



JANIS Book

of alpha-induced cross-sections

Comparison of evaluated and experimental data from
JENDL/AN-2005, TENDL-2017 and EXFOR

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OECD NEA Data Bank

Introduction

This document compares evaluated cross-sections with corresponding experimental data from the EXFOR database for a number of evaluated libraries (Table 1), nuclear reactions and associated reaction products (Table 3). This document was produced using tools based on the NEA Java-based nuclear information software (JANIS) and associated databases; up-to-date plots are available from online JANIS Books [1].

Caveat: When studying plots, please take into account that the energy resolution of experimental data is not always comparable with the resolution of the evaluated data.

Graphical comparison of nuclear data

Experimental data sets are identified by the year and first author of the main reference compiled in EXFOR. The colors give an indication on the publication year, from black/blue for the oldest data to orange/red for the most recent ones (Table 2). All experimental data are plotted on the graph but the legend will ignore all of them if there are more than 20 data sets.

Evaluated data are plotted with full lines for exclusive cross-sections explicitly defined by a MT number, whereas dashed lines indicate residual production cross-sections given in MT5. A star ‘*’ after the name of the library indicates additional operations performed by JANIS, e.g. summation over the ground and metastable yields, reconstruction of residual production cross-sections over the whole energy range.

The data are plotted in log-log scale (on the left hand side) and lin-log scale (on the right hand side). The best representation depends on the Q value of the reaction and/or the magnitude of the variation in the cross-section values.

Table of reactions and Q values

In order to identify individual contributions in residual production cross-sections, reactions leading to the same product are listed along with their associated Q values. The latter are calculated using mass excess from the NUBASE2012 evaluation of nuclear properties [2].

Navigation in this document

The data are sorted by element, then by isotope and finally by reaction. In order to facilitate access to the information, two navigation modes are available in addition to the usual bookmark. At the top of each page, on the first row, the previous (<<) and next (>>) “Isotope links” allow the reader to move from one isotope to another while staying on the same MT reaction. On the second row, the “MT links” allow scanning all reactions of a given isotope. The latter navigation mode is actually similar to the use of the page up and page down keys.

References

- [1] N. Soppera *et al.*, *Nuclear Data Sheets 120* (2014), 294. See also www.oecd-nea.org/janis.
- [2] G. Audi *et al.*, *Chinese Physics C*, 36 (12), 1157–1286, 2012.

Table 1: list of databases used in the inter-comparison

Library	Release date
JENDL/AN-2005	June 2005
TENDL-2017	December 2017
EXFOR	April 2018

Table 2: experimental data sets color code

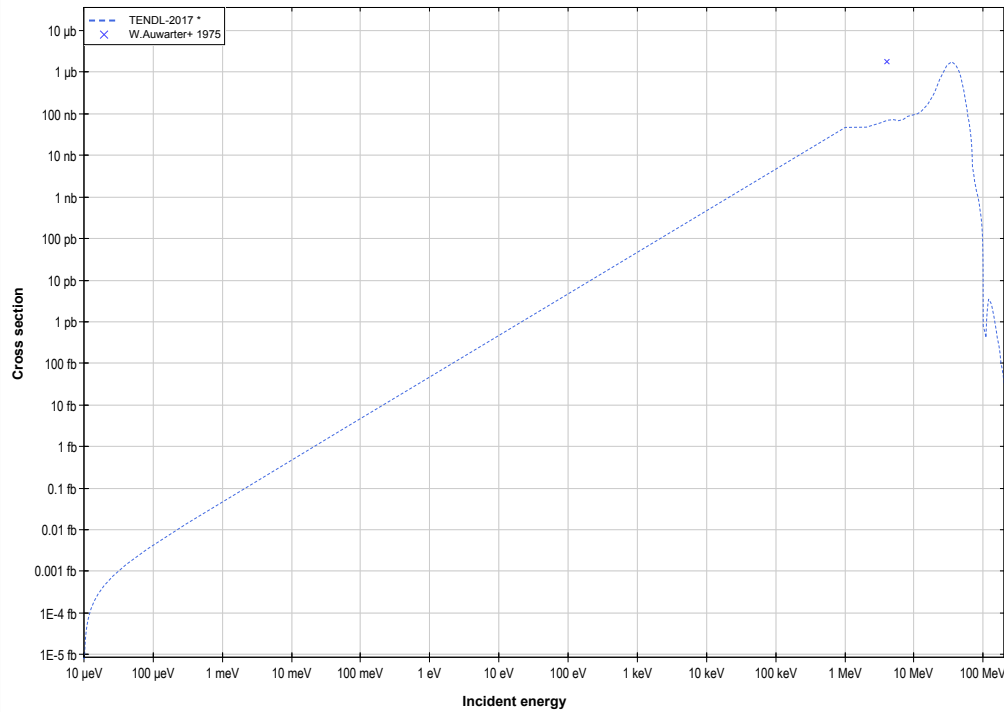
Color	Publication year
red	2005 ≤ year
orange	2000 ≤ year < 2005
light orange	1995 ≤ year < 2000
khaki	1990 ≤ year < 1995
light green	1985 ≤ year < 1990
green	1980 ≤ year < 1985
light blue	1970 ≤ year < 1980
dark blue	1960 ≤ year < 1970
black	year < 1960

Table 3: list of exclusive reactions used in the inter-comparison

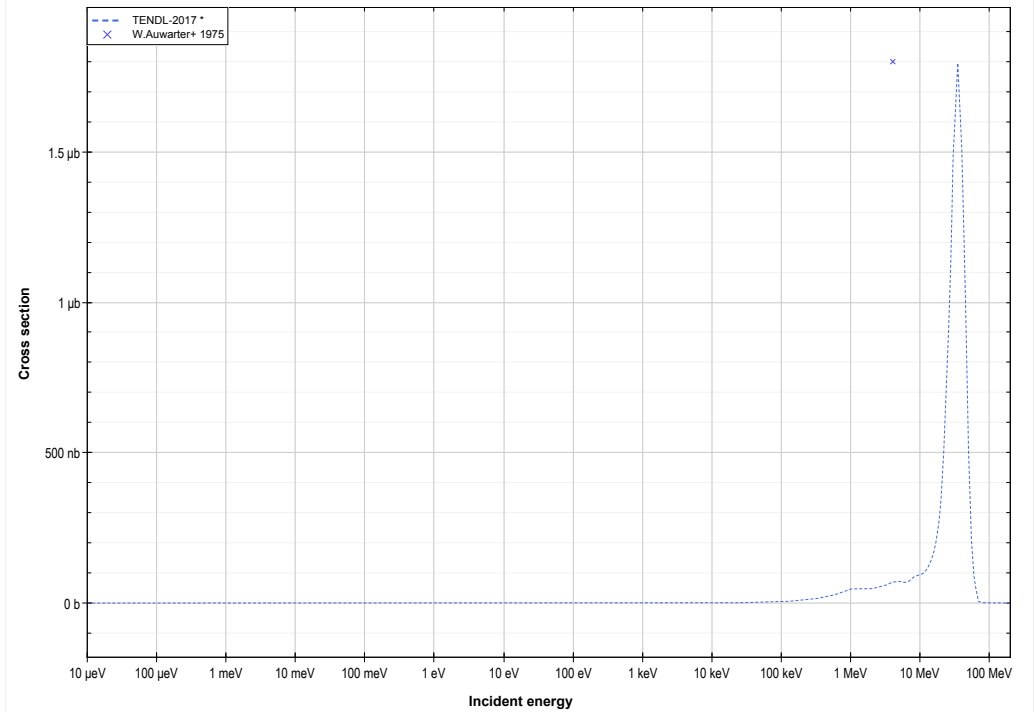
MT	Reaction	MT	Reaction	MT	Reaction	MT	Reaction
4	n	102	gamma	159	2n+p+a	181	3n+p+a
11	2n+d	103	p	160	7n	182	d+t
16	2n	104	d	161	8n	183	n+p+d
17	3n	105	t	162	5n+p	184	n+p+t
18	fission	106	h	163	6n+p	185	n+d+t
22	n+a	107	a	164	7n+p	186	n+p+h
23	n+3a	108	2a	165	4n+a	187	n+d+h
24	2n+a	109	3a	166	5n+a	188	n+t+h
25	3n+a	111	2p	167	6n+a	189	n+t+a
28	n+p	112	p+a	168	7n+a	190	2n+2p
29	n+2a	113	t+2a	169	4n+d	191	p+h
30	2n+2a	114	d+2a	170	5n+d	192	d+h
32	n+d	115	p+d	171	6n+d	193	h+a
33	n+t	116	p+t	172	3n+t	194	4n+2p
34	n+h	117	d+a	173	4n+t	195	4n+2a
35	n+d+2a	152	5n	174	5n+t	196	4n+p+a
36	n+t+2a	153	6n	175	6n+t	197	3p
37	4n	154	2n+t	176	2n+h	198	n+3p
41	2n+p	155	t+a	177	3n+h	199	3n+2p+a
42	3n+p	156	4n+p	178	4n+h	200	5n+2p
44	n+2p	157	3n+d	179	3n+2p		
45	n+p+a	158	n+d+a	180	3n+2a		

	3-Li-6	8-O-18 >>
	MT102 (α,γ) or MT5 (B10 production)	3-Li-7 MT4 (α,n) >>

Li6 (α,γ) or B10 production log-log

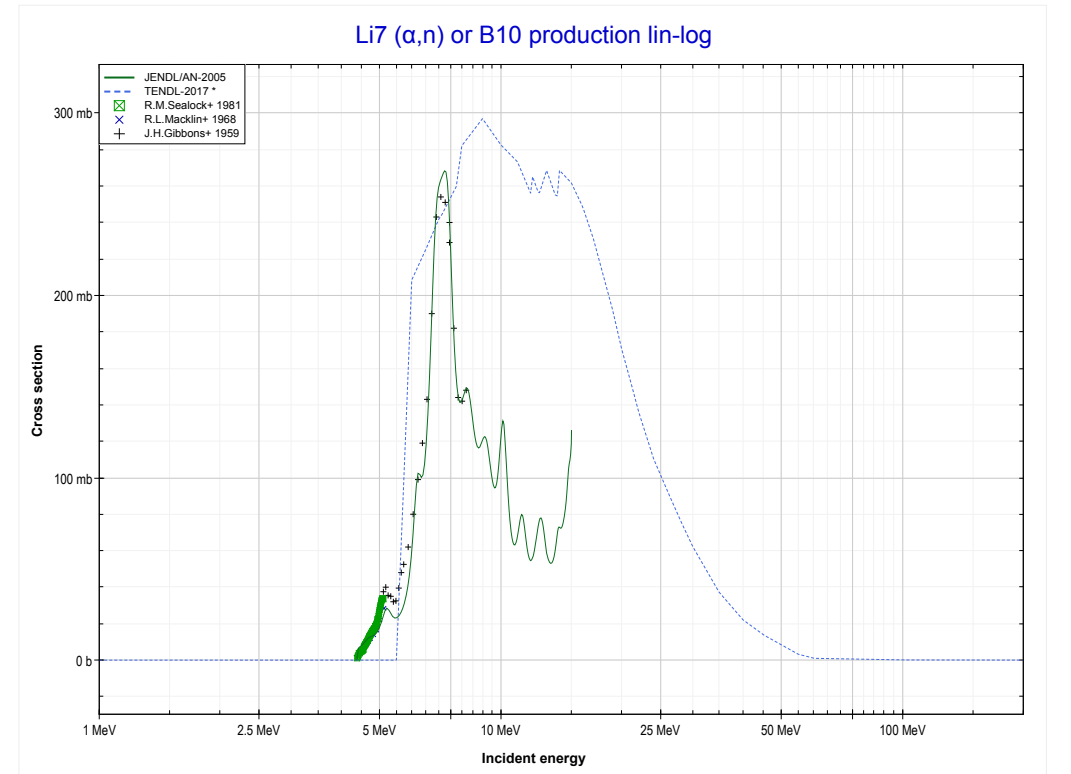
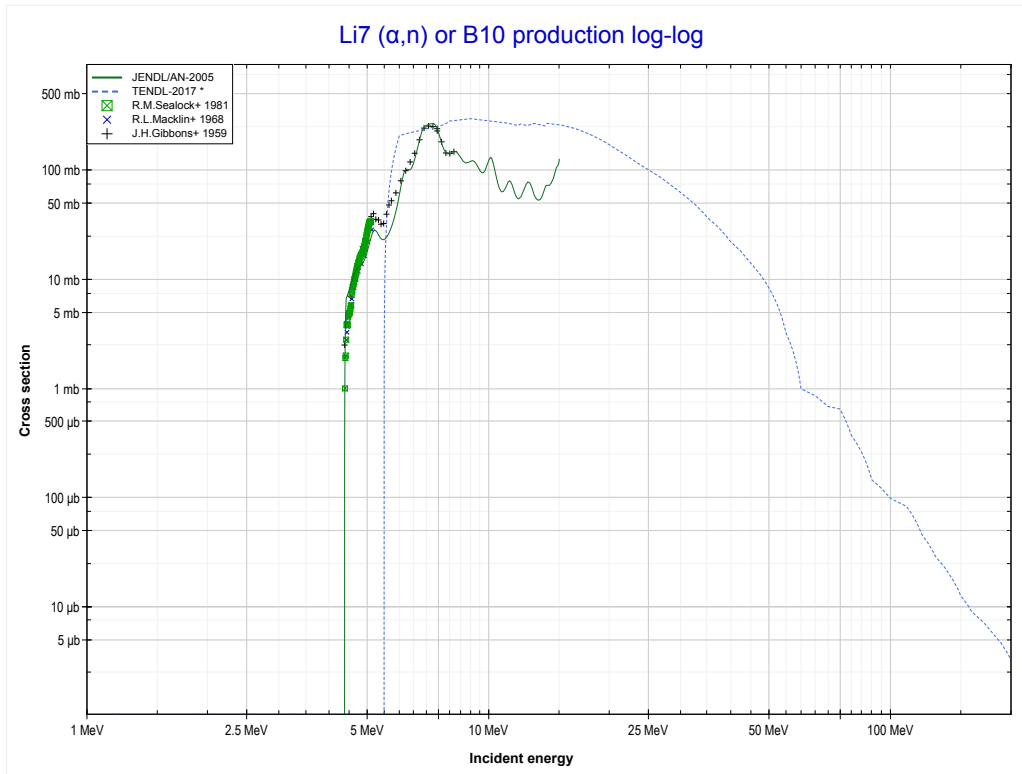


Li6 (α,γ) or B10 production lin-log



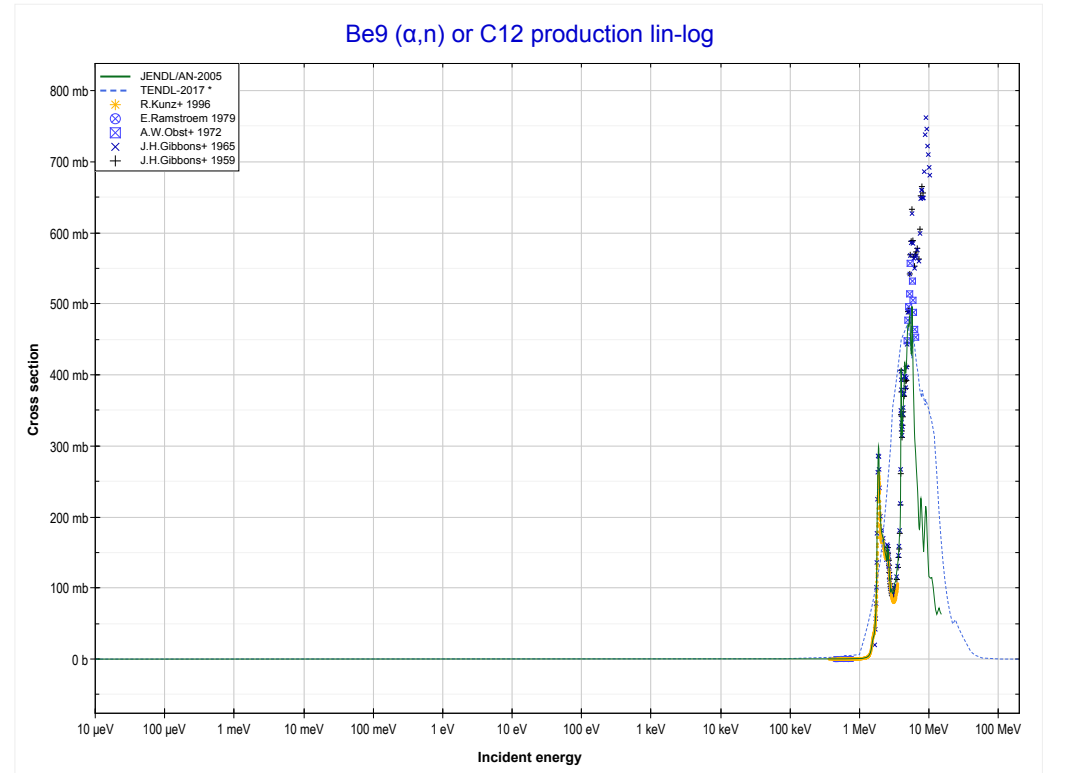
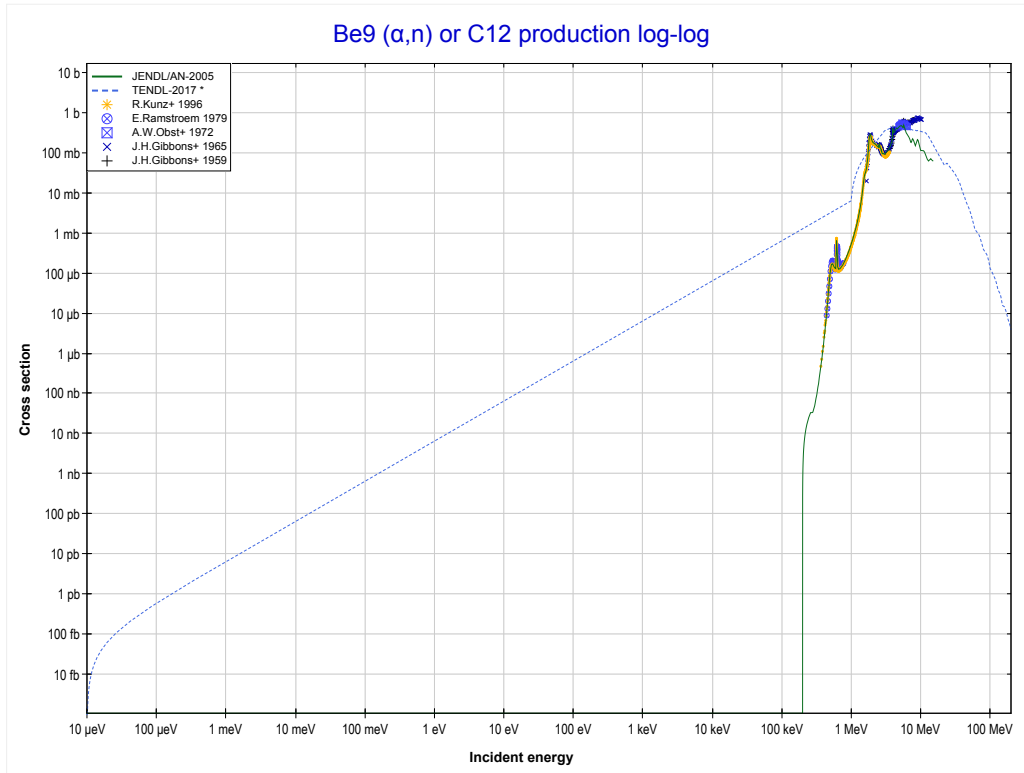
Reaction	Q-Value
Li6(α,γ)B10	4461.09 keV

	3-Li-7	4-Be-9 >>
<< 3-Li-6 MT102 (α,γ)	MT4 (α,n) or MT5 (B10 production)	4-Be-9 MT4 (α,n) >>



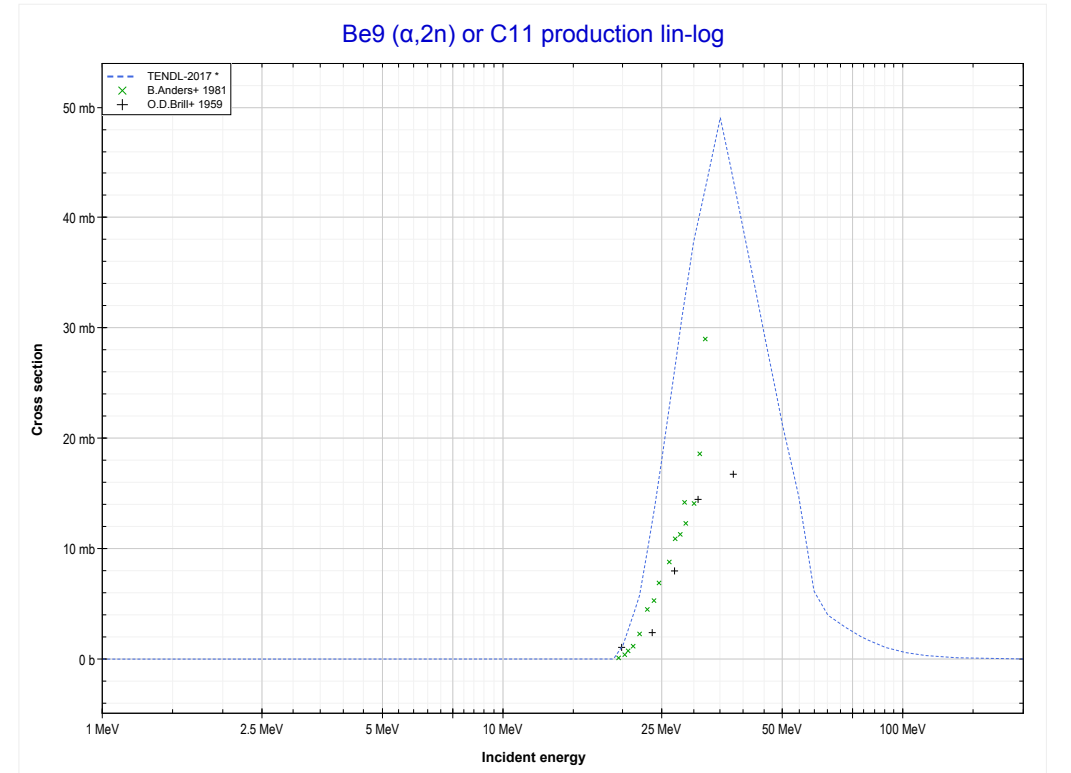
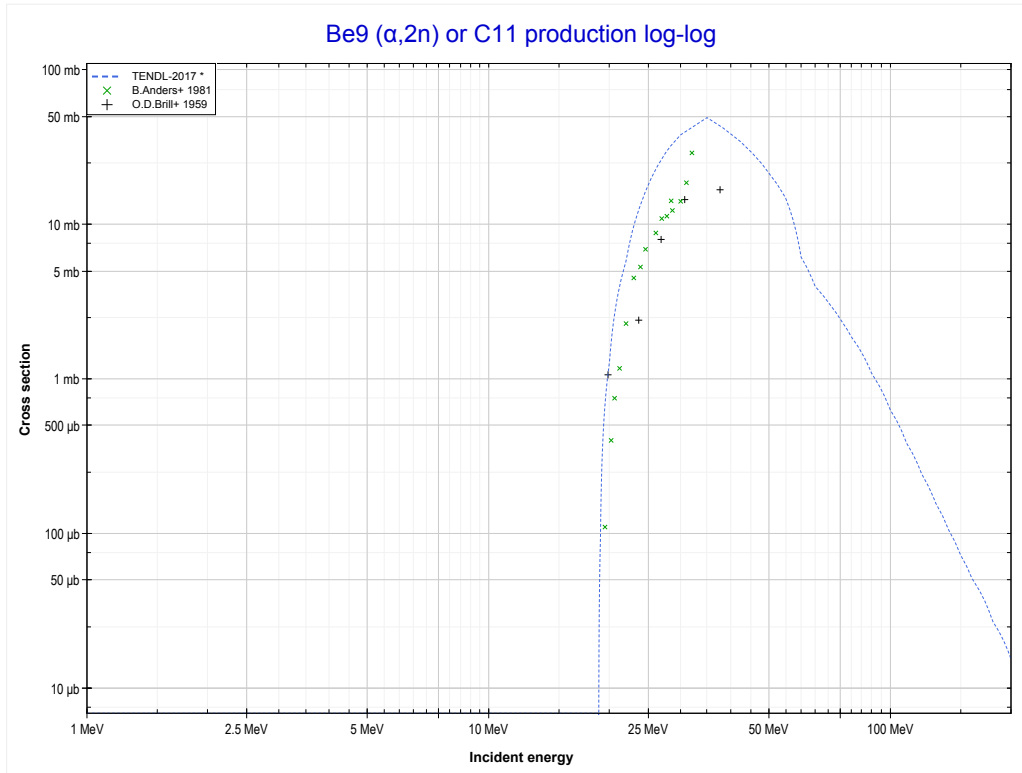
Reaction	Q-Value
Li7(α,n)B10	-2790.00 keV

<< 3-Li-7	4-Be-9	5-B-10 >>
<< 3-Li-7 MT4 (α,n)	MT4 (α,n) or MT5 (C12 production)	MT16 ($\alpha,2n$) >>



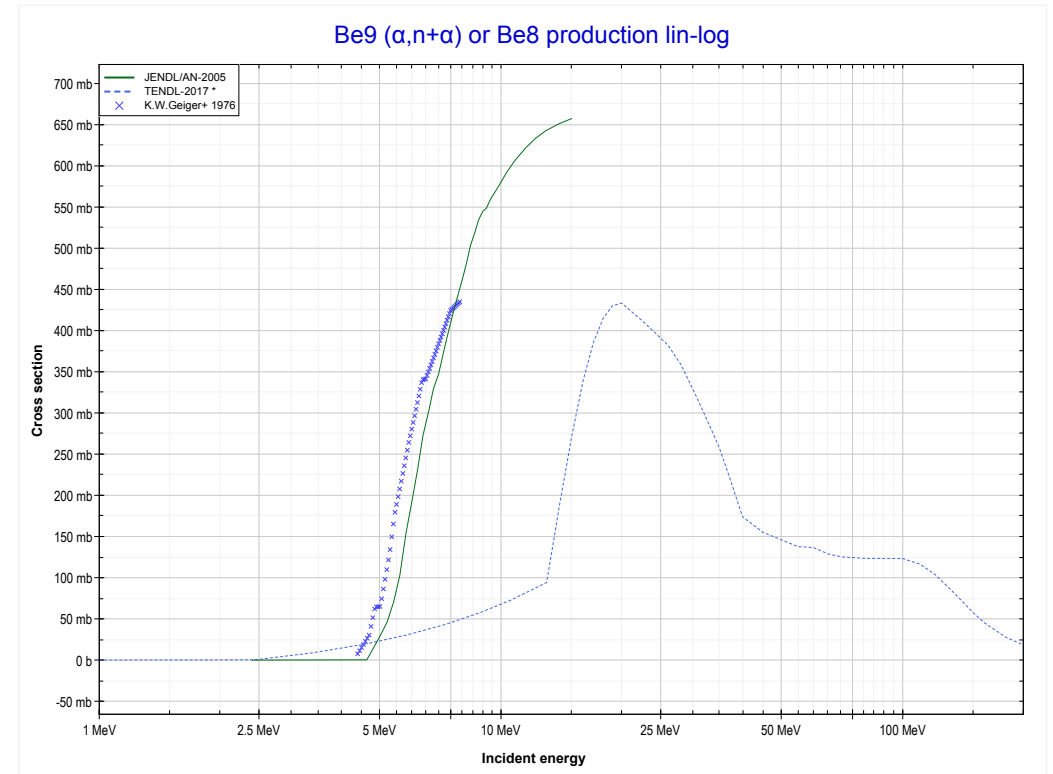
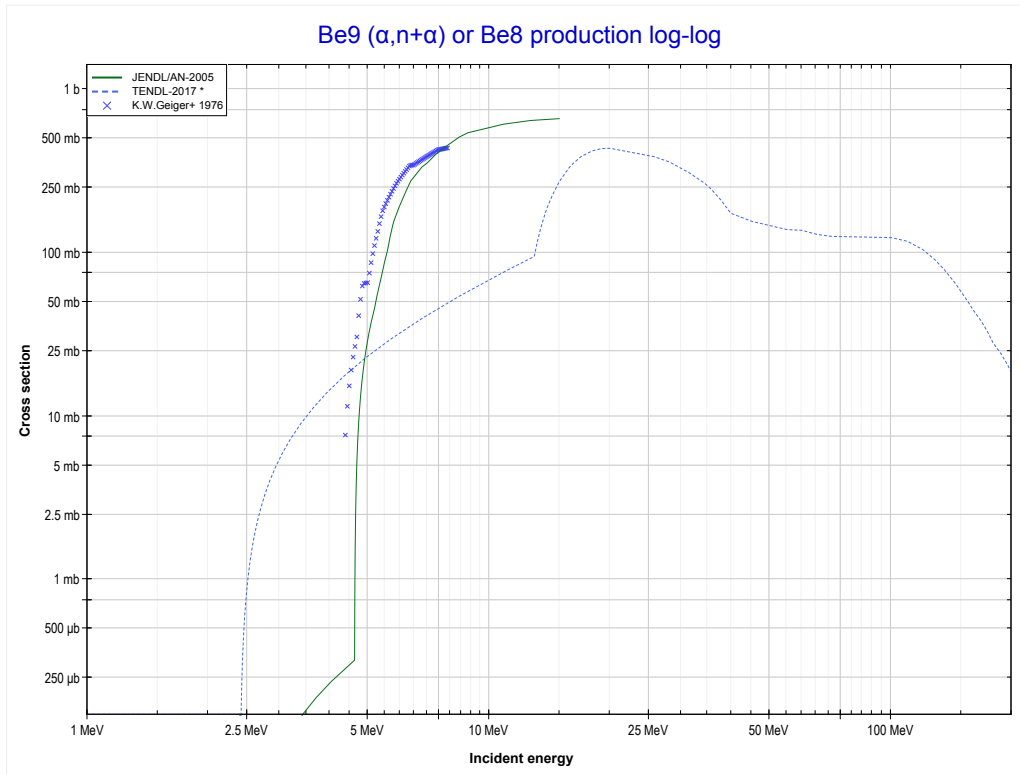
Reaction	Q-Value
Be9(α,n)C12	5702.05 keV

	4-Be-9	13-Al-27 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (C11 production)	MT22 ($\alpha, n+\alpha$) >>



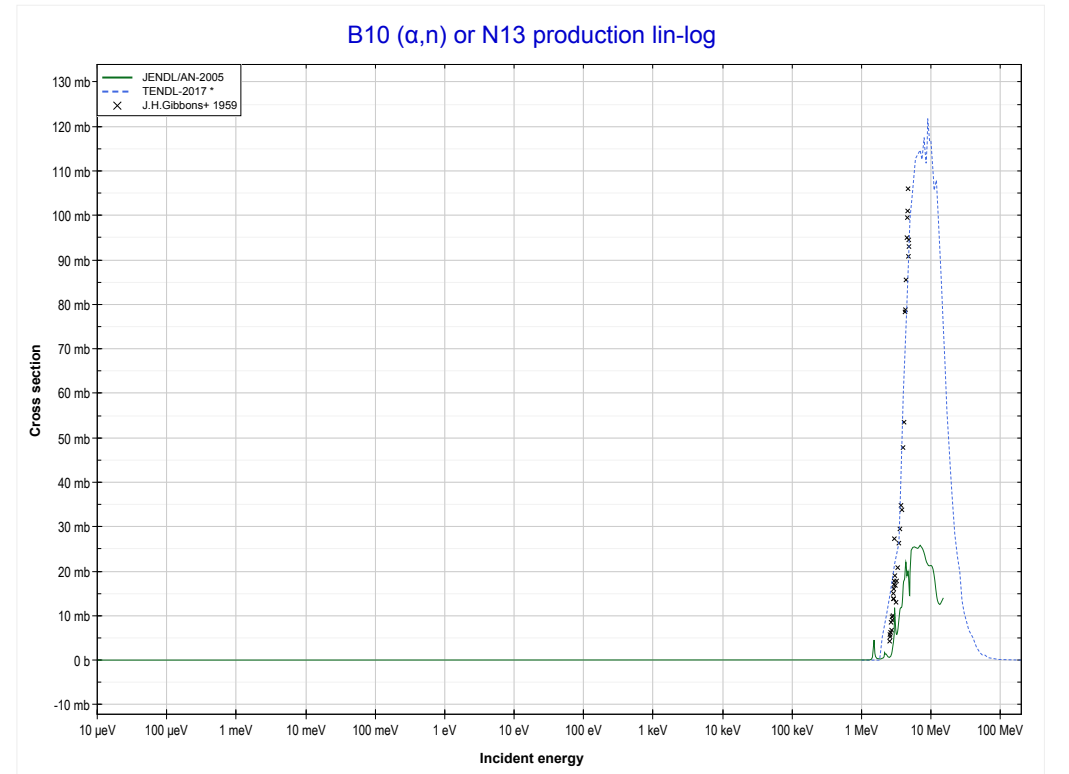
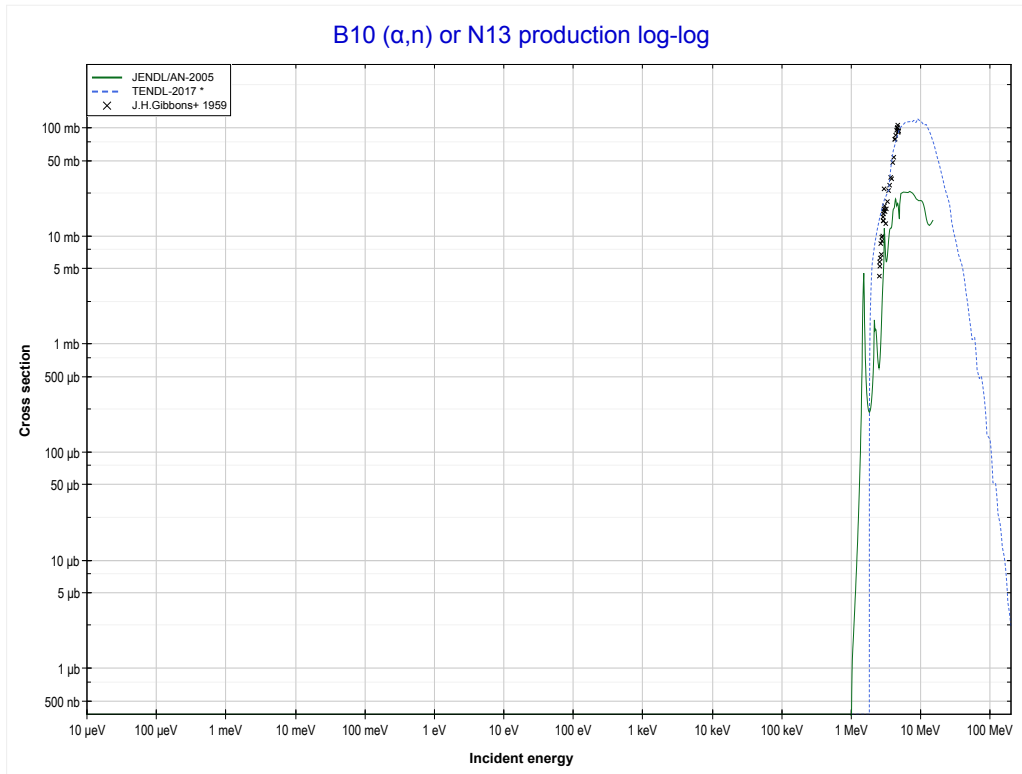
Reaction	Q-Value
Be9($\alpha, 2n$)C11	-13019.57 keV

	4-Be-9	6-C-12 >>
<< MT16 ($\alpha,2n$)	MT22 ($\alpha,n+\alpha$) or MT5 (Be8 production)	5-B-10 MT4 (α,n) >>



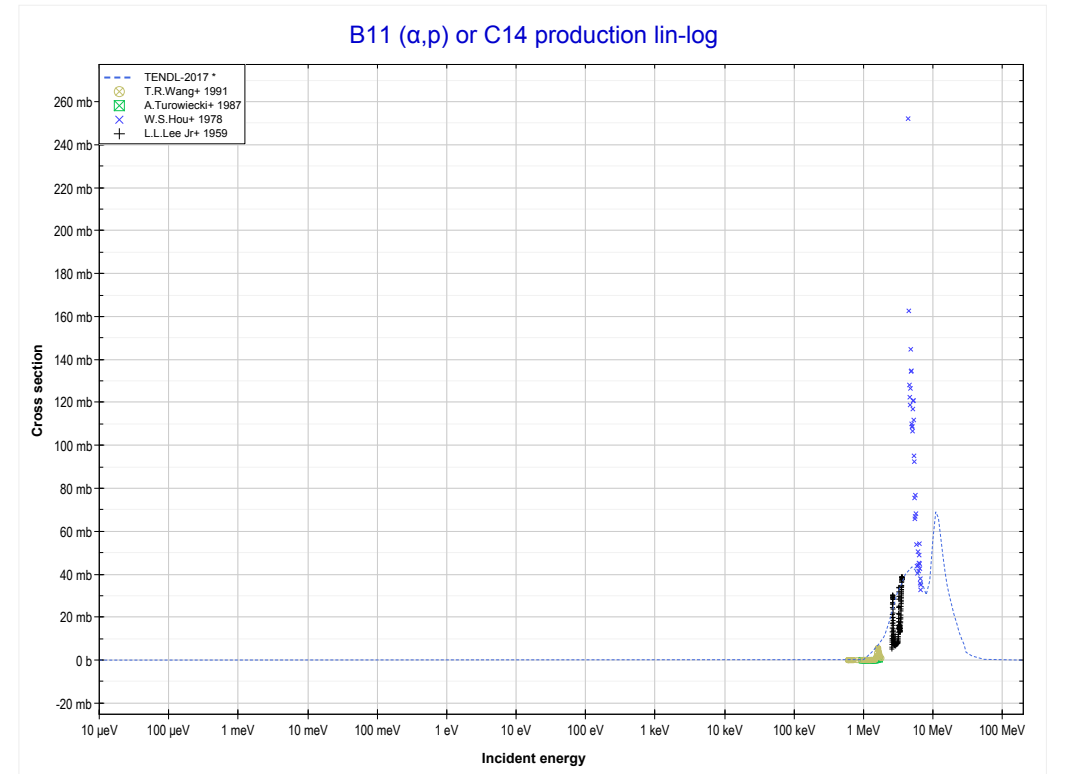
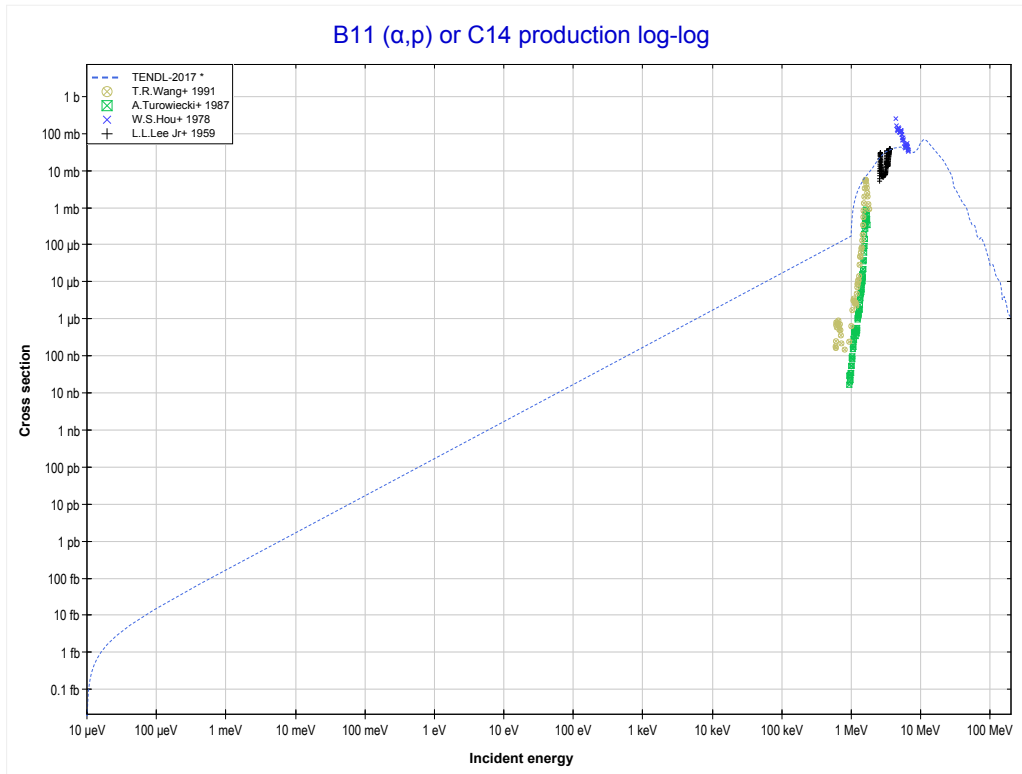
Reaction	Q-Value
Be9($\alpha,n+\alpha$)Be8	-1664.54 keV
Be9($\alpha,d+t$)Be8	-19253.83 keV
Be9($\alpha,n+p+t$)Be8	-21478.40 keV
Be9($\alpha,2n+He3$)Be8	-22242.15 keV
Be9($\alpha,n+2d$)Be8	-25511.06 keV
Be9($\alpha,2n+p+d$)Be8	-27735.63 keV
Be9($\alpha,3n+2p$)Be8	-29960.20 keV

<< 4-Be-9	5-B-10	6-C-12 >>
<< 4-Be-9 MT22 ($\alpha, n + \alpha$)	MT4 (α, n) or MT5 (N13 production)	5-B-11 MT103 (α, p) >>



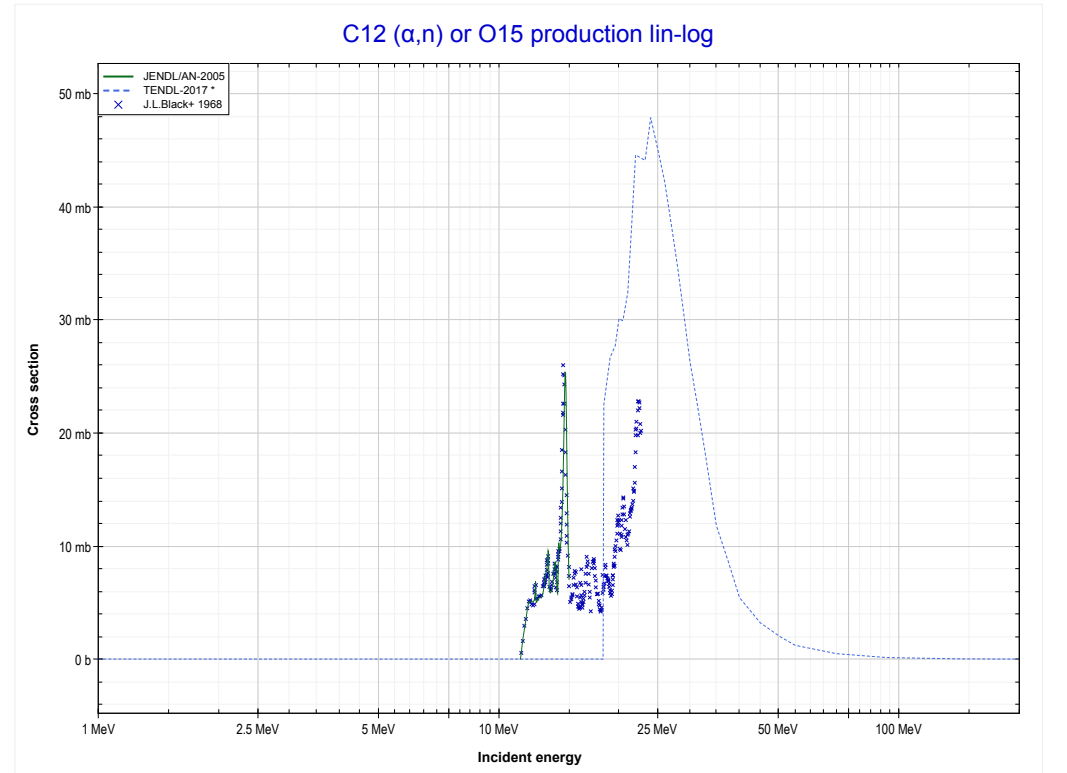
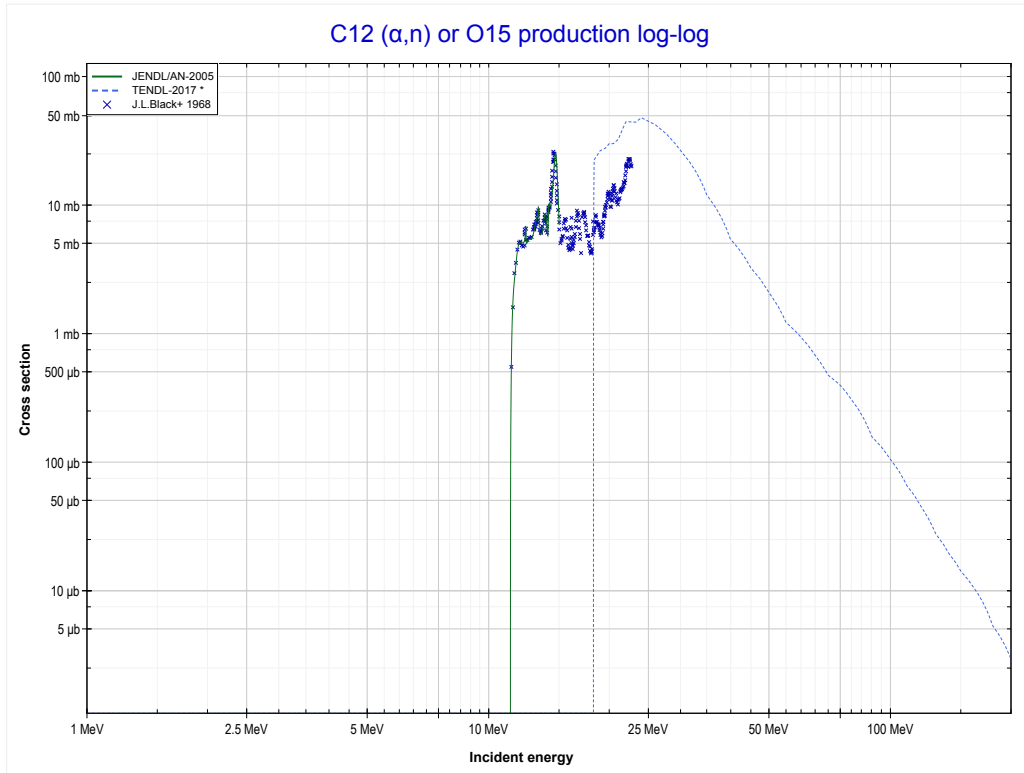
Reaction	Q-Value
B10(α, n)N13	1058.82 keV

	5-B-11	9-F-19 >>
<< 5-B-10 MT4 (α,n)	MT103 (α,p) or MT5 (C14 production)	6-C-12 MT4 (α,n) >>



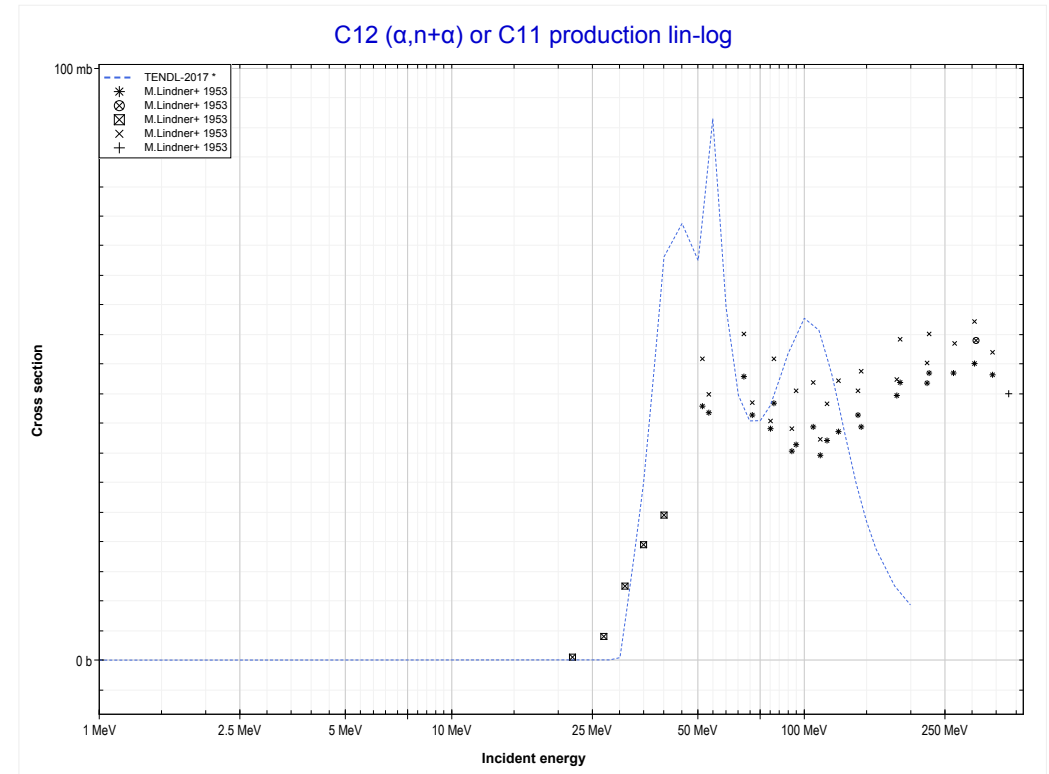
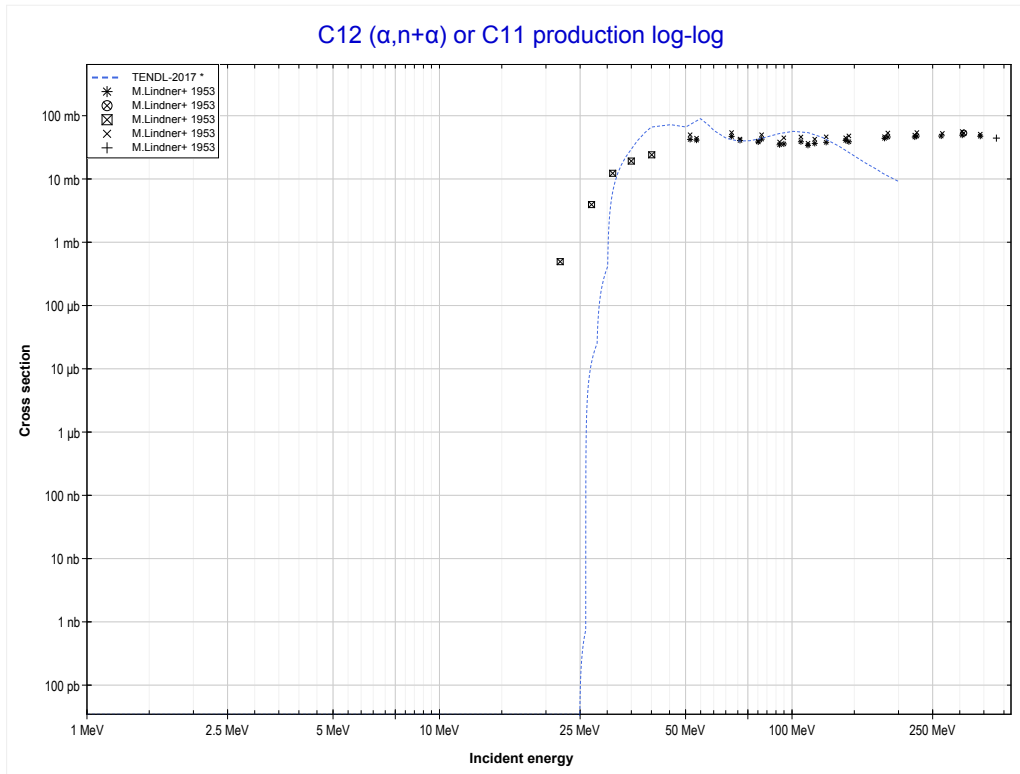
Reaction	Q-Value
B11(α,p)C14	783.95 keV

<< 5-B-10	6-C-12	6-C-13 >>
<< 5-B-11 MT103 (α,p)	MT4 (α,n) or MT5 (O15 production)	MT22 ($\alpha,n+\alpha$) >>



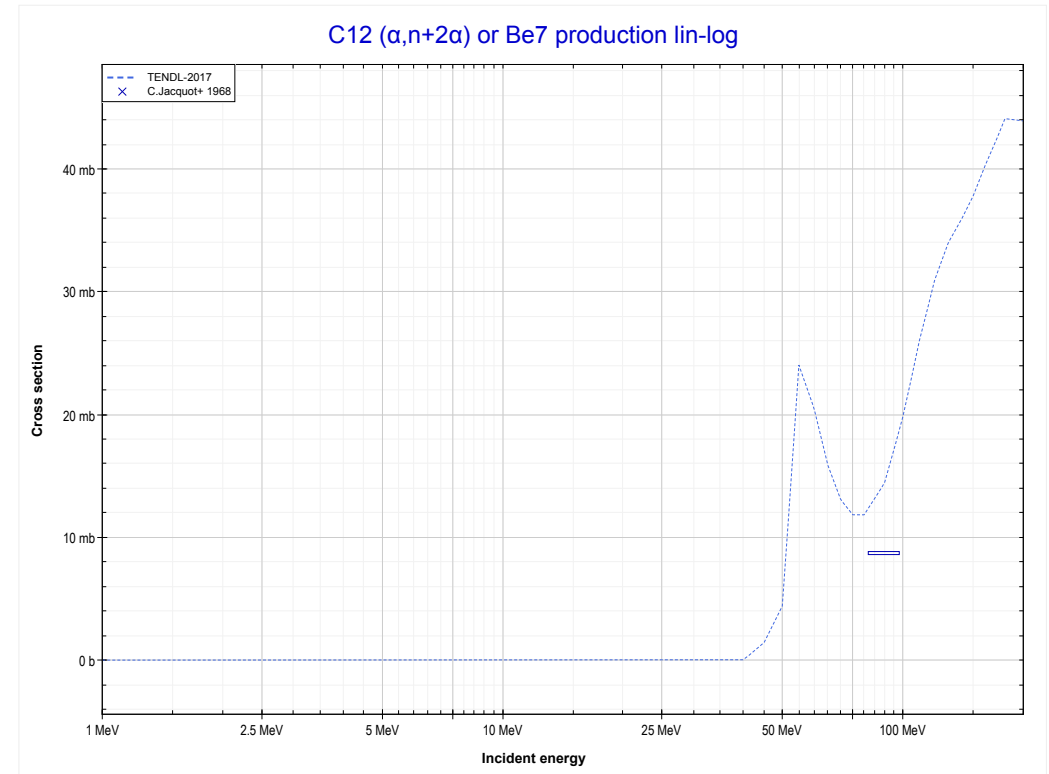
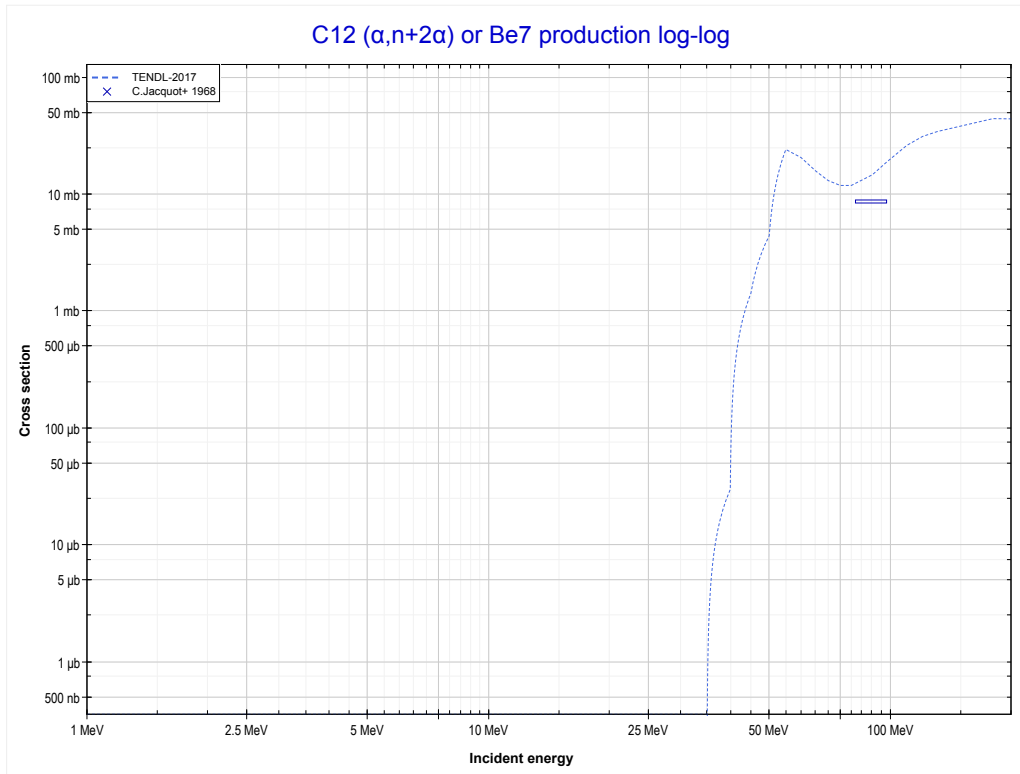
Reaction	Q-Value
C12(α,n)O15	-8502.00 keV

<< 4-Be-9	6-C-12	17-Cl-35 >>
<< MT4 (α,n)	MT22 ($\alpha,n+\alpha$) or MT5 (C11 production)	MT29 ($\alpha,n+2\alpha$) >>



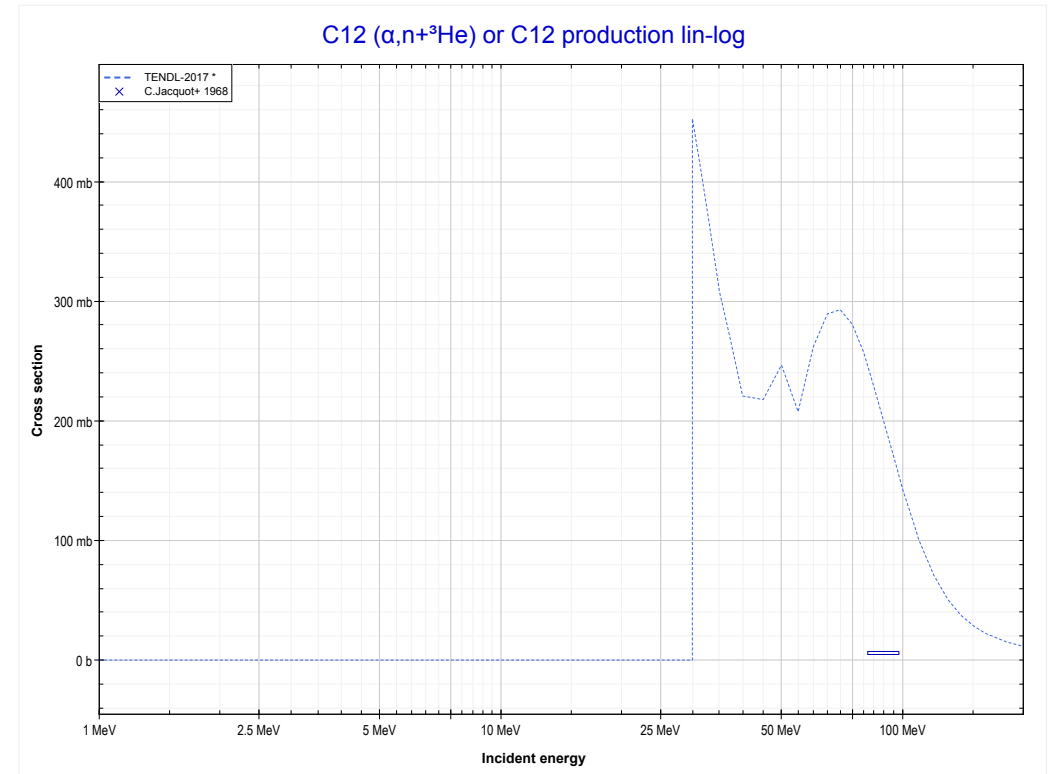
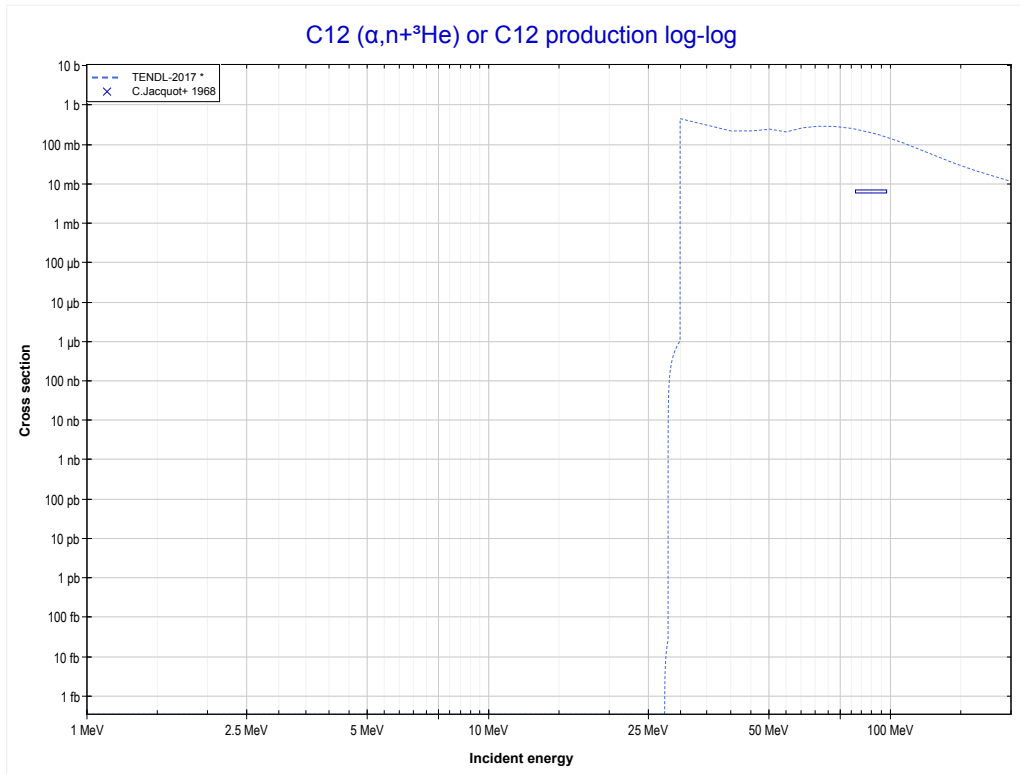
Reaction	Q-Value
C12($\alpha,n+\alpha$)C11	-18721.62 keV
C12($\alpha,d+t$)C11	-36310.91 keV
C12($\alpha,n+p+t$)C11	-38535.48 keV
C12($\alpha,2n+He3$)C11	-39299.23 keV
C12($\alpha,n+2d$)C11	-42568.14 keV
C12($\alpha,2n+p+d$)C11	-44792.71 keV
C12($\alpha,3n+2p$)C11	-47017.28 keV

	6-C-12	23-V-51 >>
<< MT22 ($\alpha, n+\alpha$)	MT29 ($\alpha, n+2\alpha$) or MT5 (Be7 production)	MT34 ($\alpha, n+{}^3\text{He}$) >>



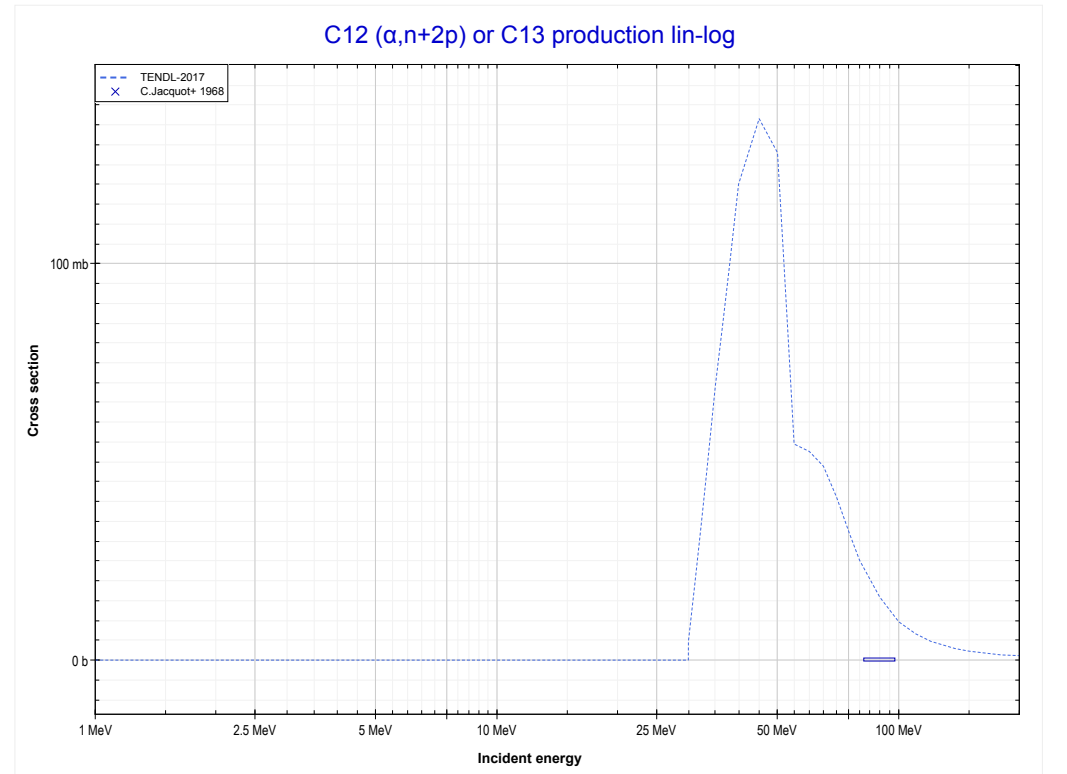
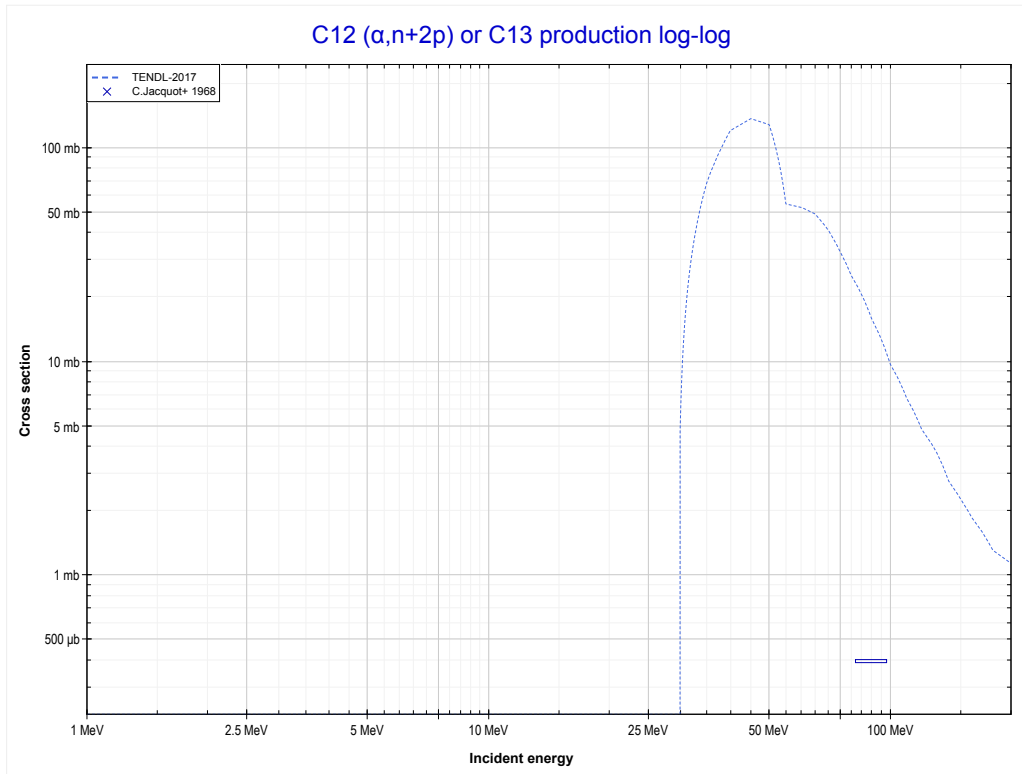
Reaction	Q-Value	Reaction	Q-Value
C12($\alpha, n+2\alpha$)Be7	-26265.23 keV	C12($\alpha, p+d+2t$)Be7	-63668.39 keV
C12($\alpha, d+t+\alpha$)Be7	-43854.53 keV	C12($\alpha, n+d+t+{}^3\text{He}$)Be7	-64432.14 keV
C12($\alpha, n+p+t+\alpha$)Be7	-46079.09 keV	C12($\alpha, n+2p+2t$)Be7	-65892.95 keV
C12($\alpha, 2n+{}^3\text{He}+\alpha$)Be7	-46842.85 keV	C12($\alpha, 2n+p+t+{}^3\text{He}$)Be7	-66656.71 keV
C12($\alpha, n+2d+\alpha$)Be7	-50111.76 keV	C12($\alpha, 3n+2{}^3\text{He}$)Be7	-67420.47 keV
C12($\alpha, 2n+p+d+\alpha$)Be7	-52336.33 keV	C12($\alpha, 3d+t$)Be7	-67701.06 keV
C12($\alpha, 3n+2p+\alpha$)Be7	-54560.89 keV	C12($\alpha, n+p+2d+t$)Be7	-69925.62 keV
C12($\alpha, 2t+{}^3\text{He}$)Be7	-58174.91 keV	C12($\alpha, 2n+2d+{}^3\text{He}$)Be7	-70689.38 keV

	6-C-12	
<< MT29 ($\alpha, n+2\alpha$)	MT34 ($\alpha, n+^3\text{He}$) or MT5 (C12 production)	MT44 ($\alpha, n+2p$) >>



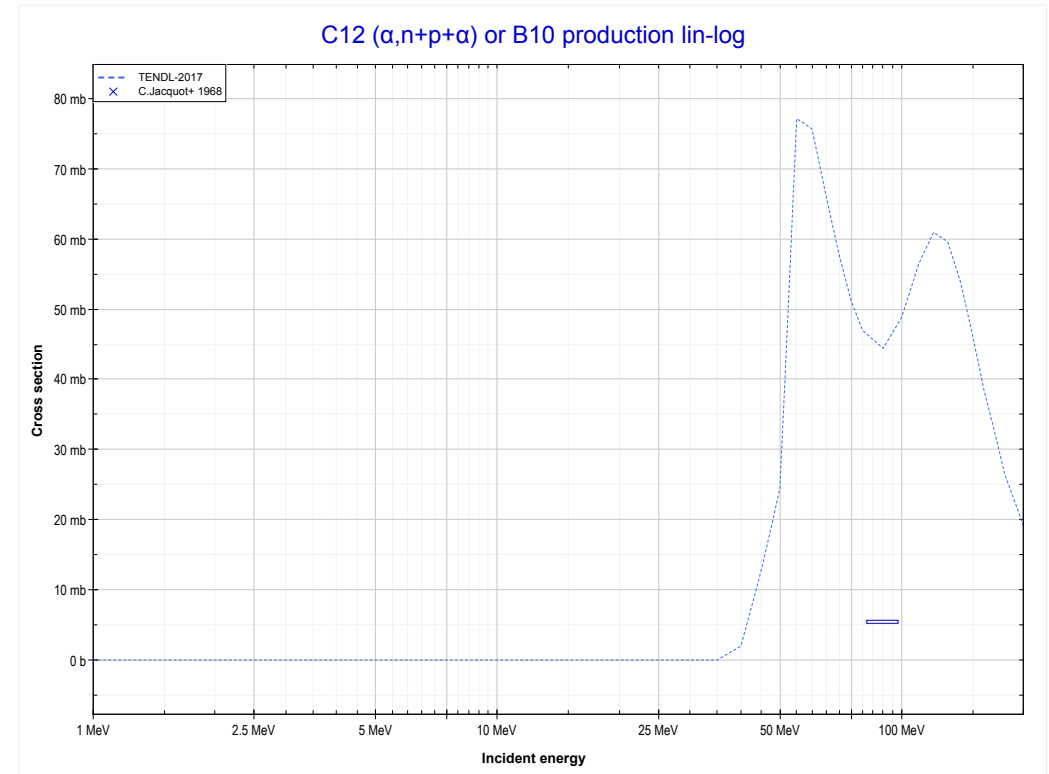
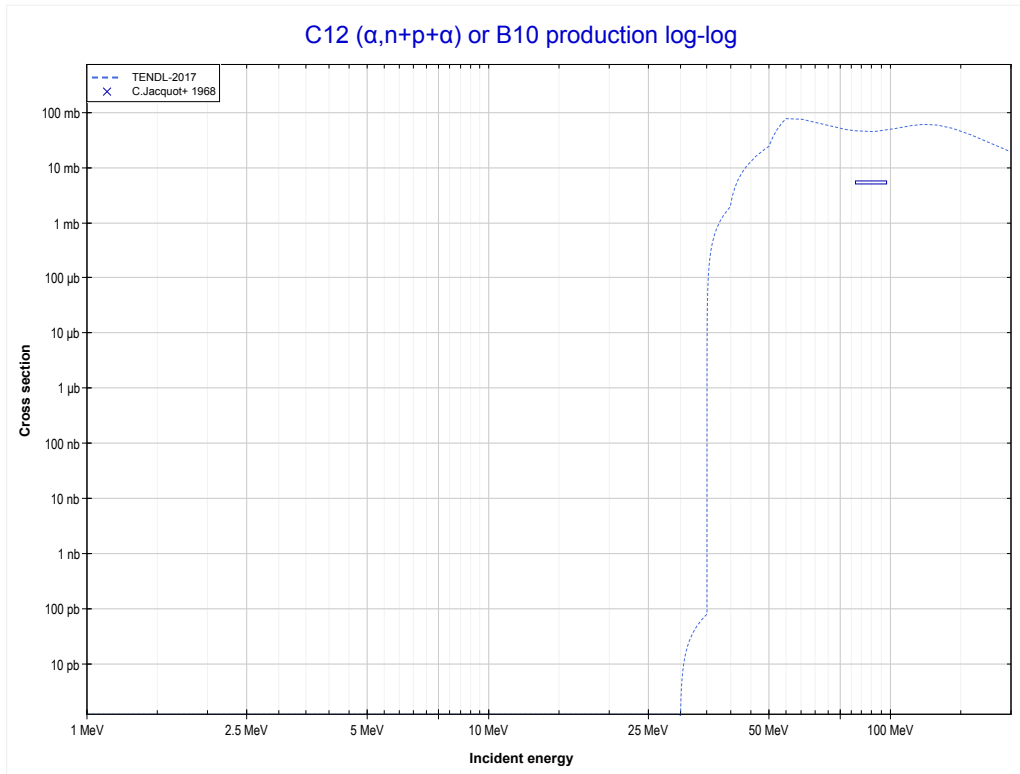
Reaction	Q-Value
C12(α, α)C12	0.00 keV
C12($\alpha, p+t$)C12	-19813.86 keV
C12($\alpha, n+^3\text{He}$)C12	-20577.62 keV
C12($\alpha, 2d$)C12	-23846.53 keV
C12($\alpha, n+p+d$)C12	-26071.09 keV
C12($\alpha, 2n+2p$)C12	-28295.66 keV

	6-C-12	13-AI-27 >>
<< MT34 ($\alpha, n+^3\text{He}$)	MT44 ($\alpha, n+2p$) or MT5 (C13 production)	MT45 ($\alpha, n+p+\alpha$) >>



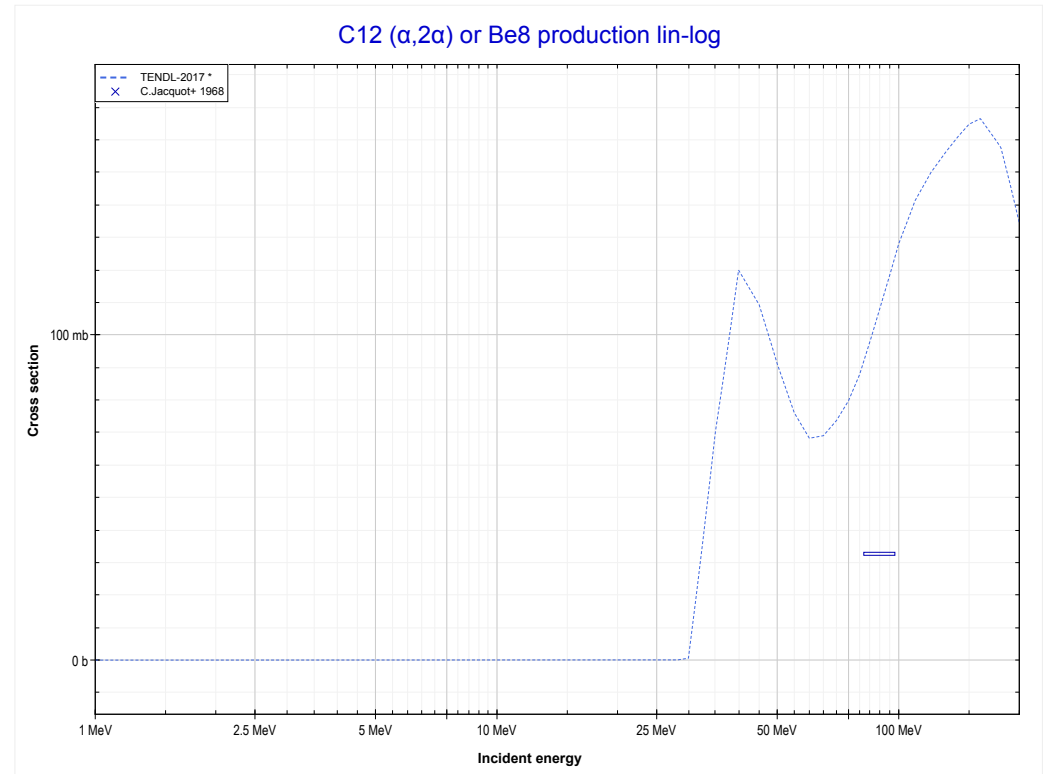
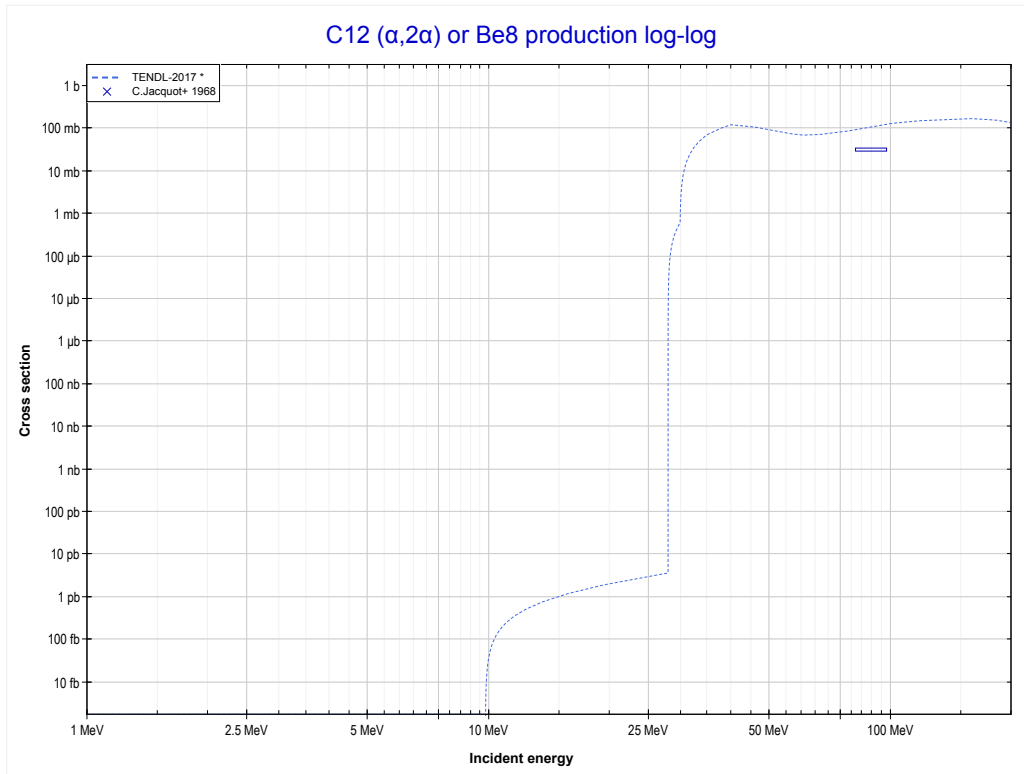
Reaction	Q-Value
C12($\alpha, \text{He3}$)C13	-15631.31 keV
C12($\alpha, p+d$)C13	-21124.79 keV
C12($\alpha, n+2p$)C13	-23349.35 keV

	6-C-12	7-N-14 >>
<< MT44 ($\alpha, n+2p$)	MT45 ($\alpha, n+p+\alpha$) or MT5 (B10 production)	MT108 ($\alpha, 2\alpha$) >>



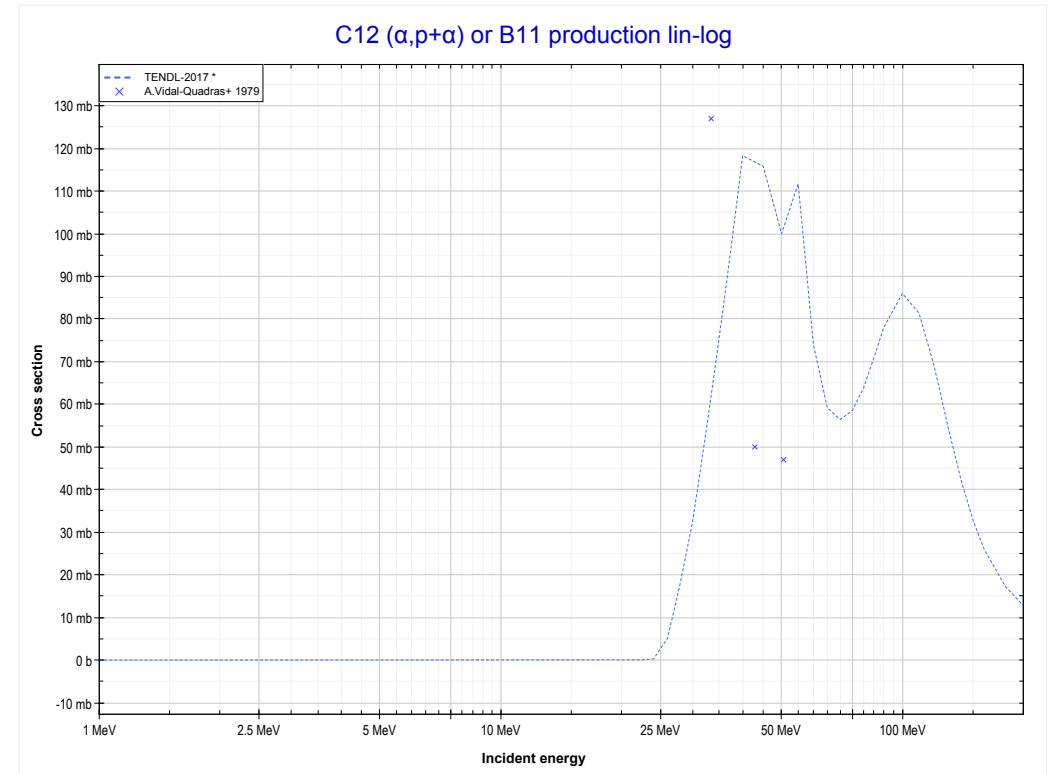
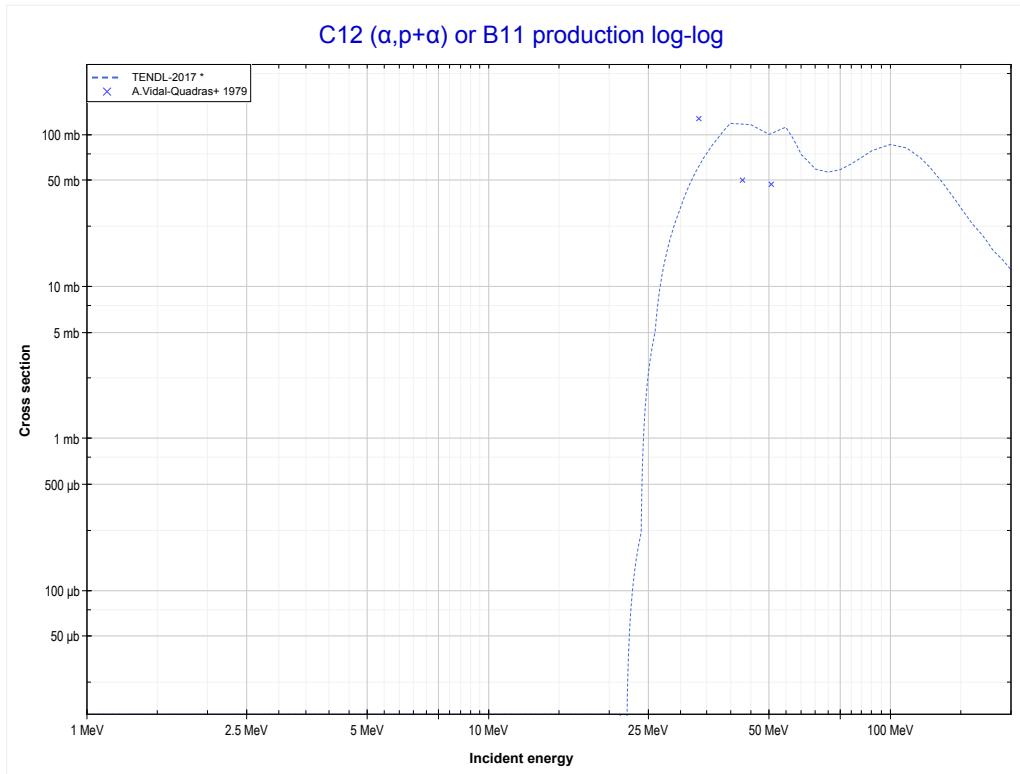
Reaction	Q-Value	Reaction	Q-Value
C12($\alpha, d+\alpha$)B10	-25186.42 keV	C12($\alpha, n+p+2d$)B10	-51257.52 keV
C12($\alpha, n+p+\alpha$)B10	-27410.99 keV	C12($\alpha, 2n+2p+d$)B10	-53482.08 keV
C12($\alpha, t+\text{He3}$)B10	-39506.81 keV	C12($\alpha, 3n+3p$)B10	-55706.65 keV
C12($\alpha, p+d+t$)B10	-45000.28 keV		
C12($\alpha, n+d+\text{He3}$)B10	-45764.04 keV		
C12($\alpha, n+2p+t$)B10	-47224.85 keV		
C12($\alpha, 2n+p+\text{He3}$)B10	-47988.60 keV		
C12($\alpha, 3d$)B10	-49032.95 keV		

	6-C-12	7-N-14 >>
<< MT45 ($\alpha, n+p+\alpha$)	MT108 ($\alpha, 2\alpha$) or MT5 (Be8 production)	MT112 ($\alpha, p+\alpha$) >>



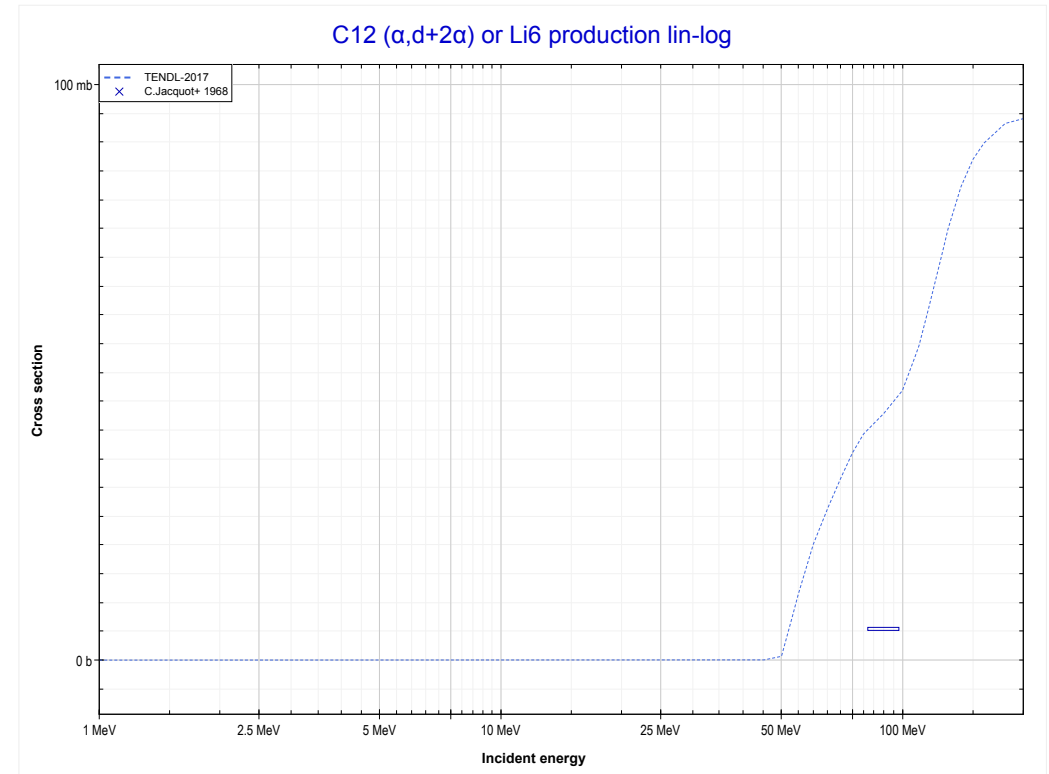
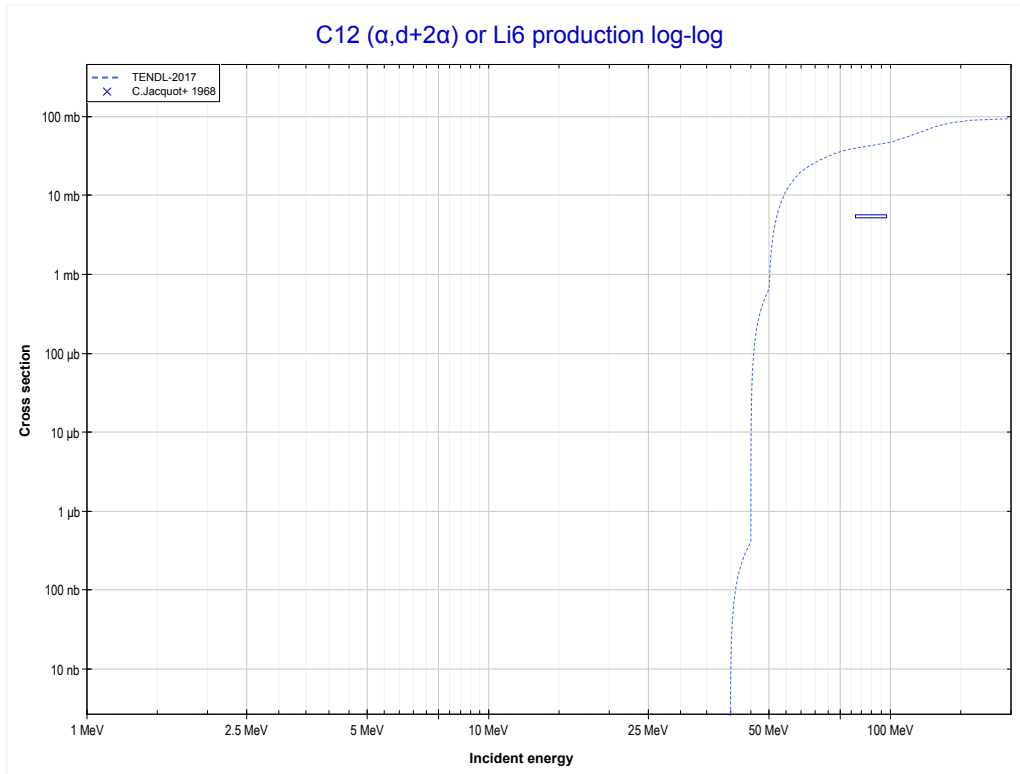
Reaction	Q-Value	Reaction	Q-Value
C12($\alpha, 2\alpha$)Be8	-7366.59 keV	C12($\alpha, n+p+t+He3$)Be8	-47758.06 keV
C12($\alpha, p+t+\alpha$)Be8	-27180.45 keV	C12($\alpha, 2n+2He3$)Be8	-48521.82 keV
C12($\alpha, n+He3+\alpha$)Be8	-27944.20 keV	C12($\alpha, p+2d+t$)Be8	-51026.97 keV
C12($\alpha, 2d+\alpha$)Be8	-31213.11 keV	C12($\alpha, n+2d+He3$)Be8	-51790.73 keV
C12($\alpha, n+p+d+\alpha$)Be8	-33437.68 keV	C12($\alpha, n+2p+d+t$)Be8	-53251.54 keV
C12($\alpha, 2n+2p+\alpha$)Be8	-35662.25 keV	C12($\alpha, 2n+p+d+He3$)Be8	-54015.30 keV
C12($\alpha, d+t+He3$)Be8	-45533.50 keV	C12($\alpha, 4d$)Be8	-55059.64 keV
C12($\alpha, 2p+2t$)Be8	-46994.31 keV	C12($\alpha, 2n+3p+t$)Be8	-55476.11 keV

	6-C-12	7-N-14 >>
<< MT108 ($\alpha,2\alpha$)	MT112 ($\alpha,p+\alpha$) or MT5 (B11 production)	MT114 ($\alpha,d+2\alpha$) >>



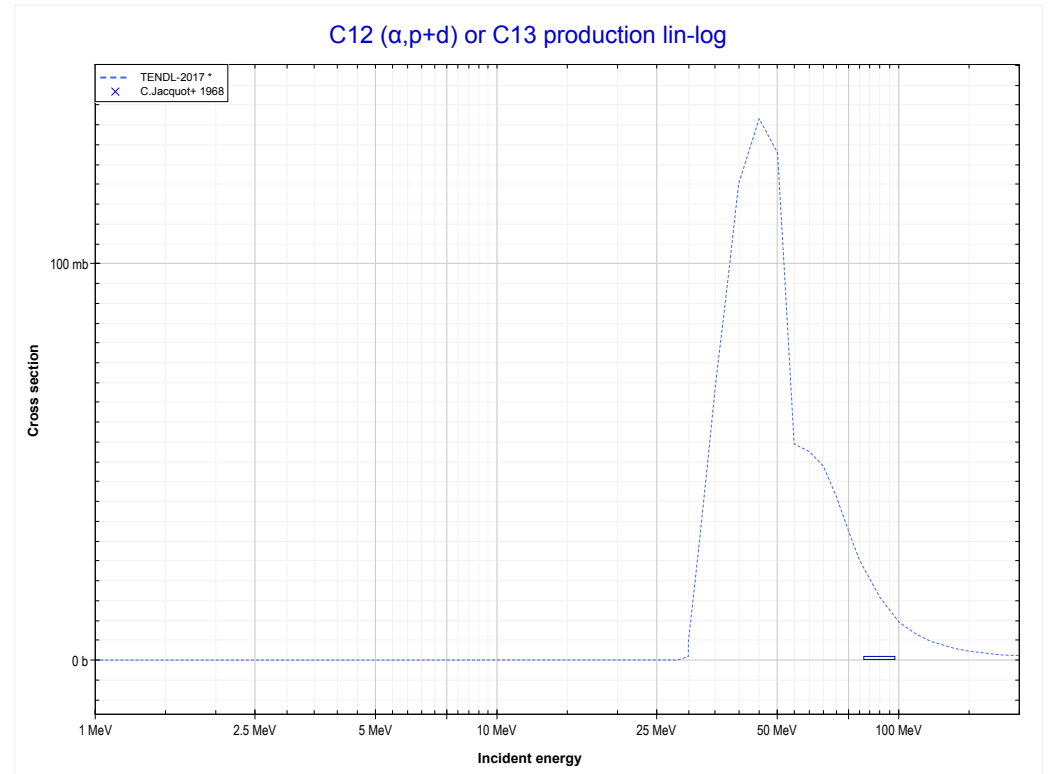
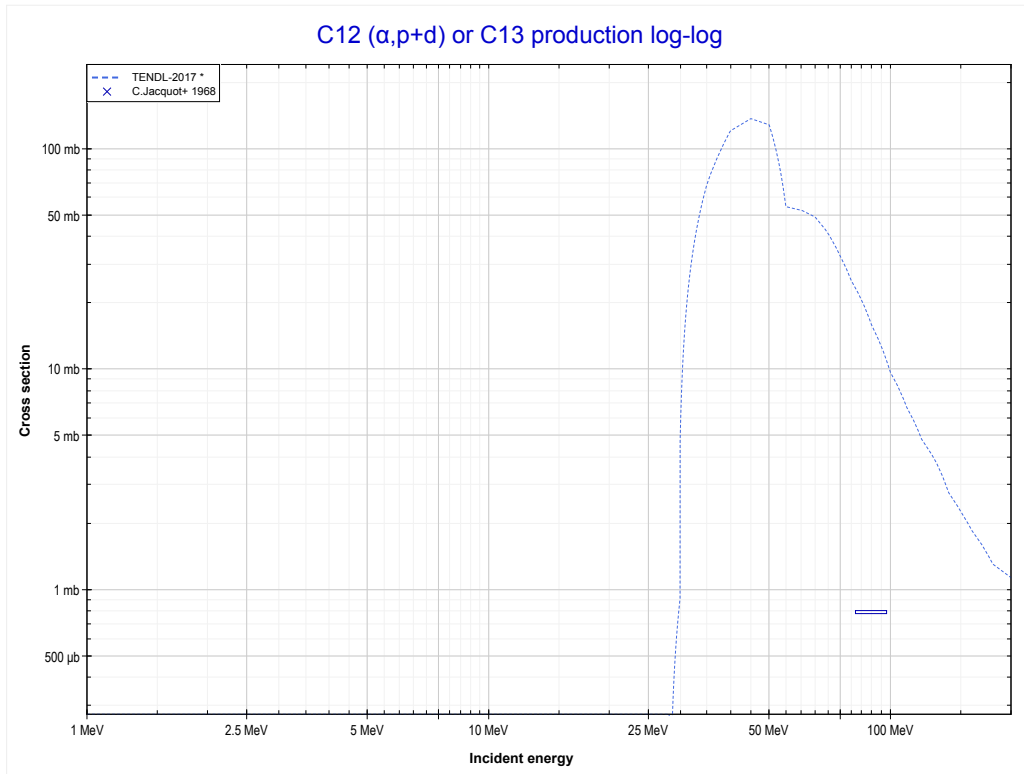
Reaction	Q-Value
C12($\alpha,p+\alpha$)B11	-15956.87 keV
C12($\alpha,d+He3$)B11	-34309.92 keV
C12($\alpha,2p+t$)B11	-35770.73 keV
C12($\alpha,n+p+He3$)B11	-36534.49 keV
C12($\alpha,p+2d$)B11	-39803.40 keV
C12($\alpha,n+2p+d$)B11	-42027.96 keV
C12($\alpha,2n+3p$)B11	-44252.53 keV

	6-C-12	
<< MT112 ($\alpha, p+\alpha$)	MT114 ($\alpha, d+2\alpha$) or MT5 (Li6 production)	MT115 ($\alpha, p+d$) >>



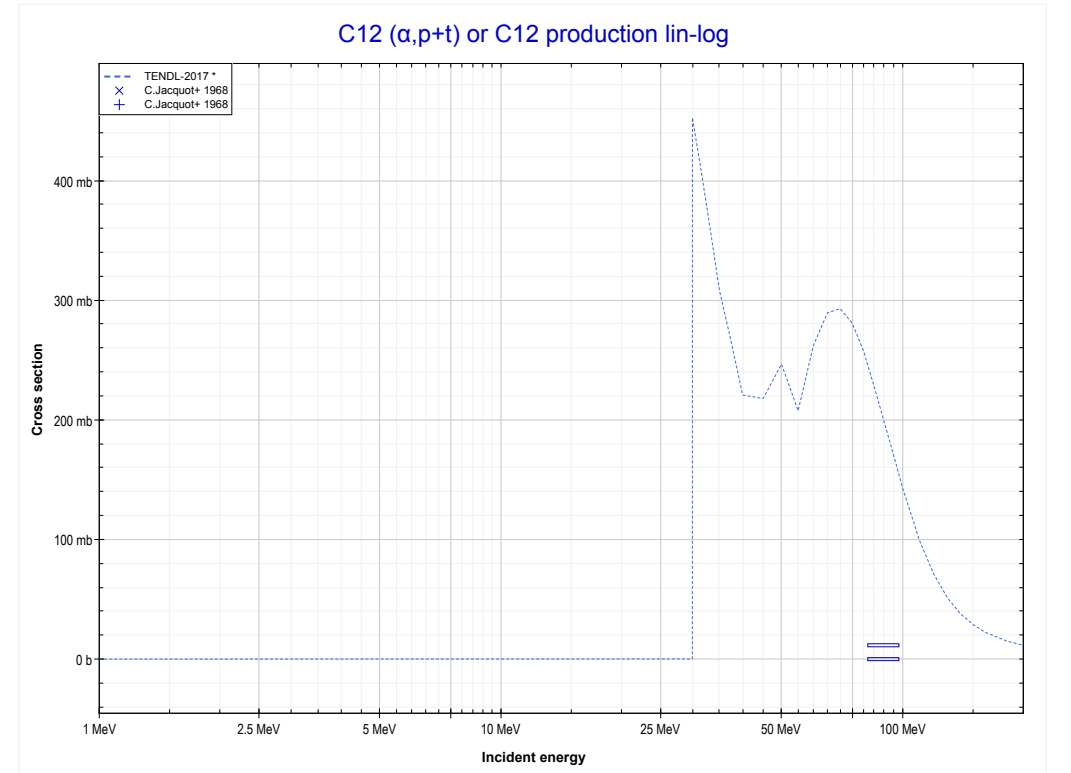
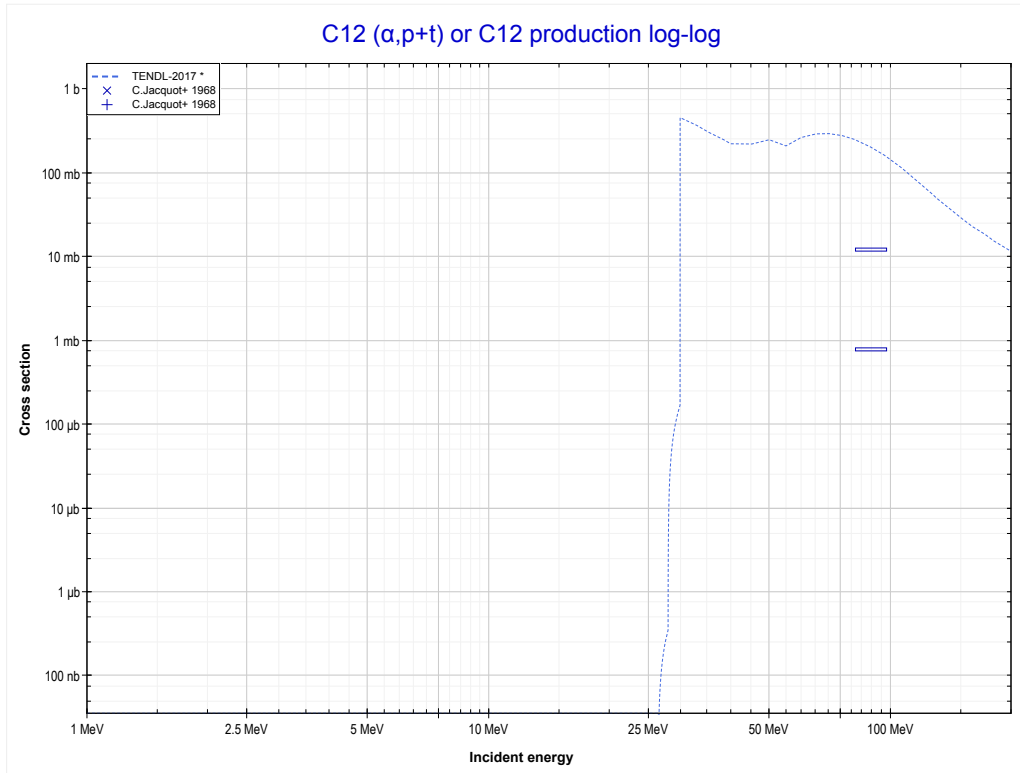
Reaction	Q-Value	Reaction	Q-Value
C12($\alpha, d+2\alpha$)Li6	-29647.52 keV	C12($\alpha, n+p+2d+\alpha$)Li6	-55718.61 keV
C12($\alpha, n+p+2\alpha$)Li6	-31872.08 keV	C12($\alpha, 2n+2p+d+\alpha$)Li6	-57943.18 keV
C12($\alpha, t+He3+\alpha$)Li6	-43967.90 keV	C12($\alpha, 3n+3p+\alpha$)Li6	-60167.74 keV
C12($\alpha, p+d+t+\alpha$)Li6	-49461.38 keV	C12($\alpha, p+2t+He3$)Li6	-63781.76 keV
C12($\alpha, n+d+He3+\alpha$)Li6	-50225.13 keV	C12($\alpha, n+t+2He3$)Li6	-64545.52 keV
C12($\alpha, n+2p+t+\alpha$)Li6	-51685.94 keV	C12($\alpha, 2d+t+He3$)Li6	-67814.43 keV
C12($\alpha, 2n+p+He3+\alpha$)Li6	-52449.70 keV	C12($\alpha, 2p+d+2t$)Li6	-69275.24 keV
C12($\alpha, 3d+\alpha$)Li6	-53494.04 keV	C12($\alpha, n+p+d+t+He3$)Li6	-70038.99 keV

	6-C-12	
<< MT114 ($\alpha, d+2\alpha$)	MT115 ($\alpha, p+d$) or MT5 (C13 production)	MT116 ($\alpha, p+t$) >>



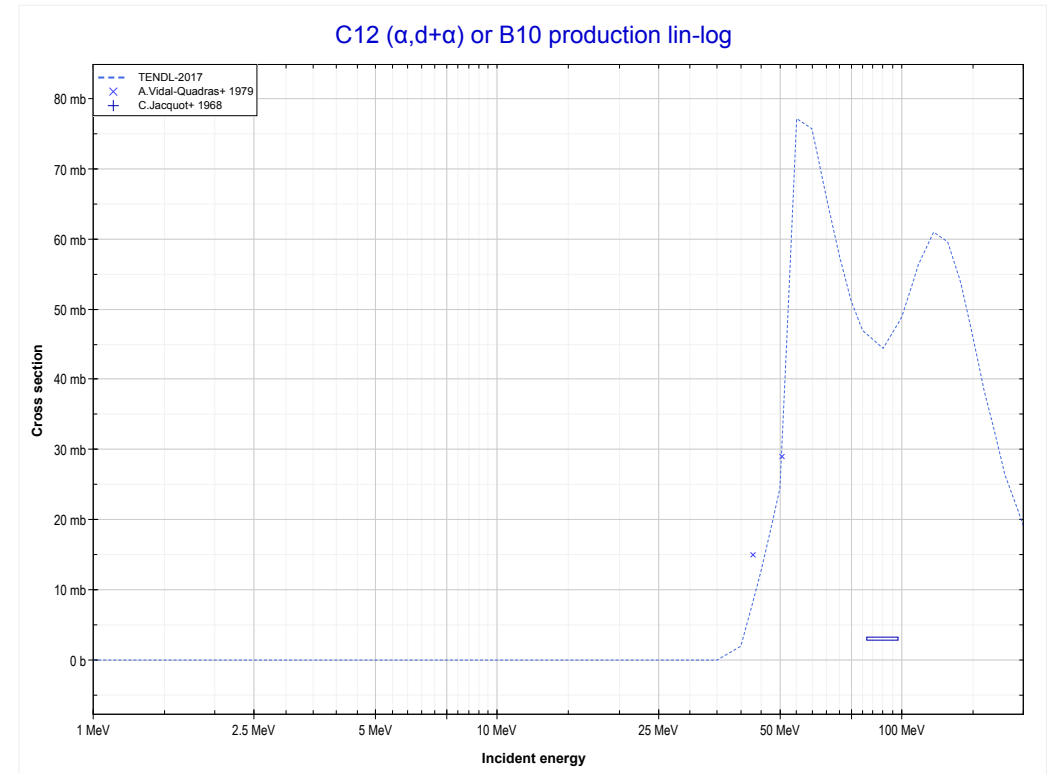
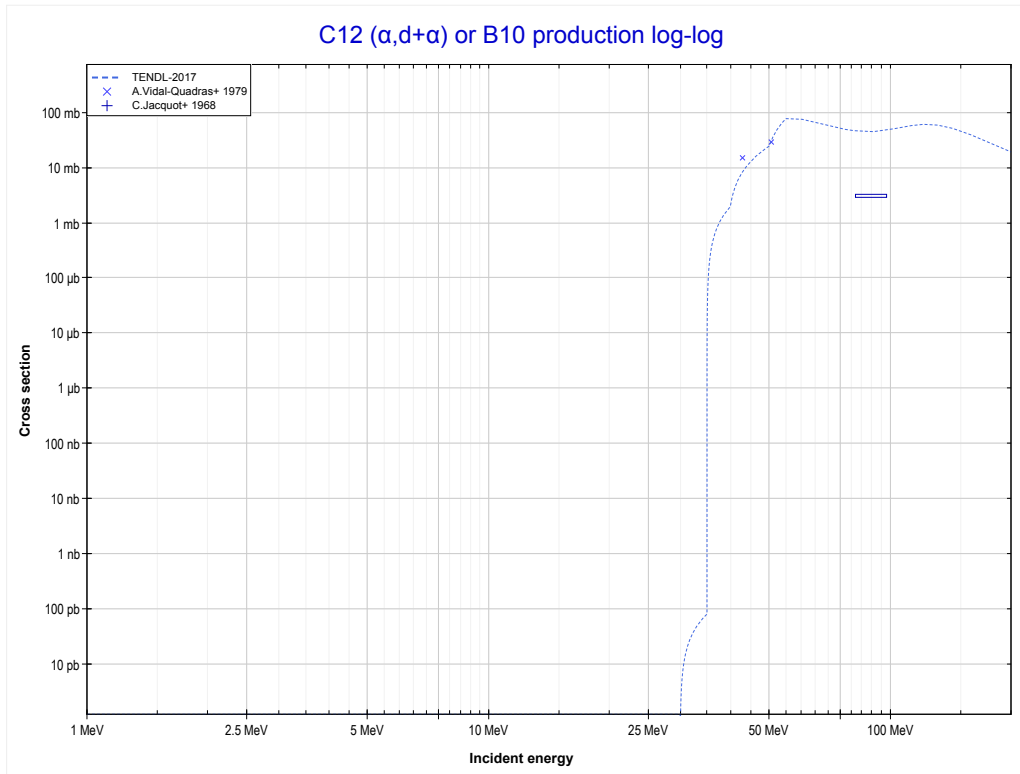
Reaction	Q-Value
C12($\alpha, He3$)C13	-15631.31 keV
C12($\alpha, p+d$)C13	-21124.79 keV
C12($\alpha, n+2p$)C13	-23349.35 keV

	6-C-12	
<< MT115 ($\alpha,p+d$)	MT116 ($\alpha,p+t$) or MT5 (C12 production)	MT117 ($\alpha,d+\alpha$) >>



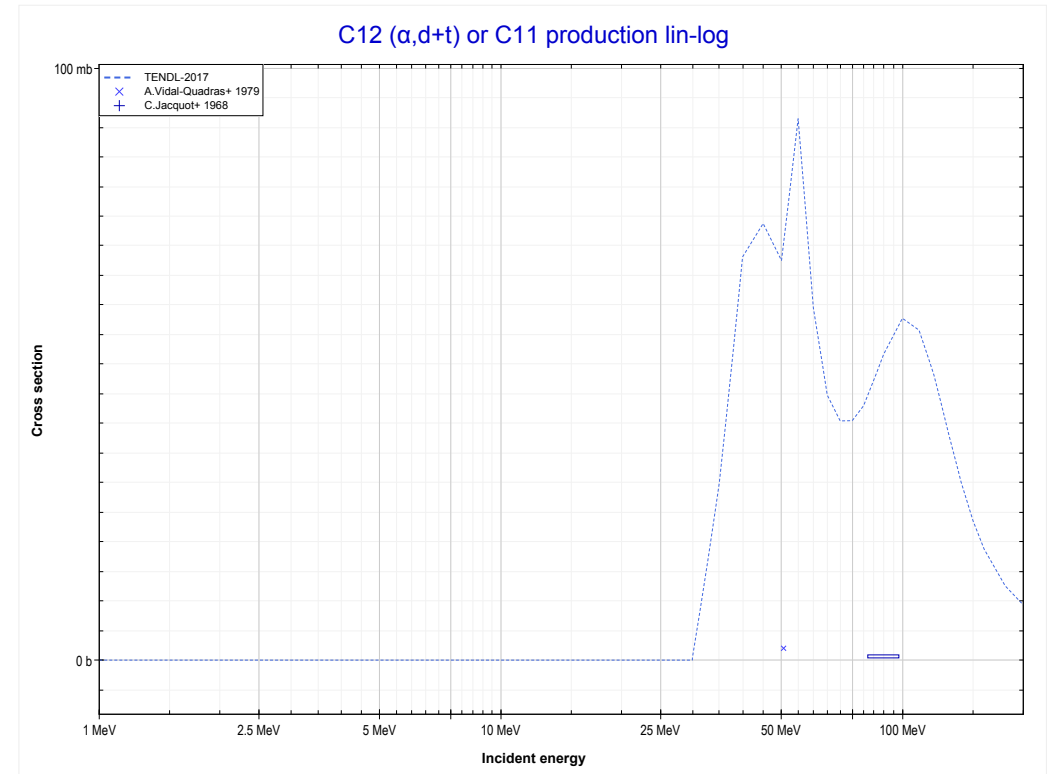
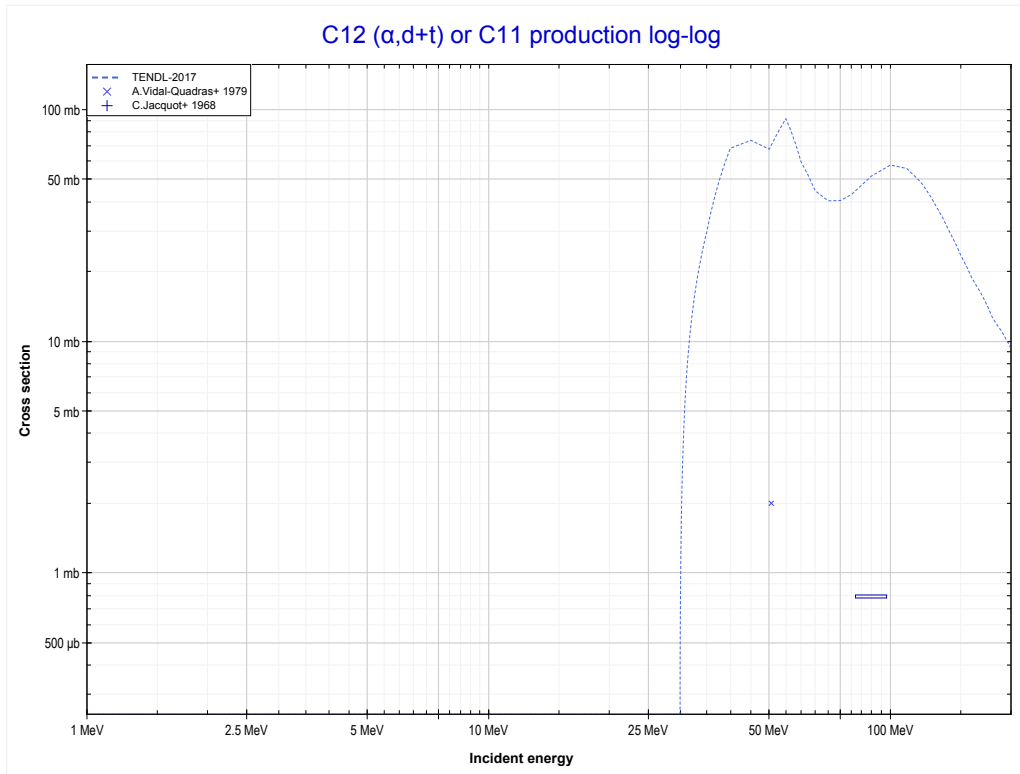
Reaction	Q-Value
C12(α,α)C12	0.00 keV
C12($\alpha,p+t$)C12	-19813.86 keV
C12($\alpha,n+He3$)C12	-20577.62 keV
C12($\alpha,2d$)C12	-23846.53 keV
C12($\alpha,n+p+d$)C12	-26071.09 keV
C12($\alpha,2n+2p$)C12	-28295.66 keV

	6-C-12	7-N-14 >>
<< MT116 ($\alpha,p+t$)	MT117 ($\alpha,d+\alpha$) or MT5 (B10 production)	MT182 ($\alpha,d+t$) >>



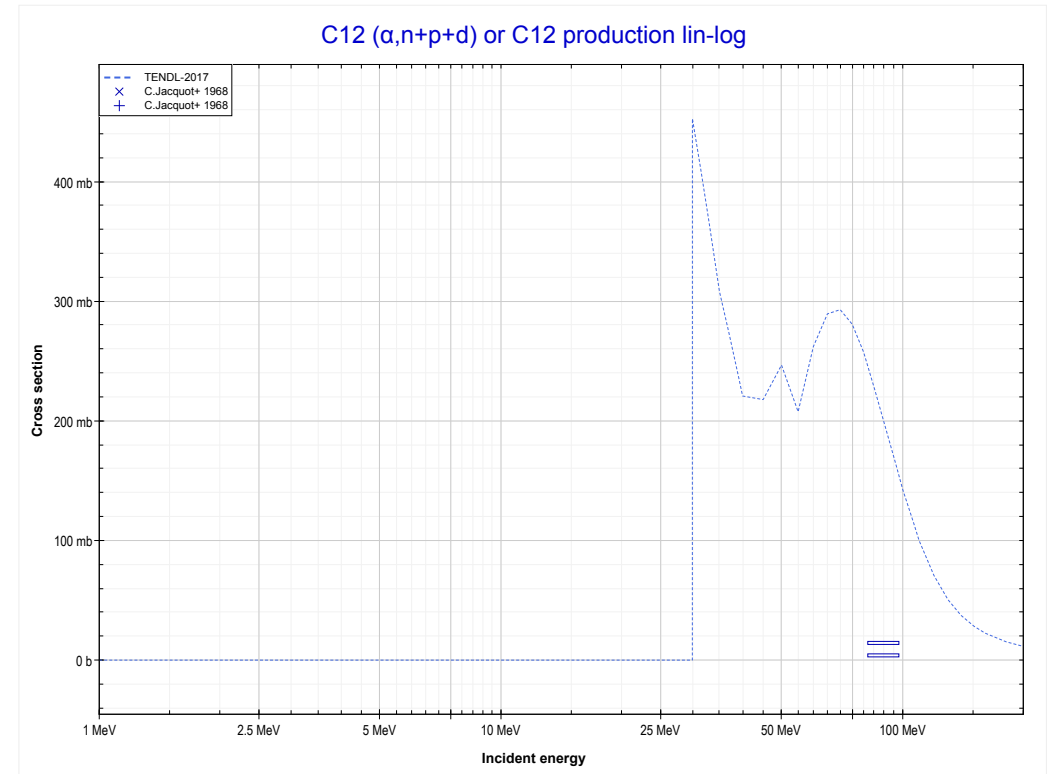
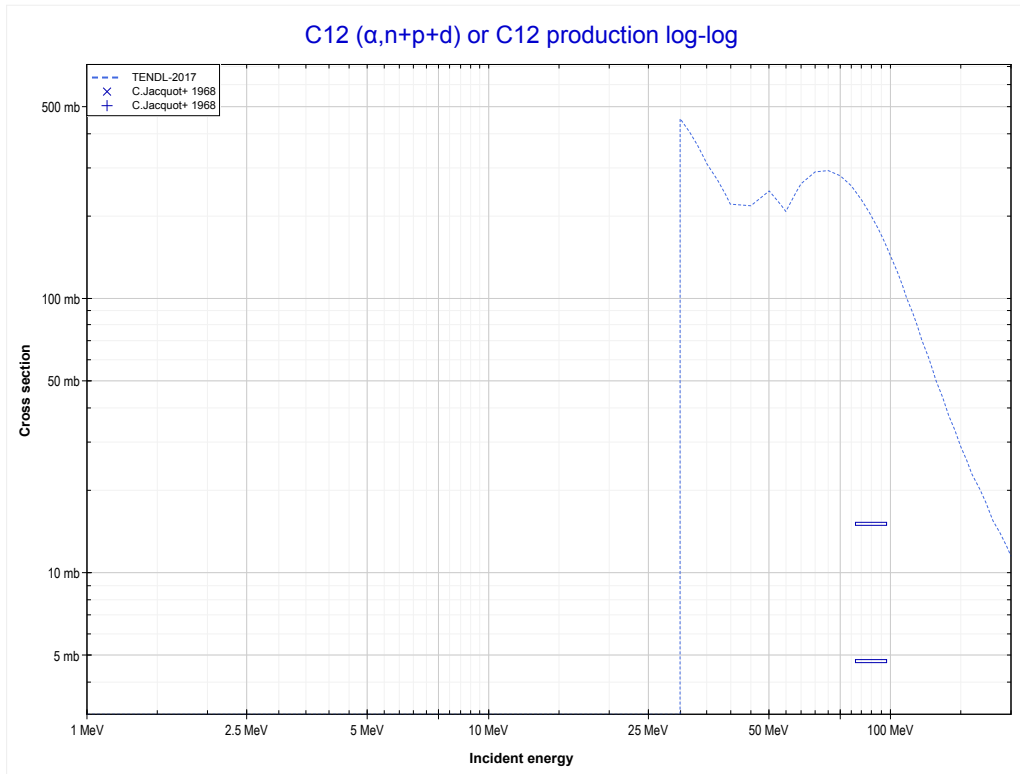
Reaction	Q-Value	Reaction	Q-Value
C12($\alpha,d+\alpha$)B10	-25186.42 keV	C12($\alpha,n+p+2d$)B10	-51257.52 keV
C12($\alpha,n+p+\alpha$)B10	-27410.99 keV	C12($\alpha,2n+2p+d$)B10	-53482.08 keV
C12($\alpha,t+He3$)B10	-39506.81 keV	C12($\alpha,3n+3p$)B10	-55706.65 keV
C12($\alpha,p+d+t$)B10	-45000.28 keV		
C12($\alpha,n+d+He3$)B10	-45764.04 keV		
C12($\alpha,n+2p+t$)B10	-47224.85 keV		
C12($\alpha,2n+p+He3$)B10	-47988.60 keV		
C12($\alpha,3d$)B10	-49032.95 keV		

	6-C-12	
<< MT117 ($\alpha, d+\alpha$)	MT182 ($\alpha, d+t$) or MT5 (C11 production)	MT183 ($\alpha, n+p+d$) >>



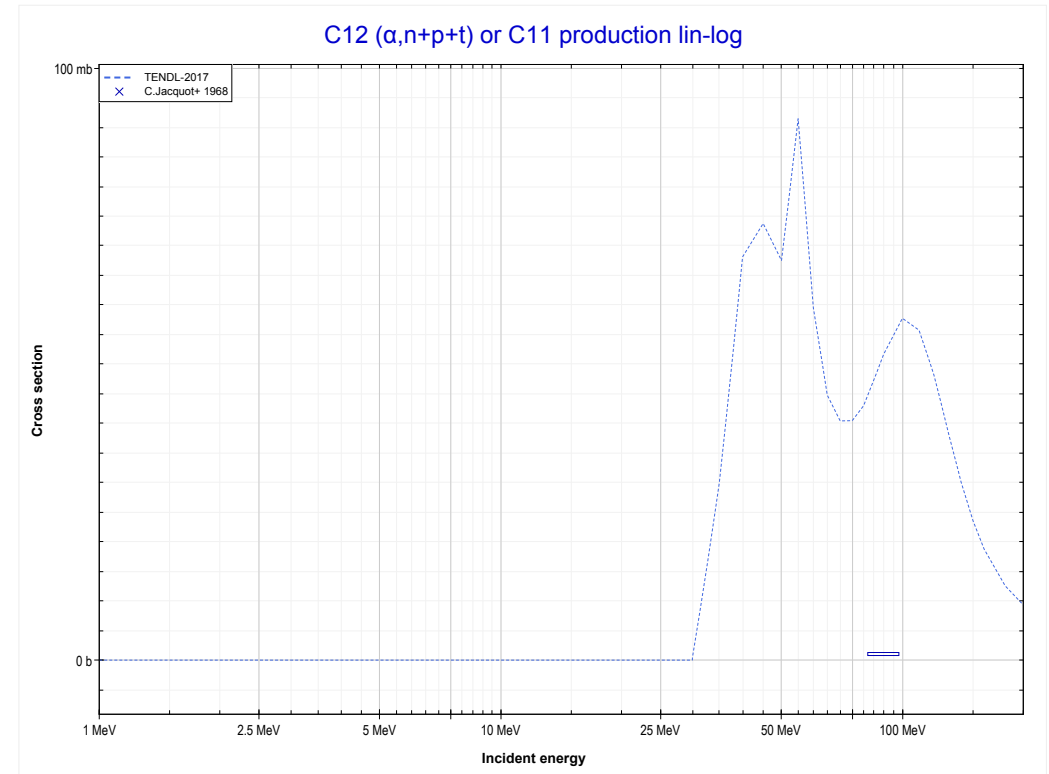
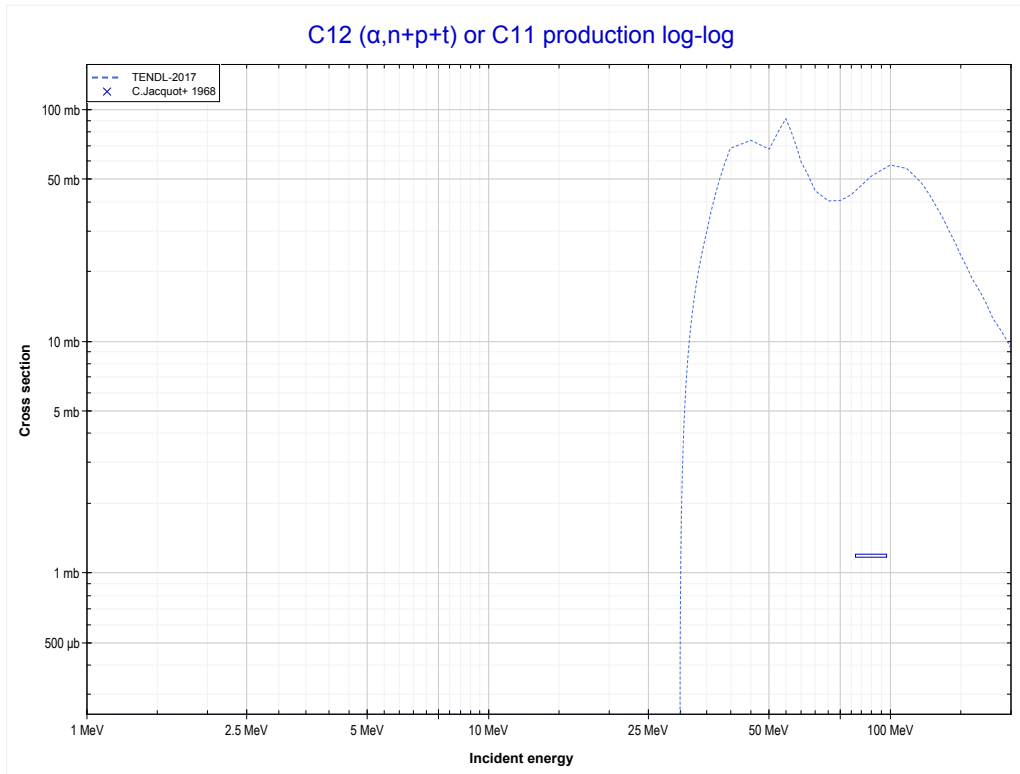
Reaction	Q-Value
C12($\alpha, n+\alpha$)C11	-18721.62 keV
C12($\alpha, d+t$)C11	-36310.91 keV
C12($\alpha, n+p+t$)C11	-38535.48 keV
C12($\alpha, 2n+He3$)C11	-39299.23 keV
C12($\alpha, n+2d$)C11	-42568.14 keV
C12($\alpha, 2n+p+d$)C11	-44792.71 keV
C12($\alpha, 3n+2p$)C11	-47017.28 keV

	6-C-12	7-N-14 >>
<< MT182 ($\alpha, d+t$)	MT183 ($\alpha, n+p+d$) or MT5 (C12 production)	MT184 ($\alpha, n+p+t$) >>



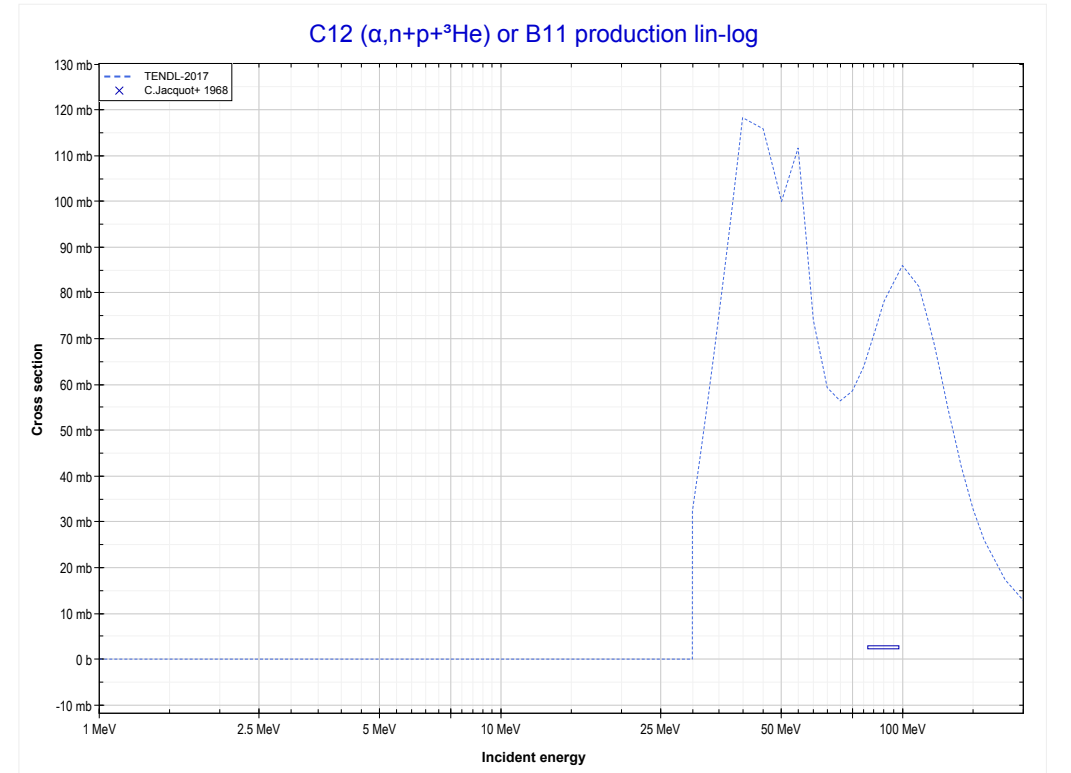
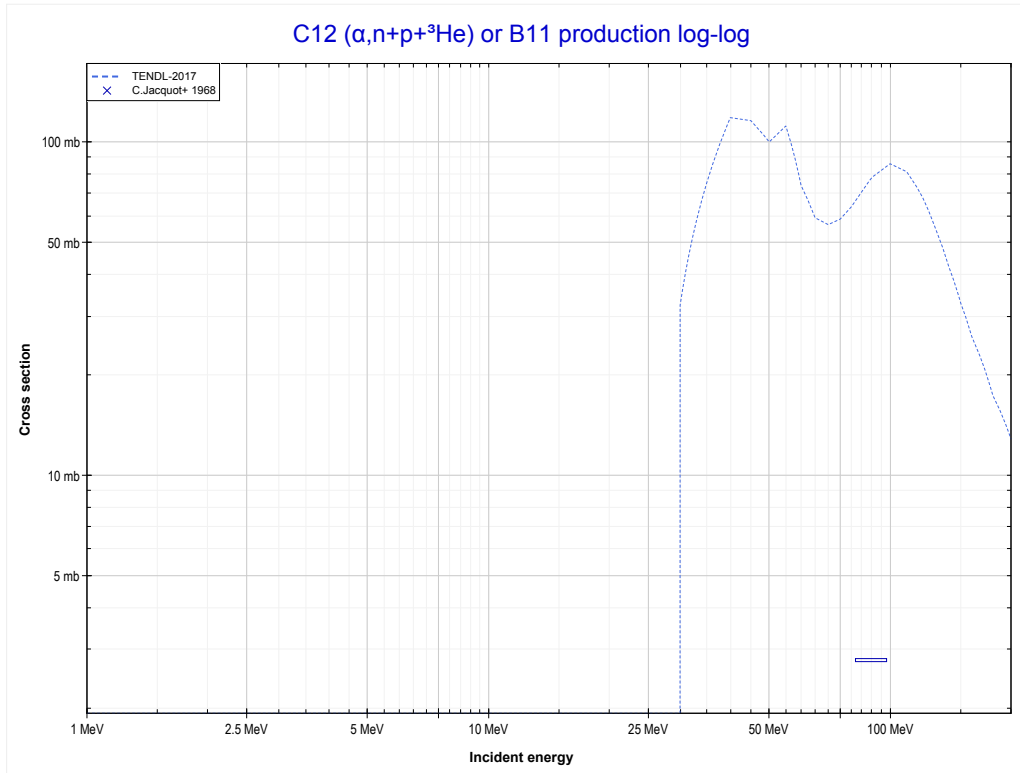
Reaction	Q-Value
C12(α, α)C12	0.00 keV
C12($\alpha, p+t$)C12	-19813.86 keV
C12($\alpha, n+He3$)C12	-20577.62 keV
C12($\alpha, 2d$)C12	-23846.53 keV
C12($\alpha, n+p+d$)C12	-26071.09 keV
C12($\alpha, 2n+2p$)C12	-28295.66 keV

	6-C-12	7-N-14 >>
<< MT183 ($\alpha, n+p+d$)	MT184 ($\alpha, n+p+t$) or MT5 (C11 production)	MT186 ($\alpha, n+p+^3\text{He}$) >>



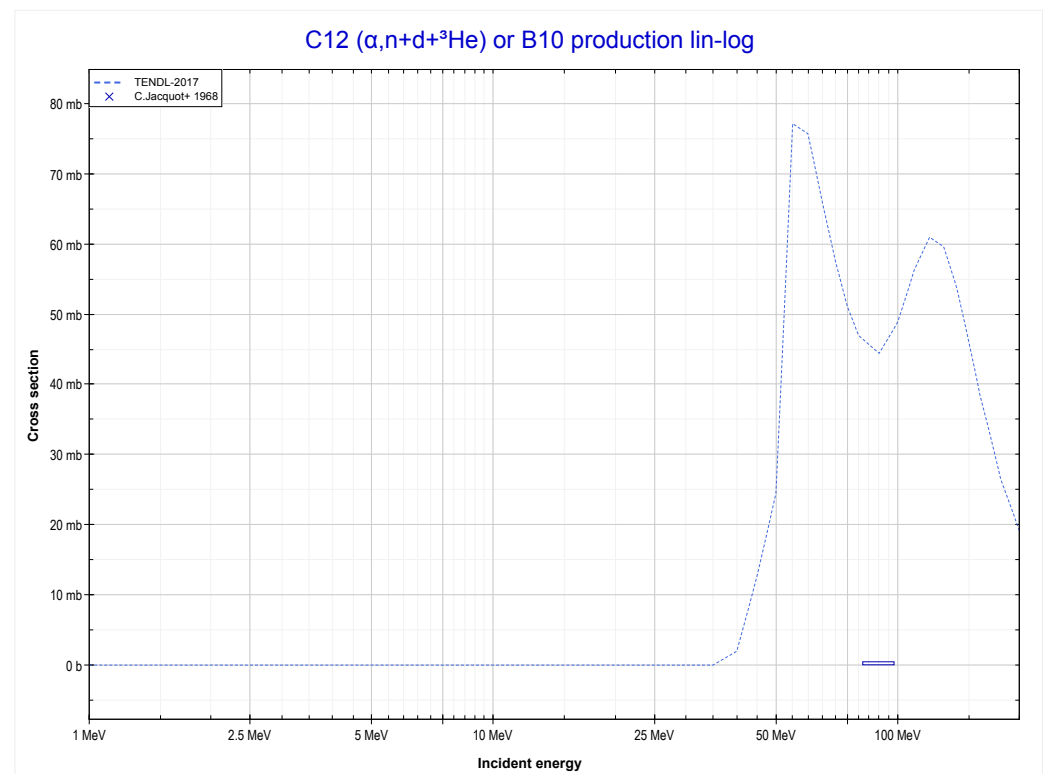
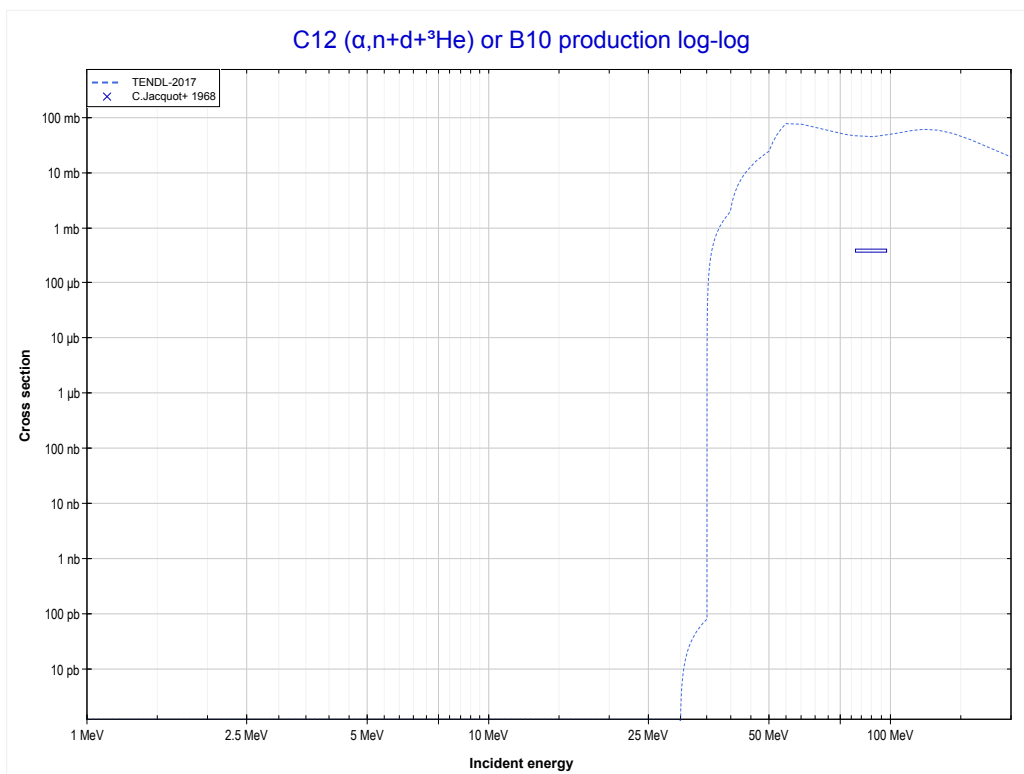
Reaction	Q-Value
C12($\alpha, n+\alpha$)C11	-18721.62 keV
C12($\alpha, d+t$)C11	-36310.91 keV
C12($\alpha, n+p+t$)C11	-38535.48 keV
C12($\alpha, 2n+^3\text{He}$)C11	-39299.23 keV
C12($\alpha, n+2d$)C11	-42568.14 keV
C12($\alpha, 2n+p+d$)C11	-44792.71 keV
C12($\alpha, 3n+2p$)C11	-47017.28 keV

	6-C-12	7-N-14 >>
<< MT184 ($\alpha, n+p+t$)	MT186 ($\alpha, n+p+^3\text{He}$) or MT5 (B11 production)	MT187 ($\alpha, n+d+^3\text{He}$) >>



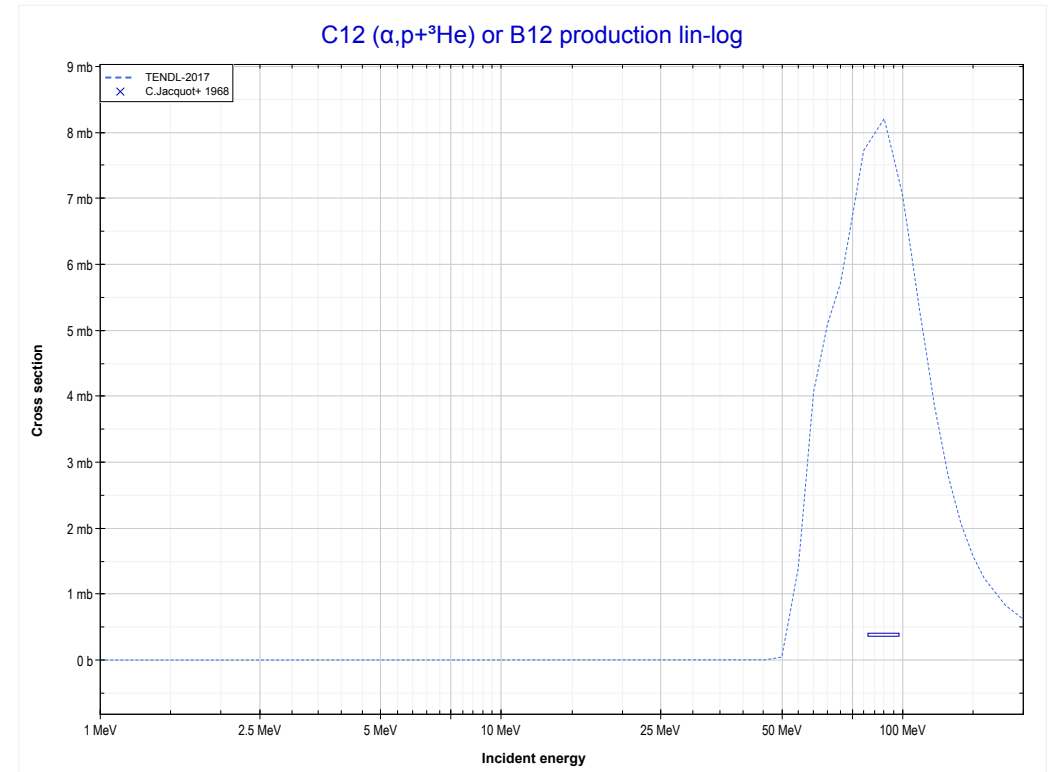
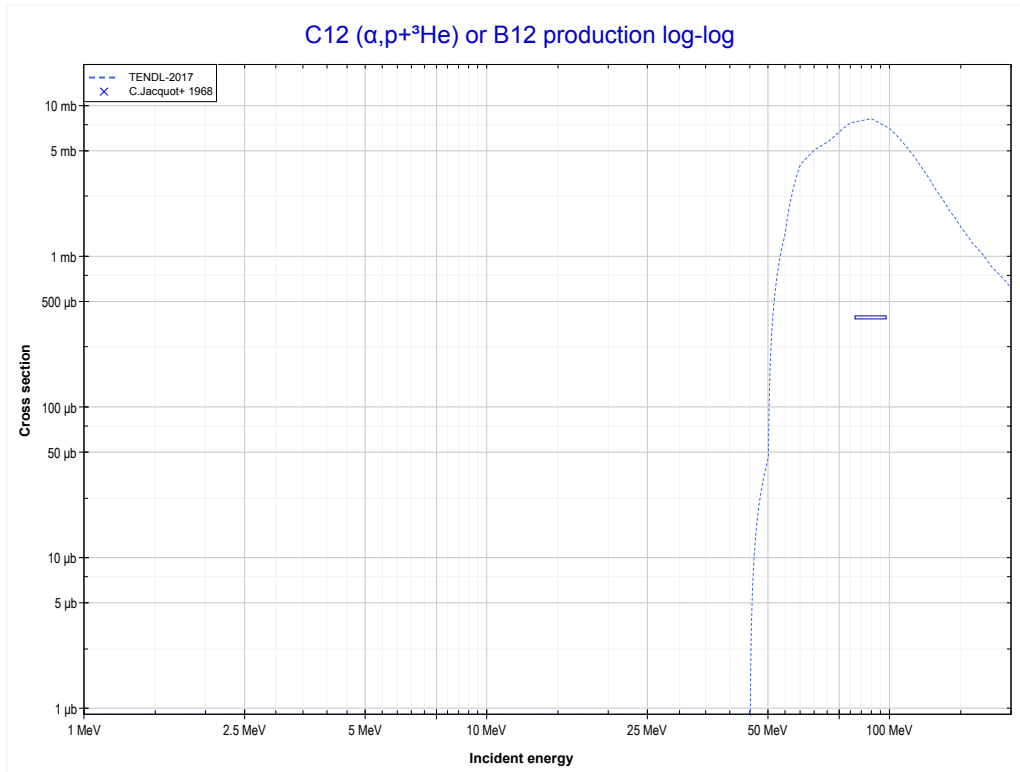
Reaction	Q-Value
C12($\alpha, p+\alpha$)B11	-15956.87 keV
C12($\alpha, d+^3\text{He}$)B11	-34309.92 keV
C12($\alpha, 2p+t$)B11	-35770.73 keV
C12($\alpha, n+p+^3\text{He}$)B11	-36534.49 keV
C12($\alpha, p+2d$)B11	-39803.40 keV
C12($\alpha, n+2p+d$)B11	-42027.96 keV
C12($\alpha, 2n+3p$)B11	-44252.53 keV

	6-C-12	7-N-14 >>
<< MT186 ($\alpha, n + p + {}^3\text{He}$)	MT187 ($\alpha, n + d + {}^3\text{He}$) or MT5 (B10 production)	MT191 ($\alpha, p + {}^3\text{He}$) >>



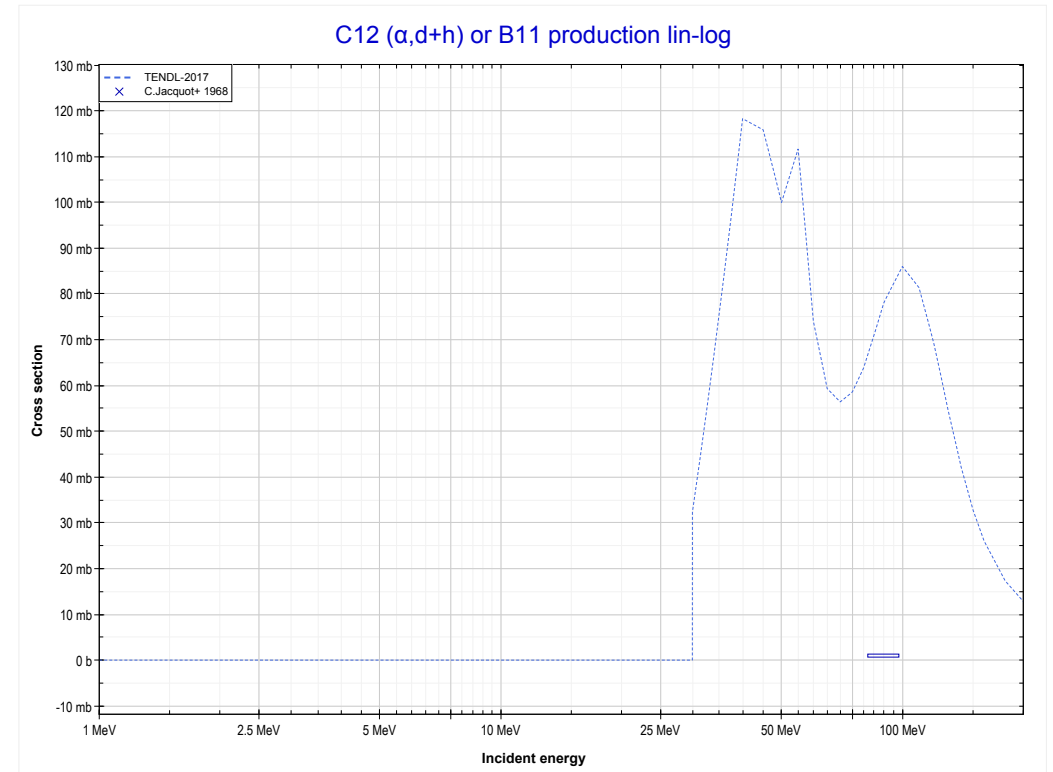
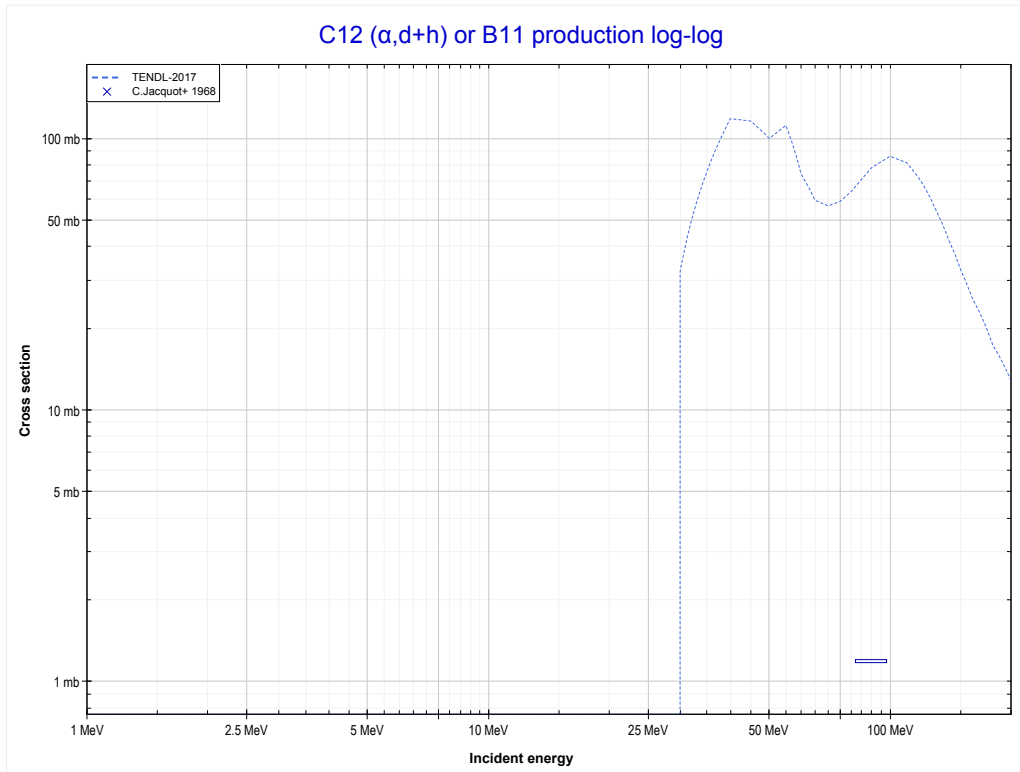
Reaction	Q-Value	Reaction	Q-Value
C12($\alpha, d + \alpha$)B10	-25186.42 keV	C12($\alpha, n + p + 2d$)B10	-51257.52 keV
C12($\alpha, n + p + \alpha$)B10	-27410.99 keV	C12($\alpha, 2n + 2p + d$)B10	-53482.08 keV
C12($\alpha, t + \text{He3}$)B10	-39506.81 keV	C12($\alpha, 3n + 3p$)B10	-55706.65 keV
C12($\alpha, p + d + t$)B10	-45000.28 keV		
C12($\alpha, n + d + \text{He3}$)B10	-45764.04 keV		
C12($\alpha, n + 2p + t$)B10	-47224.85 keV		
C12($\alpha, 2n + p + \text{He3}$)B10	-47988.60 keV		
C12($\alpha, 3d$)B10	-49032.95 keV		

	6-C-12	7-N-14 >>
<< MT187 ($\alpha, n+d+{}^3\text{He}$)	MT191 ($\alpha, p+{}^3\text{He}$) or MT5 (B12 production)	MT192 ($\alpha, d+{}^3\text{He}$) >>



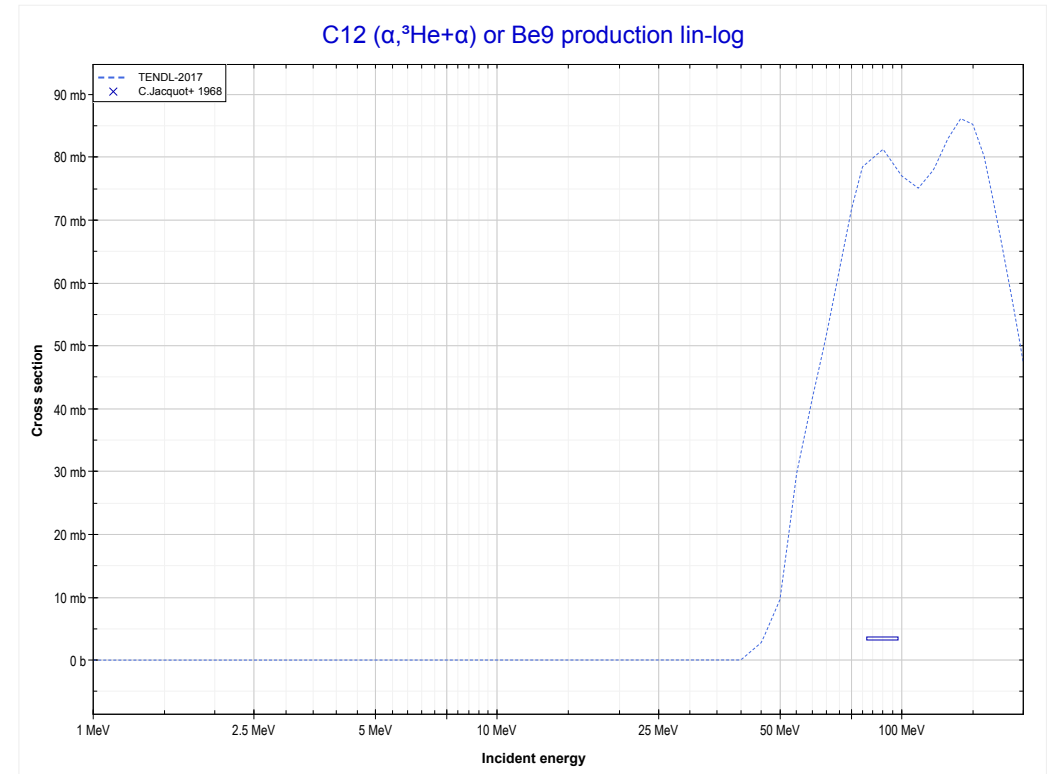
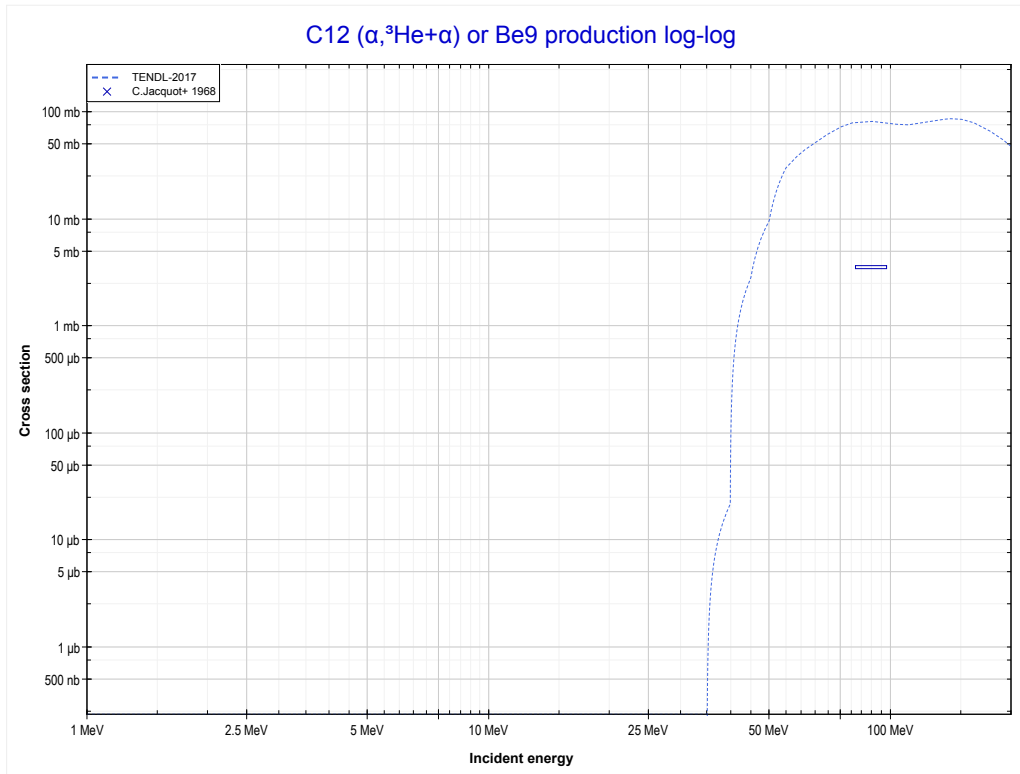
Reaction	Q-Value
C12($\alpha, p+{}^3\text{He}$)B12	-33164.67 keV
C12($\alpha, 2p+d$)B12	-38658.15 keV
C12($\alpha, n+3p$)B12	-40882.71 keV

	6-C-12	
<< MT191 ($\alpha, p+^3\text{He}$)	MT192 ($\alpha, d+^3\text{He}$) or MT5 (B11 production)	MT193 ($\alpha, ^3\text{He}+\alpha$) >>



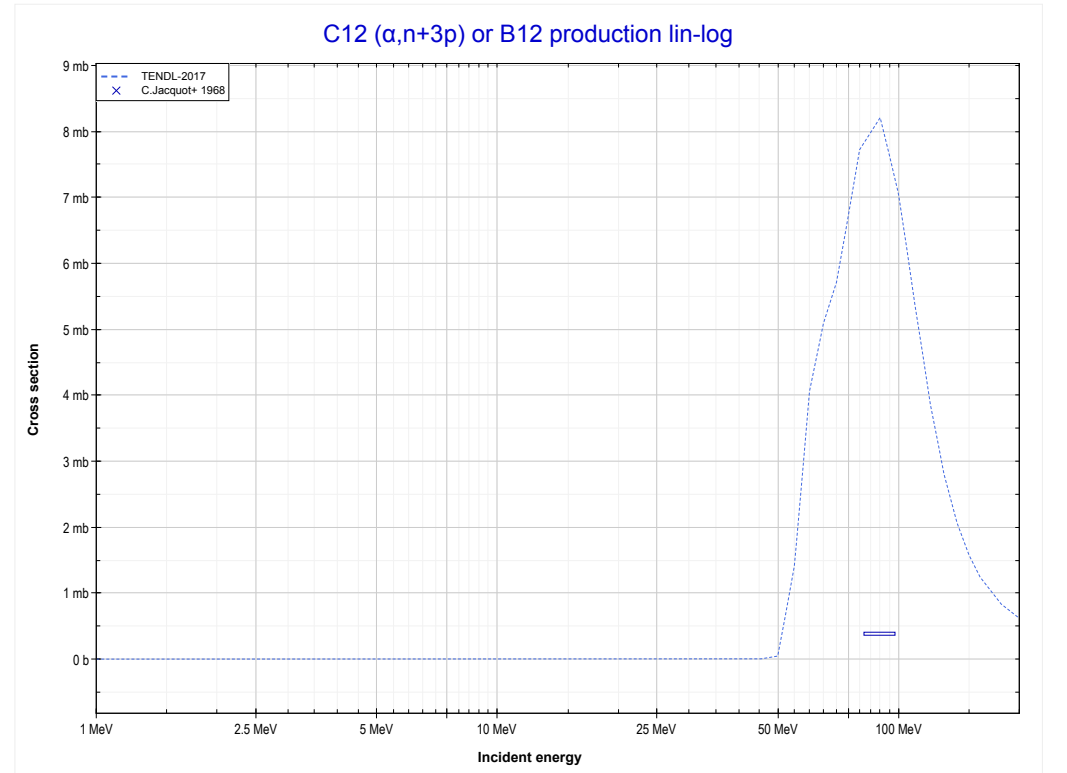
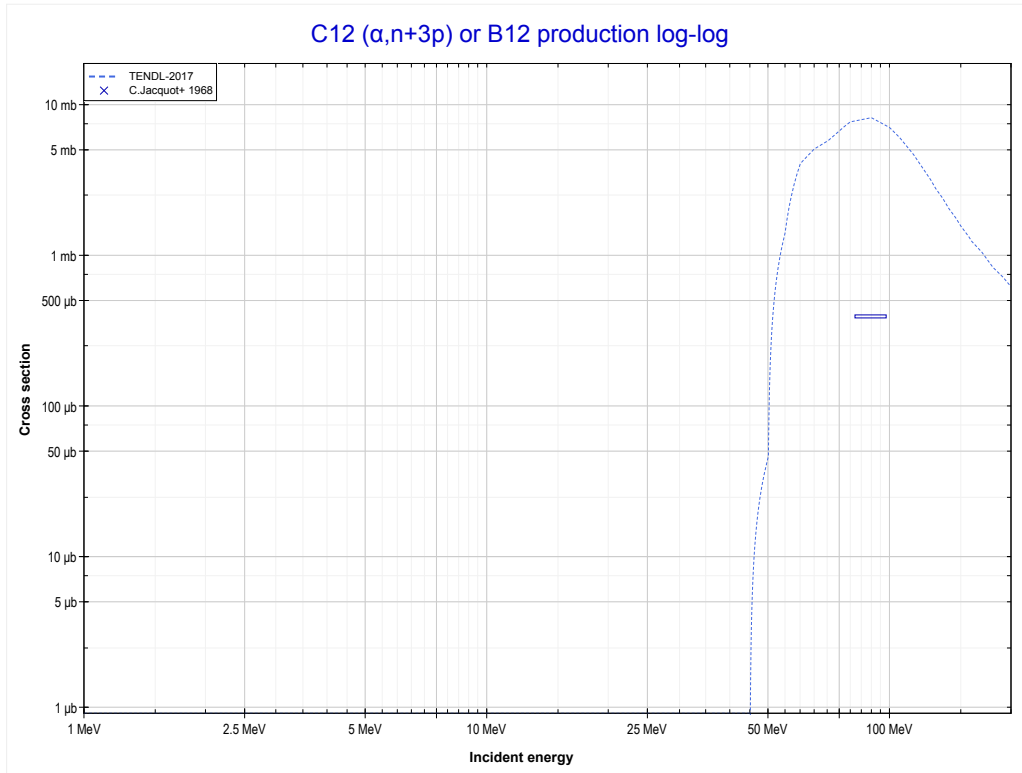
Reaction	Q-Value
C12($\alpha, p+\alpha$)B11	-15956.87 keV
C12($\alpha, d+^3\text{He}$)B11	-34309.92 keV
C12($\alpha, 2p+t$)B11	-35770.73 keV
C12($\alpha, n+p+^3\text{He}$)B11	-36534.49 keV
C12($\alpha, p+2d$)B11	-39803.40 keV
C12($\alpha, n+2p+d$)B11	-42027.96 keV
C12($\alpha, 2n+3p$)B11	-44252.53 keV

	6-C-12	7-N-14 >>
<< MT192 ($\alpha, d+^3\text{He}$)	MT193 ($\alpha, ^3\text{He}+\alpha$) or MT5 (Be9 production)	MT198 ($\alpha, n+3p$) >>



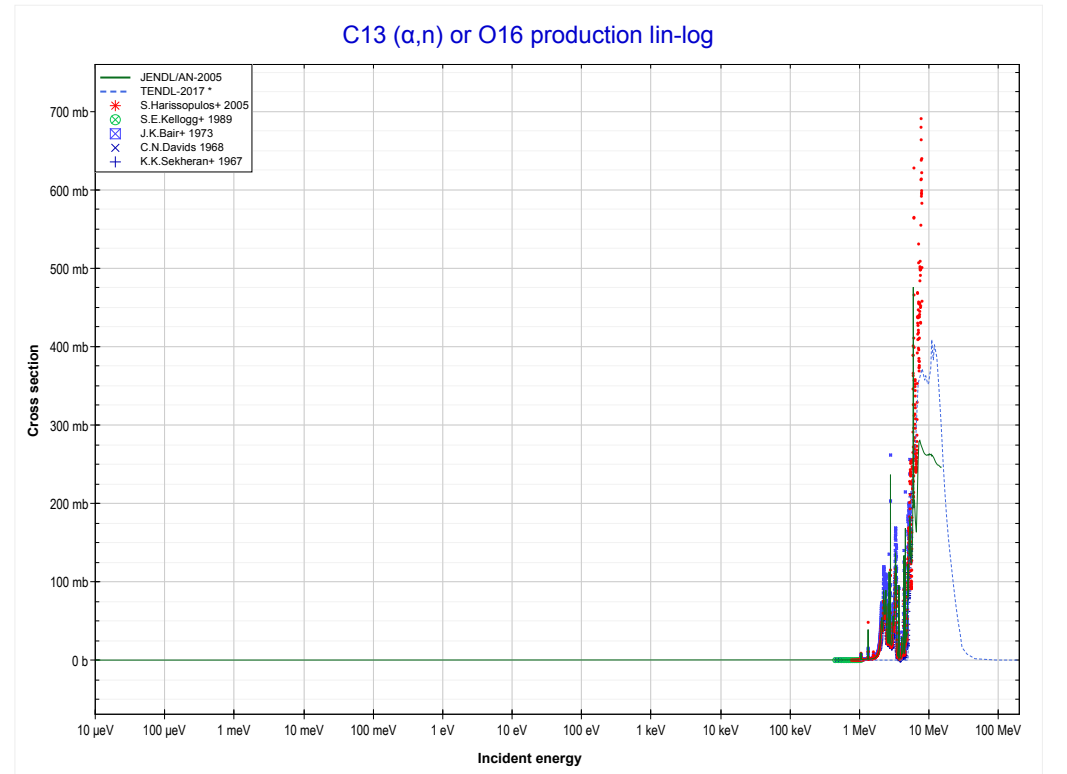
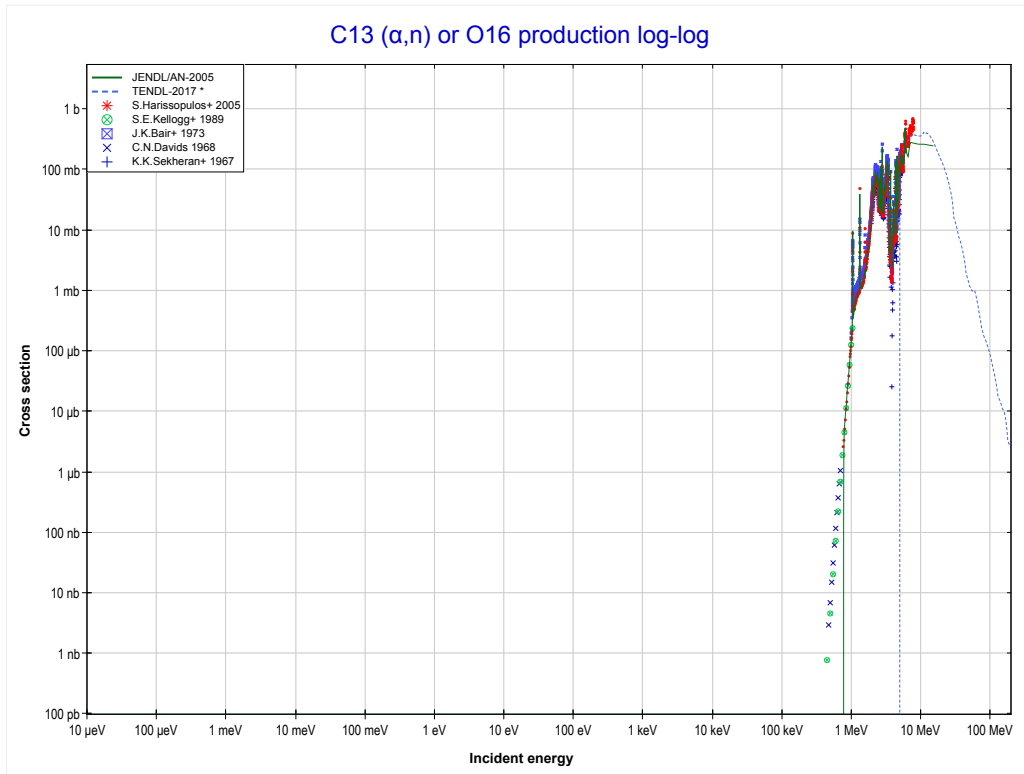
Reaction	Q-Value	Reaction	Q-Value
C12($\alpha, \text{He3}+\alpha$)Be9	-26279.67 keV	C12($\alpha, n+3p+t$)Be9	-53811.57 keV
C12($\alpha, p+d+\alpha$)Be9	-31773.14 keV	C12($\alpha, 2n+2p+\text{He3}$)Be9	-54575.33 keV
C12($\alpha, n+2p+\alpha$)Be9	-33997.71 keV	C12($\alpha, p+3d$)Be9	-55619.67 keV
C12($\alpha, p+t+\text{He3}$)Be9	-46093.53 keV	C12($\alpha, n+2p+2d$)Be9	-57844.24 keV
C12($\alpha, n+2\text{He3}$)Be9	-46857.28 keV	C12($\alpha, 2n+3p+d$)Be9	-60068.80 keV
C12($\alpha, 2d+\text{He3}$)Be9	-50126.19 keV	C12($\alpha, 3n+4p$)Be9	-62293.37 keV
C12($\alpha, 2p+d+t$)Be9	-51587.00 keV		
C12($\alpha, n+p+d+\text{He3}$)Be9	-52350.76 keV		

	6-C-12	7-N-14 >>
<< MT193 ($\alpha, ^3\text{He}+\alpha$)	MT198 ($\alpha, n+3p$) or MT5 (B12 production)	6-C-13 MT4 (α, n) >>



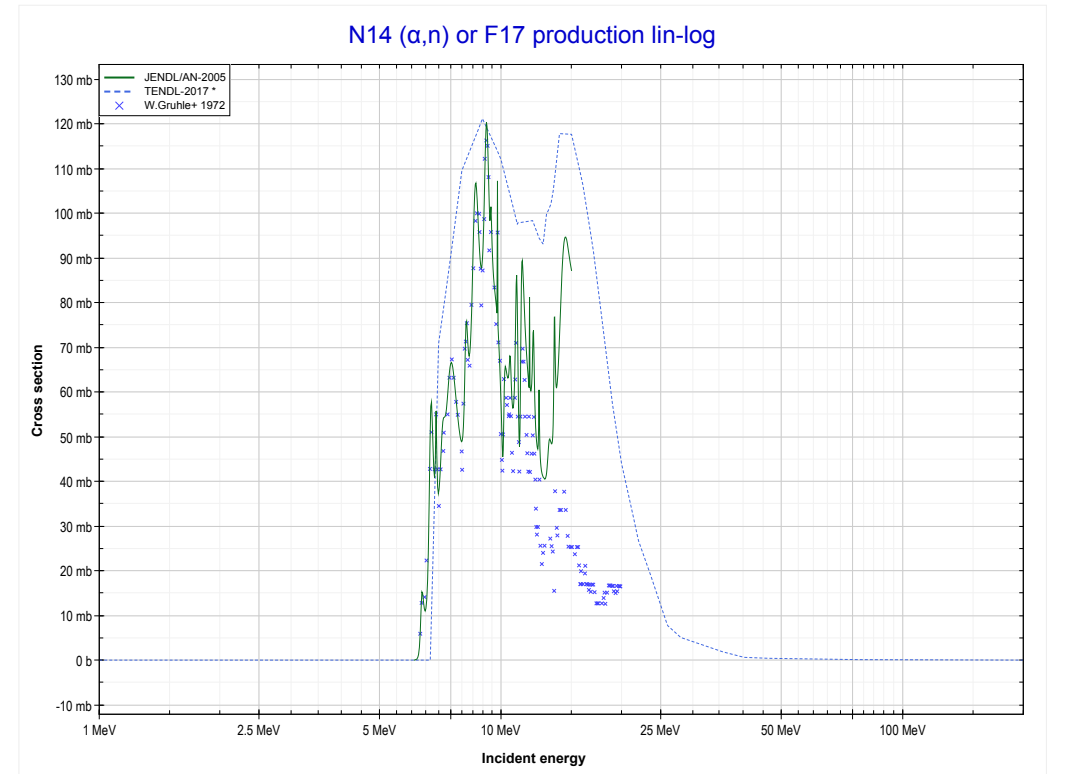
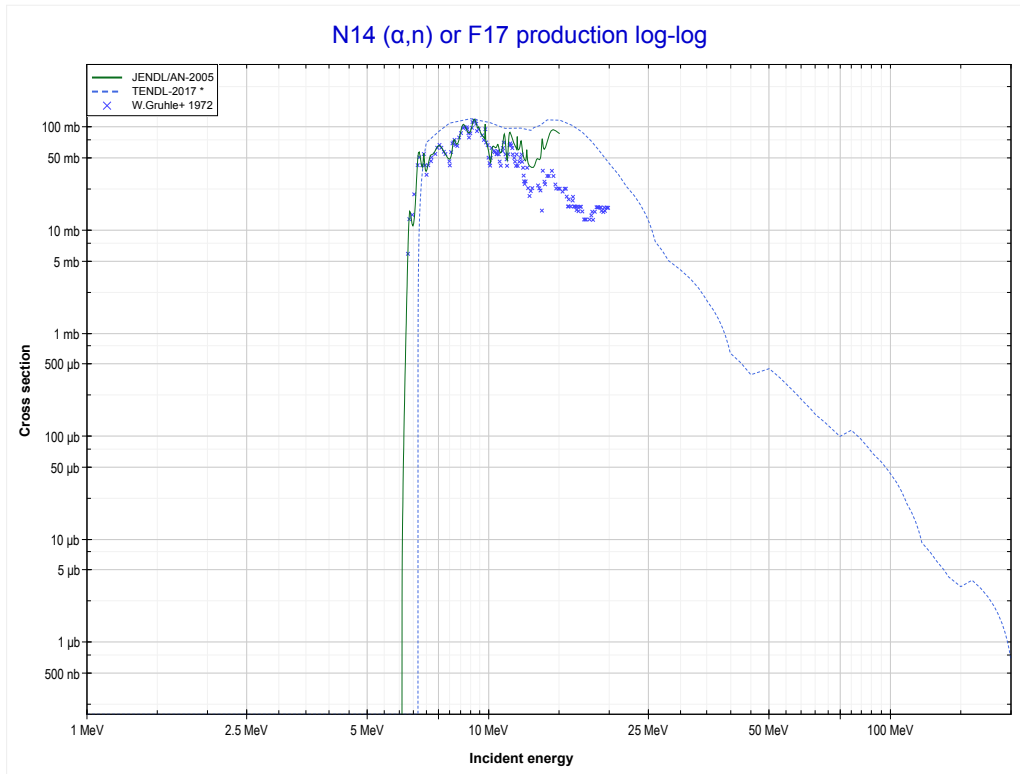
Reaction	Q-Value
C12($\alpha, p+^3\text{He}$)B12	-33164.67 keV
C12($\alpha, 2p+d$)B12	-38658.15 keV
C12($\alpha, n+3p$)B12	-40882.71 keV

<< 6-C-12	6-C-13	7-N-14 >>
<< 6-C-12 MT198 ($\alpha, n+3p$)	MT4 (α, n) or MT5 (O16 production)	7-N-14 MT4 (α, n) >>



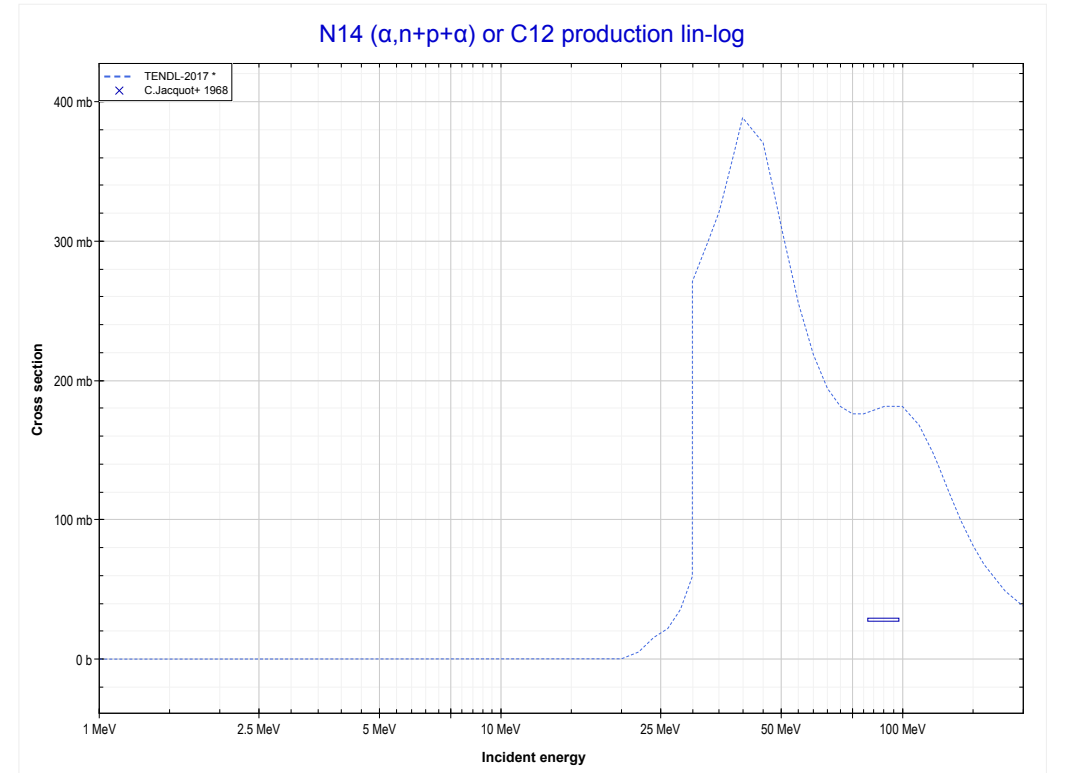
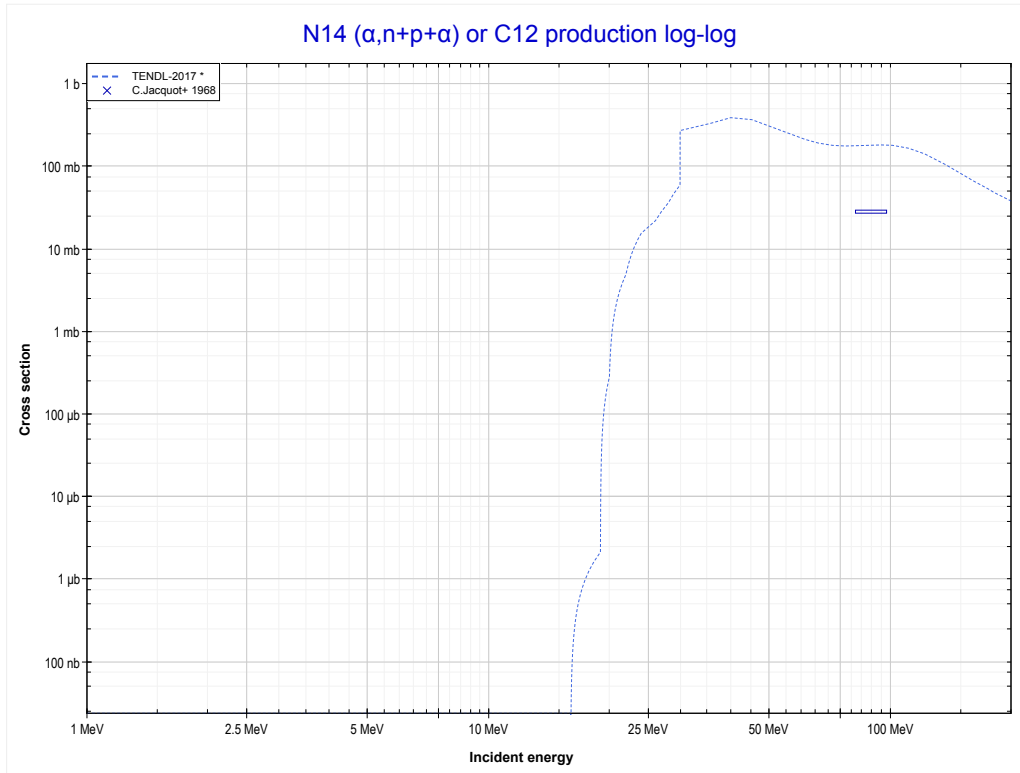
Reaction	Q-Value
C13(α, n)O16	2215.61 keV

<< 6-C-13	7-N-14	8-O-16 >>
<< 6-C-13 MT4 (α,n)	MT4 (α,n) or MT5 (F17 production)	MT45 ($\alpha,n+p+\alpha$) >>



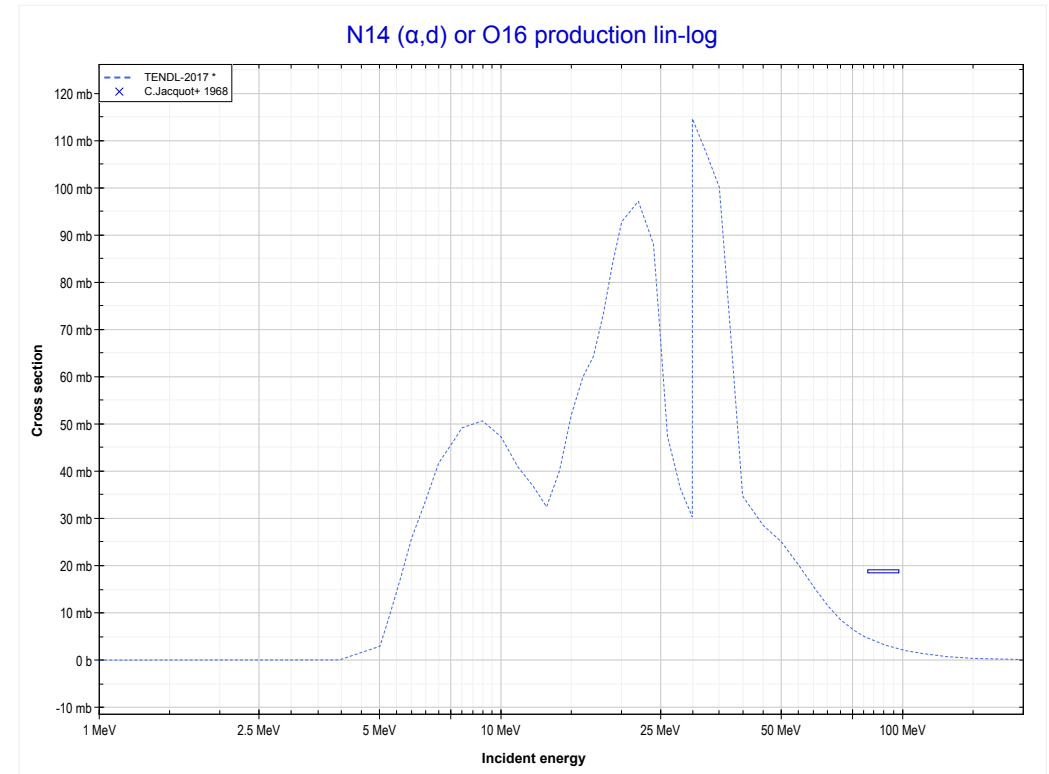
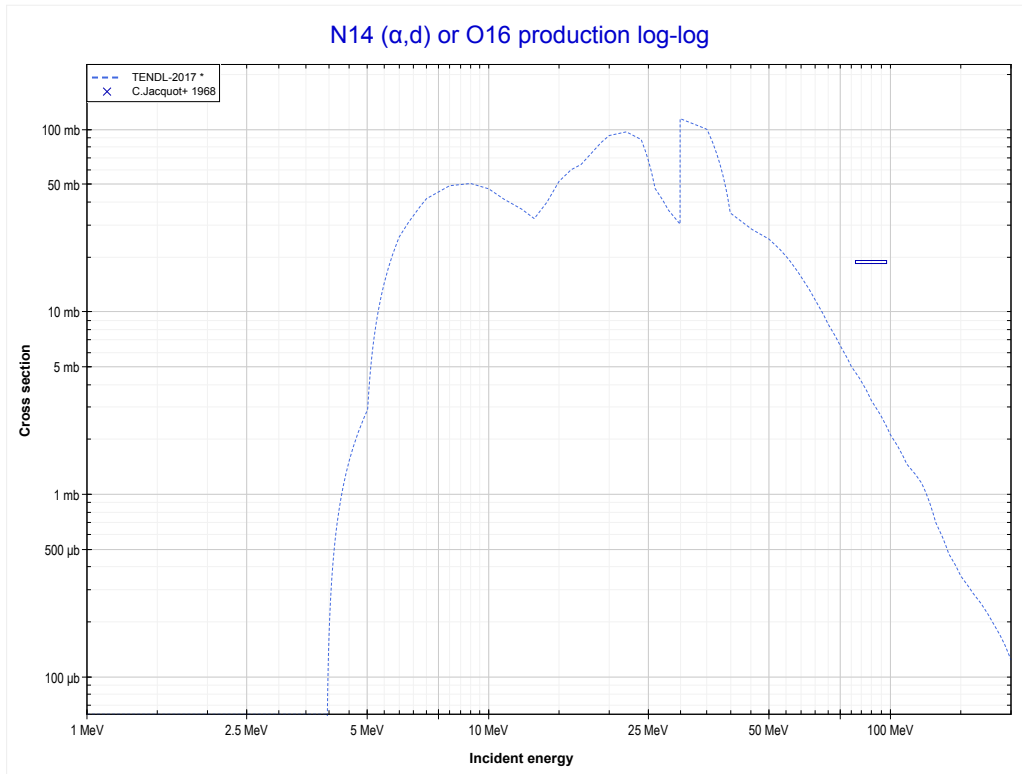
Reaction	Q-Value
N14(α,n)F17	-4734.68 keV

<< 6-C-12	7-N-14	26-Fe-54 >>
<< MT4 (α, n)	MT45 ($\alpha, n+p+\alpha$) or MT5 (C12 production)	MT104 (α, d) >>



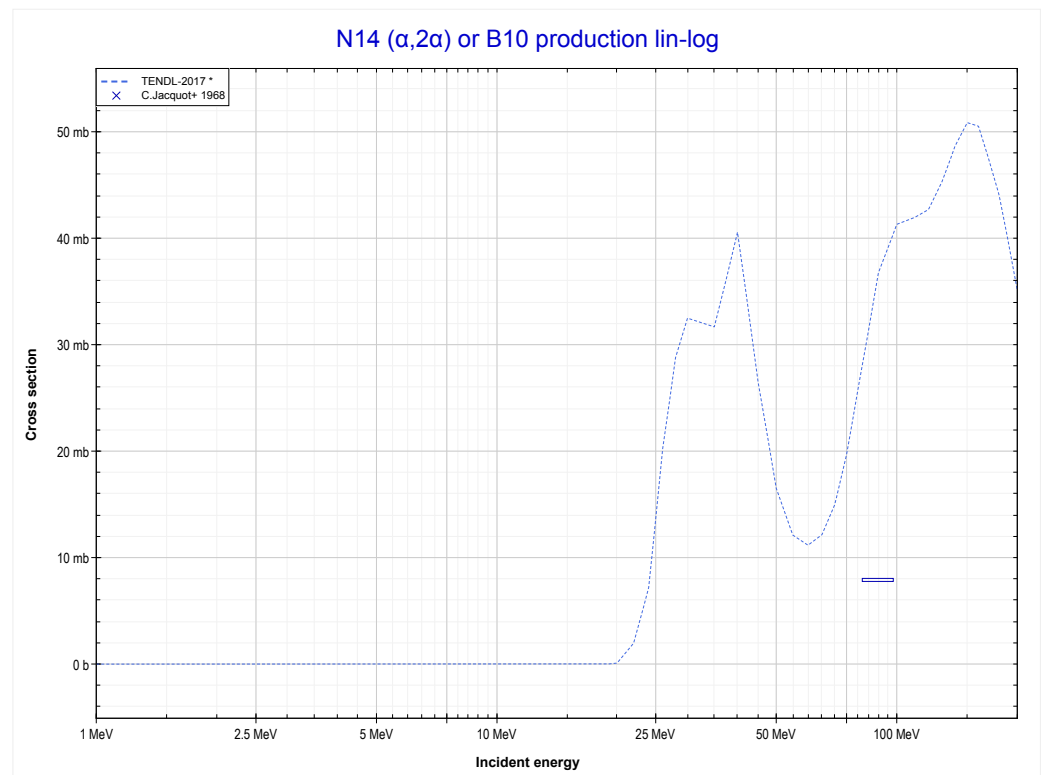
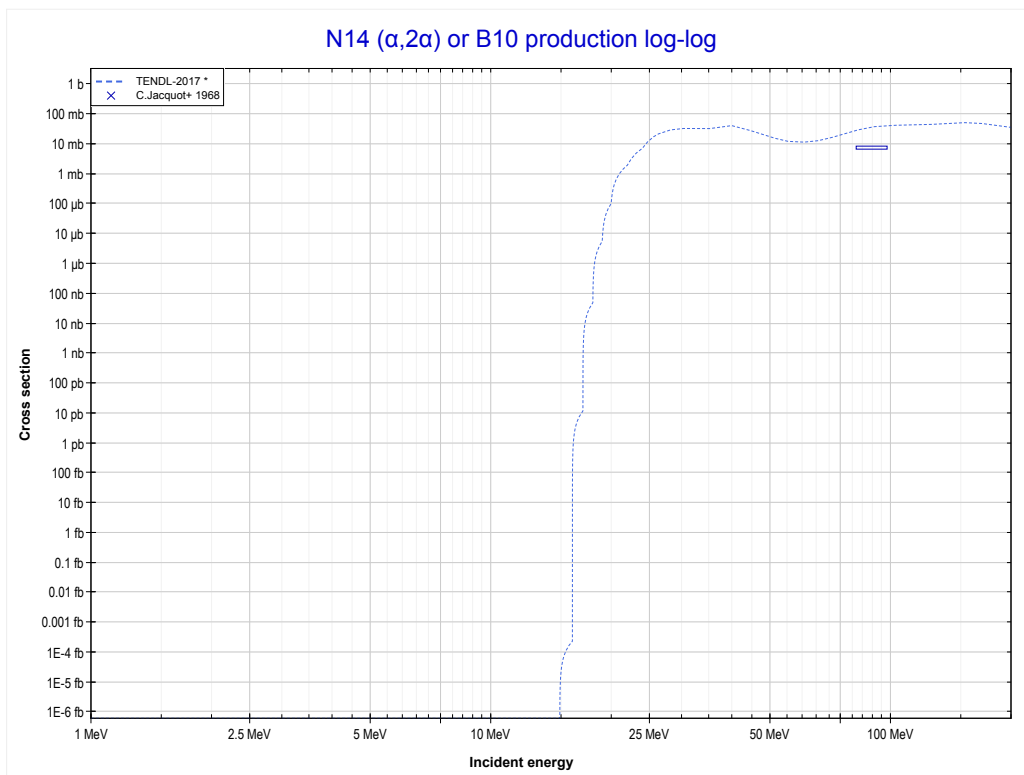
Reaction	Q-Value	Reaction	Q-Value
N14($\alpha, d+\alpha$)C12	-10272.31 keV	N14($\alpha, n+p+2d$)C12	-36343.40 keV
N14($\alpha, n+p+\alpha$)C12	-12496.87 keV	N14($\alpha, 2n+2p+d$)C12	-38567.96 keV
N14($\alpha, t+He3$)C12	-24592.69 keV	N14($\alpha, 3n+3p$)C12	-40792.53 keV
N14($\alpha, p+d+t$)C12	-30086.17 keV		
N14($\alpha, n+d+He3$)C12	-30849.92 keV		
N14($\alpha, n+2p+t$)C12	-32310.73 keV		
N14($\alpha, 2n+p+He3$)C12	-33074.49 keV		
N14($\alpha, 3d$)C12	-34118.83 keV		

	7-N-14	
<< MT45 ($\alpha, n+p+\alpha$)	MT104 (α, d) or MT5 (O16 production)	MT108 ($\alpha, 2\alpha$) >>



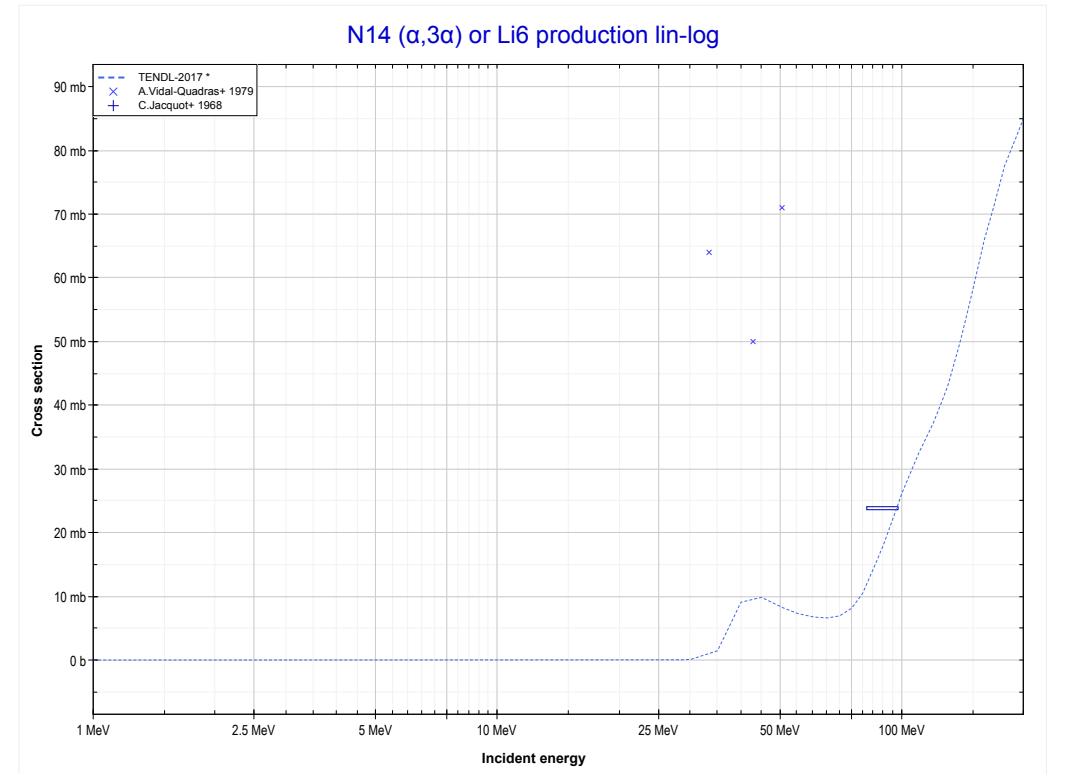
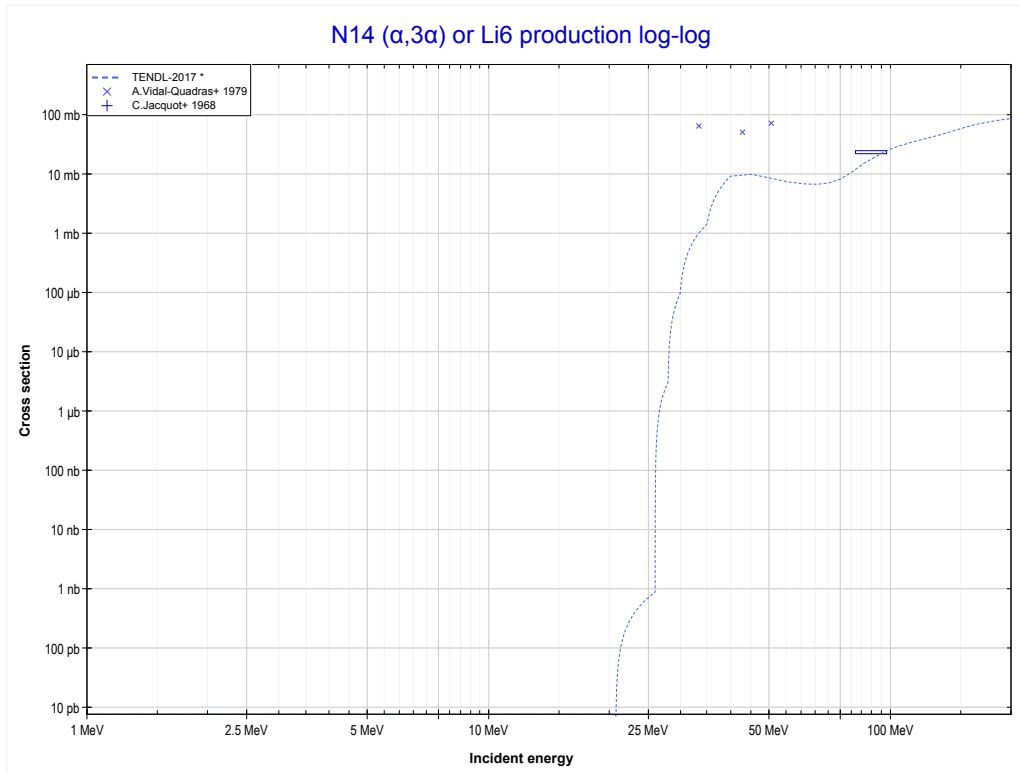
Reaction	Q-Value
N14(α, d)O16	-3110.39 keV
N14($\alpha, n+p$)O16	-5334.95 keV

<< 6-C-12	7-N-14	23-V-51 >>
<< MT104 (α, d)	MT108 ($\alpha, 2\alpha$) or MT5 (B10 production)	MT109 ($\alpha, 3\alpha$) >>



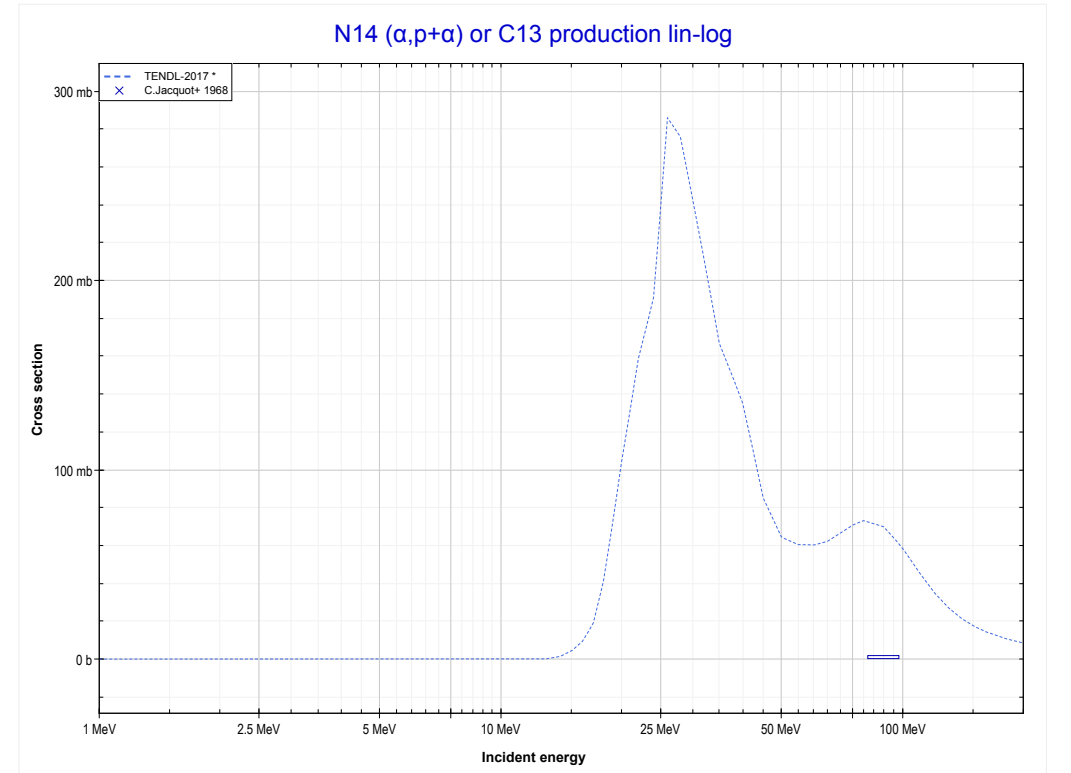
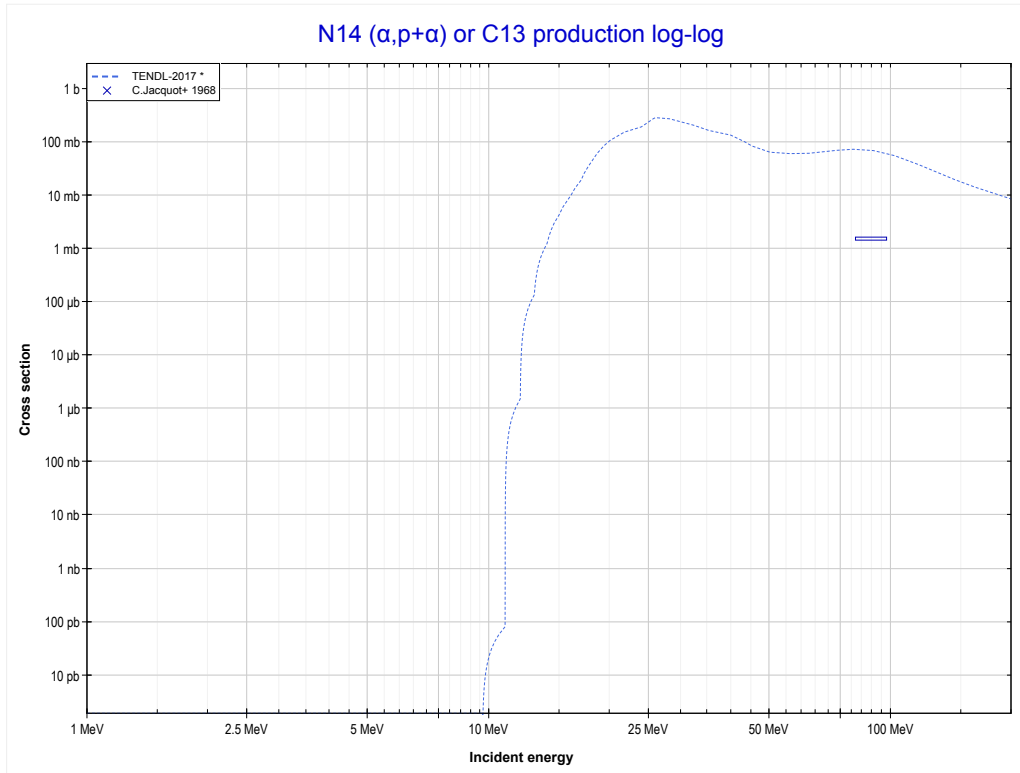
Reaction	Q-Value	Reaction	Q-Value
N14($\alpha, 2\alpha$)B10	-11612.20 keV	N14($\alpha, n+p+t+He3$)B10	-52003.68 keV
N14($\alpha, p+t+\alpha$)B10	-31426.06 keV	N14($\alpha, 2n+2He3$)B10	-52767.43 keV
N14($\alpha, n+He3+\alpha$)B10	-32189.82 keV	N14($\alpha, p+2d+t$)B10	-55272.59 keV
N14($\alpha, 2d+\alpha$)B10	-35458.73 keV	N14($\alpha, n+2d+He3$)B10	-56036.34 keV
N14($\alpha, n+p+d+\alpha$)B10	-37683.29 keV	N14($\alpha, n+2p+d+t$)B10	-57497.15 keV
N14($\alpha, 2n+2p+\alpha$)B10	-39907.86 keV	N14($\alpha, 2n+p+d+He3$)B10	-58260.91 keV
N14($\alpha, d+t+He3$)B10	-49779.11 keV	N14($\alpha, 4d$)B10	-59305.25 keV
N14($\alpha, 2p+2t$)B10	-51239.92 keV	N14($\alpha, 2n+3p+t$)B10	-59721.72 keV

	7-N-14	
<< MT108 ($\alpha,2\alpha$)	MT109 ($\alpha,3\alpha$) or MT5 (Li6 production)	MT112 ($\alpha,p+\alpha$) >>



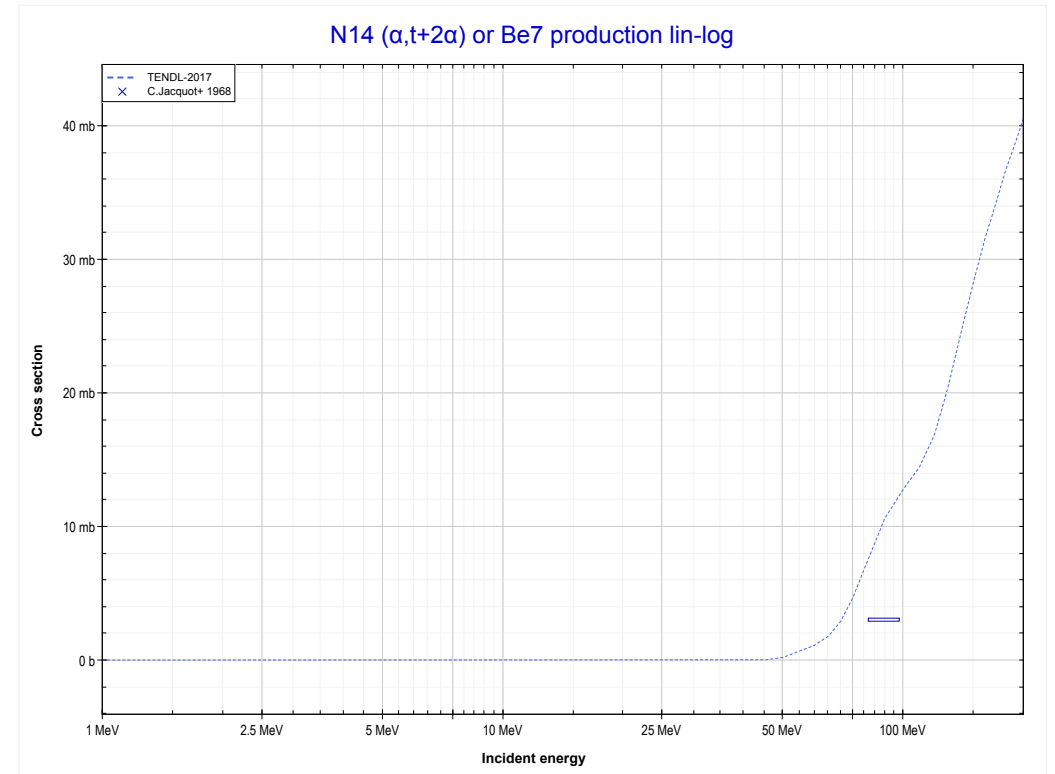
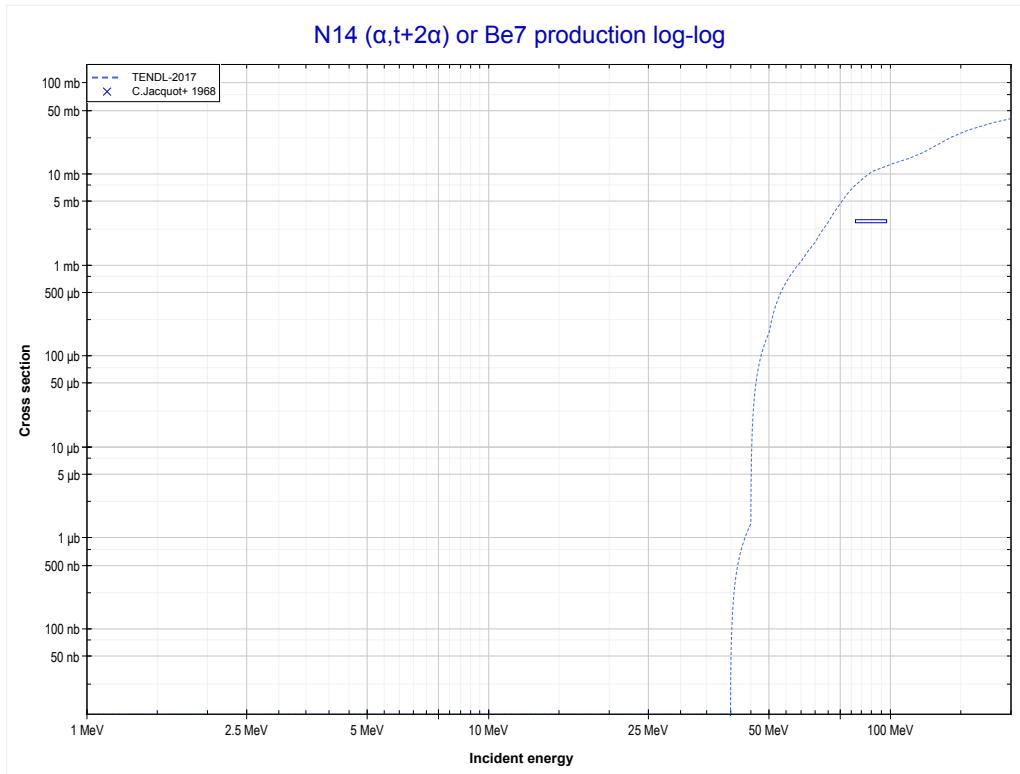
Reaction	Q-Value	Reaction	Q-Value
N14($\alpha,3\alpha$)Li6	-16073.29 keV	N14($\alpha,n+p+t+He3+\alpha$)Li6	-56464.77 keV
N14($\alpha,p+t+2\alpha$)Li6	-35887.15 keV	N14($\alpha,2n+2He3+\alpha$)Li6	-57228.53 keV
N14($\alpha,n+He3+2\alpha$)Li6	-36650.91 keV	N14($\alpha,p+2d+t+\alpha$)Li6	-59733.68 keV
N14($\alpha,2d+2\alpha$)Li6	-39919.82 keV	N14($\alpha,n+2d+He3+\alpha$)Li6	-60497.44 keV
N14($\alpha,n+p+d+2\alpha$)Li6	-42144.39 keV	N14($\alpha,n+2p+d+t+\alpha$)Li6	-61958.25 keV
N14($\alpha,2n+2p+2\alpha$)Li6	-44368.95 keV	N14($\alpha,2n+p+d+He3+\alpha$)Li6	-62722.00 keV
N14($\alpha,d+t+He3+\alpha$)Li6	-54240.21 keV	N14($\alpha,4d+\alpha$)Li6	-63766.35 keV
N14($\alpha,2p+2t+\alpha$)Li6	-55701.02 keV	N14($\alpha,2n+3p+t+\alpha$)Li6	-64182.81 keV

<< 6-C-12	7-N-14	26-Fe-57 >>
<< MT109 ($\alpha,3\alpha$)	MT112 ($\alpha,p+\alpha$) or MT5 (C13 production)	MT113 ($\alpha,t+2\alpha$) >>



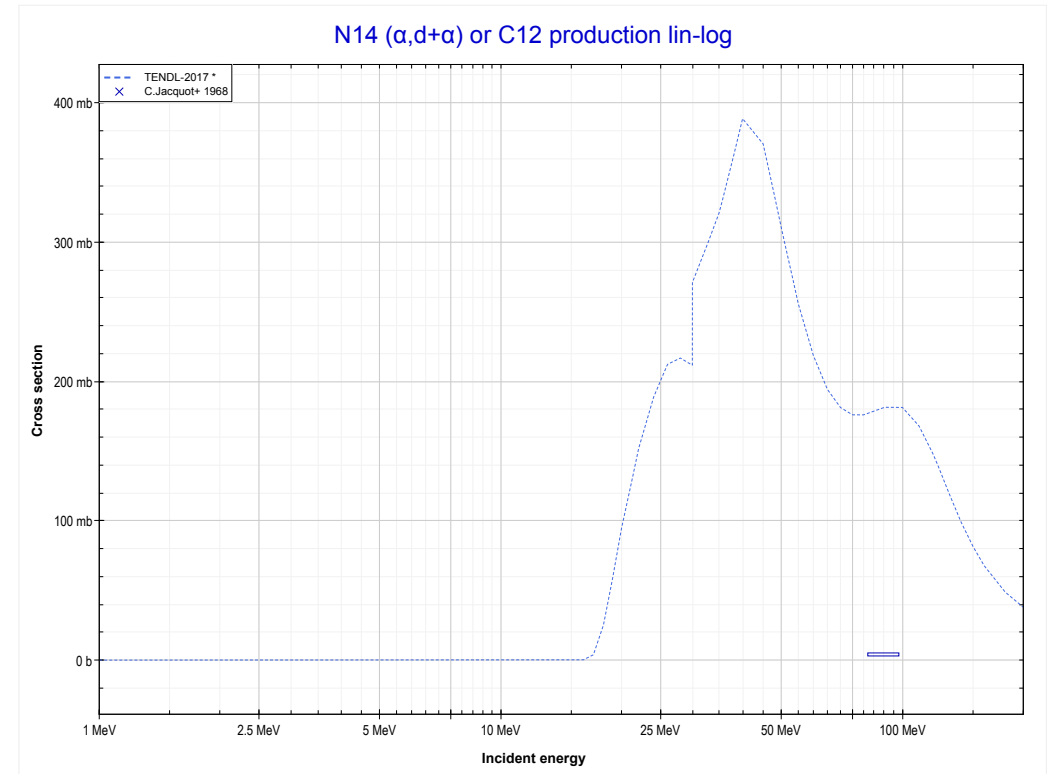
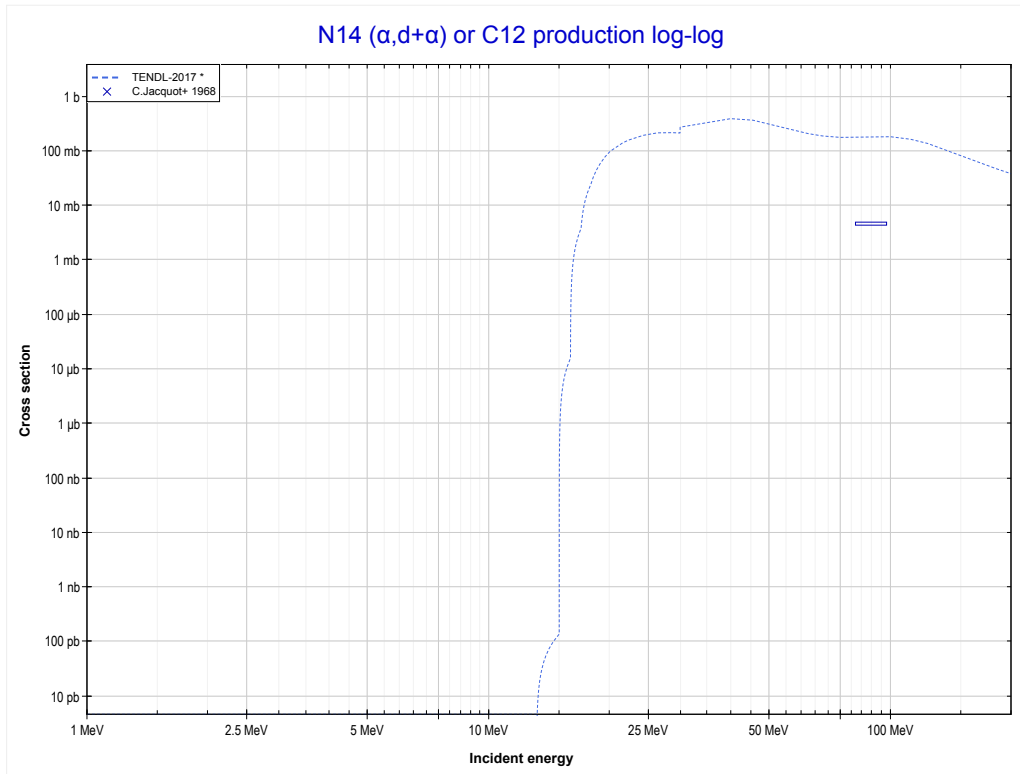
Reaction	Q-Value
N14($\alpha,p+\alpha$)C13	-7550.56 keV
N14($\alpha,d+\text{He3}$)C13	-25903.61 keV
N14($\alpha,2p+t$)C13	-27364.42 keV
N14($\alpha,n+p+\text{He3}$)C13	-28128.18 keV
N14($\alpha,p+2d$)C13	-31397.09 keV
N14($\alpha,n+2p+d$)C13	-33621.66 keV
N14($\alpha,2n+3p$)C13	-35846.22 keV

7-N-14		
<< MT112 ($\alpha, p + \alpha$)	MT113 ($\alpha, t + 2\alpha$) or MT5 (Be7 production)	MT117 ($\alpha, d + \alpha$) >>



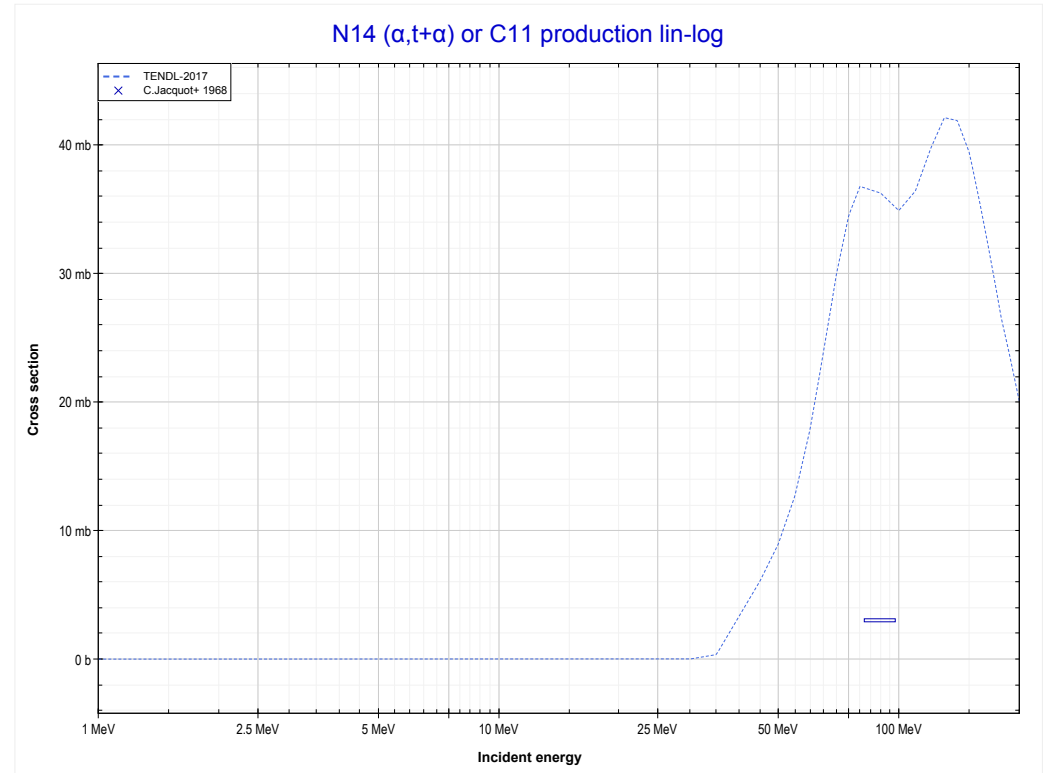
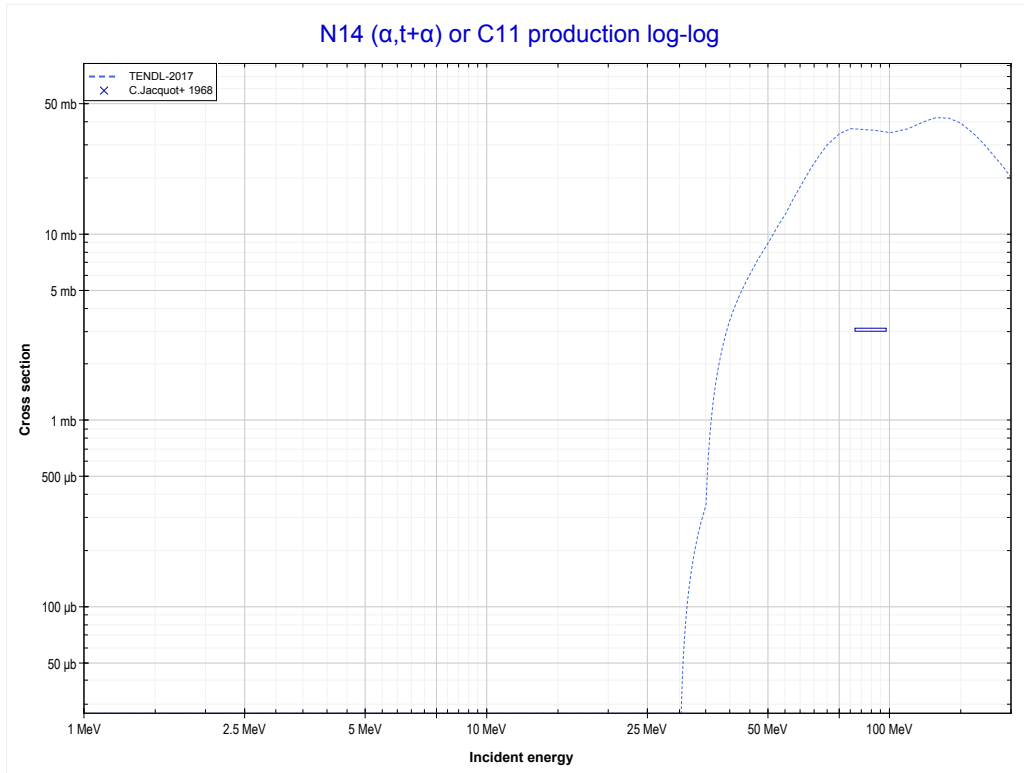
Reaction	Q-Value	Reaction	Q-Value
N14($\alpha, t + 2\alpha$)Be7	-30280.31 keV	N14($\alpha, 2n + 2p + t + \alpha$)Be7	-58575.96 keV
N14($\alpha, n + d + 2\alpha$)Be7	-36537.54 keV	N14($\alpha, 3n + p + He3 + \alpha$)Be7	-59339.72 keV
N14($\alpha, 2n + p + 2\alpha$)Be7	-38762.10 keV	N14($\alpha, n + 3d + \alpha$)Be7	-60384.07 keV
N14($\alpha, p + 2t + \alpha$)Be7	-50094.17 keV	N14($\alpha, 2n + p + 2d + \alpha$)Be7	-62608.63 keV
N14($\alpha, n + t + He3 + \alpha$)Be7	-50857.92 keV	N14($\alpha, 3n + 2p + d + \alpha$)Be7	-64833.20 keV
N14($\alpha, 2d + t + \alpha$)Be7	-54126.83 keV	N14($\alpha, 4n + 3p + \alpha$)Be7	-67057.76 keV
N14($\alpha, n + p + d + t + \alpha$)Be7	-56351.40 keV	N14($\alpha, d + 2t + He3$)Be7	-68447.22 keV
N14($\alpha, 2n + d + He3 + \alpha$)Be7	-57115.15 keV	N14($\alpha, 2p + 3t$)Be7	-69908.03 keV

<< 6-C-12	7-N-14	
<< MT113 ($\alpha, t+2\alpha$)	MT117 ($\alpha, d+\alpha$) or MT5 (C12 production)	MT155 ($\alpha, t+\alpha$) >>



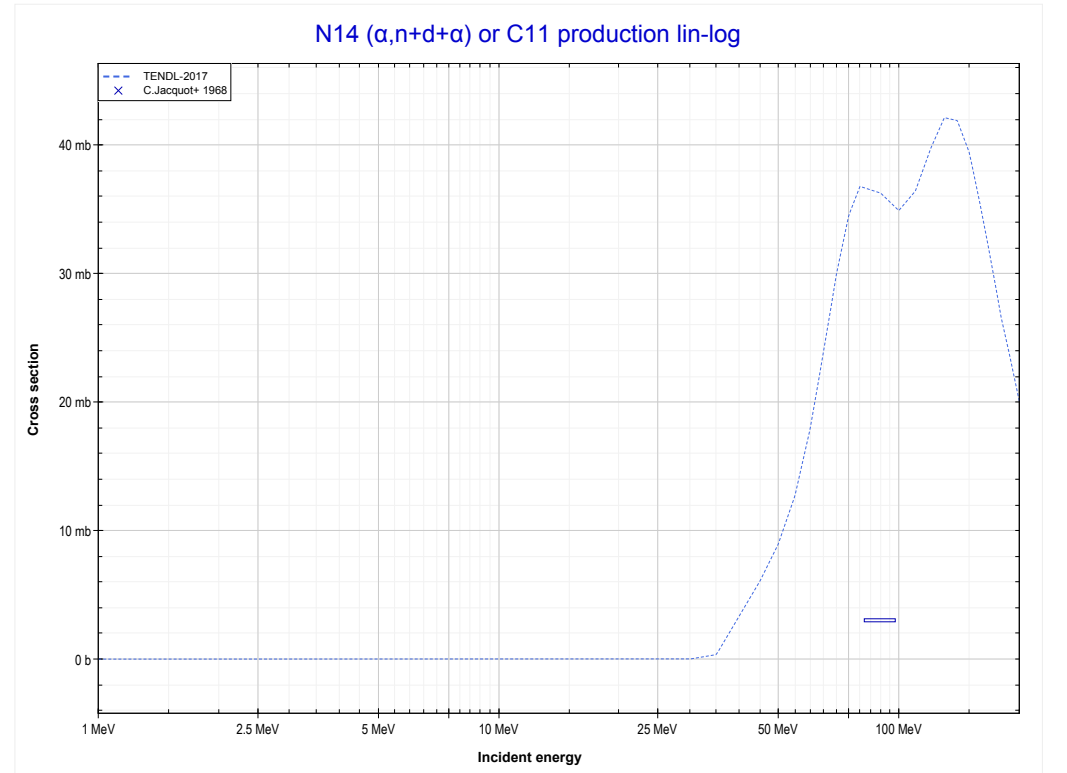
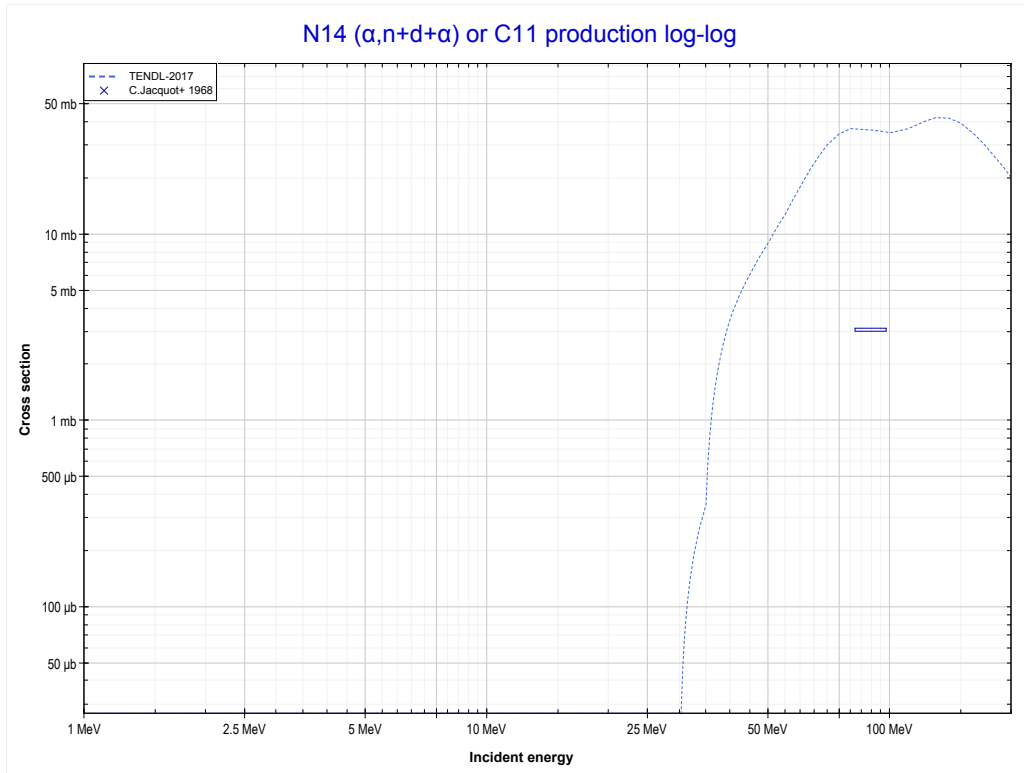
Reaction	Q-Value	Reaction	Q-Value
N14($\alpha, d+\alpha$)C12	-10272.31 keV	N14($\alpha, n+p+2d$)C12	-36343.40 keV
N14($\alpha, n+p+\alpha$)C12	-12496.87 keV	N14($\alpha, 2n+2p+d$)C12	-38567.96 keV
N14($\alpha, t+He3$)C12	-24592.69 keV	N14($\alpha, 3n+3p$)C12	-40792.53 keV
N14($\alpha, p+d+t$)C12	-30086.17 keV		
N14($\alpha, n+d+He3$)C12	-30849.92 keV		
N14($\alpha, n+2p+t$)C12	-32310.73 keV		
N14($\alpha, 2n+p+He3$)C12	-33074.49 keV		
N14($\alpha, 3d$)C12	-34118.83 keV		

7-N-14		
<< MT117 ($\alpha, d+\alpha$)	MT155 ($\alpha, t+\alpha$) or MT5 (C11 production)	MT158 ($\alpha, n+d+\alpha$) >>



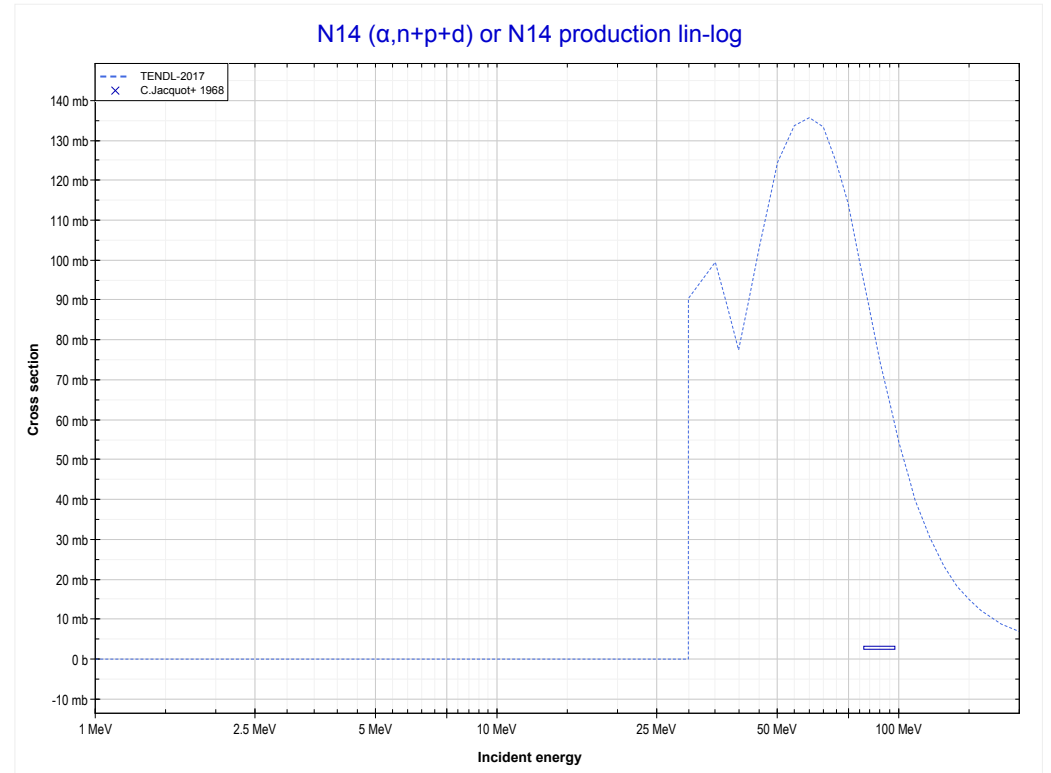
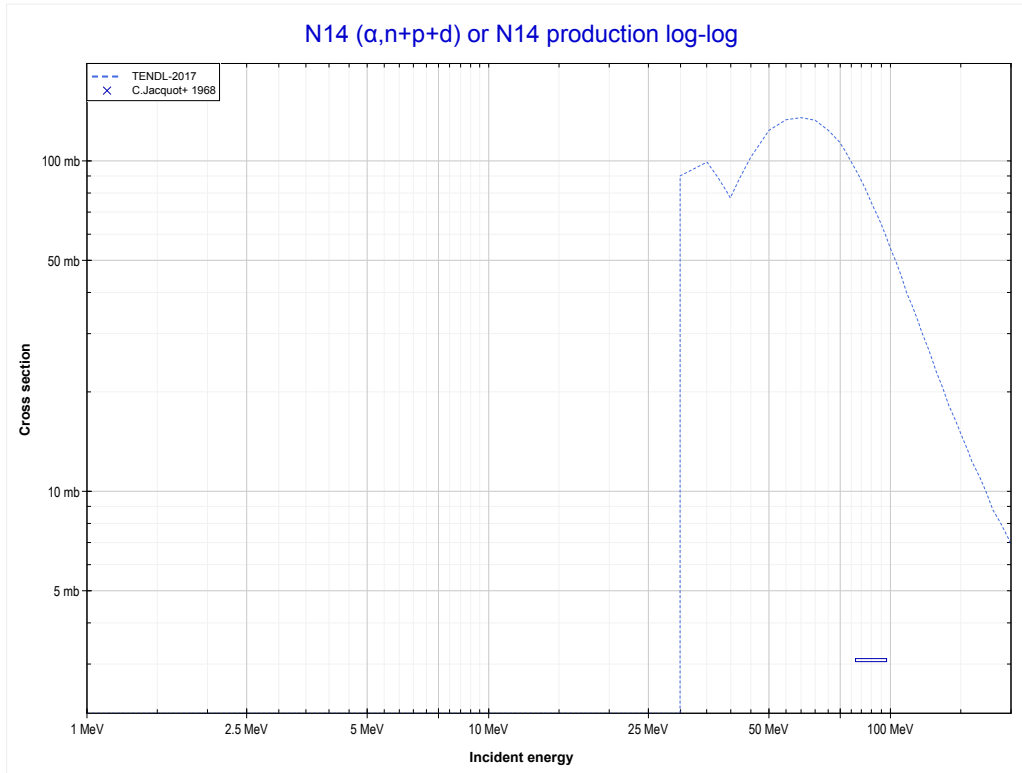
Reaction	Q-Value	Reaction	Q-Value
N14($\alpha, t+\alpha$)C11	-22736.69 keV	N14($\alpha, 2n+2p+t$)C11	-51032.35 keV
N14($\alpha, n+d+\alpha$)C11	-28993.92 keV	N14($\alpha, 3n+p+He3$)C11	-51796.11 keV
N14($\alpha, 2n+p+\alpha$)C11	-31218.49 keV	N14($\alpha, n+3d$)C11	-52840.45 keV
N14($\alpha, p+2t$)C11	-42550.55 keV	N14($\alpha, 2n+p+2d$)C11	-55065.02 keV
N14($\alpha, n+t+He3$)C11	-43314.31 keV	N14($\alpha, 3n+2p+d$)C11	-57289.58 keV
N14($\alpha, 2d+t$)C11	-46583.22 keV	N14($\alpha, 4n+3p$)C11	-59514.15 keV
N14($\alpha, n+p+d+t$)C11	-48807.78 keV		
N14($\alpha, 2n+d+He3$)C11	-49571.54 keV		

	7-N-14	
<< MT155 ($\alpha, t + \alpha$)	MT158 ($\alpha, n + d + \alpha$) or MT5 (C11 production)	MT183 ($\alpha, n + p + d$) >>



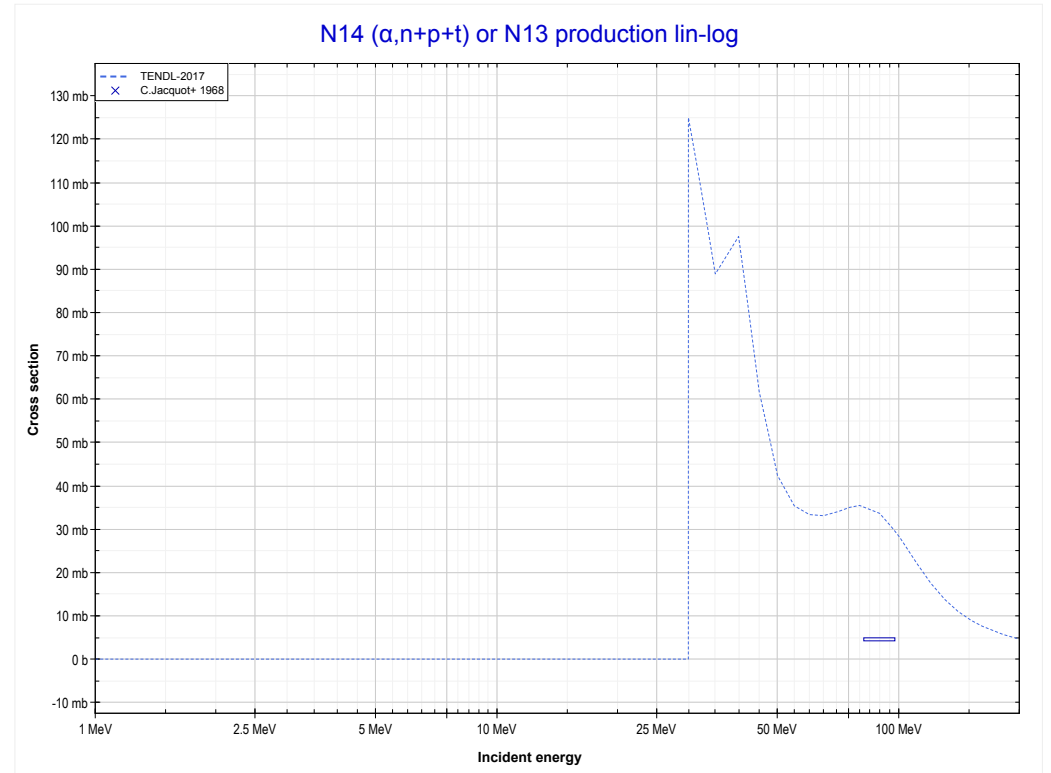
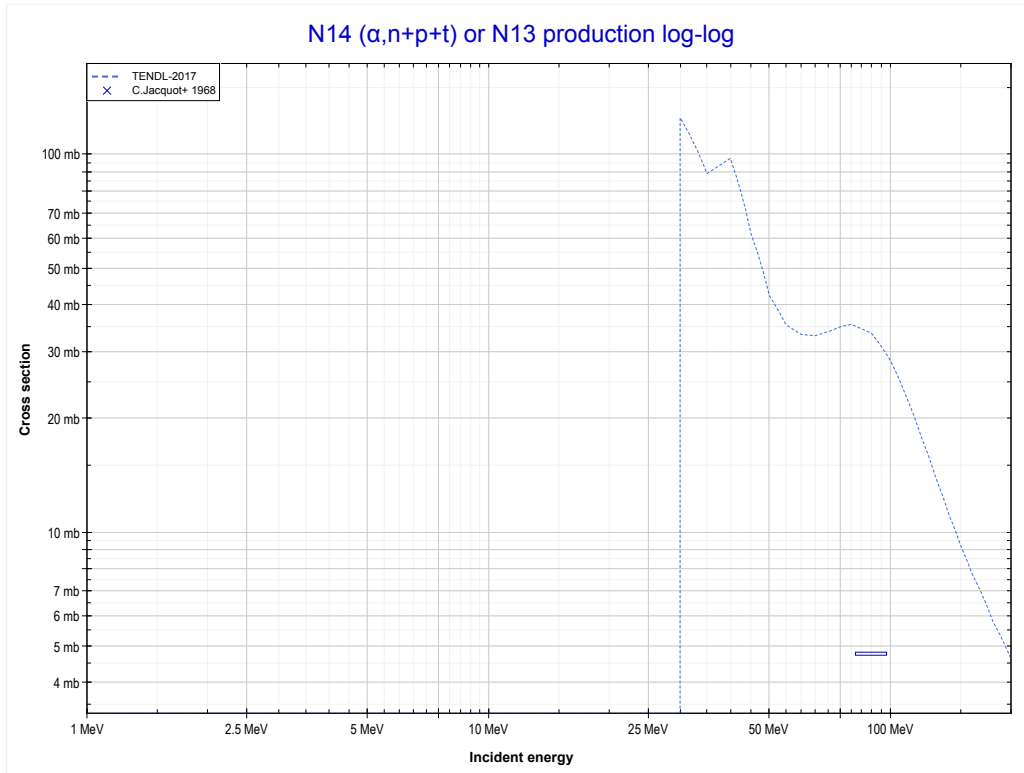
Reaction	Q-Value	Reaction	Q-Value
N14($\alpha, t + \alpha$)C11	-22736.69 keV	N14($\alpha, 2n + 2p + t$)C11	-51032.35 keV
N14($\alpha, n + d + \alpha$)C11	-28993.92 keV	N14($\alpha, 3n + p + He3$)C11	-51796.11 keV
N14($\alpha, 2n + p + \alpha$)C11	-31218.49 keV	N14($\alpha, n + 3d$)C11	-52840.45 keV
N14($\alpha, p + 2t$)C11	-42550.55 keV	N14($\alpha, 2n + p + 2d$)C11	-55065.02 keV
N14($\alpha, n + t + He3$)C11	-43314.31 keV	N14($\alpha, 3n + 2p + d$)C11	-57289.58 keV
N14($\alpha, 2d + t$)C11	-46583.22 keV	N14($\alpha, 4n + 3p$)C11	-59514.15 keV
N14($\alpha, n + p + d + t$)C11	-48807.78 keV		
N14($\alpha, 2n + d + He3$)C11	-49571.54 keV		

<< 6-C-12	7-N-14	
<< MT158 ($\alpha, n+d+\alpha$)	MT183 ($\alpha, n+p+d$) or MT5 (N14 production)	MT184 ($\alpha, n+p+t$) >>



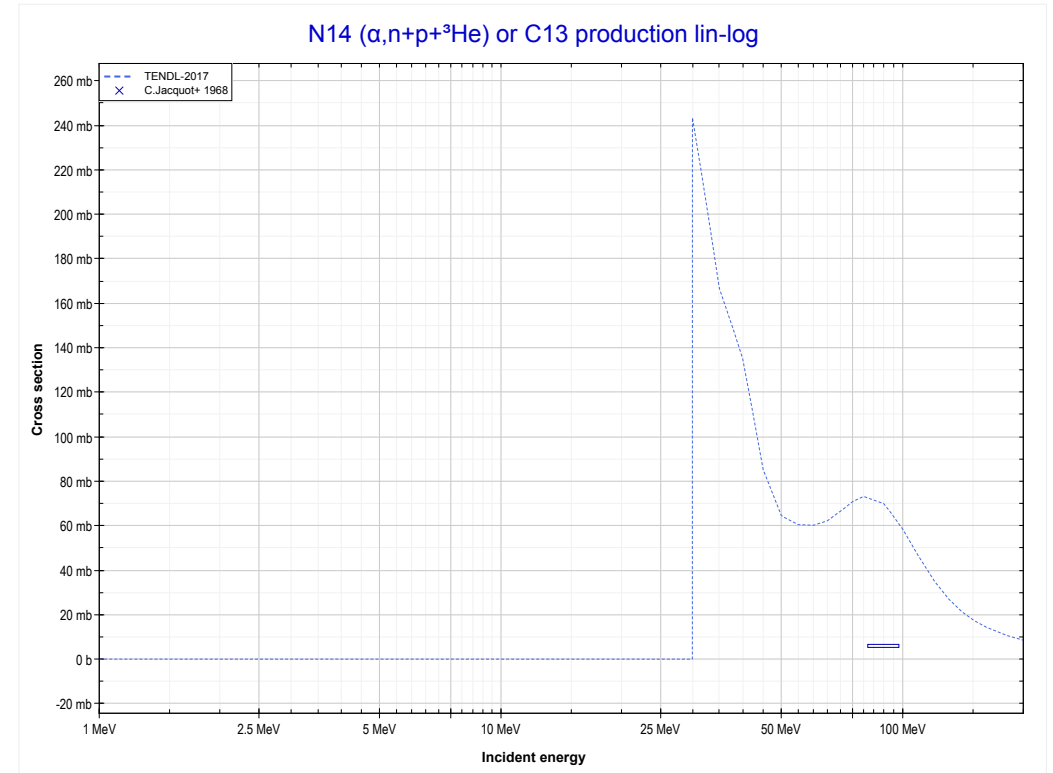
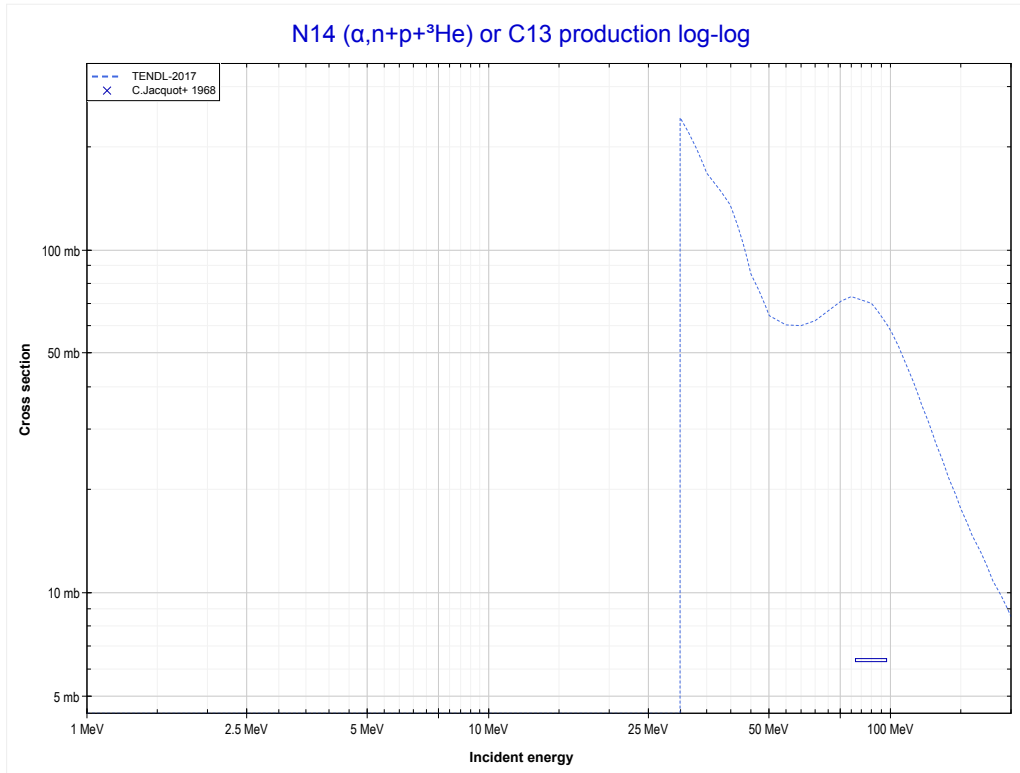
Reaction	Q-Value
N14(α, α)N14	0.00 keV
N14($\alpha, p+t$)N14	-19813.86 keV
N14($\alpha, n+He3$)N14	-20577.62 keV
N14($\alpha, 2d$)N14	-23846.53 keV
N14($\alpha, n+p+d$)N14	-26071.09 keV
N14($\alpha, 2n+2p$)N14	-28295.66 keV

<< 6-C-12	7-N-14	
<< MT183 ($\alpha, n+p+d$)	MT184 ($\alpha, n+p+t$) or MT5 (N13 production)	MT186 ($\alpha, n+p+^3\text{He}$) >>



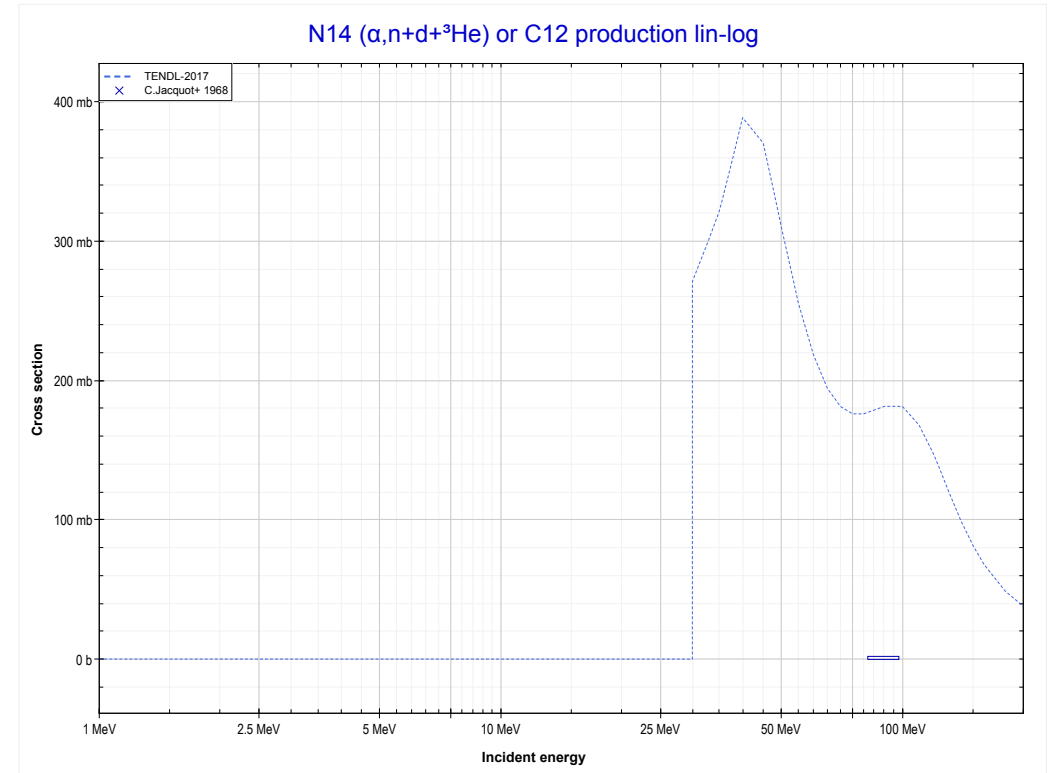
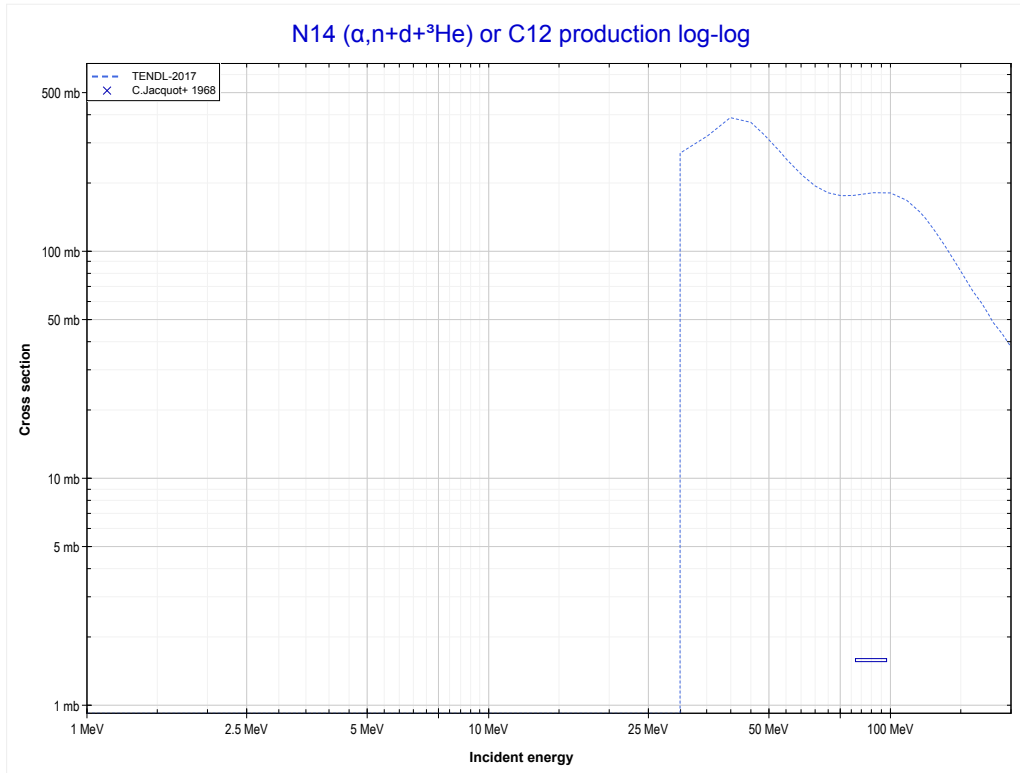
Reaction	Q-Value
N14($\alpha, n+\alpha$)N13	-10553.38 keV
N14($\alpha, d+t$)N13	-28142.68 keV
N14($\alpha, n+p+t$)N13	-30367.24 keV
N14($\alpha, 2n+^3\text{He}$)N13	-31131.00 keV
N14($\alpha, n+2d$)N13	-34399.91 keV
N14($\alpha, 2n+p+d$)N13	-36624.47 keV
N14($\alpha, 3n+2p$)N13	-38849.04 keV

<< 6-C-12	7-N-14	
<< MT184 ($\alpha, n+p+t$)	MT186 ($\alpha, n+p+{}^3\text{He}$) or MT5 ($\text{C13}$ production)	MT187 ($\alpha, n+d+{}^3\text{He}$) >>



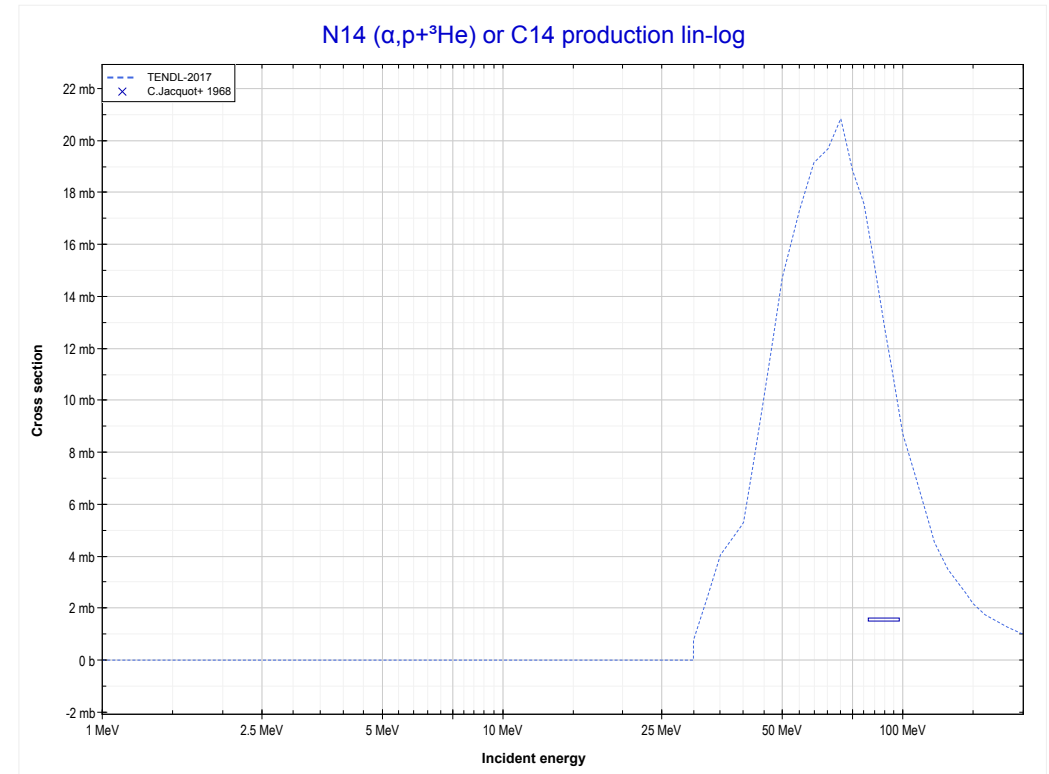
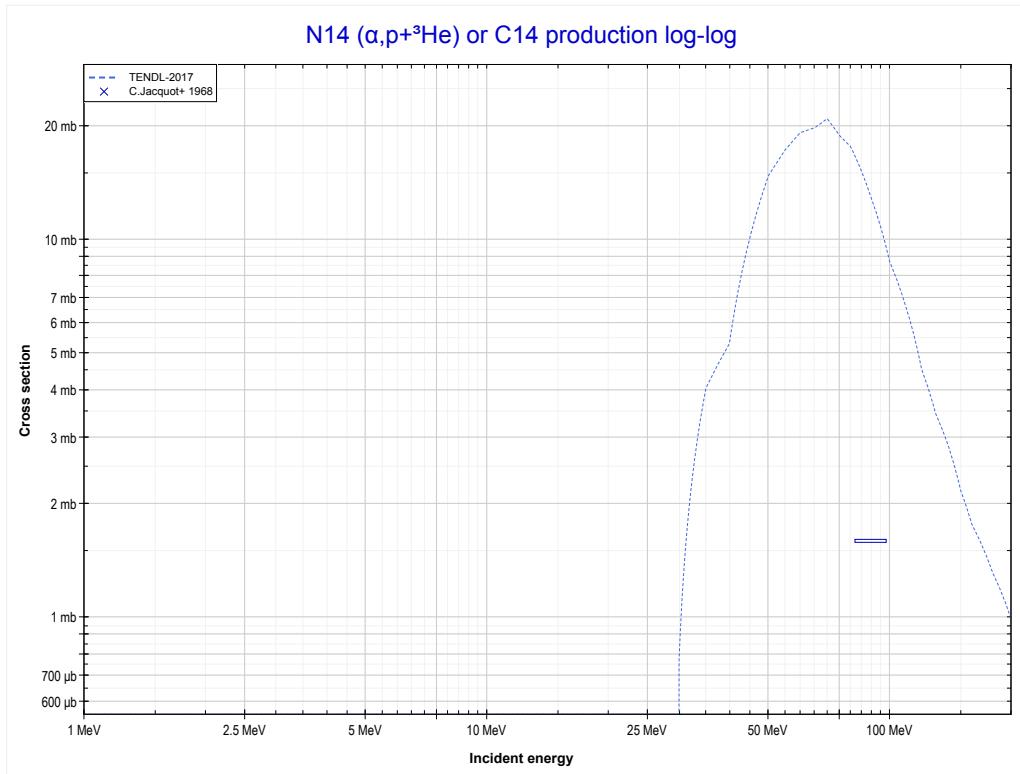
Reaction	Q-Value
N14($\alpha, p+\alpha$)C13	-7550.56 keV
N14($\alpha, d+{}^3\text{He}$)C13	-25903.61 keV
N14($\alpha, 2p+t$)C13	-27364.42 keV
N14($\alpha, n+p+{}^3\text{He}$)C13	-28128.18 keV
N14($\alpha, p+2d$)C13	-31397.09 keV
N14($\alpha, n+2p+d$)C13	-33621.66 keV
N14($\alpha, 2n+3p$)C13	-35846.22 keV

<< 6-C-12	7-N-14	
<< MT186 ($\alpha, n+p+{}^3\text{He}$)	MT187 ($\alpha, n+d+{}^3\text{He}$) or MT5 (C12 production)	MT191 ($\alpha, p+{}^3\text{He}$) >>



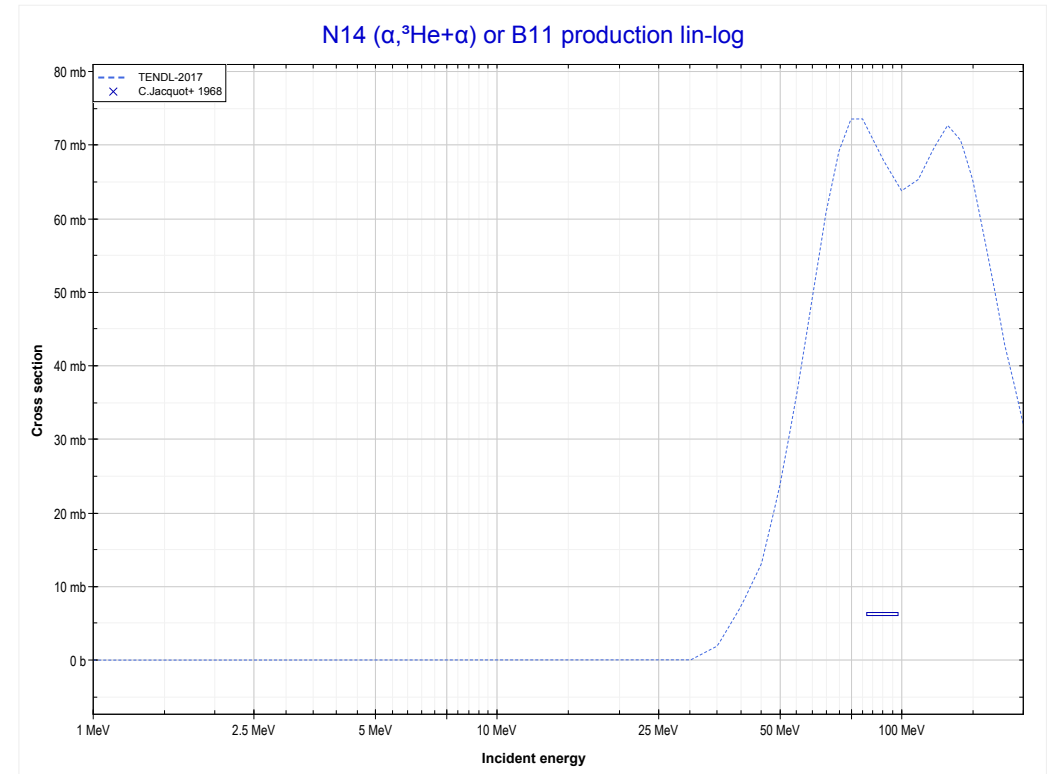
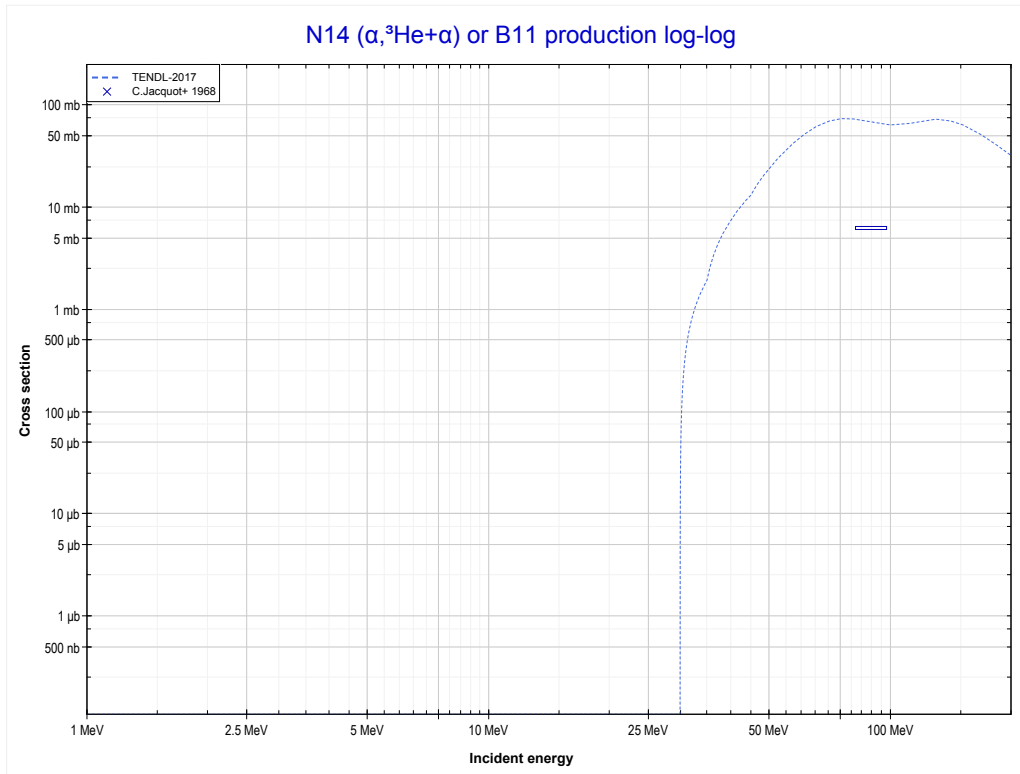
Reaction	Q-Value	Reaction	Q-Value
N14($\alpha, d+\alpha$)C12	-10272.31 keV	N14($\alpha, n+p+2d$)C12	-36343.40 keV
N14($\alpha, n+p+\alpha$)C12	-12496.87 keV	N14($\alpha, 2n+2p+d$)C12	-38567.96 keV
N14($\alpha, t+{}^3\text{He}$)C12	-24592.69 keV	N14($\alpha, 3n+3p$)C12	-40792.53 keV
N14($\alpha, p+d+t$)C12	-30086.17 keV		
N14($\alpha, n+d+{}^3\text{He}$)C12	-30849.92 keV		
N14($\alpha, n+2p+t$)C12	-32310.73 keV		
N14($\alpha, 2n+p+{}^3\text{He}$)C12	-33074.49 keV		
N14($\alpha, 3d$)C12	-34118.83 keV		

<< 6-C-12	7-N-14	
<< MT187 ($\alpha, n+d+{}^3\text{He}$)	MT191 ($\alpha, p+{}^3\text{He}$) or MT5 (C14 production)	MT193 ($\alpha, {}^3\text{He}+\alpha$) >>



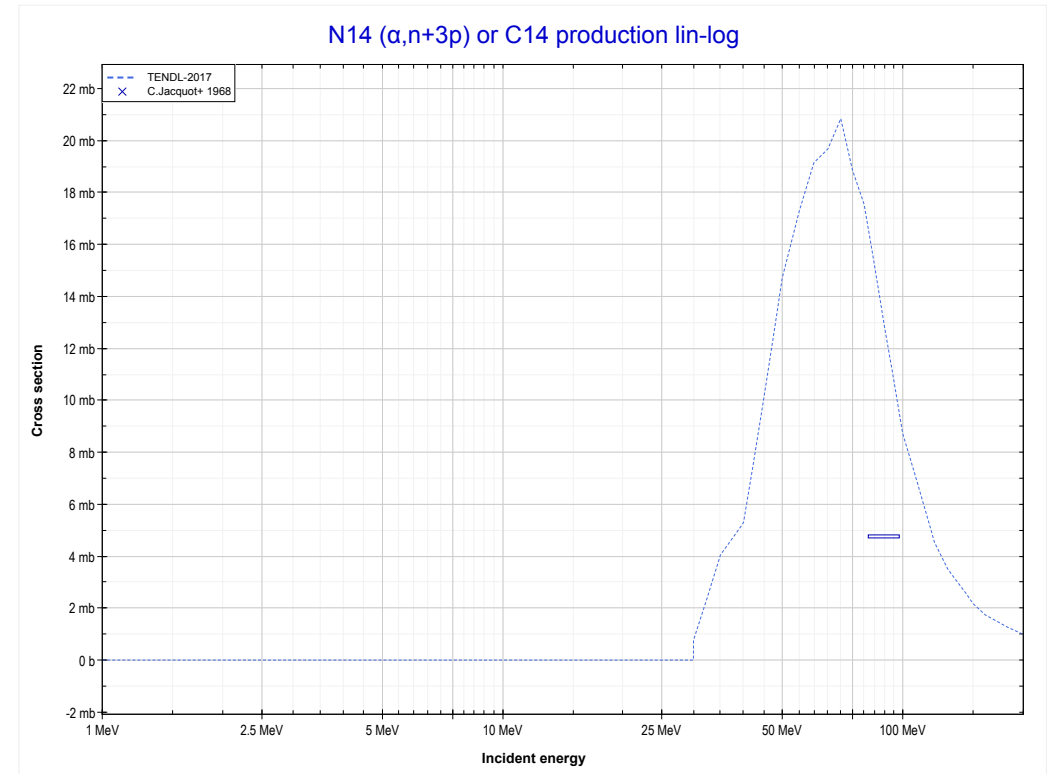
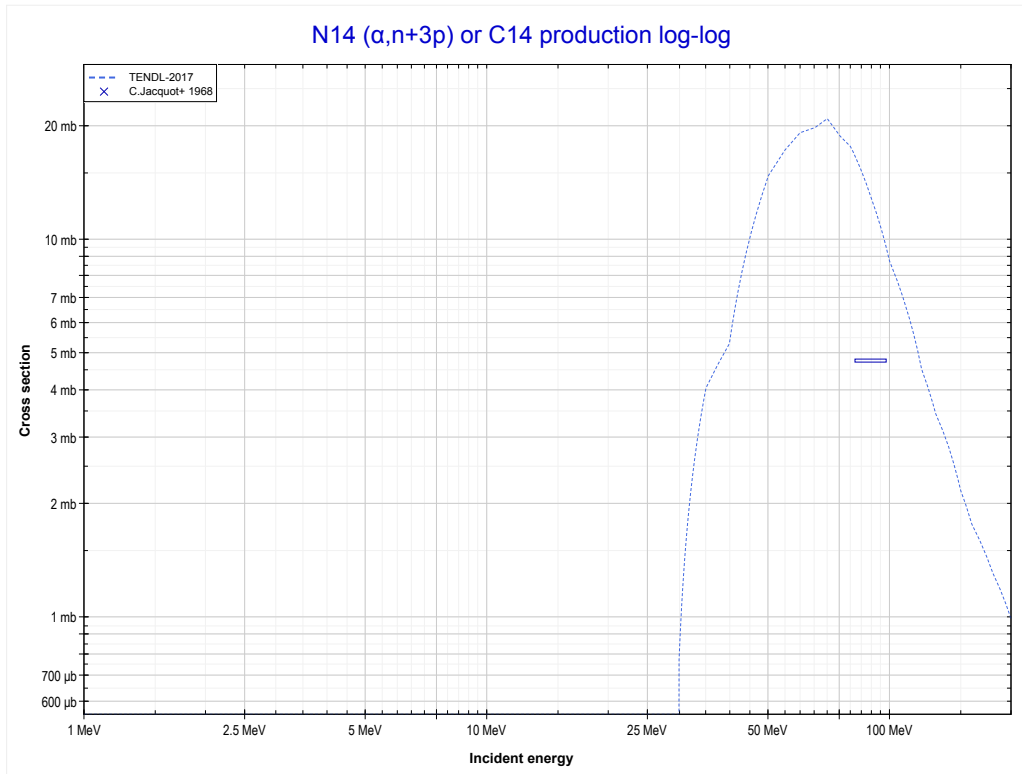
Reaction	Q-Value
N14($\alpha, p+{}^3\text{He}$)C14	-19951.75 keV
N14($\alpha, 2p+d$)C14	-25445.22 keV
N14($\alpha, n+3p$)C14	-27669.79 keV

<< 6-C-12	7-N-14	
<< MT191 ($\alpha, p+^3\text{He}$)	MT193 ($\alpha, ^3\text{He}+\alpha$) or MT5 (B11 production)	MT198 ($\alpha, n+3p$) >>



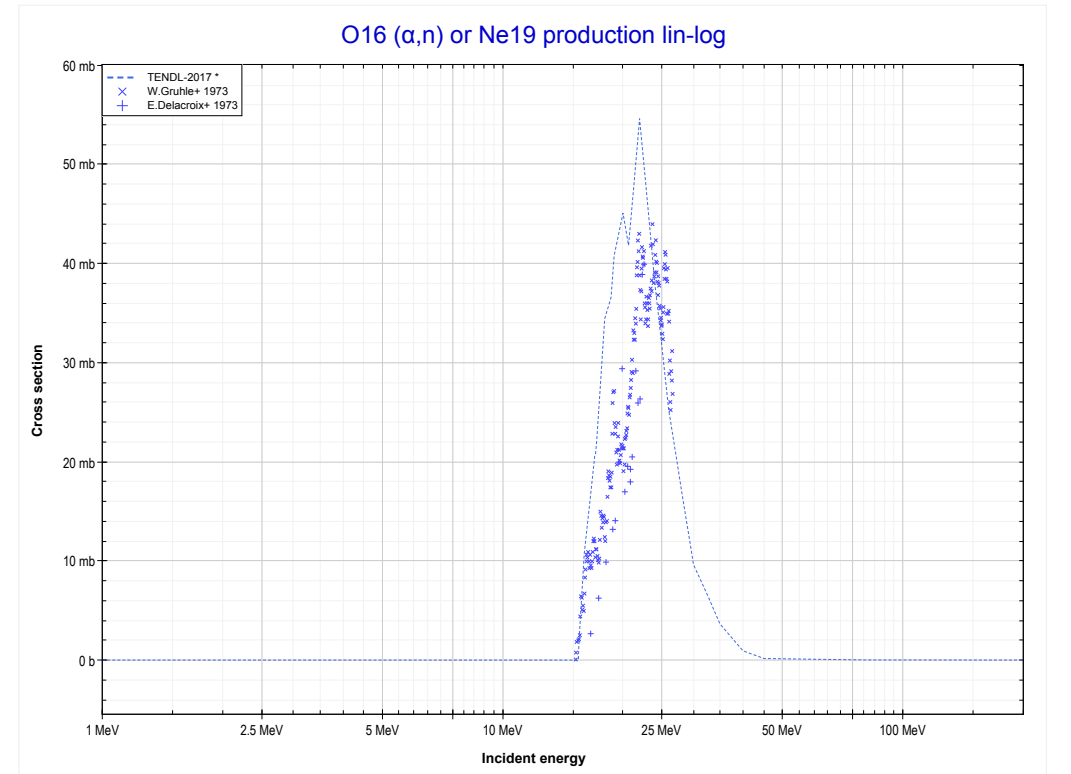
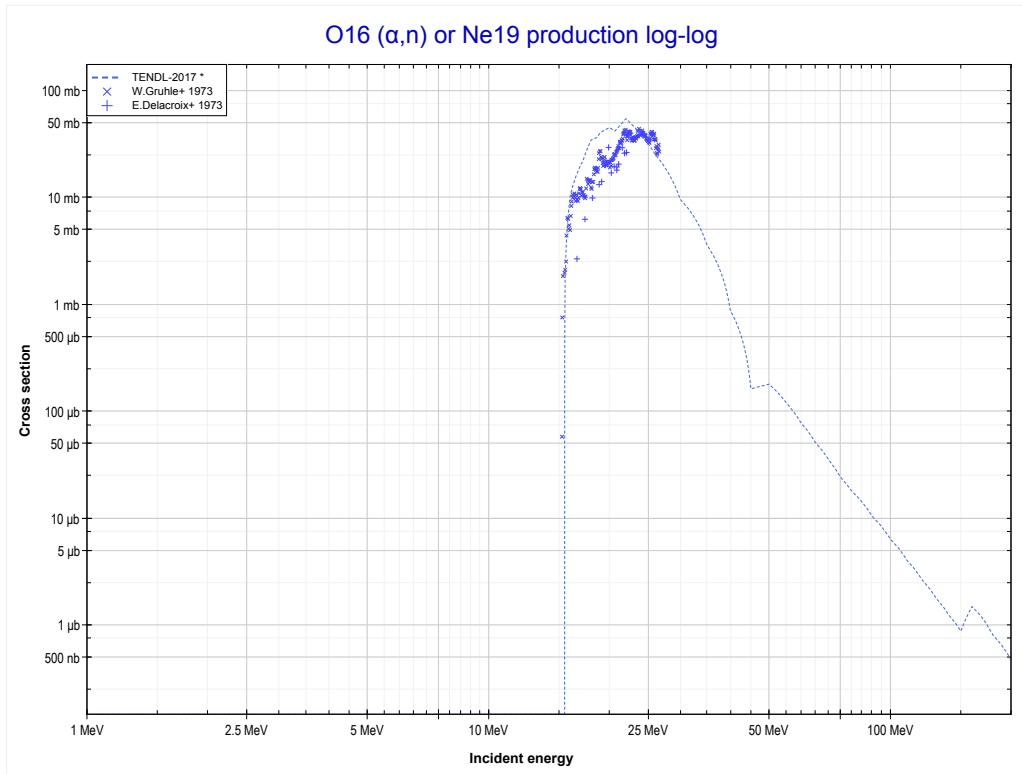
Reaction	Q-Value	Reaction	Q-Value
N14($\alpha, \text{He3}+\alpha$)B11	-20735.70 keV	N14($\alpha, n+3p+t$)B11	-48267.60 keV
N14($\alpha, p+d+\alpha$)B11	-26229.18 keV	N14($\alpha, 2n+2p+\text{He3}$)B11	-49031.36 keV
N14($\alpha, n+2p+\alpha$)B11	-28453.74 keV	N14($\alpha, p+3d$)B11	-50075.70 keV
N14($\alpha, p+t+\text{He3}$)B11	-40549.56 keV	N14($\alpha, n+2p+2d$)B11	-52300.27 keV
N14($\alpha, n+2\text{He3}$)B11	-41313.32 keV	N14($\alpha, 2n+3p+d$)B11	-54524.84 keV
N14($\alpha, 2d+\text{He3}$)B11	-44582.23 keV	N14($\alpha, 3n+4p$)B11	-56749.40 keV
N14($\alpha, 2p+d+t$)B11	-46043.04 keV		
N14($\alpha, n+p+d+\text{He3}$)B11	-46806.79 keV		

<< 6-C-12	7-N-14	
<< MT193 ($\alpha, ^3\text{He}+\alpha$)	MT198 ($\alpha, n+3p$) or MT5 (C14 production)	8-O-16 MT4 (α, n) >>



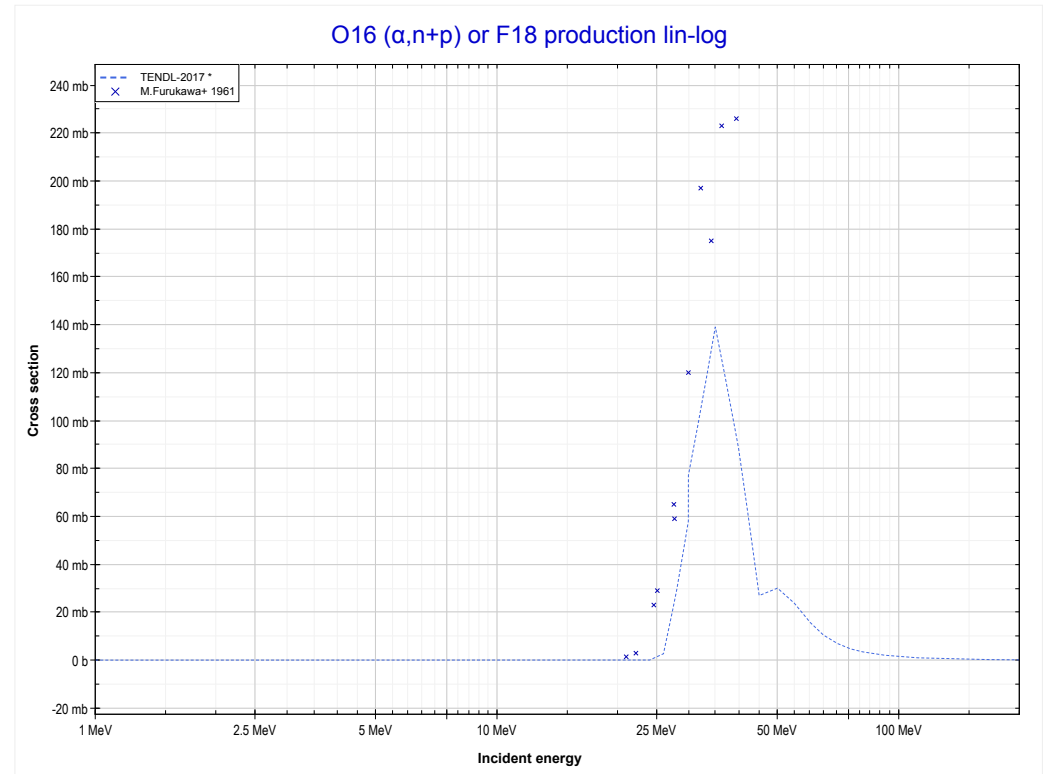
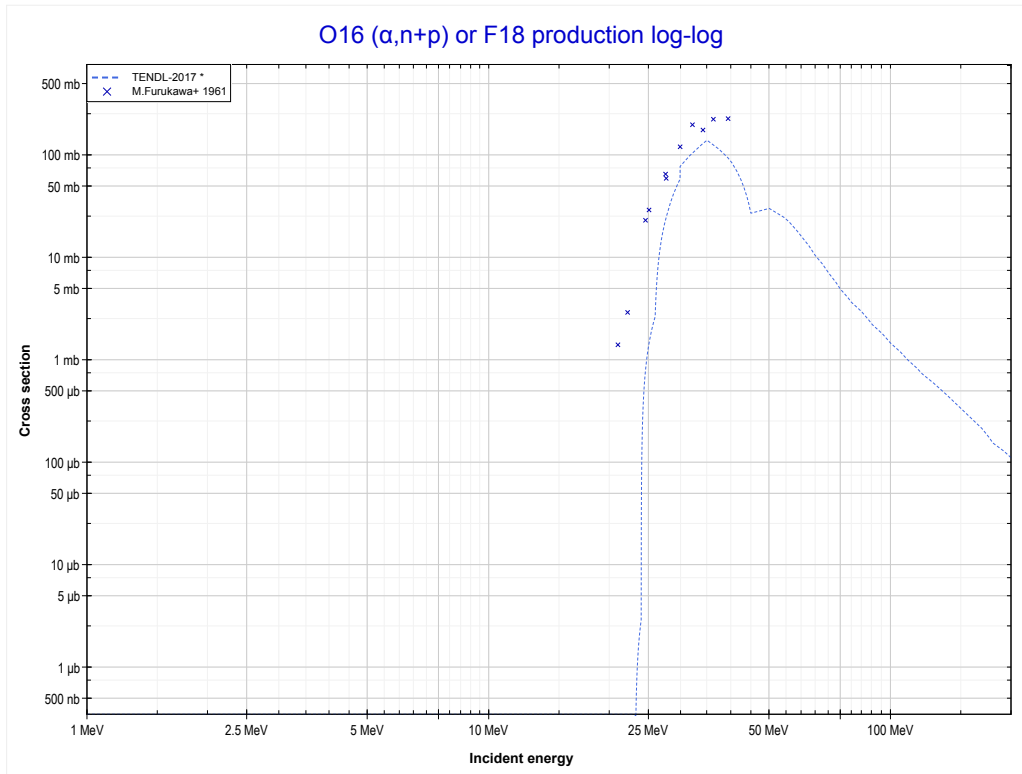
Reaction	Q-Value
N14($\alpha, p+\text{He3}$)C14	-19951.75 keV
N14($\alpha, 2p+d$)C14	-25445.22 keV
N14($\alpha, n+3p$)C14	-27669.79 keV

<< 7-N-14	8-O-16	8-O-17 >>
<< 7-N-14 MT198 ($\alpha, n+3p$)	MT4 (α, n) or MT5 (Ne19 production)	MT28 ($\alpha, n+p$) >>



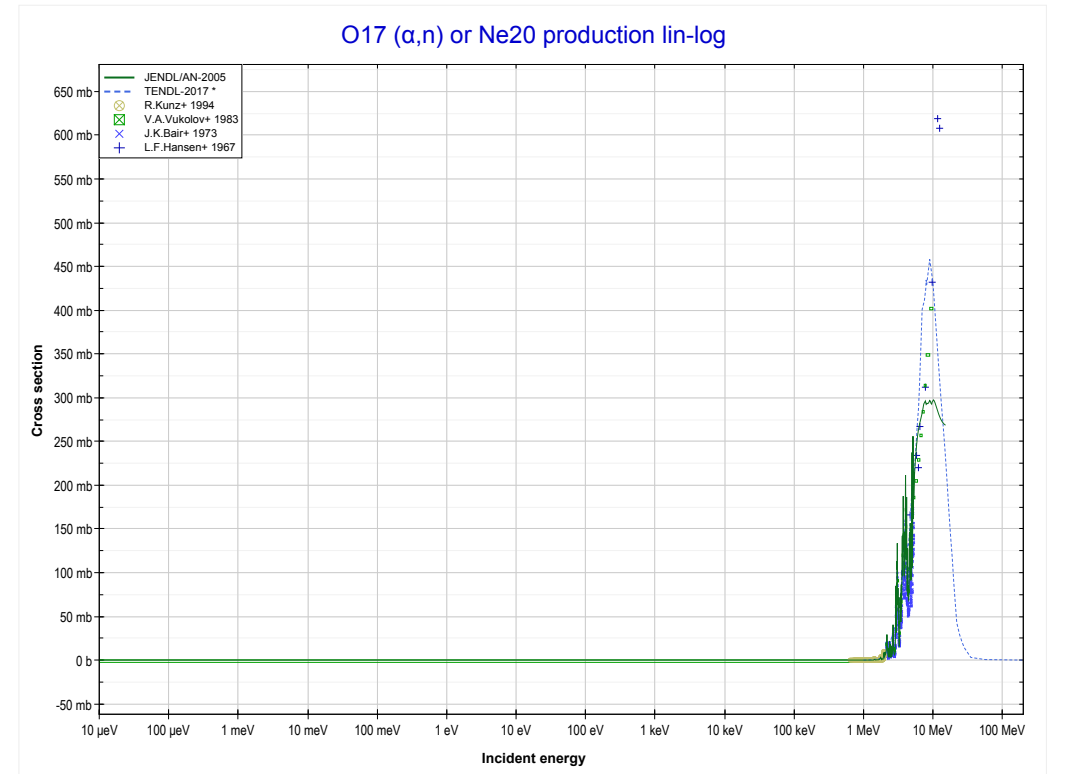
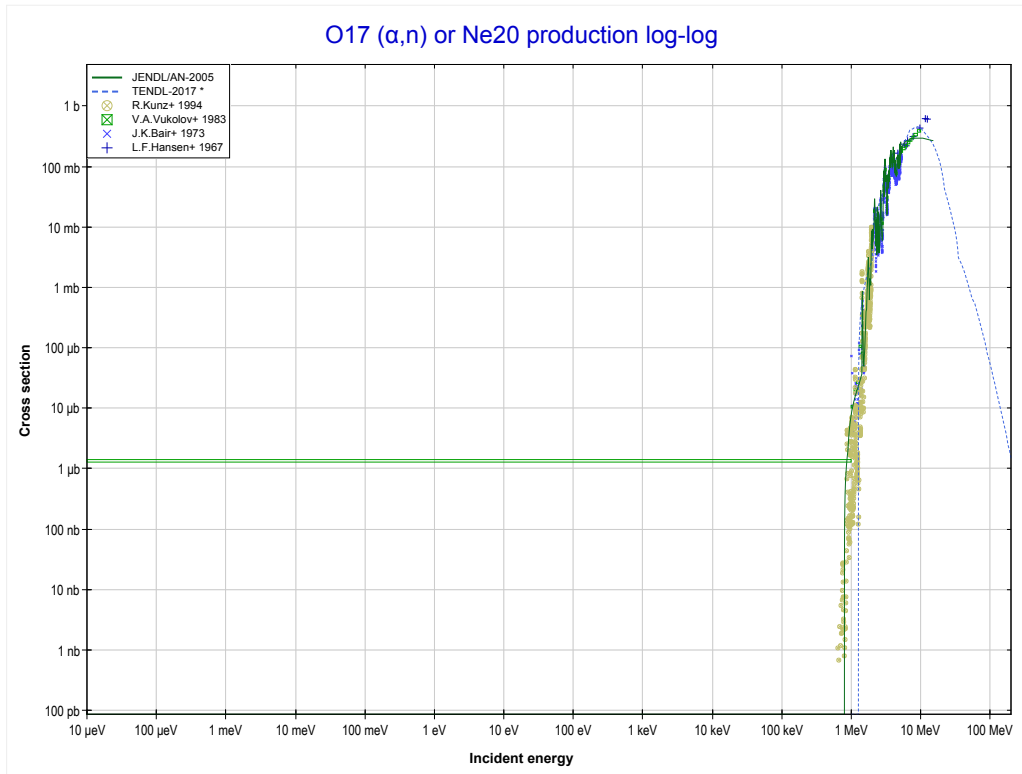
Reaction	Q-Value
O16(α, n)Ne19	-12135.45 keV

	8-O-16	18-Ar-40 >>
<< MT4 (α, n)	MT28 ($\alpha, n+p$) or MT5 (F18 production)	8-O-17 MT4 (α, n) >>



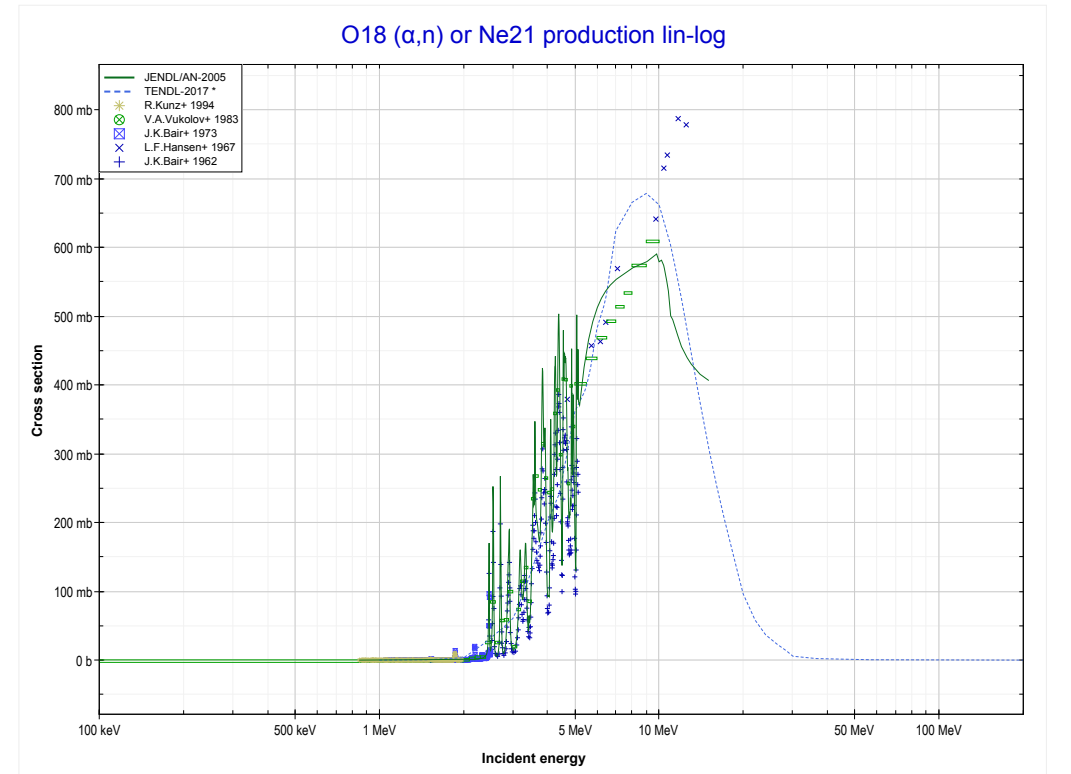
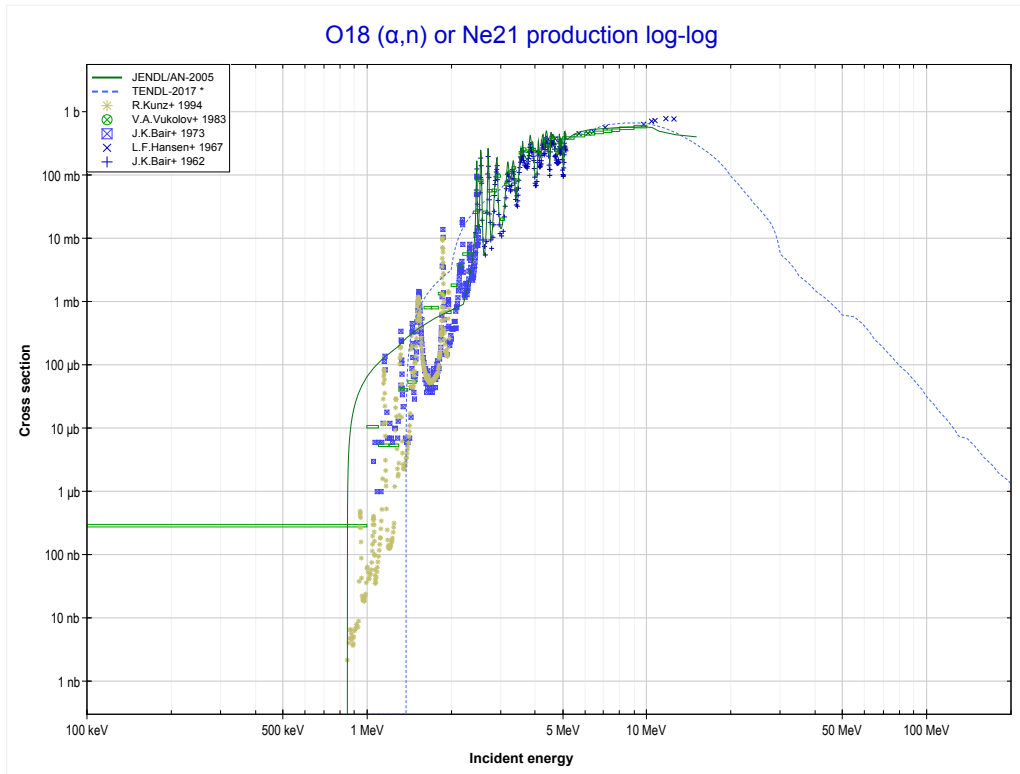
Reaction	Q-Value
O16(α, d)F18	-16320.91 keV
O16($\alpha, n+p$)F18	-18545.47 keV

<< 8-O-16	8-O-17	8-O-18 >>
<< 8-O-16 MT28 ($\alpha, n+p$)	MT4 (α, n) or MT5 (Ne20 production)	8-O-18 MT4 (α, n) >>



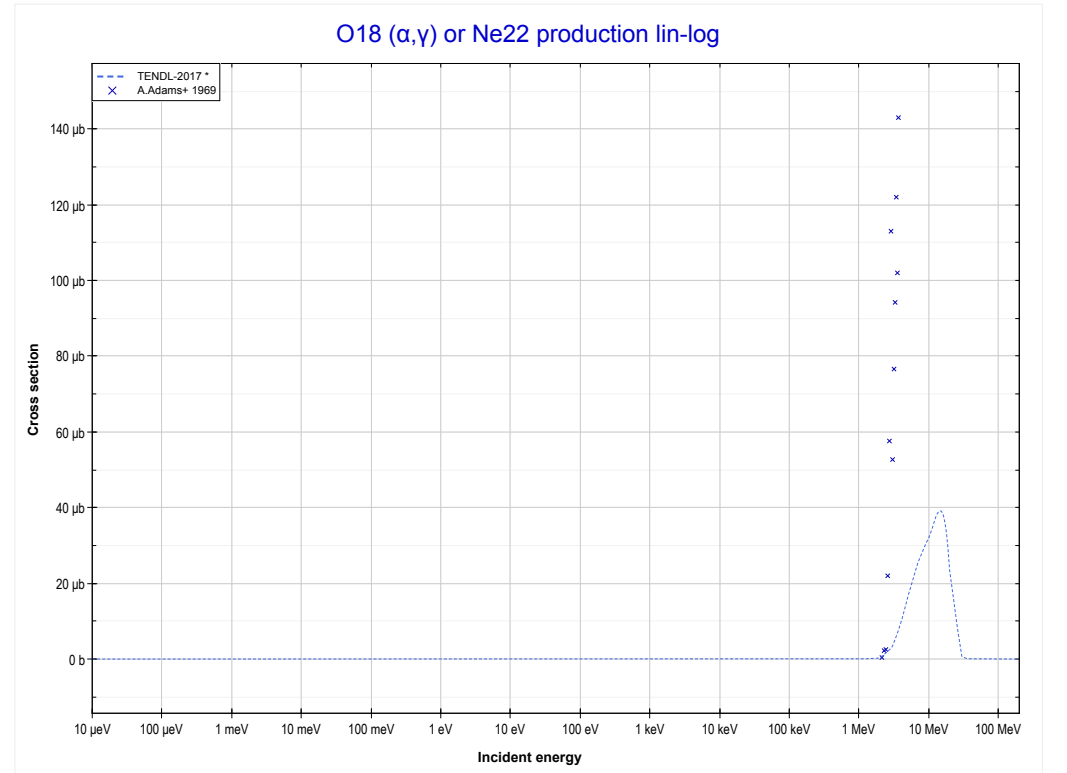
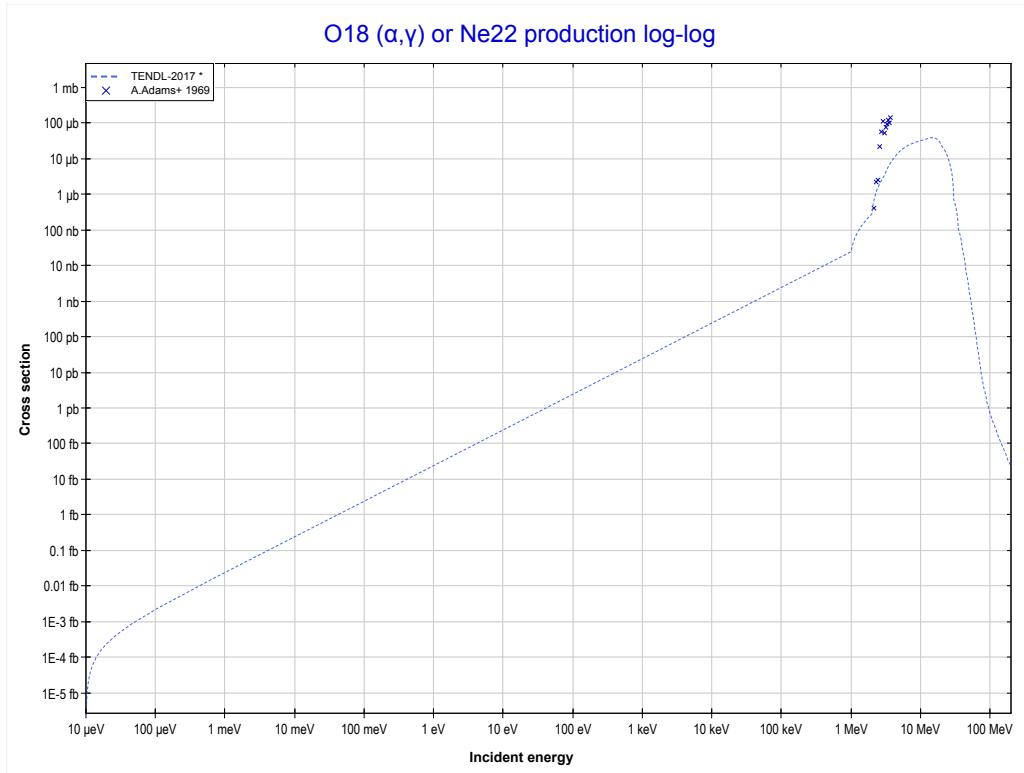
Reaction	Q-Value
O17(α, n)Ne20	586.77 keV

<< 8-O-17	8-O-18	9-F-19 >>
<< 8-O-17 MT4 (α,n)	MT4 (α,n) or MT5 (Ne21 production)	MT102 (α,γ) >>



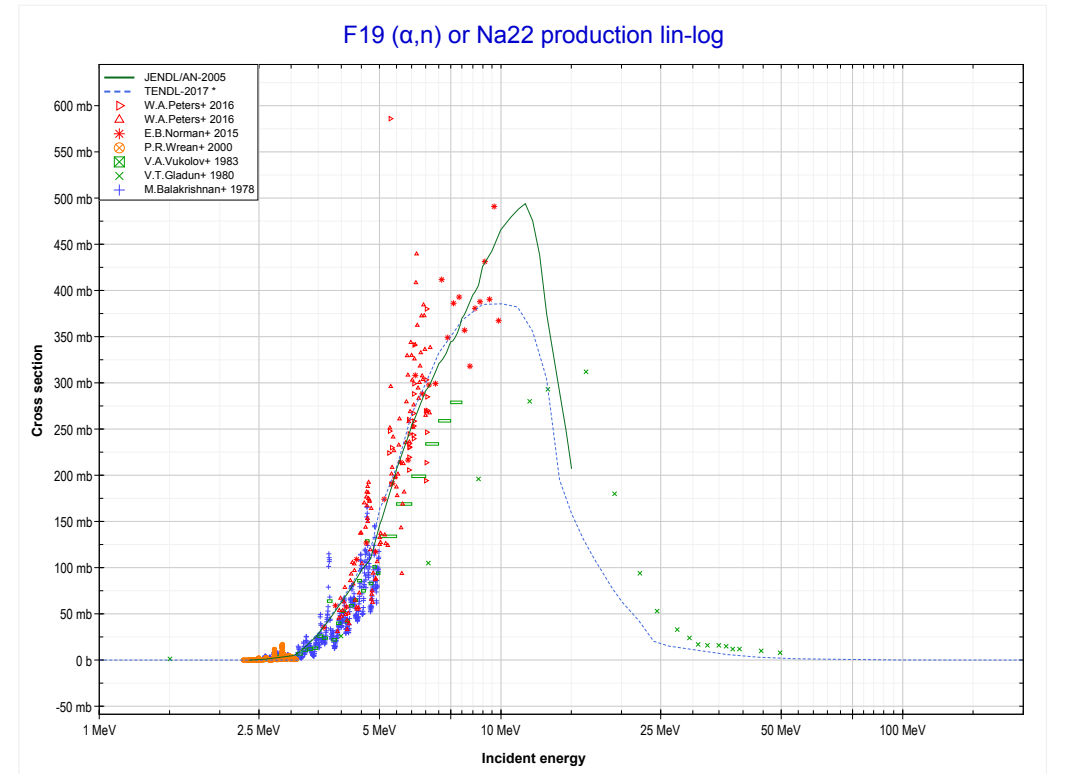
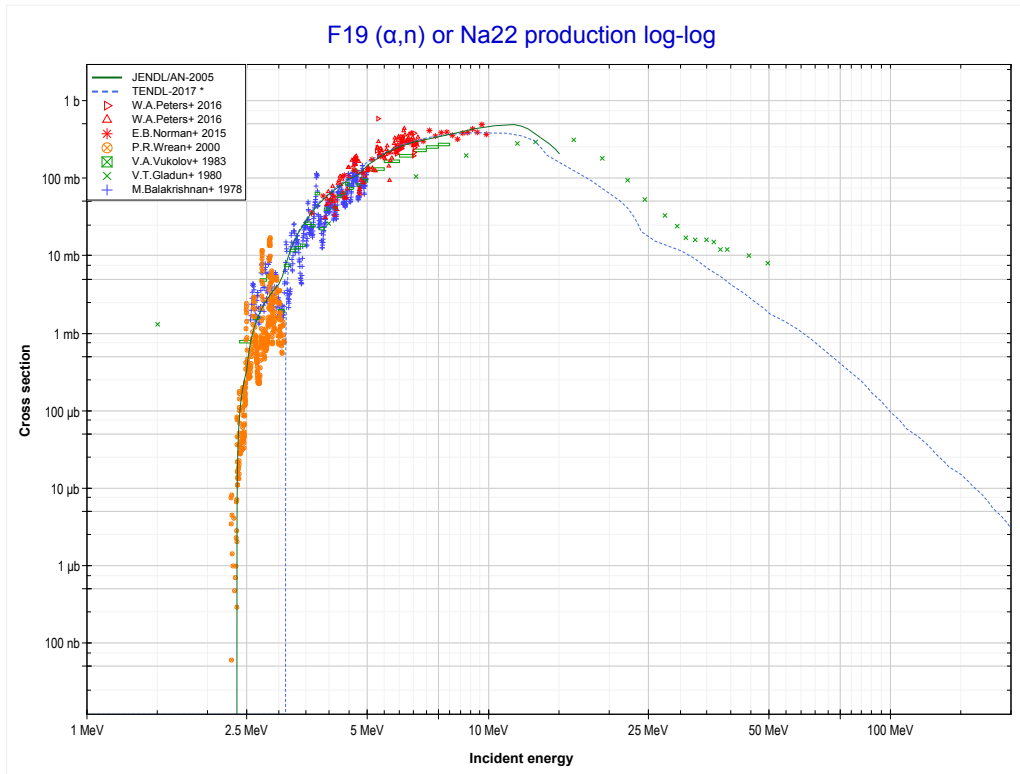
Reaction	Q-Value
O18(α,n)Ne21	-697.44 keV

<< 3-Li-6	8-O-18	16-S-34 >>
<< MT4 (α,n)	MT102 (α,γ) or MT5 (Ne22 production)	9-F-19 MT4 (α,n) >>



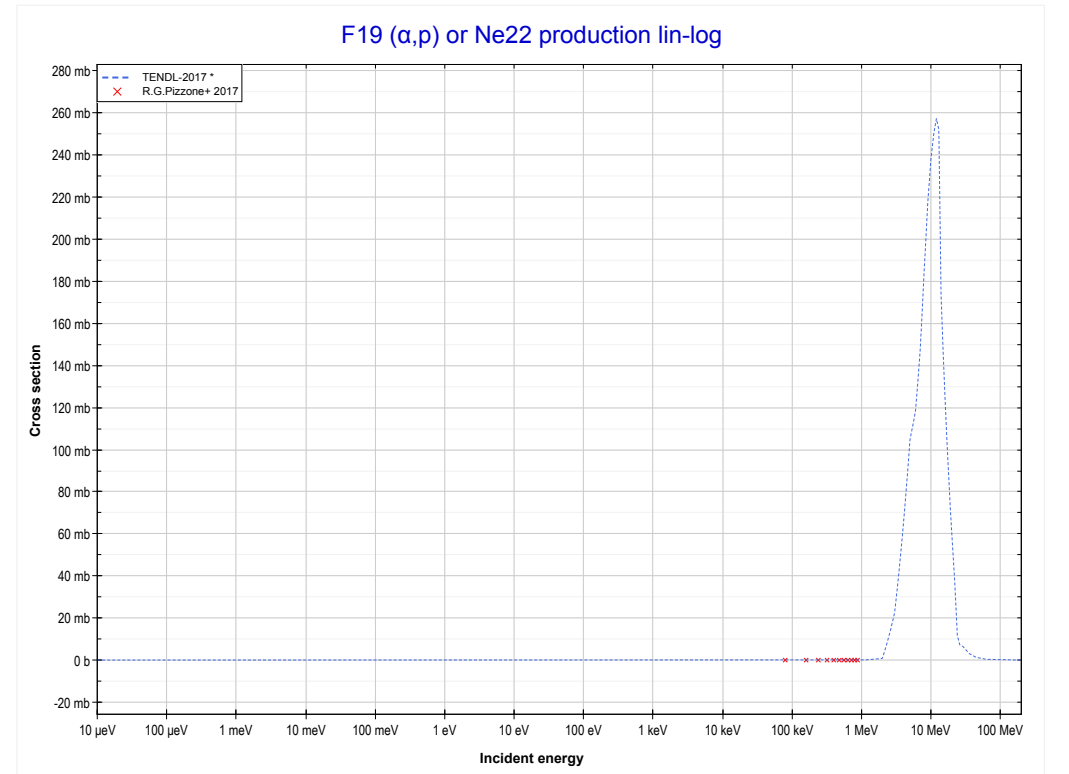
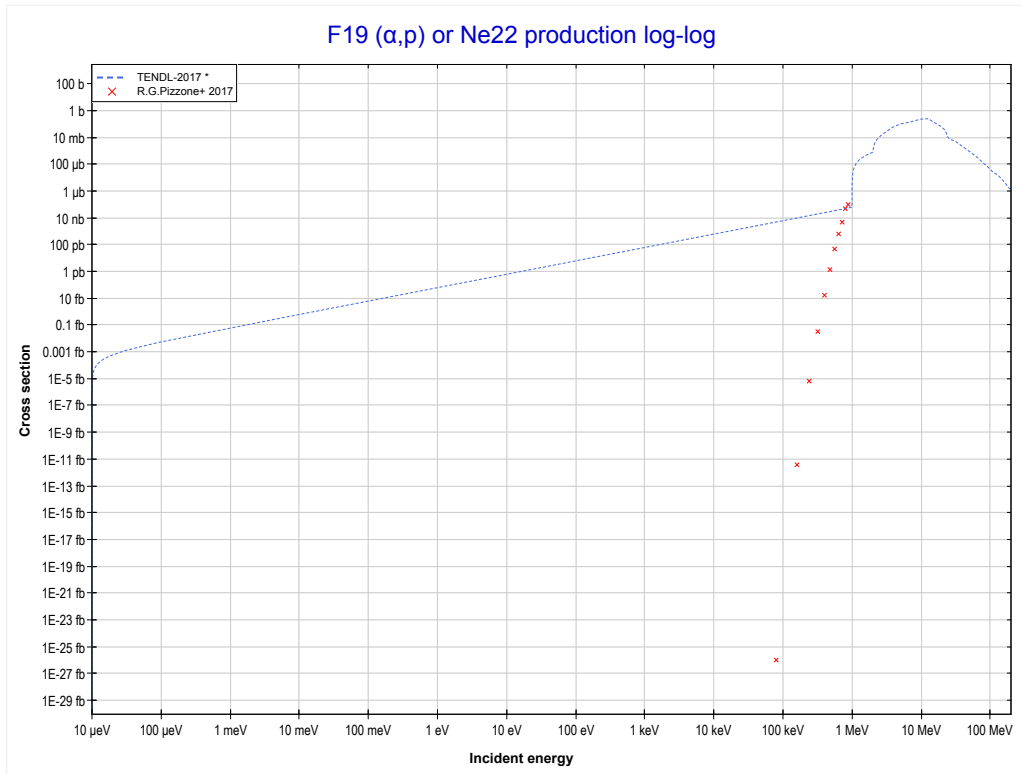
Reaction	Q-Value
O18(α,γ)Ne22	9666.81 keV

<< 8-O-18	9-F-19	10-Ne-20 >>
<< 8-O-18 MT102 (α,γ)	MT4 (α,n) or MT5 (Na22 production)	MT103 (α,p) >>



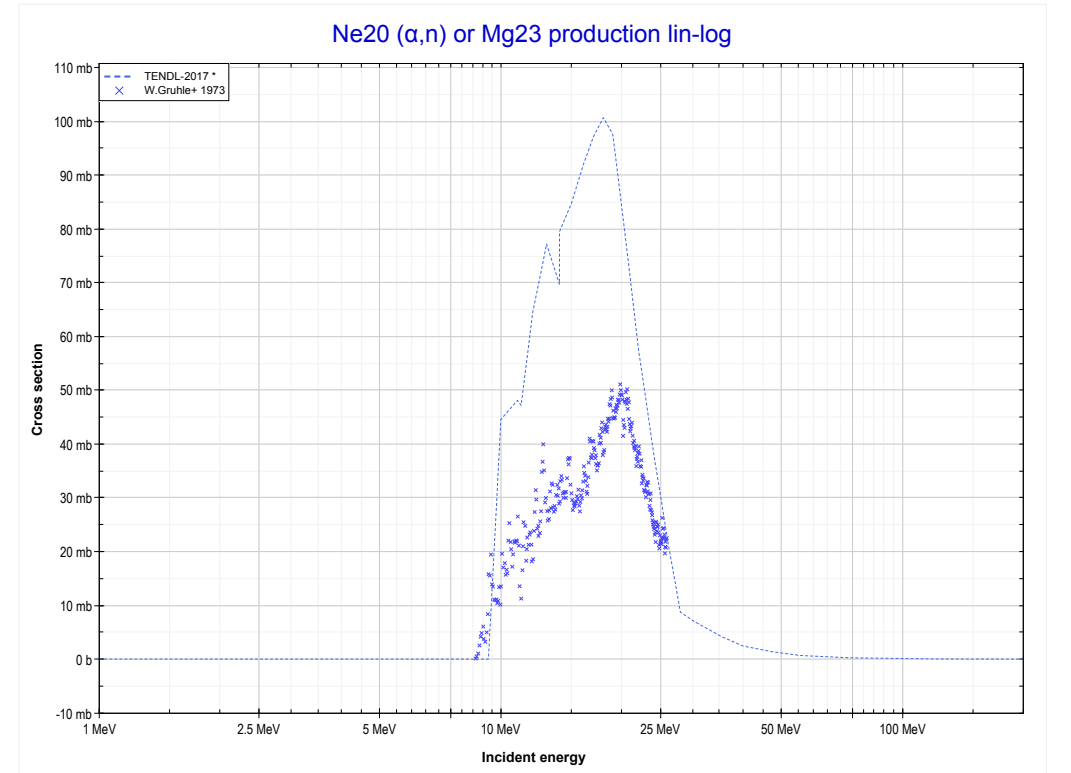
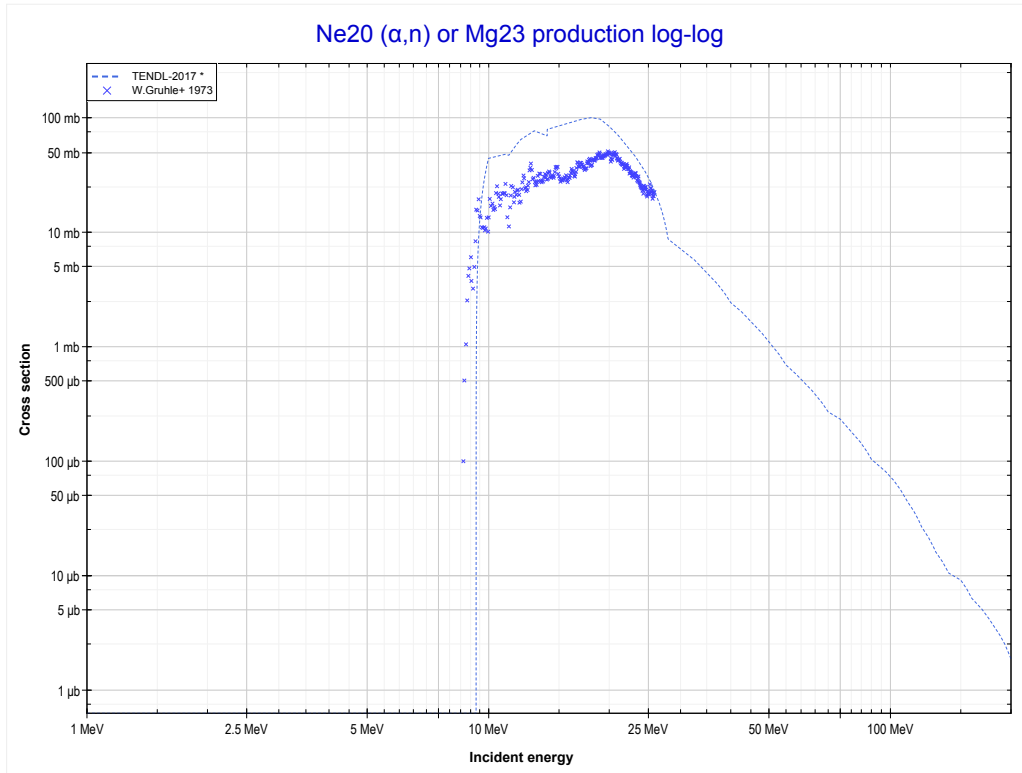
Reaction	Q-Value
F19(α,n)Na22	-1952.33 keV

<< 5-B-11	9-F-19	12-Mg-25 >>
<< MT4 (α,n)	MT103 (α,p) or MT5 (Ne22 production)	10-Ne-20 MT4 (α,n) >>



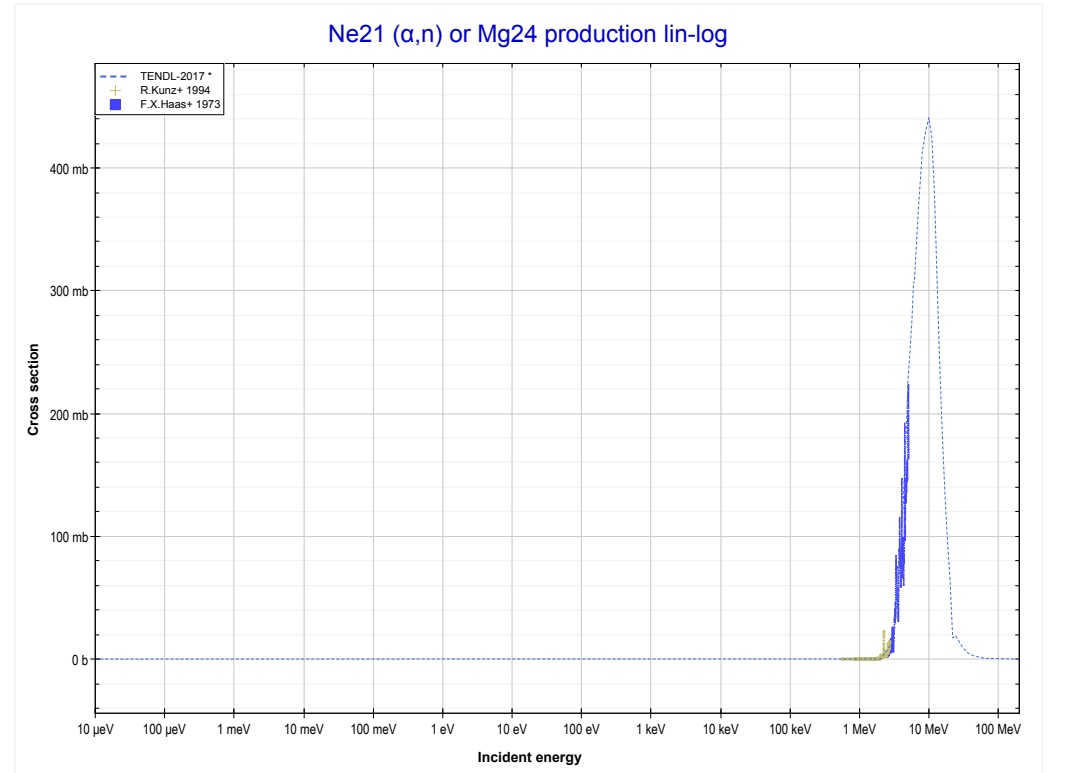
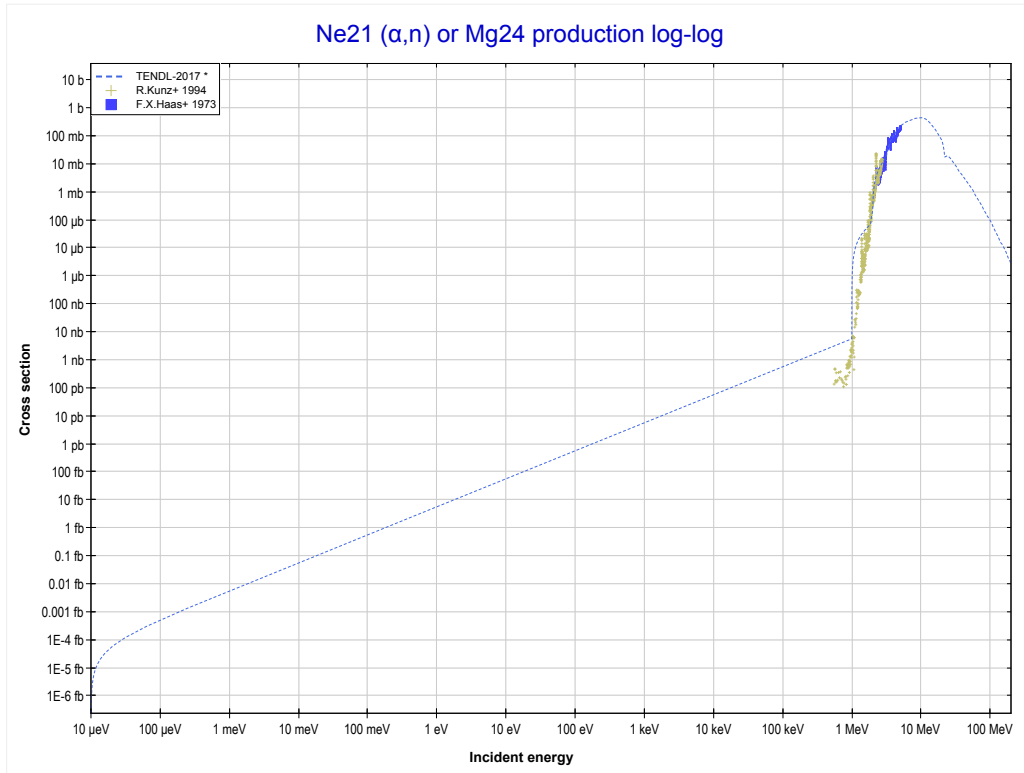
Reaction	Q-Value
F19(α,p)Ne22	1673.21 keV

<< 9-F-19	10-Ne-20	10-Ne-21 >>
<< 9-F-19 MT103 (α, p)	MT4 (α, n) or MT5 (Mg23 production)	10-Ne-21 MT4 (α, n) >>



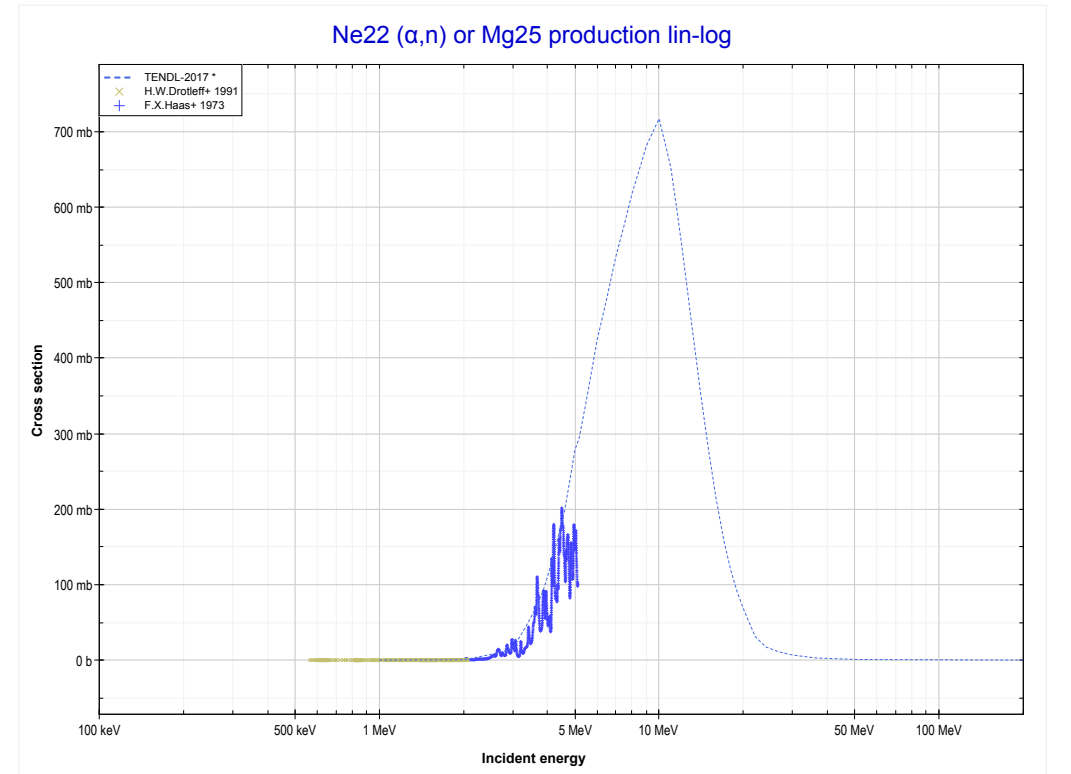
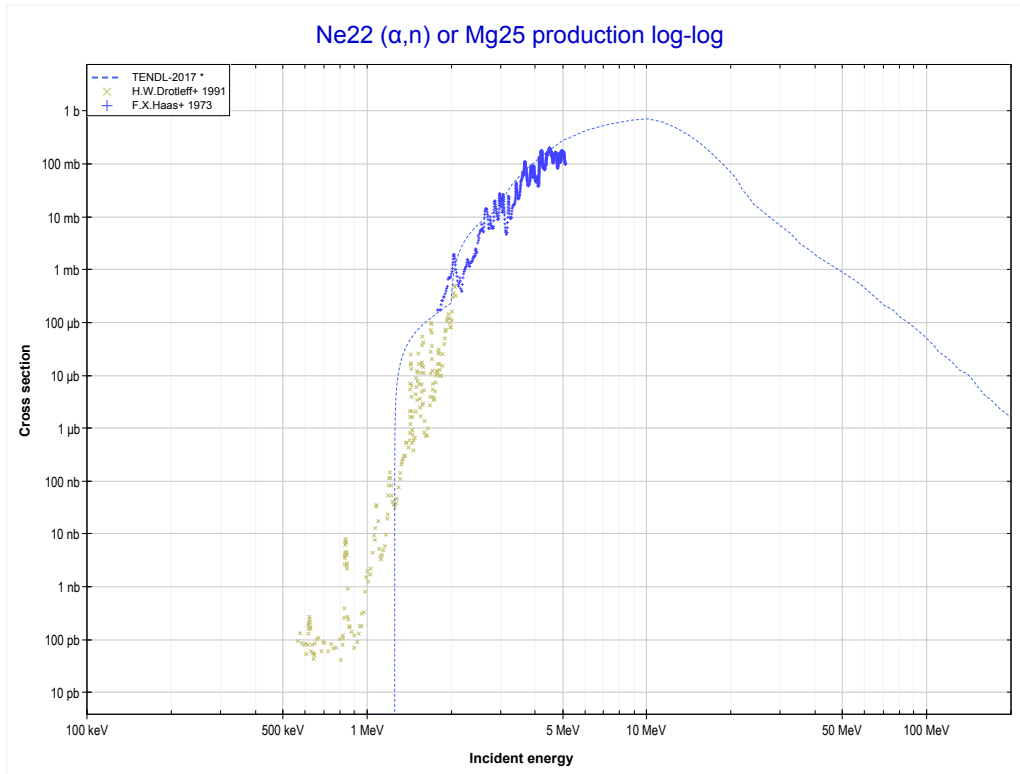
Reaction	Q-Value
Ne20(α, n)Mg23	-7215.03 keV

<< 10-Ne-20	10-Ne-21	10-Ne-22 >>
<< 10-Ne-20 MT4 (α,n)	MT4 (α,n) or MT5 (Mg24 production)	10-Ne-22 MT4 (α,n) >>



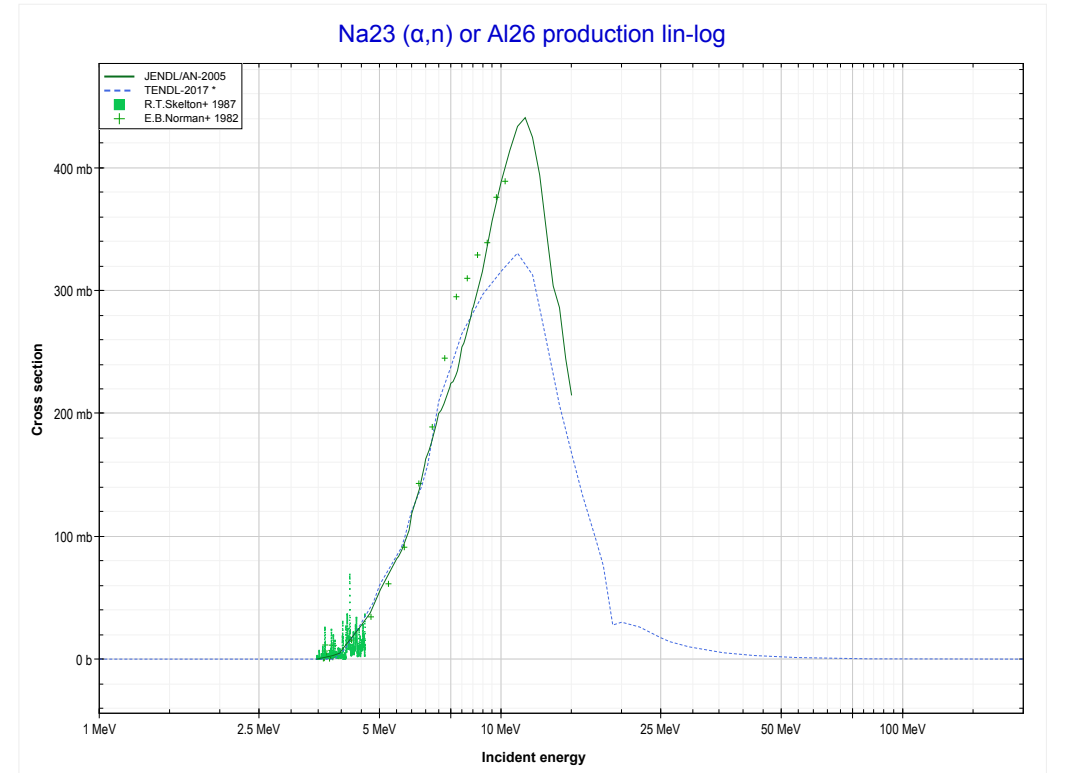
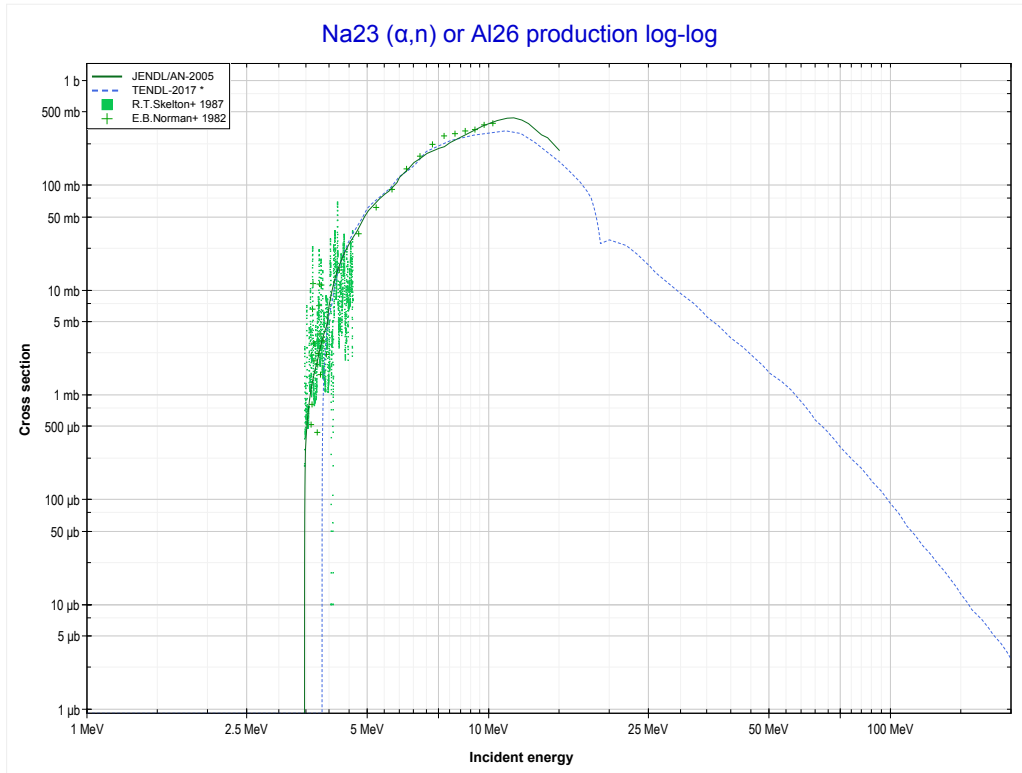
Reaction	Q-Value
Ne21(α,n)Mg24	2555.39 keV

<< 10-Ne-21	10-Ne-22	11-Na-23 >>
<< 10-Ne-21 MT4 (α,n)	MT4 (α,n) or MT5 (Mg25 production)	11-Na-23 MT4 (α,n) >>



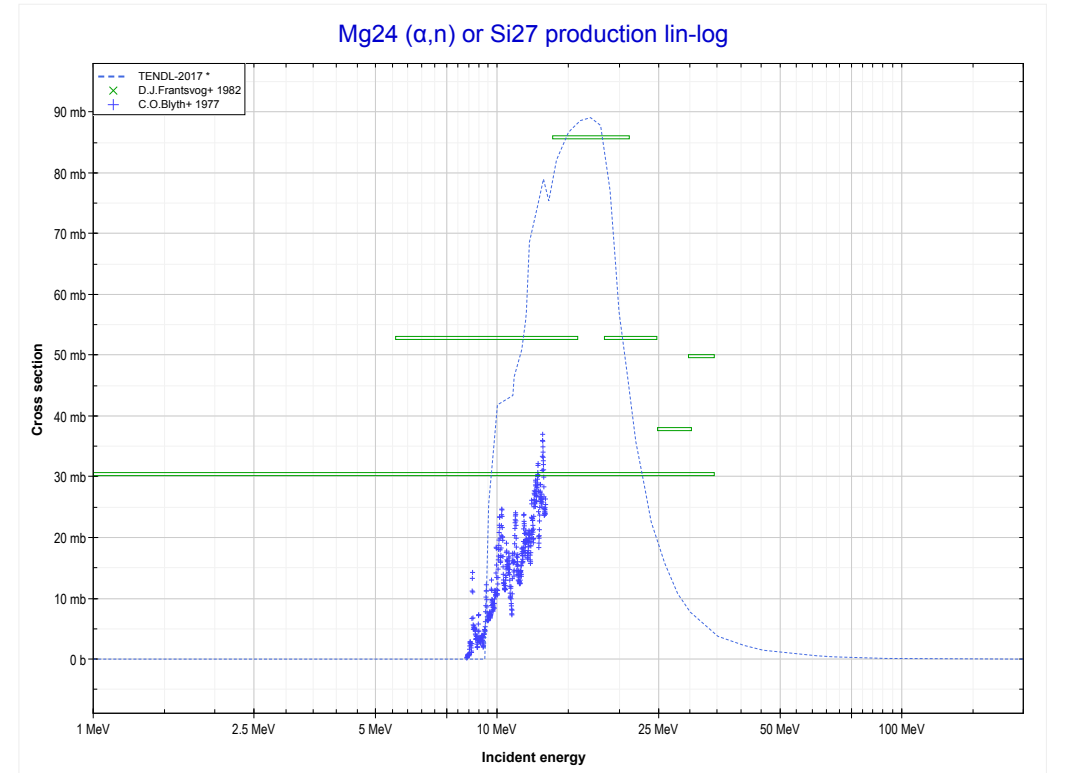
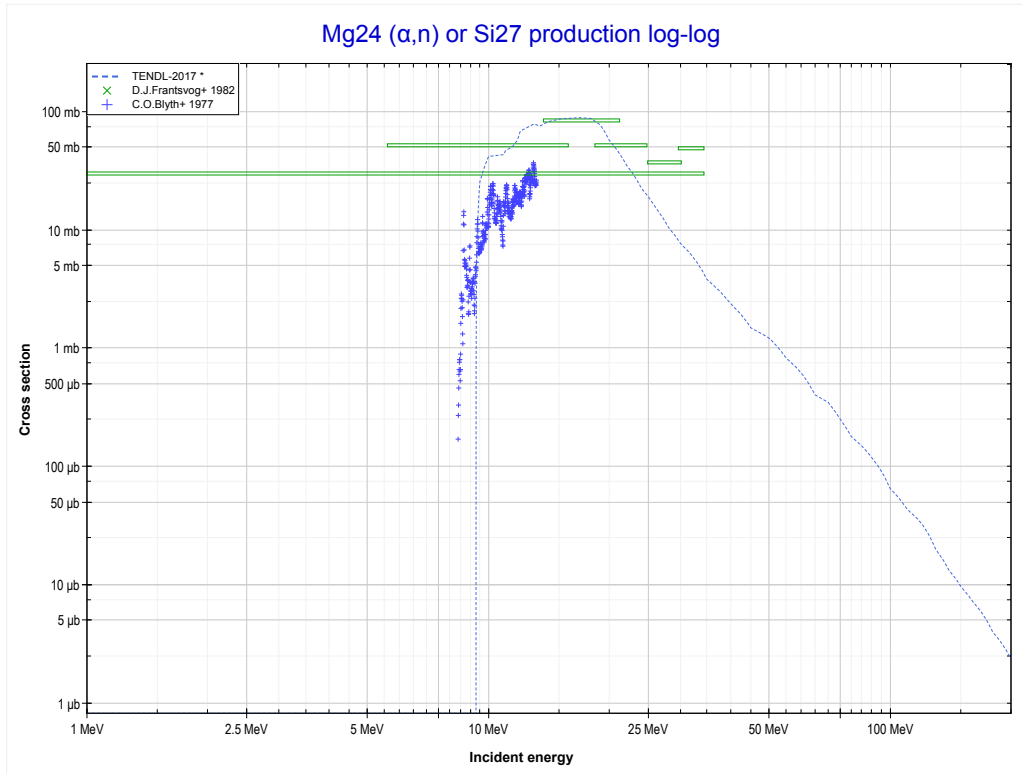
Reaction	Q-Value
Ne22(α,n)Mg25	-478.35 keV

<< 10-Ne-22	11-Na-23	12-Mg-24 >>
<< 10-Ne-22 MT4 (α,n)	MT4 (α,n) or MT5 (Al26 production)	12-Mg-24 MT4 (α,n) >>



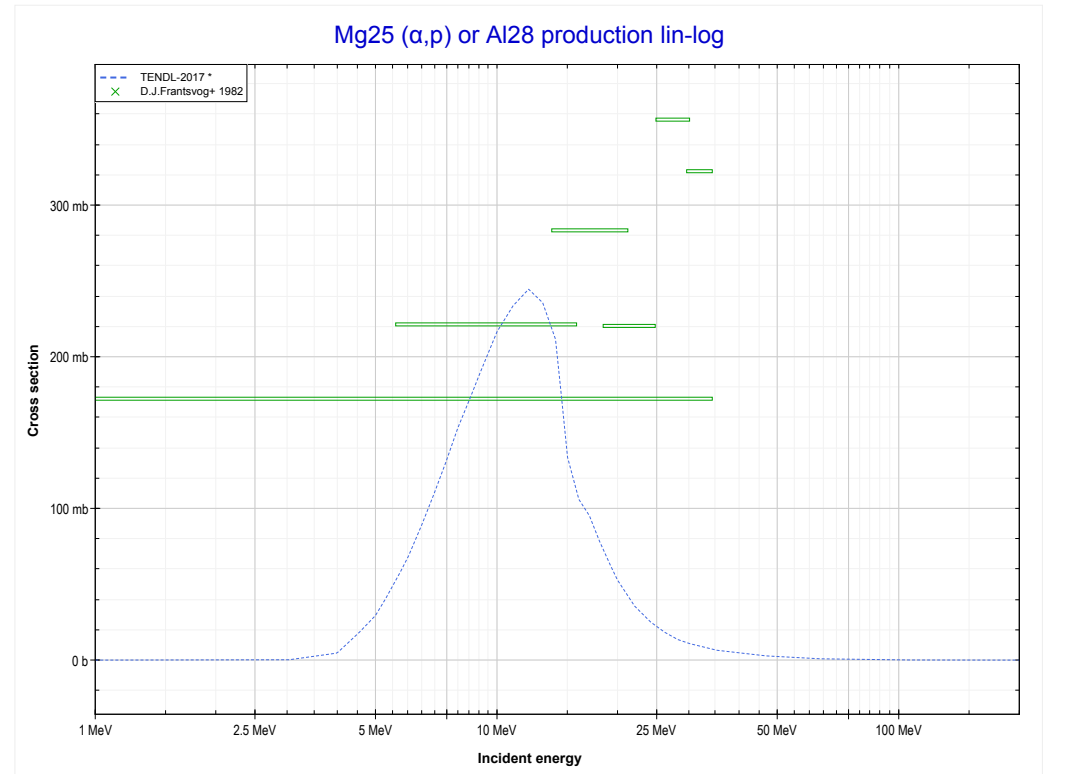
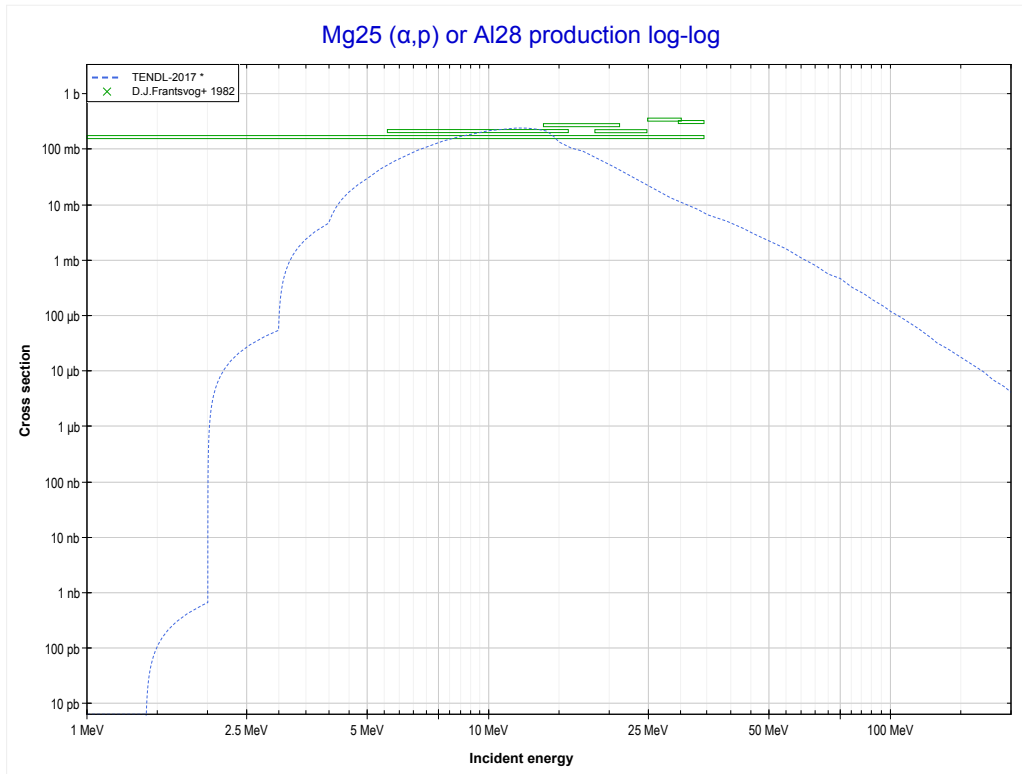
Reaction	Q-Value
Na23(α,n)Al26	-2966.14 keV

<< 11-Na-23	12-Mg-24	13-Al-27 >>
<< 11-Na-23 MT4 (α,n)	MT4 (α,n) or MT5 (Si27 production)	12-Mg-25 MT103 (α,p) >>



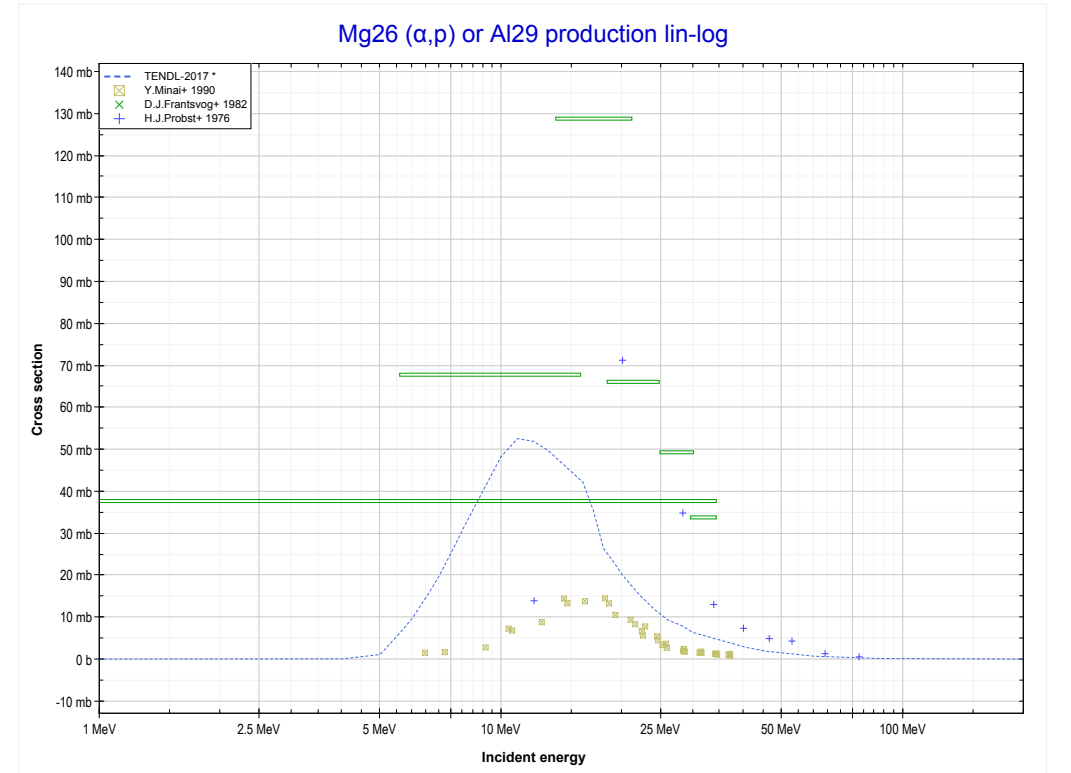
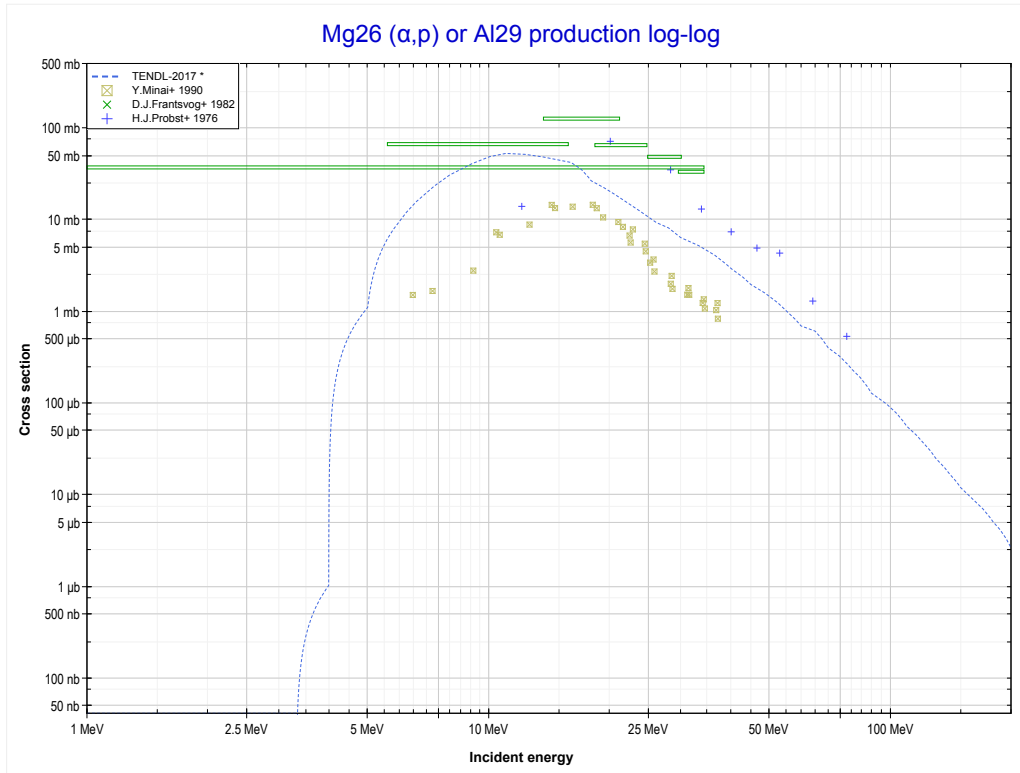
Reaction	Q-Value
Mg24(α,n)Si27	-7195.58 keV

<< 9-F-19	12-Mg-25	12-Mg-26 >>
<< 12-Mg-24 MT4 (α,n)	MT103 (α,p) or MT5 (Al28 production)	12-Mg-26 MT103 (α,p) >>



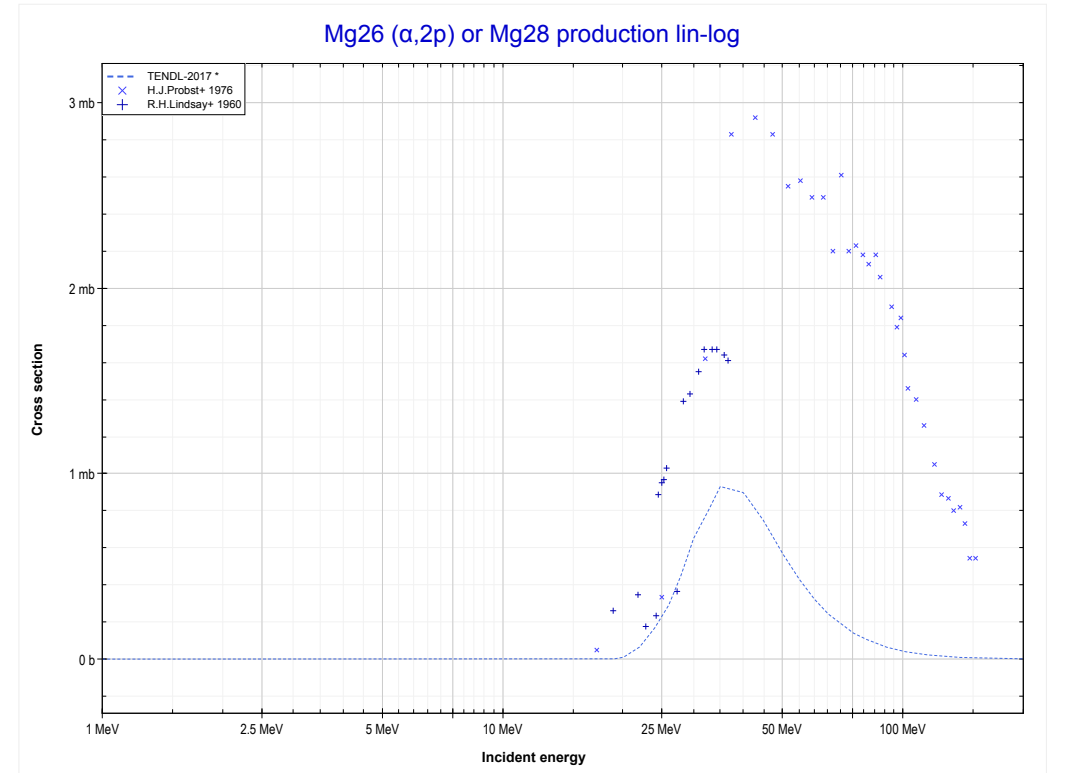
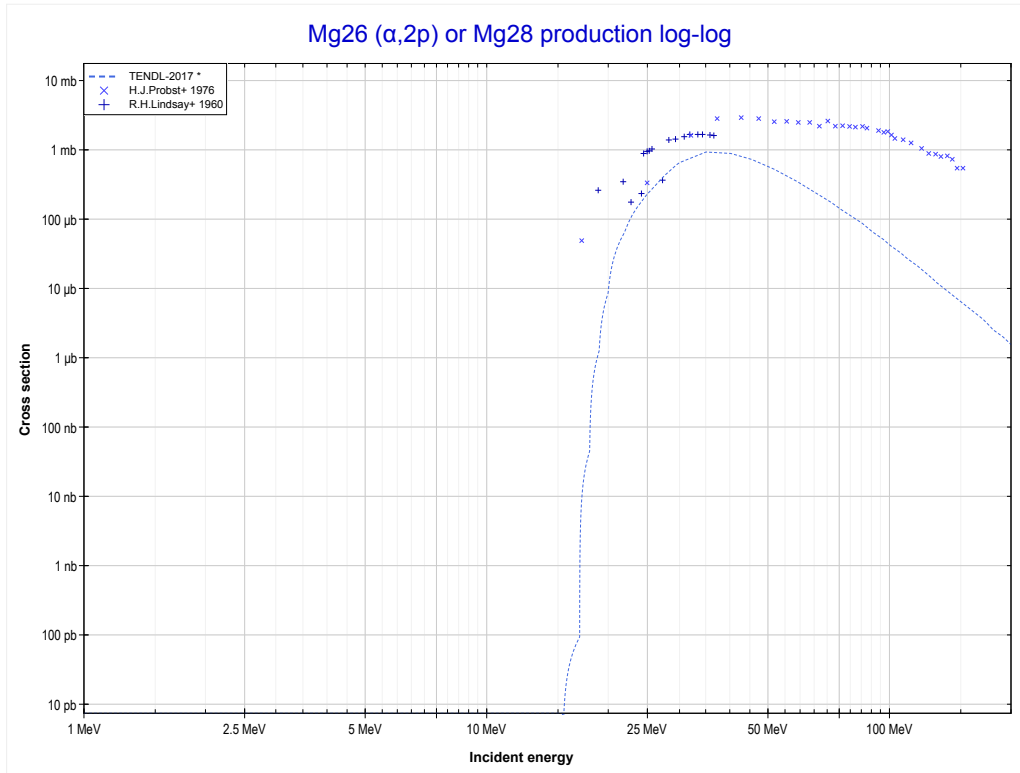
Reaction	Q-Value
Mg25(α,p)Al28	-1206.29 keV

<< 12-Mg-25	12-Mg-26	18-Ar-40 >>
<< 12-Mg-25 MT103 (α,p)	MT103 (α,p) or MT5 (Al29 production)	MT111 (α,2p) >>



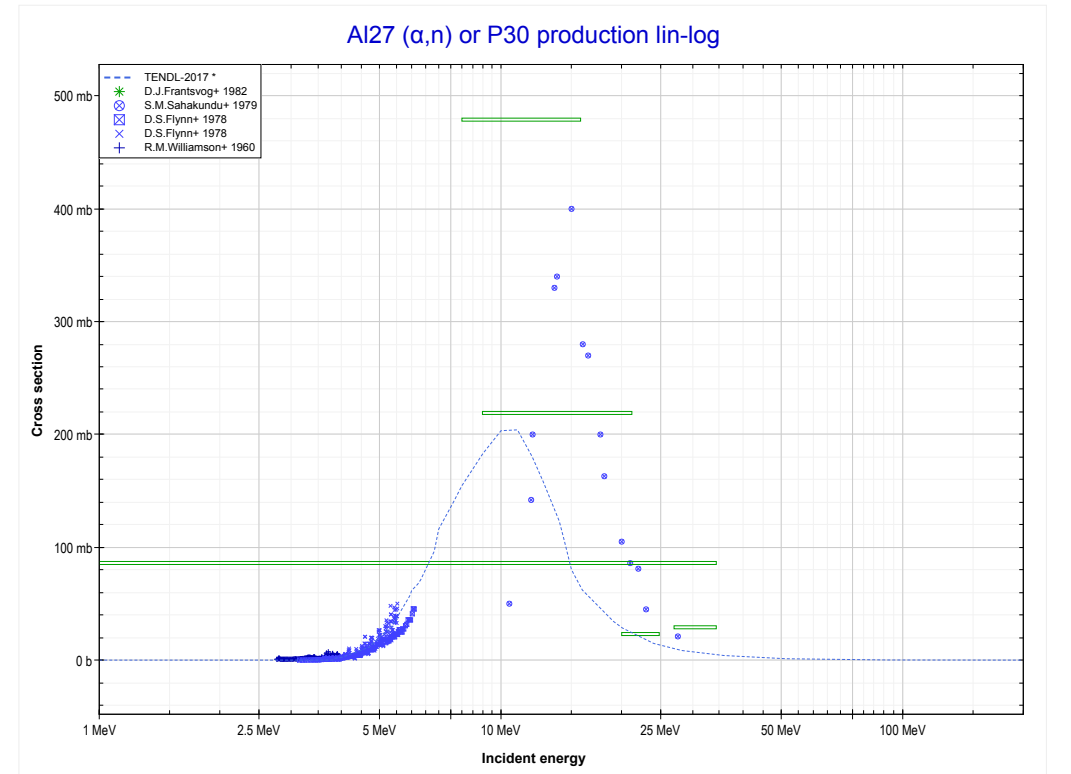
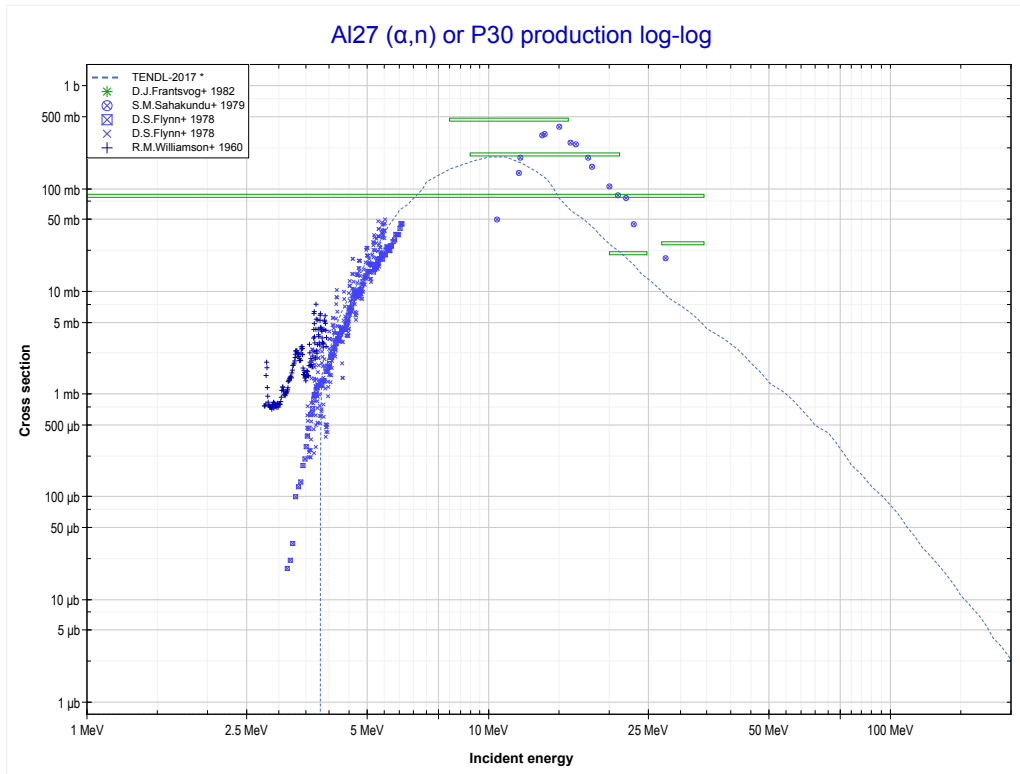
Reaction	Q-Value
Mg26(α,p)Al29	-2873.90 keV

	12-Mg-26	13-Al-27 >>
<< MT103 (α,p)	MT111 (α,2p) or MT5 (Mg28 production)	13-Al-27 MT4 (α,n) >>



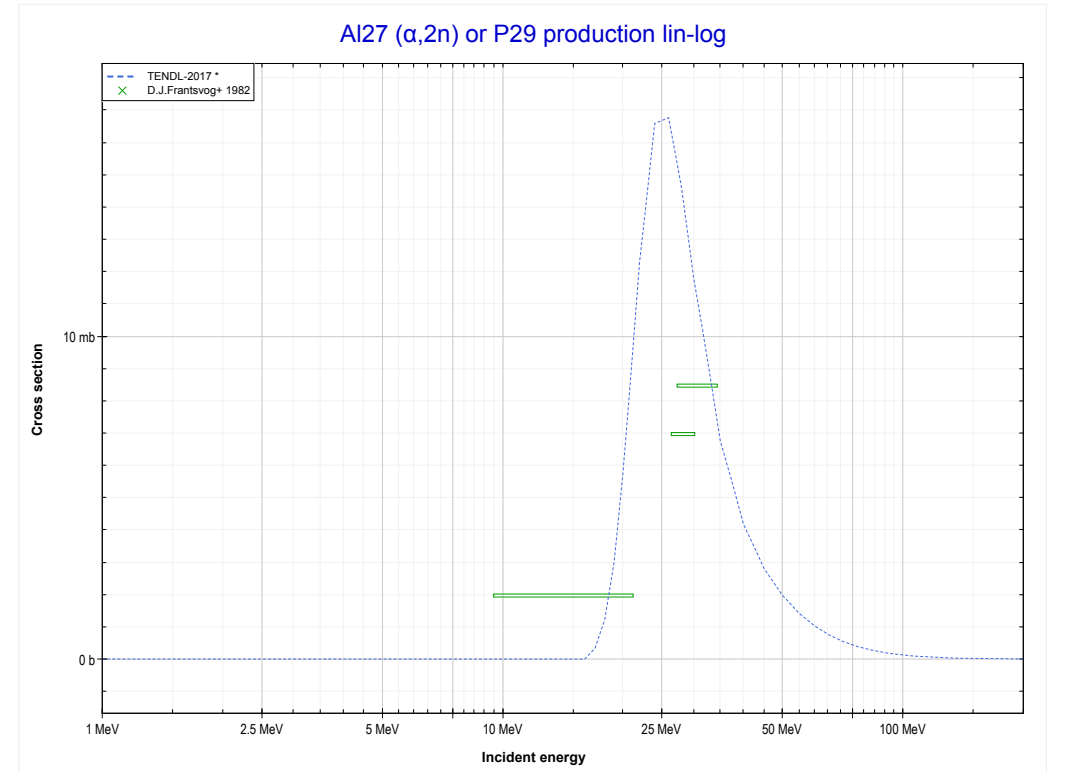
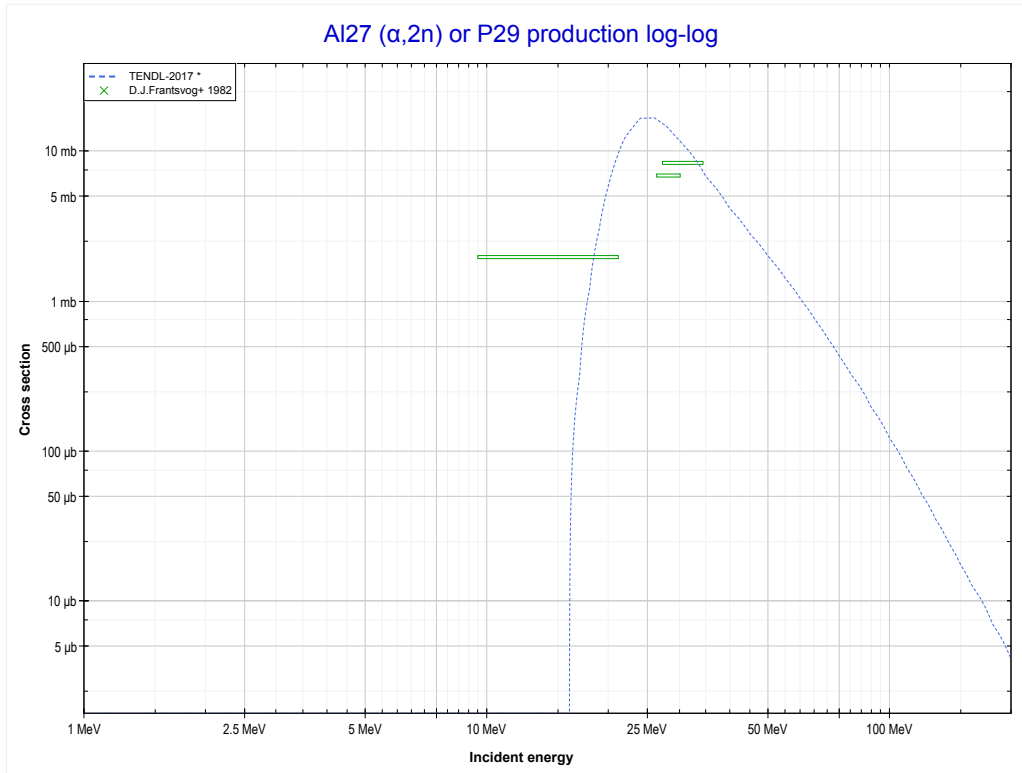
Reaction	Q-Value
Mg26(α,2p)Mg28	-13348.87 keV

<< 12-Mg-24	13-Al-27	14-Si-28 >>
<< 12-Mg-26 MT111 ($\alpha,2p$)	MT4 (α,n) or MT5 (P30 production)	MT16 ($\alpha,2n$) >>



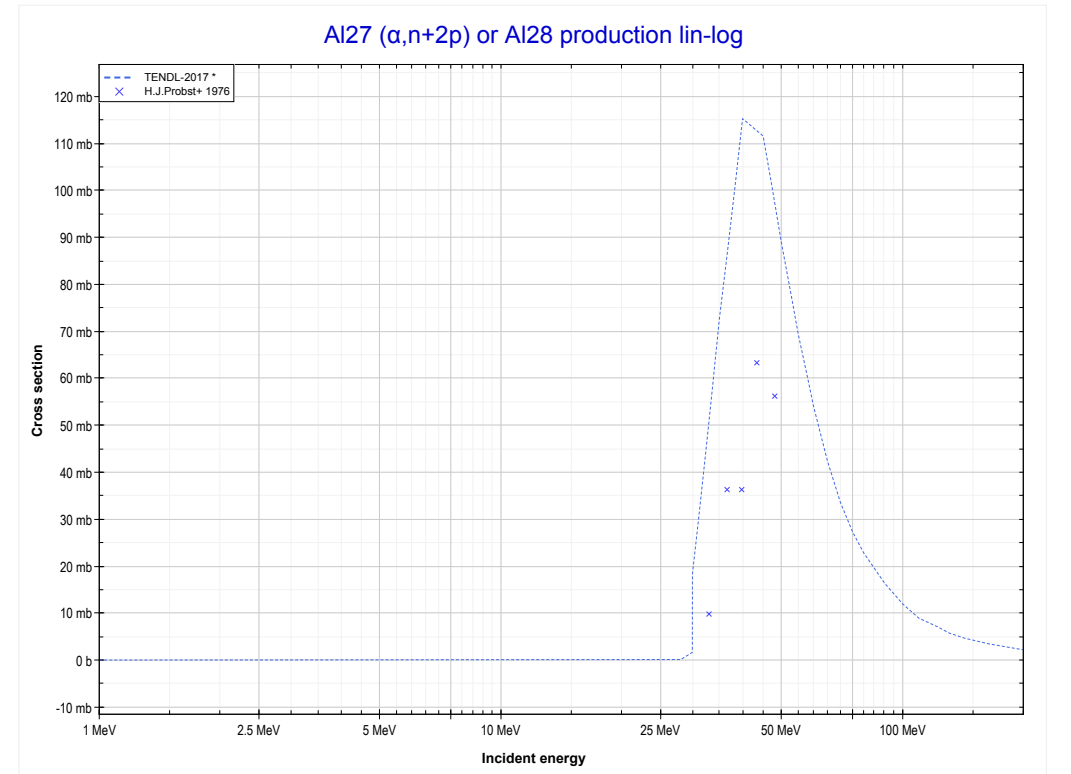
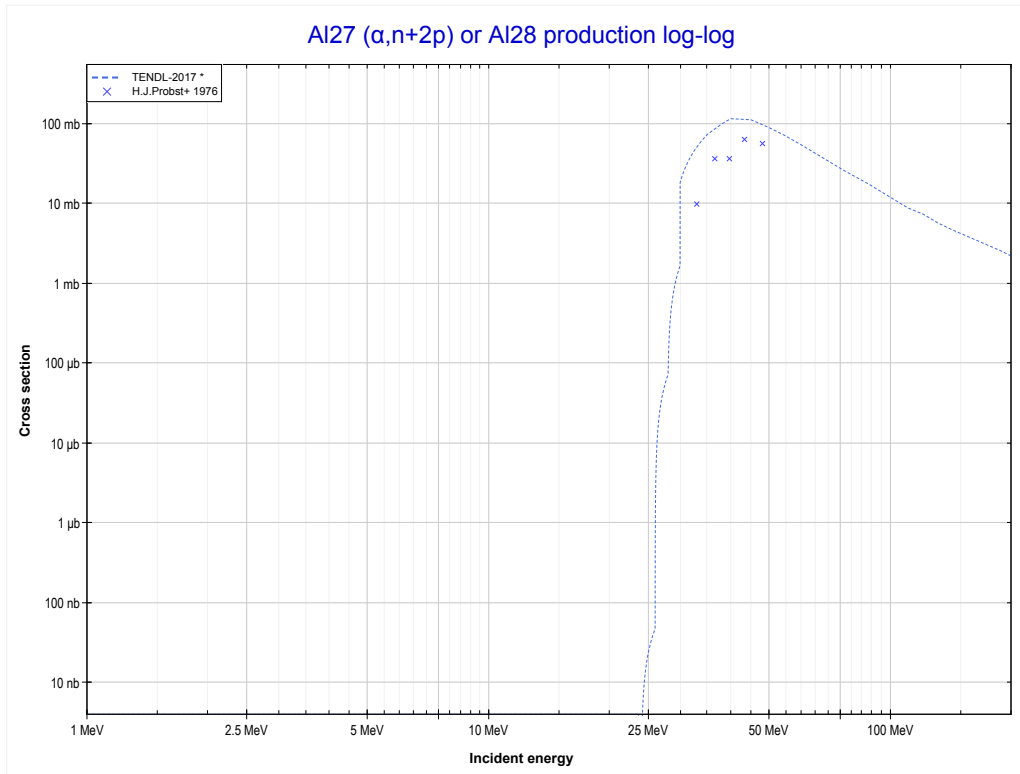
Reaction	Q-Value
Al27(α,n)P30	-2642.55 keV

<< 4-Be-9	13-Al-27	14-Si-28 >>
<< MT4 (α,n)	MT16 ($\alpha,2n$) or MT5 (P29 production)	MT44 ($\alpha,n+2p$) >>



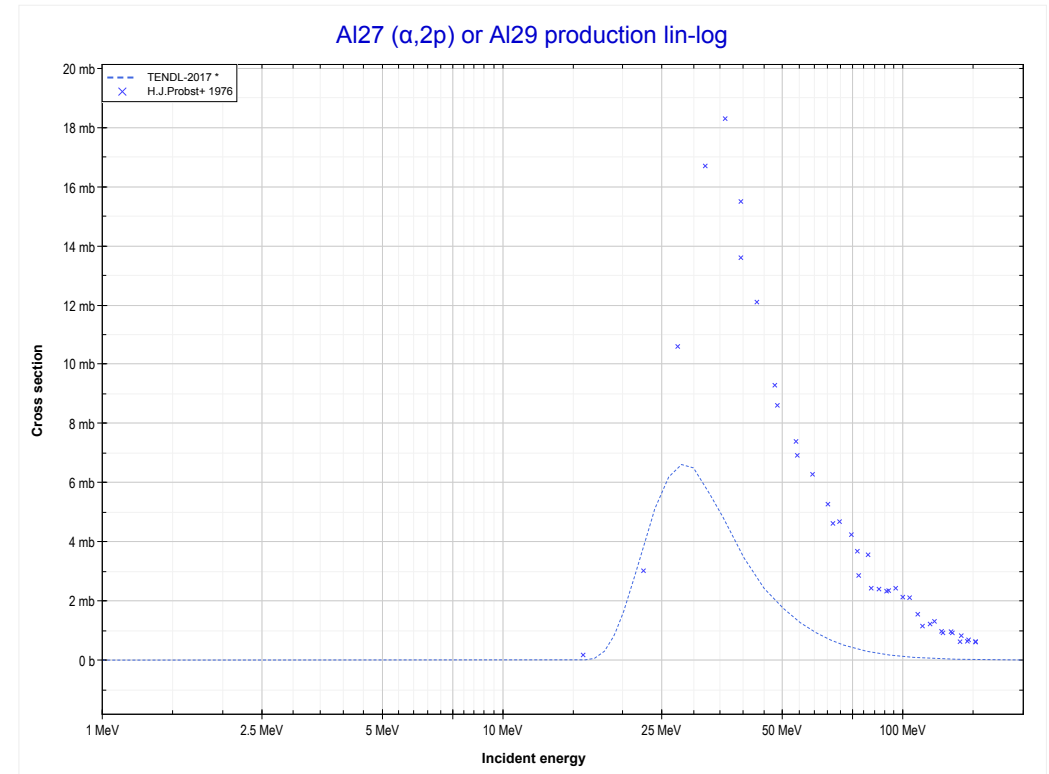
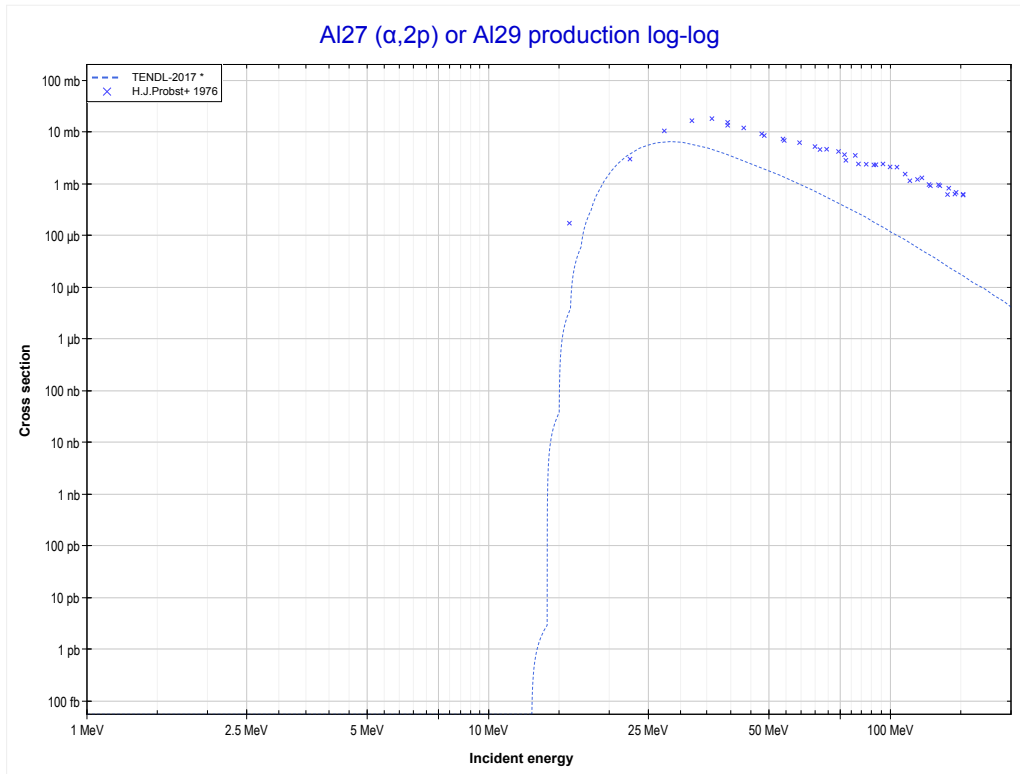
Reaction	Q-Value
Al27($\alpha,2n$)P29	-13961.97 keV

<< 6-C-12	13-Al-27	21-Sc-45 >>
<< MT16 ($\alpha,2n$)	MT44 ($\alpha,n+2p$) or MT5 (Al28 production)	MT111 ($\alpha,2p$) >>



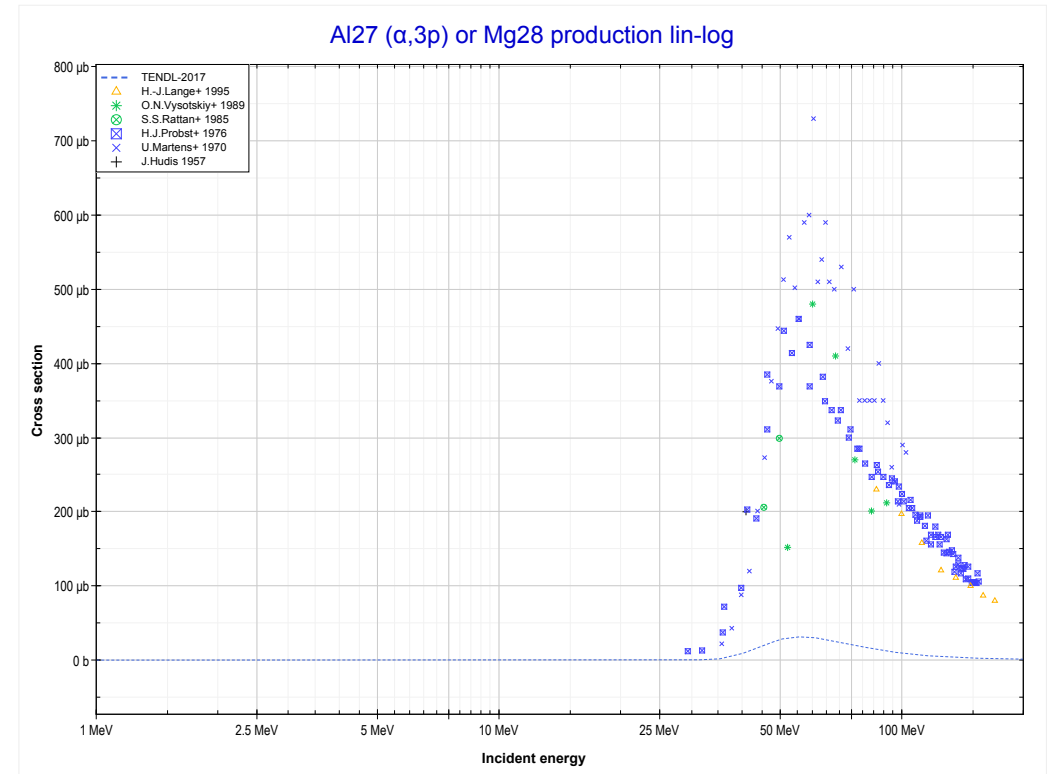
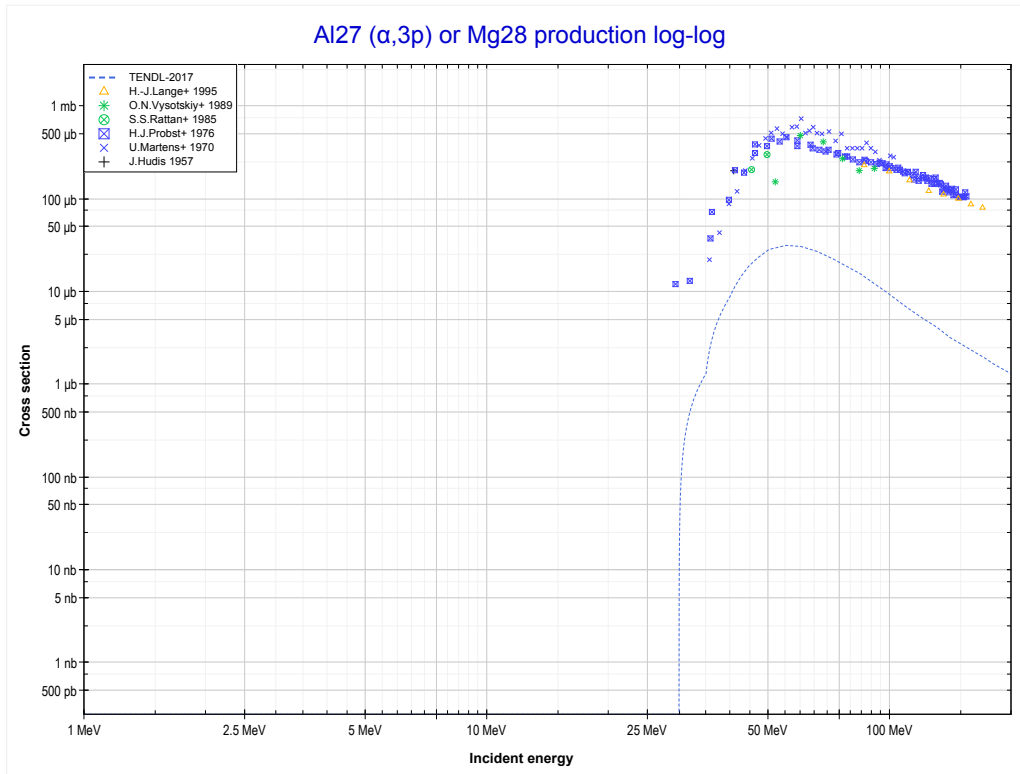
Reaction	Q-Value
Al27($\alpha,He3$)Al28	-12852.52 keV
Al27($\alpha,p+d$)Al28	-18346.00 keV
Al27($\alpha,n+2p$)Al28	-20570.56 keV

<< 12-Mg-26	13-Al-27	17-Cl-37 >>
<< MT44 ($\alpha, n+2p$)	MT111 ($\alpha, 2p$) or MT5 (Al29 production)	MT197 ($\alpha, 3p$) >>



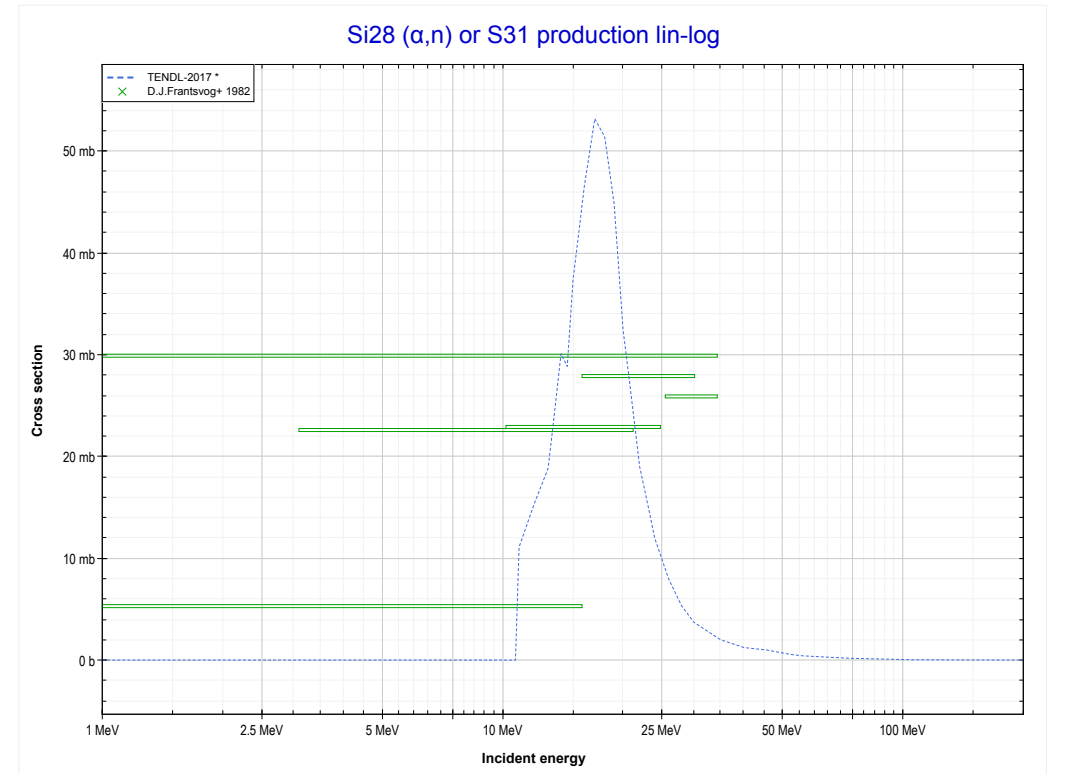
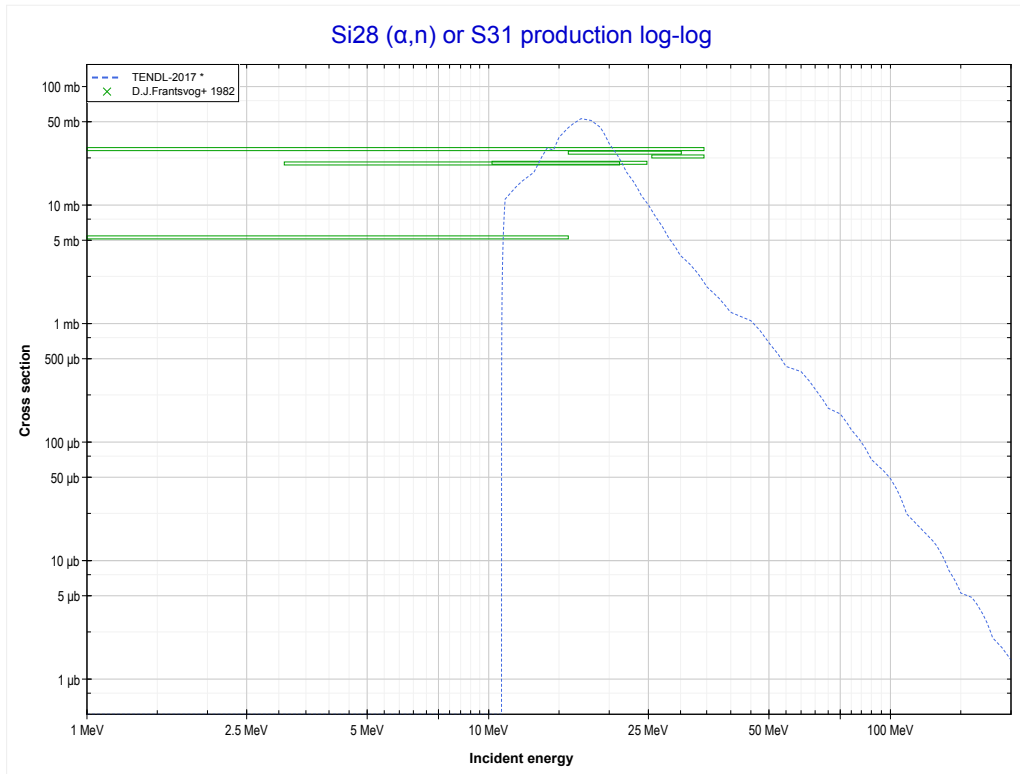
Reaction	Q-Value
Al27($\alpha, 2p$)Al29	-11145.08 keV

	13-Al-27	
<< MT111 ($\alpha,2p$)	MT197 ($\alpha,3p$) or MT5 (Mg28 production)	14-Si-28 MT4 (α,n) >>



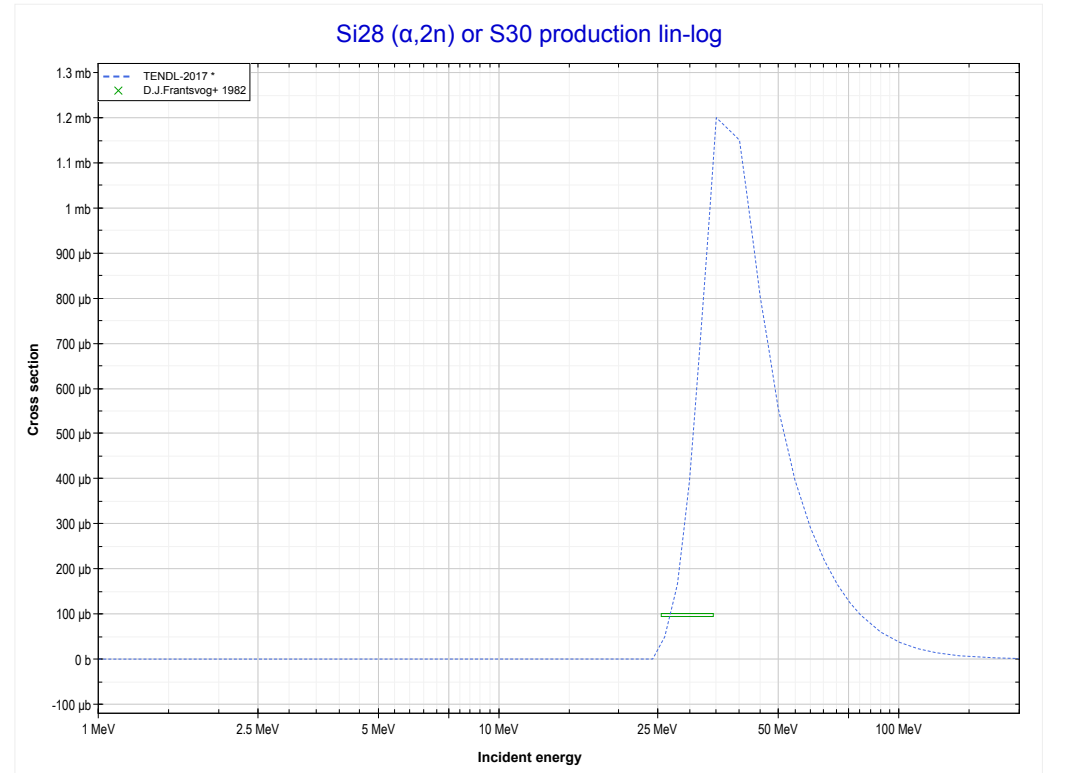
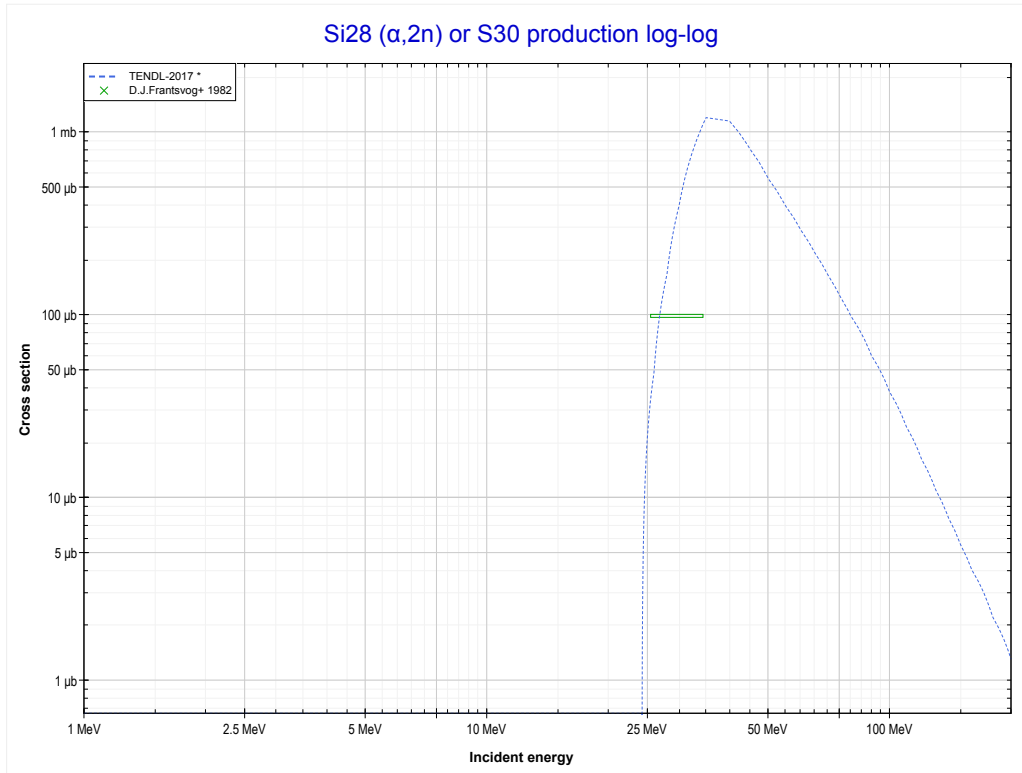
Reaction	Q-Value
Al27($\alpha,3p$)Mg28	-21620.05 keV

<< 13-Al-27	14-Si-28	14-Si-29 >>
<< 13-Al-27 MT197 ($\alpha,3p$)	MT4 (α,n) or MT5 (S31 production)	MT16 ($\alpha,2n$) >>



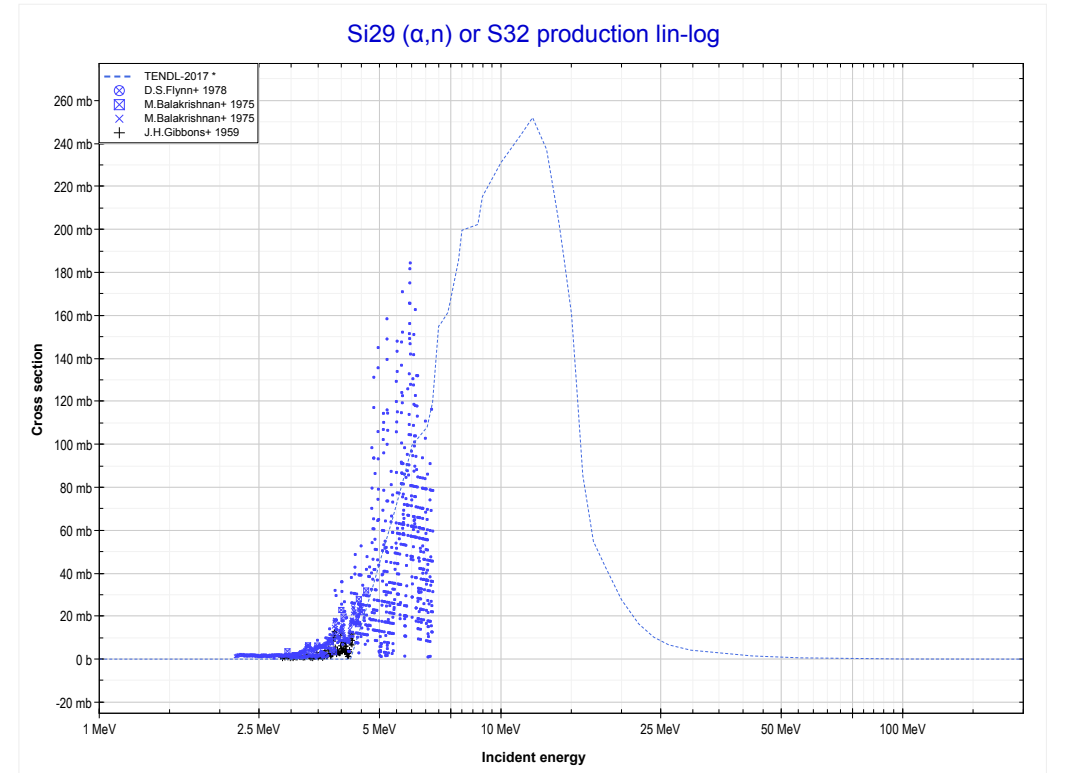
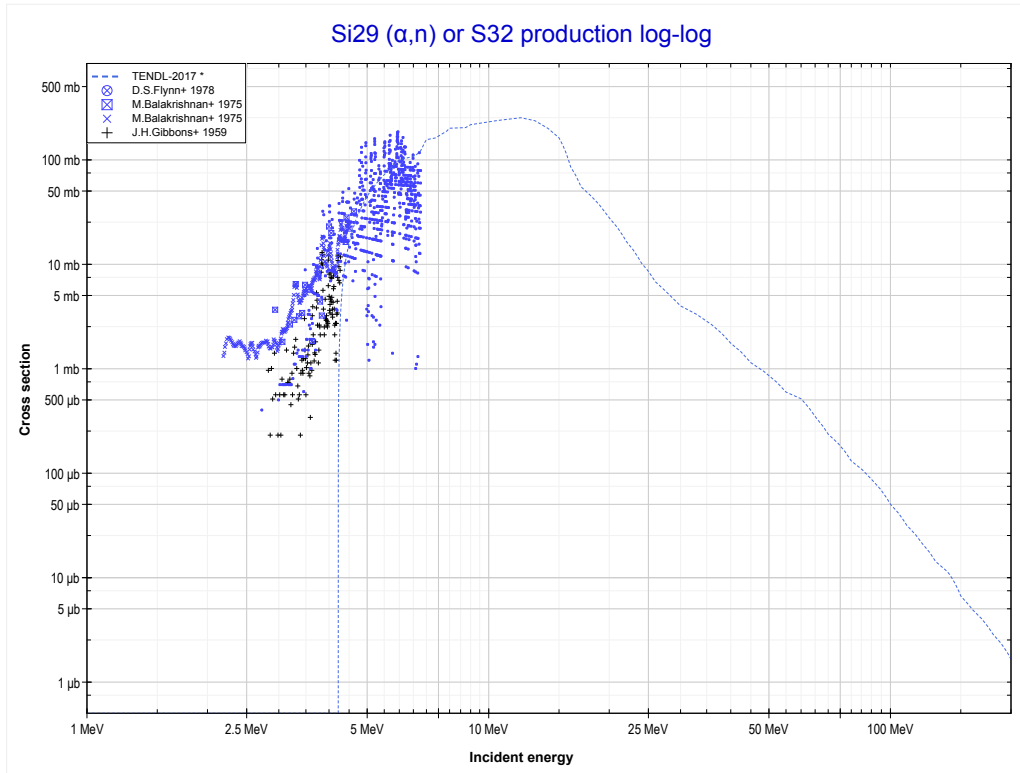
Reaction	Q-Value
Si28(α,n)S31	-8096.68 keV

<< 13-Al-27	14-Si-28	19-K-41 >>
<< MT4 (α,n)	MT16 ($\alpha,2n$) or MT5 (S30 production)	14-Si-29 MT4 (α,n) >>



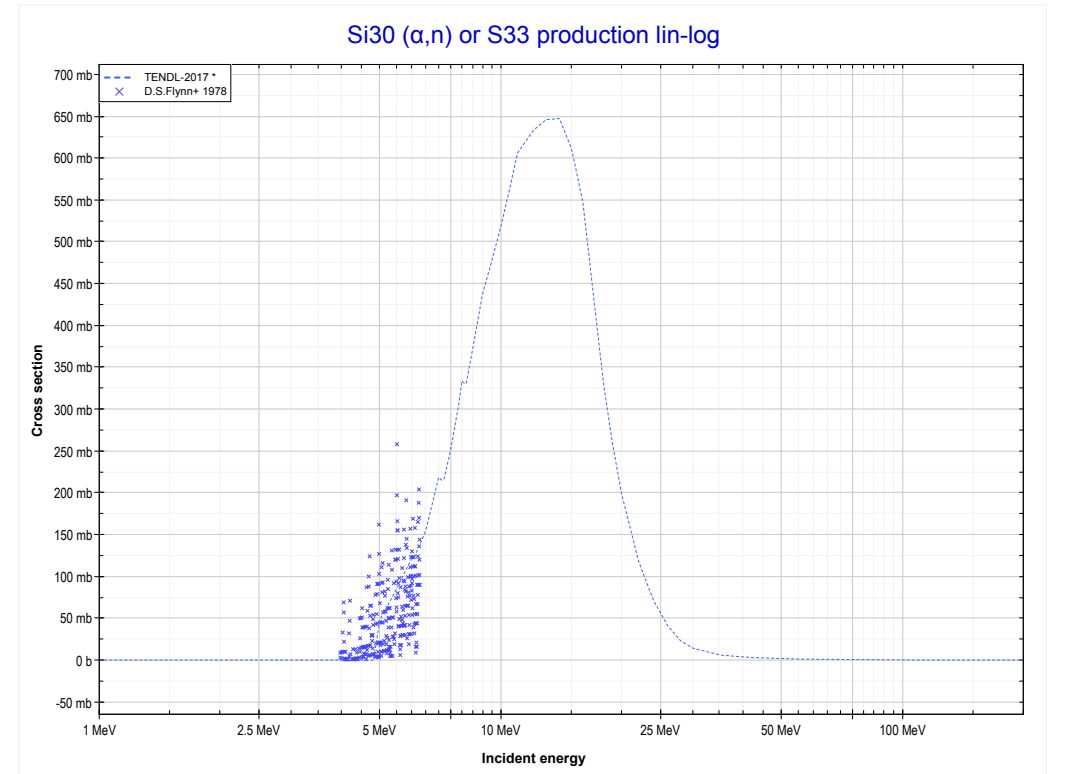
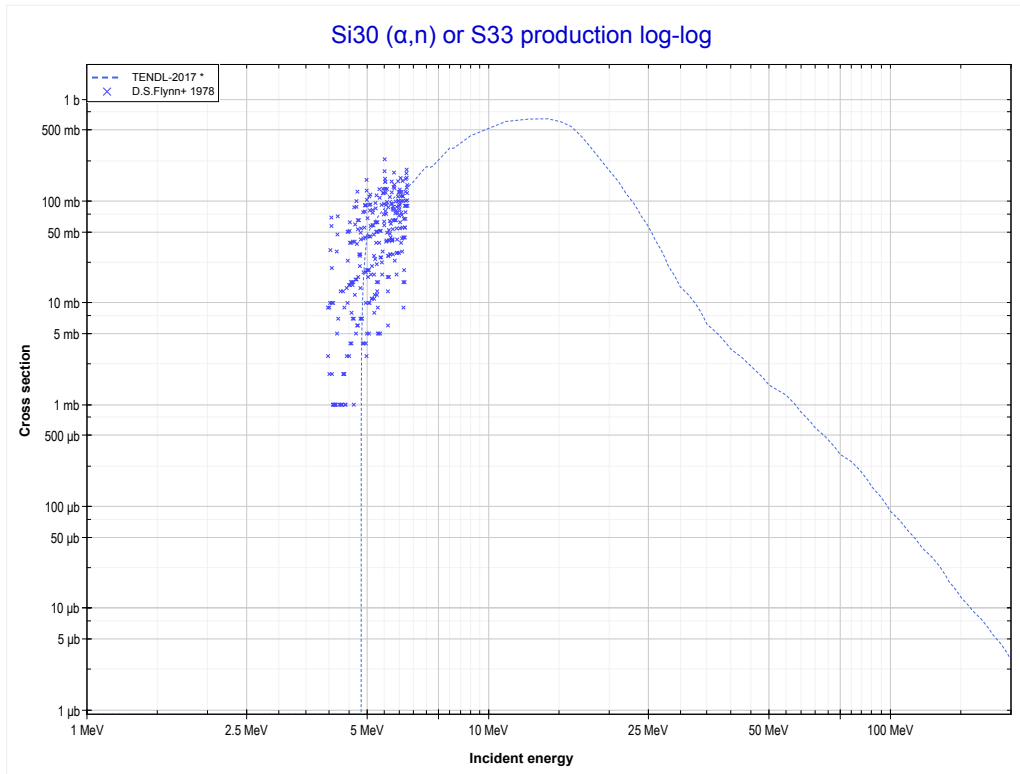
Reaction	Q-Value
Si28($\alpha,2n$)S30	-21151.51 keV

<< 14-Si-28	14-Si-29	14-Si-30 >>
<< 14-Si-28 MT16 ($\alpha,2n$)	MT4 (α,n) or MT5 (S32 production)	14-Si-30 MT4 (α,n) >>



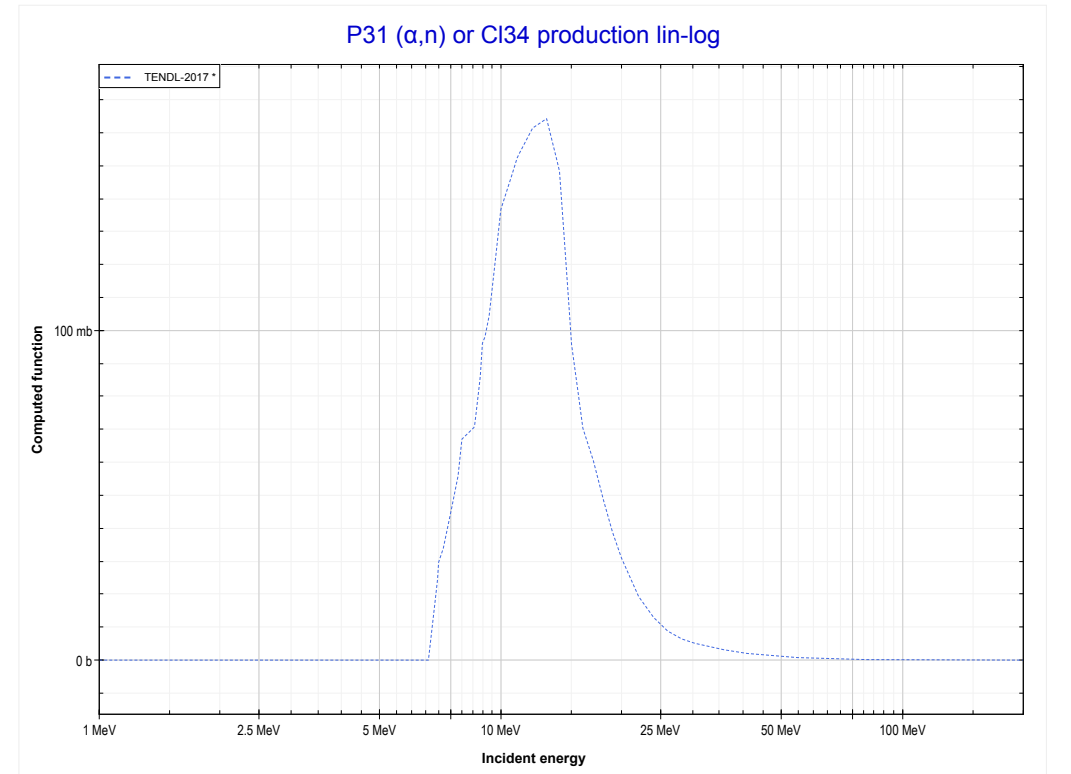
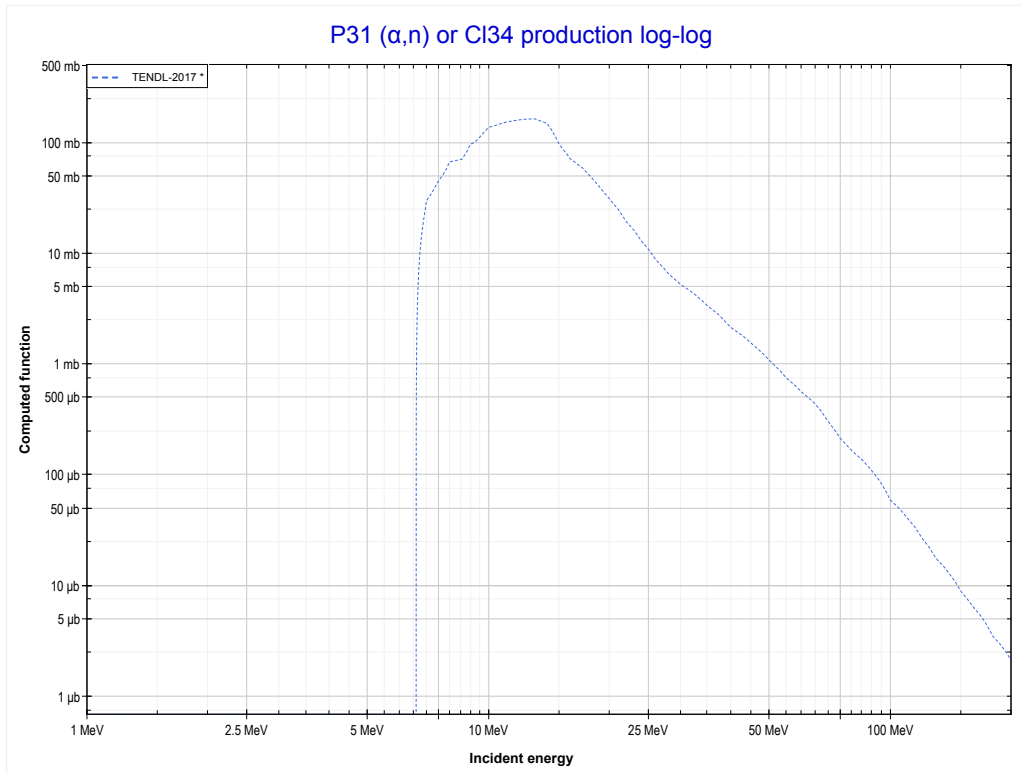
Reaction	Q-Value
Si29(α,n)S32	-1525.95 keV

<< 14-Si-29	14-Si-30	15-P-31 >>
<< 14-Si-29 MT4 (α,n)	MT4 (α,n) or MT5 (S33 production)	15-P-31 MT4 (α,n) >>



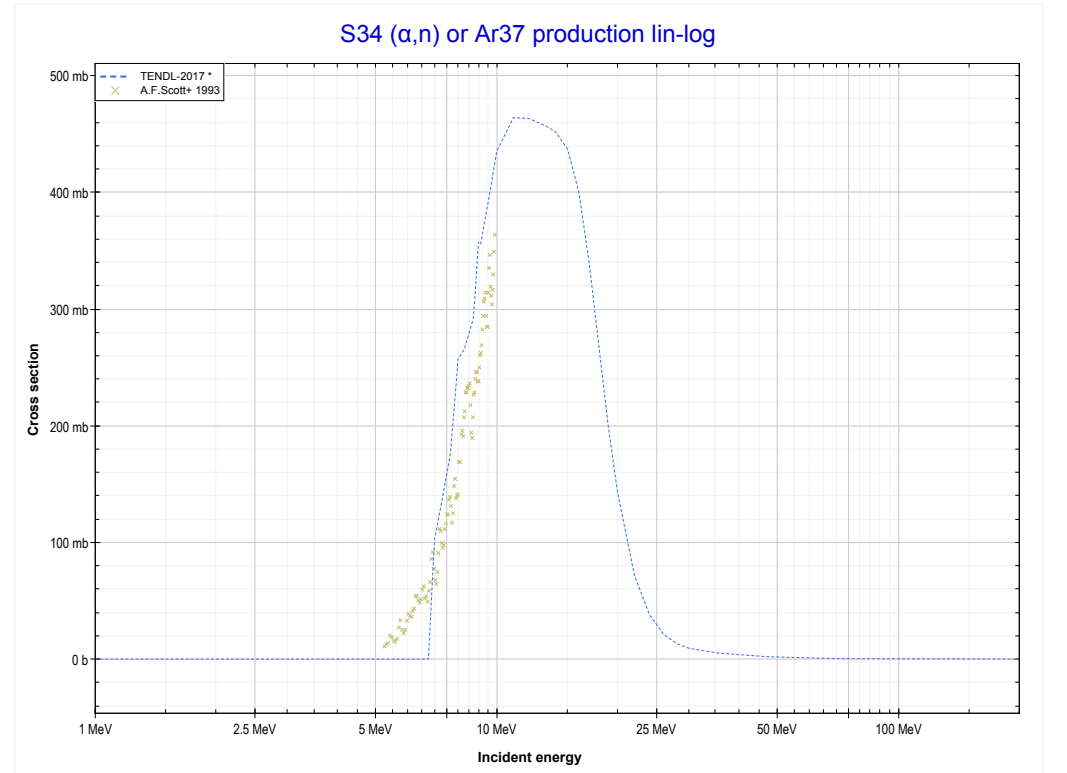
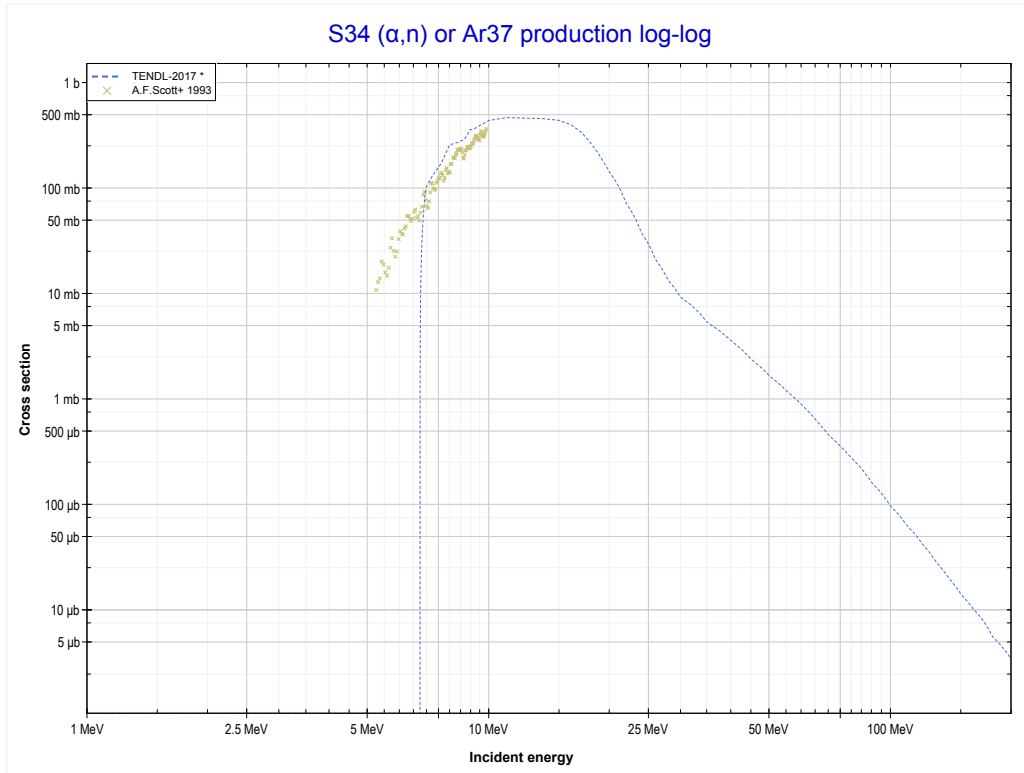
Reaction	Q-Value
Si30(α,n)S33	-3493.51 keV

<< 14-Si-30	15-P-31	16-S-34 >>
<< 14-Si-30 MT4 (α,n)	MT4 (α,n) or MT5 (Cl34 production)	16-S-34 MT4 (α,n) >>



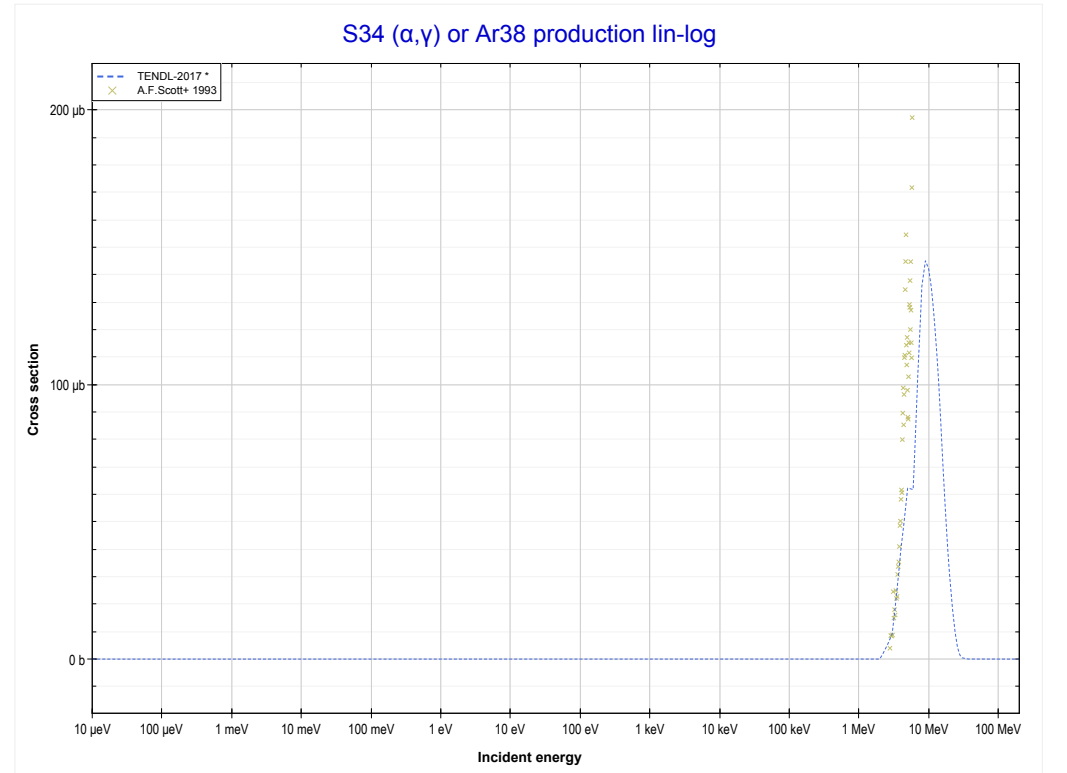
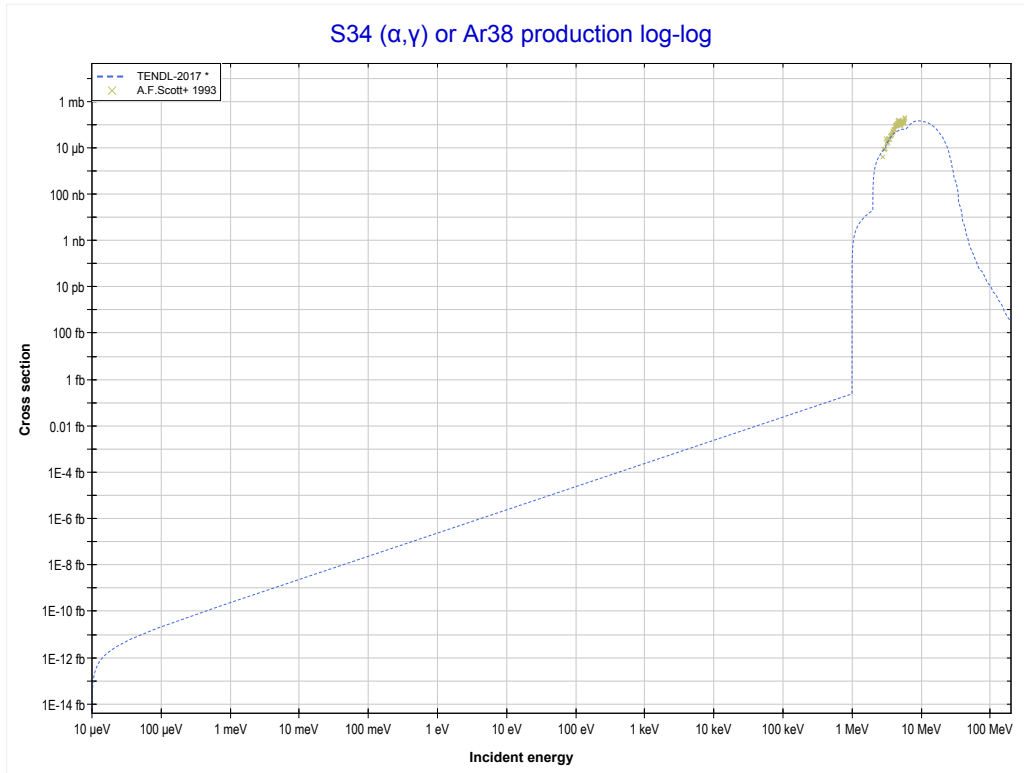
Reaction	Q-Value
P31(α,n)Cl34	-5646.85 keV

<< 15-P-31	16-S-34	17-CI-35 >>
<< 15-P-31 MT4 (α,n)	MT4 (α,n) or MT5 (Ar37 production)	MT102 (α,γ) >>



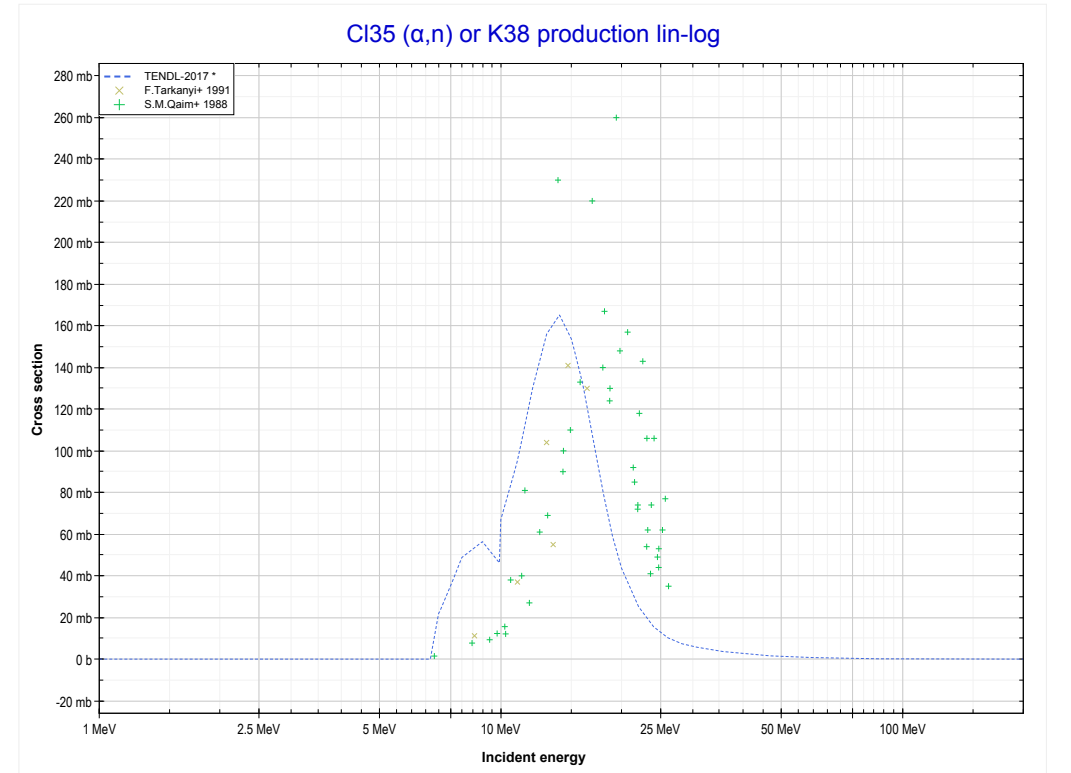
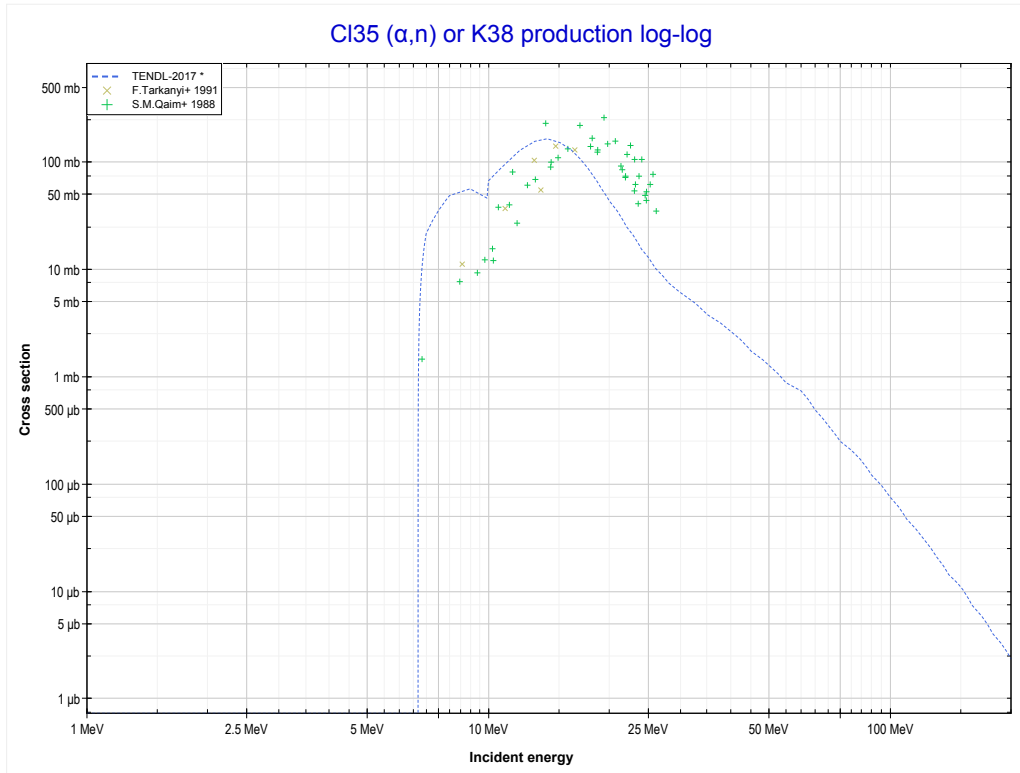
Reaction	Q-Value
S34(α,n)Ar37	-4630.44 keV

<< 8-O-18	16-S-34	17-Cl-37 >>
<< MT4 (α,n)	MT102 (α,γ) or MT5 (Ar38 production)	17-Cl-35 MT4 (α,n) >>



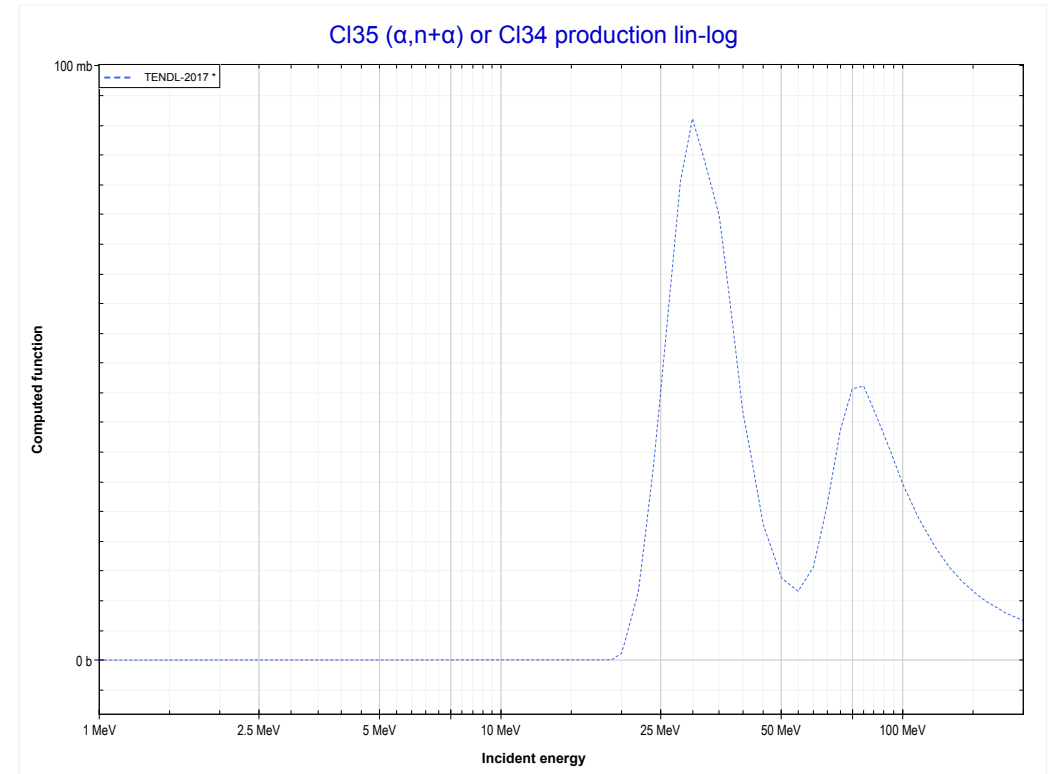
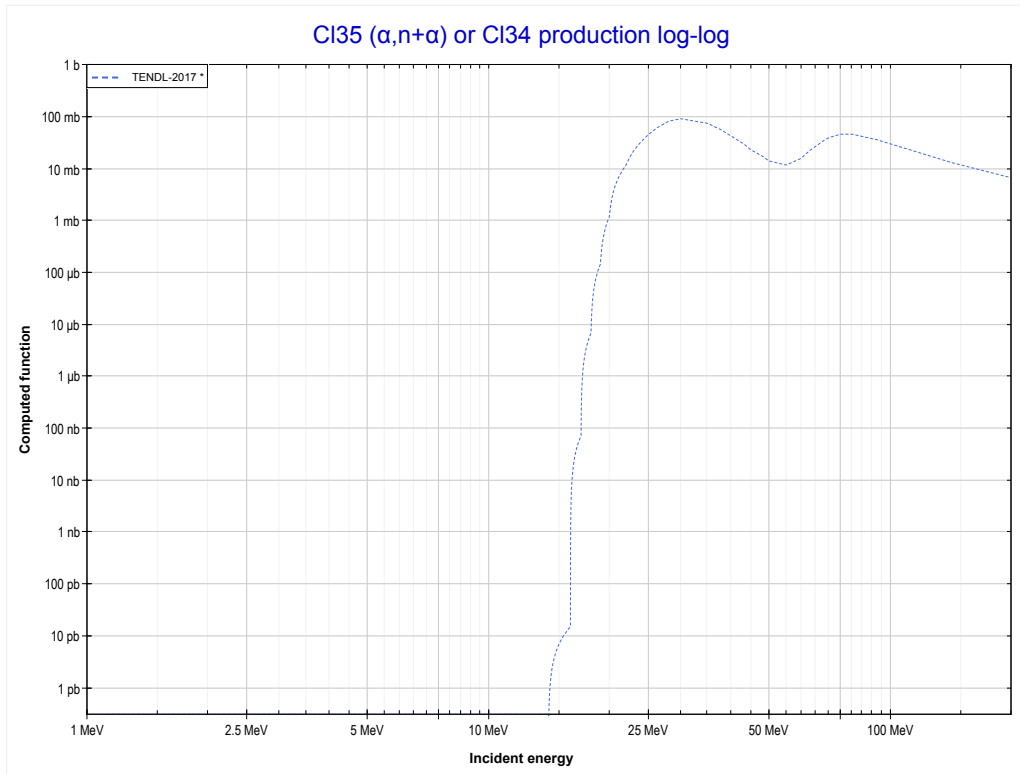
Reaction	Q-Value
S34(α,γ)Ar38	7208.05 keV

<< 16-S-34	17-CI-35	19-K-39 >>
<< 16-S-34 MT102 (α,γ)	MT4 (α,n) or MT5 (K38 production)	MT22 ($\alpha,n+\alpha$) >>



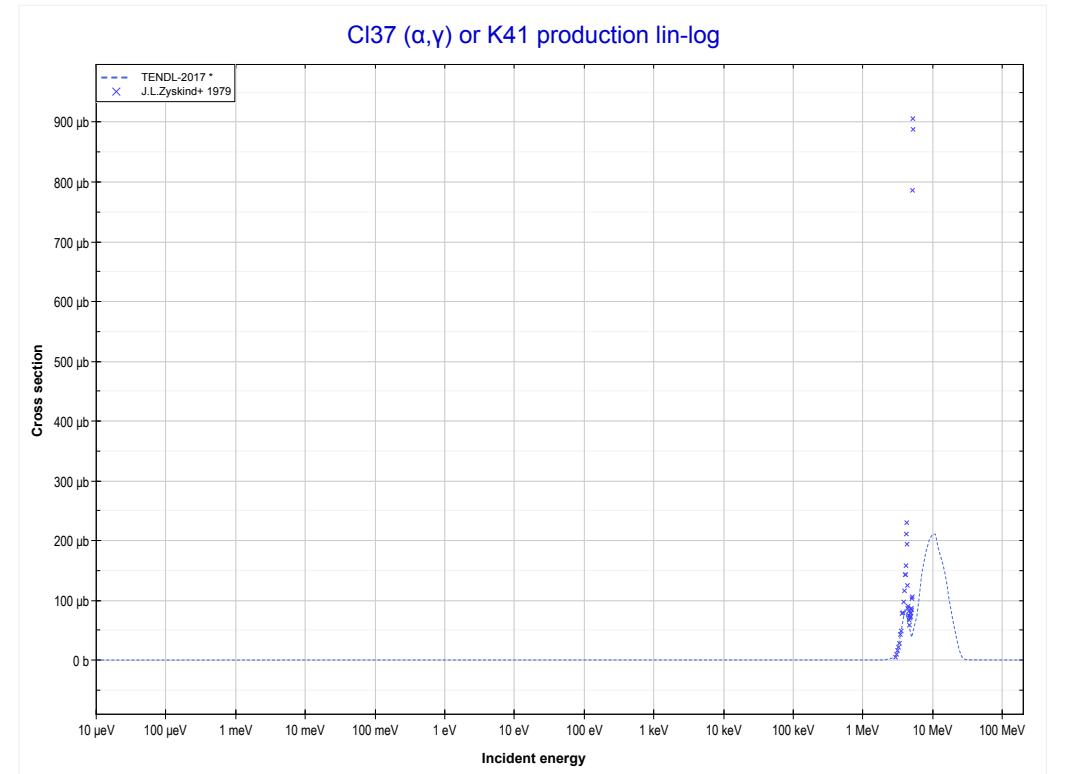
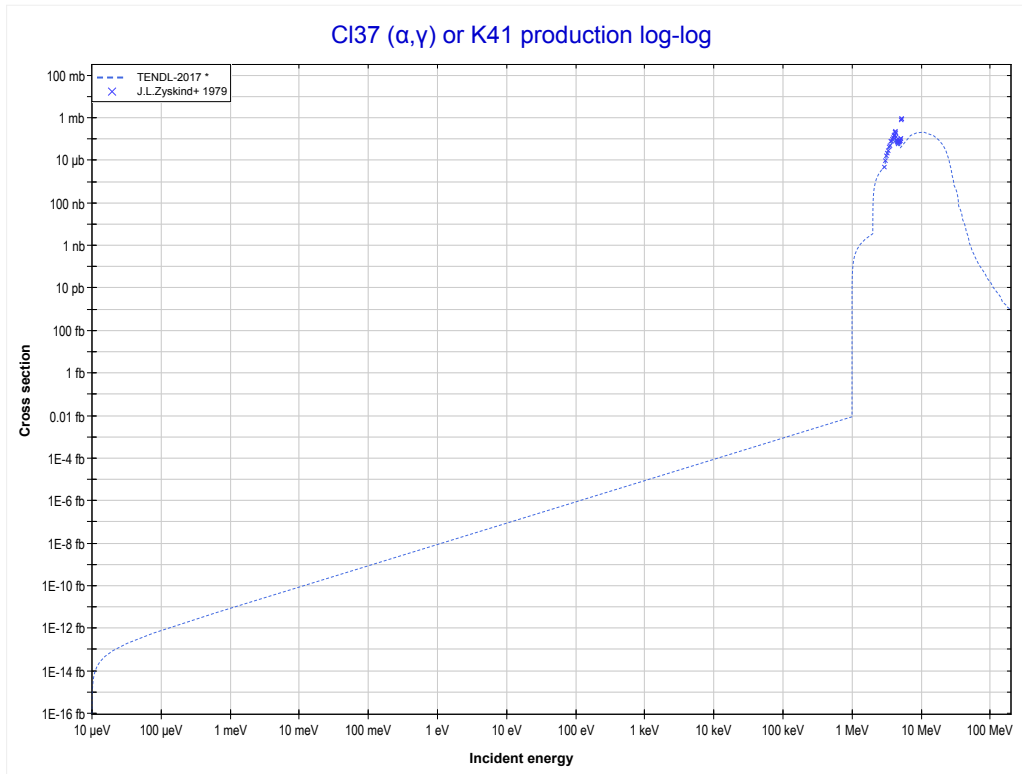
Reaction	Q-Value
Cl35(α,n)K38	-5859.19 keV

<< 6-C-12	17-Cl-35	20-Ca-48 >>
<< MT4 (α, n)	MT22 ($\alpha, n+\alpha$) or MT5 (Cl34 production)	17-Cl-37 MT102 (α, γ) >>



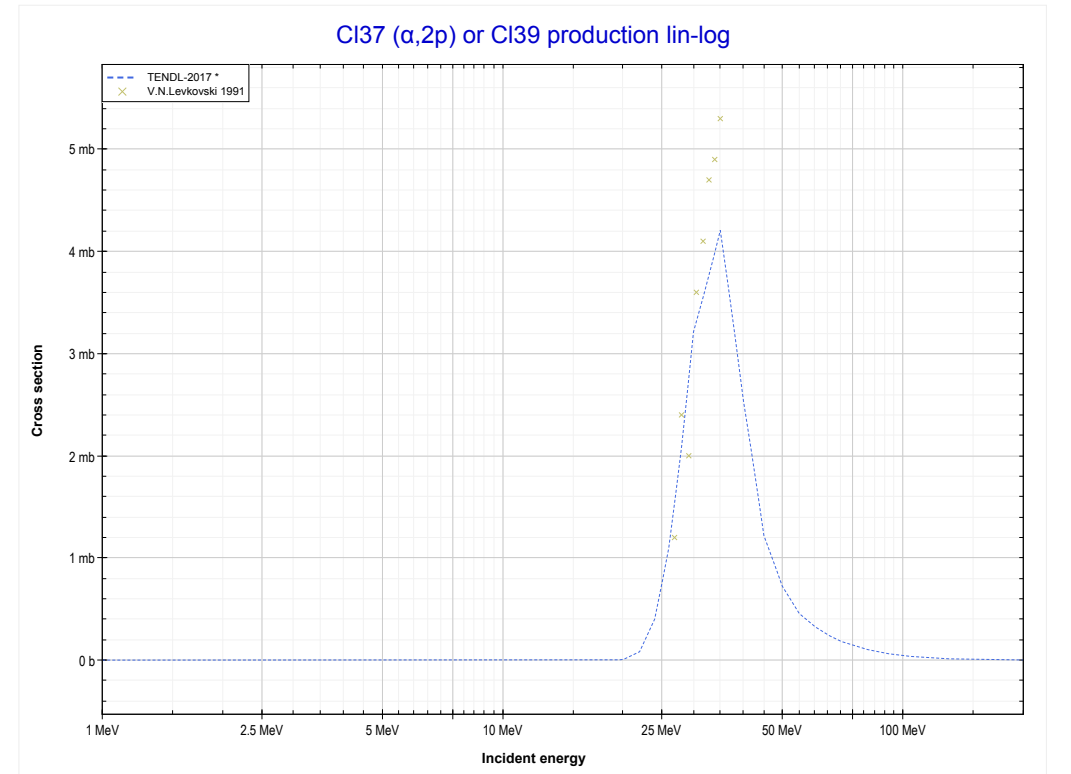
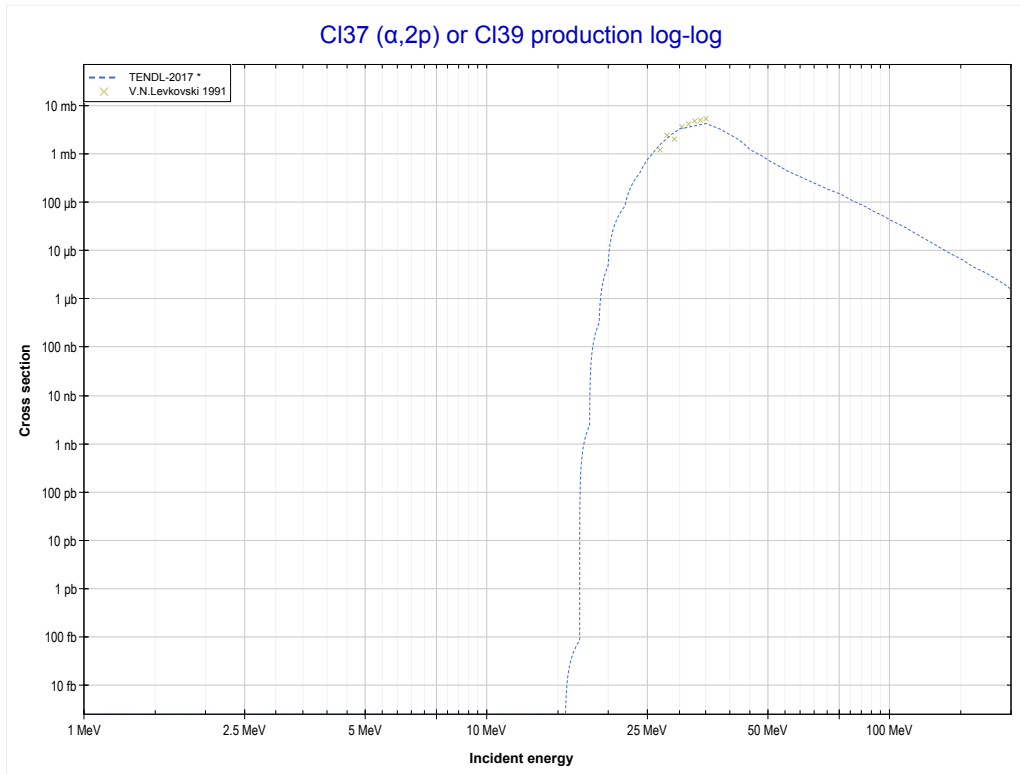
Reaction	Q-Value
Cl35($\alpha, n+\alpha$)Cl34	-12644.77 keV
Cl35($\alpha, d+t$)Cl34	-30234.06 keV
Cl35($\alpha, n+p+t$)Cl34	-32458.63 keV
Cl35($\alpha, 2n+He3$)Cl34	-33222.38 keV
Cl35($\alpha, n+2d$)Cl34	-36491.29 keV
Cl35($\alpha, 2n+p+d$)Cl34	-38715.86 keV
Cl35($\alpha, 3n+2p$)Cl34	-40940.43 keV

<< 16-S-34	17-Cl-37	28-Ni-58 >>
<< 17-Cl-35 MT22 ($\alpha, n + \alpha$)	MT102 (α, γ) or MT5 (K41 production)	MT111 ($\alpha, 2p$) >>



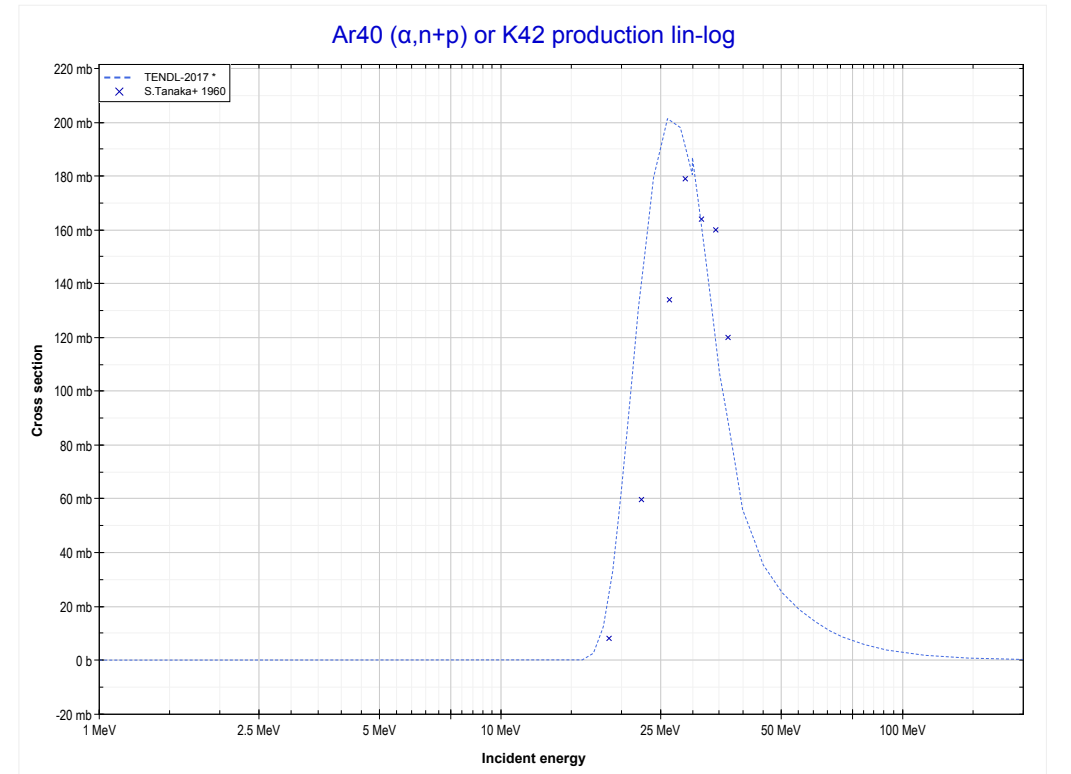
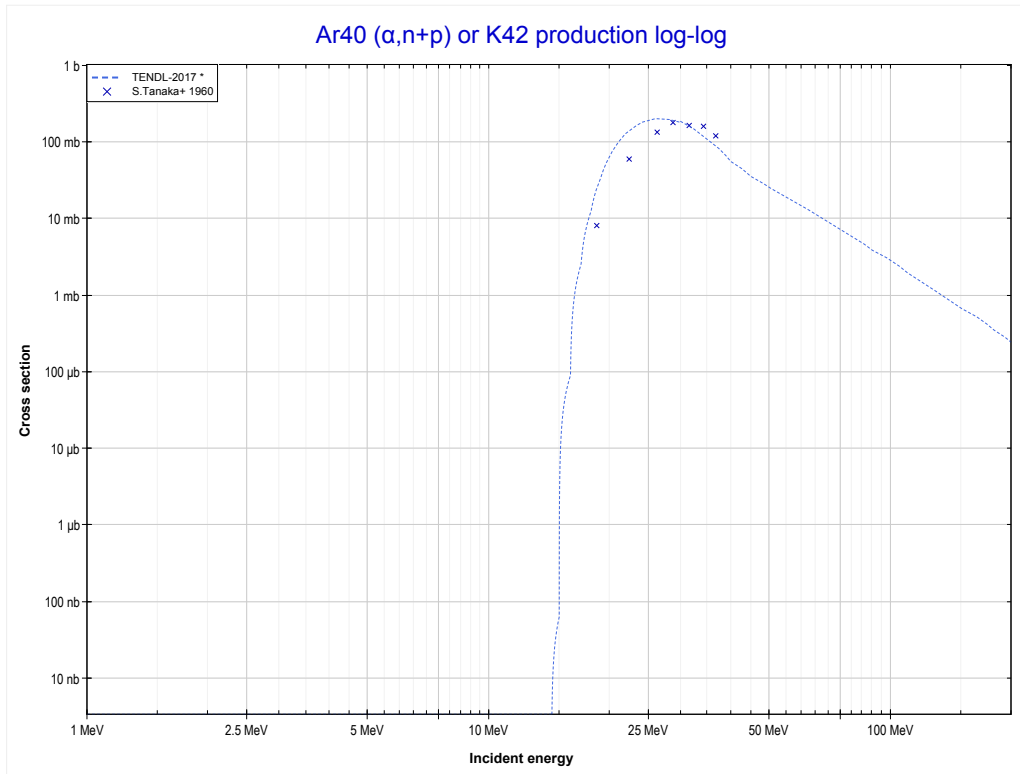
Reaction	Q-Value
Cl37(α, γ)K41	6222.94 keV

<< 13-AI-27	17-Cl-37	19-K-41 >>
<< MT102 (α,γ)	MT111 ($\alpha,2p$) or MT5 (Cl39 production)	18-Ar-40 MT28 ($\alpha,n+p$) >>



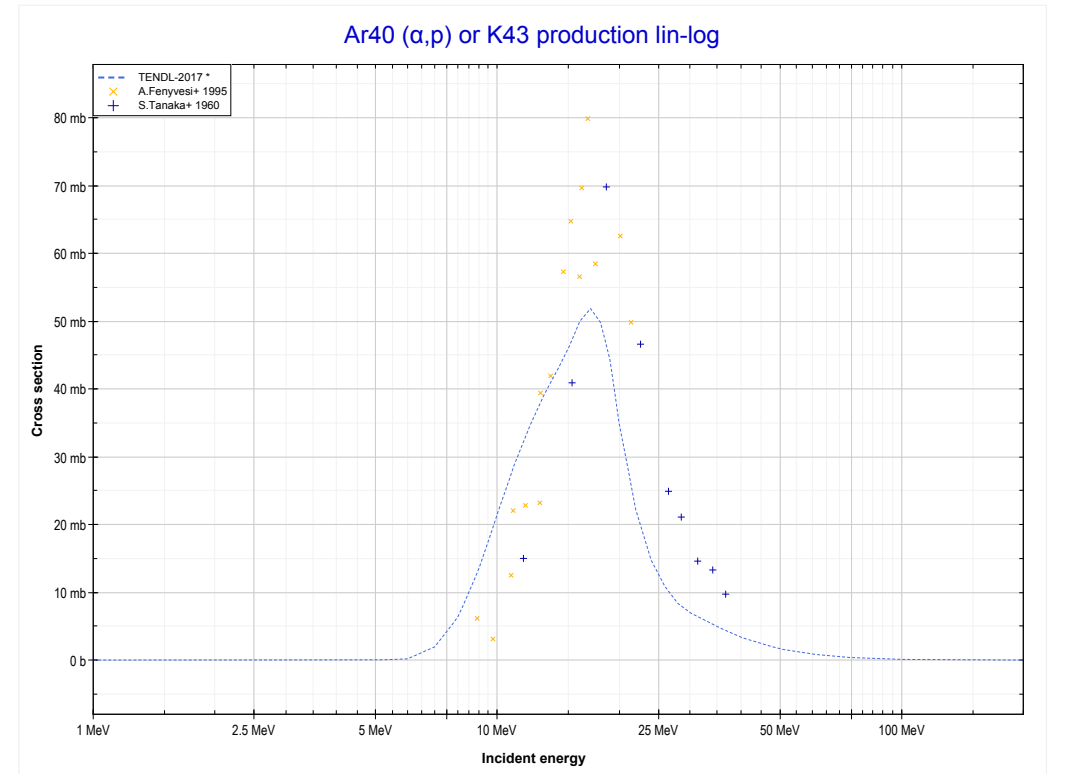
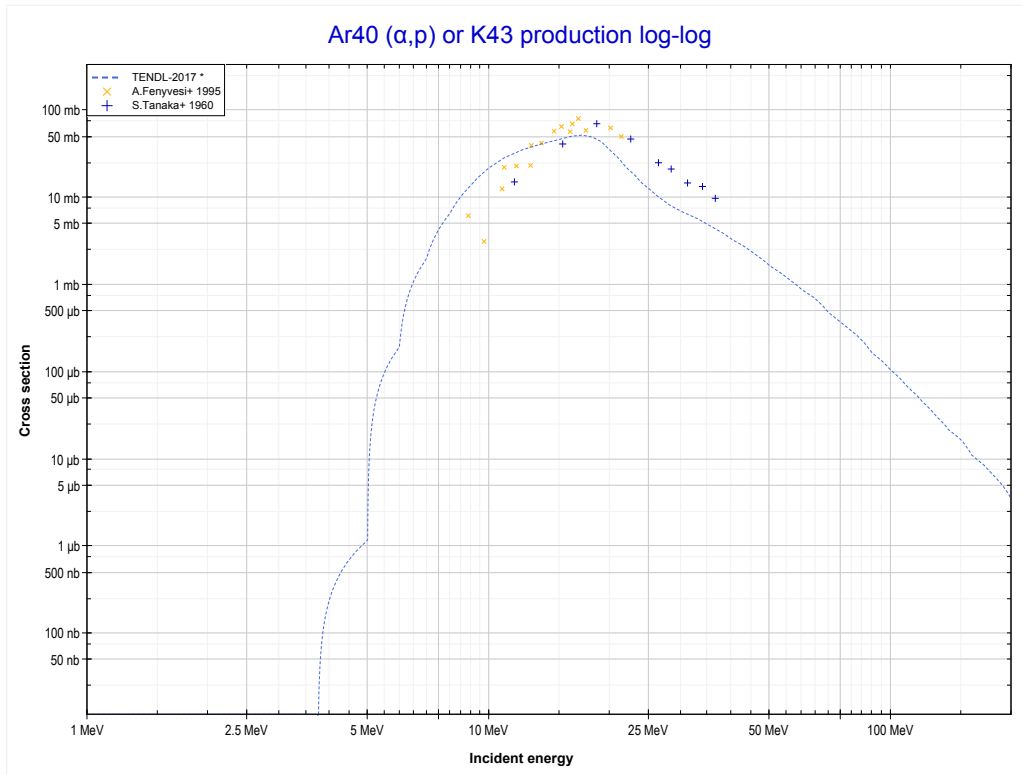
Reaction	Q-Value
Cl37($\alpha,2p$)Cl39	-14114.35 keV

<< 8-O-16	18-Ar-40	24-Cr-52 >>
<< 17-Cl-37 MT111 ($\alpha,2p$)	MT28 ($\alpha,n+p$) or MT5 (K42 production)	MT103 (α,p) >>



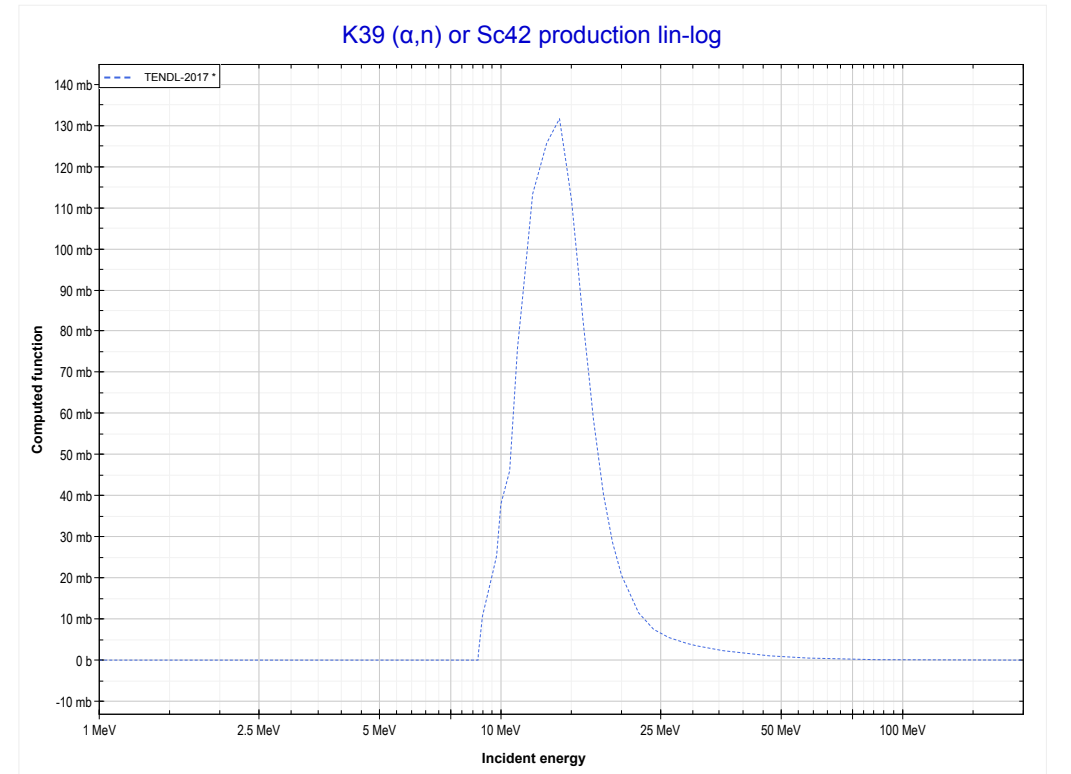
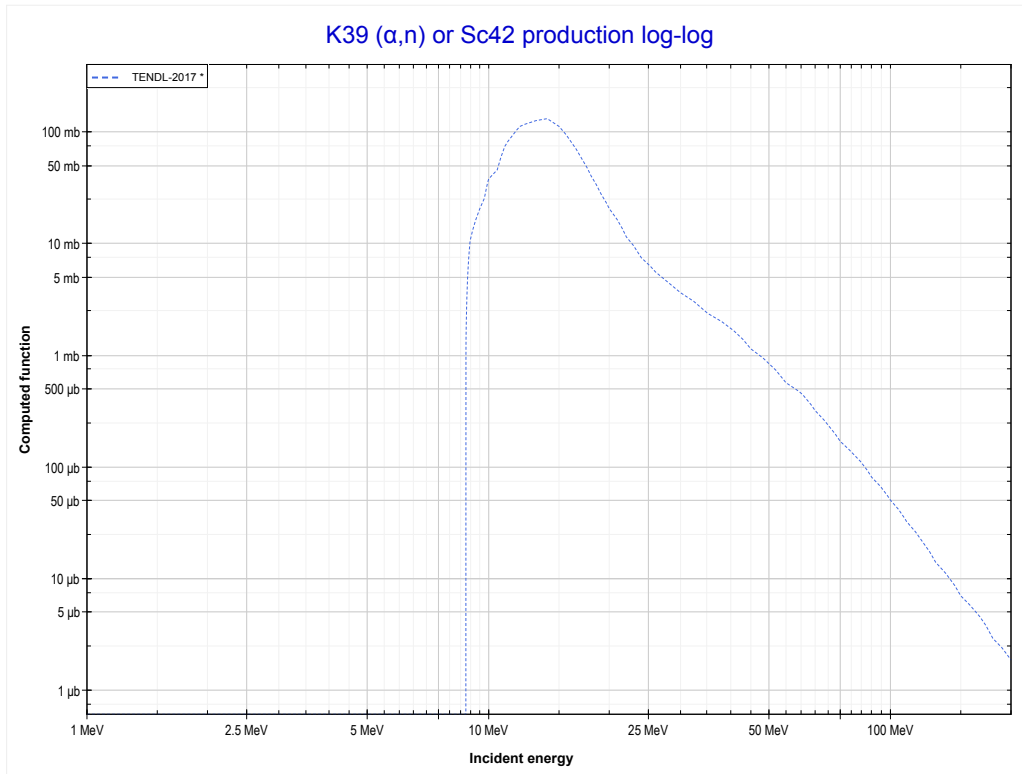
Reaction	Q-Value
Ar40(α,d)K42	-10728.67 keV
Ar40($\alpha,n+p$)K42	-12953.24 keV

<< 12-Mg-26	18-Ar-40	20-Ca-40 >>
<< MT28 ($\alpha, n+p$)	MT103 (α, p) or MT5 (K43 production)	19-K-39 MT4 (α, n) >>



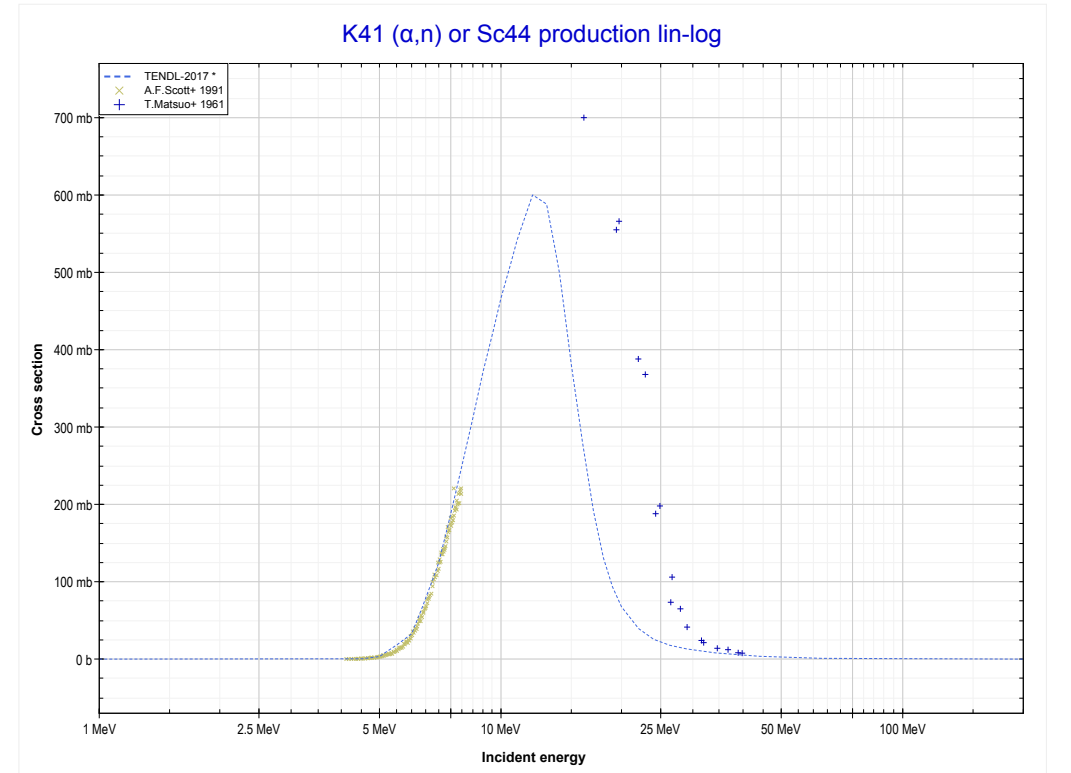
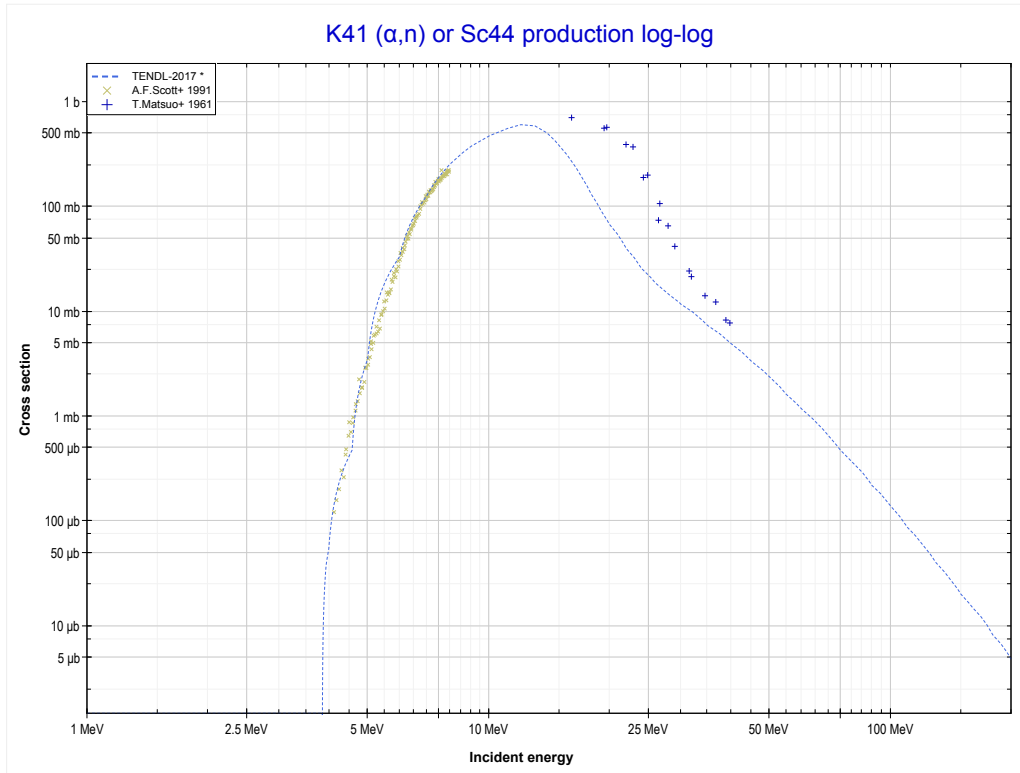
Reaction	Q-Value
Ar40(α, p)K43	-3328.55 keV

<< 17-CI-35	19-K-39	19-K-41 >>
<< 18-Ar-40 MT103 (α,p)	MT4 (α,n) or MT5 (Sc42 production)	19-K-41 MT4 (α,n) >>



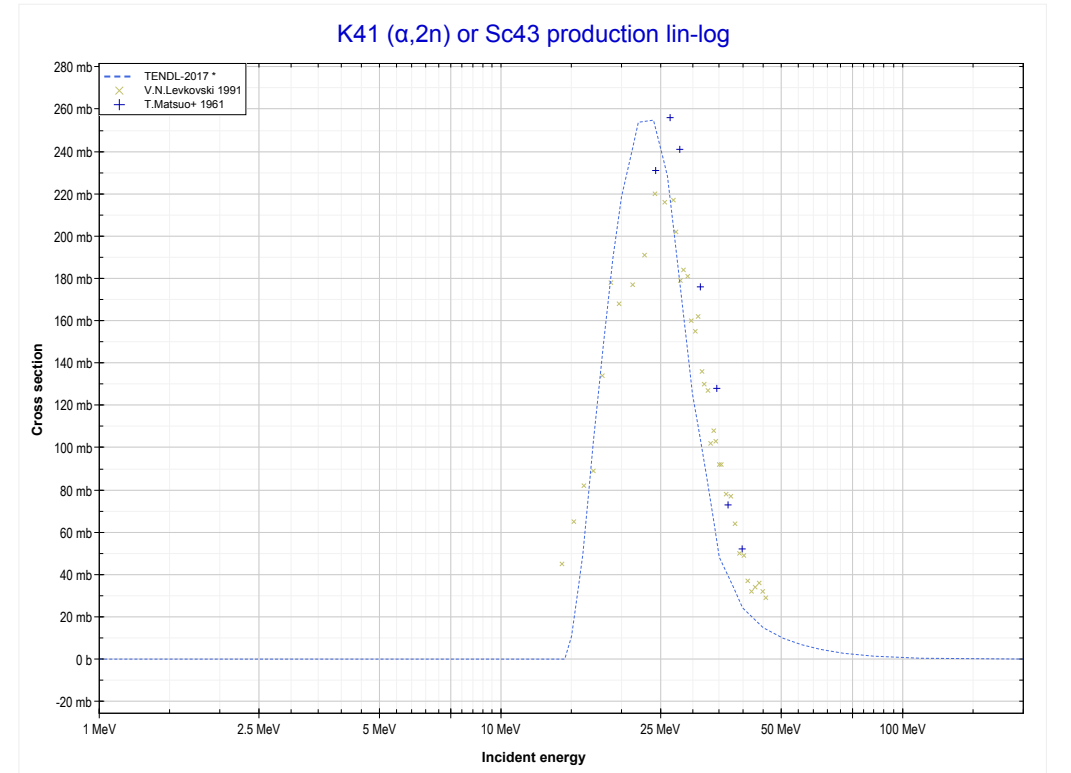
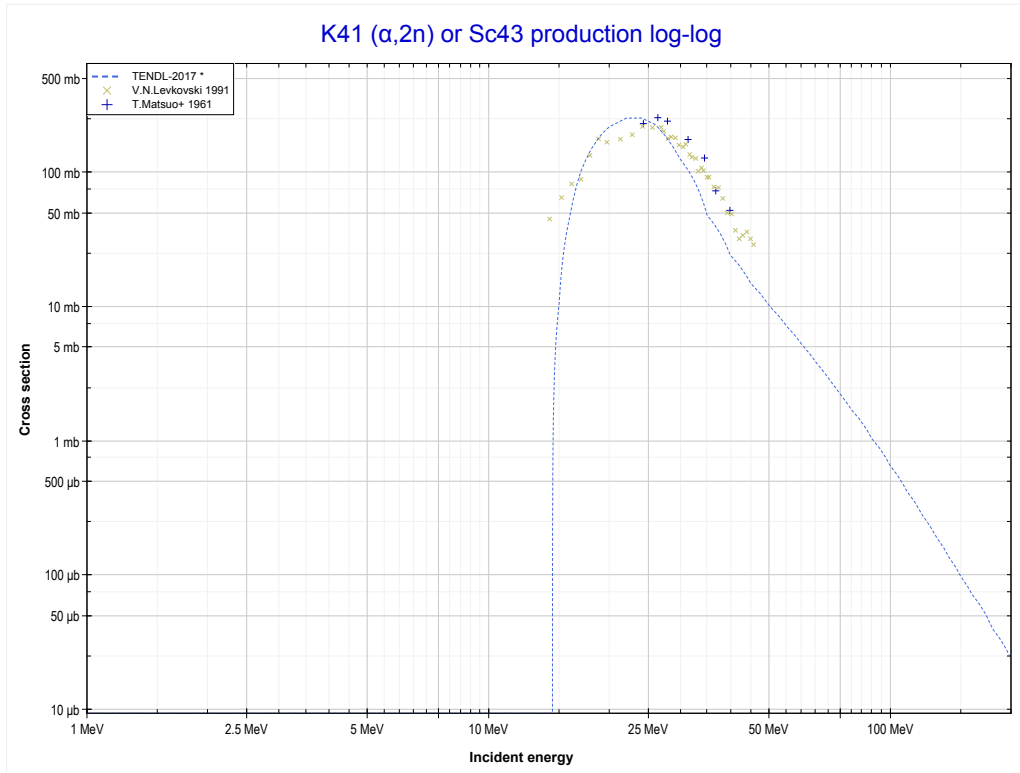
Reaction	Q-Value
K39(α,n)Sc42	-7332.45 keV

<< 19-K-39	19-K-41	21-Sc-45 >>
<< 19-K-39 MT4 (α,n)	MT4 (α,n) or MT5 (Sc44 production)	MT16 ($\alpha,2n$) >>



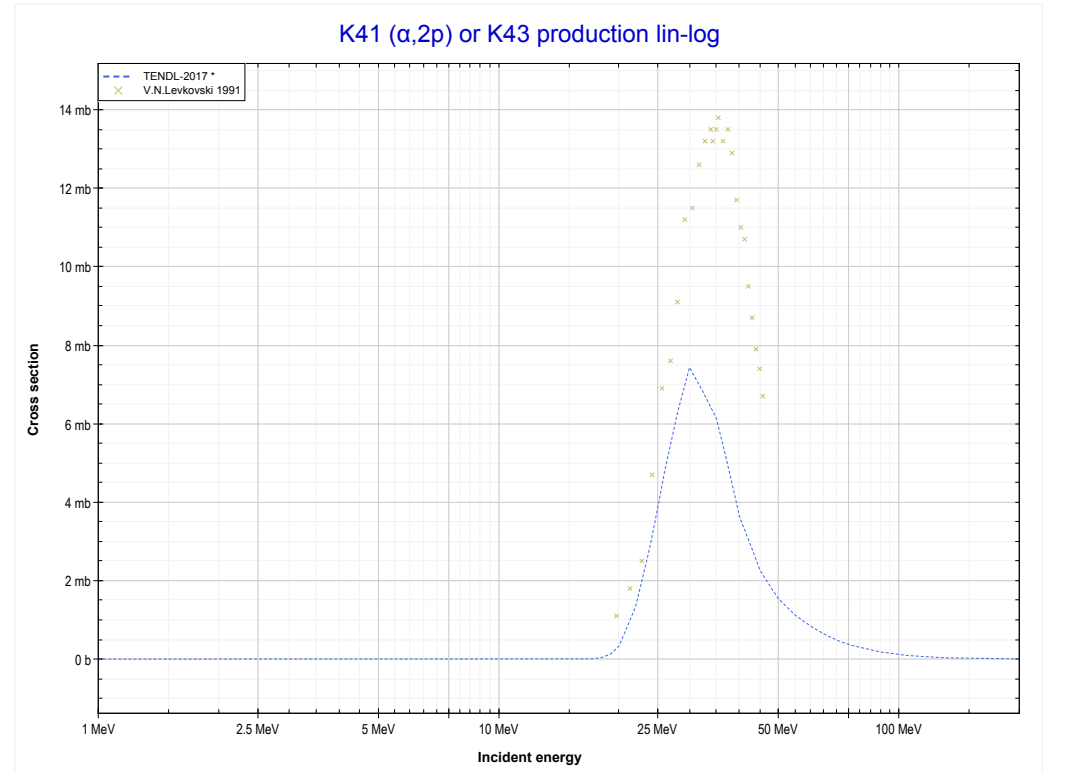
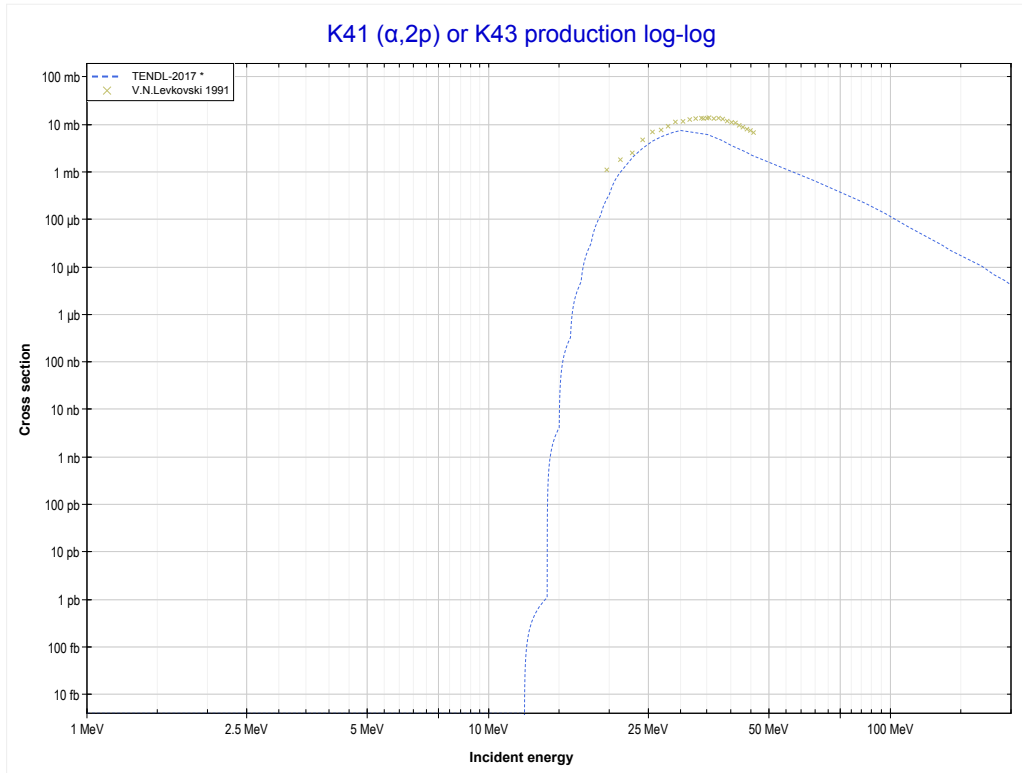
Reaction	Q-Value
K41(α,n)Sc44	-3389.94 keV

<< 14-Si-28	19-K-41	20-Ca-42 >>
<< MT4 (α,n)	MT16 ($\alpha,2n$) or MT5 (Sc43 production)	MT111 ($\alpha,2p$) >>



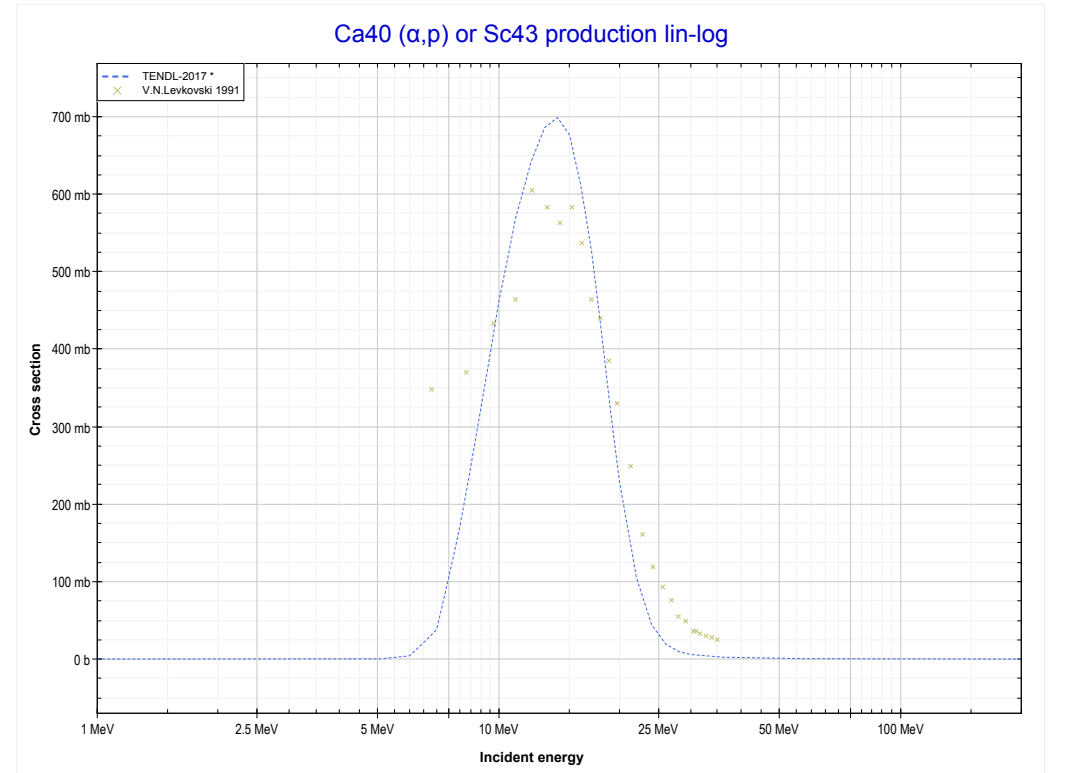
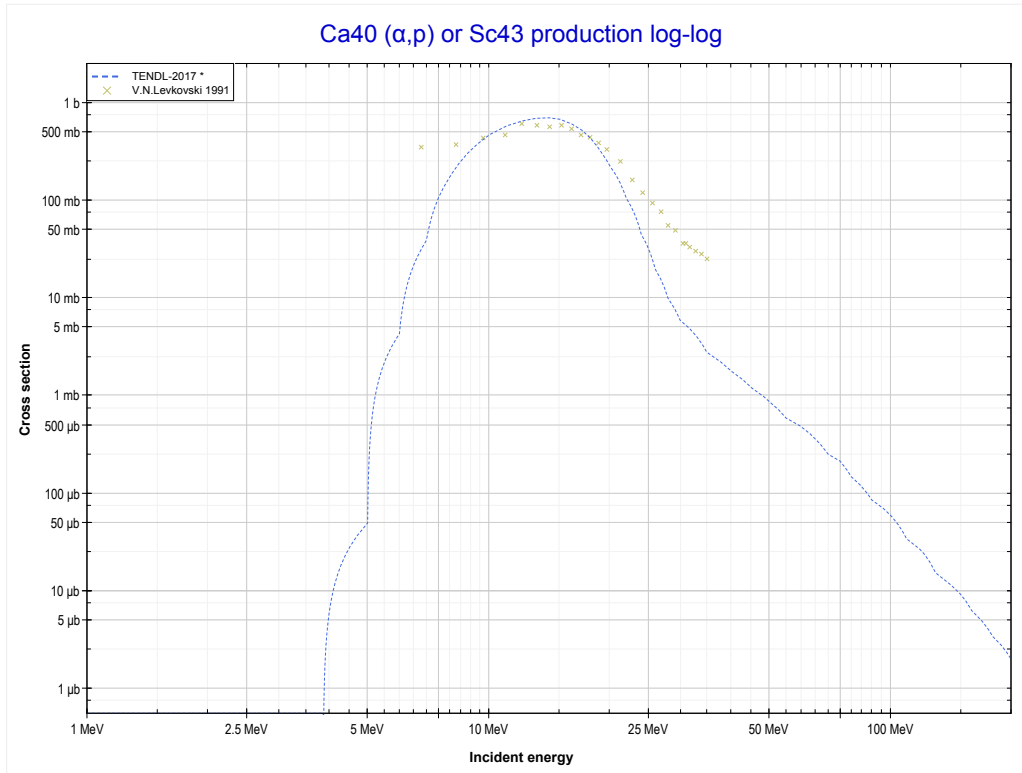
Reaction	Q-Value
K41($\alpha,2n$)Sc43	-13089.16 keV

<< 17-CI-37	19-K-41	21-Sc-45 >>
<< MT16 ($\alpha,2n$)	MT111 ($\alpha,2p$) or MT5 (K43 production)	20-Ca-40 MT103 (α,p) >>



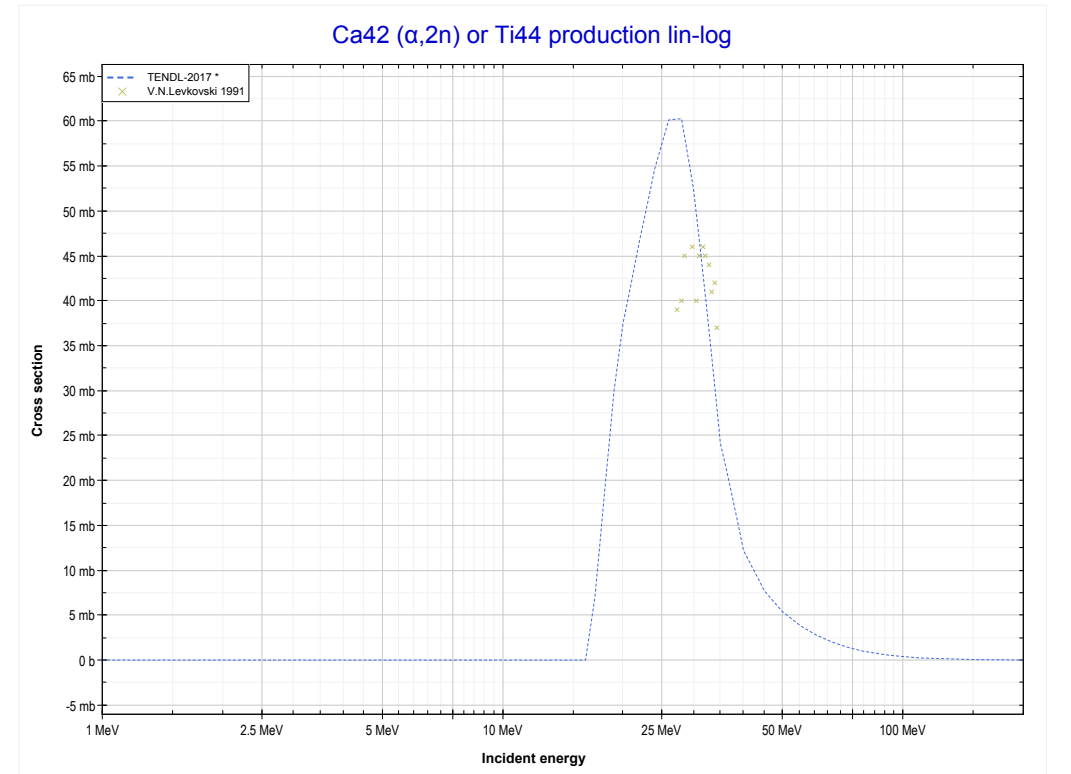
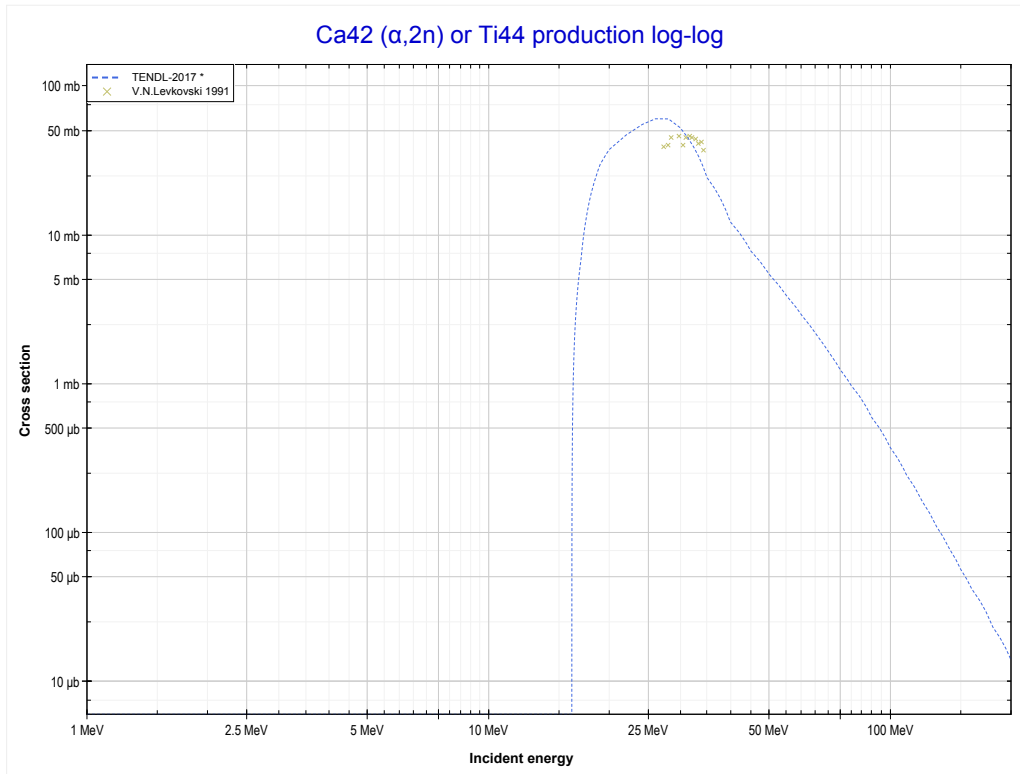
Reaction	Q-Value
K41($\alpha,2p$)K43	-11137.17 keV

<< 18-Ar-40	20-Ca-40	20-Ca-43 >>
<< 19-K-41 MT111 ($\alpha,2p$)	MT103 (α,p) or MT5 (Sc43 production)	20-Ca-42 MT16 ($\alpha,2n$) >>



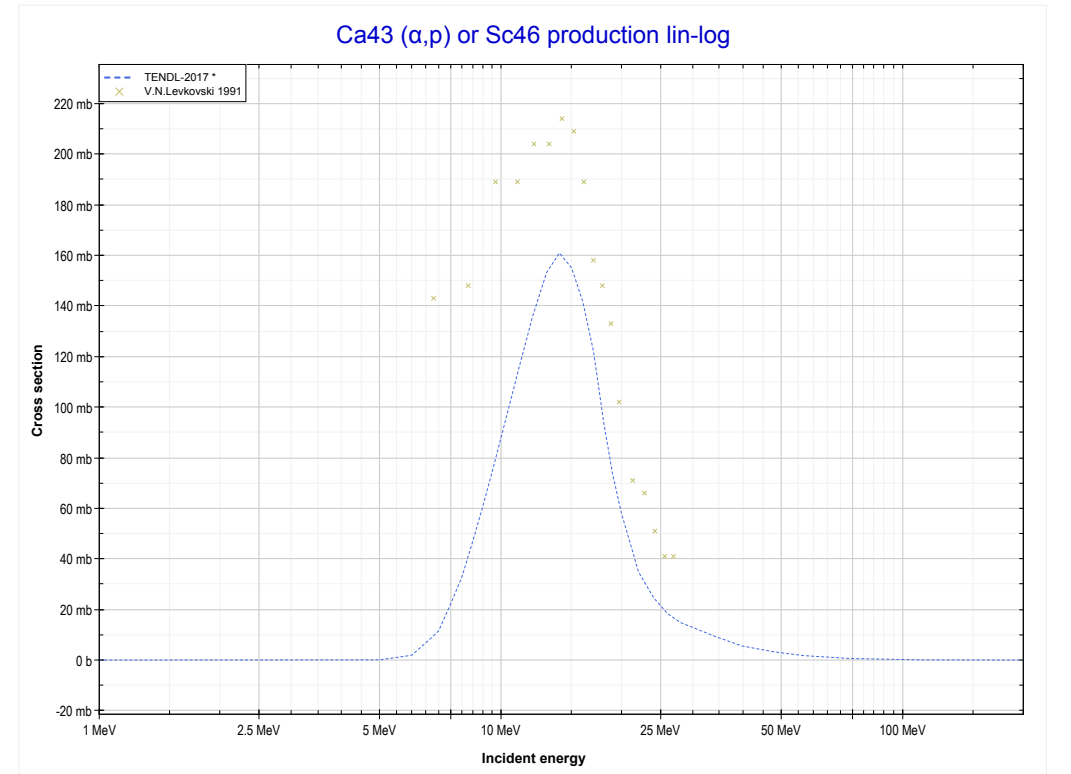
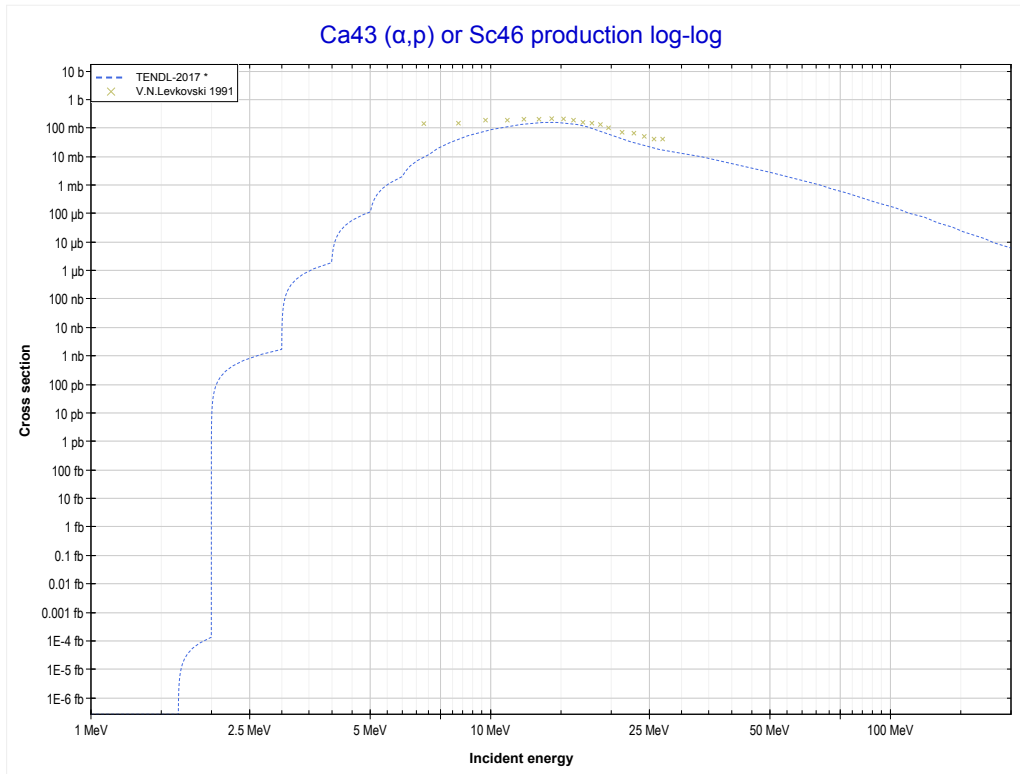
Reaction	Q-Value
Ca40(α,p)Sc43	-3522.34 keV

<< 19-K-41	20-Ca-42	21-Sc-45 >>
<< 20-Ca-40 MT103 (α,p)	MT16 ($\alpha,2n$) or MT5 (Ti44 production)	20-Ca-43 MT103 (α,p) >>



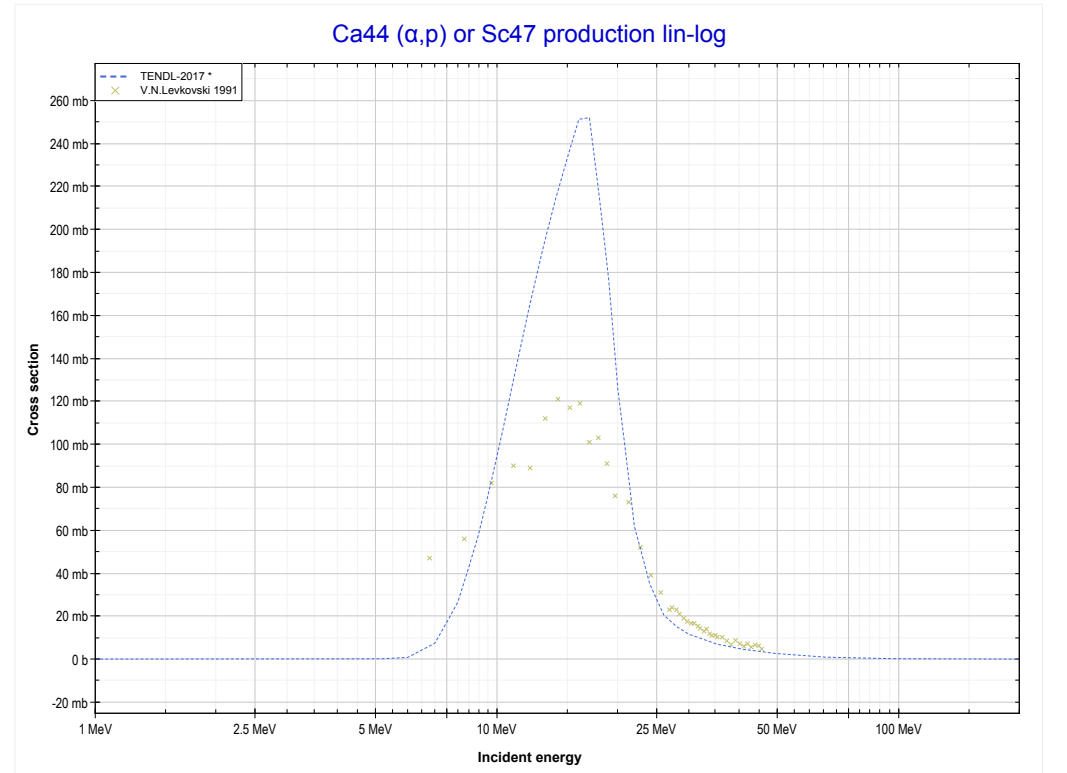
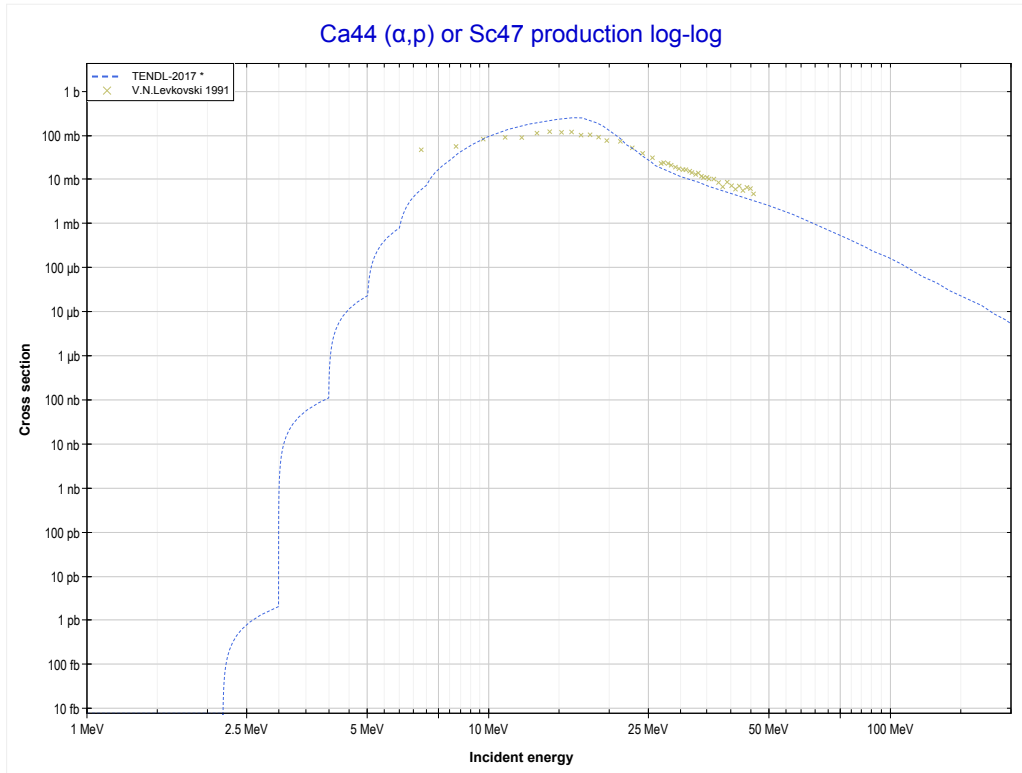
Reaction	Q-Value
Ca42($\alpha,2n$)Ti44	-14716.36 keV

<< 20-Ca-40	20-Ca-43	20-Ca-44 >>
<< 20-Ca-42 MT16 ($\alpha,2n$)	MT103 (α,p) or MT5 (Sc46 production)	20-Ca-44 MT103 (α,p) >>



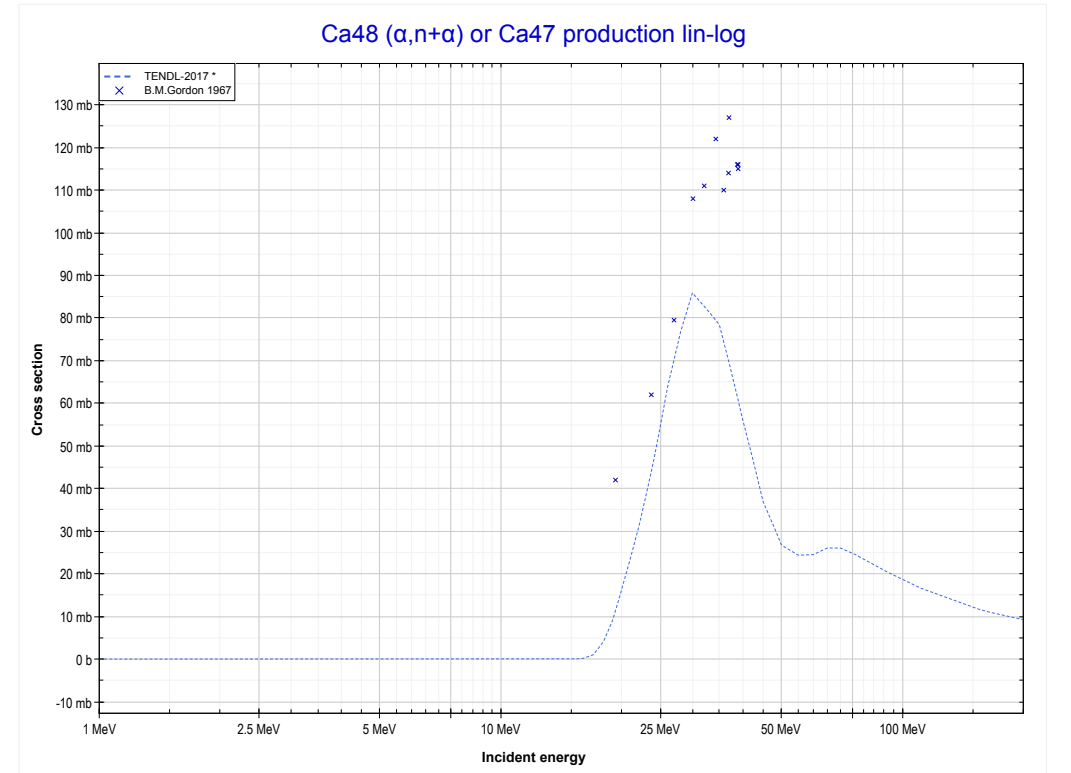
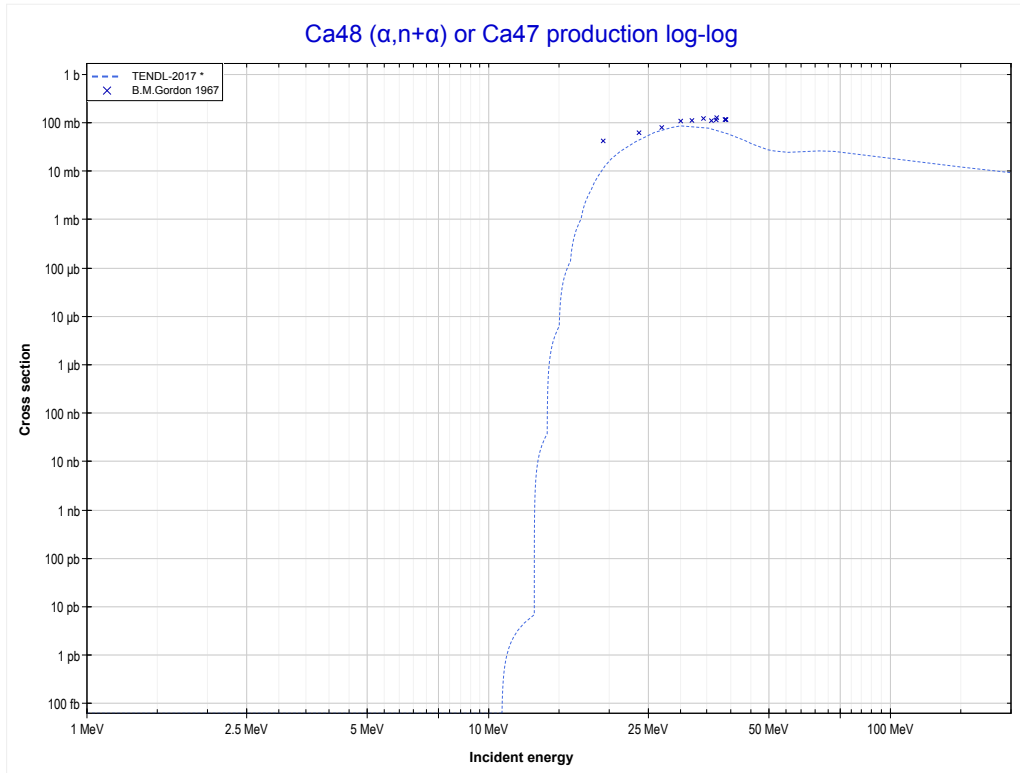
Reaction	Q-Value
Ca43(α,p)Sc46	-1512.37 keV

<< 20-Ca-43	20-Ca-44	24-Cr-53 >>
<< 20-Ca-43 MT103 (α,p)	MT103 (α,p) or MT5 (Sc47 production)	20-Ca-48 MT22 ($\alpha,n+\alpha$) >>



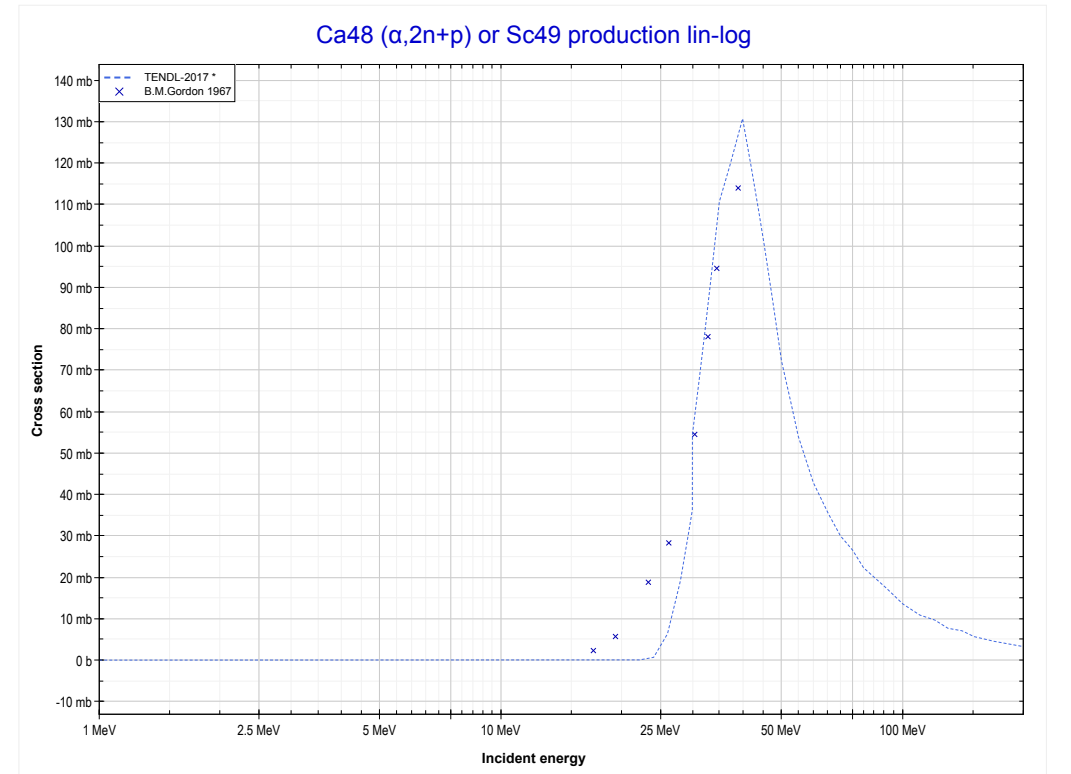
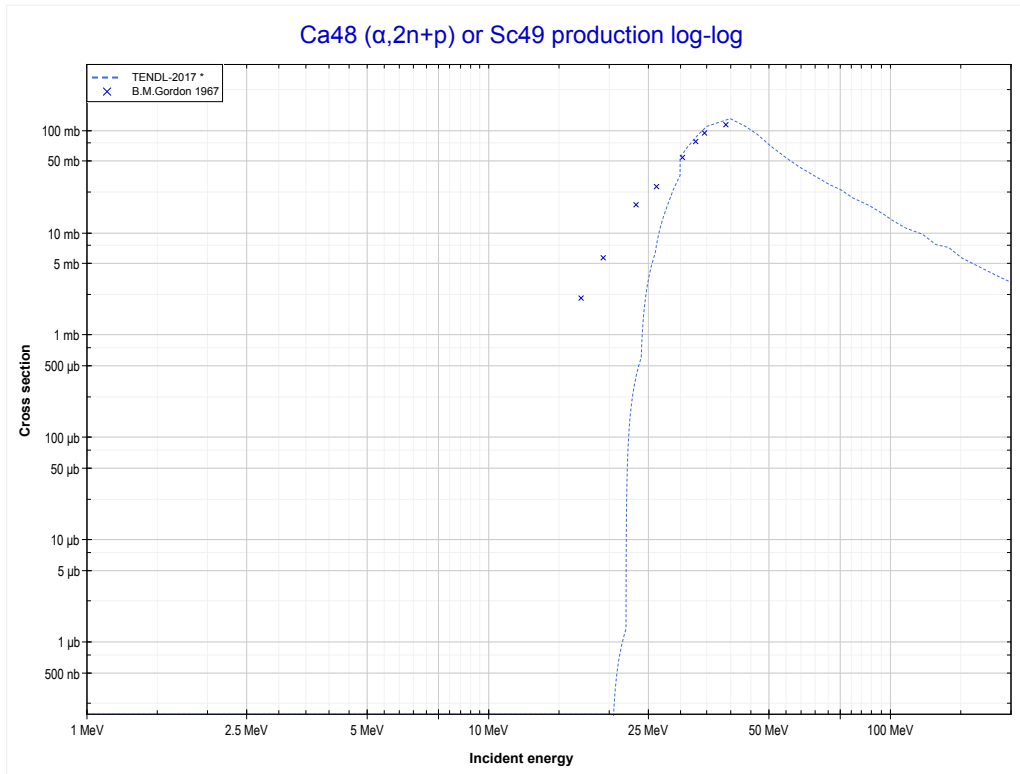
Reaction	Q-Value
Ca44(α,p)Sc47	-1997.15 keV

<< 17-CI-35	20-Ca-48	21-Sc-45 >>
<< 20-Ca-44 MT103 (α, p)	MT22 ($\alpha, n+\alpha$) or MT5 (Ca47 production)	MT41 ($\alpha, 2n+p$) >>



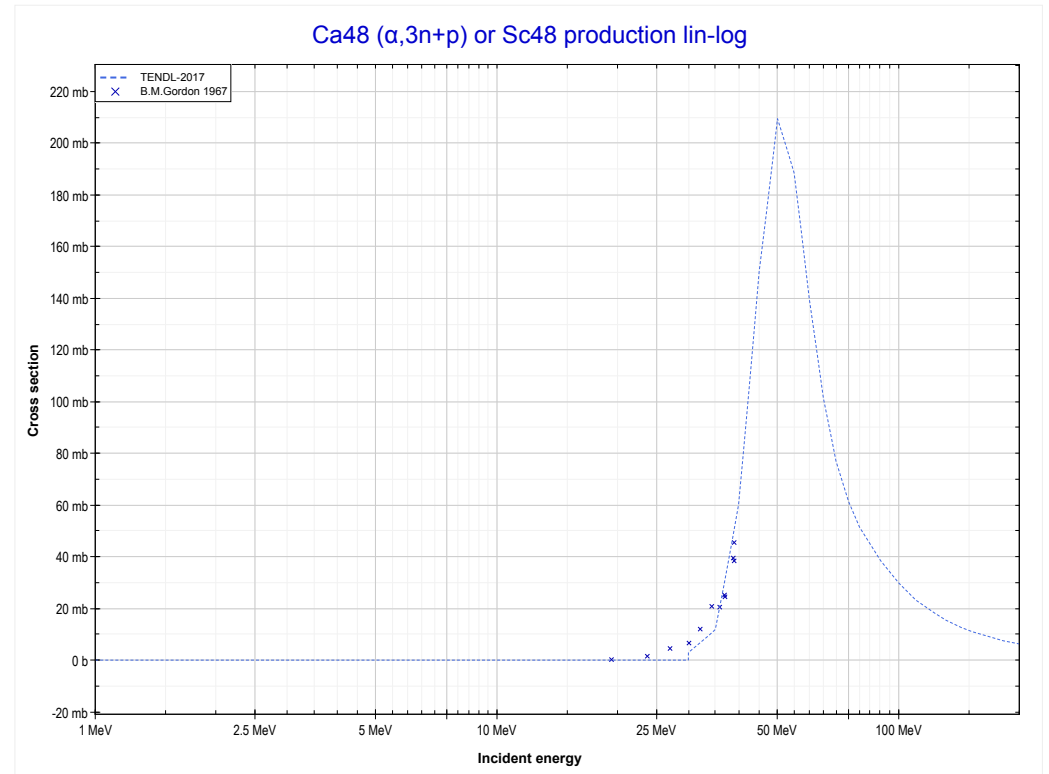
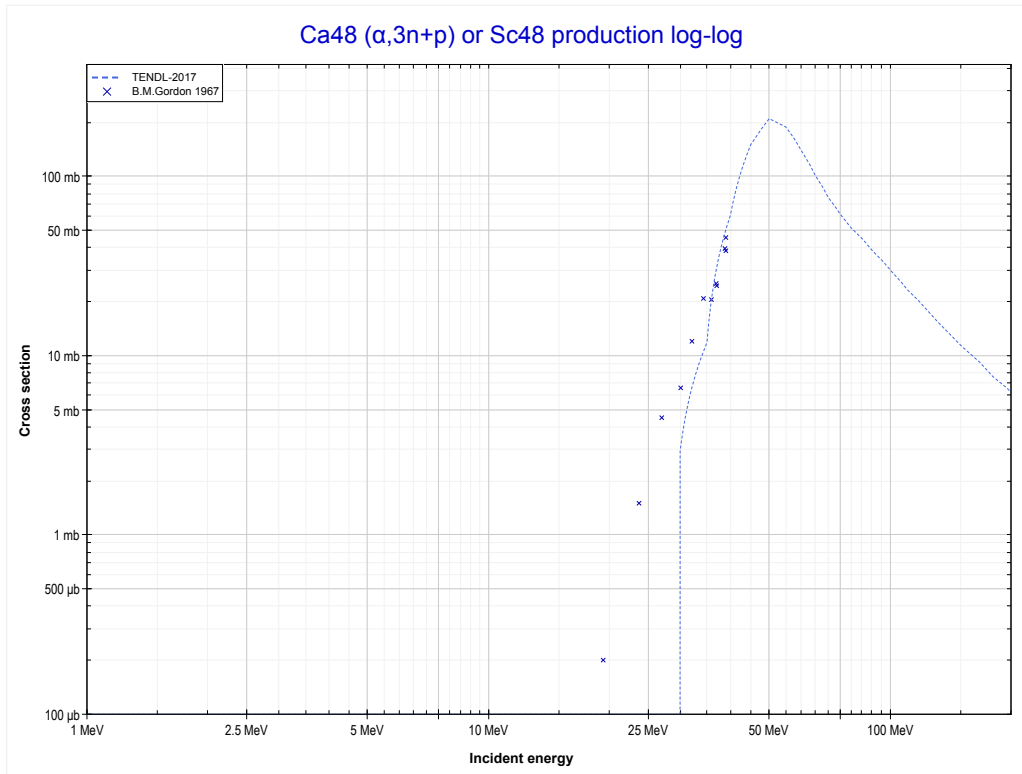
Reaction	Q-Value
Ca48($\alpha, n+\alpha$)Ca47	-9952.58 keV
Ca48($\alpha, d+t$)Ca47	-27541.87 keV
Ca48($\alpha, n+p+t$)Ca47	-29766.44 keV
Ca48($\alpha, 2n+He3$)Ca47	-30530.19 keV
Ca48($\alpha, n+2d$)Ca47	-33799.10 keV
Ca48($\alpha, 2n+p+d$)Ca47	-36023.67 keV
Ca48($\alpha, 3n+2p$)Ca47	-38248.24 keV

	20-Ca-48	26-Fe-54 >>
<< MT22 ($\alpha, n + \alpha$)	MT41 ($\alpha, 2n + p$) or MT5 (Sc49 production)	MT42 ($\alpha, 3n + p$) >>



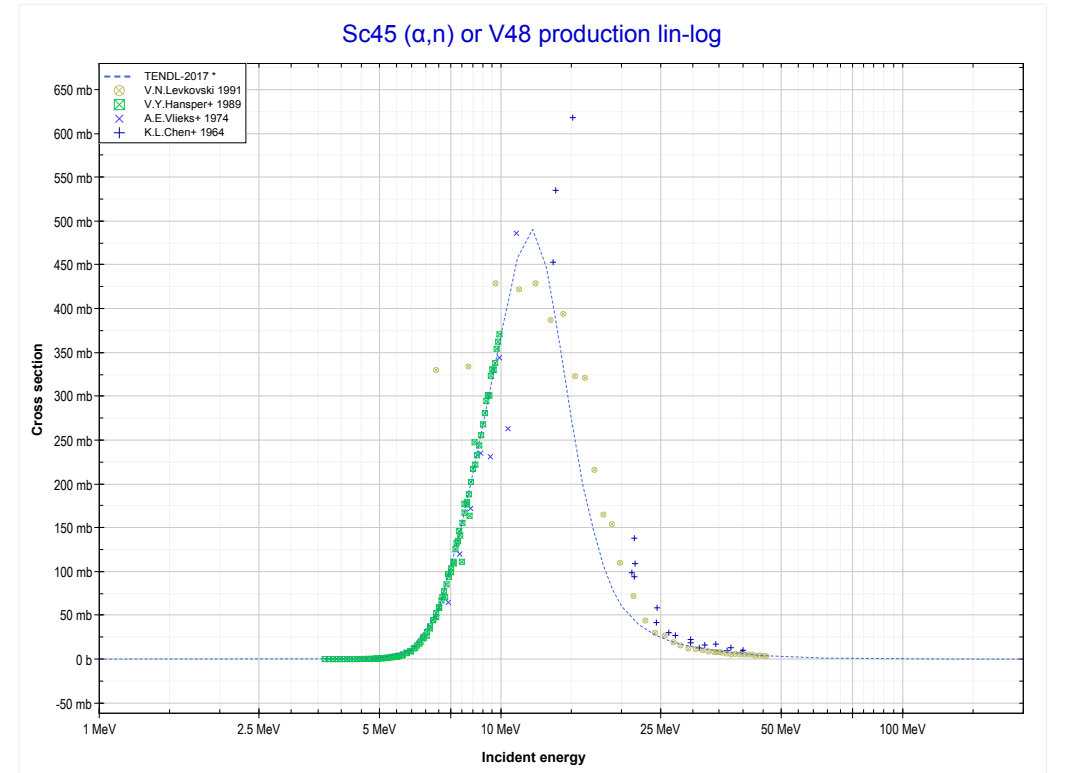
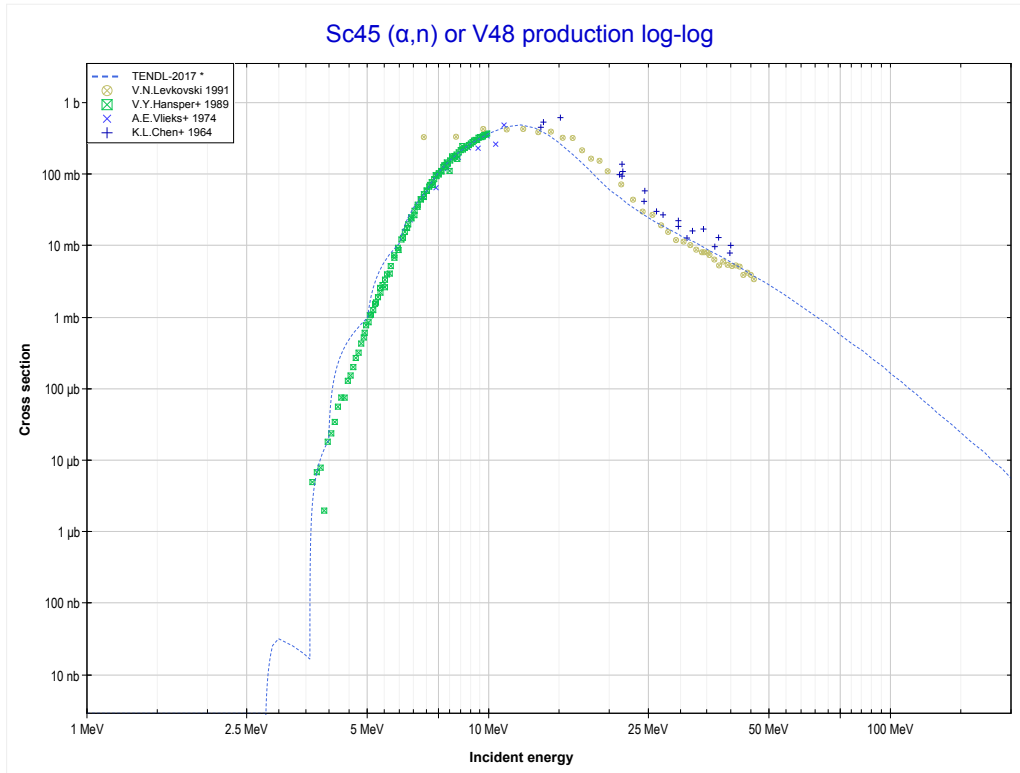
Reaction	Q-Value
Ca48(α, t)Sc49	-10188.55 keV
Ca48($\alpha, n + d$)Sc49	-16445.78 keV
Ca48($\alpha, 2n + p$)Sc49	-18670.35 keV

	20-Ca-48	26-Fe-56 >>
<< MT41 ($\alpha,2n+p$)	MT42 ($\alpha,3n+p$) or MT5 (Sc48 production)	21-Sc-45 MT4 (α,n) >>



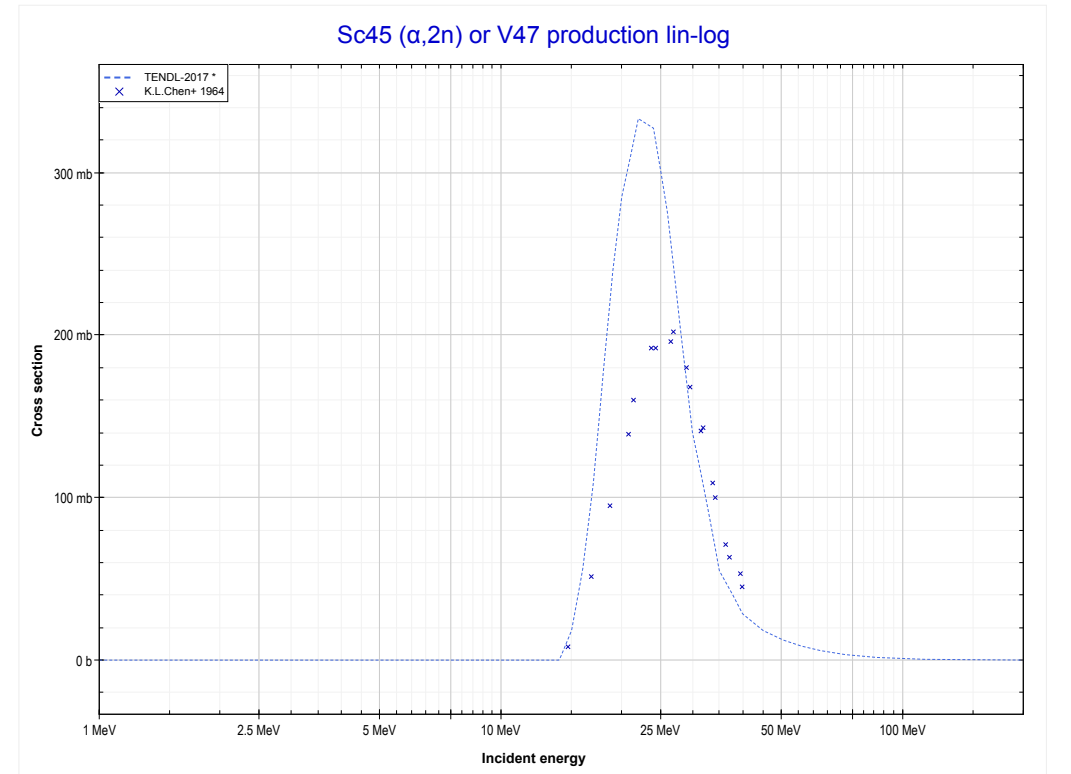
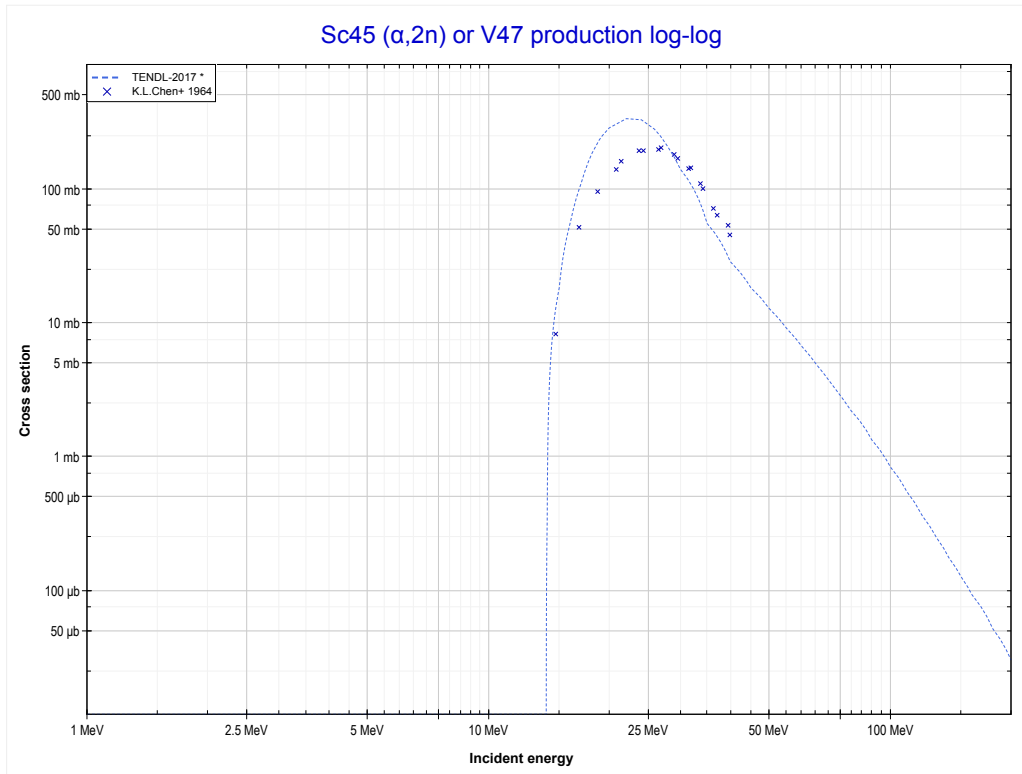
Reaction	Q-Value
Ca48($\alpha,n+t$)Sc48	-20317.97 keV
Ca48($\alpha,2n+d$)Sc48	-26575.20 keV
Ca48($\alpha,3n+p$)Sc48	-28799.77 keV

<< 19-K-41	21-Sc-45	22-Ti-46 >>
<< 20-Ca-48 MT42 ($\alpha,3n+p$)	MT4 (α,n) or MT5 (V48 production)	MT16 ($\alpha,2n$) >>



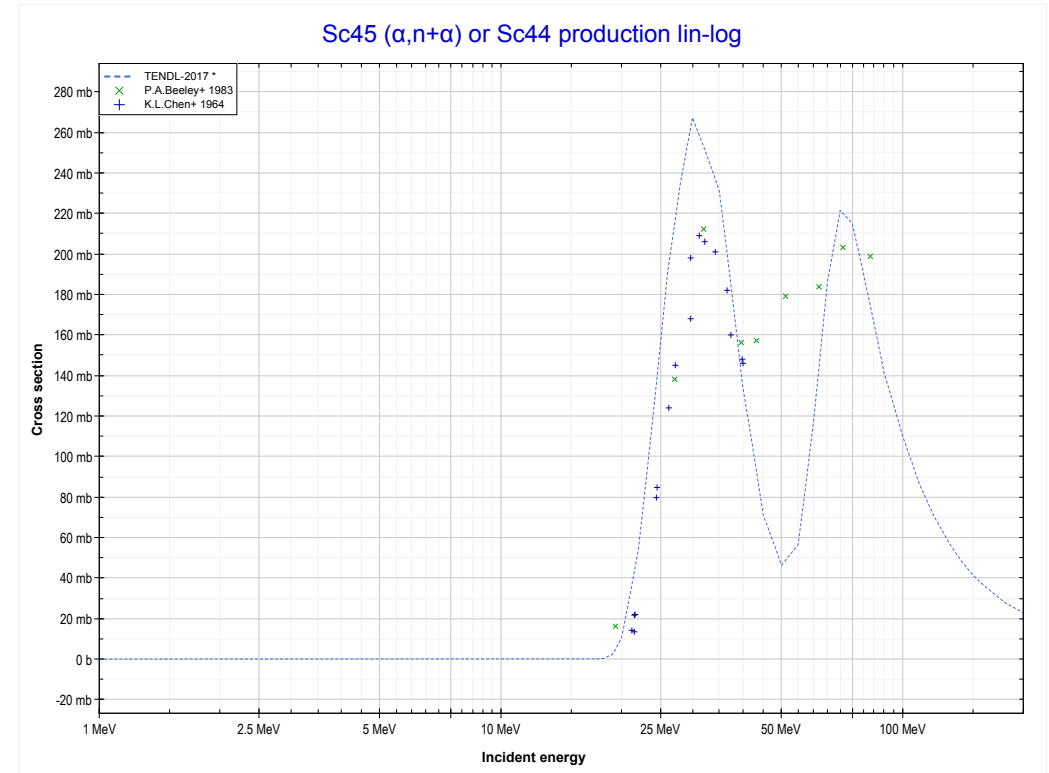
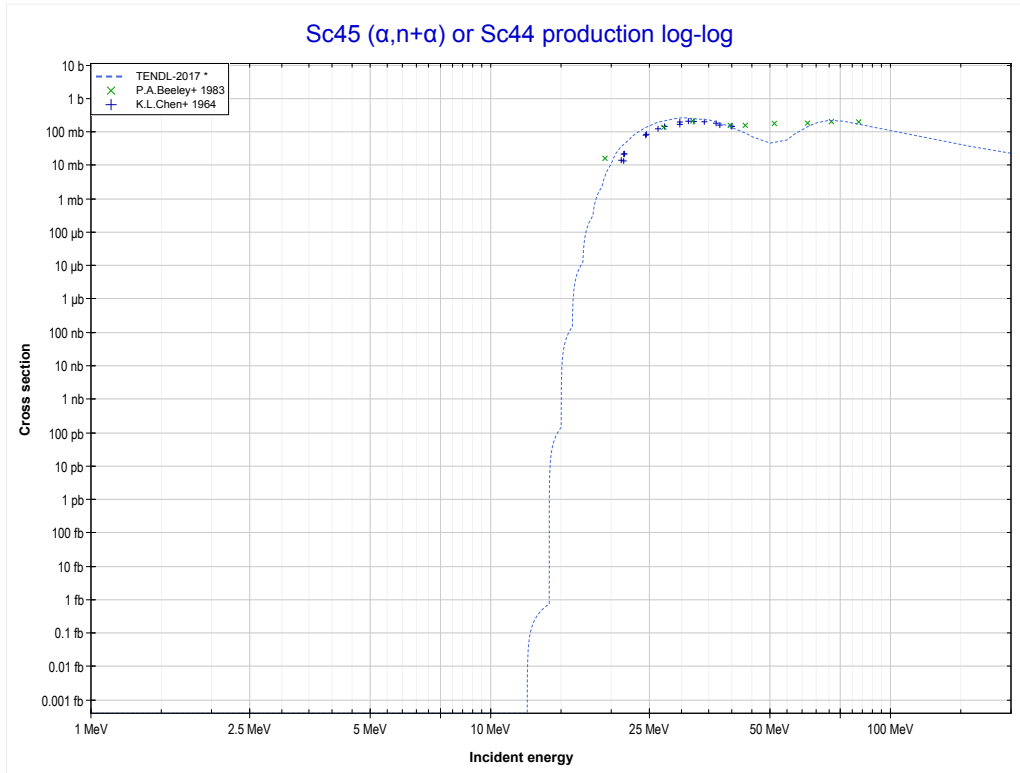
Reaction	Q-Value
Sc45(α,n)V48	-2240.80 keV

<< 20-Ca-42	21-Sc-45	22-Ti-46 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (V47 production)	MT22 ($\alpha, n+\alpha$) >>



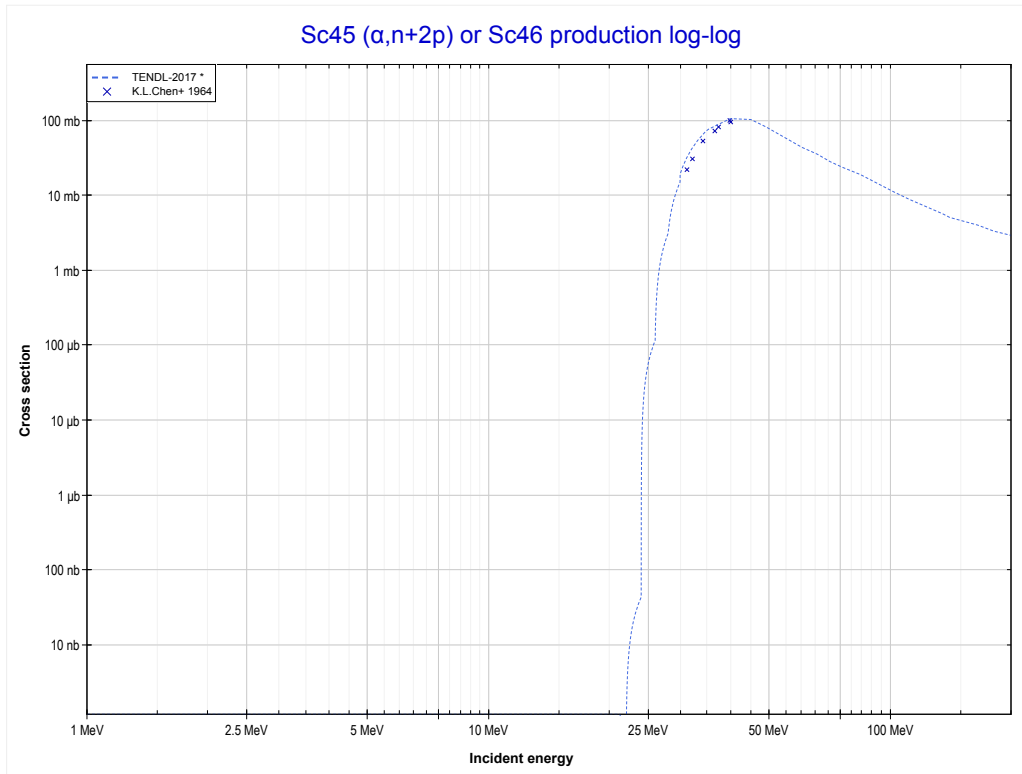
Reaction	Q-Value
Sc45($\alpha, 2n$)V47	-12783.12 keV

<< 20-Ca-48	21-Sc-45	24-Cr-50 >>
<< MT16 ($\alpha,2n$)	MT22 ($\alpha,n+\alpha$) or MT5 (Sc44 production)	MT44 ($\alpha,n+2p$) >>



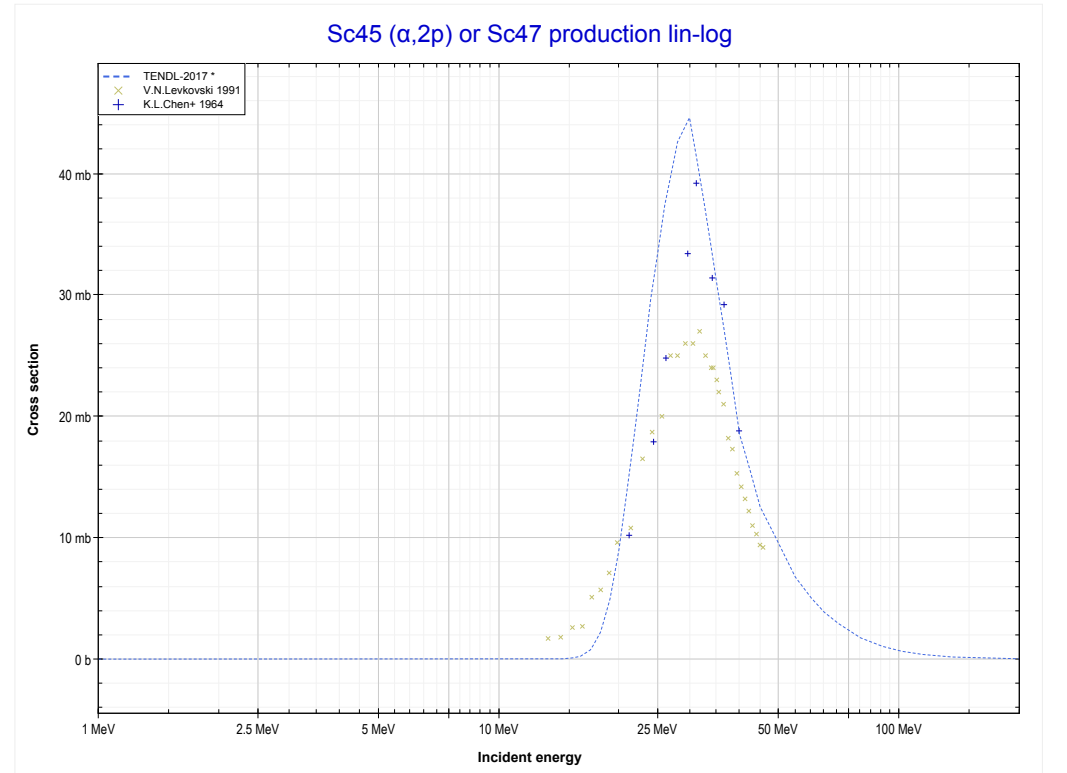
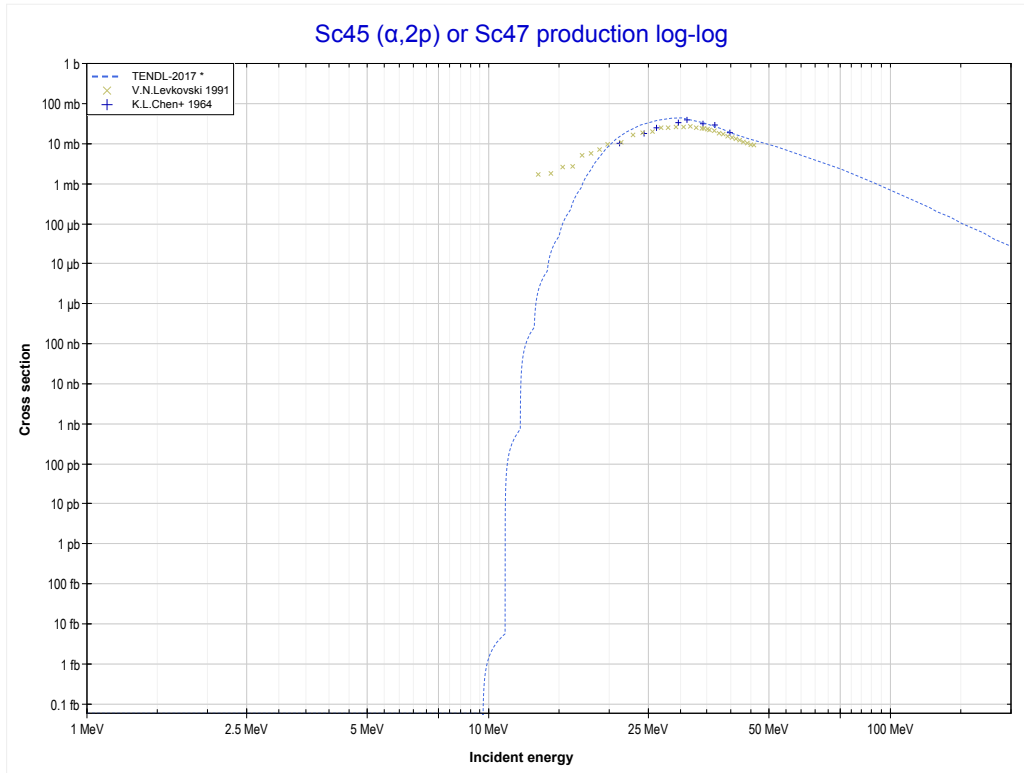
Reaction	Q-Value
Sc45($\alpha,n+\alpha$)Sc44	-11326.52 keV
Sc45($\alpha,d+t$)Sc44	-28915.81 keV
Sc45($\alpha,n+p+t$)Sc44	-31140.38 keV
Sc45($\alpha,2n+He3$)Sc44	-31904.13 keV
Sc45($\alpha,n+2d$)Sc44	-35173.04 keV
Sc45($\alpha,2n+p+d$)Sc44	-37397.61 keV
Sc45($\alpha,3n+2p$)Sc44	-39622.18 keV

<< 13-Al-27	21-Sc-45	25-Mn-55 >>
<< MT22 ($\alpha, n+\alpha$)	MT44 ($\alpha, n+2p$) or MT5 (Sc46 production)	MT111 ($\alpha, 2p$) >>



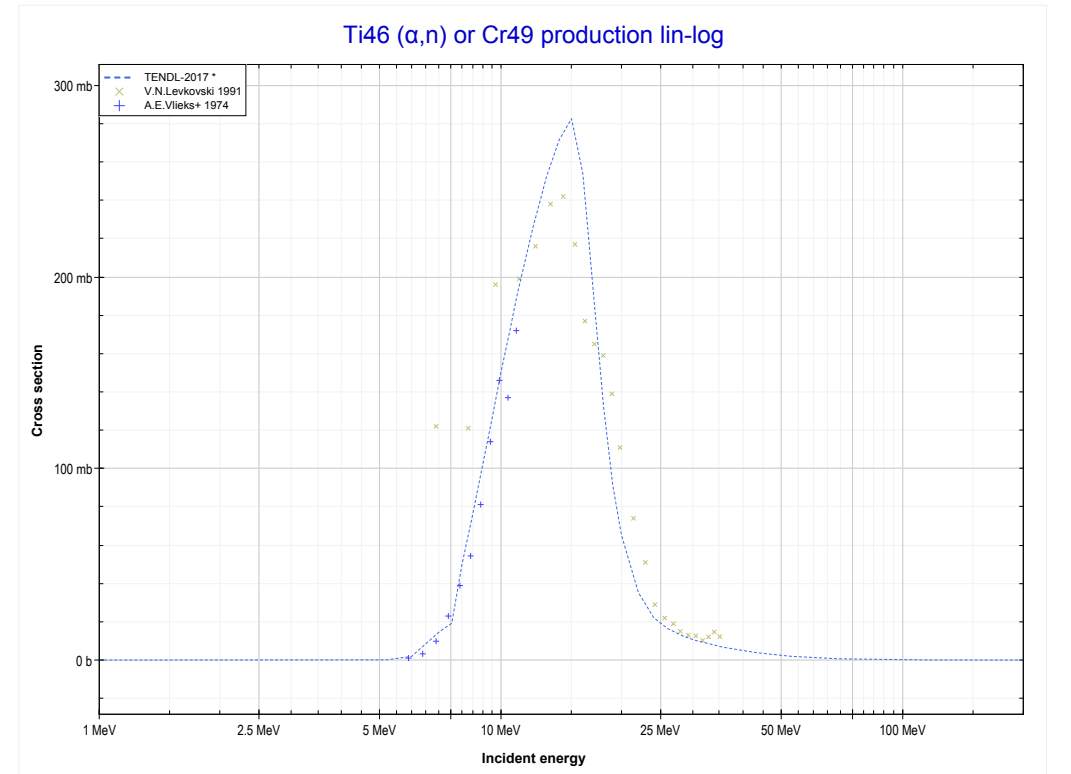
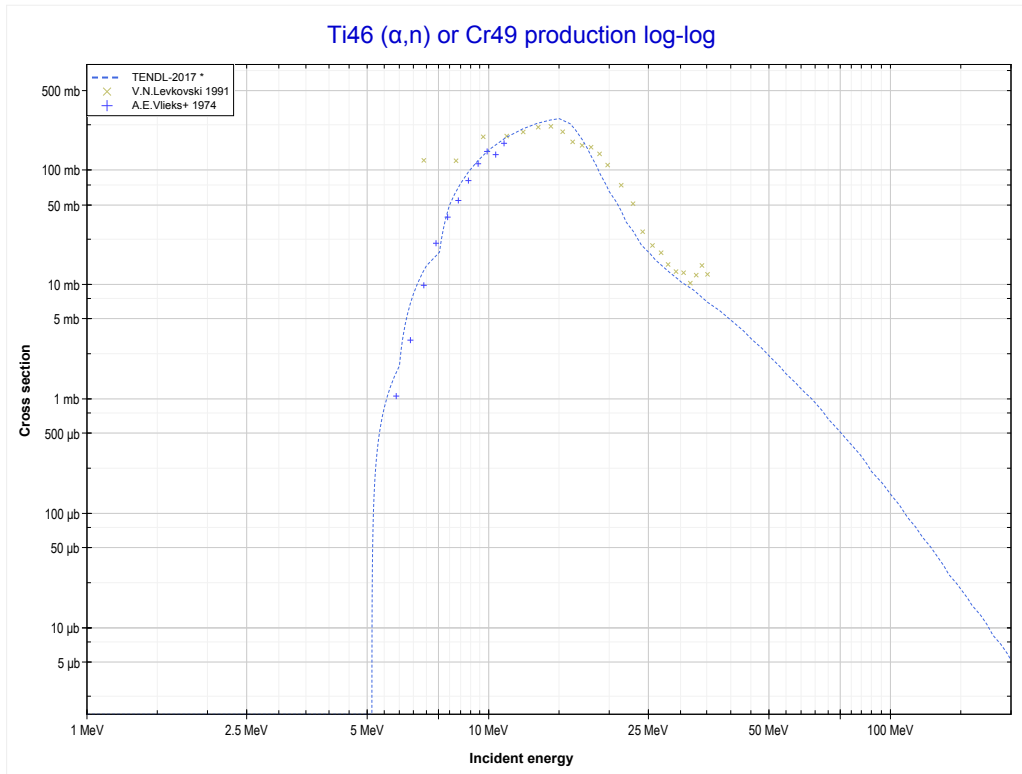
Reaction	Q-Value
Sc45($\alpha, He3$)Sc46	-11817.00 keV
Sc45($\alpha, p+d$)Sc46	-17310.48 keV
Sc45($\alpha, n+2p$)Sc46	-19535.04 keV

<< 19-K-41	21-Sc-45	26-Fe-57 >>
<< MT44 ($\alpha, n+2p$)	MT111 ($\alpha, 2p$) or MT5 (Sc47 production)	22-Ti-46 MT4 (α, n) >>



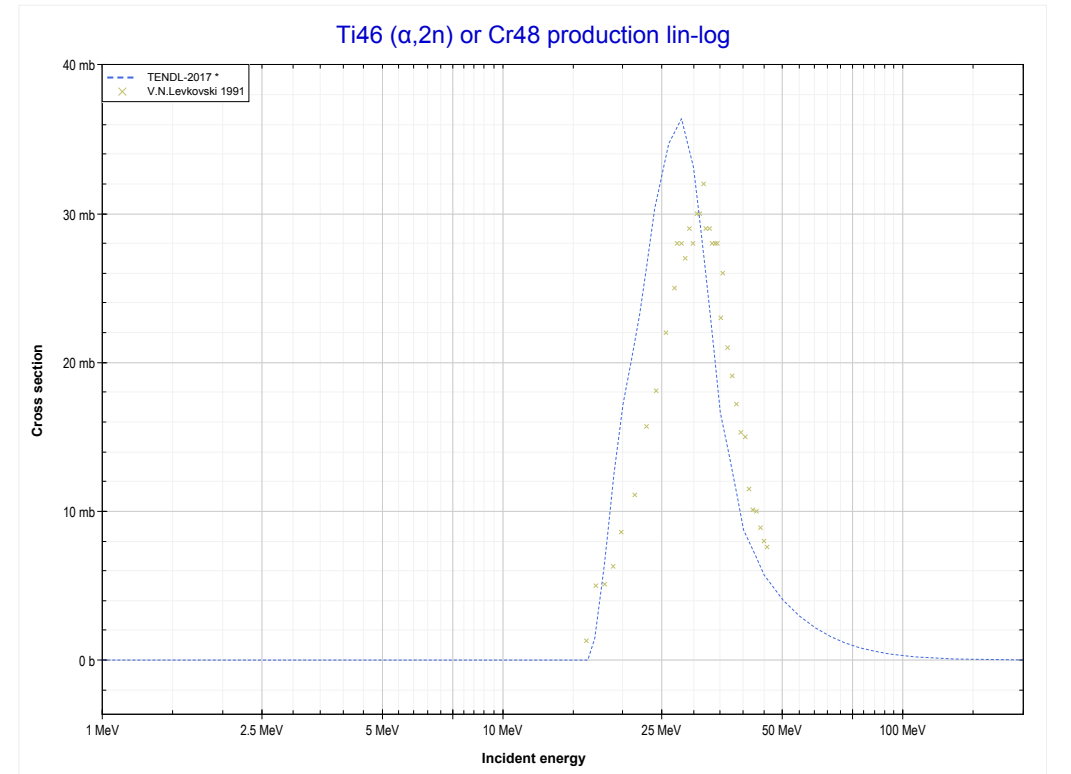
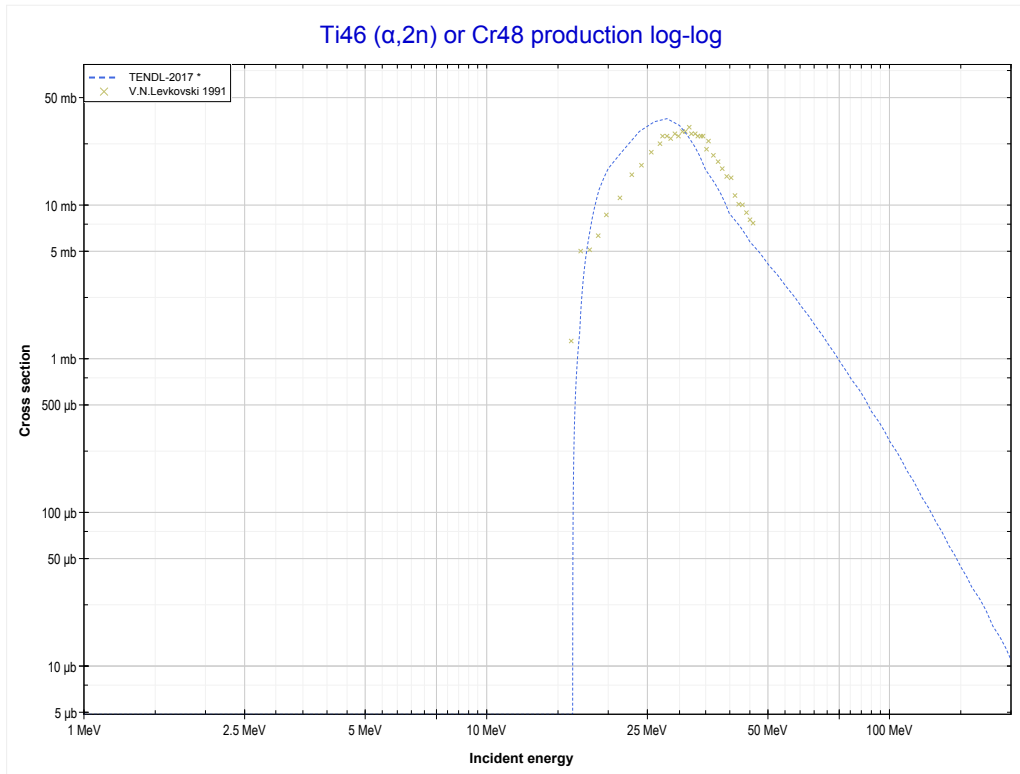
Reaction	Q-Value
Sc45($\alpha, 2p$)Sc47	-8888.63 keV

<< 21-Sc-45	22-Ti-46	22-Ti-48 >>
<< 21-Sc-45 MT111 ($\alpha,2p$)	MT4 (α,n) or MT5 (Cr49 production)	MT16 ($\alpha,2n$) >>



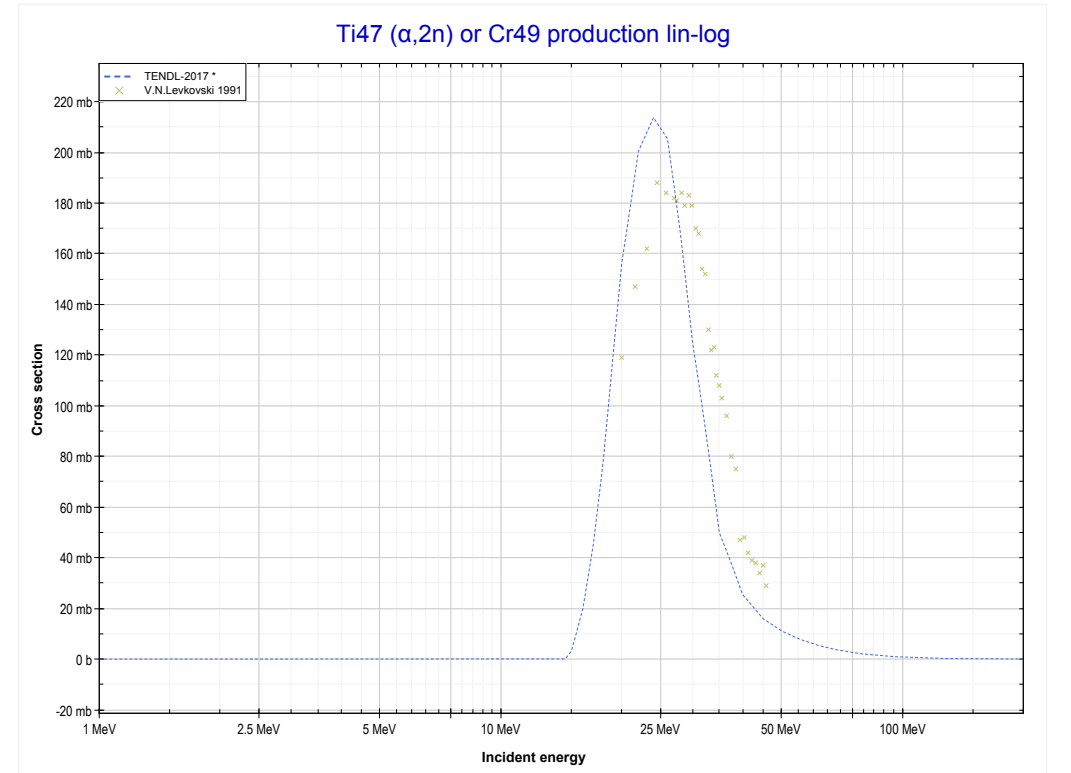
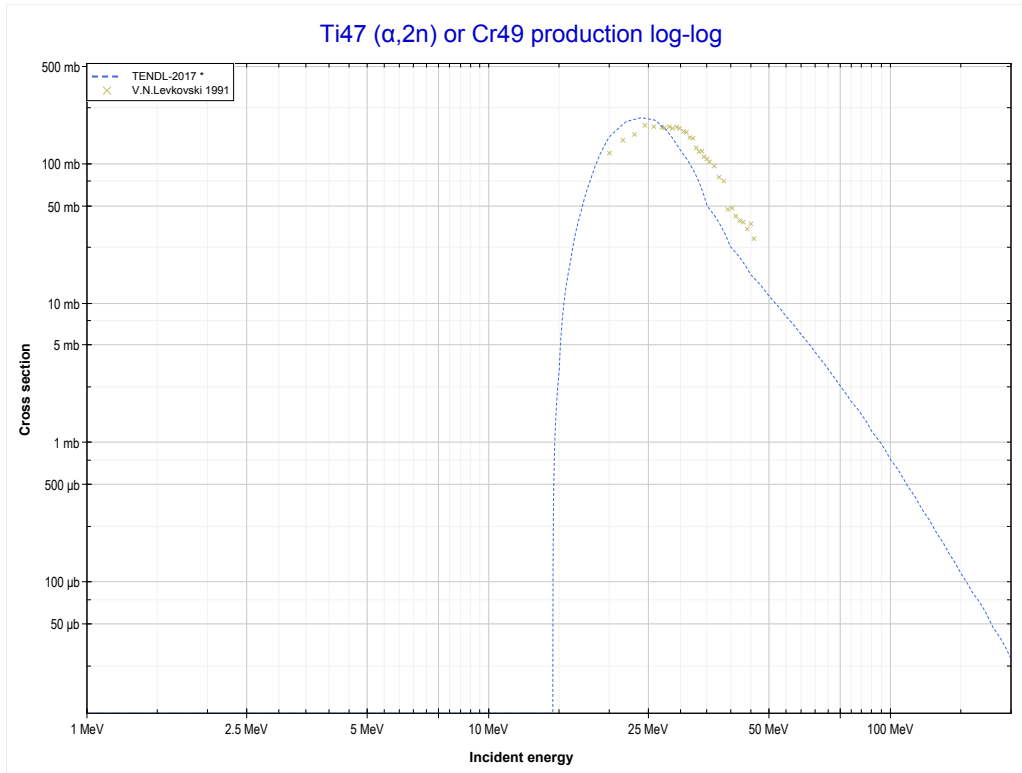
Reaction	Q-Value
Ti46(α,n)Cr49	-4440.70 keV

<< 21-Sc-45	22-Ti-46	22-Ti-47 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Cr48 production)	22-Ti-47 MT16 ($\alpha, 2n$) >>



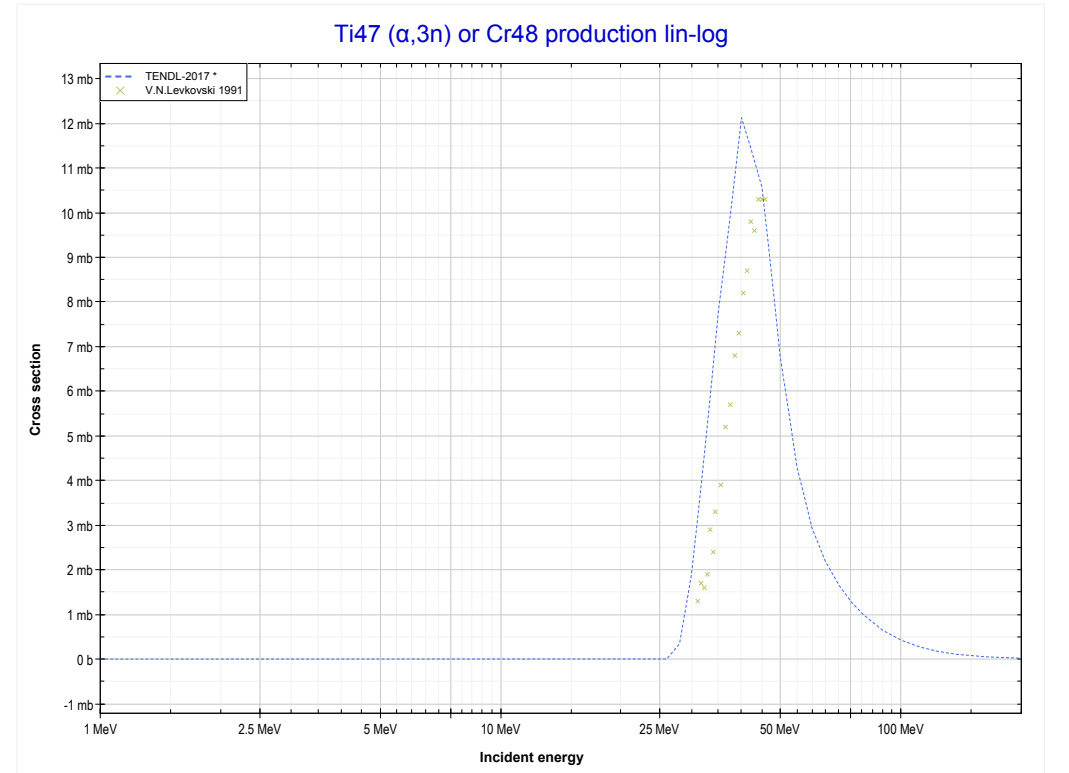
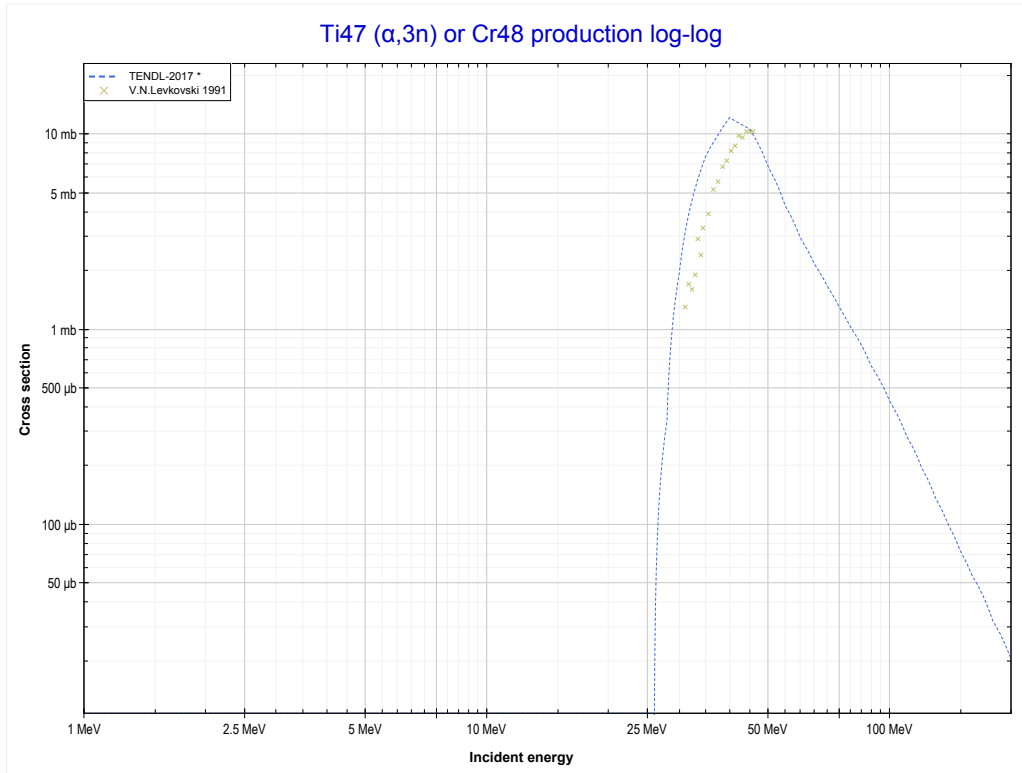
Reaction	Q-Value
Ti46($\alpha, 2n$)Cr48	-15022.72 keV

<< 22-Ti-46	22-Ti-47	22-Ti-49 >>
<< 22-Ti-46 MT16 ($\alpha,2n$)	MT16 ($\alpha,2n$) or MT5 (Cr49 production)	MT17 ($\alpha,3n$) >>



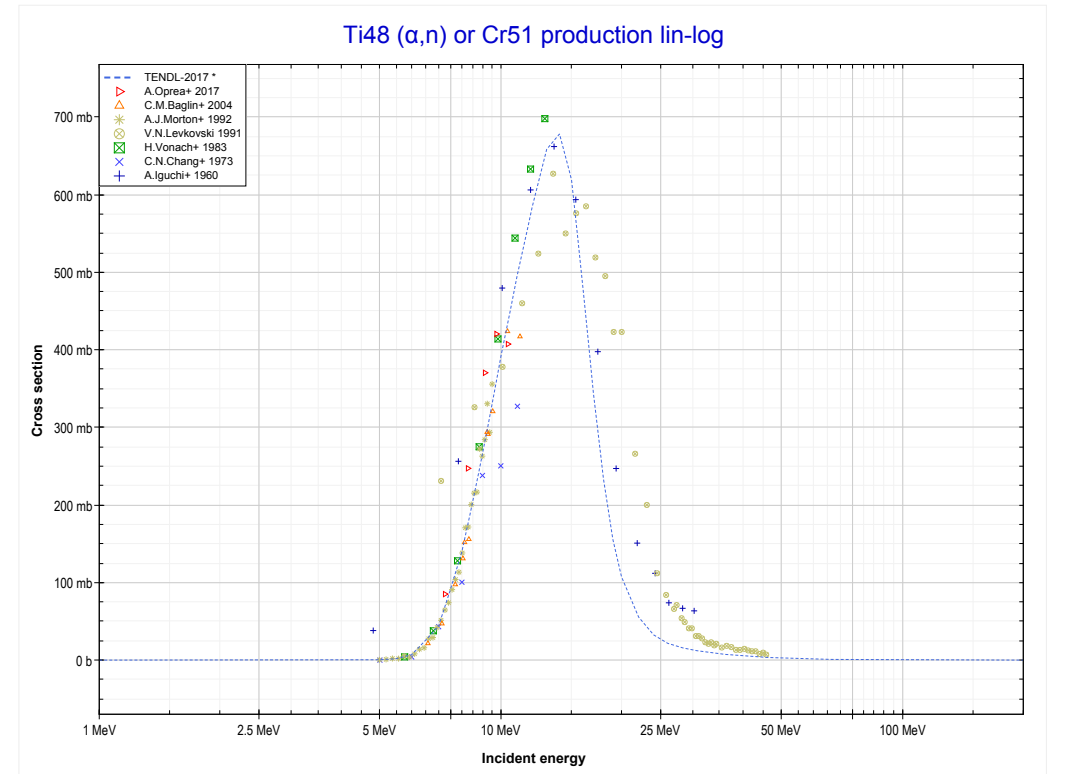
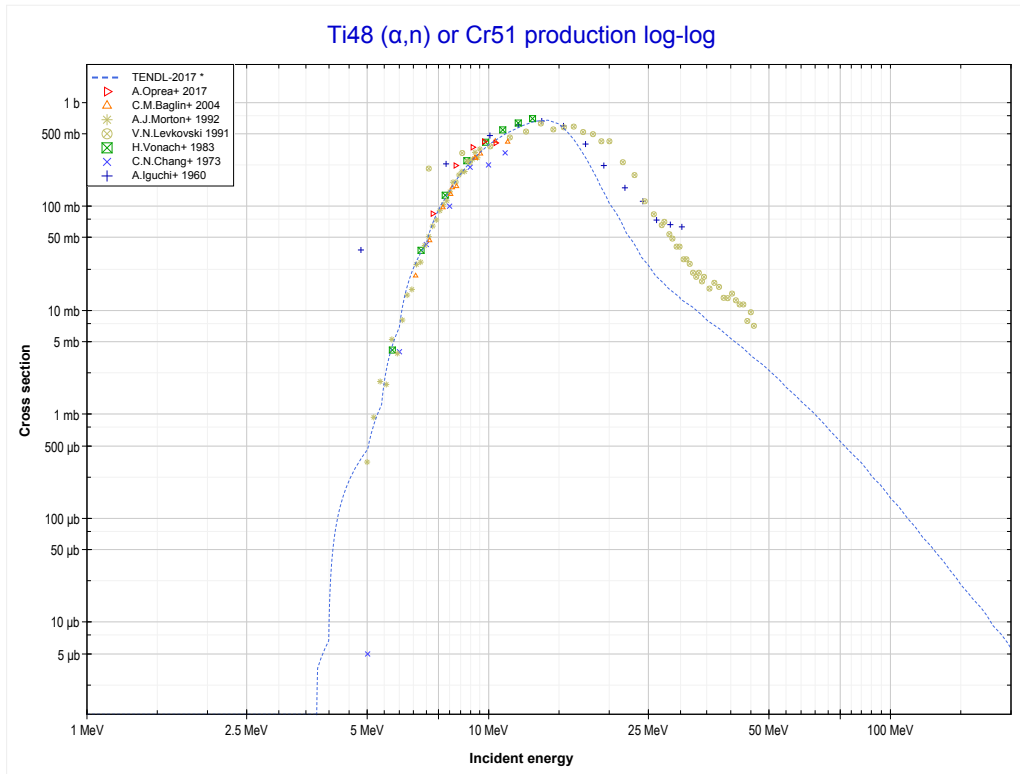
Reaction	Q-Value
Ti47($\alpha,2n$)Cr49	-13321.42 keV

	22-Ti-47	22-Ti-48 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Cr48 production)	22-Ti-48 MT4 (α,n) >>



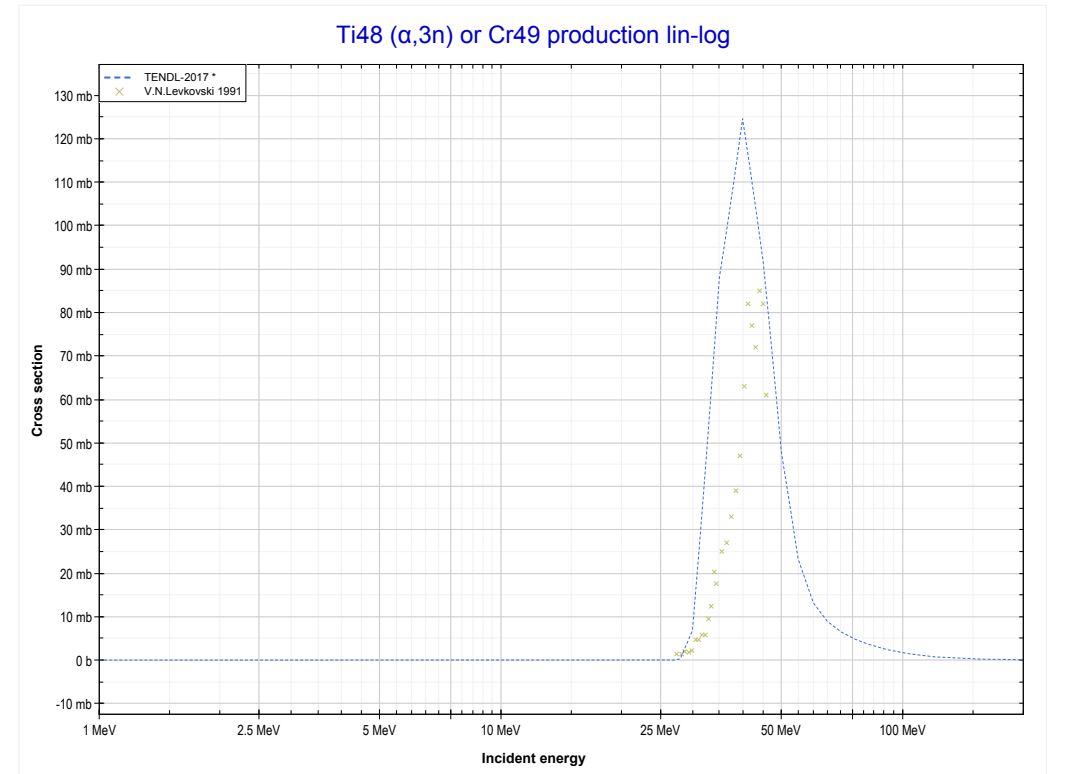
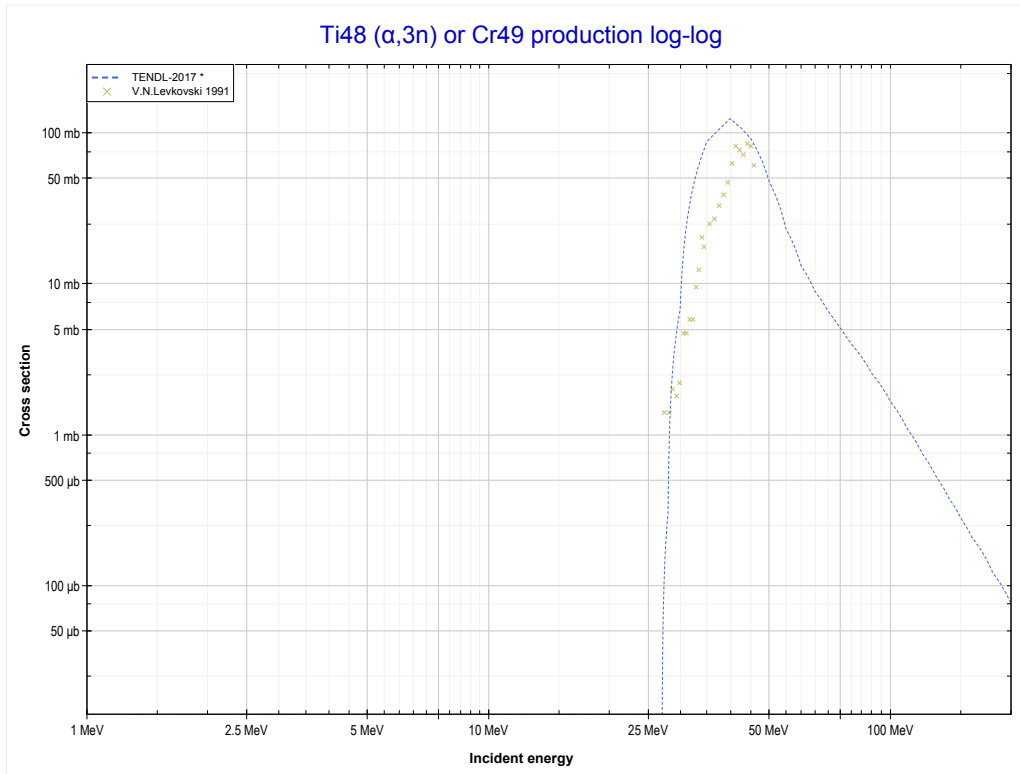
Reaction	Q-Value
Ti47($\alpha,3n$)Cr48	-23903.44 keV

<< 22-Ti-46	22-Ti-48	23-V-51 >>
<< 22-Ti-47 MT17 ($\alpha,3n$)	MT4 (α,n) or MT5 (Cr51 production)	MT17 ($\alpha,3n$) >>



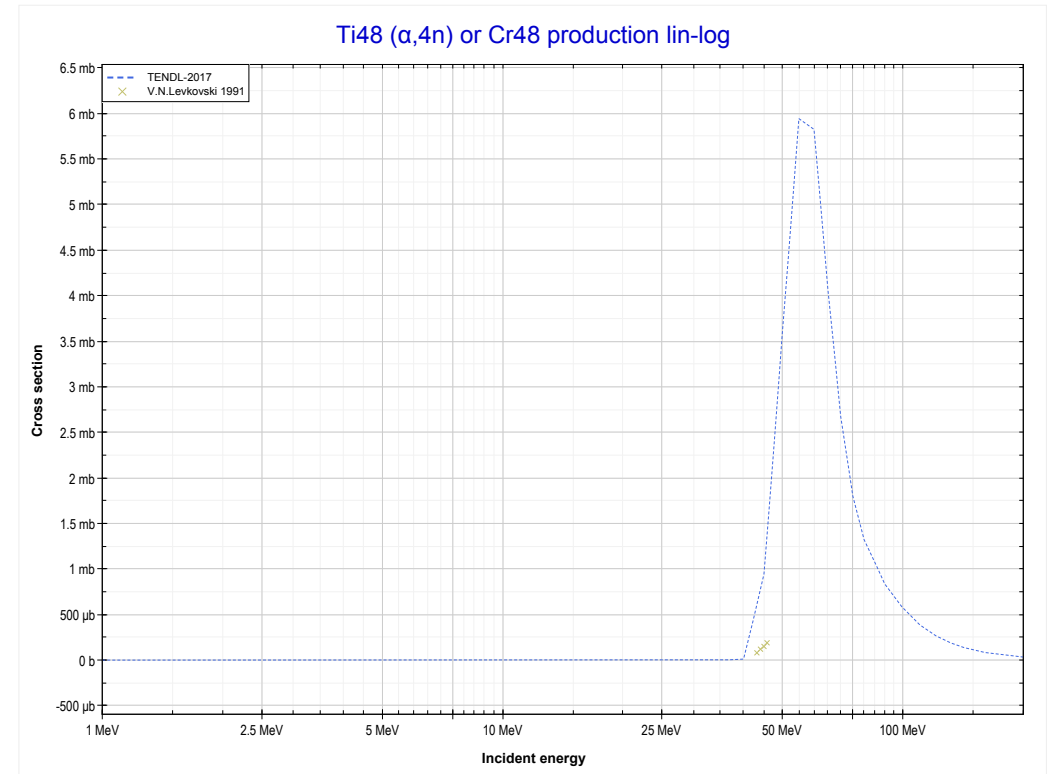
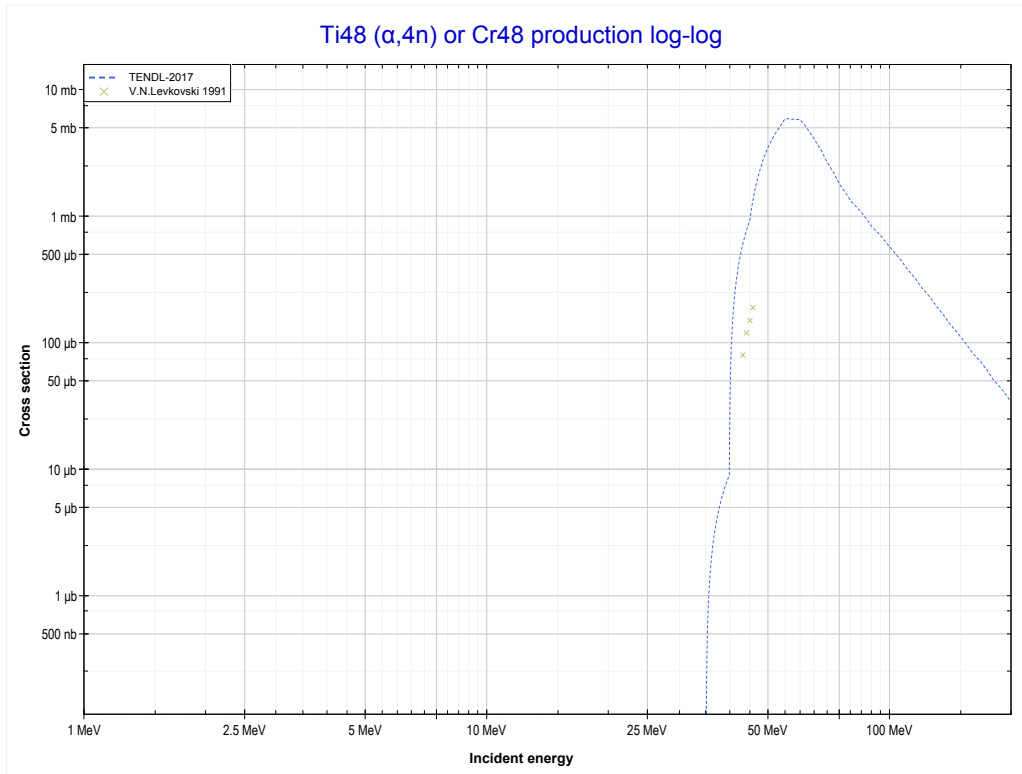
Reaction	Q-Value
Ti48(α,n)Cr51	-2687.00 keV

<< 22-Ti-47	22-Ti-48	23-V-51 >>
<< MT4 (α, n)	MT17 ($\alpha, 3n$) or MT5 (Cr49 production)	MT37 ($\alpha, 4n$) >>



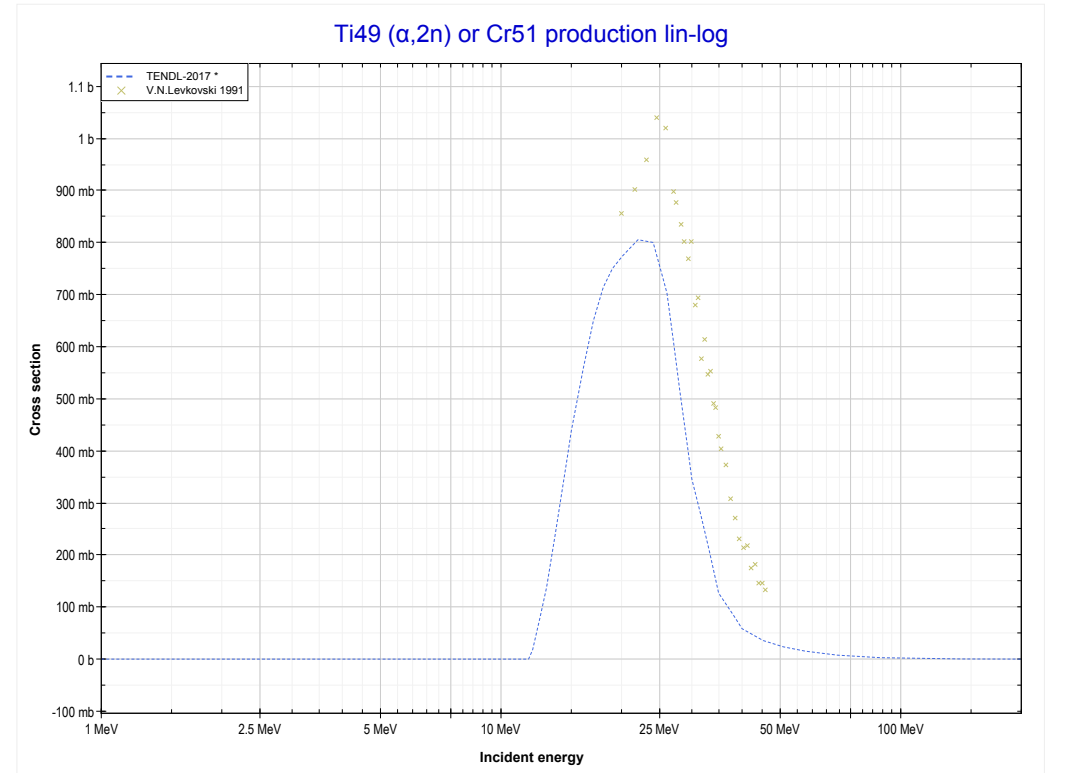
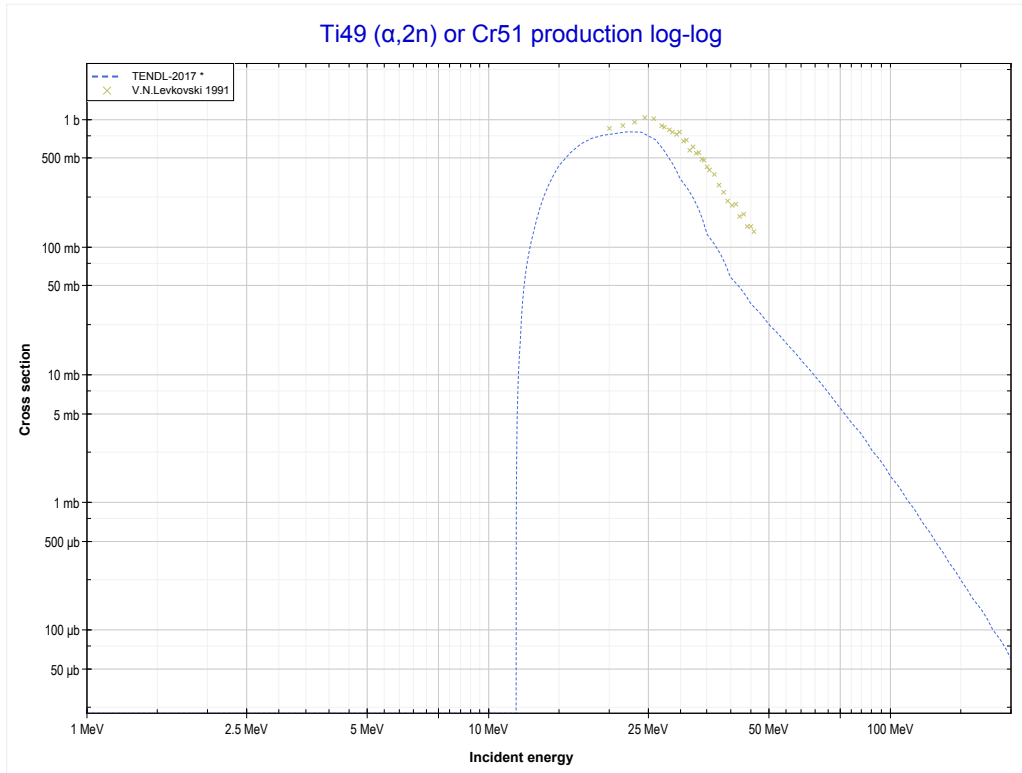
Reaction	Q-Value
Ti48($\alpha, 3n$)Cr49	-24948.04 keV

	22-Ti-48	25-Mn-55 >>
<< MT17 ($\alpha,3n$)	MT37 ($\alpha,4n$) or MT5 (Cr48 production)	22-Ti-49 MT16 ($\alpha,2n$) >>



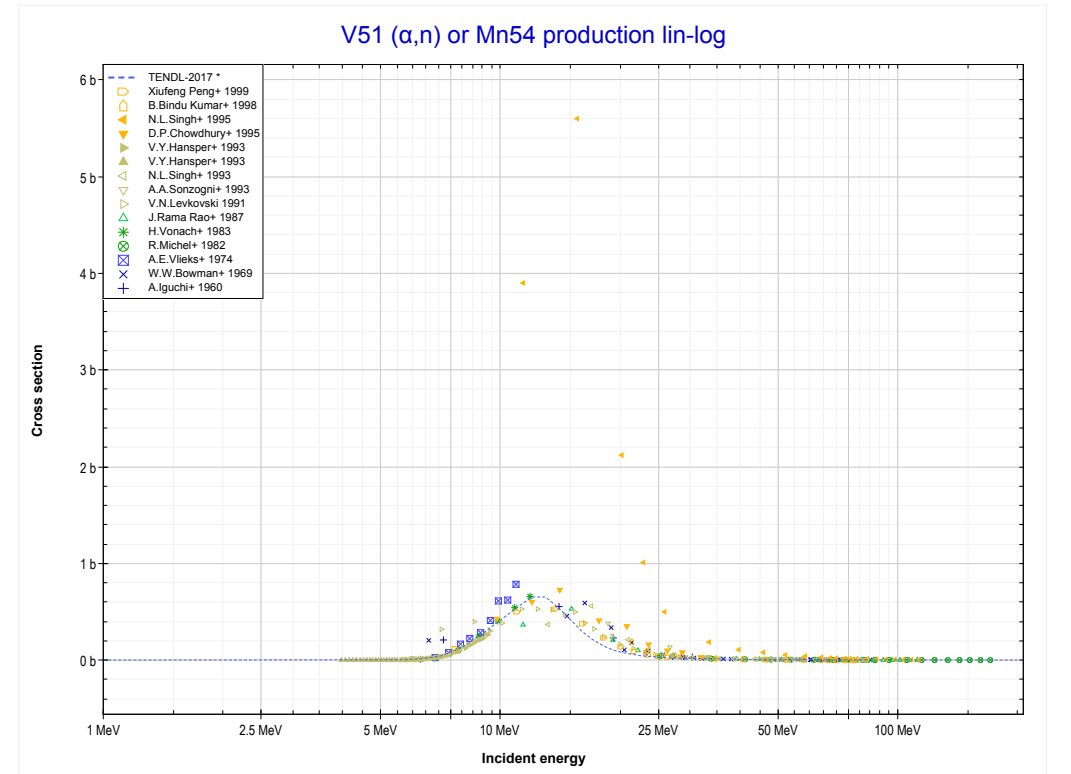
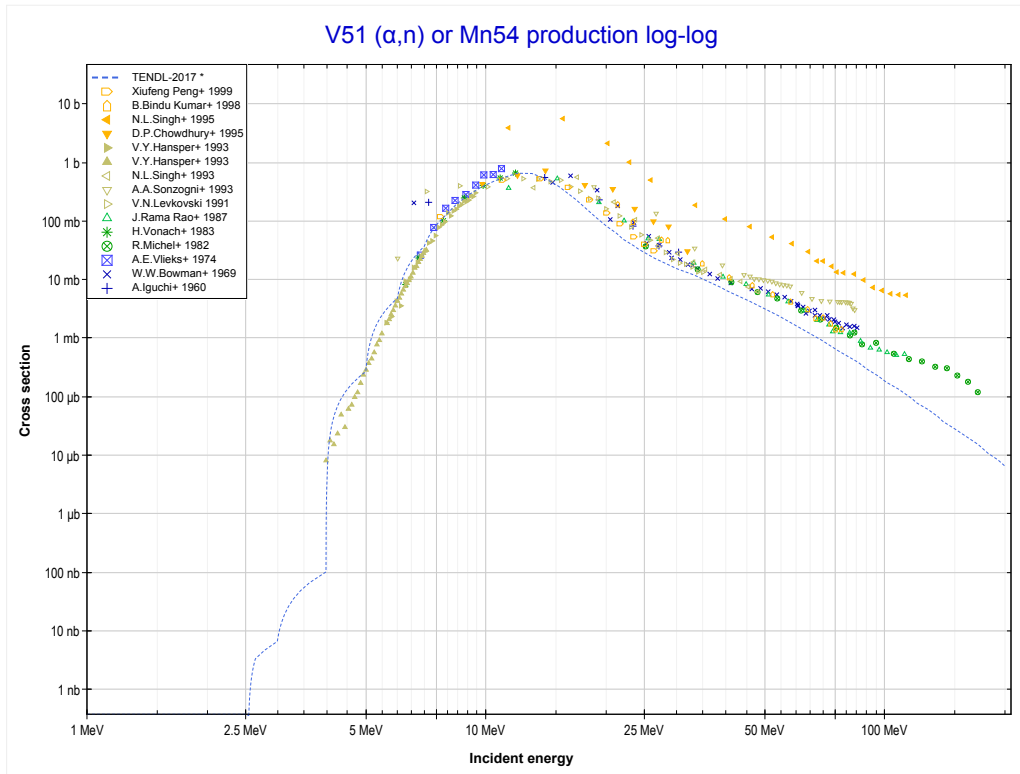
Reaction	Q-Value
Ti48($\alpha,4n$)Cr48	-35530.05 keV

<< 22-Ti-47	22-Ti-49	24-Cr-50 >>
<< 22-Ti-48 MT37 ($\alpha,4n$)	MT16 ($\alpha,2n$) or MT5 (Cr51 production)	23-V-51 MT4 (α,n) >>



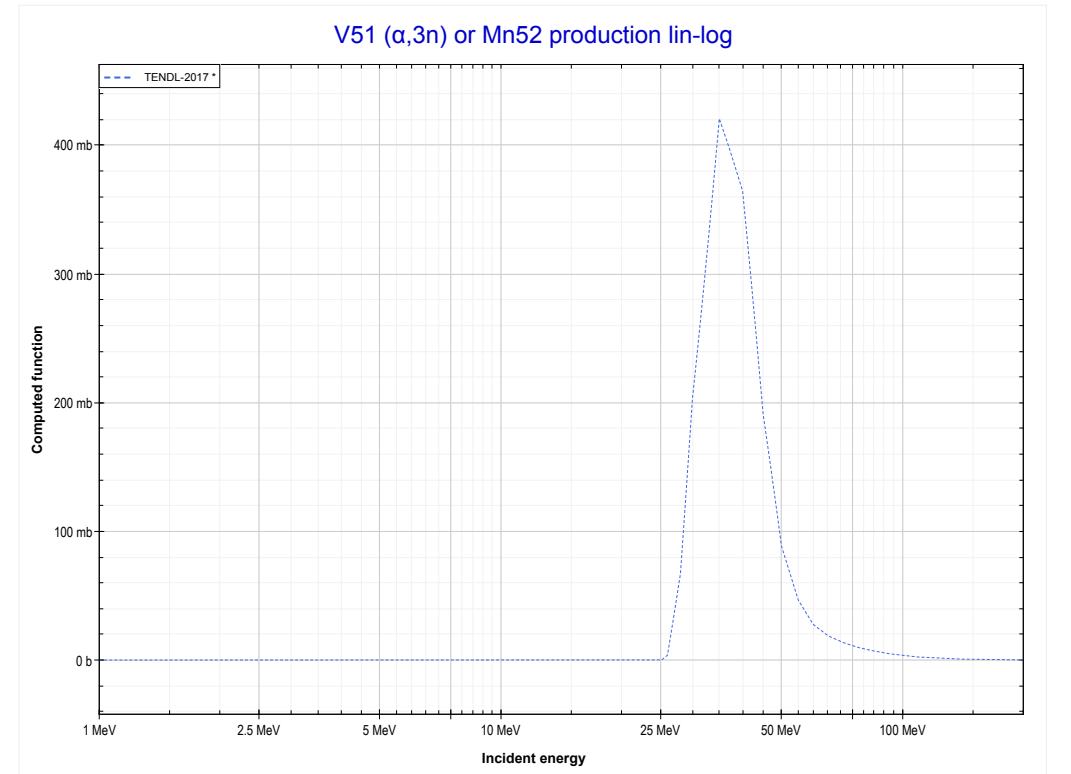
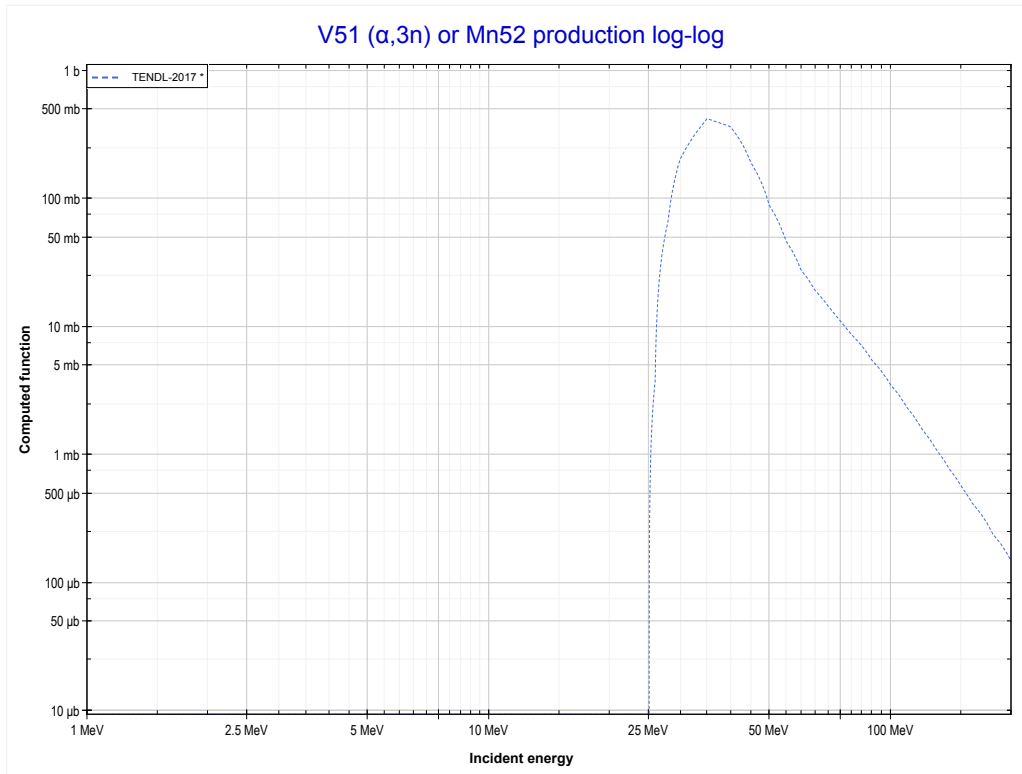
Reaction	Q-Value
Ti49($\alpha,2n$)Cr51	-10829.42 keV

<< 22-Ti-48	23-V-51	24-Cr-50 >>
<< 22-Ti-49 MT16 ($\alpha,2n$)	MT4 (α,n) or MT5 (Mn54 production)	MT17 ($\alpha,3n$) >>



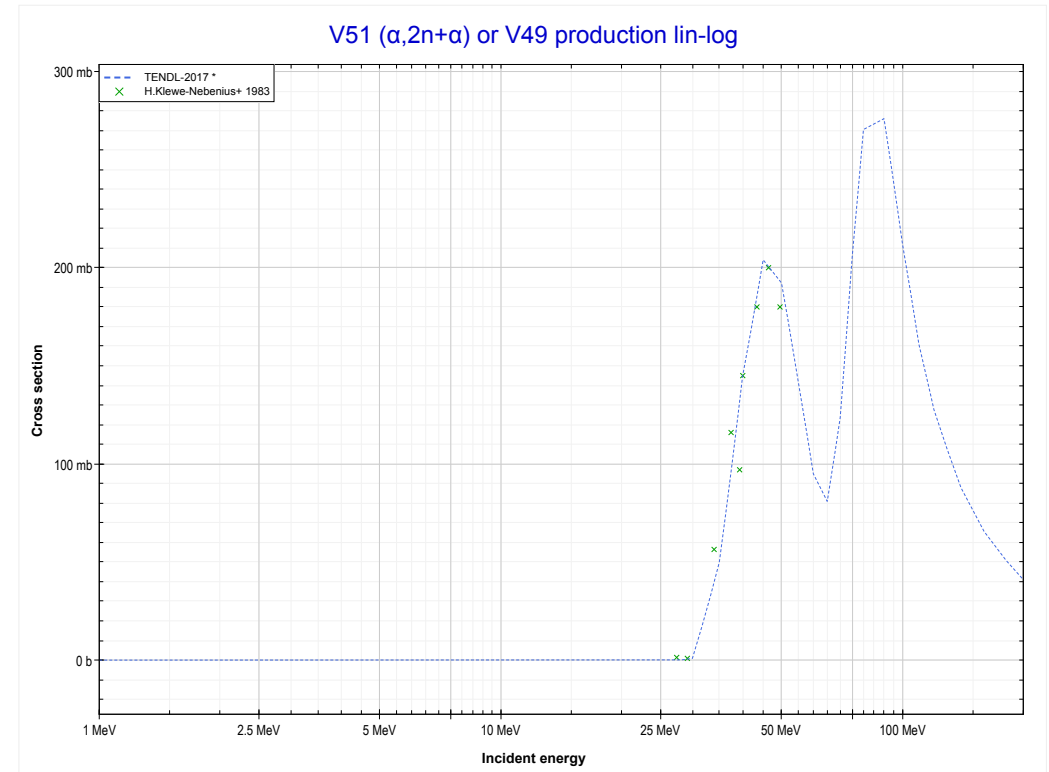
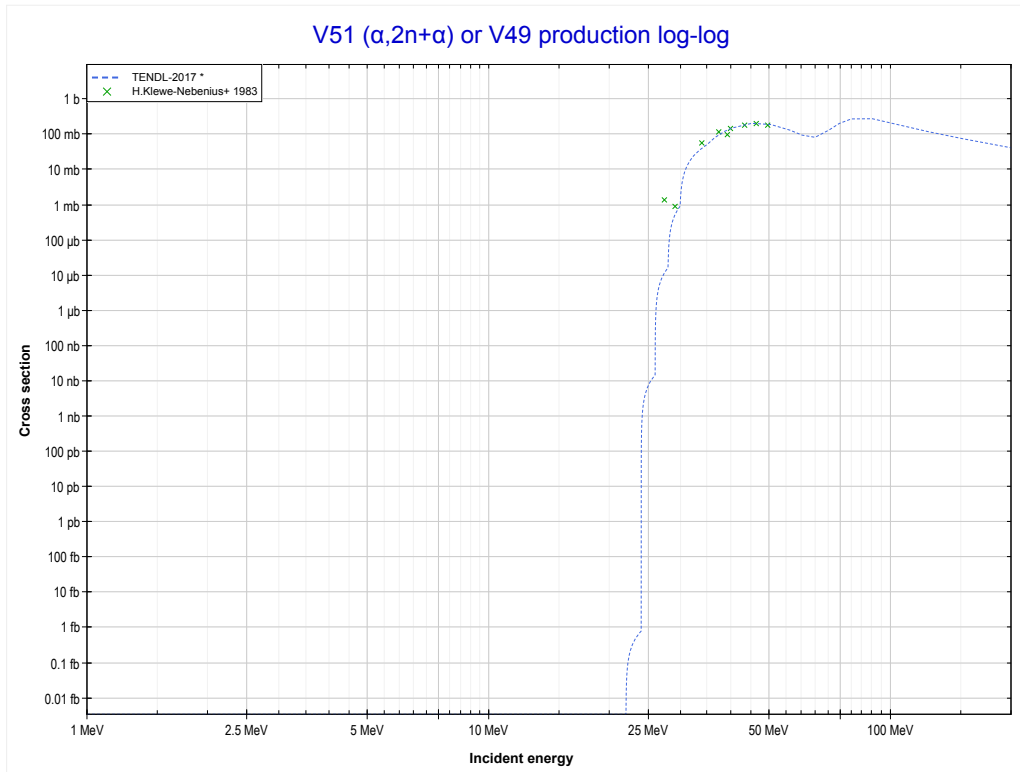
Reaction	Q-Value
V51(α,n)Mn54	-2293.60 keV

<< 22-Ti-48	23-V-51	25-Mn-55 >>
<< MT4 (α, n)	MT17 ($\alpha, 3n$) or MT5 (Mn52 production)	MT24 ($\alpha, 2n+\alpha$) >>



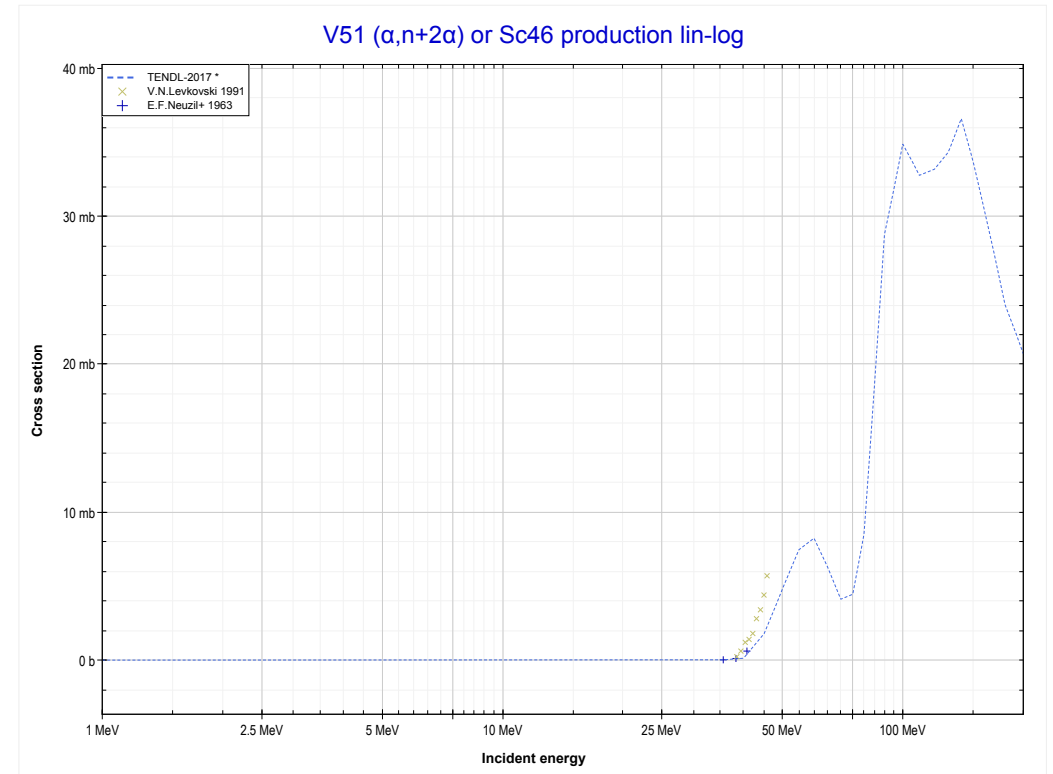
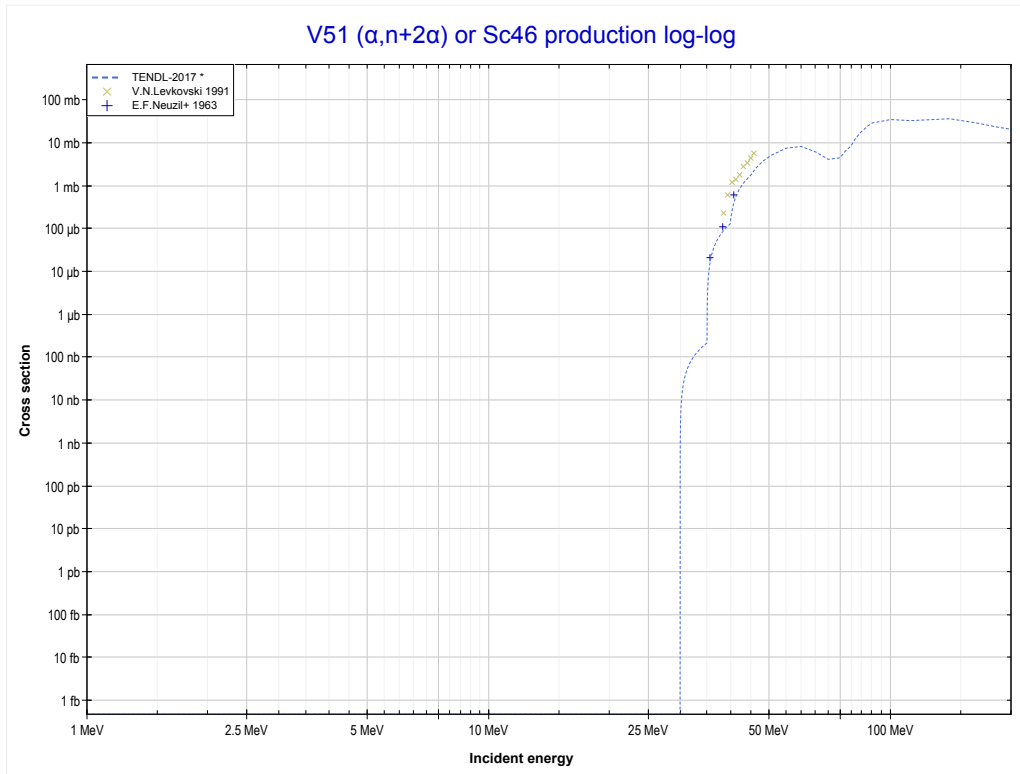
Reaction	Q-Value
V51($\alpha, 3n$)Mn52	-23285.84 keV

	23-V-51	26-Fe-54 >>
<< MT17 ($\alpha,3n$)	MT24 ($\alpha,2n+\alpha$) or MT5 (V49 production)	MT29 ($\alpha,n+2\alpha$) >>



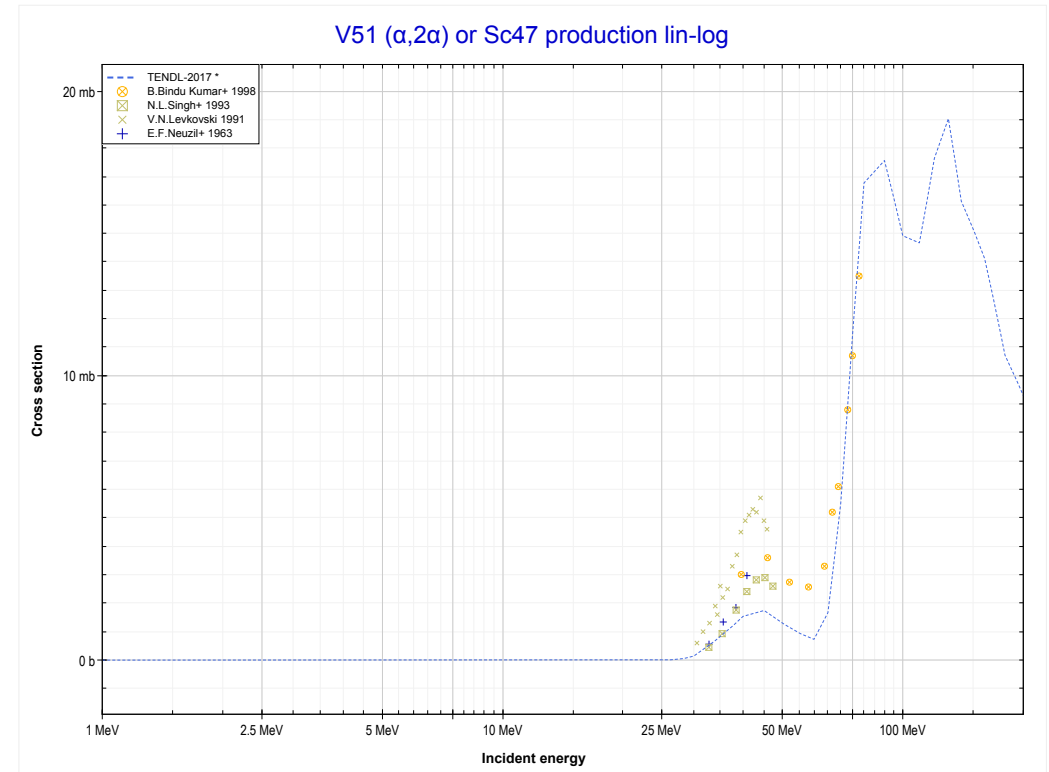
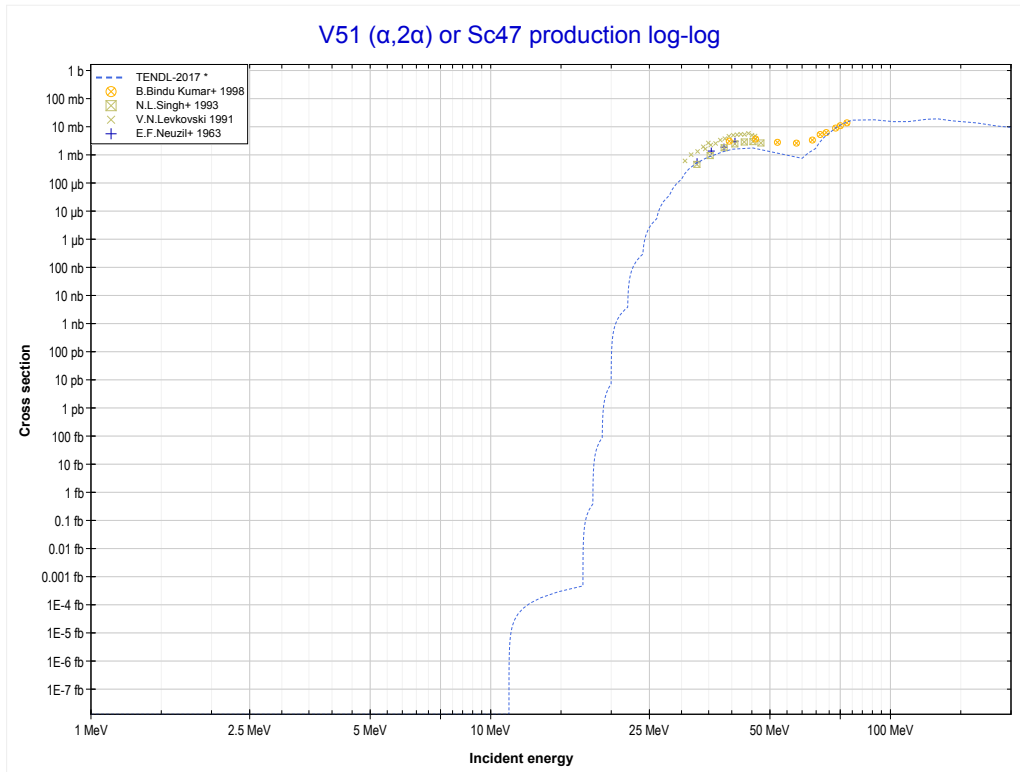
Reaction	Q-Value
V51($\alpha,2n+\alpha$)V49	-20385.33 keV
V51($\alpha,2t$)V49	-31717.40 keV
V51($\alpha,n+d+t$)V49	-37974.63 keV
V51($\alpha,2n+p+t$)V49	-40199.20 keV
V51($\alpha,3n+He3$)V49	-40962.95 keV
V51($\alpha,2n+2d$)V49	-44231.86 keV
V51($\alpha,3n+p+d$)V49	-46456.43 keV
V51($\alpha,4n+2p$)V49	-48680.99 keV

<< 6-C-12	23-V-51	27-Co-59 >>
<< MT24 ($\alpha, 2n+\alpha$)	MT29 ($\alpha, n+2\alpha$) or MT5 (Sc46 production)	MT108 ($\alpha, 2\alpha$) >>



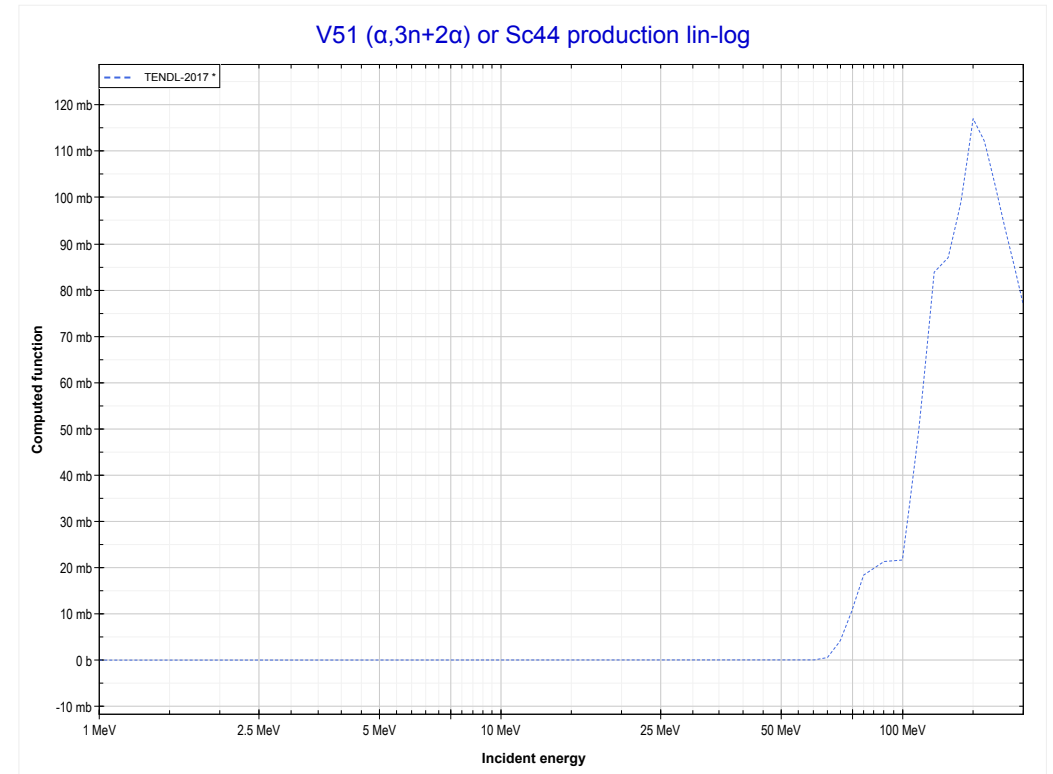
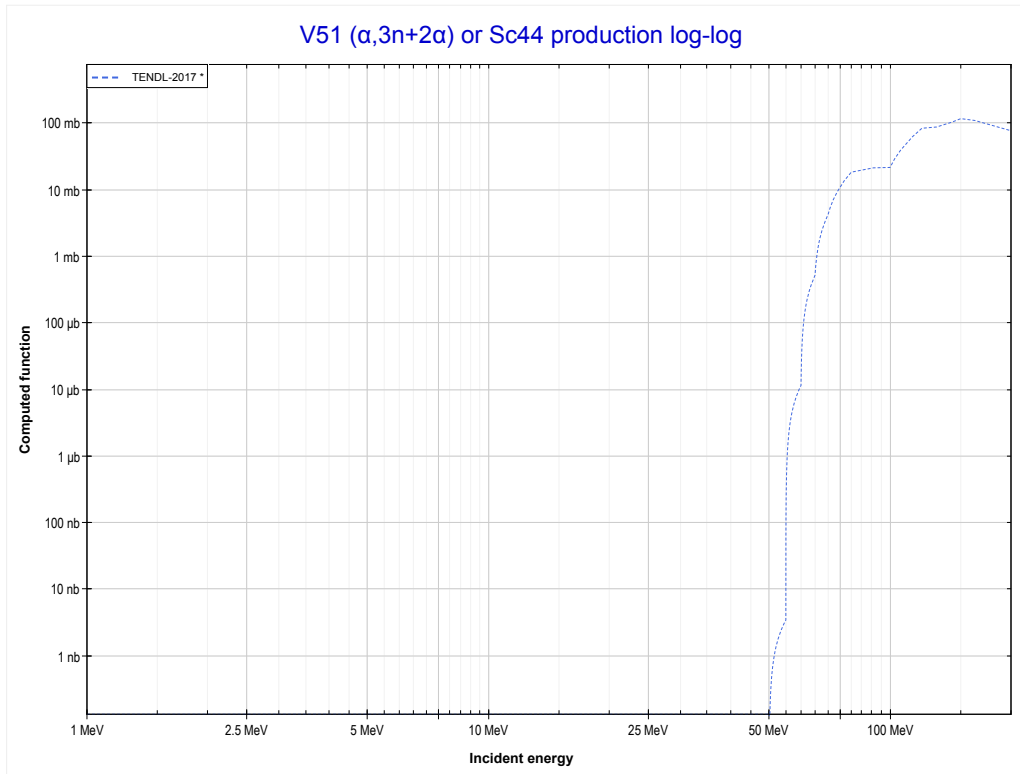
Reaction	Q-Value	Reaction	Q-Value
V51($\alpha, n+2\alpha$)Sc46	-20939.43 keV	V51($\alpha, p+d+2t$)Sc46	-58342.59 keV
V51($\alpha, d+t+\alpha$)Sc46	-38528.73 keV	V51($\alpha, n+d+t+He3$)Sc46	-59106.34 keV
V51($\alpha, n+p+t+\alpha$)Sc46	-40753.29 keV	V51($\alpha, n+2p+2t$)Sc46	-60567.15 keV
V51($\alpha, 2n+He3+\alpha$)Sc46	-41517.05 keV	V51($\alpha, 2n+p+t+He3$)Sc46	-61330.91 keV
V51($\alpha, n+2d+\alpha$)Sc46	-44785.96 keV	V51($\alpha, 3n+2He3$)Sc46	-62094.67 keV
V51($\alpha, 2n+p+d+\alpha$)Sc46	-47010.53 keV	V51($\alpha, 3d+t$)Sc46	-62375.26 keV
V51($\alpha, 3n+2p+\alpha$)Sc46	-49235.09 keV	V51($\alpha, n+p+2d+t$)Sc46	-64599.82 keV
V51($\alpha, 2t+He3$)Sc46	-52849.11 keV	V51($\alpha, 2n+2d+He3$)Sc46	-65363.58 keV

<< 7-N-14	23-V-51	
<< MT29 ($\alpha, n+2\alpha$)	MT108 ($\alpha, 2\alpha$) or MT5 (Sc47 production)	MT180 ($\alpha, 3n+2\alpha$) >>



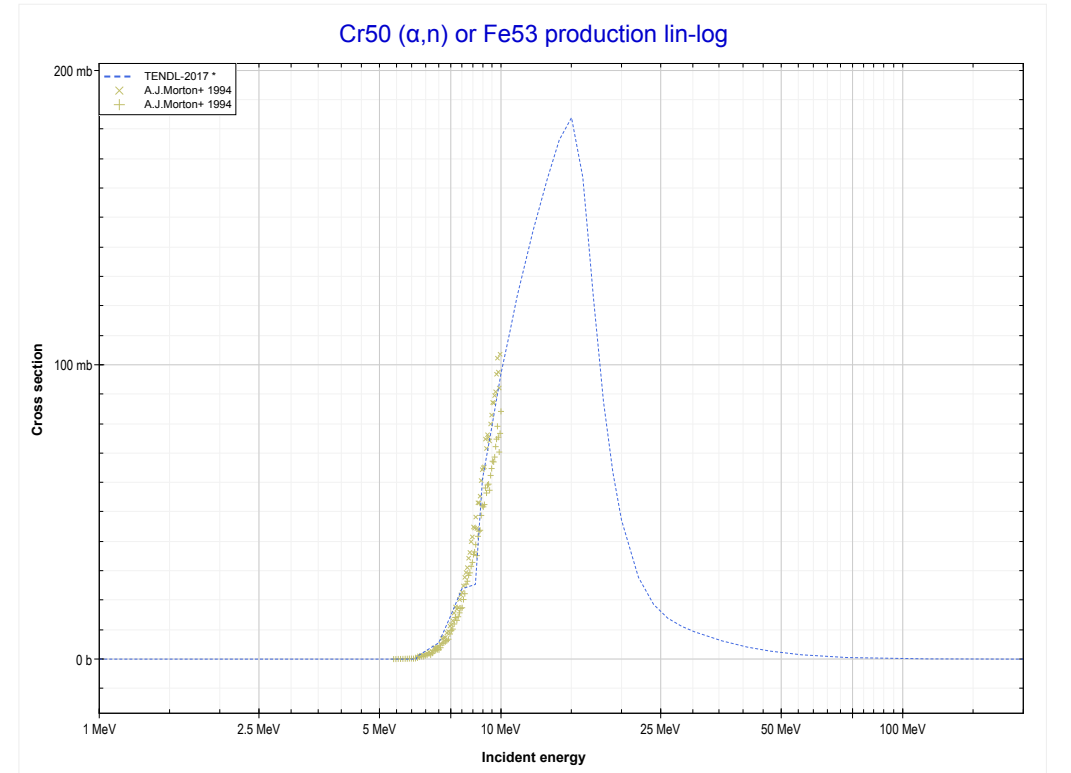
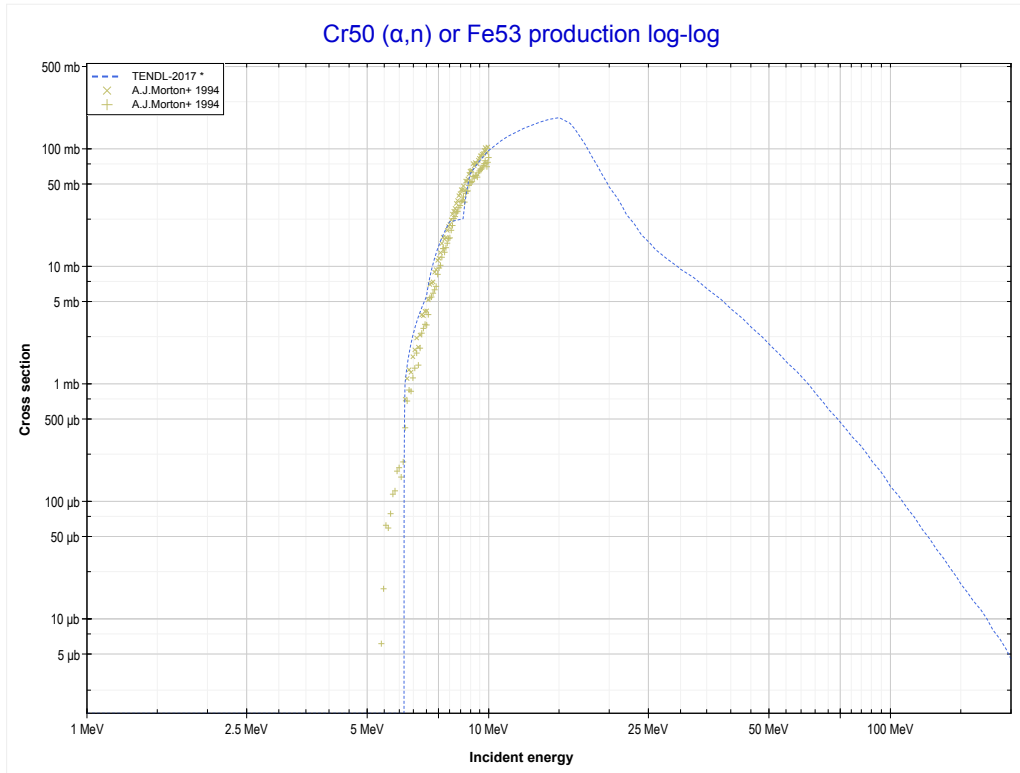
Reaction	Q-Value	Reaction	Q-Value
V51($\alpha, 2\alpha$)Sc47	-10293.02 keV	V51($\alpha, n+p+t+He3$)Sc47	-50684.49 keV
V51($\alpha, p+t+\alpha$)Sc47	-30106.88 keV	V51($\alpha, 2n+2He3$)Sc47	-51448.25 keV
V51($\alpha, n+He3+\alpha$)Sc47	-30870.63 keV	V51($\alpha, p+2d+t$)Sc47	-53953.40 keV
V51($\alpha, 2d+\alpha$)Sc47	-34139.54 keV	V51($\alpha, n+2d+He3$)Sc47	-54717.16 keV
V51($\alpha, n+p+d+\alpha$)Sc47	-36364.11 keV	V51($\alpha, n+2p+d+t$)Sc47	-56177.97 keV
V51($\alpha, 2n+2p+\alpha$)Sc47	-38588.68 keV	V51($\alpha, 2n+p+d+He3$)Sc47	-56941.73 keV
V51($\alpha, d+t+He3$)Sc47	-48459.93 keV	V51($\alpha, 4d$)Sc47	-57986.07 keV
V51($\alpha, 2p+2t$)Sc47	-49920.74 keV	V51($\alpha, 2n+3p+t$)Sc47	-58402.54 keV

	23-V-51	
<< MT108 ($\alpha,2\alpha$)	MT180 ($\alpha,3n+2\alpha$) or MT5 (Sc44 production)	24-Cr-50 MT4 (α,n) >>



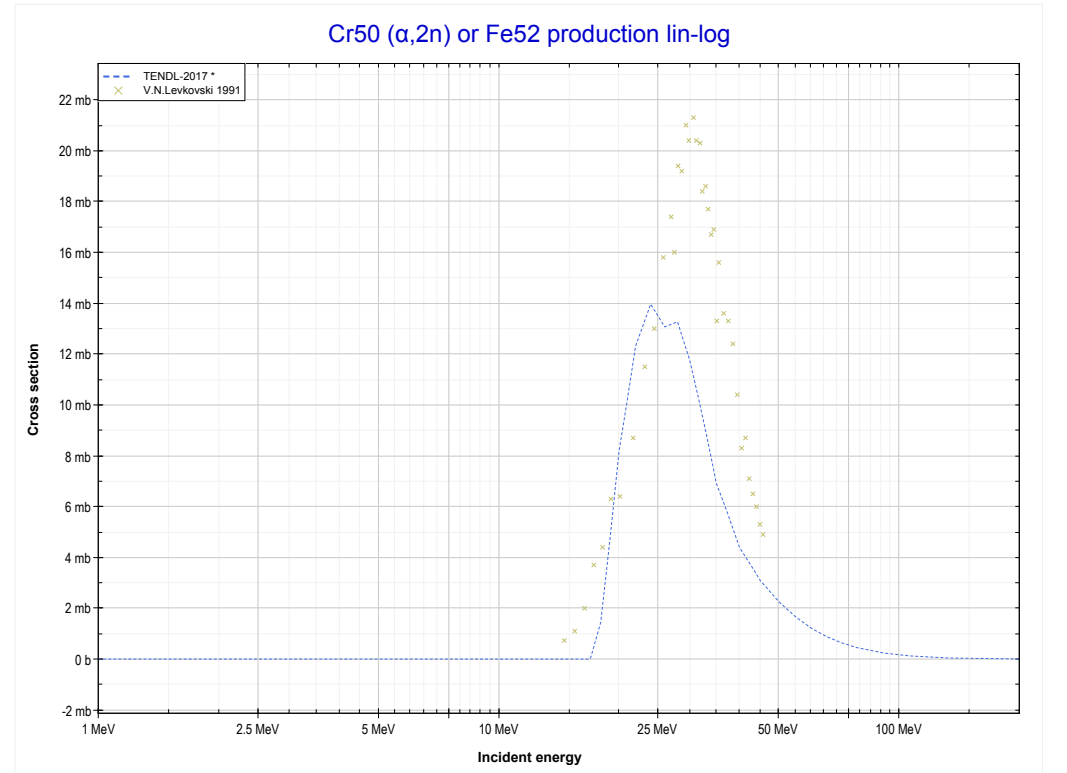
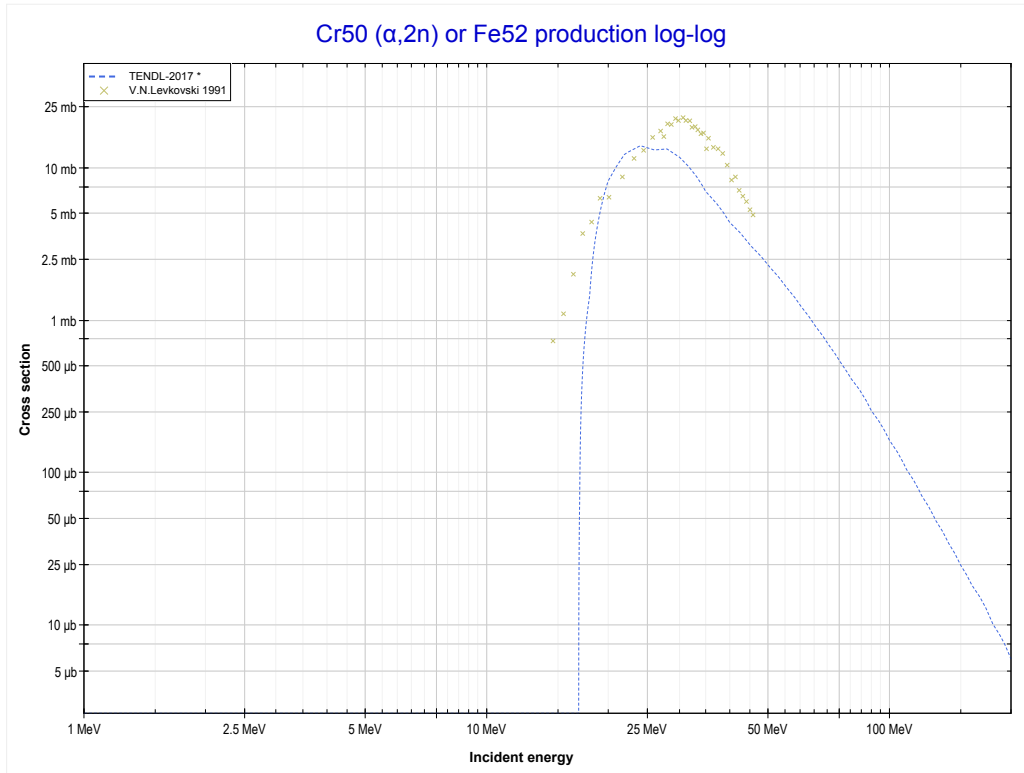
Reaction	Q-Value	Reaction	Q-Value
V51($\alpha,3n+2\alpha$)Sc44	-41026.57 keV	V51($\alpha,d+3t$)Sc44	-69947.92 keV
V51($\alpha,n+2t+\alpha$)Sc44	-52358.63 keV	V51($\alpha,n+p+3t$)Sc44	-72172.49 keV
V51($\alpha,2n+d+t+\alpha$)Sc44	-58615.86 keV	V51($\alpha,2n+2t+He3$)Sc44	-72936.25 keV
V51($\alpha,3n+p+t+\alpha$)Sc44	-60840.43 keV	V51($\alpha,n+2d+2t$)Sc44	-76205.16 keV
V51($\alpha,4n+He3+\alpha$)Sc44	-61604.18 keV	V51($\alpha,2n+p+d+2t$)Sc44	-78429.72 keV
V51($\alpha,3n+2d+\alpha$)Sc44	-64873.09 keV	V51($\alpha,3n+d+t+He3$)Sc44	-79193.48 keV
V51($\alpha,4n+p+d+\alpha$)Sc44	-67097.66 keV	V51($\alpha,3n+2p+2t$)Sc44	-80654.29 keV
V51($\alpha,5n+2p+\alpha$)Sc44	-69322.23 keV	V51($\alpha,4n+p+t+He3$)Sc44	-81418.04 keV

<< 23-V-51	24-Cr-50	25-Mn-55 >>
<< 23-V-51 MT180 ($\alpha,3n+2\alpha$)	MT4 (α,n) or MT5 (Fe53 production)	MT16 ($\alpha,2n$) >>



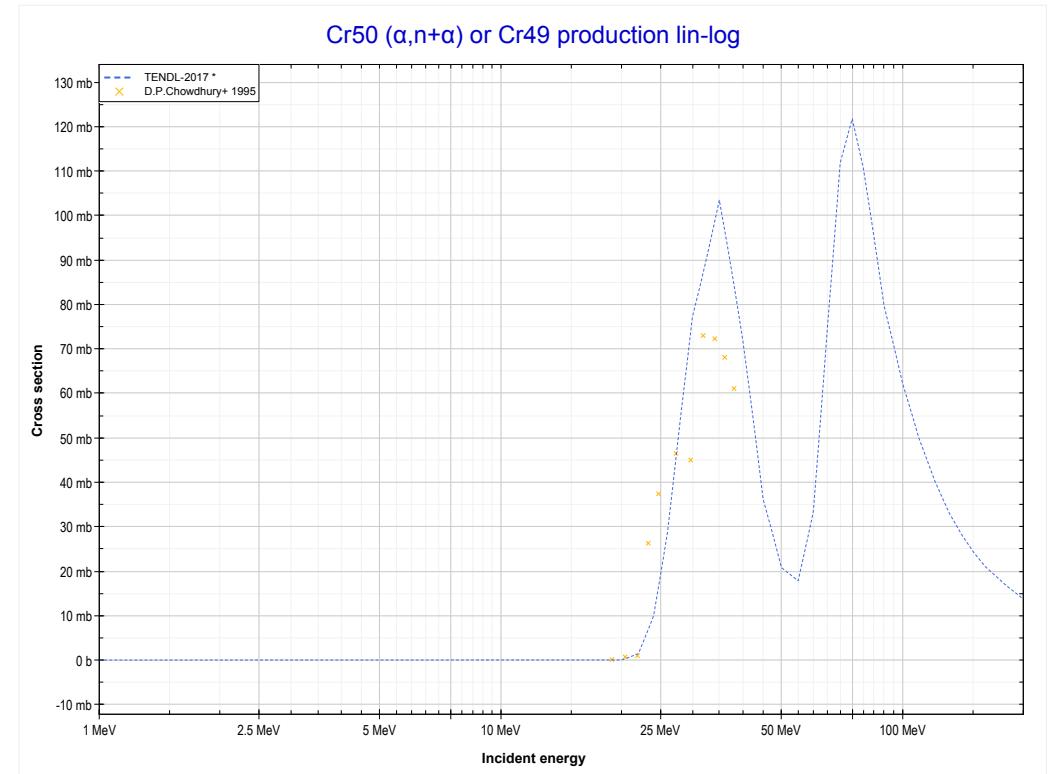
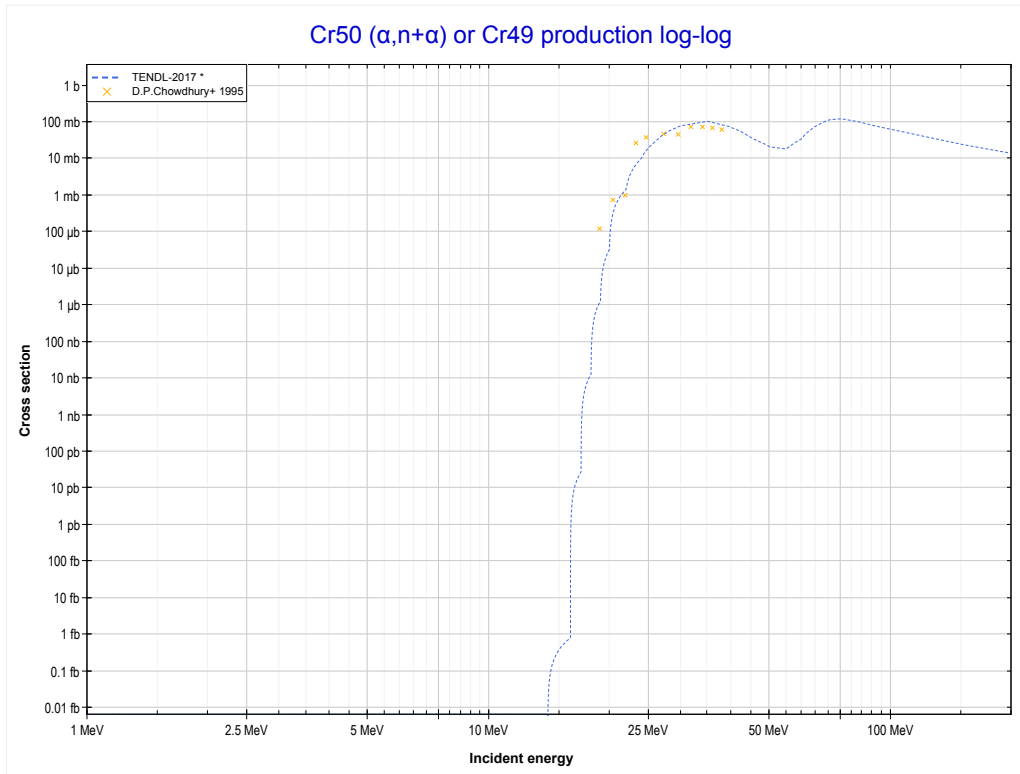
Reaction	Q-Value
Cr50(α,n)Fe53	-4961.40 keV

<< 22-Ti-49	24-Cr-50	25-Mn-55 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Fe52 production)	MT22 ($\alpha, n+\alpha$) >>



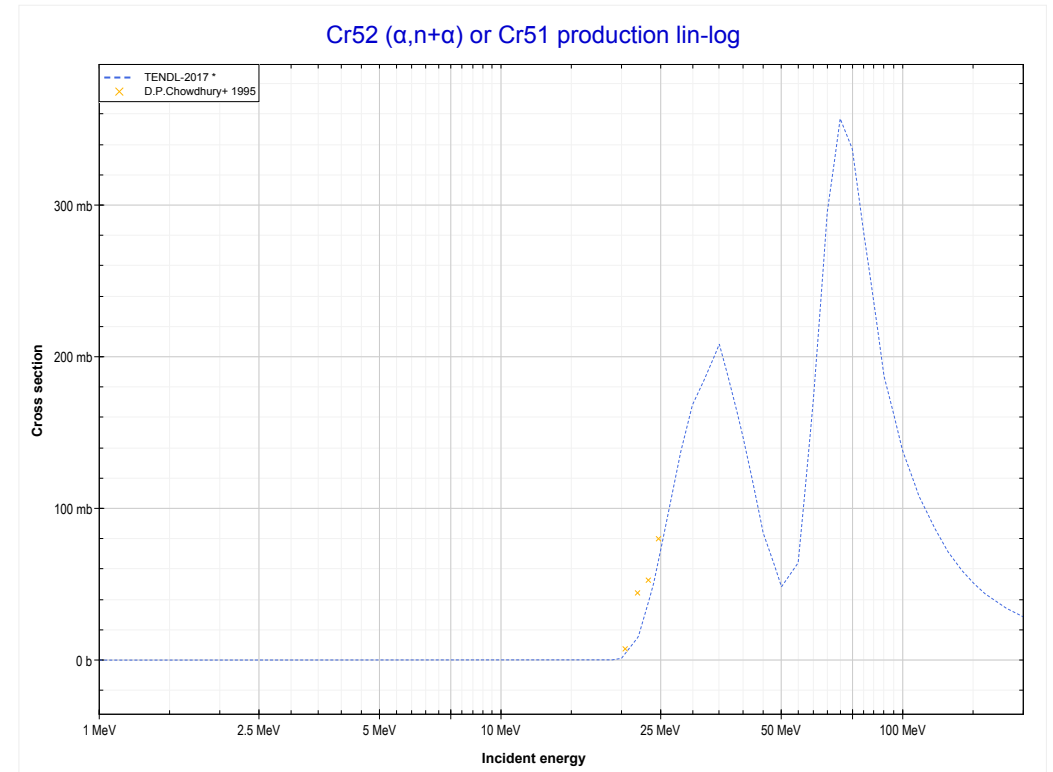
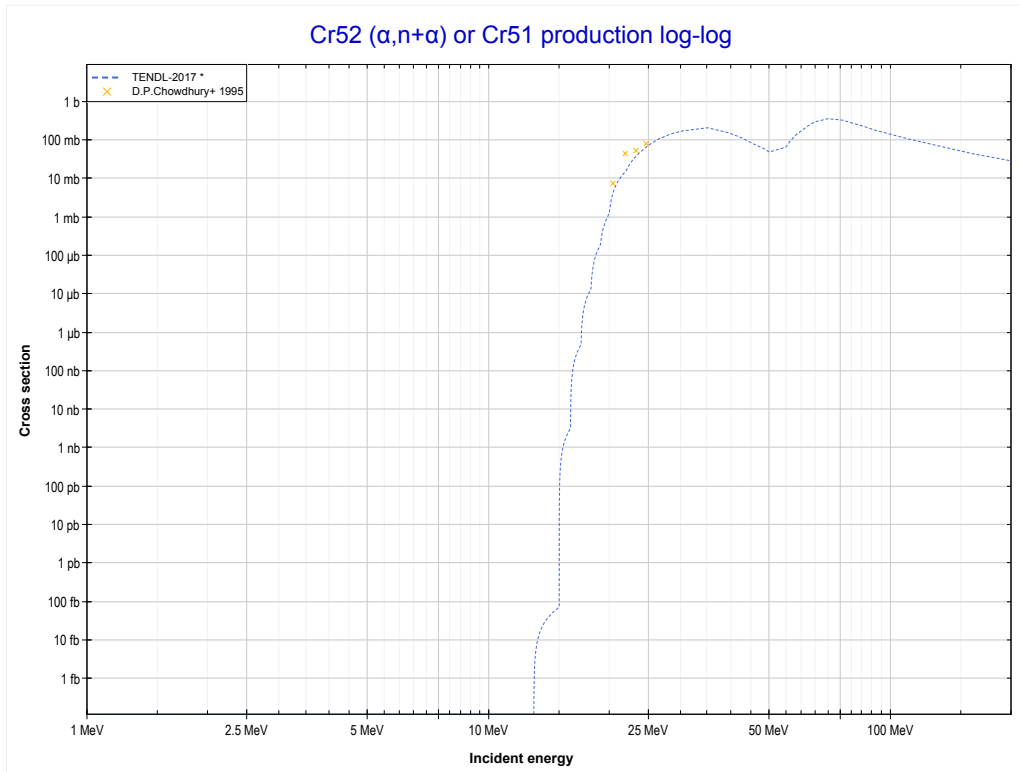
Reaction	Q-Value
Cr50($\alpha, 2n$)Fe52	-15647.42 keV

<< 21-Sc-45	24-Cr-50	24-Cr-52 >>
<< MT16 ($\alpha,2n$)	MT22 ($\alpha,n+\alpha$) or MT5 (Cr49 production)	24-Cr-52 MT22 ($\alpha,n+\alpha$) >>



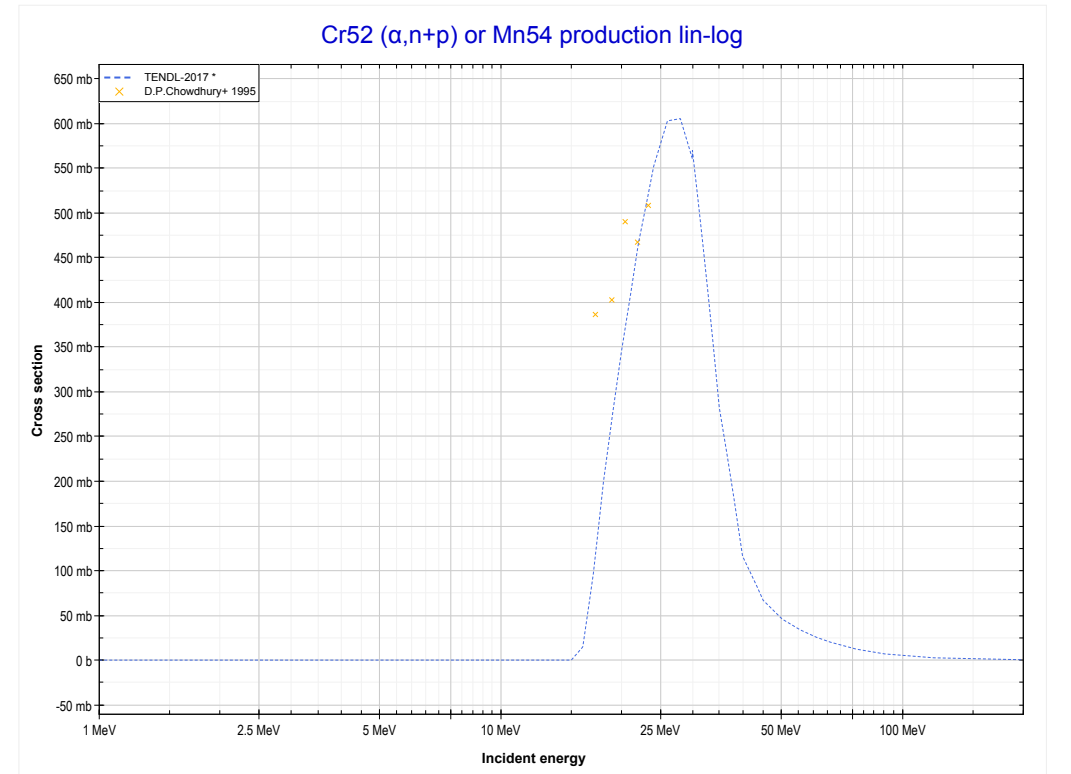
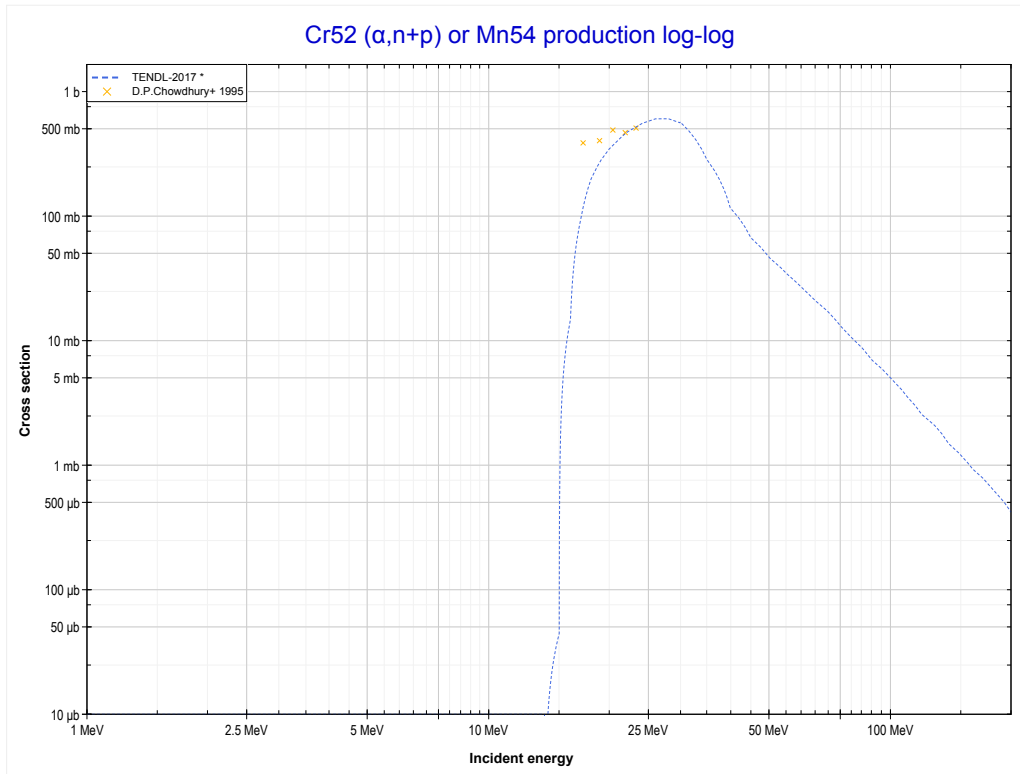
Reaction	Q-Value
Cr50($\alpha,n+\alpha$)Cr49	-13000.32 keV
Cr50($\alpha,d+t$)Cr49	-30589.61 keV
Cr50($\alpha,n+p+t$)Cr49	-32814.18 keV
Cr50($\alpha,2n+He3$)Cr49	-33577.93 keV
Cr50($\alpha,n+2d$)Cr49	-36846.84 keV
Cr50($\alpha,2n+p+d$)Cr49	-39071.41 keV
Cr50($\alpha,3n+2p$)Cr49	-41295.98 keV

<< 24-Cr-50	24-Cr-52	25-Mn-55 >>
<< 24-Cr-50 MT22 ($\alpha, n+\alpha$)	MT22 ($\alpha, n+\alpha$) or MT5 (Cr51 production)	MT28 ($\alpha, n+p$) >>



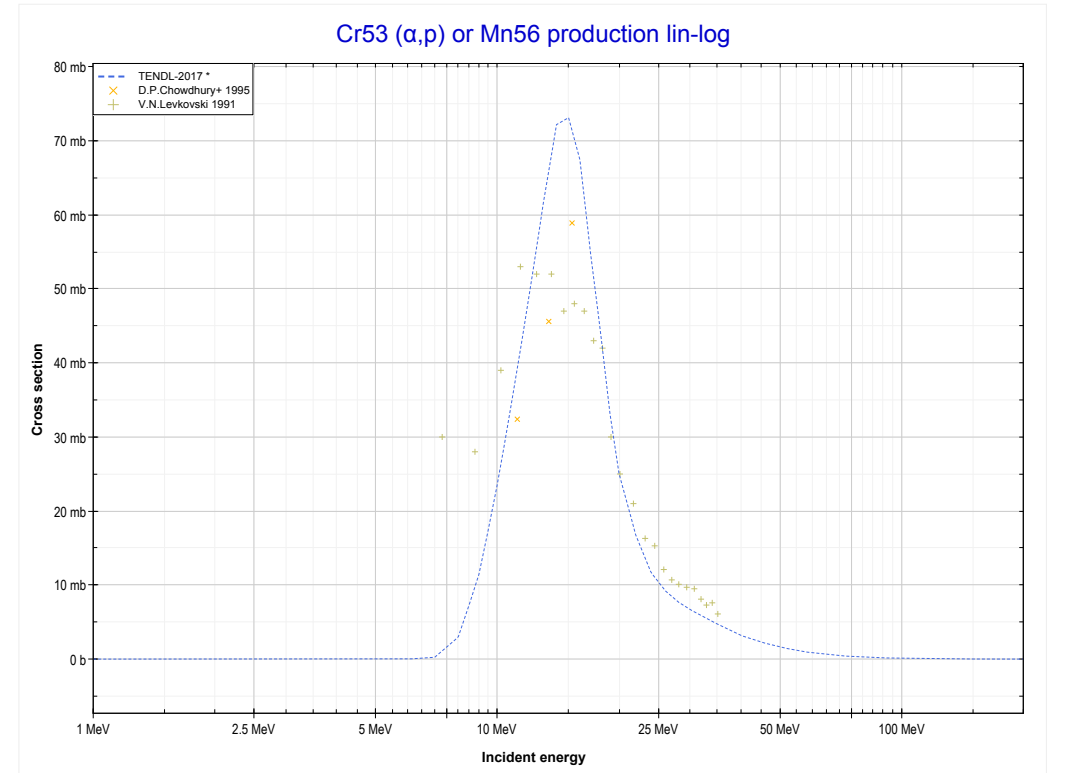
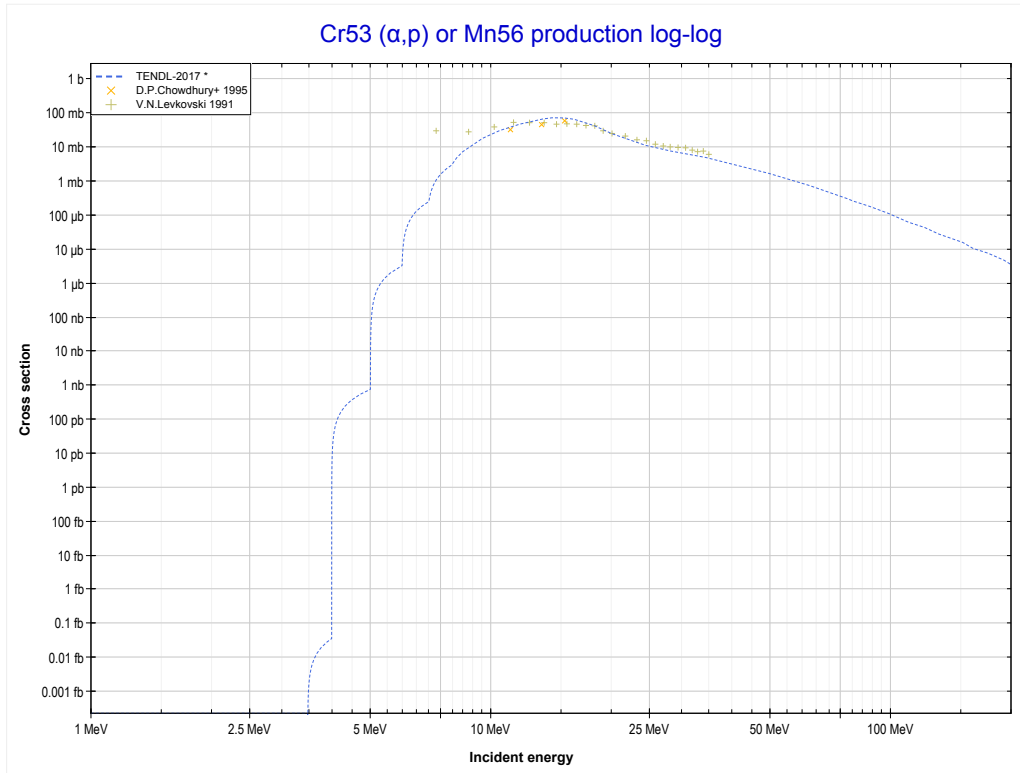
Reaction	Q-Value
Cr52($\alpha, n+\alpha$)Cr51	-12038.32 keV
Cr52($\alpha, d+t$)Cr51	-29627.61 keV
Cr52($\alpha, n+p+t$)Cr51	-31852.18 keV
Cr52($\alpha, 2n+He3$)Cr51	-32615.93 keV
Cr52($\alpha, n+2d$)Cr51	-35884.84 keV
Cr52($\alpha, 2n+p+d$)Cr51	-38109.41 keV
Cr52($\alpha, 3n+2p$)Cr51	-40333.98 keV

<< 18-Ar-40	24-Cr-52	26-Fe-54 >>
<< MT22 ($\alpha, n+\alpha$)	MT28 ($\alpha, n+p$) or MT5 (Mn54 production)	24-Cr-53 MT103 (α, p) >>



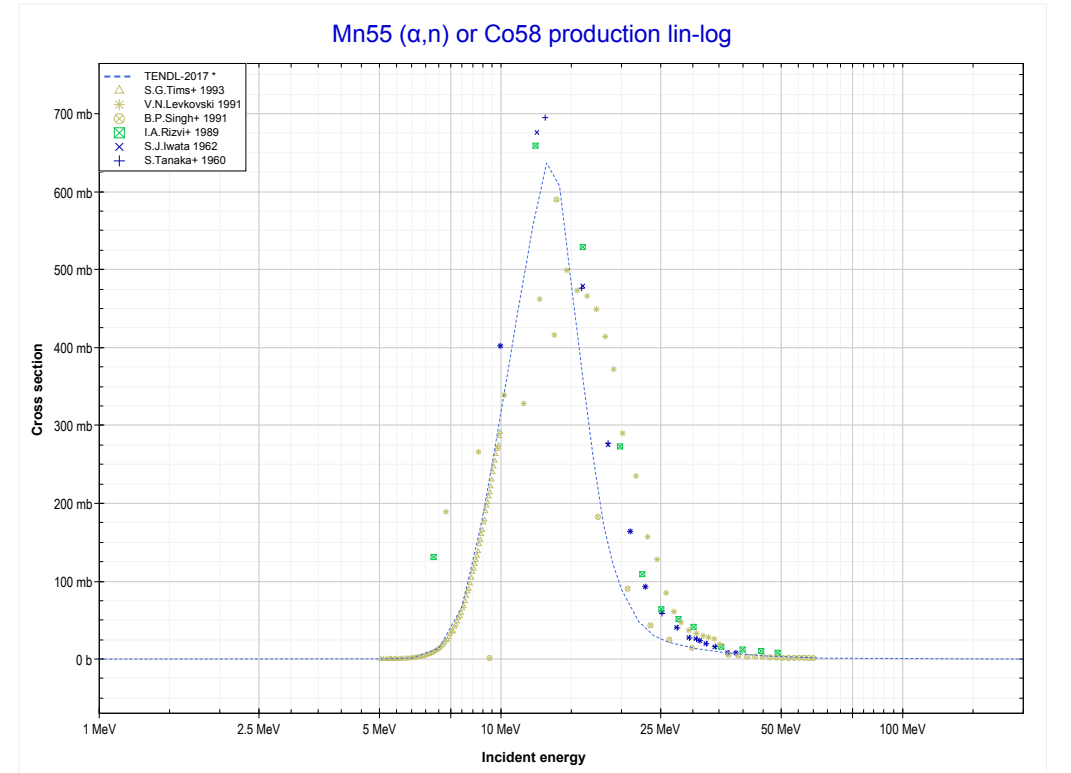
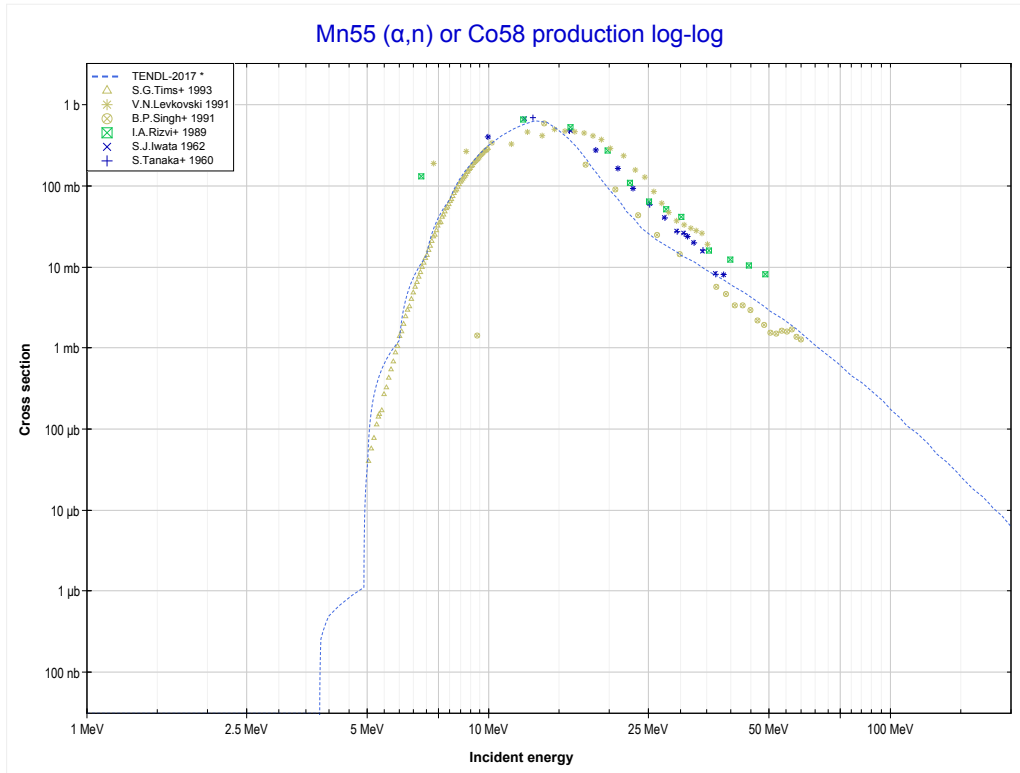
Reaction	Q-Value
Cr52(α, d)Mn54	-10572.41 keV
Cr52($\alpha, n+p$)Mn54	-12796.97 keV

<< 20-Ca-44	24-Cr-53	26-Fe-54 >>
<< 24-Cr-52 MT28 ($\alpha, n+p$)	MT103 (α, p) or MT5 (Mn56 production)	25-Mn-55 MT4 (α, n) >>



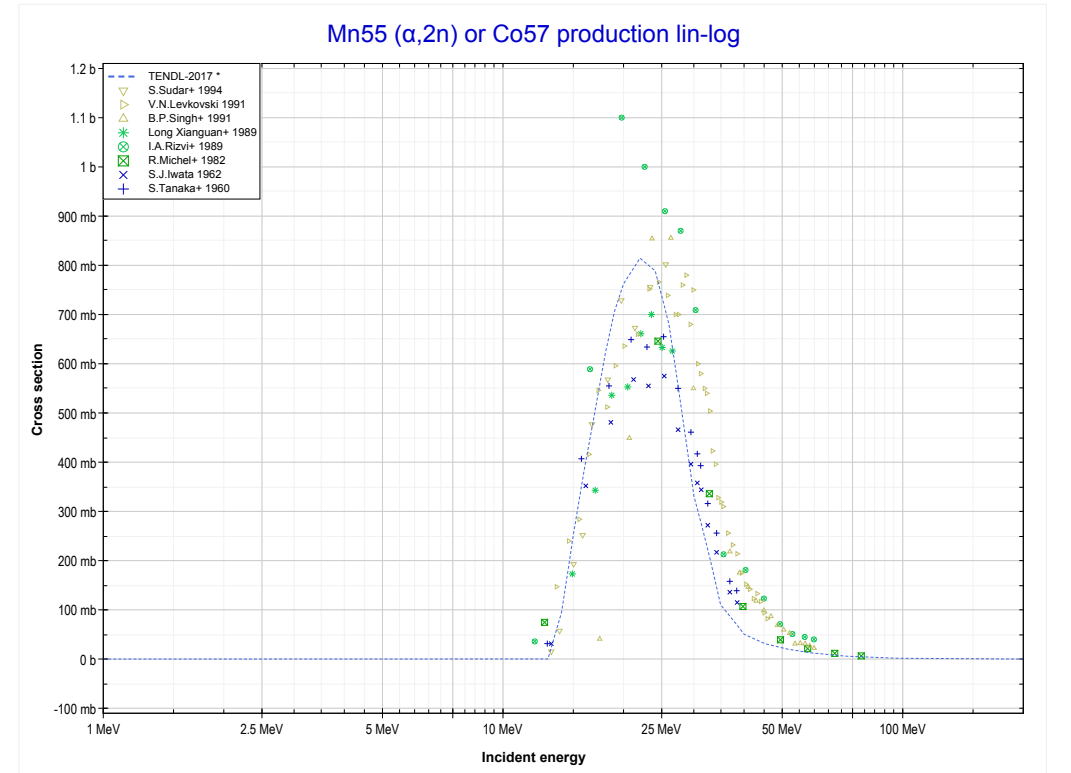
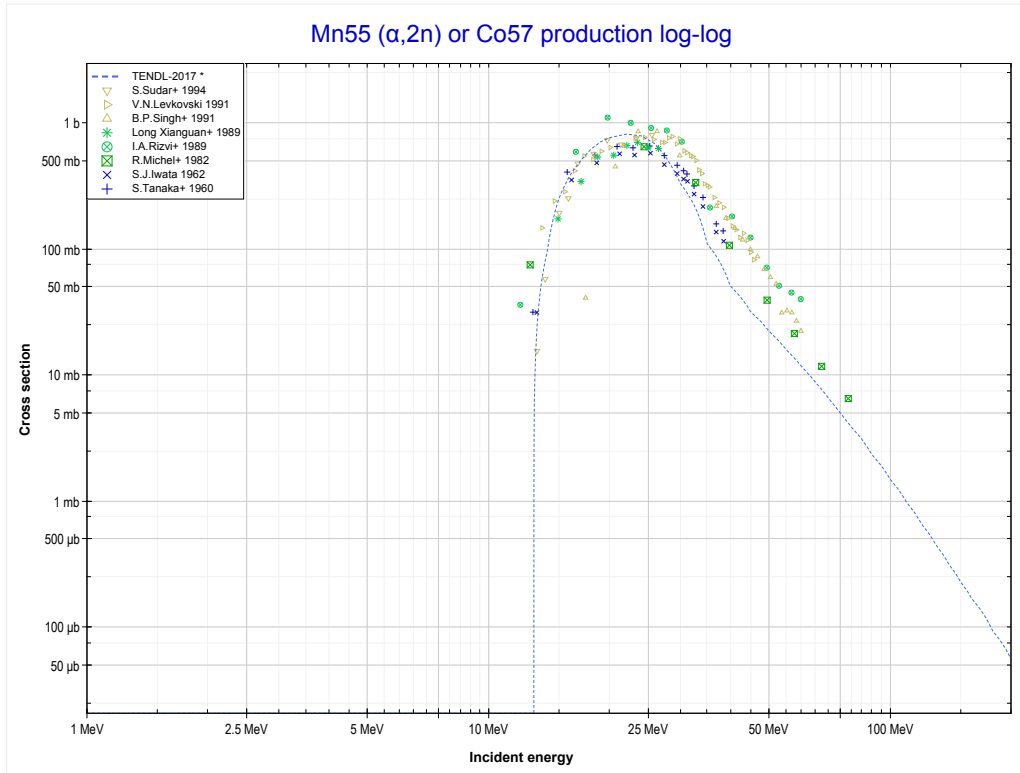
Reaction	Q-Value
Cr53(α, p)Mn56	-3239.15 keV

<< 24-Cr-50	25-Mn-55	26-Fe-54 >>
<< 24-Cr-53 MT103 (α,p)	MT4 (α,n) or MT5 (Co58 production)	MT16 ($\alpha,2n$) >>



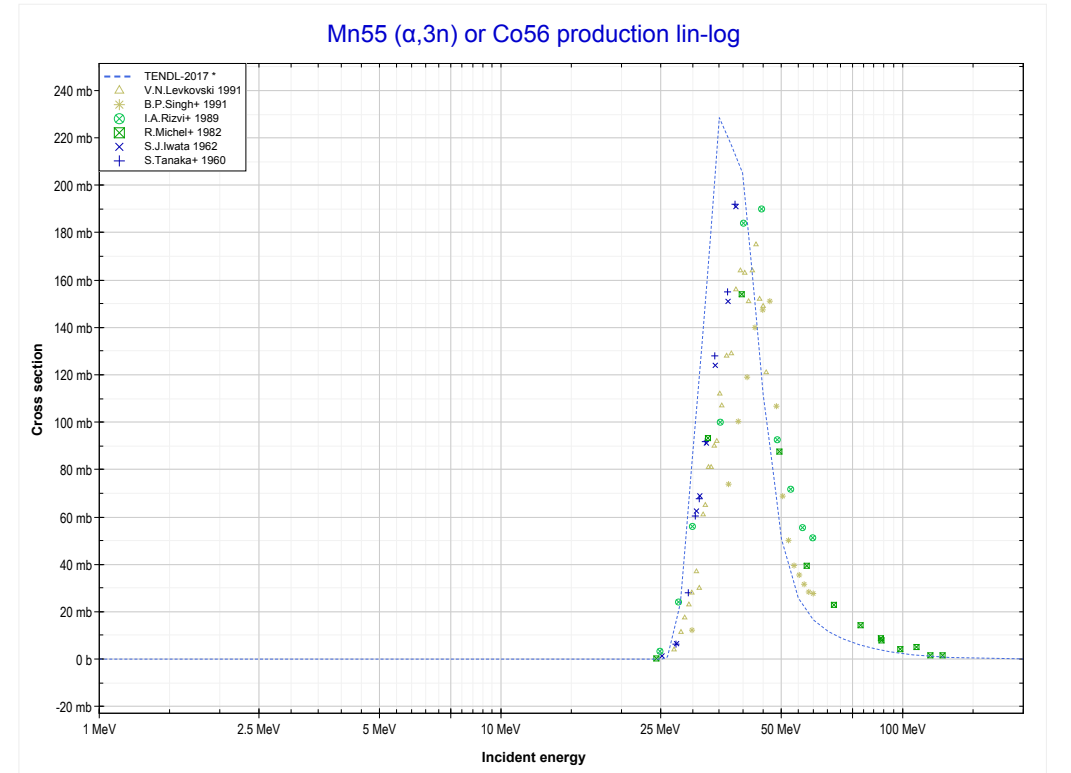
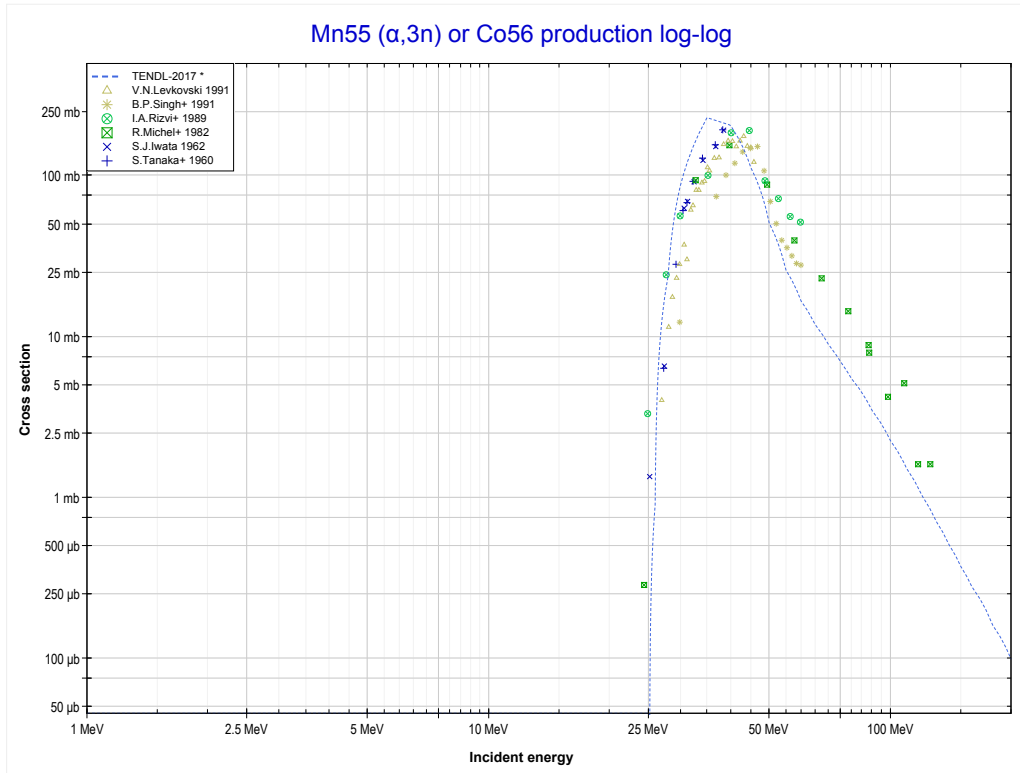
Reaction	Q-Value
Mn55(α,n)Co58	-3511.50 keV

<< 24-Cr-50	25-Mn-55	26-Fe-54 >>
<< MT4 (α,n)	MT16 ($\alpha,2n$) or MT5 (Co57 production)	MT17 ($\alpha,3n$) >>



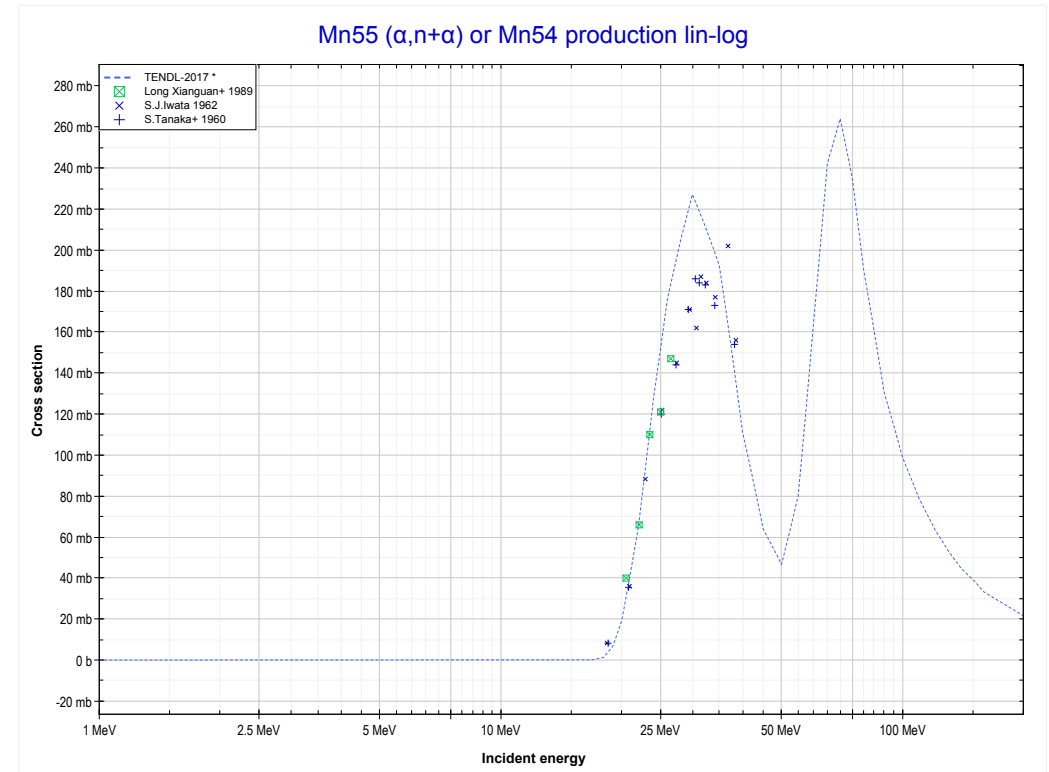
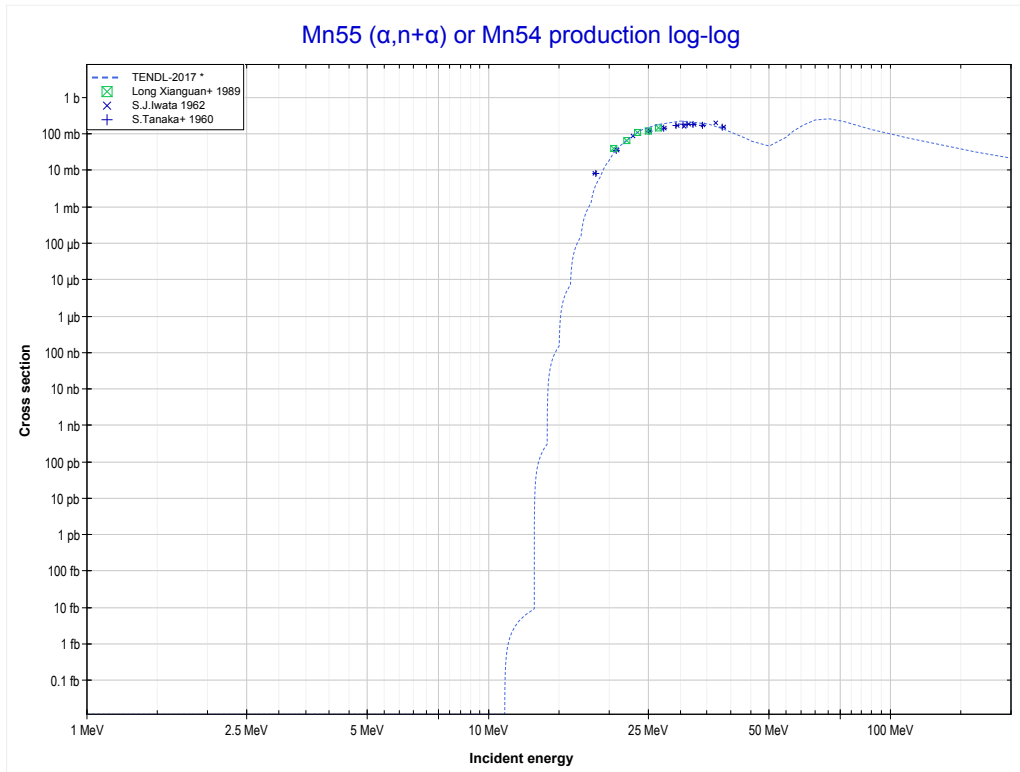
Reaction	Q-Value
Mn55($\alpha,2n$)Co57	-12084.52 keV

<< 23-V-51	25-Mn-55	26-Fe-56 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Co56 production)	MT22 ($\alpha,n+\alpha$) >>



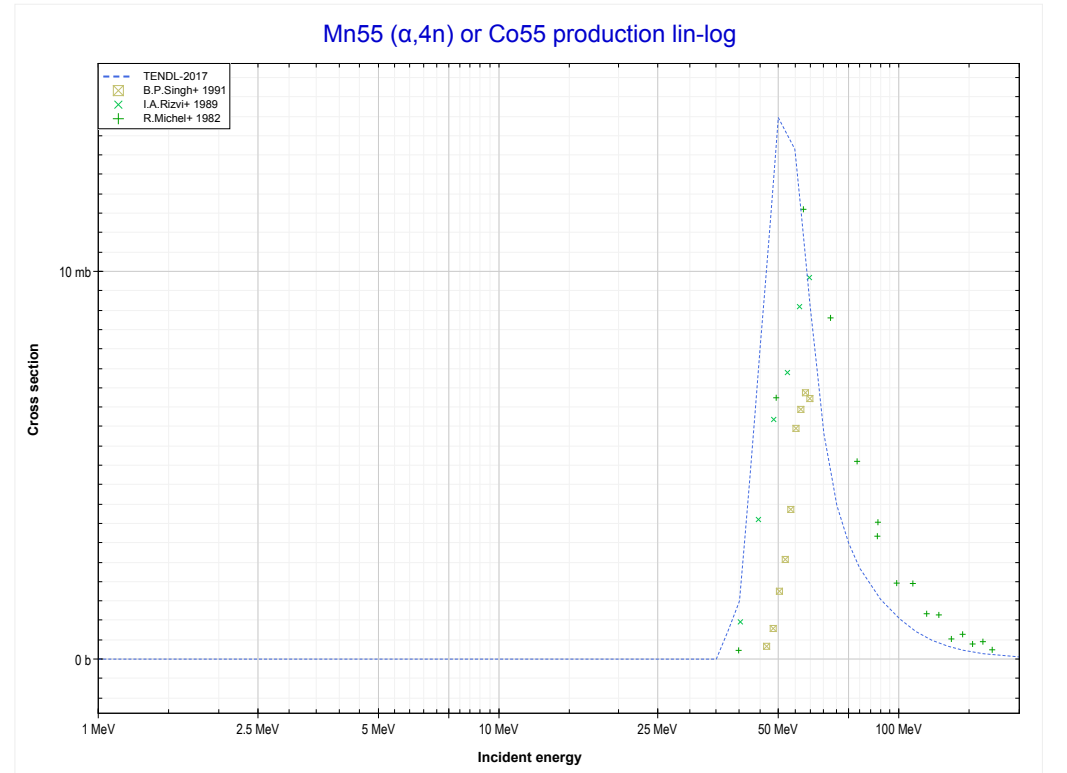
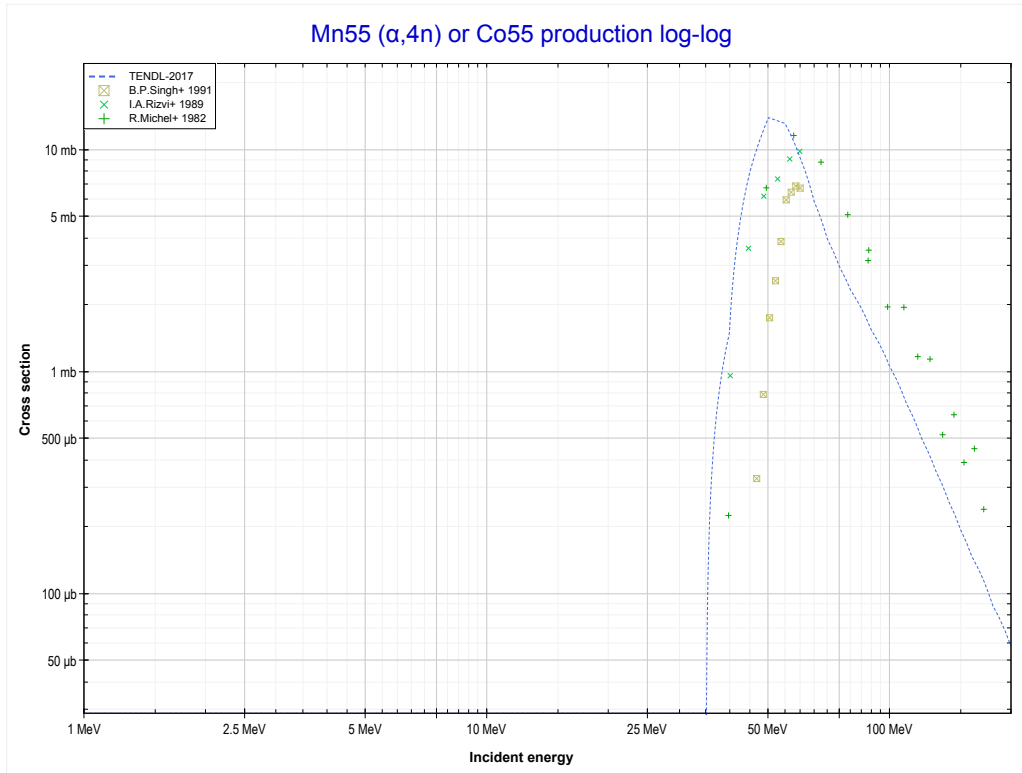
Reaction	Q-Value
Mn55($\alpha,3n$)Co56	-23460.94 keV

<< 24-Cr-52	25-Mn-55	26-Fe-54 >>
<< MT17 ($\alpha,3n$)	MT22 ($\alpha,n+\alpha$) or MT5 (Mn54 production)	MT37 ($\alpha,4n$) >>



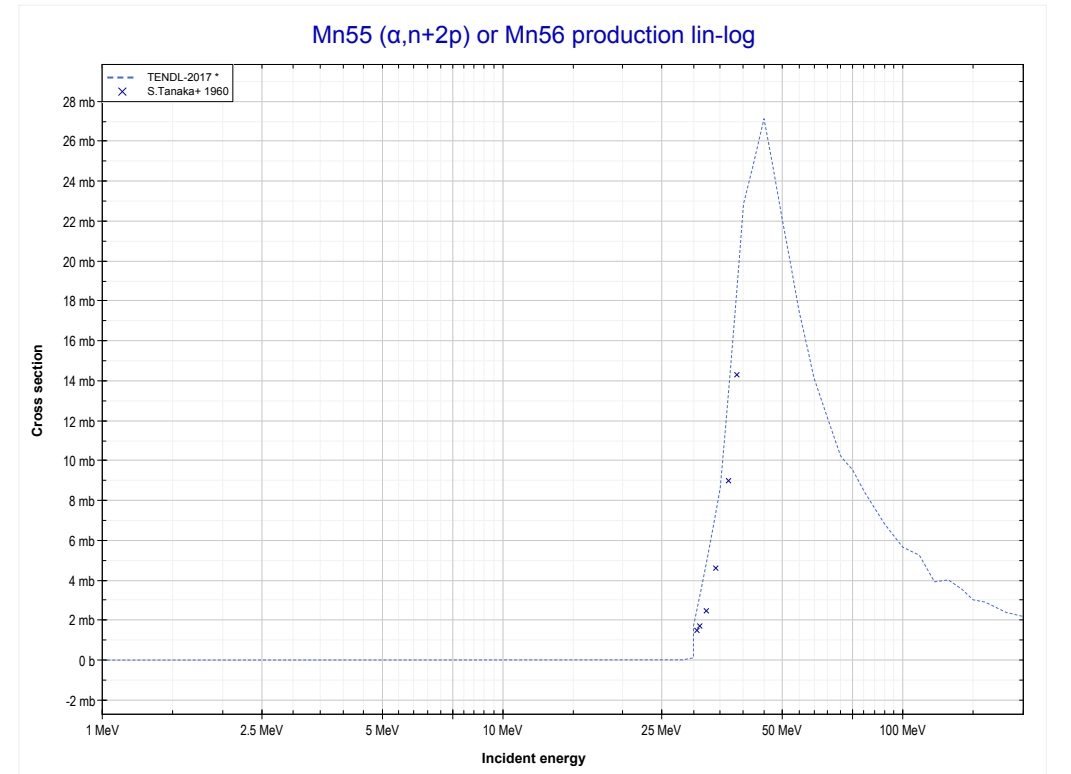
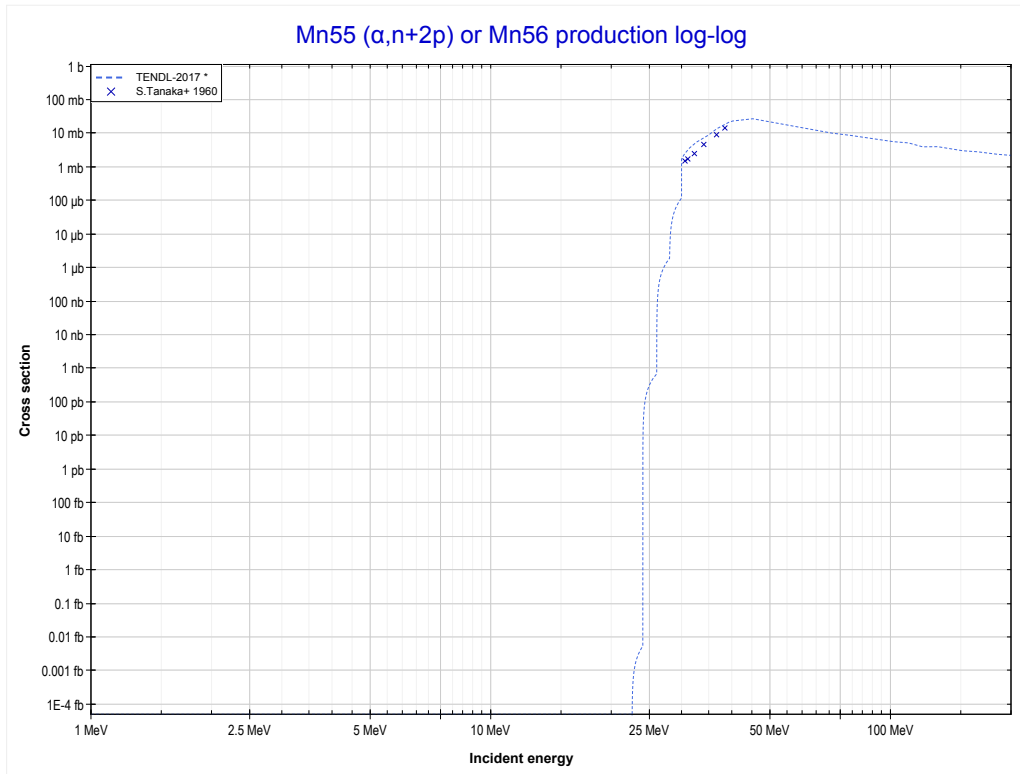
Reaction	Q-Value
Mn55($\alpha,n+\alpha$)Mn54	-10226.52 keV
Mn55($\alpha,d+t$)Mn54	-27815.81 keV
Mn55($\alpha,n+p+t$)Mn54	-30040.38 keV
Mn55($\alpha,2n+He3$)Mn54	-30804.13 keV
Mn55($\alpha,n+2d$)Mn54	-34073.04 keV
Mn55($\alpha,2n+p+d$)Mn54	-36297.61 keV
Mn55($\alpha,3n+2p$)Mn54	-38522.18 keV

<< 22-Ti-48	25-Mn-55	26-Fe-56 >>
<< MT22 ($\alpha, n + \alpha$)	MT37 ($\alpha, 4n$) or MT5 (Co55 production)	MT44 ($\alpha, n + 2p$) >>



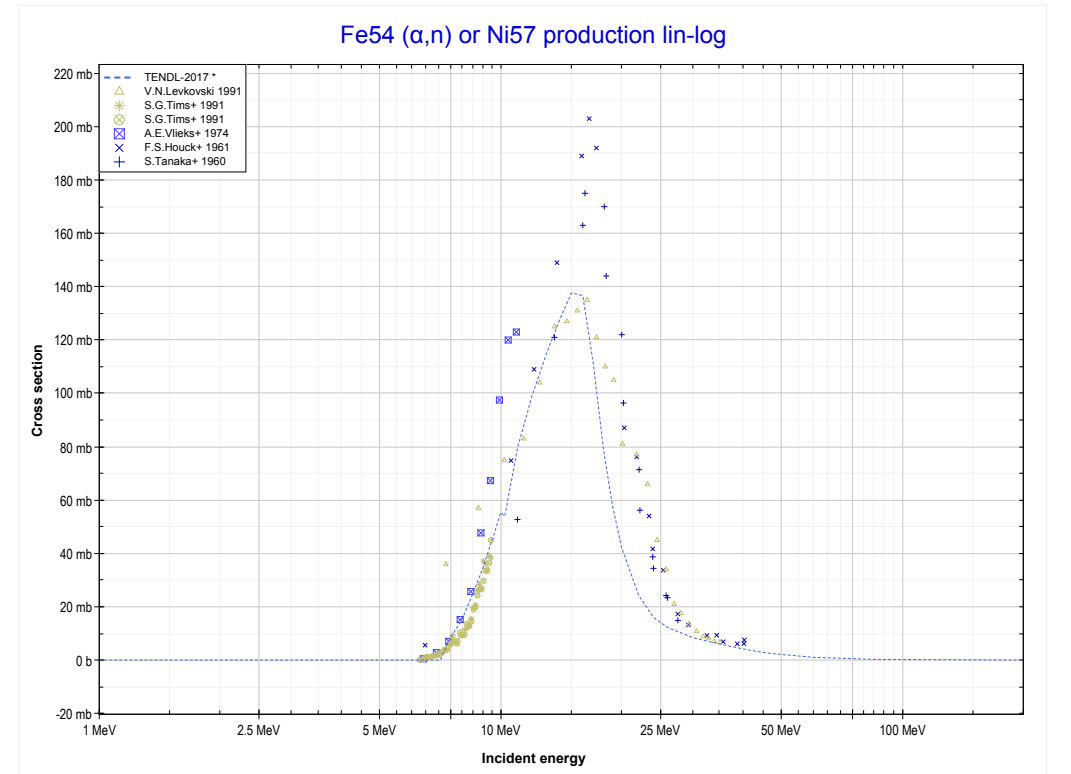
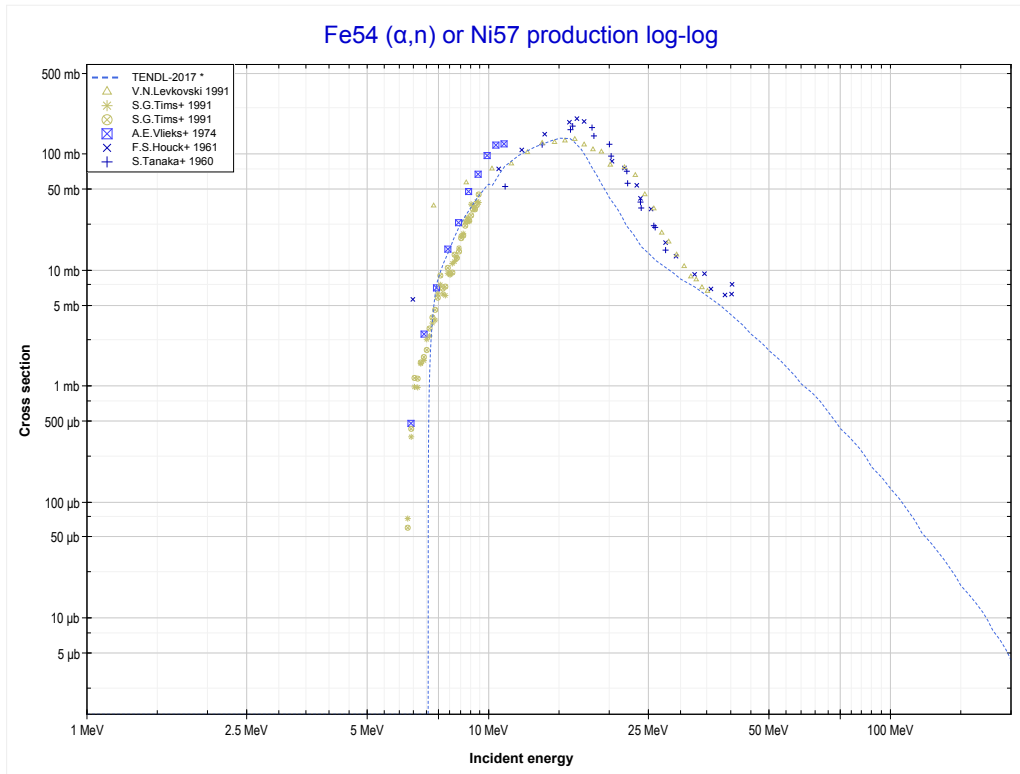
Reaction	Q-Value
Mn55($\alpha, 4n$)Co55	-33542.75 keV

<< 21-Sc-45	25-Mn-55	26-Fe-54 >>
<< MT37 ($\alpha,4n$)	MT44 ($\alpha,n+2p$) or MT5 (Mn56 production)	26-Fe-54 MT4 (α,n) >>



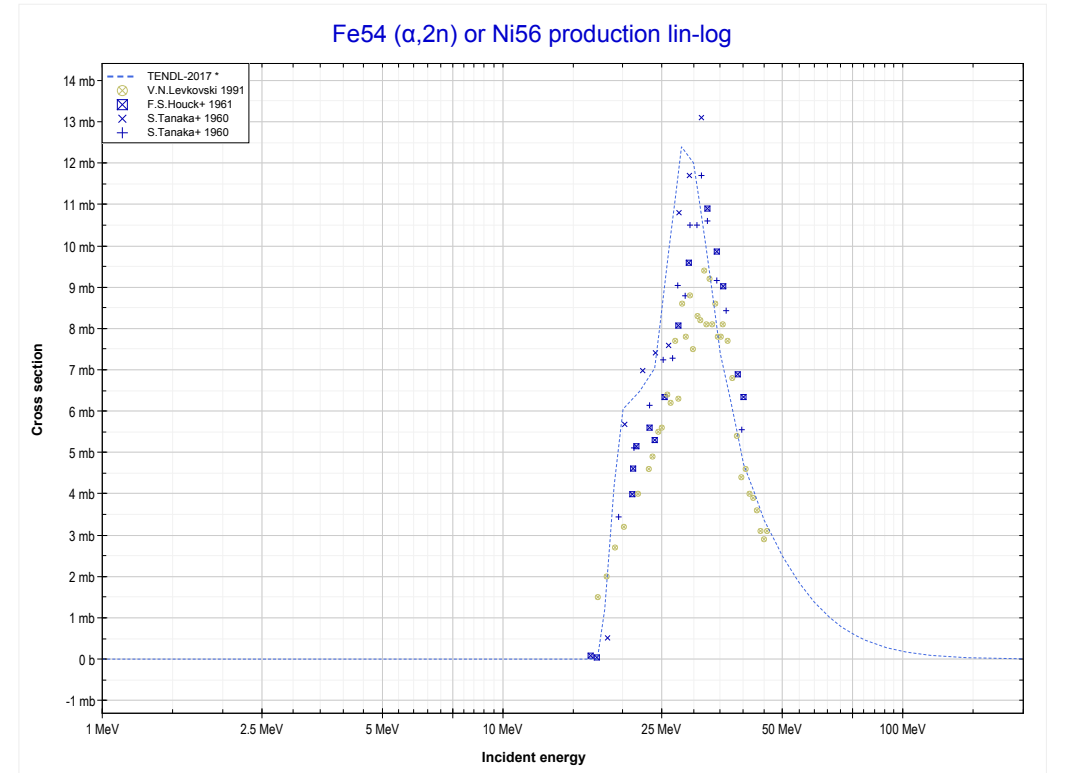
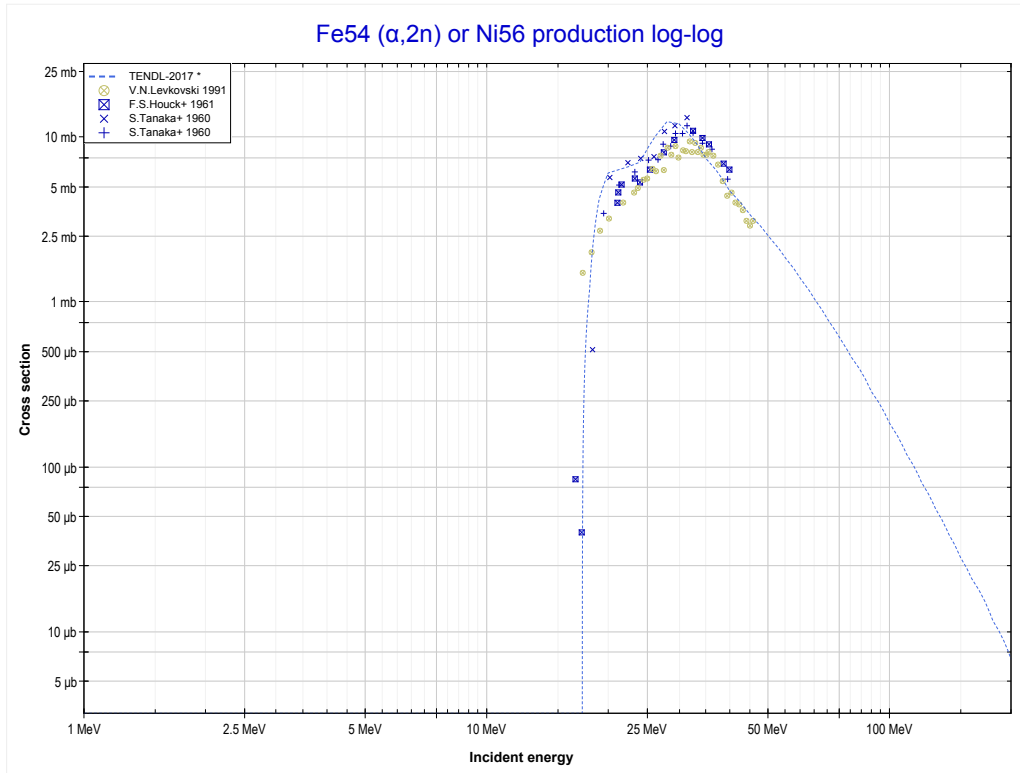
Reaction	Q-Value
Mn55($\alpha,He3$)Mn56	-13307.20 keV
Mn55($\alpha,p+d$)Mn56	-18800.68 keV
Mn55($\alpha,n+2p$)Mn56	-21025.24 keV

<< 25-Mn-55	26-Fe-54	27-Co-59 >>
<< 25-Mn-55 MT44 ($\alpha, n+2p$)	MT4 (α, n) or MT5 (Ni57 production)	MT16 ($\alpha, 2n$) >>



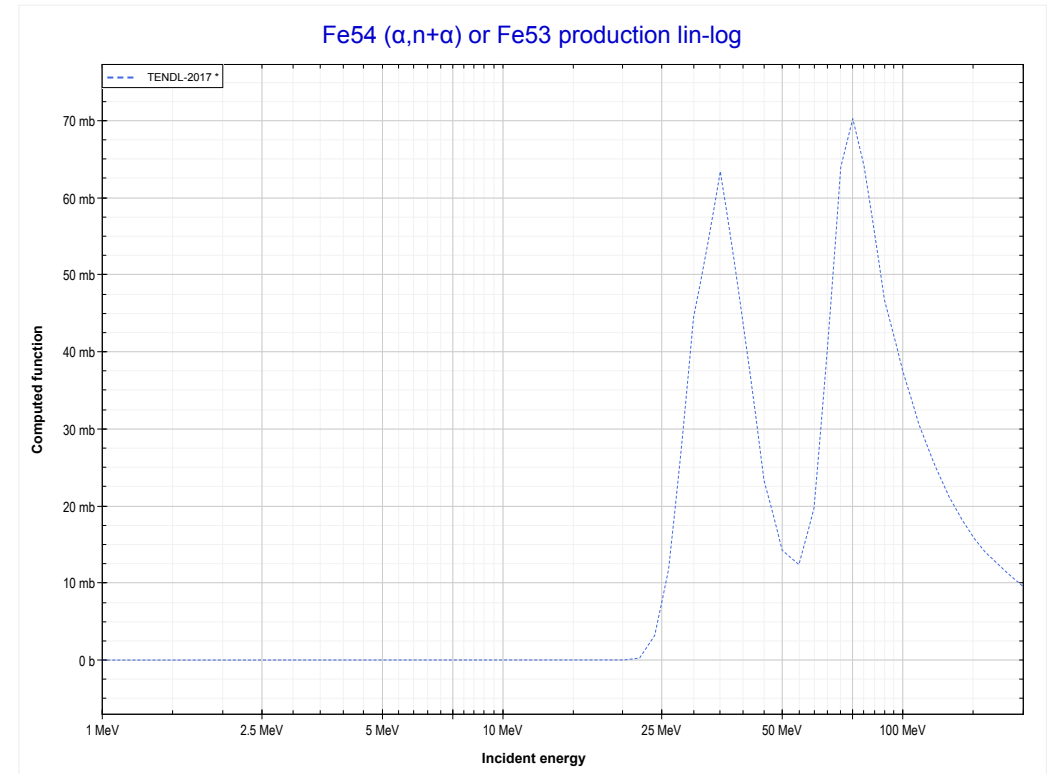
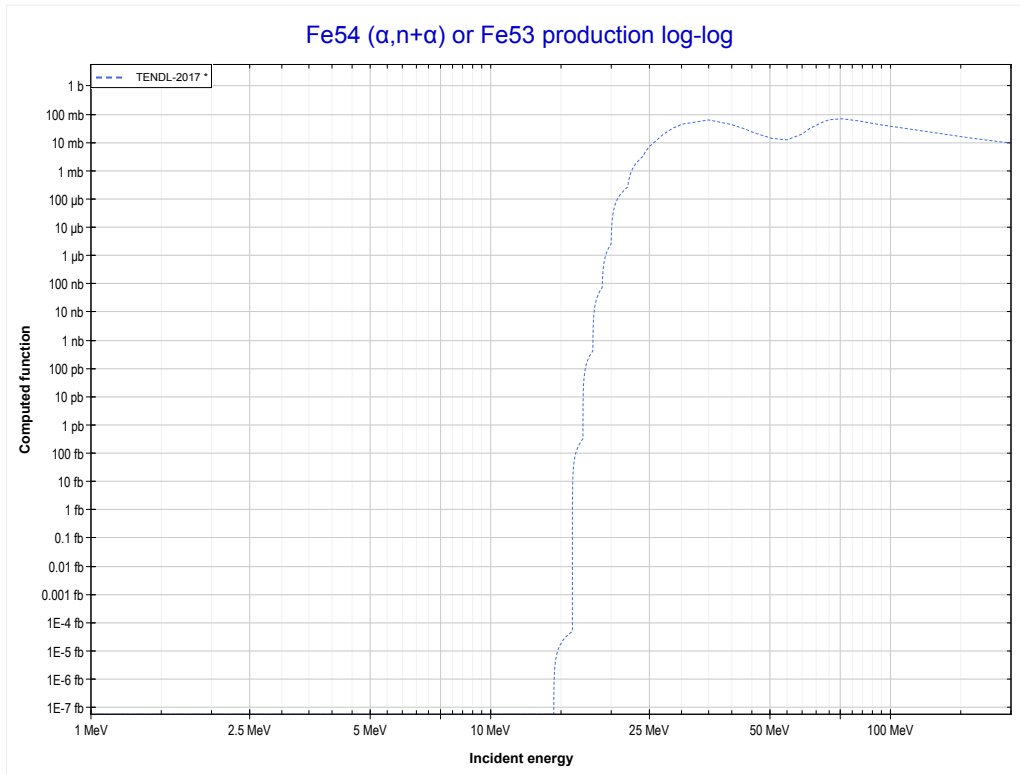
Reaction	Q-Value
$^{54}\text{Fe}(\alpha, n)^{57}\text{Ni}$	-5817.10 keV

<< 25-Mn-55	26-Fe-54	27-Co-59 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Ni56 production)	MT22 ($\alpha, n+\alpha$) >>



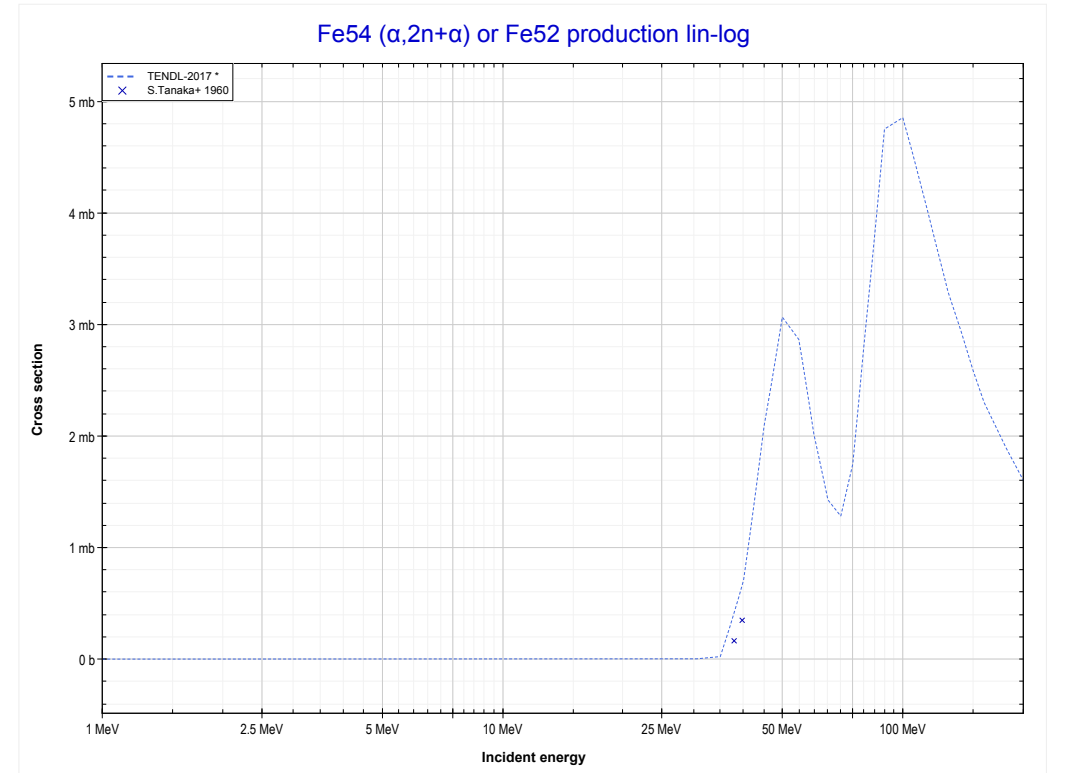
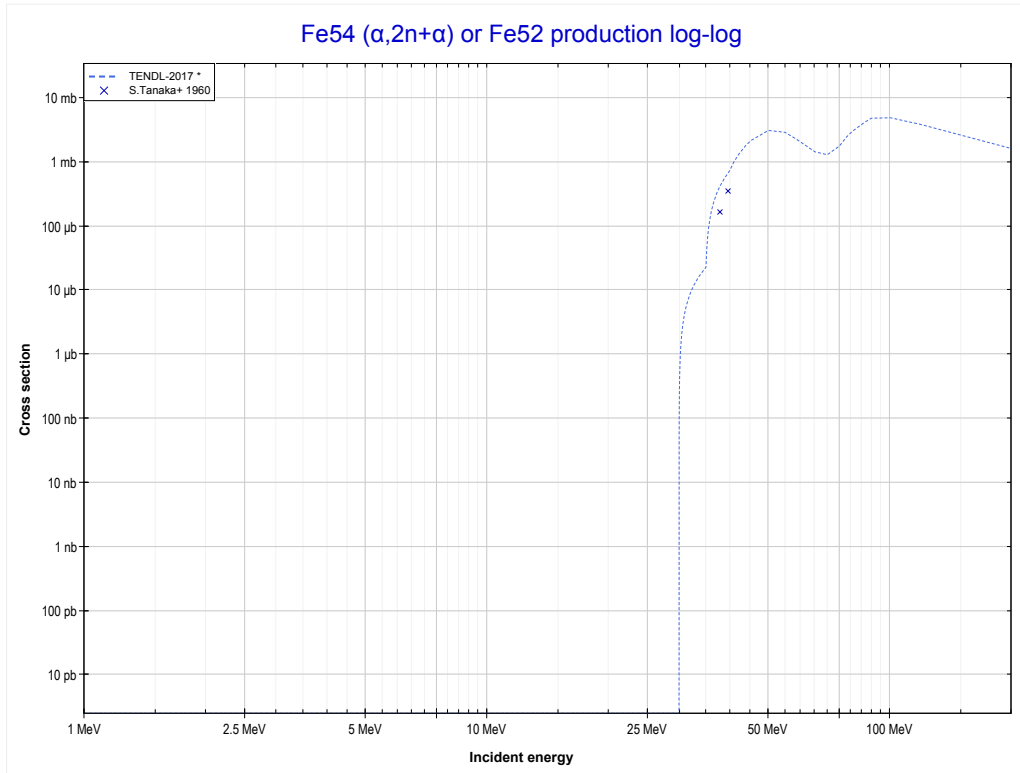
Reaction	Q-Value
Fe54($\alpha, 2n$)Ni56	-16064.72 keV

<< 25-Mn-55	26-Fe-54	27-Co-59 >>
<< MT16 ($\alpha,2n$)	MT22 ($\alpha,n+\alpha$) or MT5 (Fe53 production)	MT24 ($\alpha,2n+\alpha$) >>



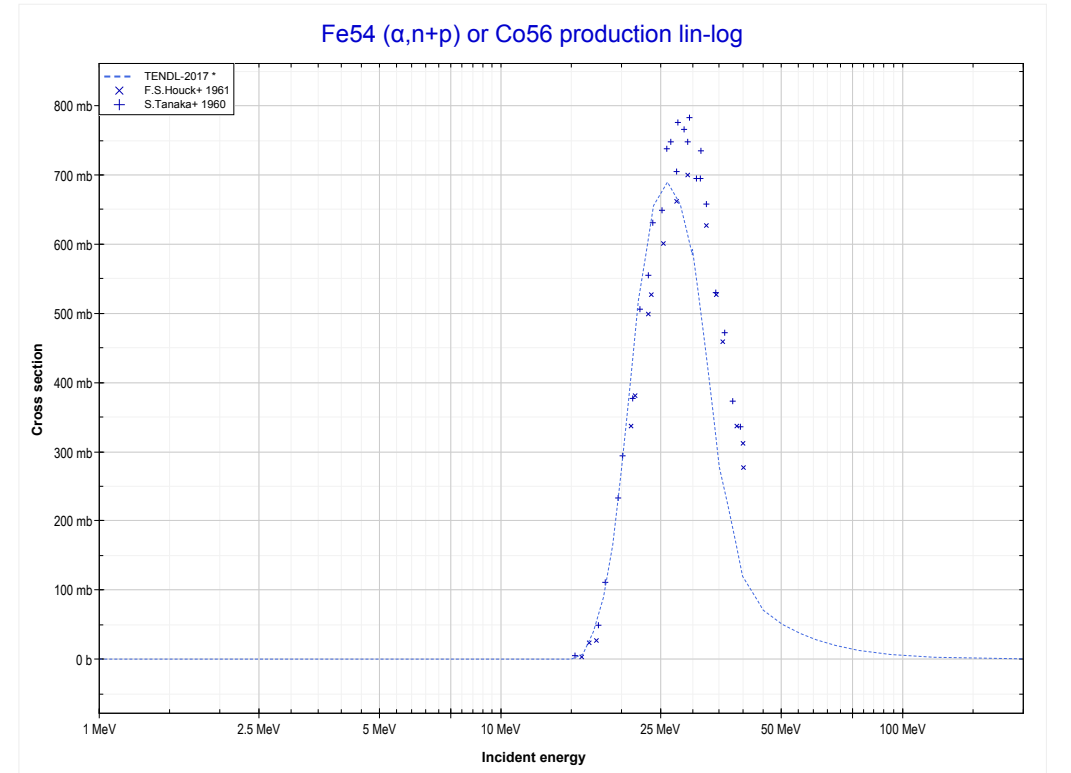
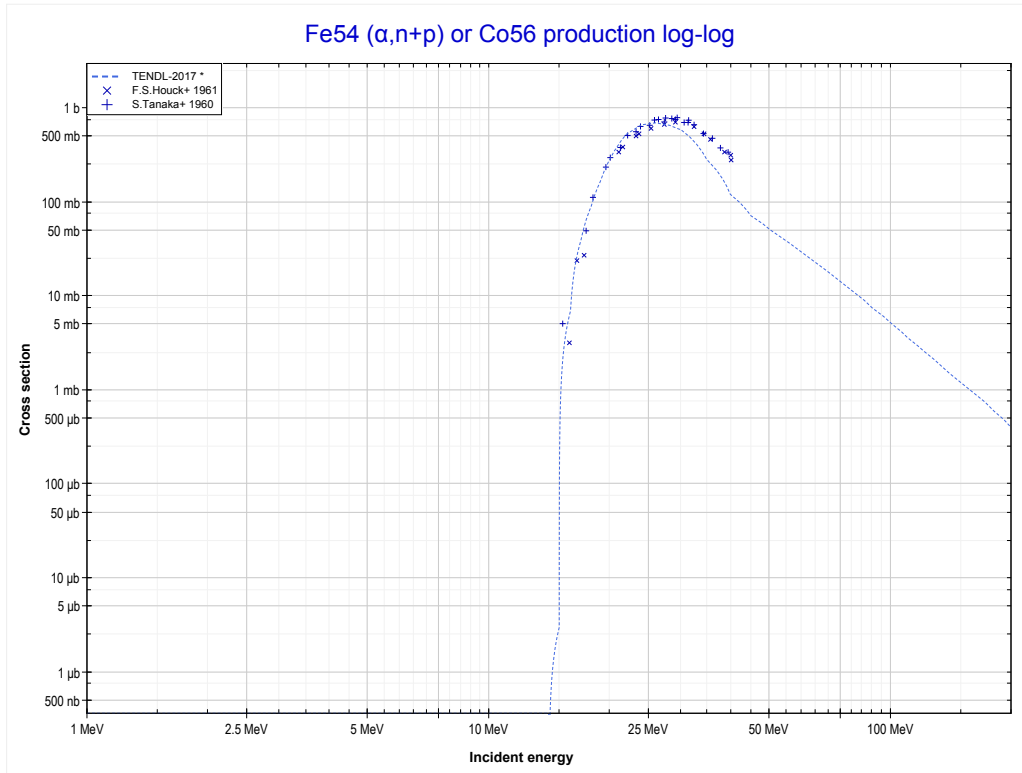
Reaction	Q-Value
Fe54($\alpha,n+\alpha$)Fe53	-13378.52 keV
Fe54($\alpha,d+t$)Fe53	-30967.81 keV
Fe54($\alpha,n+p+t$)Fe53	-33192.38 keV
Fe54($\alpha,2n+He3$)Fe53	-33956.13 keV
Fe54($\alpha,n+2d$)Fe53	-37225.04 keV
Fe54($\alpha,2n+p+d$)Fe53	-39449.61 keV
Fe54($\alpha,3n+2p$)Fe53	-41674.18 keV

<< 23-V-51	26-Fe-54	27-Co-59 >>
<< MT22 ($\alpha, n+\alpha$)	MT24 ($\alpha, 2n+\alpha$) or MT5 (Fe52 production)	MT28 ($\alpha, n+p$) >>



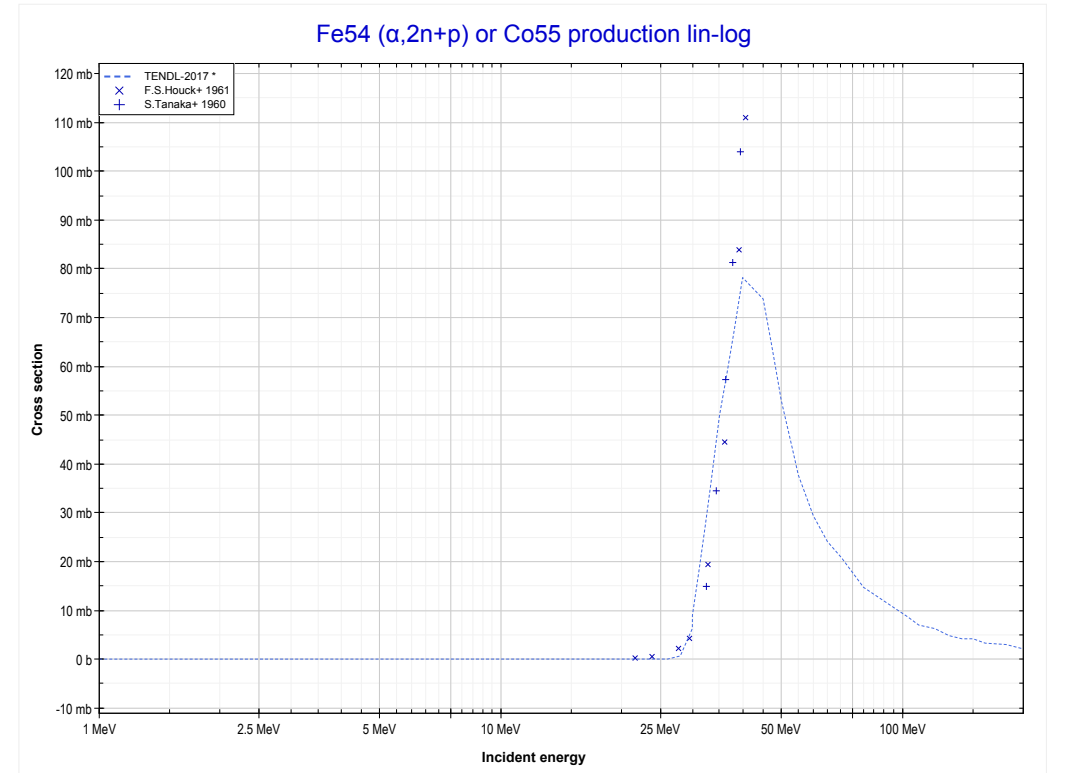
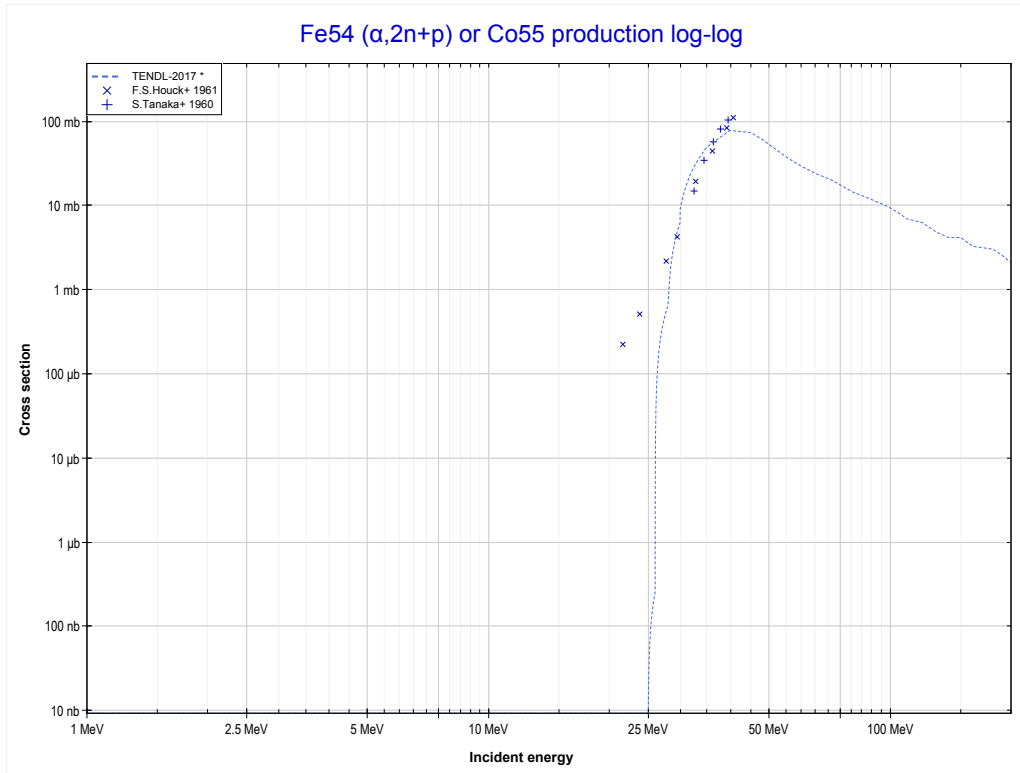
Reaction	Q-Value
Fe54($\alpha, 2n+\alpha$)Fe52	-24064.53 keV
Fe54($\alpha, 2t$)Fe52	-35396.60 keV
Fe54($\alpha, n+d+t$)Fe52	-41653.83 keV
Fe54($\alpha, 2n+p+t$)Fe52	-43878.40 keV
Fe54($\alpha, 3n+He3$)Fe52	-44642.15 keV
Fe54($\alpha, 2n+2d$)Fe52	-47911.06 keV
Fe54($\alpha, 3n+p+d$)Fe52	-50135.63 keV
Fe54($\alpha, 4n+2p$)Fe52	-52360.19 keV

<< 24-Cr-52	26-Fe-54	26-Fe-56 >>
<< MT24 ($\alpha, 2n+\alpha$)	MT28 ($\alpha, n+p$) or MT5 (Co56 production)	MT41 ($\alpha, 2n+p$) >>



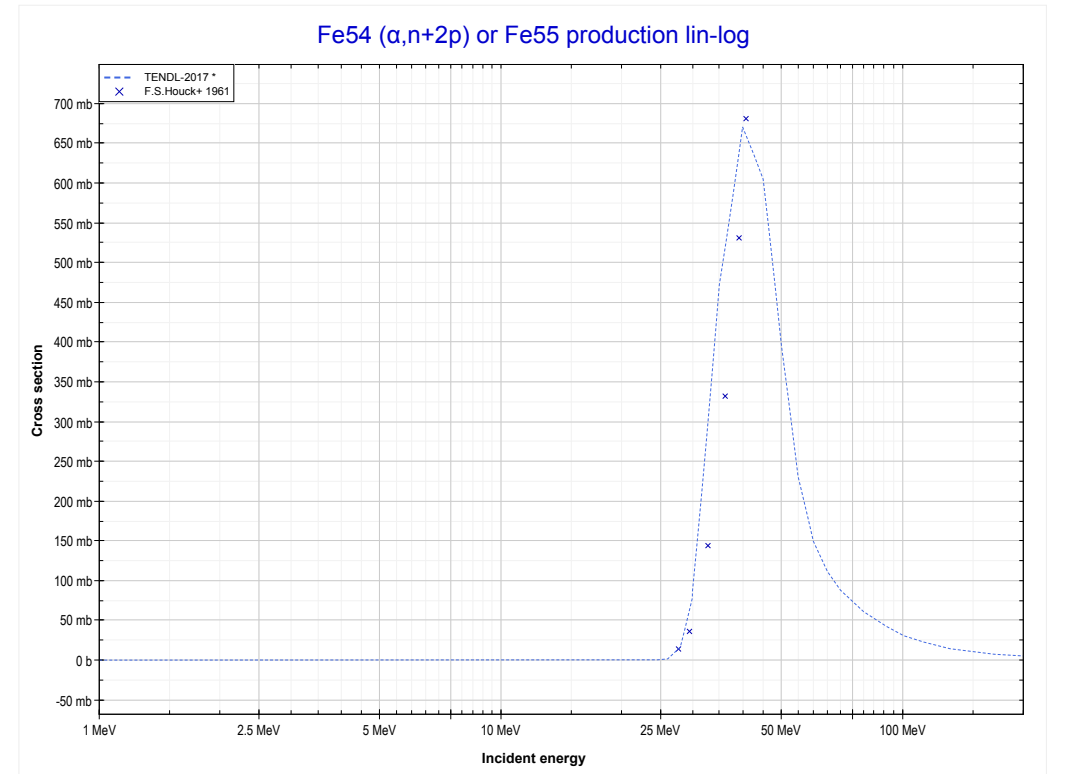
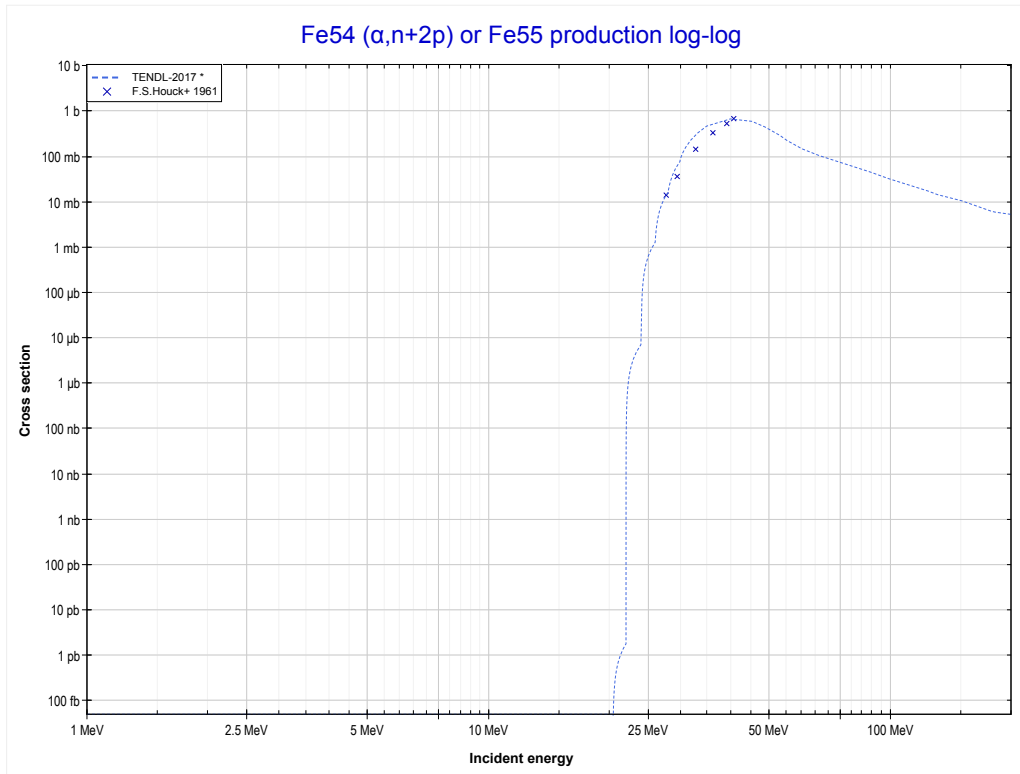
Reaction	Q-Value
Fe54(α, d)Co56	-10924.91 keV
Fe54($\alpha, n+p$)Co56	-13149.47 keV

<< 20-Ca-48	26-Fe-54	26-Fe-56 >>
<< MT28 ($\alpha, n+p$)	MT41 ($\alpha, 2n+p$) or MT5 (Co55 production)	MT44 ($\alpha, n+2p$) >>



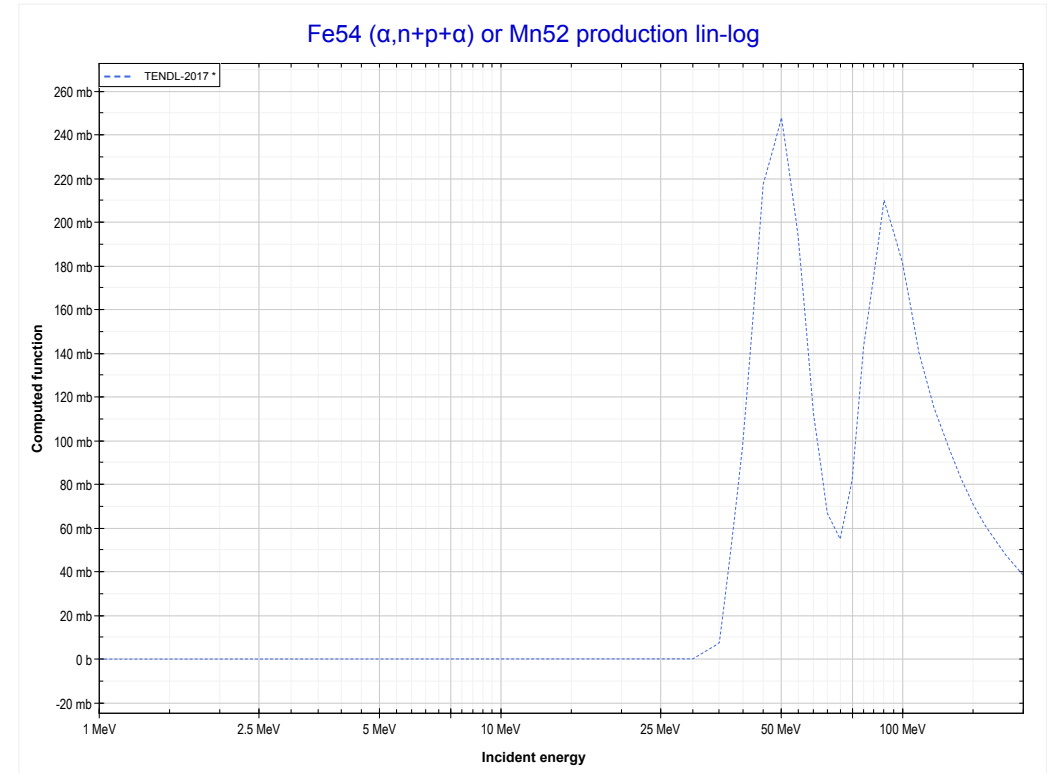
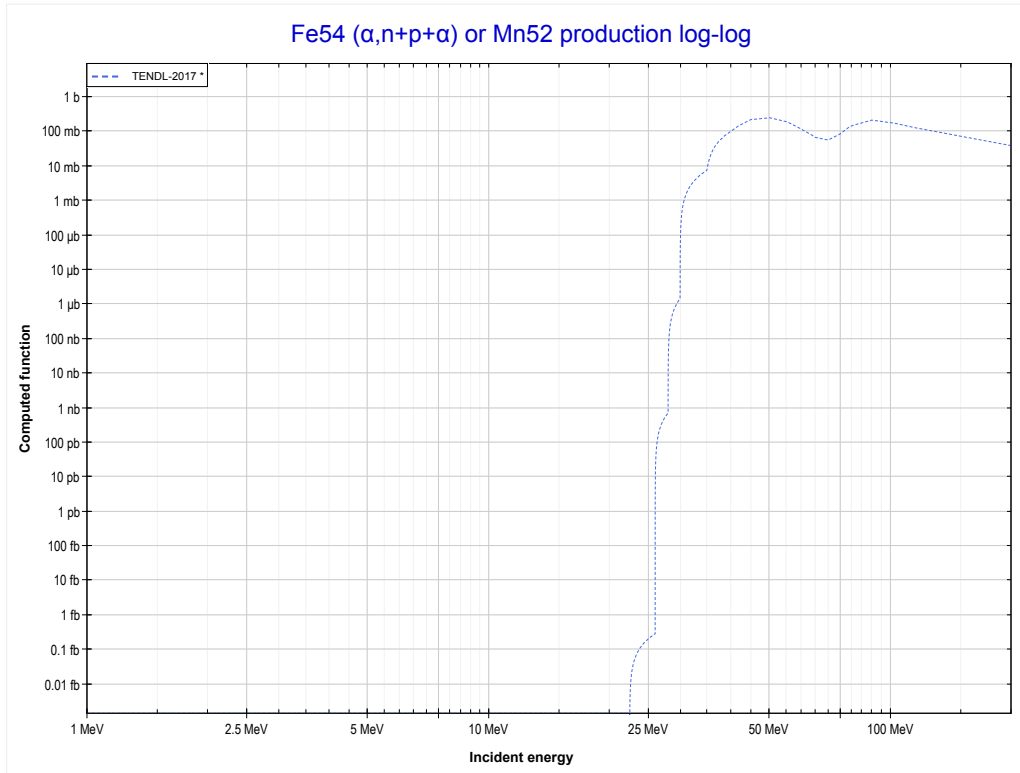
Reaction	Q-Value
$Fe54(\alpha, t)Co55$	-14749.49 keV
$Fe54(\alpha, n+d)Co55$	-21006.72 keV
$Fe54(\alpha, 2n+p)Co55$	-23231.29 keV

<< 25-Mn-55	26-Fe-54	30-Zn-64 >>
<< MT41 ($\alpha,2n+p$)	MT44 ($\alpha,n+2p$) or MT5 (Fe55 production)	MT45 ($\alpha,n+p+\alpha$) >>



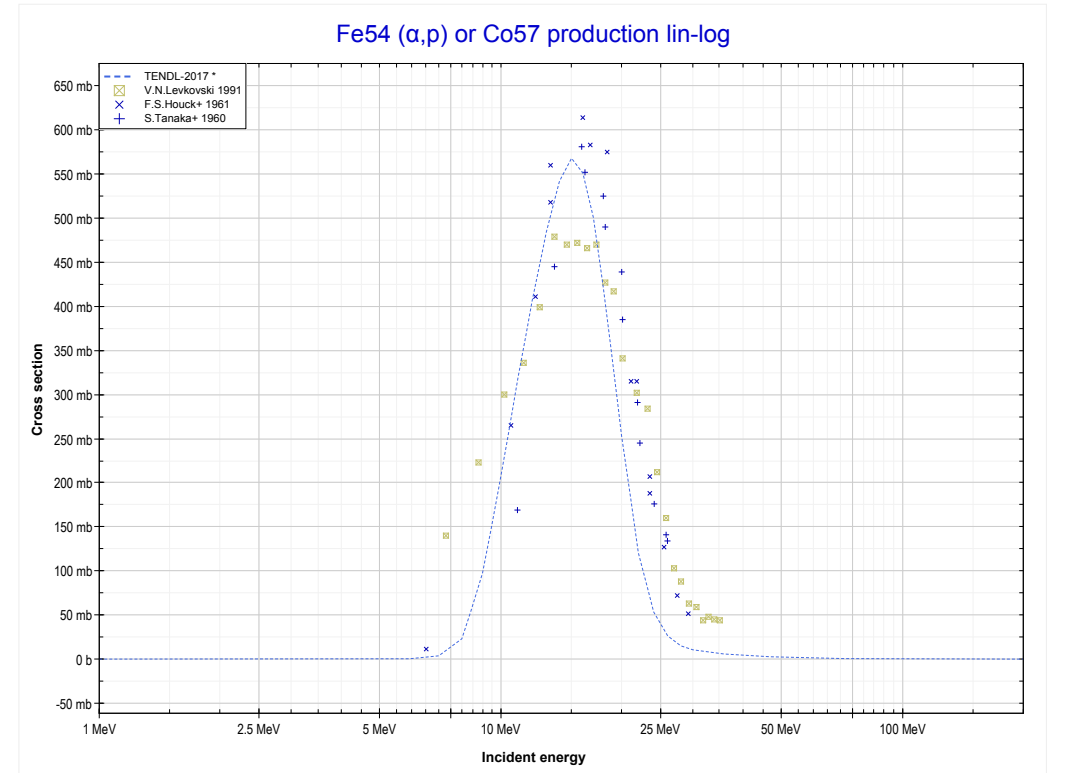
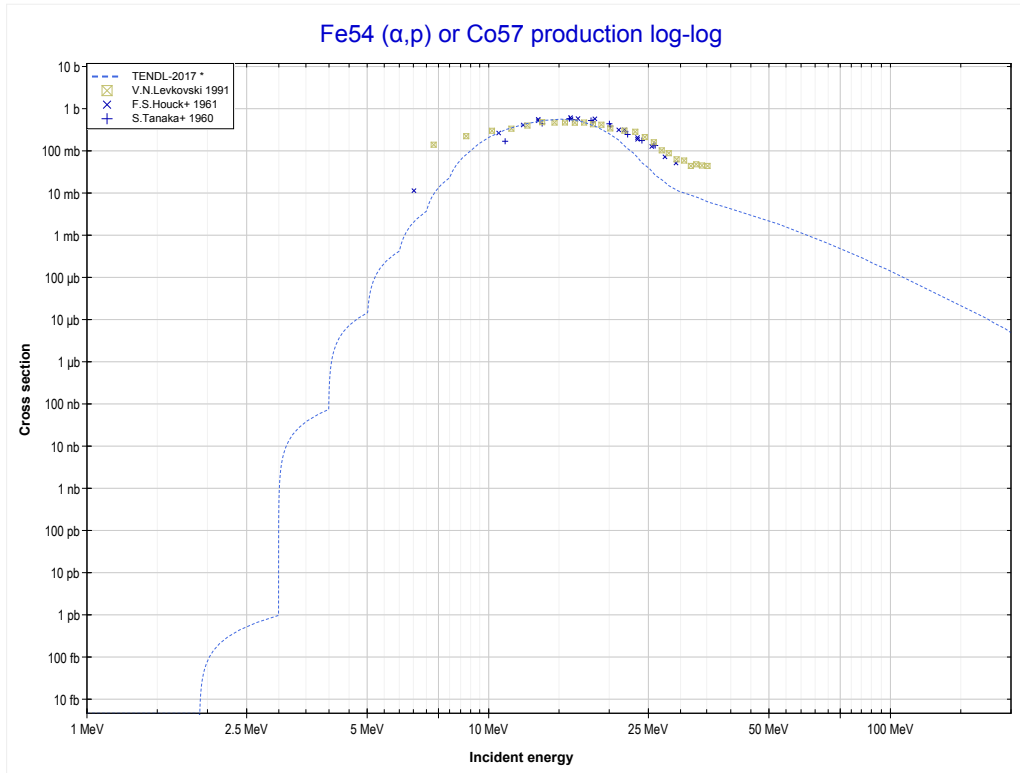
Reaction	Q-Value
Fe54($\alpha,He3$)Fe55	-11279.60 keV
Fe54($\alpha,p+d$)Fe55	-16773.08 keV
Fe54($\alpha,n+2p$)Fe55	-18997.64 keV

<< 7-N-14	26-Fe-54	26-Fe-56 >>
<< MT44 ($\alpha, n+2p$)	MT45 ($\alpha, n+p+\alpha$) or MT5 (Mn52 production)	MT103 (α, p) >>



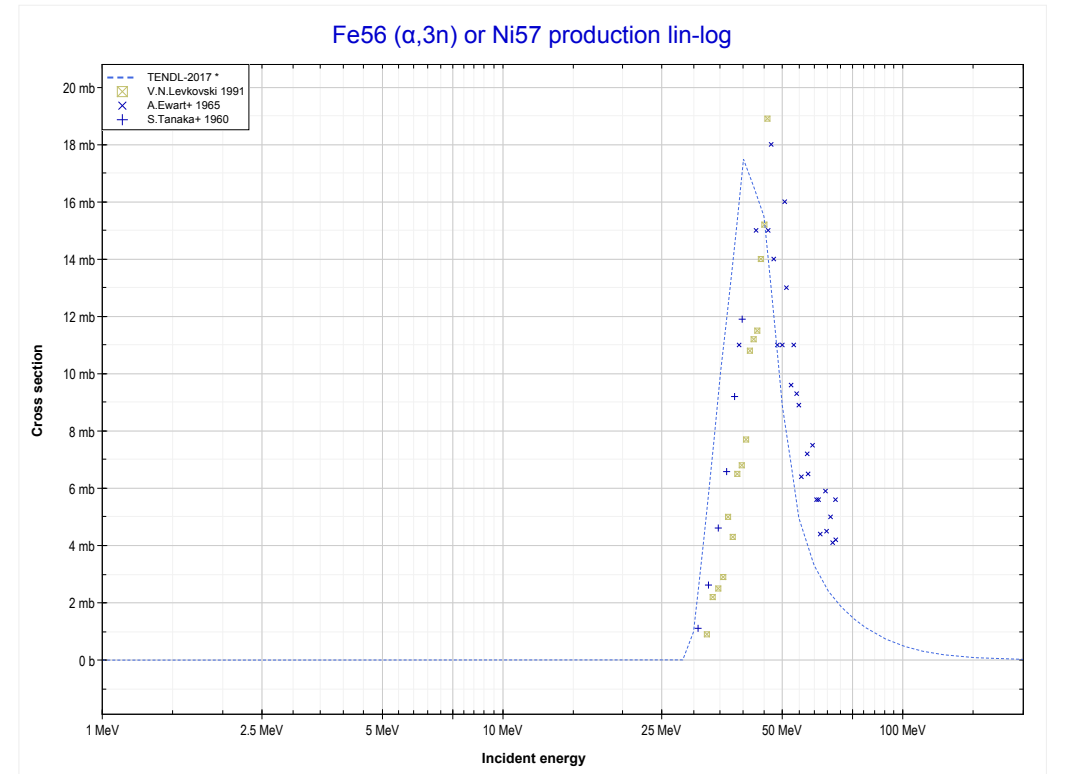
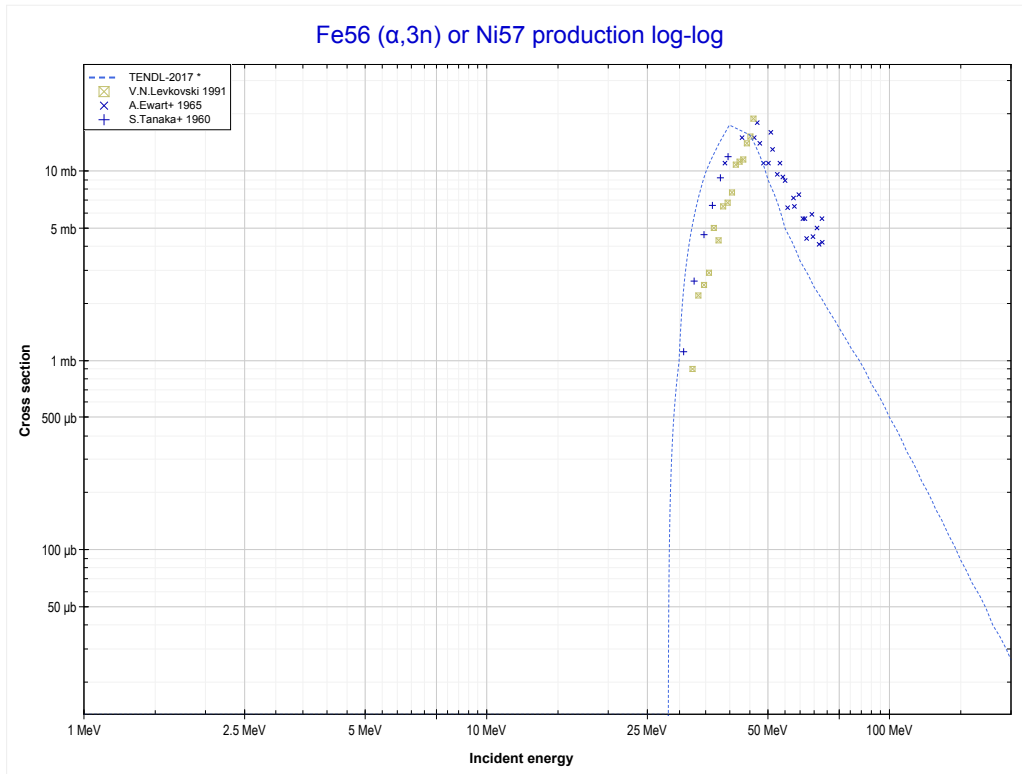
Reaction	Q-Value	Reaction	Q-Value
Fe54($\alpha, d+\alpha$)Mn52	-18682.72 keV	Fe54($\alpha, n+p+2d$)Mn52	-44753.82 keV
Fe54($\alpha, n+p+\alpha$)Mn52	-20907.29 keV	Fe54($\alpha, 2n+2p+d$)Mn52	-46978.38 keV
Fe54($\alpha, t+He3$)Mn52	-33003.11 keV	Fe54($\alpha, 3n+3p$)Mn52	-49202.95 keV
Fe54($\alpha, p+d+t$)Mn52	-38496.58 keV		
Fe54($\alpha, n+d+He3$)Mn52	-39260.34 keV		
Fe54($\alpha, n+2p+t$)Mn52	-40721.15 keV		
Fe54($\alpha, 2n+p+He3$)Mn52	-41484.90 keV		
Fe54($\alpha, 3d$)Mn52	-42529.25 keV		

<< 24-Cr-53	26-Fe-54	26-Fe-57 >>
<< MT45 ($\alpha, n+p+\alpha$)	MT103 (α, p) or MT5 (Co57 production)	26-Fe-56 MT17 ($\alpha, 3n$) >>



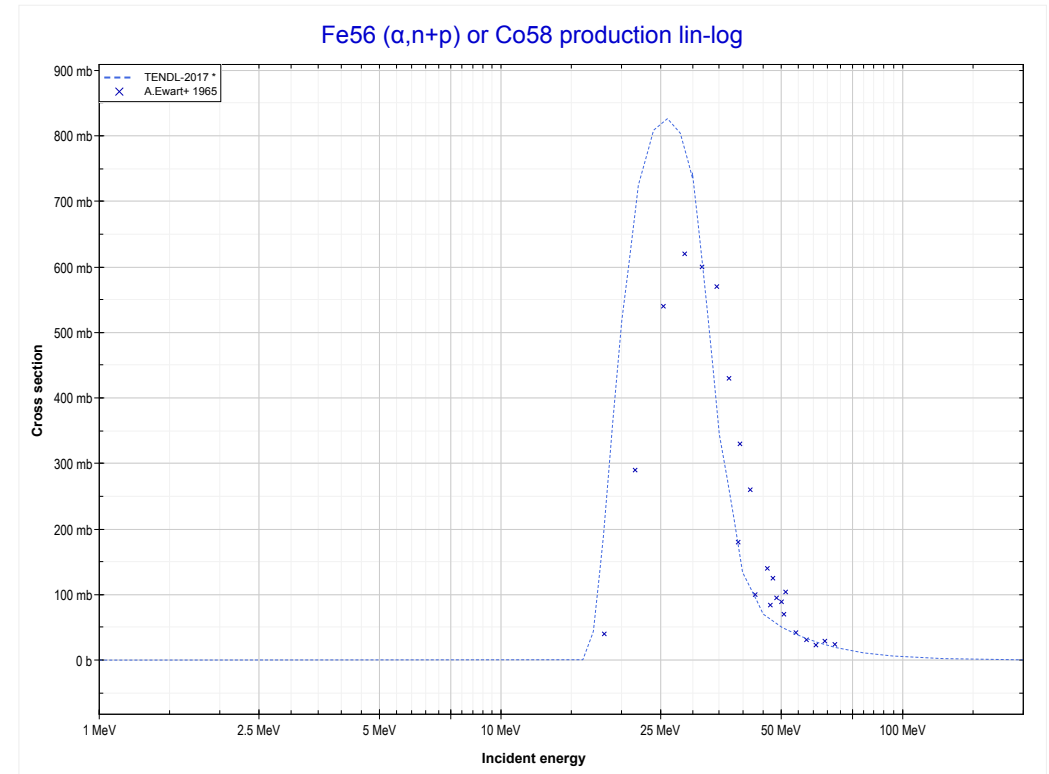
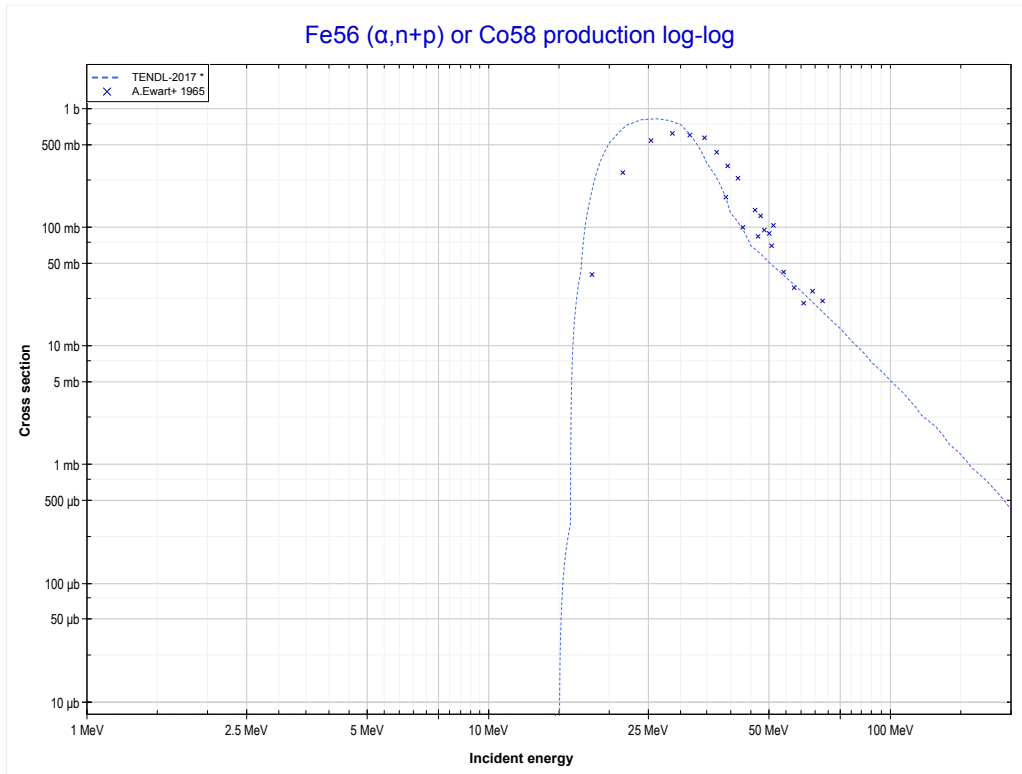
Reaction	Q-Value
$^{54}\text{Fe}(\alpha, p)^{57}\text{Co}$	-1773.05 keV

<< 25-Mn-55	26-Fe-56	27-Co-59 >>
<< 26-Fe-54 MT103 (α, p)	MT17 ($\alpha, 3n$) or MT5 (Ni57 production)	MT28 ($\alpha, n+p$) >>



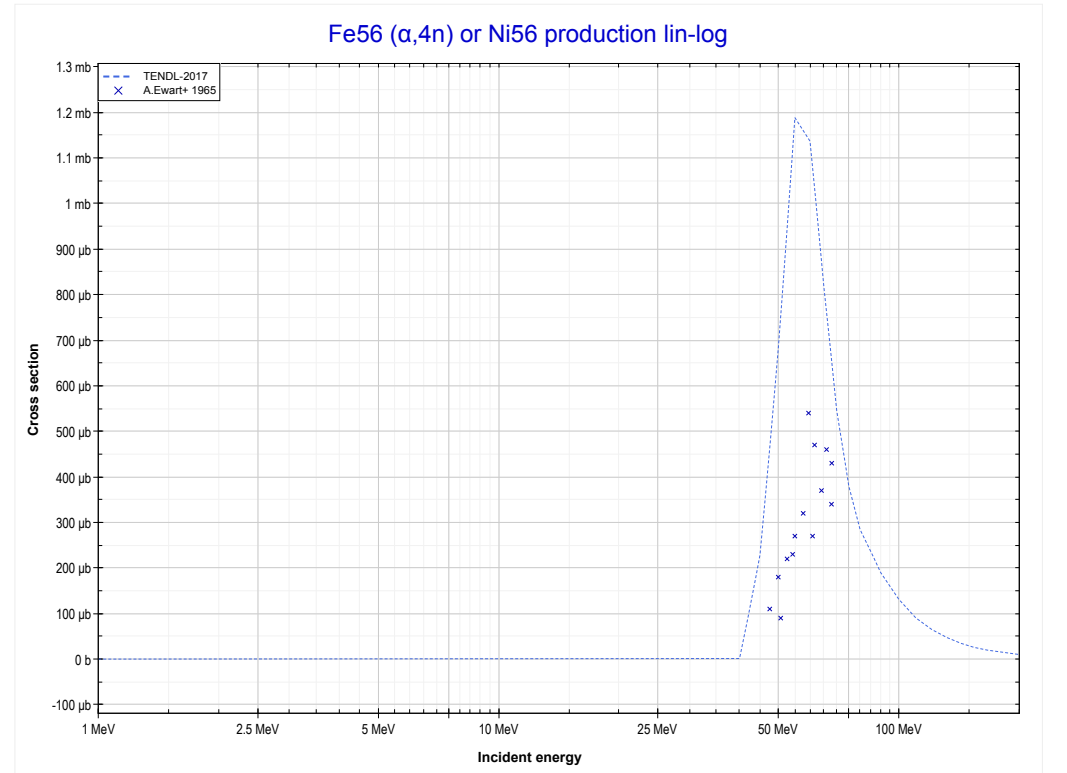
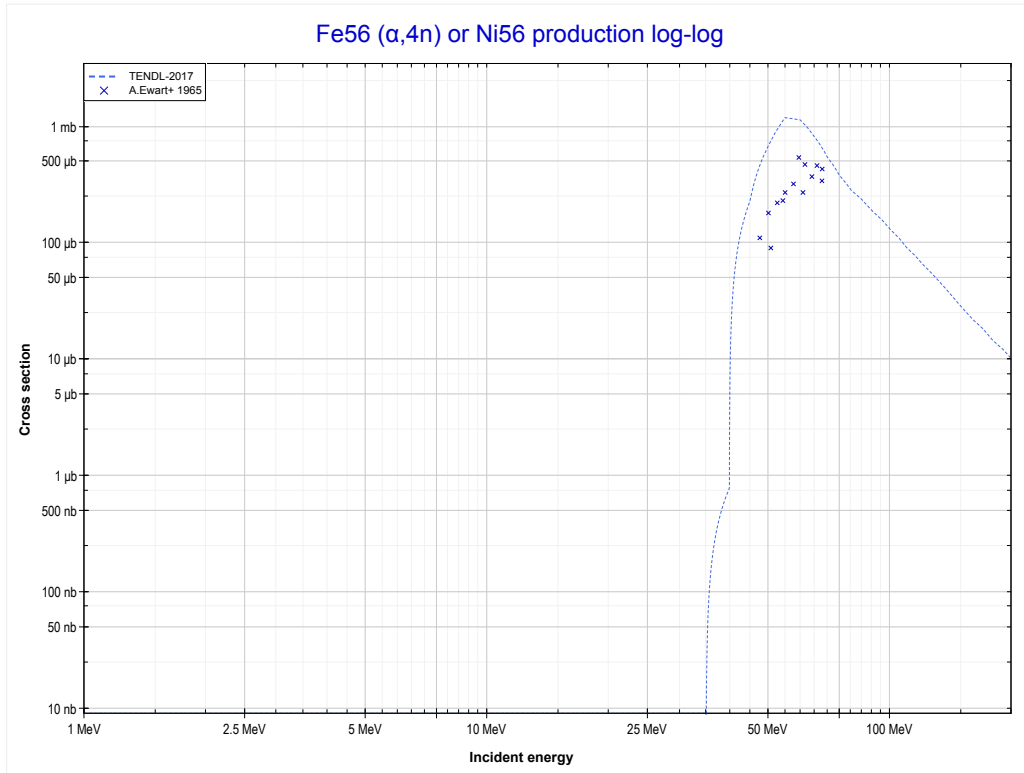
Reaction	Q-Value
Fe56($\alpha, 3n$)Ni57	-26312.24 keV

<< 26-Fe-54	26-Fe-56	28-Ni-60 >>
<< MT17 ($\alpha,3n$)	MT28 ($\alpha,n+p$) or MT5 (Co58 production)	MT37 ($\alpha,4n$) >>



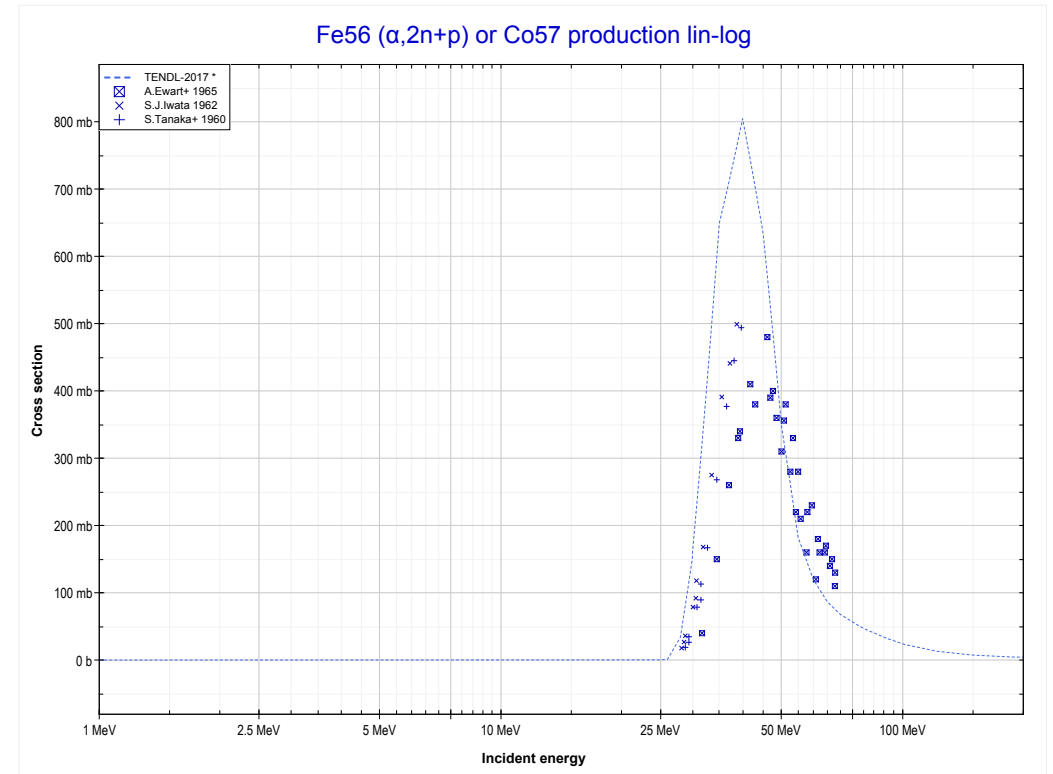
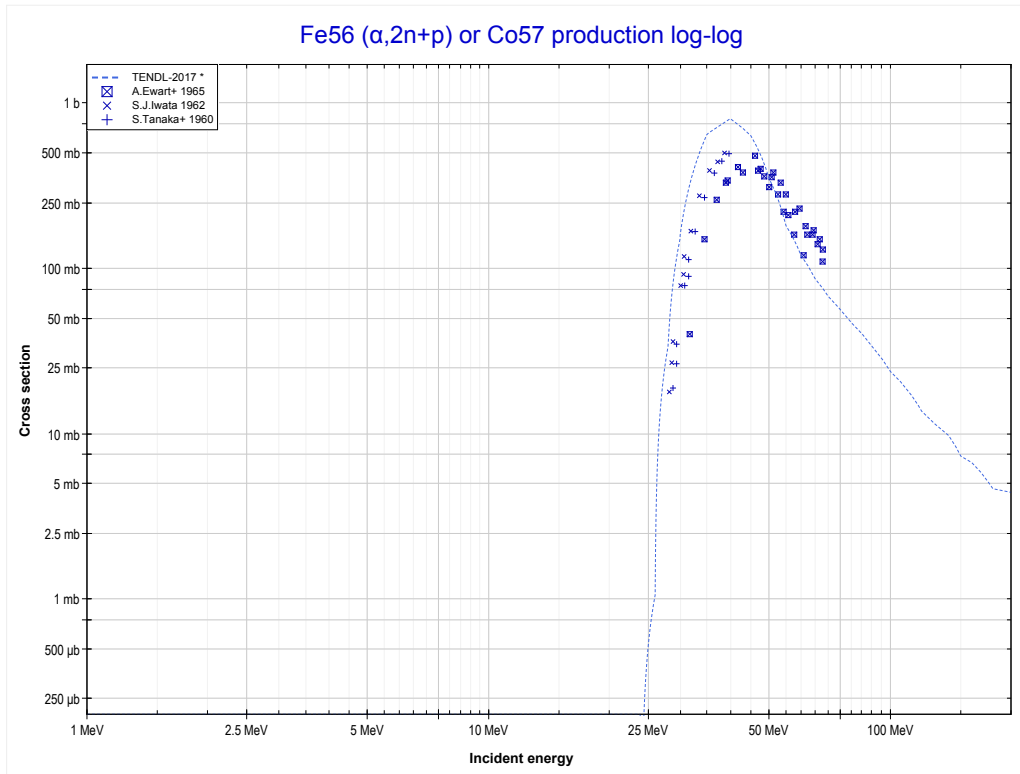
Reaction	Q-Value
Fe56(α,d)Co58	-11470.61 keV
Fe56($\alpha,n+p$)Co58	-13695.17 keV

<< 25-Mn-55	26-Fe-56	30-Zn-67 >>
<< MT28 ($\alpha, n+p$)	MT37 ($\alpha, 4n$) or MT5 (Ni56 production)	MT41 ($\alpha, 2n+p$) >>



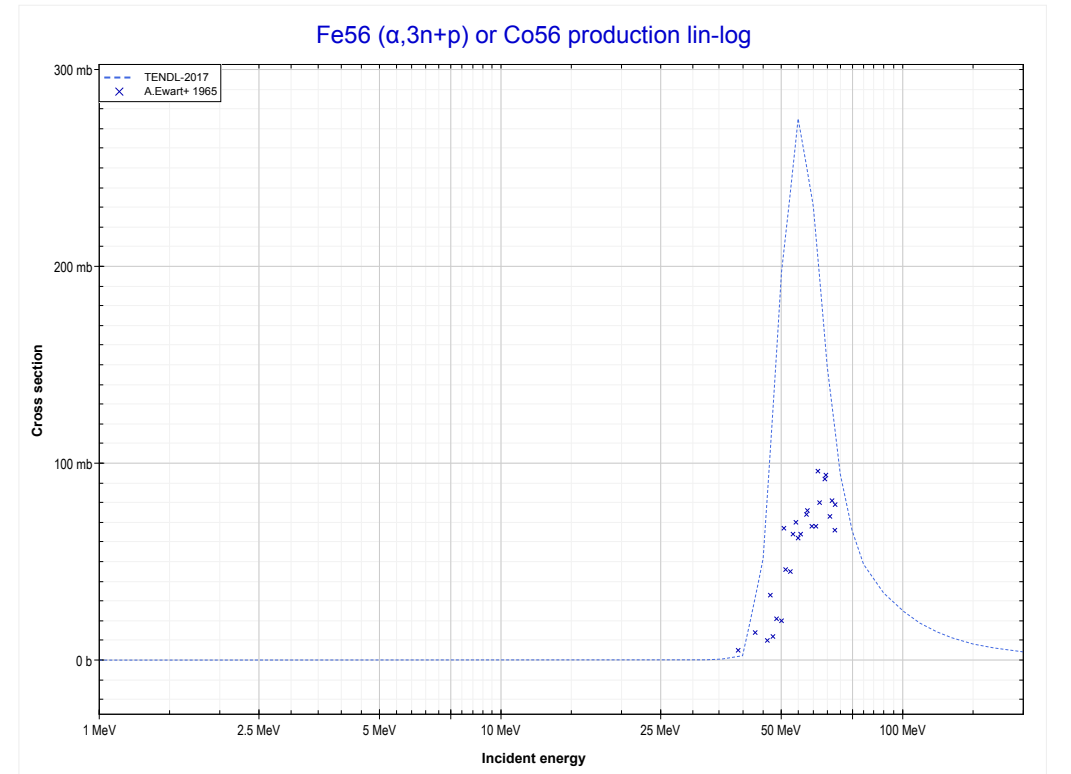
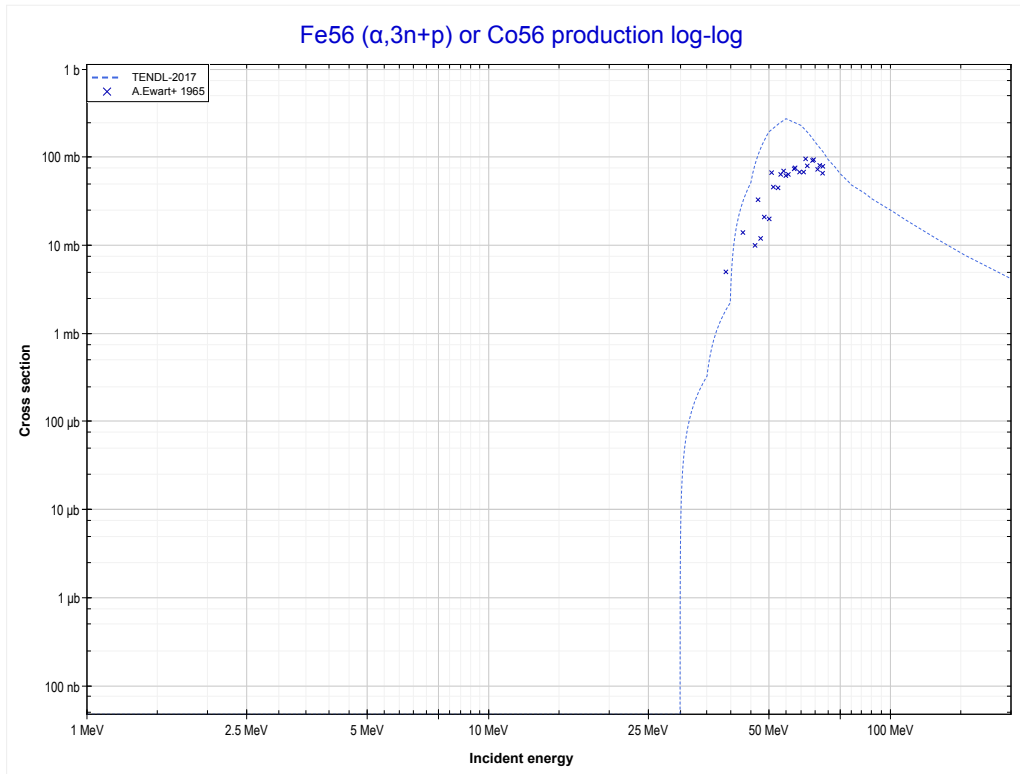
Reaction	Q-Value
Fe56($\alpha, 4n$)Ni56	-36559.85 keV

<< 26-Fe-54	26-Fe-56	30-Zn-64 >>
<< MT37 ($\alpha,4n$)	MT41 ($\alpha,2n+p$) or MT5 (Co57 production)	MT42 ($\alpha,3n+p$) >>



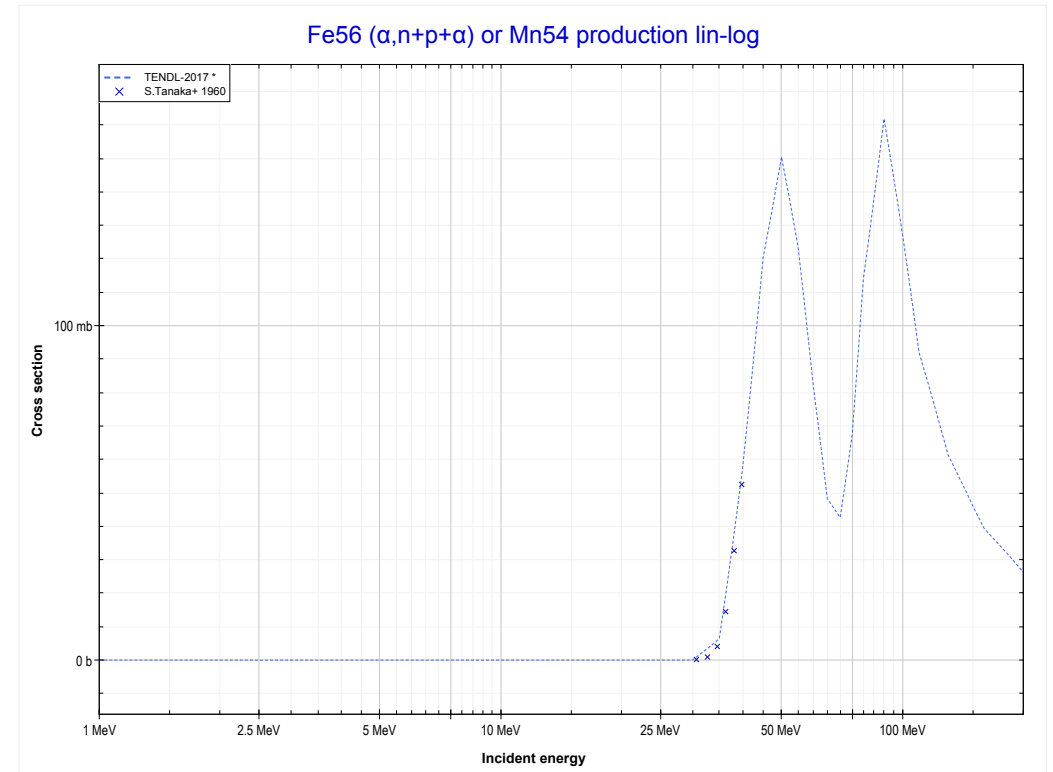
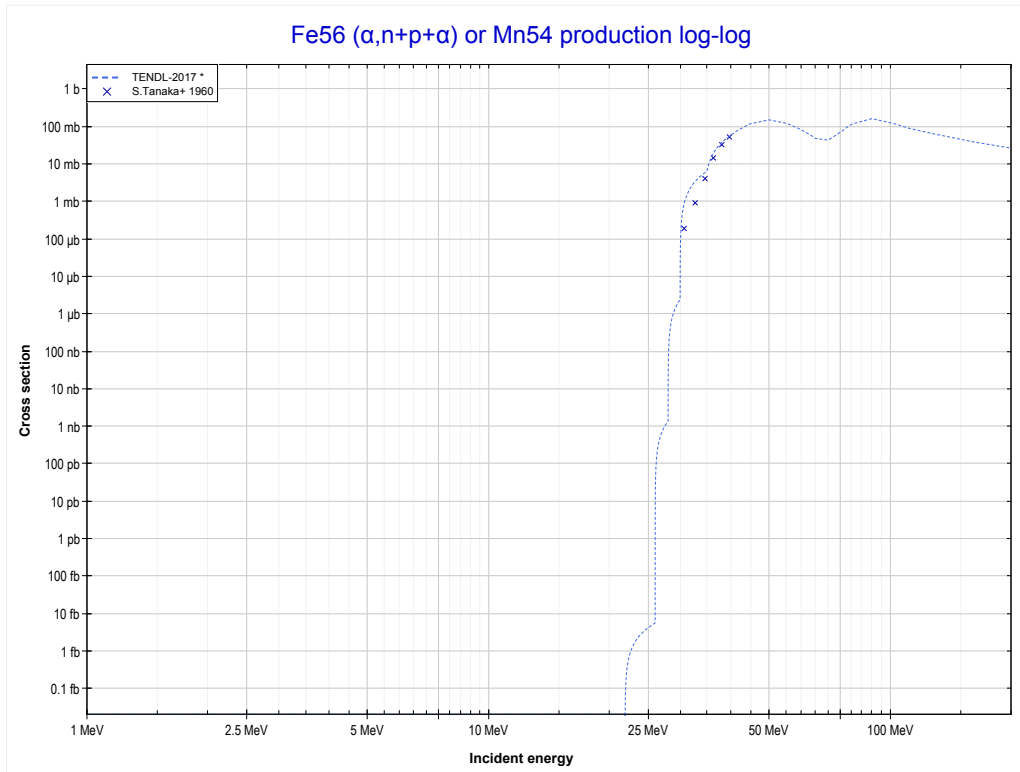
Reaction	Q-Value
Fe56(α,t)Co57	-13786.39 keV
Fe56($\alpha,n+d$)Co57	-20043.62 keV
Fe56($\alpha,2n+p$)Co57	-22268.19 keV

<< 20-Ca-48	26-Fe-56	41-Nb-93 >>
<< MT41 ($\alpha,2n+p$)	MT42 ($\alpha,3n+p$) or MT5 (Co56 production)	MT45 ($\alpha,n+p+\alpha$) >>



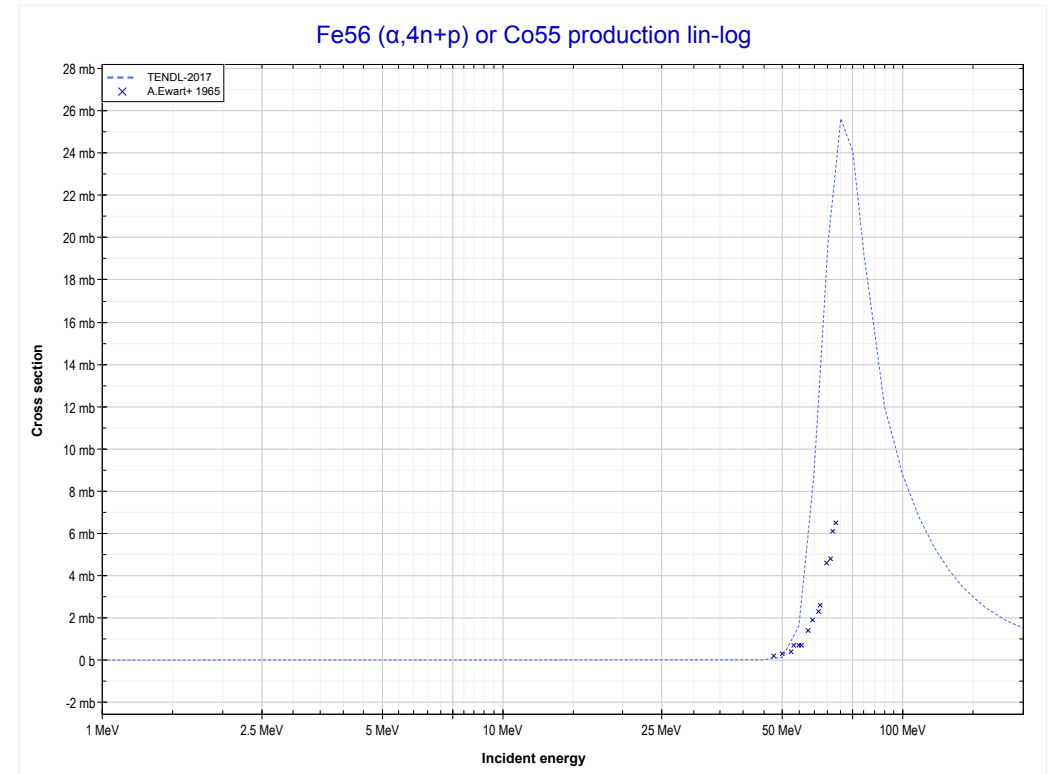
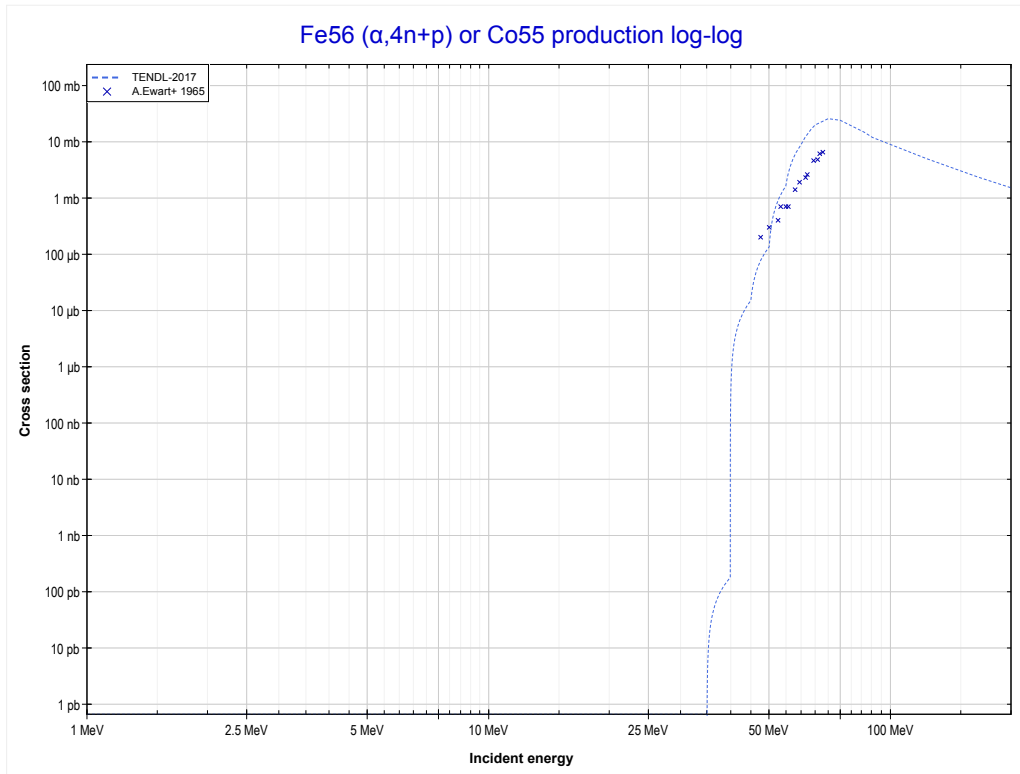
Reaction	Q-Value
Fe56($\alpha,n+t$)Co56	-25162.81 keV
Fe56($\alpha,2n+d$)Co56	-31420.04 keV
Fe56($\alpha,3n+p$)Co56	-33644.61 keV

<< 26-Fe-54	26-Fe-56	28-Ni-58 >>
<< MT42 ($\alpha, 3n+p$)	MT45 ($\alpha, n+p+\alpha$) or MT5 (Mn54 production)	MT156 ($\alpha, 4n+p$) >>



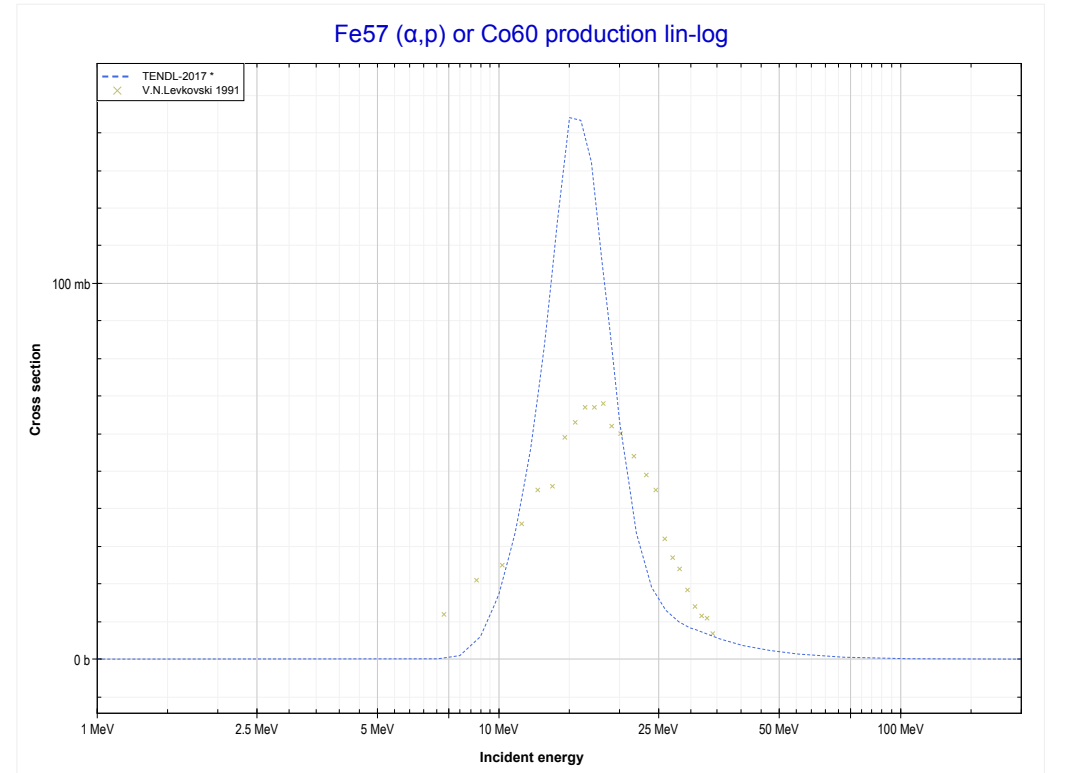
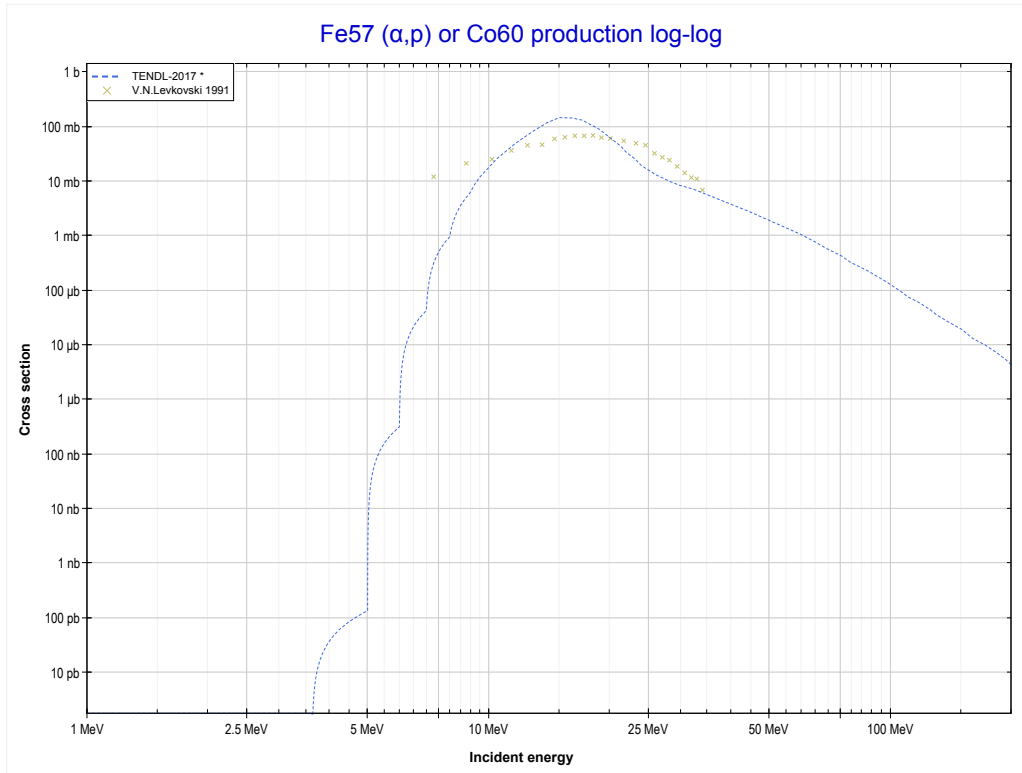
Reaction	Q-Value	Reaction	Q-Value
Fe56($\alpha, d+\alpha$)Mn54	-18185.62 keV	Fe56($\alpha, n+p+2d$)Mn54	-44256.72 keV
Fe56($\alpha, n+p+\alpha$)Mn54	-20410.19 keV	Fe56($\alpha, 2n+2p+d$)Mn54	-46481.28 keV
Fe56($\alpha, t+He3$)Mn54	-32506.01 keV	Fe56($\alpha, 3n+3p$)Mn54	-48705.85 keV
Fe56($\alpha, p+d+t$)Mn54	-37999.48 keV		
Fe56($\alpha, n+d+He3$)Mn54	-38763.24 keV		
Fe56($\alpha, n+2p+t$)Mn54	-40224.05 keV		
Fe56($\alpha, 2n+p+He3$)Mn54	-40987.80 keV		
Fe56($\alpha, 3d$)Mn54	-42032.15 keV		

	26-Fe-56	
<< MT45 ($\alpha, n+p+\alpha$)	MT156 ($\alpha, 4n+p$) or MT5 (Co55 production)	26-Fe-57 MT103 (α, p) >>



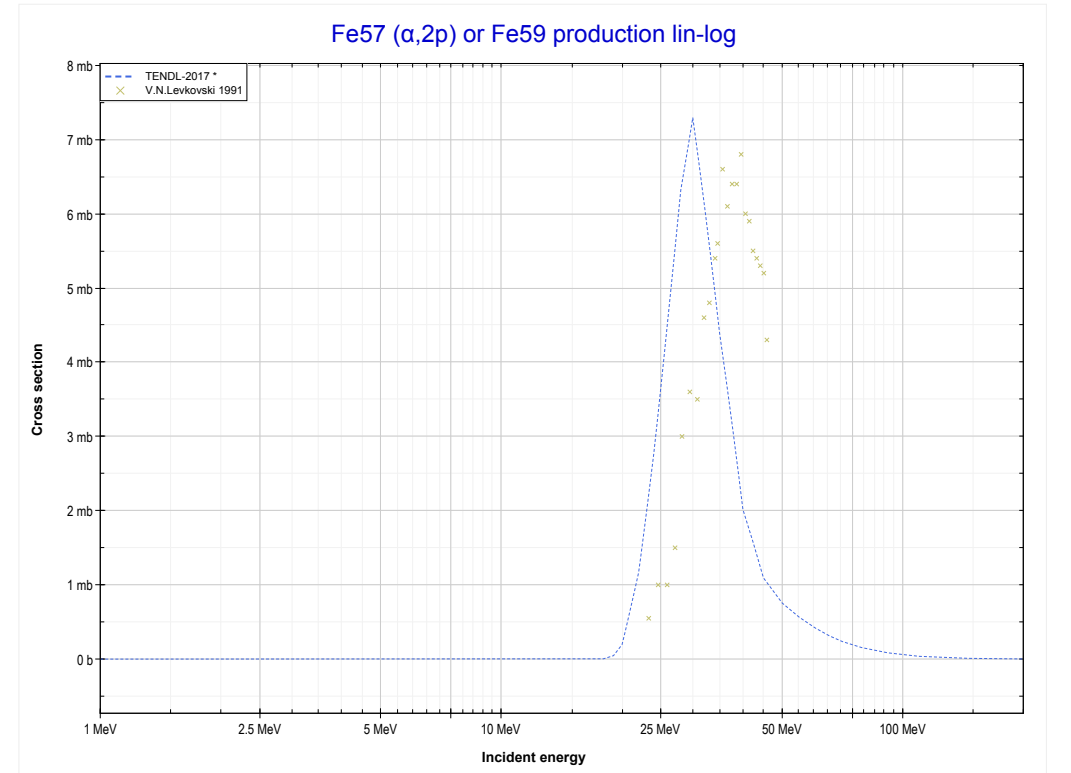
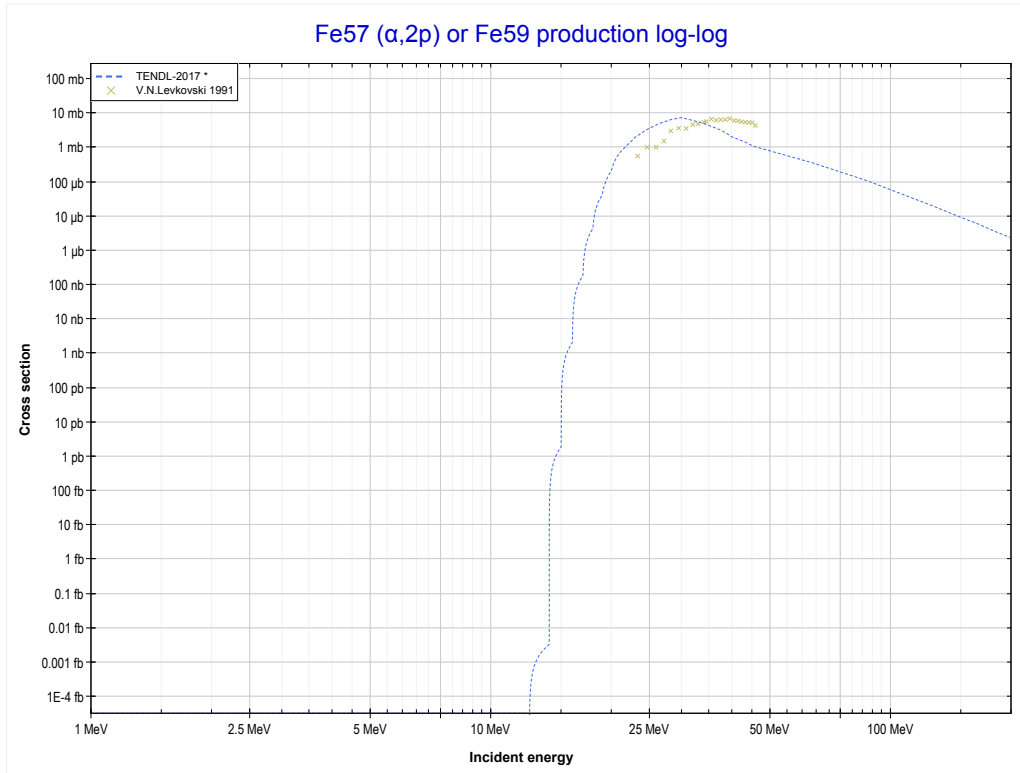
Reaction	Q-Value
Fe56($\alpha, 2n+t$)Co55	-35244.62 keV
Fe56($\alpha, 3n+d$)Co55	-41501.86 keV
Fe56($\alpha, 4n+p$)Co55	-43726.42 keV

<< 26-Fe-54	26-Fe-57	26-Fe-58 >>
<< 26-Fe-56 MT156 ($\alpha,4n+p$)	MT103 (α,p) or MT5 (Co60 production)	MT111 ($\alpha,2p$) >>



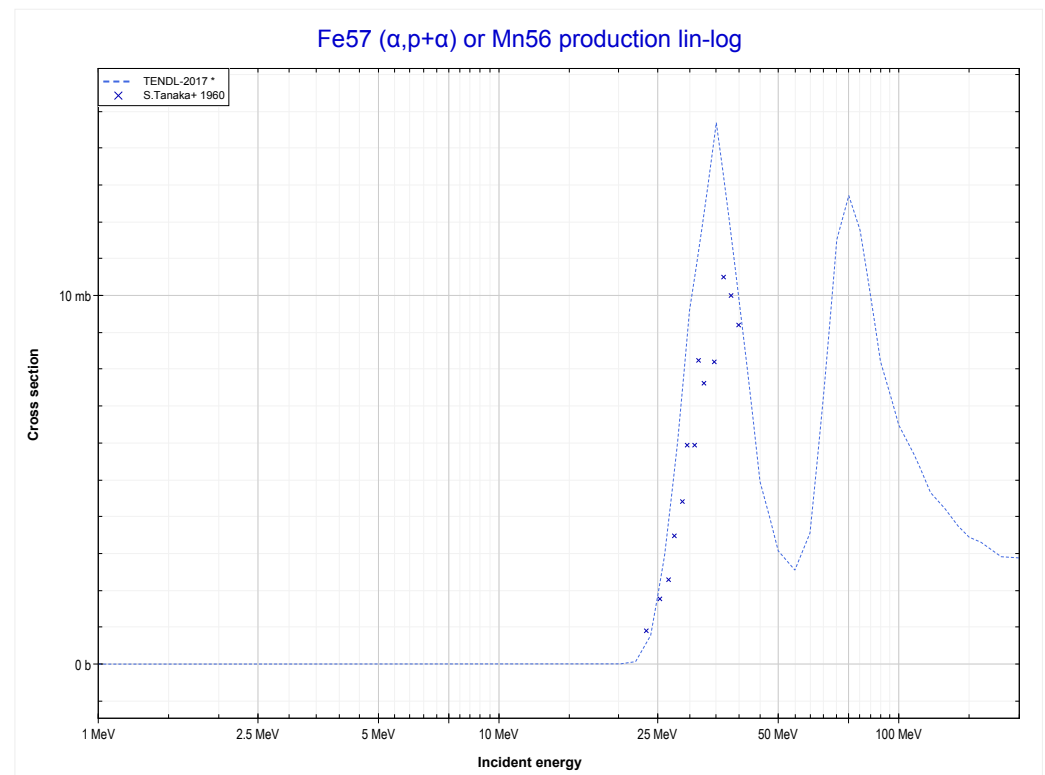
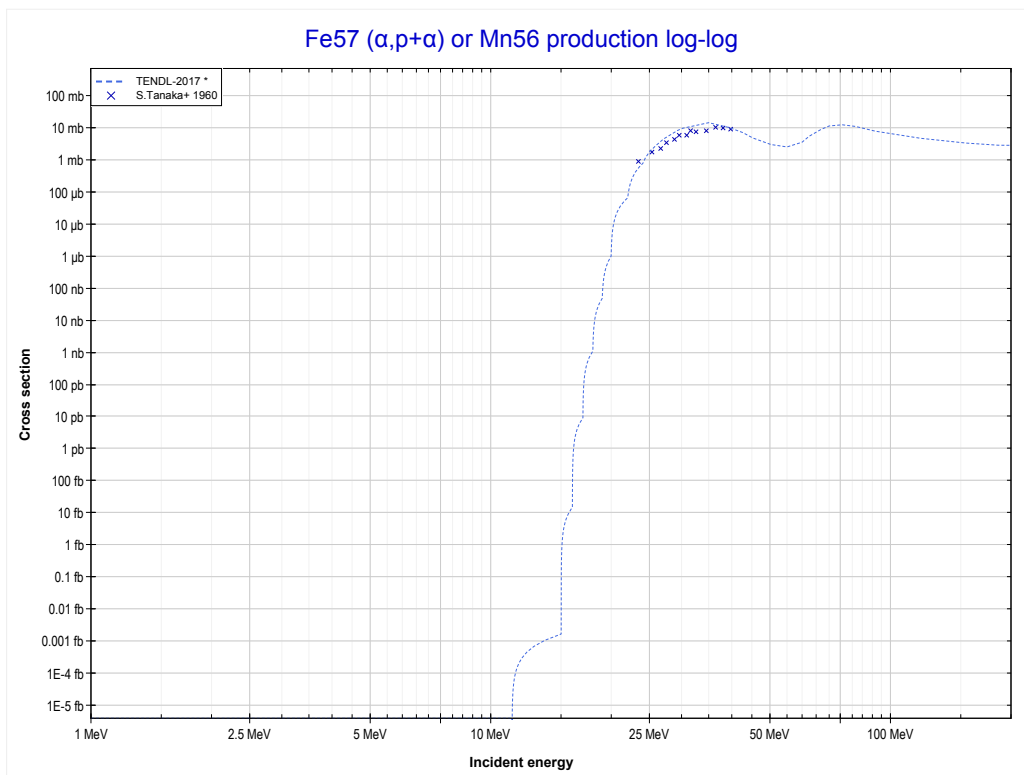
Reaction	Q-Value
Fe57(α,p)Co60	-3395.55 keV

<< 21-Sc-45	26-Fe-57	27-Co-59 >>
<< MT103 (α,p)	MT111 ($\alpha,2p$) or MT5 (Fe59 production)	MT112 ($\alpha,p+\alpha$) >>



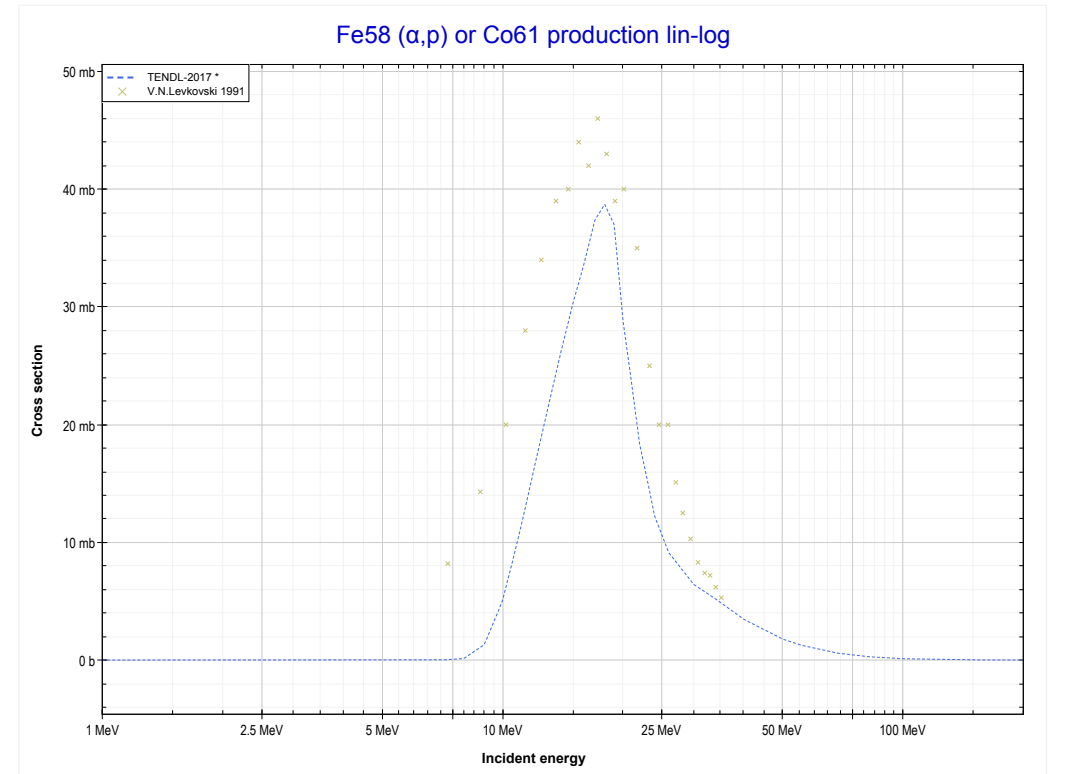
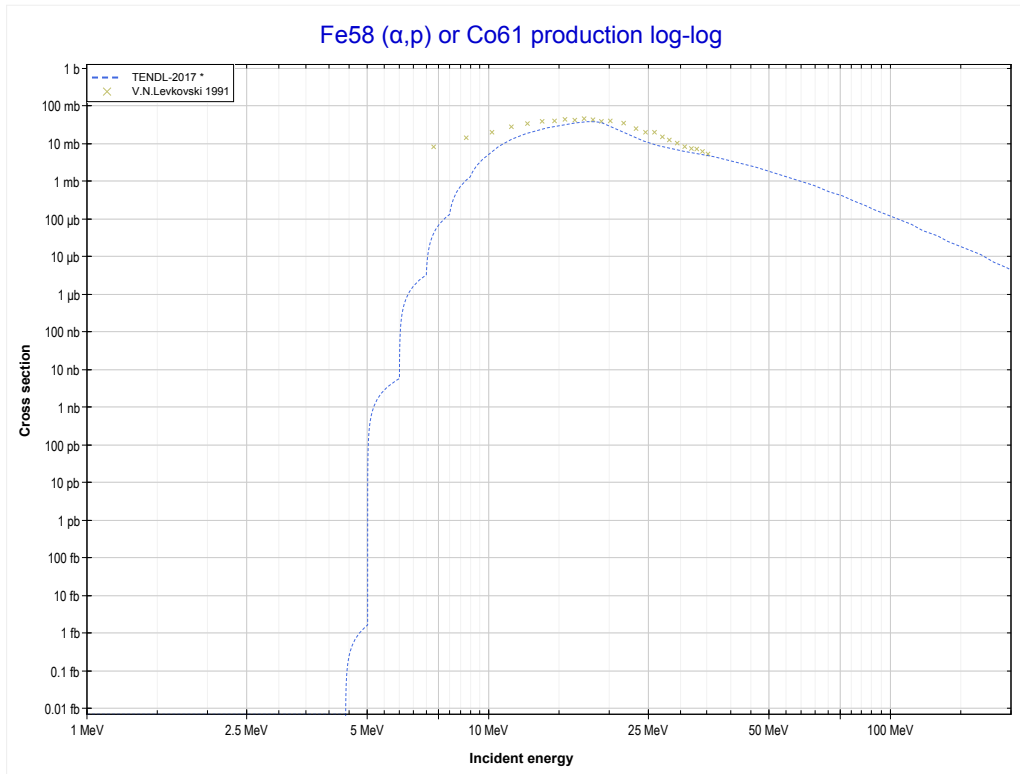
Reaction	Q-Value
Fe57($\alpha,2p$)Fe59	-11670.03 keV

<< 7-N-14	26-Fe-57	28-Ni-58 >>
<< MT111 ($\alpha,2p$)	MT112 ($\alpha,p+\alpha$) or MT5 (Mn56 production)	26-Fe-58 MT103 (α,p) >>



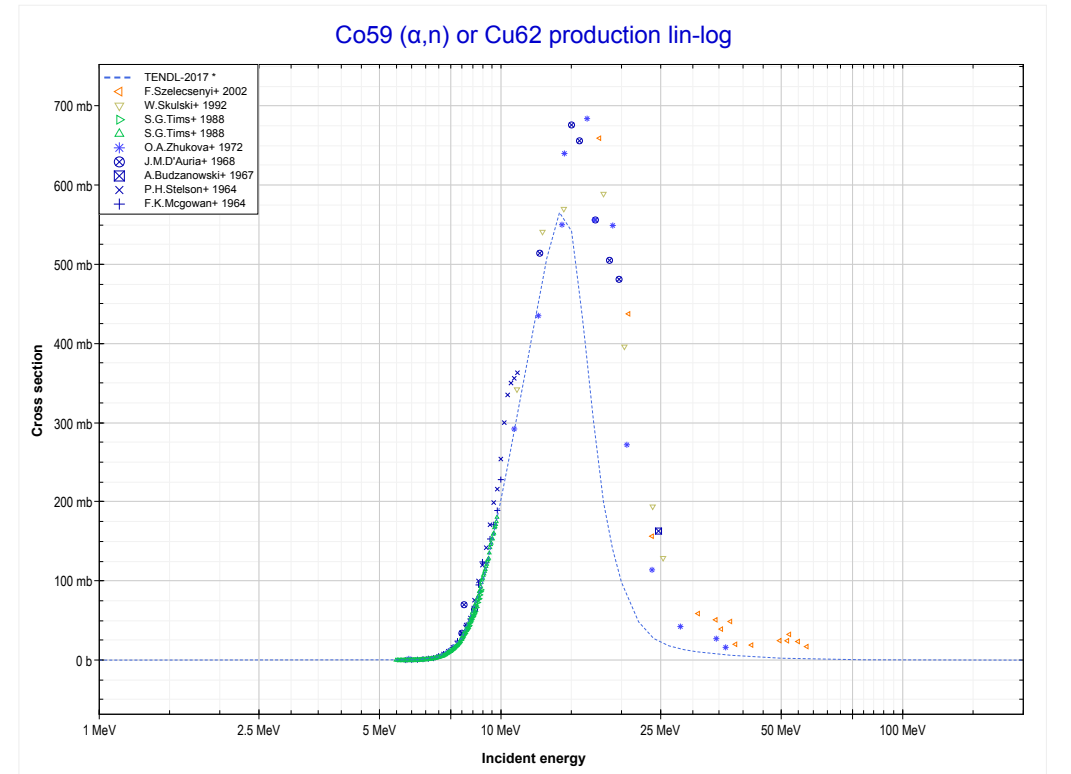
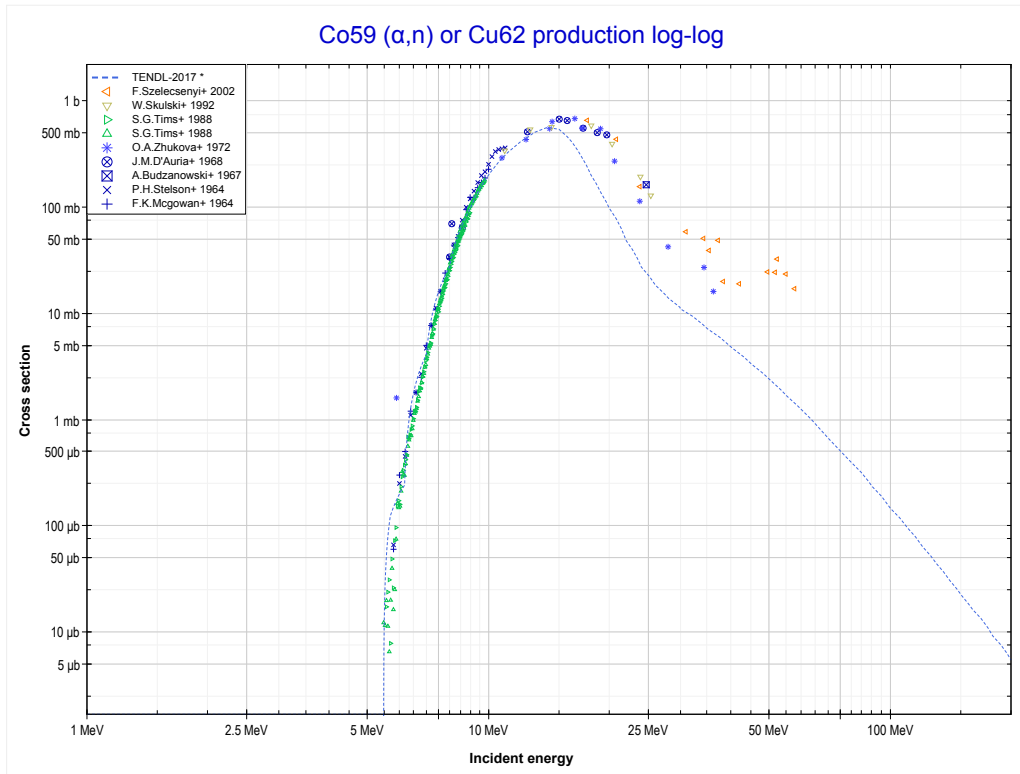
Reaction	Q-Value
Fe57($\alpha,p+\alpha$)Mn56	-10559.37 keV
Fe57($\alpha,d+He3$)Mn56	-28912.42 keV
Fe57($\alpha,2p+t$)Mn56	-30373.23 keV
Fe57($\alpha,n+p+He3$)Mn56	-31136.99 keV
Fe57($\alpha,p+2d$)Mn56	-34405.90 keV
Fe57($\alpha,n+2p+d$)Mn56	-36630.46 keV
Fe57($\alpha,2n+3p$)Mn56	-38855.03 keV

<< 26-Fe-57	26-Fe-58	28-Ni-58 >>
<< 26-Fe-57 MT112 ($\alpha, p + \alpha$)	MT103 (α, p) or MT5 (Co61 production)	27-Co-59 MT4 (α, n) >>



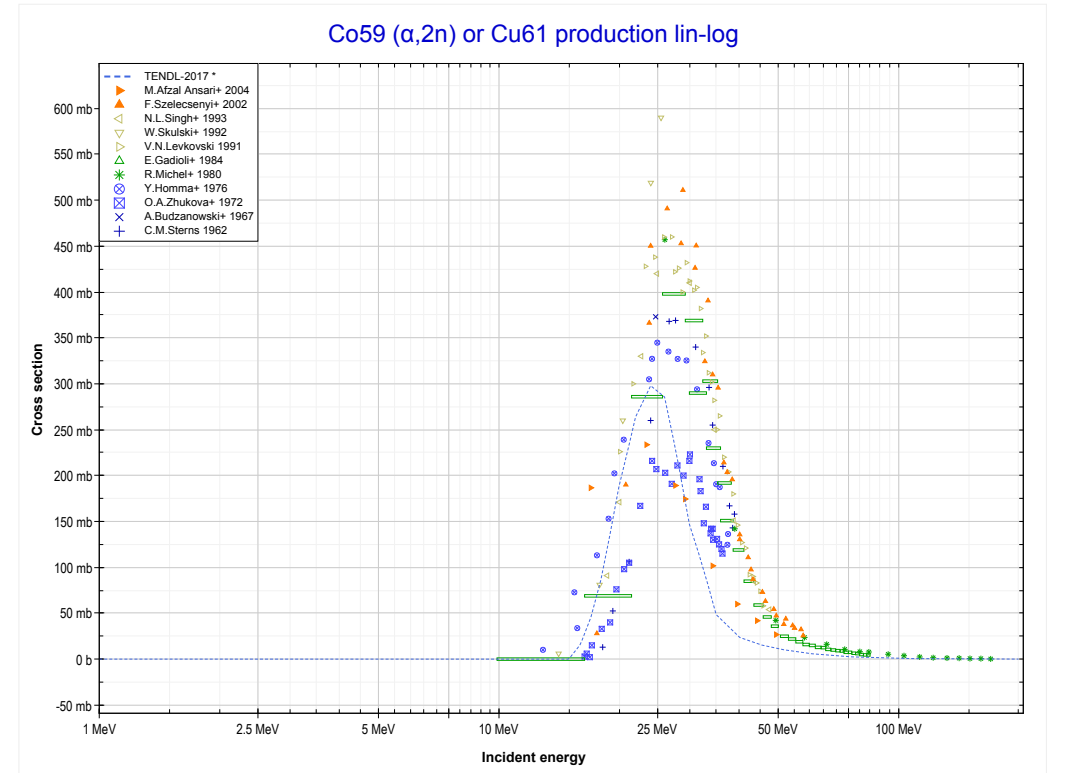
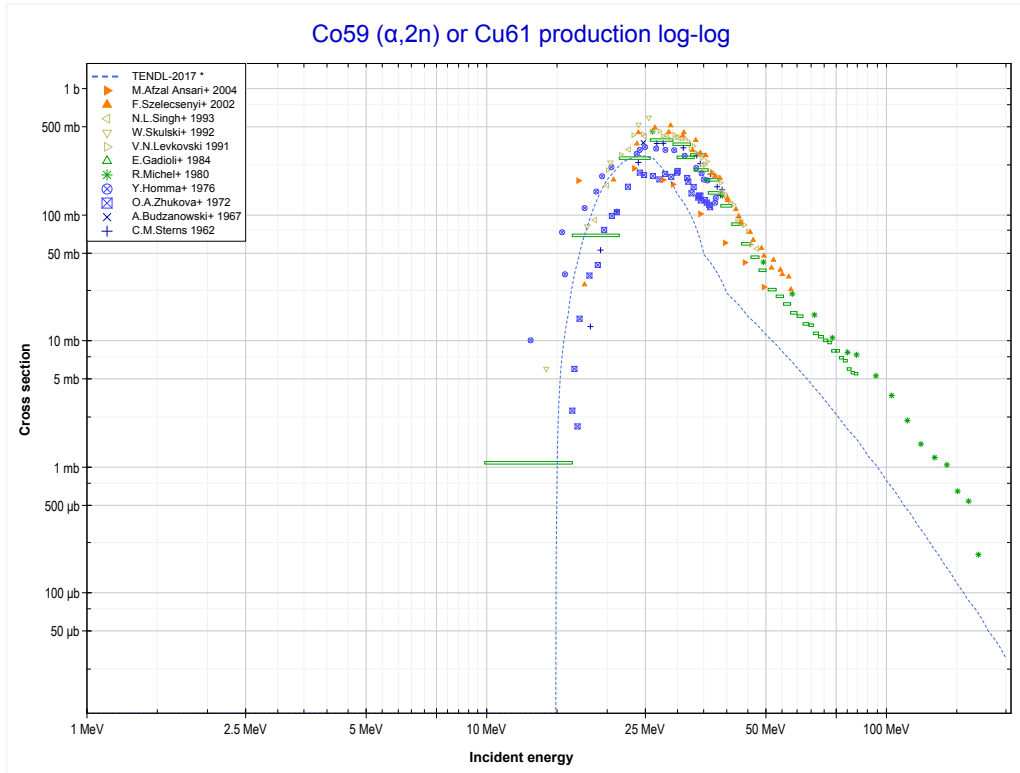
Reaction	Q-Value
Fe58(α, p)Co61	-4120.95 keV

<< 26-Fe-54	27-Co-59	28-Ni-58 >>
<< 26-Fe-58 MT103 (α, p)	MT4 (α, n) or MT5 (Cu62 production)	MT16 ($\alpha, 2n$) >>



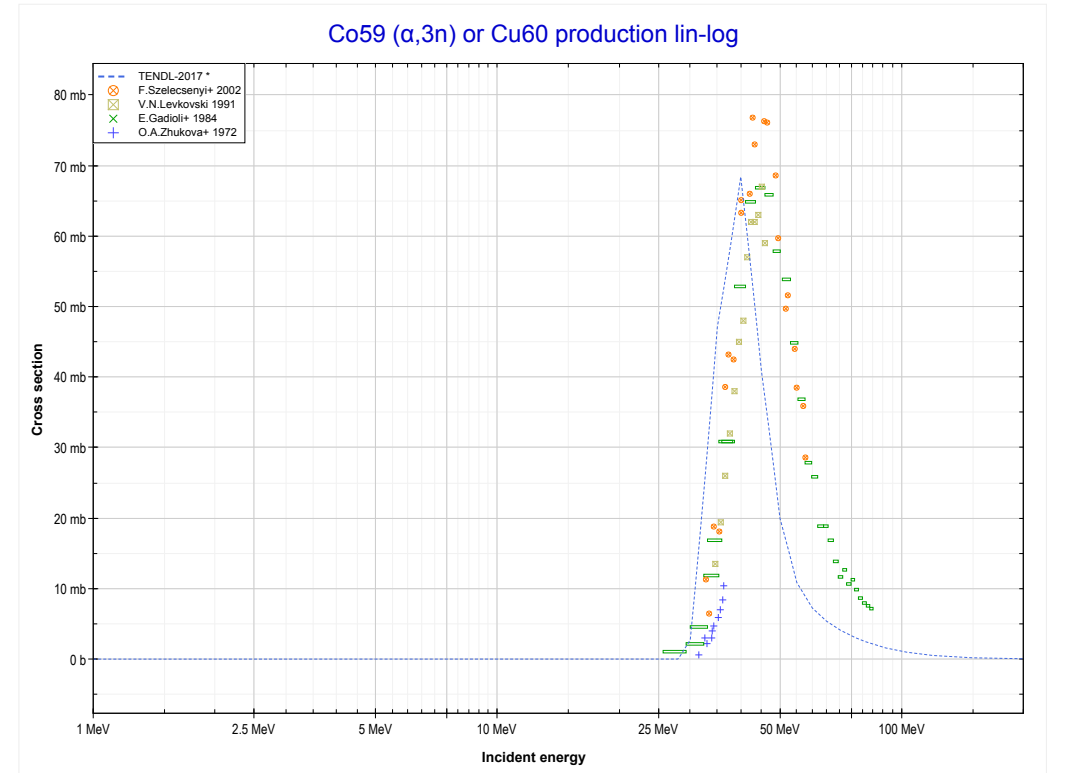
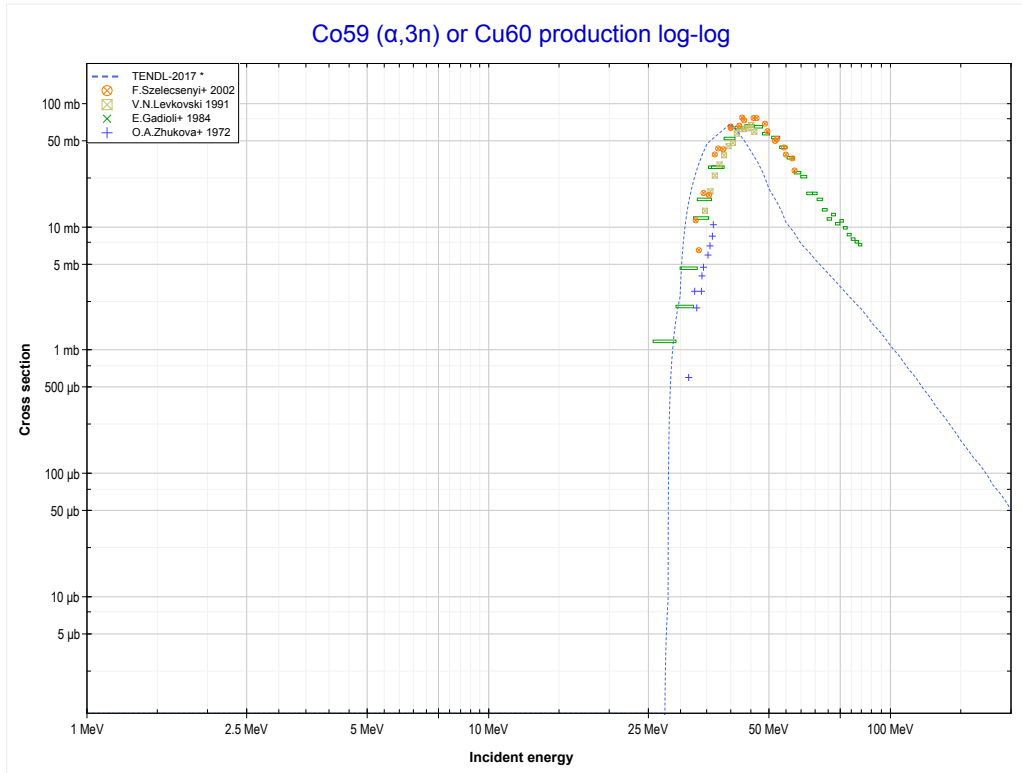
Reaction	Q-Value
Co59(α, n)Cu62	-5088.50 keV

<< 26-Fe-54	27-Co-59	28-Ni-58 >>
<< MT4 (α,n)	MT16 ($\alpha,2n$) or MT5 (Cu61 production)	MT17 ($\alpha,3n$) >>



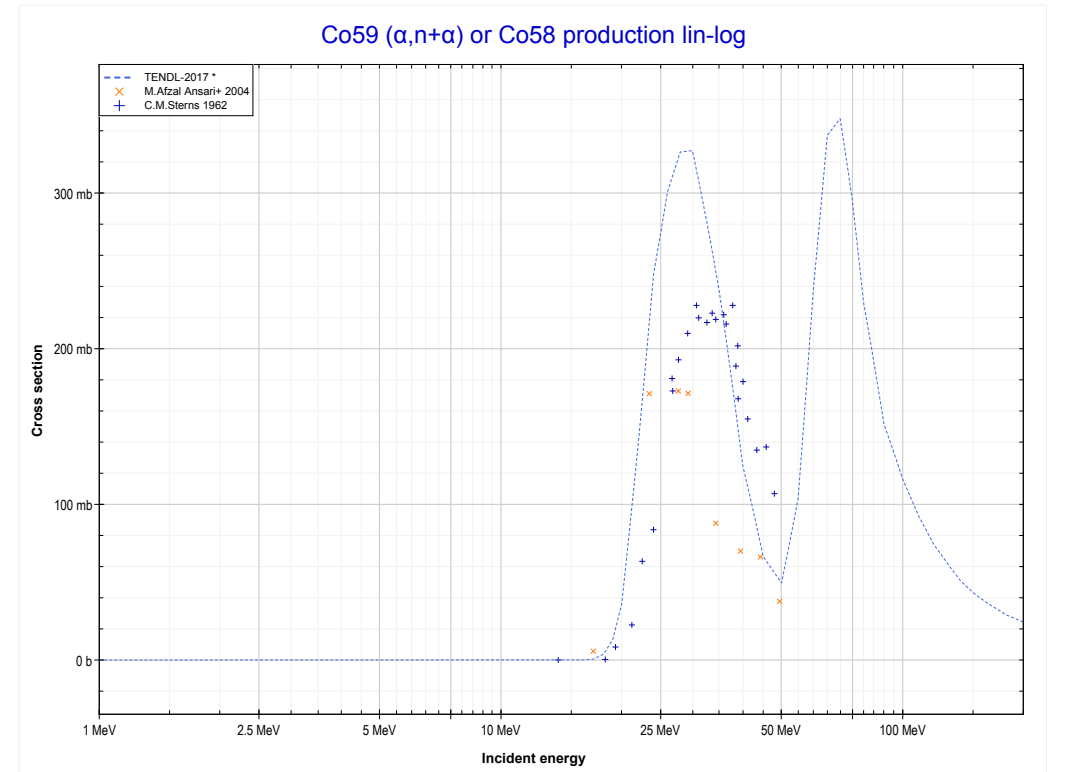
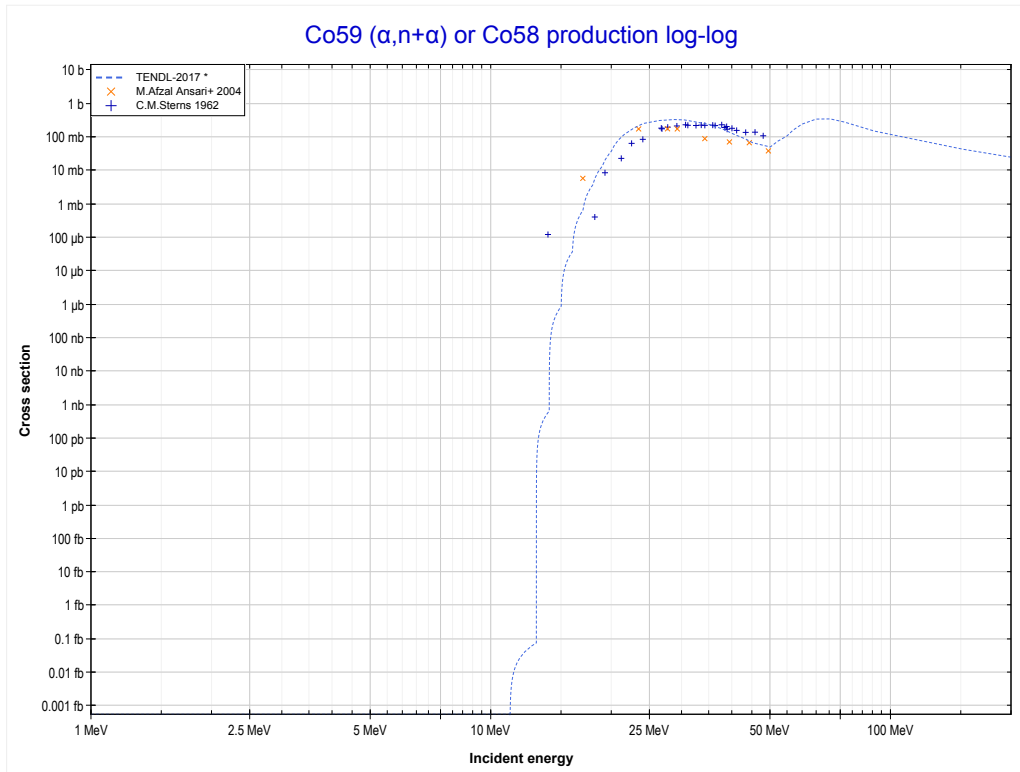
Reaction	Q-Value
Co59($\alpha,2n$)Cu61	-13963.02 keV

<< 26-Fe-56	27-Co-59	28-Ni-61 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Cu60 production)	MT22 ($\alpha,n+\alpha$) >>



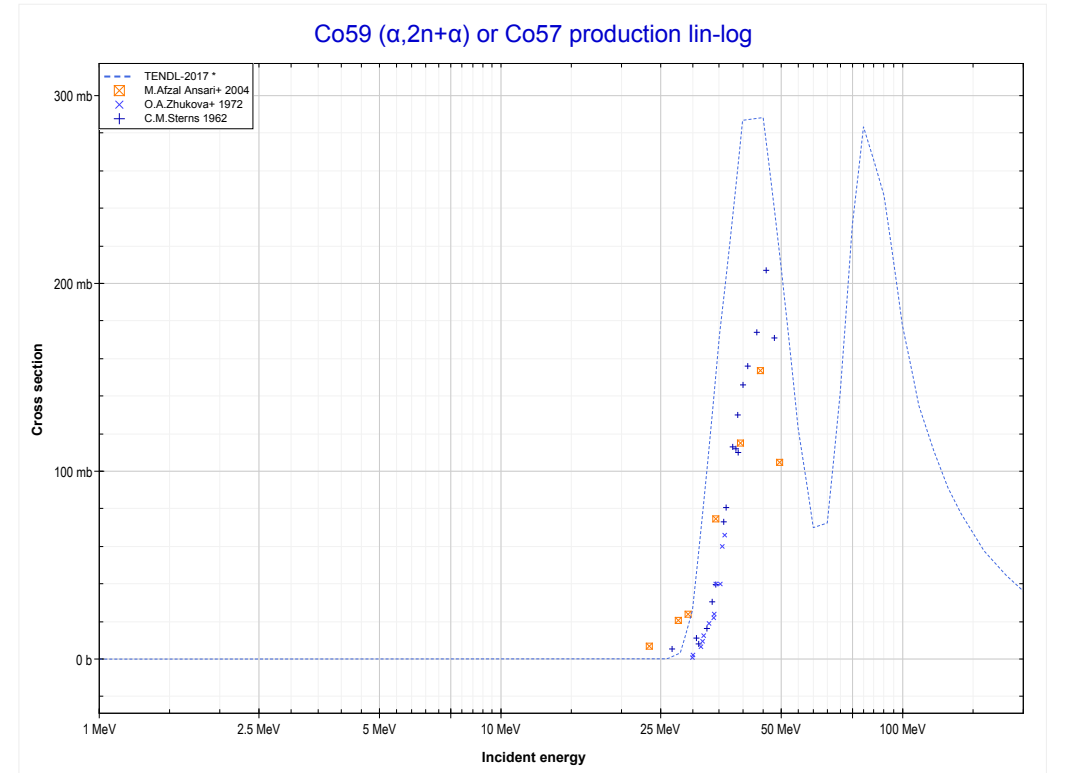
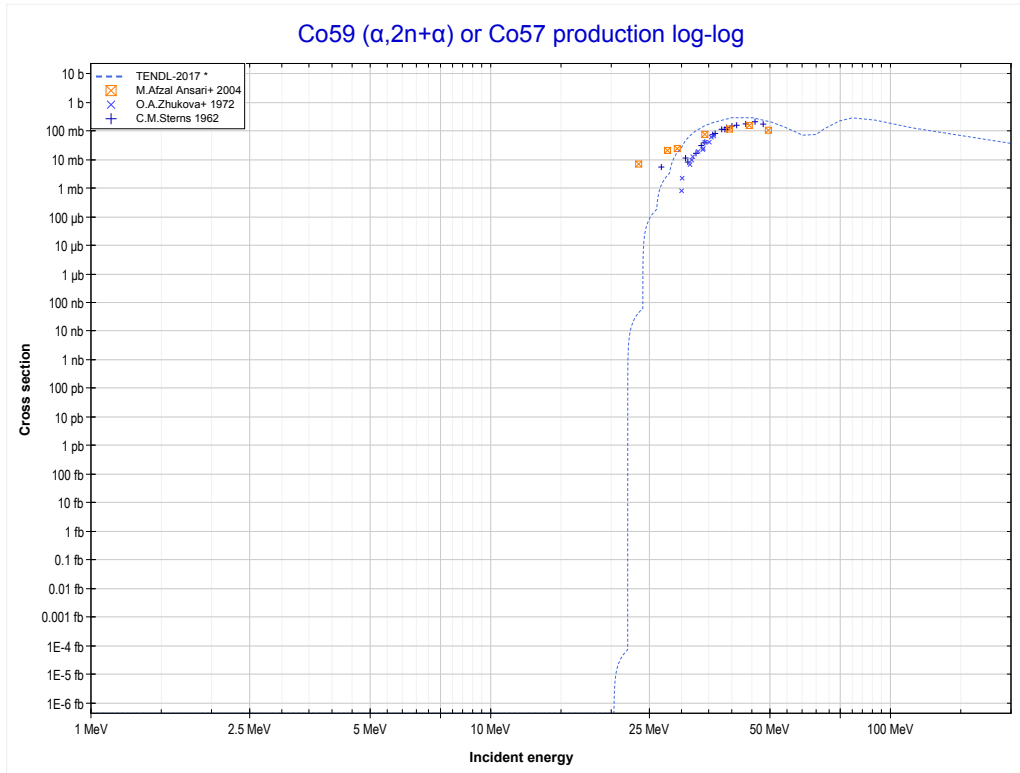
Reaction	Q-Value
Co59($\alpha,3n$)Cu60	-25673.54 keV

<< 26-Fe-54	27-Co-59	28-Ni-58 >>
<< MT17 ($\alpha,3n$)	MT22 ($\alpha,n+\alpha$) or MT5 (Co58 production)	MT24 ($\alpha,2n+\alpha$) >>



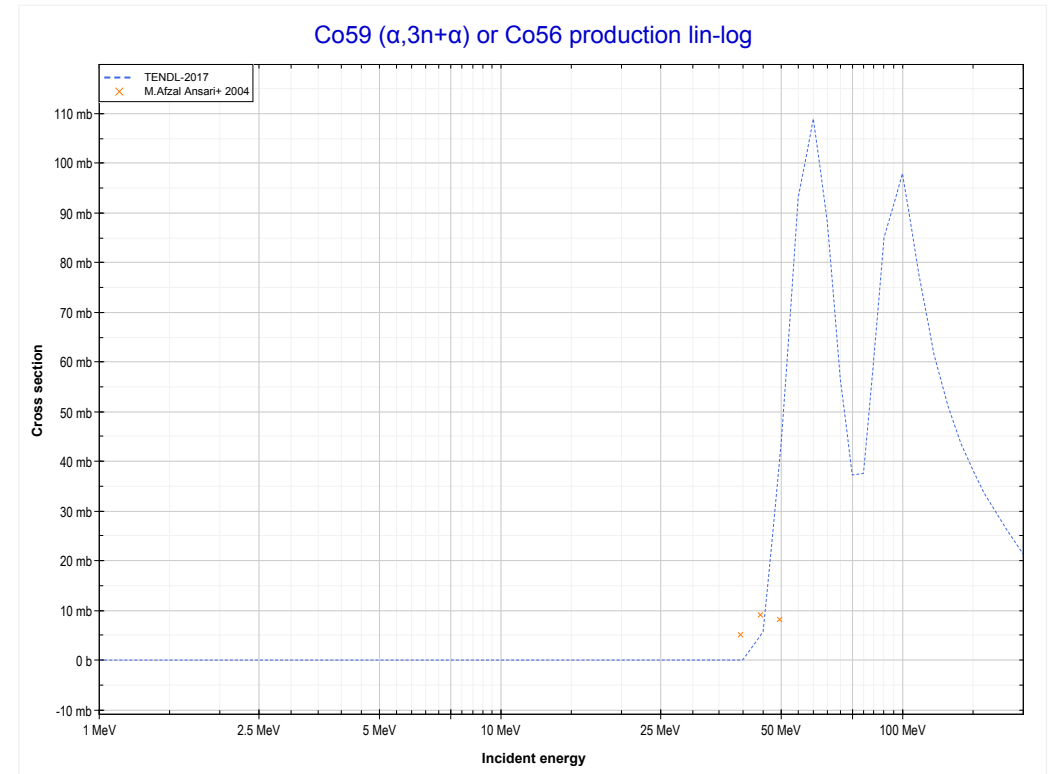
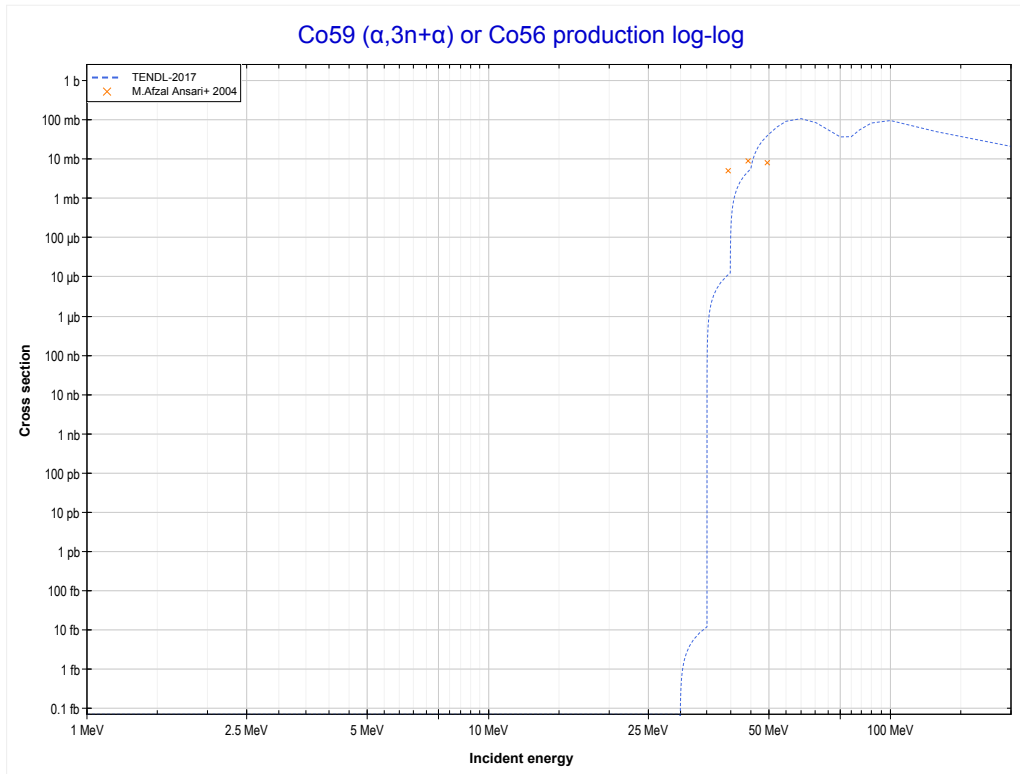
Reaction	Q-Value
Co59($\alpha,n+\alpha$)Co58	-10453.82 keV
Co59($\alpha,d+t$)Co58	-28043.11 keV
Co59($\alpha,n+p+t$)Co58	-30267.68 keV
Co59($\alpha,2n+He3$)Co58	-31031.43 keV
Co59($\alpha,n+2d$)Co58	-34300.34 keV
Co59($\alpha,2n+p+d$)Co58	-36524.91 keV
Co59($\alpha,3n+2p$)Co58	-38749.48 keV

<< 26-Fe-54	27-Co-59	28-Ni-58 >>
<< MT22 ($\alpha, n + \alpha$)	MT24 ($\alpha, 2n + \alpha$) or MT5 (Co57 production)	MT25 ($\alpha, 3n + \alpha$) >>



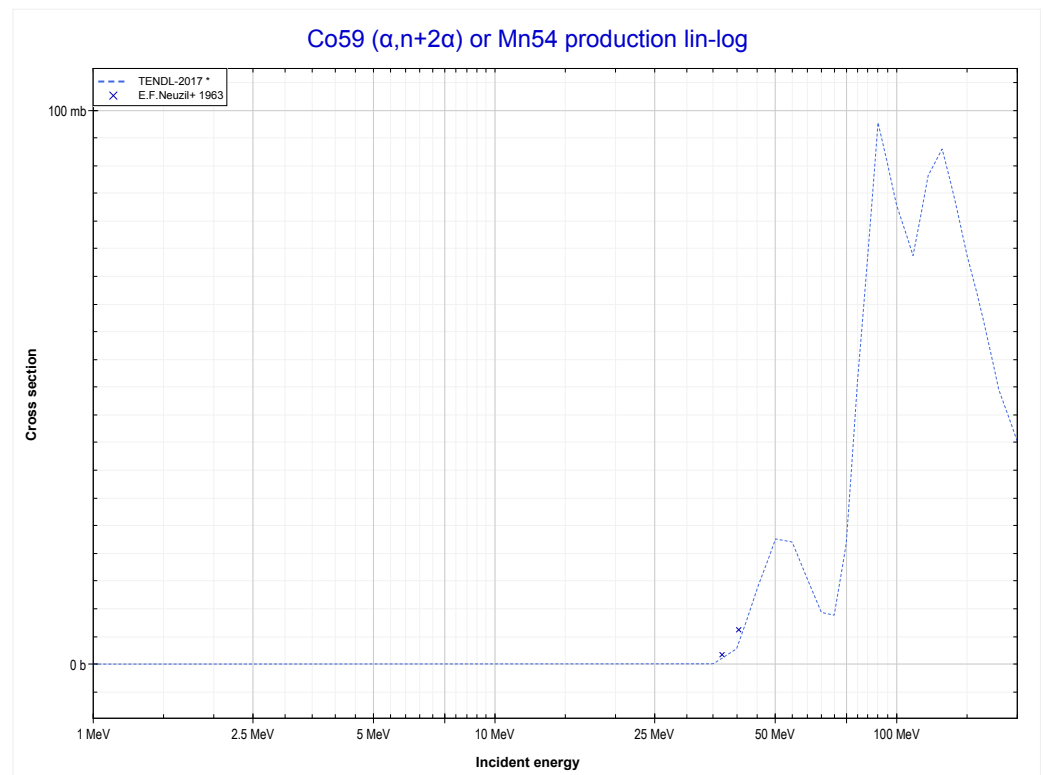
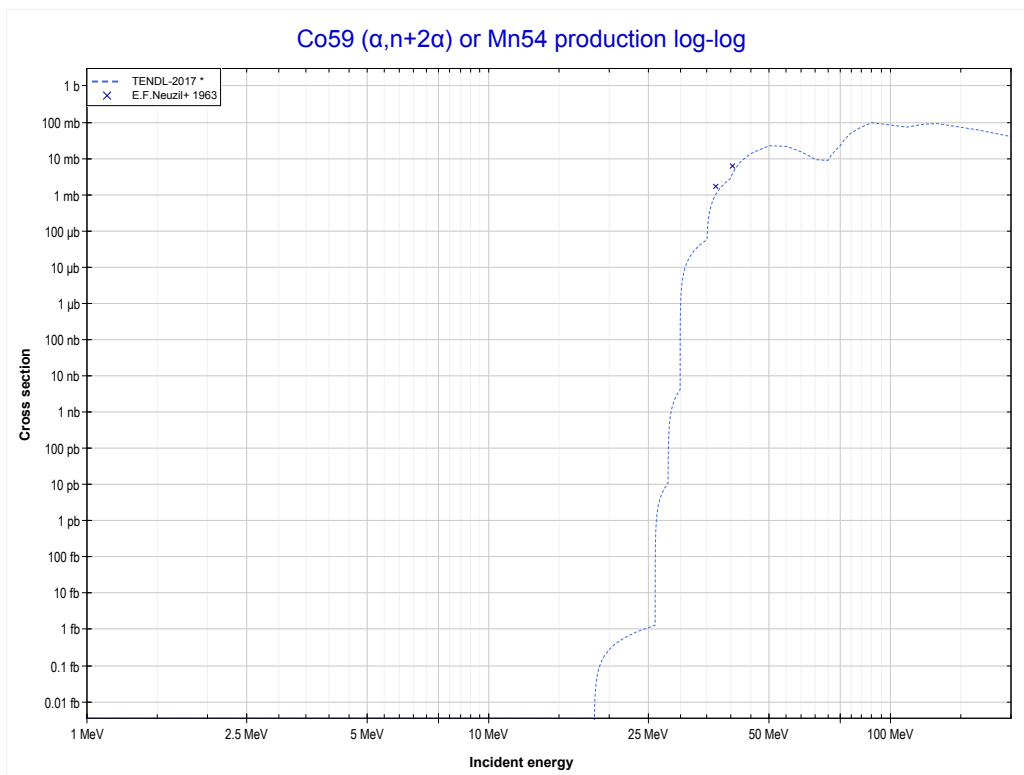
Reaction	Q-Value
Co59($\alpha, 2n + \alpha$)Co57	-19026.83 keV
Co59($\alpha, 2t$)Co57	-30358.90 keV
Co59($\alpha, n + d + t$)Co57	-36616.13 keV
Co59($\alpha, 2n + p + t$)Co57	-38840.70 keV
Co59($\alpha, 3n + He3$)Co57	-39604.45 keV
Co59($\alpha, 2n + 2d$)Co57	-42873.36 keV
Co59($\alpha, 3n + p + d$)Co57	-45097.93 keV
Co59($\alpha, 4n + 2p$)Co57	-47322.49 keV

	27-Co-59	45-Rh-103 >>
<< MT24 ($\alpha,2n+\alpha$)	MT25 ($\alpha,3n+\alpha$) or MT5 (Co56 production)	MT29 ($\alpha,n+2\alpha$) >>



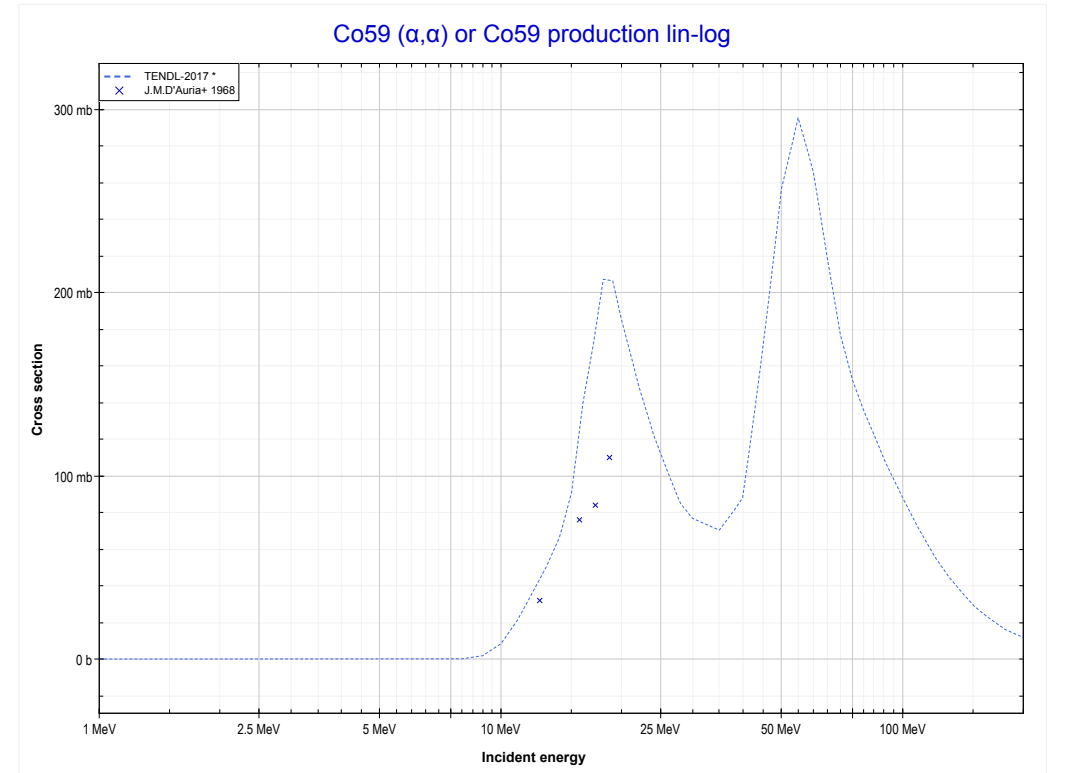
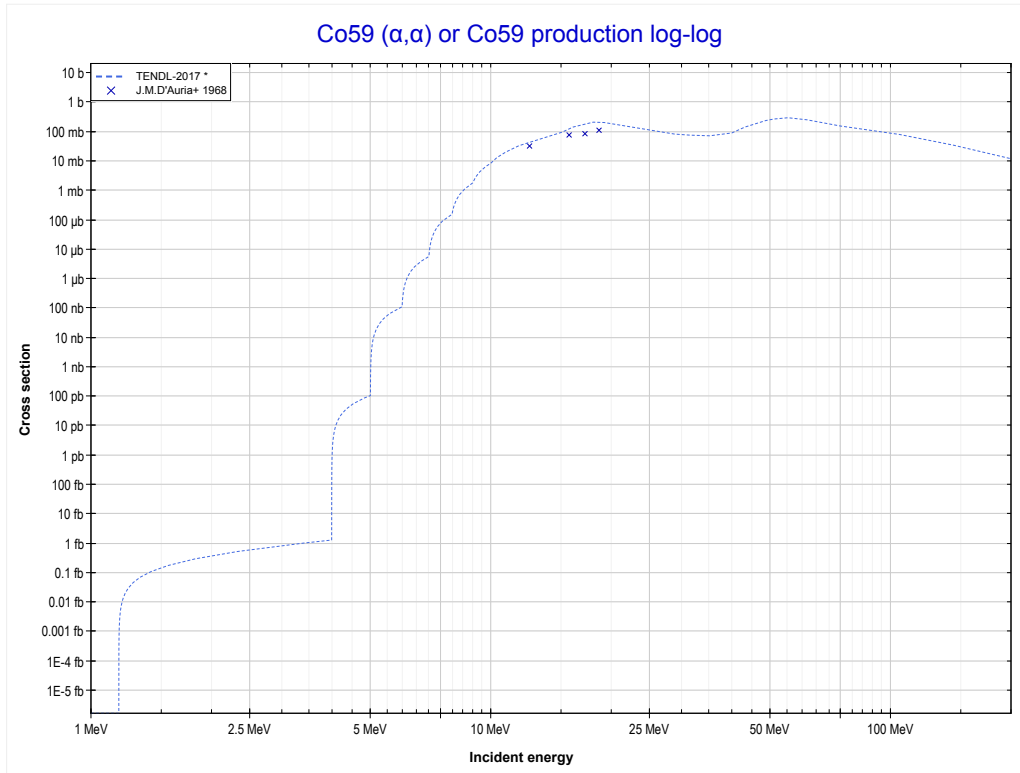
Reaction	Q-Value
Co59($\alpha,3n+\alpha$)Co56	-30403.25 keV
Co59($\alpha,n+2t$)Co56	-41735.31 keV
Co59($\alpha,2n+d+t$)Co56	-47992.55 keV
Co59($\alpha,3n+p+t$)Co56	-50217.11 keV
Co59($\alpha,4n+He3$)Co56	-50980.87 keV
Co59($\alpha,3n+2d$)Co56	-54249.78 keV
Co59($\alpha,4n+p+d$)Co56	-56474.35 keV
Co59($\alpha,5n+2p$)Co56	-58698.91 keV

<< 23-V-51	27-Co-59	48-Cd-106 >>
<< MT25 ($\alpha, 3n+\alpha$)	MT29 ($\alpha, n+2\alpha$) or MT5 (Mn54 production)	MT107 (α, α) >>



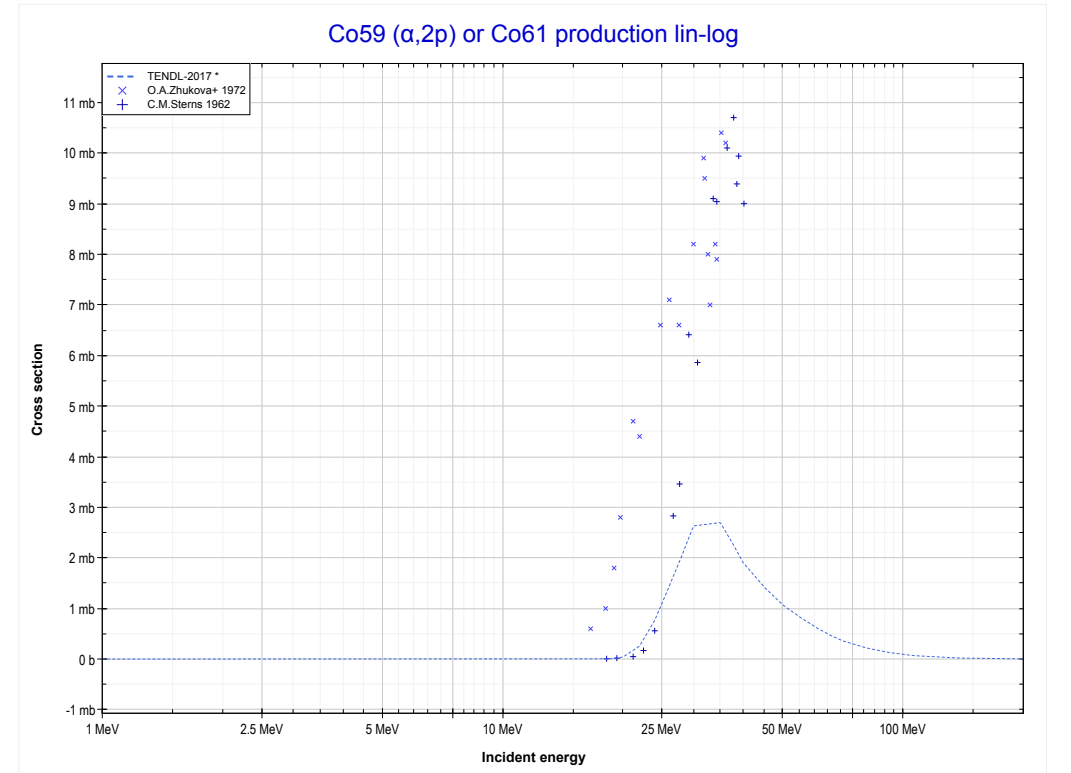
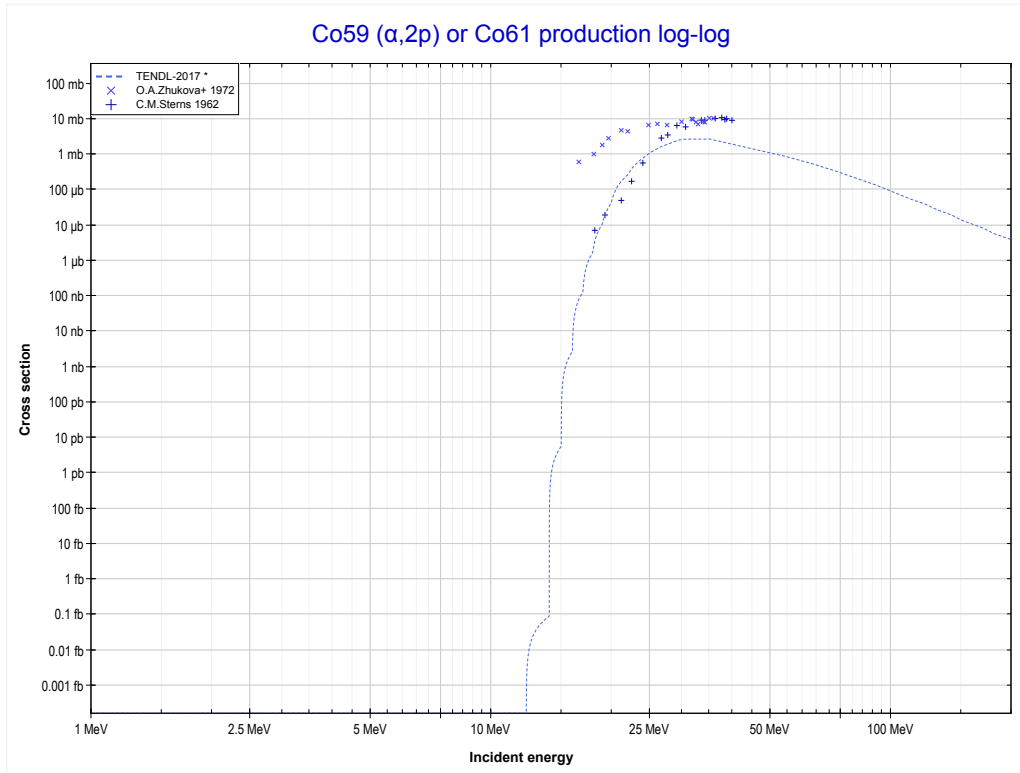
Reaction	Q-Value	Reaction	Q-Value
Co59($\alpha, n+2\alpha$)Mn54	-17168.83 keV	Co59($\alpha, p+d+2t$)Mn54	-54571.99 keV
Co59($\alpha, d+t+\alpha$)Mn54	-34758.13 keV	Co59($\alpha, n+d+t+He3$)Mn54	-55335.74 keV
Co59($\alpha, n+p+t+\alpha$)Mn54	-36982.69 keV	Co59($\alpha, n+2p+2t$)Mn54	-56796.55 keV
Co59($\alpha, 2n+He3+\alpha$)Mn54	-37746.45 keV	Co59($\alpha, 2n+p+t+He3$)Mn54	-57560.31 keV
Co59($\alpha, n+2d+\alpha$)Mn54	-41015.36 keV	Co59($\alpha, 3n+2He3$)Mn54	-58324.07 keV
Co59($\alpha, 2n+p+d+\alpha$)Mn54	-43239.93 keV	Co59($\alpha, 3d+t$)Mn54	-58604.66 keV
Co59($\alpha, 3n+2p+\alpha$)Mn54	-45464.49 keV	Co59($\alpha, n+p+2d+t$)Mn54	-60829.22 keV
Co59($\alpha, 2t+He3$)Mn54	-49078.51 keV	Co59($\alpha, 2n+2d+He3$)Mn54	-61592.98 keV

27-Co-59		
<< MT29 ($\alpha, n+2\alpha$)	MT107 (α, α) or MT5 (Co59 production)	MT111 ($\alpha, 2p$) >>



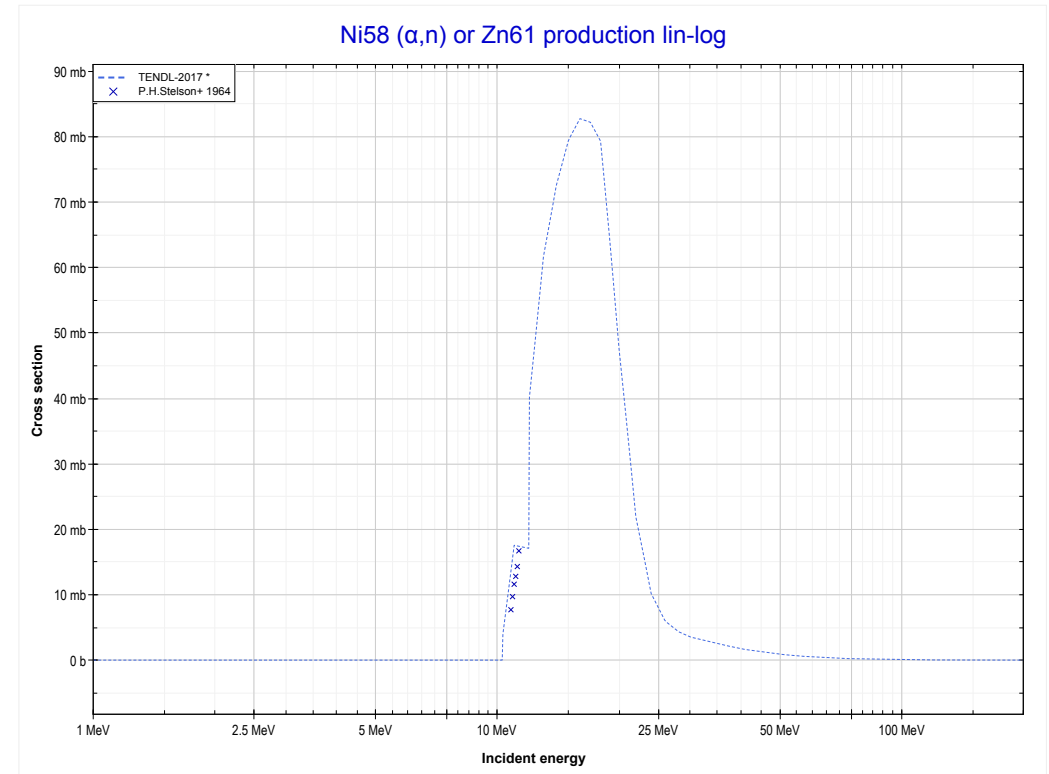
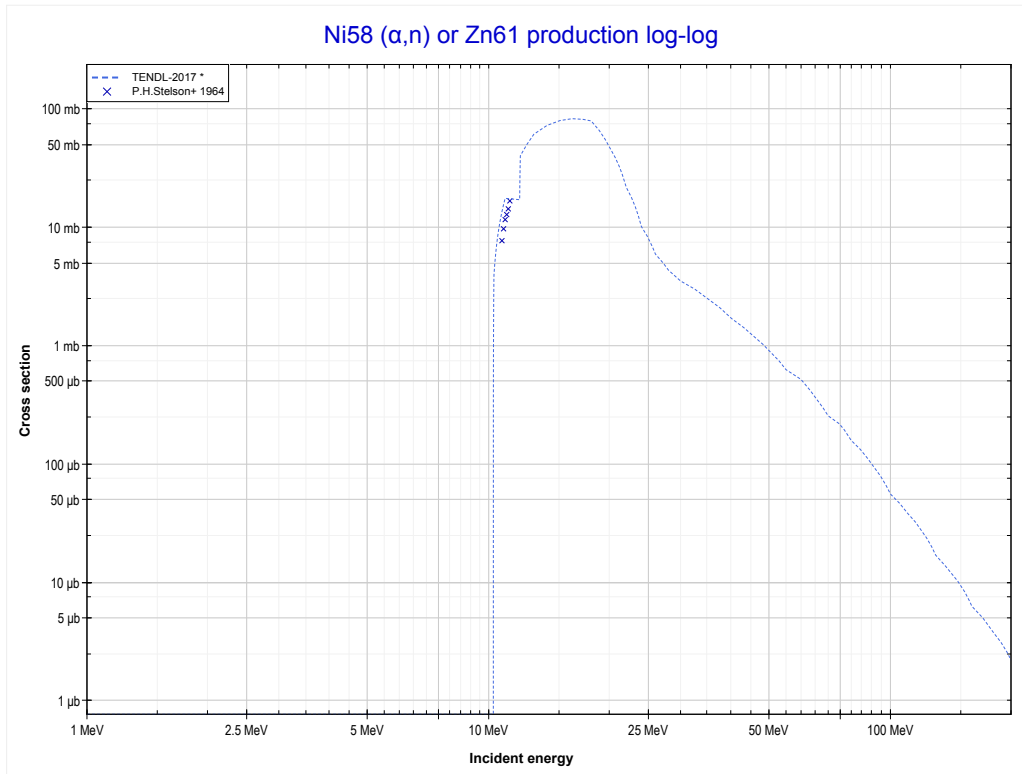
Reaction	Q-Value
Co59(α, α)Co59	0.00 keV
Co59($\alpha, p+t$)Co59	-19813.86 keV
Co59($\alpha, n+He3$)Co59	-20577.62 keV
Co59($\alpha, 2d$)Co59	-23846.53 keV
Co59($\alpha, n+p+d$)Co59	-26071.09 keV
Co59($\alpha, 2n+2p$)Co59	-28295.66 keV

<< 26-Fe-57	27-Co-59	29-Cu-65 >>
<< MT107 (α,α)	MT111 ($\alpha,2p$) or MT5 (Co61 production)	28-Ni-58 MT4 (α,n) >>



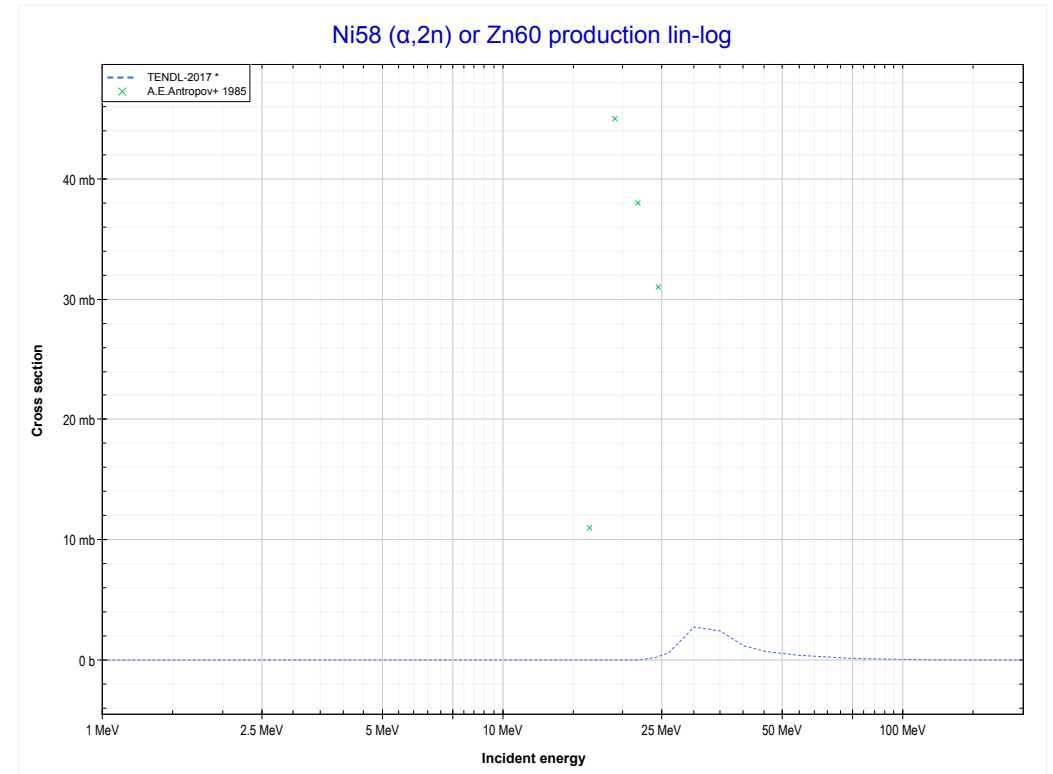
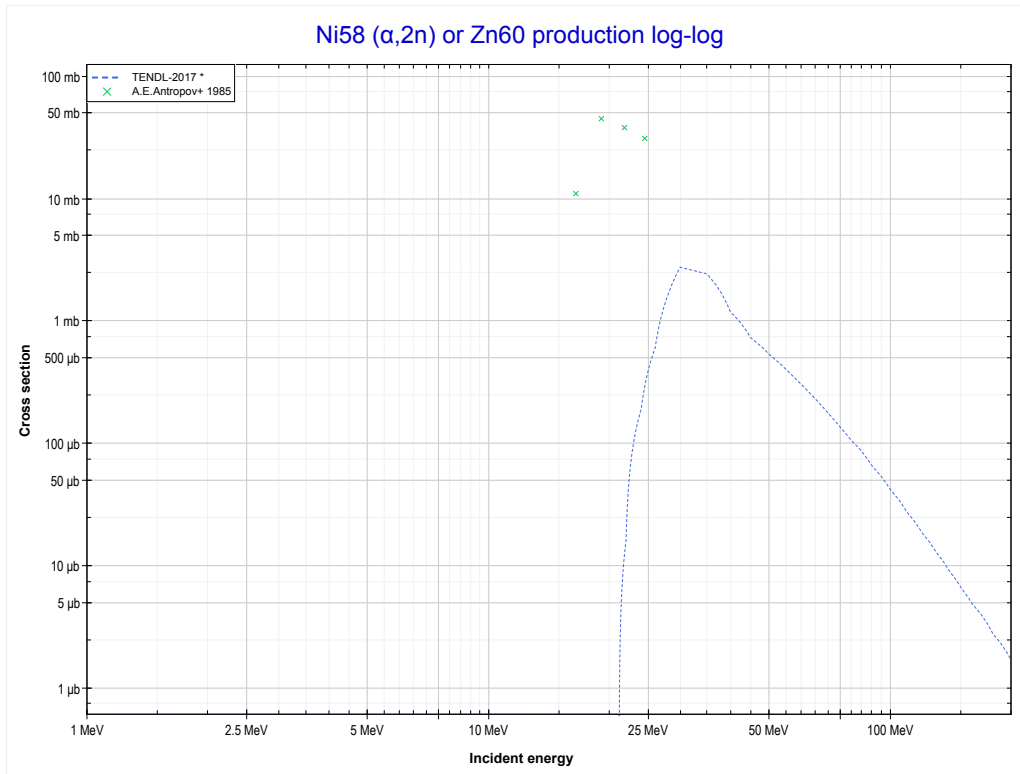
Reaction	Q-Value
Co59($\alpha,2p$)Co61	-11484.53 keV

<< 27-Co-59	28-Ni-58	28-Ni-60 >>
<< 27-Co-59 MT111 ($\alpha,2p$)	MT4 (α,n) or MT5 (Zn61 production)	MT16 ($\alpha,2n$) >>



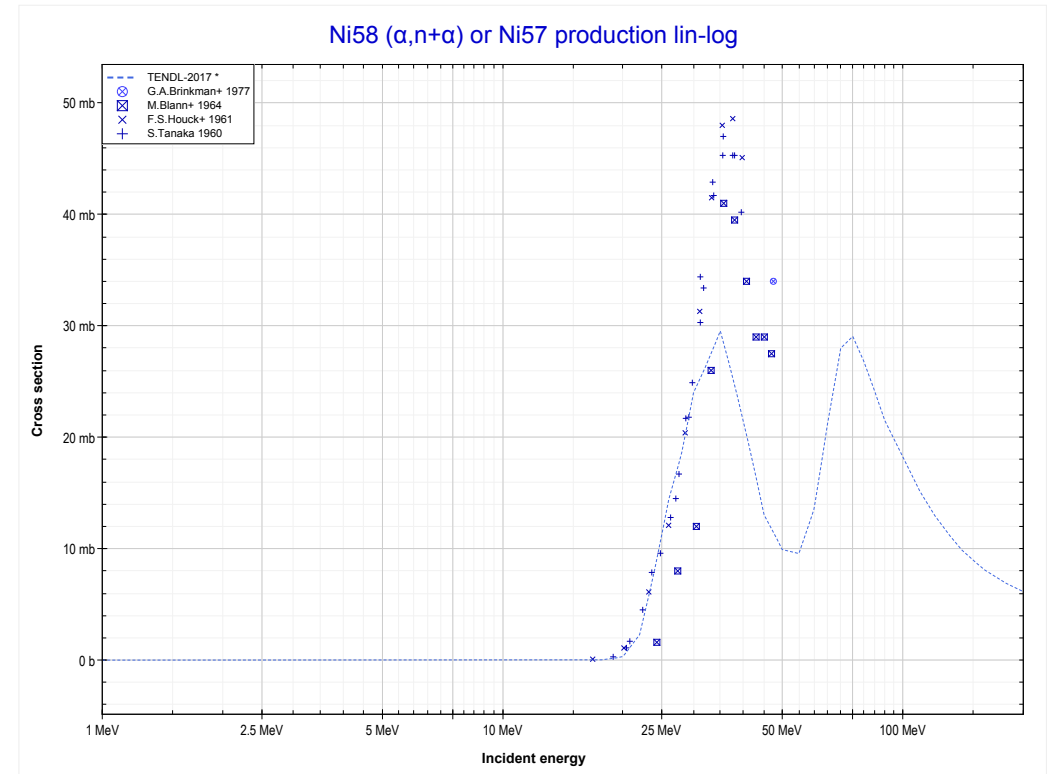
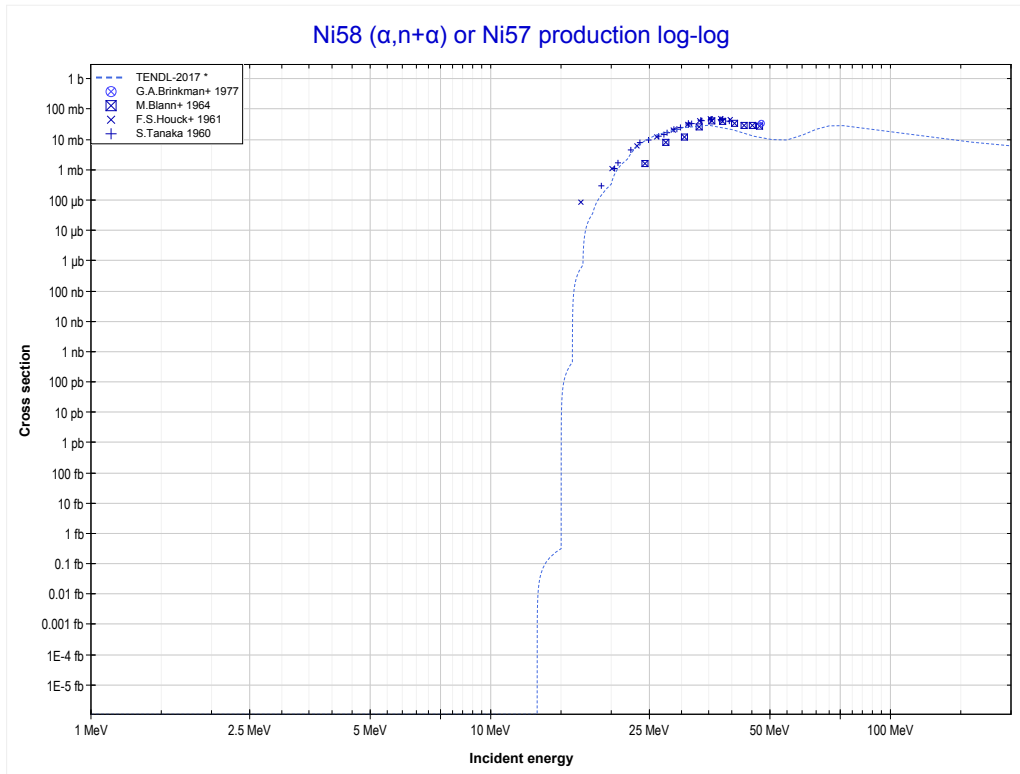
Reaction	Q-Value
Ni58(α,n)Zn61	-9525.60 keV

<< 27-Co-59	28-Ni-58	28-Ni-60 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Zn60 production)	MT22 ($\alpha, n+\alpha$) >>



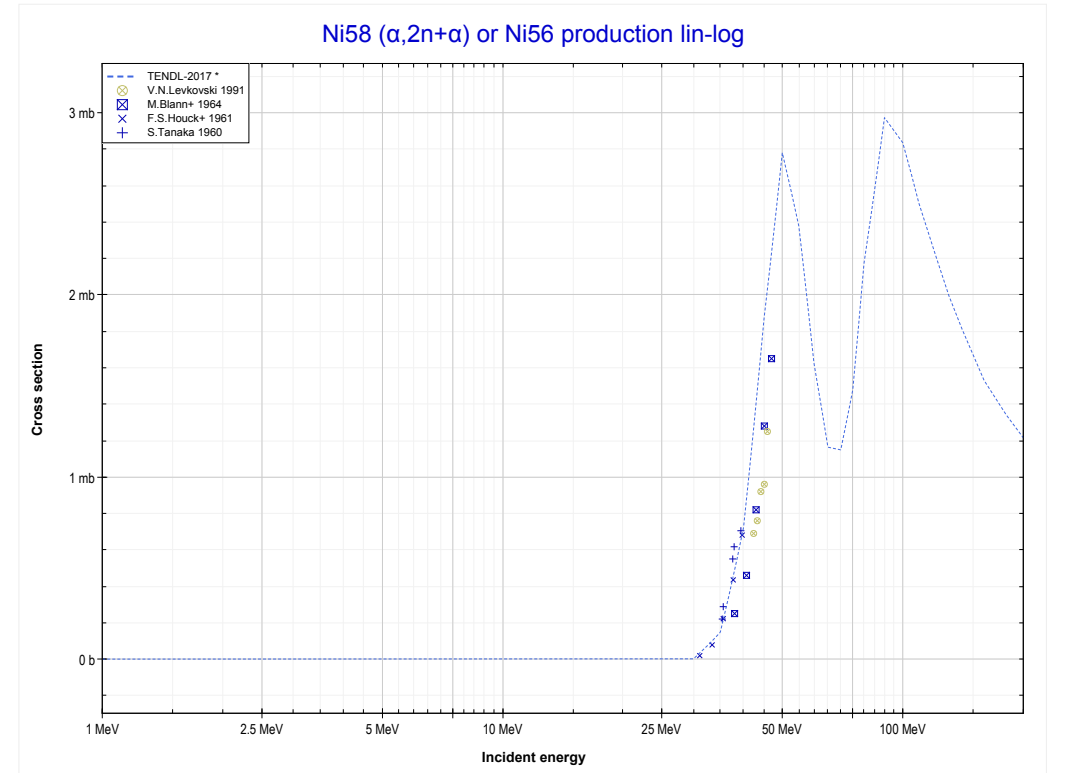
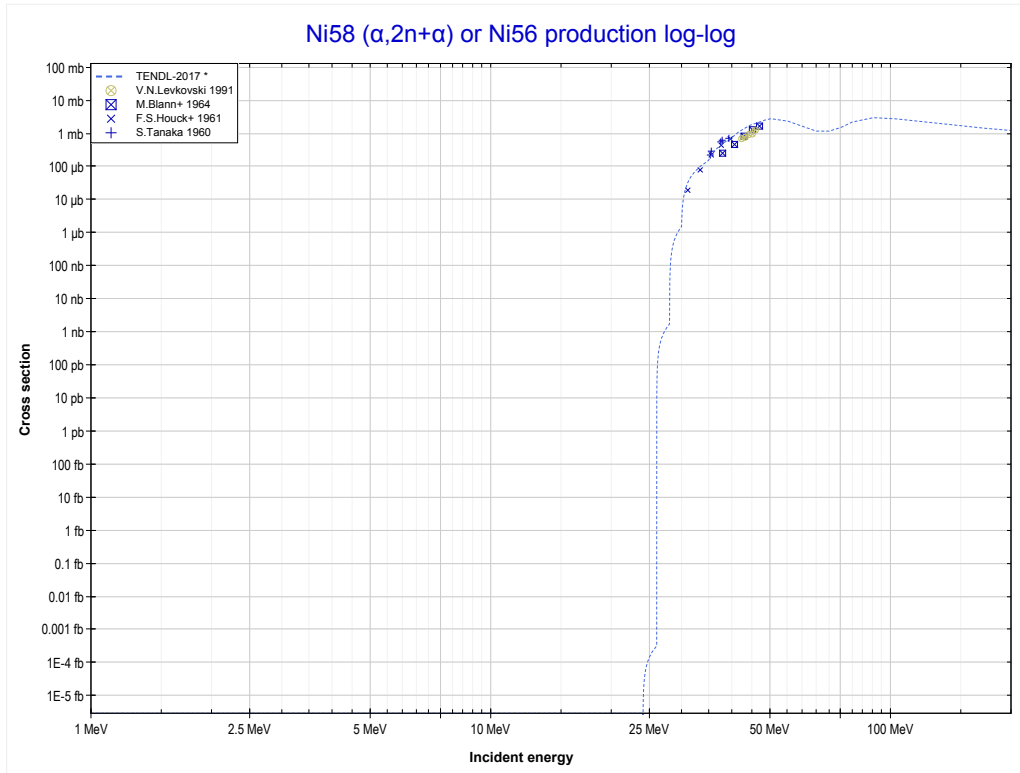
Reaction	Q-Value
Ni58($\alpha, 2n$)Zn60	-19772.22 keV

<< 27-Co-59	28-Ni-58	29-Cu-65 >>
<< MT16 ($\alpha,2n$)	MT22 ($\alpha,n+\alpha$) or MT5 (Ni57 production)	MT24 ($\alpha,2n+\alpha$) >>



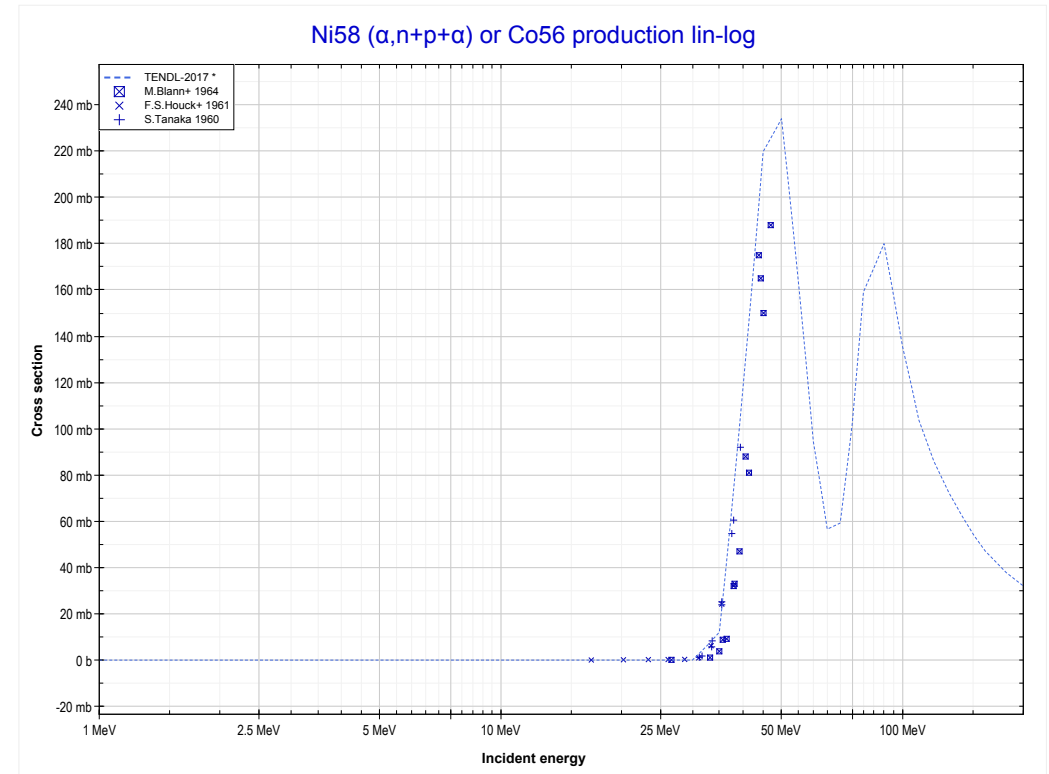
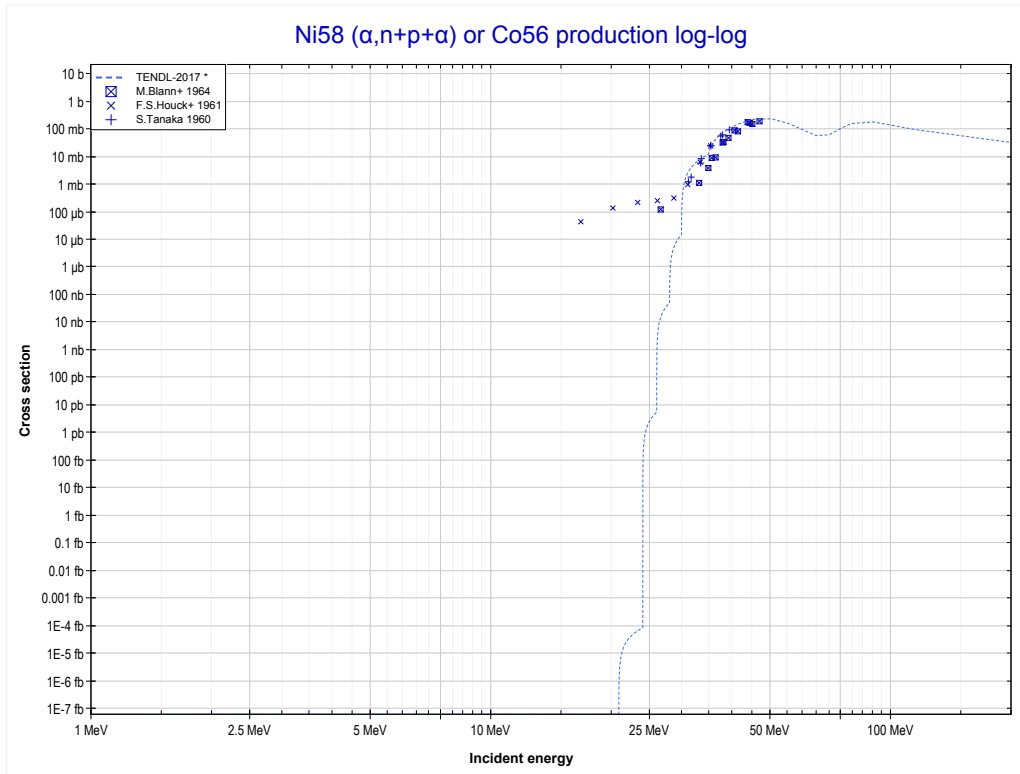
Reaction	Q-Value
Ni58($\alpha,n+\alpha$)Ni57	-12216.32 keV
Ni58($\alpha,d+t$)Ni57	-29805.61 keV
Ni58($\alpha,n+p+t$)Ni57	-32030.18 keV
Ni58($\alpha,2n+He3$)Ni57	-32793.93 keV
Ni58($\alpha,n+2d$)Ni57	-36062.84 keV
Ni58($\alpha,2n+p+d$)Ni57	-38287.41 keV
Ni58($\alpha,3n+2p$)Ni57	-40511.98 keV

<< 27-Co-59	28-Ni-58	30-Zn-64 >>
<< MT22 ($\alpha, n + \alpha$)	MT24 ($\alpha, 2n + \alpha$) or MT5 (Ni56 production)	MT45 ($\alpha, n + p + \alpha$) >>



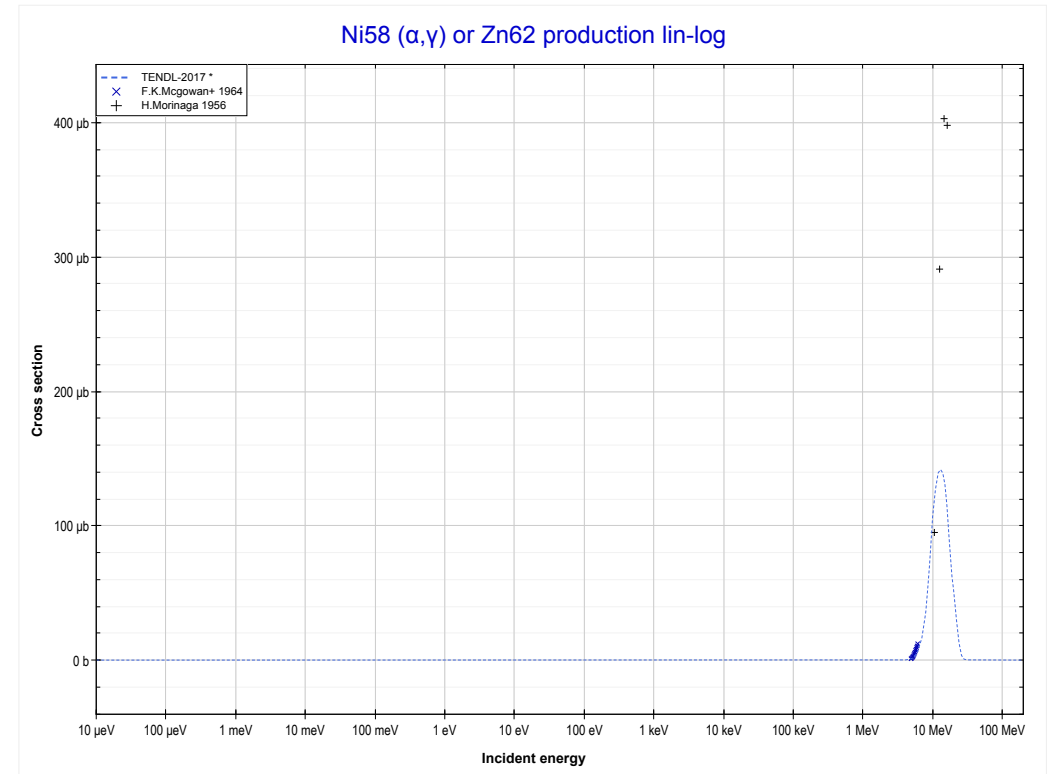
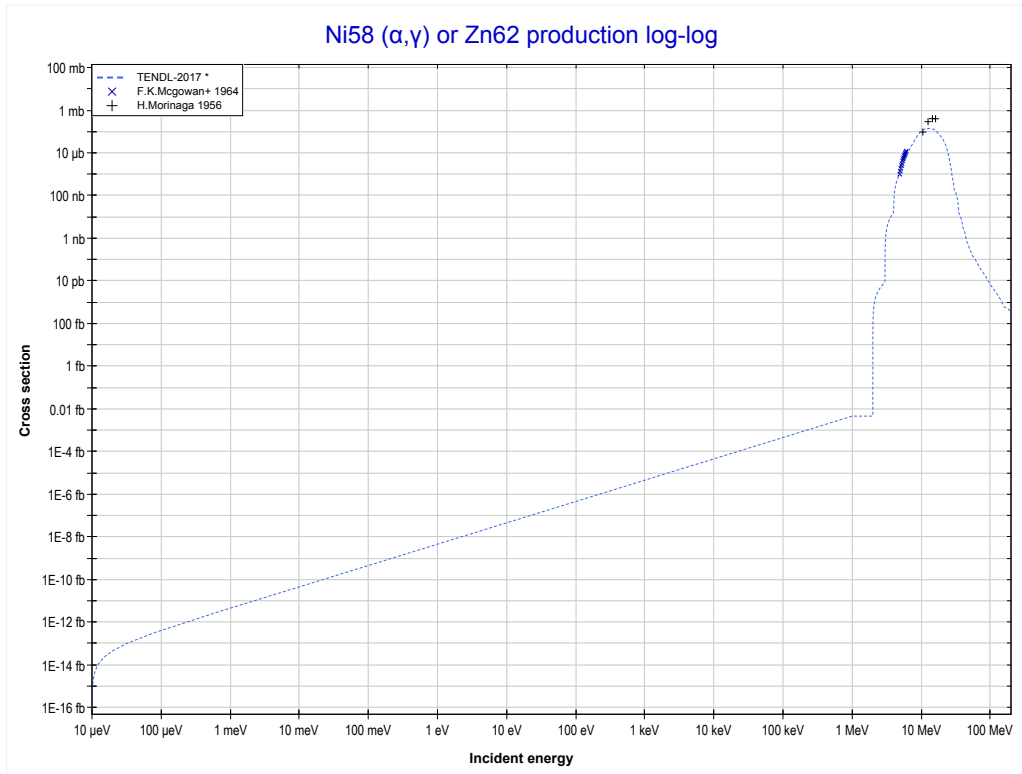
Reaction	Q-Value
Ni58($\alpha, 2n + \alpha$)Ni56	-22463.93 keV
Ni58($\alpha, 2t$)Ni56	-33796.00 keV
Ni58($\alpha, n + d + t$)Ni56	-40053.23 keV
Ni58($\alpha, 2n + p + t$)Ni56	-42277.80 keV
Ni58($\alpha, 3n + He3$)Ni56	-43041.55 keV
Ni58($\alpha, 2n + 2d$)Ni56	-46310.46 keV
Ni58($\alpha, 3n + p + d$)Ni56	-48535.03 keV
Ni58($\alpha, 4n + 2p$)Ni56	-50759.59 keV

<< 26-Fe-56	28-Ni-58	28-Ni-60 >>
<< MT24 ($\alpha, 2n+\alpha$)	MT45 ($\alpha, n+p+\alpha$) or MT5 (Co56 production)	MT102 (α, γ) >>



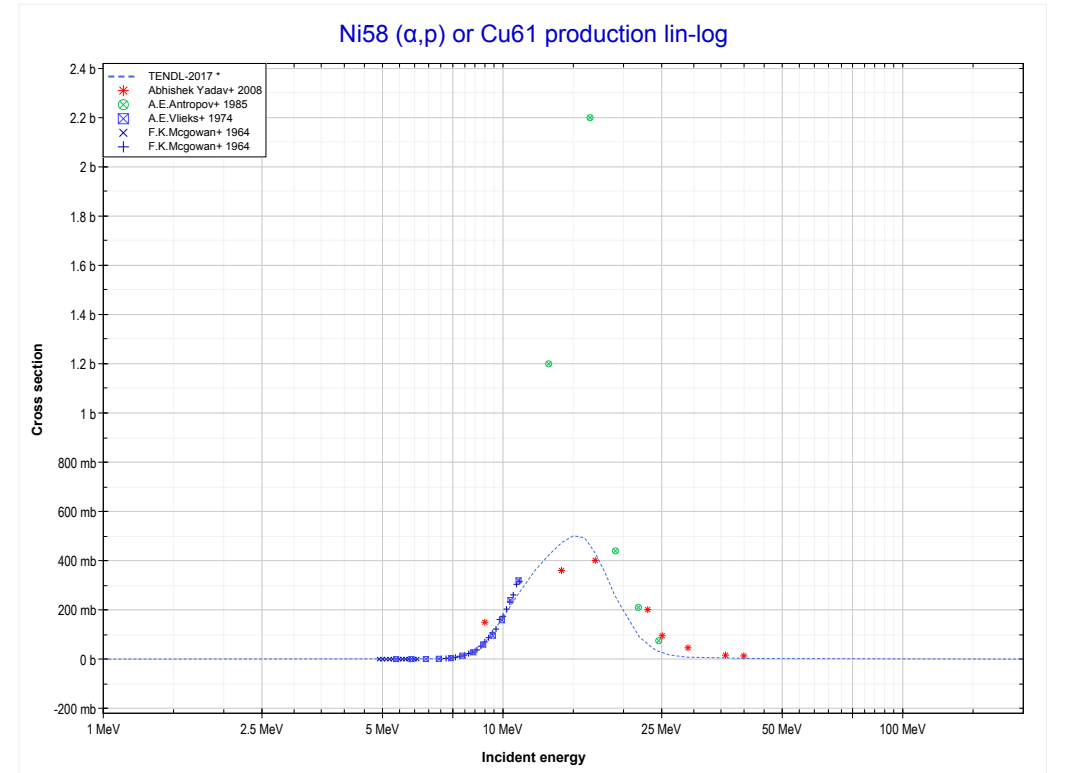
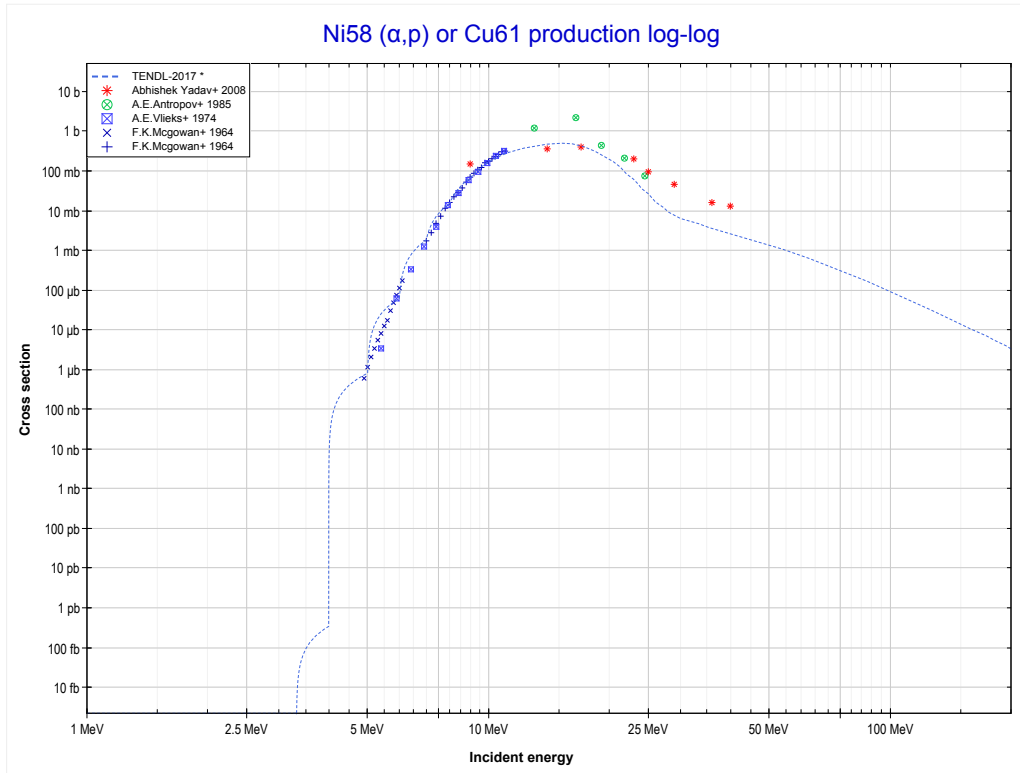
Reaction	Q-Value	Reaction	Q-Value
Ni58($\alpha, d+\alpha$)Co56	-17324.12 keV	Ni58($\alpha, n+p+2d$)Co56	-43395.22 keV
Ni58($\alpha, n+p+\alpha$)Co56	-19548.69 keV	Ni58($\alpha, 2n+2p+d$)Co56	-45619.78 keV
Ni58($\alpha, t+He3$)Co56	-31644.51 keV	Ni58($\alpha, 3n+3p$)Co56	-47844.35 keV
Ni58($\alpha, p+d+t$)Co56	-37137.98 keV		
Ni58($\alpha, n+d+He3$)Co56	-37901.74 keV		
Ni58($\alpha, n+2p+t$)Co56	-39362.55 keV		
Ni58($\alpha, 2n+p+He3$)Co56	-40126.30 keV		
Ni58($\alpha, 3d$)Co56	-41170.65 keV		

<< 17-CI-37	28-Ni-58	28-Ni-62 >>
<< MT45 ($\alpha, n+p+\alpha$)	MT102 (α, γ) or MT5 (Zn62 production)	MT103 (α, p) >>



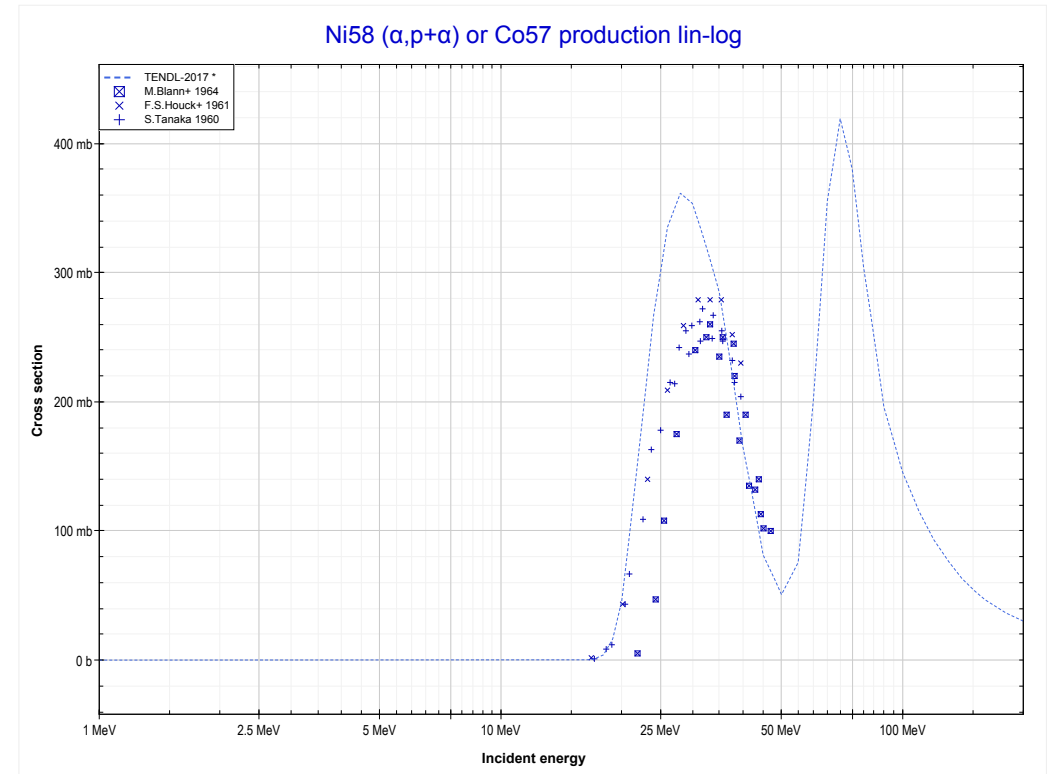
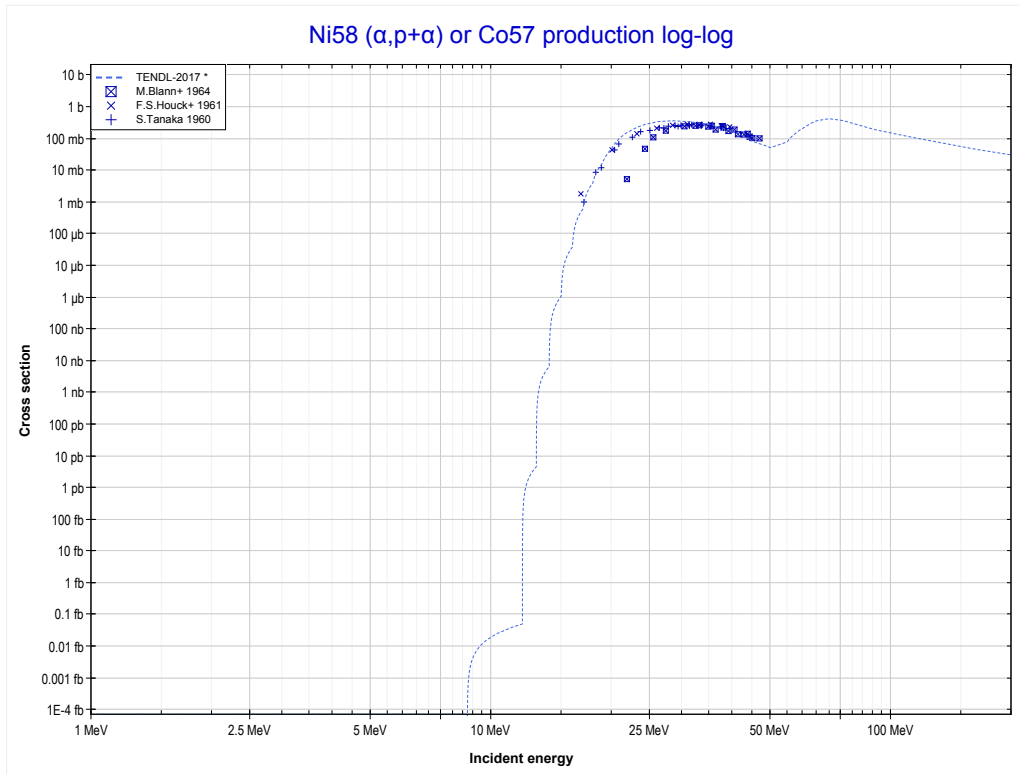
Reaction	Q-Value
Ni58(α, γ)Zn62	3364.22 keV

<< 26-Fe-58	28-Ni-58	28-Ni-61 >>
<< MT102 (α,γ)	MT103 (α,p) or MT5 (Cu61 production)	MT112 ($\alpha,p+\alpha$) >>



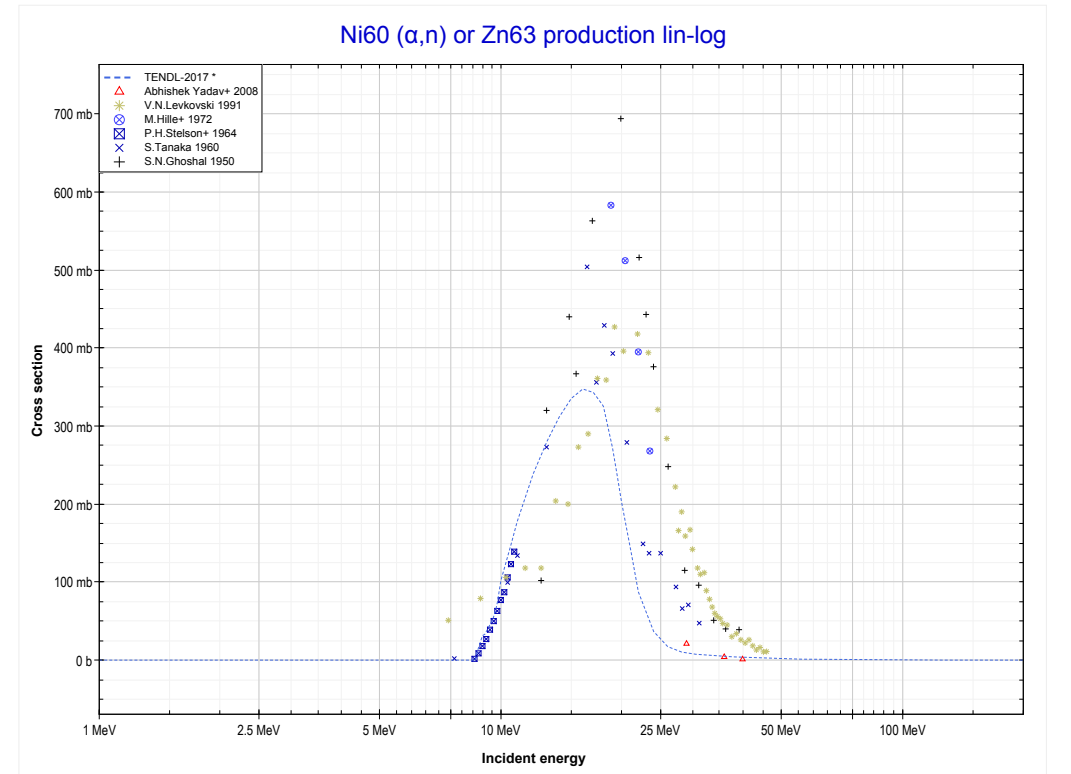
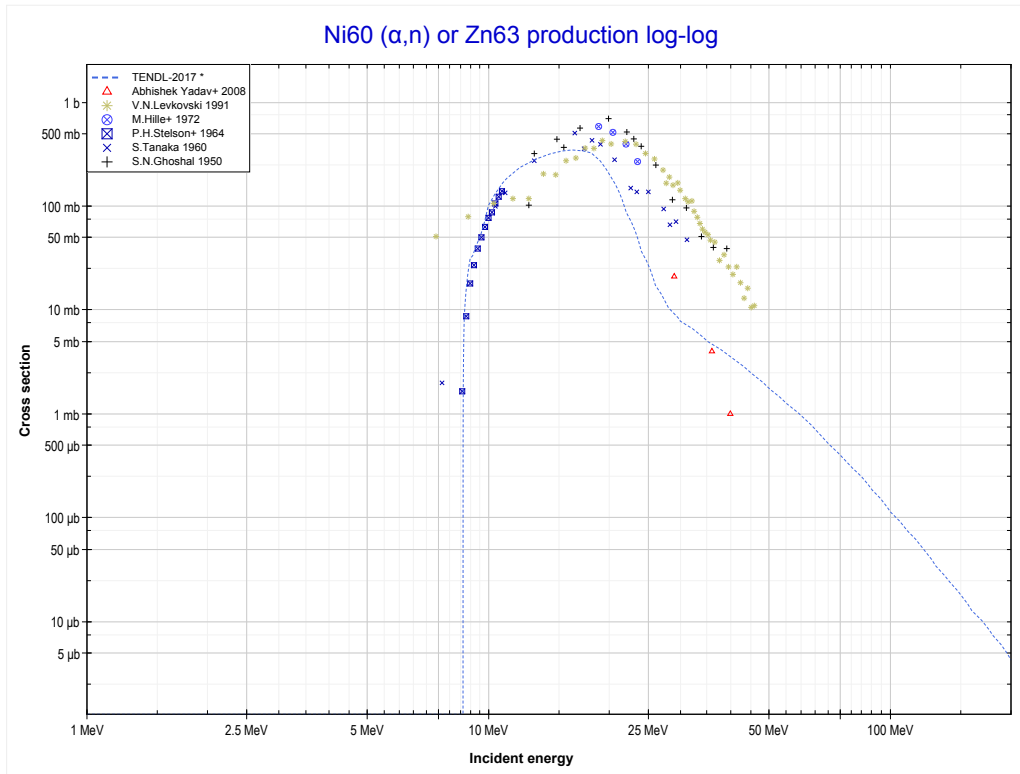
Reaction	Q-Value
Ni58(α,p)Cu61	-3108.45 keV

<< 26-Fe-57	28-Ni-58	28-Ni-62 >>
<< MT103 (α,p)	MT112 ($\alpha,p+\alpha$) or MT5 (Co57 production)	28-Ni-60 MT4 (α,n) >>



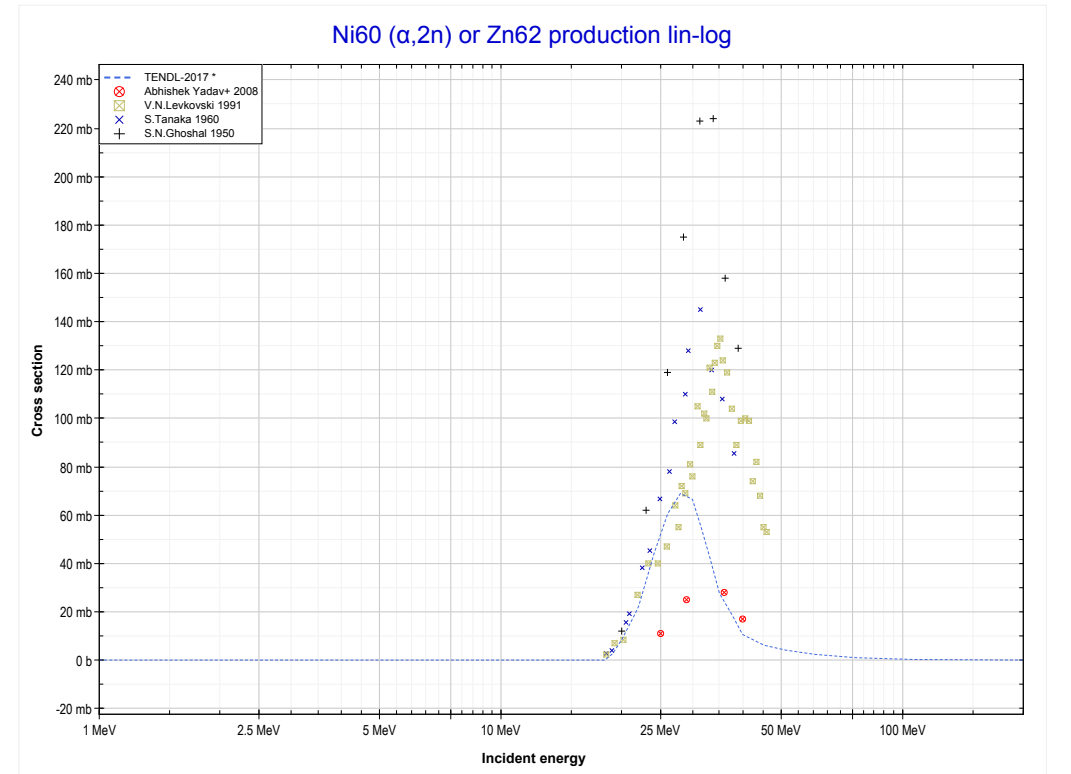
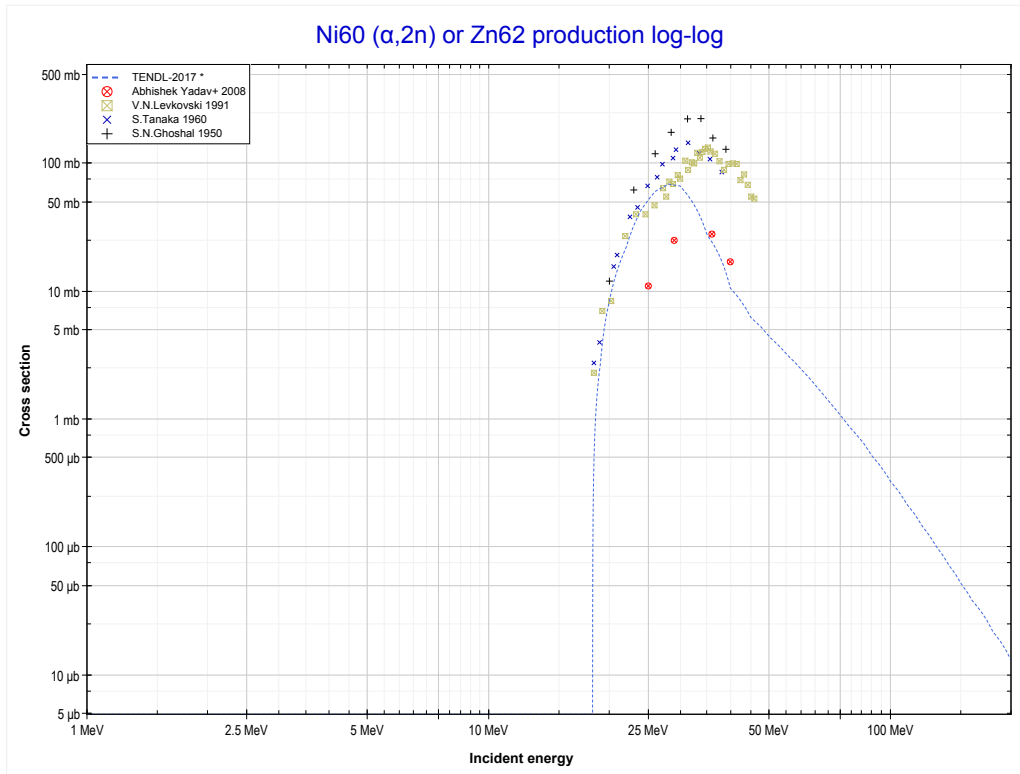
Reaction	Q-Value
Ni58($\alpha,p+\alpha$)Co57	-8172.27 keV
Ni58($\alpha,d+He3$)Co57	-26525.32 keV
Ni58($\alpha,2p+t$)Co57	-27986.13 keV
Ni58($\alpha,n+p+He3$)Co57	-28749.89 keV
Ni58($\alpha,p+2d$)Co57	-32018.80 keV
Ni58($\alpha,n+2p+d$)Co57	-34243.36 keV
Ni58($\alpha,2n+3p$)Co57	-36467.93 keV

<< 28-Ni-58	28-Ni-60	28-Ni-62 >>
<< 28-Ni-58 MT112 ($\alpha, p + \alpha$)	MT4 (α, n) or MT5 (Zn63 production)	MT16 ($\alpha, 2n$) >>



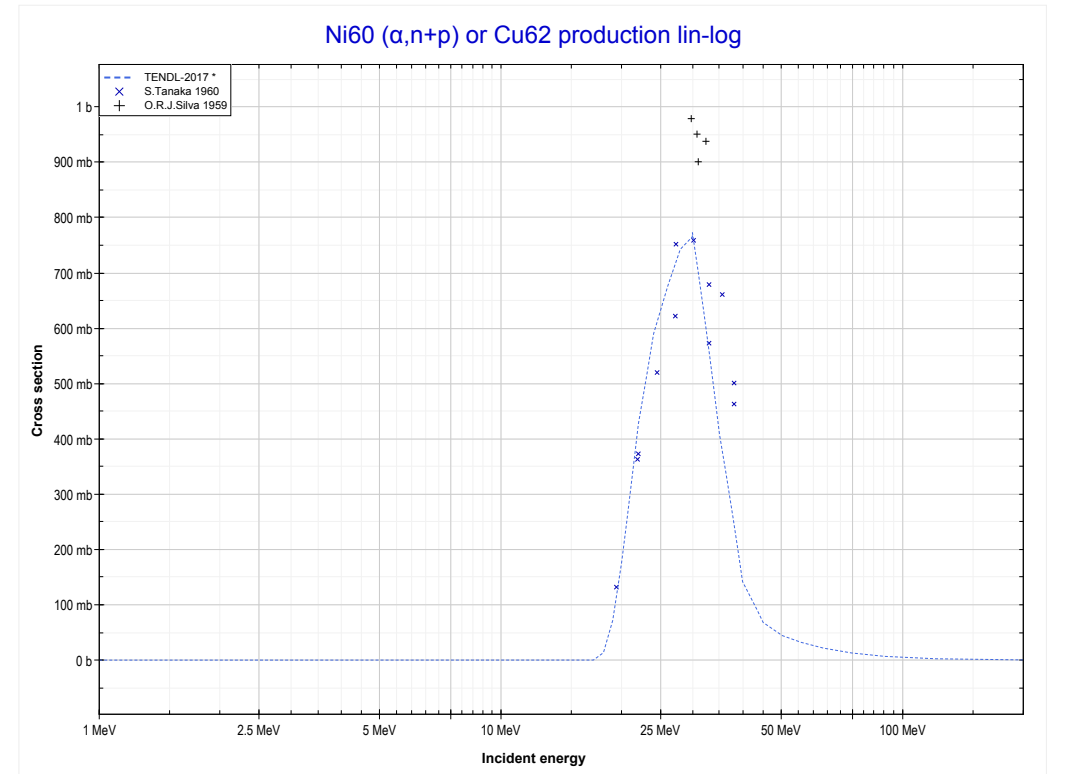
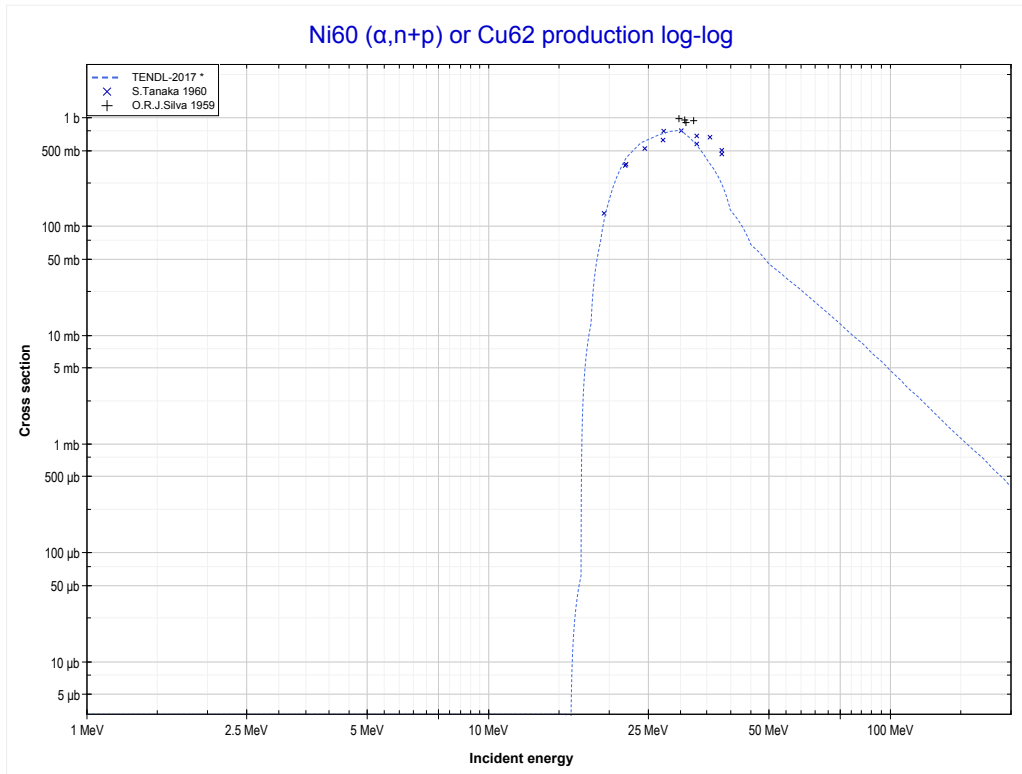
Reaction	Q-Value
Ni60(α, n)Zn63	-7905.80 keV

<< 28-Ni-58	28-Ni-60	28-Ni-61 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Zn62 production)	MT28 ($\alpha, n+p$) >>



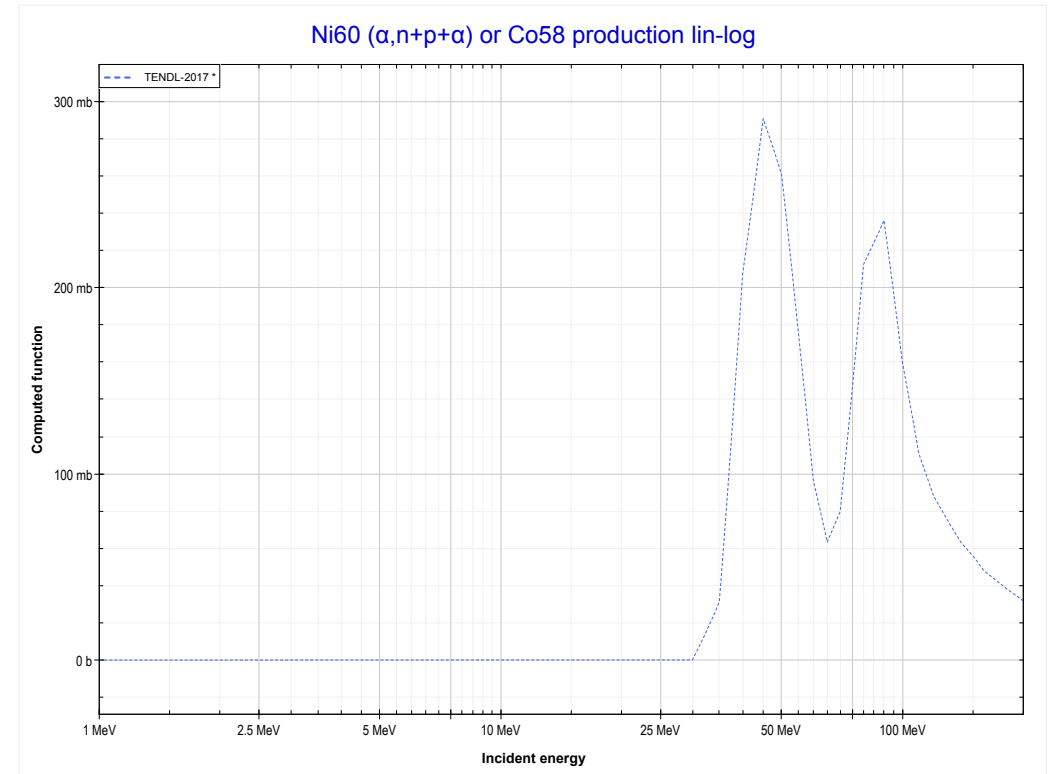
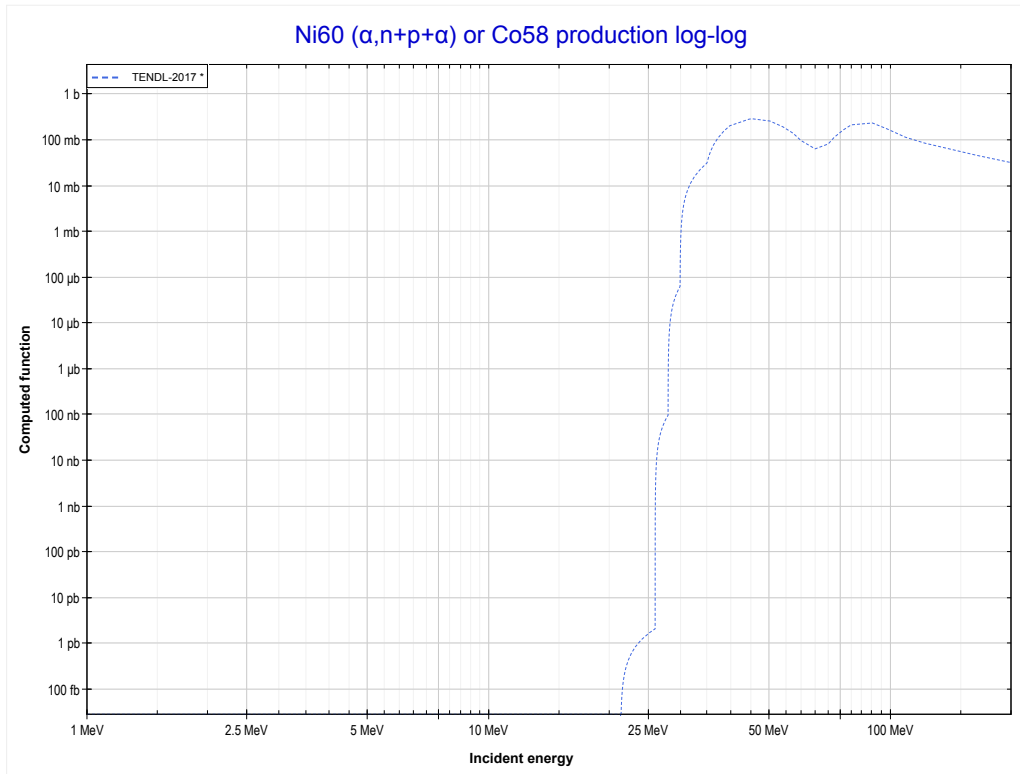
Reaction	Q-Value
Ni60($\alpha, 2n$)Zn62	-17022.72 keV

<< 26-Fe-56	28-Ni-60	28-Ni-62 >>
<< MT16 ($\alpha,2n$)	MT28 ($\alpha,n+p$) or MT5 (Cu62 production)	MT45 ($\alpha,n+p+\alpha$) >>



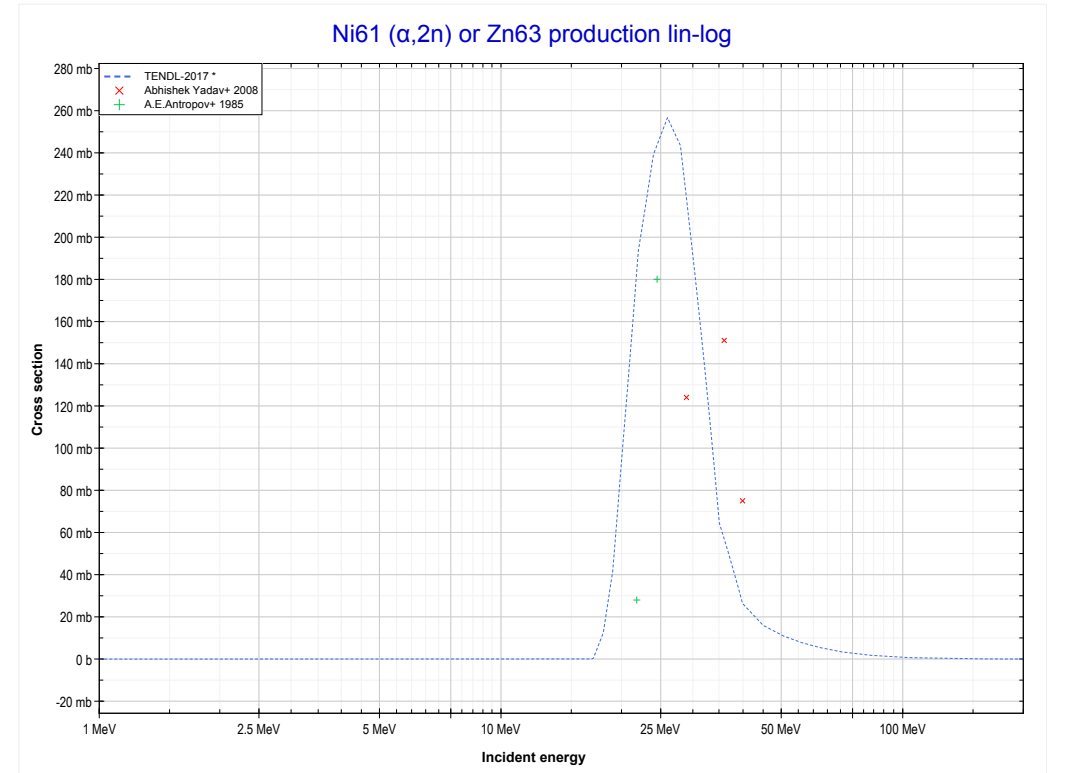
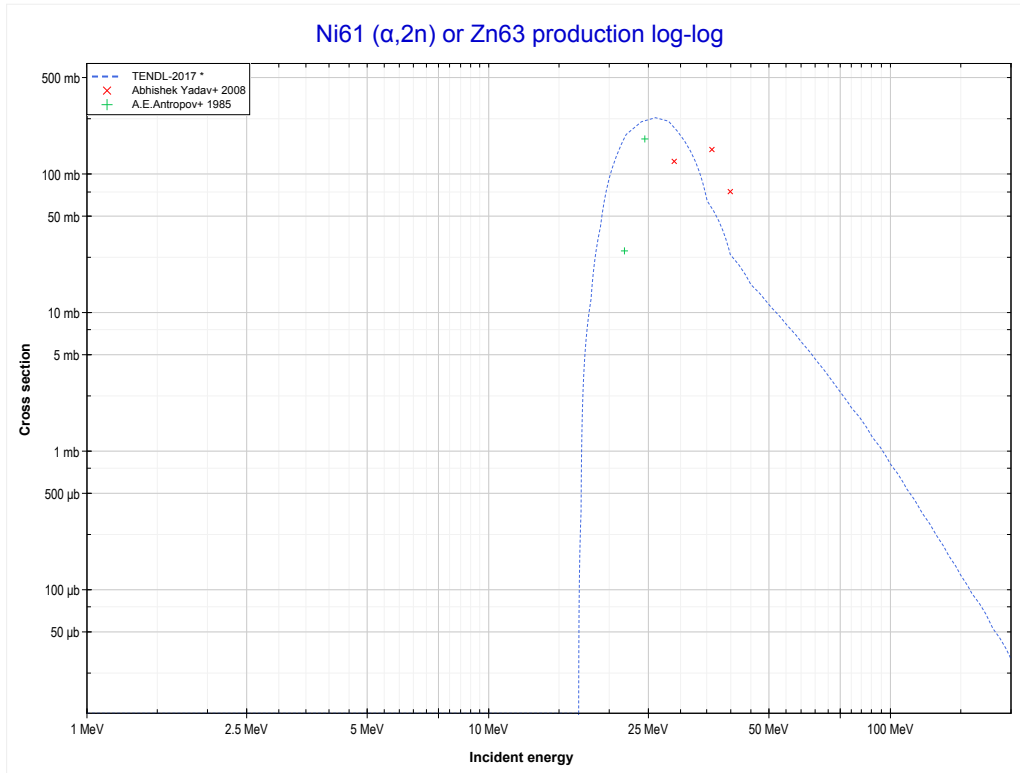
Reaction	Q-Value
Ni60(α,d)Cu62	-12396.31 keV
Ni60($\alpha,n+p$)Cu62	-14620.87 keV

<< 28-Ni-58	28-Ni-60	30-Zn-64 >>
<< MT28 ($\alpha, n+p$)	MT45 ($\alpha, n+p+\alpha$) or MT5 (Co58 production)	28-Ni-61 MT16 ($\alpha, 2n$) >>



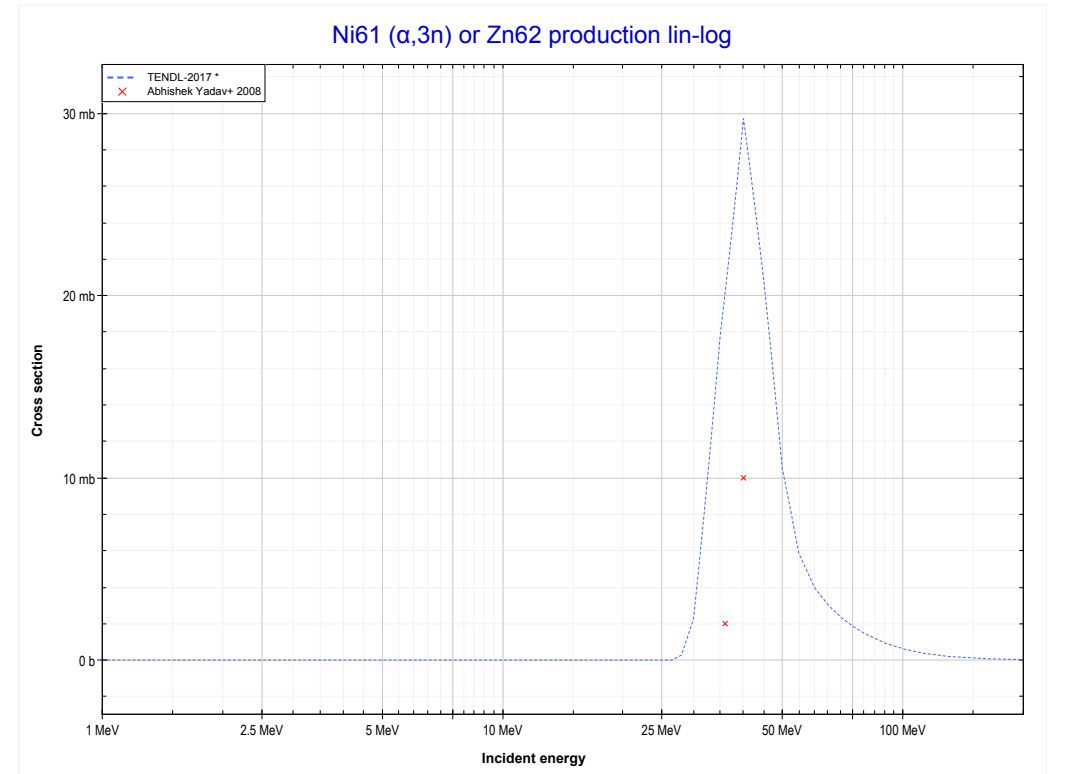
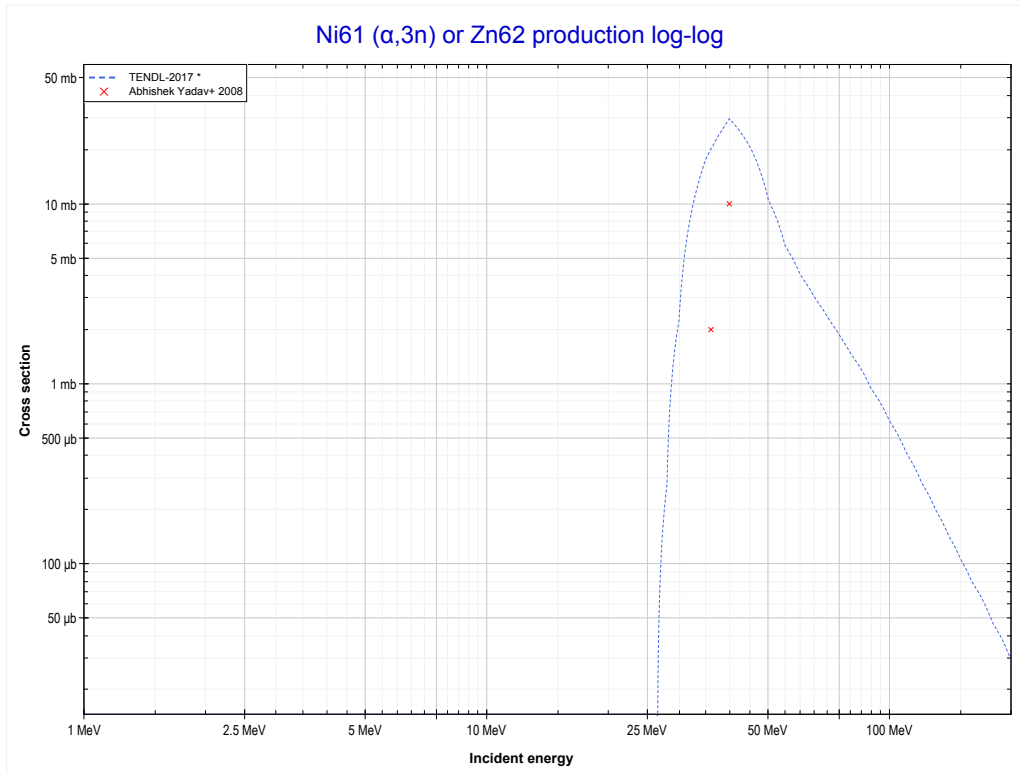
Reaction	Q-Value	Reaction	Q-Value
Ni60($\alpha, d+\alpha$)Co58	-17761.62 keV	Ni60($\alpha, n+p+2d$)Co58	-43832.72 keV
Ni60($\alpha, n+p+\alpha$)Co58	-19986.19 keV	Ni60($\alpha, 2n+2p+d$)Co58	-46057.28 keV
Ni60($\alpha, t+He3$)Co58	-32082.01 keV	Ni60($\alpha, 3n+3p$)Co58	-48281.85 keV
Ni60($\alpha, p+d+t$)Co58	-37575.48 keV		
Ni60($\alpha, n+d+He3$)Co58	-38339.24 keV		
Ni60($\alpha, n+2p+t$)Co58	-39800.05 keV		
Ni60($\alpha, 2n+p+He3$)Co58	-40563.80 keV		
Ni60($\alpha, 3d$)Co58	-41608.15 keV		

<< 28-Ni-60	28-Ni-61	29-Cu-63 >>
<< 28-Ni-60 MT45 ($\alpha, n+p+\alpha$)	MT16 ($\alpha, 2n$) or MT5 (Zn63 production)	MT17 ($\alpha, 3n$) >>



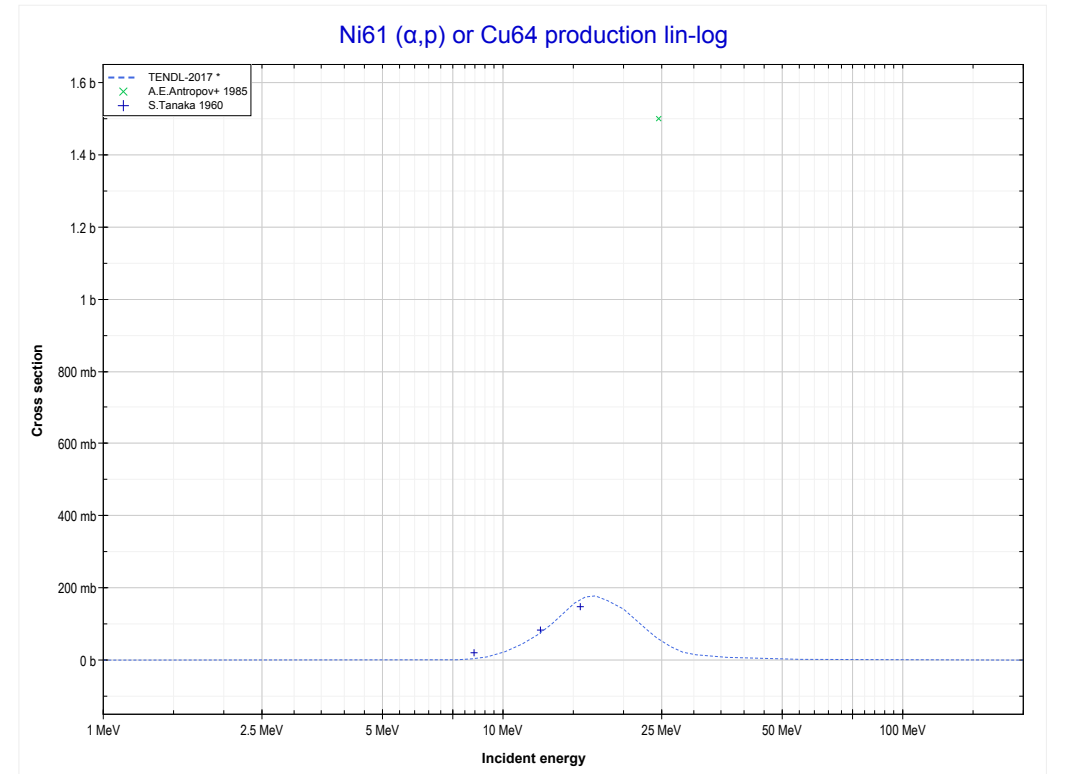
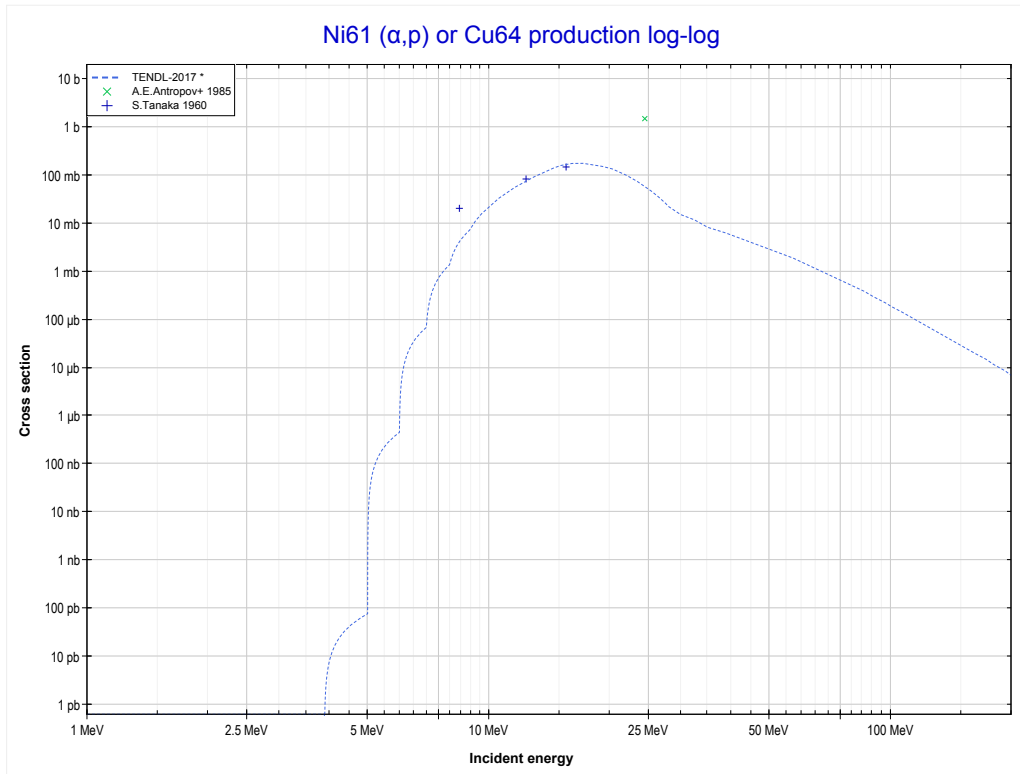
Reaction	Q-Value
Ni61($\alpha, 2n$)Zn63	-15725.92 keV

<< 27-Co-59	28-Ni-61	28-Ni-62 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Zn62 production)	MT103 (α,p) >>



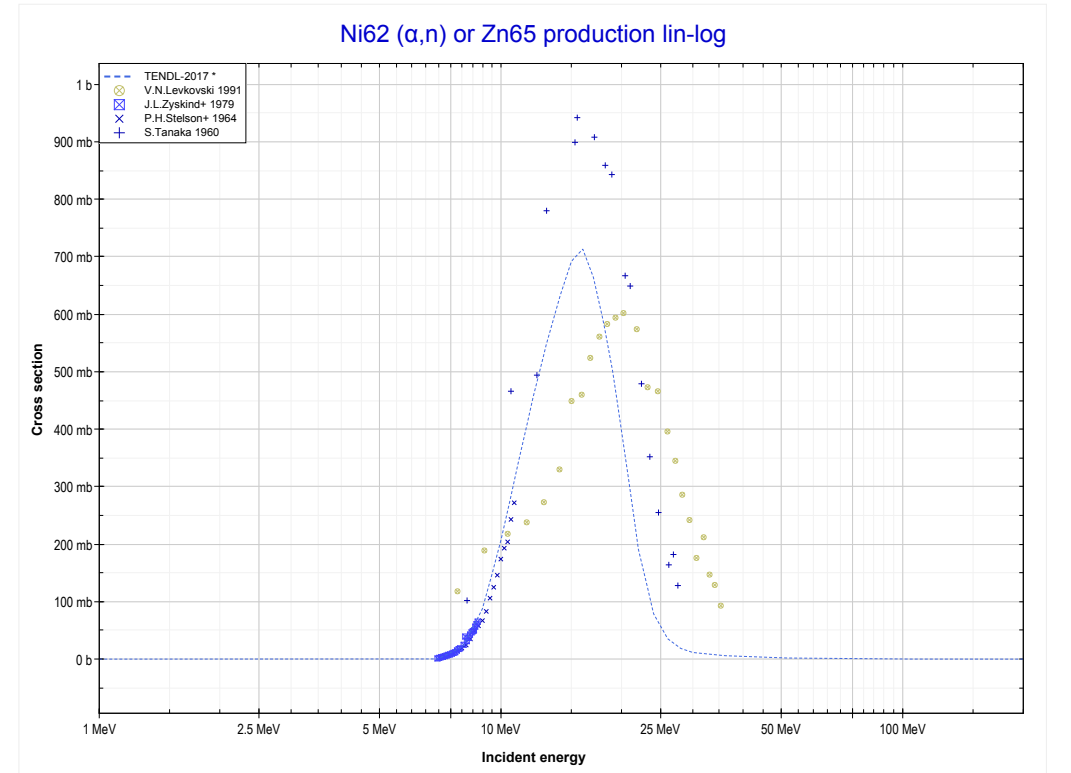
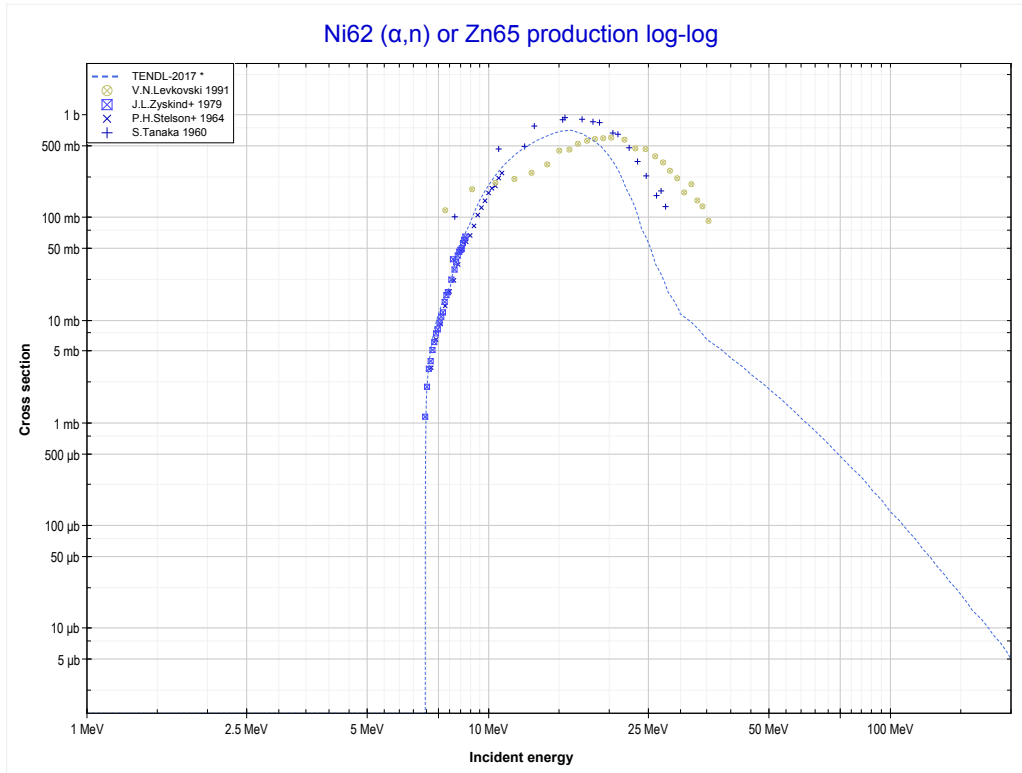
Reaction	Q-Value
Ni61($\alpha,3n$)Zn62	-24842.84 keV

<< 28-Ni-58	28-Ni-61	28-Ni-64 >>
<< MT17 ($\alpha,3n$)	MT103 (α,p) or MT5 (Cu64 production)	28-Ni-62 MT4 (α,n) >>



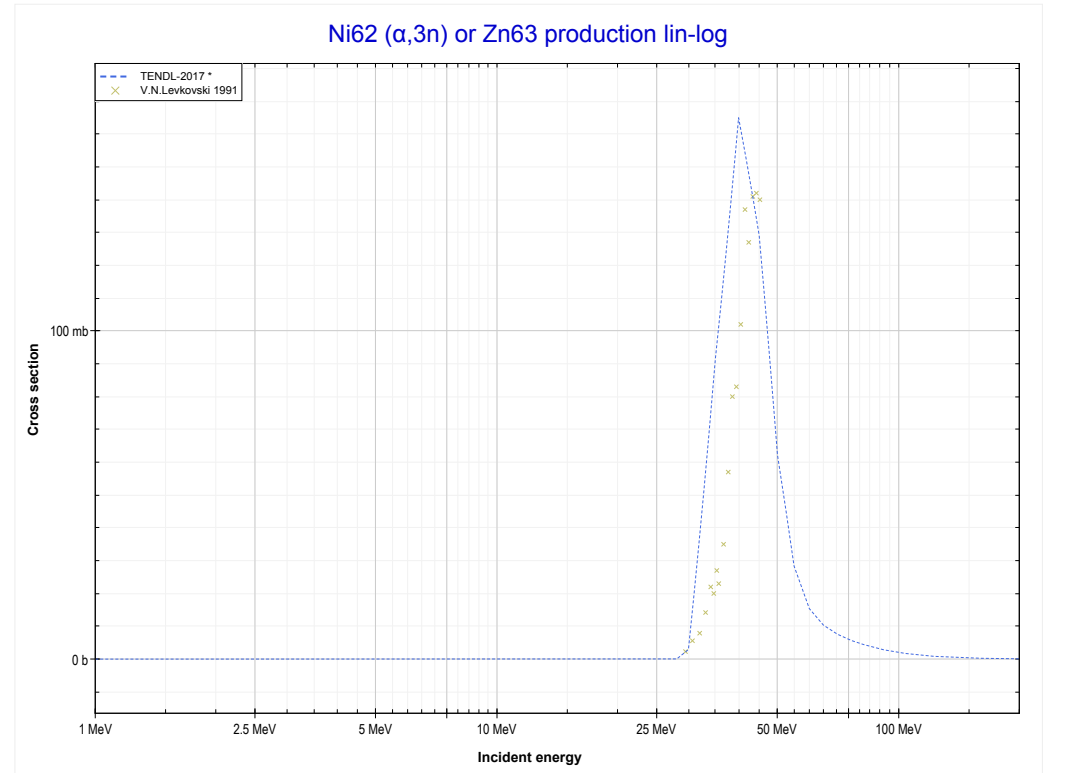
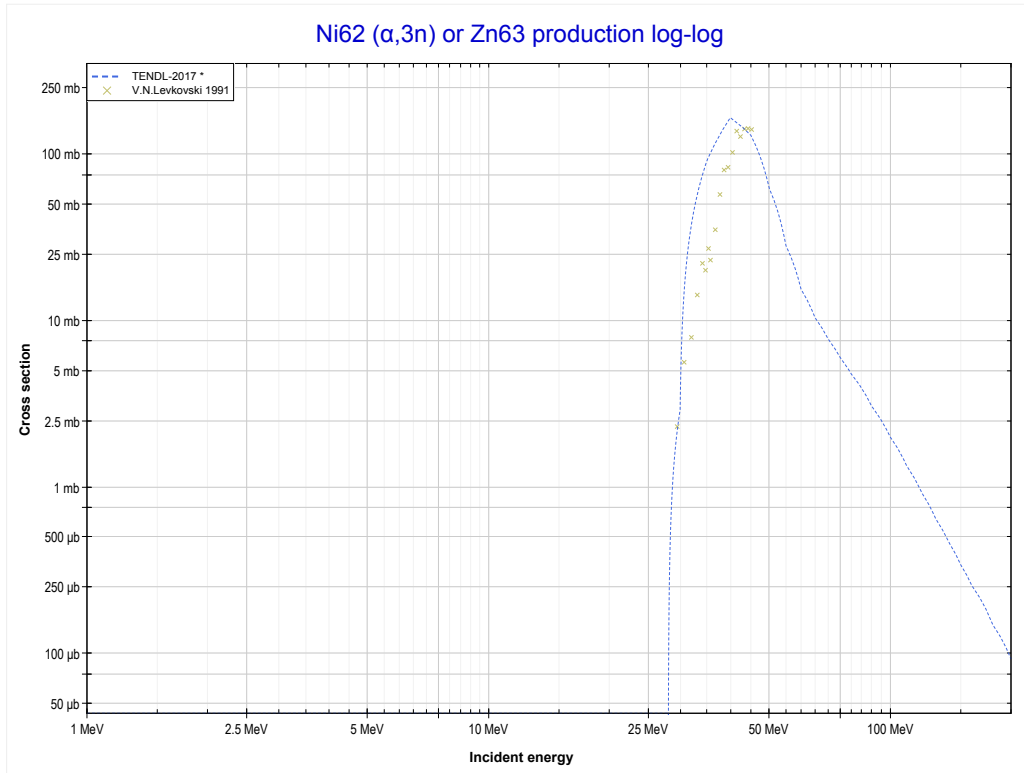
Reaction	Q-Value
Ni61(α,p)Cu64	-3661.25 keV

<< 28-Ni-60	28-Ni-62	28-Ni-64 >>
<< 28-Ni-61 MT103 (α,p)	MT4 (α,n) or MT5 (Zn65 production)	MT17 (α,3n) >>



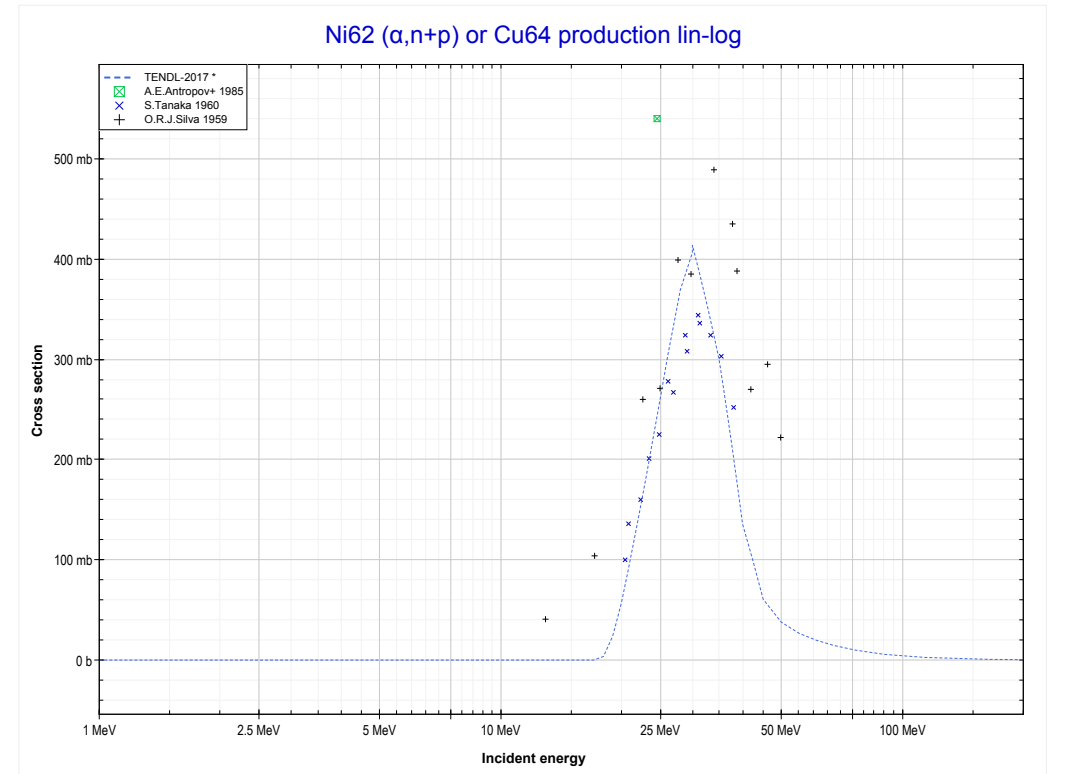
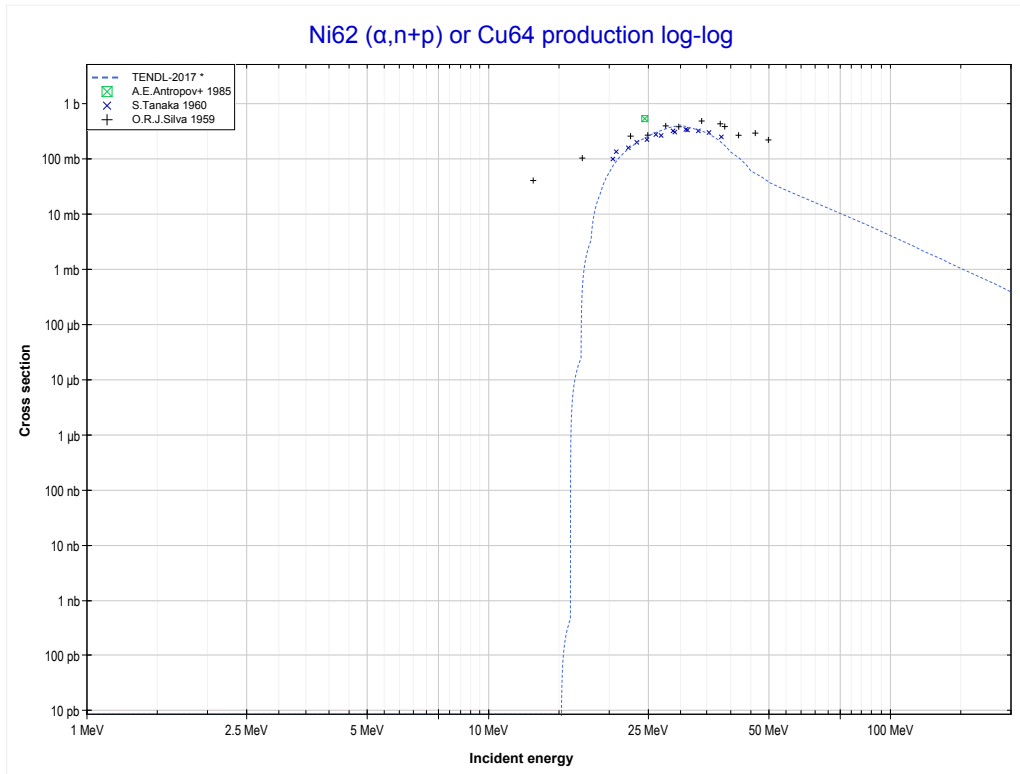
Reaction	Q-Value
Ni62(α,n)Zn65	-6480.50 keV

<< 28-Ni-61	28-Ni-62	28-Ni-64 >>
<< MT4 (α, n)	MT17 ($\alpha, 3n$) or MT5 (Zn63 production)	MT28 ($\alpha, n+p$) >>



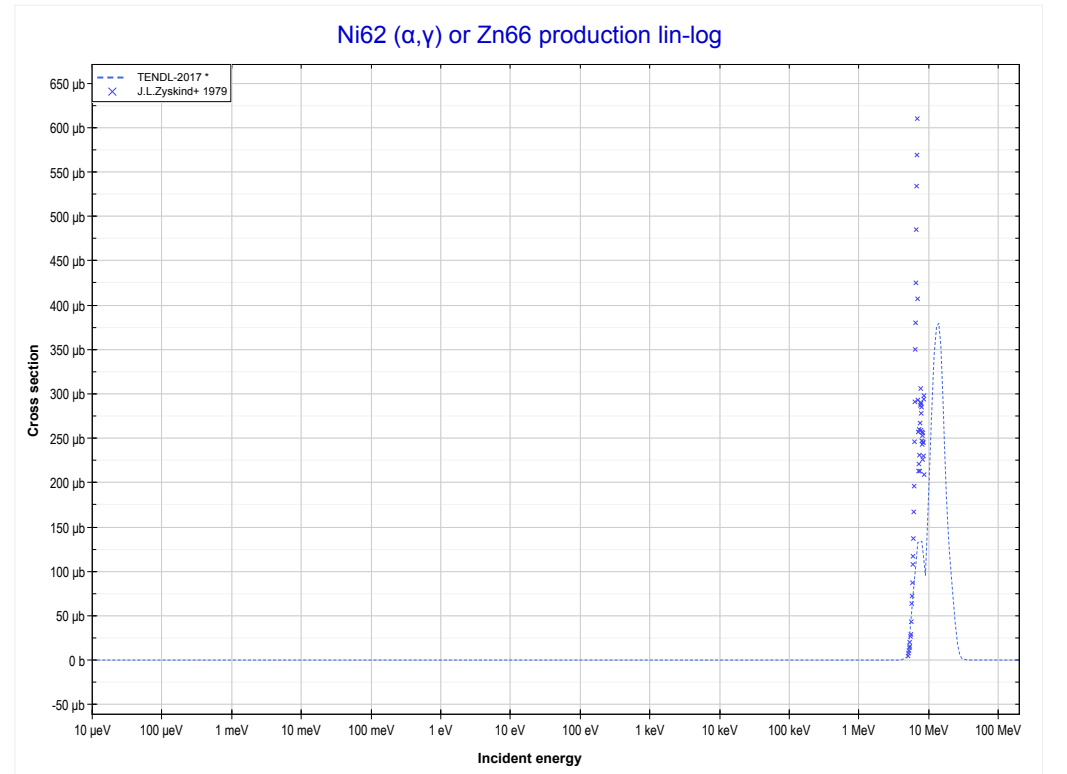
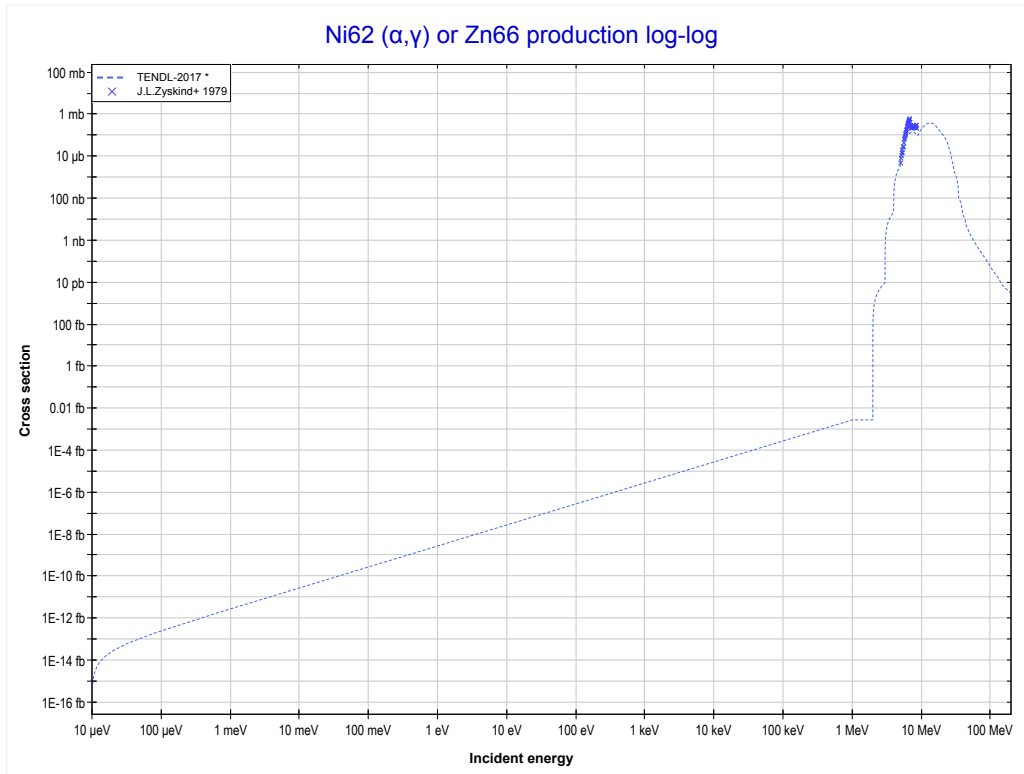
Reaction	Q-Value
Ni62($\alpha, 3n$)Zn63	-26321.84 keV

<< 28-Ni-60	28-Ni-62	30-Zn-64 >>
<< MT17 ($\alpha,3n$)	MT28 ($\alpha,n+p$) or MT5 (Cu64 production)	MT102 (α,γ) >>



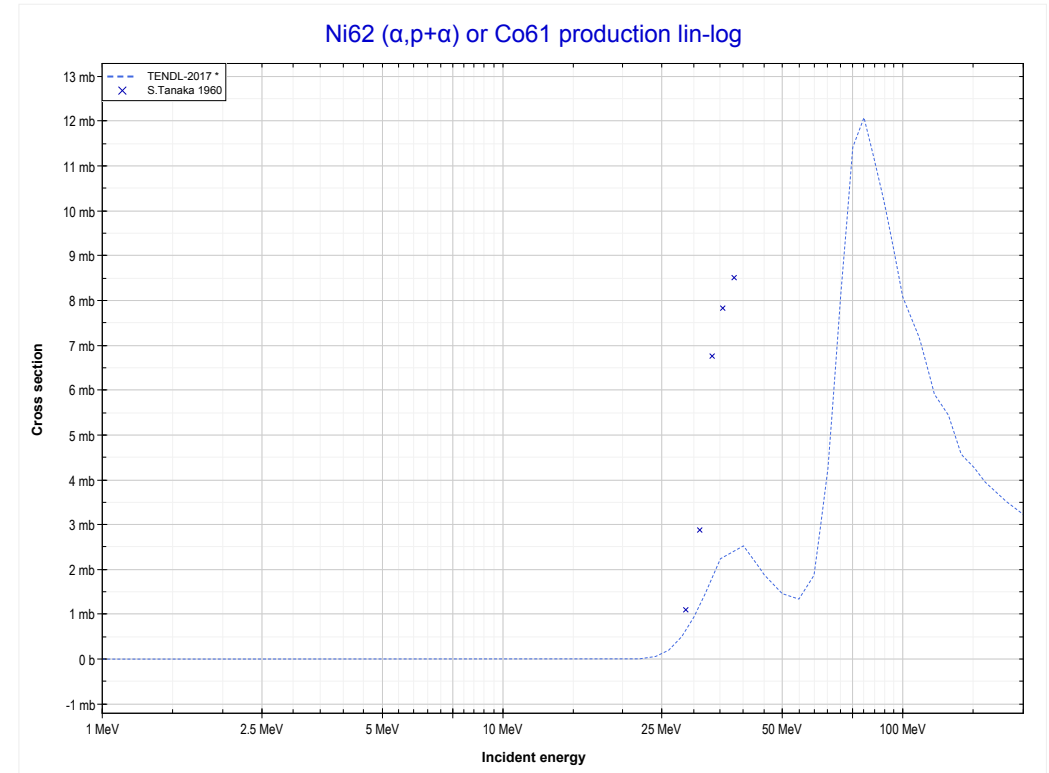
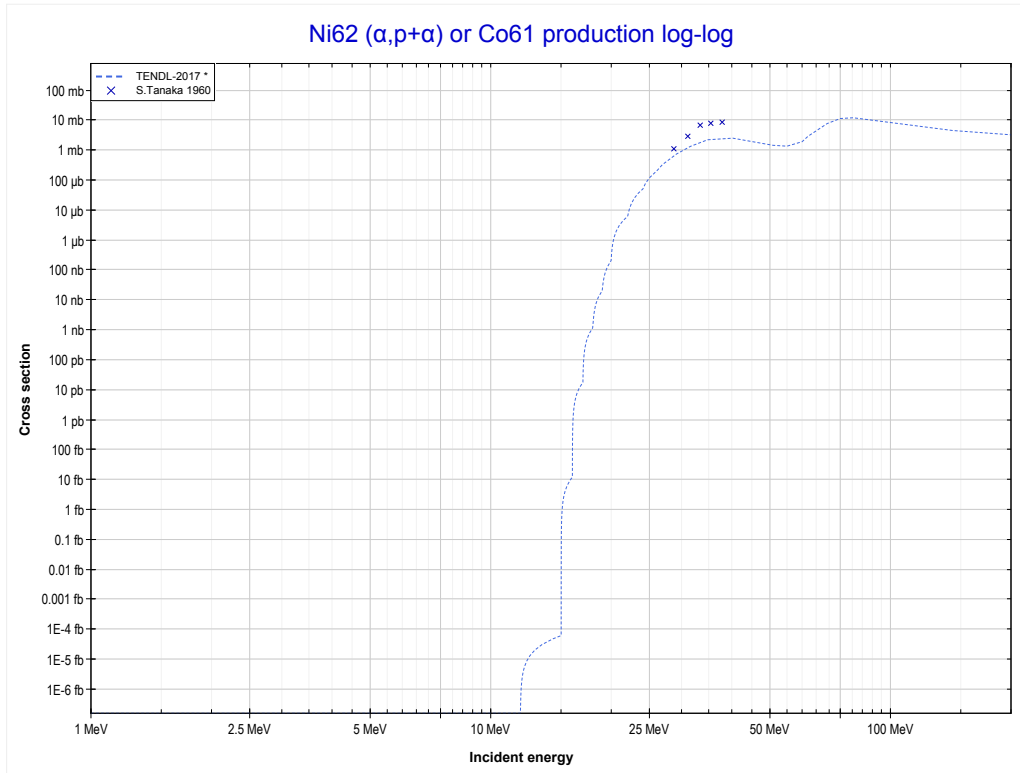
Reaction	Q-Value
Ni62(α,d)Cu64	-12032.61 keV
Ni62($\alpha,n+p$)Cu64	-14257.17 keV

<< 28-Ni-58	28-Ni-62	28-Ni-64 >>
<< MT28 ($\alpha, n+p$)	MT102 (α, γ) or MT5 (Zn66 production)	MT112 ($\alpha, p+\alpha$) >>



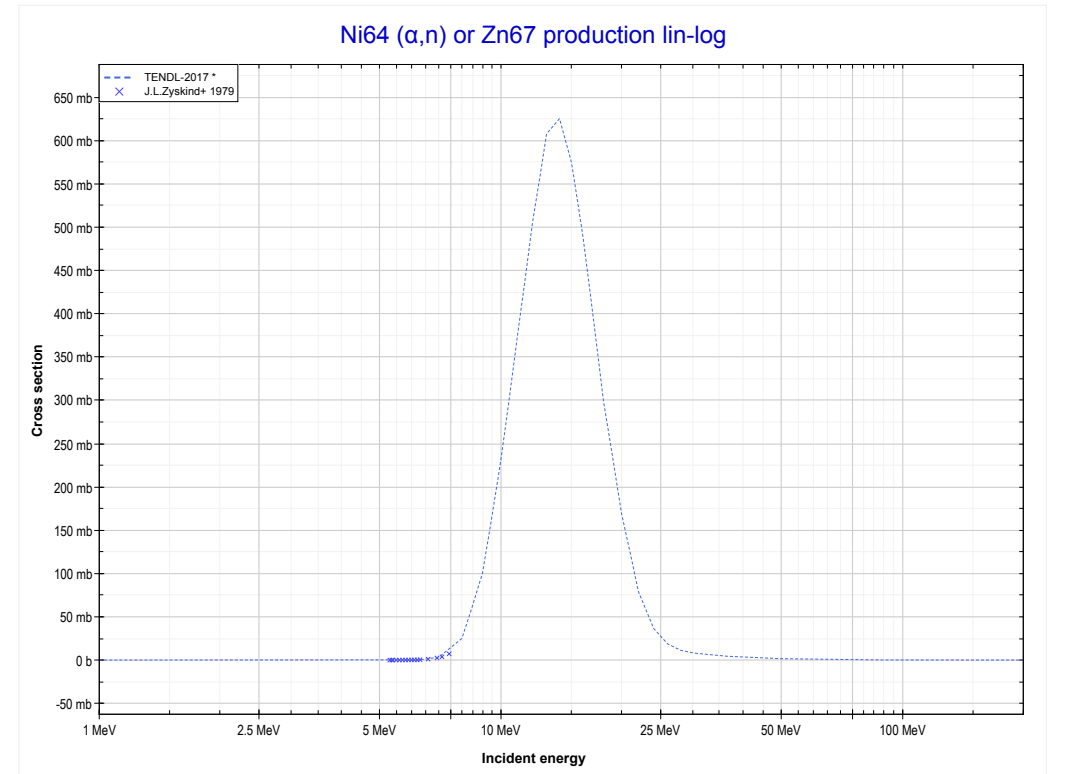
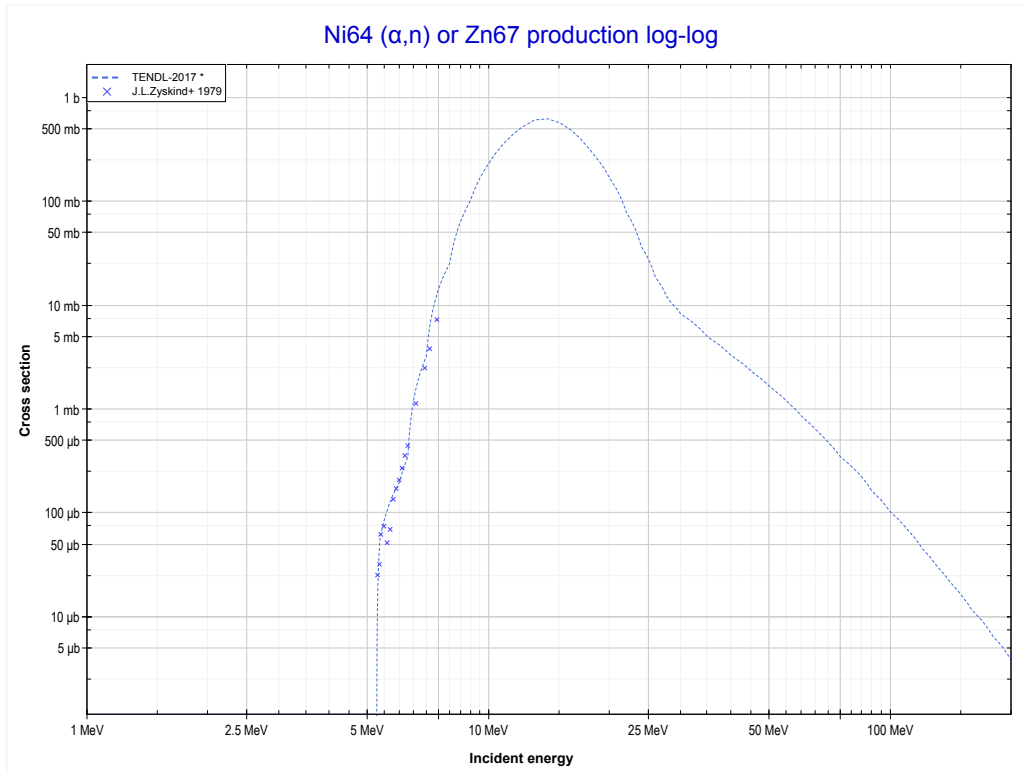
Reaction	Q-Value
Ni62(α, γ)Zn66	4578.12 keV

<< 28-Ni-58	28-Ni-62	
<< MT102 (α,γ)	MT112 ($\alpha,p+\alpha$) or MT5 (Co61 production)	28-Ni-64 MT4 (α,n) >>



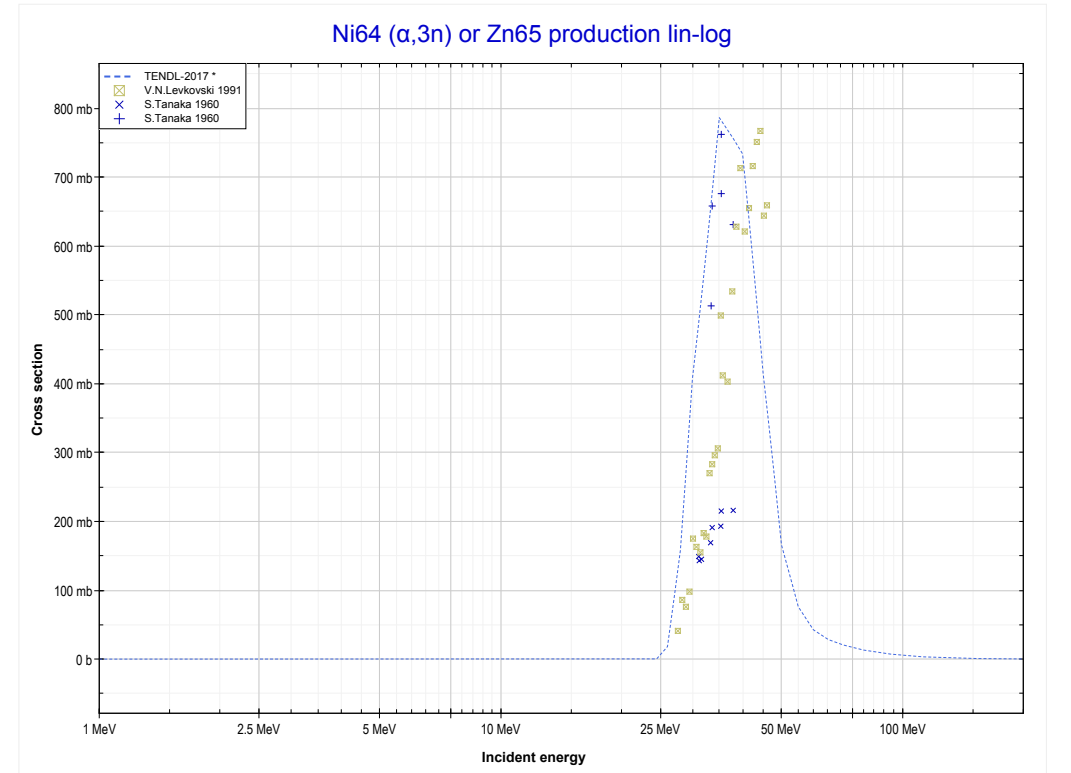
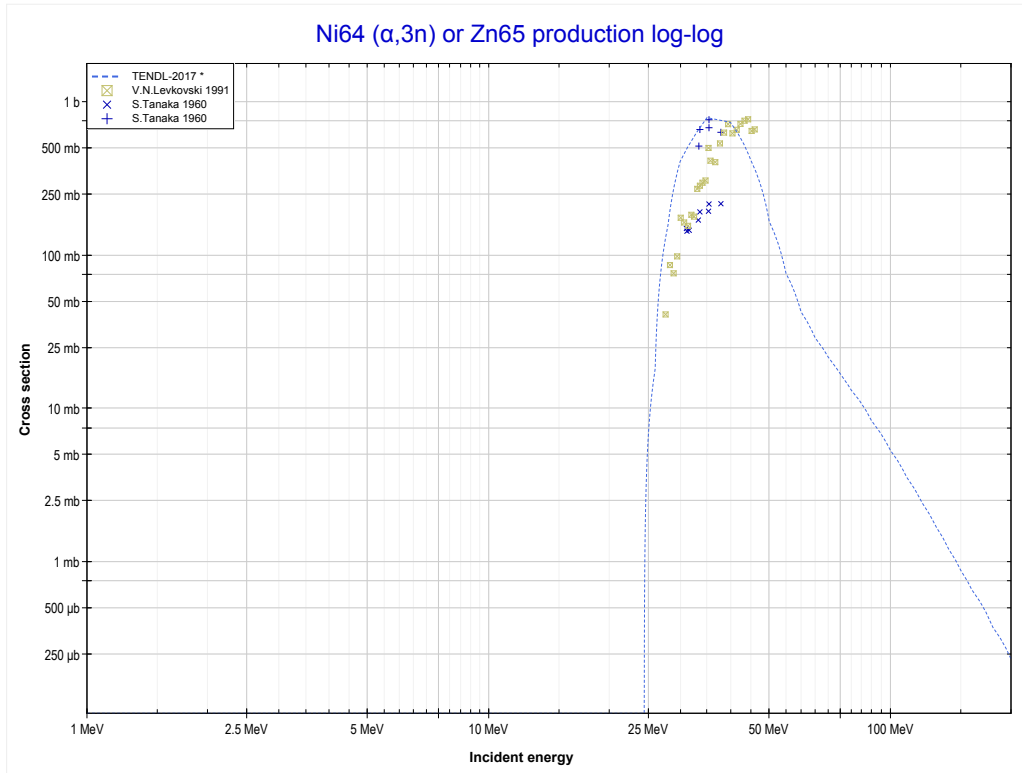
Reaction	Q-Value
Ni62($\alpha,p+\alpha$)Co61	-11137.27 keV
Ni62($\alpha,d+\text{He3}$)Co61	-29490.32 keV
Ni62($\alpha,2p+t$)Co61	-30951.13 keV
Ni62($\alpha,n+p+\text{He3}$)Co61	-31714.89 keV
Ni62($\alpha,p+2d$)Co61	-34983.80 keV
Ni62($\alpha,n+2p+d$)Co61	-37208.36 keV
Ni62($\alpha,2n+3p$)Co61	-39432.93 keV

<< 28-Ni-62	28-Ni-64	29-Cu-63 >>
<< 28-Ni-62 MT112 ($\alpha, p + \alpha$)	MT4 (α, n) or MT5 (Zn67 production)	MT17 ($\alpha, 3n$) >>



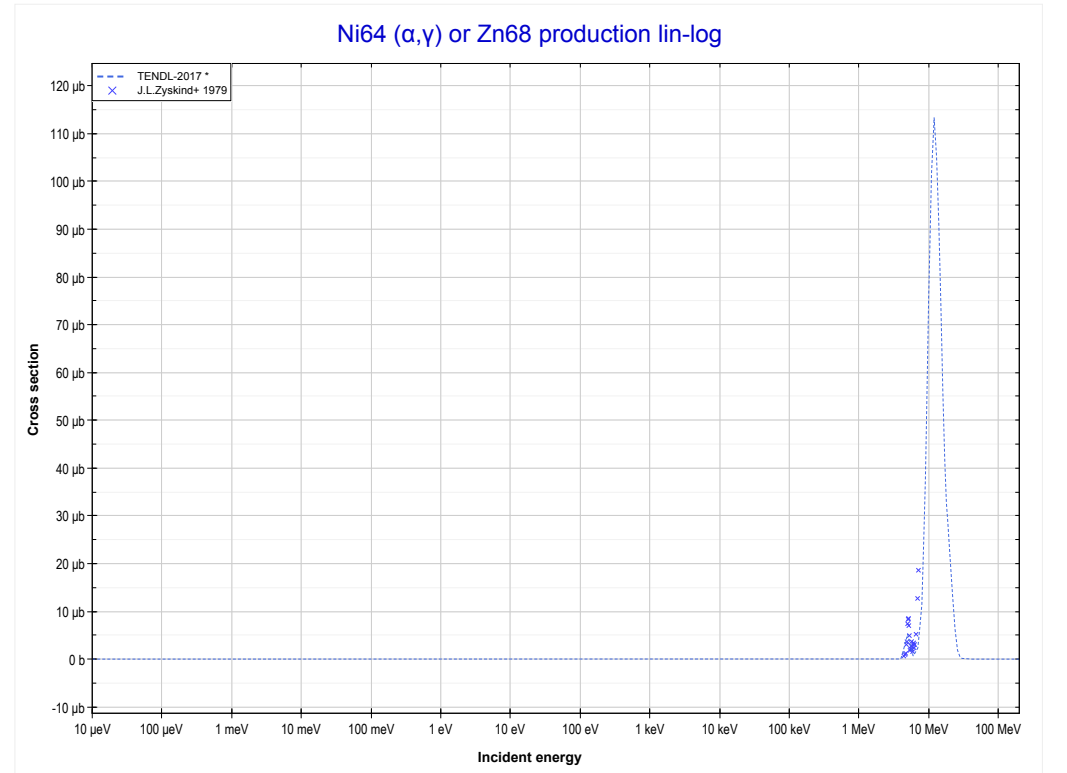
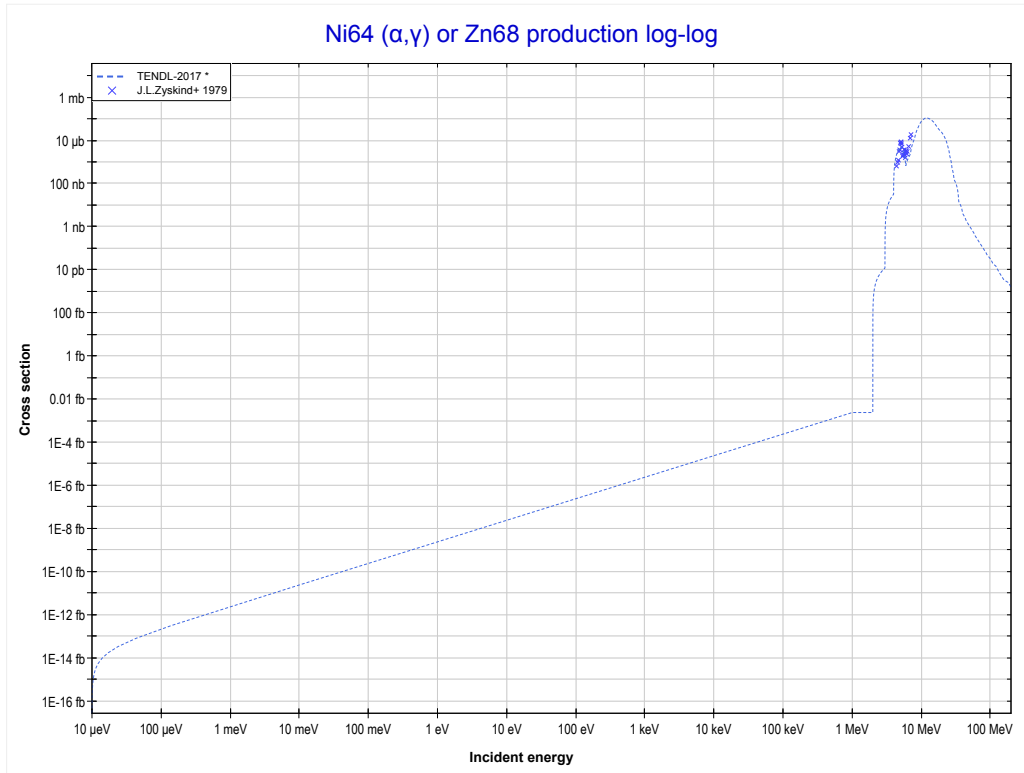
Reaction	Q-Value
Ni64(α, n)Zn67	-4864.80 keV

<< 28-Ni-62	28-Ni-64	29-Cu-65 >>
<< MT4 (α, n)	MT17 ($\alpha, 3n$) or MT5 (Zn65 production)	MT102 (α, γ) >>



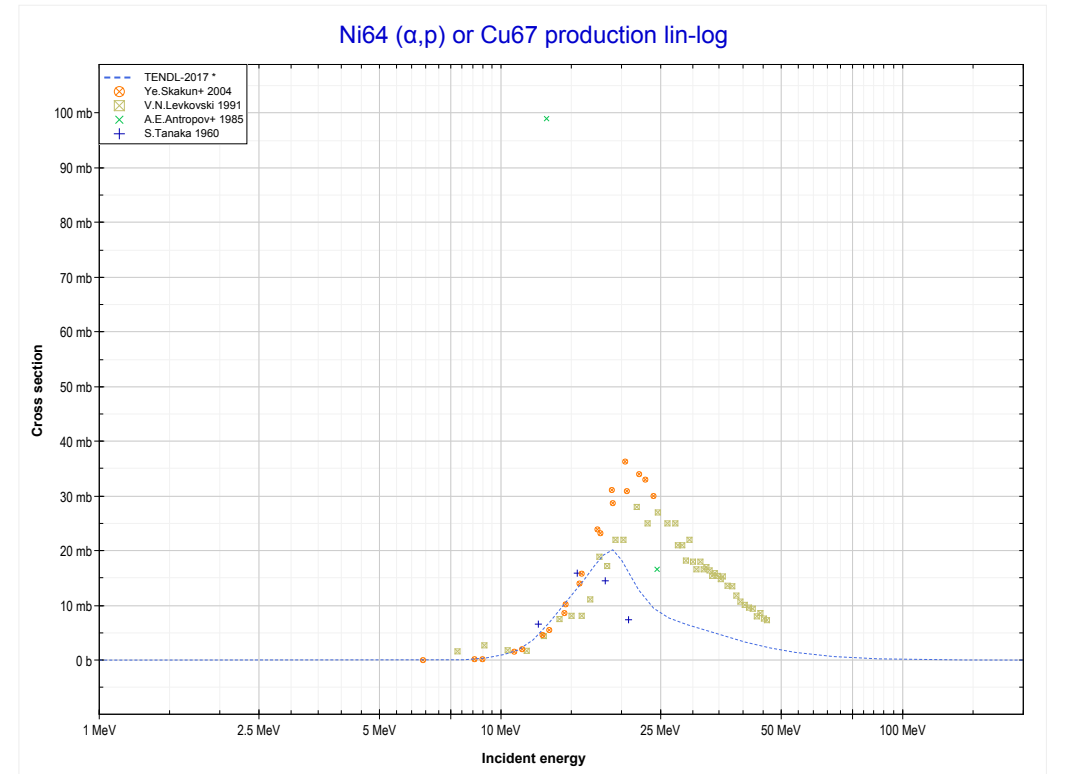
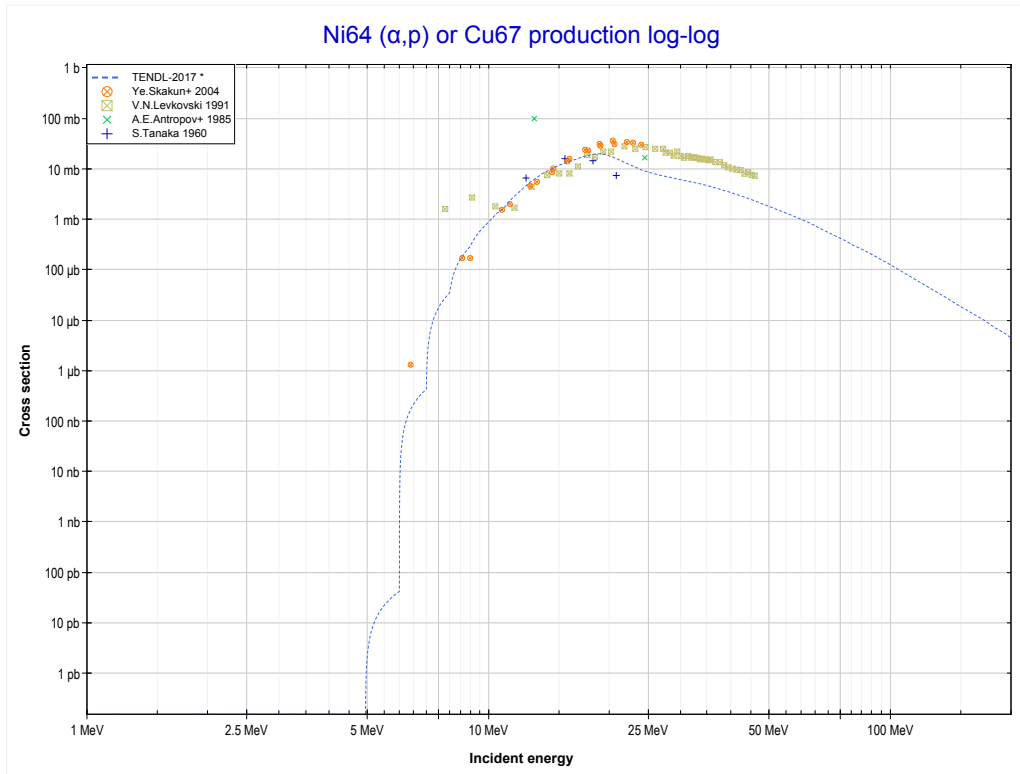
Reaction	Q-Value
Ni64($\alpha, 3n$)Zn65	-22975.74 keV

<< 28-Ni-62	28-Ni-64	29-Cu-63 >>
<< MT17 ($\alpha,3n$)	MT102 (α,γ) or MT5 (Zn68 production)	MT103 (α,p) >>



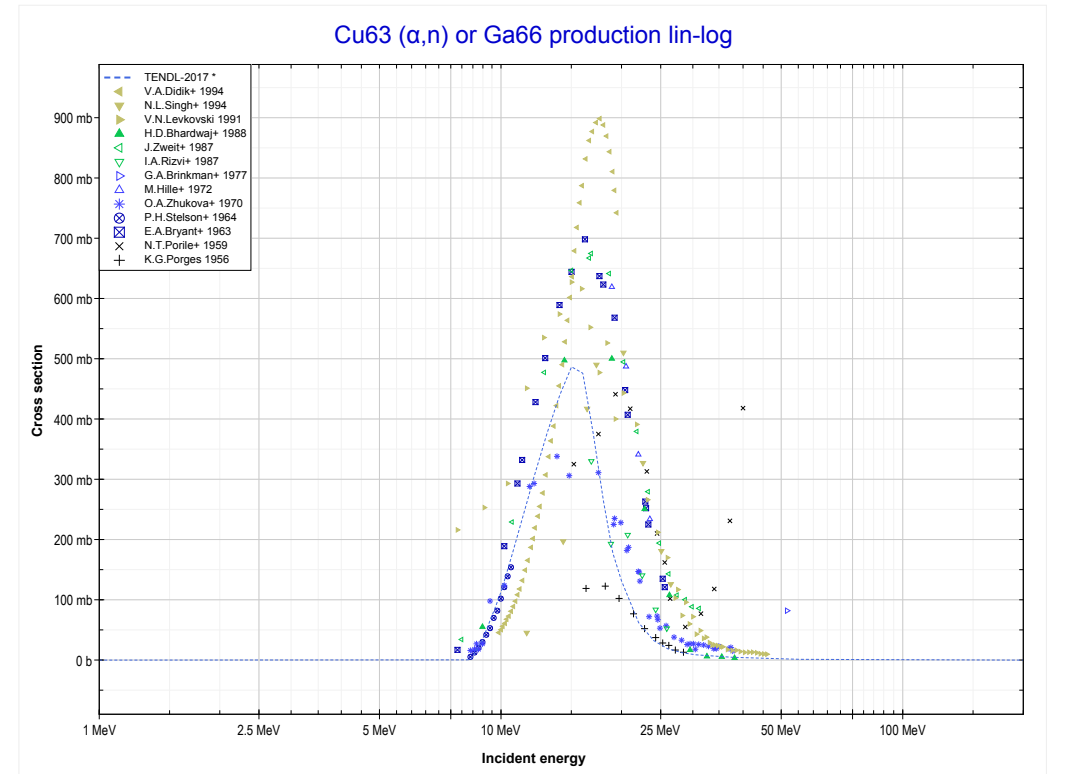
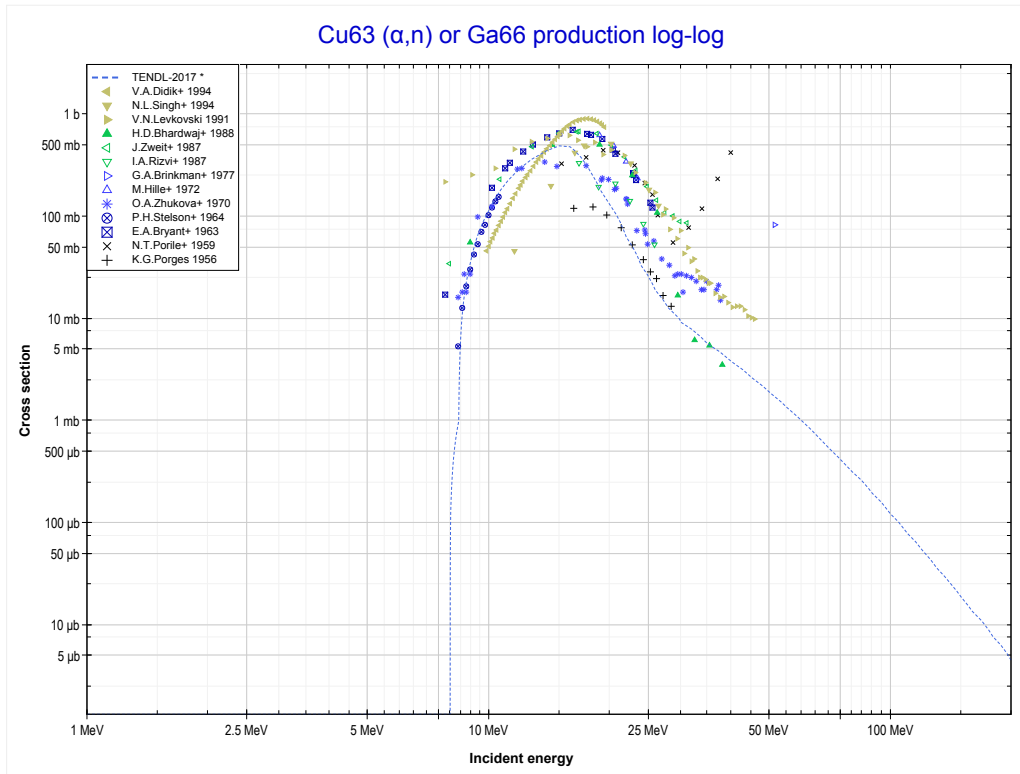
Reaction	Q-Value
Ni64(α,γ)Zn68	5333.22 keV

<< 28-Ni-61	28-Ni-64	30-Zn-64 >>
<< MT102 (α,γ)	MT103 (α,p) or MT5 (Cu67 production)	29-Cu-63 MT4 (α,n) >>



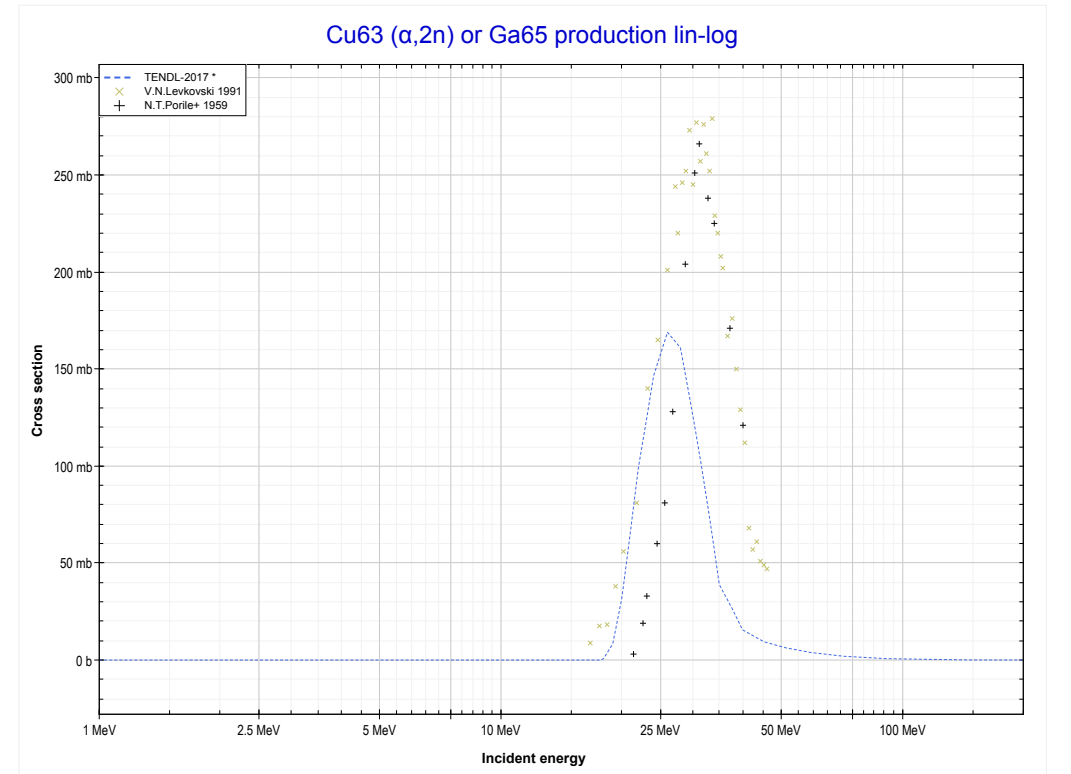
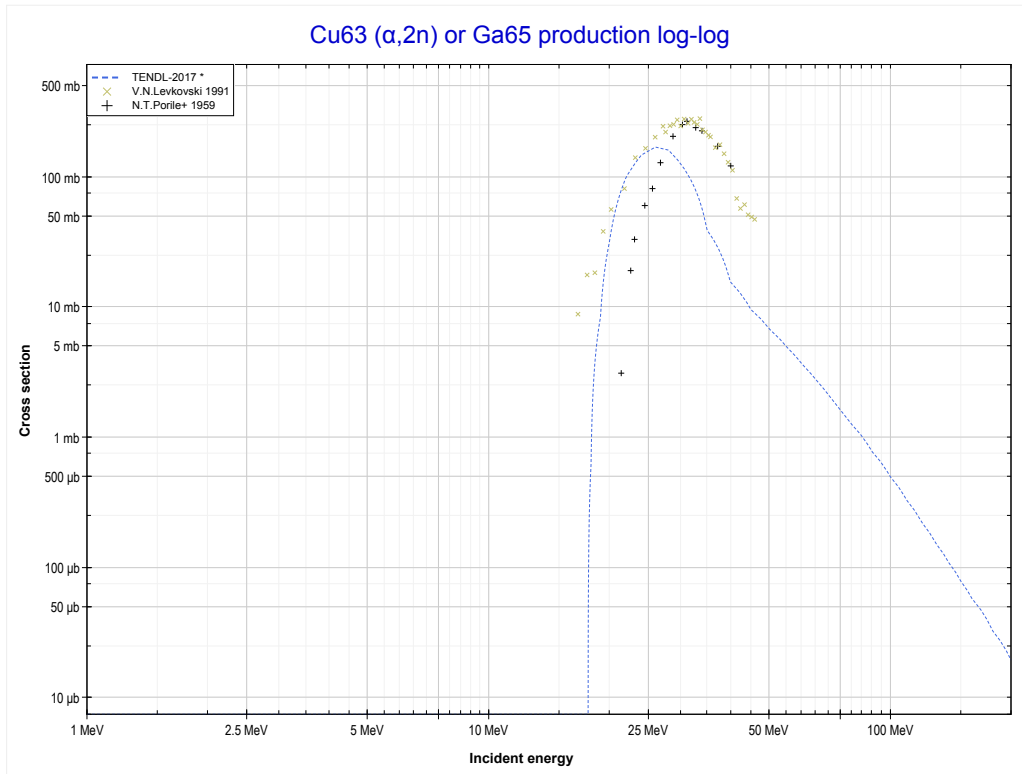
Reaction	Q-Value
Ni64(α,p)Cu67	-4643.75 keV

<< 28-Ni-64	29-Cu-63	29-Cu-65 >>
<< 28-Ni-64 MT103 (α,p)	MT4 (α,n) or MT5 (Ga66 production)	MT16 ($\alpha,2n$) >>



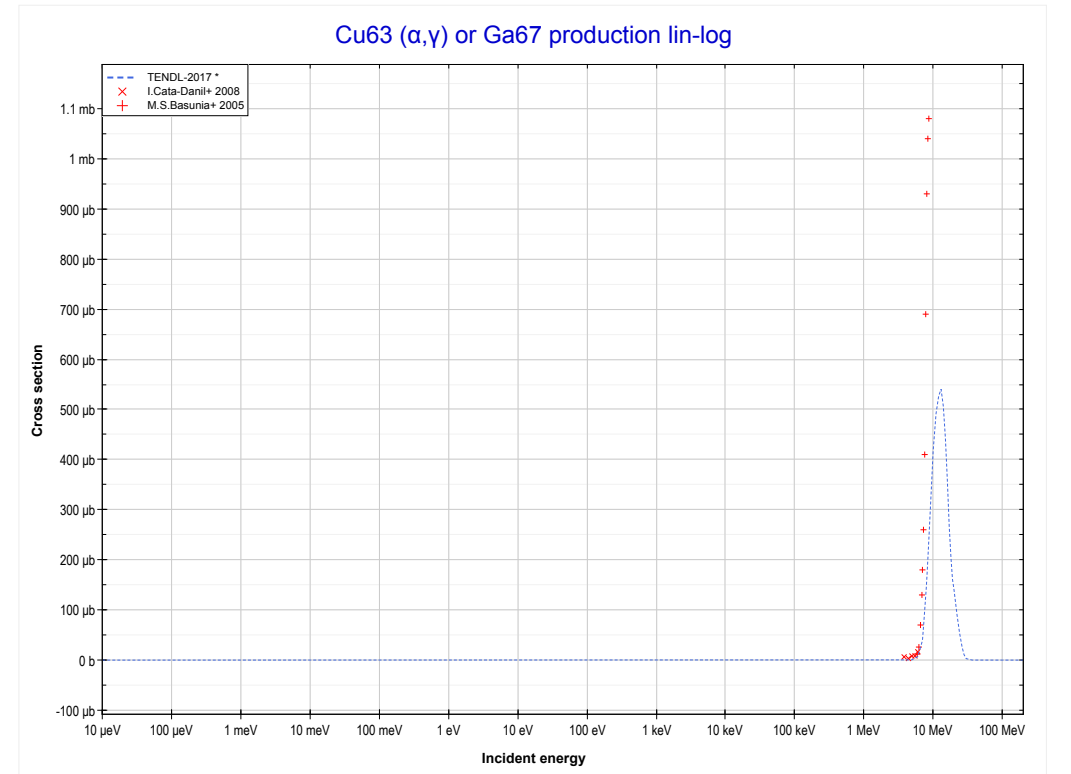
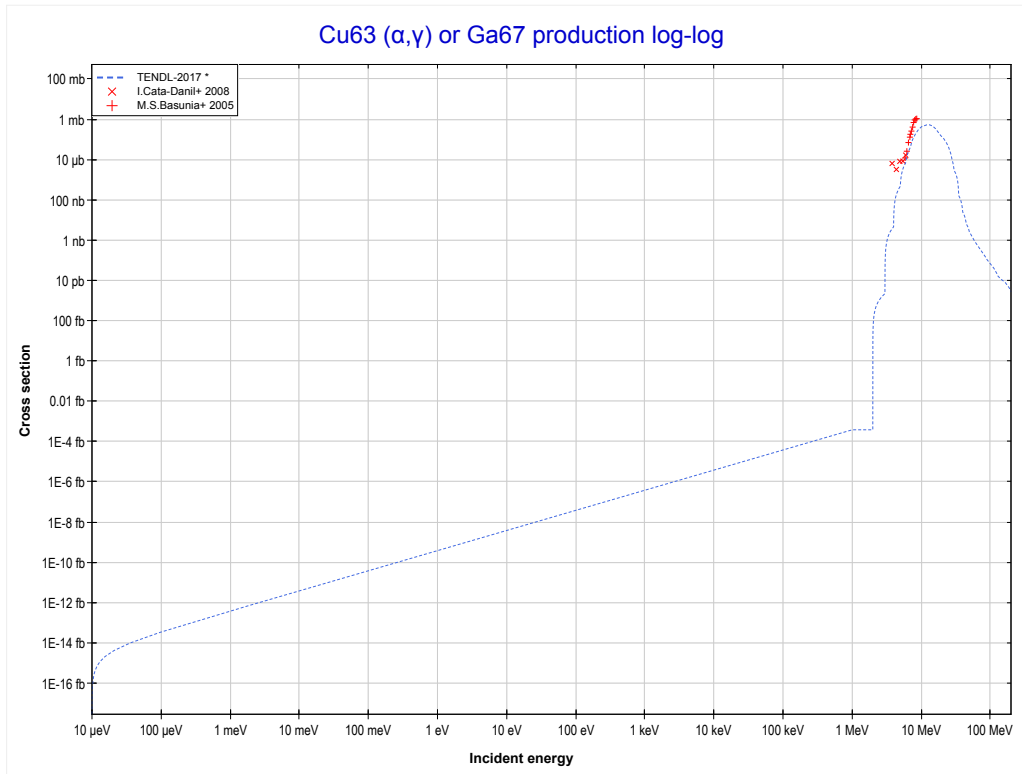
Reaction	Q-Value
Cu63(α,n)Ga66	-7501.70 keV

<< 28-Ni-61	29-Cu-63	29-Cu-65 >>
<< MT4 (α,n)	MT16 ($\alpha,2n$) or MT5 (Ga65 production)	MT102 (α,γ) >>



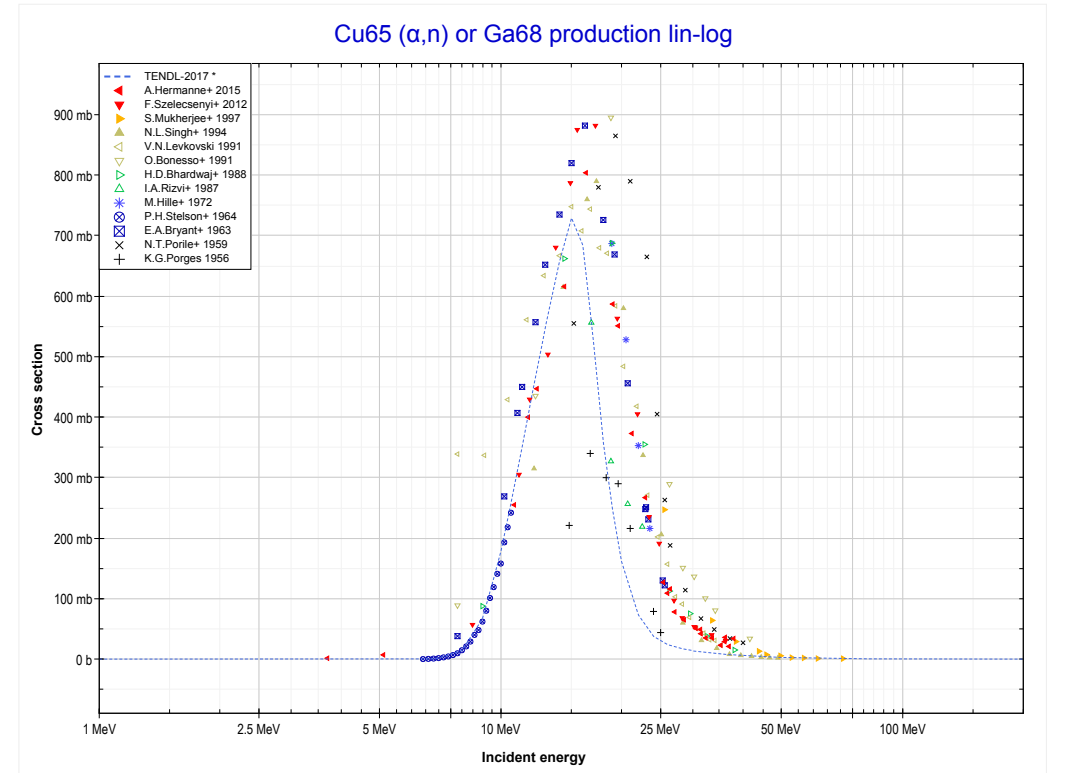
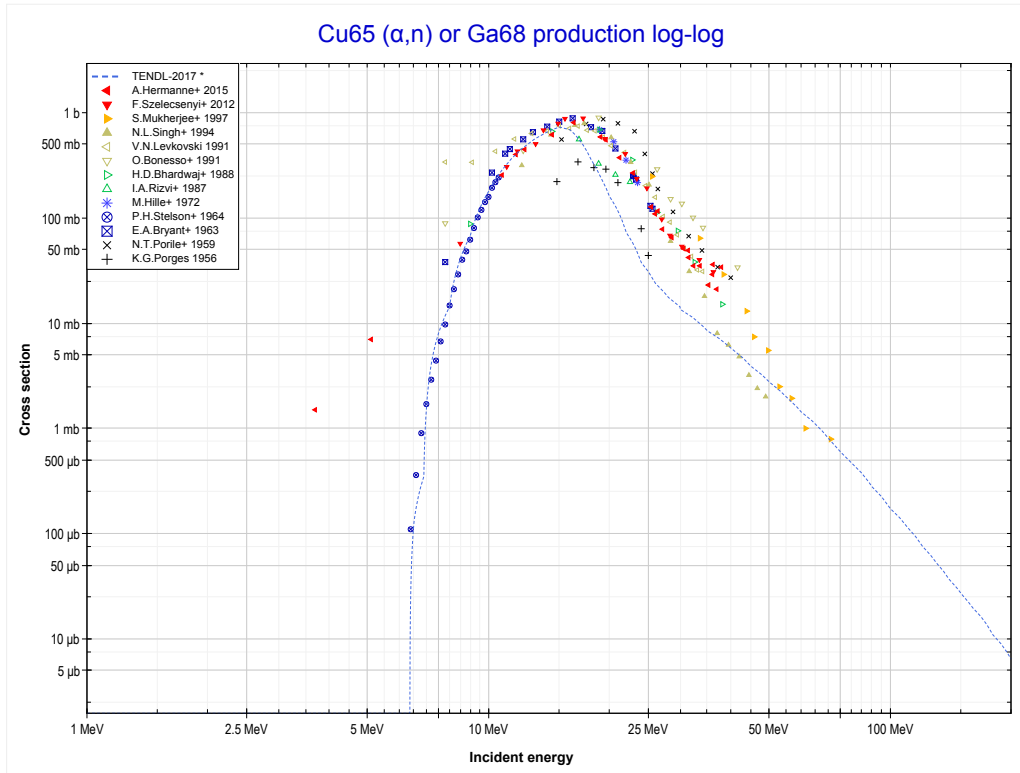
Reaction	Q-Value
Cu63($\alpha,2n$)Ga65	-16639.72 keV

<< 28-Ni-64	29-Cu-63	30-Zn-64 >>
<< MT16 ($\alpha,2n$)	MT102 (α,γ) or MT5 (Ga67 production)	29-Cu-65 MT4 (α,n) >>



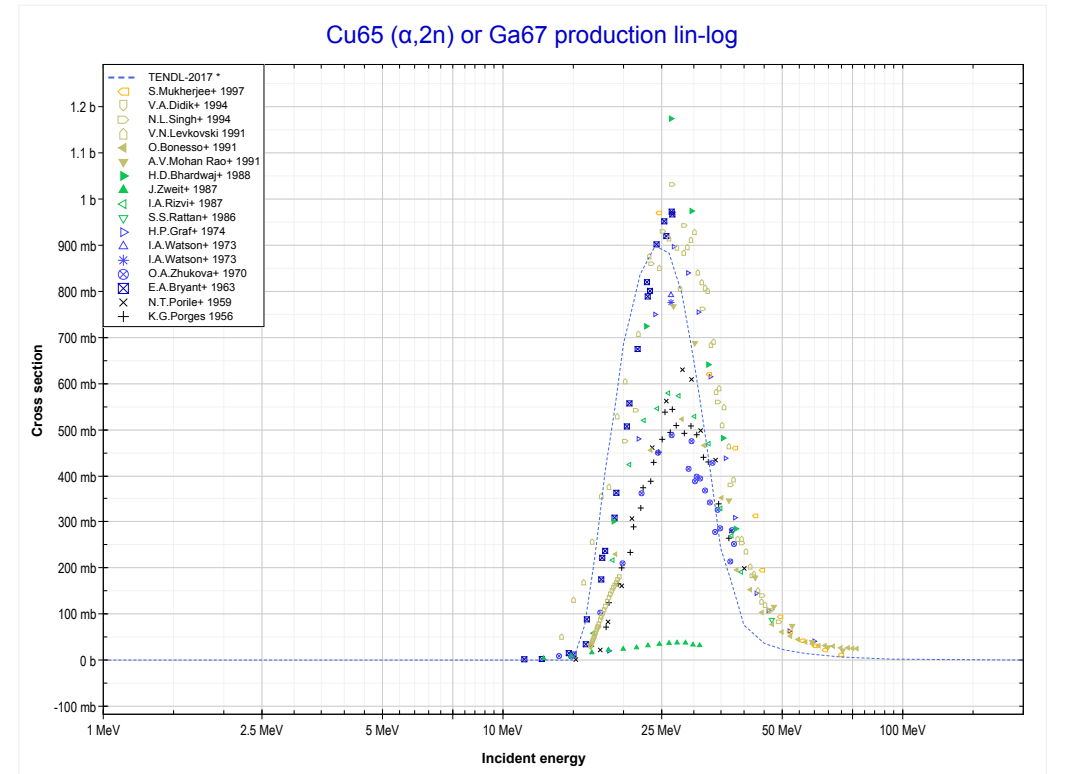
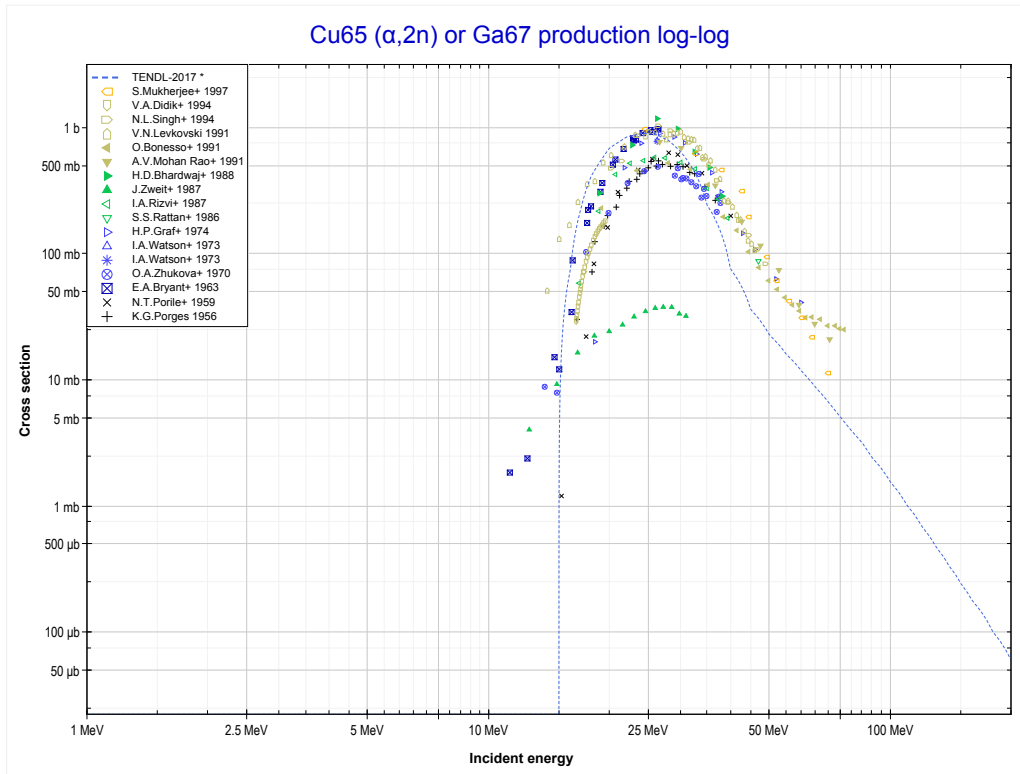
Reaction	Q-Value
Cu63(α,γ)Ga67	3724.52 keV

<< 29-Cu-63	29-Cu-65	30-Zn-64 >>
<< 29-Cu-63 MT102 (α,γ)	MT4 (α,n) or MT5 (Ga68 production)	MT16 ($\alpha,2n$) >>



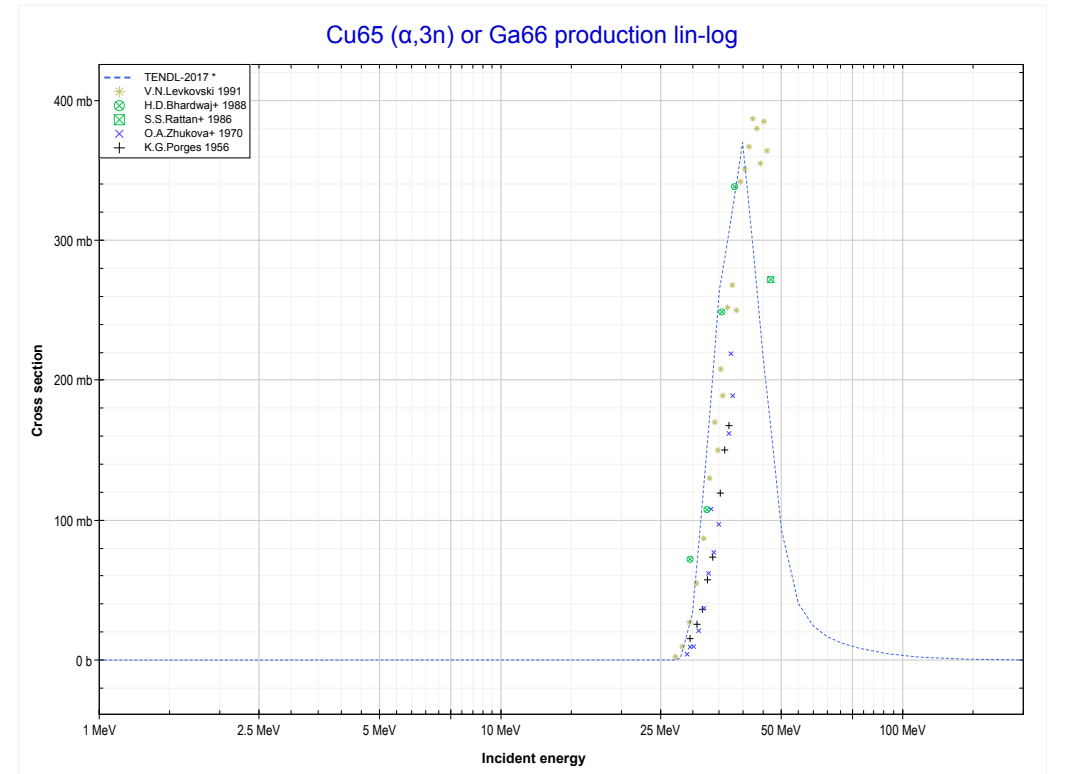
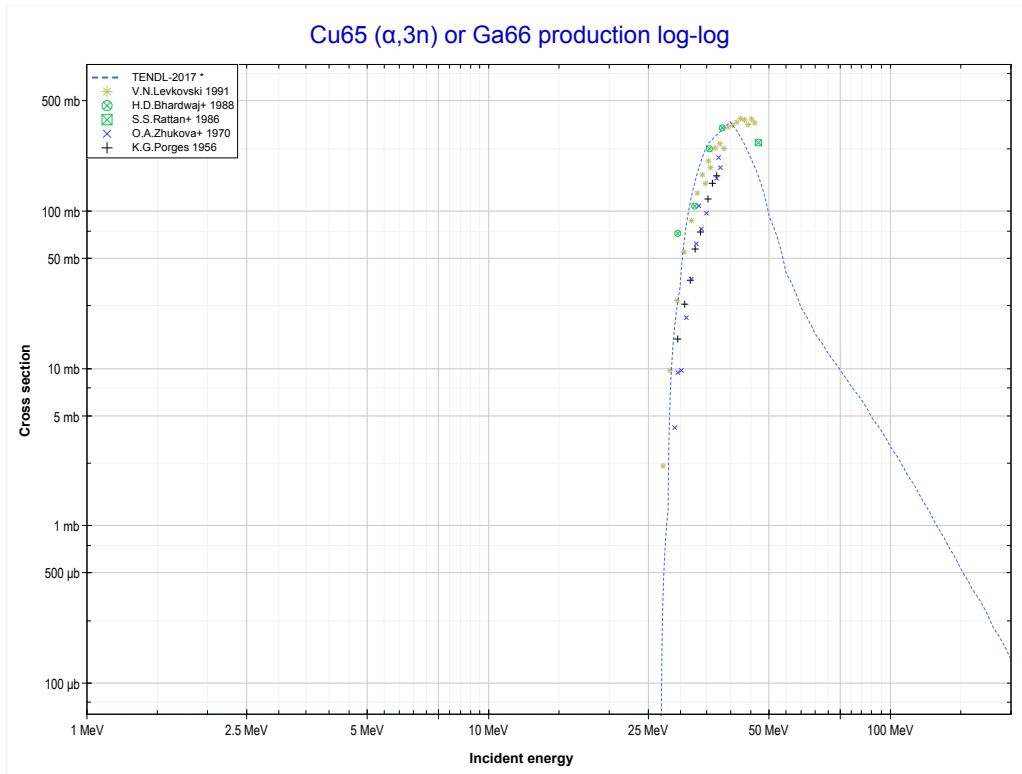
Reaction	Q-Value
Cu65(α,n)Ga68	-5824.20 keV

<< 29-Cu-63	29-Cu-65	30-Zn-64 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Ga67 production)	MT17 ($\alpha, 3n$) >>



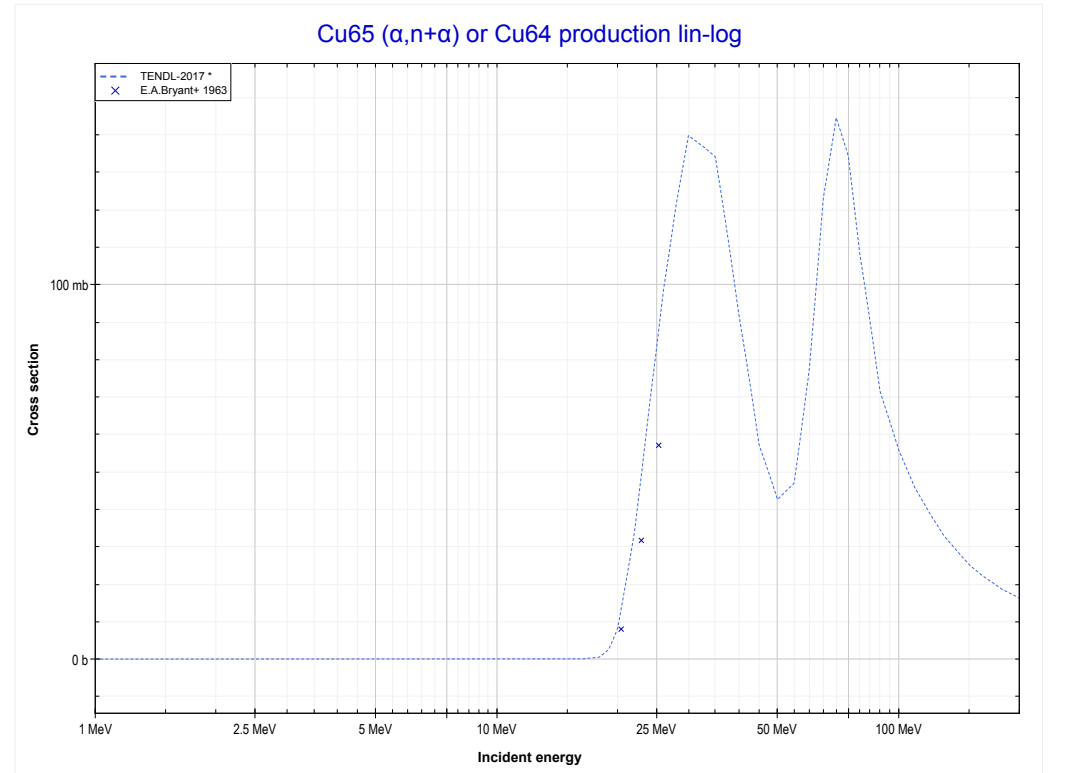
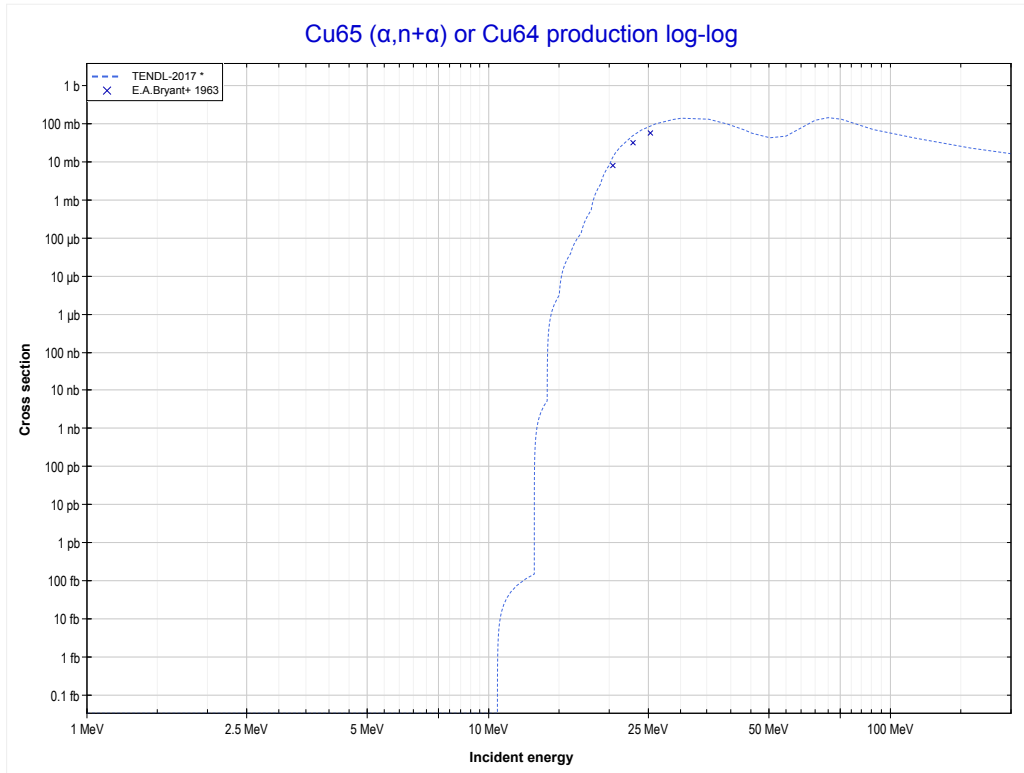
Reaction	Q-Value
Cu65($\alpha, 2n$)Ga67	-14102.32 keV

<< 28-Ni-64	29-Cu-65	30-Zn-64 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Ga66 production)	MT22 ($\alpha,n+\alpha$) >>



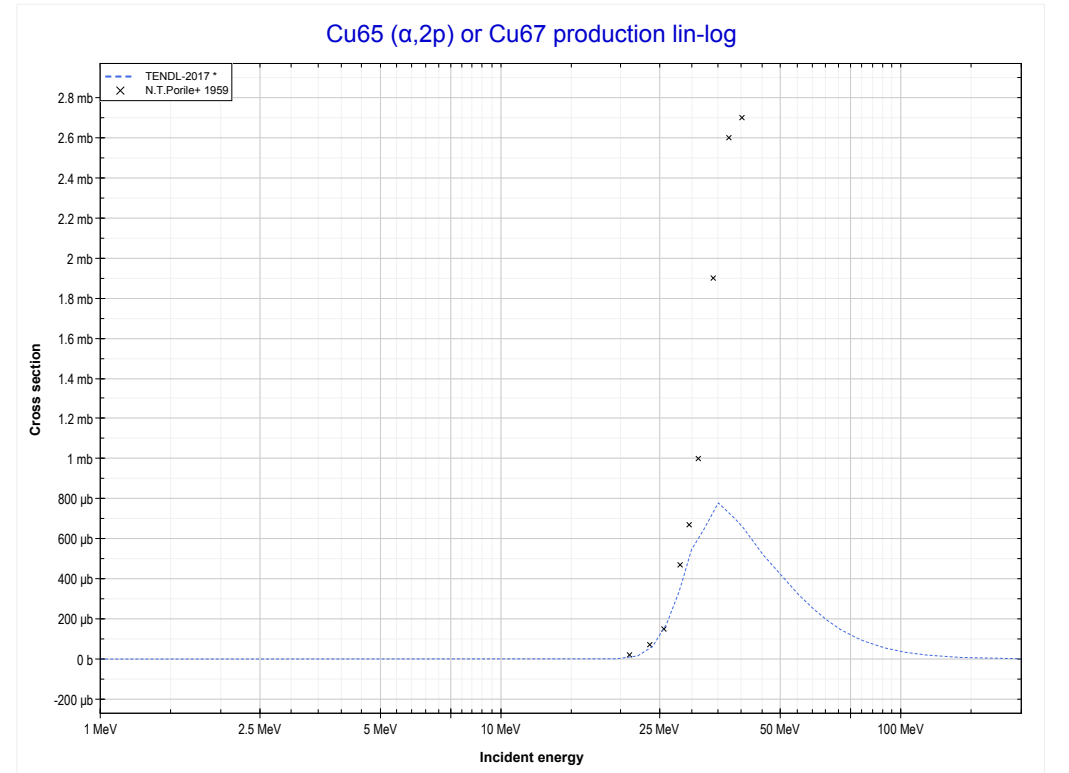
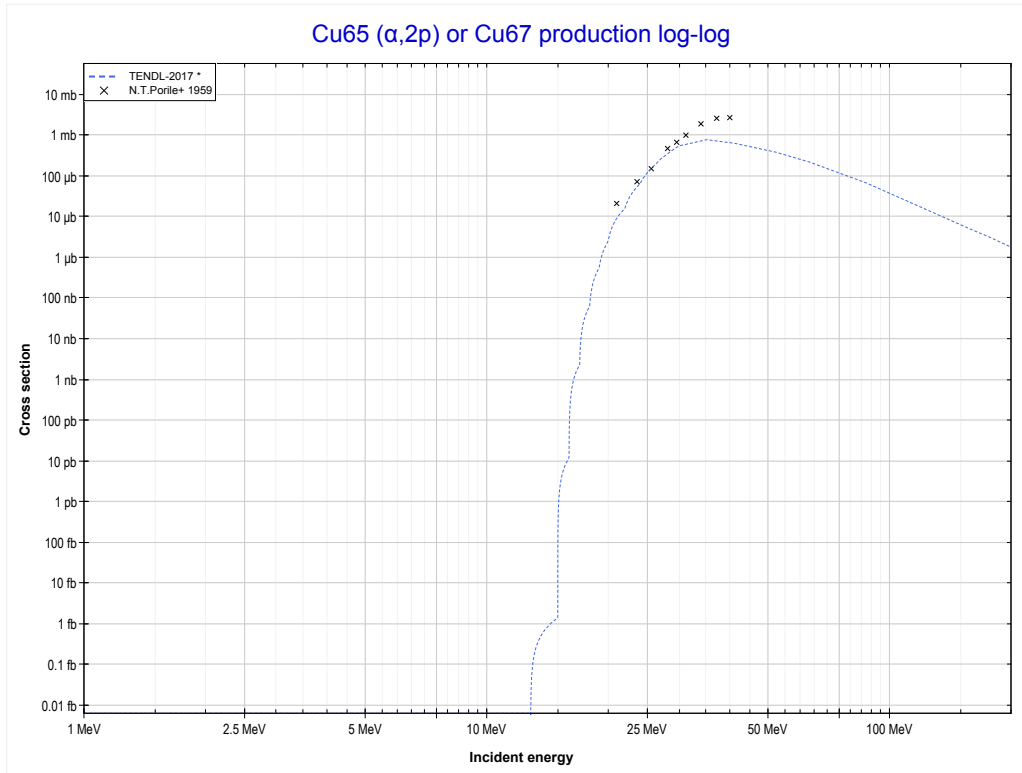
Reaction	Q-Value
Cu65($\alpha,3n$)Ga66	-25328.54 keV

<< 28-Ni-58	29-Cu-65	30-Zn-64 >>
<< MT17 ($\alpha,3n$)	MT22 ($\alpha,n+\alpha$) or MT5 (Cu64 production)	MT111 ($\alpha,2p$) >>



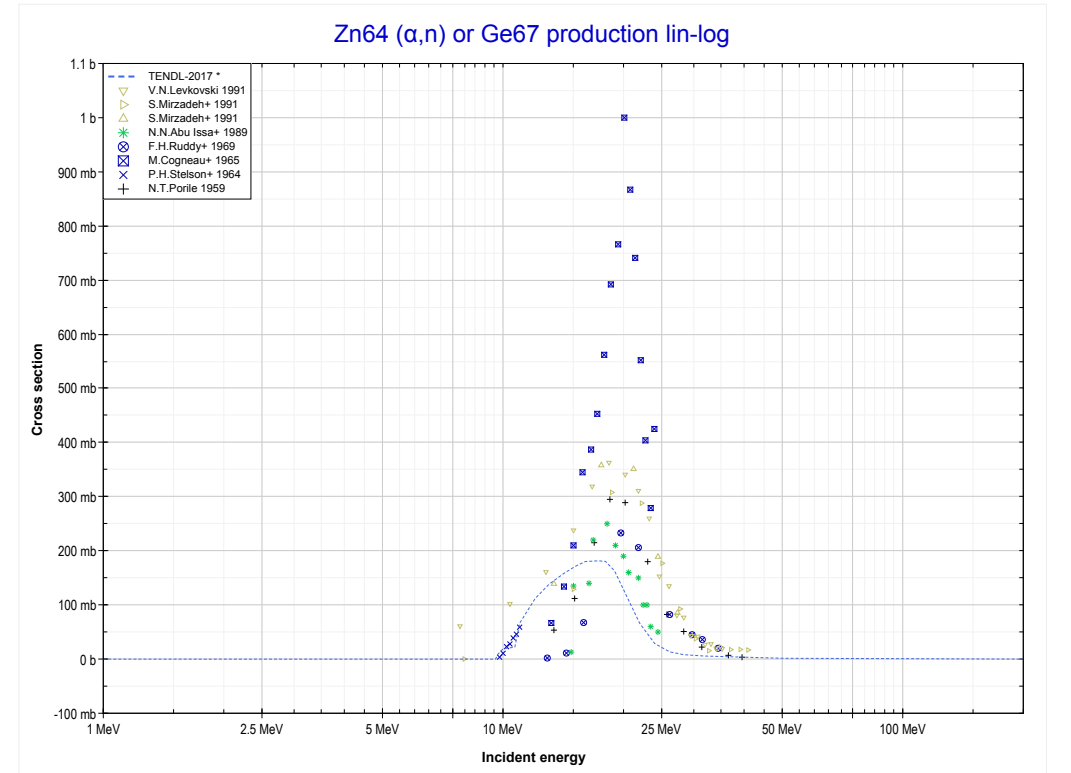
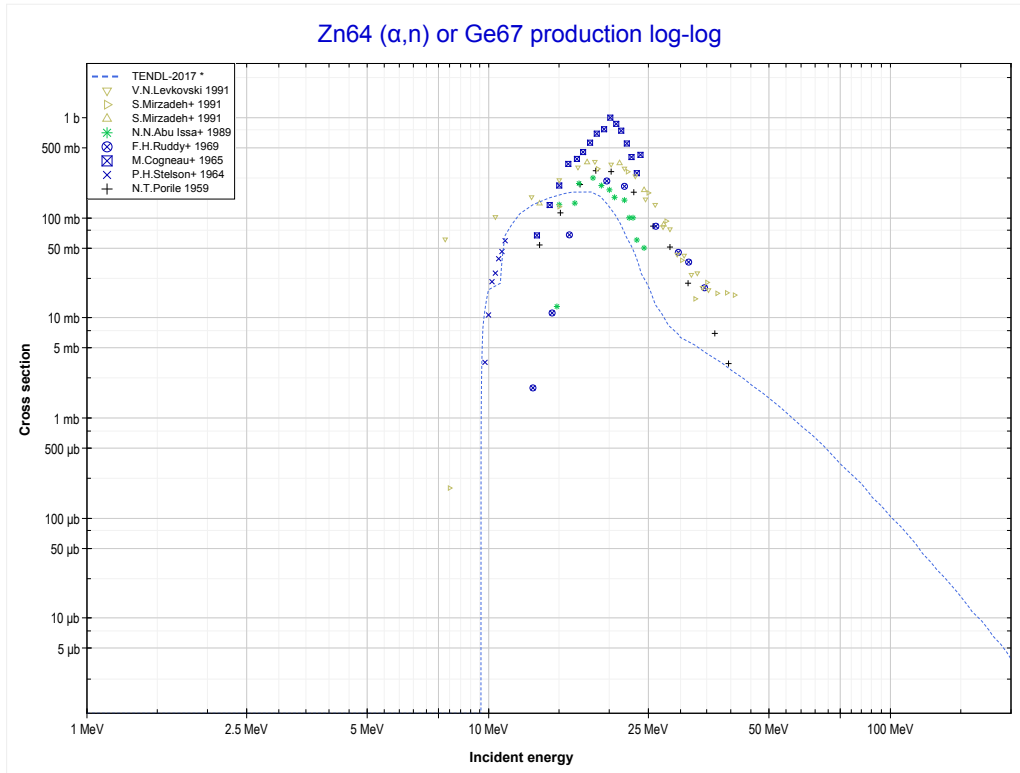
Reaction	Q-Value
Cu65($\alpha,n+\alpha$)Cu64	-9910.72 keV
Cu65($\alpha,d+t$)Cu64	-27500.01 keV
Cu65($\alpha,n+p+t$)Cu64	-29724.58 keV
Cu65($\alpha,2n+He3$)Cu64	-30488.33 keV
Cu65($\alpha,n+2d$)Cu64	-33757.24 keV
Cu65($\alpha,2n+p+d$)Cu64	-35981.81 keV
Cu65($\alpha,3n+2p$)Cu64	-38206.38 keV

<< 27-Co-59	29-Cu-65	30-Zn-70 >>
<< MT22 ($\alpha, n + \alpha$)	MT111 ($\alpha, 2p$) or MT5 (Cu67 production)	30-Zn-64 MT4 (α, n) >>



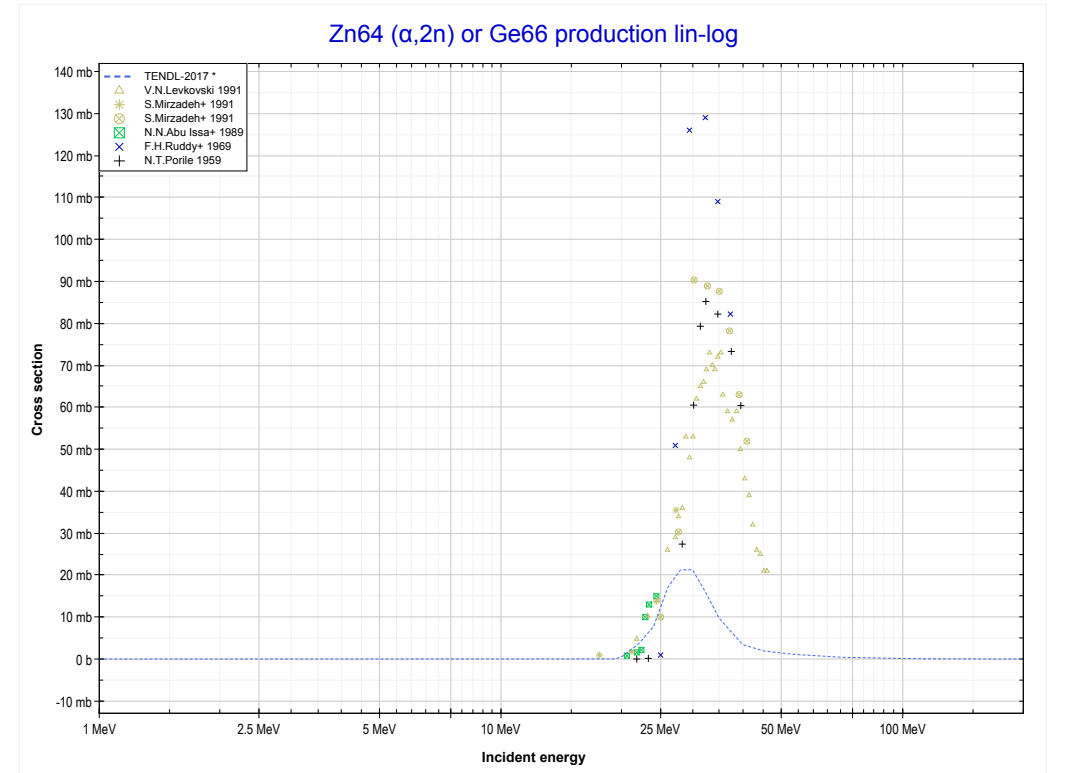
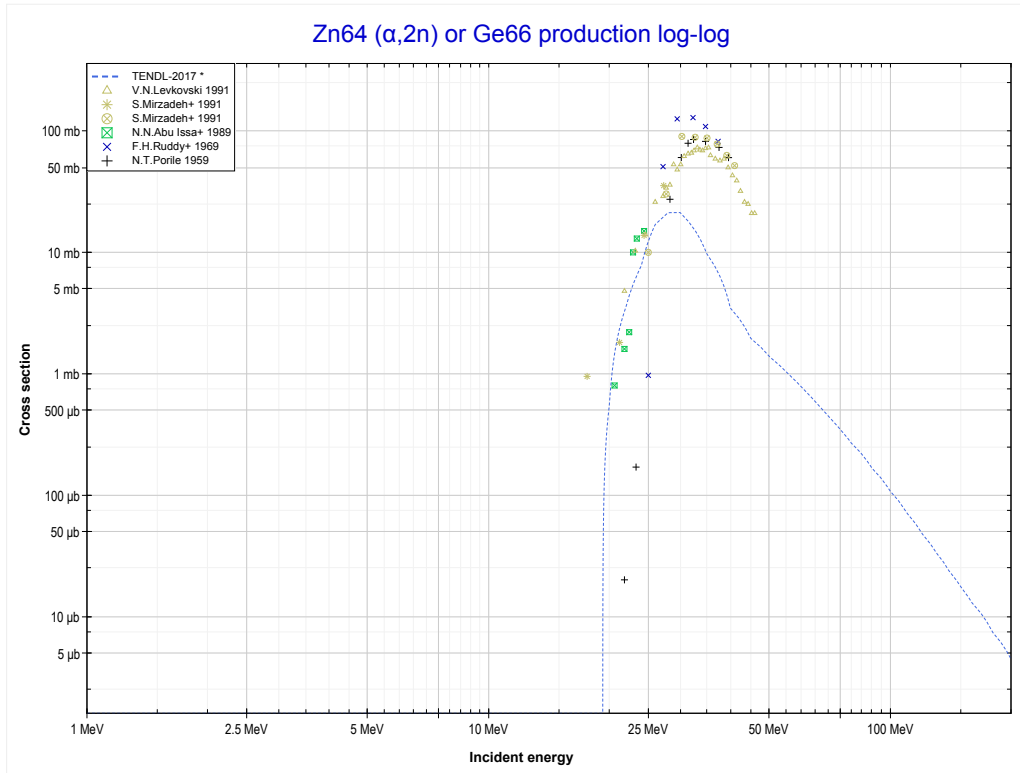
Reaction	Q-Value
Cu65($\alpha, 2p$)Cu67	-12097.73 keV

<< 29-Cu-65	30-Zn-64	30-Zn-66 >>
<< 29-Cu-65 MT111 ($\alpha,2p$)	MT4 (α,n) or MT5 (Ge67 production)	MT16 ($\alpha,2n$) >>



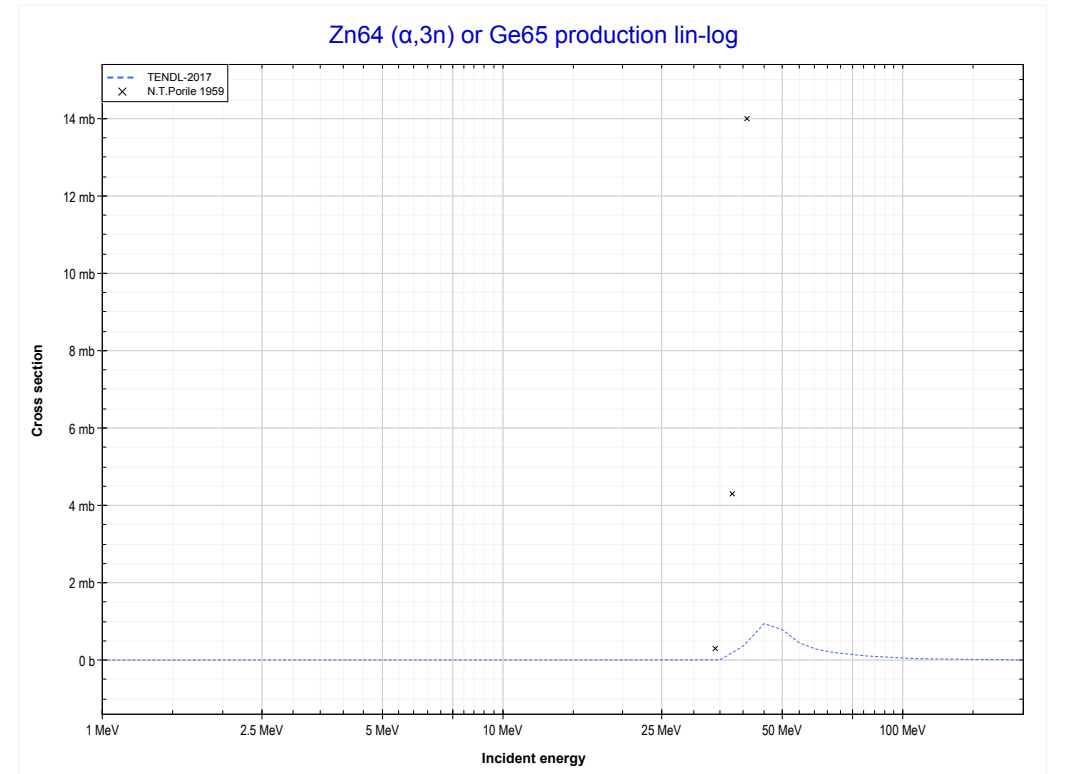
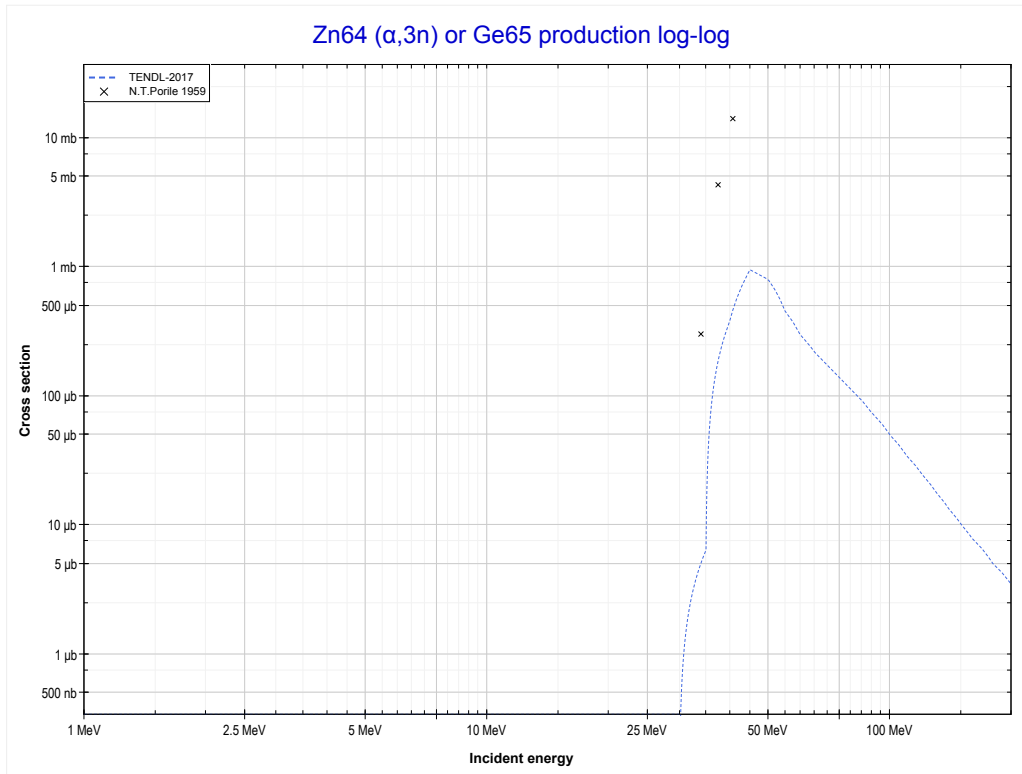
Reaction	Q-Value
Zn64(α,n)Ge67	-8992.20 keV

<< 29-Cu-65	30-Zn-64	30-Zn-66 >>
<< MT4 (α,n)	MT16 ($\alpha,2n$) or MT5 (Ge66 production)	MT17 ($\alpha,3n$) >>



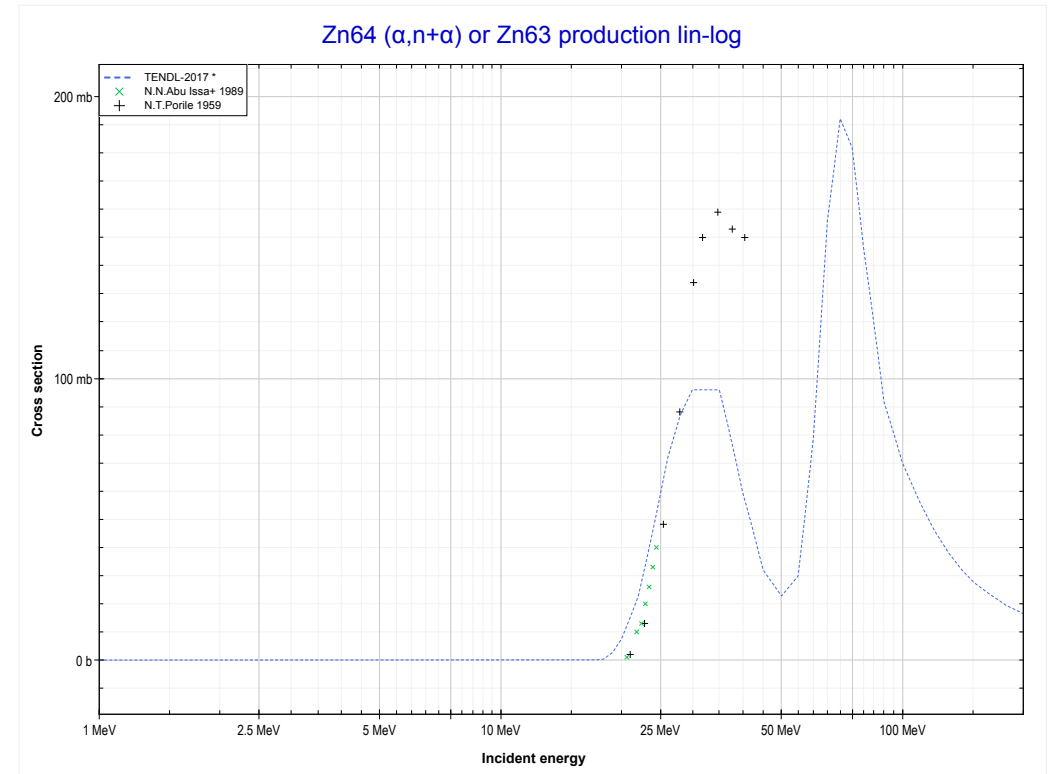
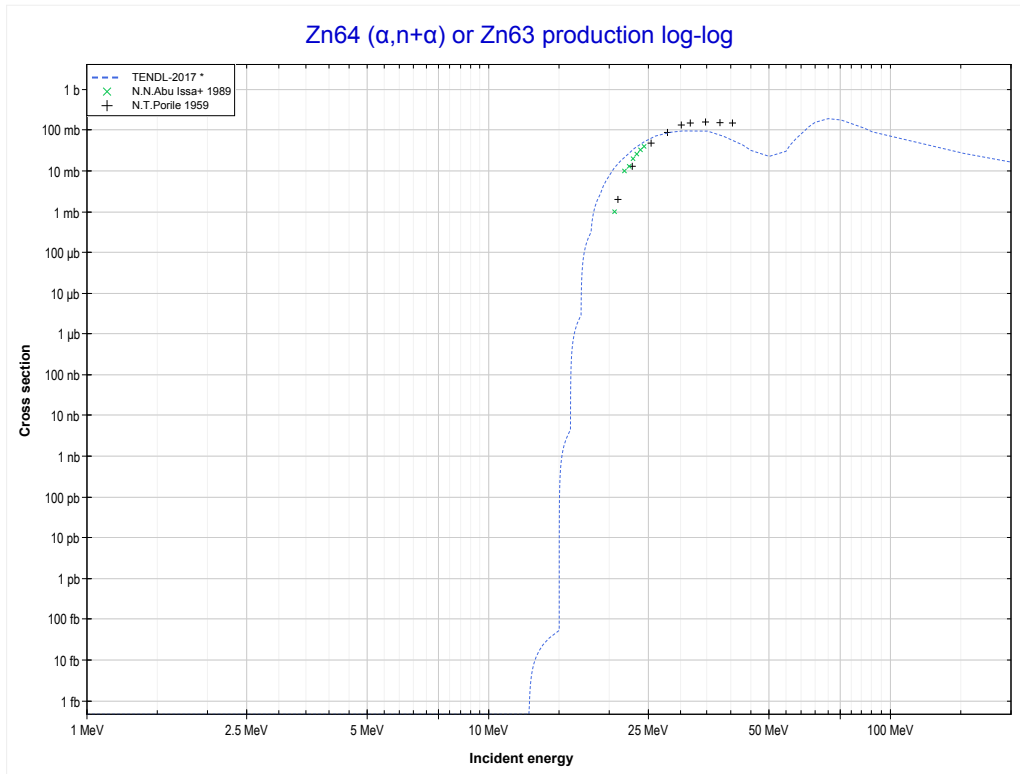
Reaction	Q-Value
Zn64($\alpha,2n$)Ge66	-18114.52 keV

<< 29-Cu-65	30-Zn-64	30-Zn-66 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Ge65 production)	MT22 ($\alpha,n+\alpha$) >>



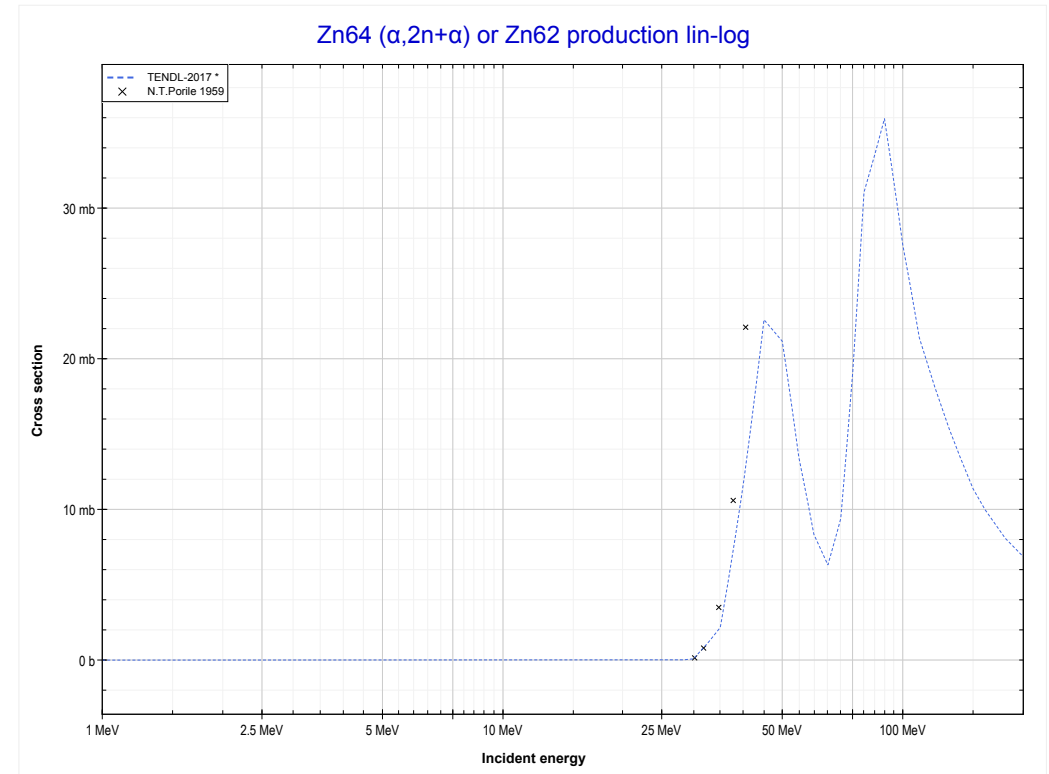
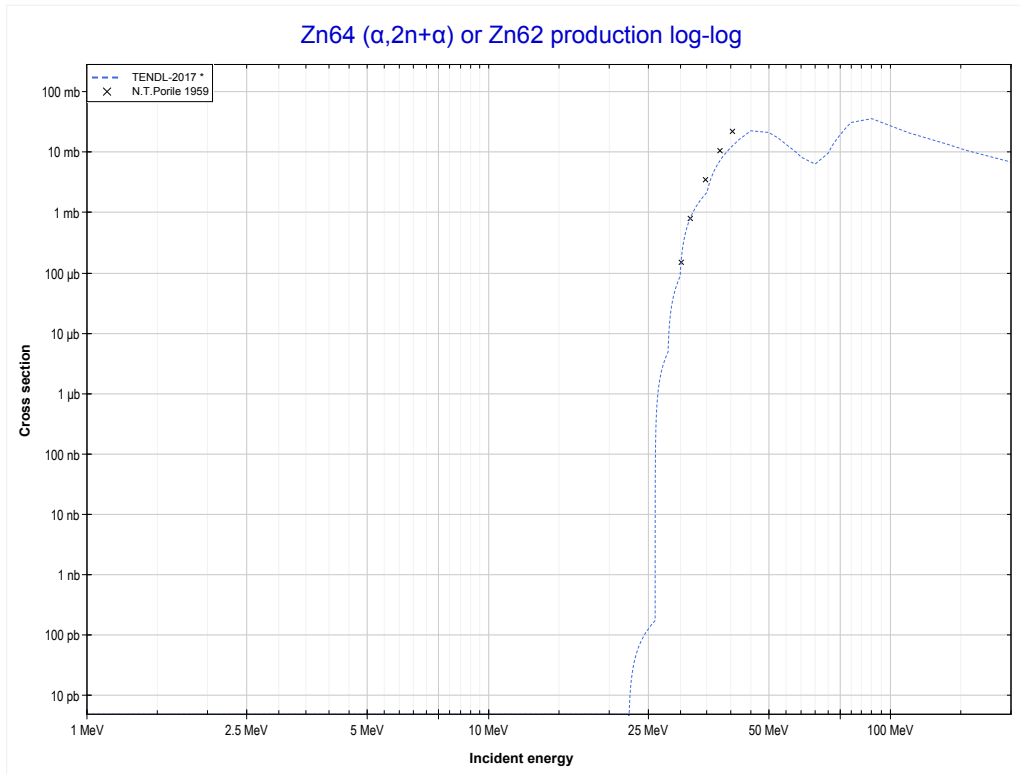
Reaction	Q-Value
Zn64($\alpha,3n$)Ge65	-31314.64 keV

<< 29-Cu-65	30-Zn-64	35-Br-79 >>
<< MT17 ($\alpha,3n$)	MT22 ($\alpha,n+\alpha$) or MT5 (Zn63 production)	MT24 ($\alpha,2n+\alpha$) >>



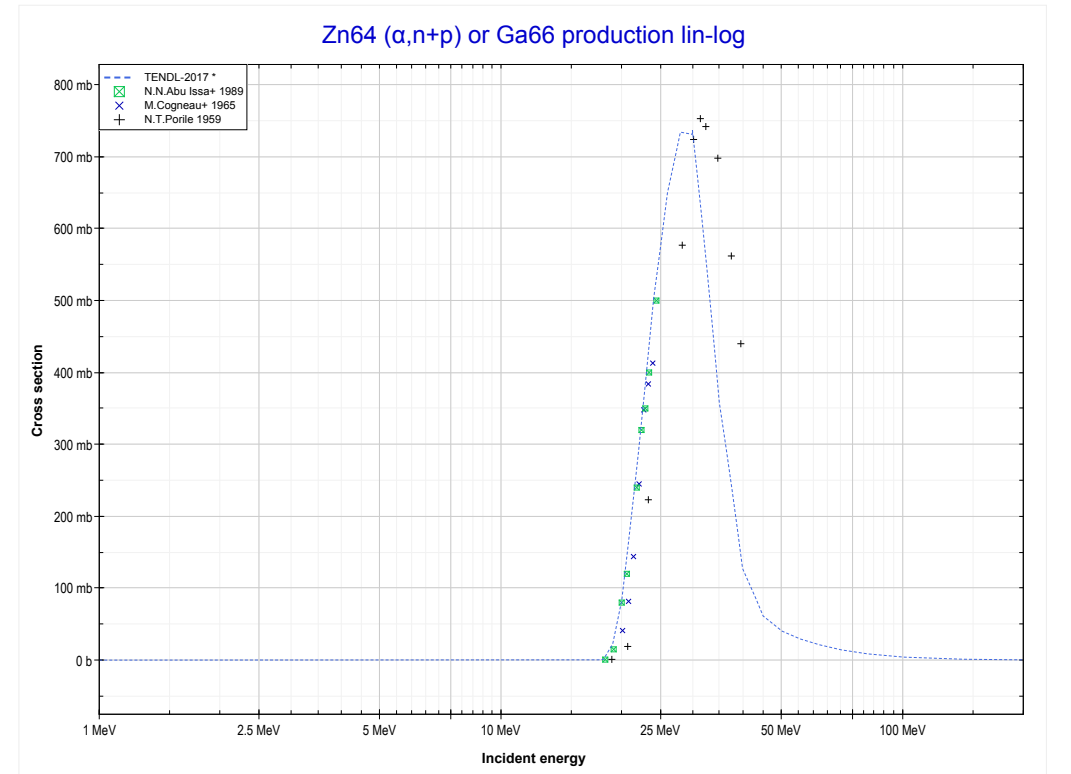
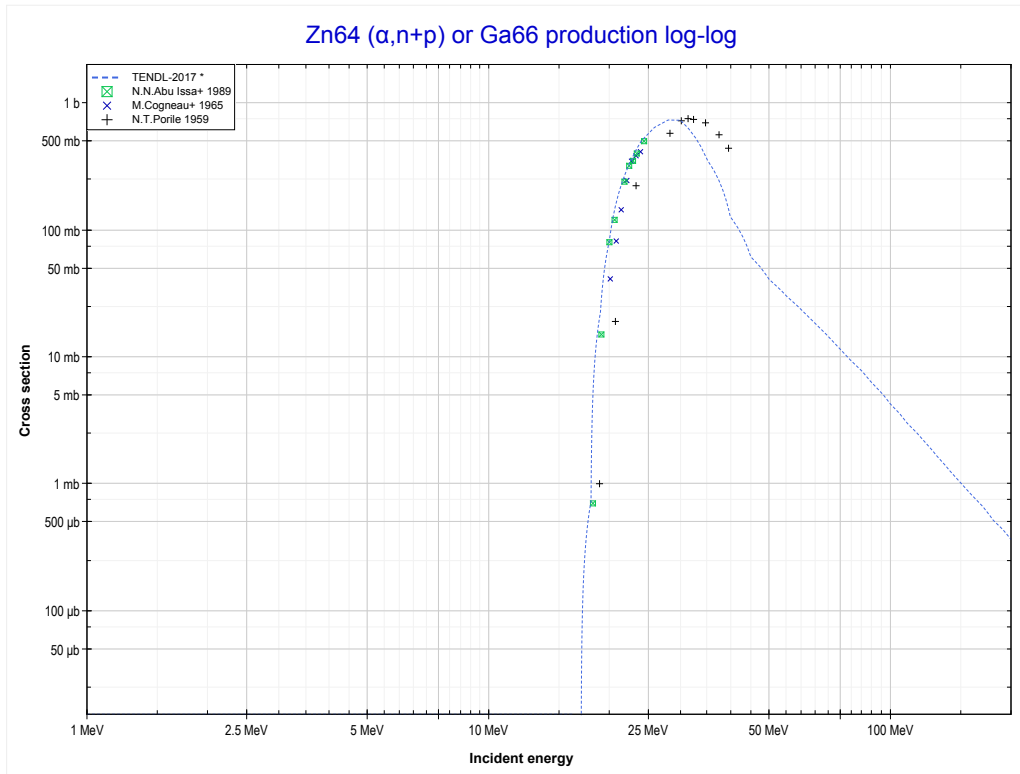
Reaction	Q-Value
Zn64($\alpha,n+\alpha$)Zn63	-11862.02 keV
Zn64($\alpha,d+t$)Zn63	-29451.31 keV
Zn64($\alpha,n+p+t$)Zn63	-31675.88 keV
Zn64($\alpha,2n+He3$)Zn63	-32439.63 keV
Zn64($\alpha,n+2d$)Zn63	-35708.54 keV
Zn64($\alpha,2n+p+d$)Zn63	-37933.11 keV
Zn64($\alpha,3n+2p$)Zn63	-40157.68 keV

<< 28-Ni-58	30-Zn-64	39-Y-89 >>
<< MT22 ($\alpha, n+\alpha$)	MT24 ($\alpha, 2n+\alpha$) or MT5 (Zn62 production)	MT28 ($\alpha, n+p$) >>



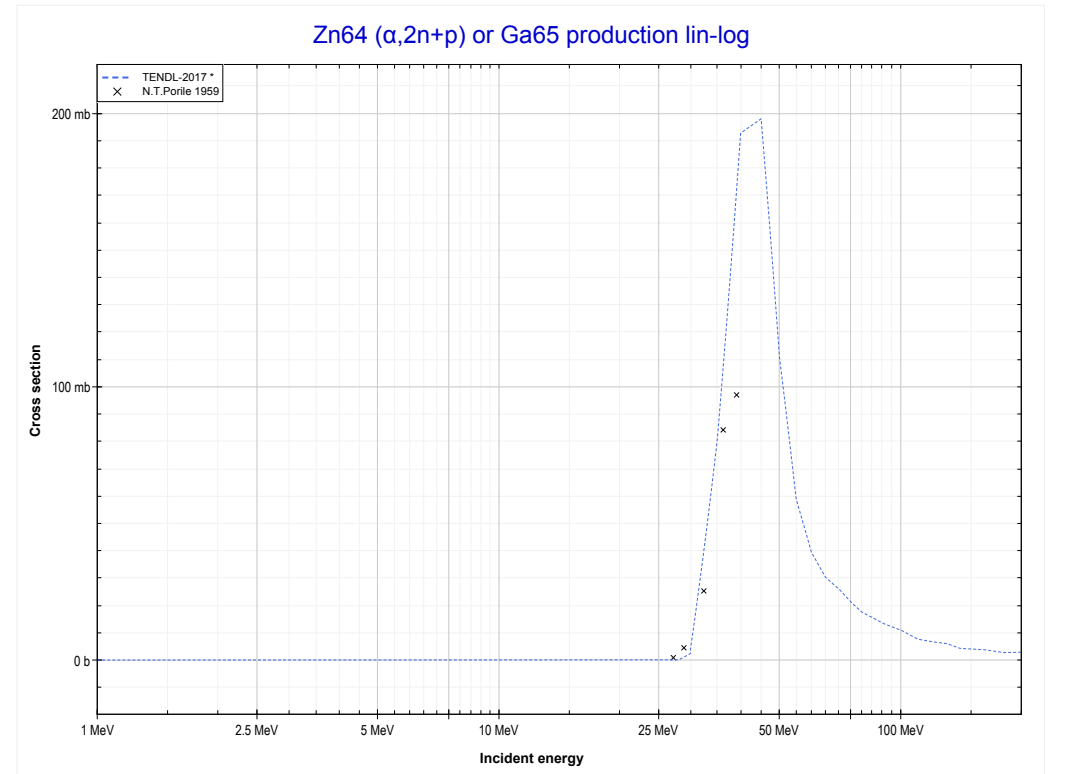
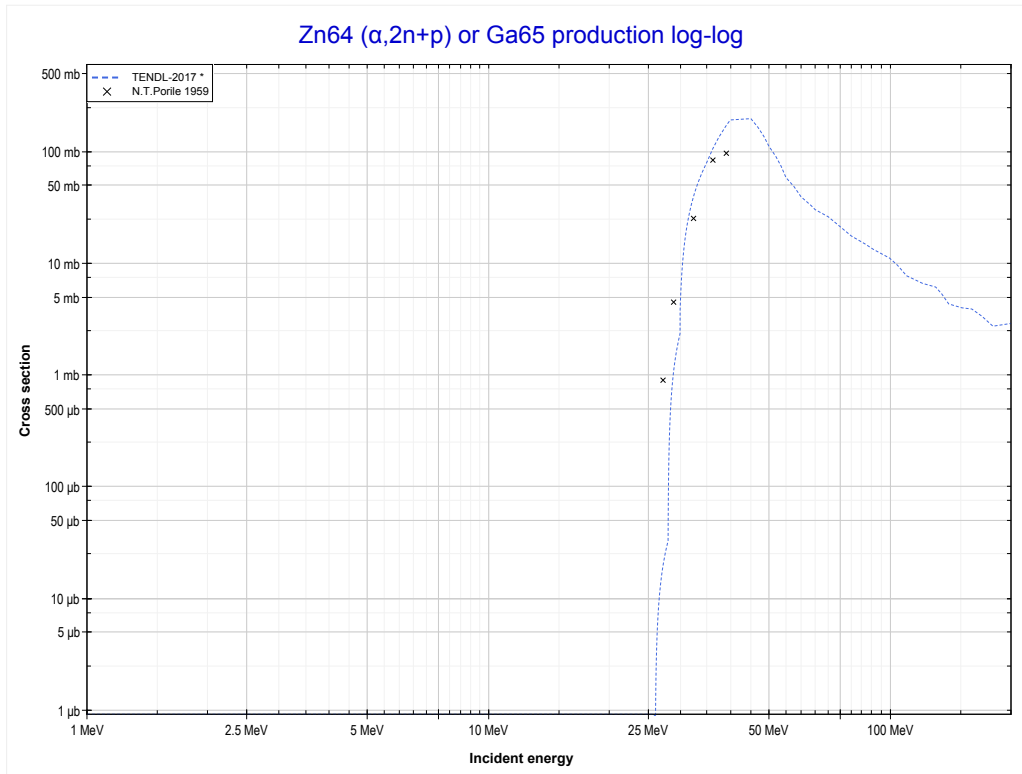
Reaction	Q-Value
Zn64($\alpha, 2n+\alpha$)Zn62	-20978.93 keV
Zn64($\alpha, 2t$)Zn62	-32311.00 keV
Zn64($\alpha, n+d+t$)Zn62	-38568.23 keV
Zn64($\alpha, 2n+p+t$)Zn62	-40792.80 keV
Zn64($\alpha, 3n+He3$)Zn62	-41556.55 keV
Zn64($\alpha, 2n+2d$)Zn62	-44825.46 keV
Zn64($\alpha, 3n+p+d$)Zn62	-47050.03 keV
Zn64($\alpha, 4n+2p$)Zn62	-49274.59 keV

<< 28-Ni-62	30-Zn-64	30-Zn-66 >>
<< MT24 ($\alpha, 2n+\alpha$)	MT28 ($\alpha, n+p$) or MT5 (Ga66 production)	MT41 ($\alpha, 2n+p$) >>



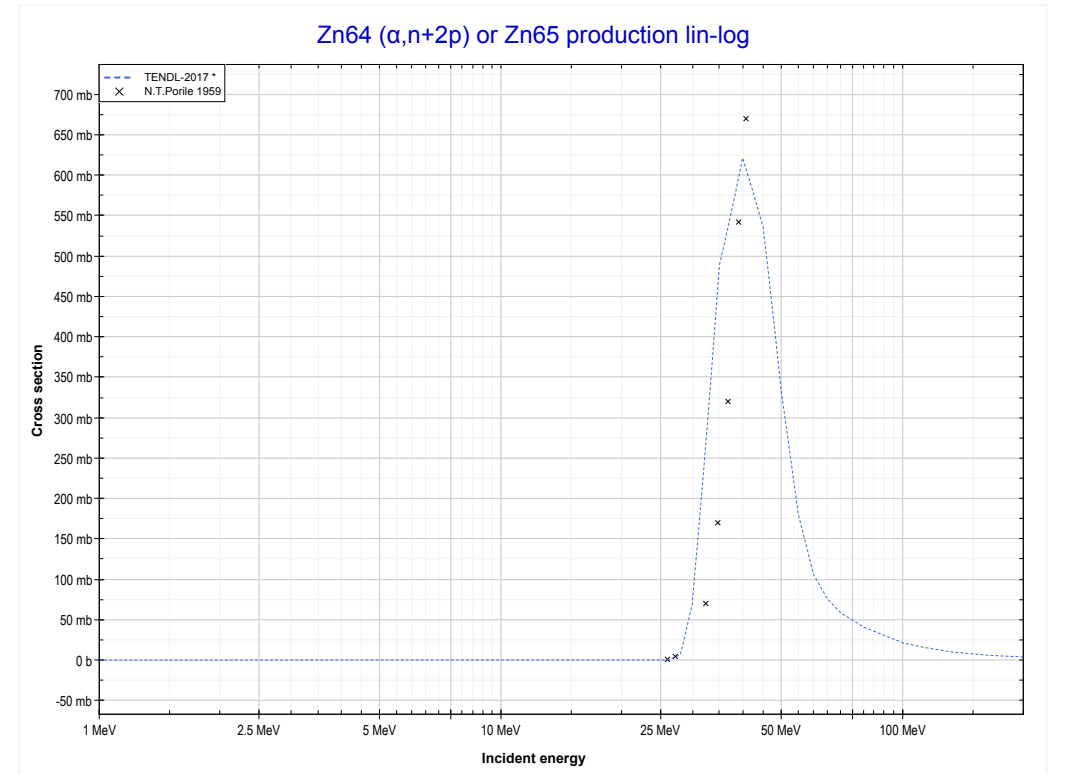
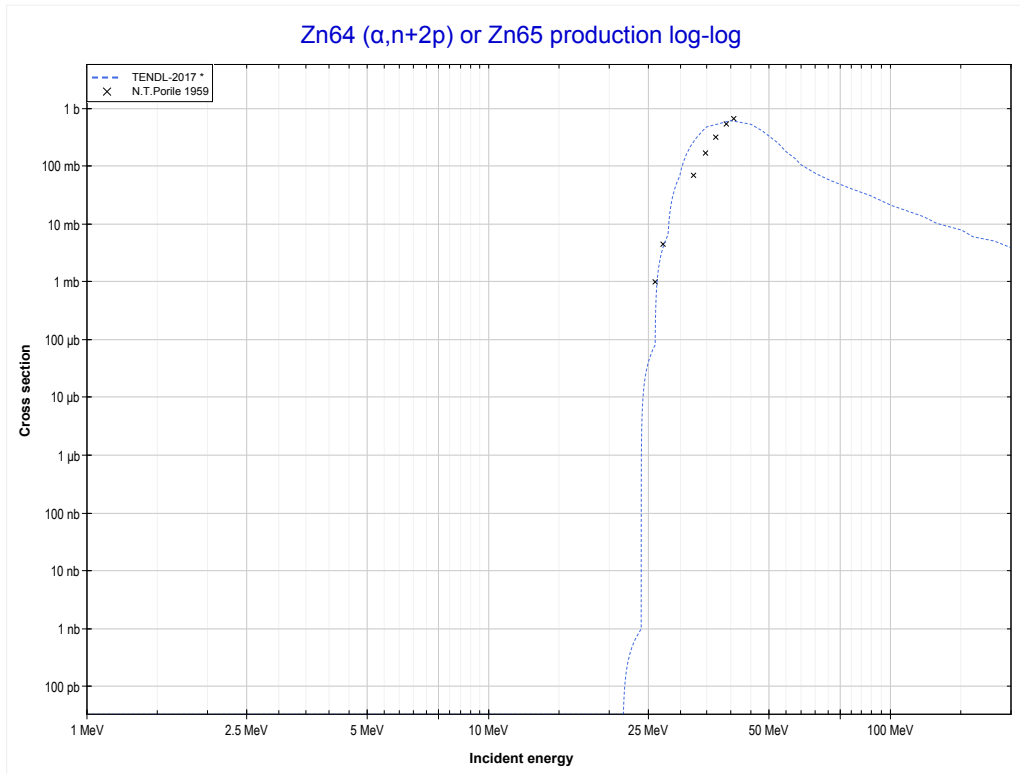
Reaction	Q-Value
Zn64(α, d)Ga66	-12990.61 keV
Zn64($\alpha, n+p$)Ga66	-15215.17 keV

<< 26-Fe-56	30-Zn-64	48-Cd-114 >>
<< MT28 ($\alpha, n+p$)	MT41 ($\alpha, 2n+p$) or MT5 (Ga65 production)	MT44 ($\alpha, n+2p$) >>



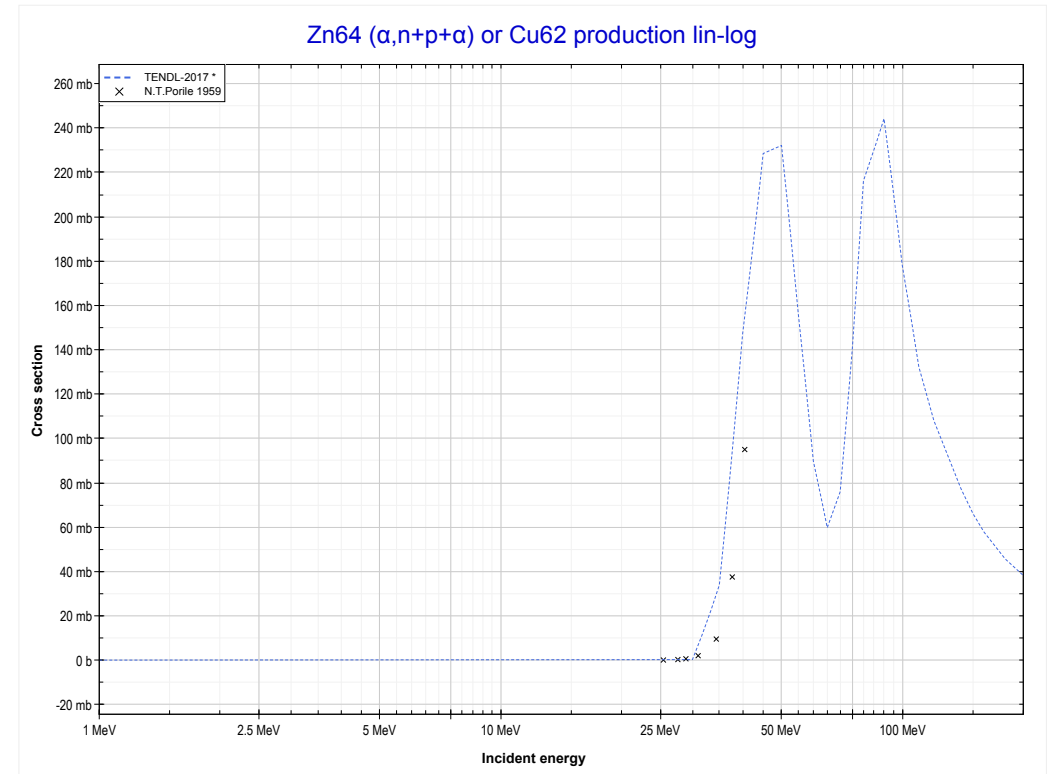
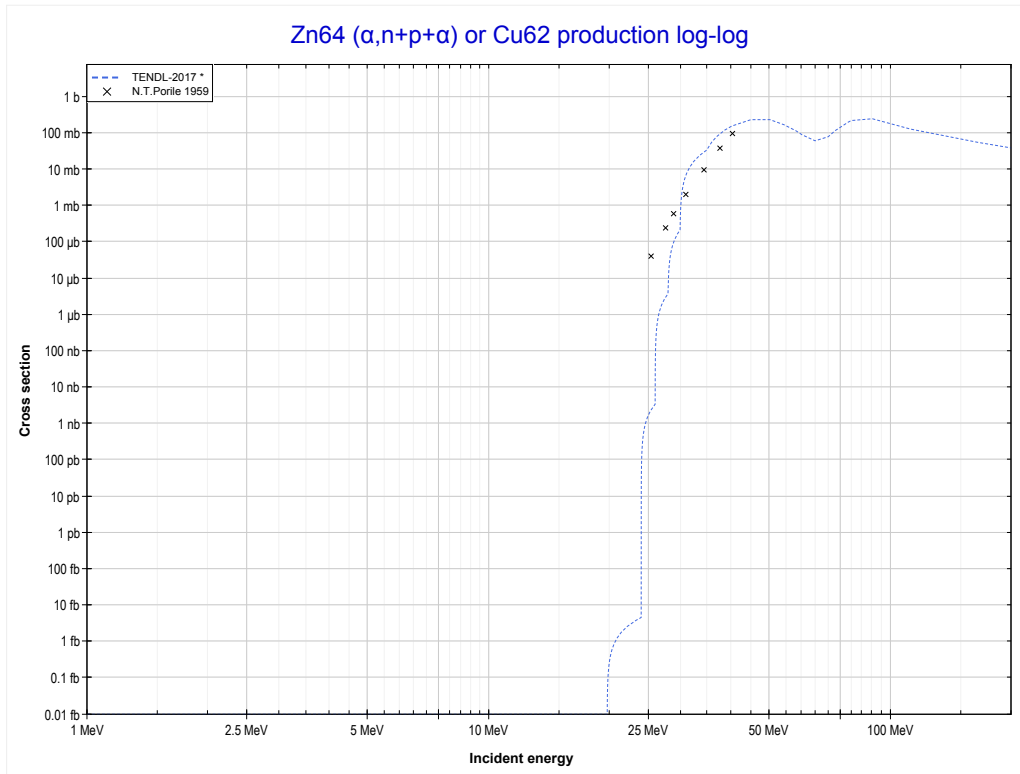
Reaction	Q-Value
Zn64(α, t)Ga65	-15871.39 keV
Zn64($\alpha, n+d$)Ga65	-22128.62 keV
Zn64($\alpha, 2n+p$)Ga65	-24353.19 keV

<< 26-Fe-54	30-Zn-64	50-Sn-124 >>
<< MT41 ($\alpha,2n+p$)	MT44 ($\alpha,n+2p$) or MT5 (Zn65 production)	MT45 ($\alpha,n+p+\alpha$) >>



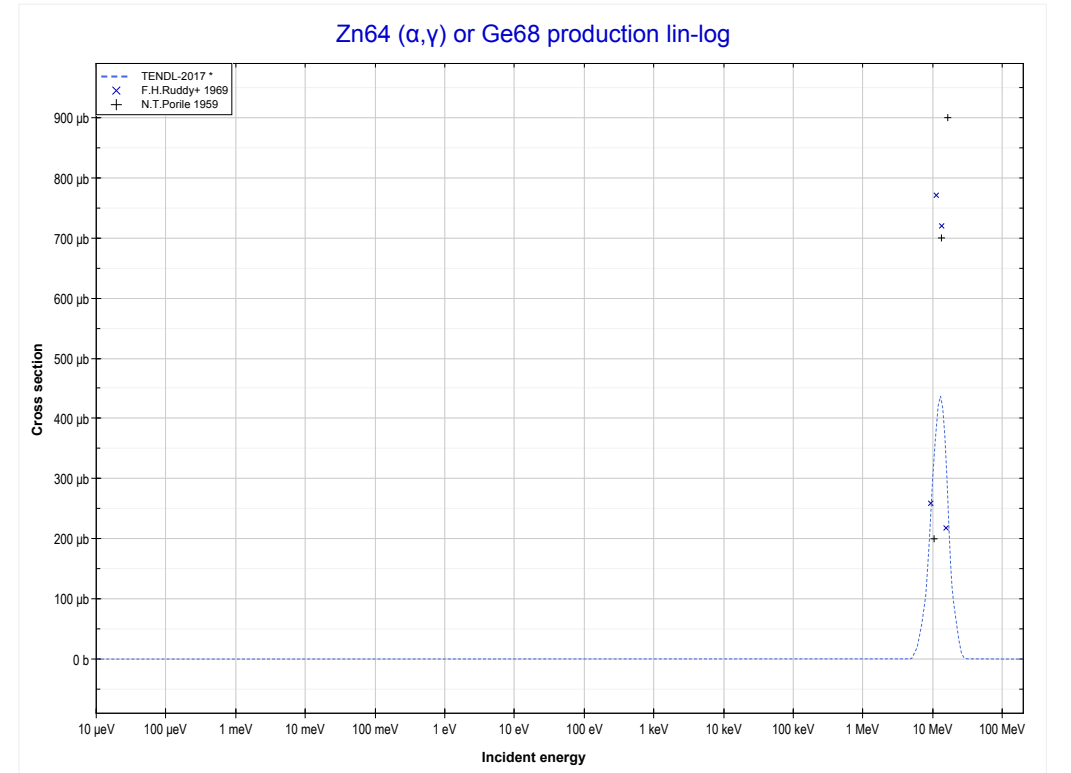
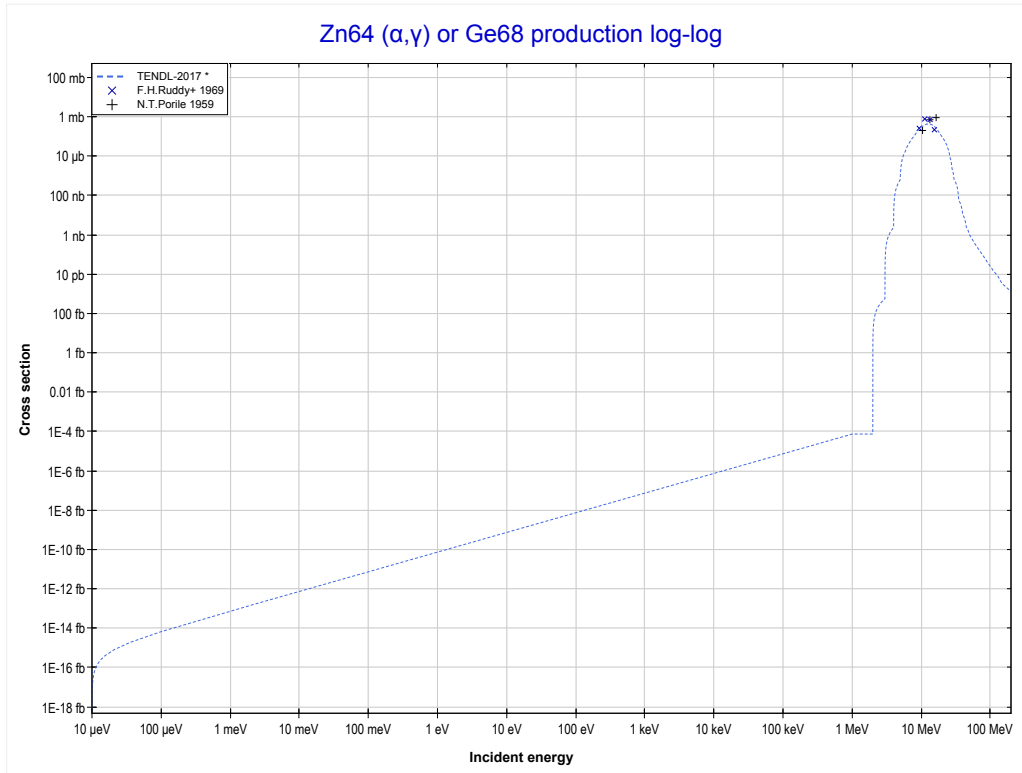
Reaction	Q-Value
Zn64($\alpha,He3$)Zn65	-12598.30 keV
Zn64($\alpha,p+d$)Zn65	-18091.78 keV
Zn64($\alpha,n+2p$)Zn65	-20316.34 keV

<< 28-Ni-60	30-Zn-64	
<< MT44 ($\alpha, n+2p$)	MT45 ($\alpha, n+p+\alpha$) or MT5 (Cu62 production)	MT102 (α, γ) >>



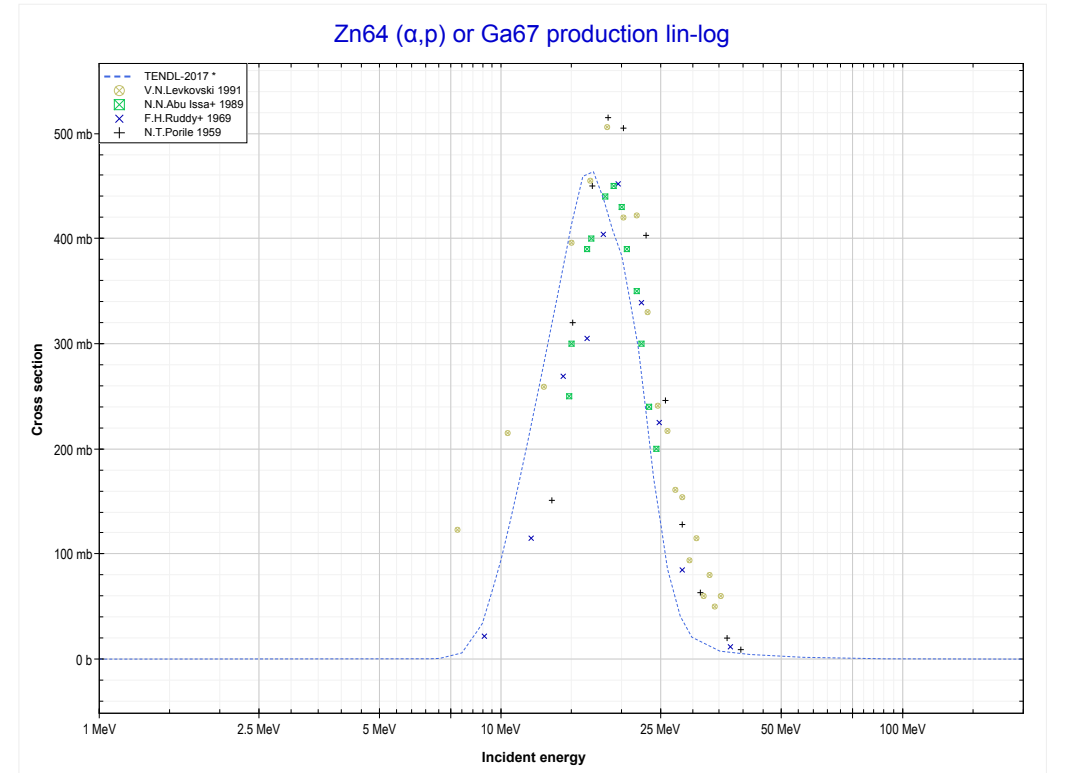
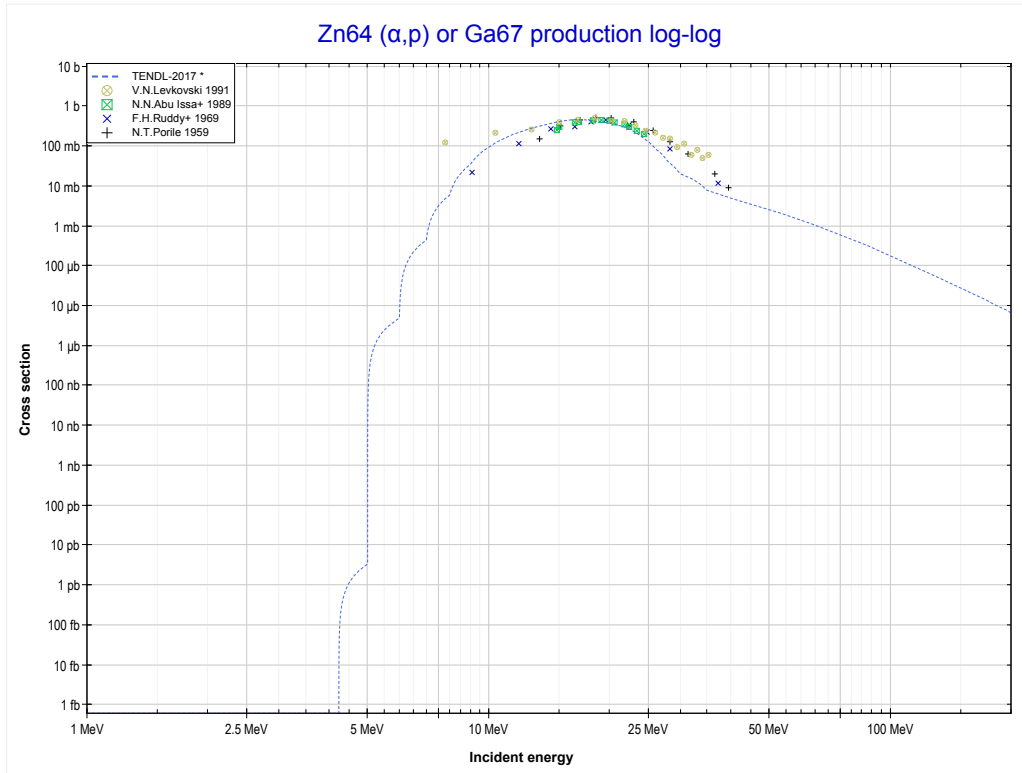
Reaction	Q-Value	Reaction	Q-Value
Zn64($\alpha, d+\alpha$)Cu62	-16352.52 keV	Zn64($\alpha, n+p+2d$)Cu62	-42423.62 keV
Zn64($\alpha, n+p+\alpha$)Cu62	-18577.09 keV	Zn64($\alpha, 2n+2p+d$)Cu62	-44648.18 keV
Zn64($\alpha, t+He3$)Cu62	-30672.91 keV	Zn64($\alpha, 3n+3p$)Cu62	-46872.75 keV
Zn64($\alpha, p+d+t$)Cu62	-36166.38 keV		
Zn64($\alpha, n+d+He3$)Cu62	-36930.14 keV		
Zn64($\alpha, n+2p+t$)Cu62	-38390.95 keV		
Zn64($\alpha, 2n+p+He3$)Cu62	-39154.70 keV		
Zn64($\alpha, 3d$)Cu62	-40199.05 keV		

<< 29-Cu-63	30-Zn-64	32-Ge-70 >>
<< MT45 ($\alpha, n+p+\alpha$)	MT102 (α, γ) or MT5 (Ge68 production)	MT103 (α, p) >>



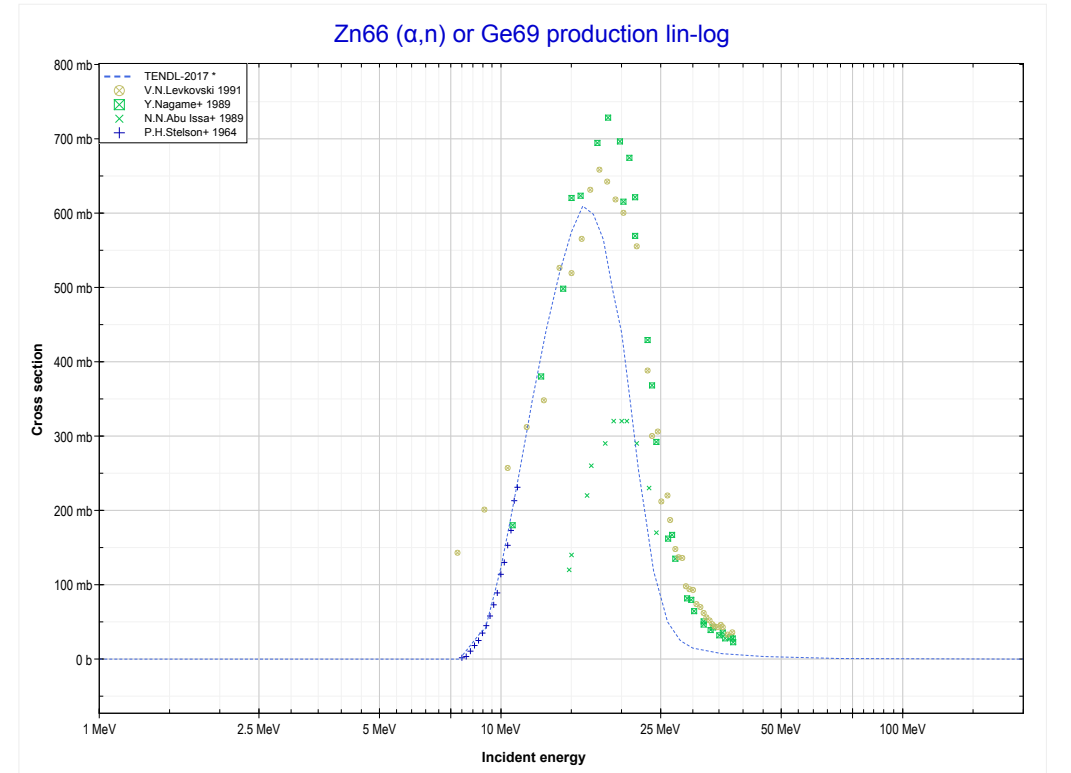
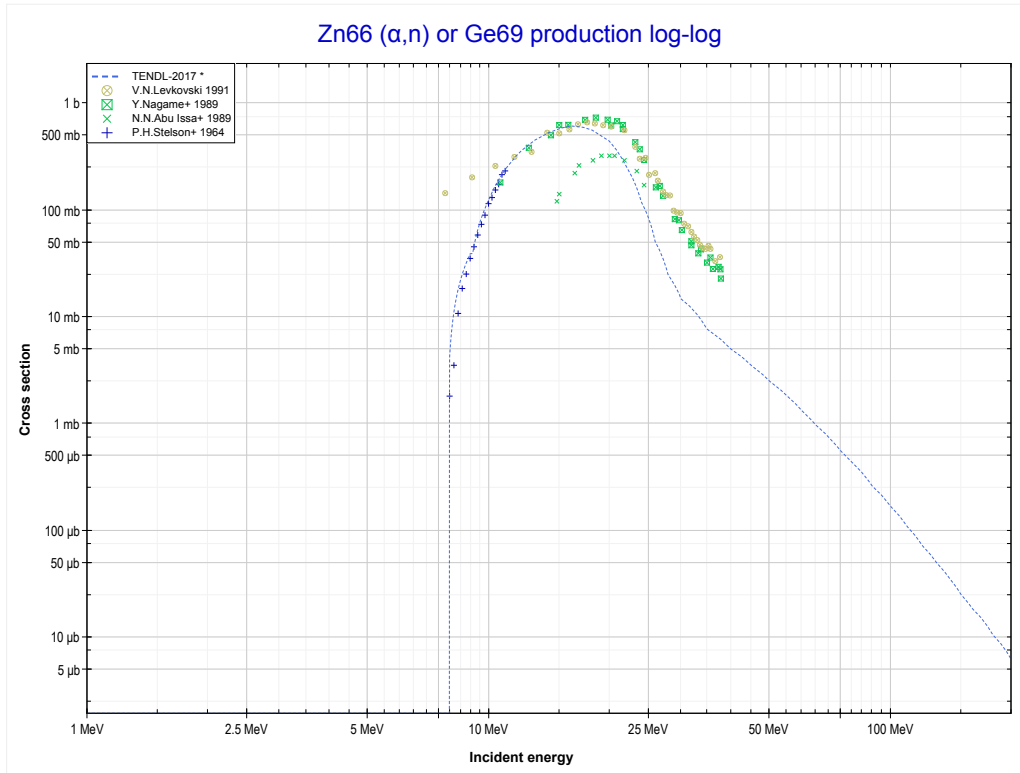
Reaction	Q-Value
Zn64(α, γ)Ge68	3399.92 keV

<< 28-Ni-64	30-Zn-64	30-Zn-70 >>
<< MT102 (α,γ)	MT103 (α,p) or MT5 (Ga67 production)	30-Zn-66 MT4 (α,n) >>



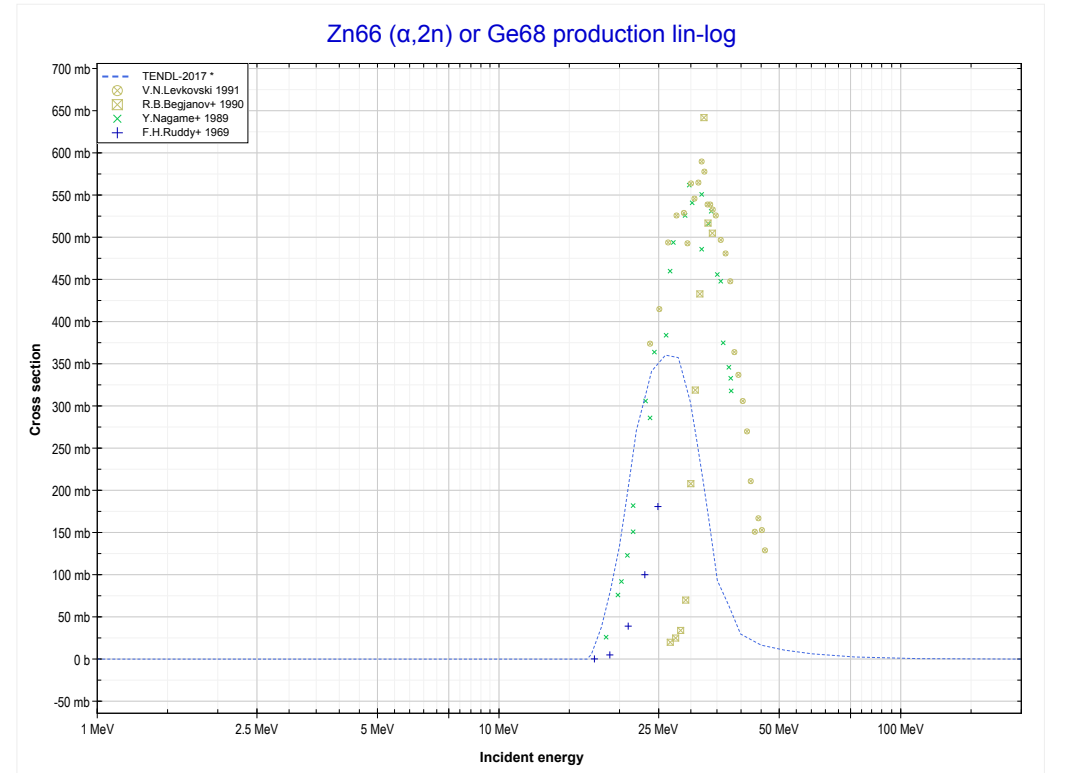
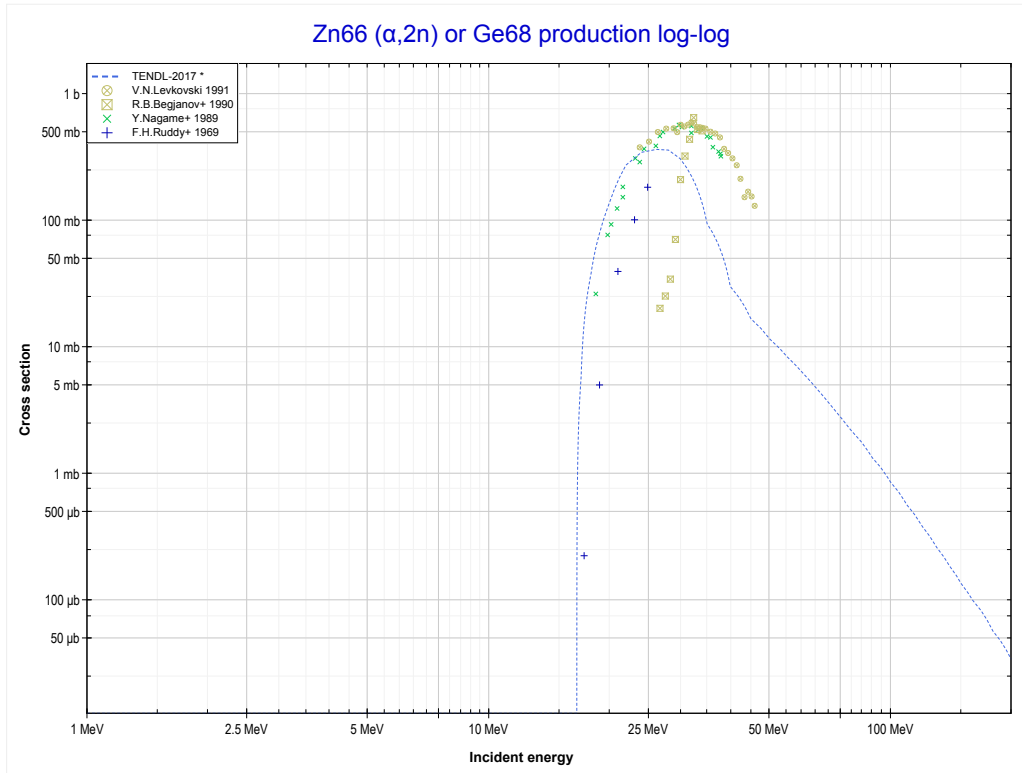
Reaction	Q-Value
Zn64(α,p)Ga67	-3988.95 keV

<< 30-Zn-64	30-Zn-66	30-Zn-68 >>
<< 30-Zn-64 MT103 (α,p)	MT4 (α,n) or MT5 (Ge69 production)	MT16 ($\alpha,2n$) >>



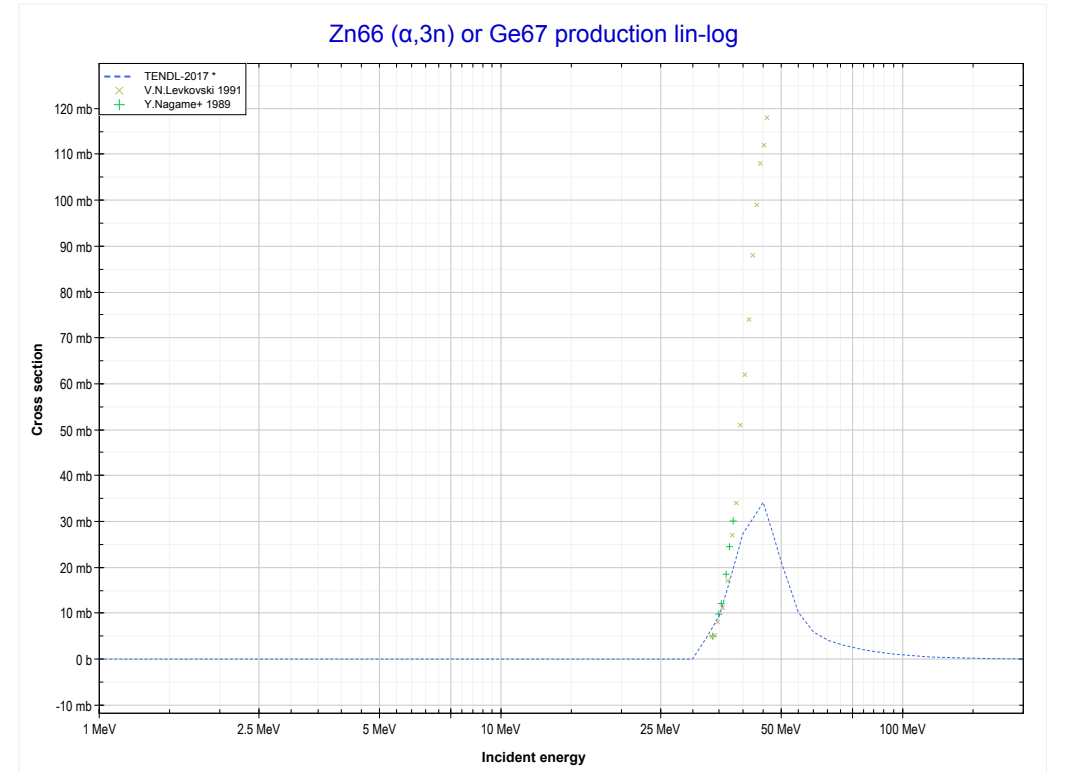
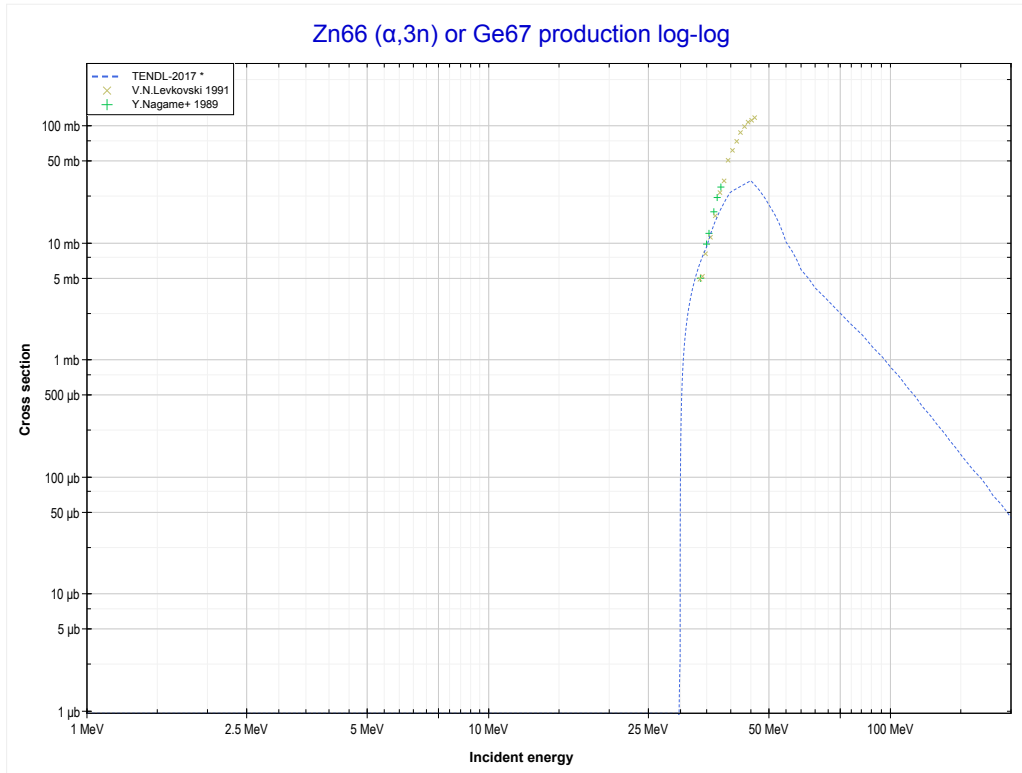
Reaction	Q-Value
Zn66(α,n)Ge69	-7444.80 keV

<< 30-Zn-64	30-Zn-66	30-Zn-67 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Ge68 production)	MT17 ($\alpha, 3n$) >>



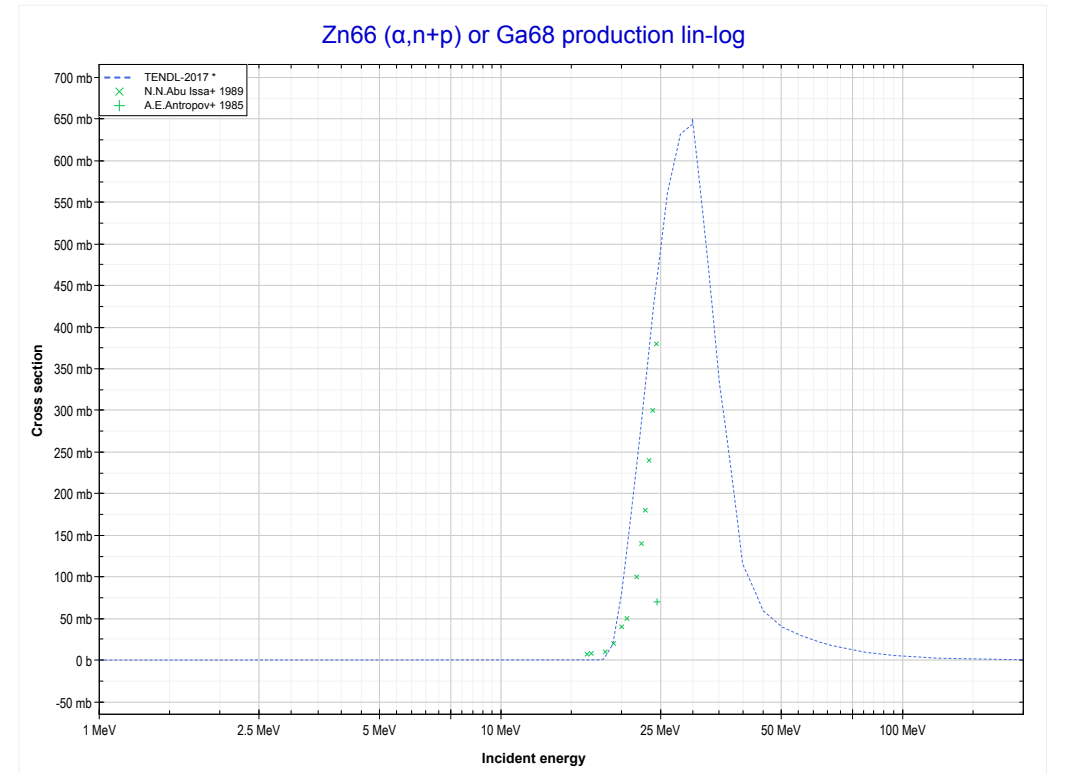
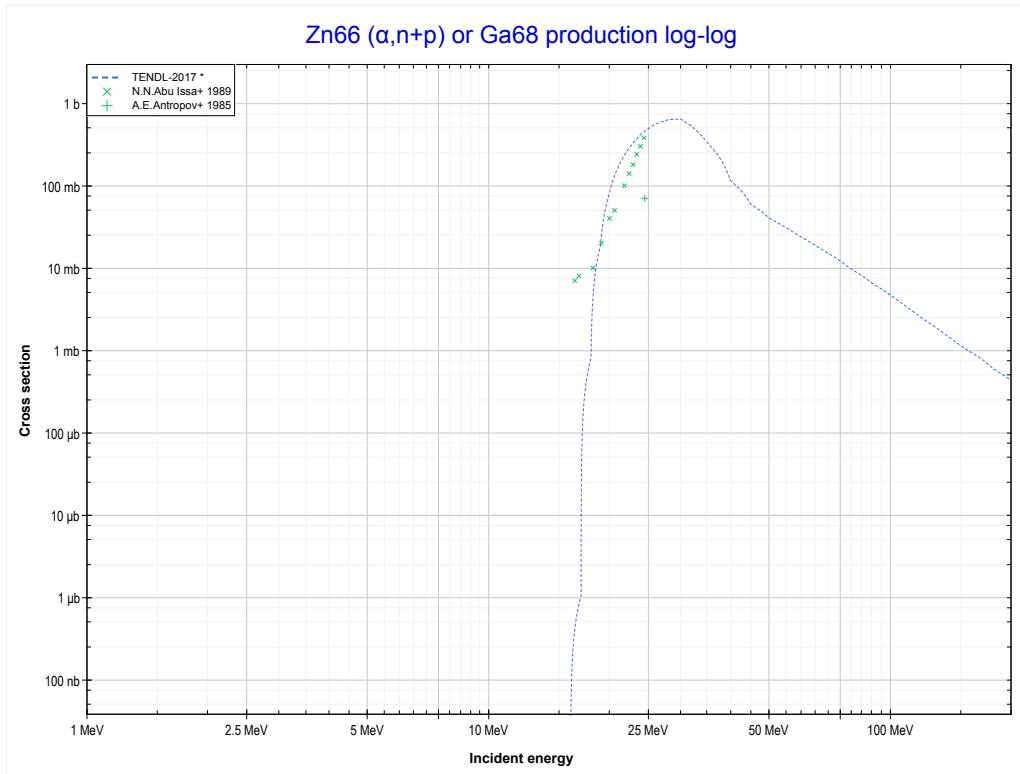
Reaction	Q-Value
Zn66($\alpha, 2n$)Ge68	-15638.02 keV

<< 30-Zn-64	30-Zn-66	30-Zn-67 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Ge67 production)	MT28 ($\alpha,n+p$) >>



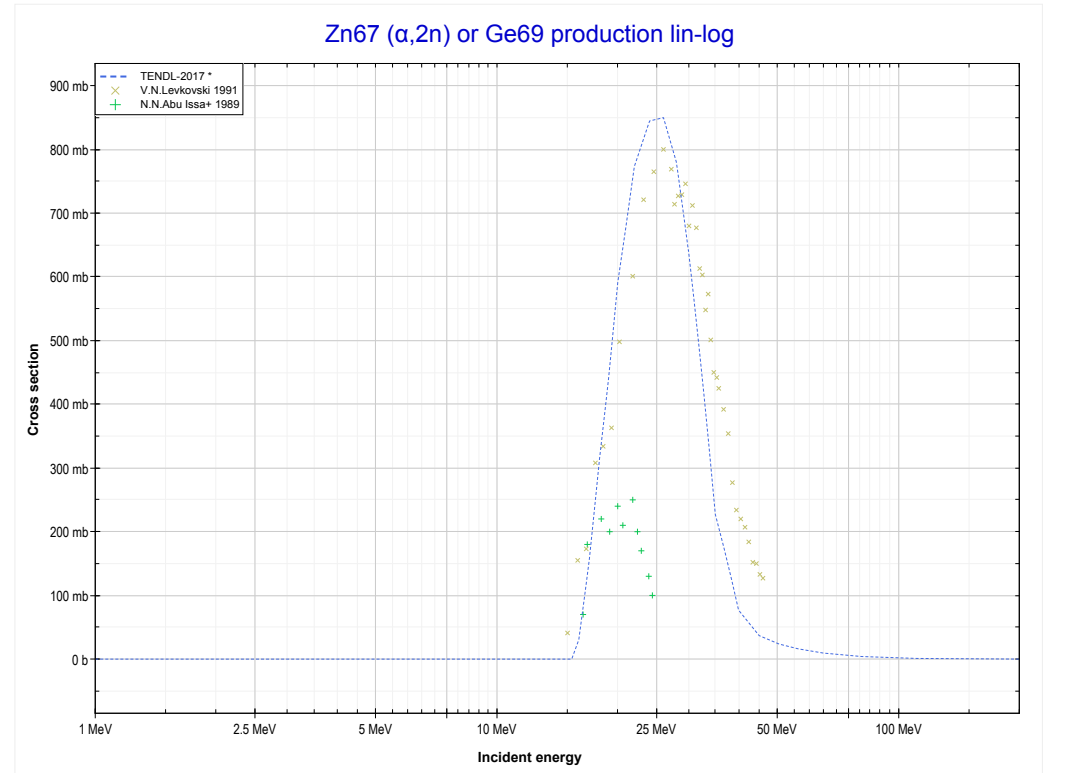
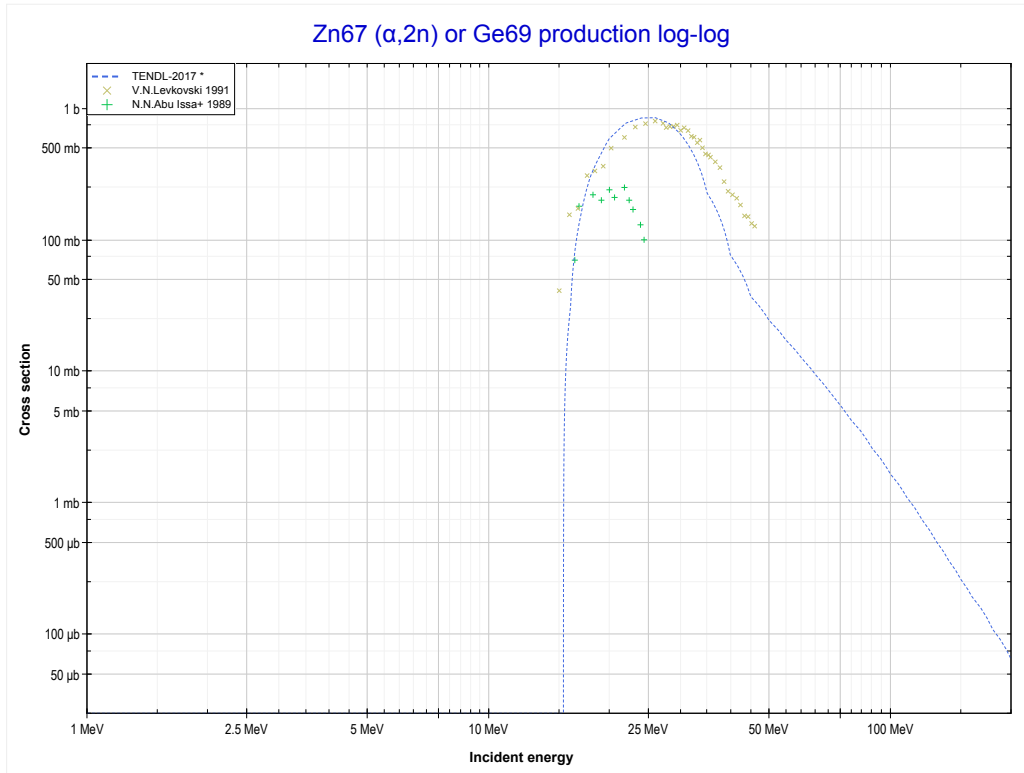
Reaction	Q-Value
Zn66($\alpha,3n$)Ge67	-28030.14 keV

<< 30-Zn-64	30-Zn-66	30-Zn-68 >>
<< MT17 ($\alpha,3n$)	MT28 ($\alpha,n+p$) or MT5 (Ga68 production)	30-Zn-67 MT16 ($\alpha,2n$) >>



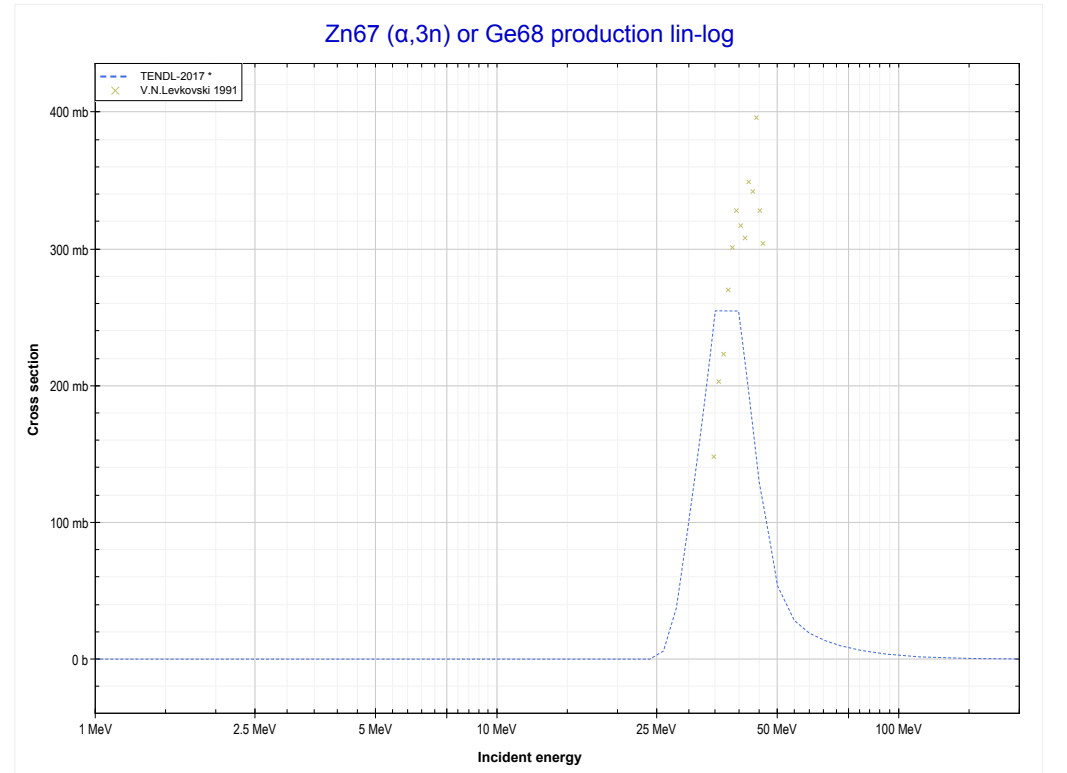
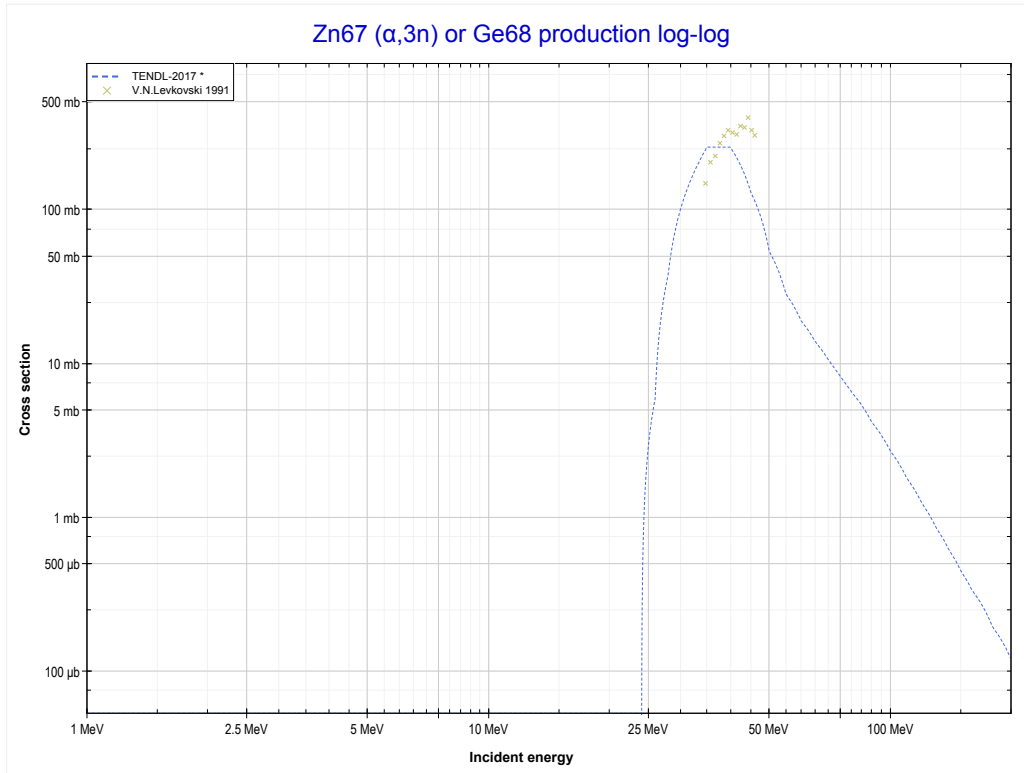
Reaction	Q-Value
Zn66(α,d)Ga68	-12524.21 keV
Zn66($\alpha,n+p$)Ga68	-14748.77 keV

<< 30-Zn-66	30-Zn-67	31-Ga-69 >>
<< 30-Zn-66 MT28 ($\alpha, n+p$)	MT16 ($\alpha, 2n$) or MT5 (Ge69 production)	MT17 ($\alpha, 3n$) >>



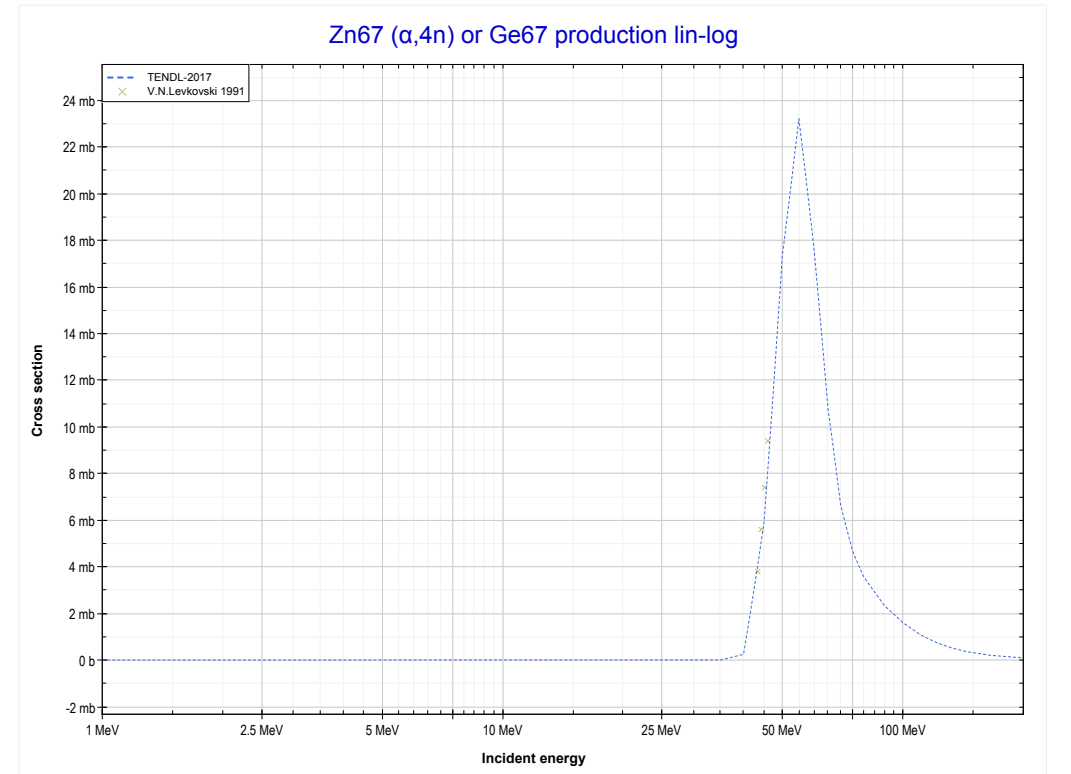
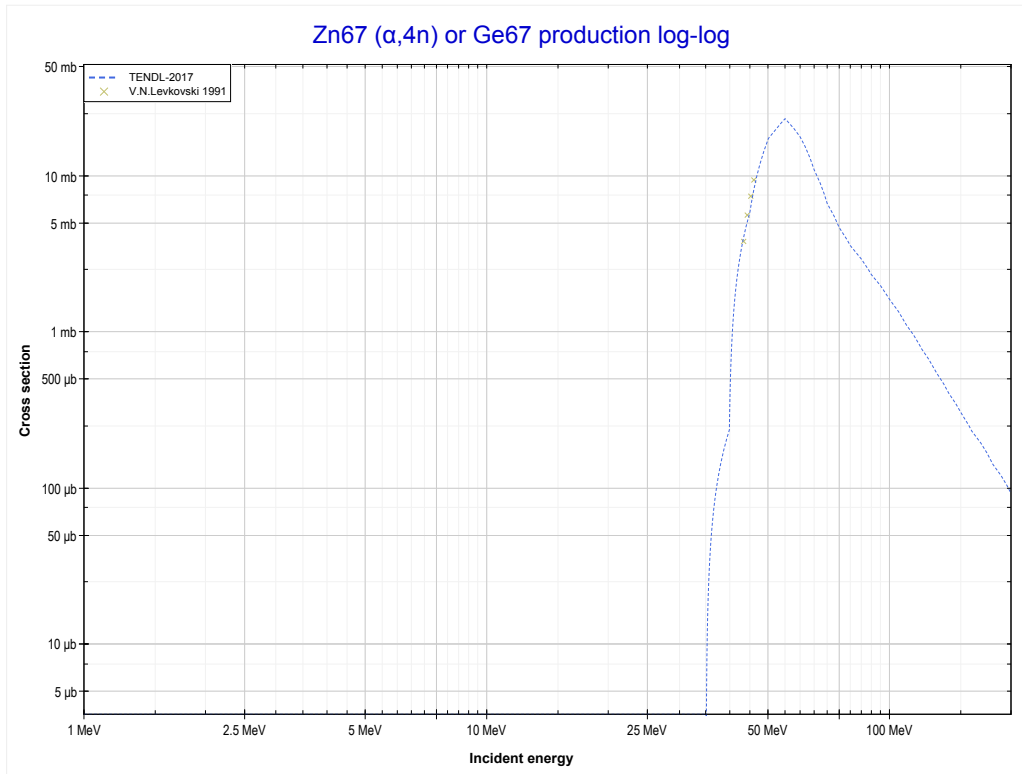
Reaction	Q-Value
Zn67($\alpha, 2n$)Ge69	-14497.12 keV

<< 30-Zn-66	30-Zn-67	30-Zn-68 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Ge68 production)	MT37 ($\alpha,4n$) >>



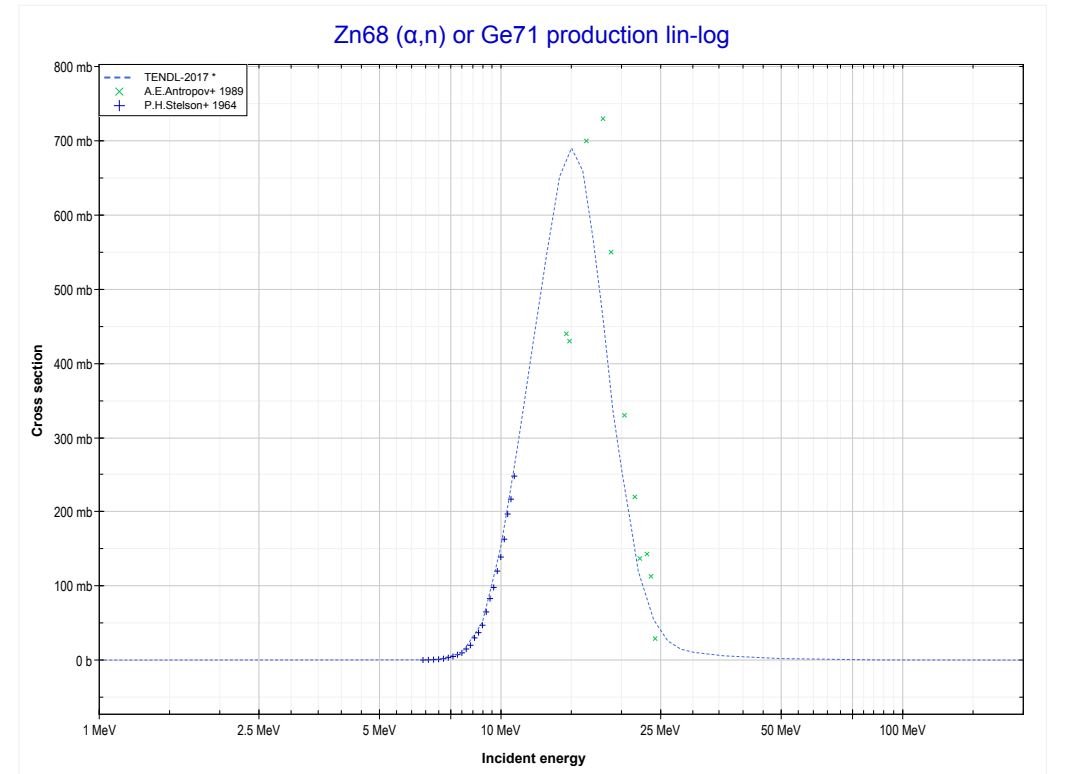
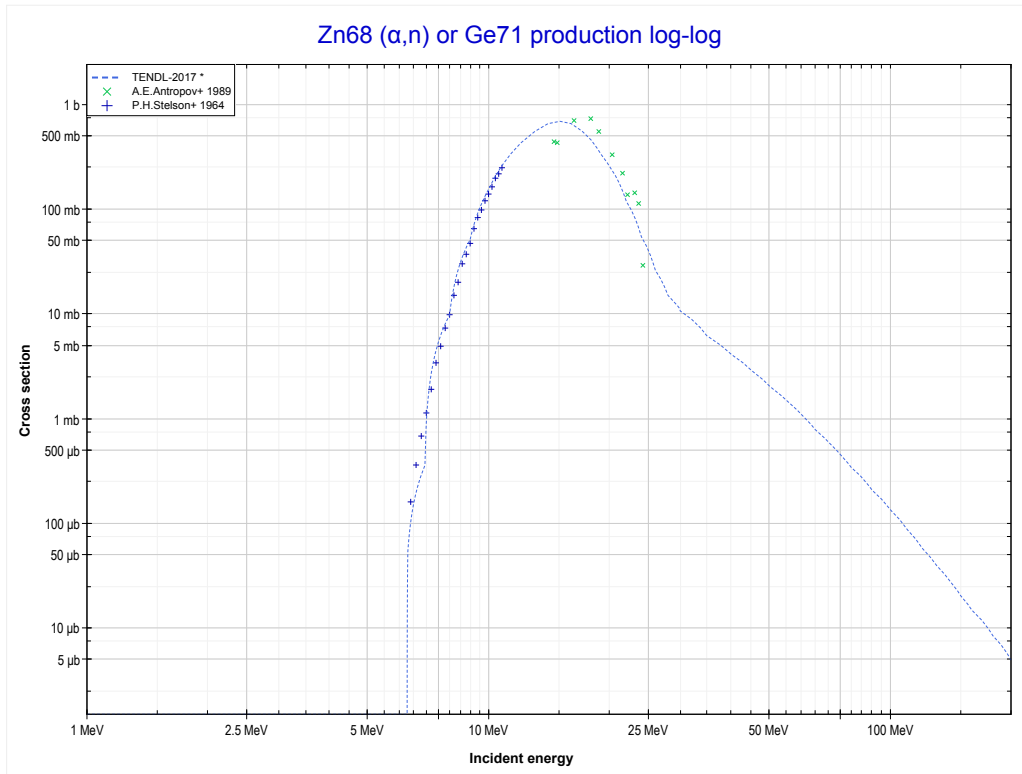
Reaction	Q-Value
Zn67($\alpha,3n$)Ge68	-22690.34 keV

<< 26-Fe-56	30-Zn-67	31-Ga-71 >>
<< MT17 ($\alpha,3n$)	MT37 ($\alpha,4n$) or MT5 (Ge67 production)	30-Zn-68 MT4 (α,n) >>



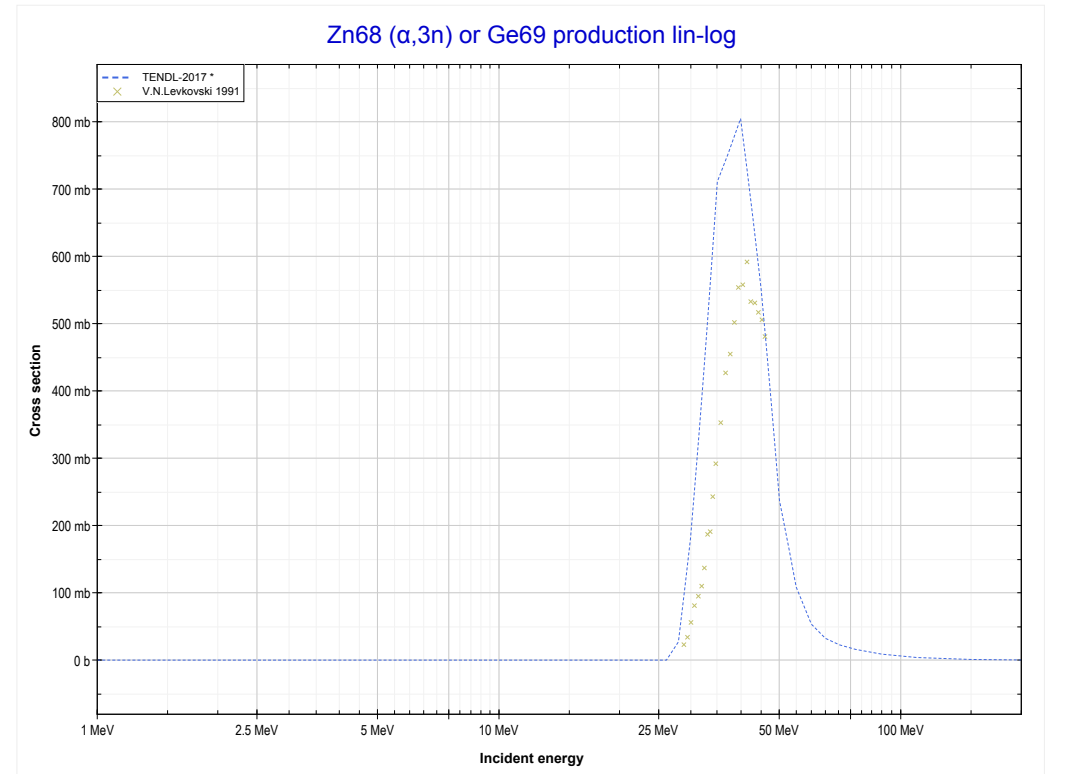
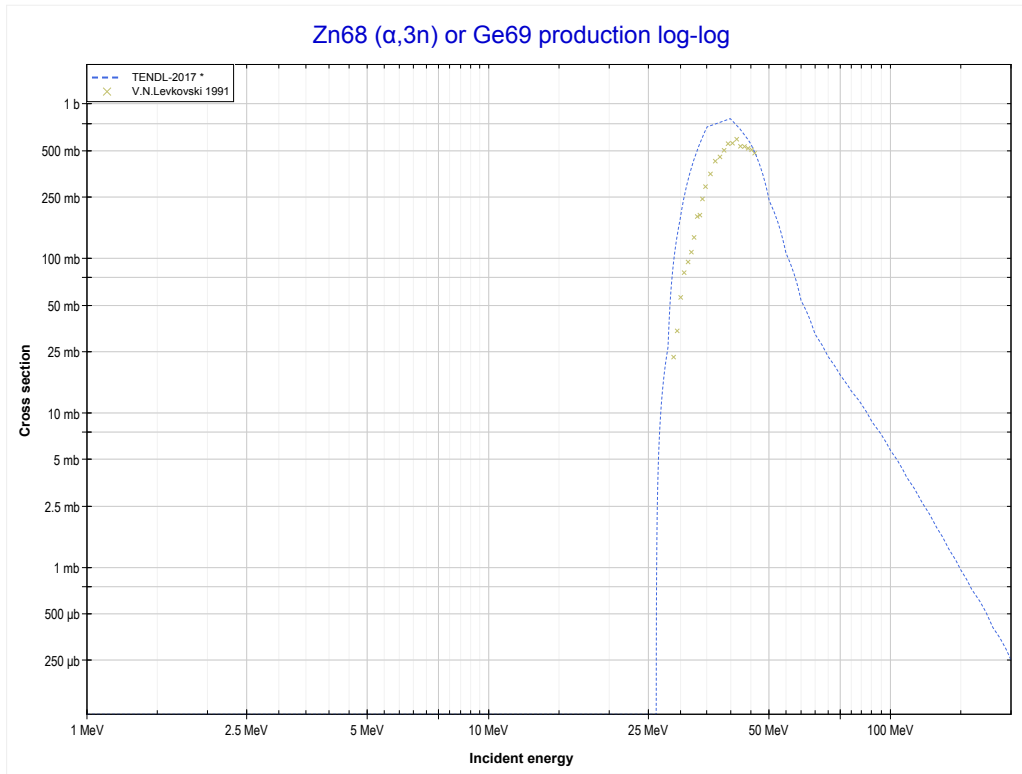
Reaction	Q-Value
Zn67($\alpha,4n$)Ge67	-35082.45 keV

<< 30-Zn-66	30-Zn-68	31-Ga-69 >>
<< 30-Zn-67 MT37 ($\alpha,4n$)	MT4 (α,n) or MT5 (Ge71 production)	MT17 ($\alpha,3n$) >>



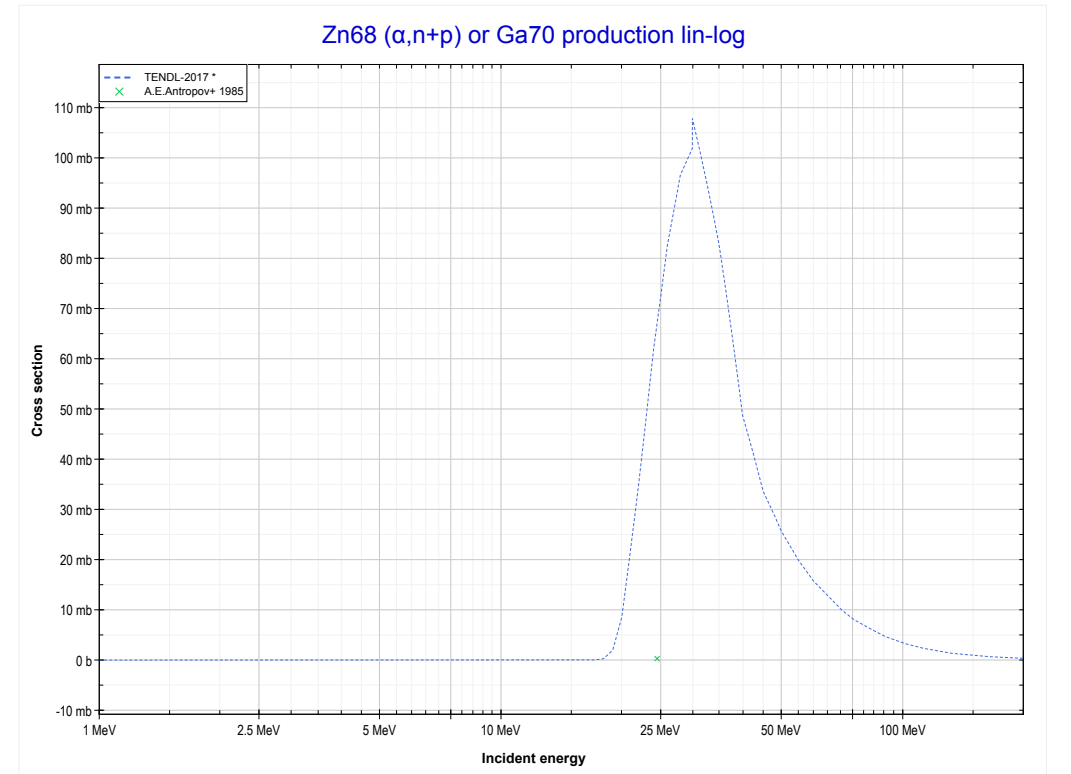
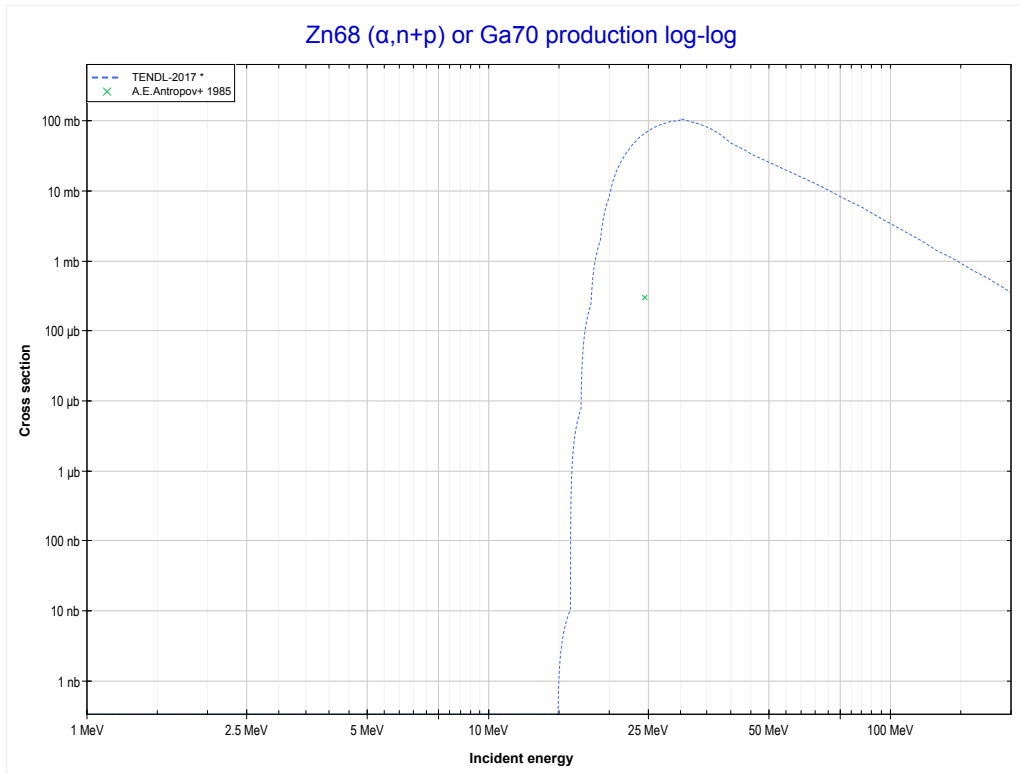
Reaction	Q-Value
Zn68(α,n)Ge71	-5746.70 keV

<< 30-Zn-67	30-Zn-68	31-Ga-69 >>
<< MT4 (α, n)	MT17 ($\alpha, 3n$) or MT5 (Ge69 production)	MT28 ($\alpha, n+p$) >>



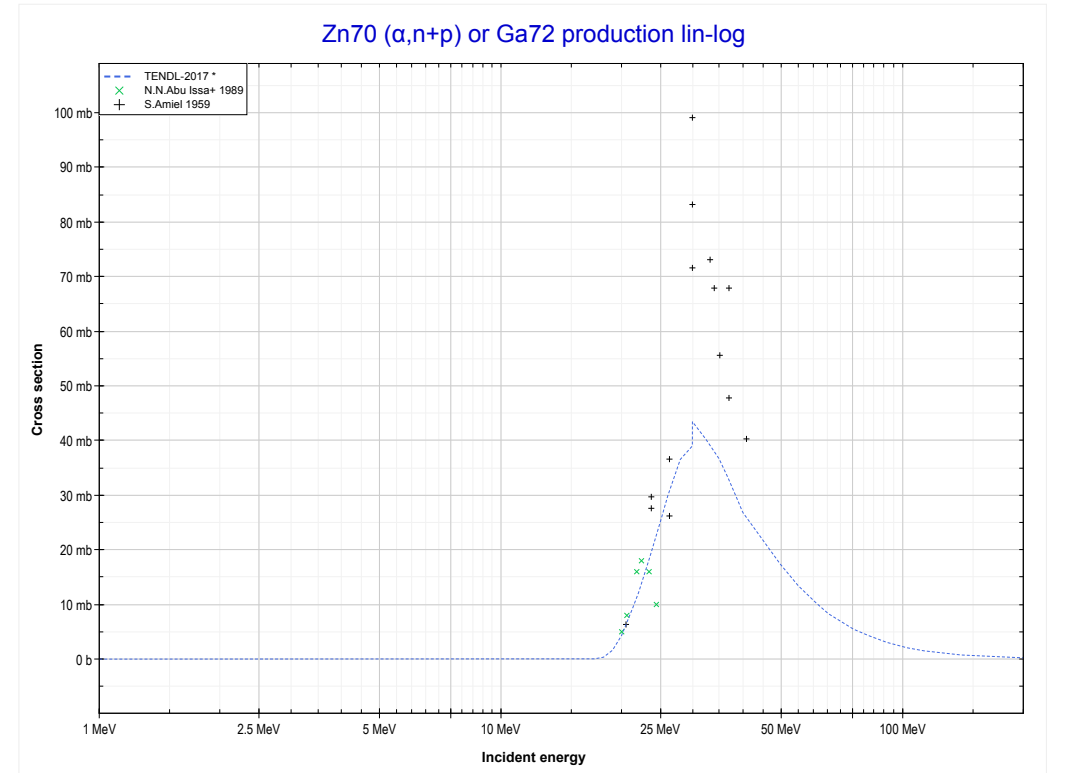
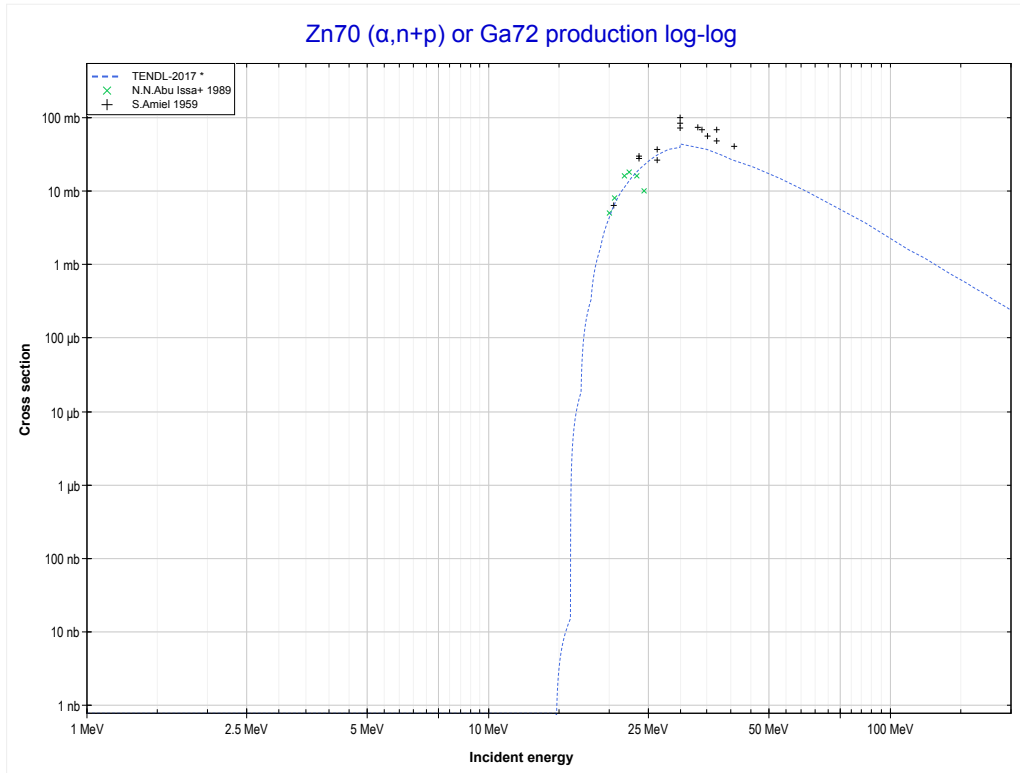
Reaction	Q-Value
Zn68($\alpha, 3n$)Ge69	-24695.14 keV

<< 30-Zn-66	30-Zn-68	30-Zn-70 >>
<< MT17 ($\alpha,3n$)	MT28 ($\alpha,n+p$) or MT5 (Ga70 production)	30-Zn-70 MT28 ($\alpha,n+p$) >>



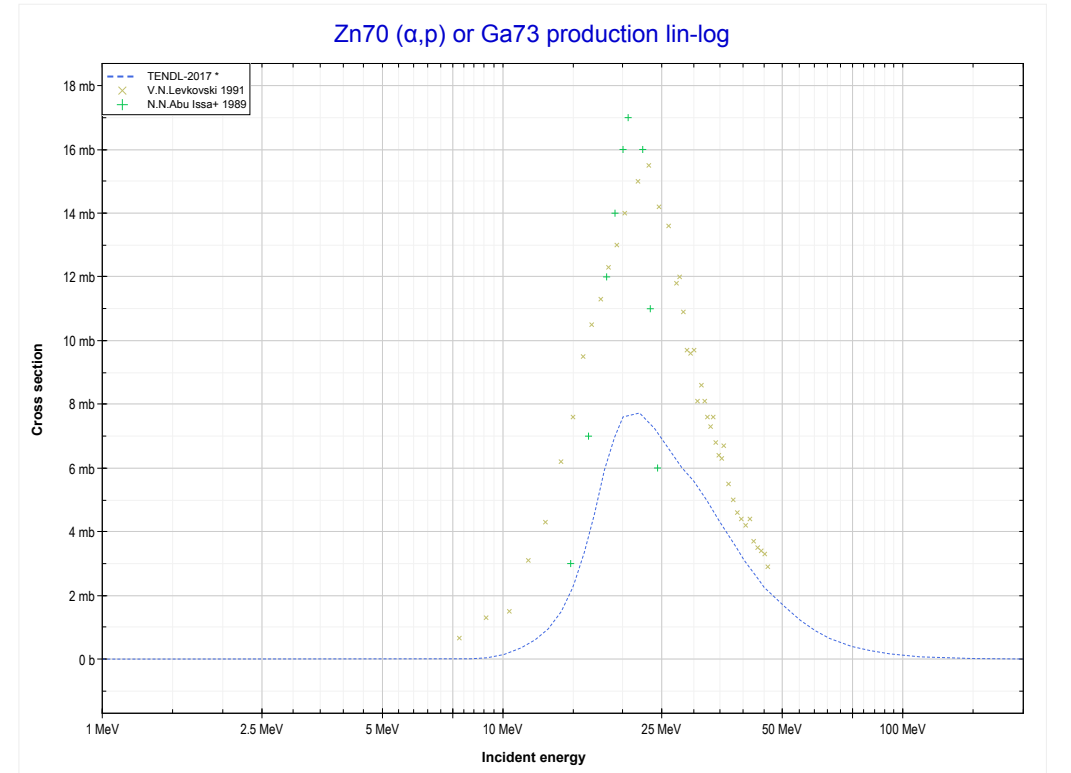
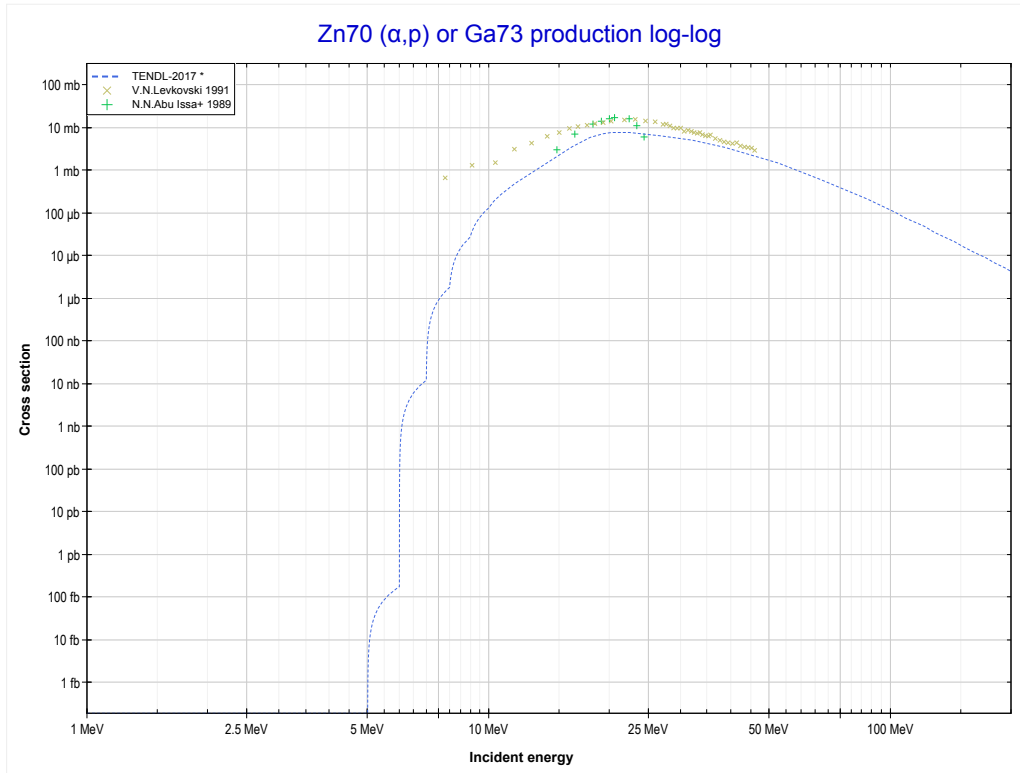
Reaction	Q-Value
Zn68(α,d)Ga70	-11807.51 keV
Zn68($\alpha,n+p$)Ga70	-14032.07 keV

<< 30-Zn-68	30-Zn-70	32-Ge-70 >>
<< 30-Zn-68 MT28 ($\alpha, n+p$)	MT28 ($\alpha, n+p$) or MT5 (Ga72 production)	MT103 (α, p) >>



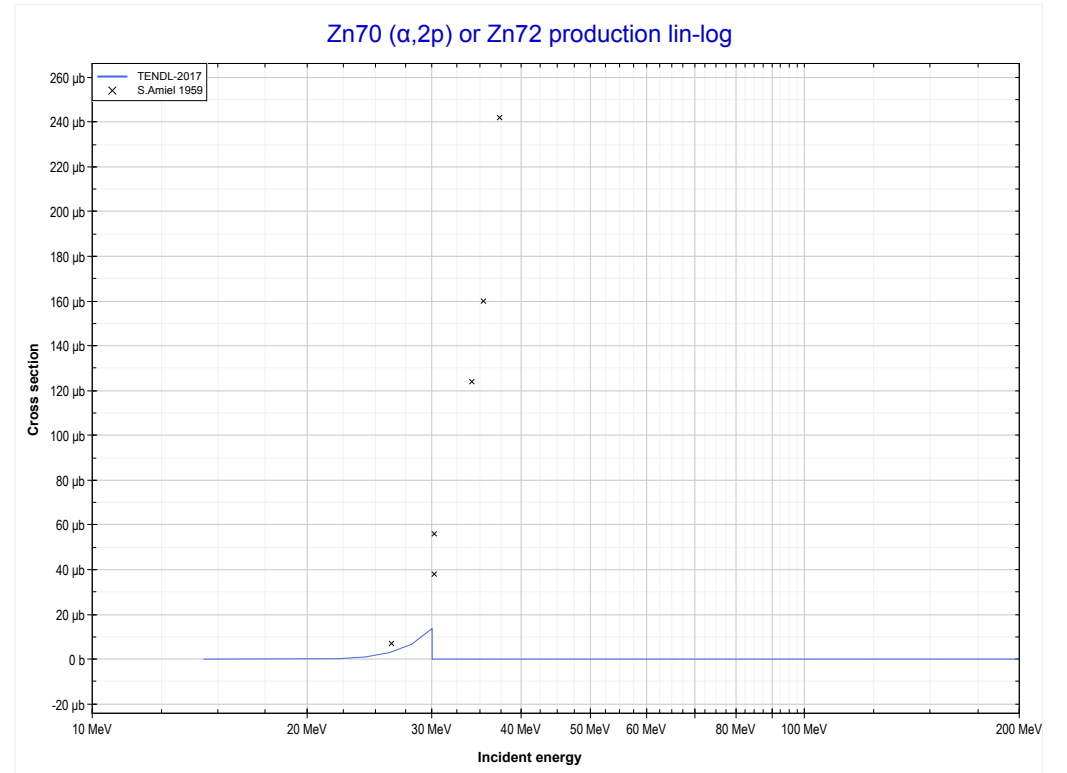
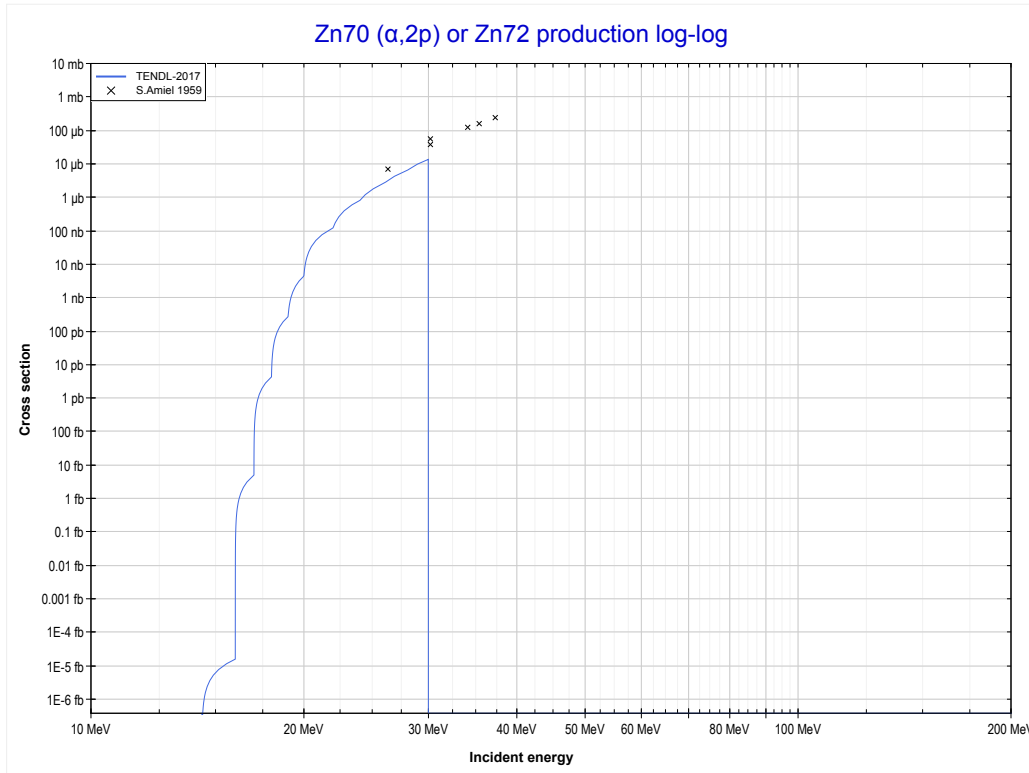
Reaction	Q-Value
Zn70(α, d)Ga72	-11687.21 keV
Zn70($\alpha, n+p$)Ga72	-13911.77 keV

<< 30-Zn-64	30-Zn-70	32-Ge-74 >>
<< MT28 ($\alpha, n+p$)	MT103 (α, p) or MT5 (Ga73 production)	MT111 ($\alpha, 2p$) >>



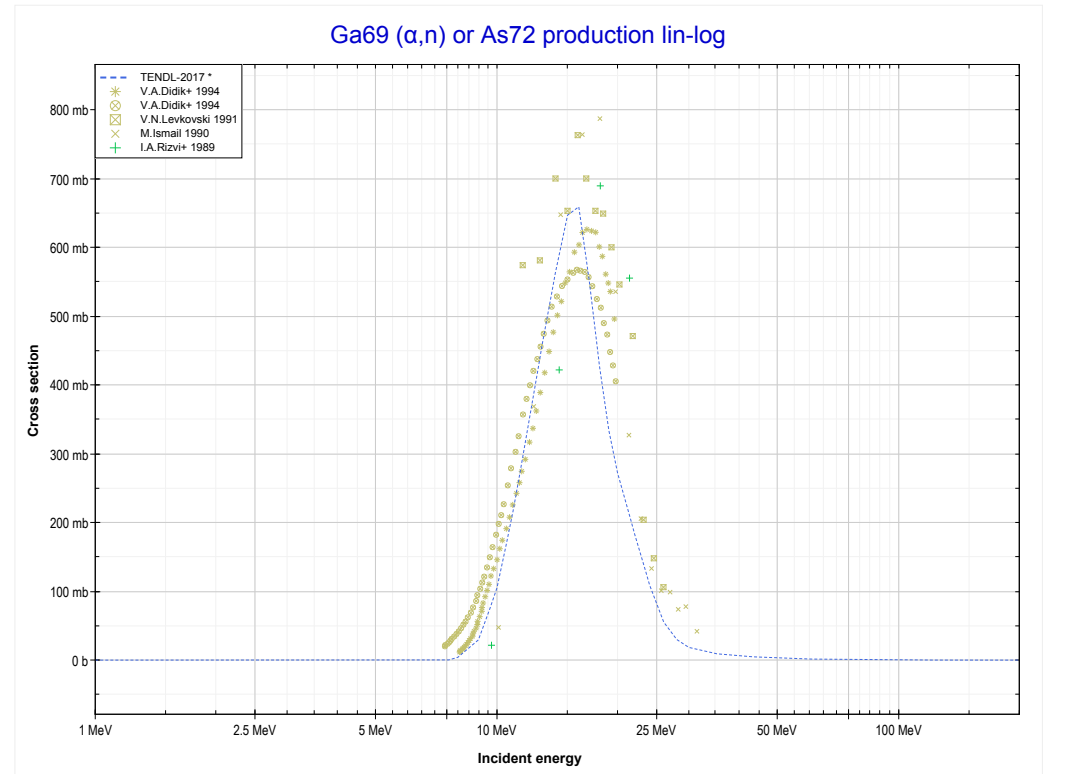
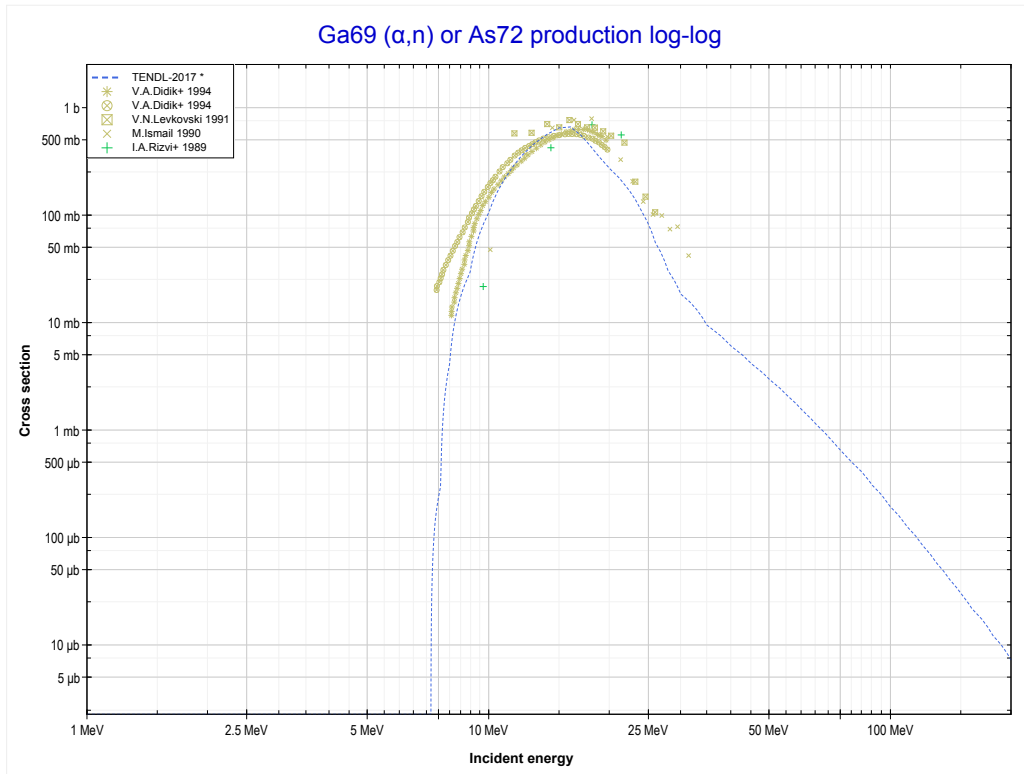
Reaction	Q-Value
Zn70(α, p)Ga73	-4729.45 keV

<< 29-Cu-65	30-Zn-70	41-Nb-93 >>
<< MT103 (α,p)	MT111 (α,2p) or MT5 (Zn72 production)	31-Ga-69 MT4 (α,n) >>



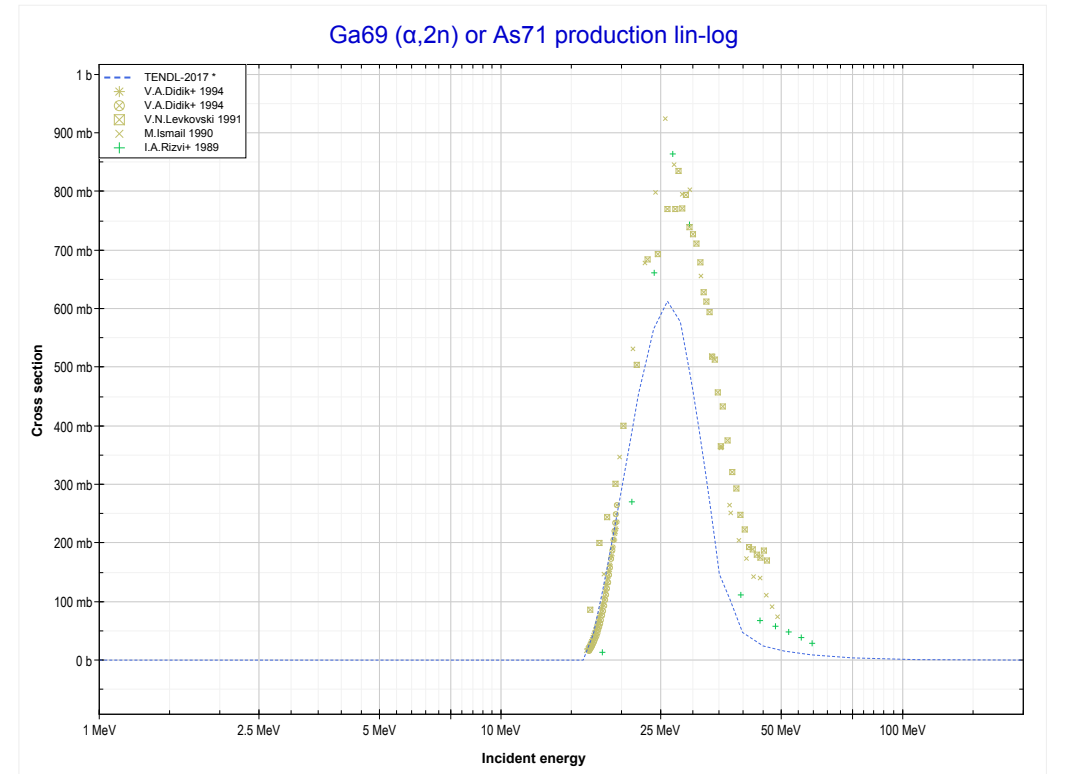
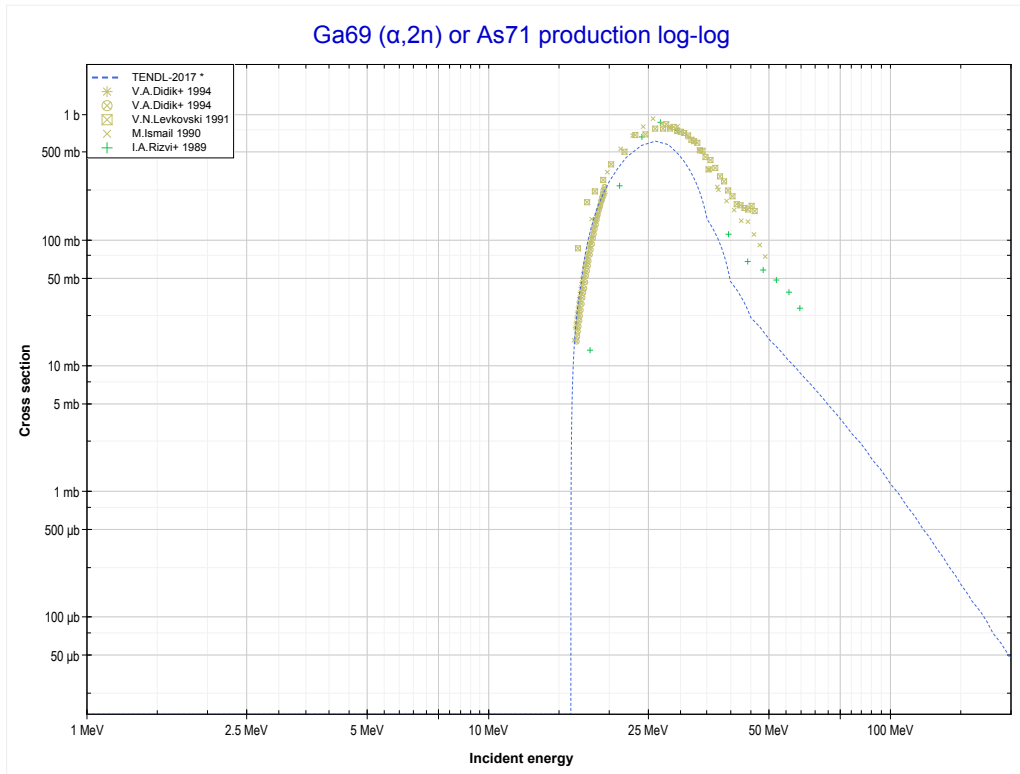
Reaction	Q-Value
Zn70(α,2p)Zn72	-13572.23 keV

<< 30-Zn-68	31-Ga-69	31-Ga-71 >>
<< 30-Zn-70 MT111 ($\alpha,2p$)	MT4 (α,n) or MT5 (As72 production)	MT16 ($\alpha,2n$) >>



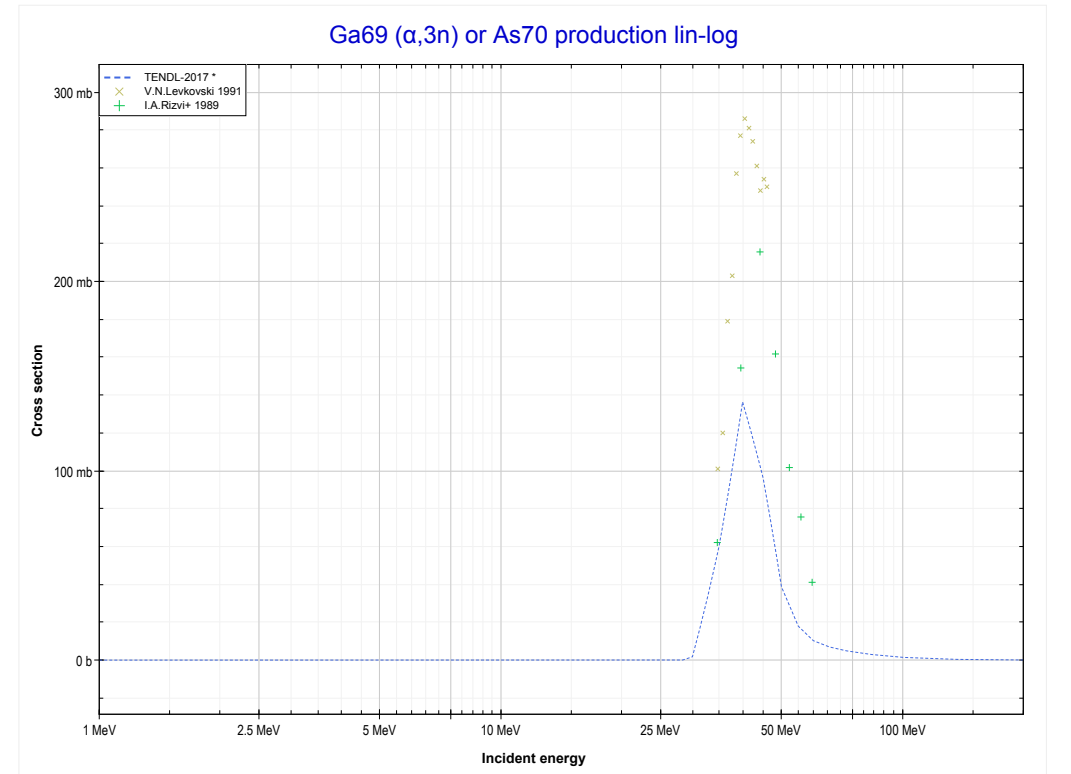
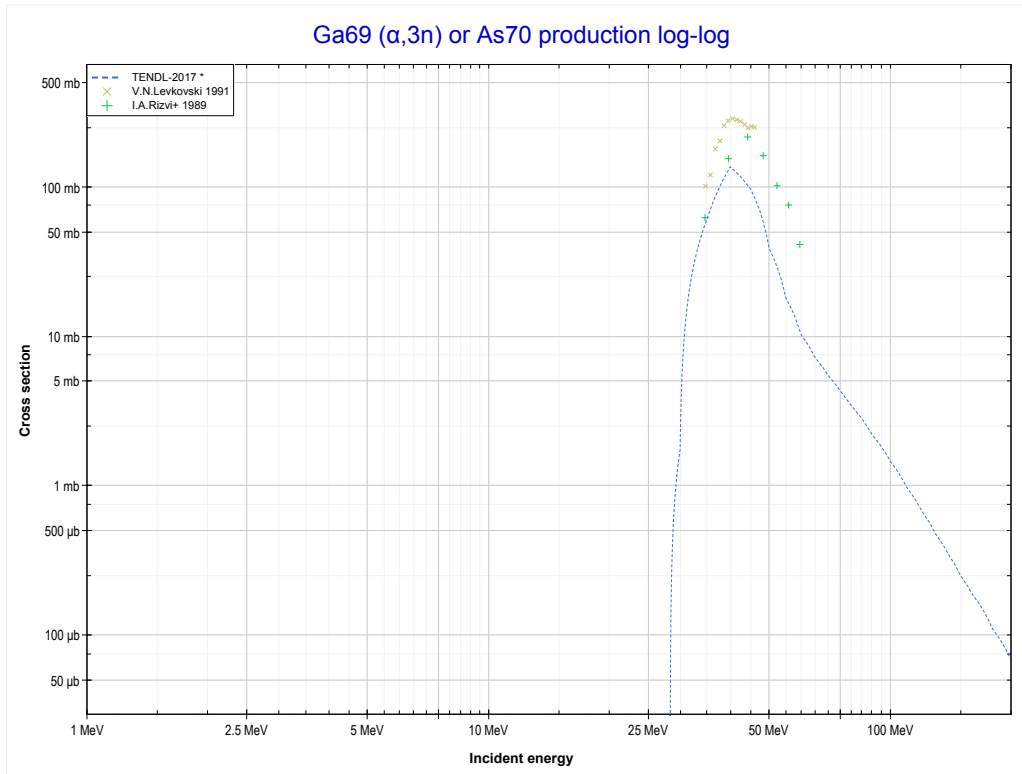
Reaction	Q-Value
Ga69(α,n)As72	-6744.20 keV

<< 30-Zn-67	31-Ga-69	32-Ge-70 >>
<< MT4 (α,n)	MT16 ($\alpha,2n$) or MT5 (As71 production)	MT17 ($\alpha,3n$) >>



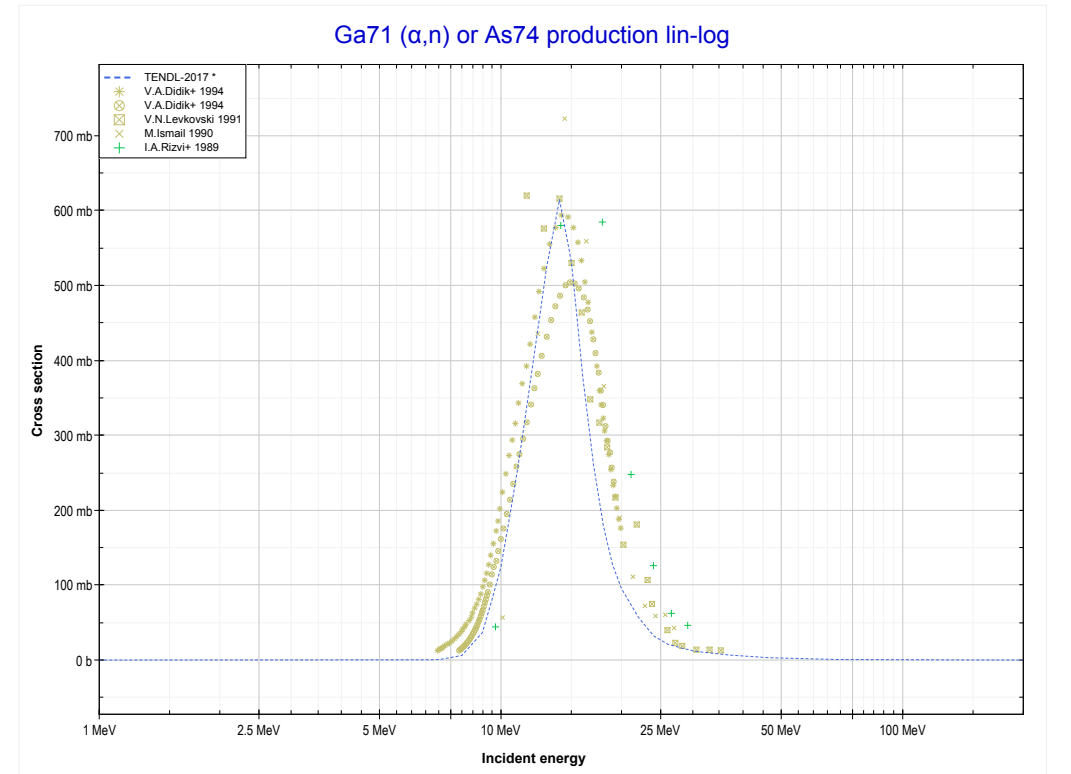
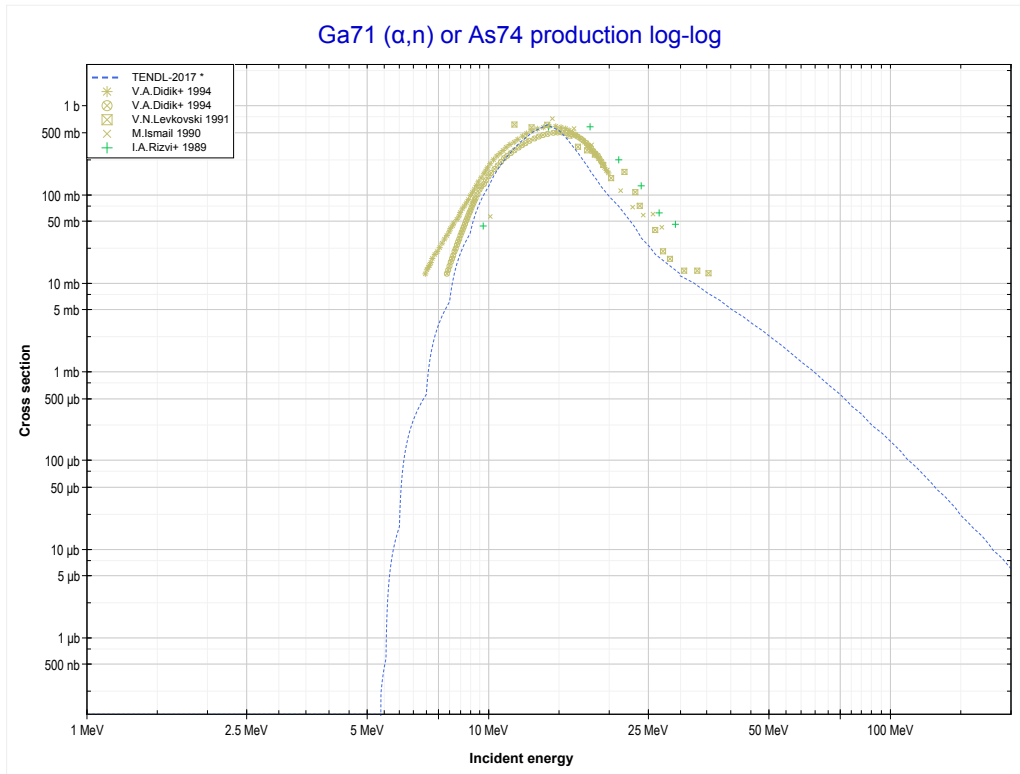
Reaction	Q-Value
Ga69($\alpha,2n$)As71	-15152.52 keV

<< 30-Zn-68	31-Ga-69	31-Ga-71 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (As70 production)	31-Ga-71 MT4 (α,n) >>



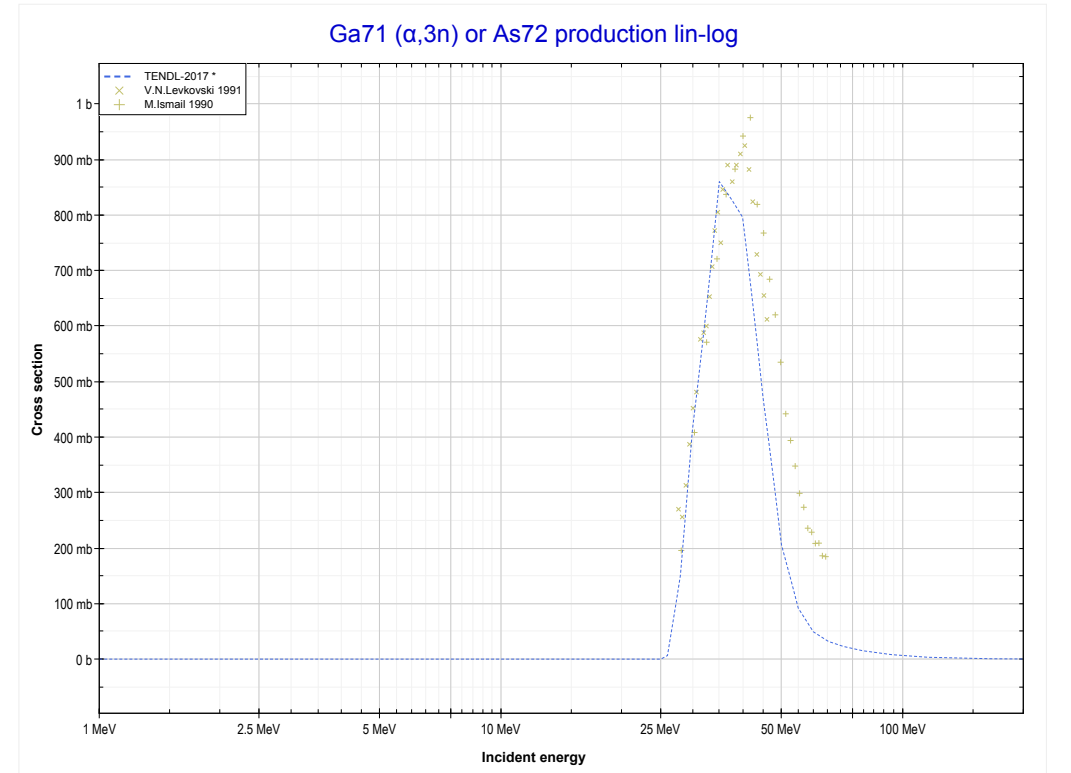
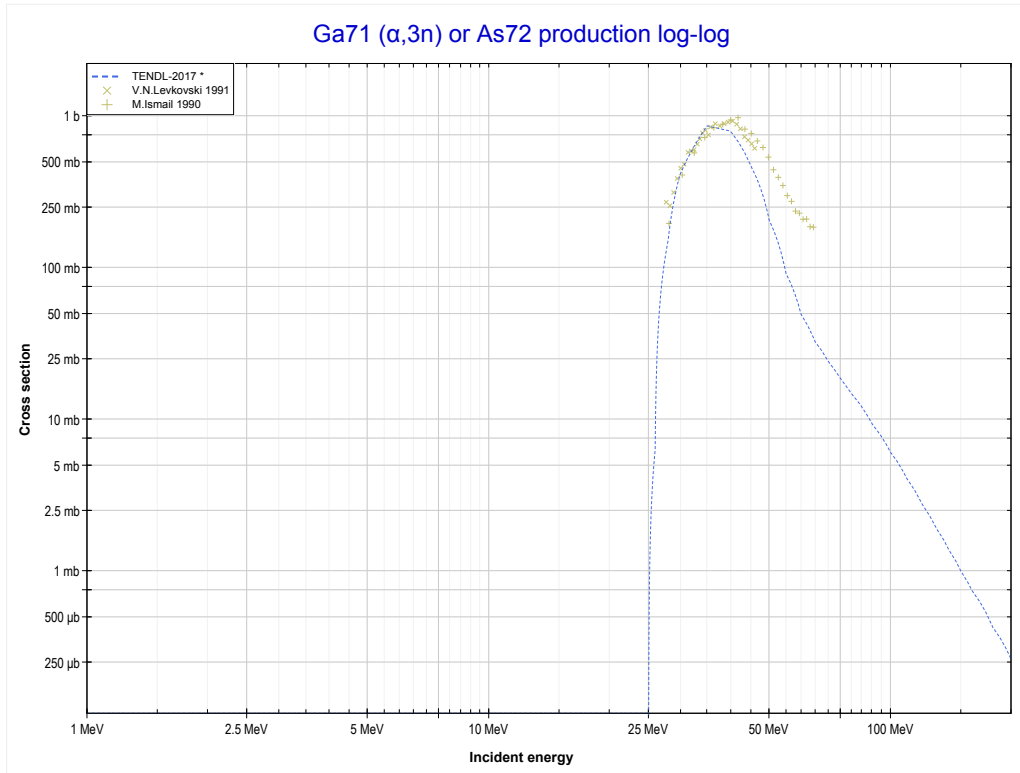
Reaction	Q-Value
Ga69($\alpha,3n$)As70	-26776.84 keV

<< 31-Ga-69	31-Ga-71	32-Ge-70 >>
<< 31-Ga-69 MT17 ($\alpha,3n$)	MT4 (α,n) or MT5 (As74 production)	MT17 ($\alpha,3n$) >>



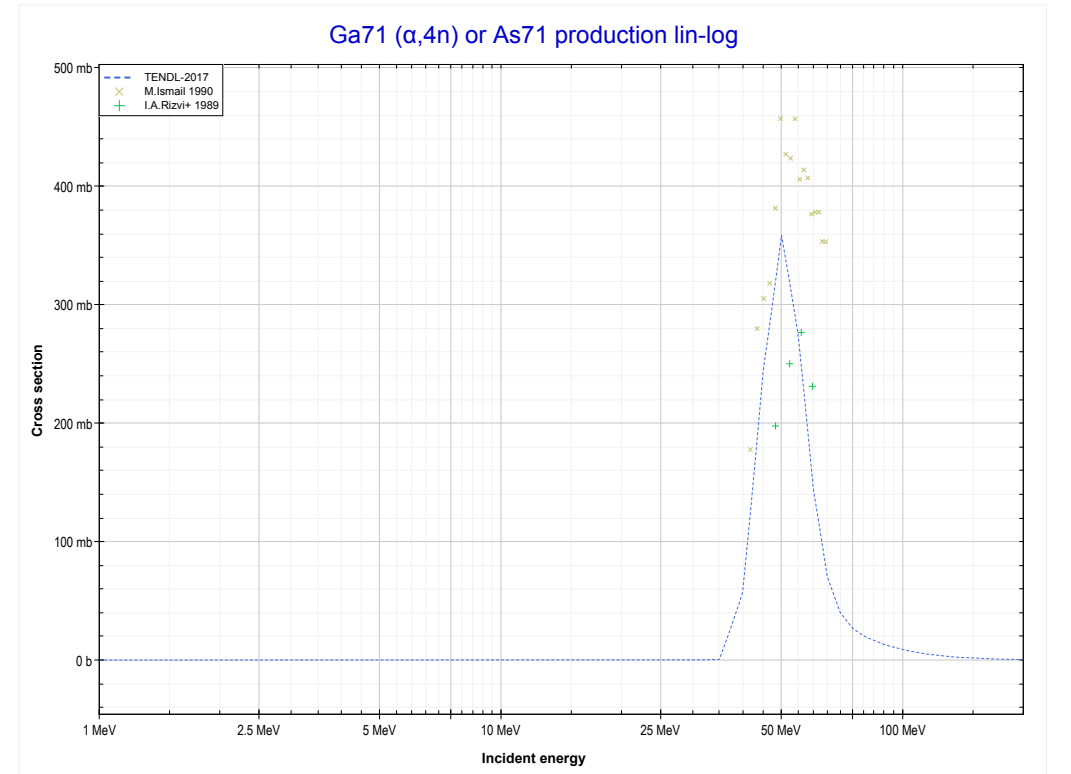
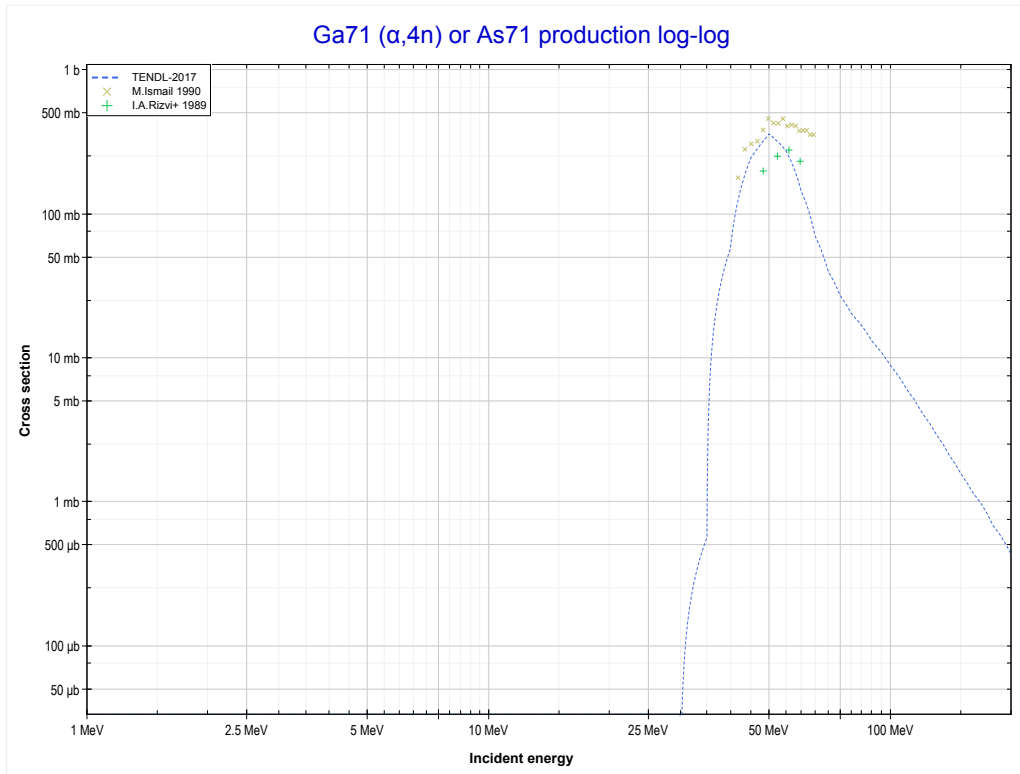
Reaction	Q-Value
Ga71(α,n)As74	-4925.40 keV

<< 31-Ga-69	31-Ga-71	32-Ge-72 >>
<< MT4 (α, n)	MT17 ($\alpha, 3n$) or MT5 (As72 production)	MT37 ($\alpha, 4n$) >>



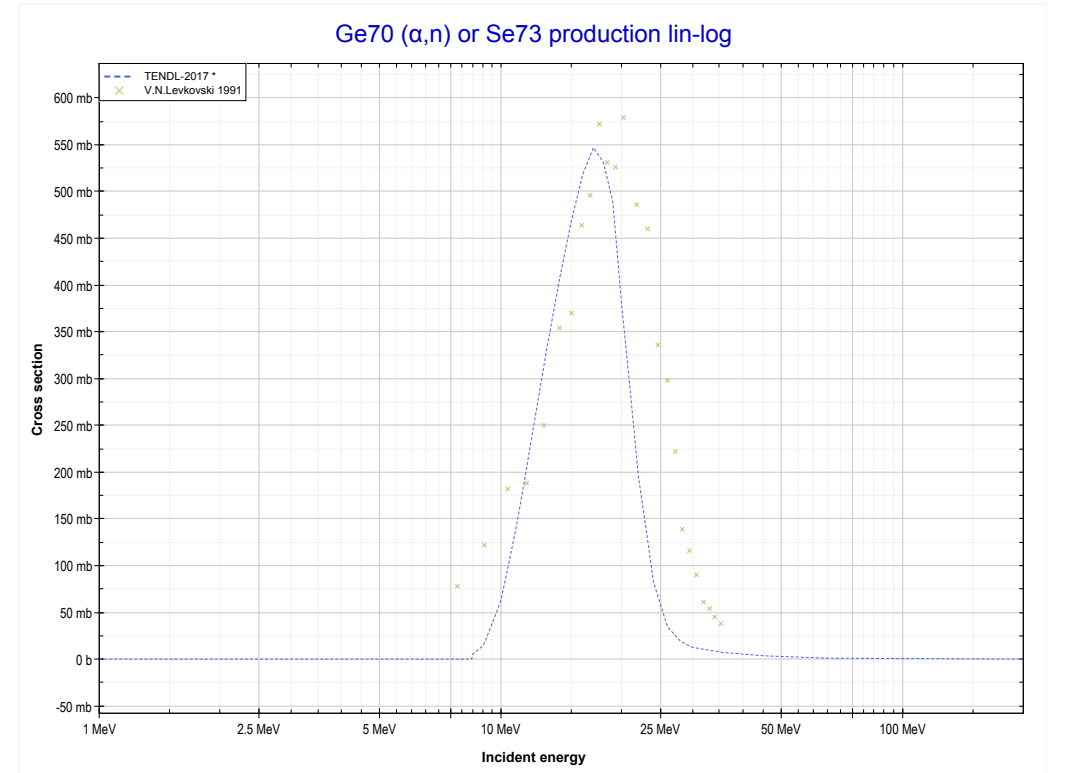
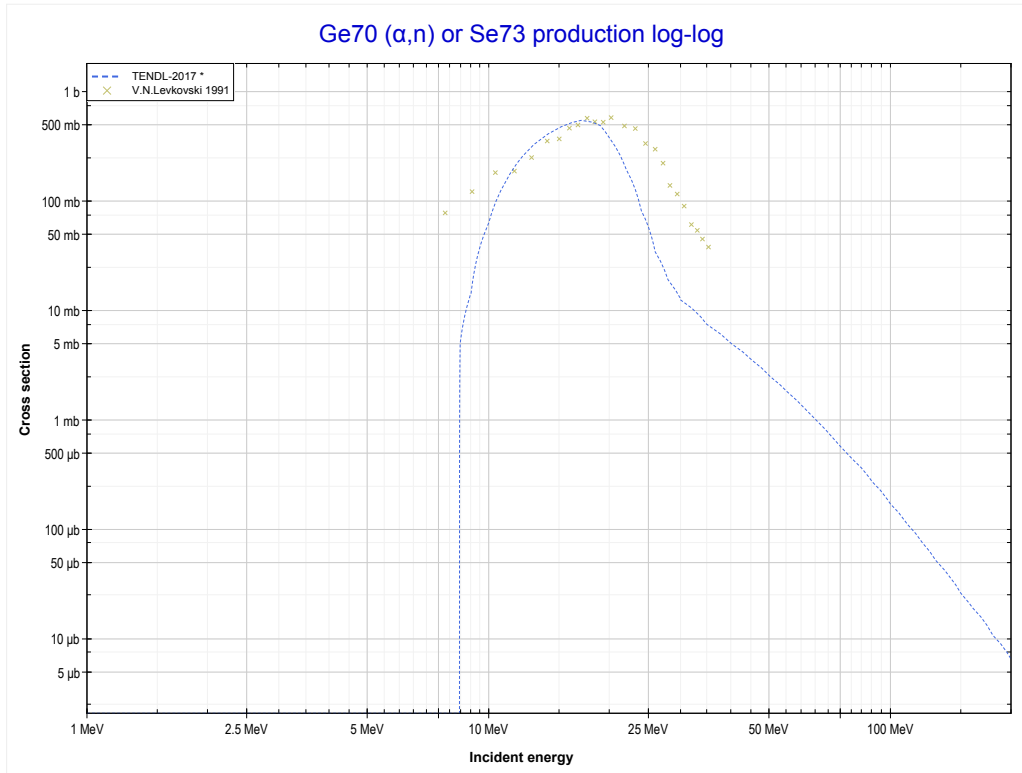
Reaction	Q-Value
Ga71($\alpha, 3n$)As72	-23698.14 keV

<< 30-Zn-67	31-Ga-71	32-Ge-72 >>
<< MT17 ($\alpha,3n$)	MT37 ($\alpha,4n$) or MT5 (As71 production)	32-Ge-70 MT4 (α,n) >>



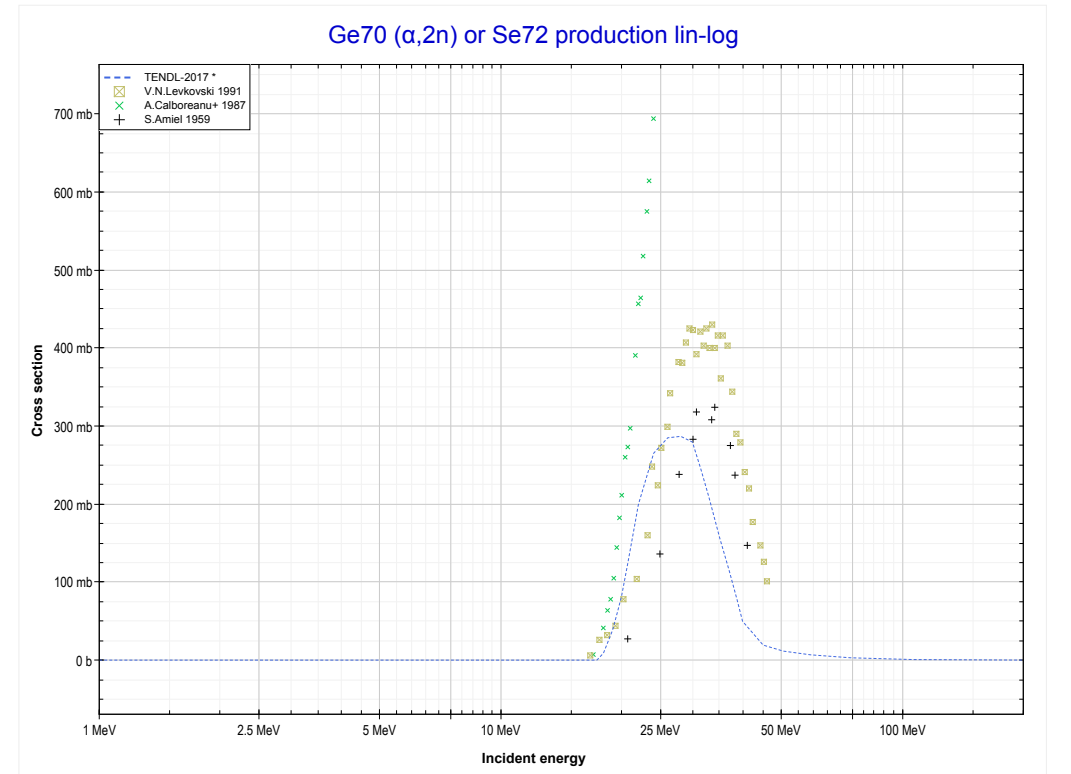
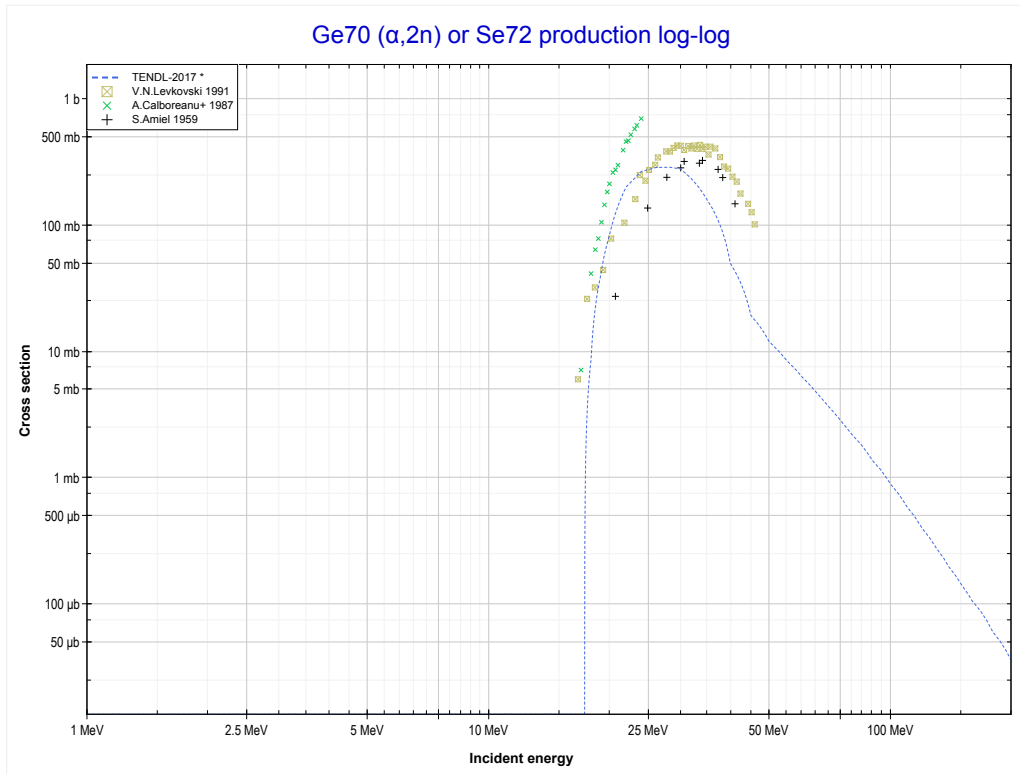
Reaction	Q-Value
Ga71($\alpha,4n$)As71	-32106.45 keV

<< 31-Ga-71	32-Ge-70	32-Ge-72 >>
<< 31-Ga-71 MT37 ($\alpha,4n$)	MT4 (α,n) or MT5 (Se73 production)	MT16 ($\alpha,2n$) >>



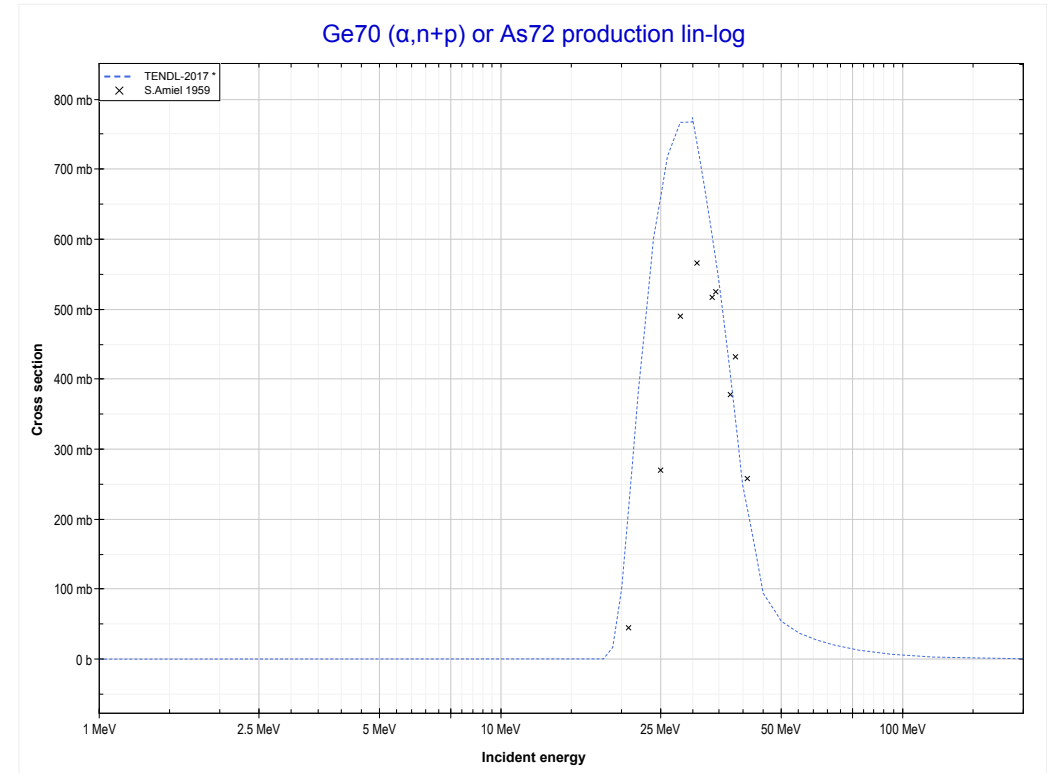
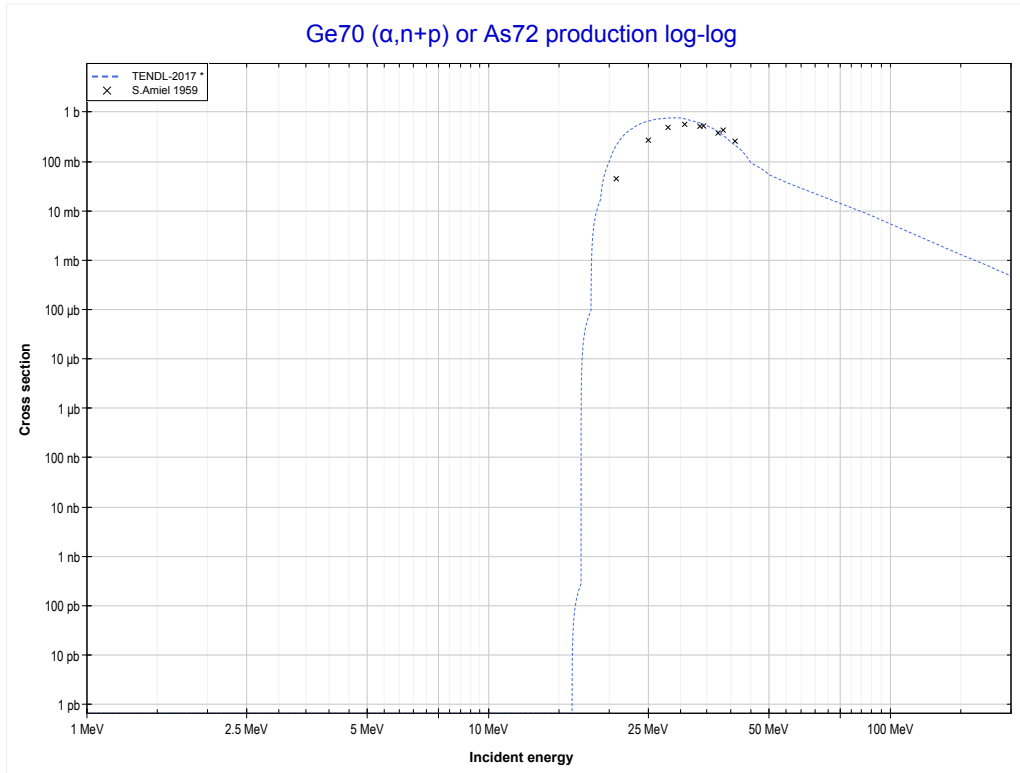
Reaction	Q-Value
Ge70(α,n)Se73	-7981.20 keV

<< 31-Ga-69	32-Ge-70	32-Ge-73 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Se72 production)	MT28 ($\alpha, n+p$) >>



Reaction	Q-Value
Ge70($\alpha, 2n$)Se72	-16411.32 keV

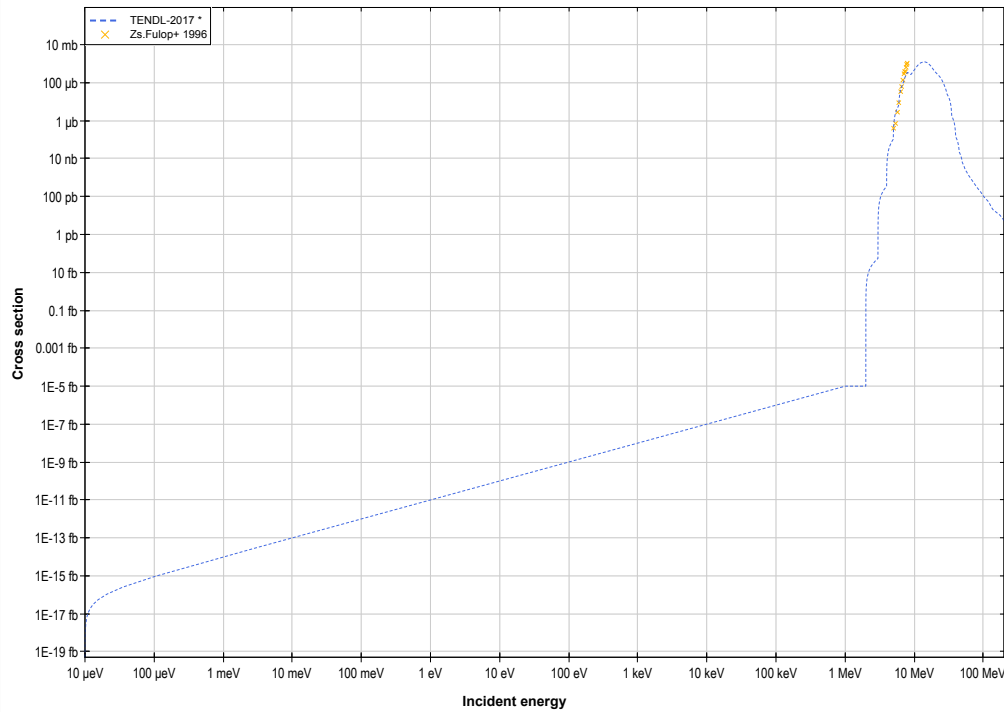
<< 30-Zn-70	32-Ge-70	40-Zr-90 >>
<< MT16 ($\alpha,2n$)	MT28 ($\alpha,n+p$) or MT5 (As72 production)	MT102 (α,γ) >>



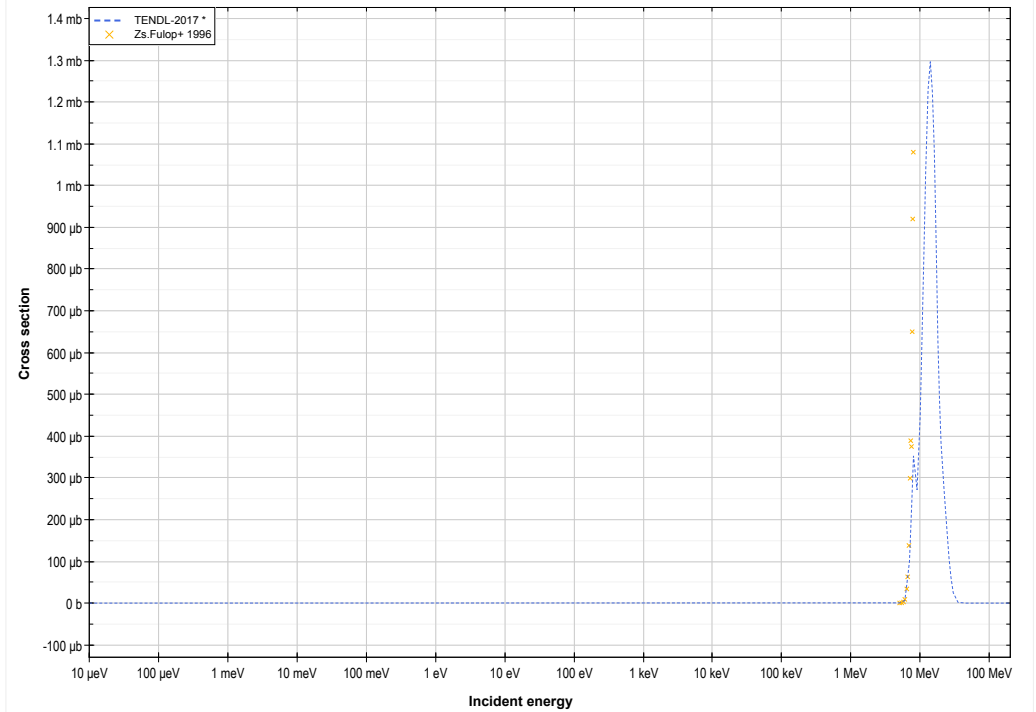
Reaction	Q-Value
$^{70}\text{Ge}(\alpha,d)^{72}\text{As}$	-13042.61 keV
$^{70}\text{Ge}(\alpha,n+p)^{72}\text{As}$	-15267.17 keV

<< 30-Zn-64	32-Ge-70	47-Ag-107 >>
<< MT28 ($\alpha, n+p$)	MT102 (α, γ) or MT5 (Se74 production)	32-Ge-72 MT4 (α, n) >>

Ge70 (α, γ) or Se74 production log-log

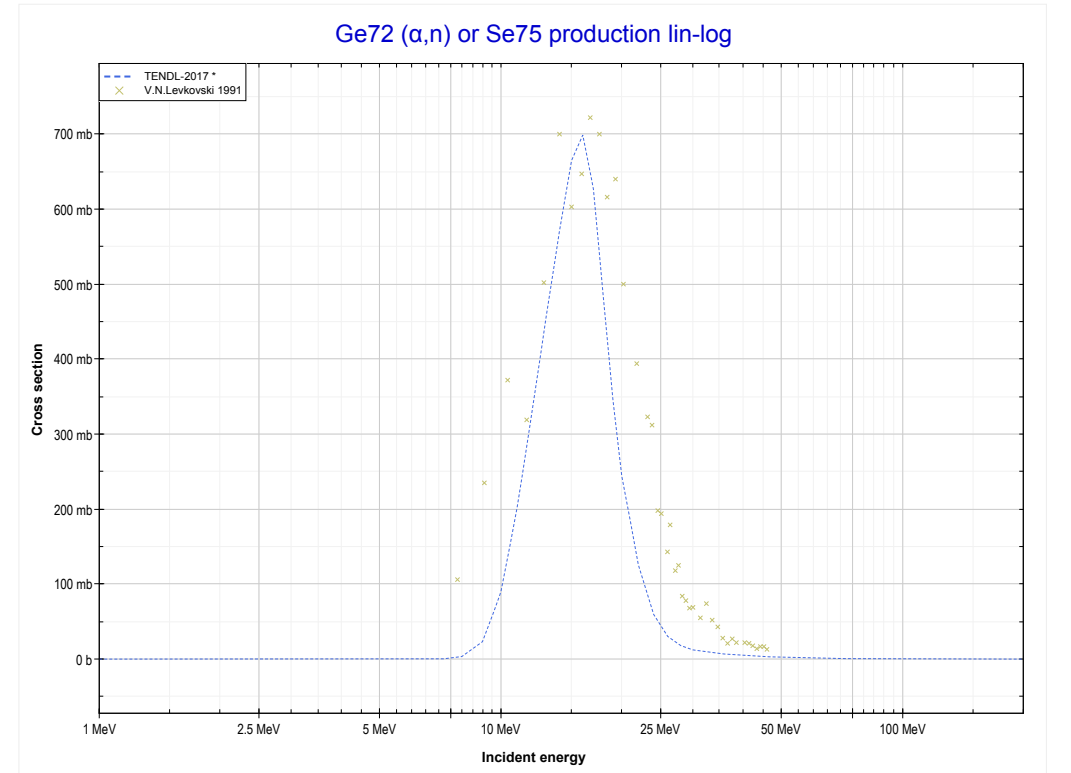
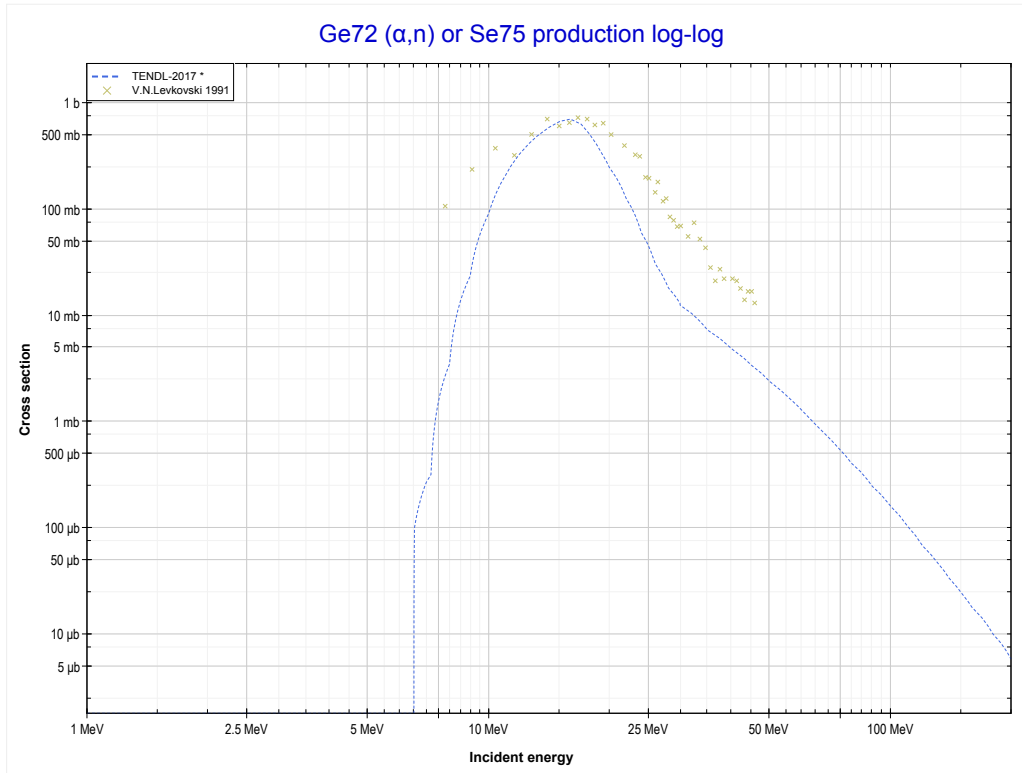


Ge70 (α, γ) or Se74 production lin-log



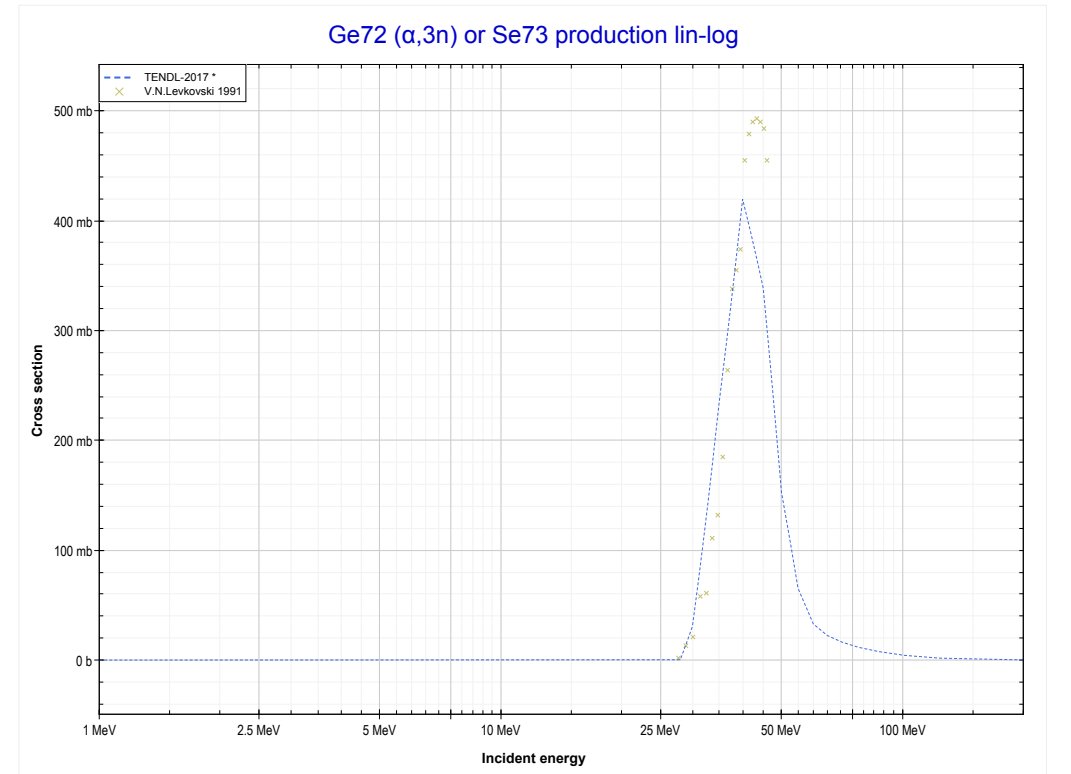
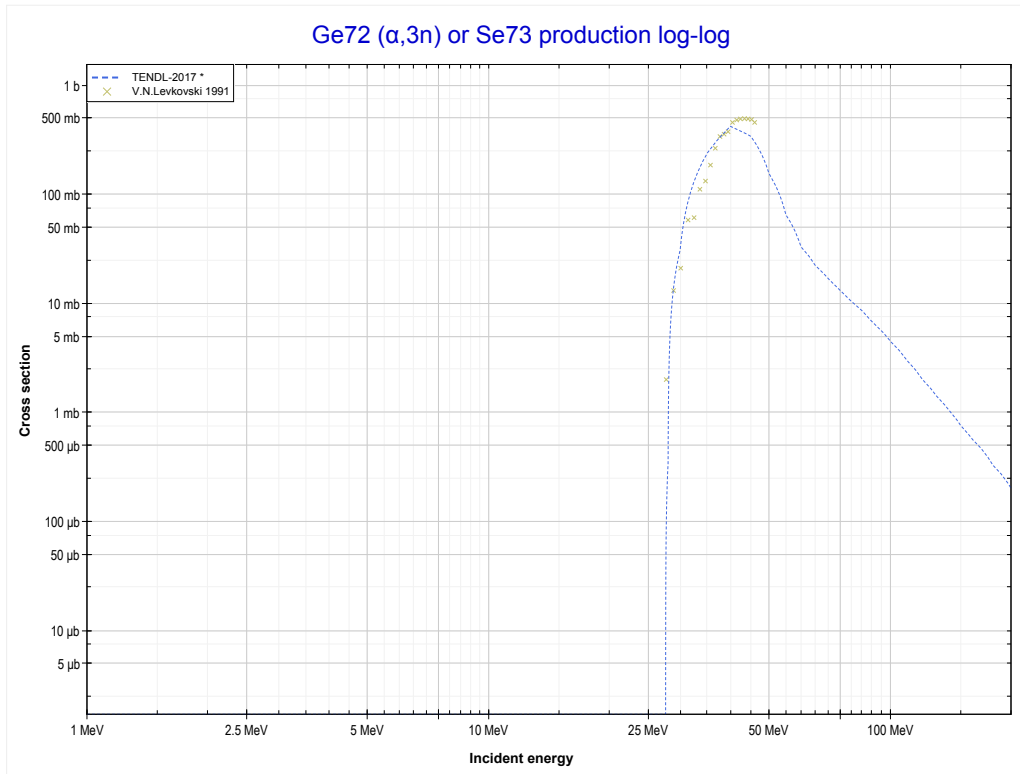
Reaction	Q-Value
Ge70(α, γ)Se74	4076.32 keV

<< 32-Ge-70	32-Ge-72	34-Se-76 >>
<< 32-Ge-70 MT102 (α,γ)	MT4 (α,n) or MT5 (Se75 production)	MT17 ($\alpha,3n$) >>



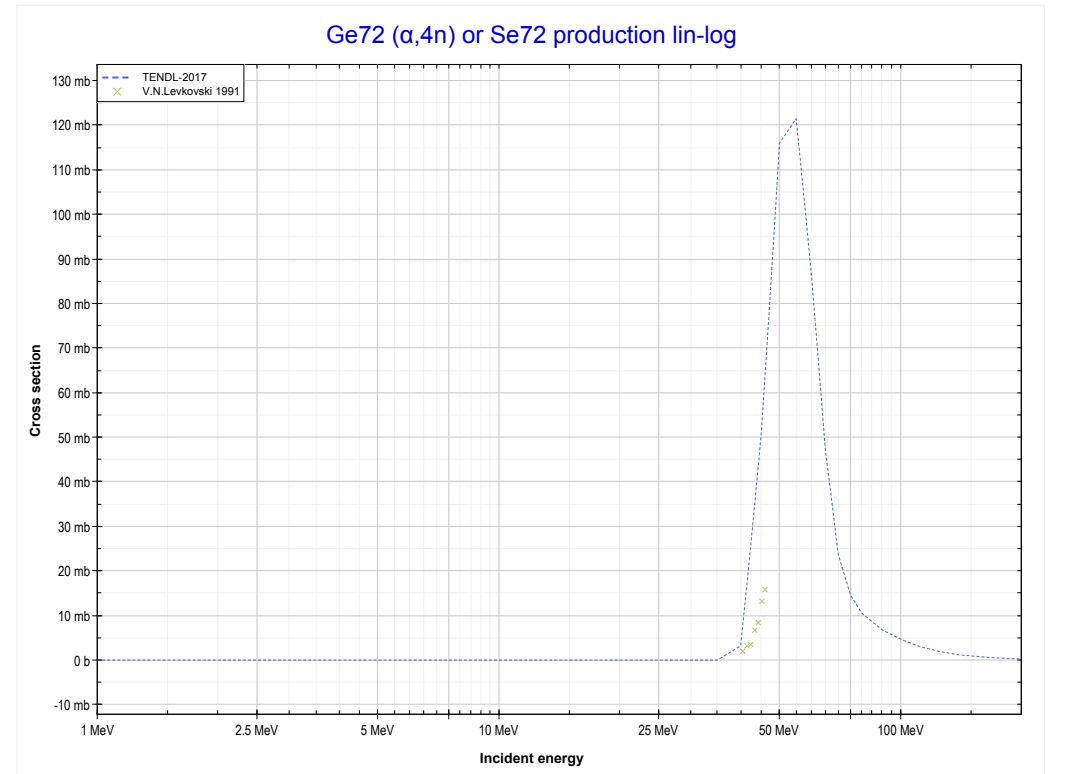
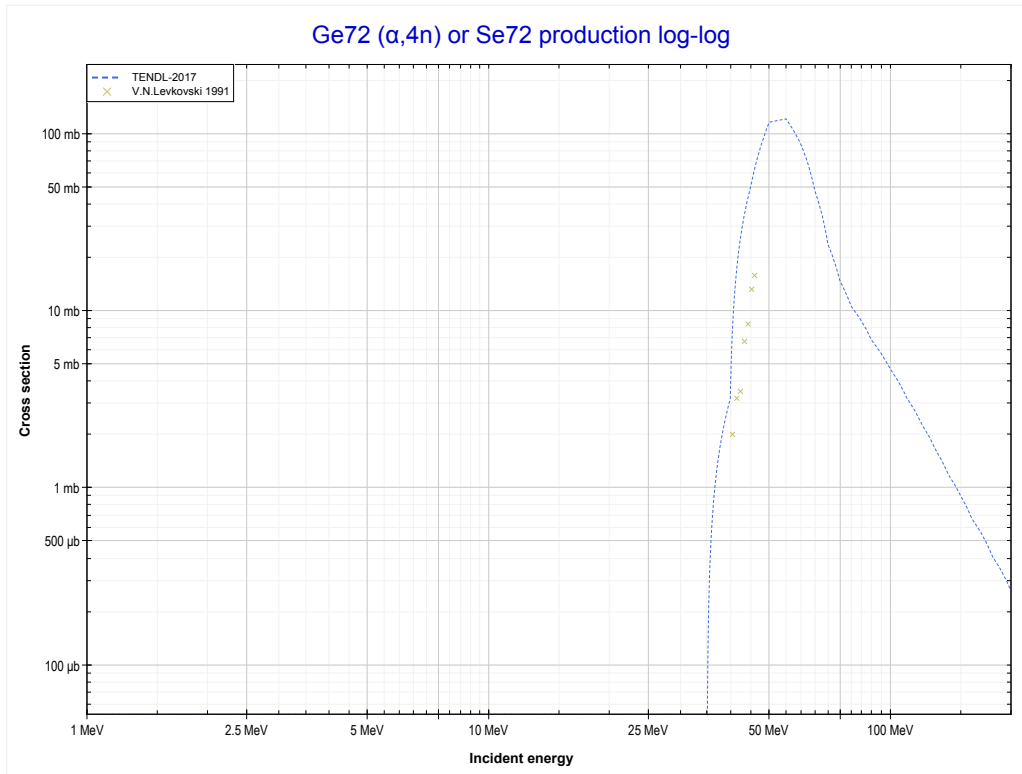
Reaction	Q-Value
Ge72(α,n)Se75	-6062.82 keV

<< 31-Ga-71	32-Ge-72	32-Ge-74 >>
<< MT4 (α, n)	MT17 ($\alpha, 3n$) or MT5 (Se73 production)	MT37 ($\alpha, 4n$) >>



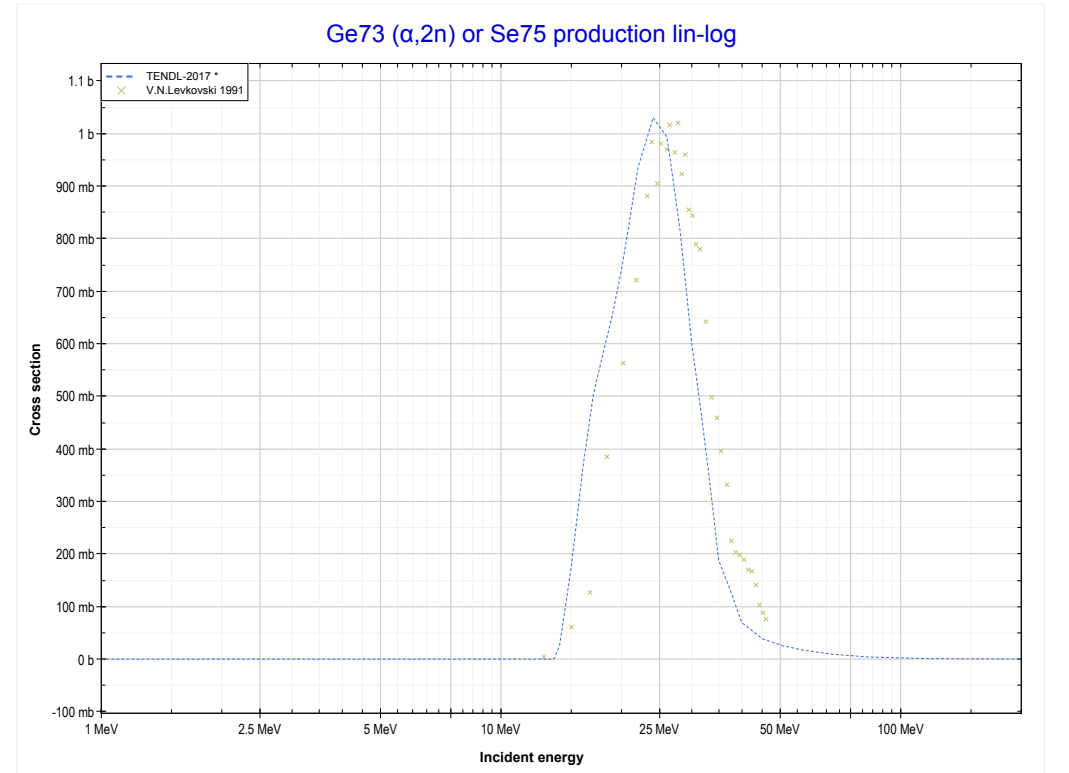
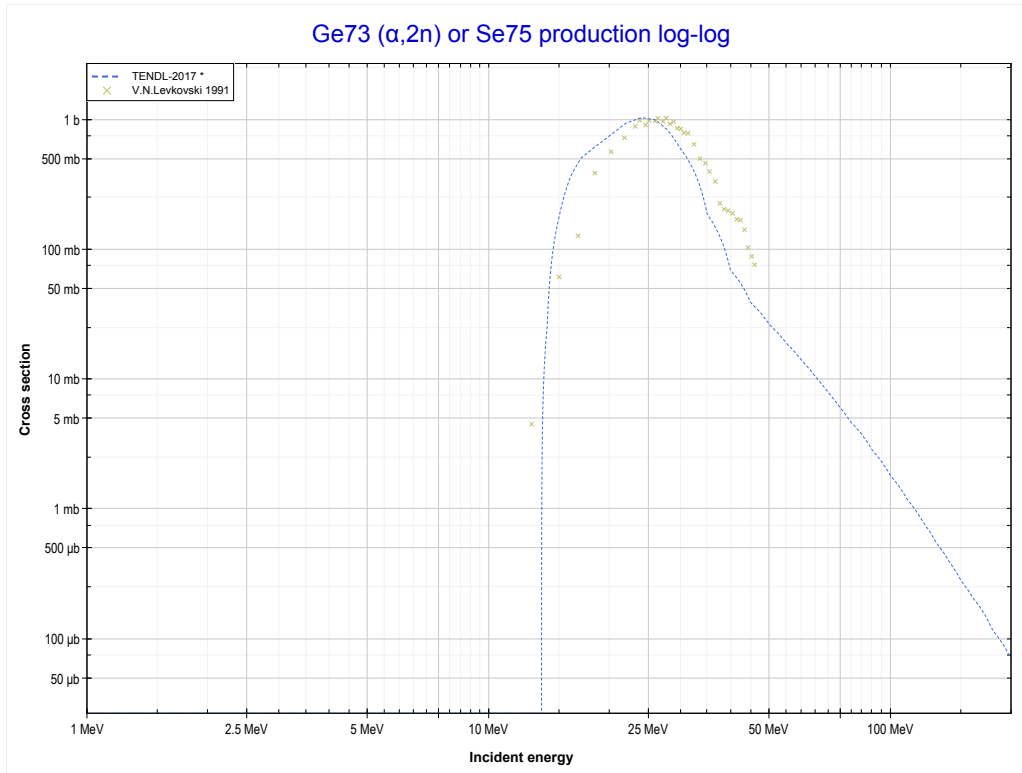
Reaction	Q-Value
Ge72($\alpha, 3n$)Se73	-26147.94 keV

<< 31-Ga-71	32-Ge-72	32-Ge-73 >>
<< MT17 ($\alpha,3n$)	MT37 ($\alpha,4n$) or MT5 (Se72 production)	32-Ge-73 MT16 ($\alpha,2n$) >>



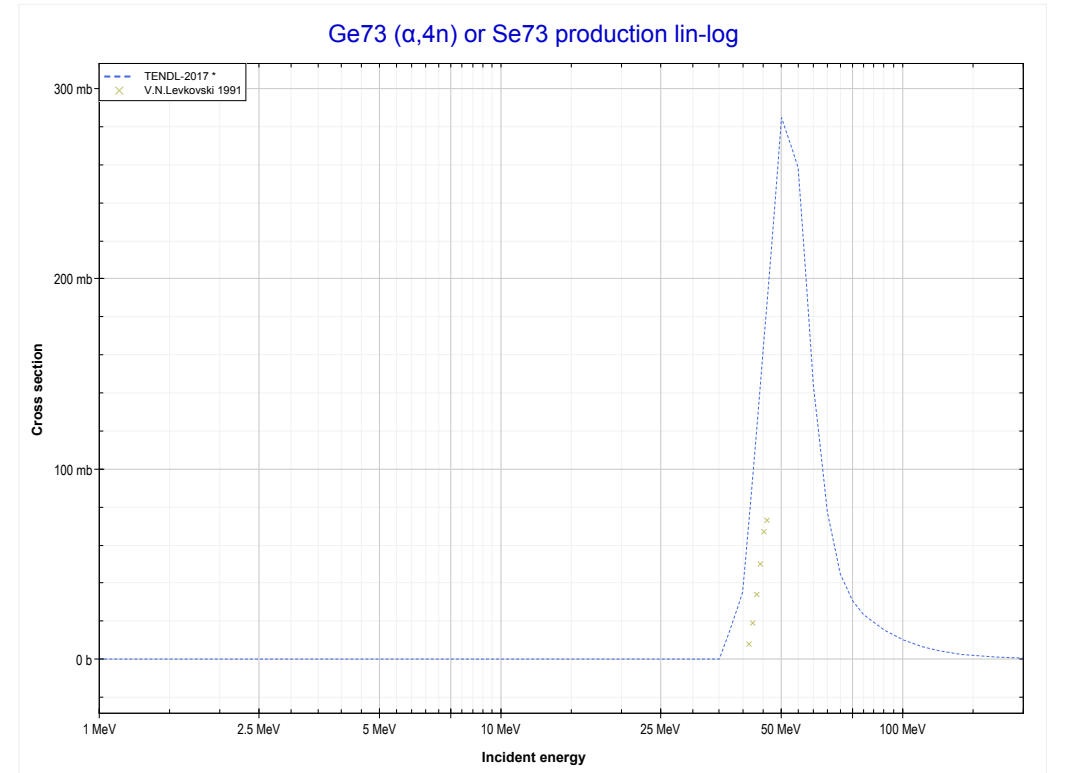
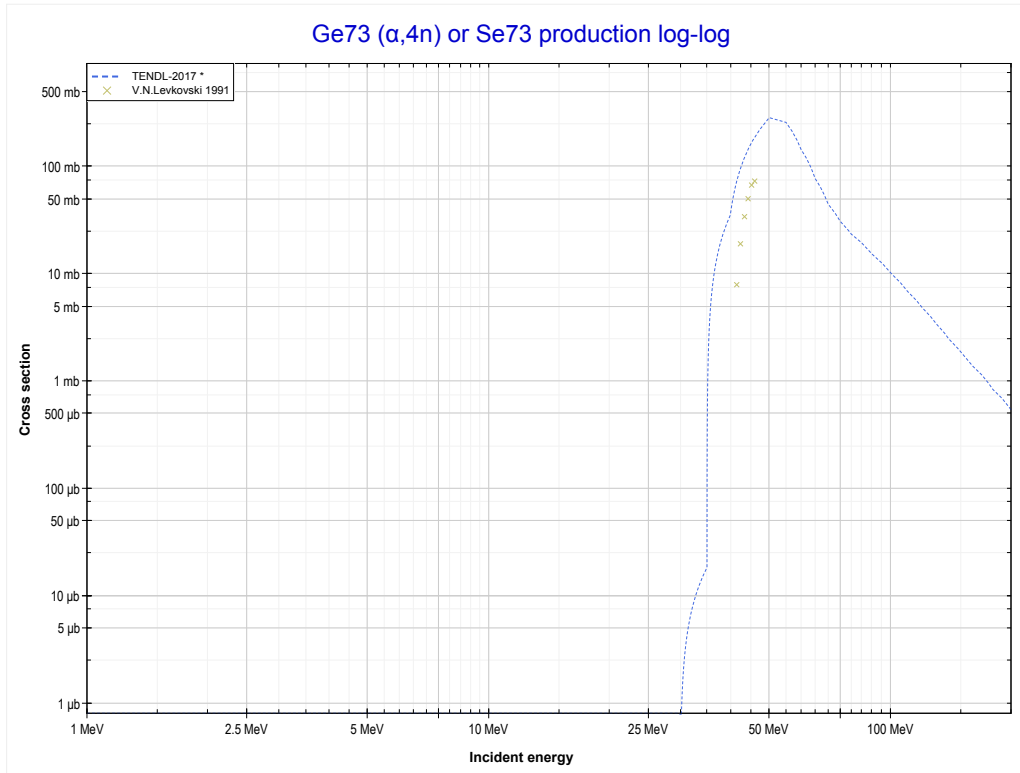
Reaction	Q-Value
Ge72($\alpha,4n$)Se72	-34578.05 keV

<< 32-Ge-70	32-Ge-73	34-Se-74 >>
<< 32-Ge-72 MT37 ($\alpha,4n$)	MT16 ($\alpha,2n$) or MT5 (Se75 production)	MT37 ($\alpha,4n$) >>



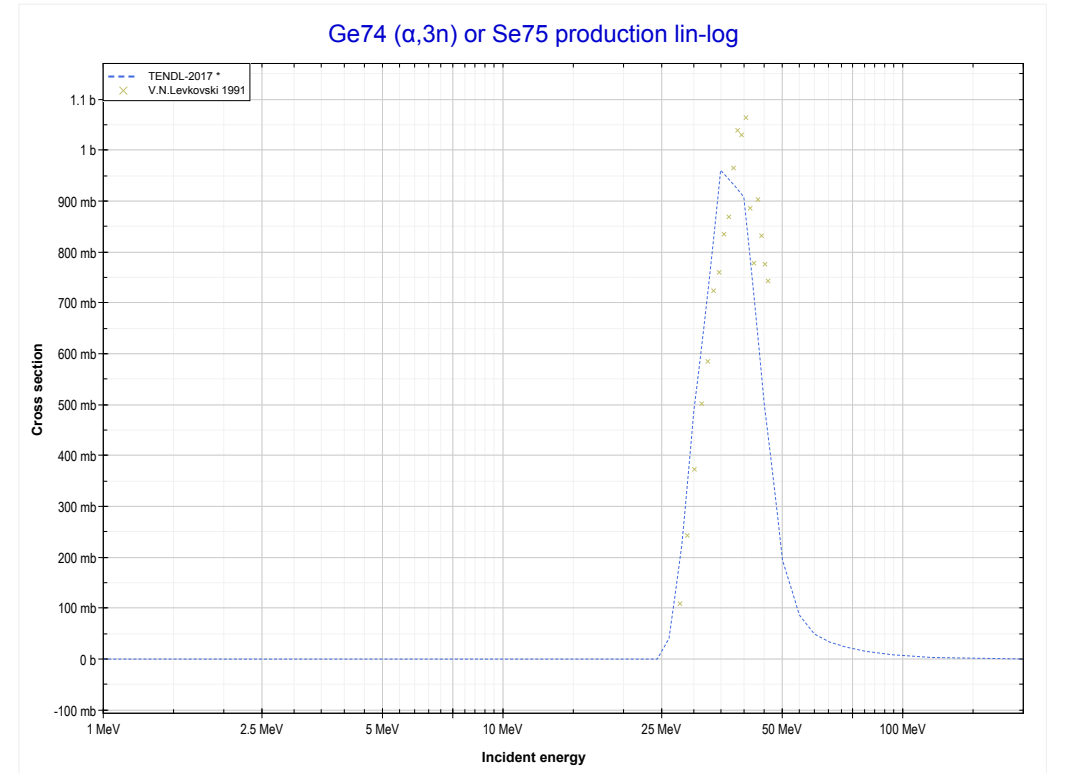
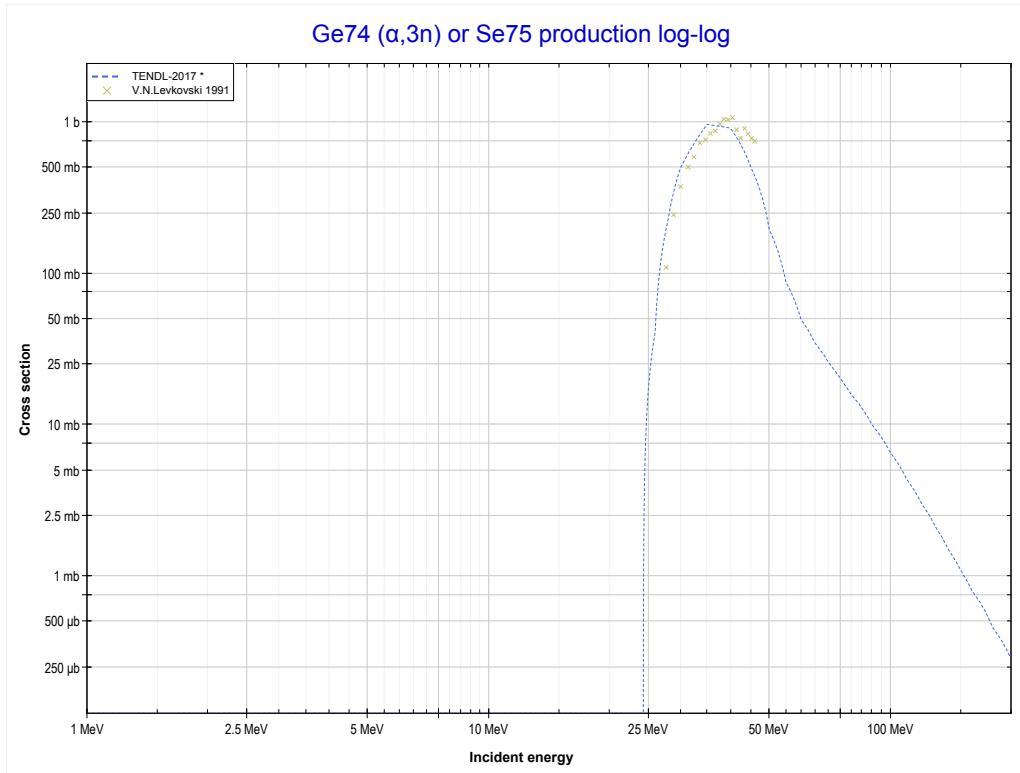
Reaction	Q-Value
Ge73($\alpha,2n$)Se75	-12845.76 keV

<< 32-Ge-72	32-Ge-73	33-As-75 >>
<< MT16 ($\alpha,2n$)	MT37 ($\alpha,4n$) or MT5 (Se73 production)	32-Ge-74 MT17 ($\alpha,3n$) >>



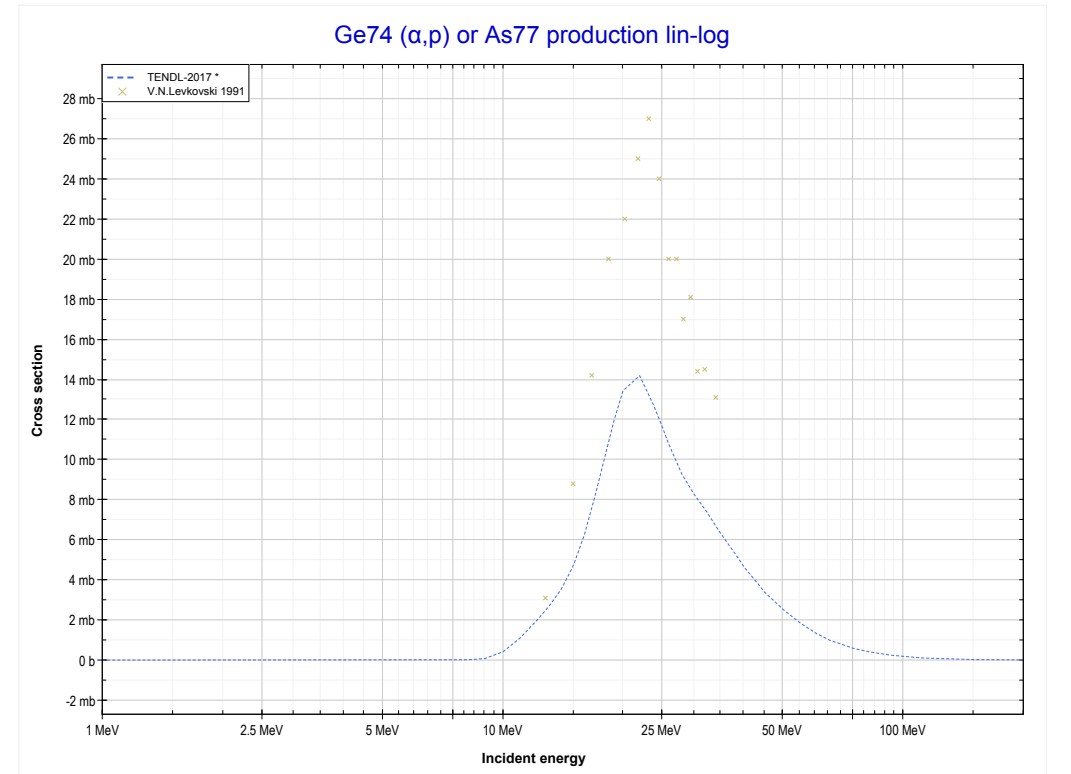
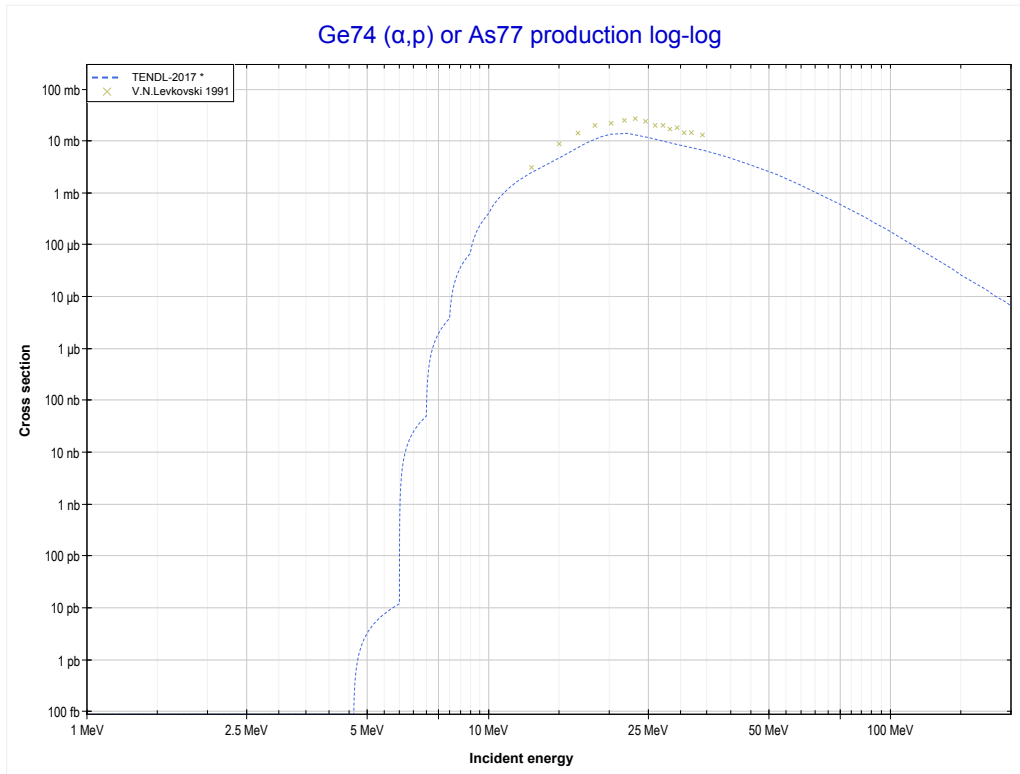
Reaction	Q-Value
Ge73($\alpha,4n$)Se73	-32930.87 keV

<< 32-Ge-72	32-Ge-74	33-As-75 >>
<< 32-Ge-73 MT37 ($\alpha,4n$)	MT17 ($\alpha,3n$) or MT5 (Se75 production)	MT103 (α,p) >>



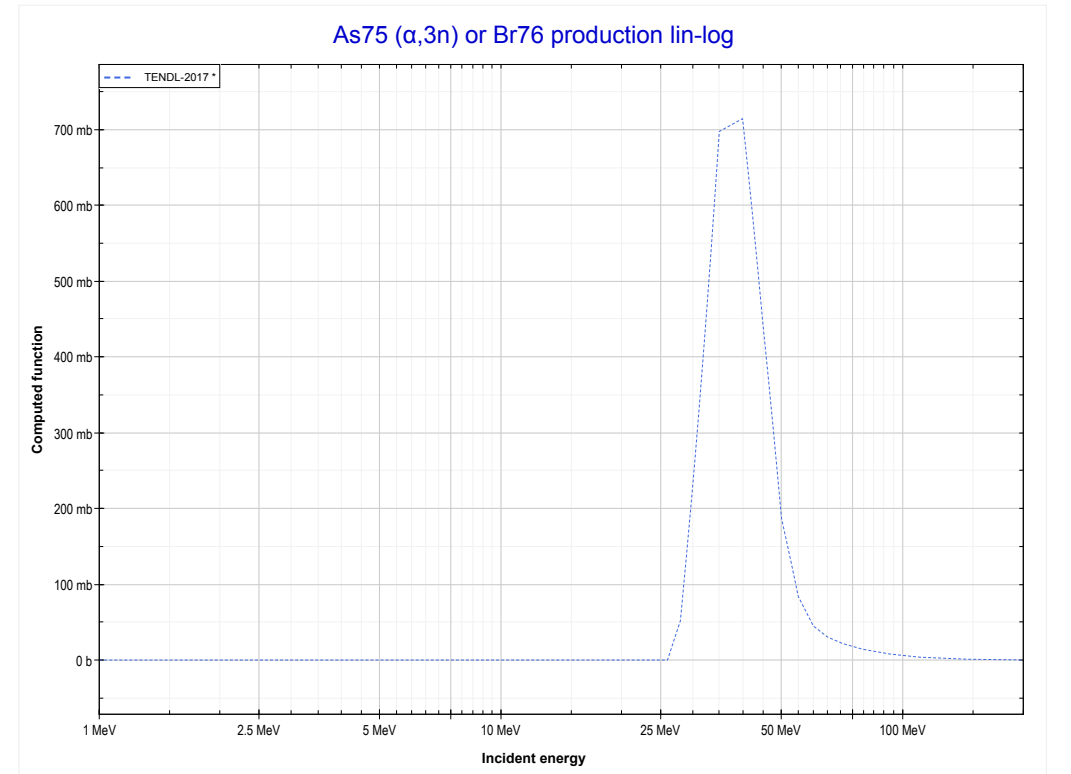
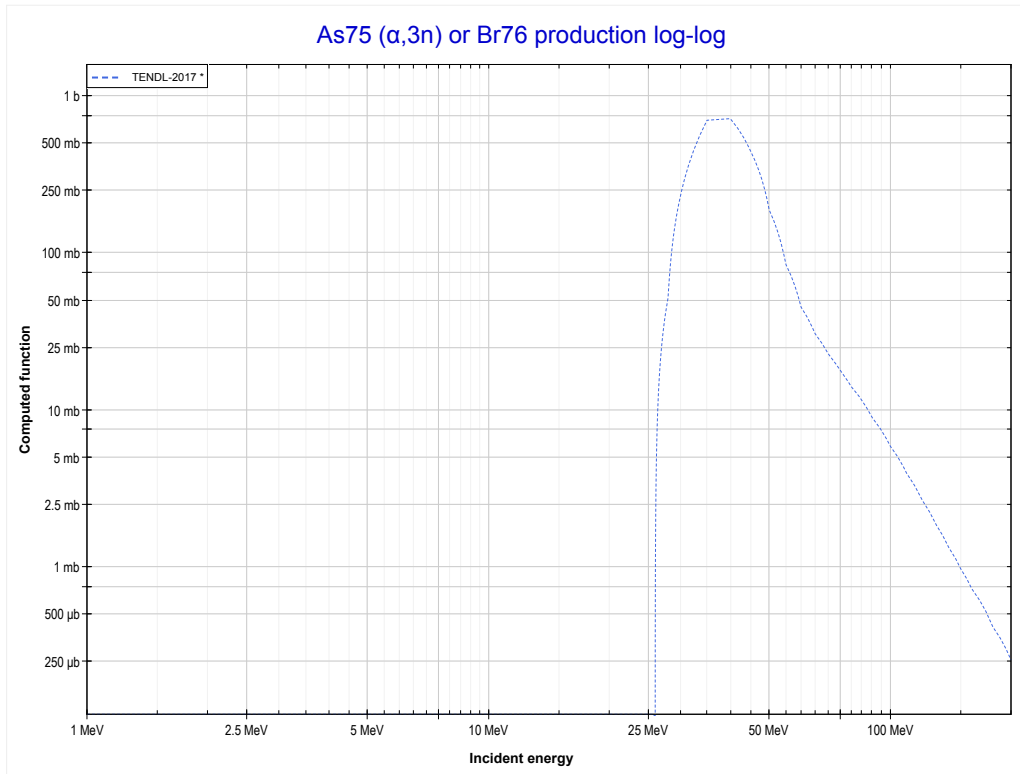
Reaction	Q-Value
Ge74($\alpha,3n$)Se75	-23042.00 keV

<< 30-Zn-70	32-Ge-74	40-Zr-92 >>
<< MT17 ($\alpha,3n$)	MT103 (α,p) or MT5 (As77 production)	33-As-75 MT17 ($\alpha,3n$) >>



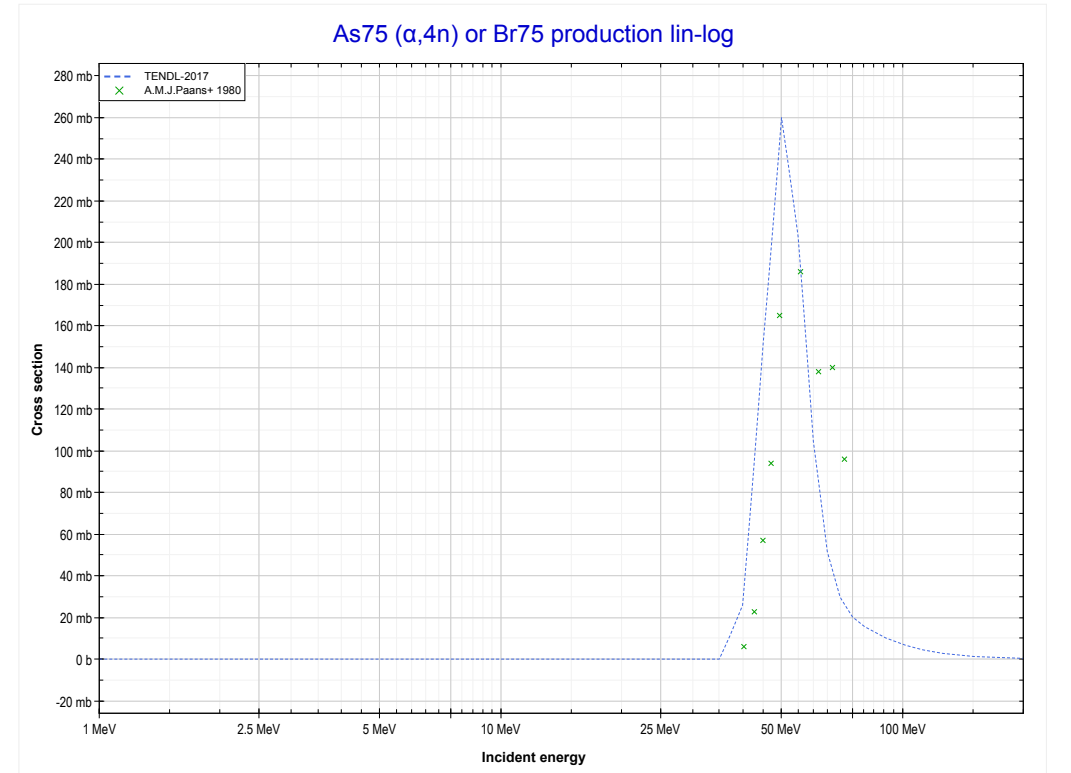
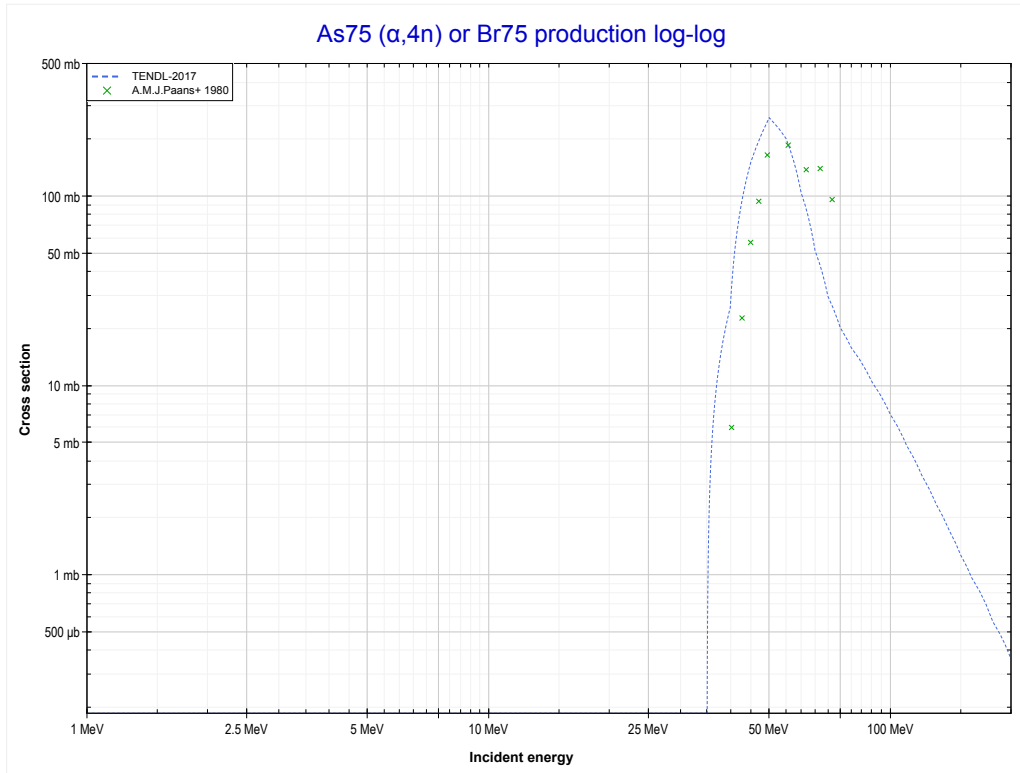
Reaction	Q-Value
Ge74(α,p)As77	-4370.20 keV

<< 32-Ge-74	33-As-75	34-Se-76 >>
<< 32-Ge-74 MT103 (α,p)	MT17 ($\alpha,3n$) or MT5 (Br76 production)	MT37 ($\alpha,4n$) >>



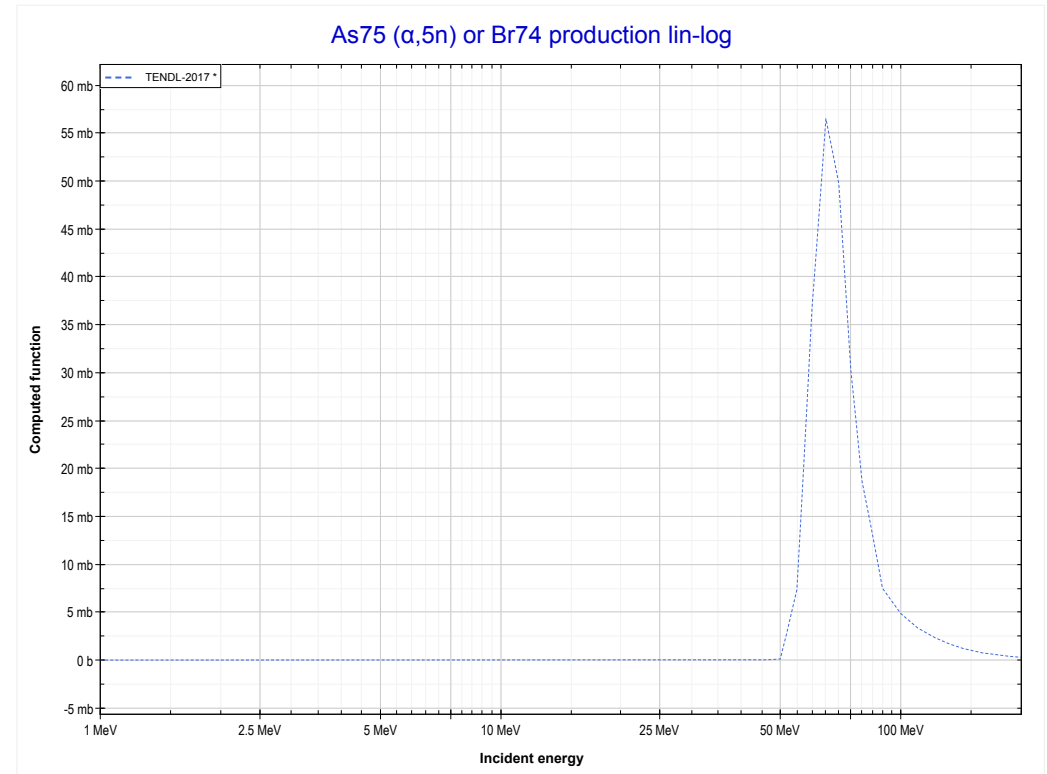
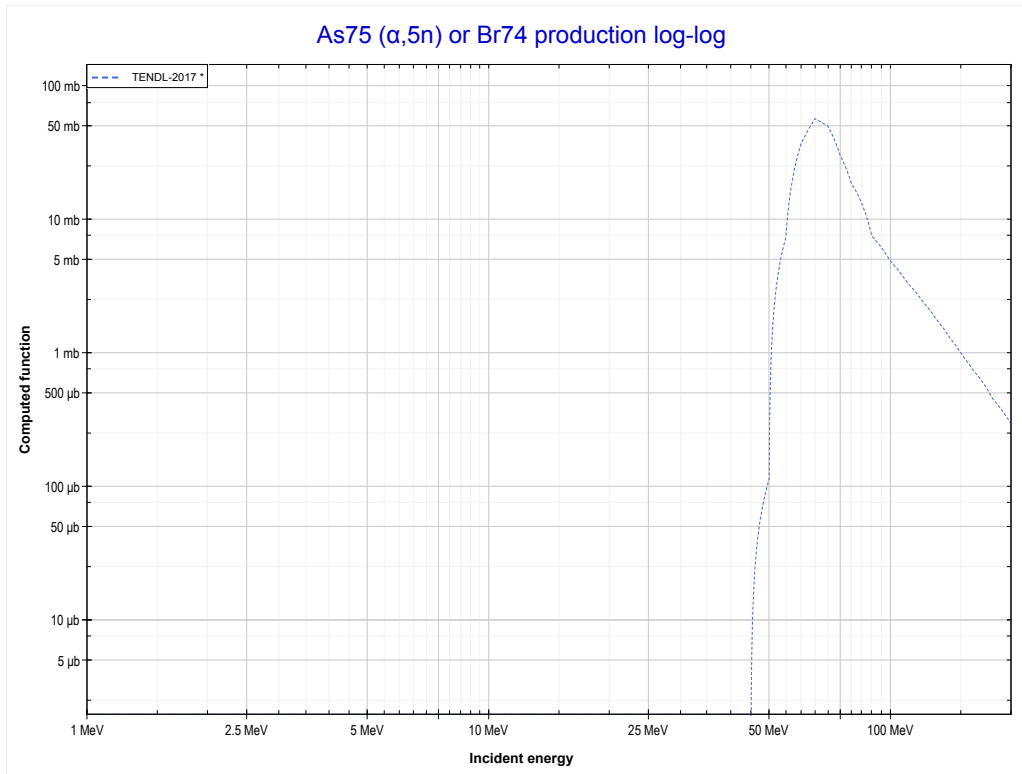
Reaction	Q-Value
As75($\alpha,3n$)Br76	-24534.24 keV

<< 32-Ge-73	33-As-75	35-Br-81 >>
<< MT17 ($\alpha,3n$)	MT37 ($\alpha,4n$) or MT5 (Br75 production)	MT152 ($\alpha,5n$) >>



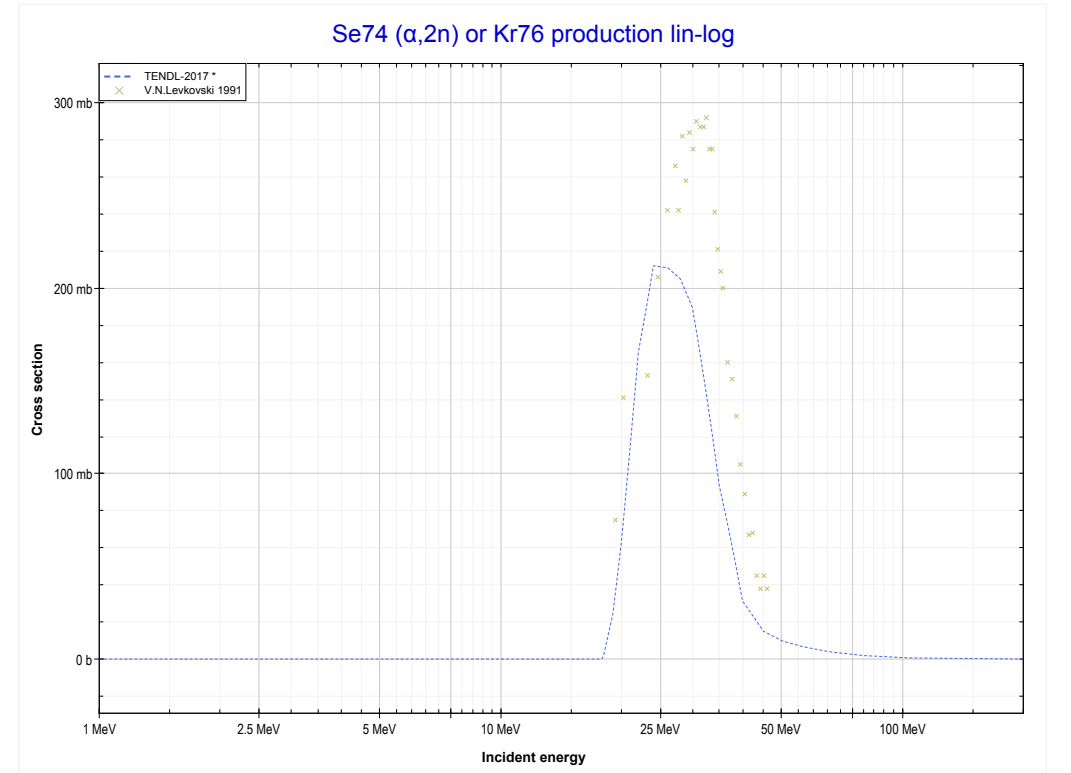
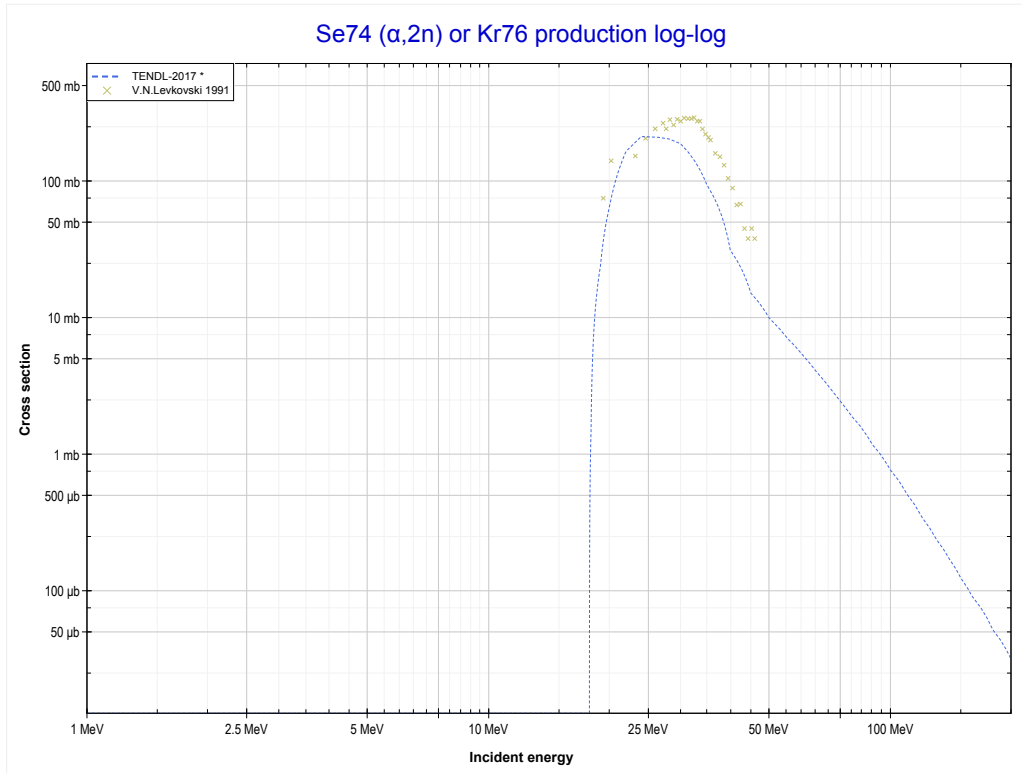
Reaction	Q-Value
As75($\alpha,4n$)Br75	-33787.55 keV

	33-As-75	36-Kr-83 >>
<< MT37 ($\alpha,4n$)	MT152 ($\alpha,5n$) or MT5 (Br74 production)	34-Se-74 MT16 ($\alpha,2n$) >>



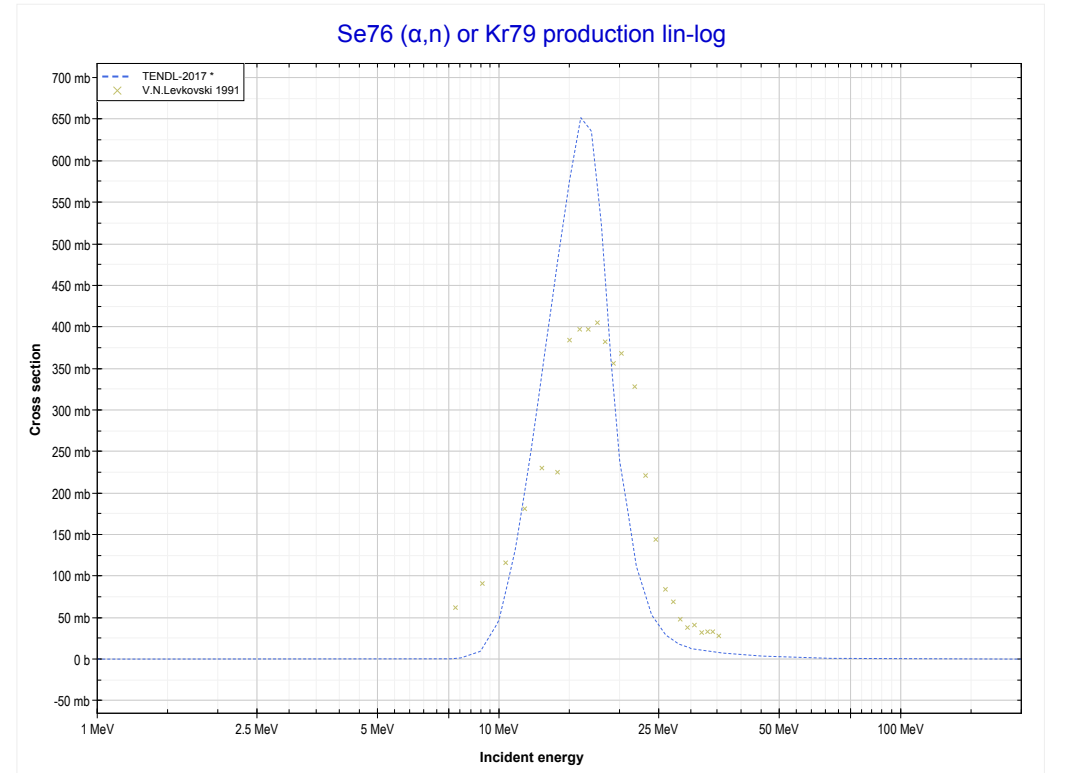
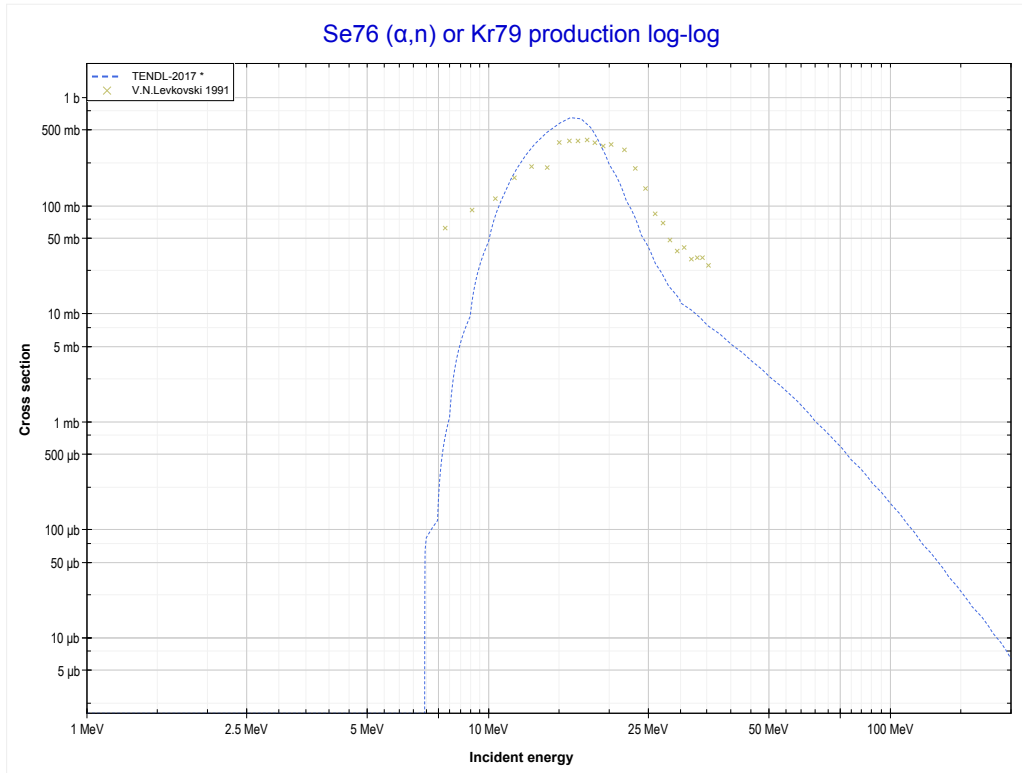
Reaction	Q-Value
As75($\alpha,5n$)Br74	-45677.87 keV

<< 32-Ge-73	34-Se-74	34-Se-77 >>
<< 33-As-75 MT152 ($\alpha,5n$)	MT16 ($\alpha,2n$) or MT5 (Kr76 production)	34-Se-76 MT4 (α,n) >>



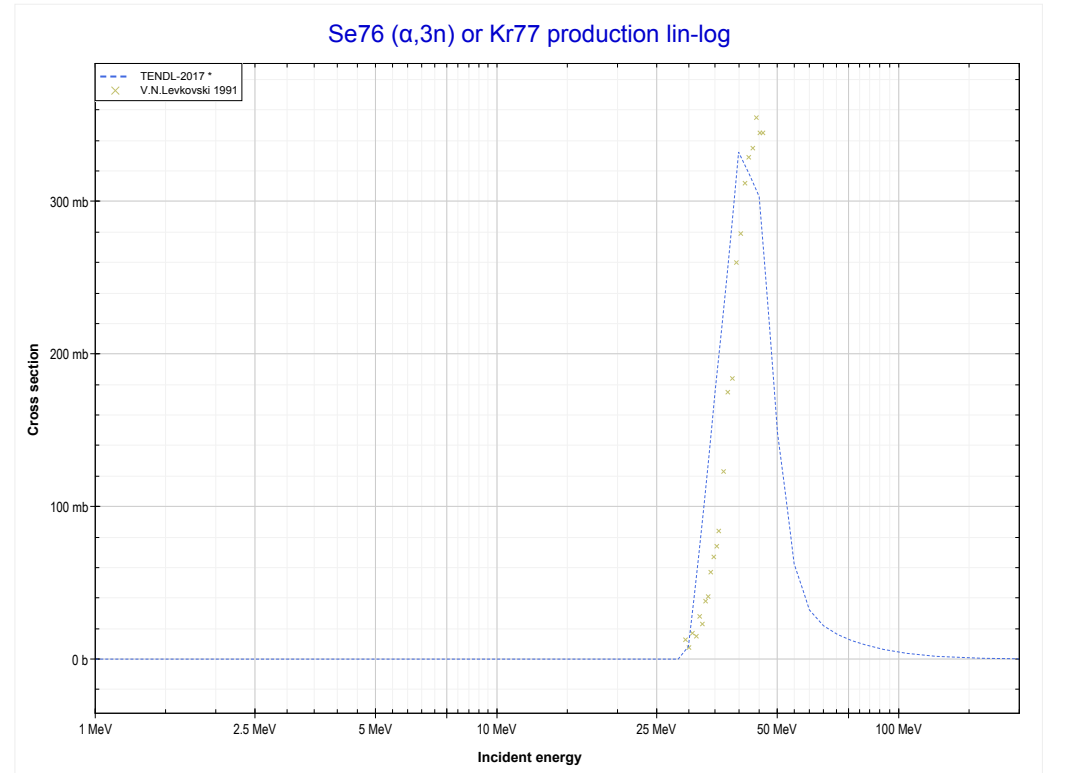
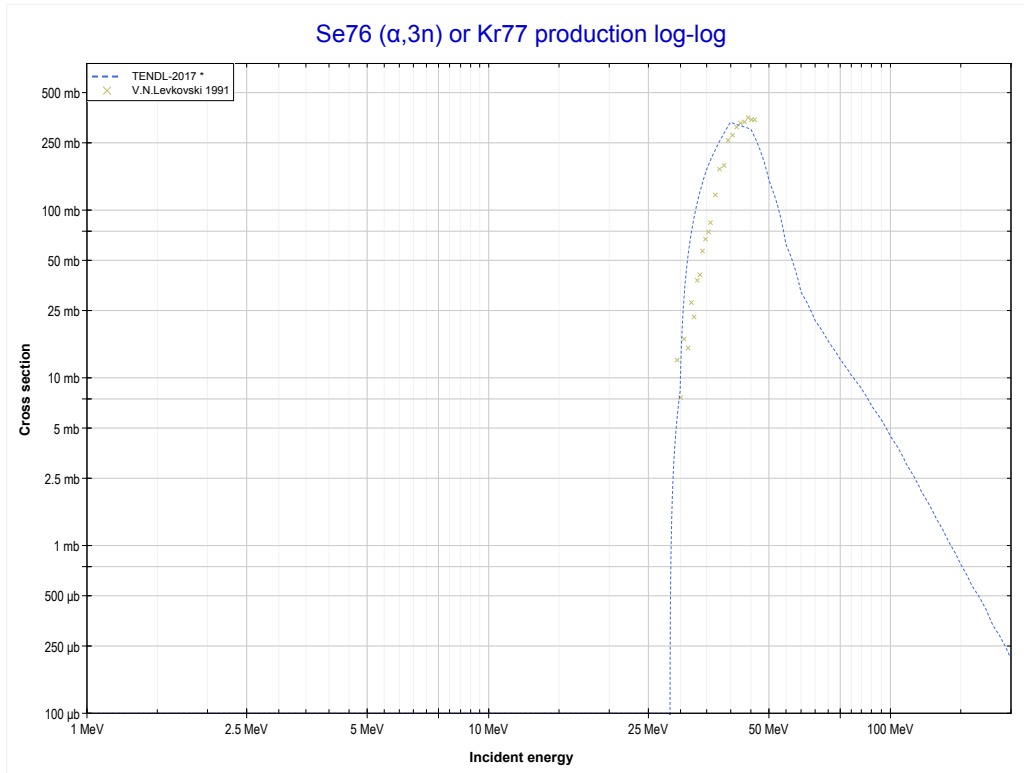
Reaction	Q-Value
Se74($\alpha,2n$)Kr76	-16916.92 keV

<< 32-Ge-72	34-Se-76	35-Br-79 >>
<< 34-Se-74 MT16 ($\alpha,2n$)	MT4 (α,n) or MT5 (Kr79 production)	MT17 ($\alpha,3n$) >>



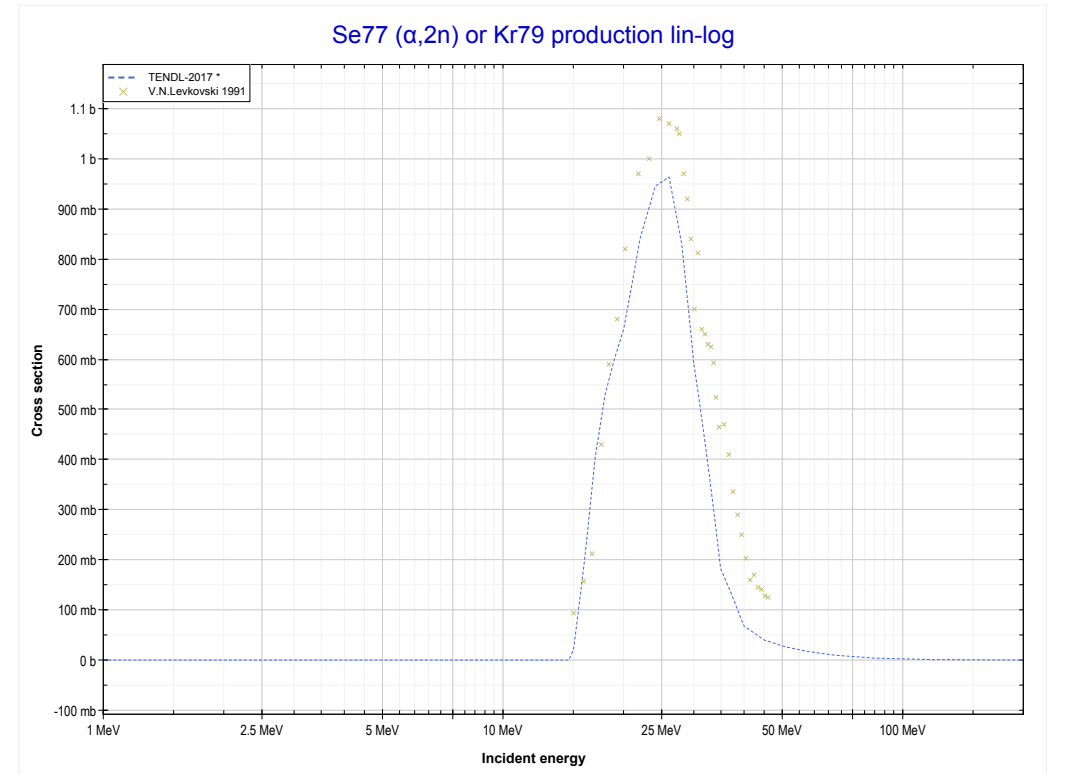
Reaction	Q-Value
Se76(α,n)Kr79	-6456.35 keV

<< 33-As-75	34-Se-76	34-Se-78 >>
<< MT4 (α, n)	MT17 ($\alpha, 3n$) or MT5 (Kr77 production)	34-Se-77 MT16 ($\alpha, 2n$) >>



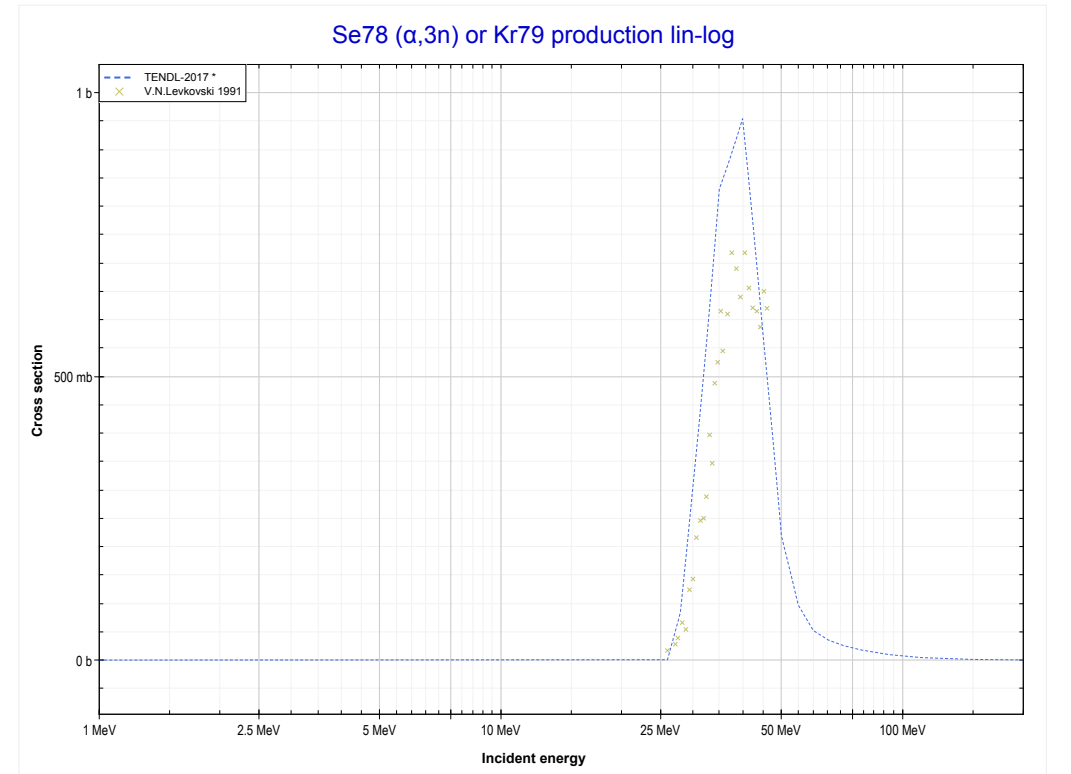
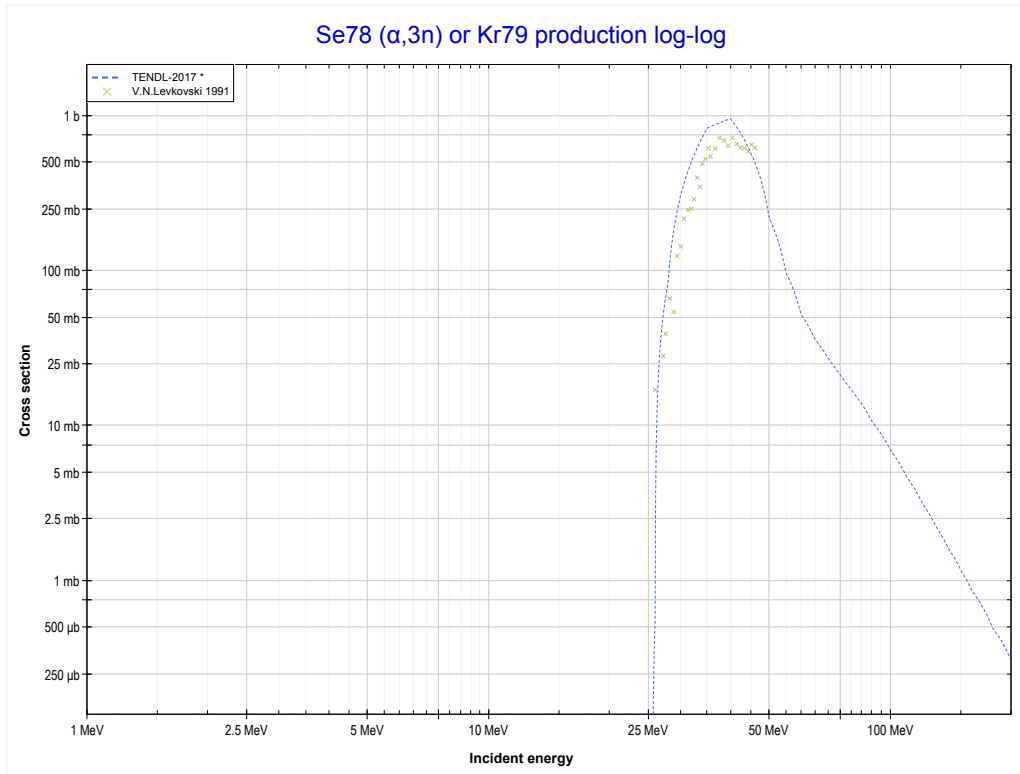
Reaction	Q-Value
Se76($\alpha, 3n$)Kr77	-26871.59 keV

<< 34-Se-74	34-Se-77	35-Br-79 >>
<< 34-Se-76 MT17 ($\alpha,3n$)	MT16 ($\alpha,2n$) or MT5 (Kr79 production)	34-Se-78 MT17 ($\alpha,3n$) >>



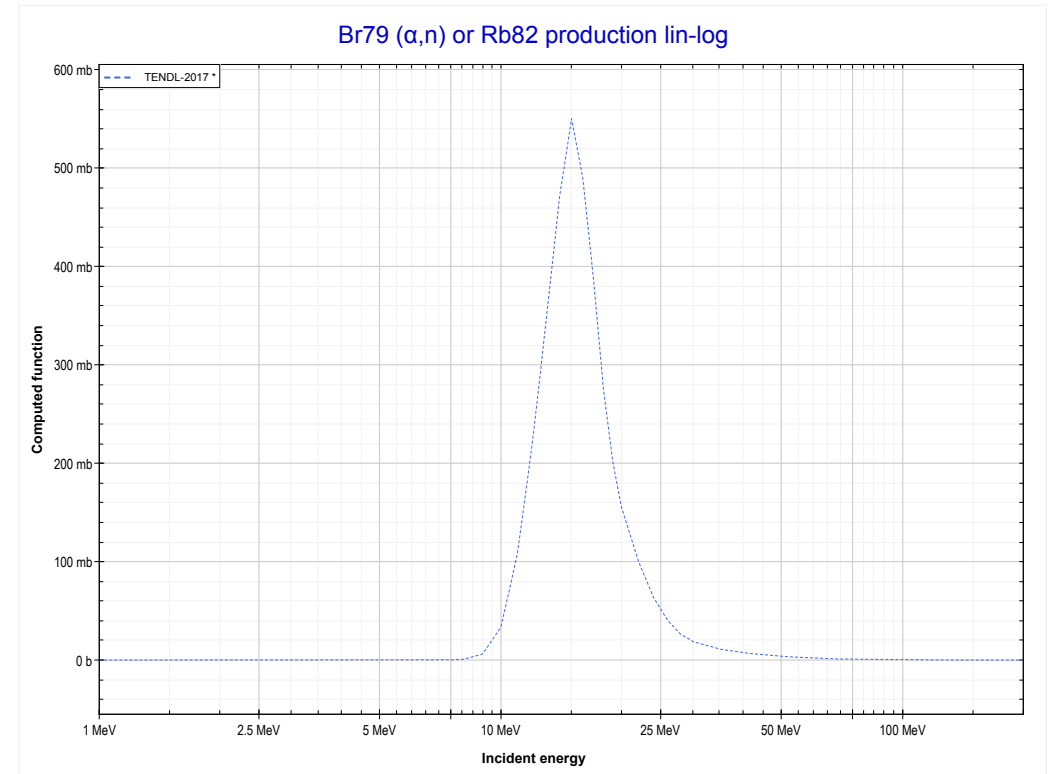
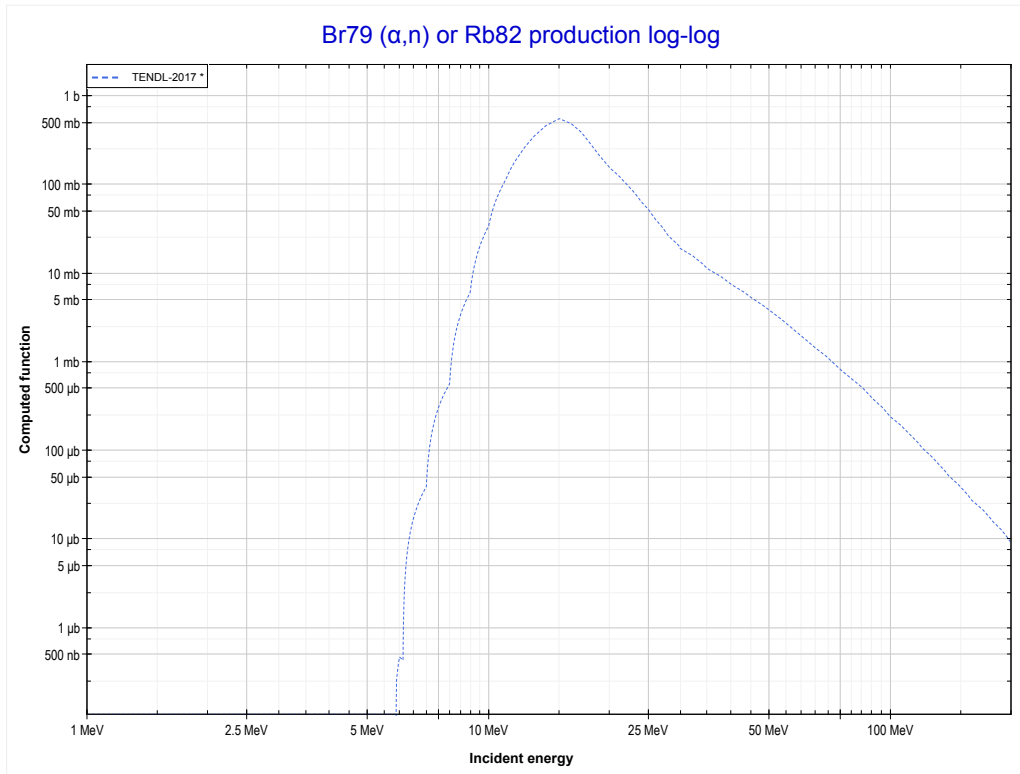
Reaction	Q-Value
Se77($\alpha,2n$)Kr79	-13875.20 keV

<< 34-Se-76	34-Se-78	35-Br-81 >>
<< 34-Se-77 MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Kr79 production)	35-Br-79 MT4 (α,n) >>



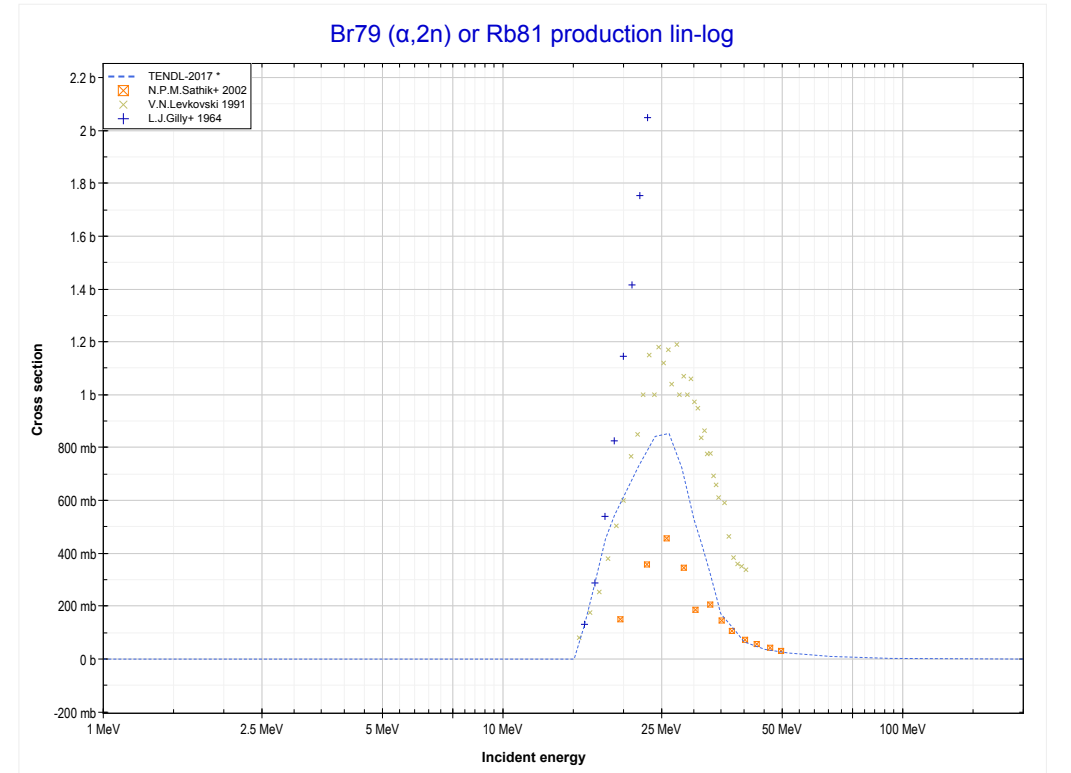
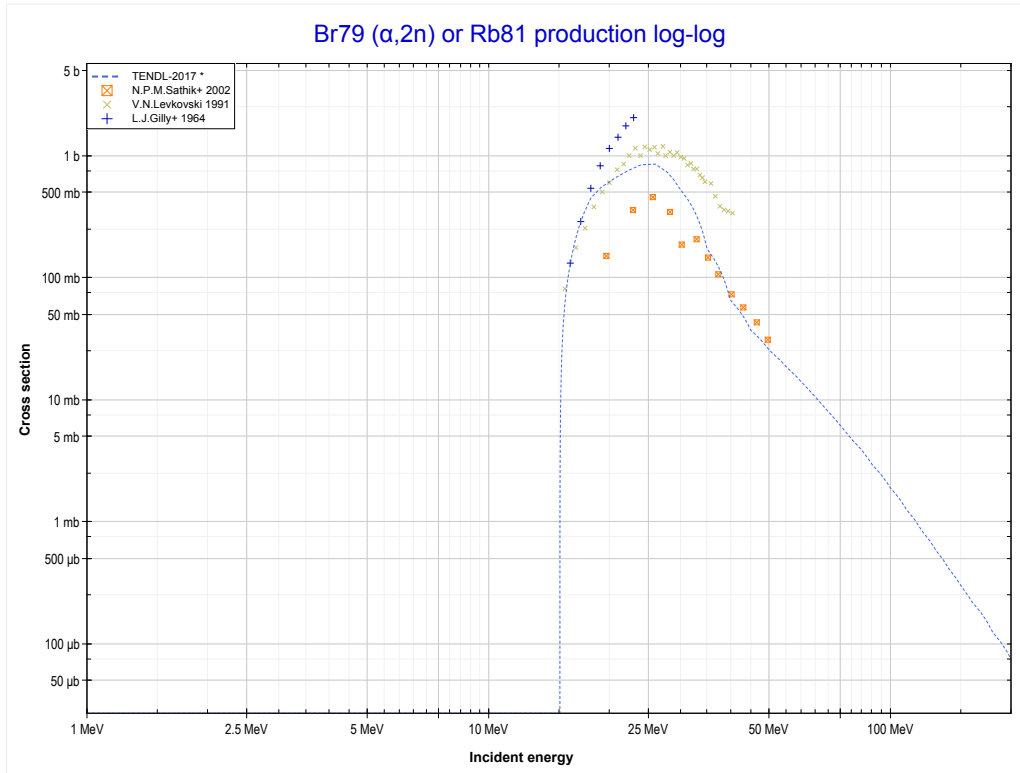
Reaction	Q-Value
Se78($\alpha,3n$)Kr79	-24372.95 keV

<< 34-Se-76	35-Br-79	35-Br-81 >>
<< 34-Se-78 MT17 ($\alpha,3n$)	MT4 (α,n) or MT5 (Rb82 production)	MT16 ($\alpha,2n$) >>



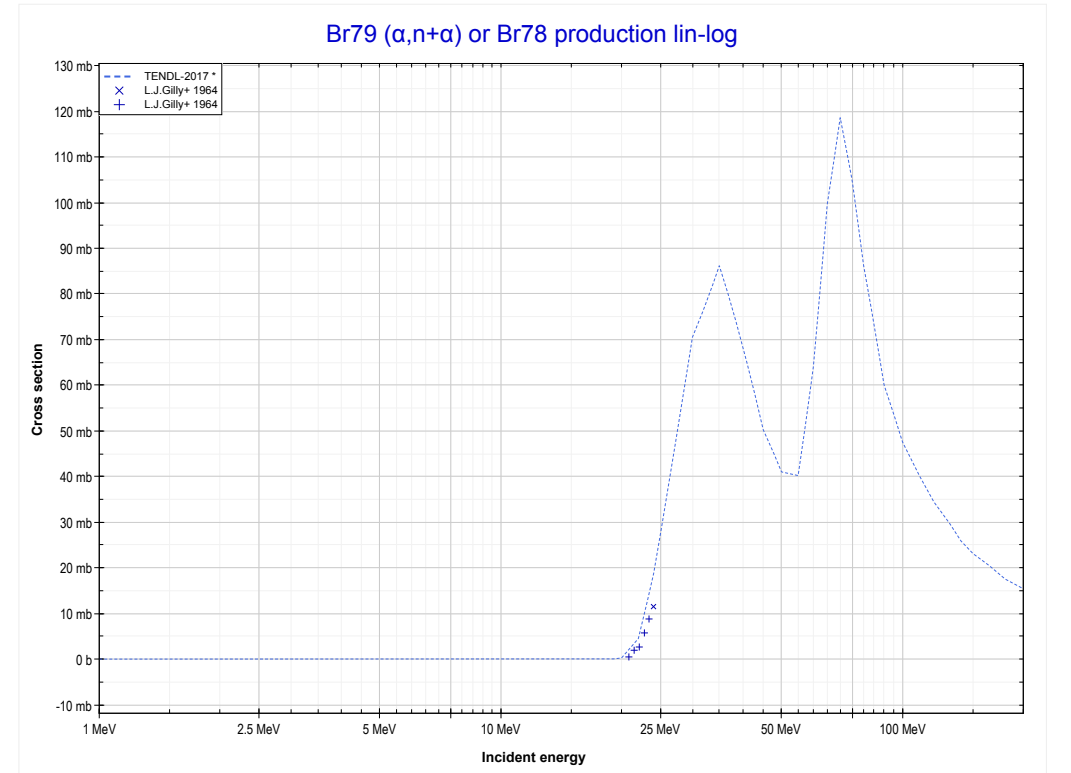
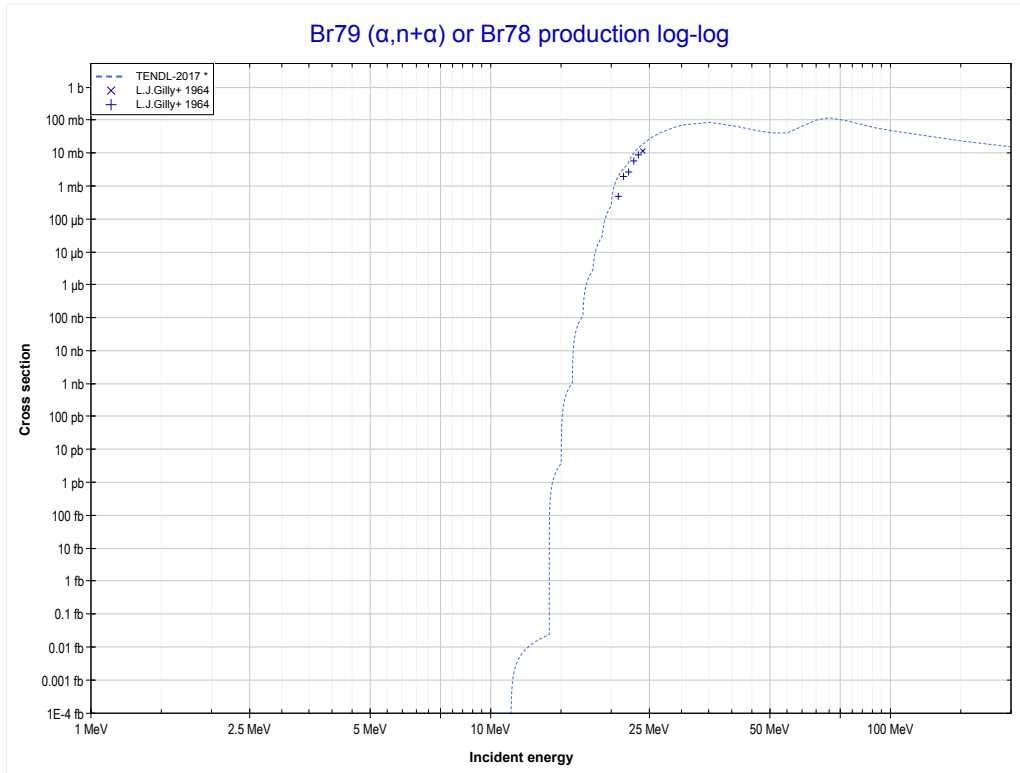
Reaction	Q-Value
Br79(α,n)Rb82	-5526.50 keV

<< 34-Se-77	35-Br-79	35-Br-81 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Rb81 production)	MT22 ($\alpha, n+\alpha$) >>



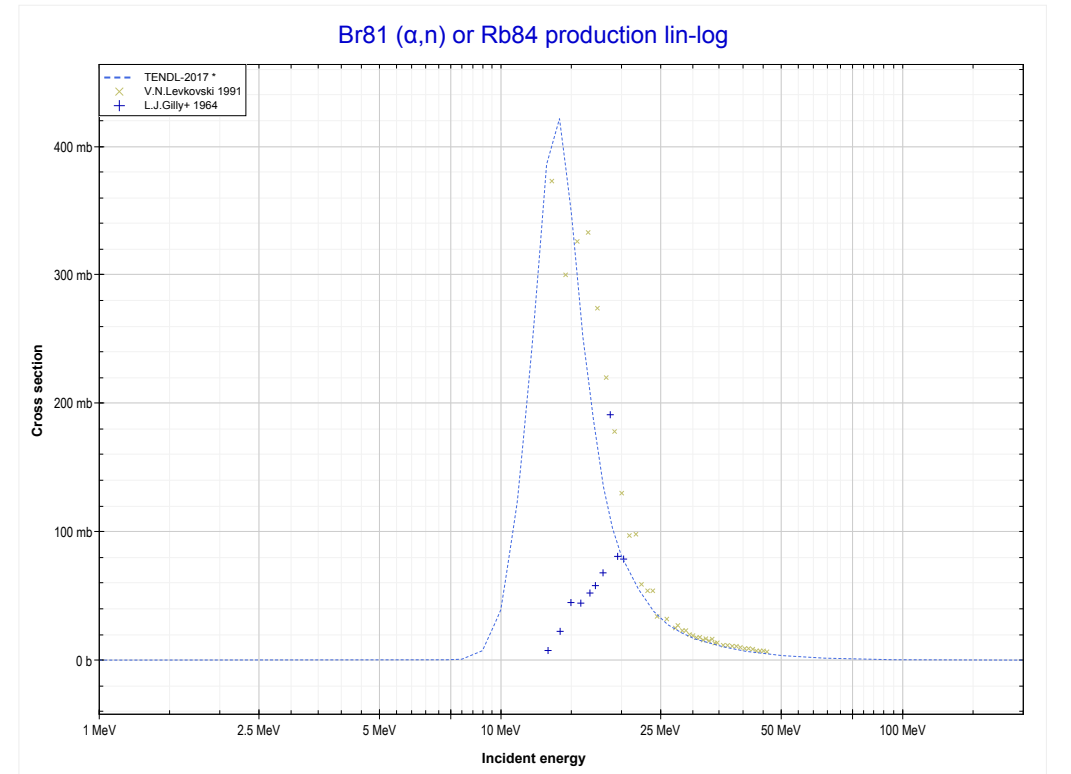
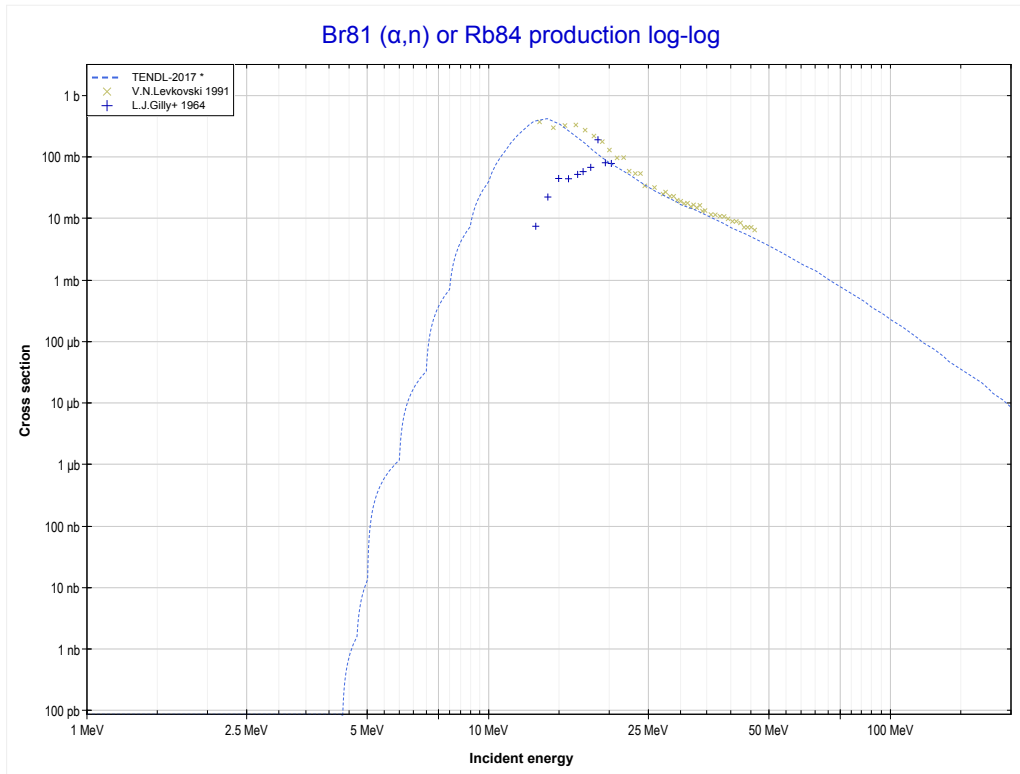
Reaction	Q-Value
Br79($\alpha, 2n$)Rb81	-14328.82 keV

<< 30-Zn-64	35-Br-79	35-Br-81 >>
<< MT16 ($\alpha,2n$)	MT22 ($\alpha,n+\alpha$) or MT5 (Br78 production)	35-Br-81 MT4 (α,n) >>



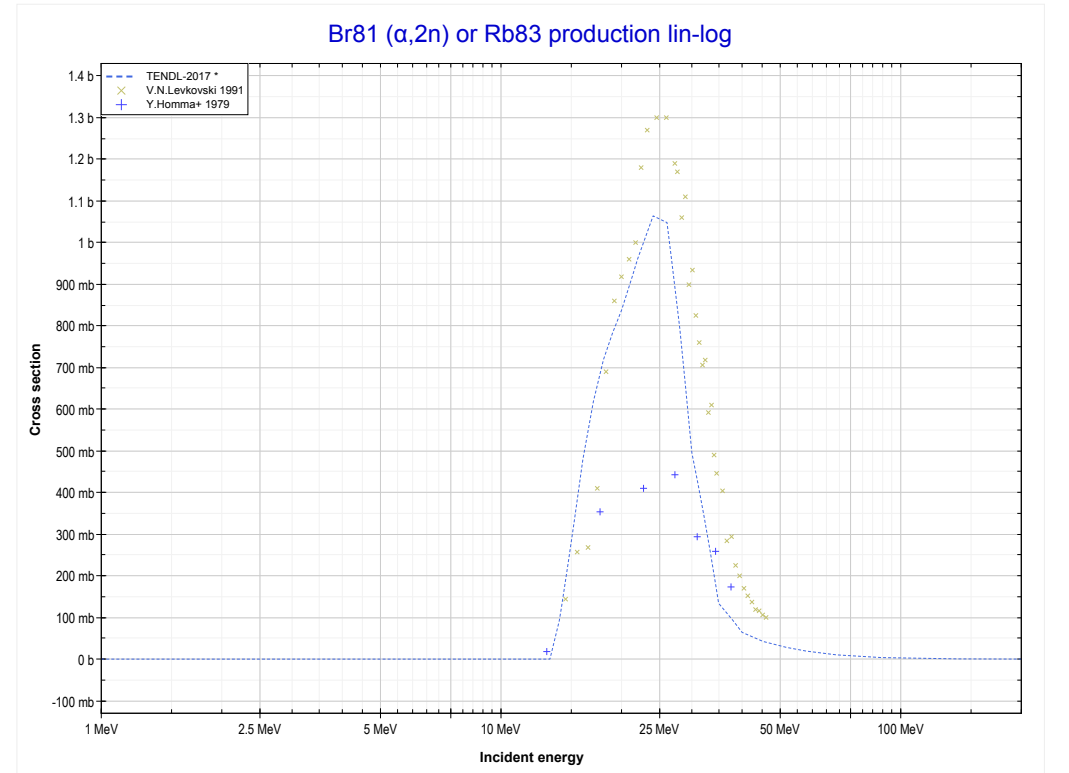
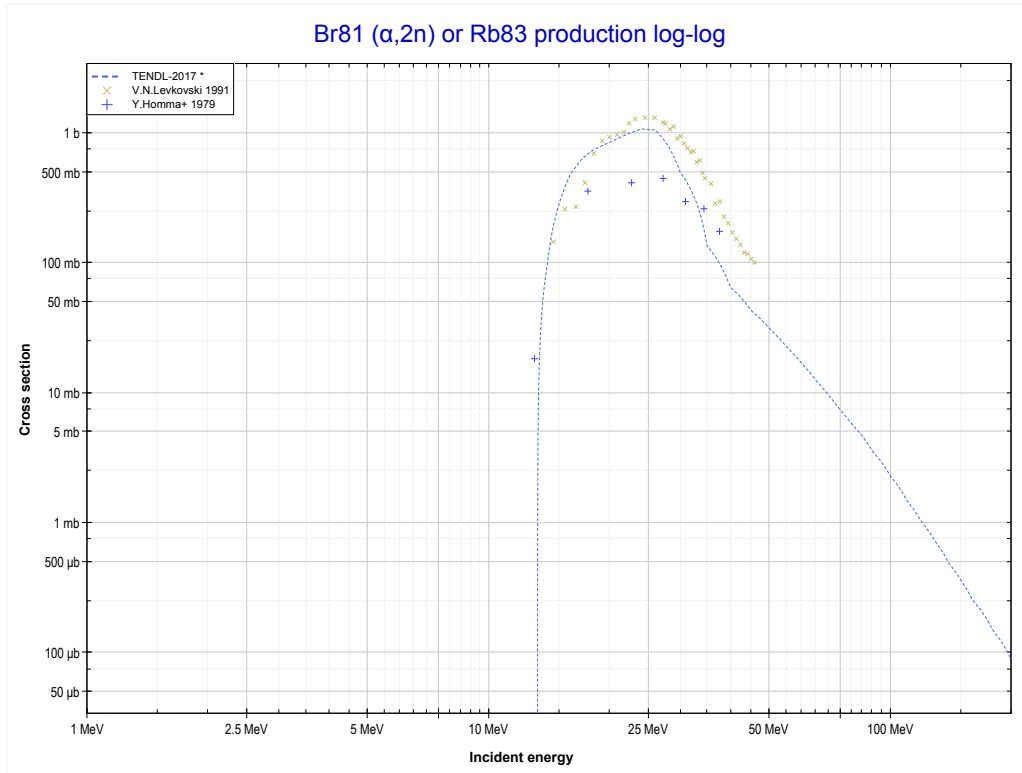
Reaction	Q-Value
Br79($\alpha,n+\alpha$)Br78	-10687.42 keV
Br79($\alpha,d+t$)Br78	-28276.71 keV
Br79($\alpha,n+p+t$)Br78	-30501.28 keV
Br79($\alpha,2n+He3$)Br78	-31265.03 keV
Br79($\alpha,n+2d$)Br78	-34533.94 keV
Br79($\alpha,2n+p+d$)Br78	-36758.51 keV
Br79($\alpha,3n+2p$)Br78	-38983.08 keV

<< 35-Br-79	35-Br-81	37-Rb-85 >>
<< 35-Br-79 MT22 ($\alpha, n + \alpha$)	MT4 (α, n) or MT5 (Rb84 production)	MT16 ($\alpha, 2n$) >>



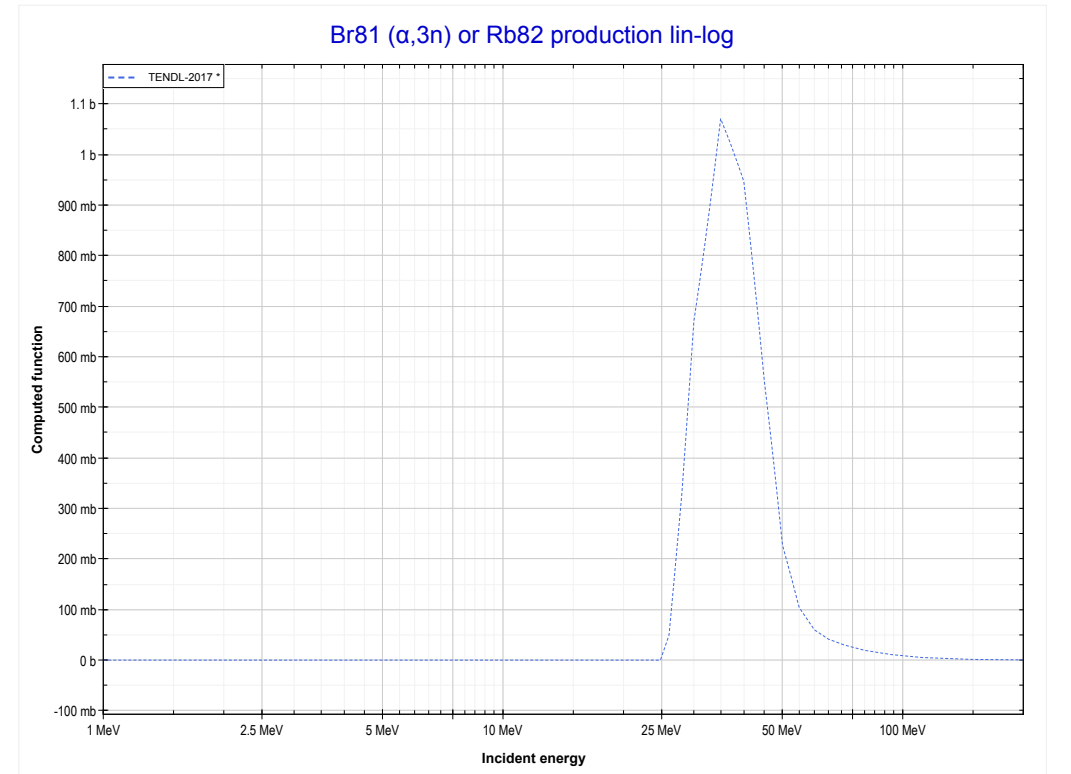
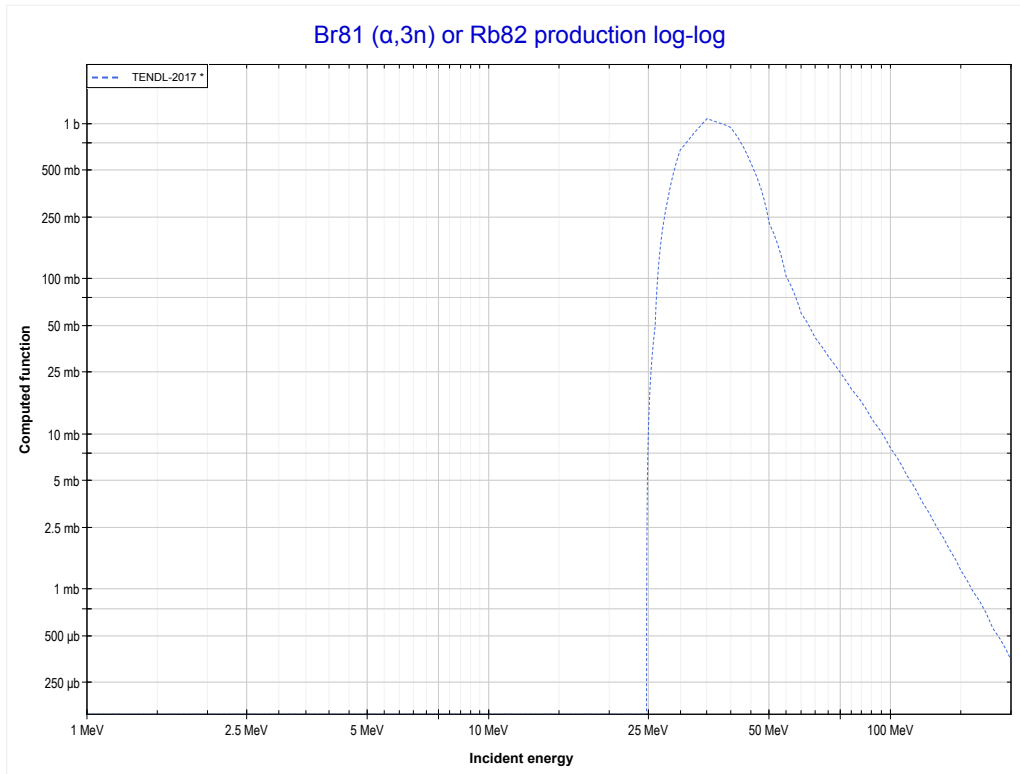
Reaction	Q-Value
Br81(α, n)Rb84	-3863.10 keV

<< 35-Br-79	35-Br-81	36-Kr-80 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Rb83 production)	MT17 ($\alpha, 3n$) >>



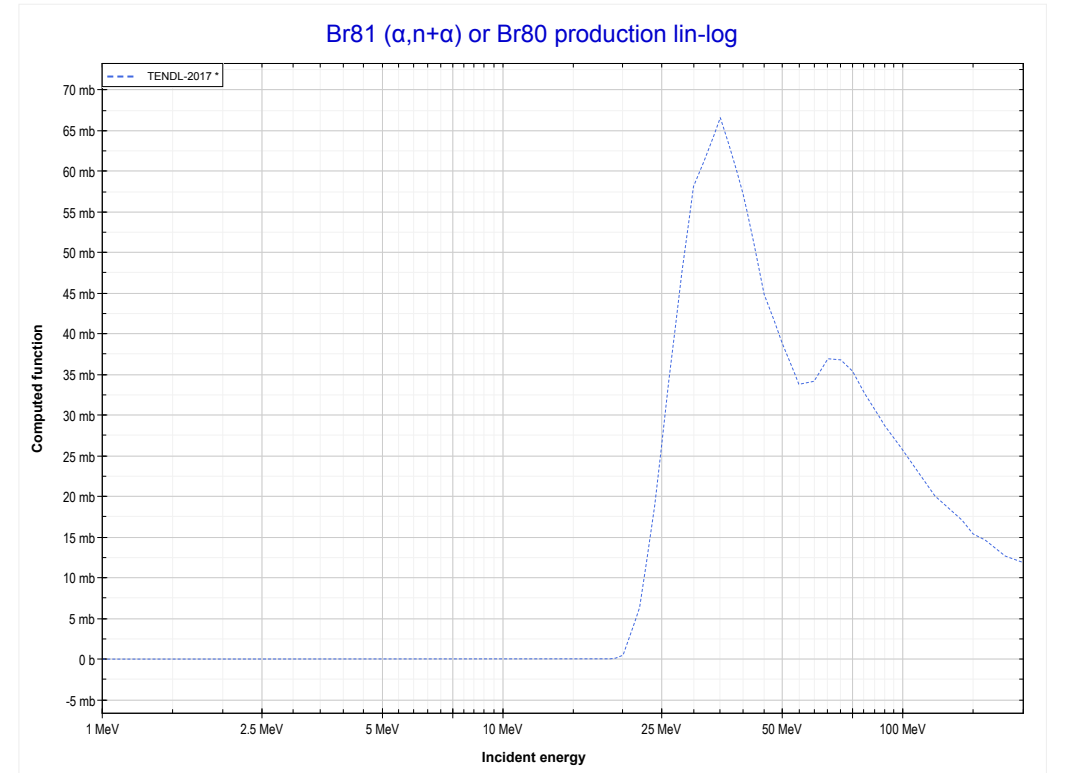
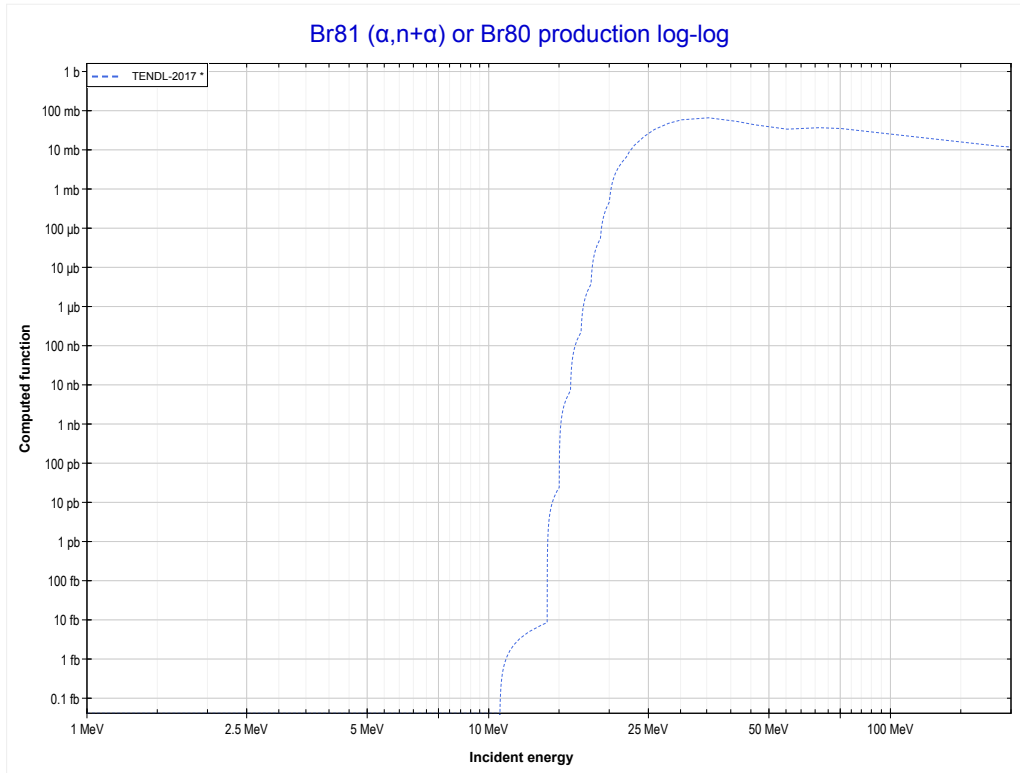
Reaction	Q-Value
Br81($\alpha, 2n$)Rb83	-12622.82 keV

<< 34-Se-78	35-Br-81	37-Rb-85 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Rb82 production)	MT22 ($\alpha,n+\alpha$) >>



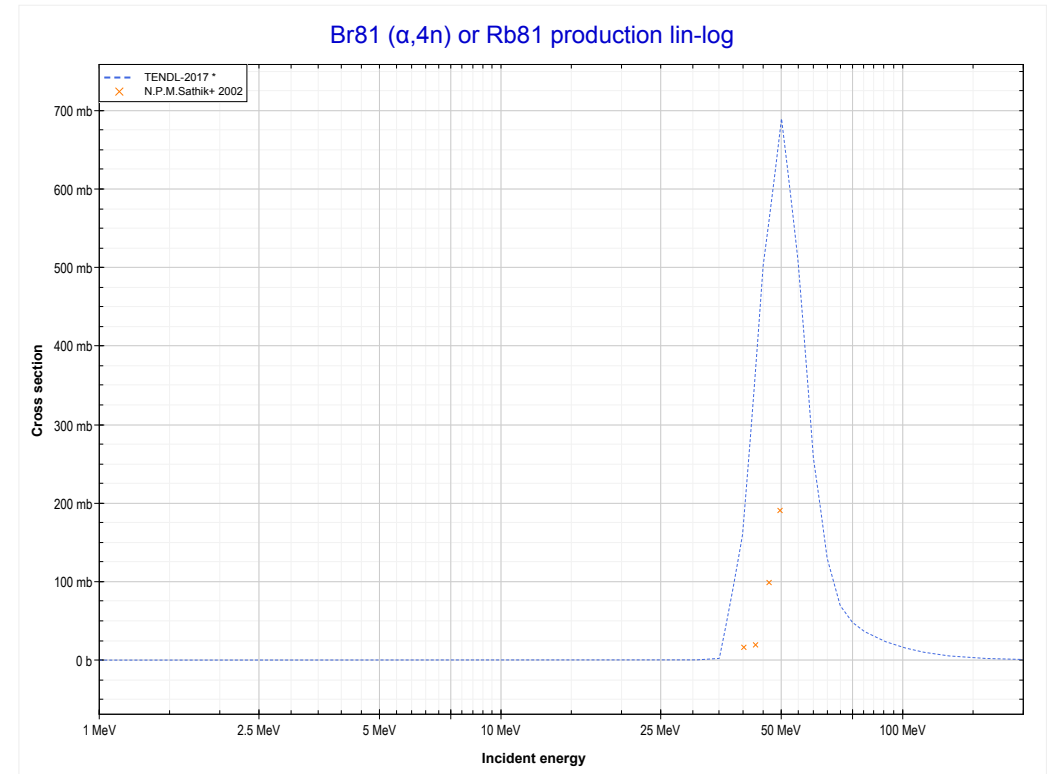
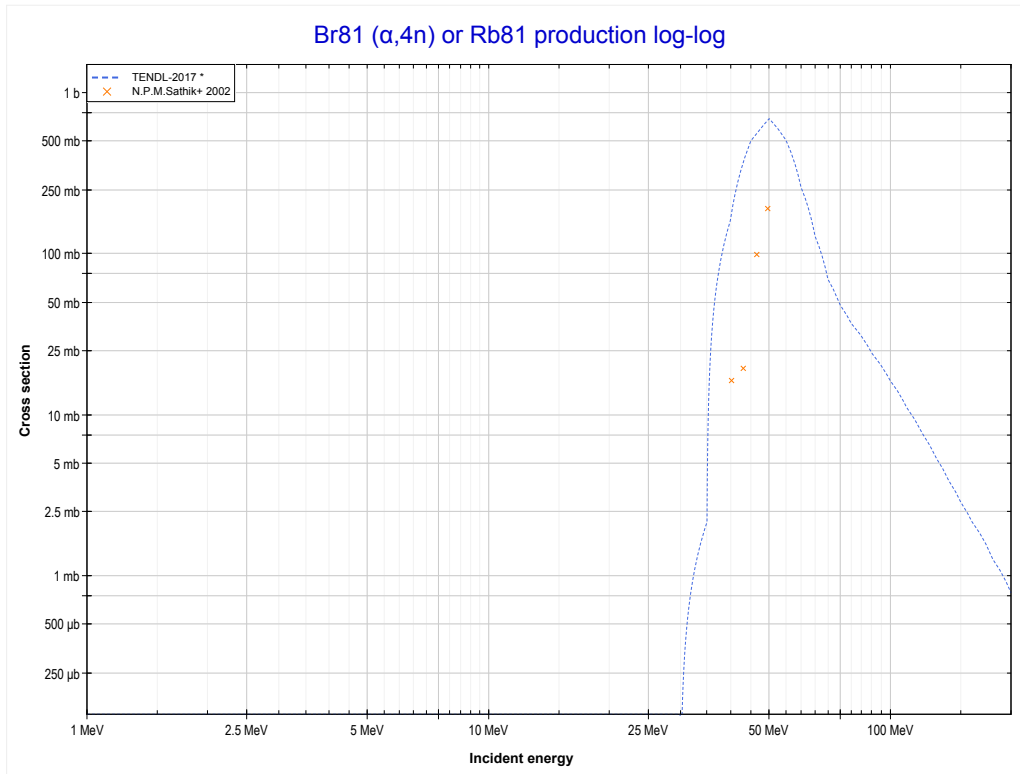
Reaction	Q-Value
Br81($\alpha,3n$)Rb82	-23576.74 keV

<< 35-Br-79	35-Br-81	37-Rb-85 >>
<< MT17 ($\alpha,3n$)	MT22 ($\alpha,n+\alpha$) or MT5 (Br80 production)	MT37 ($\alpha,4n$) >>



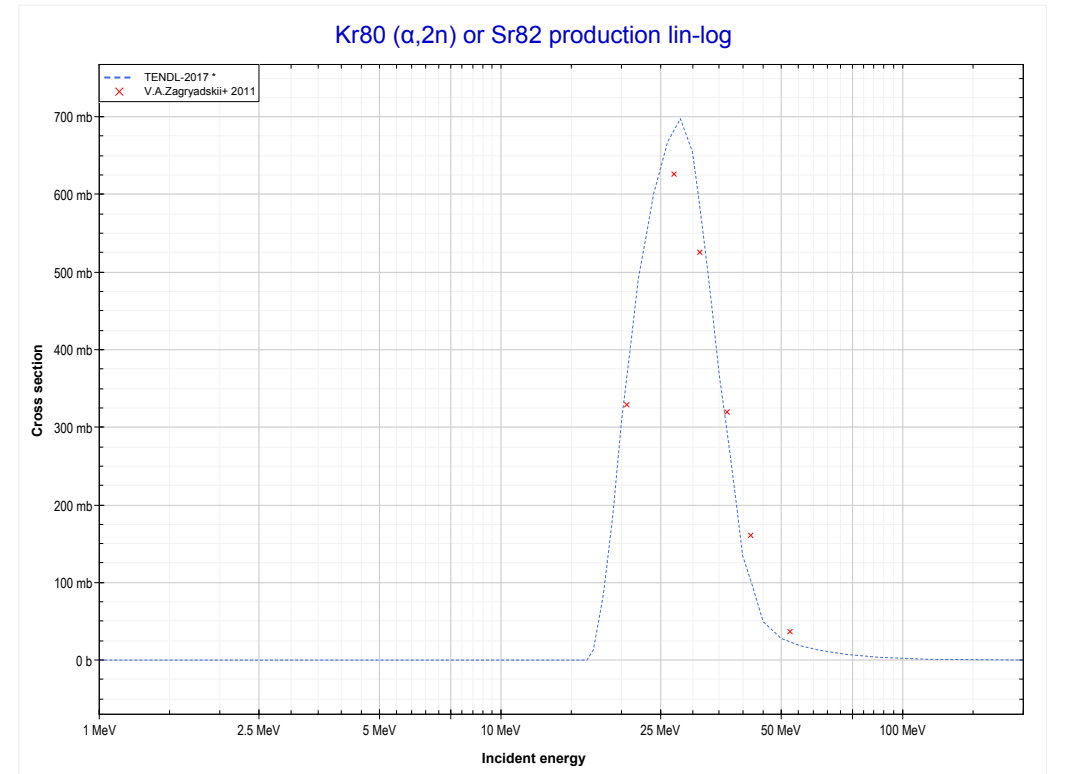
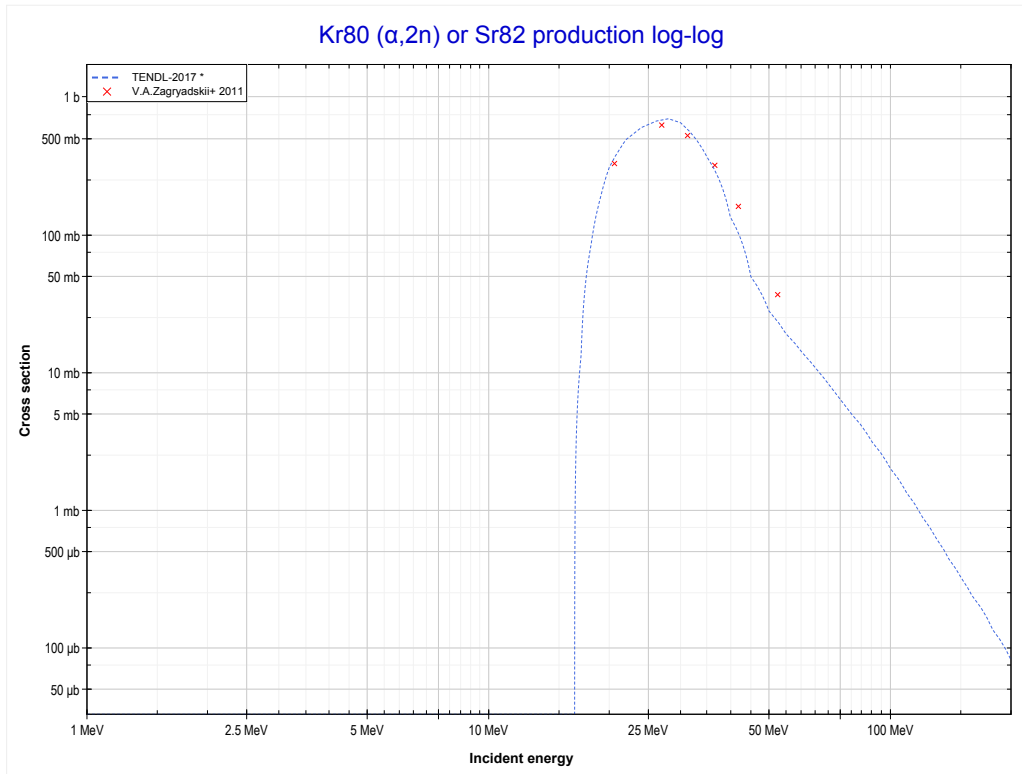
Reaction	Q-Value
Br81($\alpha,n+\alpha$)Br80	-10158.02 keV
Br81($\alpha,d+t$)Br80	-27747.31 keV
Br81($\alpha,n+p+t$)Br80	-29971.88 keV
Br81($\alpha,2n+He3$)Br80	-30735.63 keV
Br81($\alpha,n+2d$)Br80	-34004.54 keV
Br81($\alpha,2n+p+d$)Br80	-36229.11 keV
Br81($\alpha,3n+2p$)Br80	-38453.68 keV

<< 33-As-75	35-Br-81	36-Kr-82 >>
<< MT22 ($\alpha, n + \alpha$)	MT37 ($\alpha, 4n$) or MT5 (Rb81 production)	36-Kr-80 MT16 ($\alpha, 2n$) >>



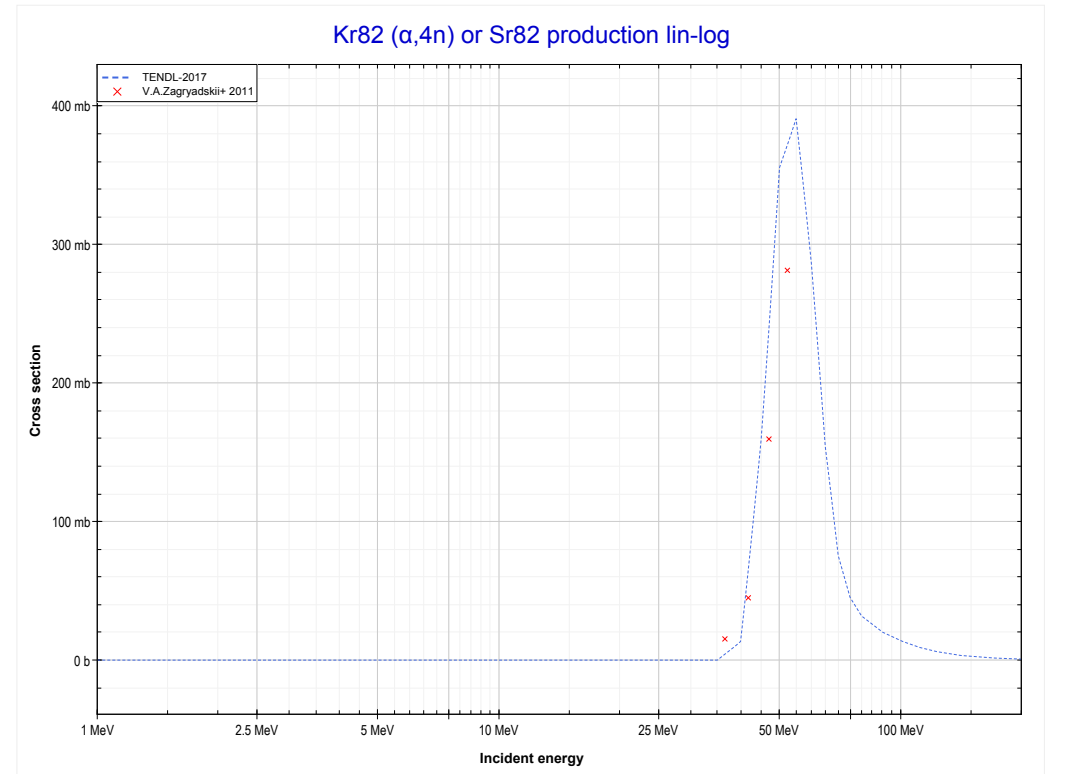
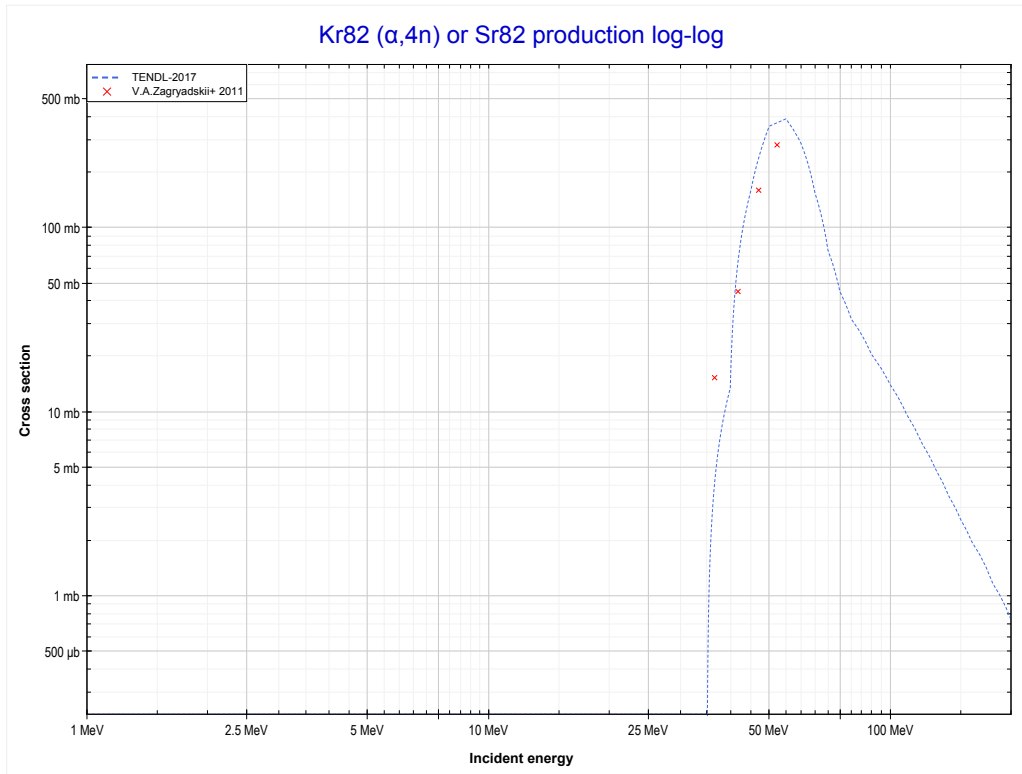
Reaction	Q-Value
Br81($\alpha, 4n$)Rb81	-32379.05 keV

<< 35-Br-81	36-Kr-80	37-Rb-85 >>
<< 35-Br-81 MT37 ($\alpha,4n$)	MT16 ($\alpha,2n$) or MT5 (Sr82 production)	36-Kr-82 MT37 ($\alpha,4n$) >>



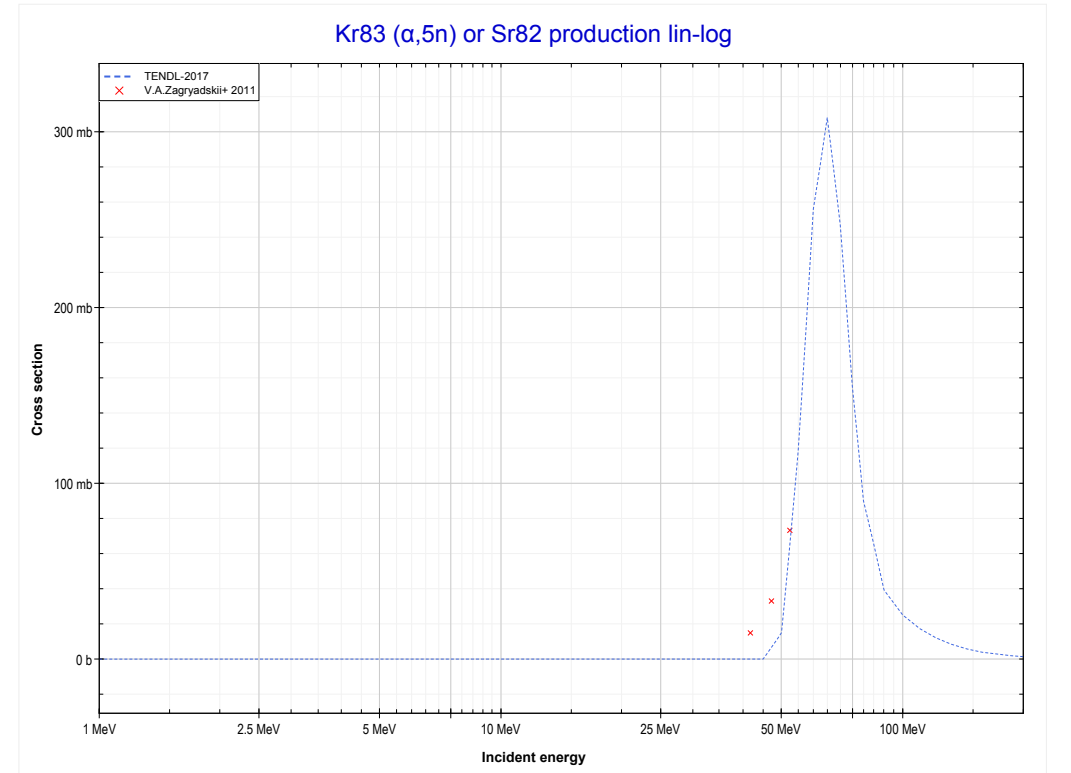
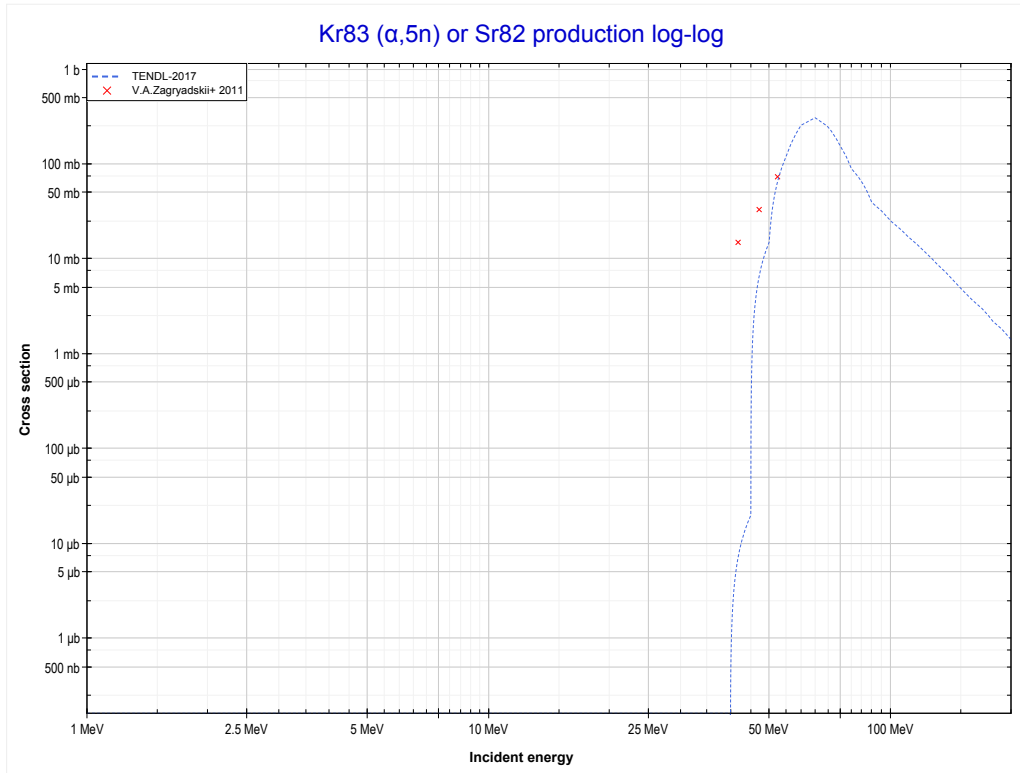
Reaction	Q-Value
Kr80($\alpha,2n$)Sr82	-15601.02 keV

<< 35-Br-81	36-Kr-82	37-Rb-85 >>
<< 36-Kr-80 MT16 ($\alpha,2n$)	MT37 ($\alpha,4n$) or MT5 (Sr82 production)	36-Kr-83 MT152 ($\alpha,5n$) >>



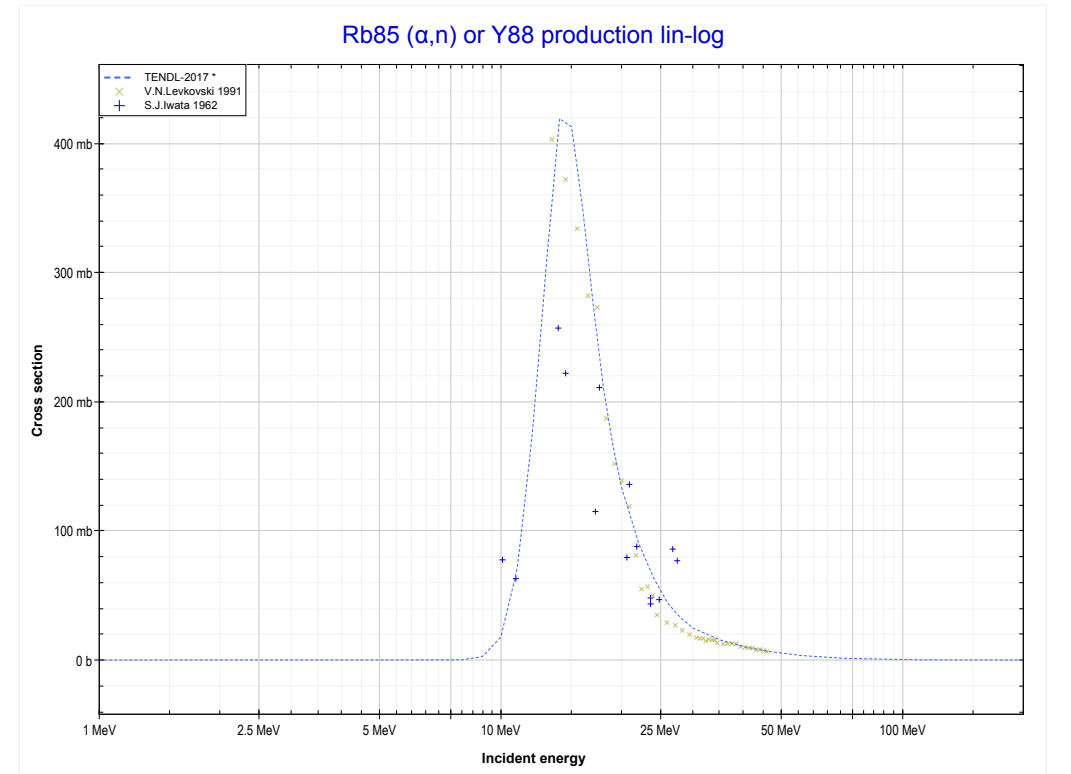
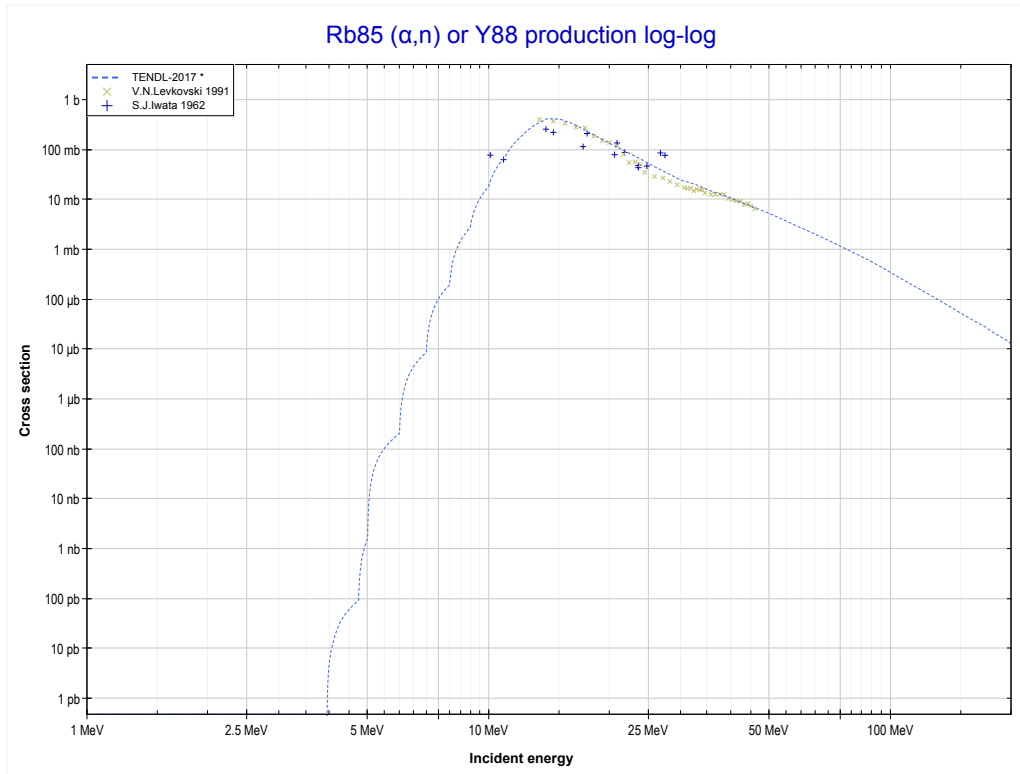
Reaction	Q-Value
Kr82($\alpha,4n$)Sr82	-34440.65 keV

<< 33-As-75	36-Kr-83	41-Nb-93 >>
<< 36-Kr-82 MT37 ($\alpha,4n$)	MT152 ($\alpha,5n$) or MT5 (Sr82 production)	37-Rb-85 MT4 (α,n) >>



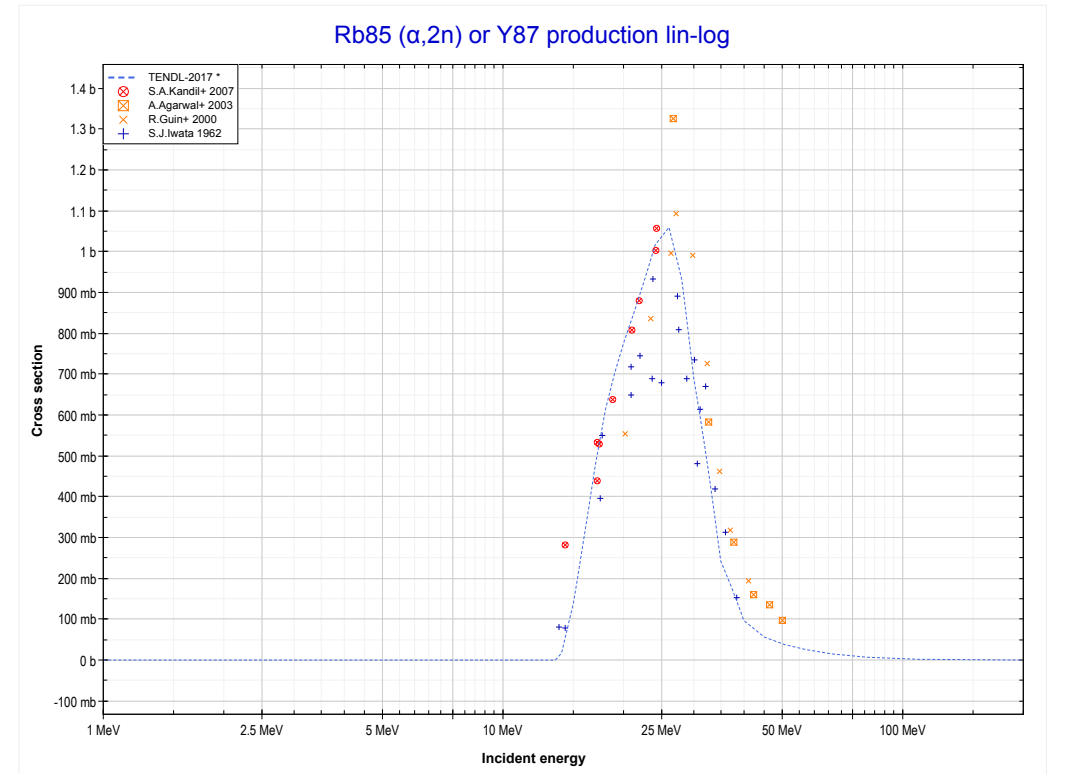
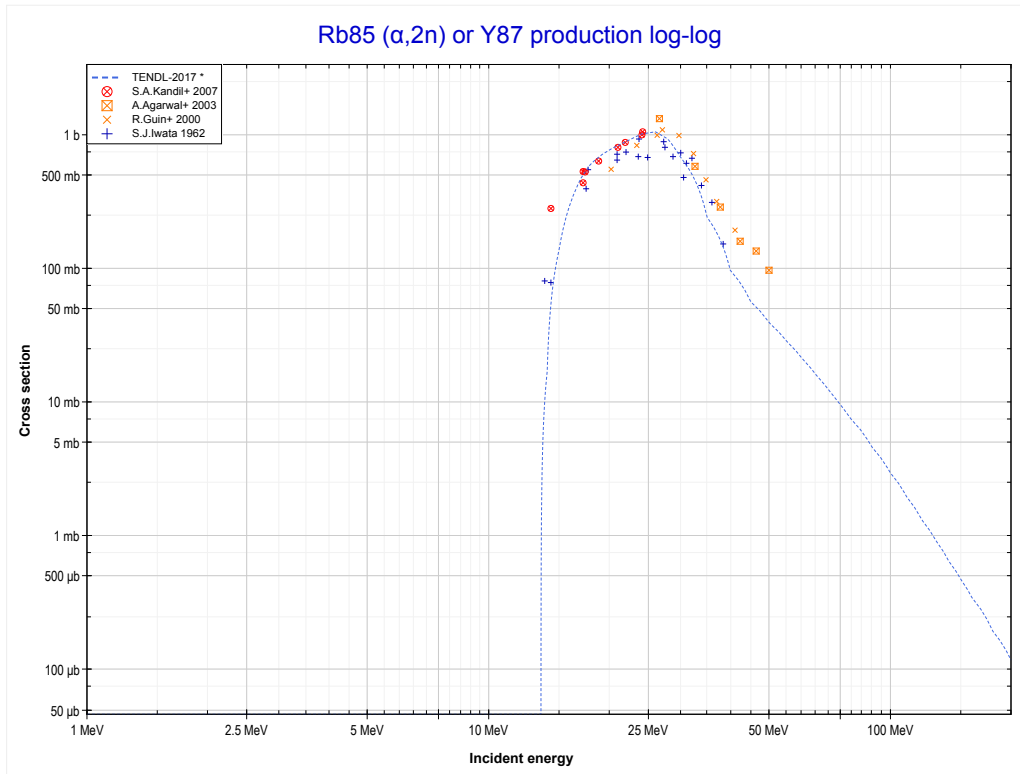
Reaction	Q-Value
Kr83($\alpha,5n$)Sr82	-41911.70 keV

<< 35-Br-81	37-Rb-85	38-Sr-86 >>
<< 36-Kr-83 MT152 ($\alpha,5n$)	MT4 (α,n) or MT5 (Y88 production)	MT16 ($\alpha,2n$) >>



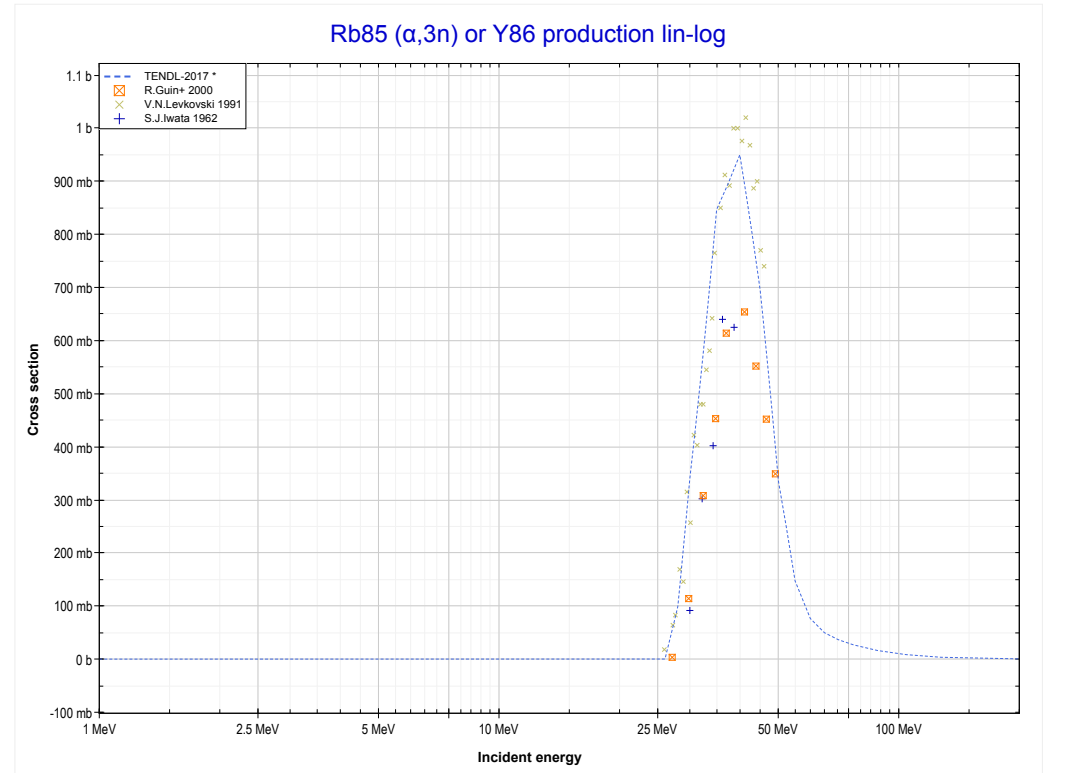
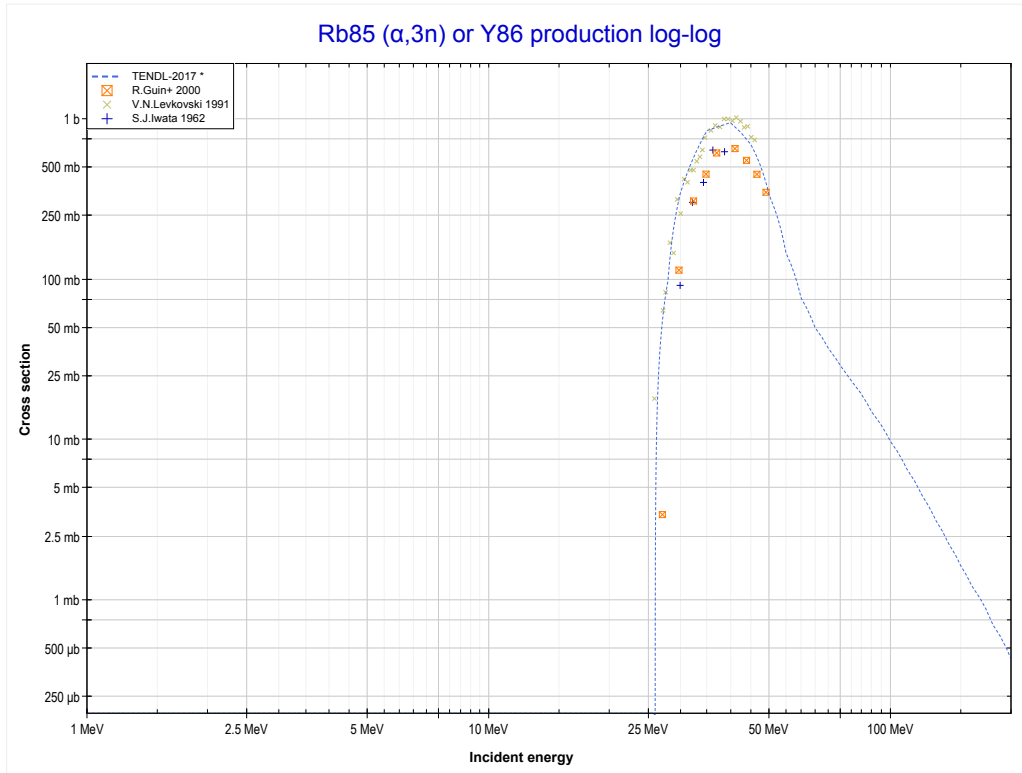
Reaction	Q-Value
Rb85(α,n)Y88	-3514.93 keV

<< 36-Kr-80	37-Rb-85	38-Sr-86 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Y87 production)	MT17 ($\alpha, 3n$) >>



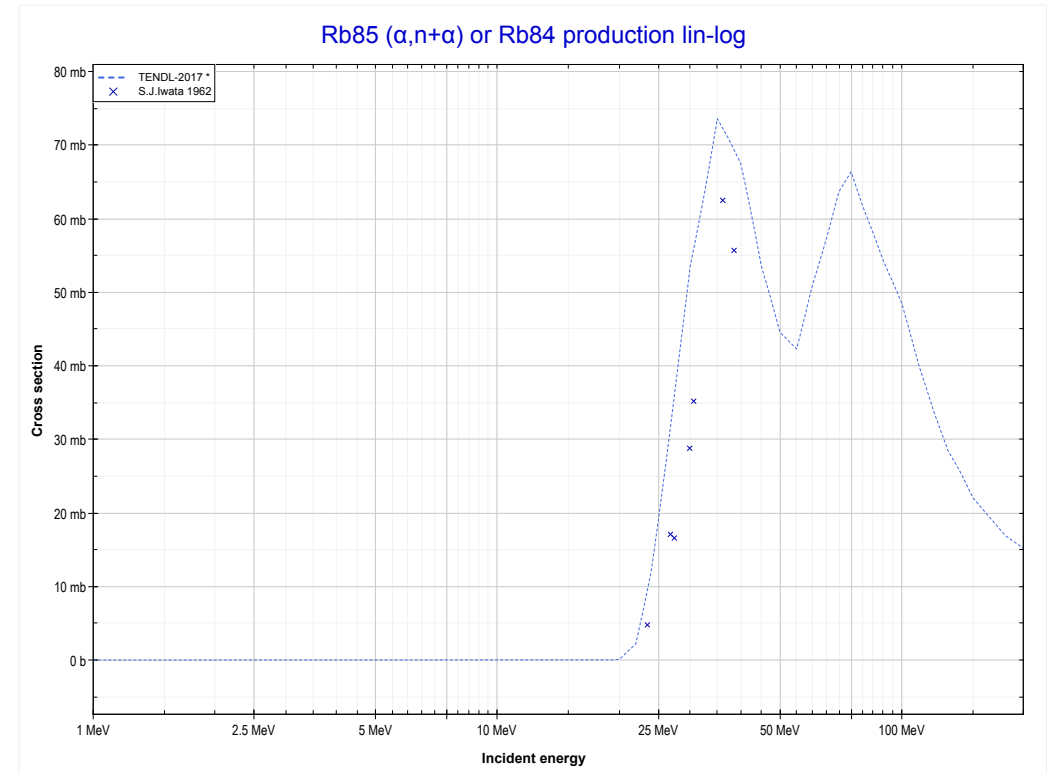
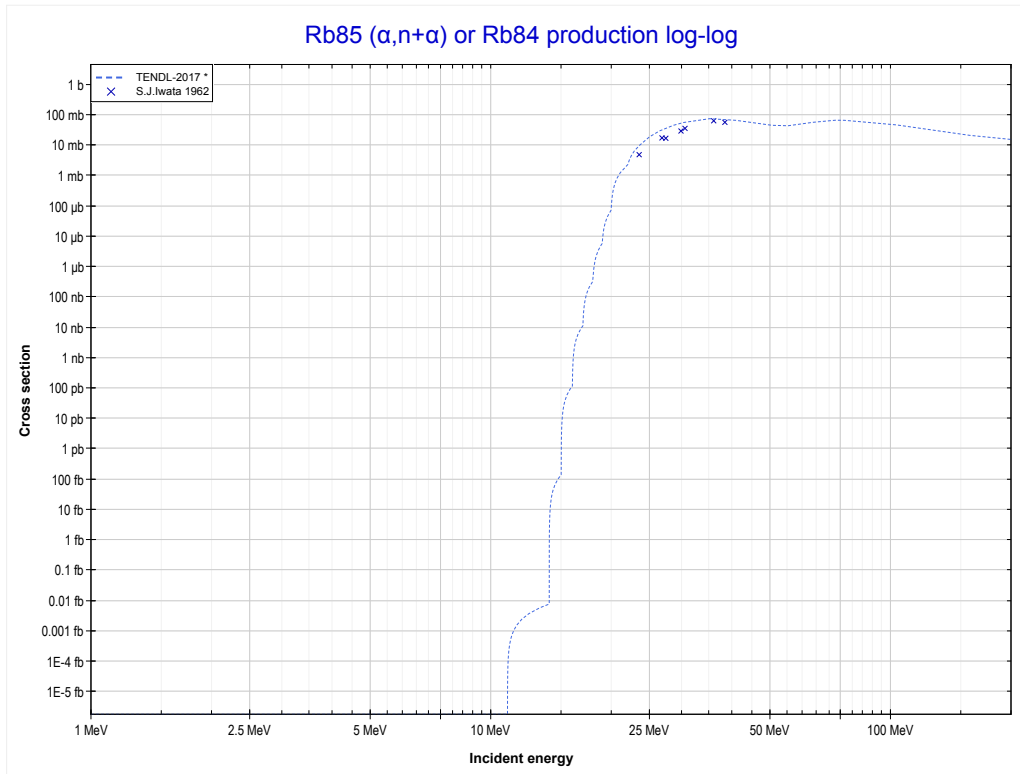
Reaction	Q-Value
Rb85($\alpha, 2n$)Y87	-12866.75 keV

<< 35-Br-81	37-Rb-85	38-Sr-86 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Y86 production)	MT22 ($\alpha,n+\alpha$) >>



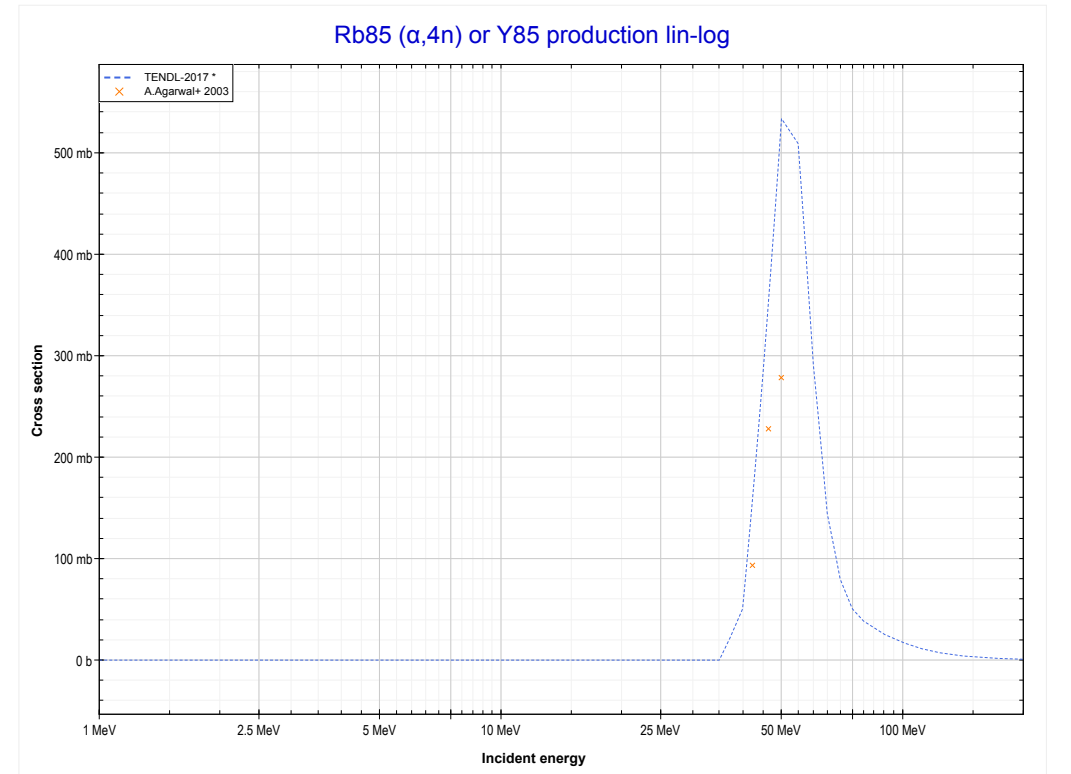
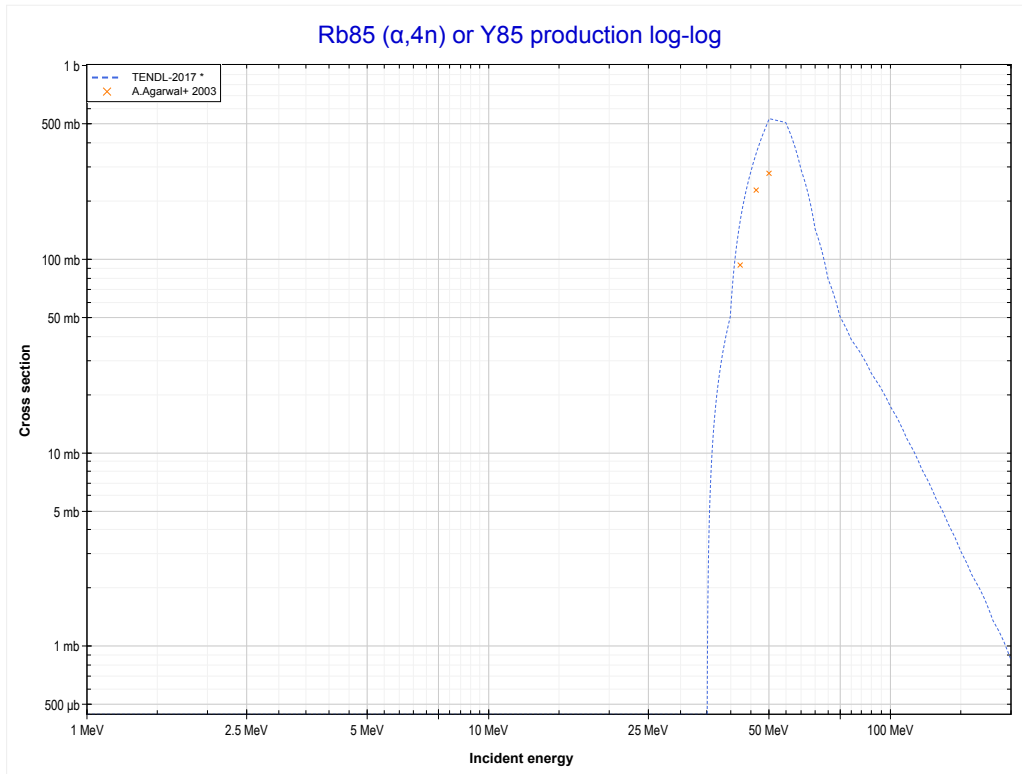
Reaction	Q-Value
Rb85($\alpha,3n$)Y86	-24673.37 keV

<< 35-Br-81	37-Rb-85	39-Y-89 >>
<< MT17 ($\alpha,3n$)	MT22 ($\alpha,n+\alpha$) or MT5 (Rb84 production)	MT37 ($\alpha,4n$) >>



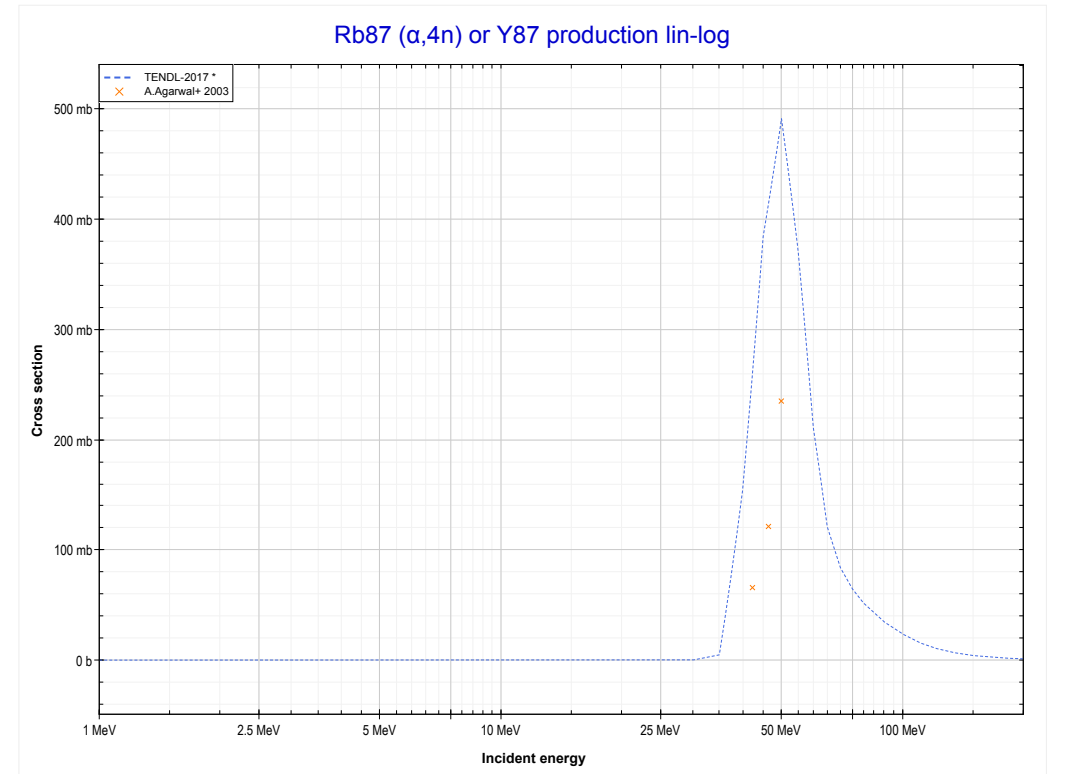
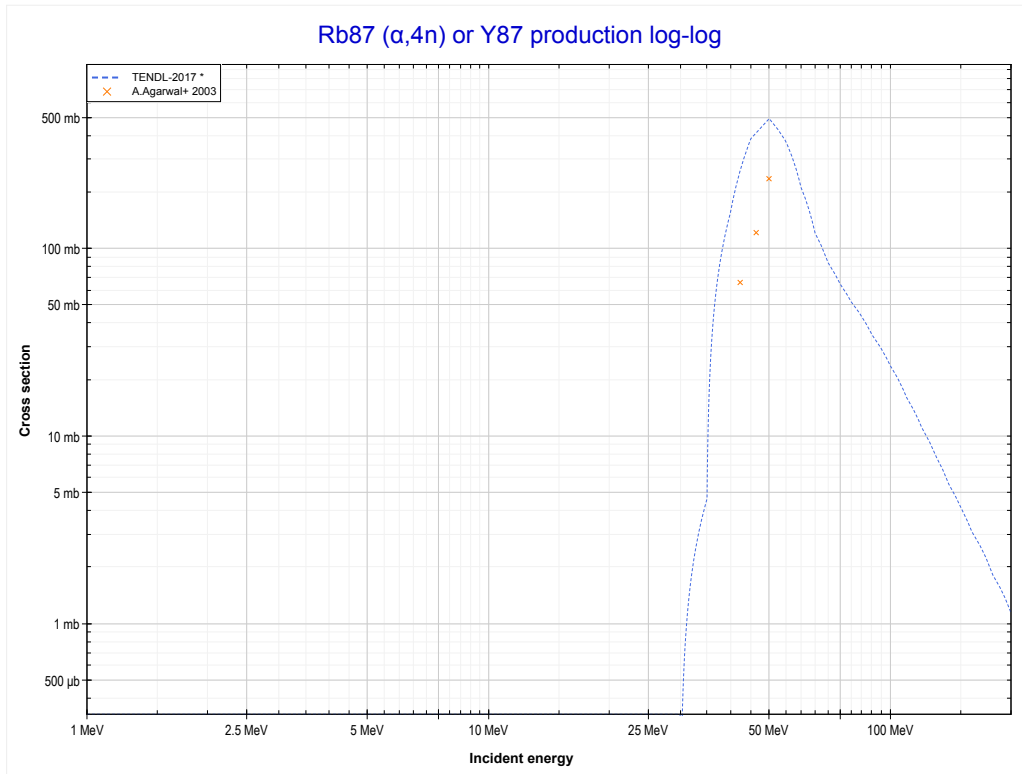
Reaction	Q-Value
Rb85($\alpha,n+\alpha$)Rb84	-10479.65 keV
Rb85($\alpha,d+t$)Rb84	-28068.94 keV
Rb85($\alpha,n+p+t$)Rb84	-30293.51 keV
Rb85($\alpha,2n+He3$)Rb84	-31057.26 keV
Rb85($\alpha,n+2d$)Rb84	-34326.17 keV
Rb85($\alpha,2n+p+d$)Rb84	-36550.74 keV
Rb85($\alpha,3n+2p$)Rb84	-38775.31 keV

<< 36-Kr-82	37-Rb-85	37-Rb-87 >>
<< MT22 ($\alpha, n+\alpha$)	MT37 ($\alpha, 4n$) or MT5 (Y85 production)	37-Rb-87 MT37 ($\alpha, 4n$) >>



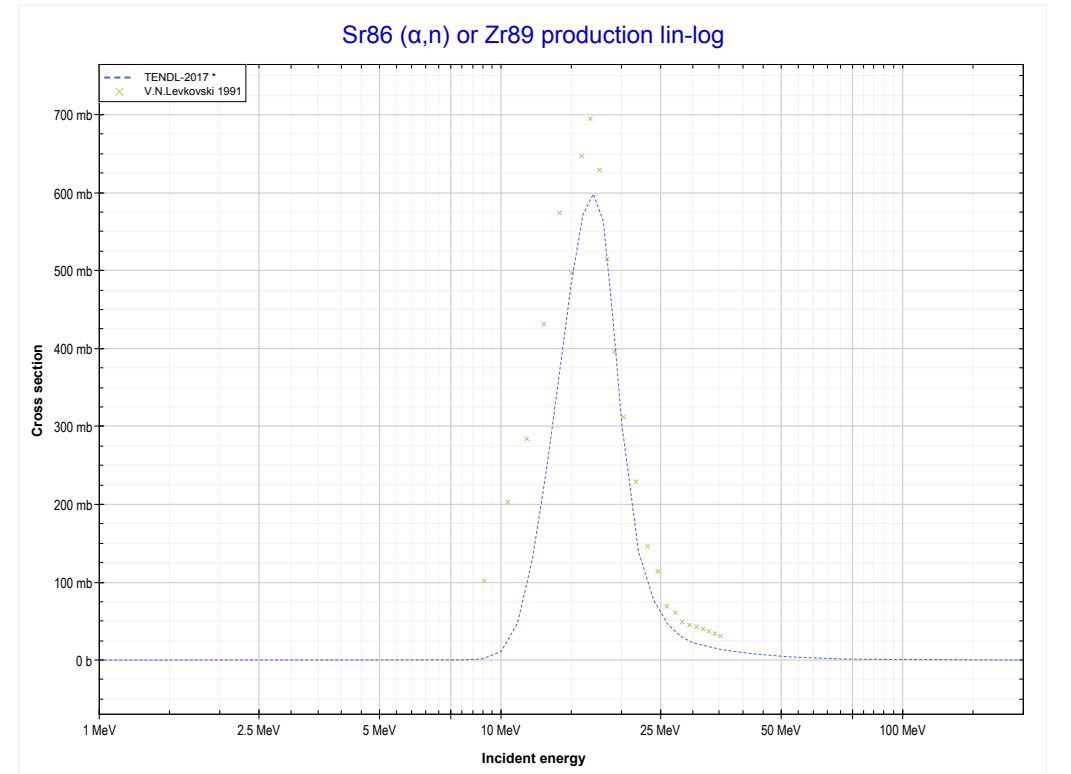
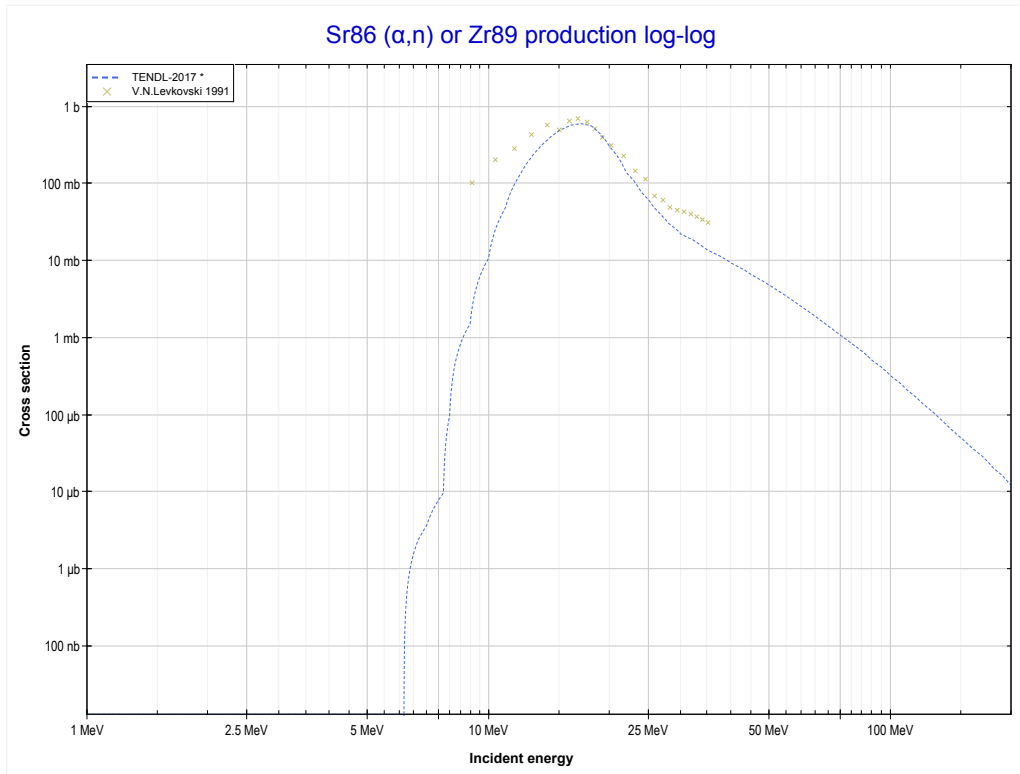
Reaction	Q-Value
Rb85($\alpha, 4n$)Y85	-34185.68 keV

<< 37-Rb-85	37-Rb-87	39-Y-89 >>
<< 37-Rb-85 MT37 ($\alpha,4n$)	MT37 ($\alpha,4n$) or MT5 (Y87 production)	38-Sr-86 MT4 (α,n) >>



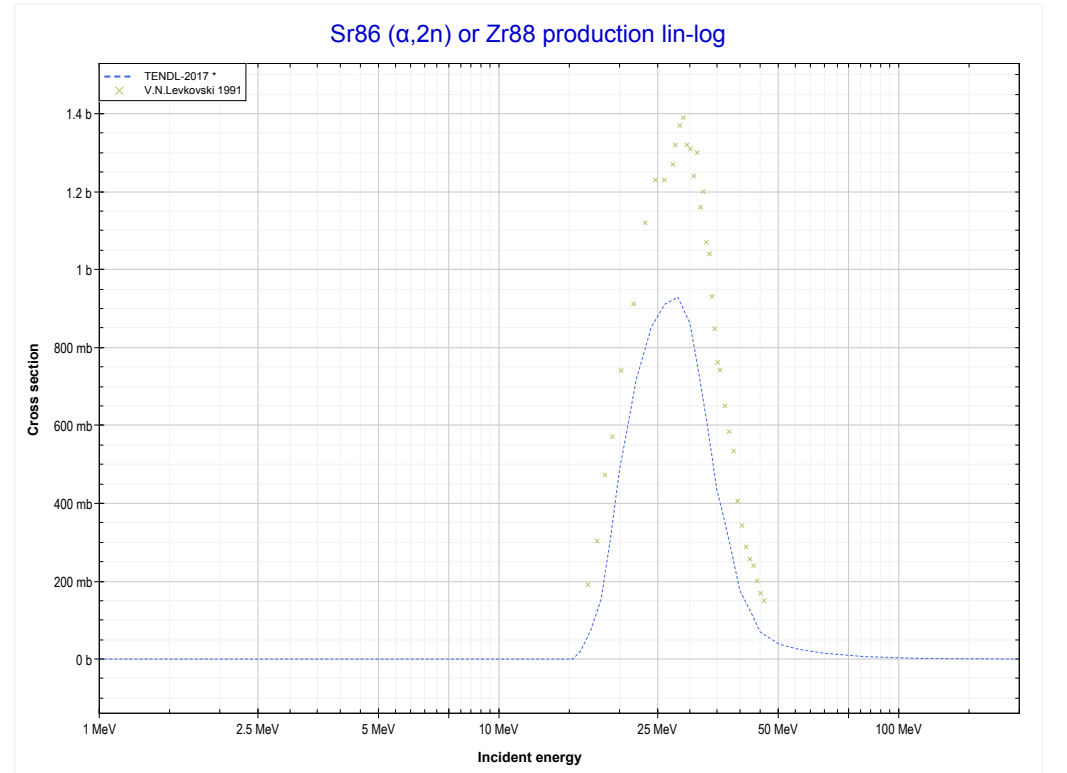
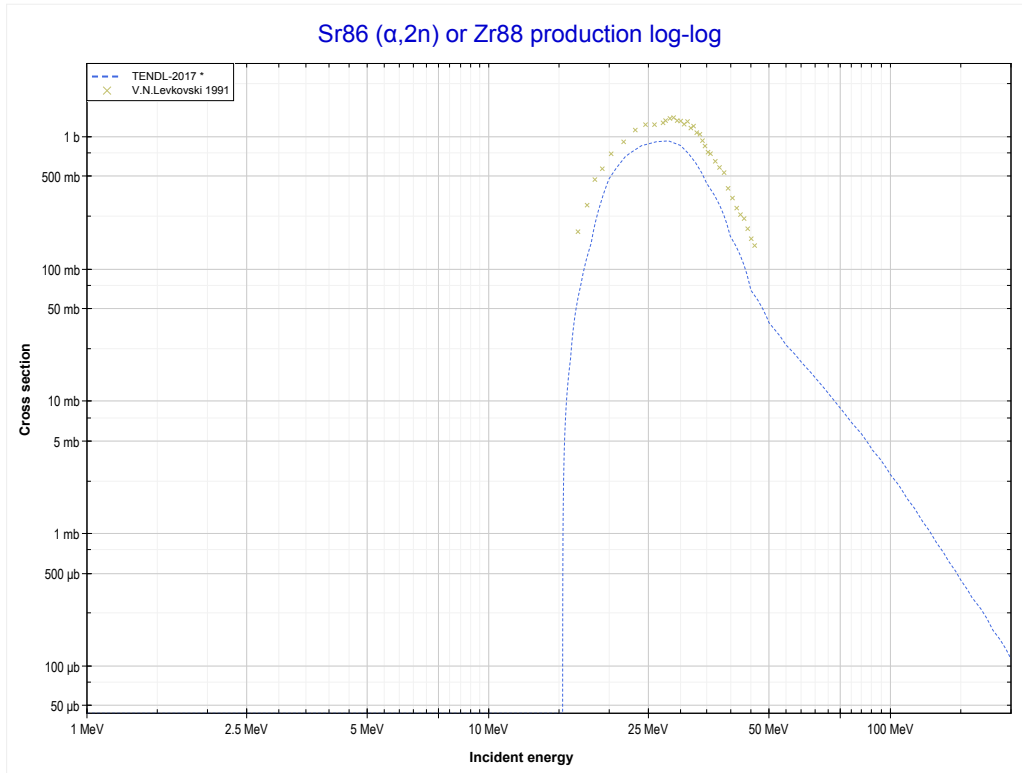
Reaction	Q-Value
Rb87($\alpha,4n$)Y87	-31439.84 keV

<< 37-Rb-85	38-Sr-86	39-Y-89 >>
<< 37-Rb-87 MT37 ($\alpha,4n$)	MT4 (α,n) or MT5 (Zr89 production)	MT16 ($\alpha,2n$) >>



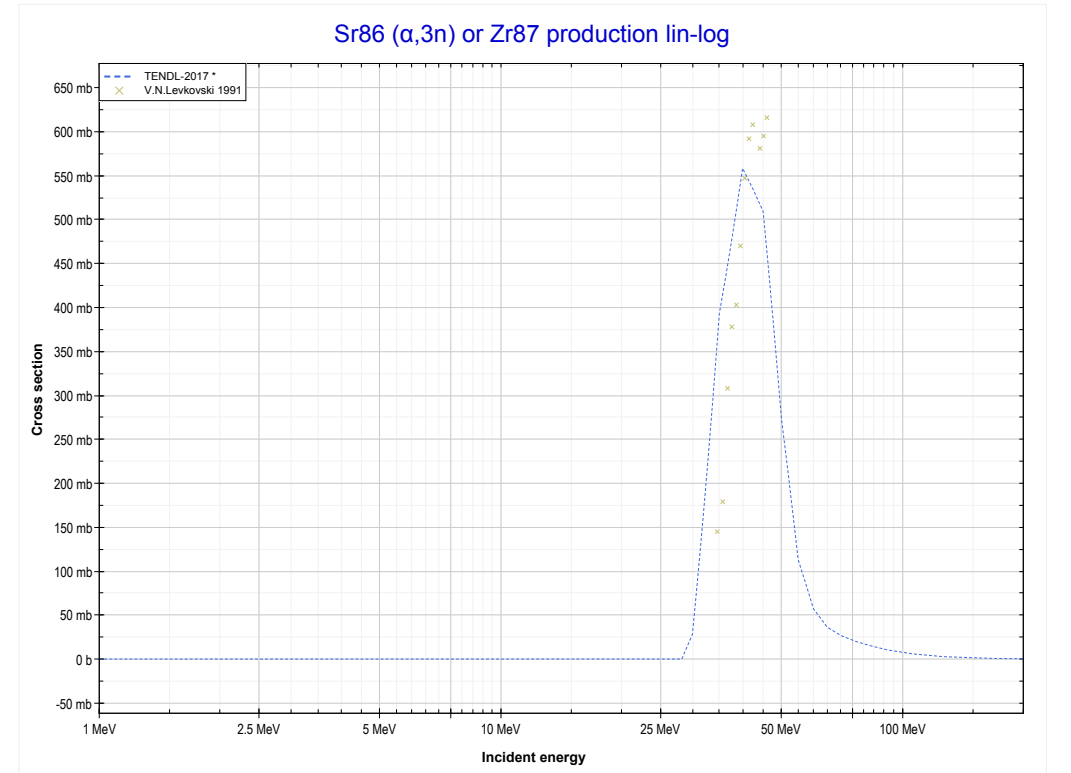
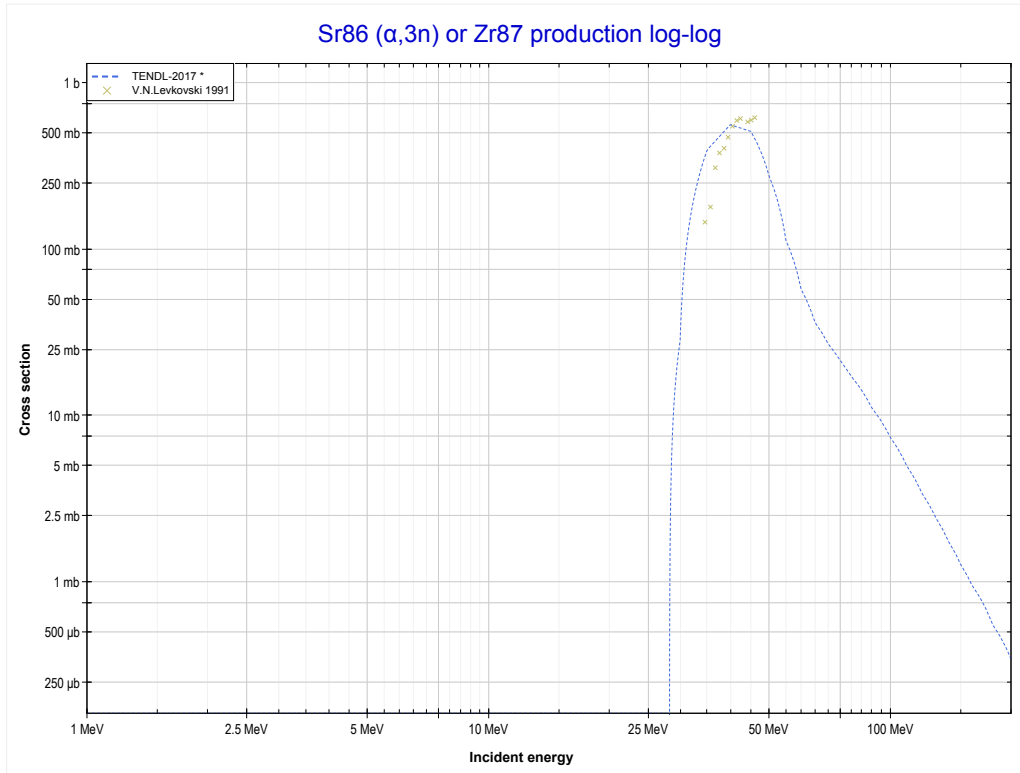
Reaction	Q-Value
Sr86(α,n)Zr89	-5293.60 keV

<< 37-Rb-85	38-Sr-86	38-Sr-87 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Zr88 production)	MT17 ($\alpha, 3n$) >>



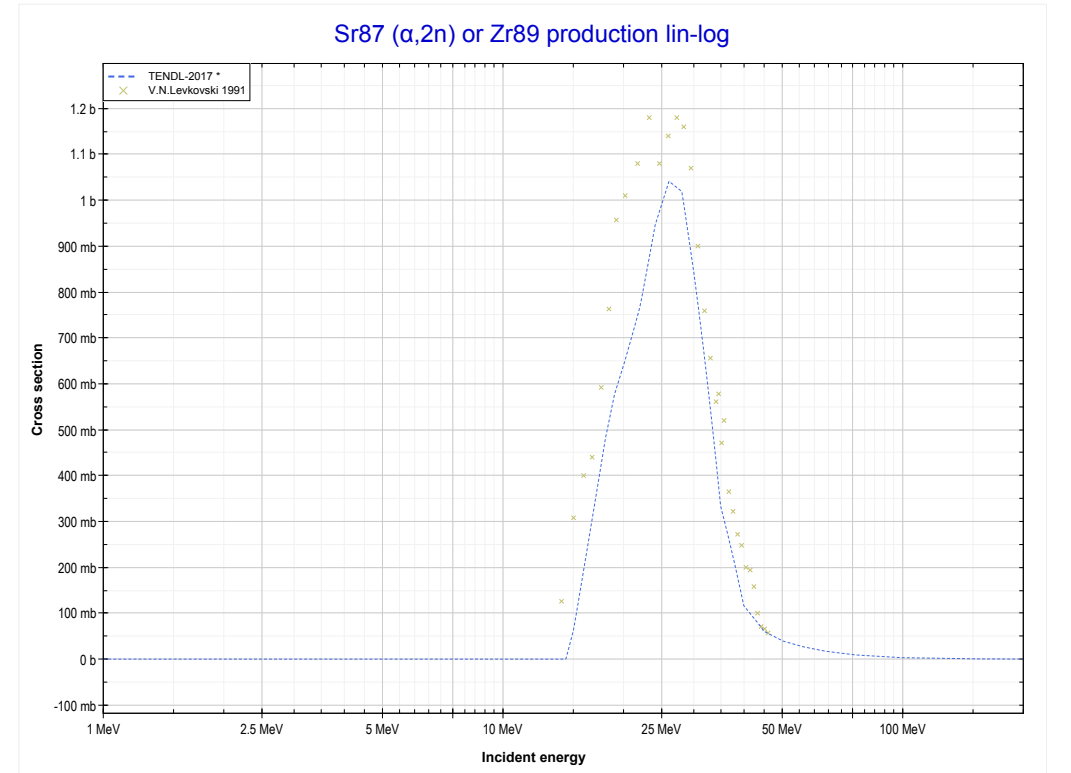
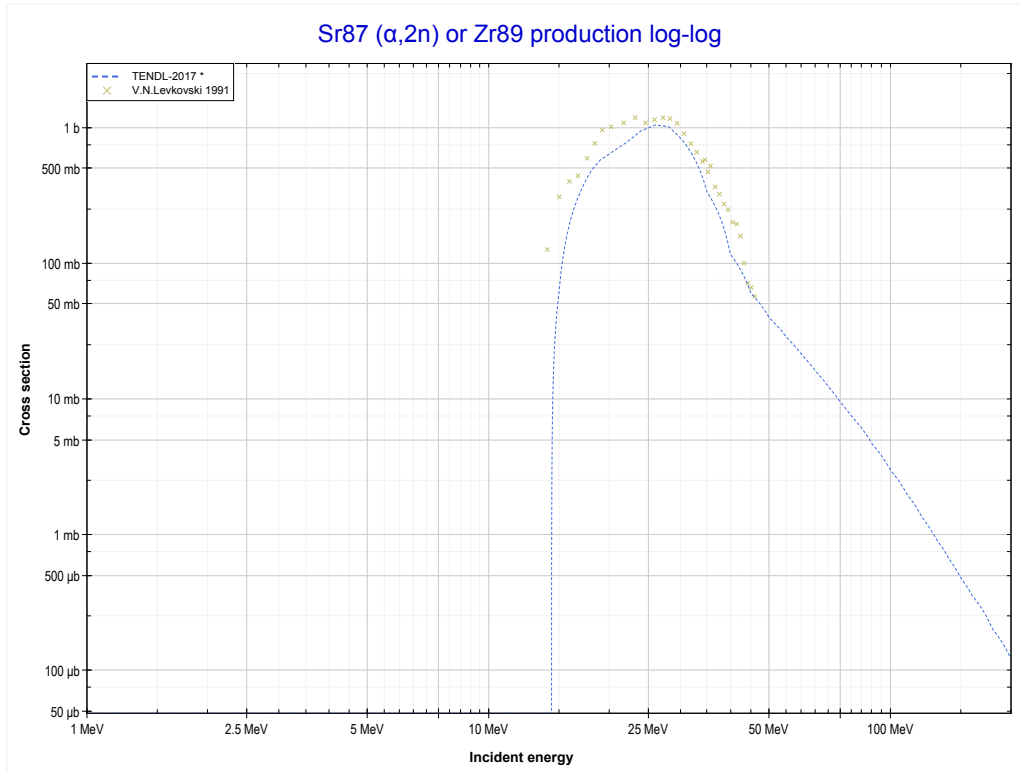
Reaction	Q-Value
Sr86($\alpha, 2n$)Zr88	-14612.92 keV

<< 37-Rb-85	38-Sr-86	38-Sr-87 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Zr87 production)	38-Sr-87 MT16 ($\alpha,2n$) >>



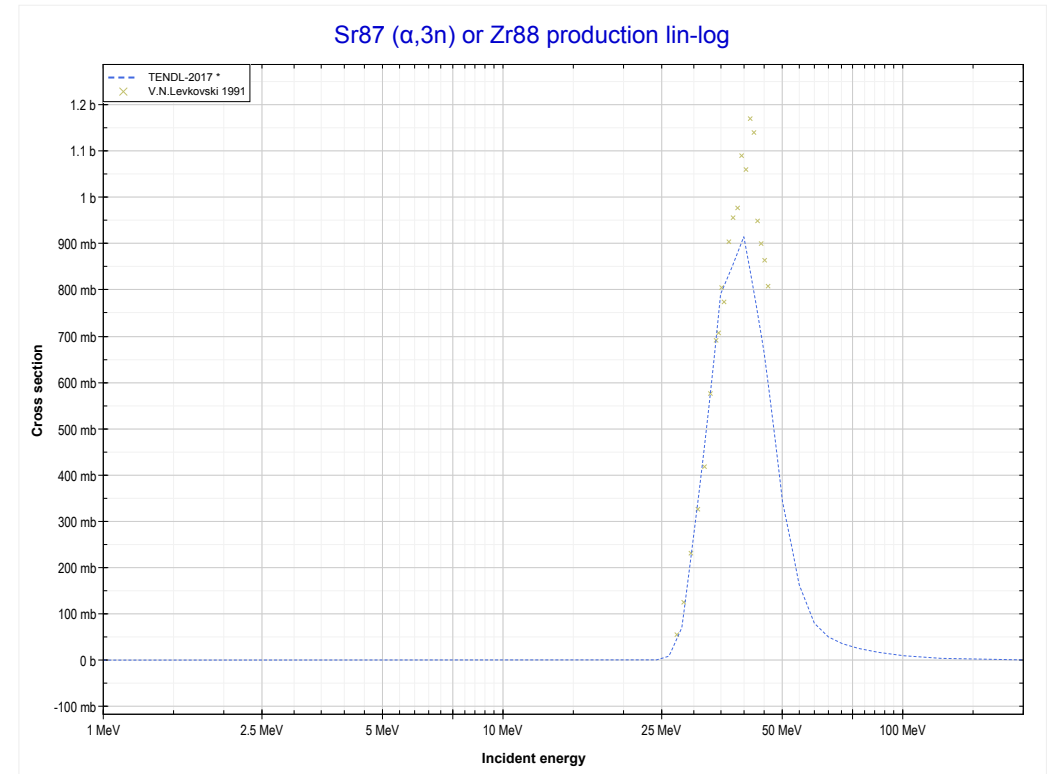
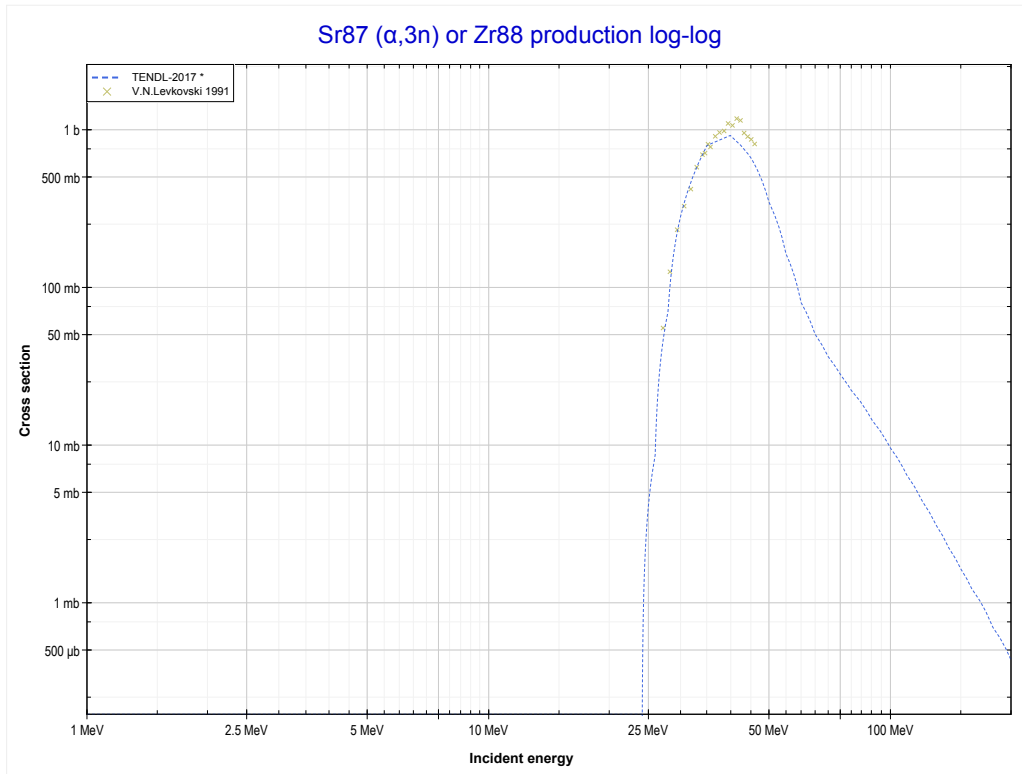
Reaction	Q-Value
Sr86($\alpha,3n$)Zr87	-26965.24 keV

<< 38-Sr-86	38-Sr-87	41-Nb-93 >>
<< 38-Sr-86 MT17 ($\alpha,3n$)	MT16 ($\alpha,2n$) or MT5 (Zr89 production)	MT17 ($\alpha,3n$) >>



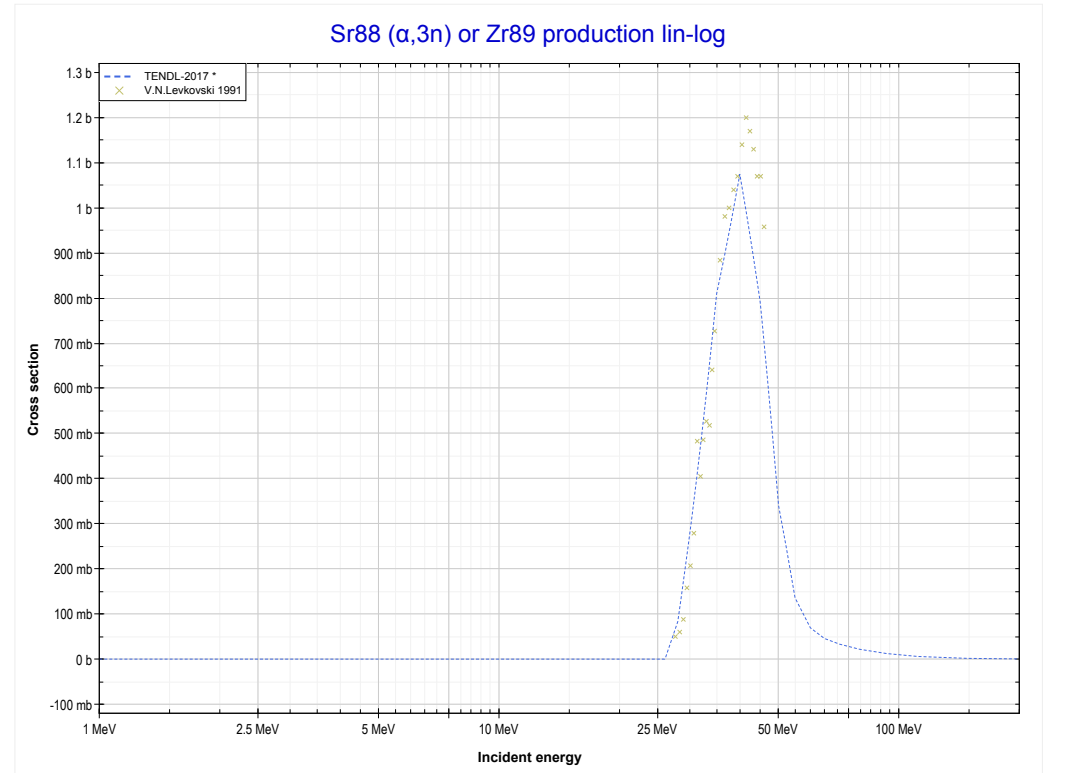
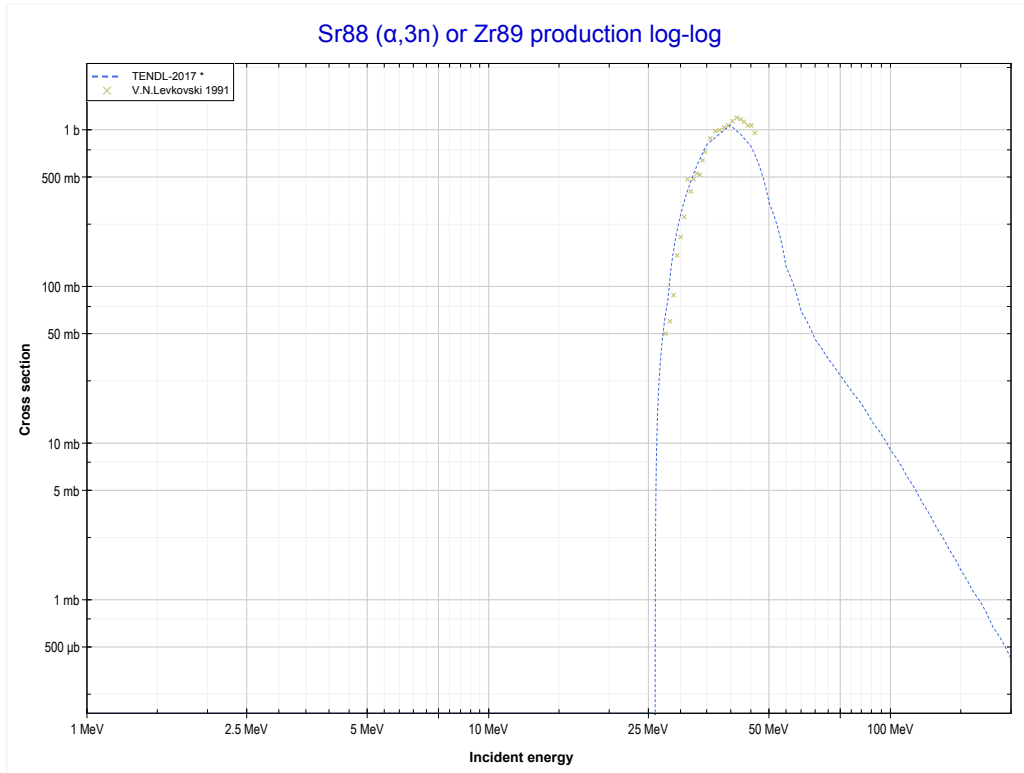
Reaction	Q-Value
Sr87($\alpha,2n$)Zr89	-13721.72 keV

<< 38-Sr-86	38-Sr-87	38-Sr-88 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Zr88 production)	38-Sr-88 MT17 ($\alpha,3n$) >>



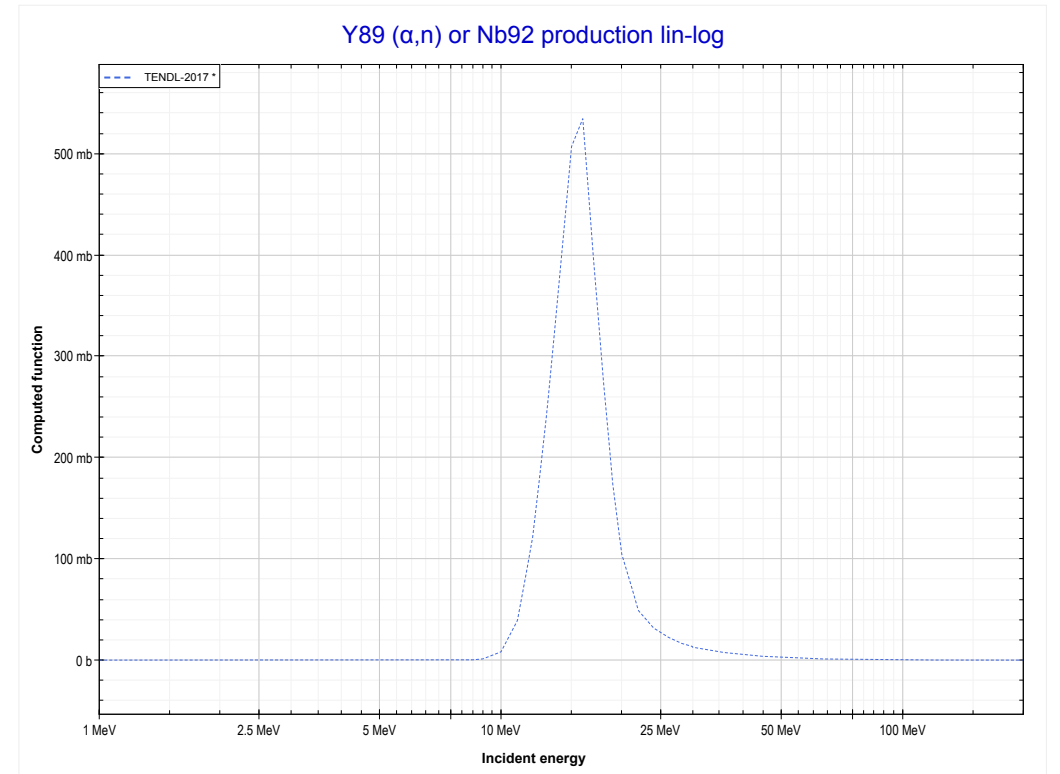
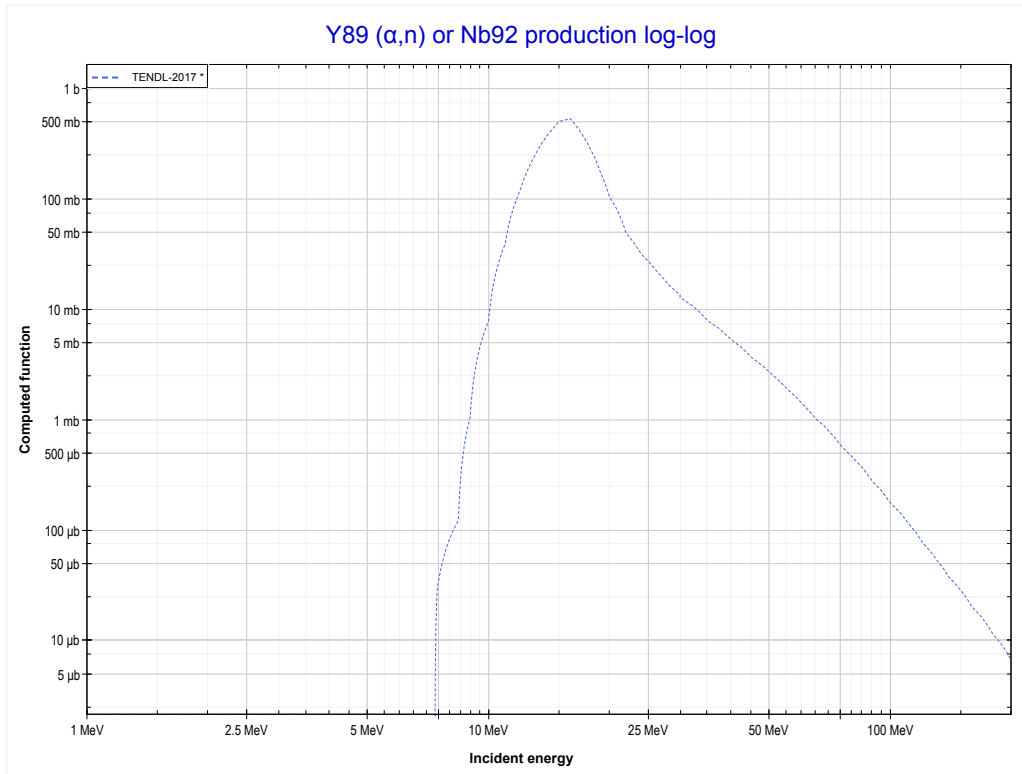
Reaction	Q-Value
Sr87($\alpha,3n$)Zr88	-23041.04 keV

<< 38-Sr-87	38-Sr-88	39-Y-89 >>
<< 38-Sr-87 MT17 ($\alpha,3n$)	MT17 ($\alpha,3n$) or MT5 (Zr89 production)	39-Y-89 MT4 (α,n) >>



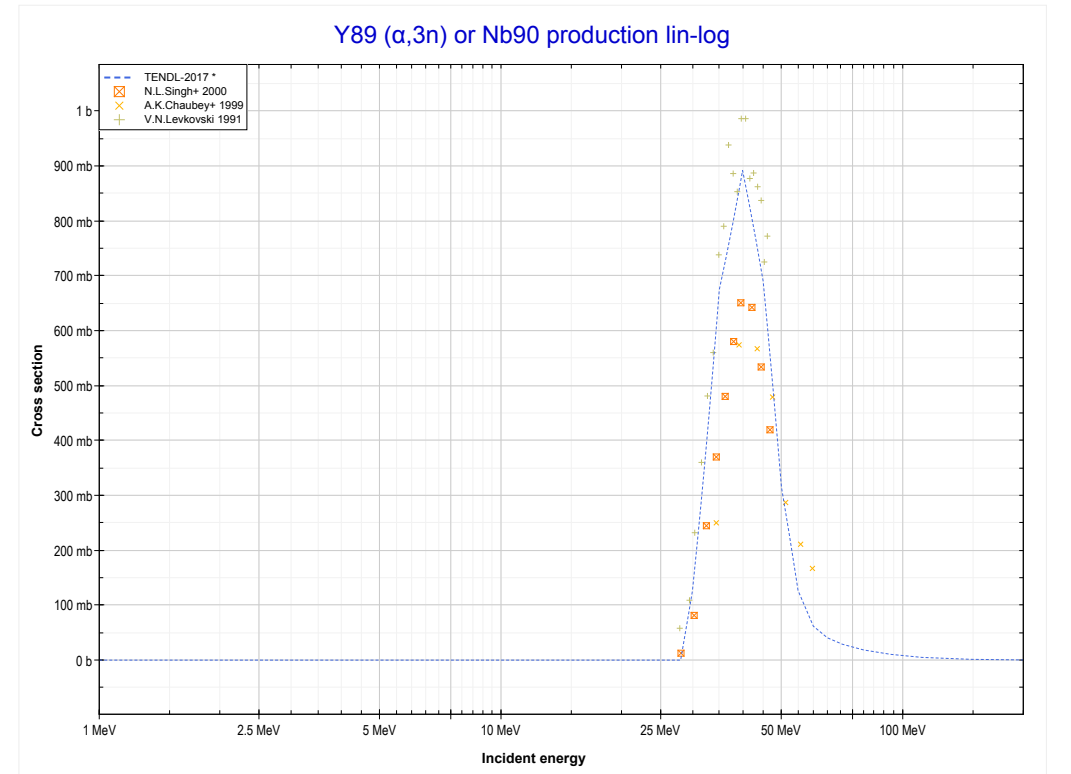
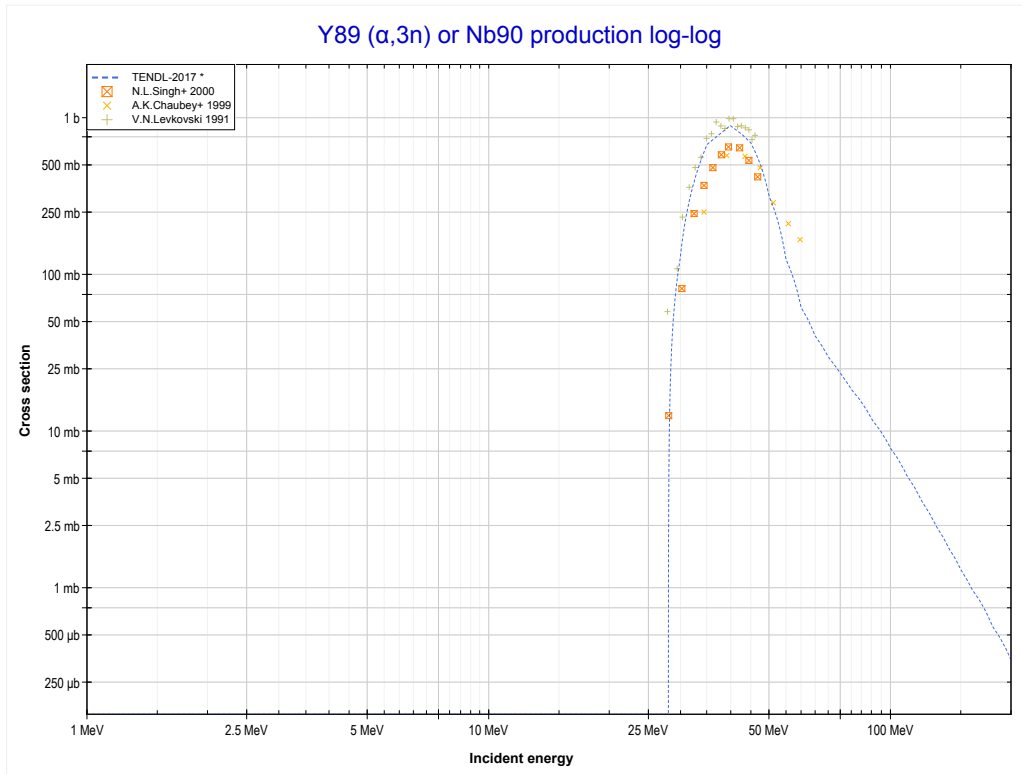
Reaction	Q-Value
Sr88($\alpha,3n$)Zr89	-24834.44 keV

<< 38-Sr-86	39-Y-89	40-Zr-96 >>
<< 38-Sr-88 MT17 ($\alpha,3n$)	MT4 (α,n) or MT5 (Nb92 production)	MT17 ($\alpha,3n$) >>



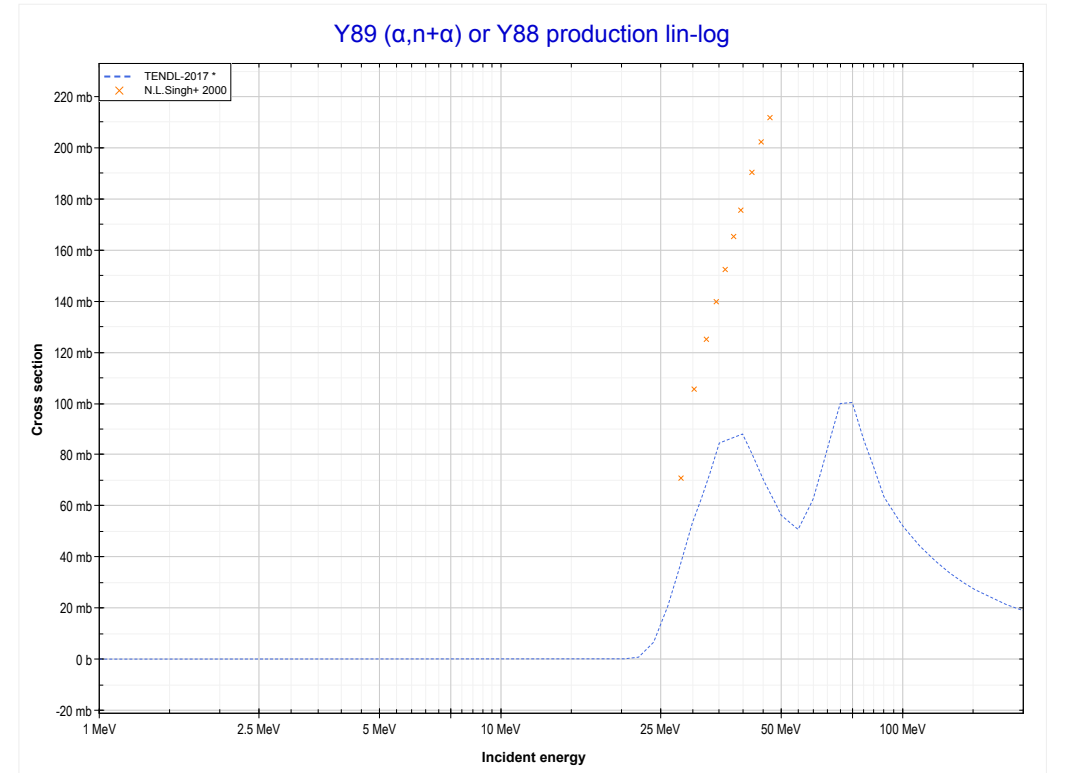
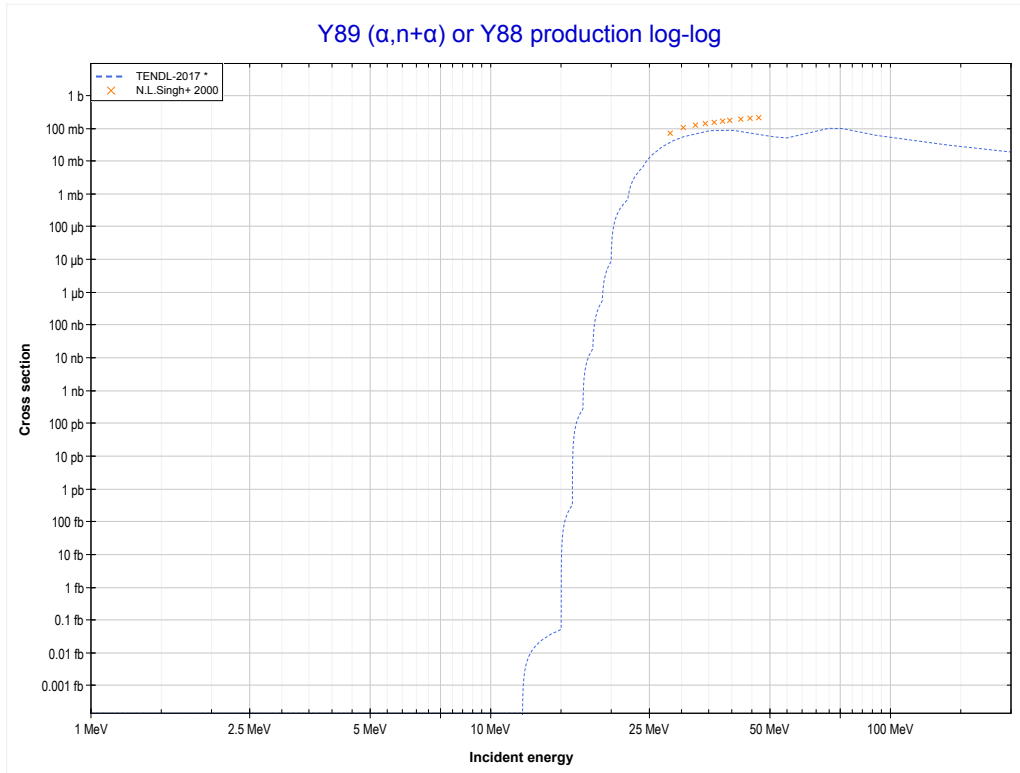
Reaction	Q-Value
Y89(α,n)Nb92	-6901.90 keV

<< 38-Sr-88	39-Y-89	41-Nb-93 >>
<< MT4 (α, n)	MT17 ($\alpha, 3n$) or MT5 (Nb90 production)	MT22 ($\alpha, n+\alpha$) >>



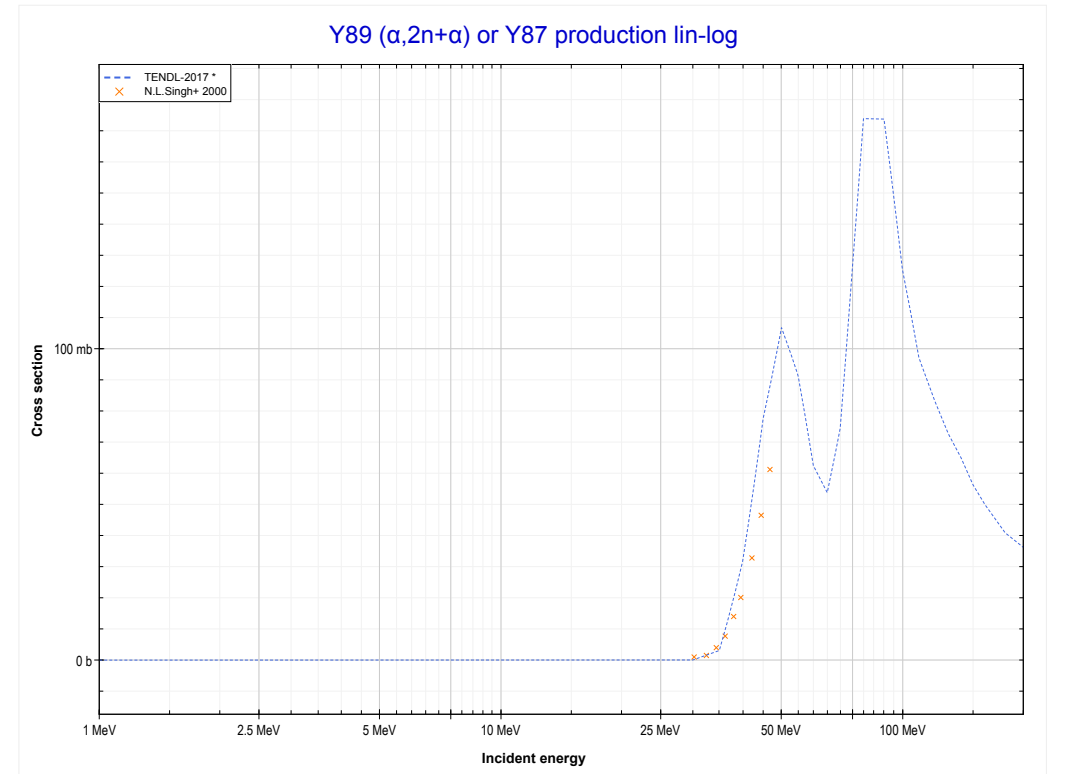
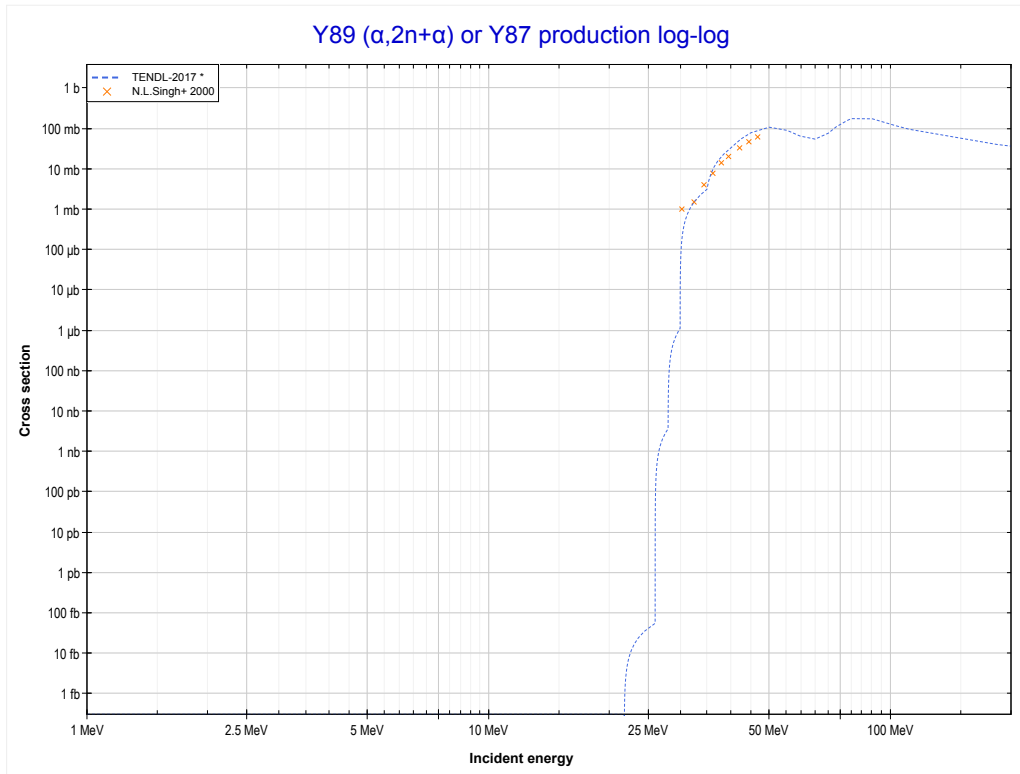
Reaction	Q-Value
Y89($\alpha, 3n$)Nb90	-26836.24 keV

<< 37-Rb-85	39-Y-89	40-Zr-96 >>
<< MT17 ($\alpha,3n$)	MT22 ($\alpha,n+\alpha$) or MT5 (Y88 production)	MT24 ($\alpha,2n+\alpha$) >>



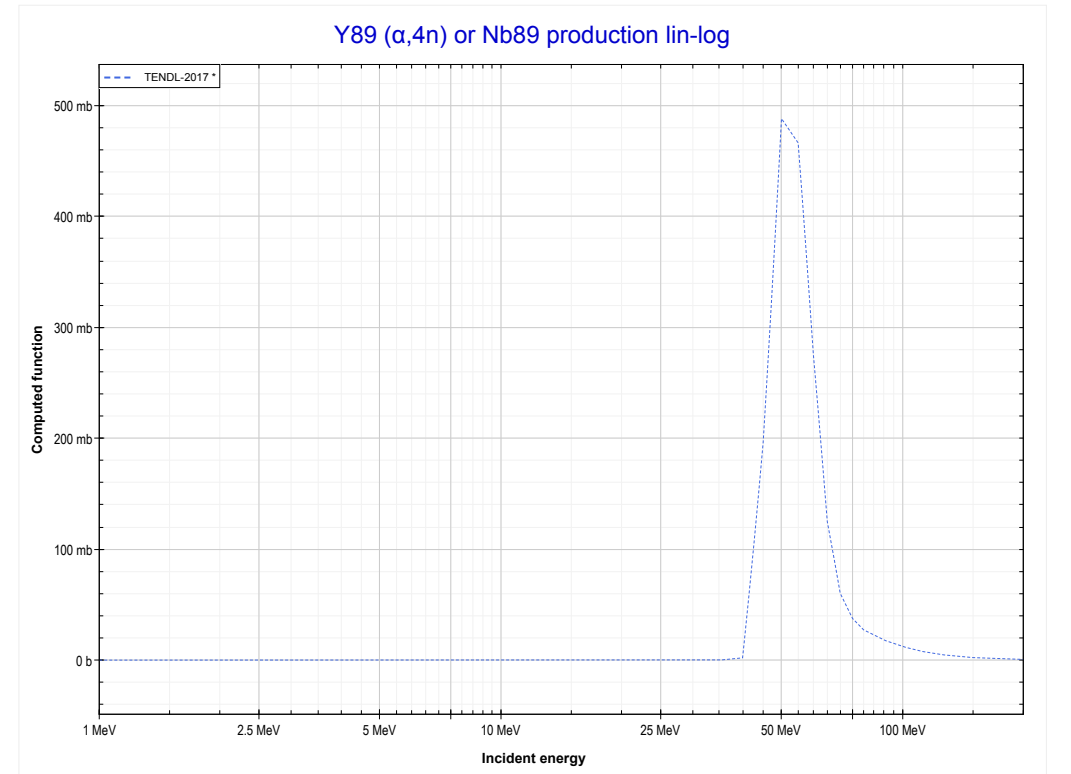
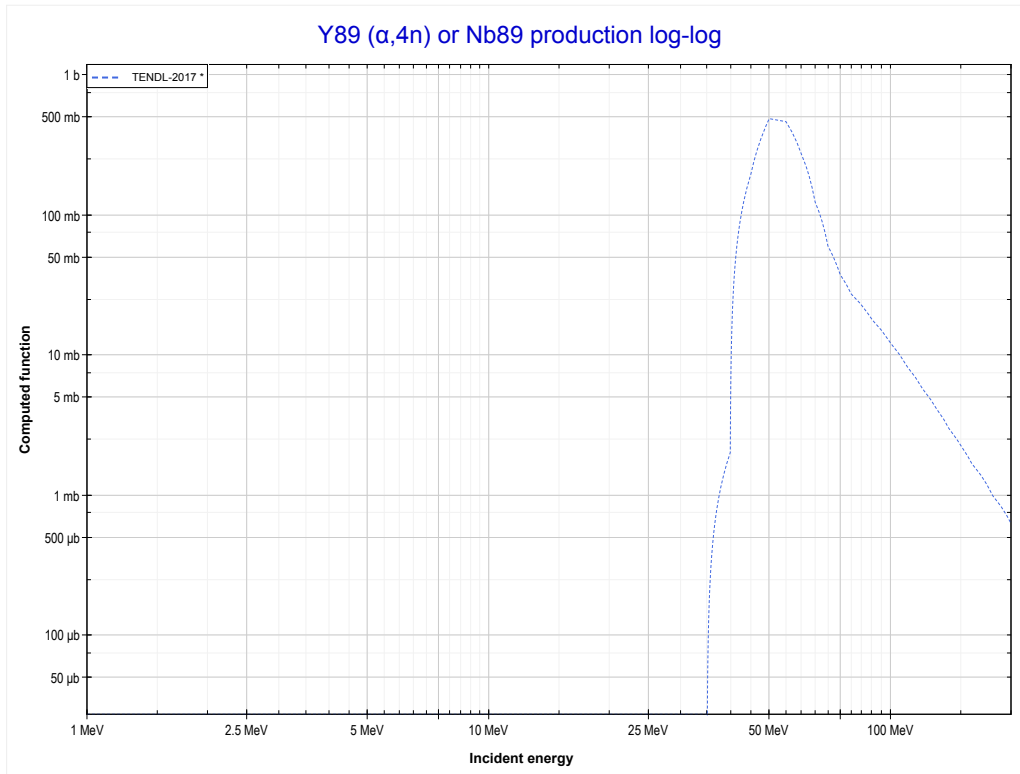
Reaction	Q-Value
Y89($\alpha,n+\alpha$)Y88	-11481.72 keV
Y89($\alpha,d+t$)Y88	-29071.01 keV
Y89($\alpha,n+p+t$)Y88	-31295.58 keV
Y89($\alpha,2n+He3$)Y88	-32059.33 keV
Y89($\alpha,n+2d$)Y88	-35328.24 keV
Y89($\alpha,2n+p+d$)Y88	-37552.81 keV
Y89($\alpha,3n+2p$)Y88	-39777.38 keV

<< 30-Zn-64	39-Y-89	45-Rh-103 >>
<< MT22 ($\alpha, n+\alpha$)	MT24 ($\alpha, 2n+\alpha$) or MT5 (Y87 production)	MT37 ($\alpha, 4n$) >>



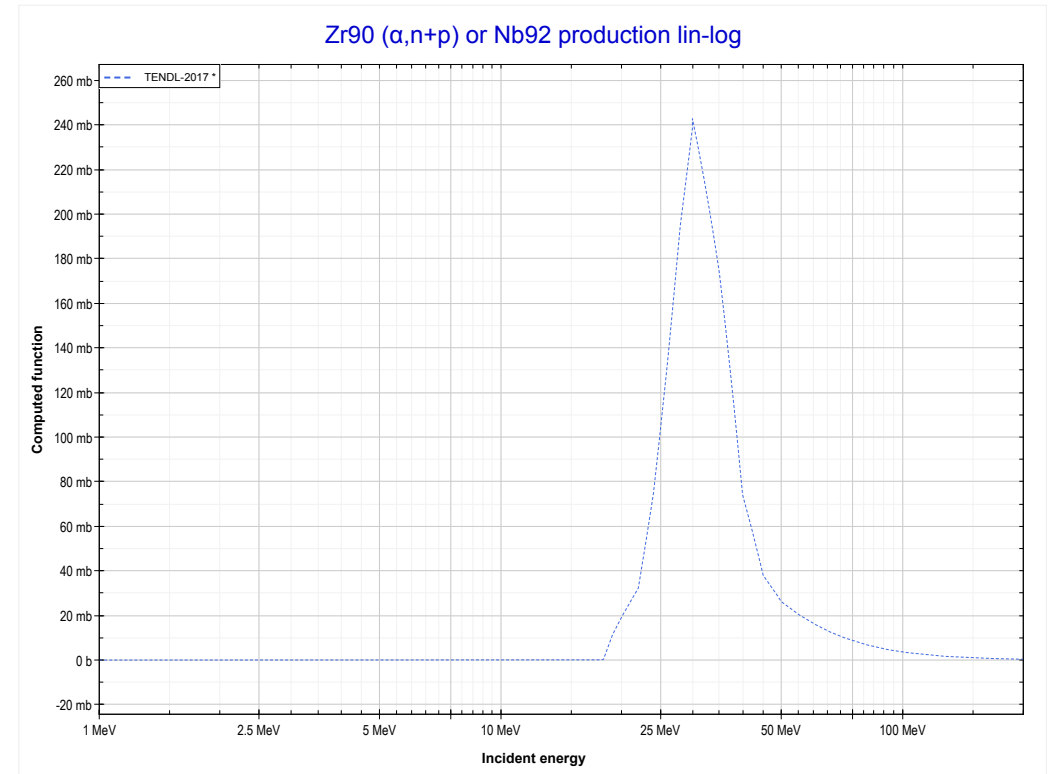
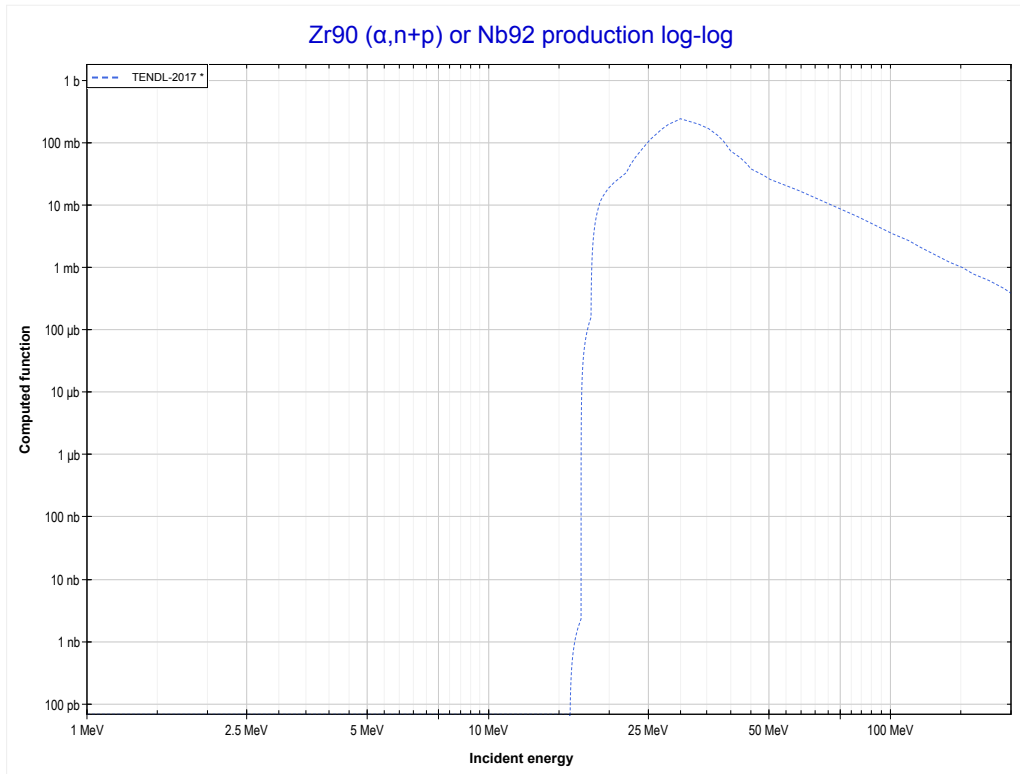
Reaction	Q-Value
Y89($\alpha, 2n+\alpha$)Y87	-20833.53 keV
Y89($\alpha, 2t$)Y87	-32165.60 keV
Y89($\alpha, n+d+t$)Y87	-38422.83 keV
Y89($\alpha, 2n+p+t$)Y87	-40647.40 keV
Y89($\alpha, 3n+He3$)Y87	-41411.15 keV
Y89($\alpha, 2n+2d$)Y87	-44680.06 keV
Y89($\alpha, 3n+p+d$)Y87	-46904.63 keV
Y89($\alpha, 4n+2p$)Y87	-49129.19 keV

<< 37-Rb-87	39-Y-89	40-Zr-90 >>
<< MT24 ($\alpha,2n+\alpha$)	MT37 ($\alpha,4n$) or MT5 (Nb89 production)	40-Zr-90 MT28 ($\alpha,n+p$) >>



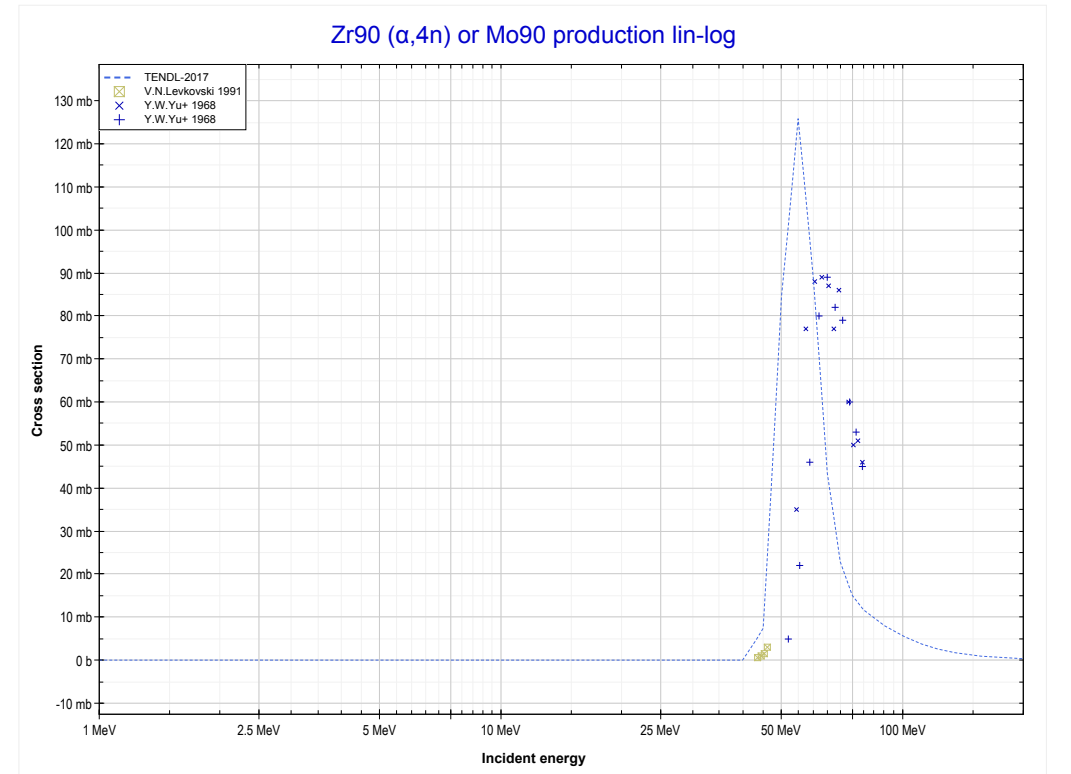
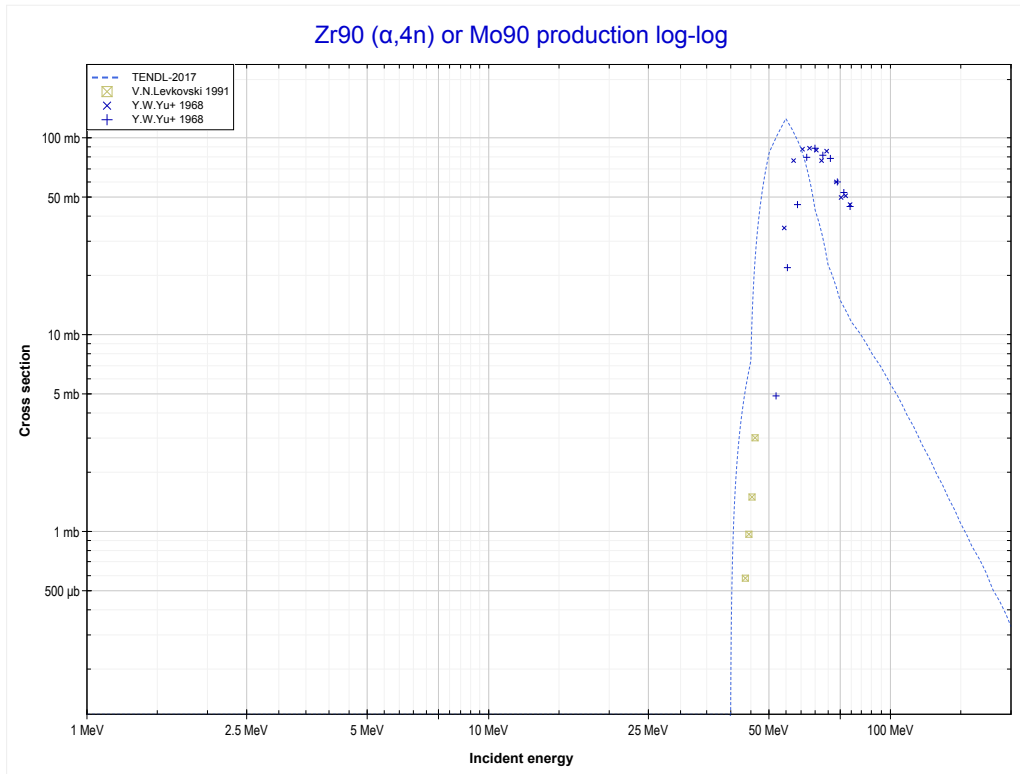
Reaction	Q-Value
Y89($\alpha,4n$)Nb89	-36944.55 keV

<< 32-Ge-70	40-Zr-90	40-Zr-94 >>
<< 39-Y-89 MT37 ($\alpha,4n$)	MT28 ($\alpha,n+p$) or MT5 (Nb92 production)	MT37 ($\alpha,4n$) >>



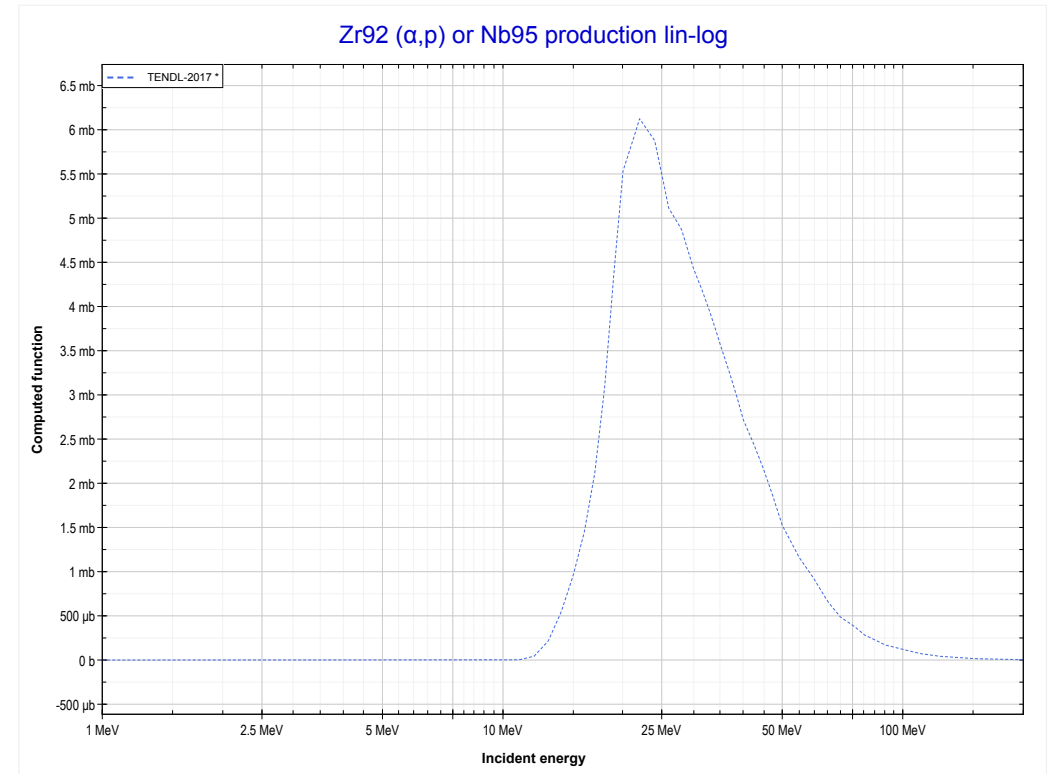
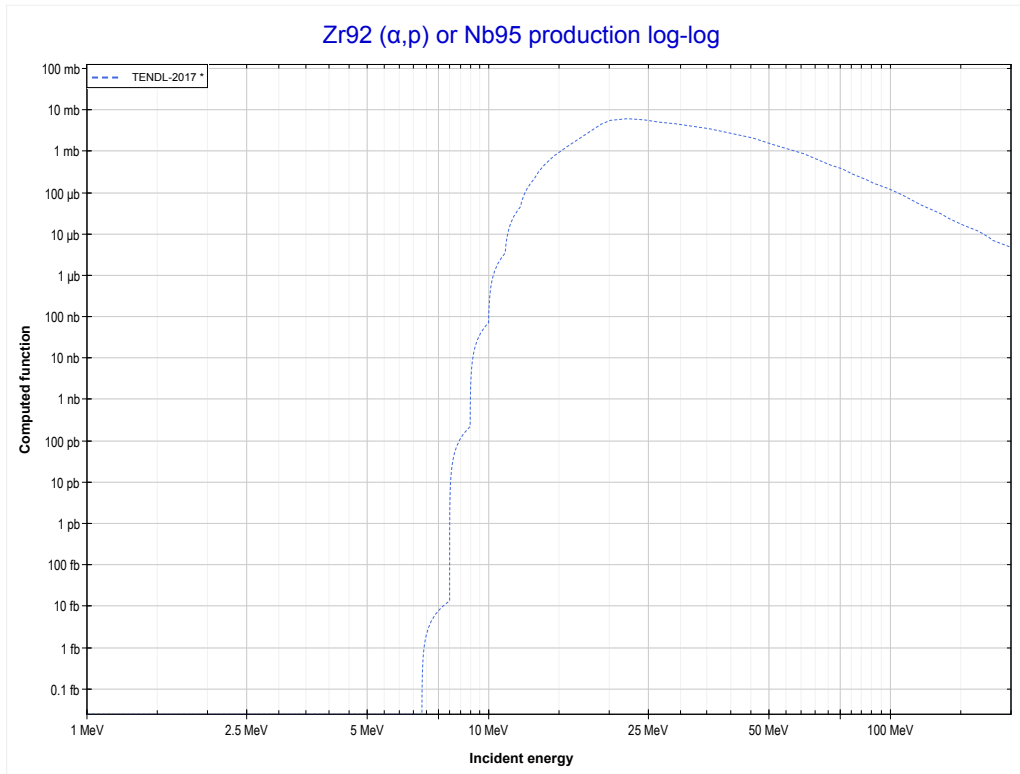
Reaction	Q-Value
Zr90(α,d)Nb92	-13030.71 keV
Zr90($\alpha,n+p$)Nb92	-15255.27 keV

<< 39-Y-89	40-Zr-90	41-Nb-93 >>
<< MT28 ($\alpha, n+p$)	MT37 ($\alpha, 4n$) or MT5 (Mo90 production)	40-Zr-92 MT103 (α, p) >>



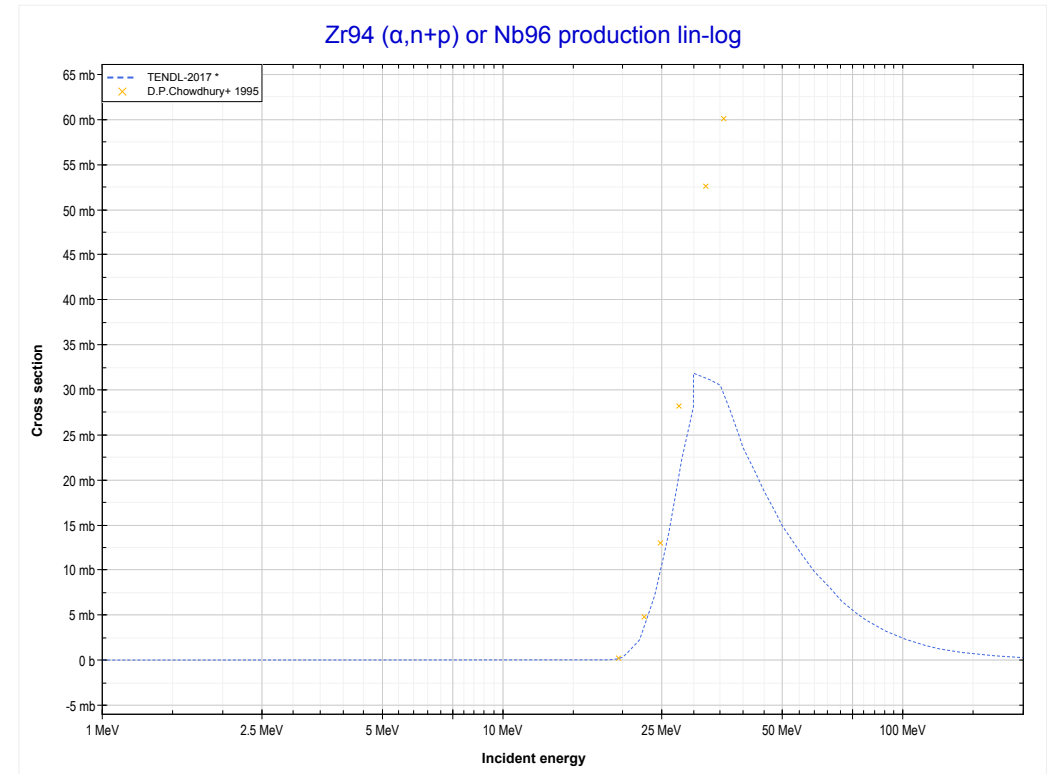
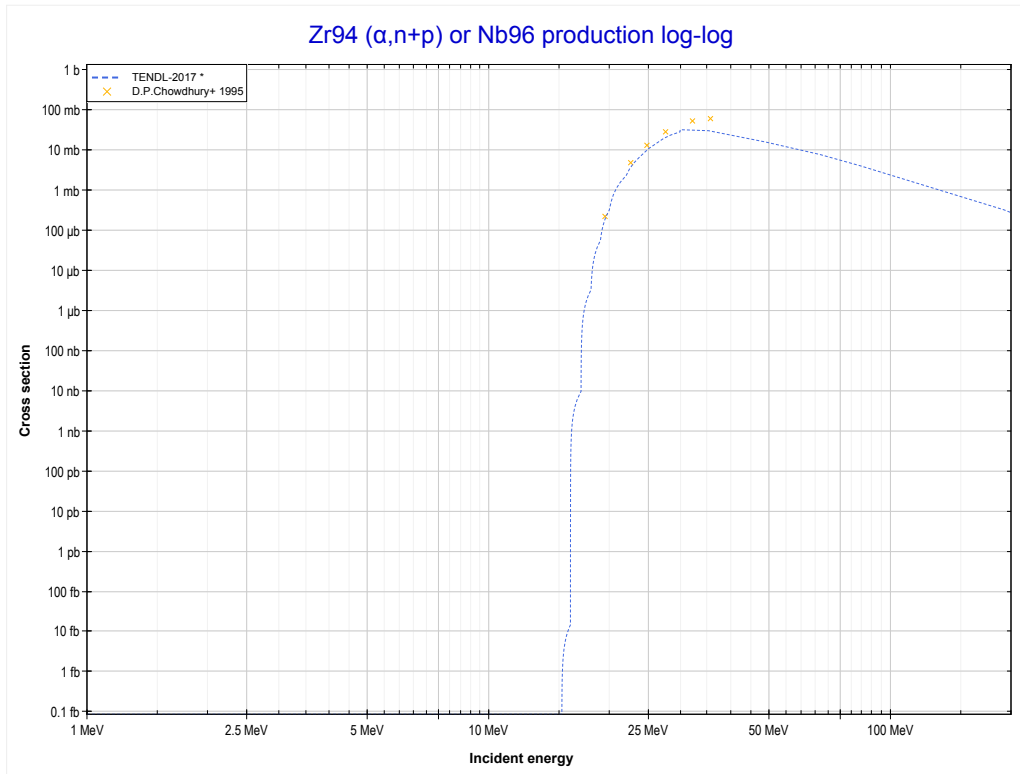
Reaction	Q-Value
Zr90($\alpha, 4n$)Mo90	-38460.95 keV

<< 32-Ge-74	40-Zr-92	40-Zr-94 >>
<< 40-Zr-90 MT37 ($\alpha,4n$)	MT103 (α,p) or MT5 (Nb95 production)	40-Zr-94 MT28 ($\alpha,n+p$) >>



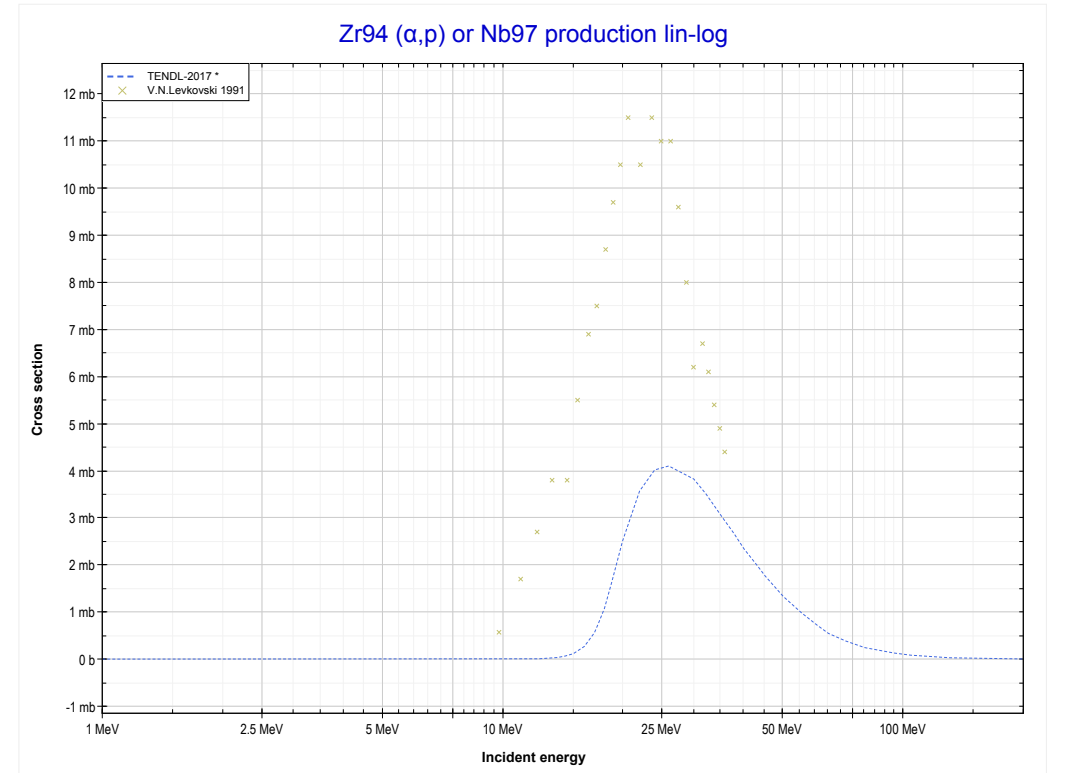
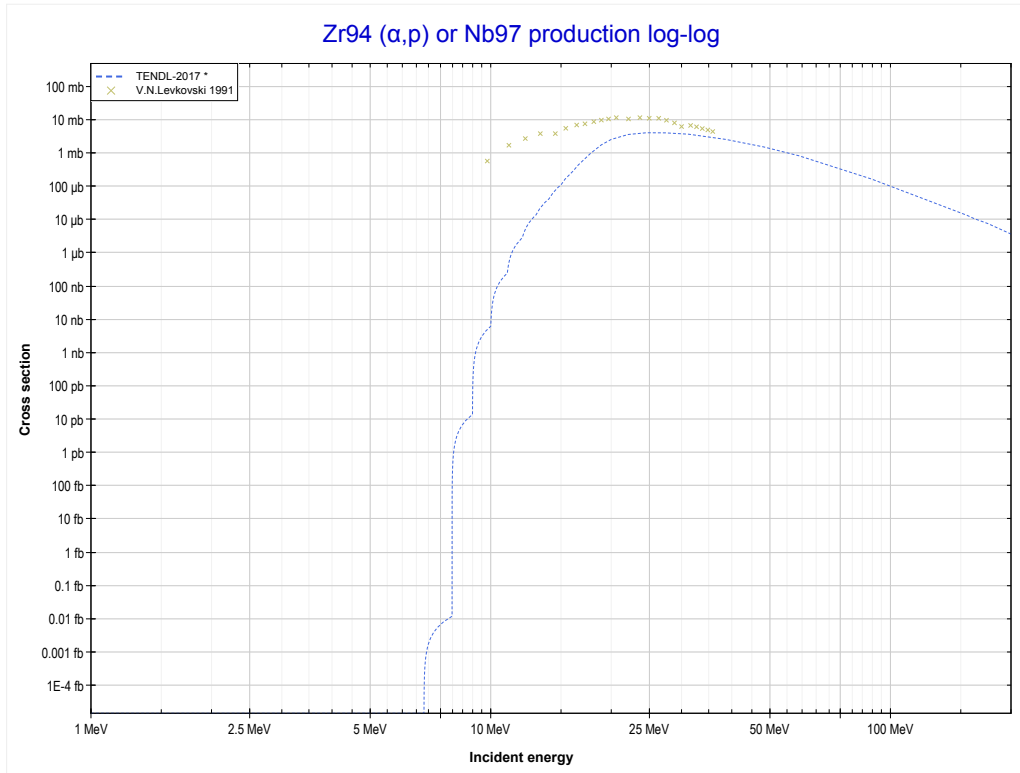
Reaction	Q-Value
Zr92(α,p)Nb95	-6538.55 keV

<< 40-Zr-90	40-Zr-94	42-Mo-92 >>
<< 40-Zr-92 MT103 (α,p)	MT28 (α,n+p) or MT5 (Nb96 production)	MT103 (α,p) >>



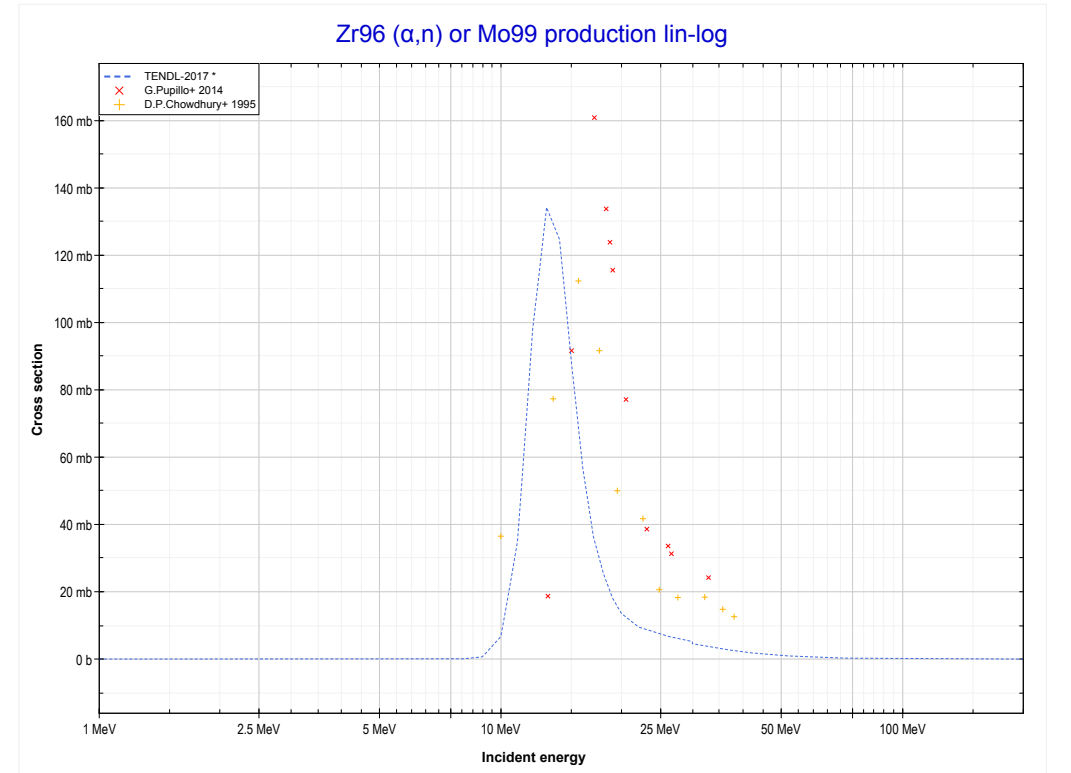
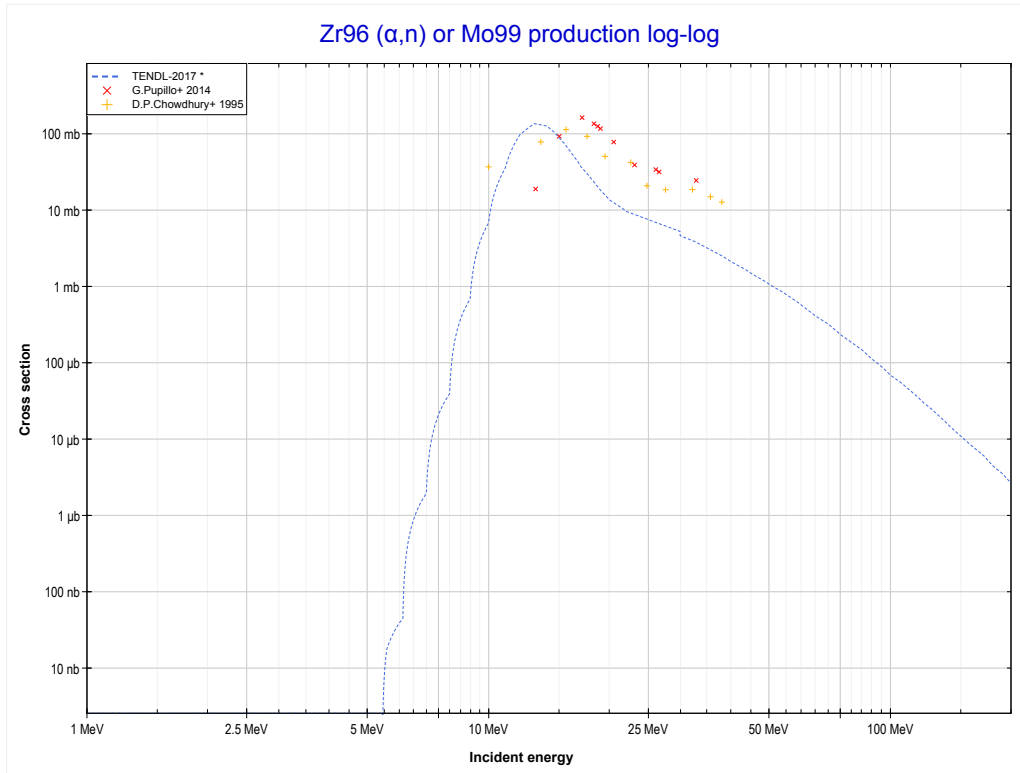
Reaction	Q-Value
Zr94(α,d)Nb96	-12374.71 keV
Zr94(α,n+p)Nb96	-14599.27 keV

<< 40-Zr-92	40-Zr-94	42-Mo-92 >>
<< MT28 ($\alpha, n+p$)	MT103 (α, p) or MT5 (Nb97 production)	40-Zr-96 MT4 (α, n) >>



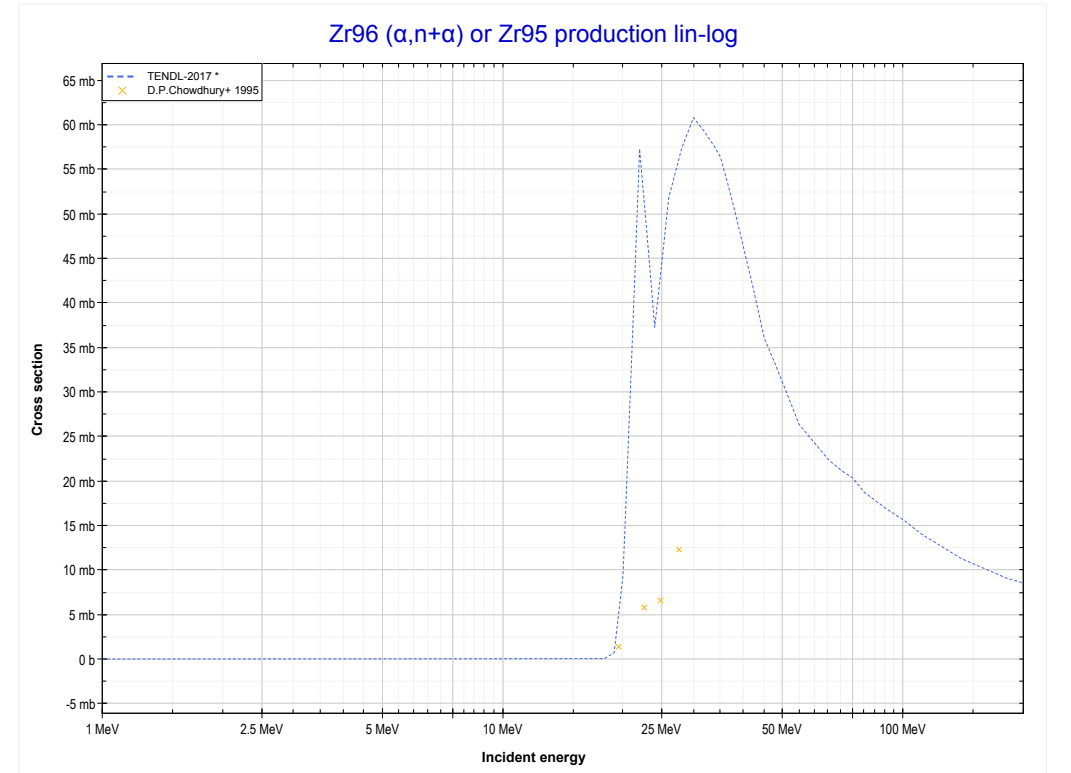
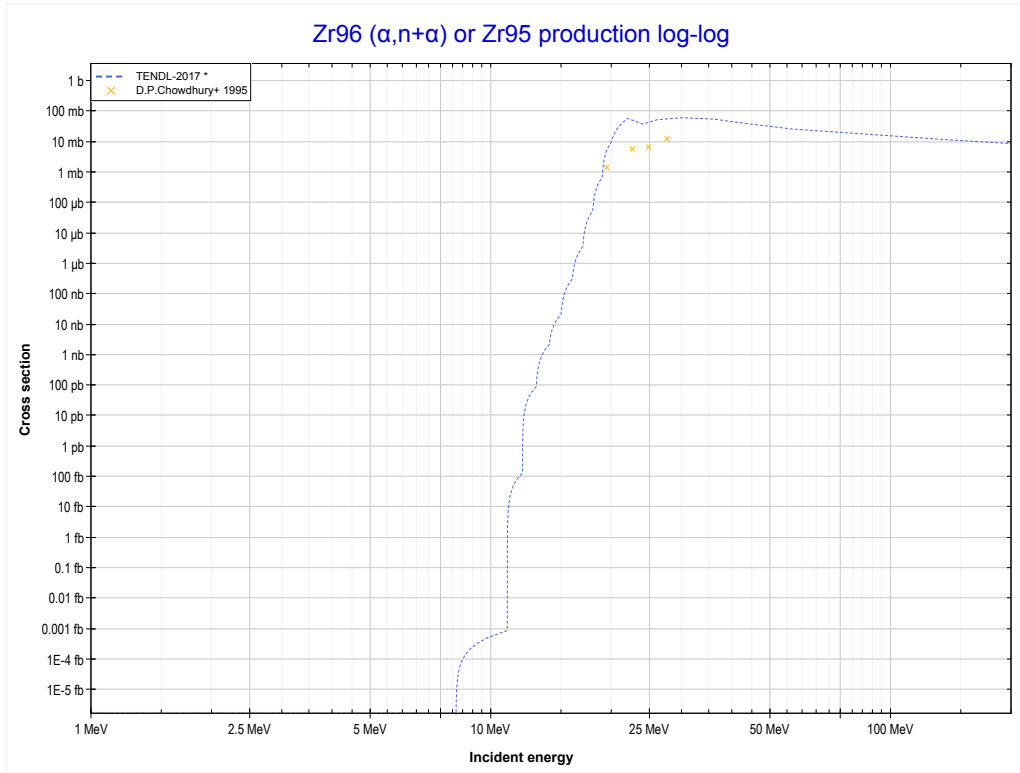
Reaction	Q-Value
Zr94(α, p)Nb97	-6526.85 keV

<< 39-Y-89	40-Zr-96	41-Nb-93 >>
<< 40-Zr-94 MT103 (α,p)	MT4 (α,n) or MT5 (Mo99 production)	MT22 (α,n+α) >>



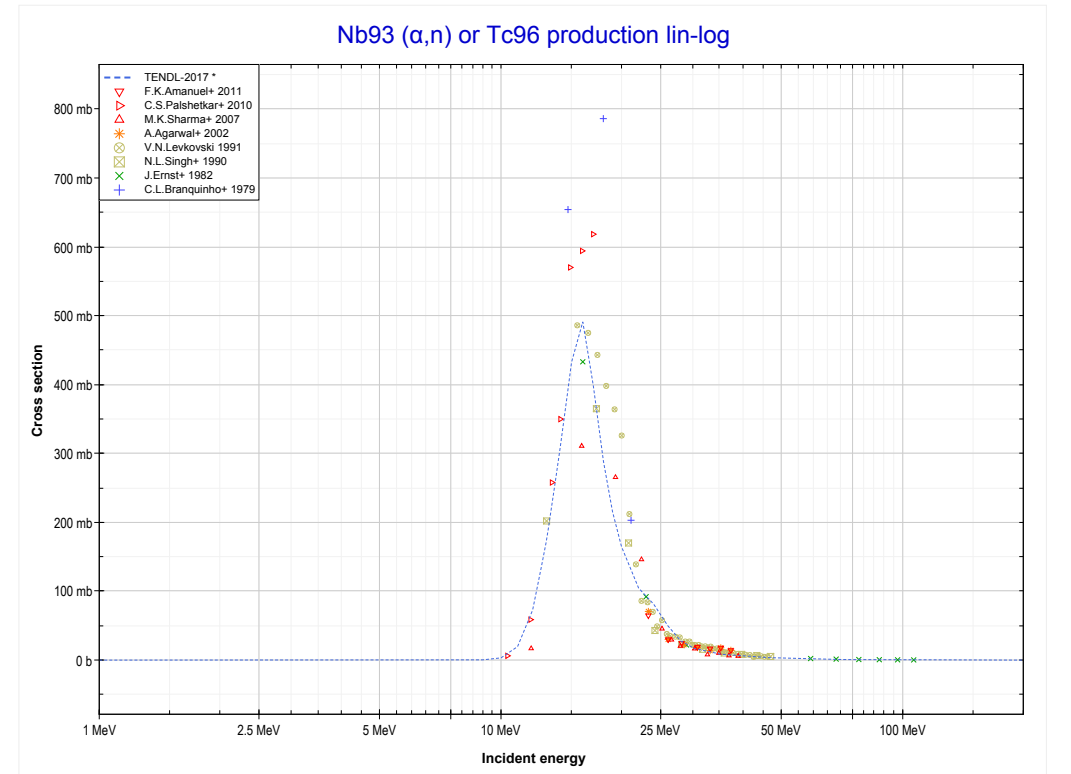
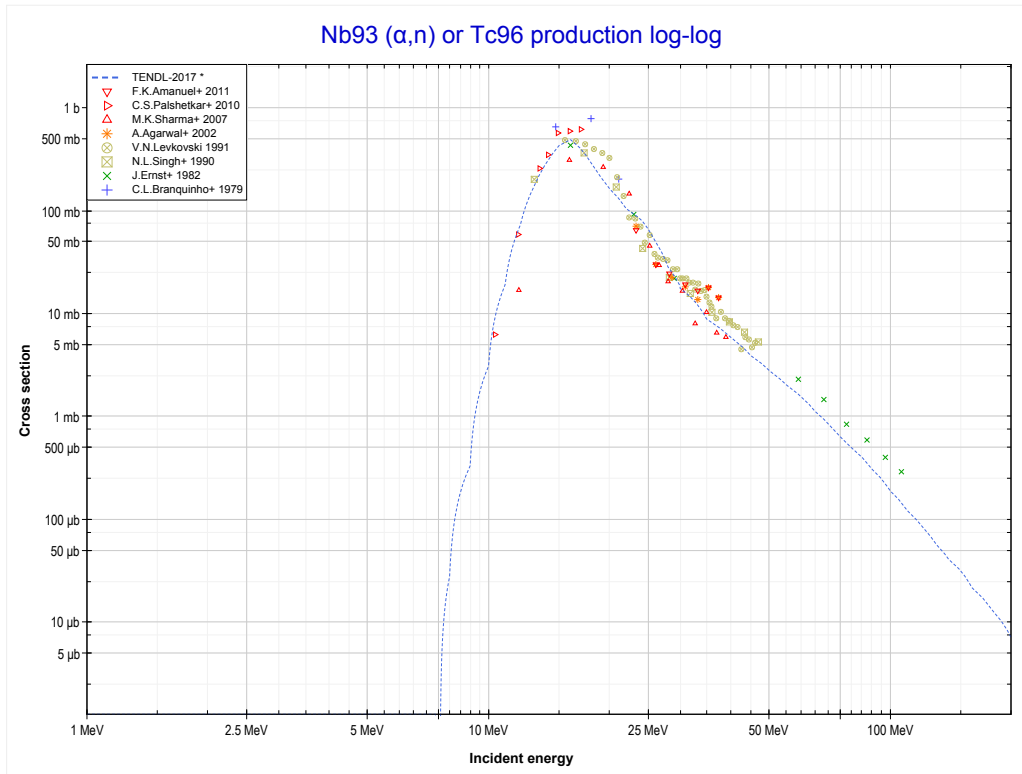
Reaction	Q-Value
Zr96(α,n)Mo99	-5122.00 keV

<< 39-Y-89	40-Zr-96	41-Nb-93 >>
<< MT4 (α, n)	MT22 ($\alpha, n+\alpha$) or MT5 (Zr95 production)	41-Nb-93 MT4 (α, n) >>



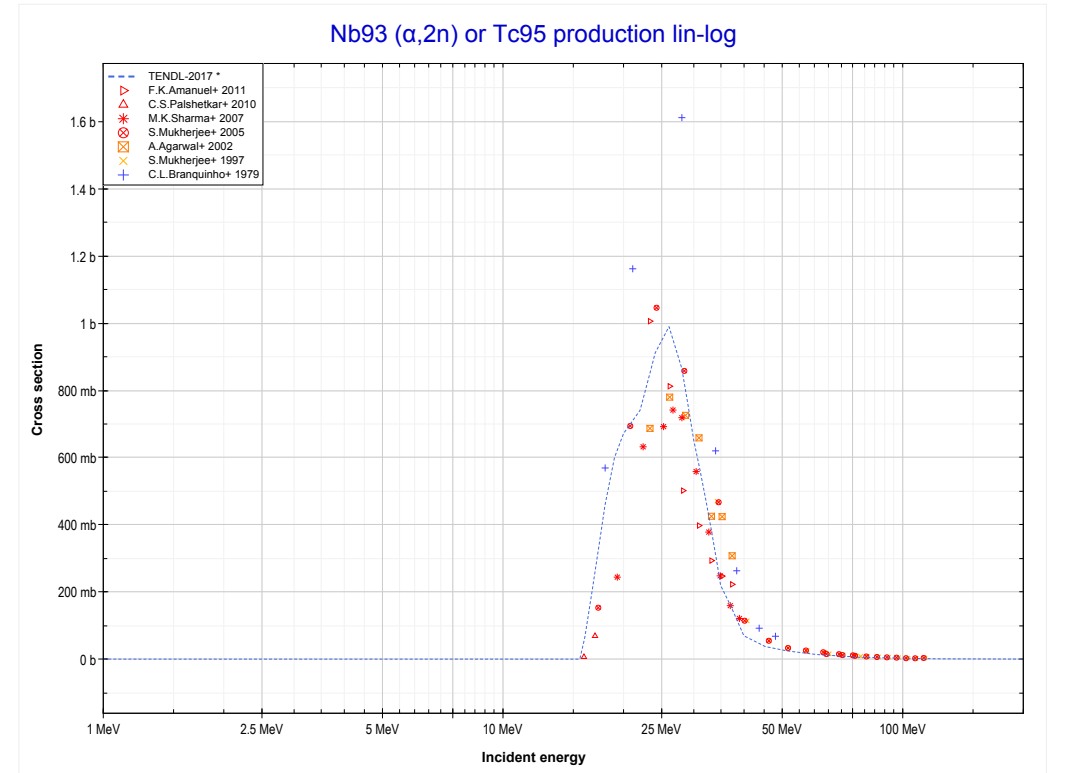
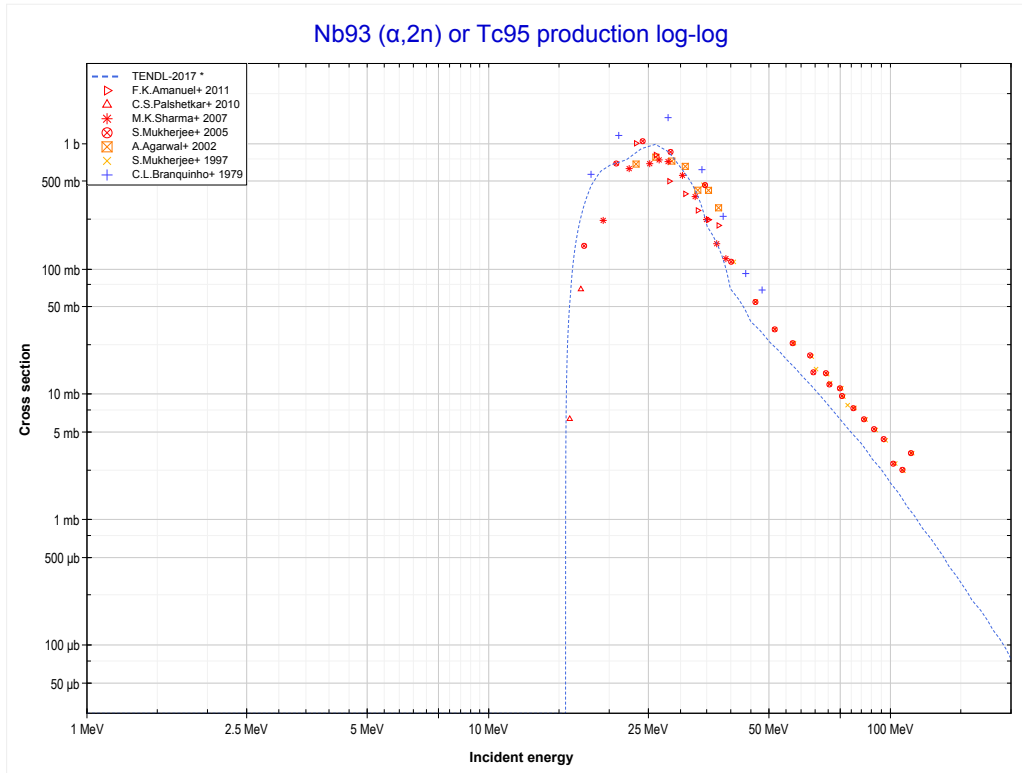
Reaction	Q-Value
Zr96($\alpha, n+\alpha$)Zr95	-7854.32 keV
Zr96($\alpha, d+t$)Zr95	-25443.61 keV
Zr96($\alpha, n+p+t$)Zr95	-27668.18 keV
Zr96($\alpha, 2n+He3$)Zr95	-28431.93 keV
Zr96($\alpha, n+2d$)Zr95	-31700.84 keV
Zr96($\alpha, 2n+p+d$)Zr95	-33925.41 keV
Zr96($\alpha, 3n+2p$)Zr95	-36149.98 keV

<< 40-Zr-96	41-Nb-93	42-Mo-92 >>
<< 40-Zr-96 MT22 ($\alpha, n + \alpha$)	MT4 (α, n) or MT5 (Tc96 production)	MT16 ($\alpha, 2n$) >>



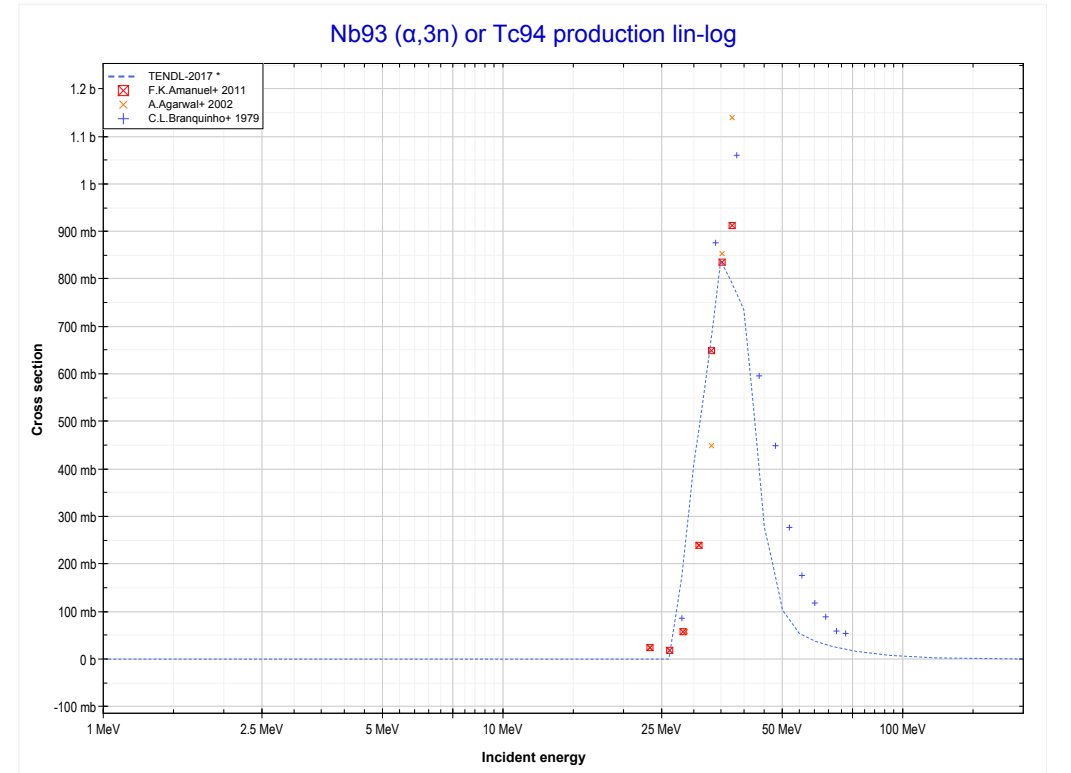
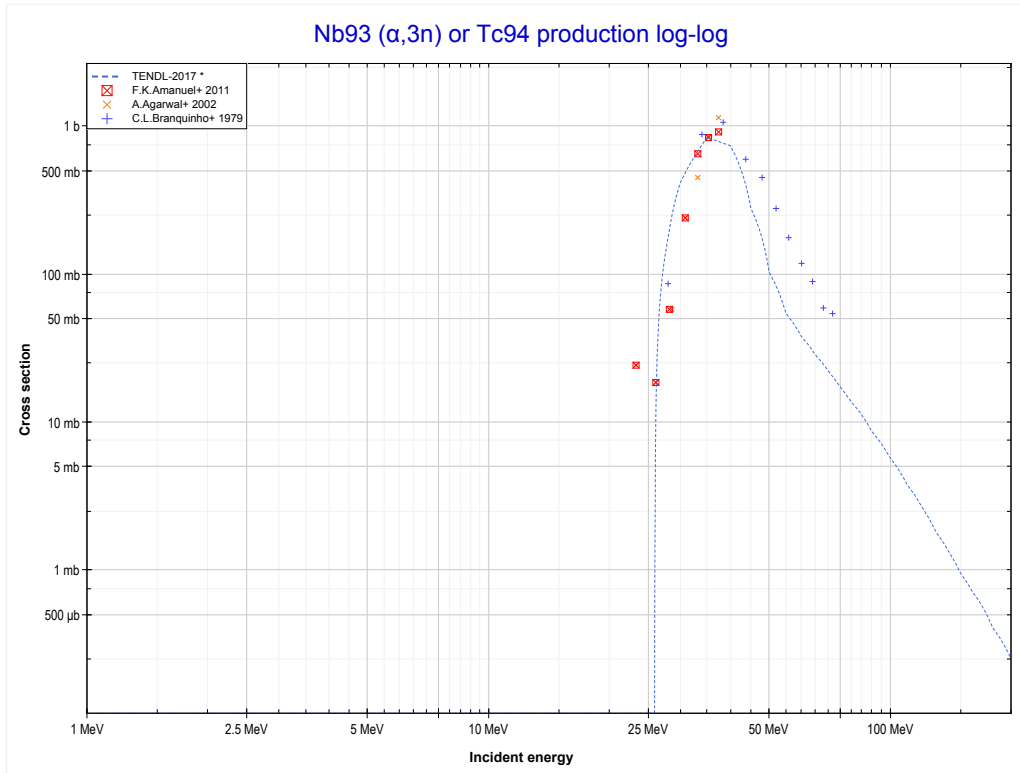
Reaction	Q-Value
Nb93(α, n)Tc96	-7039.40 keV

<< 38-Sr-87	41-Nb-93	42-Mo-92 >>
<< MT4 (α,n)	MT16 ($\alpha,2n$) or MT5 (Tc95 production)	MT17 ($\alpha,3n$) >>



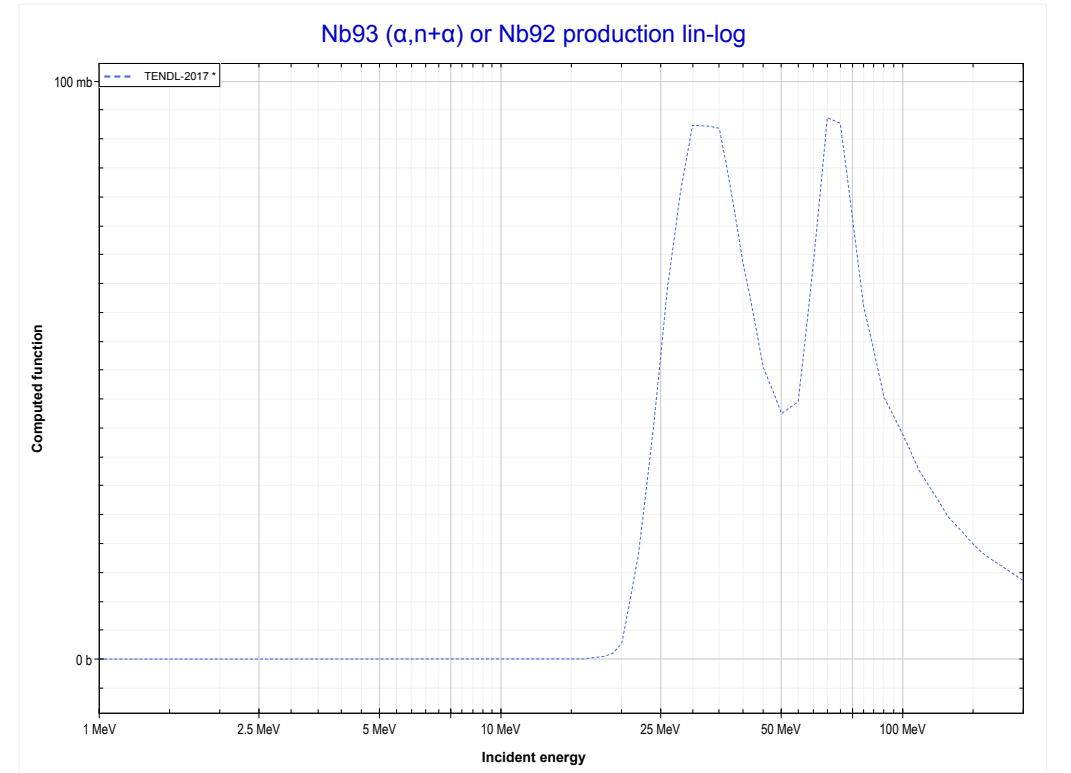
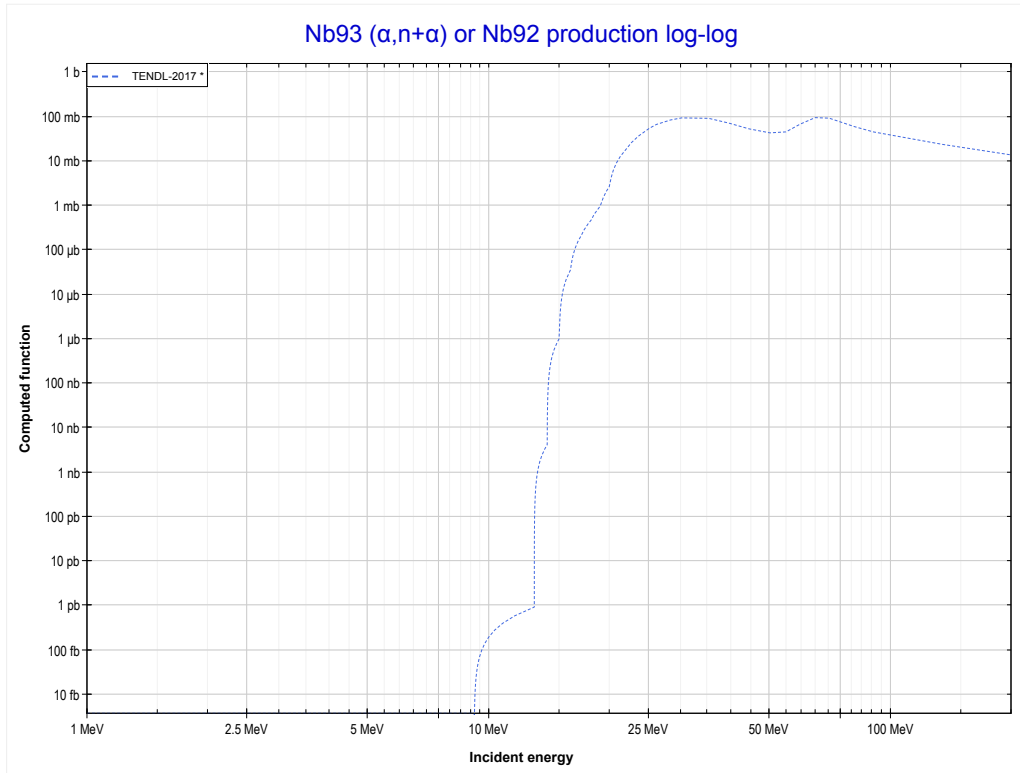
Reaction	Q-Value
Nb93($\alpha,2n$)Tc95	-14910.72 keV

<< 39-Y-89	41-Nb-93	42-Mo-94 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Tc94 production)	MT22 ($\alpha,n+\alpha$) >>



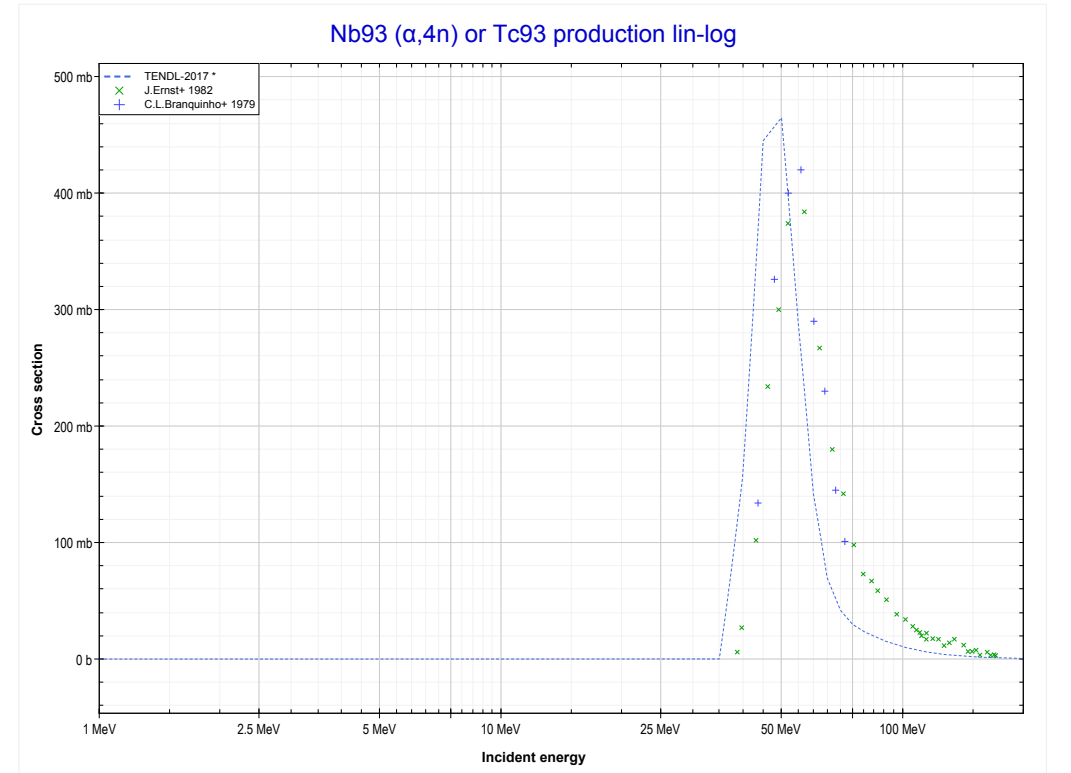
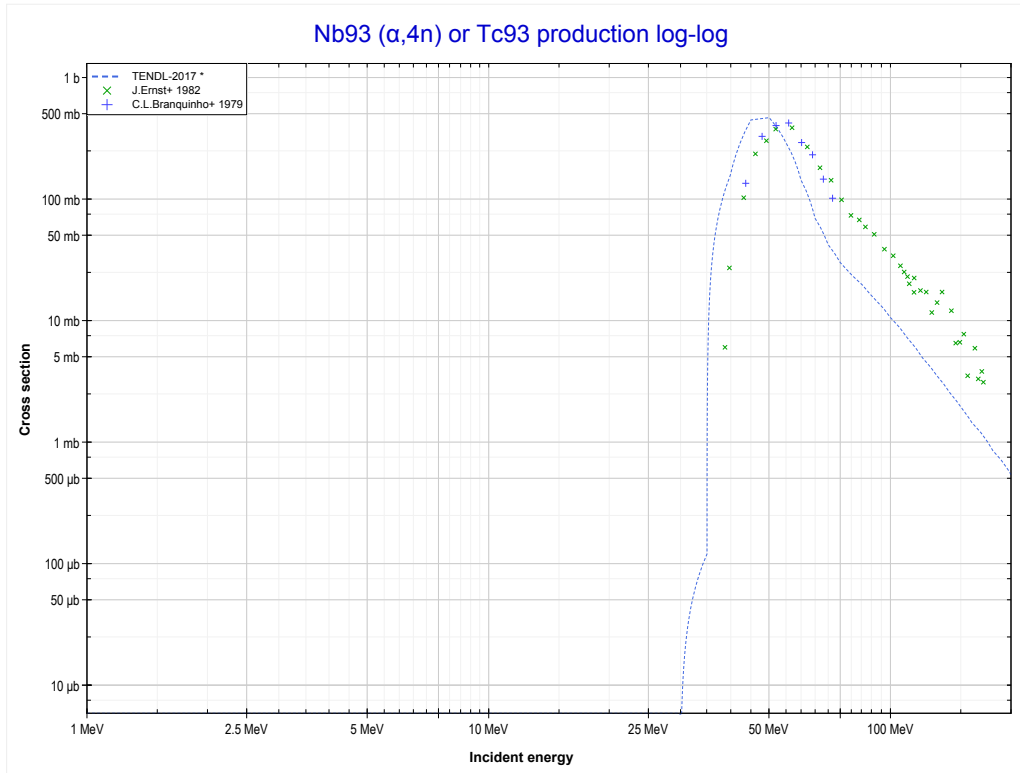
Reaction	Q-Value
Nb93($\alpha,3n$)Tc94	-24845.04 keV

<< 40-Zr-96	41-Nb-93	48-Cd-106 >>
<< MT17 ($\alpha,3n$)	MT22 ($\alpha,n+\alpha$) or MT5 (Nb92 production)	MT37 ($\alpha,4n$) >>



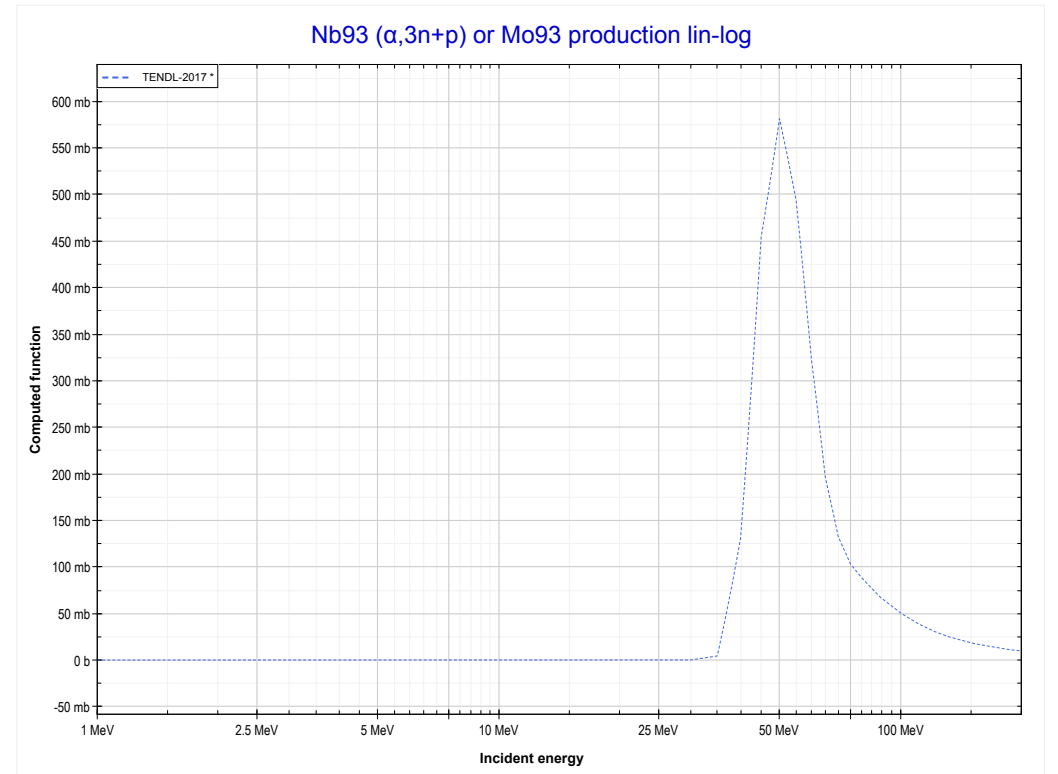
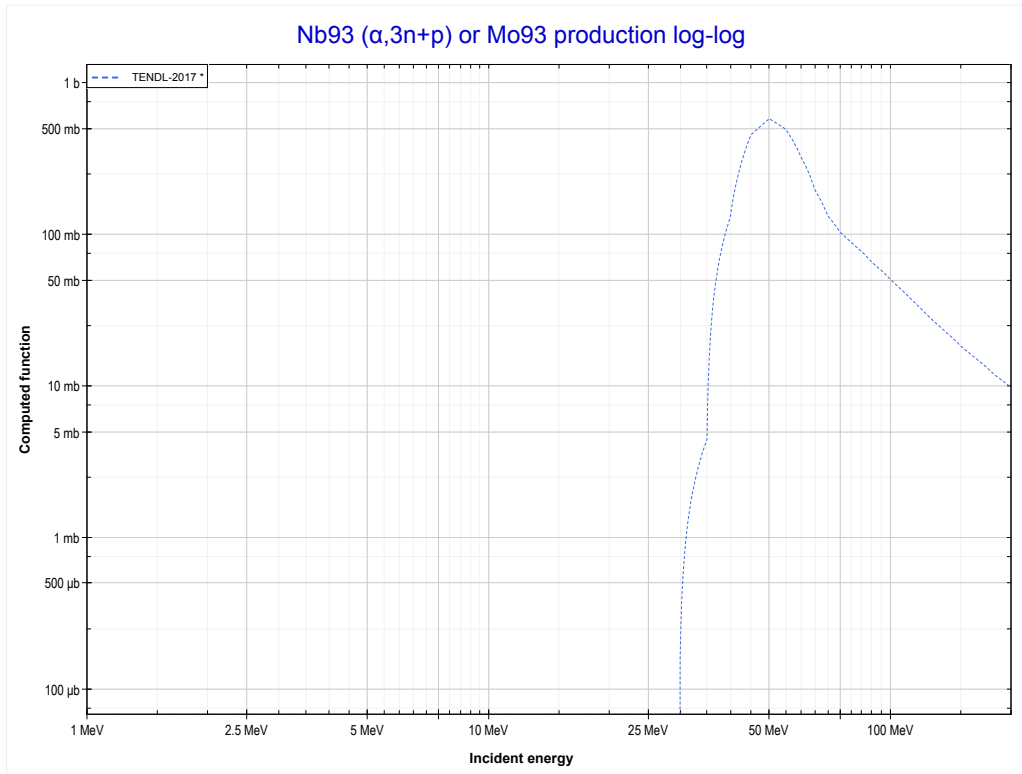
Reaction	Q-Value
Nb93($\alpha,n+\alpha$)Nb92	-8830.62 keV
Nb93($\alpha,d+t$)Nb92	-26419.91 keV
Nb93($\alpha,n+p+t$)Nb92	-28644.48 keV
Nb93($\alpha,2n+He3$)Nb92	-29408.23 keV
Nb93($\alpha,n+2d$)Nb92	-32677.14 keV
Nb93($\alpha,2n+p+d$)Nb92	-34901.71 keV
Nb93($\alpha,3n+2p$)Nb92	-37126.28 keV

<< 40-Zr-90	41-Nb-93	42-Mo-94 >>
<< MT22 ($\alpha, n+\alpha$)	MT37 ($\alpha, 4n$) or MT5 (Tc93 production)	MT42 ($\alpha, 3n+p$) >>



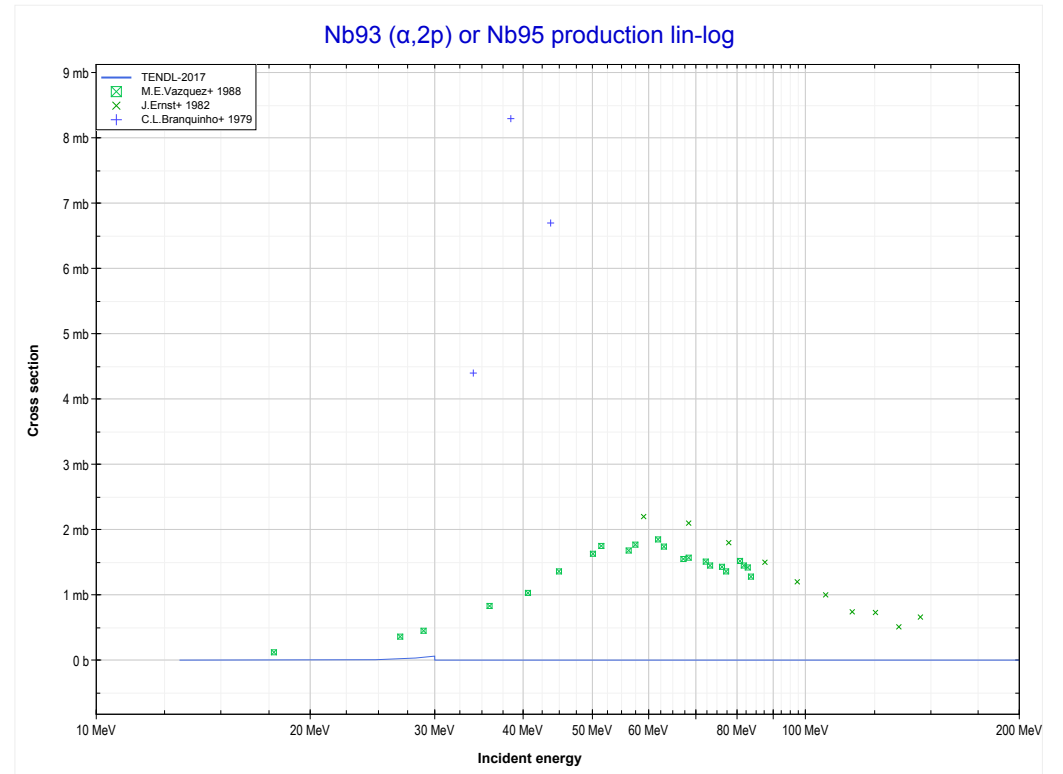
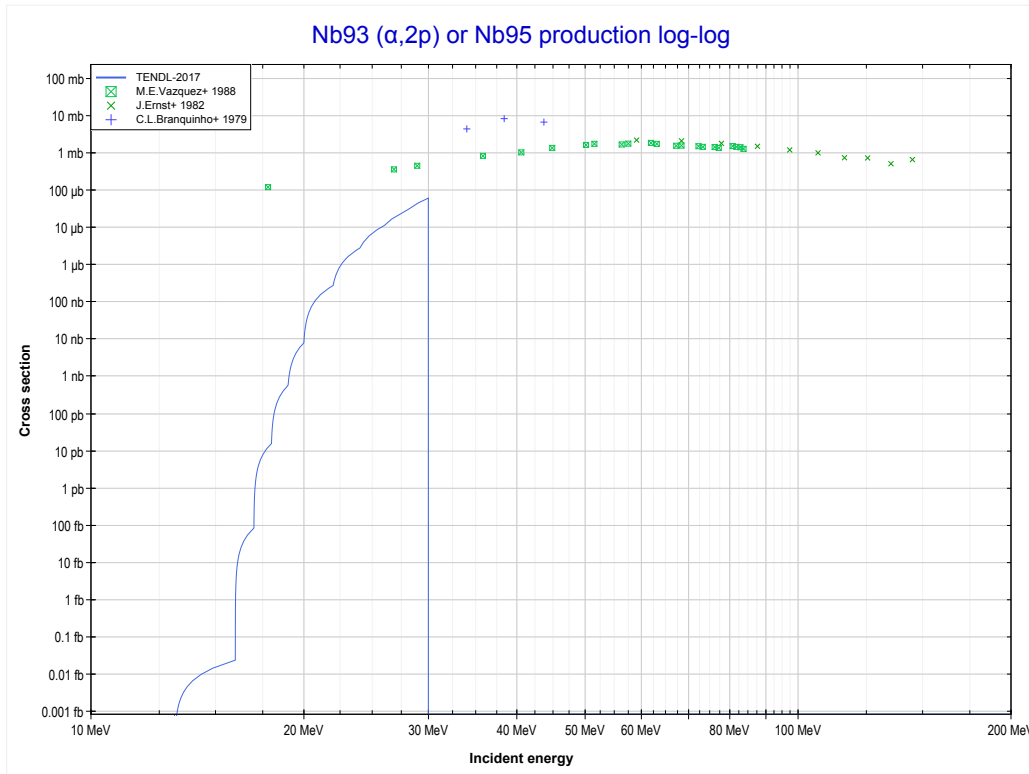
Reaction	Q-Value
Nb93($\alpha, 4n$)Tc93	-33467.95 keV

<< 26-Fe-56	41-Nb-93	48-Cd-114 >>
<< MT37 ($\alpha,4n$)	MT42 ($\alpha,3n+p$) or MT5 (Mo93 production)	MT111 ($\alpha,2p$) >>



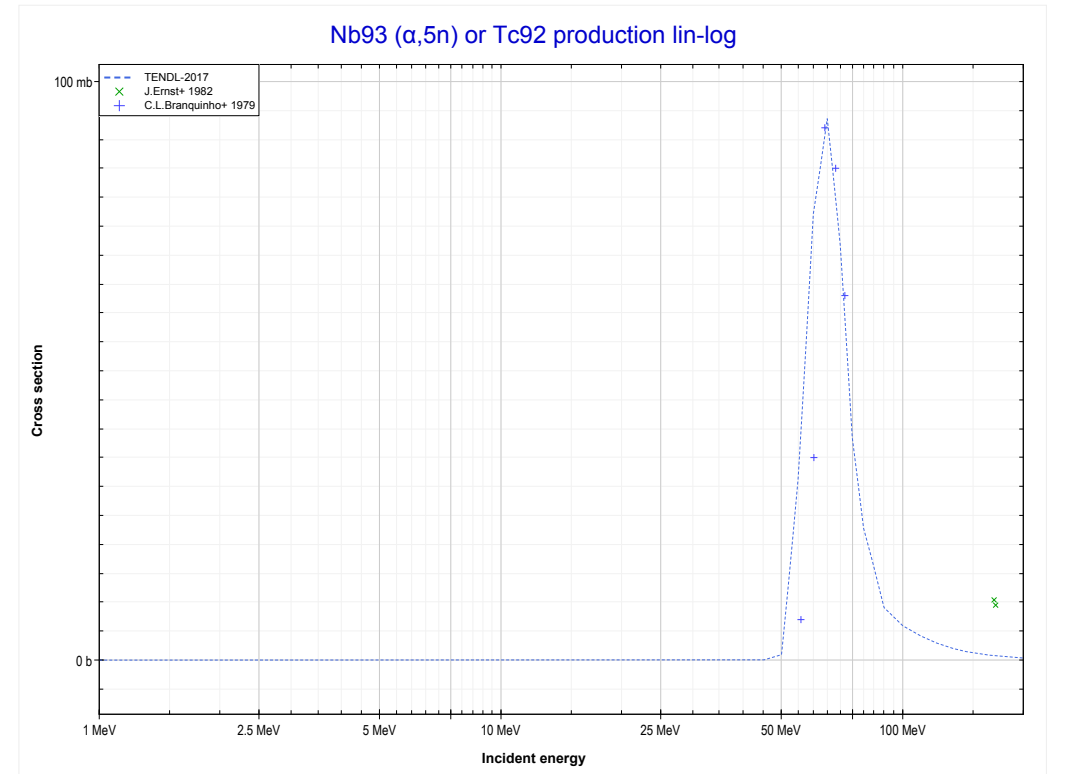
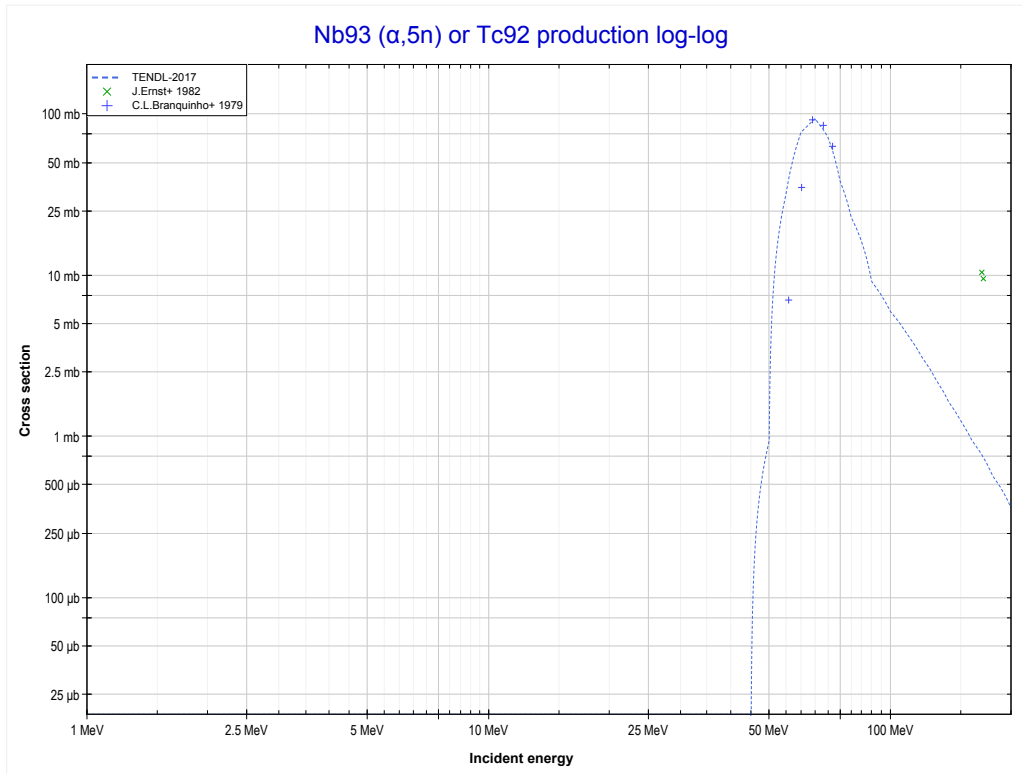
Reaction	Q-Value
Nb93($\alpha,n+t$)Mo93	-21002.91 keV
Nb93($\alpha,2n+d$)Mo93	-27260.14 keV
Nb93($\alpha,3n+p$)Mo93	-29484.71 keV

<< 30-Zn-70	41-Nb-93	47-Ag-109 >>
<< MT42 ($\alpha,3n+p$)	MT111 ($\alpha,2p$) or MT5 (Nb95 production)	MT152 ($\alpha,5n$) >>



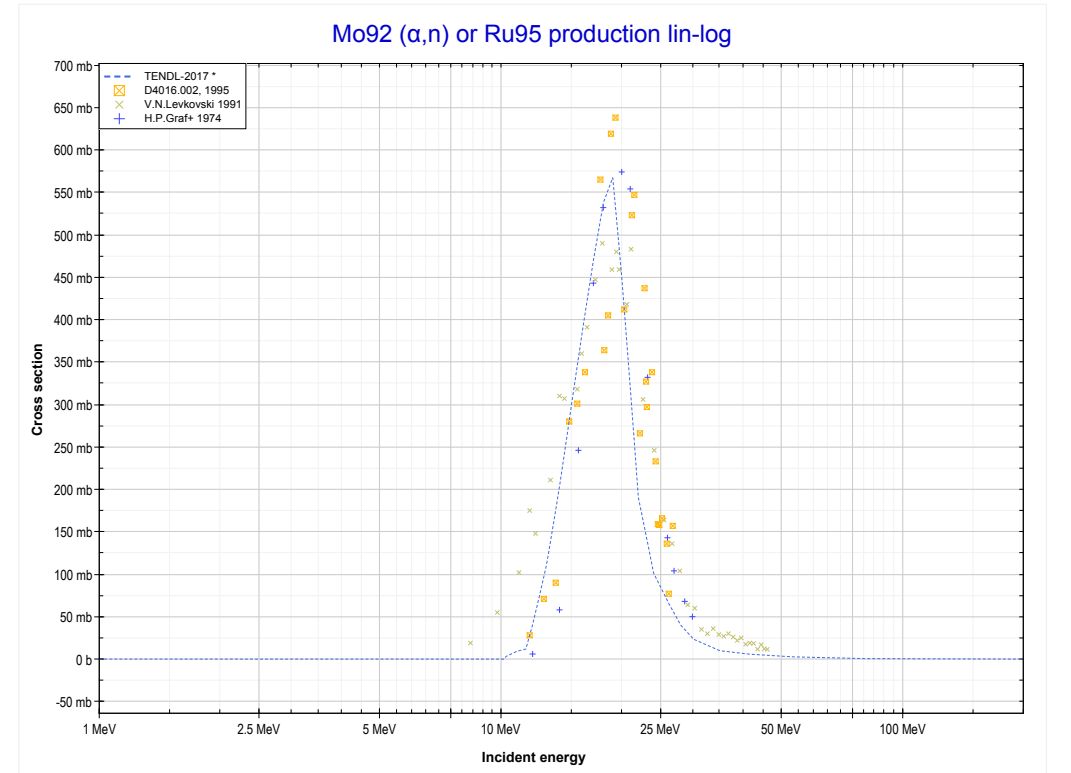
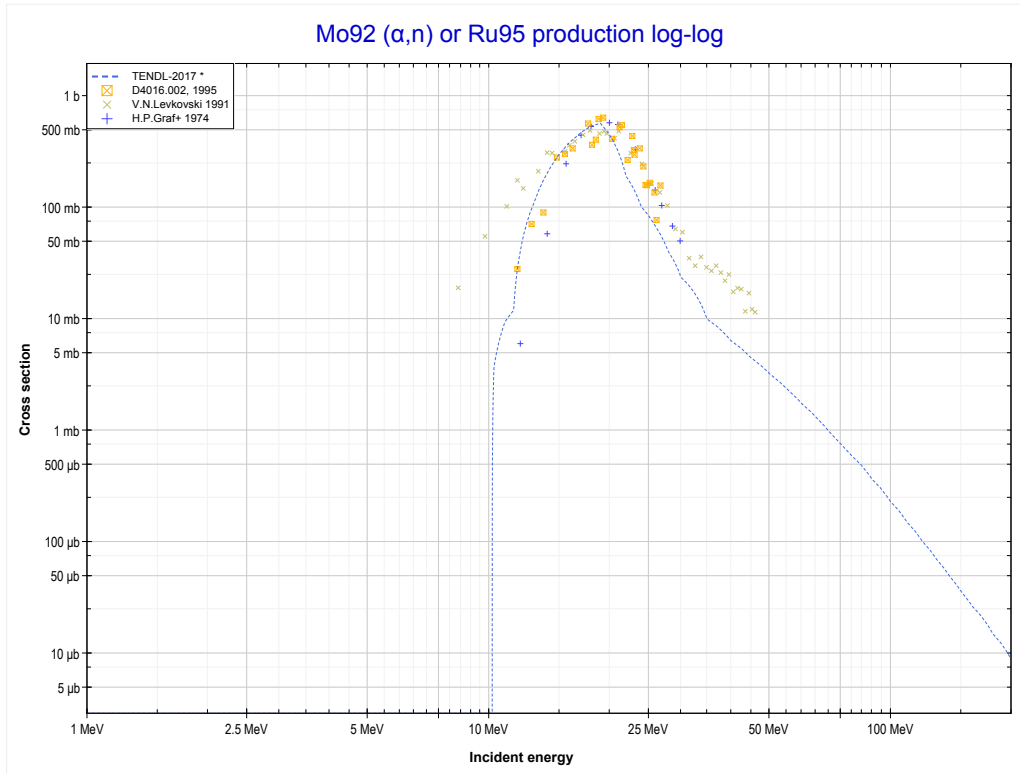
Reaction	Q-Value
Nb93($\alpha,2p$)Nb95	-12580.93 keV

<< 36-Kr-83	41-Nb-93	45-Rh-103 >>
<< MT111 ($\alpha,2p$)	MT152 ($\alpha,5n$) or MT5 (Tc92 production)	42-Mo-92 MT4 (α,n) >>



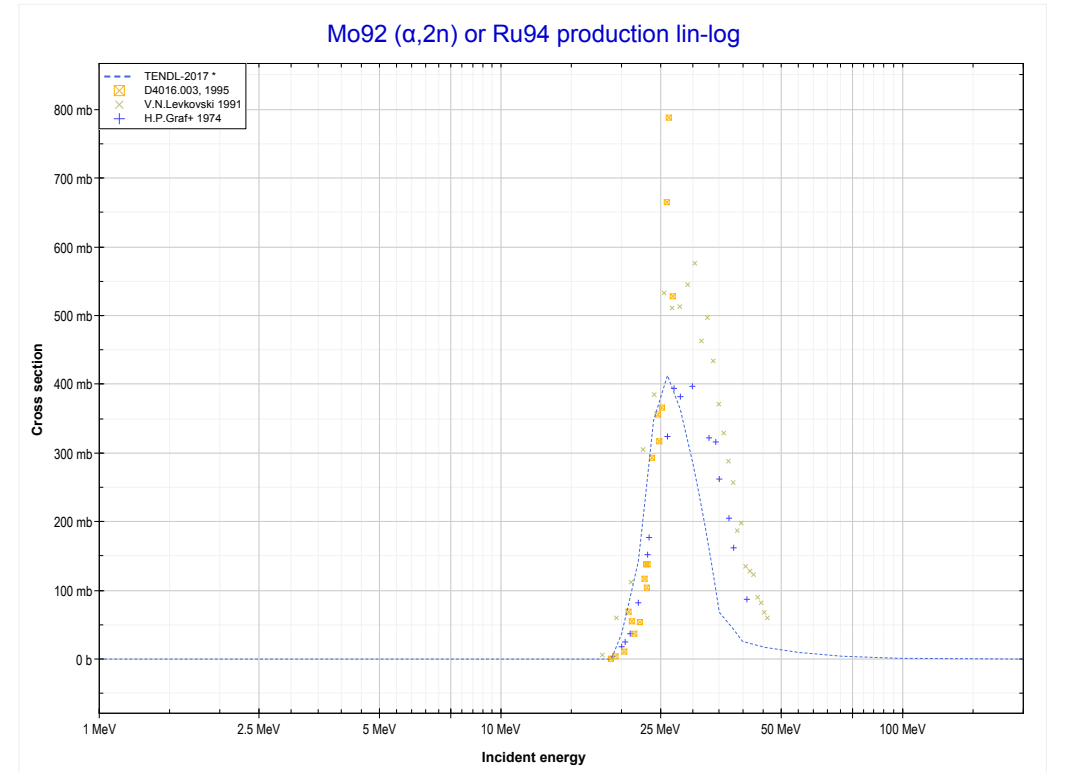
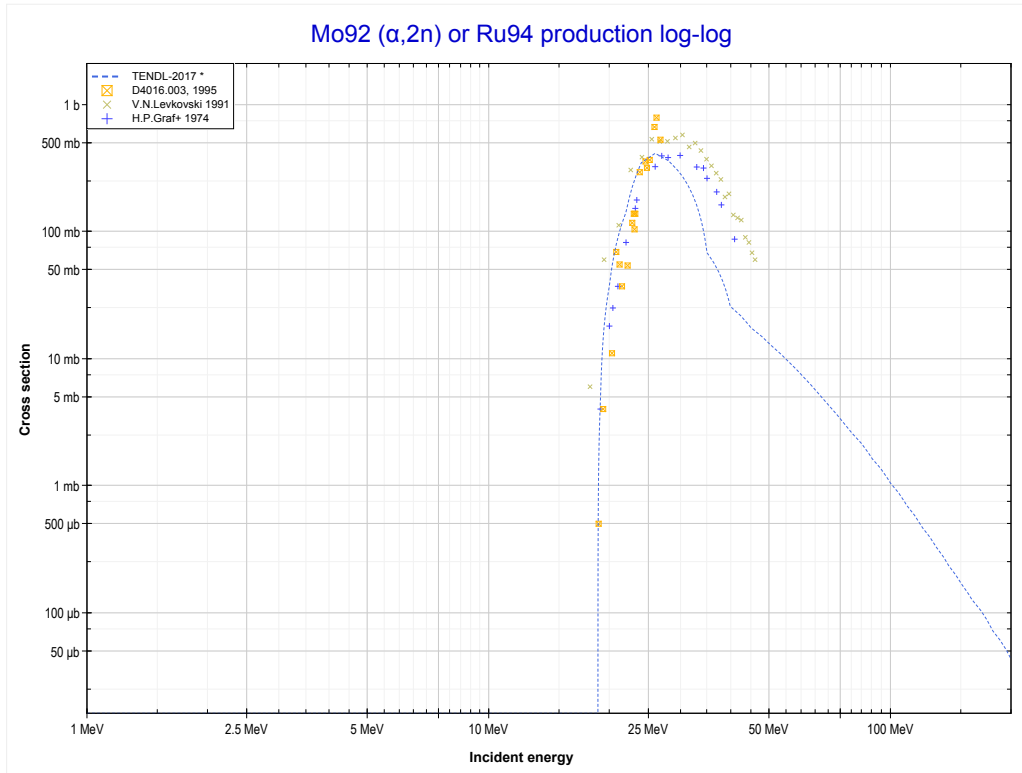
Reaction	Q-Value
Nb93($\alpha,5n$)Tc92	-46218.67 keV

<< 41-Nb-93	42-Mo-92	42-Mo-94 >>
<< 41-Nb-93 MT152 ($\alpha,5n$)	MT4 (α,n) or MT5 (Ru95 production)	MT16 ($\alpha,2n$) >>



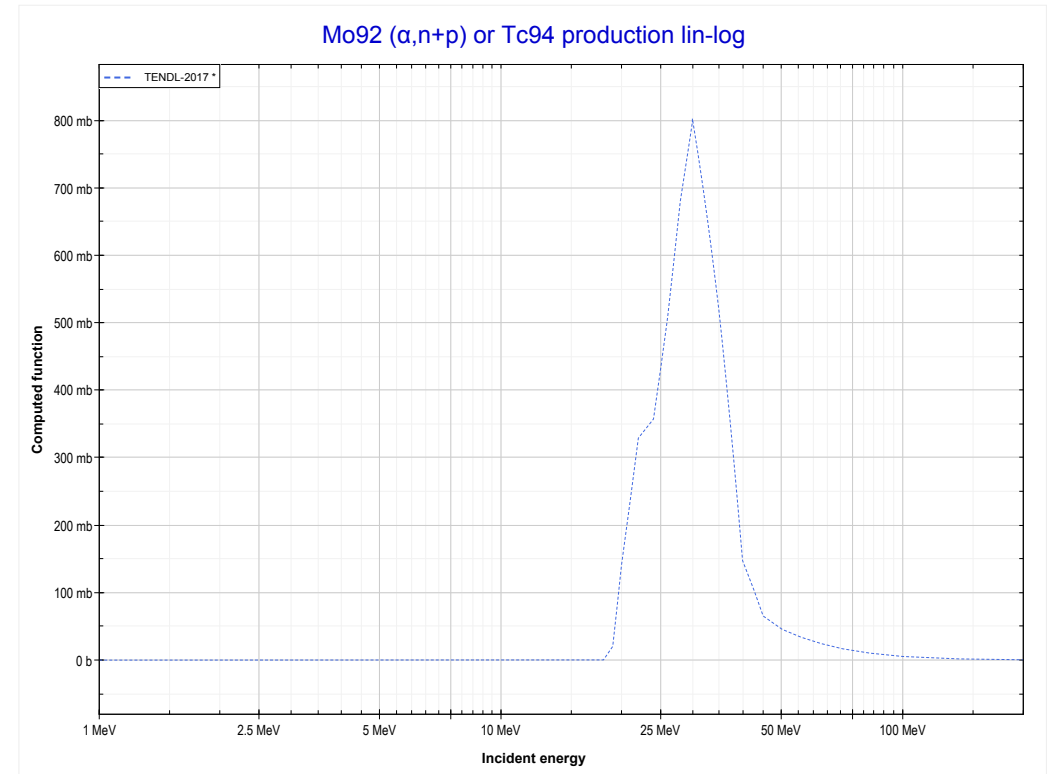
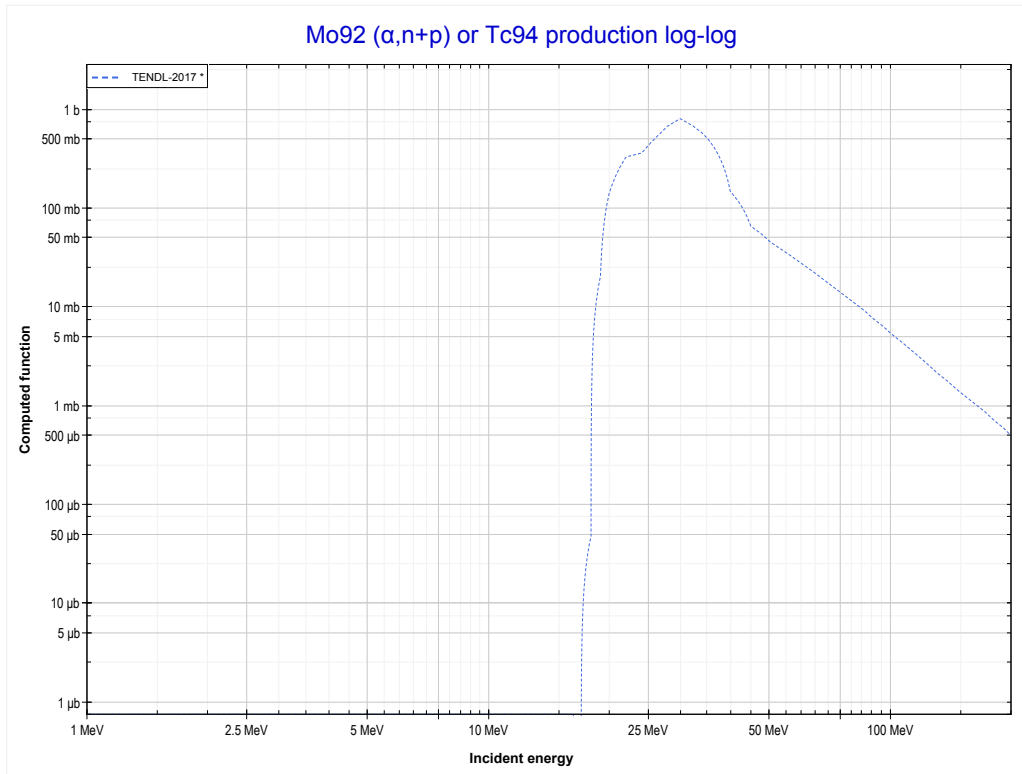
Reaction	Q-Value
Mo92(α,n)Ru95	-8998.20 keV

<< 41-Nb-93	42-Mo-92	42-Mo-95 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Ru94 production)	MT28 ($\alpha, n+p$) >>



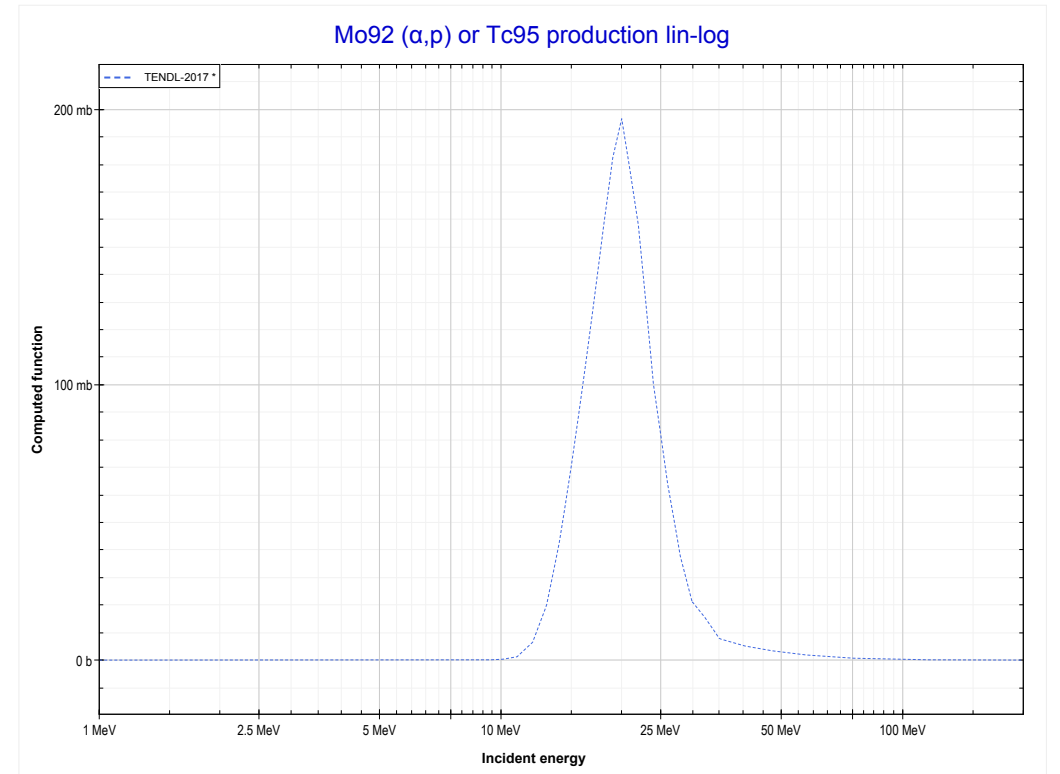
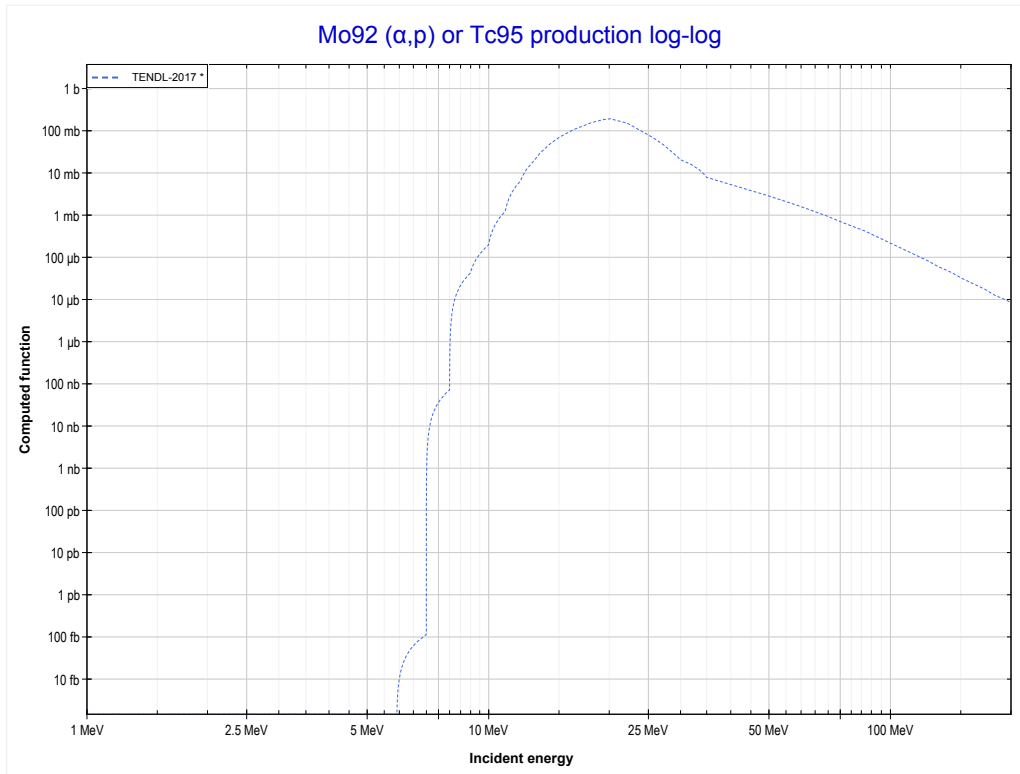
Reaction	Q-Value
Mo92($\alpha, 2n$)Ru94	-17941.52 keV

<< 40-Zr-94	42-Mo-92	47-Ag-107 >>
<< MT16 ($\alpha,2n$)	MT28 ($\alpha,n+p$) or MT5 (Tc94 production)	MT103 (α,p) >>



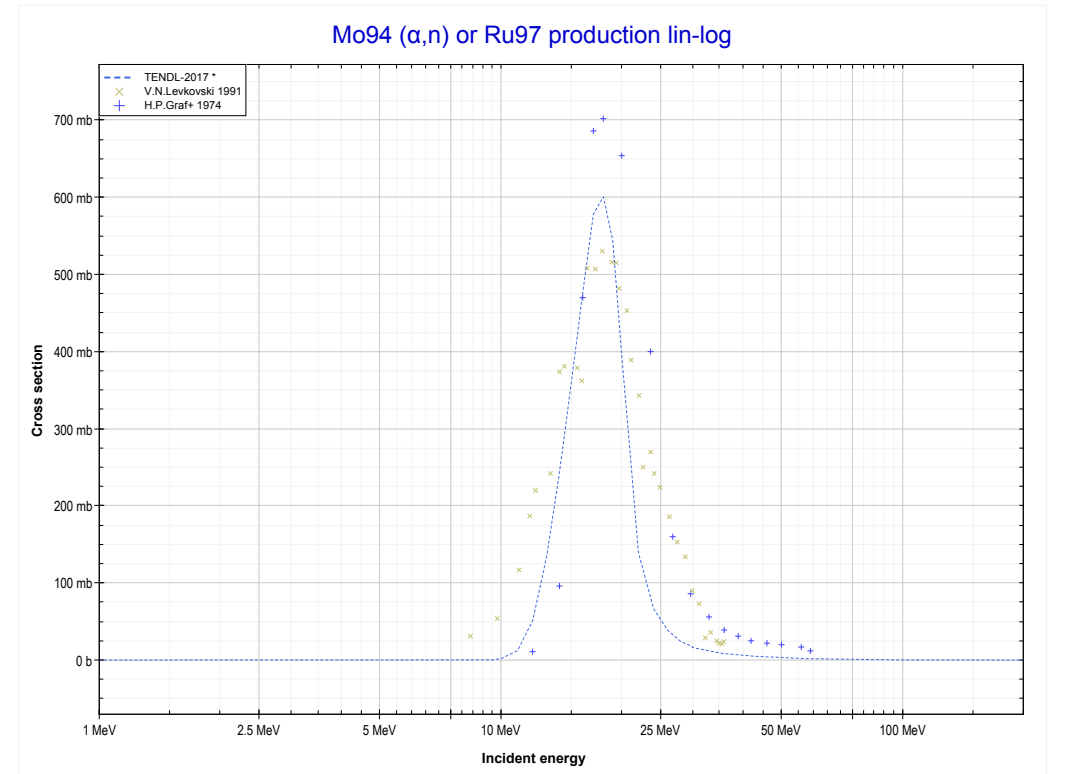
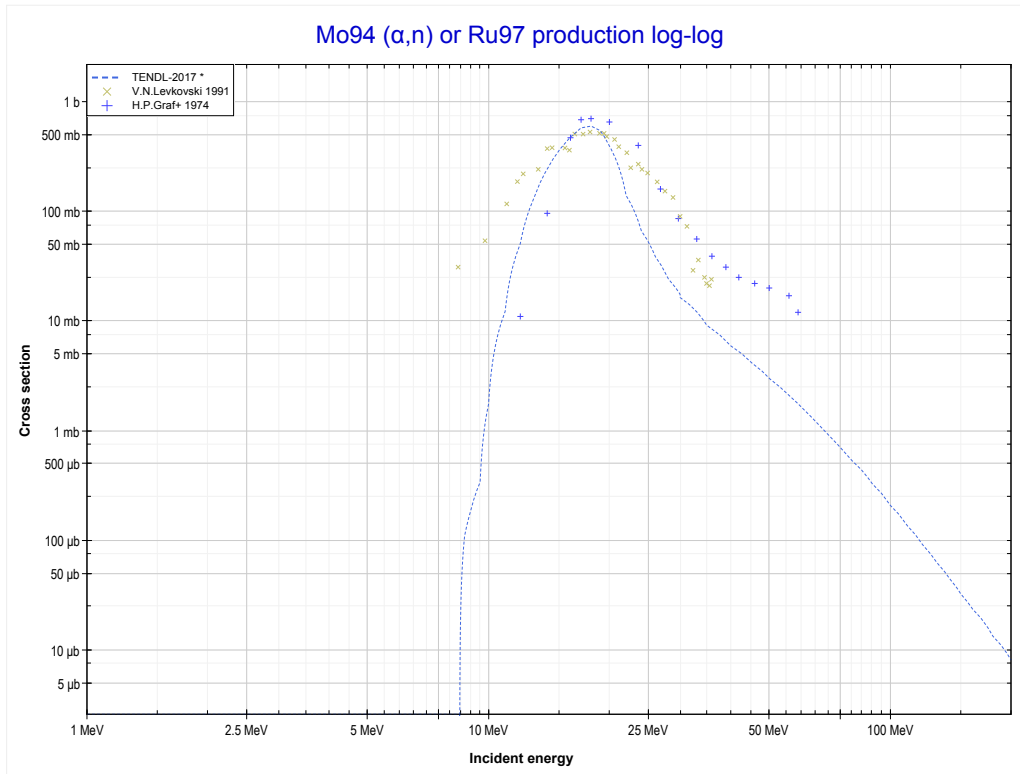
Reaction	Q-Value
Mo92(α,d)Tc94	-13361.61 keV
Mo92($\alpha,n+p$)Tc94	-15586.17 keV

<< 40-Zr-94	42-Mo-92	42-Mo-98 >>
<< MT28 ($\alpha, n+p$)	MT103 (α, p) or MT5 (Tc95 production)	42-Mo-94 MT4 (α, n) >>



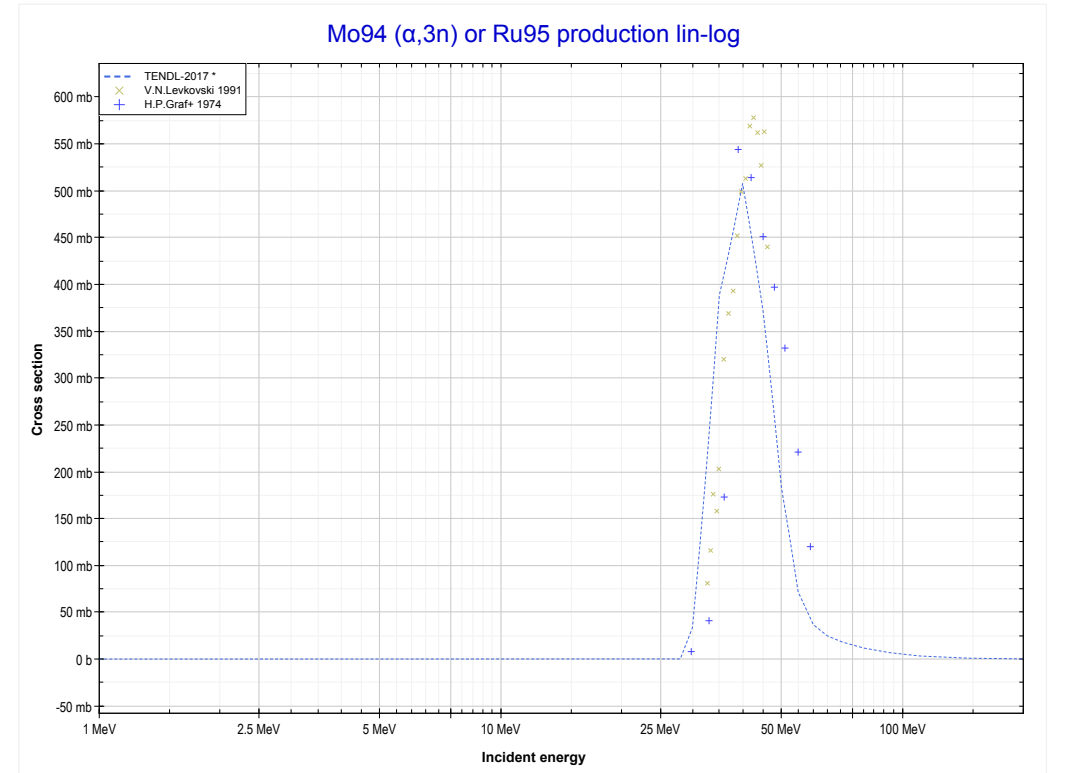
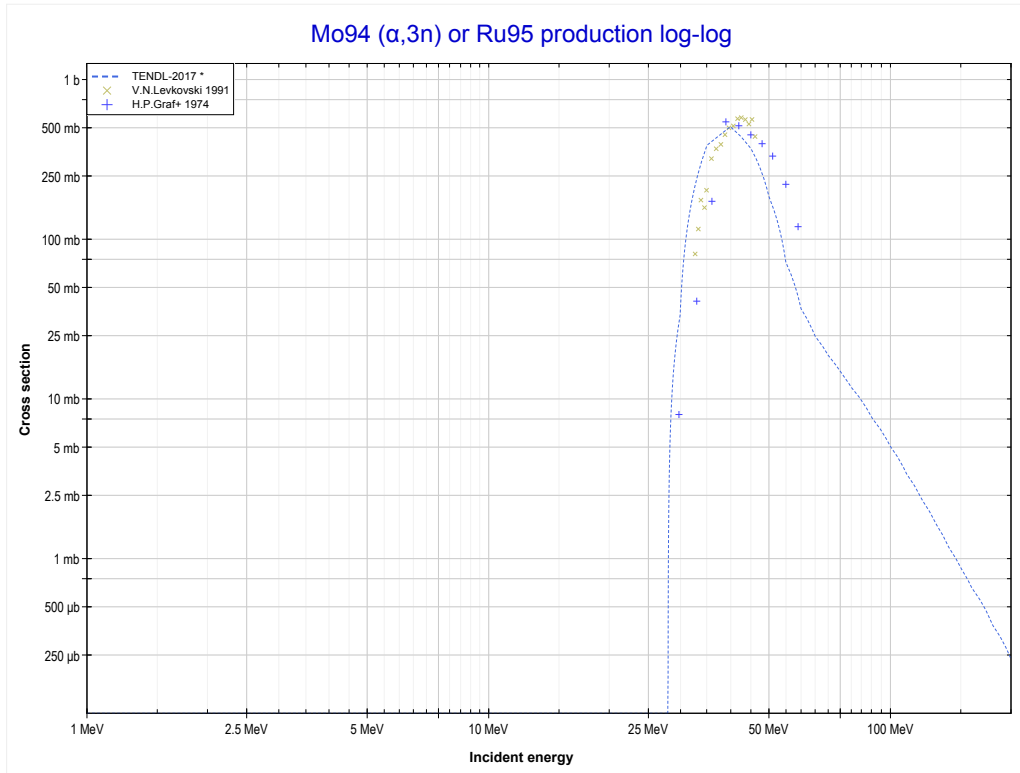
Reaction	Q-Value
Mo92(α, p)Tc95	-5651.85 keV

<< 42-Mo-92	42-Mo-94	42-Mo-100 >>
<< 42-Mo-92 MT103 (α,p)	MT4 (α,n) or MT5 (Ru97 production)	MT17 ($\alpha,3n$) >>



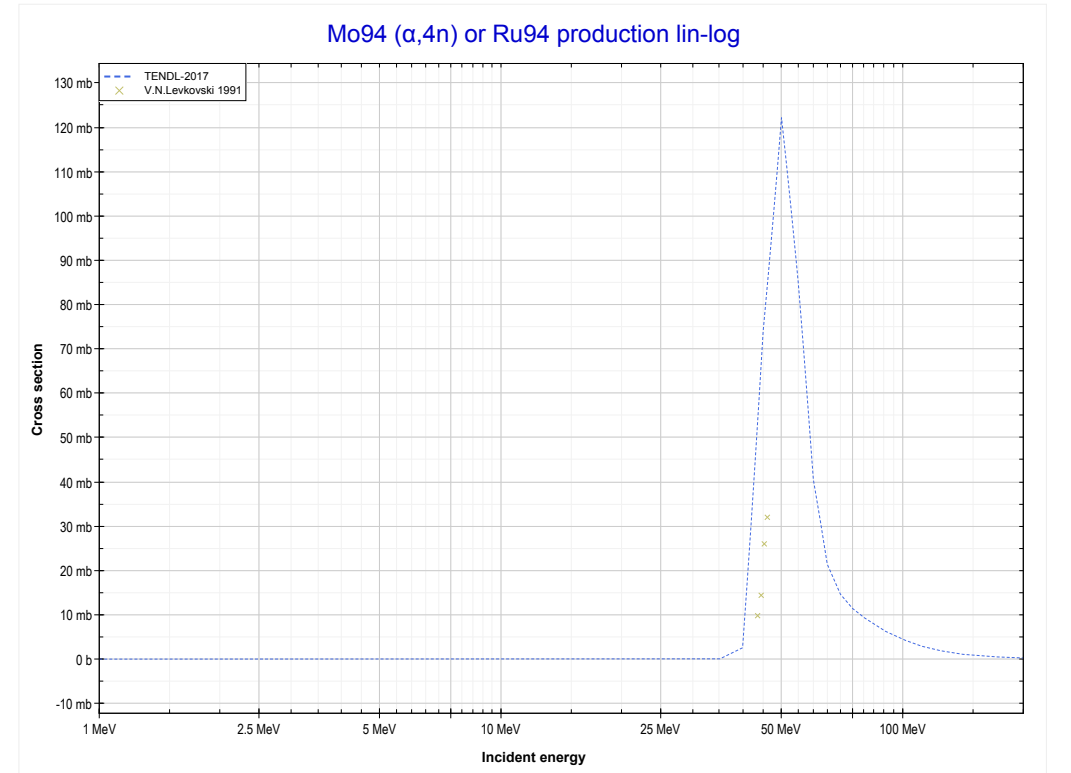
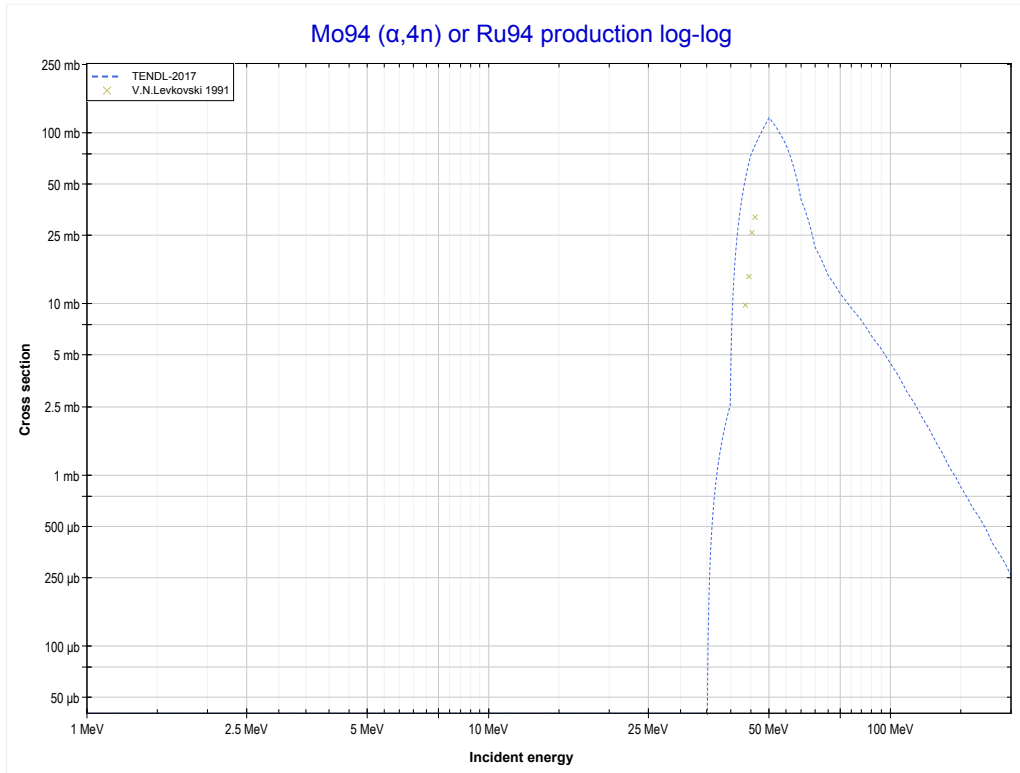
Reaction	Q-Value
Mo94(α,n)Ru97	-7939.90 keV

<< 41-Nb-93	42-Mo-94	42-Mo-96 >>
<< MT4 (α, n)	MT17 ($\alpha, 3n$) or MT5 (Ru95 production)	MT37 ($\alpha, 4n$) >>



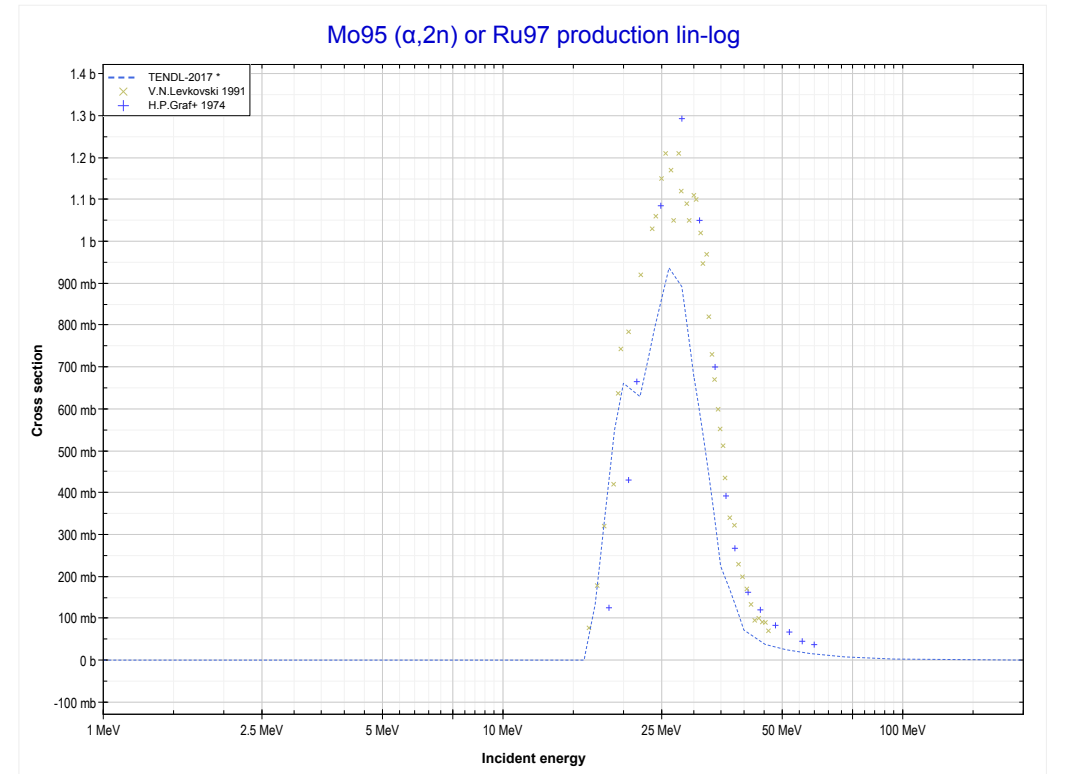
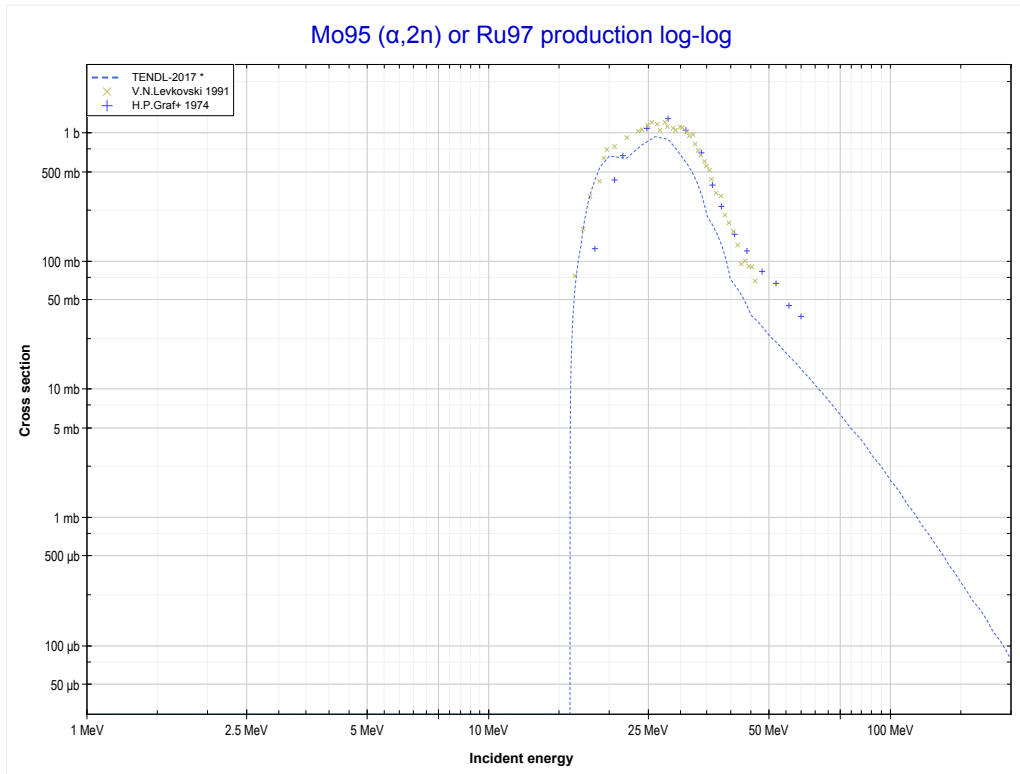
Reaction	Q-Value
Mo94($\alpha, 3n$)Ru95	-26745.84 keV

<< 41-Nb-93	42-Mo-94	42-Mo-95 >>
<< MT17 ($\alpha,3n$)	MT37 ($\alpha,4n$) or MT5 (Ru94 production)	42-Mo-95 MT16 ($\alpha,2n$) >>



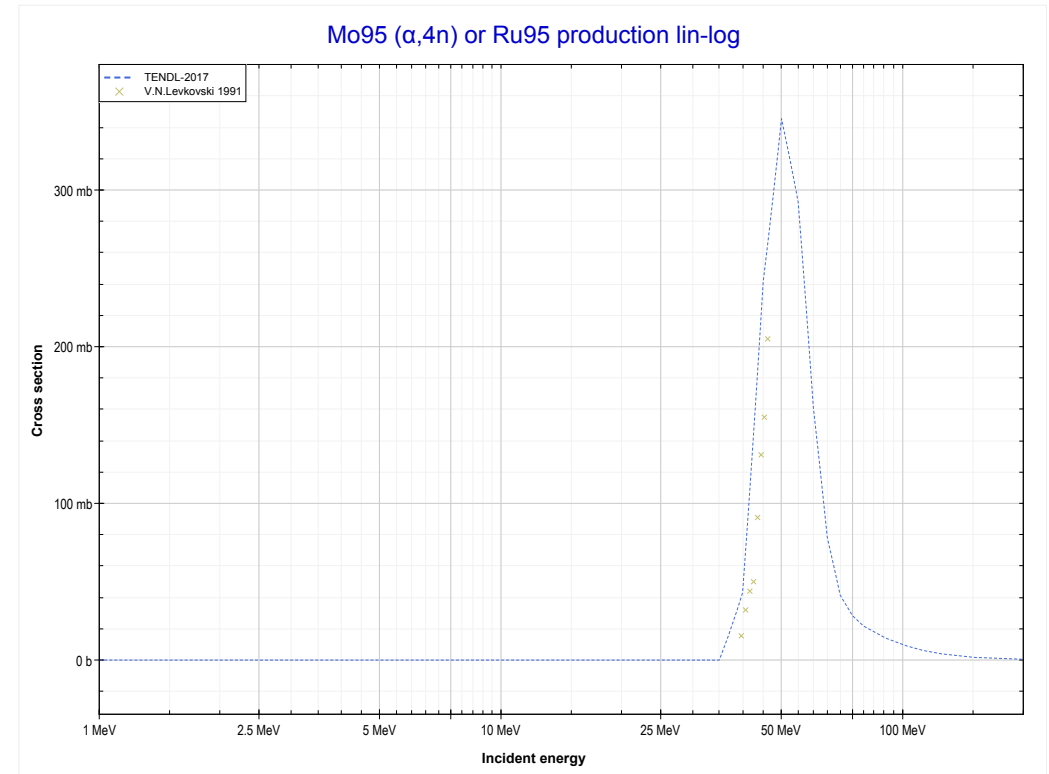
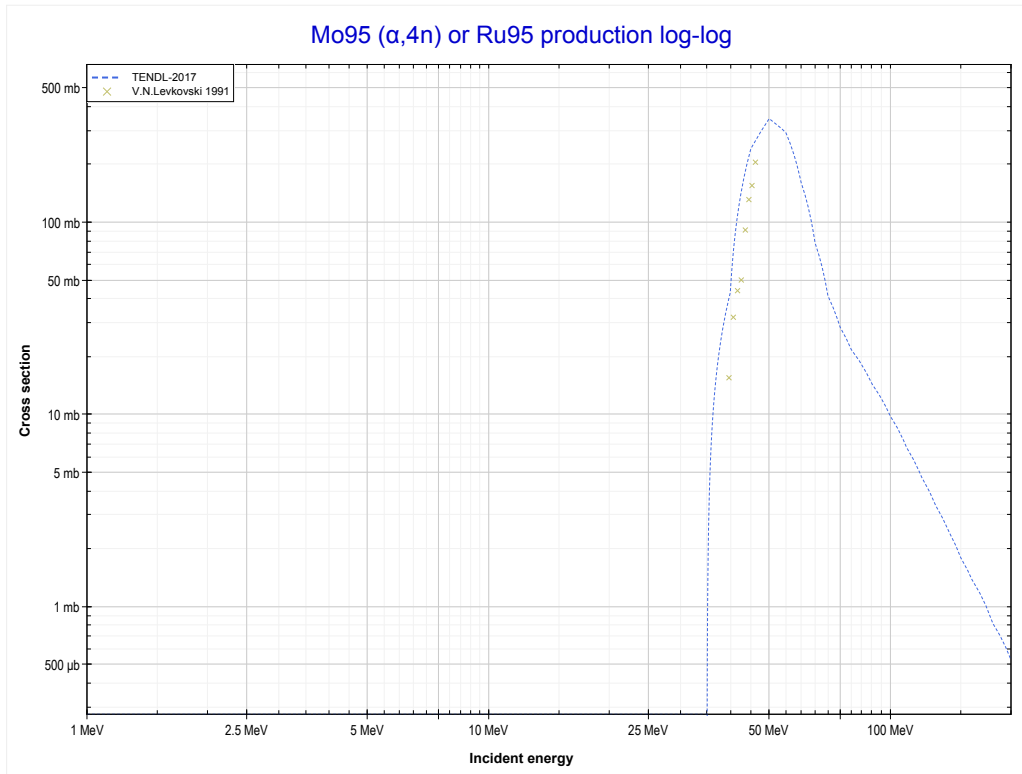
Reaction	Q-Value
Mo94($\alpha,4n$)Ru94	-35689.15 keV

<< 42-Mo-92	42-Mo-95	44-Ru-101 >>
<< 42-Mo-94 MT37 ($\alpha,4n$)	MT16 ($\alpha,2n$) or MT5 (Ru97 production)	MT37 ($\alpha,4n$) >>



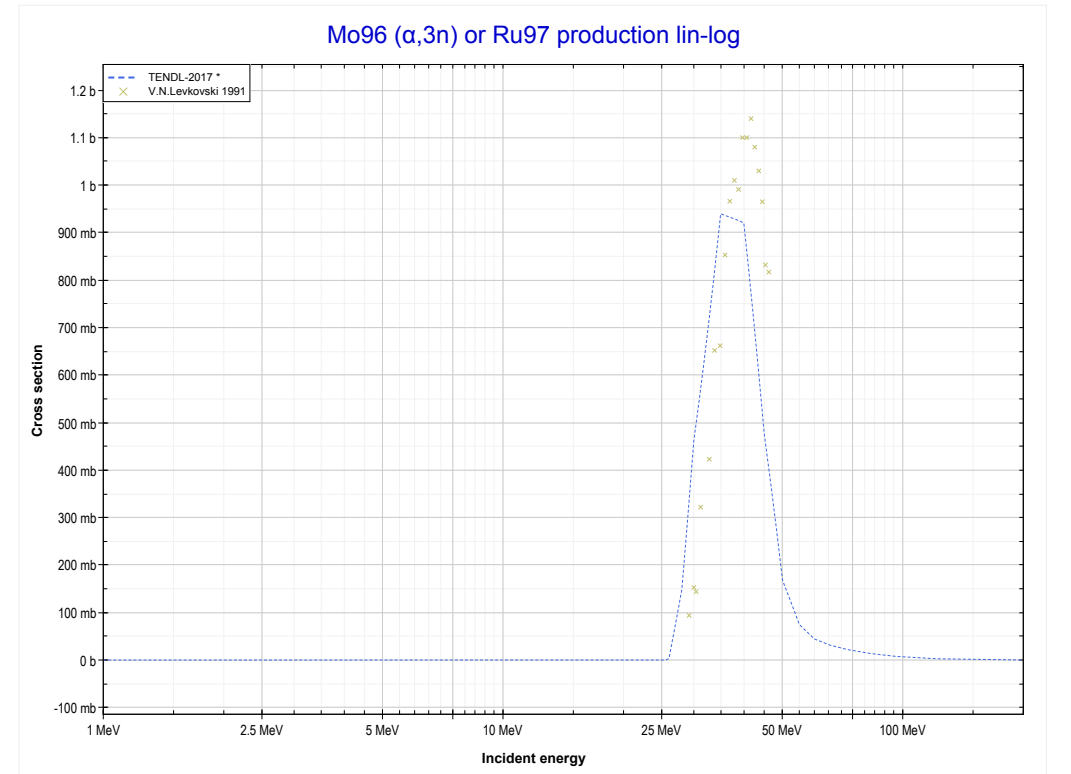
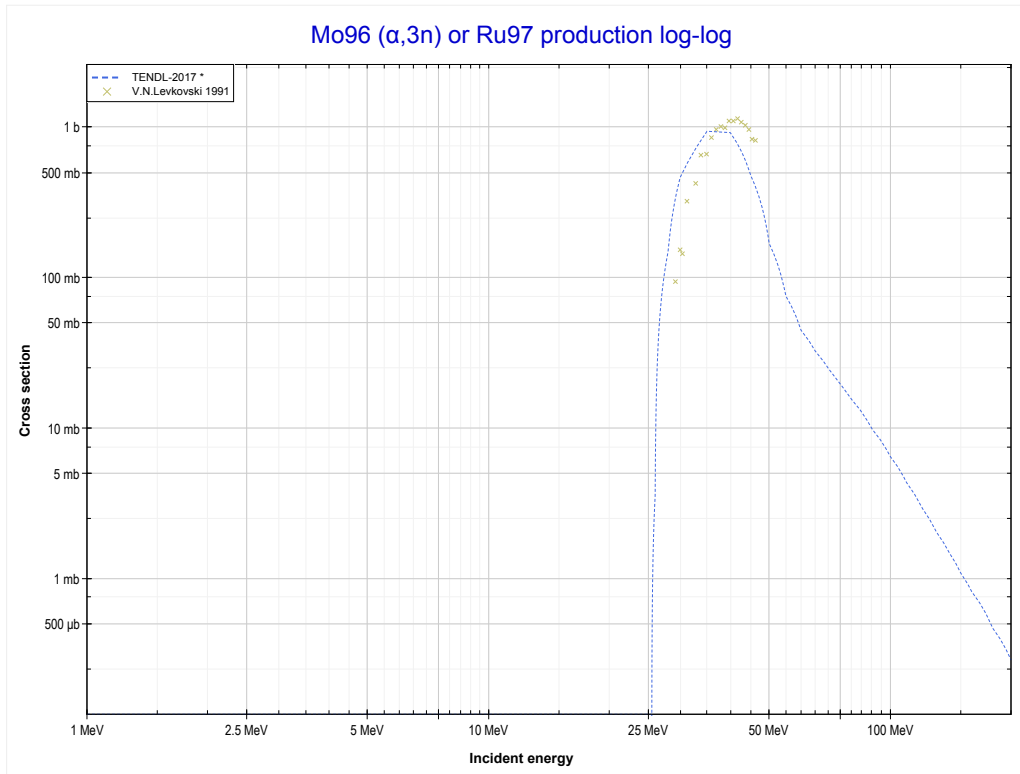
Reaction	Q-Value
Mo95($\alpha,2n$)Ru97	-15309.02 keV

<< 42-Mo-94	42-Mo-95	42-Mo-97 >>
<< MT16 ($\alpha,2n$)	MT37 ($\alpha,4n$) or MT5 (Ru95 production)	42-Mo-96 MT17 ($\alpha,3n$) >>



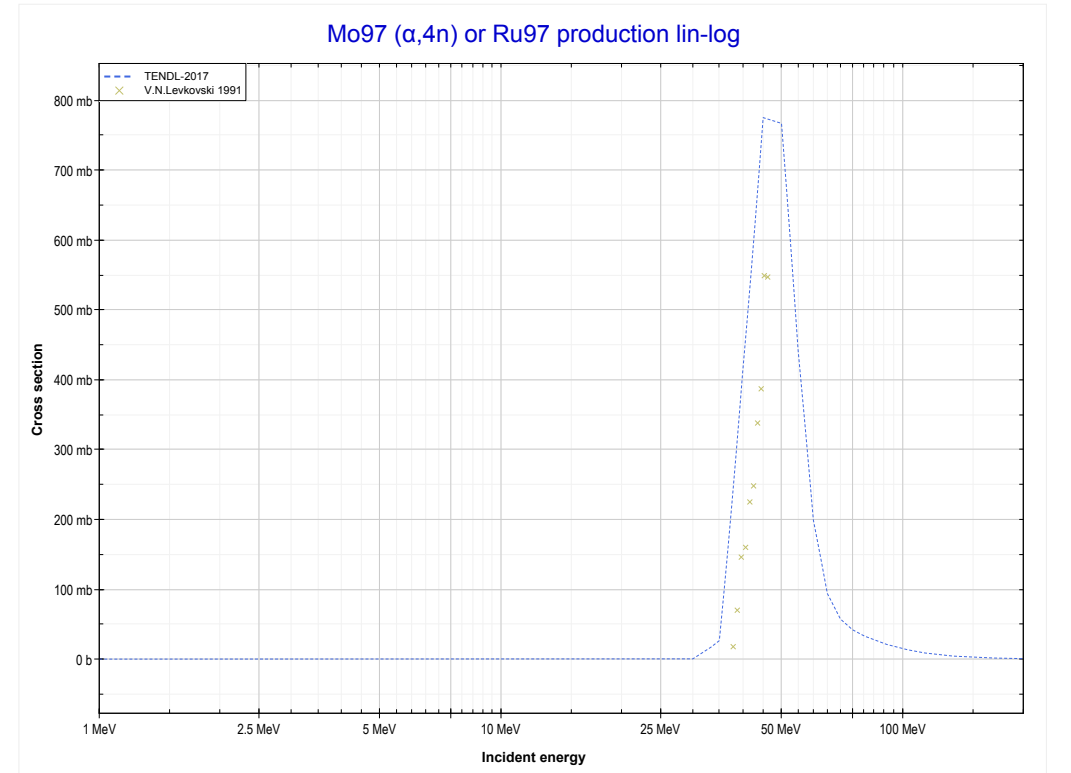
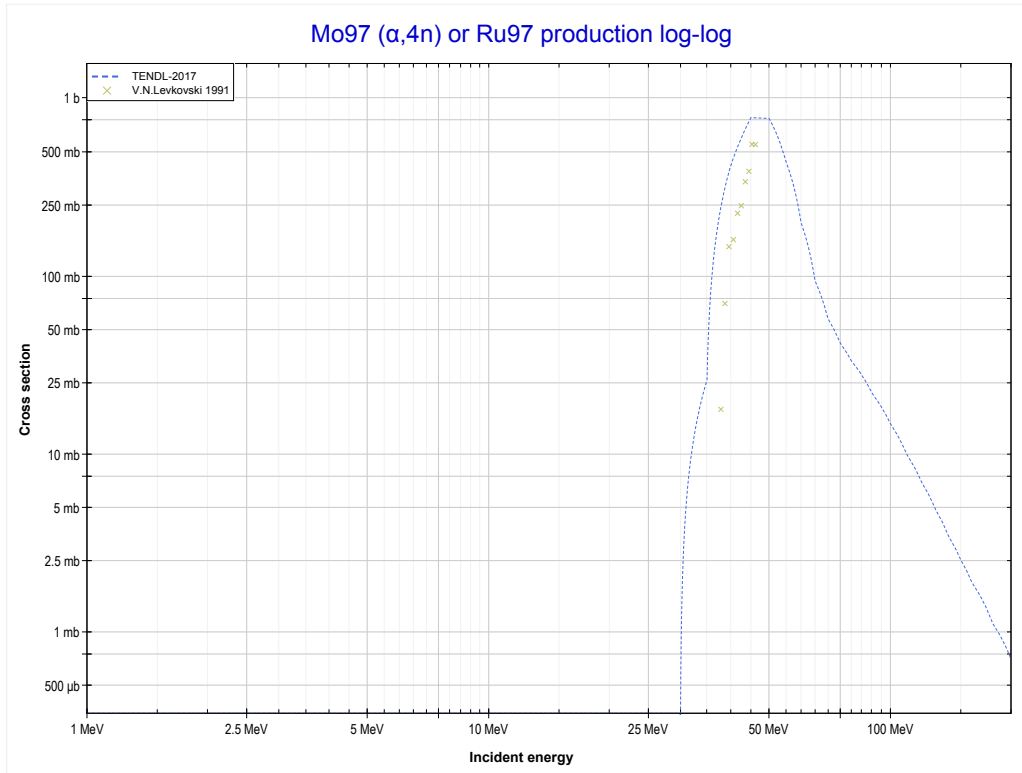
Reaction	Q-Value
Mo95($\alpha,4n$)Ru95	-34114.95 keV

<< 42-Mo-94	42-Mo-96	45-Rh-103 >>
<< 42-Mo-95 MT37 ($\alpha,4n$)	MT17 ($\alpha,3n$) or MT5 (Ru97 production)	42-Mo-97 MT37 ($\alpha,4n$) >>



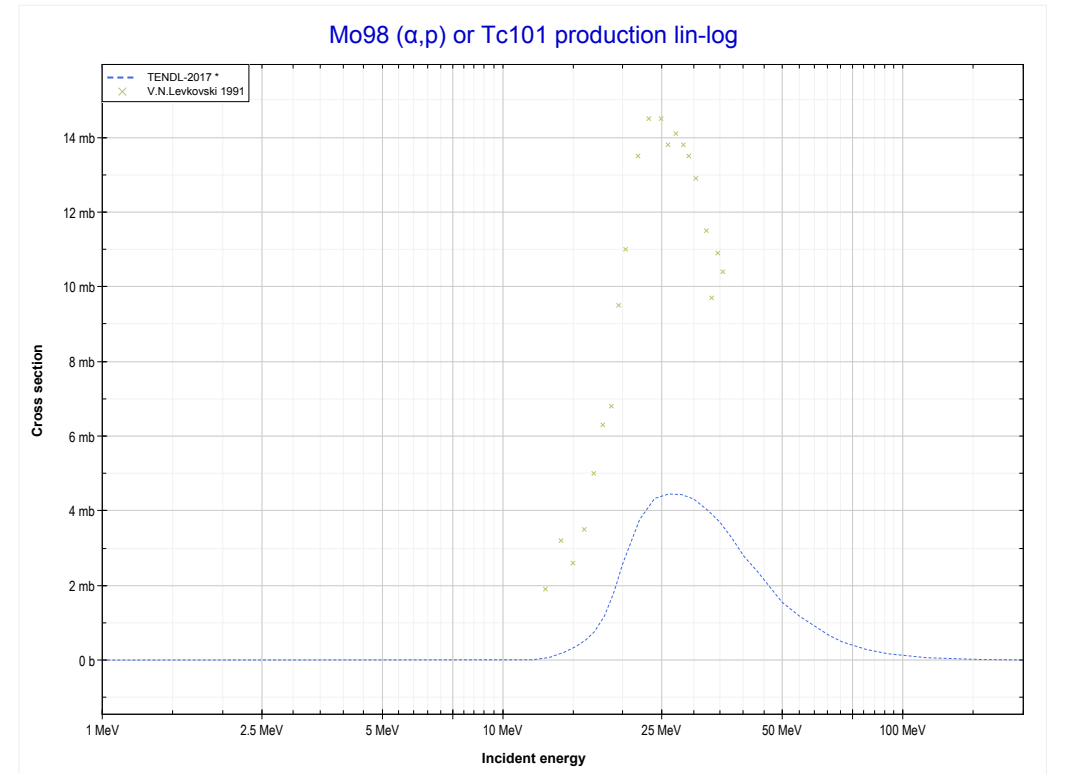
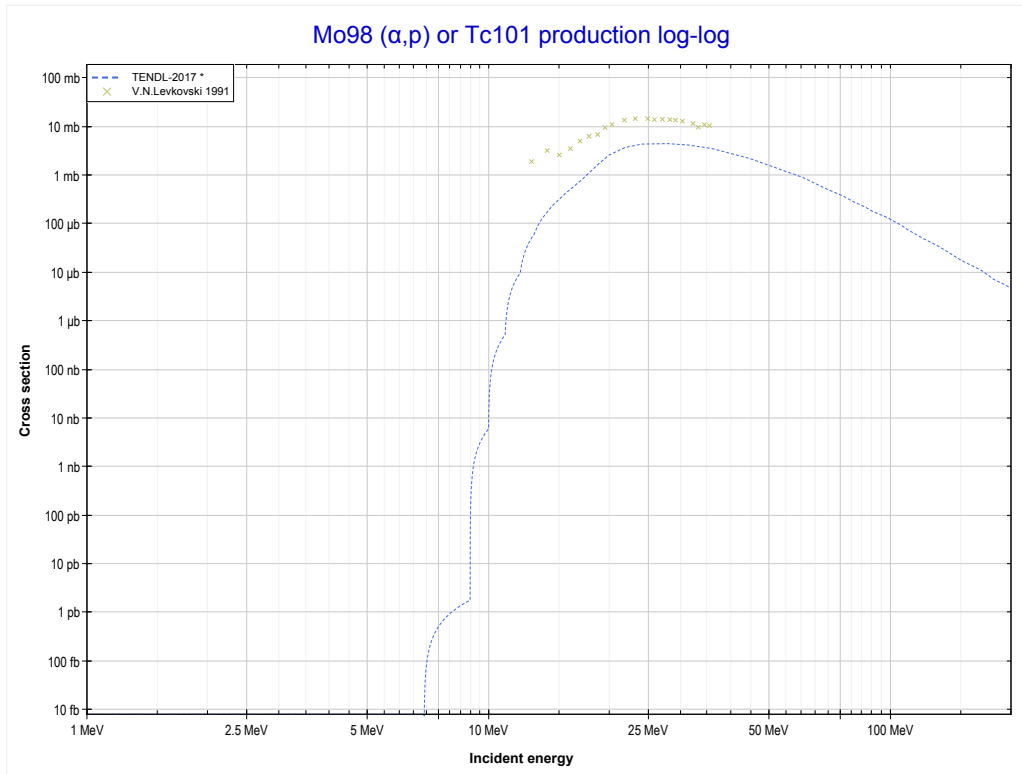
Reaction	Q-Value
Mo96($\alpha,3n$)Ru97	-24463.34 keV

<< 42-Mo-95	42-Mo-97	45-Rh-103 >>
<< 42-Mo-96 MT17 ($\alpha,3n$)	MT37 ($\alpha,4n$) or MT5 (Ru97 production)	42-Mo-98 MT103 (α,p) >>



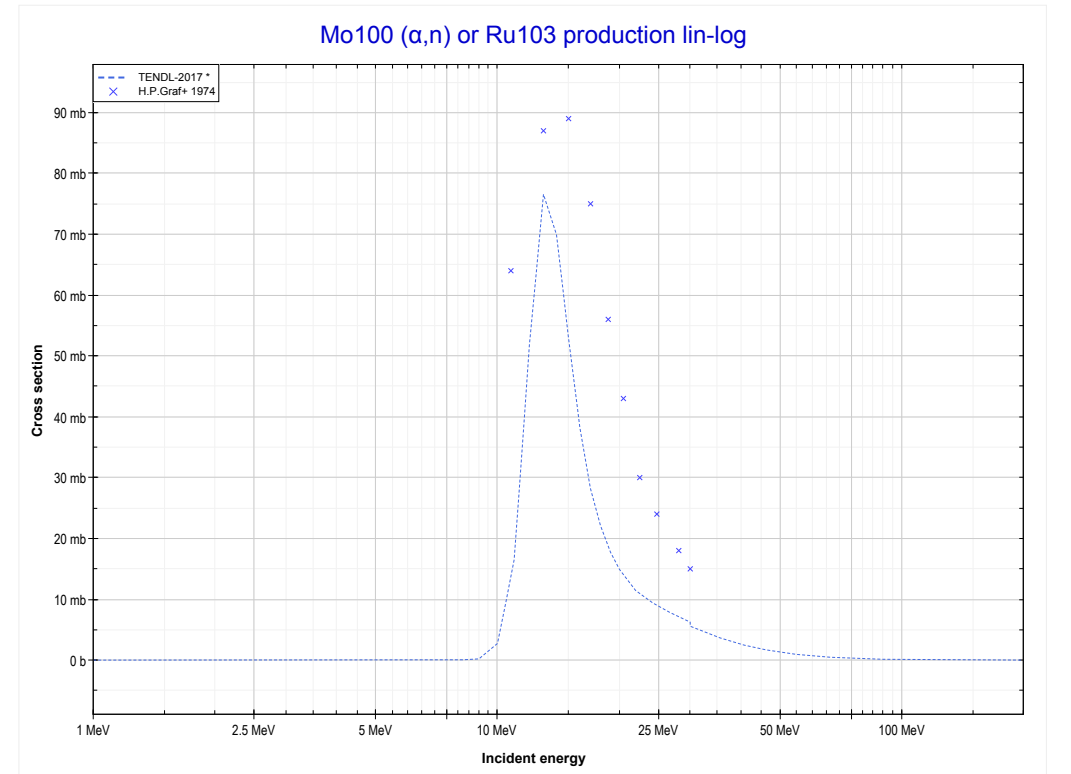
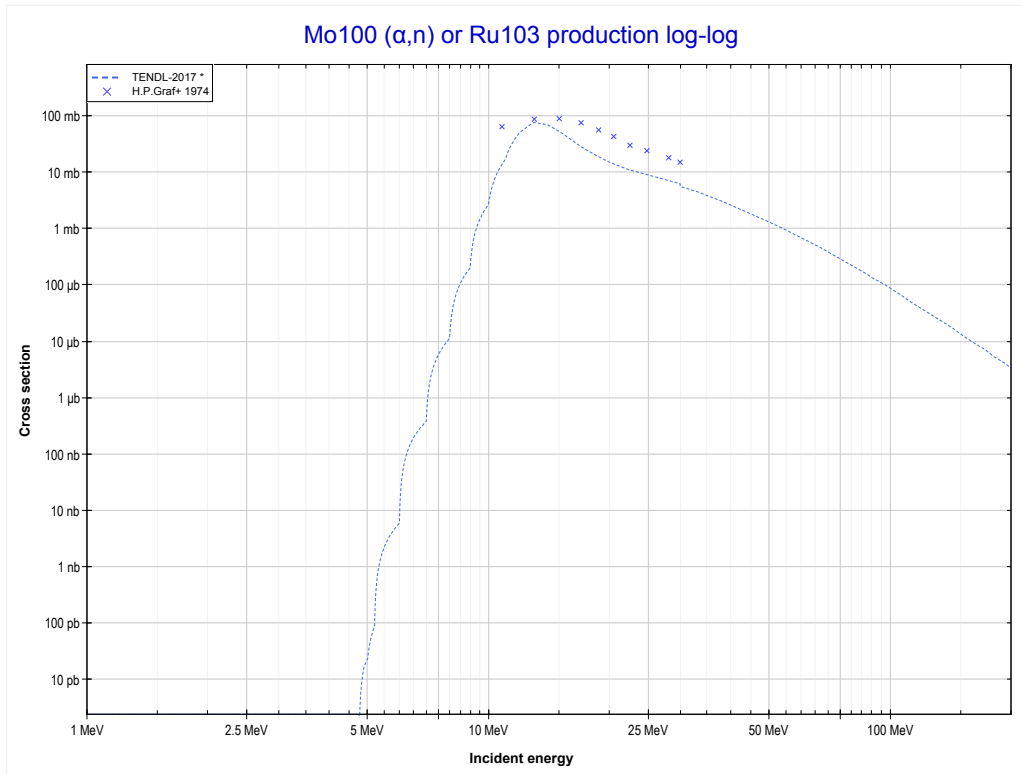
Reaction	Q-Value
Mo97($\alpha,4n$)Ru97	-31284.65 keV

<< 42-Mo-92	42-Mo-98	42-Mo-100 >>
<< 42-Mo-97 MT37 ($\alpha,4n$)	MT103 (α,p) or MT5 (Tc101 production)	42-Mo-100 MT4 (α,n) >>



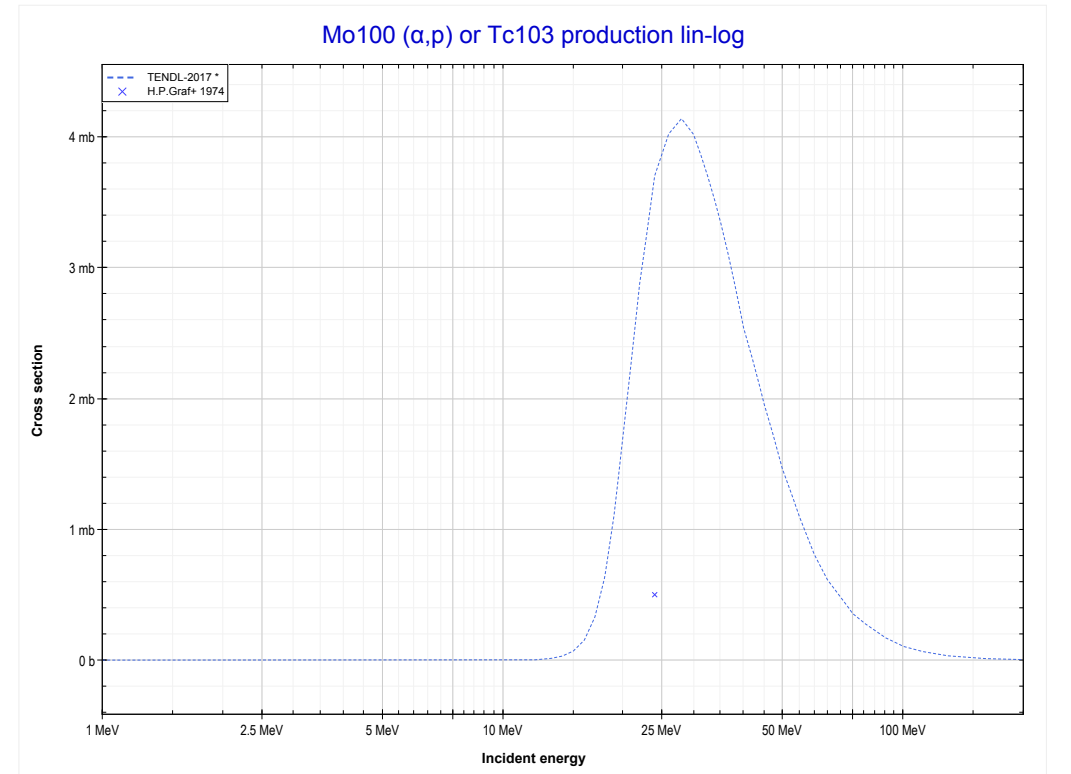
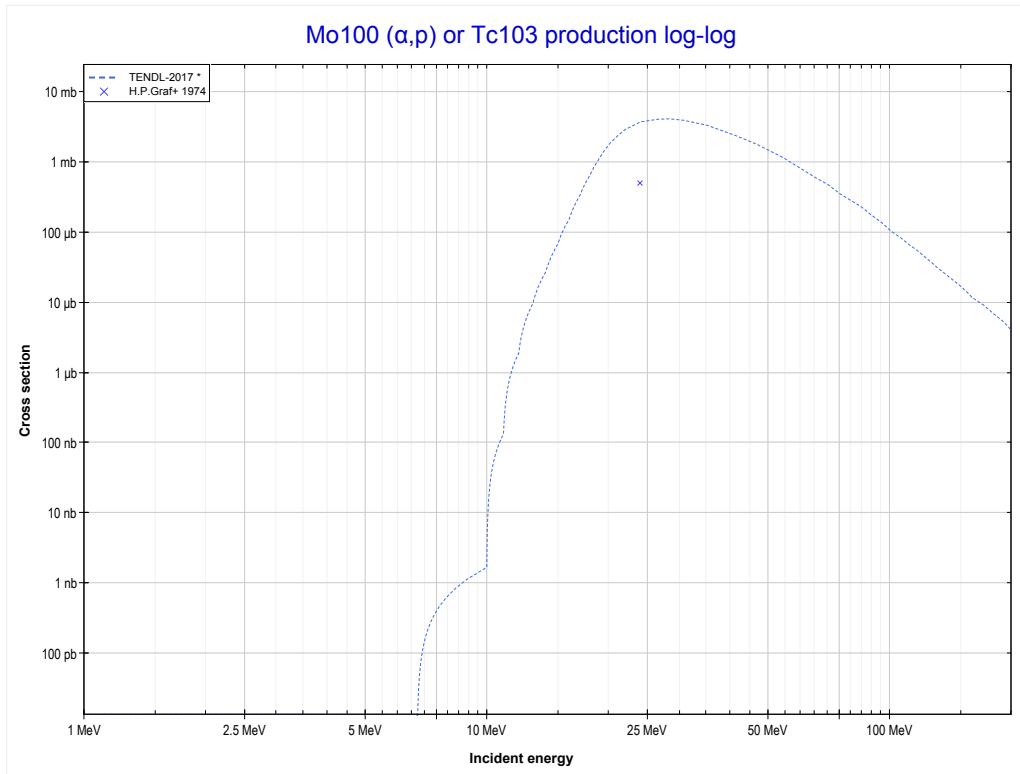
Reaction	Q-Value
Mo98(α,p)Tc101	-6637.85 keV

<< 42-Mo-94	42-Mo-100	44-Ru-100 >>
<< 42-Mo-98 MT103 (α,p)	MT4 (α,n) or MT5 (Ru103 production)	MT103 (α,p) >>



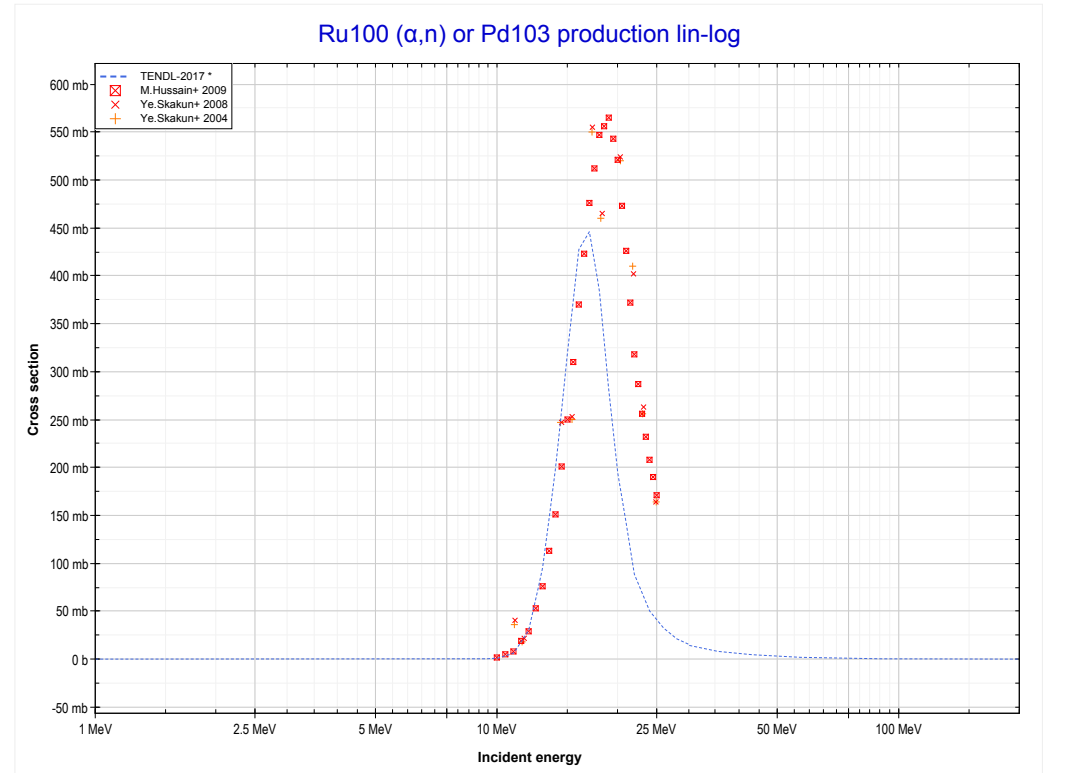
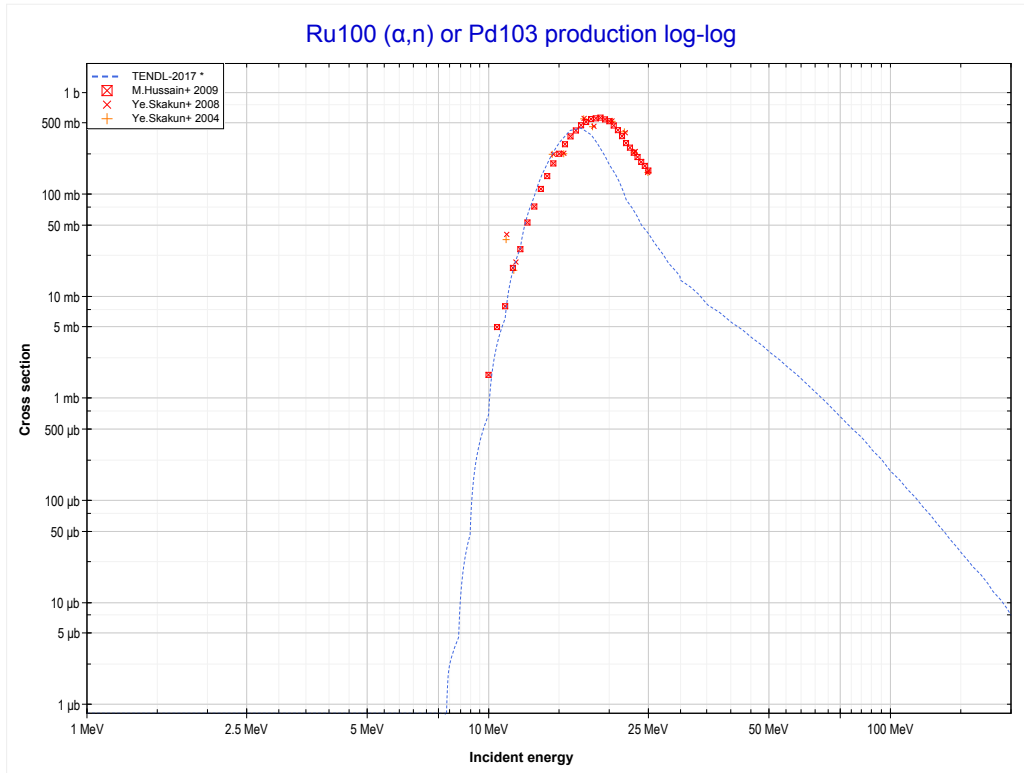
Reaction	Q-Value
Mo100(α,n)Ru103	-4572.30 keV

<< 42-Mo-98	42-Mo-100	48-Cd-106 >>
<< MT4 (α,n)	MT103 (α,p) or MT5 (Tc103 production)	44-Ru-100 MT4 (α,n) >>



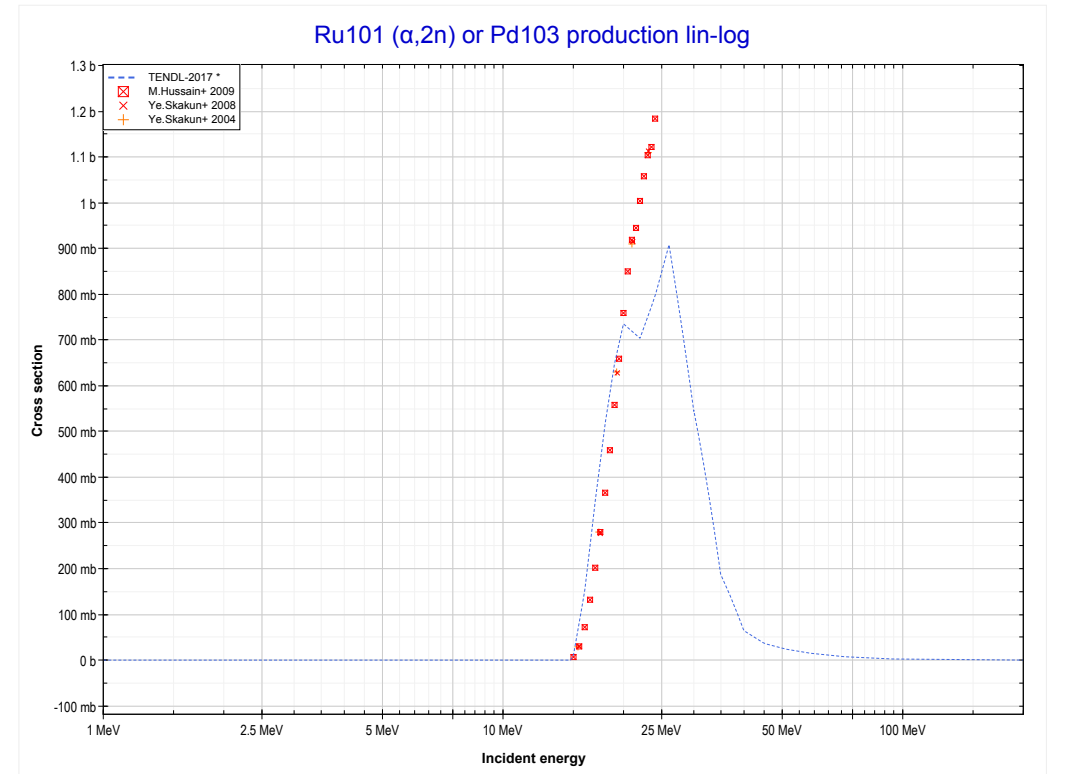
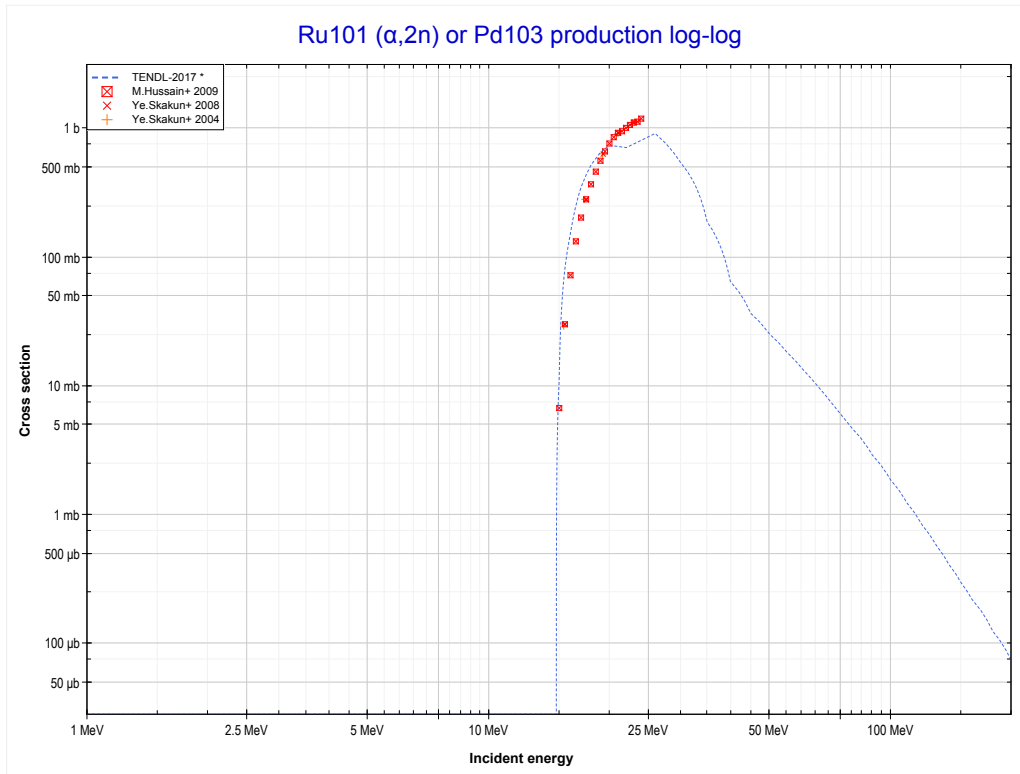
Reaction	Q-Value
Mo100(α,p)Tc103	-6451.55 keV

<< 42-Mo-100	44-Ru-100	45-Rh-103 >>
<< 42-Mo-100 MT103 (α,p)	MT4 (α,n) or MT5 (Pd103 production)	44-Ru-101 MT16 ($\alpha,2n$) >>



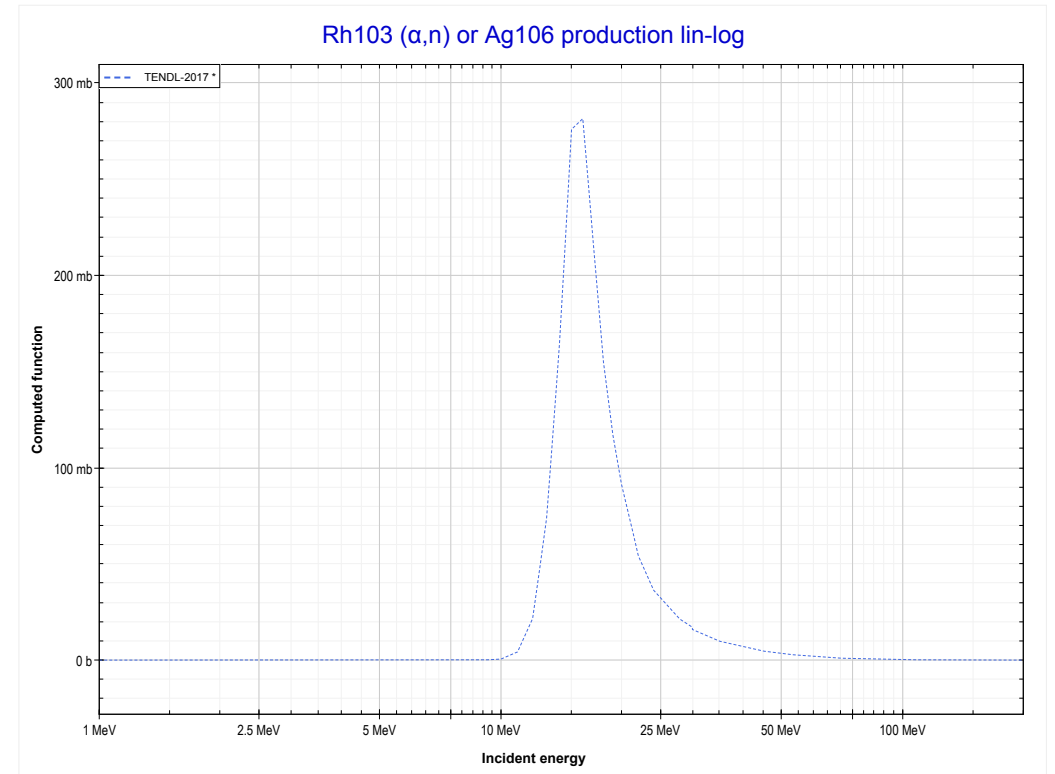
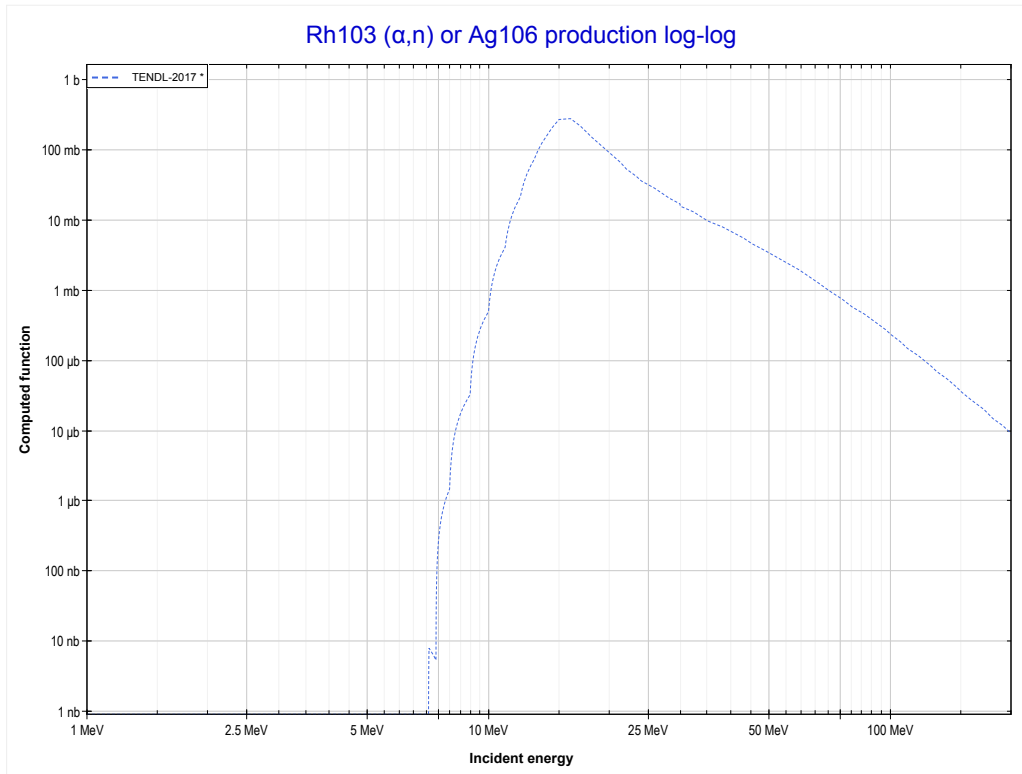
Reaction	Q-Value
Ru100(α,n)Pd103	-7385.20 keV

<< 42-Mo-95	44-Ru-101	45-Rh-103 >>
<< 44-Ru-100 MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Pd103 production)	45-Rh-103 MT4 (α, n) >>



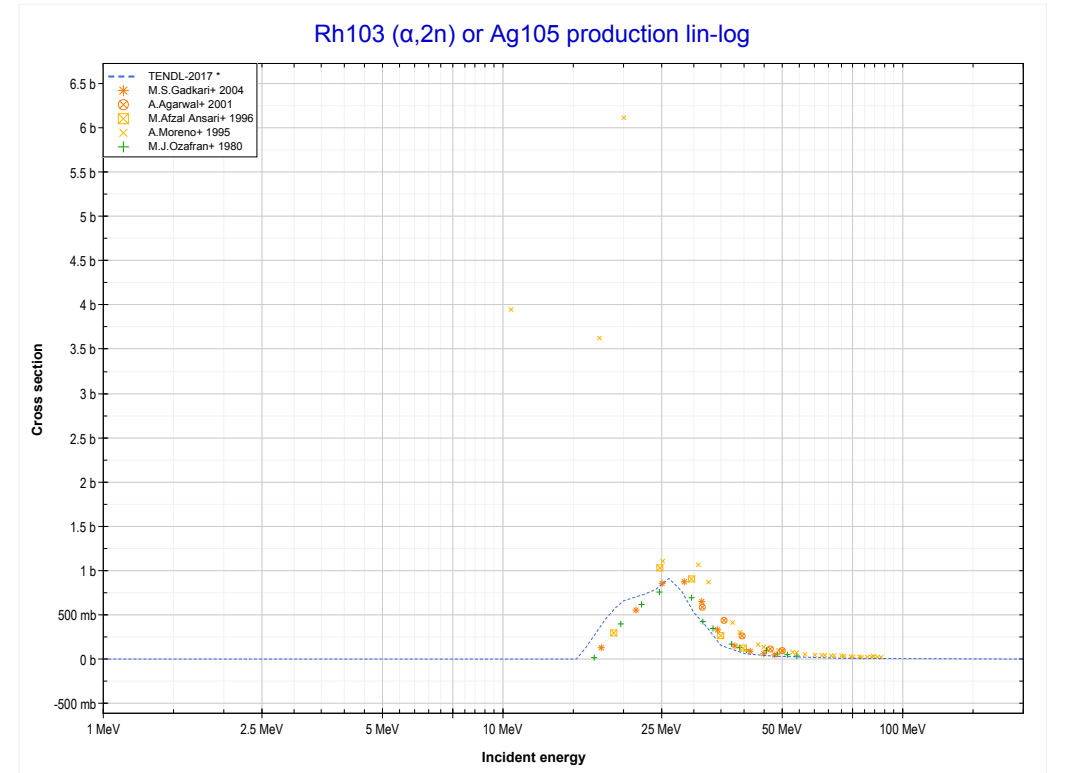
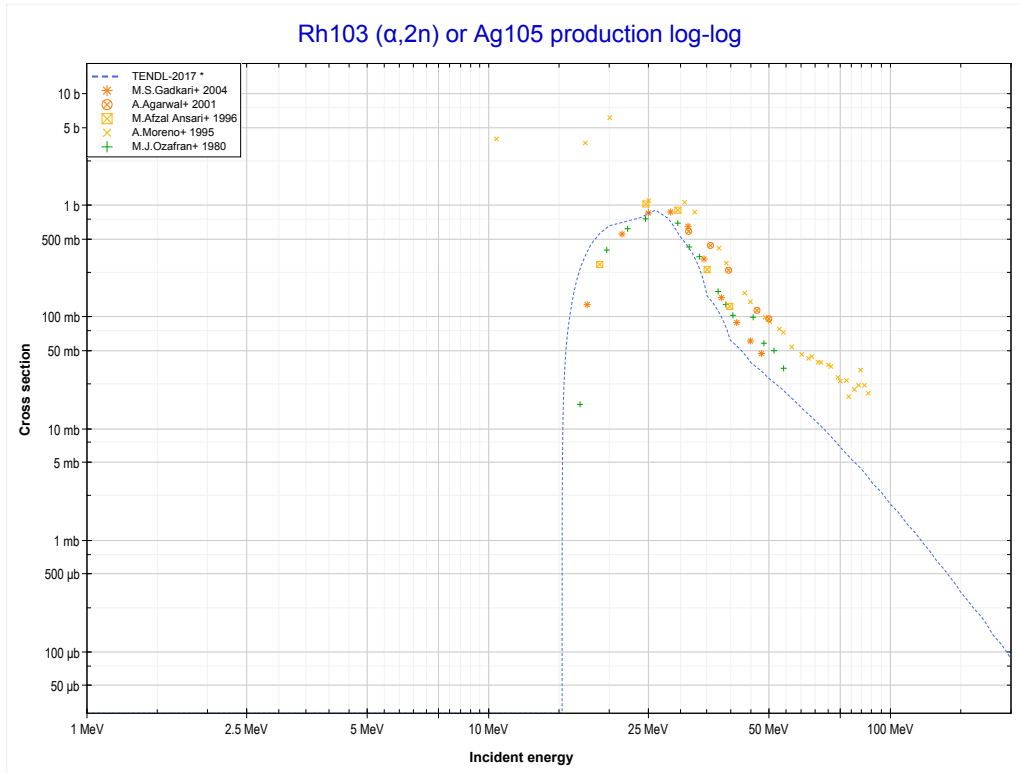
Reaction	Q-Value
Ru101($\alpha, 2n$)Pd103	-14187.32 keV

<< 44-Ru-100	45-Rh-103	47-Ag-107 >>
<< 44-Ru-101 MT16 ($\alpha,2n$)	MT4 (α,n) or MT5 (Ag106 production)	MT16 ($\alpha,2n$) >>



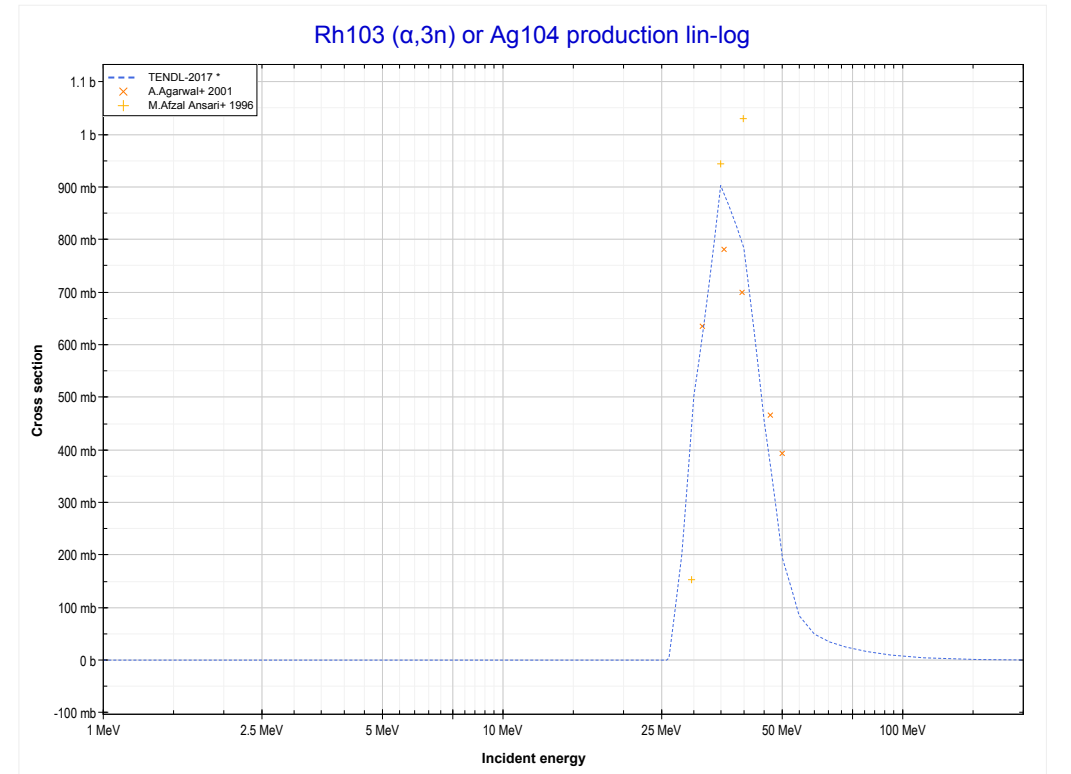
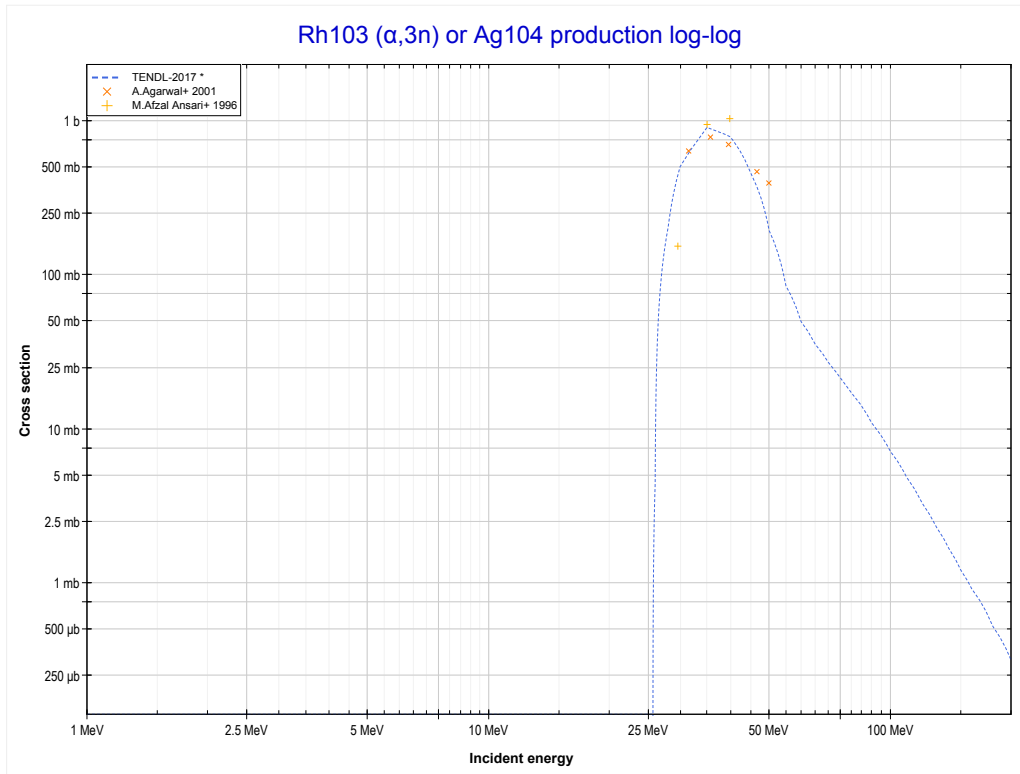
Reaction	Q-Value
Rh103(α,n)Ag106	-6732.50 keV

<< 44-Ru-101	45-Rh-103	47-Ag-107 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Ag105 production)	MT17 ($\alpha, 3n$) >>



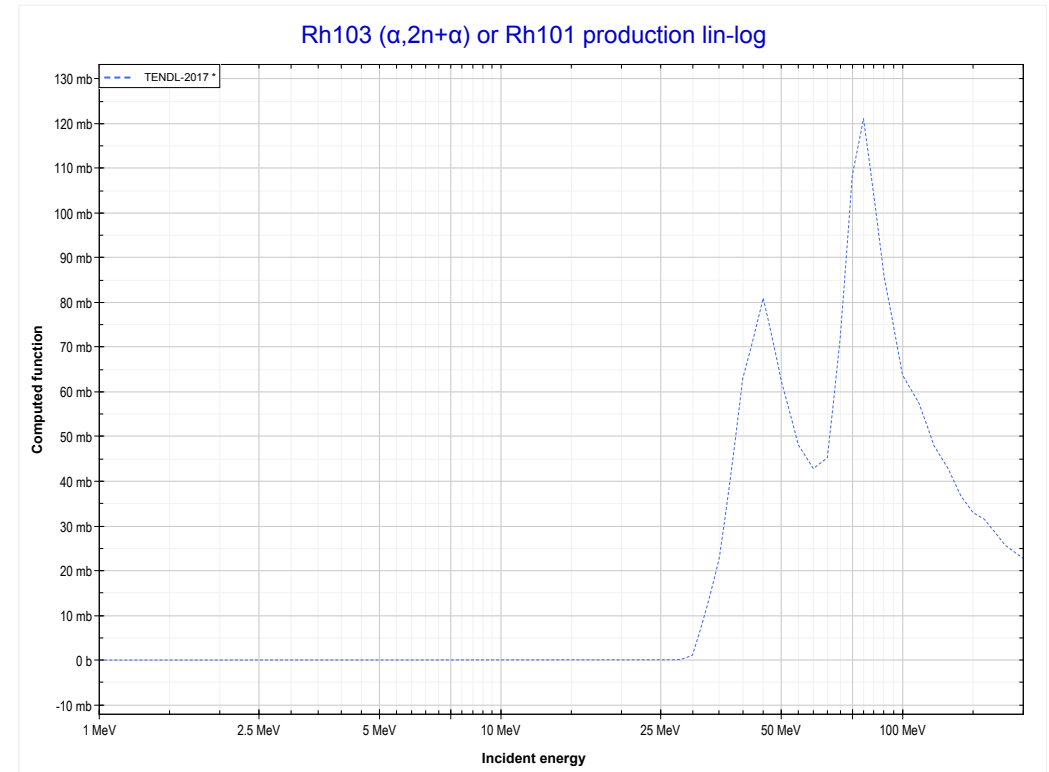
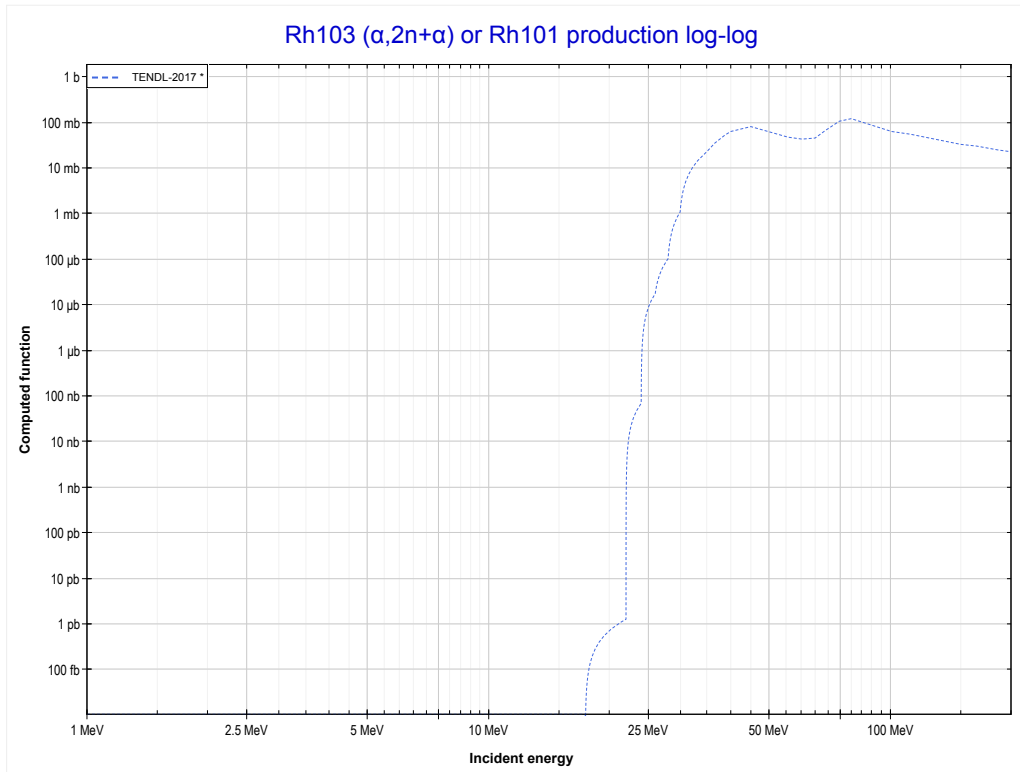
Reaction	Q-Value
Rh103($\alpha, 2n$)Ag105	-14674.82 keV

<< 42-Mo-96	45-Rh-103	47-Ag-107 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Ag104 production)	MT24 ($\alpha,2n+\alpha$) >>



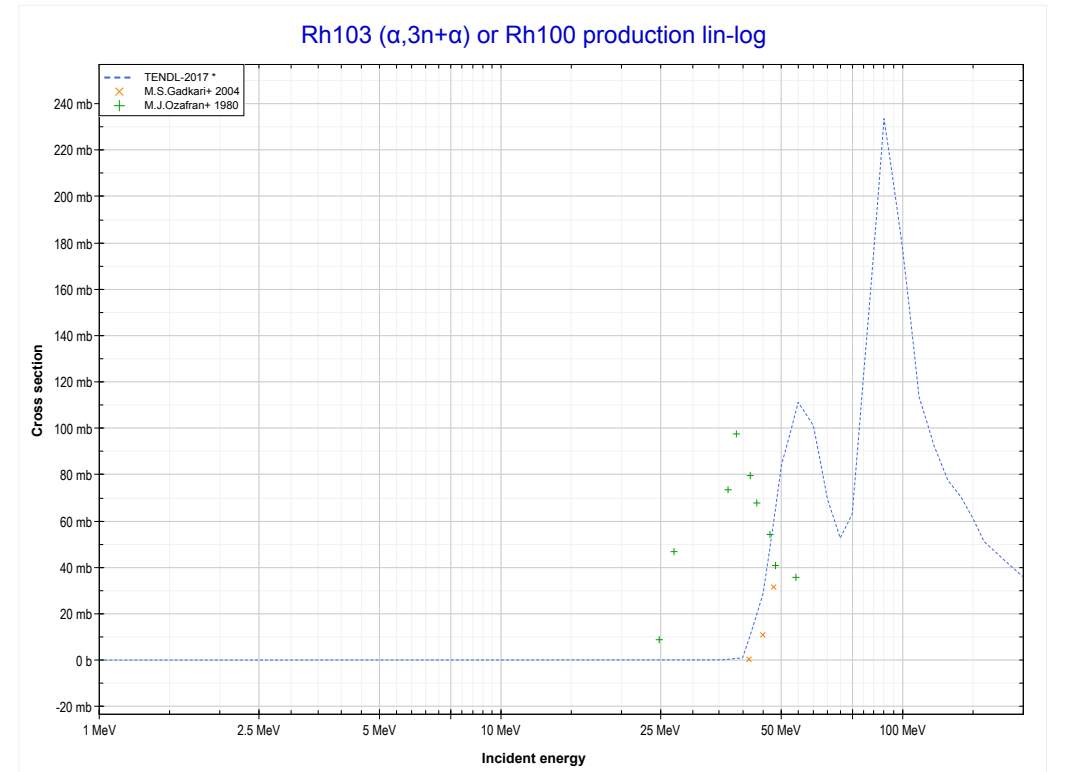
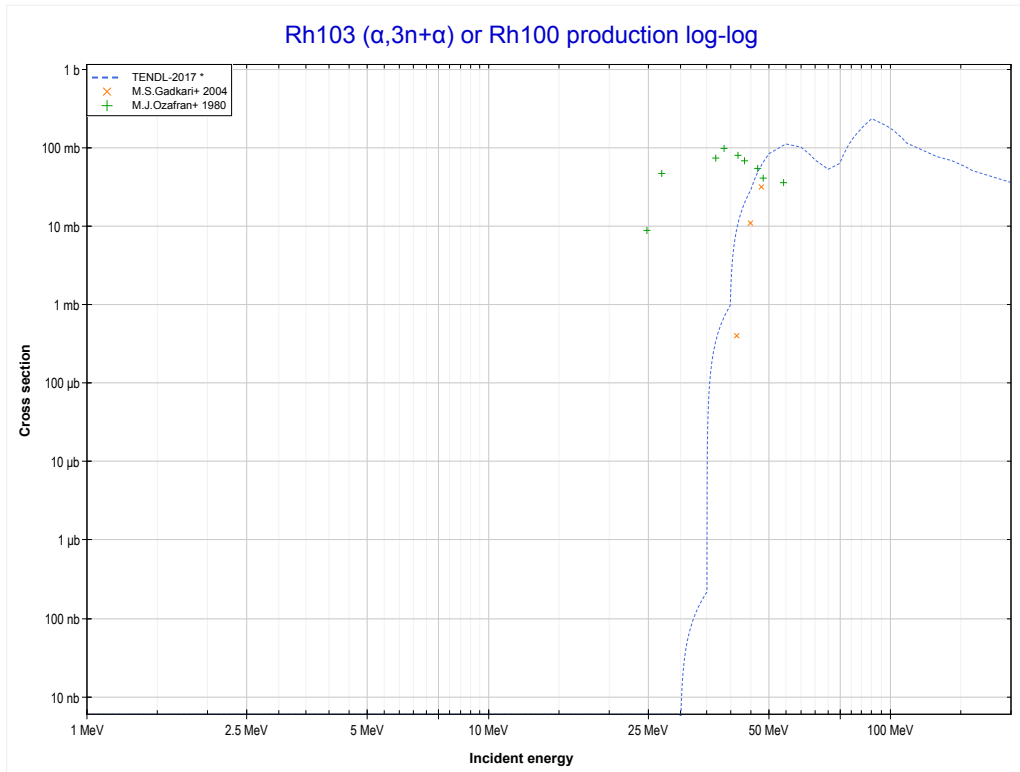
Reaction	Q-Value
Rh103($\alpha,3n$)Ag104	-24701.14 keV

<< 39-Y-89	45-Rh-103	69-Tm-169 >>
<< MT17 ($\alpha,3n$)	MT24 ($\alpha,2n+\alpha$) or MT5 (Rh101 production)	MT25 ($\alpha,3n+\alpha$) >>



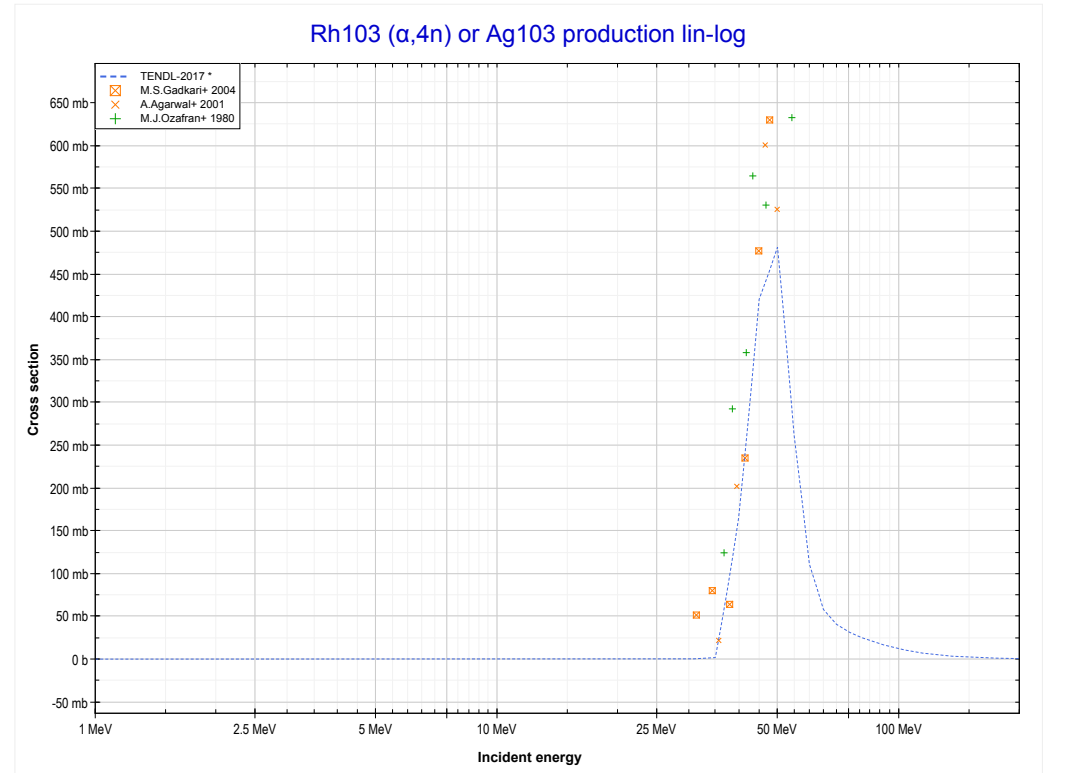
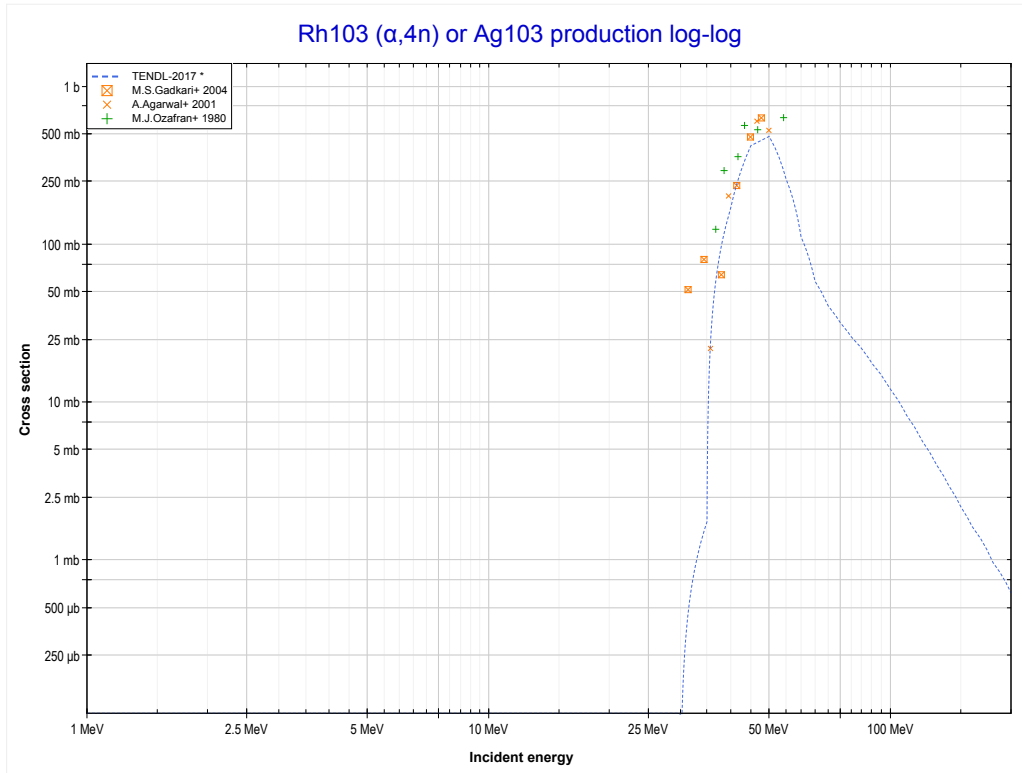
Reaction	Q-Value
Rh103($\alpha,2n+\alpha$)Rh101	-16759.73 keV
Rh103($\alpha,2t$)Rh101	-28091.80 keV
Rh103($\alpha,n+d+t$)Rh101	-34349.03 keV
Rh103($\alpha,2n+p+t$)Rh101	-36573.60 keV
Rh103($\alpha,3n+He3$)Rh101	-37337.35 keV
Rh103($\alpha,2n+2d$)Rh101	-40606.26 keV
Rh103($\alpha,3n+p+d$)Rh101	-42830.83 keV
Rh103($\alpha,4n+2p$)Rh101	-45055.39 keV

<< 27-Co-59	45-Rh-103	47-Ag-109 >>
<< MT24 ($\alpha, 2n+\alpha$)	MT25 ($\alpha, 3n+\alpha$) or MT5 (Rh100 production)	MT37 ($\alpha, 4n$) >>



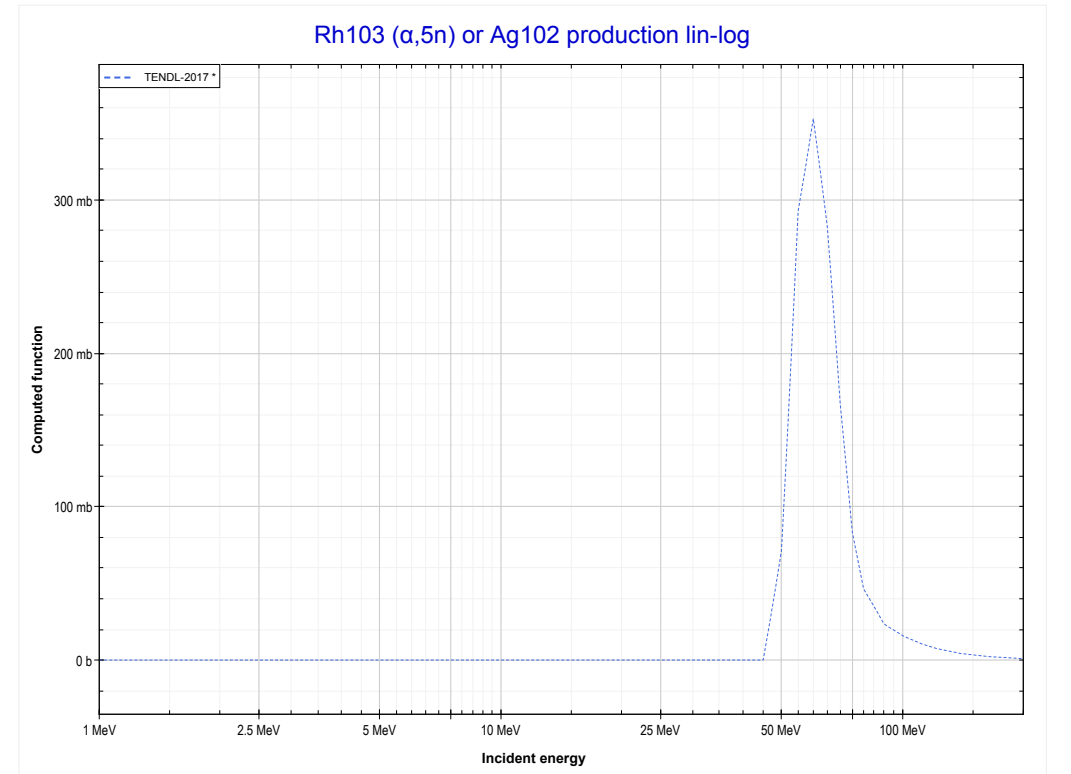
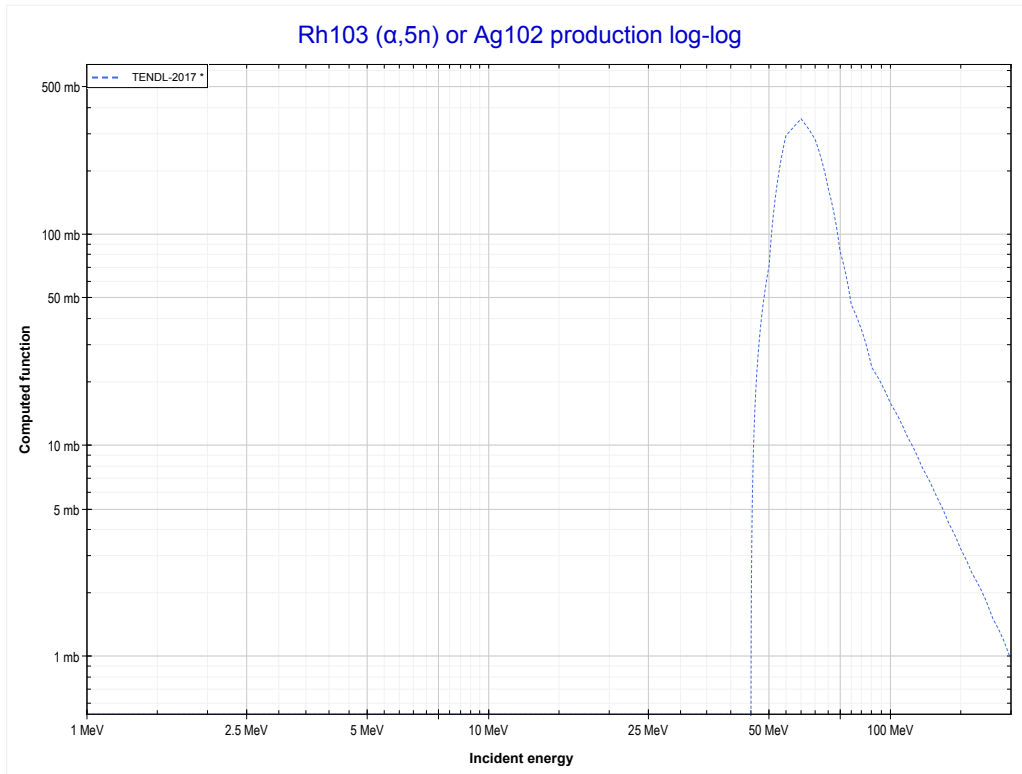
Reaction	Q-Value
Rh103($\alpha, 3n+\alpha$)Rh100	-26654.05 keV
Rh103($\alpha, n+2t$)Rh100	-37986.11 keV
Rh103($\alpha, 2n+d+t$)Rh100	-44243.35 keV
Rh103($\alpha, 3n+p+t$)Rh100	-46467.91 keV
Rh103($\alpha, 4n+He3$)Rh100	-47231.67 keV
Rh103($\alpha, 3n+2d$)Rh100	-50500.58 keV
Rh103($\alpha, 4n+p+d$)Rh100	-52725.14 keV
Rh103($\alpha, 5n+2p$)Rh100	-54949.71 keV

<< 42-Mo-97	45-Rh-103	47-Ag-107 >>
<< MT25 ($\alpha, 3n+\alpha$)	MT37 ($\alpha, 4n$) or MT5 (Ag103 production)	MT152 ($\alpha, 5n$) >>



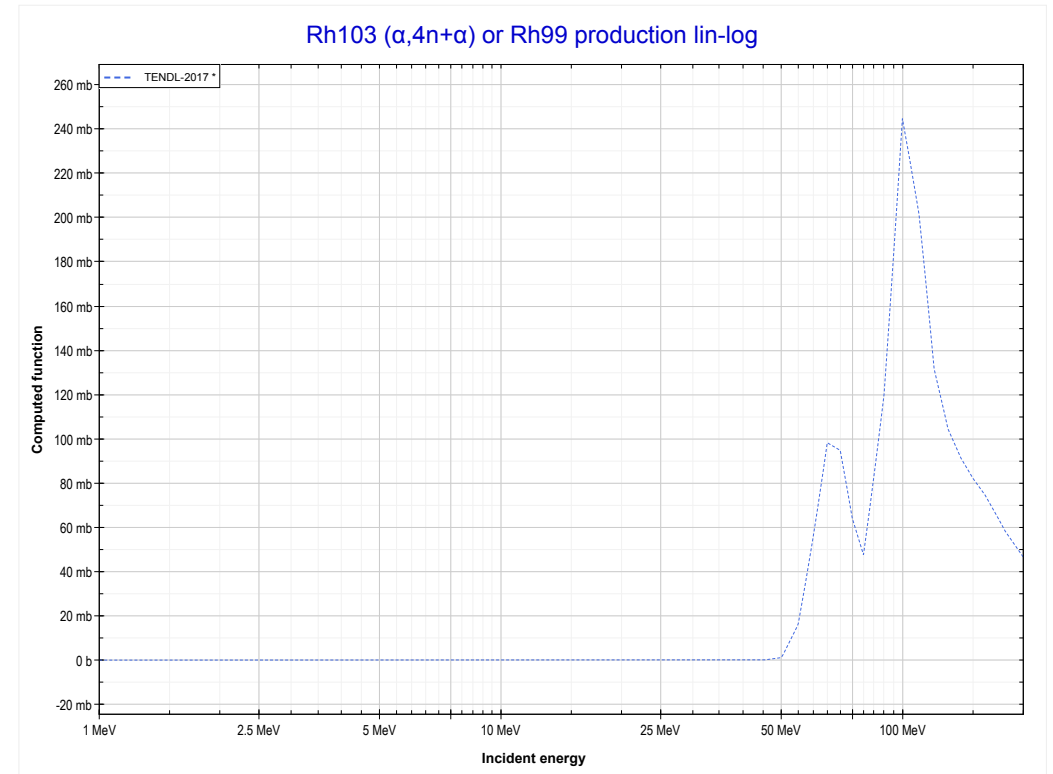
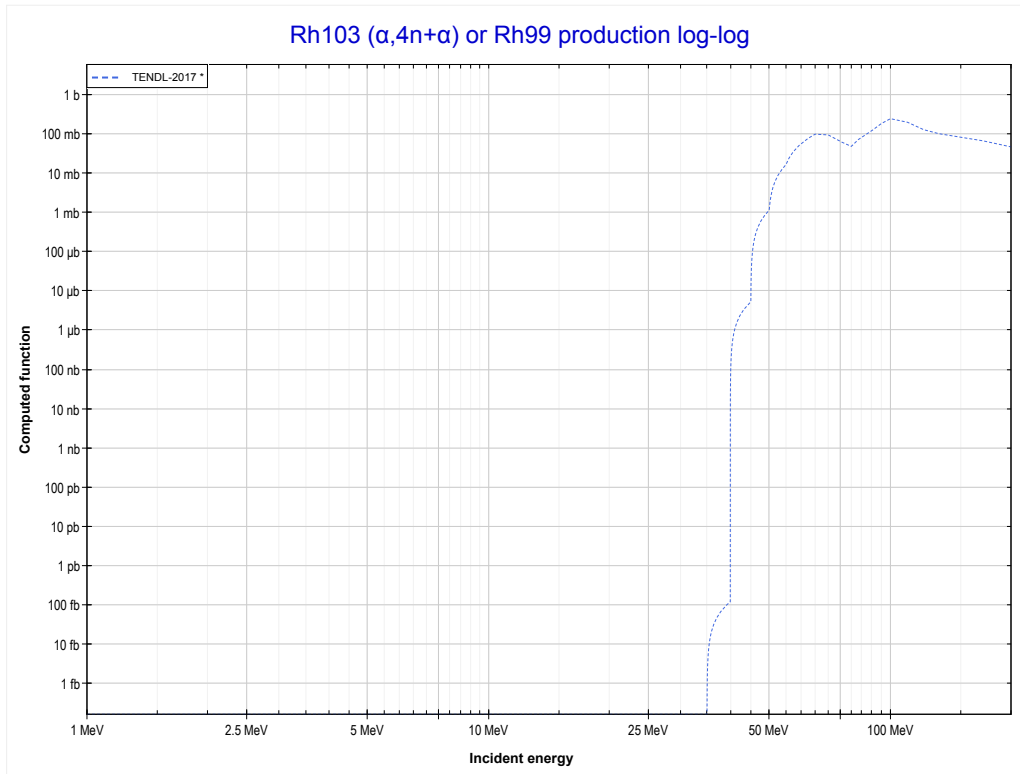
Reaction	Q-Value
Rh103($\alpha, 4n$)Ag103	-33088.45 keV

<< 41-Nb-93	45-Rh-103	47-Ag-107 >>
<< MT37 ($\alpha,4n$)	MT152 ($\alpha,5n$) or MT5 (Ag102 production)	MT165 ($\alpha,4n+\alpha$) >>



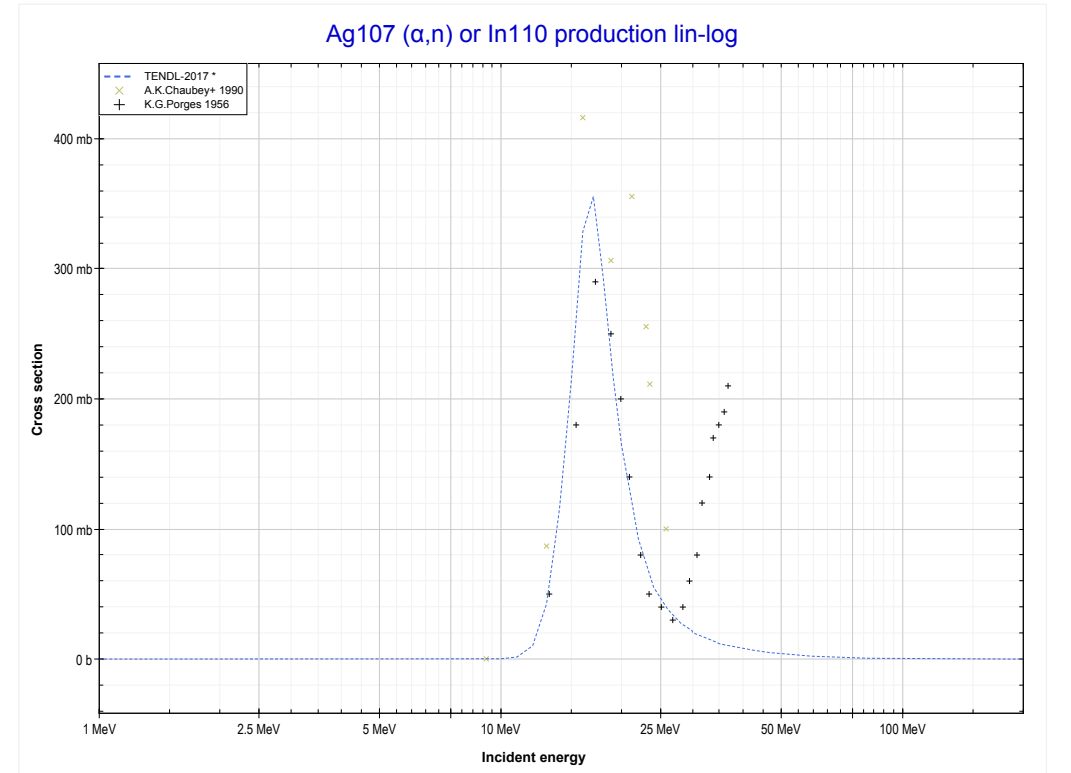
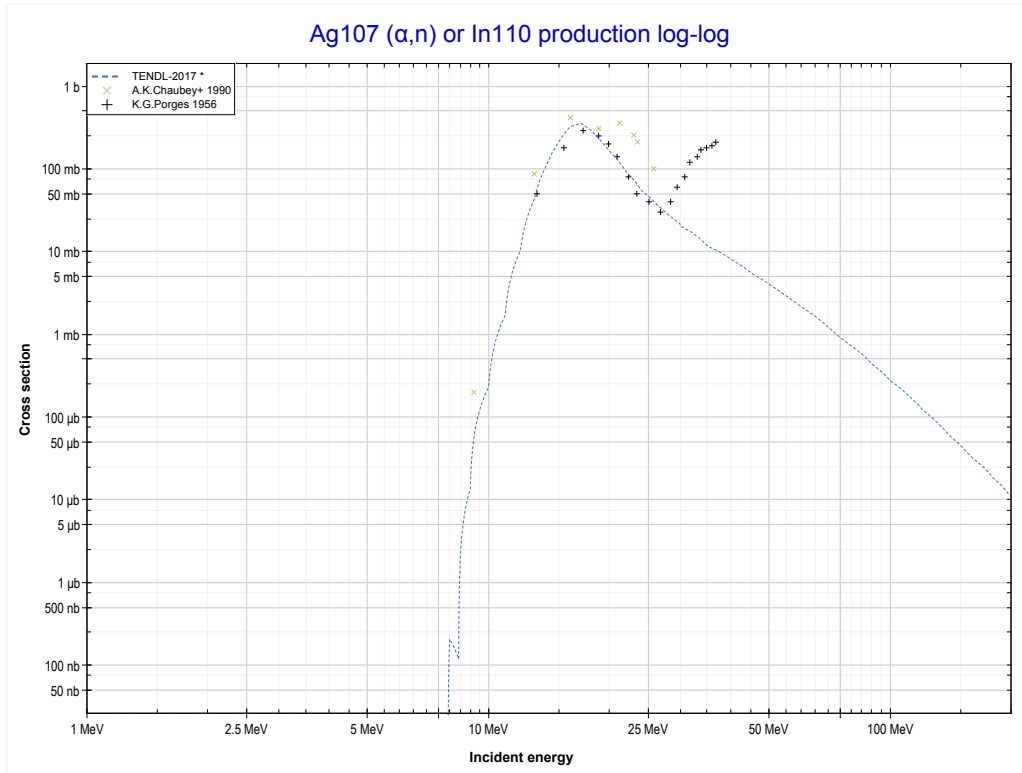
Reaction	Q-Value
Rh103($\alpha,5n$)Ag102	-43712.77 keV

	45-Rh-103	
<< MT152 ($\alpha,5n$)	MT165 ($\alpha,4n+\alpha$) or MT5 (Rh99 production)	47-Ag-107 MT4 (α,n) >>



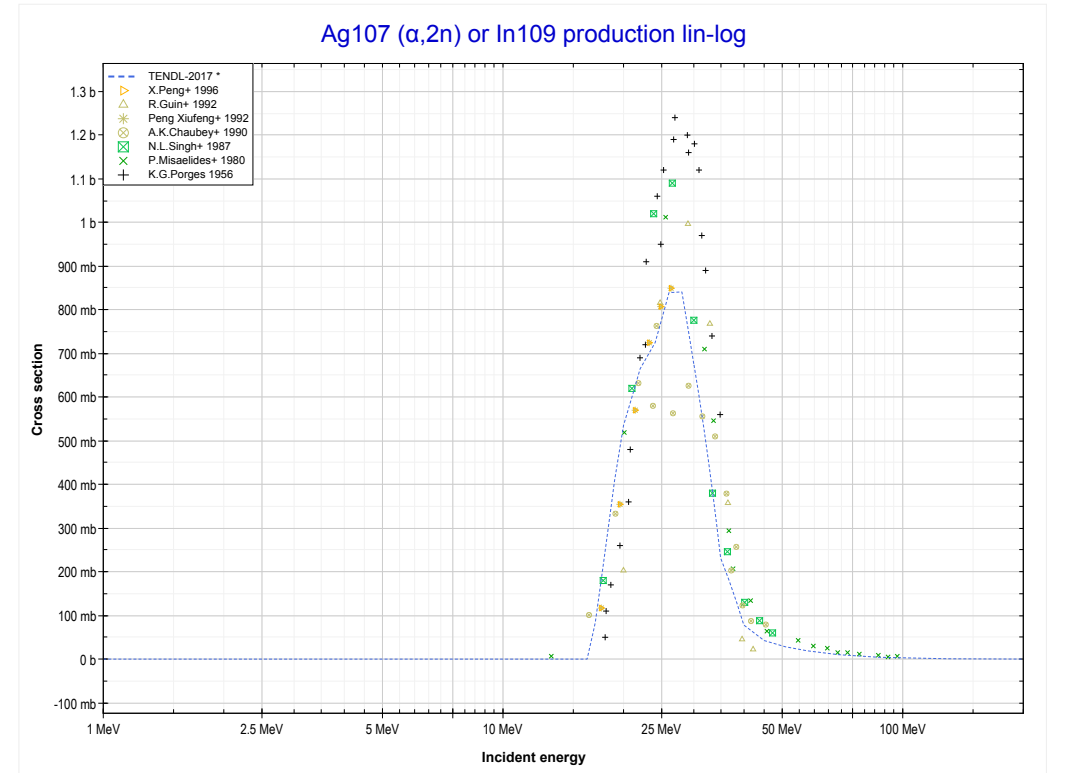
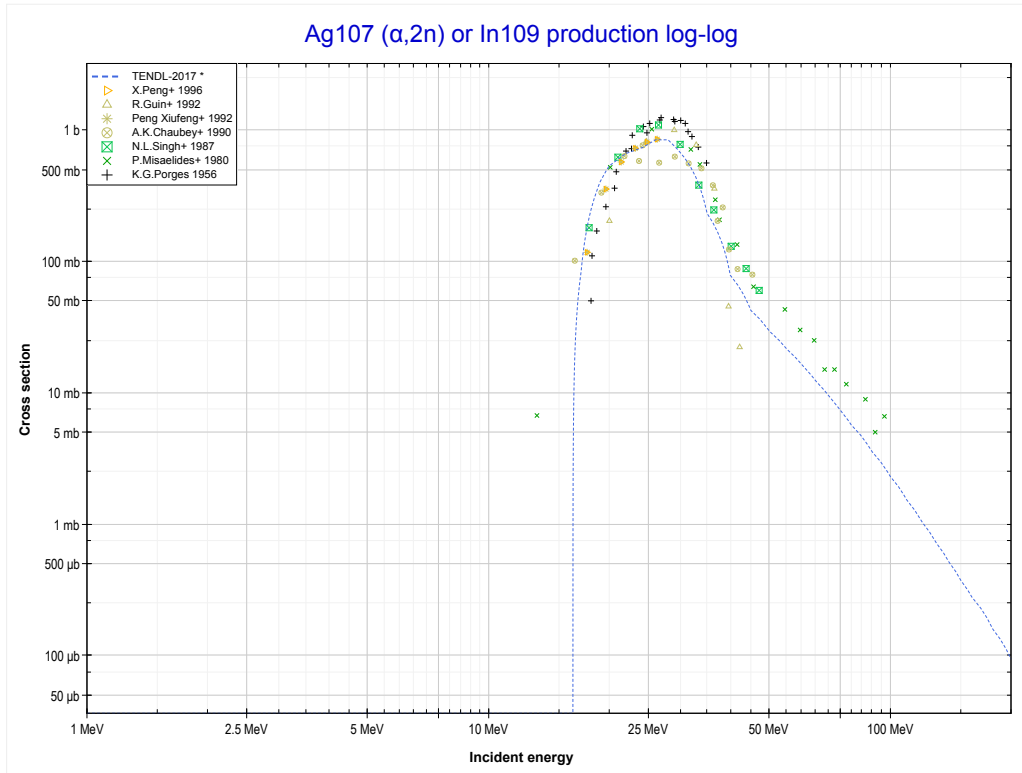
Reaction	Q-Value
Rh103($\alpha,4n+\alpha$)Rh99	-34735.37 keV
Rh103($\alpha,2n+2t$)Rh99	-46067.43 keV
Rh103($\alpha,3n+d+t$)Rh99	-52324.66 keV
Rh103($\alpha,4n+p+t$)Rh99	-54549.23 keV
Rh103($\alpha,5n+He3$)Rh99	-55312.99 keV
Rh103($\alpha,4n+2d$)Rh99	-58581.90 keV
Rh103($\alpha,5n+p+d$)Rh99	-60806.46 keV
Rh103($\alpha,6n+2p$)Rh99	-63031.03 keV

<< 45-Rh-103	47-Ag-107	47-Ag-109 >>
<< 45-Rh-103 MT165 ($\alpha,4n+\alpha$)	MT4 (α,n) or MT5 (In110 production)	MT16 ($\alpha,2n$) >>



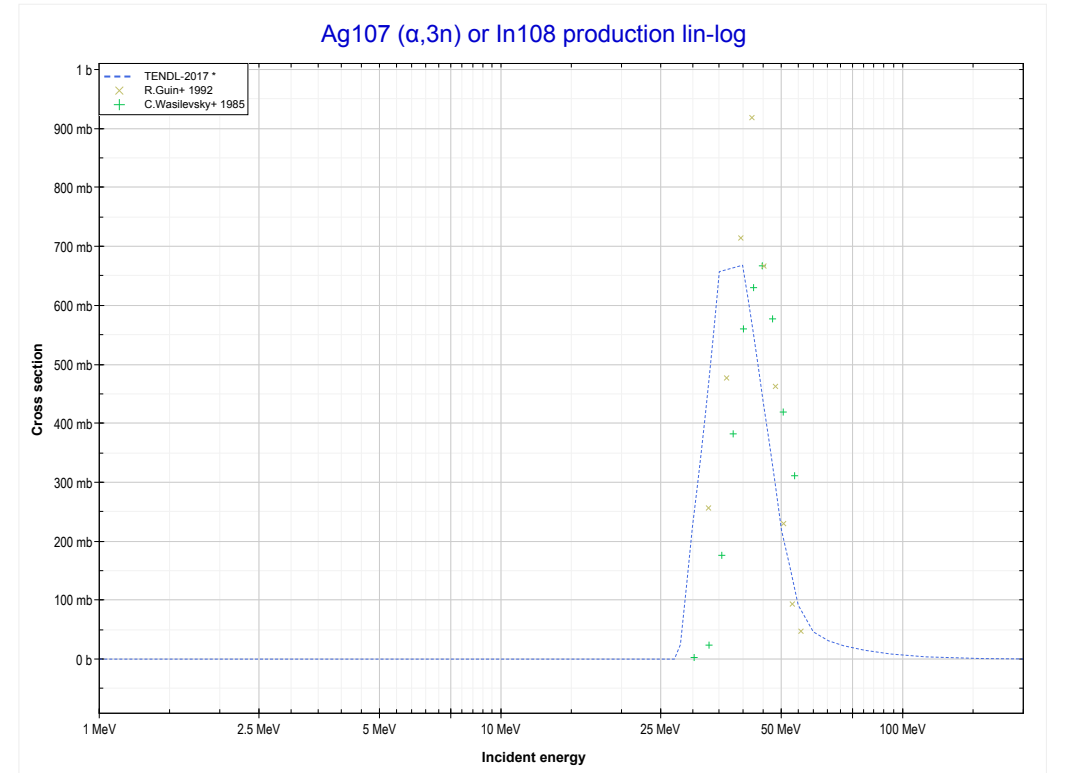
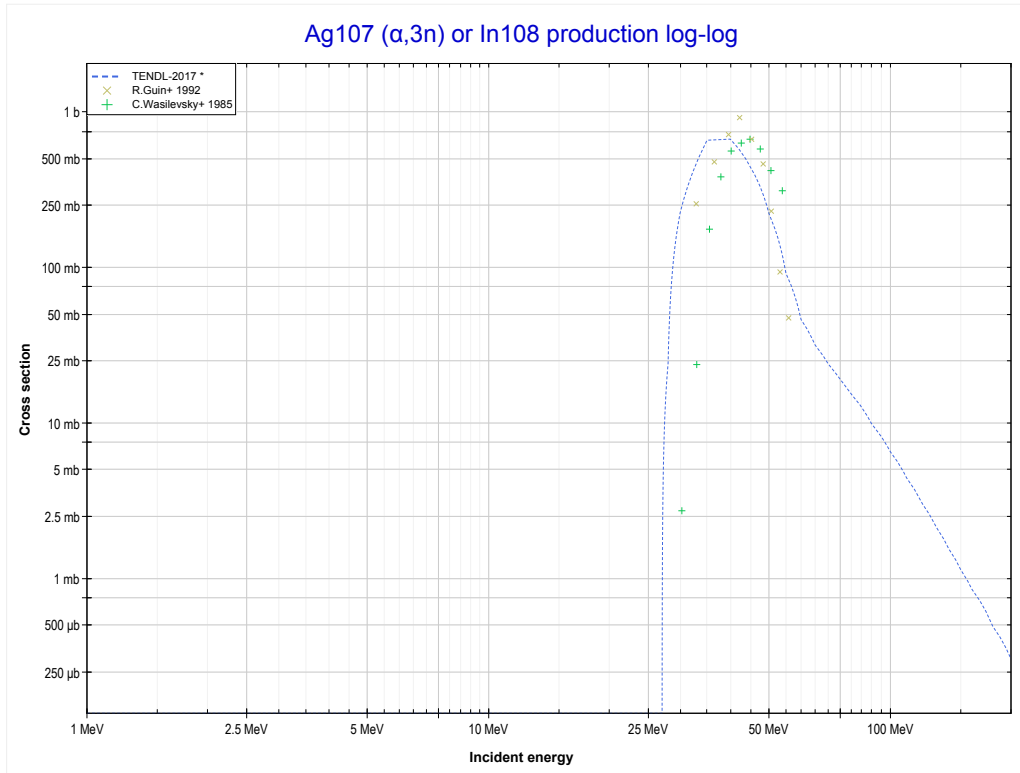
Reaction	Q-Value
Ag107(α,n)In110	-7582.00 keV

<< 45-Rh-103	47-Ag-107	47-Ag-109 >>
<< MT4 (α,n)	MT16 ($\alpha,2n$) or MT5 (In109 production)	MT17 ($\alpha,3n$) >>



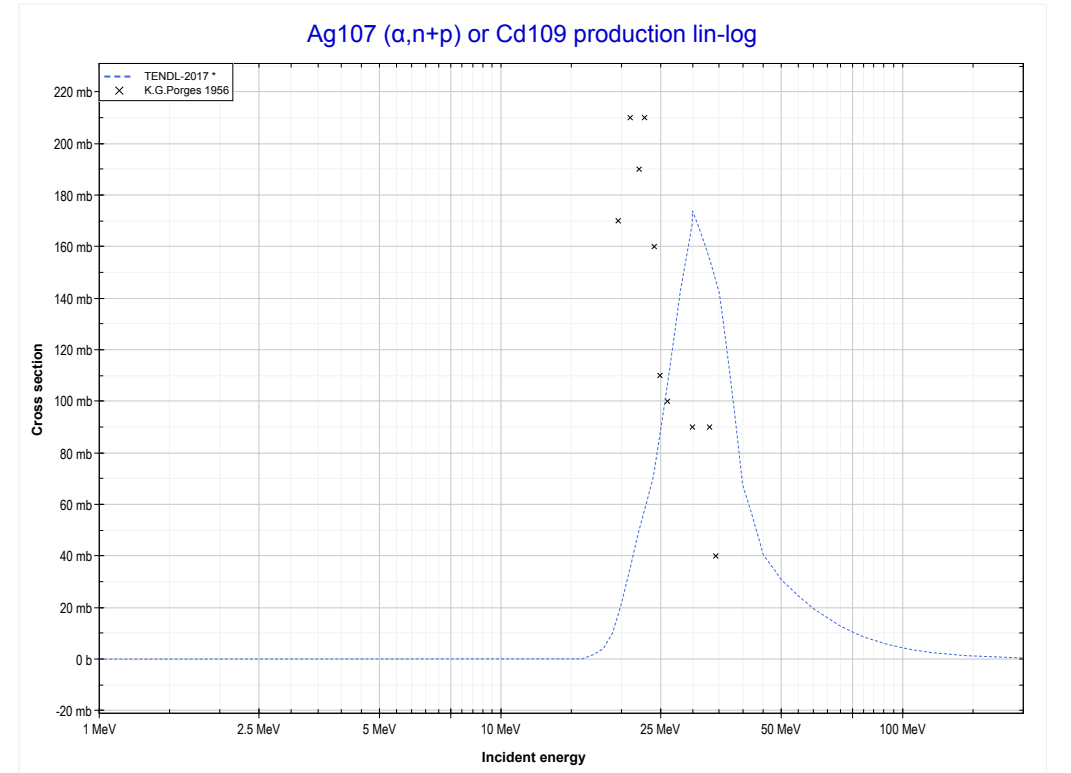
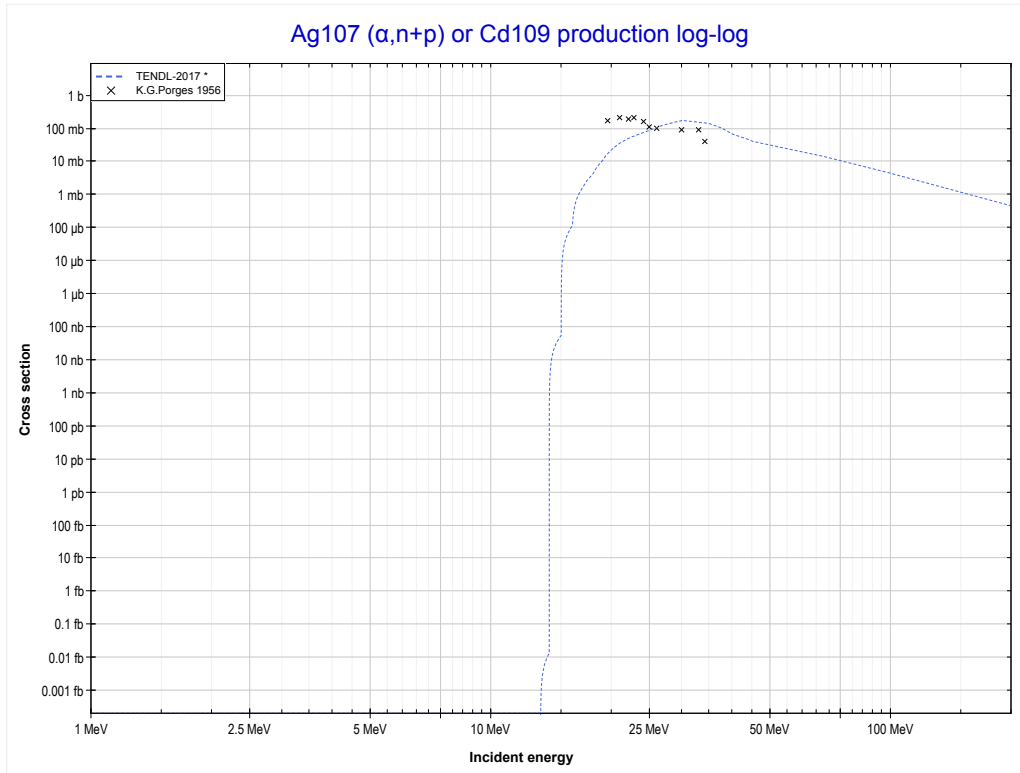
Reaction	Q-Value
Ag107($\alpha,2n$)In109	-15636.32 keV

<< 45-Rh-103	47-Ag-107	47-Ag-109 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (In108 production)	MT28 ($\alpha,n+p$) >>



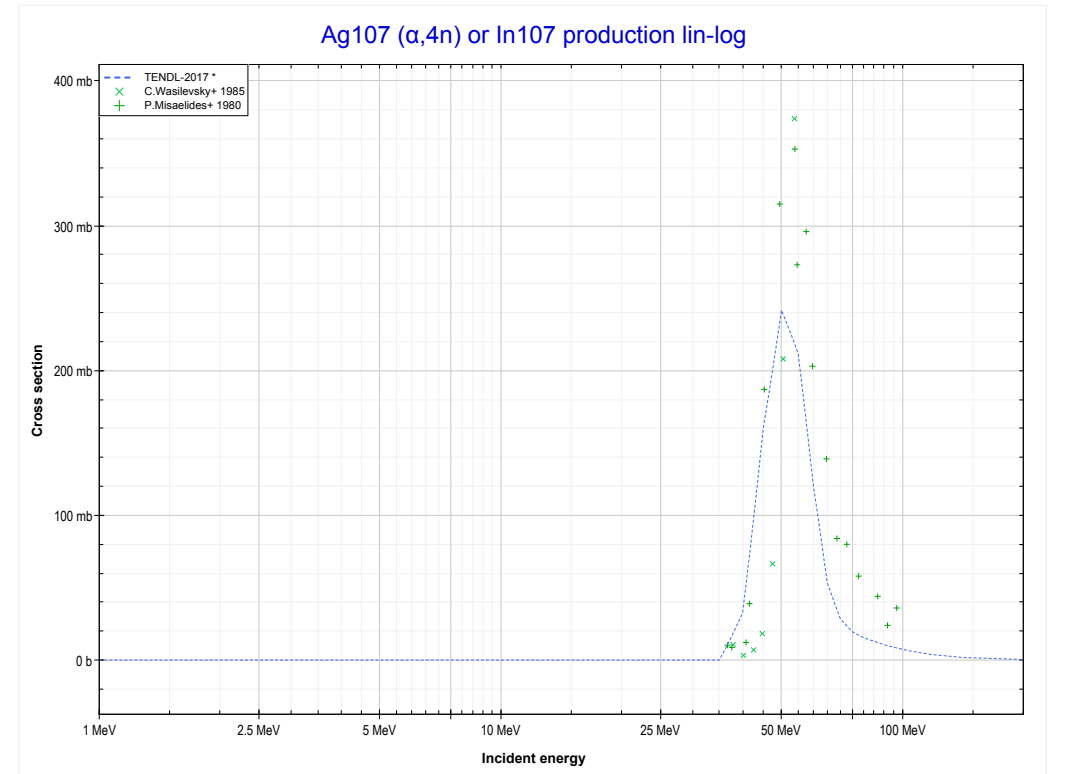
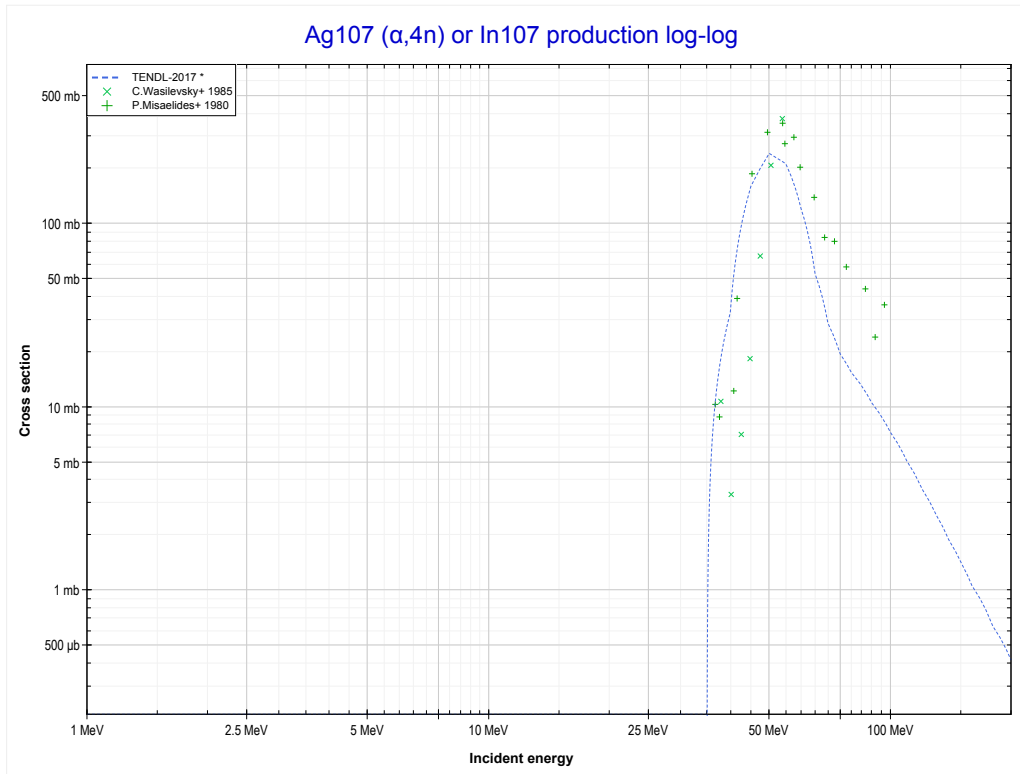
Reaction	Q-Value
Ag107($\alpha,3n$)In108	-26075.64 keV

<< 42-Mo-92	47-Ag-107	48-Cd-114 >>
<< MT17 ($\alpha,3n$)	MT28 ($\alpha,n+p$) or MT5 (Cd109 production)	MT37 ($\alpha,4n$) >>



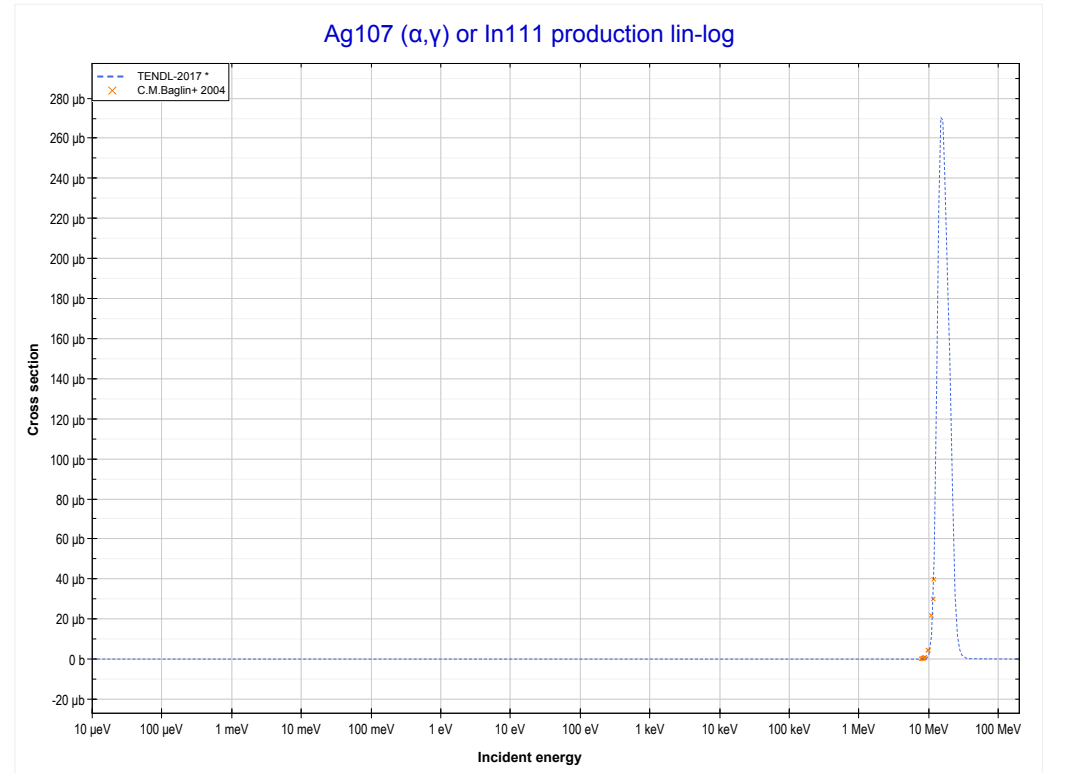
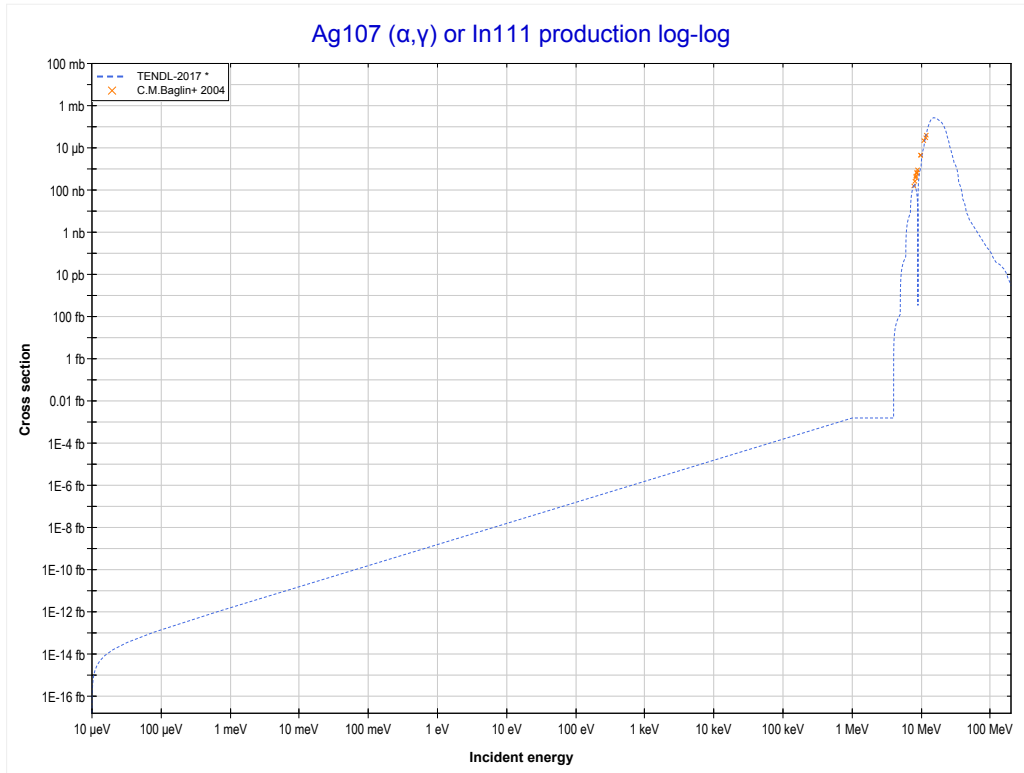
Reaction	Q-Value
Ag107(α,d)Cd109	-10613.01 keV
Ag107($\alpha,n+p$)Cd109	-12837.57 keV

<< 45-Rh-103	47-Ag-107	47-Ag-109 >>
<< MT28 ($\alpha, n+p$)	MT37 ($\alpha, 4n$) or MT5 (In107 production)	MT102 (α, γ) >>



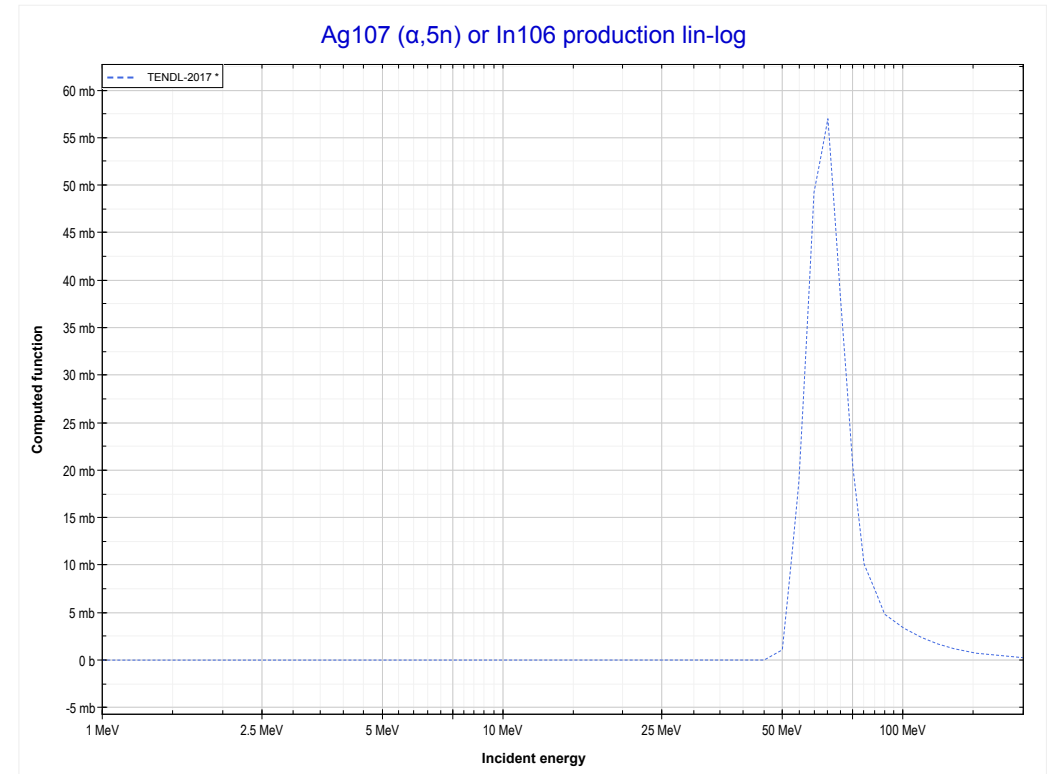
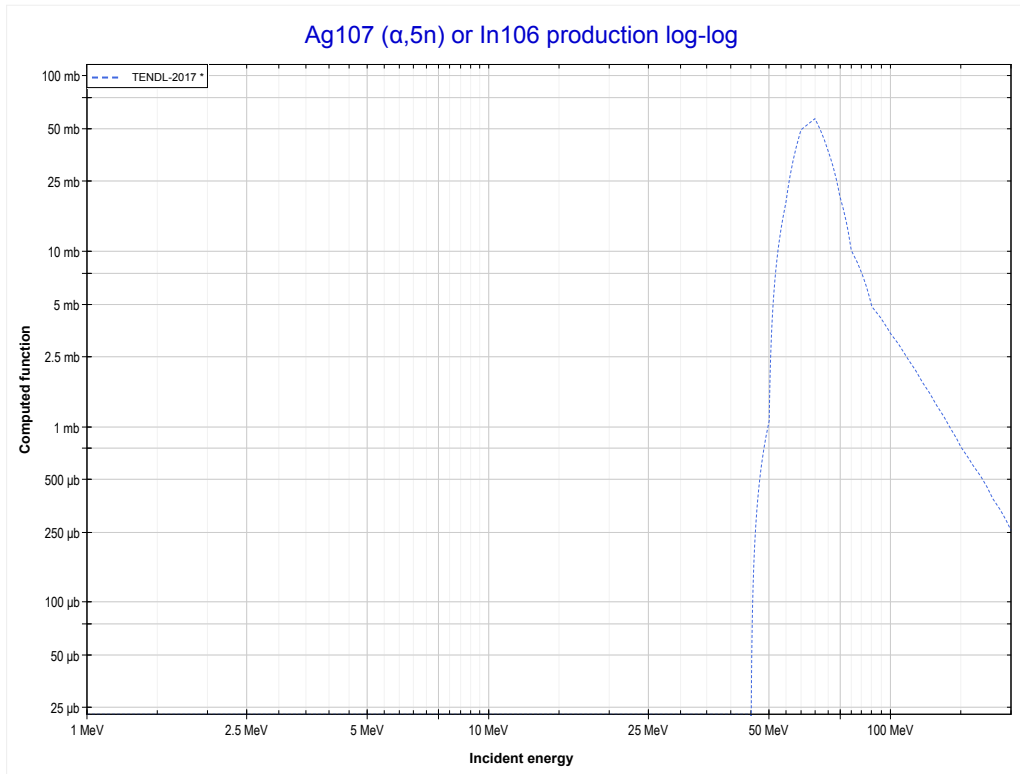
Reaction	Q-Value
Ag107($\alpha, 4n$)In107	-34702.95 keV

<< 32-Ge-70	47-Ag-107	48-Cd-106 >>
<< MT37 ($\alpha,4n$)	MT102 (α,γ) or MT5 (In111 production)	MT152 ($\alpha,5n$) >>



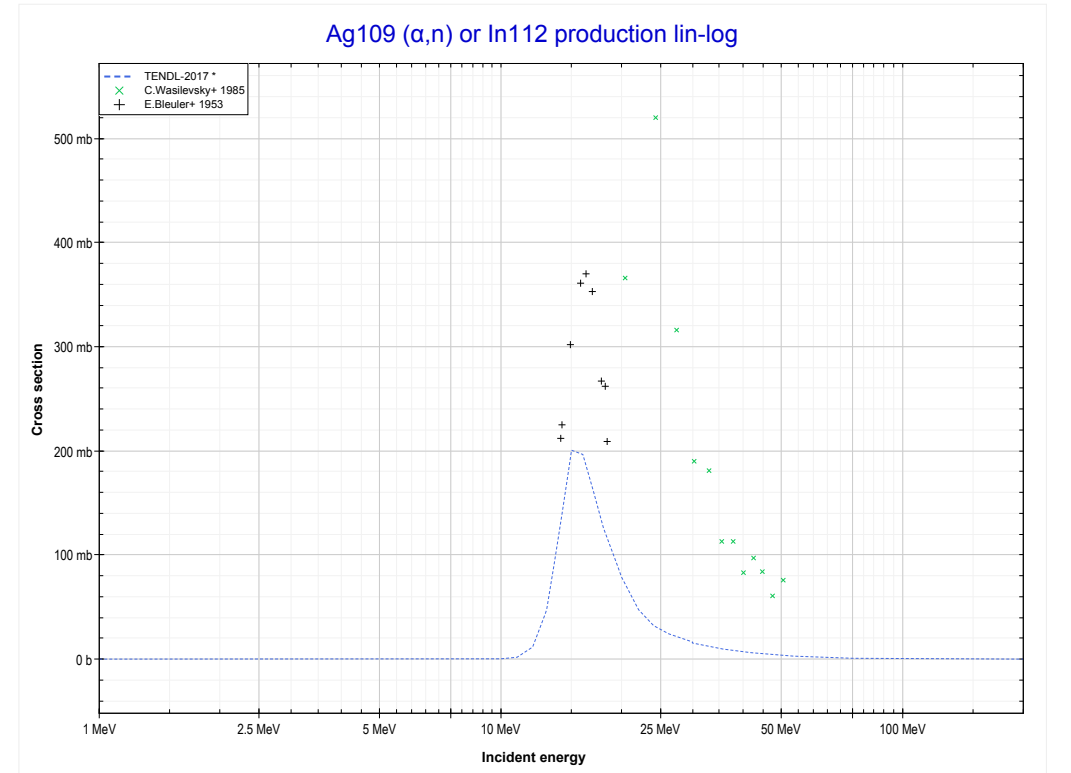
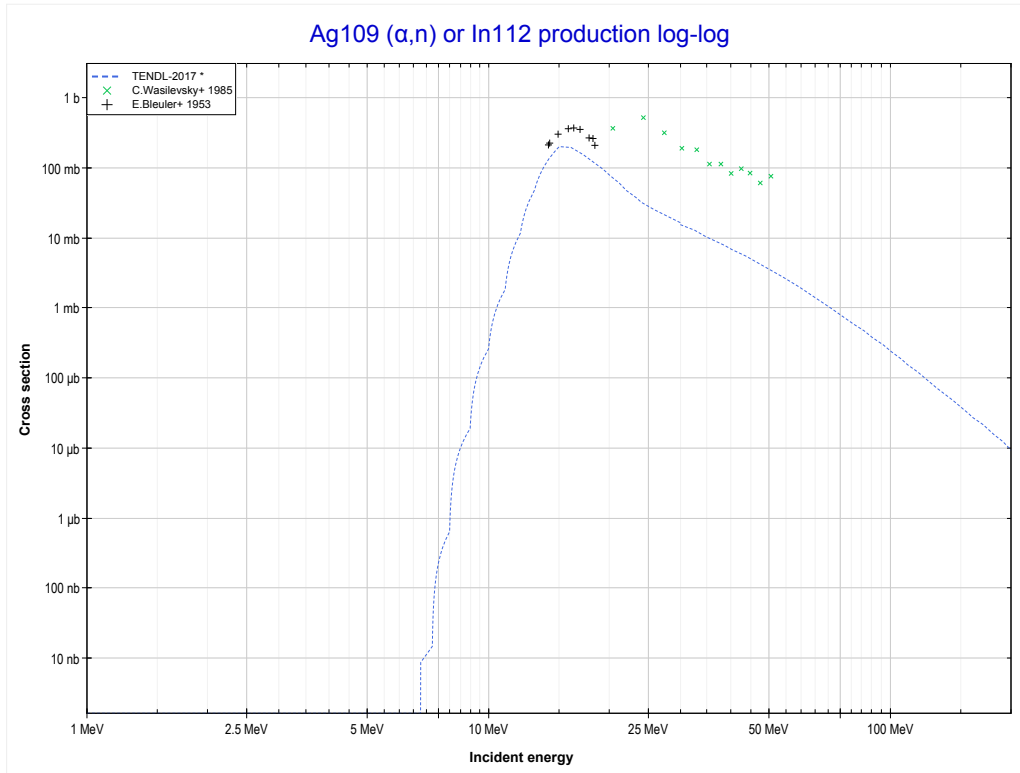
Reaction	Q-Value
Ag107(α,γ)In111	2409.32 keV

<< 45-Rh-103	47-Ag-107	47-Ag-109 >>
<< MT102 (α,γ)	MT152 ($\alpha,5n$) or MT5 (In106 production)	47-Ag-109 MT4 (α,n) >>



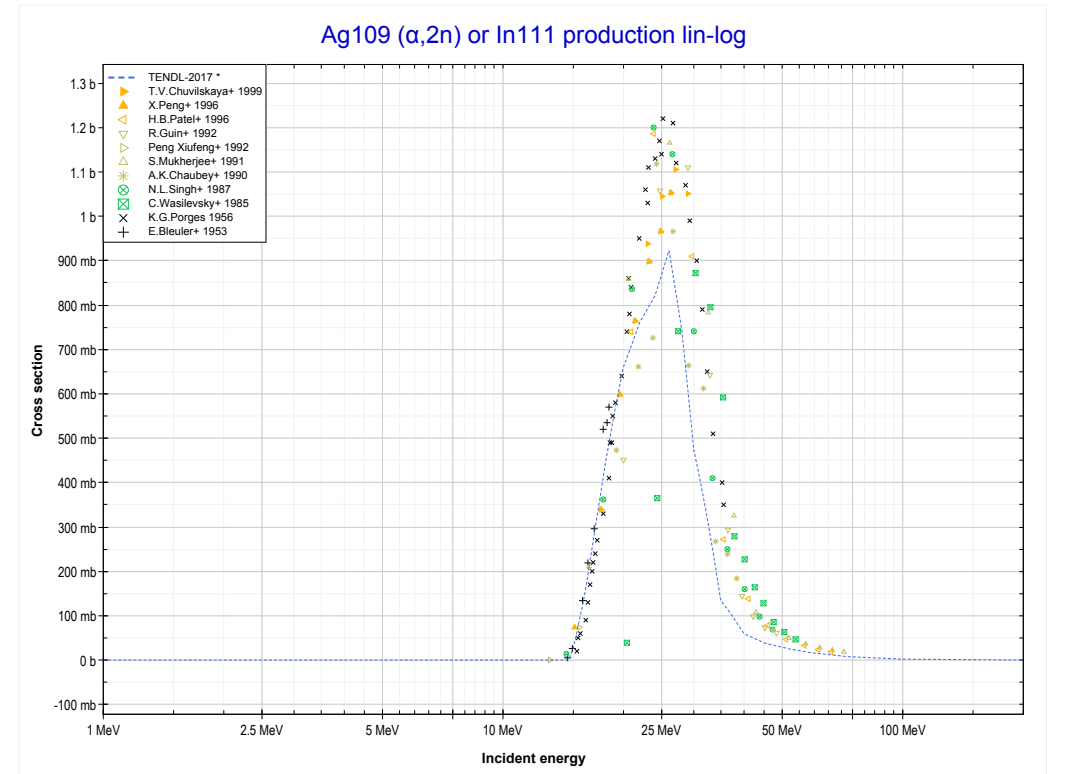
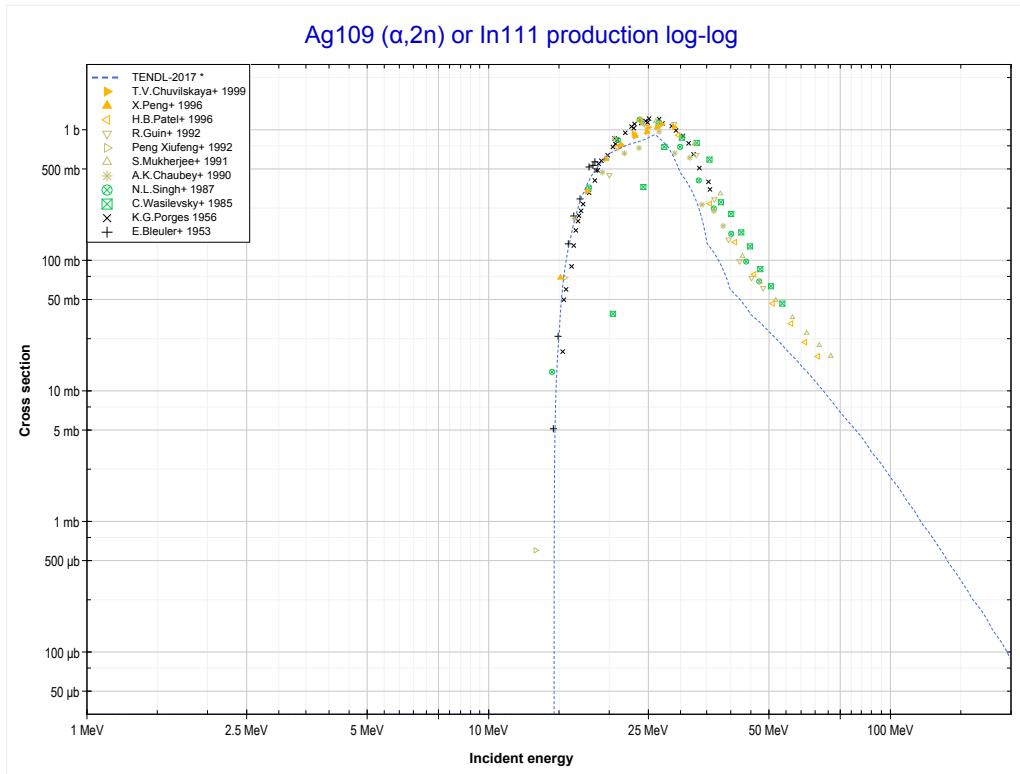
Reaction	Q-Value
Ag107($\alpha,5n$)In106	-45730.27 keV

<< 47-Ag-107	47-Ag-109	48-Cd-106 >>
<< 47-Ag-107 MT152 ($\alpha,5n$)	MT4 (α,n) or MT5 (In112 production)	MT16 ($\alpha,2n$) >>



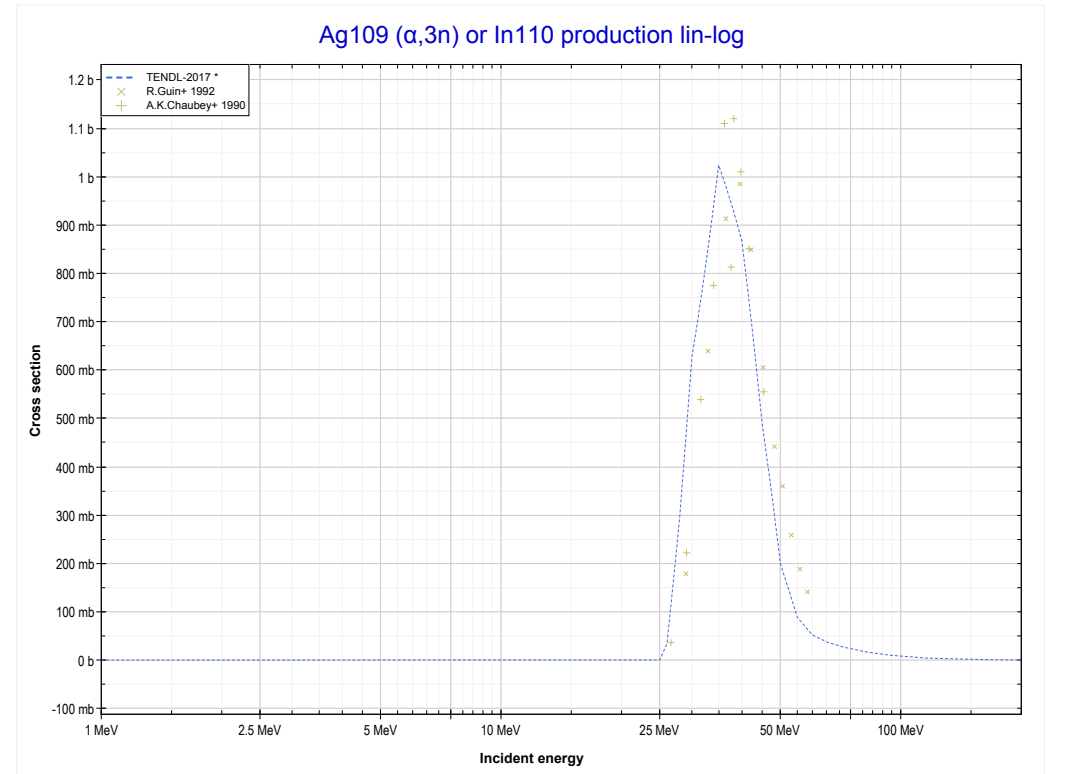
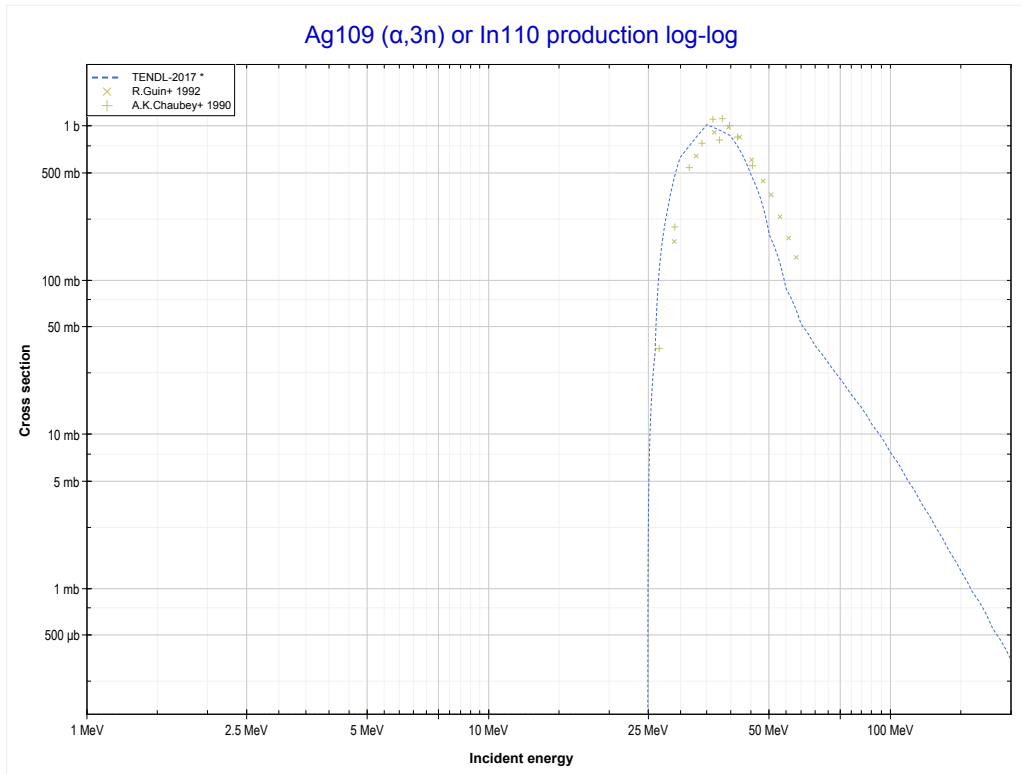
Reaction	Q-Value
Ag109(α,n)In112	-6375.30 keV

<< 47-Ag-107	47-Ag-109	48-Cd-106 >>
<< MT4 (α,n)	MT16 ($\alpha,2n$) or MT5 (In111 production)	MT17 ($\alpha,3n$) >>



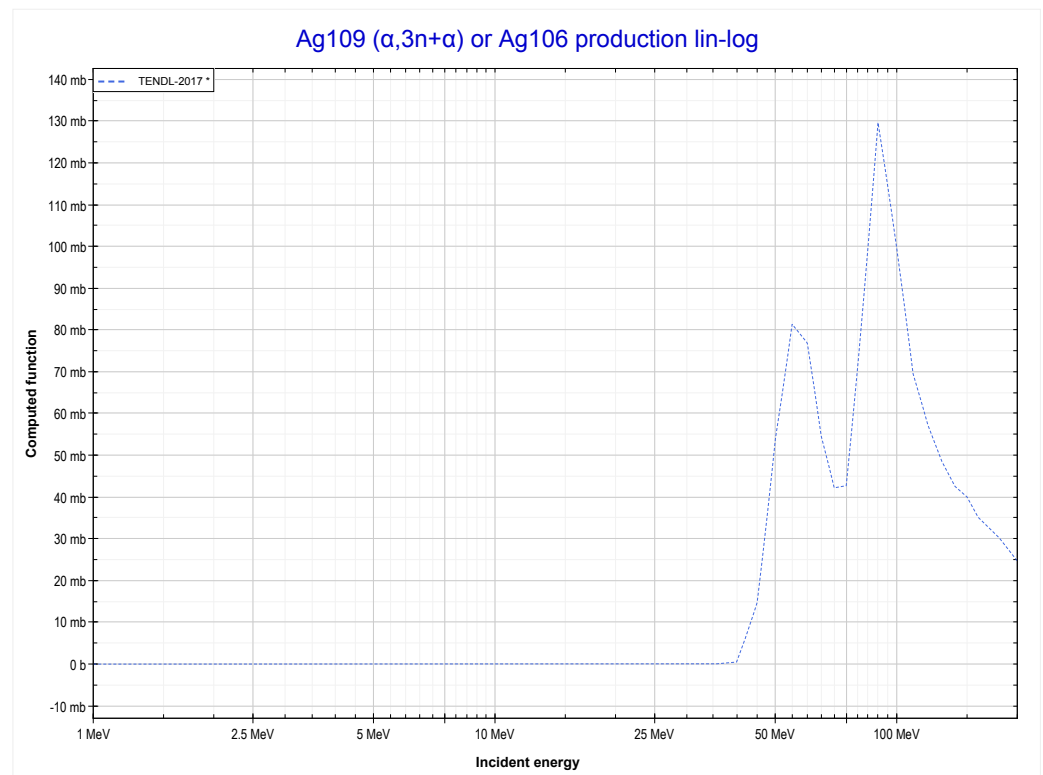
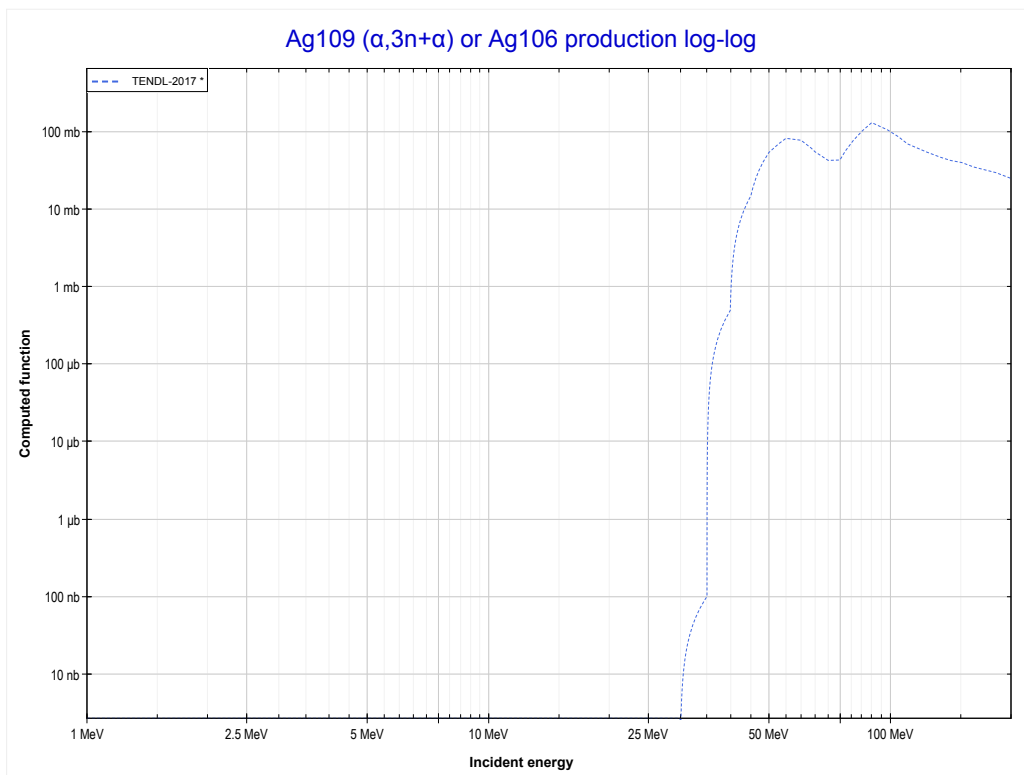
Reaction	Q-Value
Ag109($\alpha,2n$)In111	-14046.62 keV

<< 47-Ag-107	47-Ag-109	48-Cd-114 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (In110 production)	MT25 ($\alpha,3n+\alpha$) >>



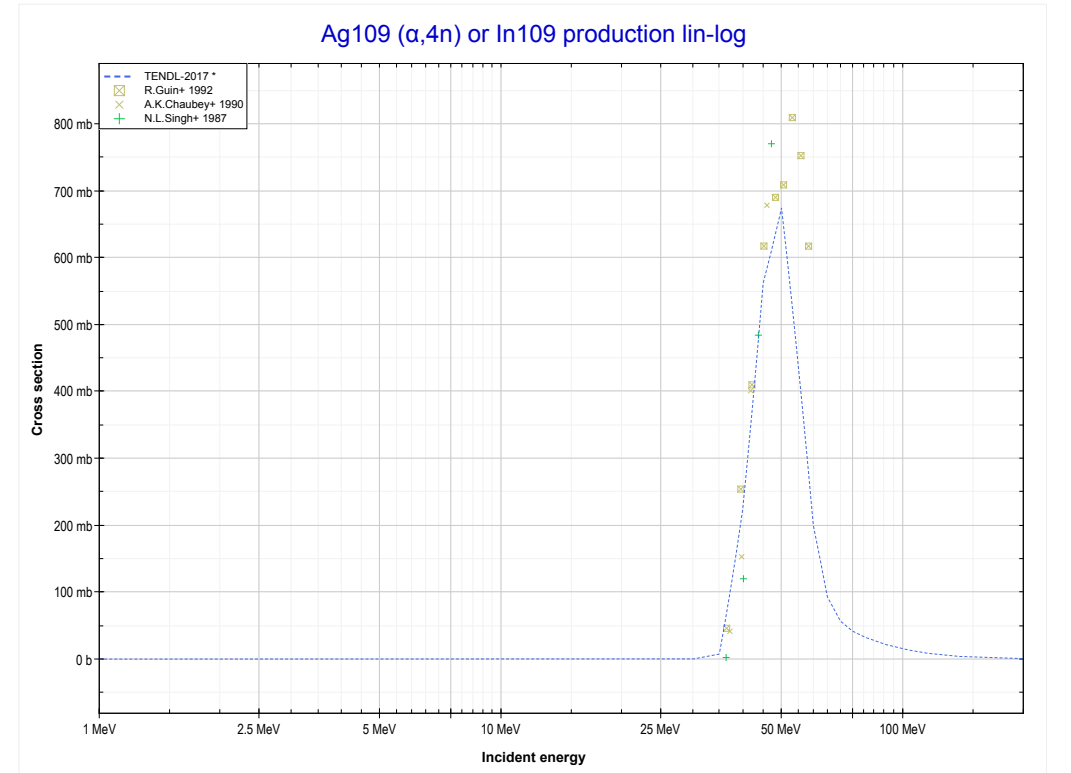
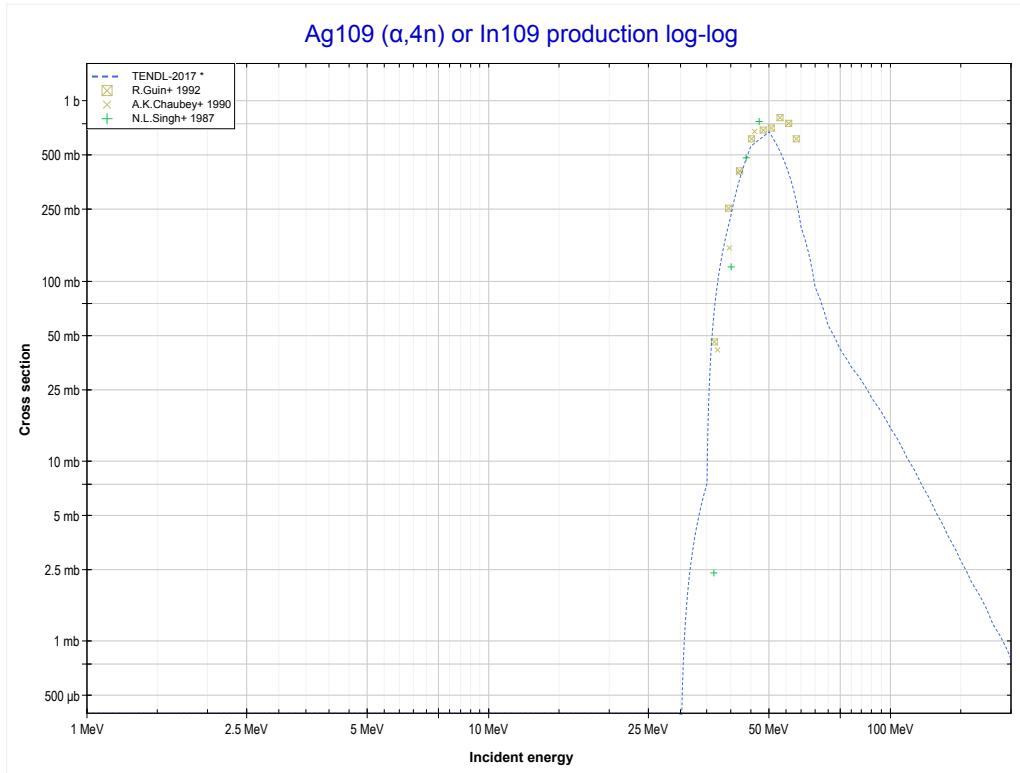
Reaction	Q-Value
Ag109($\alpha,3n$)In110	-24037.94 keV

<< 45-Rh-103	47-Ag-109	65-Tb-159 >>
<< MT17 ($\alpha,3n$)	MT25 ($\alpha,3n+\alpha$) or MT5 (Ag106 production)	MT37 ($\alpha,4n$) >>



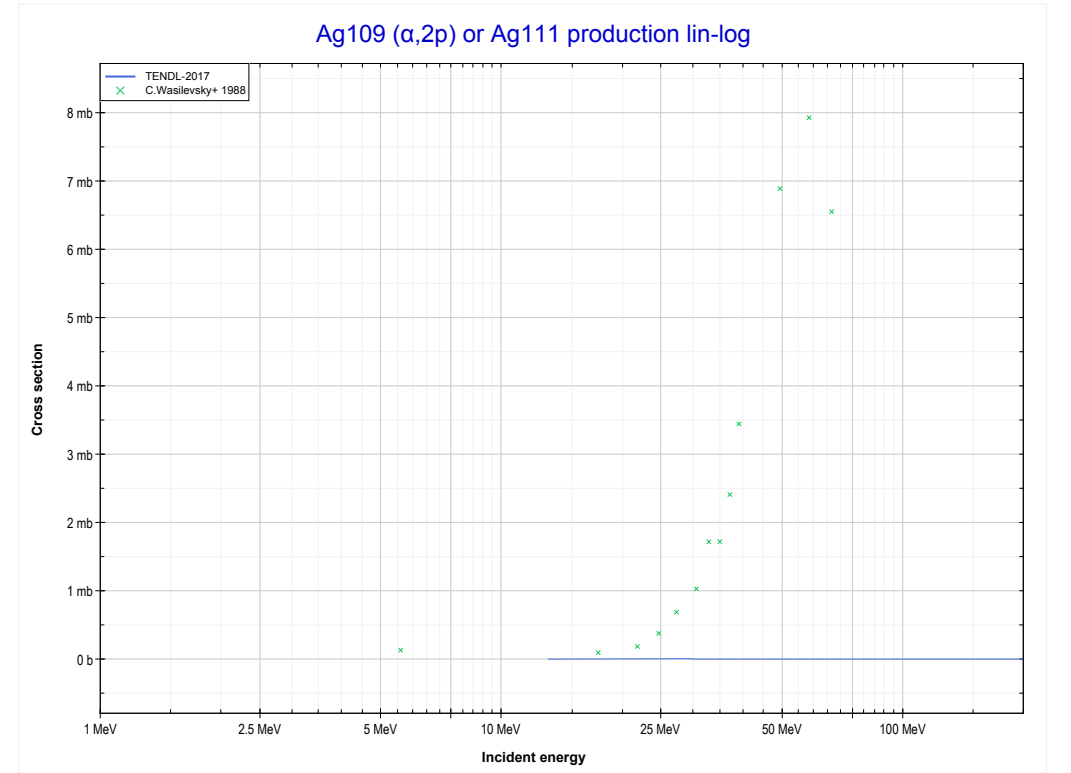
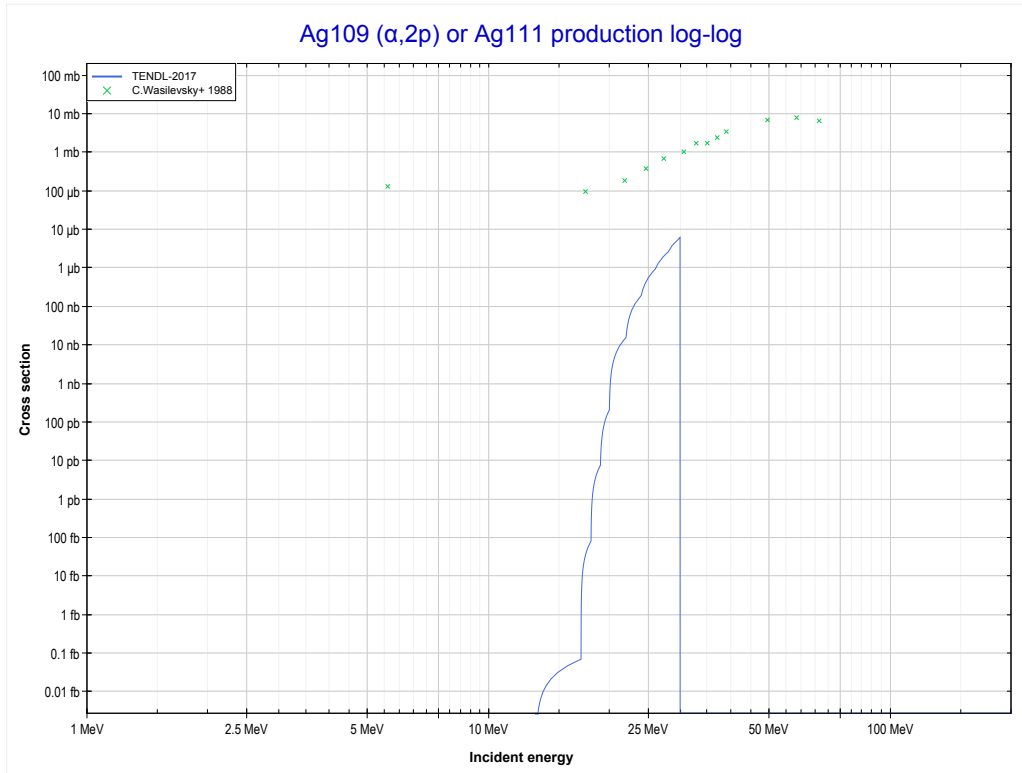
Reaction	Q-Value
Ag109($\alpha,3n+\alpha$)Ag106	-25991.85 keV
Ag109($\alpha,n+2t$)Ag106	-37323.91 keV
Ag109($\alpha,2n+d+t$)Ag106	-43581.15 keV
Ag109($\alpha,3n+p+t$)Ag106	-45805.71 keV
Ag109($\alpha,4n+He3$)Ag106	-46569.47 keV
Ag109($\alpha,3n+2d$)Ag106	-49838.38 keV
Ag109($\alpha,4n+p+d$)Ag106	-52062.94 keV
Ag109($\alpha,5n+2p$)Ag106	-54287.51 keV

<< 47-Ag-107	47-Ag-109	48-Cd-114 >>
<< MT25 ($\alpha,3n+\alpha$)	MT37 ($\alpha,4n$) or MT5 (In109 production)	MT111 ($\alpha,2p$) >>



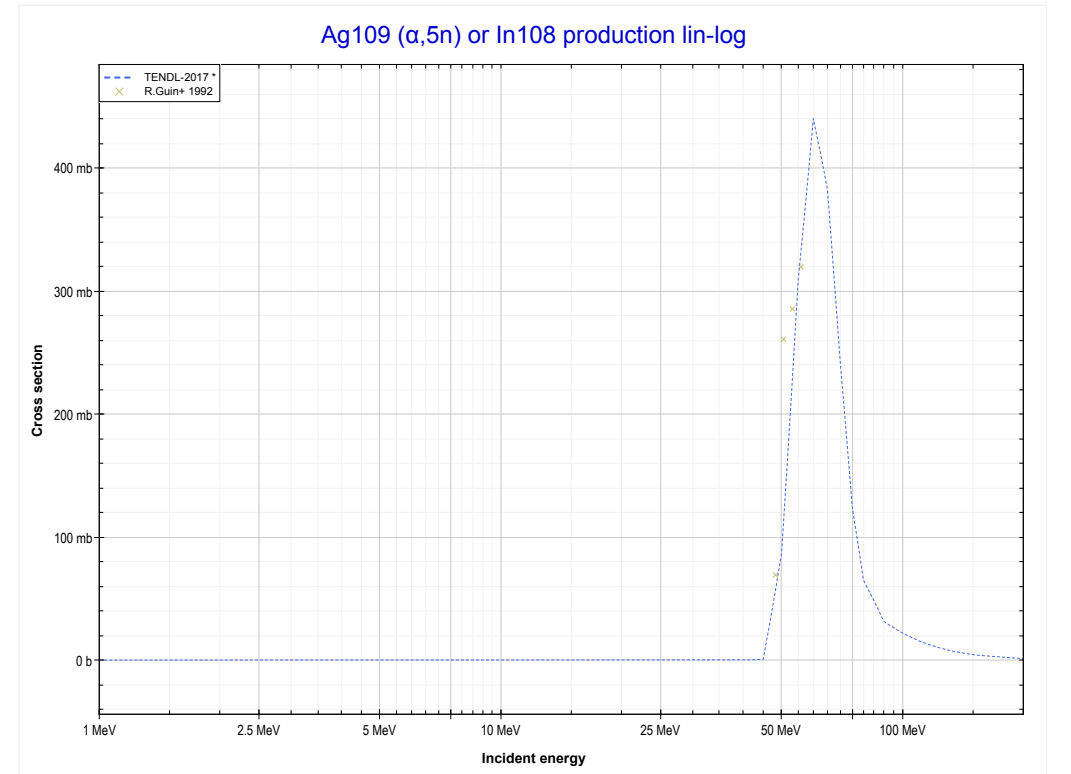
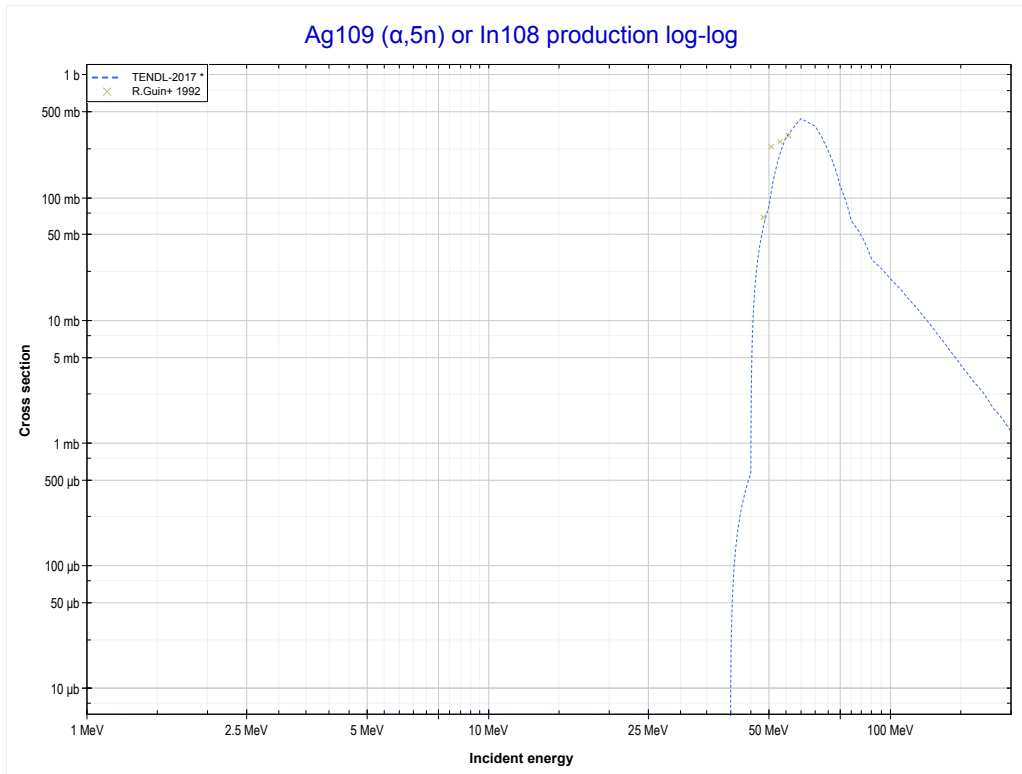
Reaction	Q-Value
Ag109($\alpha,4n$)In109	-32092.25 keV

<< 41-Nb-93	47-Ag-109	49-In-115 >>
<< MT37 ($\alpha,4n$)	MT111 ($\alpha,2p$) or MT5 (Ag111 production)	MT152 ($\alpha,5n$) >>



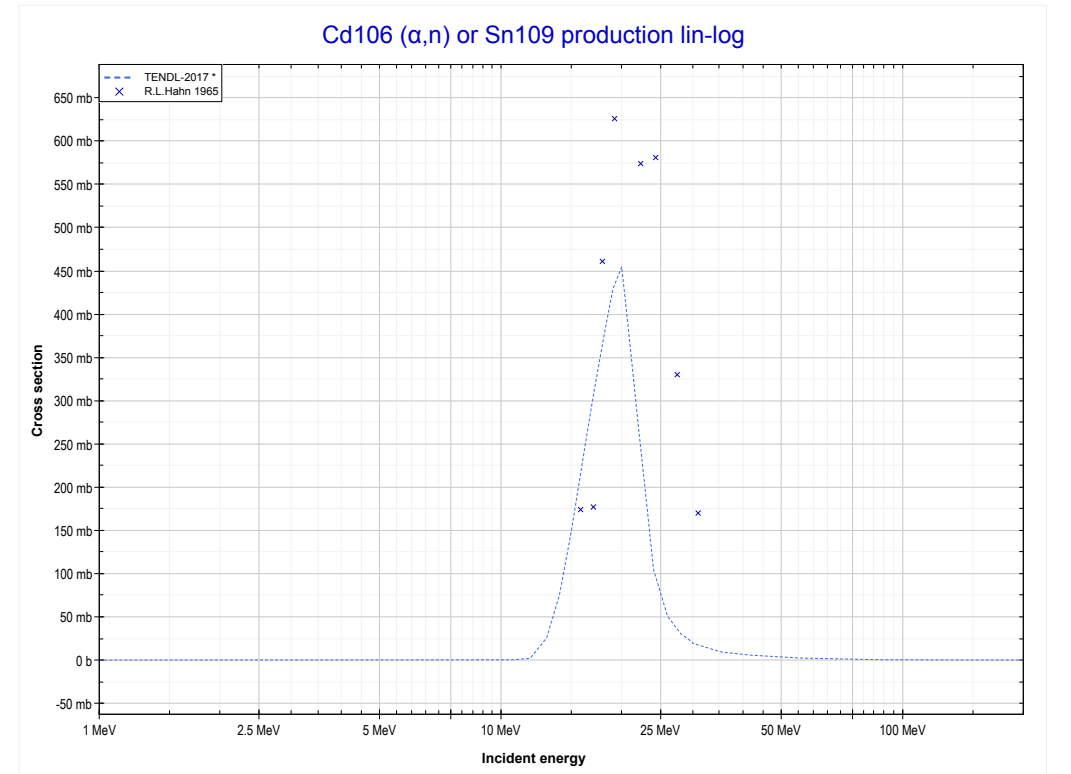
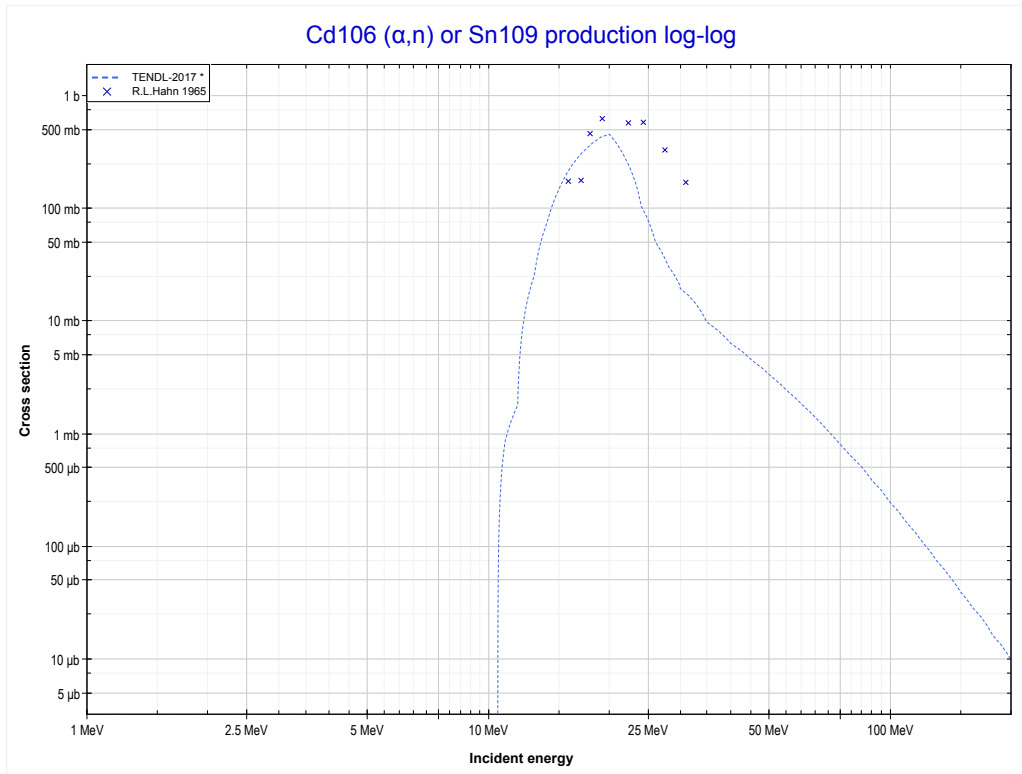
Reaction	Q-Value
Ag109($\alpha,2p$)Ag111	-12656.63 keV

<< 47-Ag-107	47-Ag-109	48-Cd-114 >>
<< MT111 ($\alpha,2p$)	MT152 ($\alpha,5n$) or MT5 (In108 production)	48-Cd-106 MT4 (α,n) >>



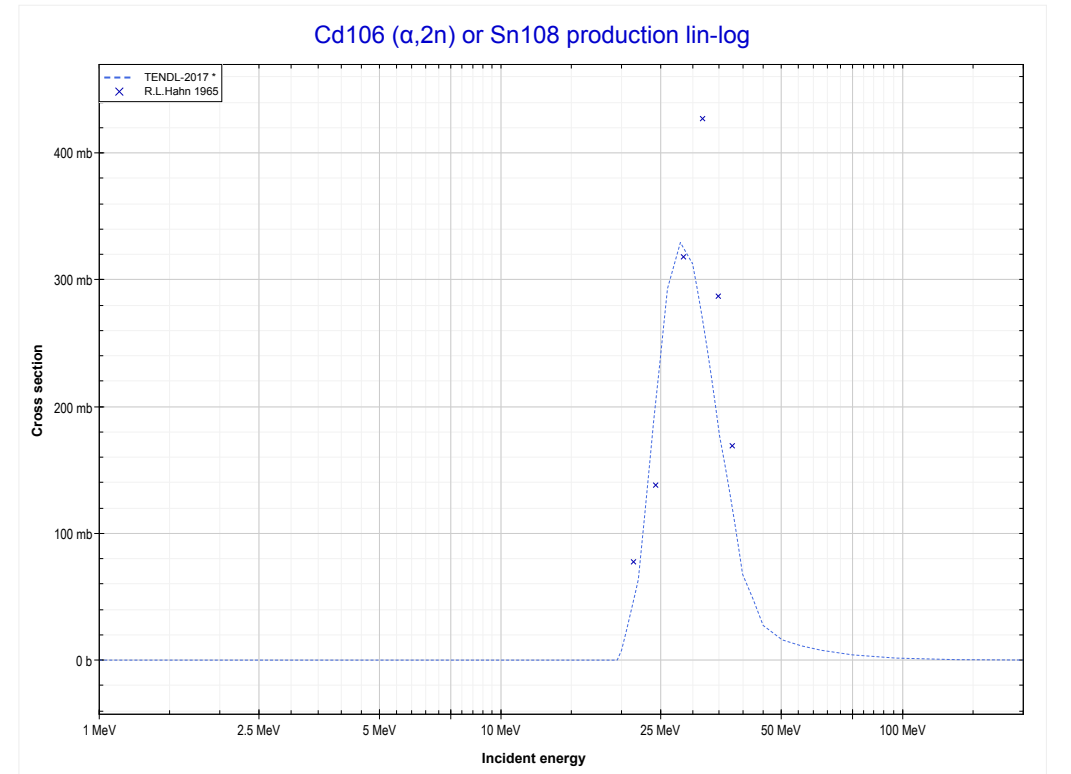
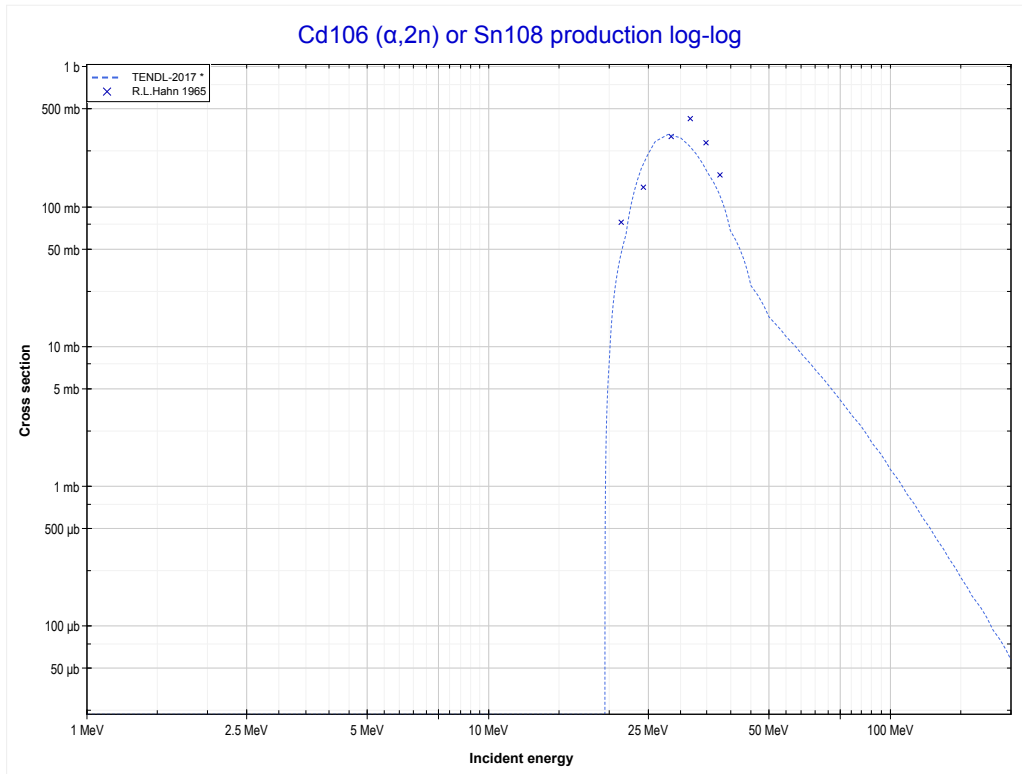
Reaction	Q-Value
Ag109($\alpha,5n$)In108	-42531.57 keV

<< 47-Ag-109	48-Cd-106	48-Cd-114 >>
<< 47-Ag-109 MT152 ($\alpha,5n$)	MT4 (α,n) or MT5 (Sn109 production)	MT16 ($\alpha,2n$) >>



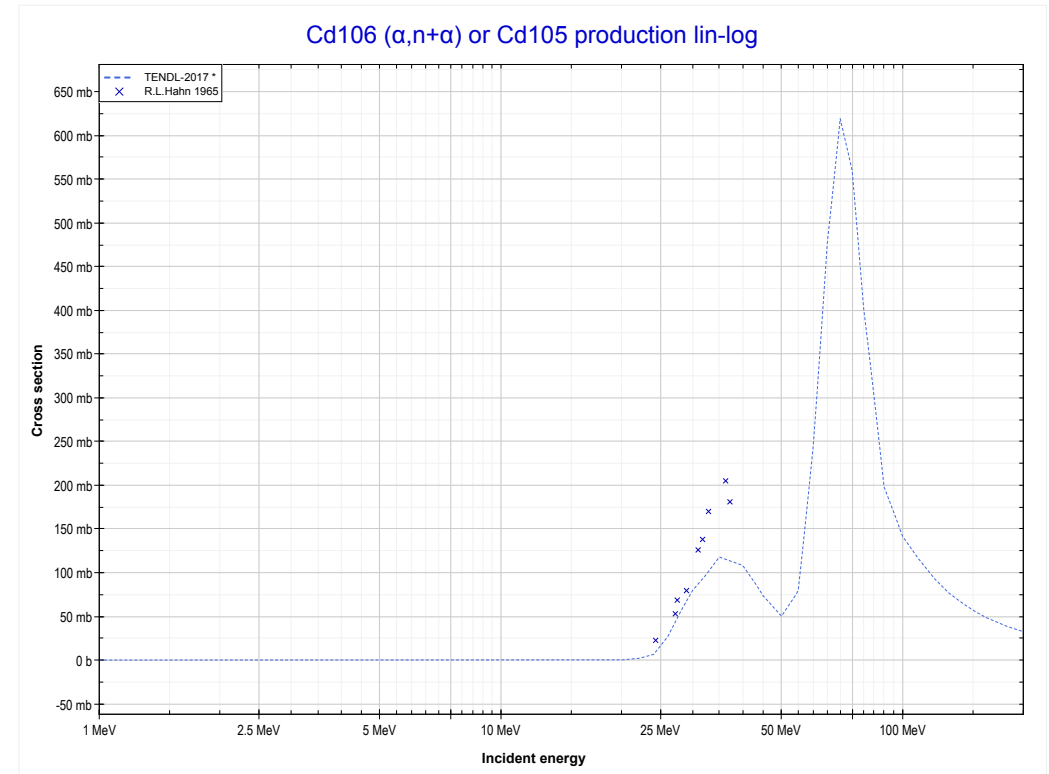
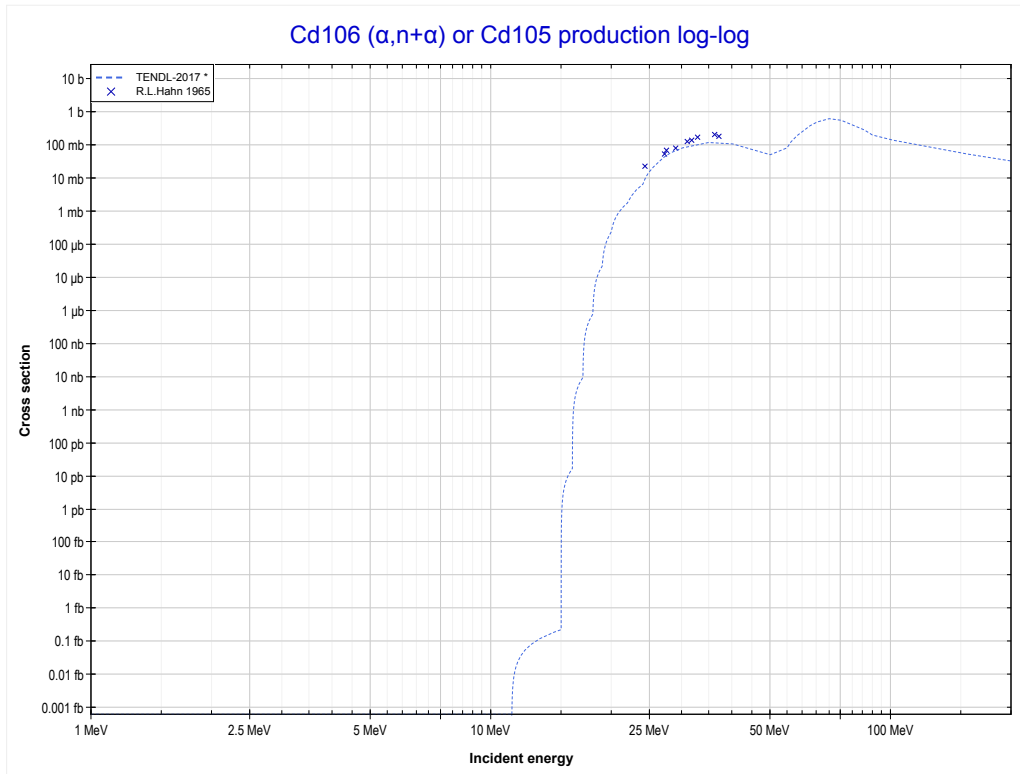
Reaction	Q-Value
Cd106(α,n)Sn109	-10147.40 keV

<< 47-Ag-109	48-Cd-106	48-Cd-114 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Sn108 production)	MT22 ($\alpha, n+\alpha$) >>



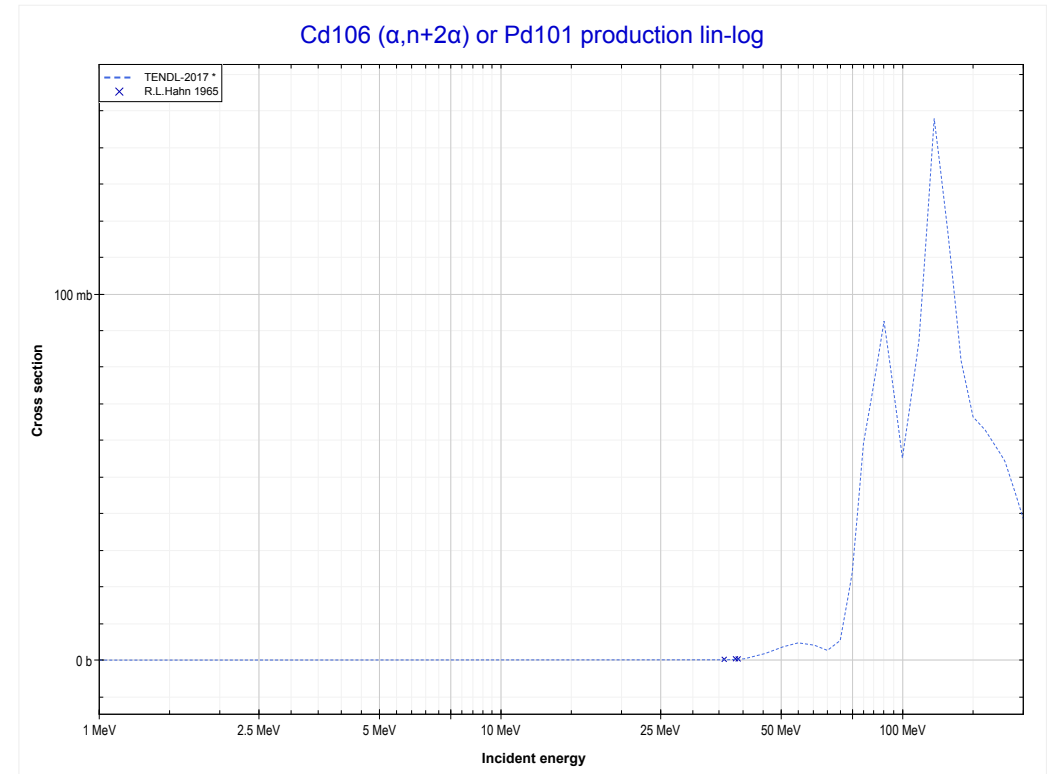
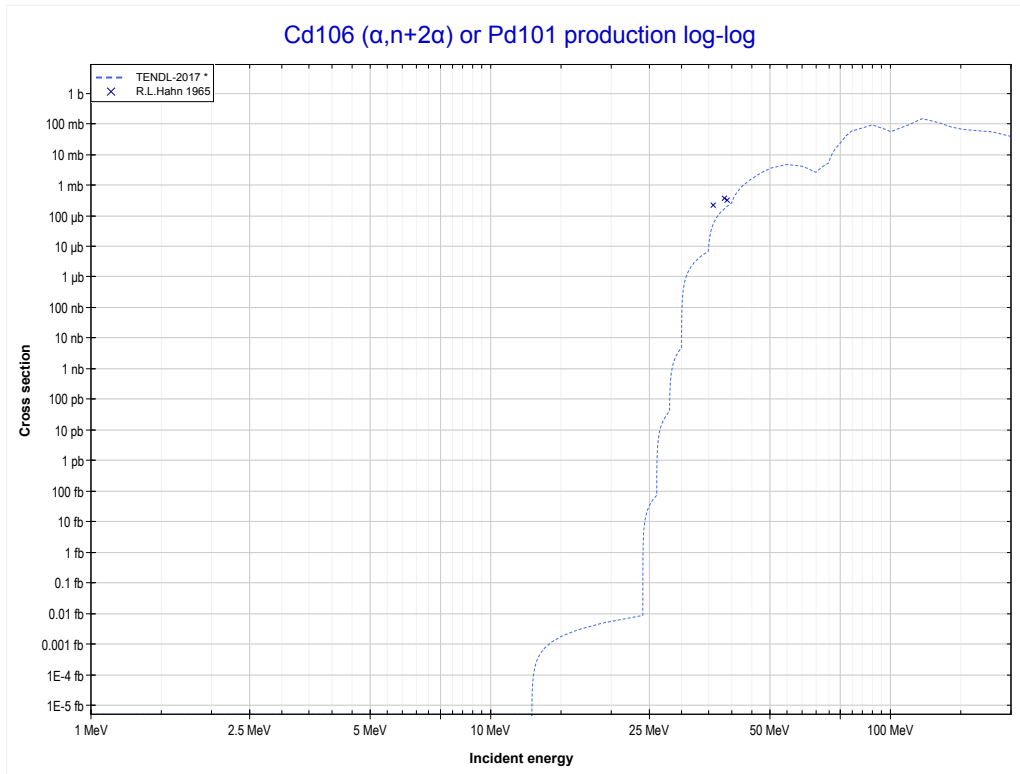
Reaction	Q-Value
Cd106($\alpha, 2n$)Sn108	-18779.72 keV

<< 41-Nb-93	48-Cd-106	48-Cd-116 >>
<< MT16 ($\alpha,2n$)	MT22 ($\alpha,n+\alpha$) or MT5 (Cd105 production)	MT29 ($\alpha,n+2\alpha$) >>



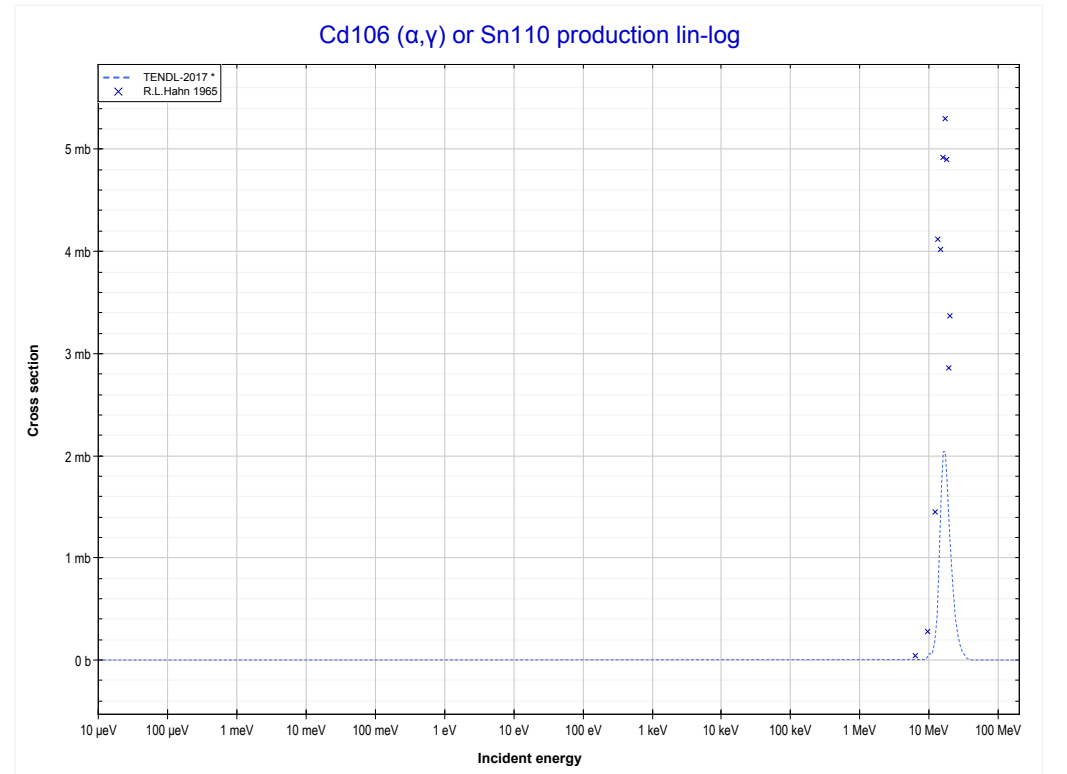
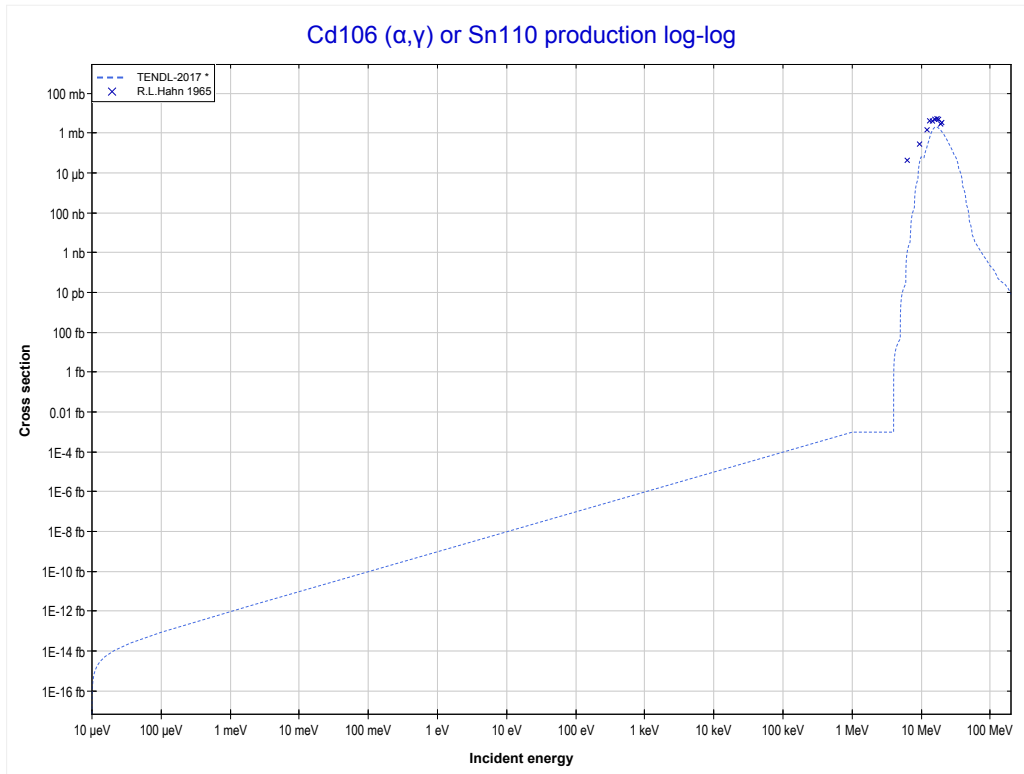
Reaction	Q-Value
Cd106($\alpha,n+\alpha$)Cd105	-10869.52 keV
Cd106($\alpha,d+t$)Cd105	-28458.81 keV
Cd106($\alpha,n+p+t$)Cd105	-30683.38 keV
Cd106($\alpha,2n+He3$)Cd105	-31447.13 keV
Cd106($\alpha,n+2d$)Cd105	-34716.04 keV
Cd106($\alpha,2n+p+d$)Cd105	-36940.61 keV
Cd106($\alpha,3n+2p$)Cd105	-39165.18 keV

<< 27-Co-59	48-Cd-106	
<< MT22 ($\alpha, n+\alpha$)	MT29 ($\alpha, n+2\alpha$) or MT5 (Pd101 production)	MT102 (α, γ) >>



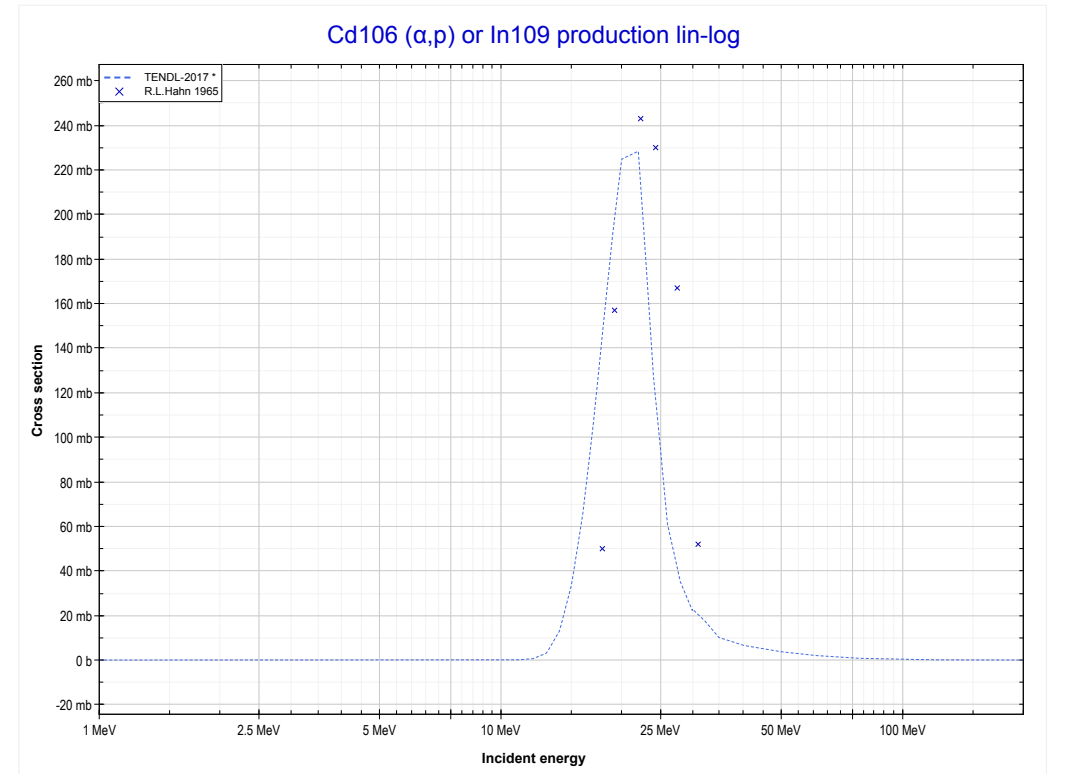
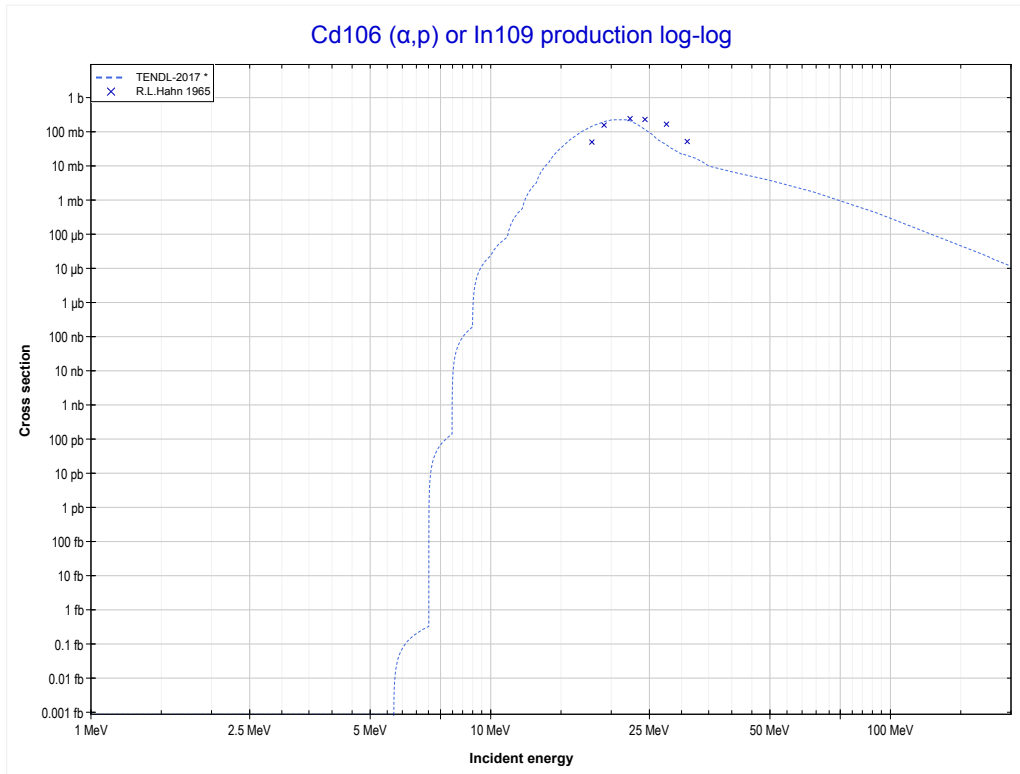
Reaction	Q-Value	Reaction	Q-Value
Cd106($\alpha, n+2\alpha$)Pd101	-12197.23 keV	Cd106($\alpha, p+d+2t$)Pd101	-49600.39 keV
Cd106($\alpha, d+t+\alpha$)Pd101	-29786.53 keV	Cd106($\alpha, n+d+t+He3$)Pd101	-50364.14 keV
Cd106($\alpha, n+p+t+\alpha$)Pd101	-32011.09 keV	Cd106($\alpha, n+2p+2t$)Pd101	-51824.95 keV
Cd106($\alpha, 2n+He3+\alpha$)Pd101	-32774.85 keV	Cd106($\alpha, 2n+p+t+He3$)Pd101	-52588.71 keV
Cd106($\alpha, n+2d+\alpha$)Pd101	-36043.76 keV	Cd106($\alpha, 3n+2He3$)Pd101	-53352.47 keV
Cd106($\alpha, 2n+p+d+\alpha$)Pd101	-38268.33 keV	Cd106($\alpha, 3d+t$)Pd101	-53633.06 keV
Cd106($\alpha, 3n+2p+\alpha$)Pd101	-40492.89 keV	Cd106($\alpha, n+p+2d+t$)Pd101	-55857.62 keV
Cd106($\alpha, 2t+He3$)Pd101	-44106.91 keV	Cd106($\alpha, 2n+2d+He3$)Pd101	-56621.38 keV

<< 47-Ag-107	48-Cd-106	49-In-113 >>
<< MT29 ($\alpha, n+2\alpha$)	MT102 (α, γ) or MT5 (Sn110 production)	MT103 (α, p) >>



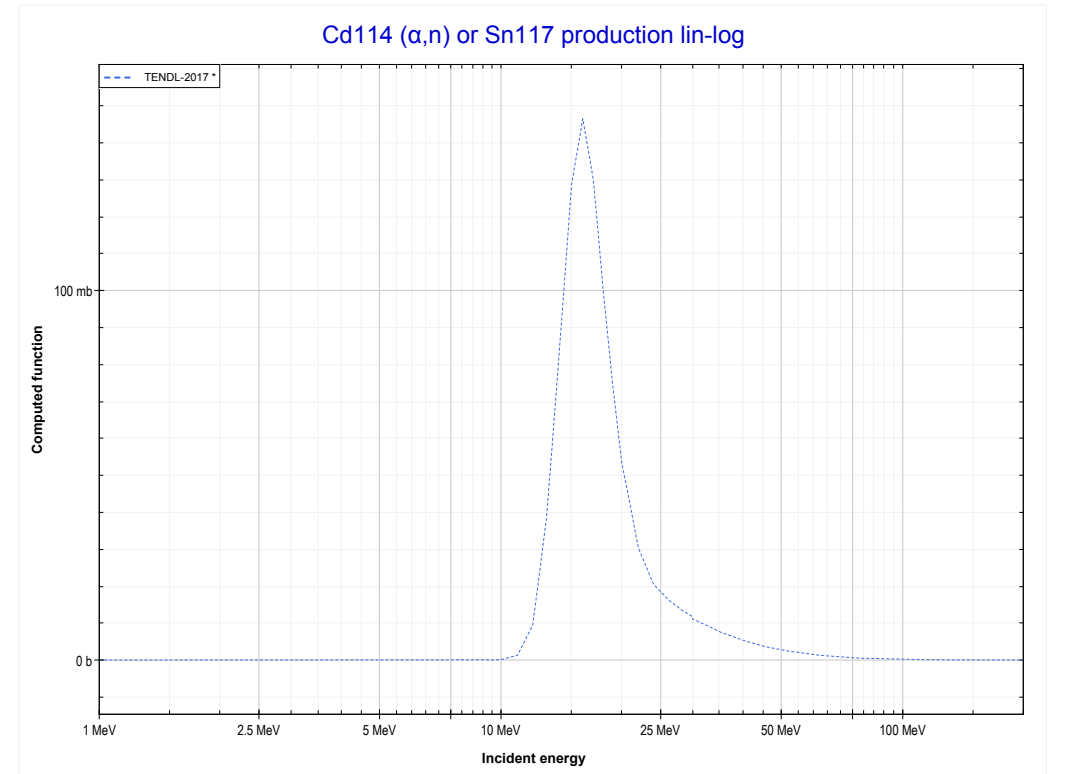
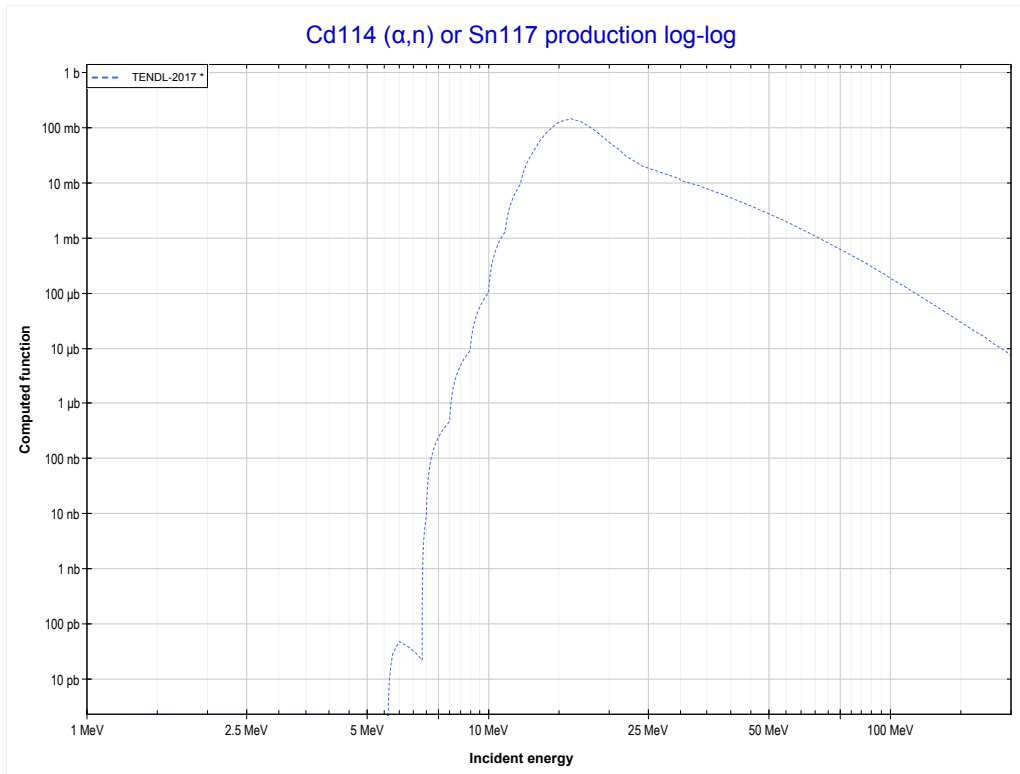
Reaction	Q-Value
Cd106(α, γ)Sn110	1134.92 keV

<< 42-Mo-100	48-Cd-106	48-Cd-114 >>
<< MT102 (α,γ)	MT103 (α,p) or MT5 (In109 production)	48-Cd-114 MT4 (α,n) >>



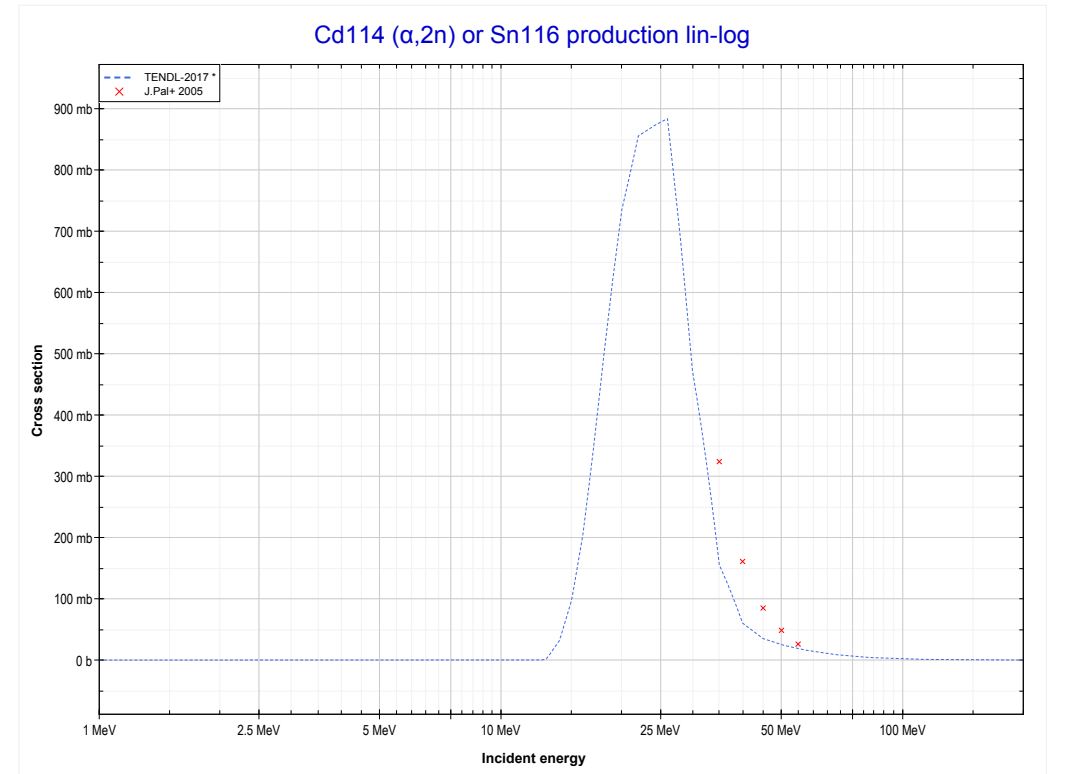
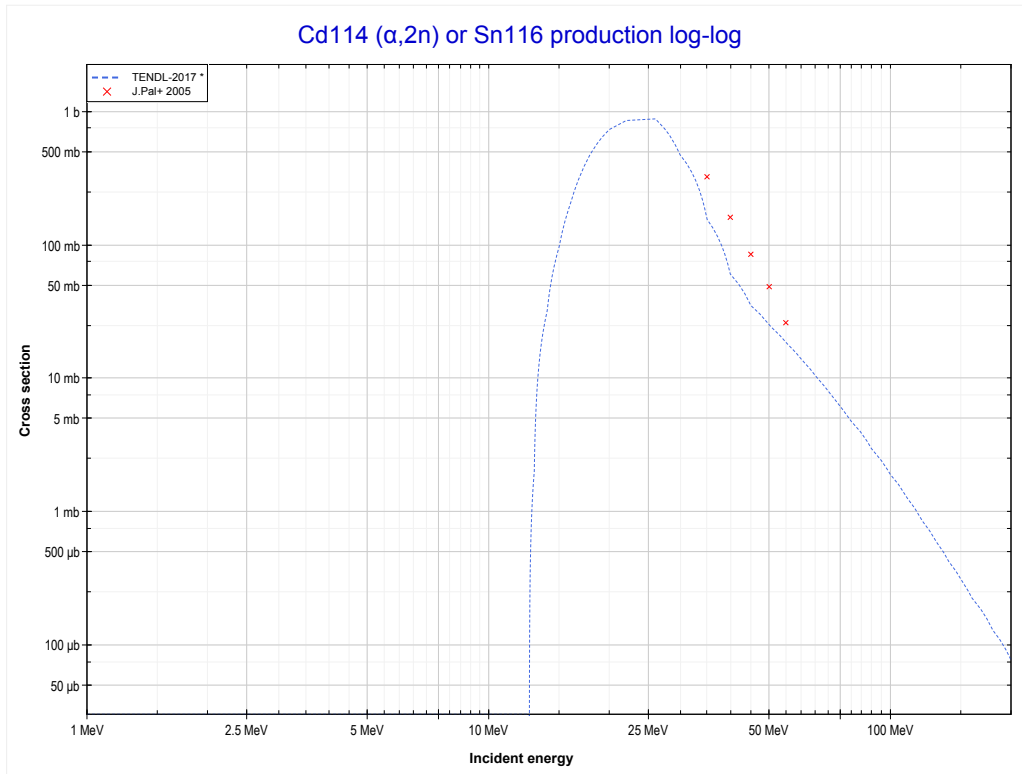
Reaction	Q-Value
Cd106(α,p)In109	-5508.05 keV

<< 48-Cd-106	48-Cd-114	48-Cd-116 >>
<< 48-Cd-106 MT103 (α,p)	MT4 (α,n) or MT5 (Sn117 production)	MT16 ($\alpha,2n$) >>



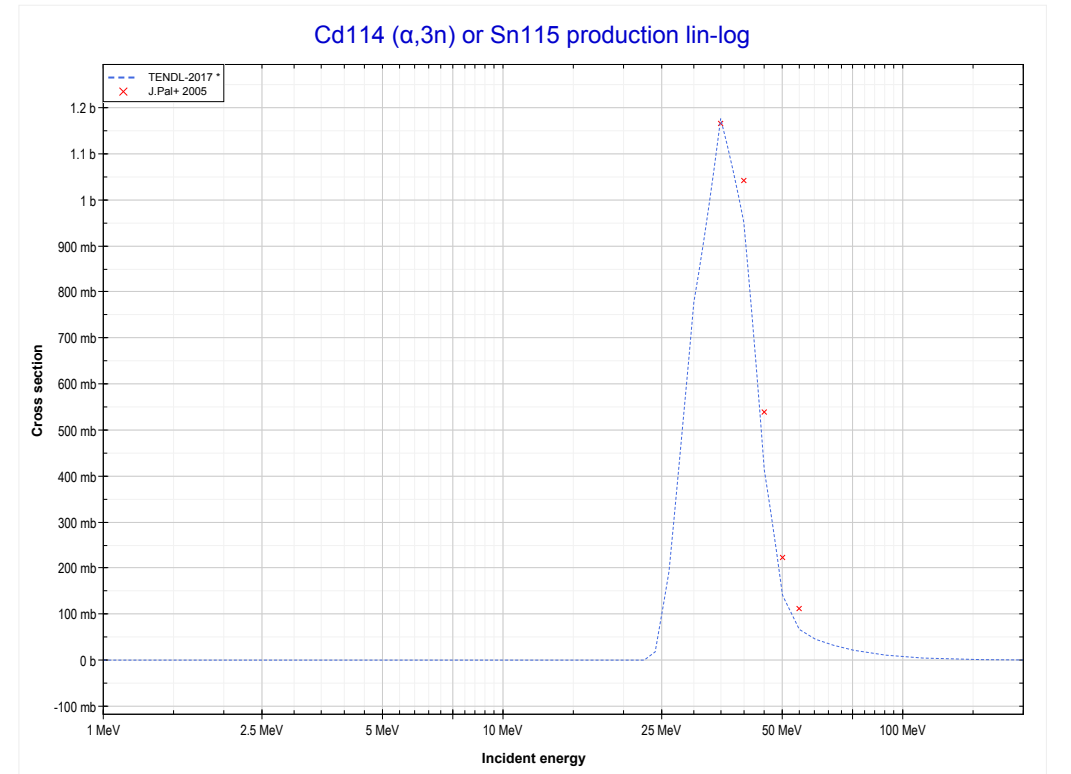
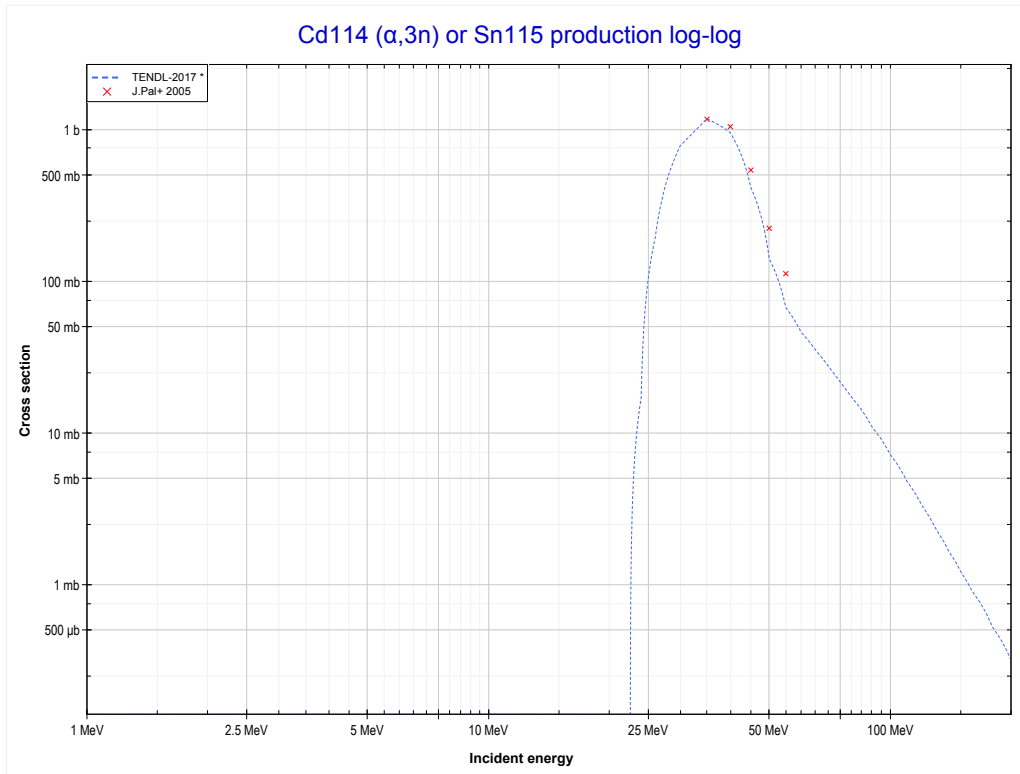
Reaction	Q-Value
Cd114(α,n)Sn117	-5263.40 keV

<< 48-Cd-106	48-Cd-114	49-In-113 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Sn116 production)	MT17 ($\alpha, 3n$) >>



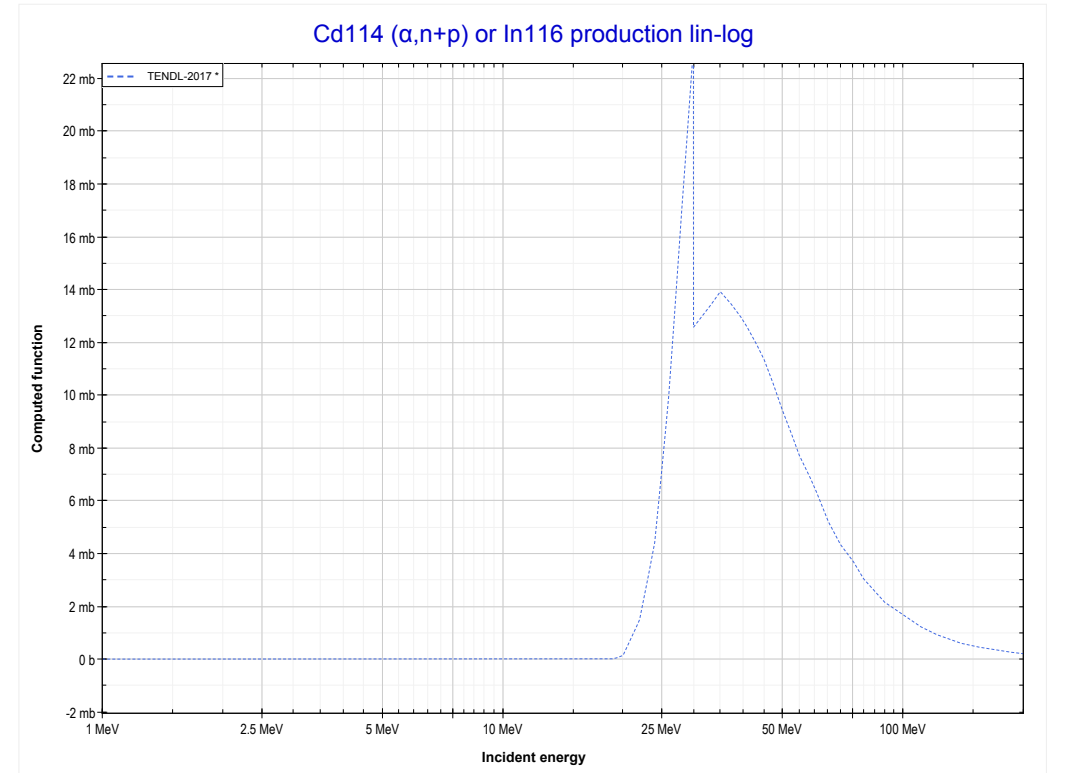
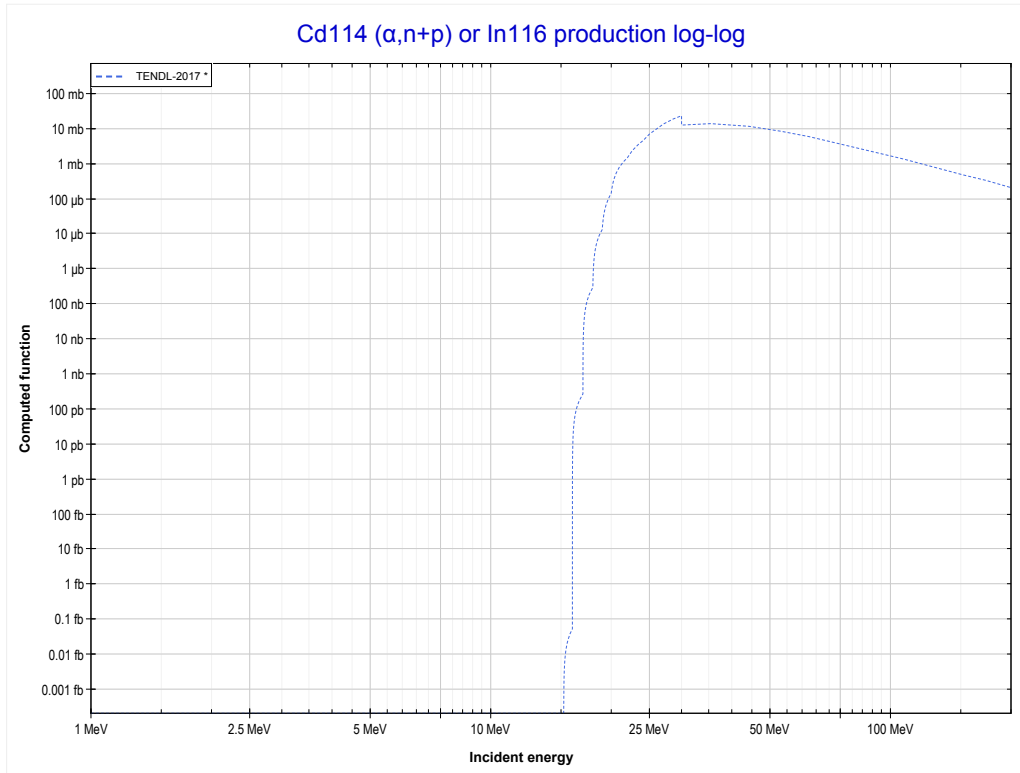
Reaction	Q-Value
Cd114($\alpha, 2n$)Sn116	-12206.53 keV

<< 47-Ag-109	48-Cd-114	48-Cd-116 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Sn115 production)	MT28 ($\alpha,n+p$) >>



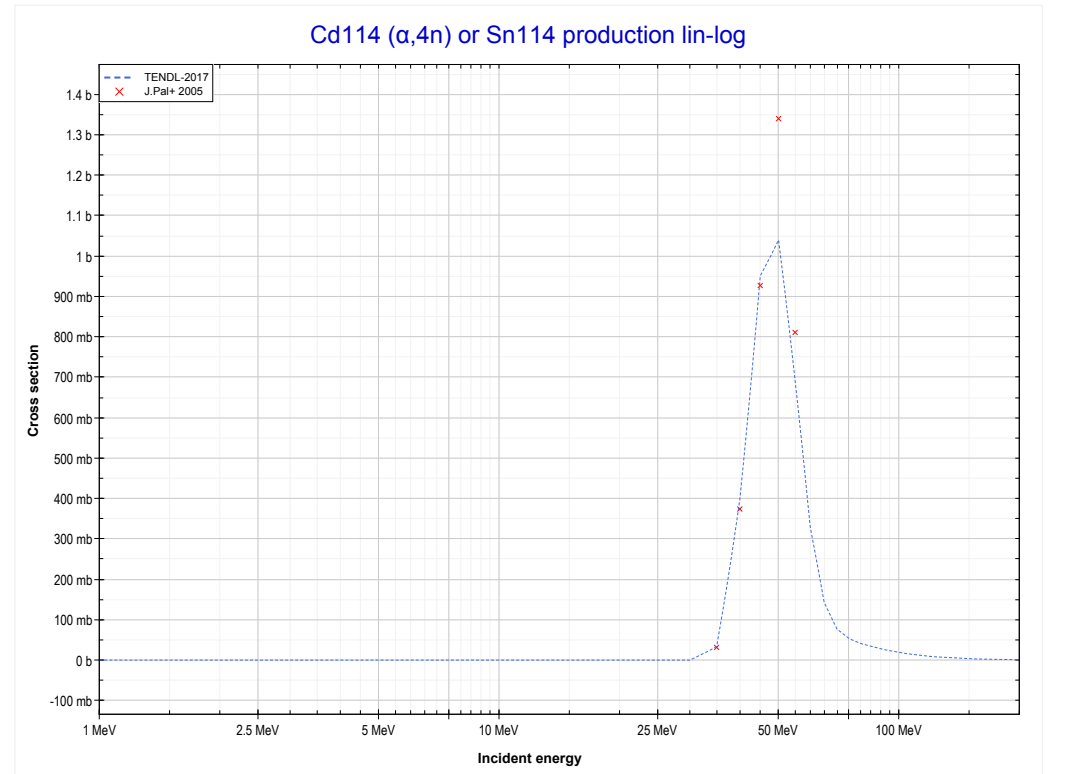
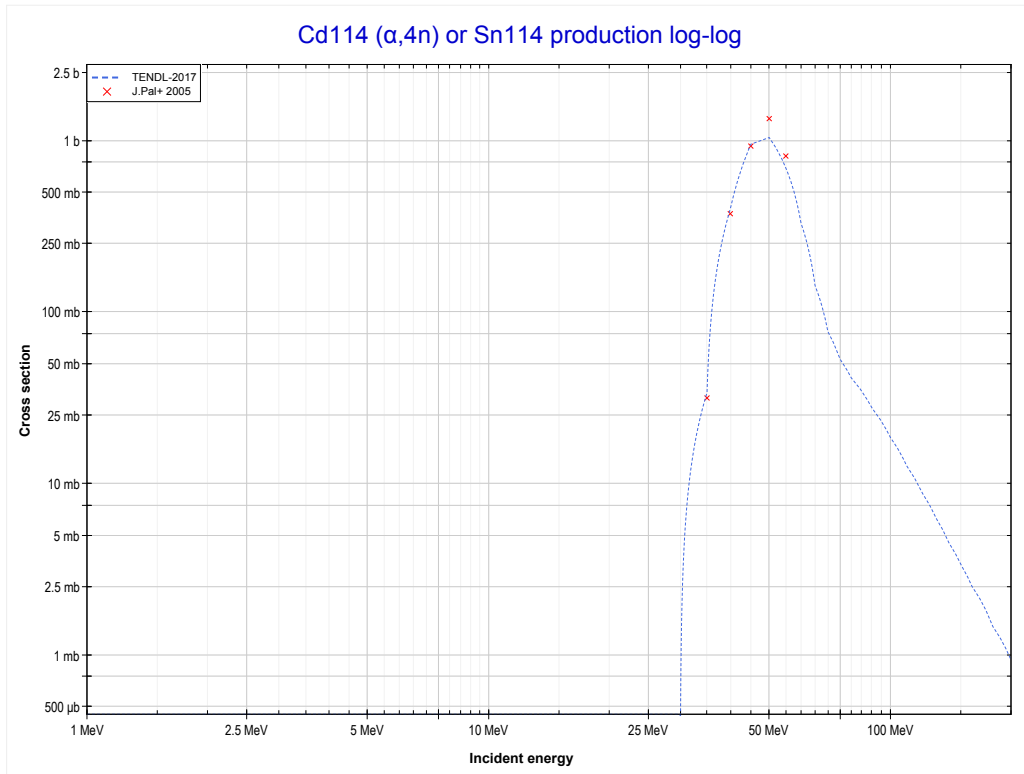
Reaction	Q-Value
Cd114($\alpha,3n$)Sn115	-21770.00 keV

<< 47-Ag-107	48-Cd-114	50-Sn-124 >>
<< MT17 ($\alpha,3n$)	MT28 ($\alpha,n+p$) or MT5 (In116 production)	MT37 ($\alpha,4n$) >>



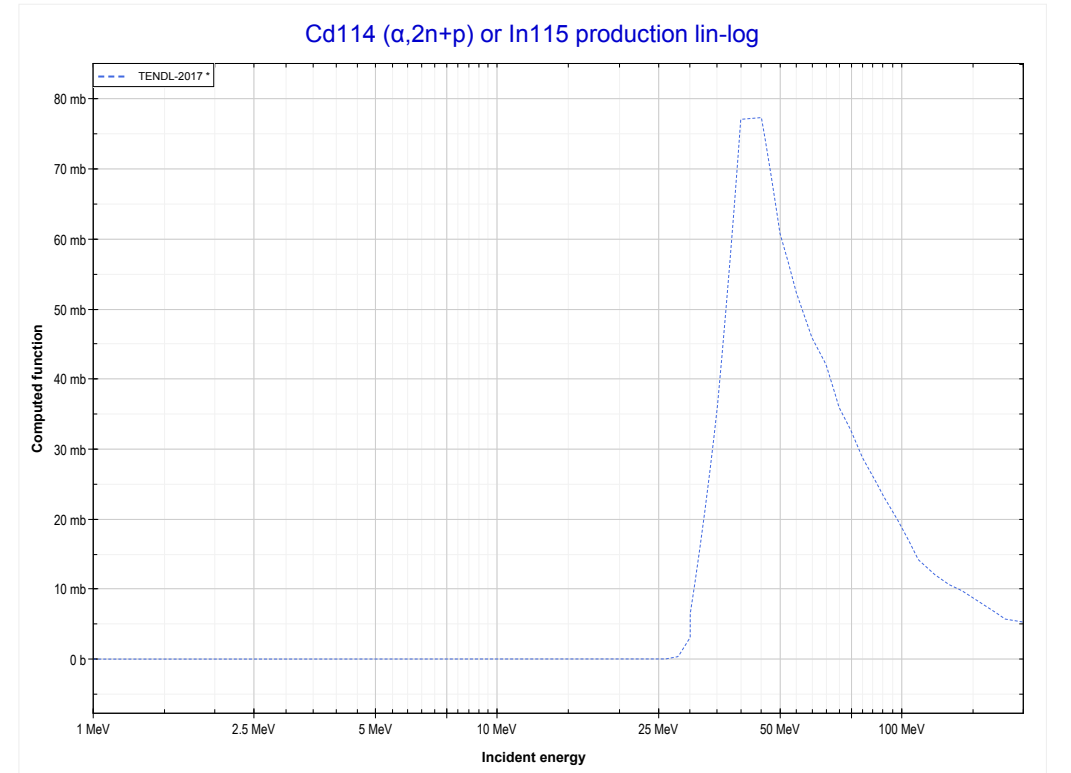
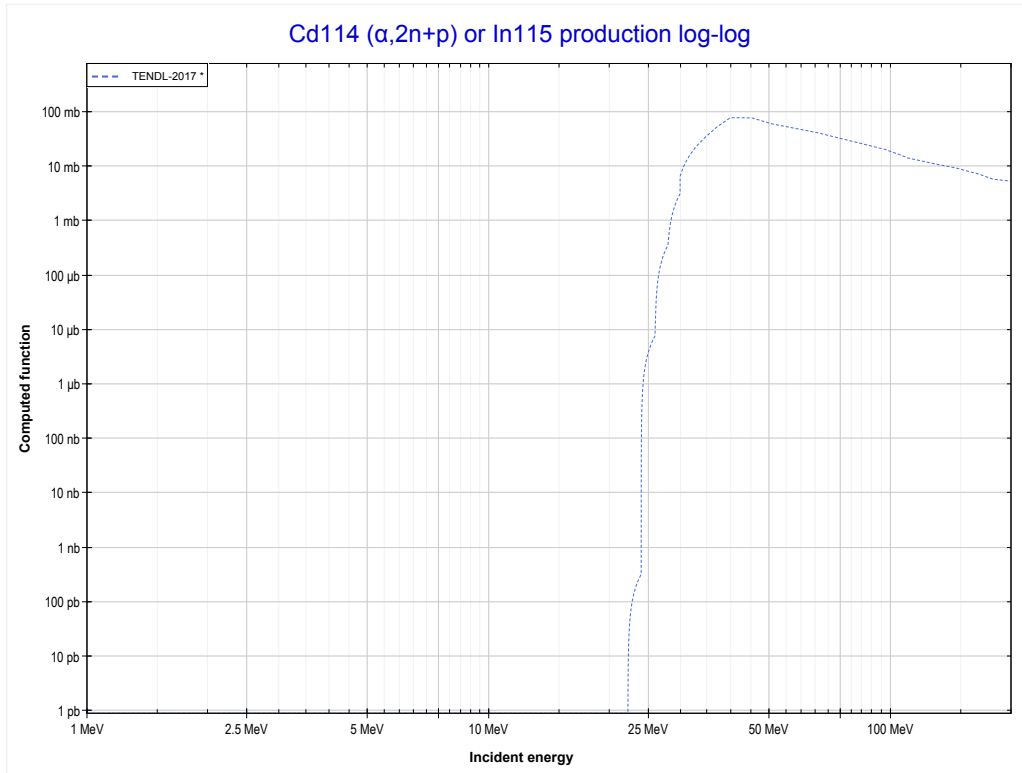
Reaction	Q-Value
Cd114(α,d)In116	-12475.86 keV
Cd114($\alpha,n+p$)In116	-14700.42 keV

<< 47-Ag-109	48-Cd-114	49-In-115 >>
<< MT28 ($\alpha, n+p$)	MT37 ($\alpha, 4n$) or MT5 (Sn114 production)	MT41 ($\alpha, 2n+p$) >>



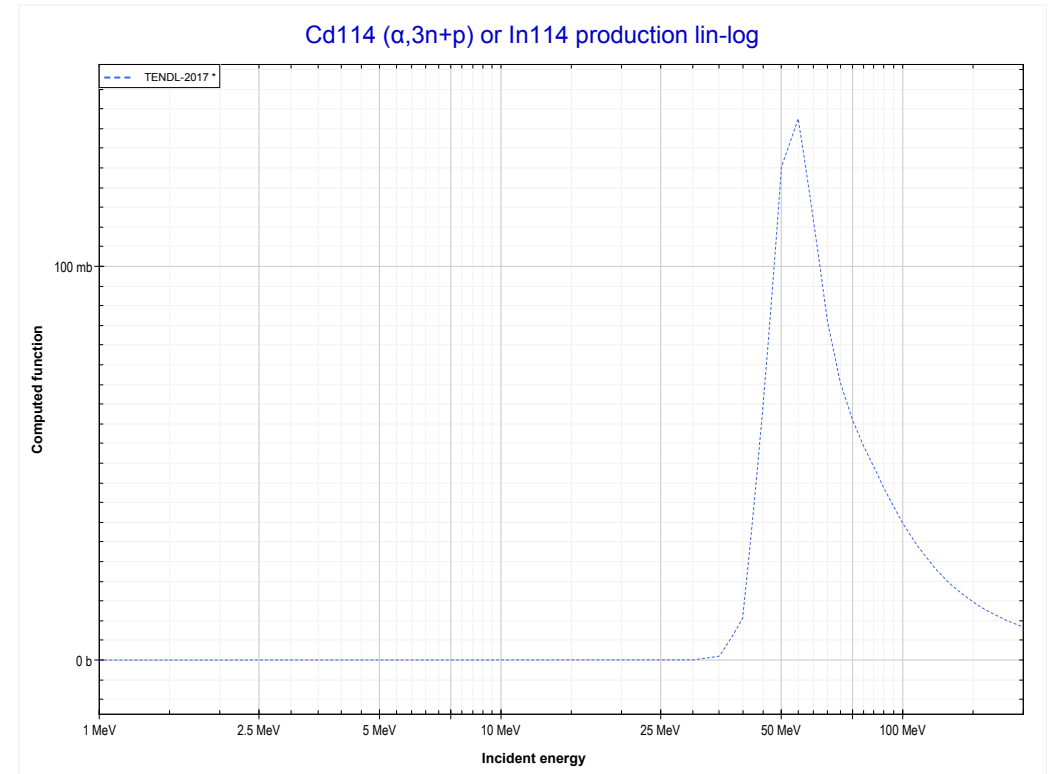
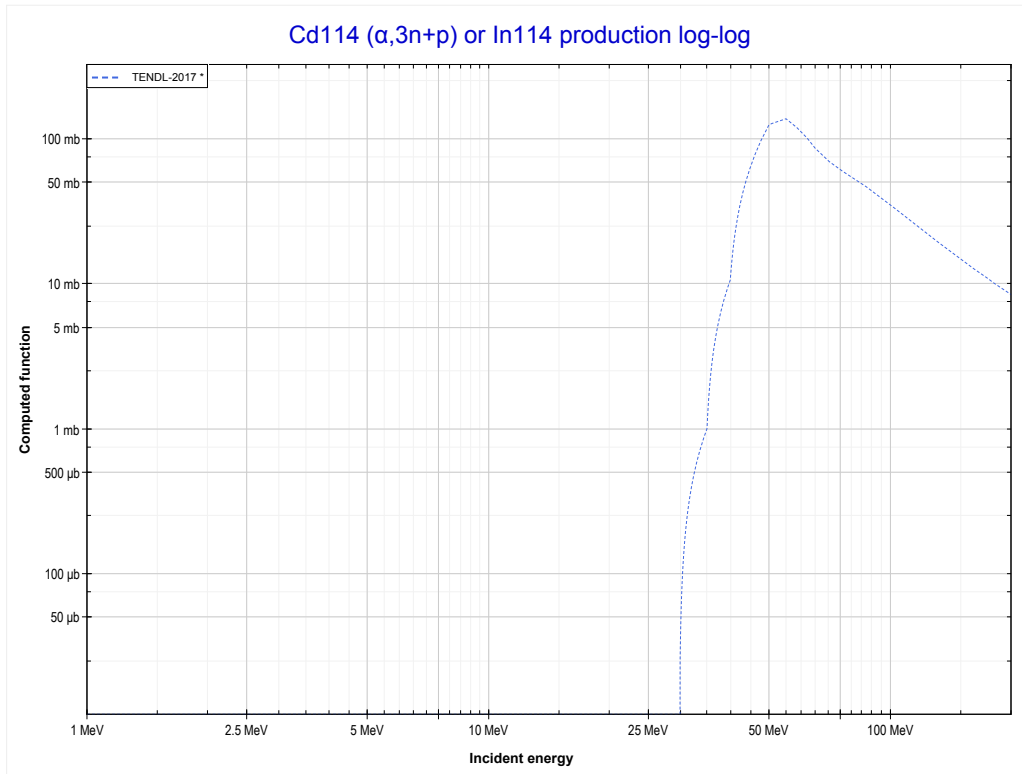
Reaction	Q-Value
Cd114($\alpha, 4n$)Sn114	-29317.85 keV

<< 30-Zn-64	48-Cd-114	48-Cd-116 >>
<< MT37 ($\alpha,4n$)	MT41 ($\alpha,2n+p$) or MT5 (In115 production)	MT42 ($\alpha,3n+p$) >>



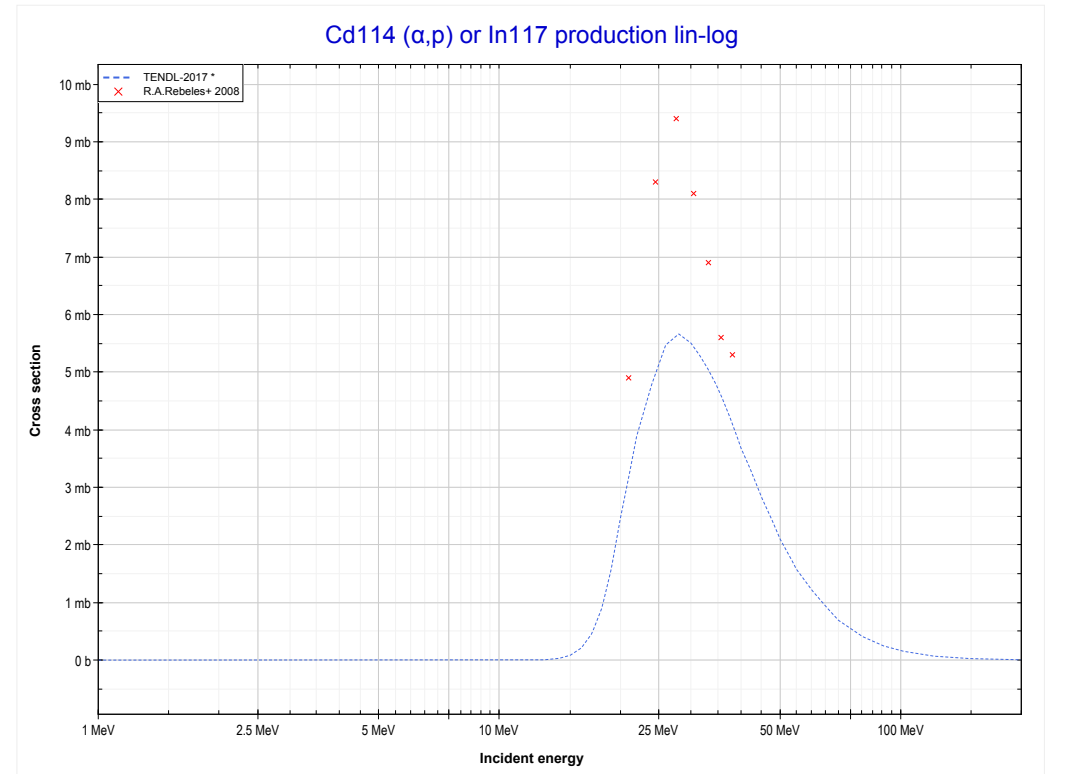
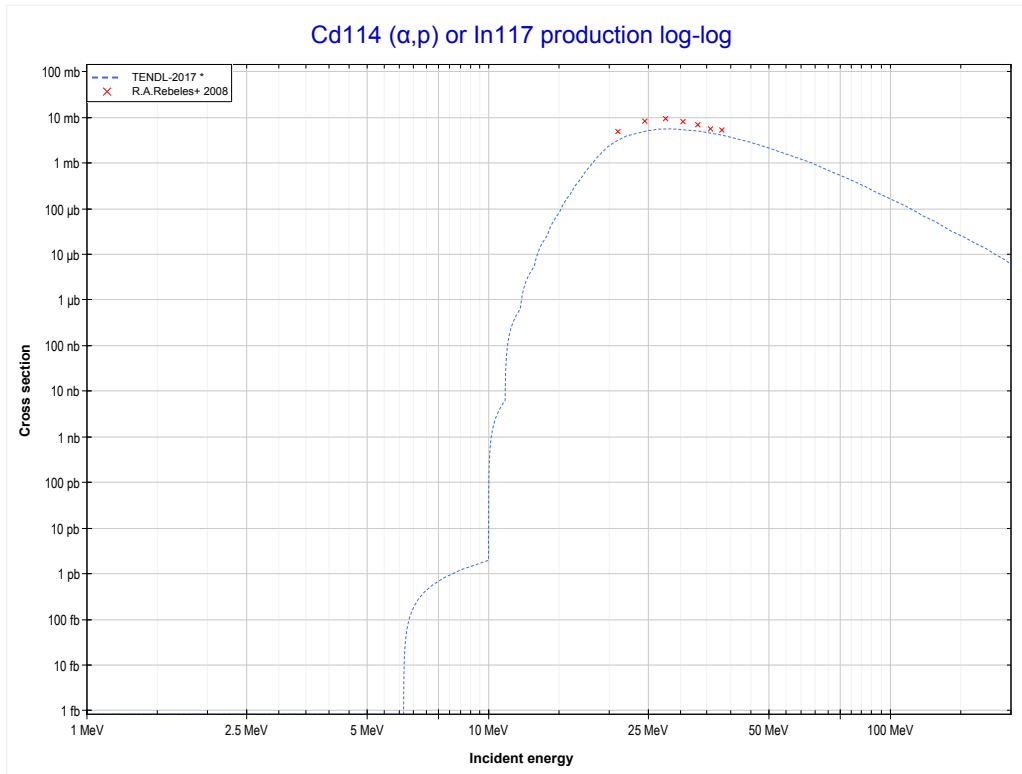
Reaction	Q-Value
Cd114(α,t)In115	-13003.35 keV
Cd114($\alpha,n+d$)In115	-19260.58 keV
Cd114($\alpha,2n+p$)In115	-21485.15 keV

<< 41-Nb-93	48-Cd-114	48-Cd-116 >>
<< MT41 ($\alpha,2n+p$)	MT42 ($\alpha,3n+p$) or MT5 (In114 production)	MT103 (α,p) >>



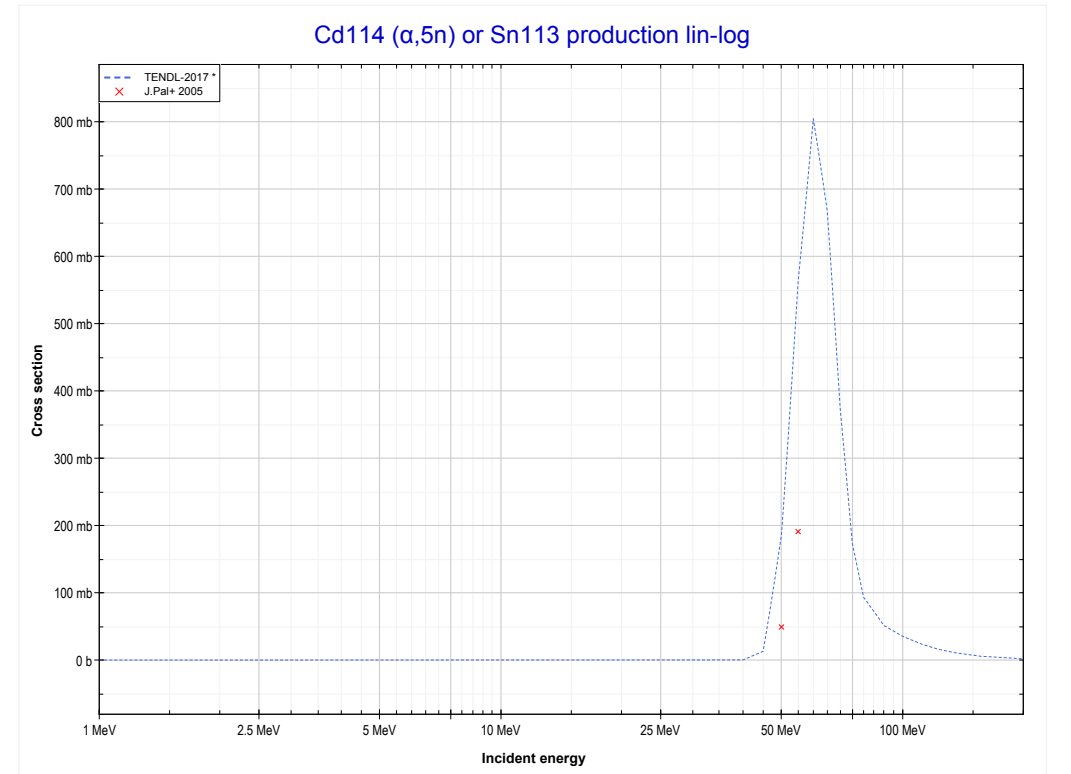
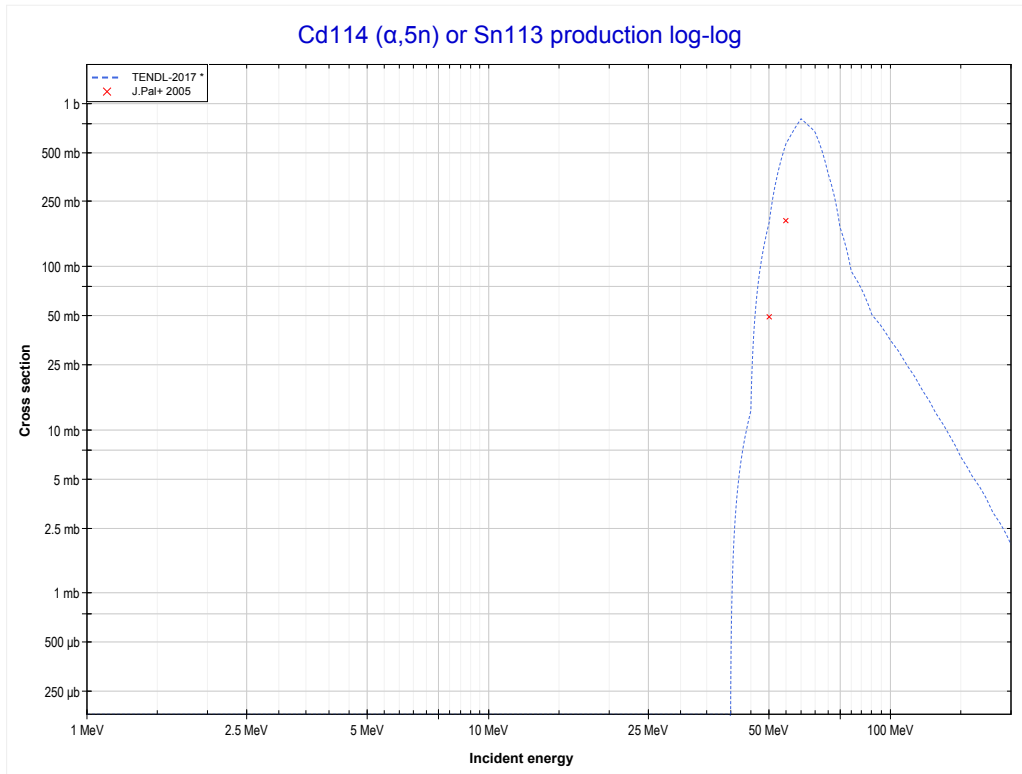
Reaction	Q-Value
Cd114($\alpha,n+t$)In114	-22042.61 keV
Cd114($\alpha,2n+d$)In114	-28299.84 keV
Cd114($\alpha,3n+p$)In114	-30524.41 keV

<< 48-Cd-106	48-Cd-114	50-Sn-112 >>
<< MT42 ($\alpha,3n+p$)	MT103 (α,p) or MT5 (In117 production)	MT152 ($\alpha,5n$) >>



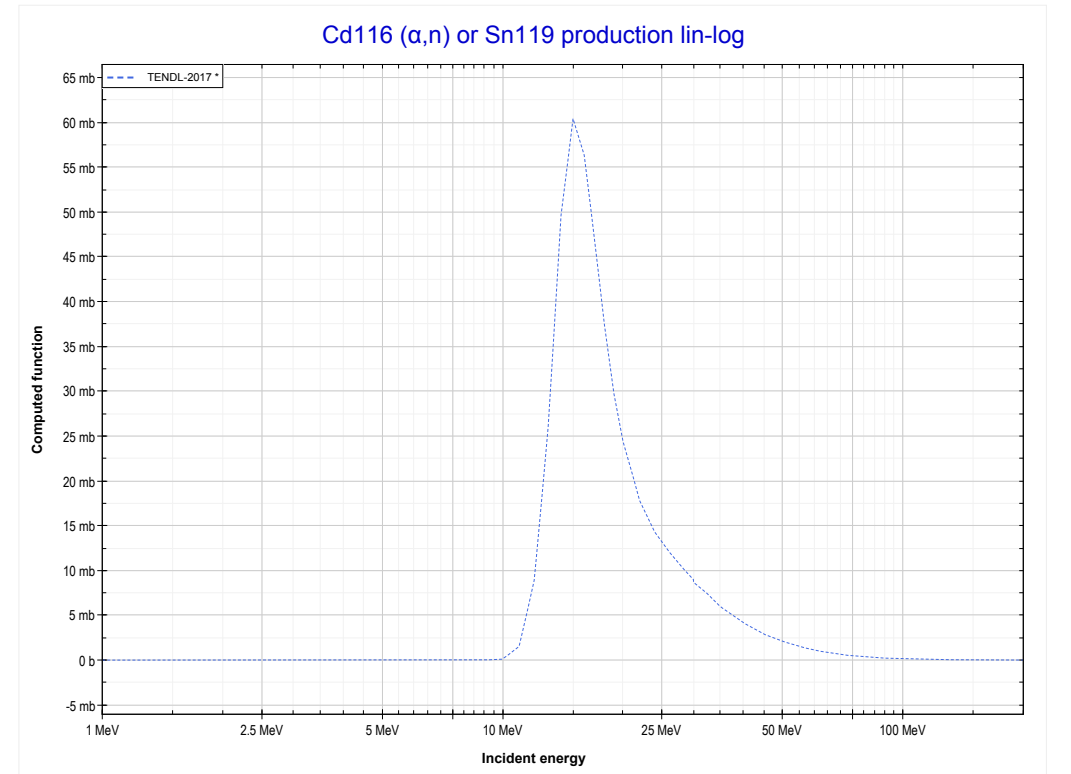
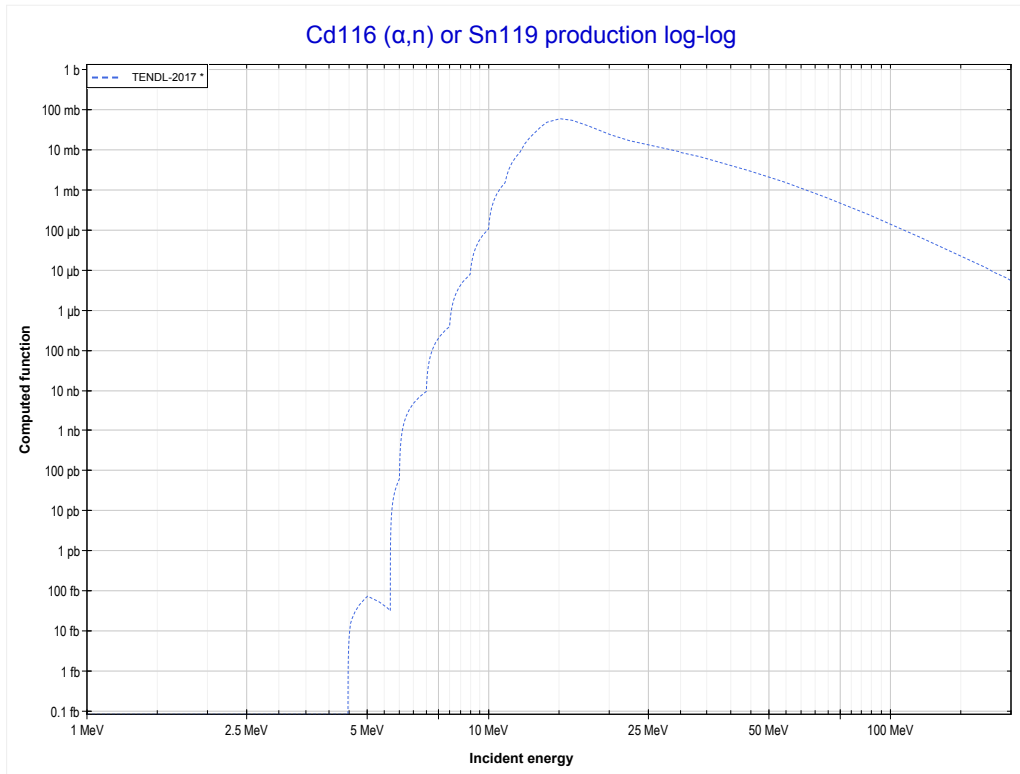
Reaction	Q-Value
Cd114(α,p)In117	-5935.85 keV

<< 47-Ag-109	48-Cd-114	65-Tb-159 >>
<< MT103 (α, p)	MT152 ($\alpha, 5n$) or MT5 (Sn113 production)	48-Cd-116 MT4 (α, n) >>



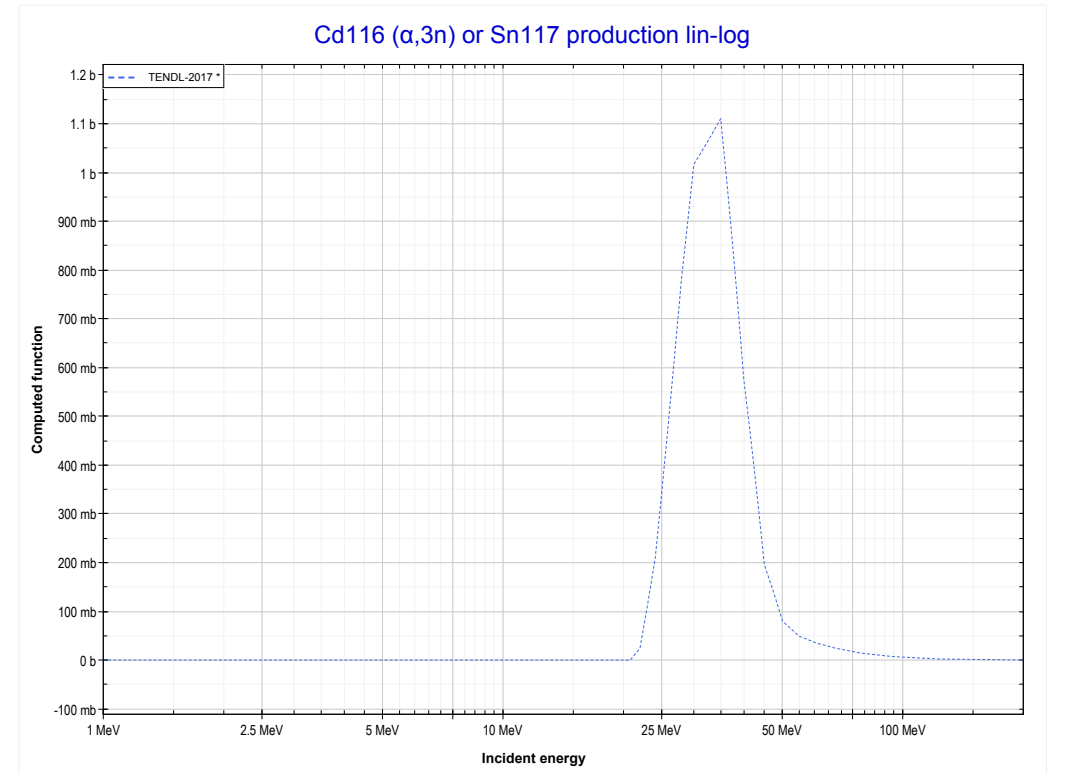
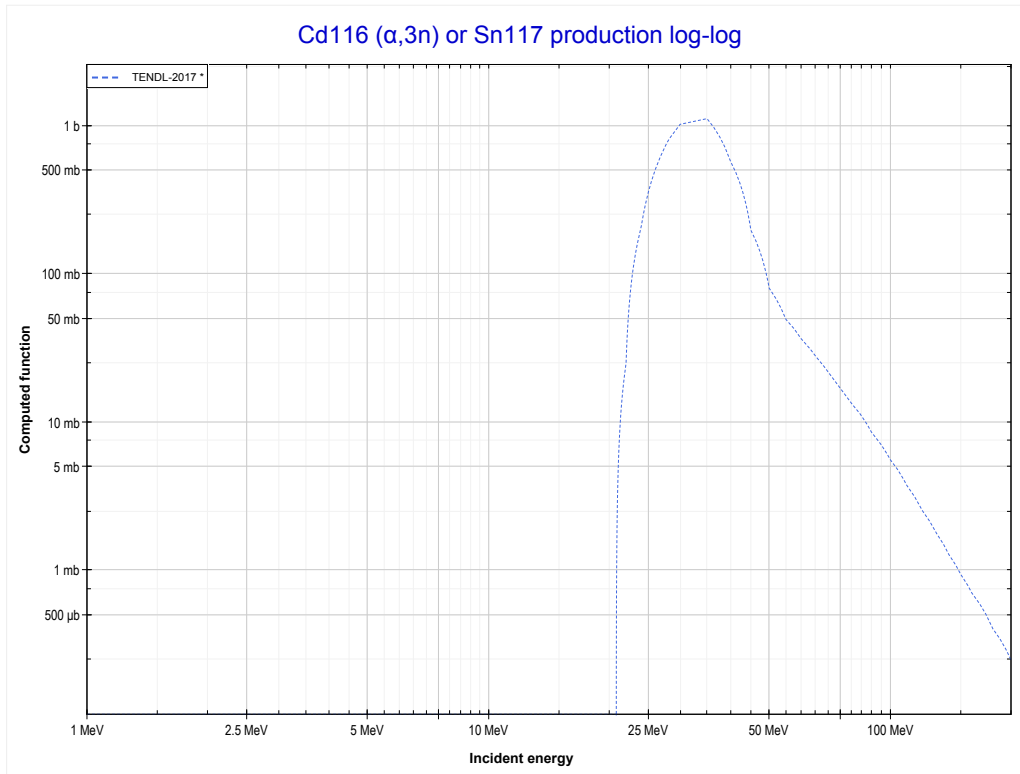
Reaction	Q-Value
Cd114($\alpha, 5n$)Sn113	-39618.27 keV

<< 48-Cd-114	48-Cd-116	49-In-113 >>
<< 48-Cd-114 MT152 ($\alpha,5n$)	MT4 (α,n) or MT5 (Sn119 production)	MT17 ($\alpha,3n$) >>



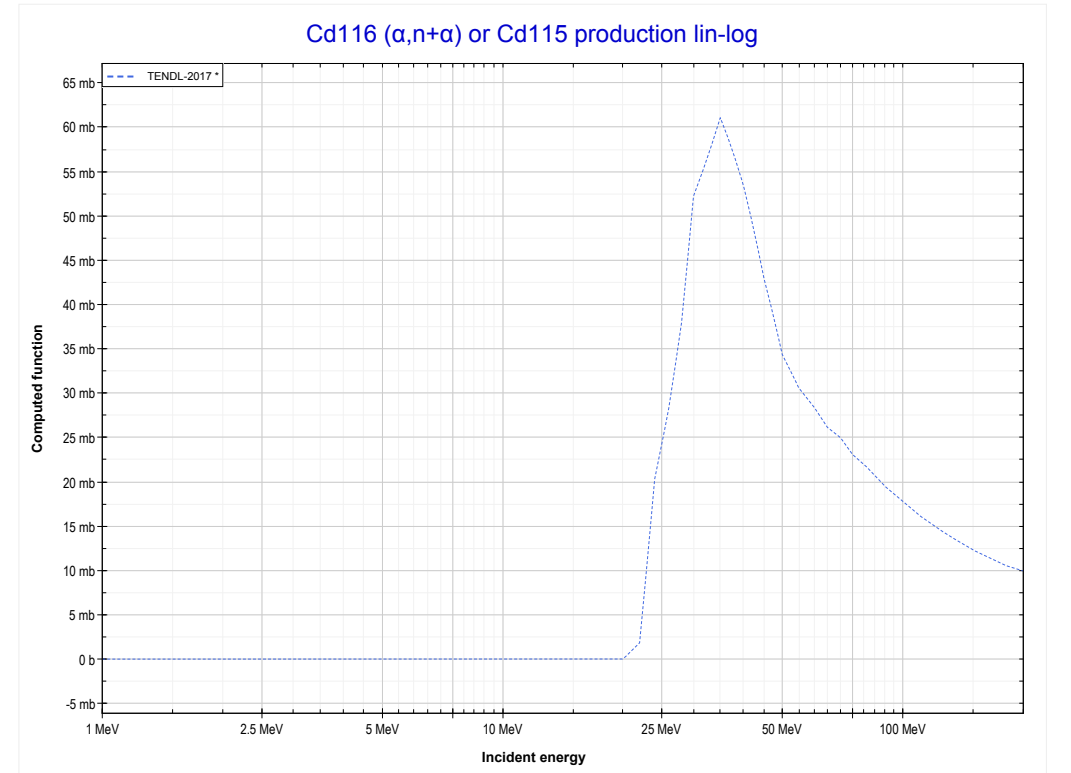
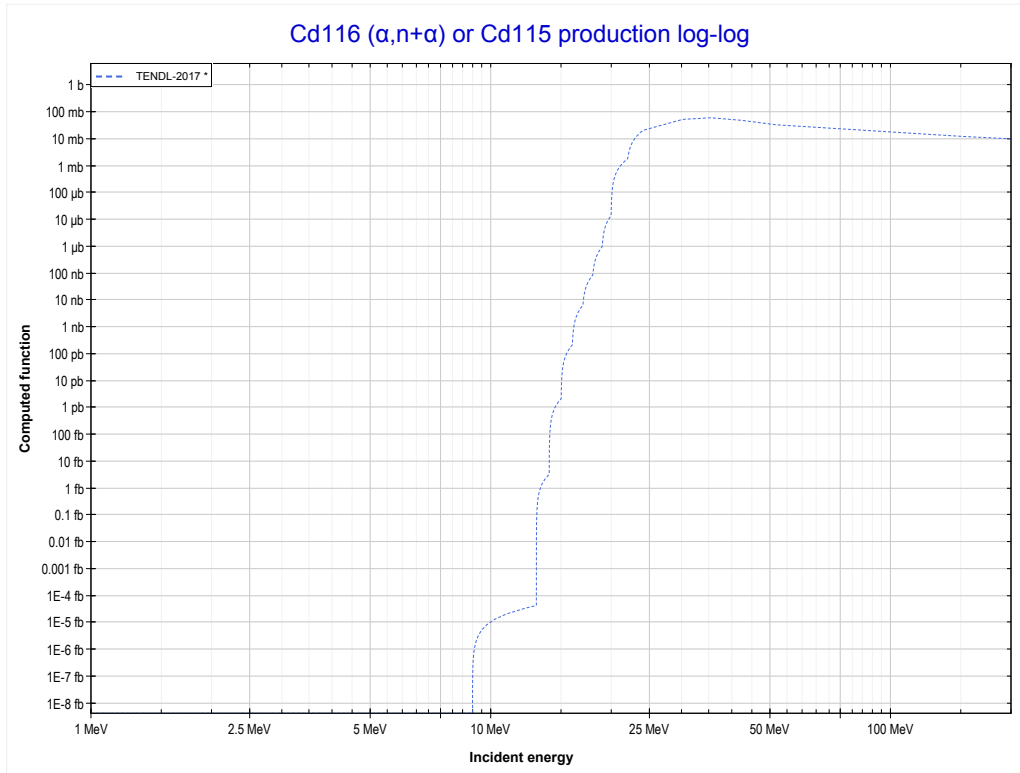
Reaction	Q-Value
Cd116(α,n)Sn119	-4293.86 keV

<< 48-Cd-114	48-Cd-116	50-Sn-117 >>
<< MT4 (α,n)	MT17 ($\alpha,3n$) or MT5 (Sn117 production)	MT22 ($\alpha,n+\alpha$) >>



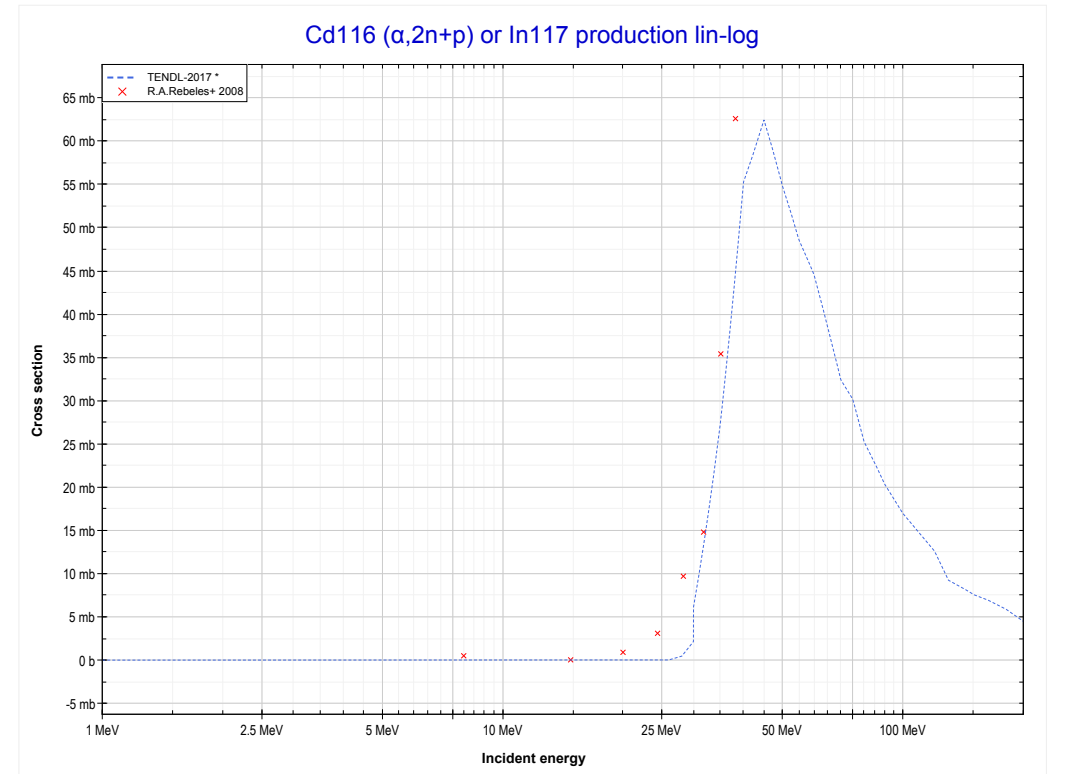
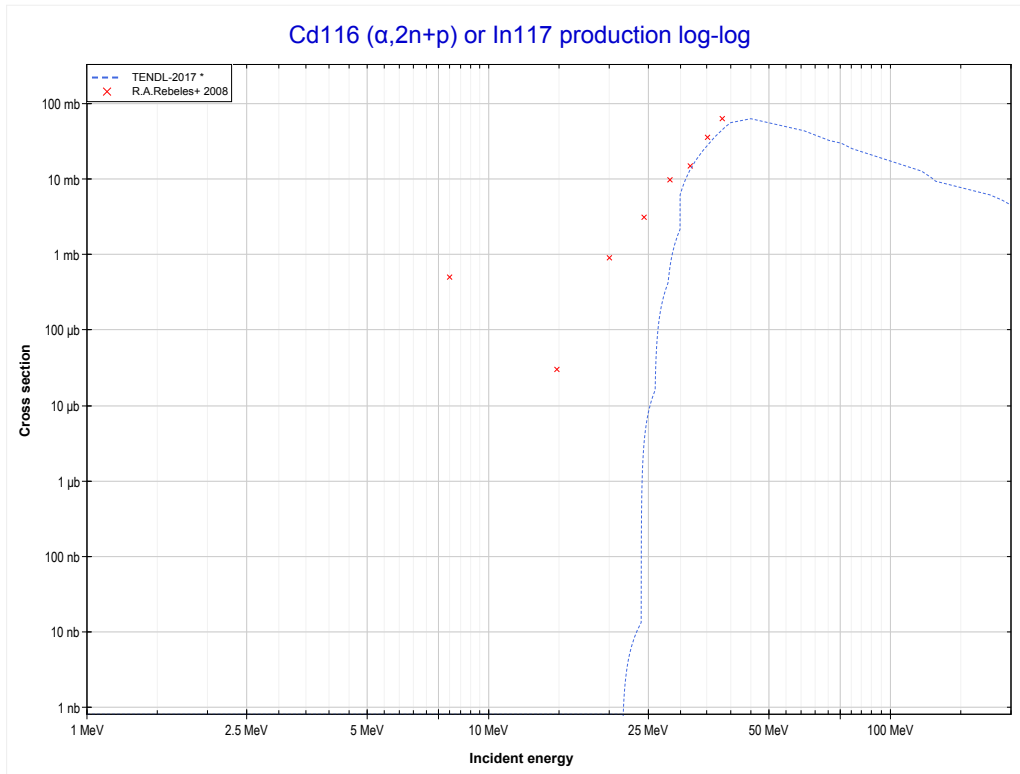
Reaction	Q-Value
Cd116($\alpha,3n$)Sn117	-20103.80 keV

<< 48-Cd-106	48-Cd-116	50-Sn-124 >>
<< MT17 ($\alpha,3n$)	MT22 ($\alpha,n+\alpha$) or MT5 (Cd115 production)	MT41 ($\alpha,2n+p$) >>



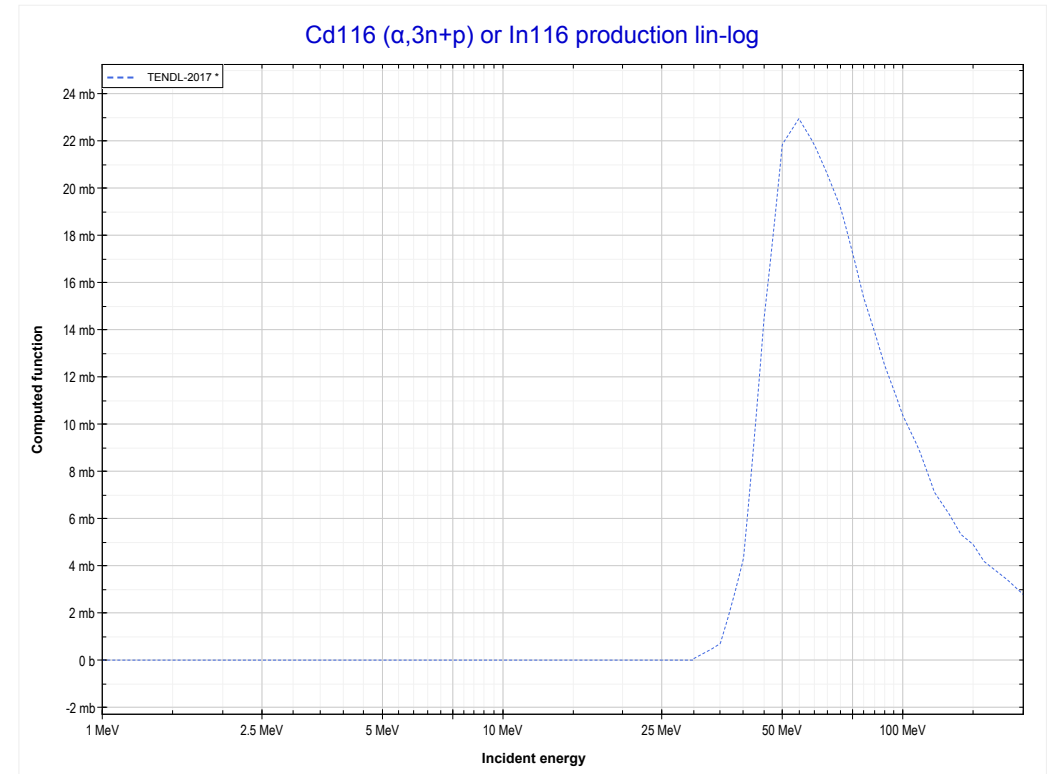
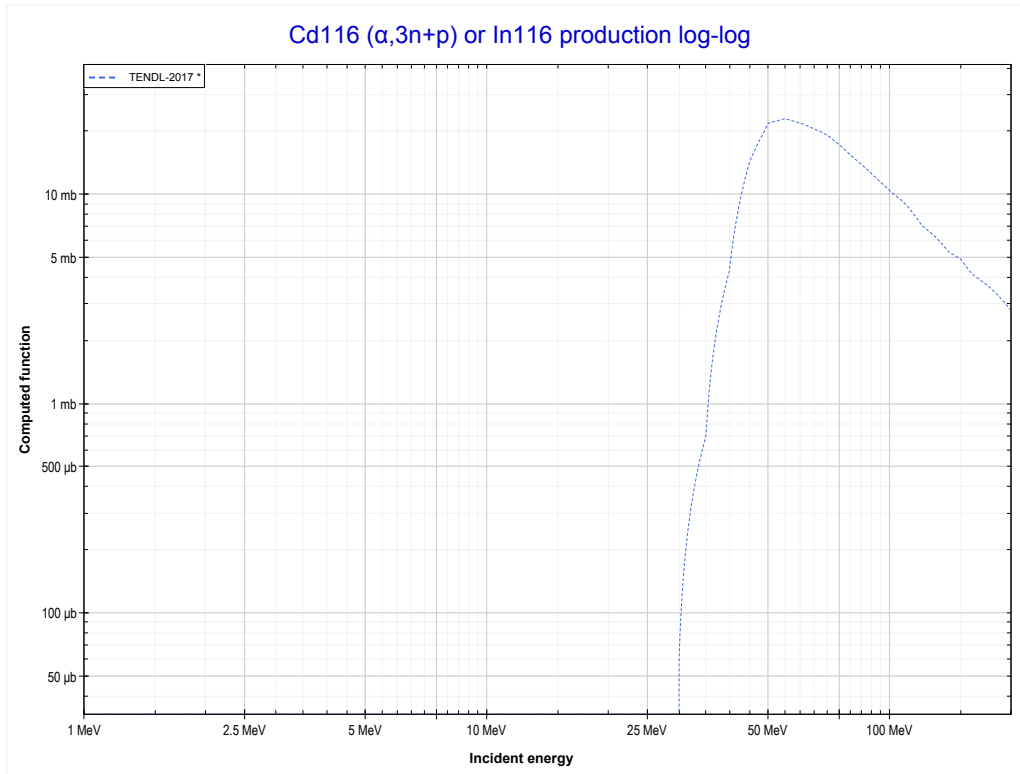
Reaction	Q-Value
Cd116($\alpha,n+\alpha$)Cd115	-8699.48 keV
Cd116($\alpha,d+t$)Cd115	-26288.77 keV
Cd116($\alpha,n+p+t$)Cd115	-28513.34 keV
Cd116($\alpha,2n+He3$)Cd115	-29277.09 keV
Cd116($\alpha,n+2d$)Cd115	-32546.00 keV
Cd116($\alpha,2n+p+d$)Cd115	-34770.57 keV
Cd116($\alpha,3n+2p$)Cd115	-36995.14 keV

<< 48-Cd-114	48-Cd-116	68-Er-167 >>
<< MT22 ($\alpha, n+\alpha$)	MT41 ($\alpha, 2n+p$) or MT5 (In117 production)	MT42 ($\alpha, 3n+p$) >>



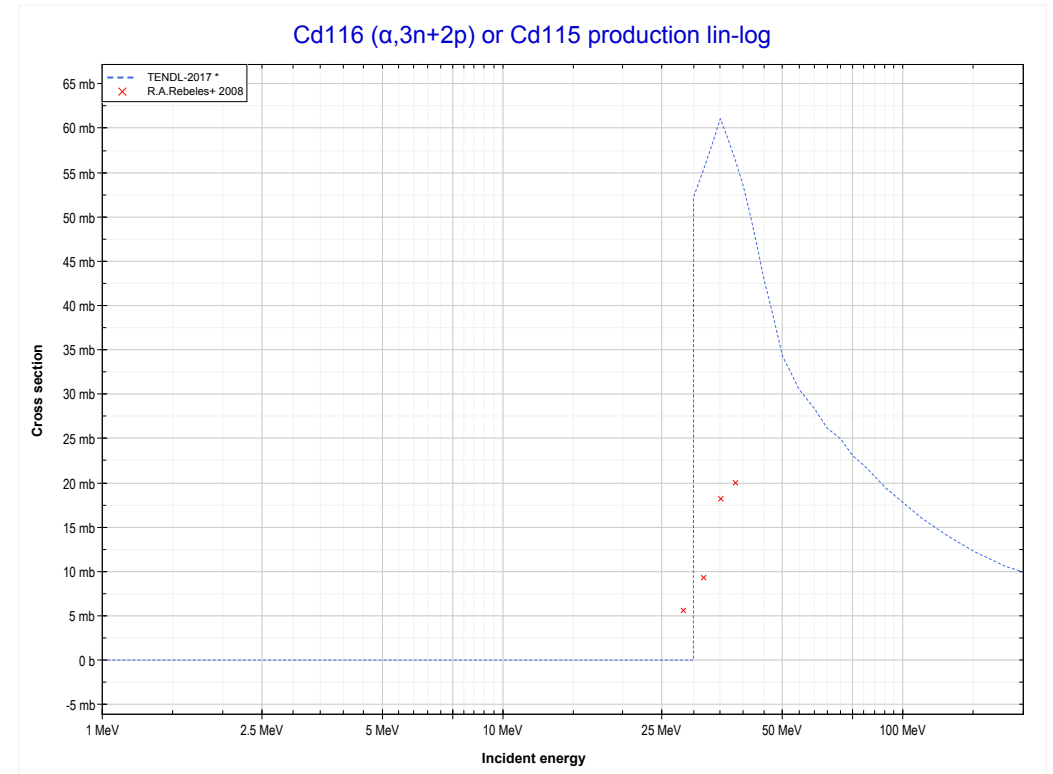
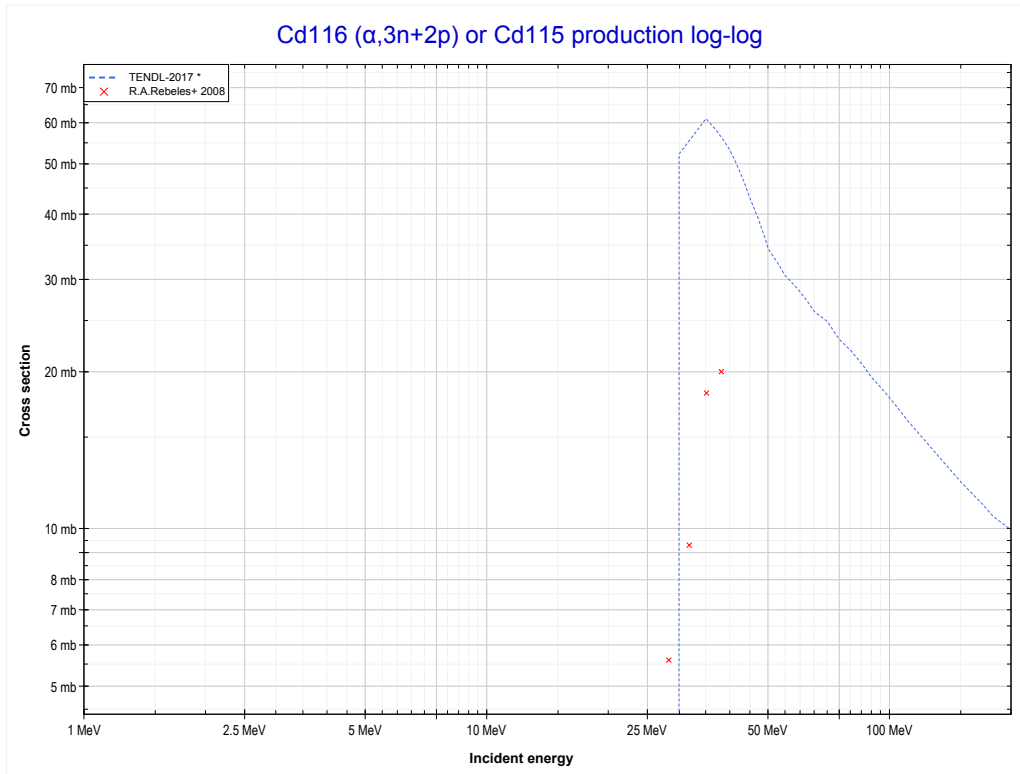
Reaction	Q-Value
Cd116(α, t)In117	-12294.45 keV
Cd116($\alpha, n+d$)In117	-18551.68 keV
Cd116($\alpha, 2n+p$)In117	-20776.25 keV

<< 48-Cd-114	48-Cd-116	79-Au-197 >>
<< MT41 ($\alpha,2n+p$)	MT42 ($\alpha,3n+p$) or MT5 (In116 production)	MT179 ($\alpha,3n+2p$) >>



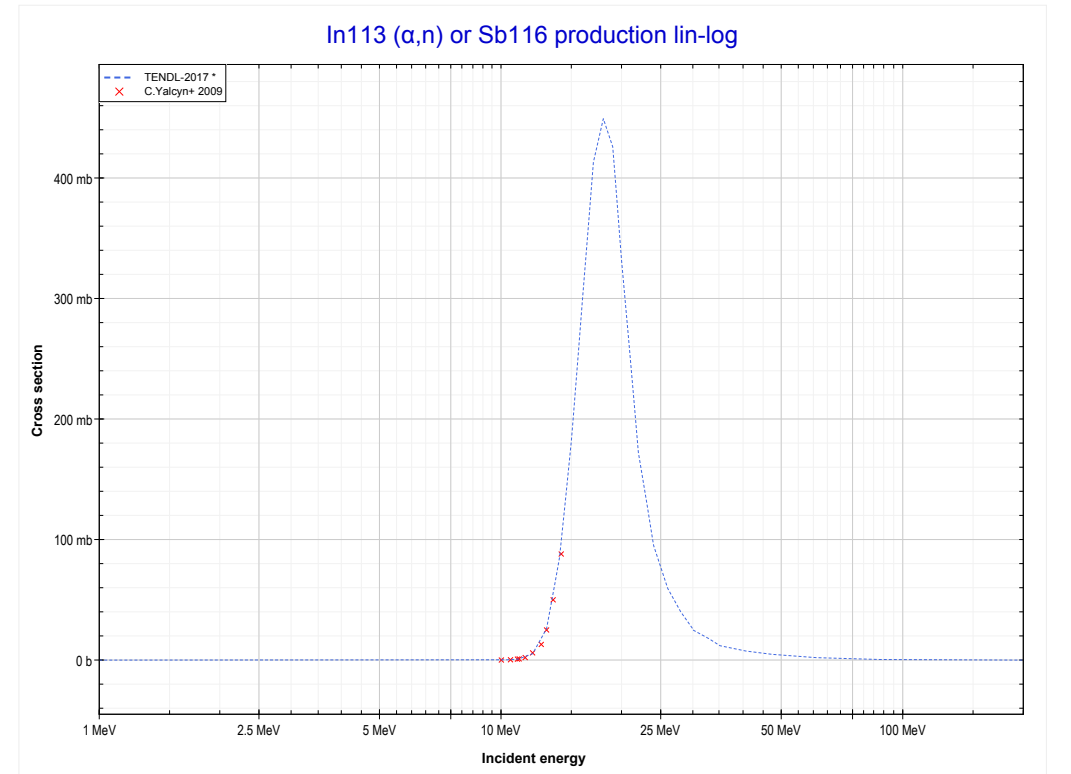
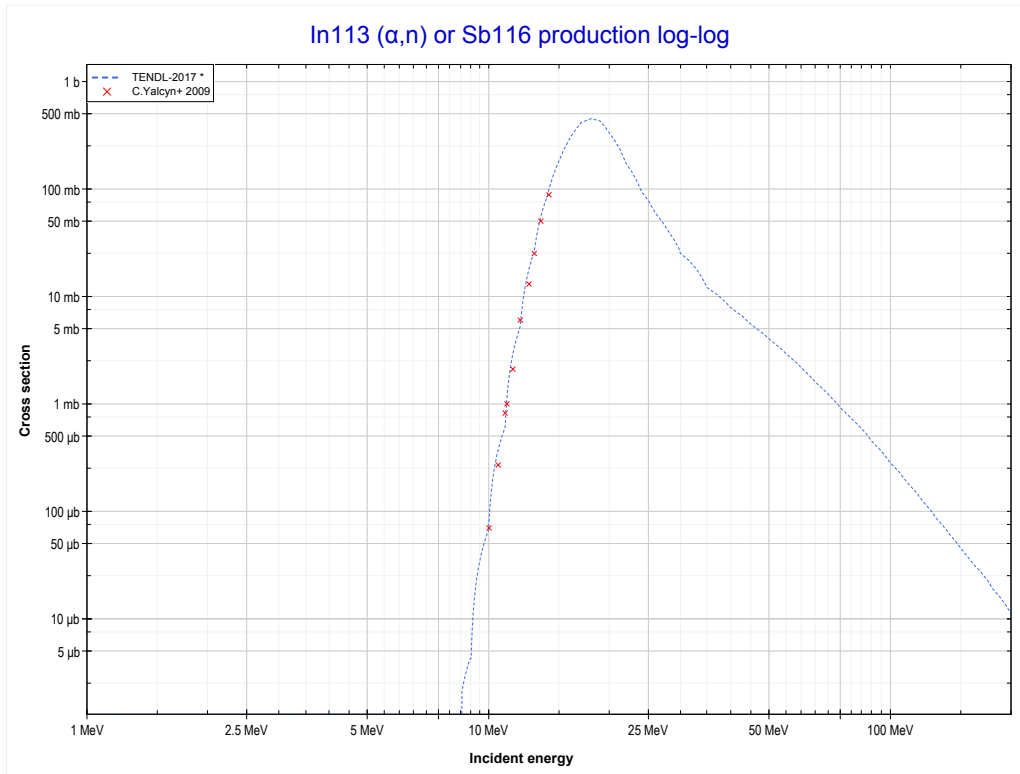
Reaction	Q-Value
Cd116($\alpha,n+t$)In116	-21059.02 keV
Cd116($\alpha,2n+d$)In116	-27316.25 keV
Cd116($\alpha,3n+p$)In116	-29540.82 keV

	48-Cd-116	
<< MT42 ($\alpha,3n+p$)	MT179 ($\alpha,3n+2p$) or MT5 (Cd115 production)	49-In-113 MT4 (α,n) >>



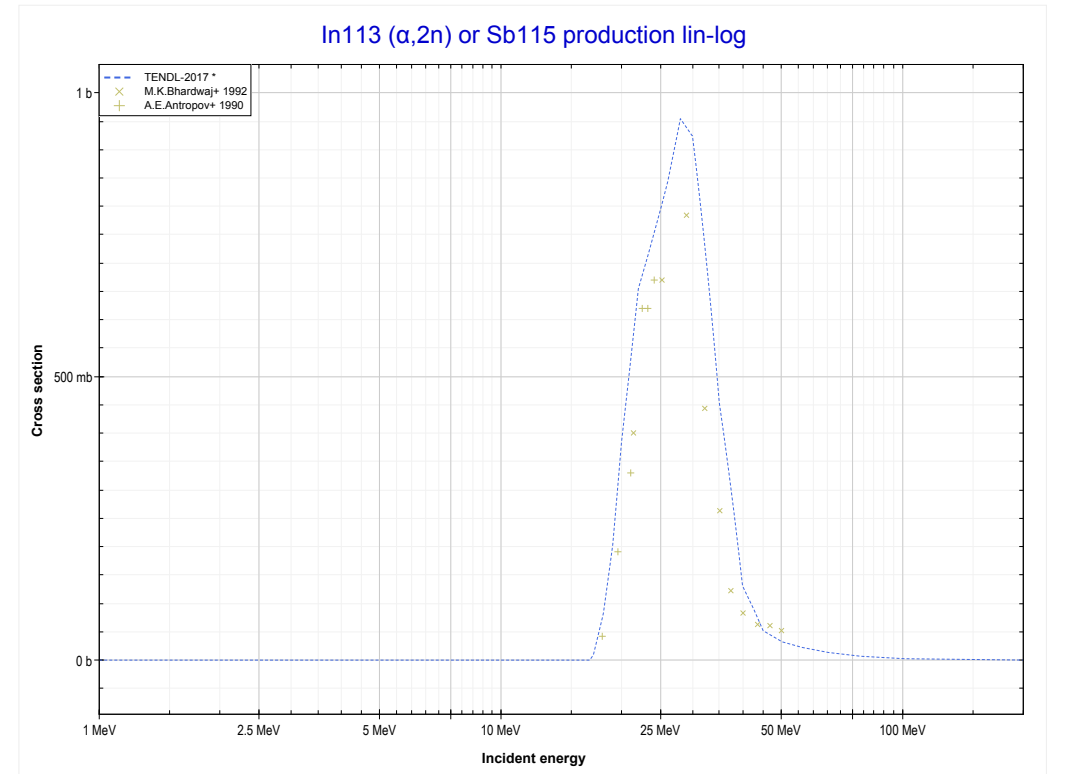
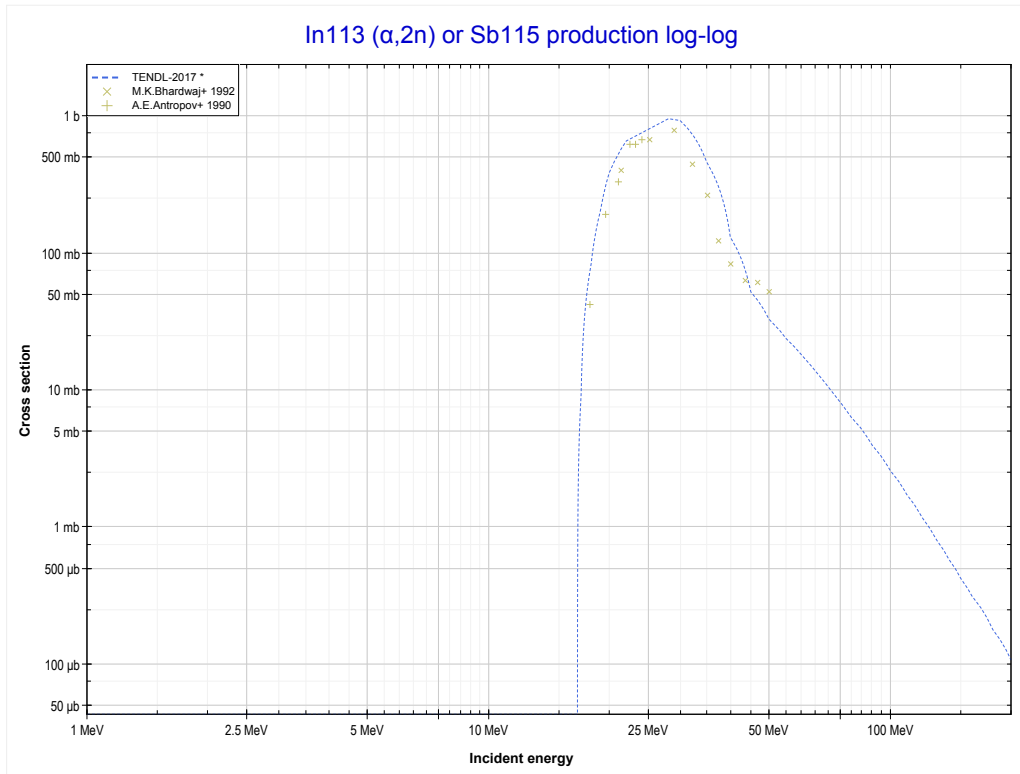
Reaction	Q-Value
Cd116($\alpha,n+\alpha$)Cd115	-8699.48 keV
Cd116($\alpha,d+t$)Cd115	-26288.77 keV
Cd116($\alpha,n+p+t$)Cd115	-28513.34 keV
Cd116($\alpha,2n+He3$)Cd115	-29277.09 keV
Cd116($\alpha,n+2d$)Cd115	-32546.00 keV
Cd116($\alpha,2n+p+d$)Cd115	-34770.57 keV
Cd116($\alpha,3n+2p$)Cd115	-36995.14 keV

<< 48-Cd-116	49-In-113	49-In-115 >>
<< 48-Cd-116 MT179 ($\alpha,3n+2p$)	MT4 (α,n) or MT5 (Sb116 production)	MT16 ($\alpha,2n$) >>



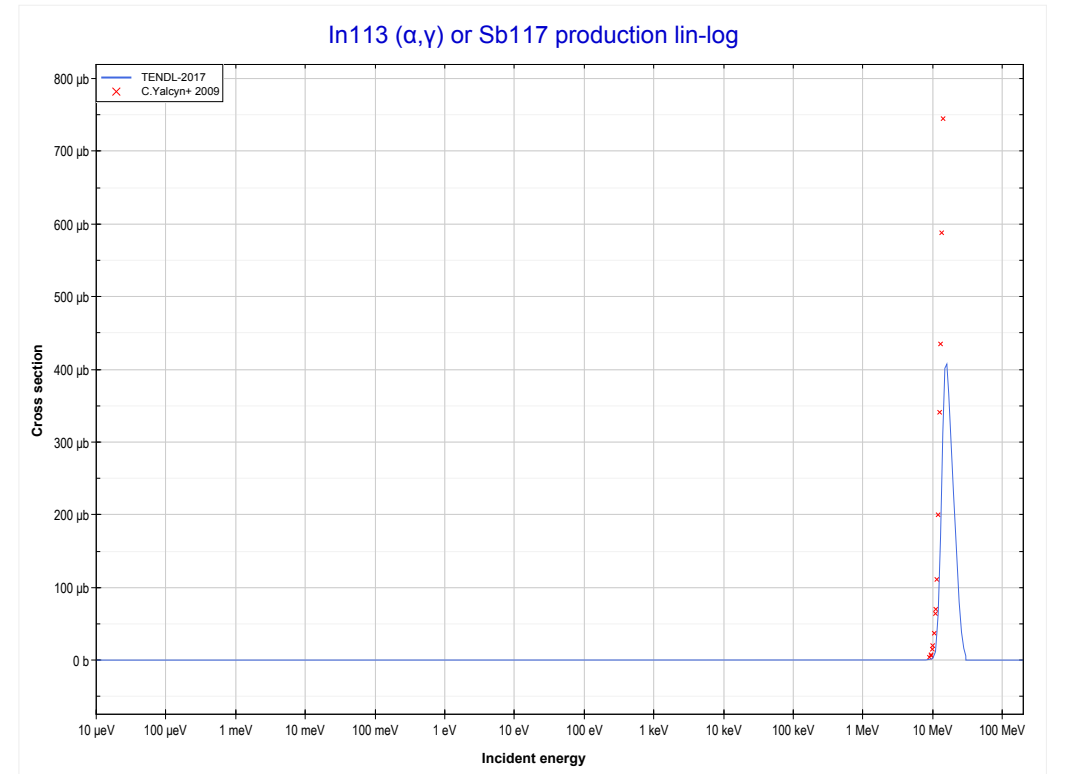
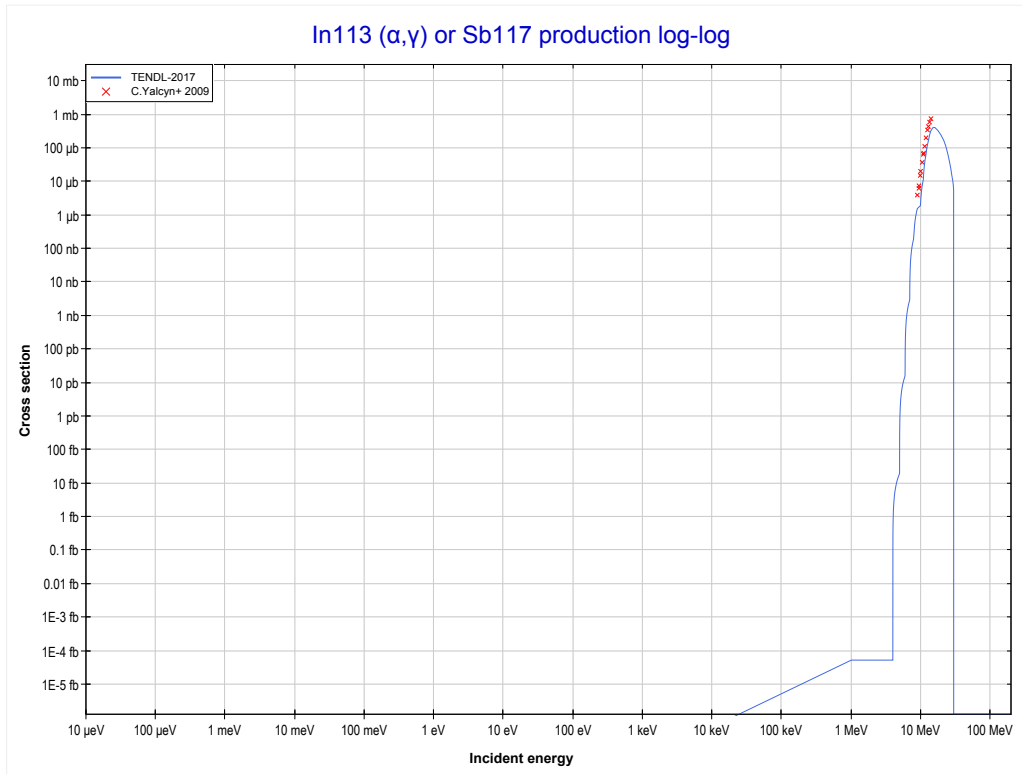
Reaction	Q-Value
In113(α,n)Sb116	-8190.20 keV

<< 48-Cd-114	49-In-113	49-In-115 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Sb115 production)	MT102 (α, γ) >>



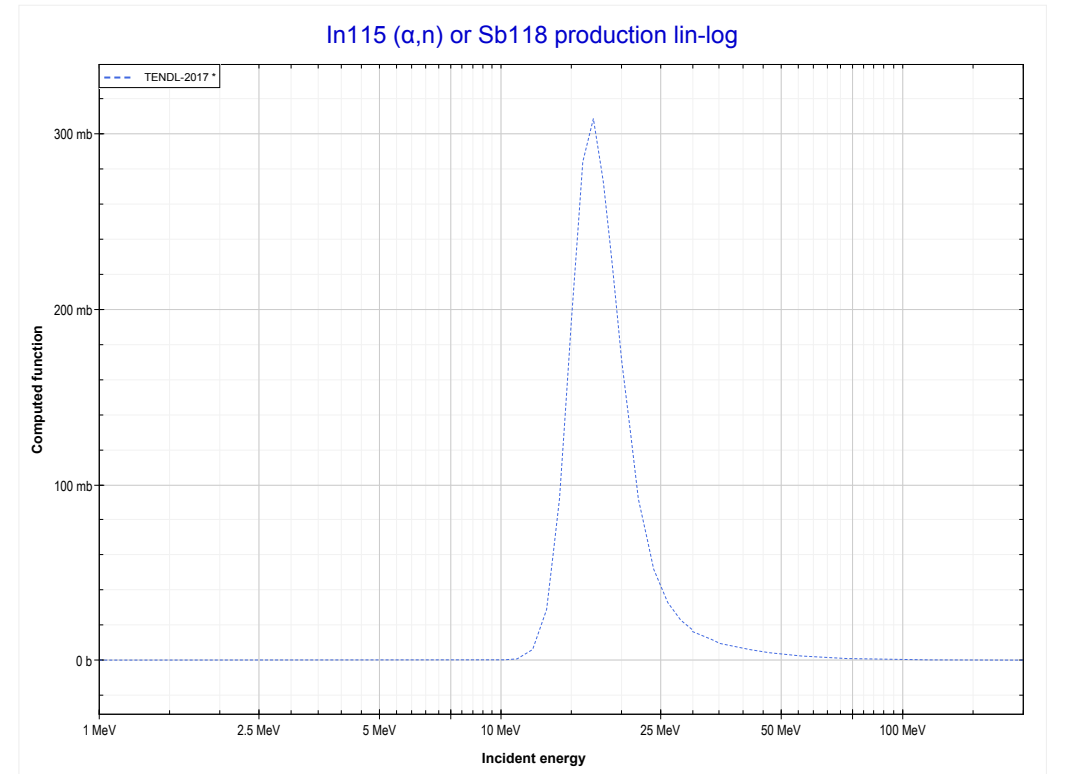
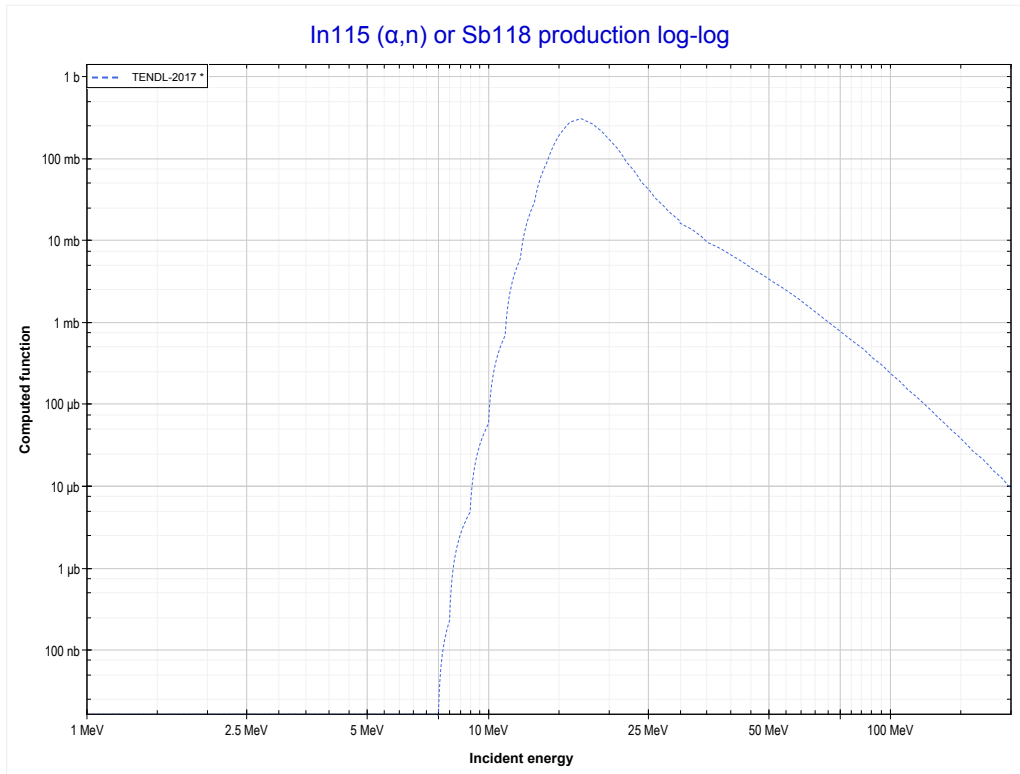
Reaction	Q-Value
In113($\alpha, 2n$)Sb115	-16080.52 keV

<< 48-Cd-106	49-In-113	49-In-115 >>
<< MT16 ($\alpha,2n$)	MT102 (α,γ) or MT5 (Sb117 production)	49-In-115 MT4 (α,n) >>



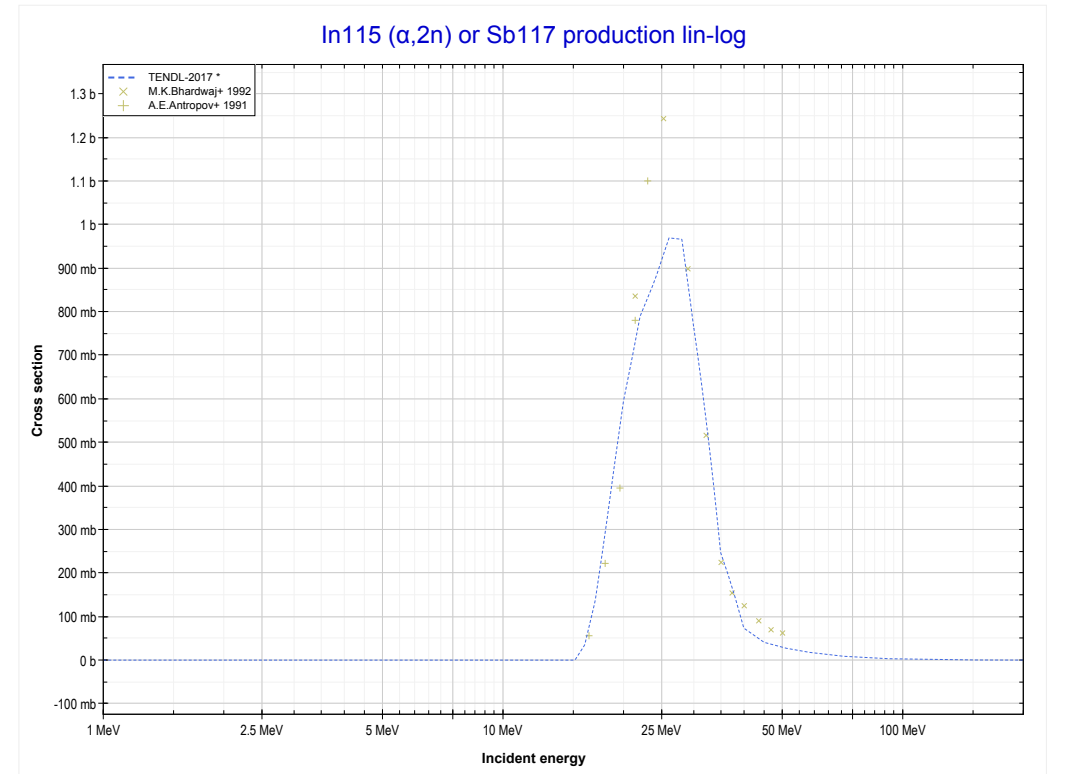
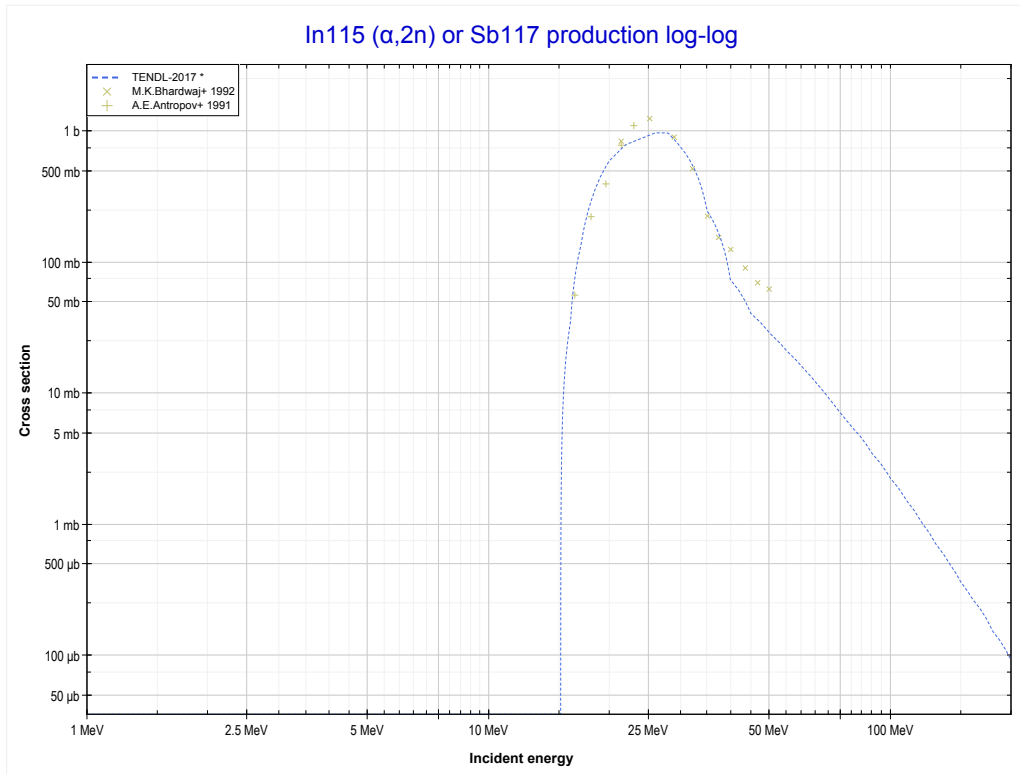
Reaction	Q-Value
In113(α,γ)Sb117	1699.12 keV

<< 49-In-113	49-In-115	50-Sn-112 >>
<< 49-In-113 MT102 (α,γ)	MT4 (α,n) or MT5 (Sb118 production)	MT16 ($\alpha,2n$) >>



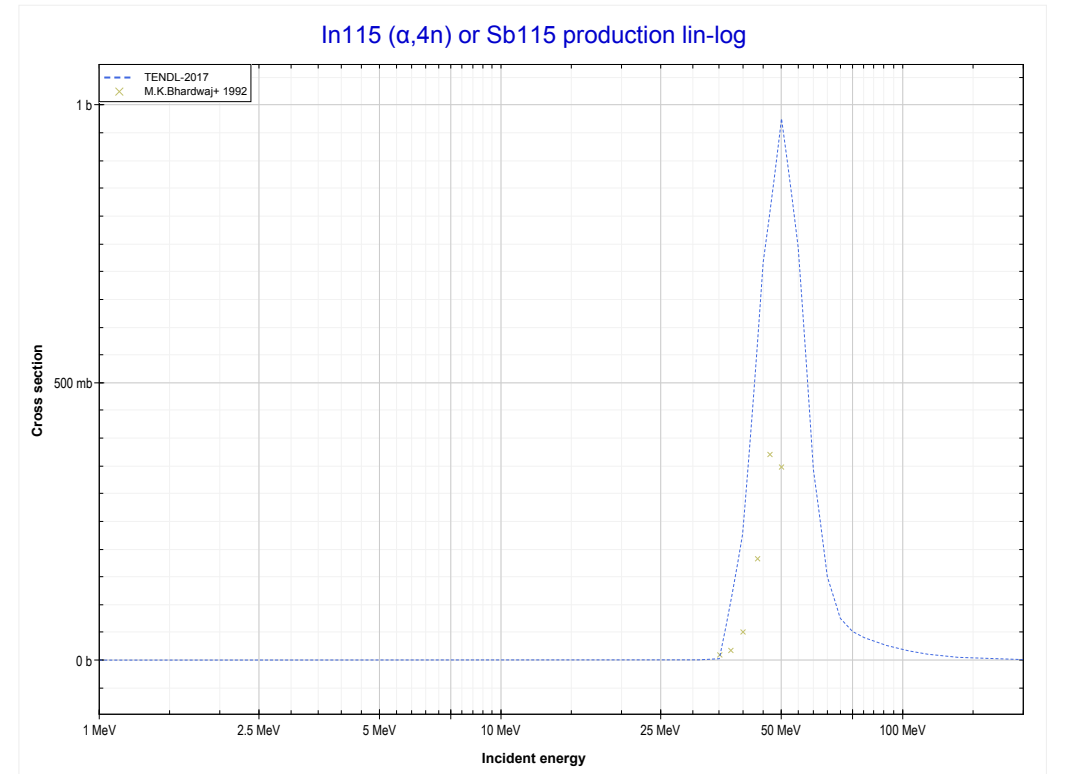
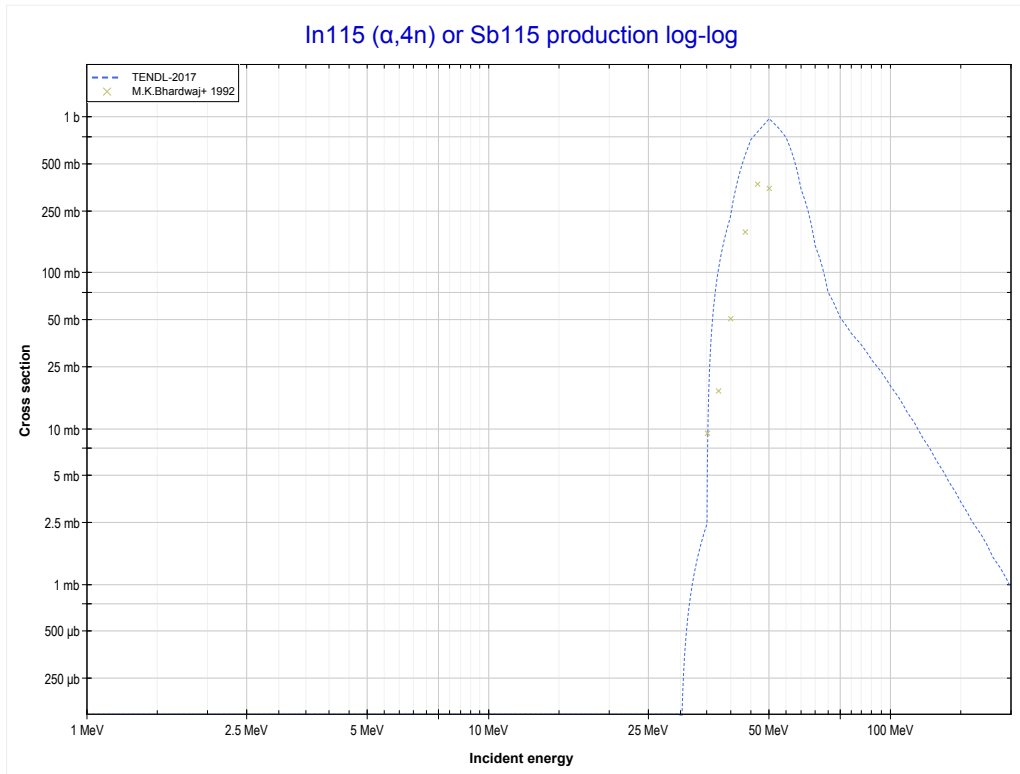
Reaction	Q-Value
In115(α,n)Sb118	-7186.74 keV

<< 49-In-113	49-In-115	50-Sn-116 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Sb117 production)	MT37 ($\alpha, 4n$) >>



Reaction	Q-Value
In115($\alpha, 2n$)Sb117	-14614.06 keV

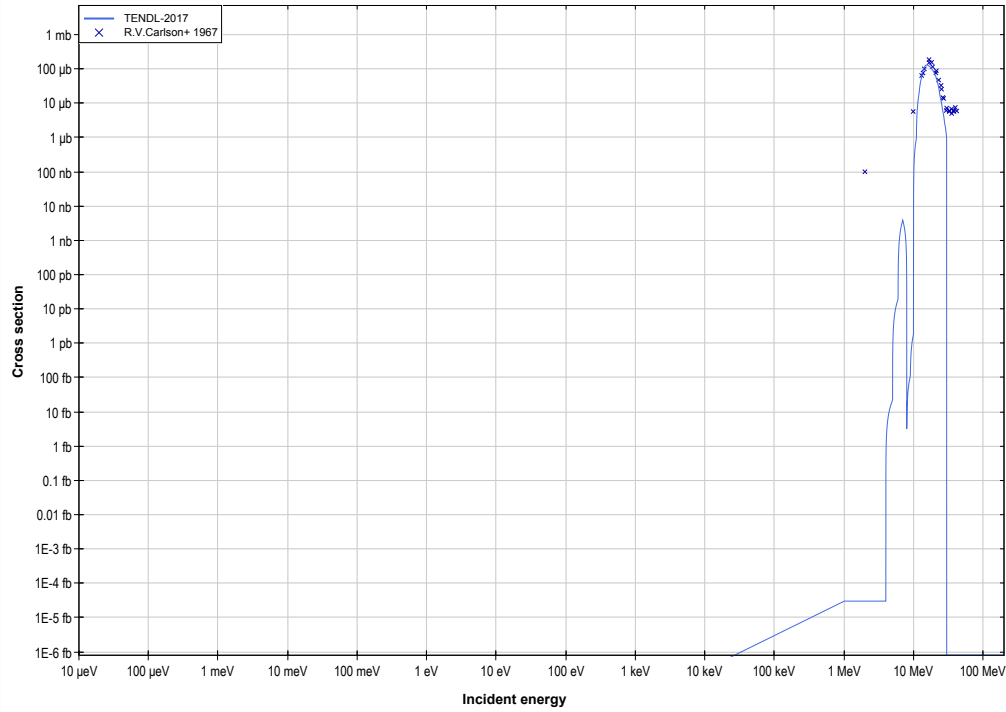
<< 48-Cd-114	49-In-115	51-Sb-121 >>
<< MT16 ($\alpha,2n$)	MT37 ($\alpha,4n$) or MT5 (Sb115 production)	MT102 (α,γ) >>



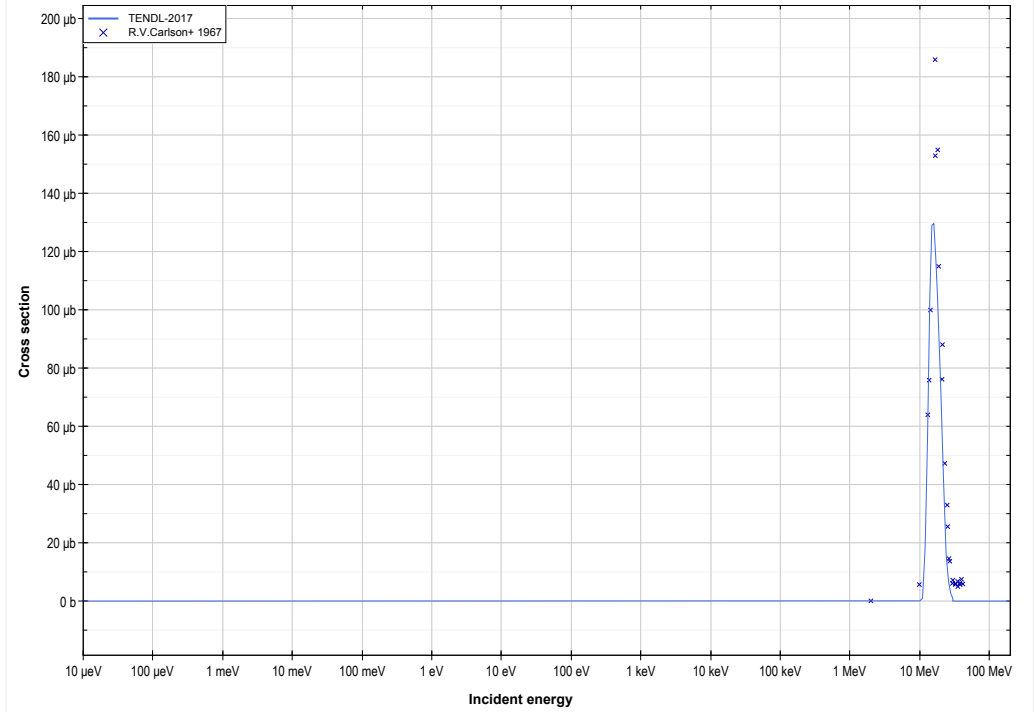
Reaction	Q-Value
In115($\alpha,4n$)Sb115	-32393.70 keV

<< 49-In-113	49-In-115	50-Sn-112 >>
<< MT37 ($\alpha,4n$)	MT102 (α,γ) or MT5 (Sb119 production)	MT111 ($\alpha,2p$) >>

In115 (α,γ) or Sb119 production log-log

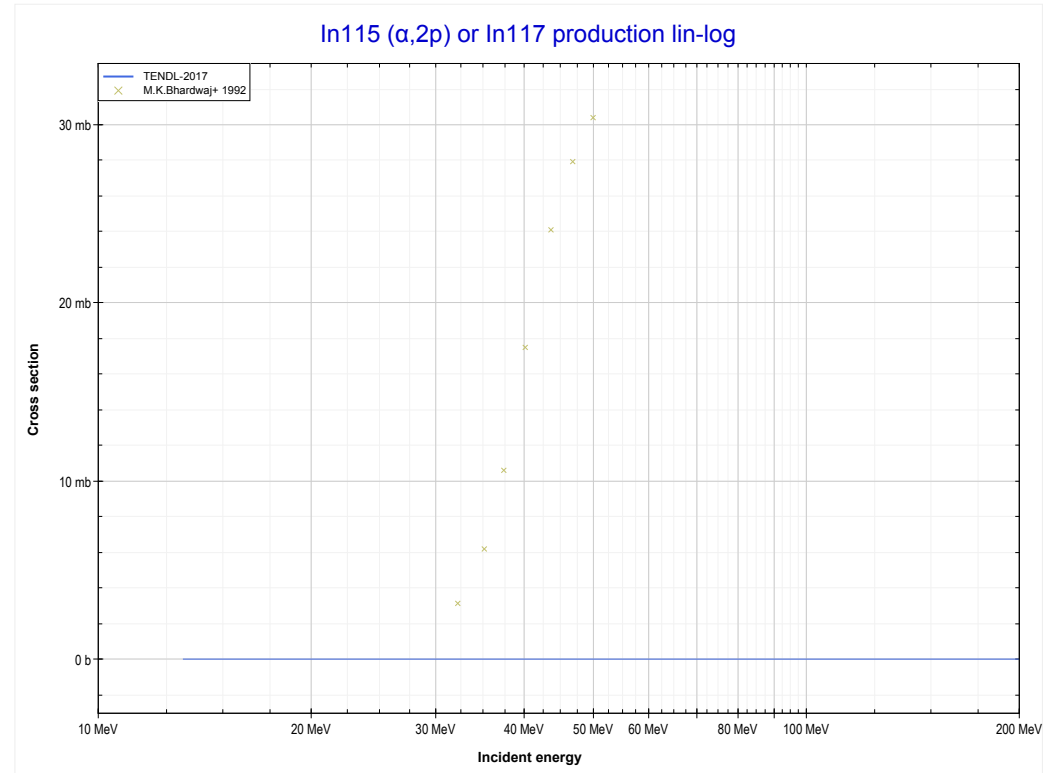
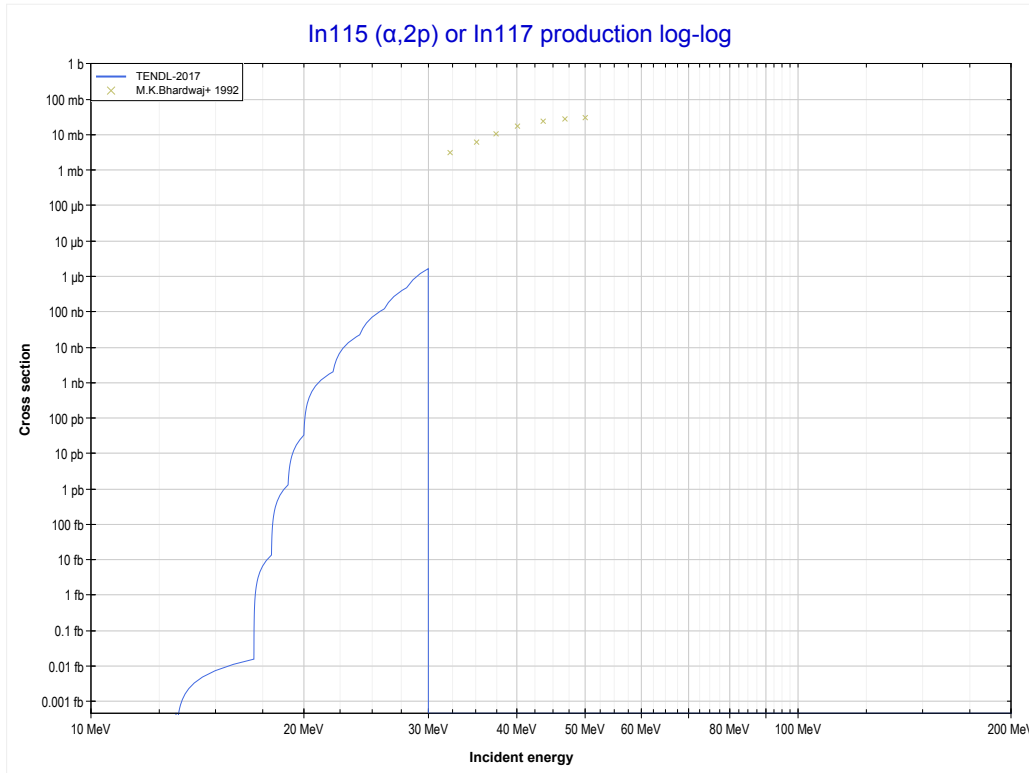


In115 (α,γ) or Sb119 production lin-log



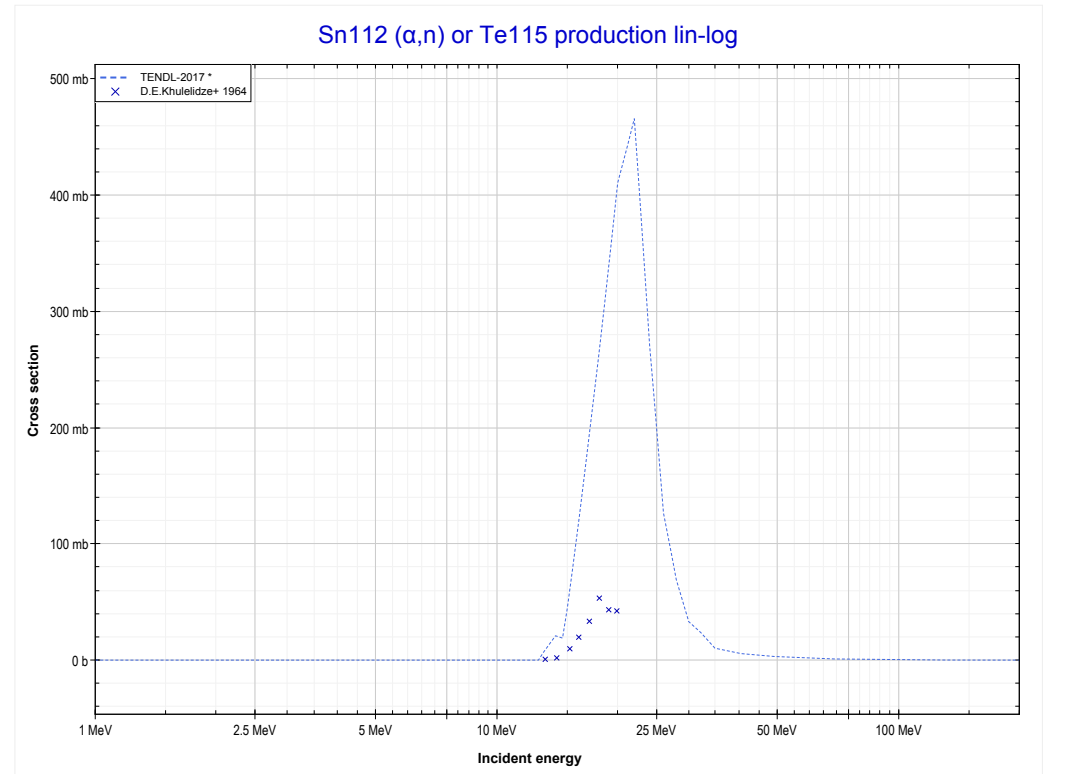
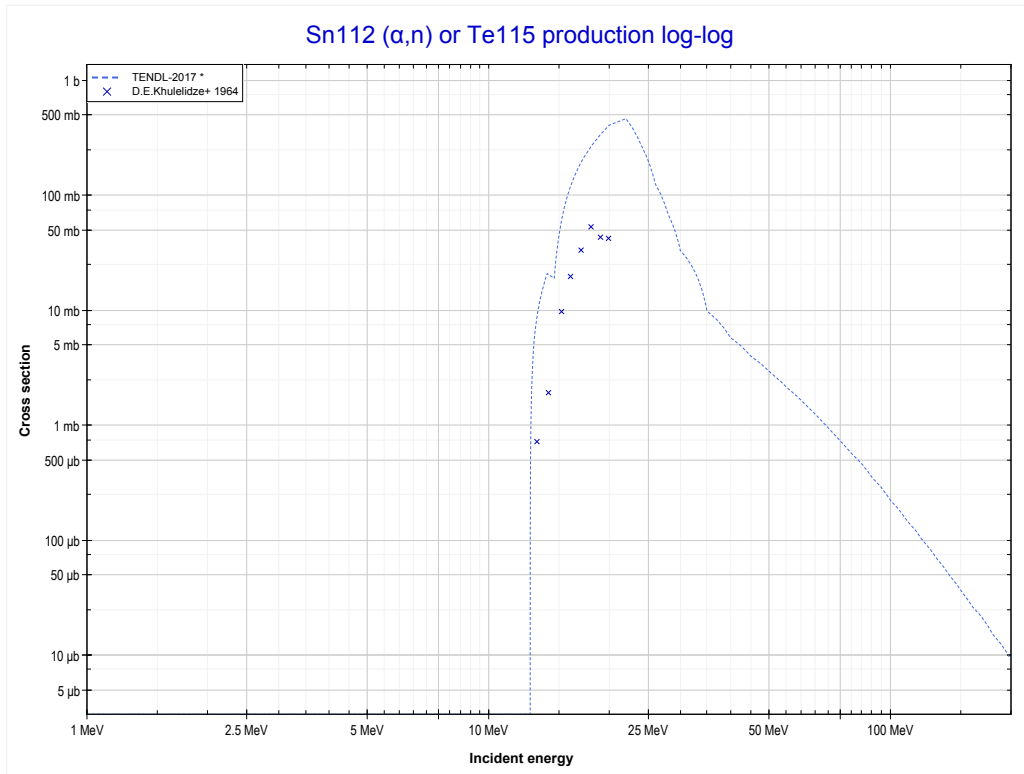
Reaction	Q-Value
In115(α,γ)Sb119	2362.57 keV

<< 47-Ag-109	49-In-115	
<< MT102 (α,γ)	MT111 ($\alpha,2p$) or MT5 (In117 production)	50-Sn-112 MT4 (α,n) >>



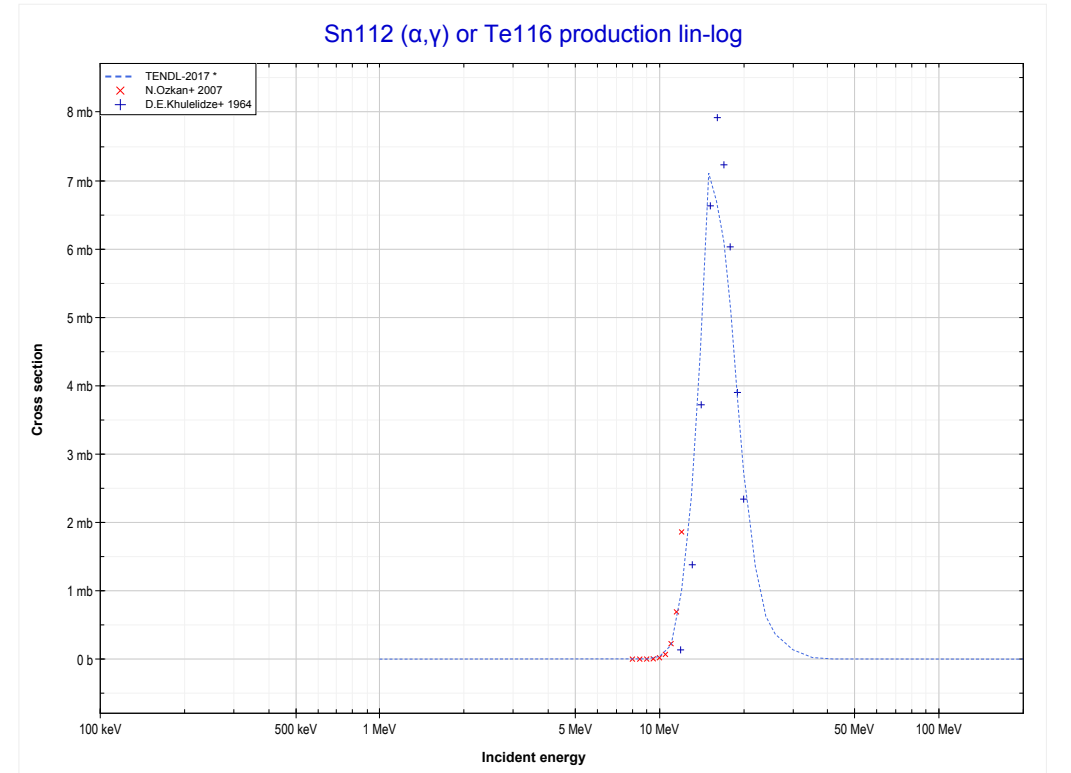
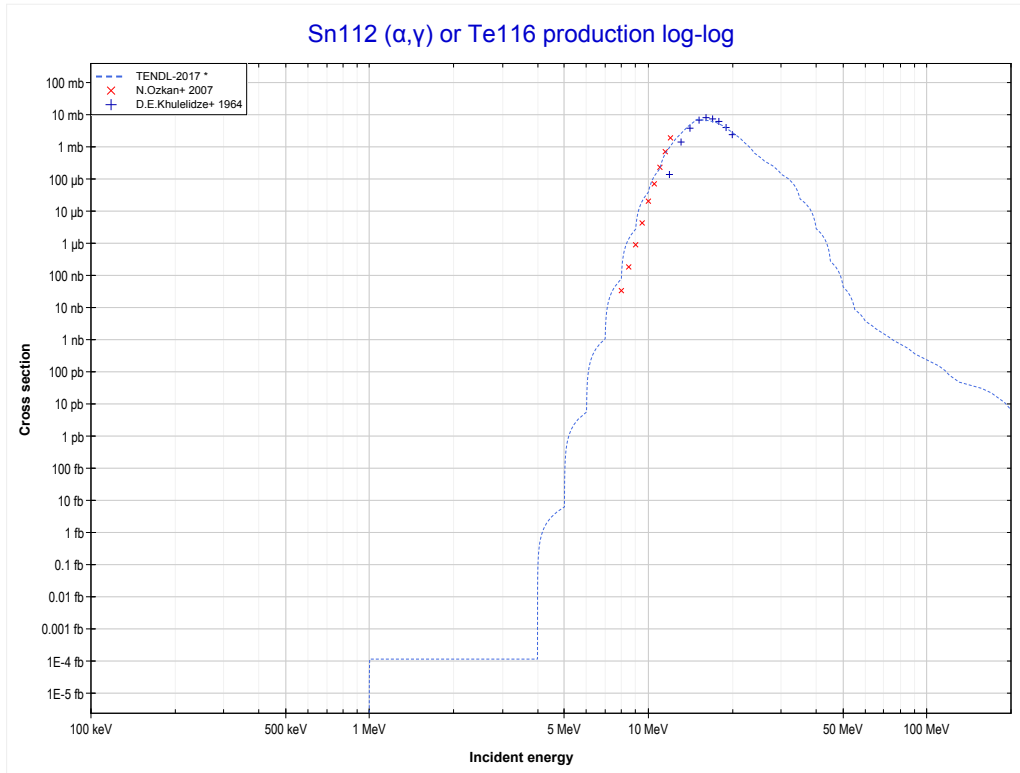
Reaction	Q-Value
In115($\alpha,2p$)In117	-12746.37 keV

<< 49-In-115	50-Sn-112	50-Sn-114 >>
<< 49-In-115 MT111 ($\alpha,2p$)	MT4 (α,n) or MT5 (Te115 production)	MT102 (α,γ) >>



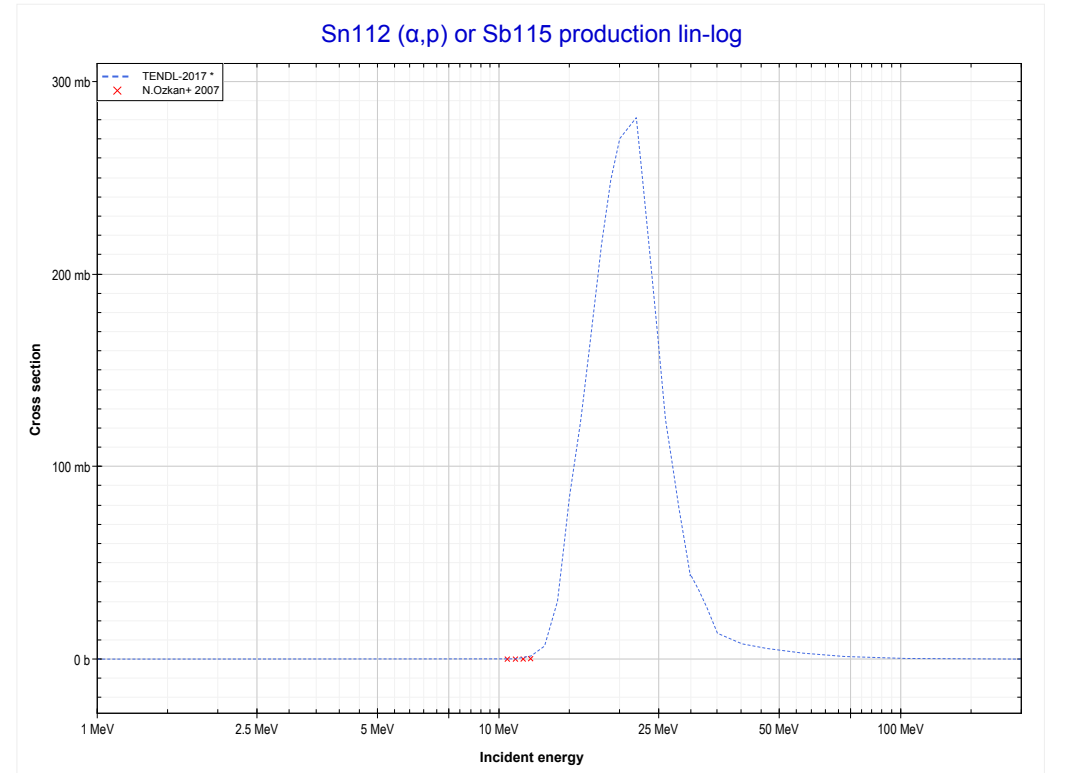
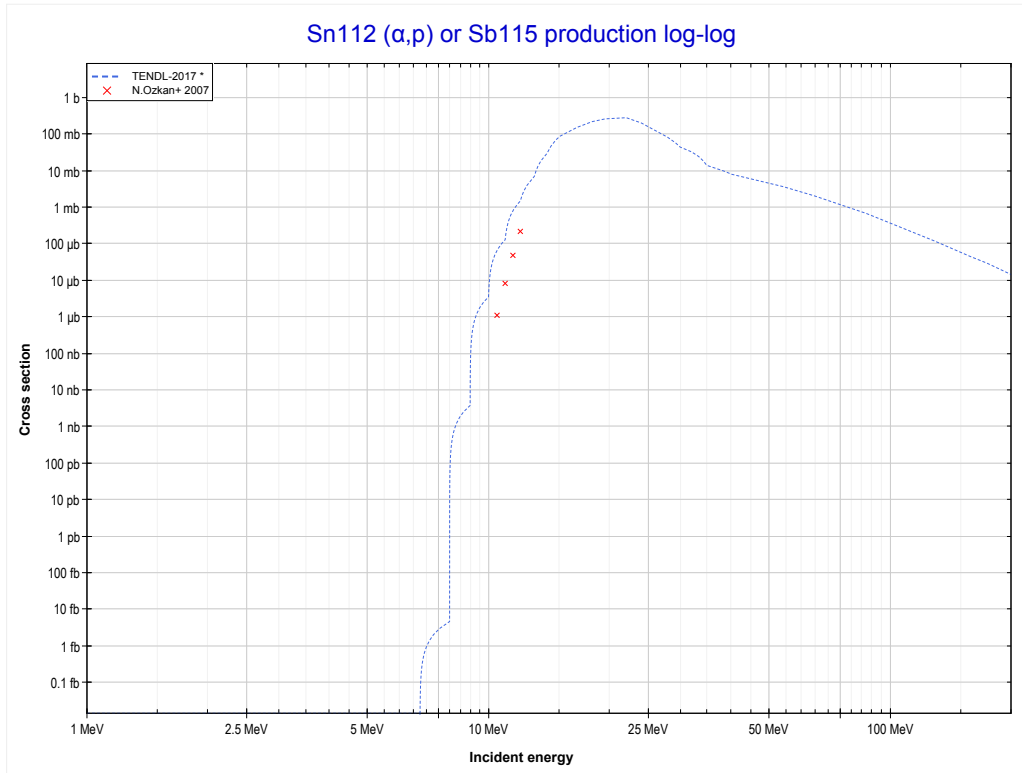
Reaction	Q-Value
Sn112(α,n)Te115	-12239.40 keV

<< 49-In-115	50-Sn-112	50-Sn-115 >>
<< MT4 (α,n)	MT102 (α,γ) or MT5 (Te116 production)	MT103 (α,p) >>



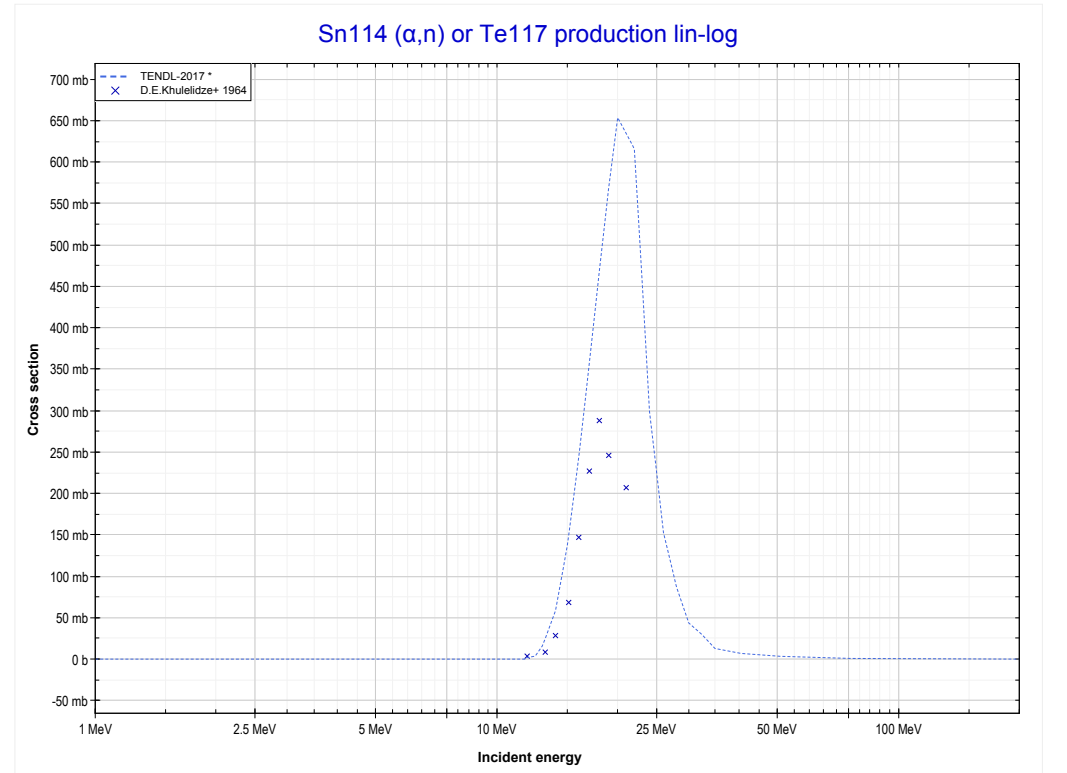
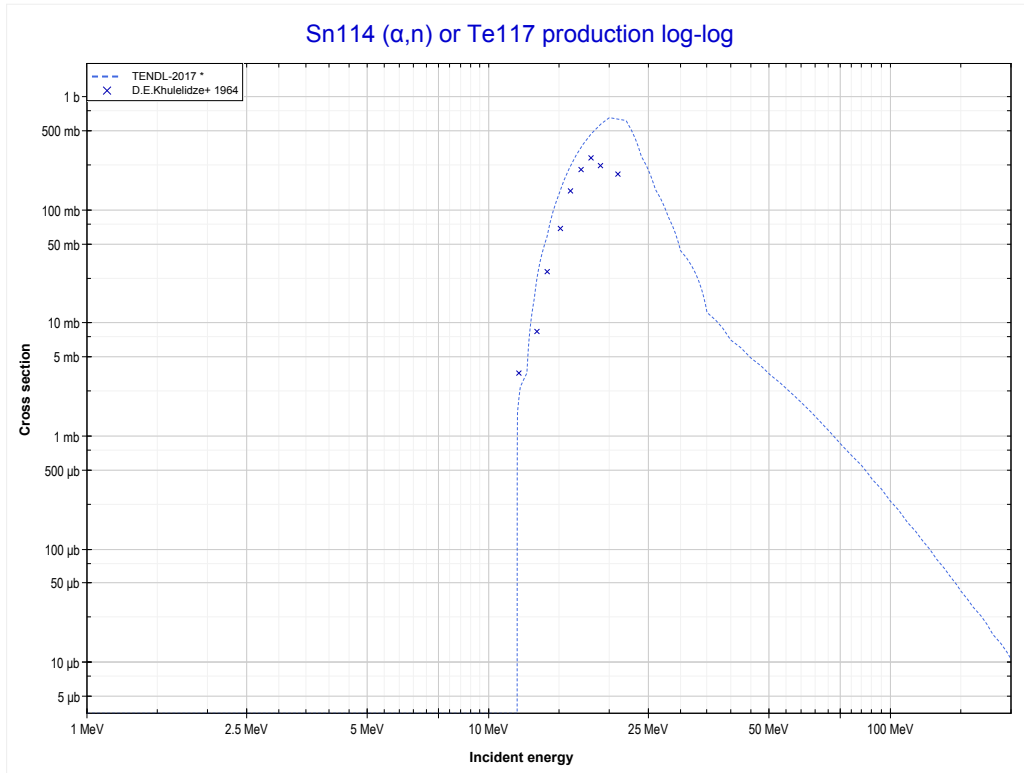
Reaction	Q-Value
Sn112(α,γ)Te116	-962.08 keV

<< 48-Cd-114	50-Sn-112	50-Sn-117 >>
<< MT102 (α,γ)	MT103 (α,p) or MT5 (Sb115 production)	50-Sn-114 MT4 (α,n) >>



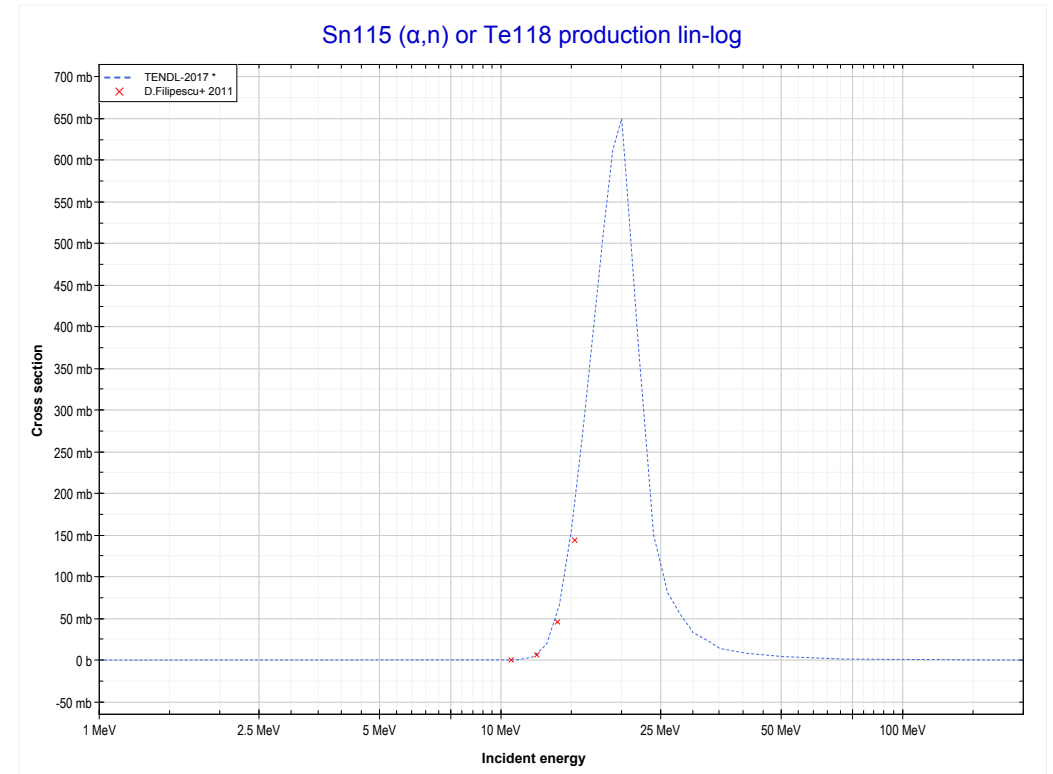
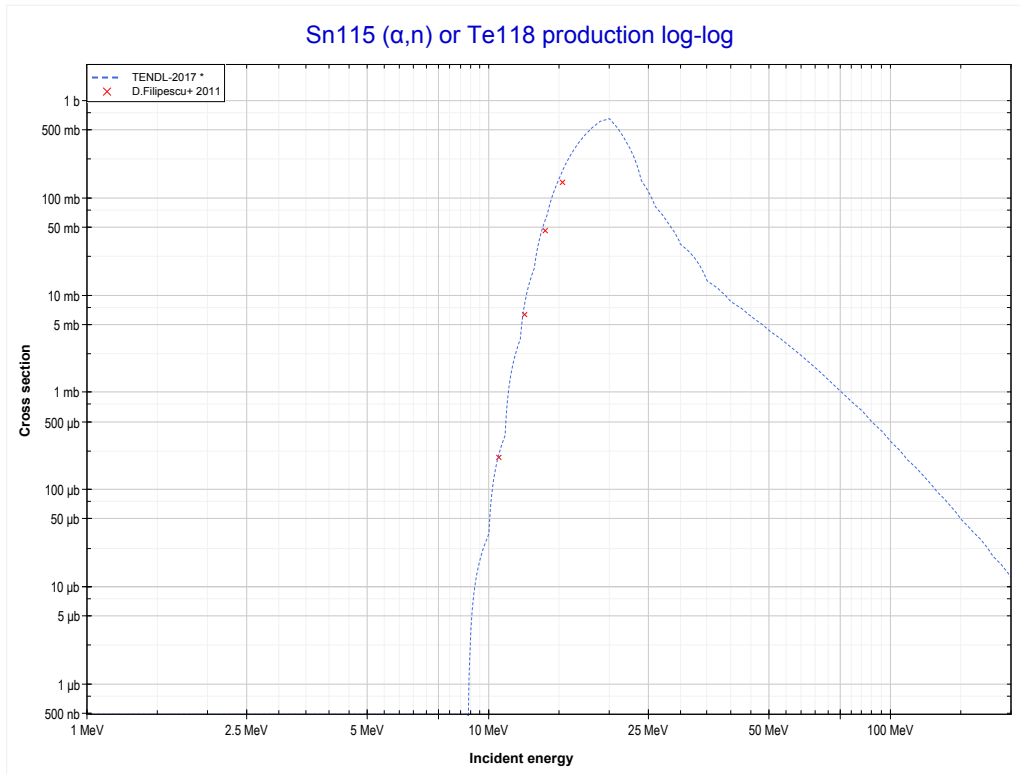
Reaction	Q-Value
Sn112(α,p)Sb115	-6517.05 keV

<< 50-Sn-112	50-Sn-114	50-Sn-115 >>
<< 50-Sn-112 MT103 (α,p)	MT4 (α,n) or MT5 (Te117 production)	50-Sn-115 MT4 (α,n) >>



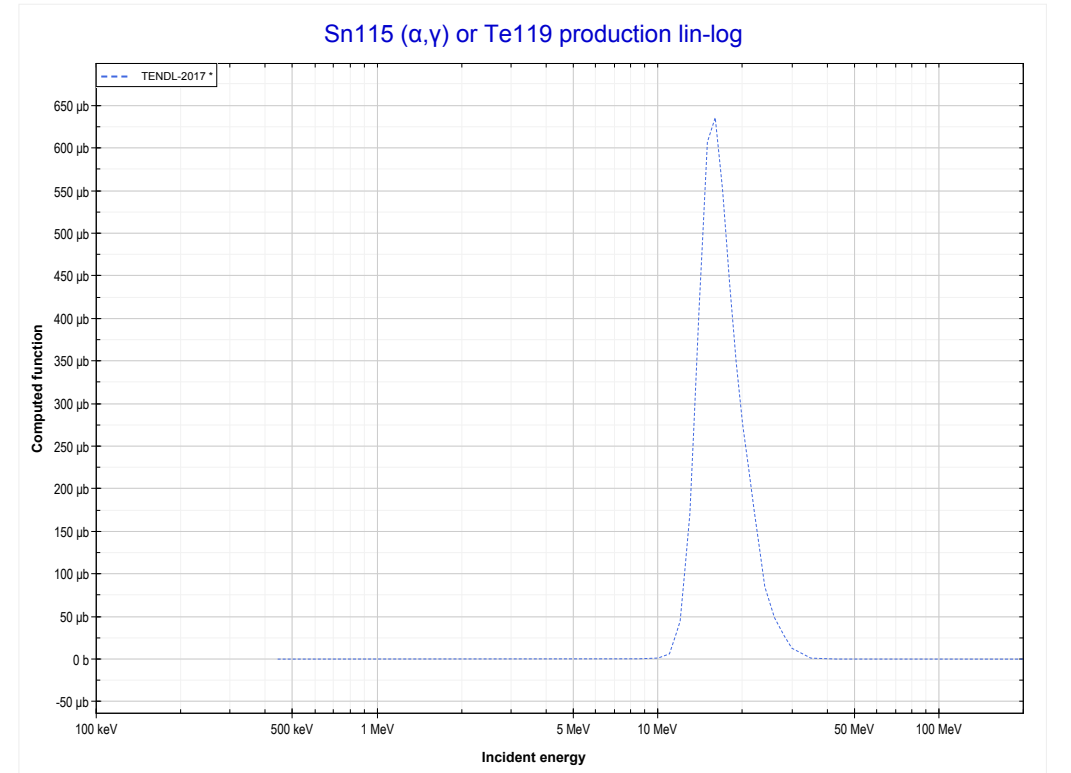
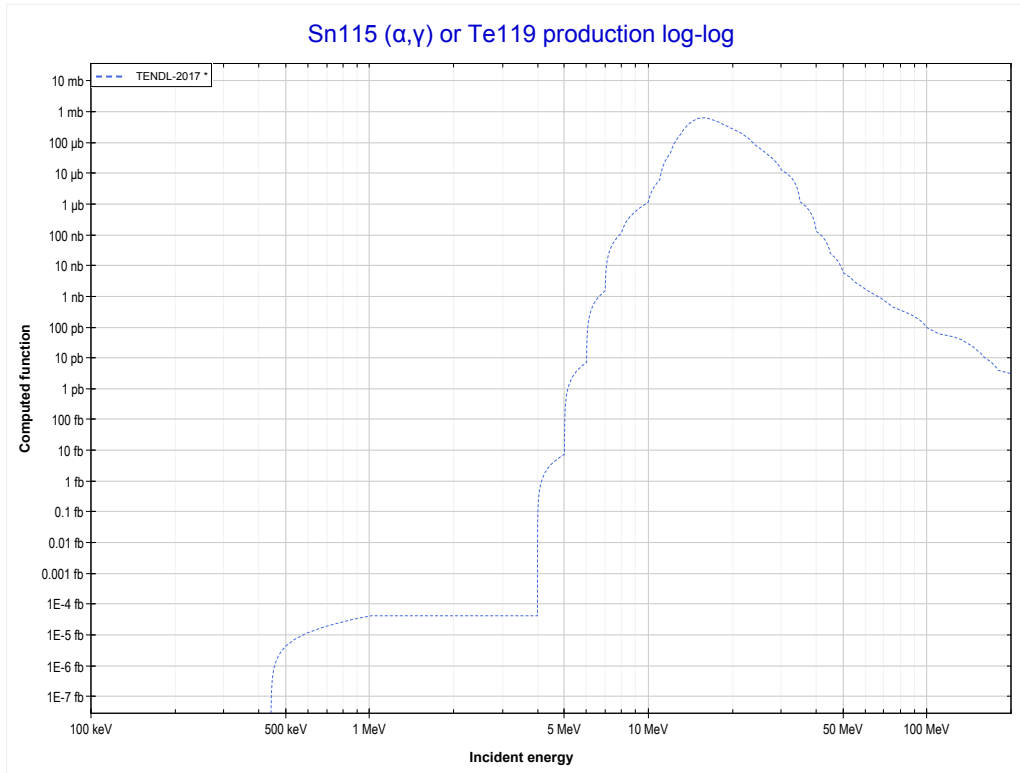
Reaction	Q-Value
Sn114(α,n)Te117	-11108.70 keV

<< 50-Sn-114	50-Sn-115	50-Sn-116 >>
<< 50-Sn-114 MT4 (α,n)	MT4 (α,n) or MT5 (Te118 production)	MT102 (α,γ) >>



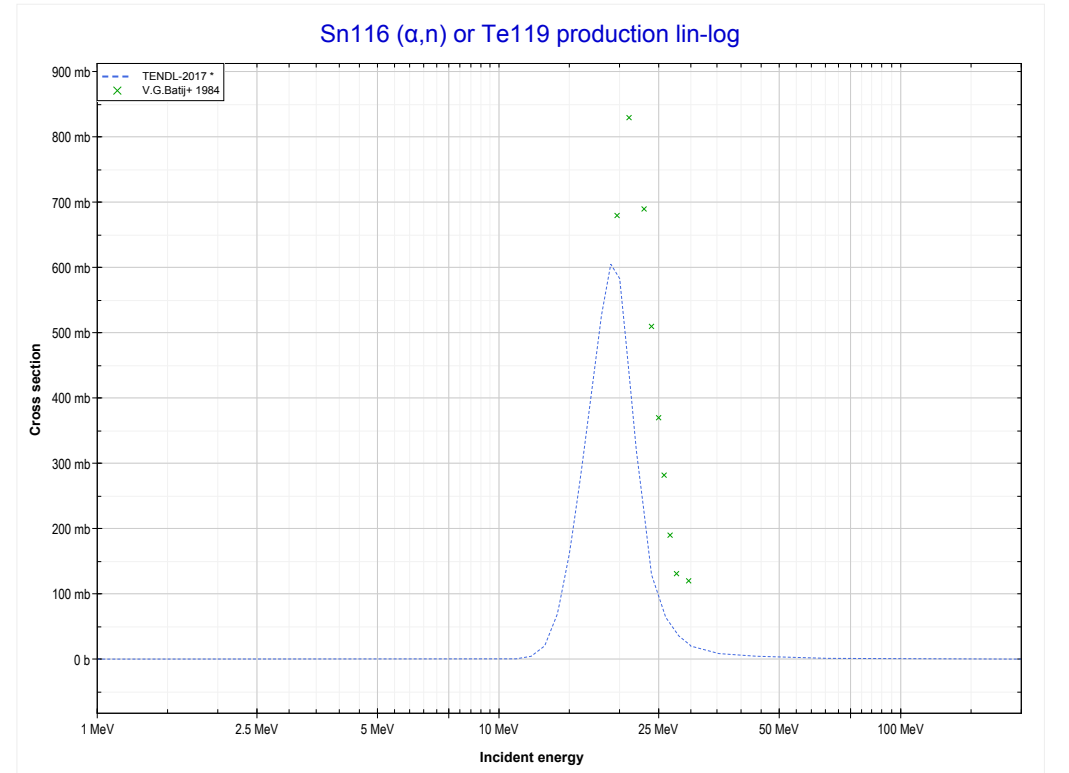
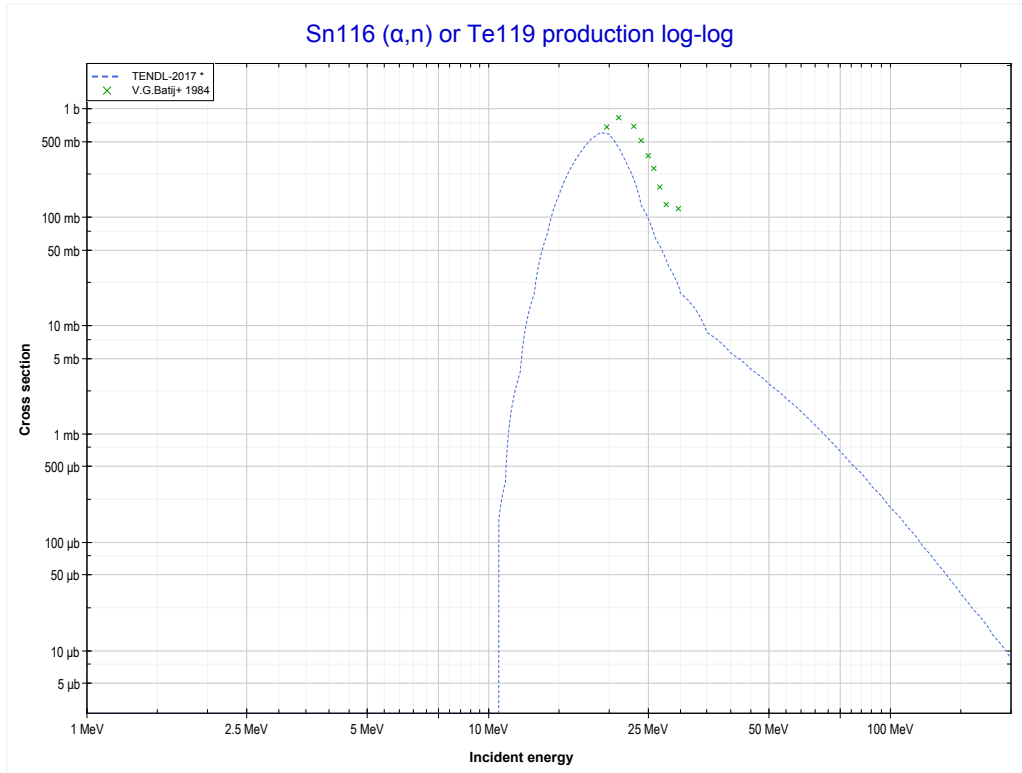
Reaction	Q-Value
Sn115(α,n)Te118	-7983.23 keV

<< 50-Sn-112	50-Sn-115	50-Sn-117 >>
<< MT4 (α,n)	MT102 (α,γ) or MT5 (Te119 production)	50-Sn-116 MT4 (α,n) >>



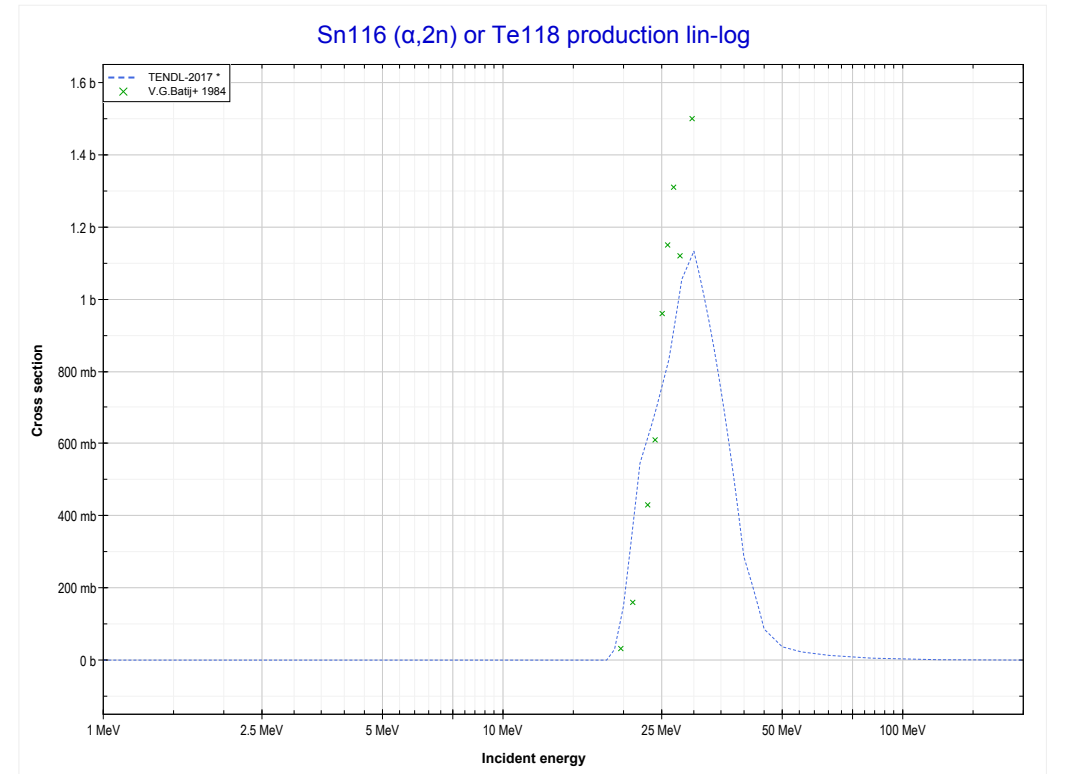
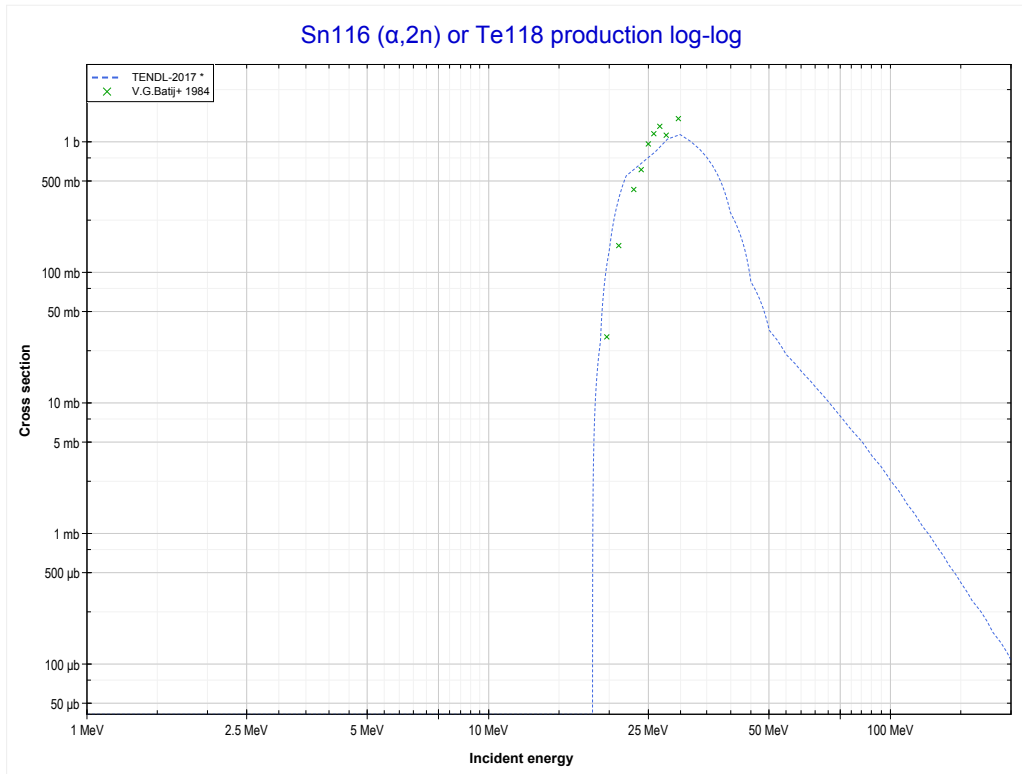
Reaction	Q-Value
Sn115(α,γ)Te119	-427.92 keV

<< 50-Sn-115	50-Sn-116	50-Sn-118 >>
<< 50-Sn-115 MT102 (α,γ)	MT4 (α,n) or MT5 (Te119 production)	MT16 ($\alpha,2n$) >>



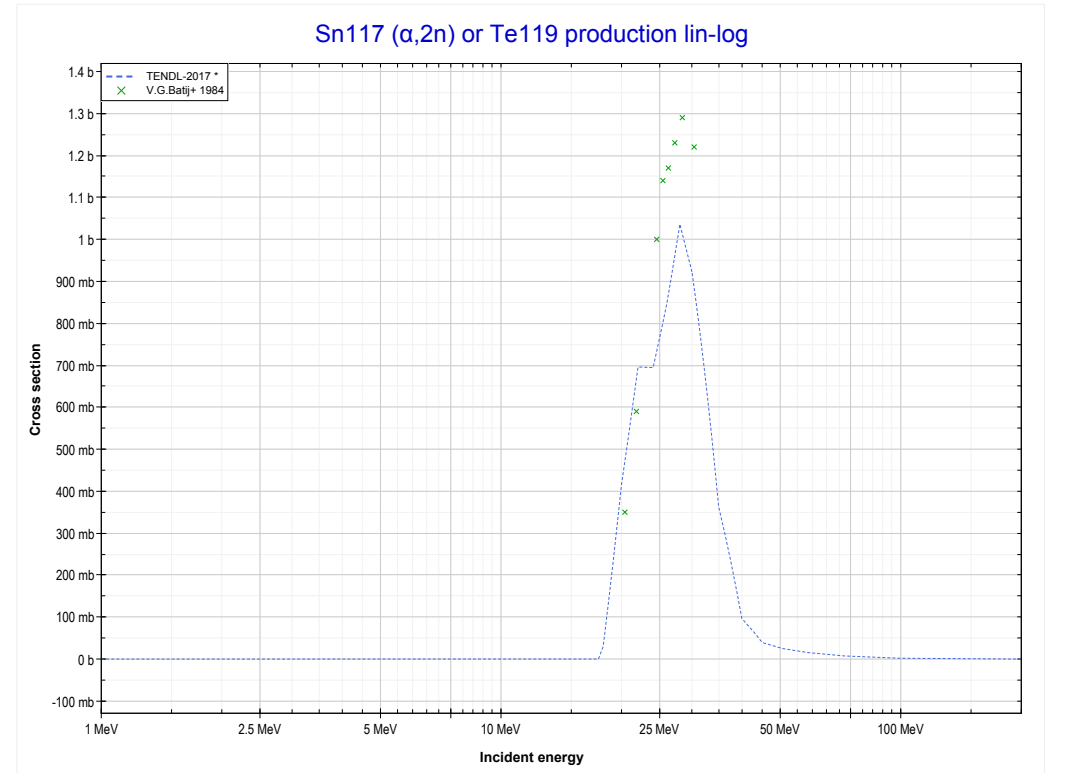
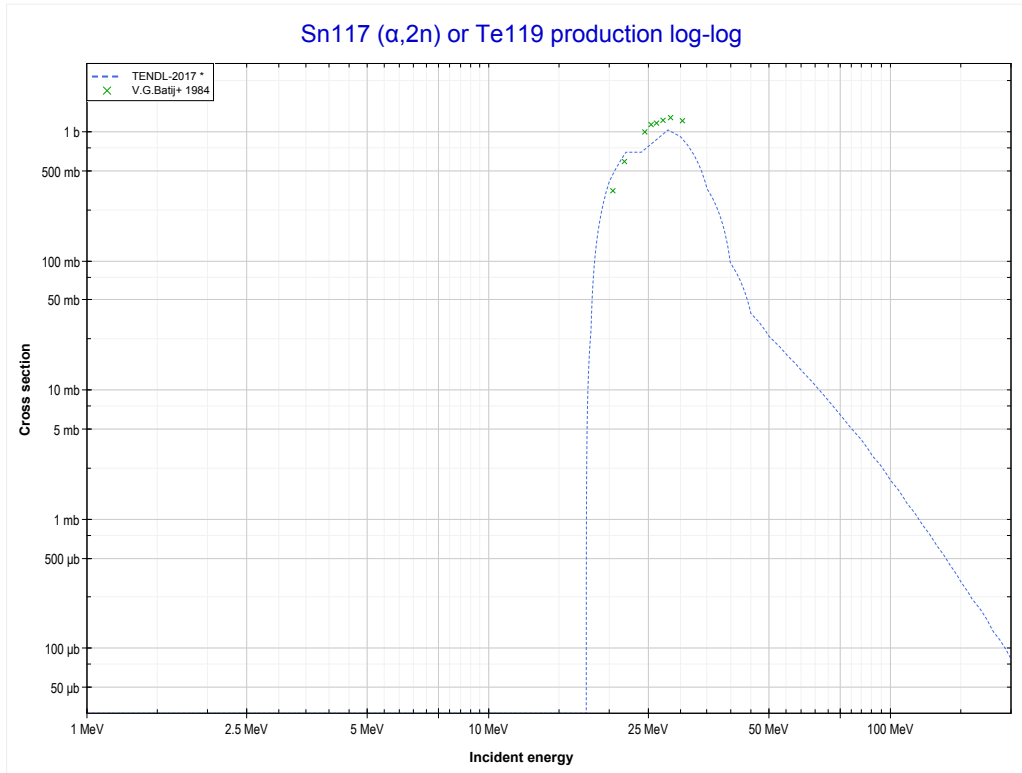
Reaction	Q-Value
Sn116(α,n)Te119	-9991.39 keV

<< 49-In-115	50-Sn-116	50-Sn-117 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Te118 production)	50-Sn-117 MT16 ($\alpha, 2n$) >>



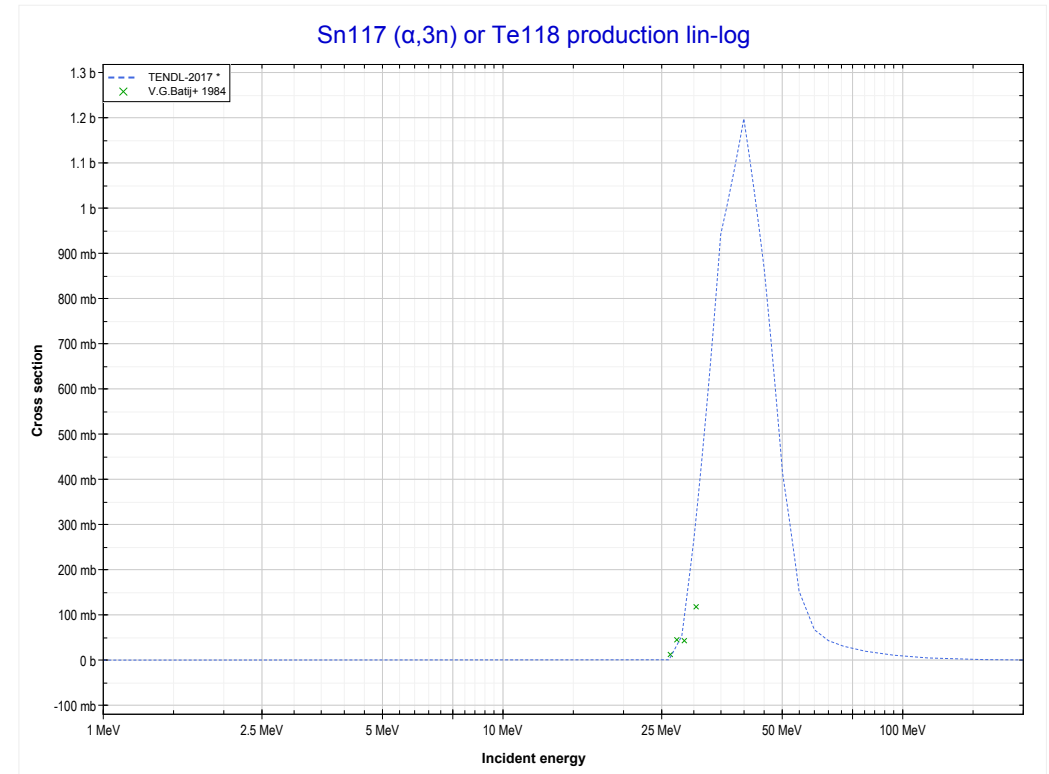
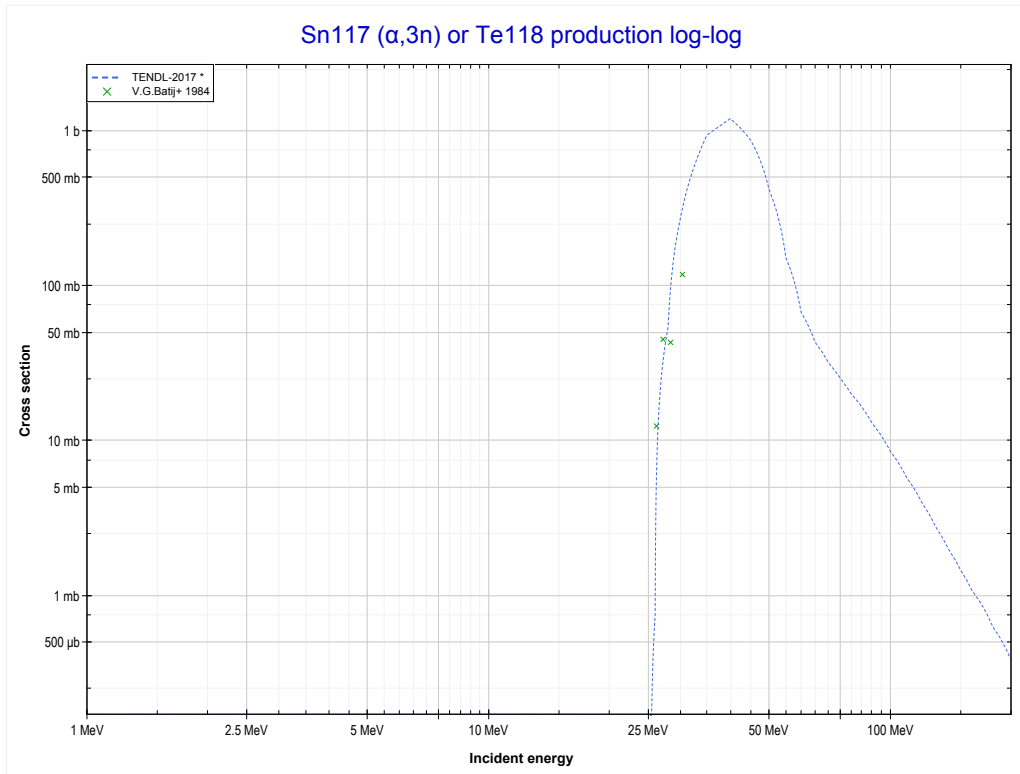
Reaction	Q-Value
Sn116($\alpha, 2n$)Te118	-17546.71 keV

<< 50-Sn-116	50-Sn-117	51-Sb-121 >>
<< 50-Sn-116 MT16 ($\alpha,2n$)	MT16 ($\alpha,2n$) or MT5 (Te119 production)	MT17 ($\alpha,3n$) >>



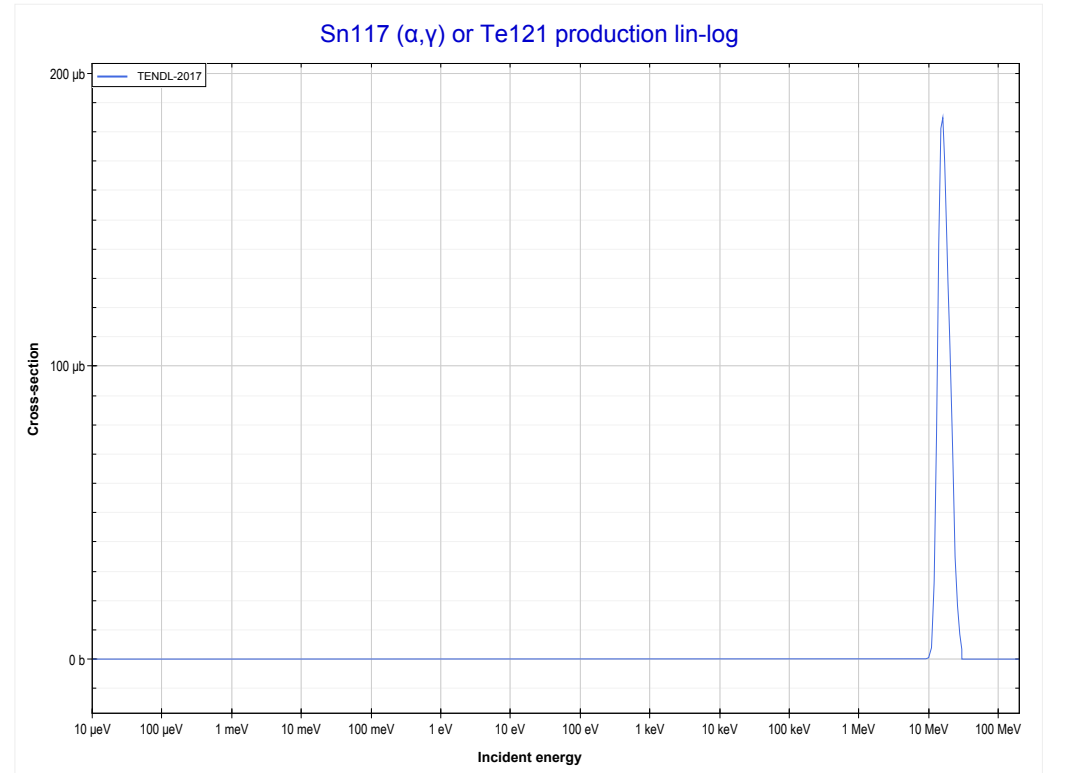
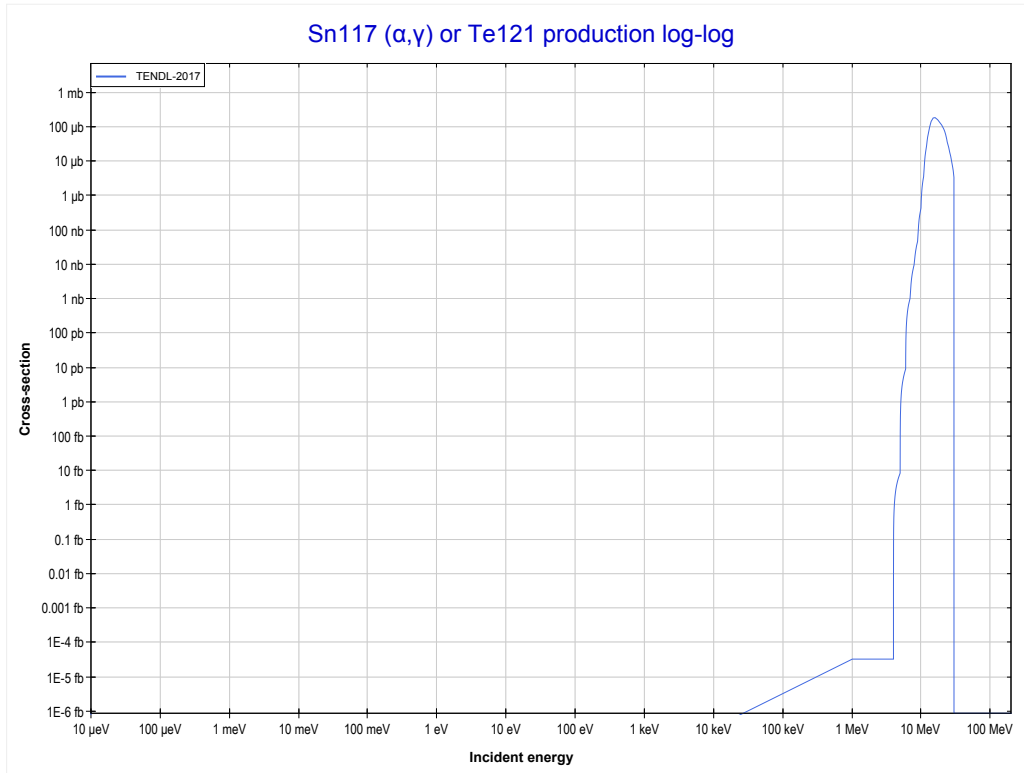
Reaction	Q-Value
Sn117($\alpha,2n$)Te119	-16934.52 keV

<< 48-Cd-116	50-Sn-117	50-Sn-124 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Te118 production)	MT102 (α,γ) >>



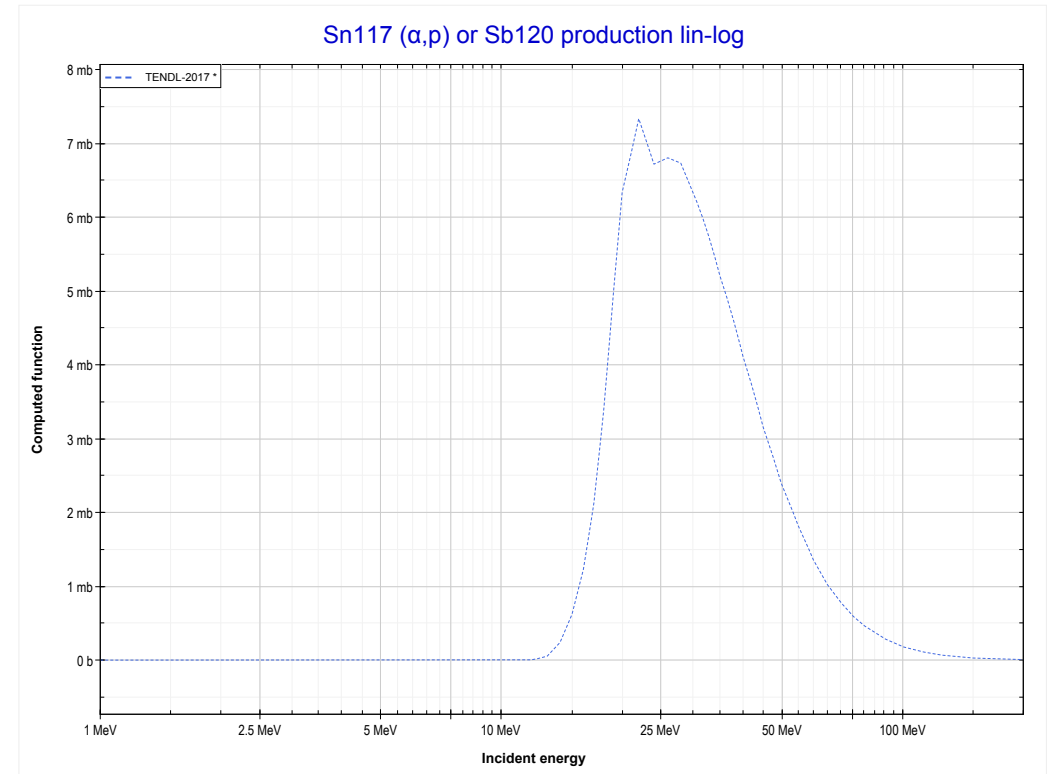
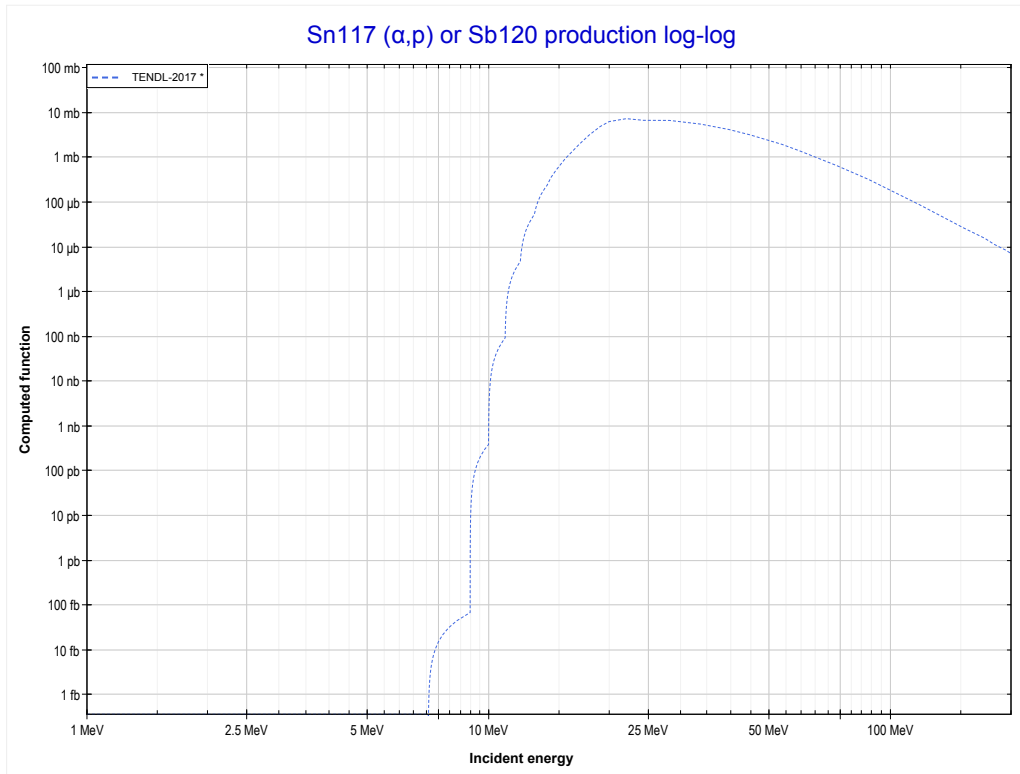
Reaction	Q-Value
Sn117($\alpha,3n$)Te118	-24489.84 keV

<< 50-Sn-115	50-Sn-117	53-I-127 >>
<< MT17 ($\alpha,3n$)	MT102 (α,γ) or MT5 (Te121 production)	MT103 (α,p) >>



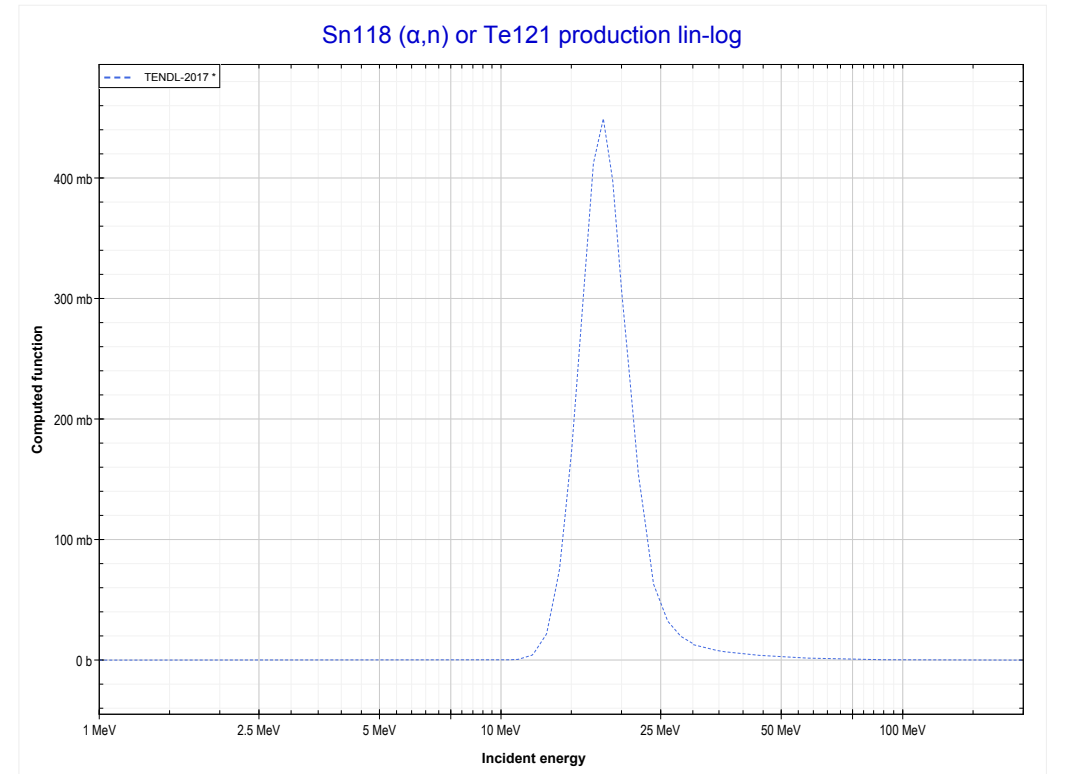
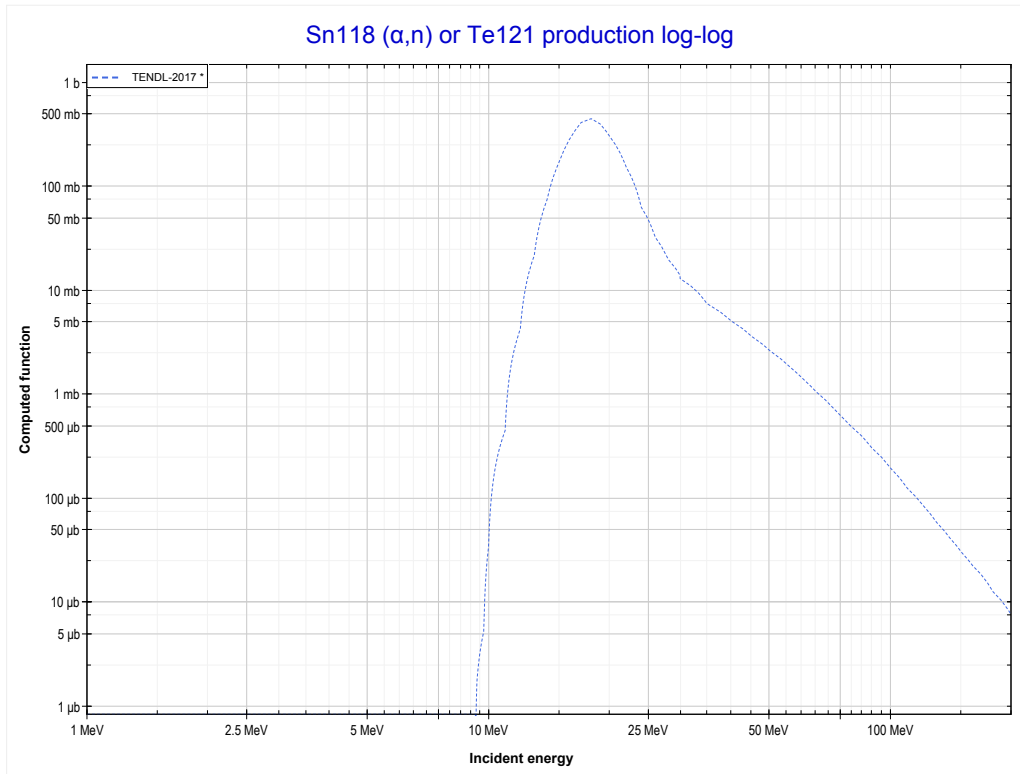
Reaction	Q-Value
Sn117(α,γ)Te121	571.12 keV

<< 50-Sn-112	50-Sn-117	50-Sn-124 >>
<< MT102 (α,γ)	MT103 (α,p) or MT5 (Sb120 production)	50-Sn-118 MT4 (α,n) >>



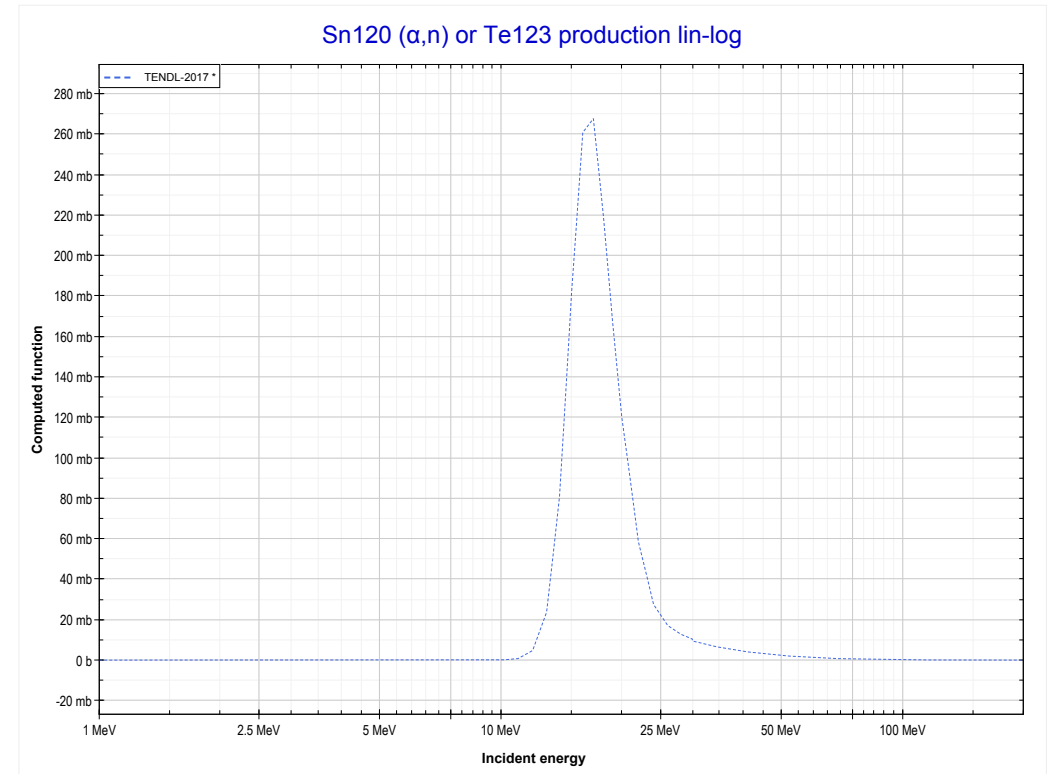
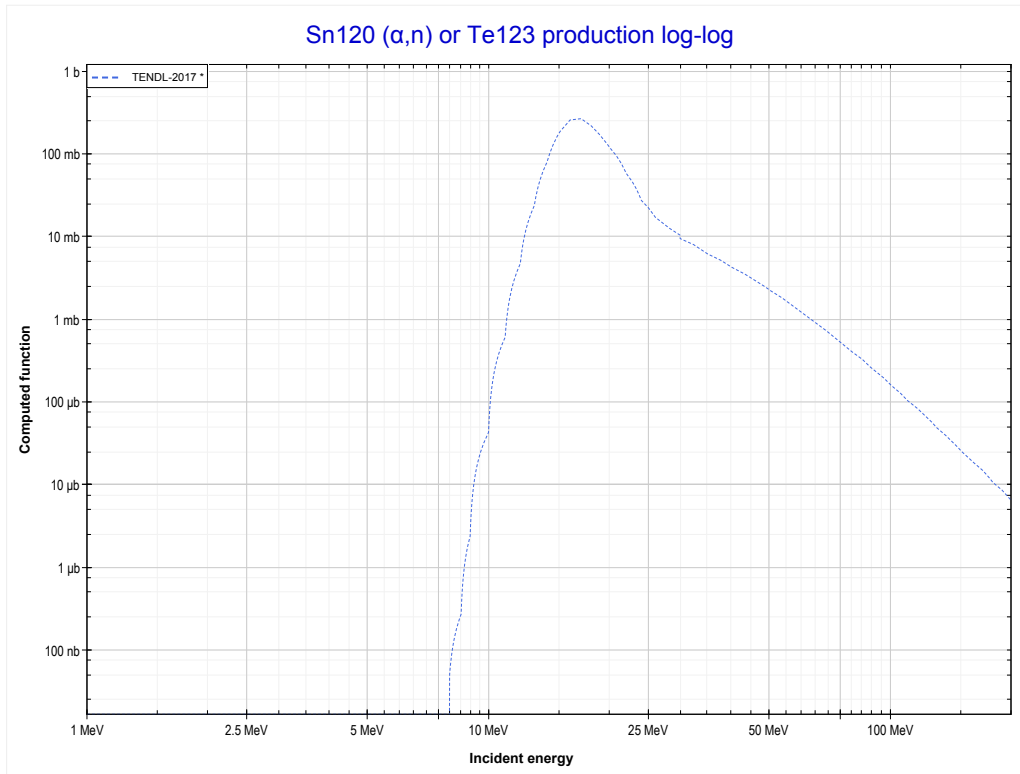
Reaction	Q-Value
Sn117(α,p)Sb120	-6843.85 keV

<< 50-Sn-116	50-Sn-118	50-Sn-120 >>
<< 50-Sn-117 MT103 (α,p)	MT4 (α,n) or MT5 (Te121 production)	50-Sn-120 MT4 (α,n) >>



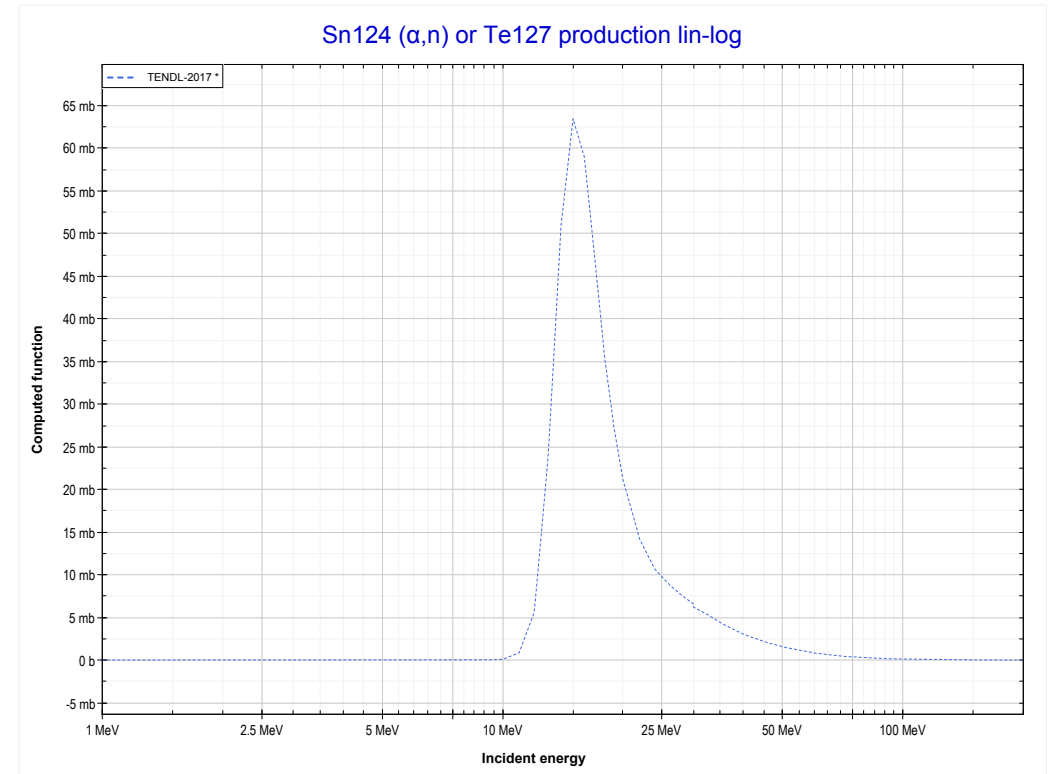
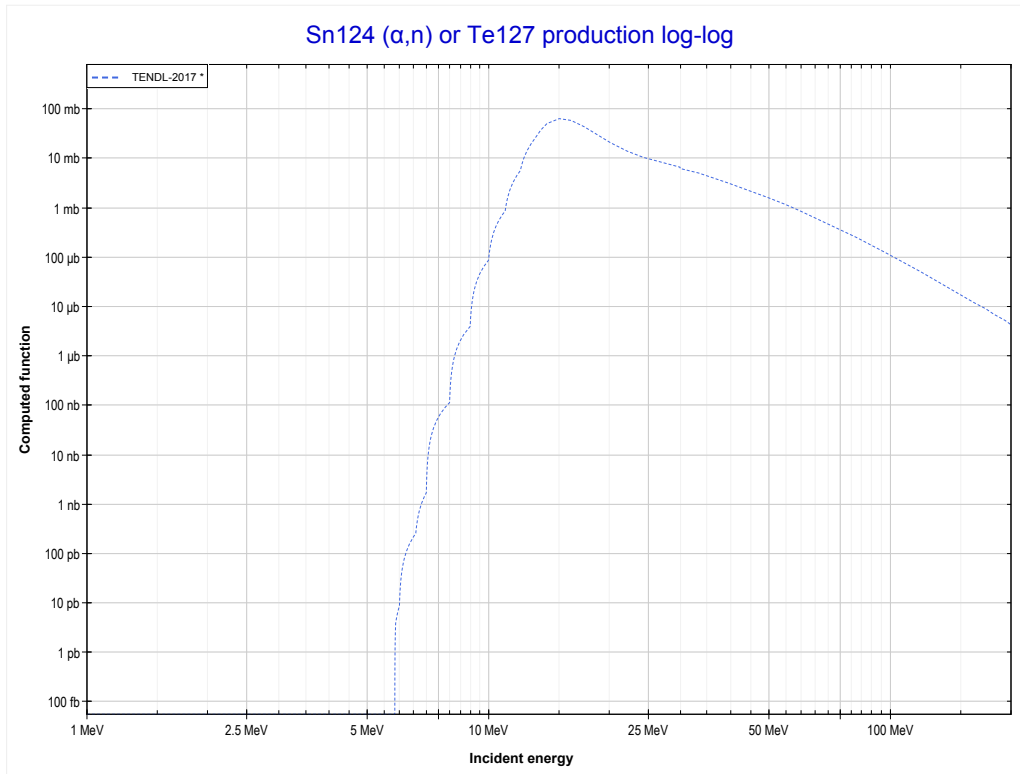
Reaction	Q-Value
Sn118(α,n)Te121	-8755.30 keV

<< 50-Sn-118	50-Sn-120	50-Sn-124 >>
<< 50-Sn-118 MT4 (α,n)	MT4 (α,n) or MT5 (Te123 production)	50-Sn-124 MT4 (α,n) >>



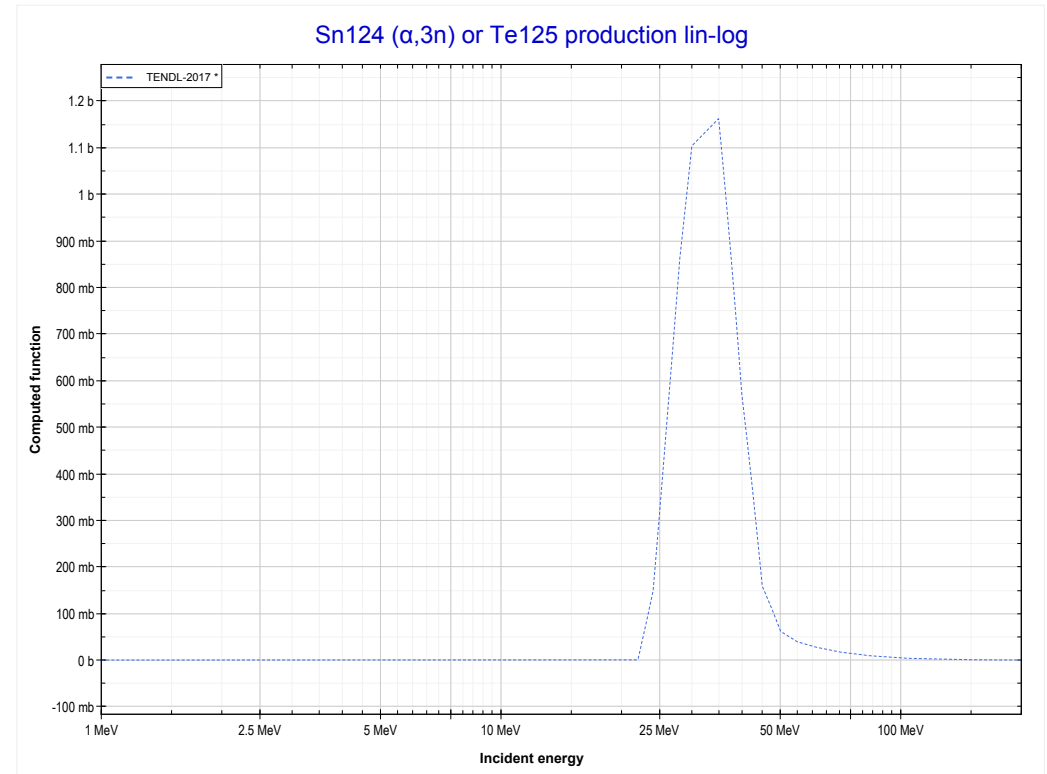
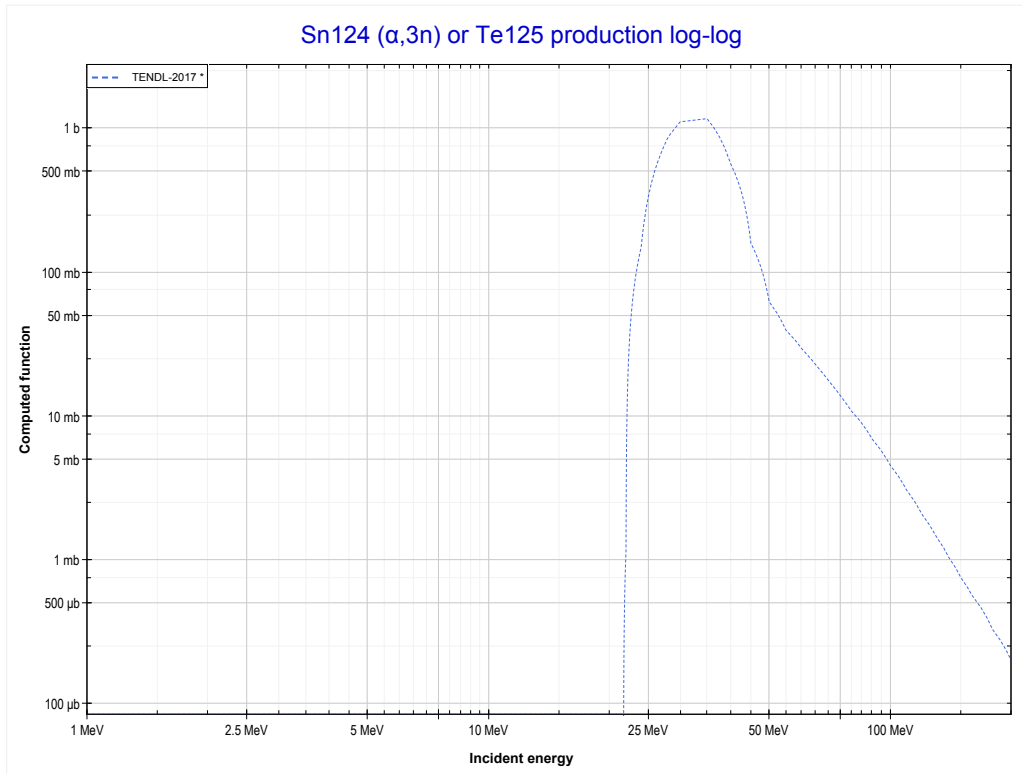
Reaction	Q-Value
Sn120(α,n)Te123	-7572.90 keV

<< 50-Sn-120	50-Sn-124	51-Sb-121 >>
<< 50-Sn-120 MT4 (α,n)	MT4 (α,n) or MT5 (Te127 production)	MT17 ($\alpha,3n$) >>



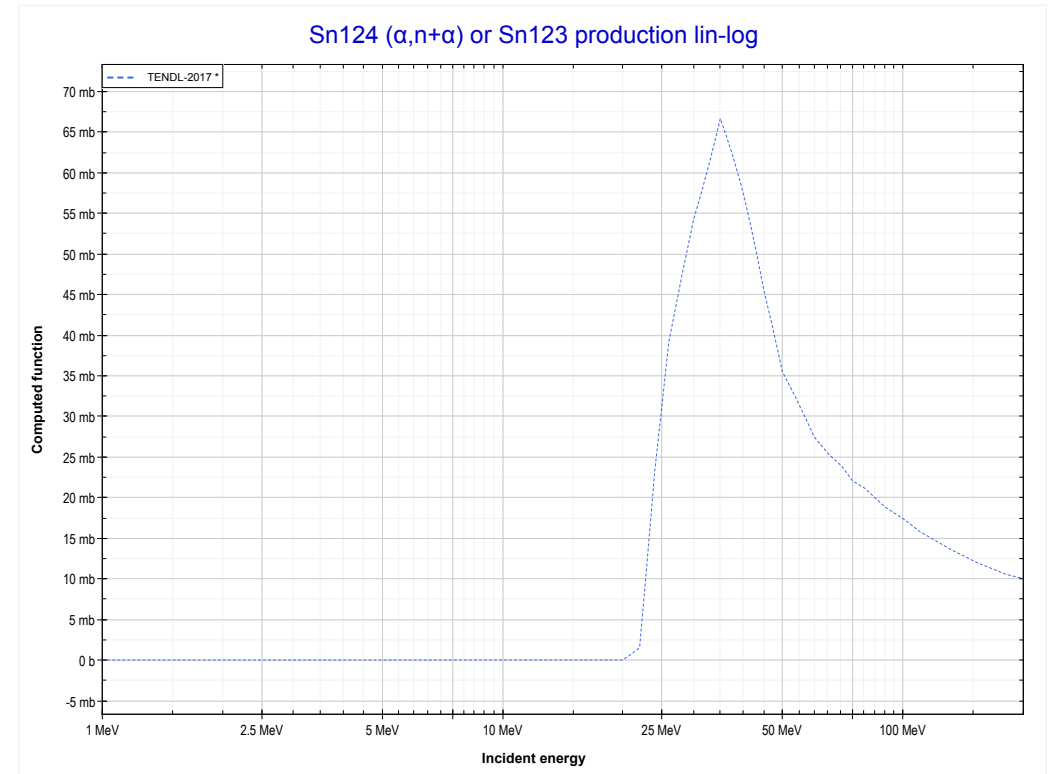
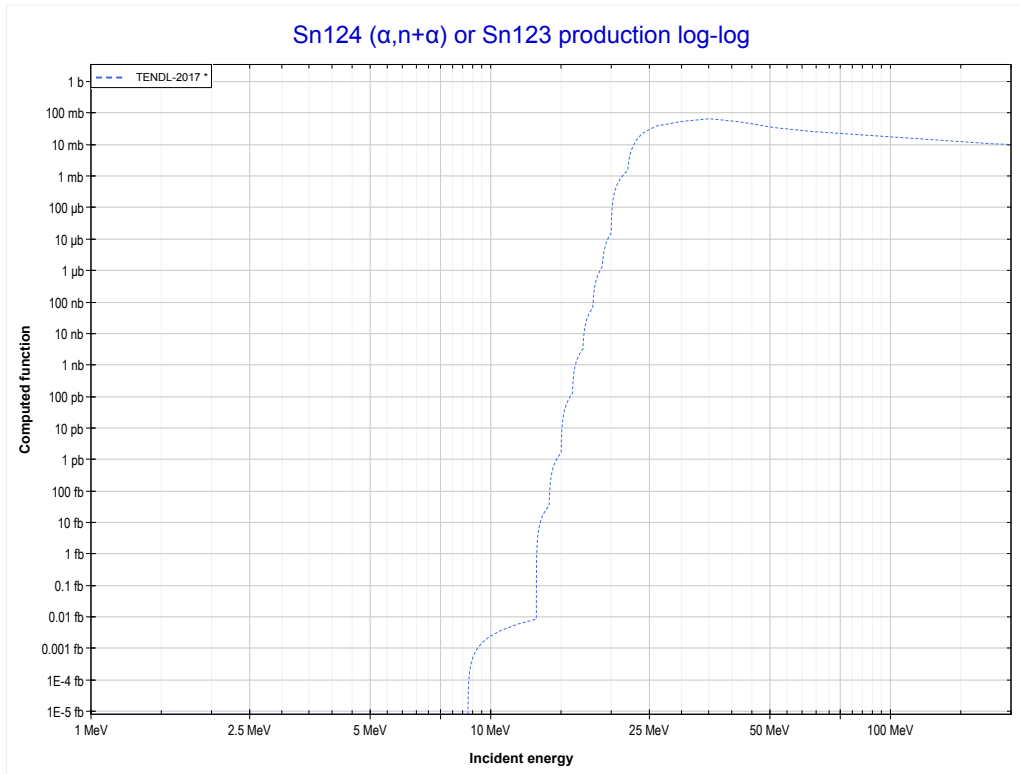
Reaction	Q-Value
Sn124(α,n)Te127	-5598.90 keV

<< 50-Sn-117	50-Sn-124	51-Sb-123 >>
<< MT4 (α, n)	MT17 ($\alpha, 3n$) or MT5 (Te125 production)	MT22 ($\alpha, n+\alpha$) >>



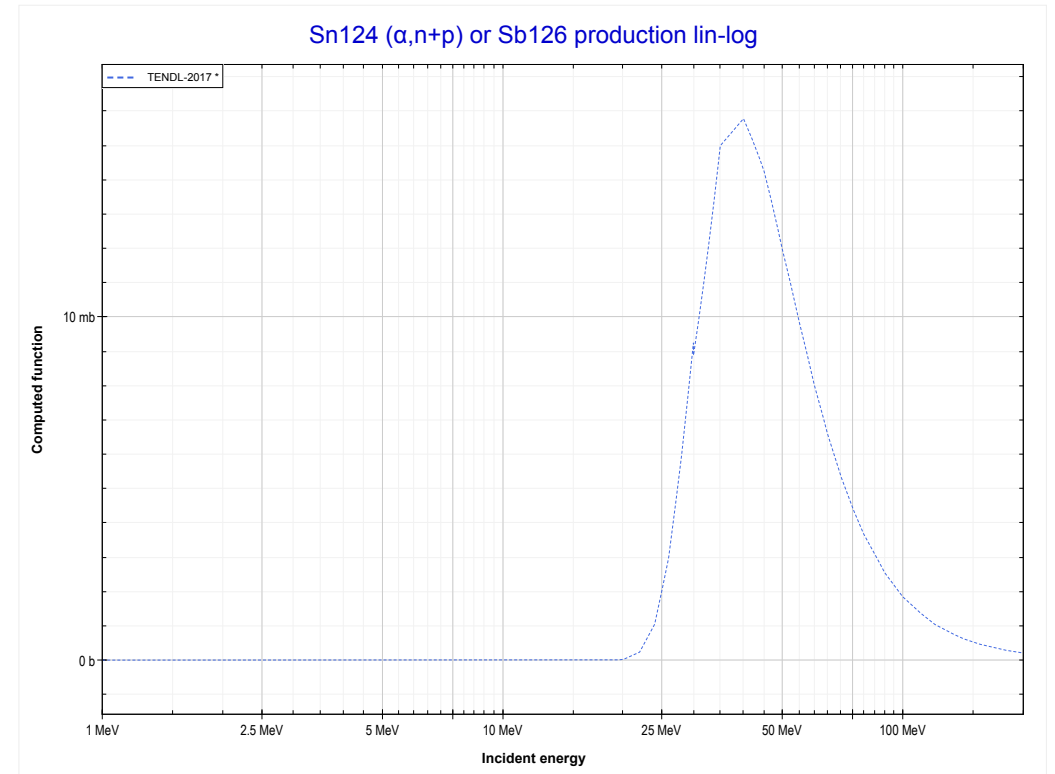
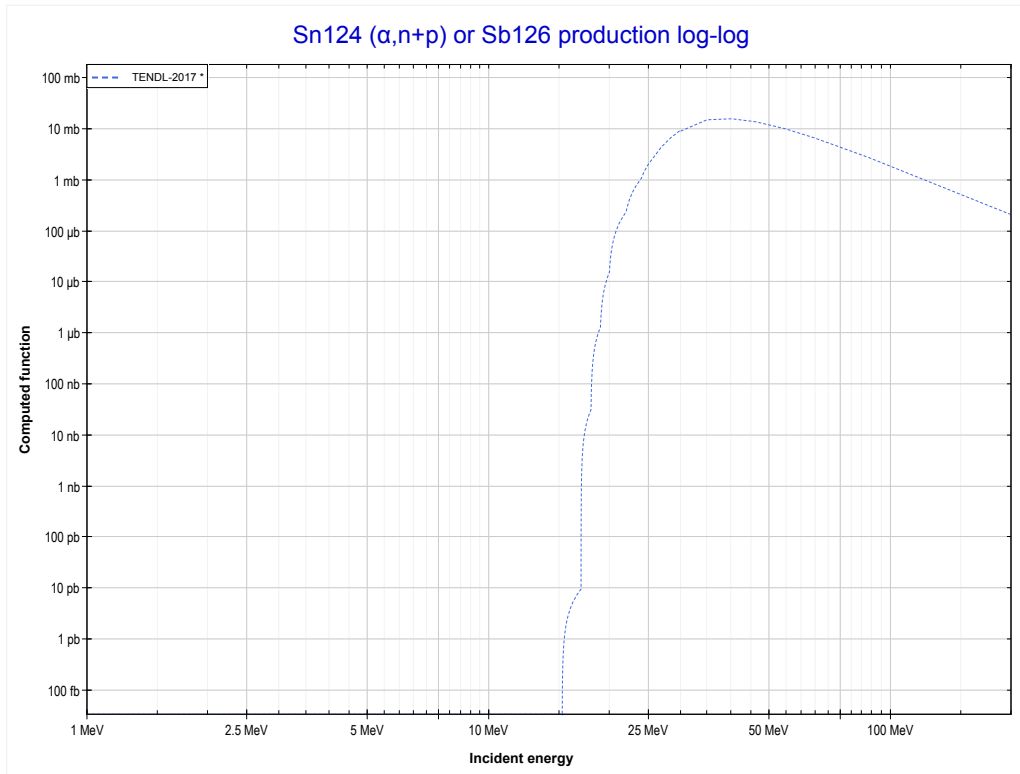
Reaction	Q-Value
Sn124($\alpha, 3n$)Te125	-21000.24 keV

<< 48-Cd-116	50-Sn-124	58-Ce-142 >>
<< MT17 ($\alpha,3n$)	MT22 ($\alpha,n+\alpha$) or MT5 (Sn123 production)	MT28 ($\alpha,n+p$) >>



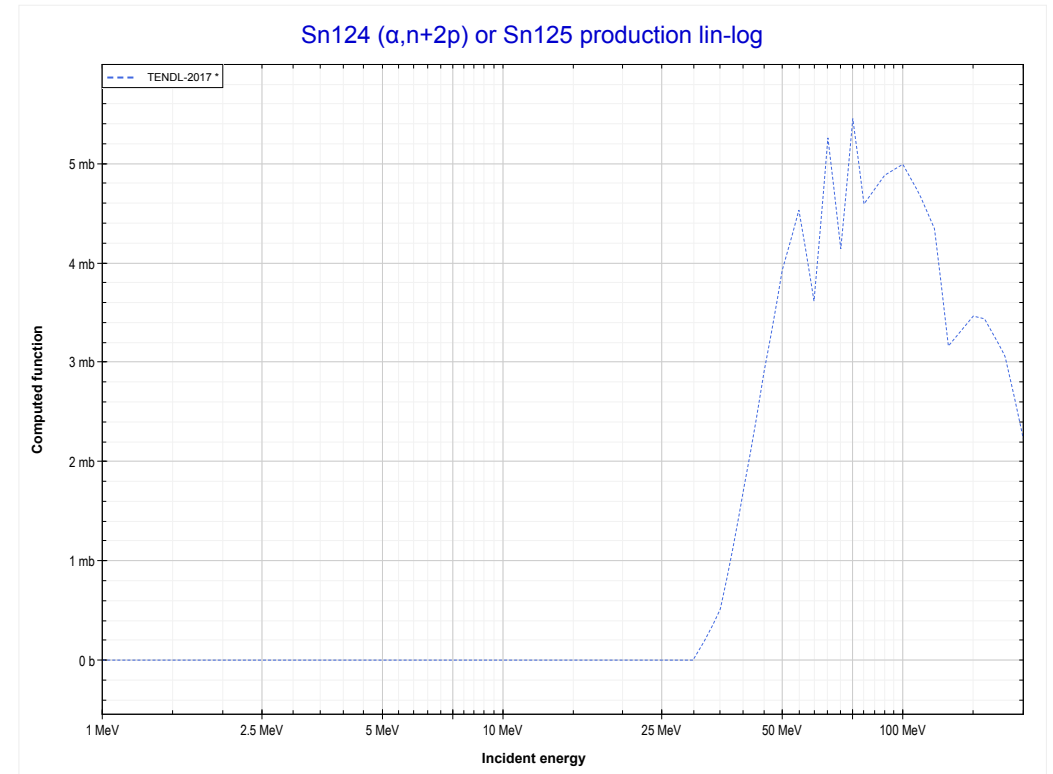
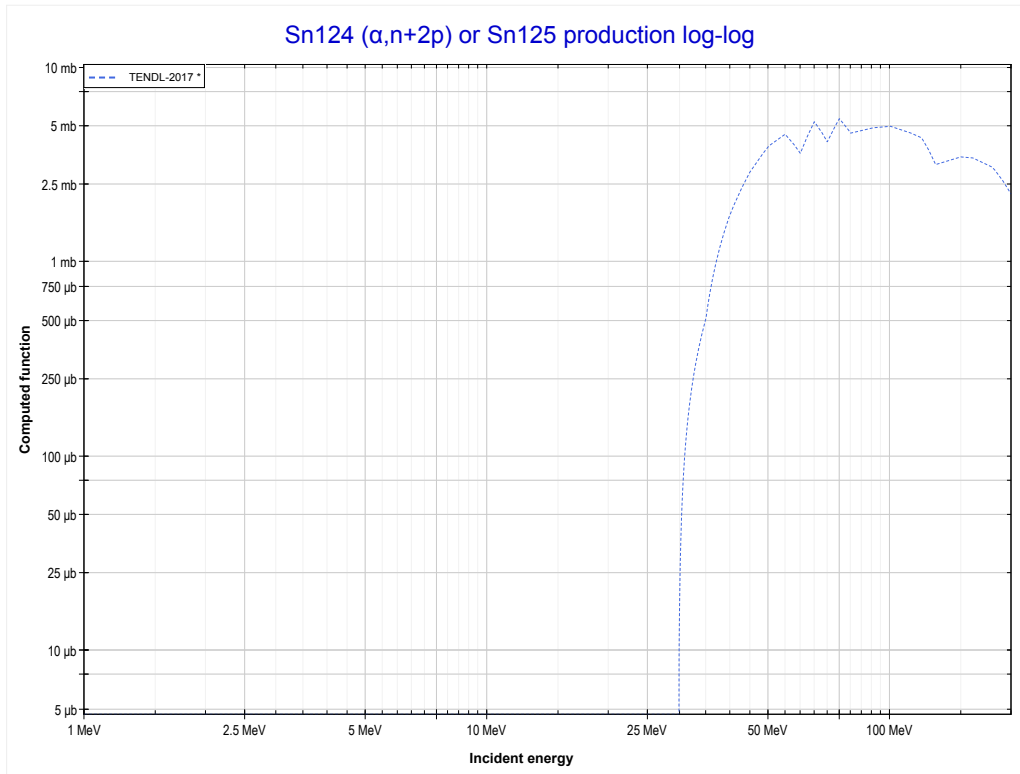
Reaction	Q-Value
Sn124($\alpha,n+\alpha$)Sn123	-8489.12 keV
Sn124($\alpha,d+t$)Sn123	-26078.41 keV
Sn124($\alpha,n+p+t$)Sn123	-28302.98 keV
Sn124($\alpha,2n+He3$)Sn123	-29066.73 keV
Sn124($\alpha,n+2d$)Sn123	-32335.64 keV
Sn124($\alpha,2n+p+d$)Sn123	-34560.21 keV
Sn124($\alpha,3n+2p$)Sn123	-36784.78 keV

<< 48-Cd-114	50-Sn-124	57-La-139 >>
<< MT22 ($\alpha, n+\alpha$)	MT28 ($\alpha, n+p$) or MT5 (Sb126 production)	MT44 ($\alpha, n+2p$) >>



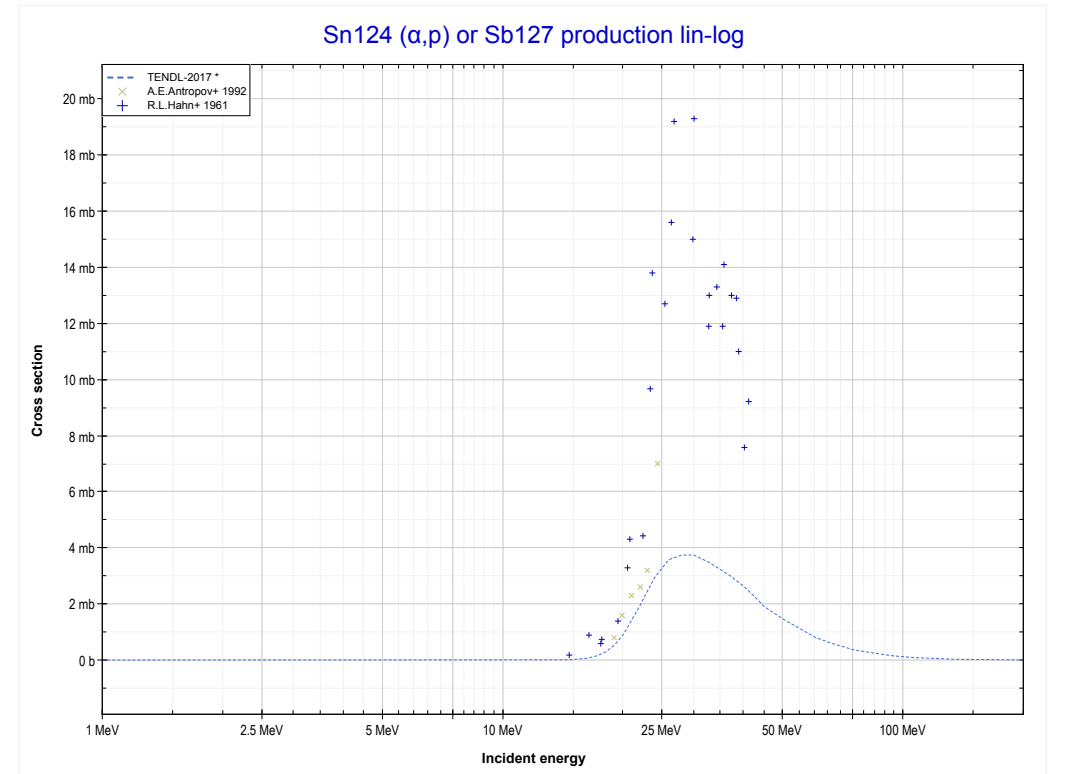
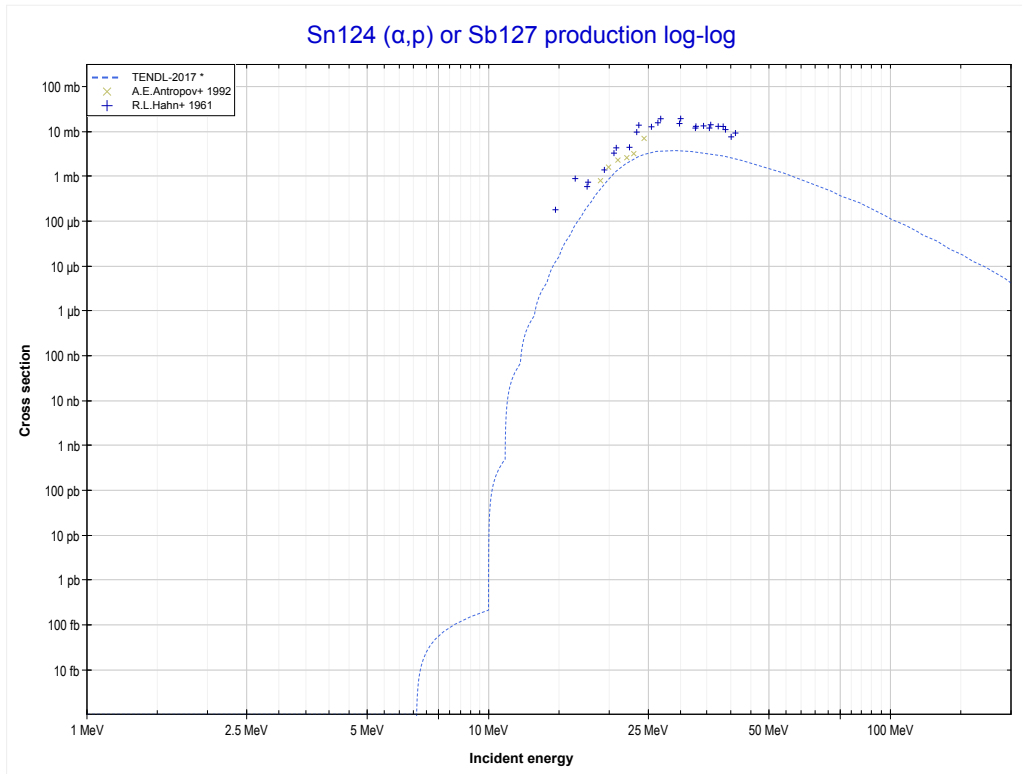
Reaction	Q-Value
Sn124(α, d)Sb126	-12555.01 keV
Sn124($\alpha, n+p$)Sb126	-14779.57 keV

<< 30-Zn-64	50-Sn-124	58-Ce-142 >>
<< MT28 ($\alpha, n+p$)	MT44 ($\alpha, n+2p$) or MT5 (Sn125 production)	MT103 (α, p) >>



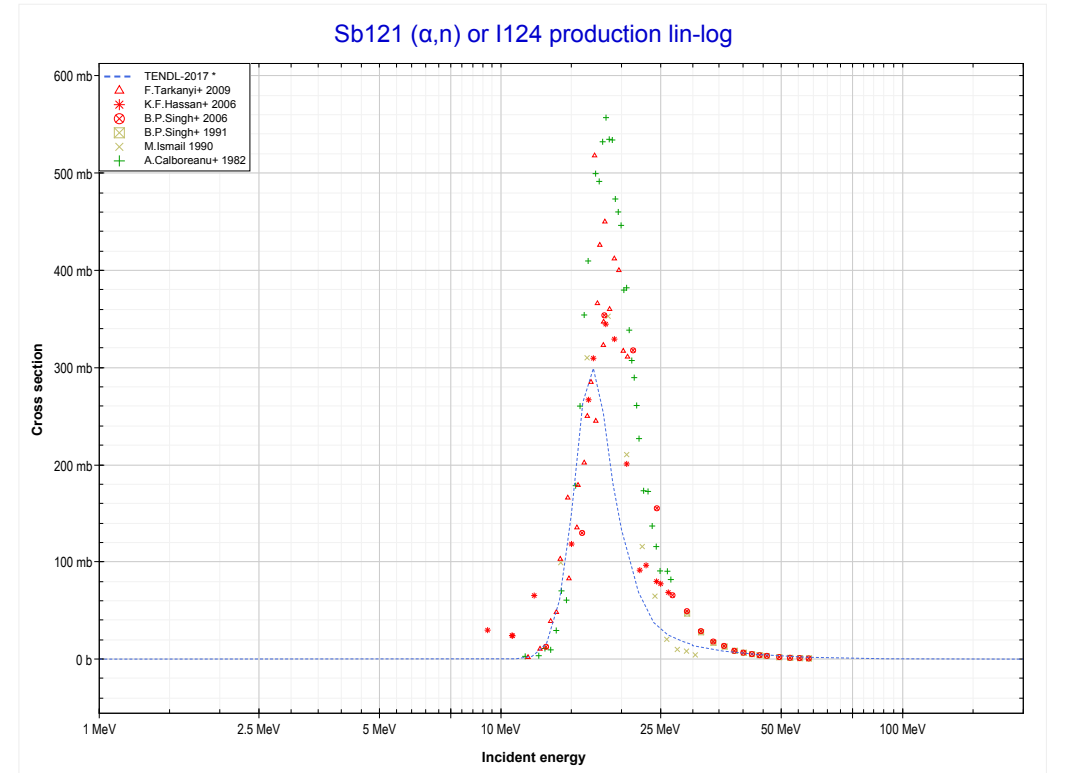
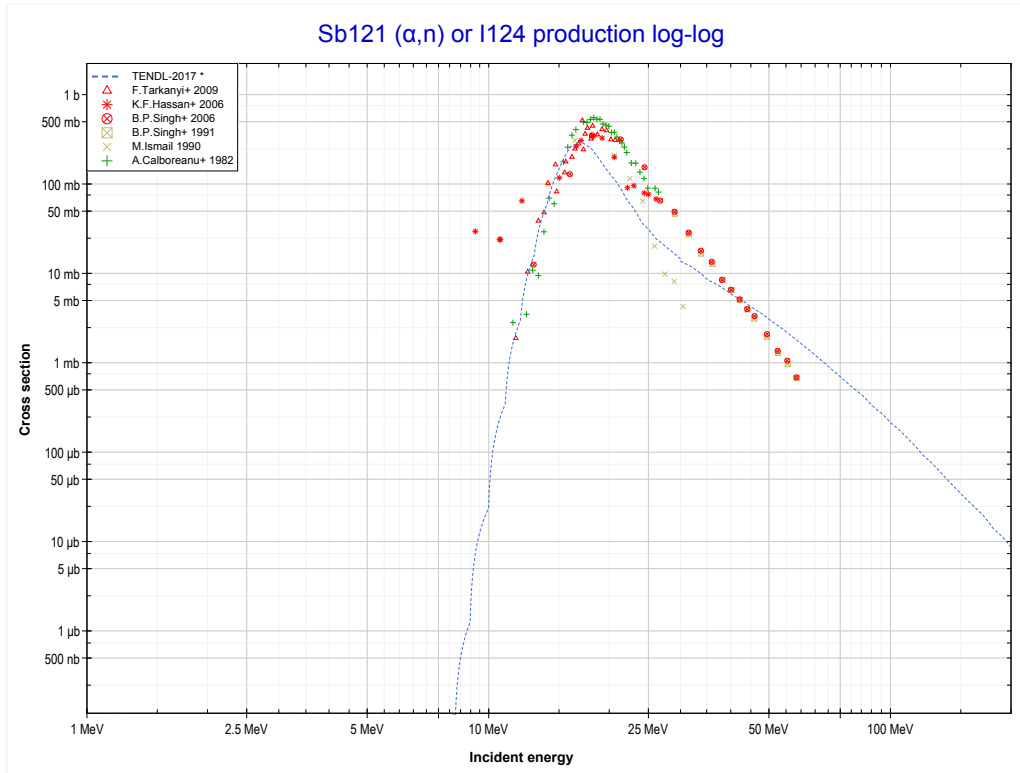
Reaction	Q-Value
Sn124($\alpha, He3$)Sn125	-14844.10 keV
Sn124($\alpha, p+d$)Sn125	-20337.58 keV
Sn124($\alpha, n+2p$)Sn125	-22562.14 keV

<< 50-Sn-117	50-Sn-124	56-Ba-138 >>
<< MT44 ($\alpha, n+2p$)	MT103 (α, p) or MT5 (Sb127 production)	51-Sb-121 MT4 (α, n) >>



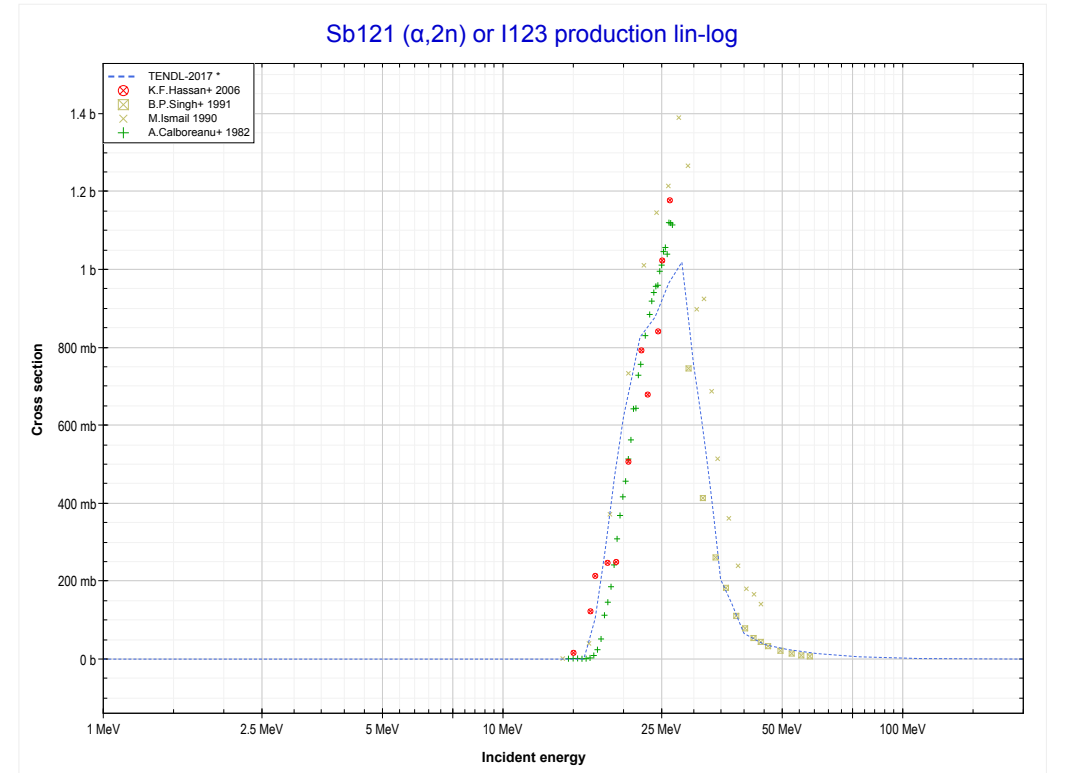
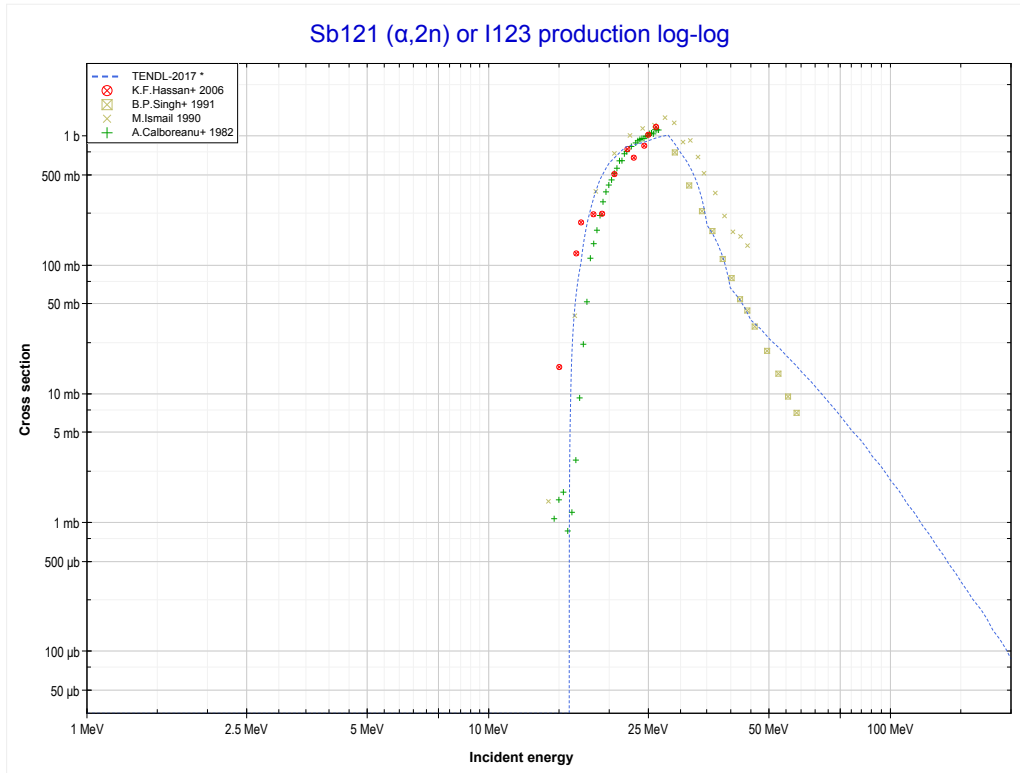
Reaction	Q-Value
Sn124(α, p)Sb127	-6399.25 keV

<< 50-Sn-124	51-Sb-121	51-Sb-123 >>
<< 50-Sn-124 MT103 (α,p)	MT4 (α,n) or MT5 (I124 production)	MT16 ($\alpha,2n$) >>



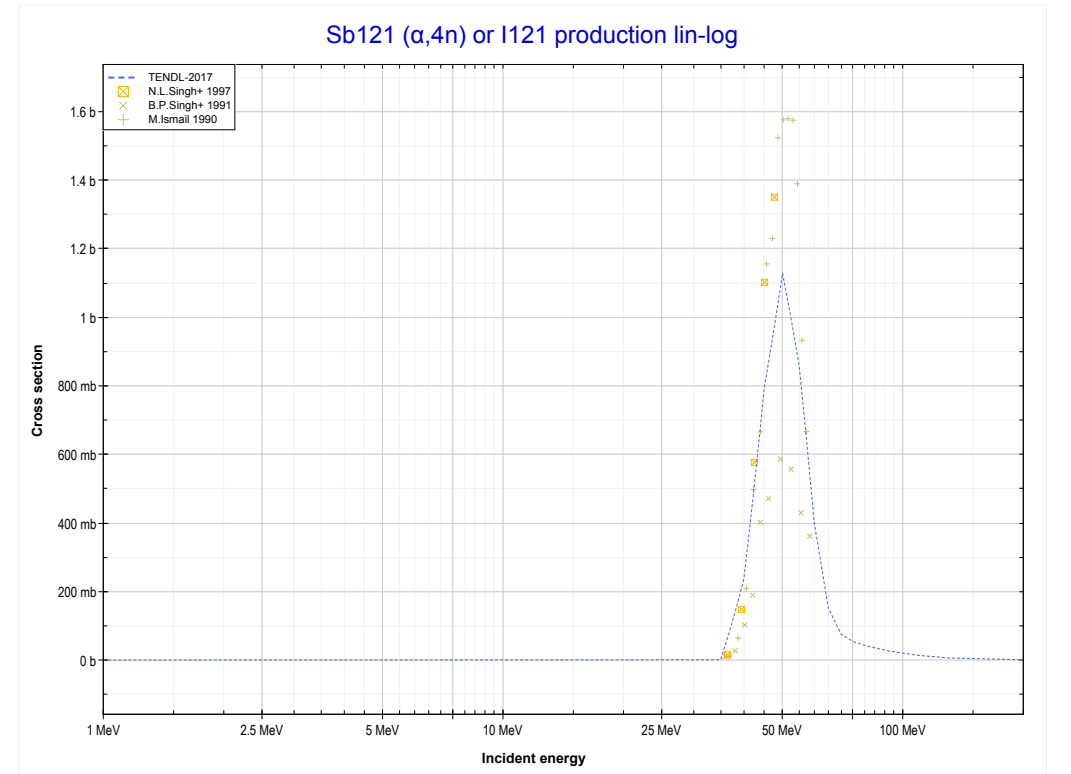
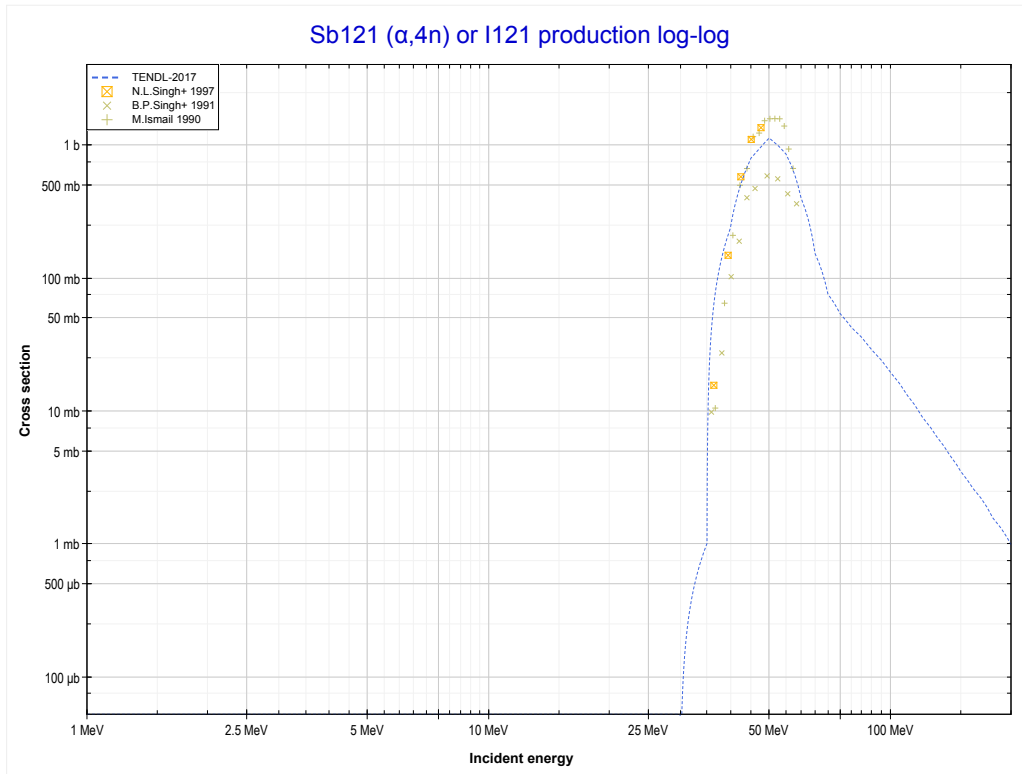
Reaction	Q-Value
Sb121(α,n)I124	-7879.30 keV

<< 50-Sn-117	51-Sb-121	51-Sb-123 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (I123 production)	MT37 ($\alpha, 4n$) >>



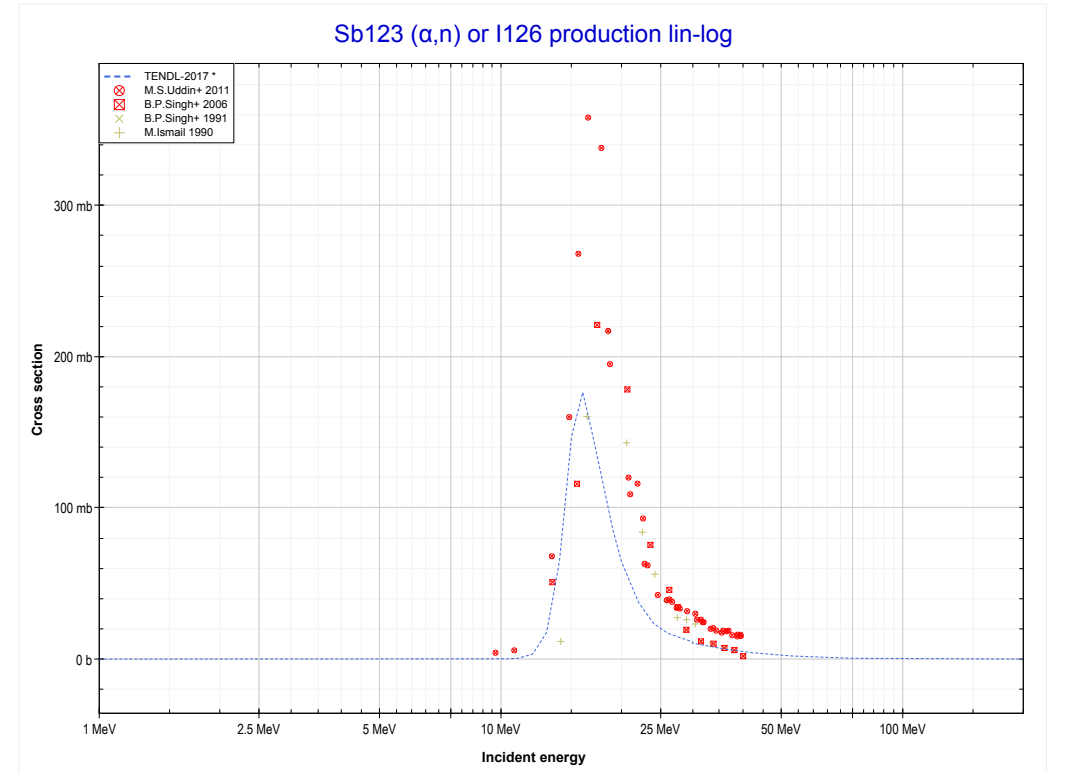
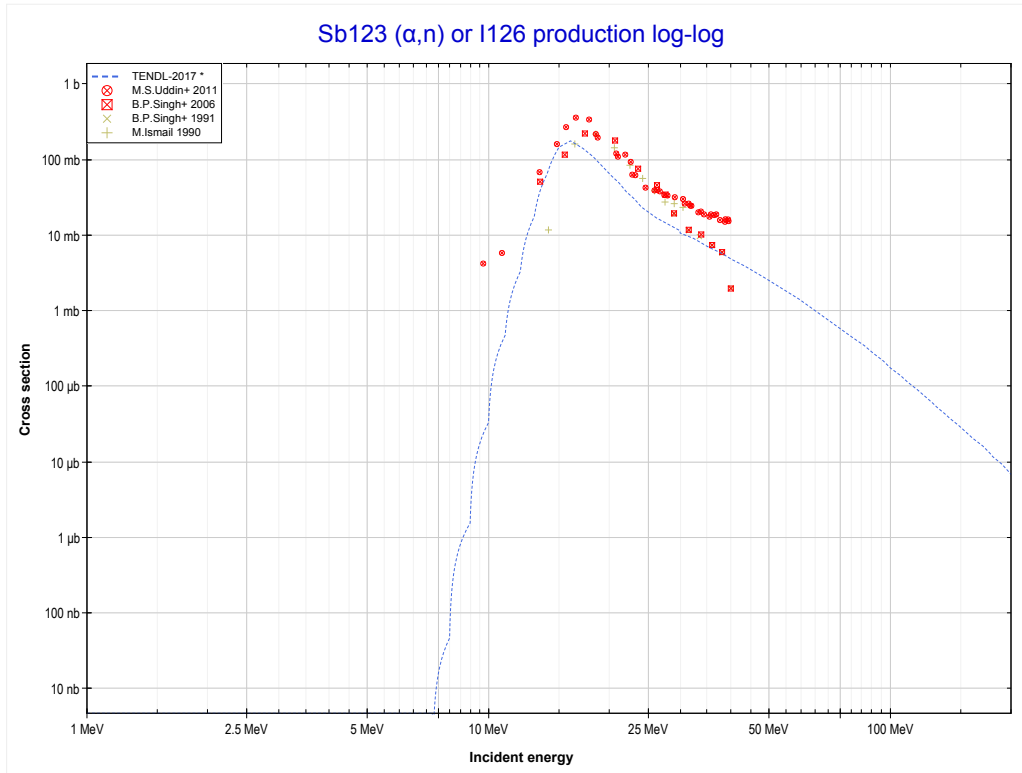
Reaction	Q-Value
Sb121($\alpha, 2n$)I123	-15372.32 keV

<< 49-In-115	51-Sb-121	51-Sb-123 >>
<< MT16 ($\alpha,2n$)	MT37 ($\alpha,4n$) or MT5 (I121 production)	51-Sb-123 MT4 (α,n) >>



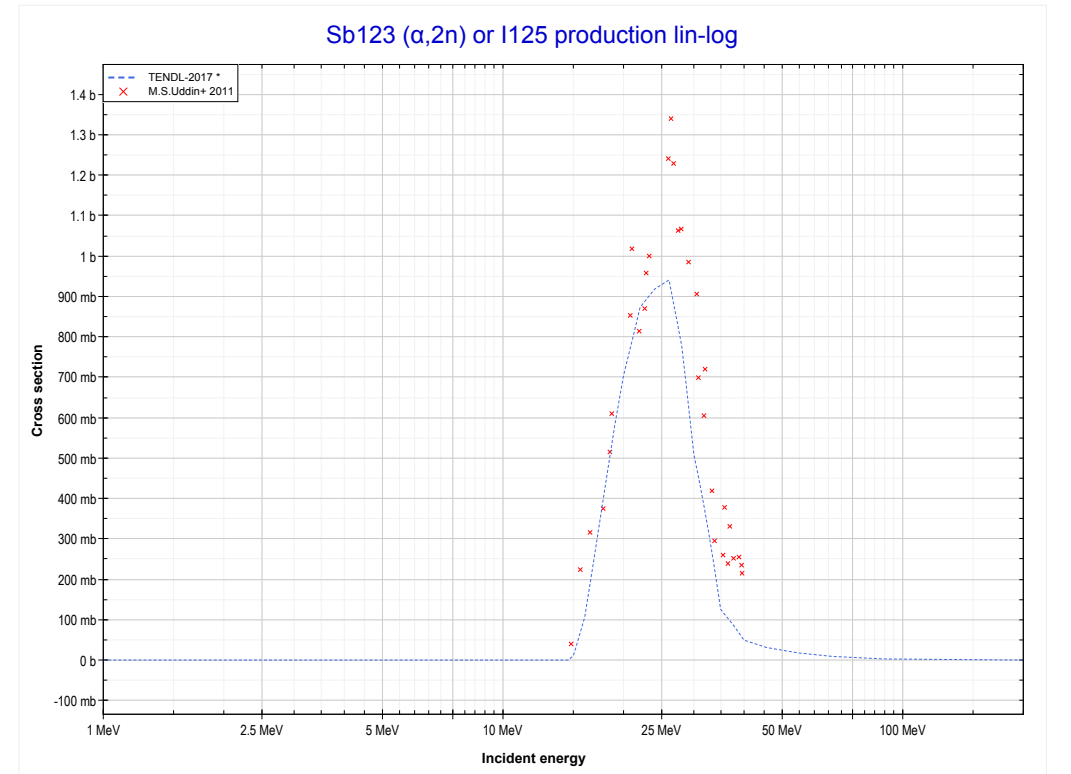
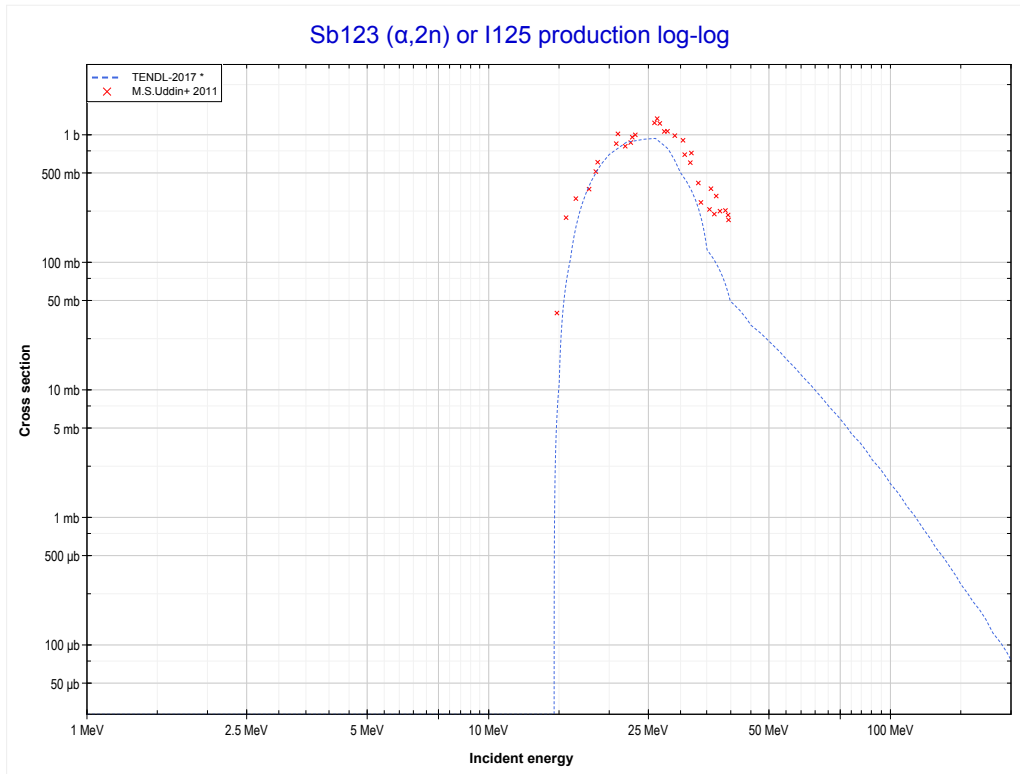
Reaction	Q-Value
Sb121($\alpha,4n$)I121	-33206.95 keV

<< 51-Sb-121	51-Sb-123	52-Te-130 >>
<< 51-Sb-121 MT37 ($\alpha,4n$)	MT4 (α,n) or MT5 (I126 production)	MT16 ($\alpha,2n$) >>



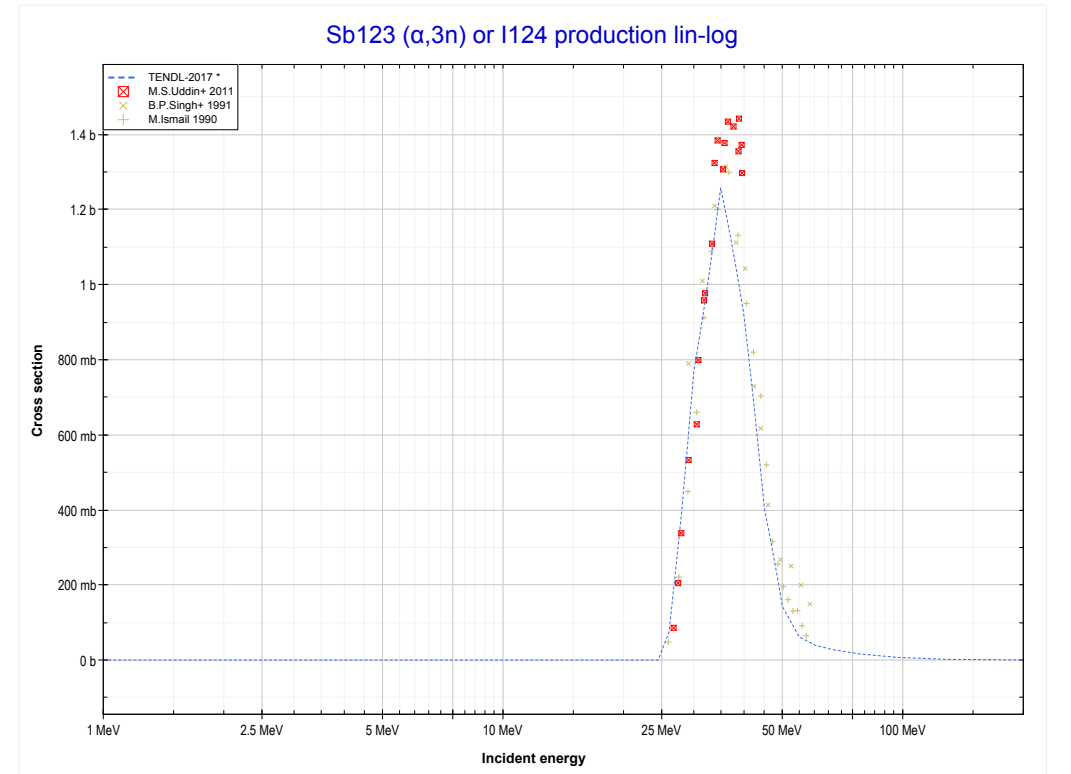
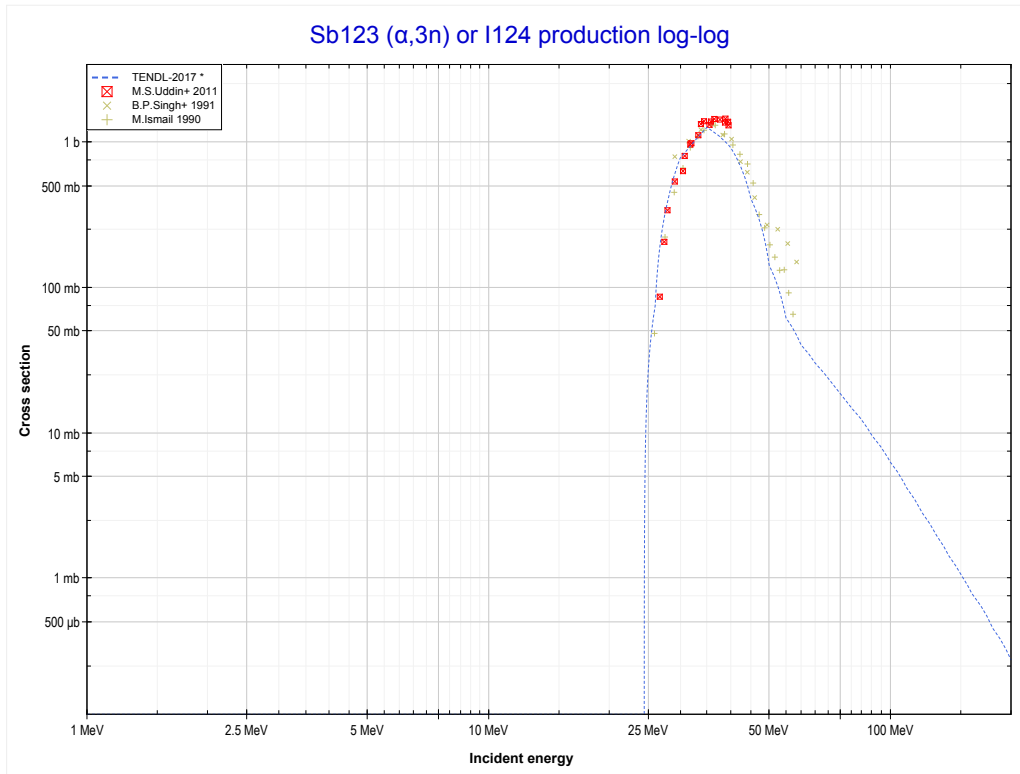
Reaction	Q-Value
Sb123(α,n)I126	-6960.20 keV

<< 51-Sb-121	51-Sb-123	52-Te-130 >>
<< MT4 (α,n)	MT16 ($\alpha,2n$) or MT5 (I125 production)	MT17 ($\alpha,3n$) >>



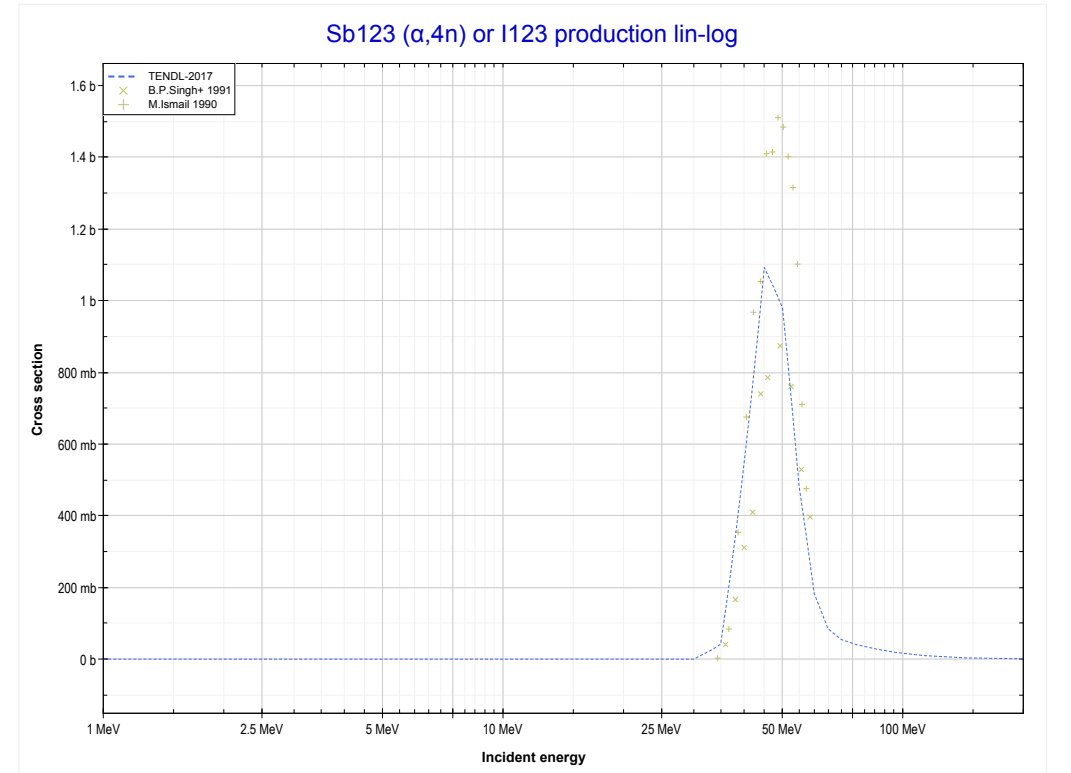
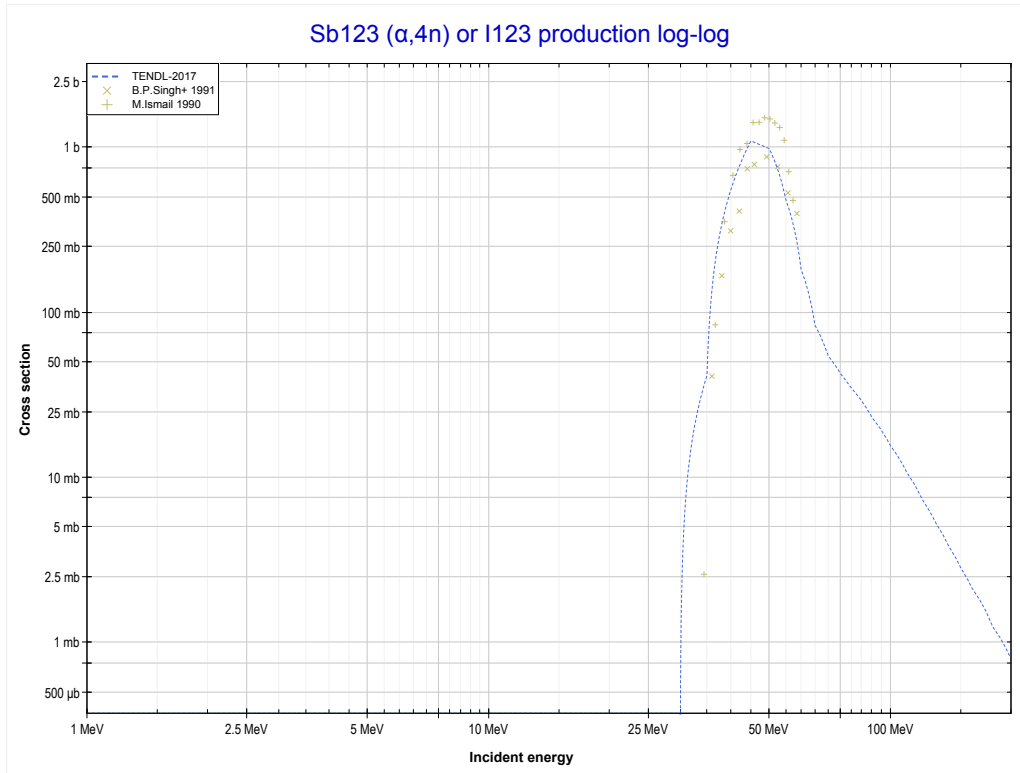
Reaction	Q-Value
Sb123($\alpha,2n$)I125	-14105.32 keV

<< 50-Sn-124	51-Sb-123	56-Ba-136 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (I124 production)	MT37 ($\alpha,4n$) >>



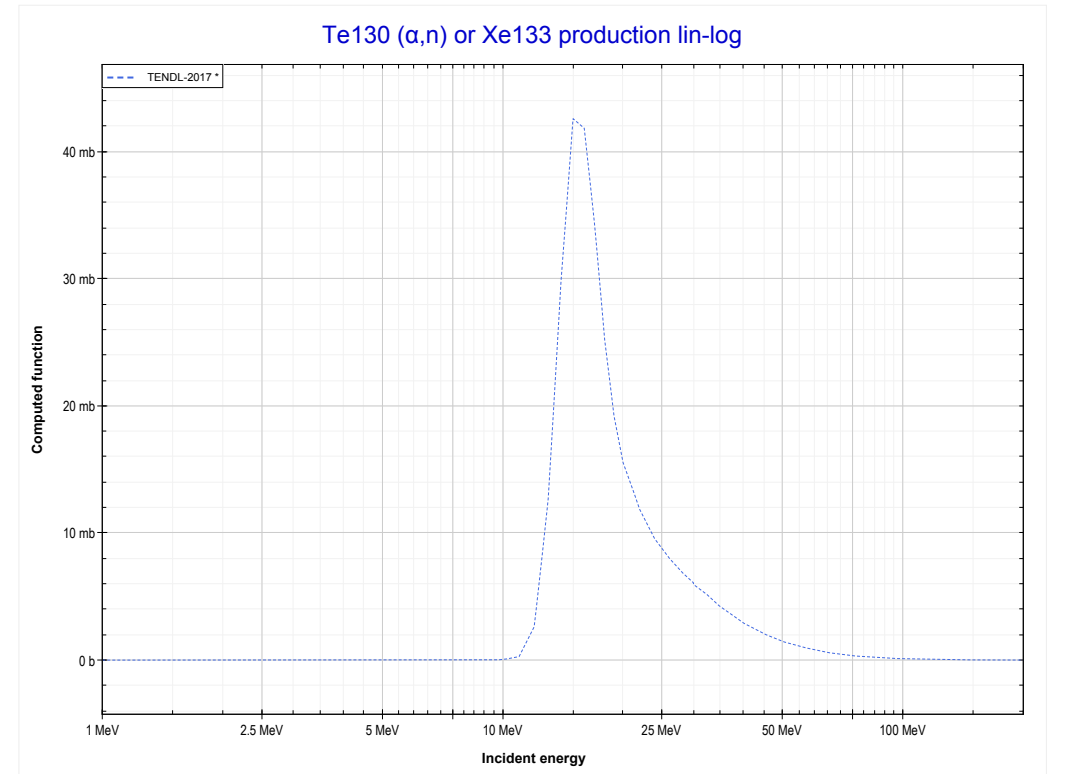
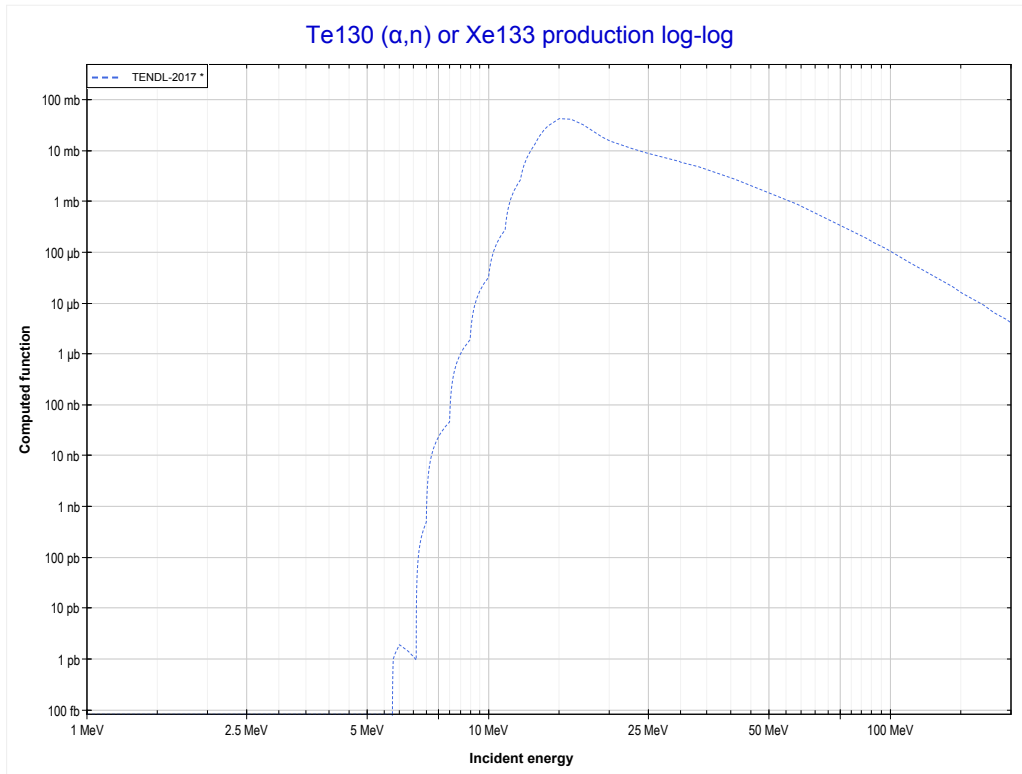
Reaction	Q-Value
Sb123($\alpha,3n$)I124	-23648.14 keV

<< 51-Sb-121	51-Sb-123	53-I-127 >>
<< MT17 ($\alpha,3n$)	MT37 ($\alpha,4n$) or MT5 (I123 production)	52-Te-130 MT4 (α,n) >>



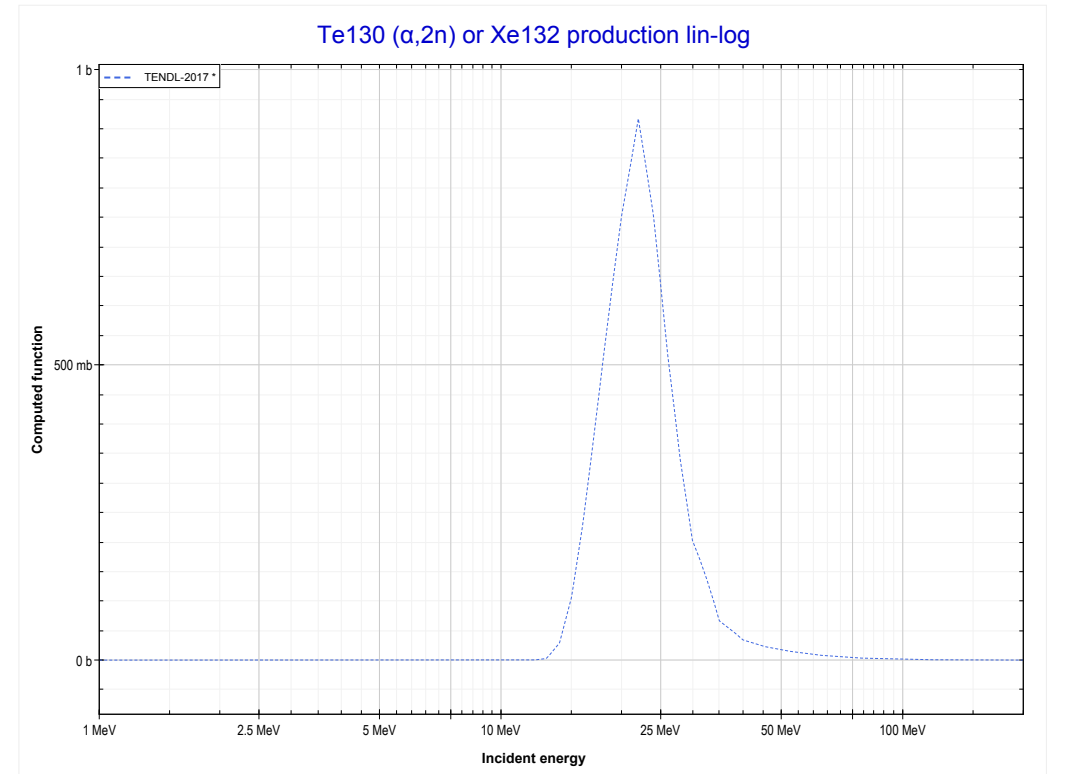
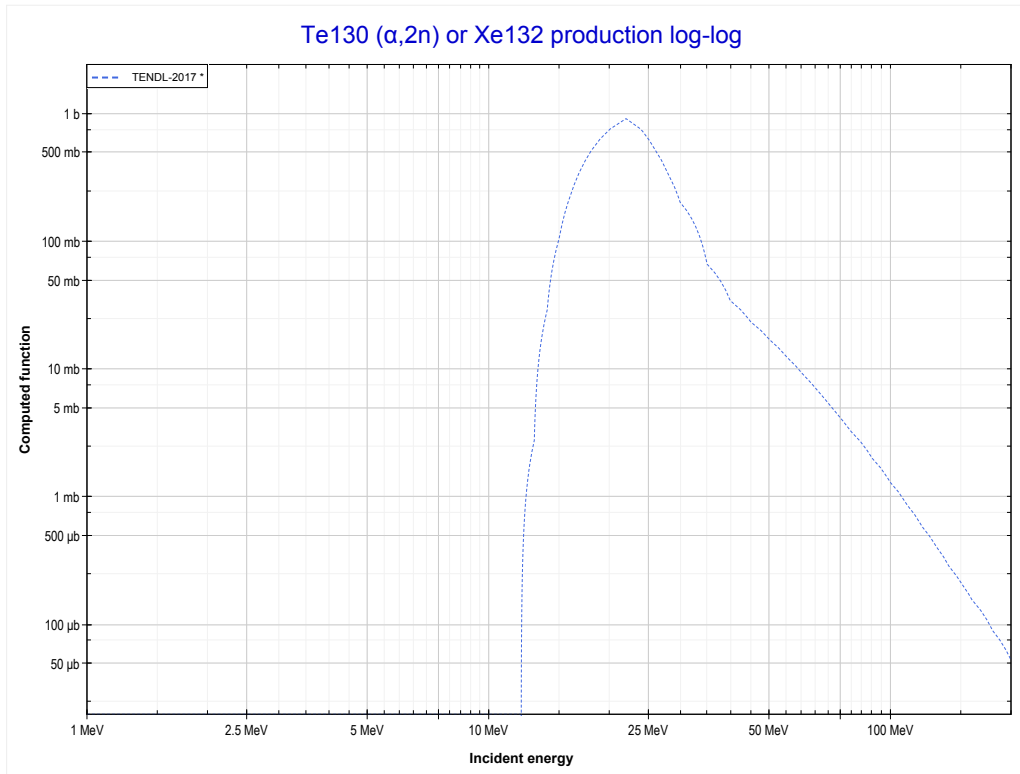
Reaction	Q-Value
Sb123($\alpha,4n$)I123	-31141.15 keV

<< 51-Sb-123	52-Te-130	56-Ba-134 >>
<< 51-Sb-123 MT37 ($\alpha,4n$)	MT4 (α,n) or MT5 (Xe133 production)	MT16 ($\alpha,2n$) >>



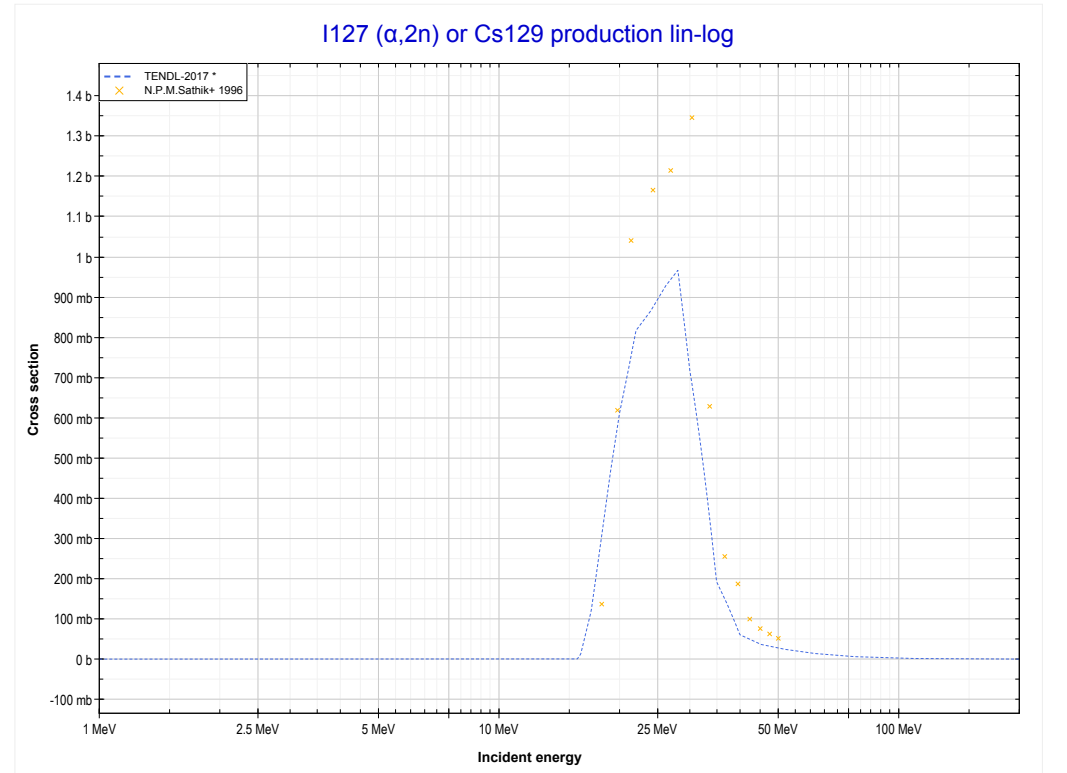
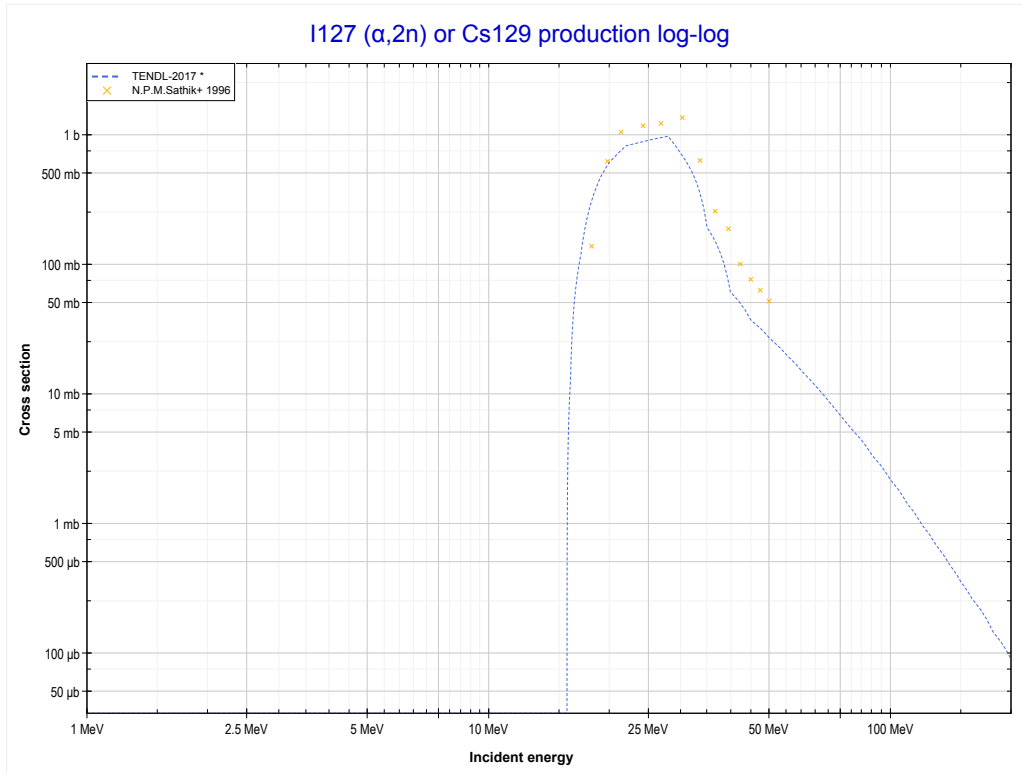
Reaction	Q-Value
Te130(α,n)Xe133	-5355.75 keV

<< 51-Sb-123	52-Te-130	53-I-127 >>
<< MT4 (α,n)	MT16 ($\alpha,2n$) or MT5 (Xe132 production)	53-I-127 MT16 ($\alpha,2n$) >>



Reaction	Q-Value
Te130($\alpha,2n$)Xe132	-11791.70 keV

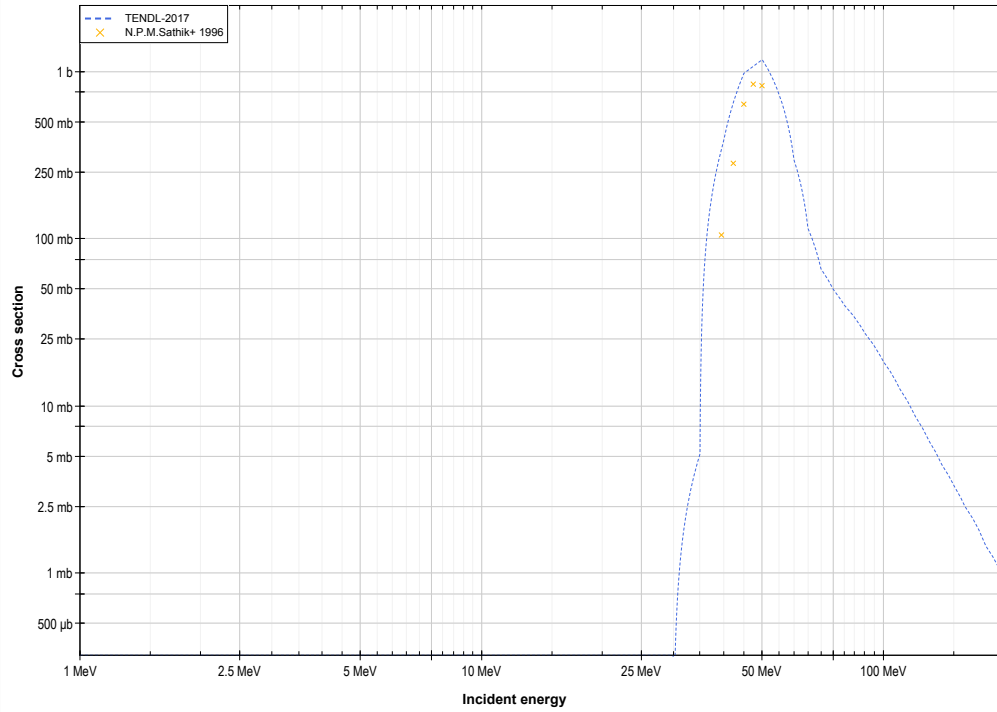
<< 52-Te-130	53-I-127	55-Cs-133 >>
<< 52-Te-130 MT16 ($\alpha,2n$)	MT16 ($\alpha,2n$) or MT5 (Cs129 production)	MT37 ($\alpha,4n$) >>



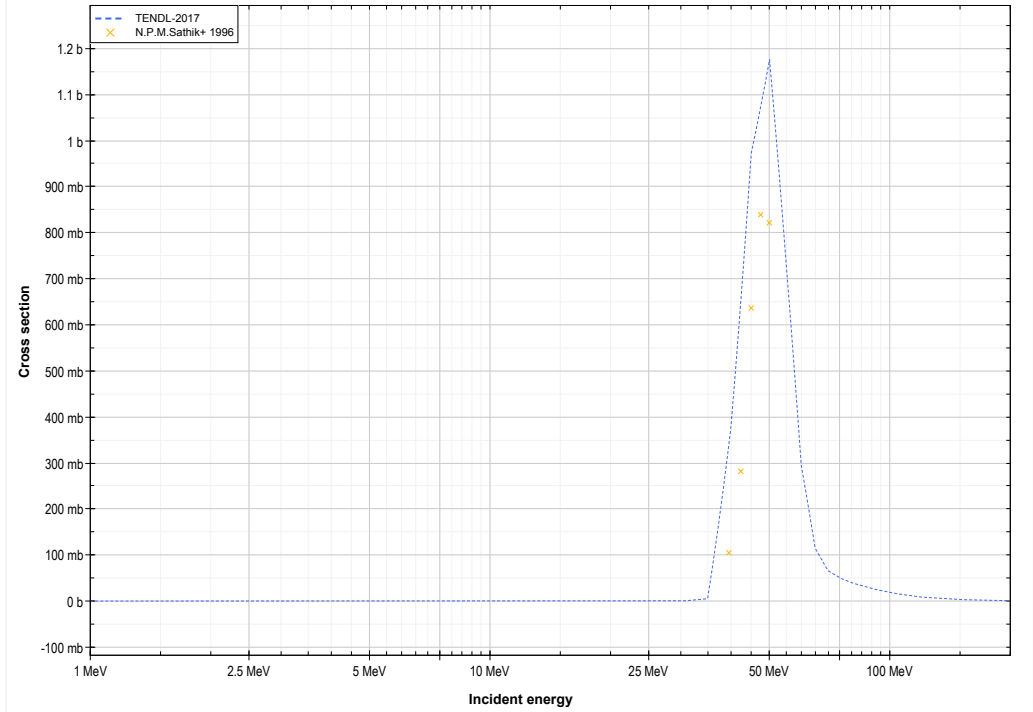
Reaction	Q-Value
I127($\alpha,2n$)Cs129	-15202.72 keV

<< 51-Sb-123	53-I-127	55-Cs-133 >>
<< MT16 ($\alpha,2n$)	MT37 ($\alpha,4n$) or MT5 (Cs127 production)	MT102 (α,γ) >>

I127 ($\alpha,4n$) or Cs127 production log-log



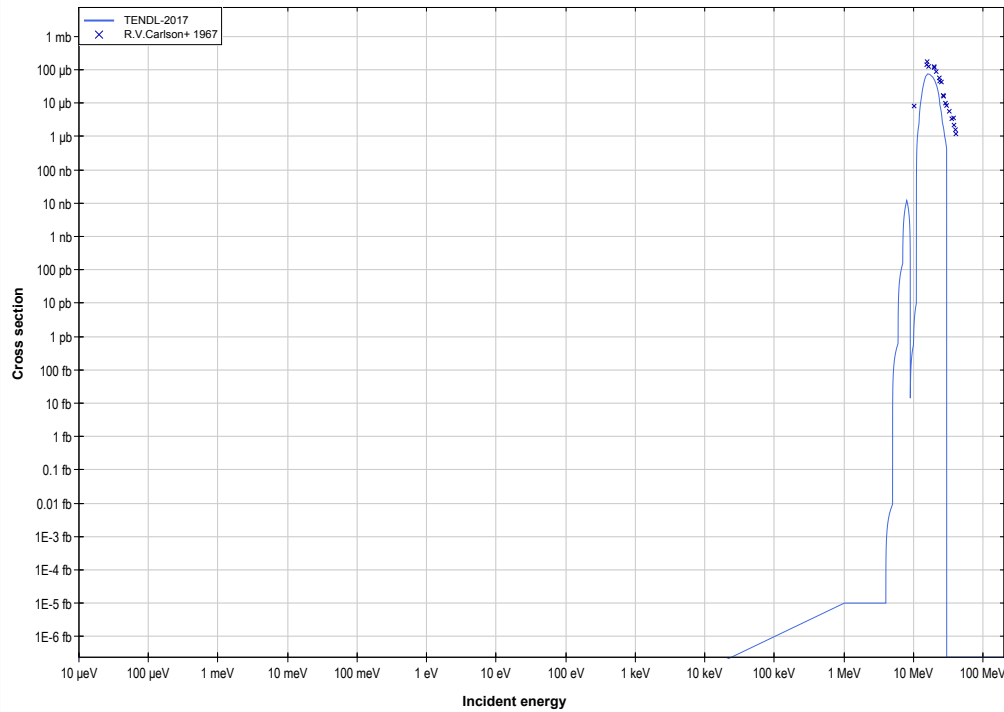
I127 ($\alpha,4n$) or Cs127 production lin-log



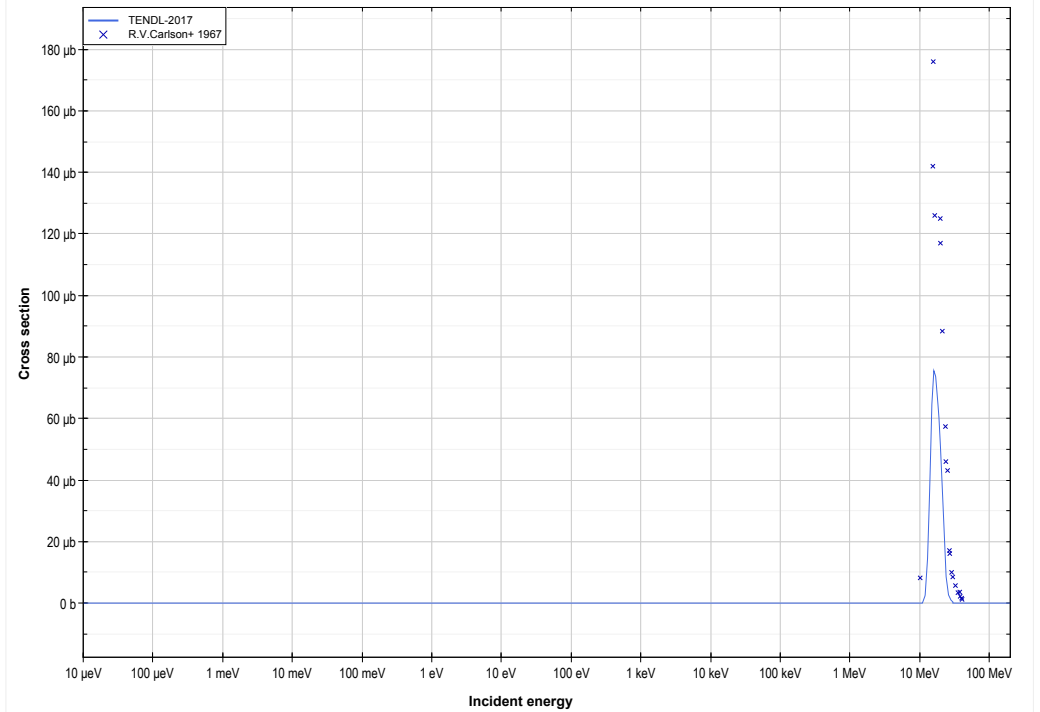
Reaction	Q-Value
I127($\alpha,4n$)Cs127	-32604.35 keV

<< 50-Sn-117	53-I-127	57-La-139 >>
<< MT37 ($\alpha,4n$)	MT102 (α,γ) or MT5 (Cs131 production)	55-Cs-133 MT16 ($\alpha,2n$) >>

1127 (α,γ) or Cs131 production log-log

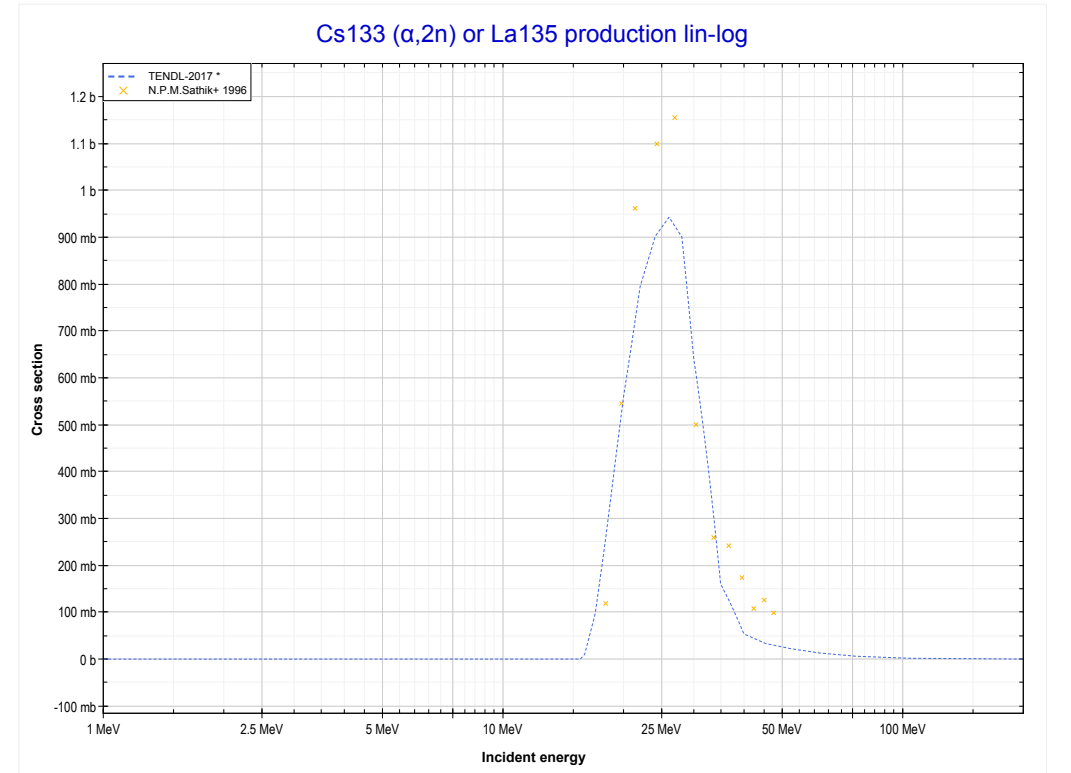
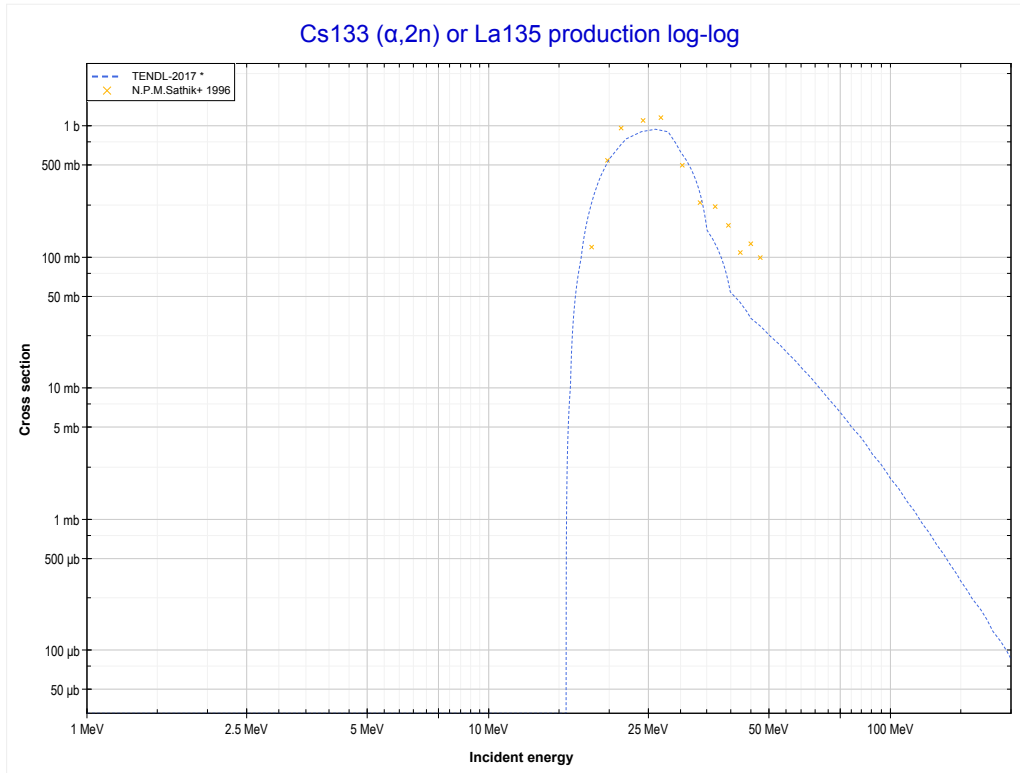


1127 (α,γ) or Cs131 production lin-log



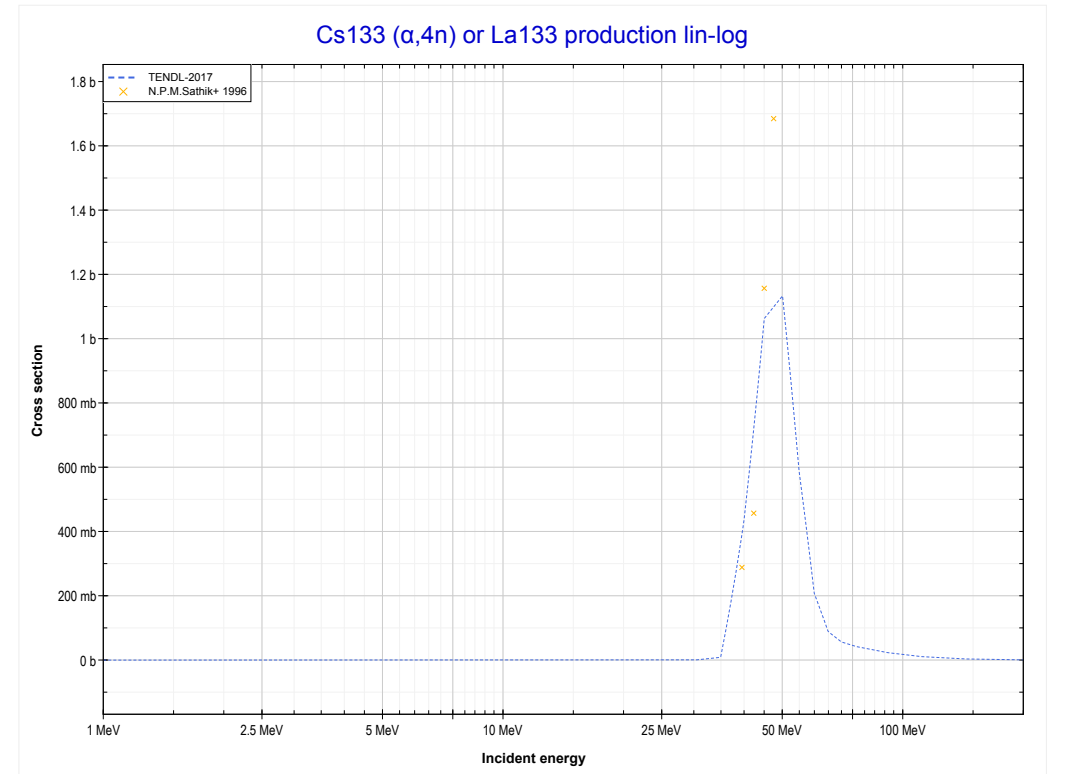
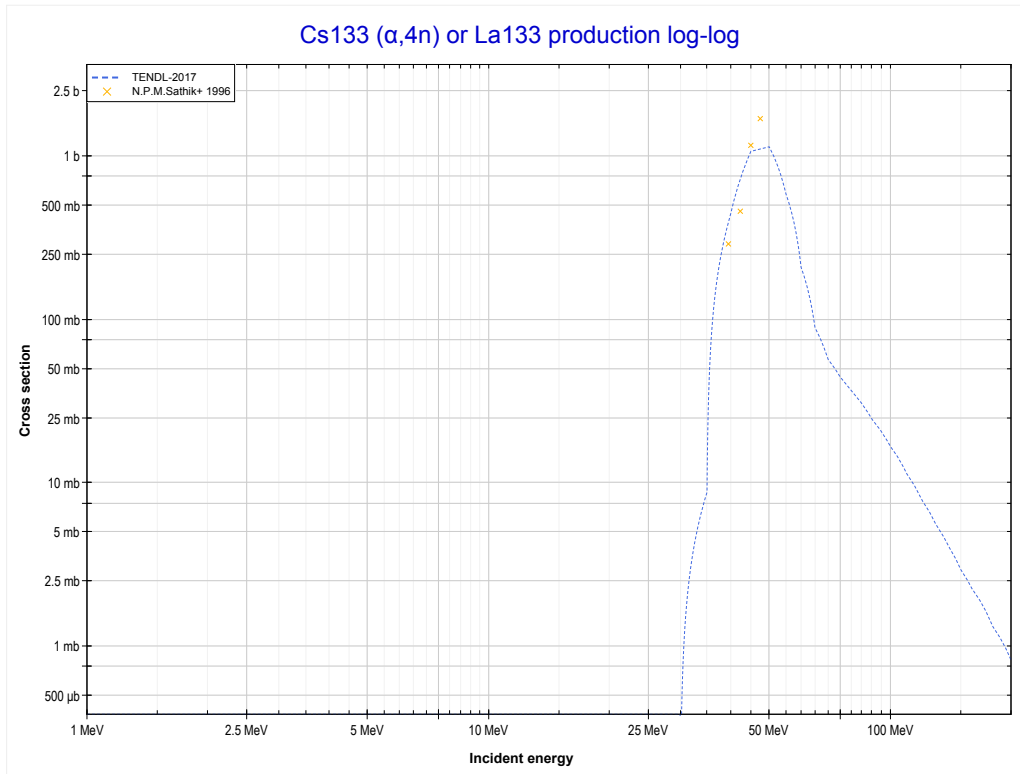
Reaction	Q-Value
1127(α,γ)Cs131	1499.92 keV

<< 53-I-127	55-Cs-133	56-Ba-135 >>
<< 53-I-127 MT102 (α,γ)	MT16 ($\alpha,2n$) or MT5 (La135 production)	MT37 ($\alpha,4n$) >>



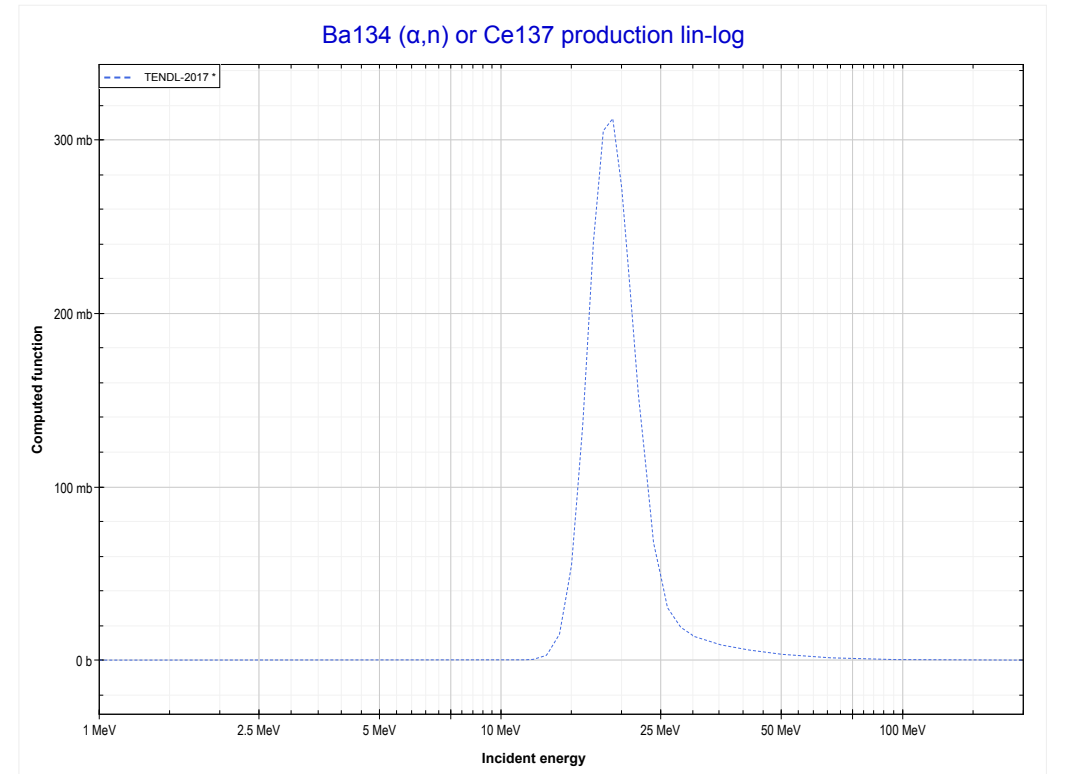
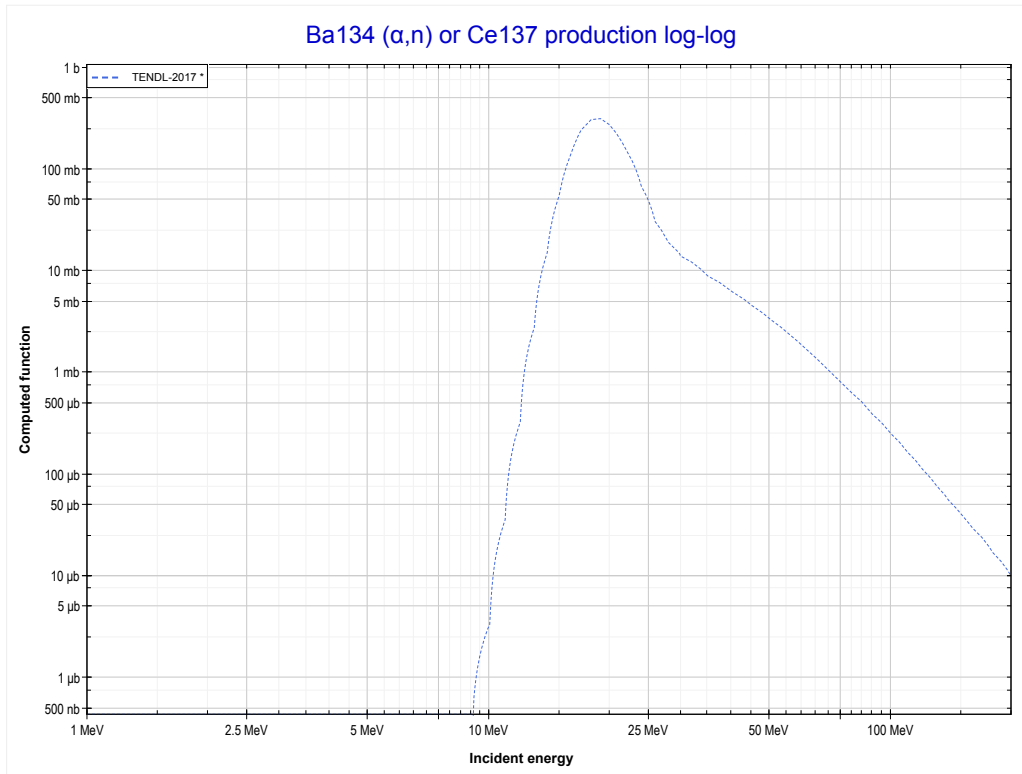
Reaction	Q-Value
Cs133($\alpha,2n$)La135	-15144.65 keV

<< 53-I-127	55-Cs-133	57-La-139 >>
<< MT16 ($\alpha,2n$)	MT37 ($\alpha,4n$) or MT5 (La133 production)	56-Ba-134 MT4 (α,n) >>



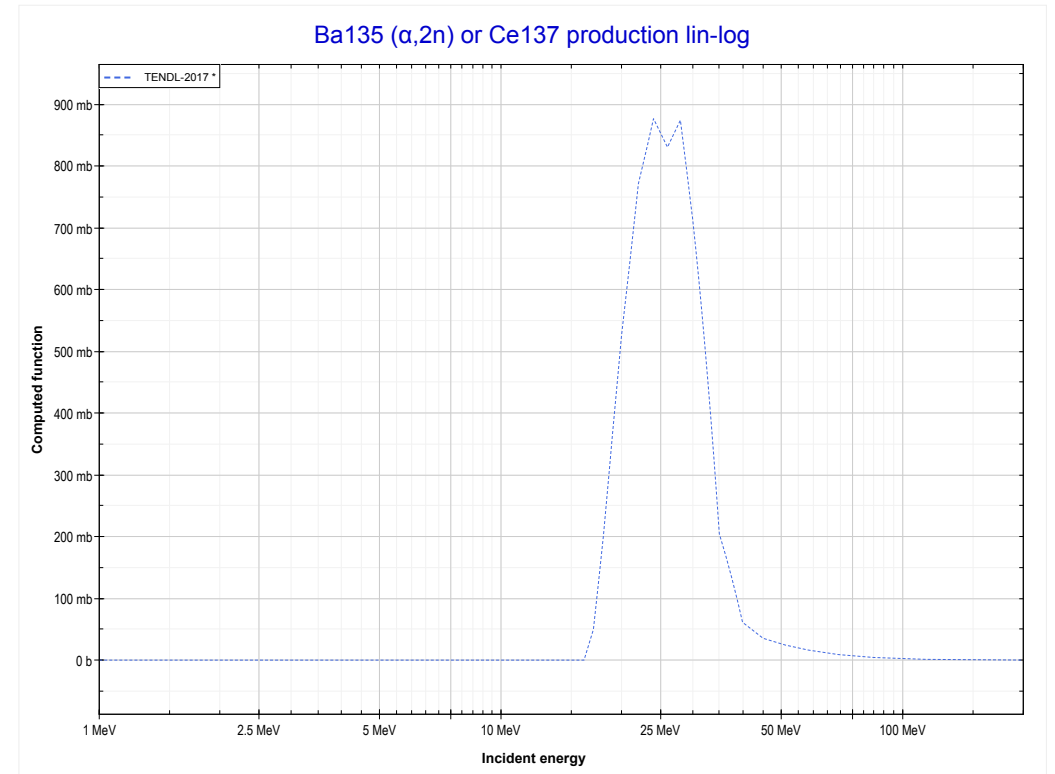
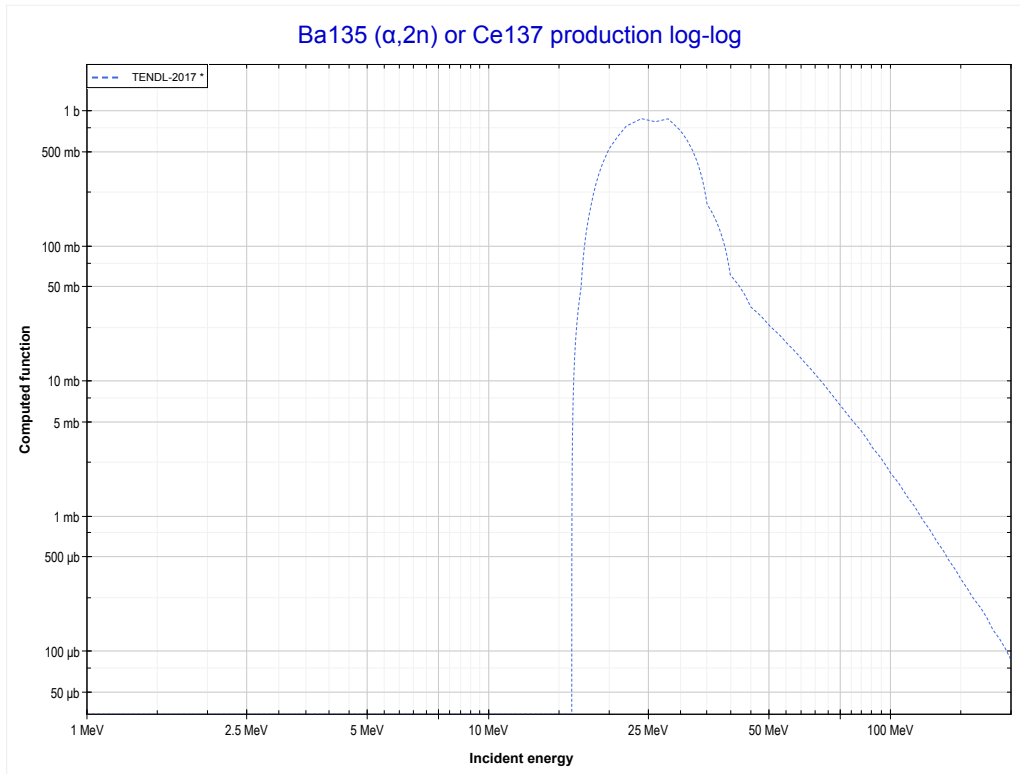
Reaction	Q-Value
Cs133($\alpha,4n$)La133	-32437.28 keV

<< 52-Te-130	56-Ba-134	57-La-139 >>
<< 55-Cs-133 MT37 ($\alpha,4n$)	MT4 (α,n) or MT5 (Ce137 production)	56-Ba-135 MT16 ($\alpha,2n$) >>



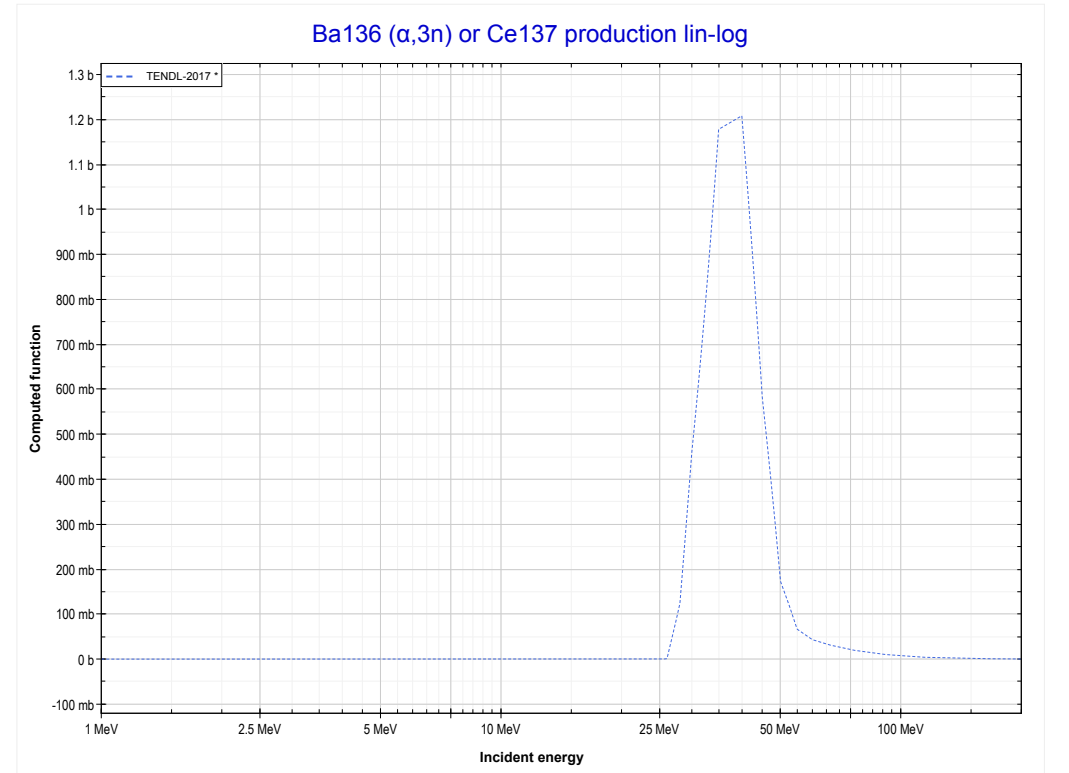
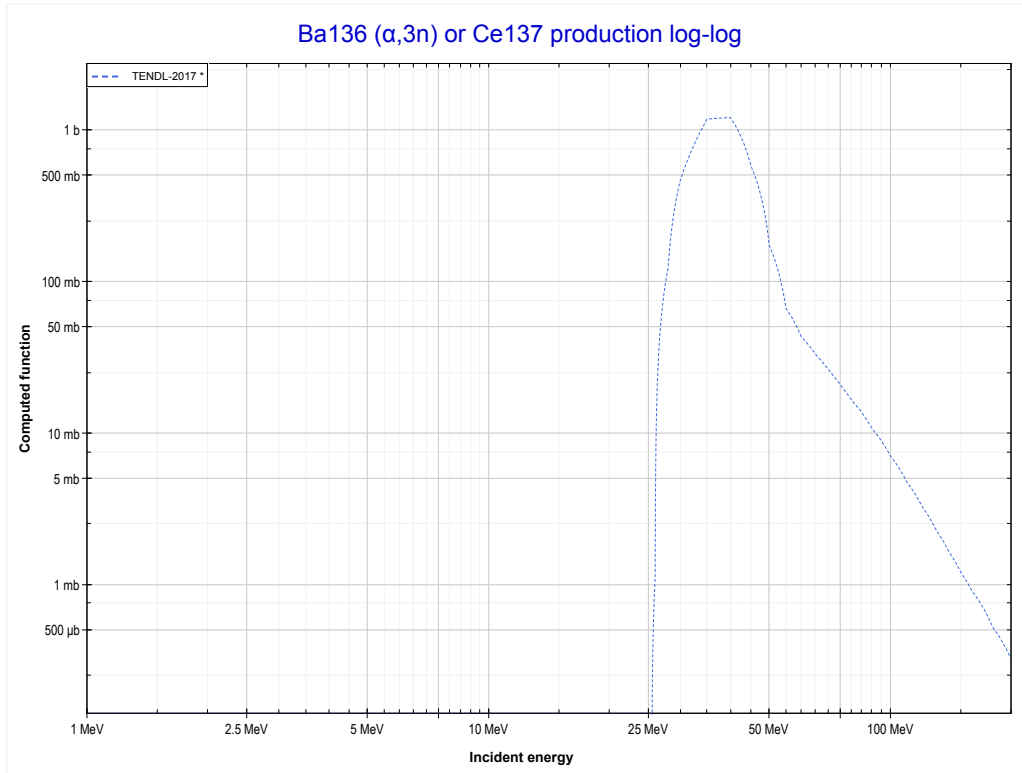
Reaction	Q-Value
Ba134(α,n)Ce137	-8677.65 keV

<< 55-Cs-133	56-Ba-135	59-Pr-141 >>
<< 56-Ba-134 MT4 (α,n)	MT16 ($\alpha,2n$) or MT5 (Ce137 production)	56-Ba-136 MT17 ($\alpha,3n$) >>



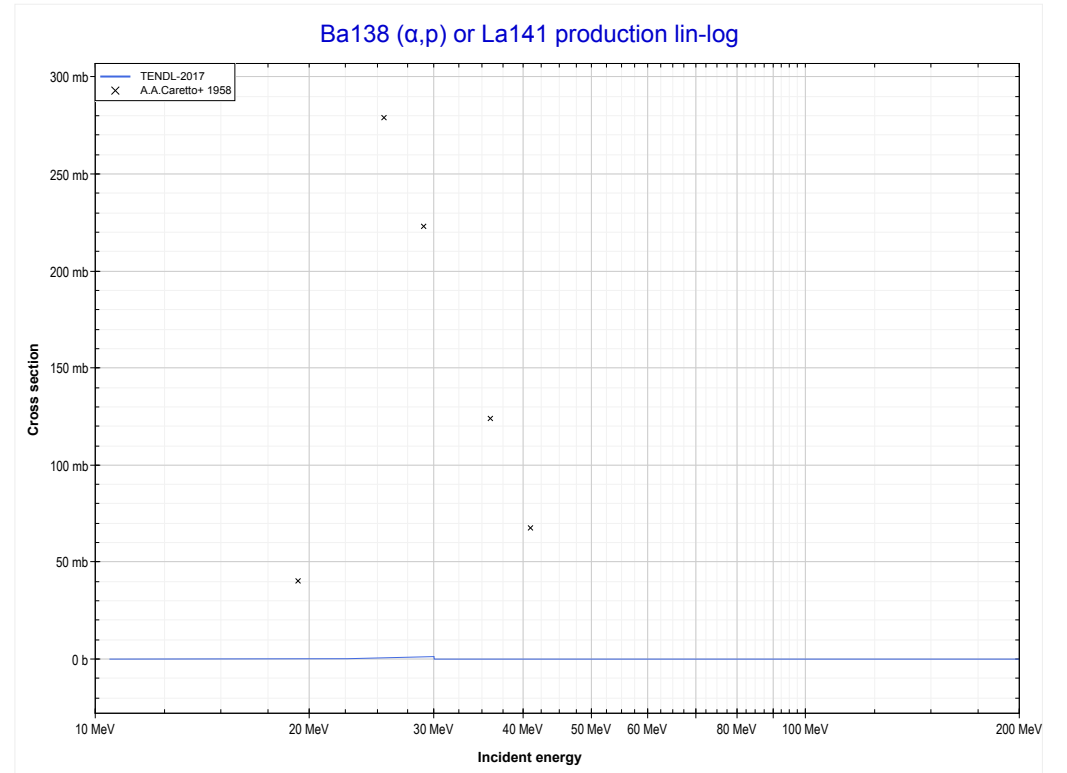
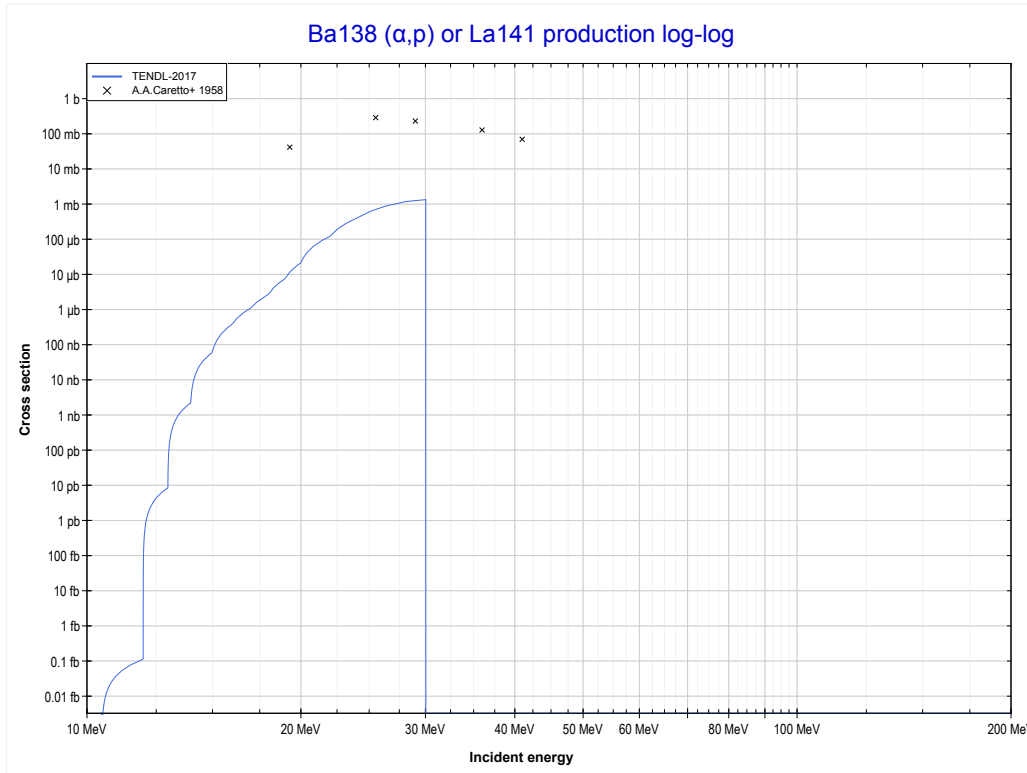
Reaction	Q-Value
Ba135($\alpha,2n$)Ce137	-15649.63 keV

<< 51-Sb-123	56-Ba-136	57-La-139 >>
<< 56-Ba-135 MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Ce137 production)	56-Ba-138 MT103 (α,p) >>



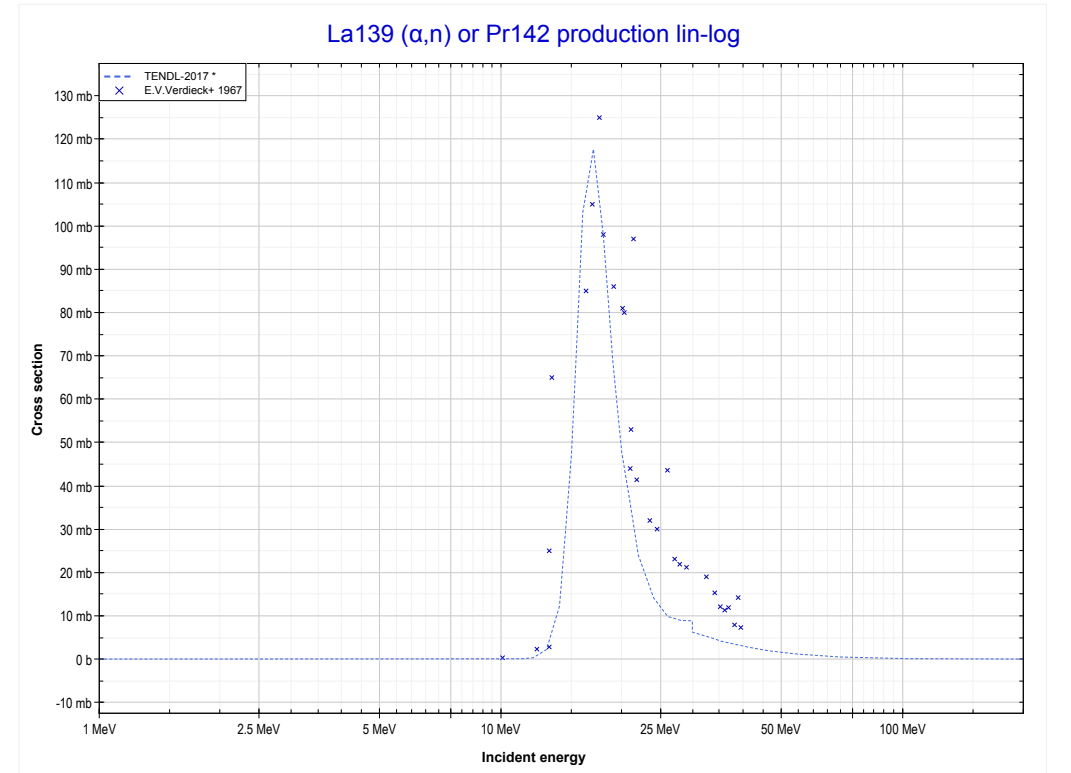
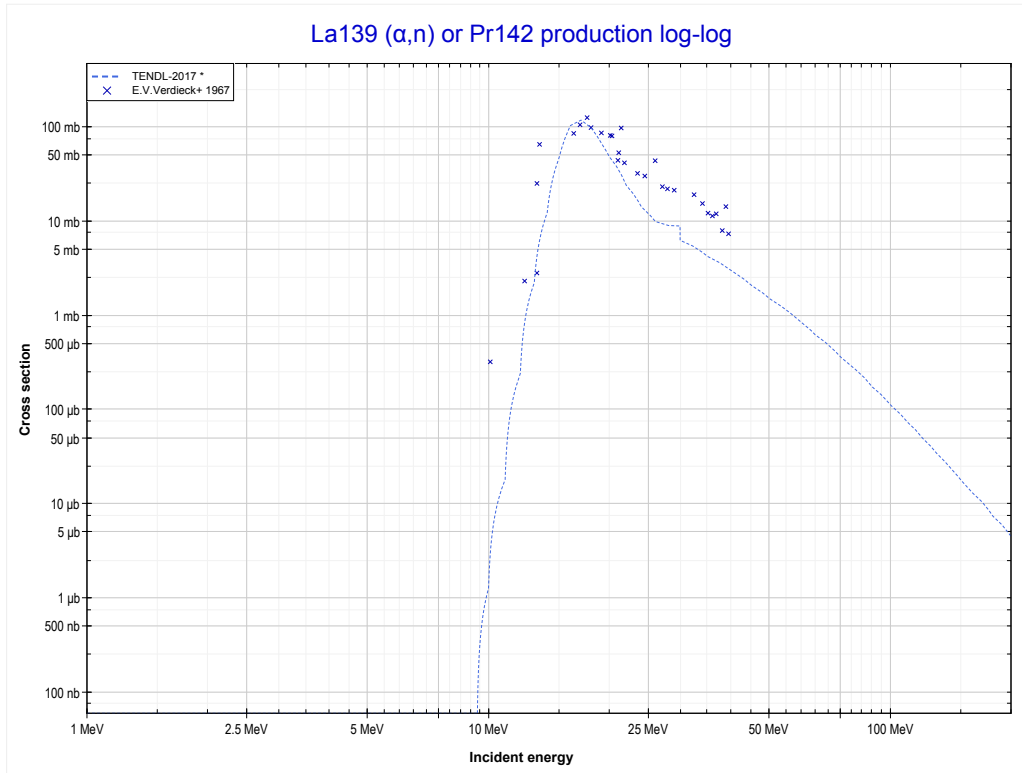
Reaction	Q-Value
Ba136($\alpha,3n$)Ce137	-24757.38 keV

<< 50-Sn-124	56-Ba-138	74-W-186 >>
<< 56-Ba-136 MT17 ($\alpha,3n$)	MT103 (α,p) or MT5 (La141 production)	57-La-139 MT4 (α,n) >>



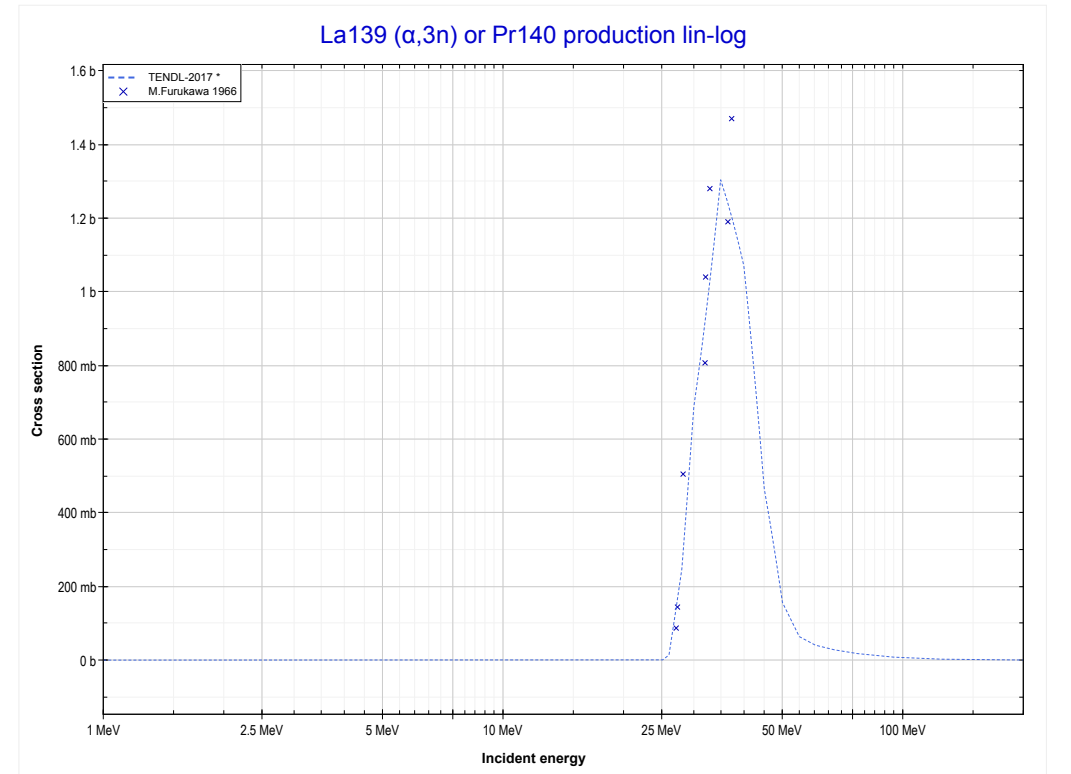
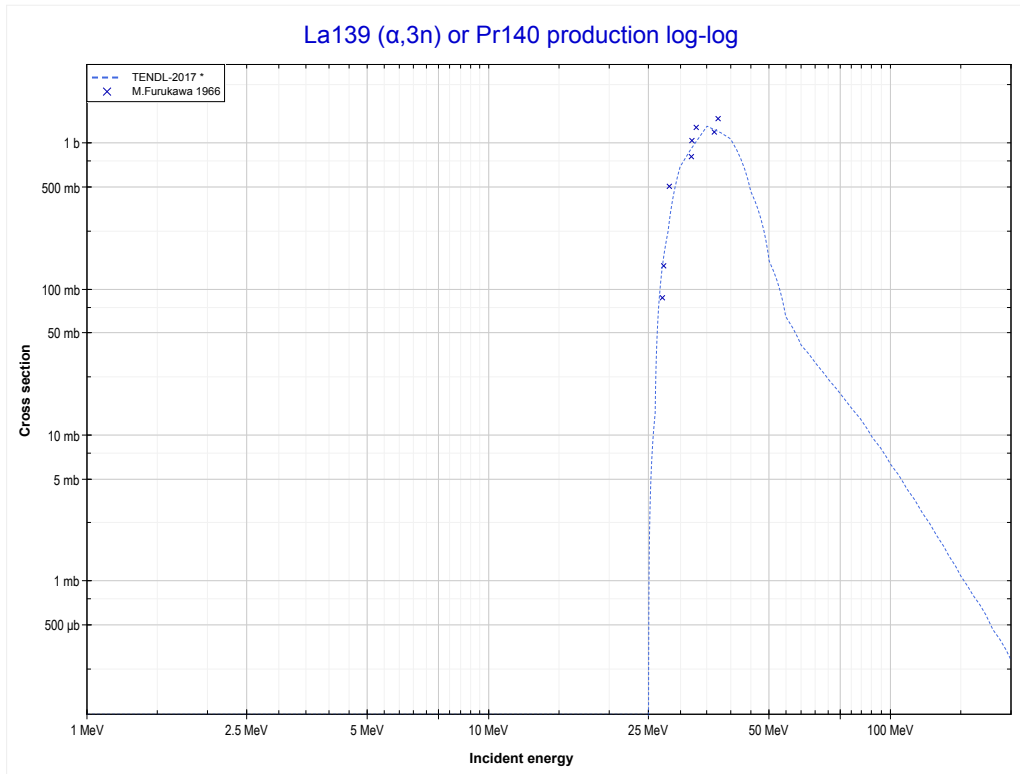
Reaction	Q-Value
Ba138(α,p)La141	-10190.91 keV

<< 56-Ba-134	57-La-139	59-Pr-141 >>
<< 56-Ba-138 MT103 (α, p)	MT4 (α, n) or MT5 (Pr142 production)	MT17 ($\alpha, 3n$) >>



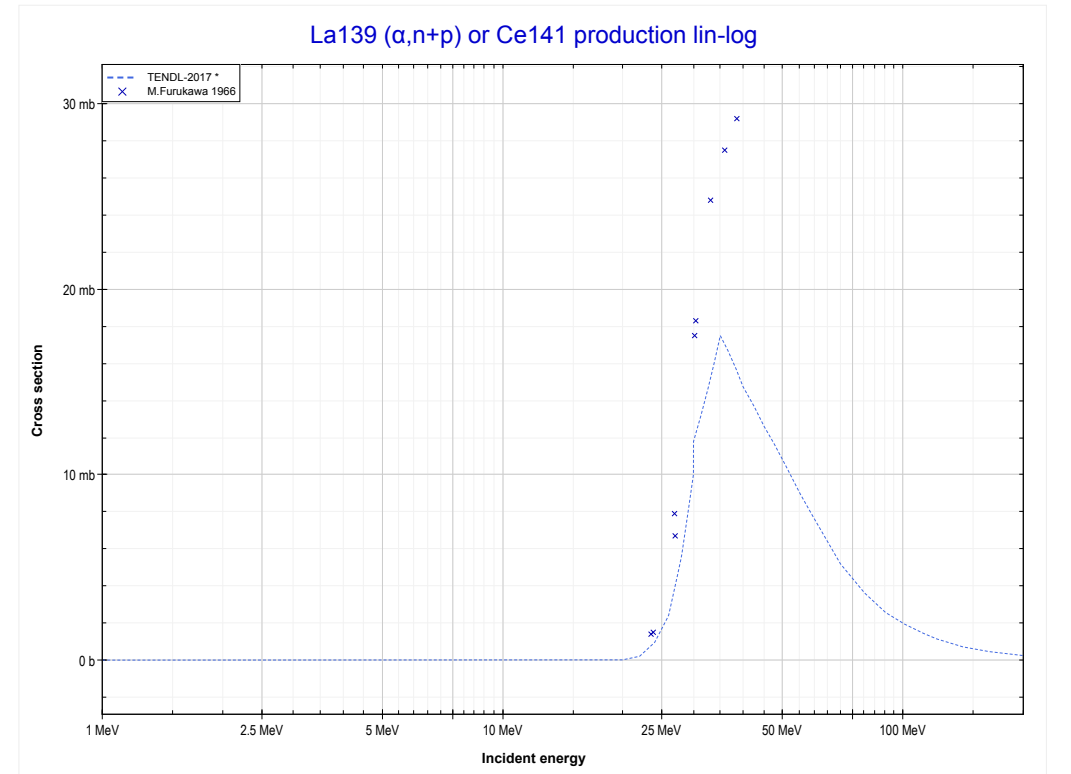
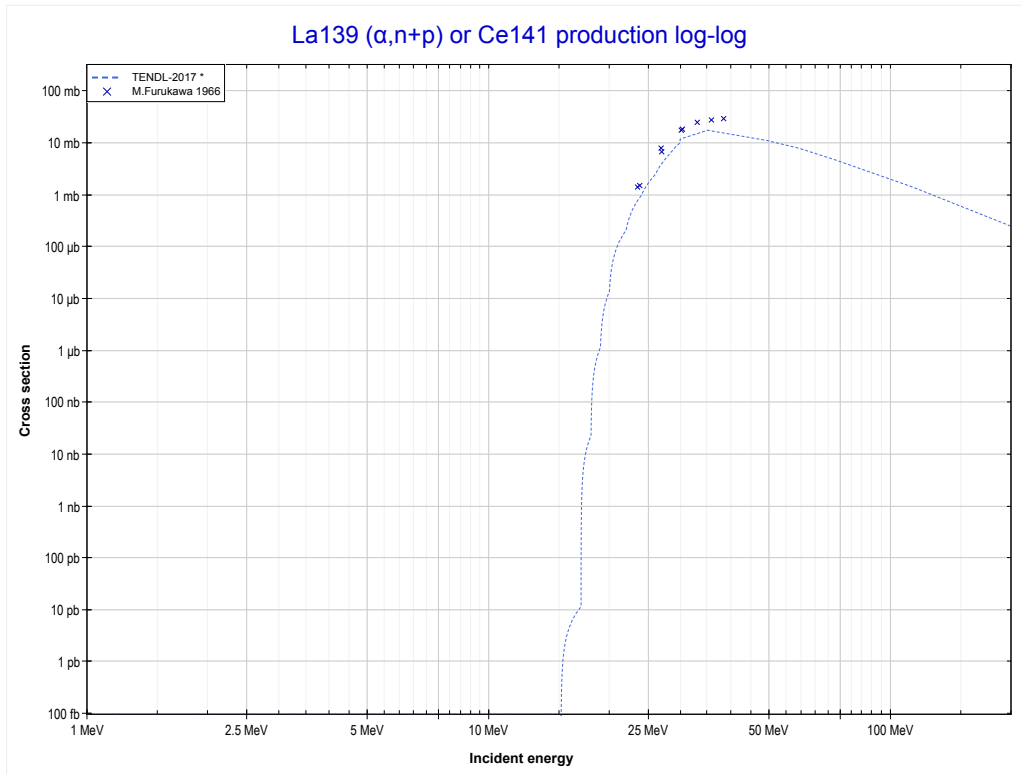
Reaction	Q-Value
La139(α, n)Pr142	-9086.70 keV

<< 56-Ba-136	57-La-139	60-Nd-142 >>
<< MT4 (α, n)	MT17 ($\alpha, 3n$) or MT5 (Pr140 production)	MT28 ($\alpha, n+p$) >>



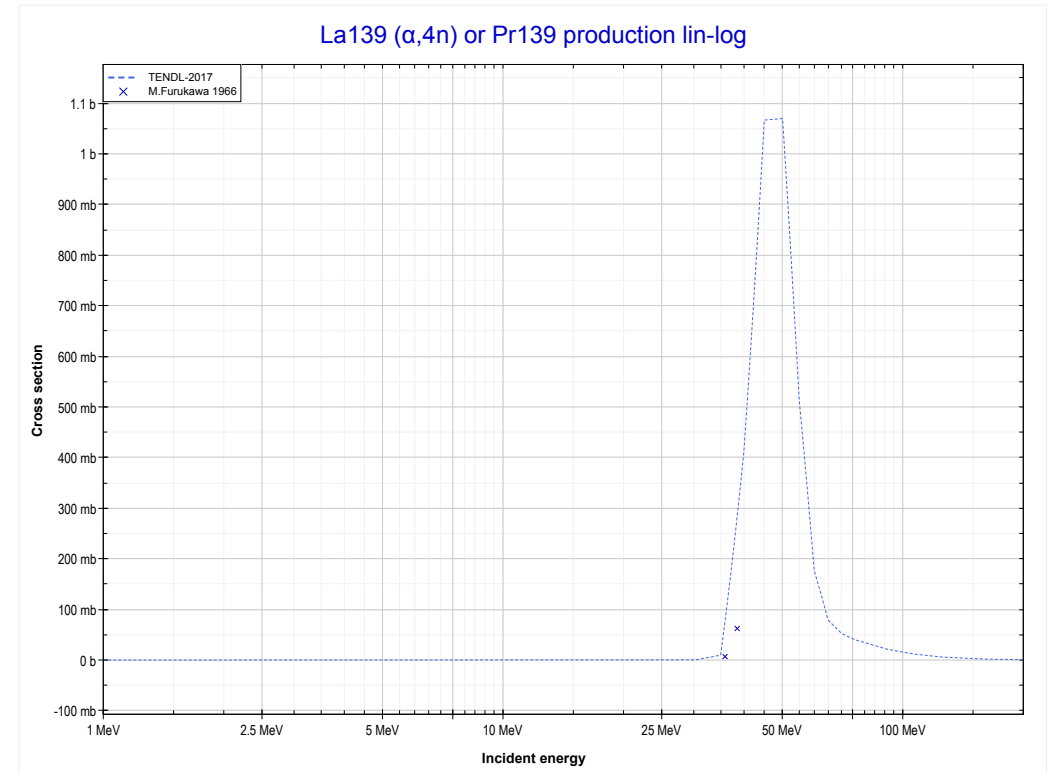
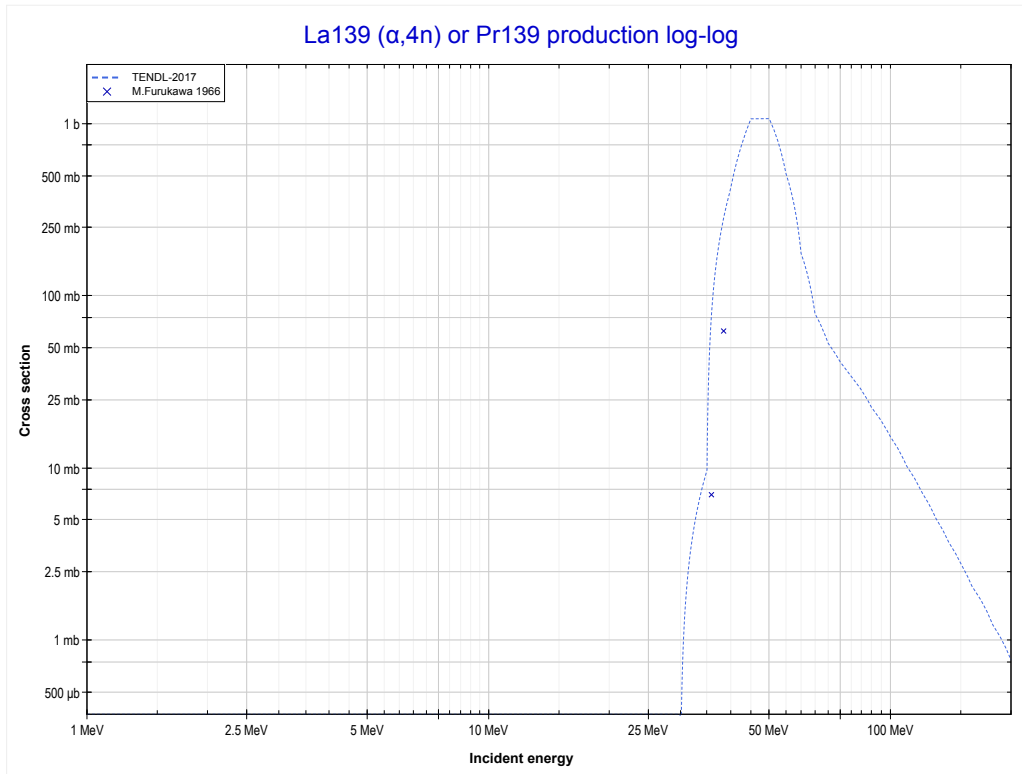
Reaction	Q-Value
La139($\alpha, 3n$)Pr140	-24326.64 keV

<< 50-Sn-124	57-La-139	68-Er-166 >>
<< MT17 ($\alpha,3n$)	MT28 ($\alpha,n+p$) or MT5 (Ce141 production)	MT37 ($\alpha,4n$) >>



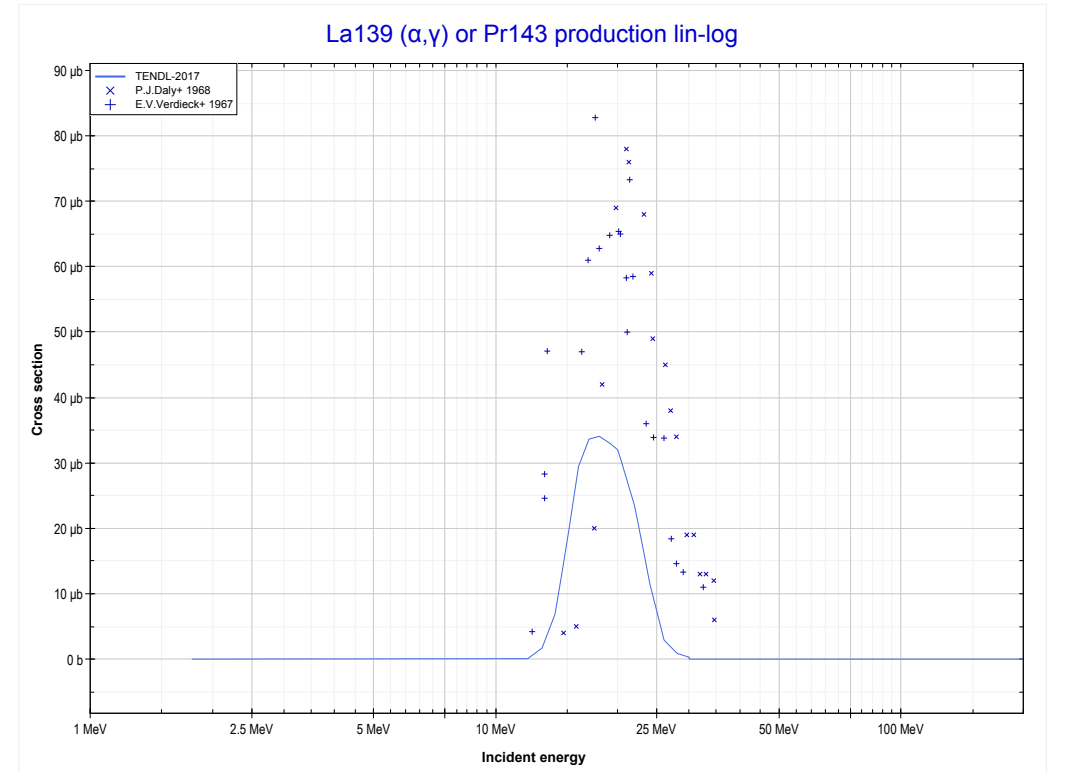
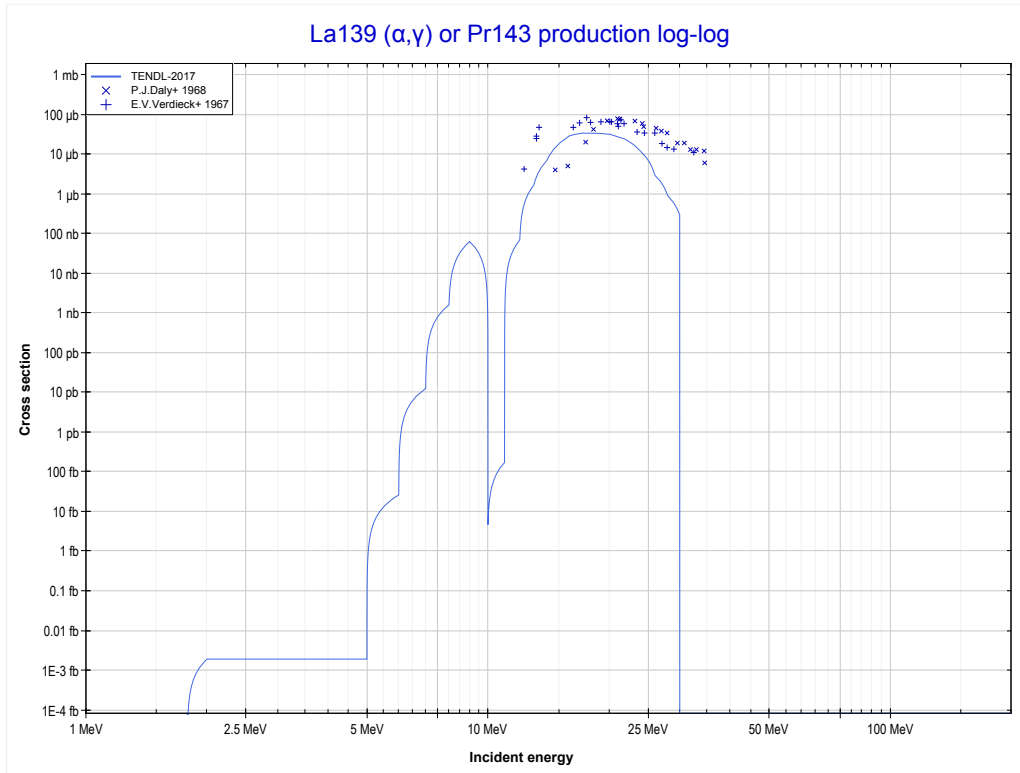
Reaction	Q-Value
La139(α,d)Ce141	-12503.41 keV
La139($\alpha,n+p$)Ce141	-14727.97 keV

<< 55-Cs-133	57-La-139	60-Nd-142 >>
<< MT28 ($\alpha, n+p$)	MT37 ($\alpha, 4n$) or MT5 (Pr139 production)	MT102 (α, γ) >>



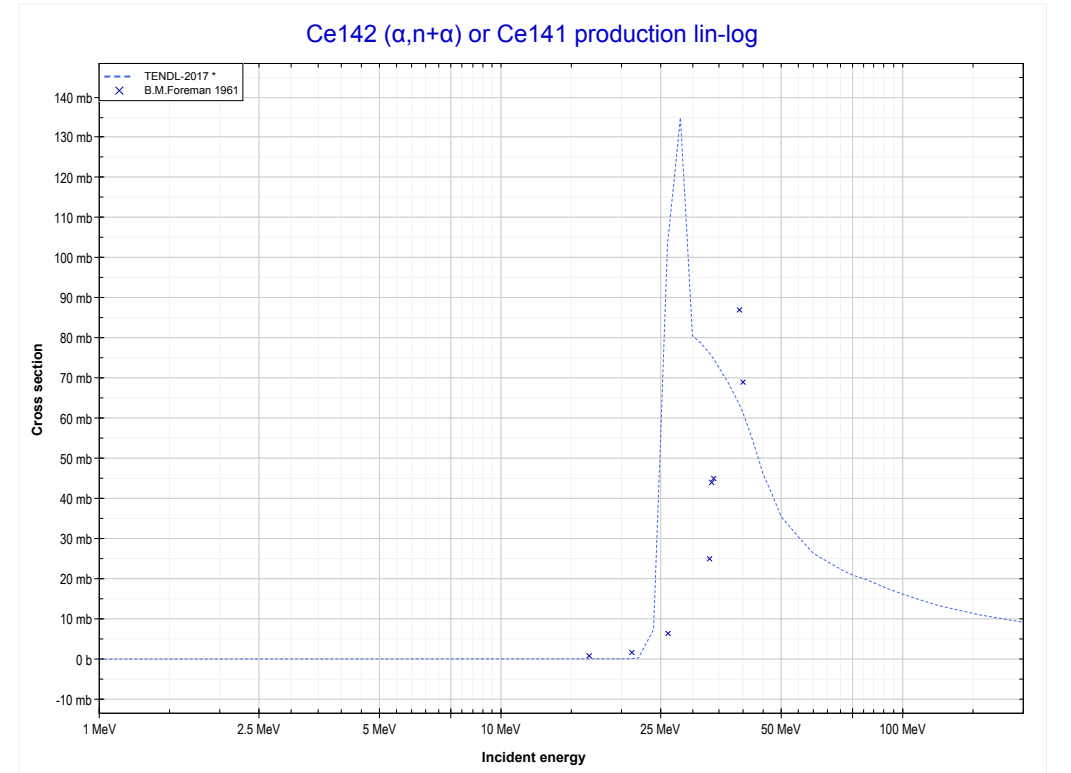
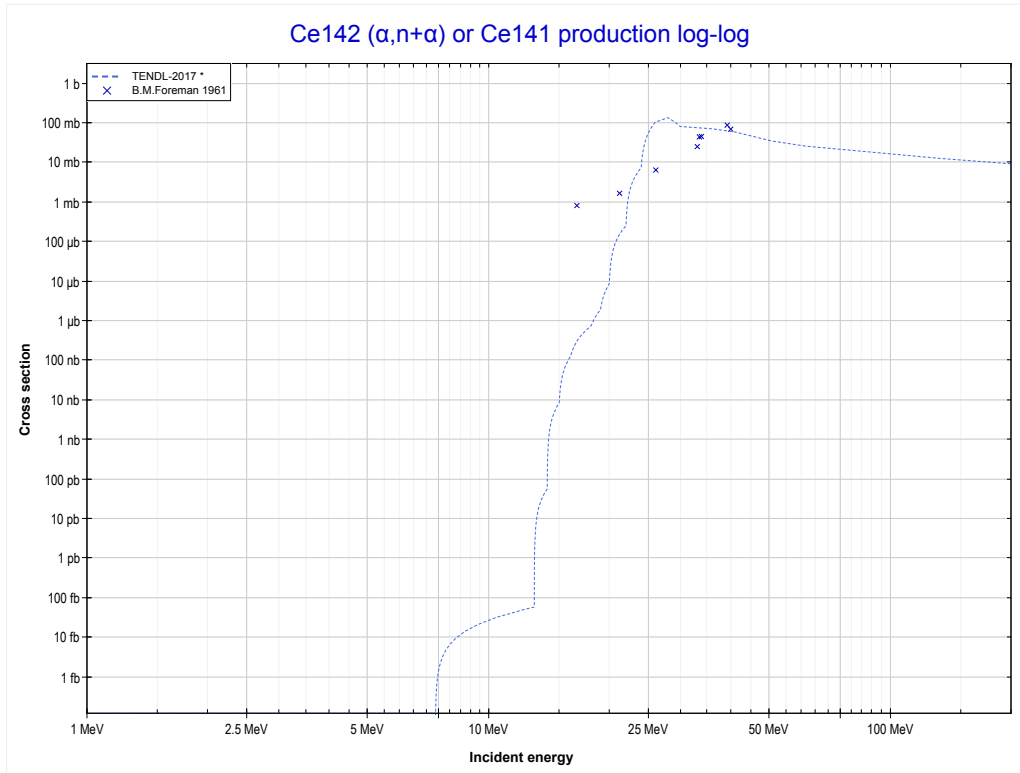
Reaction	Q-Value
La139($\alpha, 4n$)Pr139	-32267.95 keV

<< 53-I-127	57-La-139	62-Sm-144 >>
<< MT37 ($\alpha,4n$)	MT102 (α,γ) or MT5 (Pr143 production)	58-Ce-142 MT22 ($\alpha,n+\alpha$) >>



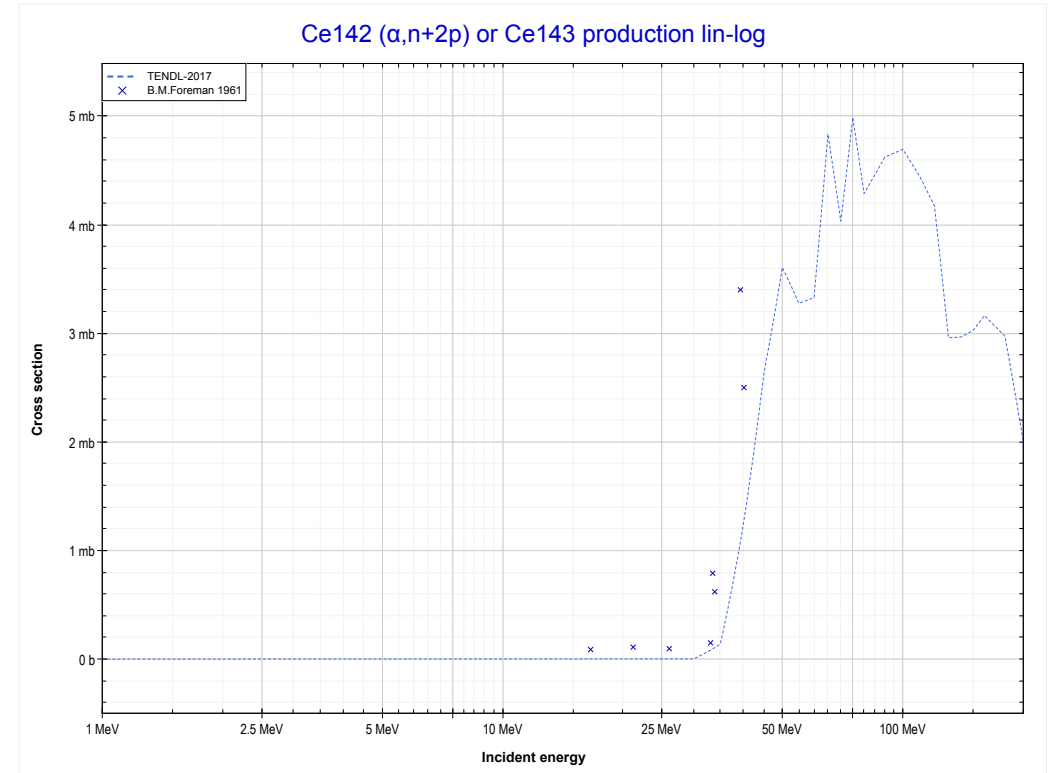
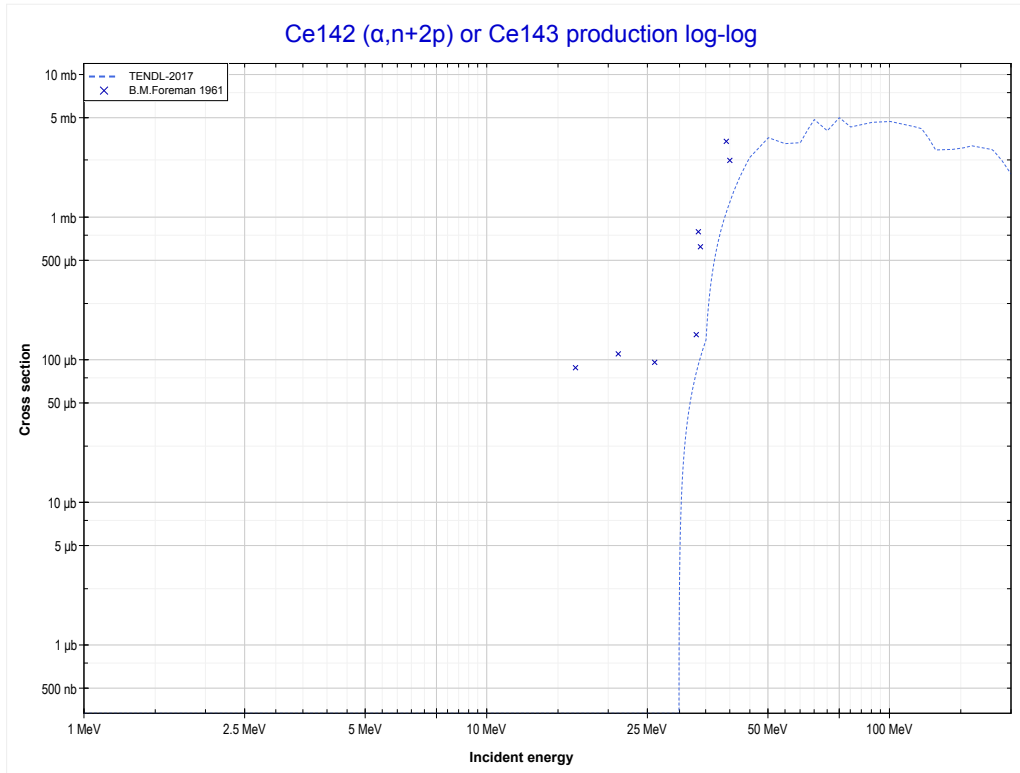
Reaction	Q-Value
La139(α,γ)Pr143	-1735.68 keV

<< 50-Sn-124	58-Ce-142	60-Nd-142 >>
<< 57-La-139 MT102 (α,γ)	MT22 ($\alpha,n+\alpha$) or MT5 (Ce141 production)	MT44 ($\alpha,n+2p$) >>



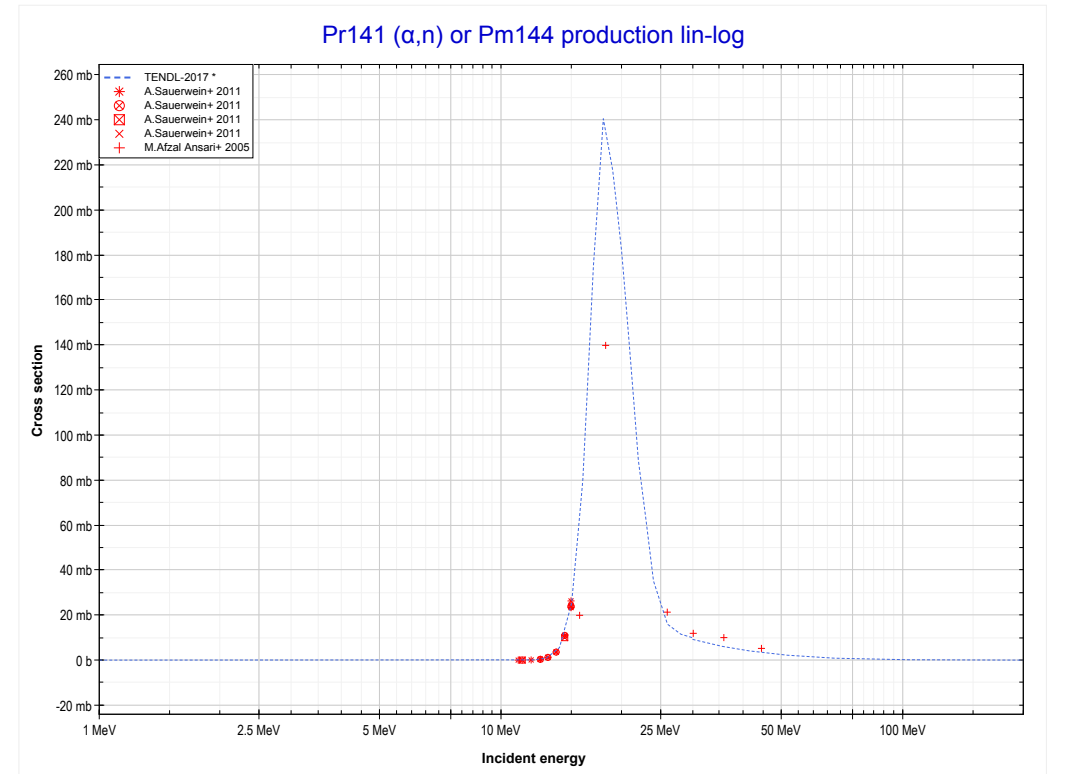
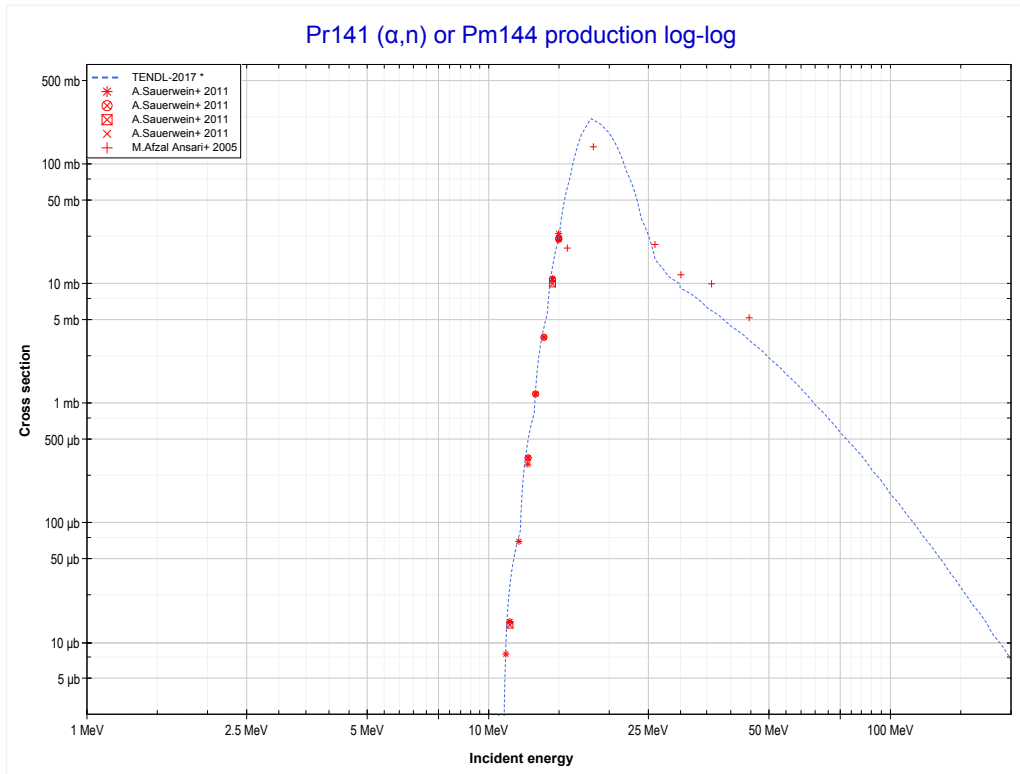
Reaction	Q-Value
Ce142($\alpha,n+\alpha$)Ce141	-7168.02 keV
Ce142($\alpha,d+t$)Ce141	-24757.31 keV
Ce142($\alpha,n+p+t$)Ce141	-26981.88 keV
Ce142($\alpha,2n+He3$)Ce141	-27745.63 keV
Ce142($\alpha,n+2d$)Ce141	-31014.54 keV
Ce142($\alpha,2n+p+d$)Ce141	-33239.11 keV
Ce142($\alpha,3n+2p$)Ce141	-35463.68 keV

<< 50-Sn-124	58-Ce-142	
<< MT22 ($\alpha, n+\alpha$)	MT44 ($\alpha, n+2p$) or MT5 (Ce143 production)	59-Pr-141 MT4 (α, n) >>



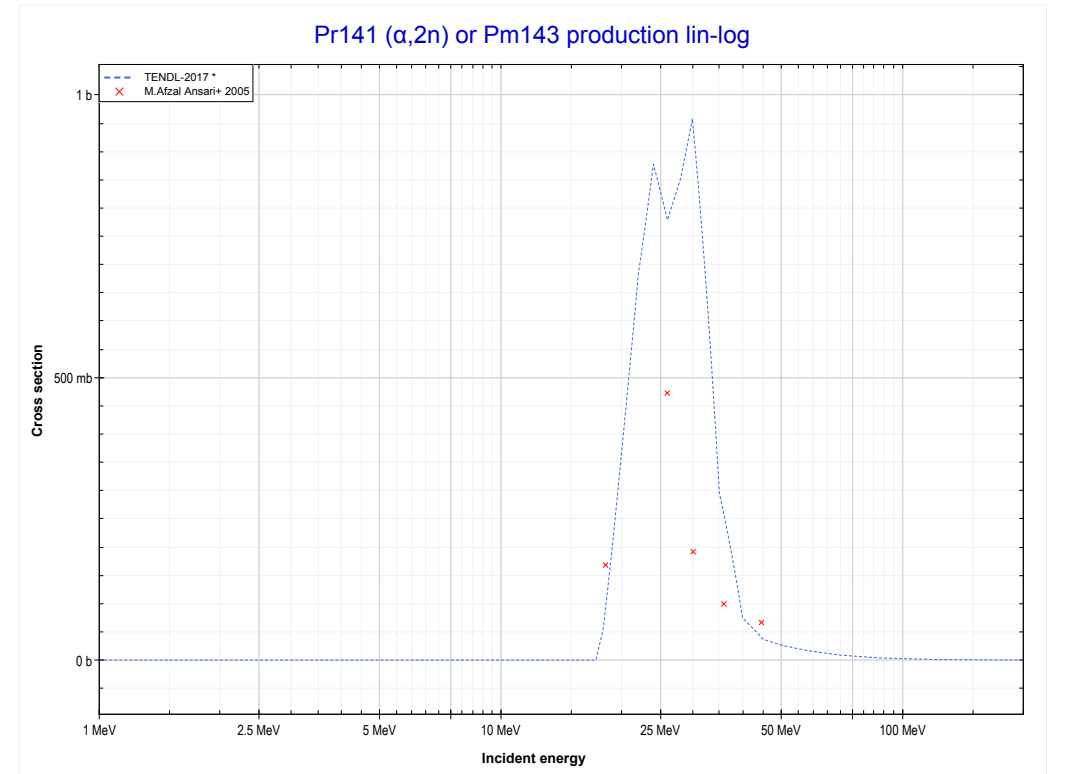
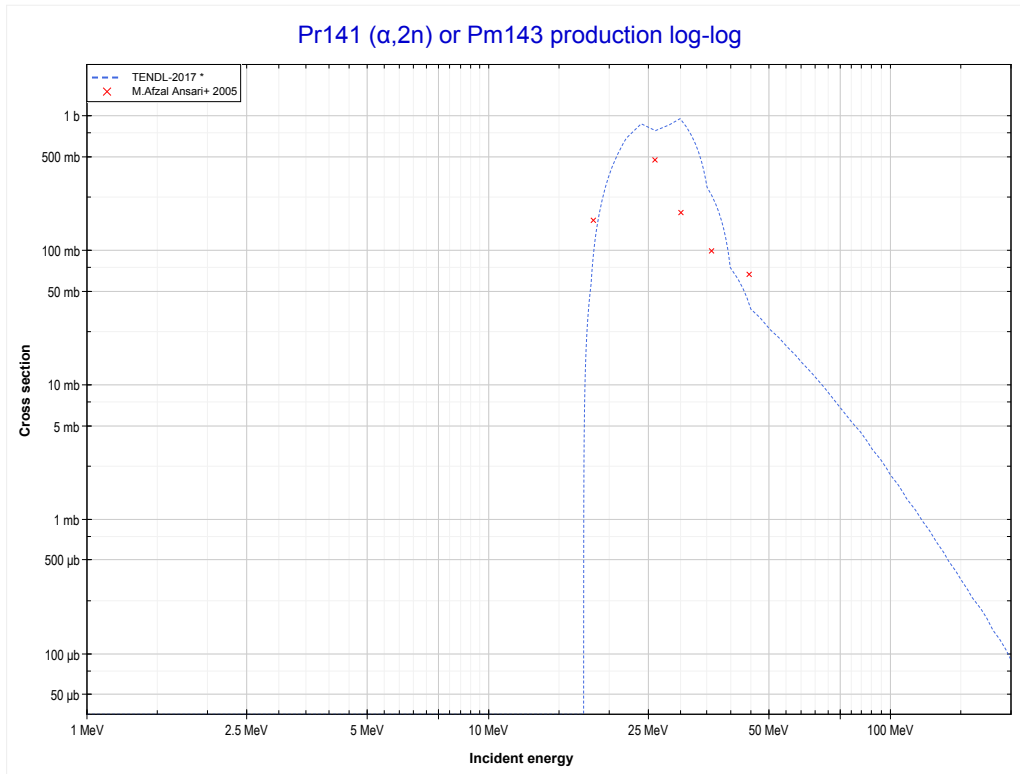
Reaction	Q-Value
Ce142($\alpha, He3$)Ce143	-15432.80 keV
Ce142($\alpha, p+d$)Ce143	-20926.28 keV
Ce142($\alpha, n+2p$)Ce143	-23150.84 keV

<< 57-La-139	59-Pr-141	60-Nd-150 >>
<< 58-Ce-142 MT44 ($\alpha, n+2p$)	MT4 (α, n) or MT5 (Pm144 production)	MT16 ($\alpha, 2n$) >>



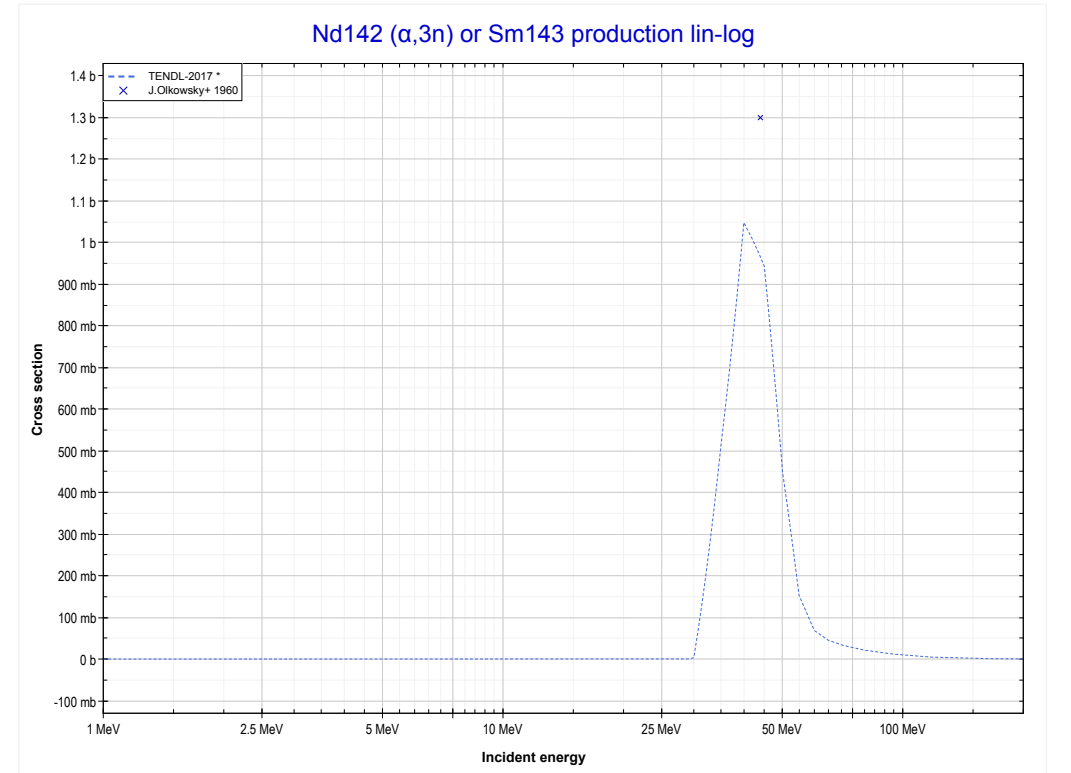
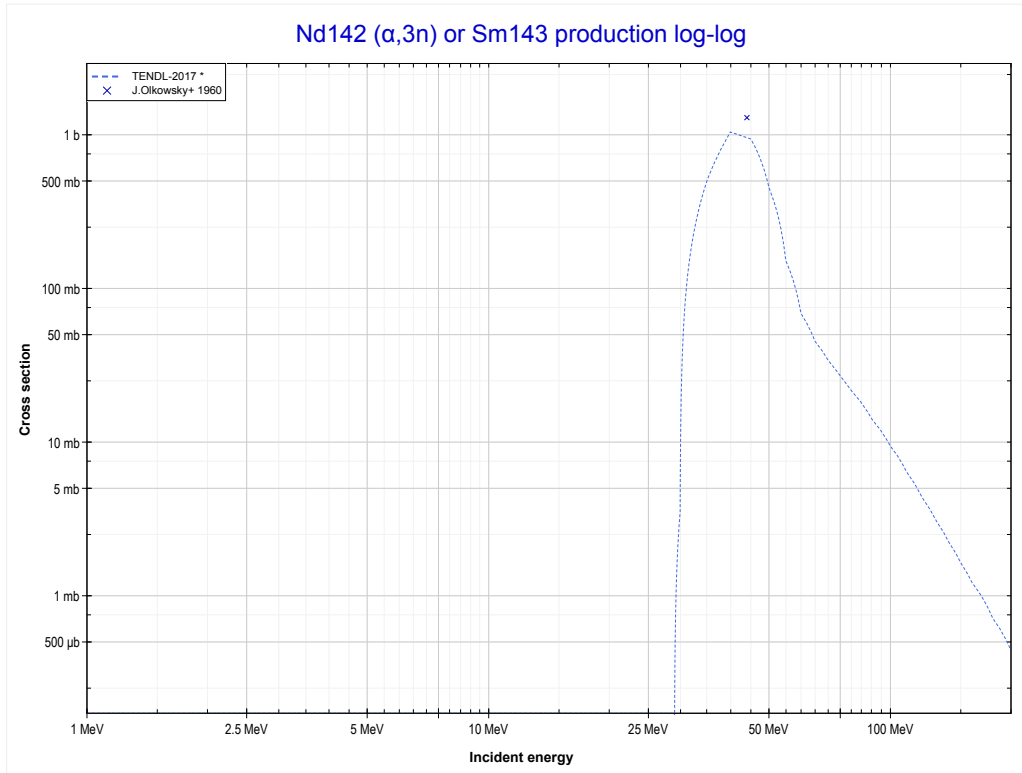
Reaction	Q-Value
Pr141(α, n)Pm144	-10246.80 keV

<< 56-Ba-135	59-Pr-141	62-Sm-154 >>
<< MT4 (α,n)	MT16 ($\alpha,2n$) or MT5 (Pm143 production)	60-Nd-142 MT17 ($\alpha,3n$) >>



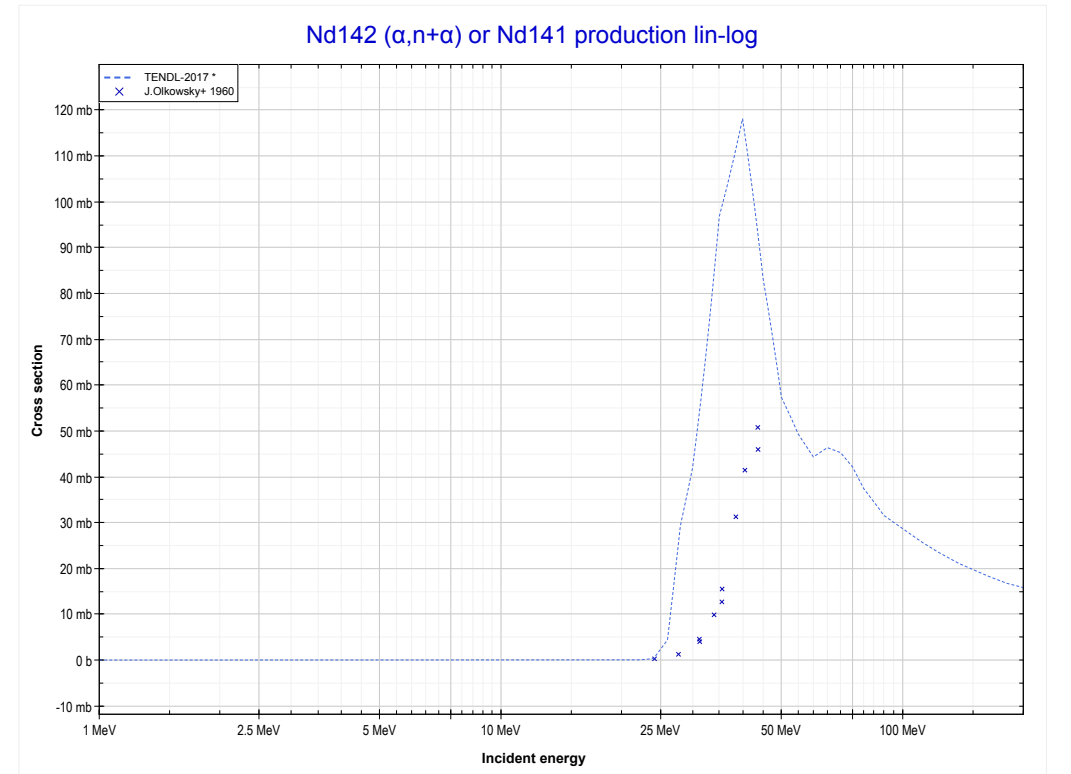
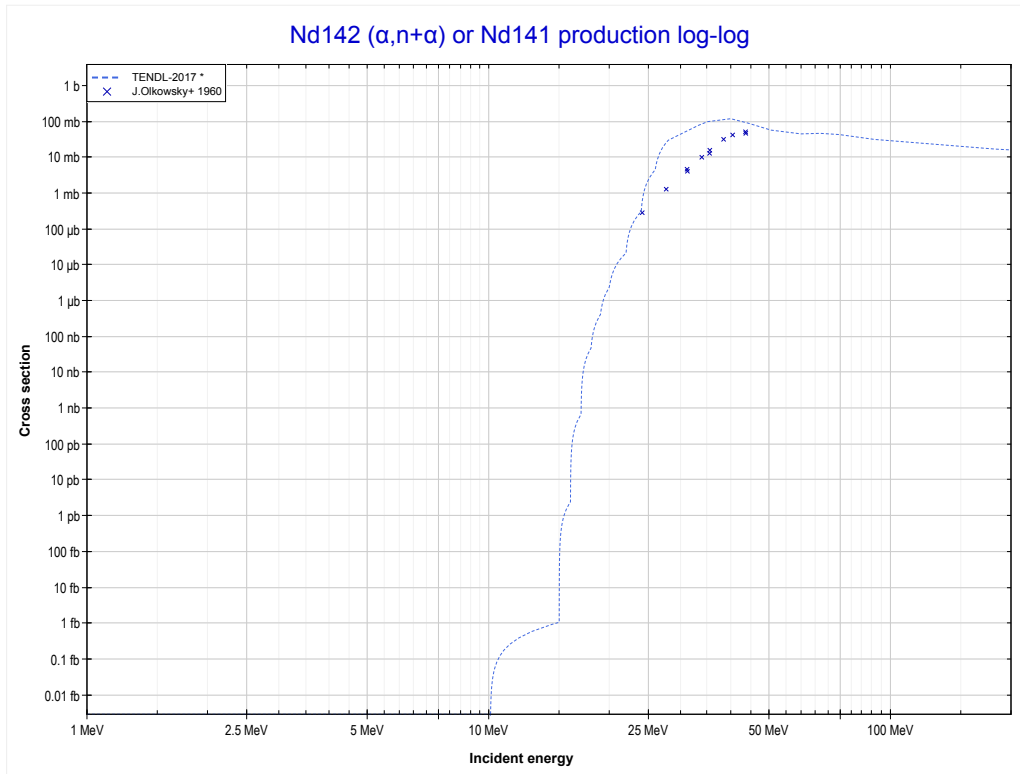
Reaction	Q-Value
Pr141($\alpha,2n$)Pm143	-16774.12 keV

<< 57-La-139	60-Nd-142	65-Tb-159 >>
<< 59-Pr-141 MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Sm143 production)	MT22 ($\alpha,n+\alpha$) >>



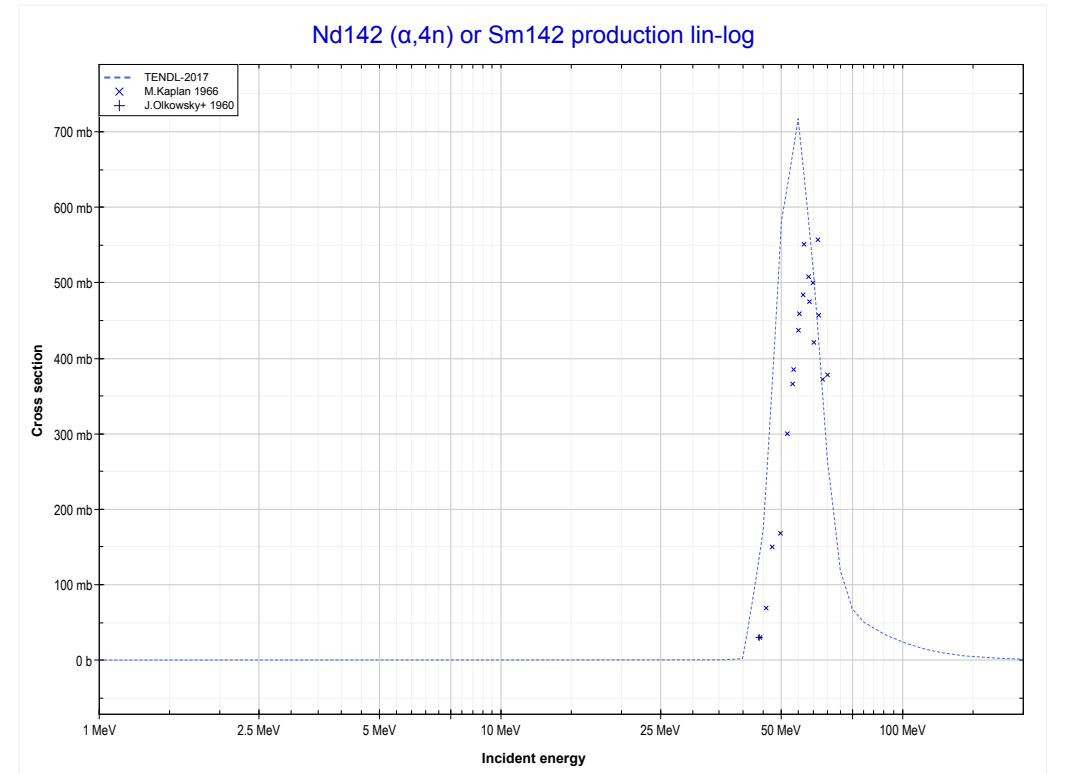
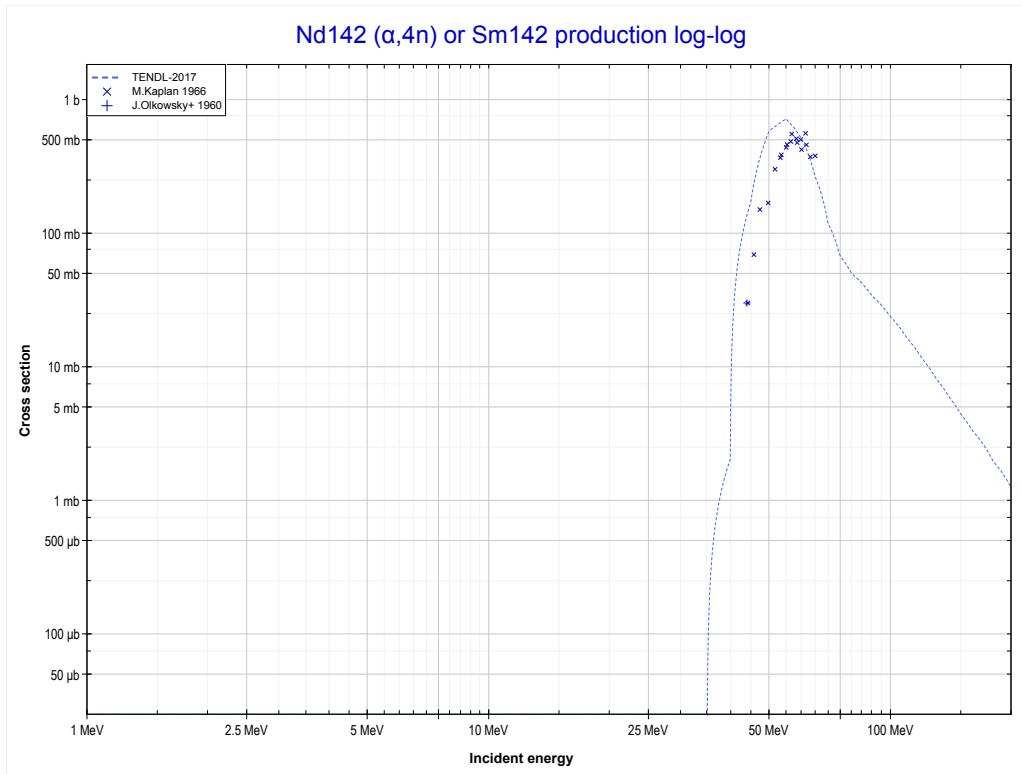
Reaction	Q-Value
Nd142($\alpha,3n$)Sm143	-28221.94 keV

<< 58-Ce-142	60-Nd-142	69-Tm-169 >>
<< MT17 ($\alpha,3n$)	MT22 ($\alpha,n+\alpha$) or MT5 (Nd141 production)	MT37 ($\alpha,4n$) >>



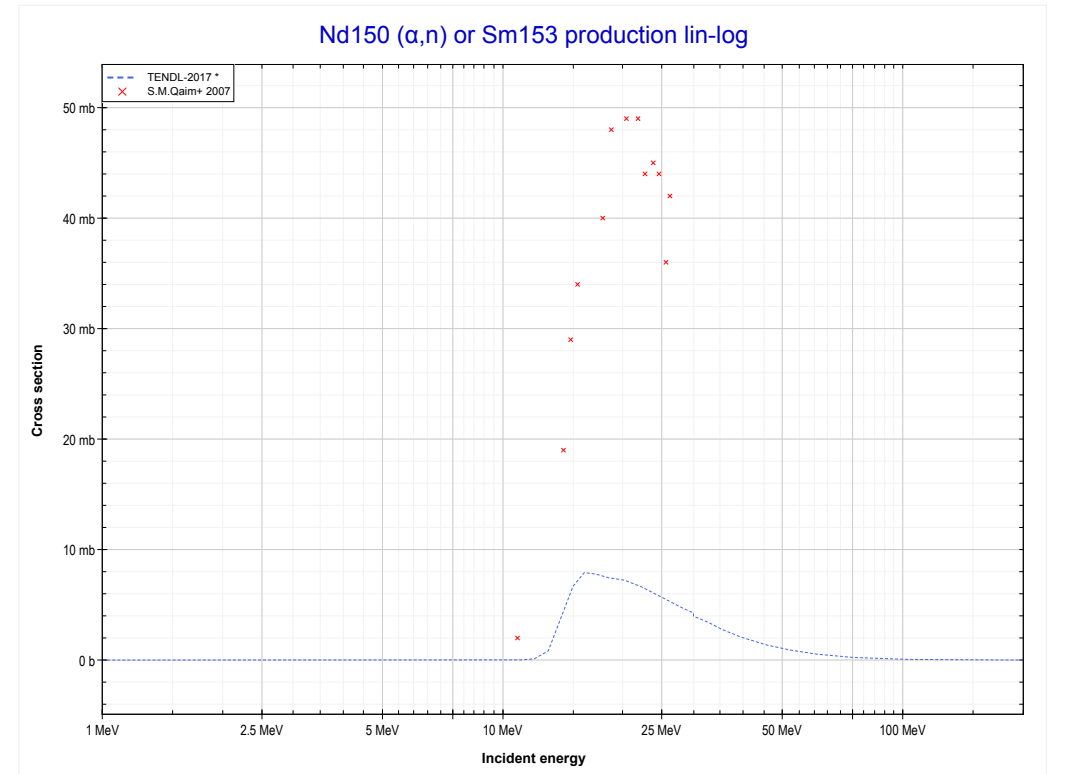
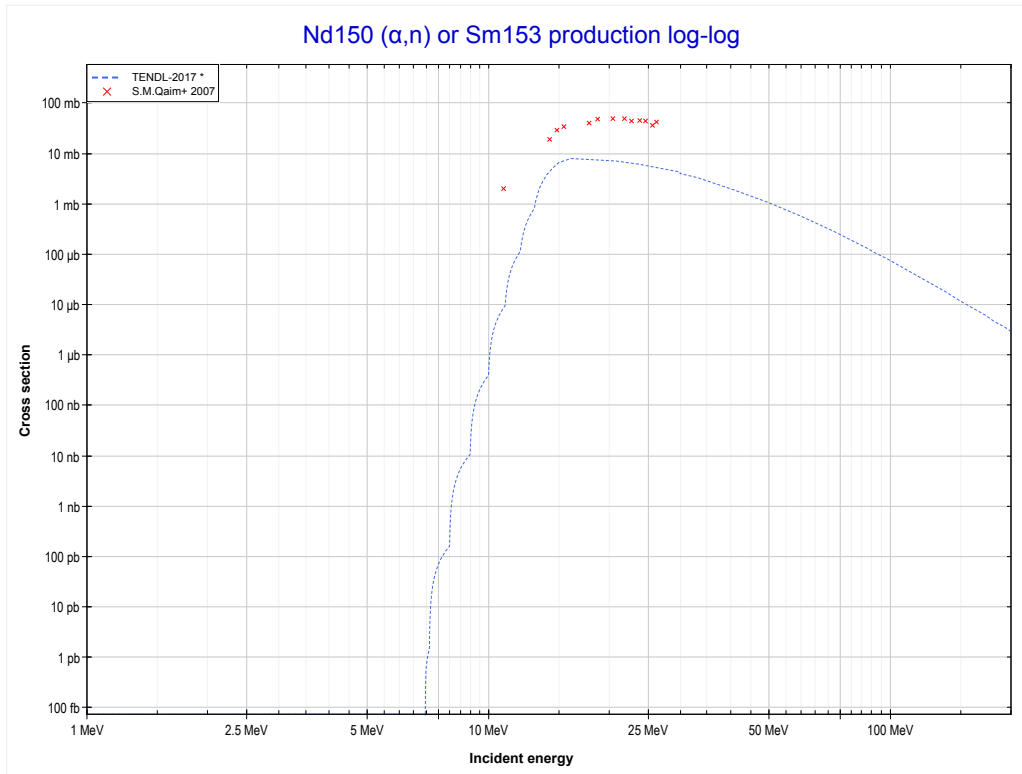
Reaction	Q-Value
Nd142($\alpha,n+\alpha$)Nd141	-9828.22 keV
Nd142($\alpha,d+t$)Nd141	-27417.51 keV
Nd142($\alpha,n+p+t$)Nd141	-29642.08 keV
Nd142($\alpha,2n+He3$)Nd141	-30405.83 keV
Nd142($\alpha,n+2d$)Nd141	-33674.74 keV
Nd142($\alpha,2n+p+d$)Nd141	-35899.31 keV
Nd142($\alpha,3n+2p$)Nd141	-38123.88 keV

<< 57-La-139	60-Nd-142	65-Tb-159 >>
<< MT22 ($\alpha, n + \alpha$)	MT37 ($\alpha, 4n$) or MT5 (Sm142 production)	60-Nd-150 MT4 (α, n) >>



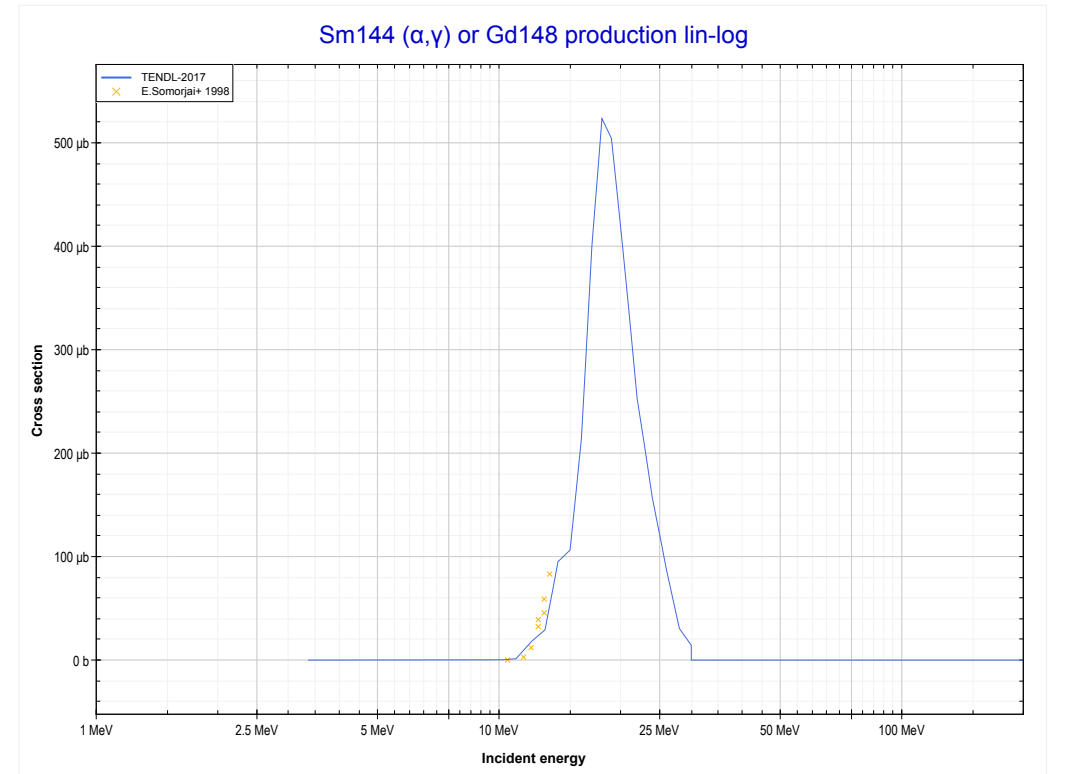
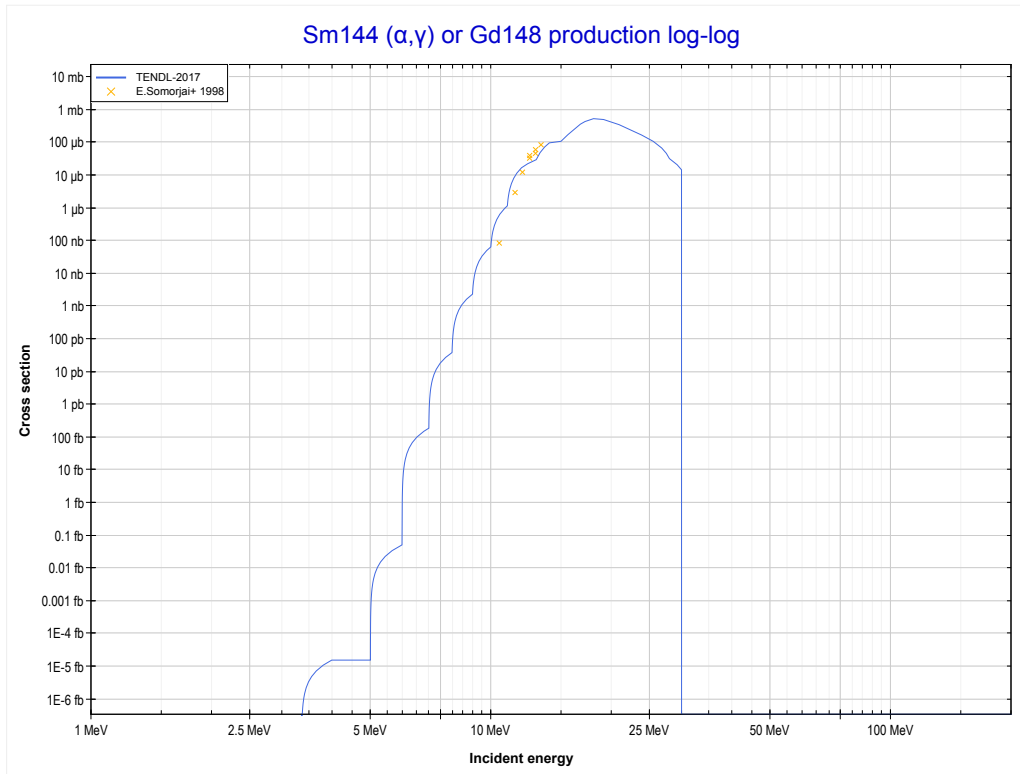
Reaction	Q-Value
Nd142($\alpha, 4n$)Sm142	-36823.25 keV

<< 59-Pr-141	60-Nd-150	65-Tb-159 >>
<< 60-Nd-142 MT37 ($\alpha,4n$)	MT4 (α,n) or MT5 (Sm153 production)	62-Sm-144 MT102 (α,γ) >>



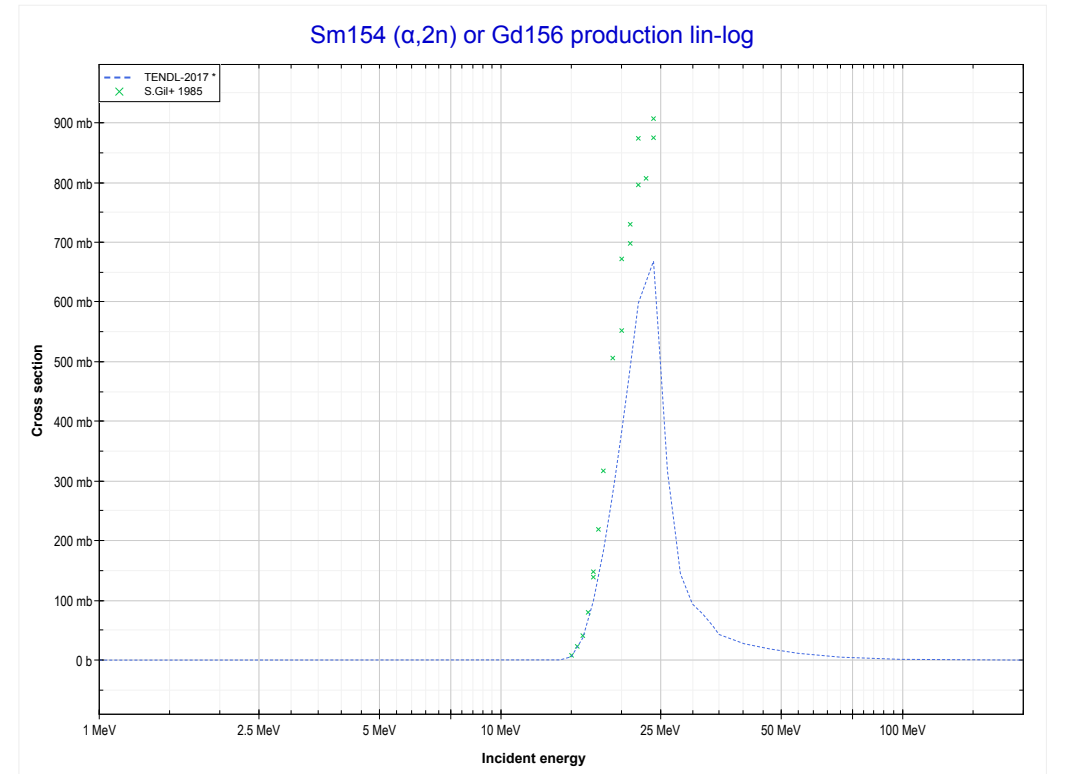
Reaction	Q-Value
Nd150(α,n)Sm153	-6766.40 keV

<< 57-La-139	62-Sm-144	79-Au-197 >>
<< 60-Nd-150 MT4 (α,n)	MT102 (α,γ) or MT5 (Gd148 production)	62-Sm-154 MT16 ($\alpha,2n$) >>



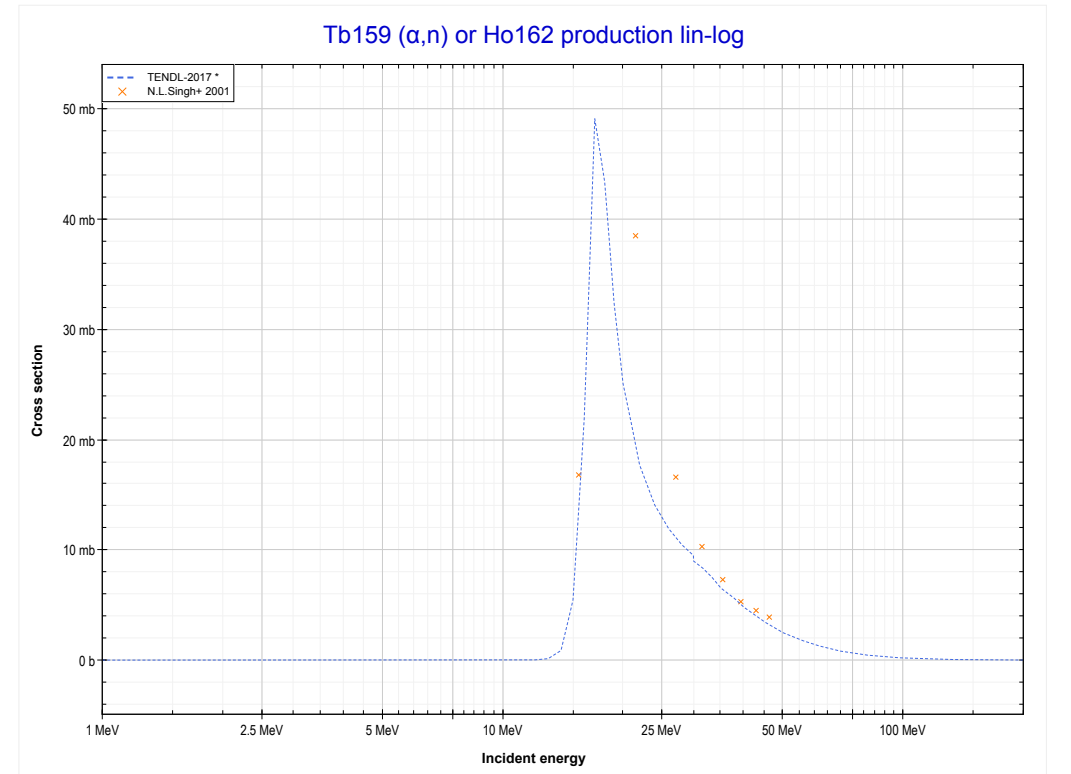
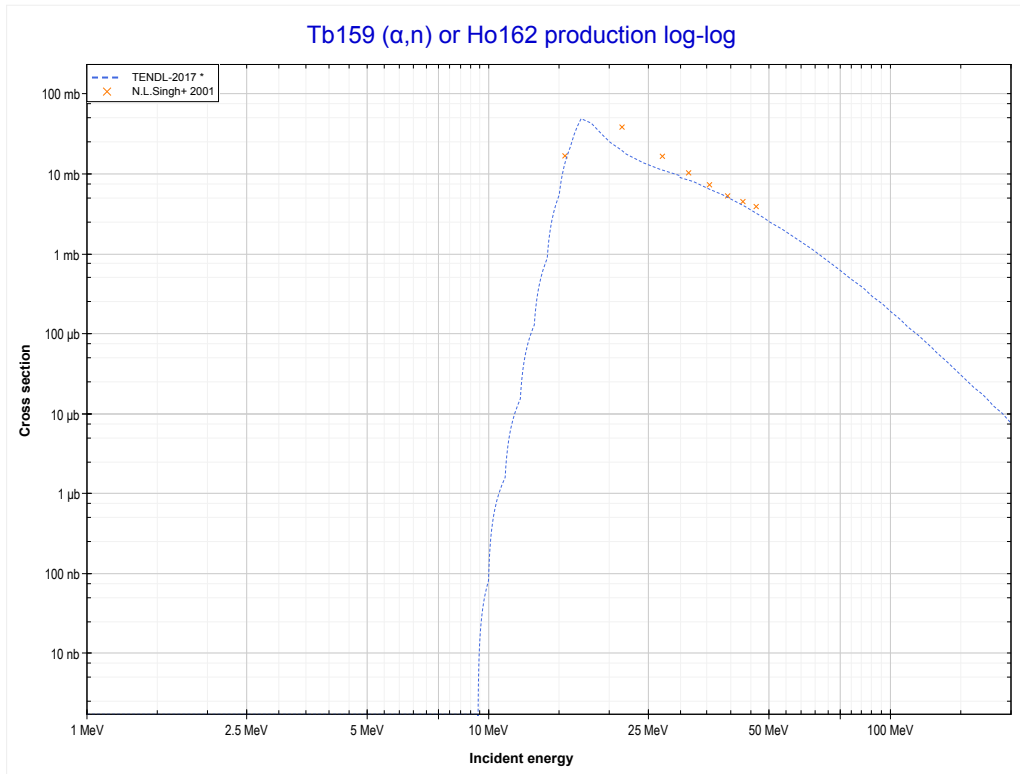
Reaction	Q-Value
Sm144(α,γ)Gd148	-3271.18 keV

<< 59-Pr-141	62-Sm-154	65-Tb-159 >>
<< 62-Sm-144 MT102 (α,γ)	MT16 ($\alpha,2n$) or MT5 (Gd156 production)	65-Tb-159 MT4 (α,n) >>



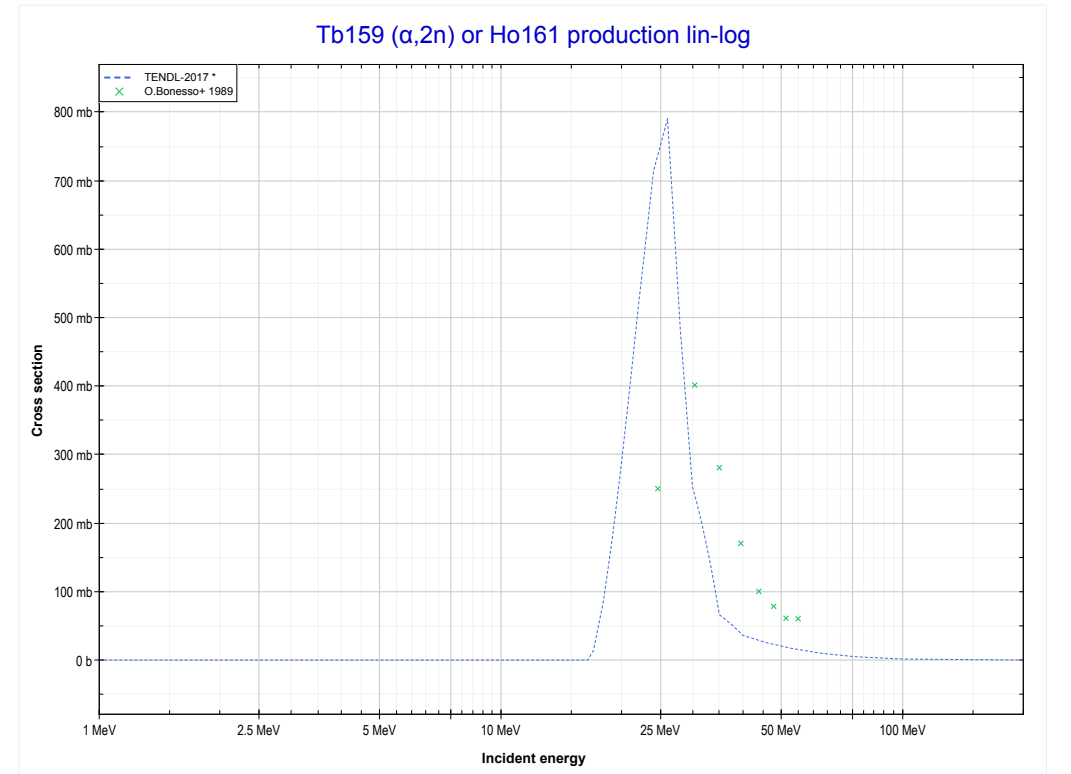
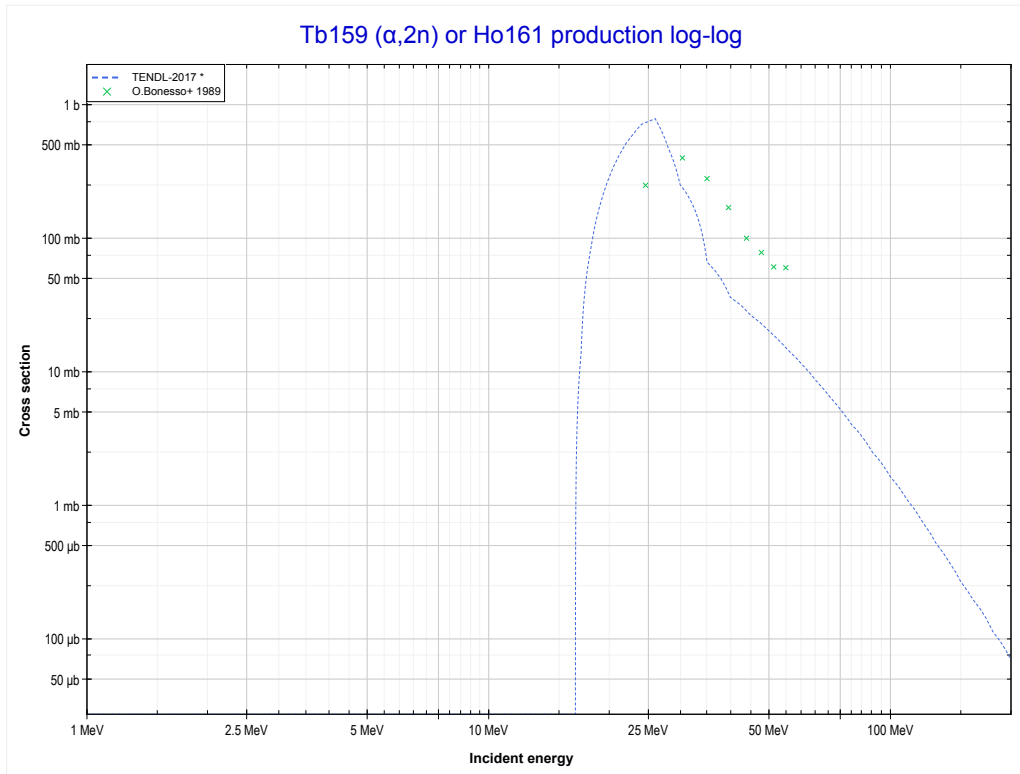
Reaction	Q-Value
Sm154($\alpha,2n$)Gd156	-13637.92 keV

<< 60-Nd-150	65-Tb-159	67-Ho-165 >>
<< 62-Sm-154 MT16 ($\alpha,2n$)	MT4 (α,n) or MT5 (Ho162 production)	MT16 ($\alpha,2n$) >>



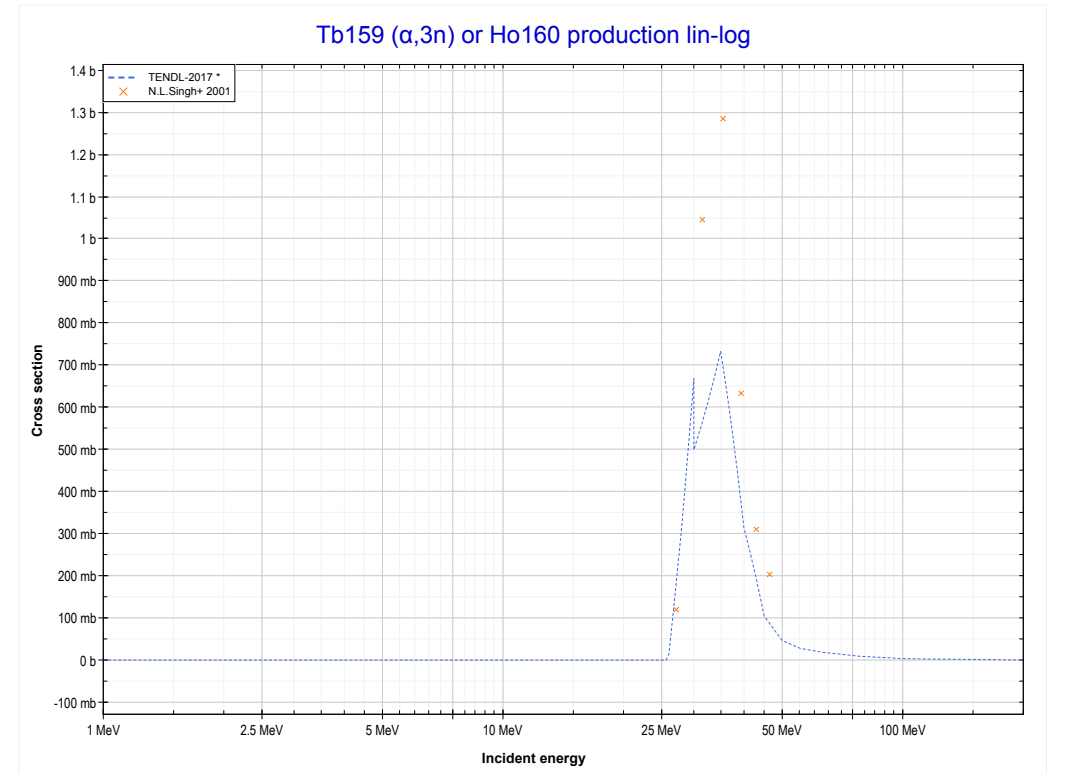
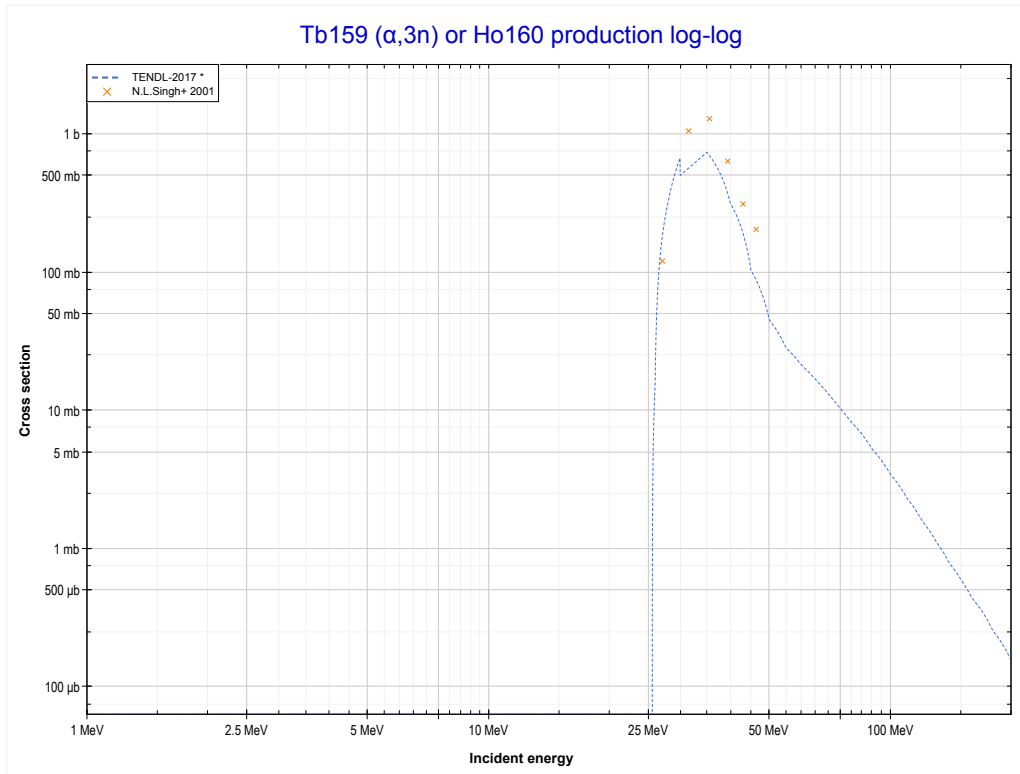
Reaction	Q-Value
Tb159(α,n)Ho162	-9137.00 keV

<< 62-Sm-154	65-Tb-159	67-Ho-165 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Ho161 production)	MT17 ($\alpha, 3n$) >>



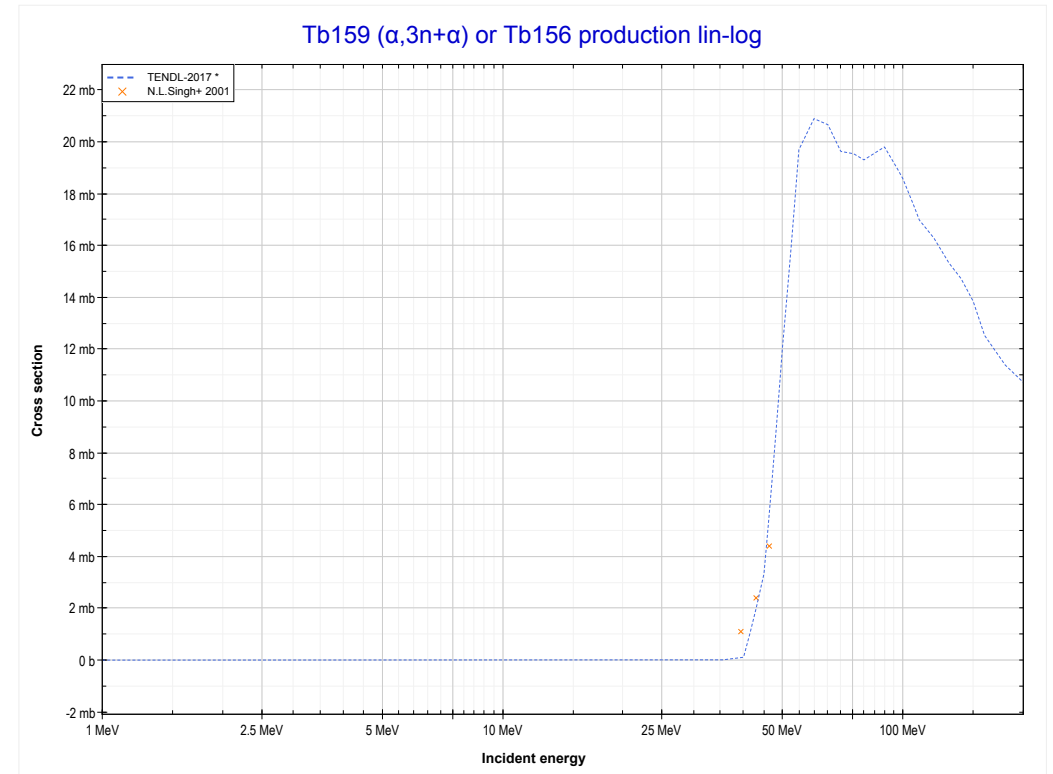
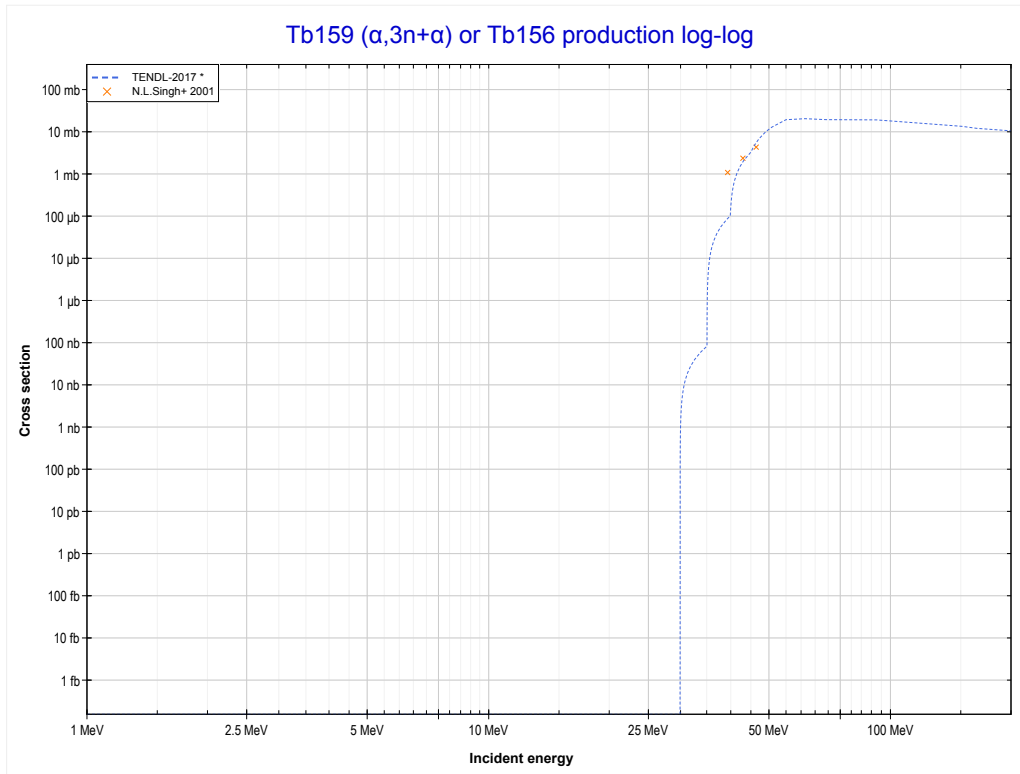
Reaction	Q-Value
Tb159($\alpha, 2n$)Ho161	-16052.82 keV

<< 60-Nd-142	65-Tb-159	67-Ho-165 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Ho160 production)	MT25 ($\alpha,3n+\alpha$) >>



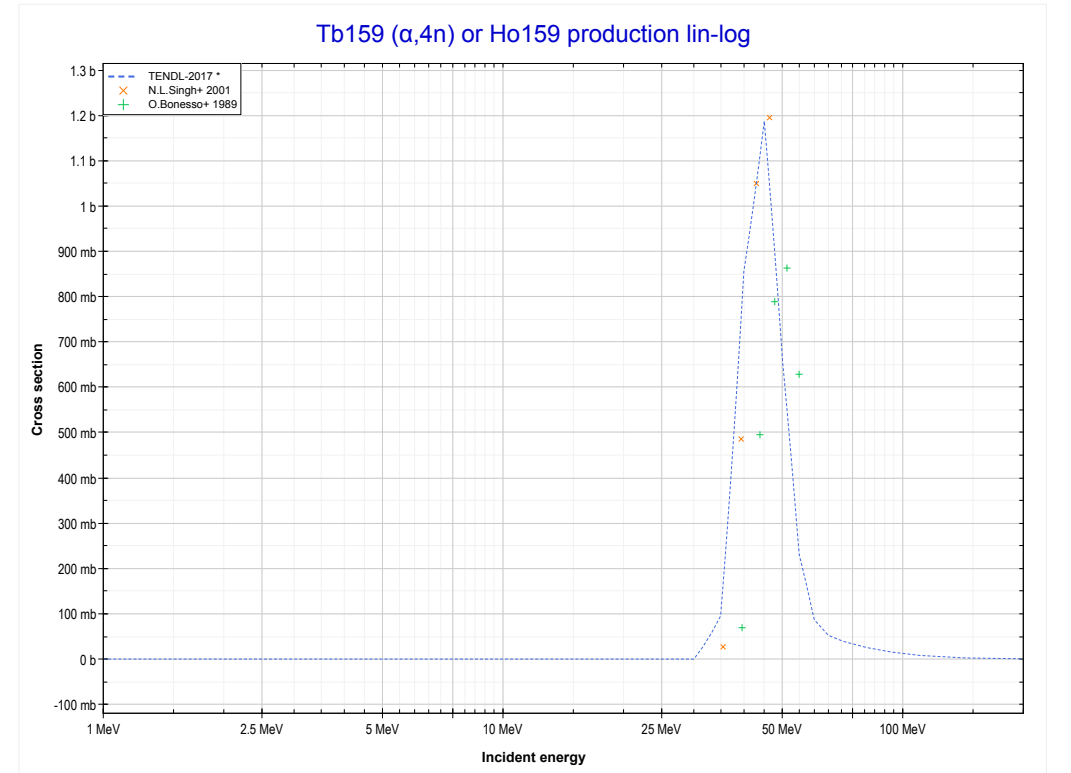
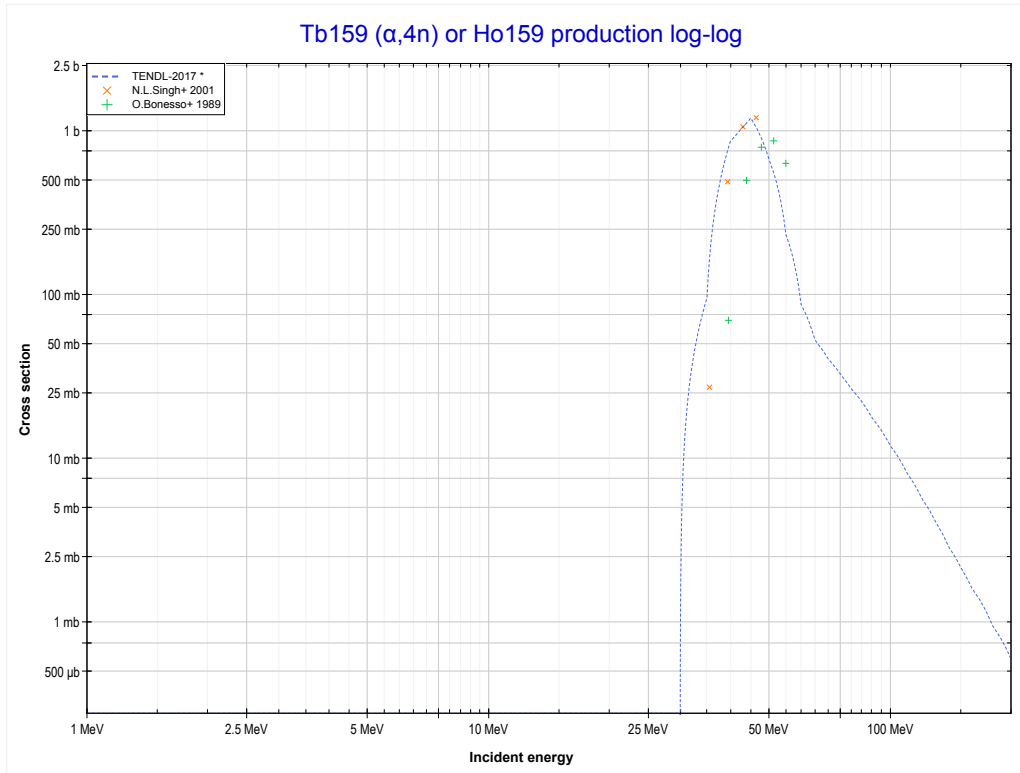
Reaction	Q-Value
Tb159($\alpha,3n$)Ho160	-24939.64 keV

<< 47-Ag-109	65-Tb-159	
<< MT17 ($\alpha,3n$)	MT25 ($\alpha,3n+\alpha$) or MT5 (Tb156 production)	MT37 ($\alpha,4n$) >>



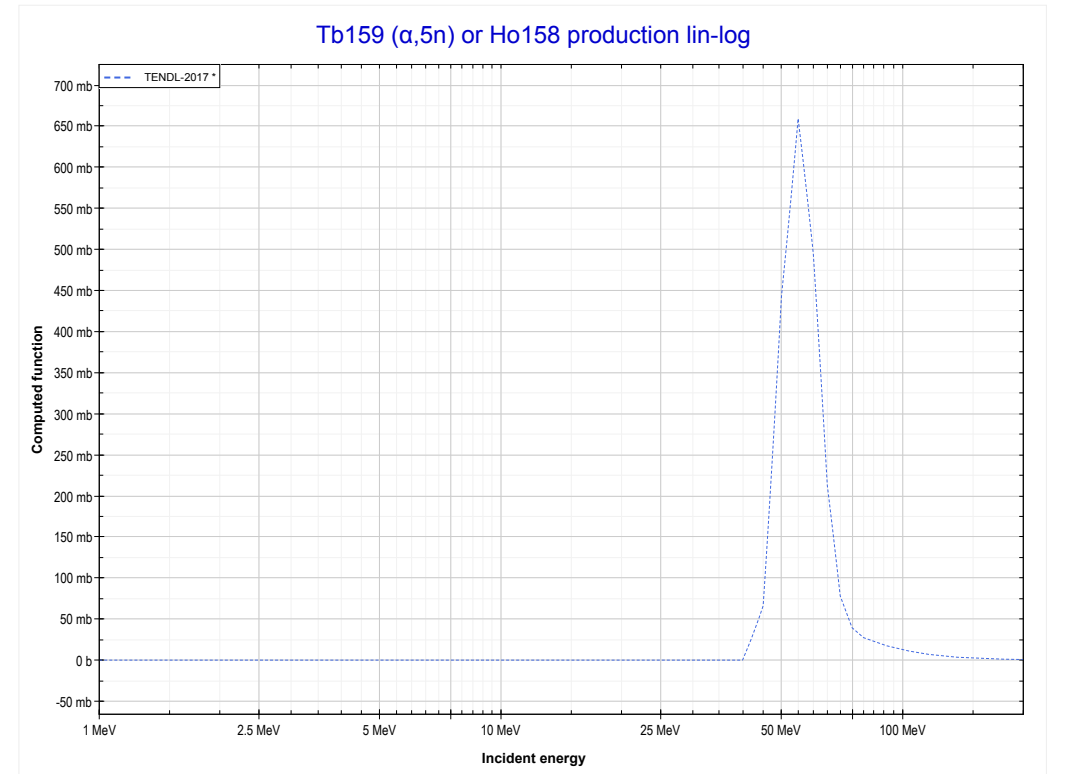
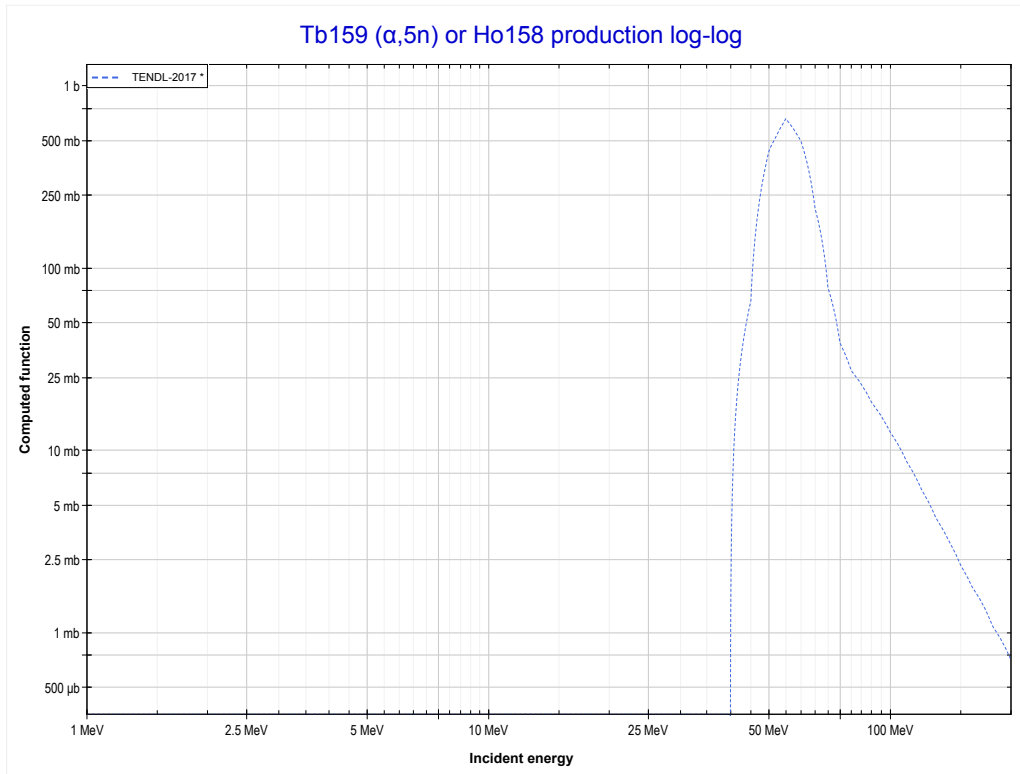
Reaction	Q-Value
Tb159($\alpha,3n+\alpha$)Tb156	-23655.55 keV
Tb159($\alpha,n+2t$)Tb156	-34987.61 keV
Tb159($\alpha,2n+d+t$)Tb156	-41244.85 keV
Tb159($\alpha,3n+p+t$)Tb156	-43469.41 keV
Tb159($\alpha,4n+He3$)Tb156	-44233.17 keV
Tb159($\alpha,3n+2d$)Tb156	-47502.08 keV
Tb159($\alpha,4n+p+d$)Tb156	-49726.64 keV
Tb159($\alpha,5n+2p$)Tb156	-51951.21 keV

<< 60-Nd-142	65-Tb-159	67-Ho-165 >>
<< MT25 ($\alpha, 3n+\alpha$)	MT37 ($\alpha, 4n$) or MT5 (Ho159 production)	MT152 ($\alpha, 5n$) >>



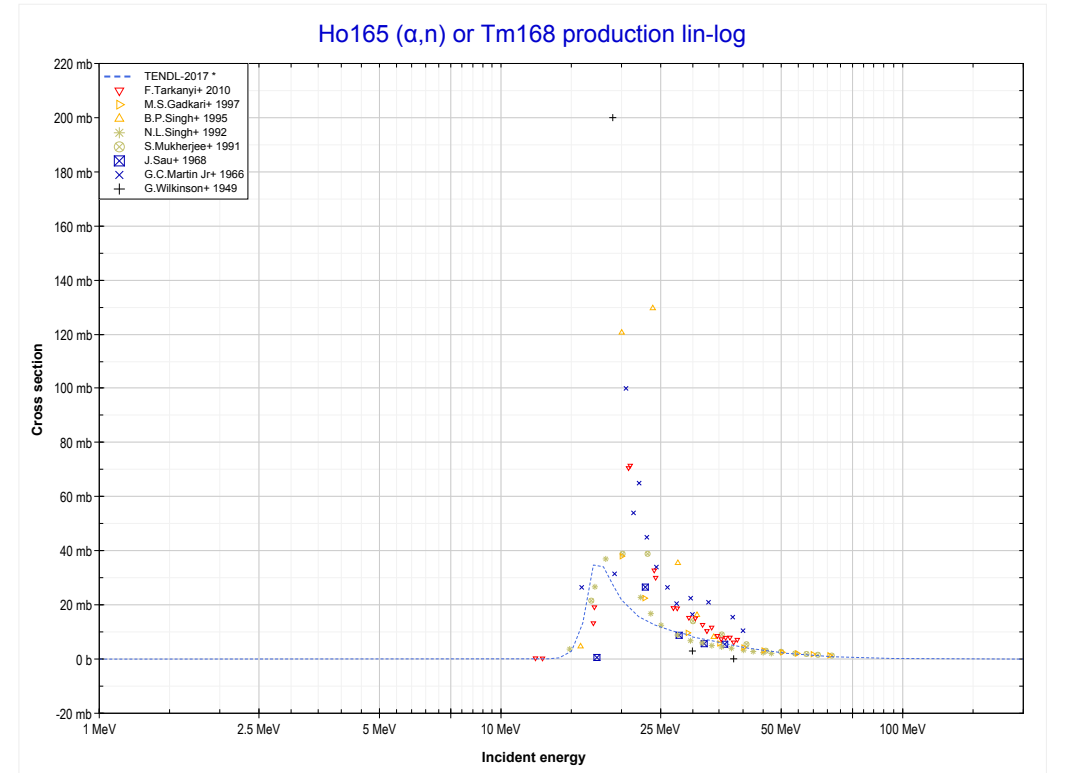
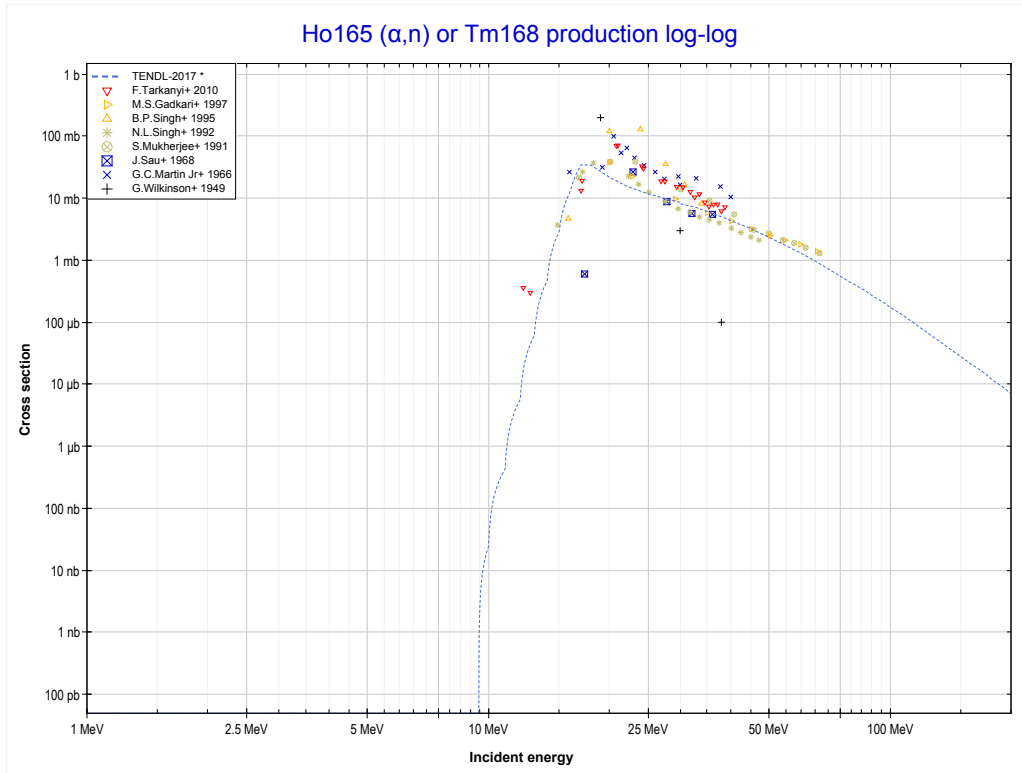
Reaction	Q-Value
Tb159($\alpha, 4n$)Ho159	-32062.95 keV

<< 48-Cd-114	65-Tb-159	69-Tm-169 >>
<< MT37 ($\alpha,4n$)	MT152 ($\alpha,5n$) or MT5 (Ho158 production)	67-Ho-165 MT4 (α,n) >>



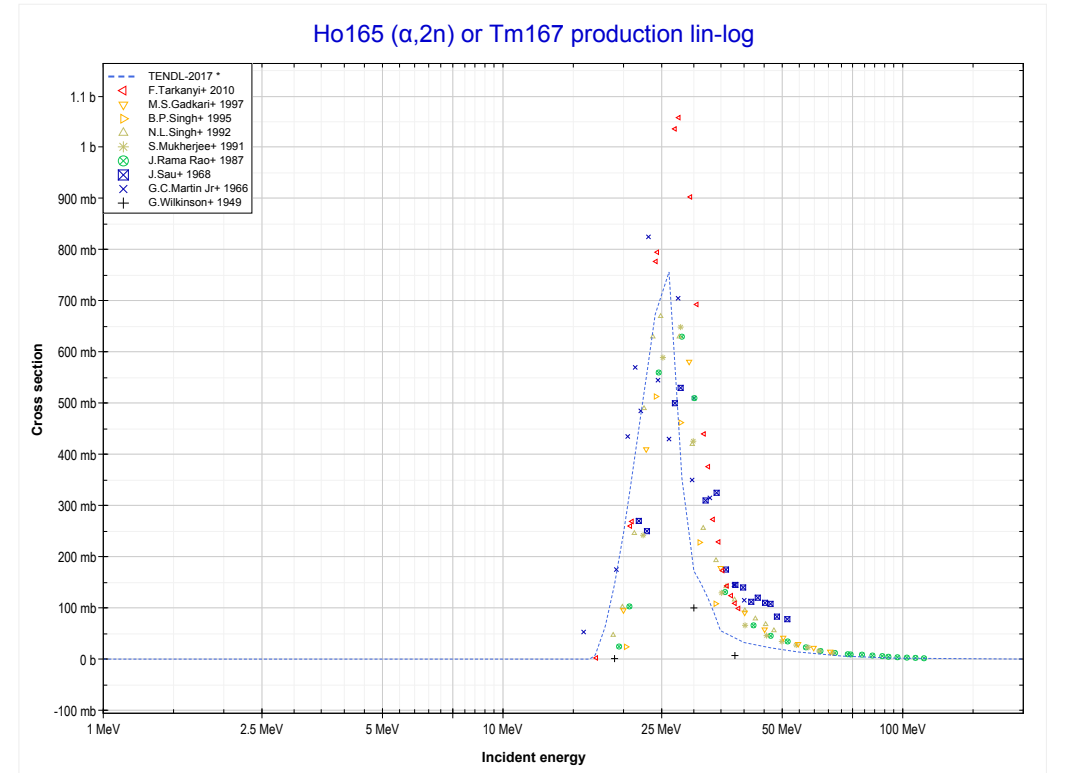
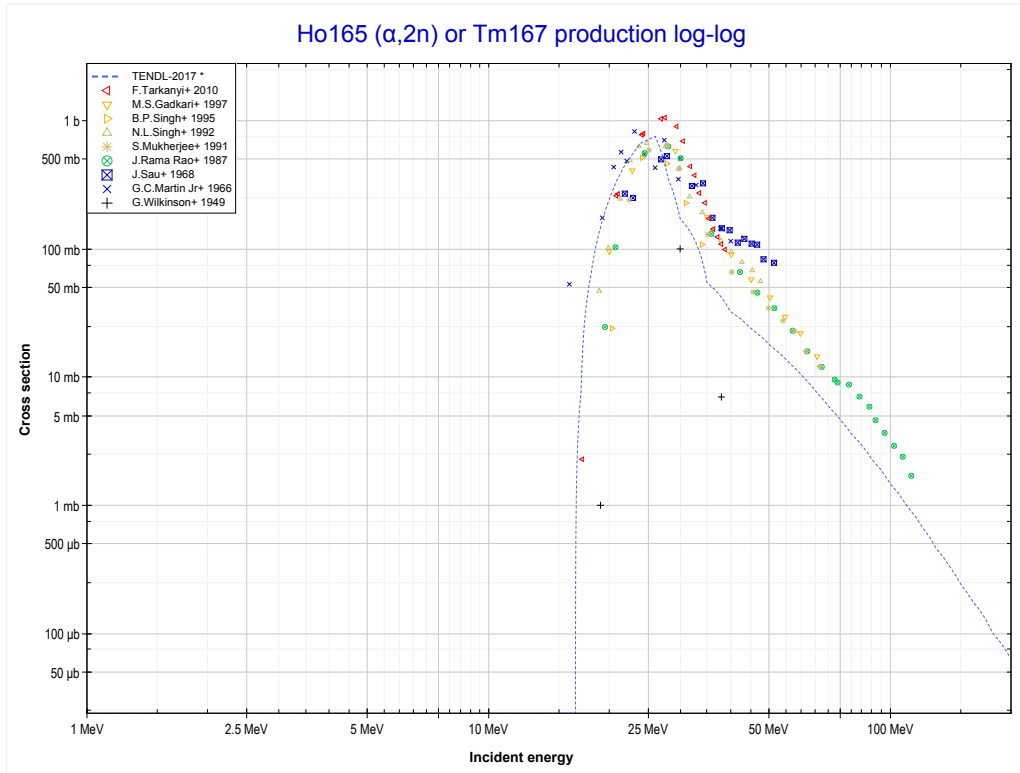
Reaction	Q-Value
Tb159($\alpha,5n$)Ho158	-41277.27 keV

<< 65-Tb-159	67-Ho-165	68-Er-164 >>
<< 65-Tb-159 MT152 ($\alpha,5n$)	MT4 (α,n) or MT5 (Tm168 production)	MT16 ($\alpha,2n$) >>



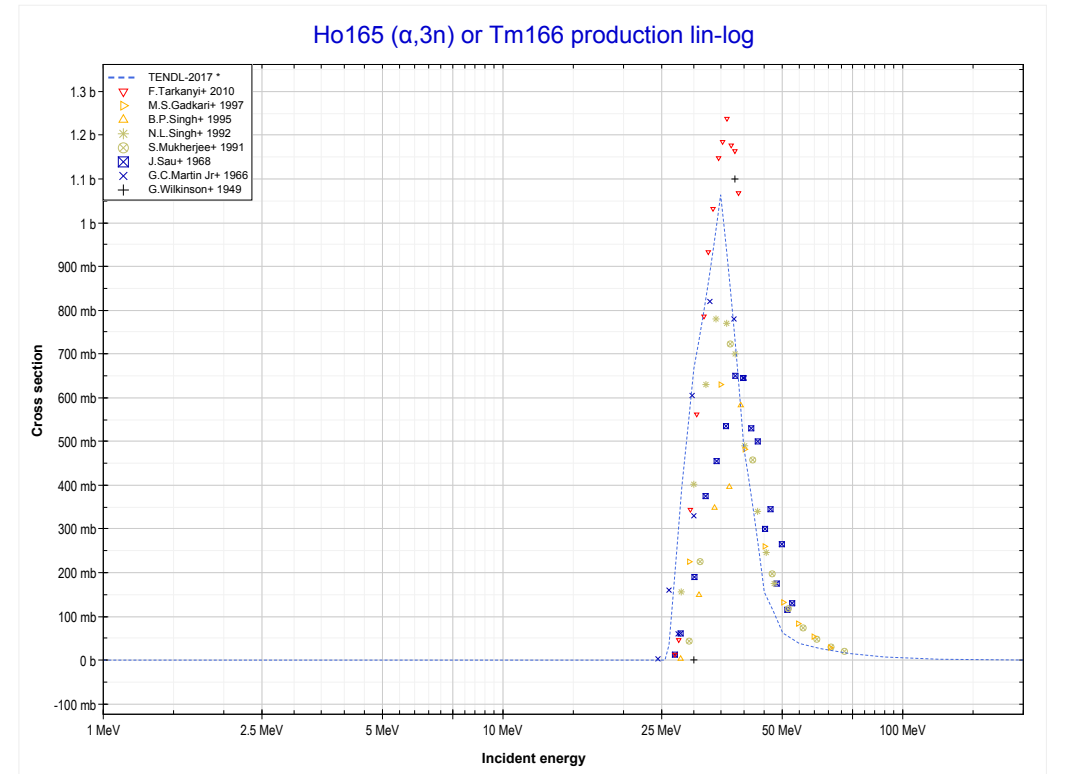
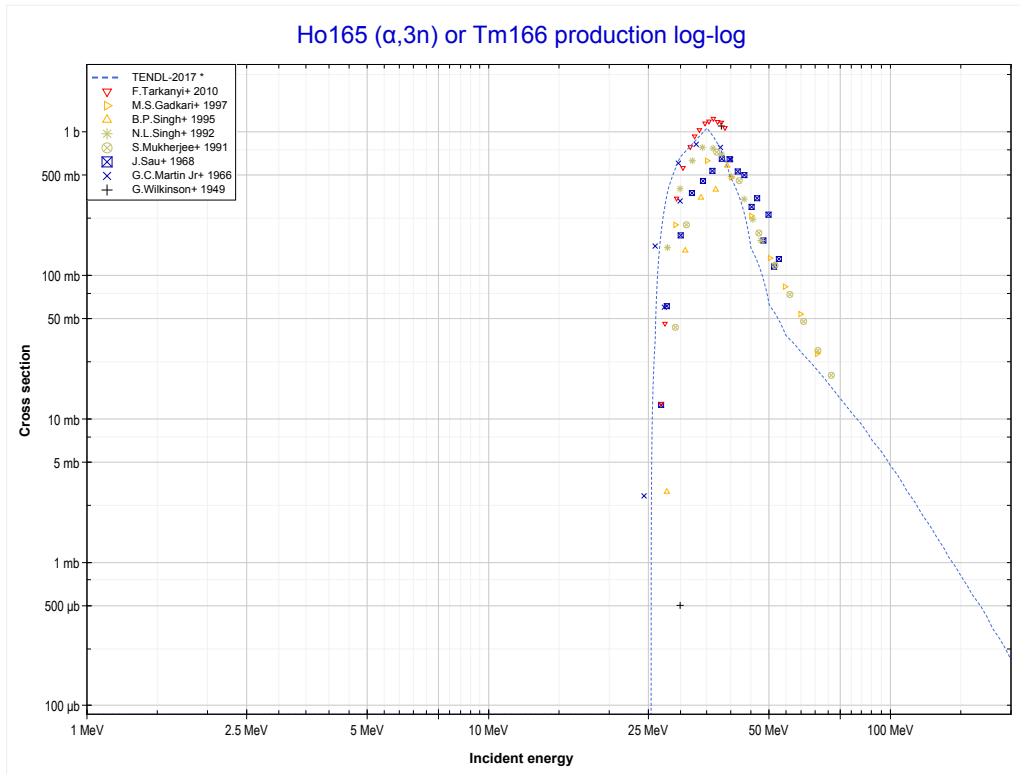
Reaction	Q-Value
Ho165(α,n)Tm168	-9231.40 keV

<< 65-Tb-159	67-Ho-165	68-Er-164 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Tm167 production)	MT17 ($\alpha, 3n$) >>



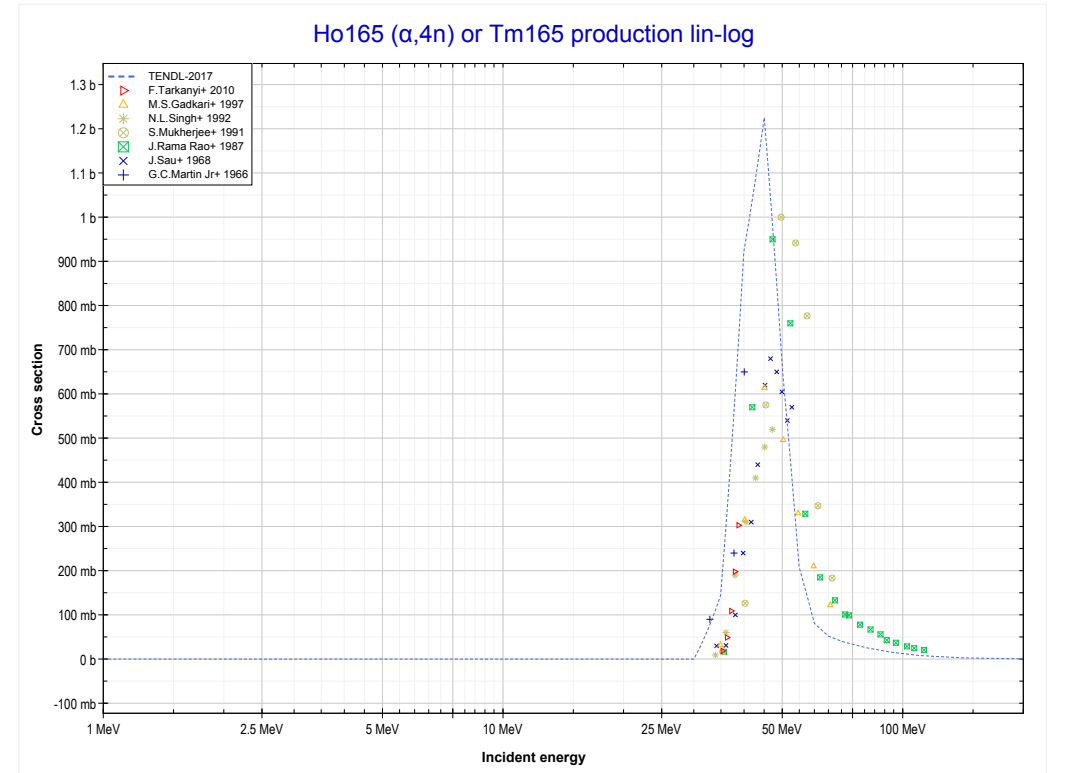
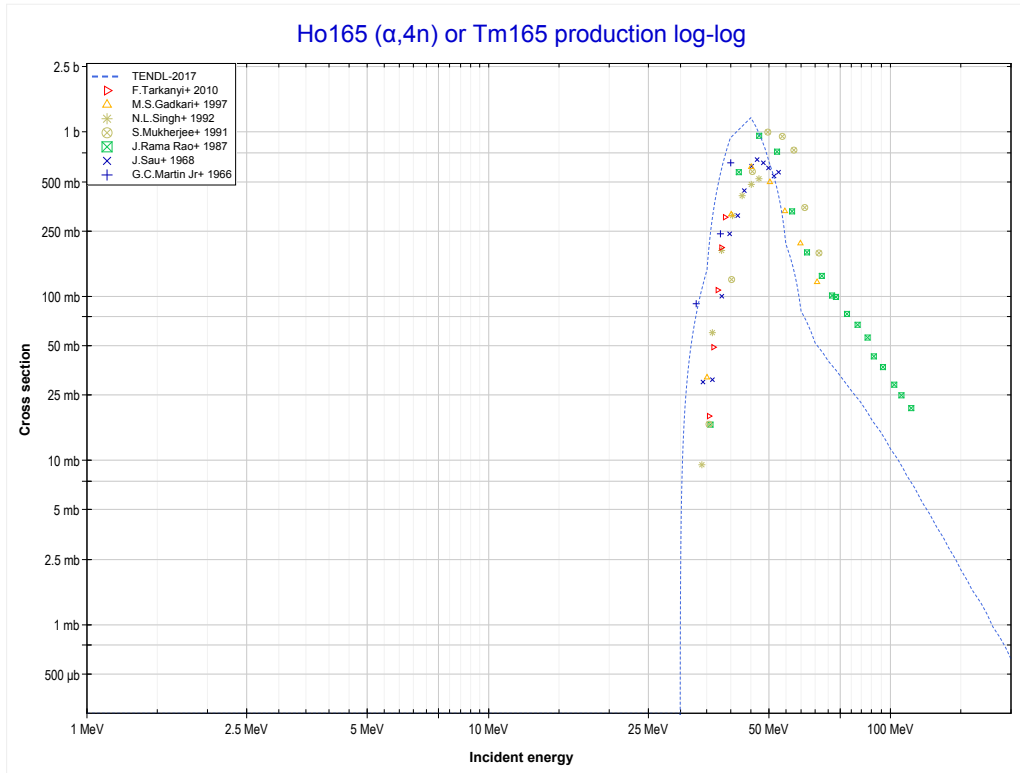
Reaction	Q-Value
Ho165($\alpha, 2n$)Tm167	-16071.92 keV

<< 65-Tb-159	67-Ho-165	68-Er-164 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Tm166 production)	MT37 ($\alpha,4n$) >>



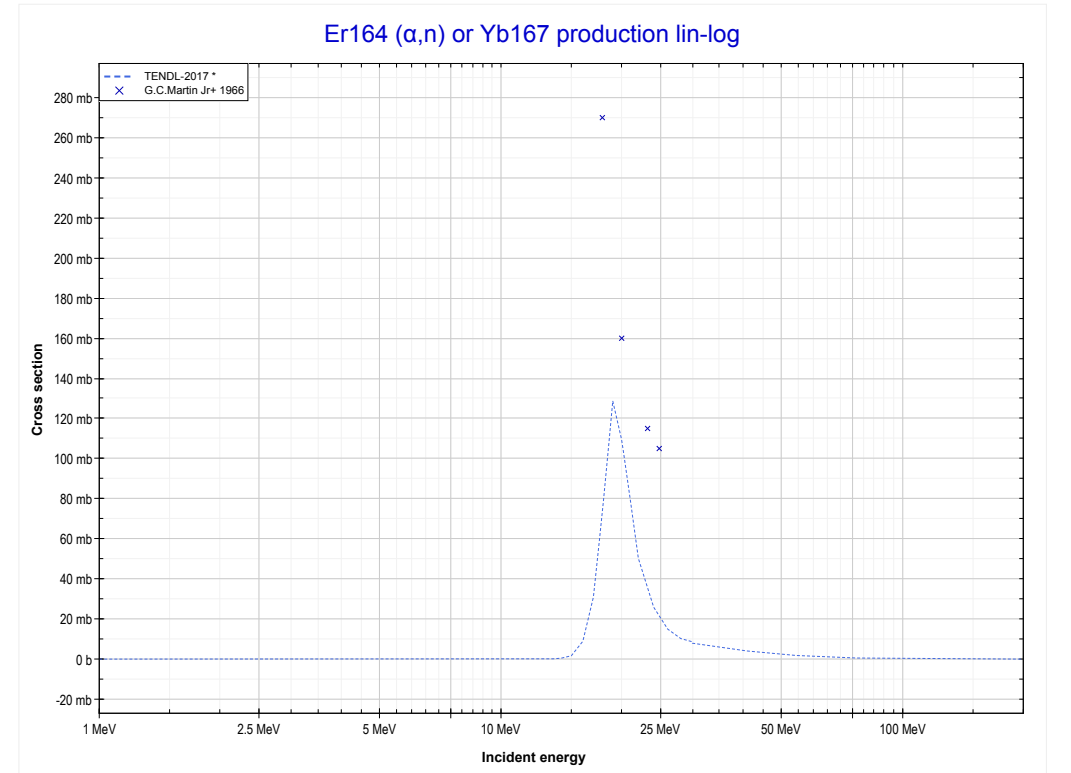
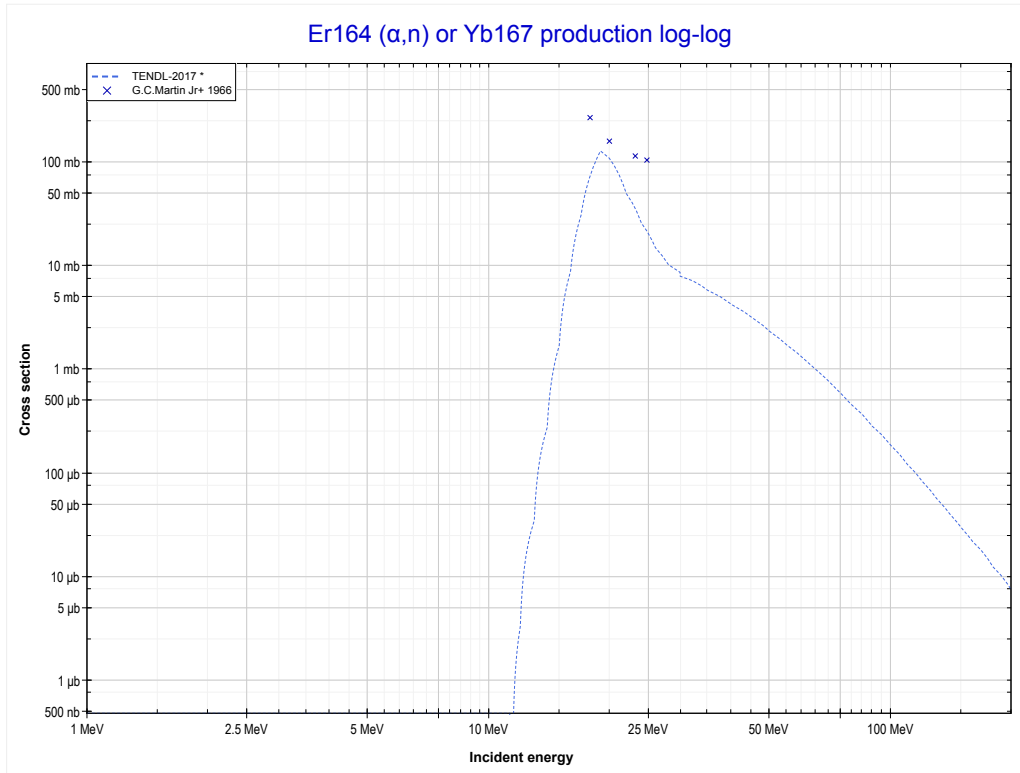
Reaction	Q-Value
Ho165($\alpha,3n$)Tm166	-24799.34 keV

<< 65-Tb-159	67-Ho-165	68-Er-166 >>
<< MT17 ($\alpha,3n$)	MT37 ($\alpha,4n$) or MT5 (Tm165 production)	68-Er-164 MT4 (α,n) >>



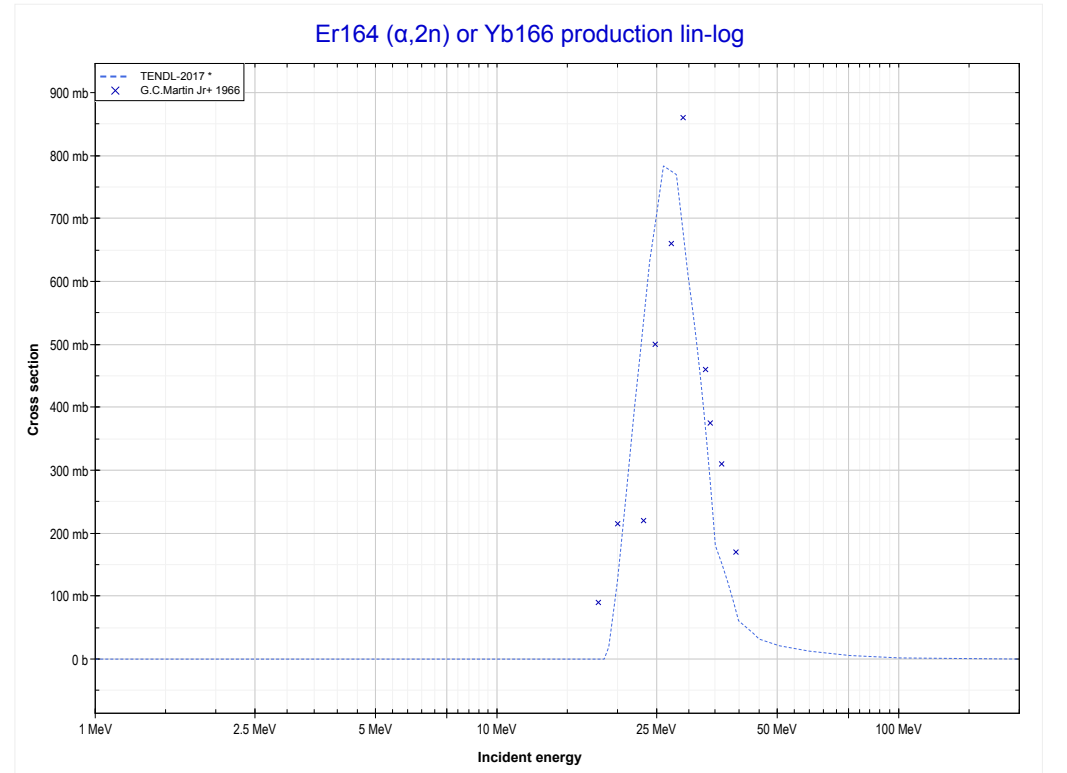
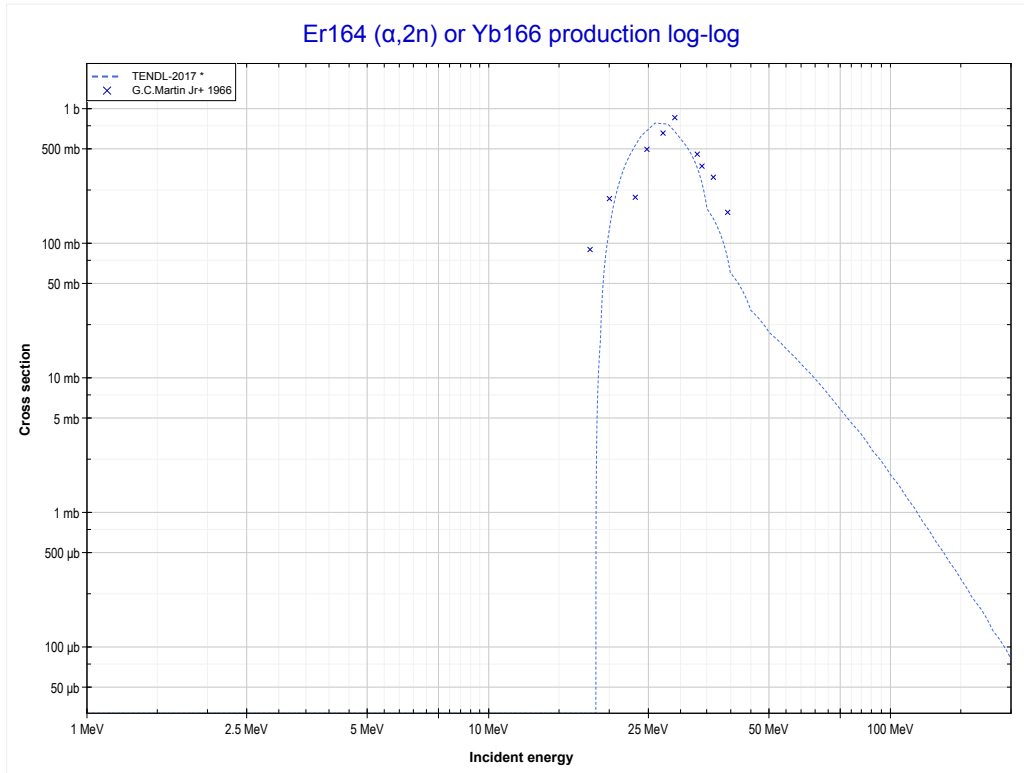
Reaction	Q-Value
Ho165($\alpha,4n$)Tm165	-31829.85 keV

<< 67-Ho-165	68-Er-164	69-Tm-169 >>
<< 67-Ho-165 MT37 ($\alpha,4n$)	MT4 (α,n) or MT5 (Yb167 production)	MT16 ($\alpha,2n$) >>



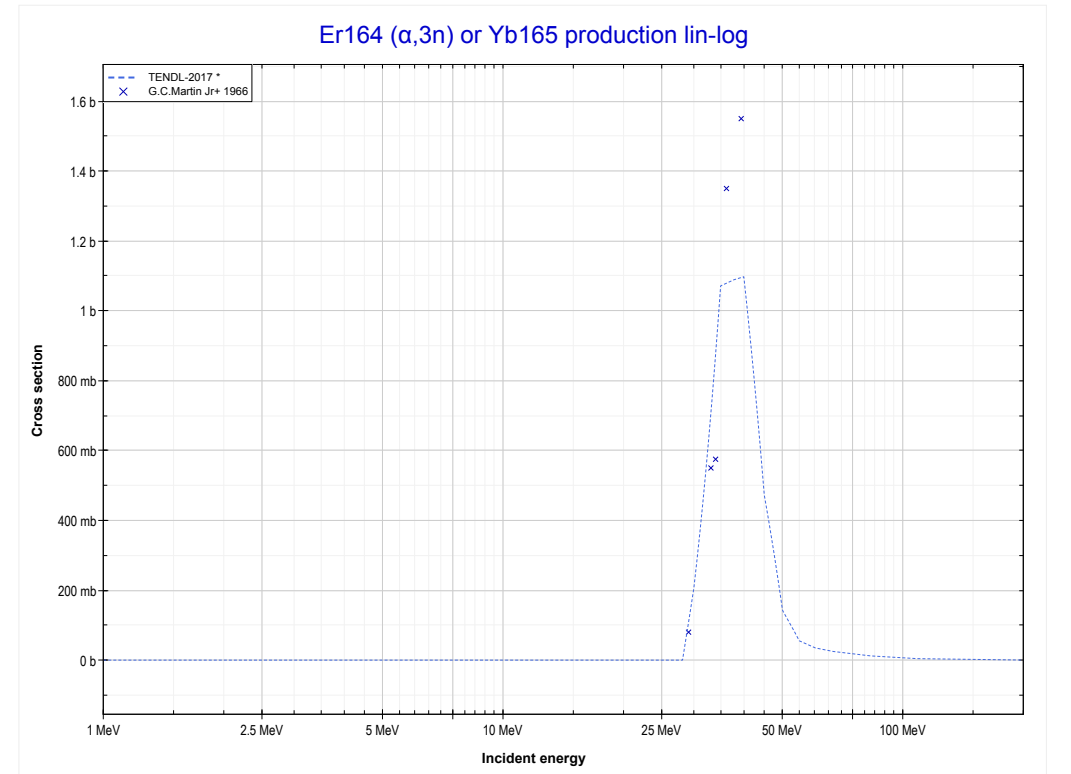
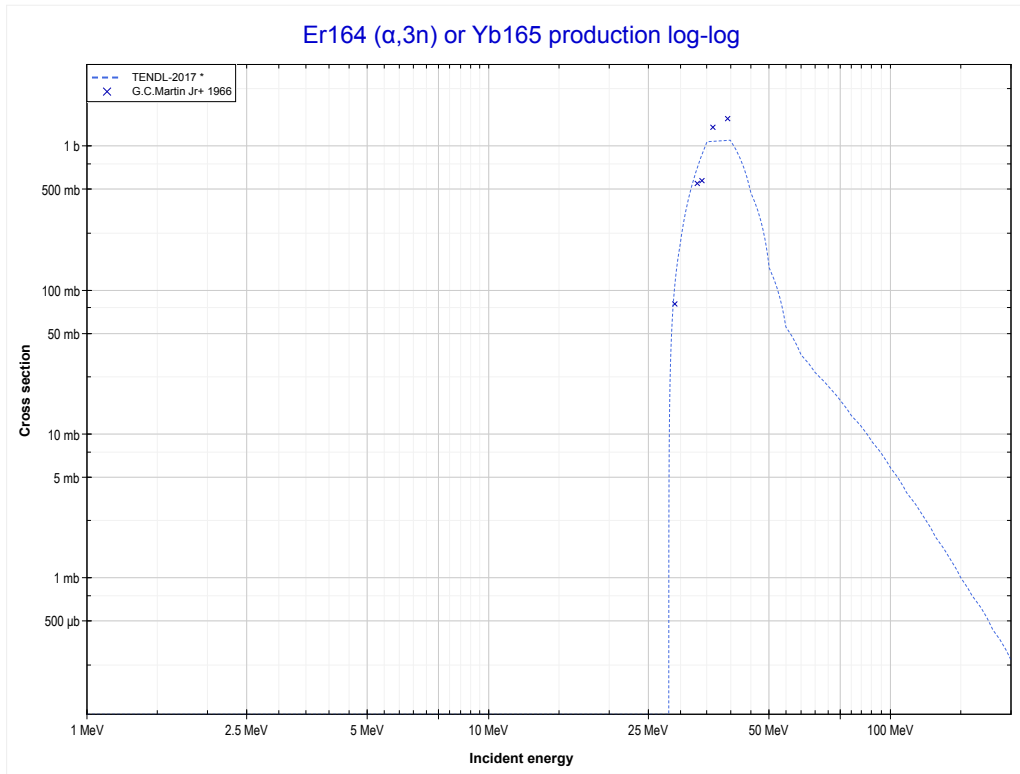
Reaction	Q-Value
Er164(α,n)Yb167	-10997.00 keV

<< 67-Ho-165	68-Er-164	69-Tm-169 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Yb166 production)	MT17 ($\alpha, 3n$) >>



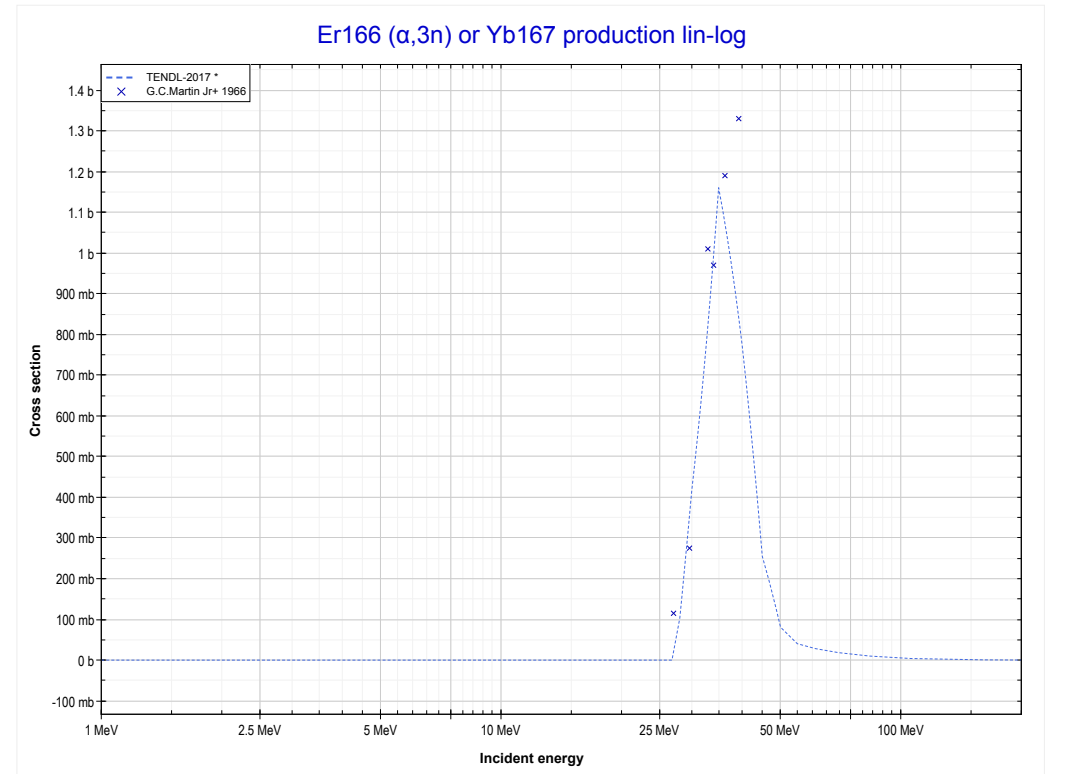
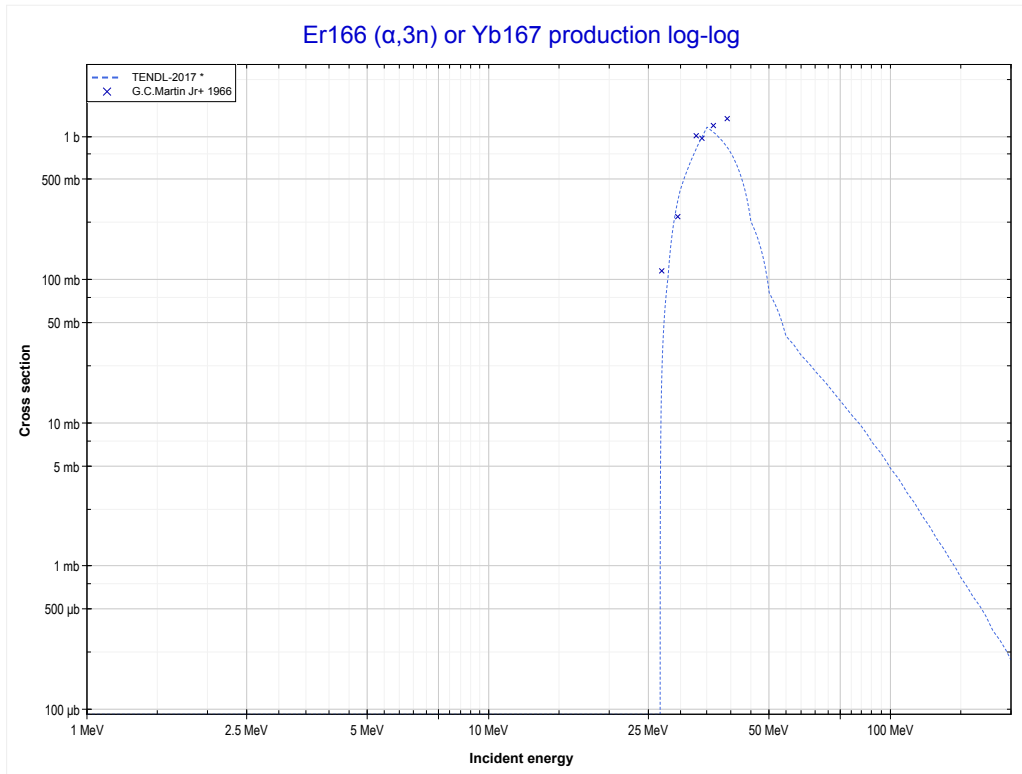
Reaction	Q-Value
Er164($\alpha, 2n$)Yb166	-18064.32 keV

<< 67-Ho-165	68-Er-164	68-Er-166 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Yb165 production)	68-Er-166 MT17 ($\alpha,3n$) >>



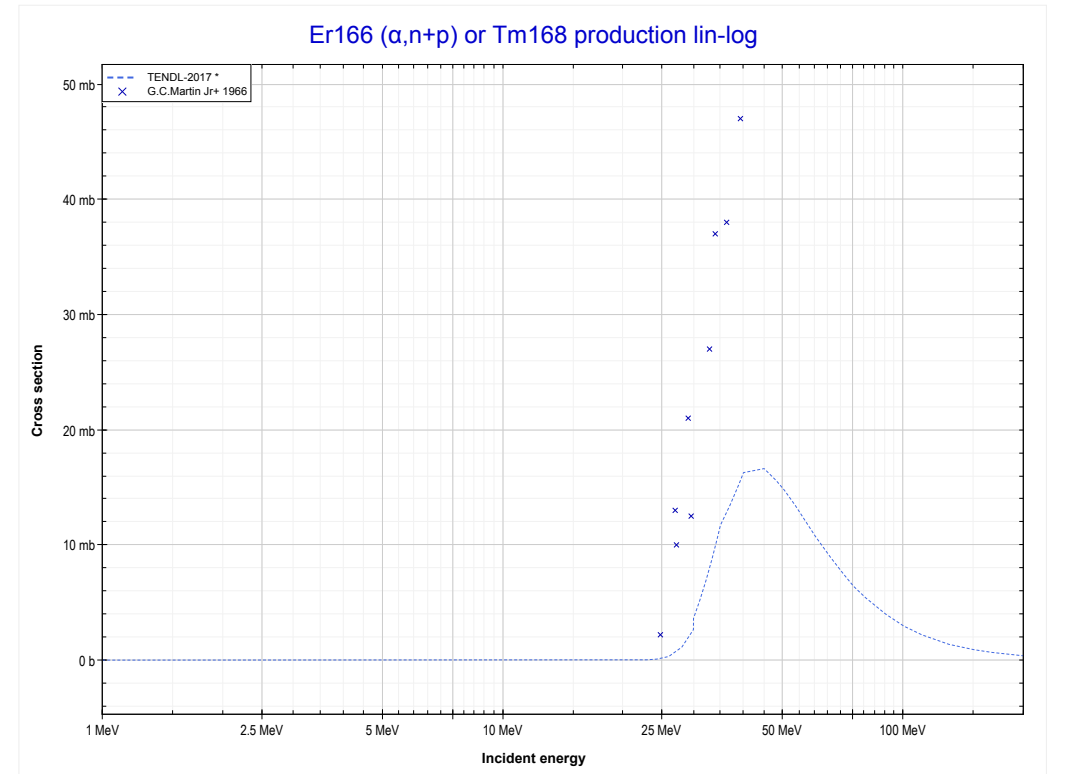
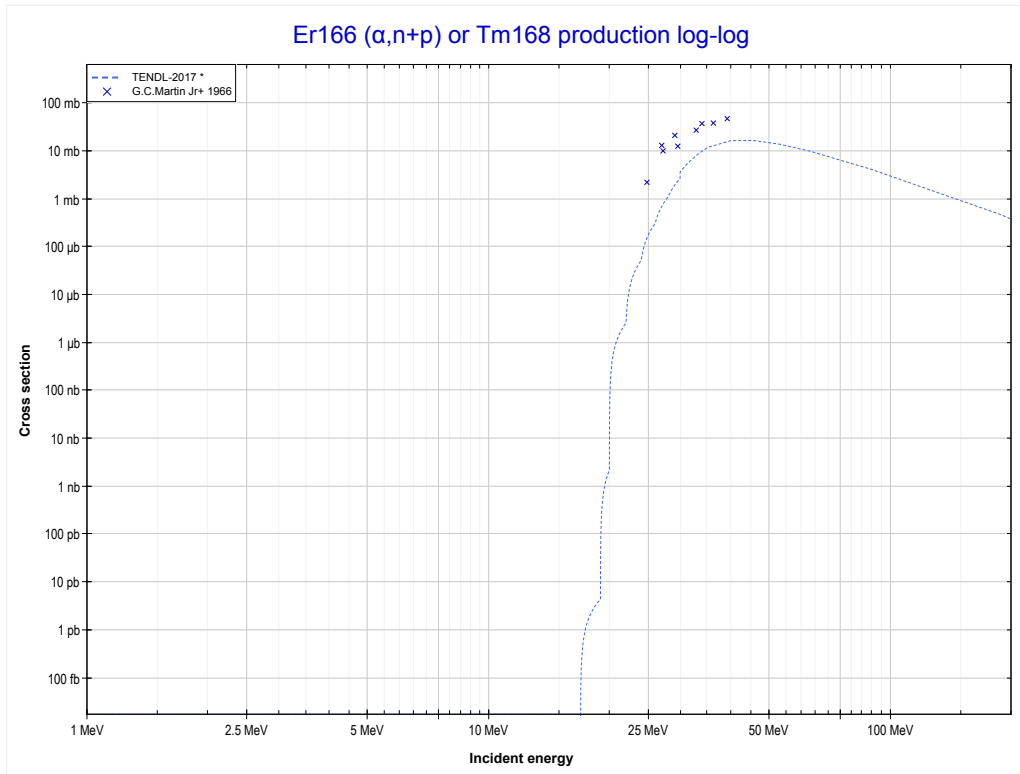
Reaction	Q-Value
Er164($\alpha,3n$)Yb165	-27435.64 keV

<< 68-Er-164	68-Er-166	69-Tm-169 >>
<< 68-Er-164 MT17 ($\alpha,3n$)	MT17 ($\alpha,3n$) or MT5 (Yb167 production)	MT28 ($\alpha,n+p$) >>



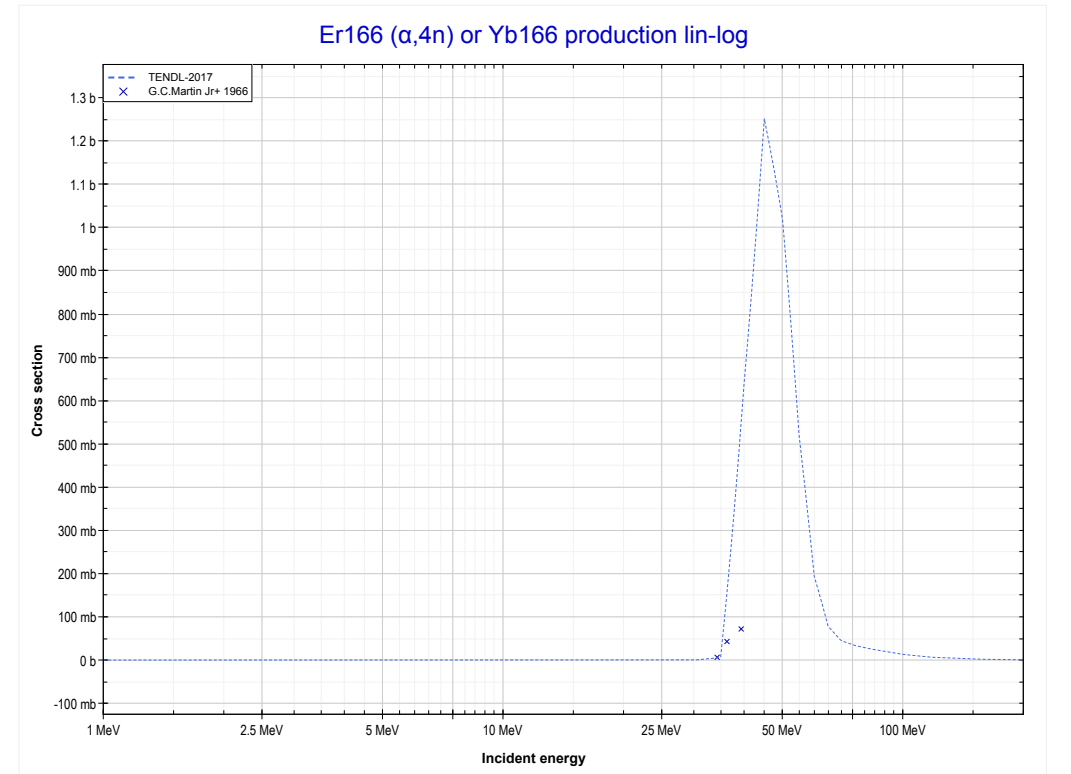
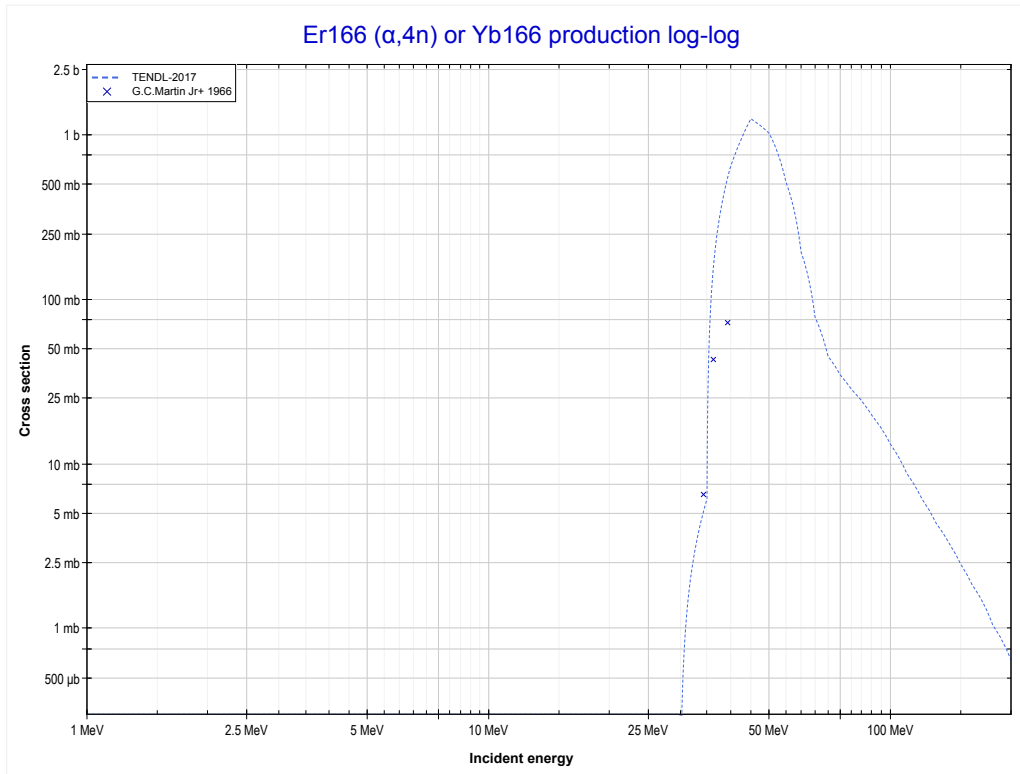
Reaction	Q-Value
Er166($\alpha,3n$)Yb167	-26123.64 keV

<< 57-La-139	68-Er-166	83-Bi-209 >>
<< MT17 ($\alpha,3n$)	MT28 ($\alpha,n+p$) or MT5 (Tm168 production)	MT37 ($\alpha,4n$) >>



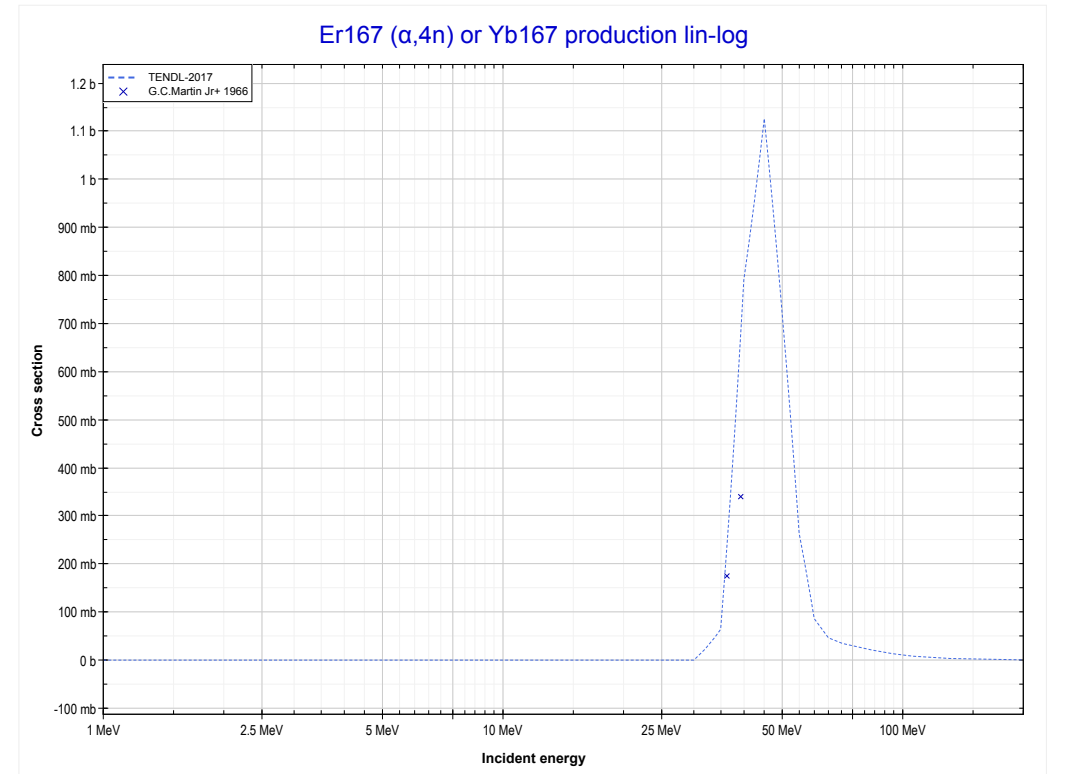
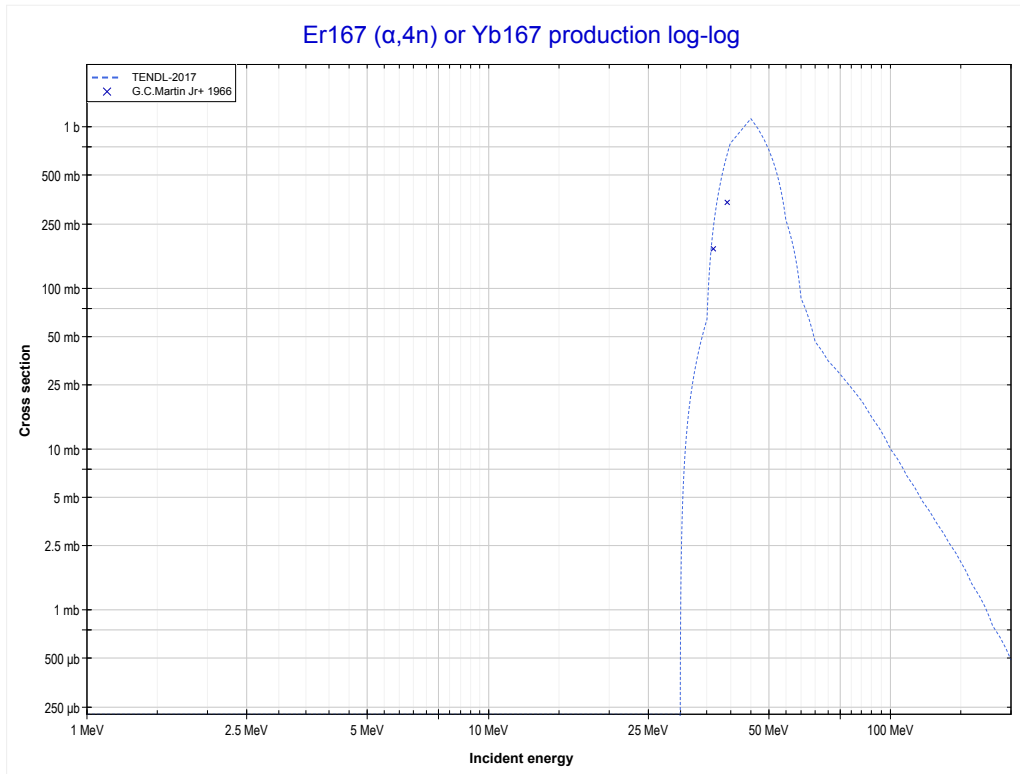
Reaction	Q-Value
Er166(α,d)Tm168	-14323.11 keV
Er166($\alpha,n+p$)Tm168	-16547.67 keV

<< 67-Ho-165	68-Er-166	68-Er-167 >>
<< MT28 ($\alpha, n+p$)	MT37 ($\alpha, 4n$) or MT5 (Yb166 production)	68-Er-167 MT37 ($\alpha, 4n$) >>



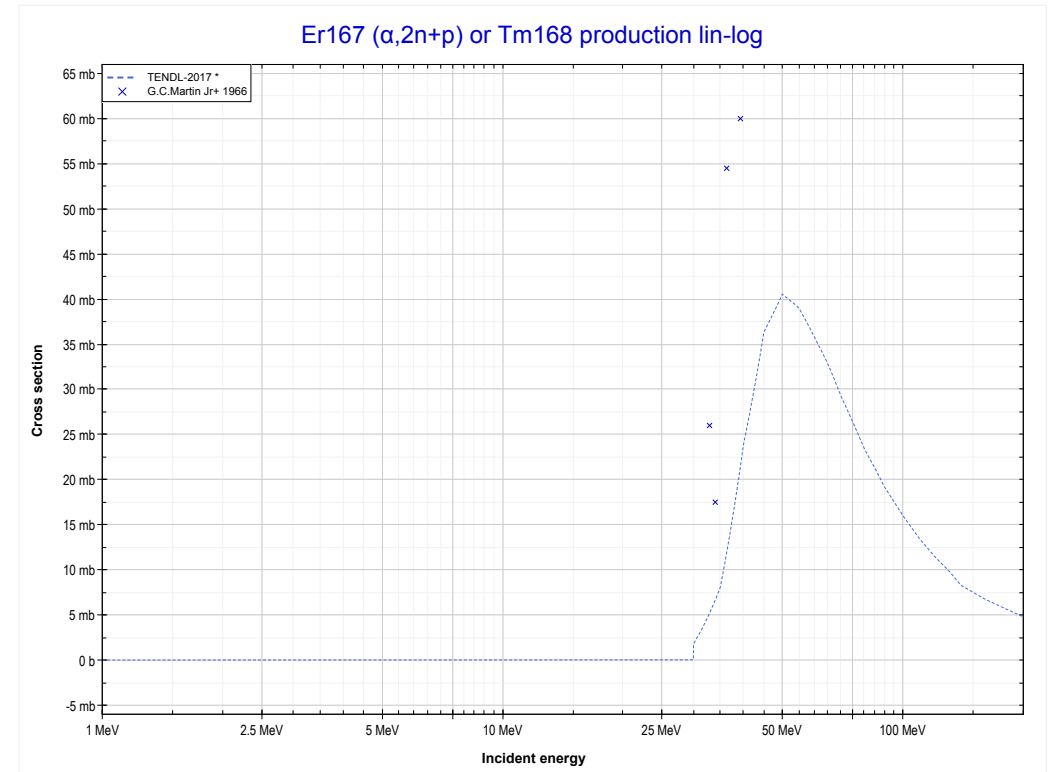
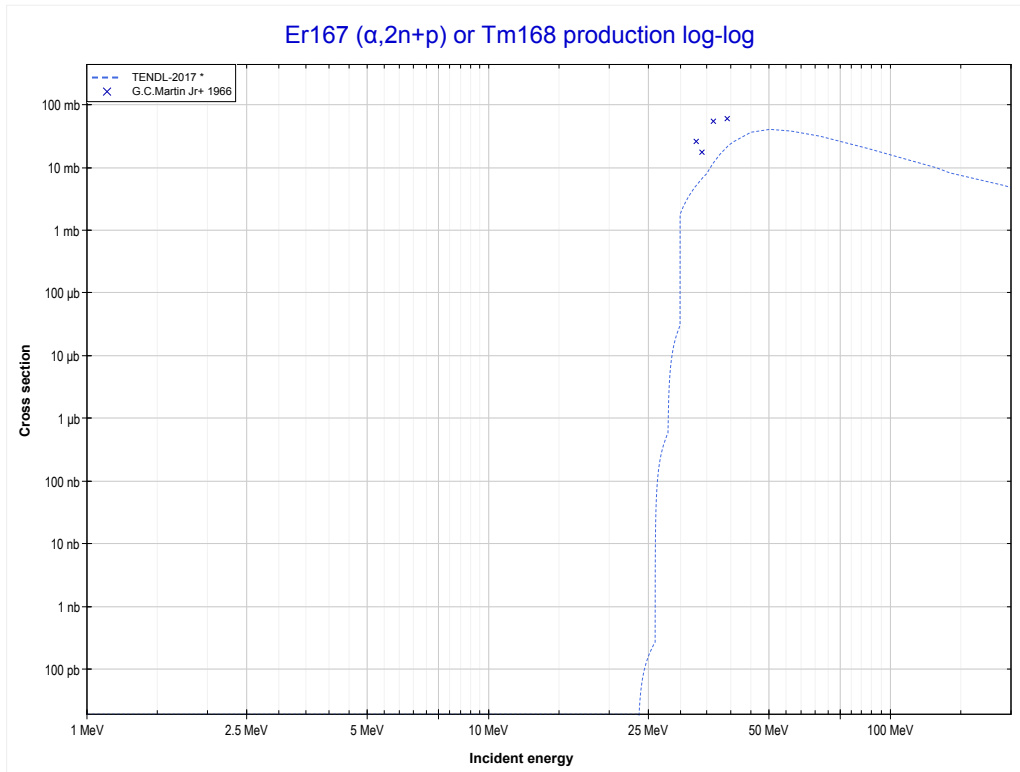
Reaction	Q-Value
Er166($\alpha, 4n$)Yb166	-33190.95 keV

<< 68-Er-166	68-Er-167	69-Tm-169 >>
<< 68-Er-166 MT37 ($\alpha,4n$)	MT37 ($\alpha,4n$) or MT5 (Yb167 production)	MT41 ($\alpha,2n+p$) >>



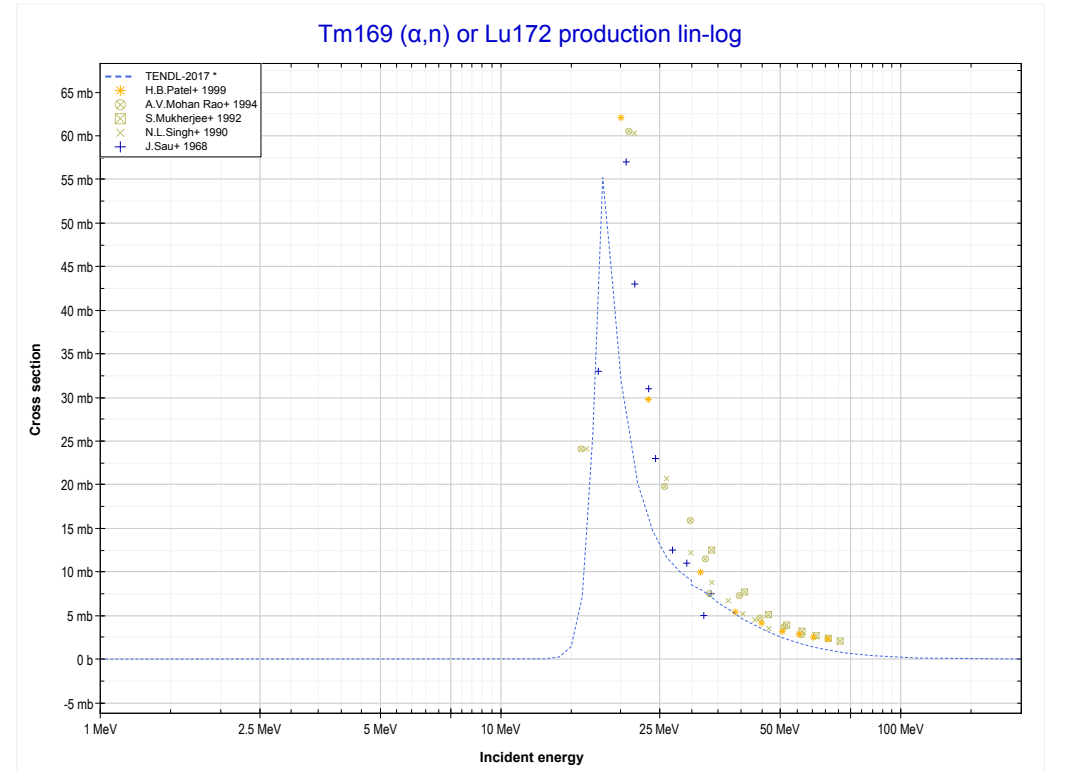
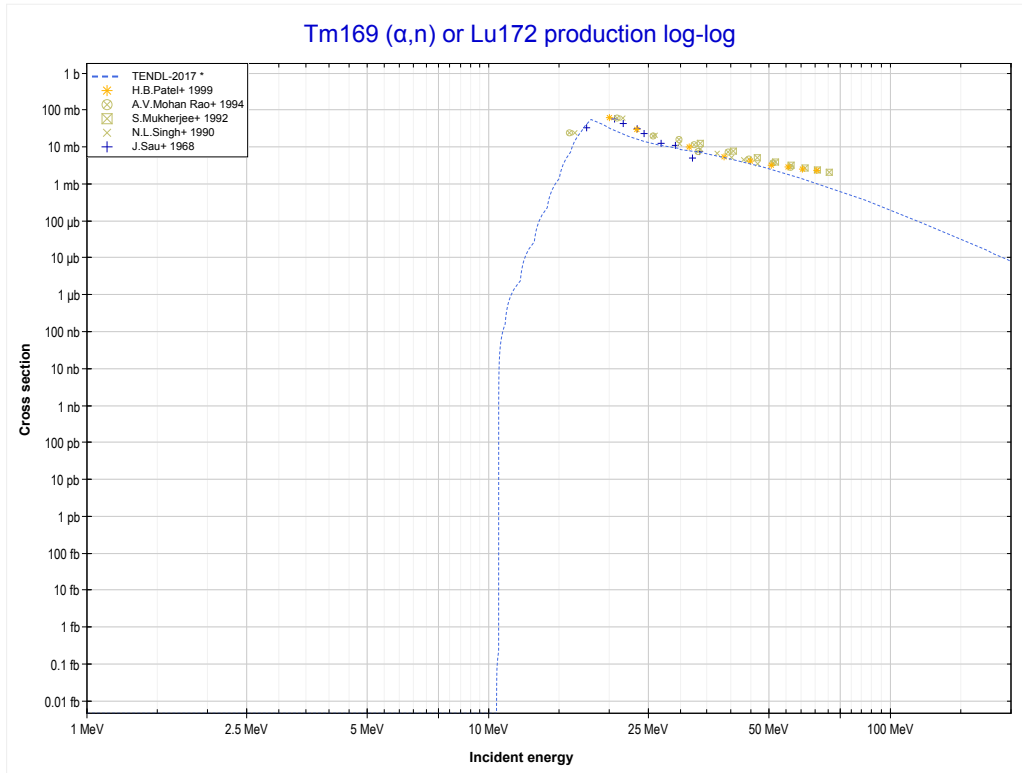
Reaction	Q-Value
Er167($\alpha,4n$)Yb167	-32560.05 keV

<< 48-Cd-116	68-Er-167	
<< MT37 ($\alpha,4n$)	MT41 ($\alpha,2n+p$) or MT5 (Tm168 production)	69-Tm-169 MT4 (α,n) >>



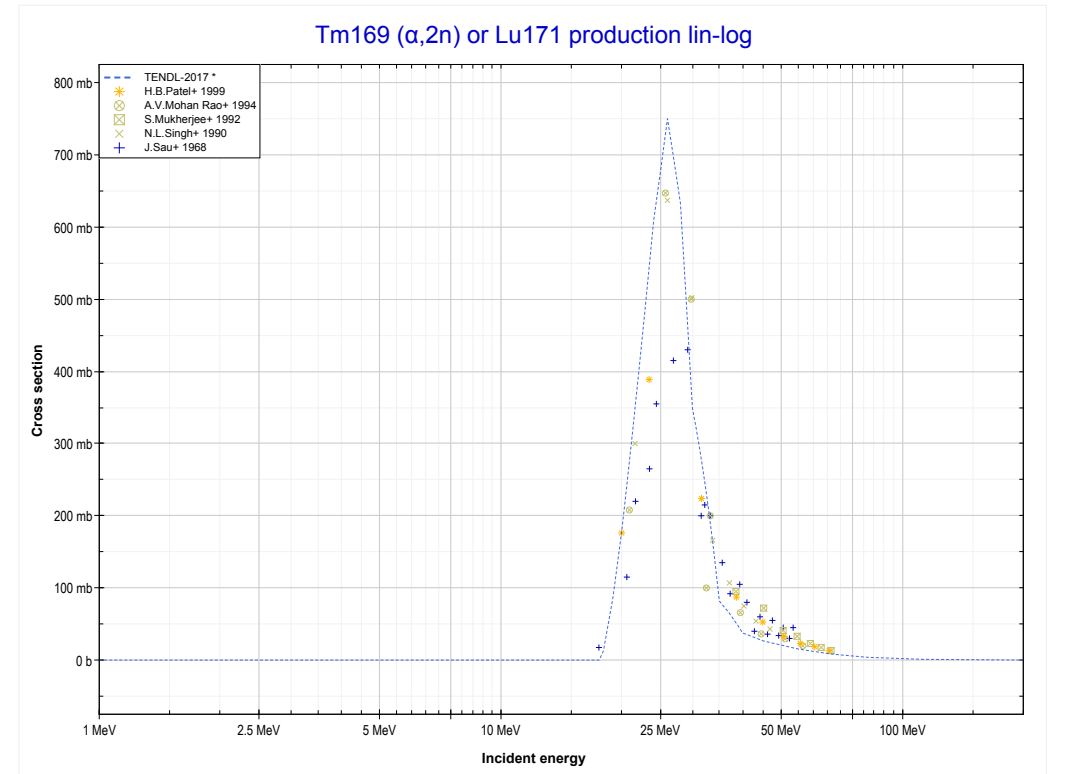
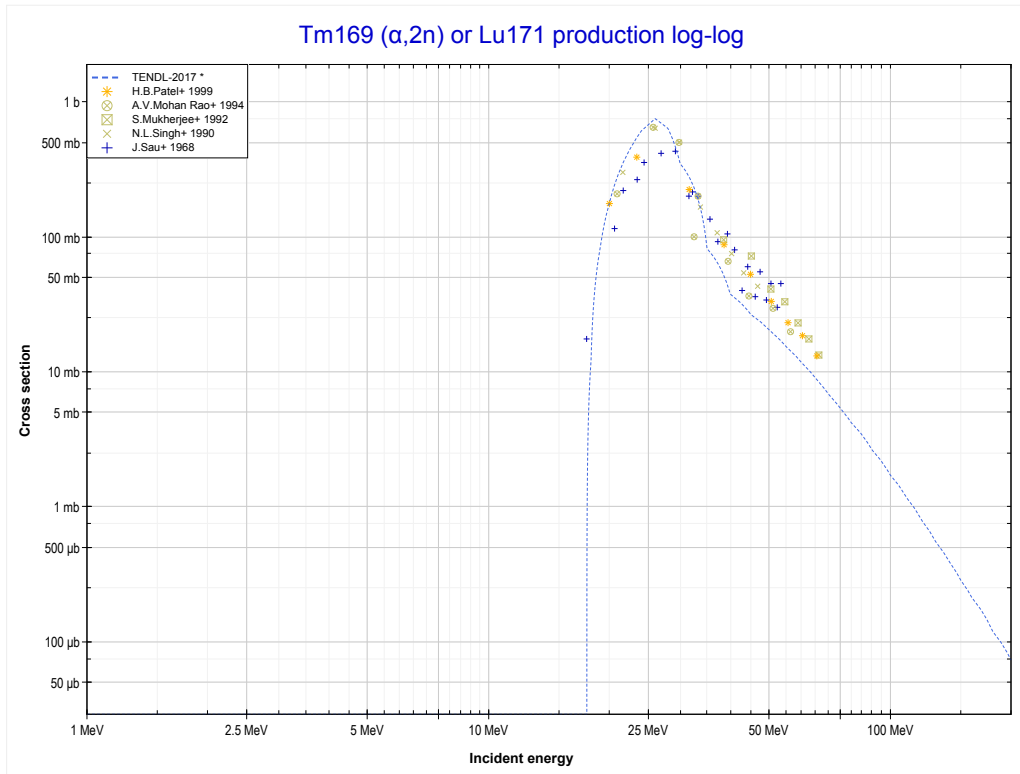
Reaction	Q-Value
Er167(α,t)Tm168	-14502.29 keV
Er167($\alpha,n+d$)Tm168	-20759.52 keV
Er167($\alpha,2n+p$)Tm168	-22984.09 keV

<< 68-Er-164	69-Tm-169	70-Yb-176 >>
<< 68-Er-167 MT41 ($\alpha,2n+p$)	MT4 (α,n) or MT5 (Lu172 production)	MT16 ($\alpha,2n$) >>



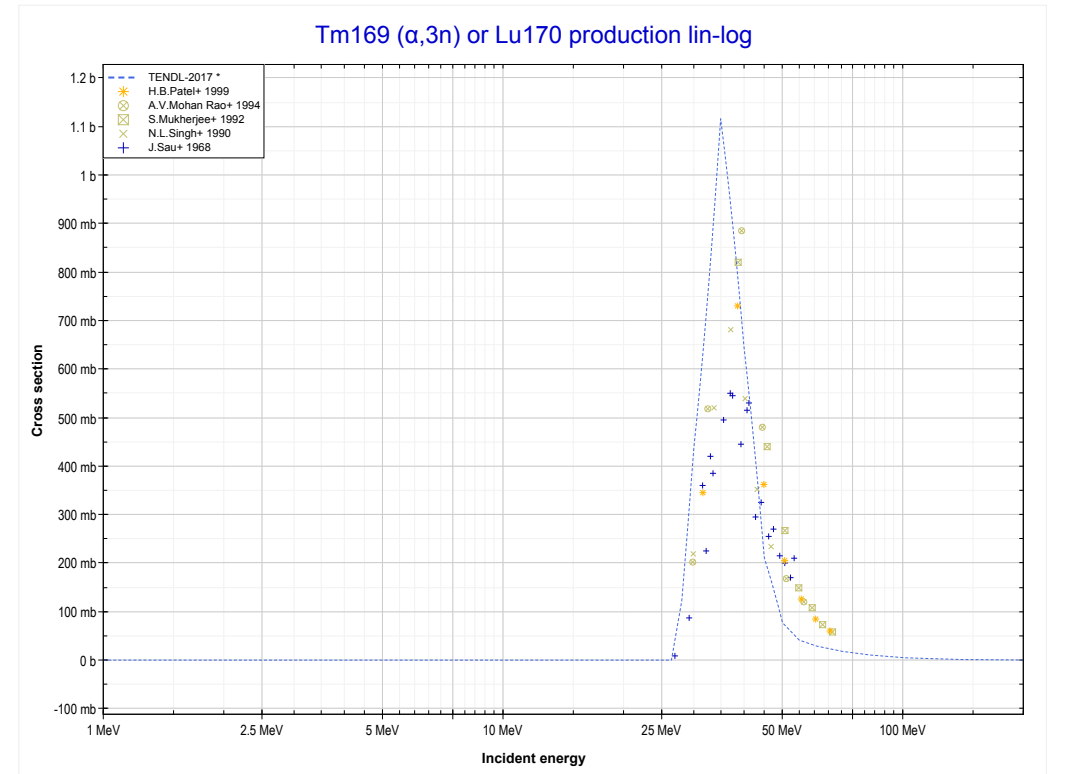
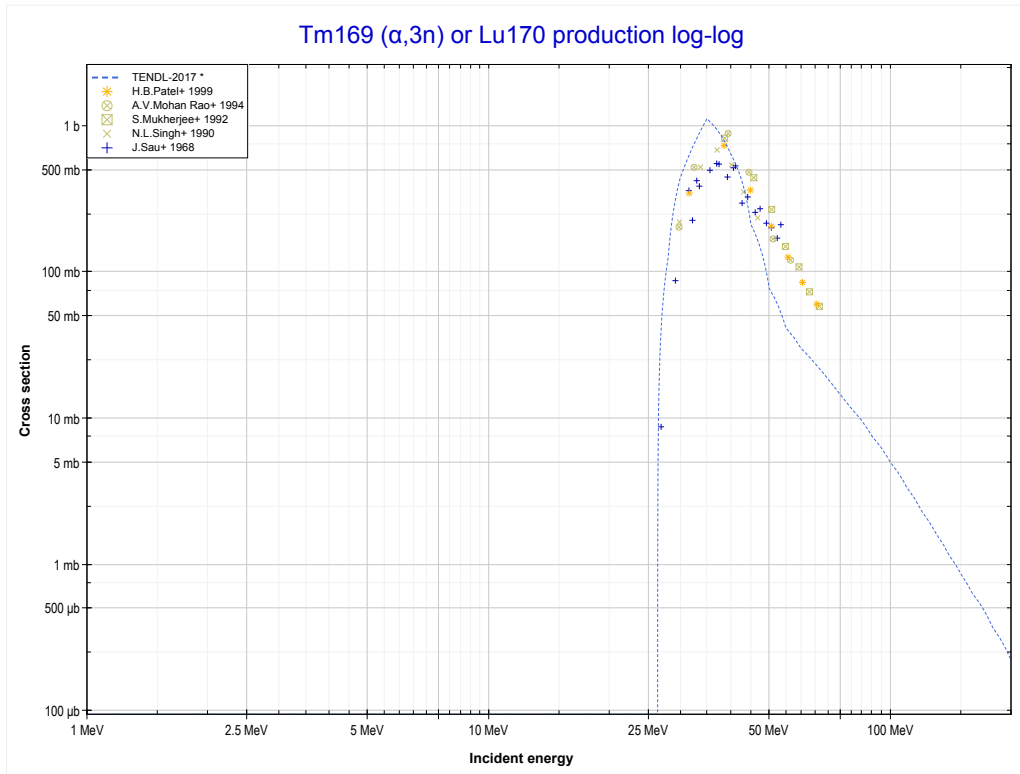
Reaction	Q-Value
Tm169(α,n)Lu172	-10183.90 keV

<< 68-Er-164	69-Tm-169	70-Yb-176 >>
<< MT4 (α,n)	MT16 ($\alpha,2n$) or MT5 (Lu171 production)	MT17 ($\alpha,3n$) >>



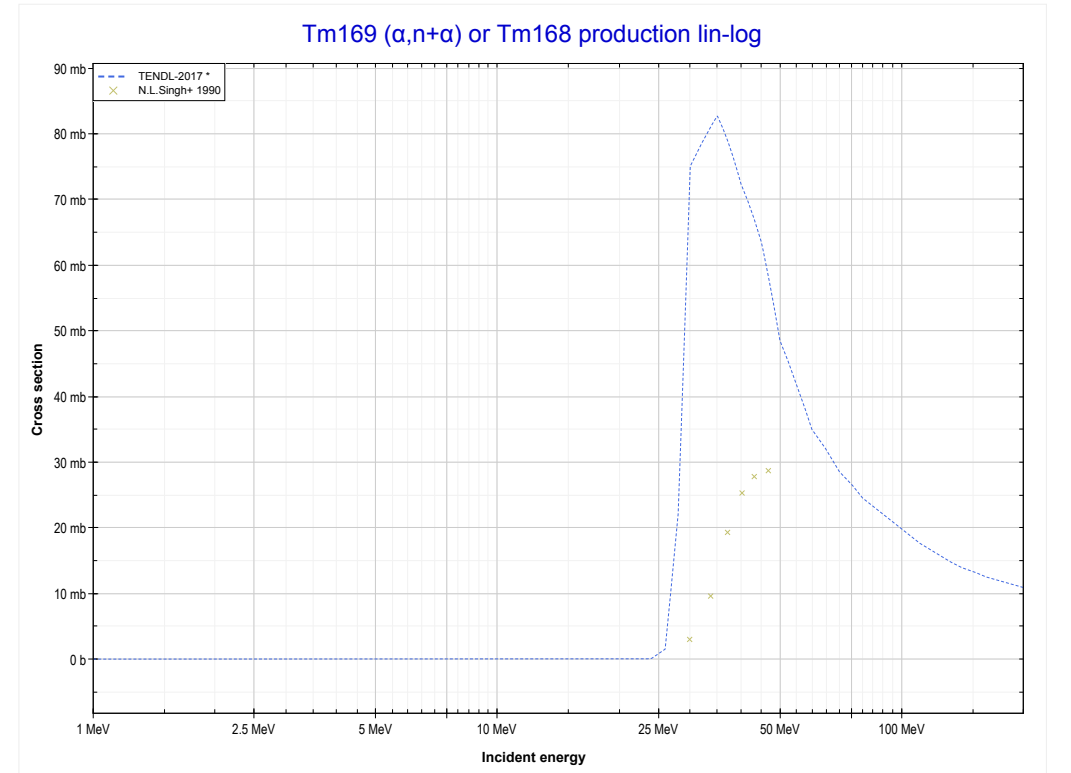
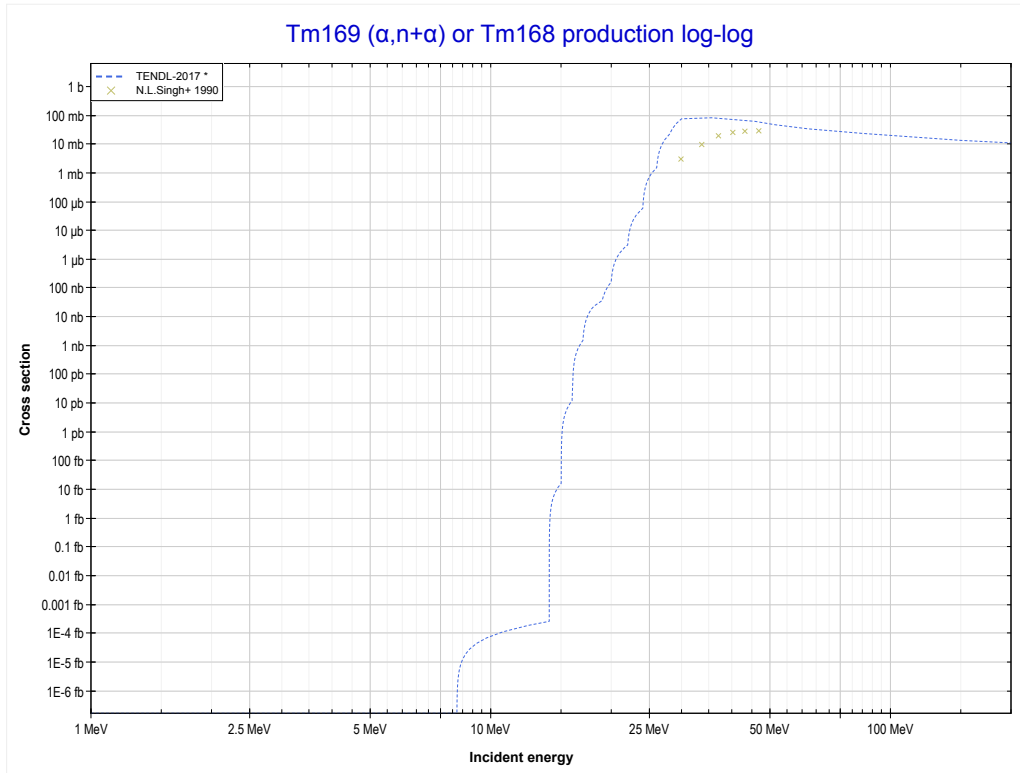
Reaction	Q-Value
Tm169($\alpha,2n$)Lu171	-17163.32 keV

<< 68-Er-166	69-Tm-169	73-Ta-181 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Lu170 production)	MT22 ($\alpha,n+\alpha$) >>



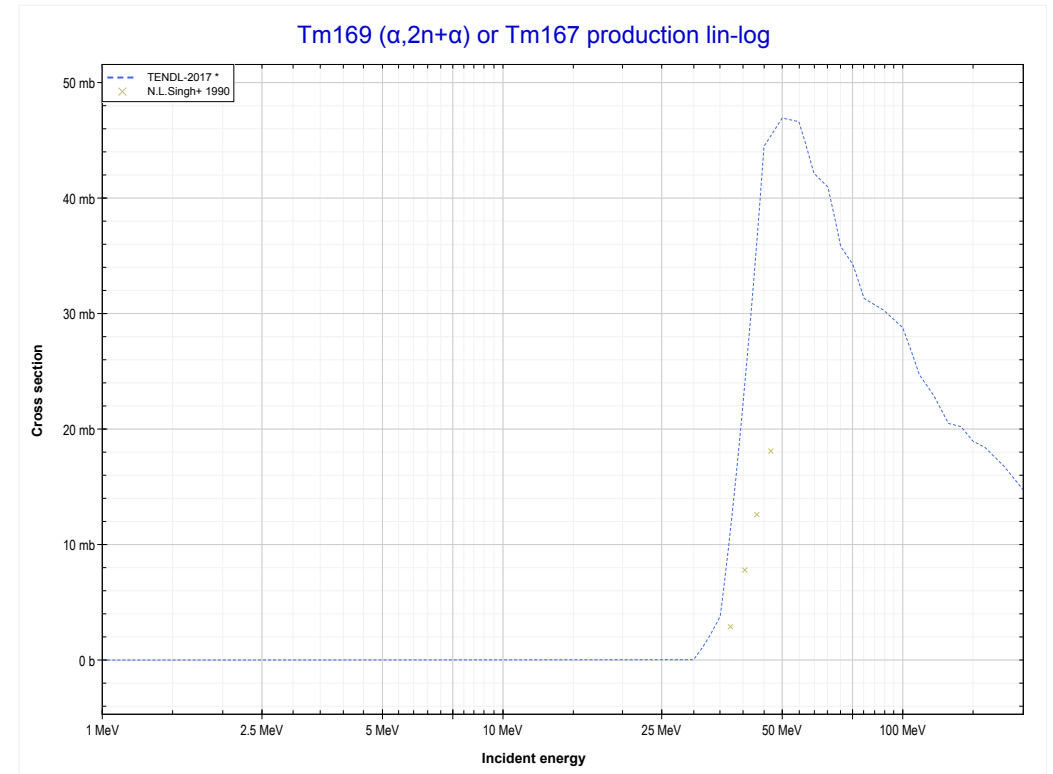
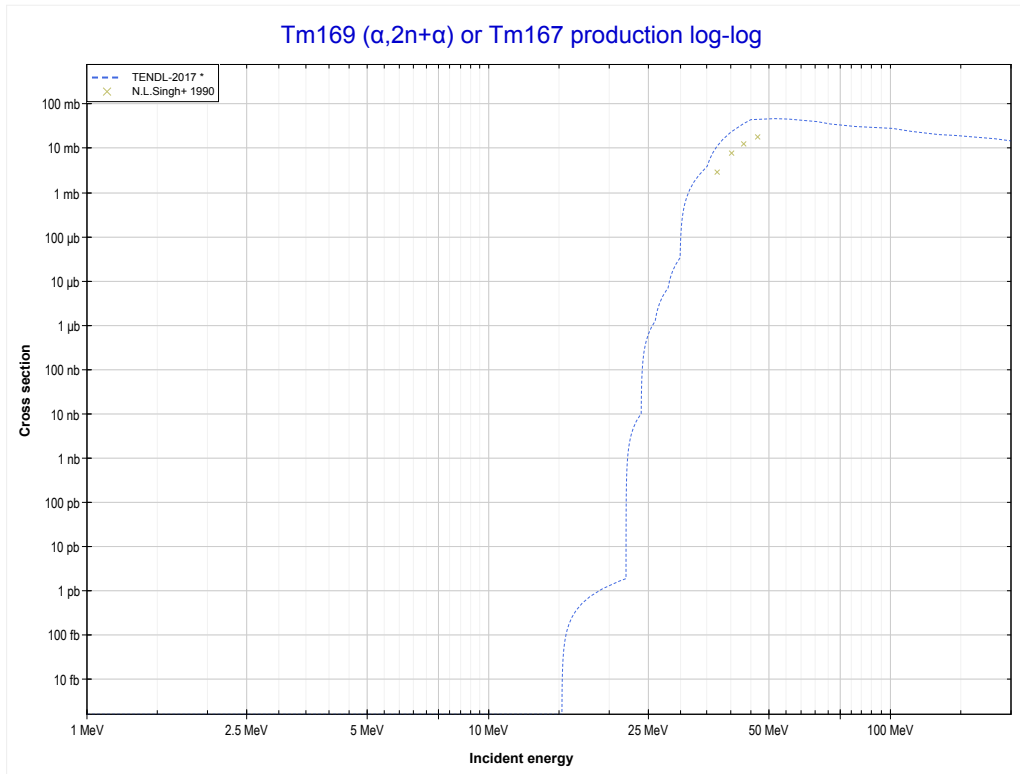
Reaction	Q-Value
Tm169($\alpha,3n$)Lu170	-25757.64 keV

<< 60-Nd-142	69-Tm-169	79-Au-197 >>
<< MT17 ($\alpha,3n$)	MT22 ($\alpha,n+\alpha$) or MT5 (Tm168 production)	MT24 ($\alpha,2n+\alpha$) >>



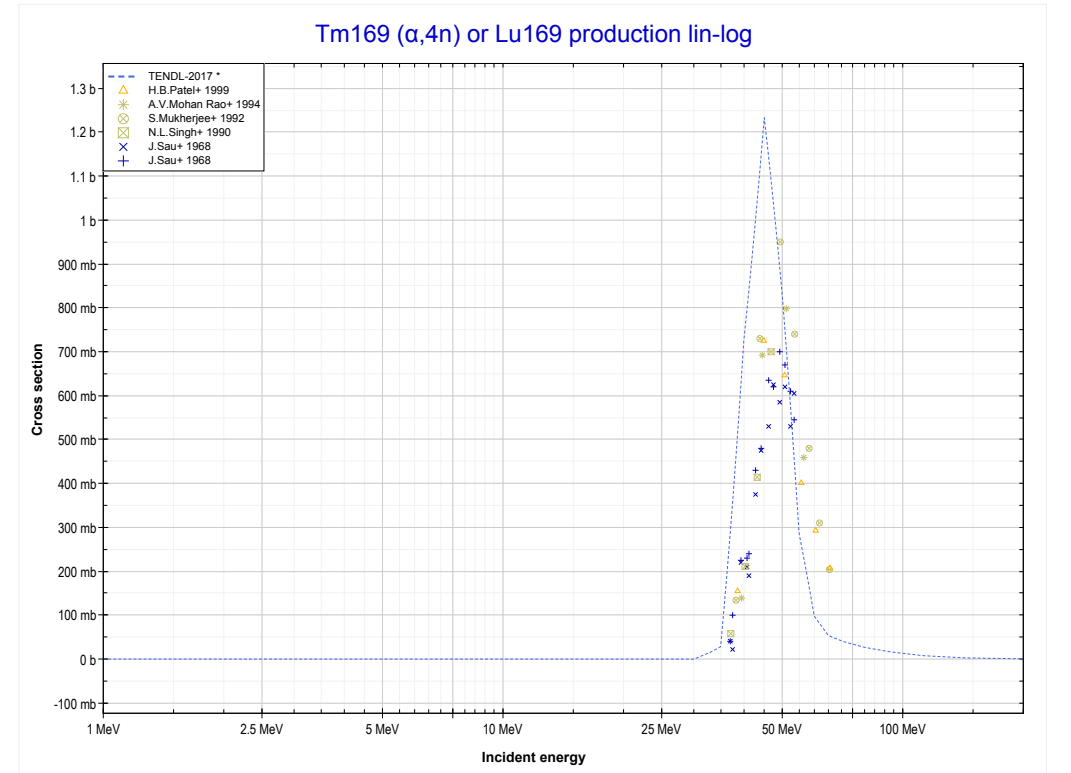
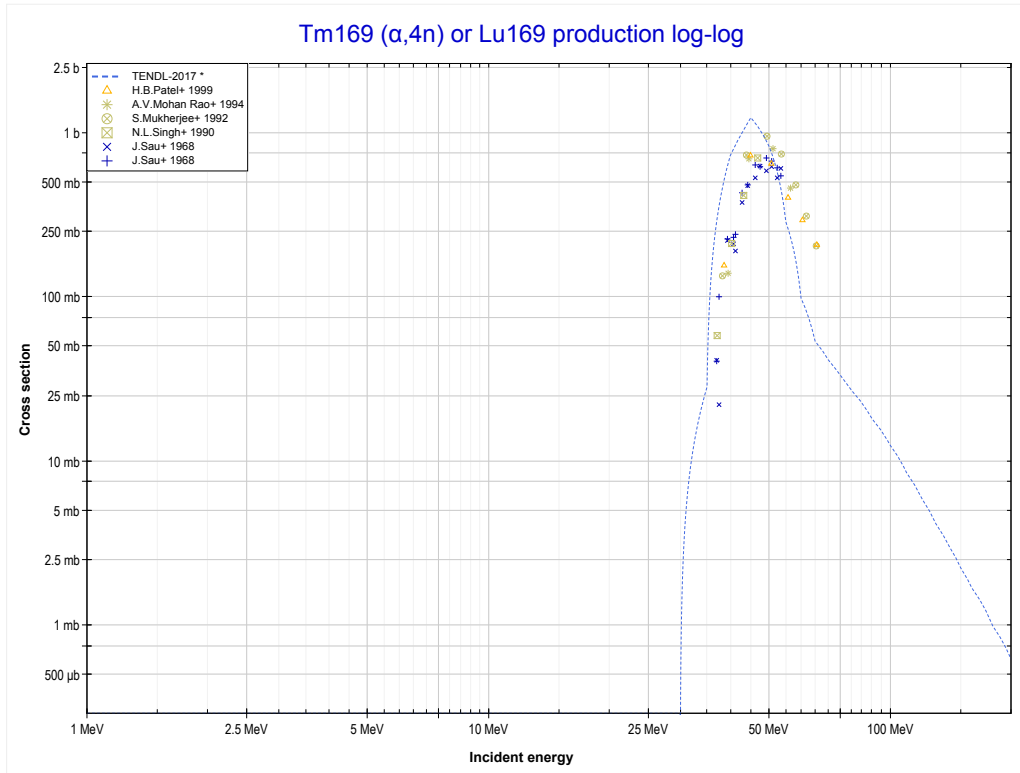
Reaction	Q-Value
Tm169($\alpha,n+\alpha$)Tm168	-8033.62 keV
Tm169($\alpha,d+t$)Tm168	-25622.91 keV
Tm169($\alpha,n+p+t$)Tm168	-27847.48 keV
Tm169($\alpha,2n+He3$)Tm168	-28611.23 keV
Tm169($\alpha,n+2d$)Tm168	-31880.14 keV
Tm169($\alpha,2n+p+d$)Tm168	-34104.71 keV
Tm169($\alpha,3n+2p$)Tm168	-36329.28 keV

<< 45-Rh-103	69-Tm-169	
<< MT22 ($\alpha, n + \alpha$)	MT24 ($\alpha, 2n + \alpha$) or MT5 (Tm167 production)	MT37 ($\alpha, 4n$) >>



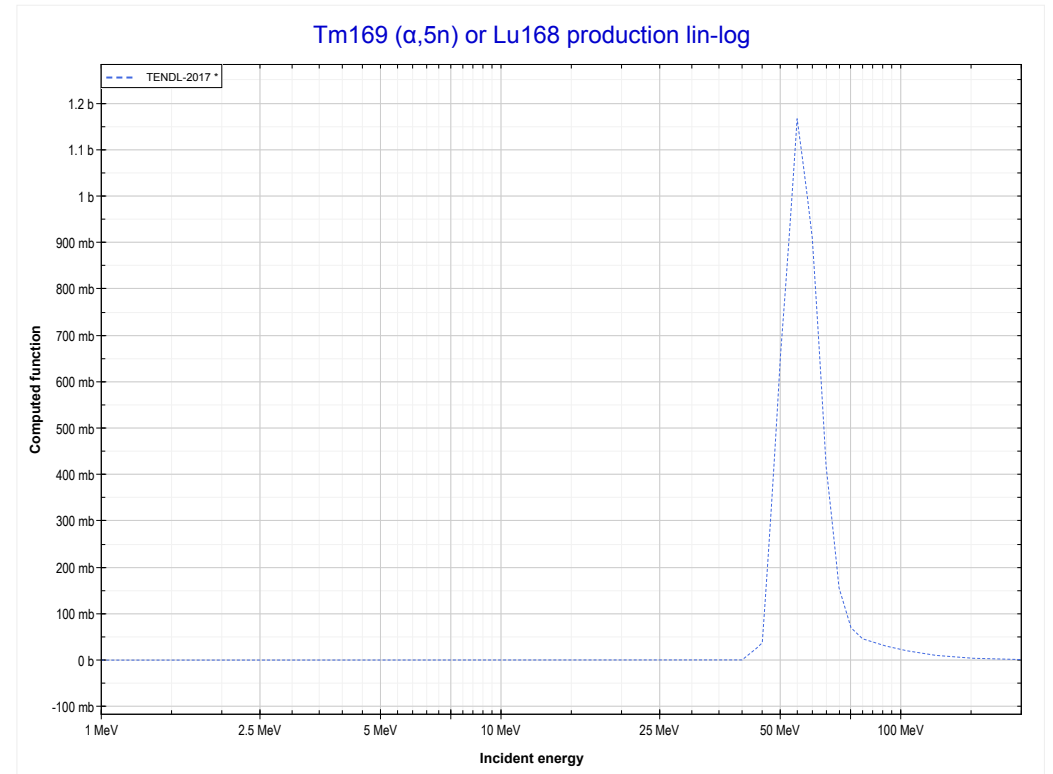
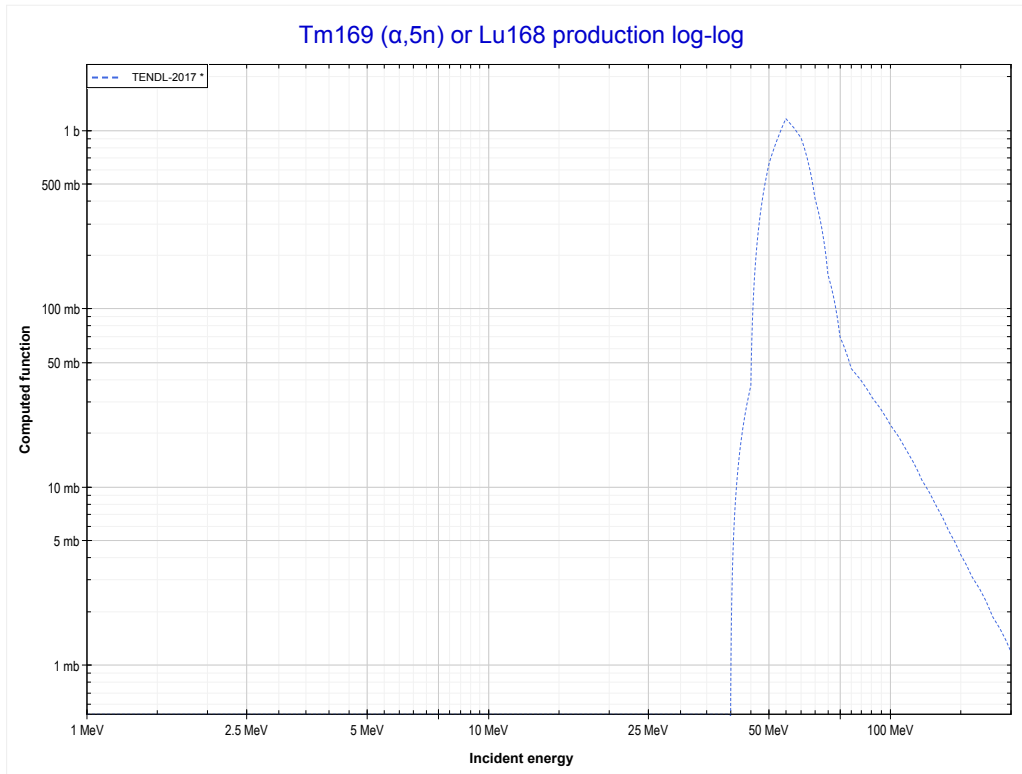
Reaction	Q-Value
Tm169($\alpha, 2n + \alpha$)Tm167	-14874.13 keV
Tm169($\alpha, 2t$)Tm167	-26206.20 keV
Tm169($\alpha, n + d + t$)Tm167	-32463.43 keV
Tm169($\alpha, 2n + p + t$)Tm167	-34688.00 keV
Tm169($\alpha, 3n + He3$)Tm167	-35451.75 keV
Tm169($\alpha, 2n + 2d$)Tm167	-38720.66 keV
Tm169($\alpha, 3n + p + d$)Tm167	-40945.23 keV
Tm169($\alpha, 4n + 2p$)Tm167	-43169.79 keV

<< 68-Er-167	69-Tm-169	73-Ta-181 >>
<< MT24 ($\alpha, 2n+\alpha$)	MT37 ($\alpha, 4n$) or MT5 (Lu169 production)	MT152 ($\alpha, 5n$) >>



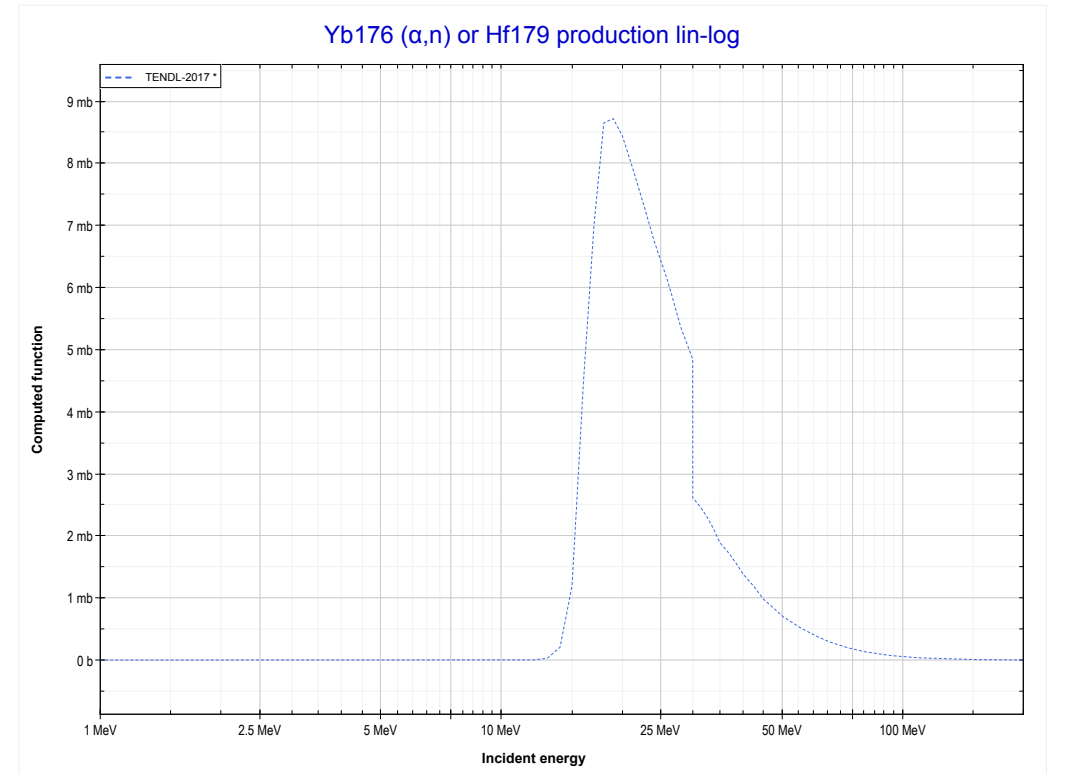
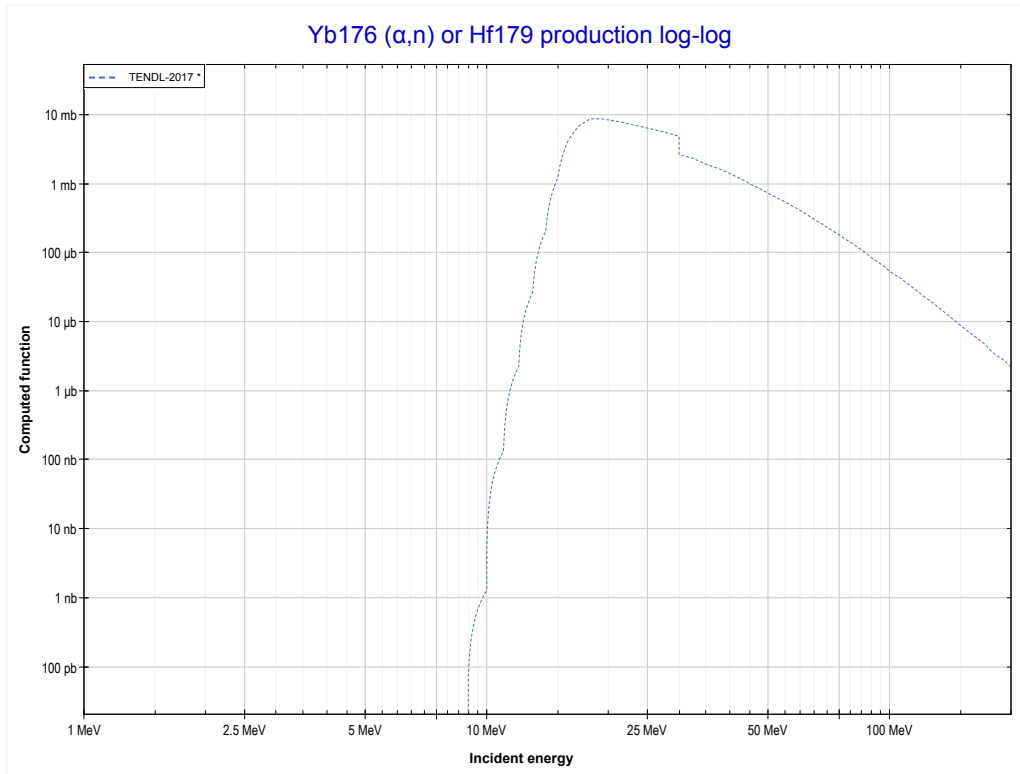
Reaction	Q-Value
Tm169($\alpha, 4n$)Lu169	-33051.95 keV

<< 65-Tb-159	69-Tm-169	73-Ta-181 >>
<< MT37 ($\alpha,4n$)	MT152 ($\alpha,5n$) or MT5 (Lu168 production)	70-Yb-176 MT4 (α,n) >>



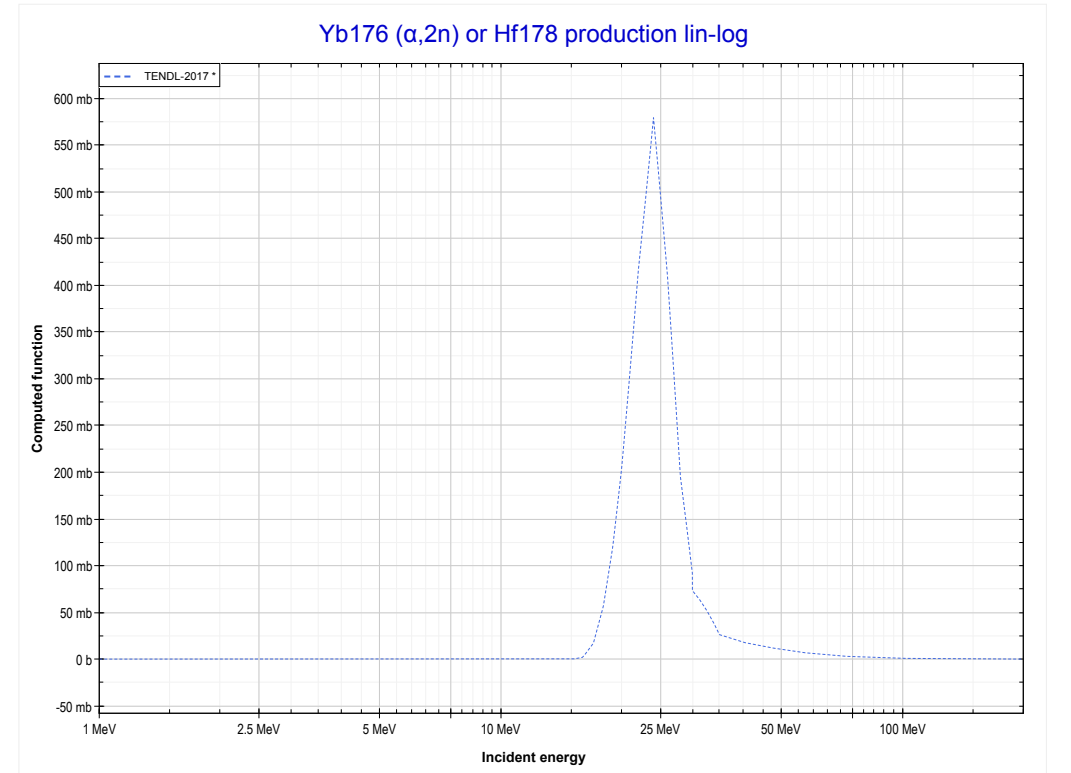
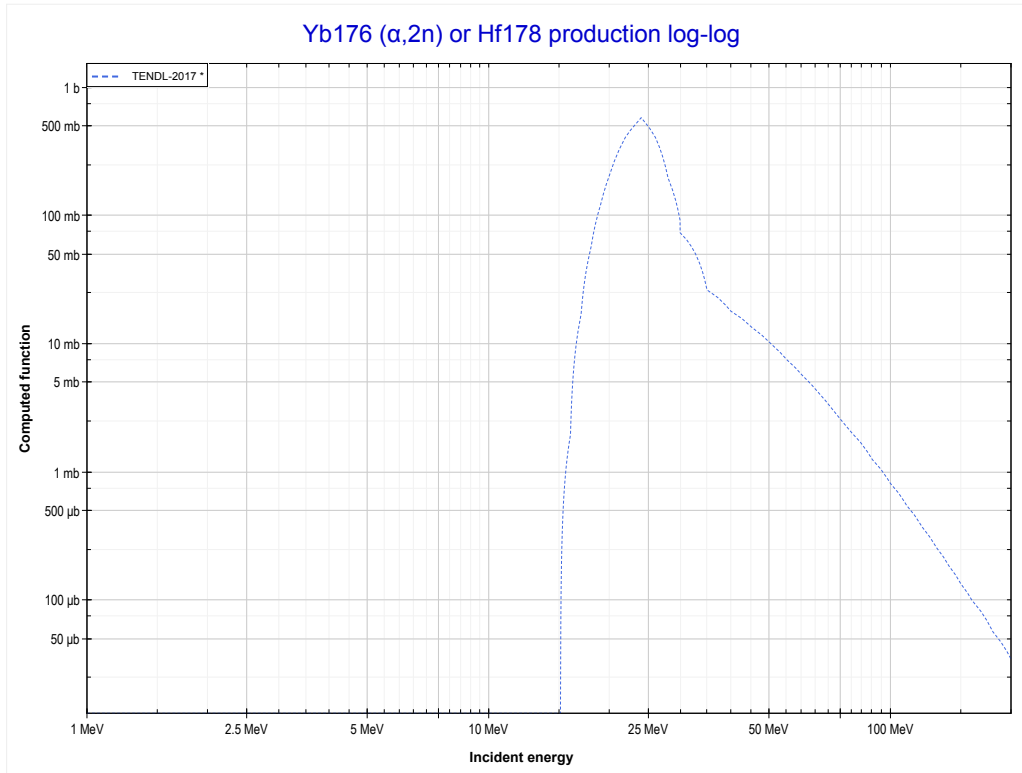
Reaction	Q-Value
Tm169($\alpha,5n$)Lu168	-42137.27 keV

<< 69-Tm-169	70-Yb-176	73-Ta-181 >>
<< 69-Tm-169 MT152 ($\alpha,5n$)	MT4 (α,n) or MT5 (Hf179 production)	MT16 ($\alpha,2n$) >>



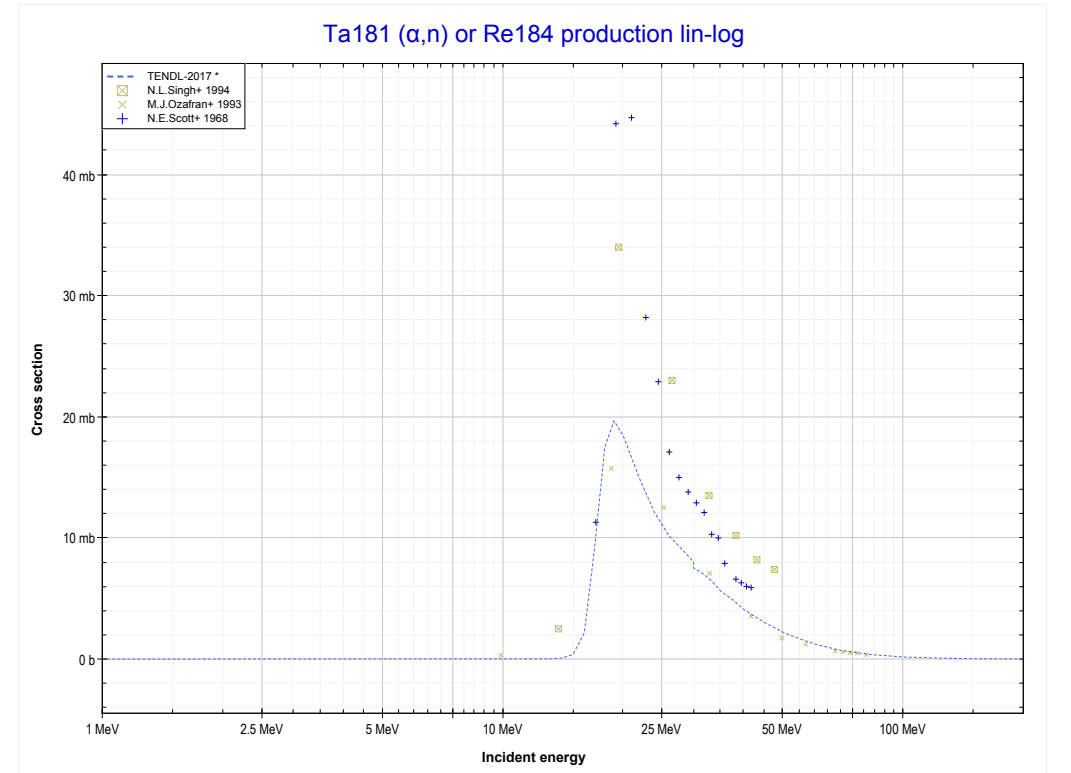
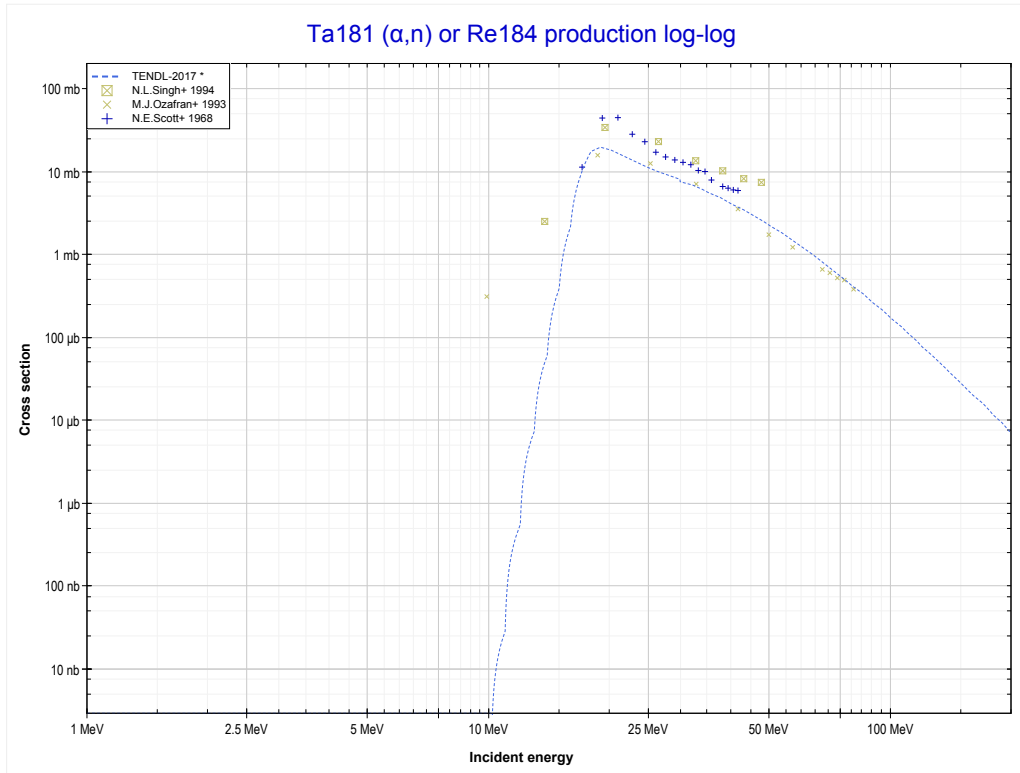
Reaction	Q-Value
Yb176(α,n)Hf179	-8670.70 keV

<< 69-Tm-169	70-Yb-176	73-Ta-181 >>
<< MT4 (α,n)	MT16 ($\alpha,2n$) or MT5 (Hf178 production)	73-Ta-181 MT4 (α,n) >>



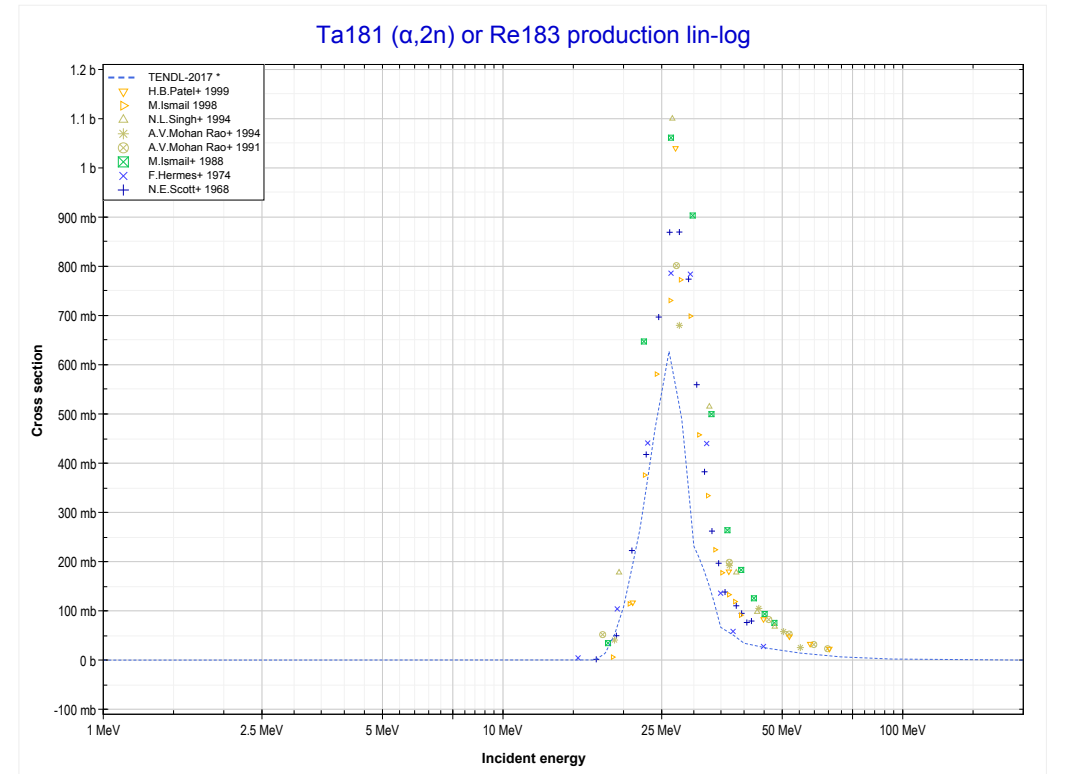
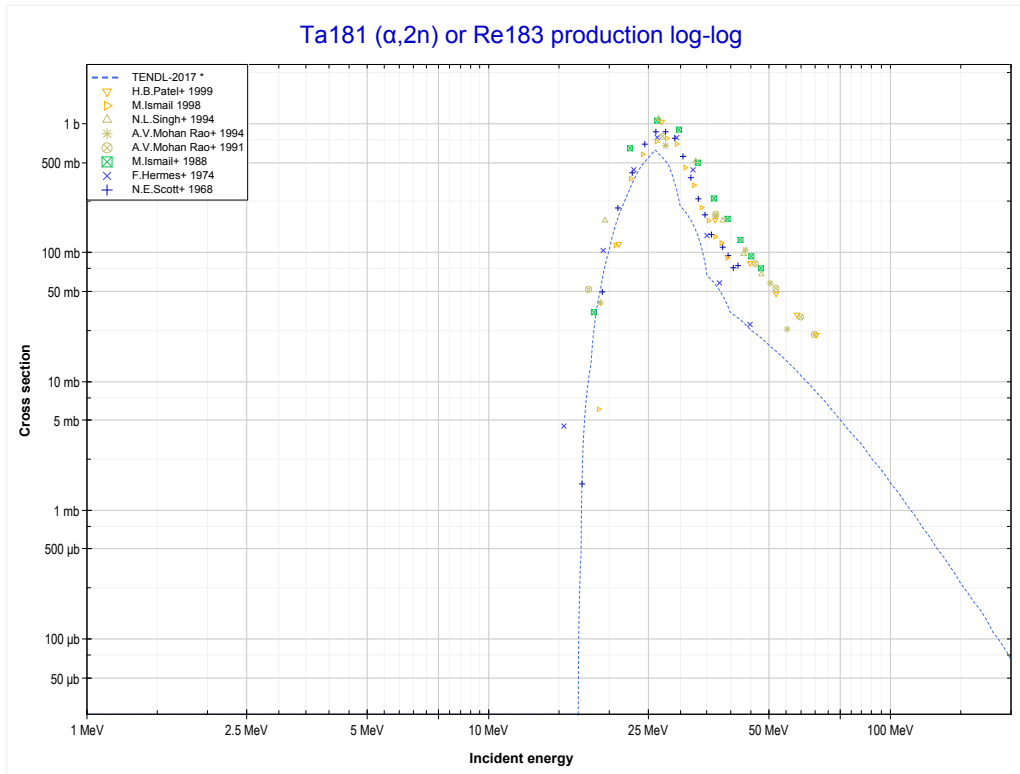
Reaction	Q-Value
Yb176($\alpha,2n$)Hf178	-14769.72 keV

<< 70-Yb-176	73-Ta-181	75-Re-187 >>
<< 70-Yb-176 MT16 ($\alpha,2n$)	MT4 (α,n) or MT5 (Re184 production)	MT16 ($\alpha,2n$) >>



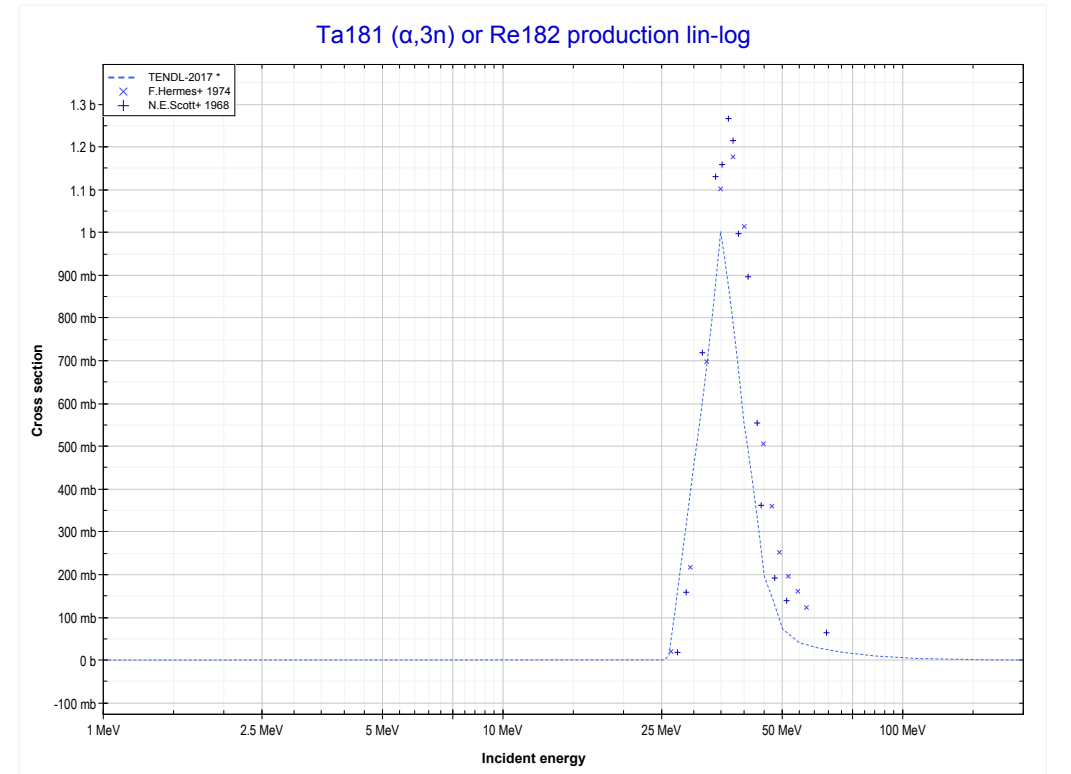
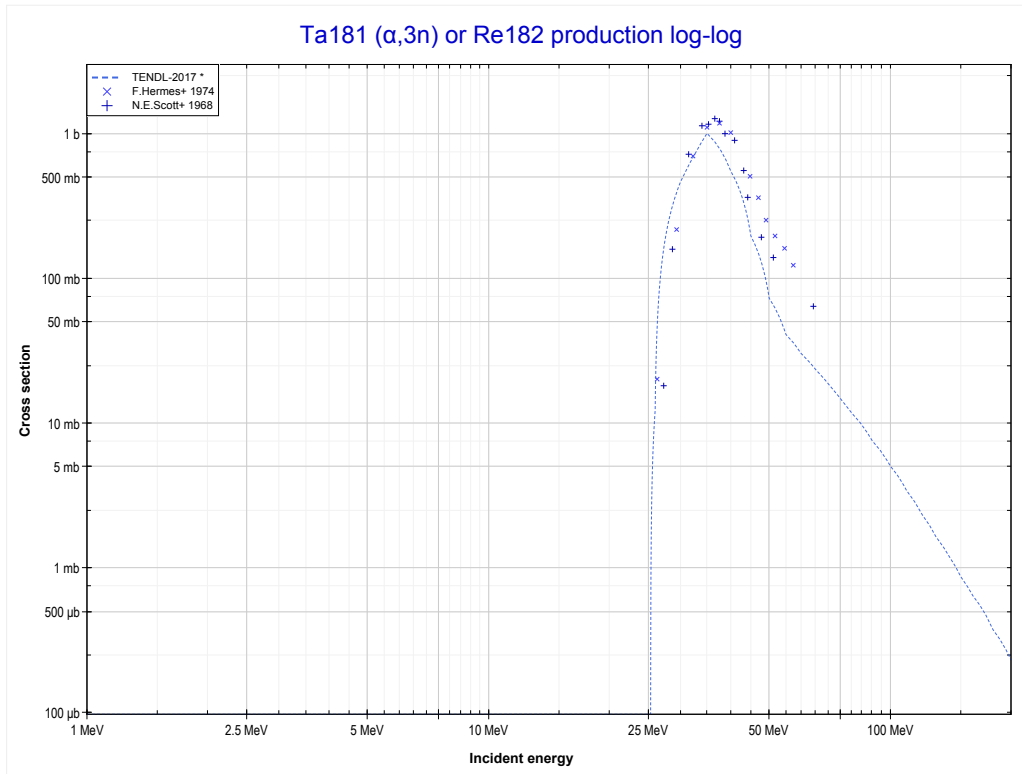
Reaction	Q-Value
Ta181(α,n)Re184	-9863.00 keV

<< 70-Yb-176	73-Ta-181	77-Ir-191 >>
<< MT4 (α,n)	MT16 ($\alpha,2n$) or MT5 (Re183 production)	MT17 ($\alpha,3n$) >>



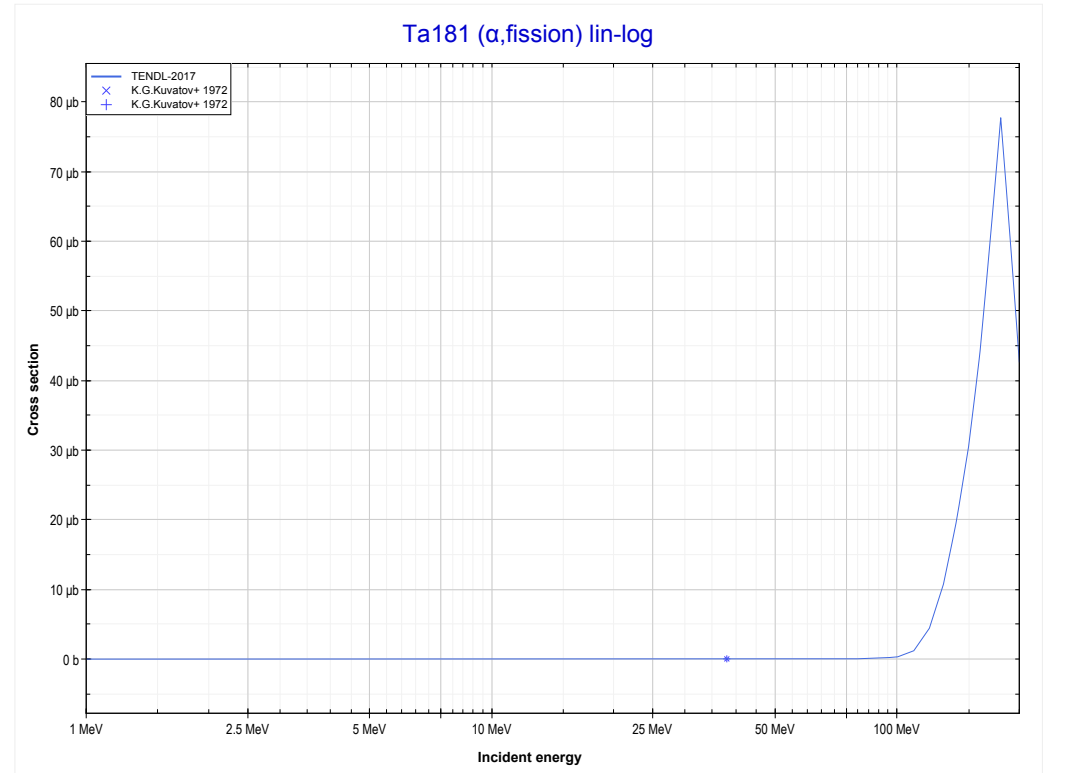
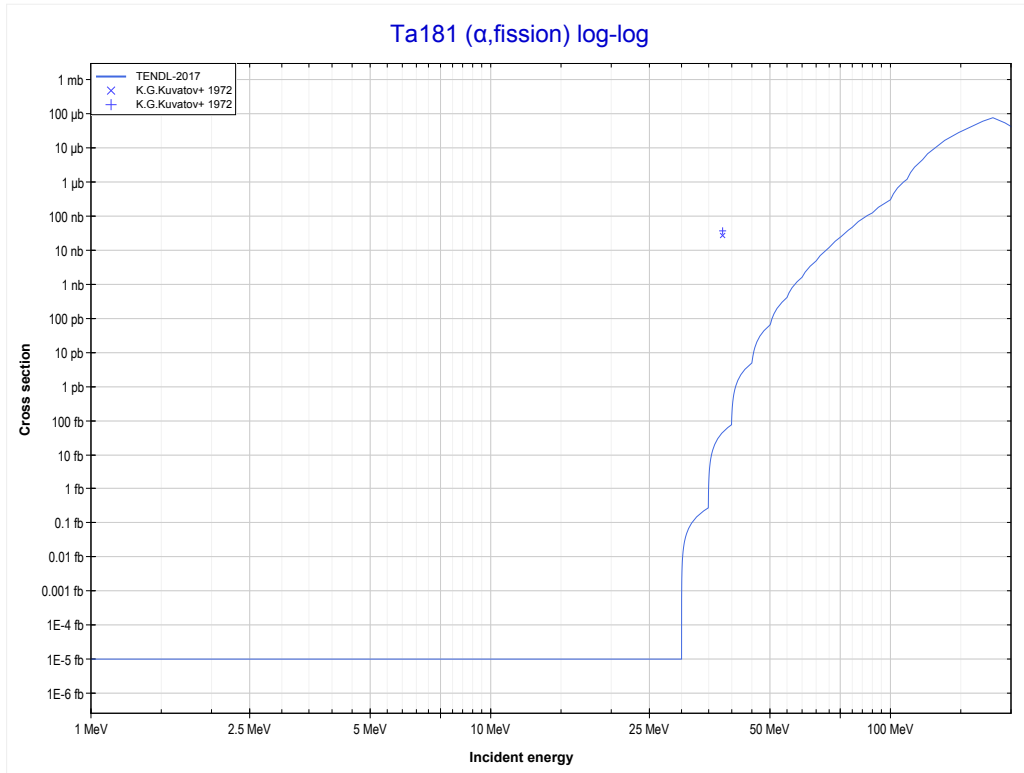
Reaction	Q-Value
Ta181($\alpha,2n$)Re183	-16348.32 keV

<< 69-Tm-169	73-Ta-181	75-Re-187 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Re182 production)	MT18 (α ,fission) >>

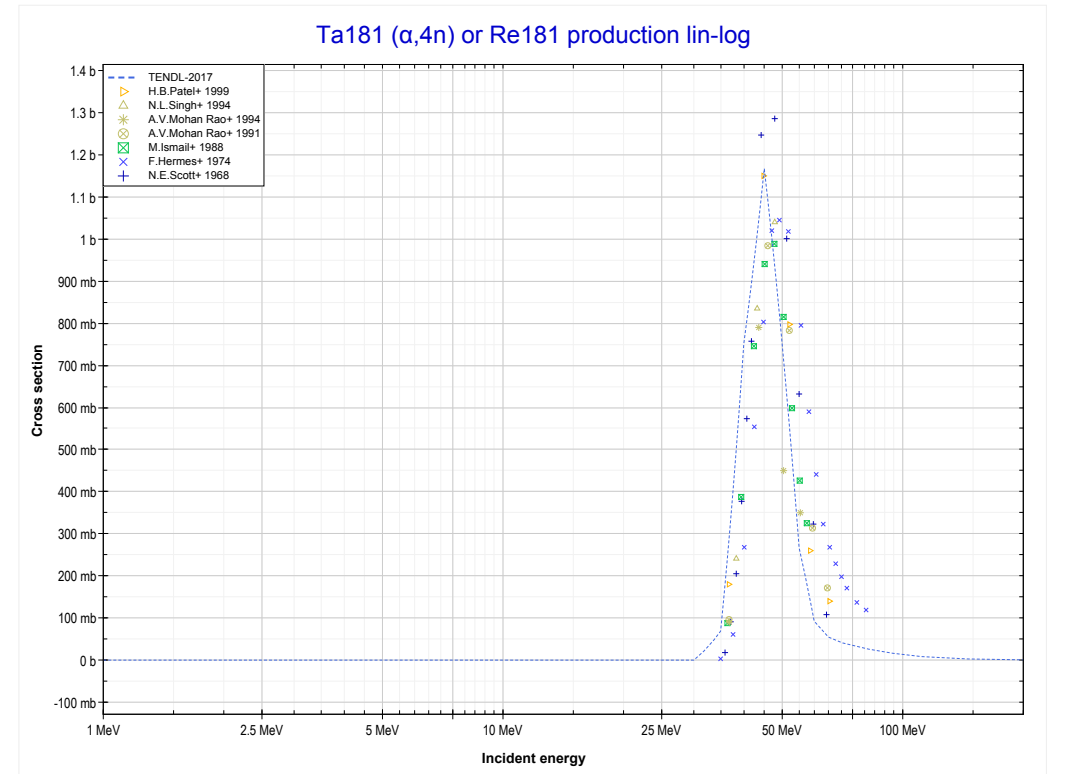
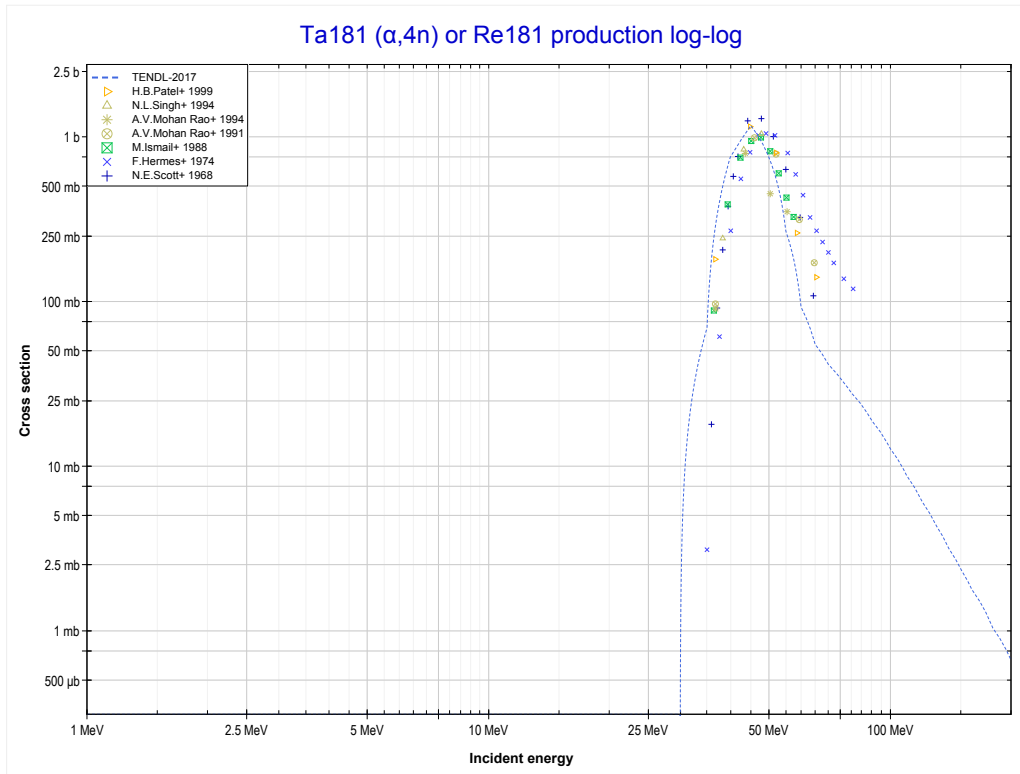


Reaction	Q-Value
Ta181($\alpha,3n$)Re182	-24780.64 keV

	73-Ta-181	75-Re-185 >>
<< MT17 ($\alpha,3n$)	MT18 (α,fission)	MT37 ($\alpha,4n$) >>

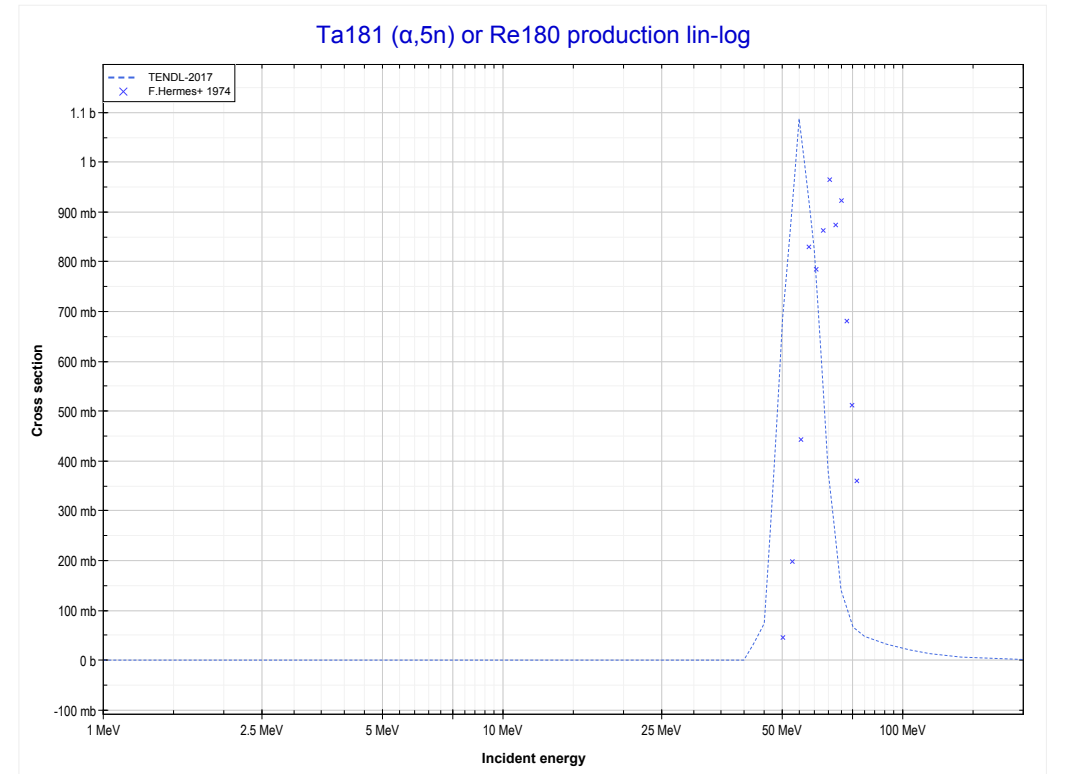
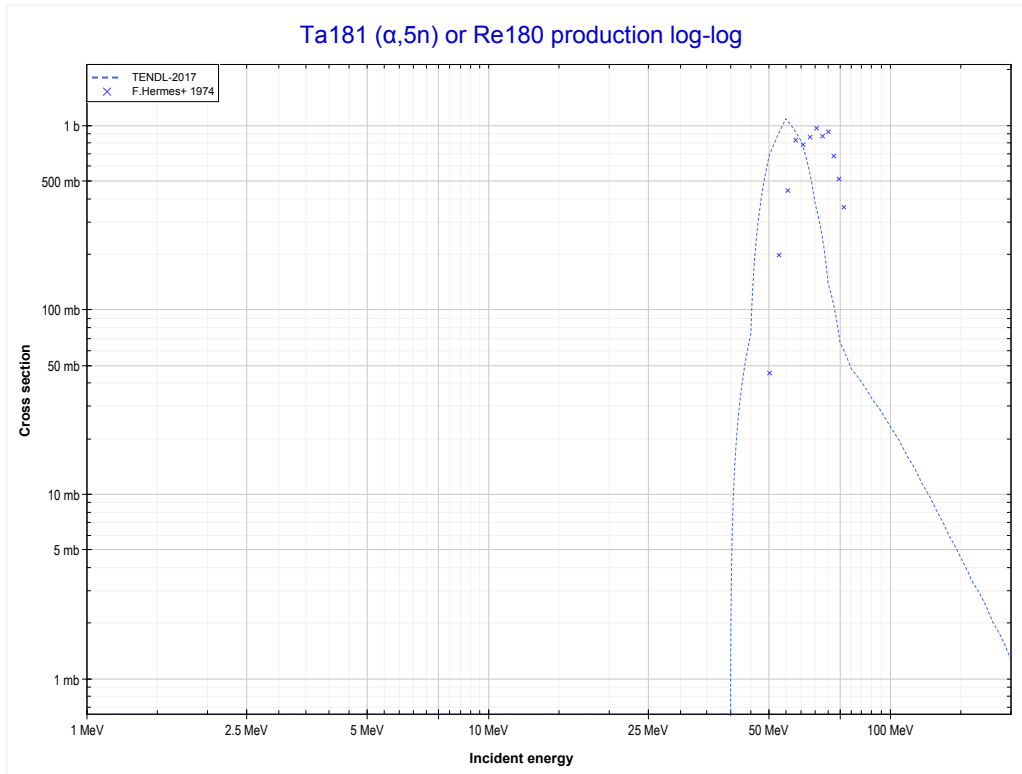


<< 69-Tm-169	73-Ta-181	75-Re-187 >>
<< MT18 (α ,fission)	MT37 (α,4n) or MT5 (Re181 production)	MT152 (α ,5n) >>



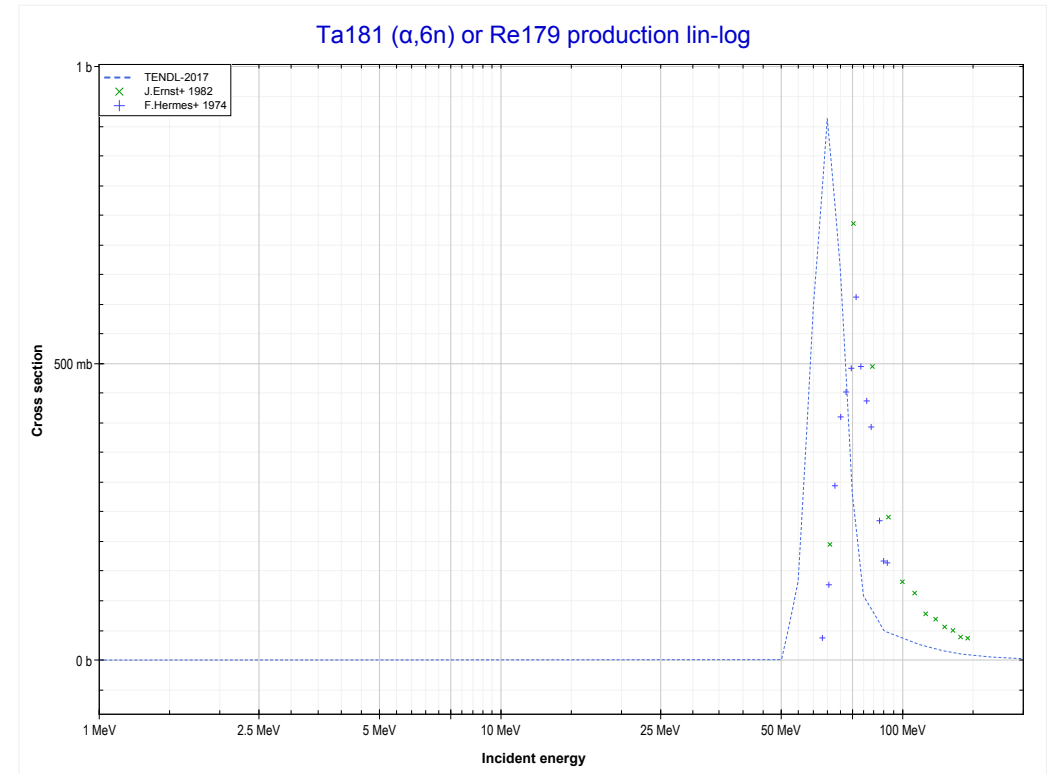
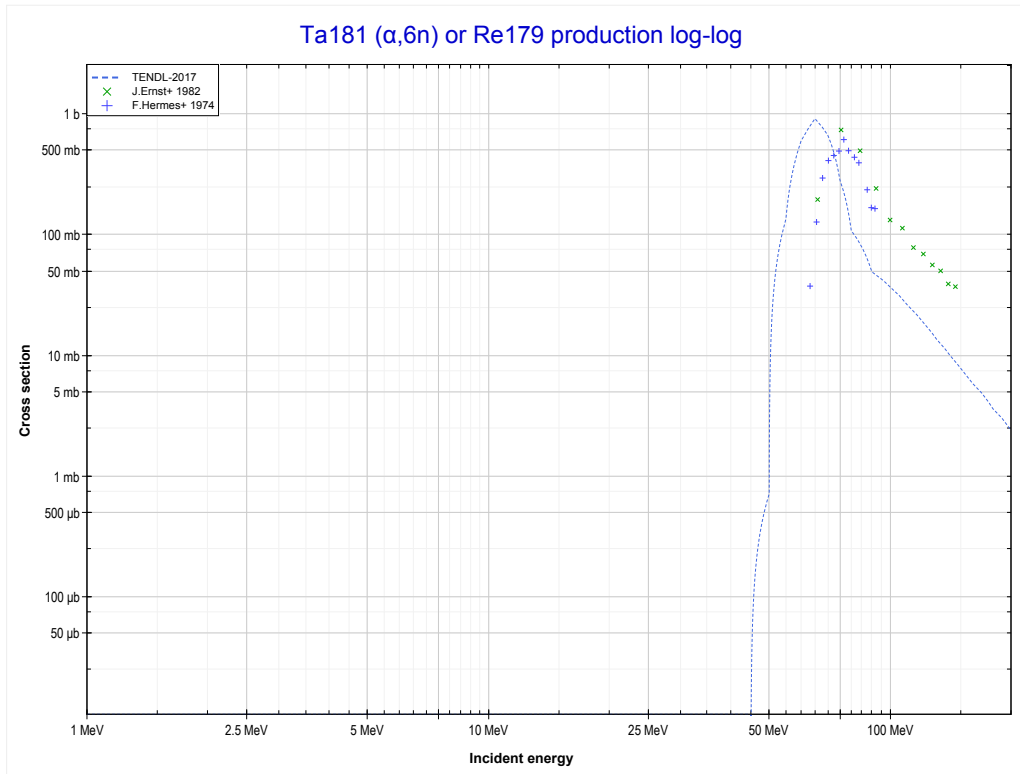
Reaction	Q-Value
Ta181(α ,4n)Re181	-31780.95 keV

<< 69-Tm-169	73-Ta-181	75-Re-187 >>
<< MT37 ($\alpha,4n$)	MT152 ($\alpha,5n$) or MT5 (Re180 production)	MT153 ($\alpha,6n$) >>



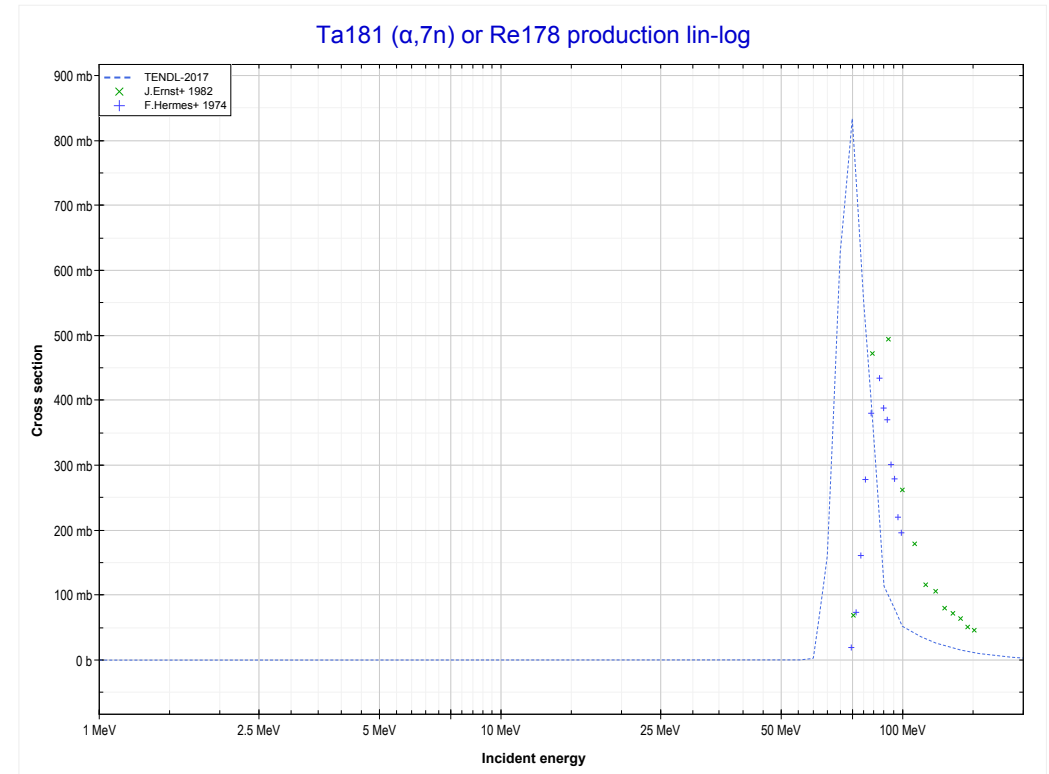
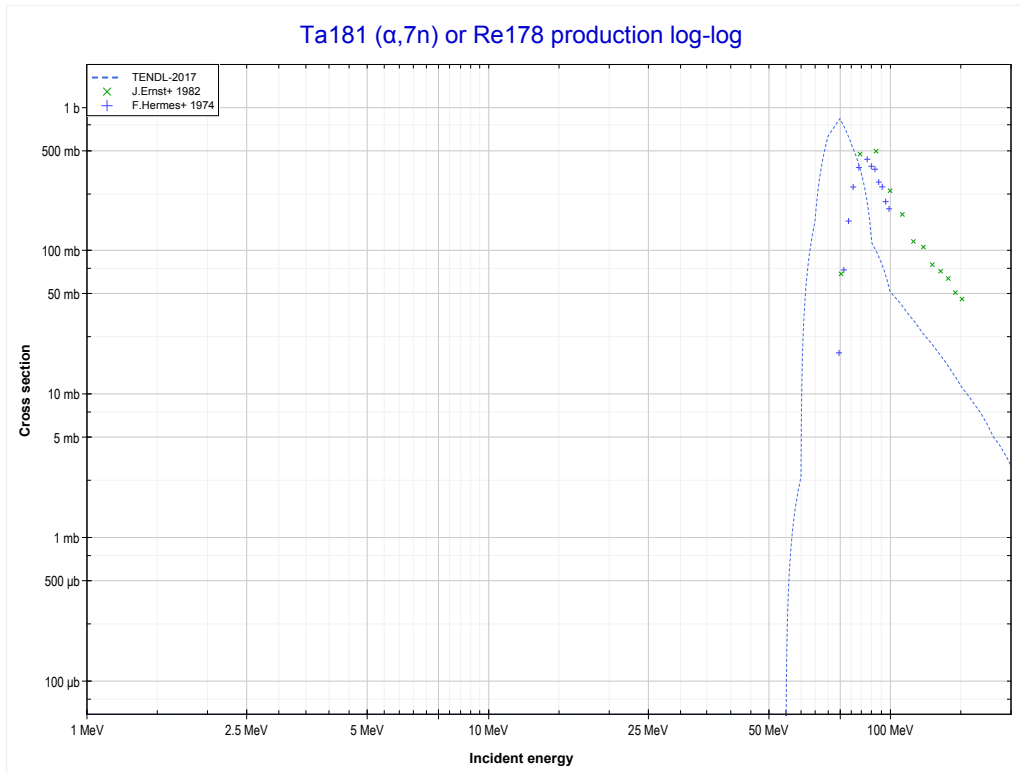
Reaction	Q-Value
Ta181($\alpha,5n$)Re180	-40536.27 keV

	73-Ta-181	75-Re-187 >>
<< MT152 ($\alpha,5n$)	MT153 ($\alpha,6n$) or MT5 (Re179 production)	MT160 ($\alpha,7n$) >>



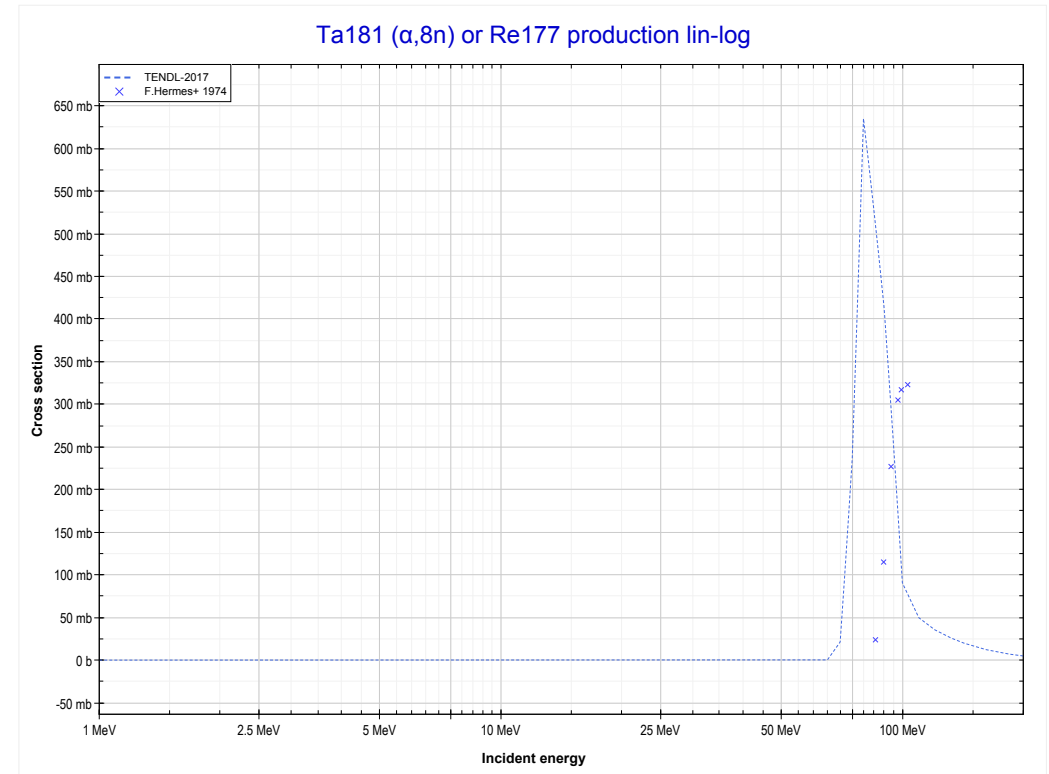
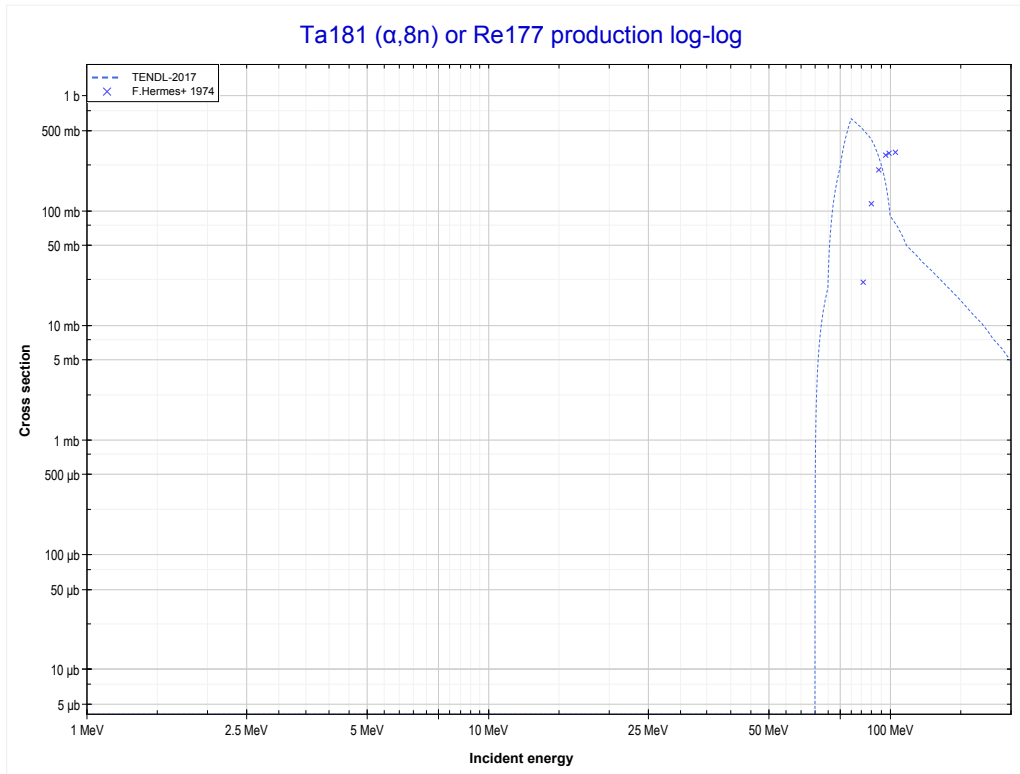
Reaction	Q-Value
Ta181($\alpha,6n$)Re179	-47859.59 keV

	73-Ta-181	75-Re-187 >>
<< MT153 ($\alpha,6n$)	MT160 ($\alpha,7n$) or MT5 (Re178 production)	MT161 ($\alpha,8n$) >>



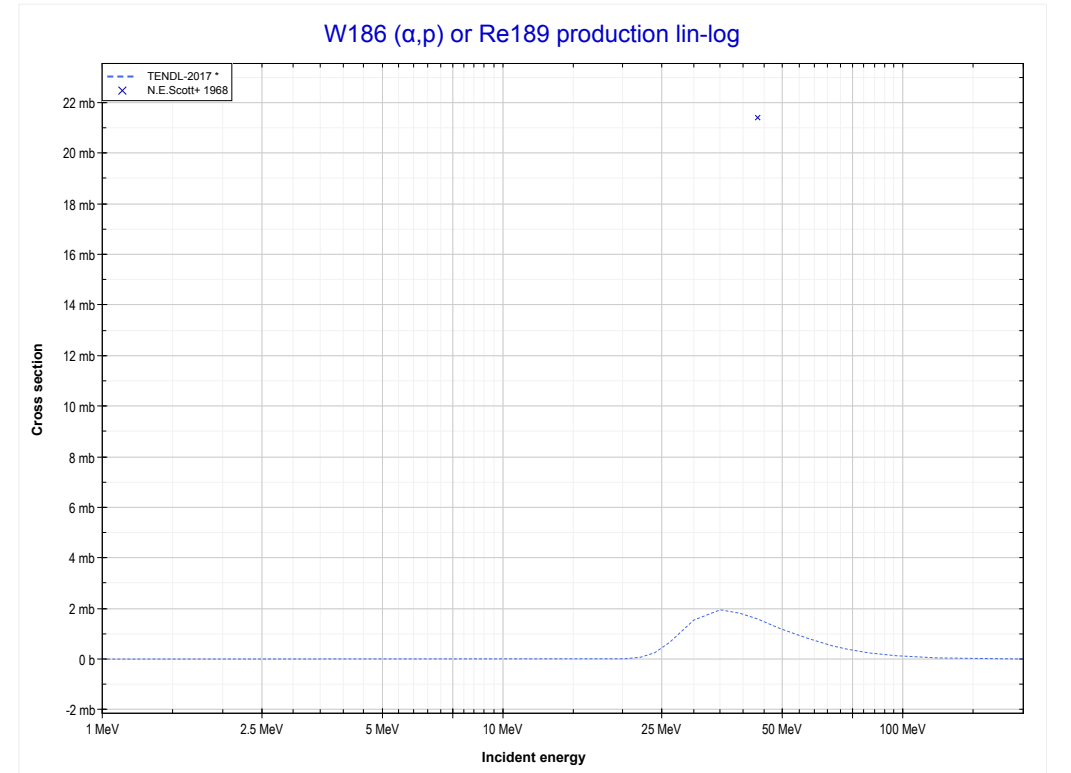
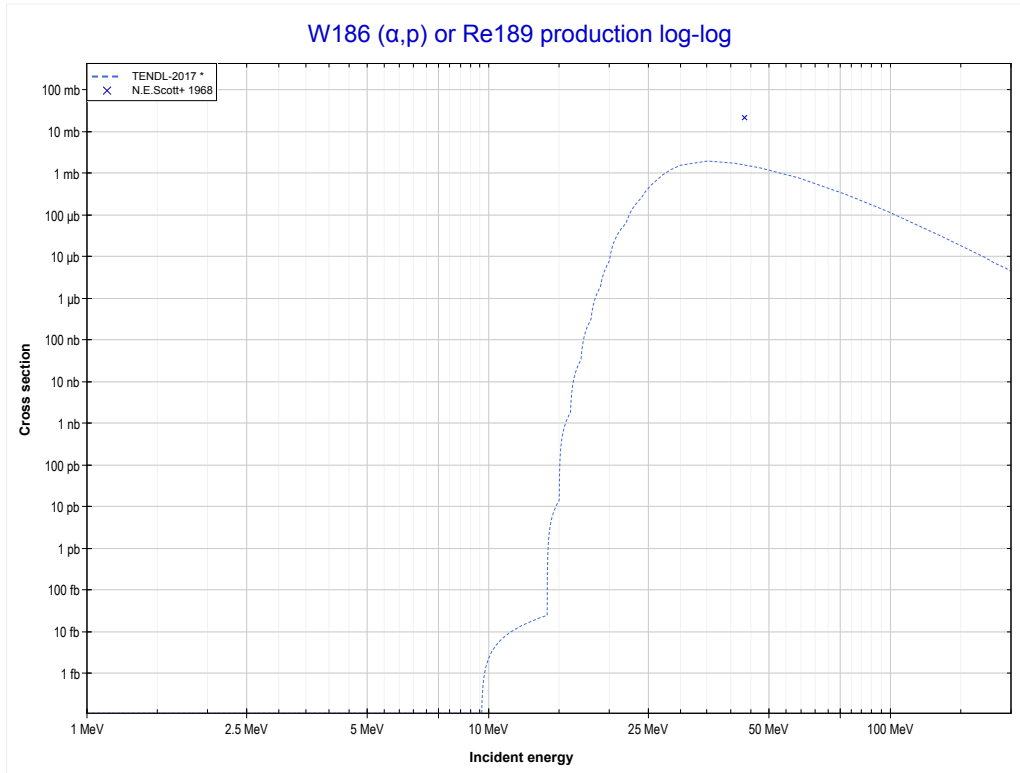
Reaction	Q-Value
Ta181($\alpha,7n$)Re178	-56862.90 keV

	73-Ta-181	79-Au-197 >>
<< MT160 ($\alpha,7n$)	MT161 ($\alpha,8n$) or MT5 (Re177 production)	74-W-186 MT103 (α,p) >>



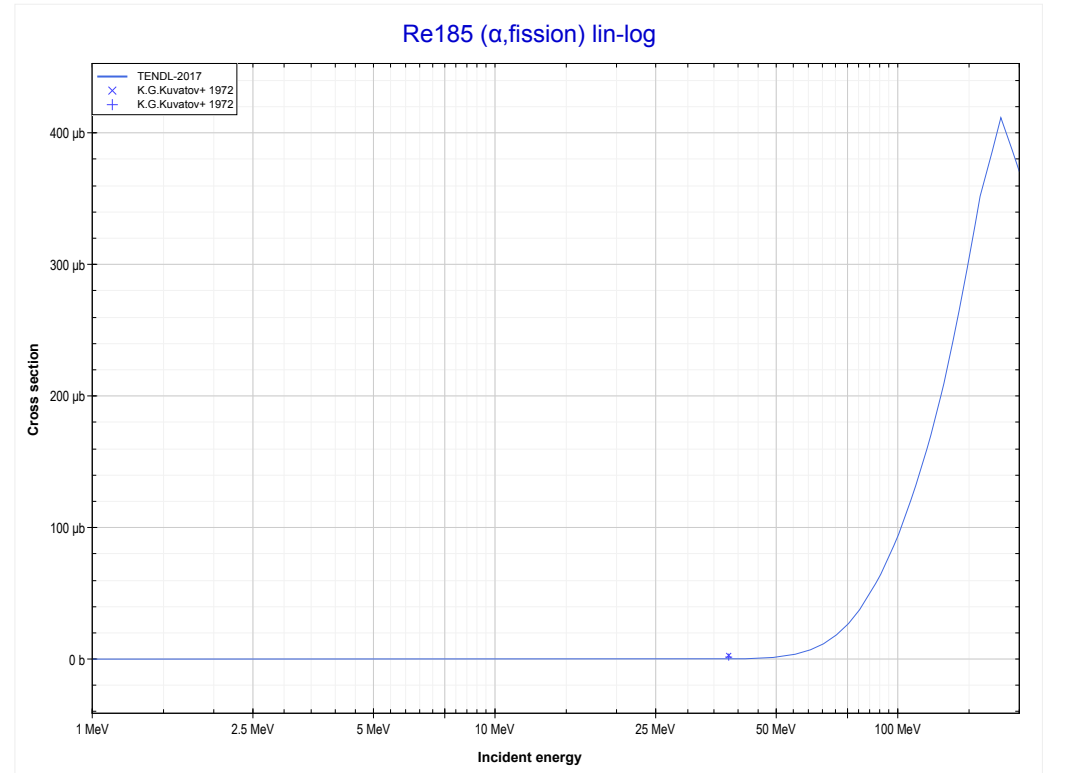
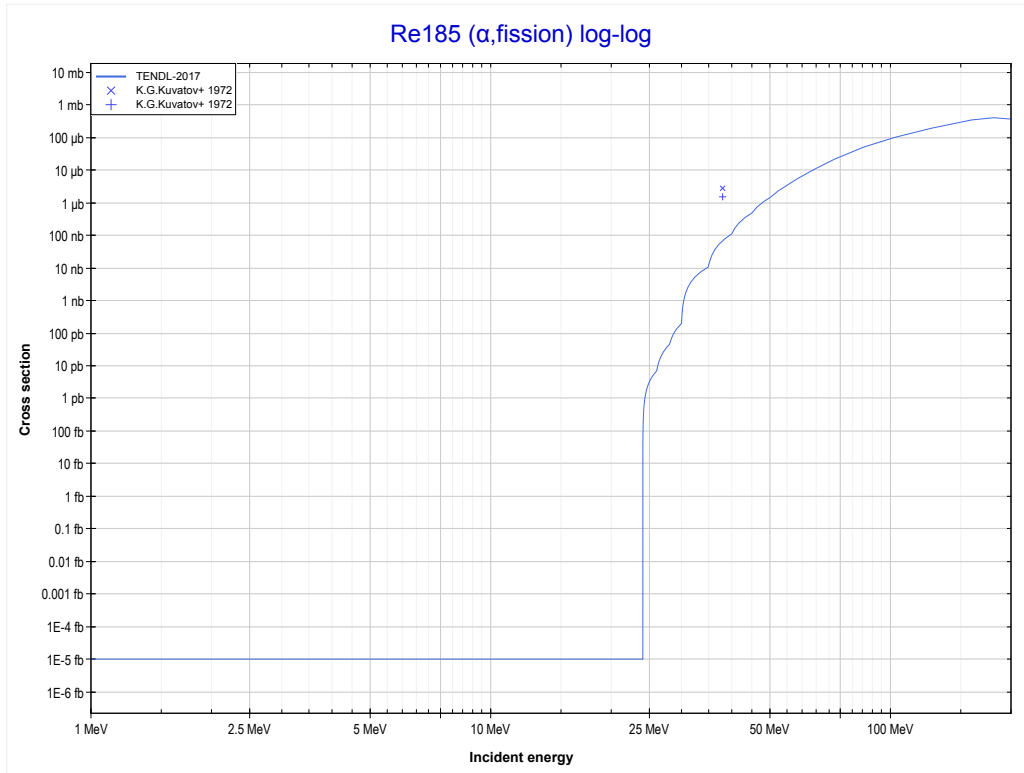
Reaction	Q-Value
Ta181($\alpha,8n$)Re177	-64318.22 keV

<< 56-Ba-138	74-W-186	82-Pb-208 >>
<< 73-Ta-181 MT161 ($\alpha,8n$)	MT103 (α,p) or MT5 (Re189 production)	75-Re-185 MT18 ($\alpha,fission$) >>

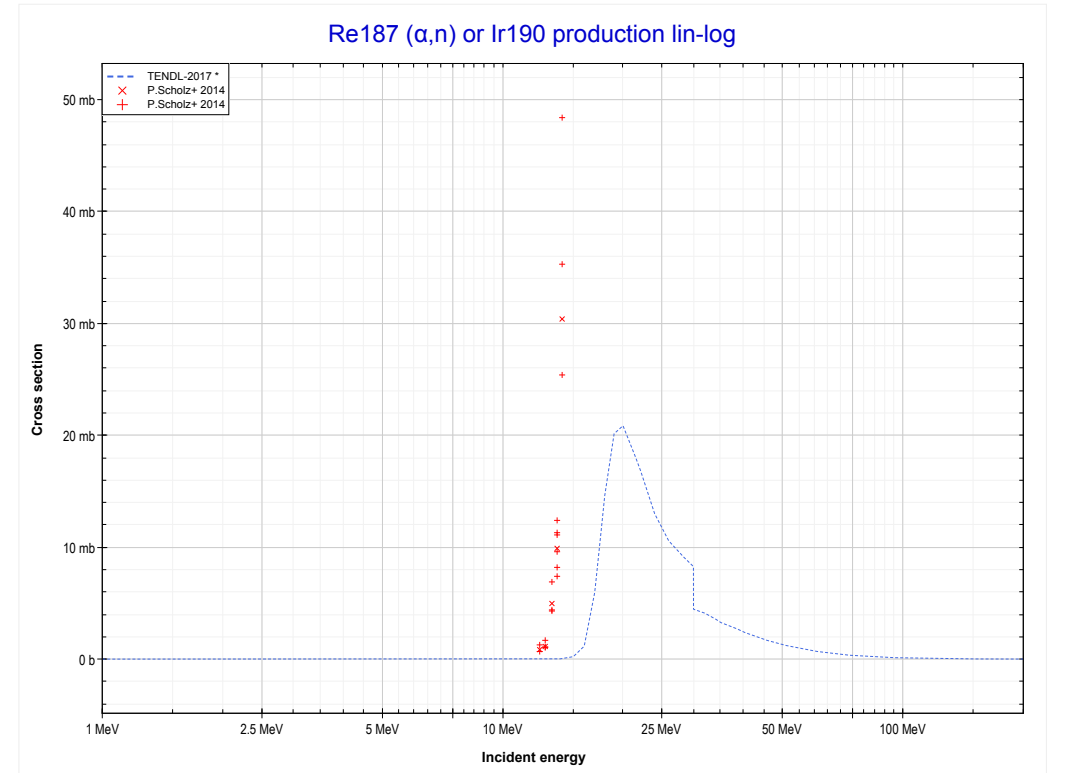
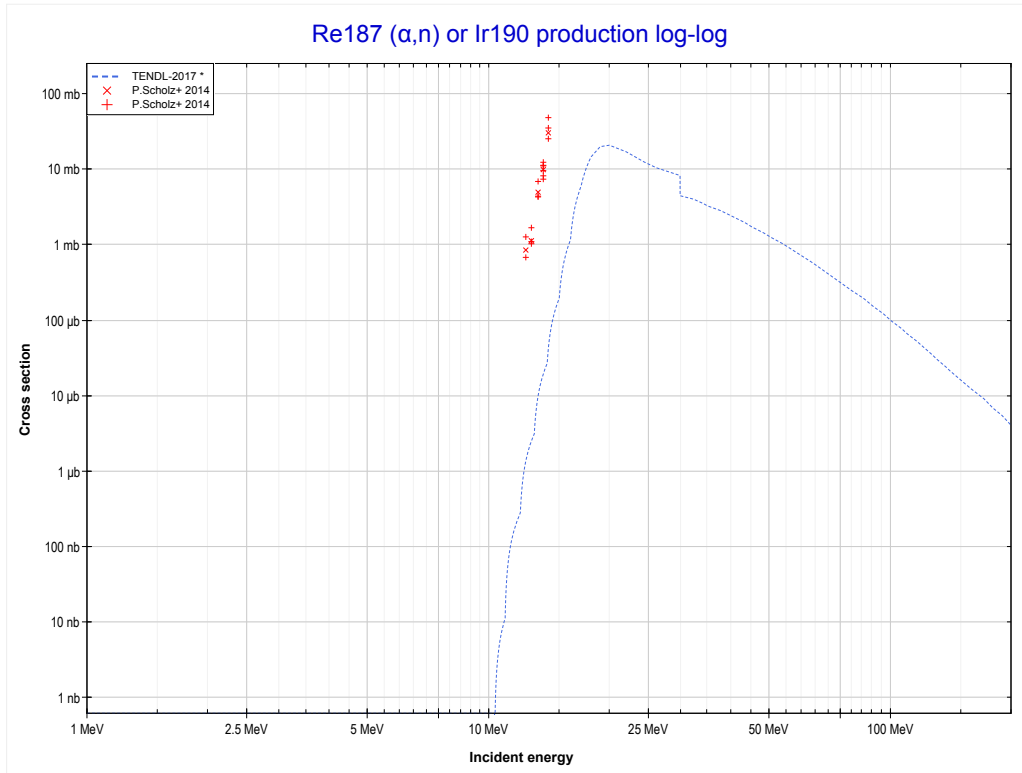


Reaction	Q-Value
W186(α,p)Re189	-9393.85 keV

<< 73-Ta-181	75-Re-185	75-Re-187 >>
<< 74-W-186 MT103 (α, p)	MT18 ($\alpha, fission$)	75-Re-187 MT4 (α, n) >>

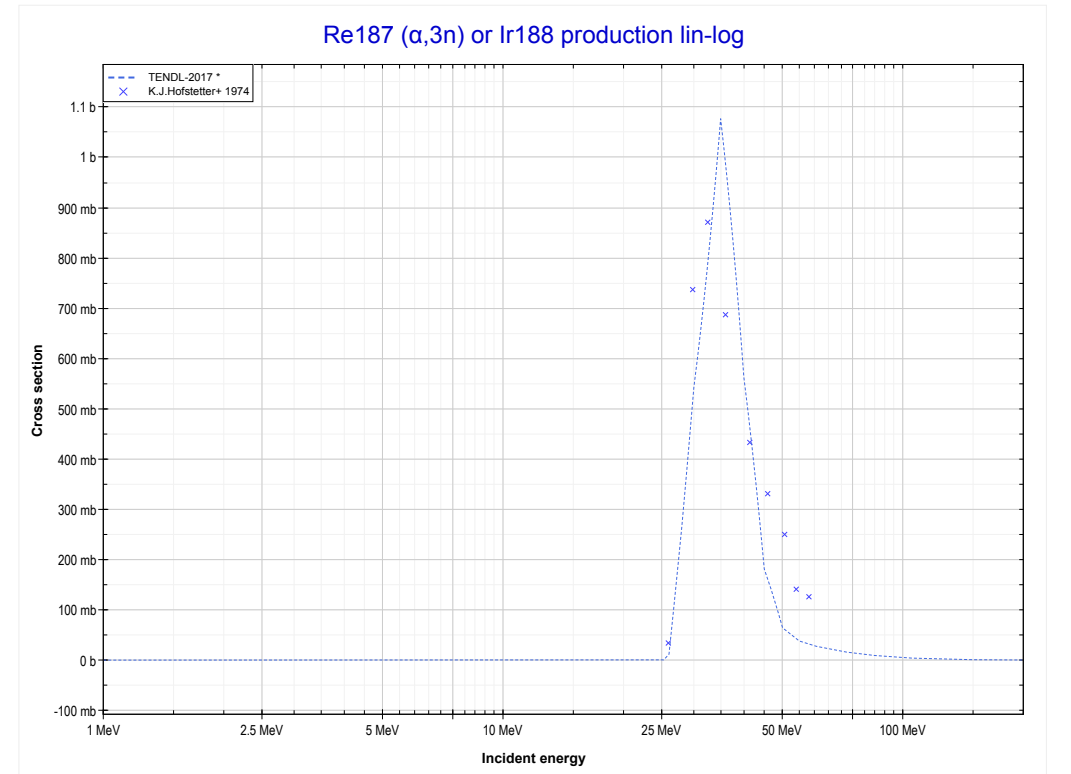
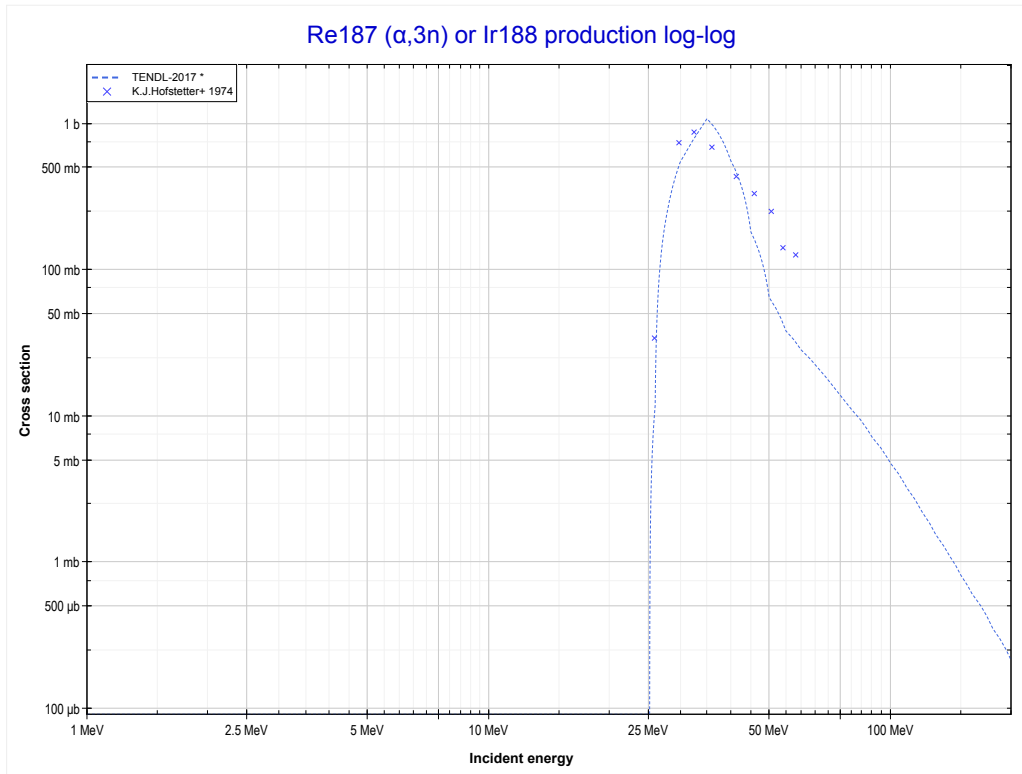


<< 73-Ta-181	75-Re-187	76-Os-192 >>
<< 75-Re-185 MT18 (α ,fission)	MT4 (α,n) or MT5 (Ir190 production)	MT17 (α ,3n) >>



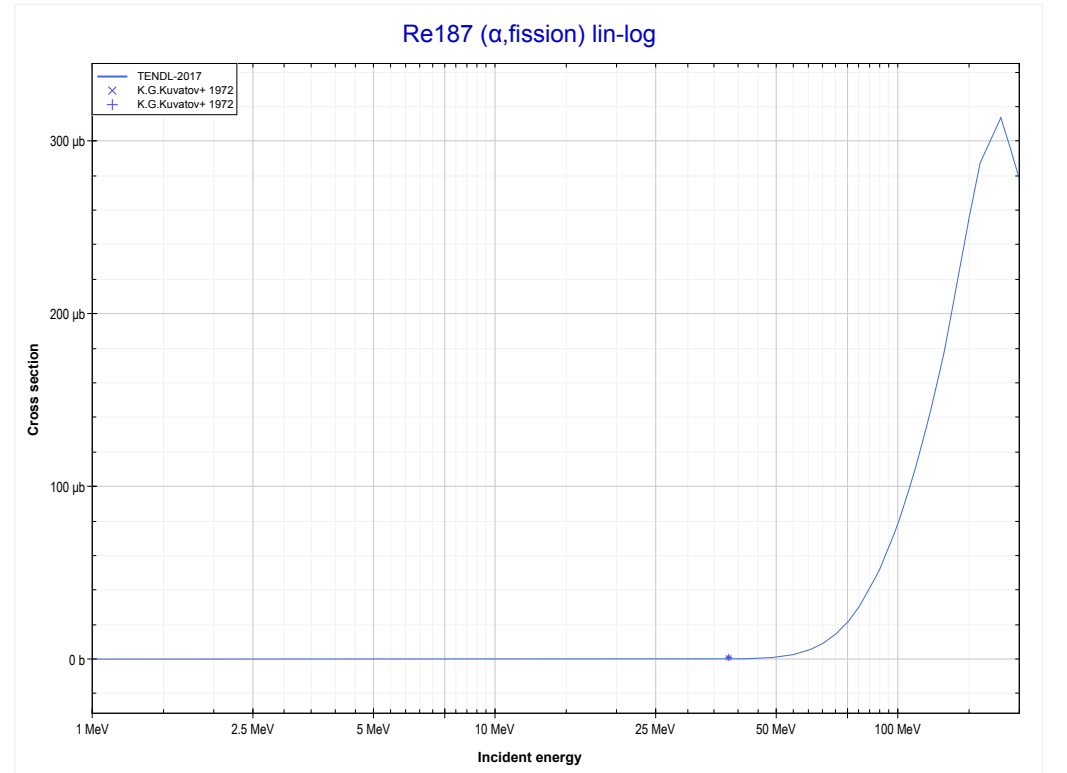
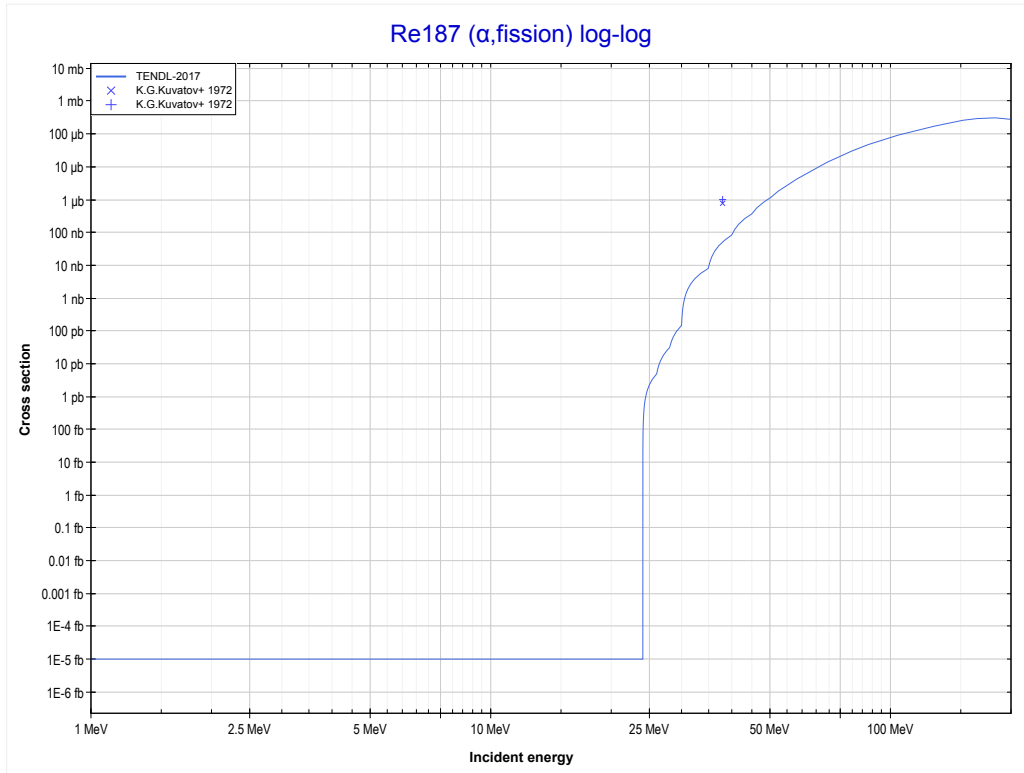
Reaction	Q-Value
Re187(α ,n)Ir190	-10109.30 keV

<< 73-Ta-181	75-Re-187	76-Os-192 >>
<< MT4 (α, n)	MT17 ($\alpha, 3n$) or MT5 (Ir188 production)	MT18 ($\alpha, fission$) >>

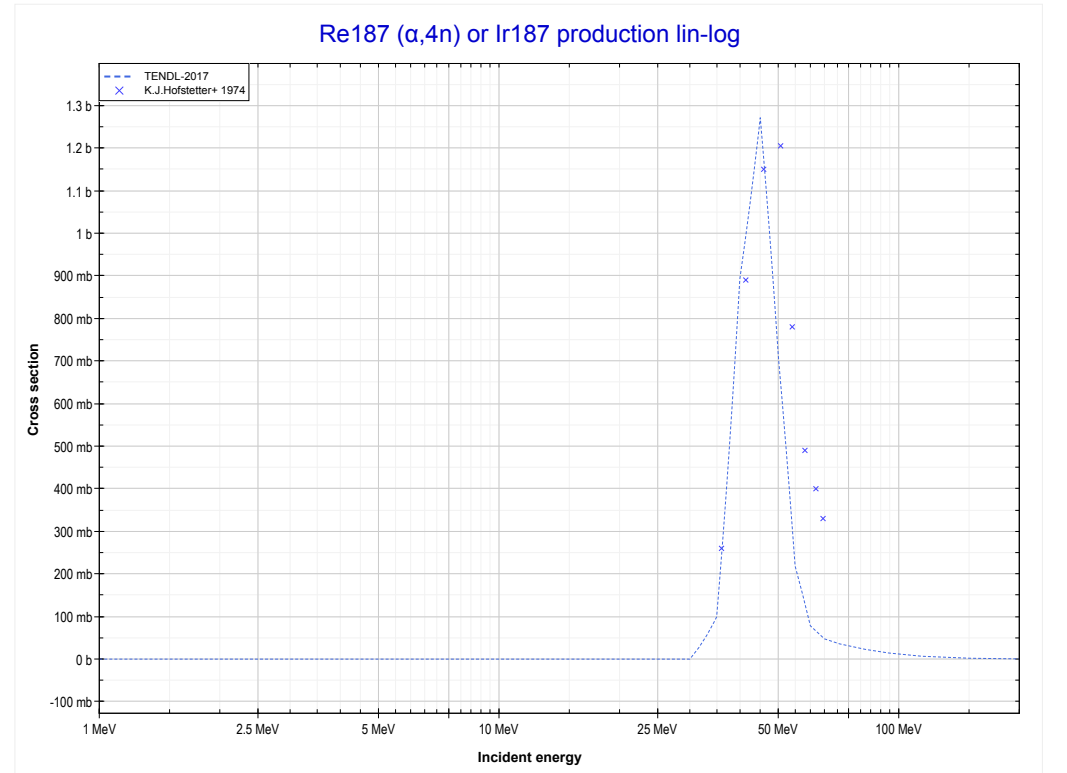
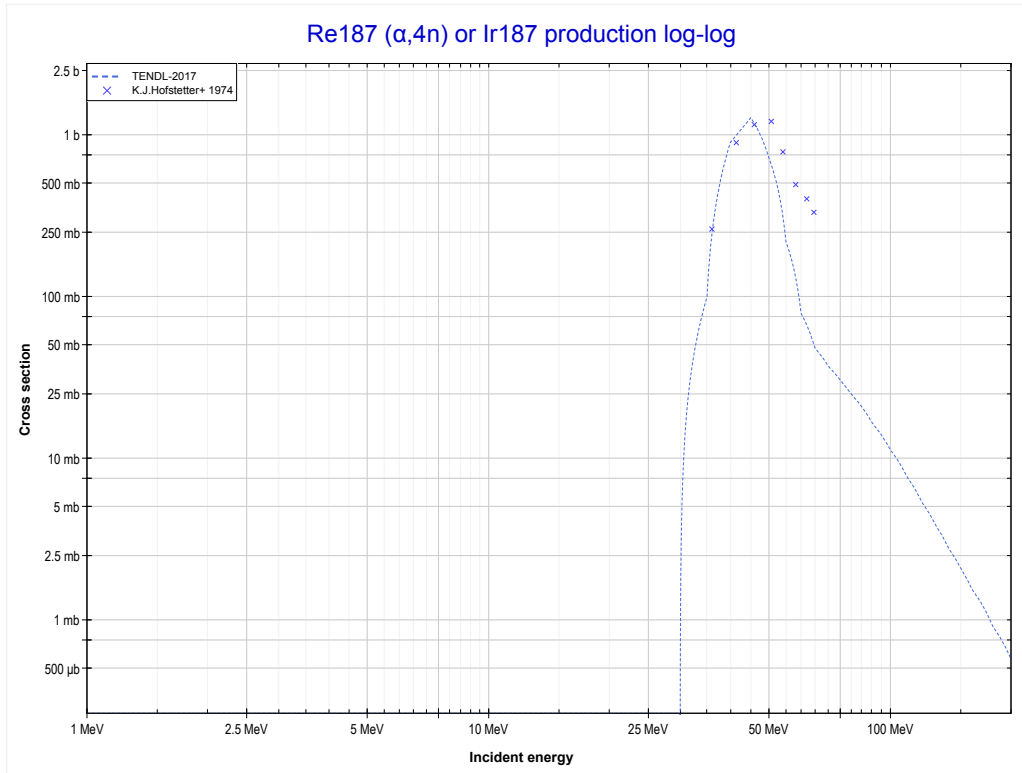


Reaction	Q-Value
Re187($\alpha, 3n$)Ir188	-24656.54 keV

<< 75-Re-185	75-Re-187	76-Os-188 >>
<< MT17 ($\alpha,3n$)	MT18 (α,fission)	MT37 ($\alpha,4n$) >>

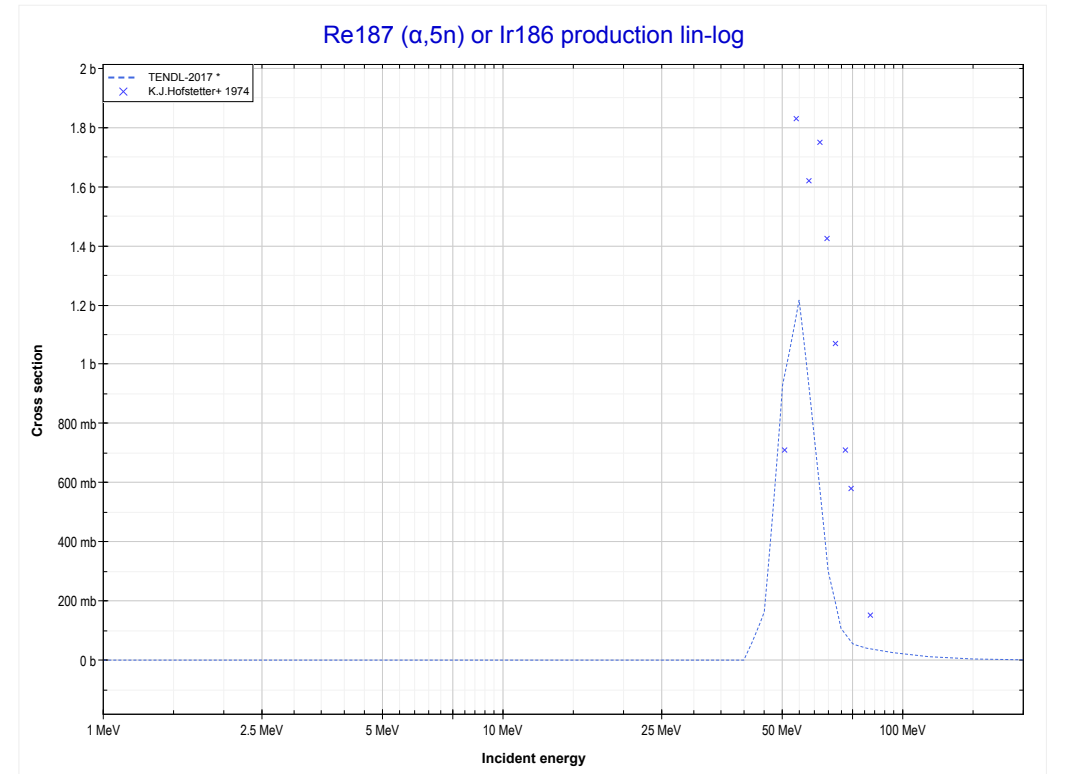
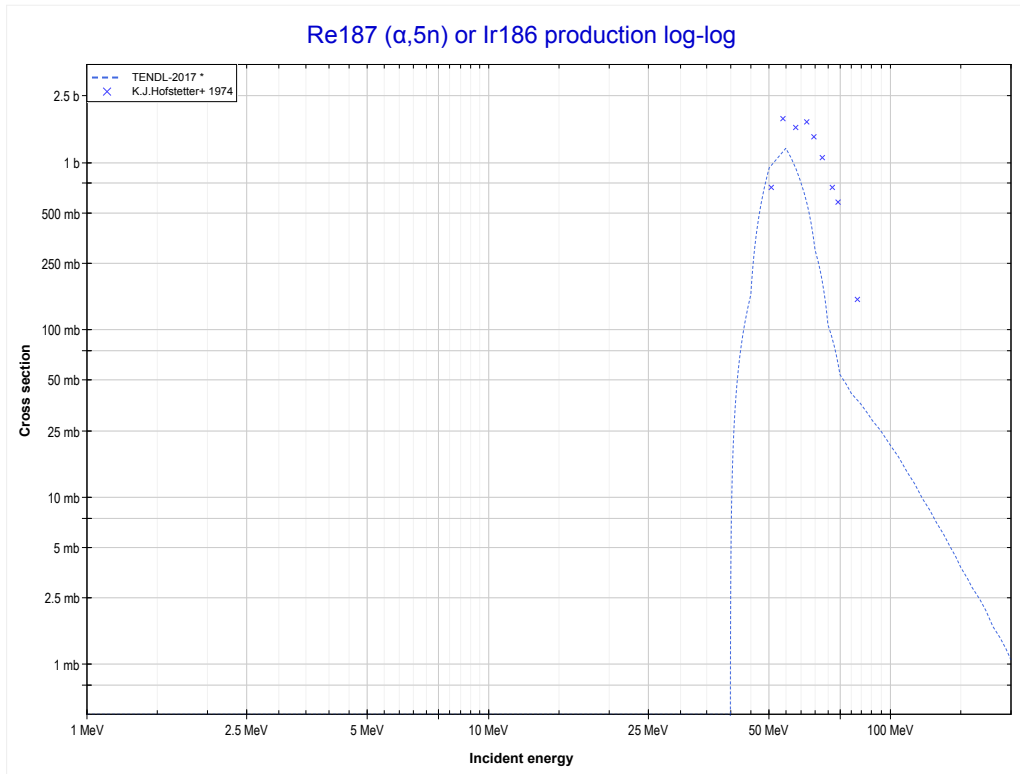


<< 73-Ta-181	75-Re-187	77-Ir-191 >>
<< MT18 (α ,fission)	MT37 (α,4n) or MT5 (Ir187 production)	MT152 (α ,5n) >>



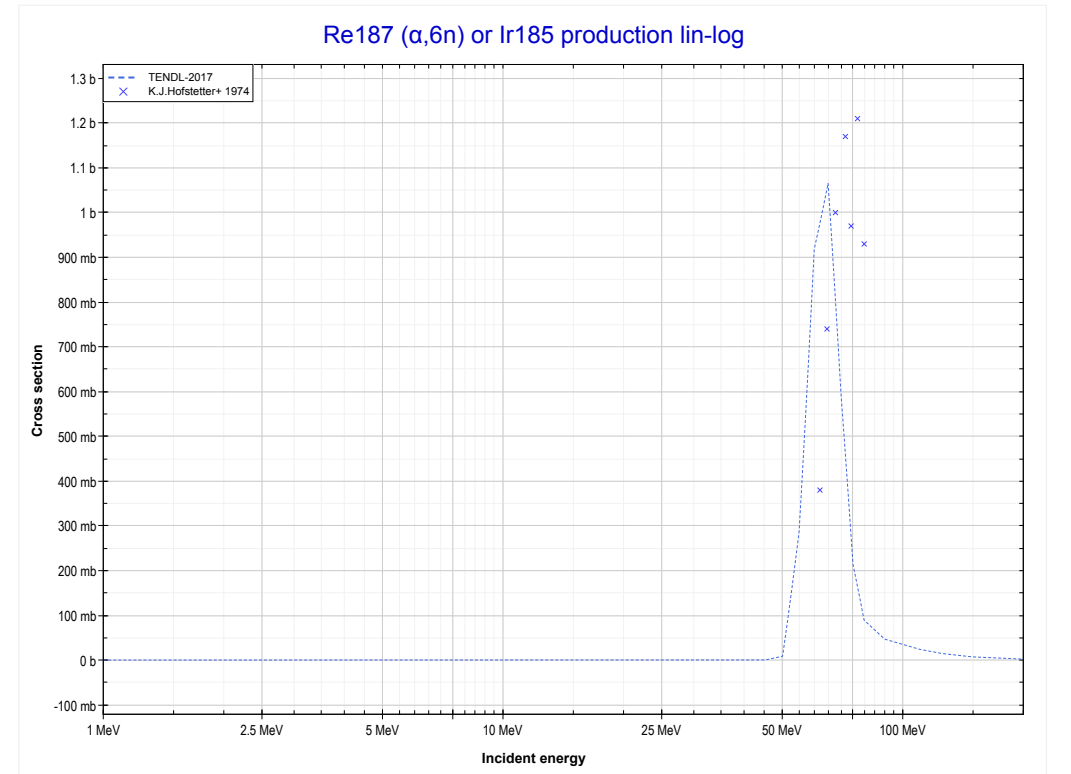
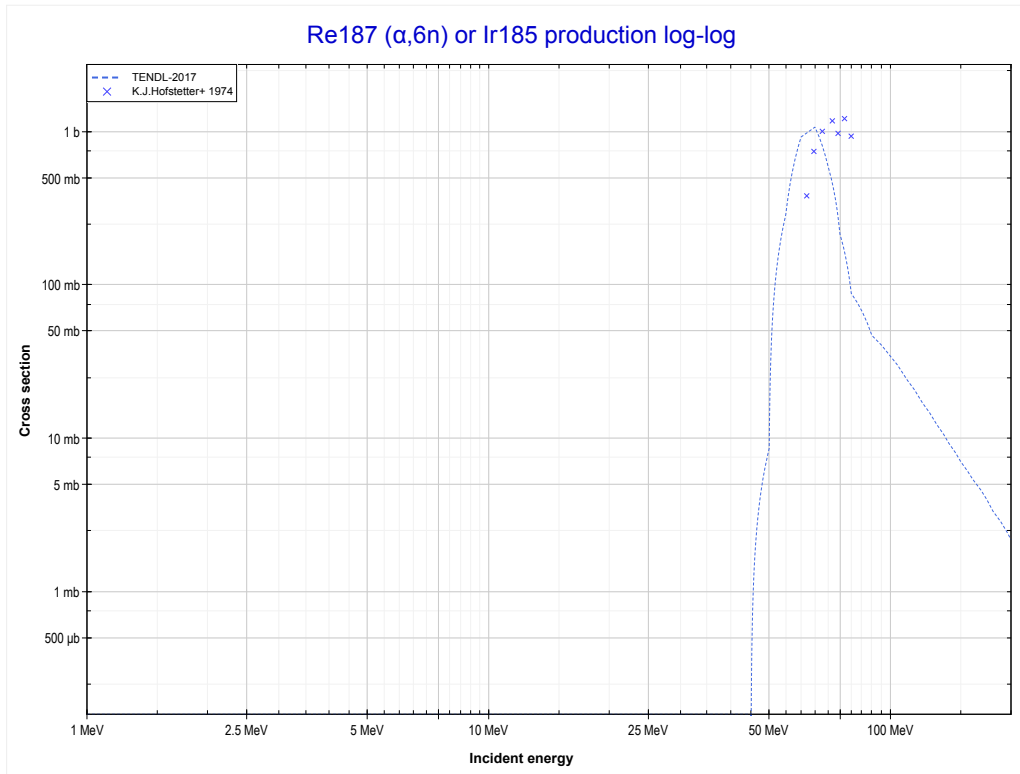
Reaction	Q-Value
Re187(α ,4n)Ir187	-31529.85 keV

<< 73-Ta-181	75-Re-187	77-Ir-191 >>
<< MT37 ($\alpha,4n$)	MT152 ($\alpha,5n$) or MT5 (Ir186 production)	MT153 ($\alpha,6n$) >>



Reaction	Q-Value
Re187($\alpha,5n$)Ir186	-39975.17 keV

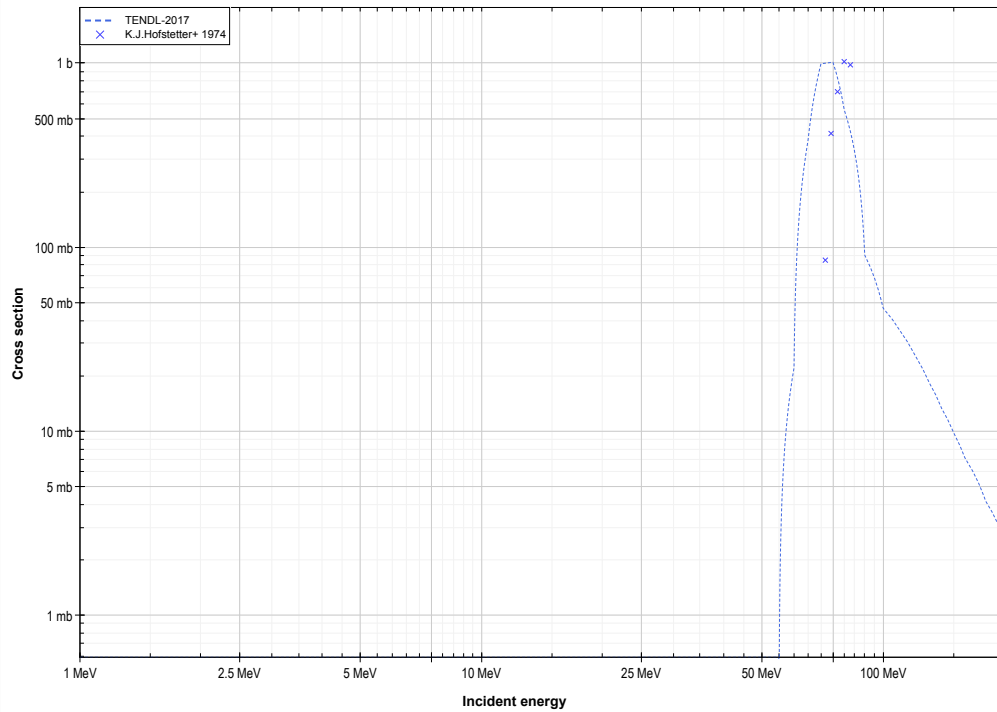
<< 73-Ta-181	75-Re-187	79-Au-197 >>
<< MT152 ($\alpha,5n$)	MT153 ($\alpha,6n$) or MT5 (Ir185 production)	MT160 ($\alpha,7n$) >>



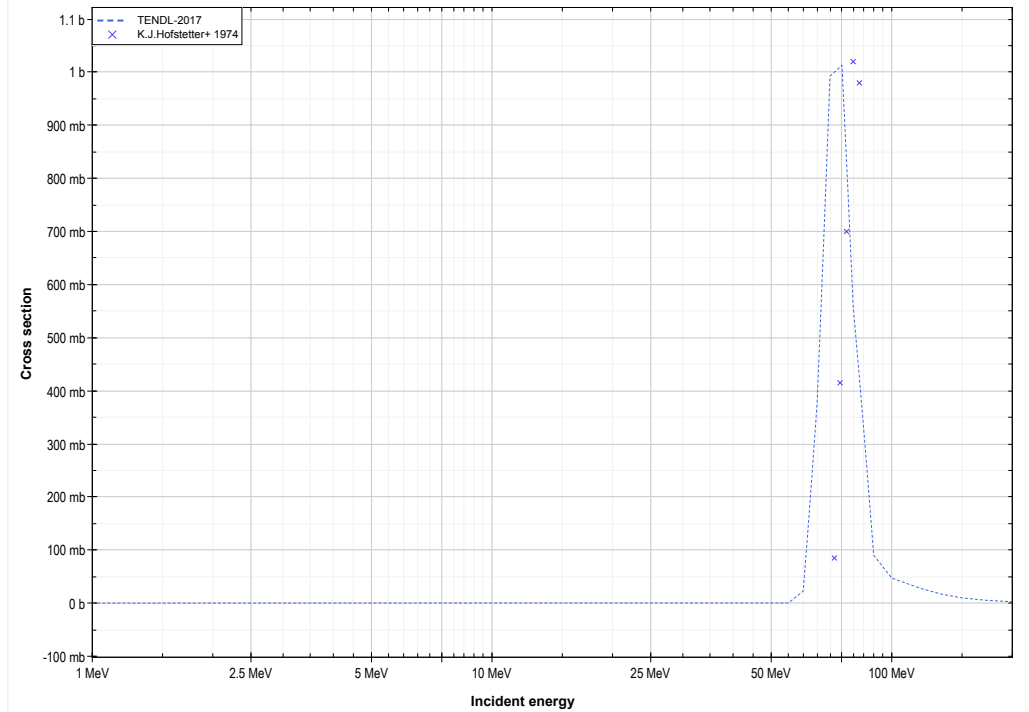
Reaction	Q-Value
Re187($\alpha,6n$)Ir185	-46885.49 keV

<< 73-Ta-181	75-Re-187	79-Au-197 >>
<< MT153 ($\alpha,6n$)	MT160 ($\alpha,7n$) or MT5 (Ir184 production)	76-Os-188 MT18 (α ,fission) >>

Re187 ($\alpha,7n$) or Ir184 production log-log

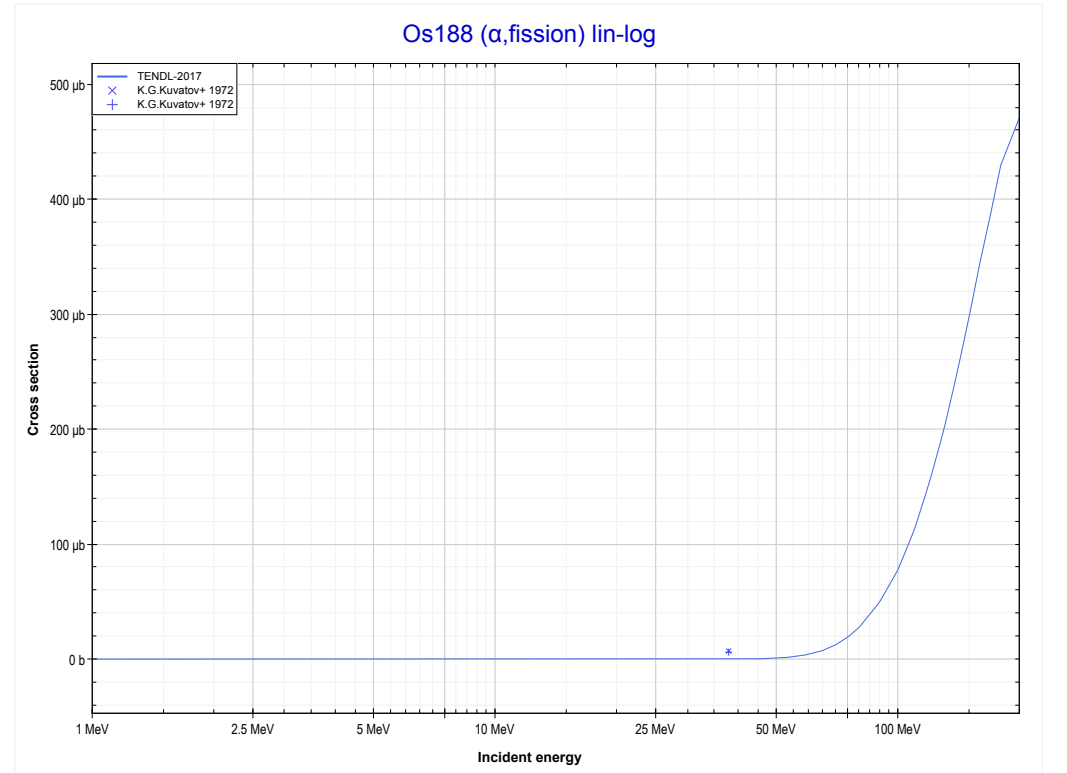
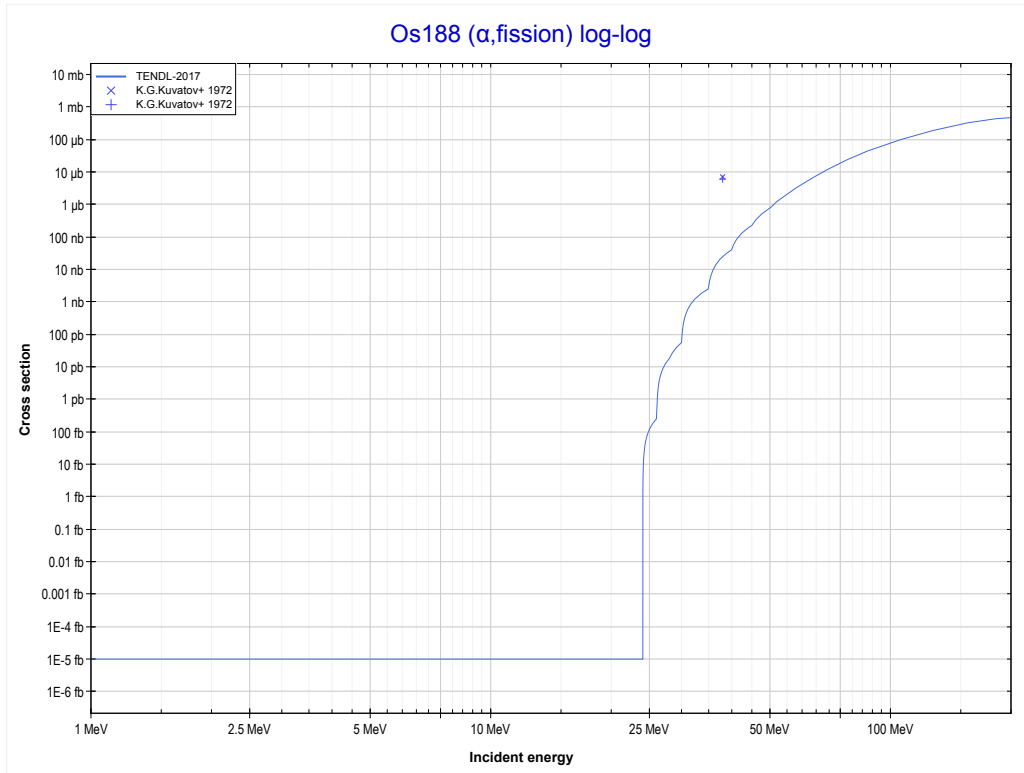


Re187 ($\alpha,7n$) or Ir184 production lin-log

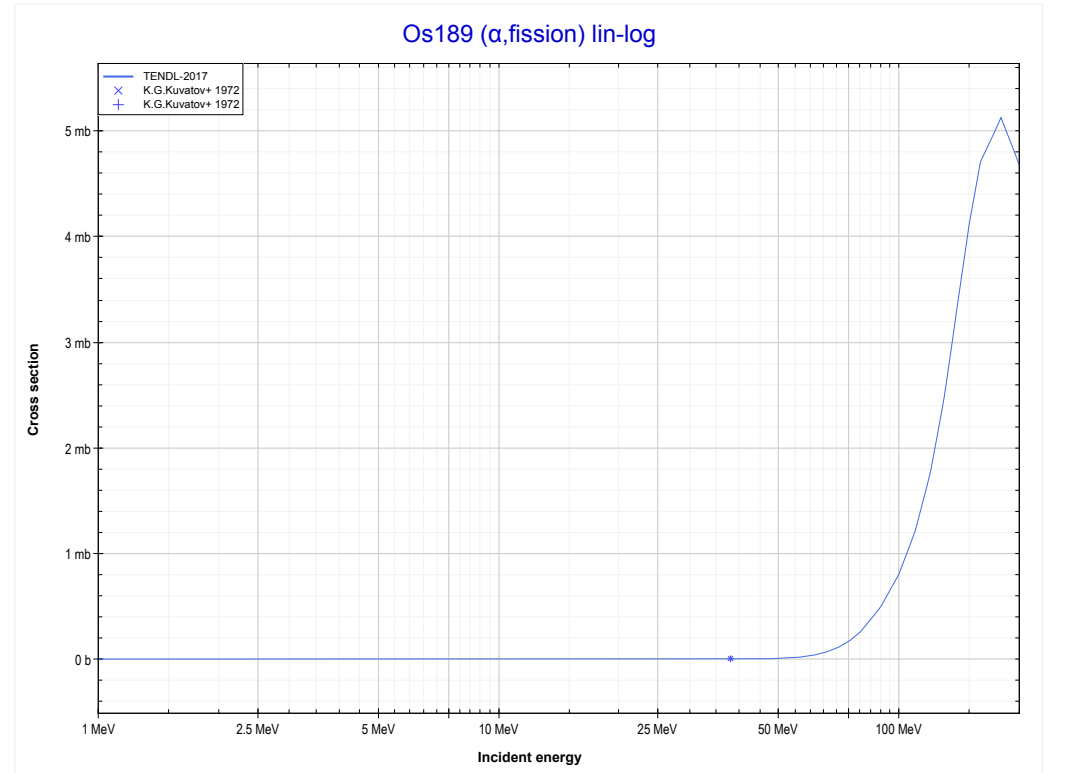
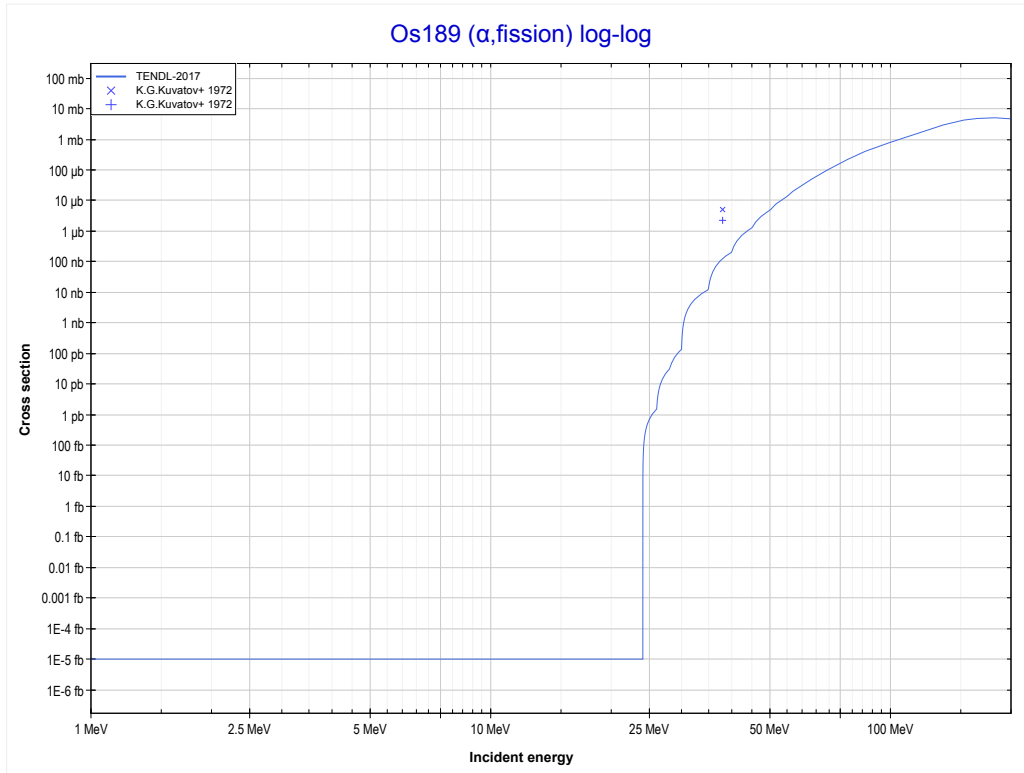


Reaction	Q-Value
Re187($\alpha,7n$)Ir184	-55681.80 keV

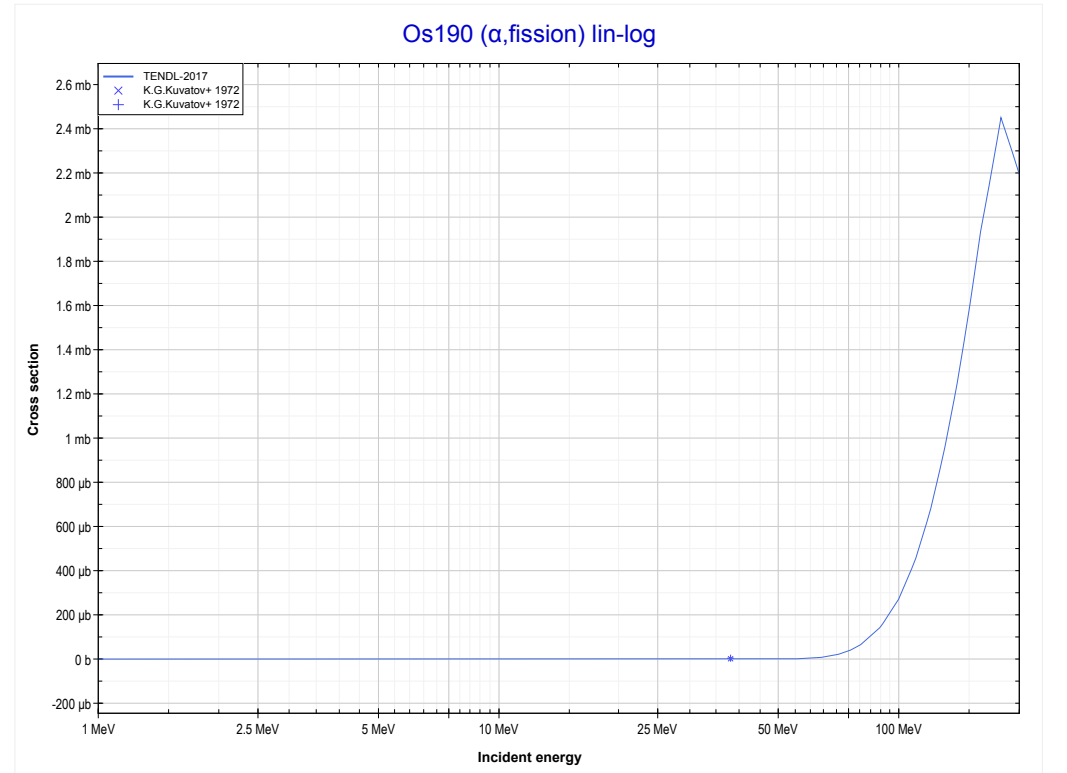
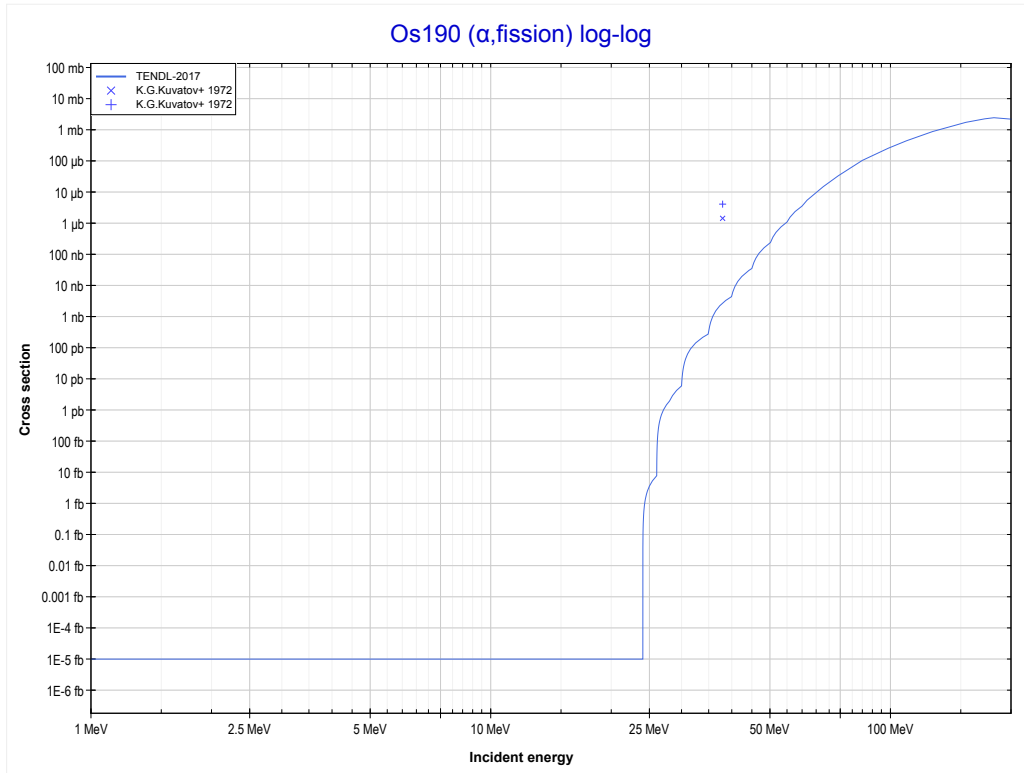
<< 75-Re-187	76-Os-188	76-Os-189 >>
<< 75-Re-187 MT160 ($\alpha,7n$)	MT18 (α,fission)	76-Os-189 MT18 (α ,fission) >>



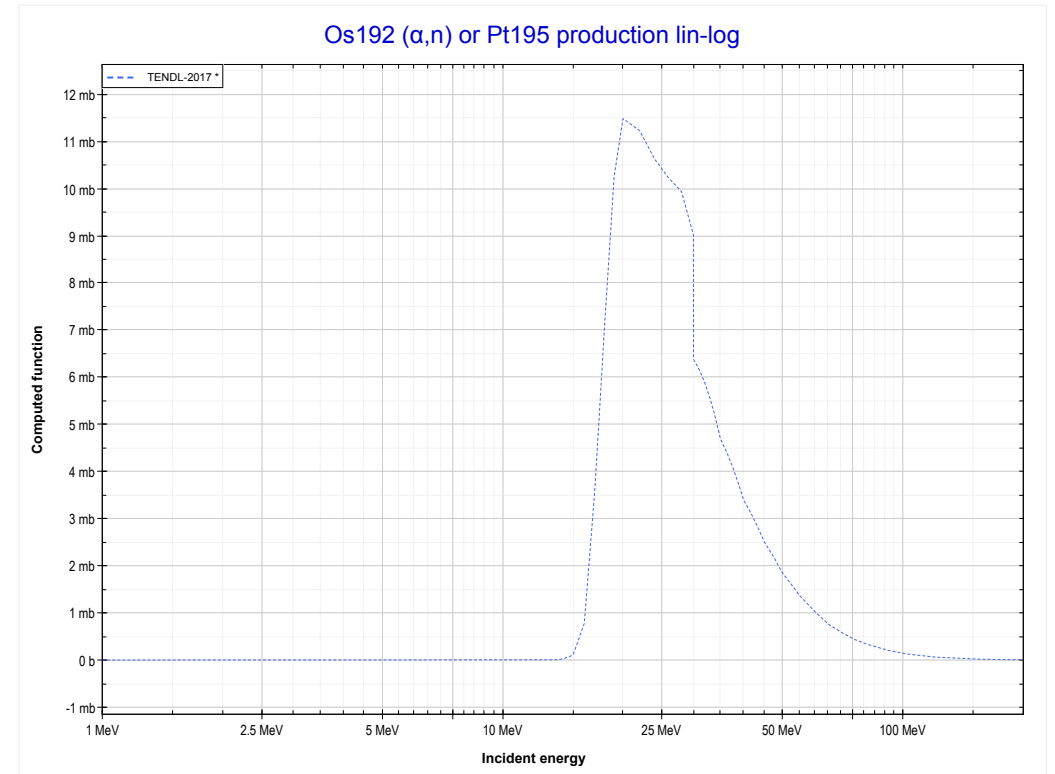
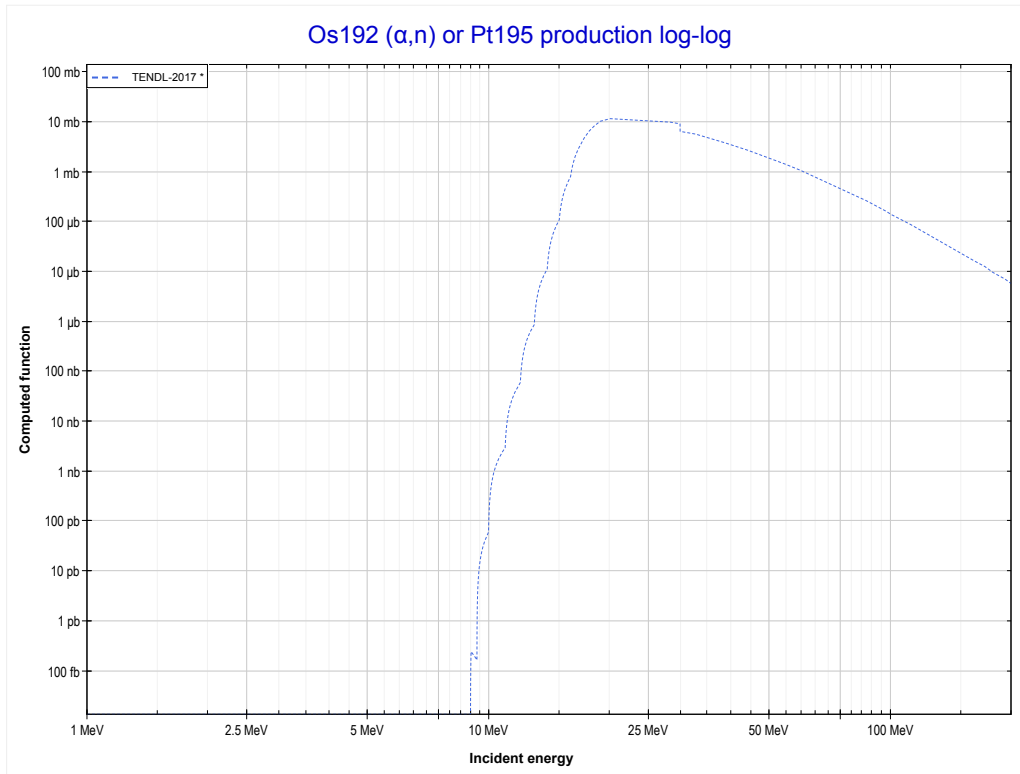
<< 76-Os-188	76-Os-189	76-Os-190 >>
<< 76-Os-188 MT18 (α ,fission)	MT18 (α,fission)	76-Os-190 MT18 (α ,fission) >>



<< 76-Os-189	76-Os-190	76-Os-192 >>
<< 76-Os-189 MT18 (α ,fission)	MT18 (α,fission)	76-Os-192 MT4 (α ,n) >>

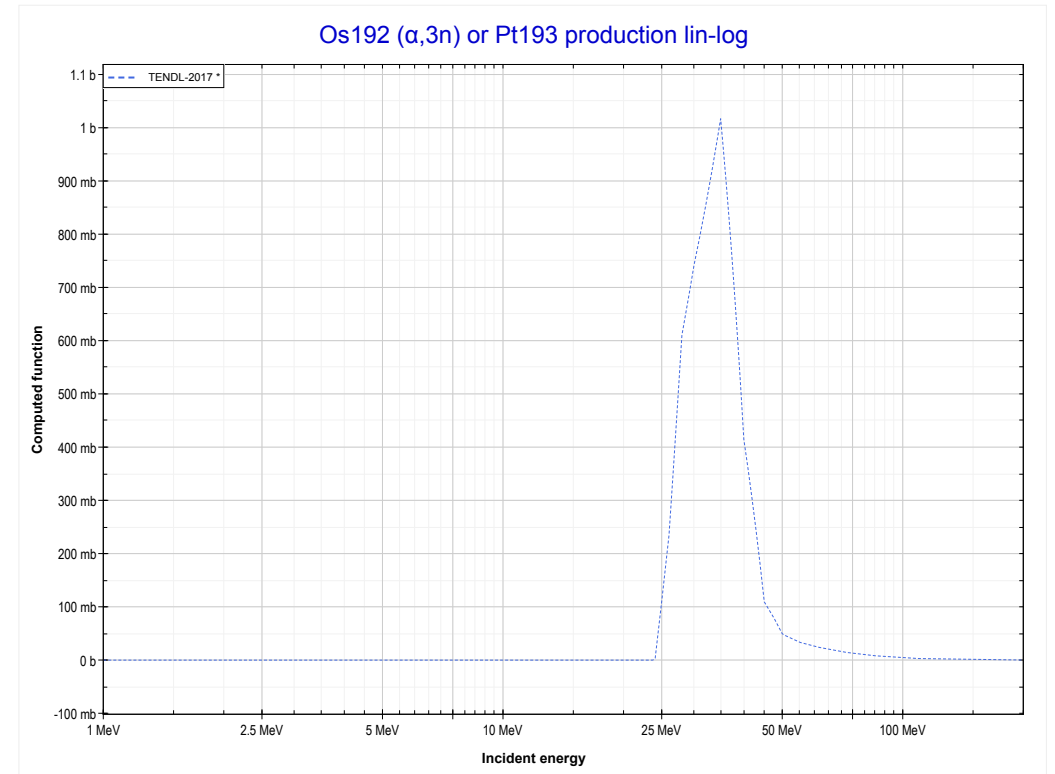
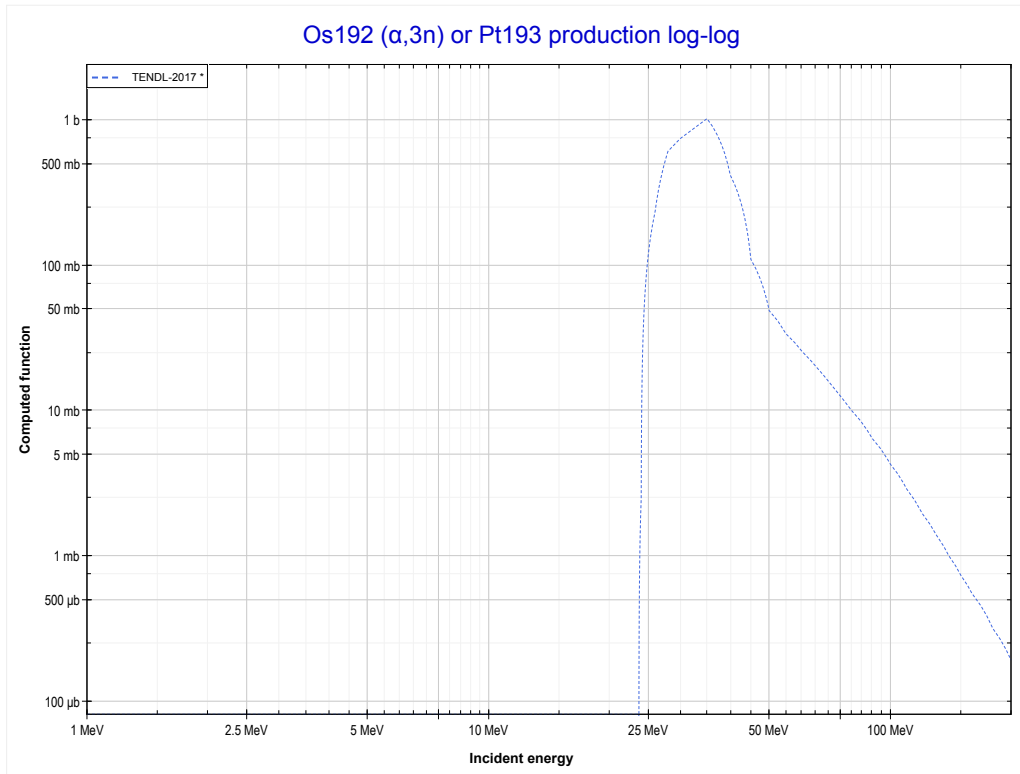


<< 75-Re-187	76-Os-192	77-Ir-191 >>
<< 76-Os-190 MT18 (α ,fission)	MT4 (α,n) or MT5 (Pt195 production)	MT17 (α ,3n) >>



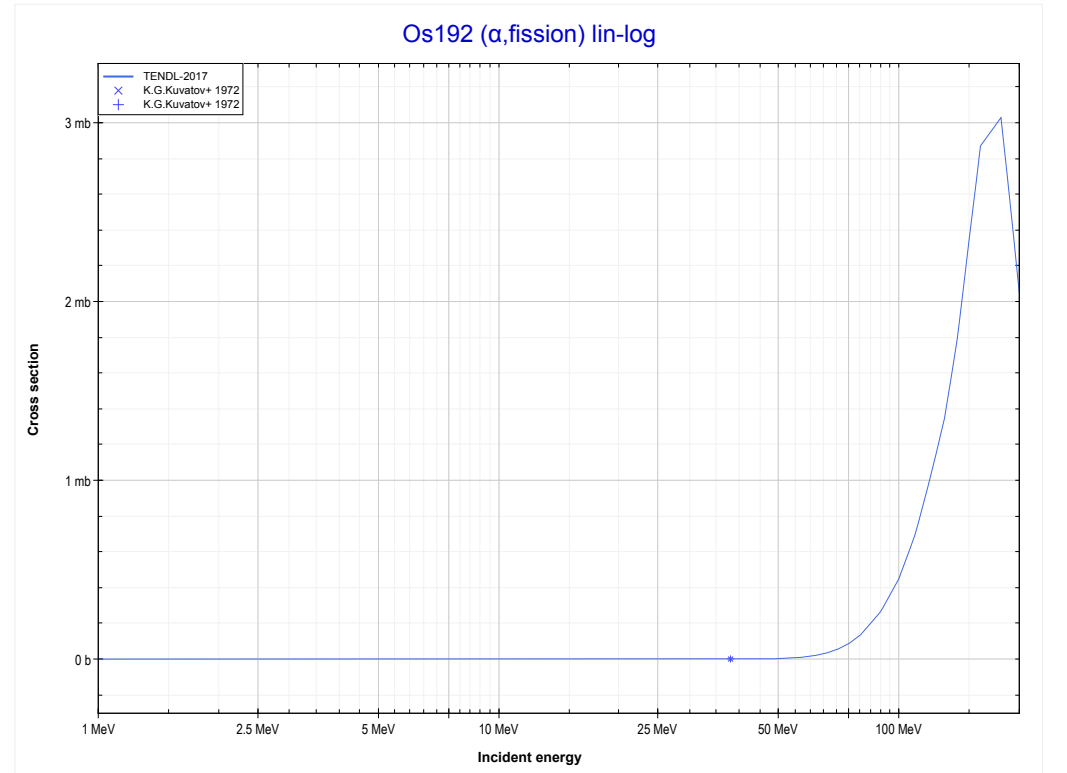
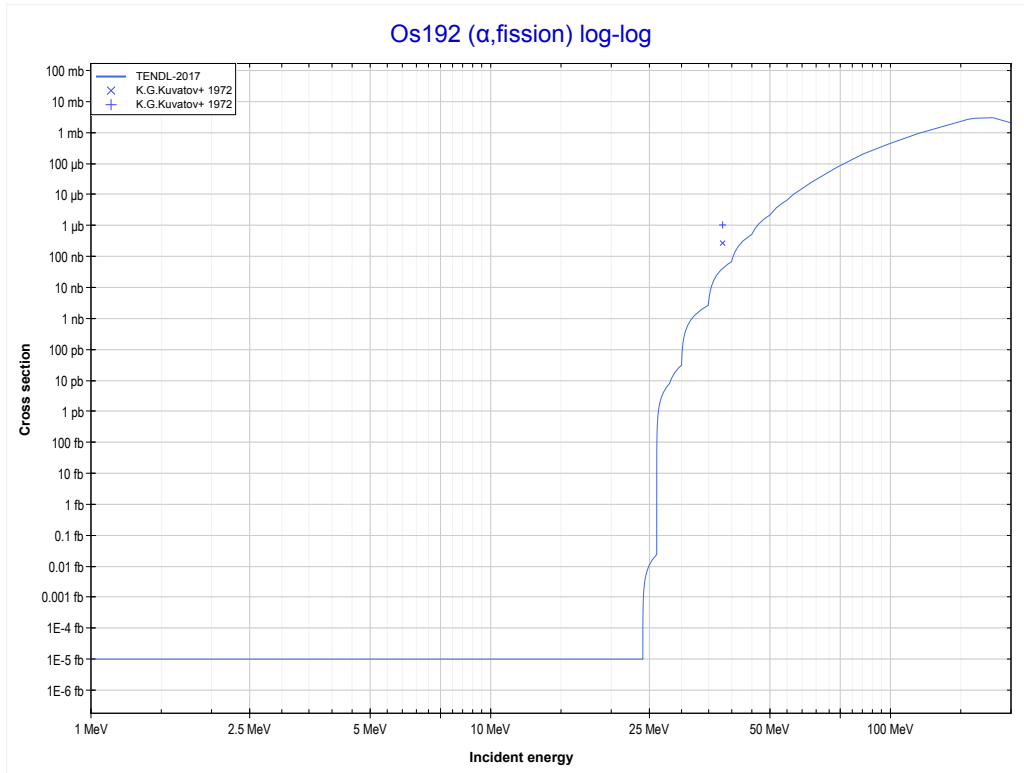
Reaction	Q-Value
Os192(α ,n)Pt195	-8734.00 keV

<< 75-Re-187	76-Os-192	77-Ir-191 >>
<< MT4 (α,n)	MT17 ($\alpha,3n$) or MT5 (Pt193 production)	MT18 ($\alpha,fission$) >>

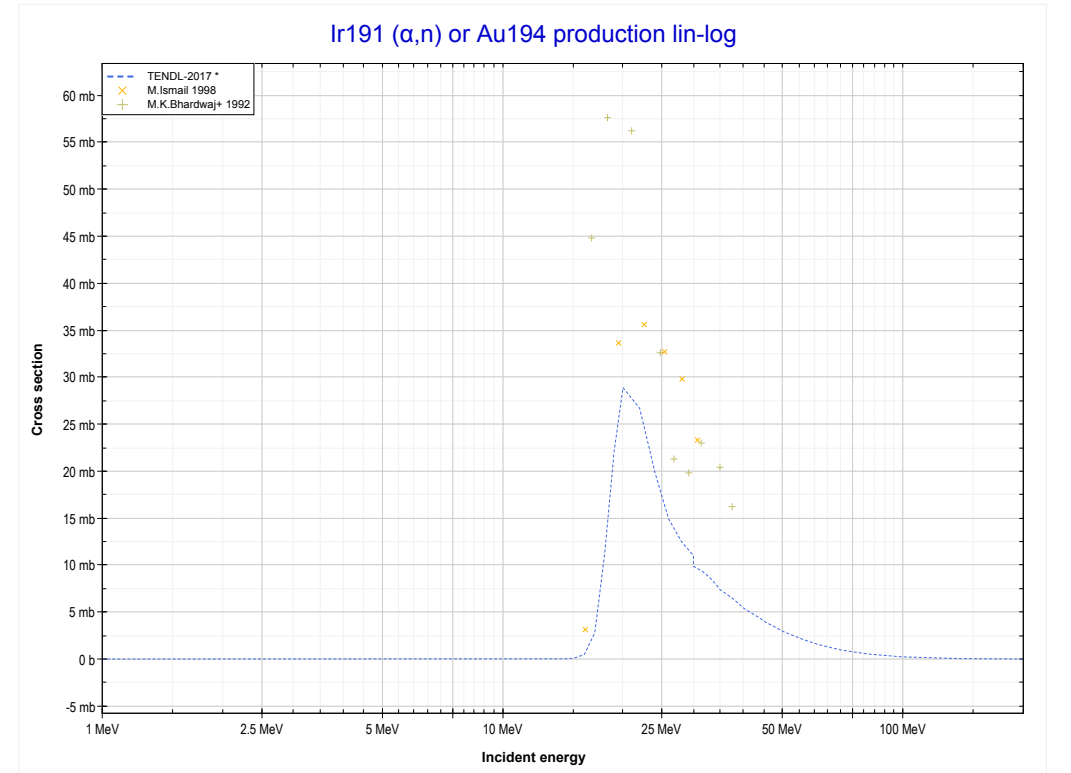
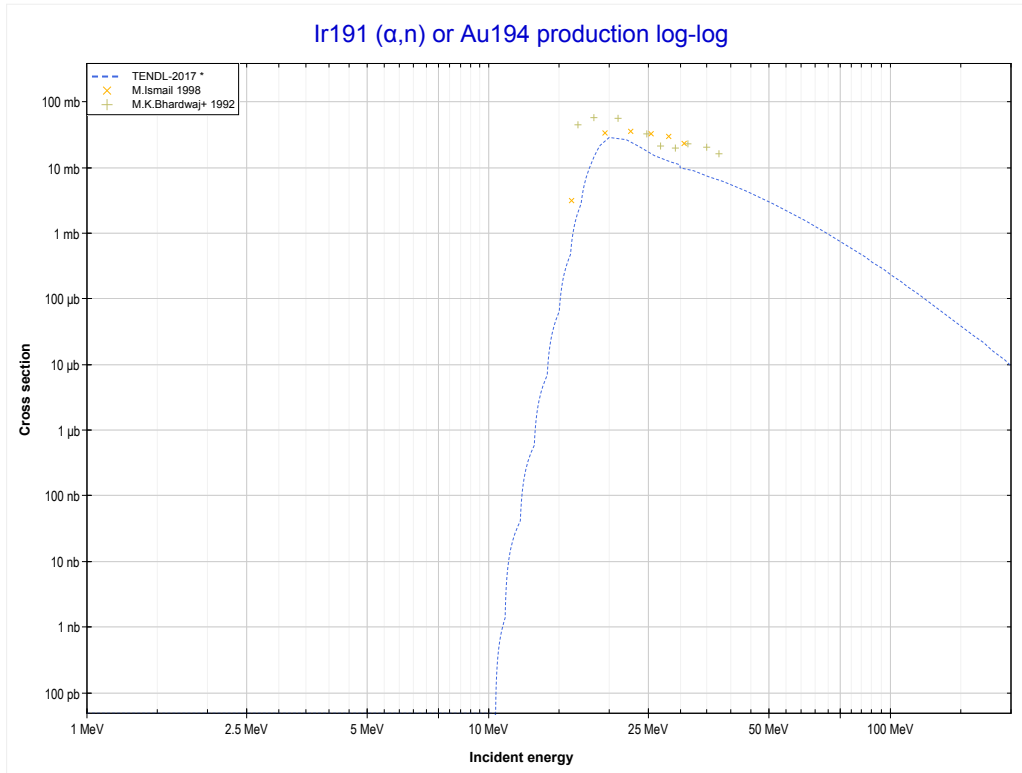


Reaction	Q-Value
Os192($\alpha,3n$)Pt193	-23191.24 keV

<< 76-Os-190	76-Os-192	78-Pt-194 >>
<< MT17 ($\alpha,3n$)	MT18 (α,fission)	77-Ir-191 MT4 (α,n) >>

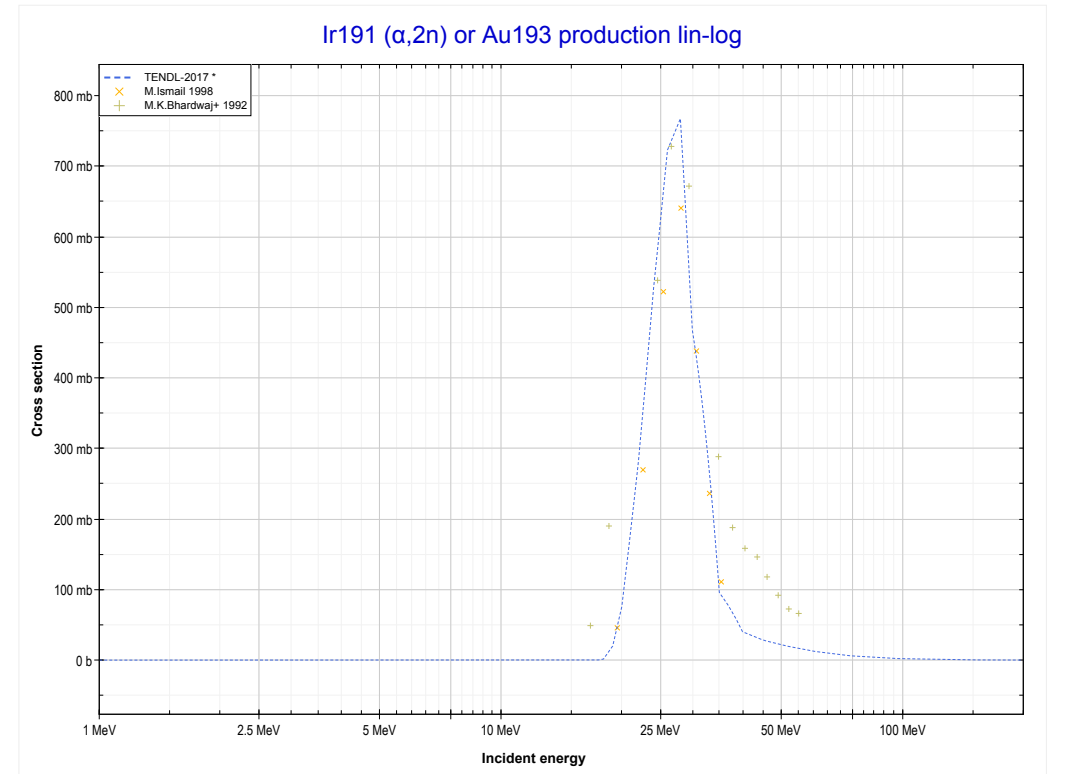
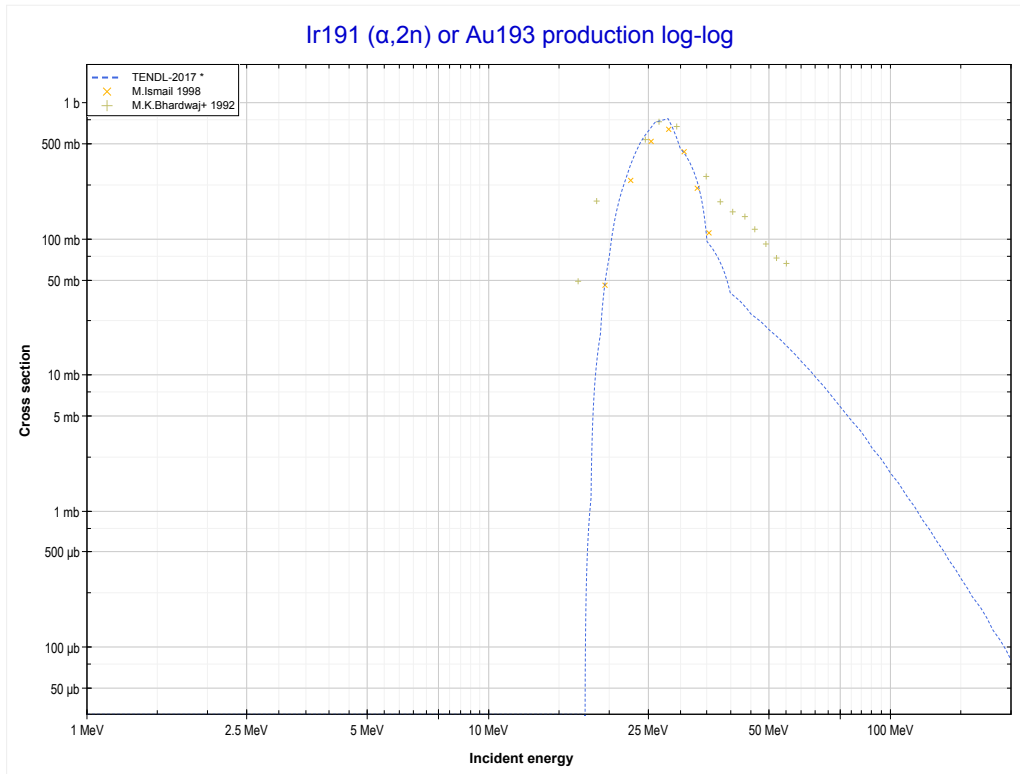


<< 76-Os-192	77-Ir-191	79-Au-197 >>
<< 76-Os-192 MT18 (α ,fission)	MT4 (α,n) or MT5 (Au194 production)	MT16 (α ,2n) >>



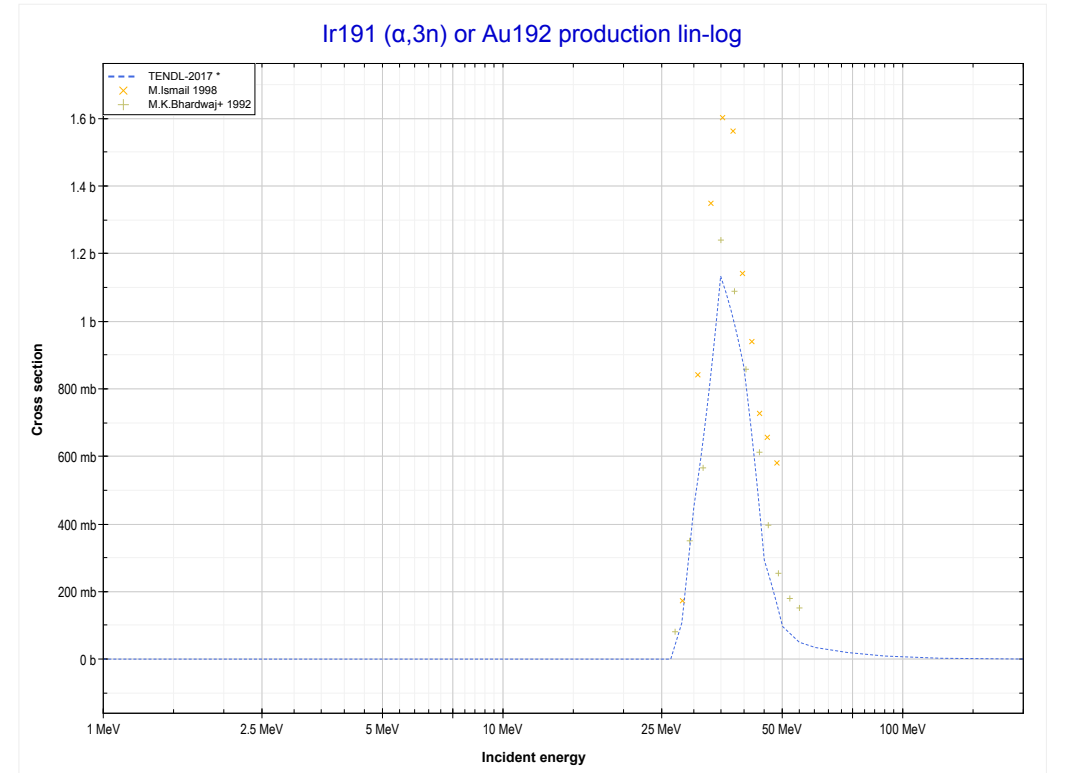
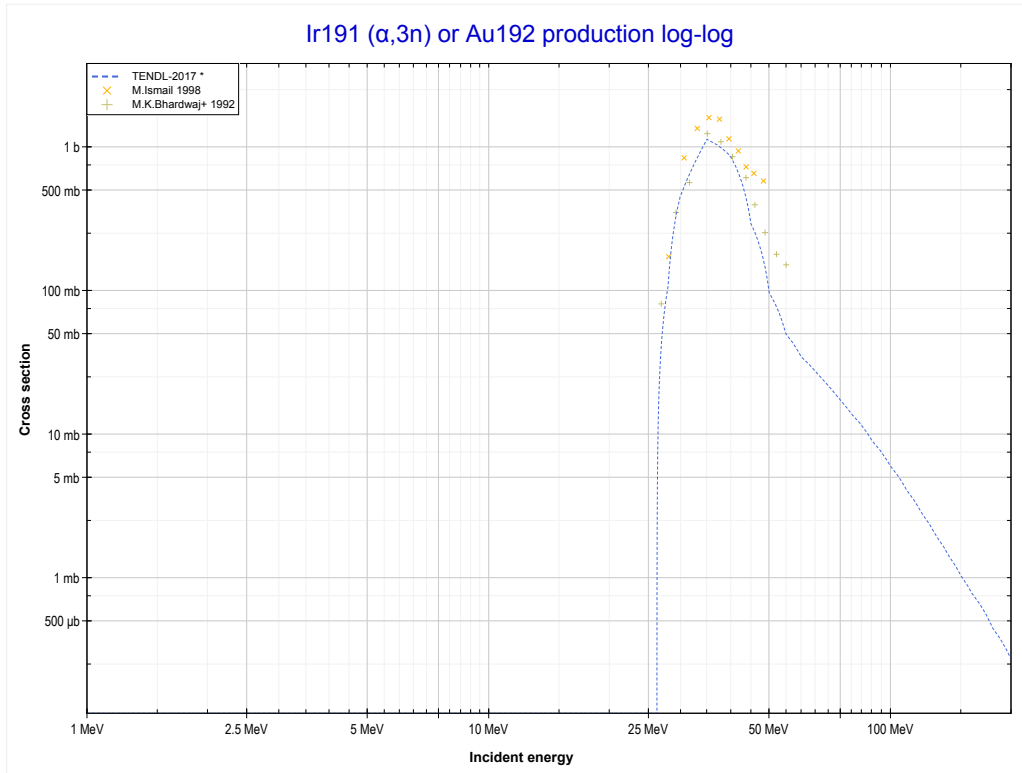
Reaction	Q-Value
Ir191(α ,n)Au194	-10144.00 keV

<< 73-Ta-181	77-Ir-191	77-Ir-193 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Au193 production)	MT17 ($\alpha, 3n$) >>



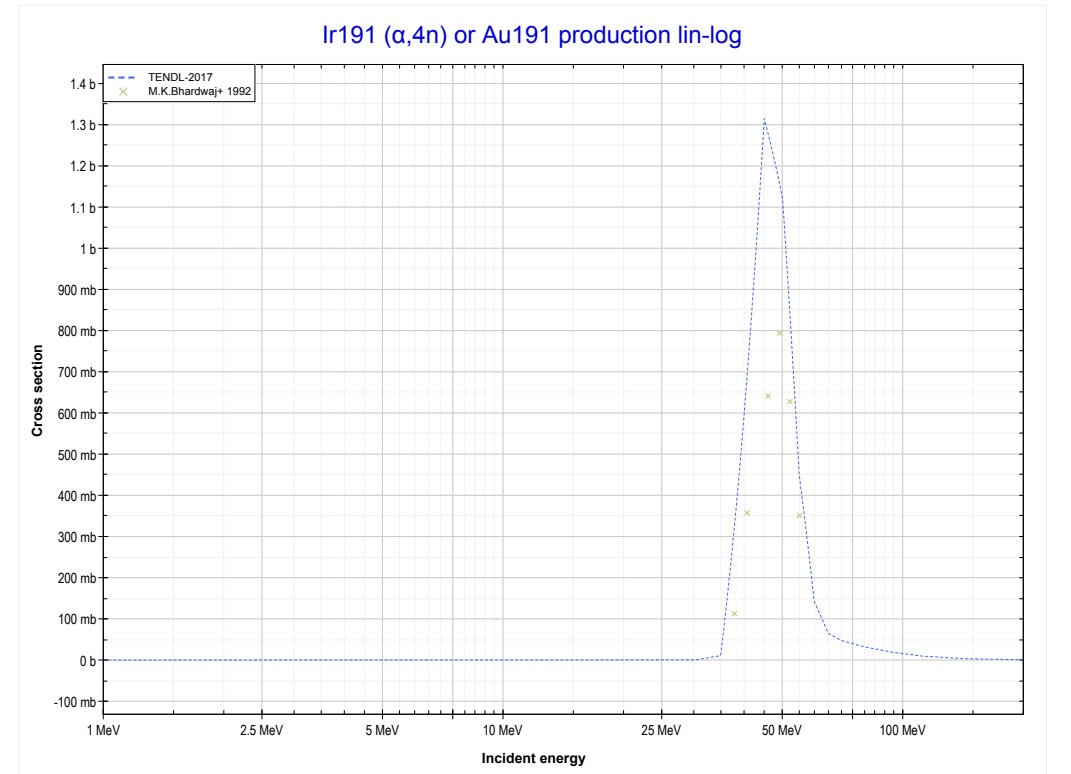
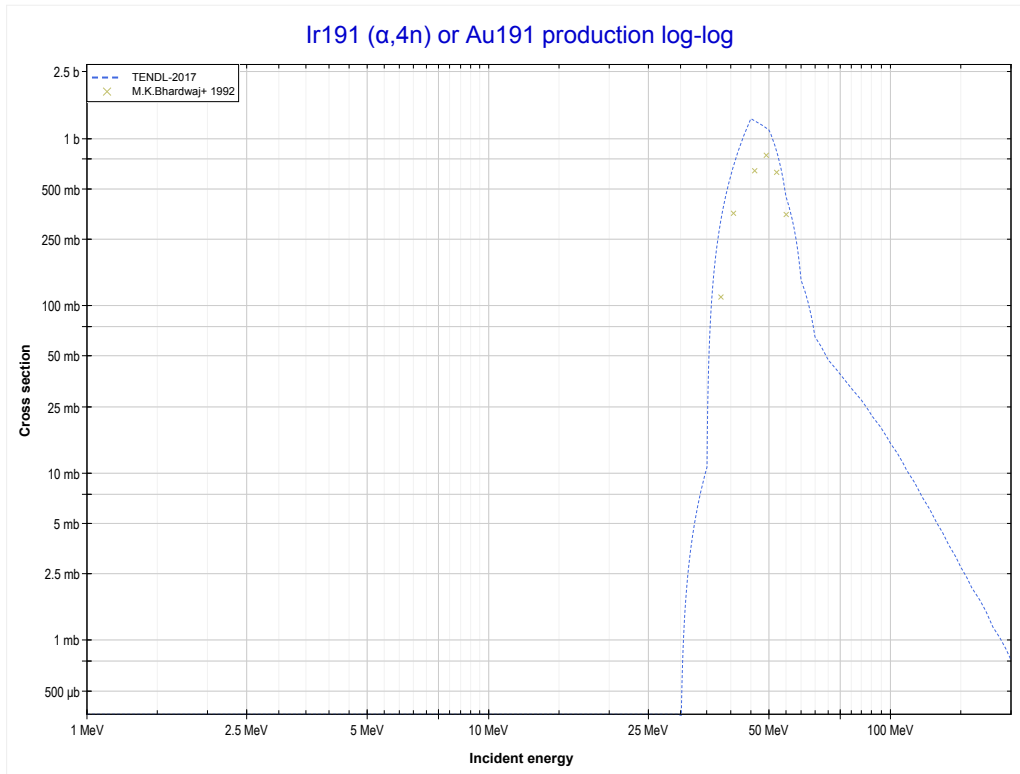
Reaction	Q-Value
Ir191($\alpha, 2n$)Au193	-17022.52 keV

<< 76-Os-192	77-Ir-191	77-Ir-193 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Au192 production)	MT37 ($\alpha,4n$) >>



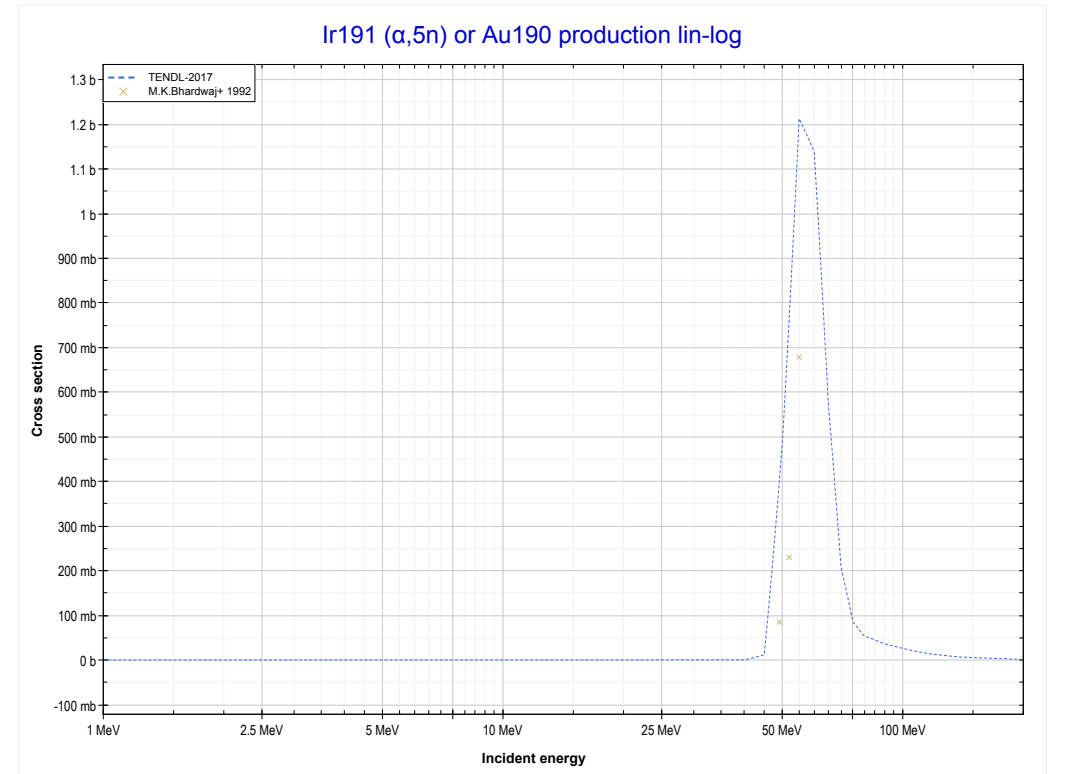
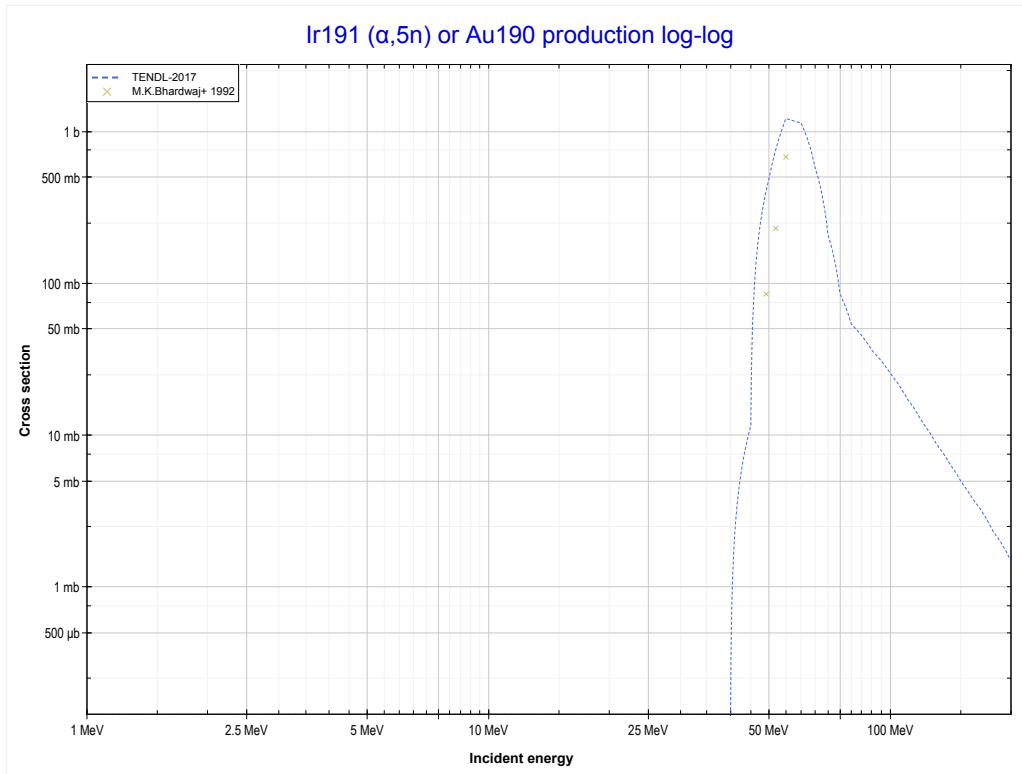
Reaction	Q-Value
Ir191($\alpha,3n$)Au192	-25723.84 keV

<< 75-Re-187	77-Ir-191	77-Ir-193 >>
<< MT17 ($\alpha,3n$)	MT37 ($\alpha,4n$) or MT5 (Au191 production)	MT152 ($\alpha,5n$) >>



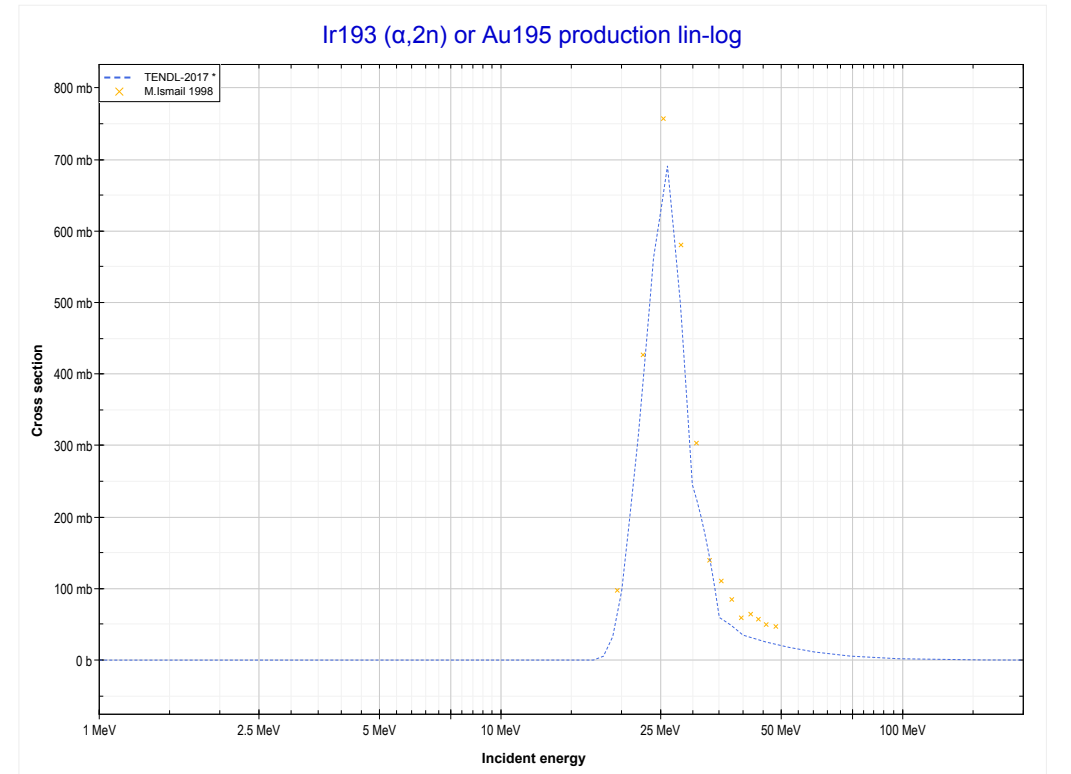
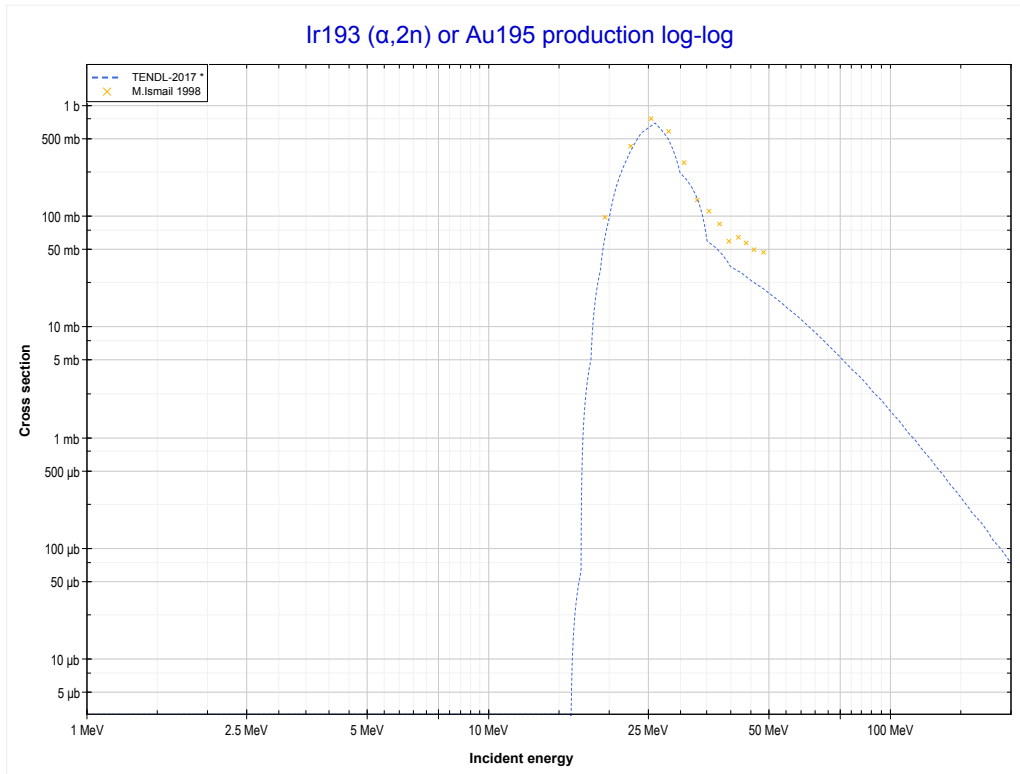
Reaction	Q-Value
Ir191($\alpha,4n$)Au191	-32761.15 keV

<< 75-Re-187	77-Ir-191	77-Ir-193 >>
<< MT37 ($\alpha,4n$)	MT152 ($\alpha,5n$) or MT5 (Au190 production)	77-Ir-193 MT16 ($\alpha,2n$) >>



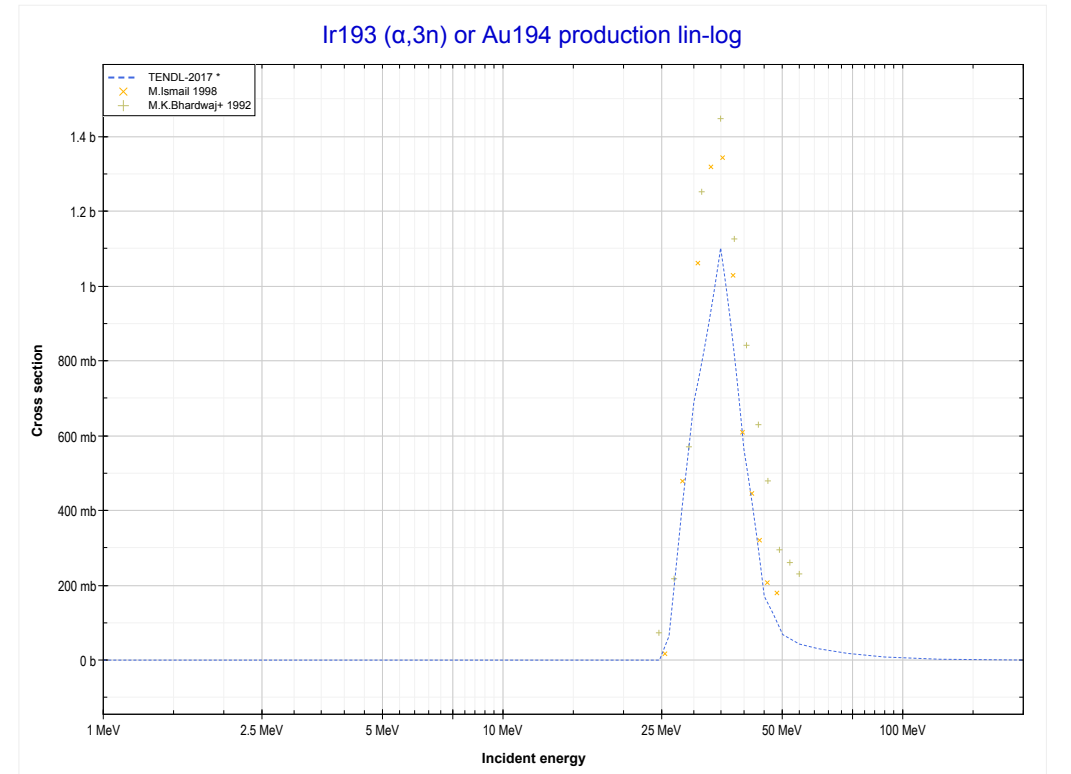
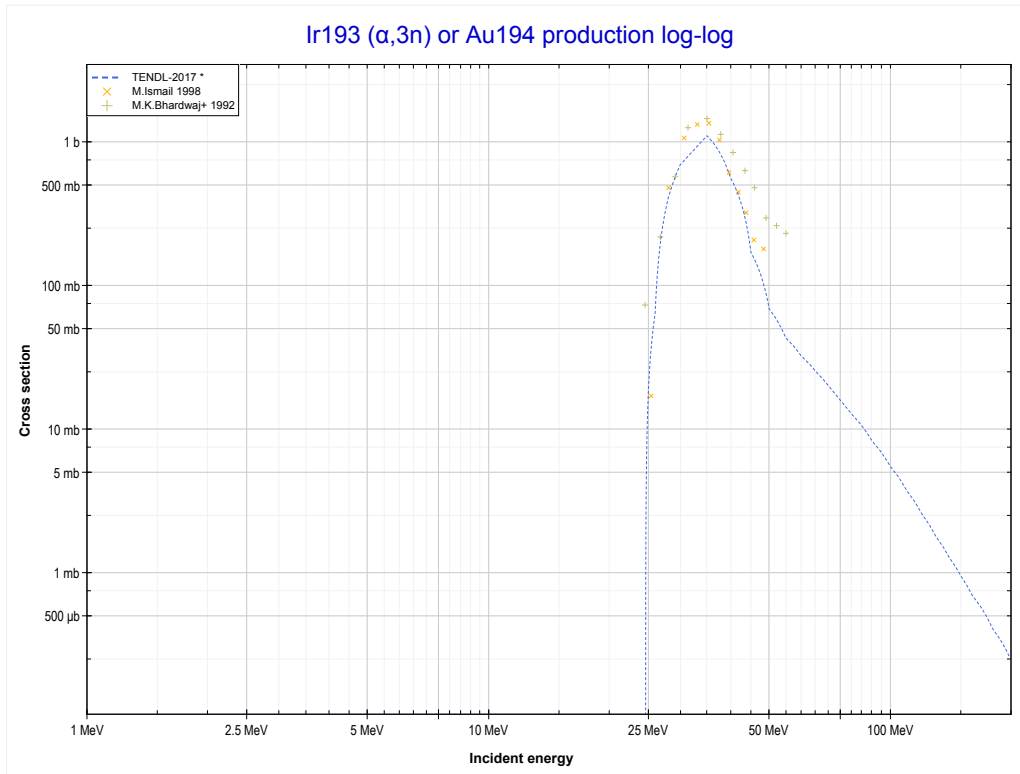
Reaction	Q-Value
Ir191($\alpha,5n$)Au190	-41759.47 keV

<< 77-Ir-191	77-Ir-193	79-Au-197 >>
<< 77-Ir-191 MT152 ($\alpha,5n$)	MT16 ($\alpha,2n$) or MT5 (Au195 production)	MT17 ($\alpha,3n$) >>



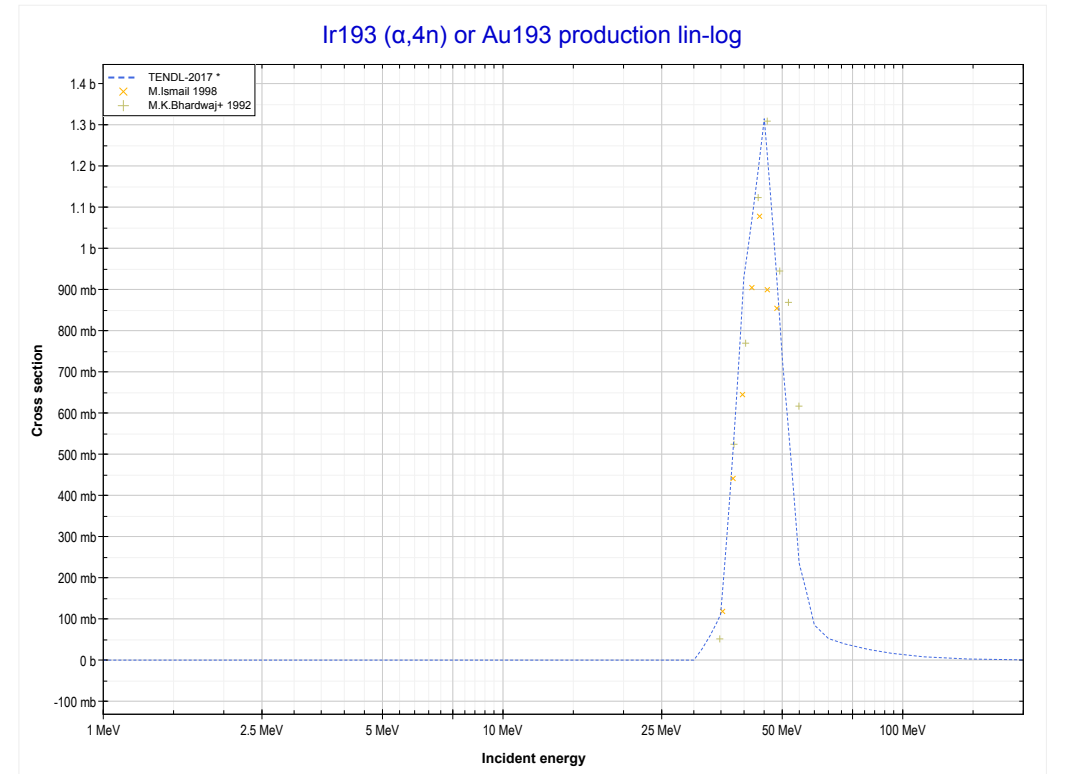
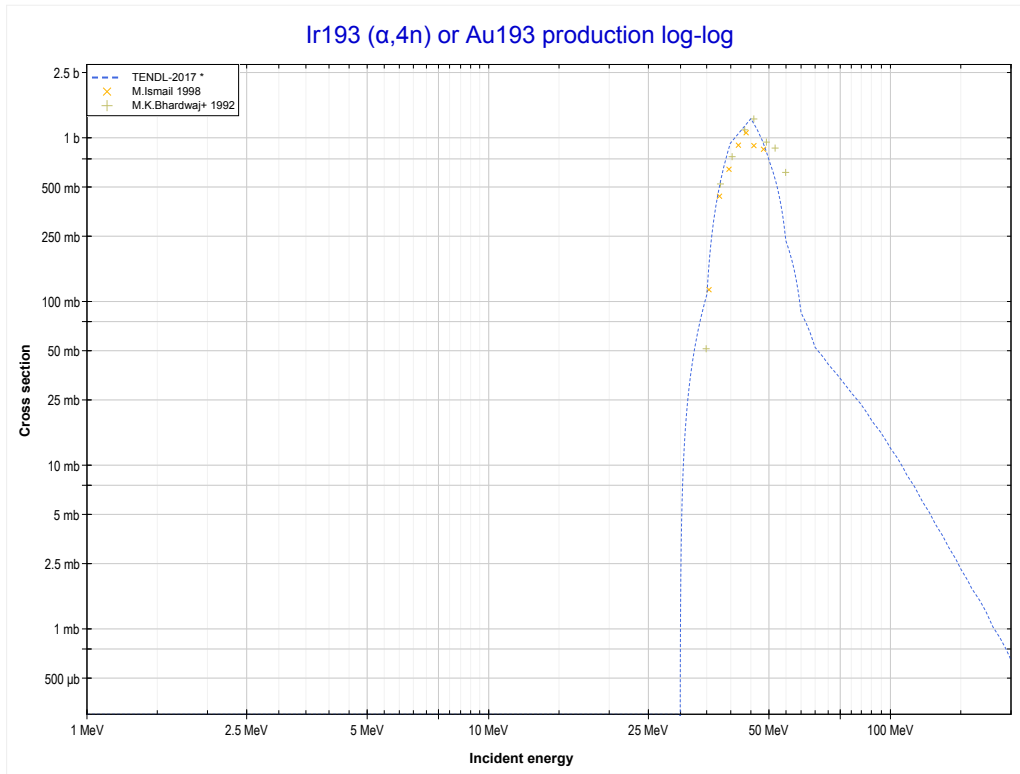
Reaction	Q-Value
Ir193($\alpha,2n$)Au195	-15686.52 keV

<< 77-Ir-191	77-Ir-193	79-Au-197 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Au194 production)	MT37 ($\alpha,4n$) >>



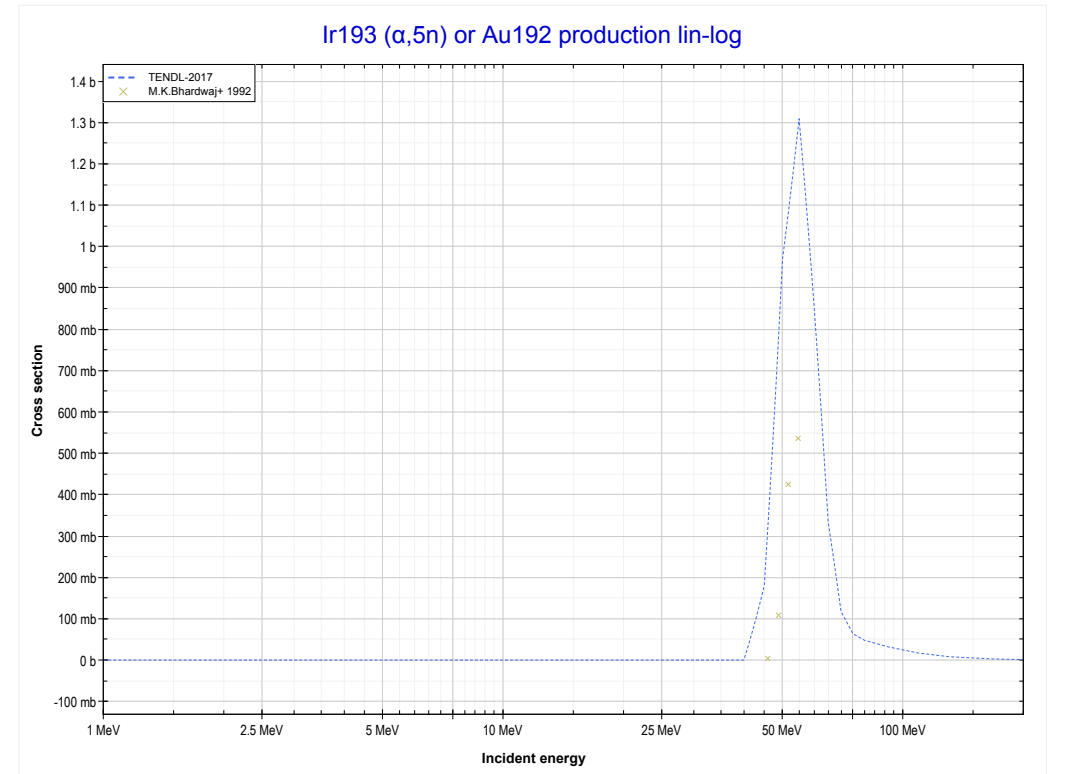
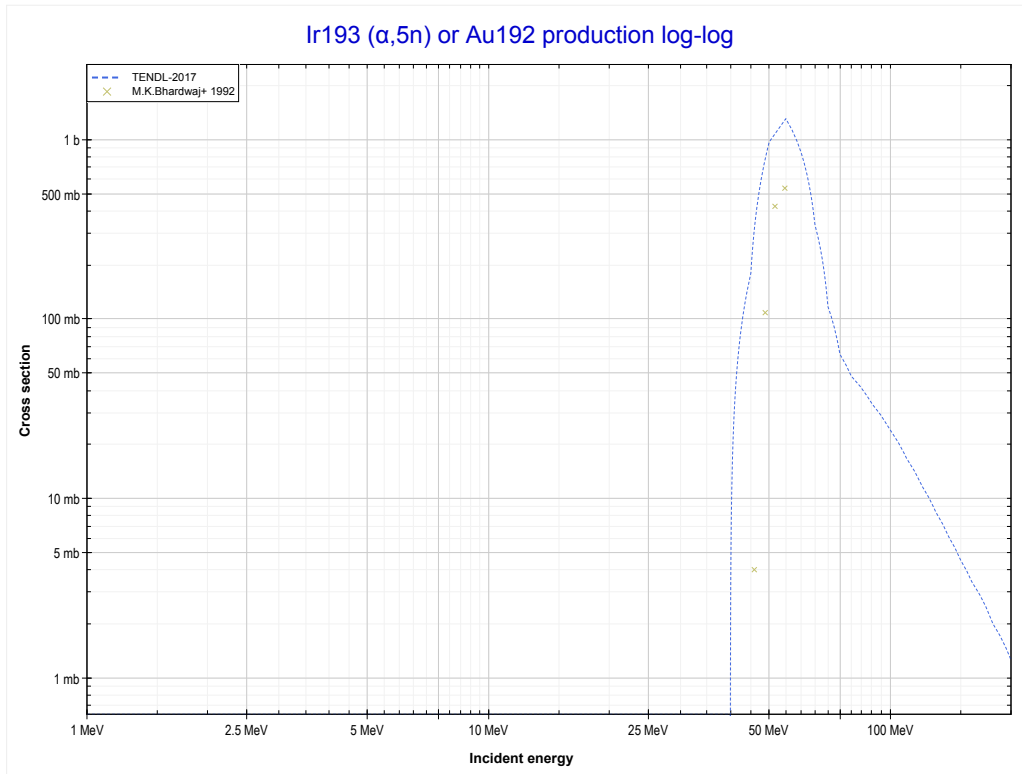
Reaction	Q-Value
Ir193($\alpha,3n$)Au194	-24114.14 keV

<< 77-Ir-191	77-Ir-193	79-Au-197 >>
<< MT17 ($\alpha,3n$)	MT37 ($\alpha,4n$) or MT5 (Au193 production)	MT152 ($\alpha,5n$) >>



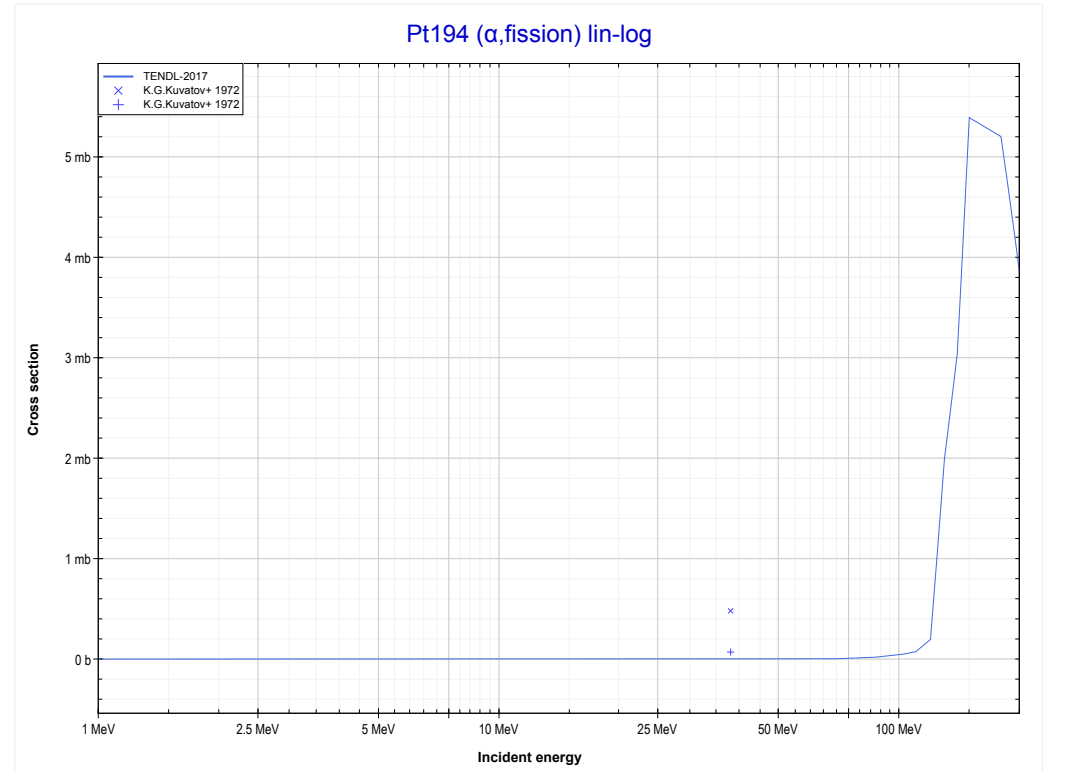
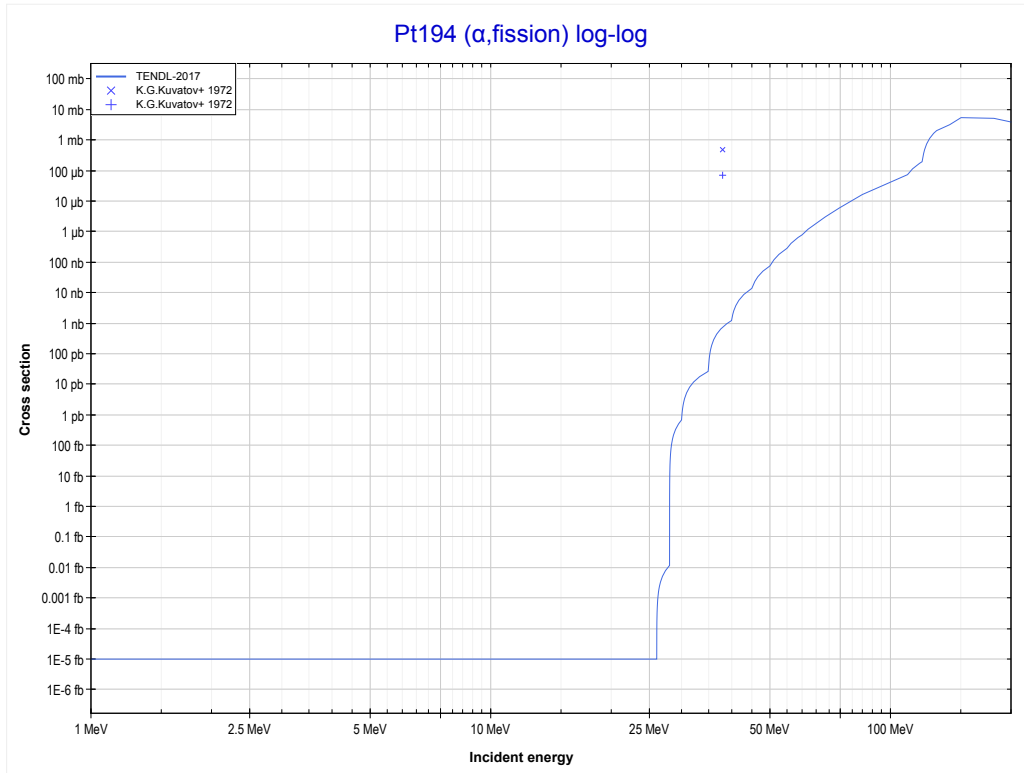
Reaction	Q-Value
Ir193($\alpha,4n$)Au193	-30992.65 keV

<< 77-Ir-191	77-Ir-193	79-Au-197 >>
<< MT37 ($\alpha,4n$)	MT152 ($\alpha,5n$) or MT5 (Au192 production)	78-Pt-194 MT18 (α ,fission) >>

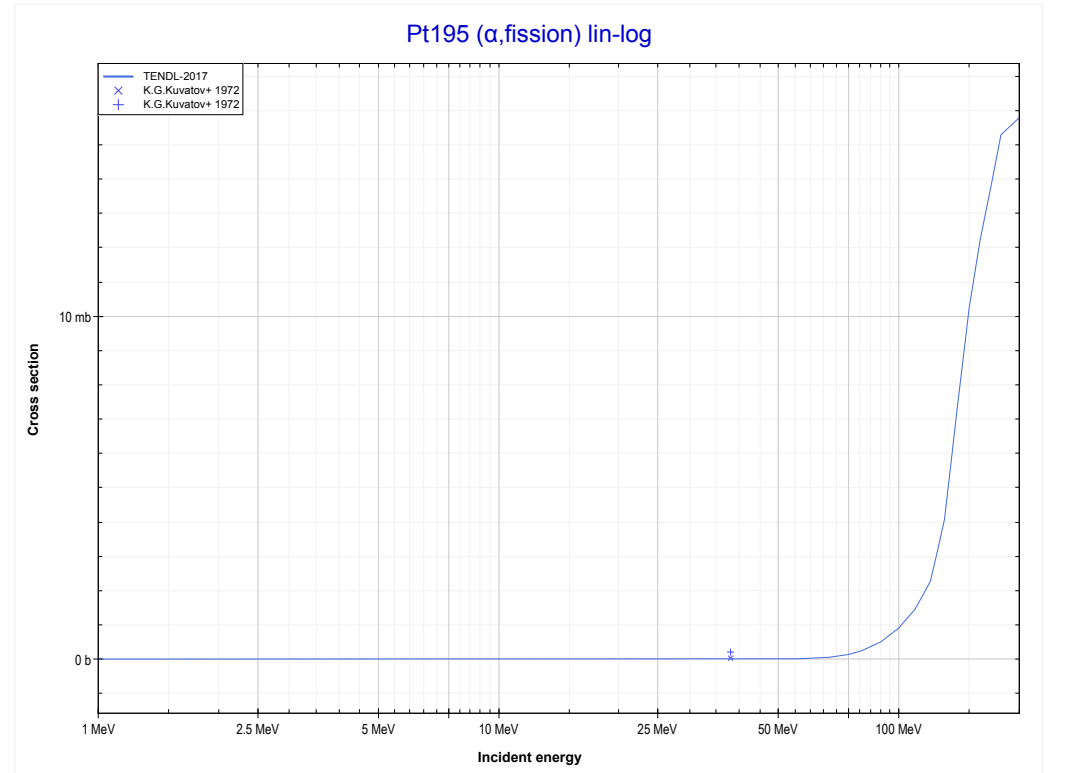
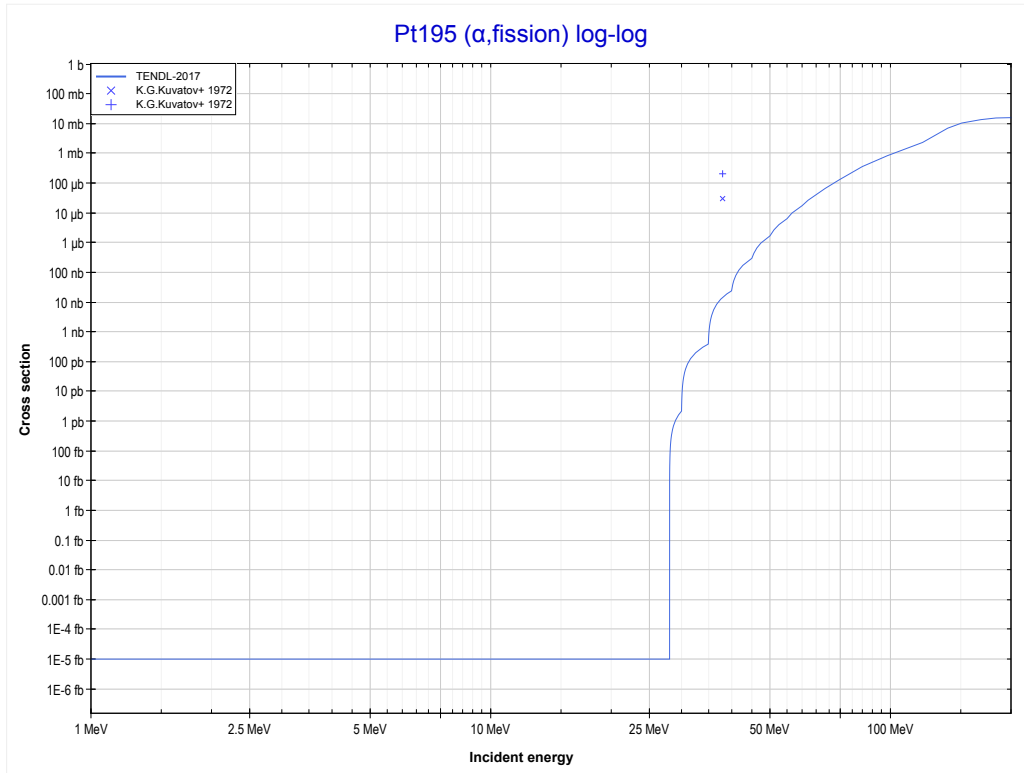


Reaction	Q-Value
Ir193($\alpha,5n$)Au192	-39693.97 keV

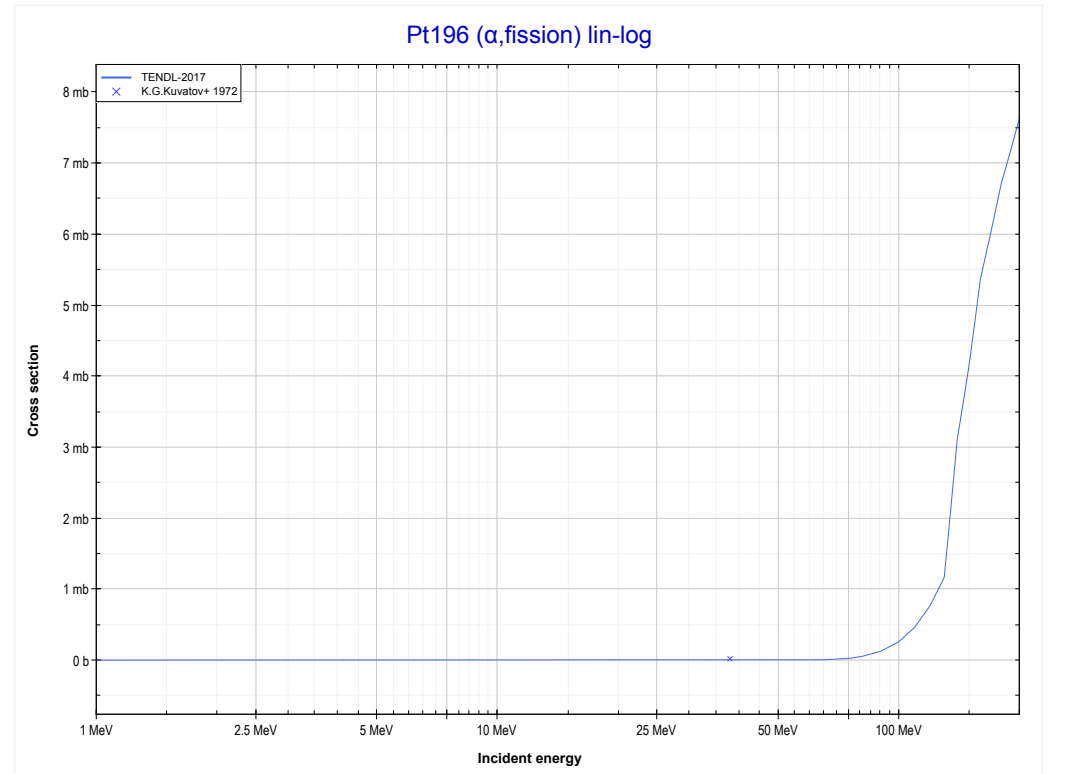
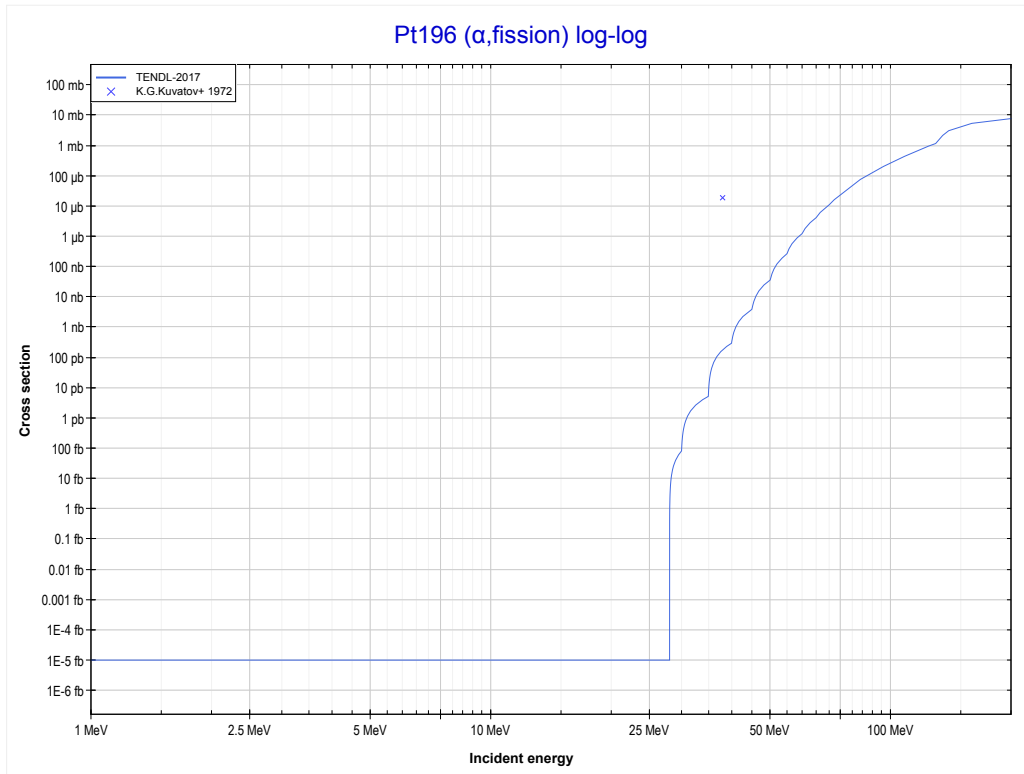
<< 76-Os-192	78-Pt-194	78-Pt-195 >>
<< 77-Ir-193 MT152 ($\alpha,5n$)	MT18 (α,fission)	78-Pt-195 MT18 (α ,fission) >>



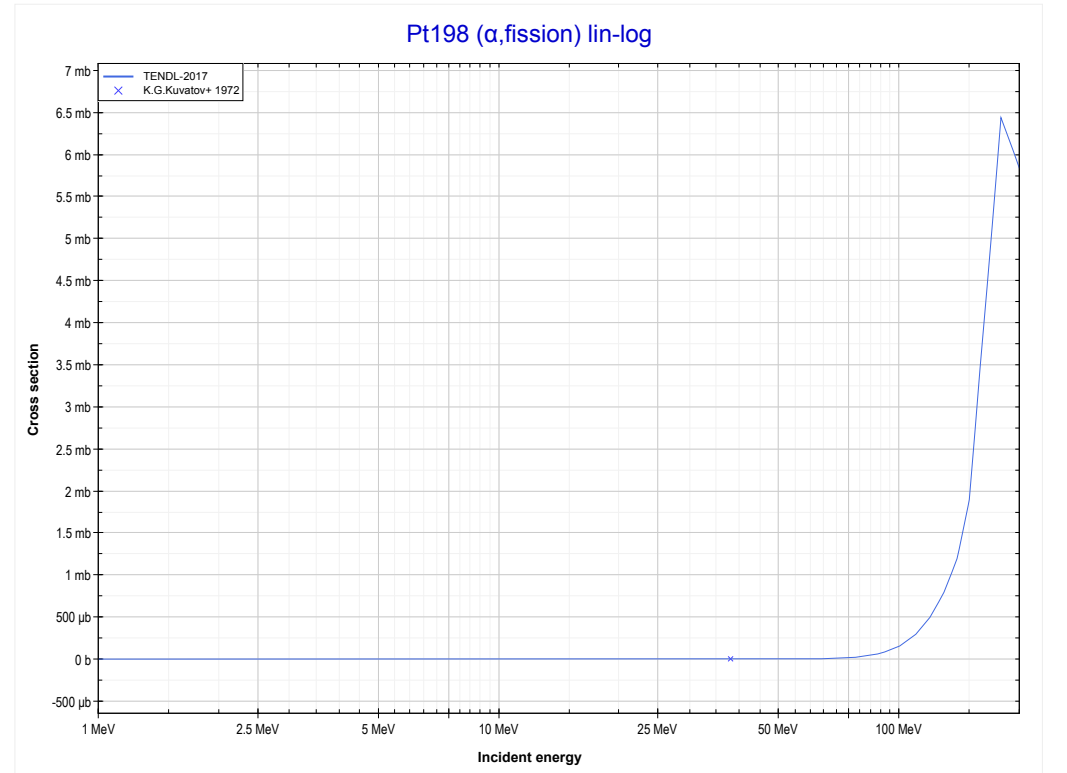
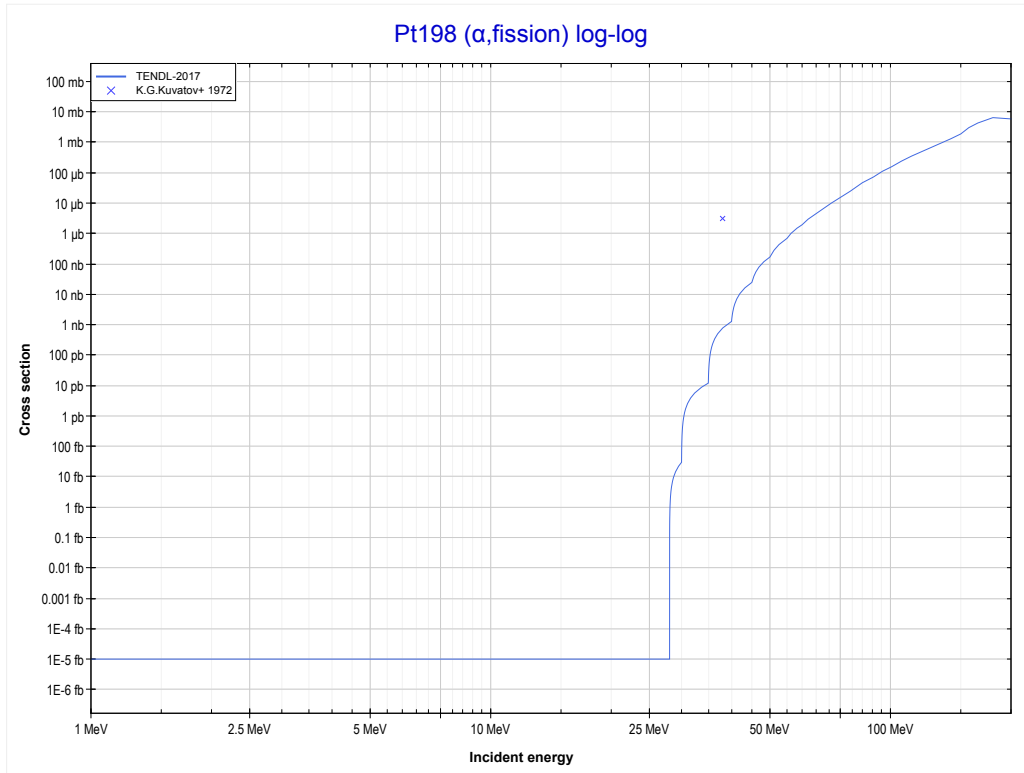
<< 78-Pt-194	78-Pt-195	78-Pt-196 >>
<< 78-Pt-194 MT18 (α ,fission)	MT18 (α,fission)	78-Pt-196 MT18 (α ,fission) >>



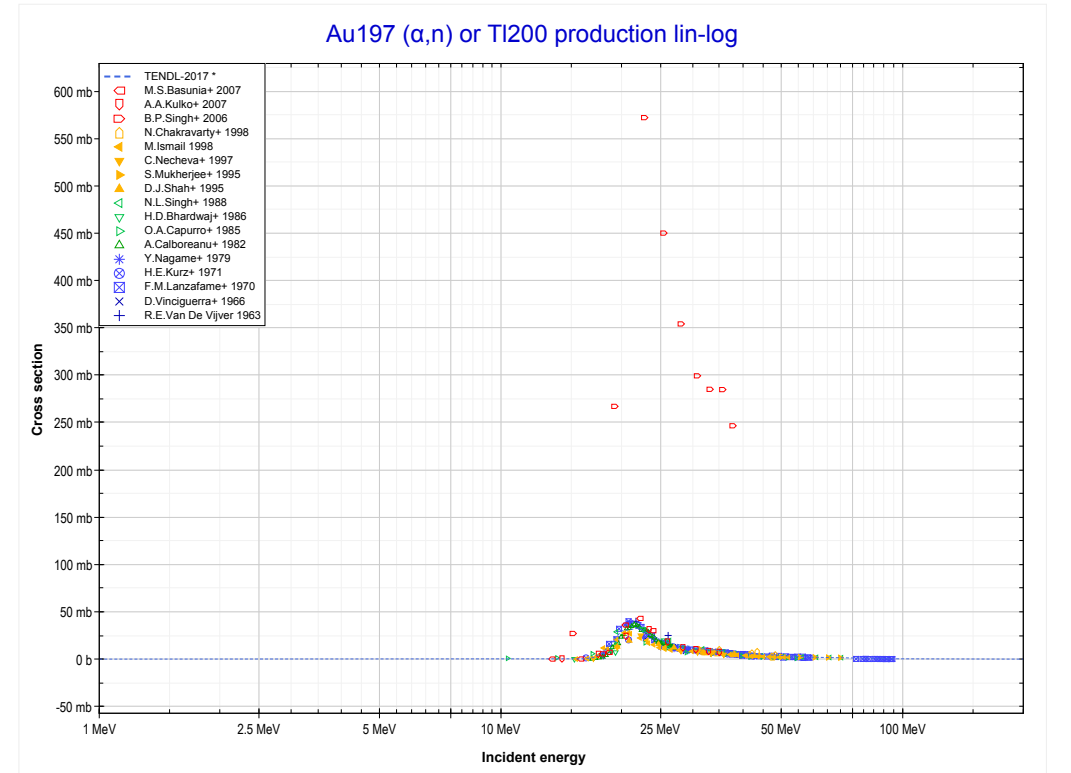
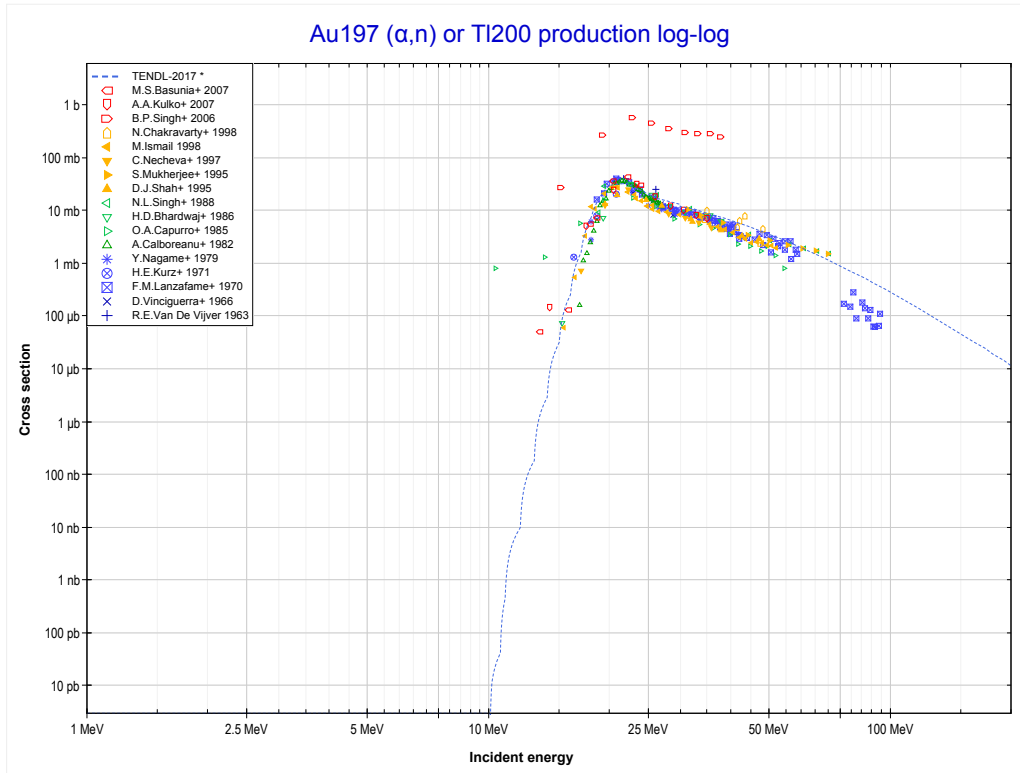
<< 78-Pt-195	78-Pt-196	78-Pt-198 >>
<< 78-Pt-195 MT18 (α ,fission)	MT18 (α,fission)	78-Pt-198 MT18 (α ,fission) >>



<< 78-Pt-196	78-Pt-198	79-Au-197 >>
<< 78-Pt-196 MT18 (α ,fission)	MT18 (α,fission)	79-Au-197 MT4 (α ,n) >>

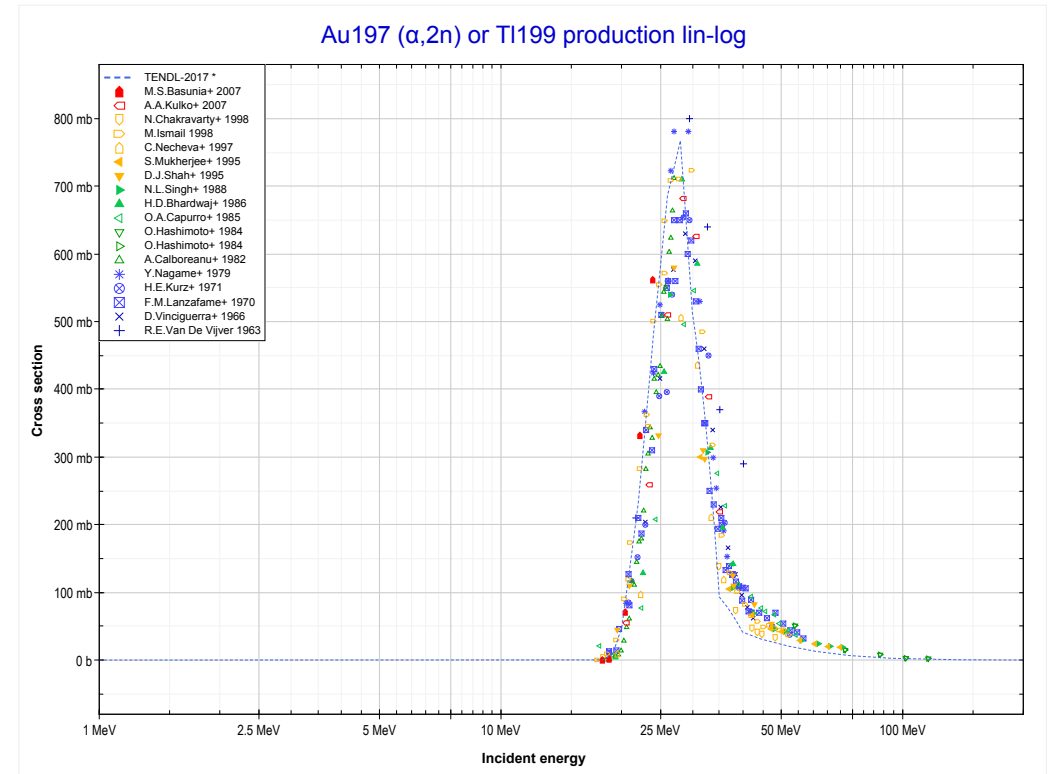
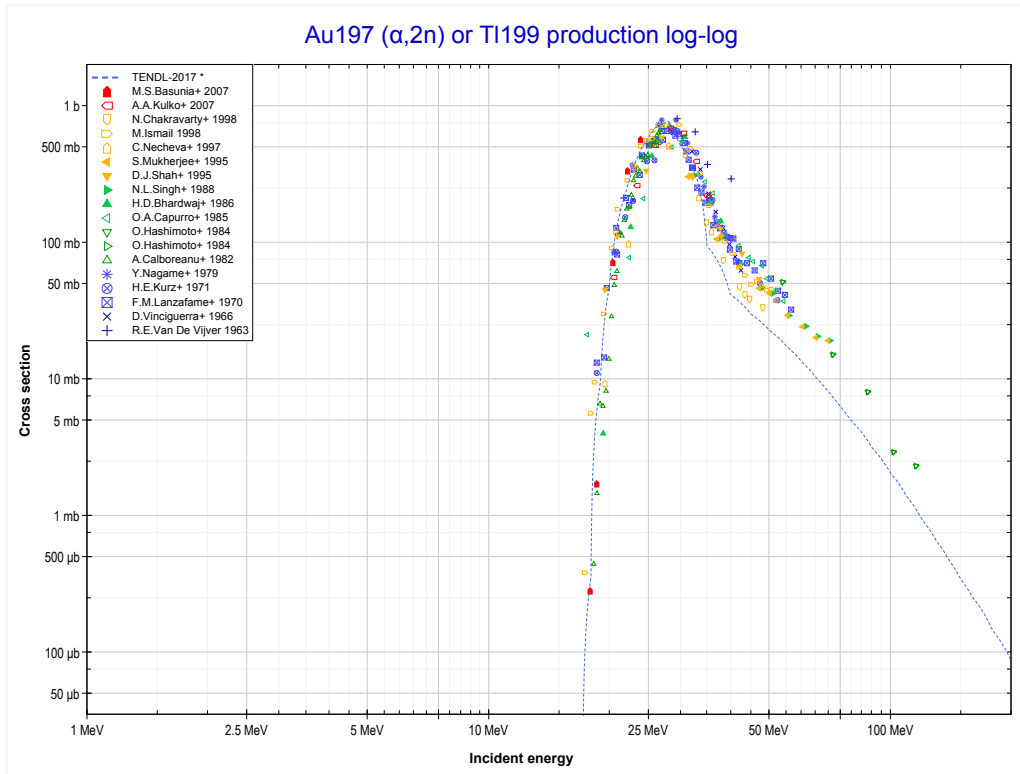


<< 77-Ir-191	79-Au-197	81-Tl-203 >>
<< 78-Pt-198 MT18 (α ,fission)	MT4 (α,n) or MT5 (TI200 production)	MT16 (α ,2n) >>



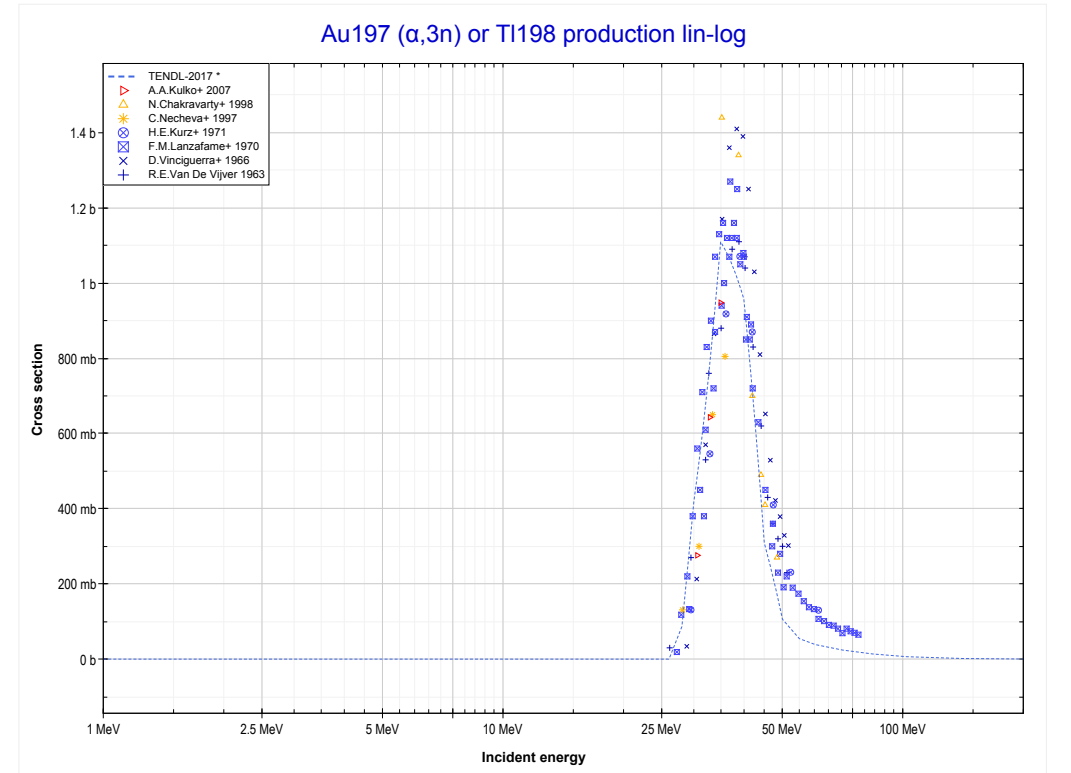
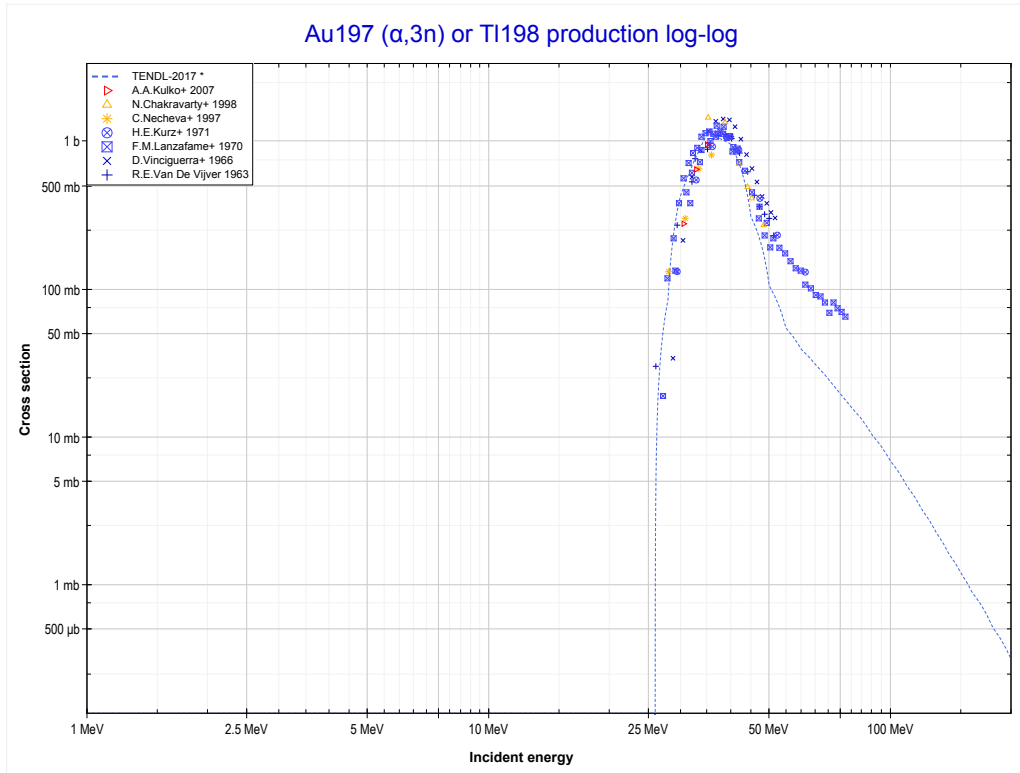
Reaction	Q-Value
Au197(α ,n)TI200	-9739.40 keV

<< 77-Ir-193	79-Au-197	81-Tl-203 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (TI199 production)	MT17 ($\alpha, 3n$) >>



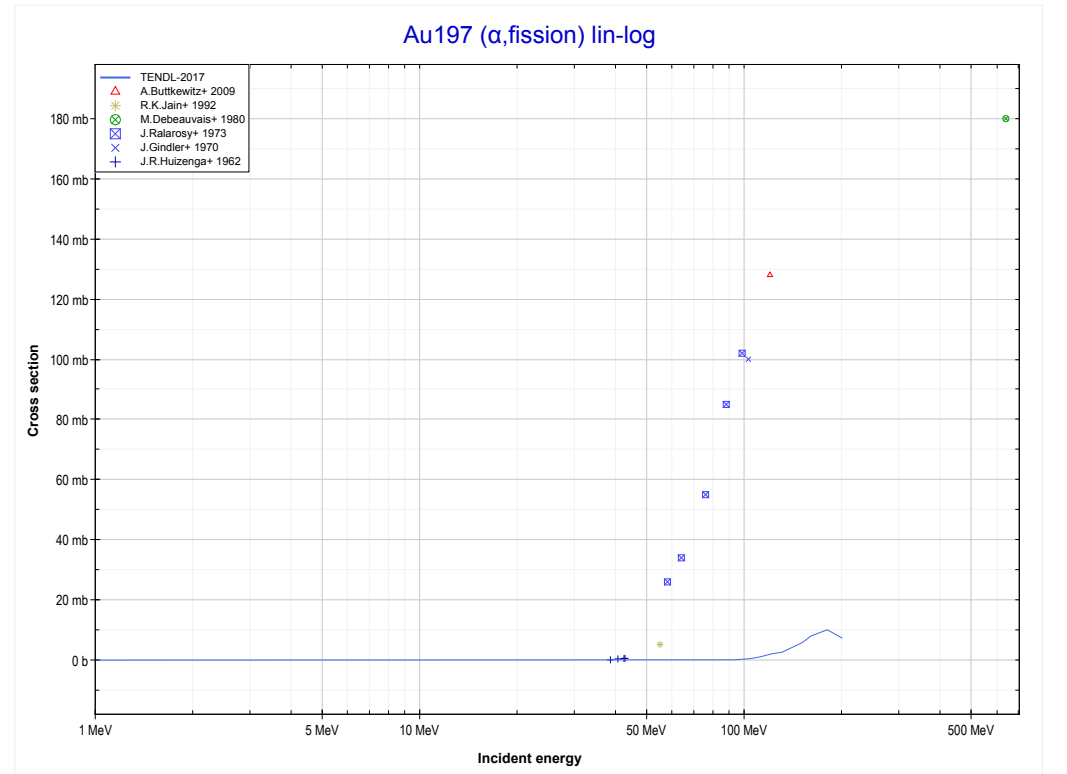
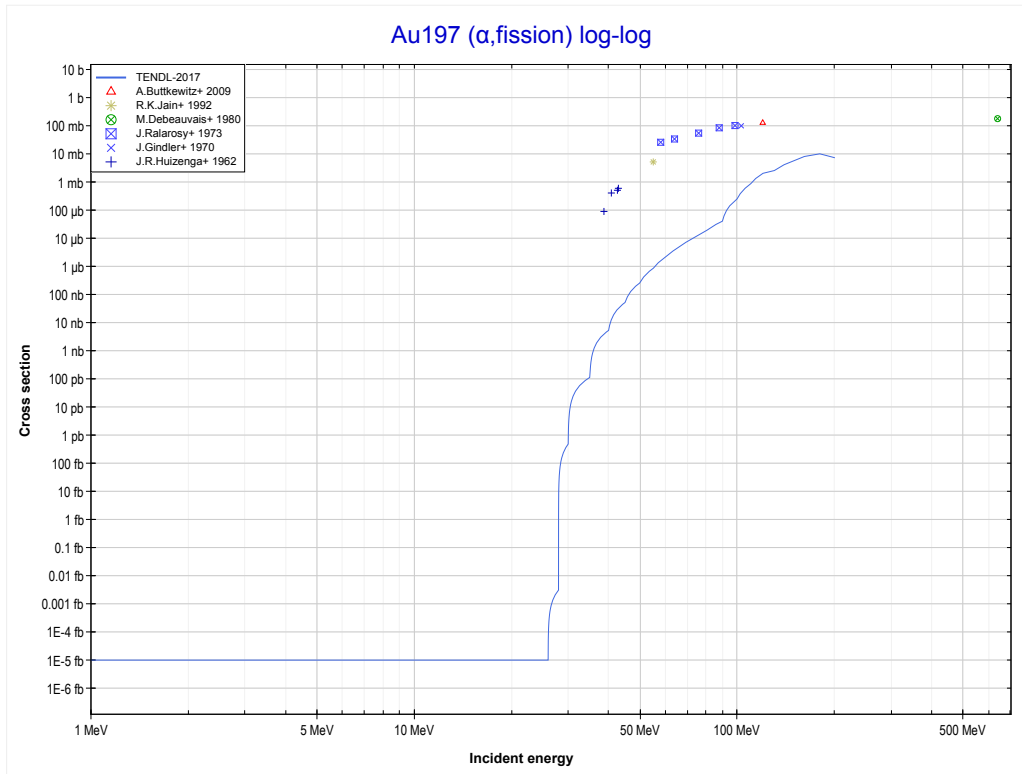
Reaction	Q-Value
Au197($\alpha, 2n$)Tl199	-16799.72 keV

<< 77-Ir-193	79-Au-197	81-Tl-203 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Tl198 production)	MT18 (α ,fission) >>

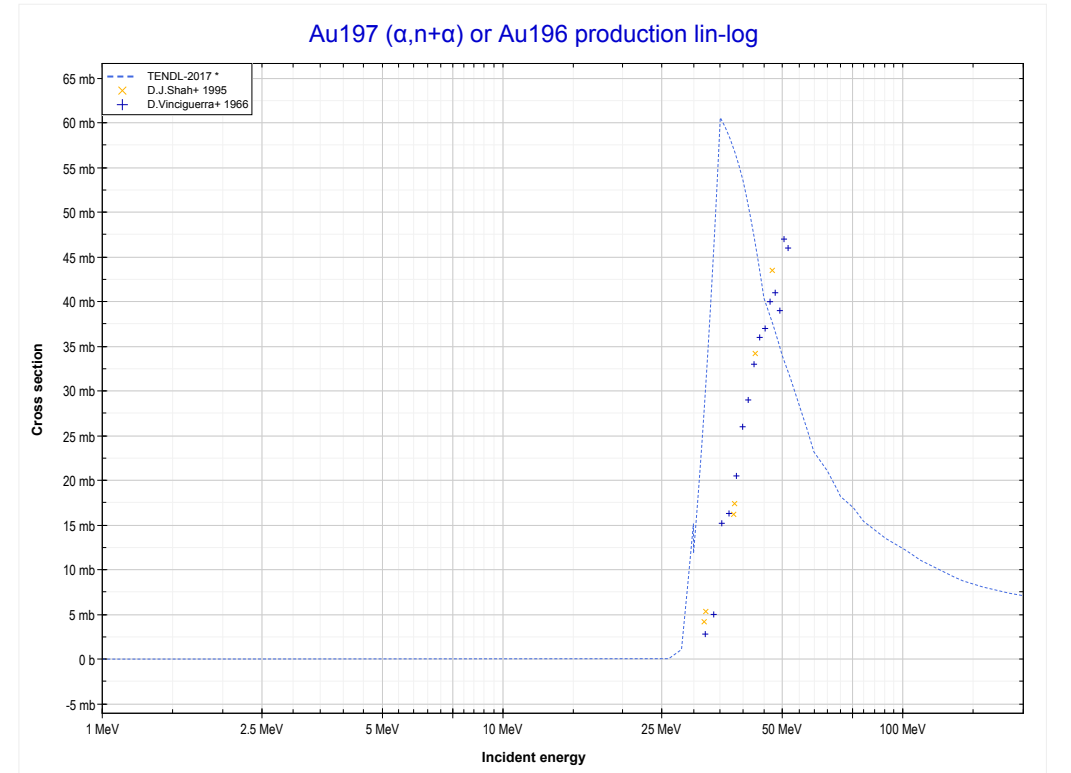
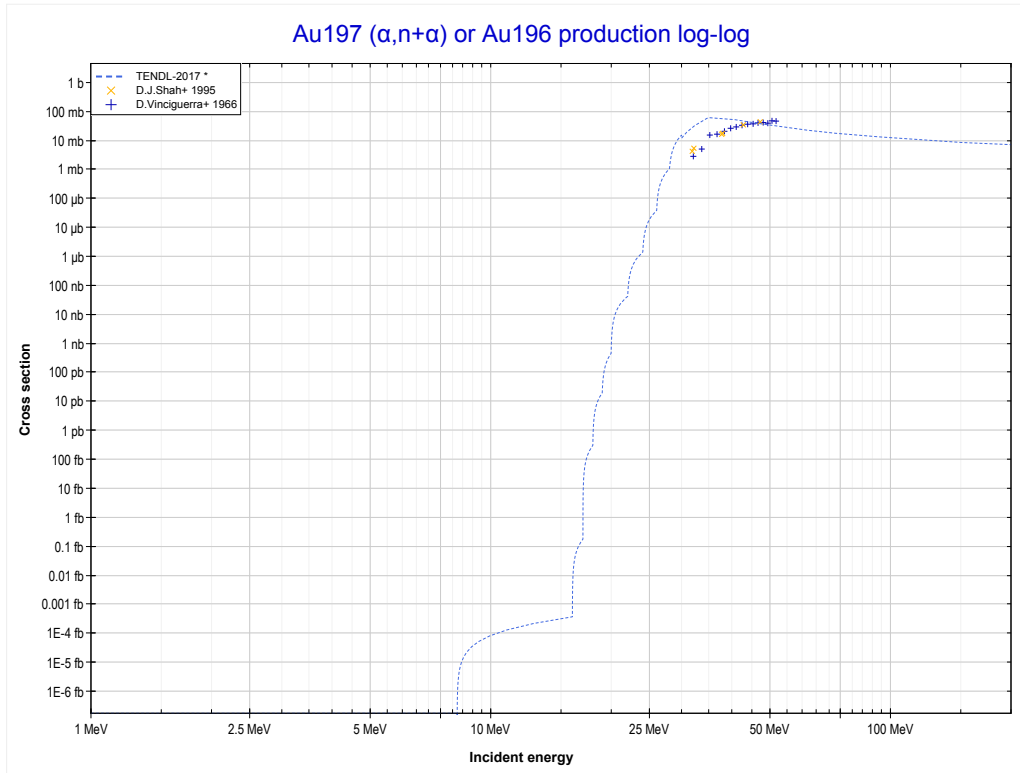


Reaction	Q-Value
Au197($\alpha,3n$)Tl198	-25440.04 keV

<< 78-Pt-198	79-Au-197	81-Tl-203 >>
<< MT17 ($\alpha,3n$)	MT18 (α,fission)	MT22 (α ,n+ α) >>

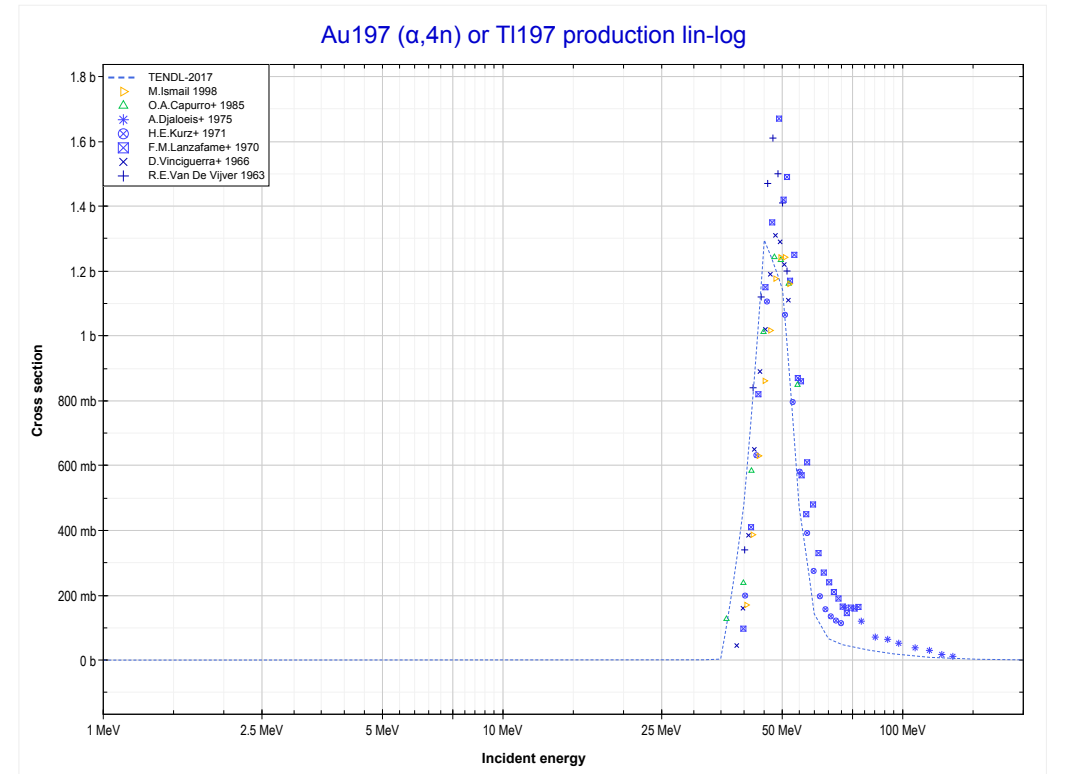
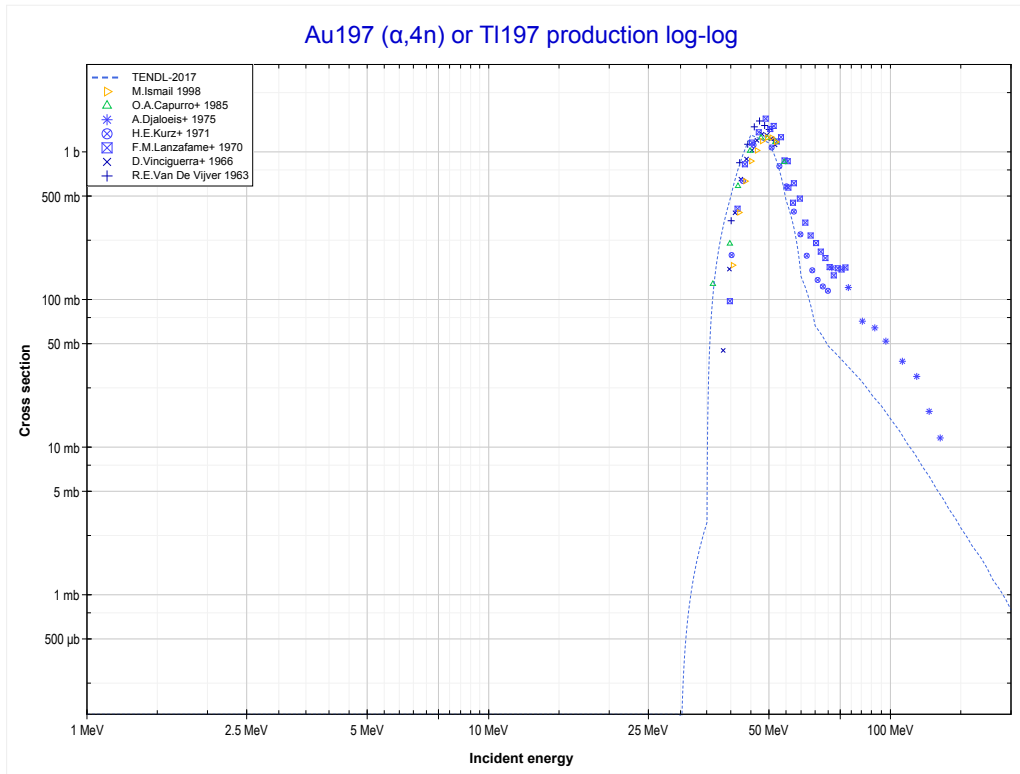


<< 69-Tm-169	79-Au-197	93-Np-237 >>
<< MT18 (α ,fission)	MT22 (α,n+α) or MT5 (Au196 production)	MT37 (α ,4n) >>



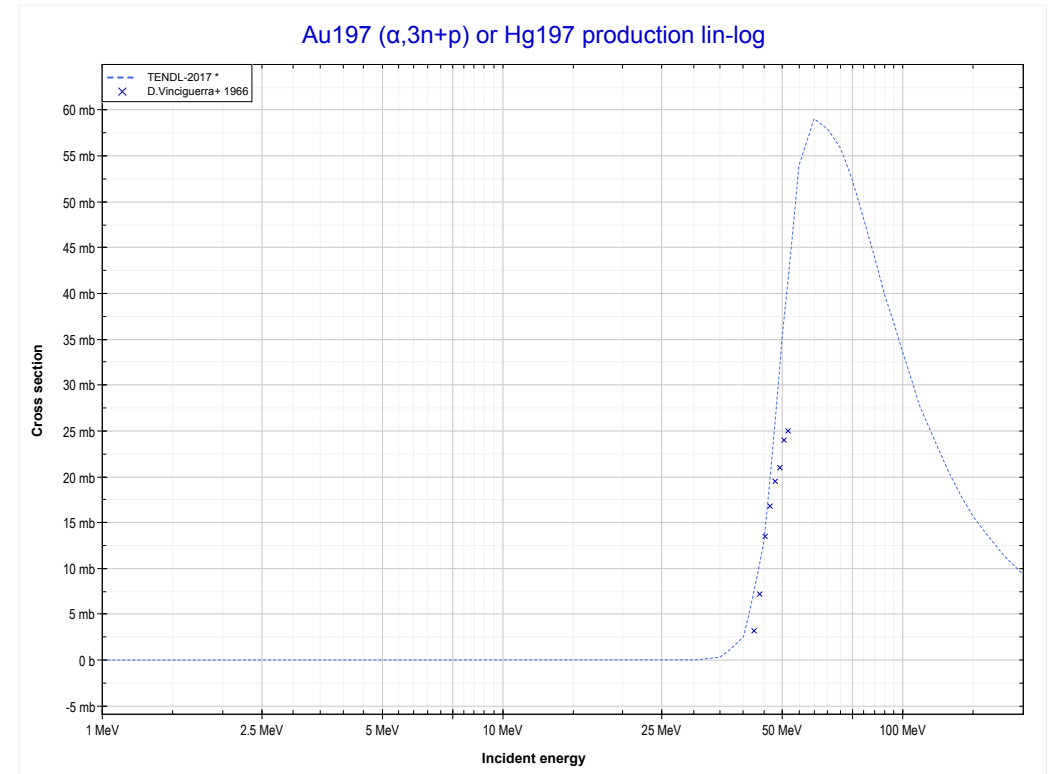
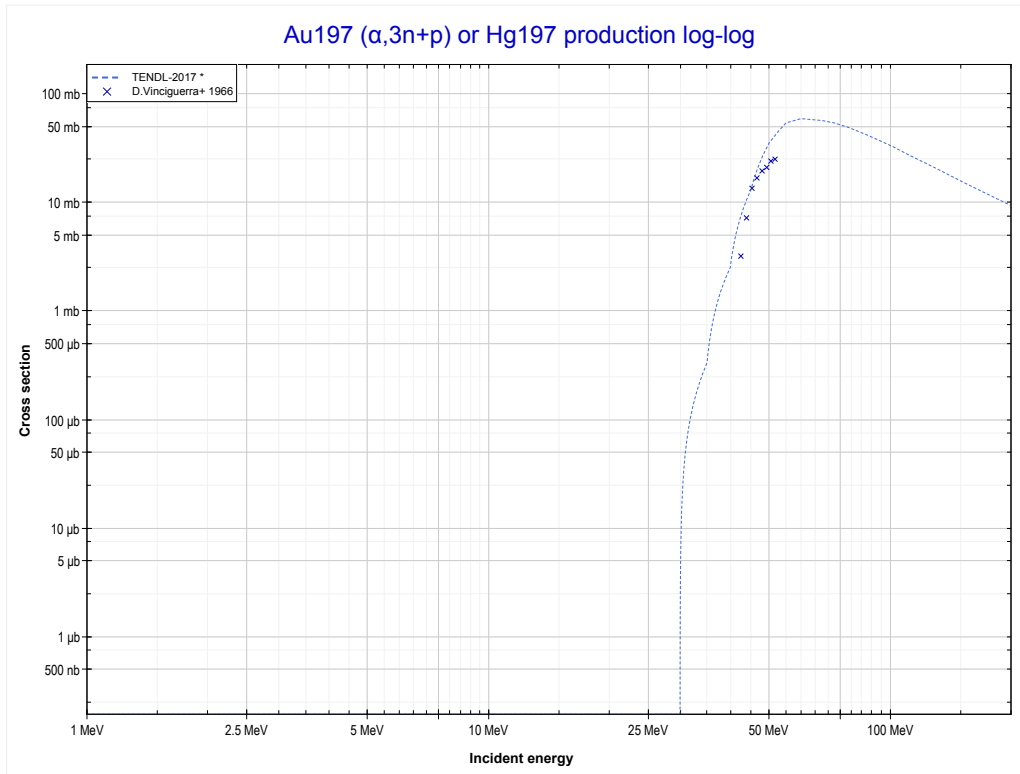
Reaction	Q-Value
Au197(α ,n+ α)Au196	-8072.42 keV
Au197(α ,d+t)Au196	-25661.71 keV
Au197(α ,n+p+t)Au196	-27886.28 keV
Au197(α ,2n+He3)Au196	-28650.03 keV
Au197(α ,n+2d)Au196	-31918.94 keV
Au197(α ,2n+p+d)Au196	-34143.51 keV
Au197(α ,3n+2p)Au196	-36368.08 keV

<< 77-Ir-193	79-Au-197	81-Tl-203 >>
<< MT22 ($\alpha, n+\alpha$)	MT37 ($\alpha, 4n$) or MT5 (Tl197 production)	MT42 ($\alpha, 3n+p$) >>



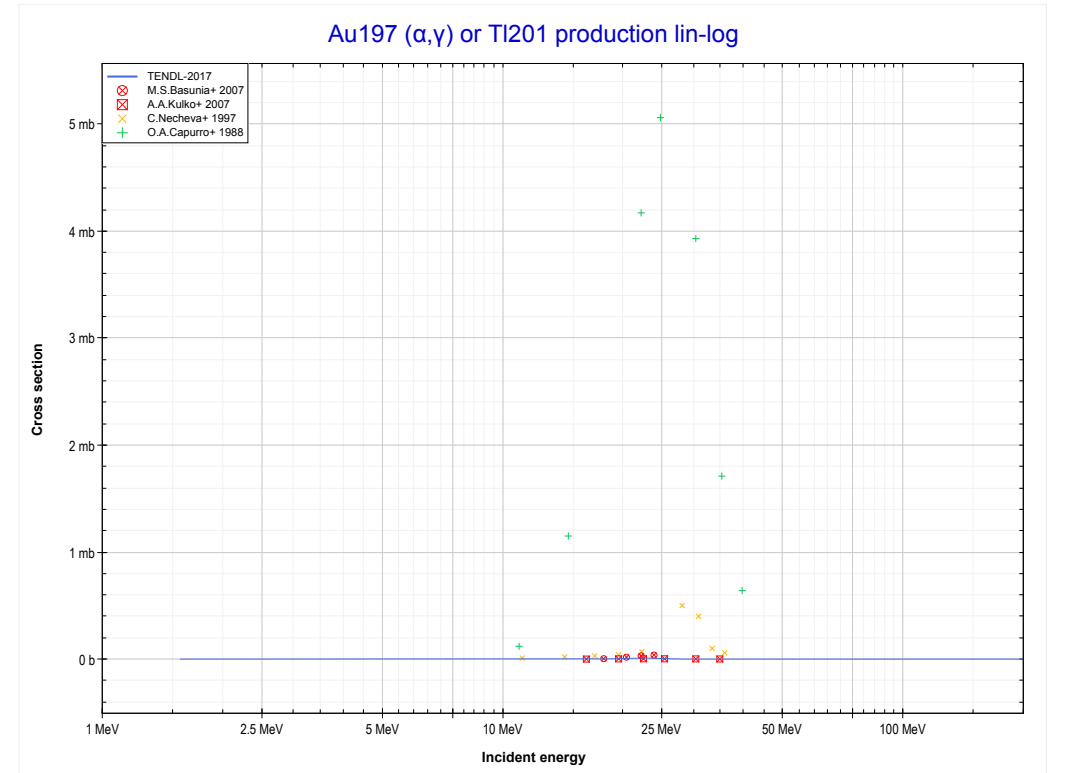
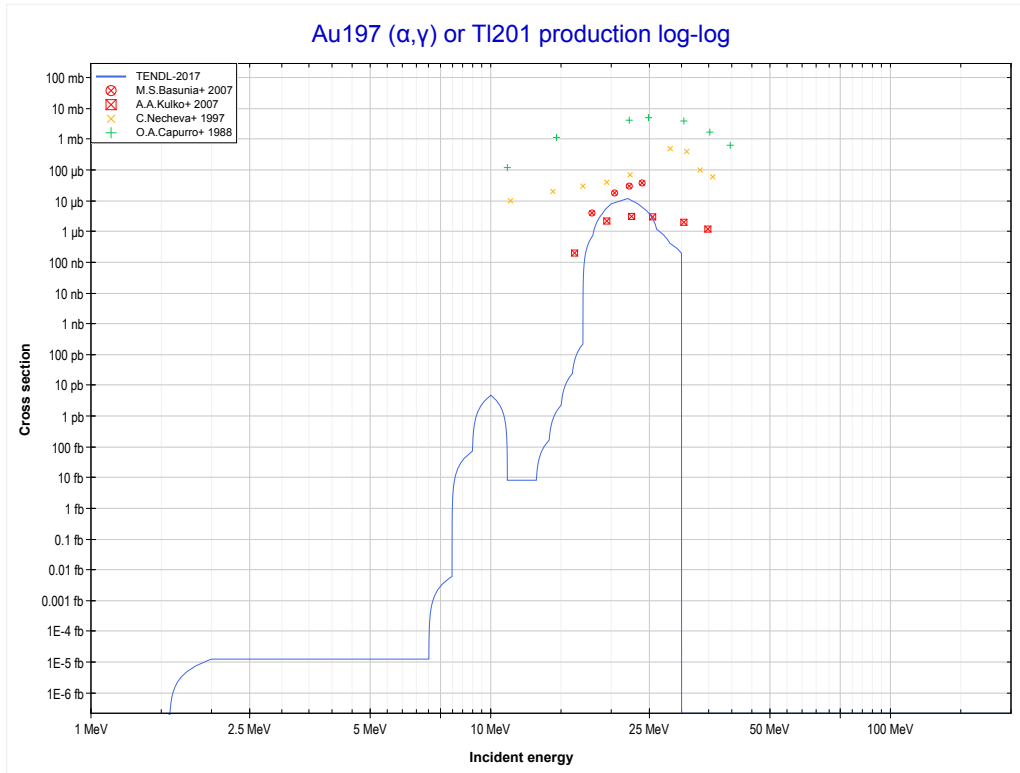
Reaction	Q-Value
Au197($\alpha, 4n$)Tl197	-32661.35 keV

<< 48-Cd-116	79-Au-197	
<< MT37 ($\alpha,4n$)	MT42 ($\alpha,3n+p$) or MT5 (Hg197 production)	MT102 (α,γ) >>



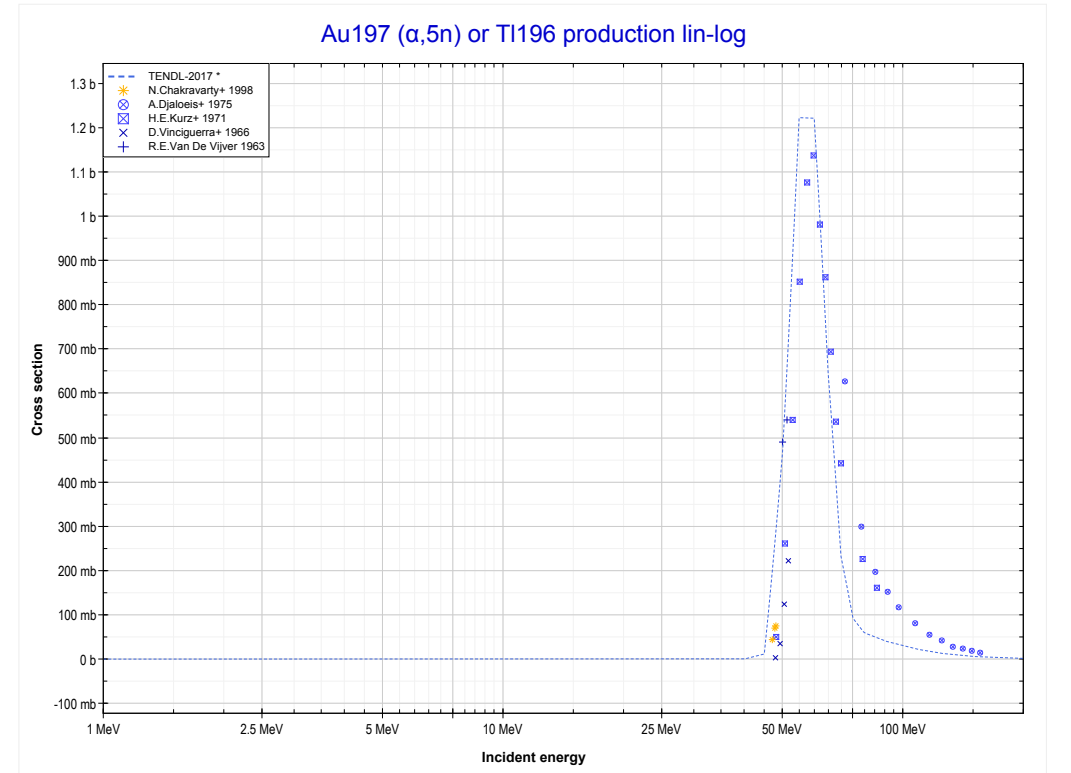
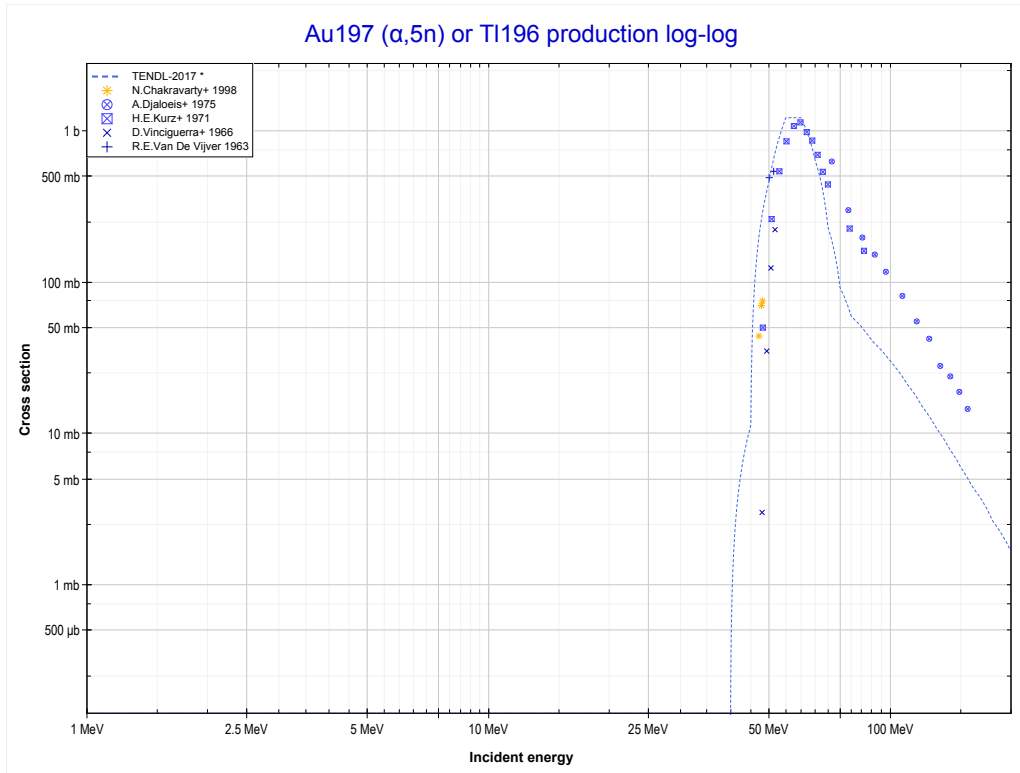
Reaction	Q-Value
Au197($\alpha,n+t$)Hg197	-21196.21 keV
Au197($\alpha,2n+d$)Hg197	-27453.44 keV
Au197($\alpha,3n+p$)Hg197	-29678.01 keV

<< 62-Sm-144	79-Au-197	
<< MT42 ($\alpha,3n+p$)	MT102 (α,γ) or MT5 (TI201 production)	MT152 ($\alpha,5n$) >>



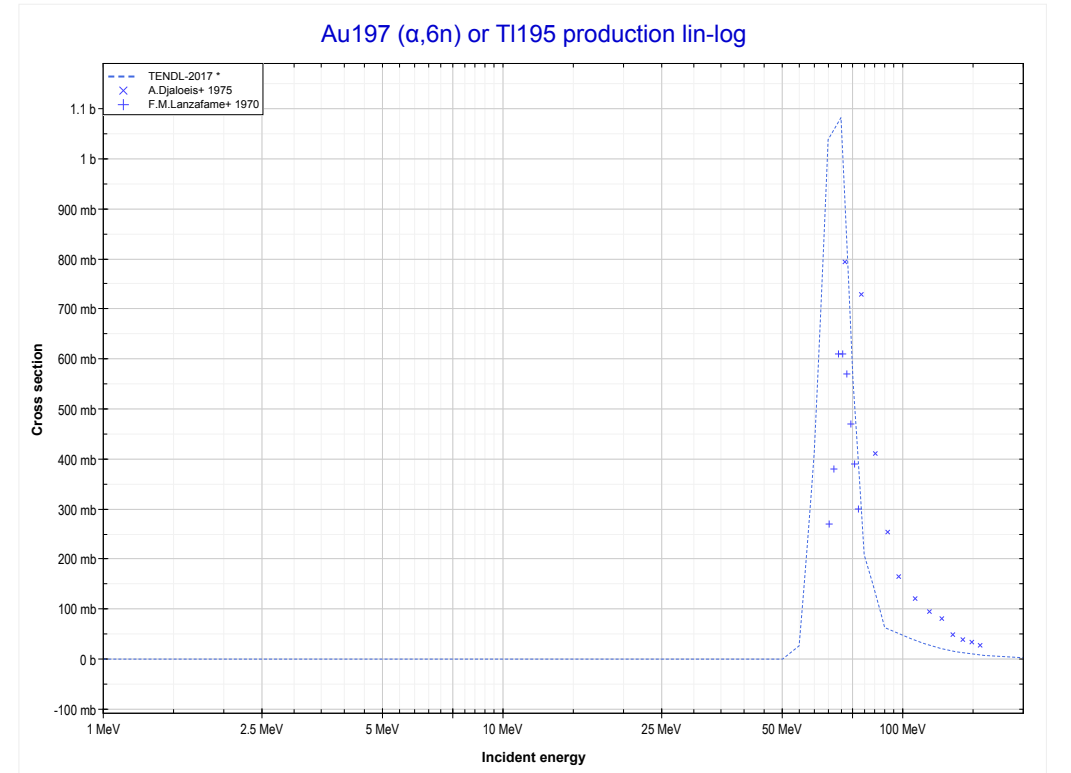
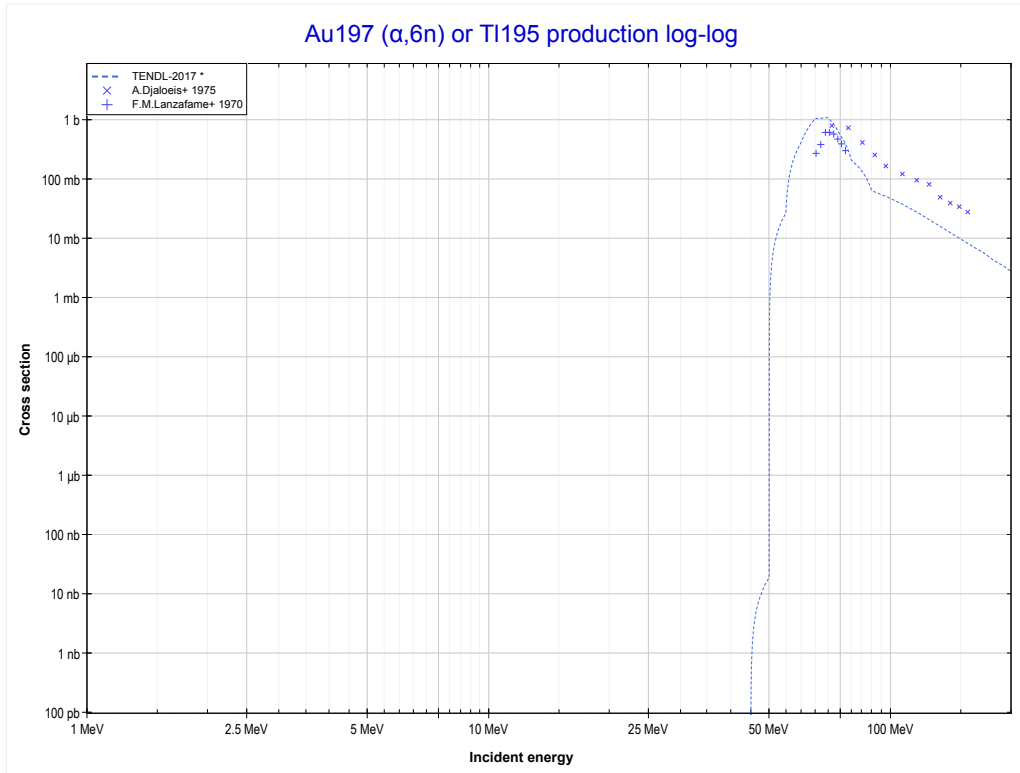
Reaction	Q-Value
Au197(α,γ)TI201	-1537.08 keV

<< 77-Ir-193	79-Au-197	82-Pb-206 >>
<< MT102 (α,γ)	MT152 ($\alpha,5n$) or MT5 (Tl196 production)	MT153 ($\alpha,6n$) >>



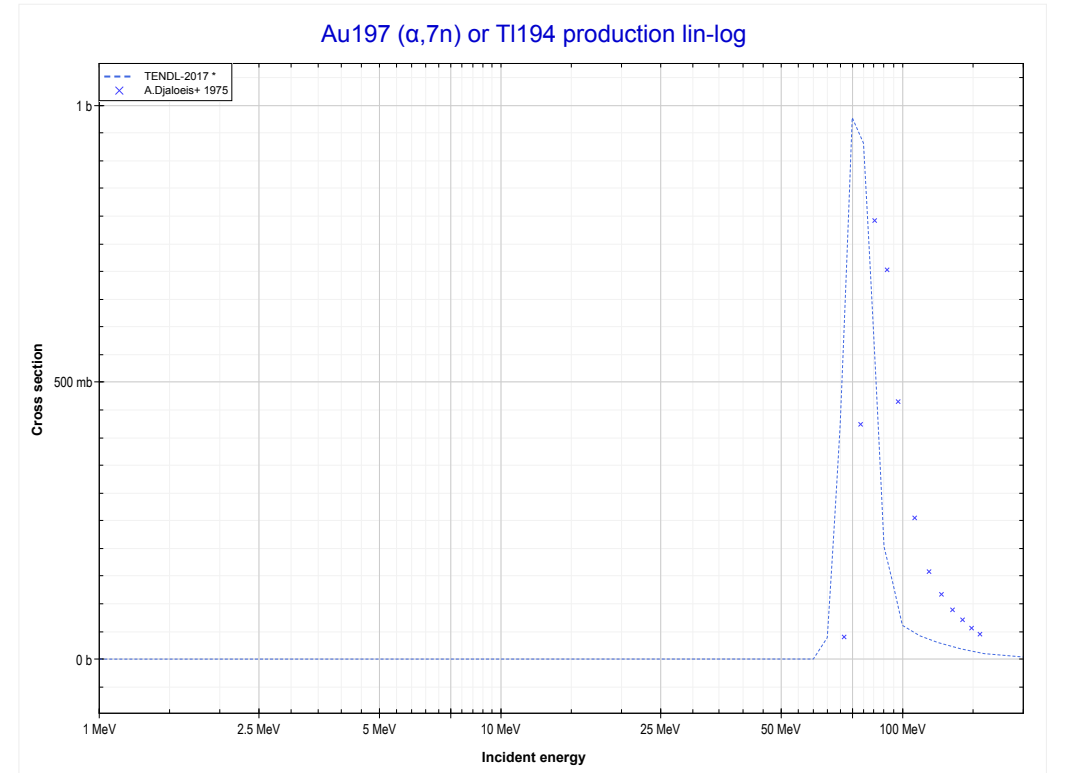
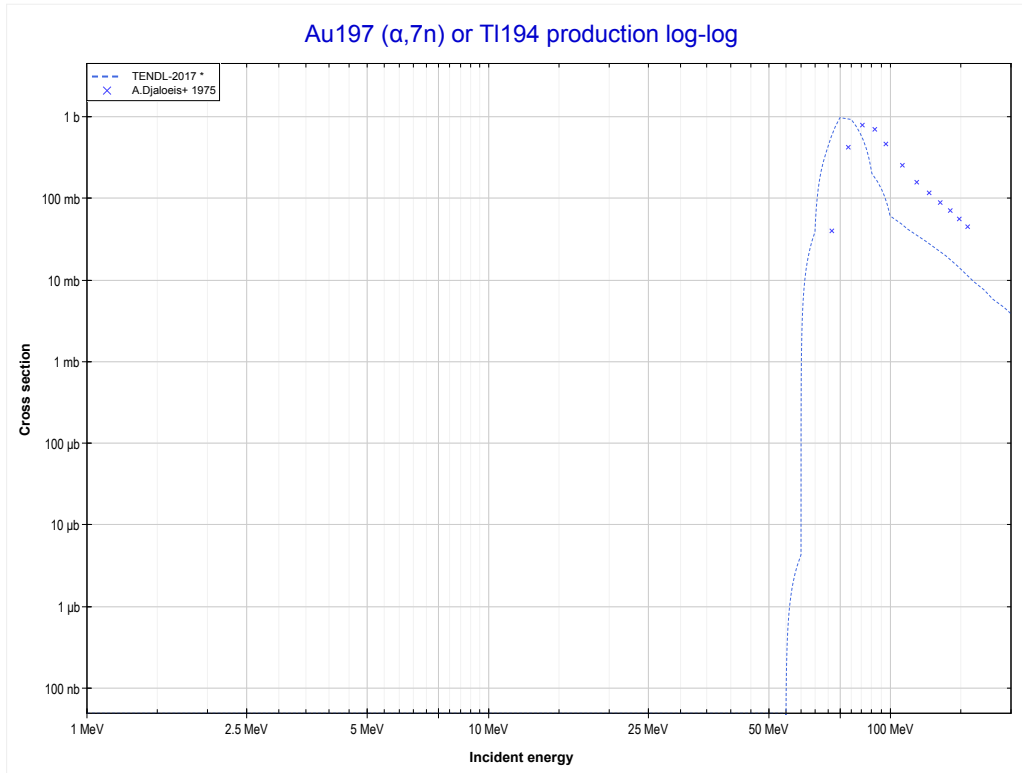
Reaction	Q-Value
Au197($\alpha,5n$)Tl196	-41575.67 keV

<< 75-Re-187	79-Au-197	82-Pb-206 >>
<< MT152 ($\alpha,5n$)	MT153 ($\alpha,6n$) or MT5 (Tl195 production)	MT160 ($\alpha,7n$) >>



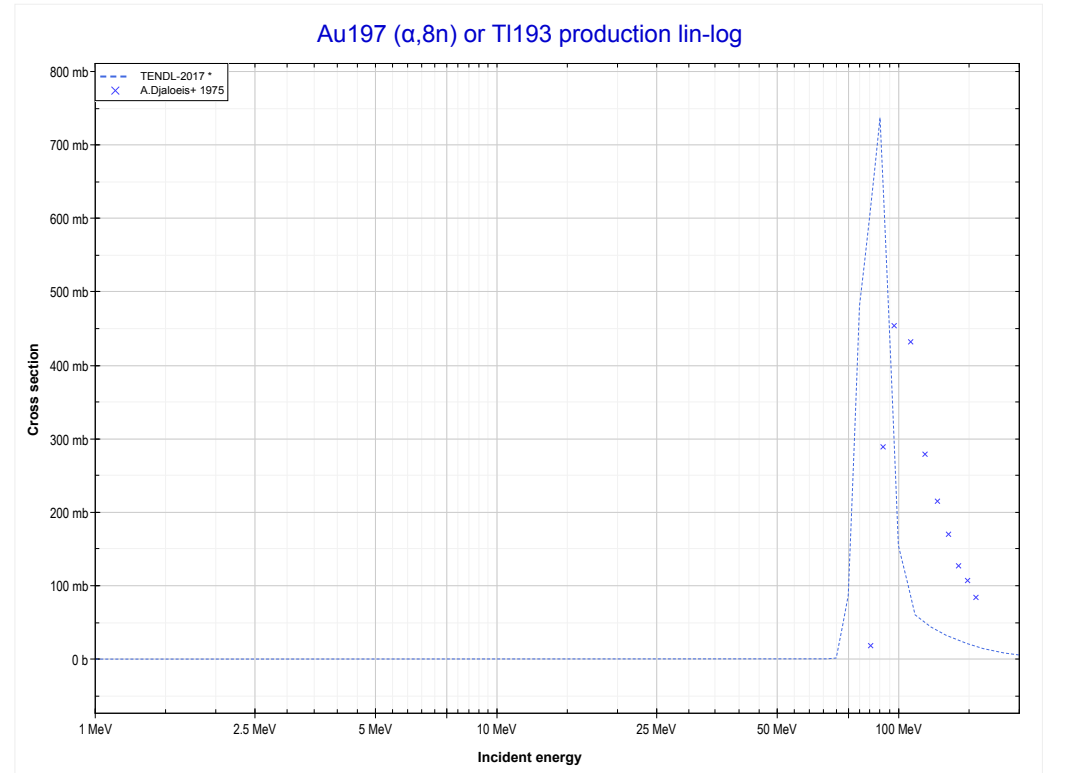
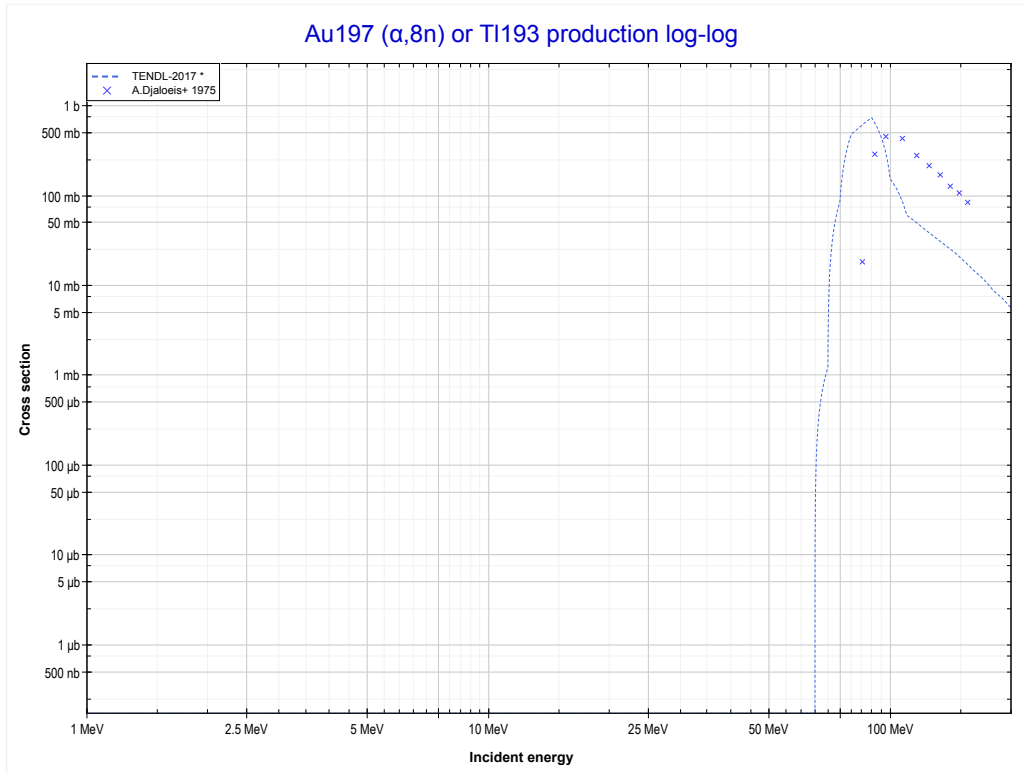
Reaction	Q-Value
Au197($\alpha,6n$)Tl195	-48988.99 keV

<< 75-Re-187	79-Au-197	82-Pb-206 >>
<< MT153 ($\alpha,6n$)	MT160 ($\alpha,7n$) or MT5 (Tl194 production)	MT161 ($\alpha,8n$) >>



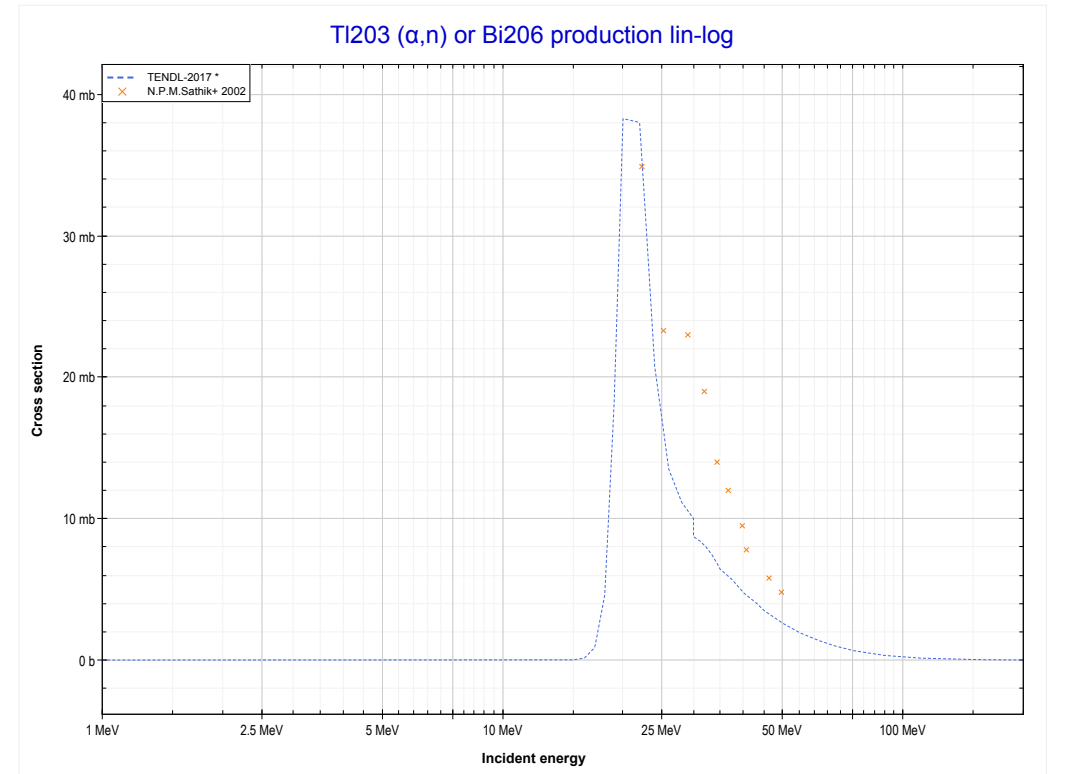
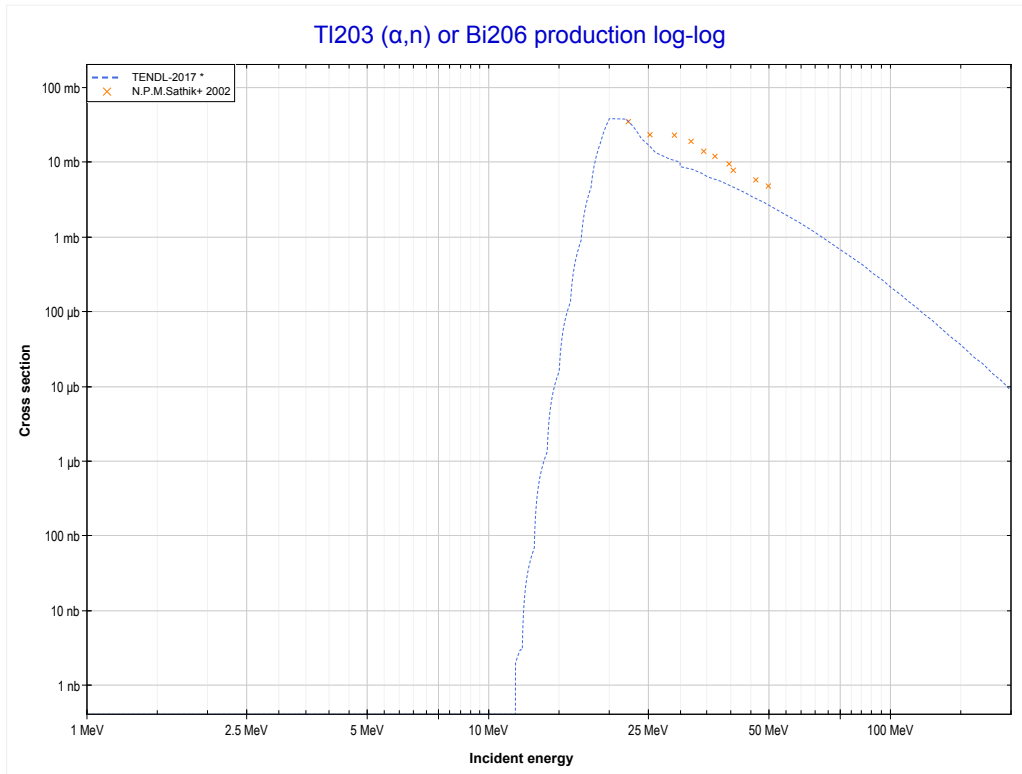
Reaction	Q-Value
Au197($\alpha,7n$)Tl194	-58278.30 keV

<< 73-Ta-181	79-Au-197	82-Pb-206 >>
<< MT160 ($\alpha,7n$)	MT161 ($\alpha,8n$) or MT5 (Tl193 production)	81-Tl-203 MT4 (α,n) >>



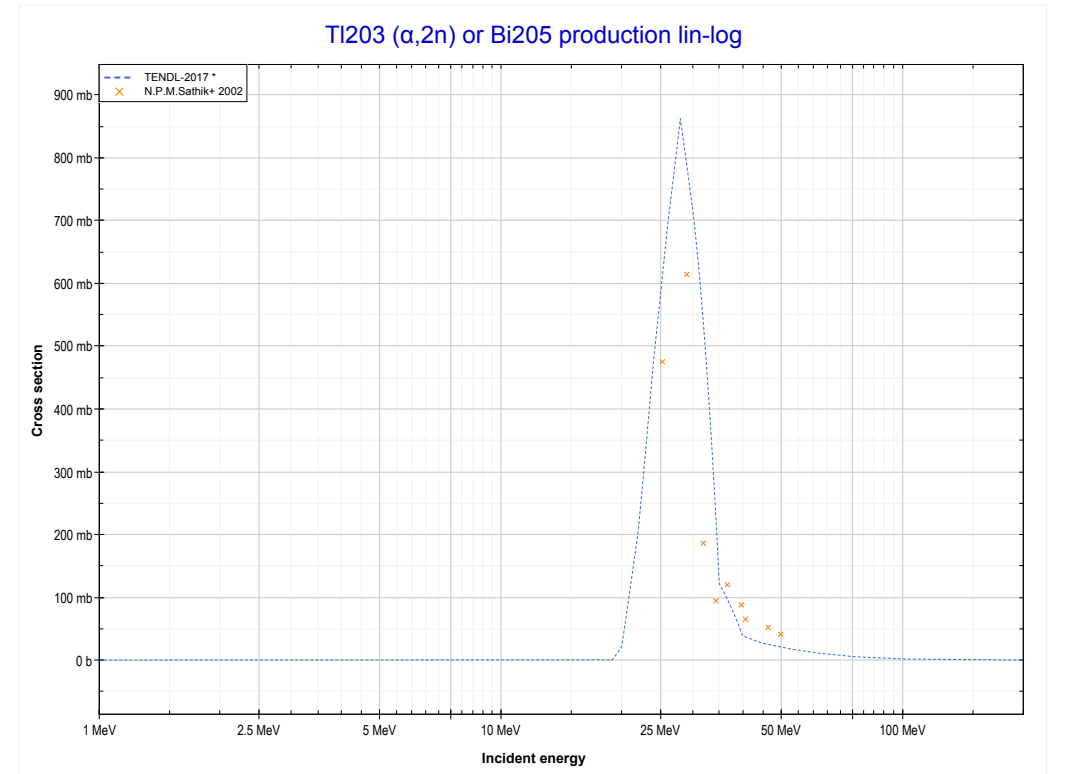
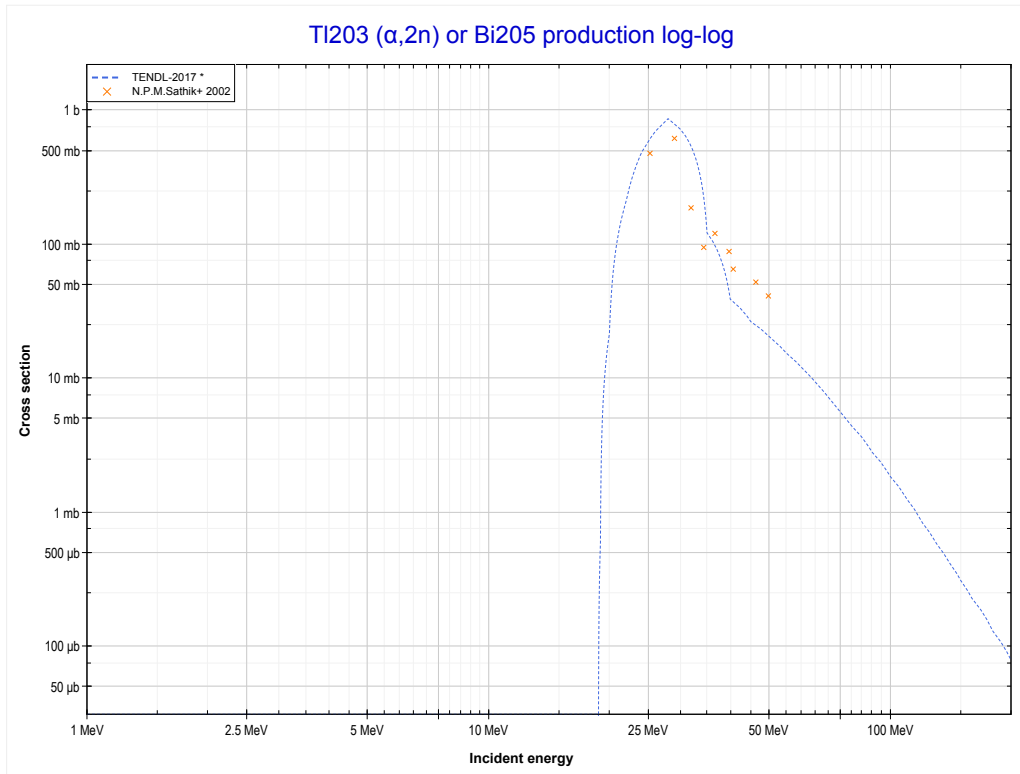
Reaction	Q-Value
Au197($\alpha,8n$)Tl193	-65809.62 keV

<< 79-Au-197	81-Tl-203	82-Pb-208 >>
<< 79-Au-197 MT161 ($\alpha,8n$)	MT4 (α,n) or MT5 (Bi206 production)	MT16 ($\alpha,2n$) >>



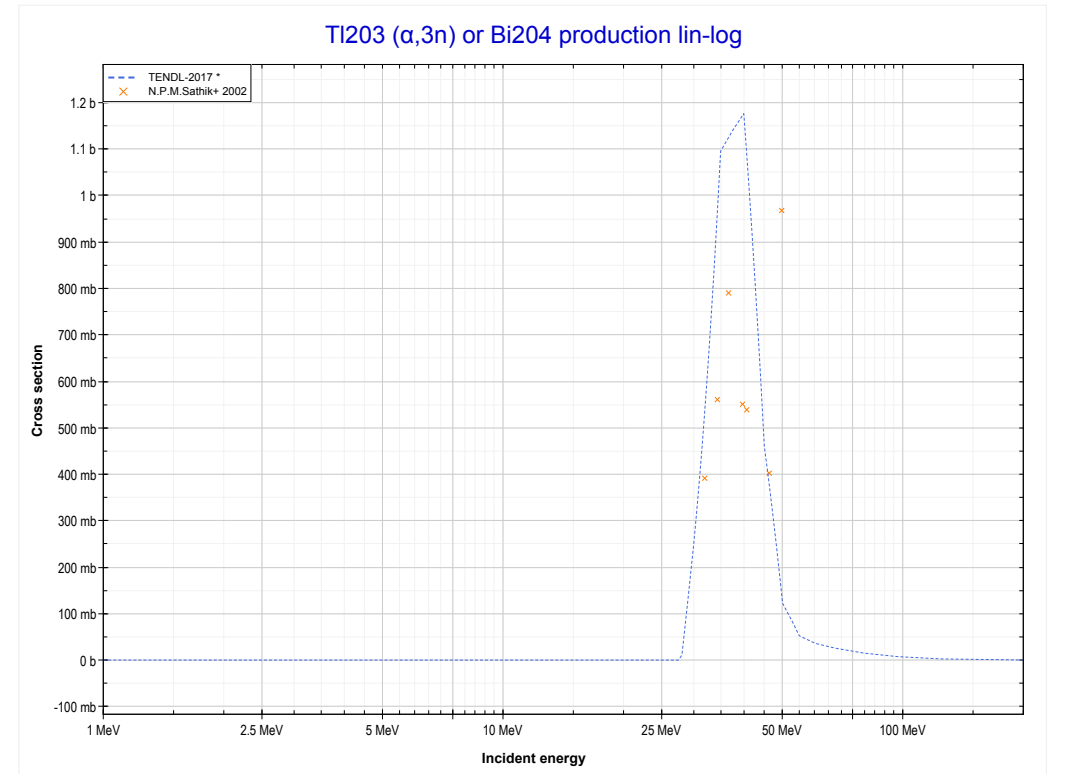
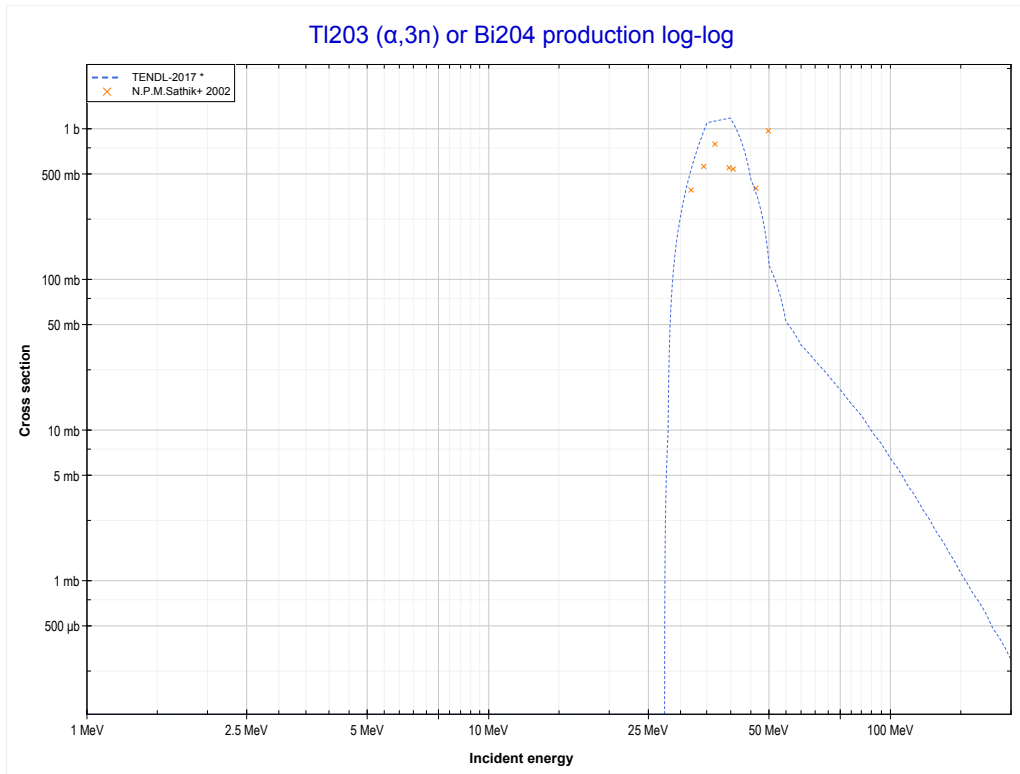
Reaction	Q-Value
Tl203(α,n)Bi206	-11379.20 keV

<< 79-Au-197	81-Tl-203	82-Pb-206 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Bi205 production)	MT17 ($\alpha, 3n$) >>



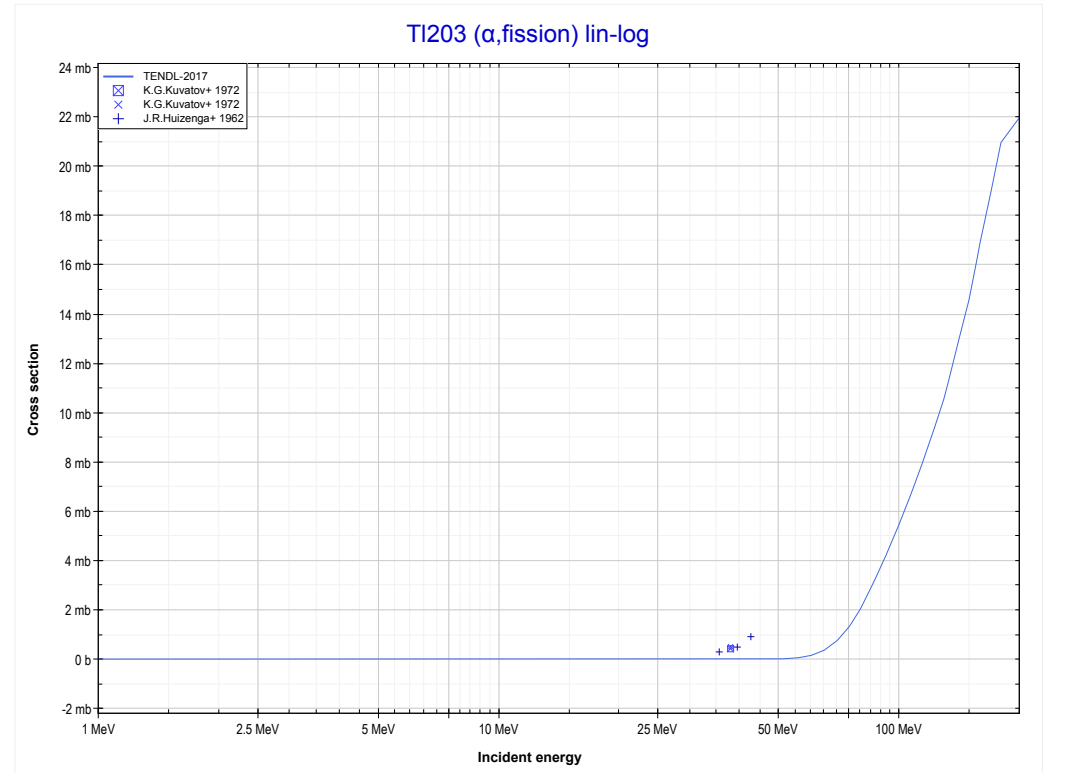
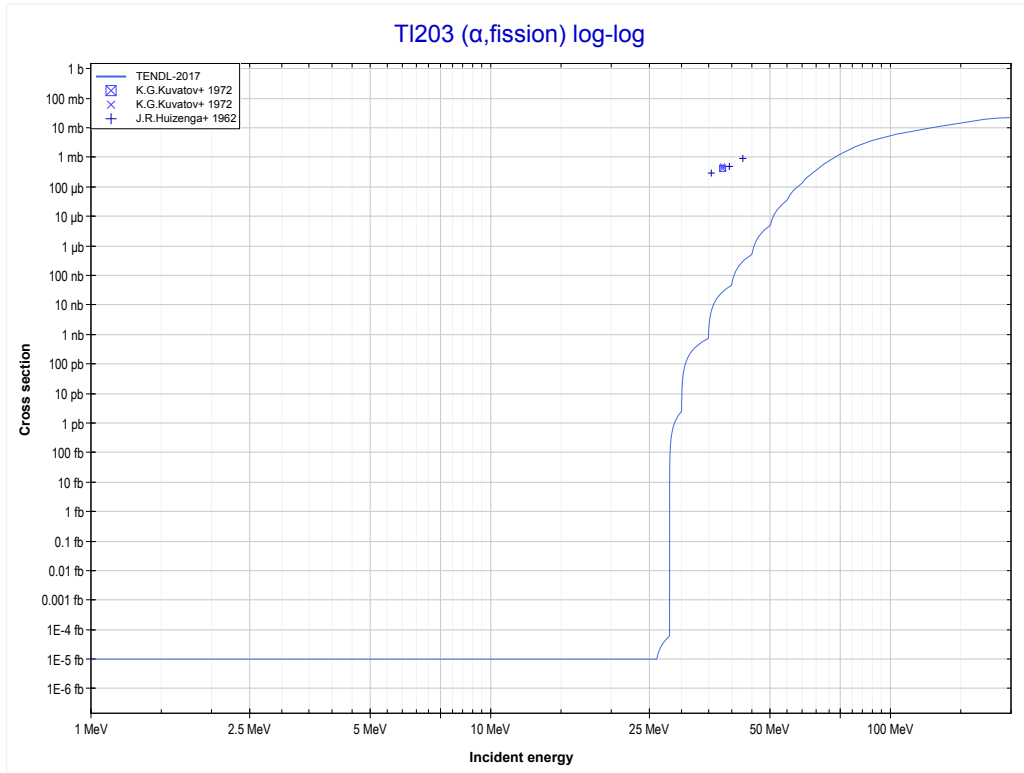
Reaction	Q-Value
Tl203($\alpha, 2n$)Bi205	-18414.52 keV

<< 79-Au-197	81-Tl-203	81-Tl-205 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Bi204 production)	MT18 (α ,fission) >>

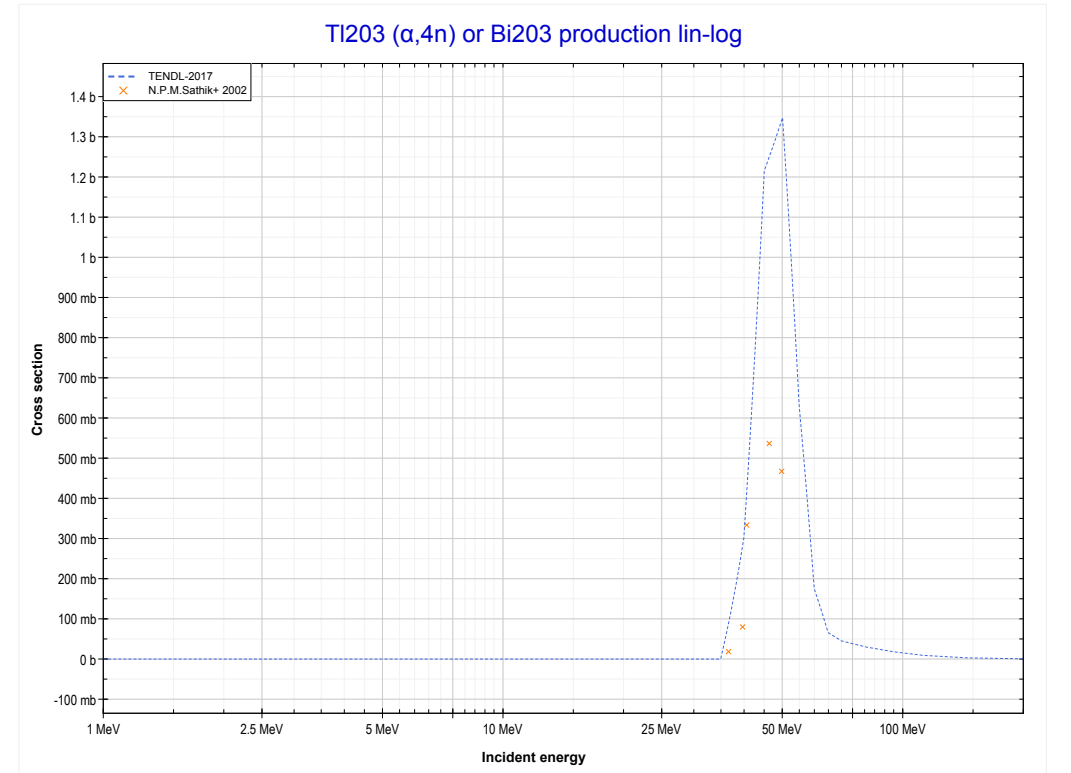
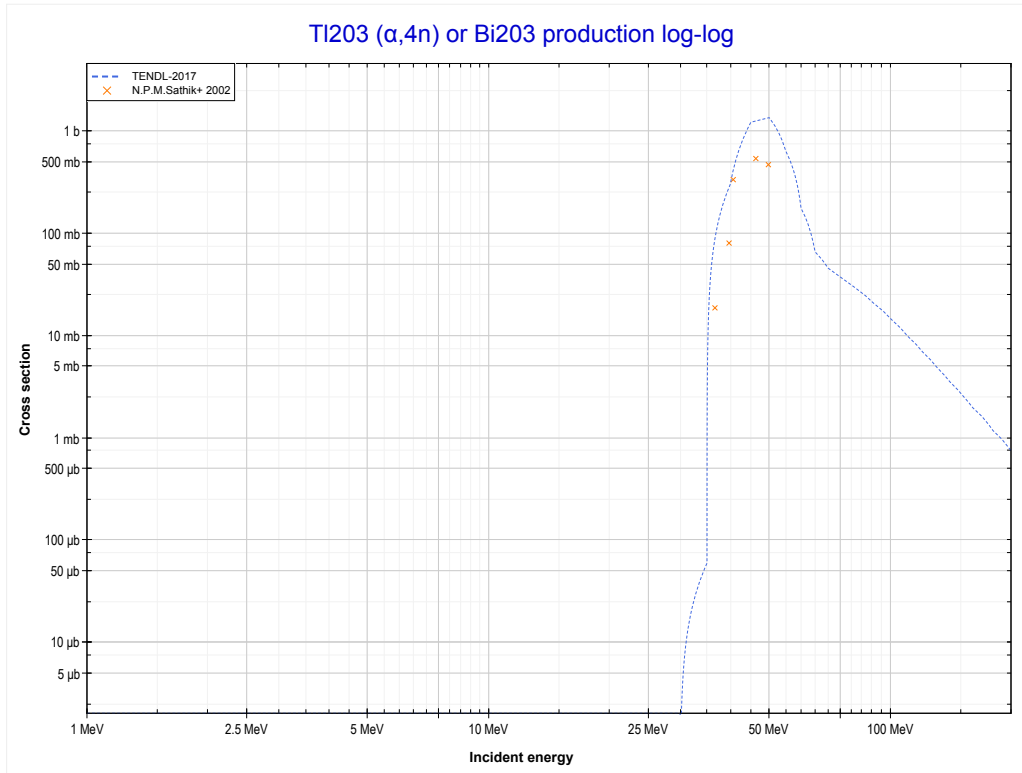


Reaction	Q-Value
Tl203($\alpha,3n$)Bi204	-26903.84 keV

<< 79-Au-197	81-Tl-203	81-Tl-205 >>
<< MT17 ($\alpha,3n$)	MT18 (α,fission)	MT37 ($\alpha,4n$) >>

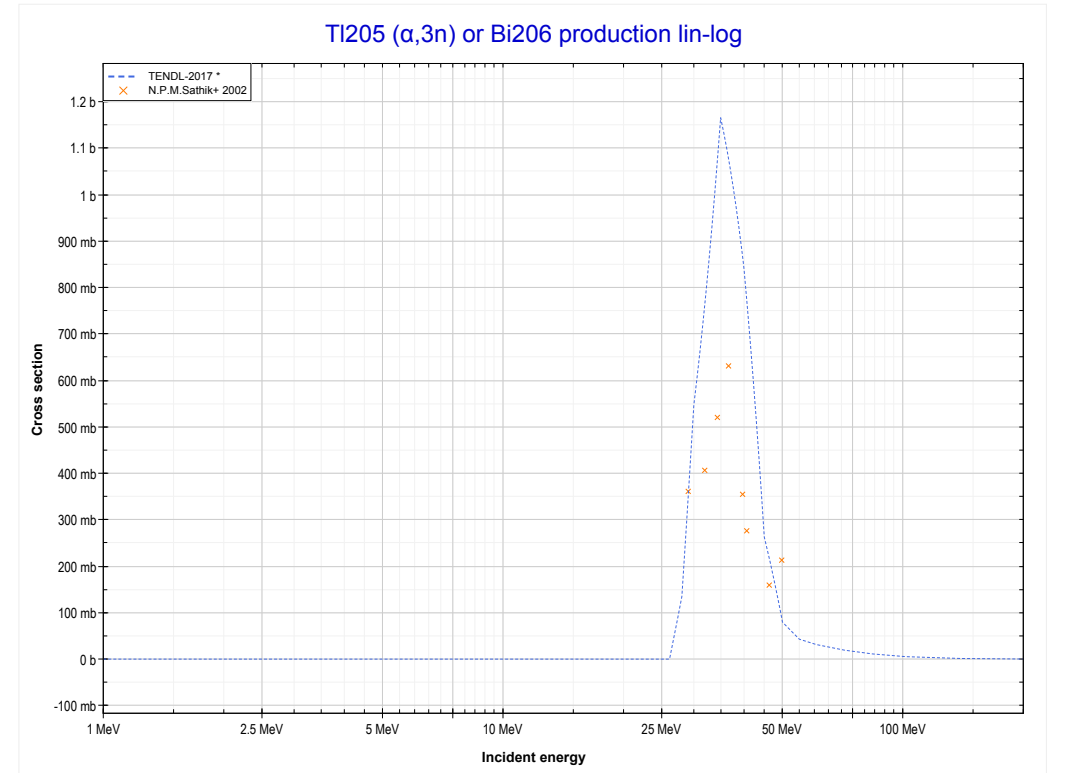
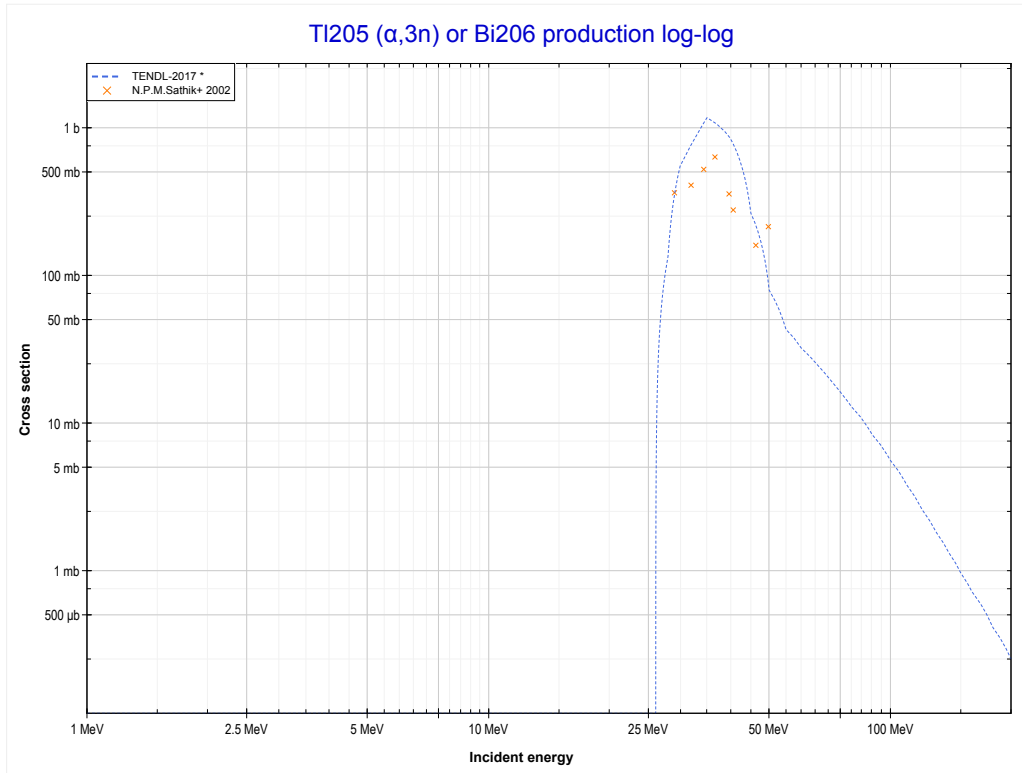


<< 79-Au-197	81-Tl-203	81-Tl-205 >>
<< MT18 (α ,fission)	MT37 (α,4n) or MT5 (Bi203 production)	81-Tl-205 MT17 (α ,3n) >>



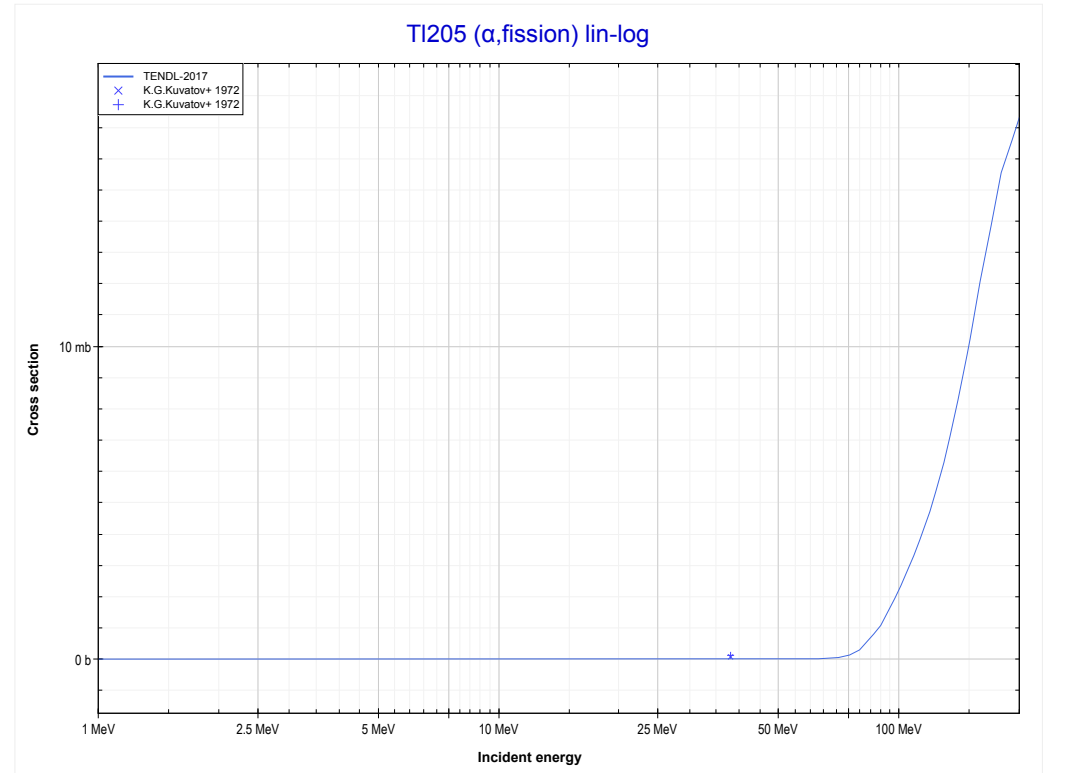
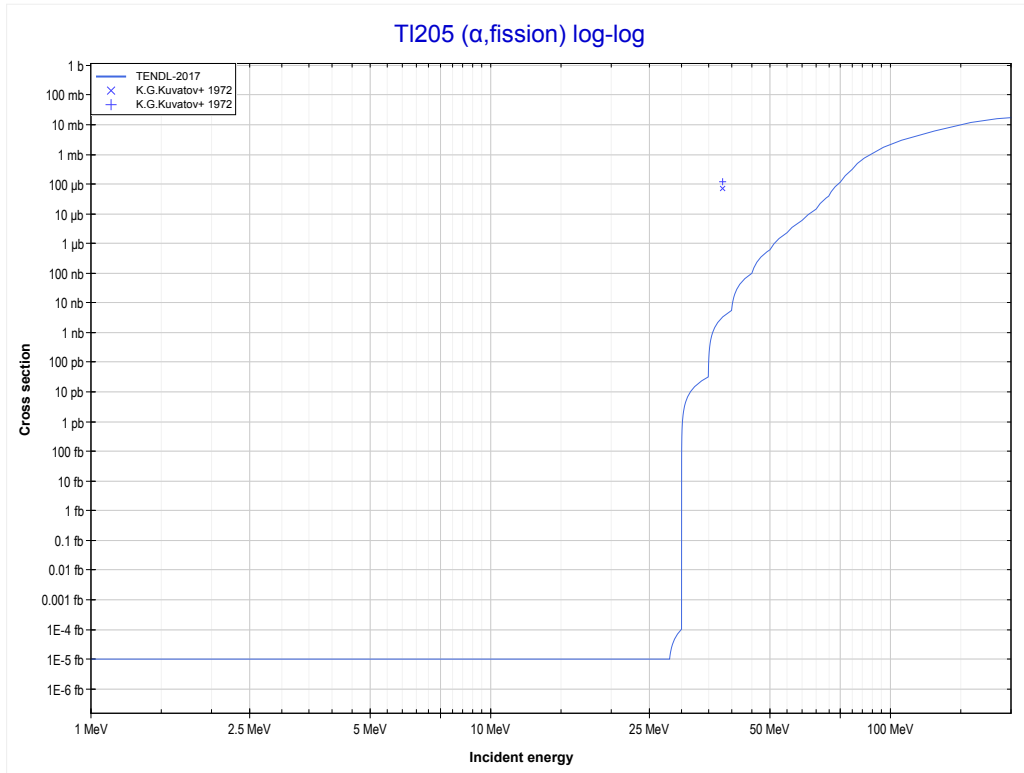
Reaction	Q-Value
Tl203(α ,4n)Bi203	-34097.15 keV

<< 81-Tl-203	81-Tl-205	82-Pb-206 >>
<< 81-Tl-203 MT37 ($\alpha,4n$)	MT17 ($\alpha,3n$) or MT5 (Bi206 production)	MT18 (α ,fission) >>

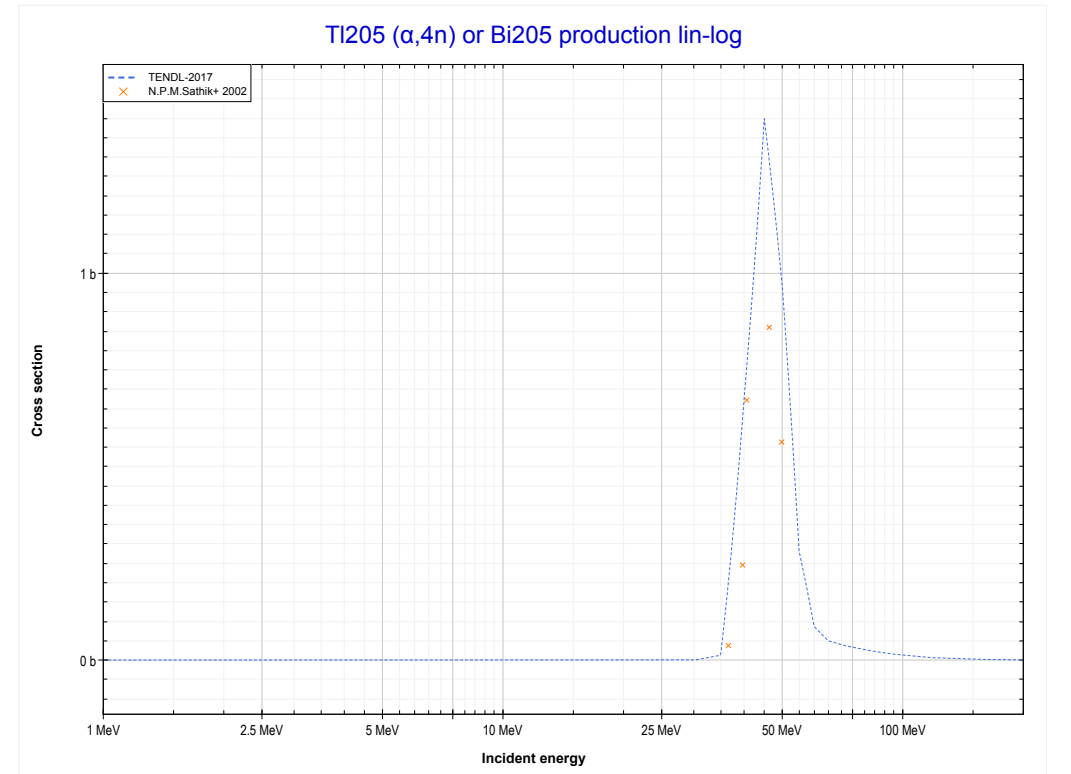
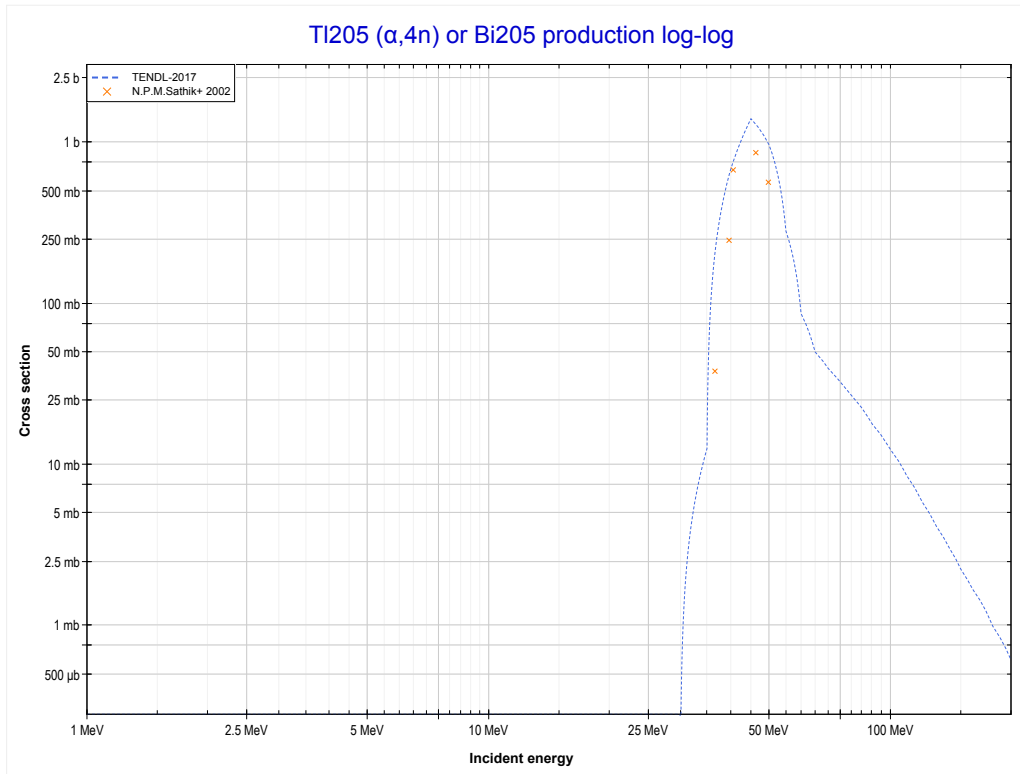


Reaction	Q-Value
Tl205($\alpha,3n$)Bi206	-25581.34 keV

<< 81-Tl-203	81-Tl-205	82-Pb-204 >>
<< MT17 ($\alpha,3n$)	MT18 (α,fission)	MT37 ($\alpha,4n$) >>

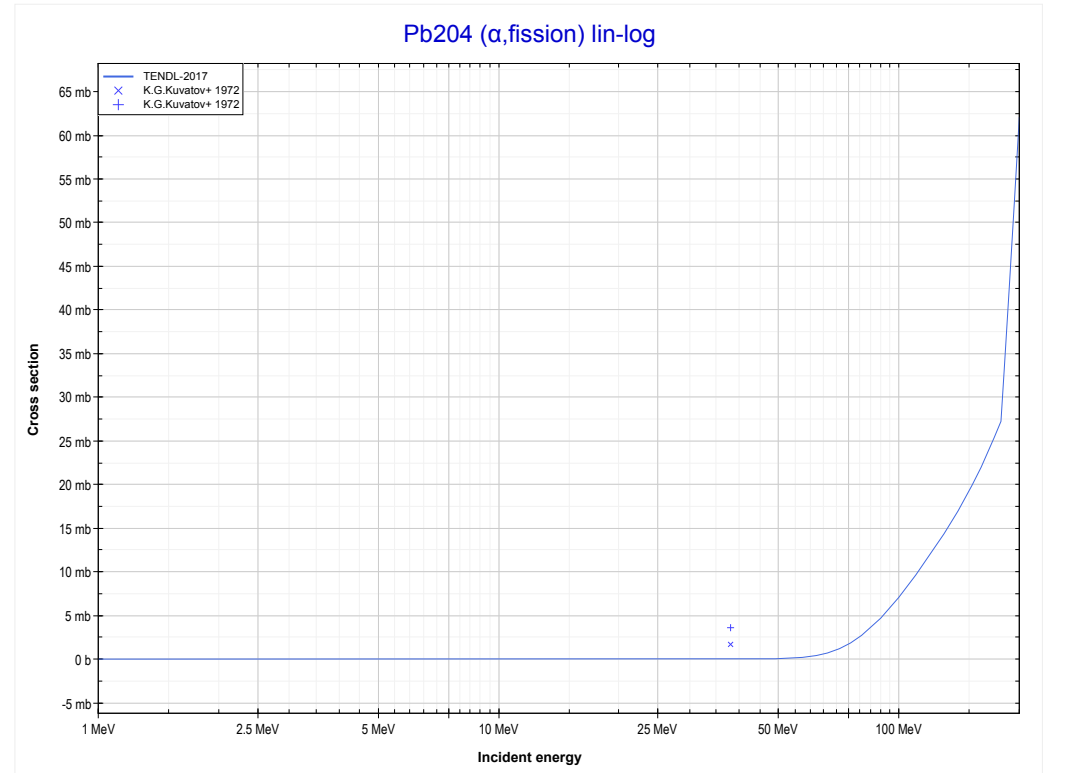
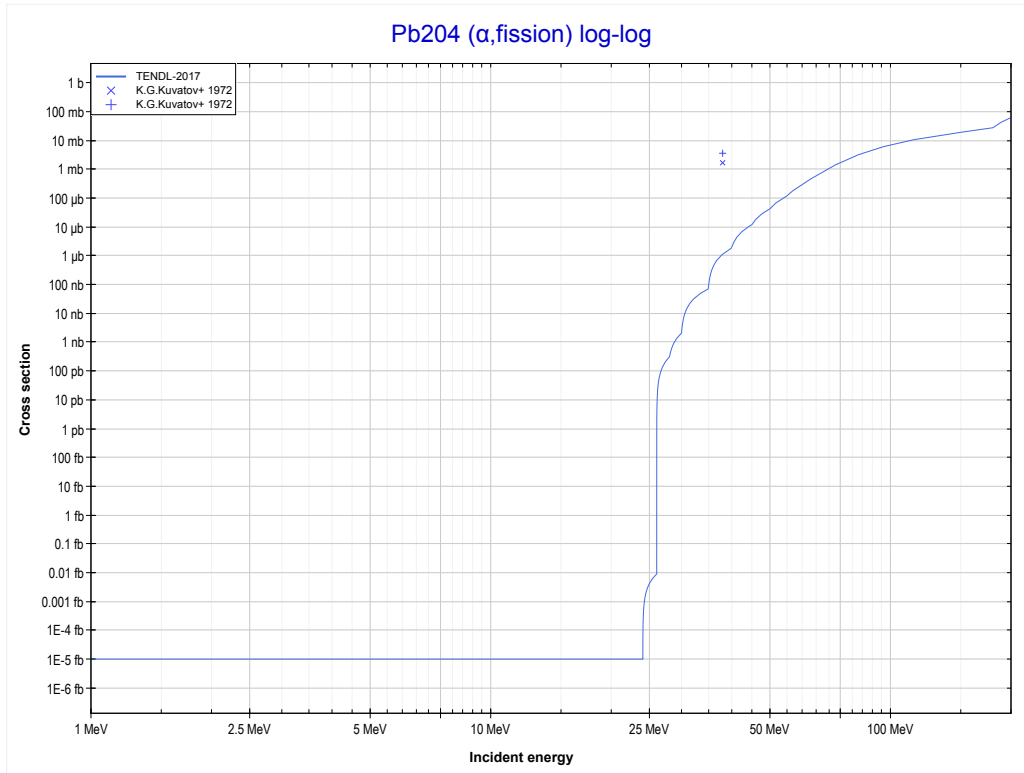


<< 81-Tl-203	81-Tl-205	82-Pb-204 >>
<< MT18 (α ,fission)	MT37 (α,4n) or MT5 (Bi205 production)	82-Pb-204 MT18 (α ,fission) >>

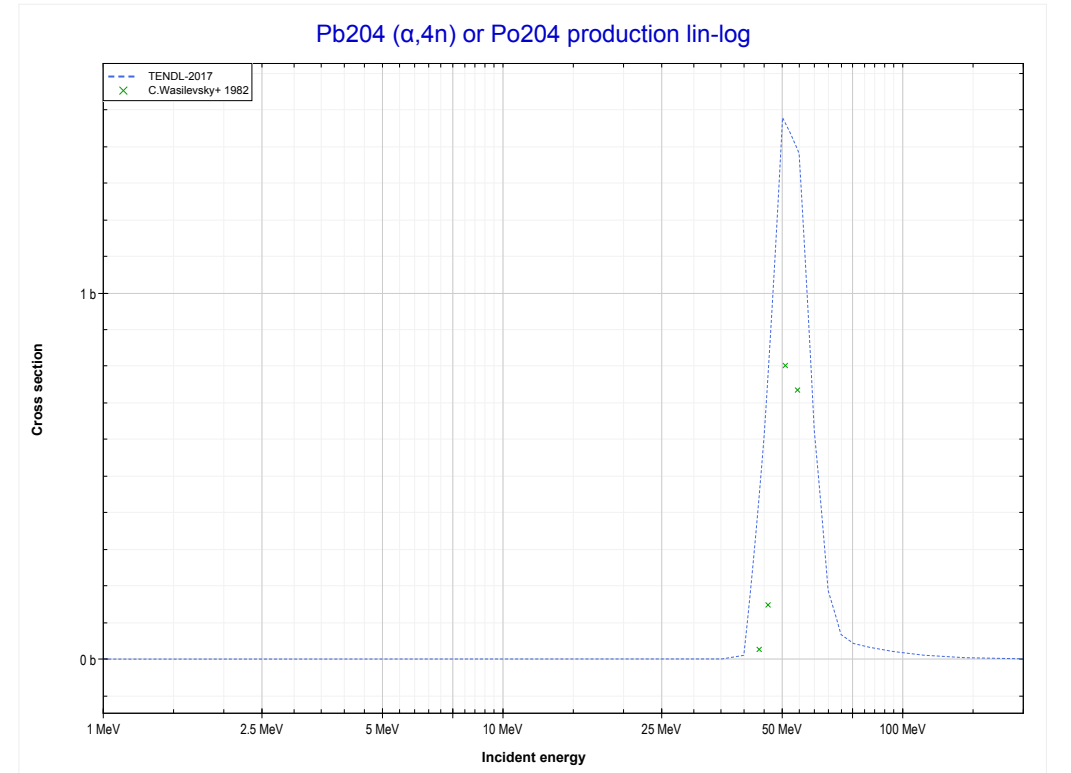
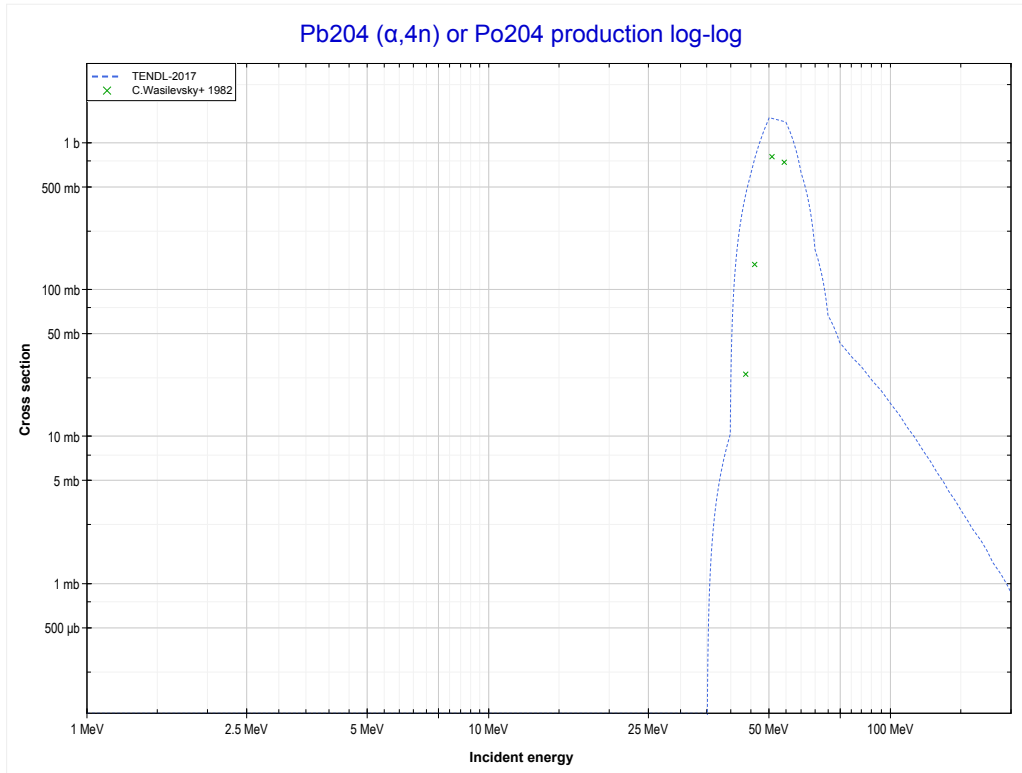


Reaction	Q-Value
TI205(α ,4n)Bi205	-32616.65 keV

<< 81-Tl-205	82-Pb-204	82-Pb-206 >>
<< 81-Tl-205 MT37 ($\alpha,4n$)	MT18 (α,fission)	MT37 ($\alpha,4n$) >>

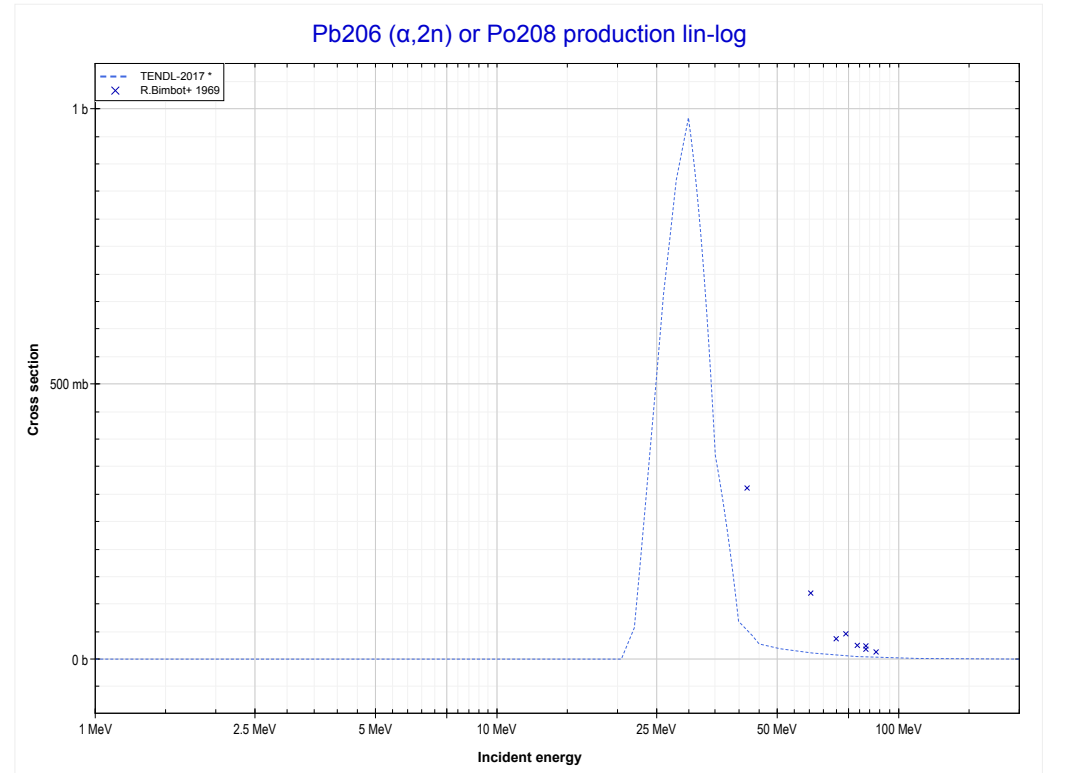
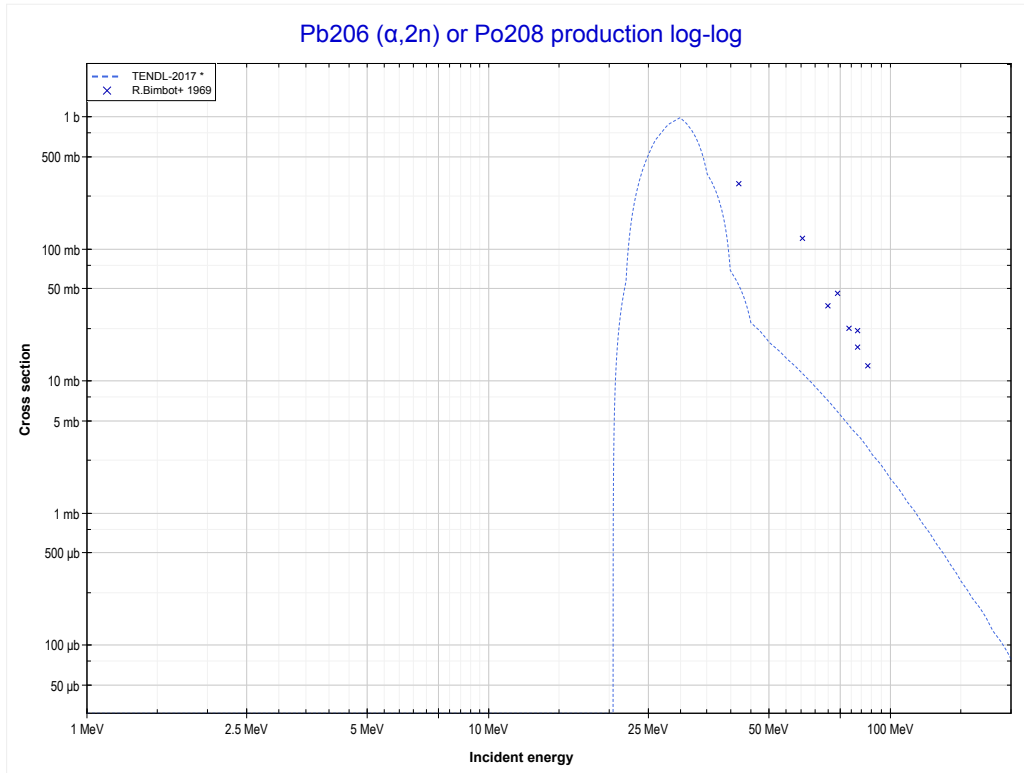


<< 81-Tl-205	82-Pb-204	82-Pb-206 >>
<< MT18 (α ,fission)	MT37 (α,4n) or MT5 (Po204 production)	82-Pb-206 MT16 (α ,2n) >>



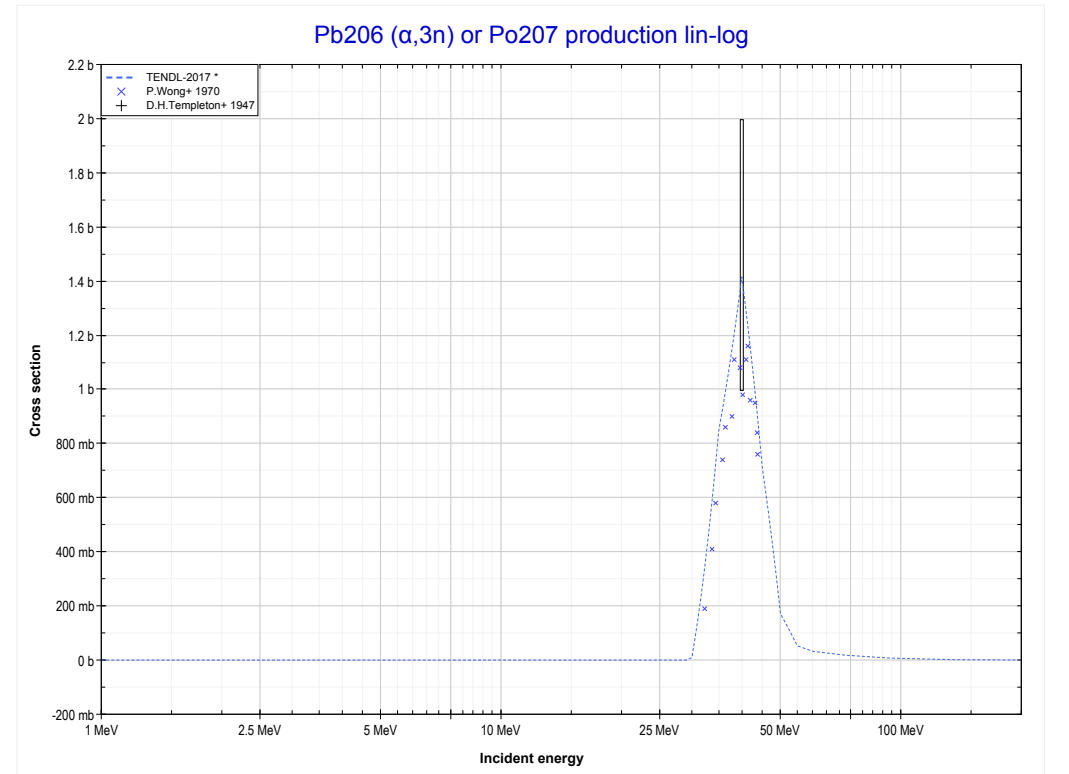
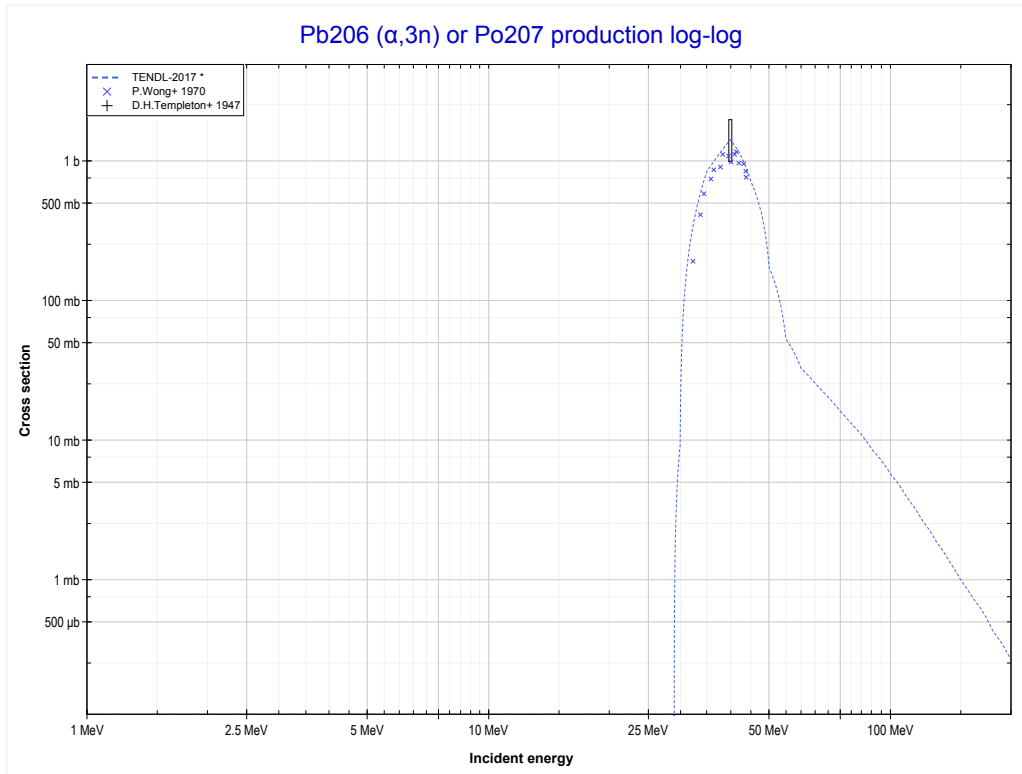
Reaction	Q-Value
Pb204(α ,4n)Po204	-36628.75 keV

<< 81-Tl-203	82-Pb-206	82-Pb-208 >>
<< 82-Pb-204 MT37 ($\alpha,4n$)	MT16 ($\alpha,2n$) or MT5 (Po208 production)	MT17 ($\alpha,3n$) >>



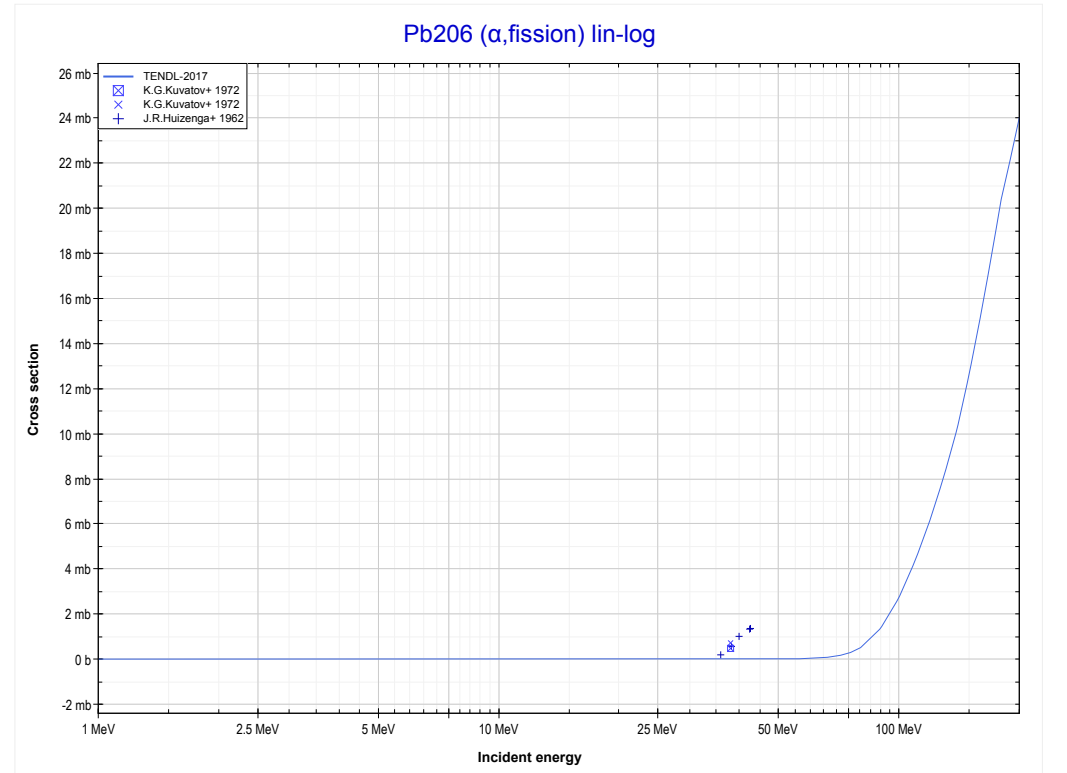
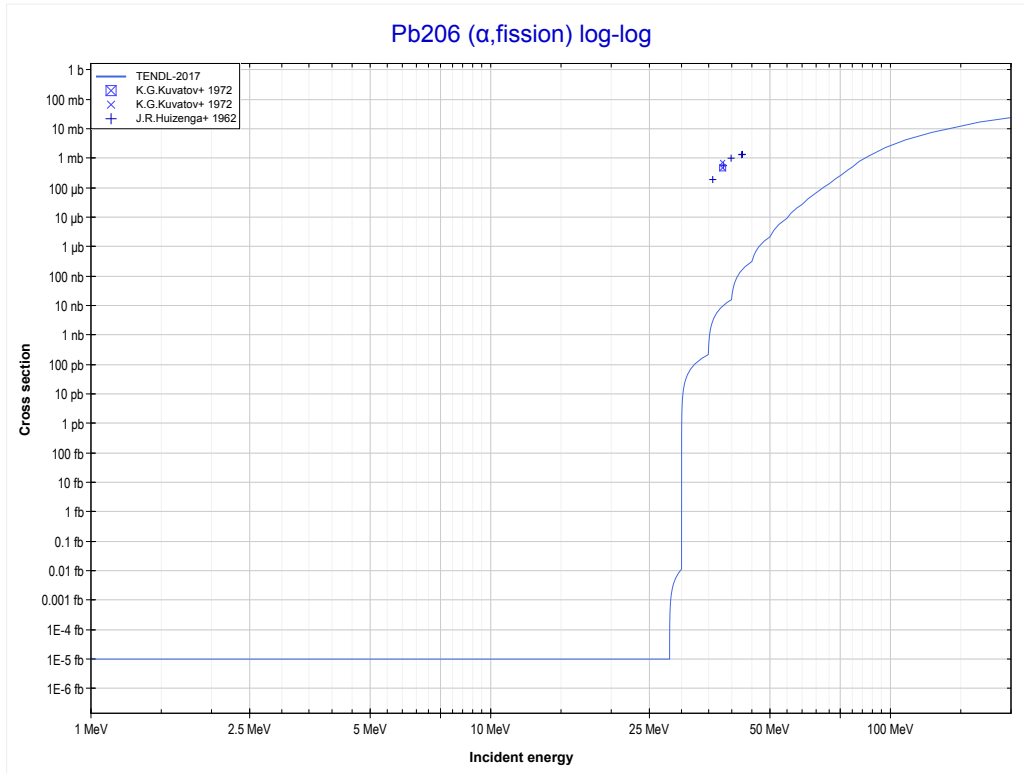
Reaction	Q-Value
Pb206($\alpha,2n$)Po208	-20033.62 keV

<< 81-Tl-205	82-Pb-206	83-Bi-209 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Po207 production)	MT18 (α ,fission) >>

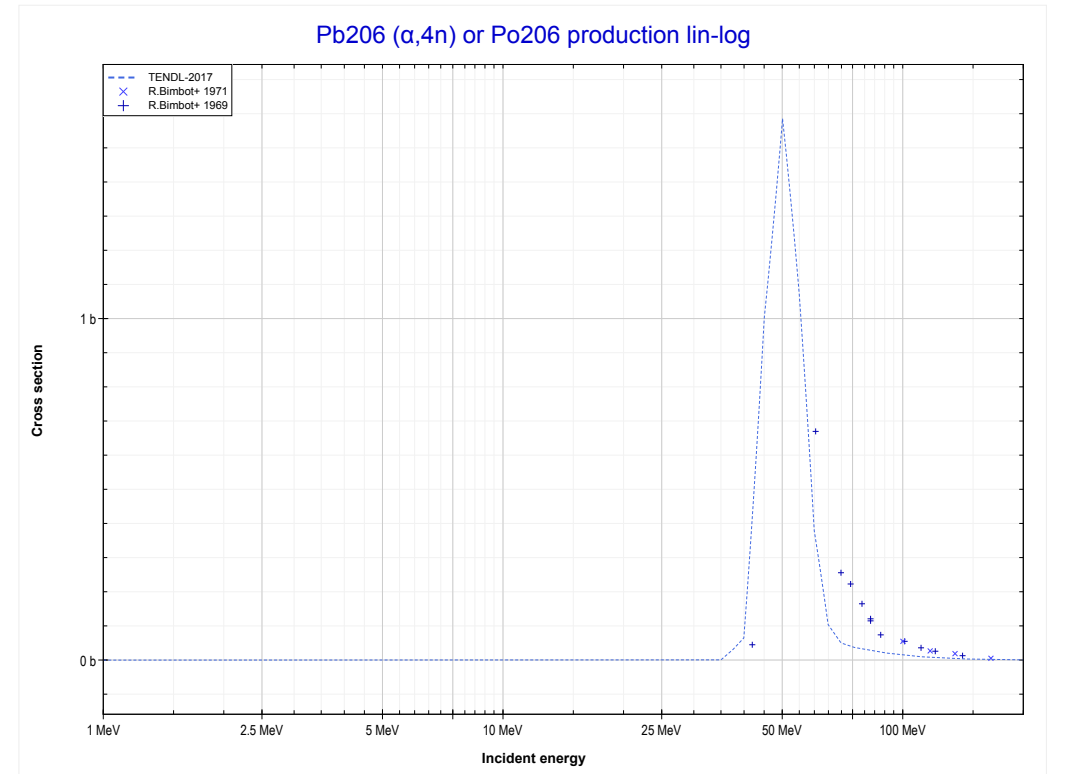
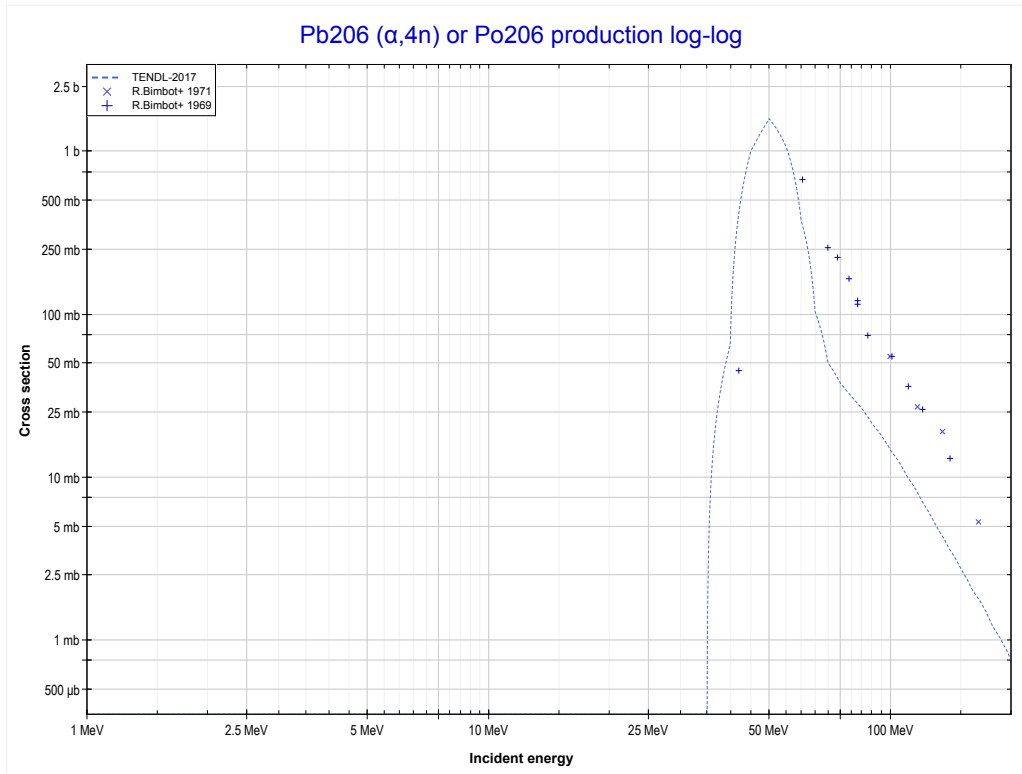


Reaction	Q-Value
Pb206($\alpha,3n$)Po207	-28429.14 keV

<< 82-Pb-204	82-Pb-206	82-Pb-207 >>
<< MT17 ($\alpha,3n$)	MT18 (α,fission)	MT37 ($\alpha,4n$) >>

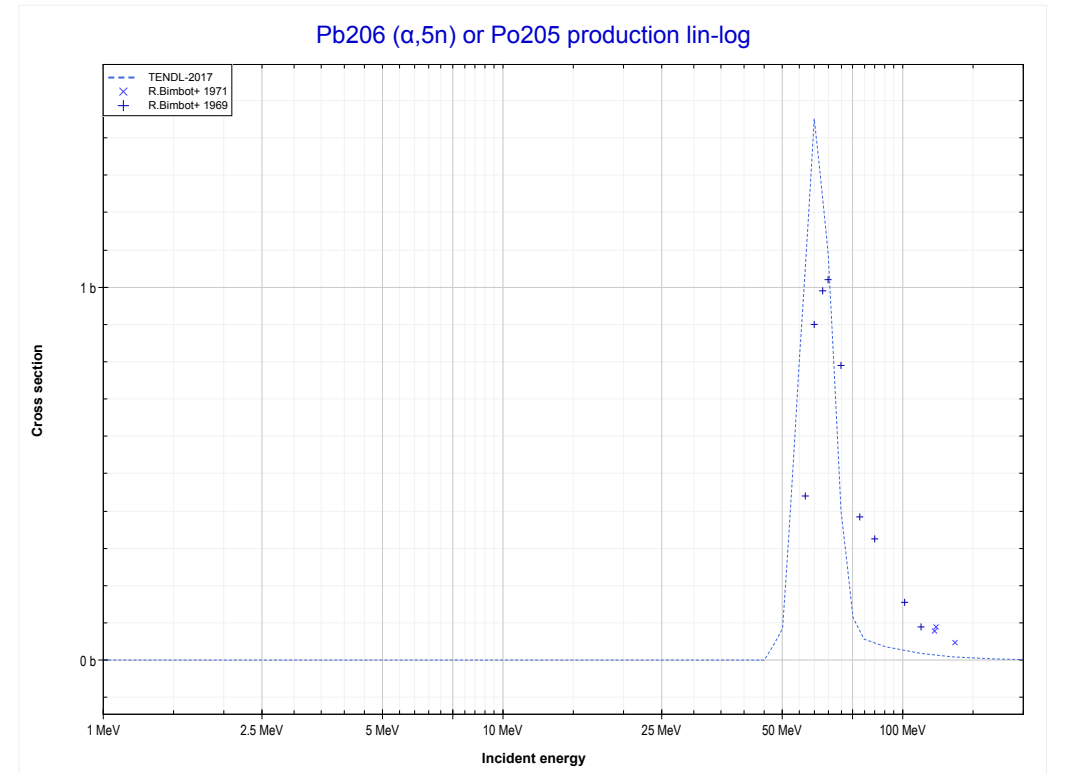
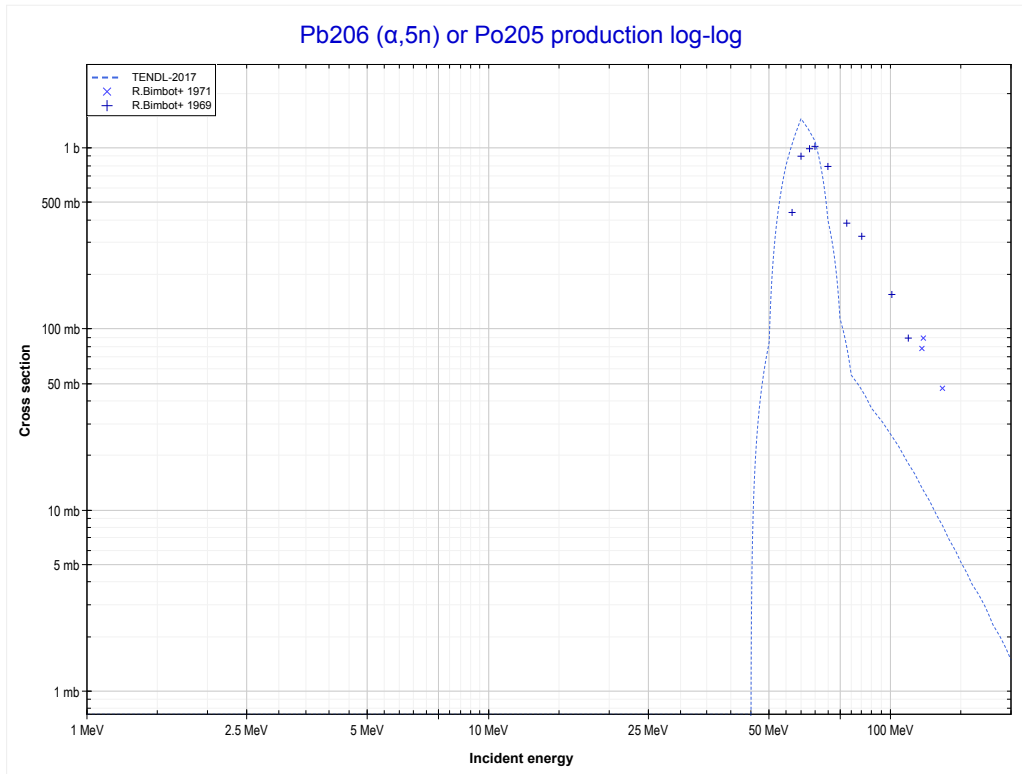


<< 82-Pb-204	82-Pb-206	83-Bi-209 >>
<< MT18 (α ,fission)	MT37 (α,4n) or MT5 (Po206 production)	MT152 (α ,5n) >>



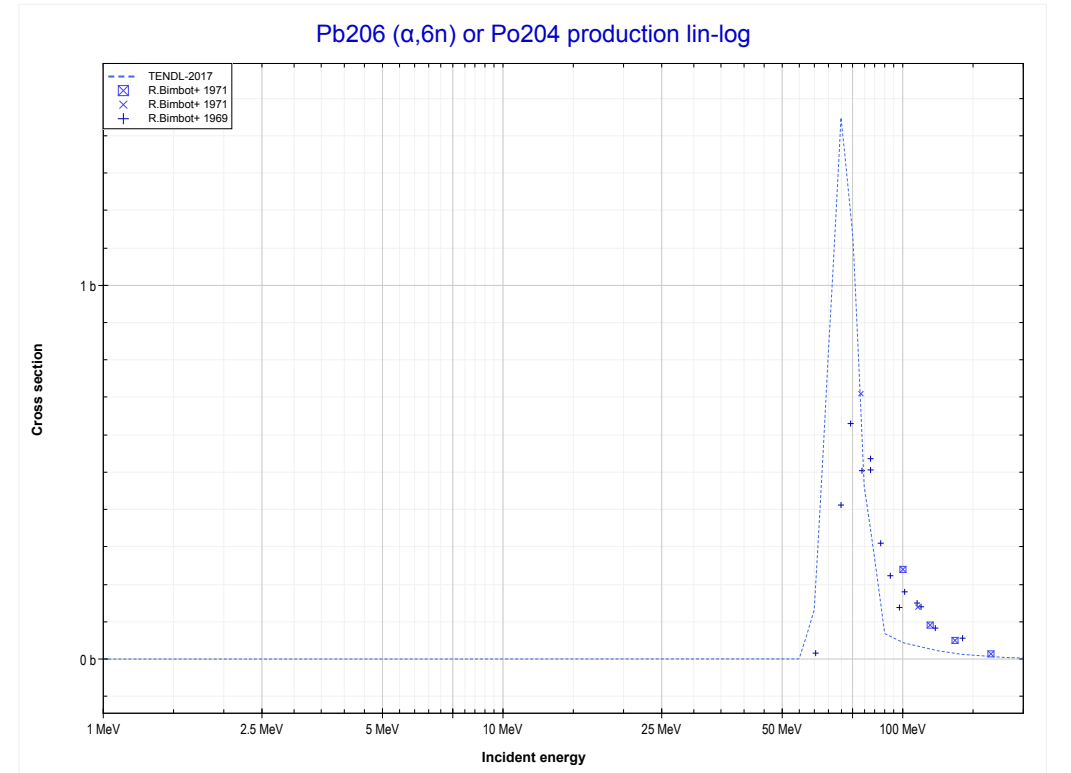
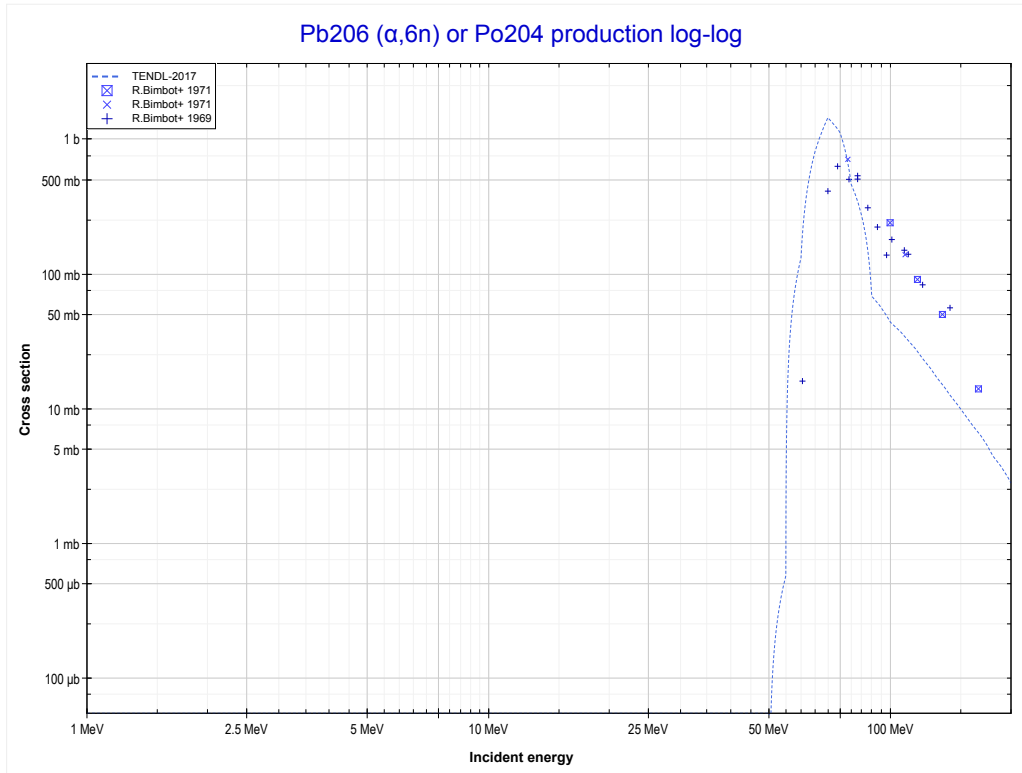
Reaction	Q-Value
Pb206(α ,4n)Po206	-35457.45 keV

<< 79-Au-197	82-Pb-206	83-Bi-209 >>
<< MT37 ($\alpha,4n$)	MT152 ($\alpha,5n$) or MT5 (Po205 production)	MT153 ($\alpha,6n$) >>



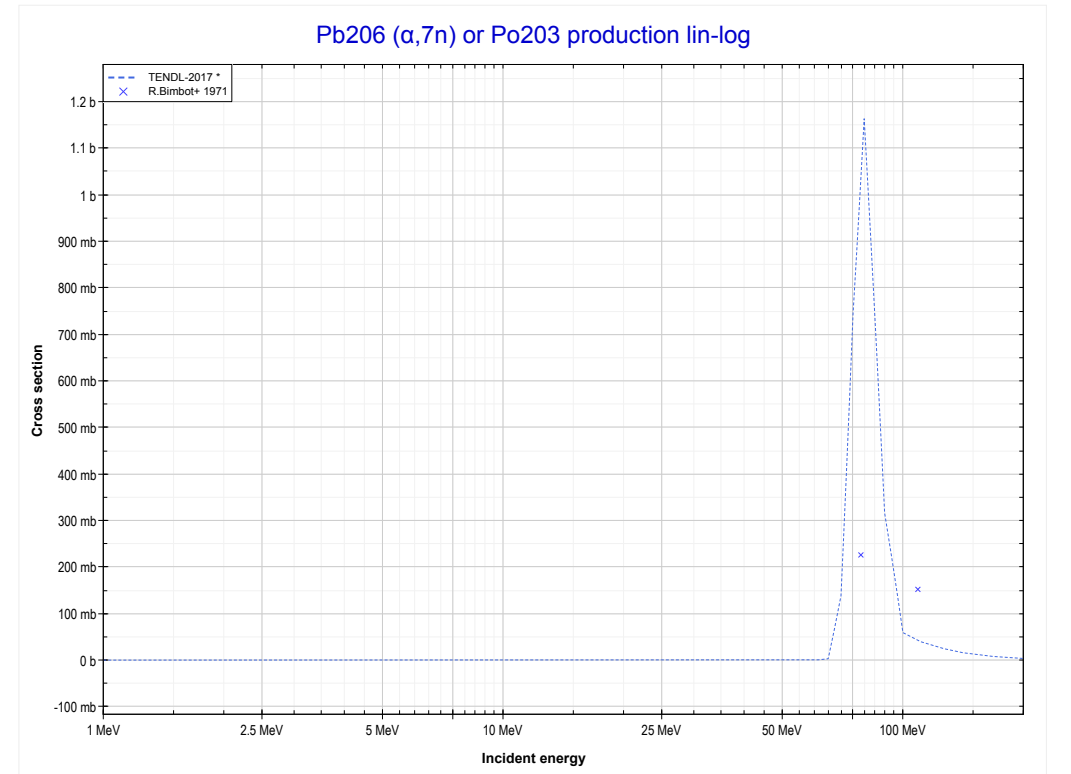
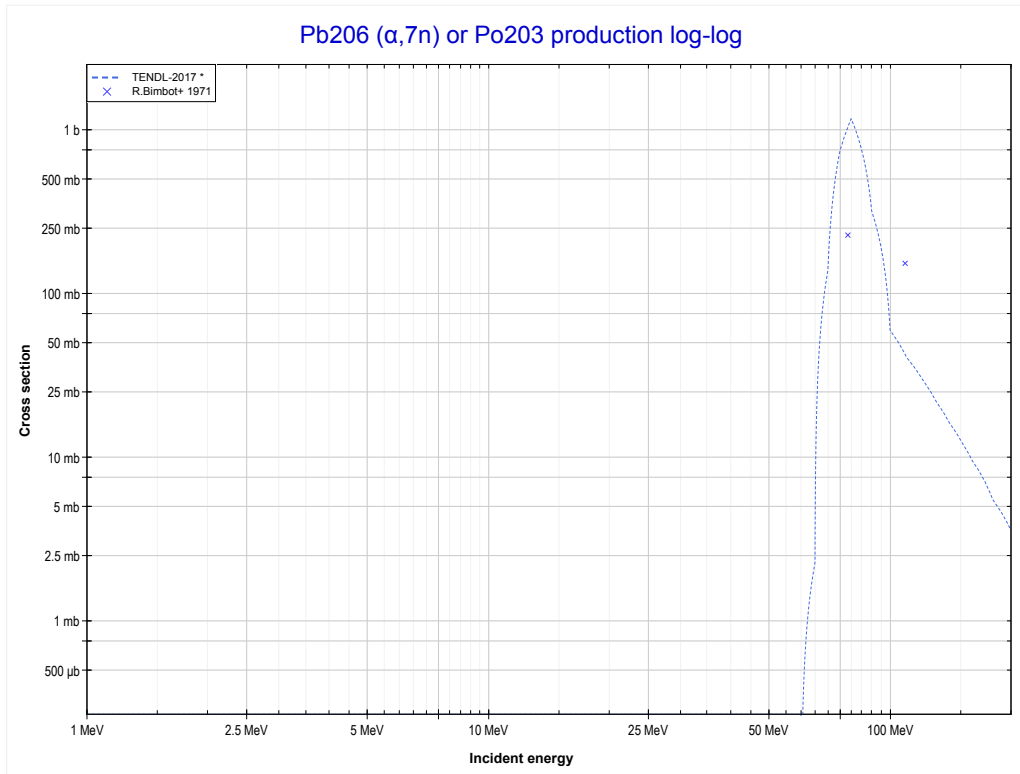
Reaction	Q-Value
Pb206($\alpha,5n$)Po205	-44207.77 keV

<< 79-Au-197	82-Pb-206	82-Pb-208 >>
<< MT152 ($\alpha,5n$)	MT153 ($\alpha,6n$) or MT5 (Po204 production)	MT160 ($\alpha,7n$) >>



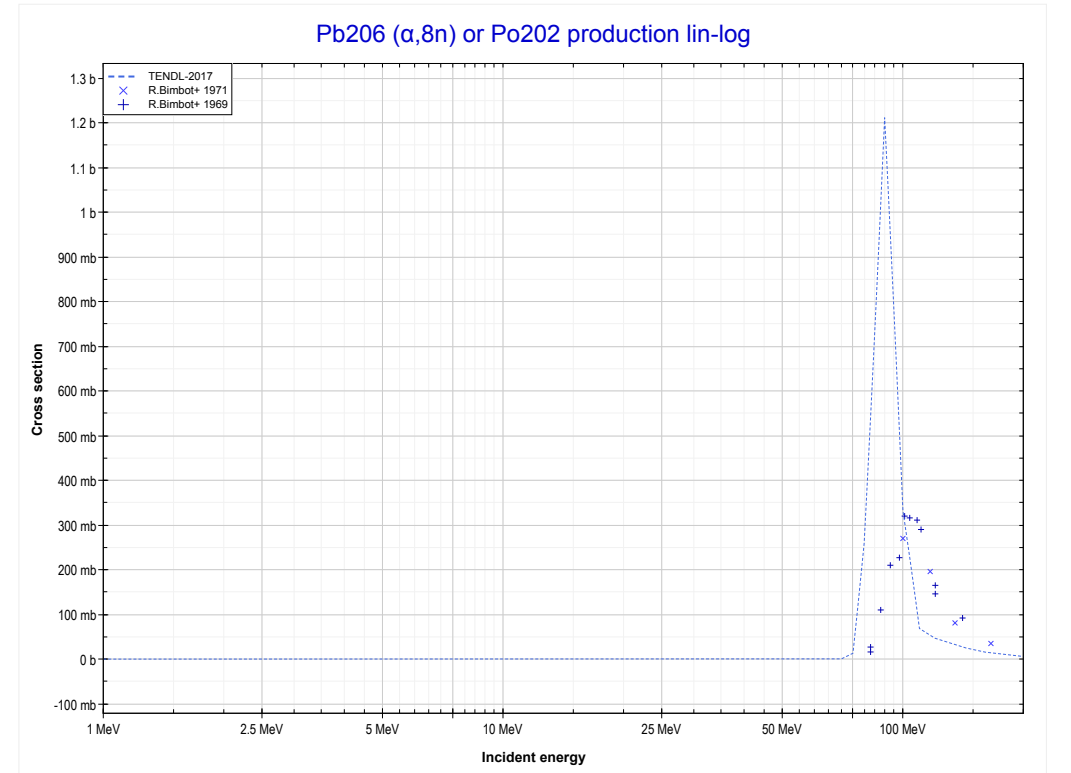
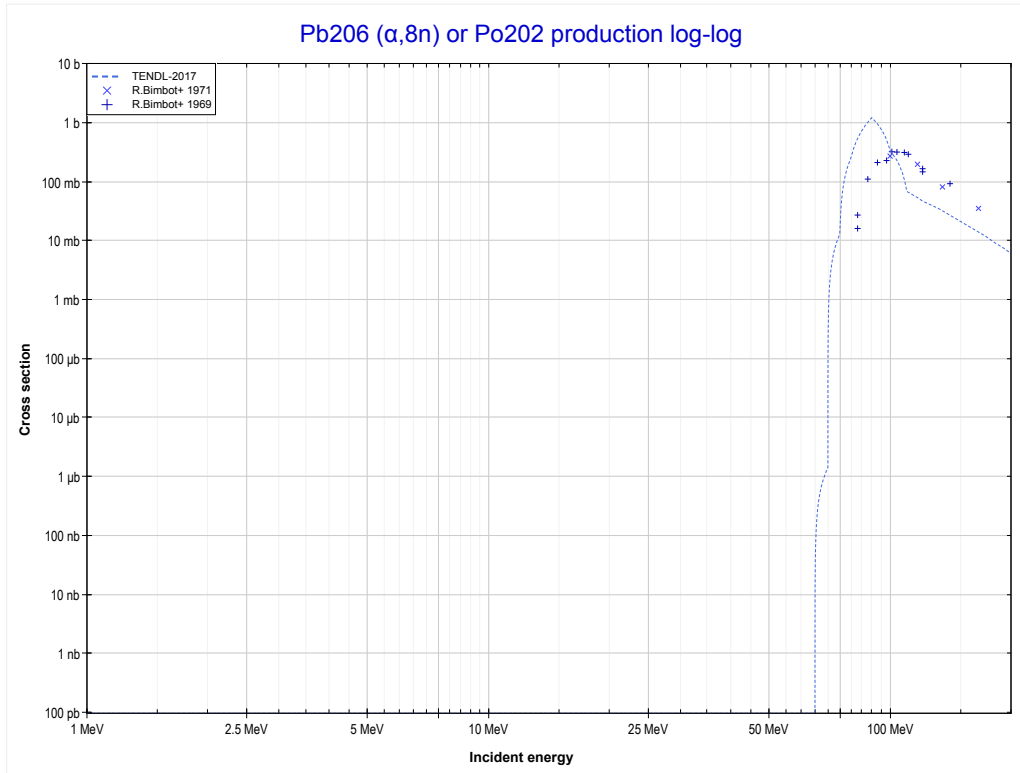
Reaction	Q-Value
Pb206($\alpha,6n$)Po204	-51447.09 keV

<< 79-Au-197	82-Pb-206	82-Pb-208 >>
<< MT153 ($\alpha,6n$)	MT160 ($\alpha,7n$) or MT5 (Po203 production)	MT161 ($\alpha,8n$) >>



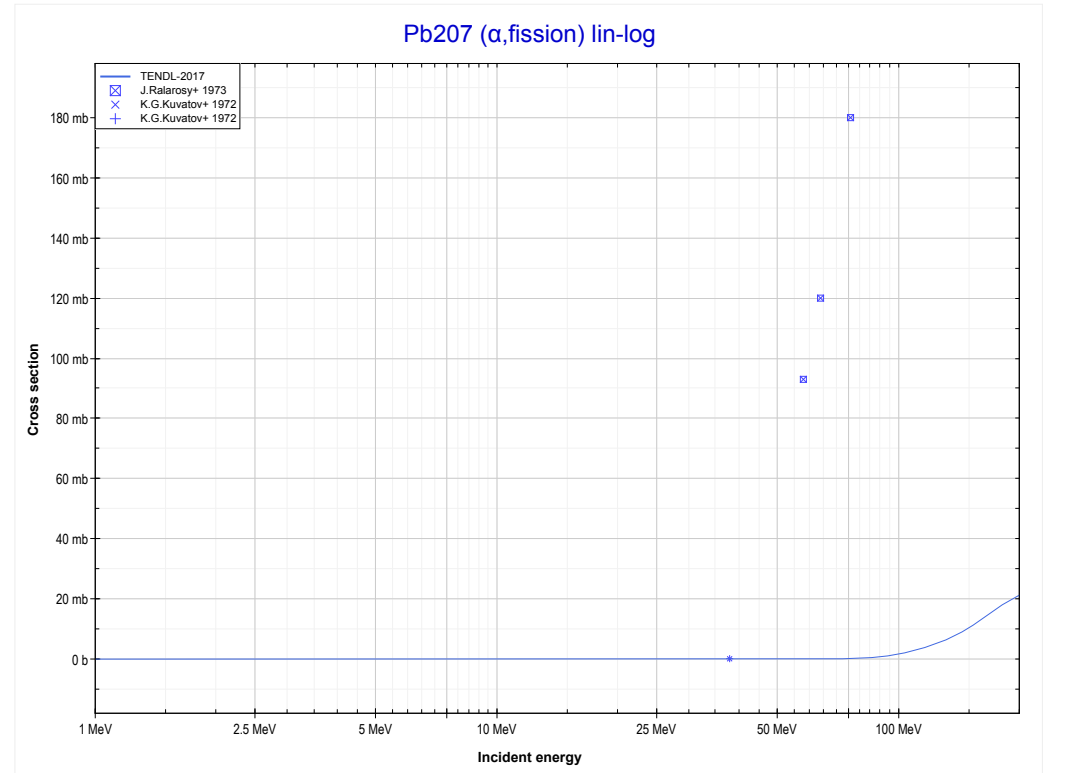
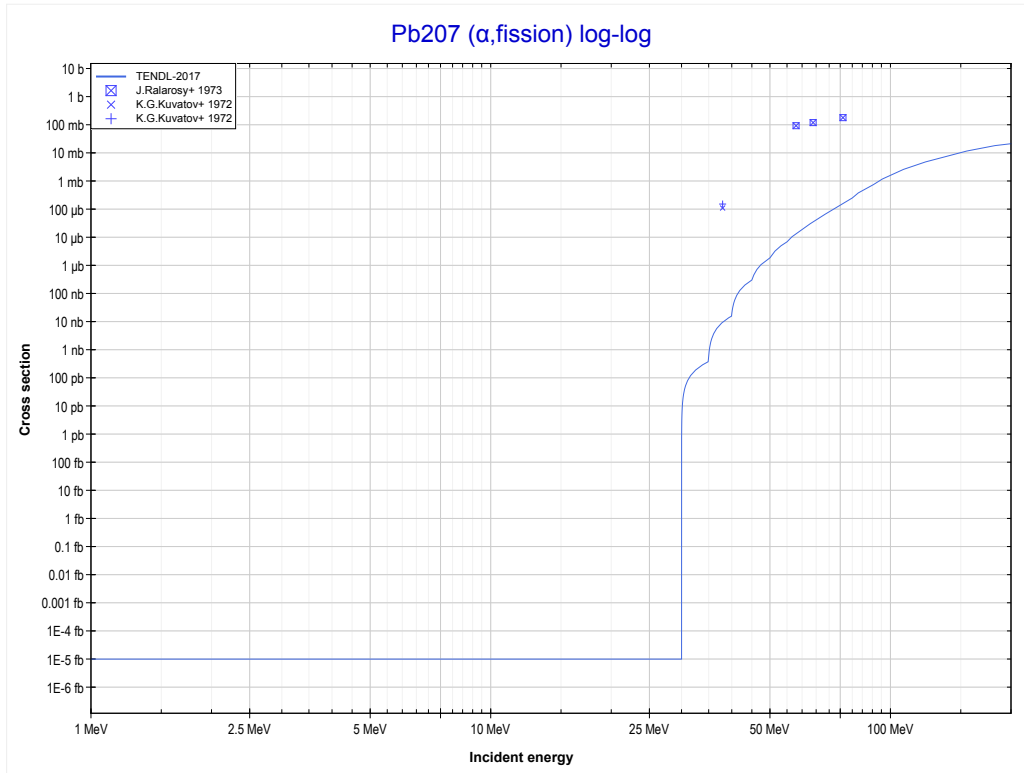
Reaction	Q-Value
Pb206($\alpha,7n$)Po203	-60548.40 keV

<< 79-Au-197	82-Pb-206	82-Pb-208 >>
<< MT160 ($\alpha,7n$)	MT161 ($\alpha,8n$) or MT5 (Po202 production)	82-Pb-207 MT18 (α ,fission) >>

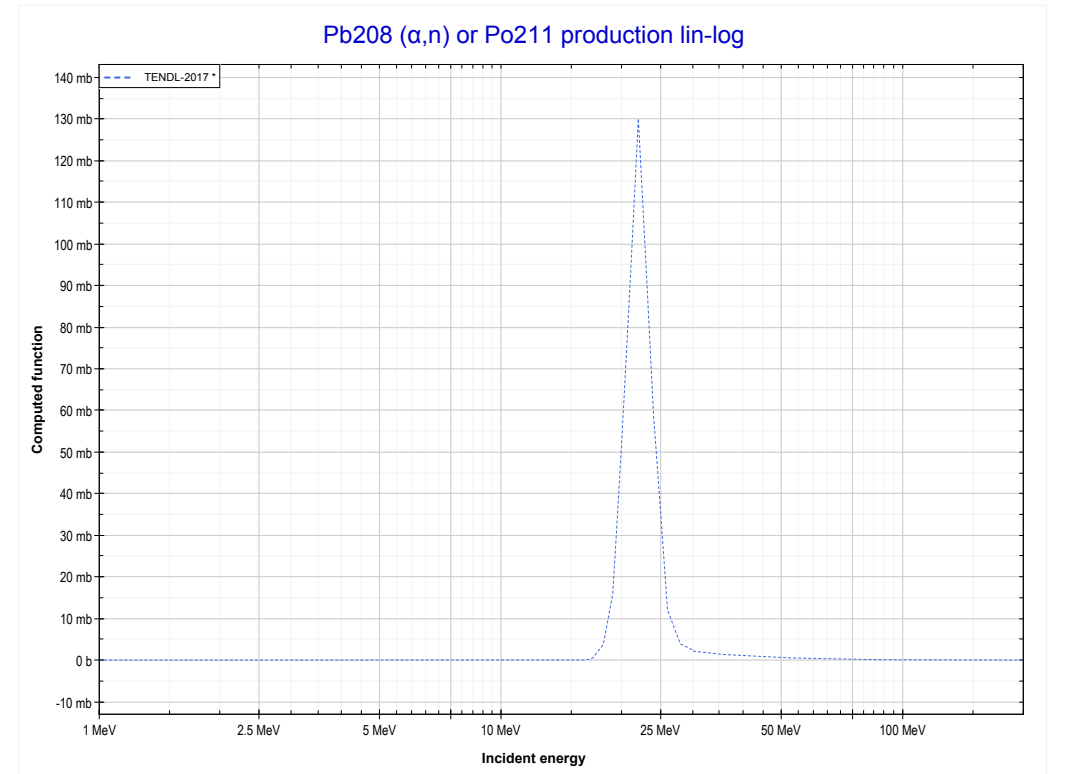
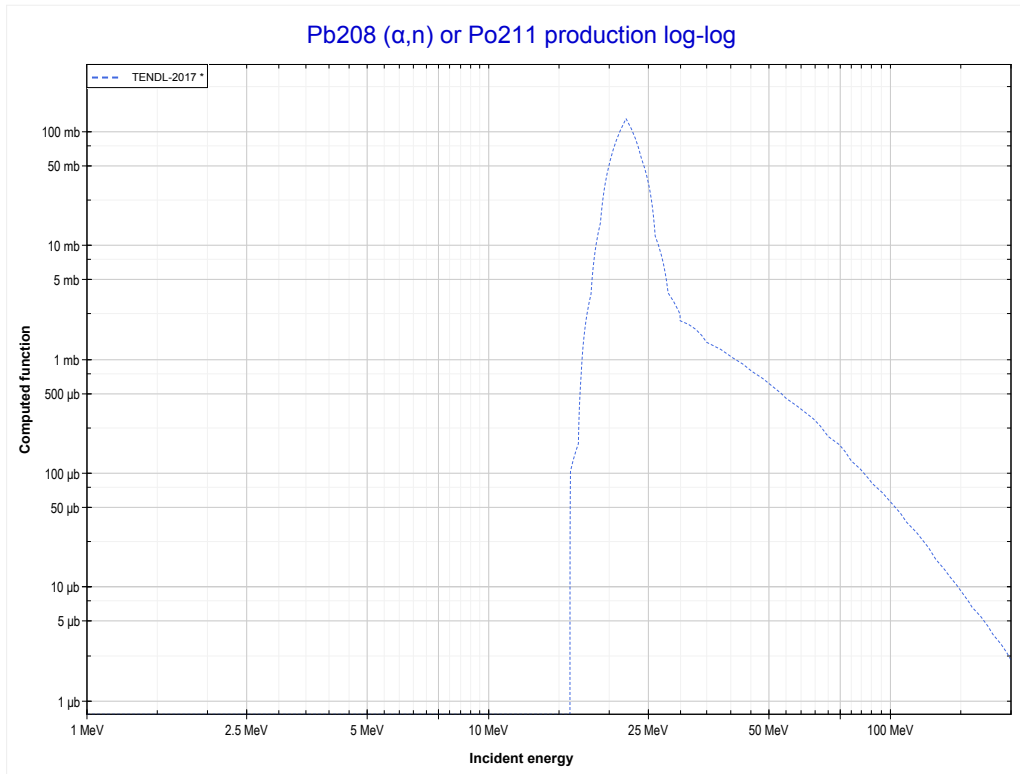


Reaction	Q-Value
Pb206($\alpha,8n$)Po202	-68006.72 keV

<< 82-Pb-206	82-Pb-207	82-Pb-208 >>
<< 82-Pb-206 MT161 ($\alpha,8n$)	MT18 (α,fission)	82-Pb-208 MT4 (α,n) >>

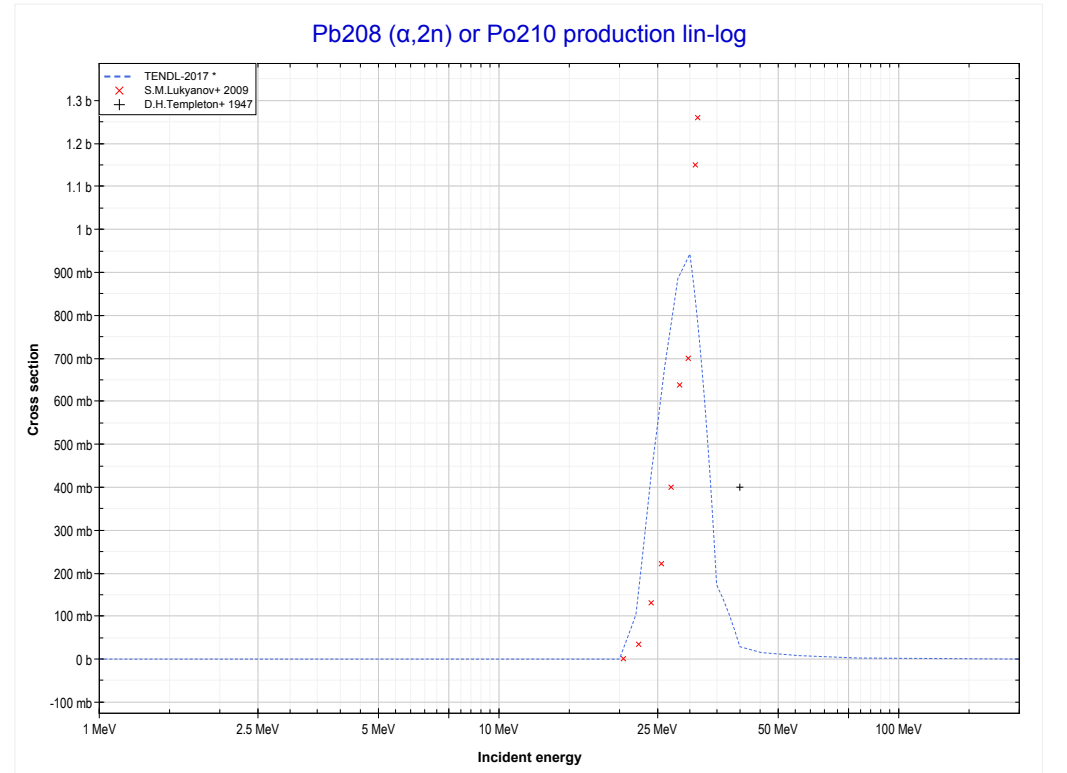
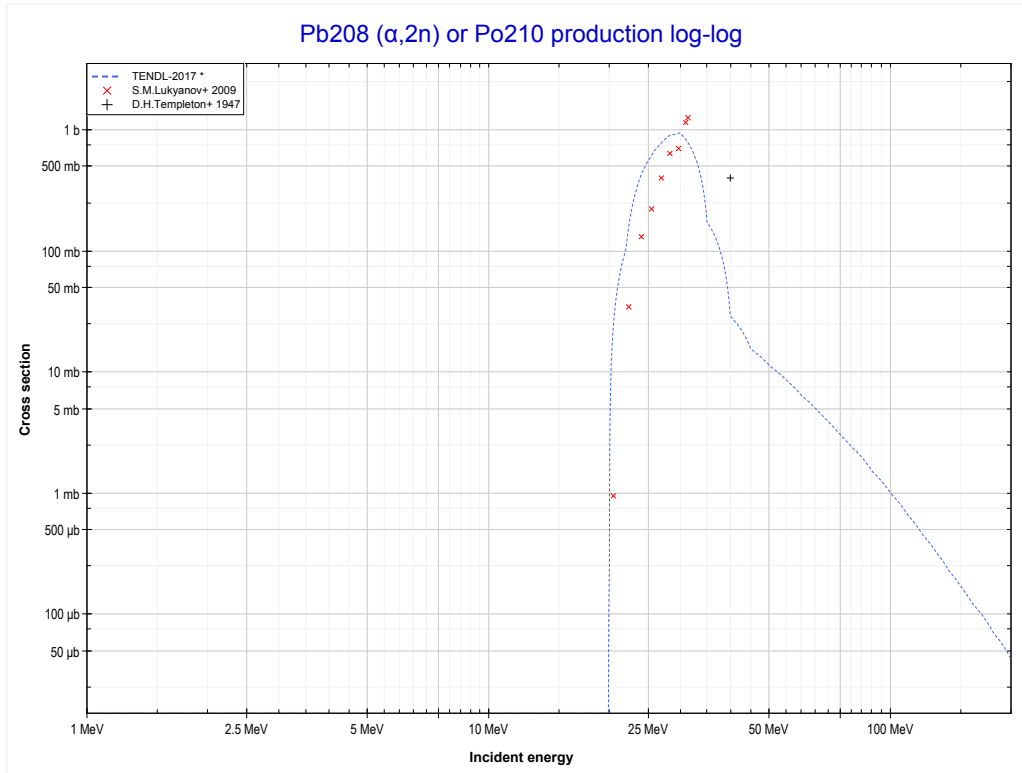


<< 81-Tl-203	82-Pb-208	83-Bi-209 >>
<< 82-Pb-207 MT18 (α ,fission)	MT4 (α,n) or MT5 (Po211 production)	MT16 (α ,2n) >>



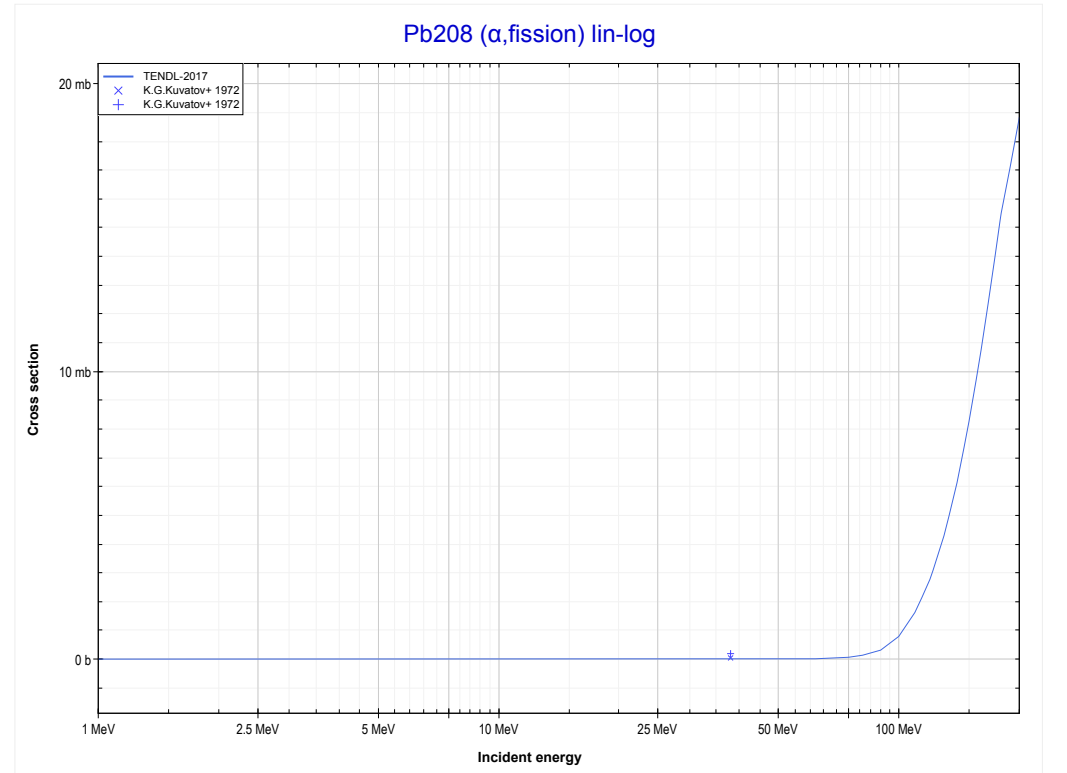
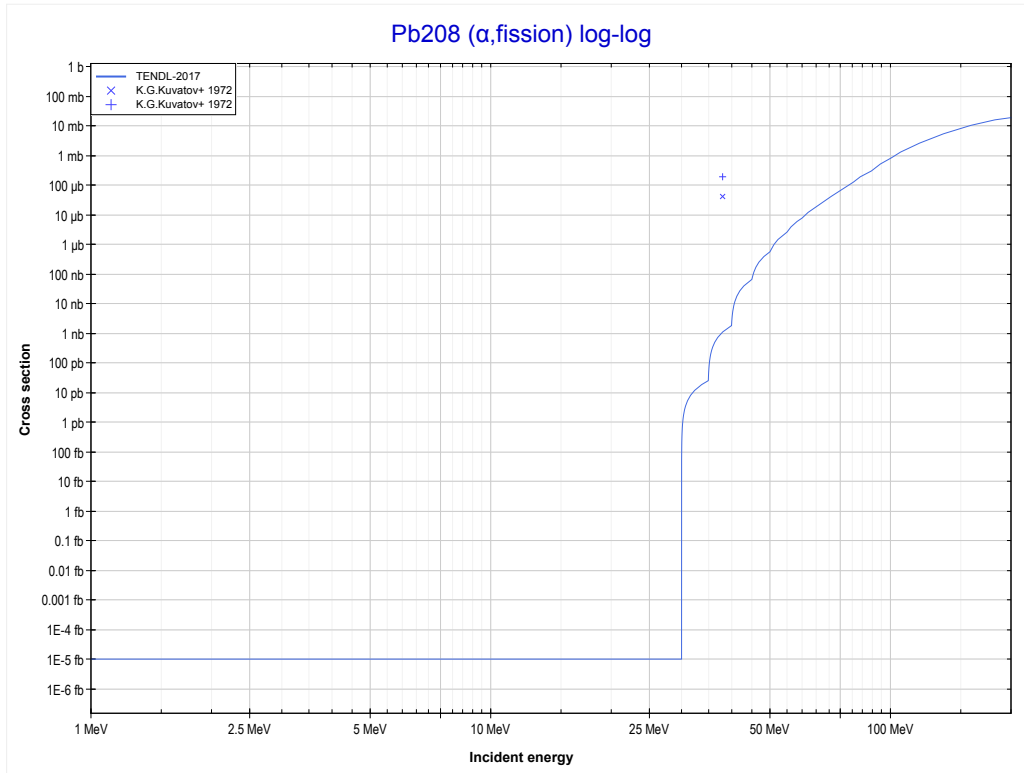
Reaction	Q-Value
Pb208(α ,n)Po211	-14962.40 keV

<< 82-Pb-206	82-Pb-208	83-Bi-209 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Po210 production)	MT18 ($\alpha, fission$) >>

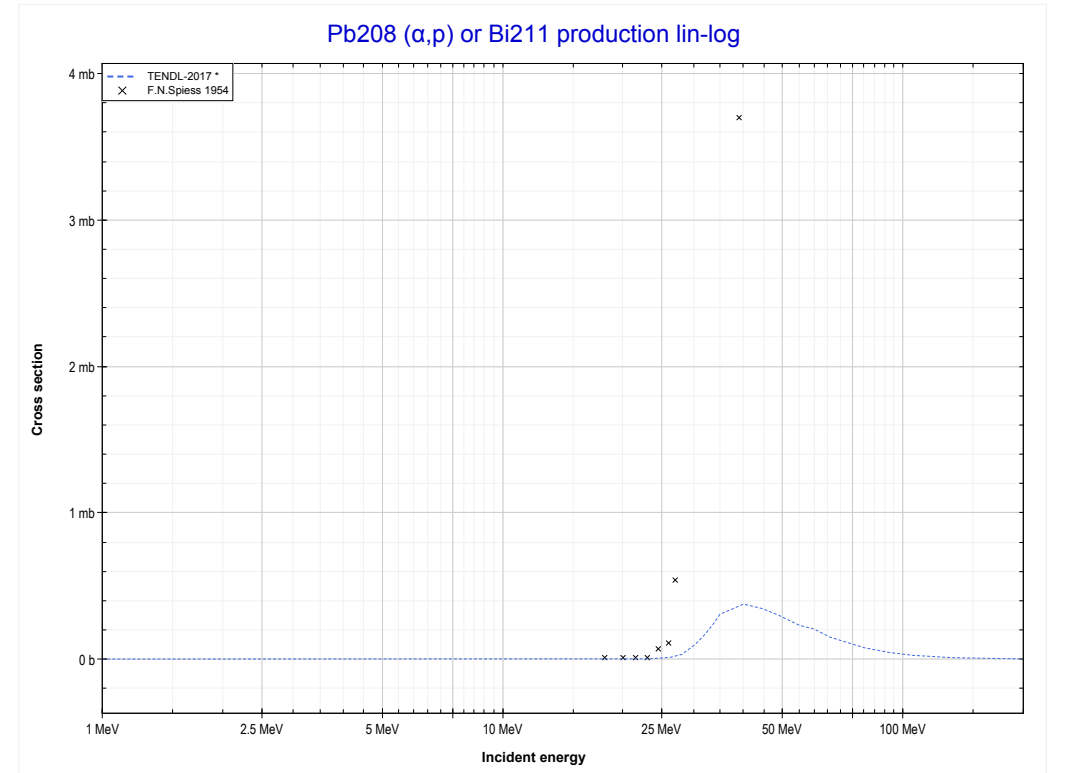
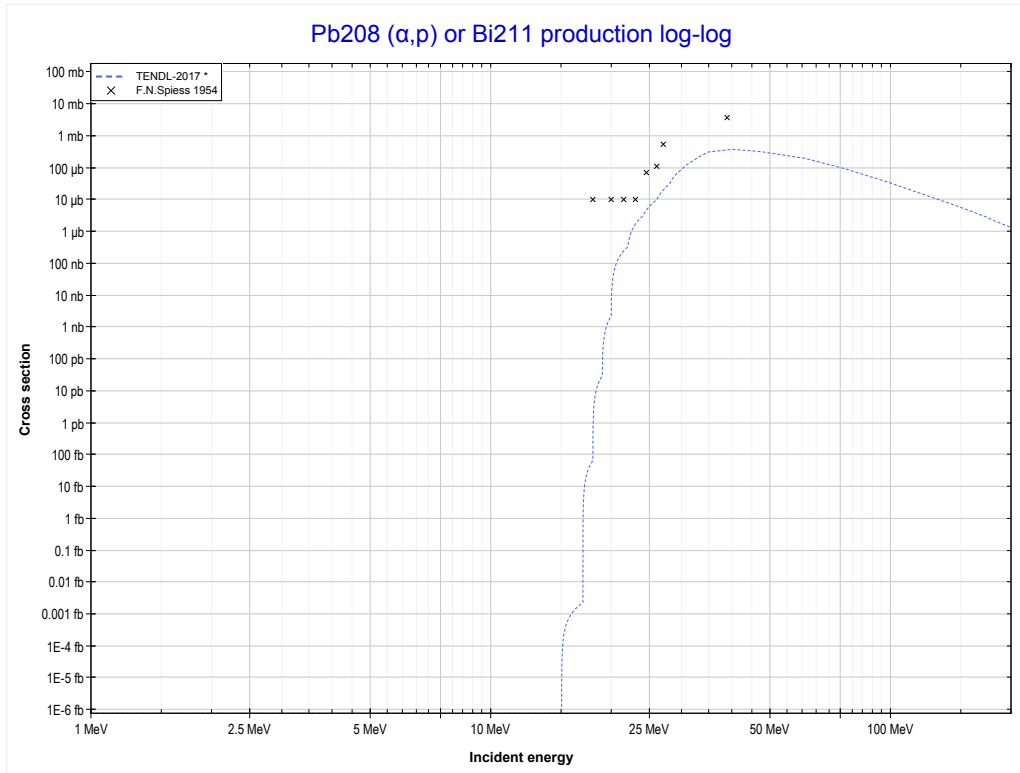


Reaction	Q-Value
Pb208($\alpha, 2n$)Po210	-19513.12 keV

<< 82-Pb-207	82-Pb-208	83-Bi-209 >>
<< MT16 ($\alpha,2n$)	MT18 (α,fission)	MT103 (α ,p) >>

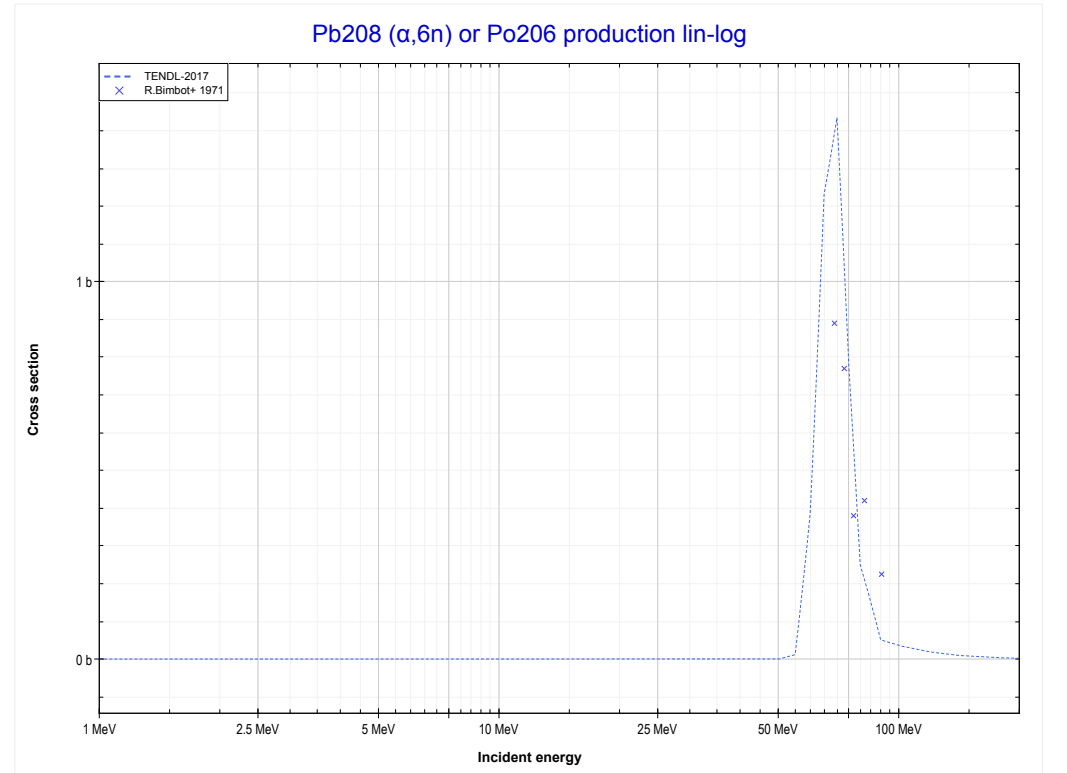
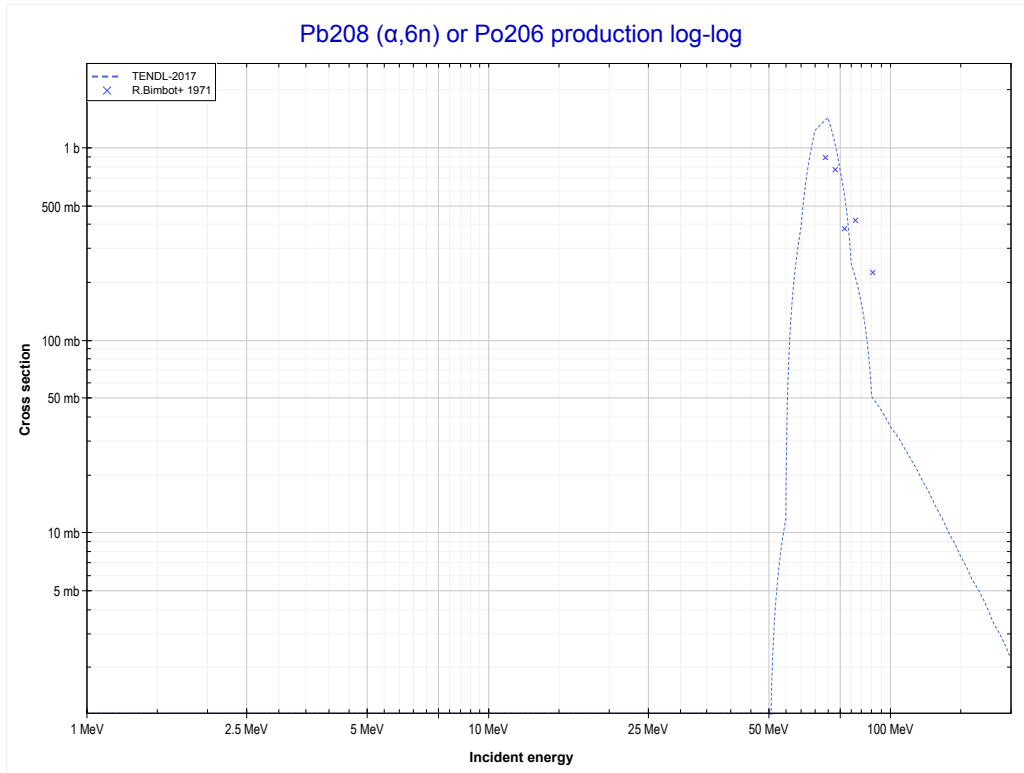


<< 74-W-186	82-Pb-208	83-Bi-209 >>
<< MT18 (α ,fission)	MT103 (α,p) or MT5 (Bi211 production)	MT153 (α ,6n) >>



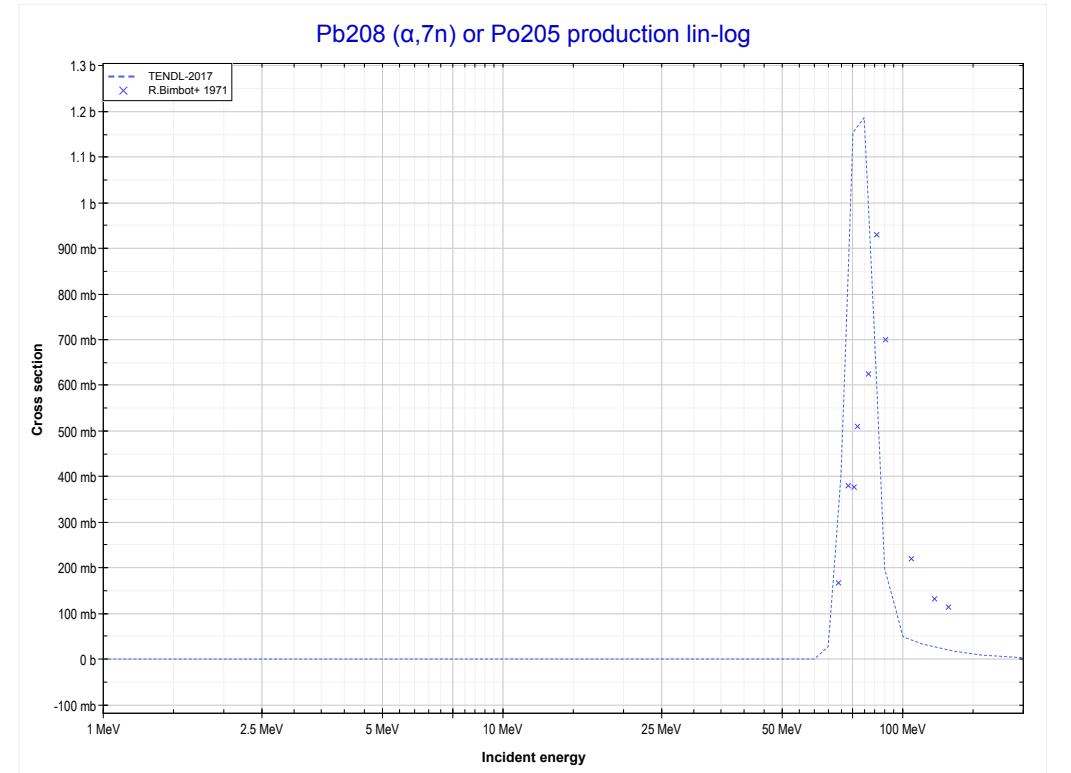
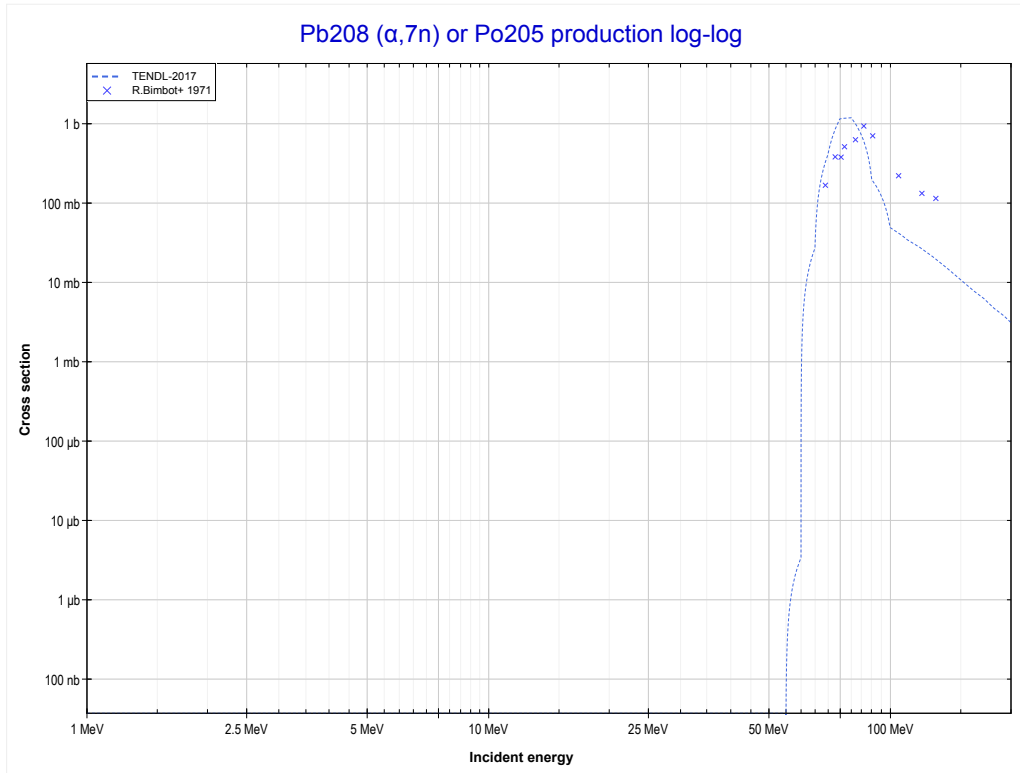
Reaction	Q-Value
Pb208(α ,p)Bi211	-14754.15 keV

<< 82-Pb-206	82-Pb-208	83-Bi-209 >>
<< MT103 (α,p)	MT153 ($\alpha,6n$) or MT5 (Po206 production)	MT160 ($\alpha,7n$) >>



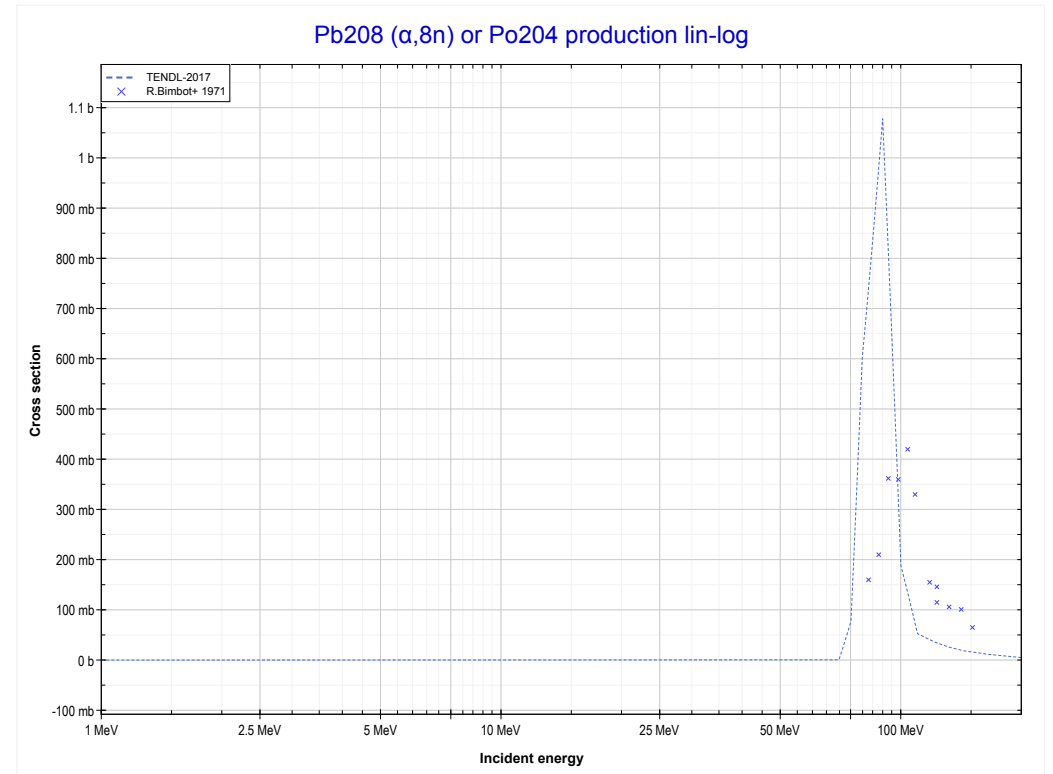
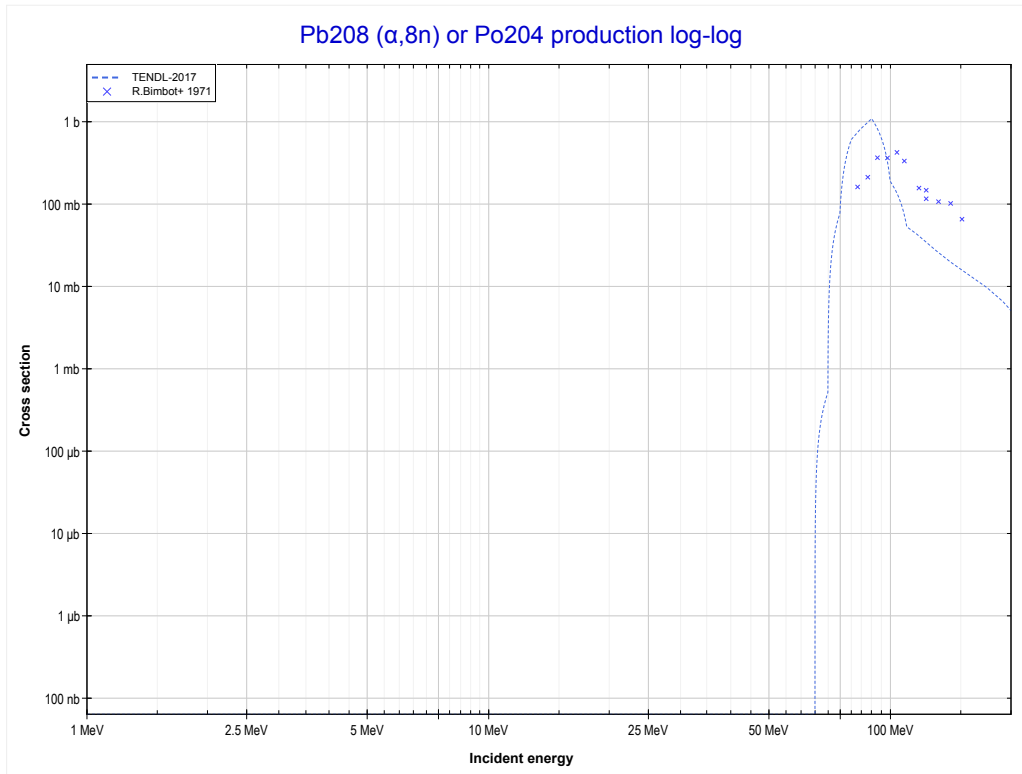
Reaction	Q-Value
Pb208($\alpha,6n$)Po206	-49563.09 keV

<< 82-Pb-206	82-Pb-208	90-Th-232 >>
<< MT153 ($\alpha,6n$)	MT160 ($\alpha,7n$) or MT5 (Po205 production)	MT161 ($\alpha,8n$) >>



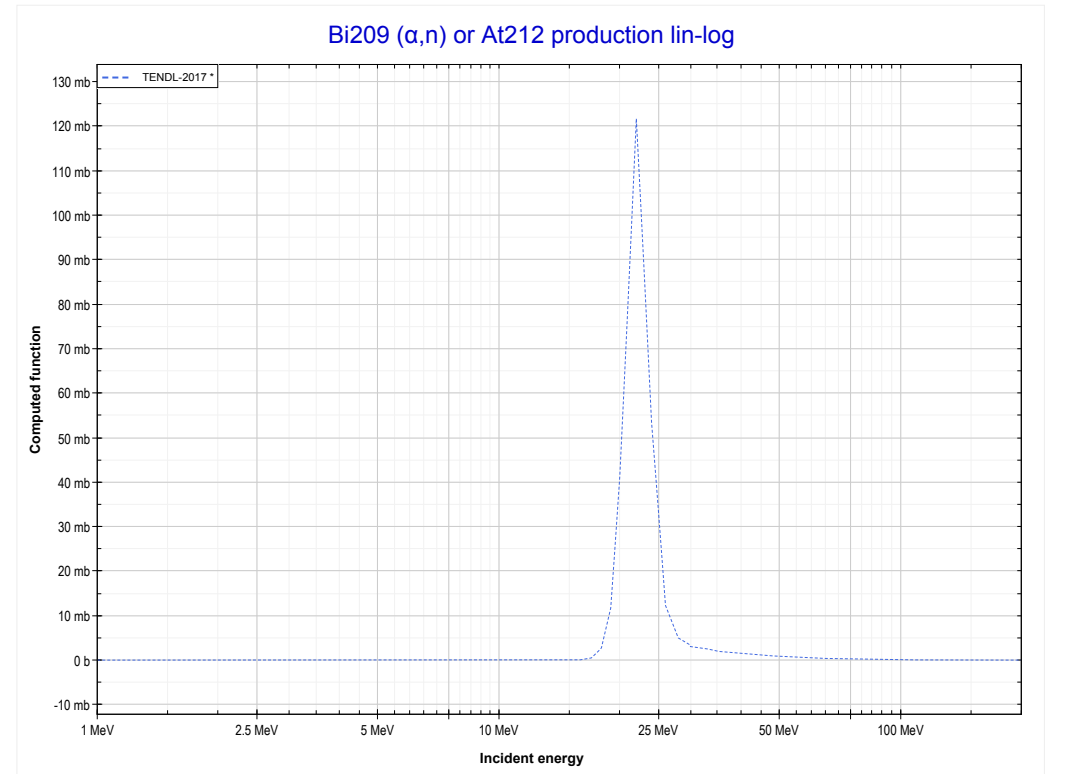
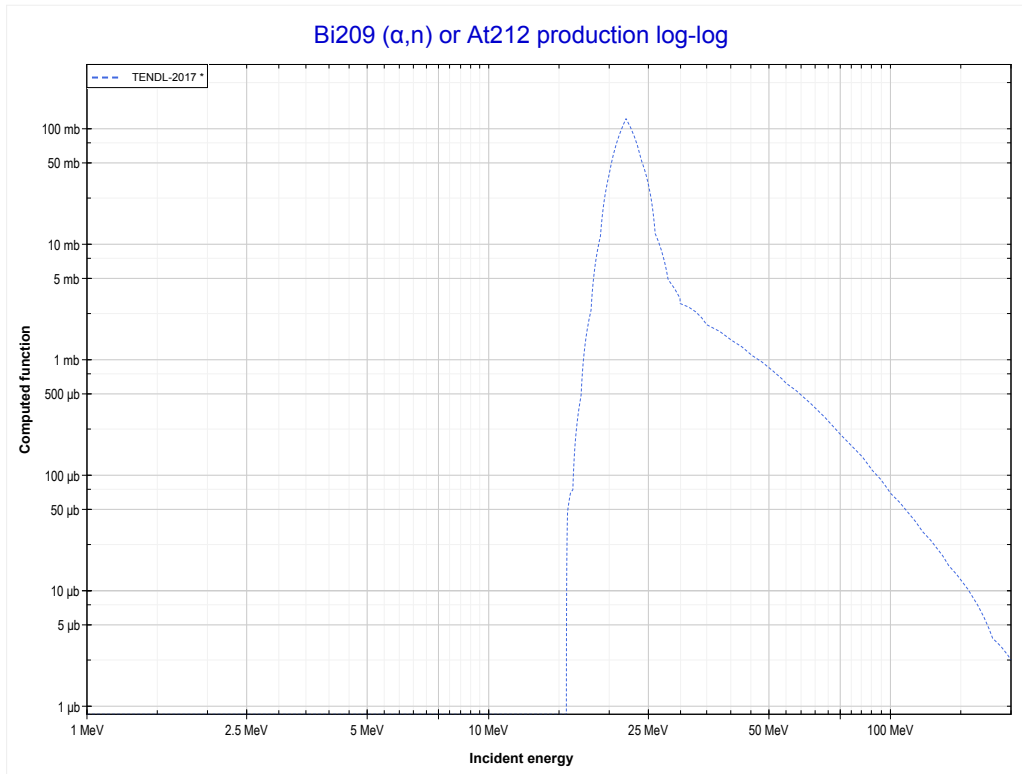
Reaction	Q-Value
Pb208($\alpha,7n$)Po205	-58313.40 keV

<< 82-Pb-206	82-Pb-208	83-Bi-209 >>
<< MT160 ($\alpha,7n$)	MT161 ($\alpha,8n$) or MT5 (Po204 production)	83-Bi-209 MT4 (α,n) >>



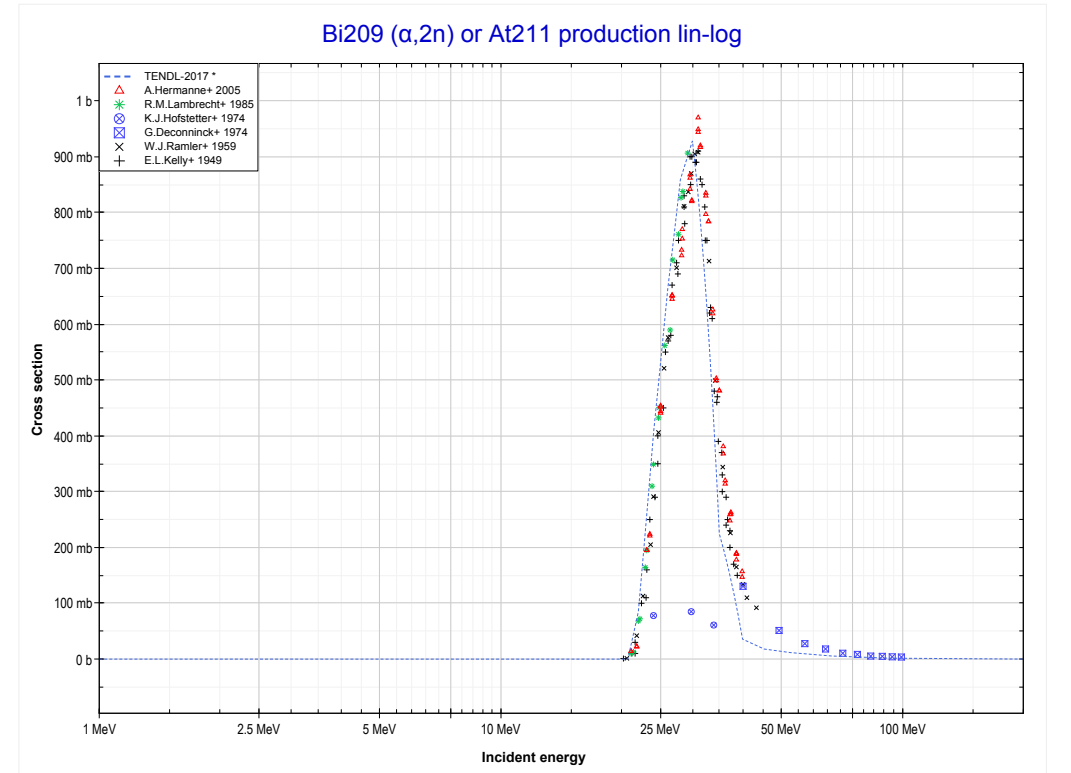
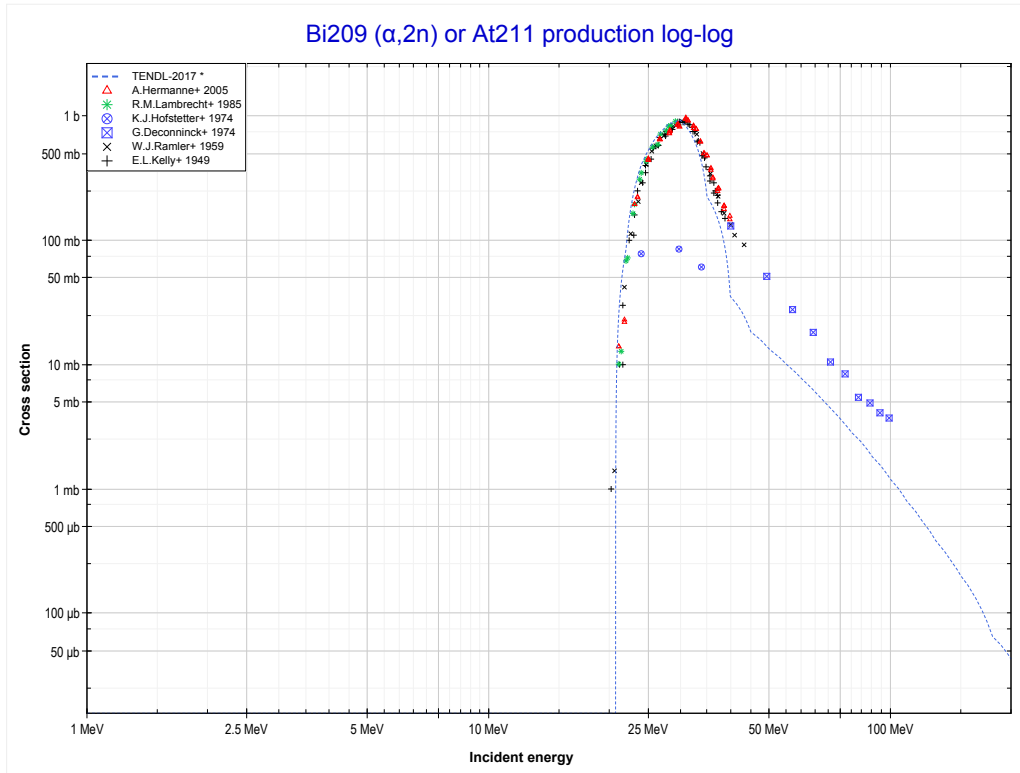
Reaction	Q-Value
Pb208($\alpha,8n$)Po204	-65552.72 keV

<< 82-Pb-208	83-Bi-209	92-U-233 >>
<< 82-Pb-208 MT161 ($\alpha,8n$)	MT4 (α,n) or MT5 (At212 production)	MT16 ($\alpha,2n$) >>



Reaction	Q-Value
Bi209(α,n)At212	-15276.80 keV

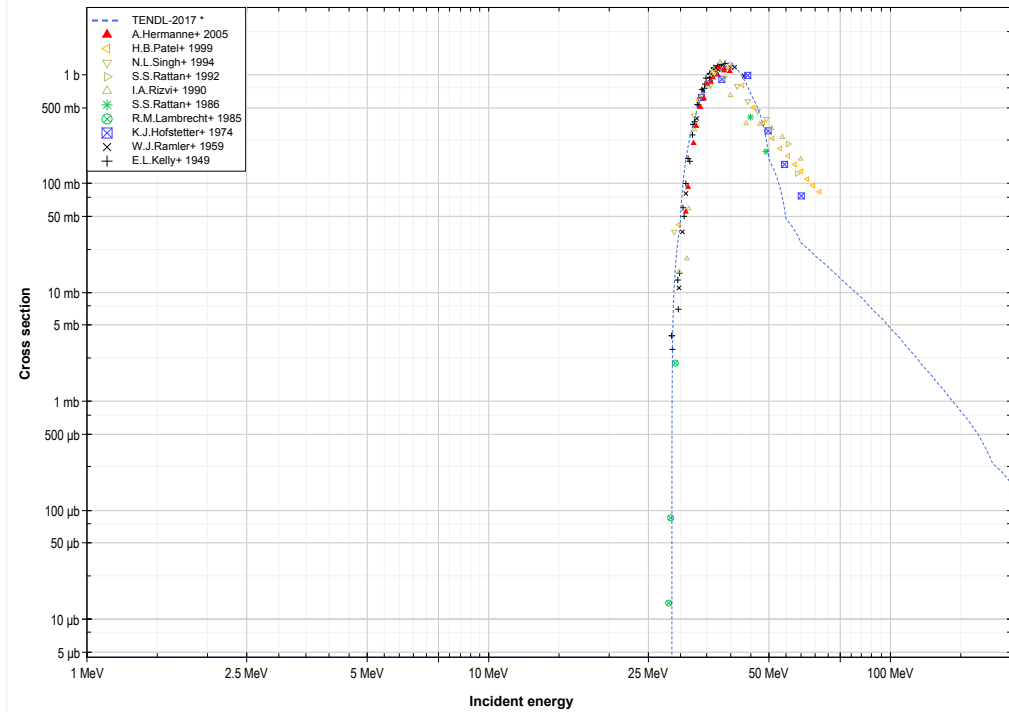
<< 82-Pb-208	83-Bi-209	92-U-233 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (At211 production)	MT17 ($\alpha, 3n$) >>



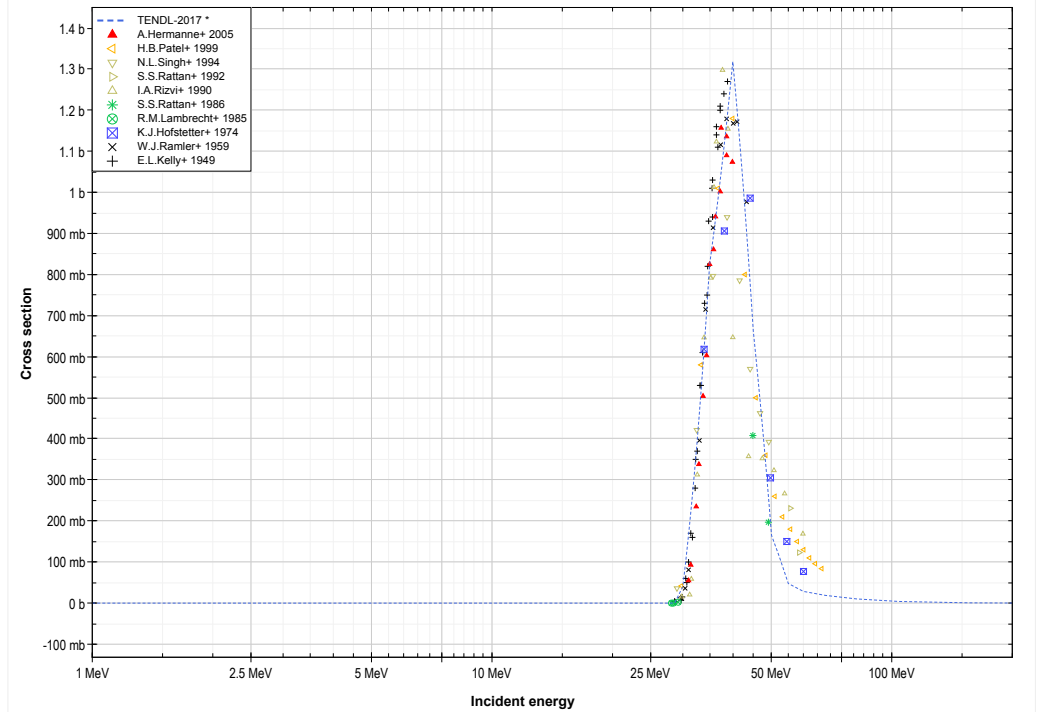
Reaction	Q-Value
Bi209($\alpha, 2n$)At211	-20329.12 keV

<< 82-Pb-206	83-Bi-209	92-U-233 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (At210 production)	MT18 (α ,fission) >>

Bi209 ($\alpha,3n$) or At210 production log-log

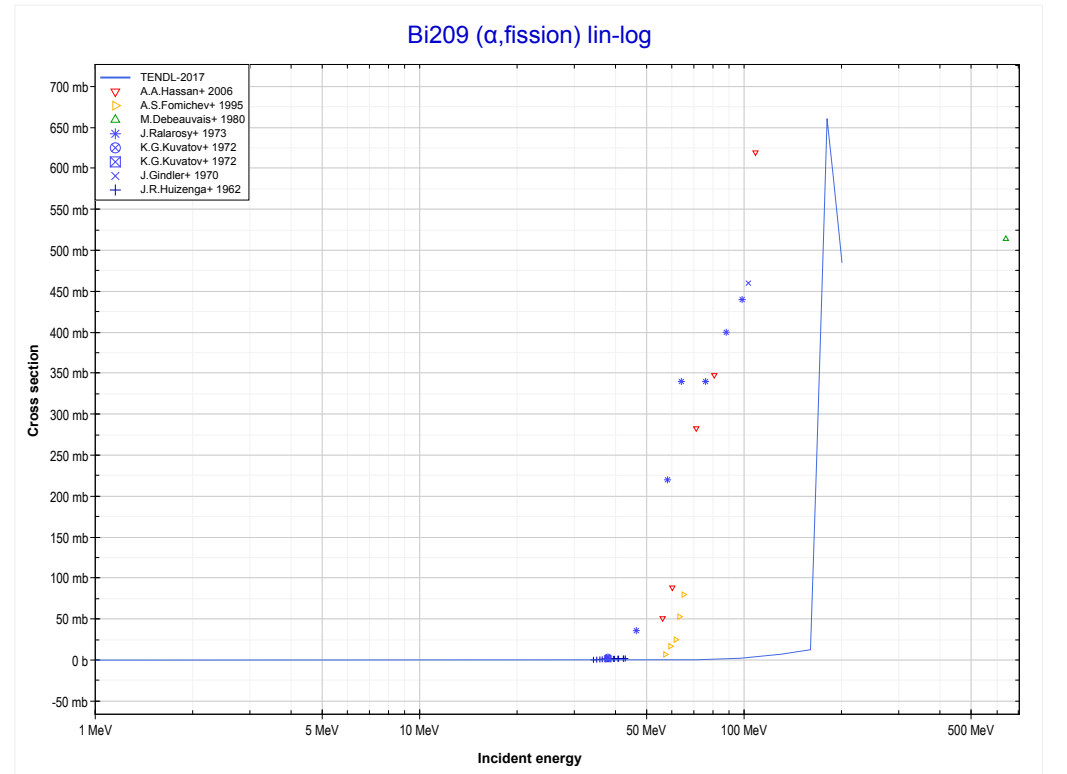
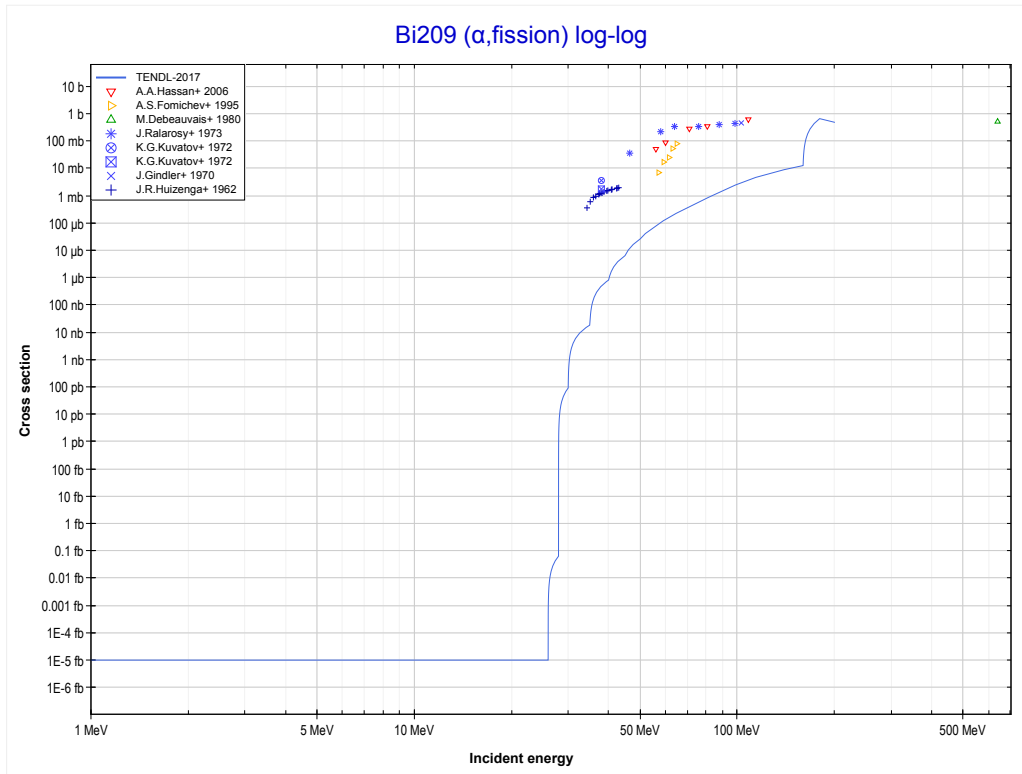


Bi209 ($\alpha,3n$) or At210 production lin-log

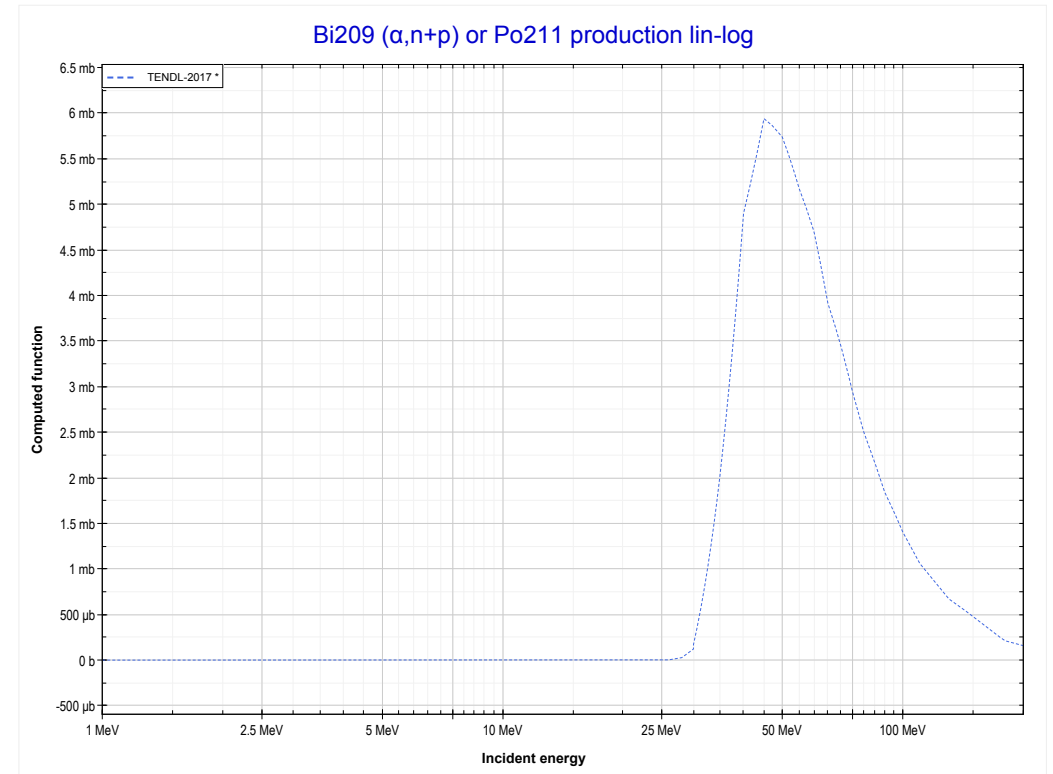
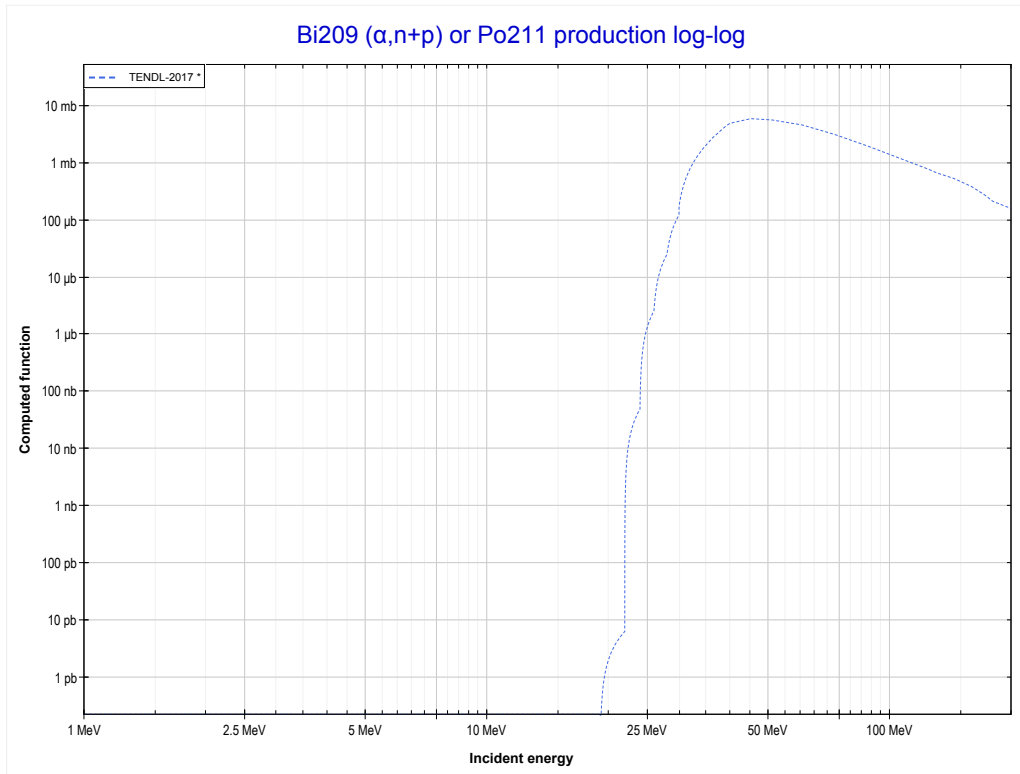


Reaction	Q-Value
Bi209($\alpha,3n$)At210	-28075.24 keV

<< 82-Pb-208	83-Bi-209	88-Ra-226 >>
<< MT17 ($\alpha,3n$)	MT18 (α,fission)	MT28 (α ,n+p) >>

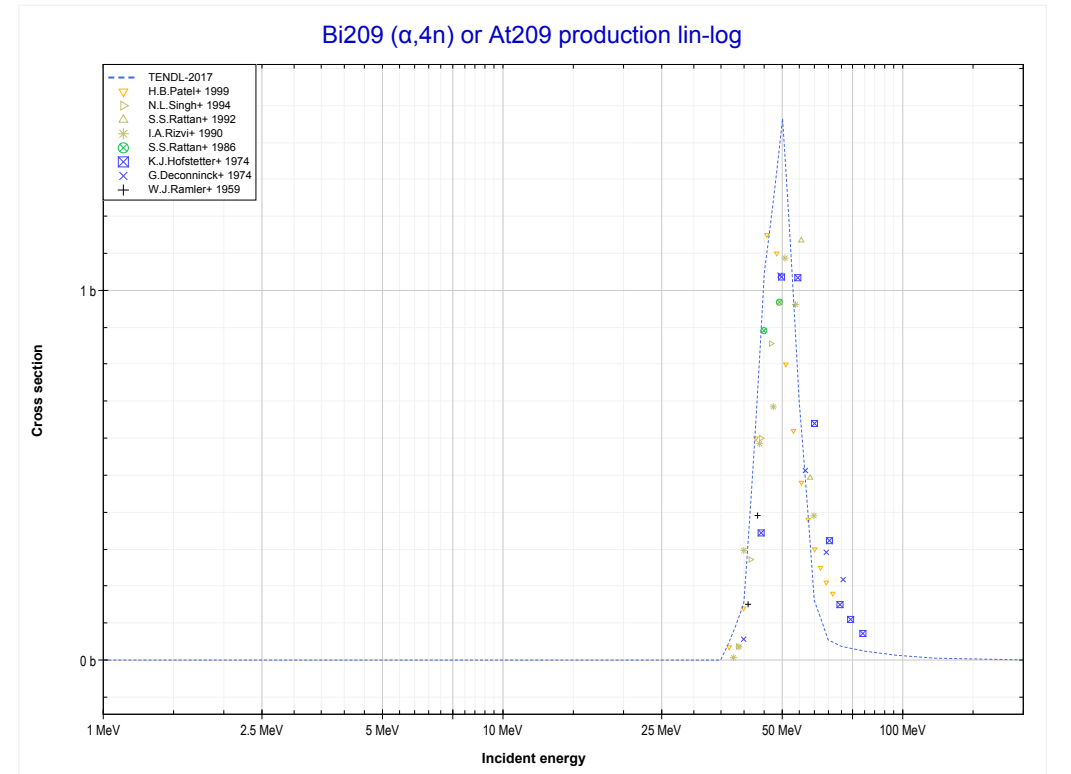
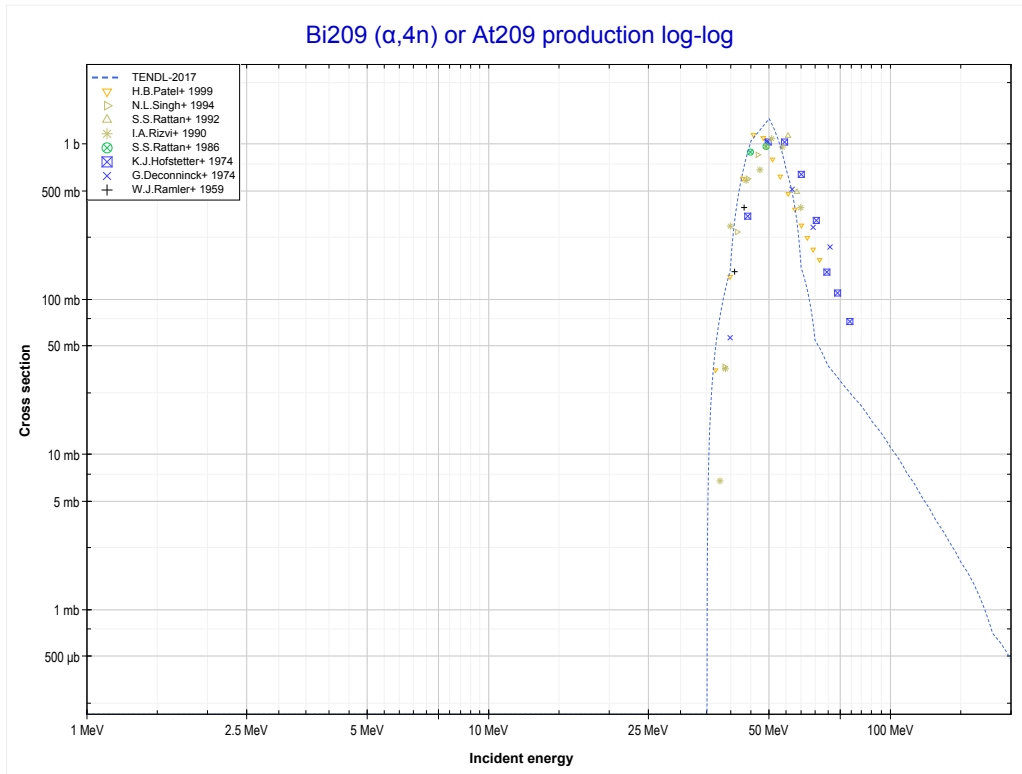


<< 68-Er-166	83-Bi-209	
<< MT18 (α ,fission)	MT28 (α,n+p) or MT5 (Po211 production)	MT37 (α ,4n) >>



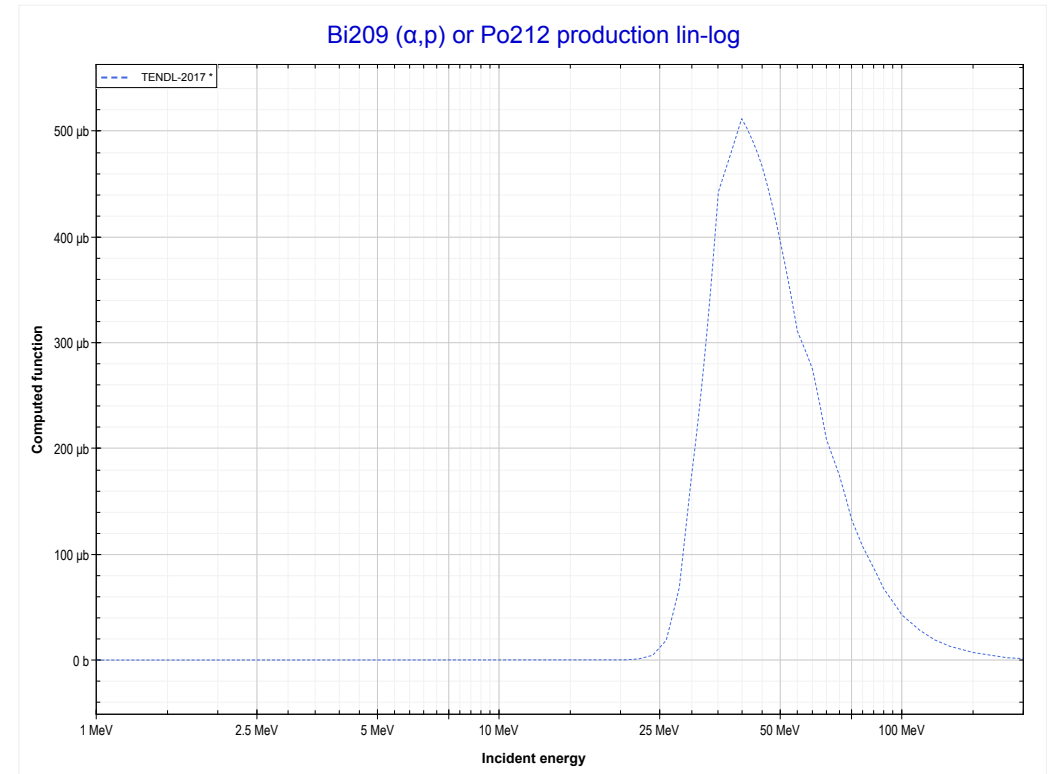
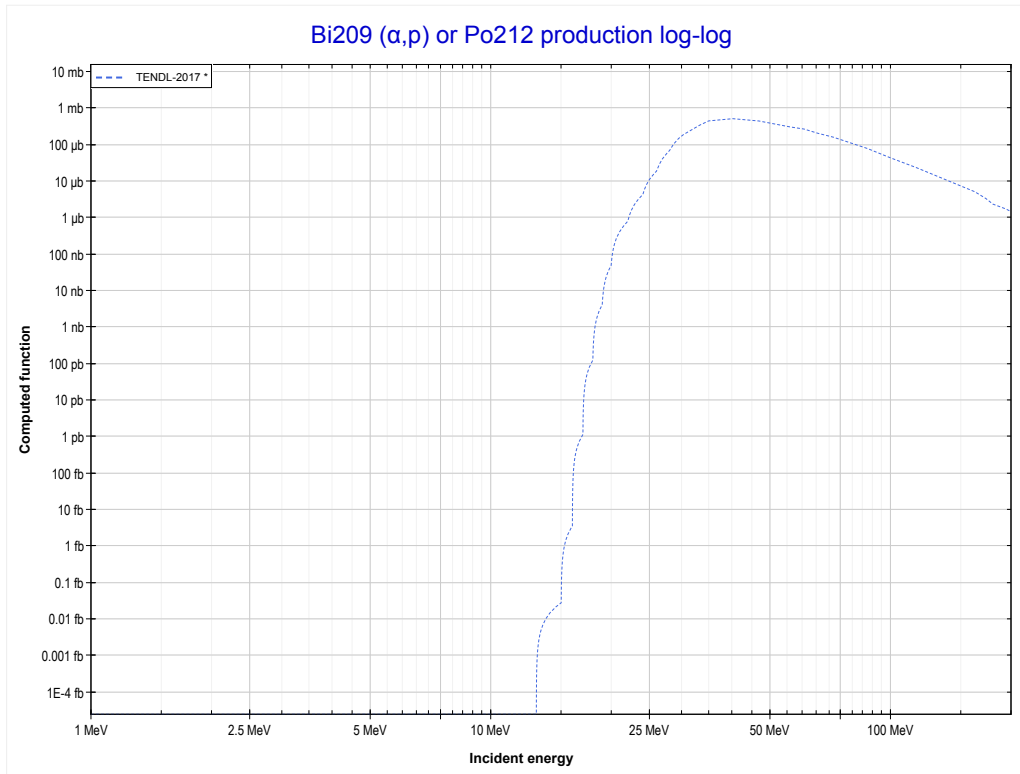
Reaction	Q-Value
Bi209(α ,d)Po211	-16536.91 keV
Bi209(α ,n+p)Po211	-18761.47 keV

<< 82-Pb-206	83-Bi-209	92-U-235 >>
<< MT28 ($\alpha, n+p$)	MT37 ($\alpha, 4n$) or MT5 (At209 production)	MT103 (α, p) >>



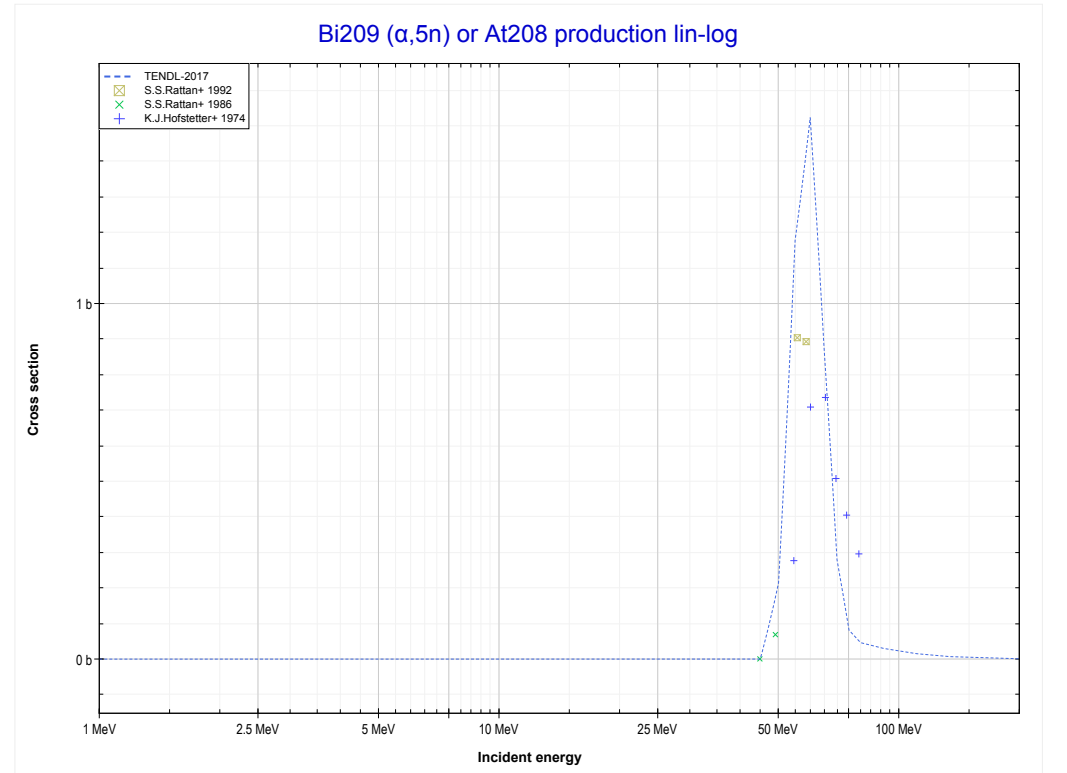
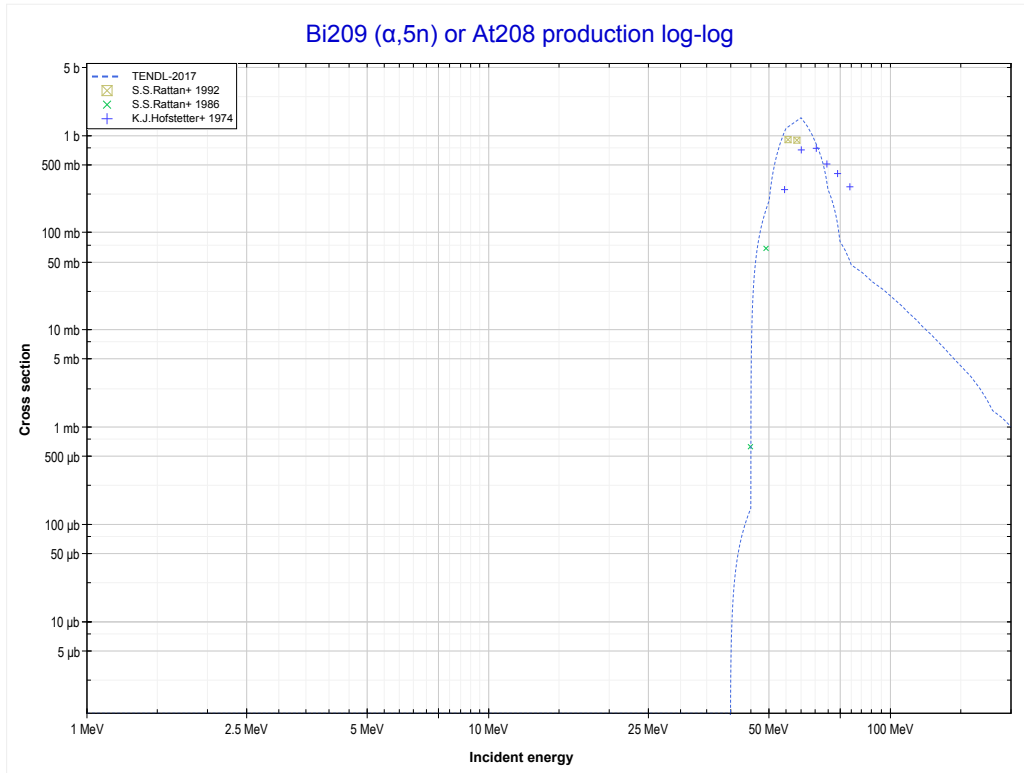
Reaction	Q-Value
Bi209($\alpha, 4n$)At209	-35236.55 keV

<< 82-Pb-208	83-Bi-209	92-U-233 >>
<< MT37 ($\alpha,4n$)	MT103 (α,p) or MT5 (Po212 production)	MT152 ($\alpha,5n$) >>



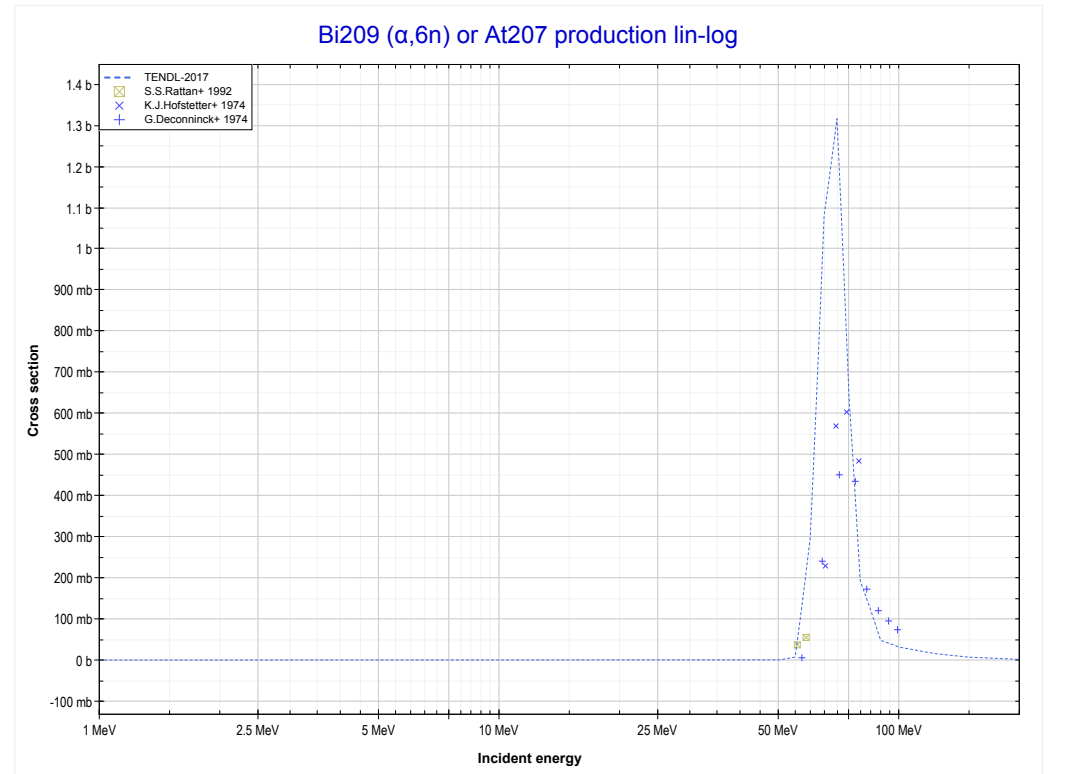
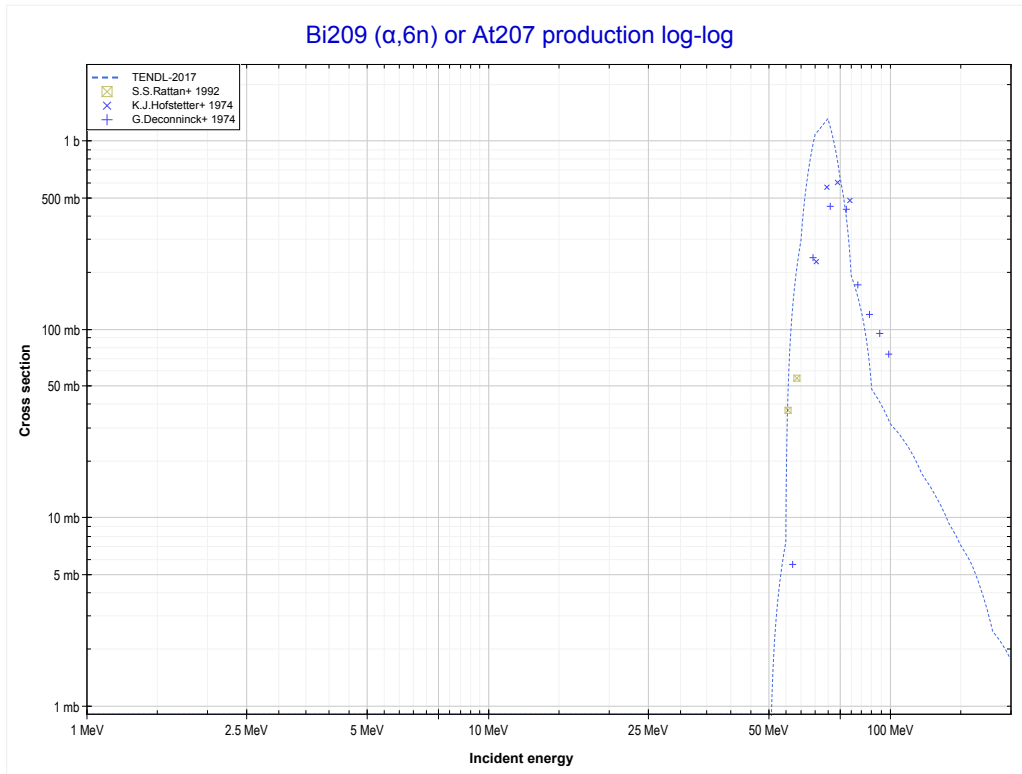
Reaction	Q-Value
Bi209(α,p)Po212	-12753.25 keV

<< 82-Pb-206	83-Bi-209	
<< MT103 (α, p)	MT152 ($\alpha, 5n$) or MT5 (At208 production)	MT153 ($\alpha, 6n$) >>



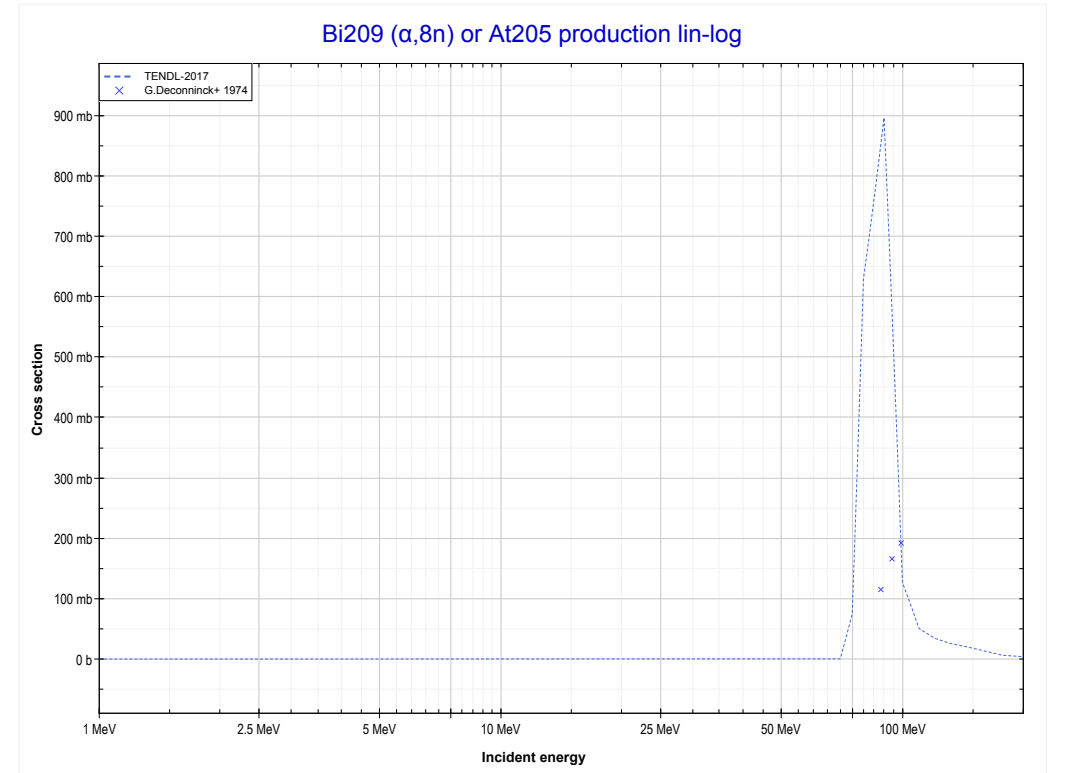
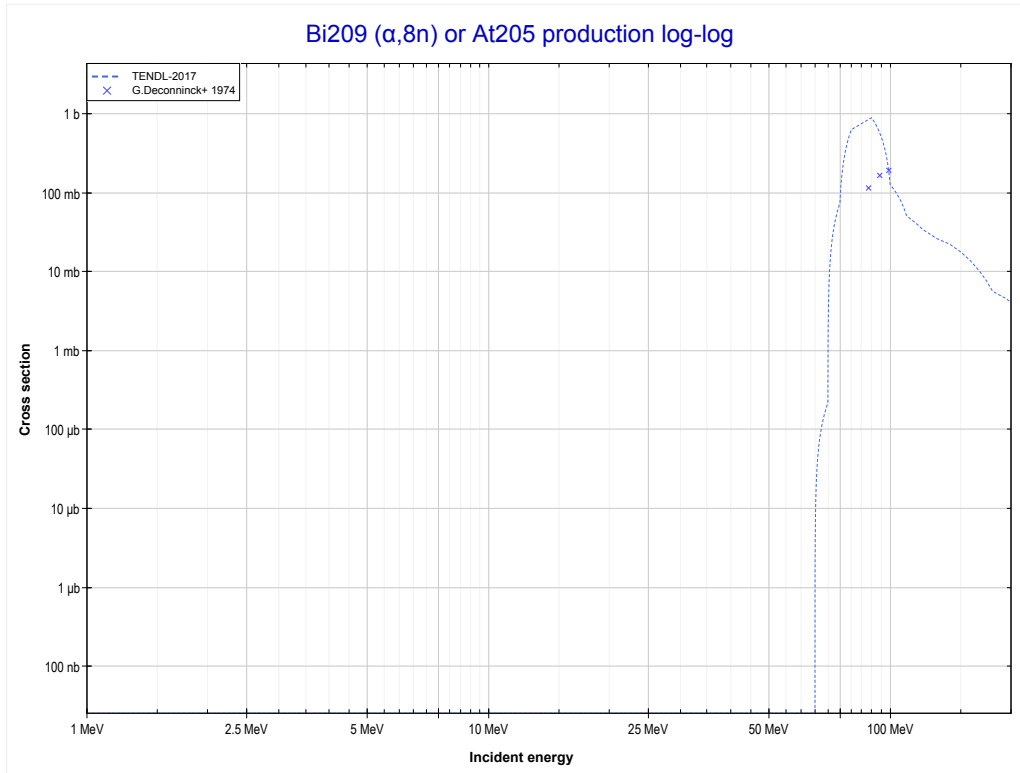
Reaction	Q-Value
Bi209($\alpha, 5n$)At208	-43719.87 keV

<< 82-Pb-208	83-Bi-209	
<< MT152 ($\alpha,5n$)	MT153 ($\alpha,6n$) or MT5 (At207 production)	MT161 ($\alpha,8n$) >>



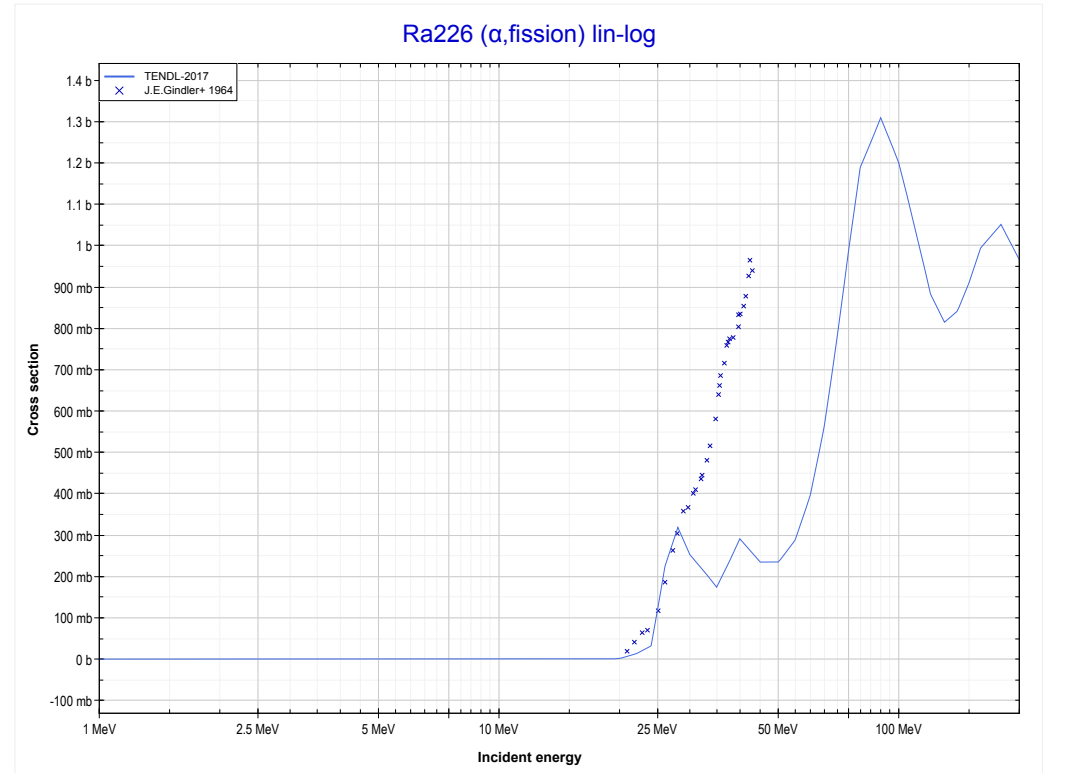
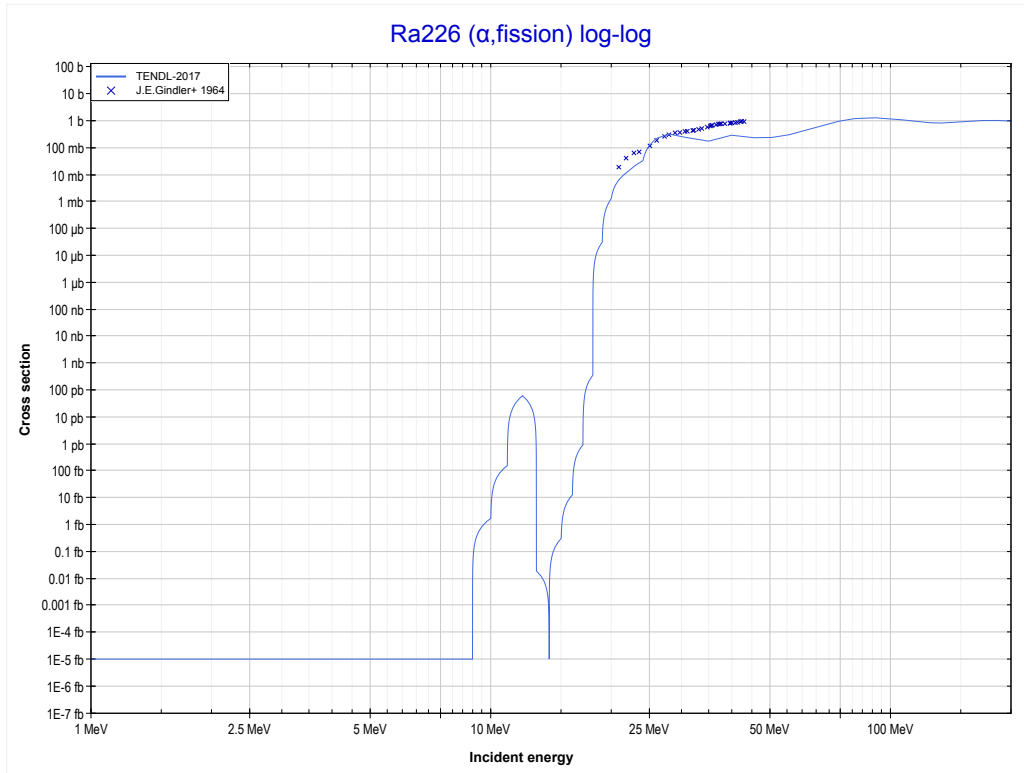
Reaction	Q-Value
Bi209($\alpha,6n$)At207	-51034.19 keV

<< 82-Pb-208	83-Bi-209	90-Th-232 >>
<< MT153 ($\alpha,6n$)	MT161 ($\alpha,8n$) or MT5 (At205 production)	88-Ra-226 MT18 (α ,fission) >>

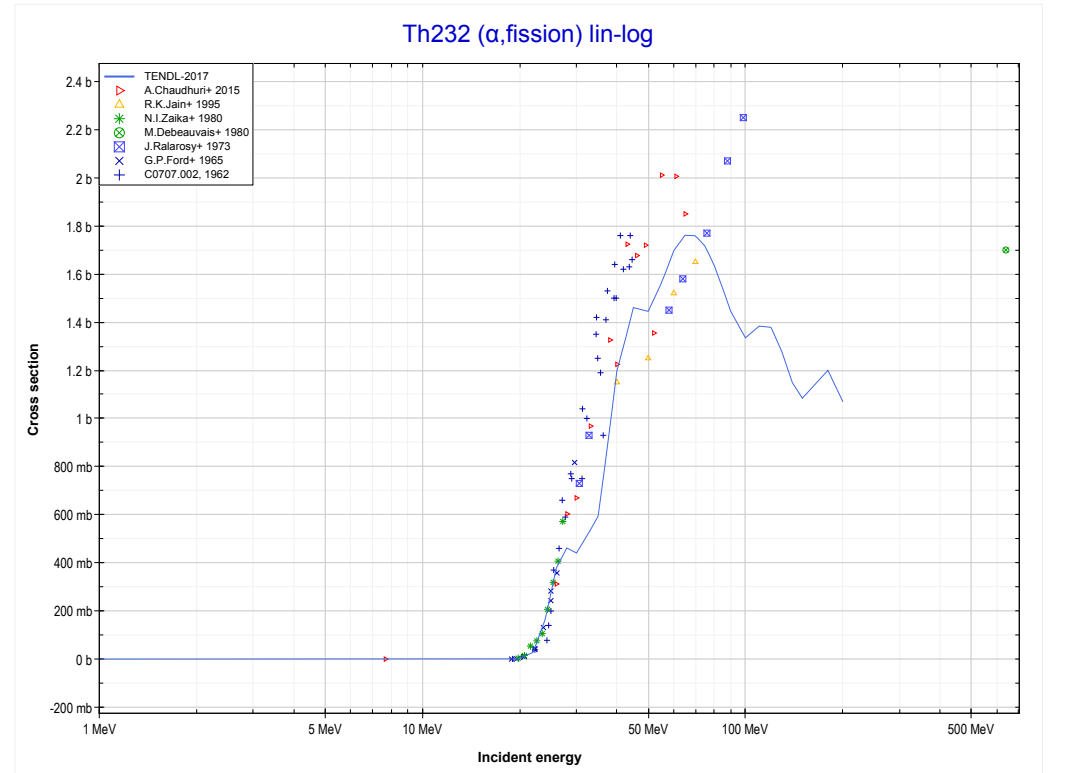
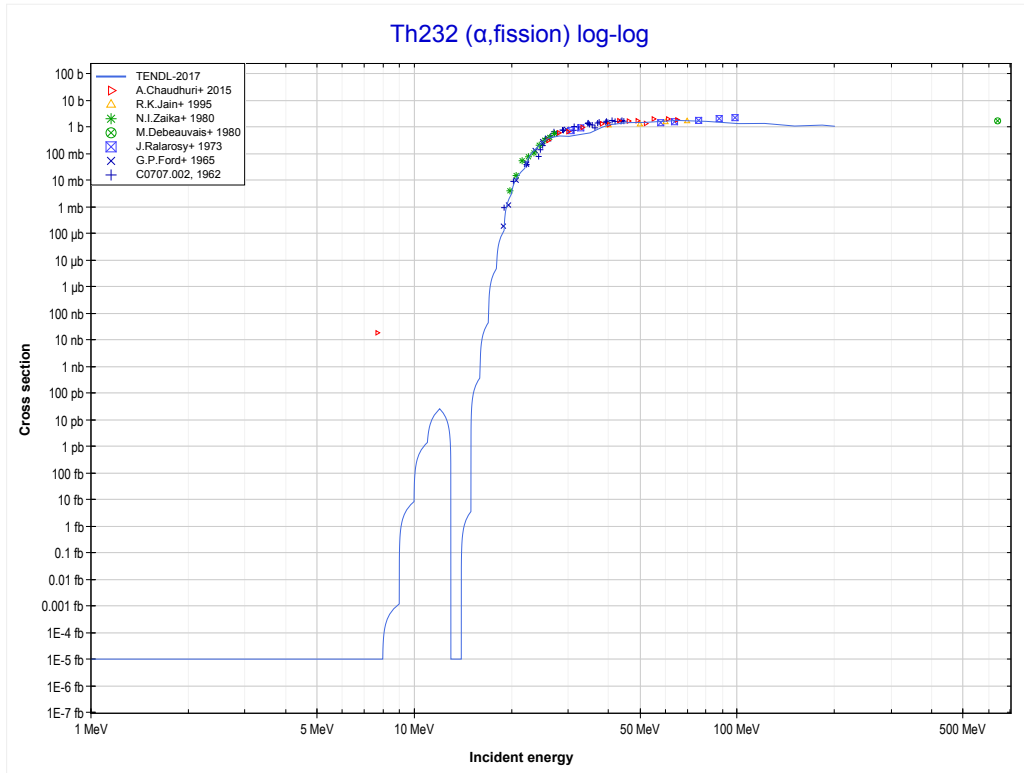


Reaction	Q-Value
Bi209($\alpha,8n$)At205	-67433.82 keV

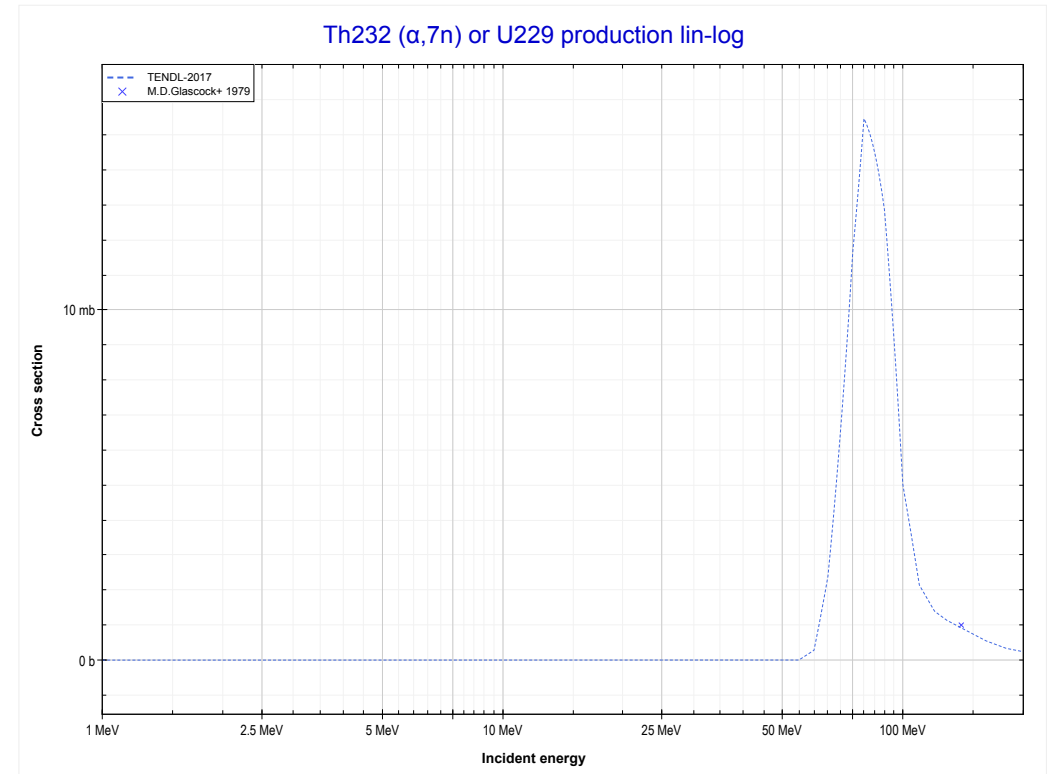
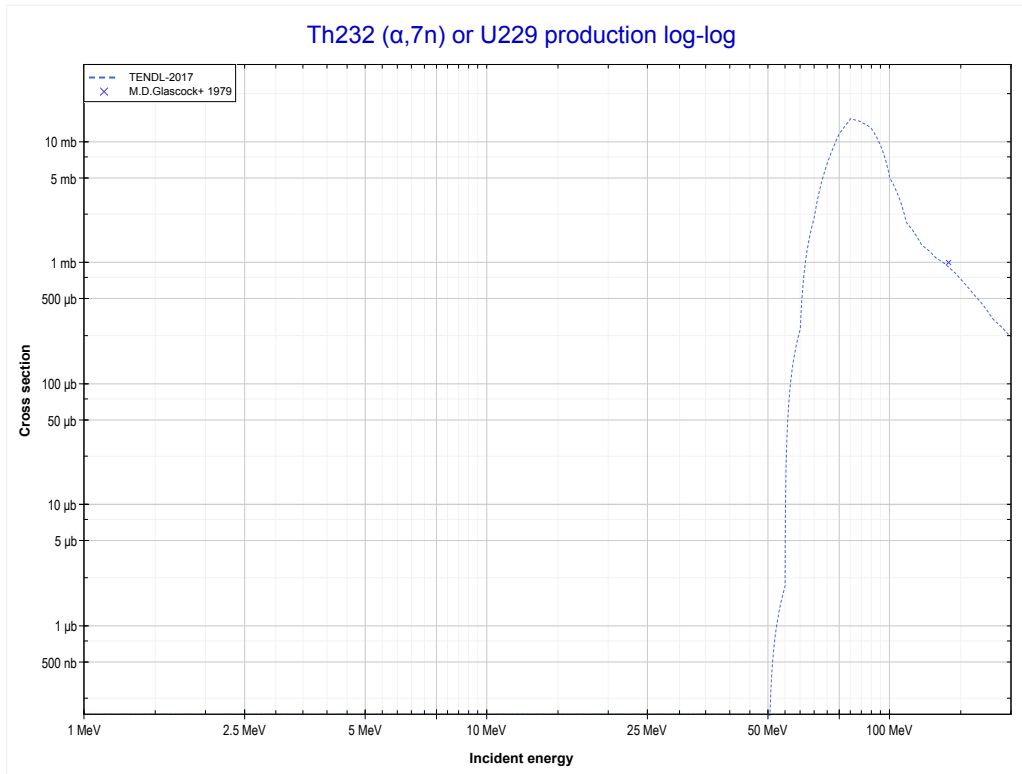
<< 83-Bi-209	88-Ra-226	90-Th-232 >>
<< 83-Bi-209 MT161 ($\alpha,8n$)	MT18 (α,fission)	90-Th-232 MT18 (α ,fission) >>



<< 88-Ra-226	90-Th-232	92-U-233 >>
<< 88-Ra-226 MT18 (α ,fission)	MT18 (α,fission)	MT160 (α ,7n) >>

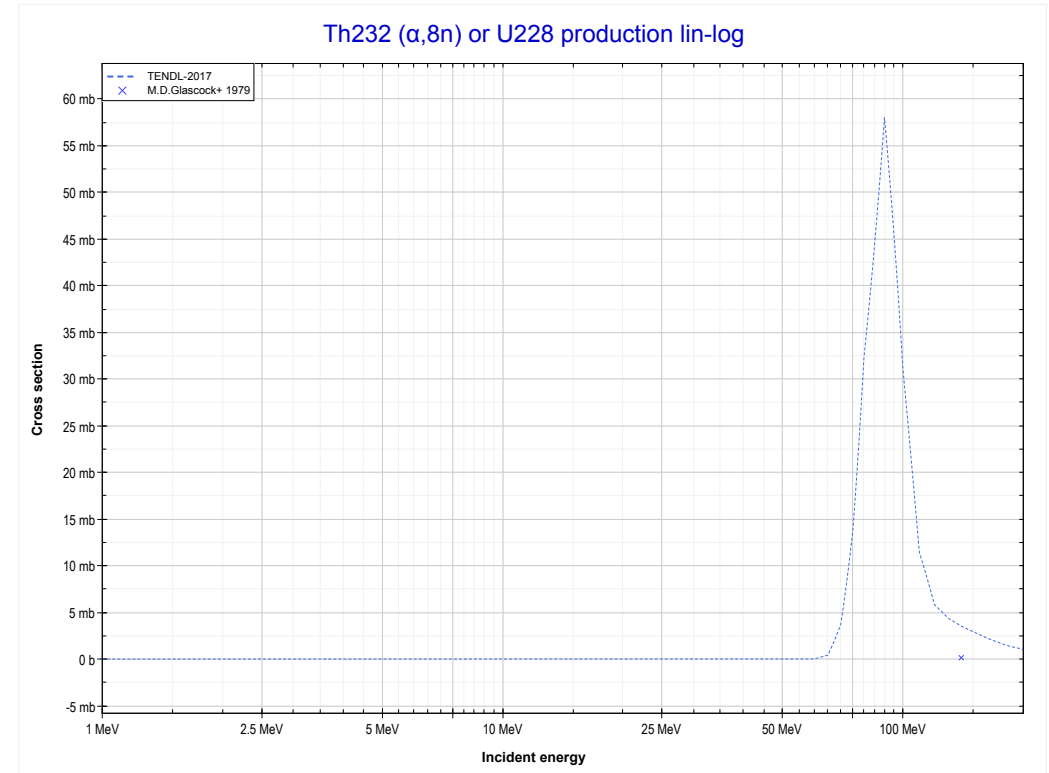
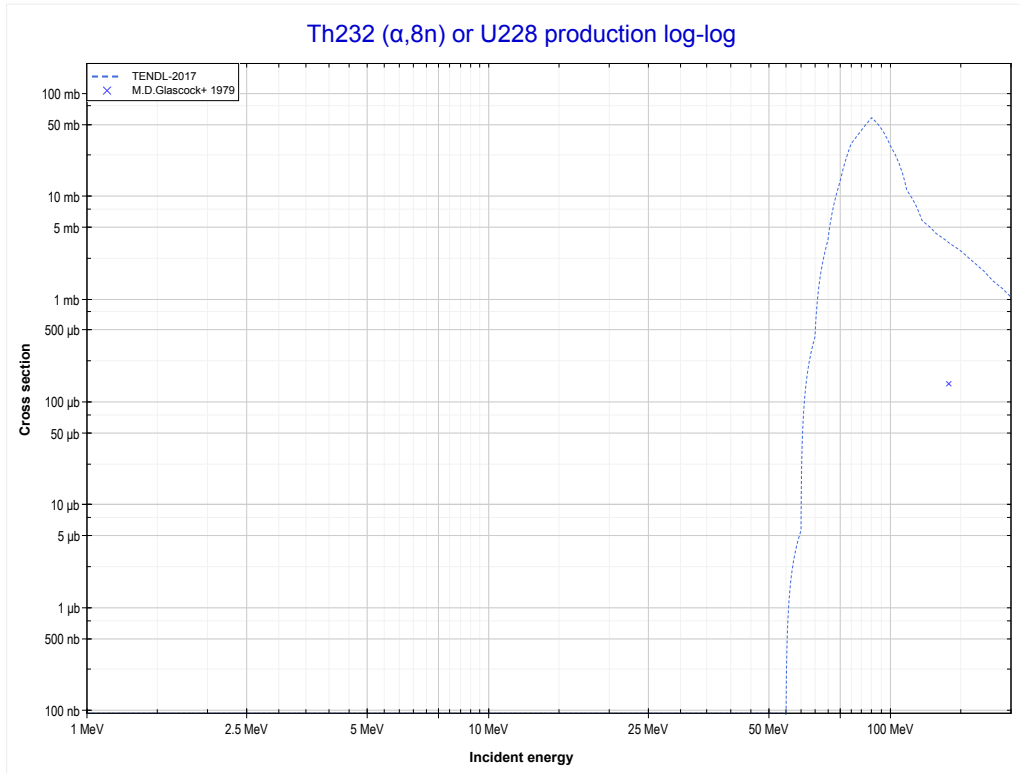


<< 82-Pb-208	90-Th-232	
<< MT18 (α ,fission)	MT160 (α,7n) or MT5 (U229 production)	MT161 (α ,8n) >>



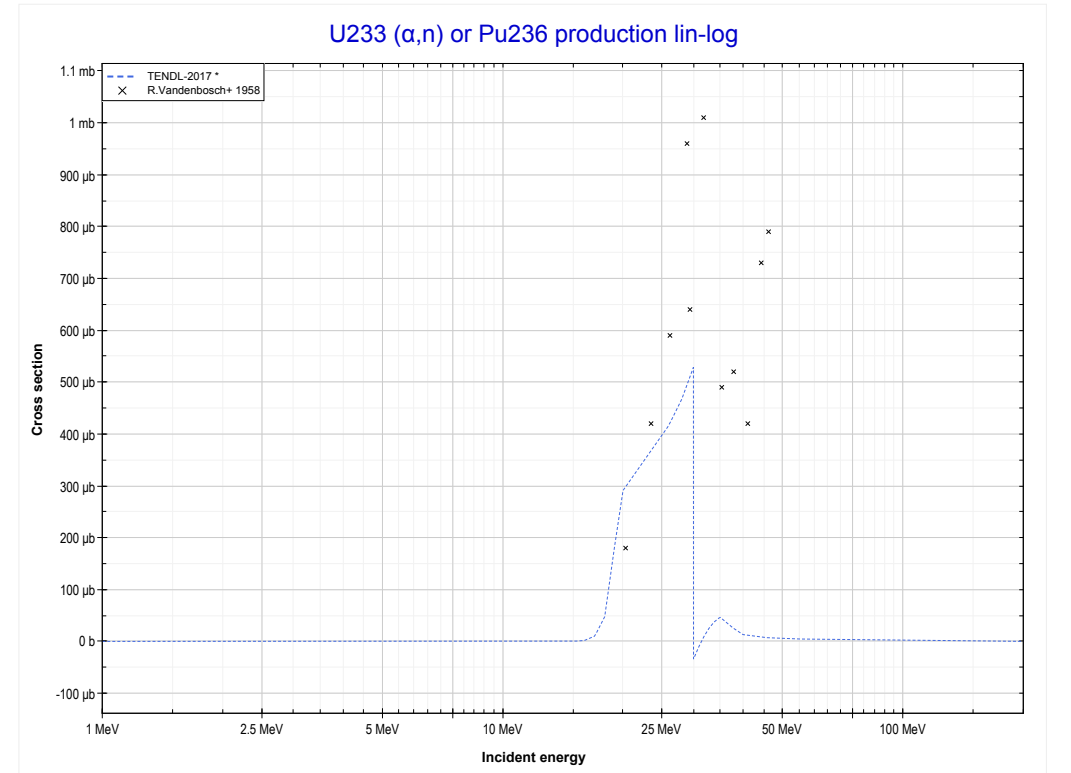
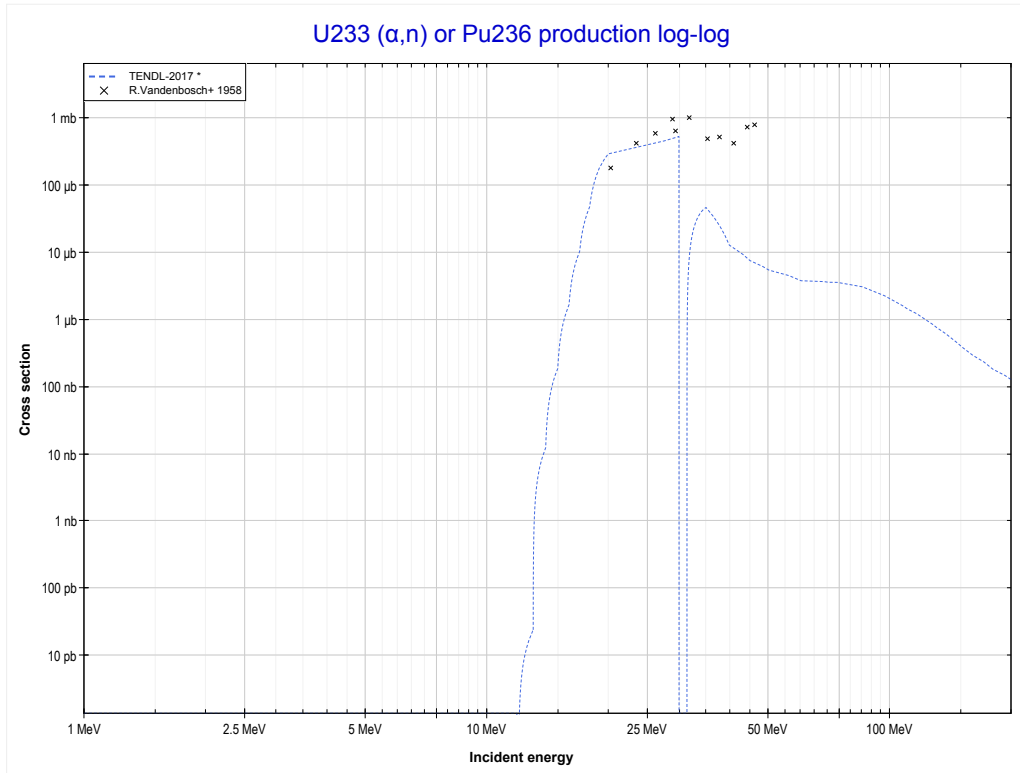
Reaction	Q-Value
Th232(α ,7n)U229	-49836.60 keV

<< 83-Bi-209	90-Th-232	
<< MT160 ($\alpha,7n$)	MT161 ($\alpha,8n$) or MT5 (U228 production)	92-U-233 MT4 (α,n) >>



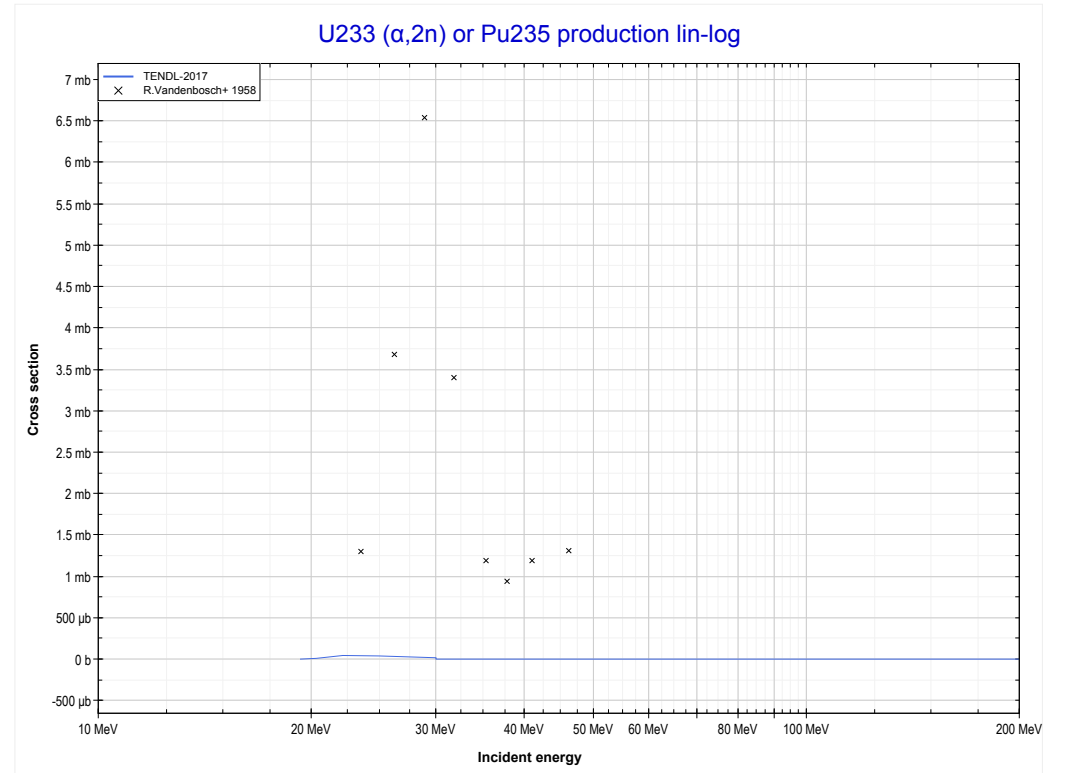
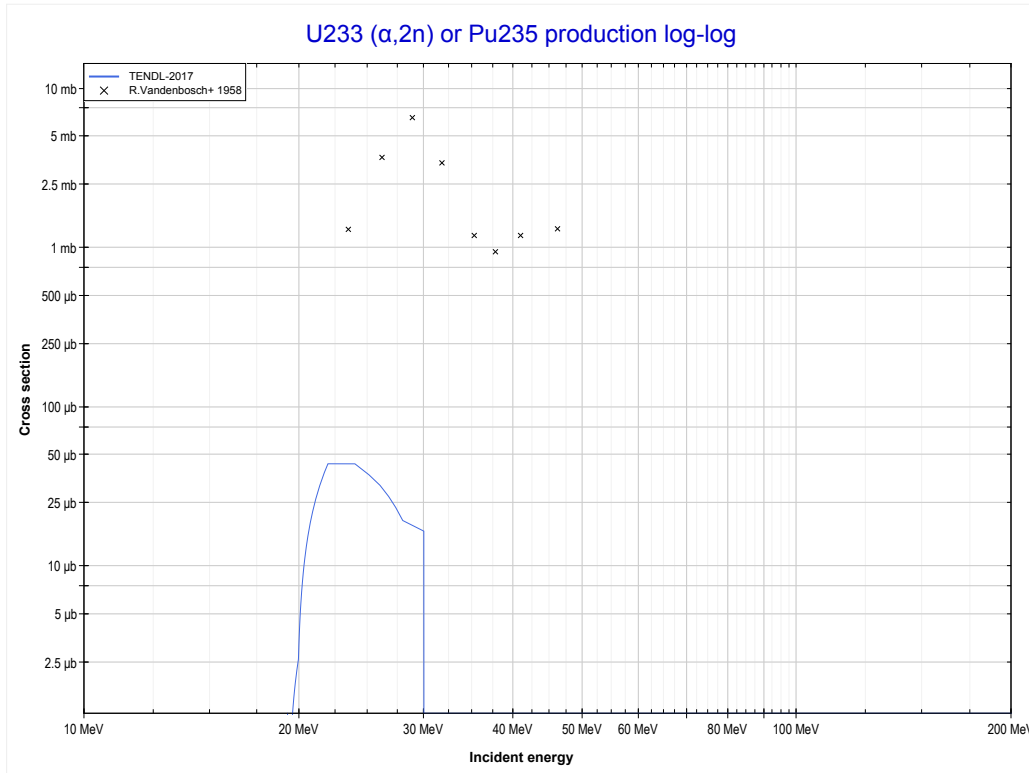
Reaction	Q-Value
Th232($\alpha,8n$)U228	-55918.92 keV

<< 83-Bi-209	92-U-233	92-U-234 >>
<< 90-Th-232 MT161 ($\alpha,8n$)	MT4 (α,n) or MT5 (Pu236 production)	MT16 ($\alpha,2n$) >>



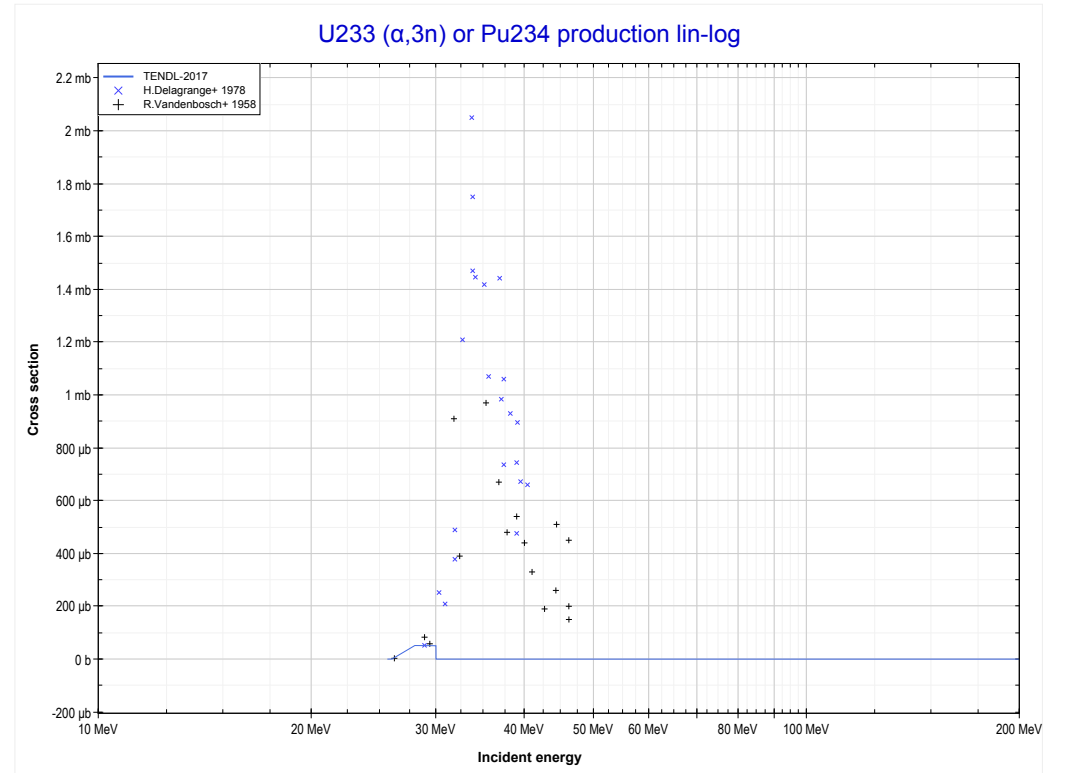
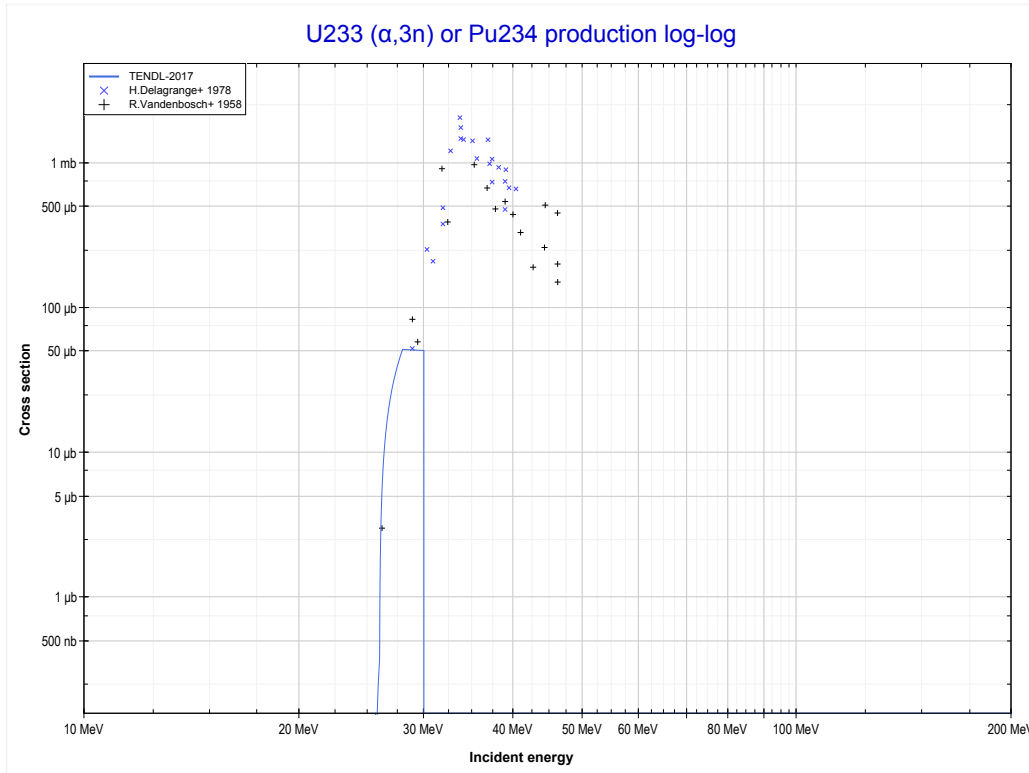
Reaction	Q-Value
U233(α,n)Pu236	-11629.00 keV

<< 83-Bi-209	92-U-233	92-U-234 >>
<< MT4 (α,n)	MT16 ($\alpha,2n$) or MT5 (Pu235 production)	MT17 ($\alpha,3n$) >>



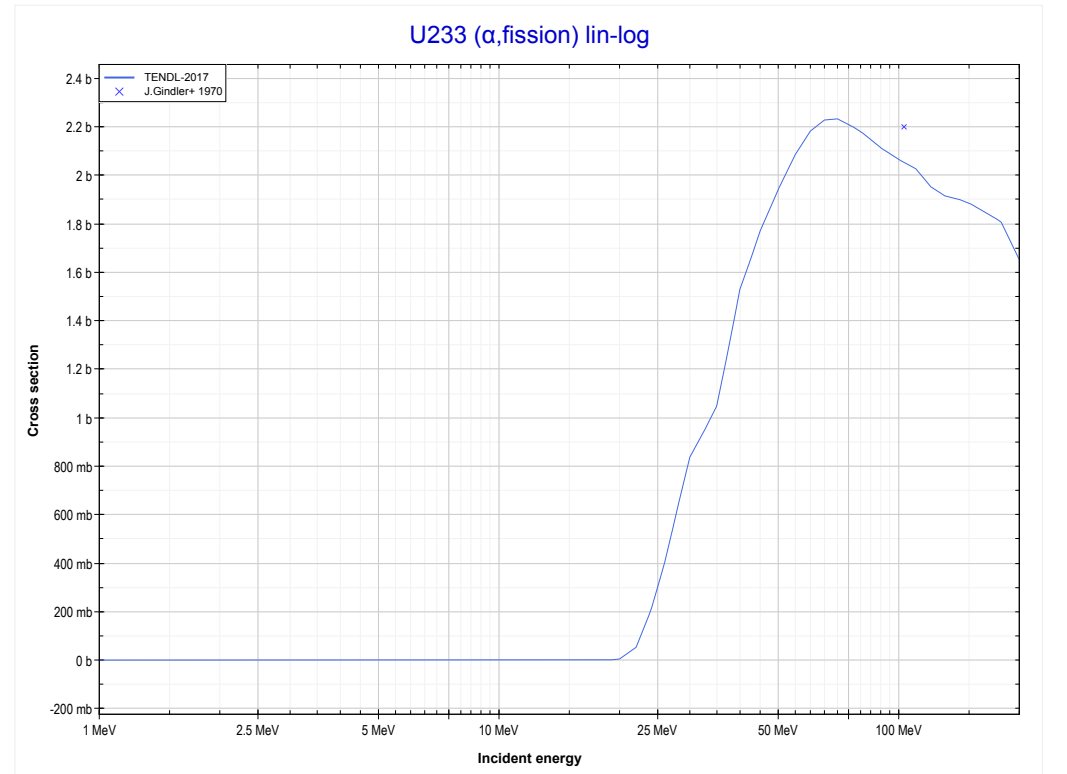
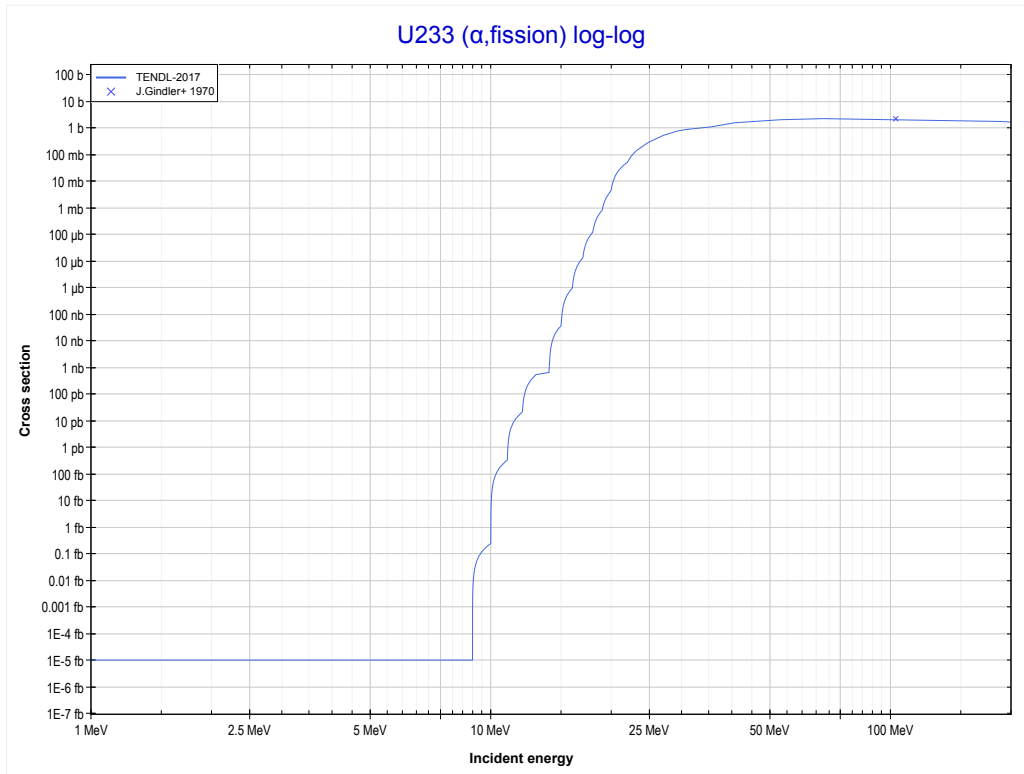
Reaction	Q-Value
U233($\alpha,2n$)Pu235	-18981.42 keV

<< 83-Bi-209	92-U-233	92-U-234 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Pu234 production)	MT18 (α ,fission) >>

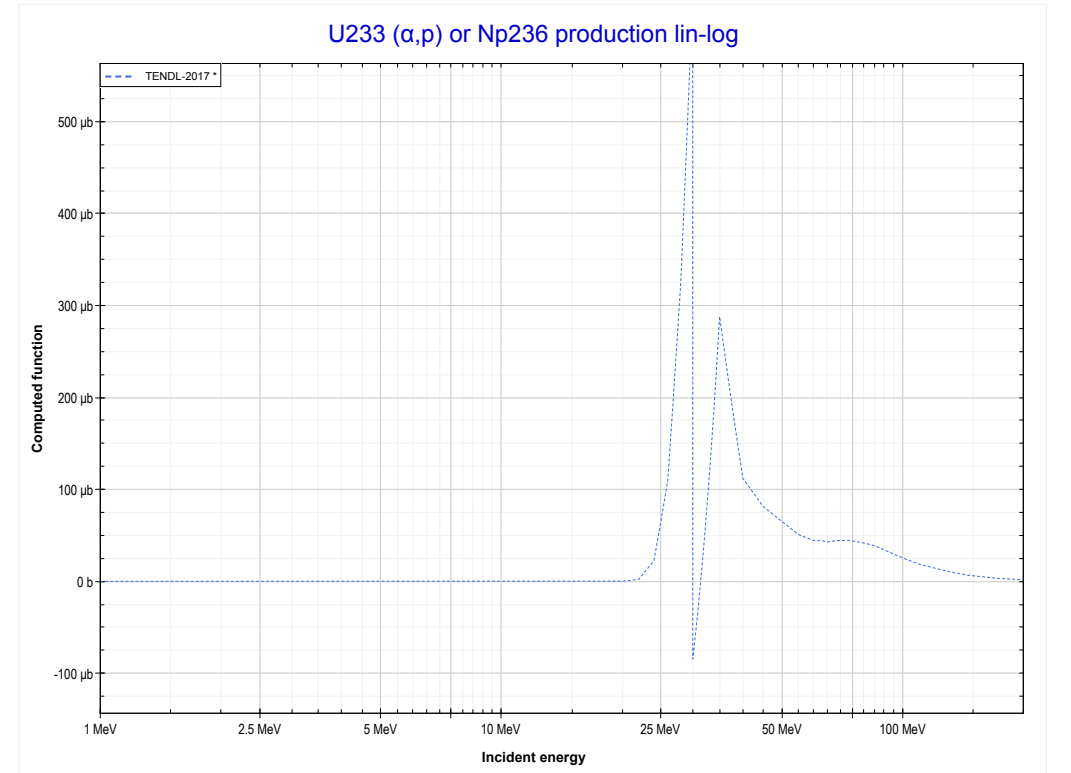
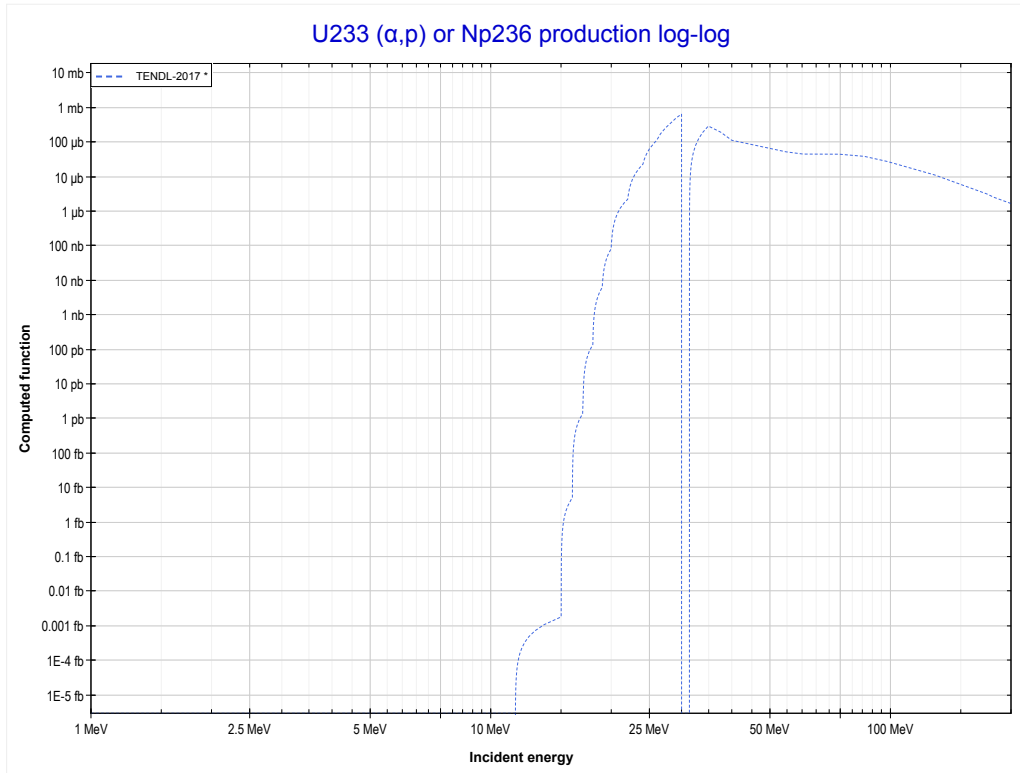


Reaction	Q-Value
U233($\alpha,3n$)Pu234	-25218.74 keV

<< 90-Th-232	92-U-233	92-U-234 >>
<< MT17 ($\alpha,3n$)	MT18 (α,fission)	MT103 (α,p) >>

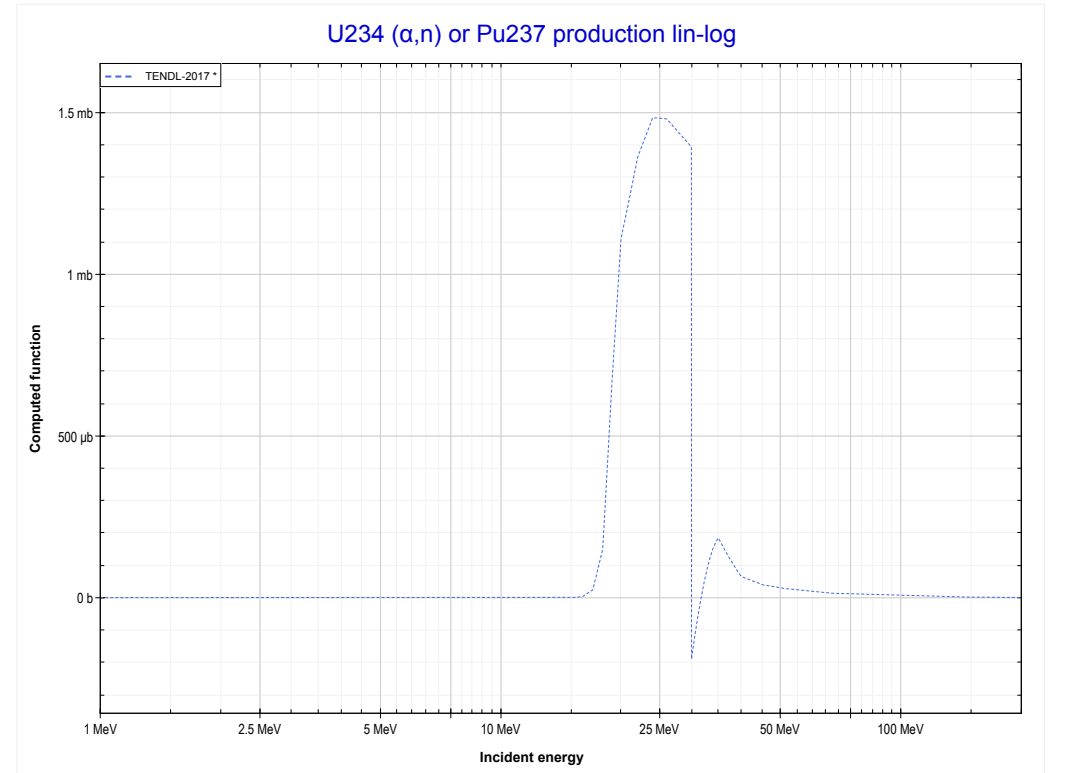
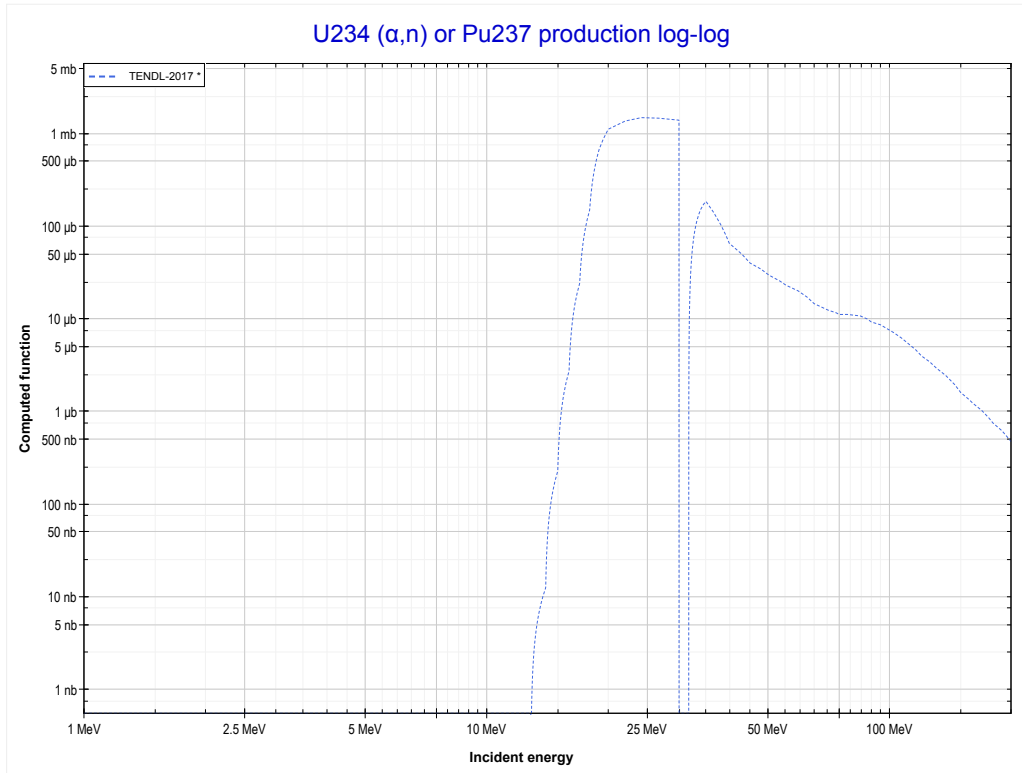


<< 83-Bi-209	92-U-233	92-U-235 >>
<< MT18 (α ,fission)	MT103 (α,p) or MT5 (Np236 production)	92-U-234 MT4 (α ,n) >>



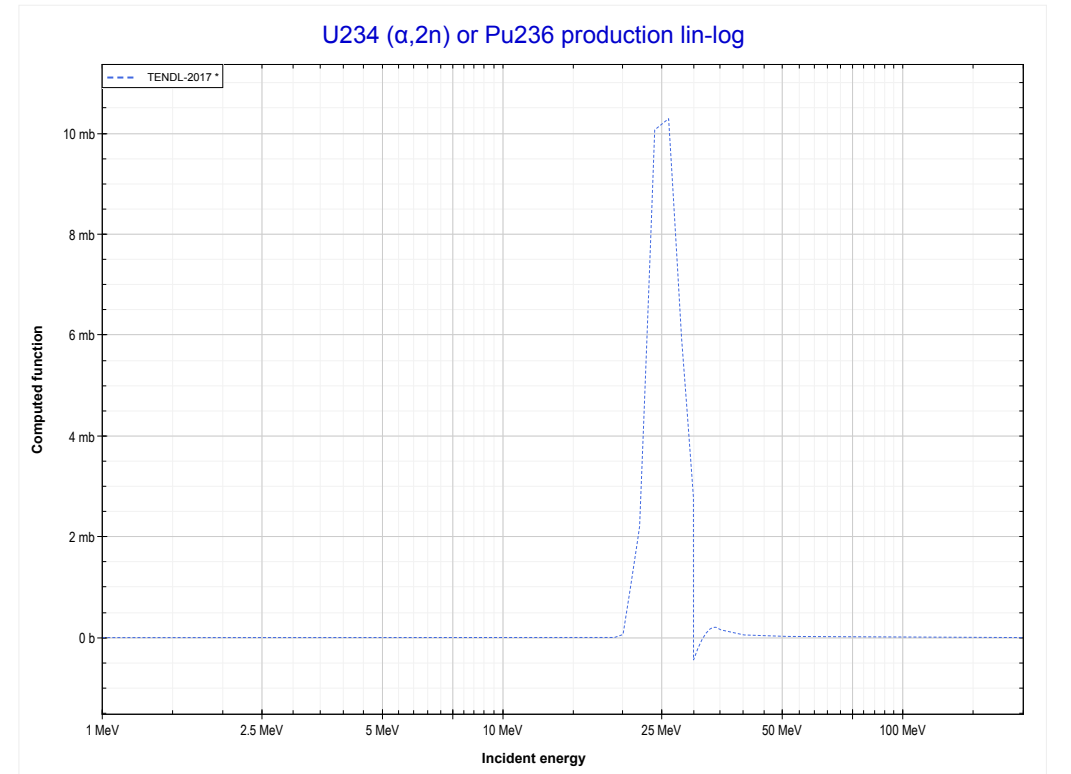
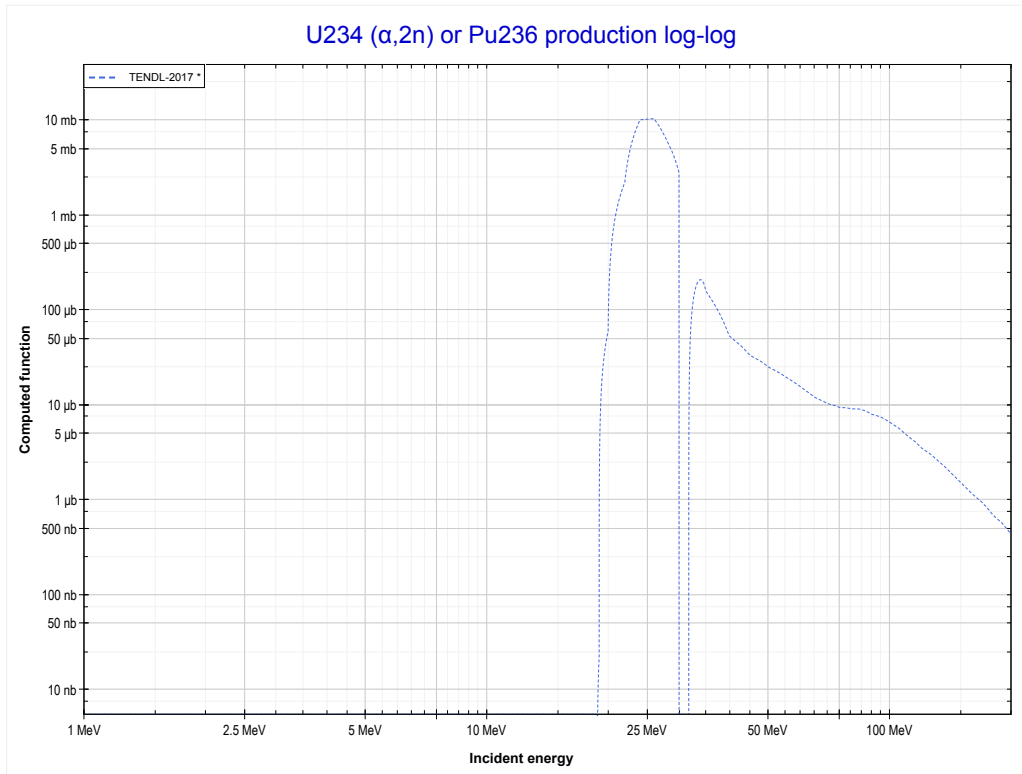
Reaction	Q-Value
U233(α ,p)Np236	-11323.75 keV

<< 92-U-233	92-U-234	92-U-235 >>
<< 92-U-233 MT103 (α,p)	MT4 (α,n) or MT5 (Pu237 production)	MT16 ($\alpha,2n$) >>



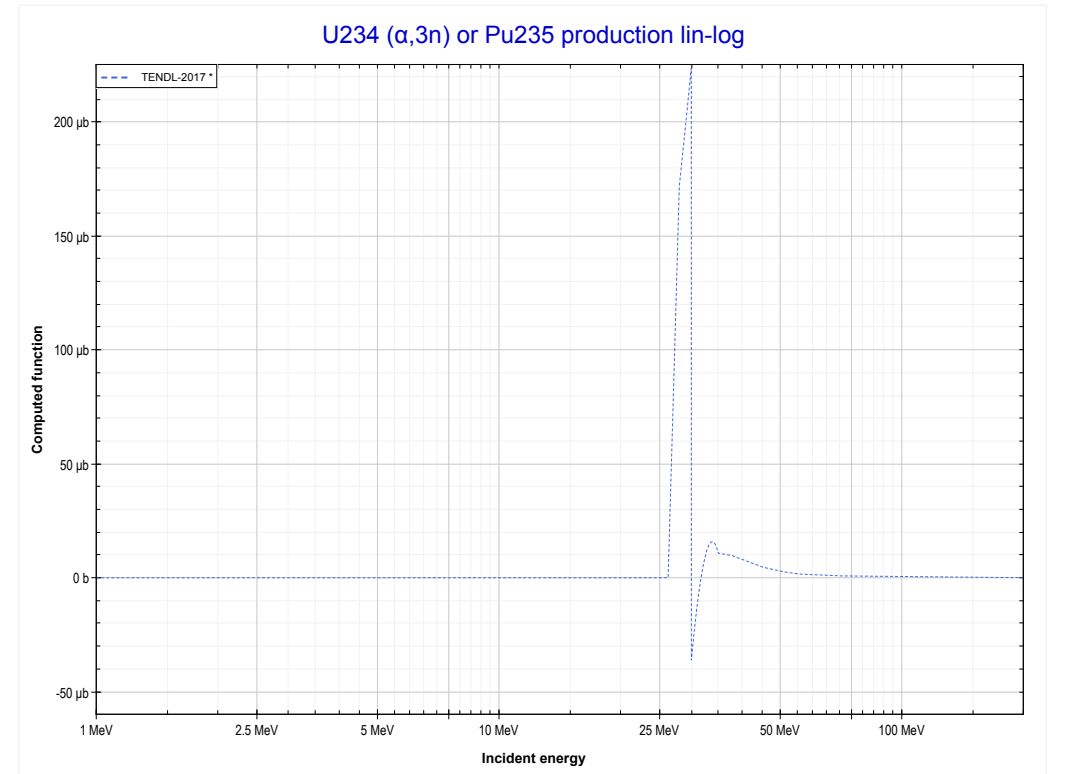
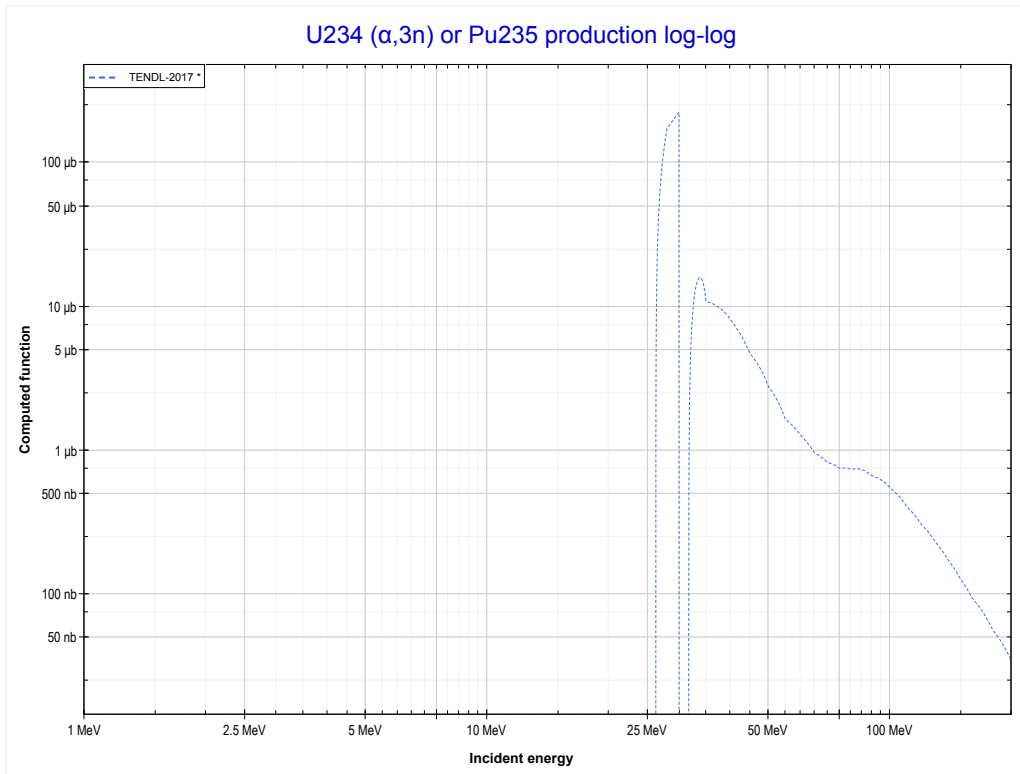
Reaction	Q-Value
U234(α,n)Pu237	-12593.10 keV

<< 92-U-233	92-U-234	92-U-235 >>
<< MT4 (α,n)	MT16 ($\alpha,2n$) or MT5 (Pu236 production)	MT17 ($\alpha,3n$) >>



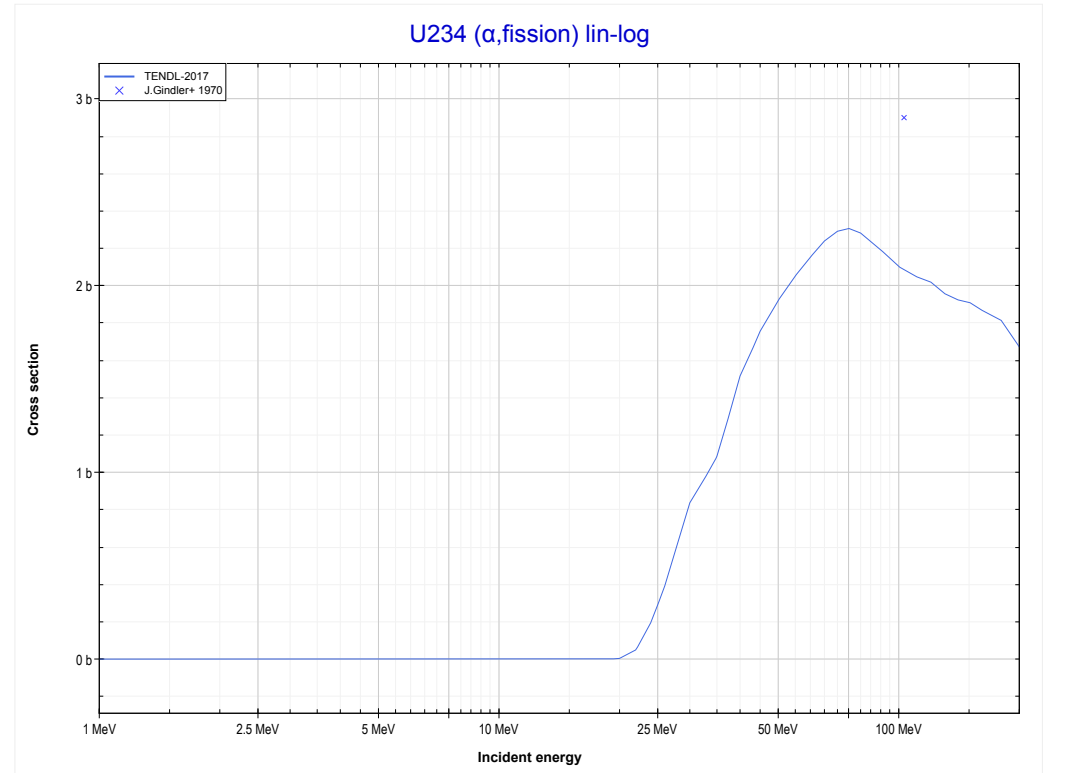
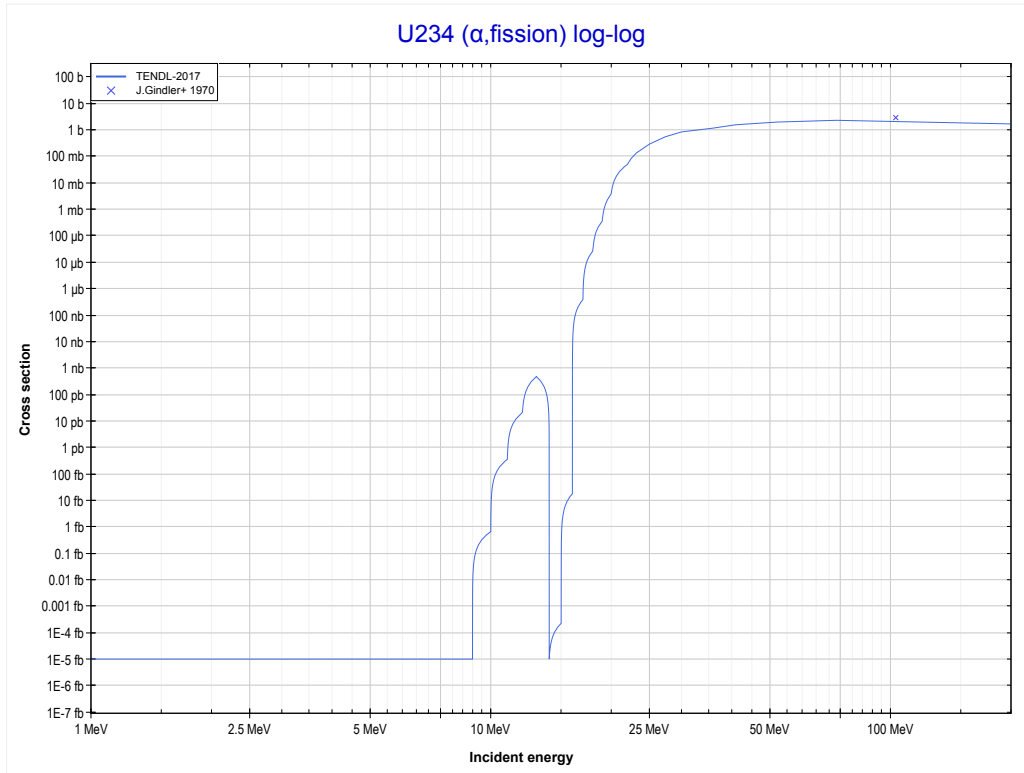
Reaction	Q-Value
U234($\alpha,2n$)Pu236	-18473.82 keV

<< 92-U-233	92-U-234	92-U-235 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Pu235 production)	MT18 (α ,fission) >>

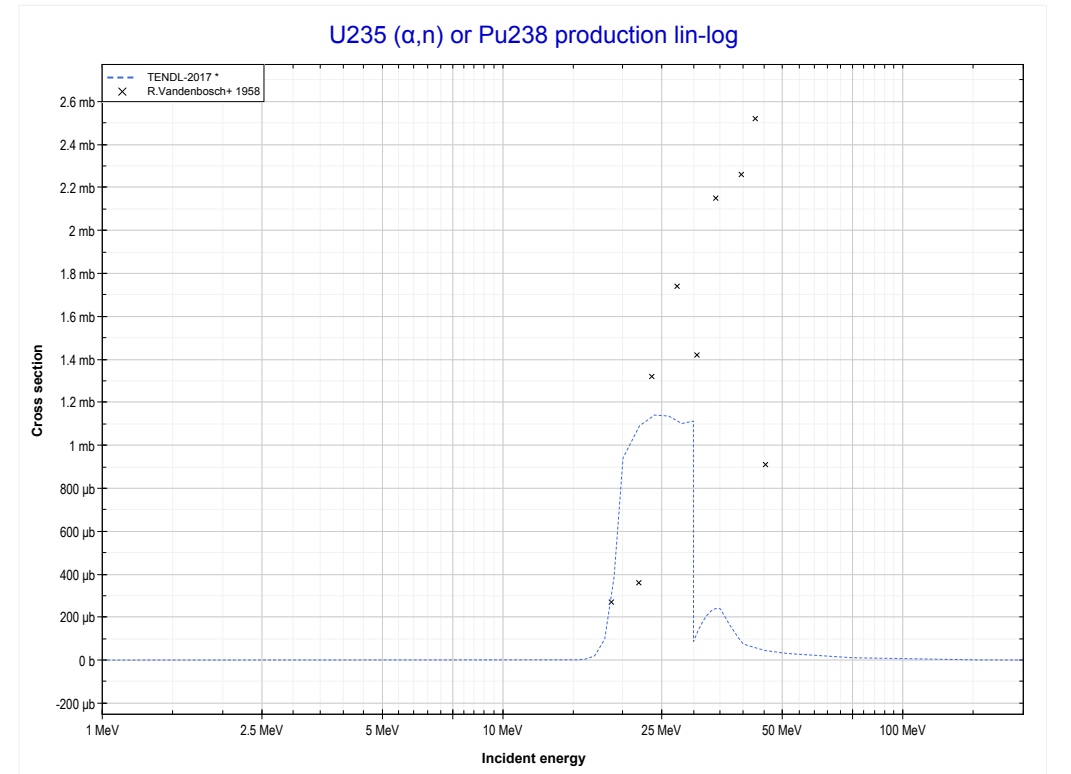
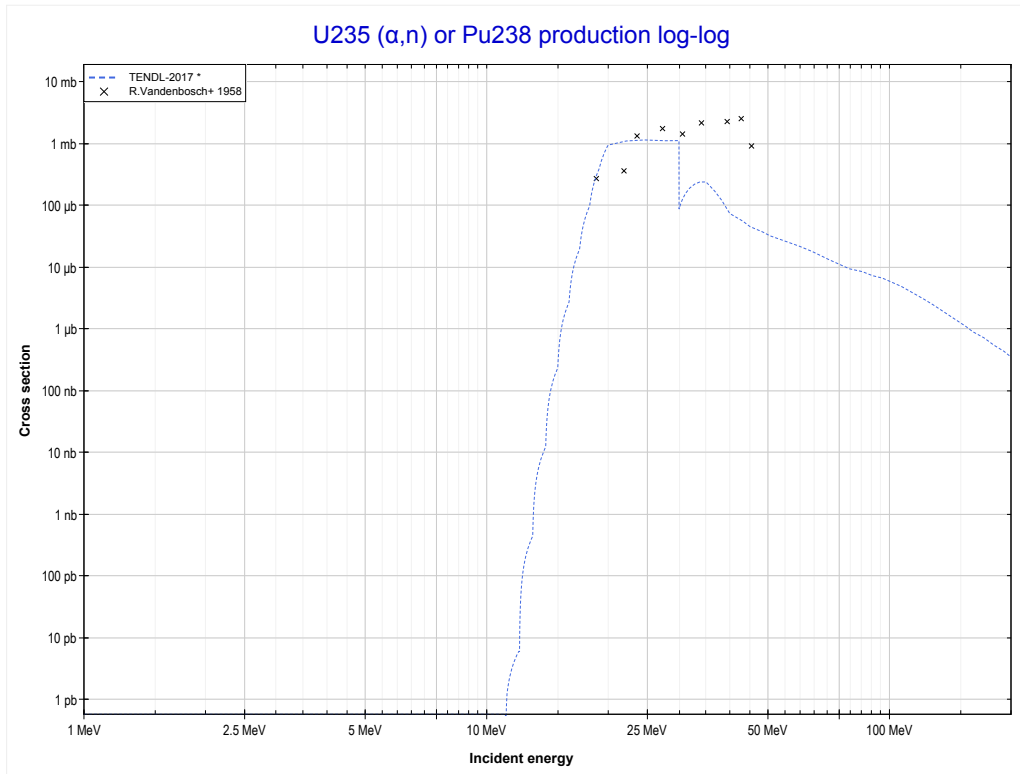


Reaction	Q-Value
U234($\alpha,3n$)Pu235	-25826.24 keV

<< 92-U-233	92-U-234	92-U-235 >>
<< MT17 ($\alpha,3n$)	MT18 (α,fission)	92-U-235 MT4 (α,n) >>

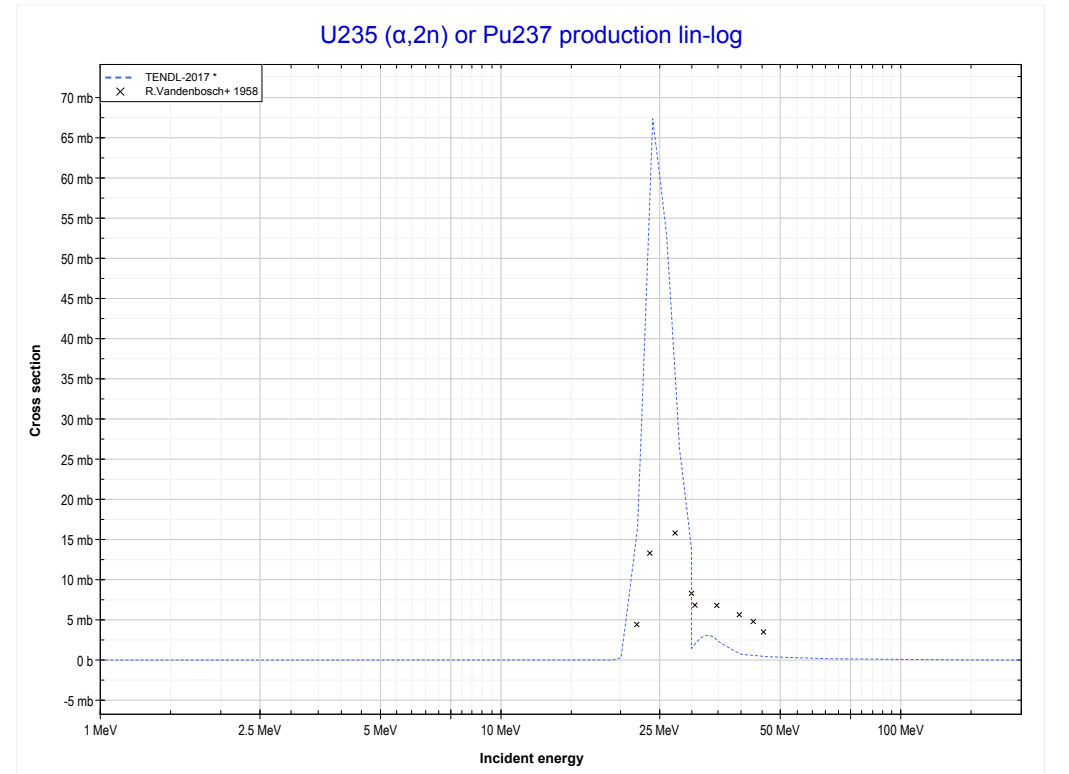
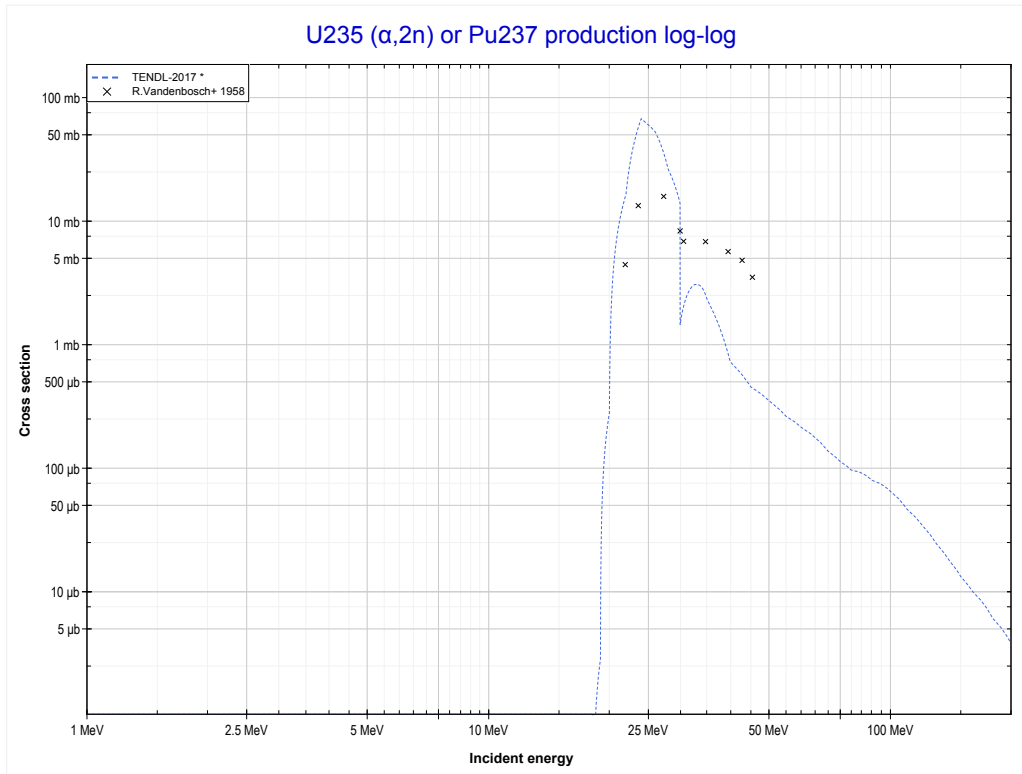


<< 92-U-234	92-U-235	93-Np-237 >>
<< 92-U-234 MT18 (α ,fission)	MT4 (α,n) or MT5 (Pu238 production)	MT16 (α ,2n) >>



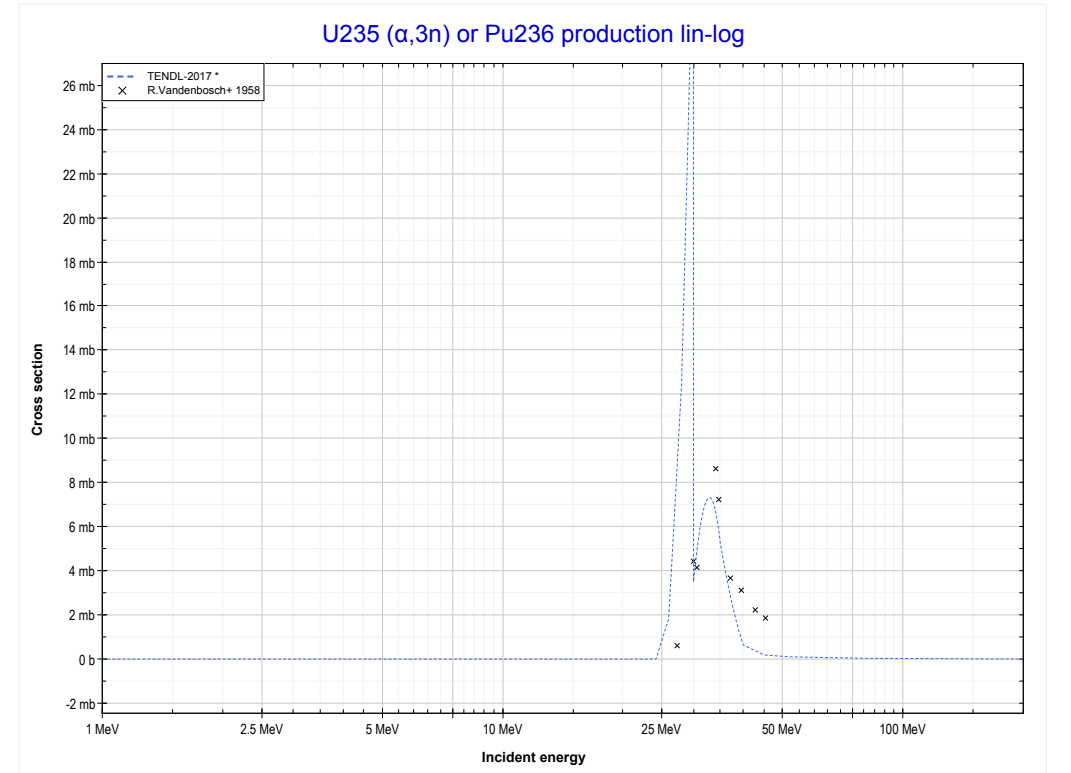
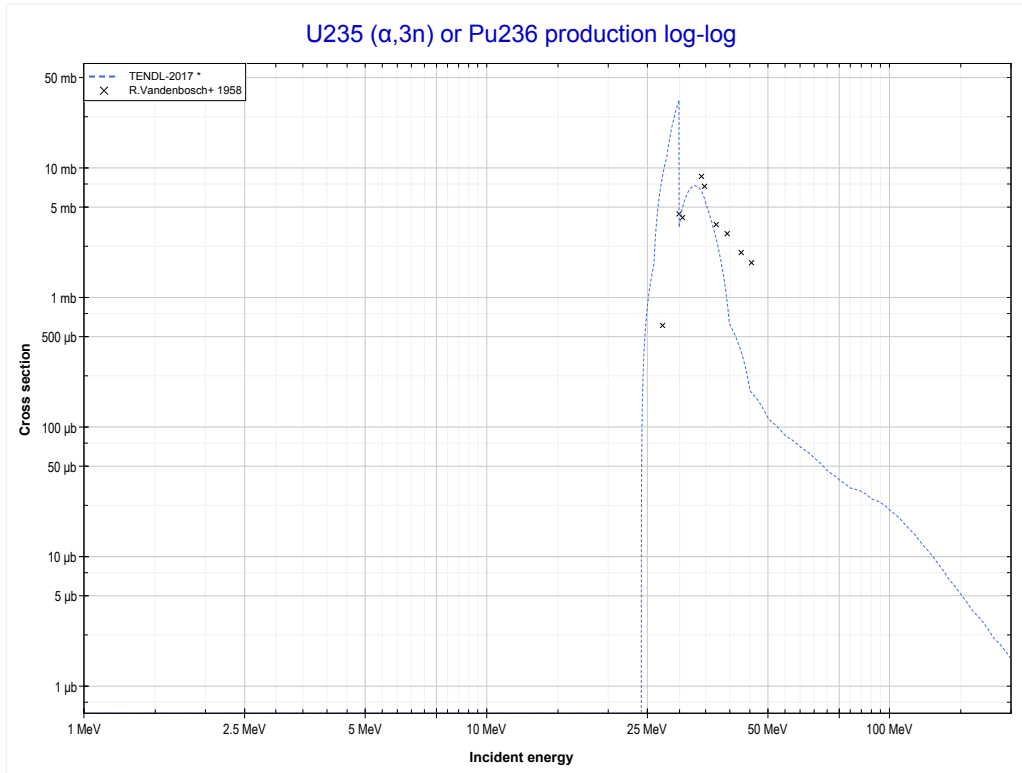
Reaction	Q-Value
U235(α ,n)Pu238	-10890.60 keV

<< 92-U-234	92-U-235	92-U-238 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Pu237 production)	MT17 ($\alpha, 3n$) >>



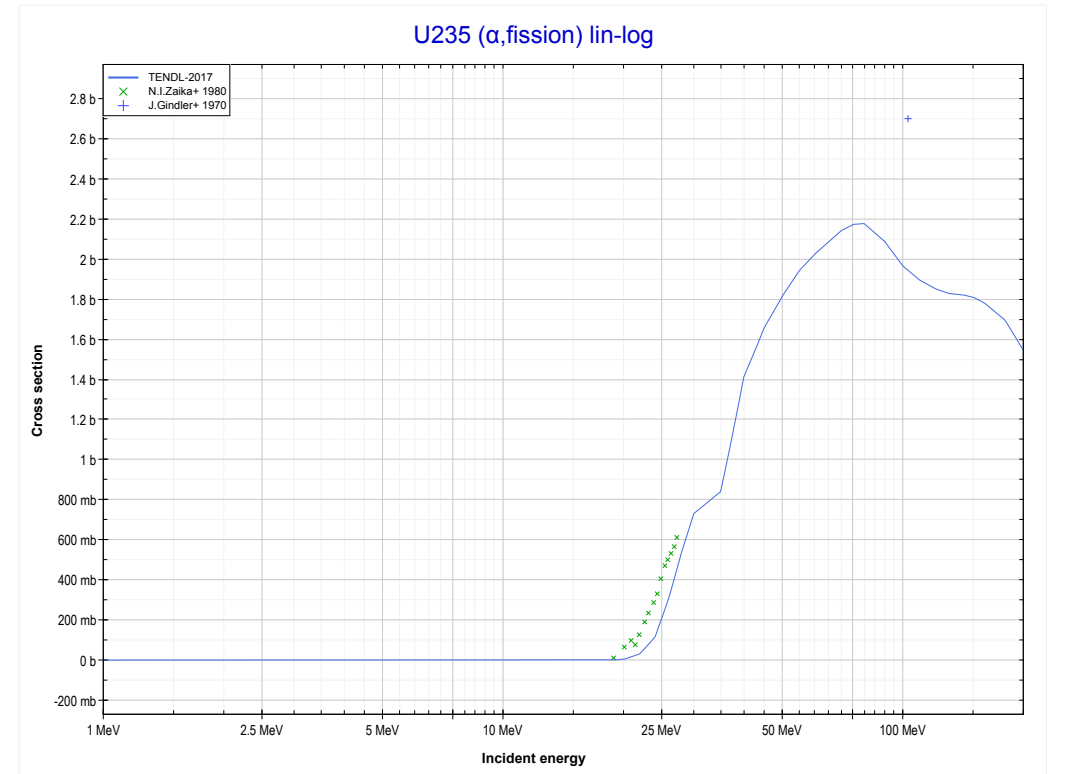
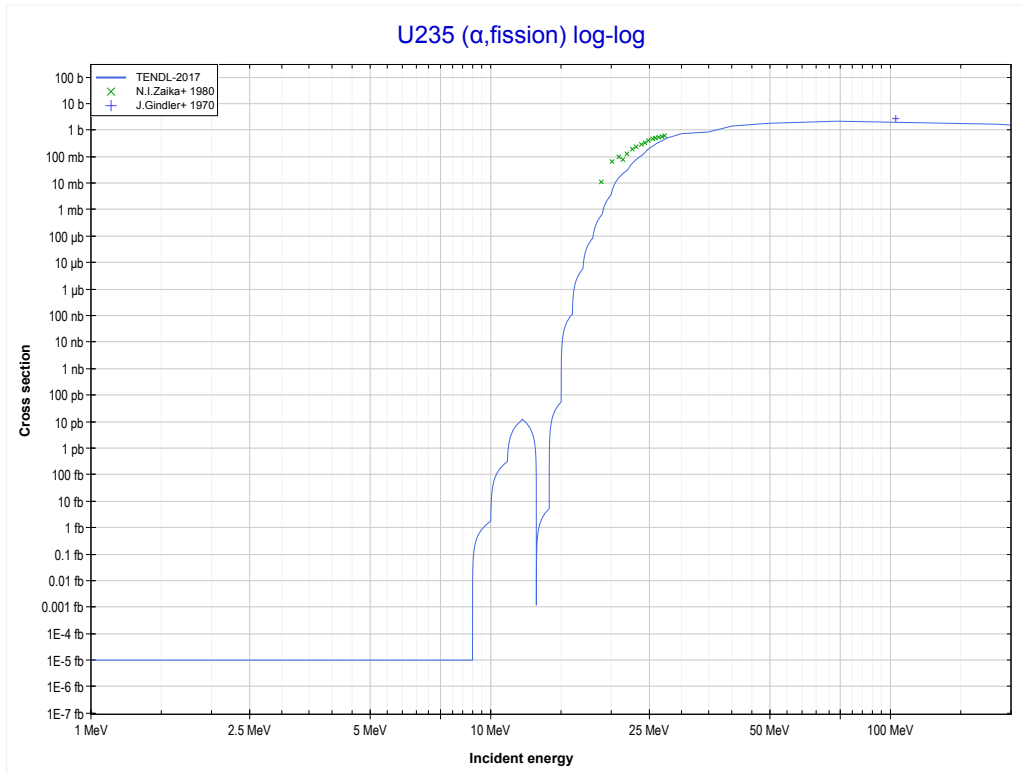
Reaction	Q-Value
U235($\alpha, 2n$)Pu237	-17890.52 keV

<< 92-U-234	92-U-235	92-U-238 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Pu236 production)	MT18 (α ,fission) >>

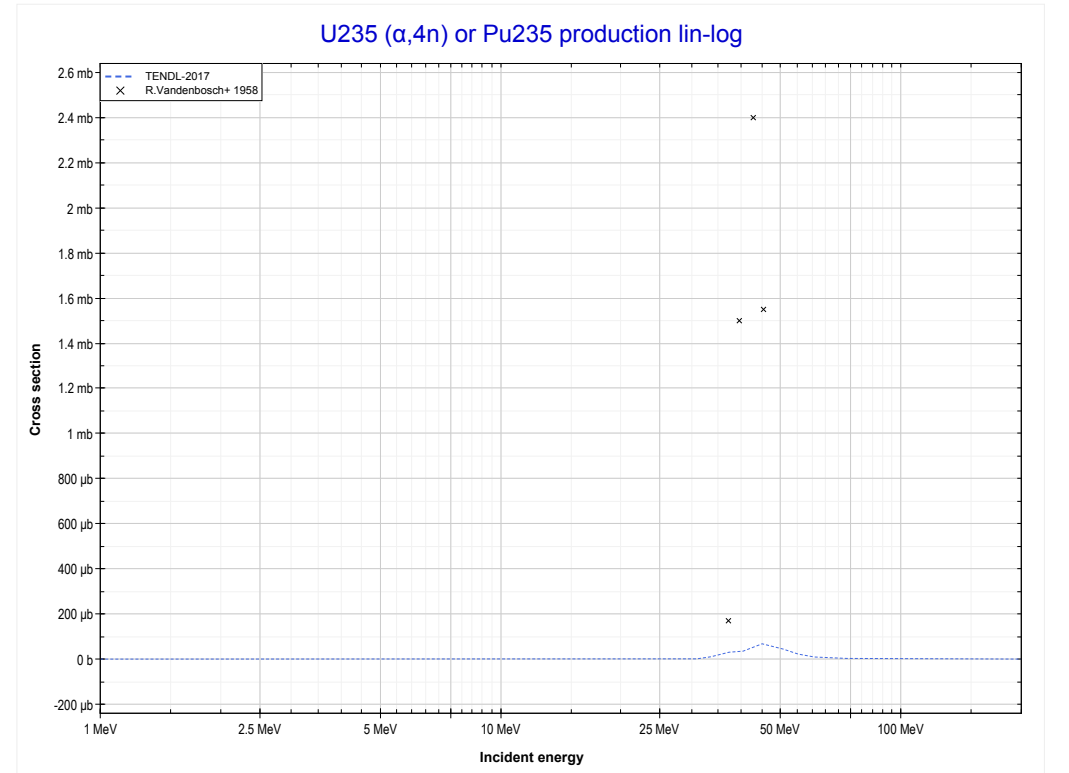
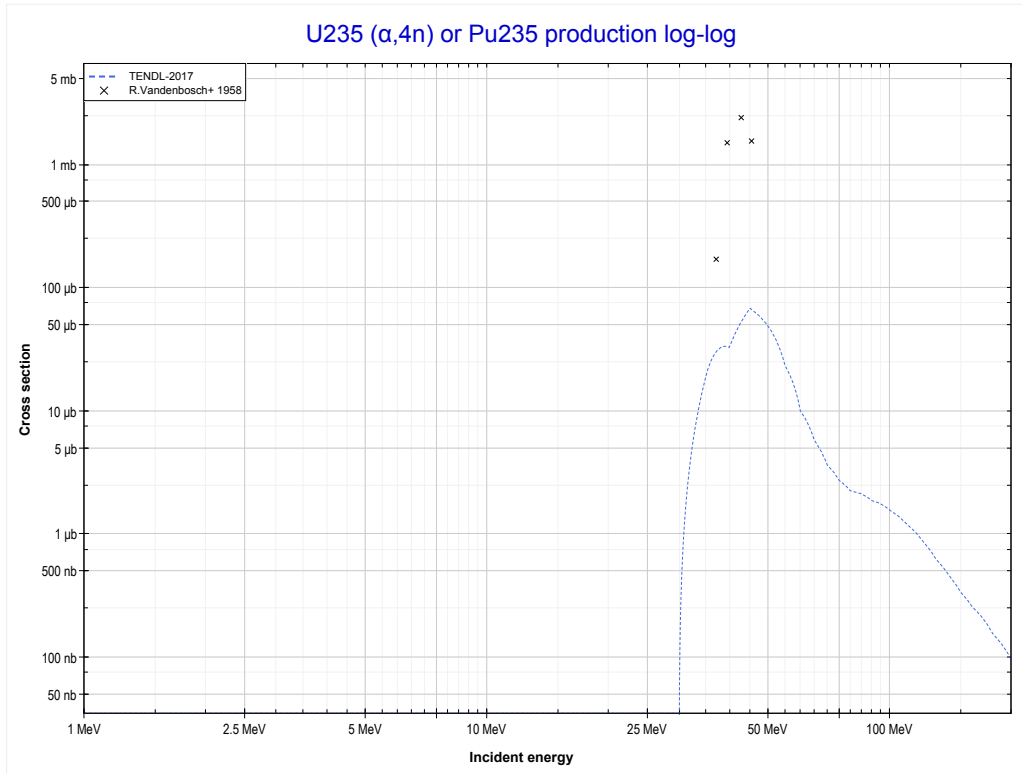


Reaction	Q-Value
U235($\alpha,3n$)Pu236	-23771.24 keV

<< 92-U-234	92-U-235	92-U-238 >>
<< MT17 ($\alpha,3n$)	MT18 (α,fission)	MT37 ($\alpha,4n$) >>

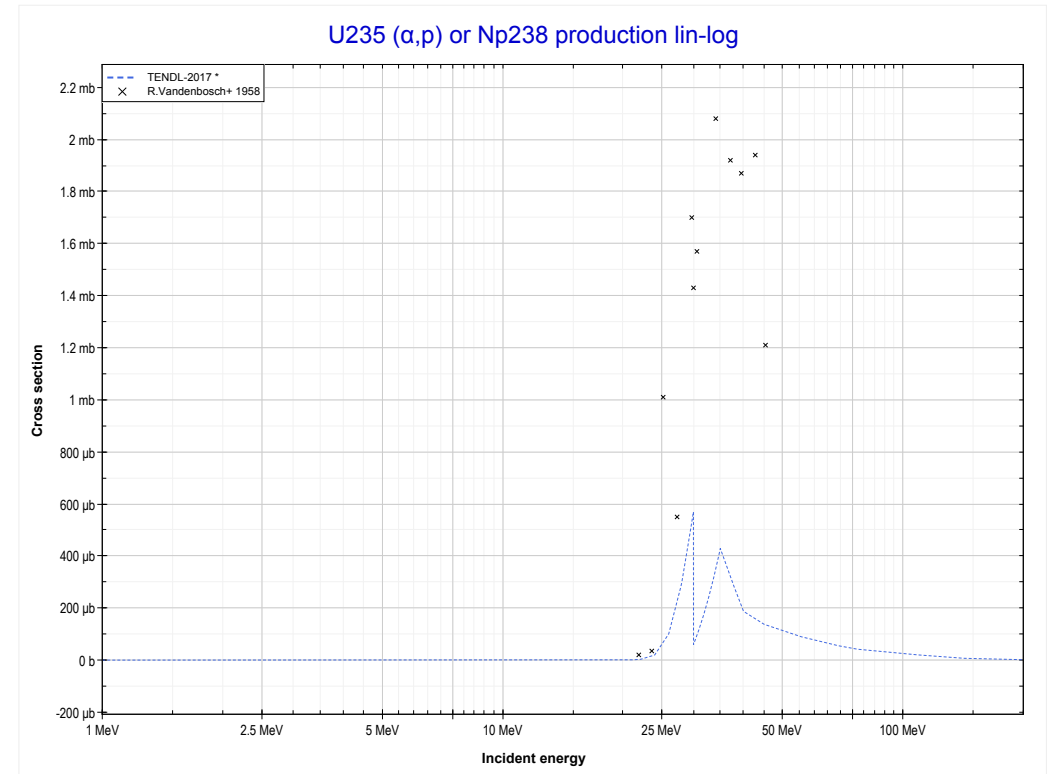
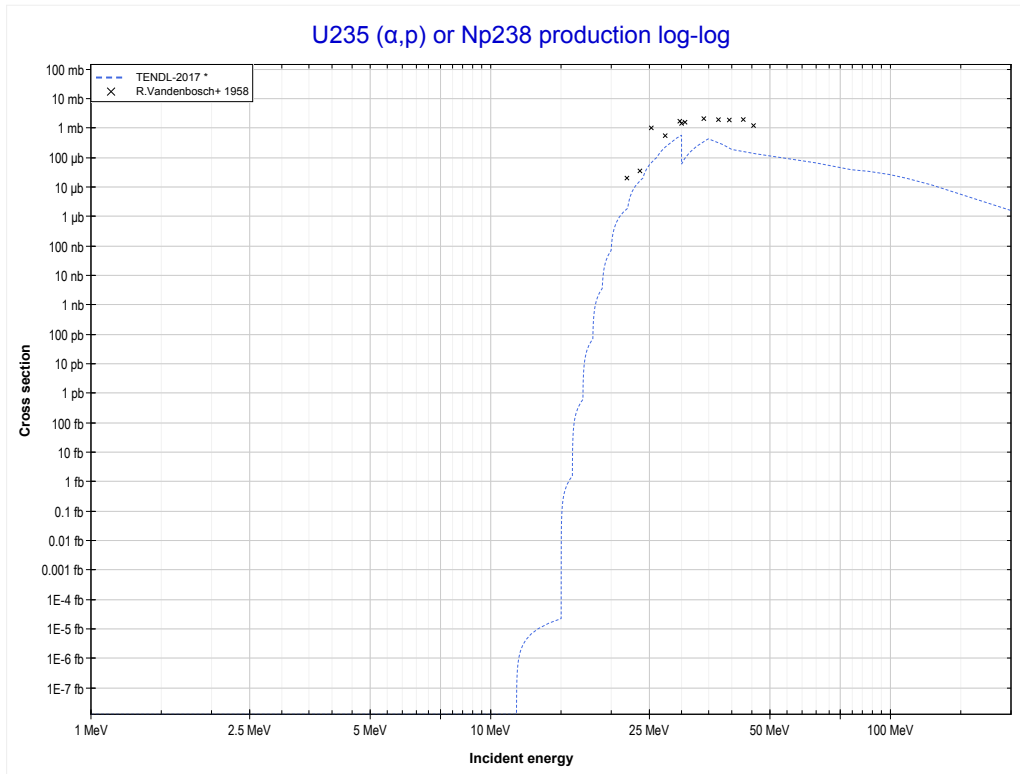


<< 83-Bi-209	92-U-235	92-U-238 >>
<< MT18 (α ,fission)	MT37 (α,4n) or MT5 (Pu235 production)	MT103 (α ,p) >>



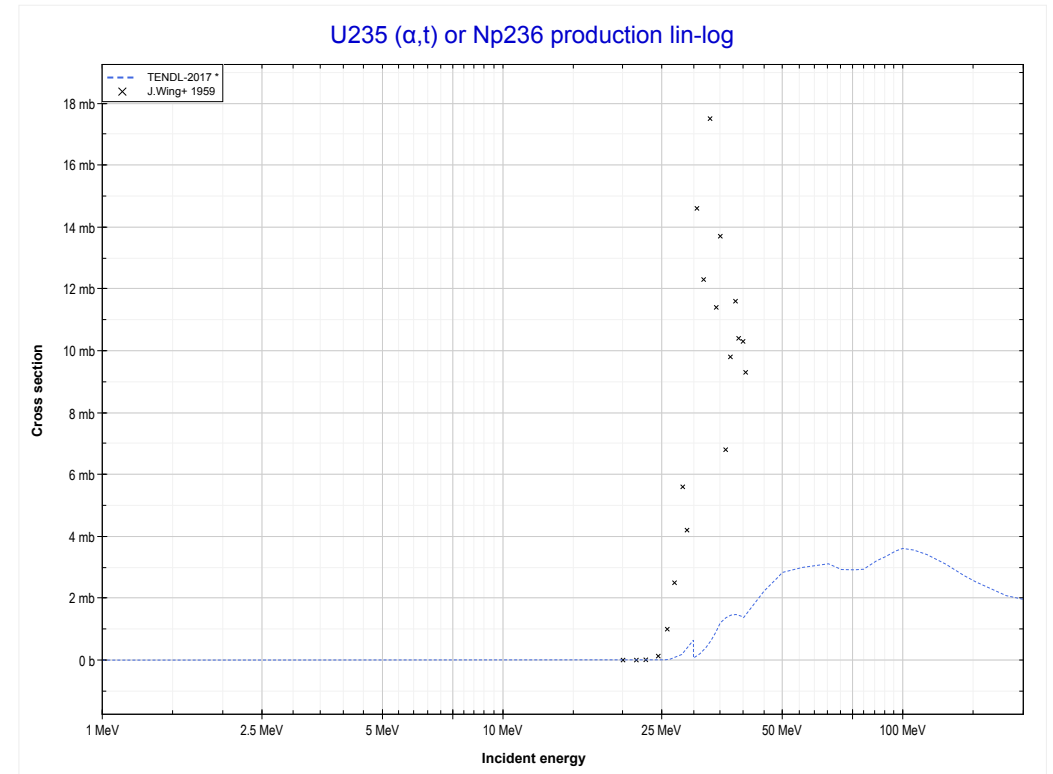
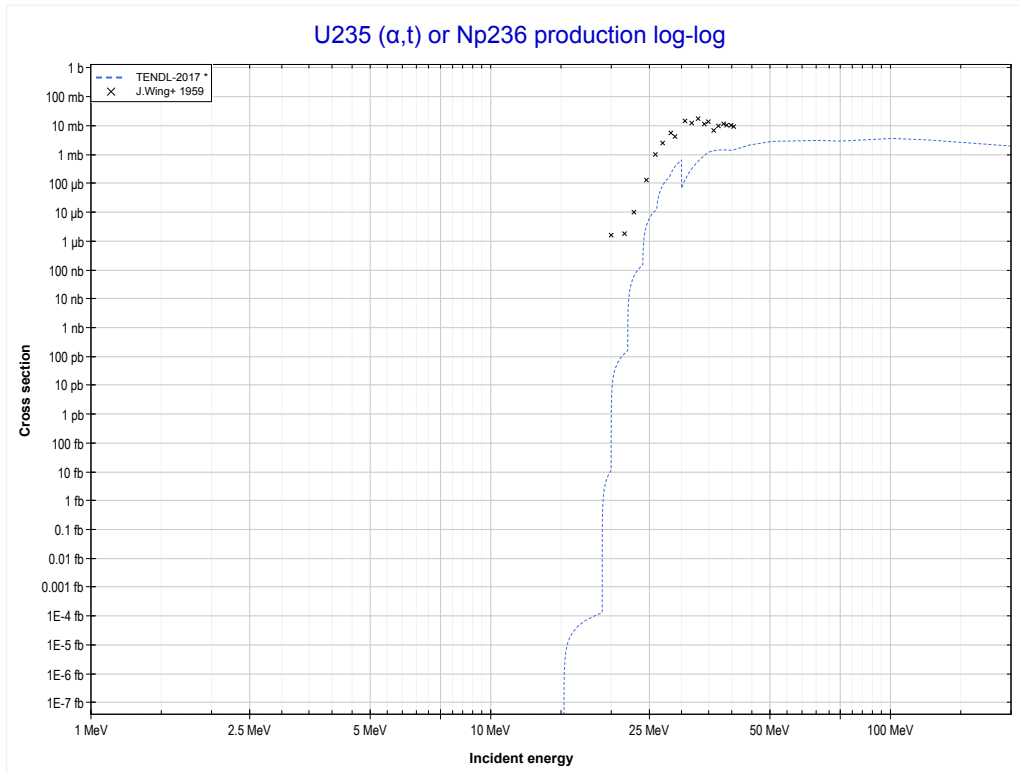
Reaction	Q-Value
U235(α ,4n)Pu235	-31123.65 keV

<< 92-U-233	92-U-235	
<< MT37 ($\alpha,4n$)	MT103 (α,p) or MT5 (Np238 production)	MT105 (α,t) >>



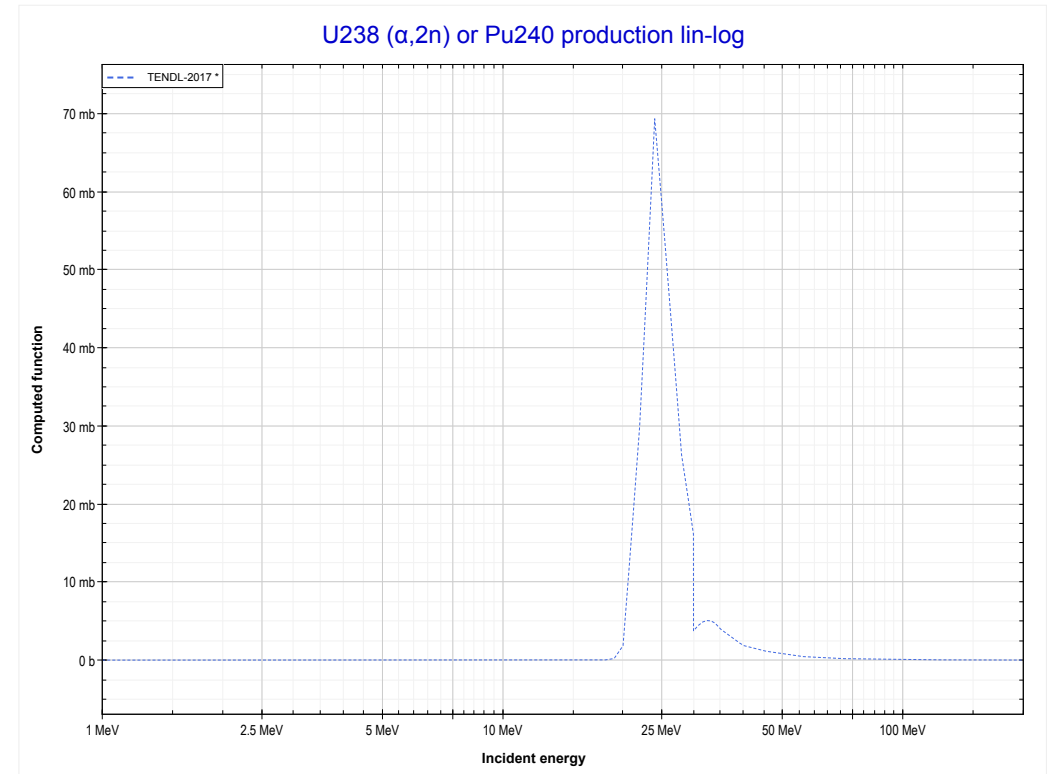
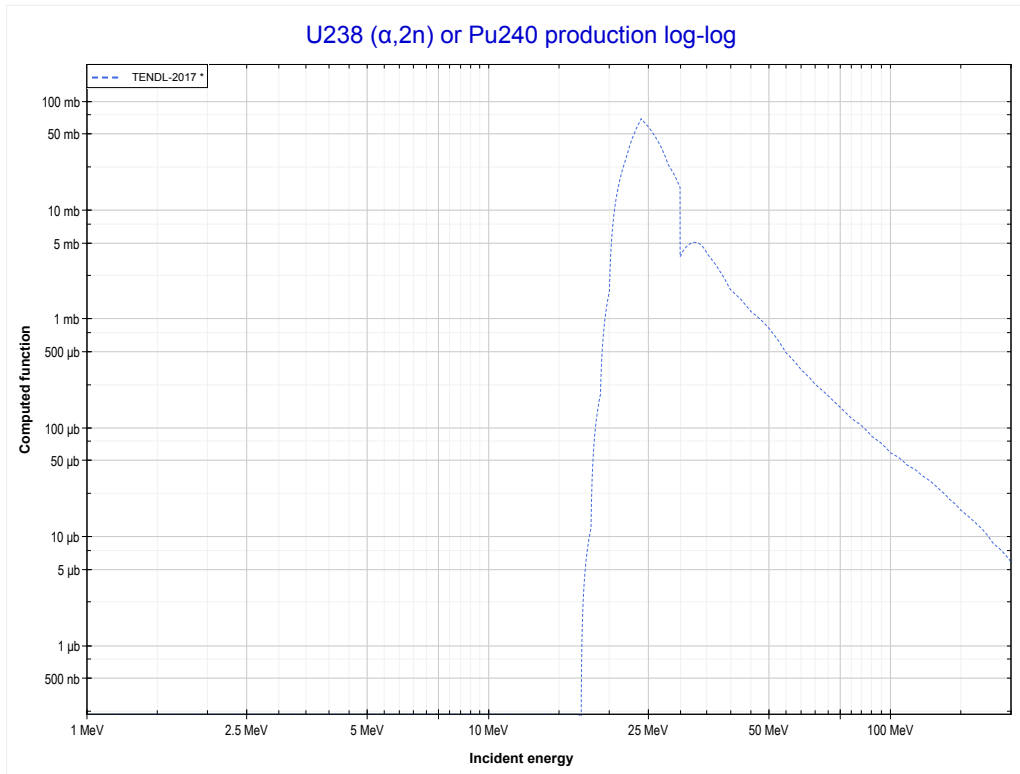
Reaction	Q-Value
U235(α,p)Np238	-11399.85 keV

	92-U-235	
<< MT103 (α,p)	MT105 (α,t) or MT5 (Np236 production)	92-U-238 MT16 ($\alpha,2n$) >>



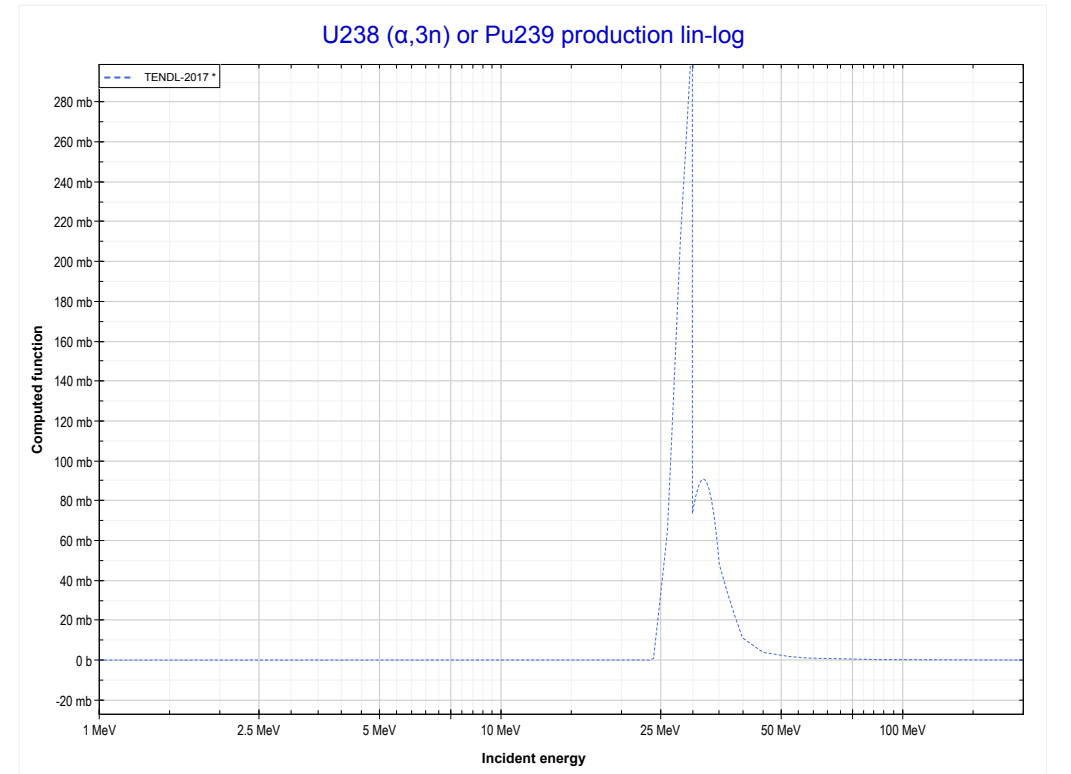
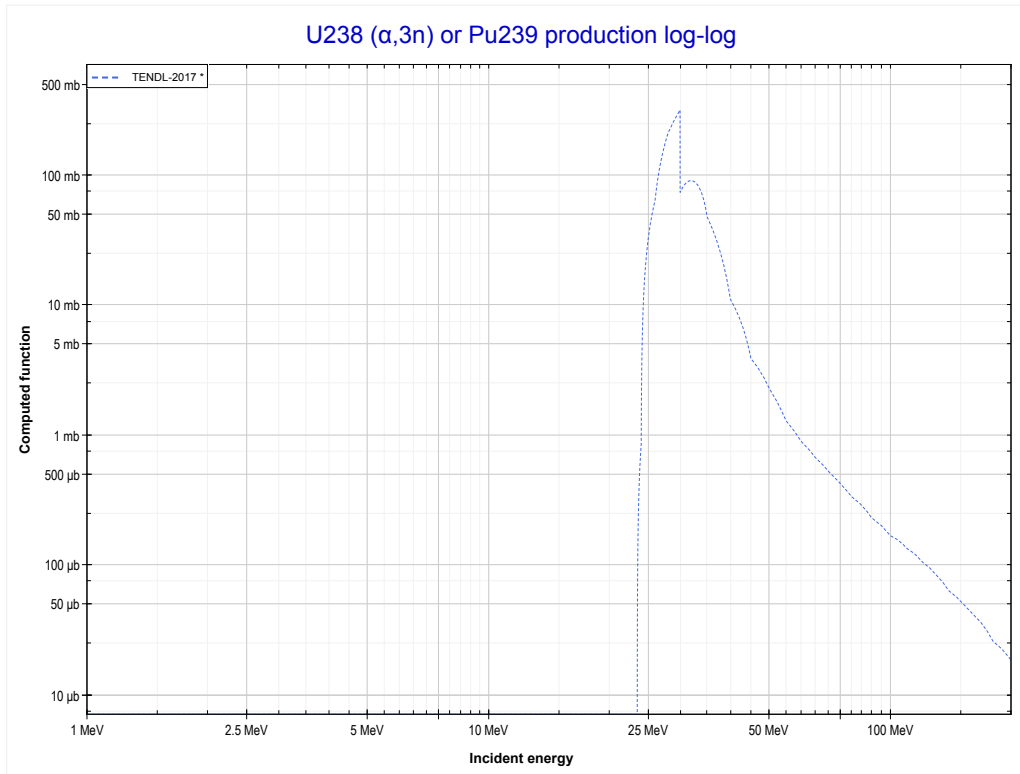
Reaction	Q-Value
U235(α,t)Np236	-14984.19 keV
U235($\alpha,n+d$)Np236	-21241.42 keV
U235($\alpha,2n+p$)Np236	-23465.99 keV

<< 92-U-235	92-U-238	93-Np-237 >>
<< 92-U-235 MT105 (α,t)	MT16 ($\alpha,2n$) or MT5 (Pu240 production)	MT17 ($\alpha,3n$) >>



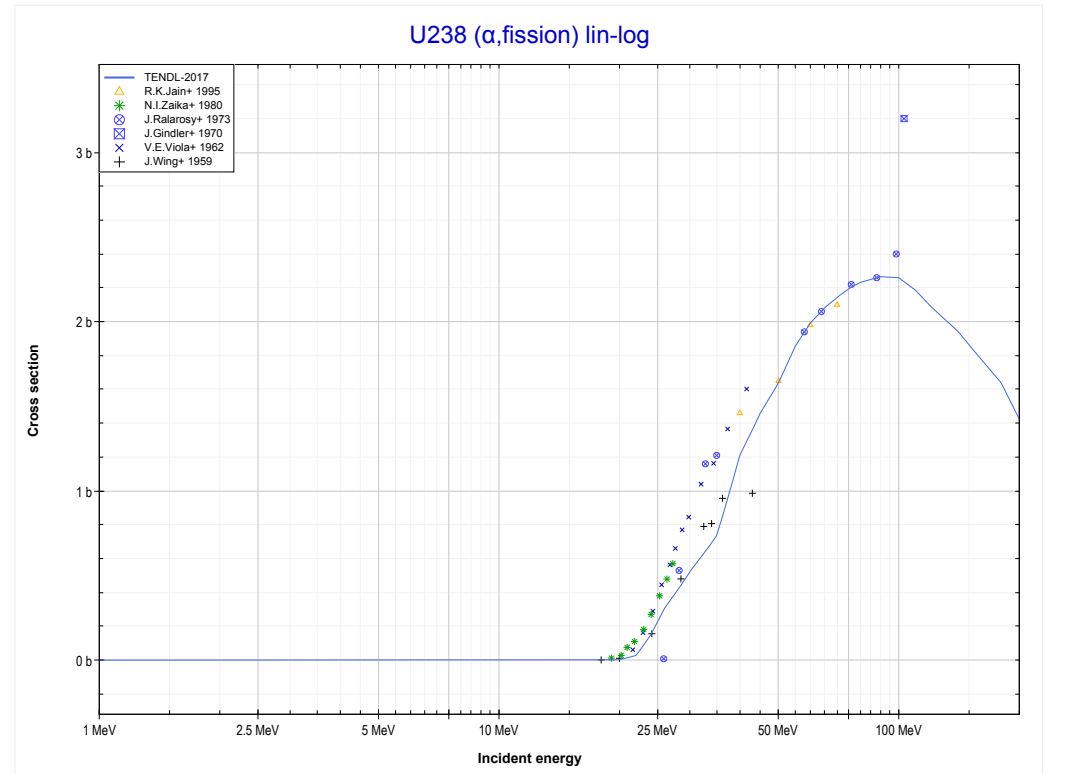
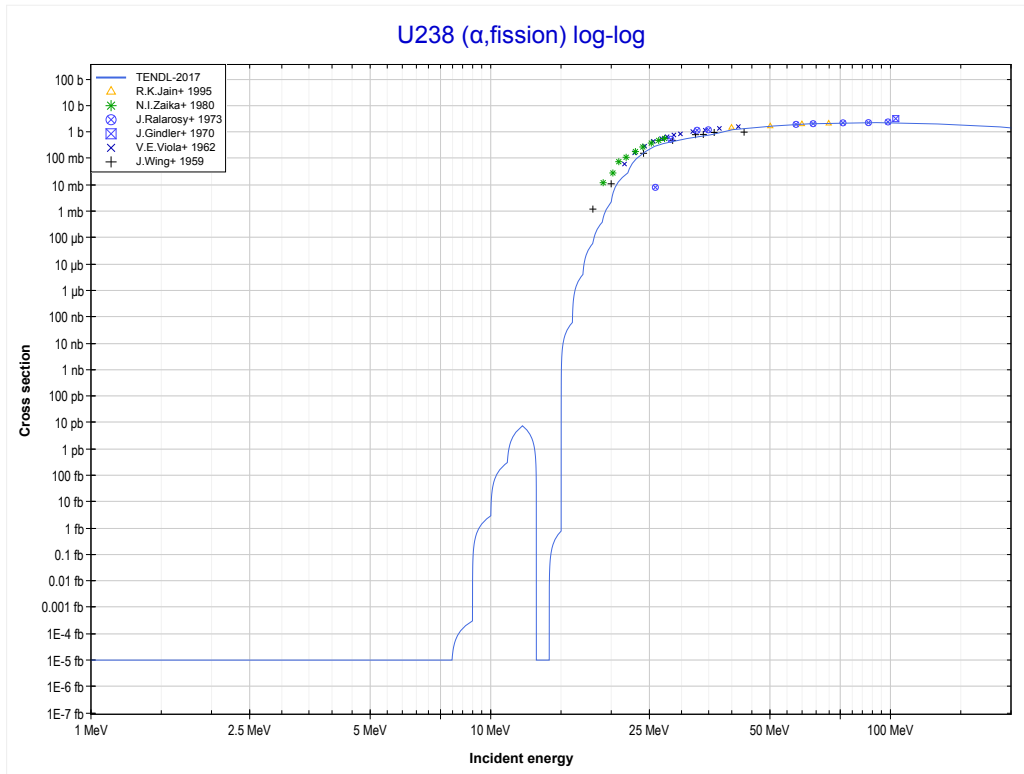
Reaction	Q-Value
U238($\alpha,2n$)Pu240	-16535.82 keV

<< 92-U-235	92-U-238	93-Np-237 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Pu239 production)	MT18 (α ,fission) >>

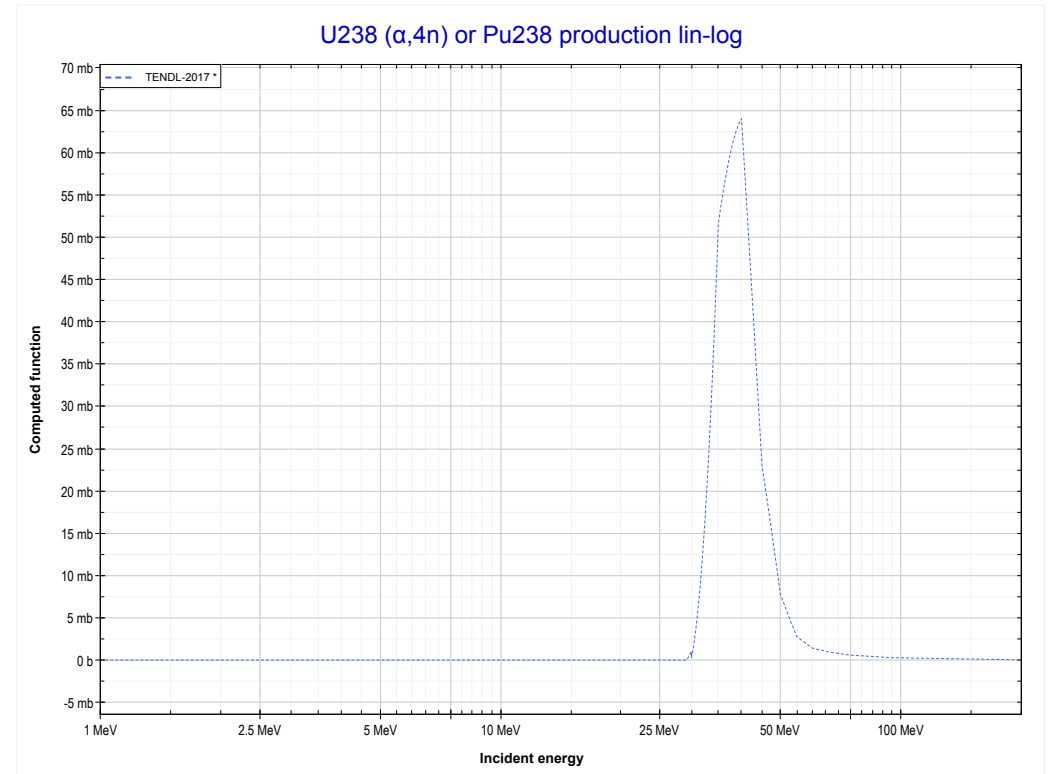
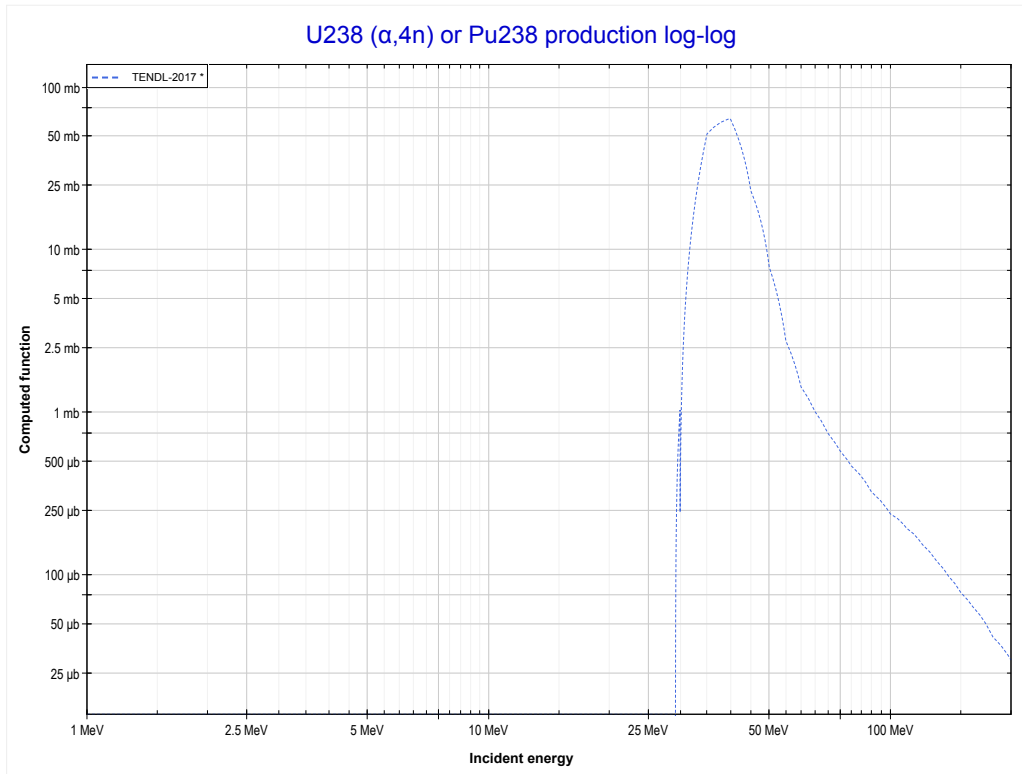


Reaction	Q-Value
U238($\alpha,3n$)Pu239	-23070.04 keV

<< 92-U-235	92-U-238	93-Np-237 >>
<< MT17 ($\alpha,3n$)	MT18 (α,fission)	MT37 ($\alpha,4n$) >>

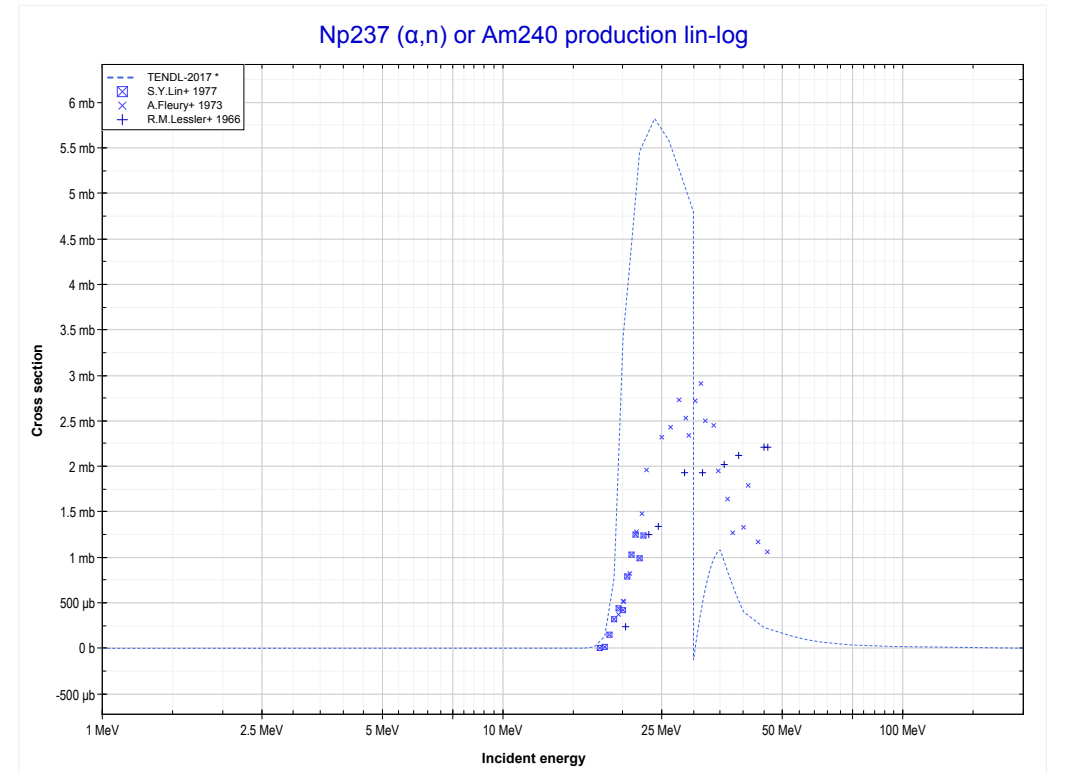
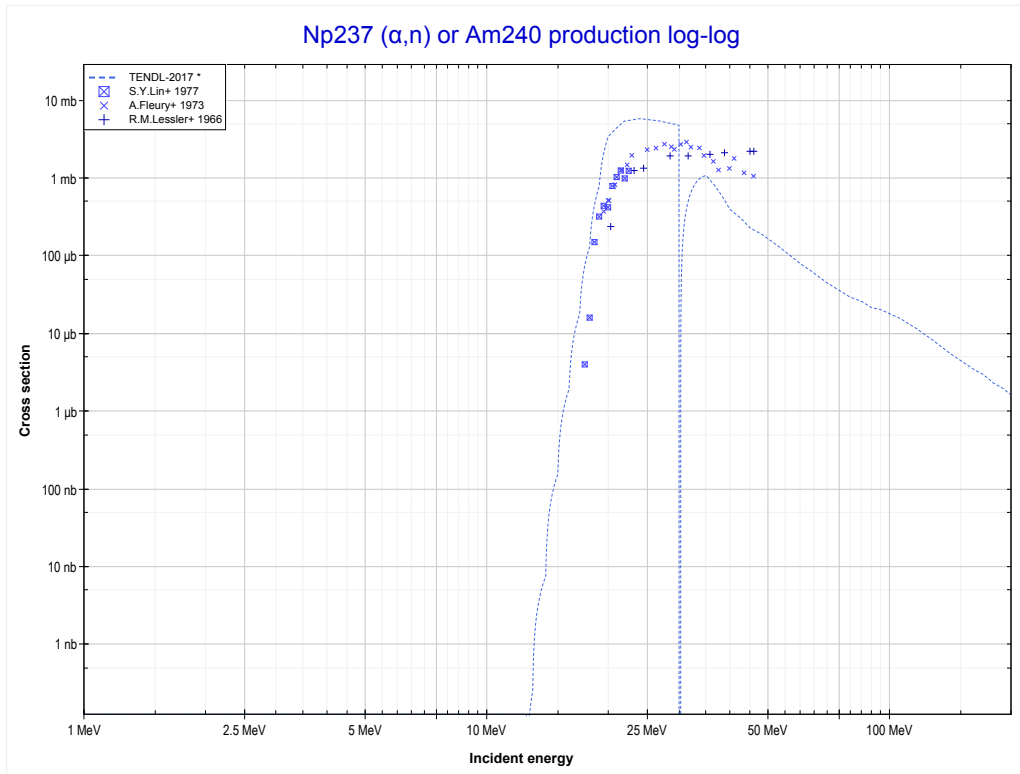


<< 92-U-235	92-U-238	
<< MT18 (α ,fission)	MT37 (α,4n) or MT5 (Pu238 production)	93-Np-237 MT4 (α ,n) >>



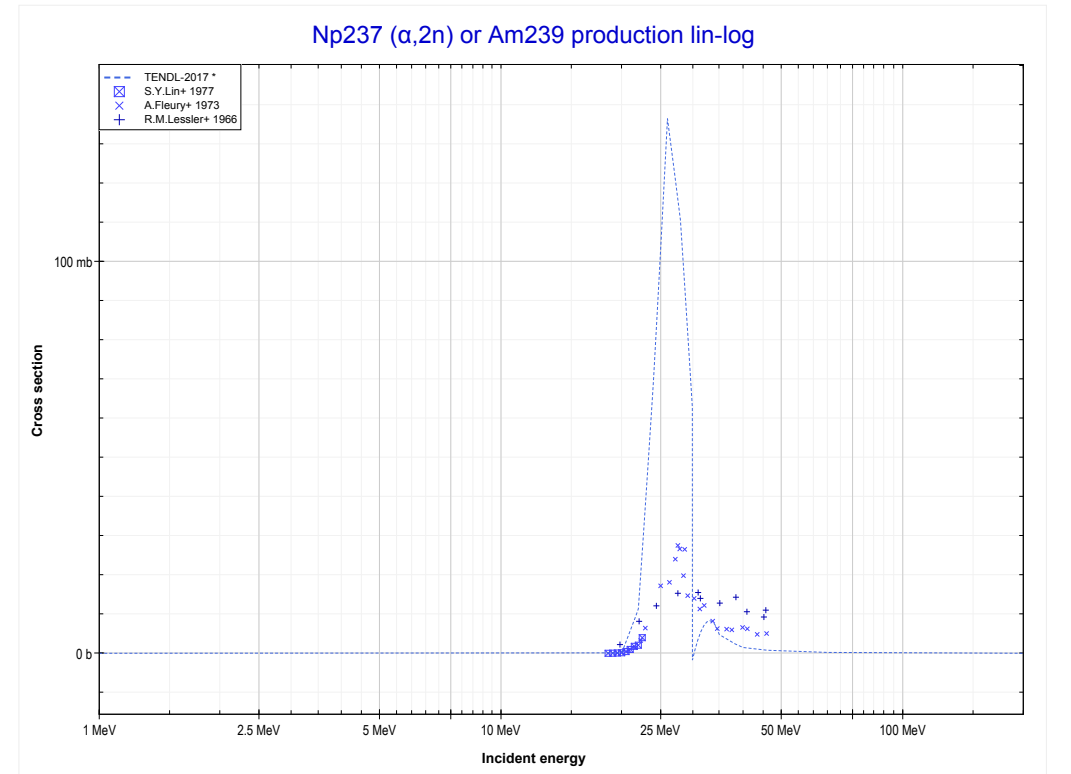
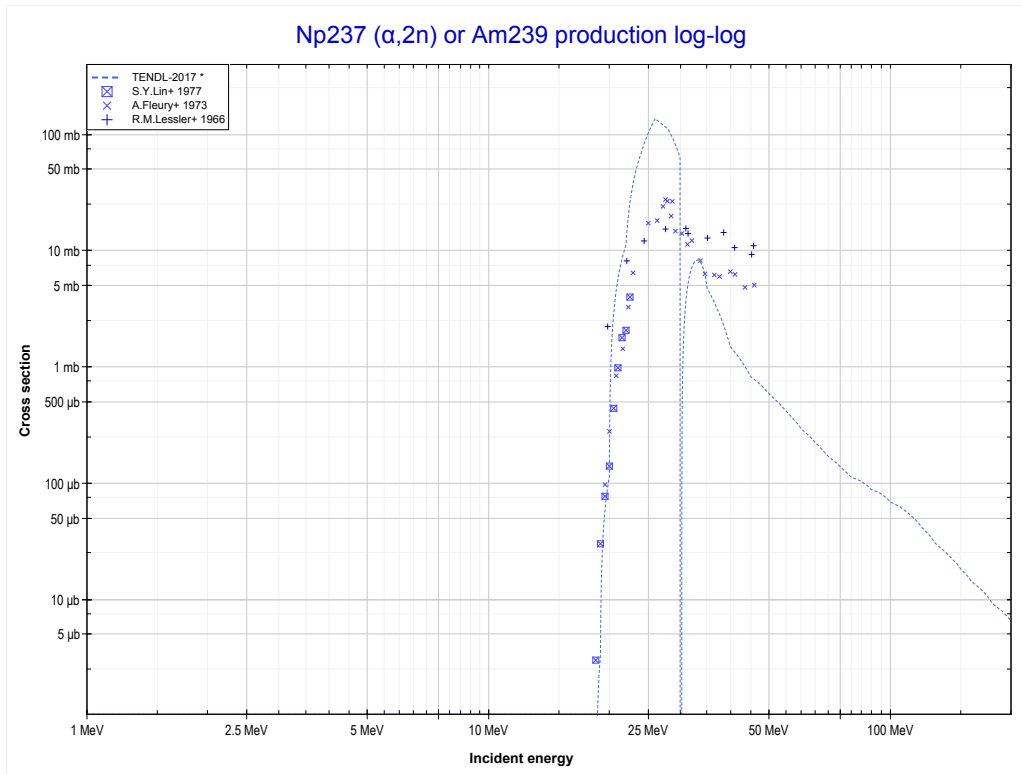
Reaction	Q-Value
U238(α ,4n)Pu238	-28716.15 keV

<< 92-U-235	93-Np-237	94-Pu-238 >>
<< 92-U-238 MT37 ($\alpha,4n$)	MT4 (α,n) or MT5 (Am240 production)	MT16 ($\alpha,2n$) >>



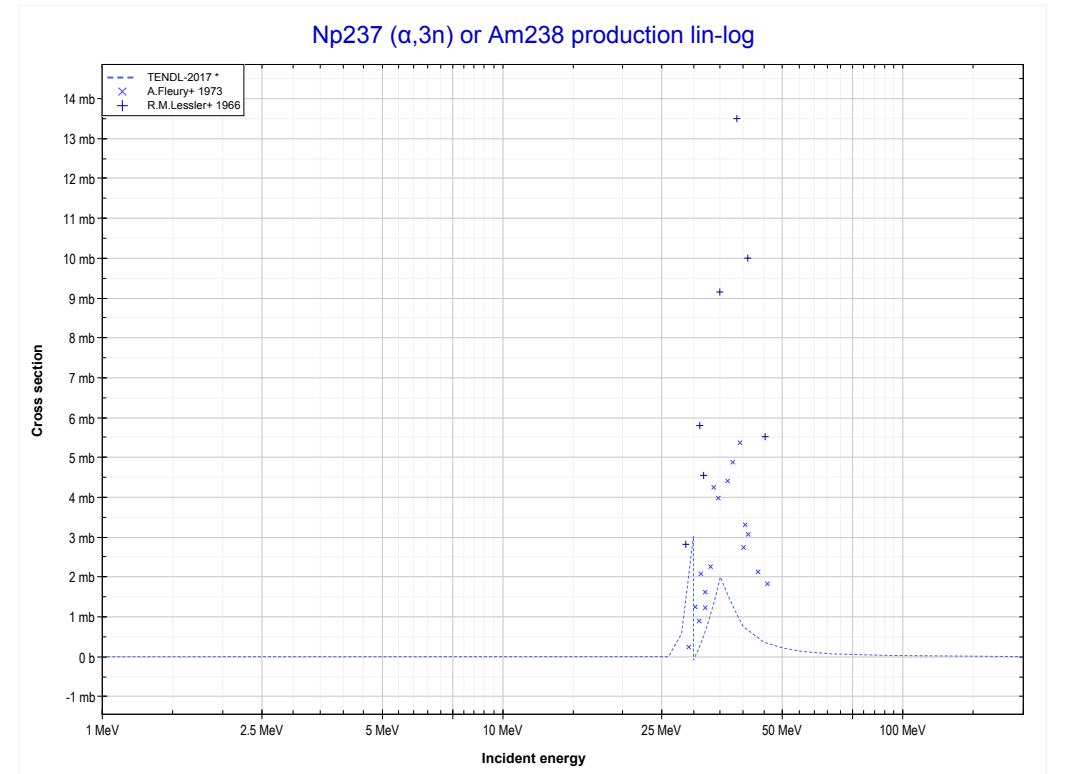
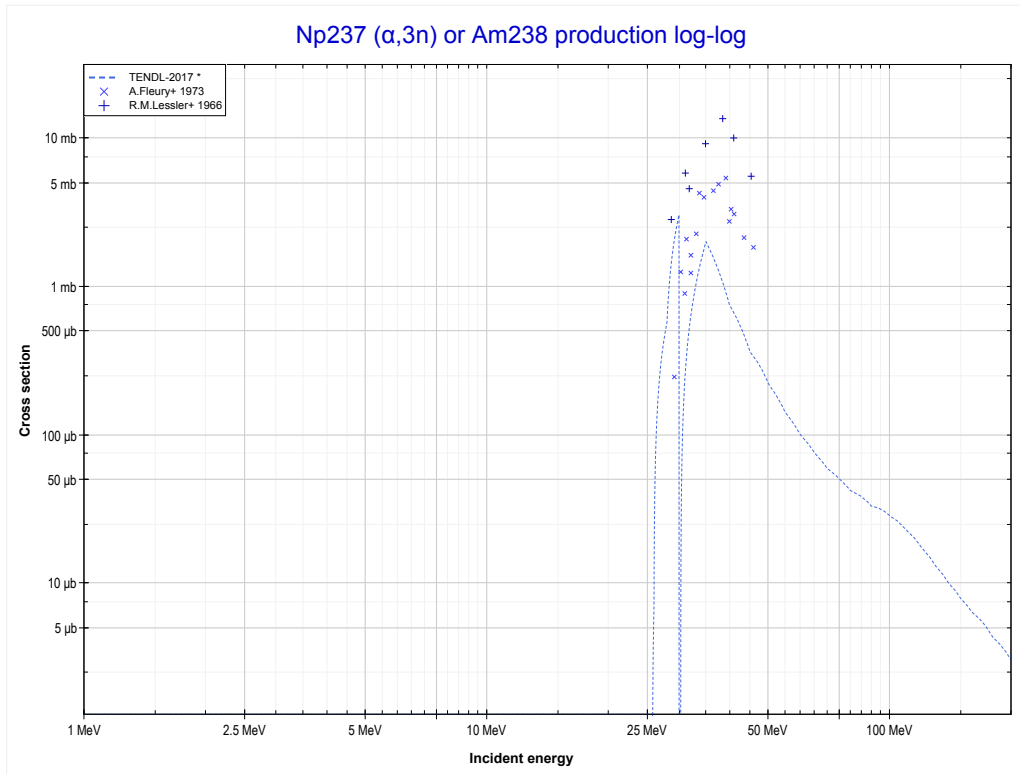
Reaction	Q-Value
Np237(α,n)Am240	-12284.90 keV

<< 92-U-238	93-Np-237	94-Pu-238 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Am239 production)	MT17 ($\alpha, 3n$) >>



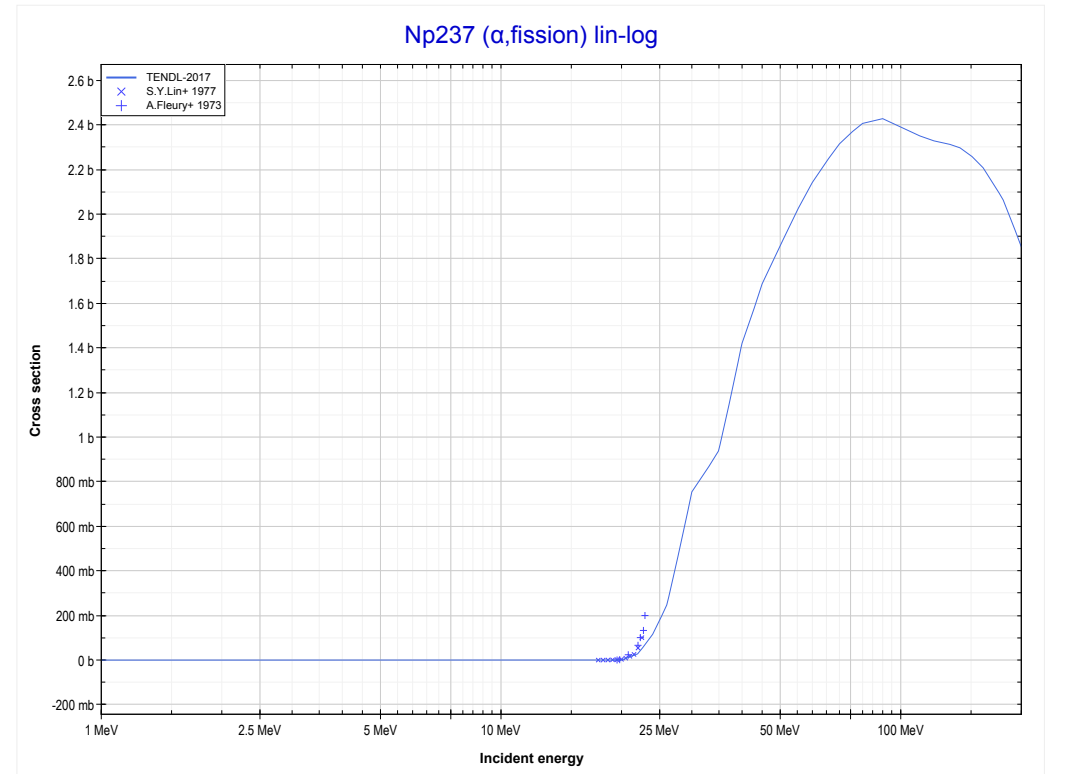
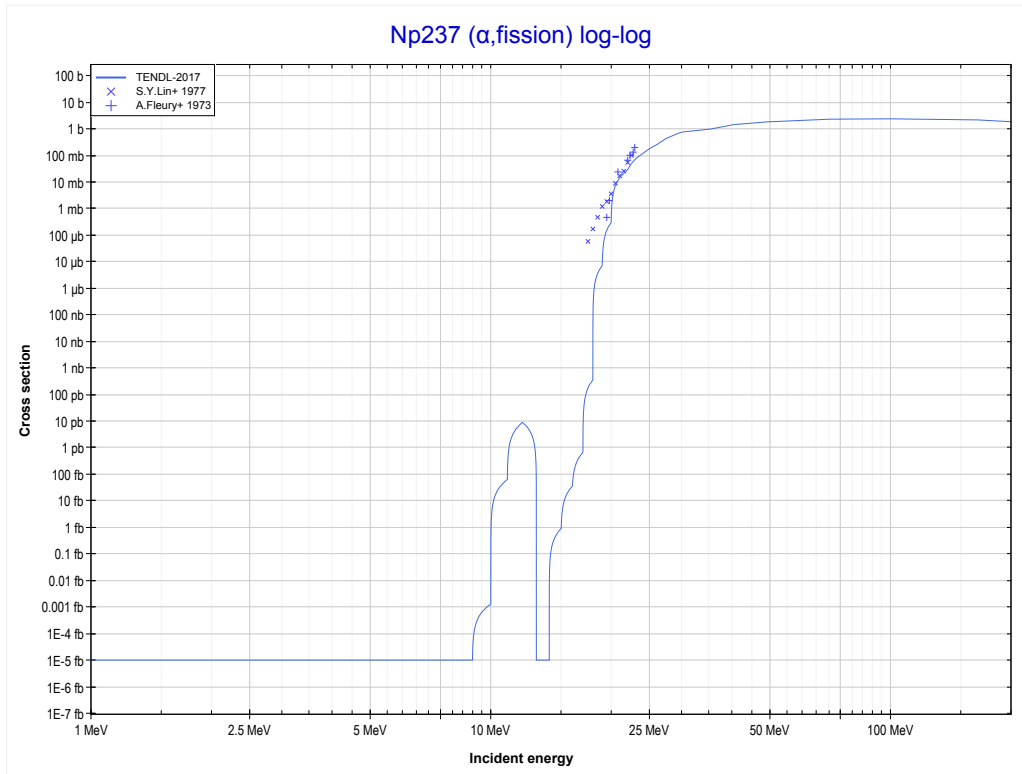
Reaction	Q-Value
Np237($\alpha, 2n$)Am239	-18236.42 keV

<< 92-U-238	93-Np-237	98-Cf-252 >>
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Am238 production)	MT18 (α ,fission) >>

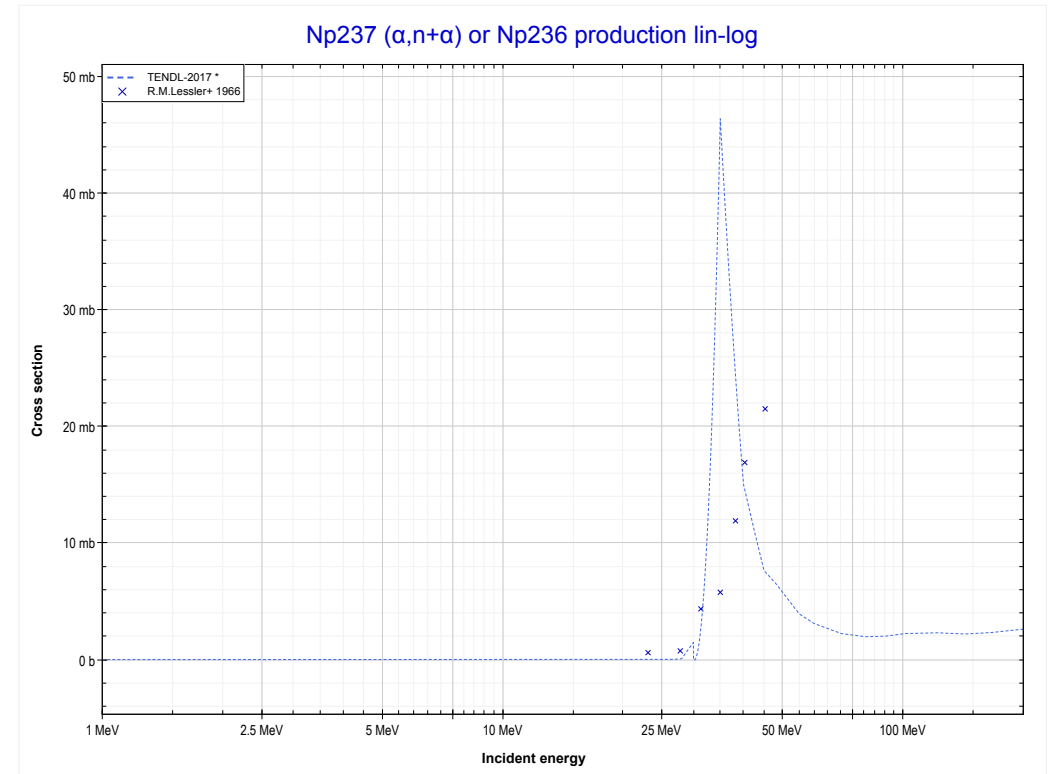
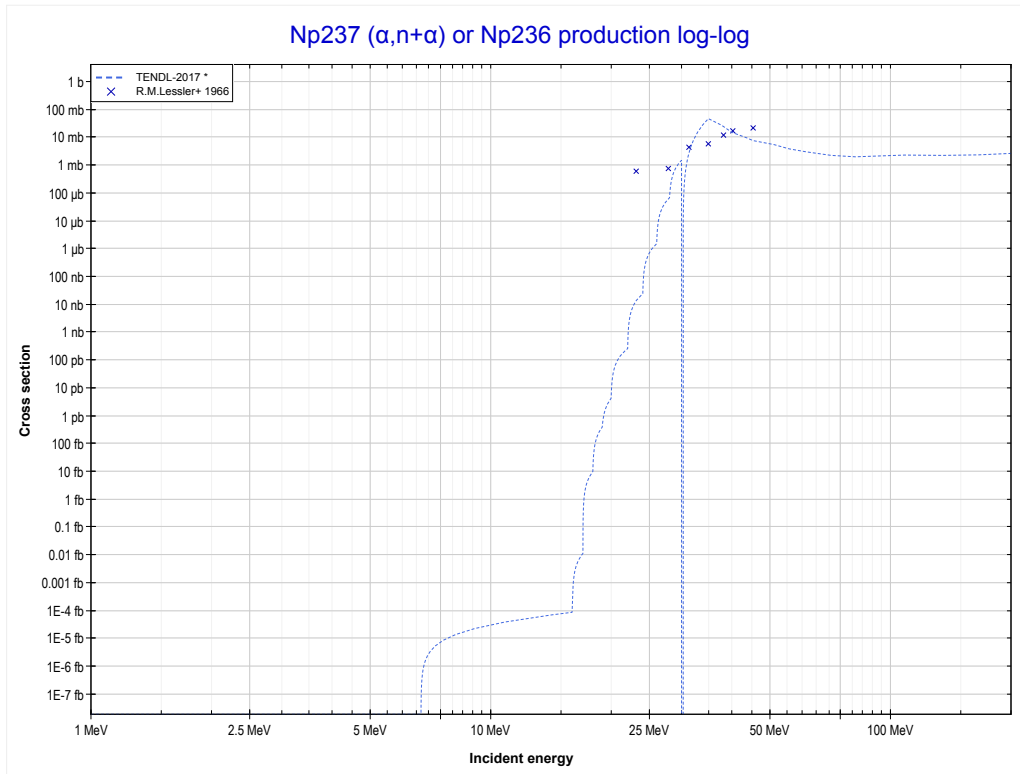


Reaction	Q-Value
Np237($\alpha,3n$)Am238	-25335.54 keV

<< 92-U-238	93-Np-237	94-Pu-239 >>
<< MT17 ($\alpha,3n$)	MT18 (α,fission)	MT22 ($\alpha,n+\alpha$) >>

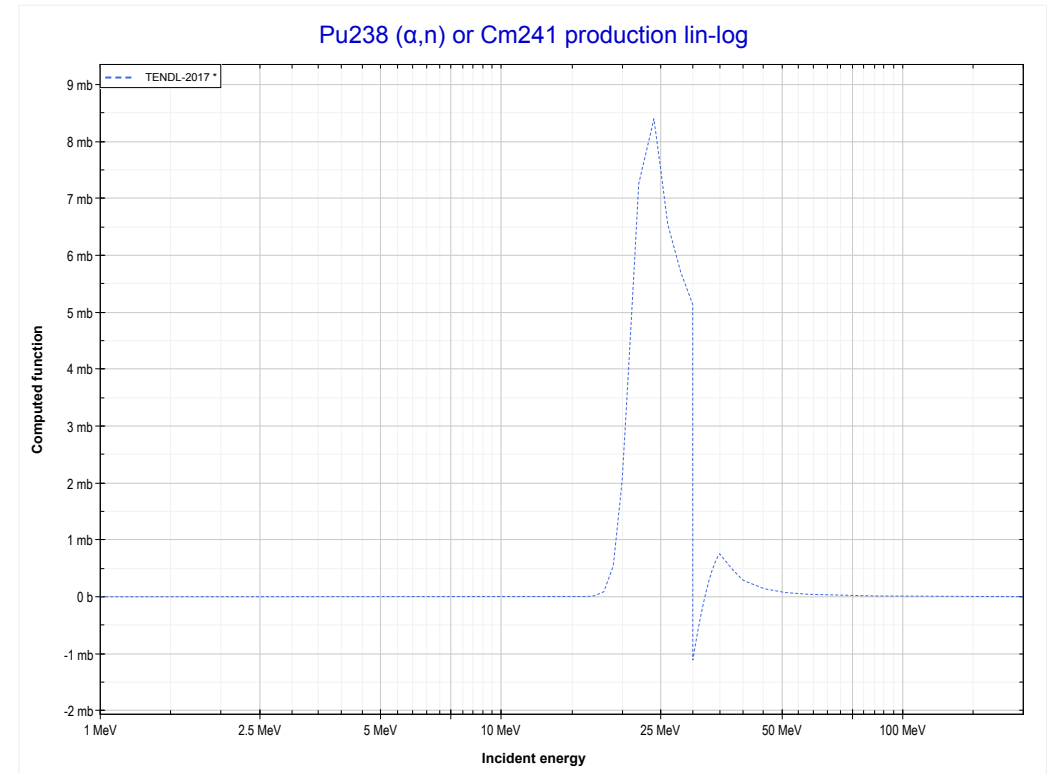
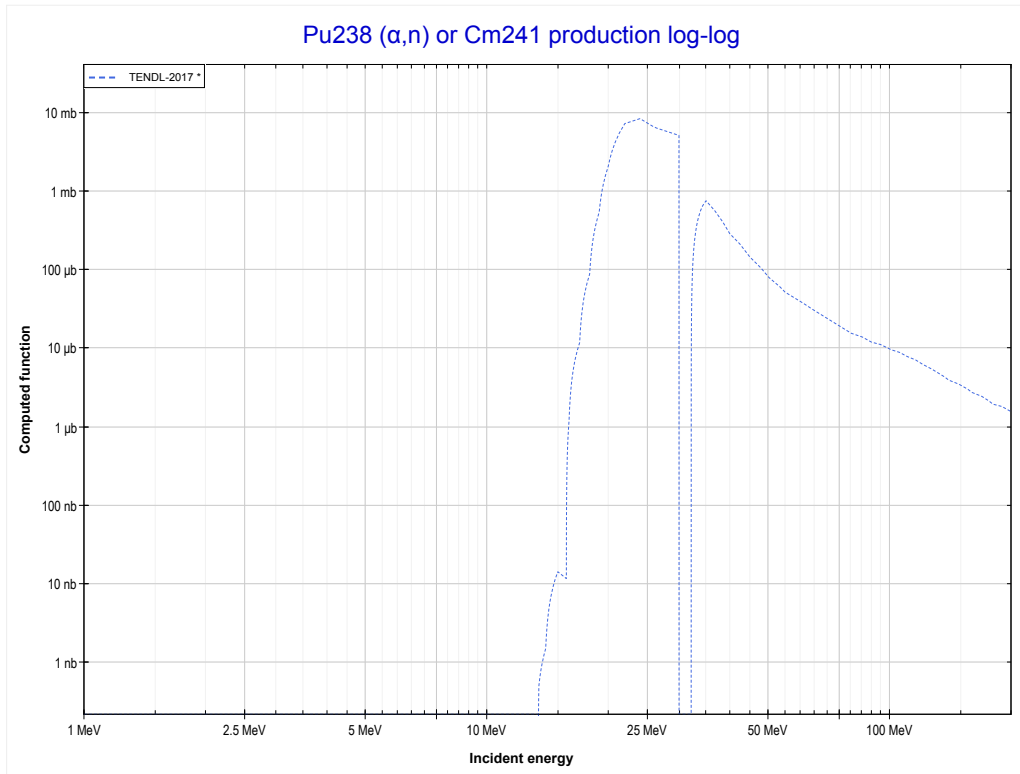


<< 79-Au-197	93-Np-237	
<< MT18 (α ,fission)	MT22 (α,n+α) or MT5 (Np236 production)	94-Pu-238 MT4 (α ,n) >>



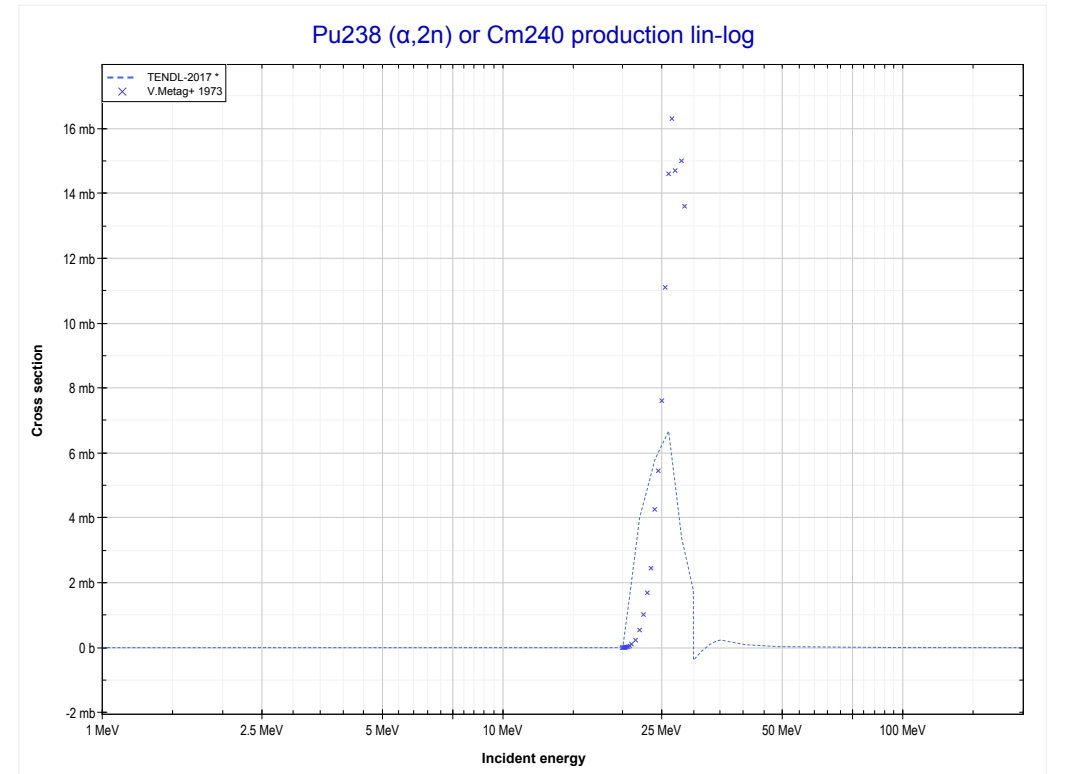
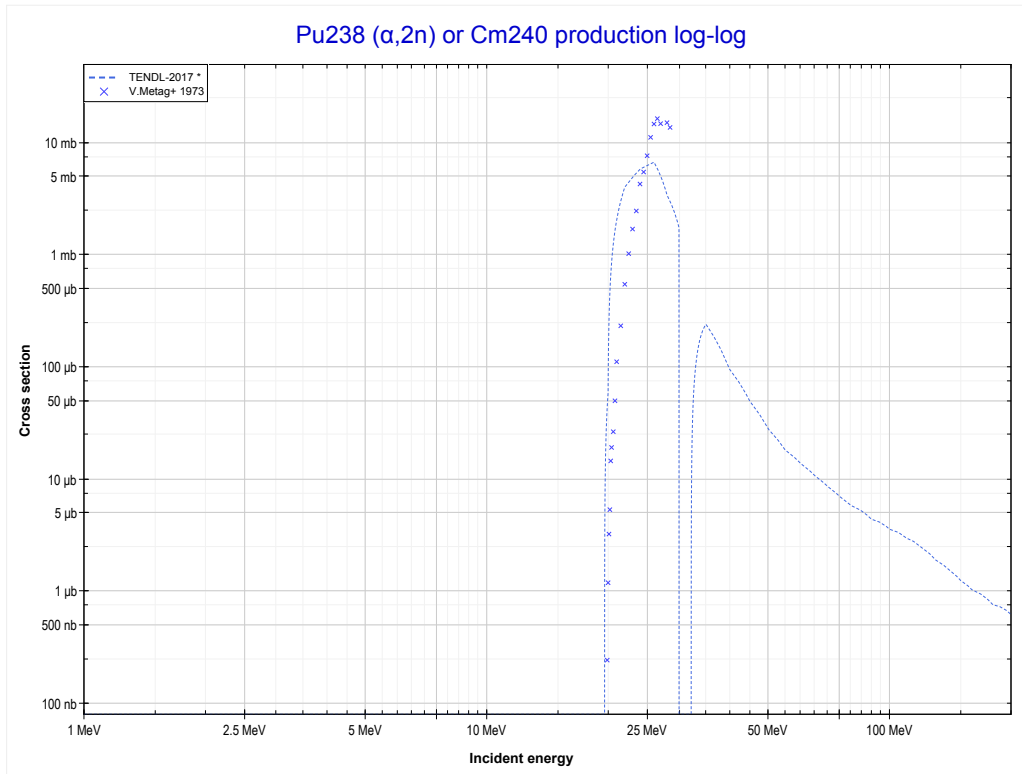
Reaction	Q-Value
Np237(α ,n+ α)Np236	-6577.82 keV
Np237(α ,d+t)Np236	-24167.11 keV
Np237(α ,n+p+t)Np236	-26391.68 keV
Np237(α ,2n+He3)Np236	-27155.43 keV
Np237(α ,n+2d)Np236	-30424.34 keV
Np237(α ,2n+p+d)Np236	-32648.91 keV
Np237(α ,3n+2p)Np236	-34873.48 keV

<< 93-Np-237	94-Pu-238	
<< 93-Np-237 MT22 ($\alpha, n + \alpha$)	MT4 (α, n) or MT5 (Cm241 production)	MT16 ($\alpha, 2n$) >>



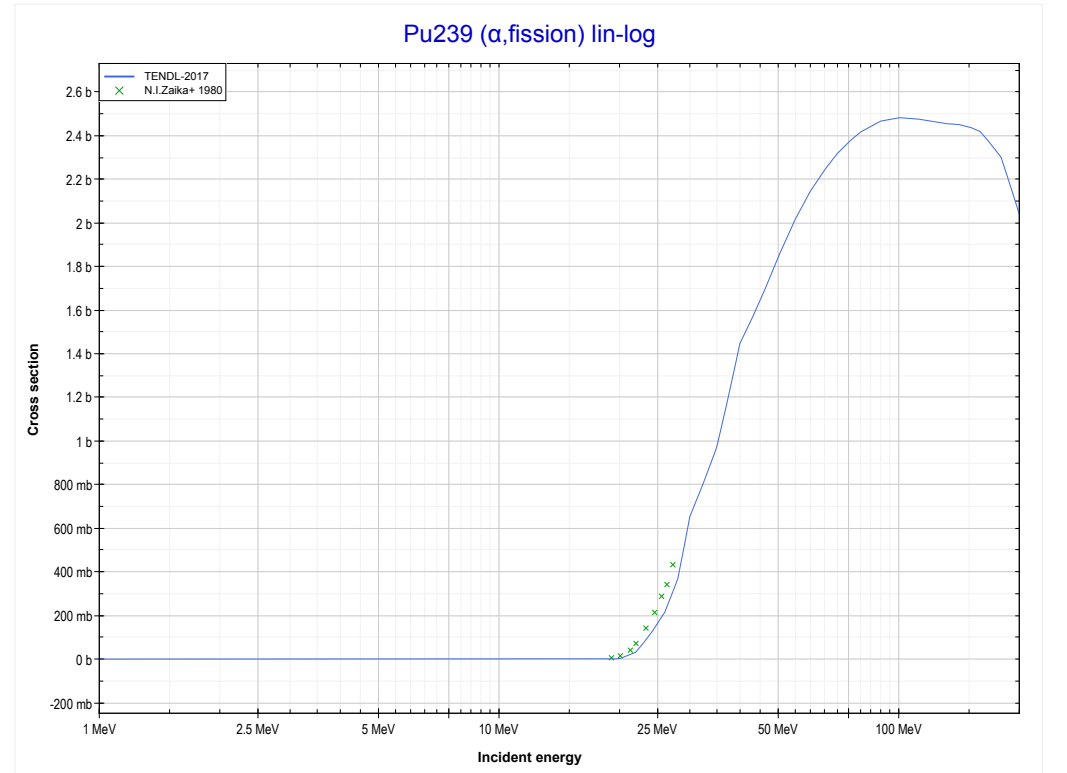
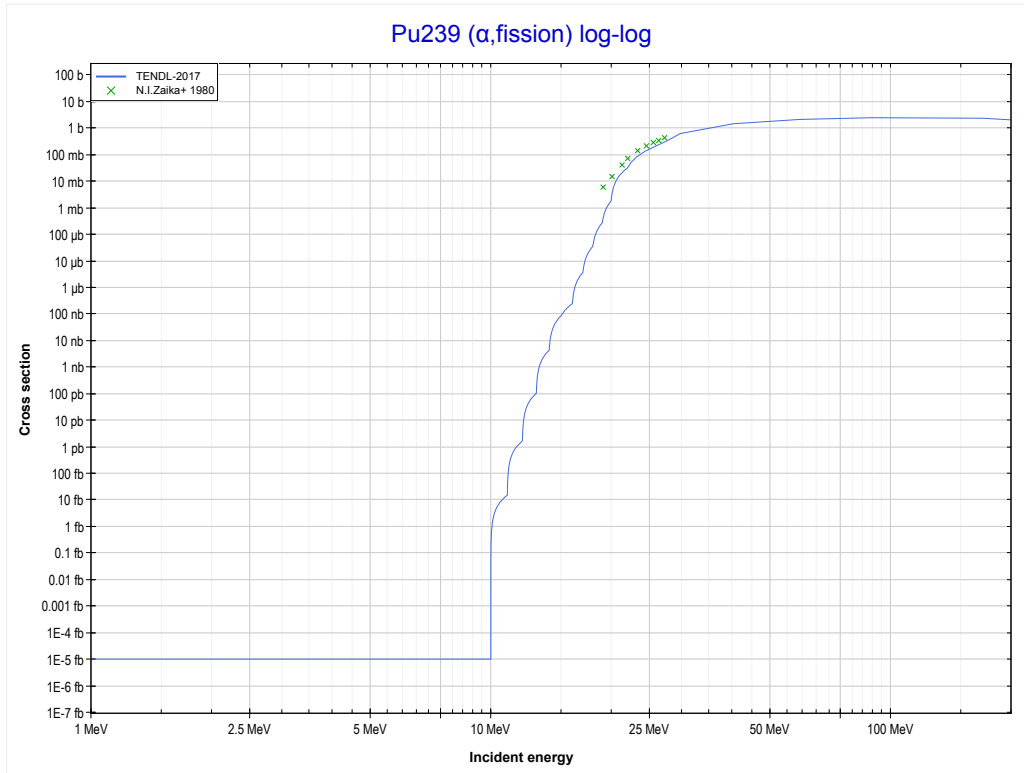
Reaction	Q-Value
Pu238(α, n)Cm241	-13185.10 keV

<< 93-Np-237	94-Pu-238	98-Cf-252 >>
<< MT4 (α, n)	MT16 ($\alpha, 2n$) or MT5 (Cm240 production)	94-Pu-239 MT18 ($\alpha, fission$) >>

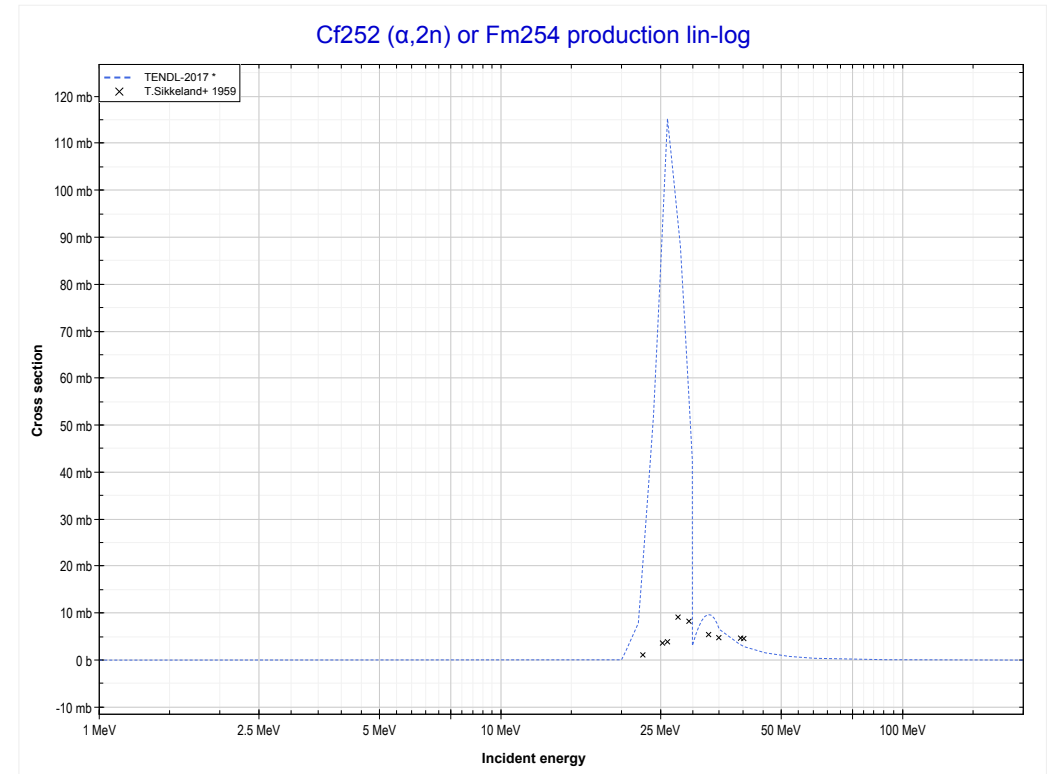
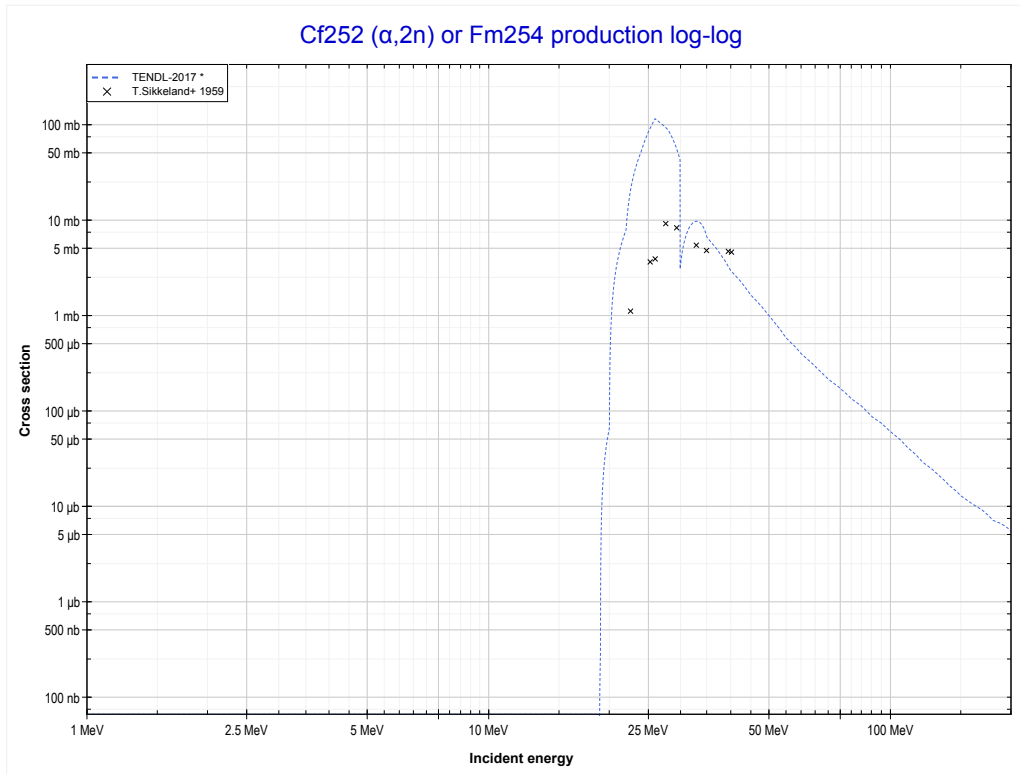


Reaction	Q-Value
Pu238($\alpha, 2n$)Cm240	-19278.42 keV

<< 93-Np-237	94-Pu-239	
<< 94-Pu-238 MT16 ($\alpha,2n$)	MT18 (α,fission)	98-Cf-252 MT16 ($\alpha,2n$) >>

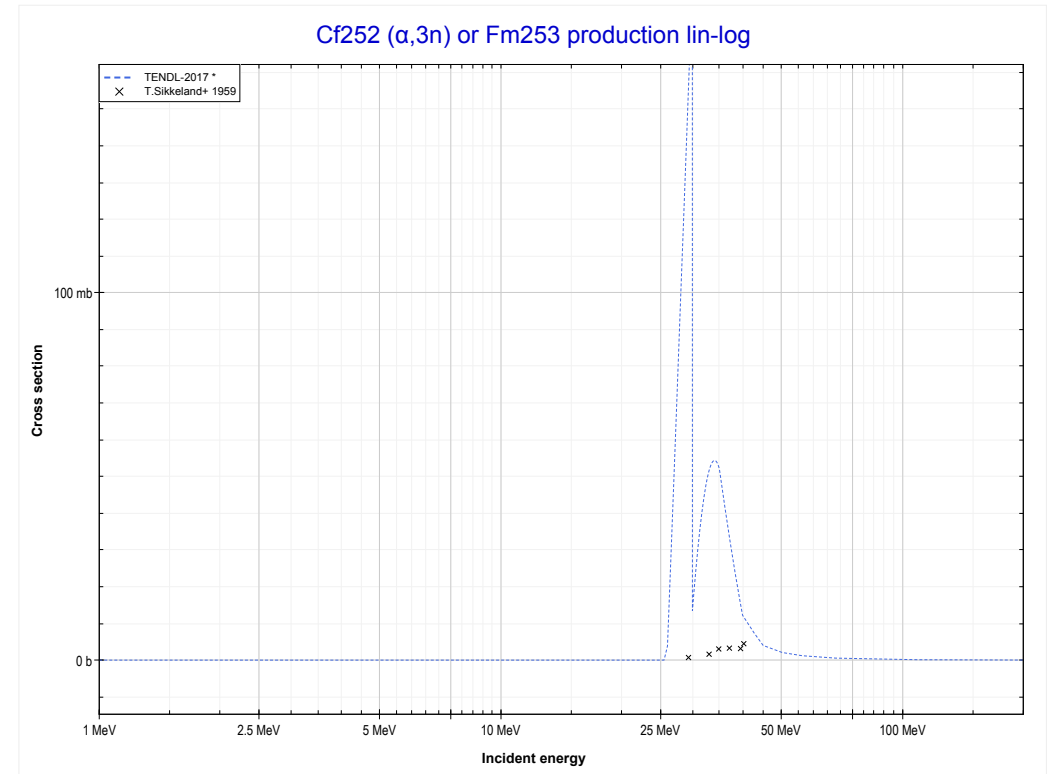
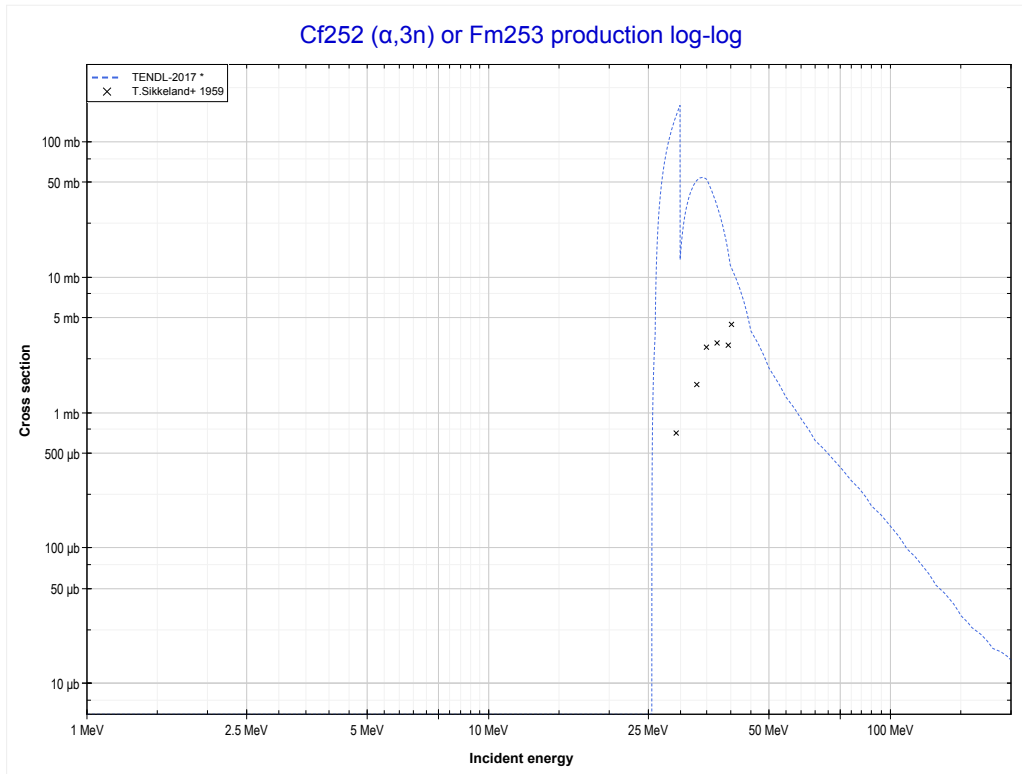


<< 94-Pu-238	98-Cf-252	
<< 94-Pu-239 MT18 (α ,fission)	MT16 (α,2n) or MT5 (Fm254 production)	MT17 (α,3n) >>



Reaction	Q-Value
Cf252(α ,2n)Fm254	-18587.12 keV

<< 93-Np-237	98-Cf-252	
<< MT16 ($\alpha,2n$)	MT17 ($\alpha,3n$) or MT5 (Fm253 production)	



Reaction	Q-Value
Cf252($\alpha,3n$)Fm253	-25103.04 keV