JANIS Book

of helion-induced cross-sections

Comparison of evaluated and experimental data from

ENDF/B-VIII.0, TENDL-2019 and EXFOR

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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 NUBASE2016 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, 41* (3), 030001, 2017.

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

Library	Release date
ENDF/B-VIII.0	February 2018
TENDL-2019	December 2019
EXFOR	September 2020

Table 2: experimental data sets color code

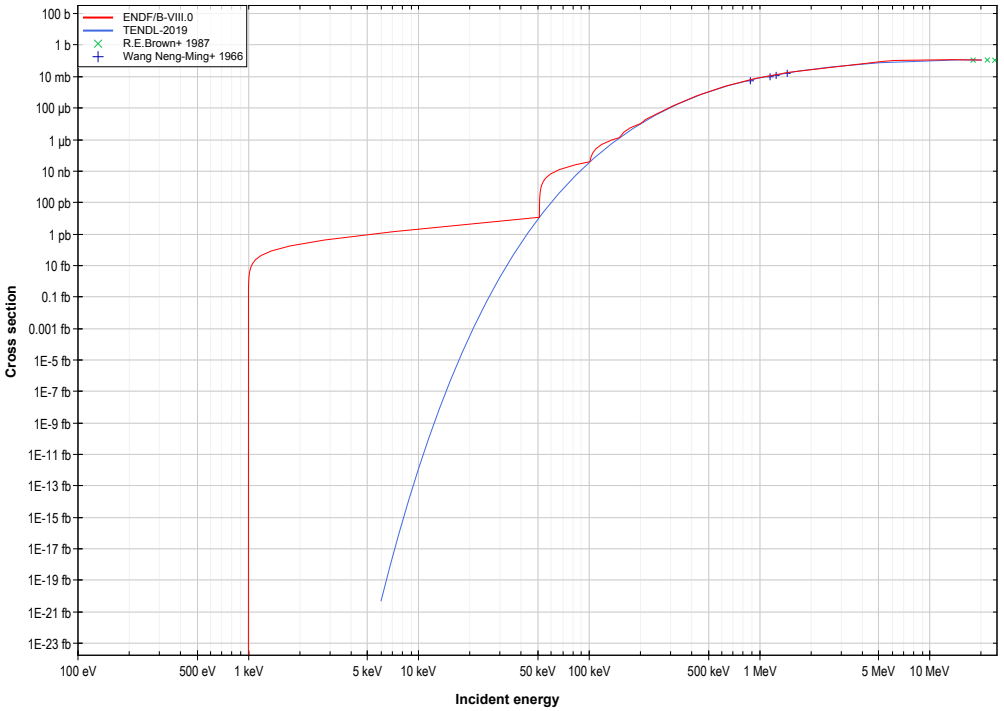
Color	Publication year
red	2005 ≤ year
orange	2000 ≤ year < 2005
light orange	1995 ≤ year < 2000
khaki	1990 ≤ year < 1995
light green	1985 ≤ year < 1990
green	1980 ≤ year < 1985
light blue	1970 ≤ year < 1980
dark blue	1960 ≤ year < 1970
black	year < 1960

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

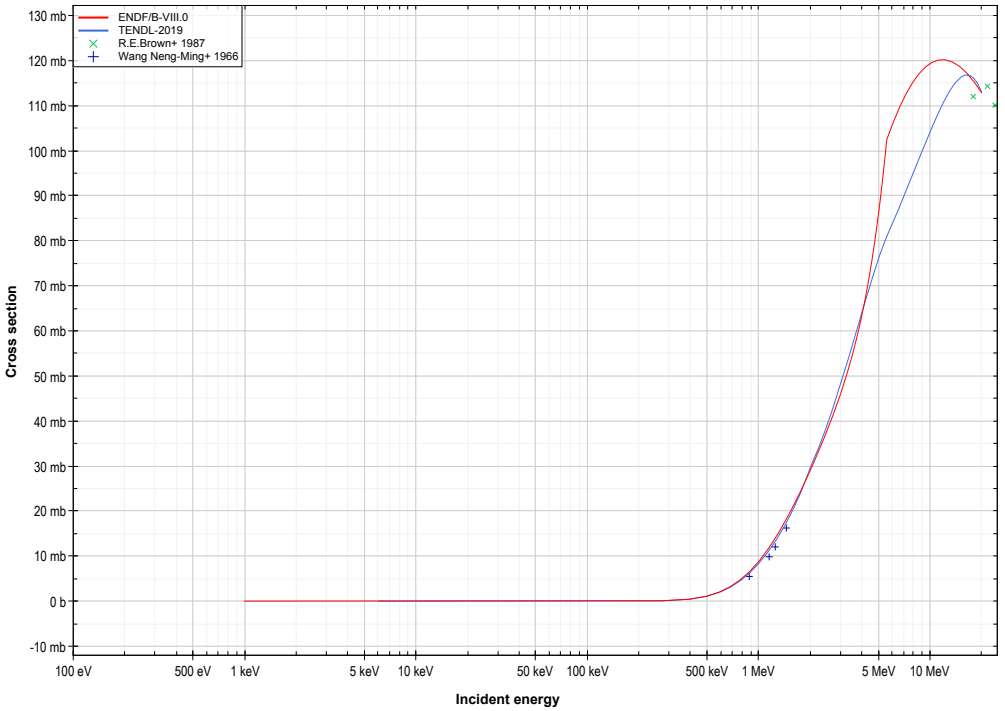
MT	Reaction	MT	Reaction	MT	Reaction	MT	Reaction
4	n	102	gamma	159	2n+p+a	181	3n+p+a
11	2n+d	103	p	160	7n	182	d+t
16	2n	104	d	161	8n	183	n+p+d
17	3n	105	t	162	5n+p	184	n+p+t
18	fission	106	h	163	6n+p	185	n+d+t
22	n+a	107	a	164	7n+p	186	n+p+h
23	n+3a	108	2a	165	4n+a	187	n+d+h
24	2n+a	109	3a	166	5n+a	188	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		

	2-He-3	12-Mg-26 >>
	MT111 (^{3}He,2p) or MT5 (He4 production)	3-Li-6 MT112 (^{3}He,p+α) >>

He3 (^{3}He,2p) or He4 production log-log



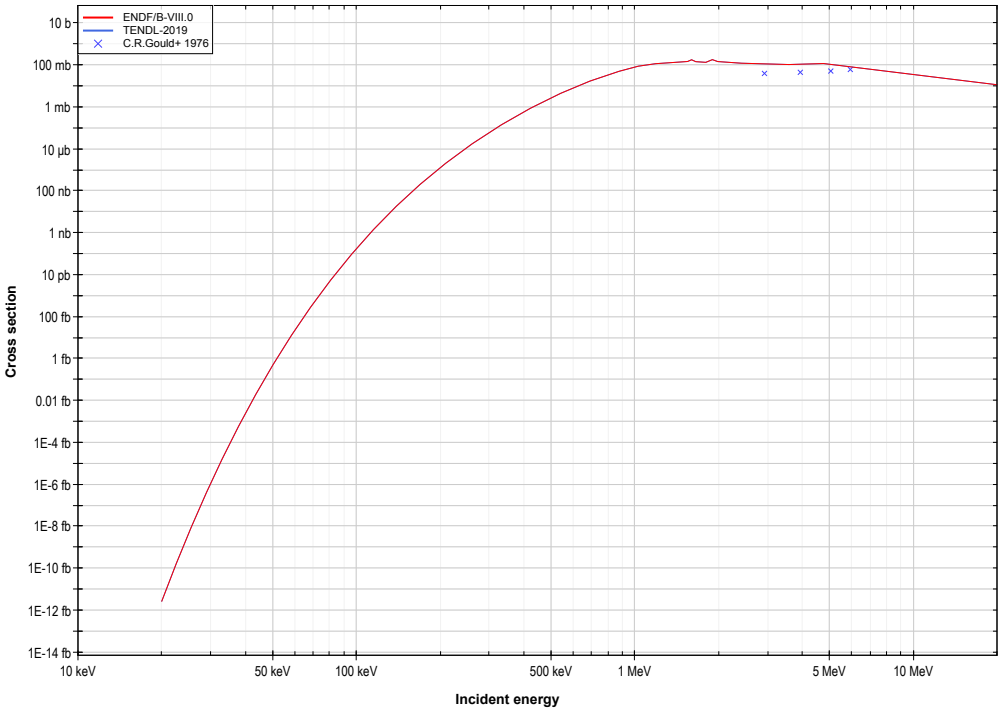
He3 (^{3}He,2p) or He4 production lin-log



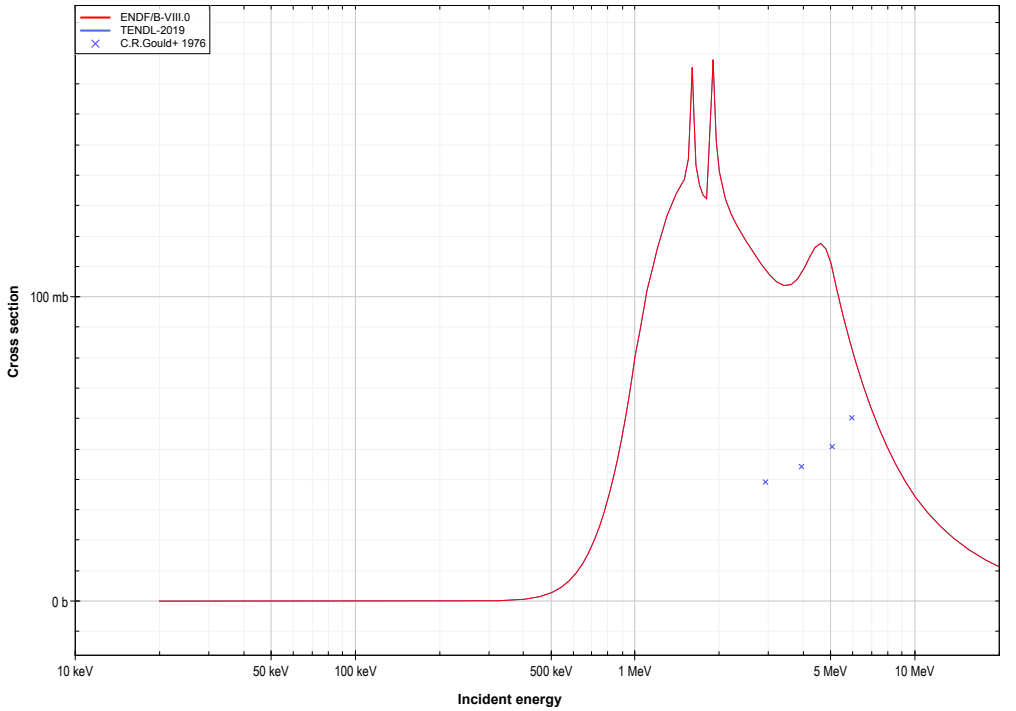
Reaction	Q-Value
He3(He3,2p)He4	12859.58 keV

	3-Li-6	44-Ru-101 >>
<< 2-He-3 MT111 (³He,2p)	**MT112 (³He,p+α) or MT5 (He4 production)**	3-Li-7 MT105 (³He,t) >>

Li6 (³He,p+α) or He4 production log-log



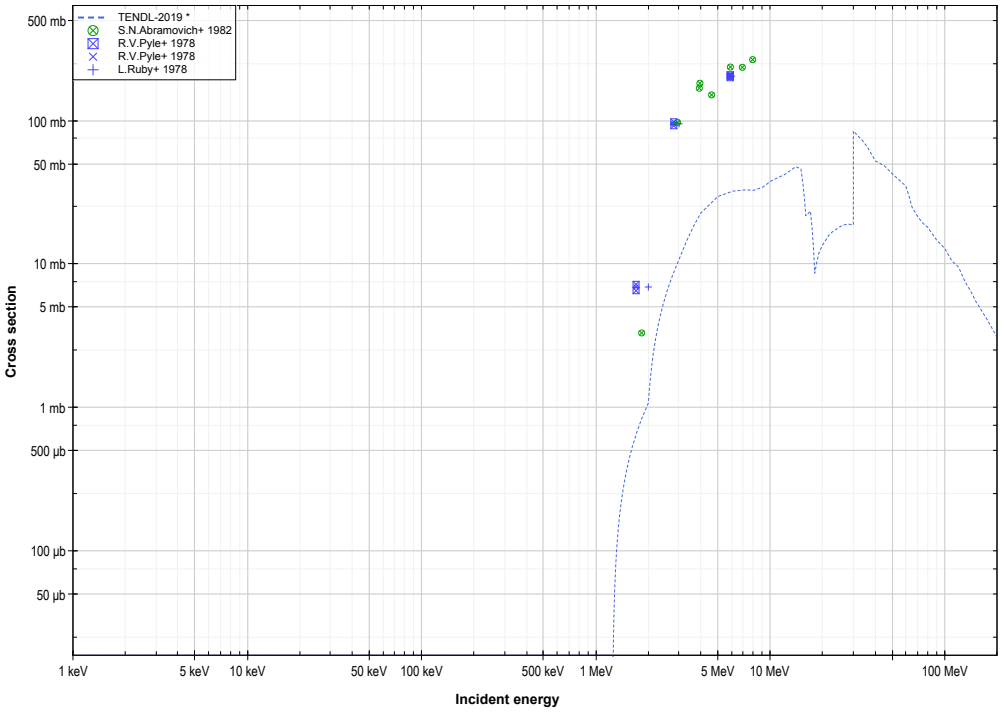
Li6 (³He,p+α) or He4 production lin-log



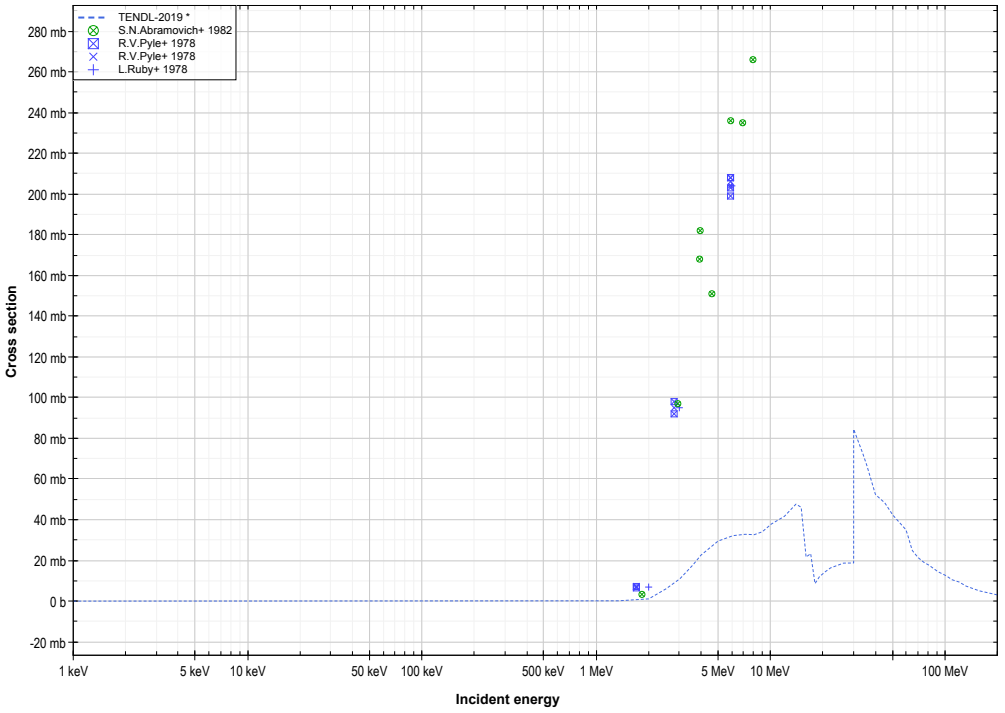
Reaction	Q-Value
Li6(He3,p+α)He4	16879.30 keV
Li6(He3,d+He3)He4	-1473.76 keV
Li6(He3,2p+t)He4	-2934.57 keV
Li6(He3,n+p+He3)He4	-3698.32 keV
Li6(He3,p+2d)He4	-6967.23 keV
Li6(He3,n+2p+d)He4	-9191.80 keV
Li6(He3,2n+3p)He4	-11416.36 keV

	3-Li-7	5-B-10 >>
<< 3-Li-6 MT112 (³He,p+α)	**MT105 (³He,t) or MT5 (Be7 production)**	4-Be-9 MT4 (³He,n) >>

Li7 (³He,t) or Be7 production log-log



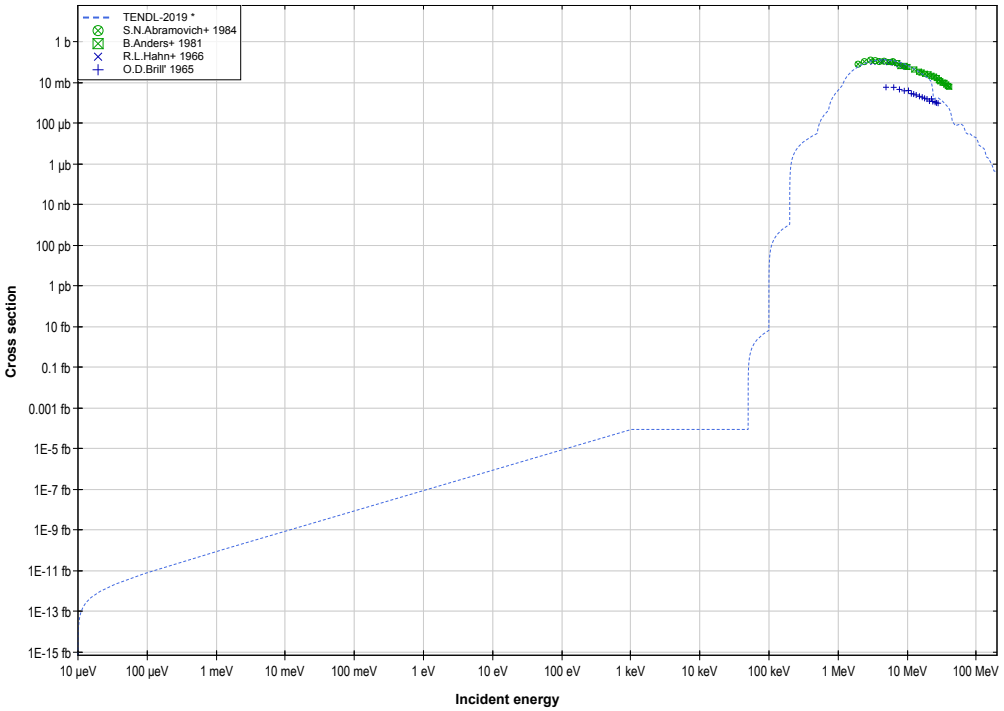
Li7 (³He,t) or Be7 production lin-log



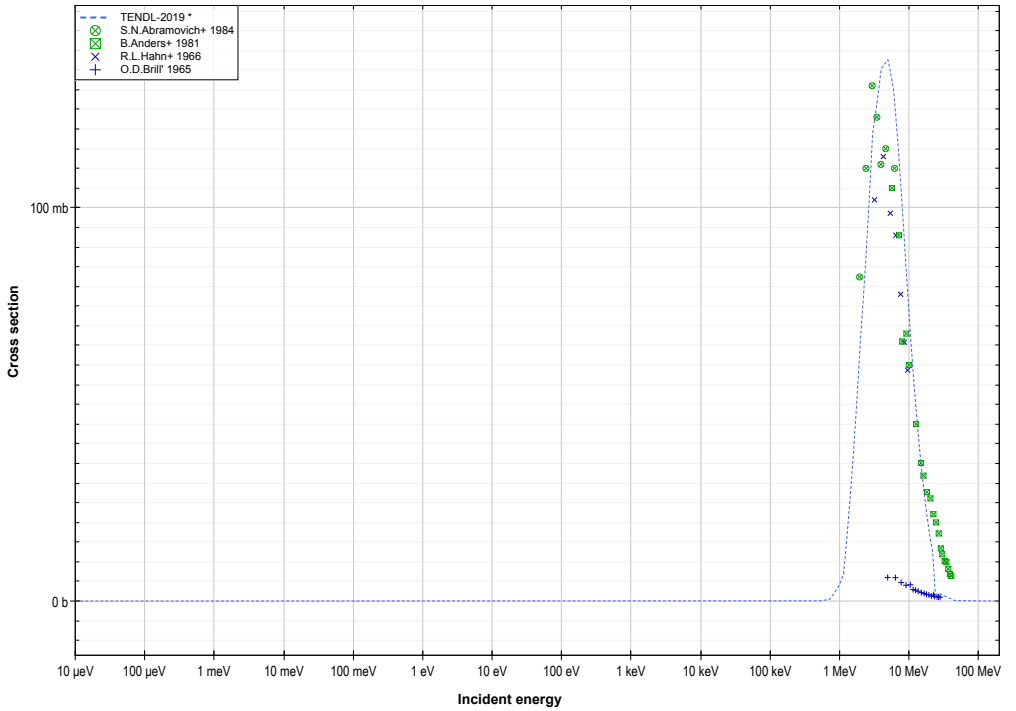
Reaction	Q-Value
Li7(He3,t)Be7	-880.49 keV
Li7(He3,n+d)Be7	-7137.72 keV
Li7(He3,2n+p)Be7	-9362.28 keV

	4-Be-9	5-B-10 >>
<< 3-Li-7 MT105 (^{3}He,t)	**MT4 (^{3}He,n) or MT5 (C11 production)**	MT16 (^{3}He,2n) >>

Be9 (^{3}He,n) or C11 production log-log



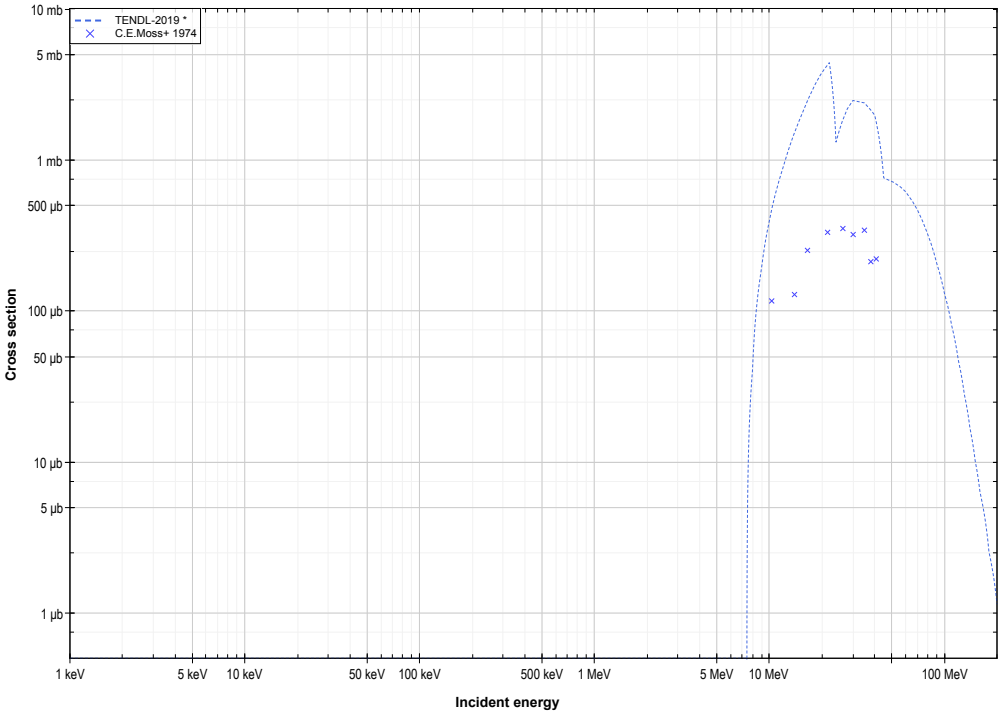
Be9 (^{3}He,n) or C11 production lin-log



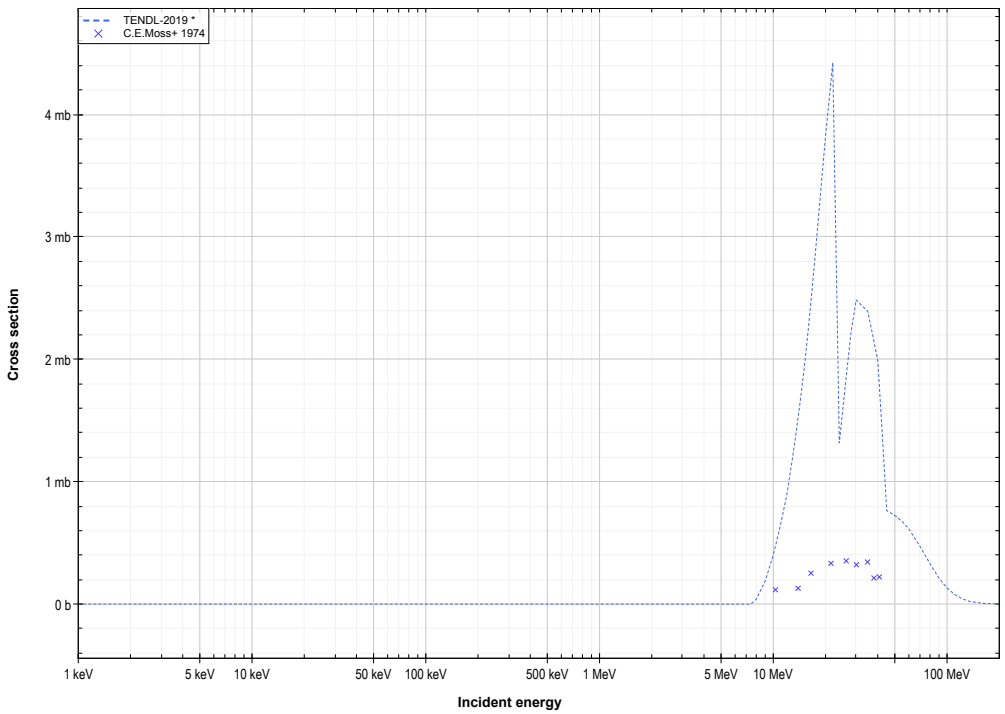
Reaction	Q-Value
Be9(He3,n)C11	7558.95 keV

	4-Be-9	12-Mg-24 >>
<< MT4 (³He,n)	**MT16 (³He,2n) or MT5 (C10 production)**	MT22 (³He,n+α) >>

Be9 (³He,2n) or C10 production log-log



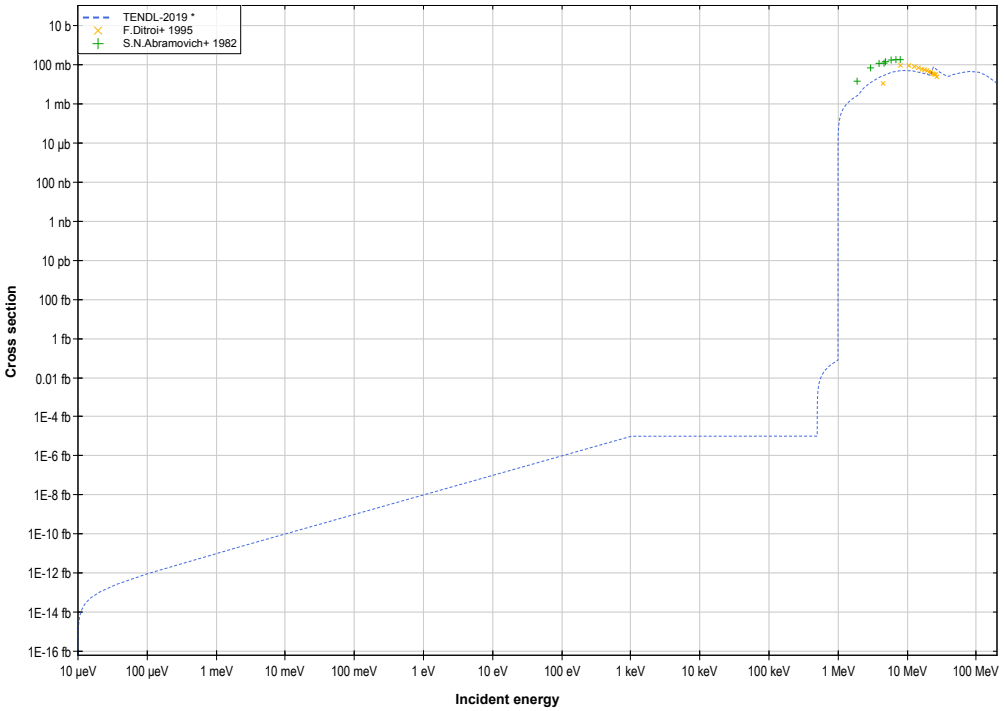
Be9 (³He,2n) or C10 production lin-log



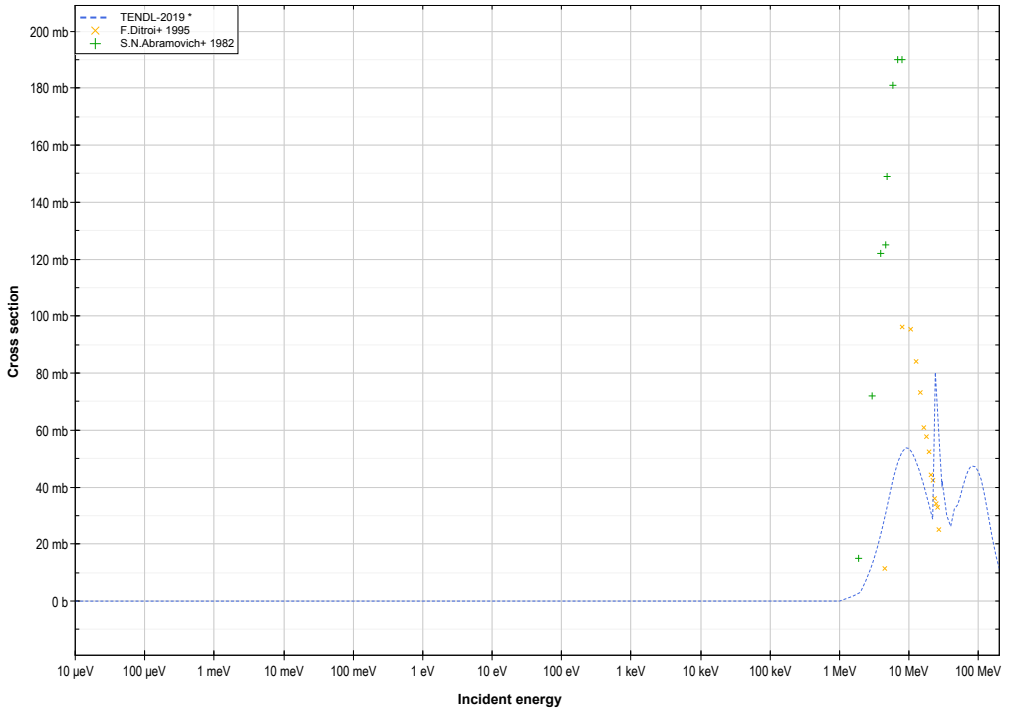
Reaction	Q-Value
Be9(He3,2n)C10	-5561.64 keV

	4-Be-9	6-C-12 >>
<< MT16 (³He,2n)	**MT22 (³He,n+α) or MT5 (Be7 production)**	MT176 (³He,2n+³He) >>

Be9 (³He,n+α) or Be7 production log-log



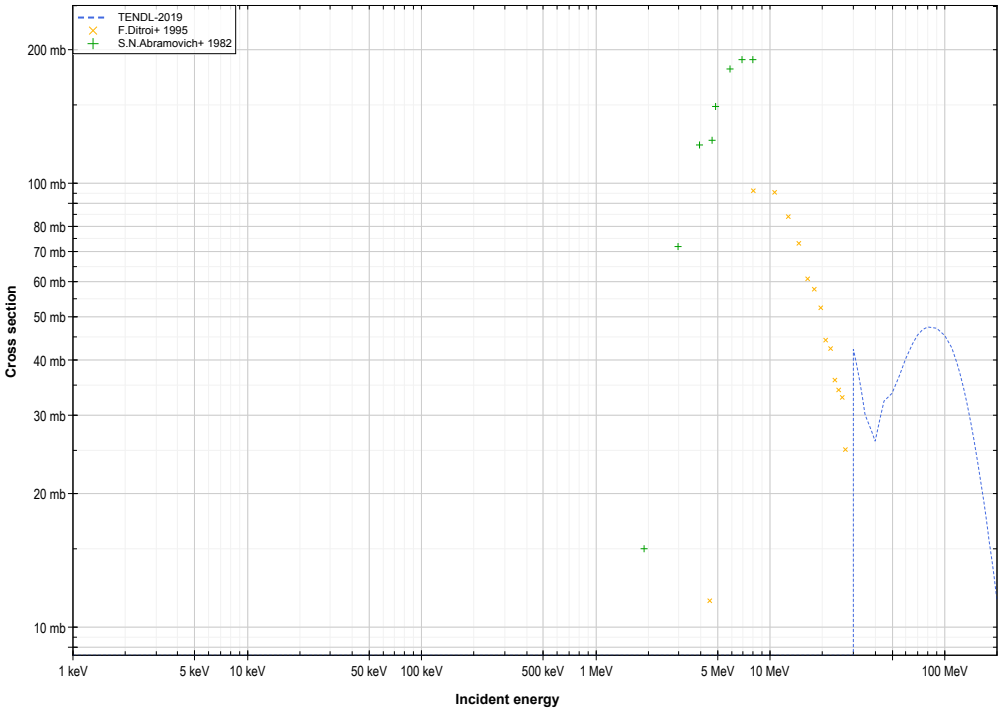
Be9 (³He,n+α) or Be7 production lin-log



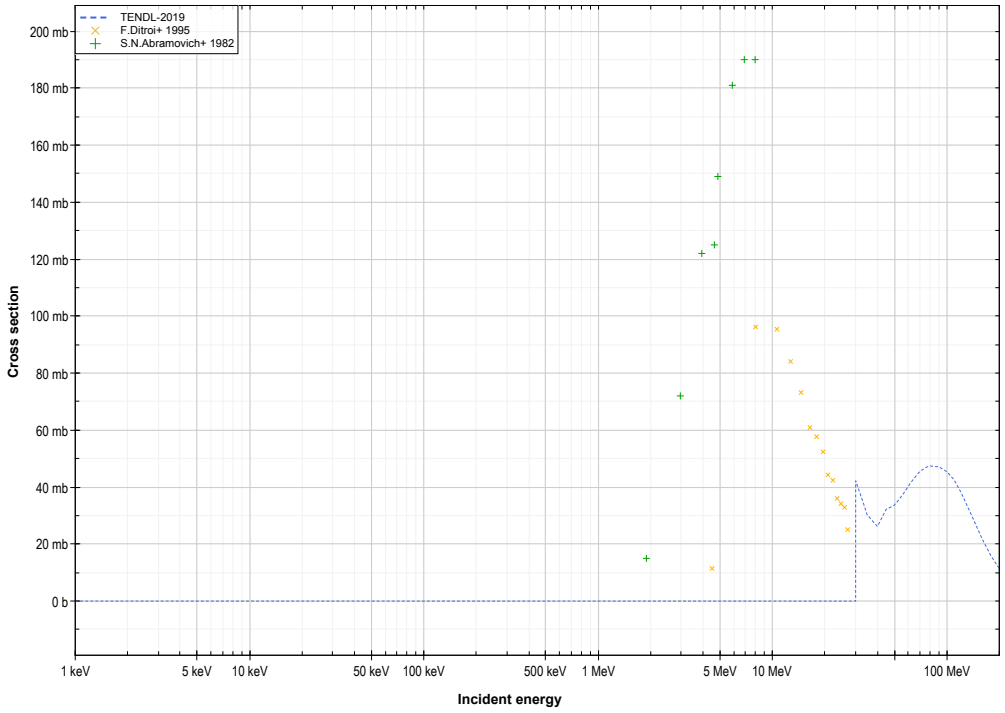
Reaction	Q-Value
Be9(He3,n+α)Be7	14.44 keV
Be9(He3,d+t)Be7	-17574.86 keV
Be9(He3,n+p+t)Be7	-19799.43 keV
Be9(He3,2n+He3)Be7	-20563.18 keV
Be9(He3,n+2d)Be7	-23832.09 keV
Be9(He3,2n+p+d)Be7	-26056.66 keV
Be9(He3,3n+2p)Be7	-28281.22 keV

	4-Be-9	6-C-12 >>
<< MT22 (^{3}He,n+α)	**MT176 (^{3}He,2n+^{3}He) or MT5 (Be7 production)**	MT179 (^{3}He,3n+2p) >>

Be9 (^{3}He,2n+^{3}He) or Be7 production log-log



Be9 (^{3}He,2n+^{3}He) or Be7 production lin-log



Reaction	Q-Value
Be9(He3,n+α)Be7	14.44 keV
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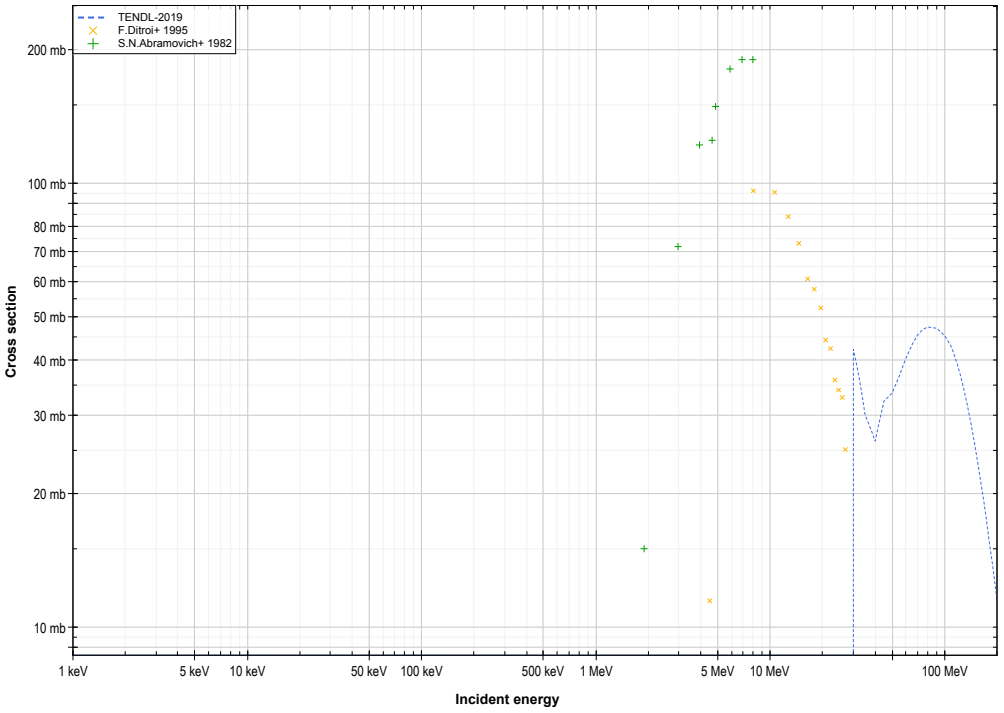
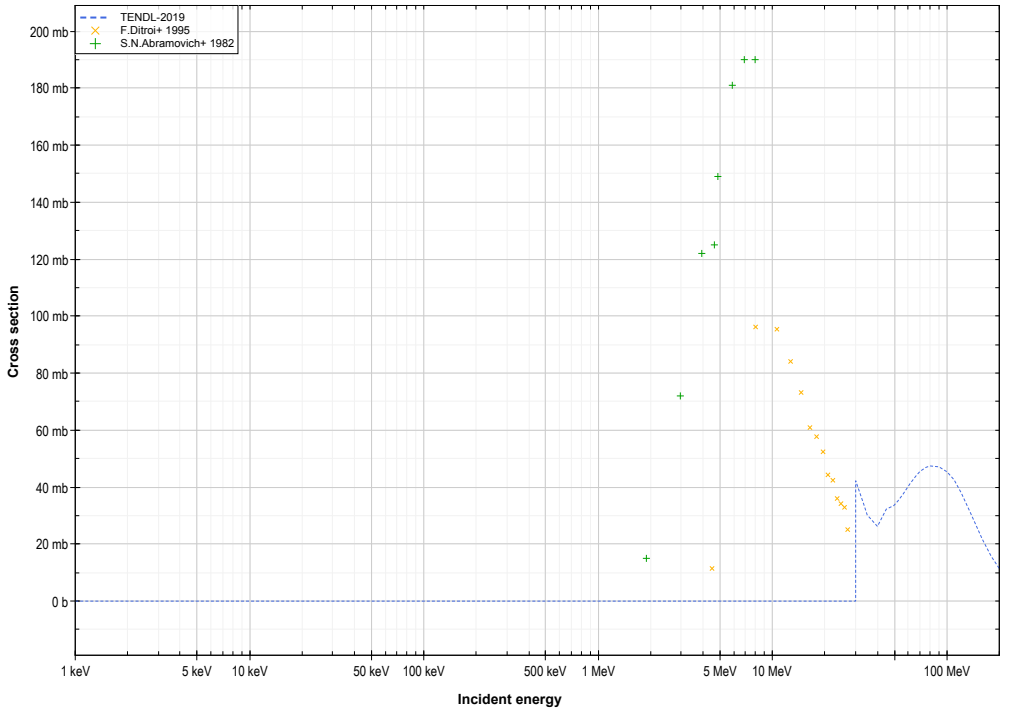
Be9(He3,n+2d)Be7	-23832.09 keV
Be9(He3,2n+p+d)Be7	-26056.66 keV
Be9(He3,3n+2p)Be7	-28281.22 keV

	4-Be-9	6-C-12 >>
<< MT176 (^{3}He,2n+^{3}He)	**MT179 (^{3}He,3n+2p) or MT5 (Be7 production)**	MT182 (^{3}He,d+t) >>

Be9 (^{3}He,3n+2p) or Be7 production log-log



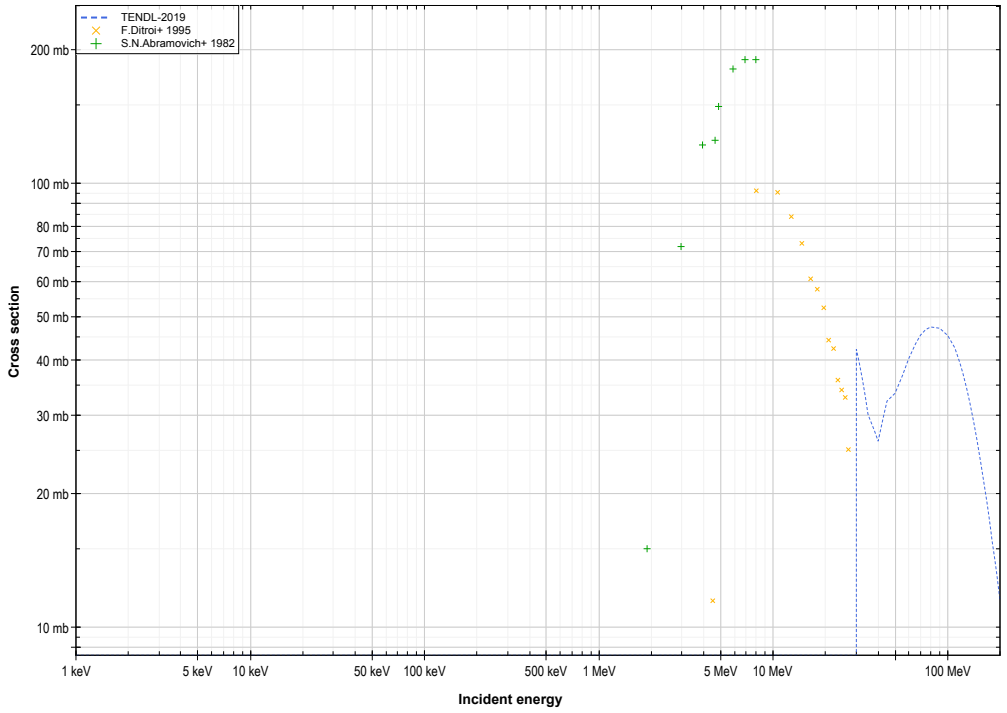
Be9 (^{3}He,3n+2p) or Be7 production lin-log



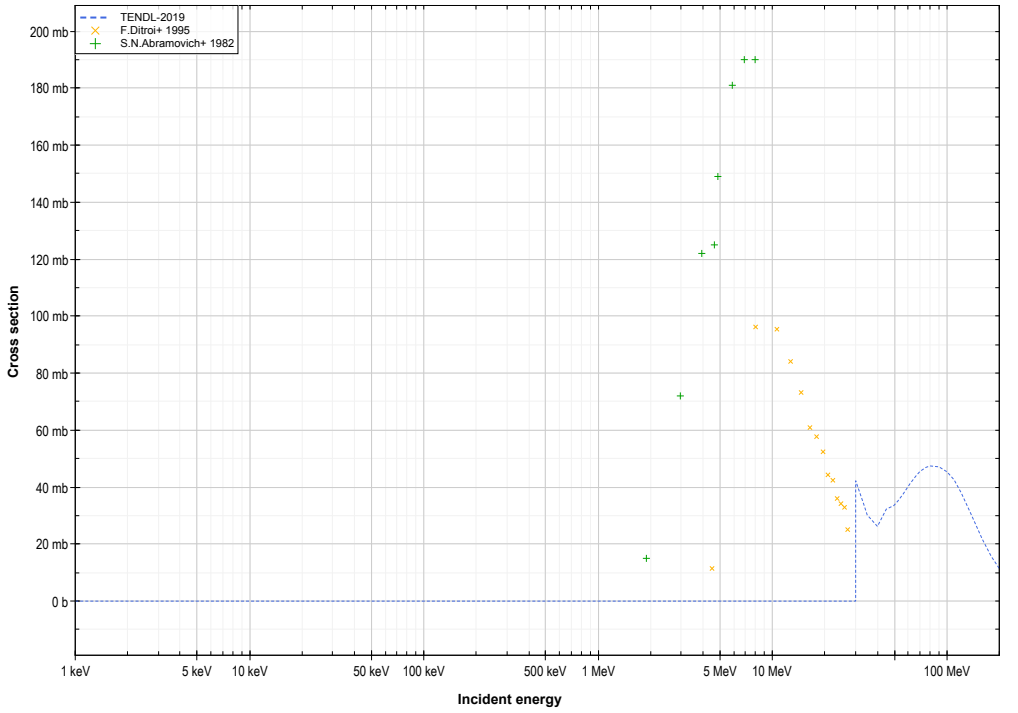
Reaction	Q-Value
Be9(He3,n+α)Be7	14.44 keV
Be9(He3,d+t)Be7	-17574.86 keV
Be9(He3,n+p+t)Be7	-19799.43 keV
Be9(He3,2n+He3)Be7	-20563.18 keV
Be9(He3,n+2d)Be7	-23832.09 keV
Be9(He3,2n+p+d)Be7	-26056.66 keV
Be9(He3,3n+2p)Be7	-28281.22 keV

	4-Be-9	6-C-12 >>
<< MT179 (^{3}He,3n+2p)	**MT182 (^{3}He,d+t) or MT5 (Be7 production)**	MT184 (^{3}He,n+p+t) >>

Be9 (^{3}He,d+t) or Be7 production log-log



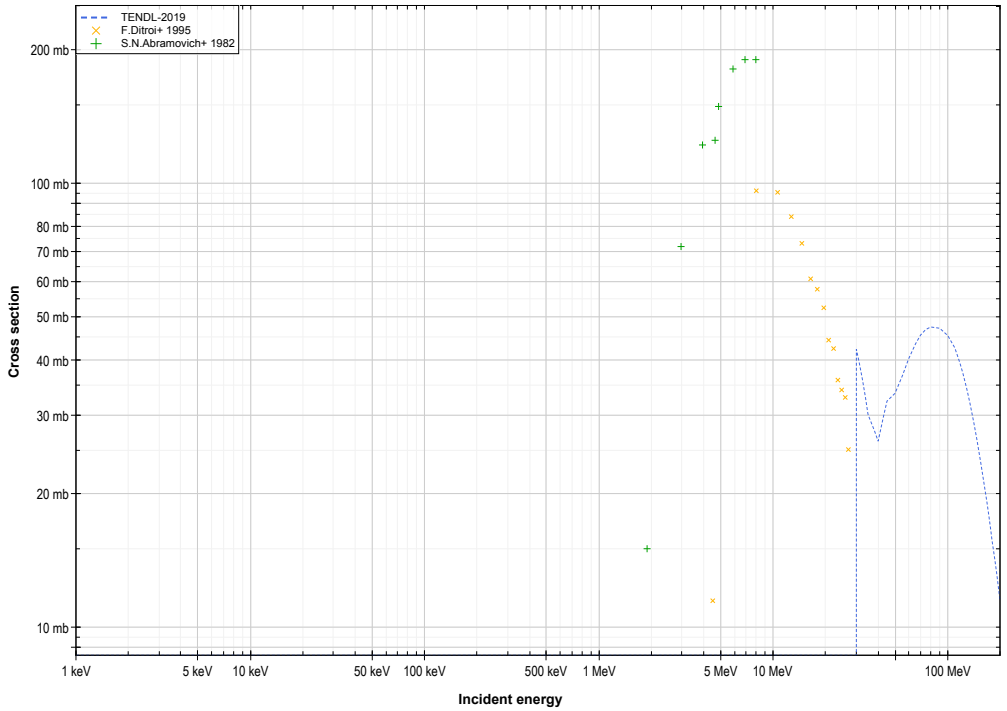
Be9 (^{3}He,d+t) or Be7 production lin-log



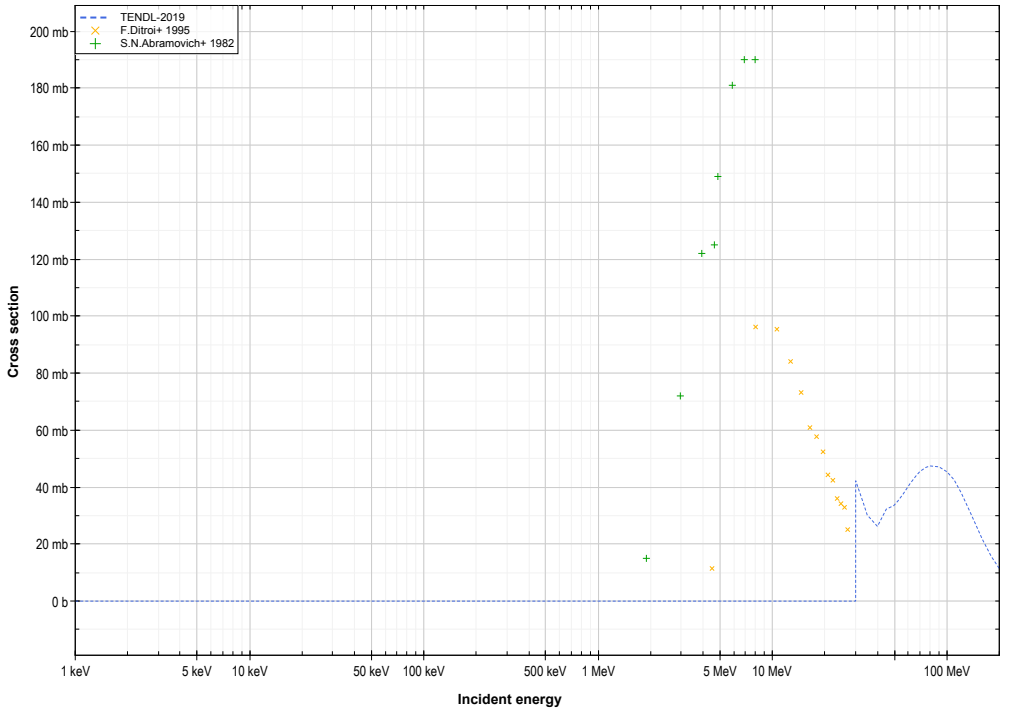
Reaction	Q-Value
Be9(He3,n+α)Be7	14.44 keV
Be9(He3,d+t)Be7	-17574.86 keV
Be9(He3,n+p+t)Be7	-19799.43 keV
Be9(He3,2n+He3)Be7	-20563.18 keV
Be9(He3,n+2d)Be7	-23832.09 keV
Be9(He3,2n+p+d)Be7	-26056.66 keV
Be9(He3,3n+2p)Be7	-28281.22 keV

	4-Be-9	6-C-12 >>
<< MT182 (³He,d+t)	**MT184 (³He,n+p+t) or MT5 (Be7 production)**	5-B-10 MT4 (³He,n) >>

Be9 (³He,n+p+t) or Be7 production log-log



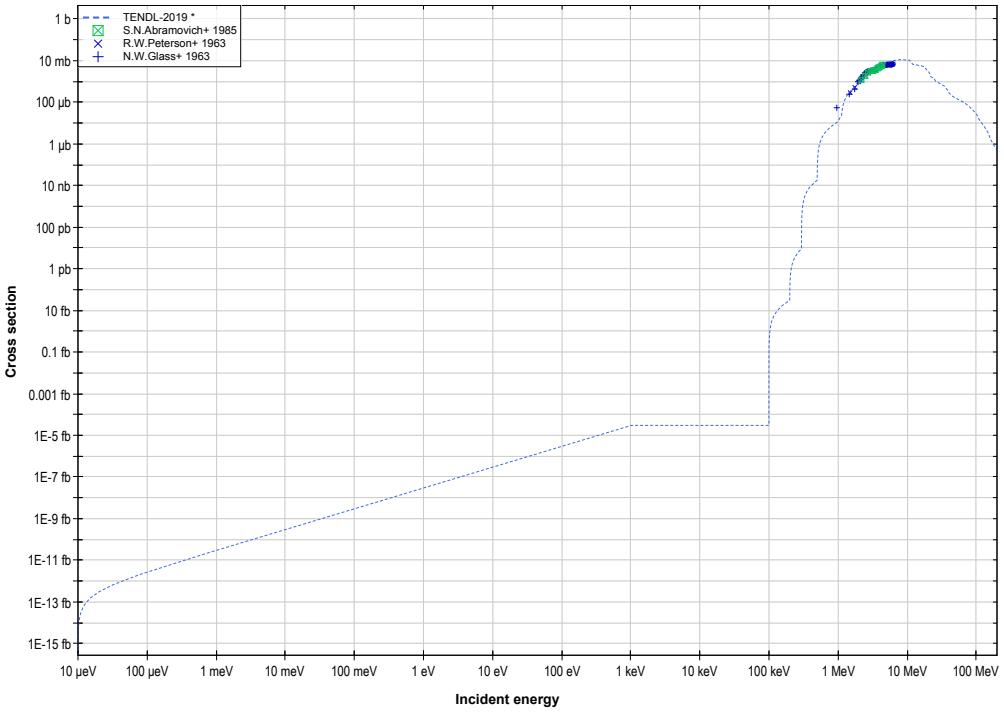
Be9 (³He,n+p+t) or Be7 production lin-log



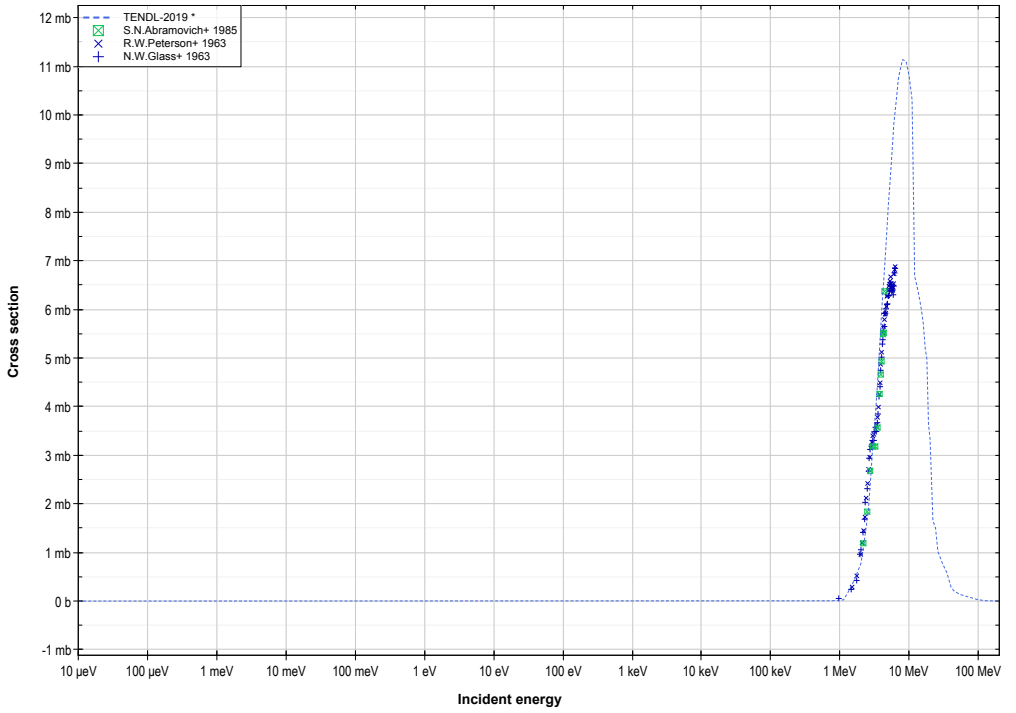
Reaction	Q-Value
Be9(He3,n+α)Be7	14.44 keV
Be9(He3,d+t)Be7	-17574.86 keV
Be9(He3,n+p+t)Be7	-19799.43 keV
Be9(He3,2n+He3)Be7	-20563.18 keV
Be9(He3,n+2d)Be7	-23832.09 keV
Be9(He3,2n+p+d)Be7	-26056.66 keV
Be9(He3,3n+2p)Be7	-28281.22 keV

<< 4-Be-9	**5-B-10**	6-C-12 >>
<< 4-Be-9 MT184 (^{3}He,n+p+t)	**MT4 (^{3}He,n) or MT5 (N12 production)**	MT28 (^{3}He,n+p) >>

B10 (^{3}He,n) or N12 production log-log



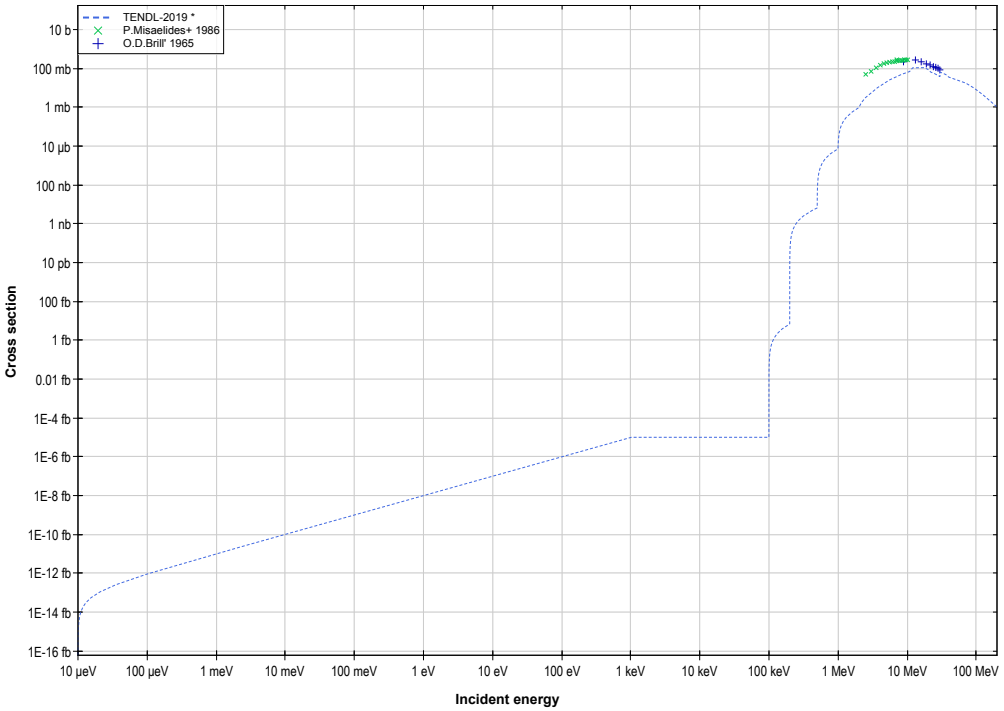
B10 (^{3}He,n) or N12 production lin-log



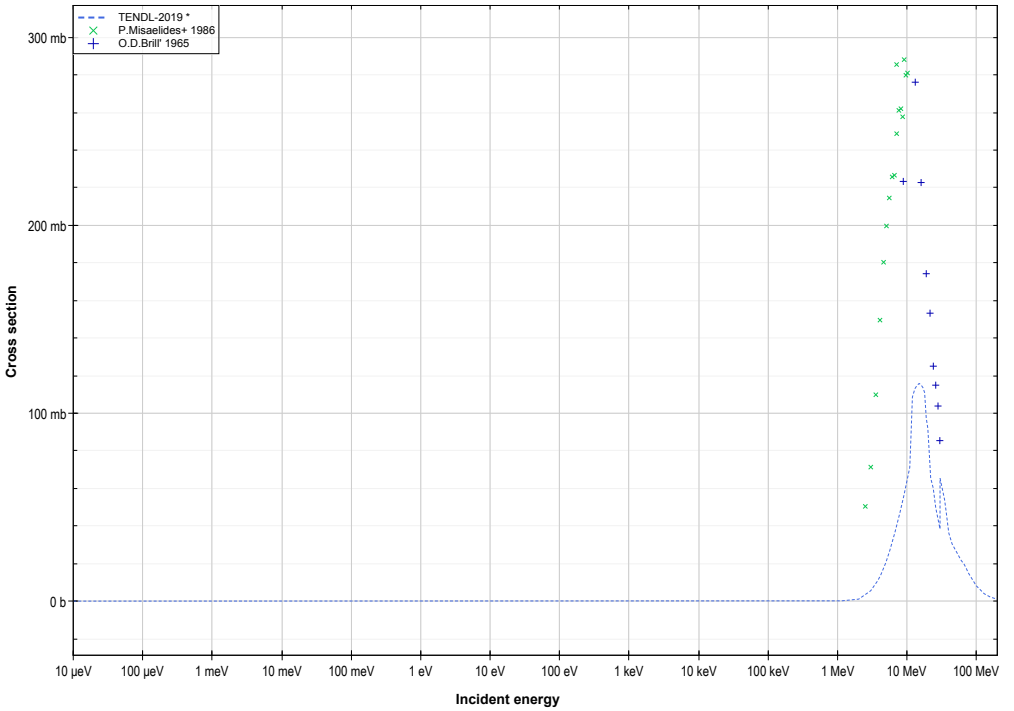
Reaction	Q-Value
B10(He3,n)N12	1572.41 keV

	5-B-10	6-C-12 >>
<< MT4 (³He,n)	**MT28 (³He,n+p) or MT5 (C11 production)**	MT45 (³He,n+p+α) >>

B10 (³He,n+p) or C11 production log-log



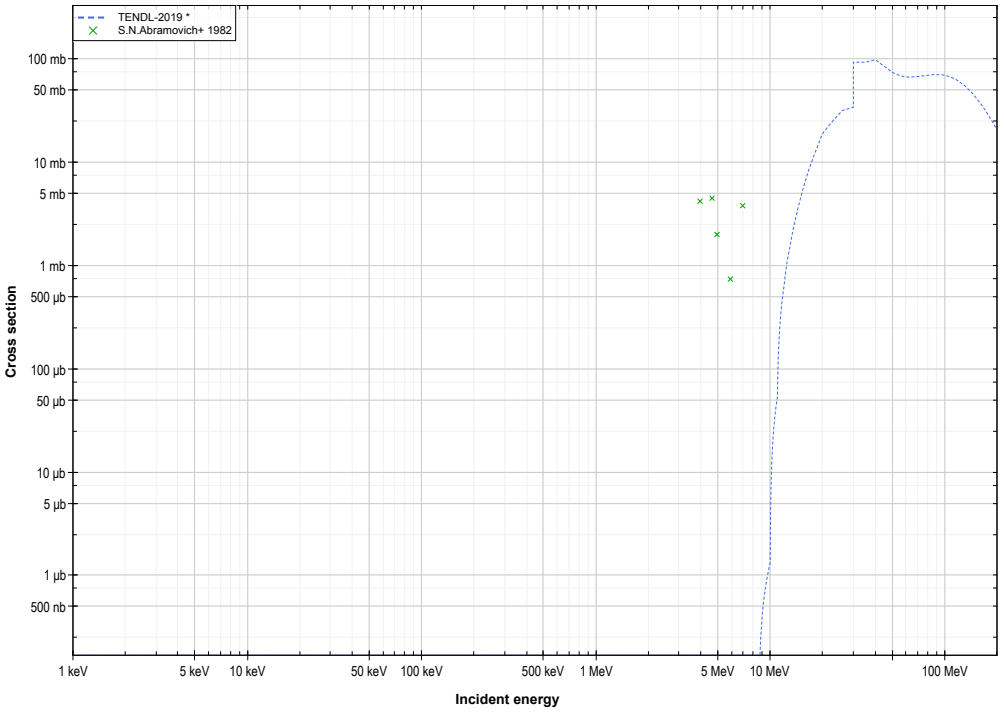
B10 (³He,n+p) or C11 production lin-log



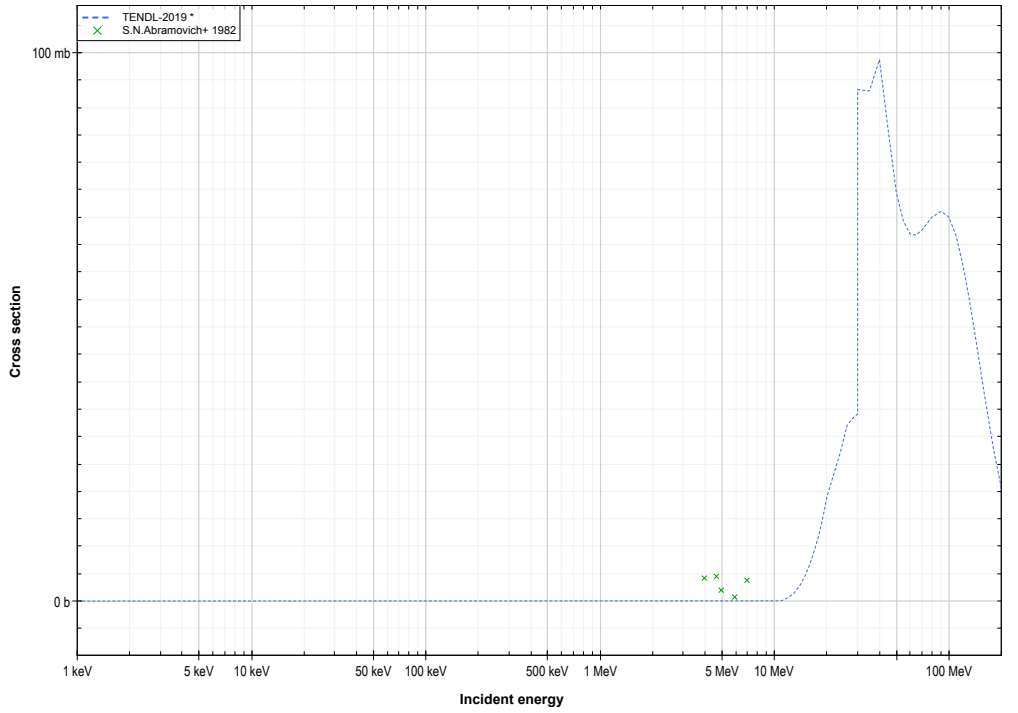
Reaction	Q-Value
B10(He3,d)C11	3196.71 keV
B10(He3,n+p)C11	972.14 keV

	5-B-10	
<< MT28 (^{3}He,n+p)	**MT45 (^{3}He,n+p+α) or MT5 (Be7 production)**	MT104 (^{3}He,d) >>

B10 (^{3}He,n+p+α) or Be7 production log-log



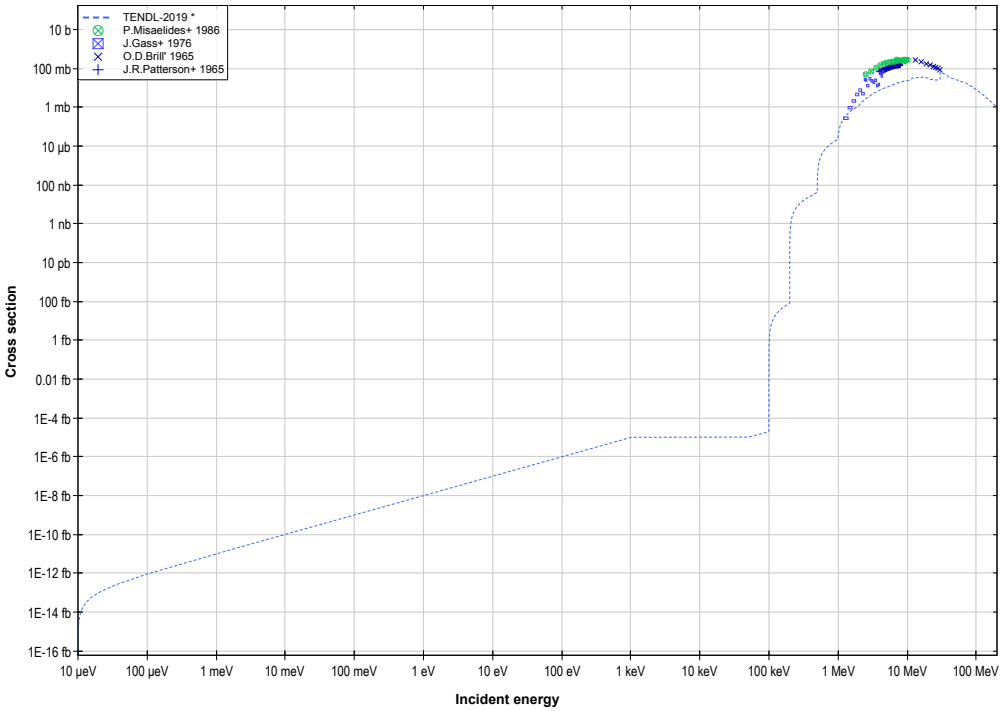
B10 (^{3}He,n+p+α) or Be7 production lin-log



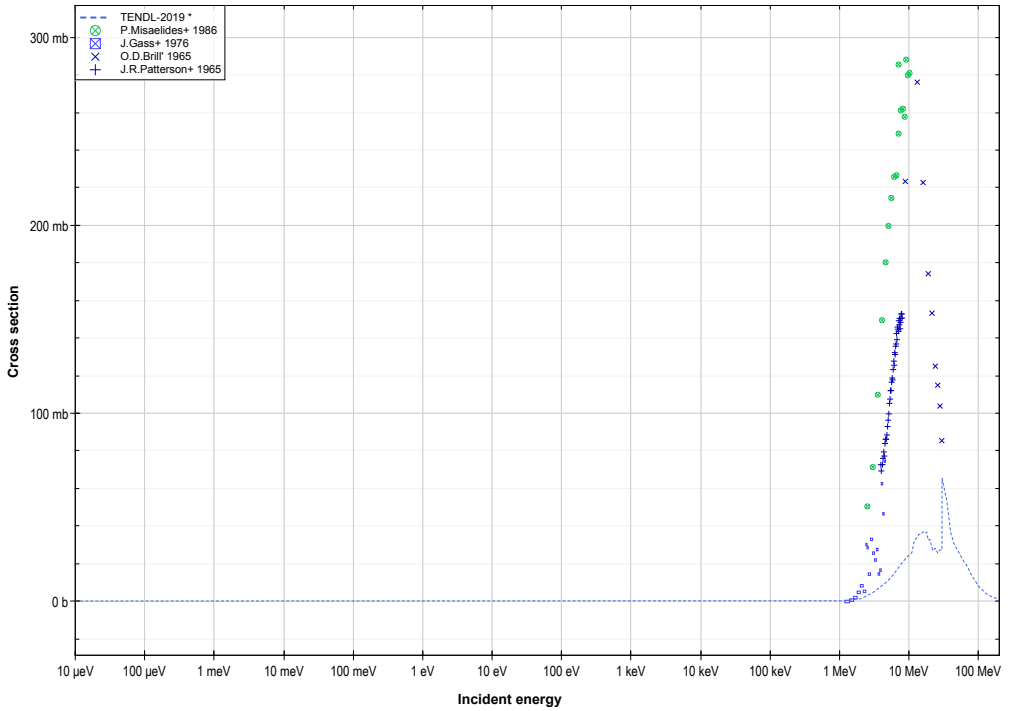
Reaction	Q-Value	Reaction	Q-Value
B10(He3,d+α)Be7	-4347.81 keV	B10(He3,n+p+2d)Be7	-30418.90 keV
B10(He3,n+p+α)Be7	-6572.38 keV	B10(He3,2n+2p+d)Be7	-32643.47 keV
B10(He3,t+He3)Be7	-18668.20 keV	B10(He3,3n+3p)Be7	-34868.04 keV
B10(He3,p+d+t)Be7	-24161.68 keV		
B10(He3,n+d+He3)Be7	-24925.43 keV		
B10(He3,n+2p+t)Be7	-26386.24 keV		
B10(He3,2n+p+He3)Be7	-27150.00 keV		
B10(He3,3d)Be7	-28194.34 keV		

	5-B-10	6-C-12 >>
<< MT45 (³He,n+p+α)	**MT104 (³He,d) or MT5 (C11 production)**	MT105 (³He,t) >>

B10 (³He,d) or C11 production log-log



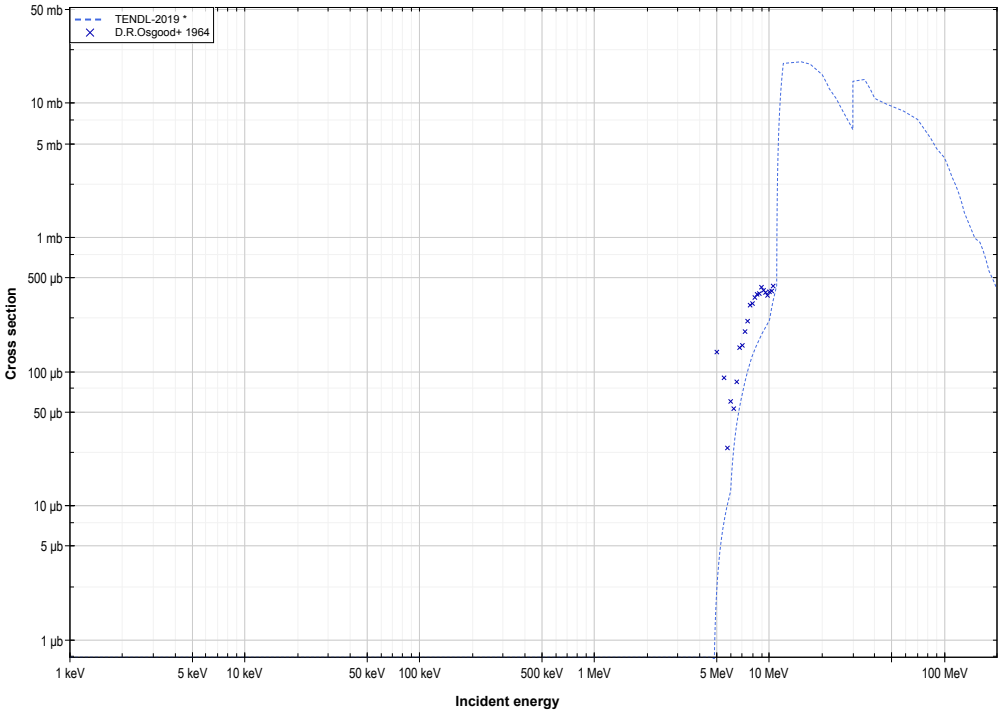
B10 (³He,d) or C11 production lin-log



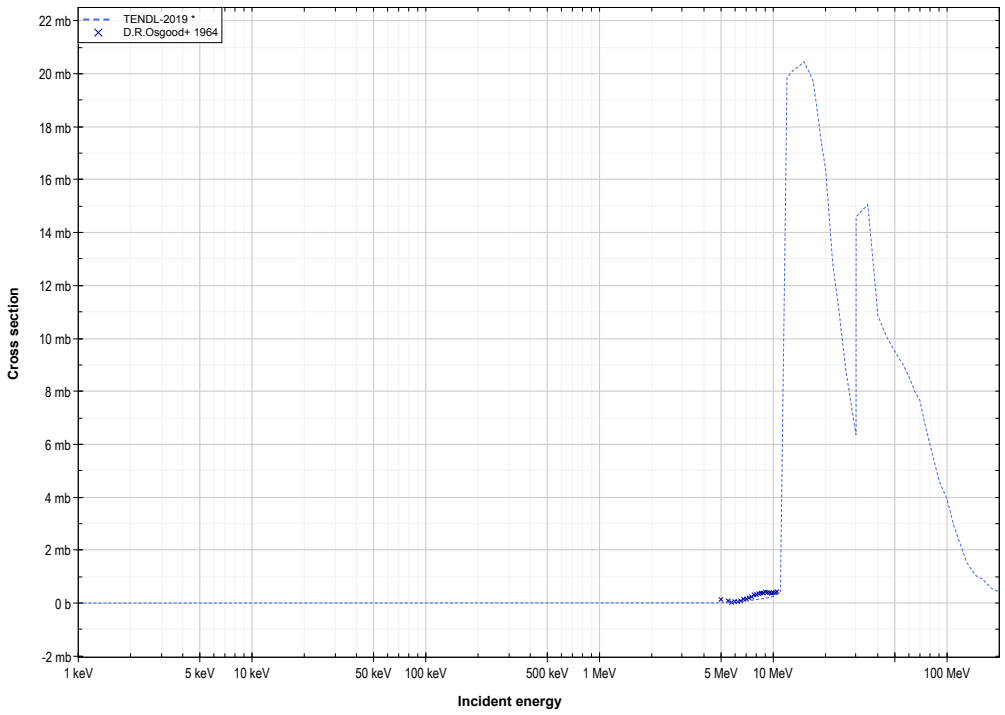
Reaction	Q-Value
B10(He3,d)C11	3196.71 keV
B10(He3,n+p)C11	972.14 keV

<< 3-Li-7	**5-B-10**	5-B-11 >>
<< MT104 (^{3}He,d)	**MT105 (^{3}He,t) or MT5 (C10 production)**	MT117 (^{3}He,d+α) >>

B10 (^{3}He,t) or C10 production log-log



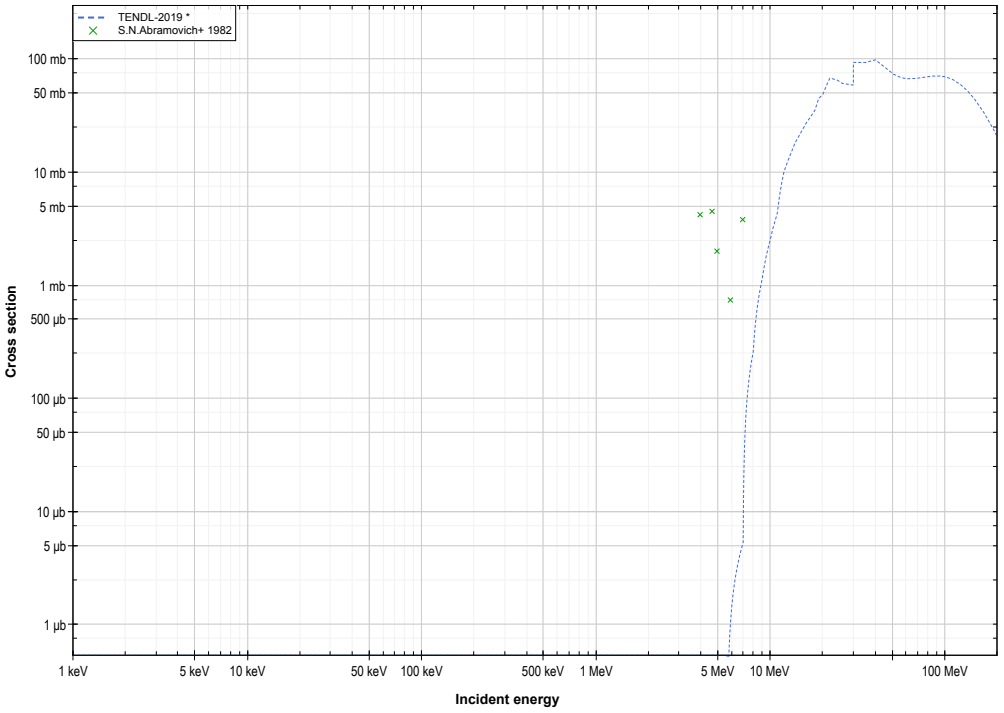
B10 (^{3}He,t) or C10 production lin-log



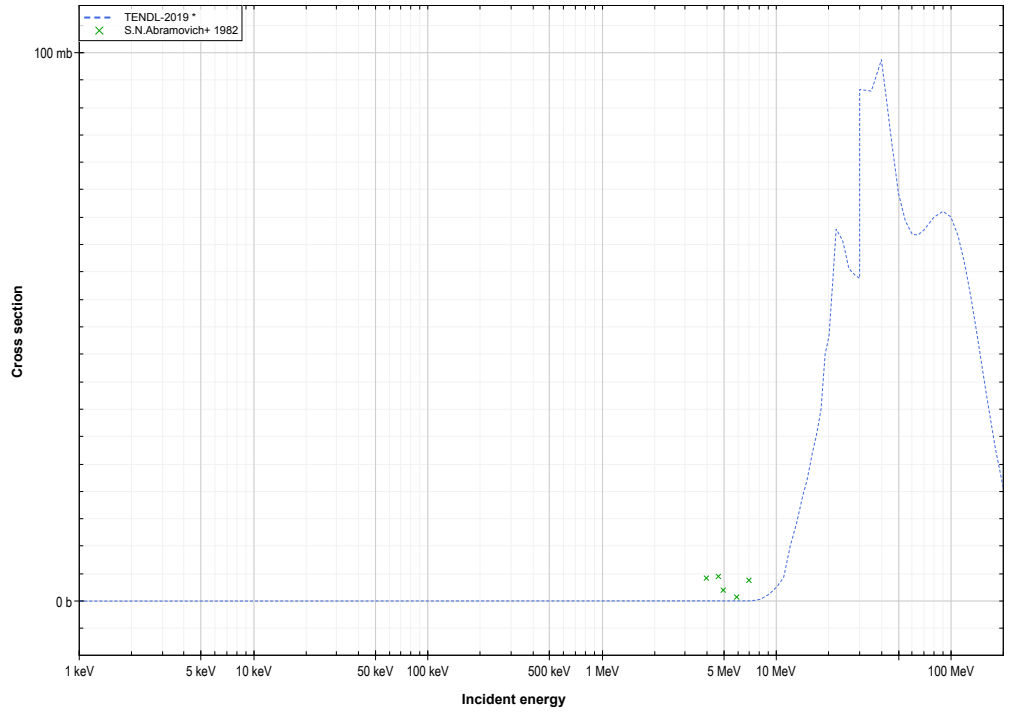
Reaction	Q-Value
B10(He3,t)C10	-3666.65 keV
B10(He3,n+d)C10	-9923.88 keV
B10(He3,2n+p)C10	-12148.45 keV

	5-B-10	
<< MT105 (^{3}He,t)	**MT117 (^{3}He,d+α) or MT5 (Be7 production)**	MT187 (^{3}He,n+d+^{3}He) >>

B10 (^{3}He,d+α) or Be7 production log-log



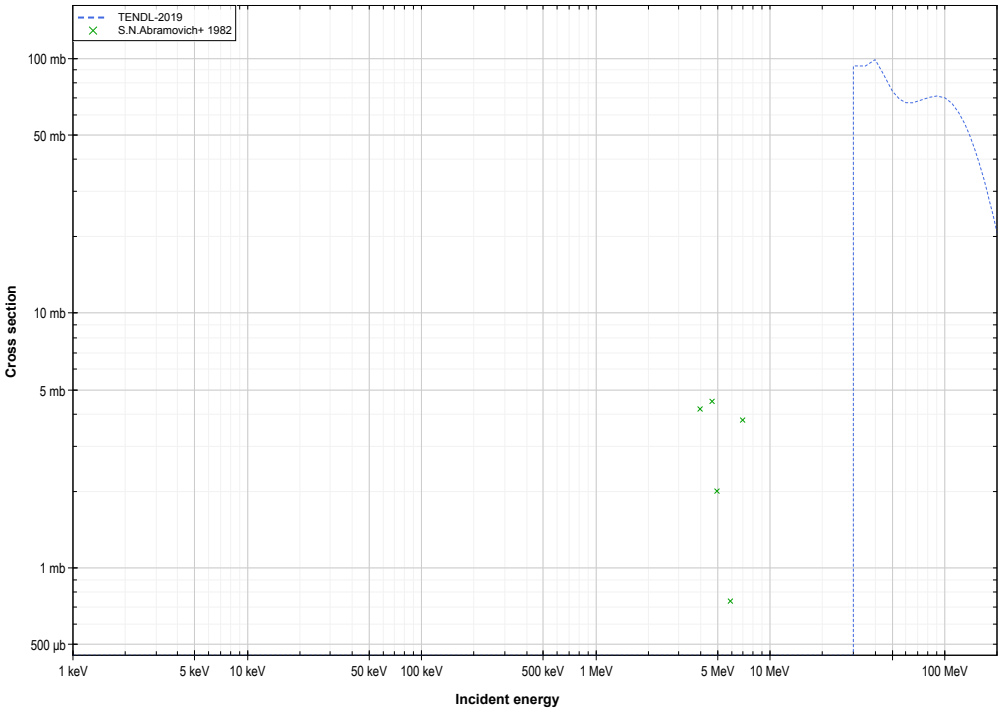
B10 (^{3}He,d+α) or Be7 production lin-log



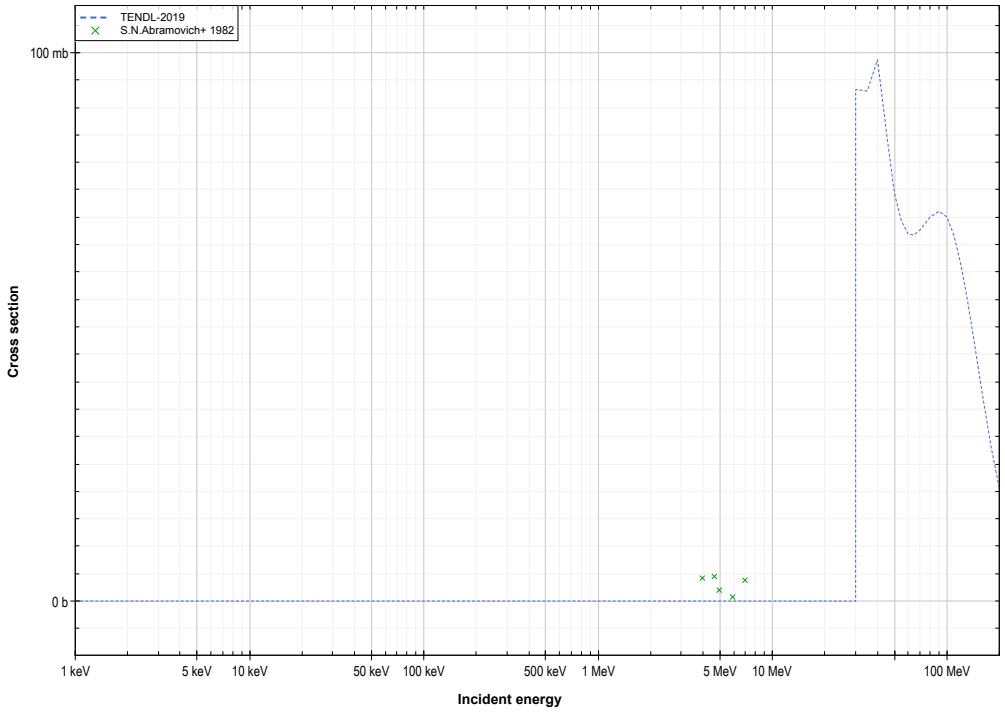
Reaction	Q-Value	Reaction	Q-Value
B10(He3,d+α)Be7	-4347.81 keV	B10(He3,n+p+2d)Be7	-30418.90 keV
B10(He3,n+p+α)Be7	-6572.38 keV	B10(He3,2n+2p+d)Be7	-32643.47 keV
B10(He3,t+He3)Be7	-18668.20 keV	B10(He3,3n+3p)Be7	-34868.04 keV
B10(He3,p+d+t)Be7	-24161.68 keV		
B10(He3,n+d+He3)Be7	-24925.43 keV		
B10(He3,n+2p+t)Be7	-26386.24 keV		
B10(He3,2n+p+He3)Be7	-27150.00 keV		
B10(He3,3d)Be7	-28194.34 keV		

	5-B-10	
<< MT117 (^{3}He,d+α)	**MT187 (^{3}He,n+d+^{3}He) or MT5 (Be7 production)**	5-B-11 MT105 (^{3}He,t) >>

B10 (^{3}He,n+d+^{3}He) or Be7 production log-log



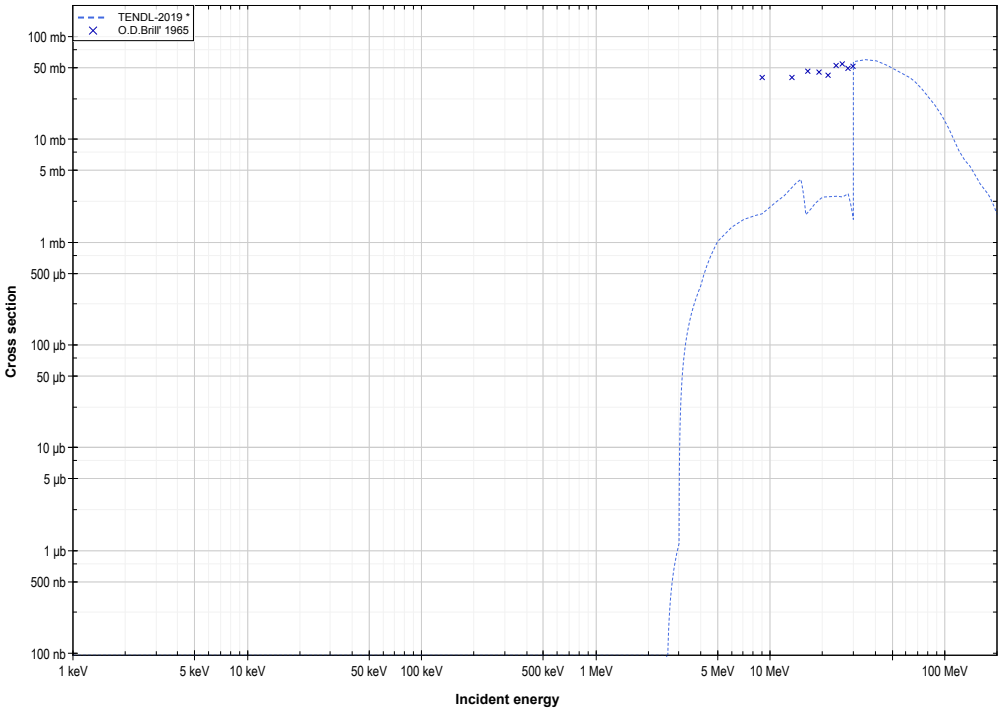
B10 (^{3}He,n+d+^{3}He) or Be7 production lin-log



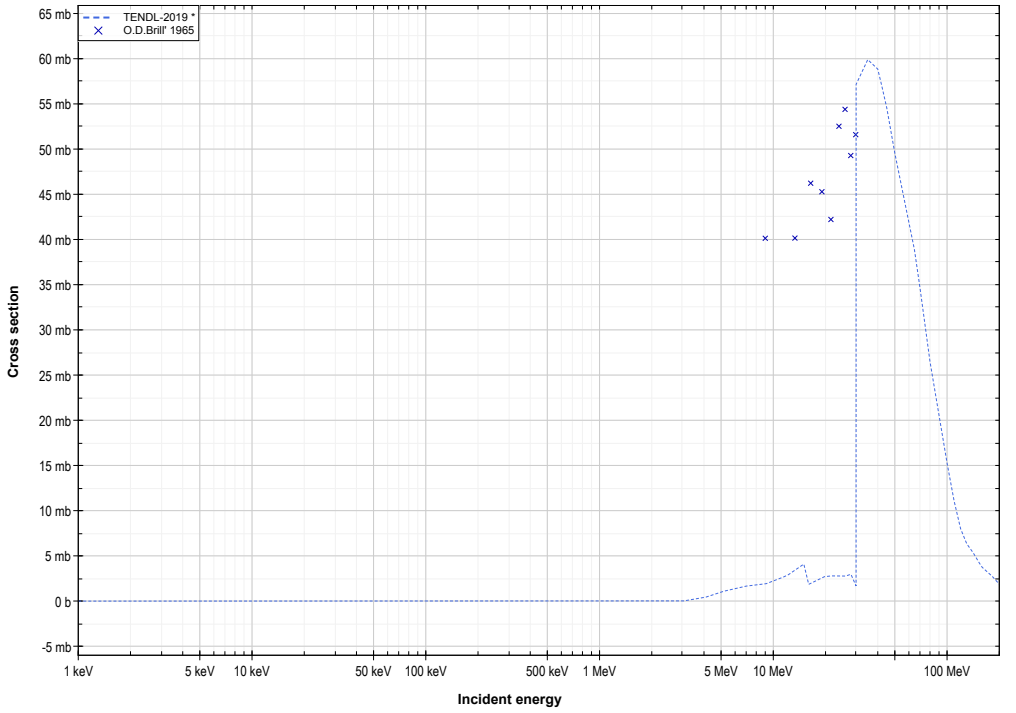
Reaction	Q-Value	Reaction	Q-Value
B10(He3,d+α)Be7	-4347.81 keV	B10(He3,n+p+2d)Be7	-30418.90 keV
B10(He3,n+p+α)Be7	-6572.38 keV	B10(He3,2n+2p+d)Be7	-32643.47 keV
B10(He3,t+He3)Be7	-18668.20 keV	B10(He3,3n+3p)Be7	-34868.04 keV
B10(He3,p+d+t)Be7	-24161.68 keV		
B10(He3,n+d+He3)Be7	-24925.43 keV		
B10(He3,n+2p+t)Be7	-26386.24 keV		
B10(He3,2n+p+He3)Be7	-27150.00 keV		
B10(He3,3d)Be7	-28194.34 keV		

<< 5-B-10	**5-B-11**	12-Mg-24 >>
<< 5-B-10 MT187 (^{3}He,n+d+^{3}He)	**MT105 (^{3}He,t) or MT5 (C11 production)**	6-C-12 MT4 (^{3}He,n) >>

B11 (^{3}He,t) or C11 production log-log



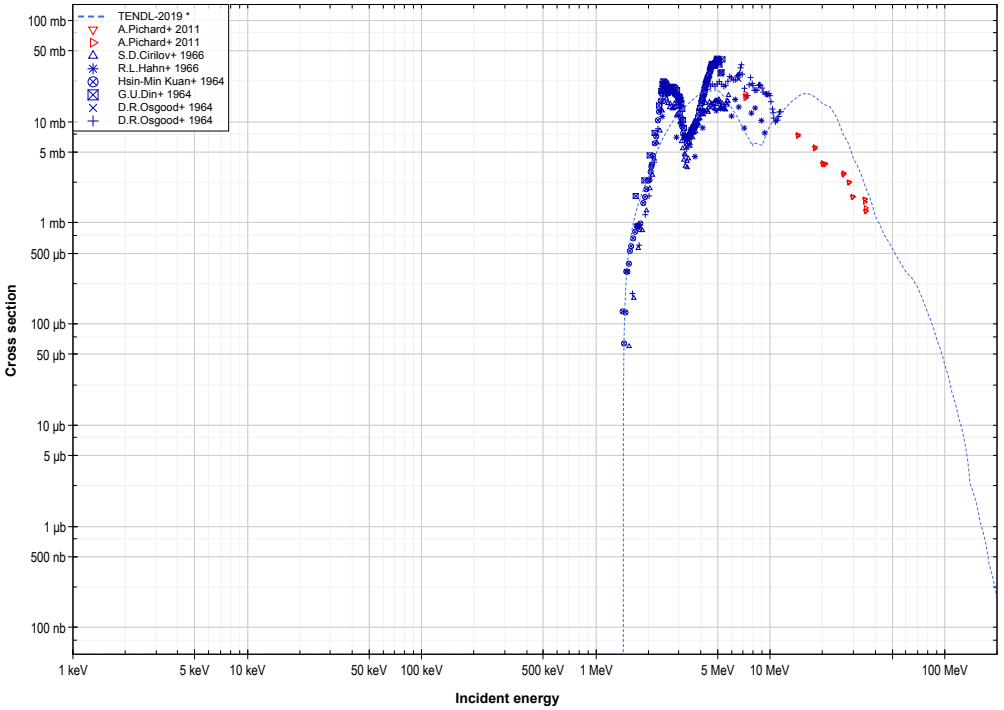
B11 (^{3}He,t) or C11 production lin-log



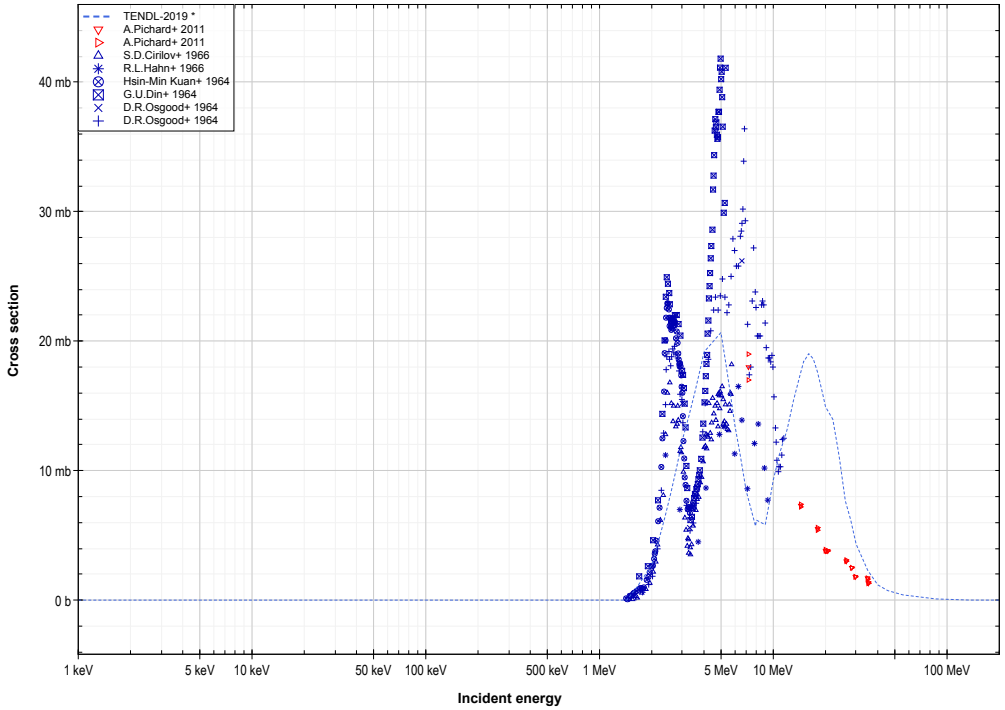
Reaction	Q-Value
B11(He3,t)C11	-2000.29 keV
B11(He3,n+d)C11	-8257.51 keV
B11(He3,2n+p)C11	-10482.08 keV

<< 5-B-10	**6-C-12**	12-Mg-24 >>
<< 5-B-11 MT105 (³He,t)	**MT4 (³He,n) or MT5 (O14 production)**	MT22 (³He,n+α) >>

C12 (³He,n) or O14 production log-log



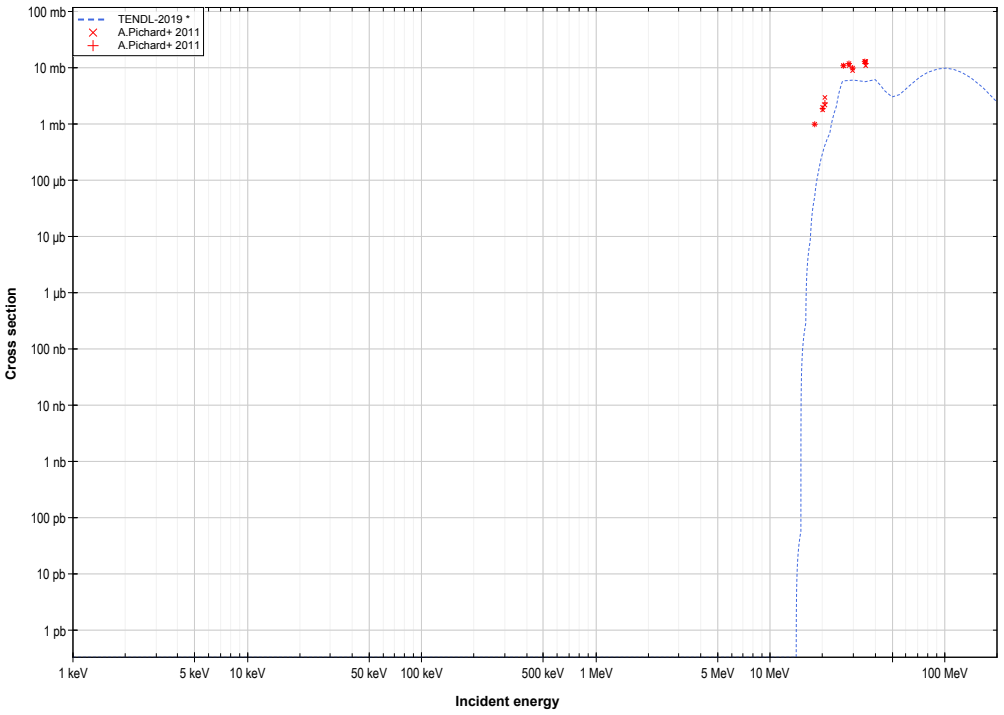
C12 (³He,n) or O14 production lin-log



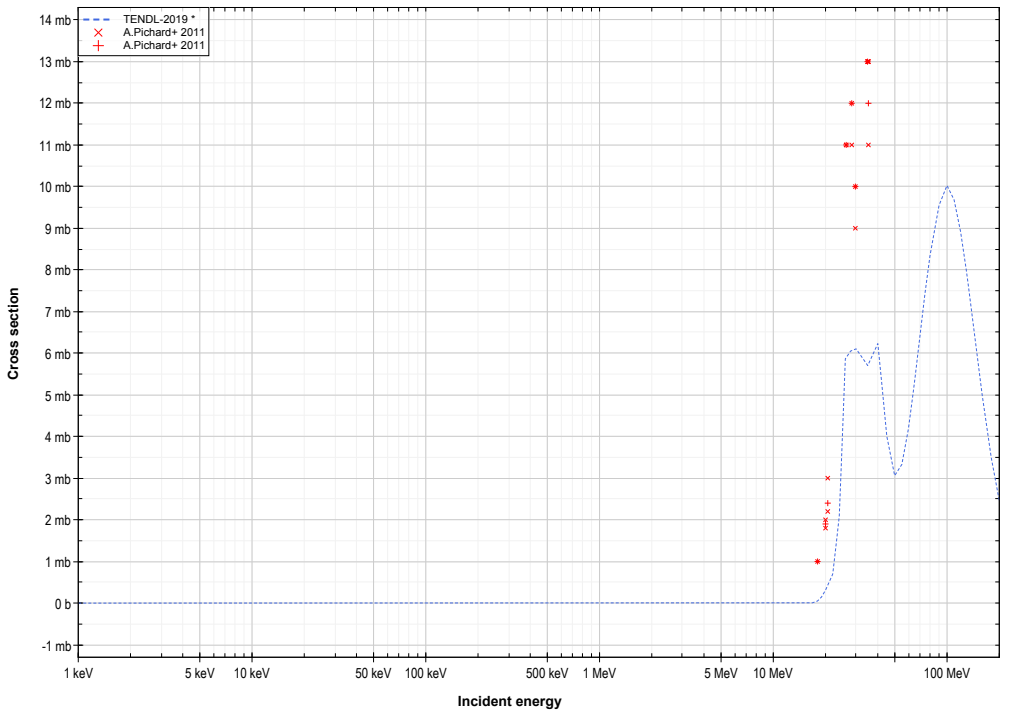
Reaction	Q-Value
C12(He3,n)O14	-1147.88 keV

<< 4-Be-9	**6-C-12**	9-F-19 >>
<< MT4 (^{3}He,n)	**MT22 (^{3}He,n+α) or MT5 (C10 production)**	MT28 (^{3}He,n+p) >>

C12 (^{3}He,n+α) or C10 production log-log



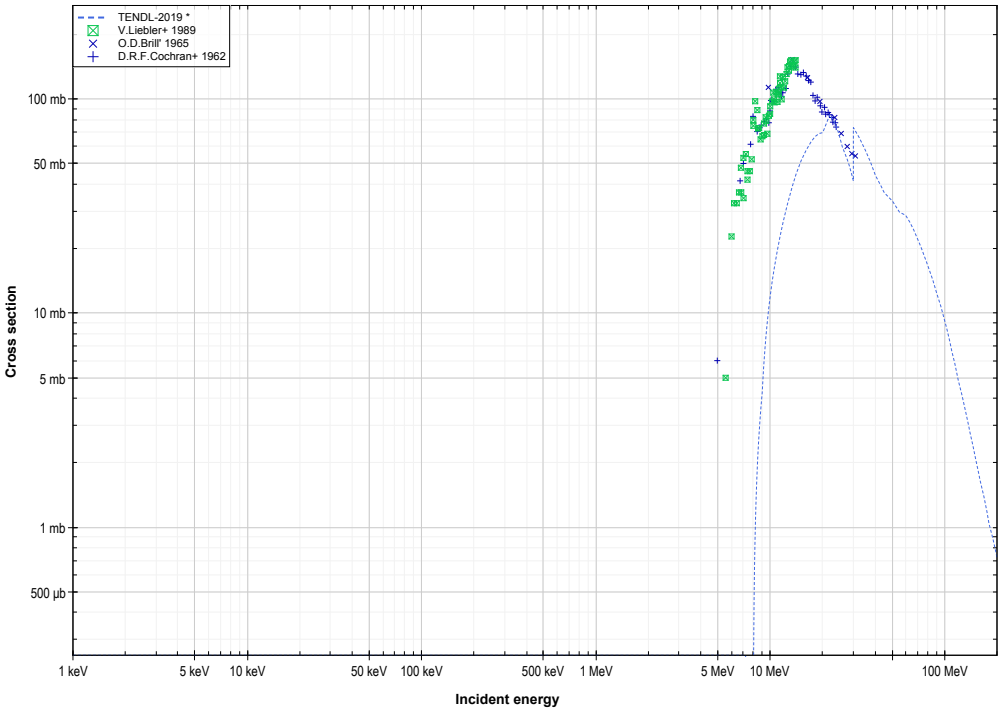
C12 (^{3}He,n+α) or C10 production lin-log



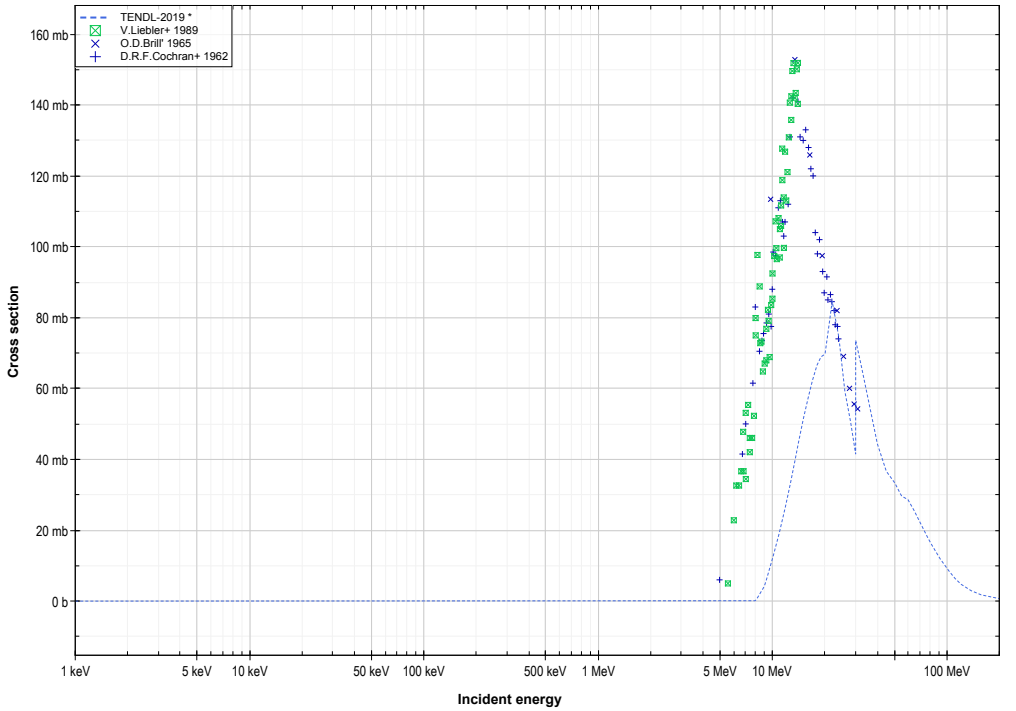
Reaction	Q-Value
C12(He3,n+α)C10	-11263.68 keV
C12(He3,d+t)C10	-28852.98 keV
C12(He3,n+p+t)C10	-31077.55 keV
C12(He3,2n+He3)C10	-31841.30 keV
C12(He3,n+2d)C10	-35110.21 keV
C12(He3,2n+p+d)C10	-37334.78 keV
C12(He3,3n+2p)C10	-39559.34 keV

<< 5-B-10	**6-C-12**	12-Mg-24 >>
<< MT22 (^{3}He,n+α)	**MT28 (^{3}He,n+p) or MT5 (N13 production)**	MT34 (^{3}He,n+^{3}He) >>

C12 (^{3}He,n+p) or N13 production log-log



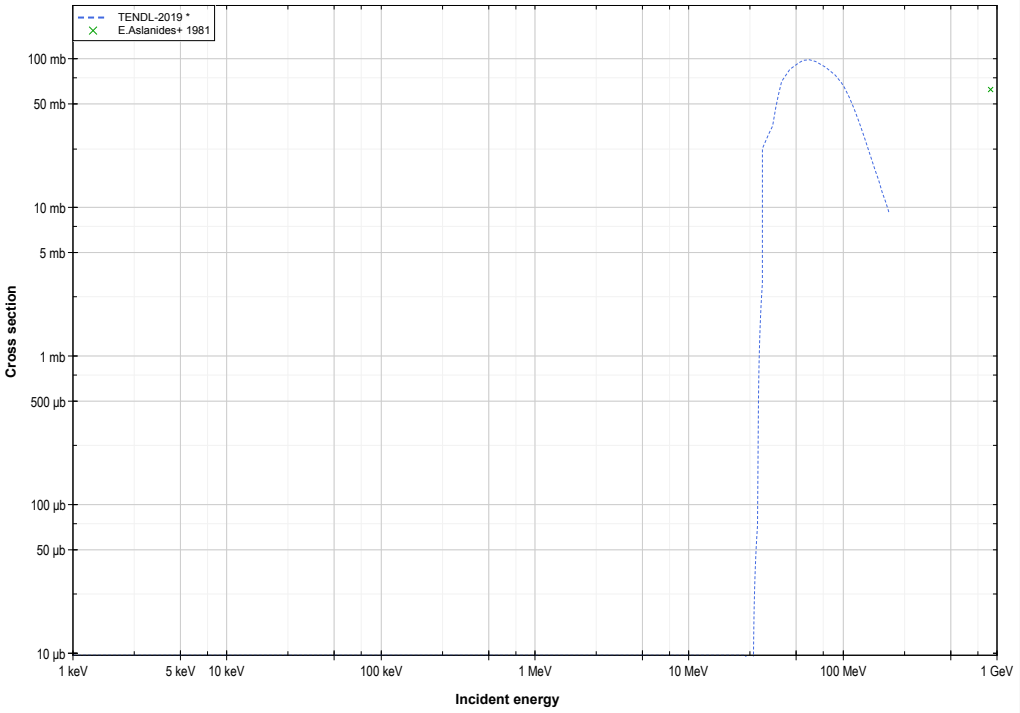
C12 (^{3}He,n+p) or N13 production lin-log



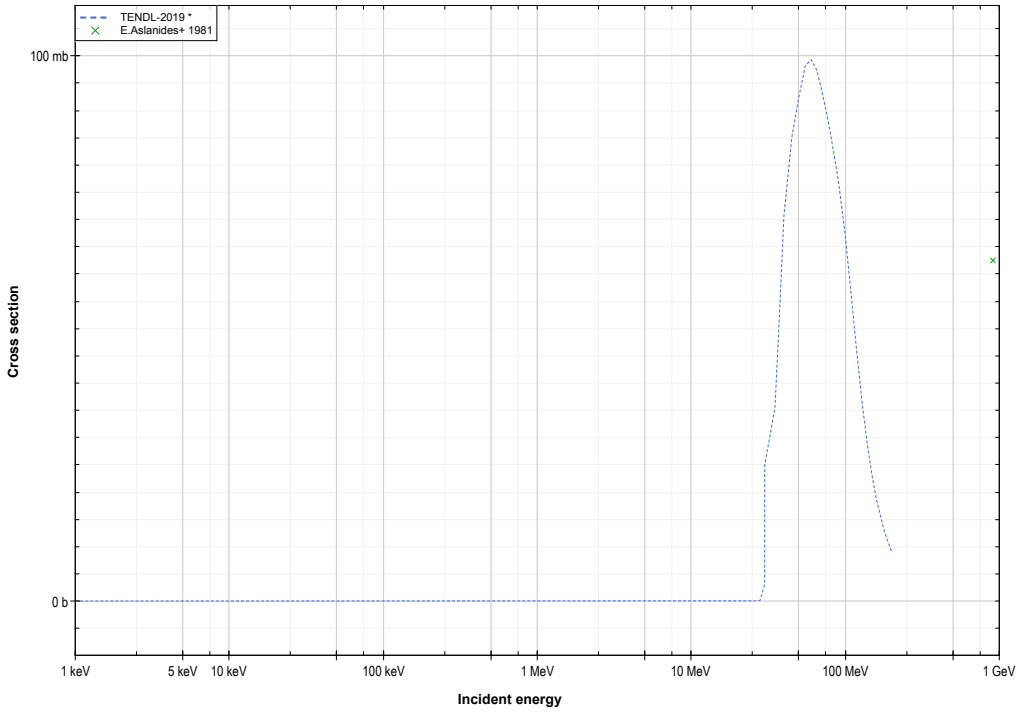
Reaction	Q-Value
C12(He3,d)N13	-3549.98 keV
C12(He3,n+p)N13	-5774.55 keV

	6-C-12	12-Mg-24 >>
<< MT28 (³He,n+p)	**MT34 (³He,n+³He) or MT5 (C11 production)**	MT104 (³He,d) >>

C12 (³He,n+³He) or C11 production log-log



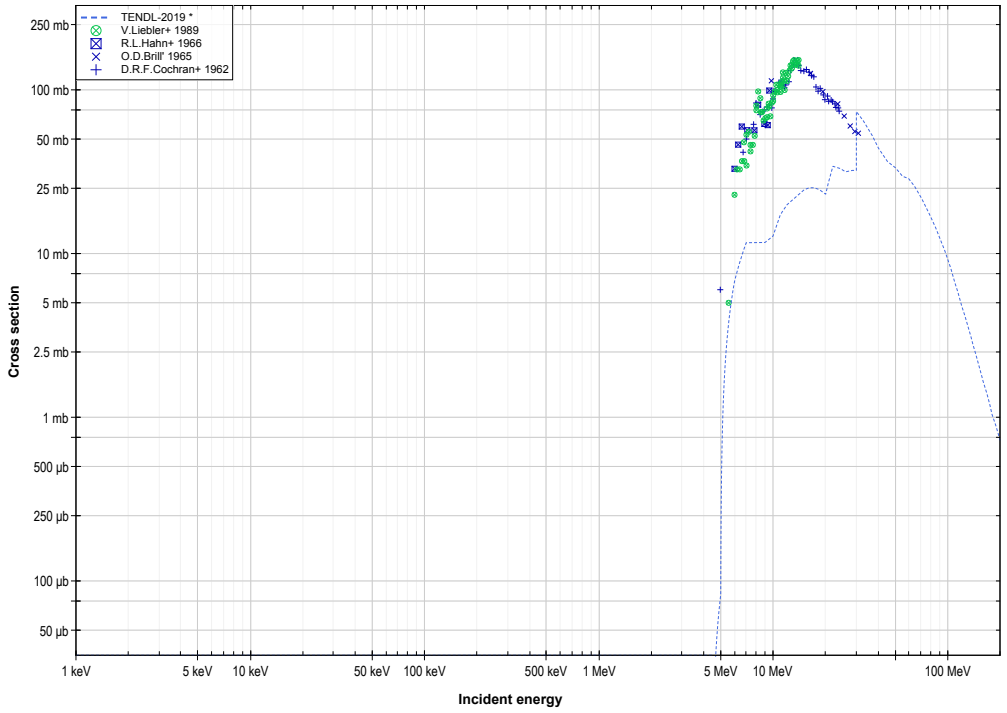
C12 (³He,n+³He) or C11 production lin-log



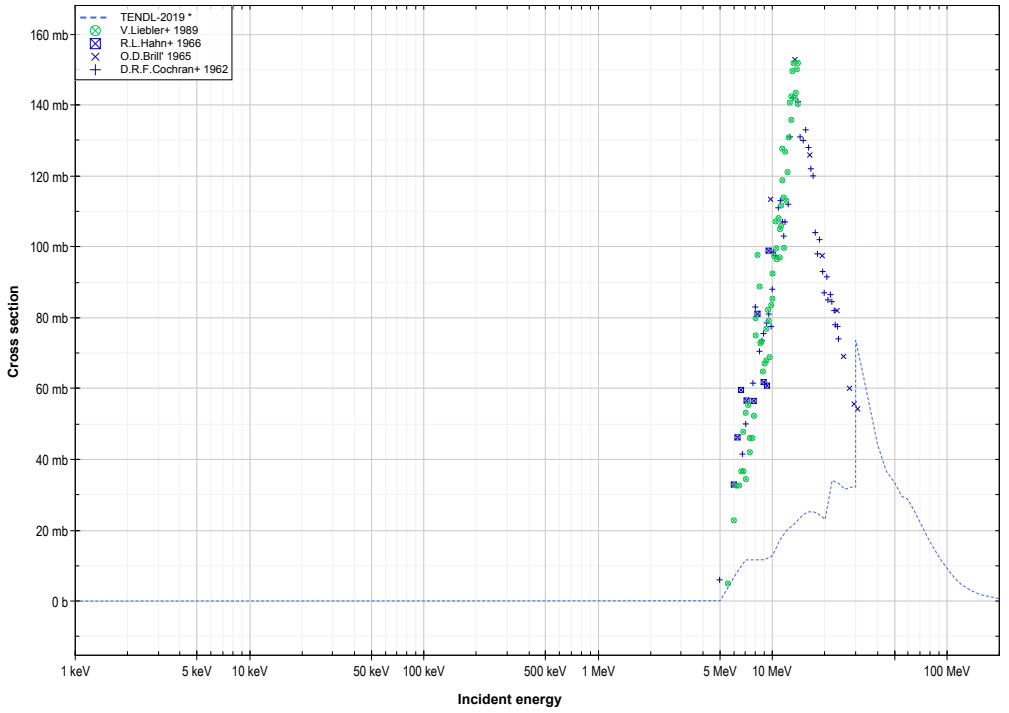
Reaction	Q-Value
C12(He3,α)C11	1856.90 keV
C12(He3,p+t)C11	-17956.96 keV
C12(He3,n+He3)C11	-18720.72 keV
C12(He3,2d)C11	-21989.63 keV
C12(He3,n+p+d)C11	-24214.19 keV
C12(He3,2n+2p)C11	-26438.76 keV

<< 5-B-10	**6-C-12**	12-Mg-24 >>
<< MT34 (^{3}He,n+^{3}He)	**MT104 (^{3}He,d) or MT5 (N13 production)**	MT107 (^{3}He,α) >>

C12 (^{3}He,d) or N13 production log-log



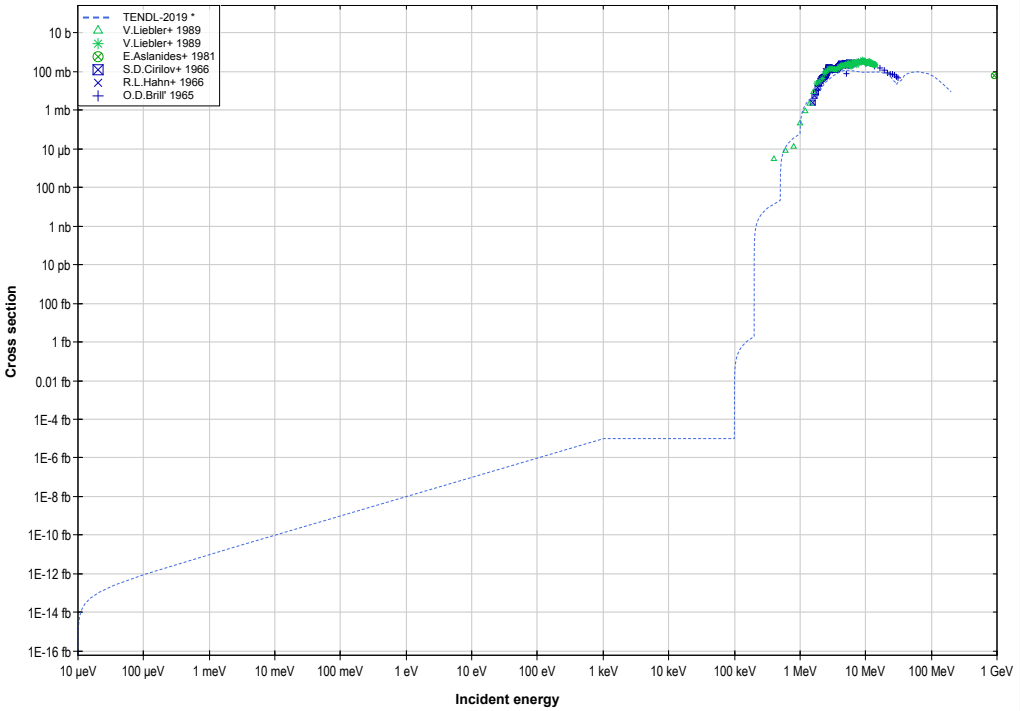
C12 (^{3}He,d) or N13 production lin-log



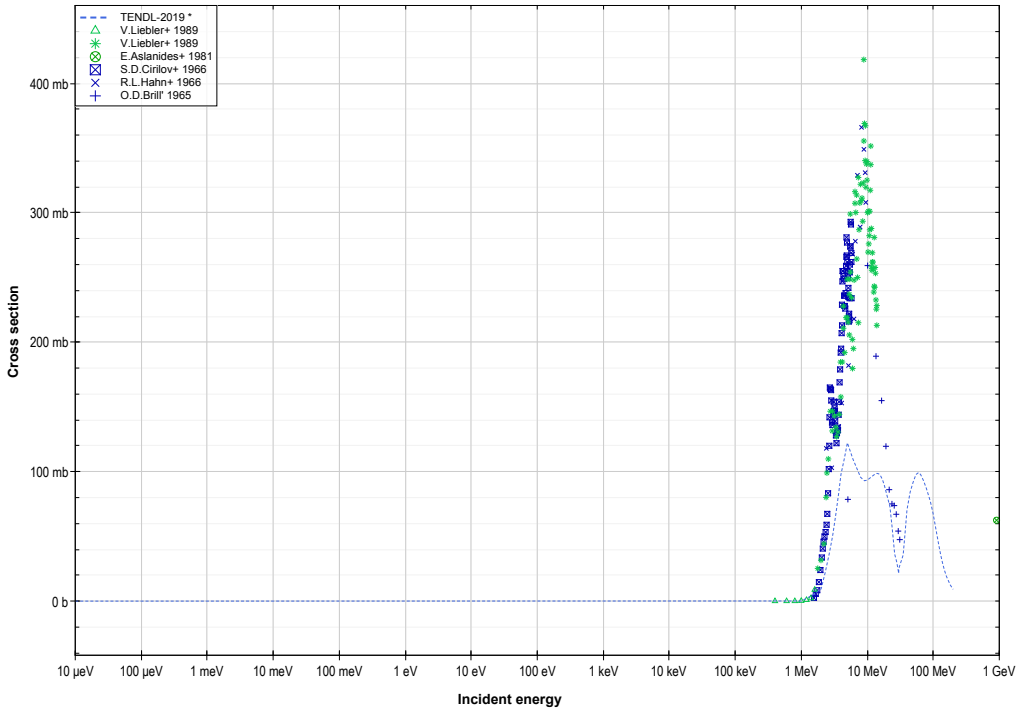
Reaction	Q-Value
C12(He3,d)N13	-3549.98 keV
C12(He3,n+p)N13	-5774.55 keV

	6-C-12	7-N-14 >>
<< MT104 (³He,d)	**MT107 (³He,α) or MT5 (C11 production)**	MT108 (³He,2α) >>

C12 (³He,α) or C11 production log-log



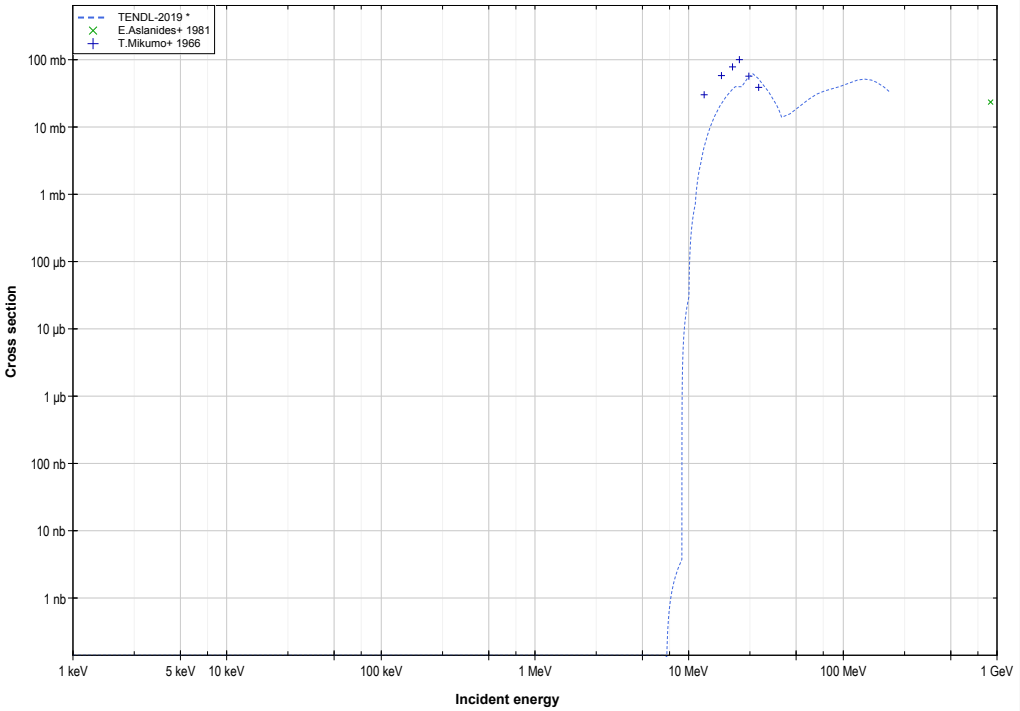
C12 (³He,α) or C11 production lin-log



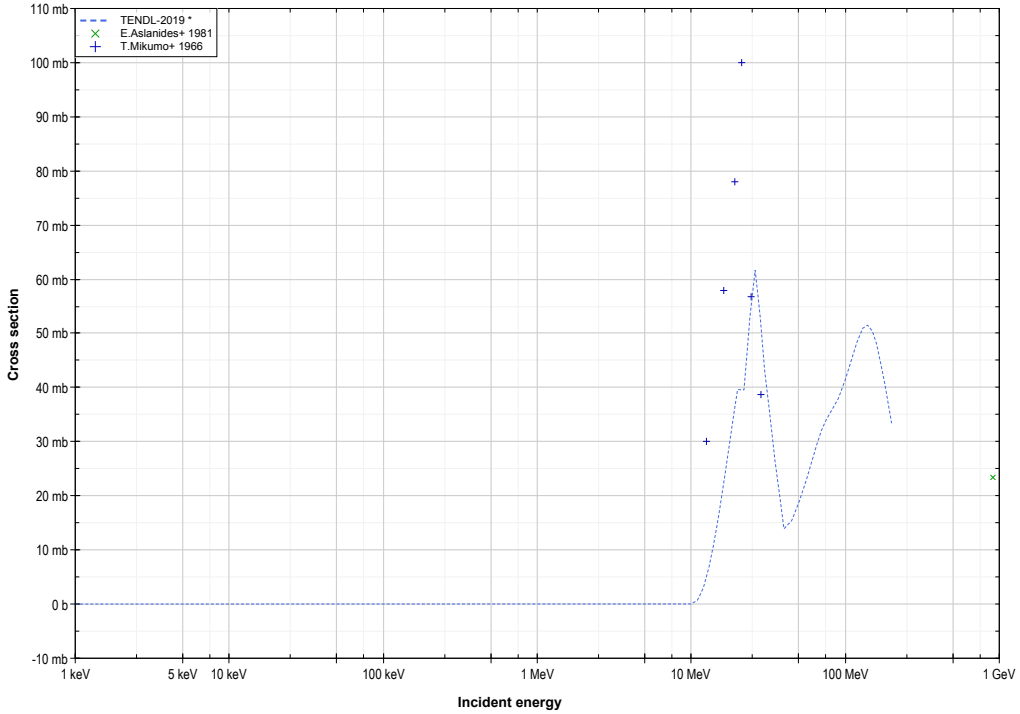
Reaction	Q-Value
C12(He3,α)C11	1856.90 keV
C12(He3,p+t)C11	-17956.96 keV
C12(He3,n+He3)C11	-18720.72 keV
C12(He3,2d)C11	-21989.63 keV
C12(He3,n+p+d)C11	-24214.19 keV
C12(He3,2n+2p)C11	-26438.76 keV

	6-C-12	8-O-16 >>
<< MT107 (^{3}He,α)	**MT108 (^{3}He,2α) or MT5 (Be7 production)**	MT116 (^{3}He,p+t) >>

C12 (^{3}He,2α) or Be7 production log-log



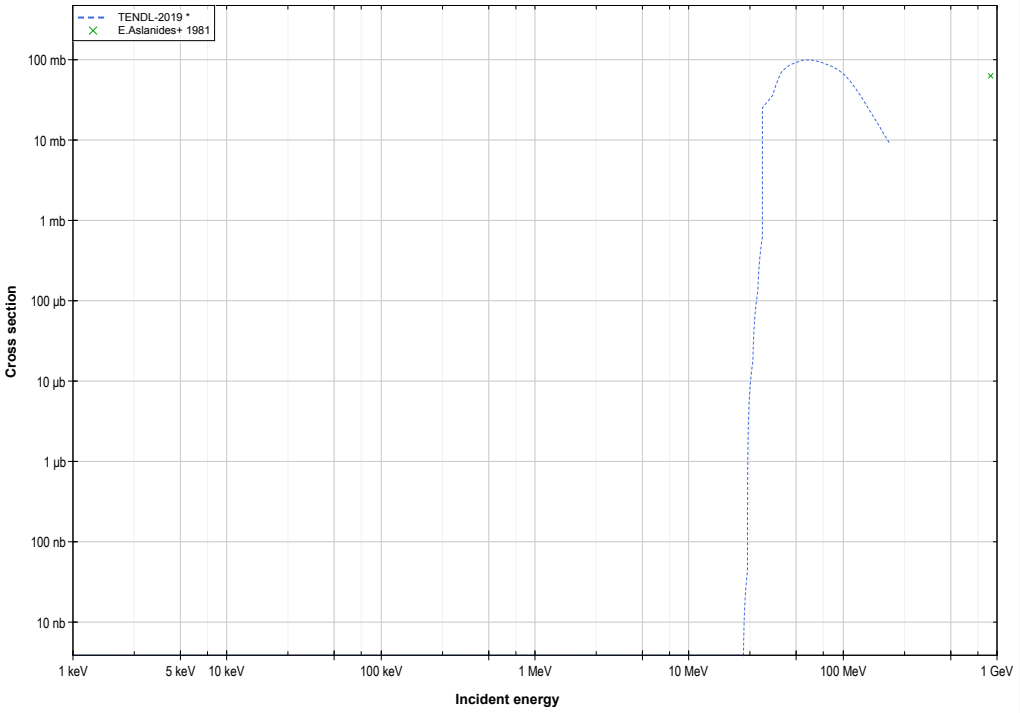
C12 (^{3}He,2α) or Be7 production lin-log



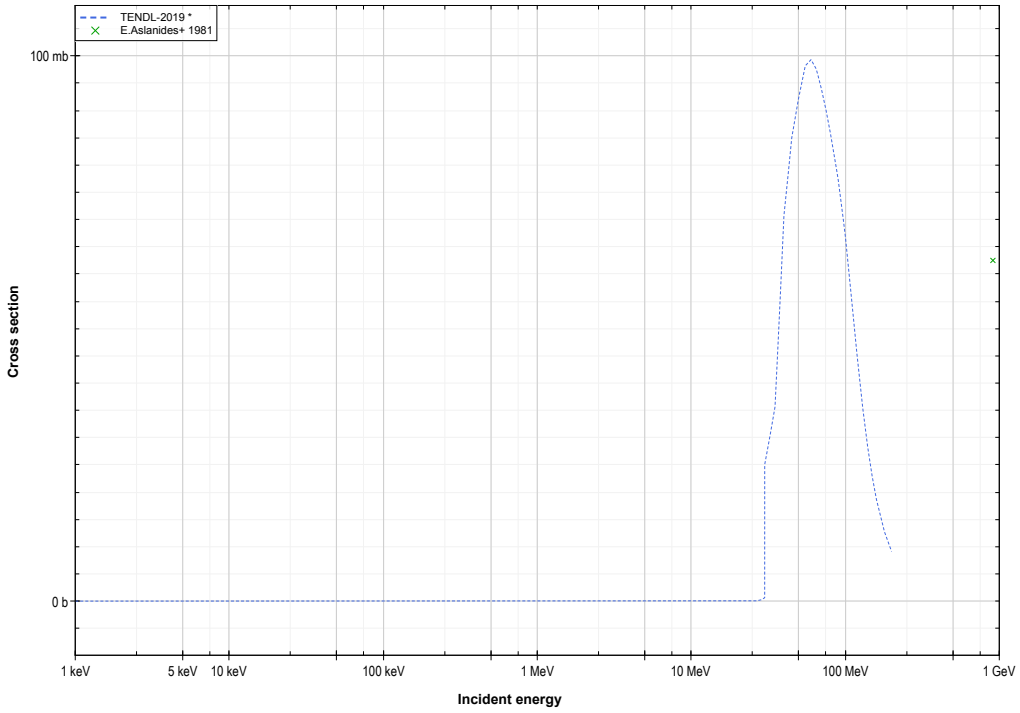
Reaction	Q-Value	Reaction	Q-Value
C12(He3,2α)Be7	-5687.61 keV	C12(He3,n+p+t+He3)Be7	-46079.10 keV
C12(He3,p+t+α)Be7	-25501.48 keV	C12(He3,2n+2He3)Be7	-46842.85 keV
C12(He3,n+He3+α)Be7	-26265.23 keV	C12(He3,p+2d+t)Be7	-49348.01 keV
C12(He3,2d+α)Be7	-29534.14 keV	C12(He3,n+2d+He3)Be7	-50111.76 keV
C12(He3,n+p+d+α)Be7	-31758.71 keV	C12(He3,n+2p+d+t)Be7	-51572.57 keV
C12(He3,2n+2p+α)Be7	-33983.27 keV	C12(He3,2n+p+d+He3)Be7	-52336.33 keV
C12(He3,d+t+He3)Be7	-43854.53 keV	C12(He3,4d)Be7	-53380.67 keV
C12(He3,2p+2t)Be7	-45315.34 keV	C12(He3,2n+3p+t)Be7	-53797.14 keV

	6-C-12	12-Mg-24 >>
<< MT108 (^{3}He,2α)	**MT116 (^{3}He,p+t) or MT5 (C11 production)**	MT176 (^{3}He,2n+^{3}He) >>

C12 (^{3}He,p+t) or C11 production log-log



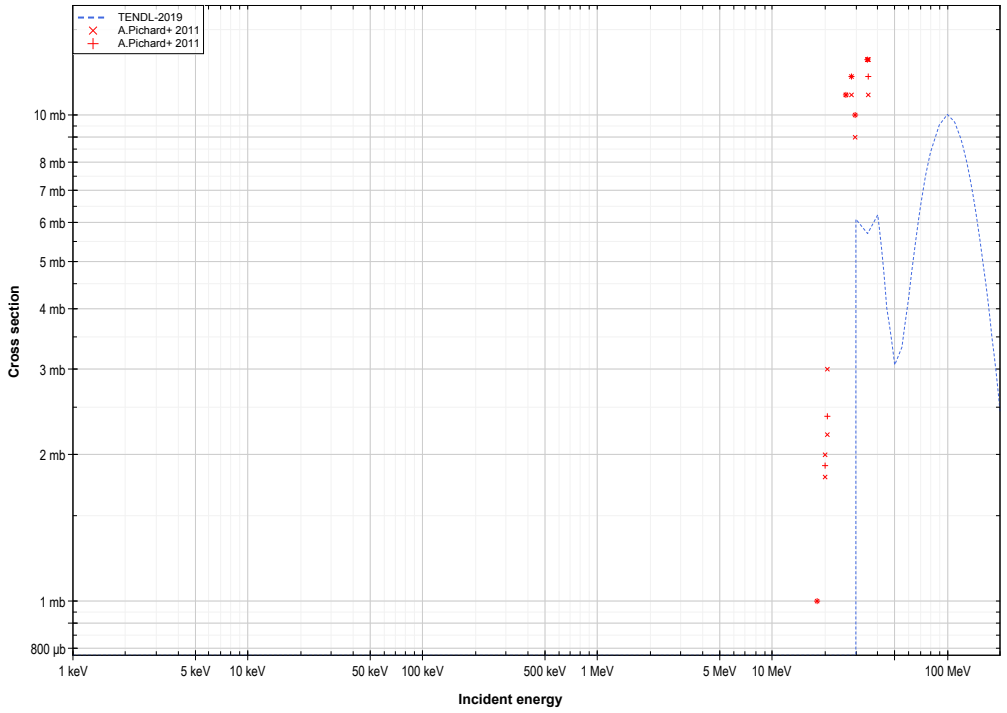
C12 (^{3}He,p+t) or C11 production lin-log



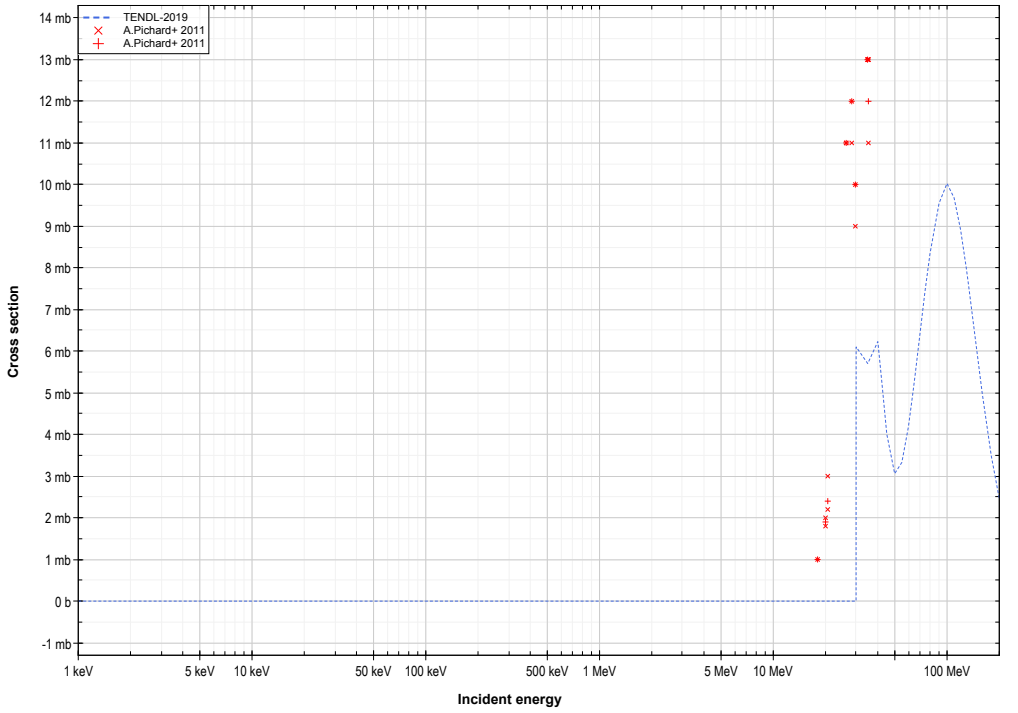
Reaction	Q-Value
C12(He3,α)C11	1856.90 keV
C12(He3,p+t)C11	-17956.96 keV
C12(He3,n+He3)C11	-18720.72 keV
C12(He3,2d)C11	-21989.63 keV
C12(He3,n+p+d)C11	-24214.19 keV
C12(He3,2n+2p)C11	-26438.76 keV

<< 4-Be-9	**6-C-12**	12-Mg-24 >>
<< MT116 (^{3}He,p+t)	**MT176 (^{3}He,2n+^{3}He) or MT5 (C10 production)**	MT179 (^{3}He,3n+2p) >>

C12 (^{3}He,2n+^{3}He) or C10 production log-log



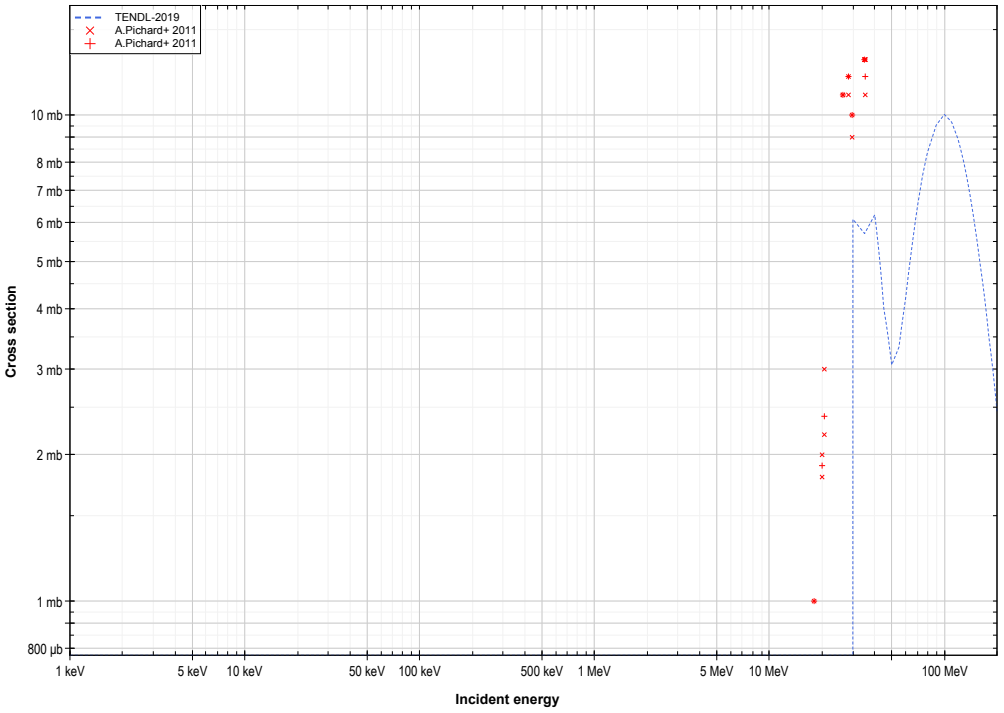
C12 (^{3}He,2n+^{3}He) or C10 production lin-log



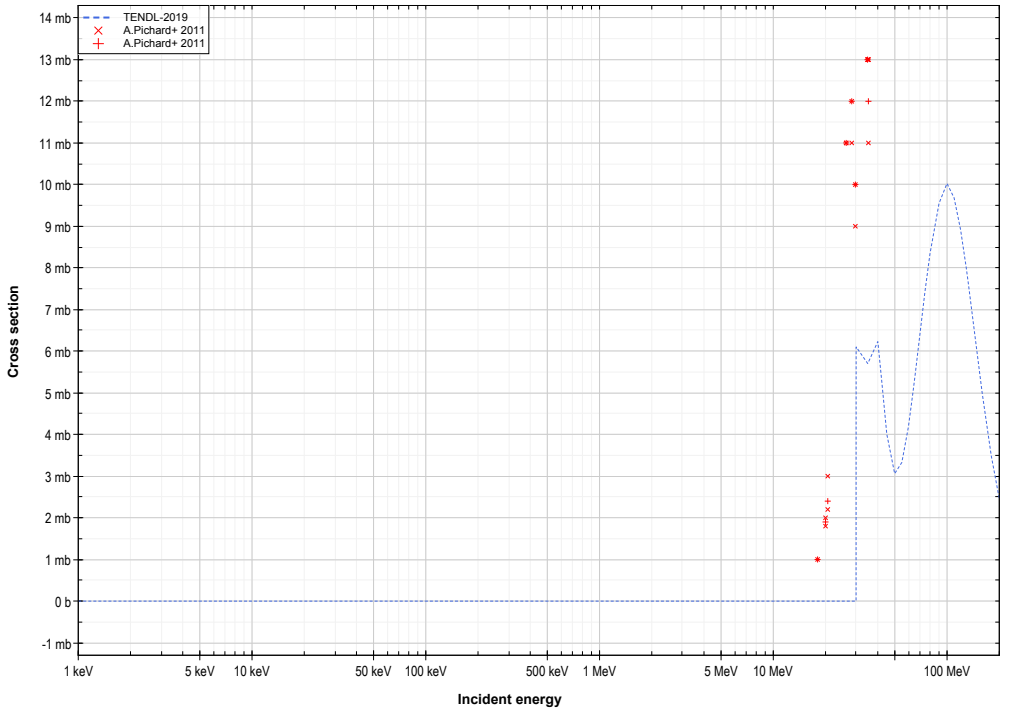
Reaction	Q-Value
C12(He3,n+α)C10	-11263.68 keV
C12(He3,d+t)C10	-28852.98 keV
C12(He3,n+p+t)C10	-31077.55 keV
C12(He3,2n+He3)C10	-31841.30 keV
C12(He3,n+2d)C10	-35110.21 keV
C12(He3,2n+p+d)C10	-37334.78 keV
C12(He3,3n+2p)C10	-39559.34 keV

<< 4-Be-9	**6-C-12**	12-Mg-24 >>
<< MT176 (^{3}He,2n+^{3}He)	**MT179 (^{3}He,3n+2p) or MT5 (C10 production)**	MT182 (^{3}He,d+t) >>

C12 (^{3}He,3n+2p) or C10 production log-log



C12 (^{3}He,3n+2p) or C10 production lin-log



Reaction	Q-Value
C12(He3,n+α)C10	-11263.68 keV
C12(He3,d+t)C10	-28852.98 keV
C12(He3,n+p+t)C10	-31077.55 keV
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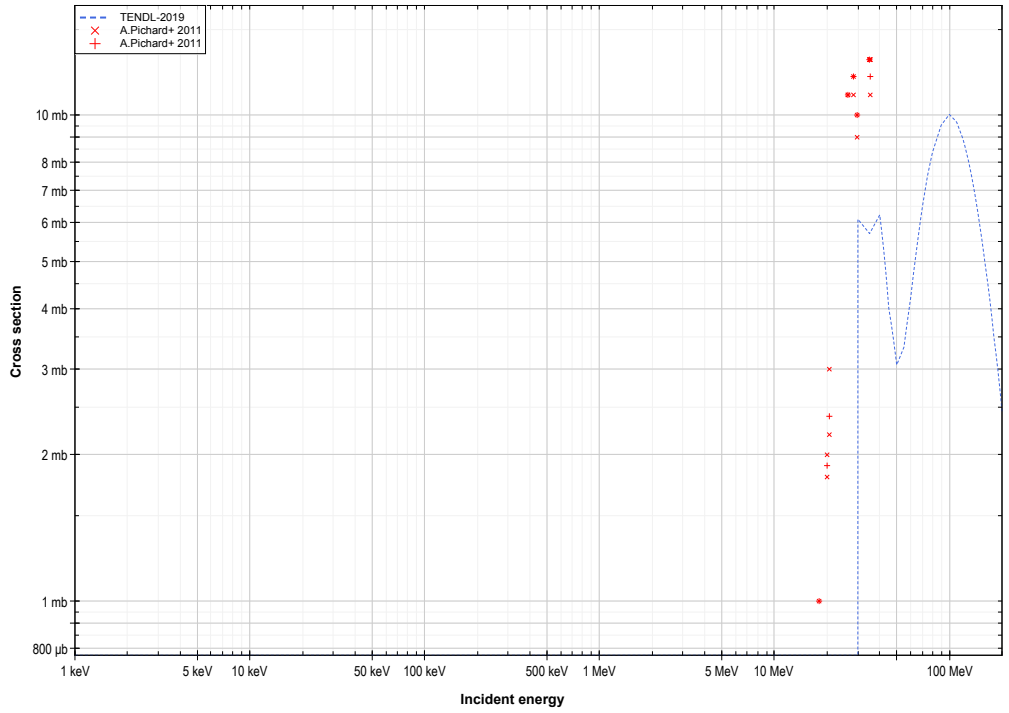
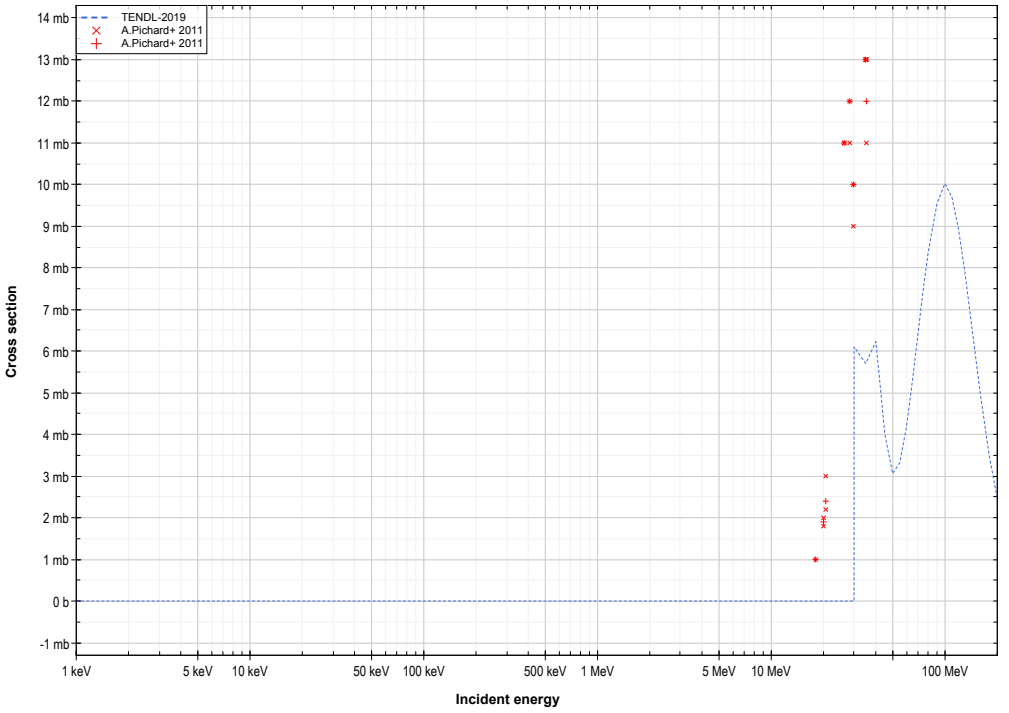
C12(He3,n+2d)C10	-35110.21 keV
C12(He3,2n+p+d)C10	-37334.78 keV
C12(He3,3n+2p)C10	-39559.34 keV

<< 4-Be-9	**6-C-12**	12-Mg-24 >>
<< MT179 (^{3}He,3n+2p)	**MT182 (^{3}He,d+t) or MT5 (C10 production)**	MT183 (^{3}He,n+p+d) >>

C12 (^{3}He,d+t) or C10 production log-log



C12 (^{3}He,d+t) or C10 production lin-log



Reaction	Q-Value
C12(He3,n+α)C10	-11263.68 keV
C12(He3,d+t)C10	-28852.98 keV
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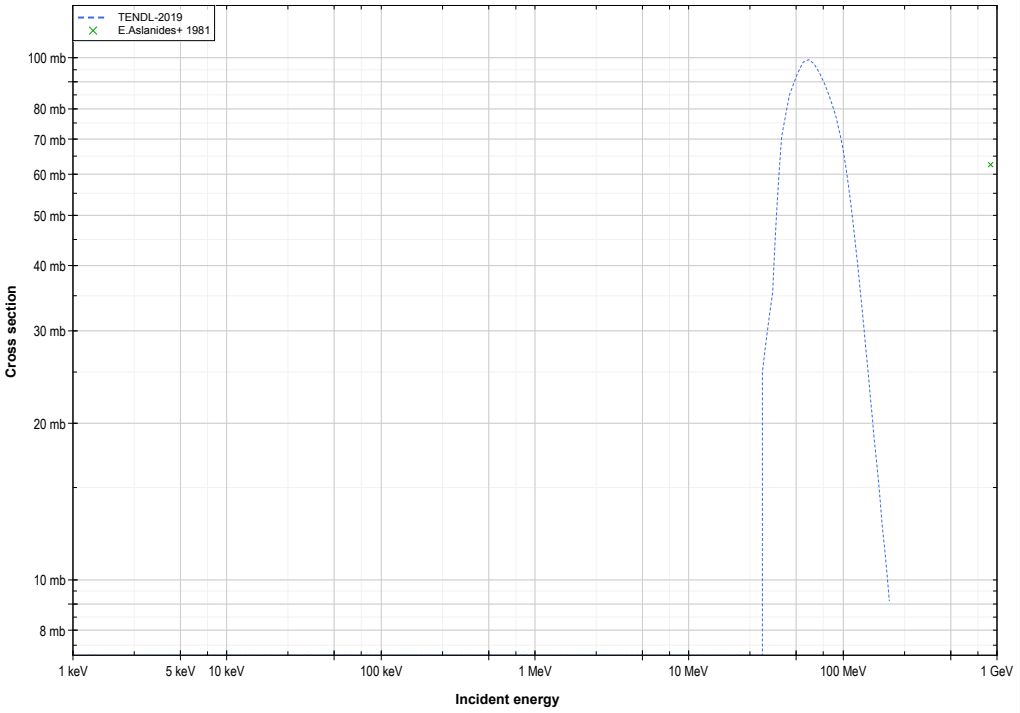
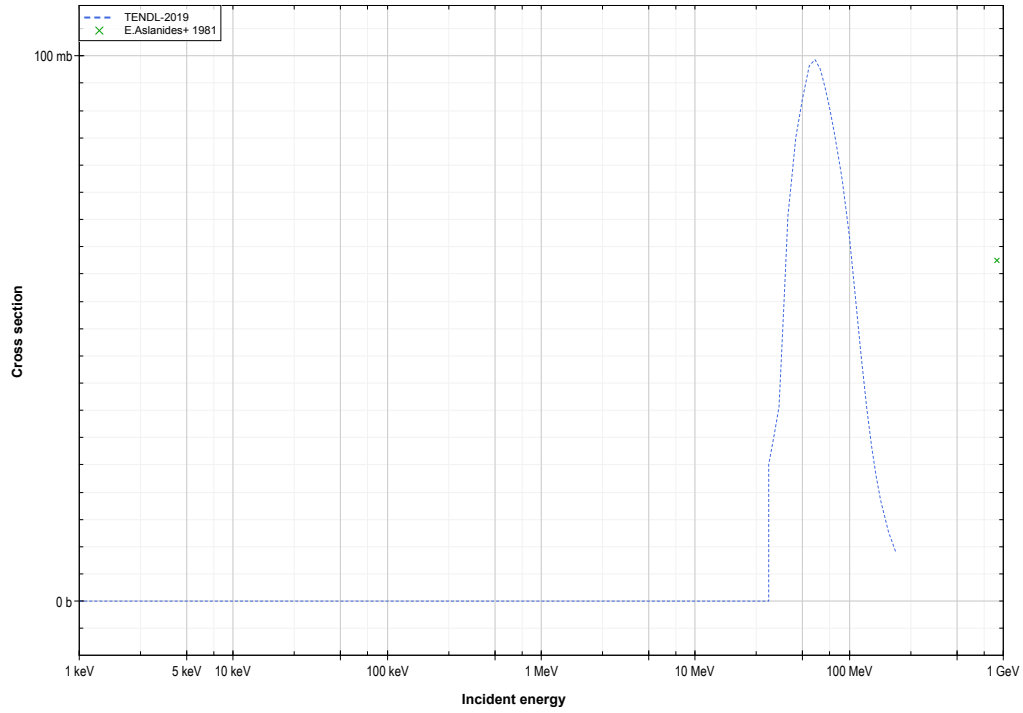
C12(He3,n+2d)C10	-35110.21 keV
C12(He3,2n+p+d)C10	-37334.78 keV
C12(He3,3n+2p)C10	-39559.34 keV

	6-C-12	12-Mg-24 >>
<< MT182 (^{3}He,d+t)	**MT183 (^{3}He,n+p+d) or MT5 (C11 production)**	MT184 (^{3}He,n+p+t) >>

C12 (^{3}He,n+p+d) or C11 production log-log



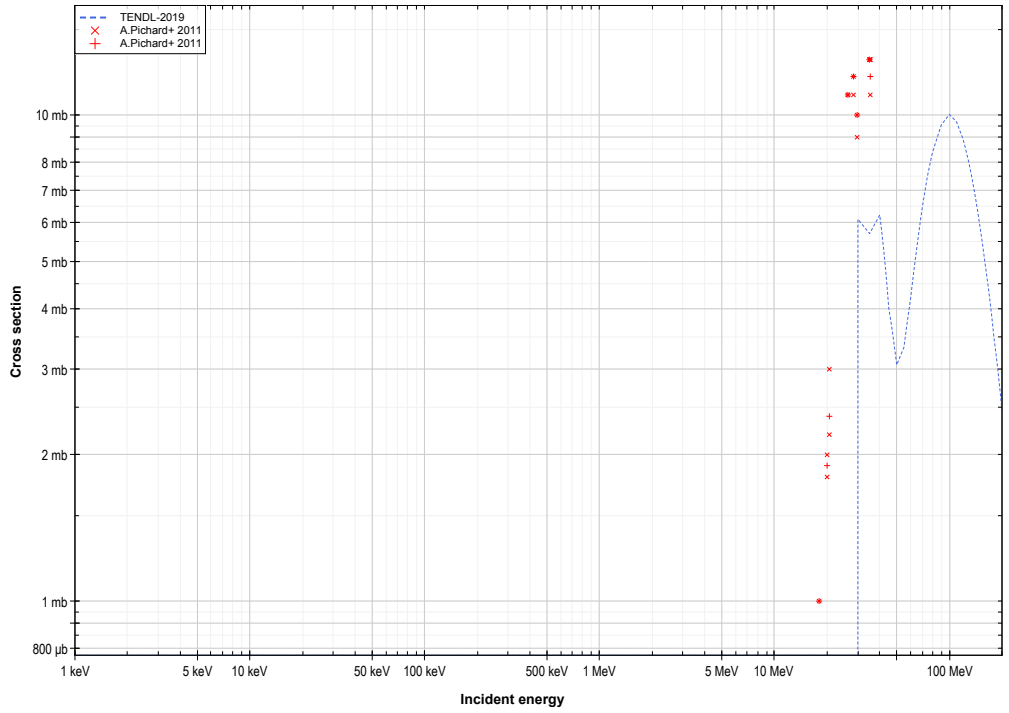
C12 (^{3}He,n+p+d) or C11 production lin-log



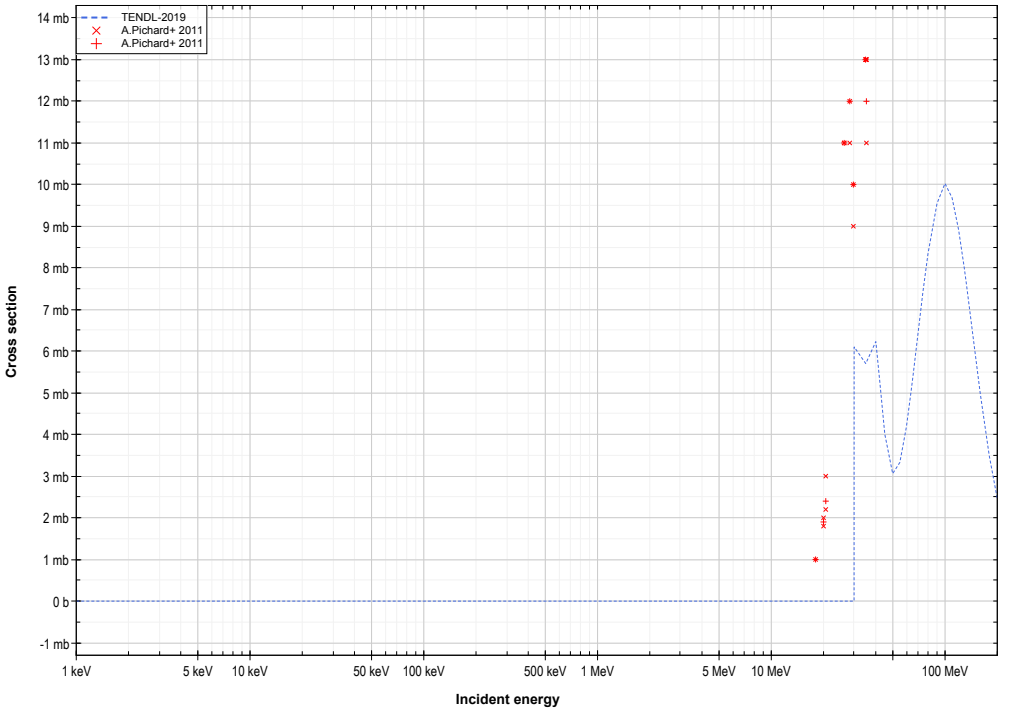
Reaction	Q-Value
C12(He3,α)C11	1856.90 keV
C12(He3,p+t)C11	-17956.96 keV
C12(He3,n+He3)C11	-18720.72 keV
C12(He3,2d)C11	-21989.63 keV
C12(He3,n+p+d)C11	-24214.19 keV
C12(He3,2n+2p)C11	-26438.76 keV

<< 4-Be-9	**6-C-12**	12-Mg-24 >>
<< MT183 (^{3}He,n+p+d)	**MT184 (^{3}He,n+p+t) or MT5 (C10 production)**	MT190 (^{3}He,2n+2p) >>

C12 (^{3}He,n+p+t) or C10 production log-log



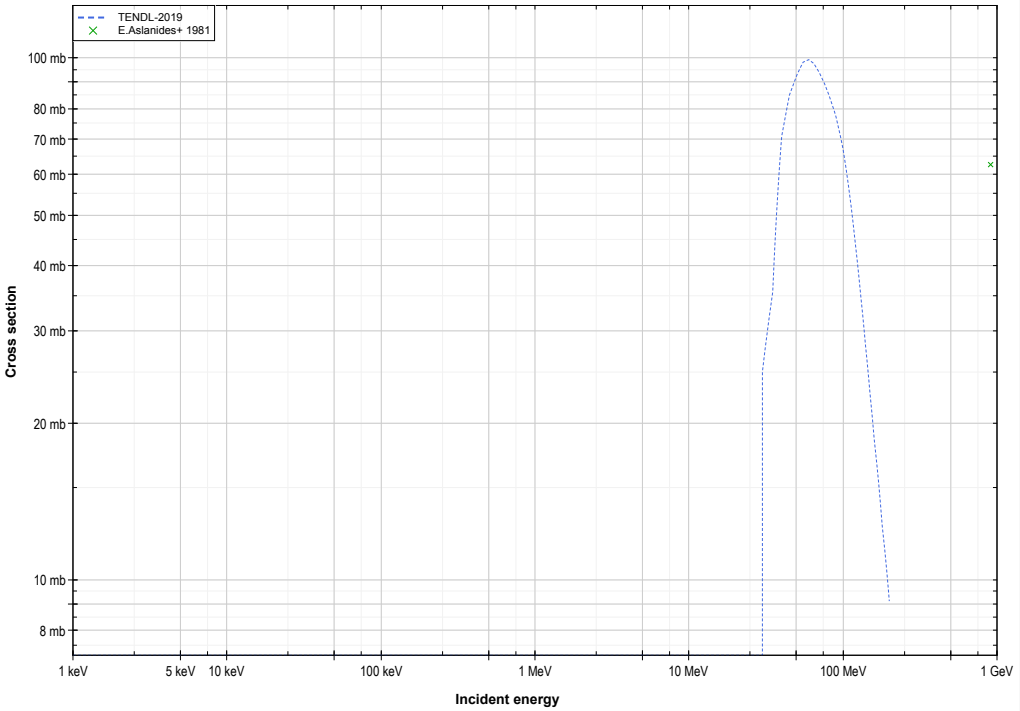
C12 (^{3}He,n+p+t) or C10 production lin-log



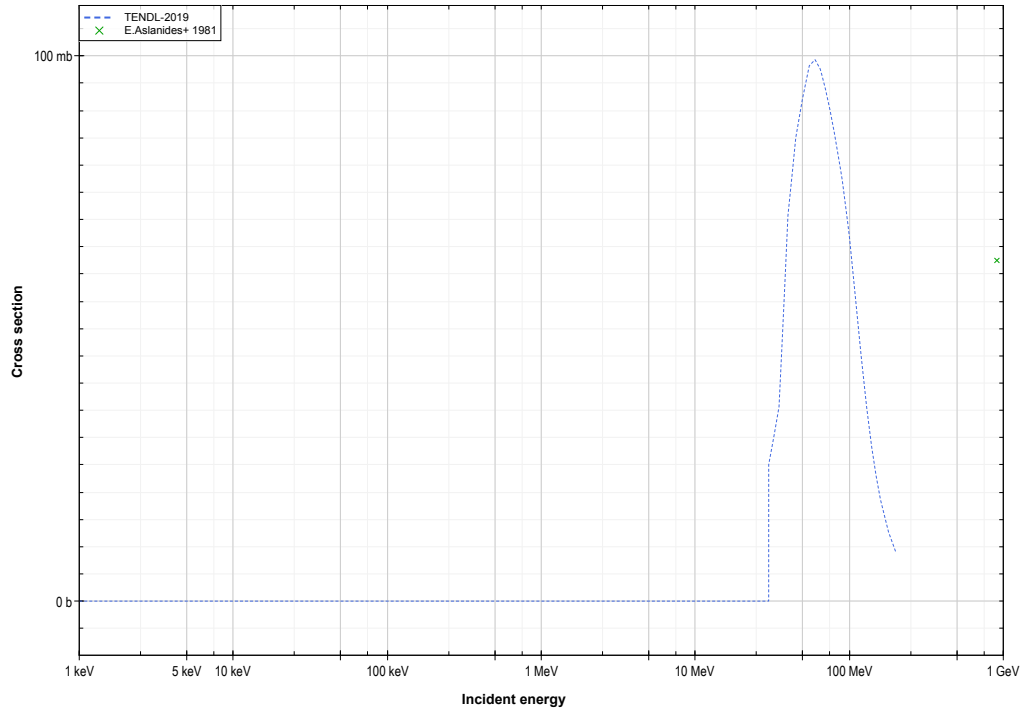
Reaction	Q-Value
C12(He3,n+α)C10	-11263.68 keV
C12(He3,d+t)C10	-28852.98 keV
C12(He3,n+p+t)C10	-31077.55 keV
C12(He3,2n+He3)C10	-31841.30 keV
C12(He3,n+2d)C10	-35110.21 keV
C12(He3,2n+p+d)C10	-37334.78 keV
C12(He3,3n+2p)C10	-39559.34 keV

	6-C-12	12-Mg-24 >>
<< MT184 (³He,n+p+t)	**MT190 (³He,2n+2p) or MT5 (C11 production)**	7-N-14 MT107 (³He,α) >>

C12 (³He,2n+2p) or C11 production log-log



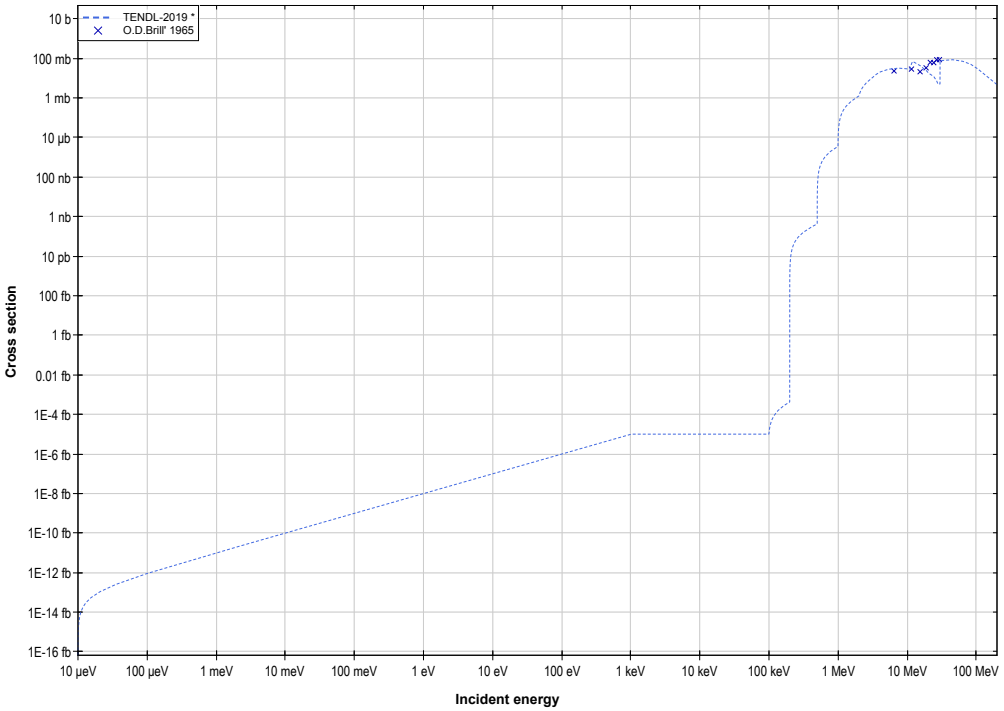
C12 (³He,2n+2p) or C11 production lin-log



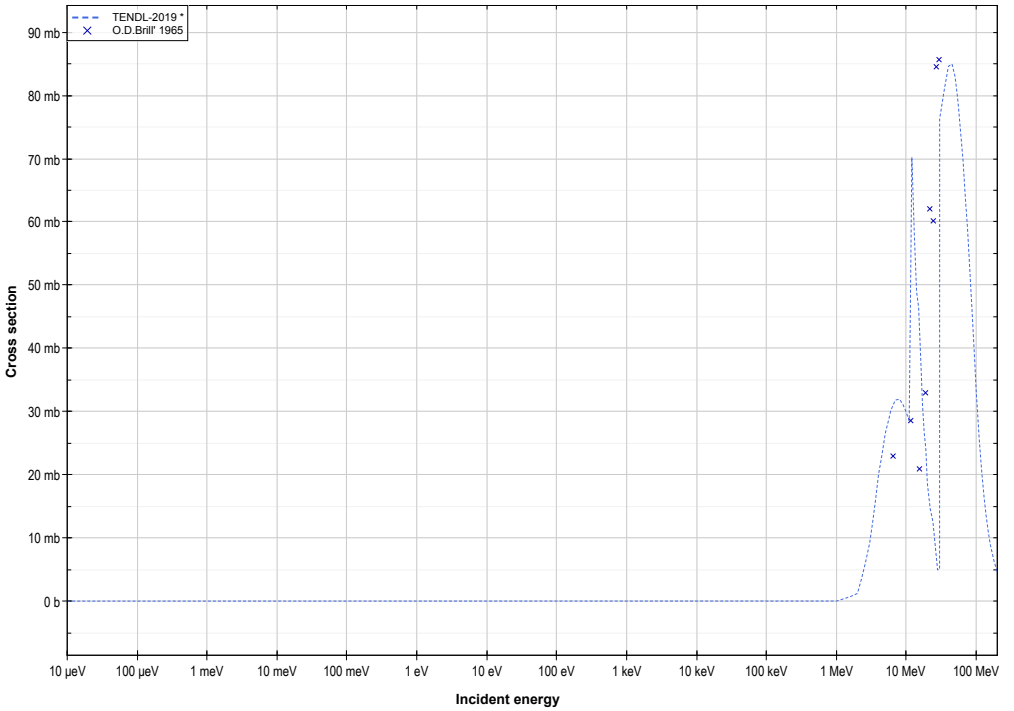
Reaction	Q-Value
C12(He3,α)C11	1856.90 keV
C12(He3,p+t)C11	-17956.96 keV
C12(He3,n+He3)C11	-18720.72 keV
C12(He3,2d)C11	-21989.63 keV
C12(He3,n+p+d)C11	-24214.19 keV
C12(He3,2n+2p)C11	-26438.76 keV

<< 6-C-12	**7-N-14**	8-O-16 >>
<< 6-C-12 MT190 (³He,2n+2p)	**MT107 (³He,α) or MT5 (N13 production)**	MT114 (³He,d+2α) >>

N14 (³He,α) or N13 production log-log



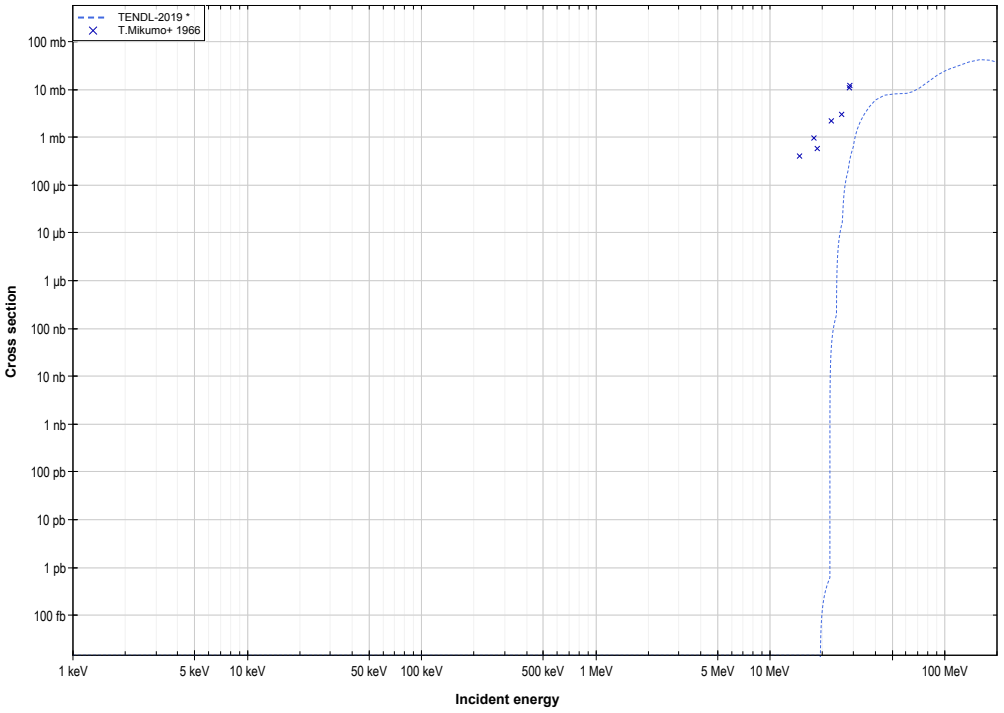
N14 (³He,α) or N13 production lin-log



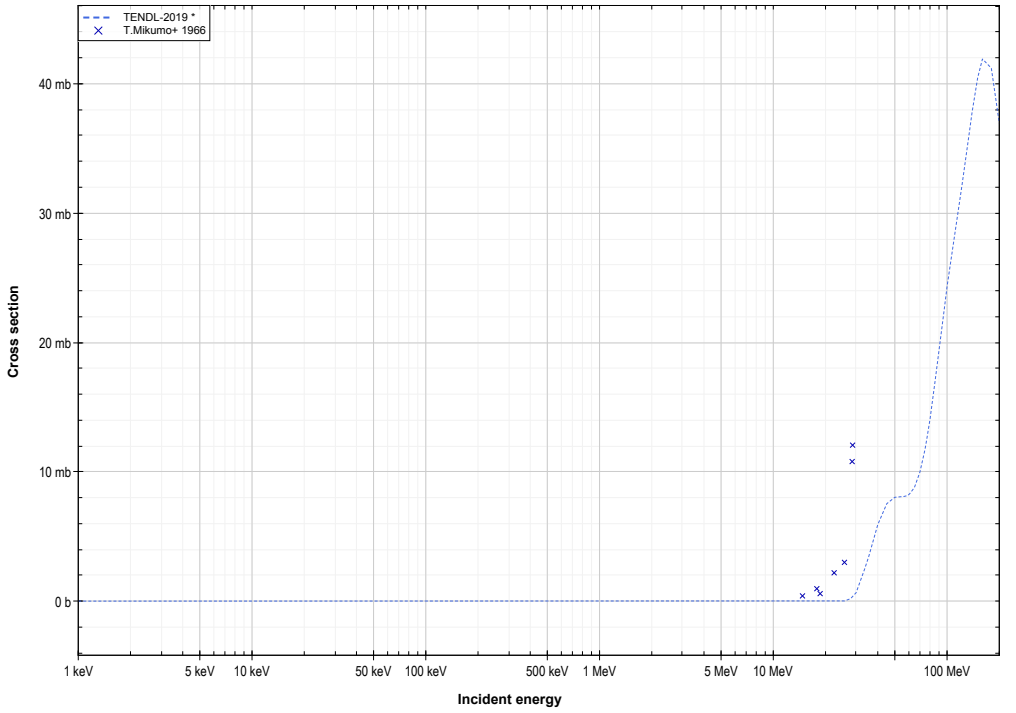
Reaction	Q-Value
N14(He3,α)N13	10024.24 keV
N14(He3,p+t)N13	-9789.63 keV
N14(He3,n+He3)N13	-10553.38 keV
N14(He3,2d)N13	-13822.29 keV
N14(He3,n+p+d)N13	-16046.85 keV
N14(He3,2n+2p)N13	-18271.42 keV

	7-N-14	
<< MT107 (³He,α)	**MT114 (³He,d+2α) or MT5 (Be7 production)**	8-O-16 MT103 (³He,p) >>

N14 (³He,d+2α) or Be7 production log-log



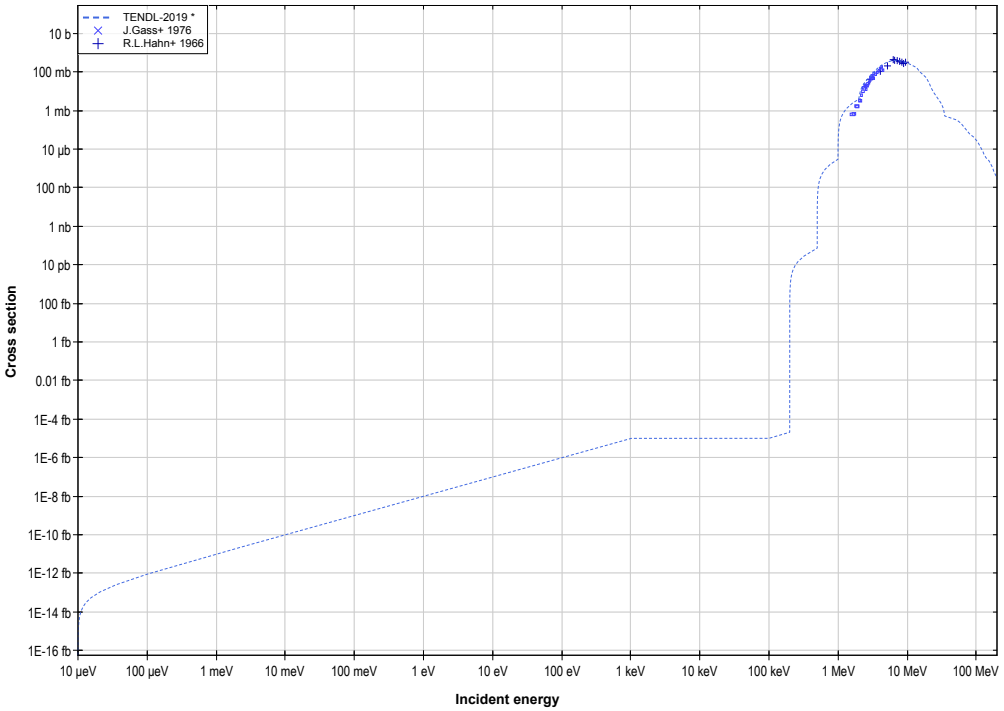
N14 (³He,d+2α) or Be7 production lin-log



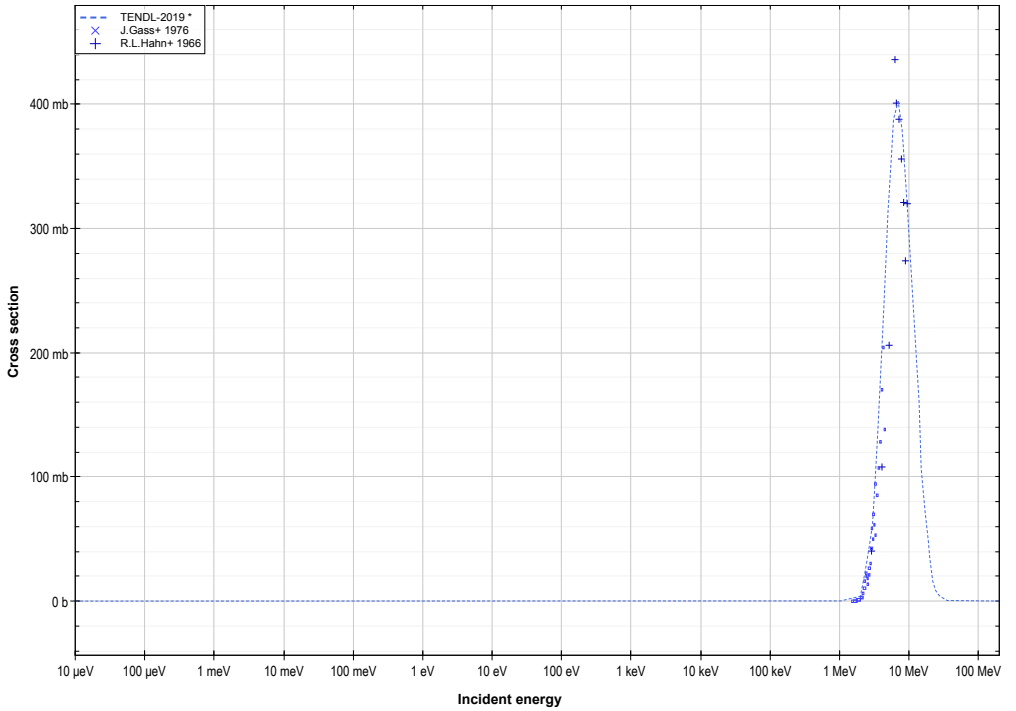
Reaction	Q-Value	Reaction	Q-Value
N14(He3,d+2α)Be7	-15959.92 keV	N14(He3,n+p+2d+α)Be7	-42031.01 keV
N14(He3,n+p+2α)Be7	-18184.48 keV	N14(He3,2n+2p+d+α)Be7	-44255.58 keV
N14(He3,t+He3+α)Be7	-30280.31 keV	N14(He3,3n+3p+α)Be7	-46480.14 keV
N14(He3,p+d+t+α)Be7	-35773.78 keV	N14(He3,p+2t+He3)Be7	-50094.17 keV
N14(He3,n+d+He3+α)Be7	-36537.54 keV	N14(He3,n+t+2He3)Be7	-50857.93 keV
N14(He3,n+2p+t+α)Be7	-37998.35 keV	N14(He3,2d+t+He3)Be7	-54126.84 keV
N14(He3,2n+p+He3+α)Be7	-38762.10 keV	N14(He3,2p+d+2t)Be7	-55587.65 keV
N14(He3,3d+α)Be7	-39806.45 keV	N14(He3,n+p+d+t+He3)Be7	-56351.40 keV

	8-O-16	12-Mg-24 >>
<< 7-N-14 MT114 (^{3}He,d+2α)	**MT103 (^{3}He,p) or MT5 (F18 production)**	MT107 (^{3}He,α) >>

O16 (^{3}He,p) or F18 production log-log



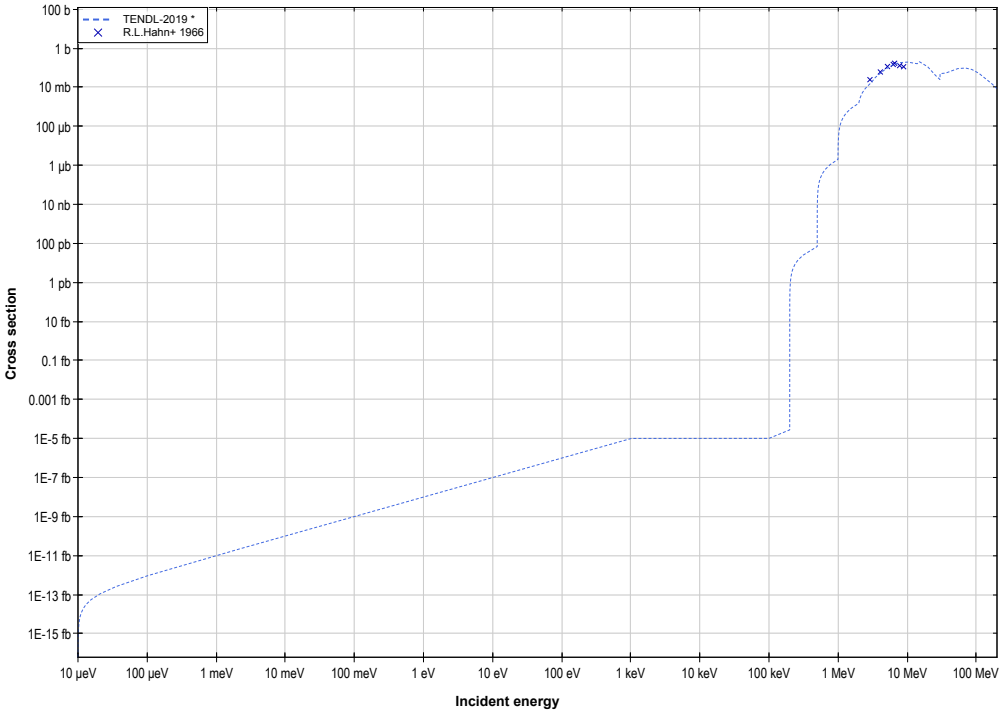
O16 (^{3}He,p) or F18 production lin-log



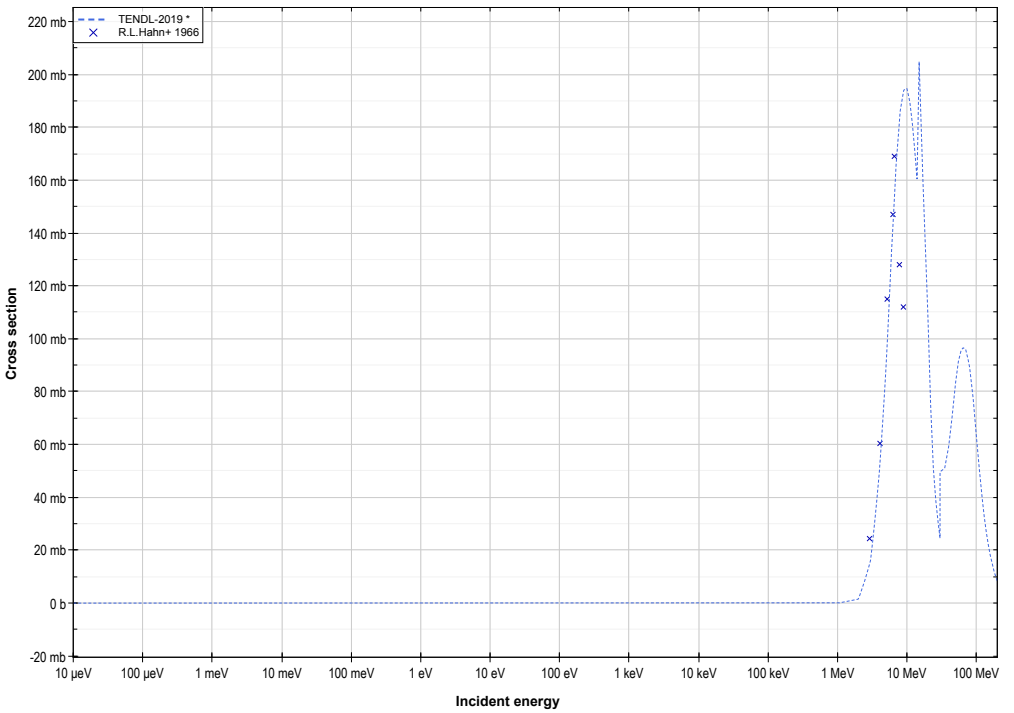
Reaction	Q-Value
O16(He3,p)F18	2032.15 keV

<< 7-N-14	**8-O-16**	9-F-19 >>
<< MT103 (³He,p)	**MT107 (³He,α) or MT5 (O15 production)**	MT108 (³He,2α) >>

O16 (³He,α) or O15 production log-log



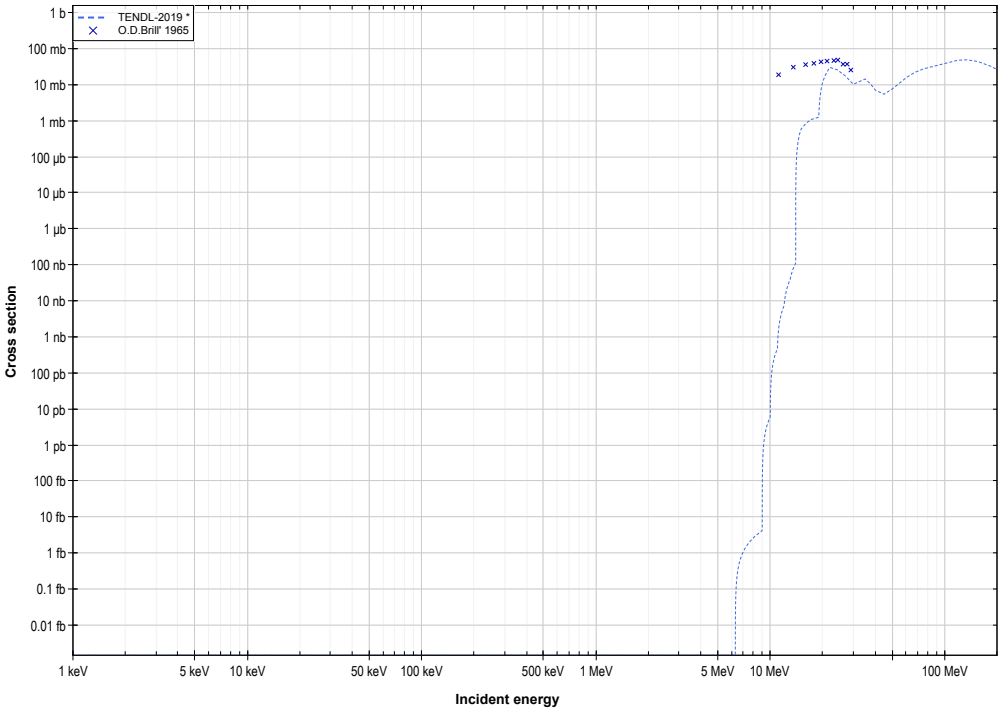
O16 (³He,α) or O15 production lin-log



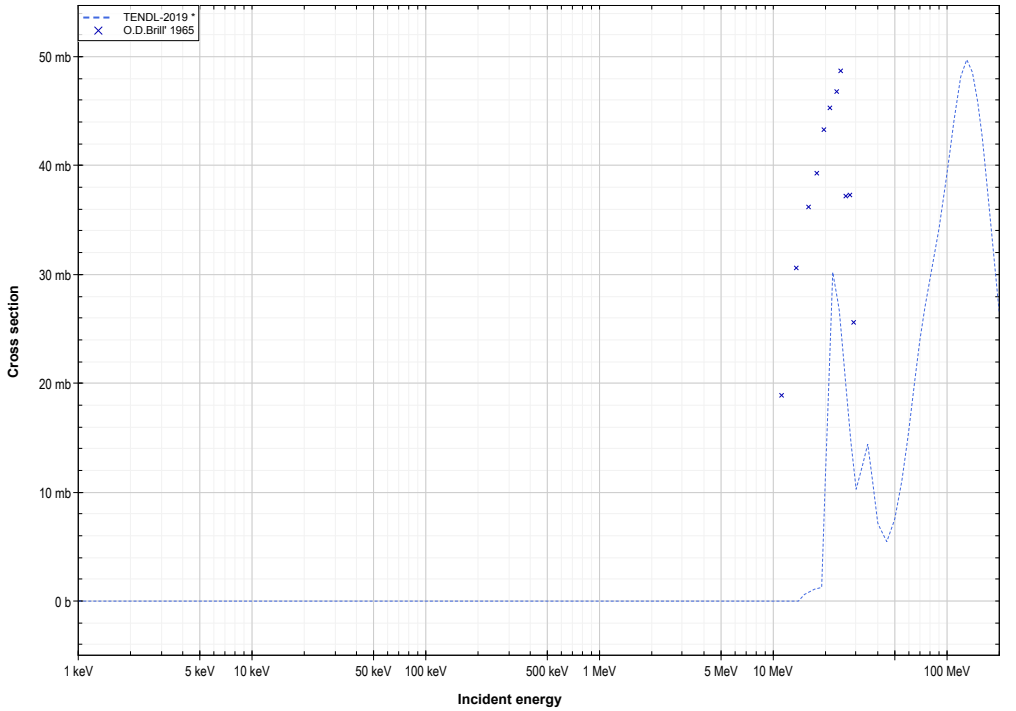
Reaction	Q-Value
O16(He3,α)O15	4913.70 keV
O16(He3,p+t)O15	-14900.16 keV
O16(He3,n+He3)O15	-15663.92 keV
O16(He3,2d)O15	-18932.83 keV
O16(He3,n+p+d)O15	-21157.39 keV
O16(He3,2n+2p)O15	-23381.96 keV

<< 6-C-12	**8-O-16**	13-Al-27 >>
<< MT107 (^{3}He,α)	**MT108 (^{3}He,2α) or MT5 (C11 production)**	MT109 (^{3}He,3α) >>

O16 (^{3}He,2α) or C11 production log-log



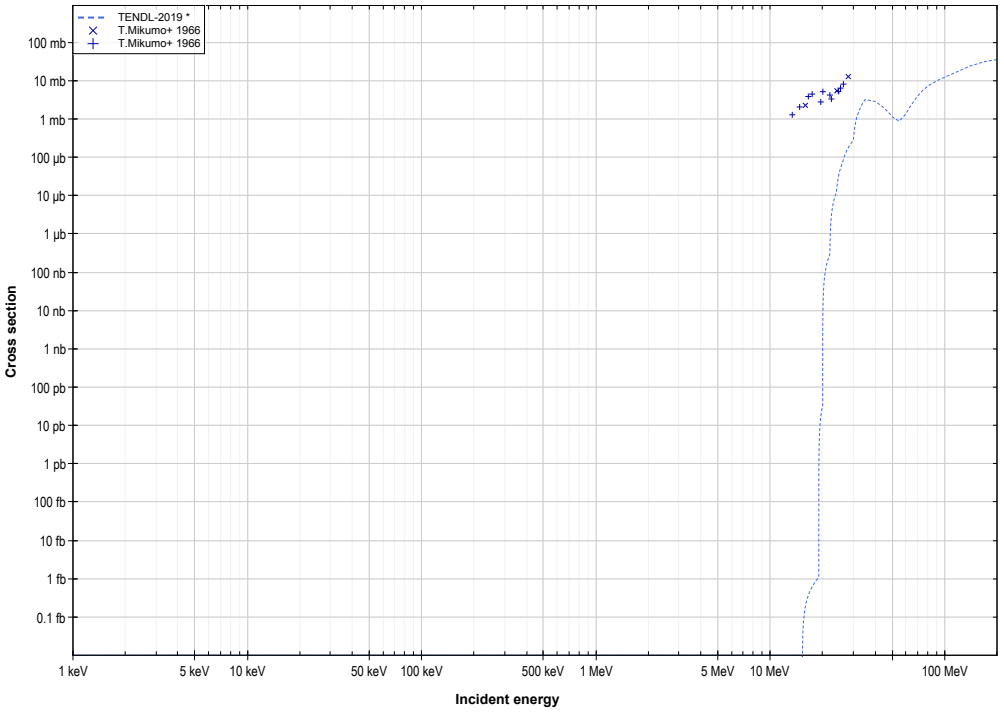
O16 (^{3}He,2α) or C11 production lin-log



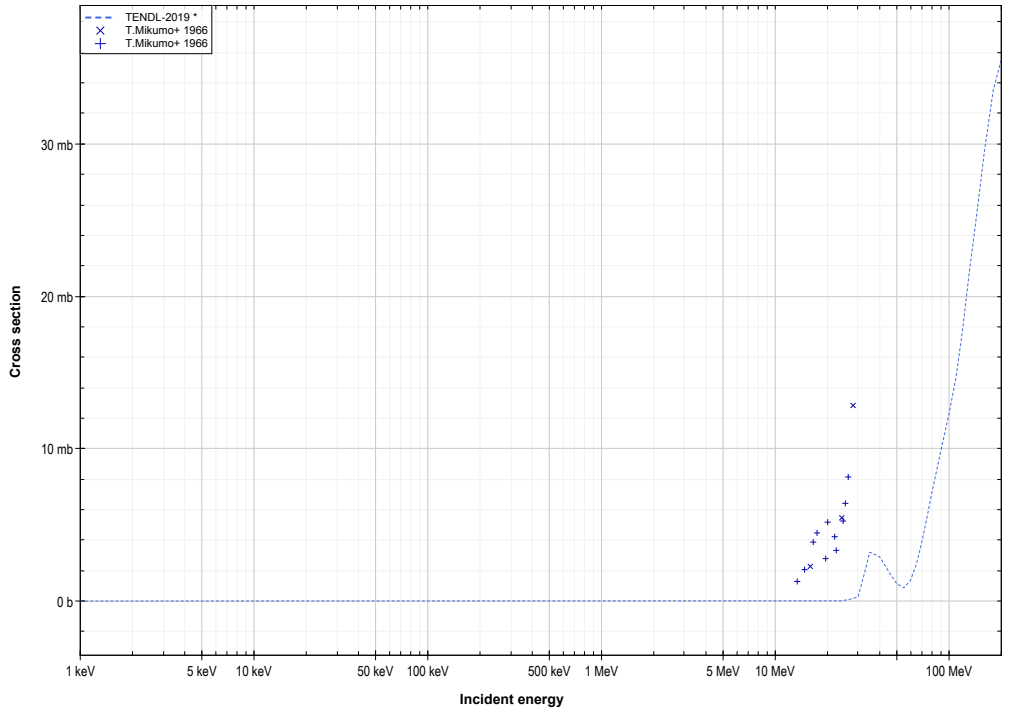
Reaction	Q-Value	Reaction	Q-Value
O16(He3,2α)C11	-5305.01 keV	O16(He3,n+p+t+He3)C11	-45696.50 keV
O16(He3,p+t+α)C11	-25118.88 keV	O16(He3,2n+2He3)C11	-46460.25 keV
O16(He3,n+He3+α)C11	-25882.63 keV	O16(He3,p+2d+t)C11	-48965.41 keV
O16(He3,2d+α)C11	-29151.54 keV	O16(He3,n+2d+He3)C11	-49729.16 keV
O16(He3,n+p+d+α)C11	-31376.11 keV	O16(He3,n+2p+d+t)C11	-51189.97 keV
O16(He3,2n+2p+α)C11	-33600.67 keV	O16(He3,2n+p+d+He3)C11	-51953.73 keV
O16(He3,d+t+He3)C11	-43471.93 keV	O16(He3,4d)C11	-52998.07 keV
O16(He3,2p+2t)C11	-44932.74 keV	O16(He3,2n+3p+t)C11	-53414.54 keV

	8-O-16	41-Nb-93 >>
<< MT108 (^{3}He,2α)	**MT109 (^{3}He,3α) or MT5 (Be7 production)**	9-F-19 MT22 (^{3}He,n+α) >>

O16 (^{3}He,3α) or Be7 production log-log



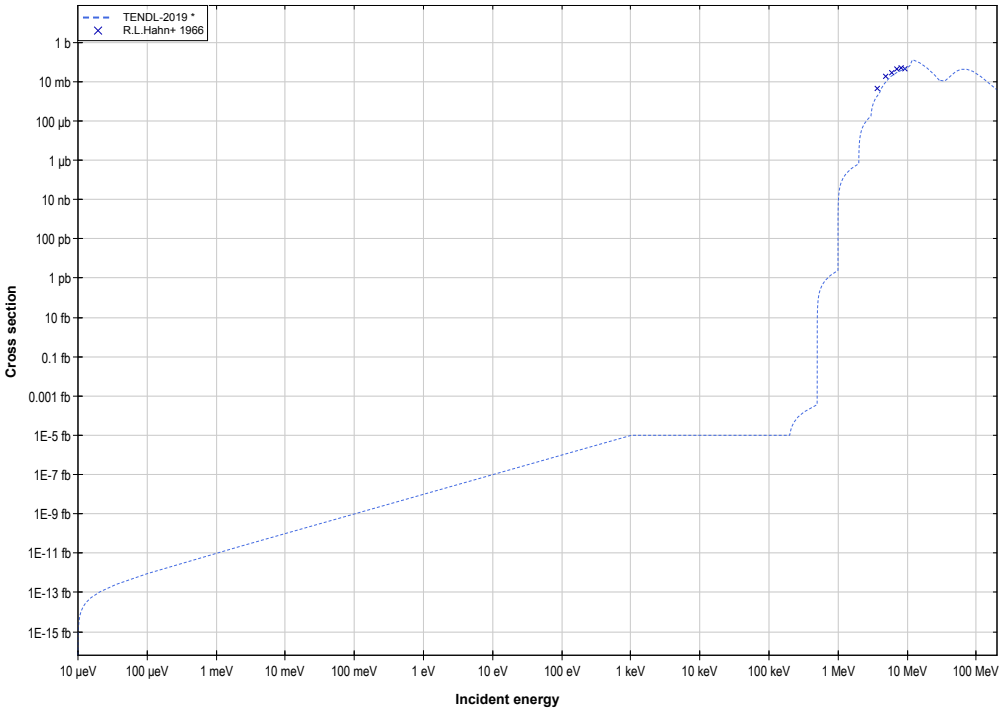
O16 (^{3}He,3α) or Be7 production lin-log



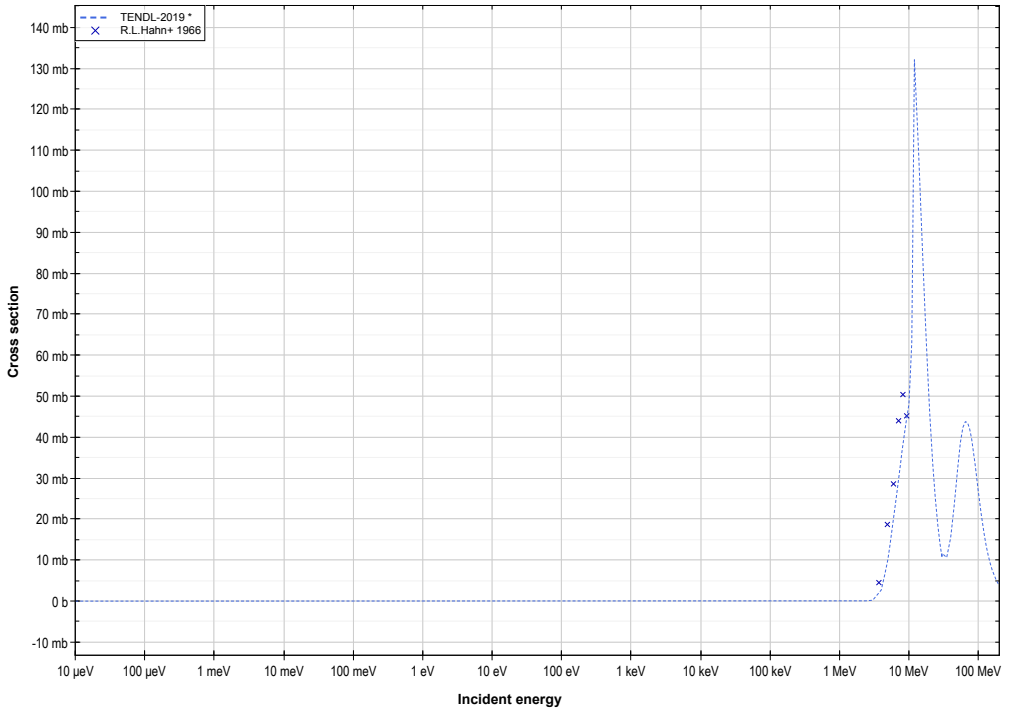
Reaction	Q-Value	Reaction	Q-Value
O16(He3,3α)Be7	-12849.53 keV	O16(He3,n+p+t+He3+α)Be7	-53241.01 keV
O16(He3,p+t+2α)Be7	-32663.40 keV	O16(He3,2n+2He3+α)Be7	-54004.77 keV
O16(He3,n+He3+2α)Be7	-33427.15 keV	O16(He3,p+2d+t+α)Be7	-56509.92 keV
O16(He3,2d+2α)Be7	-36696.06 keV	O16(He3,n+2d+He3+α)Be7	-57273.68 keV
O16(He3,n+p+d+2α)Be7	-38920.62 keV	O16(He3,n+2p+d+t+α)Be7	-58734.49 keV
O16(He3,2n+2p+2α)Be7	-41145.19 keV	O16(He3,2n+p+d+He3+α)Be7	-59498.24 keV
O16(He3,d+t+He3+α)Be7	-51016.45 keV	O16(He3,4d+α)Be7	-60542.59 keV
O16(He3,2p+2t+α)Be7	-52477.26 keV	O16(He3,2n+3p+t+α)Be7	-60959.05 keV

<< 6-C-12	**9-F-19**	12-Mg-24 >>
<< 8-O-16 MT109 (³He,3α)	**MT22 (³He,n+α) or MT5 (F17 production)**	MT107 (³He,α) >>

F19 (³He,n+α) or F17 production log-log



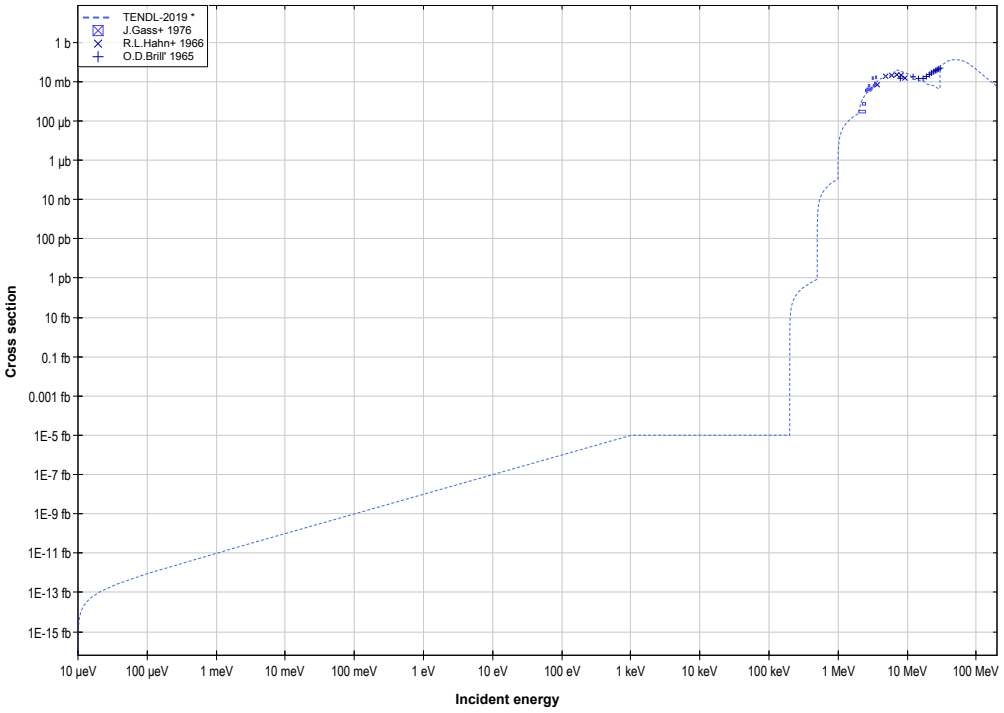
F19 (³He,n+α) or F17 production lin-log



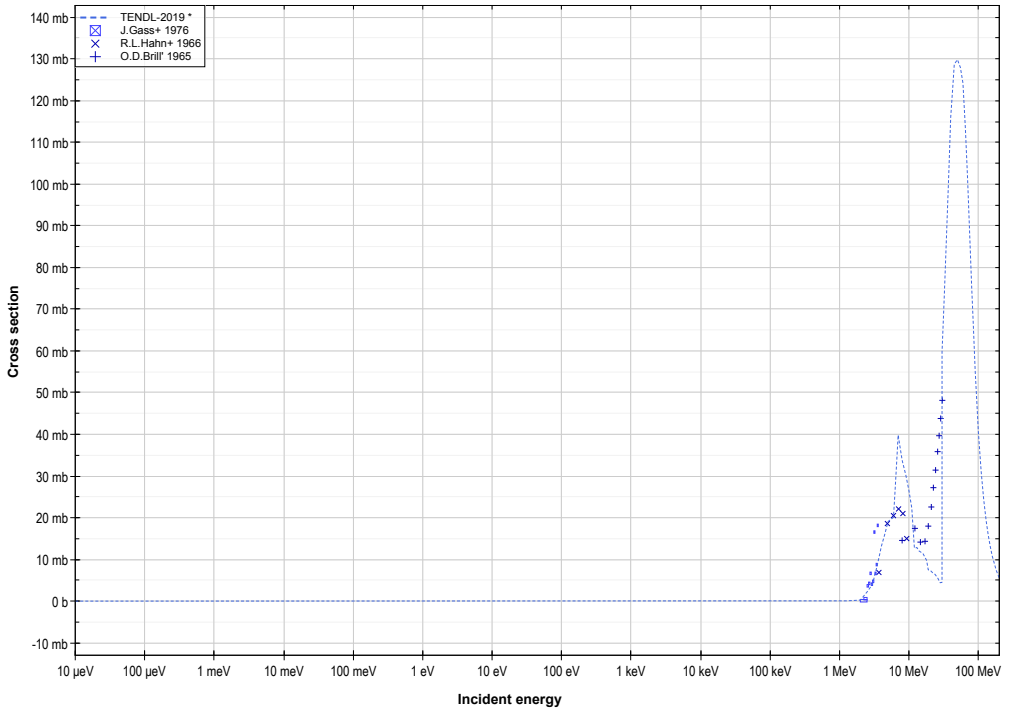
Reaction	Q-Value
F19(He3,n+α)F17	995.84 keV
F19(He3,d+t)F17	-16593.46 keV
F19(He3,n+p+t)F17	-18818.02 keV
F19(He3,2n+He3)F17	-19581.78 keV
F19(He3,n+2d)F17	-22850.69 keV
F19(He3,2n+p+d)F17	-25075.25 keV
F19(He3,3n+2p)F17	-27299.82 keV

<< 8-O-16	**9-F-19**	12-Mg-24 >>
<< MT22 (³He,n+α)	**MT107 (³He,α) or MT5 (F18 production)**	12-Mg-24 MT4 (³He,n) >>

F19 (³He,α) or F18 production log-log



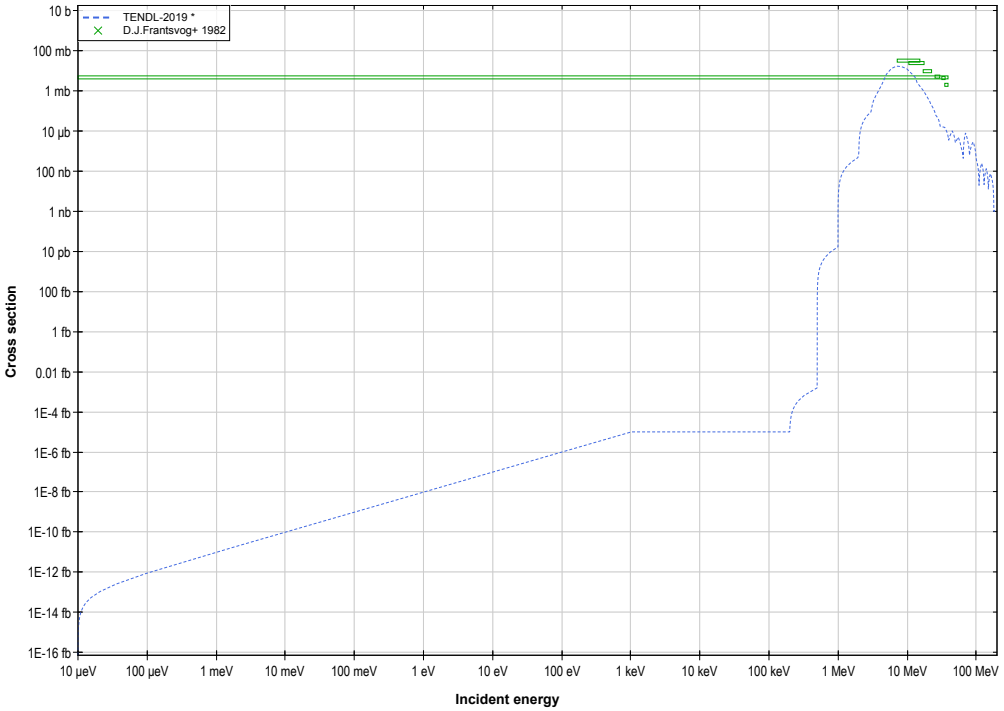
F19 (³He,α) or F18 production lin-log



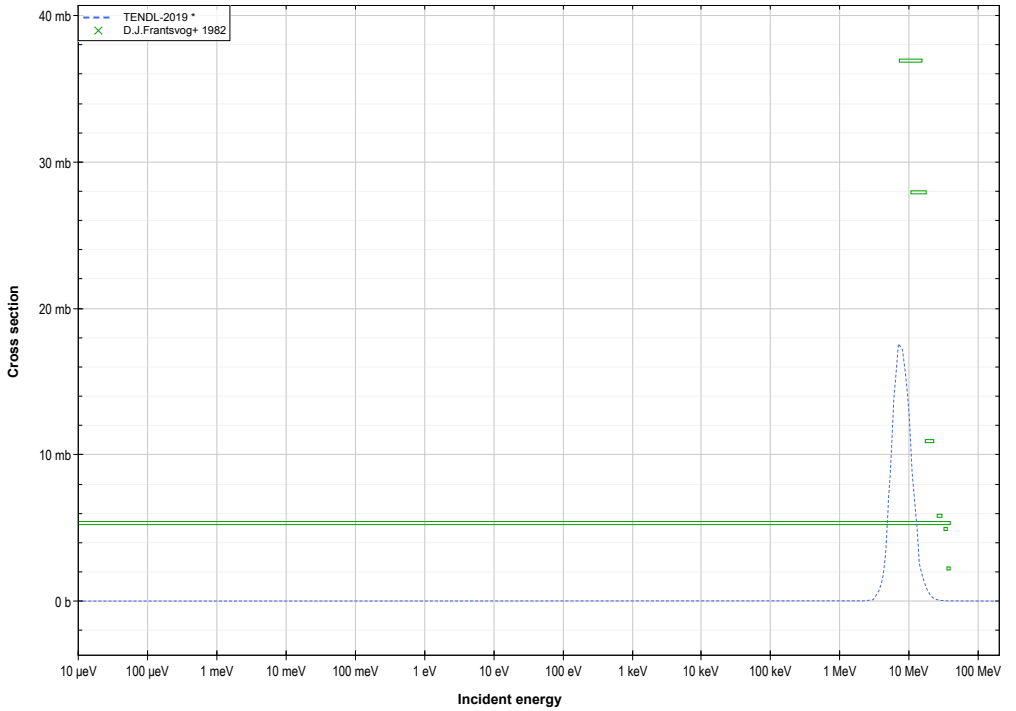
Reaction	Q-Value
F19(He3,α)F18	10145.76 keV
F19(He3,p+t)F18	-9668.11 keV
F19(He3,n+He3)F18	-10431.86 keV
F19(He3,2d)F18	-13700.77 keV
F19(He3,n+p+d)F18	-15925.34 keV
F19(He3,2n+2p)F18	-18149.90 keV

<< 6-C-12	**12-Mg-24**	13-Al-27 >>
<< 9-F-19 MT107 (^{3}He,α)	**MT4 (^{3}He,n) or MT5 (Si26 production)**	MT16 (^{3}He,2n) >>

Mg24 (^{3}He,n) or Si26 production log-log



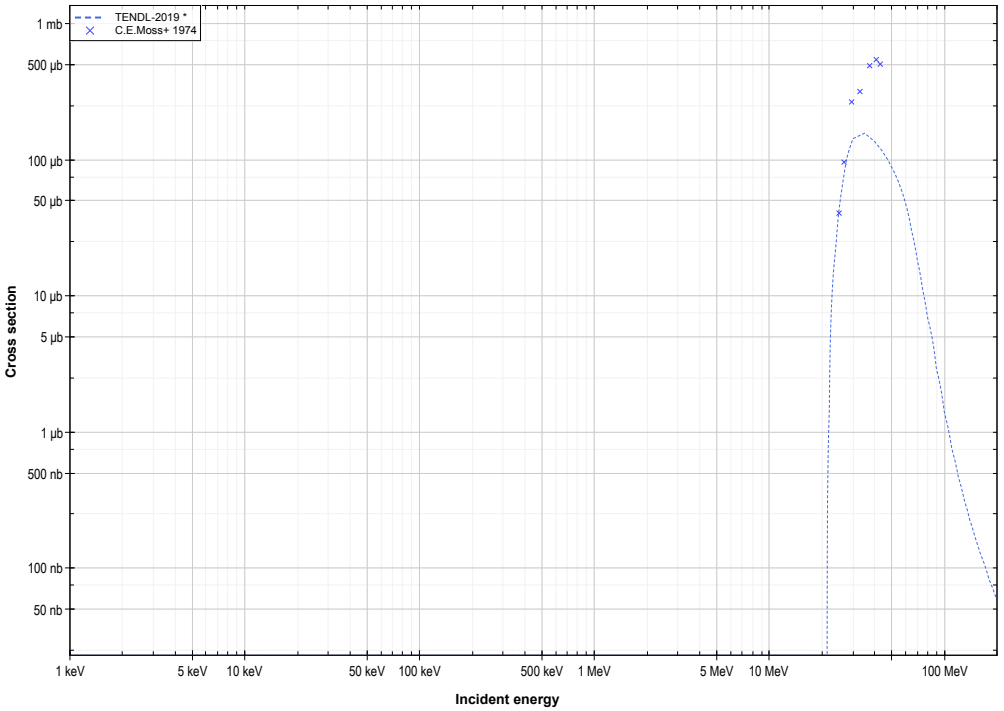
Mg24 (^{3}He,n) or Si26 production lin-log



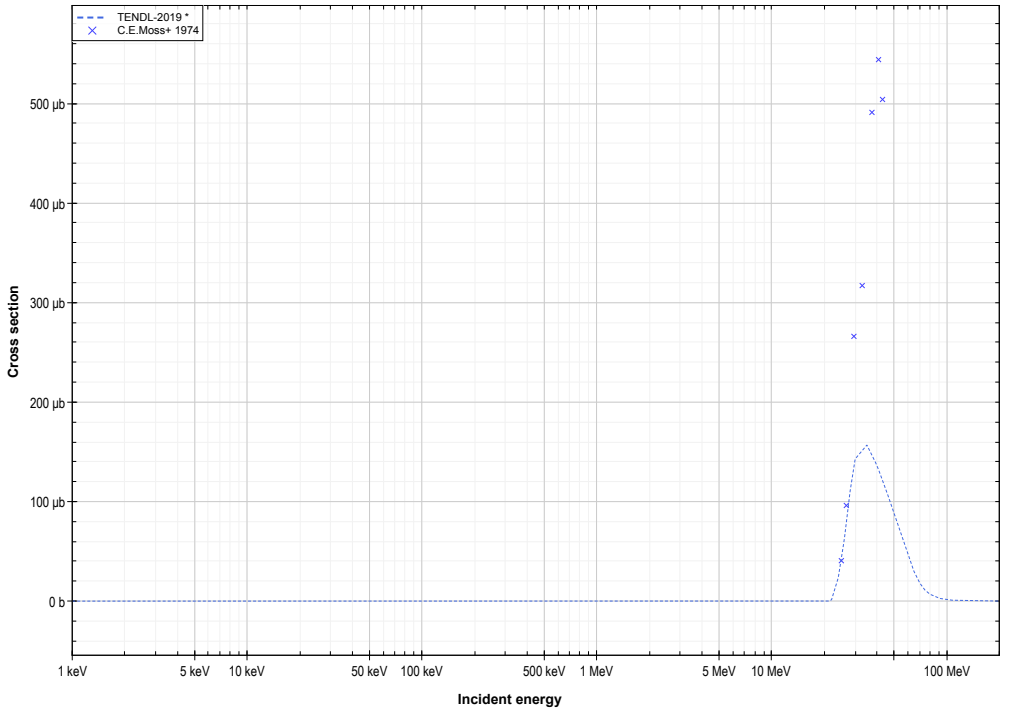
Reaction	Q-Value
Mg24(He3,n)Si26	67.35 keV

<< 4-Be-9	**12-Mg-24**	13-Al-27 >>
<< MT4 (^{3}He,n)	**MT16 (^{3}He,2n) or MT5 (Si25 production)**	MT22 (^{3}He,n+α) >>

Mg24 (^{3}He,2n) or Si25 production log-log



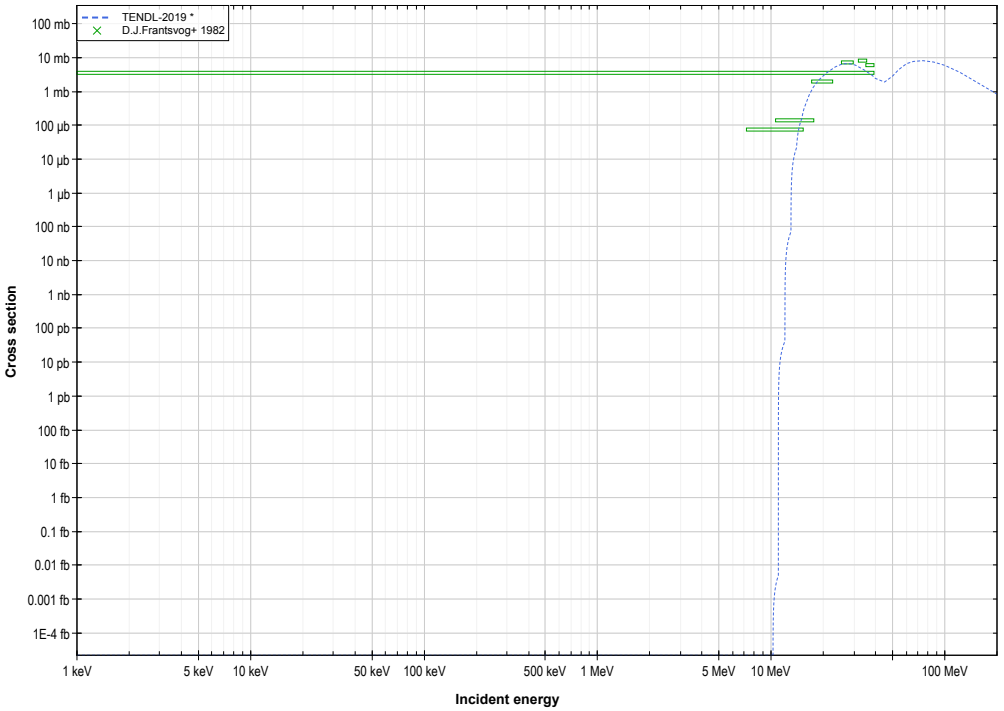
Mg24 (^{3}He,2n) or Si25 production lin-log



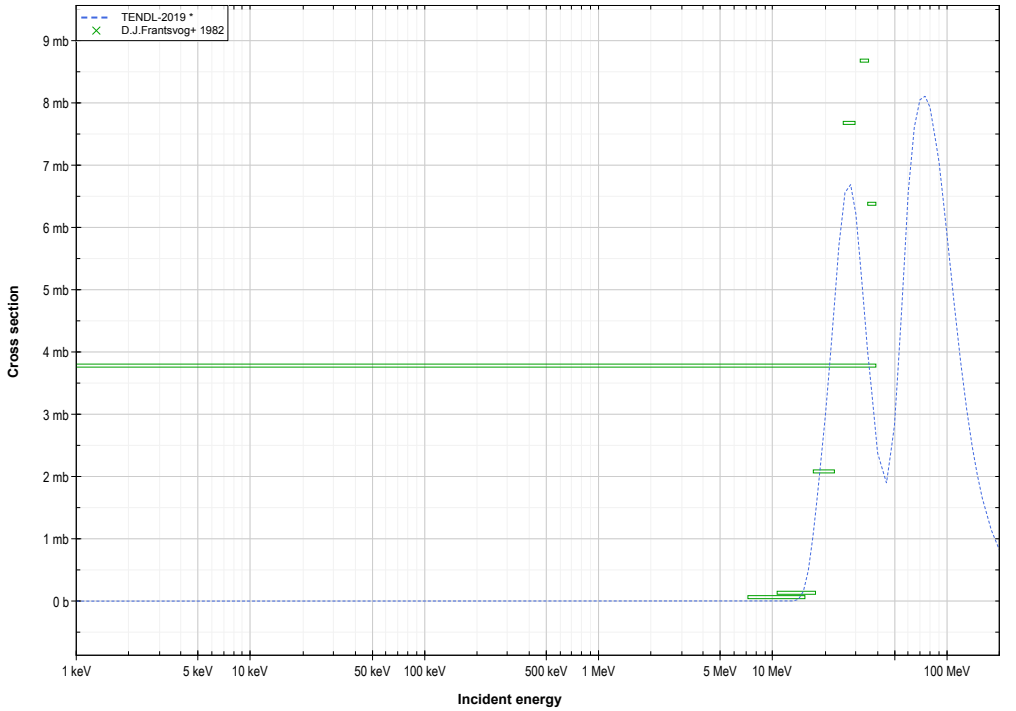
Reaction	Q-Value
Mg24(He3,2n)Si25	-18971.99 keV

<< 9-F-19	**12-Mg-24**	13-Al-27 >>
<< MT16 (³He,2n)	**MT22 (³He,n+α) or MT5 (Mg22 production)**	MT28 (³He,n+p) >>

Mg24 (³He,n+α) or Mg22 production log-log



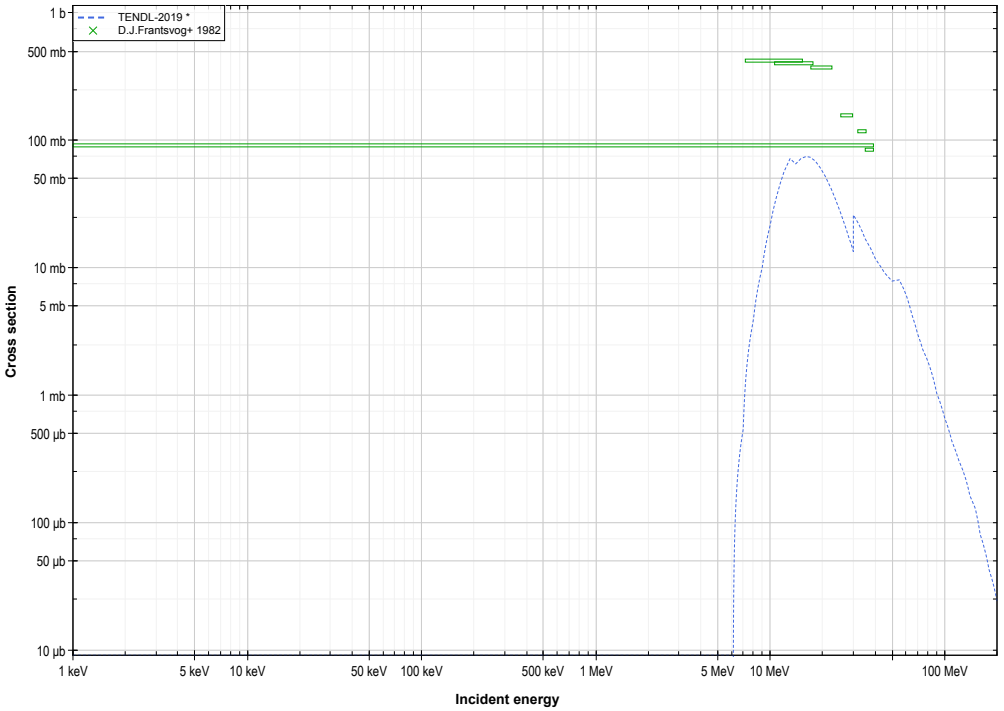
Mg24 (³He,n+α) or Mg22 production lin-log



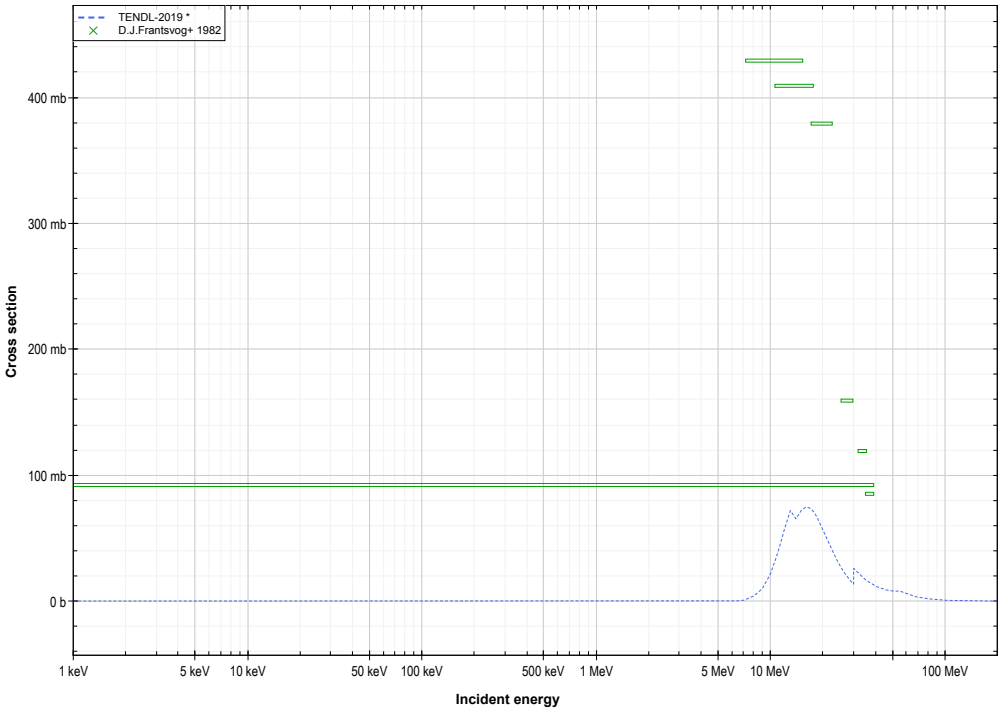
Reaction	Q-Value
Mg24(He3,n+α)Mg22	-9098.68 keV
Mg24(He3,d+t)Mg22	-26687.98 keV
Mg24(He3,n+p+t)Mg22	-28912.55 keV
Mg24(He3,2n+He3)Mg22	-29676.30 keV
Mg24(He3,n+2d)Mg22	-32945.21 keV
Mg24(He3,2n+p+d)Mg22	-35169.78 keV
Mg24(He3,3n+2p)Mg22	-37394.34 keV

<< 6-C-12	**12-Mg-24**	14-Si-28 >>
<< MT22 (^{3}He,n+α)	**MT28 (^{3}He,n+p) or MT5 (Al25 production)**	MT32 (^{3}He,n+d) >>

Mg24 (^{3}He,n+p) or Al25 production log-log



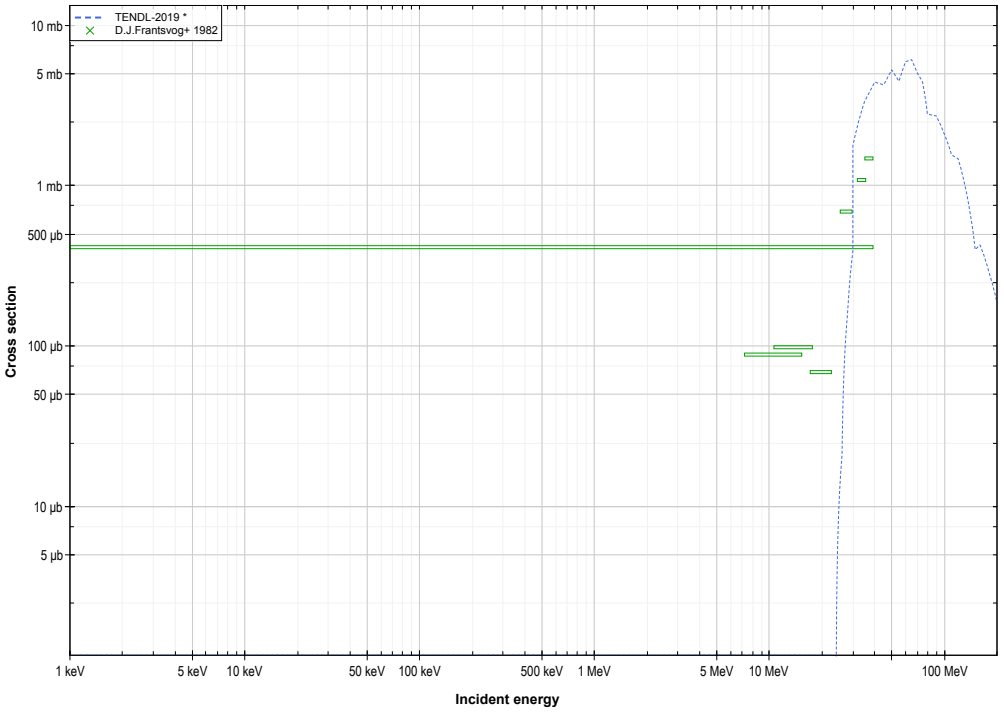
Mg24 (^{3}He,n+p) or Al25 production lin-log



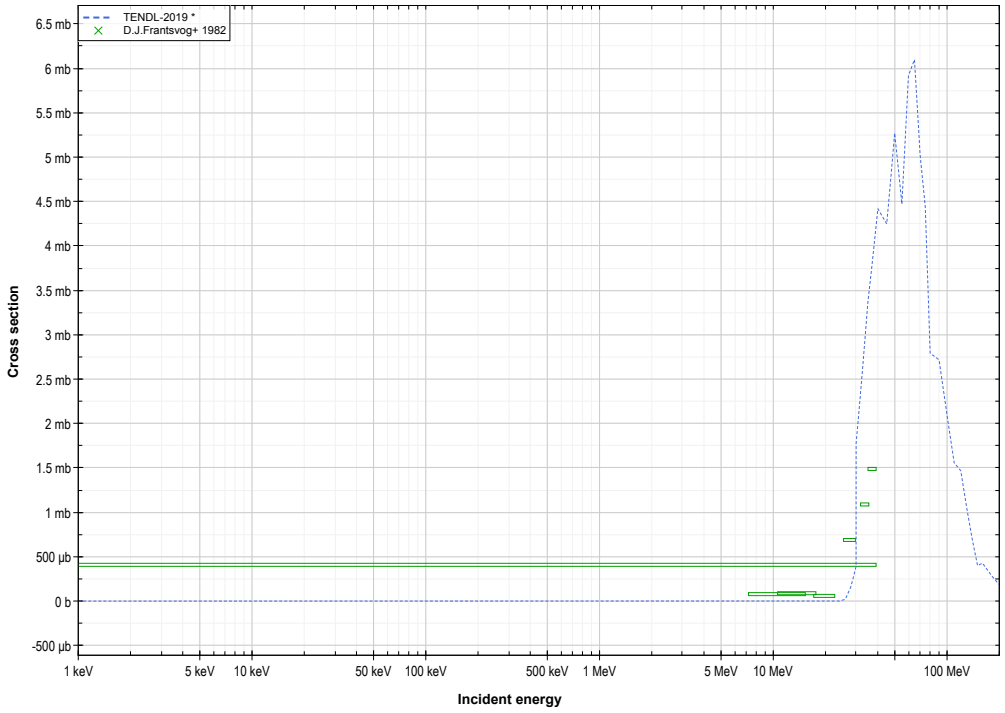
Reaction	Q-Value
Mg24(He3,d)Al25	-3222.10 keV
Mg24(He3,n+p)Al25	-5446.67 keV

	12-Mg-24	13-Al-27 >>
<< MT28 (^{3}He,n+p)	**MT32 (^{3}He,n+d) or MT5 (Al24 production)**	MT34 (^{3}He,n+^{3}He) >>

Mg24 (^{3}He,n+d) or Al24 production log-log



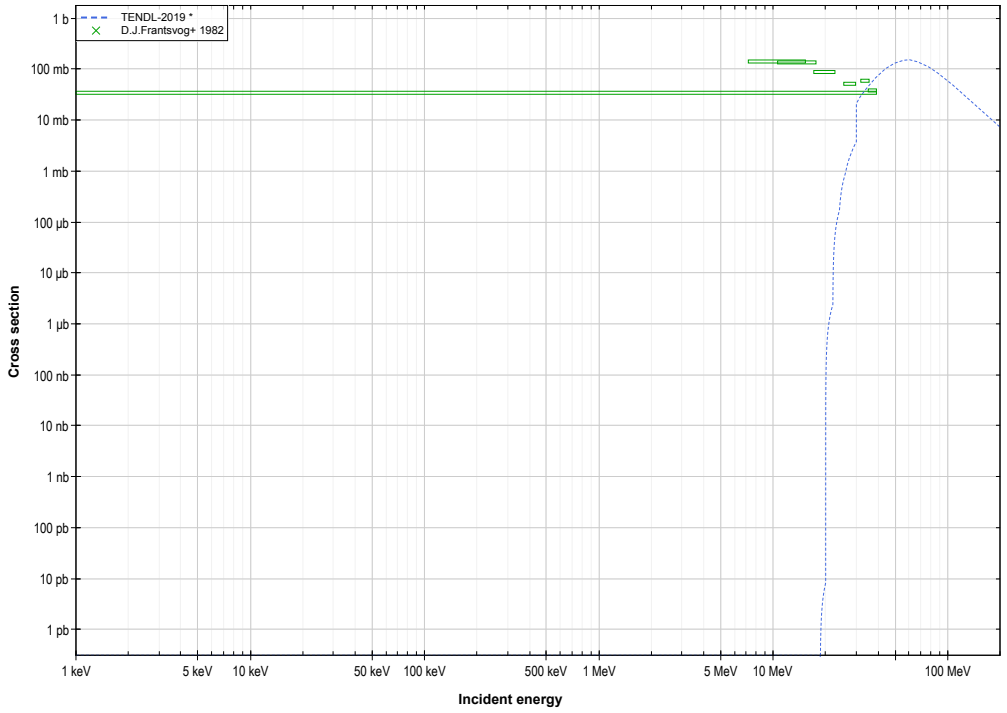
Mg24 (^{3}He,n+d) or Al24 production lin-log



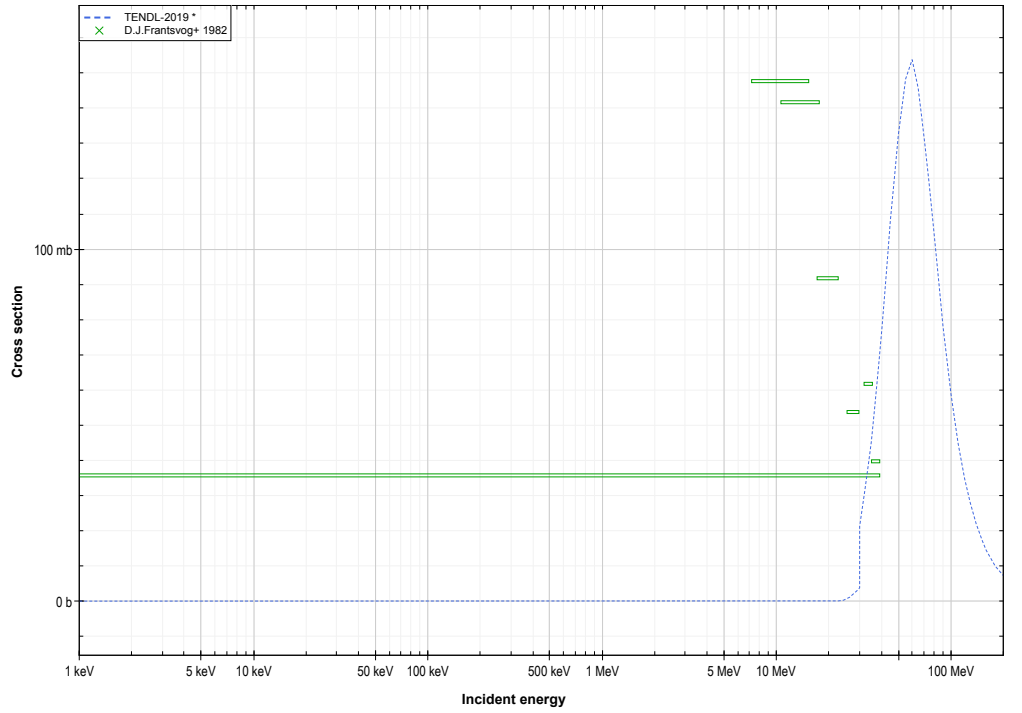
Reaction	Q-Value
Mg24(He3,t)Al24	-13903.30 keV
Mg24(He3,n+d)Al24	-20160.53 keV
Mg24(He3,2n+p)Al24	-22385.10 keV

<< 6-C-12	**12-Mg-24**	13-Al-27 >>
<< MT32 (³He,n+d)	**MT34 (³He,n+³He) or MT5 (Mg23 production)**	MT41 (³He,2n+p) >>

Mg24 (³He,n+³He) or Mg23 production log-log



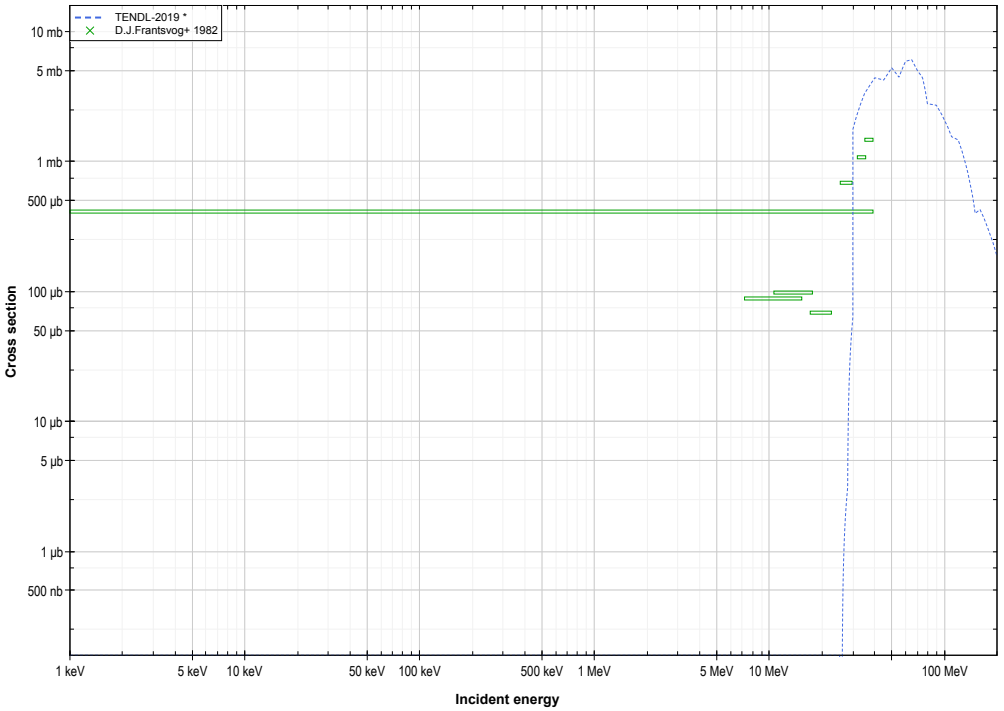
Mg24 (³He,n+³He) or Mg23 production lin-log



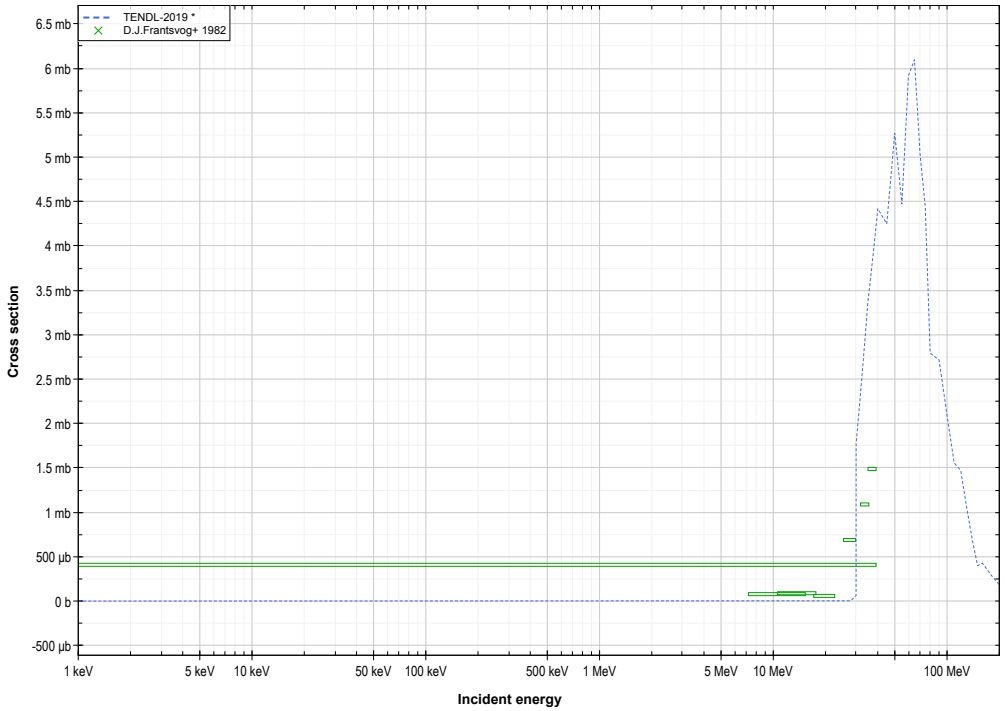
Reaction	Q-Value
Mg24(He3,α)Mg23	4046.24 keV
Mg24(He3,p+t)Mg23	-15767.62 keV
Mg24(He3,n+He3)Mg23	-16531.38 keV
Mg24(He3,2d)Mg23	-19800.28 keV
Mg24(He3,n+p+d)Mg23	-22024.85 keV
Mg24(He3,2n+2p)Mg23	-24249.42 keV

	12-Mg-24	13-Al-27 >>
<< MT34 (^{3}He,n+^{3}He)	**MT41 (^{3}He,2n+p) or MT5 (Al24 production)**	MT102 (^{3}He,γ) >>

Mg24 (^{3}He,2n+p) or Al24 production log-log



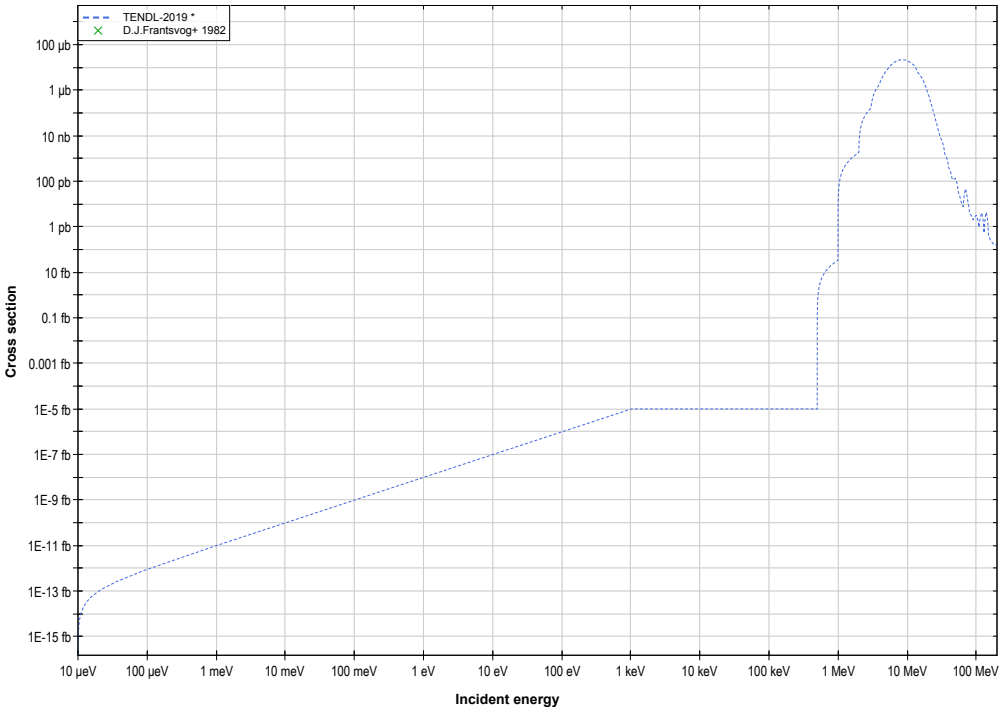
Mg24 (^{3}He,2n+p) or Al24 production lin-log



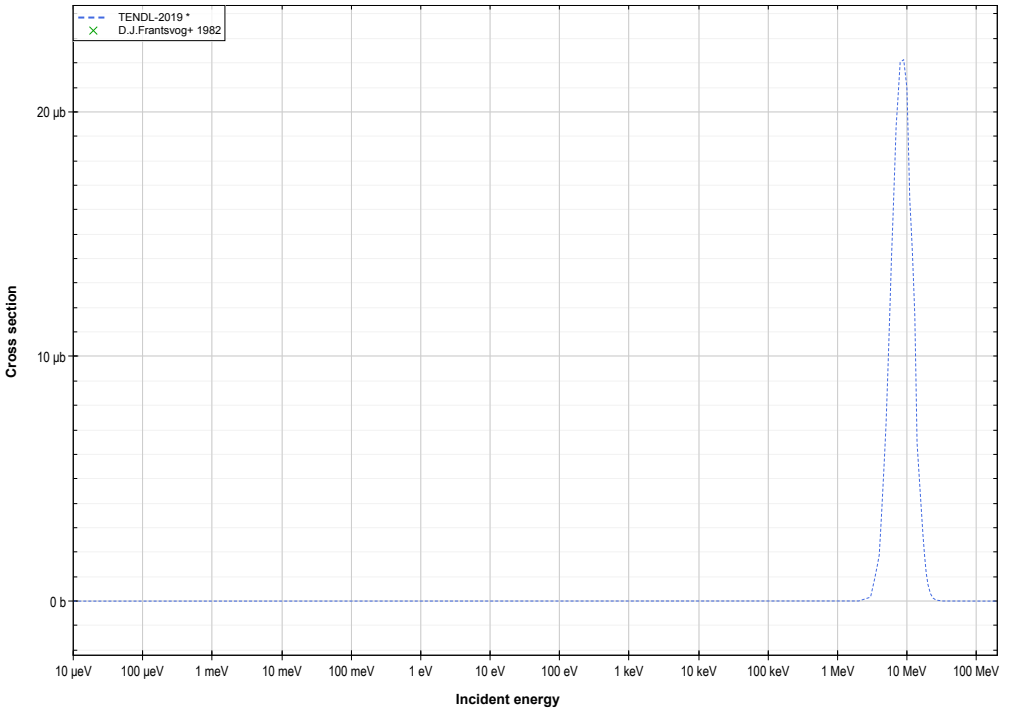
Reaction	Q-Value
Mg24(He3,t)Al24	-13903.30 keV
Mg24(He3,n+d)Al24	-20160.53 keV
Mg24(He3,2n+p)Al24	-22385.10 keV

	12-Mg-24	13-Al-27 >>
<< MT41 (³He,2n+p)	**MT102 (³He,γ) or MT5 (Si27 production)**	MT103 (³He,p) >>

Mg24 (³He,γ) or Si27 production log-log



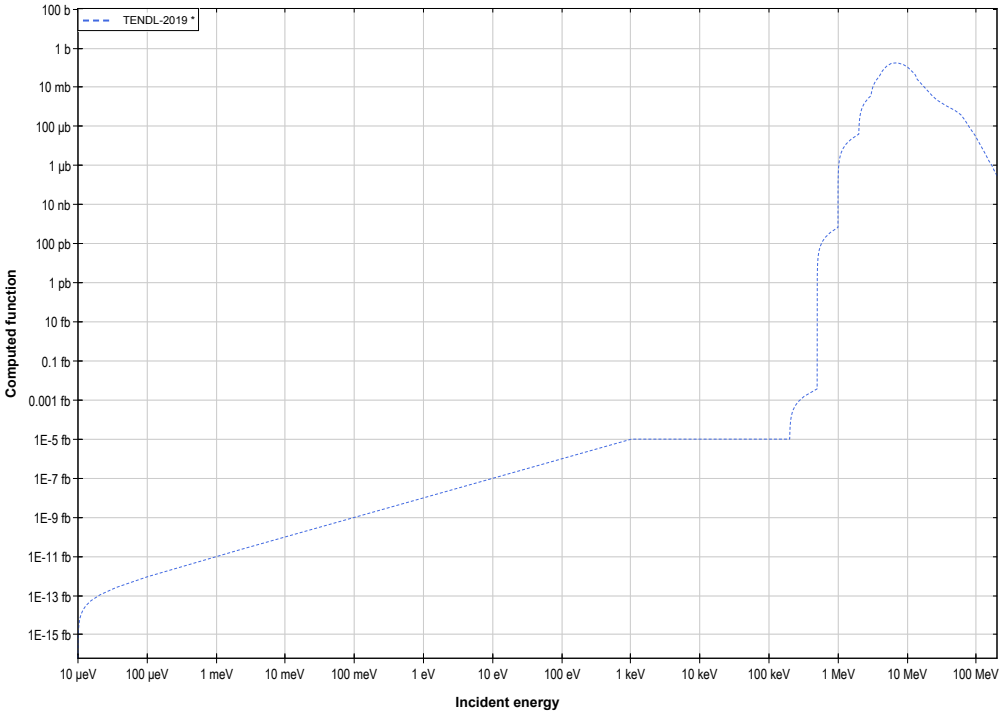
Mg24 (³He,γ) or Si27 production lin-log



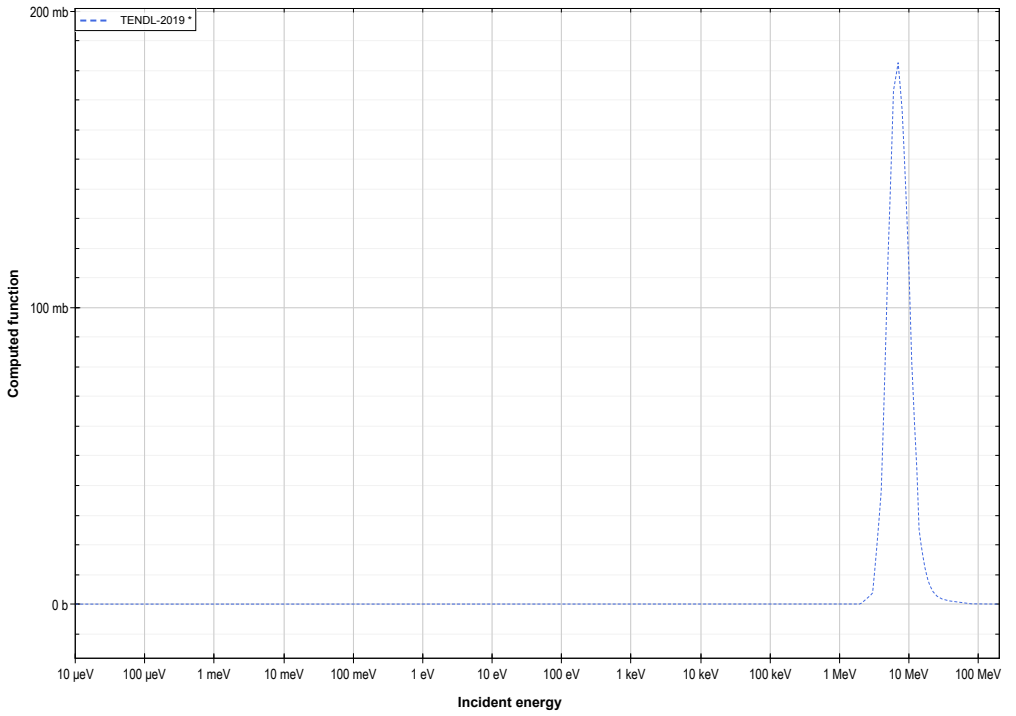
Reaction	Q-Value
Mg24(He3,γ)Si27	13382.15 keV

<< 8-O-16	**12-Mg-24**	12-Mg-26 >>
<< MT102 (³He,γ)	**MT103 (³He,p) or MT5 (Al26 production)**	MT104 (³He,d) >>

Mg24 (³He,p) or Al26 production log-log



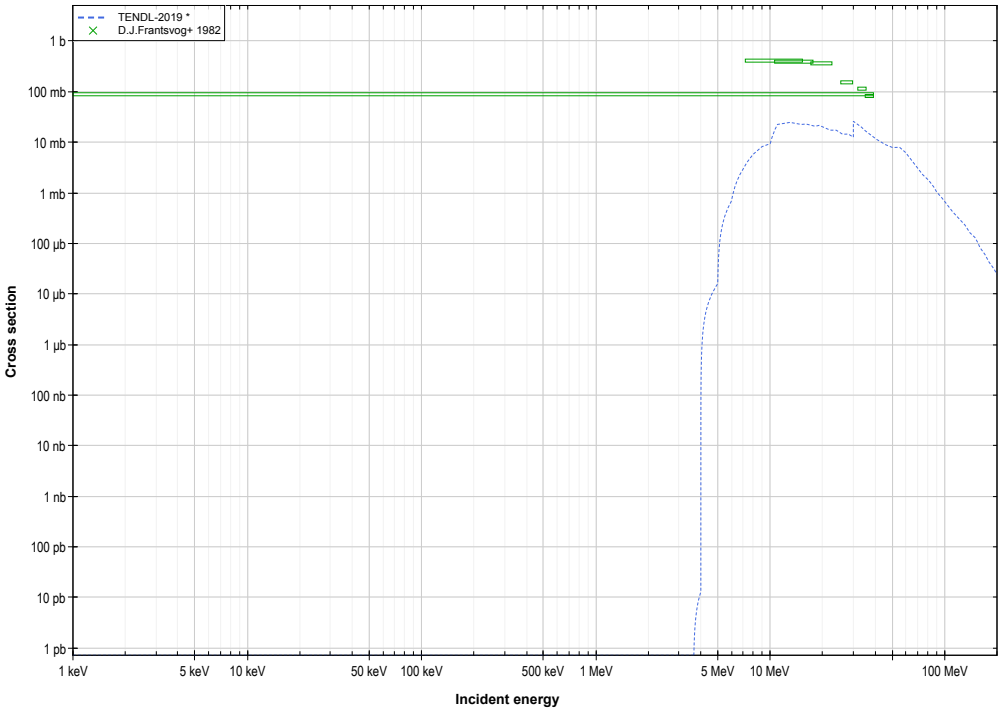
Mg24 (³He,p) or Al26 production lin-log



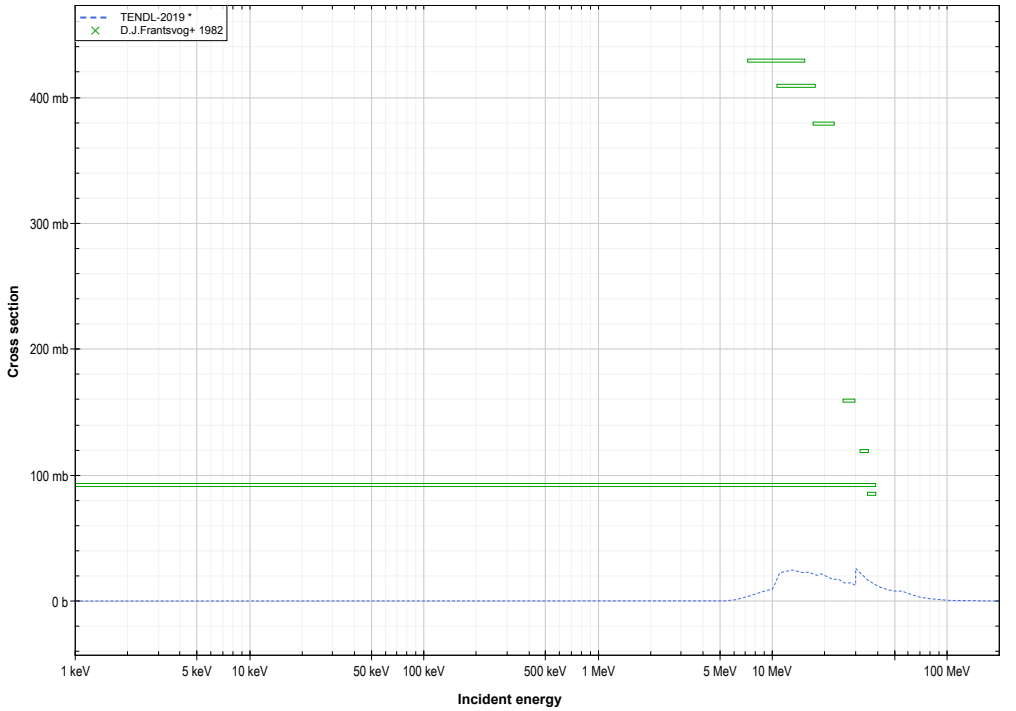
Reaction	Q-Value
Mg24(He3,p)Al26	5918.83 keV

<< 6-C-12	**12-Mg-24**	14-Si-28 >>
<< MT103 (^{3}He,p)	**MT104 (^{3}He,d) or MT5 (Al25 production)**	MT105 (^{3}He,t) >>

Mg24 (^{3}He,d) or Al25 production log-log



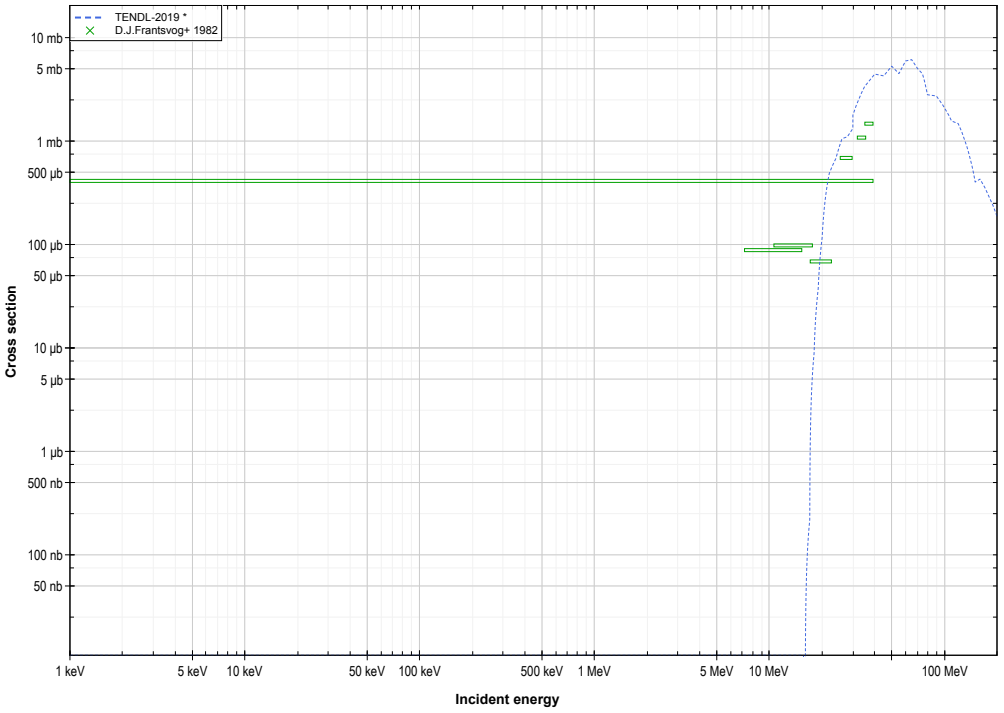
Mg24 (^{3}He,d) or Al25 production lin-log



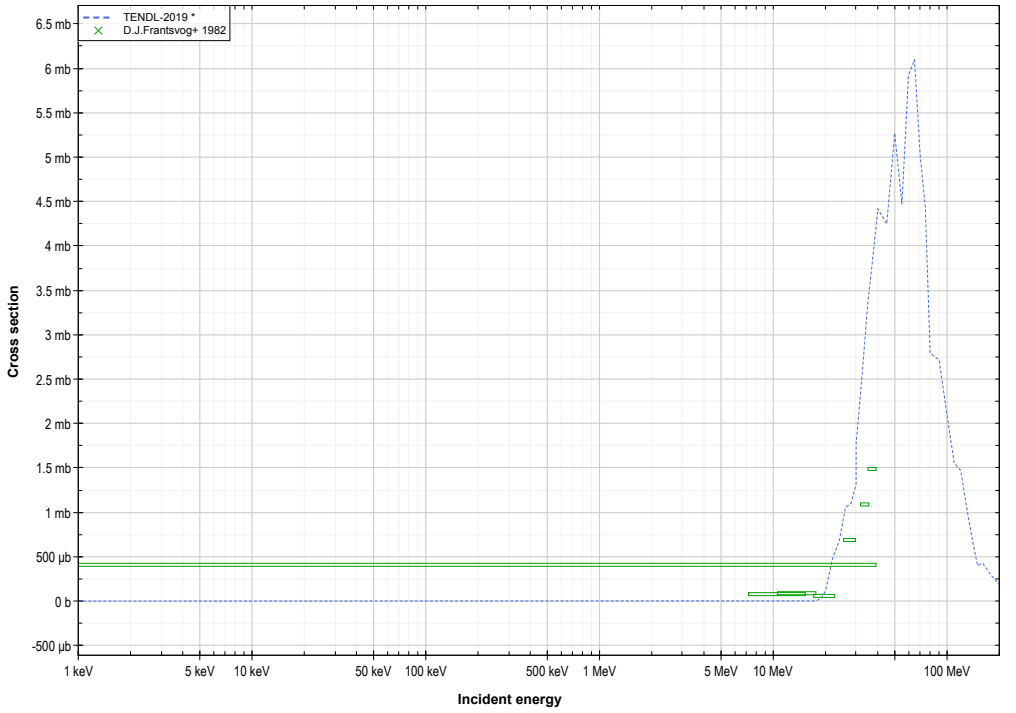
Reaction	Q-Value
Mg24(He3,d)Al25	-3222.10 keV
Mg24(He3,n+p)Al25	-5446.67 keV

<< 5-B-11	**12-Mg-24**	13-Al-27 >>
<< MT104 (^{3}He,d)	**MT105 (^{3}He,t) or MT5 (Al24 production)**	MT107 (^{3}He,α) >>

Mg24 (^{3}He,t) or Al24 production log-log



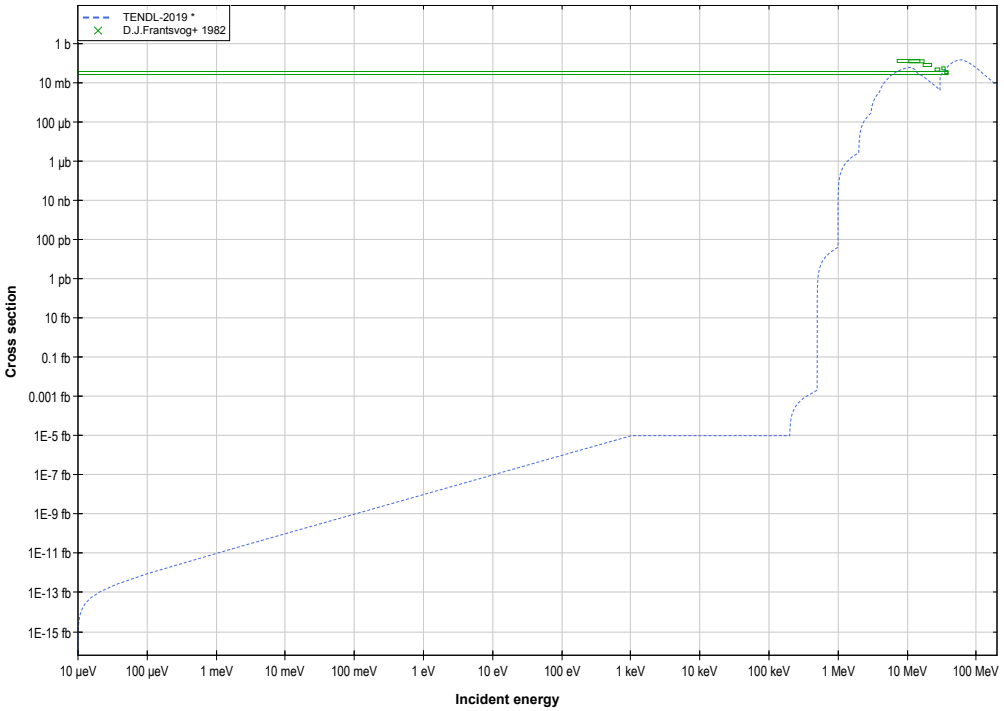
Mg24 (^{3}He,t) or Al24 production lin-log



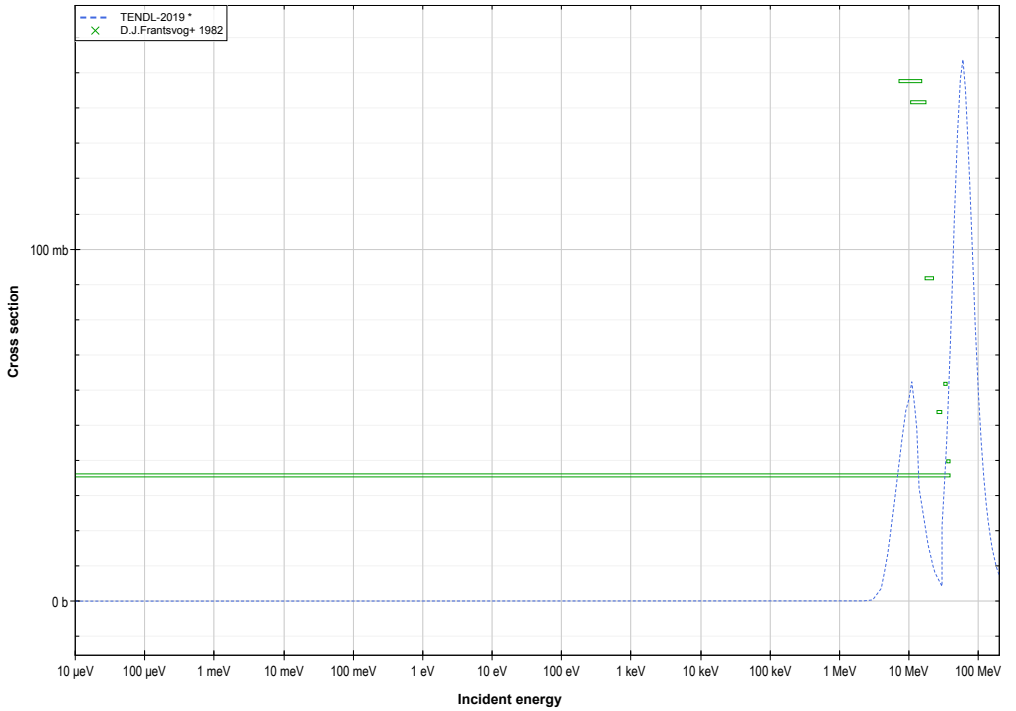
Reaction	Q-Value
Mg24(He3,t)Al24	-13903.30 keV
Mg24(He3,n+d)Al24	-20160.53 keV
Mg24(He3,2n+p)Al24	-22385.10 keV

<< 9-F-19	**12-Mg-24**	13-Al-27 >>
<< MT105 (³He,t)	**MT107 (³He,α) or MT5 (Mg23 production)**	MT116 (³He,p+t) >>

Mg24 (³He,α) or Mg23 production log-log



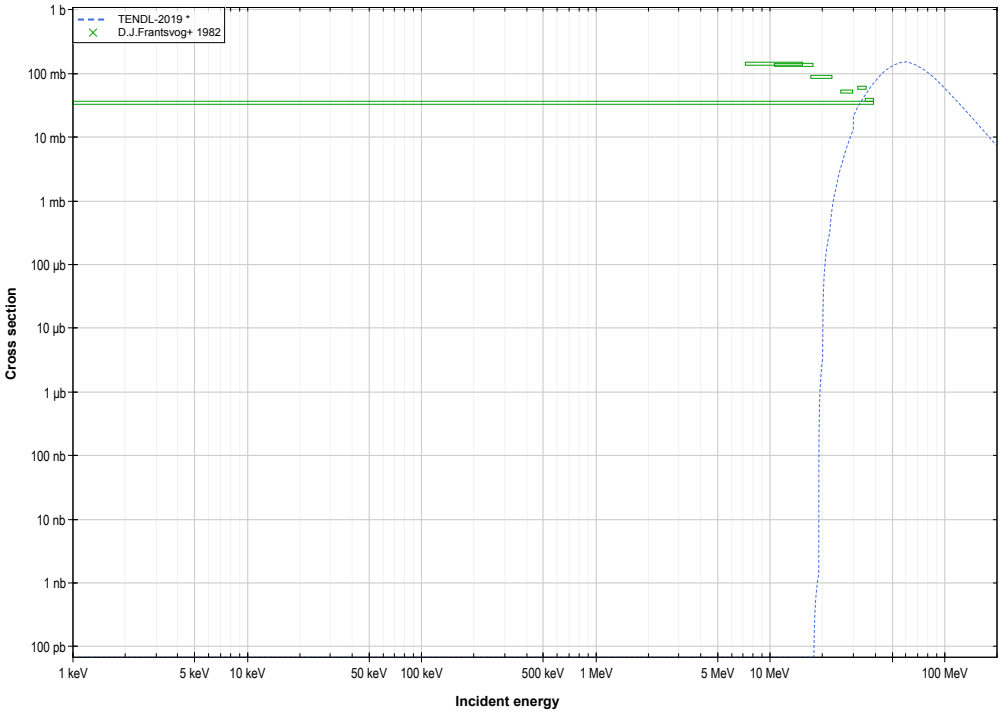
Mg24 (³He,α) or Mg23 production lin-log



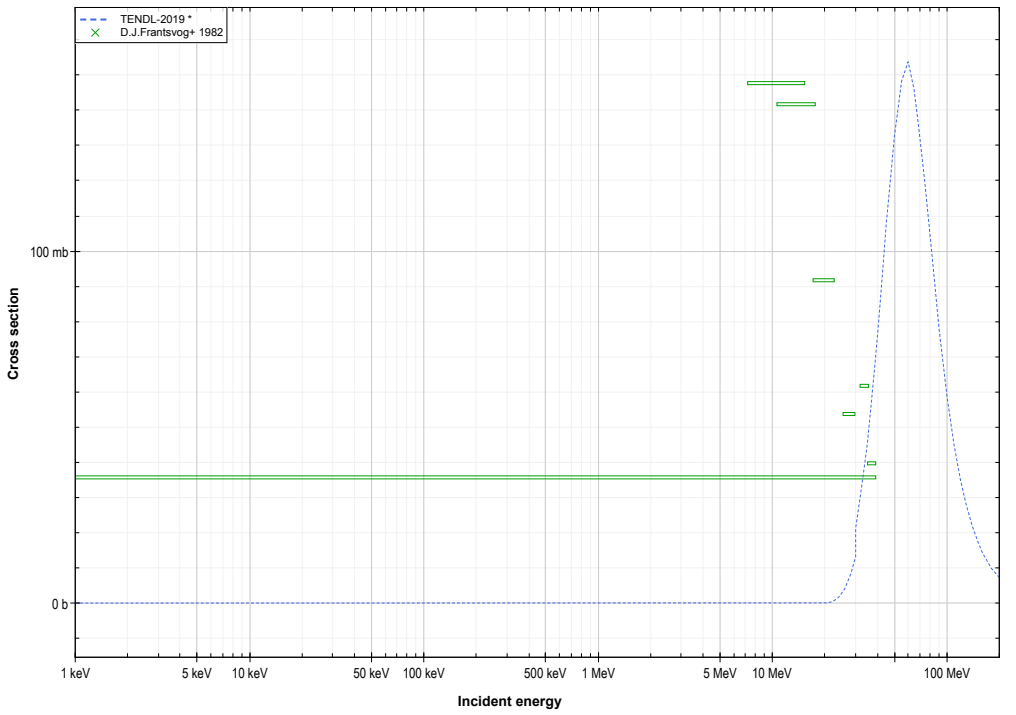
Reaction	Q-Value
Mg24(He3,α)Mg23	4046.24 keV
Mg24(He3,p+t)Mg23	-15767.62 keV
Mg24(He3,n+He3)Mg23	-16531.38 keV
Mg24(He3,2d)Mg23	-19800.28 keV
Mg24(He3,n+p+d)Mg23	-22024.85 keV
Mg24(He3,2n+2p)Mg23	-24249.42 keV

<< 6-C-12	**12-Mg-24**	13-Al-27 >>
<< MT107 (^{3}He,α)	**MT116 (^{3}He,p+t) or MT5 (Mg23 production)**	MT176 (^{3}He,2n+^{3}He) >>

Mg24 (^{3}He,p+t) or Mg23 production log-log



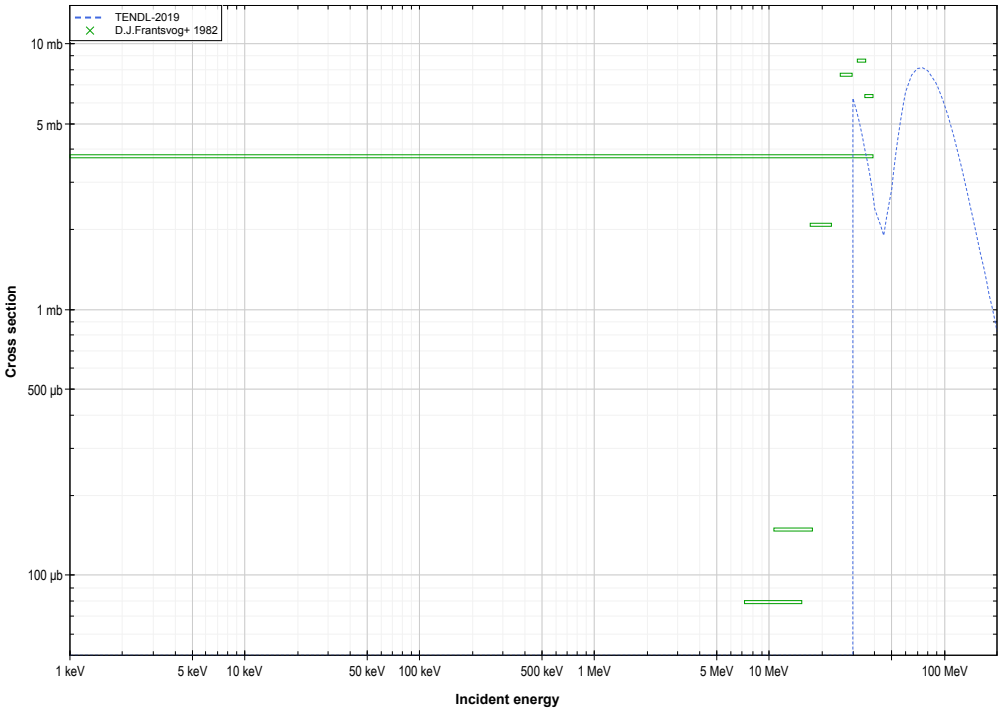
Mg24 (^{3}He,p+t) or Mg23 production lin-log



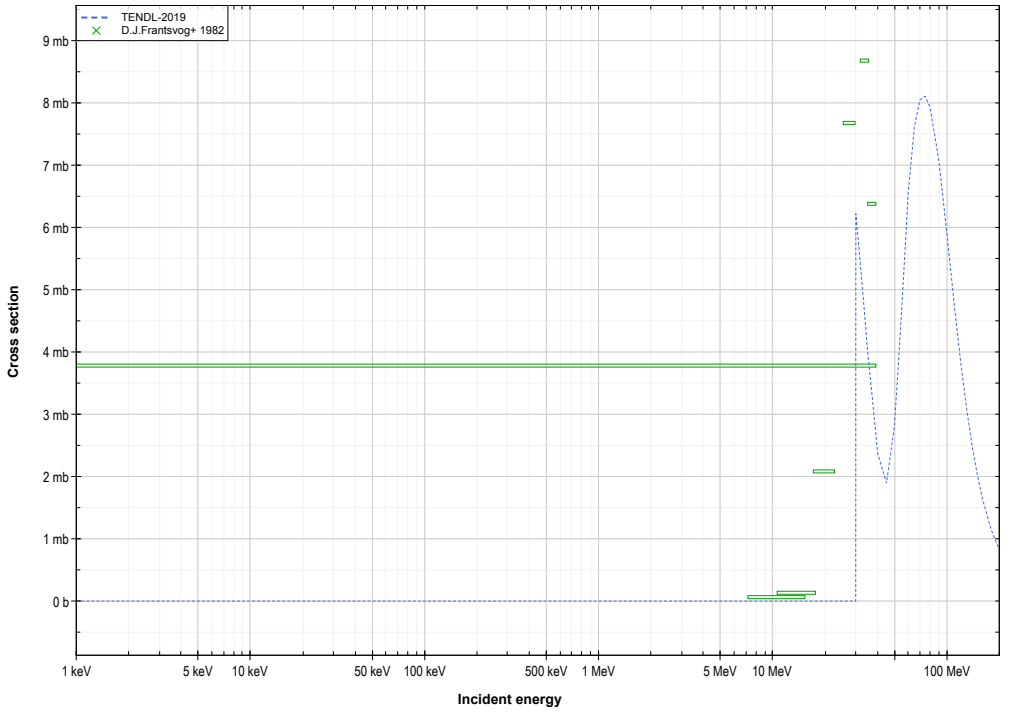
Reaction	Q-Value
Mg24(He3,α)Mg23	4046.24 keV
Mg24(He3,p+t)Mg23	-15767.62 keV
Mg24(He3,n+He3)Mg23	-16531.38 keV
Mg24(He3,2d)Mg23	-19800.28 keV
Mg24(He3,n+p+d)Mg23	-22024.85 keV
Mg24(He3,2n+2p)Mg23	-24249.42 keV

<< 6-C-12	**12-Mg-24**	13-Al-27 >>
<< MT116 (^{3}He,p+t)	**MT176 (^{3}He,2n+^{3}He) or MT5 (Mg22 production)**	MT179 (^{3}He,3n+2p) >>

Mg24 (^{3}He,2n+^{3}He) or Mg22 production log-log



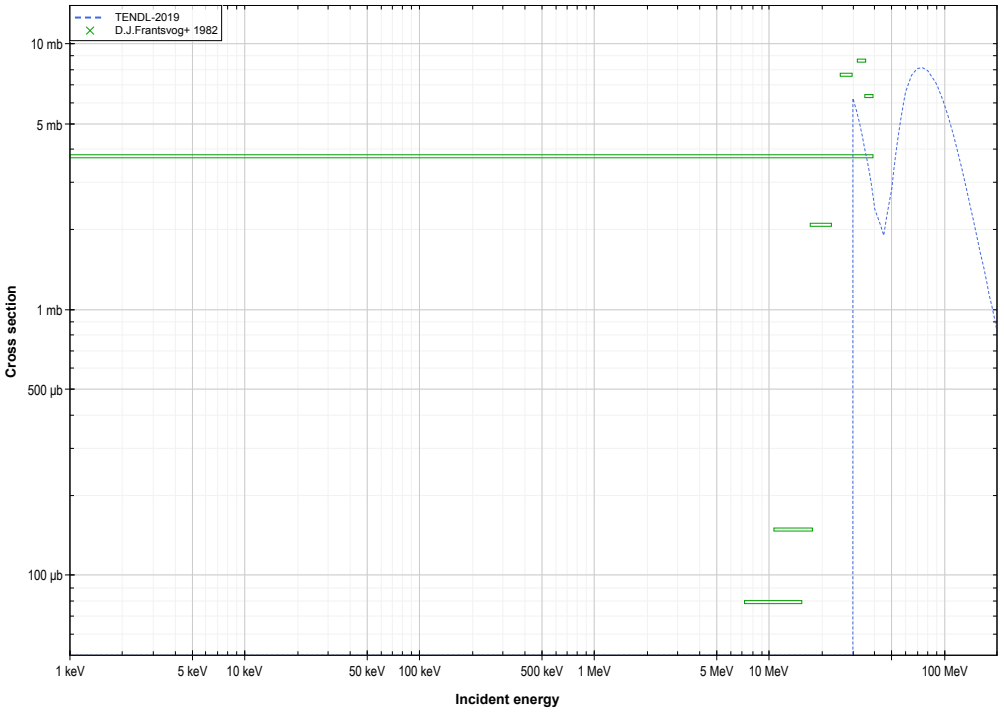
Mg24 (^{3}He,2n+^{3}He) or Mg22 production lin-log



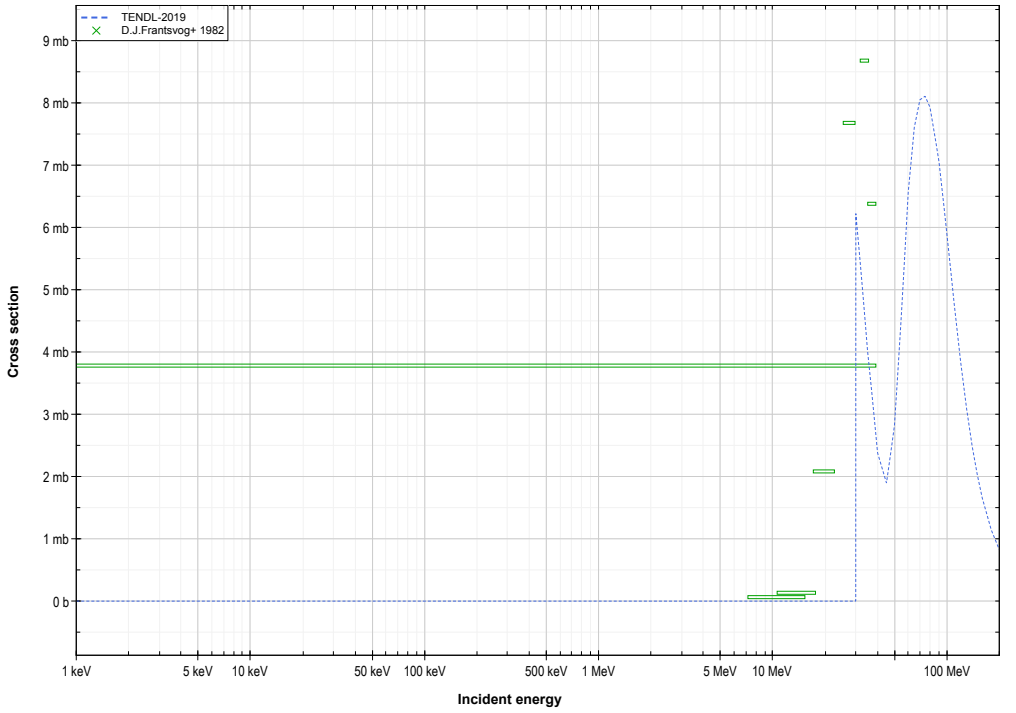
Reaction	Q-Value
Mg24(He3,n+α)Mg22	-9098.68 keV
Mg24(He3,d+t)Mg22	-26687.98 keV
Mg24(He3,n+p+t)Mg22	-28912.55 keV
Mg24(He3,2n+He3)Mg22	-29676.30 keV
Mg24(He3,n+2d)Mg22	-32945.21 keV
Mg24(He3,2n+p+d)Mg22	-35169.78 keV
Mg24(He3,3n+2p)Mg22	-37394.34 keV

<< 6-C-12	**12-Mg-24**	13-Al-27 >>
<< MT176 (³He,2n+³He)	**MT179 (³He,3n+2p) or MT5 (Mg22 production)**	MT182 (³He,d+t) >>

Mg24 (³He,3n+2p) or Mg22 production log-log



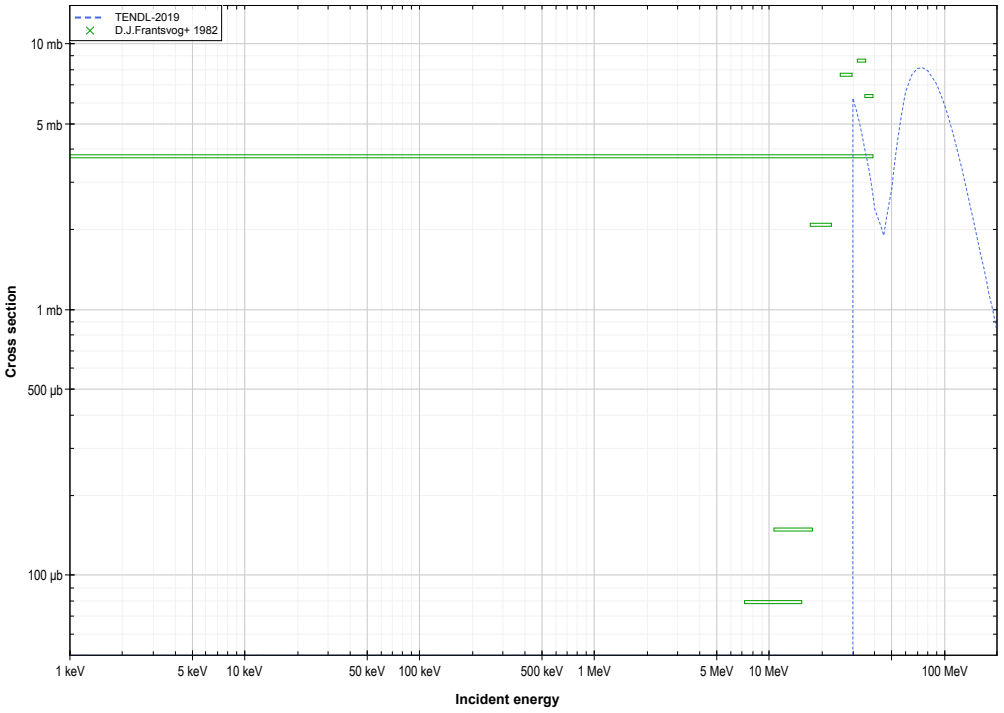
Mg24 (³He,3n+2p) or Mg22 production lin-log



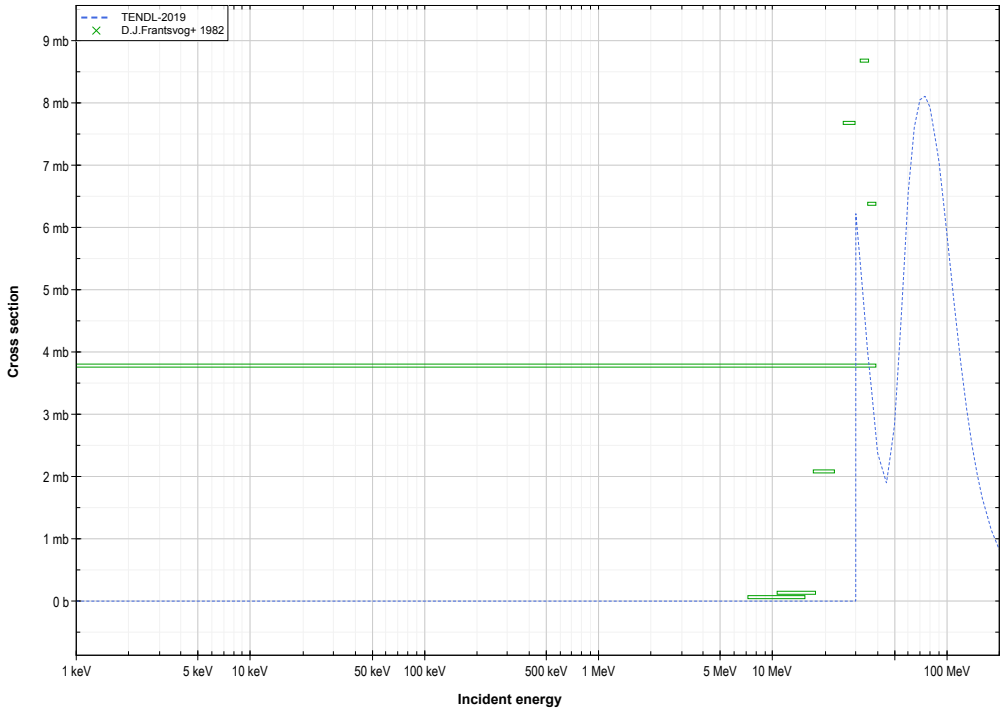
Reaction	Q-Value
Mg24(He3,n+α)Mg22	-9098.68 keV
Mg24(He3,d+t)Mg22	-26687.98 keV
Mg24(He3,n+p+t)Mg22	-28912.55 keV
Mg24(He3,2n+He3)Mg22	-29676.30 keV
Mg24(He3,n+2d)Mg22	-32945.21 keV
Mg24(He3,2n+p+d)Mg22	-35169.78 keV
Mg24(He3,3n+2p)Mg22	-37394.34 keV

<< 6-C-12	**12-Mg-24**	13-Al-27 >>
<< MT179 (³He,3n+2p)	**MT182 (³He,d+t) or MT5 (Mg22 production)**	MT183 (³He,n+p+d) >>

Mg24 (³He,d+t) or Mg22 production log-log



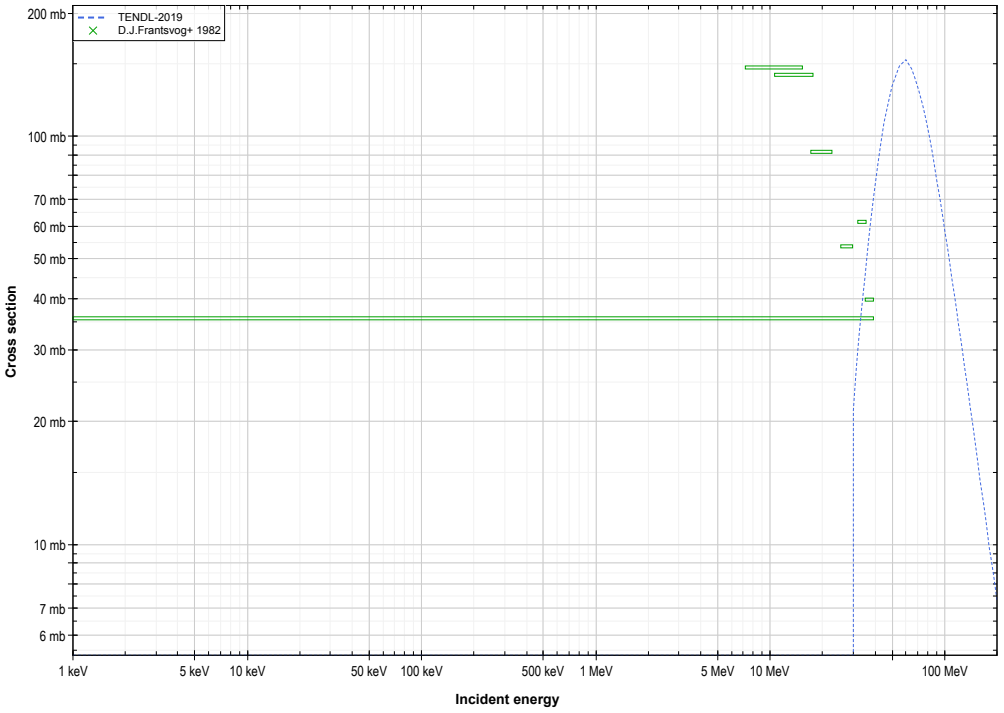
Mg24 (³He,d+t) or Mg22 production lin-log



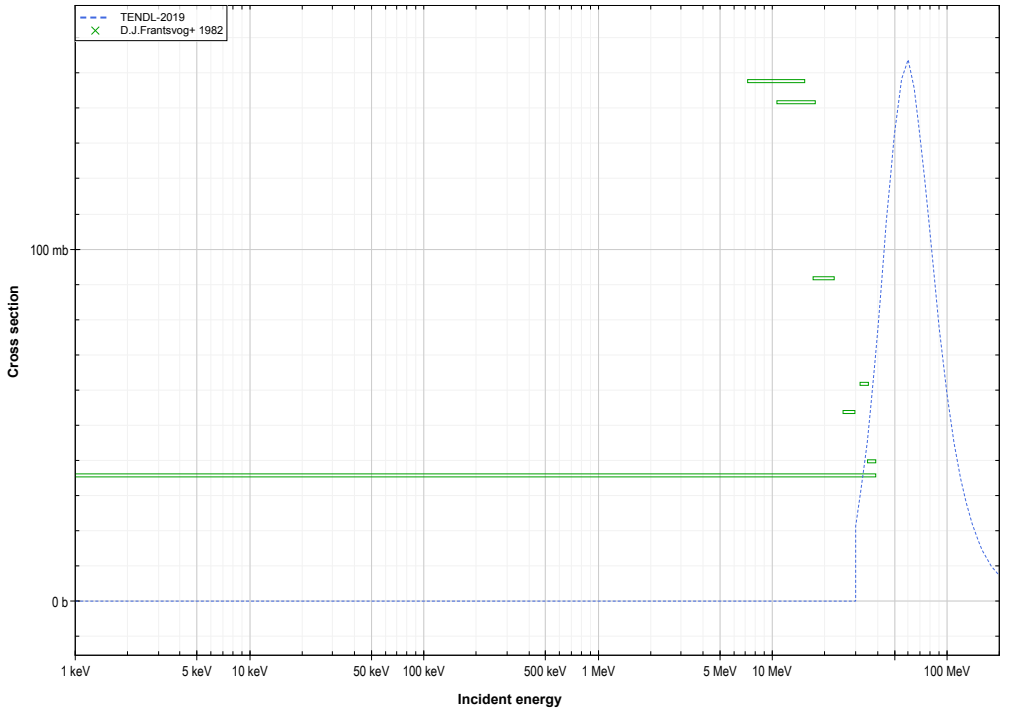
Reaction	Q-Value
Mg24(He3,n+α)Mg22	-9098.68 keV
Mg24(He3,d+t)Mg22	-26687.98 keV
Mg24(He3,n+p+t)Mg22	-28912.55 keV
Mg24(He3,2n+He3)Mg22	-29676.30 keV
Mg24(He3,n+2d)Mg22	-32945.21 keV
Mg24(He3,2n+p+d)Mg22	-35169.78 keV
Mg24(He3,3n+2p)Mg22	-37394.34 keV

<< 6-C-12	**12-Mg-24**	13-Al-27 >>
<< MT182 (^{3}He,d+t)	**MT183 (^{3}He,n+p+d) or MT5 (Mg23 production)**	MT184 (^{3}He,n+p+t) >>

Mg24 (^{3}He,n+p+d) or Mg23 production log-log



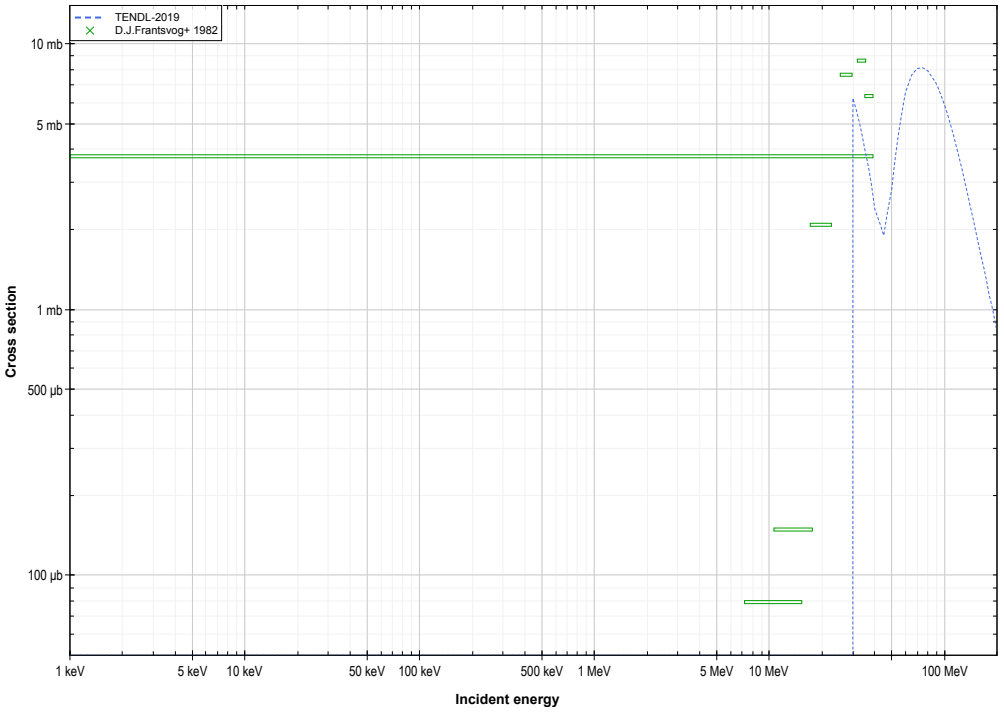
Mg24 (^{3}He,n+p+d) or Mg23 production lin-log



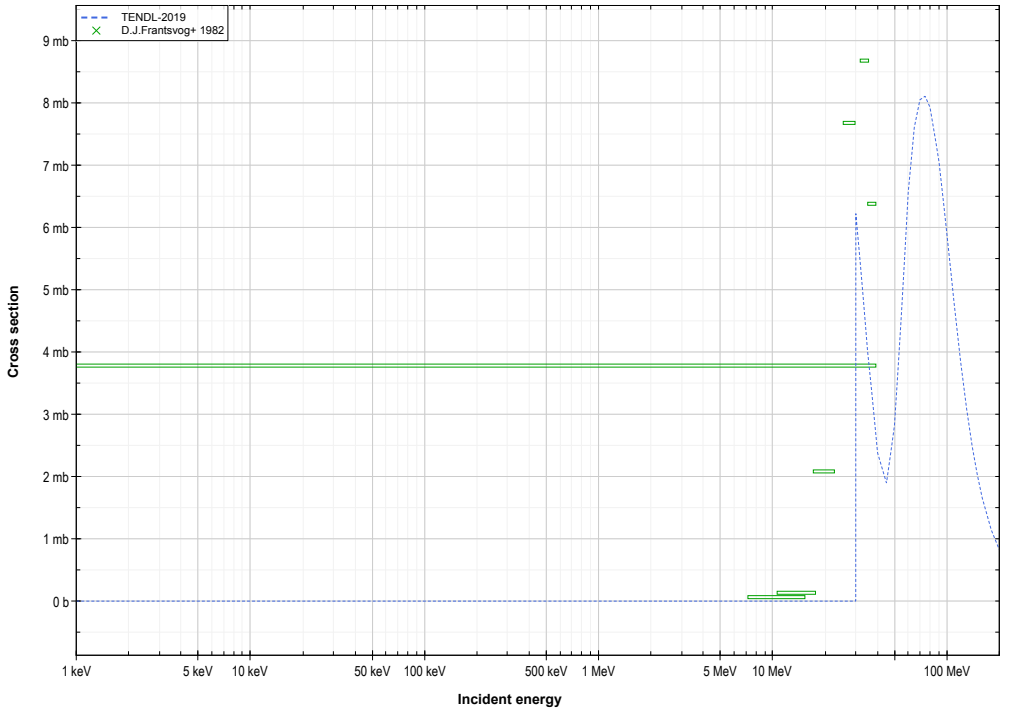
Reaction	Q-Value
Mg24(He3,α)Mg23	4046.24 keV
Mg24(He3,p+t)Mg23	-15767.62 keV
Mg24(He3,n+He3)Mg23	-16531.38 keV
Mg24(He3,2d)Mg23	-19800.28 keV
Mg24(He3,n+p+d)Mg23	-22024.85 keV
Mg24(He3,2n+2p)Mg23	-24249.42 keV

<< 6-C-12	**12-Mg-24**	13-Al-27 >>
<< MT183 (^{3}He,n+p+d)	**MT184 (^{3}He,n+p+t) or MT5 (Mg22 production)**	MT190 (^{3}He,2n+2p) >>

Mg24 (^{3}He,n+p+t) or Mg22 production log-log



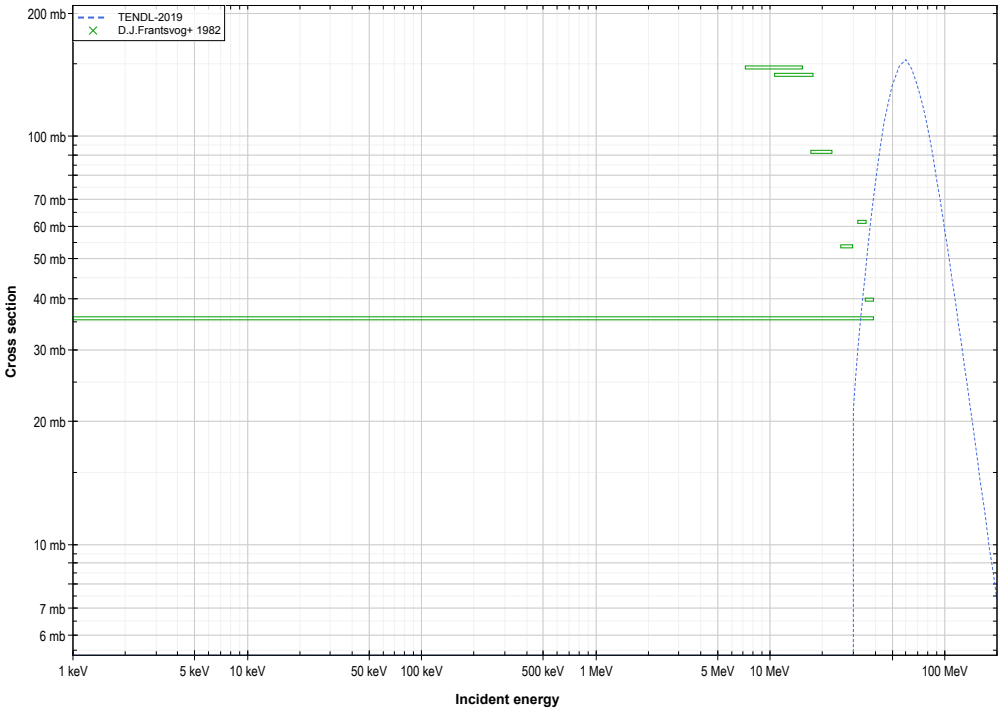
Mg24 (^{3}He,n+p+t) or Mg22 production lin-log



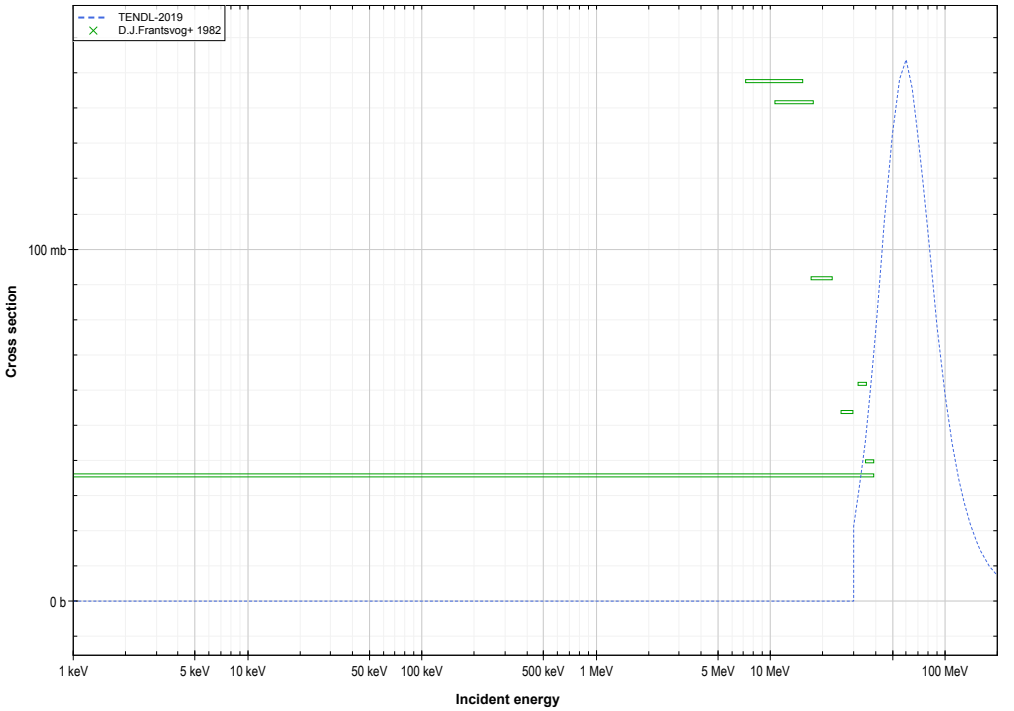
Reaction	Q-Value
Mg24(He3,n+α)Mg22	-9098.68 keV
Mg24(He3,d+t)Mg22	-26687.98 keV
Mg24(He3,n+p+t)Mg22	-28912.55 keV
Mg24(He3,2n+He3)Mg22	-29676.30 keV
Mg24(He3,n+2d)Mg22	-32945.21 keV
Mg24(He3,2n+p+d)Mg22	-35169.78 keV
Mg24(He3,3n+2p)Mg22	-37394.34 keV

<< 6-C-12	**12-Mg-24**	13-Al-27 >>
<< MT184 (³He,n+p+t)	**MT190 (³He,2n+2p) or MT5 (Mg23 production)**	MT197 (³He,3p) >>

Mg24 (³He,2n+2p) or Mg23 production log-log



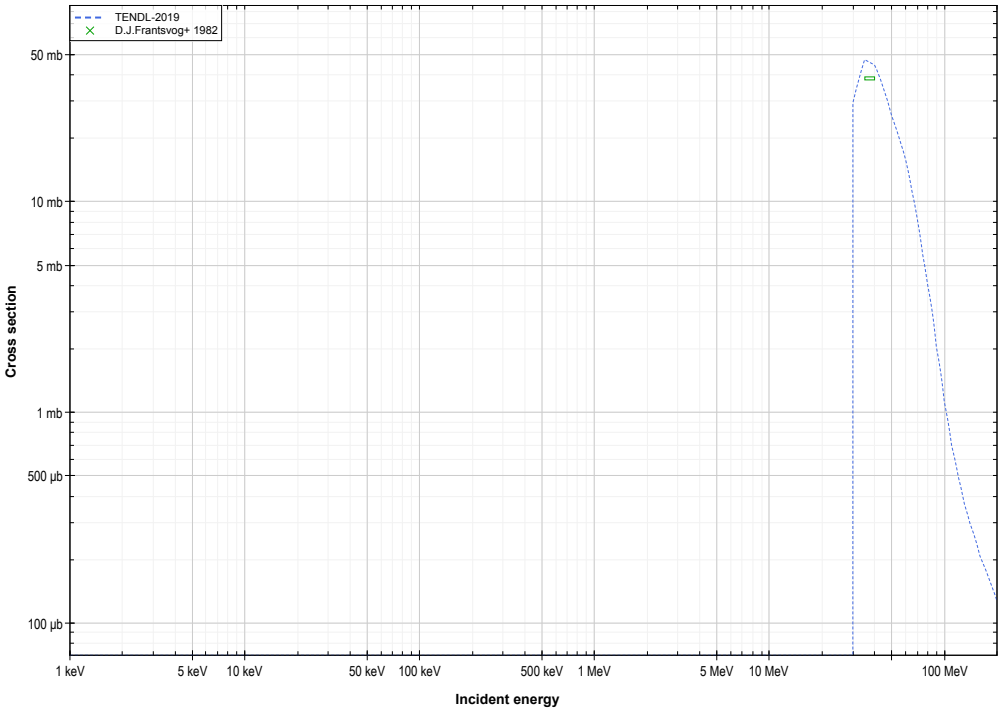
Mg24 (³He,2n+2p) or Mg23 production lin-log



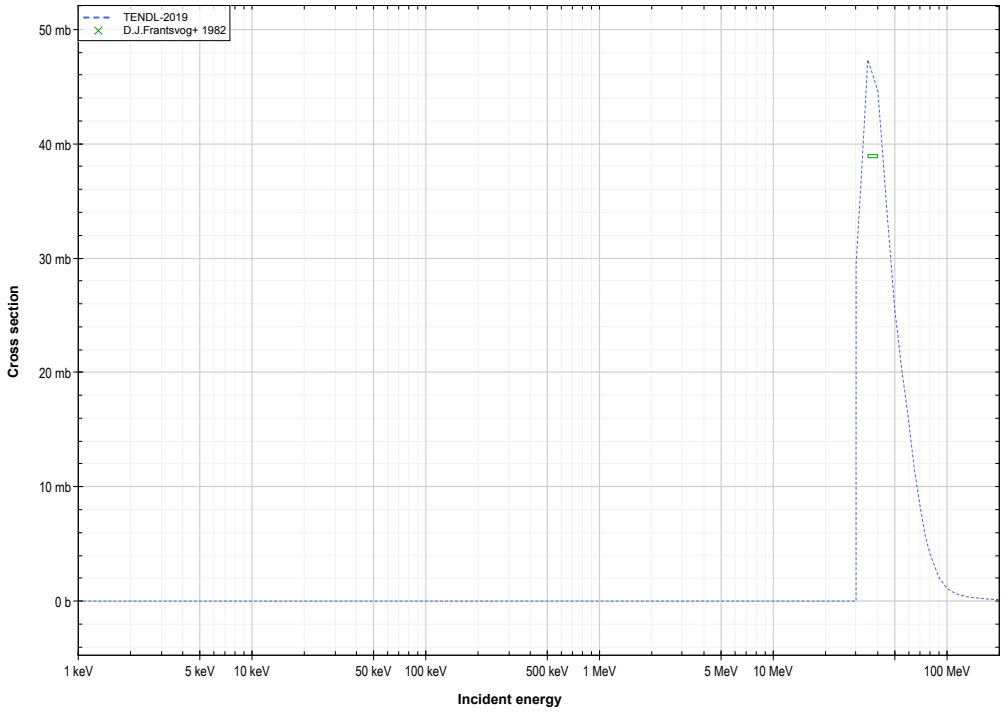
Reaction	Q-Value
Mg24(He3,α)Mg23	4046.24 keV
Mg24(He3,p+t)Mg23	-15767.62 keV
Mg24(He3,n+He3)Mg23	-16531.38 keV
Mg24(He3,2d)Mg23	-19800.28 keV
Mg24(He3,n+p+d)Mg23	-22024.85 keV
Mg24(He3,2n+2p)Mg23	-24249.42 keV

	12-Mg-24	12-Mg-25 >>
<< MT190 (^{3}He,2n+2p)	**MT197 (^{3}He,3p) or MT5 (Na24 production)**	12-Mg-25 MT197 (^{3}He,3p) >>

Mg24 (^{3}He,3p) or Na24 production log-log



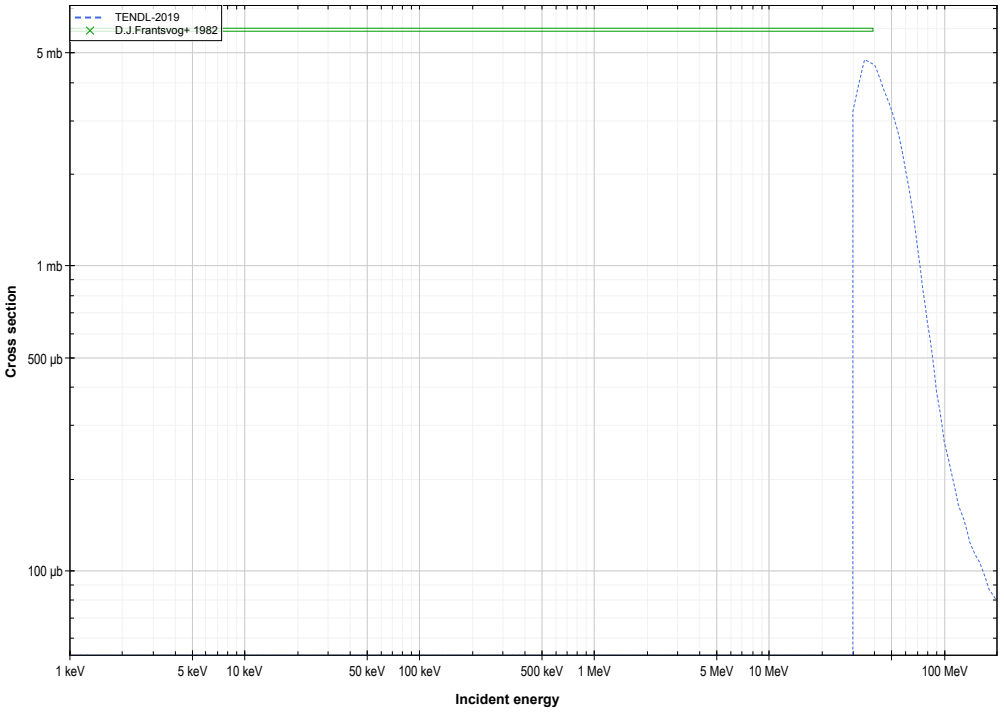
Mg24 (^{3}He,3p) or Na24 production lin-log



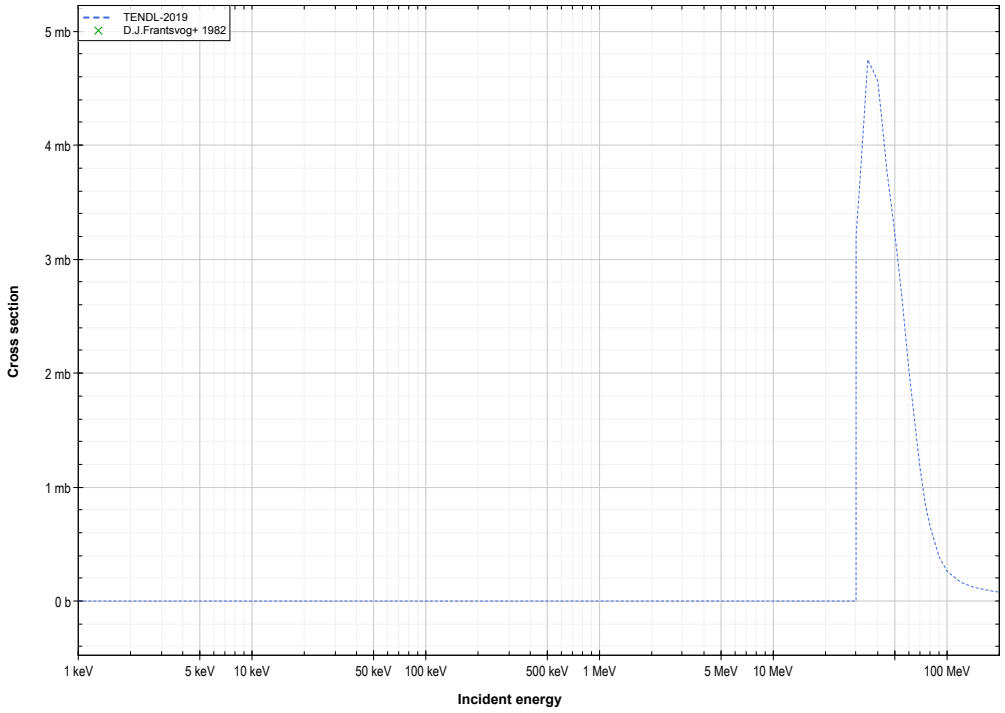
Reaction	Q-Value
Mg24(He3,3p)Na24	-12451.36 keV

<< 12-Mg-24	**12-Mg-25**	12-Mg-26 >>
<< 12-Mg-24 MT197 (³He,3p)	**MT197 (³He,3p) or MT5 (Na25 production)**	12-Mg-26 MT103 (³He,p) >>

Mg25 (³He,3p) or Na25 production log-log



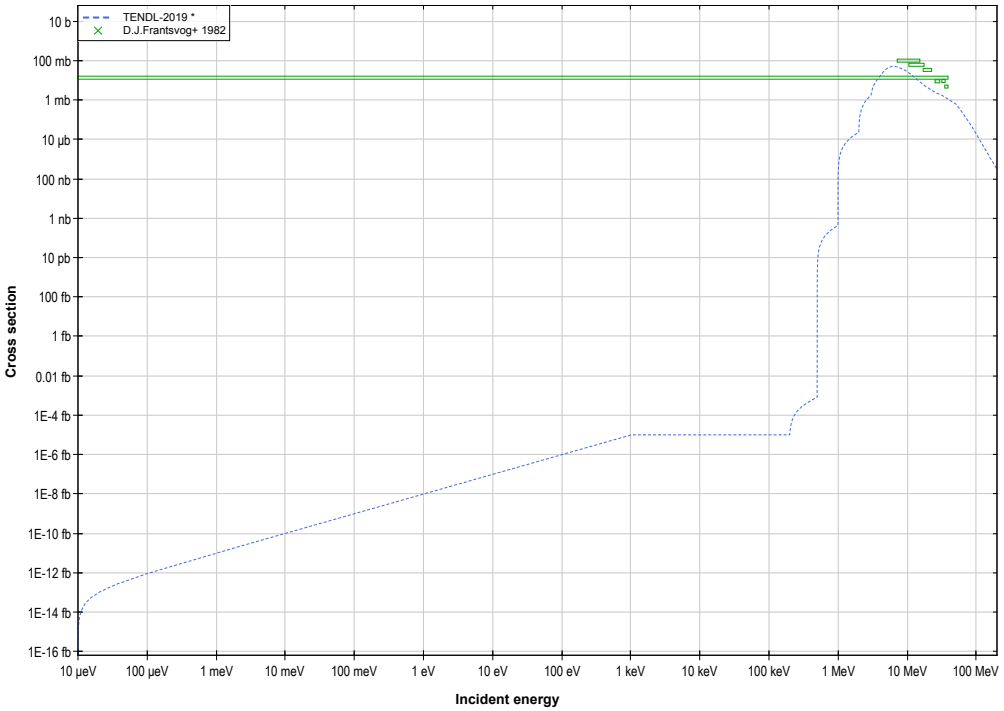
Mg25 (³He,3p) or Na25 production lin-log



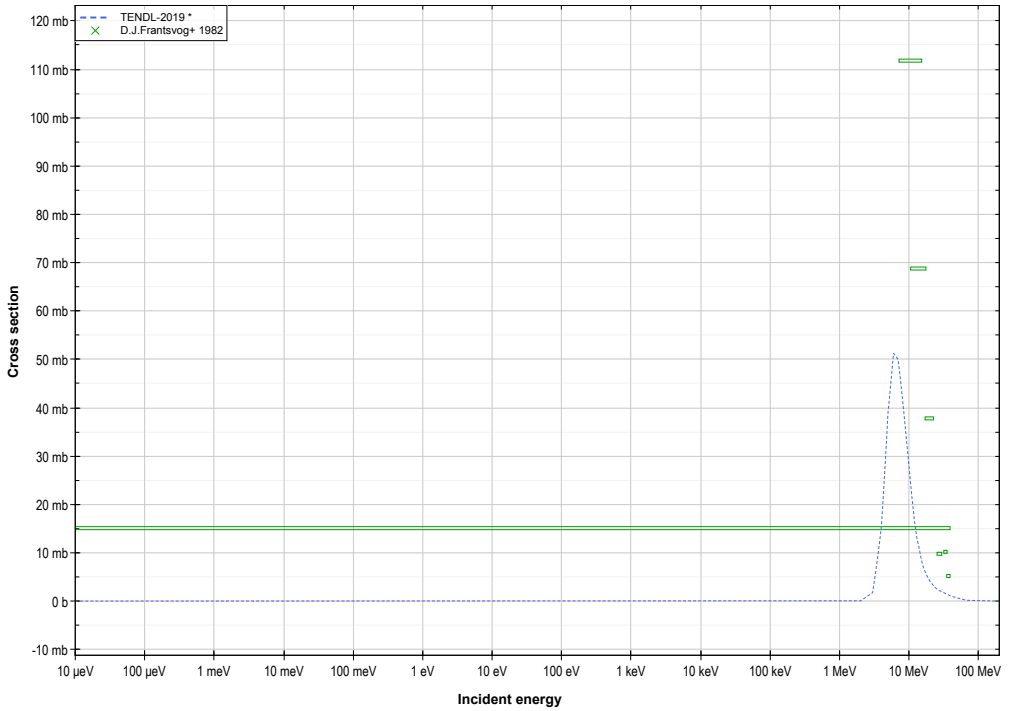
Reaction	Q-Value
Mg25(He3,3p)Na25	-10770.67 keV

<< 12-Mg-24	**12-Mg-26**	14-Si-28 >>
<< 12-Mg-25 MT197 (^{3}He,3p)	**MT103 (^{3}He,p) or MT5 (Al28 production)**	MT111 (^{3}He,2p) >>

Mg26 (^{3}He,p) or Al28 production log-log



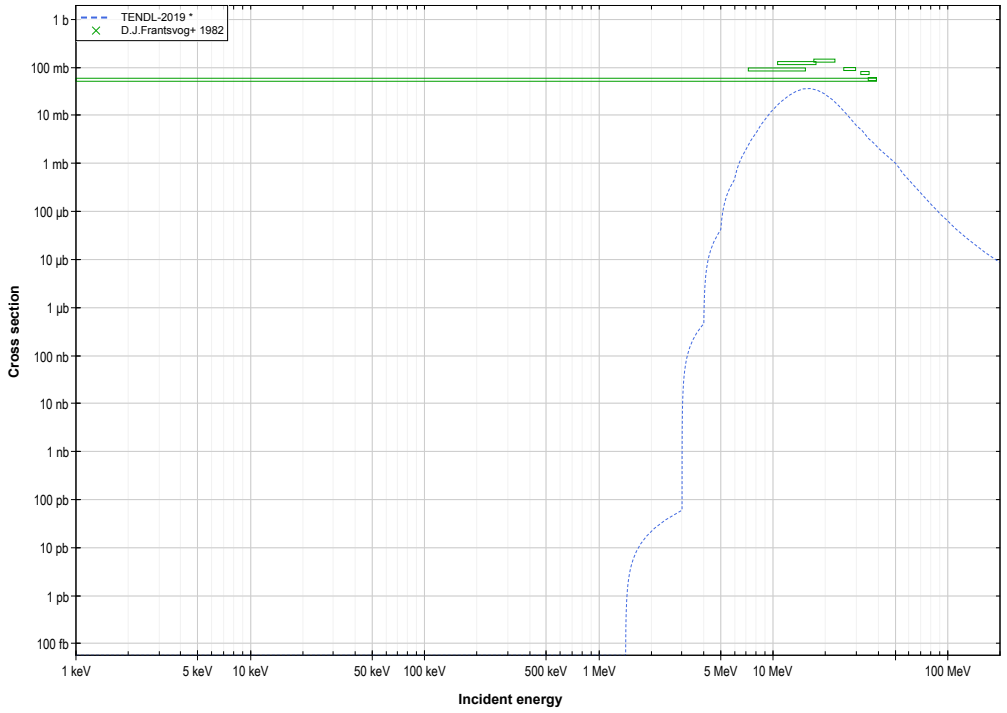
Mg26 (^{3}He,p) or Al28 production lin-log



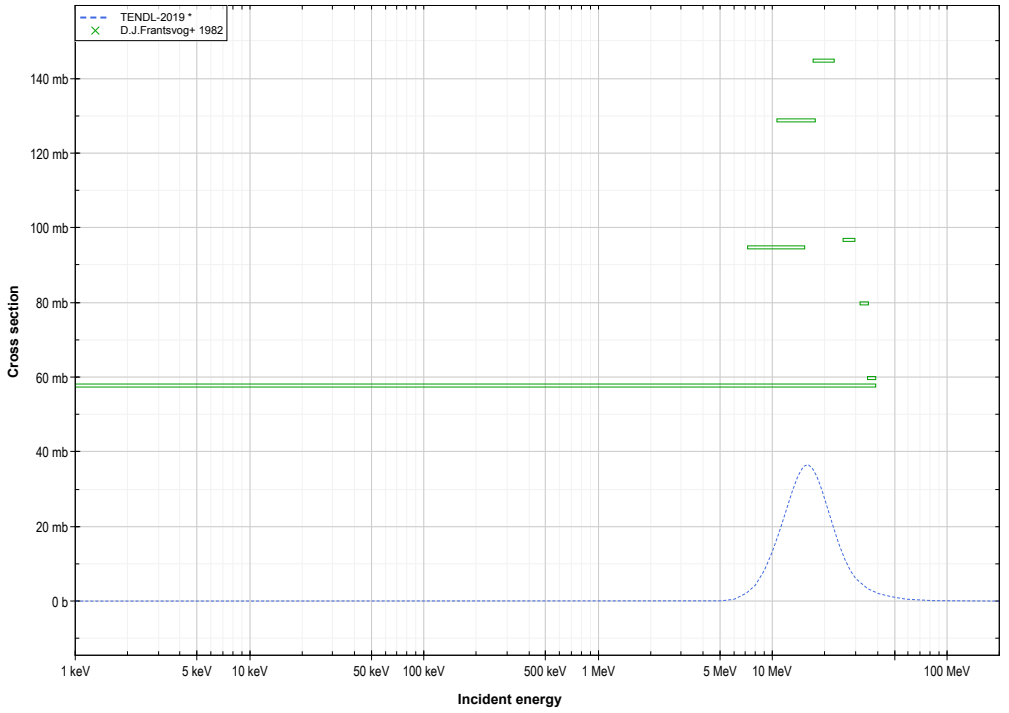
Reaction	Q-Value
Mg26(He3,p)Al28	8278.35 keV

<< 2-He-3	**12-Mg-26**	13-Al-27 >>
<< MT103 (³He,p)	**MT111 (³He,2p) or MT5 (Mg27 production)**	MT197 (³He,3p) >>

Mg26 (³He,2p) or Mg27 production log-log



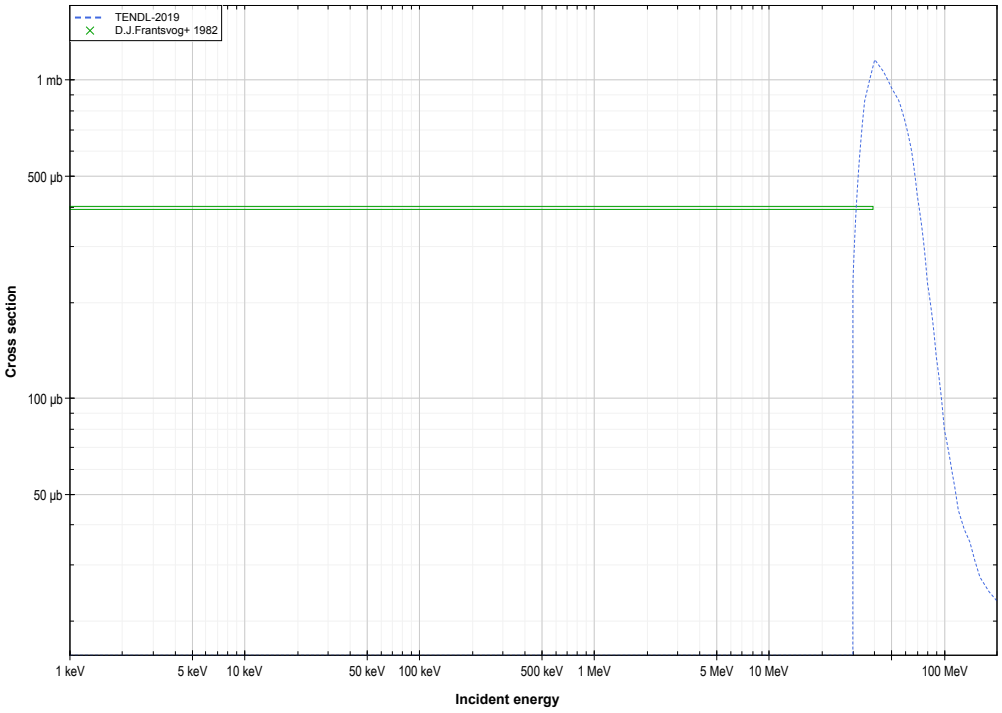
Mg26 (³He,2p) or Mg27 production lin-log



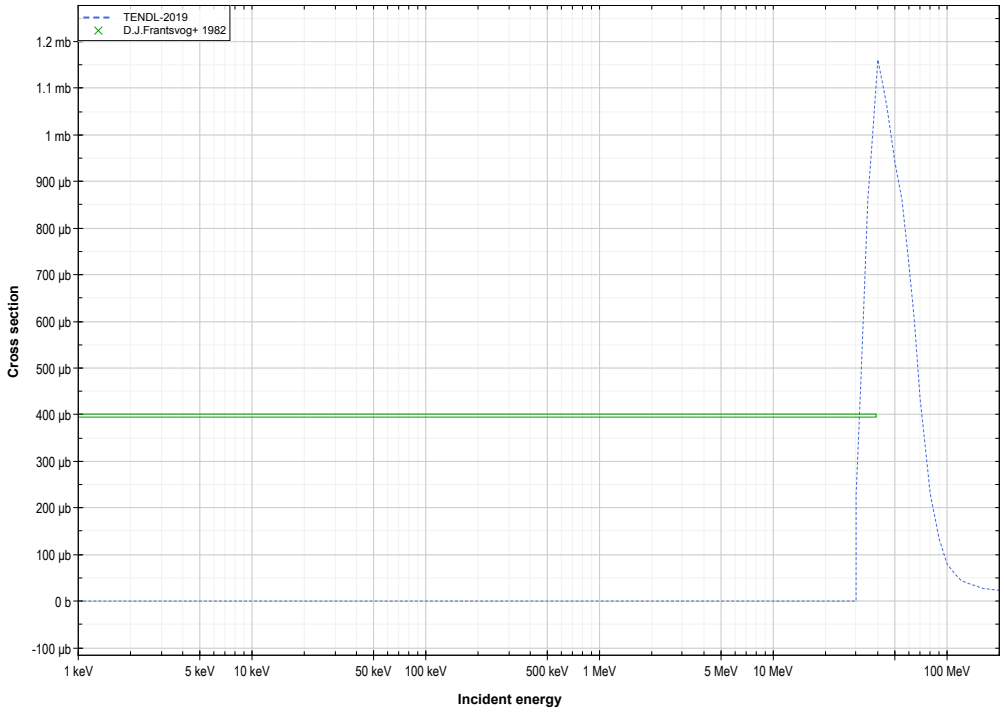
Reaction	Q-Value
Mg26(He3,2p)Mg27	-1274.66 keV

<< 12-Mg-25	**12-Mg-26**	13-Al-27 >>
<< MT111 (^{3}He,2p)	**MT197 (^{3}He,3p) or MT5 (Na26 production)**	13-Al-27 MT4 (^{3}He,n) >>

Mg26 (^{3}He,3p) or Na26 production log-log



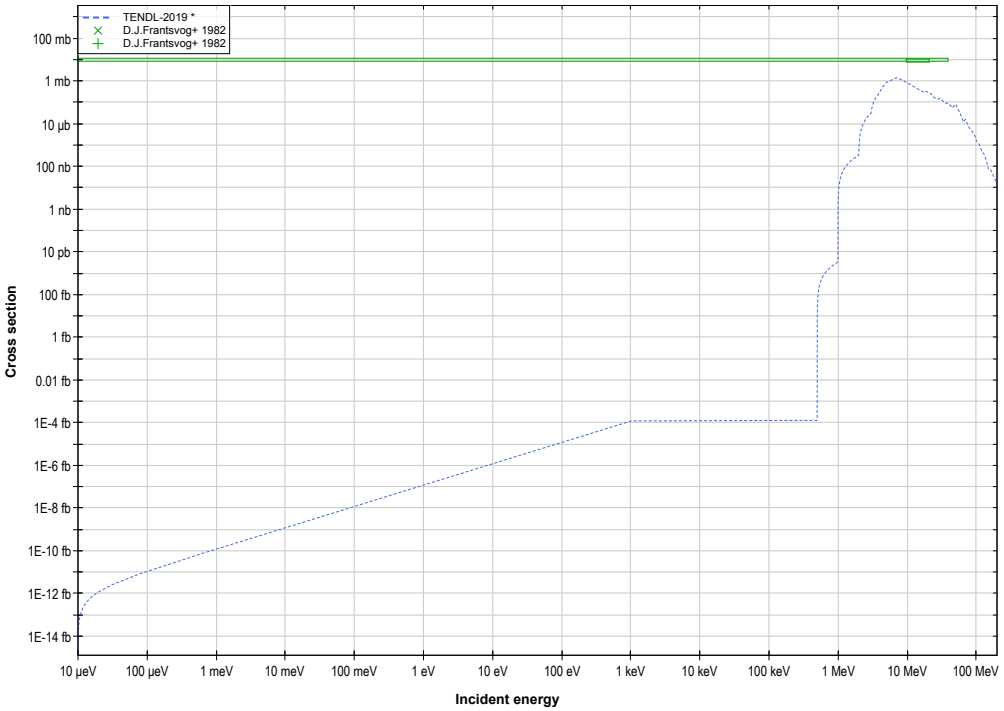
Mg26 (^{3}He,3p) or Na26 production lin-log



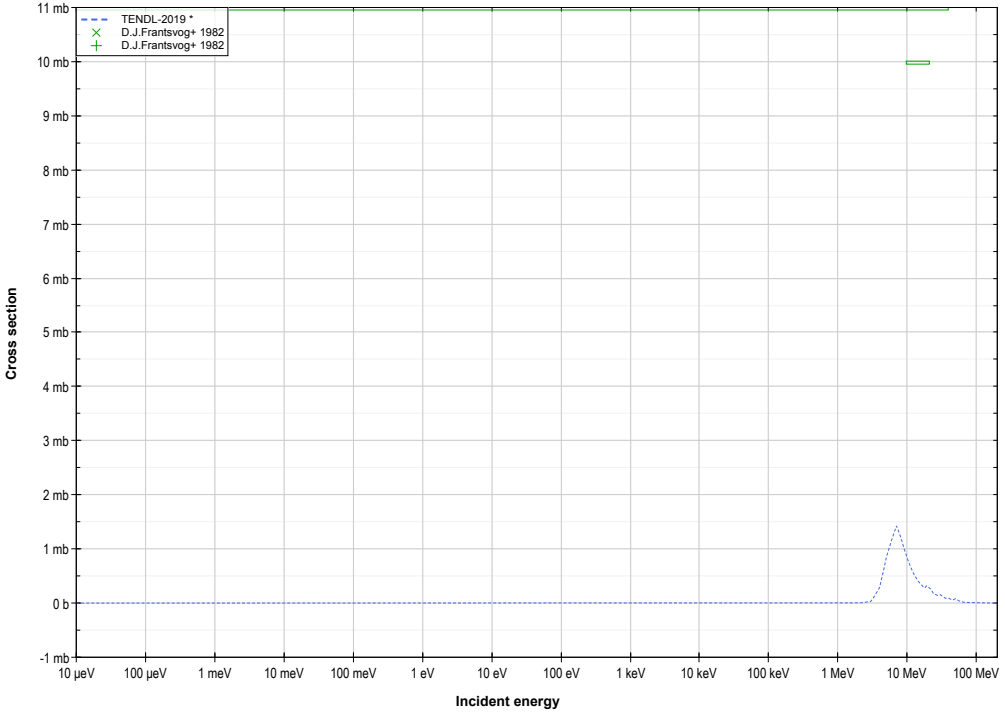
Reaction	Q-Value
Mg26(He3,3p)Na26	-16289.24 keV

<< 12-Mg-24	**13-Al-27**	14-Si-28 >>
<< 12-Mg-26 MT197 (³He,3p)	**MT4 (³He,n) or MT5 (P29 production)**	MT11 (³He,2n+d) >>

Al27 (³He,n) or P29 production log-log



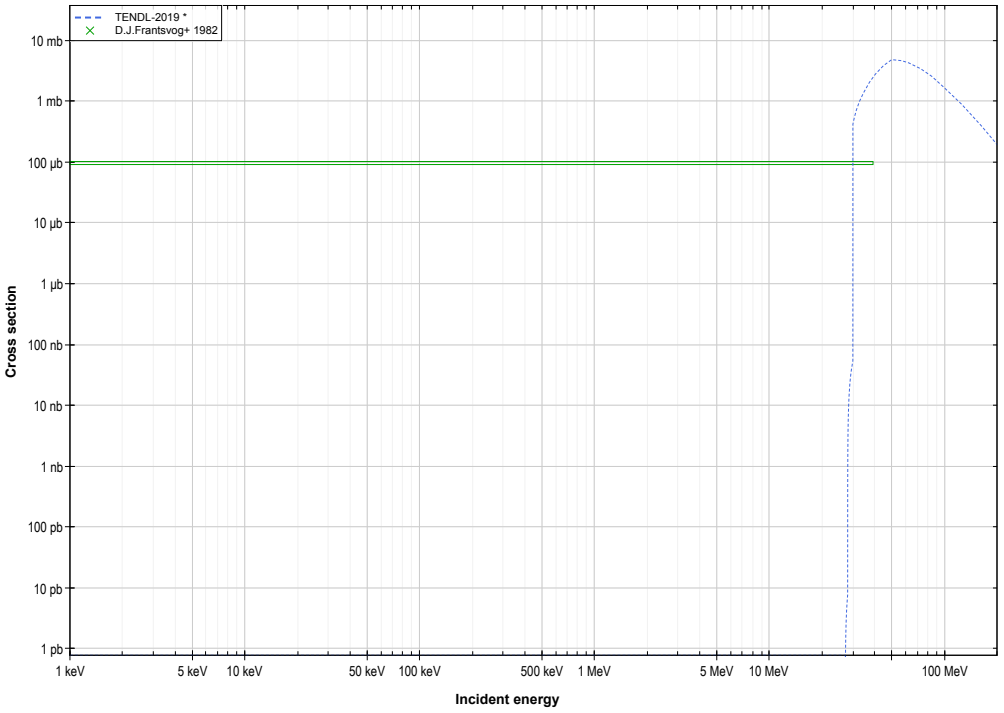
Al27 (³He,n) or P29 production lin-log



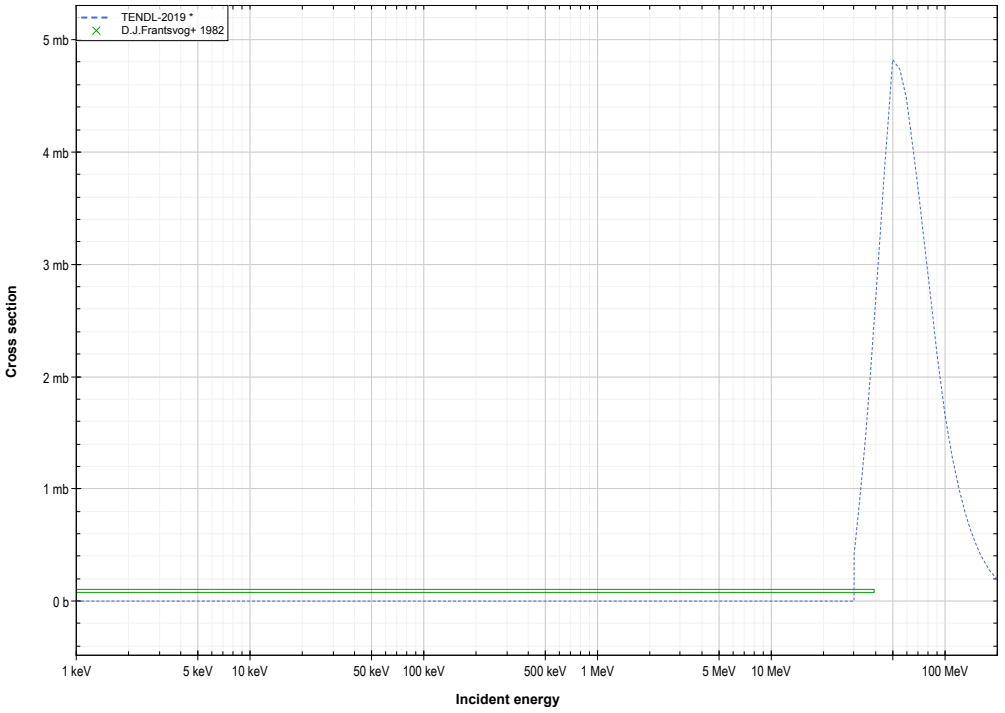
Reaction	Q-Value
Al27(He3,n)P29	6615.84 keV

	13-Al-27	62-Sm-147 >>
<< MT4 (³He,n)	**MT11 (³He,2n+d) or MT5 (Si26 production)**	MT16 (³He,2n) >>

Al27 (³He,2n+d) or Si26 production log-log



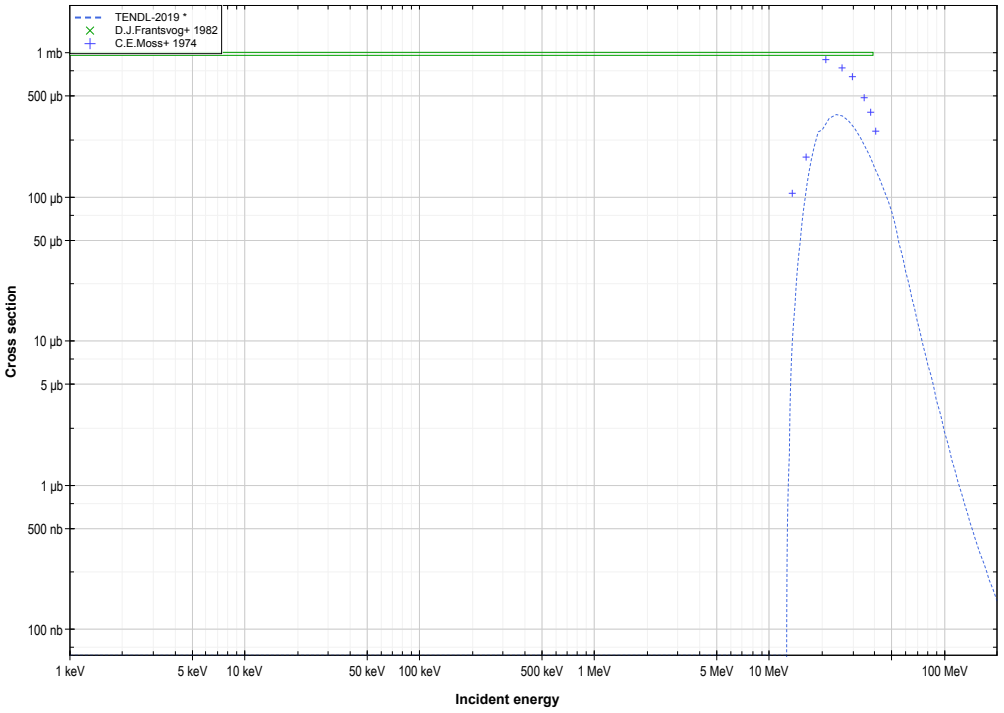
Al27 (³He,2n+d) or Si26 production lin-log



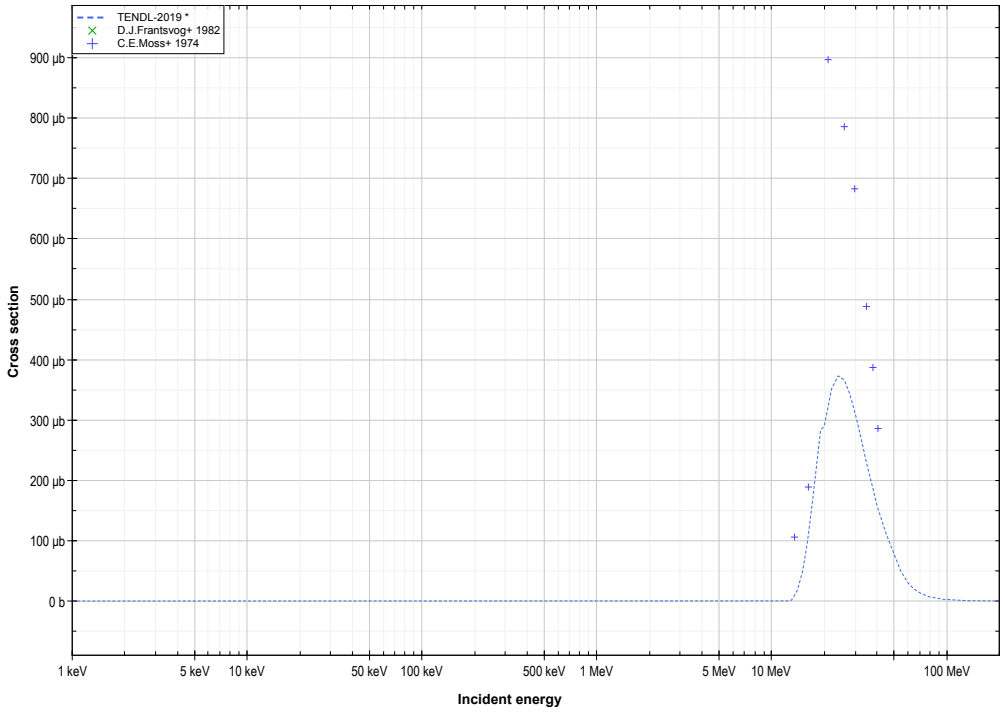
Reaction	Q-Value
Al27(He3,n+t)Si26	-18145.75 keV
Al27(He3,2n+d)Si26	-24402.98 keV
Al27(He3,3n+p)Si26	-26627.54 keV

<< 12-Mg-24	**13-Al-27**	17-Cl-37 >>
<< MT11 (^{3}He,2n+d)	**MT16 (^{3}He,2n) or MT5 (P28 production)**	MT22 (^{3}He,n+α) >>

Al27 (^{3}He,2n) or P28 production log-log



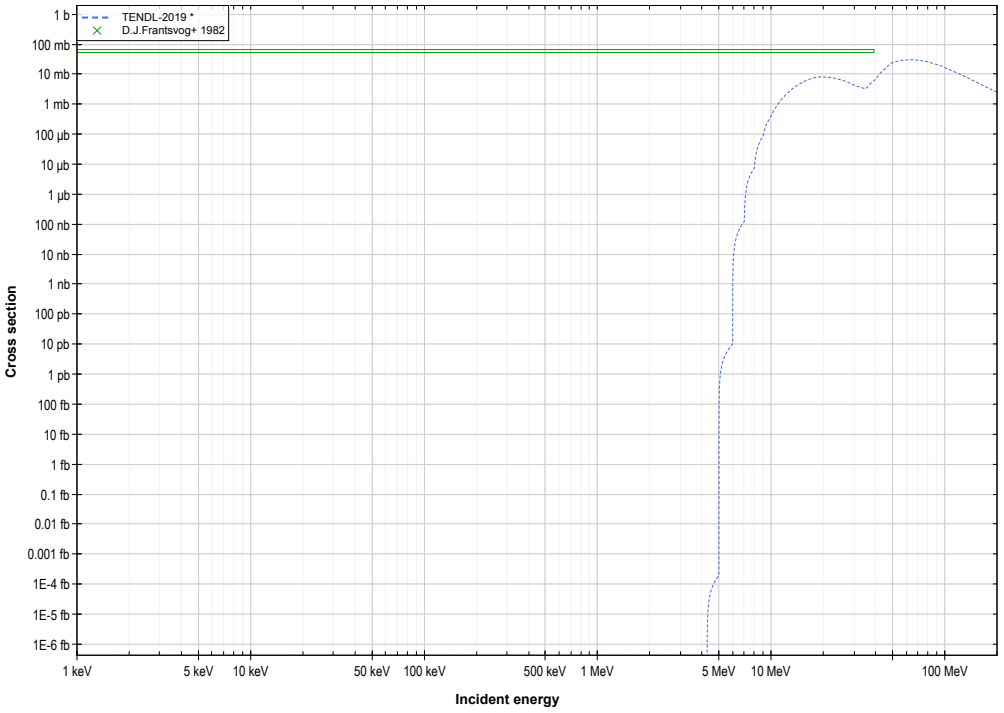
Al27 (^{3}He,2n) or P28 production lin-log



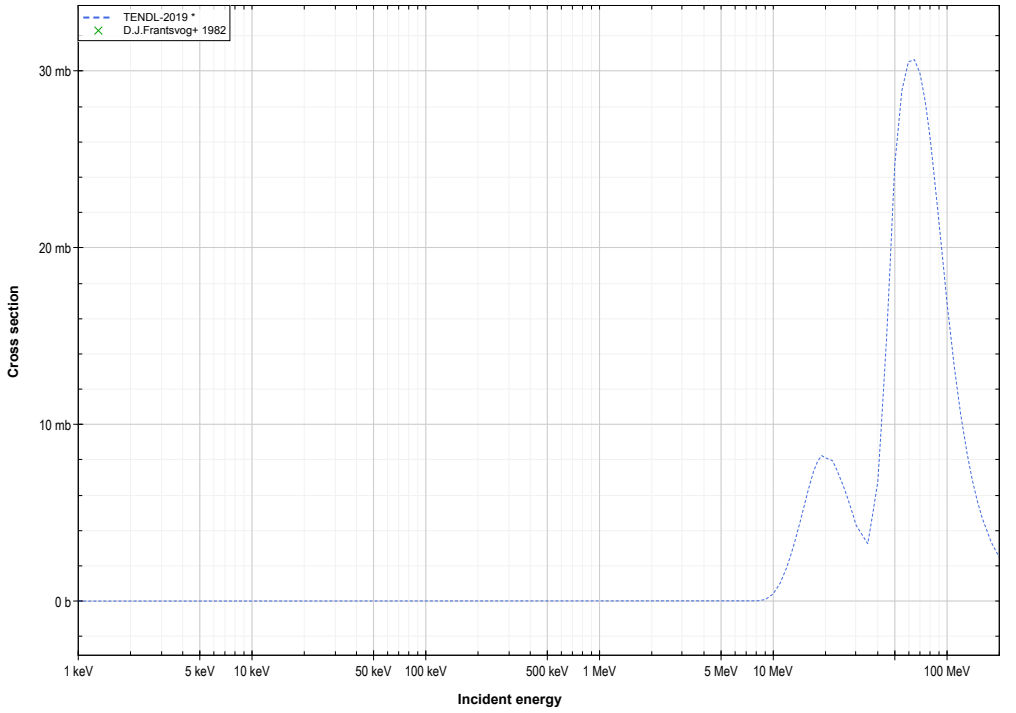
Reaction	Q-Value
Al27(He3,2n)P28	-11260.58 keV

<< 12-Mg-24	**13-Al-27**	14-Si-28 >>
<< MT16 (³He,2n)	**MT22 (³He,n+α) or MT5 (Al25 production)**	MT24 (³He,2n+α) >>

Al27 (³He,n+α) or Al25 production log-log



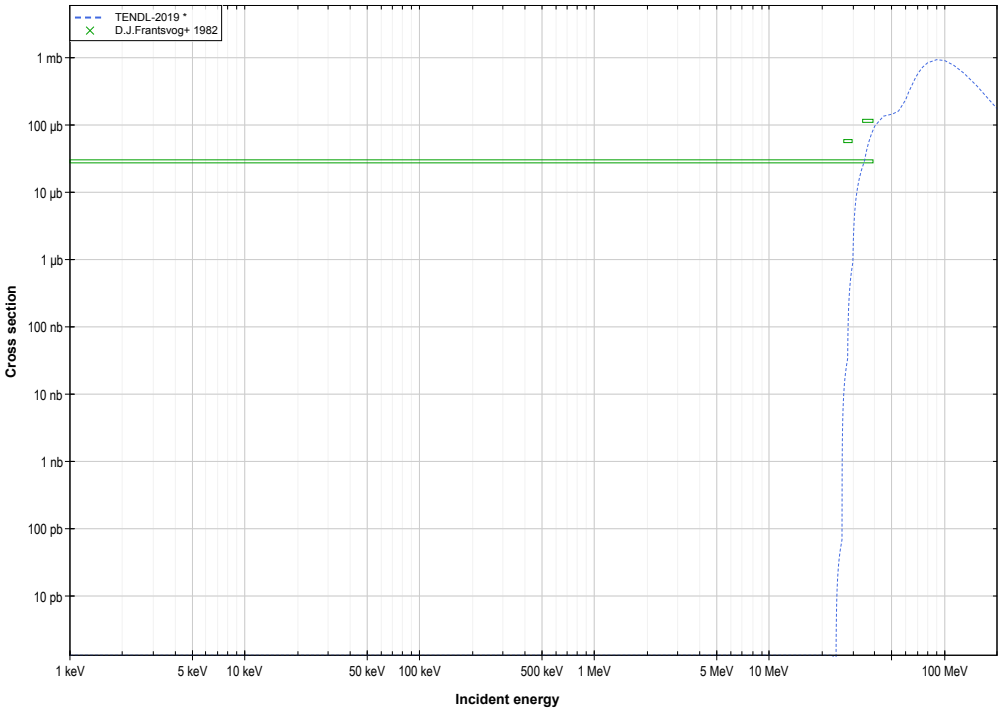
Al27 (³He,n+α) or Al25 production lin-log



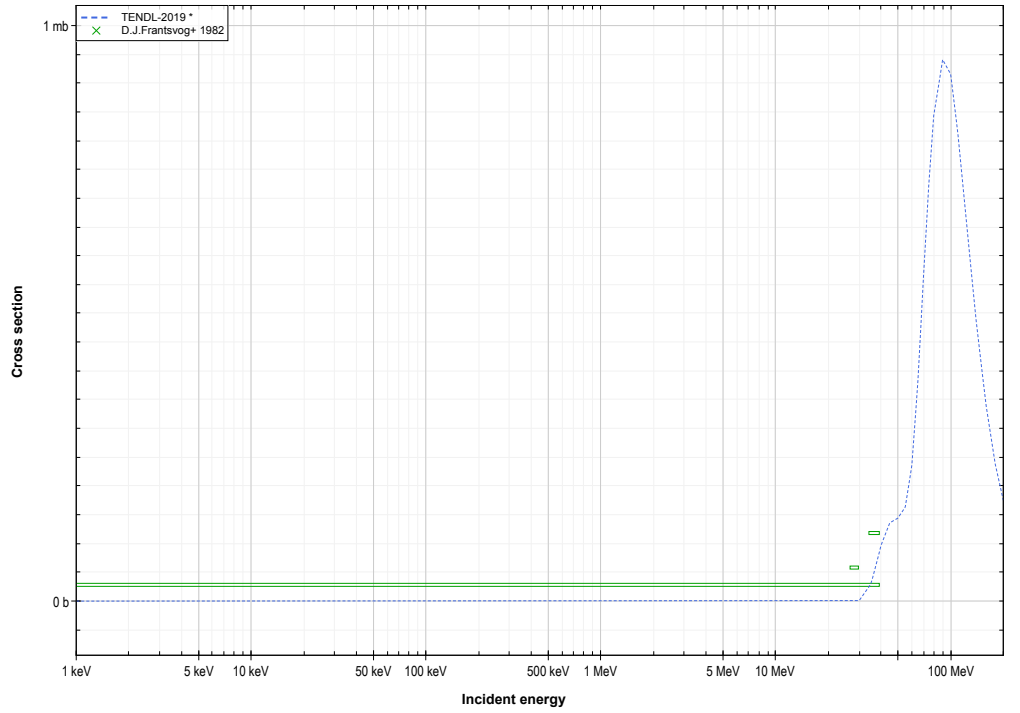
Reaction	Q-Value
Al27(He3,n+α)Al25	-3845.90 keV
Al27(He3,d+t)Al25	-21435.20 keV
Al27(He3,n+p+t)Al25	-23659.77 keV
Al27(He3,2n+He3)Al25	-24423.52 keV
Al27(He3,n+2d)Al25	-27692.43 keV
Al27(He3,2n+p+d)Al25	-29917.00 keV
Al27(He3,3n+2p)Al25	-32141.56 keV

	13-Al-27	27-Co-59 >>
<< MT22 (³He,n+α)	**MT24 (³He,2n+α) or MT5 (Al24 production)**	MT32 (³He,n+d) >>

Al27 (³He,2n+α) or Al24 production log-log



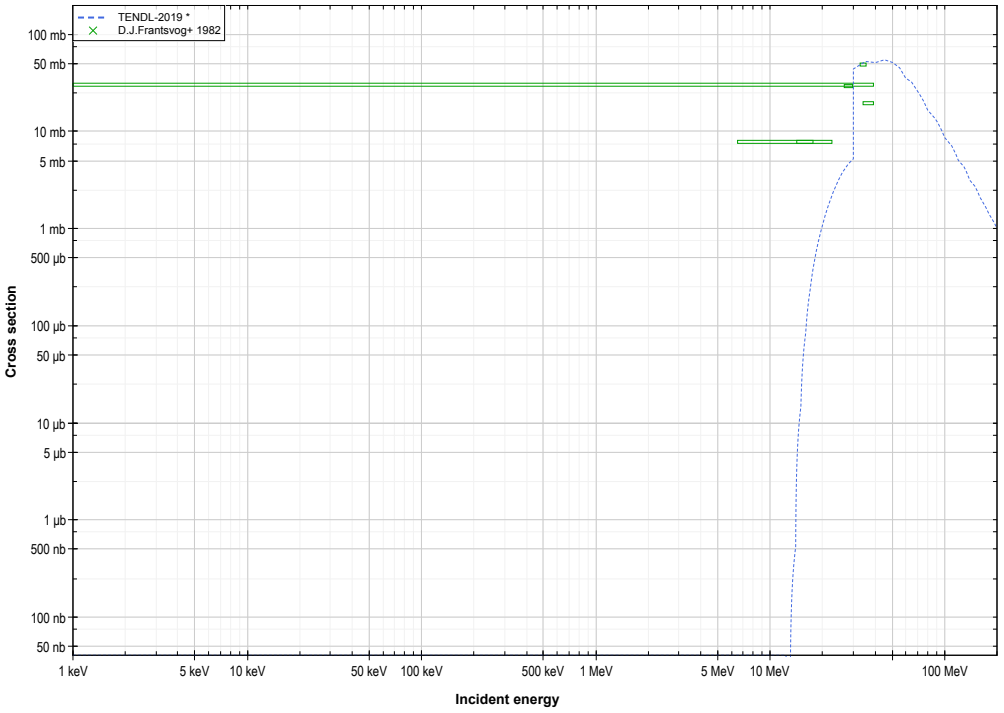
Al27 (³He,2n+α) or Al24 production lin-log



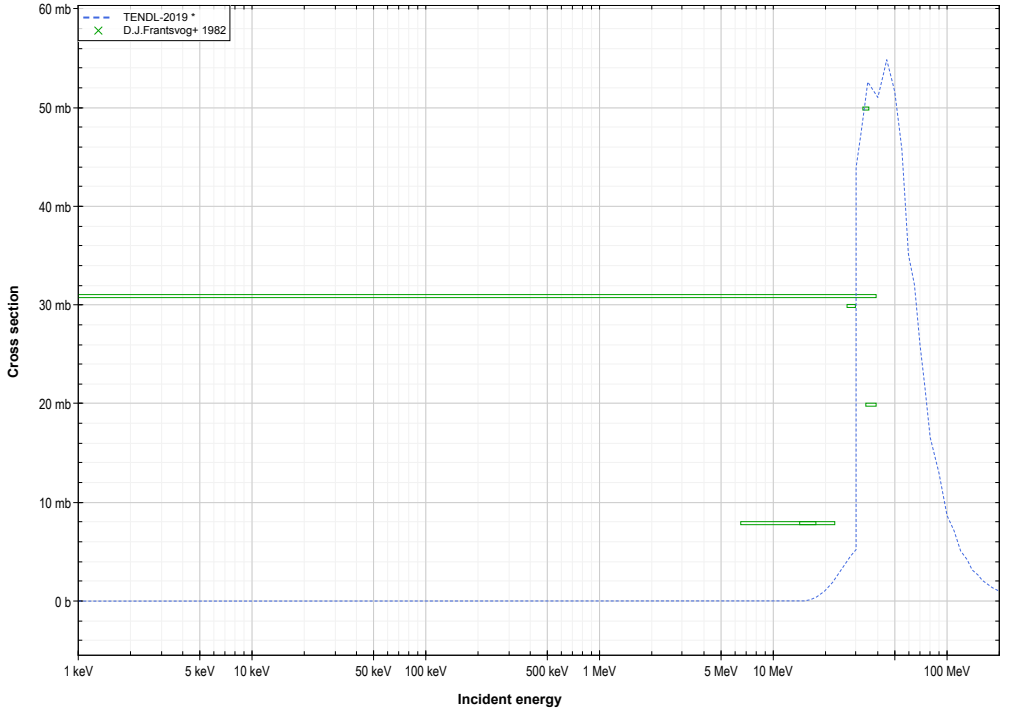
Reaction	Q-Value
Al27(He3,2n+α)Al24	-20784.33 keV
Al27(He3,2t)Al24	-32116.40 keV
Al27(He3,n+d+t)Al24	-38373.63 keV
Al27(He3,2n+p+t)Al24	-40598.20 keV
Al27(He3,3n+He3)Al24	-41361.95 keV
Al27(He3,2n+2d)Al24	-44630.86 keV
Al27(He3,3n+p+d)Al24	-46855.43 keV
Al27(He3,4n+2p)Al24	-49079.99 keV

<< 12-Mg-24	**13-Al-27**	14-Si-28 >>
<< MT24 (^{3}He,2n+α)	**MT32 (^{3}He,n+d) or MT5 (Si27 production)**	MT33 (^{3}He,n+t) >>

Al27 (^{3}He,n+d) or Si27 production log-log



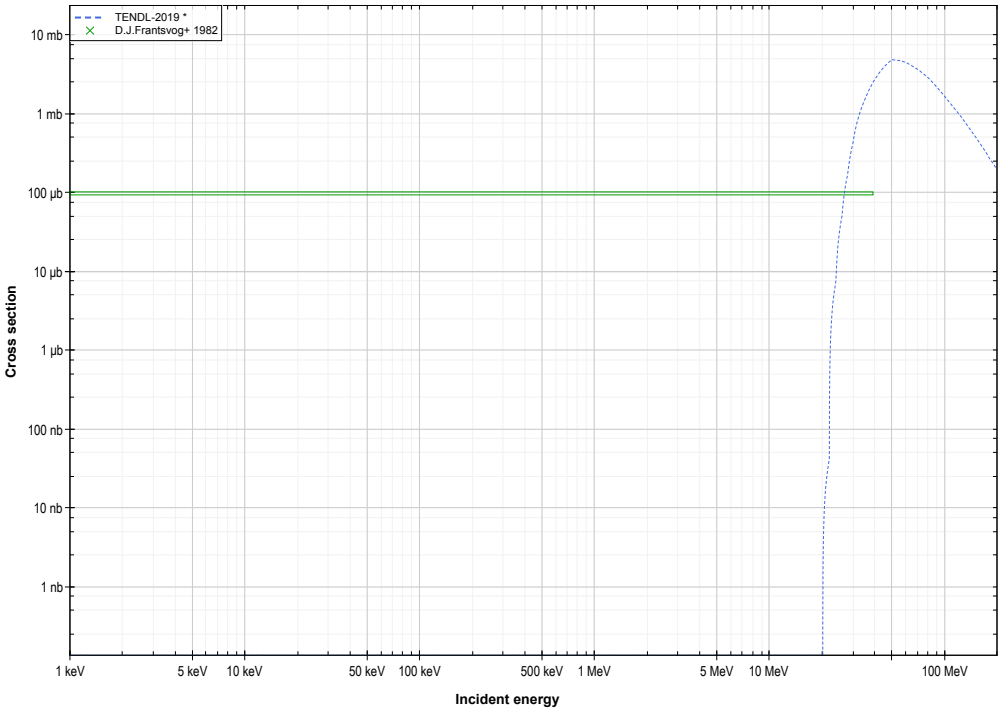
Al27 (^{3}He,n+d) or Si27 production lin-log



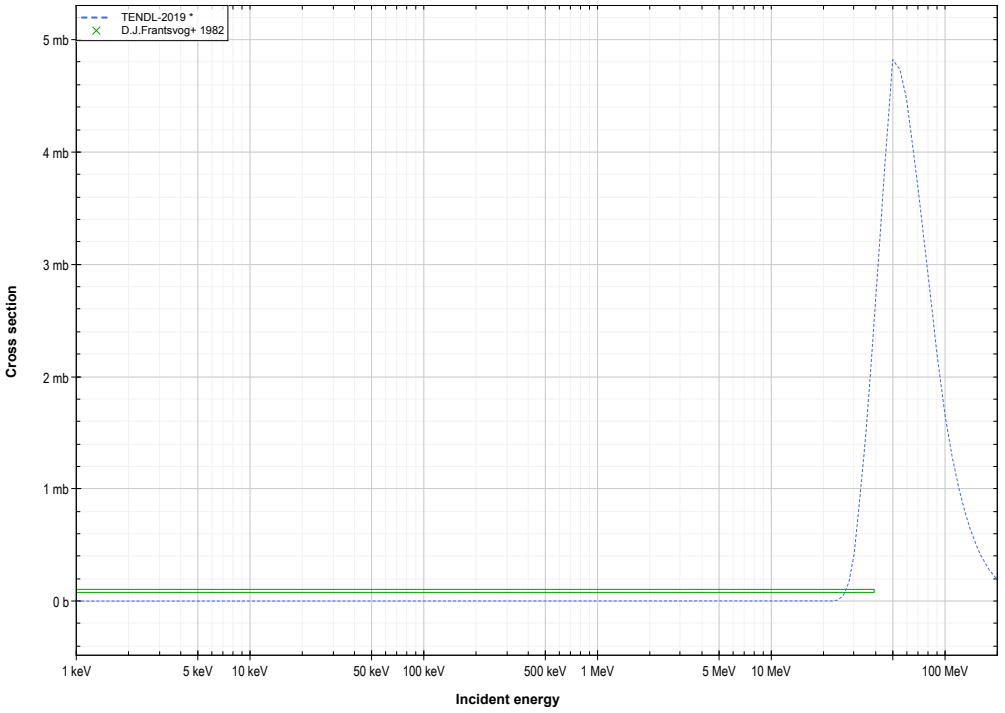
Reaction	Q-Value
Al27(He3,t)Si27	-4830.95 keV
Al27(He3,n+d)Si27	-11088.18 keV
Al27(He3,2n+p)Si27	-13312.75 keV

	13-Al-27	62-Sm-147 >>
<< MT32 (³He,n+d)	**MT33 (³He,n+t) or MT5 (Si26 production)**	MT34 (³He,n+³He) >>

Al27 (³He,n+t) or Si26 production log-log



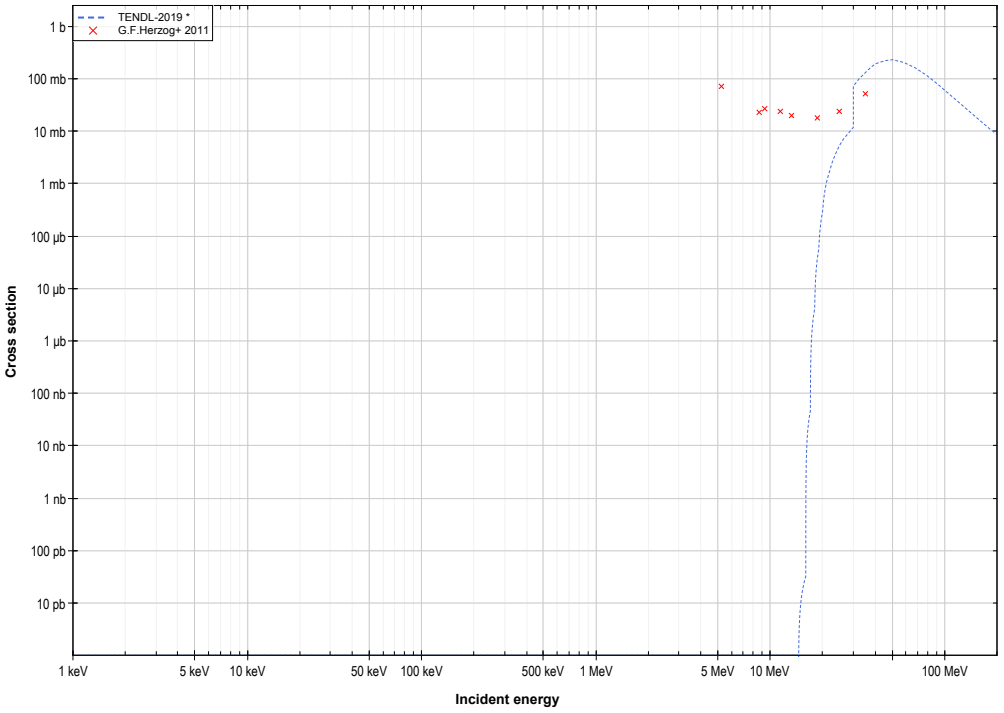
Al27 (³He,n+t) or Si26 production lin-log



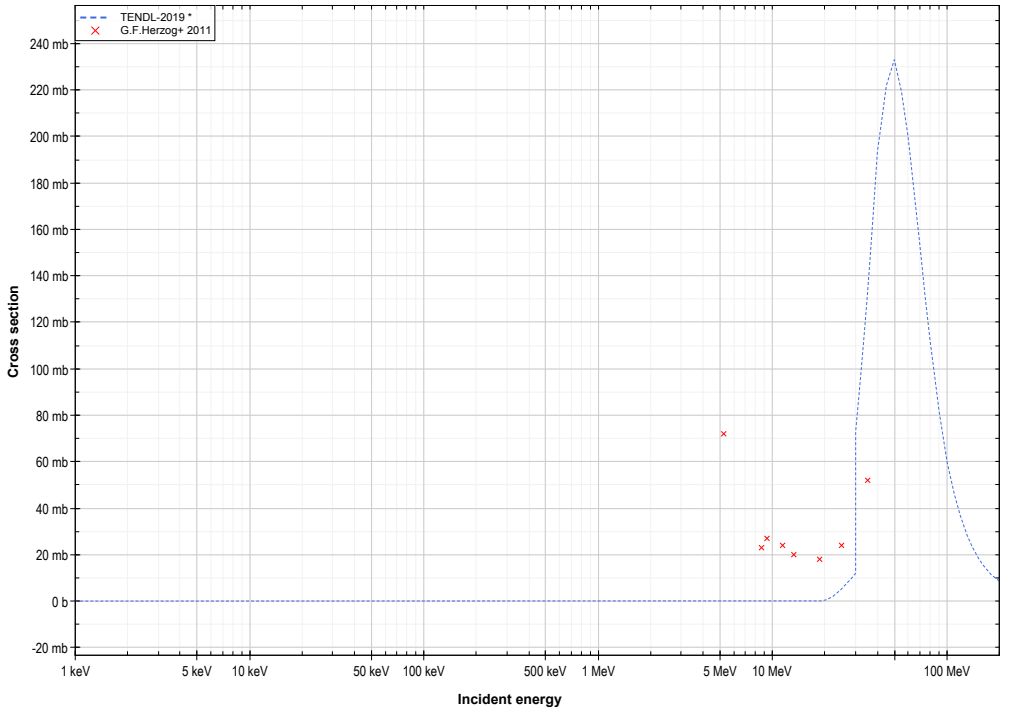
Reaction	Q-Value
Al27(He3,n+t)Si26	-18145.75 keV
Al27(He3,2n+d)Si26	-24402.98 keV
Al27(He3,3n+p)Si26	-26627.54 keV

<< 12-Mg-24	**13-Al-27**	14-Si-28 >>
<< MT33 (^{3}He,n+t)	**MT34 (^{3}He,n+^{3}He) or MT5 (Al26 production)**	MT41 (^{3}He,2n+p) >>

Al27 (^{3}He,n+^{3}He) or Al26 production log-log



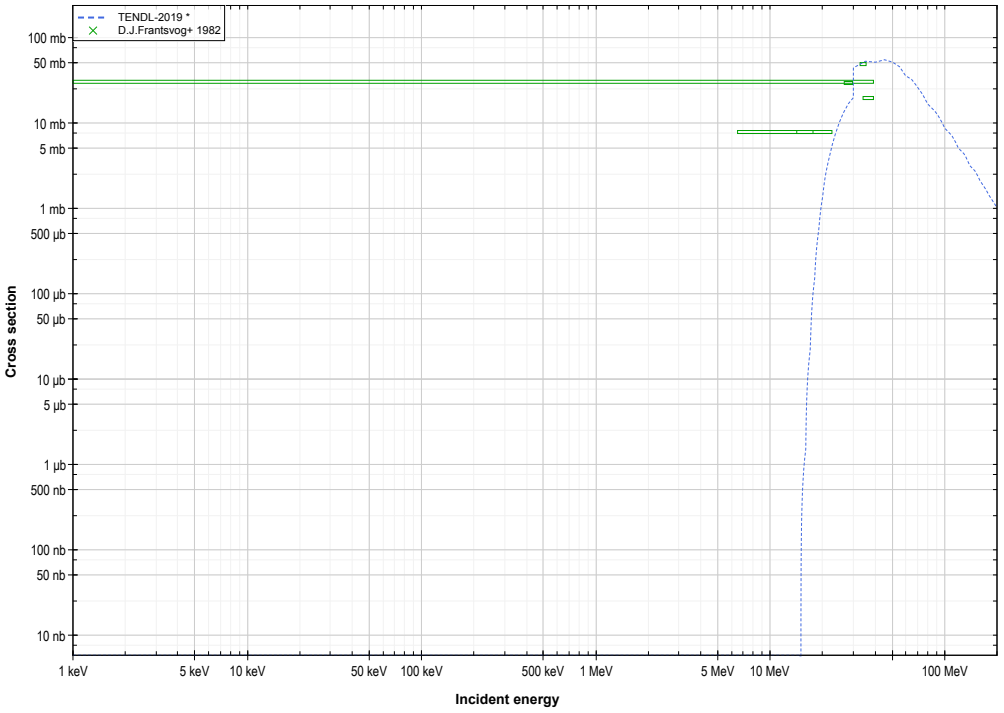
Al27 (^{3}He,n+^{3}He) or Al26 production lin-log



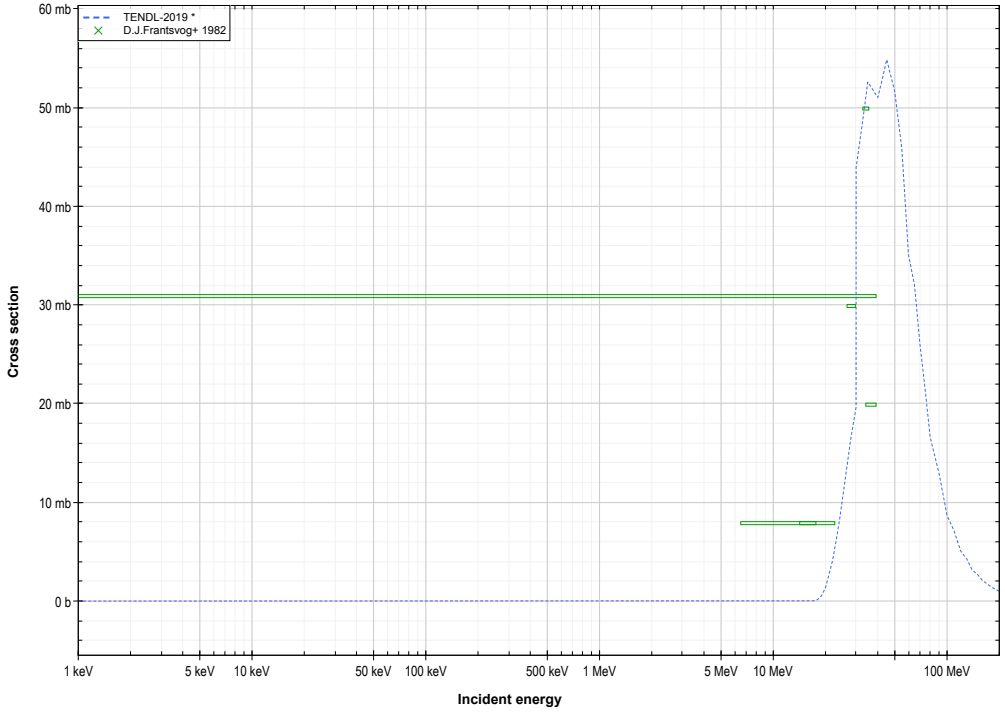
Reaction	Q-Value
Al27(He3,α)Al26	7519.59 keV
Al27(He3,p+t)Al26	-12294.27 keV
Al27(He3,n+He3)Al26	-13058.03 keV
Al27(He3,2d)Al26	-16326.94 keV
Al27(He3,n+p+d)Al26	-18551.50 keV
Al27(He3,2n+2p)Al26	-20776.07 keV

<< 12-Mg-24	**13-Al-27**	14-Si-28 >>
<< MT34 (^{3}He,n+^{3}He)	**MT41 (^{3}He,2n+p) or MT5 (Si27 production)**	MT42 (^{3}He,3n+p) >>

Al27 (^{3}He,2n+p) or Si27 production log-log



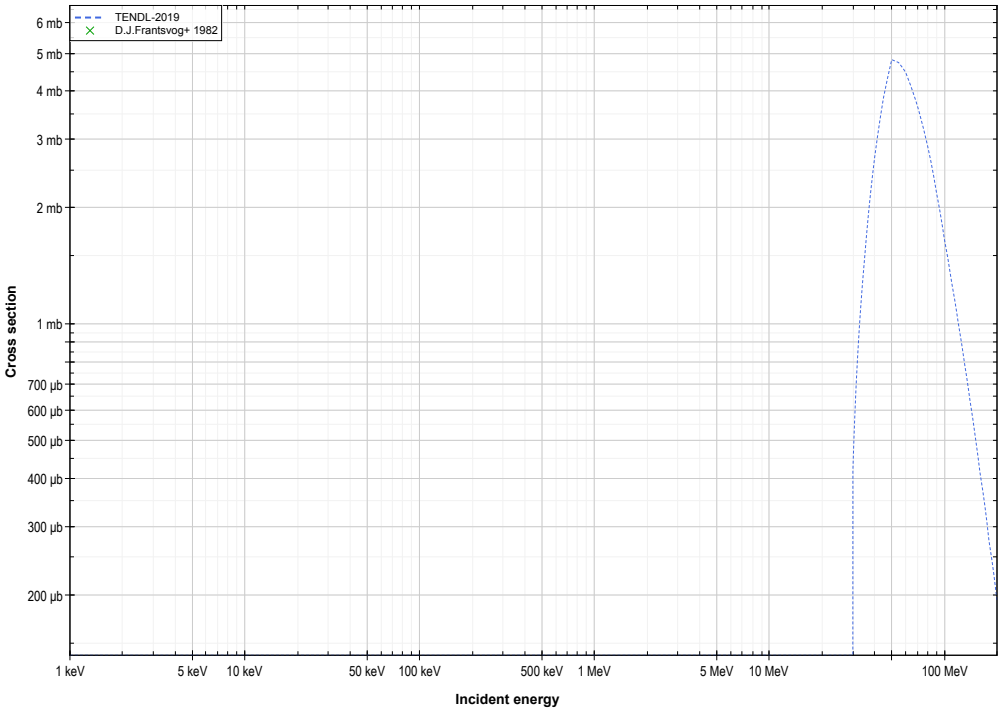
Al27 (^{3}He,2n+p) or Si27 production lin-log



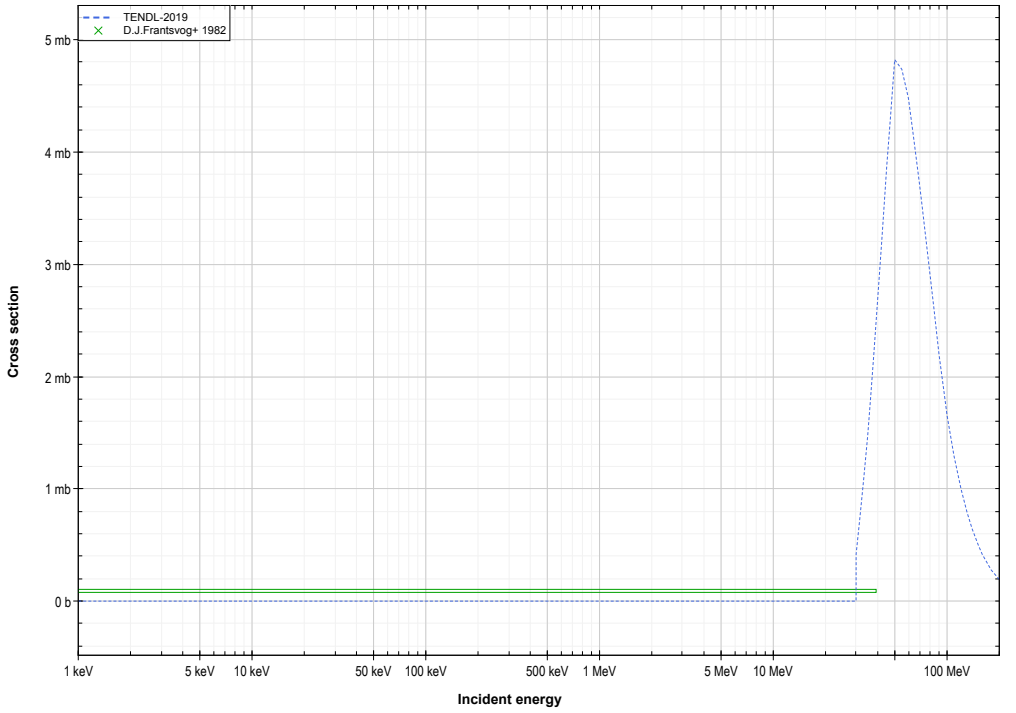
Reaction	Q-Value
Al27(He3,t)Si27	-4830.95 keV
Al27(He3,n+d)Si27	-11088.18 keV
Al27(He3,2n+p)Si27	-13312.75 keV

	13-Al-27	29-Cu-63 >>
<< MT41 (^{3}He,2n+p)	**MT42 (^{3}He,3n+p) or MT5 (Si26 production)**	MT102 (^{3}He,γ) >>

Al27 (^{3}He,3n+p) or Si26 production log-log



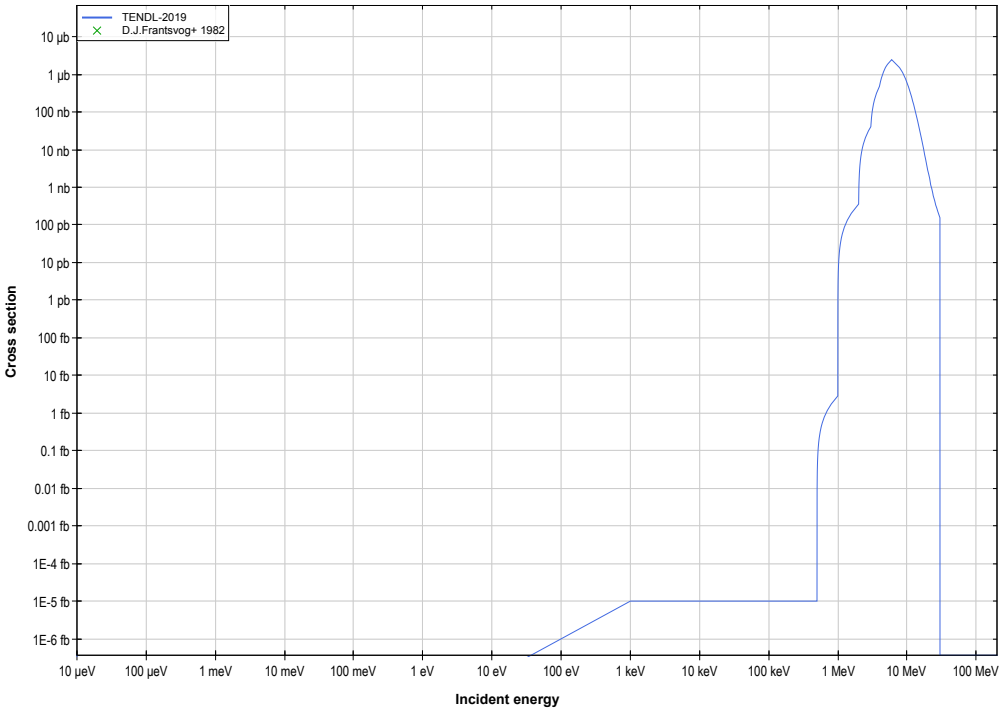
Al27 (^{3}He,3n+p) or Si26 production lin-log



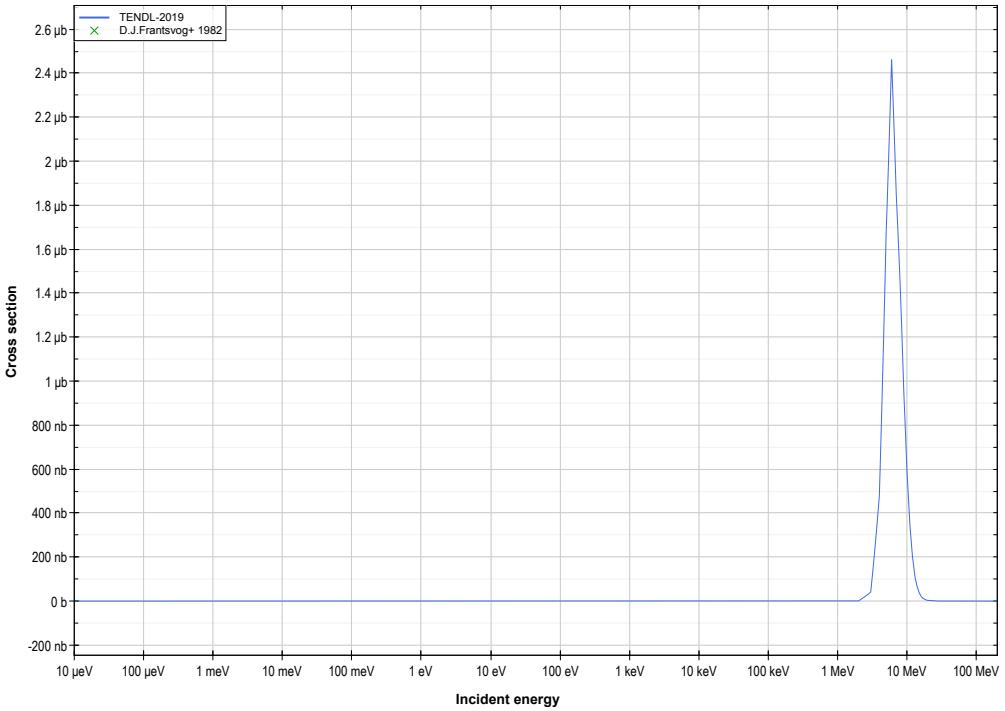
Reaction	Q-Value
Al27(He3,n+t)Si26	-18145.75 keV
Al27(He3,2n+d)Si26	-24402.98 keV
Al27(He3,3n+p)Si26	-26627.54 keV

<< 12-Mg-24	**13-Al-27**	14-Si-28 >>
<< MT42 (³He,3n+p)	**MT102 (³He,γ) or MT5 (P30 production)**	MT105 (³He,t) >>

Al27 (³He,γ) or P30 production log-log



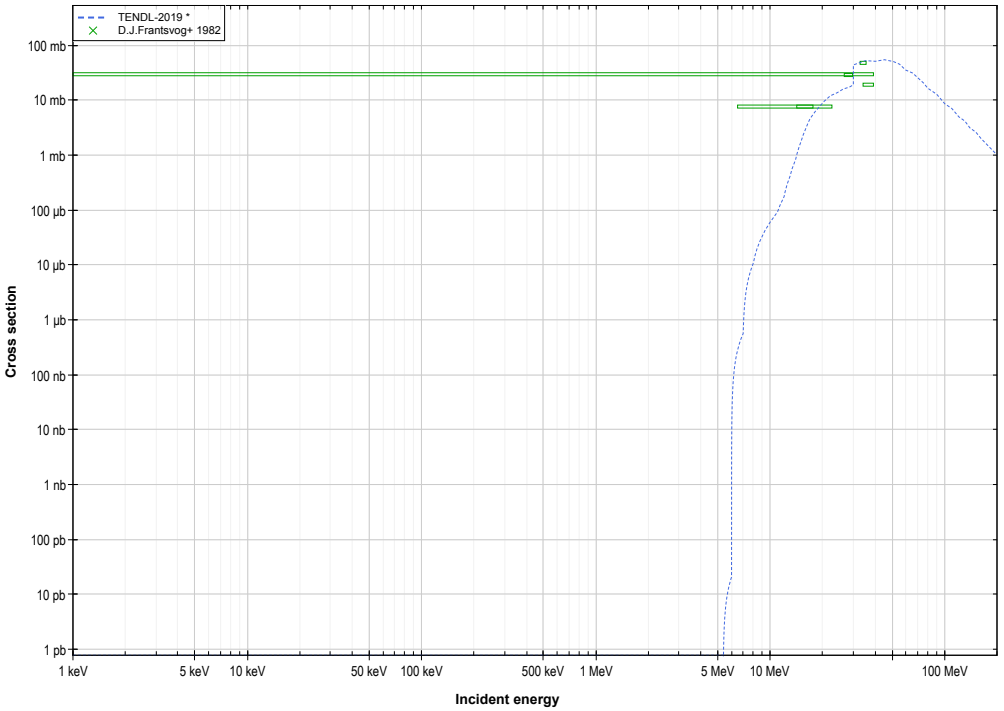
Al27 (³He,γ) or P30 production lin-log



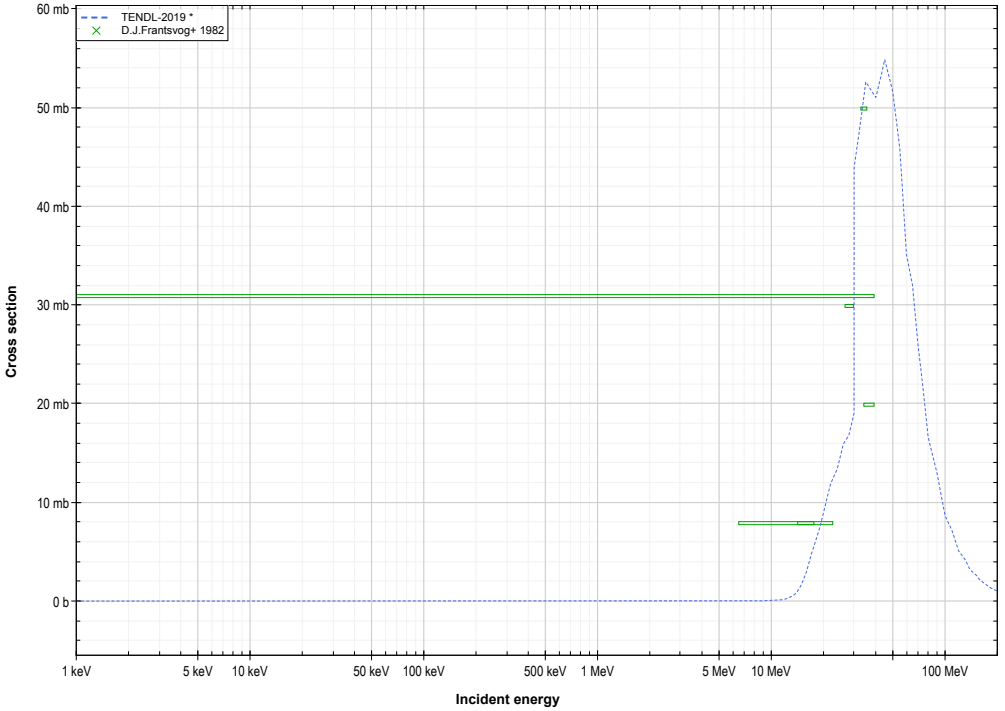
Reaction	Q-Value
Al27(He3,γ)P30	17935.21 keV

<< 12-Mg-24	**13-Al-27**	14-Si-28 >>
<< MT102 (^{3}He,γ)	**MT105 (^{3}He,t) or MT5 (Si27 production)**	MT107 (^{3}He,α) >>

Al27 (^{3}He,t) or Si27 production log-log



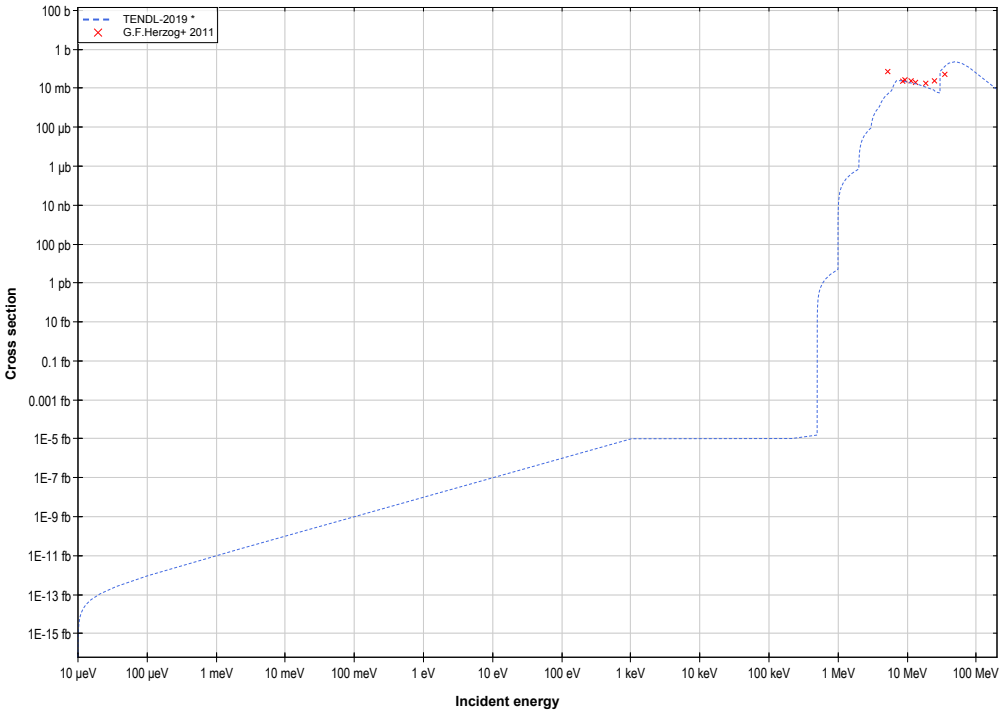
Al27 (^{3}He,t) or Si27 production lin-log



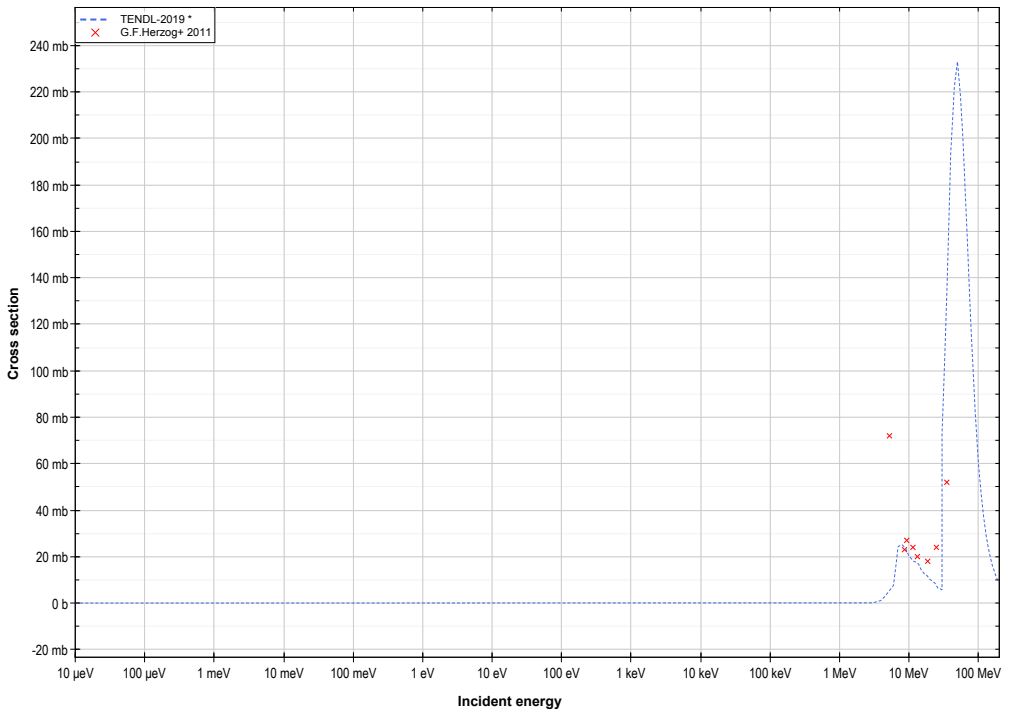
Reaction	Q-Value
Al27(He3,t)Si27	-4830.95 keV
Al27(He3,n+d)Si27	-11088.18 keV
Al27(He3,2n+p)Si27	-13312.75 keV

<< 12-Mg-24	**13-Al-27**	14-Si-28 >>
<< MT105 (^{3}He,t)	**MT107 (^{3}He,α) or MT5 (Al26 production)**	MT108 (^{3}He,2α) >>

Al27 (^{3}He,α) or Al26 production log-log



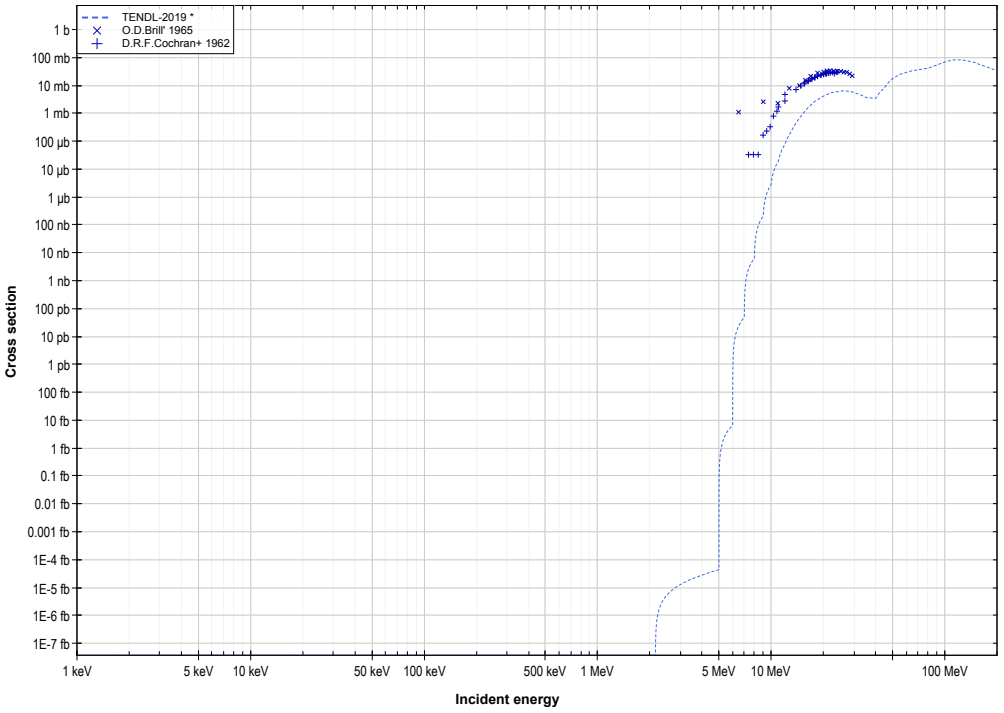
Al27 (^{3}He,α) or Al26 production lin-log



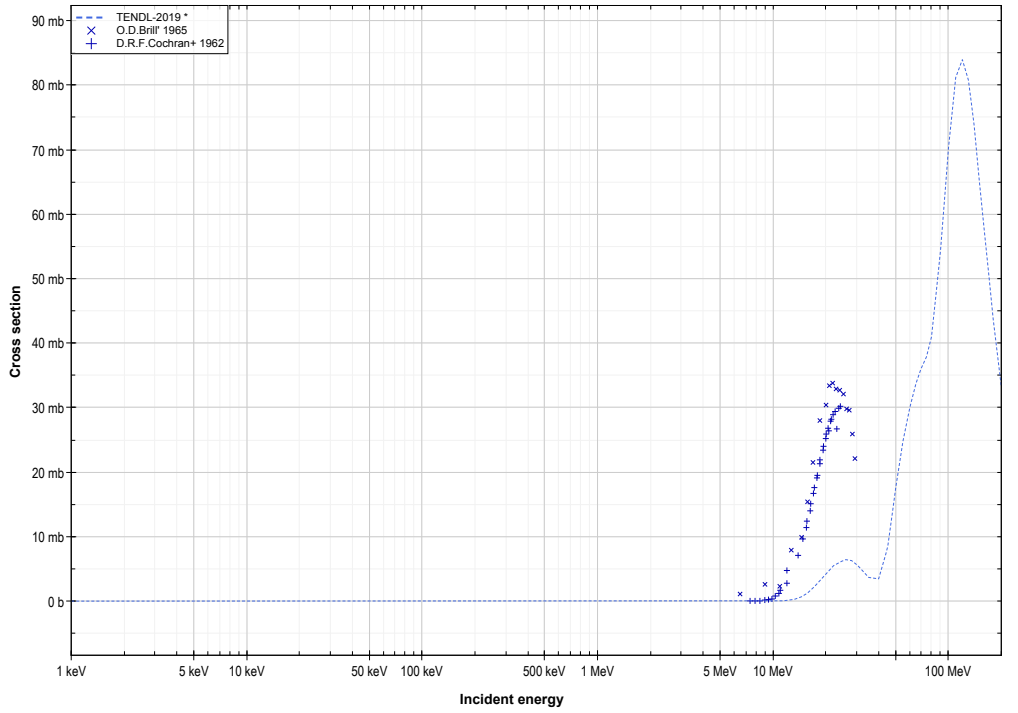
Reaction	Q-Value
Al27(He3,α)Al26	7519.59 keV
Al27(He3,p+t)Al26	-12294.27 keV
Al27(He3,n+He3)Al26	-13058.03 keV
Al27(He3,2d)Al26	-16326.94 keV
Al27(He3,n+p+d)Al26	-18551.50 keV
Al27(He3,2n+2p)Al26	-20776.07 keV

<< 8-O-16	**13-Al-27**	14-Si-28 >>
<< MT107 (^{3}He,α)	**MT108 (^{3}He,2α) or MT5 (Na22 production)**	MT111 (^{3}He,2p) >>

Al27 (^{3}He,2α) or Na22 production log-log



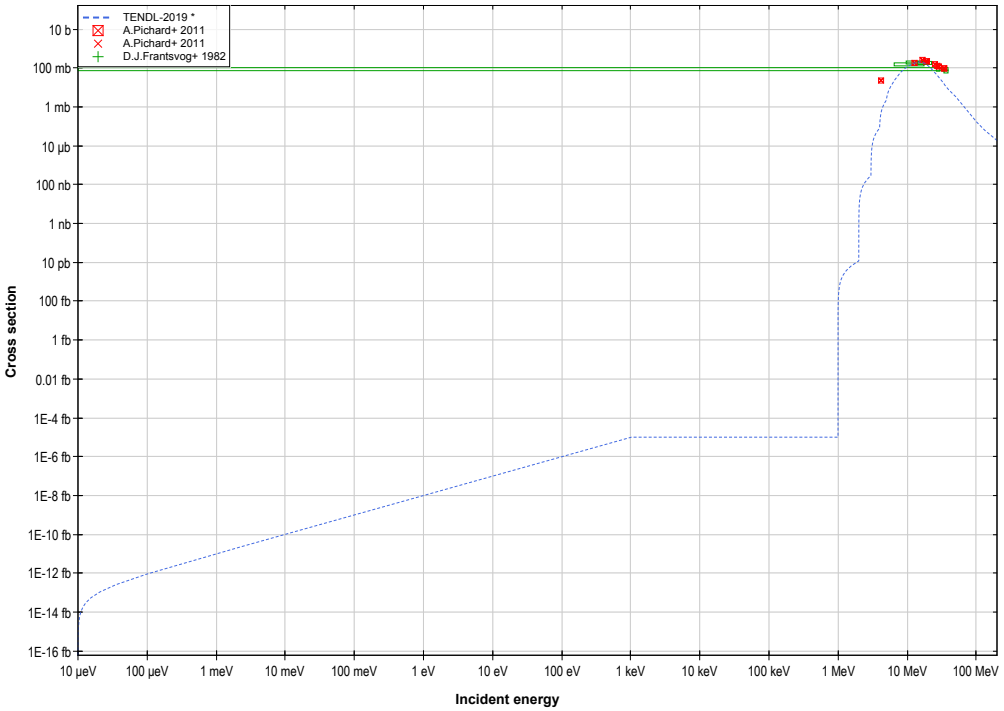
Al27 (^{3}He,2α) or Na22 production lin-log



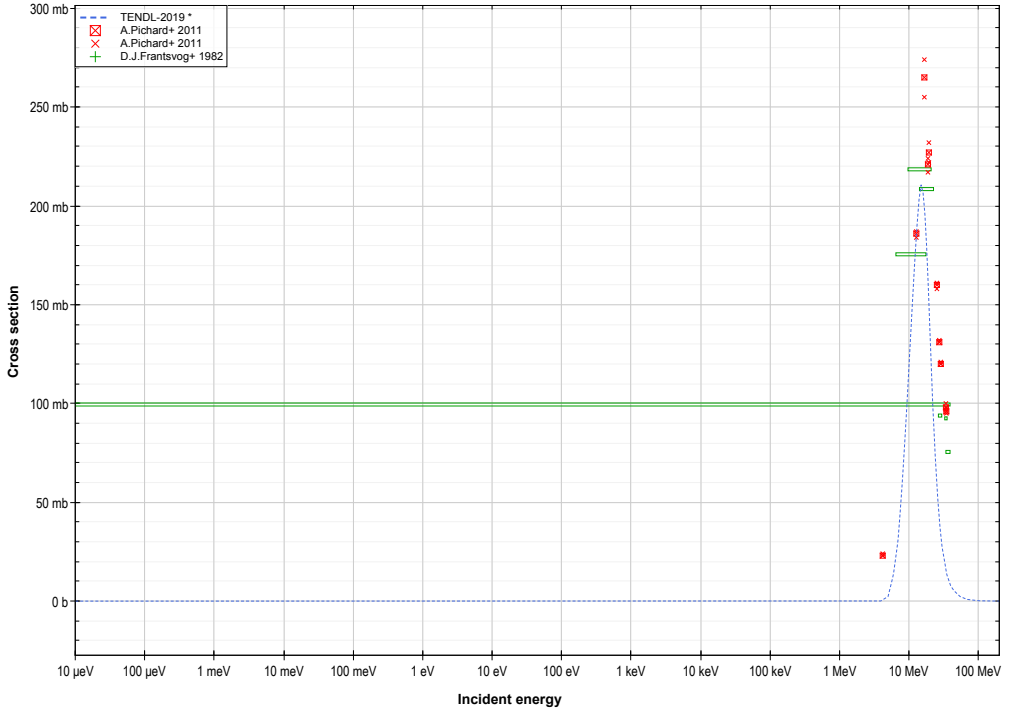
Reaction	Q-Value	Reaction	Q-Value
Al27(He3,2α)Na22	-1933.96 keV	Al27(He3,n+p+t+He3)Na22	-42325.45 keV
Al27(He3,p+t+α)Na22	-21747.83 keV	Al27(He3,2n+2He3)Na22	-43089.20 keV
Al27(He3,n+He3+α)Na22	-22511.58 keV	Al27(He3,p+2d+t)Na22	-45594.36 keV
Al27(He3,2d+α)Na22	-25780.49 keV	Al27(He3,n+2d+He3)Na22	-46358.11 keV
Al27(He3,n+p+d+α)Na22	-28005.06 keV	Al27(He3,n+2p+d+t)Na22	-47818.92 keV
Al27(He3,2n+2p+α)Na22	-30229.62 keV	Al27(He3,2n+p+d+He3)Na22	-48582.68 keV
Al27(He3,d+t+He3)Na22	-40100.88 keV	Al27(He3,4d)Na22	-49627.02 keV
Al27(He3,2p+2t)Na22	-41561.69 keV	Al27(He3,2n+3p+t)Na22	-50043.49 keV

<< 12-Mg-26	**13-Al-27**	17-Cl-37 >>
<< MT108 (^{3}He,2α)	**MT111 (^{3}He,2p) or MT5 (Al28 production)**	MT116 (^{3}He,p+t) >>

Al27 (^{3}He,2p) or Al28 production log-log



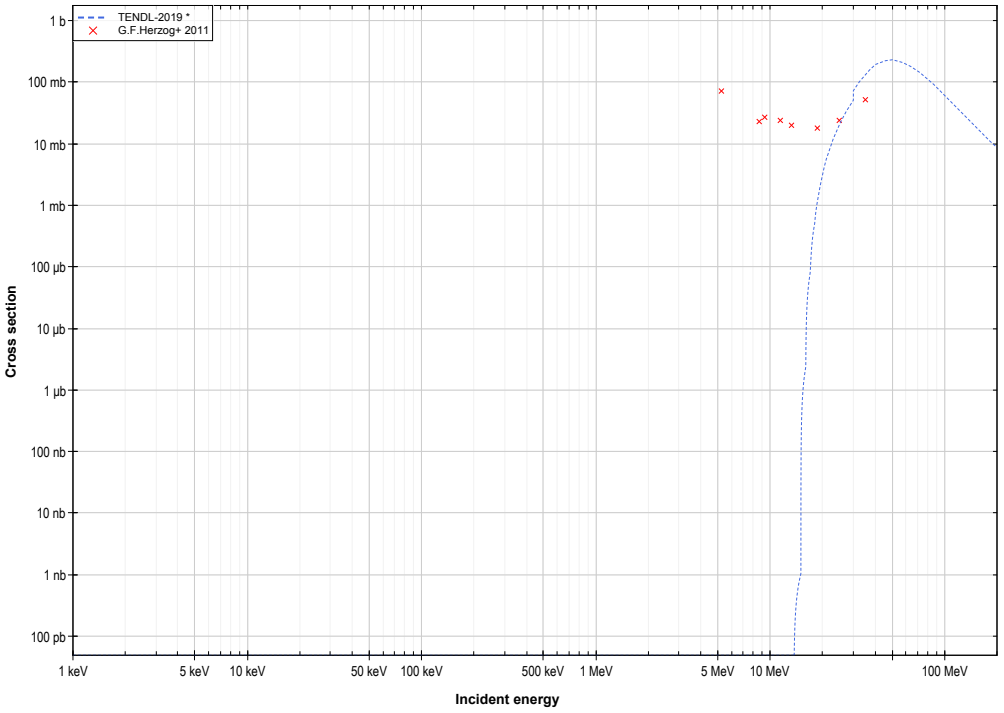
Al27 (^{3}He,2p) or Al28 production lin-log



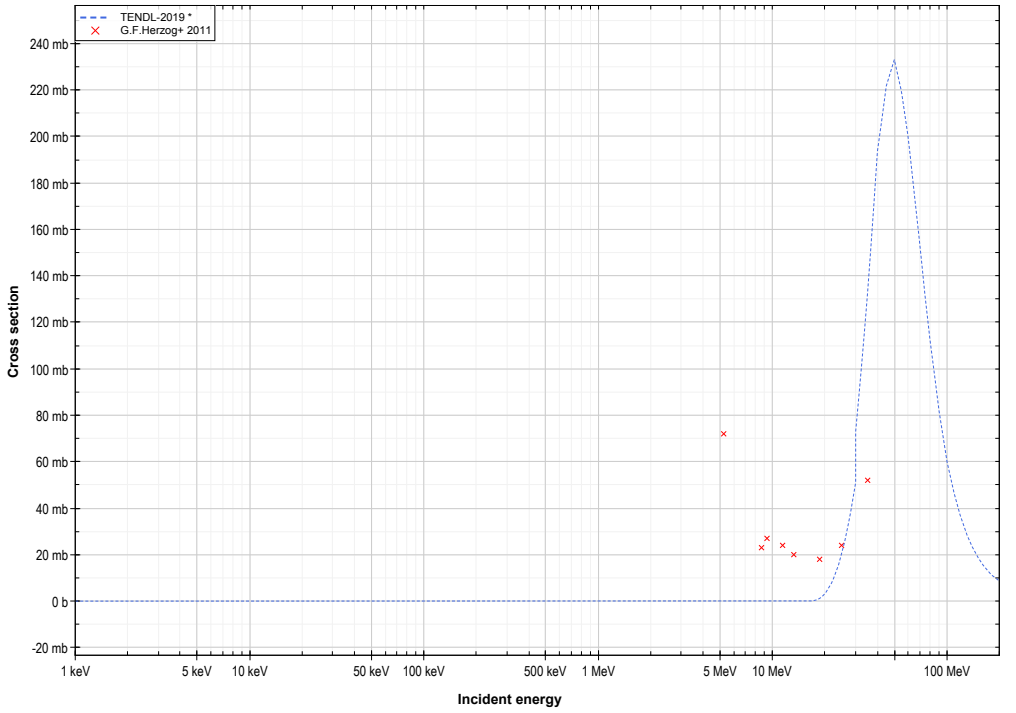
Reaction	Q-Value
Al27(He3,2p)Al28	7.06 keV

<< 12-Mg-24	**13-Al-27**	14-Si-28 >>
<< MT111 (^{3}He,2p)	**MT116 (^{3}He,p+t) or MT5 (Al26 production)**	MT155 (^{3}He,t+α) >>

Al27 (^{3}He,p+t) or Al26 production log-log



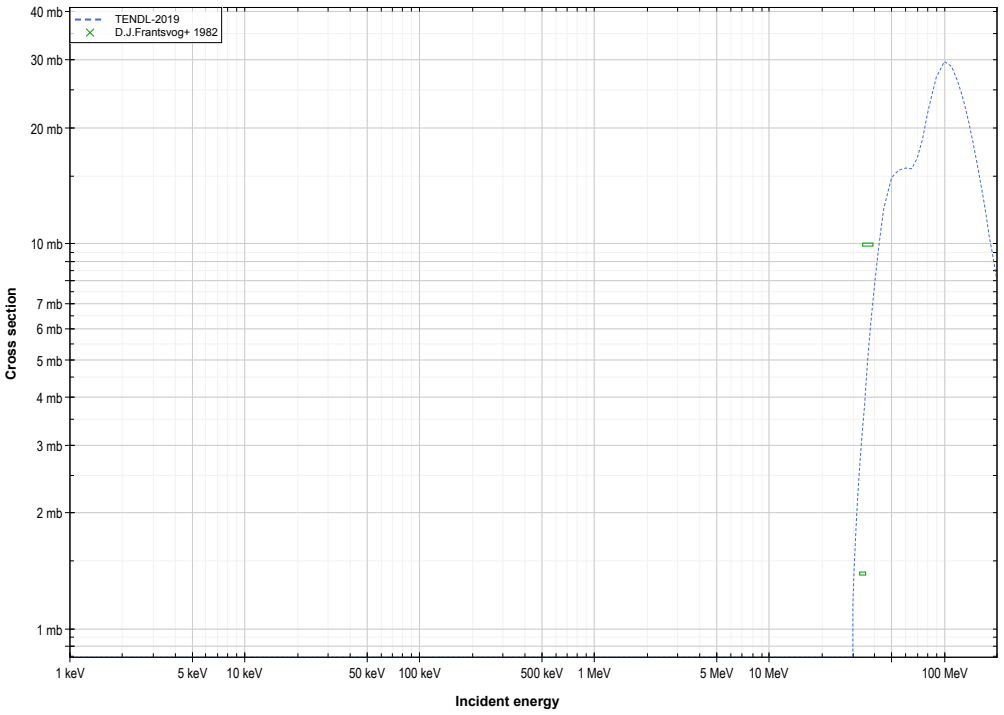
Al27 (^{3}He,p+t) or Al26 production lin-log



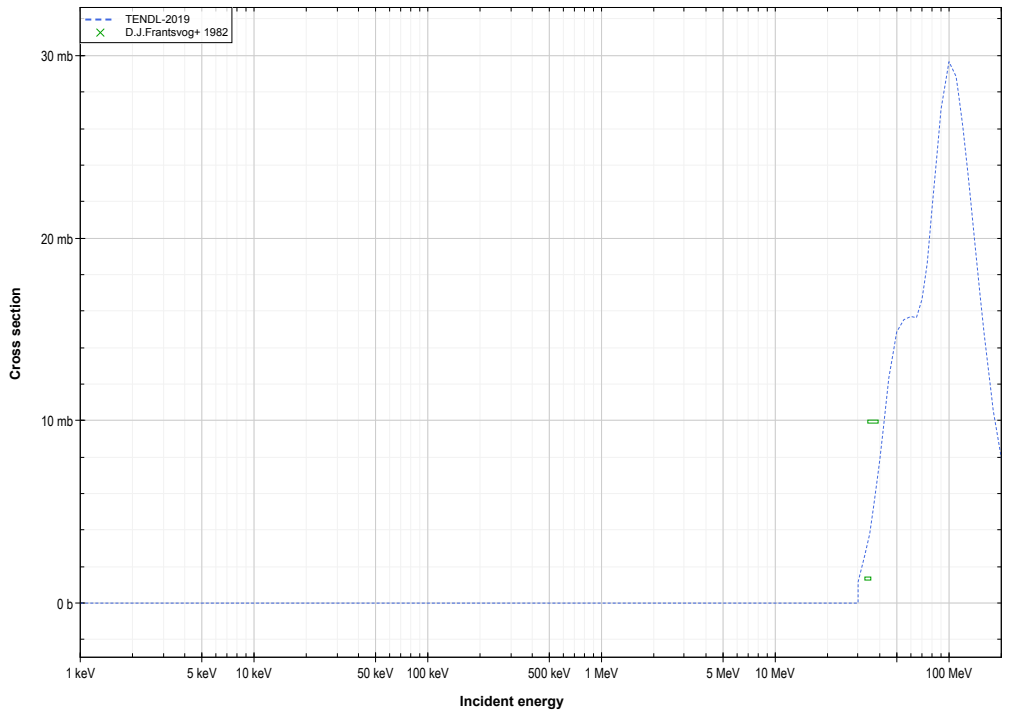
Reaction	Q-Value
Al27(He3,α)Al26	7519.59 keV
Al27(He3,p+t)Al26	-12294.27 keV
Al27(He3,n+He3)Al26	-13058.03 keV
Al27(He3,2d)Al26	-16326.94 keV
Al27(He3,n+p+d)Al26	-18551.50 keV
Al27(He3,2n+2p)Al26	-20776.07 keV

	13-Al-27	
<< MT116 (^{3}He,p+t)	**MT155 (^{3}He,t+α) or MT5 (Mg23 production)**	MT158 (^{3}He,n+d+α) >>

Al27 (^{3}He,t+α) or Mg23 production log-log



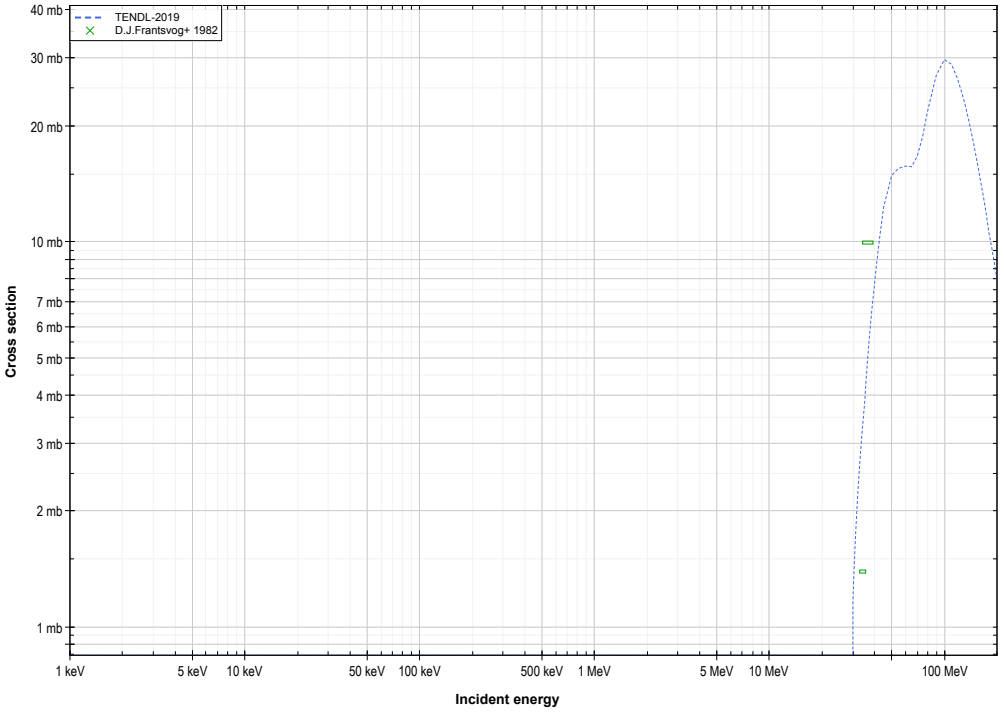
Al27 (^{3}He,t+α) or Mg23 production lin-log



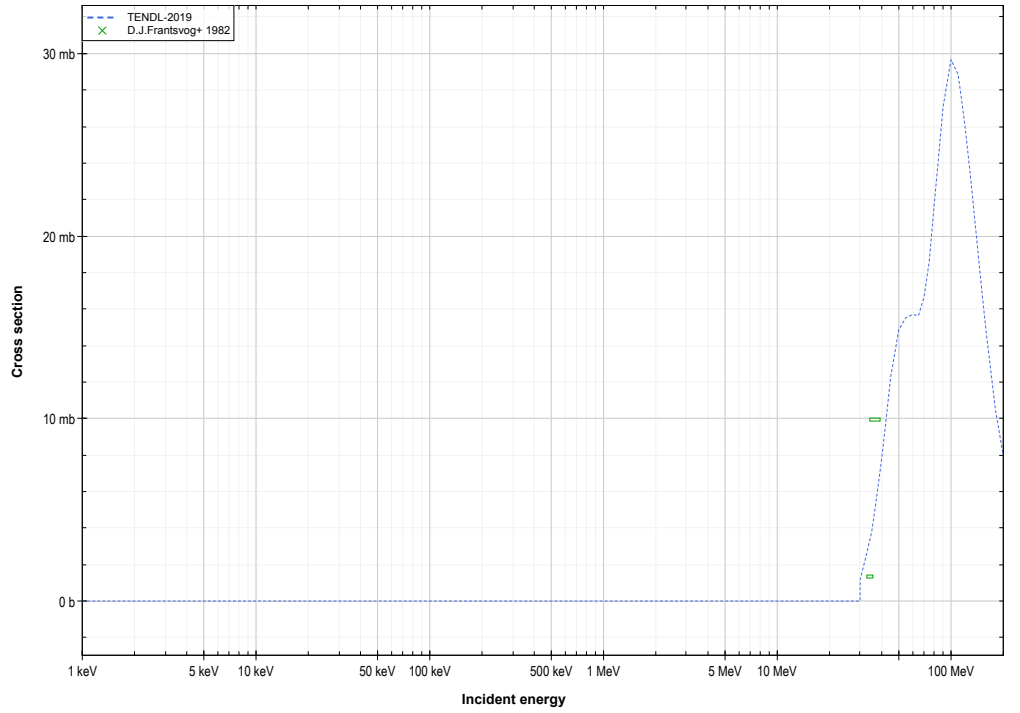
Reaction	Q-Value	Reaction	Q-Value
Al27(He3,t+α)Mg23	-14166.86 keV	Al27(He3,2n+2p+t)Mg23	-42462.52 keV
Al27(He3,n+d+α)Mg23	-20424.09 keV	Al27(He3,3n+p+He3)Mg23	-43226.27 keV
Al27(He3,2n+p+α)Mg23	-22648.65 keV	Al27(He3,n+3d)Mg23	-44270.61 keV
Al27(He3,p+2t)Mg23	-33980.72 keV	Al27(He3,2n+p+2d)Mg23	-46495.18 keV
Al27(He3,n+t+He3)Mg23	-34744.48 keV	Al27(He3,3n+2p+d)Mg23	-48719.75 keV
Al27(He3,2d+t)Mg23	-38013.39 keV	Al27(He3,4n+3p)Mg23	-50944.31 keV
Al27(He3,n+p+d+t)Mg23	-40237.95 keV		
Al27(He3,2n+d+He3)Mg23	-41001.71 keV		

	13-Al-27	
<< MT155 (^{3}He,t+α)	**MT158 (^{3}He,n+d+α) or MT5 (Mg23 production)**	MT159 (^{3}He,2n+p+α) >>

Al27 (^{3}He,n+d+α) or Mg23 production log-log



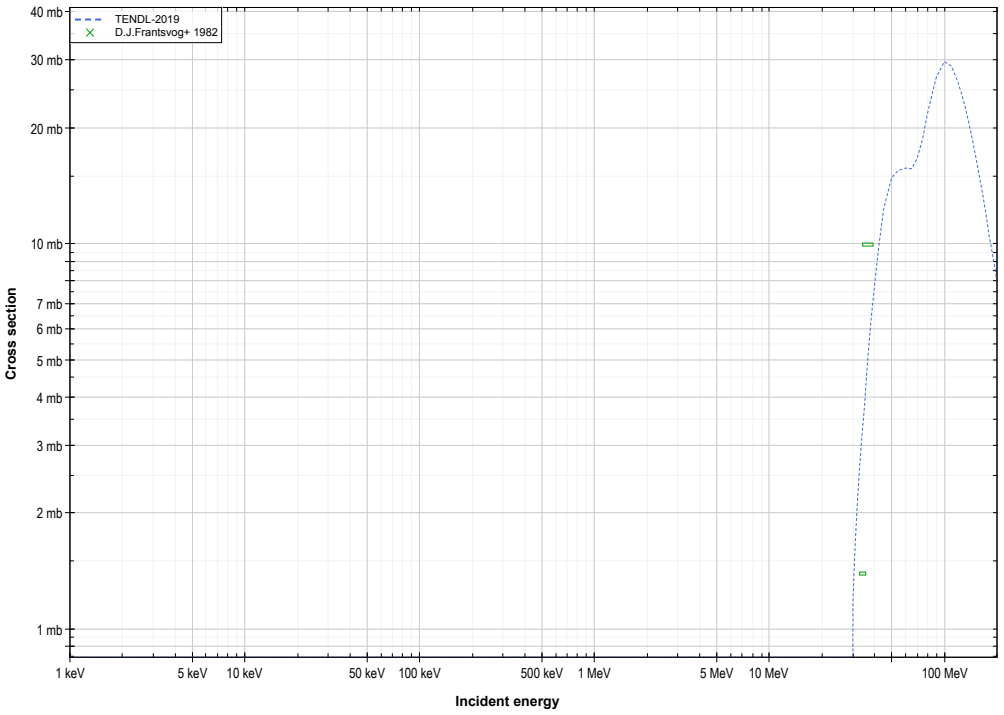
Al27 (^{3}He,n+d+α) or Mg23 production lin-log



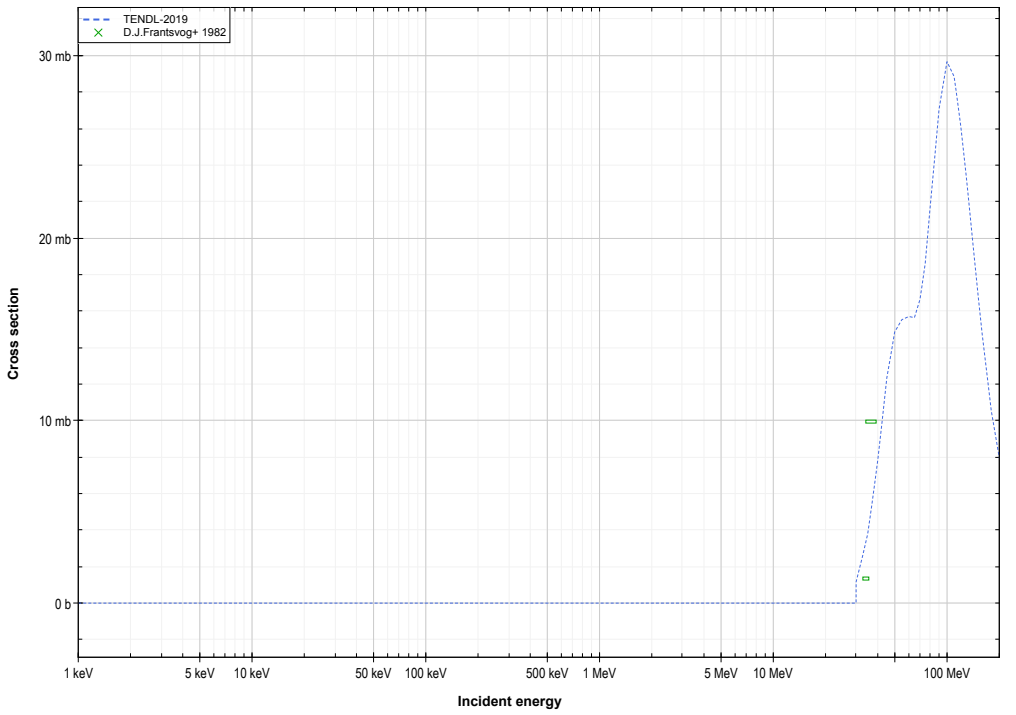
Reaction	Q-Value	Reaction	Q-Value
Al27(He3,t+α)Mg23	-14166.86 keV	Al27(He3,2n+2p+t)Mg23	-42462.52 keV
Al27(He3,n+d+α)Mg23	-20424.09 keV	Al27(He3,3n+p+He3)Mg23	-43226.27 keV
Al27(He3,2n+p+α)Mg23	-22648.65 keV	Al27(He3,n+3d)Mg23	-44270.61 keV
Al27(He3,p+2t)Mg23	-33980.72 keV	Al27(He3,2n+p+2d)Mg23	-46495.18 keV
Al27(He3,n+t+He3)Mg23	-34744.48 keV	Al27(He3,3n+2p+d)Mg23	-48719.75 keV
Al27(He3,2d+t)Mg23	-38013.39 keV	Al27(He3,4n+3p)Mg23	-50944.31 keV
Al27(He3,n+p+d+t)Mg23	-40237.95 keV		
Al27(He3,2n+d+He3)Mg23	-41001.71 keV		

	13-Al-27	
<< MT158 (^{3}He,n+d+α)	**MT159 (^{3}He,2n+p+α) or MT5 (Mg23 production)**	MT176 (^{3}He,2n+^{3}He) >>

Al27 (^{3}He,2n+p+α) or Mg23 production log-log



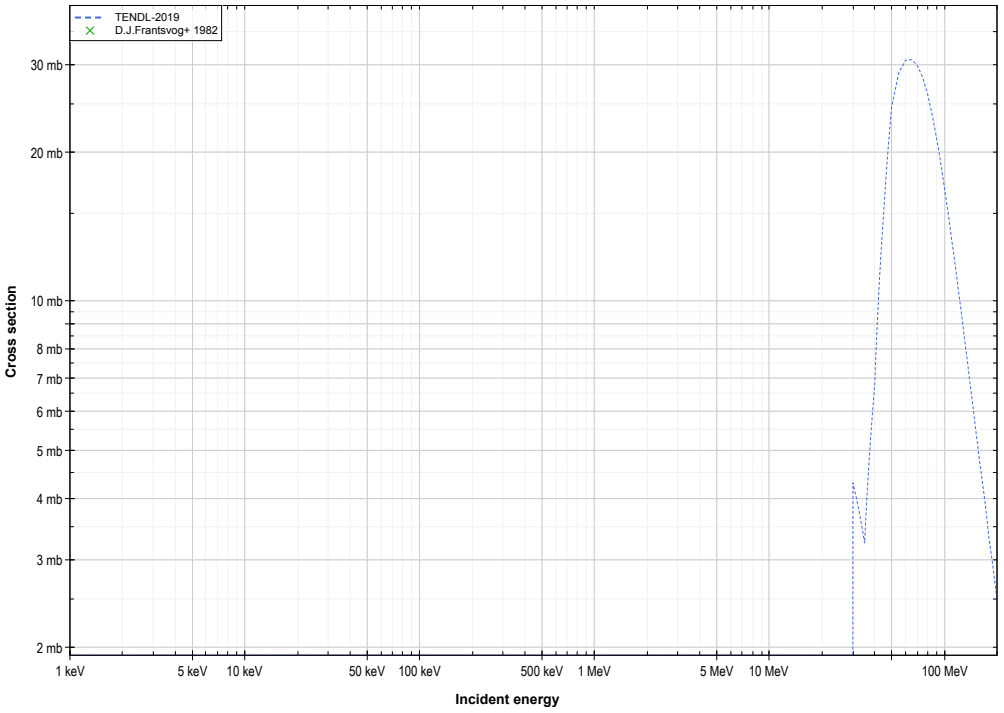
Al27 (^{3}He,2n+p+α) or Mg23 production lin-log



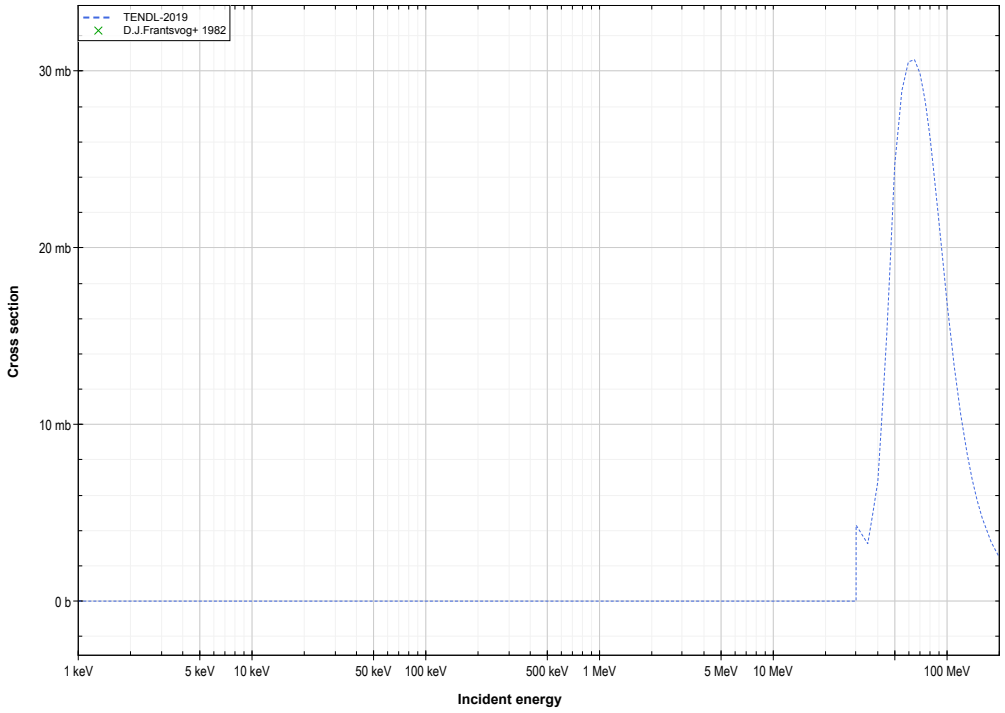
Reaction	Q-Value	Reaction	Q-Value
Al27(He3,t+α)Mg23	-14166.86 keV	Al27(He3,2n+2p+t)Mg23	-42462.52 keV
Al27(He3,n+d+α)Mg23	-20424.09 keV	Al27(He3,3n+p+He3)Mg23	-43226.27 keV
Al27(He3,2n+p+α)Mg23	-22648.65 keV	Al27(He3,n+3d)Mg23	-44270.61 keV
Al27(He3,p+2t)Mg23	-33980.72 keV	Al27(He3,2n+p+2d)Mg23	-46495.18 keV
Al27(He3,n+t+He3)Mg23	-34744.48 keV	Al27(He3,3n+2p+d)Mg23	-48719.75 keV
Al27(He3,2d+t)Mg23	-38013.39 keV	Al27(He3,4n+3p)Mg23	-50944.31 keV
Al27(He3,n+p+d+t)Mg23	-40237.95 keV		
Al27(He3,2n+d+He3)Mg23	-41001.71 keV		

<< 12-Mg-24	**13-Al-27**	14-Si-28 >>
<< MT159 (^{3}He,2n+p+α)	**MT176 (^{3}He,2n+^{3}He) or MT5 (Al25 production)**	MT177 (^{3}He,3n+^{3}He) >>

Al27 (^{3}He,2n+^{3}He) or Al25 production log-log



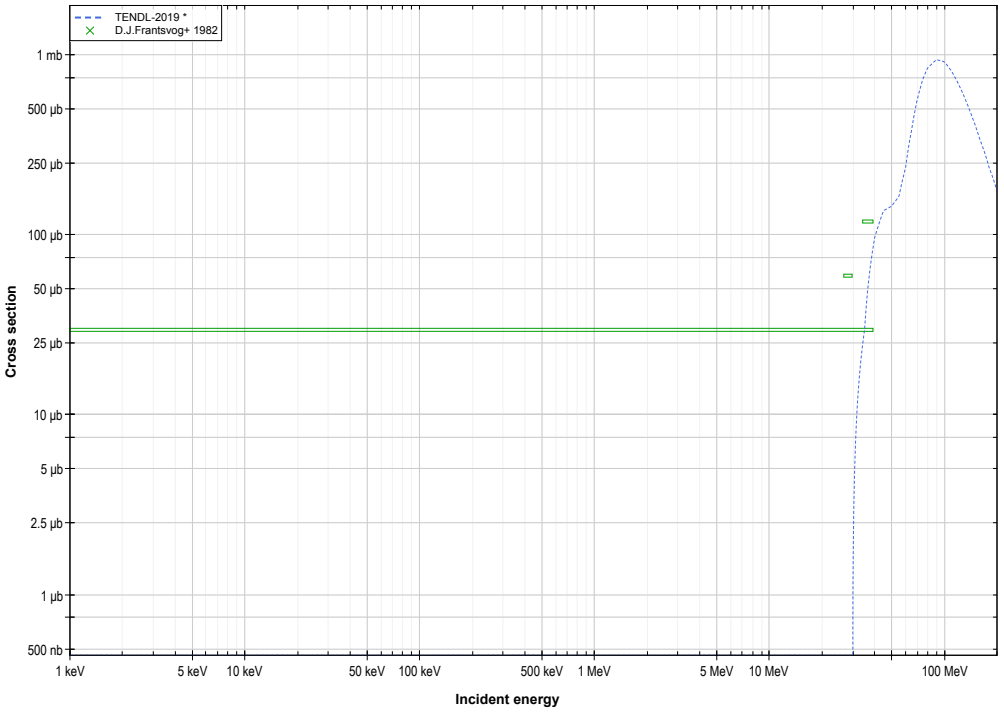
Al27 (^{3}He,2n+^{3}He) or Al25 production lin-log



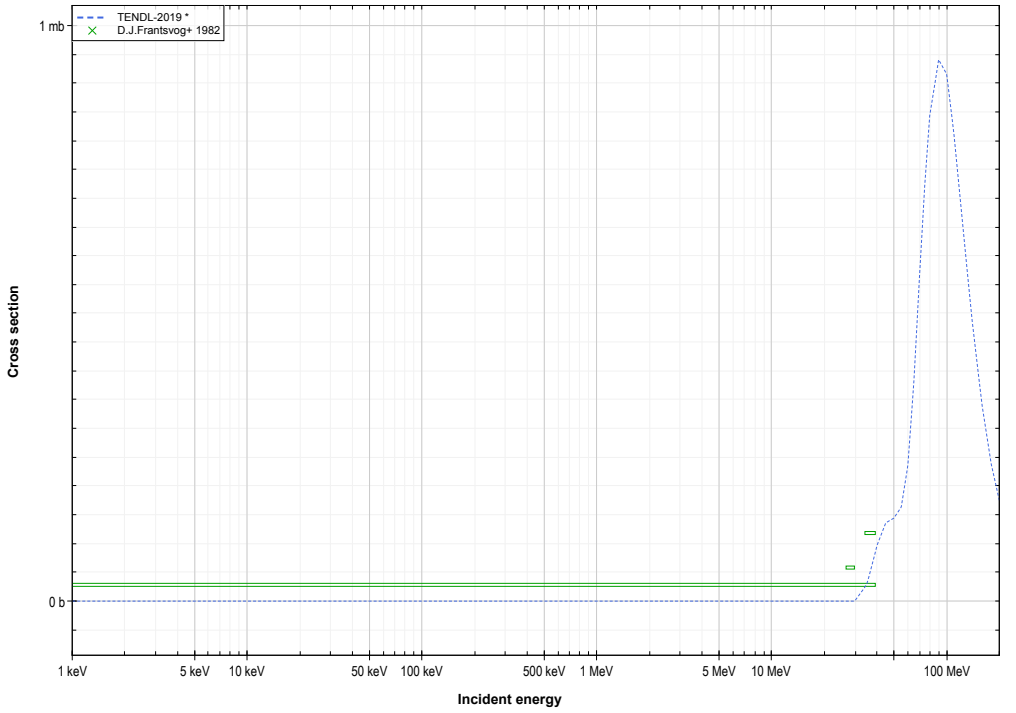
Reaction	Q-Value
Al27(He3,n+α)Al25	-3845.90 keV
Al27(He3,d+t)Al25	-21435.20 keV
Al27(He3,n+p+t)Al25	-23659.77 keV
Al27(He3,2n+He3)Al25	-24423.52 keV
Al27(He3,n+2d)Al25	-27692.43 keV
Al27(He3,2n+p+d)Al25	-29917.00 keV
Al27(He3,3n+2p)Al25	-32141.56 keV

	13-Al-27	27-Co-59 >>
<< MT176 (^{3}He,2n+^{3}He)	**MT177 (^{3}He,3n+^{3}He) or MT5 (Al24 production)**	MT179 (^{3}He,3n+2p) >>

Al27 (^{3}He,3n+^{3}He) or Al24 production log-log



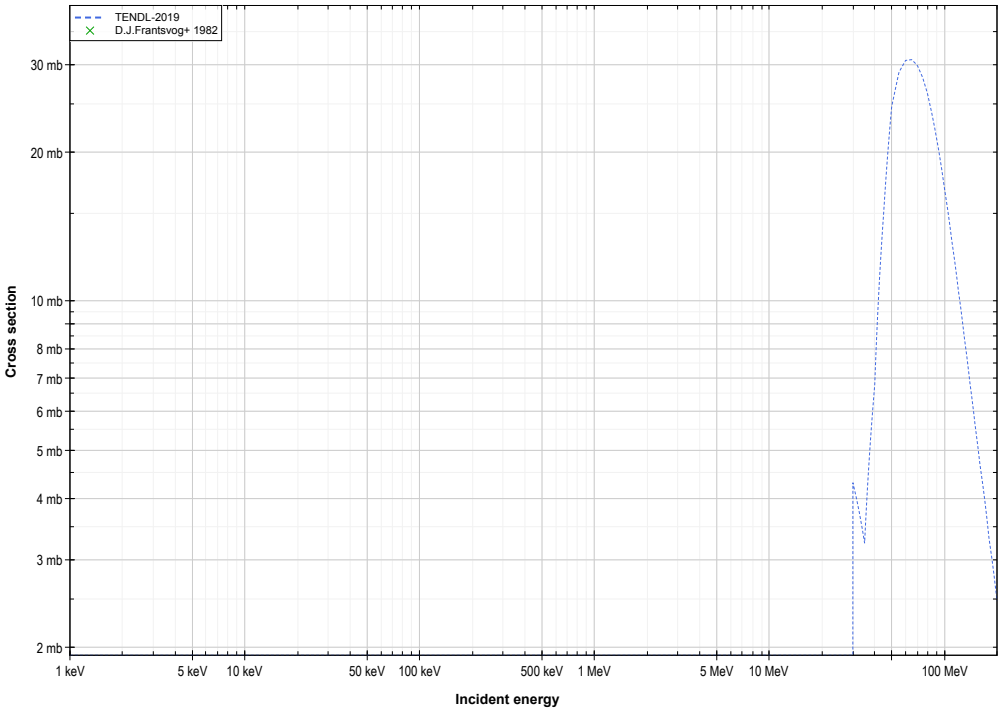
Al27 (^{3}He,3n+^{3}He) or Al24 production lin-log



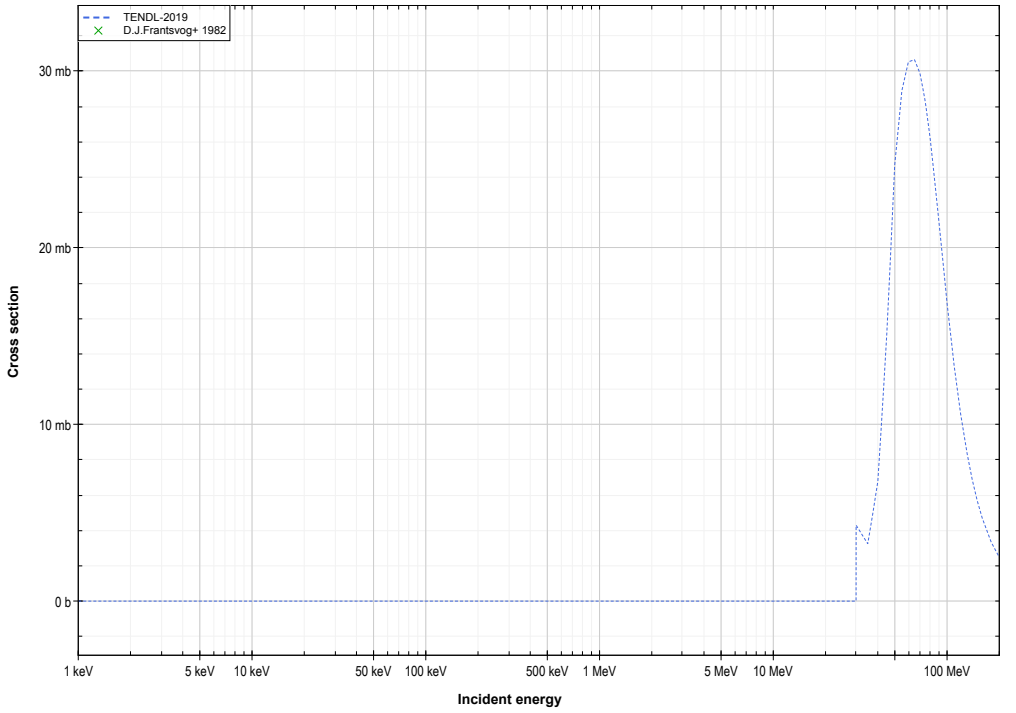
Reaction	Q-Value
Al27(He3,2n+α)Al24	-20784.33 keV
Al27(He3,2t)Al24	-32116.40 keV
Al27(He3,n+d+t)Al24	-38373.63 keV
Al27(He3,2n+p+t)Al24	-40598.20 keV
Al27(He3,3n+He3)Al24	-41361.95 keV
Al27(He3,2n+2d)Al24	-44630.86 keV
Al27(He3,3n+p+d)Al24	-46855.43 keV
Al27(He3,4n+2p)Al24	-49079.99 keV

<< 12-Mg-24	**13-Al-27**	14-Si-28 >>
<< MT177 (^{3}He,3n+^{3}He)	**MT179 (^{3}He,3n+2p) or MT5 (Al25 production)**	MT182 (^{3}He,d+t) >>

Al27 (^{3}He,3n+2p) or Al25 production log-log



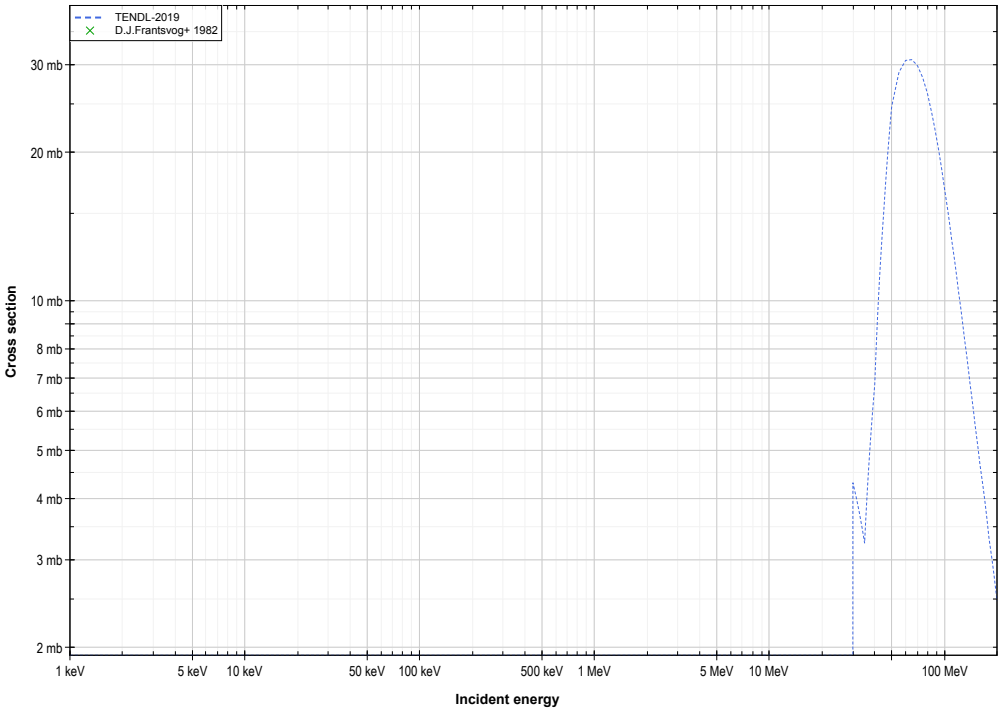
Al27 (^{3}He,3n+2p) or Al25 production lin-log



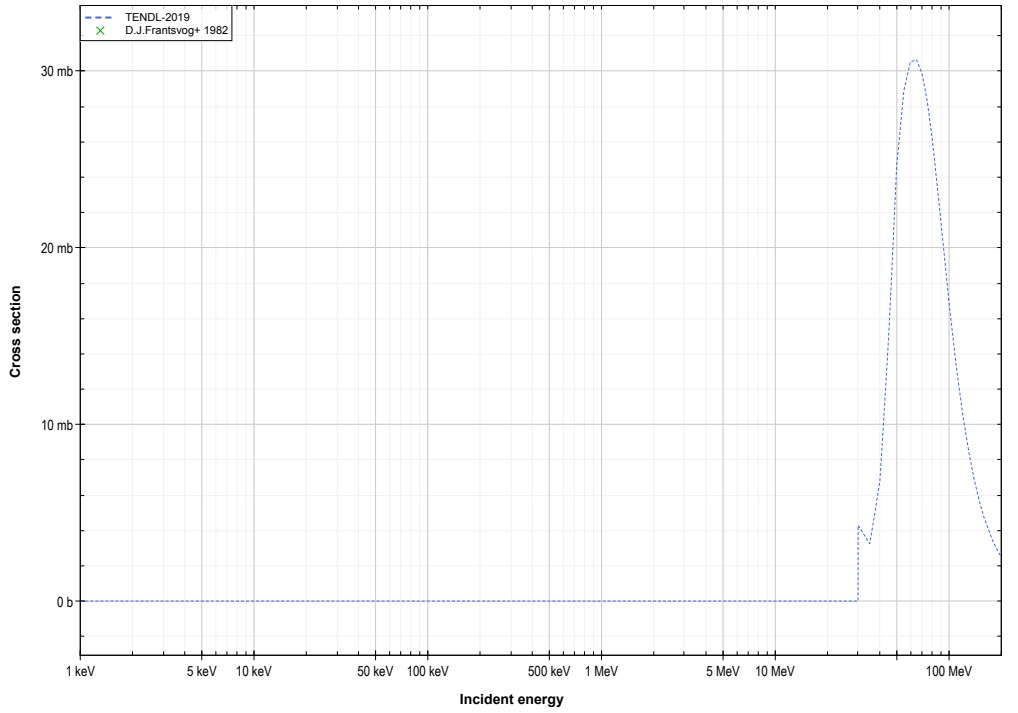
Reaction	Q-Value
Al27(He3,n+α)Al25	-3845.90 keV
Al27(He3,d+t)Al25	-21435.20 keV
Al27(He3,n+p+t)Al25	-23659.77 keV
Al27(He3,2n+He3)Al25	-24423.52 keV
Al27(He3,n+2d)Al25	-27692.43 keV
Al27(He3,2n+p+d)Al25	-29917.00 keV
Al27(He3,3n+2p)Al25	-32141.56 keV

<< 12-Mg-24	**13-Al-27**	14-Si-28 >>
<< MT179 (^{3}He,3n+2p)	**MT182 (^{3}He,d+t) or MT5 (Al25 production)**	MT183 (^{3}He,n+p+d) >>

Al27 (^{3}He,d+t) or Al25 production log-log



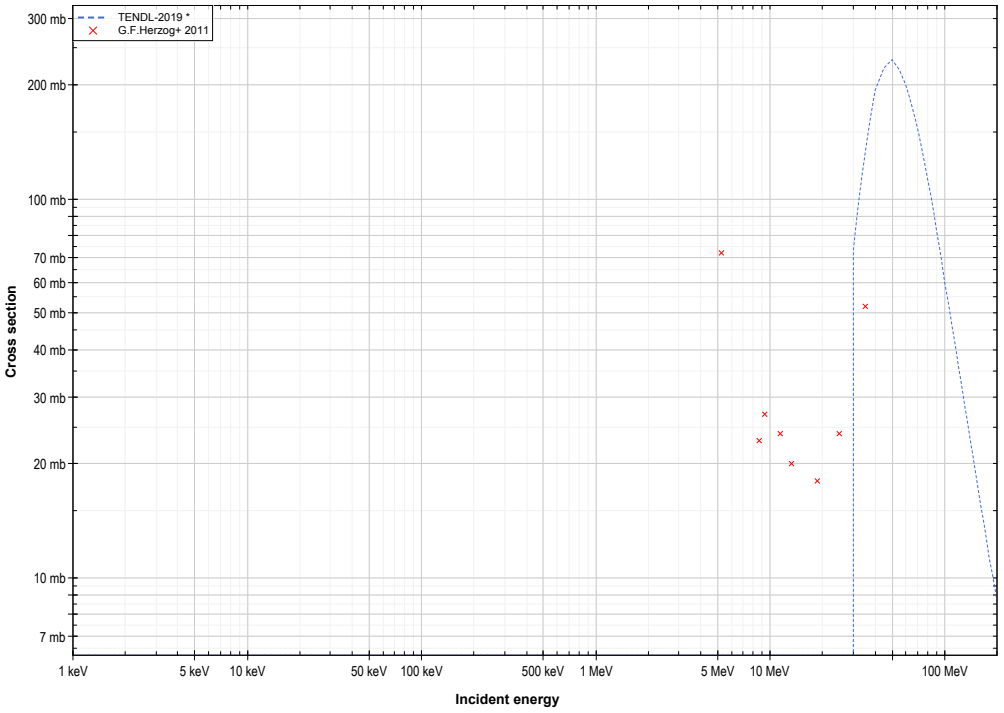
Al27 (^{3}He,d+t) or Al25 production lin-log



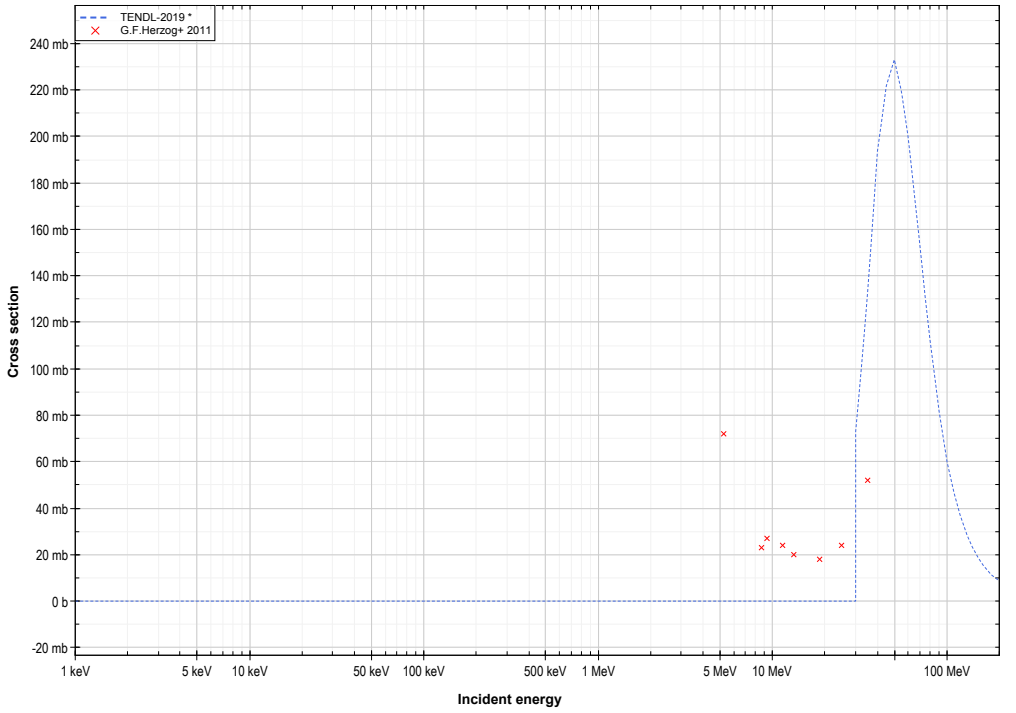
Reaction	Q-Value
Al27(He3,n+α)Al25	-3845.90 keV
Al27(He3,d+t)Al25	-21435.20 keV
Al27(He3,n+p+t)Al25	-23659.77 keV
Al27(He3,2n+He3)Al25	-24423.52 keV
Al27(He3,n+2d)Al25	-27692.43 keV
Al27(He3,2n+p+d)Al25	-29917.00 keV
Al27(He3,3n+2p)Al25	-32141.56 keV

<< 12-Mg-24	**13-Al-27**	14-Si-28 >>
<< MT182 (^{3}He,d+t)	**MT183 (^{3}He,n+p+d) or MT5 (Al26 production)**	MT184 (^{3}He,n+p+t) >>

Al27 (^{3}He,n+p+d) or Al26 production log-log



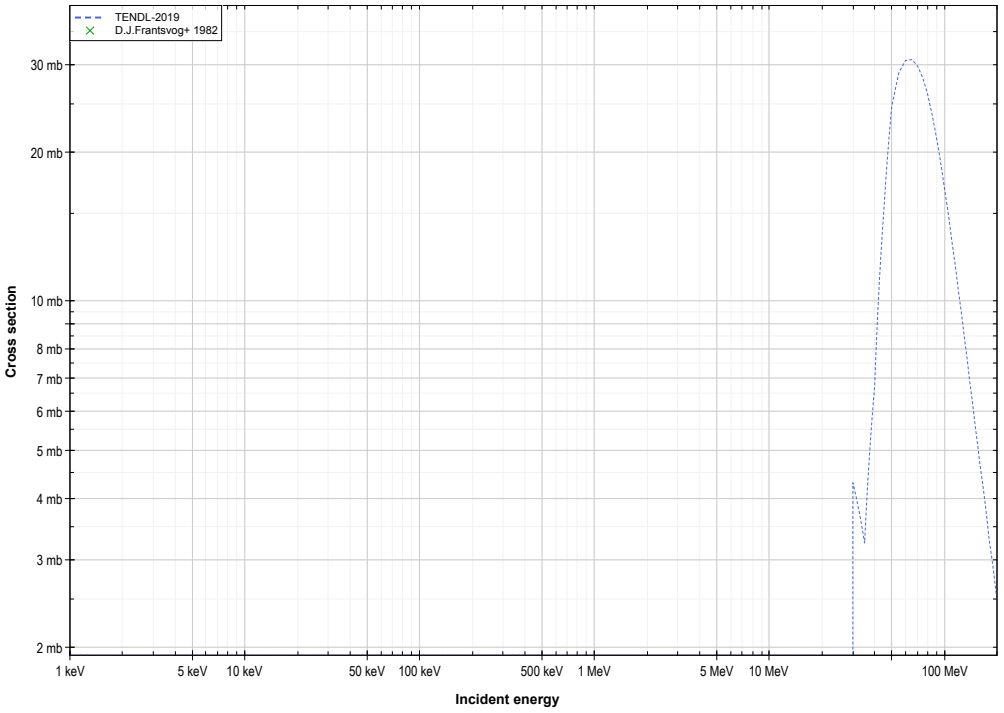
Al27 (^{3}He,n+p+d) or Al26 production lin-log



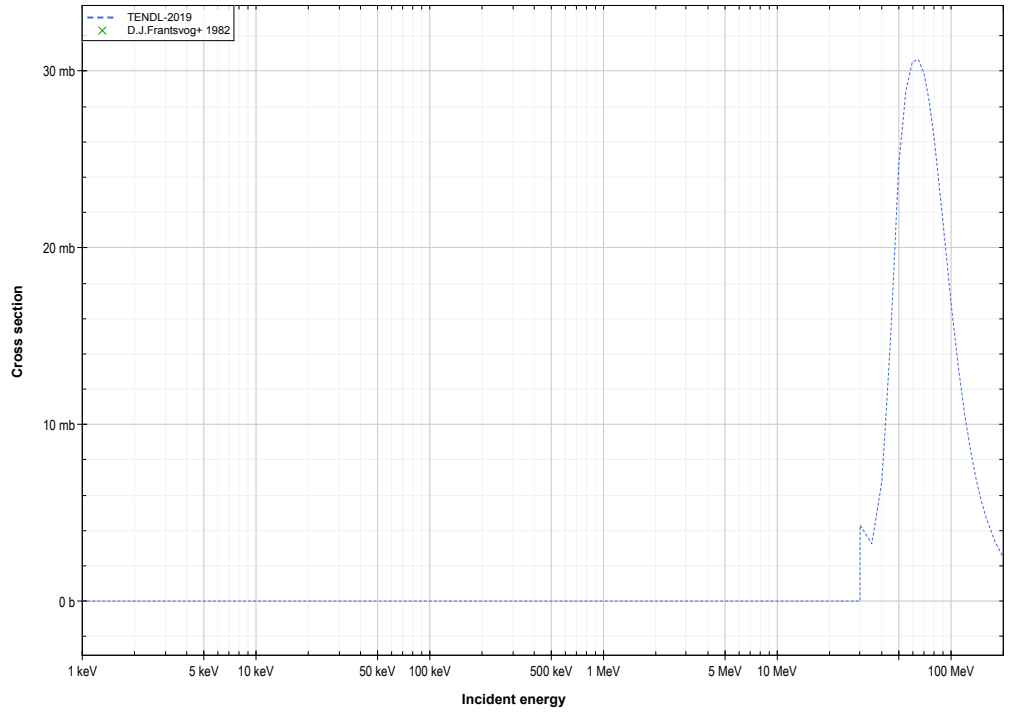
Reaction	Q-Value
Al27(He3,α)Al26	7519.59 keV
Al27(He3,p+t)Al26	-12294.27 keV
Al27(He3,n+He3)Al26	-13058.03 keV
Al27(He3,2d)Al26	-16326.94 keV
Al27(He3,n+p+d)Al26	-18551.50 keV
Al27(He3,2n+2p)Al26	-20776.07 keV

<< 12-Mg-24	**13-Al-27**	14-Si-28 >>
<< MT183 (^{3}He,n+p+d)	**MT184 (^{3}He,n+p+t) or MT5 (Al25 production)**	MT185 (^{3}He,n+d+t) >>

Al27 (^{3}He,n+p+t) or Al25 production log-log



Al27 (^{3}He,n+p+t) or Al25 production lin-log



Reaction	Q-Value
Al27(He3,n+α)Al25	-3845.90 keV
Al27(He3,d+t)Al25	-21435.20 keV
Al27(He3,n+p+t)Al25	-23659.77 keV
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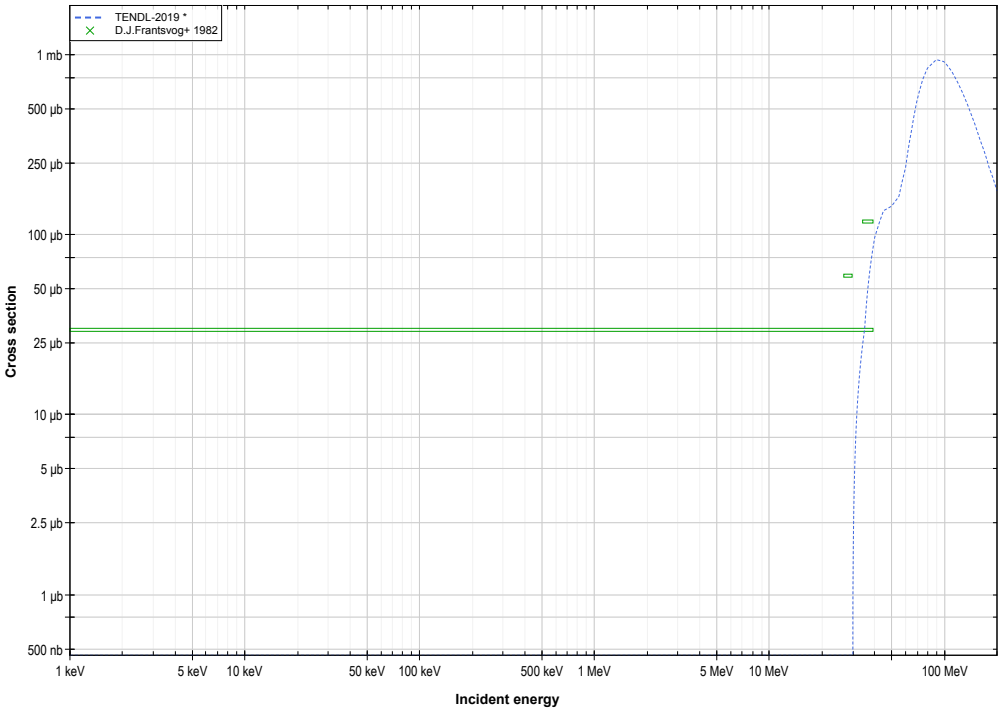
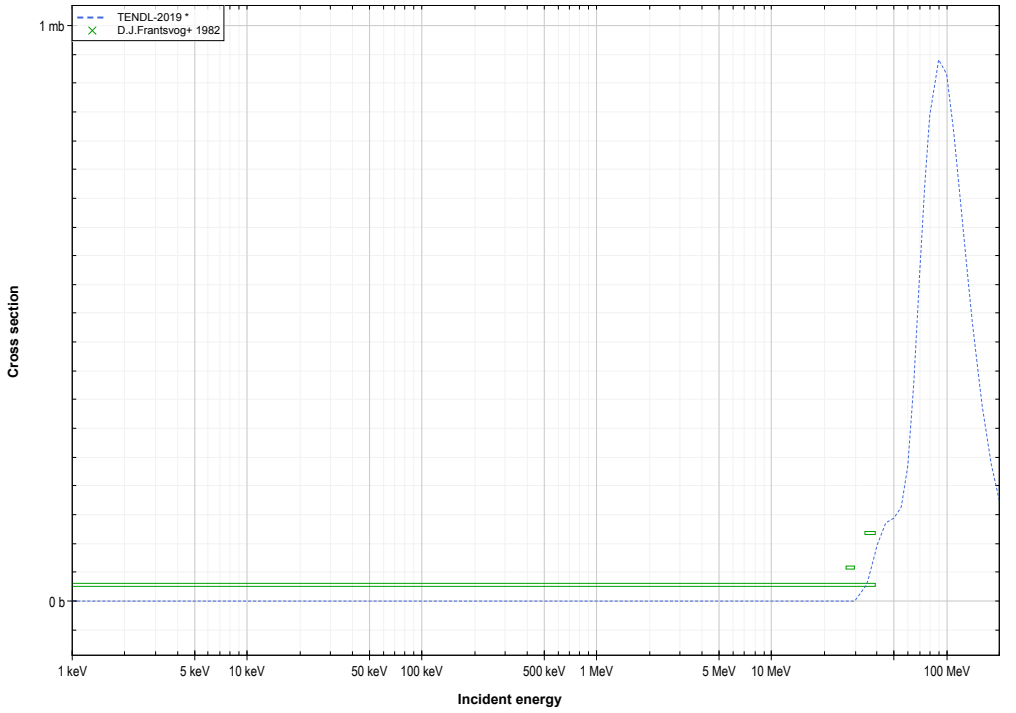
Al27(He3,2n+p+d)Al25	-29917.00 keV
Al27(He3,3n+2p)Al25	-32141.56 keV

	13-Al-27	27-Co-59 >>
<< MT184 (^{3}He,n+p+t)	**MT185 (^{3}He,n+d+t) or MT5 (Al24 production)**	MT188 (^{3}He,n+t+^{3}He) >>

Al27 (^{3}He,n+d+t) or Al24 production log-log



Al27 (^{3}He,n+d+t) or Al24 production lin-log



Reaction	Q-Value
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Al27(He3,2t)Al24	-32116.40 keV
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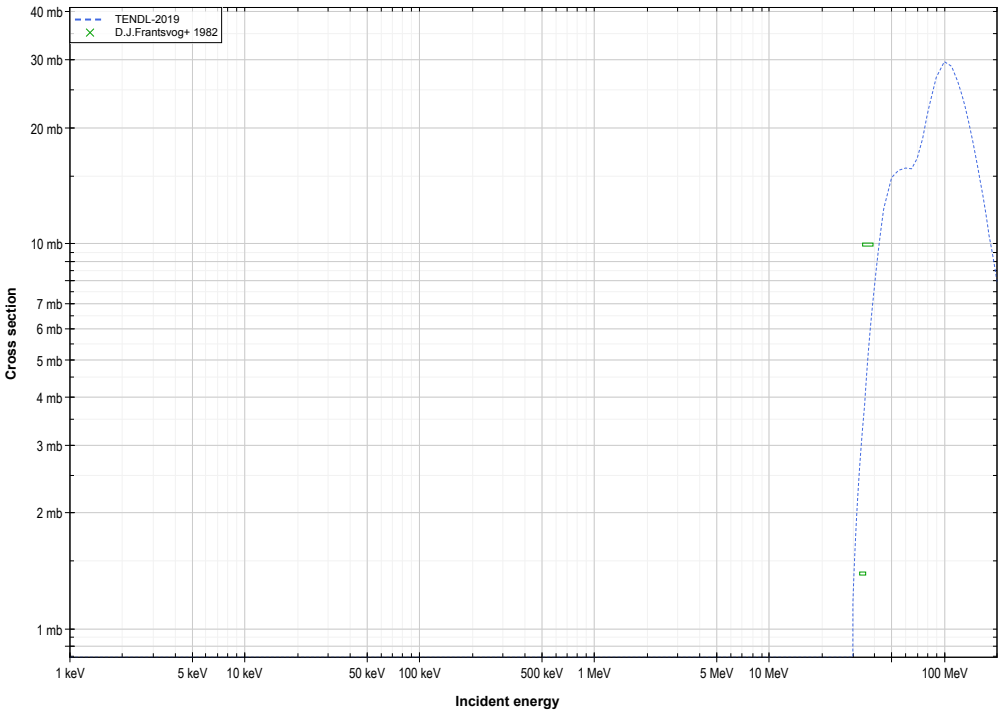
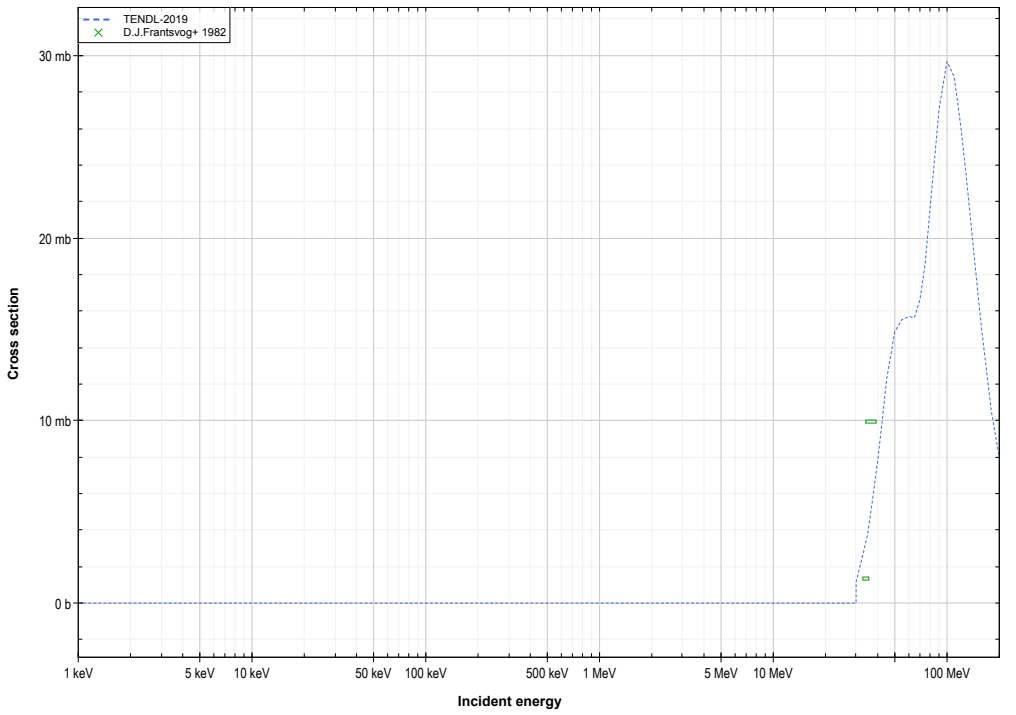
Al27(He3,2n+2d)Al24	-44630.86 keV
Al27(He3,3n+p+d)Al24	-46855.43 keV
Al27(He3,4n+2p)Al24	-49079.99 keV

	13-Al-27	
<< MT185 (^{3}He,n+d+t)	**MT188 (^{3}He,n+t+^{3}He) or MT5 (Mg23 production)**	MT190 (^{3}He,2n+2p) >>

Al27 (^{3}He,n+t+^{3}He) or Mg23 production log-log



Al27 (^{3}He,n+t+^{3}He) or Mg23 production lin-log



Reaction	Q-Value	Reaction	Q-Value
Al27(He3,t+α)Mg23	-14166.86 keV	Al27(He3,2n+2p+t)Mg23	-42462.52 keV
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Al27(He3,n+t+He3)Mg23	-34744.48 keV	Al27(He3,3n+2p+d)Mg23	-48719.75 keV
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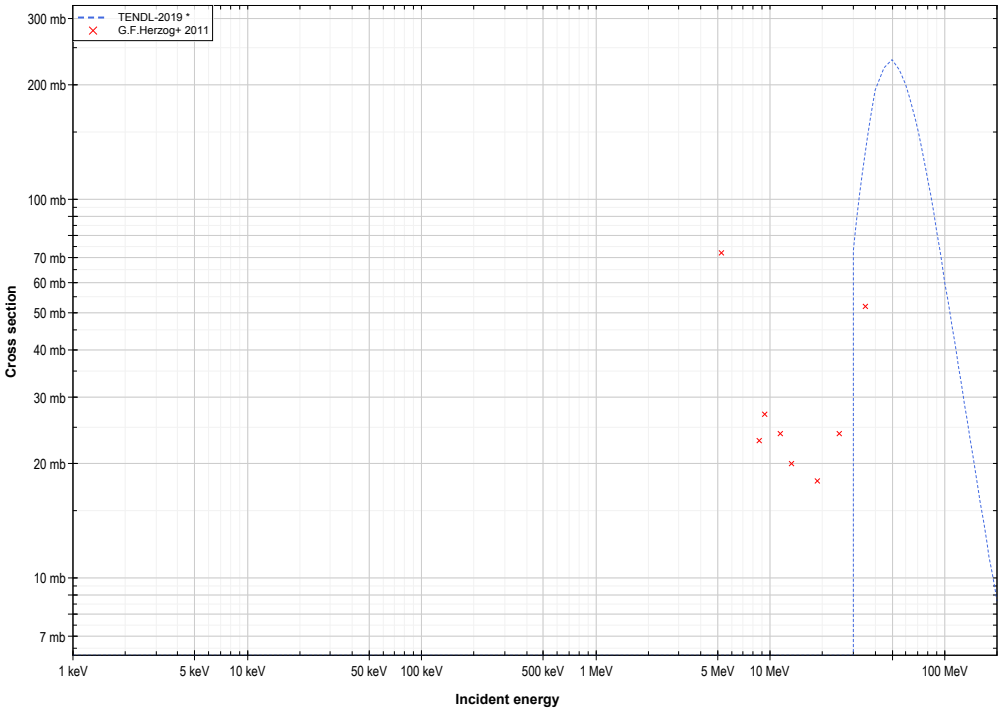
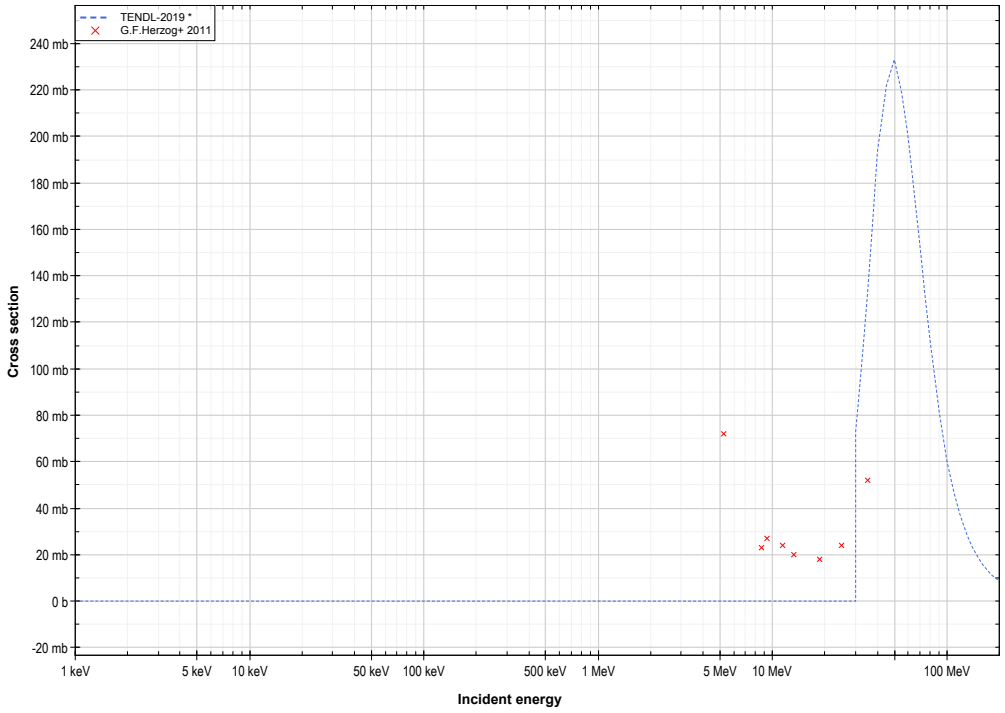
Al27(He3,n+p+d+t)Mg23	-40237.95 keV		
Al27(He3,2n+d+He3)Mg23	-41001.71 keV		

<< 12-Mg-24	**13-Al-27**	14-Si-28 >>
<< MT188 (^{3}He,n+t+^{3}He)	**MT190 (^{3}He,2n+2p) or MT5 (Al26 production)**	MT194 (^{3}He,4n+2p) >>

Al27 (^{3}He,2n+2p) or Al26 production log-log



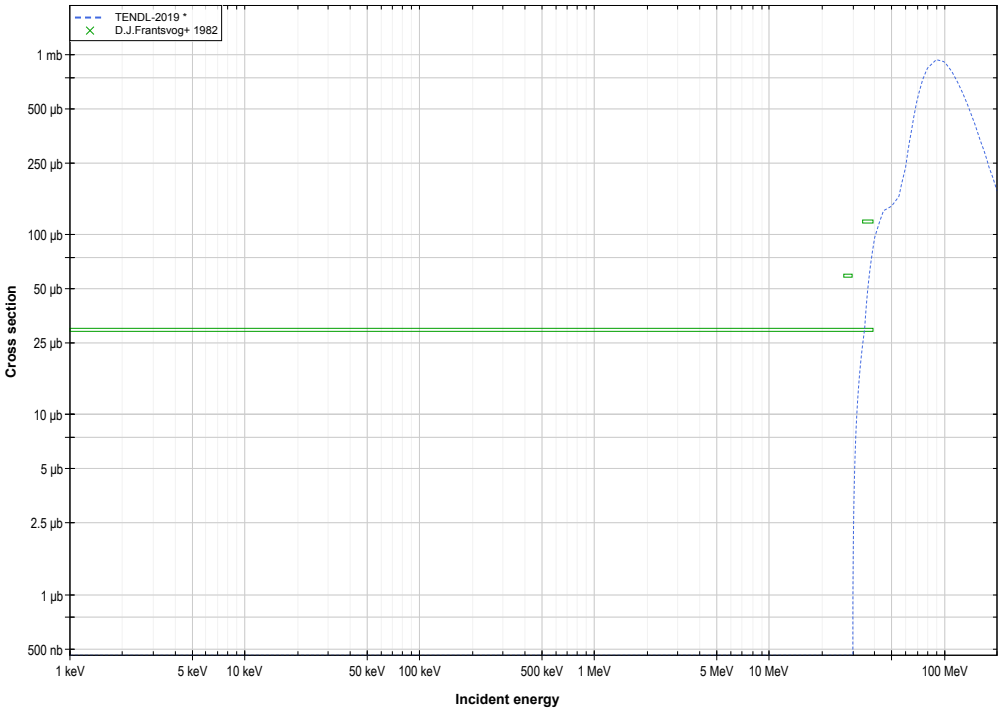
Al27 (^{3}He,2n+2p) or Al26 production lin-log



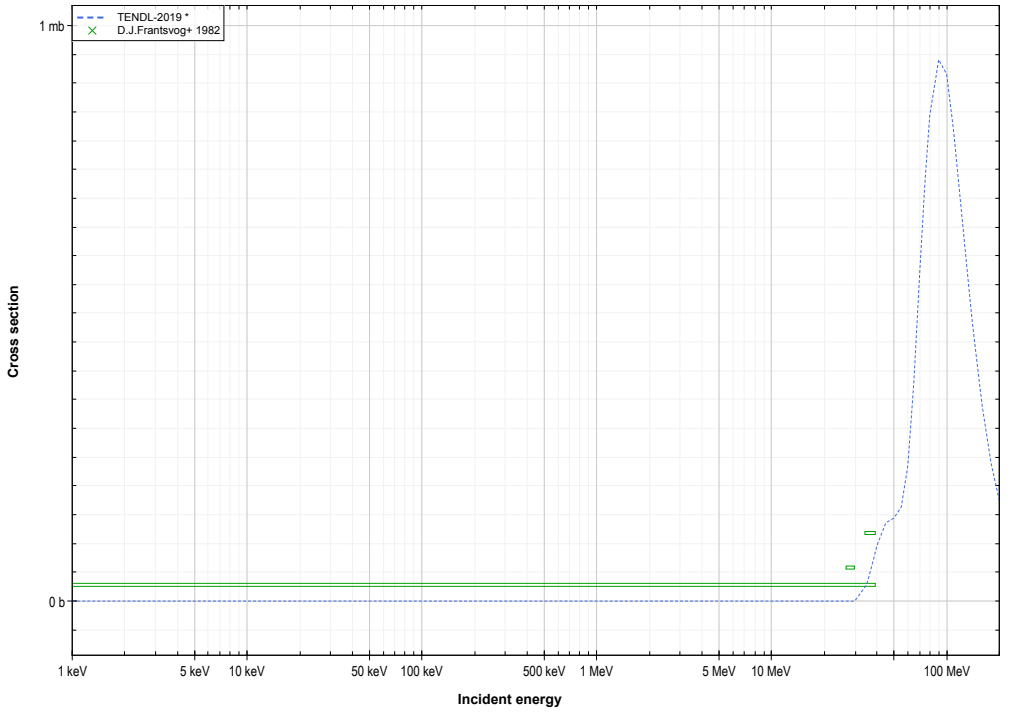
Reaction	Q-Value
Al27(He3,α)Al26	7519.59 keV
Al27(He3,p+t)Al26	-12294.27 keV
Al27(He3,n+He3)Al26	-13058.03 keV
Al27(He3,2d)Al26	-16326.94 keV
Al27(He3,n+p+d)Al26	-18551.50 keV
Al27(He3,2n+2p)Al26	-20776.07 keV

	13-Al-27	27-Co-59 >>
<< MT190 (^{3}He,2n+2p)	**MT194 (^{3}He,4n+2p) or MT5 (Al24 production)**	MT197 (^{3}He,3p) >>

Al27 (^{3}He,4n+2p) or Al24 production log-log



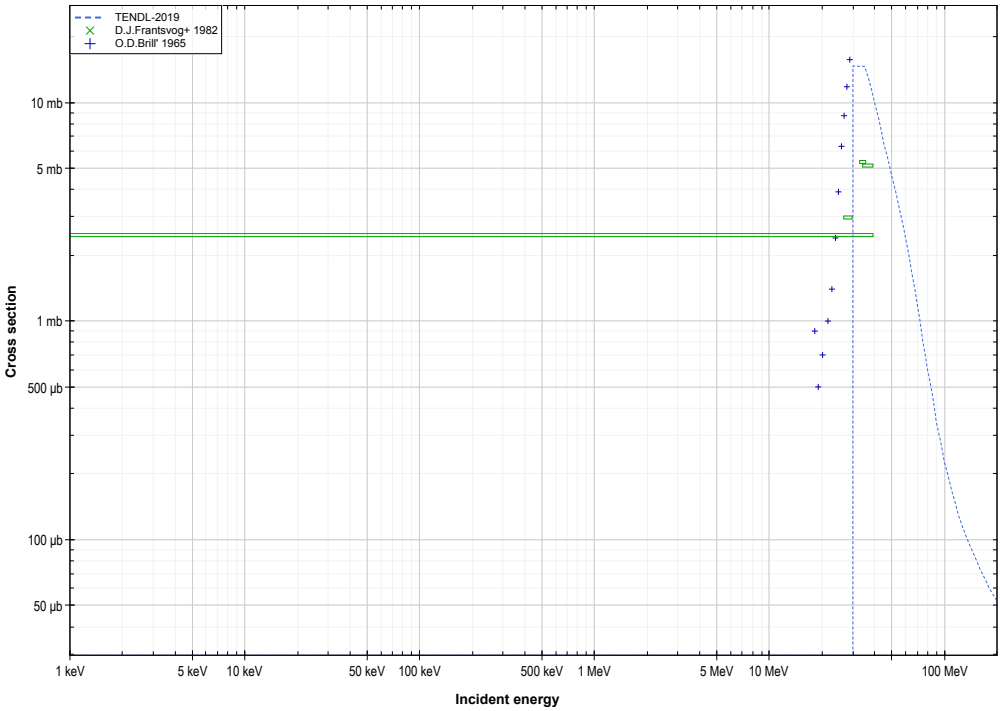
Al27 (^{3}He,4n+2p) or Al24 production lin-log



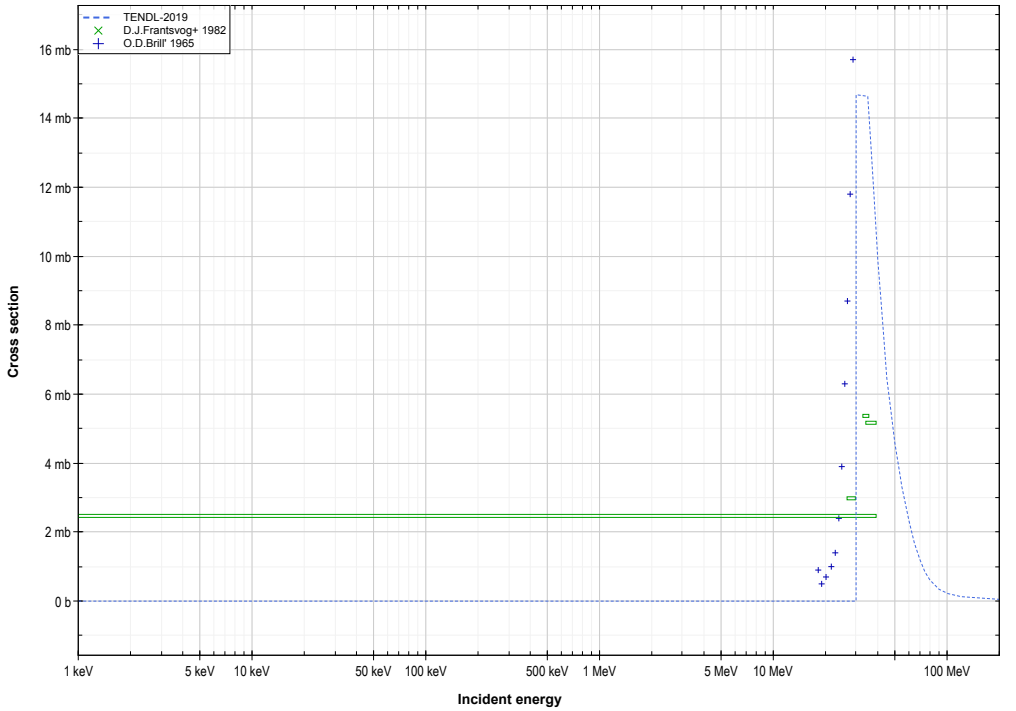
Reaction	Q-Value
Al27(He3,2n+α)Al24	-20784.33 keV
Al27(He3,2t)Al24	-32116.40 keV
Al27(He3,n+d+t)Al24	-38373.63 keV
Al27(He3,2n+p+t)Al24	-40598.20 keV
Al27(He3,3n+He3)Al24	-41361.95 keV
Al27(He3,2n+2d)Al24	-44630.86 keV
Al27(He3,3n+p+d)Al24	-46855.43 keV
Al27(He3,4n+2p)Al24	-49079.99 keV

<< 12-Mg-26	**13-Al-27**	14-Si-28 >>
<< MT194 (^{3}He,4n+2p)	**MT197 (^{3}He,3p) or MT5 (Mg27 production)**	14-Si-28 MT4 (^{3}He,n) >>

Al27 (^{3}He,3p) or Mg27 production log-log



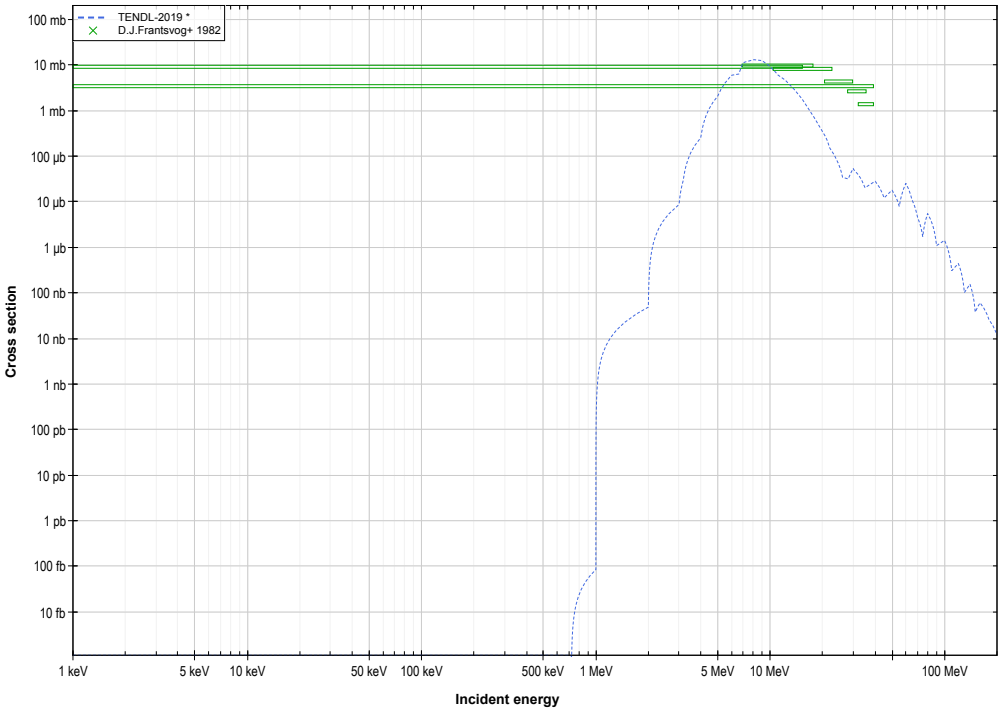
Al27 (^{3}He,3p) or Mg27 production lin-log



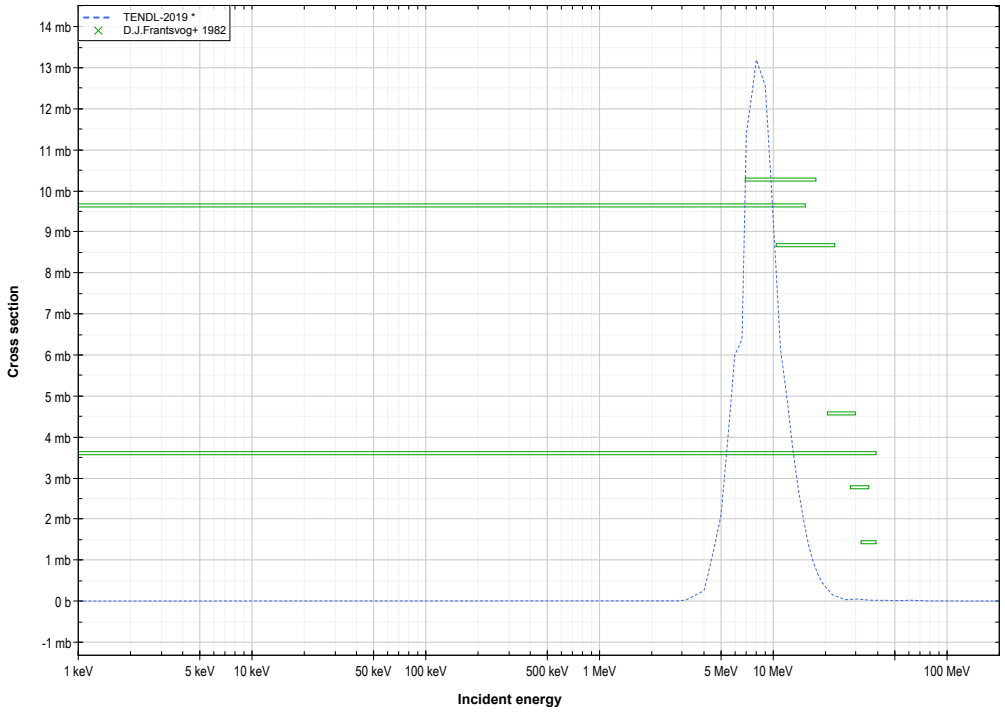
Reaction	Q-Value
Al27(He3,3p)Mg27	-9545.94 keV

<< 13-Al-27	**14-Si-28**	25-Mn-55 >>
<< 13-Al-27 MT197 (^{3}He,3p)	**MT4 (^{3}He,n) or MT5 (S30 production)**	MT22 (^{3}He,n+α) >>

Si28 (^{3}He,n) or S30 production log-log



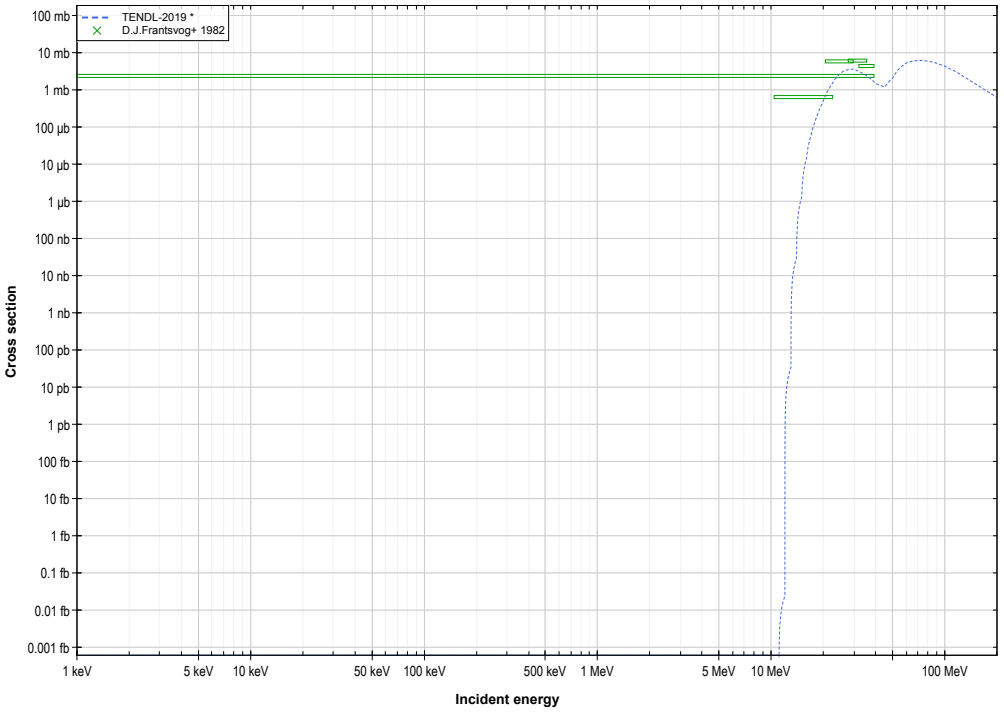
Si28 (^{3}He,n) or S30 production lin-log



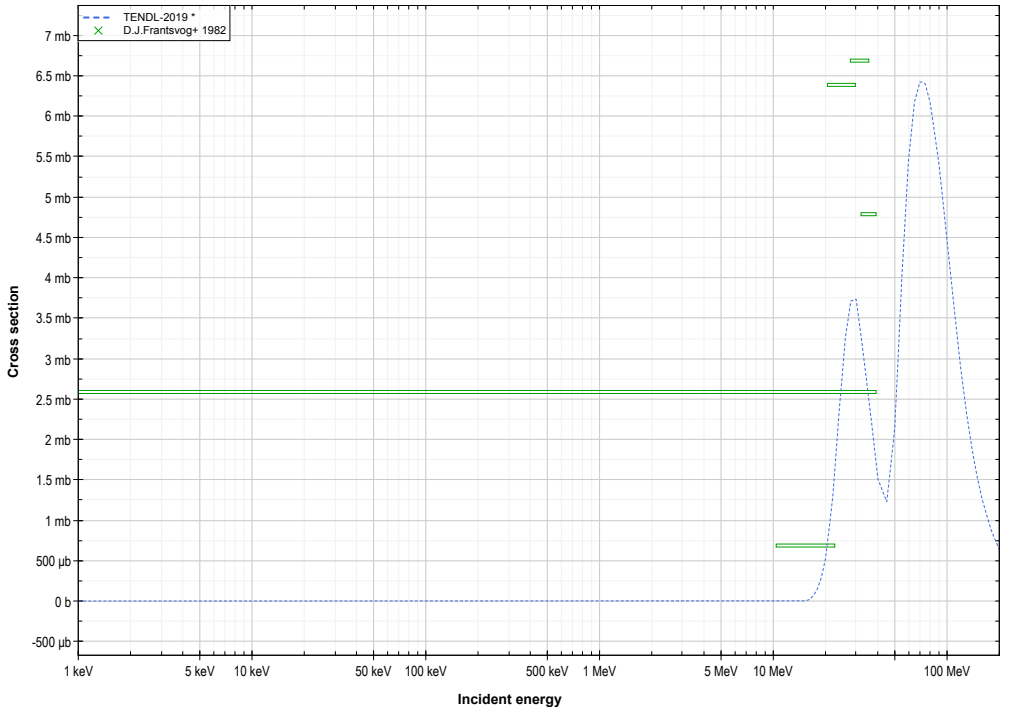
Reaction	Q-Value
Si28(He3,n)S30	-573.64 keV

<< 13-Al-27	**14-Si-28**	21-Sc-45 >>
<< MT4 (^{3}He,n)	**MT22 (^{3}He,n+α) or MT5 (Si26 production)**	MT28 (^{3}He,n+p) >>

Si28 (^{3}He,n+α) or Si26 production log-log



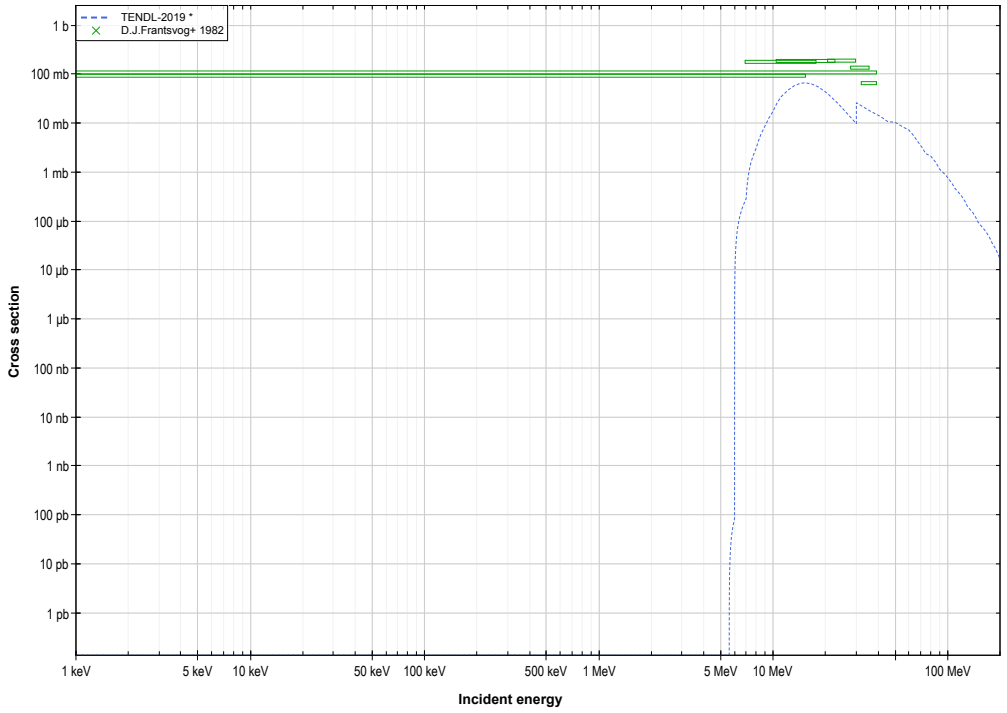
Si28 (^{3}He,n+α) or Si26 production lin-log



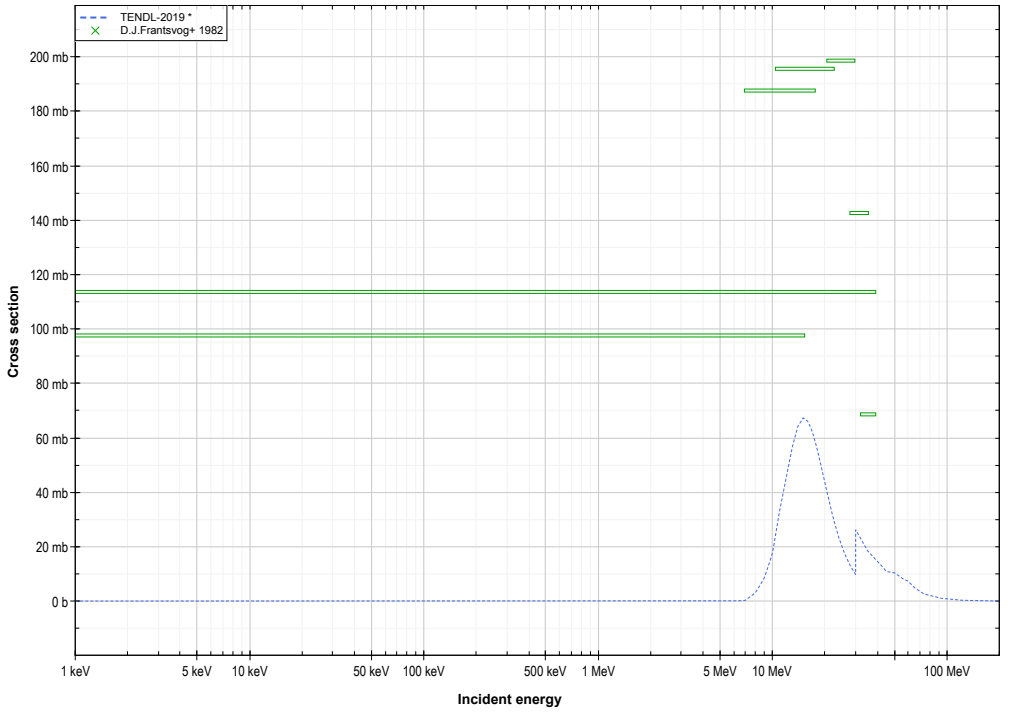
Reaction	Q-Value
Si28(He3,n+α)Si26	-9916.79 keV
Si28(He3,d+t)Si26	-27506.09 keV
Si28(He3,n+p+t)Si26	-29730.65 keV
Si28(He3,2n+He3)Si26	-30494.41 keV
Si28(He3,n+2d)Si26	-33763.32 keV
Si28(He3,2n+p+d)Si26	-35987.88 keV
Si28(He3,3n+2p)Si26	-38212.45 keV

<< 12-Mg-24	**14-Si-28**	26-Fe-56 >>
<< MT22 (^{3}He,n+α)	**MT28 (^{3}He,n+p) or MT5 (P29 production)**	MT32 (^{3}He,n+d) >>

Si28 (^{3}He,n+p) or P29 production log-log



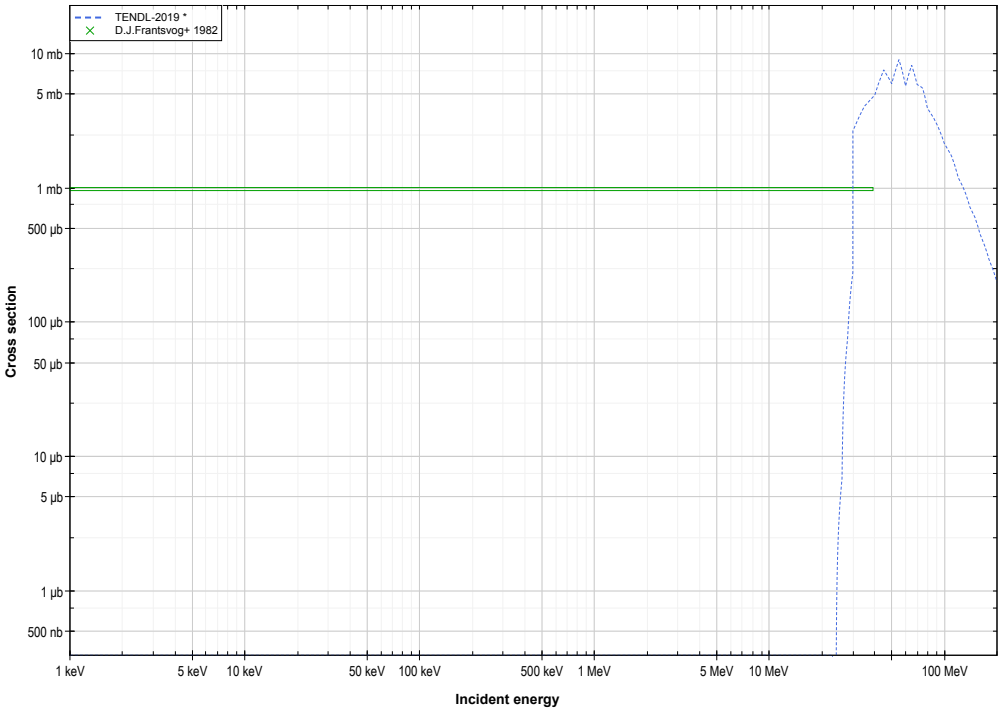
Si28 (^{3}He,n+p) or P29 production lin-log



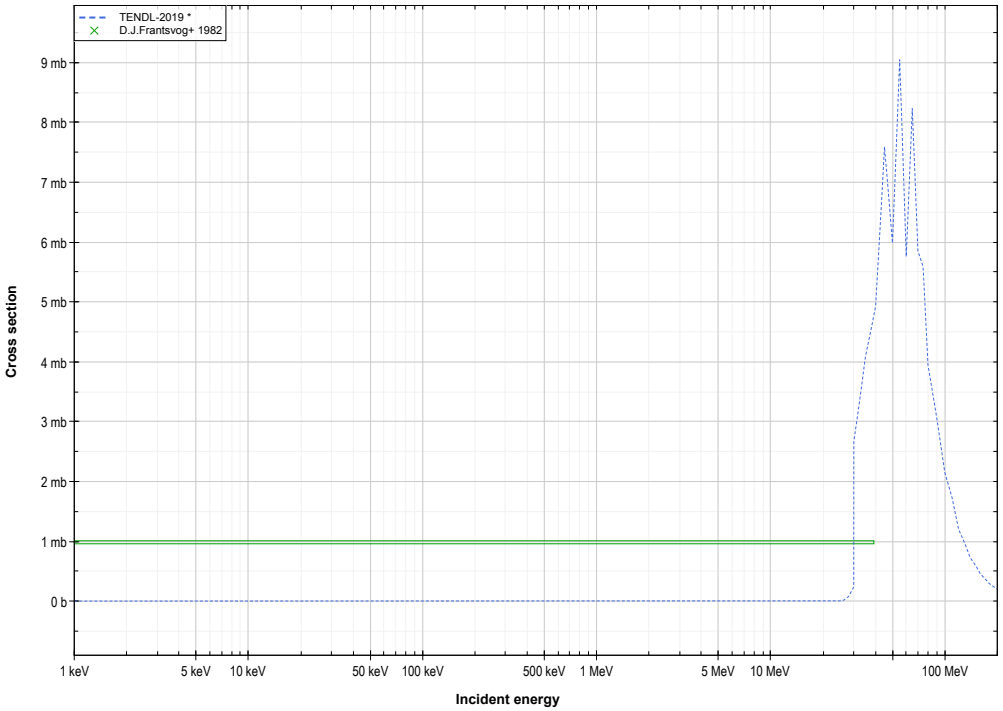
Reaction	Q-Value
Si28(He3,d)P29	-2744.50 keV
Si28(He3,n+p)P29	-4969.06 keV

<< 13-Al-27	**14-Si-28**	21-Sc-45 >>
<< MT28 (^{3}He,n+p)	**MT32 (^{3}He,n+d) or MT5 (P28 production)**	MT34 (^{3}He,n+^{3}He) >>

Si28 (^{3}He,n+d) or P28 production log-log



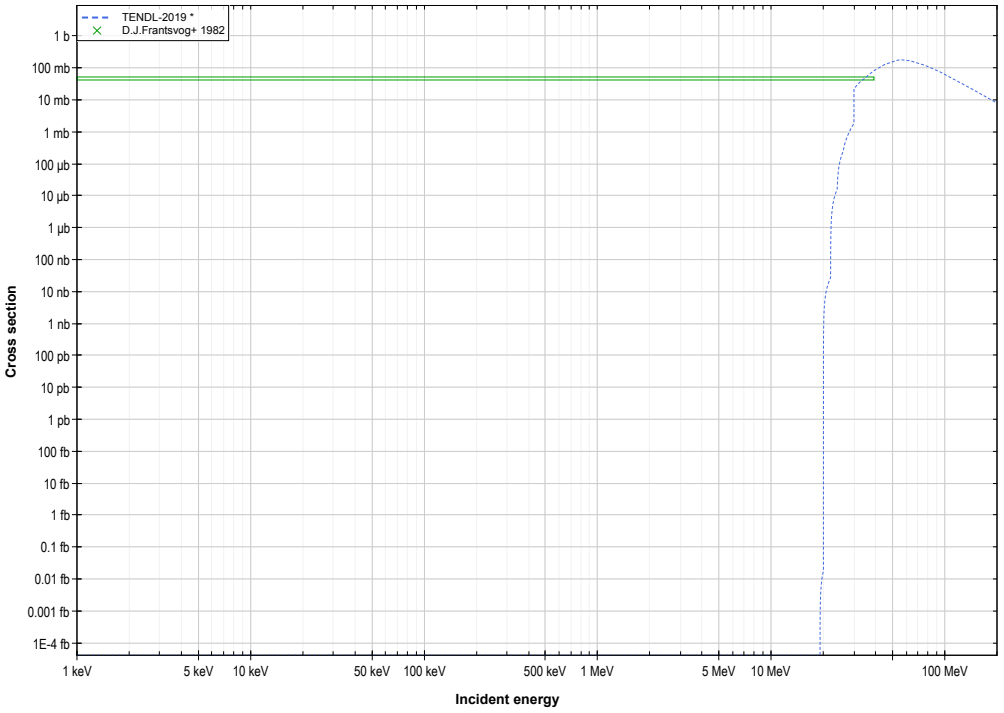
Si28 (^{3}He,n+d) or P28 production lin-log



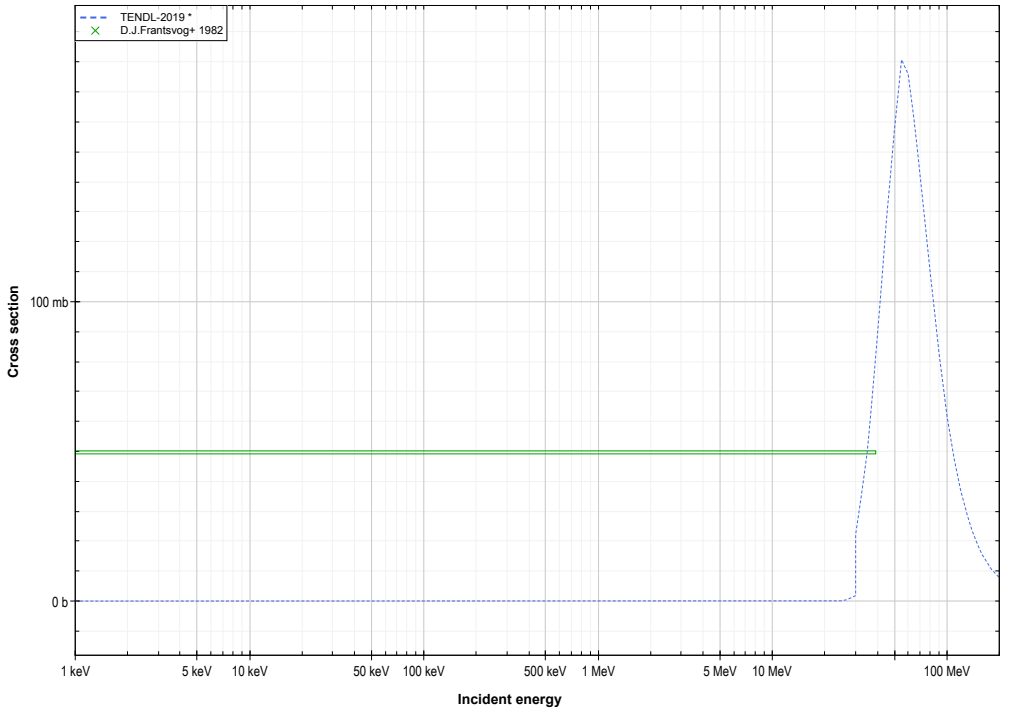
Reaction	Q-Value
Si28(He3,t)P28	-14363.69 keV
Si28(He3,n+d)P28	-20620.92 keV
Si28(He3,2n+p)P28	-22845.48 keV

<< 13-Al-27	**14-Si-28**	21-Sc-45 >>
<< MT32 (³He,n+d)	**MT34 (³He,n+³He) or MT5 (Si27 production)**	MT41 (³He,2n+p) >>

Si28 (³He,n+³He) or Si27 production log-log



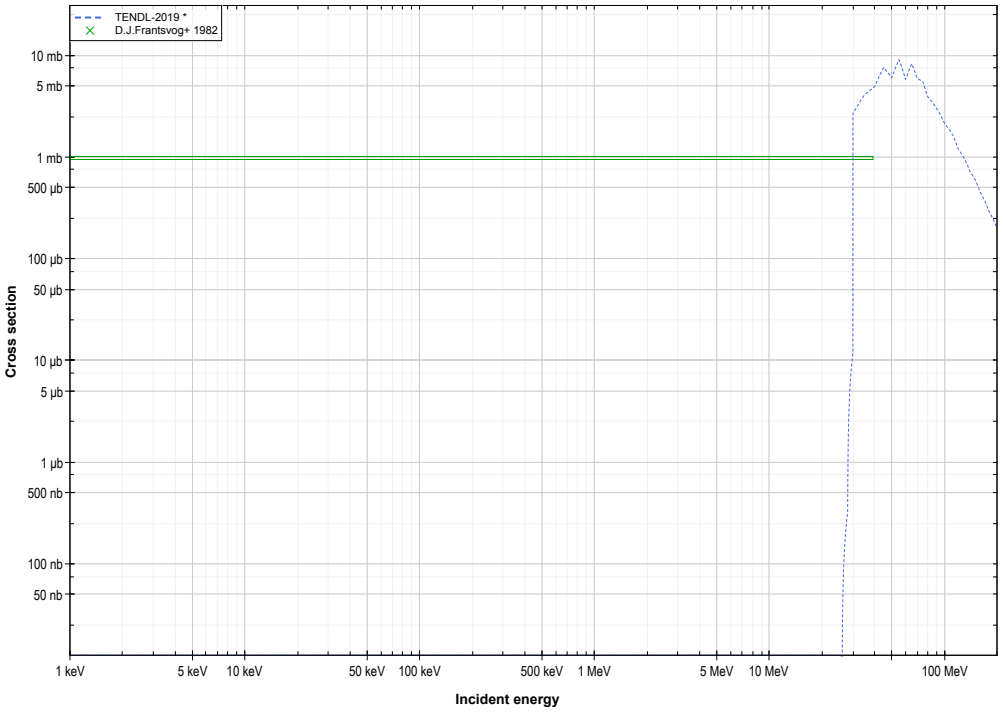
Si28 (³He,n+³He) or Si27 production lin-log



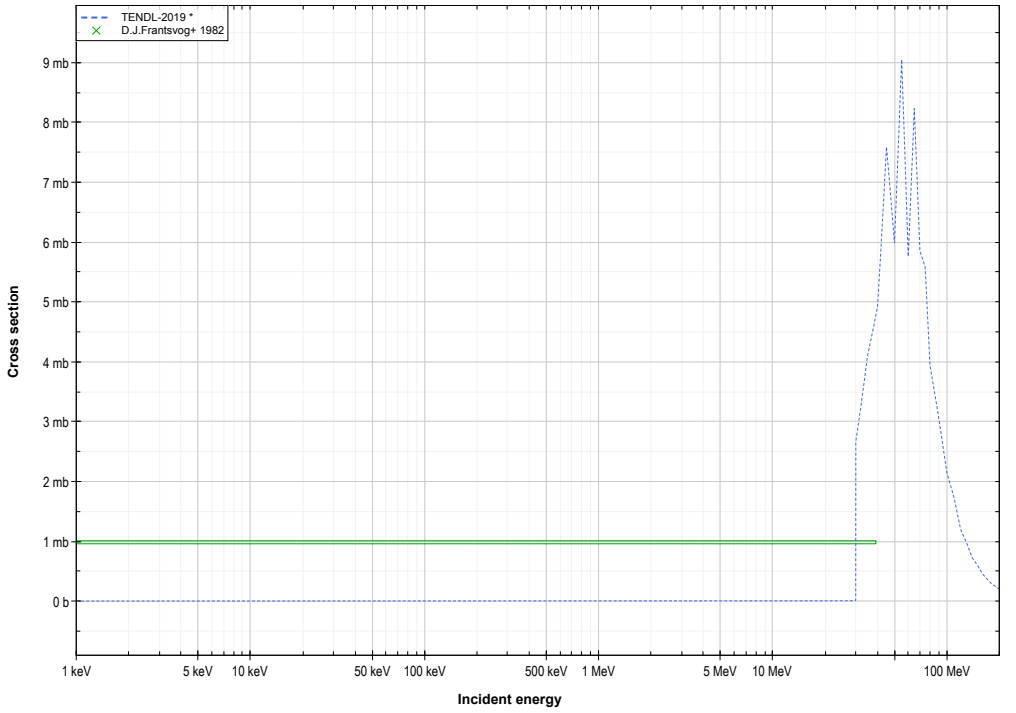
Reaction	Q-Value
Si28(He3,α)Si27	3398.01 keV
Si28(He3,p+t)Si27	-16415.86 keV
Si28(He3,n+He3)Si27	-17179.61 keV
Si28(He3,2d)Si27	-20448.52 keV
Si28(He3,n+p+d)Si27	-22673.09 keV
Si28(He3,2n+2p)Si27	-24897.65 keV

<< 13-Al-27	**14-Si-28**	21-Sc-45 >>
<< MT34 (^{3}He,n+^{3}He)	**MT41 (^{3}He,2n+p) or MT5 (P28 production)**	MT102 (^{3}He,γ) >>

Si28 (^{3}He,2n+p) or P28 production log-log



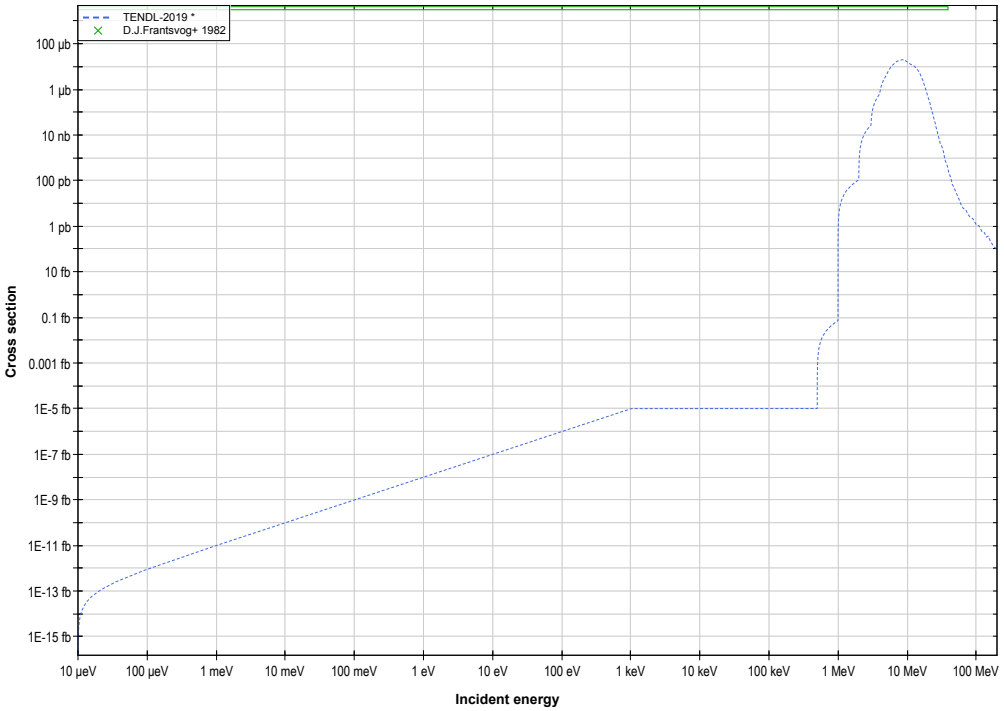
Si28 (^{3}He,2n+p) or P28 production lin-log



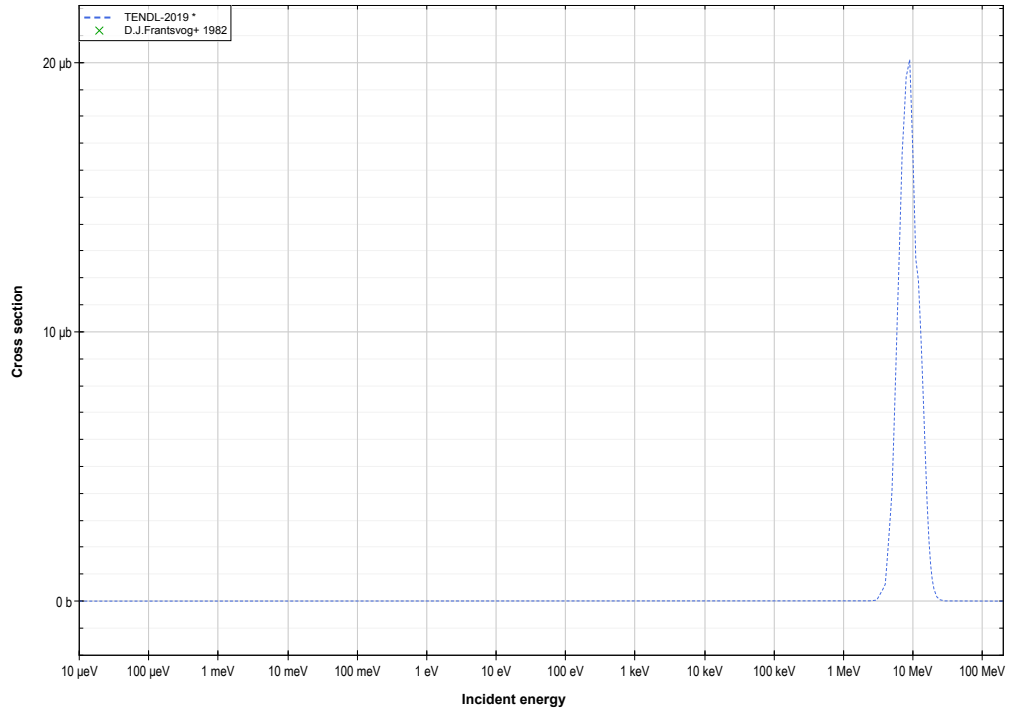
Reaction	Q-Value
Si28(He3,t)P28	-14363.69 keV
Si28(He3,n+d)P28	-20620.92 keV
Si28(He3,2n+p)P28	-22845.48 keV

<< 13-Al-27	**14-Si-28**	19-K-41 >>
<< MT41 (^{3}He,2n+p)	**MT102 (^{3}He,γ) or MT5 (S31 production)**	MT103 (^{3}He,p) >>

Si28 (^{3}He,γ) or S31 production log-log



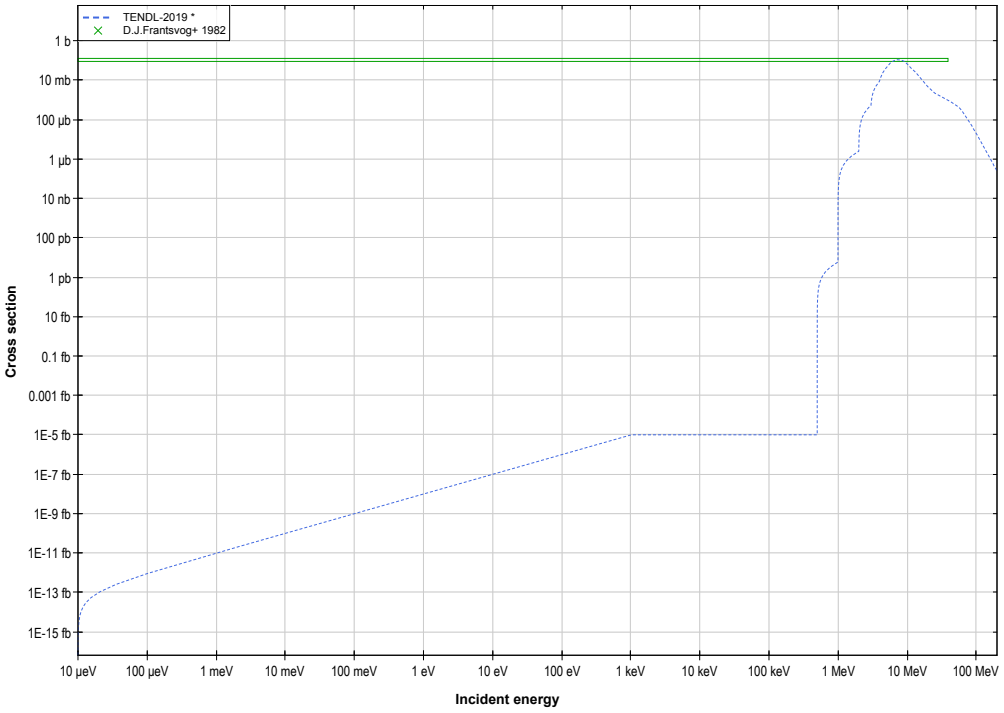
Si28 (^{3}He,γ) or S31 production lin-log



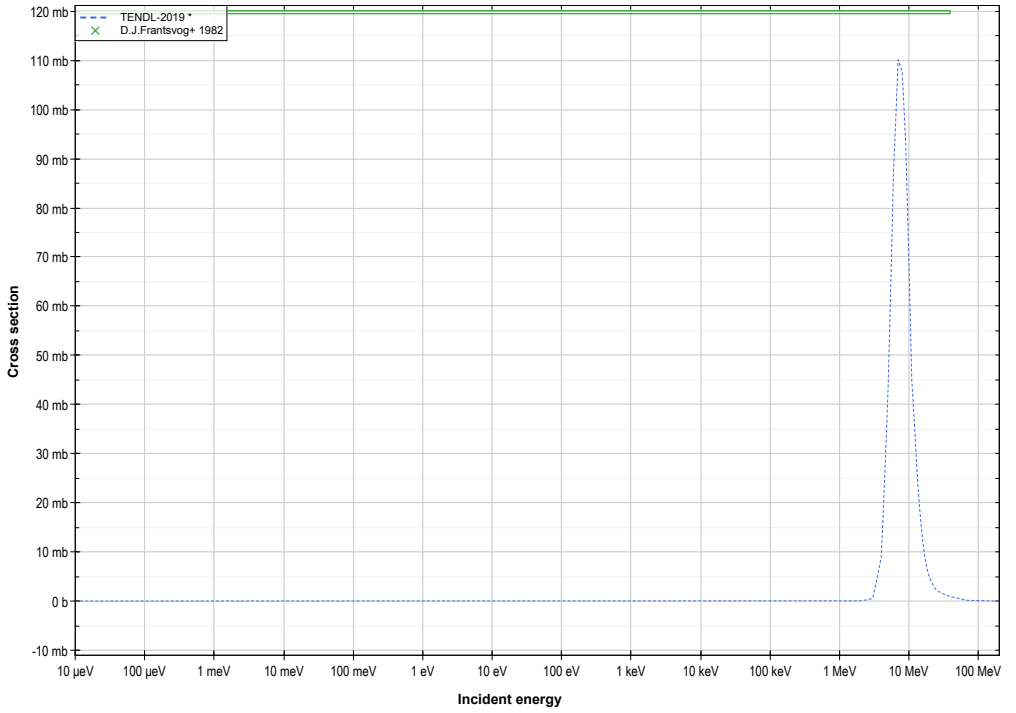
Reaction	Q-Value
Si28(He3,γ)S31	12480.94 keV

<< 12-Mg-26	**14-Si-28**	26-Fe-56 >>
<< MT102 (^{3}He,γ)	**MT103 (^{3}He,p) or MT5 (P30 production)**	MT104 (^{3}He,d) >>

Si28 (^{3}He,p) or P30 production log-log



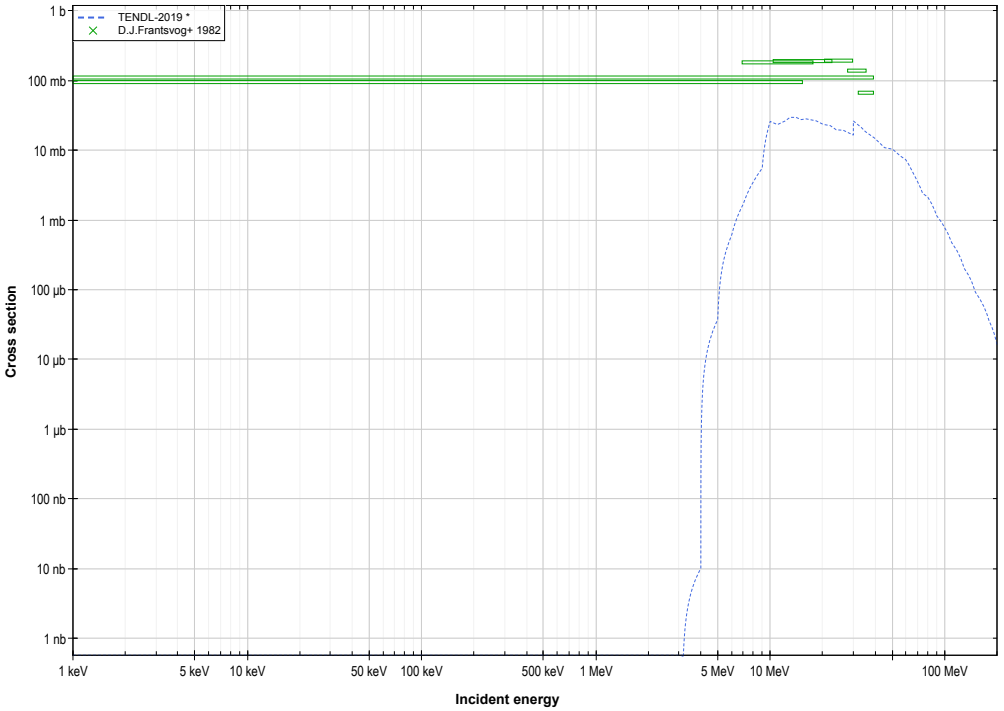
Si28 (^{3}He,p) or P30 production lin-log



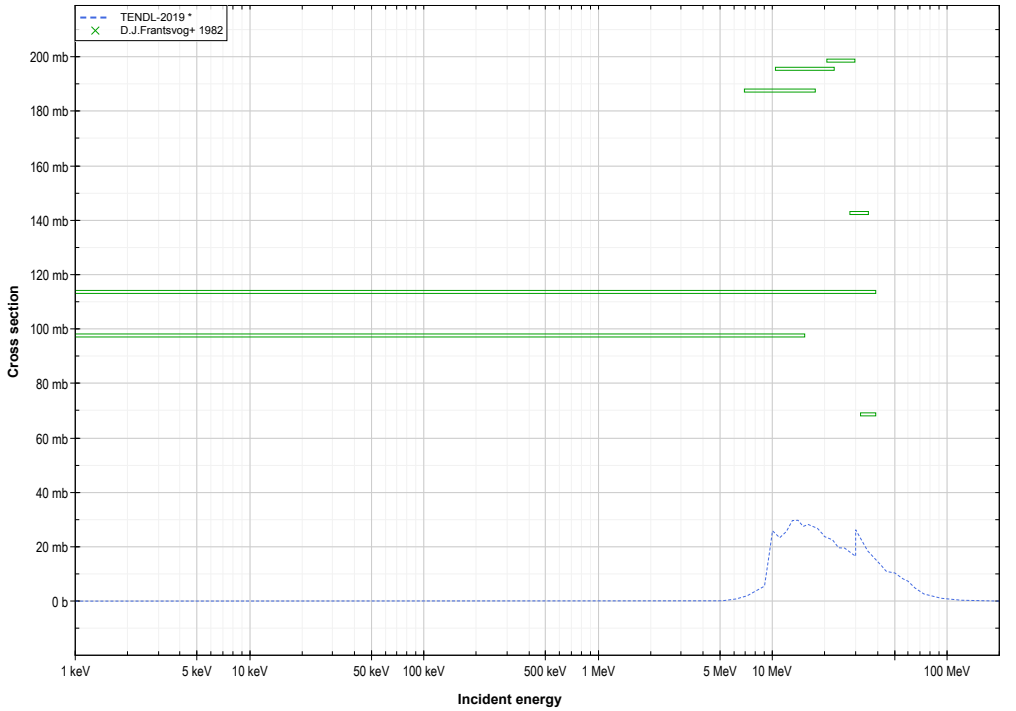
Reaction	Q-Value
Si28(He3,p)P30	6350.30 keV

<< 12-Mg-24	**14-Si-28**	26-Fe-56 >>
<< MT103 (^{3}He,p)	**MT104 (^{3}He,d) or MT5 (P29 production)**	MT105 (^{3}He,t) >>

Si28 (^{3}He,d) or P29 production log-log



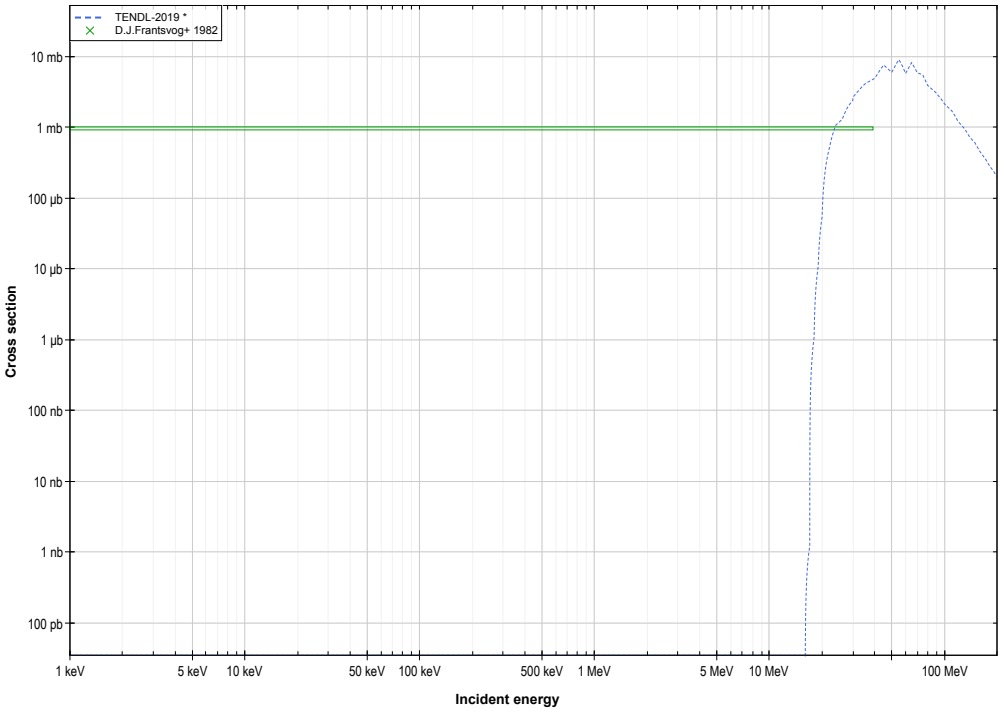
Si28 (^{3}He,d) or P29 production lin-log



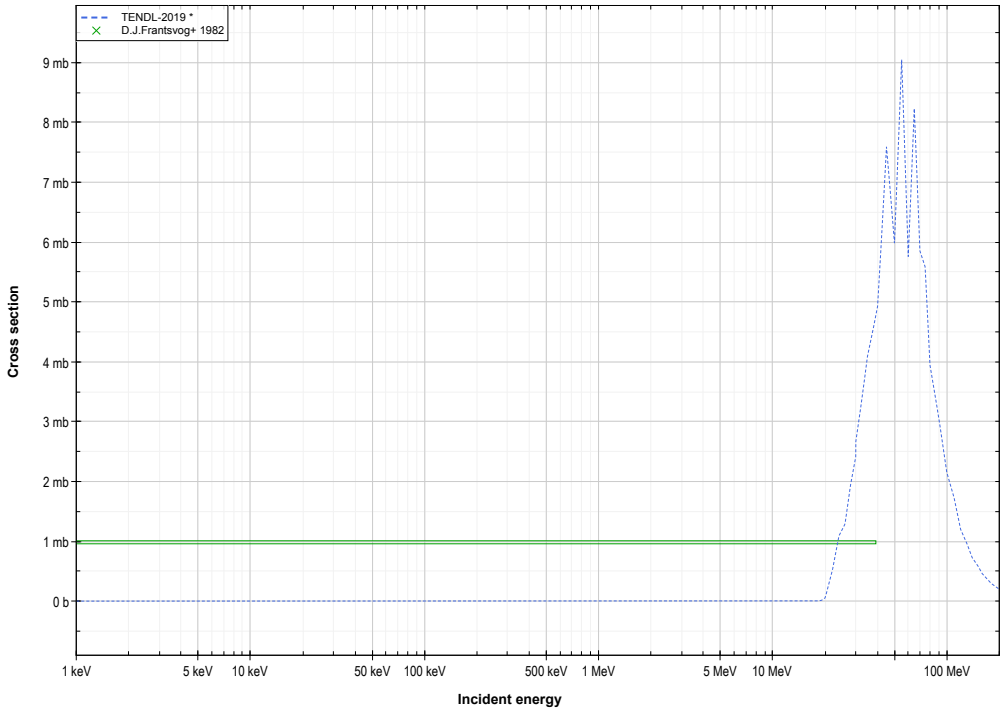
Reaction	Q-Value
Si28(He3,d)P29	-2744.50 keV
Si28(He3,n+p)P29	-4969.06 keV

<< 13-Al-27	**14-Si-28**	21-Sc-45 >>
<< MT104 (³He,d)	**MT105 (³He,t) or MT5 (P28 production)**	MT107 (³He,α) >>

Si28 (³He,t) or P28 production log-log



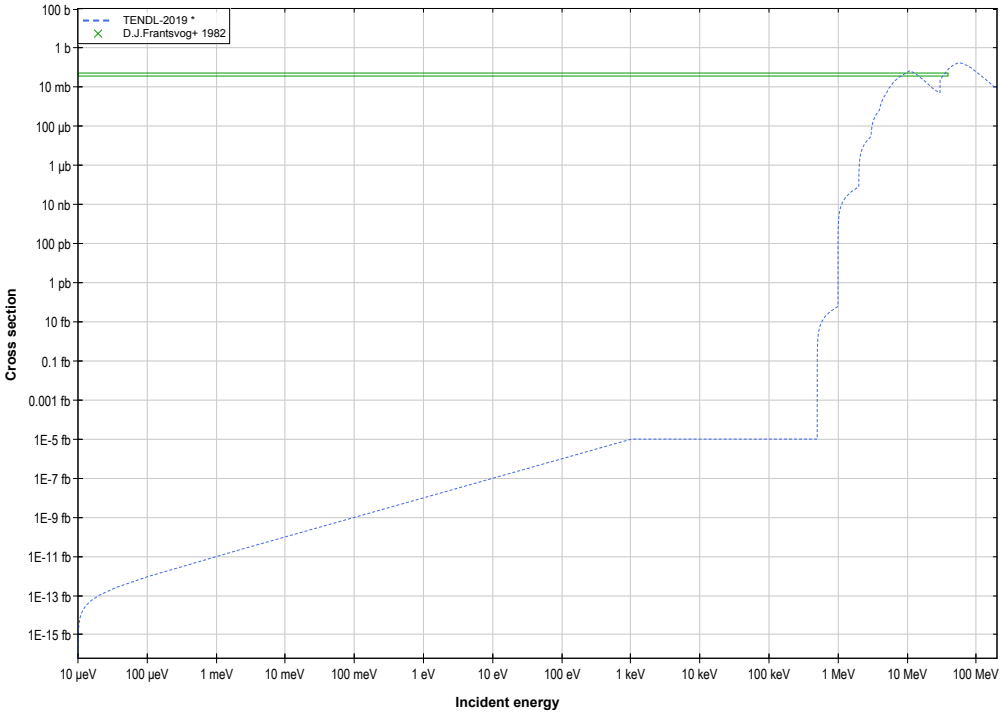
Si28 (³He,t) or P28 production lin-log



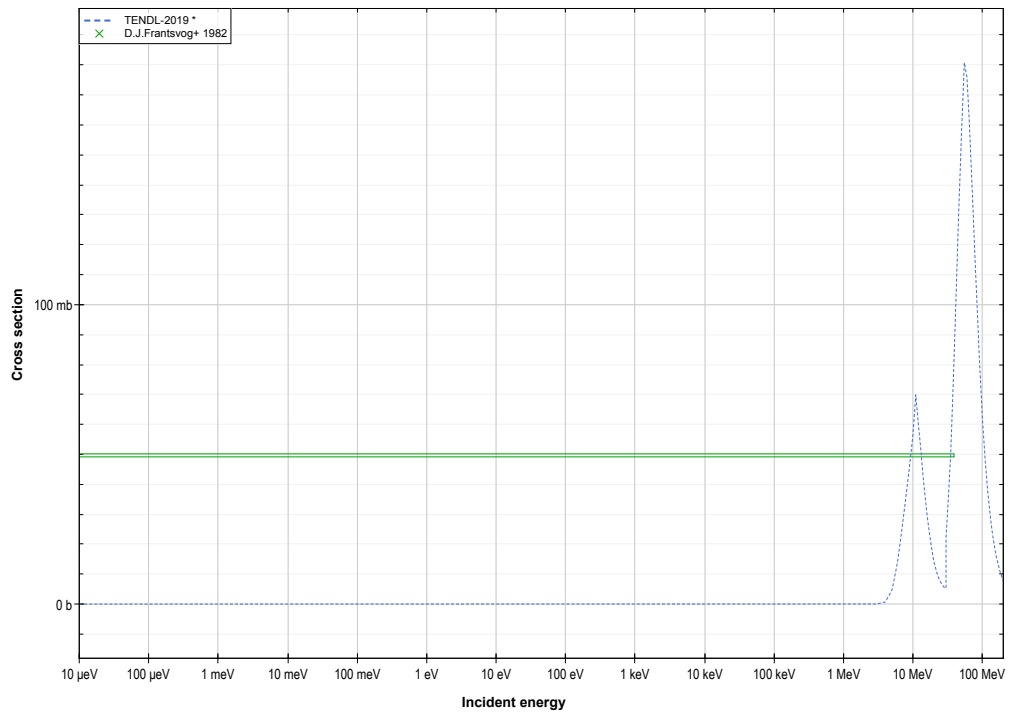
Reaction	Q-Value
Si28(He3,t)P28	-14363.69 keV
Si28(He3,n+d)P28	-20620.92 keV
Si28(He3,2n+p)P28	-22845.48 keV

<< 13-Al-27	**14-Si-28**	17-Cl-35 >>
<< MT105 (^{3}He,t)	**MT107 (^{3}He,α) or MT5 (Si27 production)**	MT108 (^{3}He,2α) >>

Si28 (^{3}He,α) or Si27 production log-log



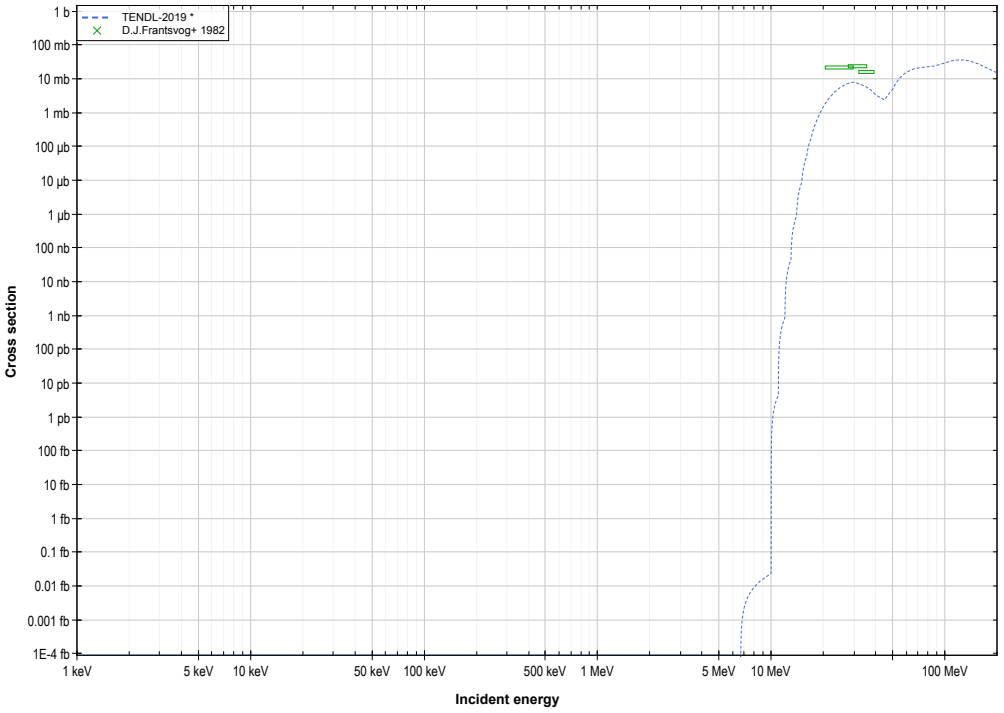
Si28 (^{3}He,α) or Si27 production lin-log



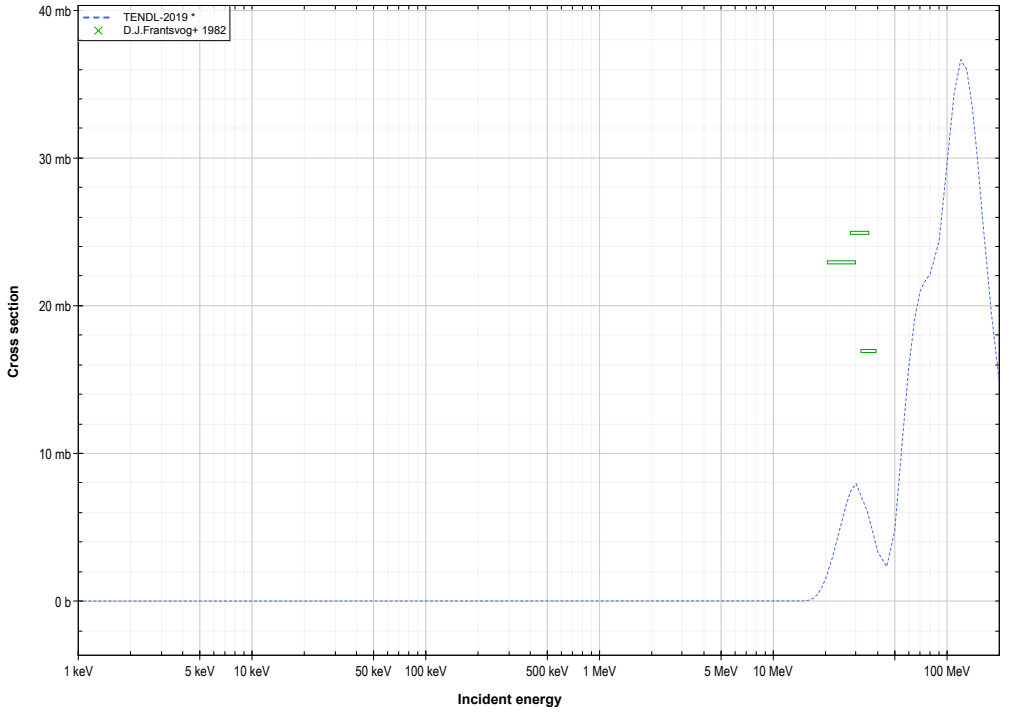
Reaction	Q-Value
Si28(He3,α)Si27	3398.01 keV
Si28(He3,p+t)Si27	-16415.86 keV
Si28(He3,n+He3)Si27	-17179.61 keV
Si28(He3,2d)Si27	-20448.52 keV
Si28(He3,n+p+d)Si27	-22673.09 keV
Si28(He3,2n+2p)Si27	-24897.65 keV

<< 13-Al-27	**14-Si-28**	19-K-39 >>
<< MT107 (³He,α)	**MT108 (³He,2α) or MT5 (Mg23 production)**	MT116 (³He,p+t) >>

Si28 (³He,2α) or Mg23 production log-log



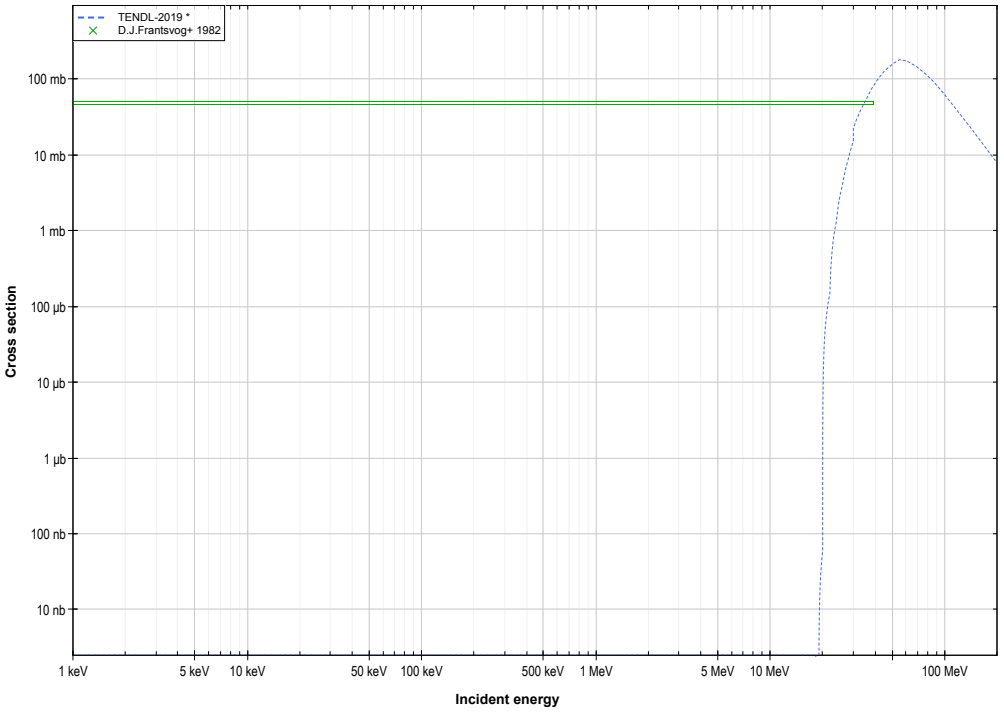
Si28 (³He,2α) or Mg23 production lin-log



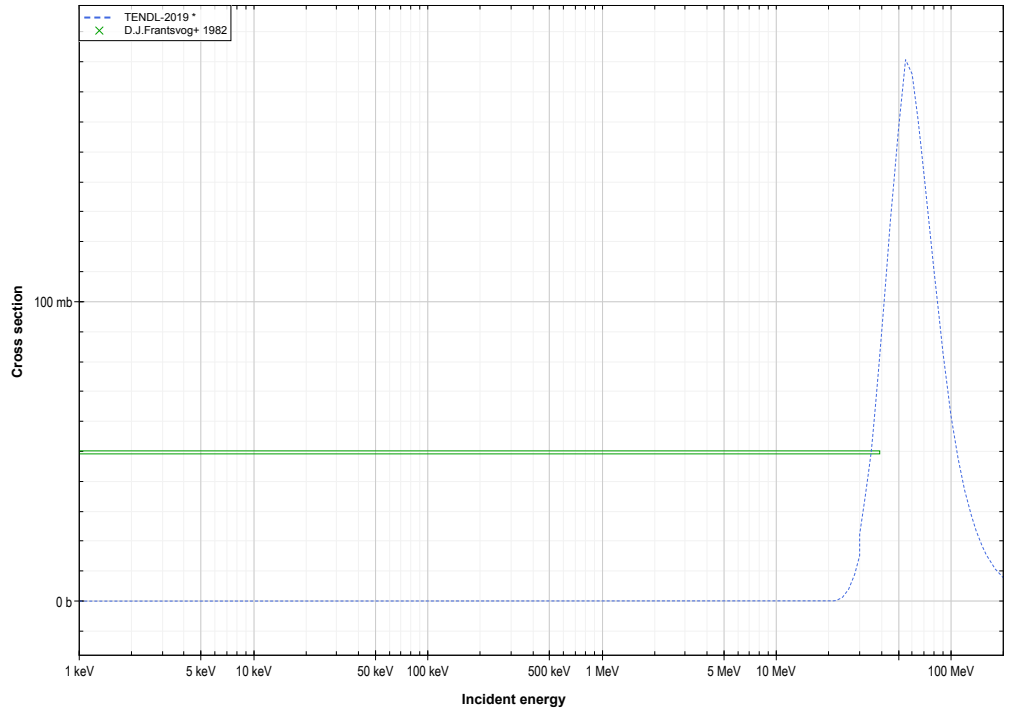
Reaction	Q-Value	Reaction	Q-Value
Si28(He3,2α)Mg23	-5937.90 keV	Si28(He3,n+p+t+He3)Mg23	-46329.38 keV
Si28(He3,p+t+α)Mg23	-25751.76 keV	Si28(He3,2n+2He3)Mg23	-47093.14 keV
Si28(He3,n+He3+α)Mg23	-26515.52 keV	Si28(He3,p+2d+t)Mg23	-49598.29 keV
Si28(He3,2d+α)Mg23	-29784.43 keV	Si28(He3,n+2d+He3)Mg23	-50362.04 keV
Si28(He3,n+p+d+α)Mg23	-32008.99 keV	Si28(He3,n+2p+d+t)Mg23	-51822.86 keV
Si28(He3,2n+2p+α)Mg23	-34233.56 keV	Si28(He3,2n+p+d+He3)Mg23	-52586.61 keV
Si28(He3,d+t+He3)Mg23	-44104.82 keV	Si28(He3,4d)Mg23	-53630.95 keV
Si28(He3,2p+2t)Mg23	-45565.63 keV	Si28(He3,2n+3p+t)Mg23	-54047.42 keV

<< 13-Al-27	**14-Si-28**	21-Sc-45 >>
<< MT108 (^{3}He,2α)	**MT116 (^{3}He,p+t) or MT5 (Si27 production)**	MT176 (^{3}He,2n+^{3}He) >>

Si28 (^{3}He,p+t) or Si27 production log-log



Si28 (^{3}He,p+t) or Si27 production lin-log



Reaction	Q-Value
Si28(He3,α)Si27	3398.01 keV
Si28(He3,p+t)Si27	-16415.86 keV
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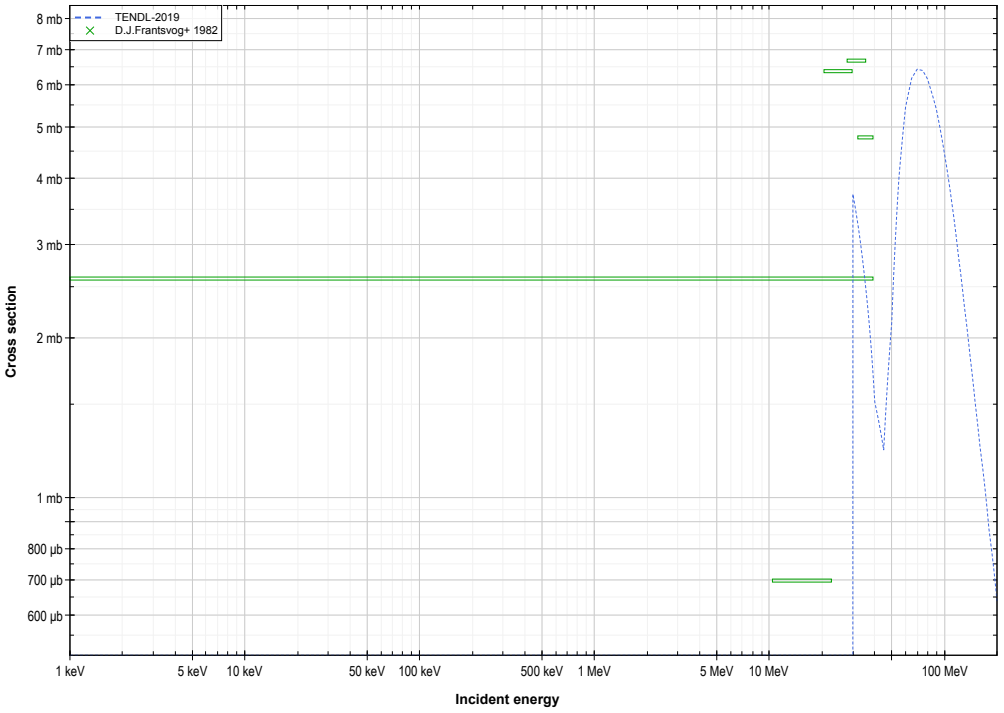
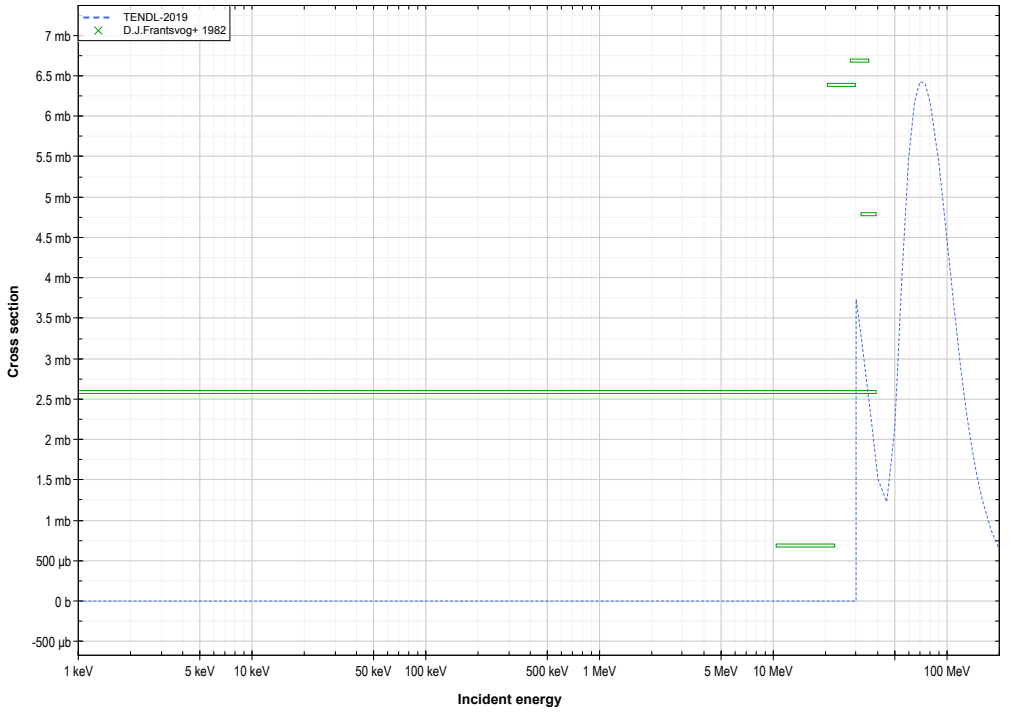
Si28(He3,n+p+d)Si27	-22673.09 keV
Si28(He3,2n+2p)Si27	-24897.65 keV

<< 13-Al-27	**14-Si-28**	21-Sc-45 >>
<< MT116 (^{3}He,p+t)	**MT176 (^{3}He,2n+^{3}He) or MT5 (Si26 production)**	MT179 (^{3}He,3n+2p) >>

Si28 (^{3}He,2n+^{3}He) or Si26 production log-log



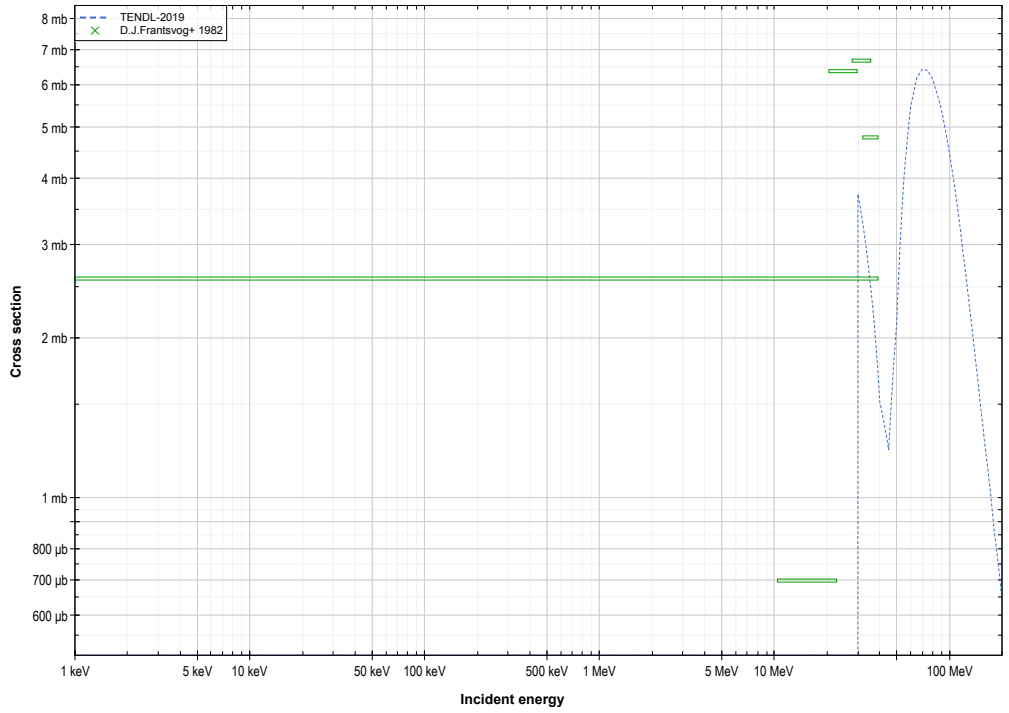
Si28 (^{3}He,2n+^{3}He) or Si26 production lin-log



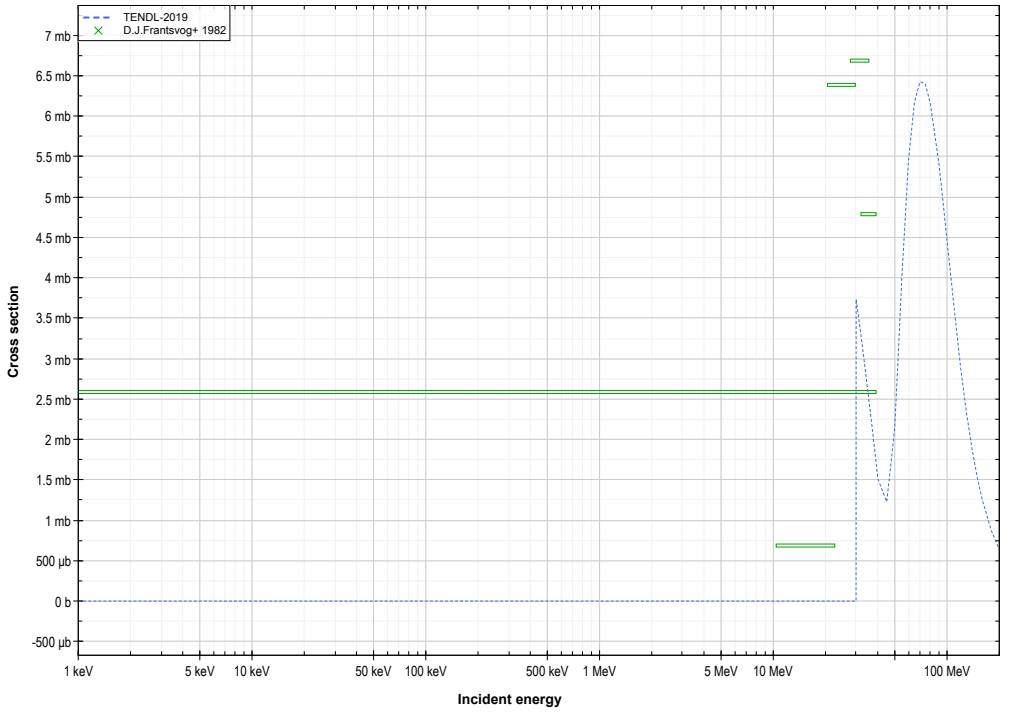
Reaction	Q-Value
Si28(He3,n+α)Si26	-9916.79 keV
Si28(He3,d+t)Si26	-27506.09 keV
Si28(He3,n+p+t)Si26	-29730.65 keV
Si28(He3,2n+He3)Si26	-30494.41 keV
Si28(He3,n+2d)Si26	-33763.32 keV
Si28(He3,2n+p+d)Si26	-35987.88 keV
Si28(He3,3n+2p)Si26	-38212.45 keV

<< 13-Al-27	**14-Si-28**	21-Sc-45 >>
<< MT176 (^{3}He,2n+^{3}He)	**MT179 (^{3}He,3n+2p) or MT5 (Si26 production)**	MT182 (^{3}He,d+t) >>

Si28 (^{3}He,3n+2p) or Si26 production log-log



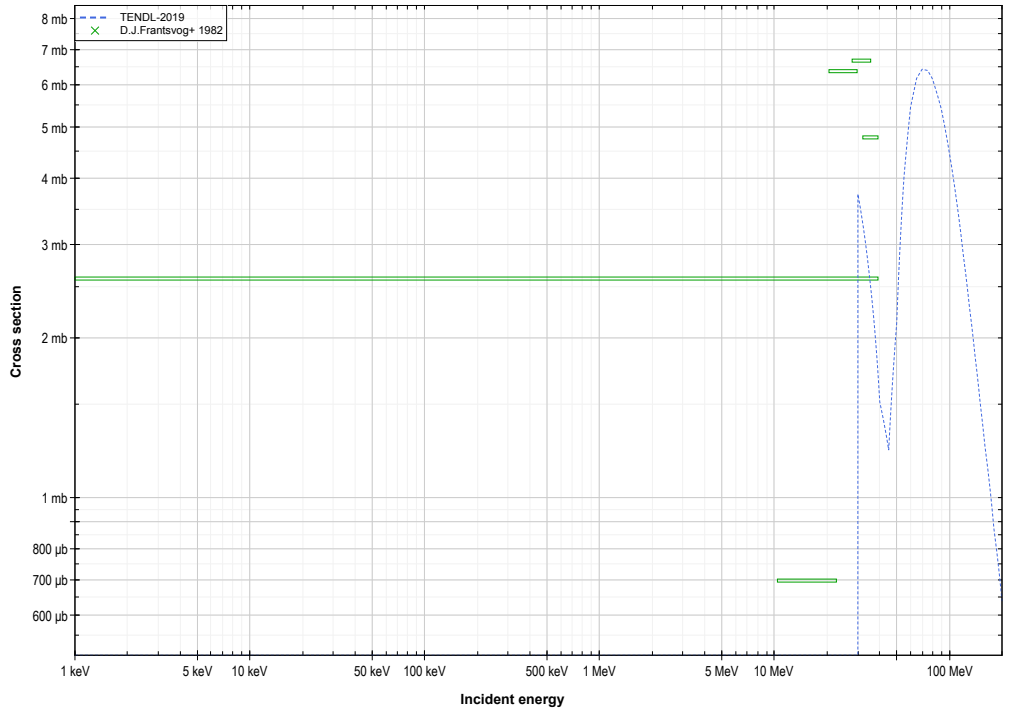
Si28 (^{3}He,3n+2p) or Si26 production lin-log



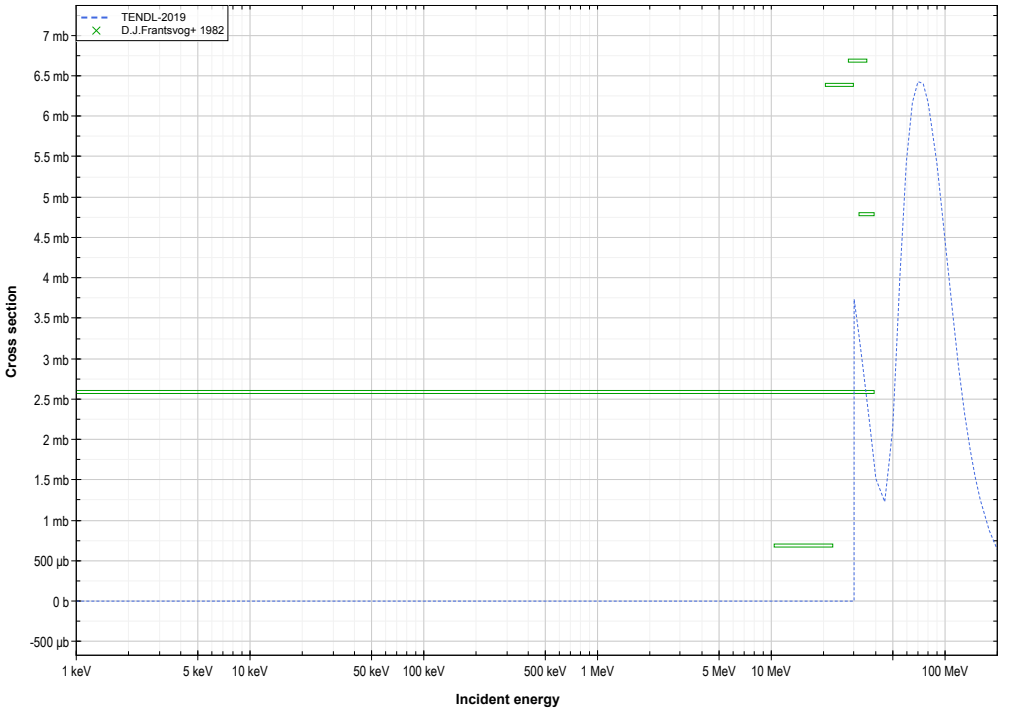
Reaction	Q-Value
Si28(He3,n+α)Si26	-9916.79 keV
Si28(He3,d+t)Si26	-27506.09 keV
Si28(He3,n+p+t)Si26	-29730.65 keV
Si28(He3,2n+He3)Si26	-30494.41 keV
Si28(He3,n+2d)Si26	-33763.32 keV
Si28(He3,2n+p+d)Si26	-35987.88 keV
Si28(He3,3n+2p)Si26	-38212.45 keV

<< 13-Al-27	**14-Si-28**	21-Sc-45 >>
<< MT179 (^{3}He,3n+2p)	**MT182 (^{3}He,d+t) or MT5 (Si26 production)**	MT183 (^{3}He,n+p+d) >>

Si28 (^{3}He,d+t) or Si26 production log-log



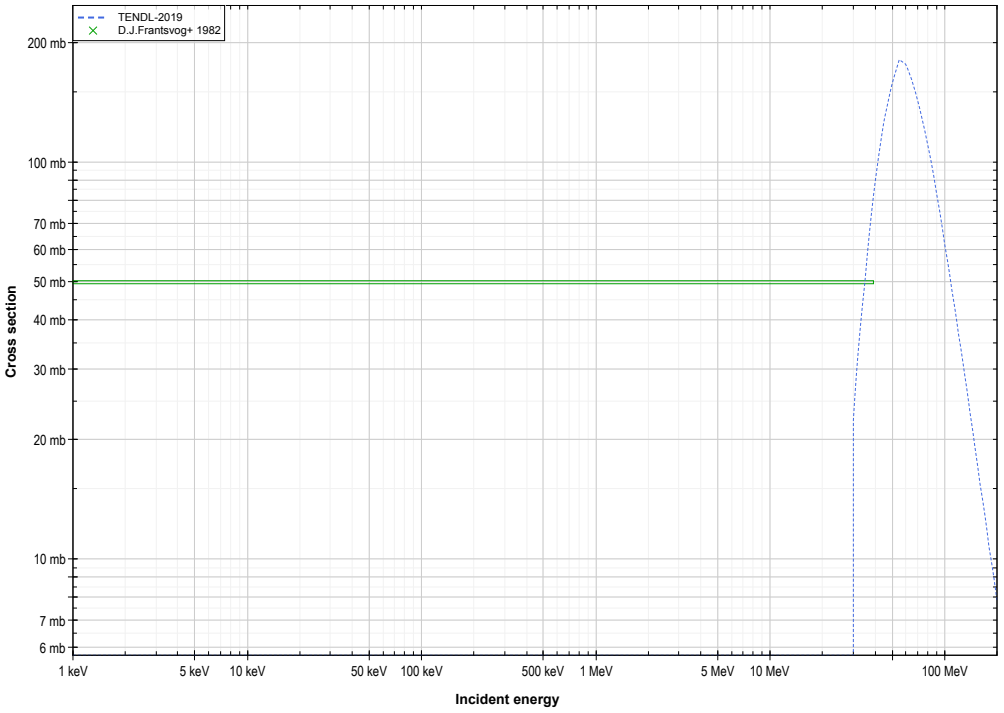
Si28 (^{3}He,d+t) or Si26 production lin-log



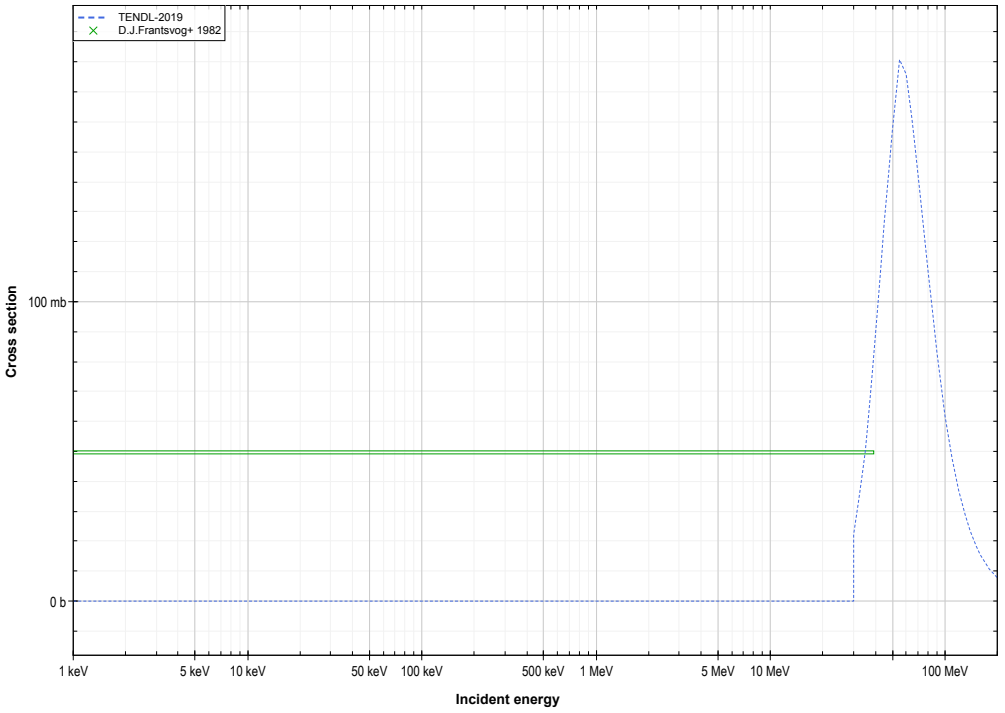
Reaction	Q-Value
Si28(He3,n+α)Si26	-9916.79 keV
Si28(He3,d+t)Si26	-27506.09 keV
Si28(He3,n+p+t)Si26	-29730.65 keV
Si28(He3,2n+He3)Si26	-30494.41 keV
Si28(He3,n+2d)Si26	-33763.32 keV
Si28(He3,2n+p+d)Si26	-35987.88 keV
Si28(He3,3n+2p)Si26	-38212.45 keV

<< 13-Al-27	**14-Si-28**	21-Sc-45 >>
<< MT182 (^{3}He,d+t)	**MT183 (^{3}He,n+p+d) or MT5 (Si27 production)**	MT184 (^{3}He,n+p+t) >>

Si28 (^{3}He,n+p+d) or Si27 production log-log



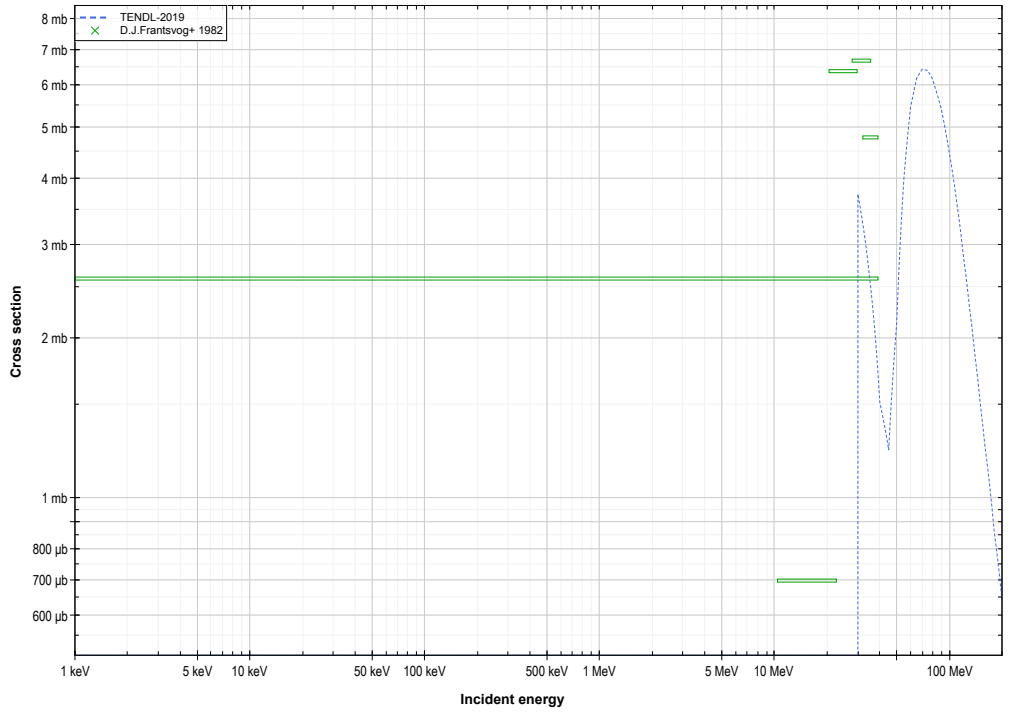
Si28 (^{3}He,n+p+d) or Si27 production lin-log



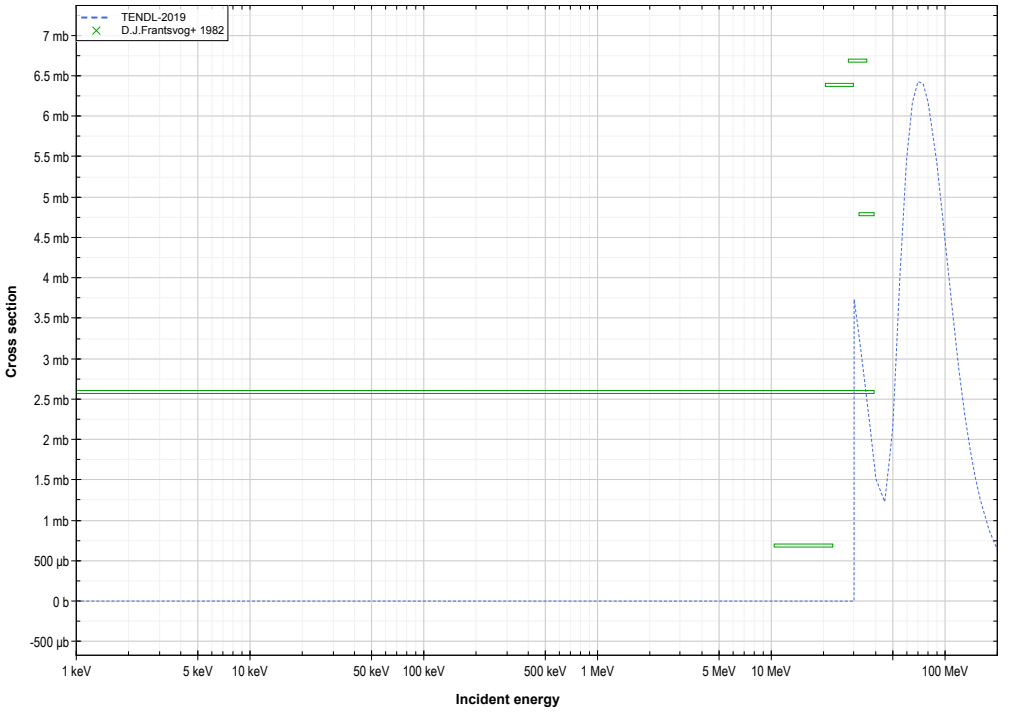
Reaction	Q-Value
Si28(He3,α)Si27	3398.01 keV
Si28(He3,p+t)Si27	-16415.86 keV
Si28(He3,n+He3)Si27	-17179.61 keV
Si28(He3,2d)Si27	-20448.52 keV
Si28(He3,n+p+d)Si27	-22673.09 keV
Si28(He3,2n+2p)Si27	-24897.65 keV

<< 13-Al-27	**14-Si-28**	21-Sc-45 >>
<< MT183 (^{3}He,n+p+d)	**MT184 (^{3}He,n+p+t) or MT5 (Si26 production)**	MT190 (^{3}He,2n+2p) >>

Si28 (^{3}He,n+p+t) or Si26 production log-log



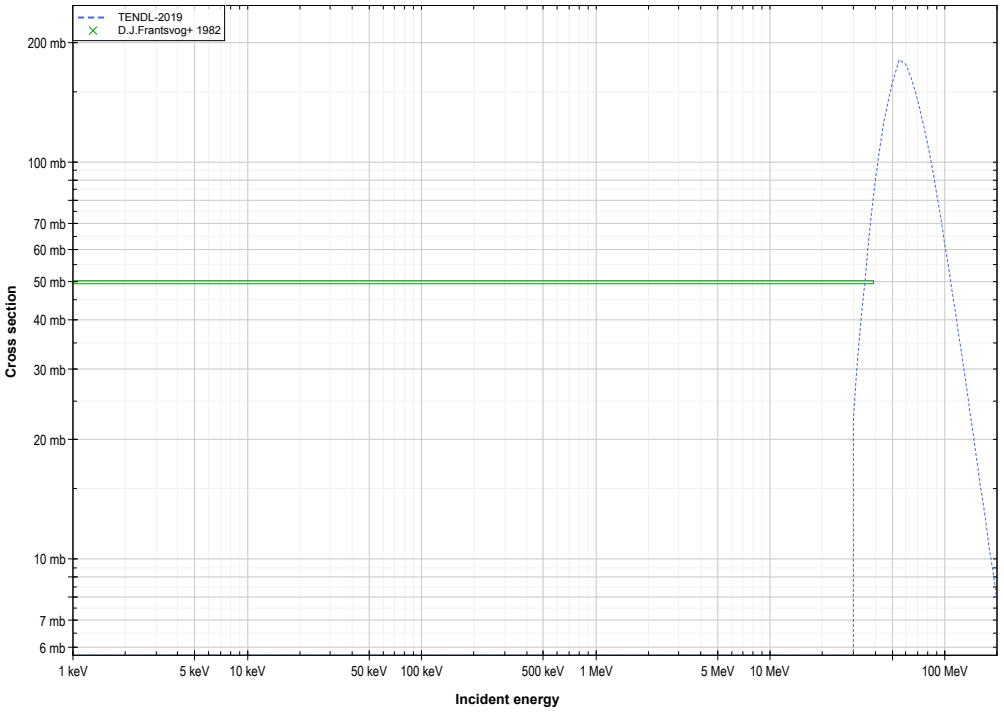
Si28 (^{3}He,n+p+t) or Si26 production lin-log



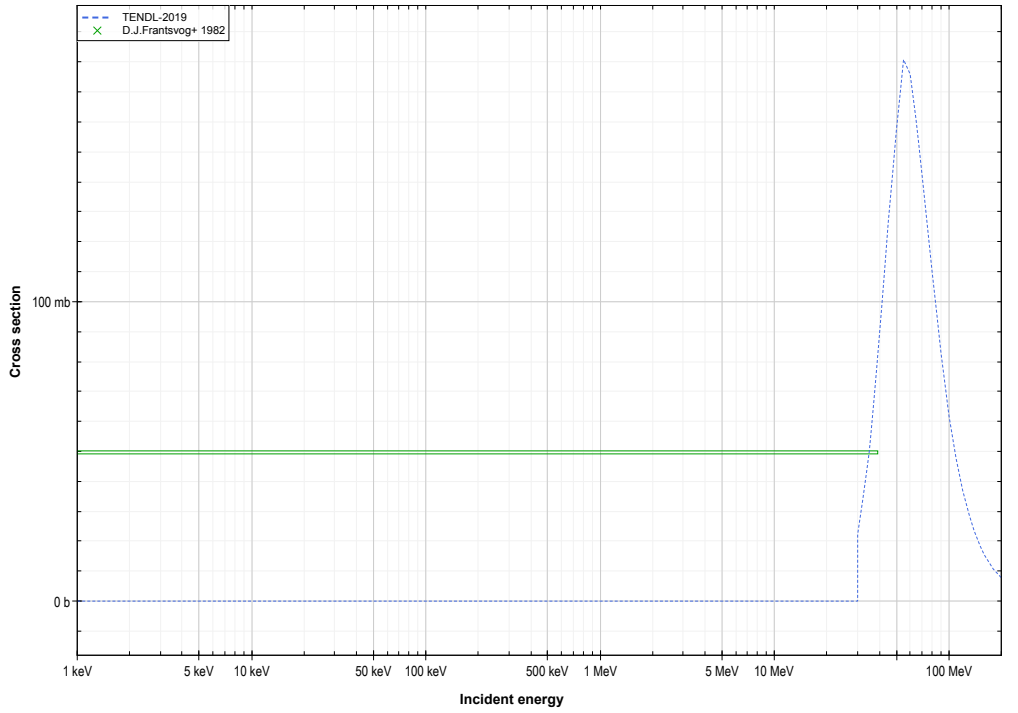
Reaction	Q-Value
Si28(He3,n+α)Si26	-9916.79 keV
Si28(He3,d+t)Si26	-27506.09 keV
Si28(He3,n+p+t)Si26	-29730.65 keV
Si28(He3,2n+He3)Si26	-30494.41 keV
Si28(He3,n+2d)Si26	-33763.32 keV
Si28(He3,2n+p+d)Si26	-35987.88 keV
Si28(He3,3n+2p)Si26	-38212.45 keV

<< 13-Al-27	**14-Si-28**	21-Sc-45 >>
<< MT184 (^{3}He,n+p+t)	**MT190 (^{3}He,2n+2p) or MT5 (Si27 production)**	MT197 (^{3}He,3p) >>

Si28 (^{3}He,2n+2p) or Si27 production log-log



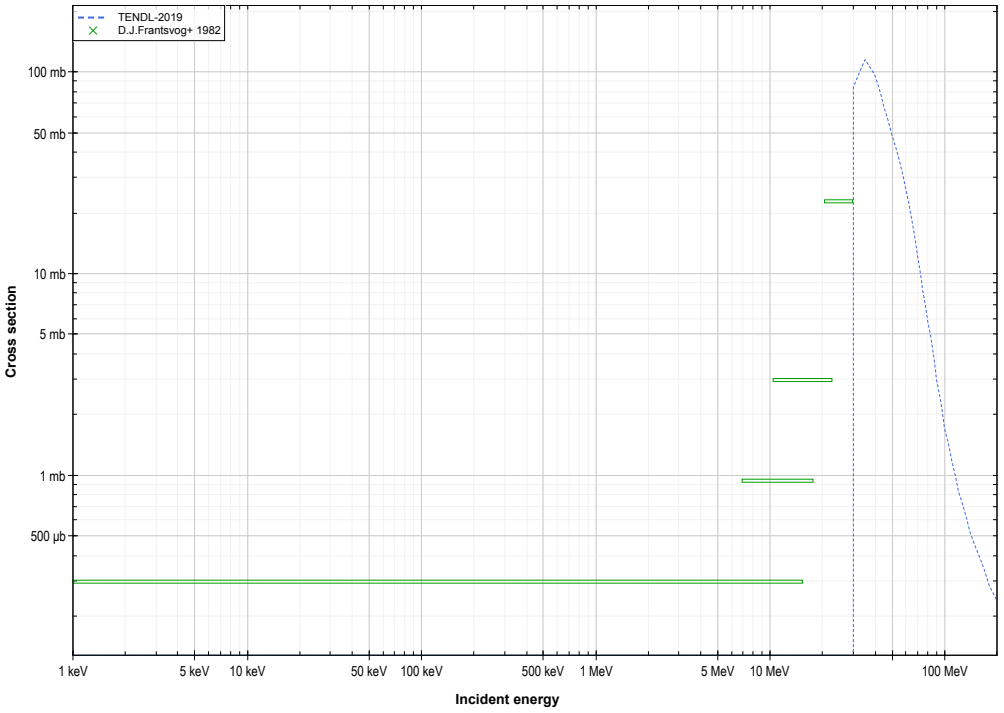
Si28 (^{3}He,2n+2p) or Si27 production lin-log



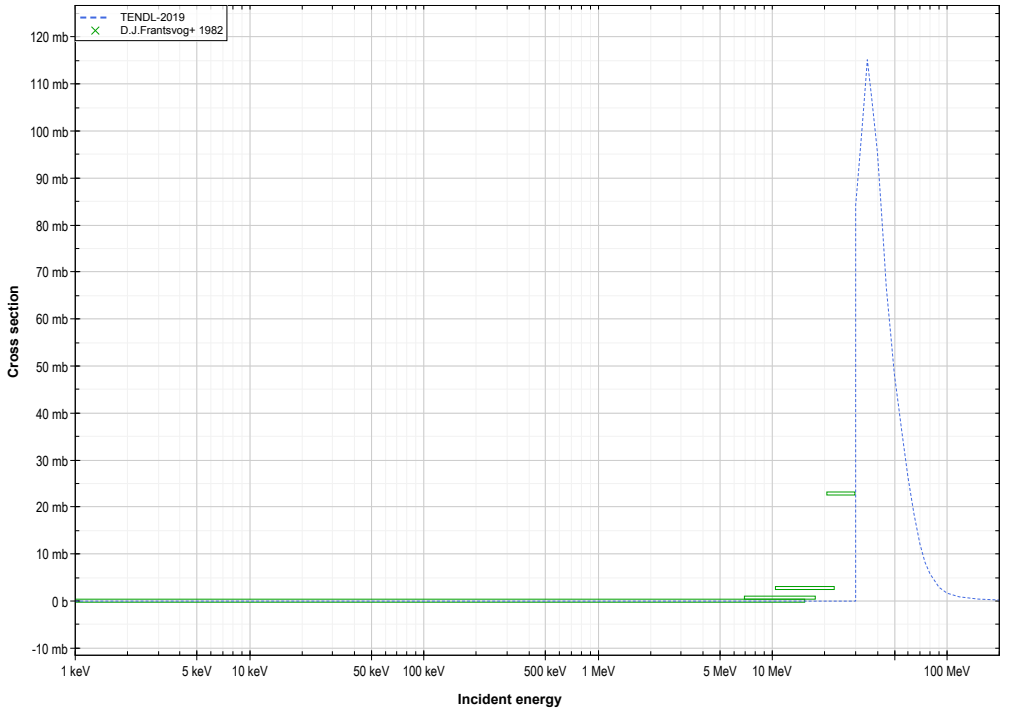
Reaction	Q-Value
Si28(He3,α)Si27	3398.01 keV
Si28(He3,p+t)Si27	-16415.86 keV
Si28(He3,n+He3)Si27	-17179.61 keV
Si28(He3,2d)Si27	-20448.52 keV
Si28(He3,n+p+d)Si27	-22673.09 keV
Si28(He3,2n+2p)Si27	-24897.65 keV

<< 13-Al-27	**14-Si-28**	27-Co-59 >>
<< MT190 (^{3}He,2n+2p)	**MT197 (^{3}He,3p) or MT5 (Al28 production)**	17-Cl-35 MT107 (^{3}He,α) >>

Si28 (^{3}He,3p) or Al28 production log-log



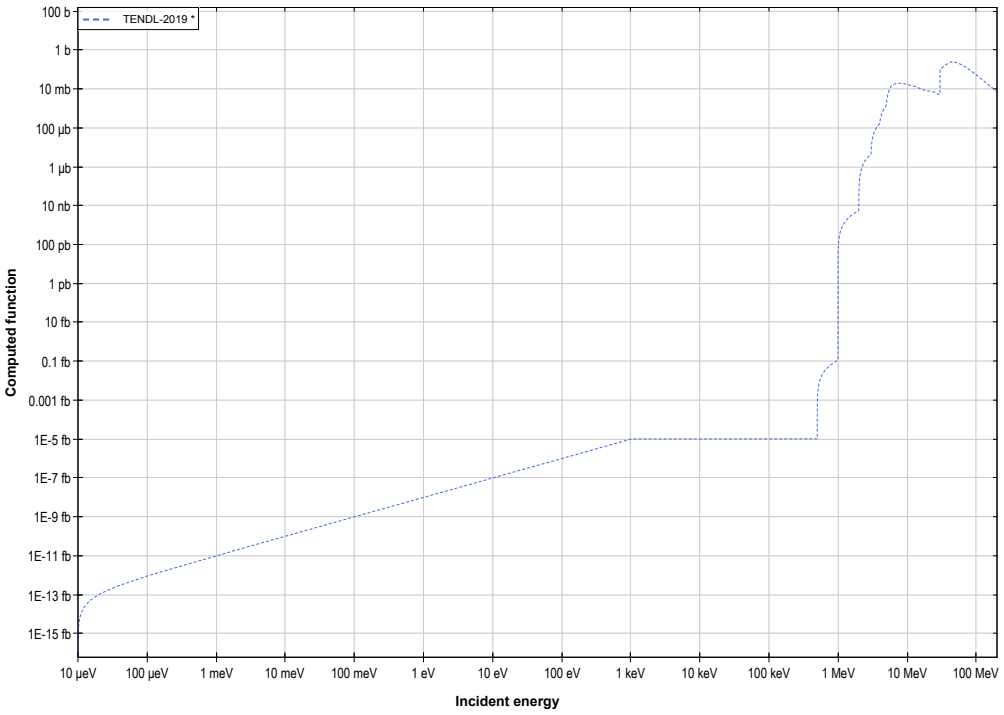
Si28 (^{3}He,3p) or Al28 production lin-log



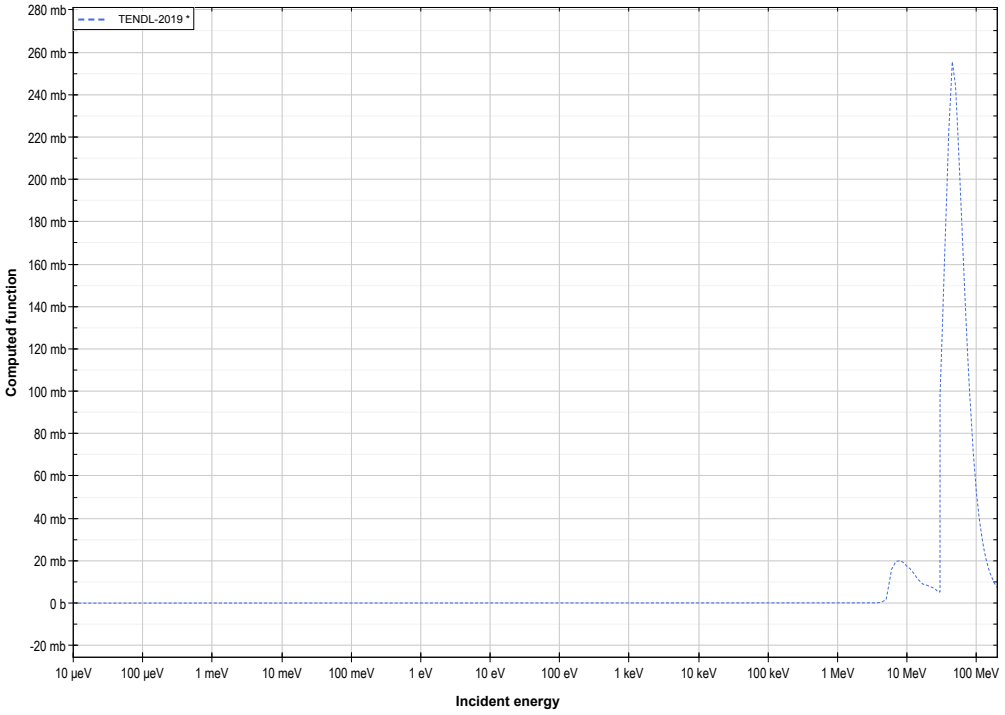
Reaction	Q-Value
Si28(He3,3p)Al28	-11577.85 keV

<< 14-Si-28	**17-Cl-35**	19-K-39 >>
<< 14-Si-28 MT197 (^{3}He,3p)	**MT107 (^{3}He,α) or MT5 (Cl34 production)**	17-Cl-37 MT16 (^{3}He,2n) >>

Cl35 (^{3}He,α) or Cl34 production log-log



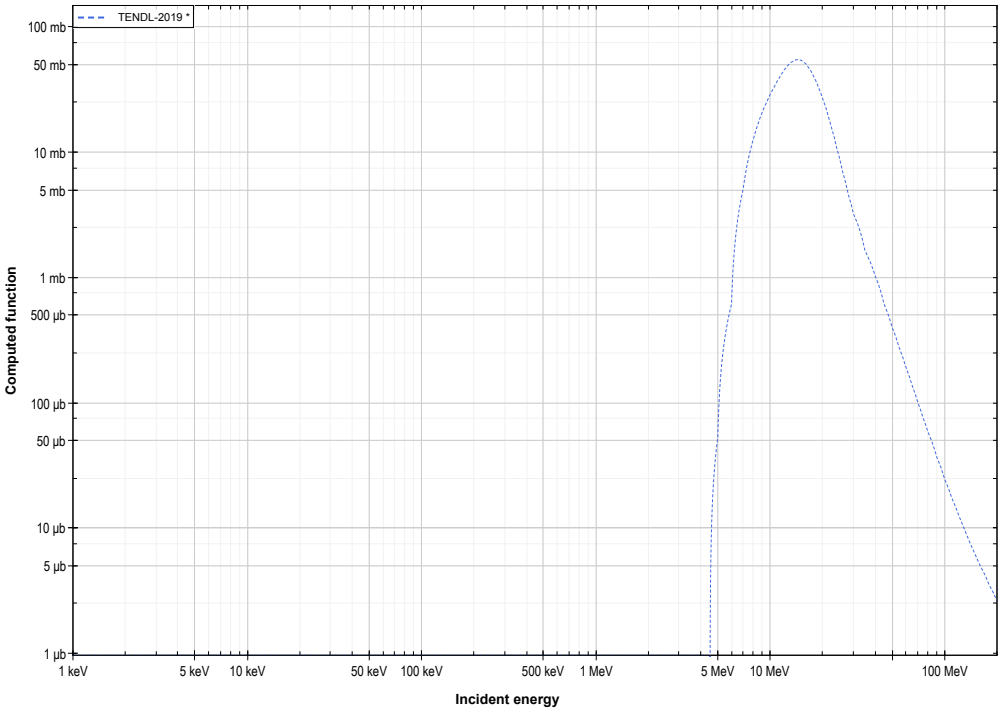
Cl35 (^{3}He,α) or Cl34 production lin-log



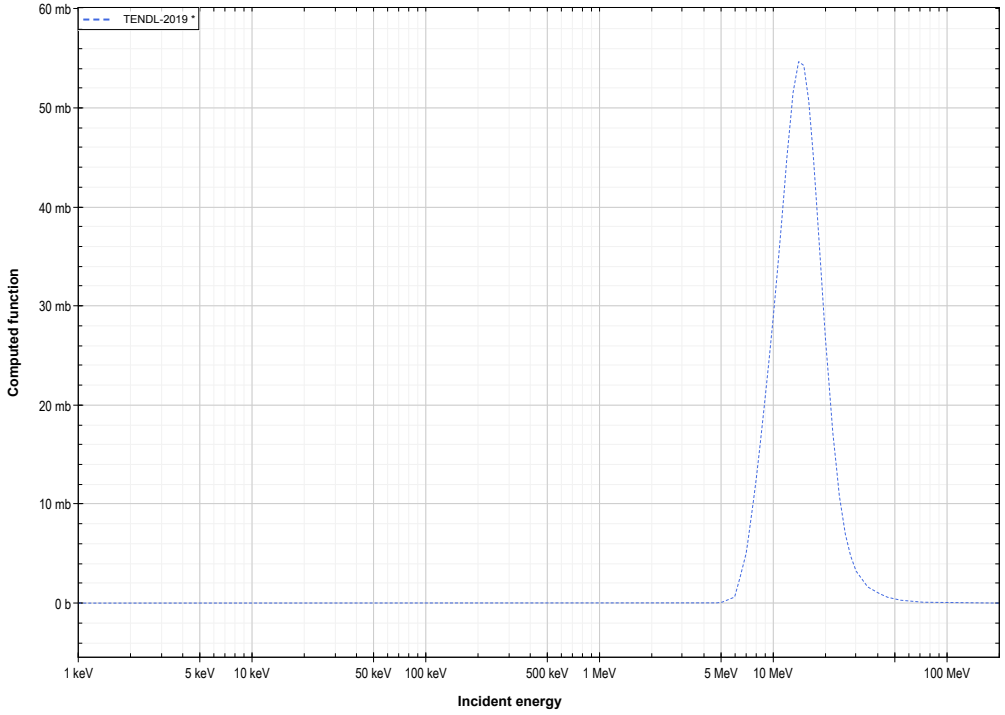
Reaction	Q-Value
Cl35(He3,α)Cl34	7932.85 keV
Cl35(He3,p+t)Cl34	-11881.01 keV
Cl35(He3,n+He3)Cl34	-12644.77 keV
Cl35(He3,2d)Cl34	-15913.68 keV
Cl35(He3,n+p+d)Cl34	-18138.24 keV
Cl35(He3,2n+2p)Cl34	-20362.81 keV

<< 13-Al-27	**17-Cl-37**	24-Cr-50 >>
<< 17-Cl-35 MT107 (^{3}He,α)	**MT16 (^{3}He,2n) or MT5 (K38 production)**	MT111 (^{3}He,2p) >>

Cl37 (^{3}He,2n) or K38 production log-log



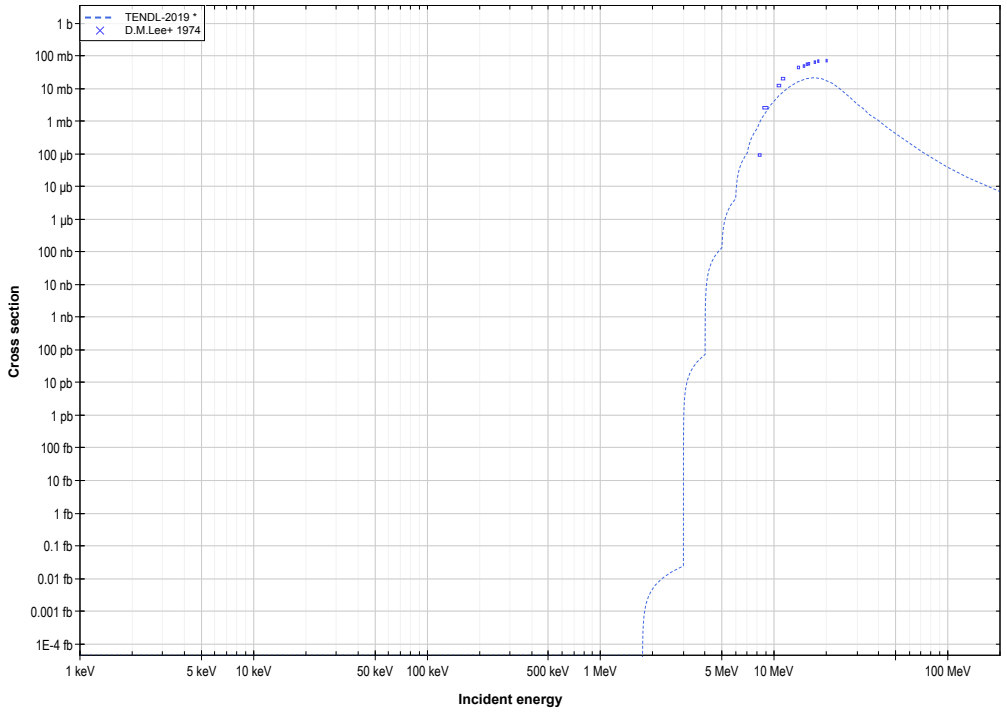
Cl37 (^{3}He,2n) or K38 production lin-log



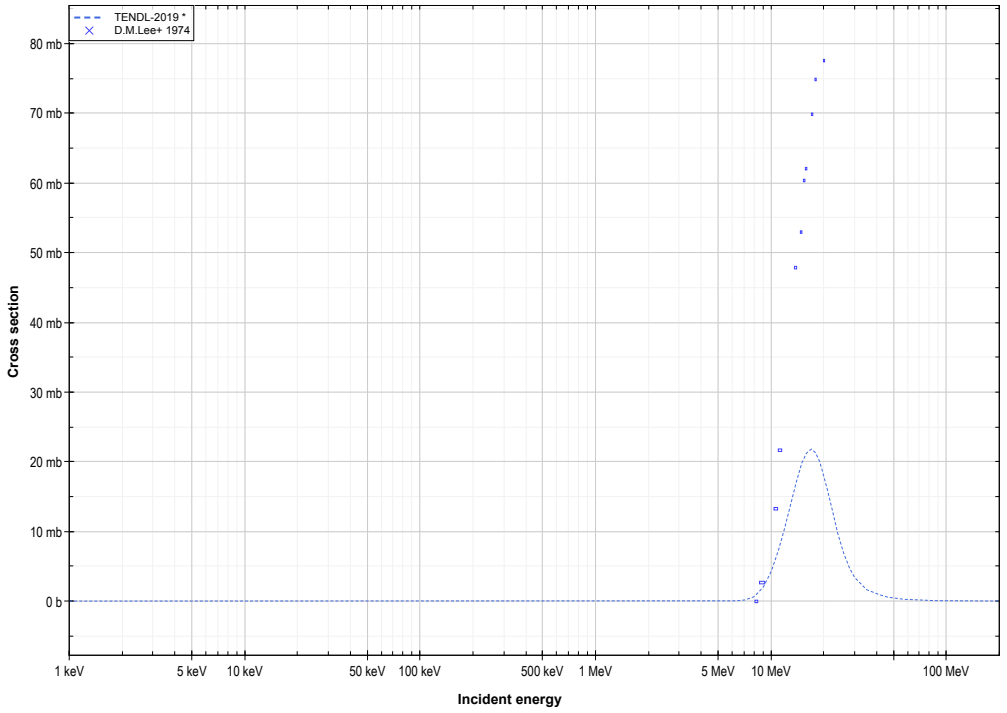
Reaction	Q-Value
Cl37(He3,2n)K38	-4172.21 keV

<< 13-Al-27	**17-Cl-37**	21-Sc-45 >>
<< MT16 (^{3}He,2n)	**MT111 (^{3}He,2p) or MT5 (Cl38 production)**	19-K-39 MT107 (^{3}He,α) >>

Cl37 (^{3}He,2p) or Cl38 production log-log



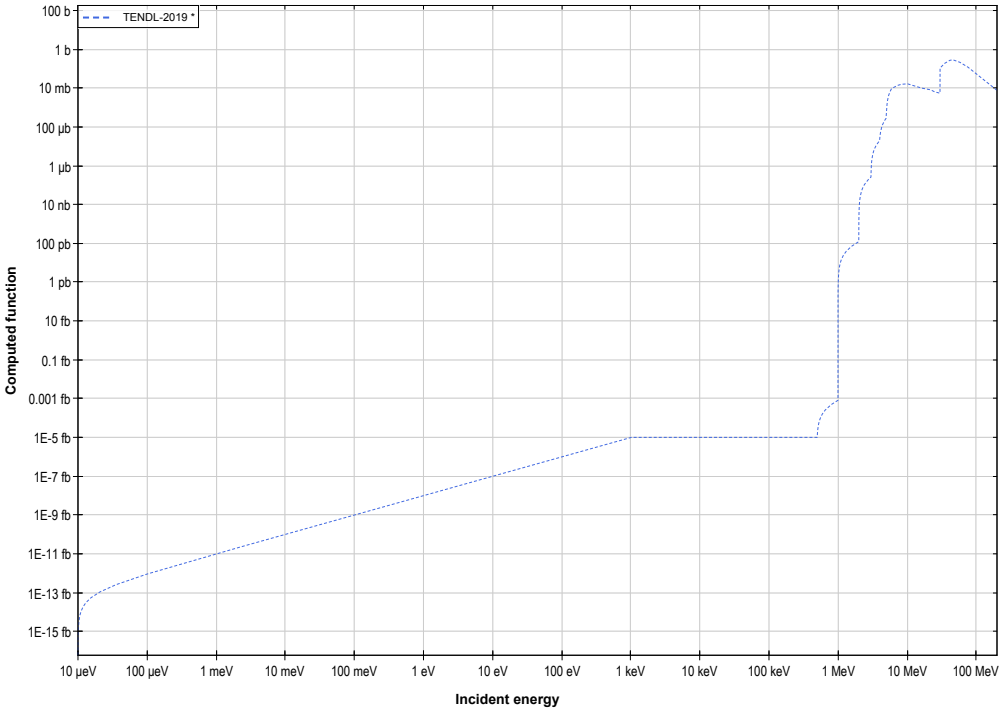
Cl37 (^{3}He,2p) or Cl38 production lin-log



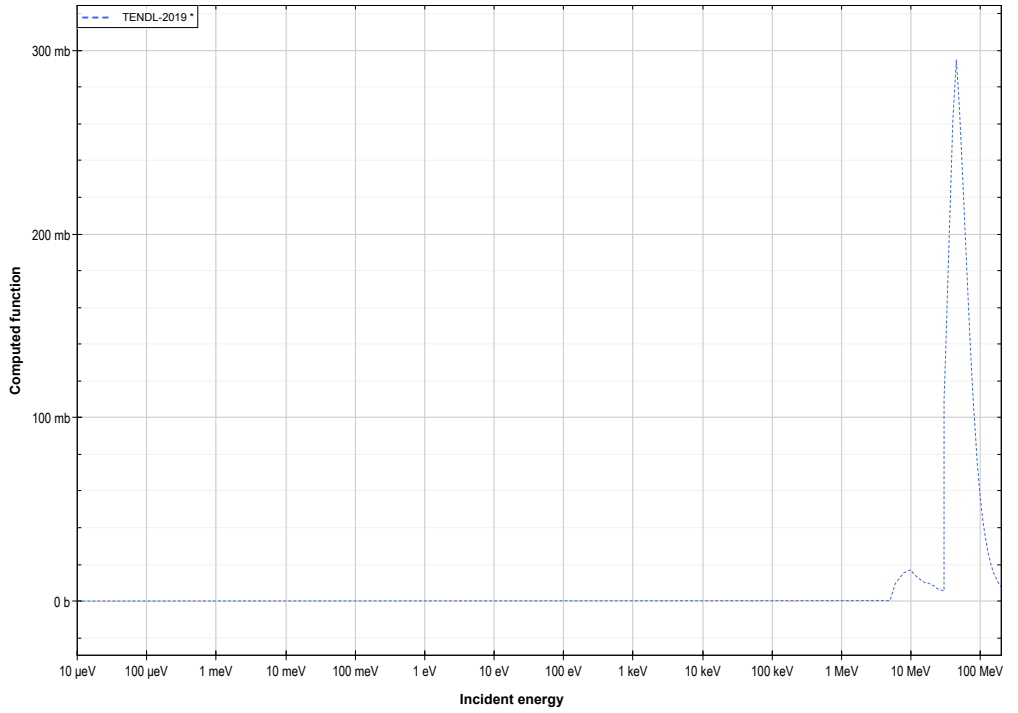
Reaction	Q-Value
Cl37(He3,2p)Cl38	-1610.16 keV

<< 17-Cl-35	**19-K-39**	21-Sc-45 >>
<< 17-Cl-37 MT111 (³He,2p)	**MT107 (³He,α) or MT5 (K38 production)**	MT108 (³He,2α) >>

K39 (³He,α) or K38 production log-log



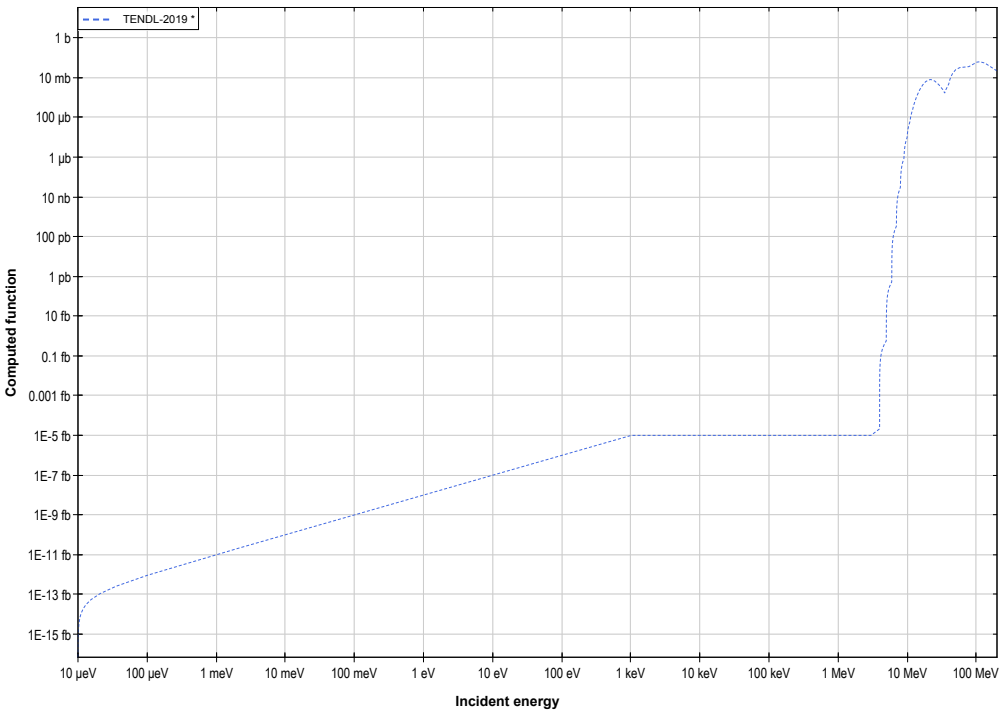
K39 (³He,α) or K38 production lin-log



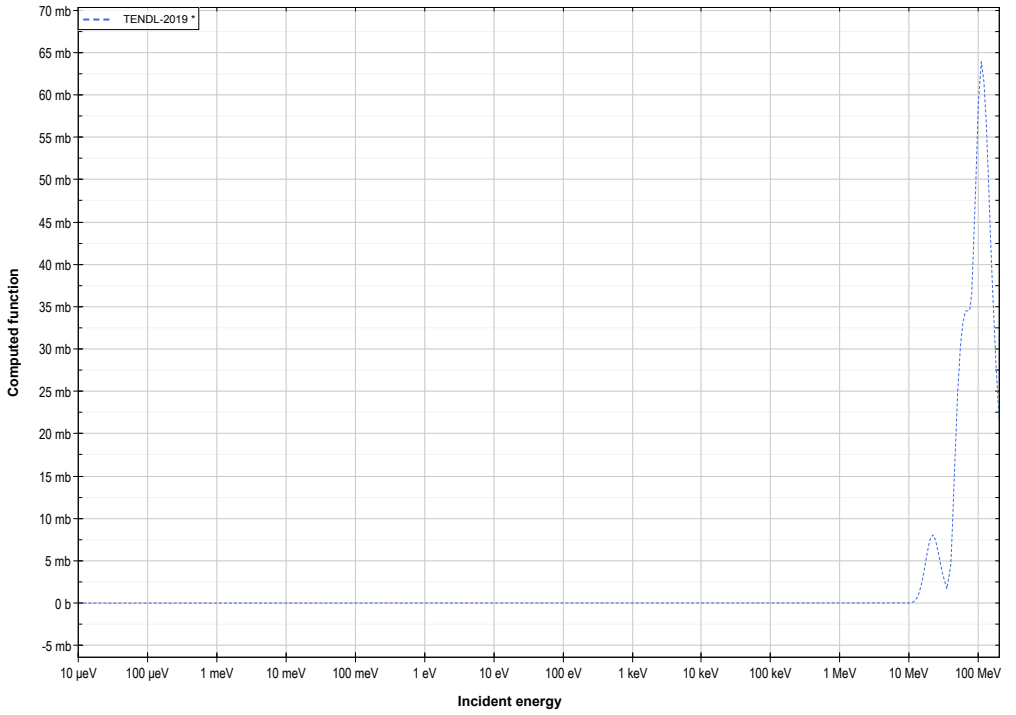
Reaction	Q-Value
K39(He3,α)K38	7499.86 keV
K39(He3,p+t)K38	-12314.00 keV
K39(He3,n+He3)K38	-13077.76 keV
K39(He3,2d)K38	-16346.67 keV
K39(He3,n+p+d)K38	-18571.23 keV
K39(He3,2n+2p)K38	-20795.80 keV

<< 14-Si-28	**19-K-39**	27-Co-59 >>
<< MT107 (^{3}He,α)	**MT108 (^{3}He,2α) or MT5 (Cl34 production)**	19-K-41 MT102 (^{3}He,γ) >>

K39 (^{3}He,2α) or Cl34 production log-log



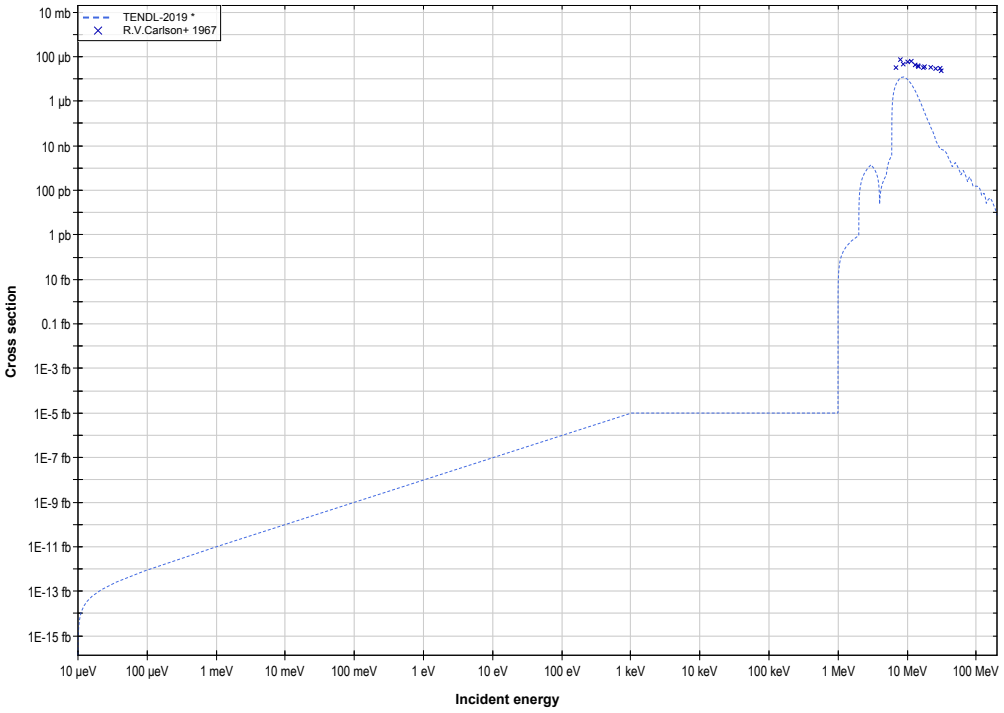
K39 (^{3}He,2α) or Cl34 production lin-log



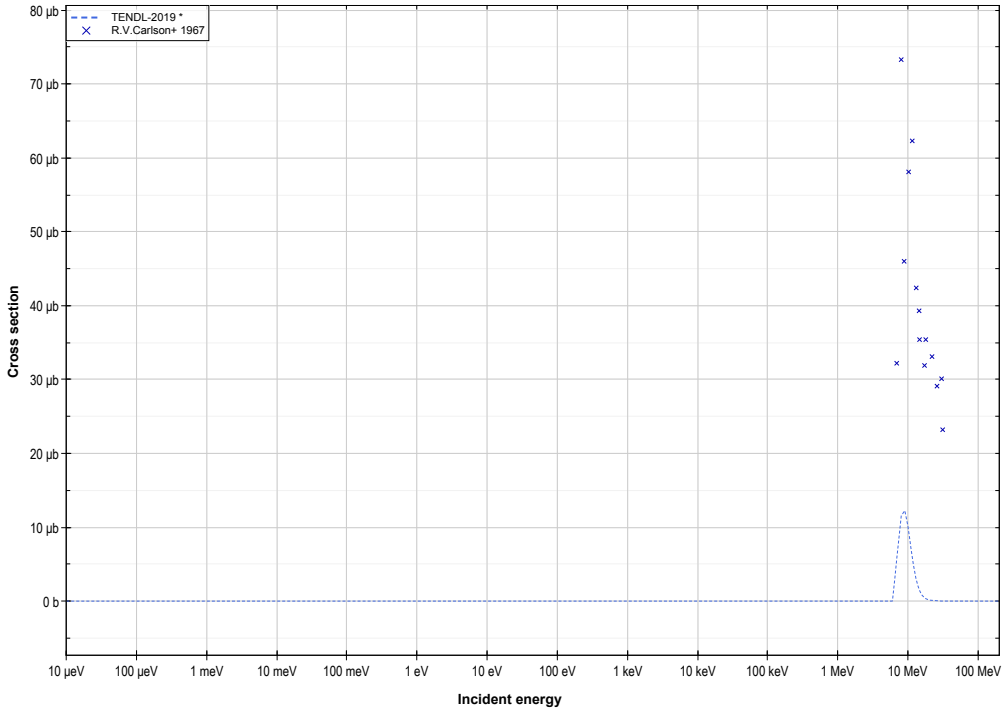
Reaction	Q-Value	Reaction	Q-Value
K39(He3,2α)Cl34	714.28 keV	K39(He3,n+p+t+He3)Cl34	-39677.21 keV
K39(He3,p+t+α)Cl34	-19099.59 keV	K39(He3,2n+2He3)Cl34	-40440.96 keV
K39(He3,n+He3+α)Cl34	-19863.34 keV	K39(He3,p+2d+t)Cl34	-42946.12 keV
K39(He3,2d+α)Cl34	-23132.25 keV	K39(He3,n+2d+He3)Cl34	-43709.87 keV
K39(He3,n+p+d+α)Cl34	-25356.82 keV	K39(He3,n+2p+d+t)Cl34	-45170.68 keV
K39(He3,2n+2p+α)Cl34	-27581.38 keV	K39(He3,2n+p+d+He3)Cl34	-45934.44 keV
K39(He3,d+t+He3)Cl34	-37452.64 keV	K39(He3,4d)Cl34	-46978.78 keV
K39(He3,2p+2t)Cl34	-38913.45 keV	K39(He3,2n+3p+t)Cl34	-47395.25 keV

<< 14-Si-28	**19-K-41**	21-Sc-45 >>
<< 19-K-39 MT108 (^{3}He,2α)	**MT102 (^{3}He,γ) or MT5 (Sc44 production)**	21-Sc-45 MT22 (^{3}He,n+α) >>

K41 (^{3}He,γ) or Sc44 production log-log



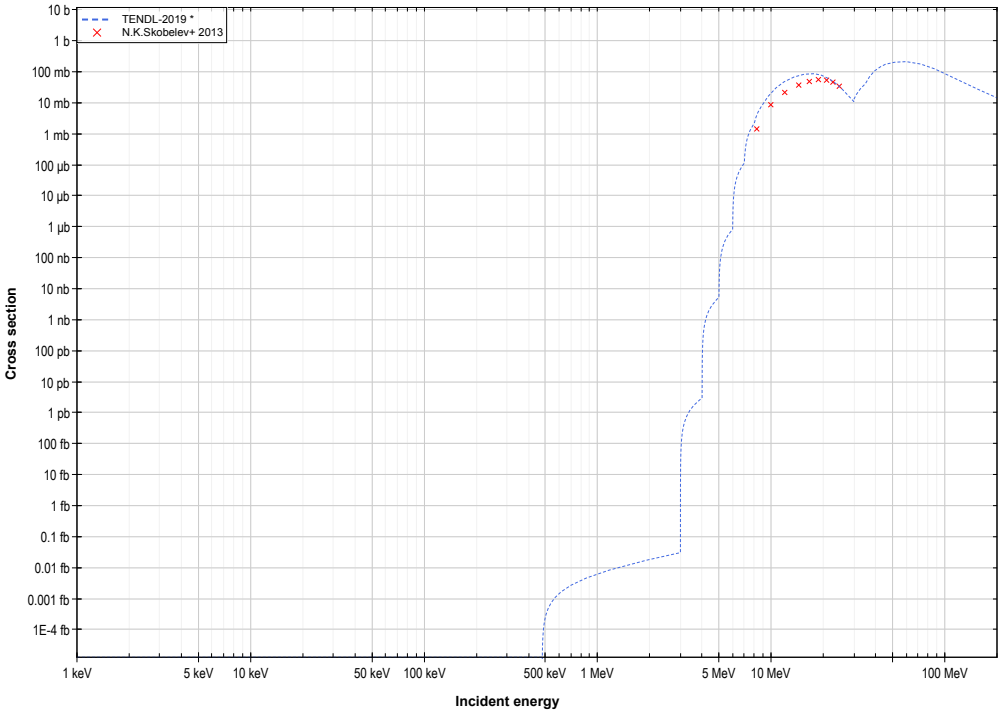
K41 (^{3}He,γ) or Sc44 production lin-log



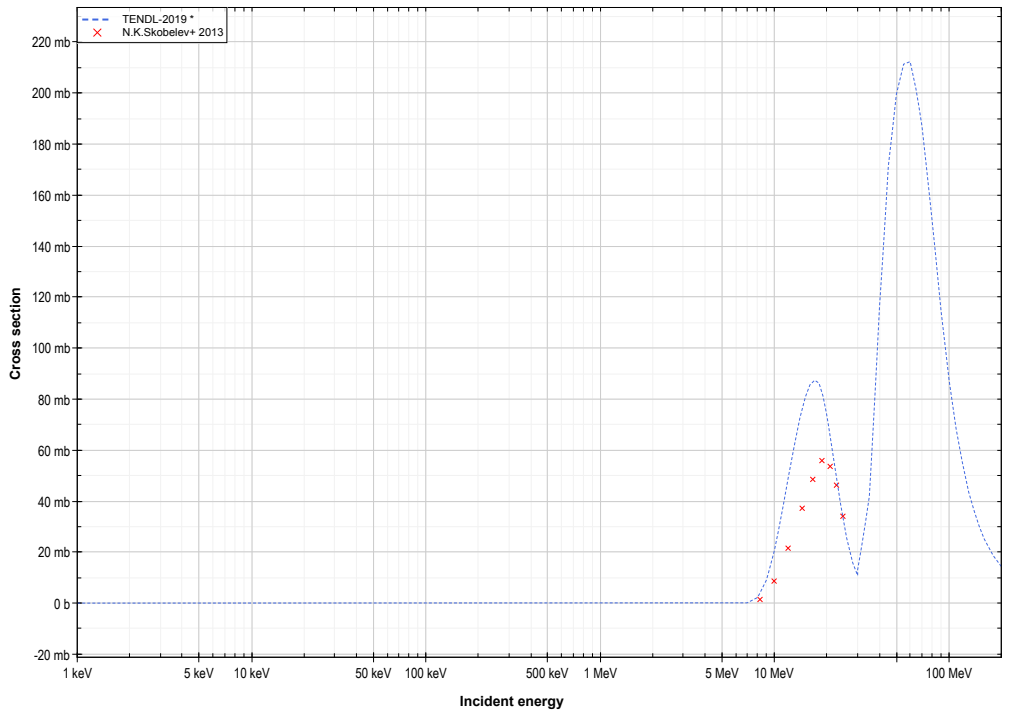
Reaction	Q-Value
K41(He3,γ)Sc44	17187.67 keV

<< 14-Si-28	**21-Sc-45**	23-V-51 >>
<< 19-K-41 MT102 (³He,γ)	**MT22 (³He,n+α) or MT5 (Sc43 production)**	MT32 (³He,n+d) >>

Sc45 (³He,n+α) or Sc43 production log-log



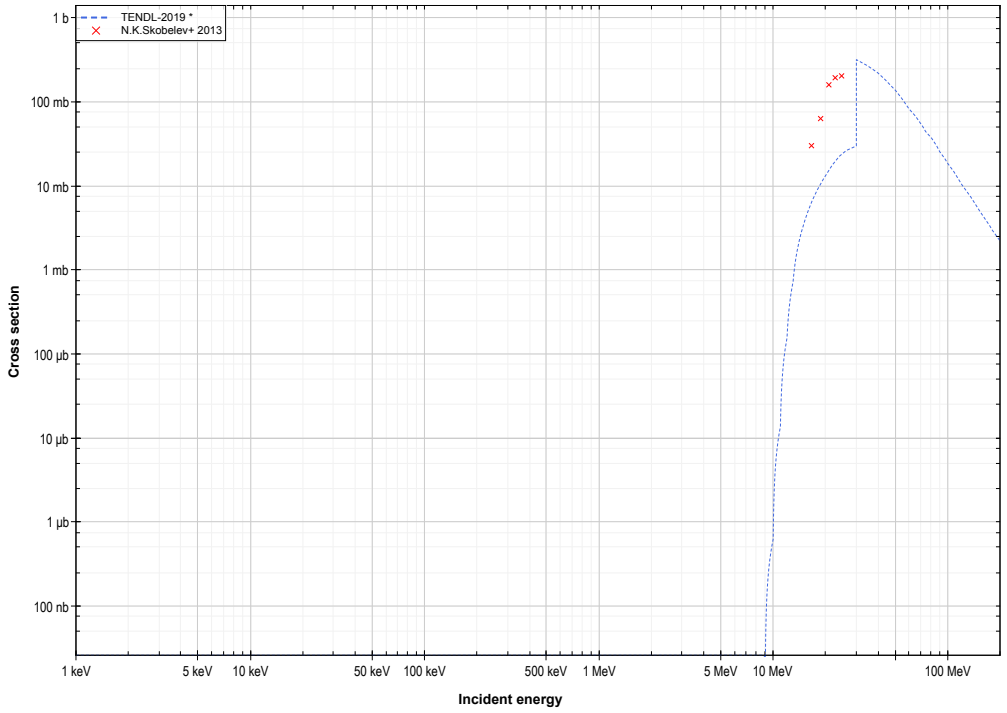
Sc45 (³He,n+α) or Sc43 production lin-log



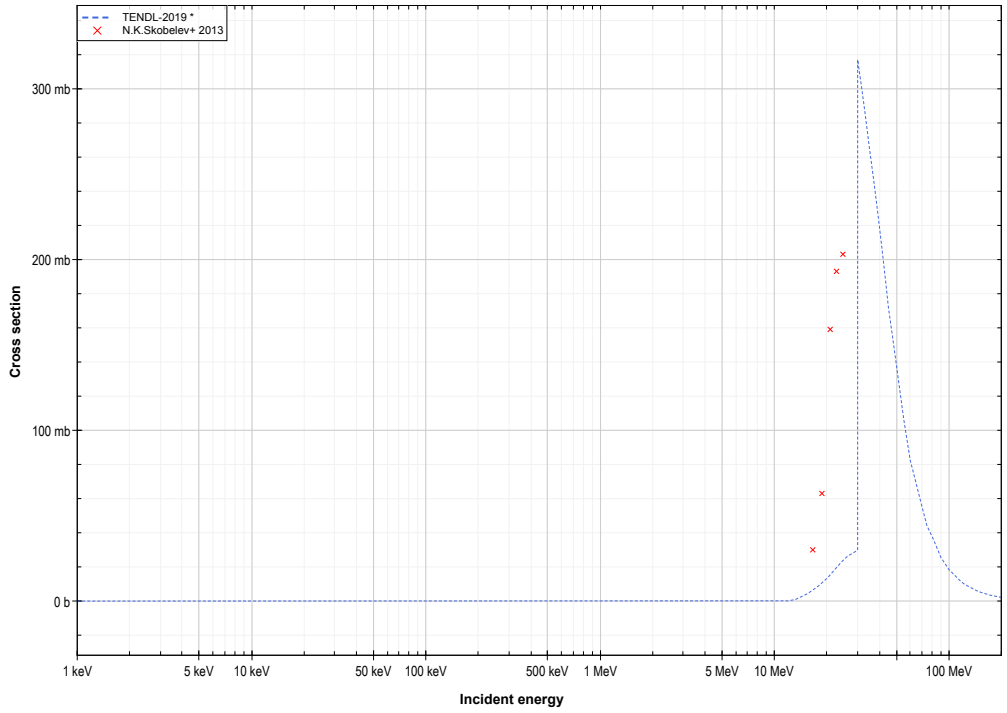
Reaction	Q-Value
Sc45(He3,n+α)Sc43	-448.81 keV
Sc45(He3,d+t)Sc43	-18038.11 keV
Sc45(He3,n+p+t)Sc43	-20262.68 keV
Sc45(He3,2n+He3)Sc43	-21026.43 keV
Sc45(He3,n+2d)Sc43	-24295.34 keV
Sc45(He3,2n+p+d)Sc43	-26519.91 keV
Sc45(He3,3n+2p)Sc43	-28744.47 keV

<< 14-Si-28	**21-Sc-45**	24-Cr-52 >>
<< MT22 (^{3}He,n+α)	**MT32 (^{3}He,n+d) or MT5 (Ti45 production)**	MT34 (^{3}He,n+^{3}He) >>

Sc45 (^{3}He,n+d) or Ti45 production log-log

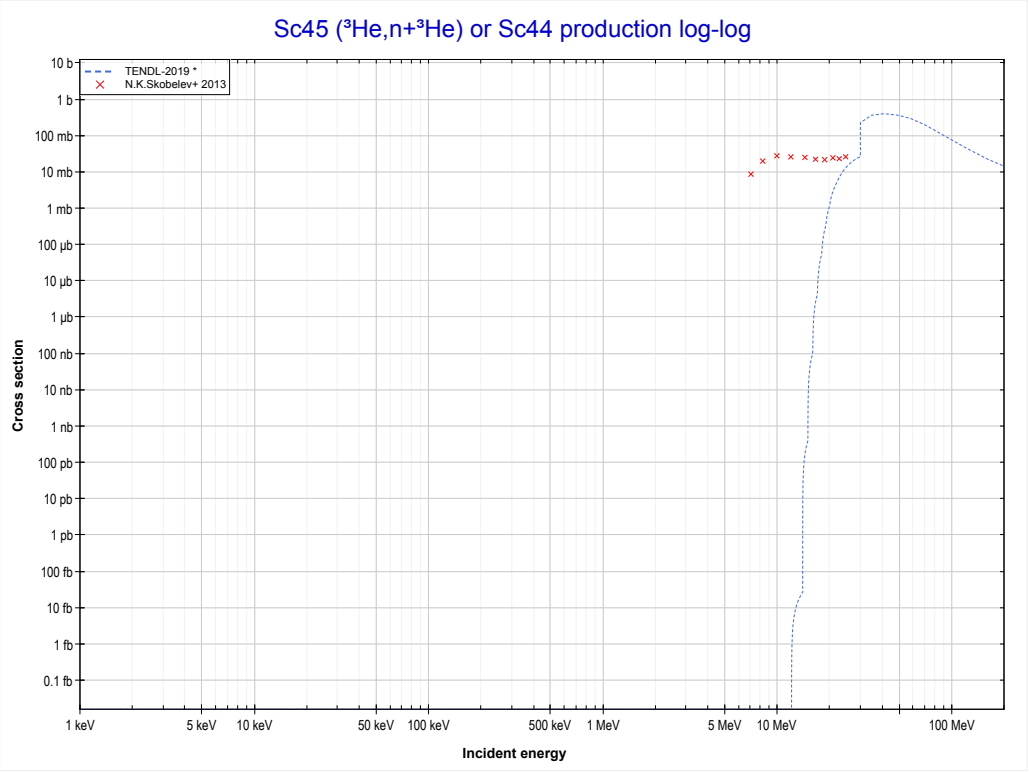


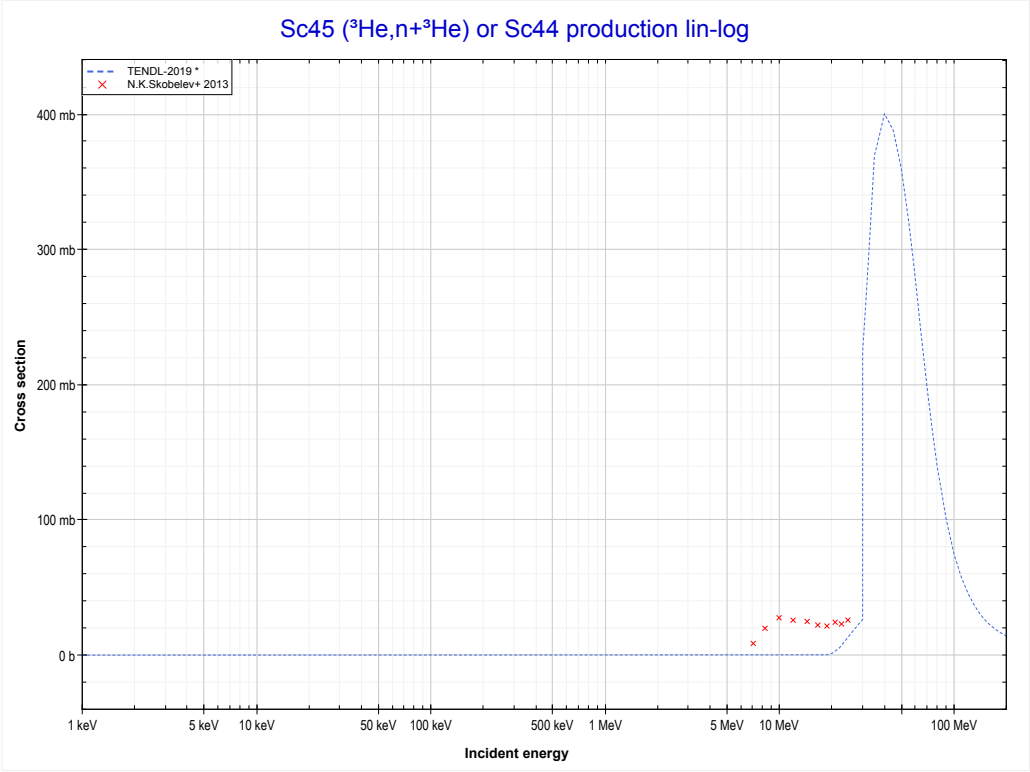
Sc45 (^{3}He,n+d) or Ti45 production lin-log



Reaction	Q-Value
Sc45(He3,t)Ti45	-2080.69 keV
Sc45(He3,n+d)Ti45	-8337.92 keV
Sc45(He3,2n+p)Ti45	-10562.49 keV

<< 14-Si-28	**21-Sc-45**	25-Mn-55 >>
<< MT32 (^{3}He,n+d)	**MT34 (^{3}He,n+^{3}He) or MT5 (Sc44 production)**	MT41 (^{3}He,2n+p) >>

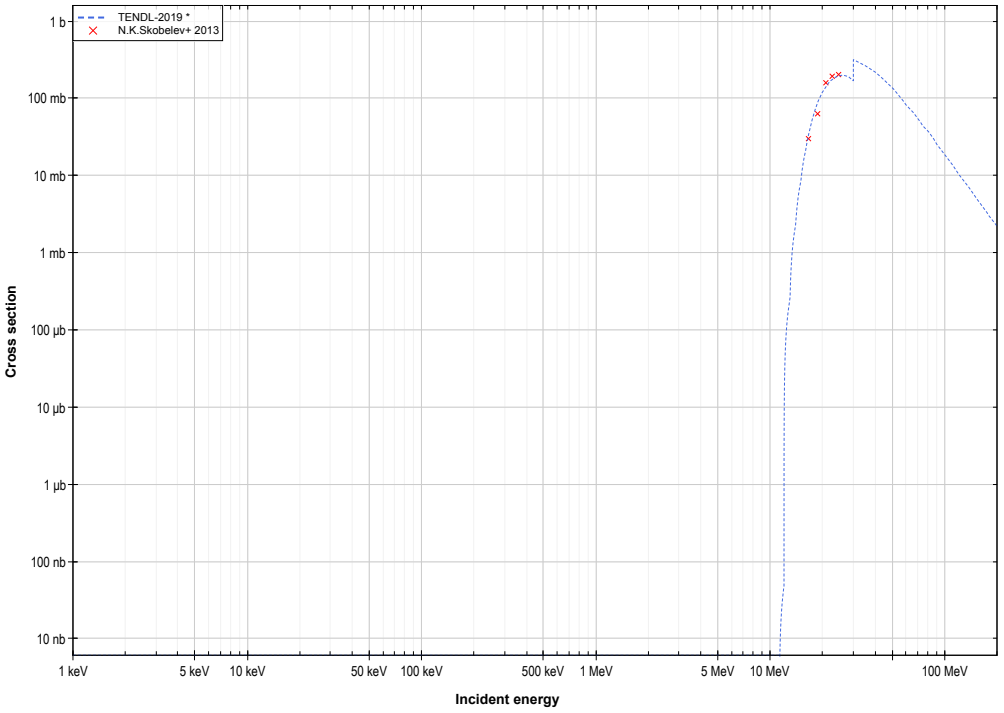




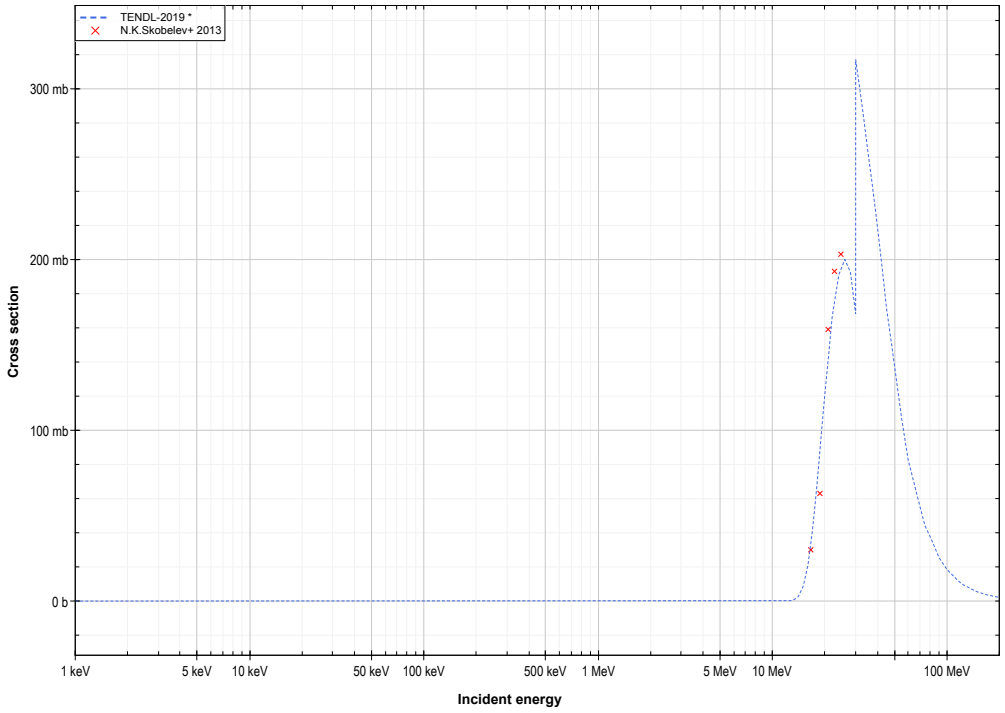
Reaction	Q-Value
Sc45(He3,α)Sc44	9250.40 keV
Sc45(He3,p+t)Sc44	-10563.46 keV
Sc45(He3,n+He3)Sc44	-11327.22 keV
Sc45(He3,2d)Sc44	-14596.13 keV
Sc45(He3,n+p+d)Sc44	-16820.69 keV
Sc45(He3,2n+2p)Sc44	-19045.26 keV

<< 14-Si-28	**21-Sc-45**	24-Cr-52 >>
<< MT34 (^{3}He,n+^{3}He)	**MT41 (^{3}He,2n+p) or MT5 (Ti45 production)**	MT102 (^{3}He,γ) >>

Sc45 (^{3}He,2n+p) or Ti45 production log-log



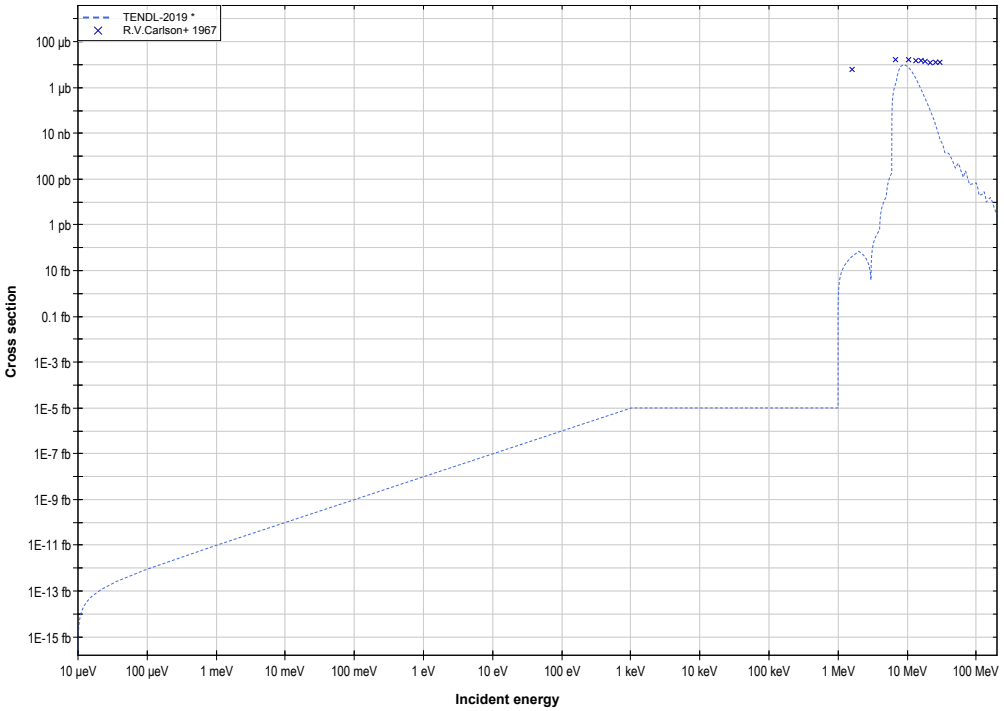
Sc45 (^{3}He,2n+p) or Ti45 production lin-log



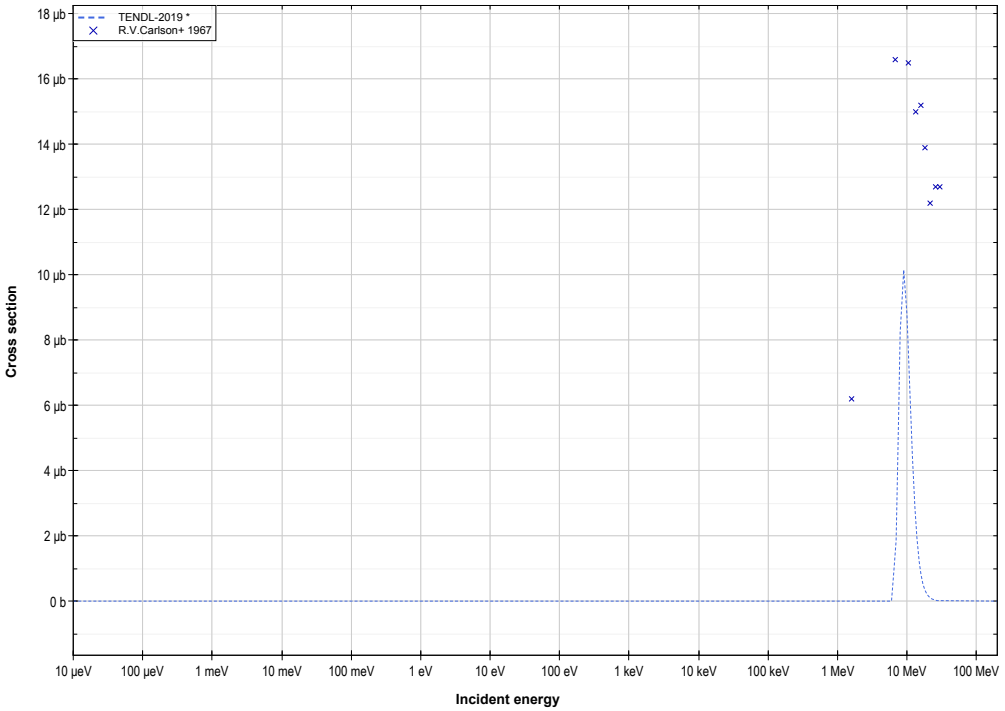
Reaction	Q-Value
Sc45(He3,t)Ti45	-2080.69 keV
Sc45(He3,n+d)Ti45	-8337.92 keV
Sc45(He3,2n+p)Ti45	-10562.49 keV

<< 19-K-41	**21-Sc-45**	31-Ga-71 >>
<< MT41 (³He,2n+p)	**MT102 (³He,γ) or MT5 (V48 production)**	MT105 (³He,t) >>

Sc45 (³He,γ) or V48 production log-log



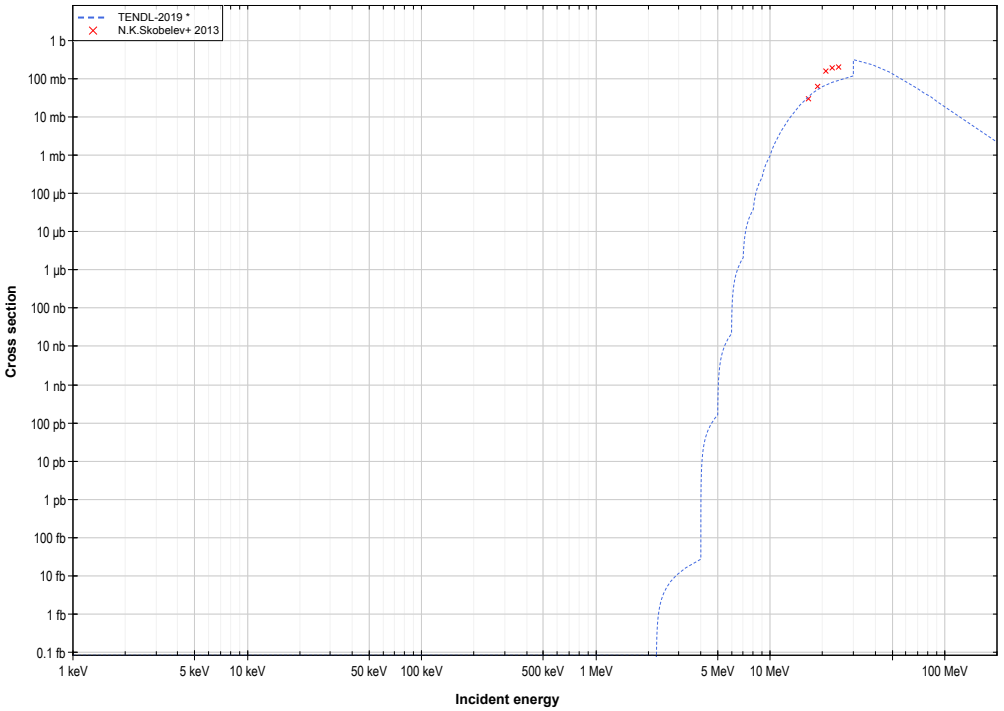
Sc45 (³He,γ) or V48 production lin-log



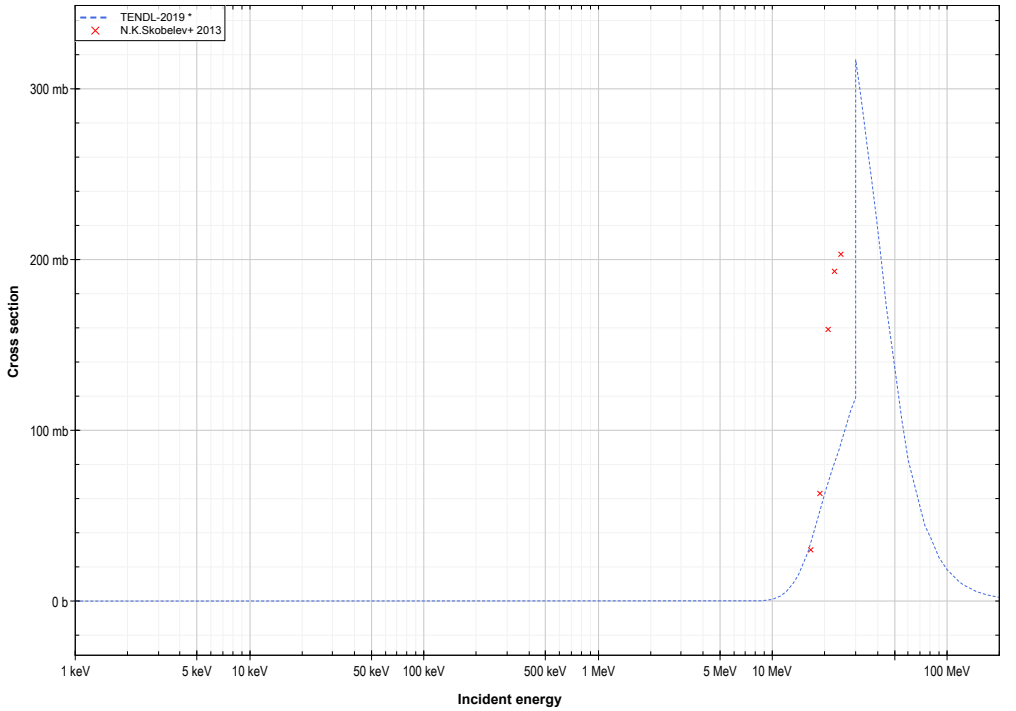
Reaction	Q-Value
Sc45(He3,γ)V48	18337.02 keV

<< 14-Si-28	**21-Sc-45**	24-Cr-52 >>
<< MT102 (³He,γ)	**MT105 (³He,t) or MT5 (Ti45 production)**	MT107 (³He,α) >>

Sc45 (³He,t) or Ti45 production log-log



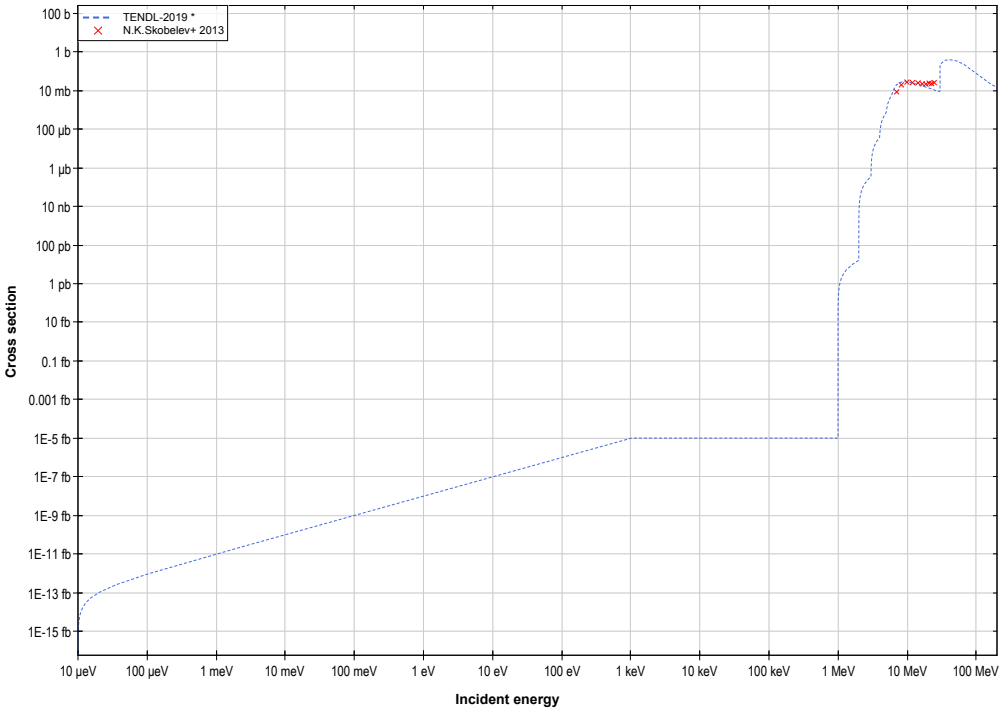
Sc45 (³He,t) or Ti45 production lin-log



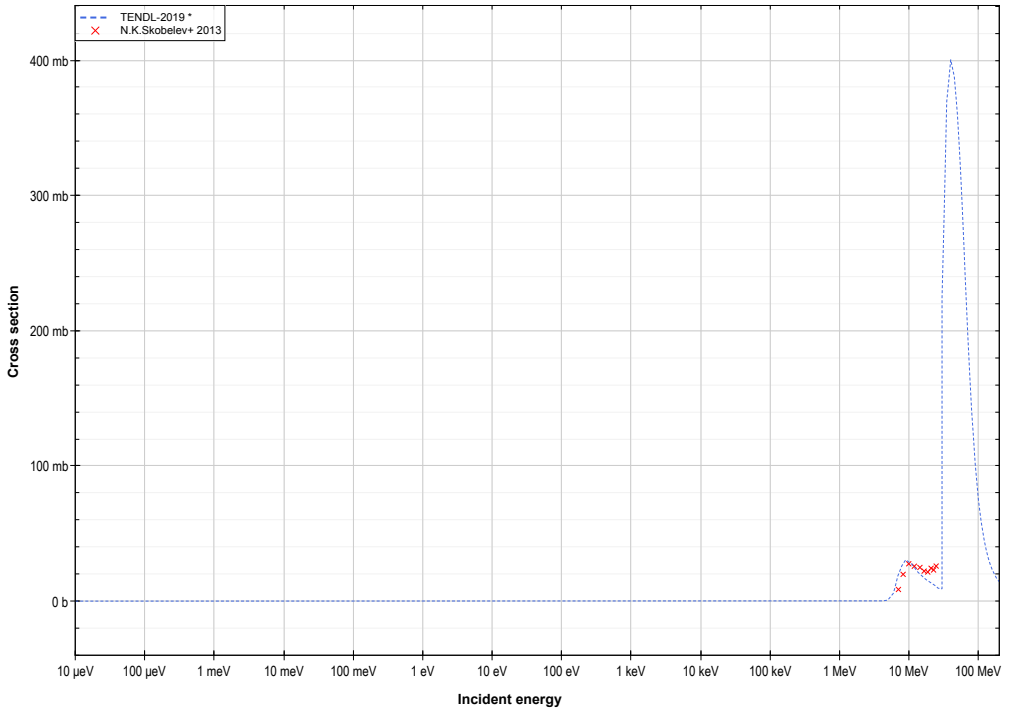
Reaction	Q-Value
Sc45(He3,t)Ti45	-2080.69 keV
Sc45(He3,n+d)Ti45	-8337.92 keV
Sc45(He3,2n+p)Ti45	-10562.49 keV

<< 19-K-39	**21-Sc-45**	25-Mn-55 >>
<< MT105 (^{3}He,t)	**MT107 (^{3}He,α) or MT5 (Sc44 production)**	MT111 (^{3}He,2p) >>

Sc45 (^{3}He,α) or Sc44 production log-log



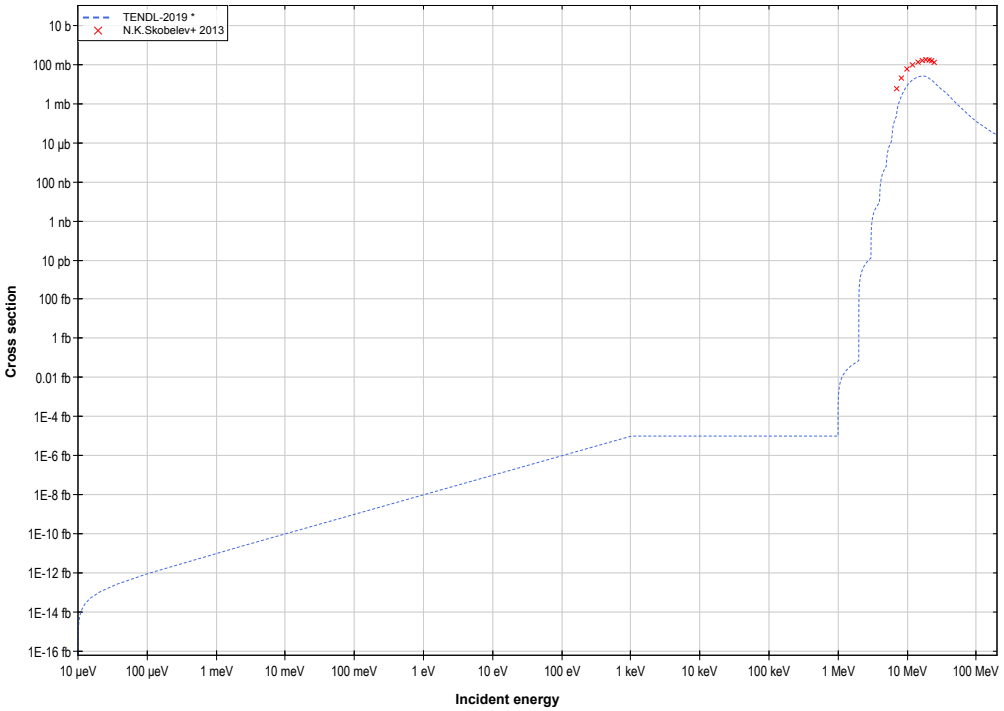
Sc45 (^{3}He,α) or Sc44 production lin-log



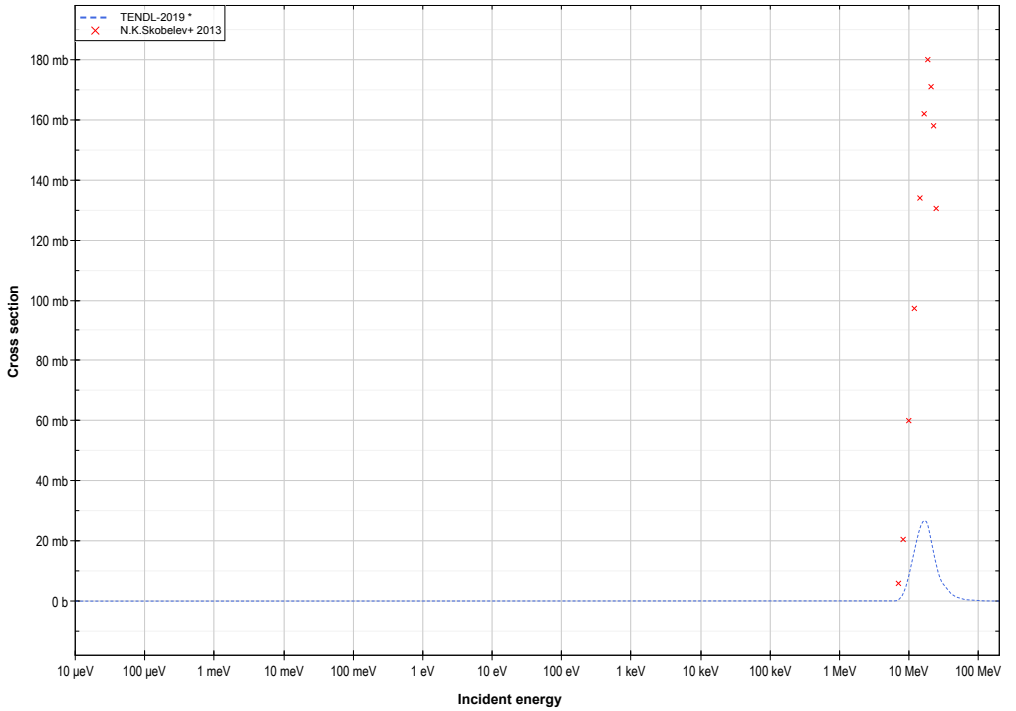
Reaction	Q-Value
Sc45(He3,α)Sc44	9250.40 keV
Sc45(He3,p+t)Sc44	-10563.46 keV
Sc45(He3,n+He3)Sc44	-11327.22 keV
Sc45(He3,2d)Sc44	-14596.13 keV
Sc45(He3,n+p+d)Sc44	-16820.69 keV
Sc45(He3,2n+2p)Sc44	-19045.26 keV

<< 17-Cl-37	**21-Sc-45**	25-Mn-55 >>
<< MT107 (^{3}He,α)	**MT111 (^{3}He,2p) or MT5 (Sc46 production)**	MT116 (^{3}He,p+t) >>

Sc45 (^{3}He,2p) or Sc46 production log-log



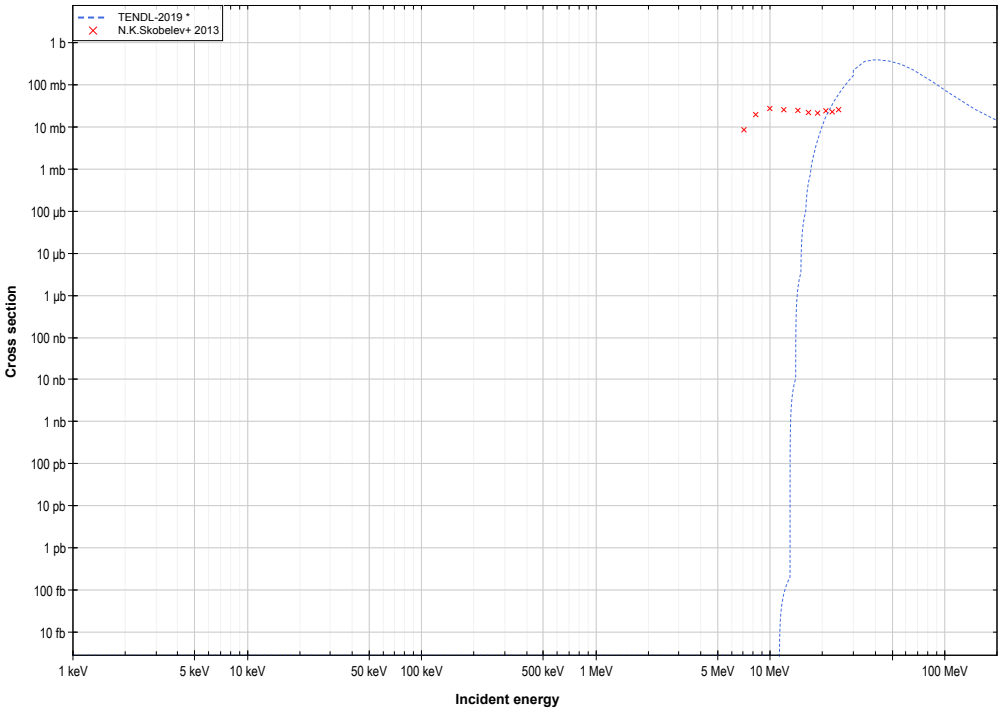
Sc45 (^{3}He,2p) or Sc46 production lin-log



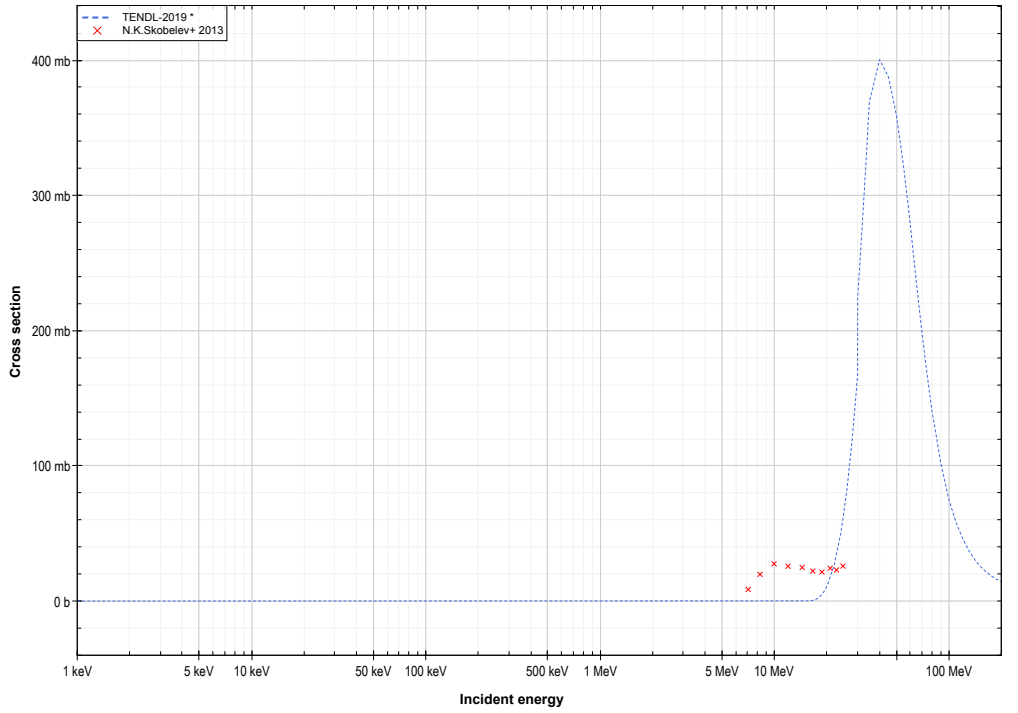
Reaction	Q-Value
Sc45(He3,2p)Sc46	1042.58 keV

<< 14-Si-28	**21-Sc-45**	25-Mn-55 >>
<< MT111 (^{3}He,2p)	**MT116 (^{3}He,p+t) or MT5 (Sc44 production)**	MT176 (^{3}He,2n+^{3}He) >>

Sc45 (^{3}He,p+t) or Sc44 production log-log



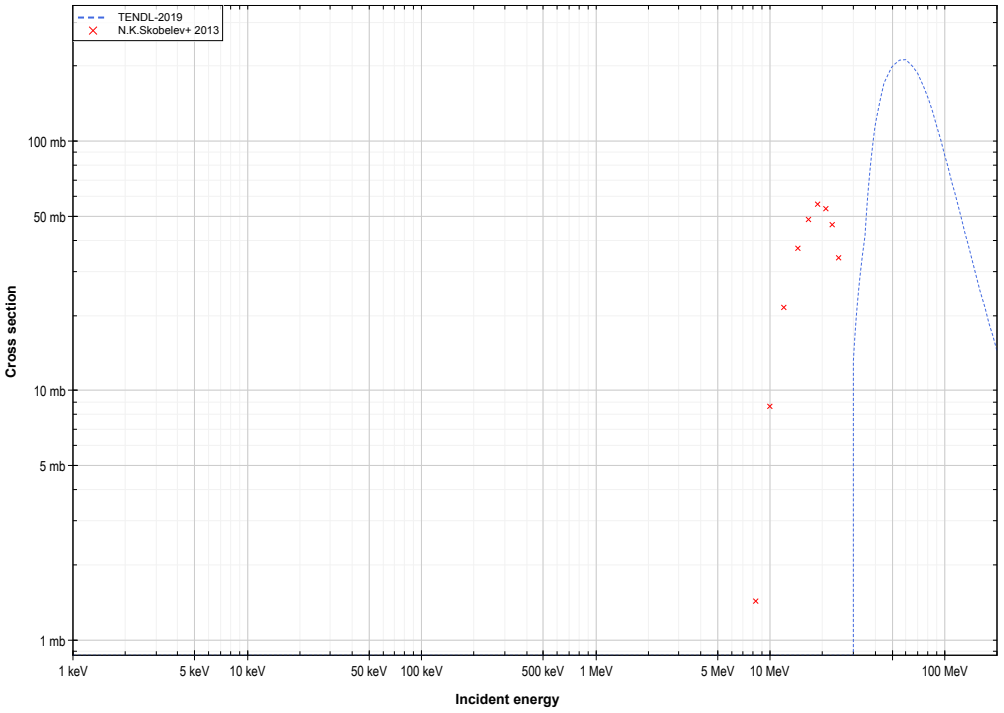
Sc45 (^{3}He,p+t) or Sc44 production lin-log



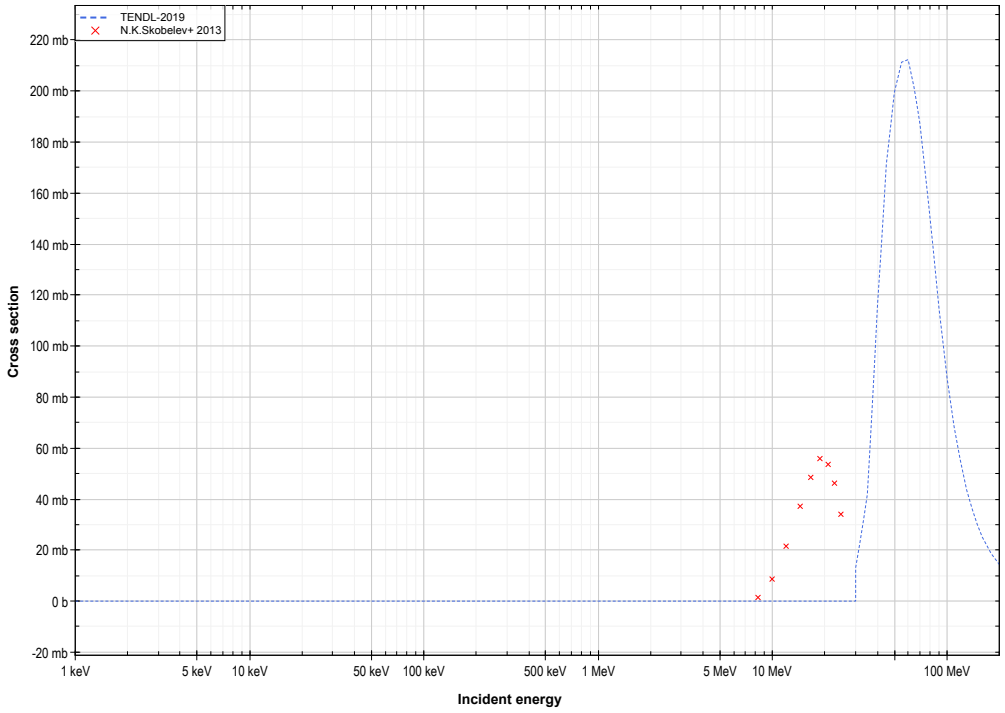
Reaction	Q-Value
Sc45(He3,α)Sc44	9250.40 keV
Sc45(He3,p+t)Sc44	-10563.46 keV
Sc45(He3,n+He3)Sc44	-11327.22 keV
Sc45(He3,2d)Sc44	-14596.13 keV
Sc45(He3,n+p+d)Sc44	-16820.69 keV
Sc45(He3,2n+2p)Sc44	-19045.26 keV

<< 14-Si-28	**21-Sc-45**	23-V-51 >>
<< MT116 (^{3}He,p+t)	**MT176 (^{3}He,2n+^{3}He) or MT5 (Sc43 production)**	MT179 (^{3}He,3n+2p) >>

Sc45 (^{3}He,2n+^{3}He) or Sc43 production log-log



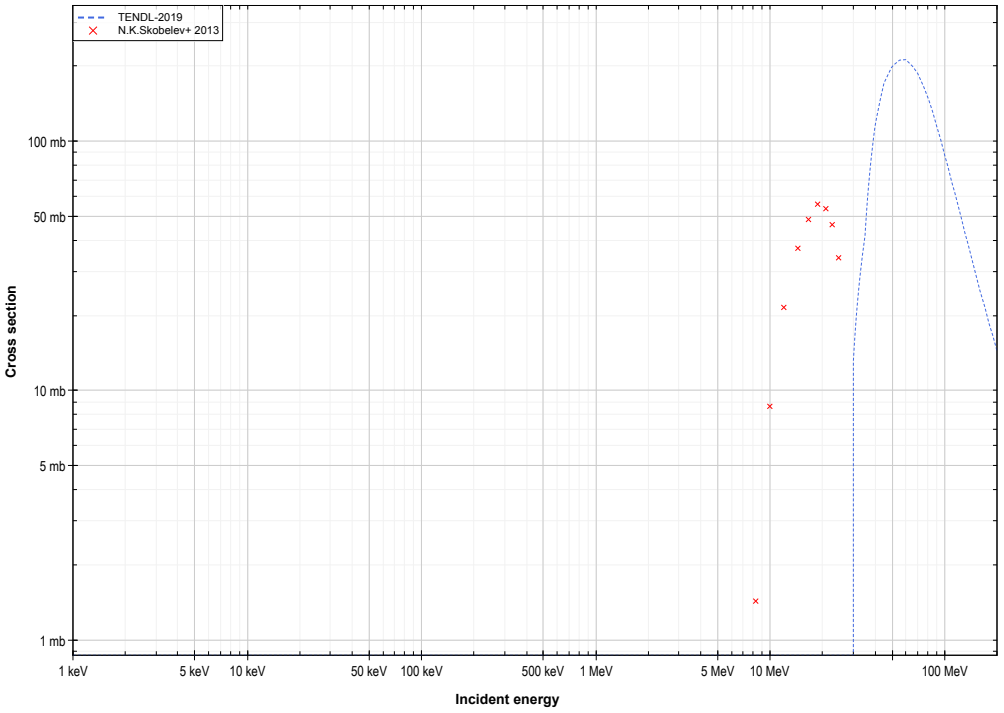
Sc45 (^{3}He,2n+^{3}He) or Sc43 production lin-log



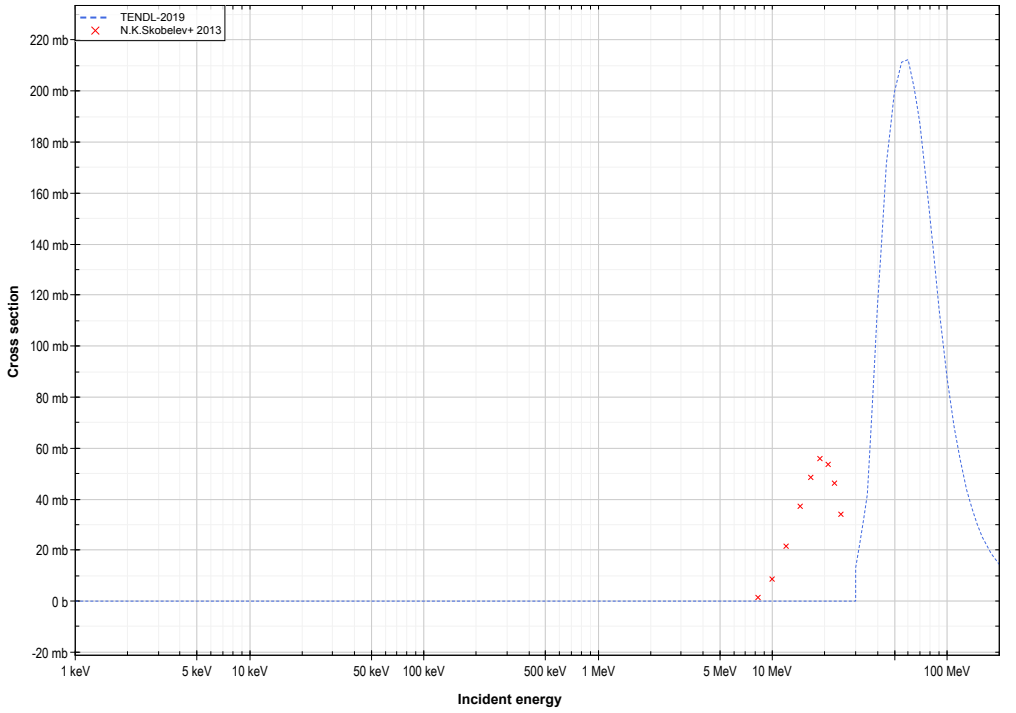
Reaction	Q-Value
Sc45(He3,n+α)Sc43	-448.81 keV
Sc45(He3,d+t)Sc43	-18038.11 keV
Sc45(He3,n+p+t)Sc43	-20262.68 keV
Sc45(He3,2n+He3)Sc43	-21026.43 keV
Sc45(He3,n+2d)Sc43	-24295.34 keV
Sc45(He3,2n+p+d)Sc43	-26519.91 keV
Sc45(He3,3n+2p)Sc43	-28744.47 keV

<< 14-Si-28	**21-Sc-45**	23-V-51 >>
<< MT176 (^{3}He,2n+^{3}He)	**MT179 (^{3}He,3n+2p) or MT5 (Sc43 production)**	MT182 (^{3}He,d+t) >>

Sc45 (^{3}He,3n+2p) or Sc43 production log-log



Sc45 (^{3}He,3n+2p) or Sc43 production lin-log



Reaction	Q-Value
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Sc45(He3,d+t)Sc43	-18038.11 keV
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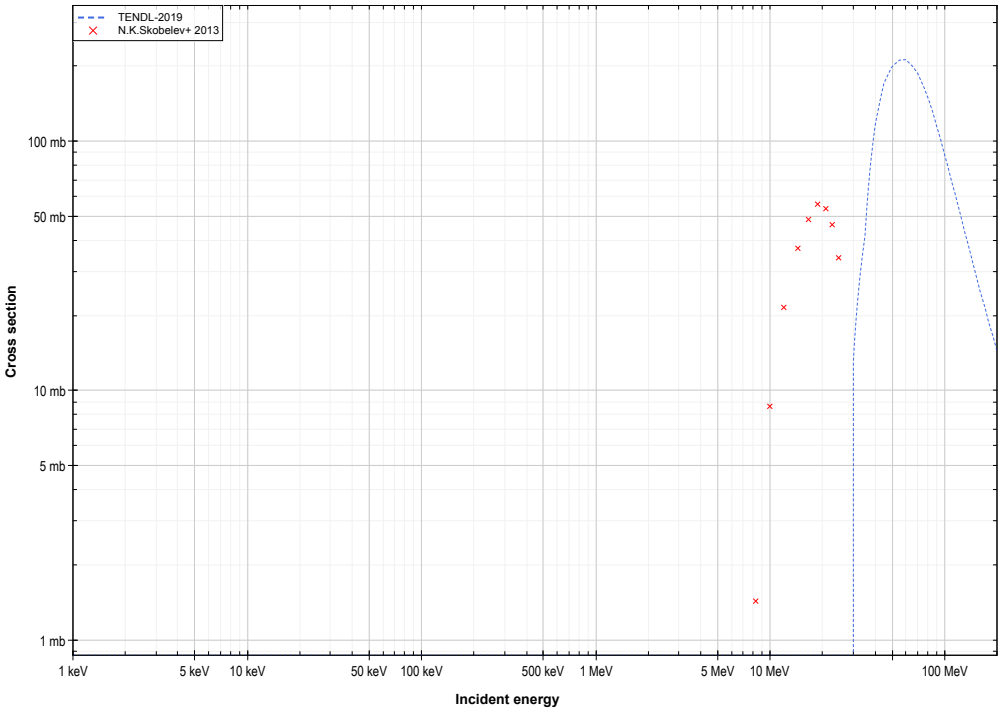
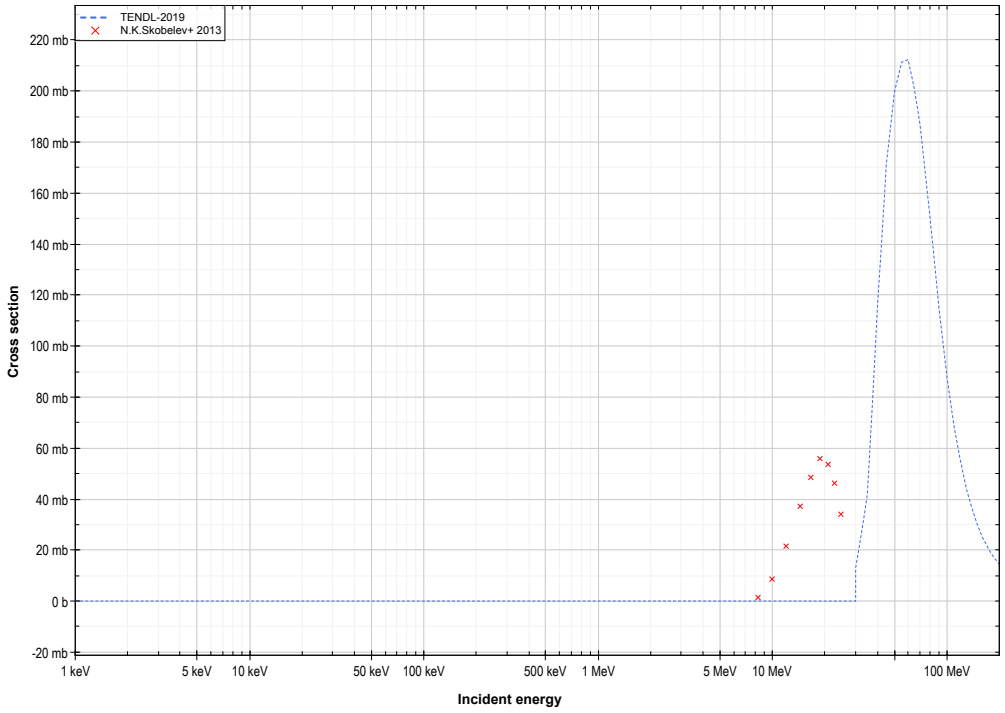
Sc45(He3,n+2d)Sc43	-24295.34 keV
Sc45(He3,2n+p+d)Sc43	-26519.91 keV
Sc45(He3,3n+2p)Sc43	-28744.47 keV

<< 14-Si-28	**21-Sc-45**	23-V-51 >>
<< MT179 (^{3}He,3n+2p)	**MT182 (^{3}He,d+t) or MT5 (Sc43 production)**	MT183 (^{3}He,n+p+d) >>

Sc45 (^{3}He,d+t) or Sc43 production log-log

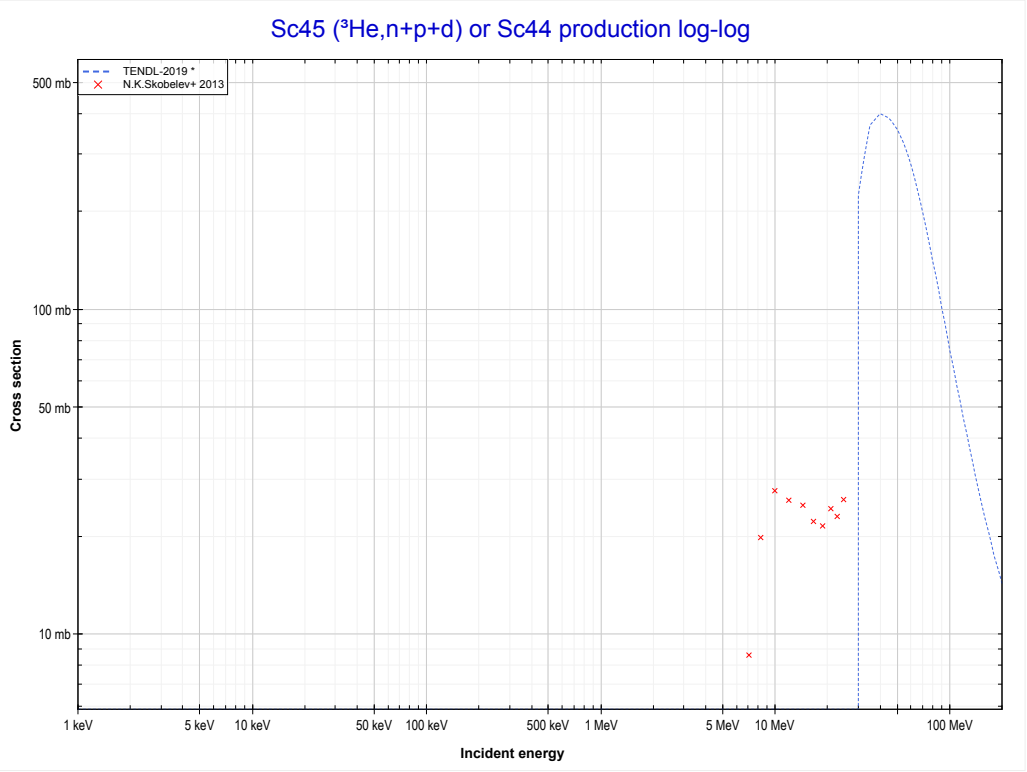


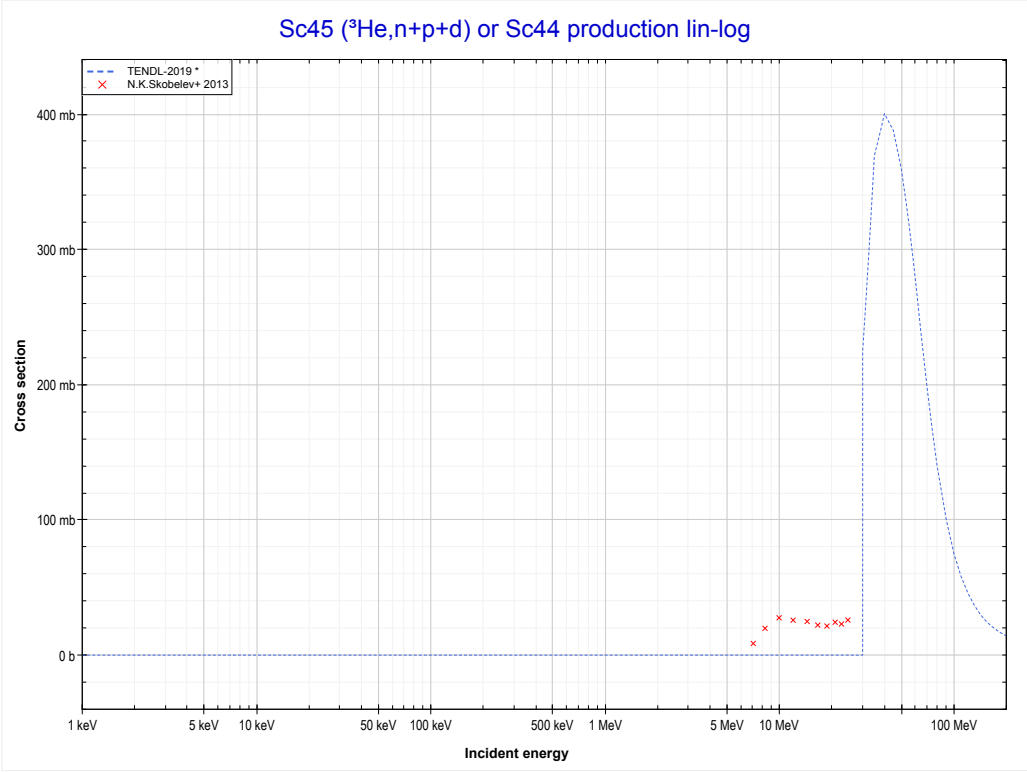
Sc45 (^{3}He,d+t) or Sc43 production lin-log



Reaction	Q-Value
Sc45(He3,n+α)Sc43	-448.81 keV
Sc45(He3,d+t)Sc43	-18038.11 keV
Sc45(He3,n+p+t)Sc43	-20262.68 keV
Sc45(He3,2n+He3)Sc43	-21026.43 keV
Sc45(He3,n+2d)Sc43	-24295.34 keV
Sc45(He3,2n+p+d)Sc43	-26519.91 keV
Sc45(He3,3n+2p)Sc43	-28744.47 keV

<< 14-Si-28	**21-Sc-45**	25-Mn-55 >>
<< MT182 (^{3}He,d+t)	**MT183 (^{3}He,n+p+d) or MT5 (Sc44 production)**	MT184 (^{3}He,n+p+t) >>

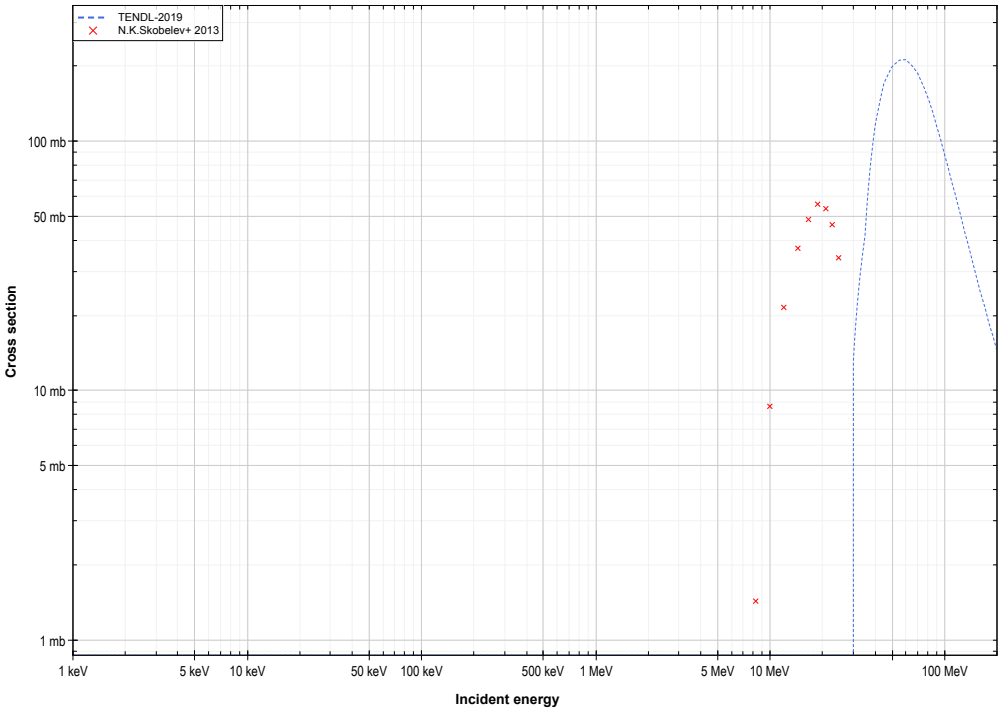




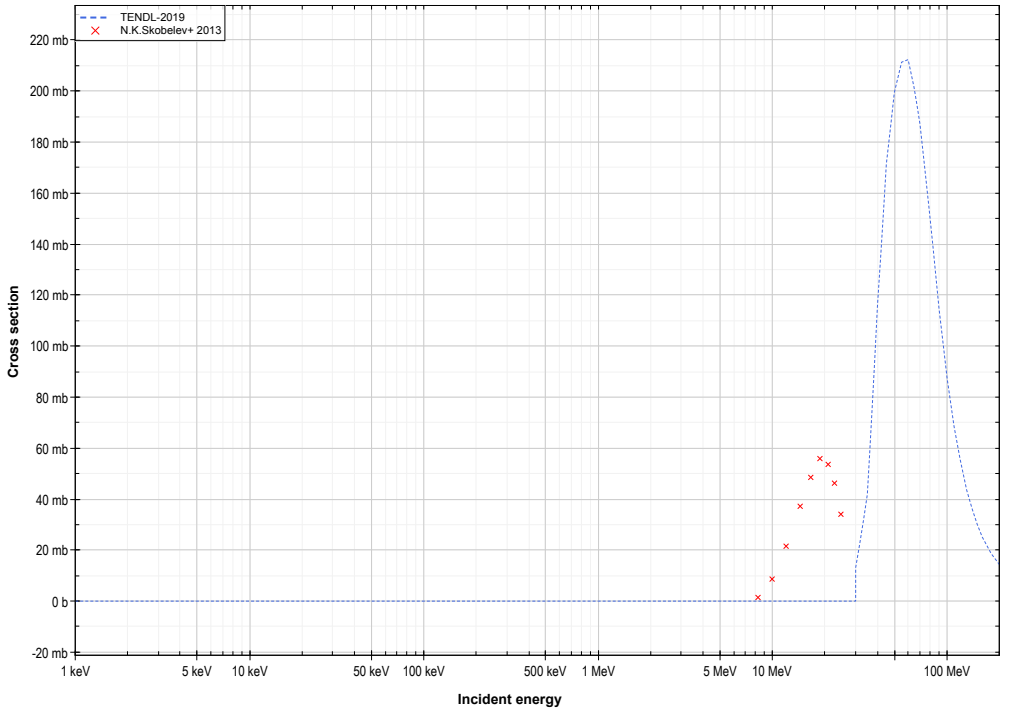
Reaction	Q-Value
Sc45(He3,α)Sc44	9250.40 keV
Sc45(He3,p+t)Sc44	-10563.46 keV
Sc45(He3,n+He3)Sc44	-11327.22 keV
Sc45(He3,2d)Sc44	-14596.13 keV
Sc45(He3,n+p+d)Sc44	-16820.69 keV
Sc45(He3,2n+2p)Sc44	-19045.26 keV

<< 14-Si-28	**21-Sc-45**	23-V-51 >>
<< MT183 (^{3}He,n+p+d)	**MT184 (^{3}He,n+p+t) or MT5 (Sc43 production)**	MT190 (^{3}He,2n+2p) >>

Sc45 (^{3}He,n+p+t) or Sc43 production log-log



Sc45 (^{3}He,n+p+t) or Sc43 production lin-log



Reaction	Q-Value
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Sc45(He3,d+t)Sc43	-18038.11 keV
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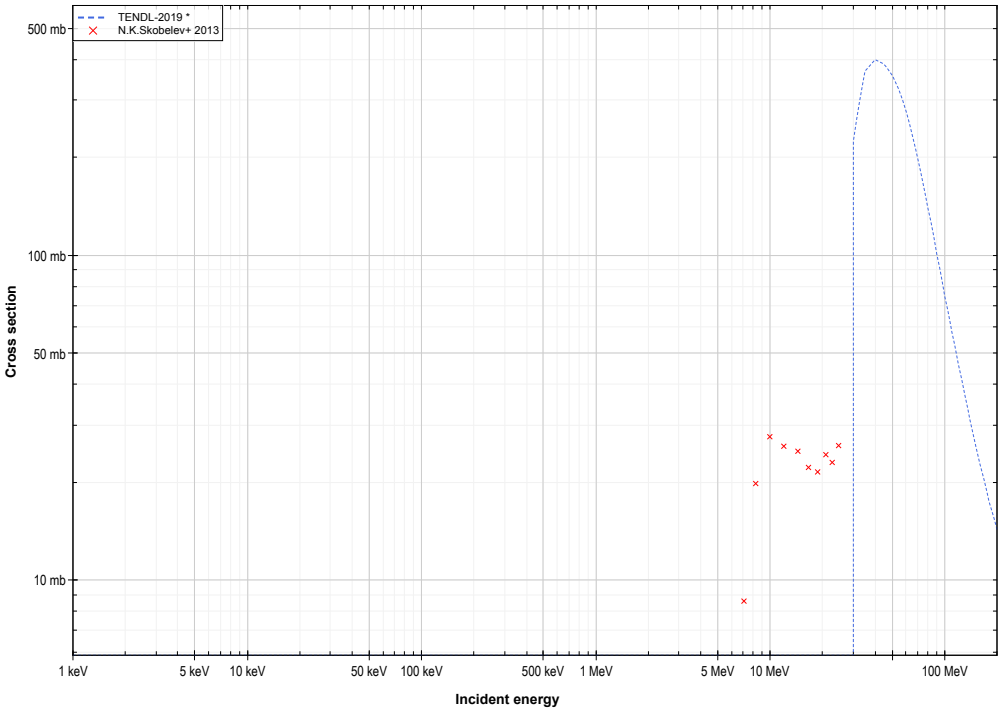
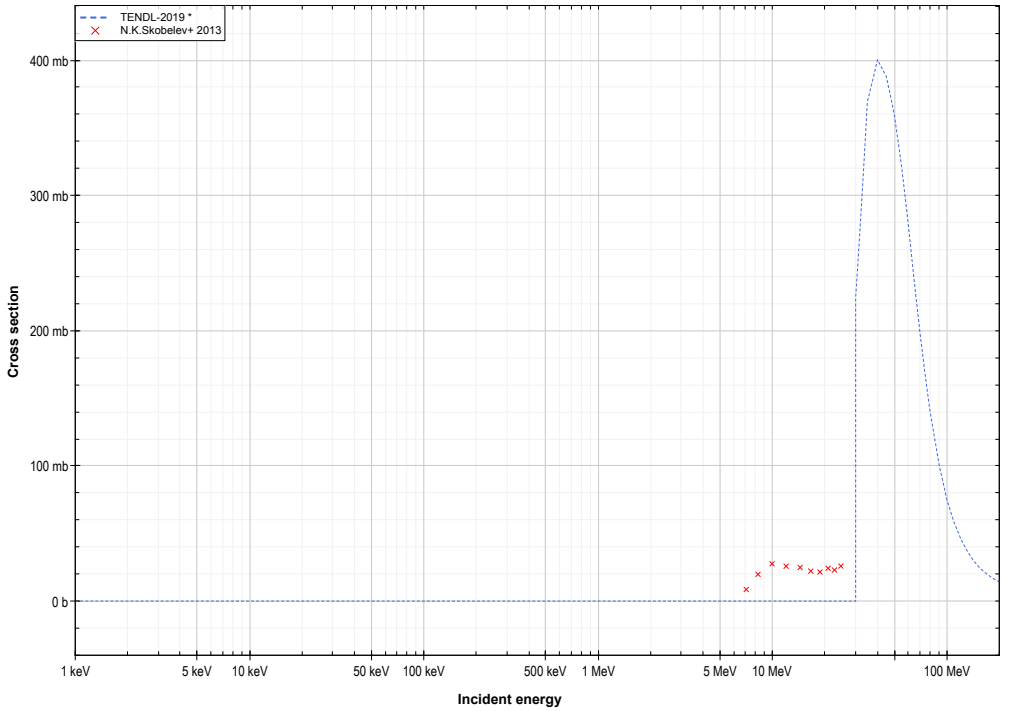
Sc45(He3,2n+p+d)Sc43	-26519.91 keV
Sc45(He3,3n+2p)Sc43	-28744.47 keV

<< 14-Si-28	**21-Sc-45**	25-Mn-55 >>
<< MT184 (^{3}He,n+p+t)	**MT190 (^{3}He,2n+2p) or MT5 (Sc44 production)**	23-V-51 MT22 (^{3}He,n+α) >>

Sc45 (^{3}He,2n+2p) or Sc44 production log-log



Sc45 (^{3}He,2n+2p) or Sc44 production lin-log



Reaction	Q-Value
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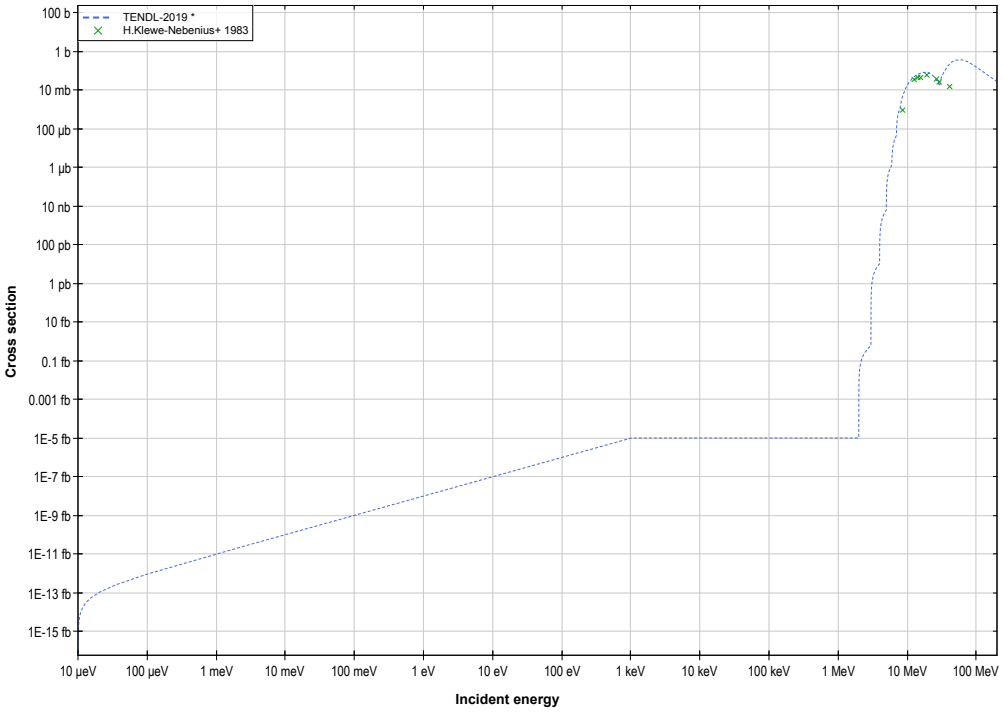
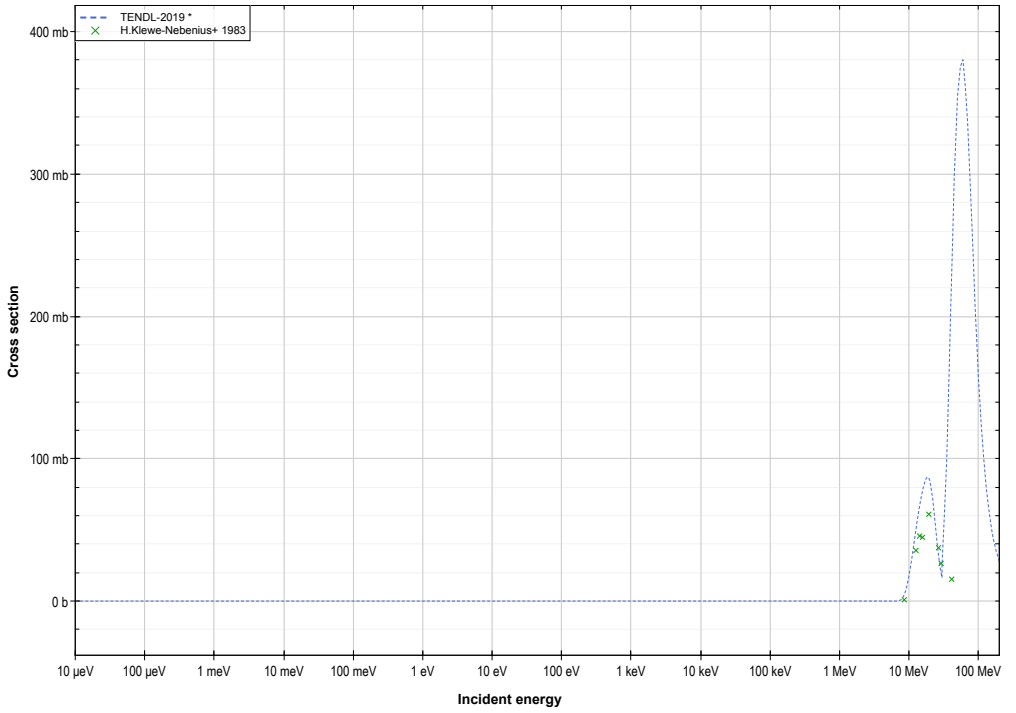
Sc45(He3,n+p+d)Sc44	-16820.69 keV
Sc45(He3,2n+2p)Sc44	-19045.26 keV

<< 21-Sc-45	**23-V-51**	27-Co-59 >>
<< 21-Sc-45 MT190 (^{3}He,2n+2p)	**MT22 (^{3}He,n+α) or MT5 (V49 production)**	MT176 (^{3}He,2n+^{3}He) >>

V51 (^{3}He,n+α) or V49 production log-log



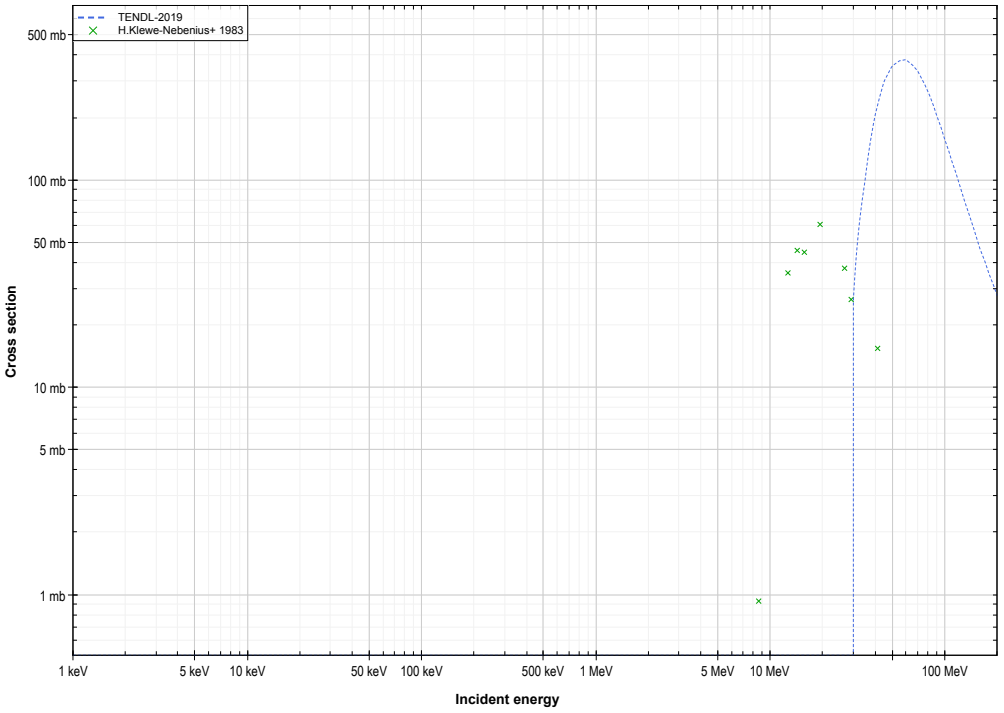
V51 (^{3}He,n+α) or V49 production lin-log



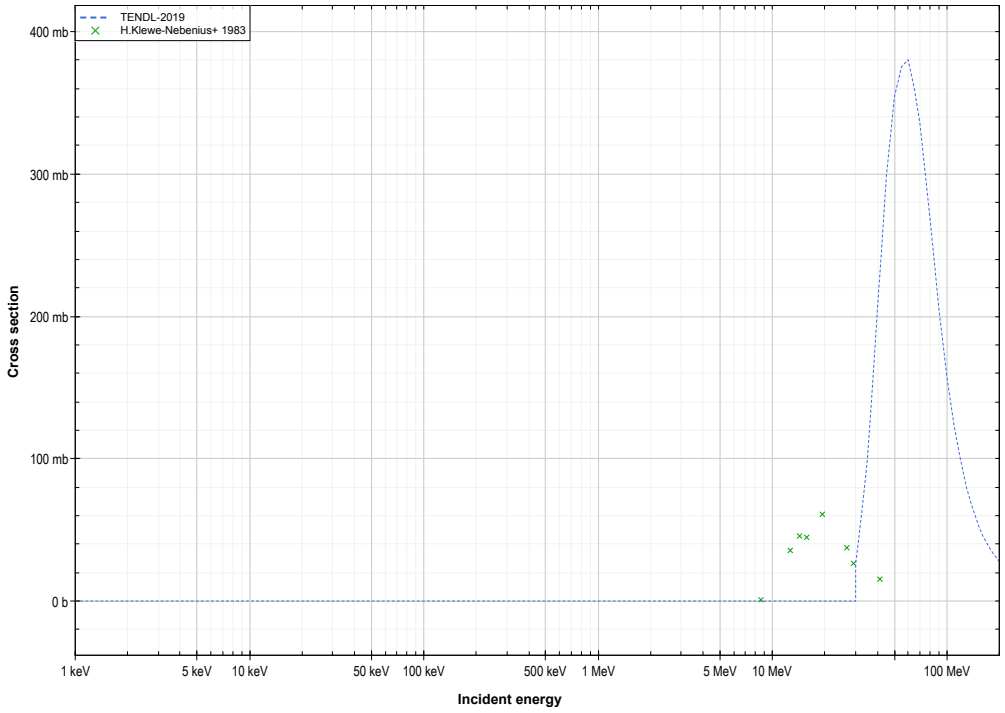
Reaction	Q-Value
V51(He3,n+α)V49	193.09 keV
V51(He3,d+t)V49	-17396.21 keV
V51(He3,n+p+t)V49	-19620.78 keV
V51(He3,2n+He3)V49	-20384.53 keV
V51(He3,n+2d)V49	-23653.44 keV
V51(He3,2n+p+d)V49	-25878.01 keV
V51(He3,3n+2p)V49	-28102.57 keV

<< 21-Sc-45	**23-V-51**	27-Co-59 >>
<< MT22 (^{3}He,n+α)	**MT176 (^{3}He,2n+^{3}He) or MT5 (V49 production)**	MT179 (^{3}He,3n+2p) >>

V51 (^{3}He,2n+^{3}He) or V49 production log-log



V51 (^{3}He,2n+^{3}He) or V49 production lin-log



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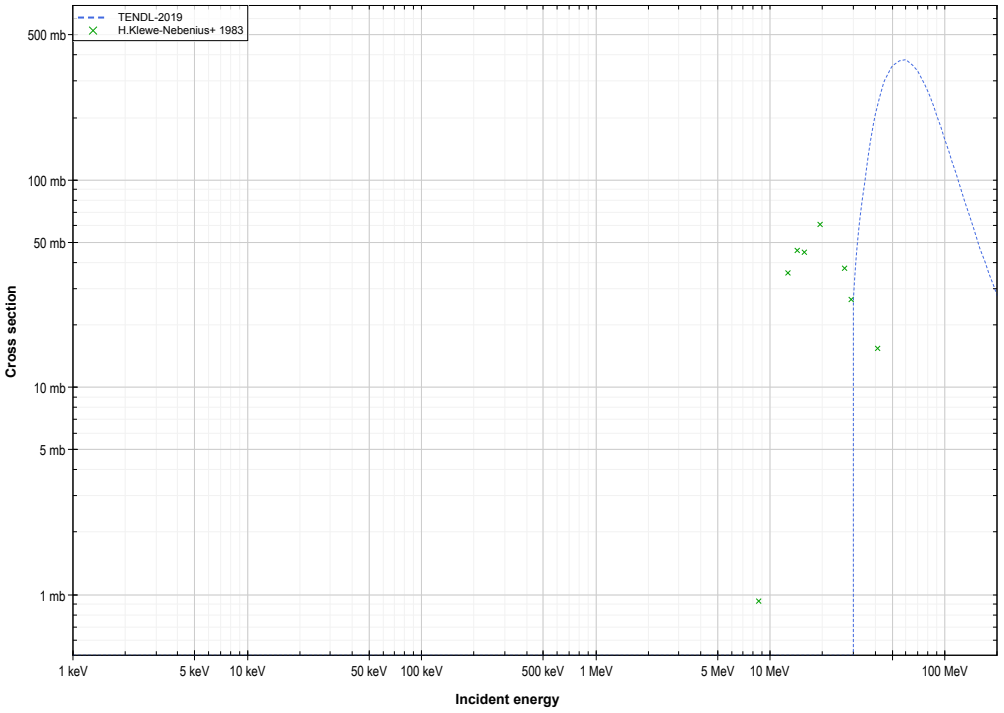
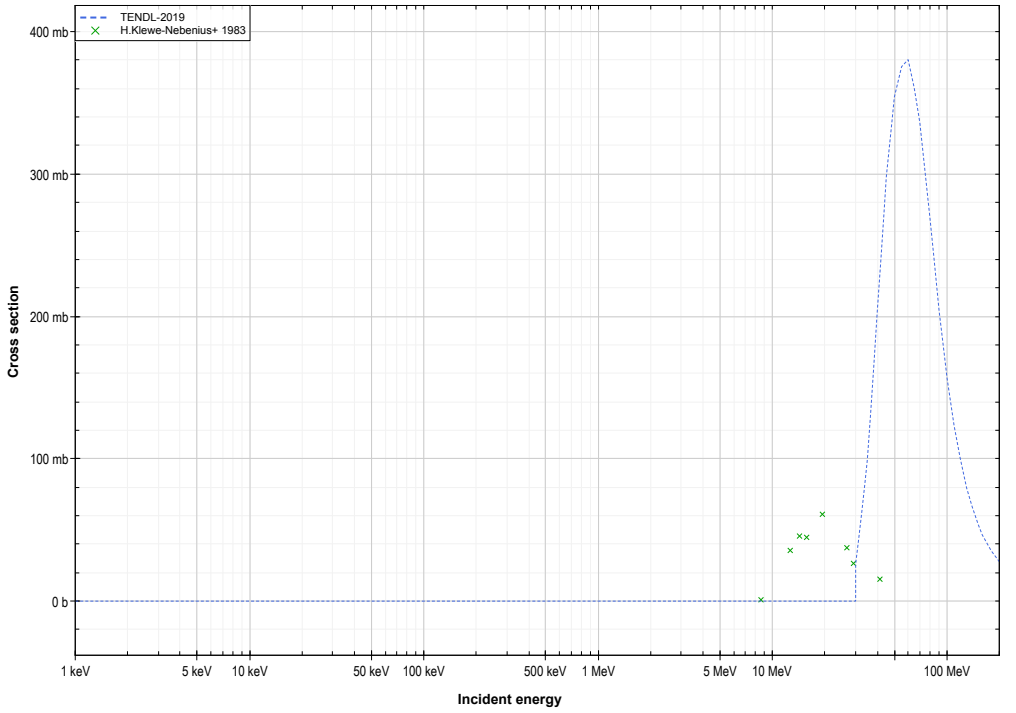
V51(He3,2n+p+d)V49	-25878.01 keV
V51(He3,3n+2p)V49	-28102.57 keV

<< 21-Sc-45	**23-V-51**	27-Co-59 >>
<< MT176 (^{3}He,2n+^{3}He)	**MT179 (^{3}He,3n+2p) or MT5 (V49 production)**	MT182 (^{3}He,d+t) >>

V51 (^{3}He,3n+2p) or V49 production log-log



V51 (^{3}He,3n+2p) or V49 production lin-log



Reaction	Q-Value
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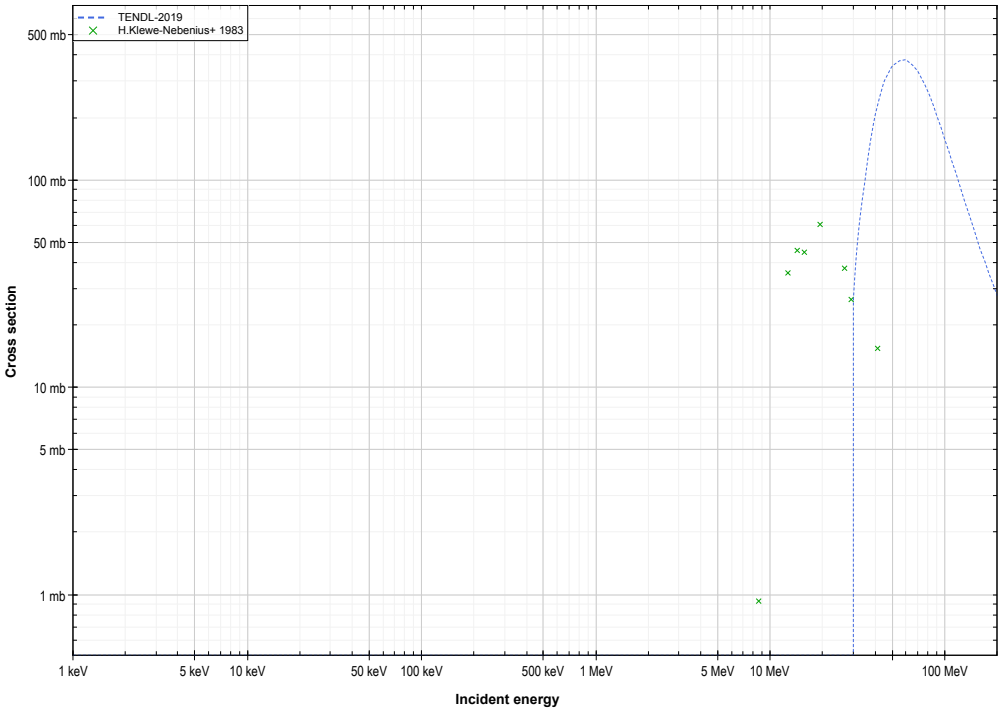
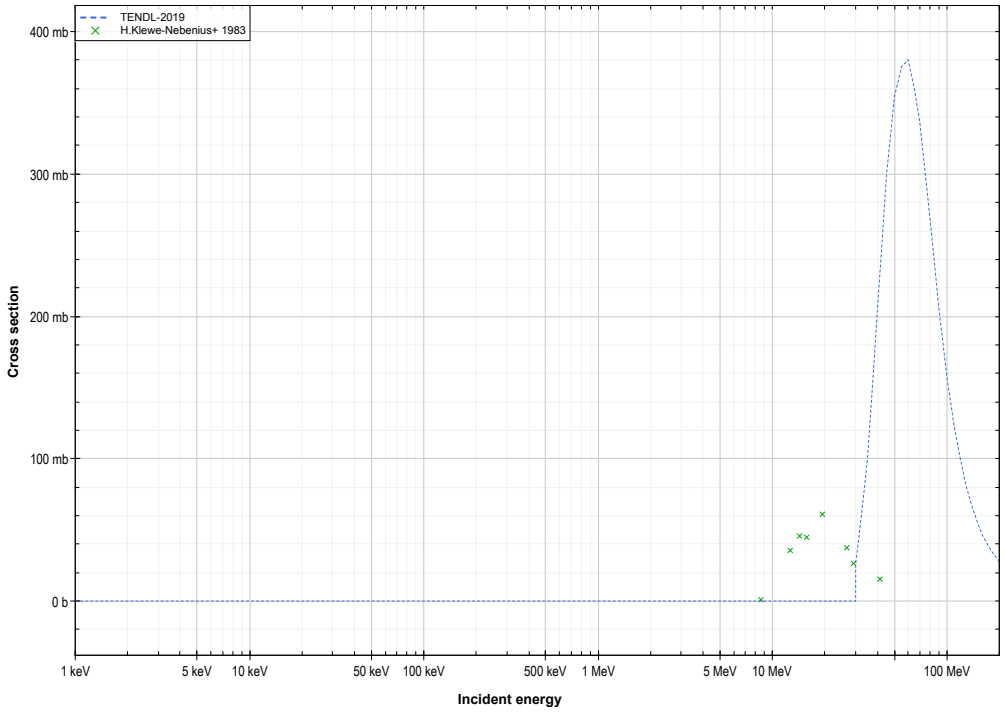
V51(He3,d+t)V49	-17396.21 keV
V51(He3,n+p+t)V49	-19620.78 keV
V51(He3,2n+He3)V49	-20384.53 keV
V51(He3,n+2d)V49	-23653.44 keV
V51(He3,2n+p+d)V49	-25878.01 keV
V51(He3,3n+2p)V49	-28102.57 keV

<< 21-Sc-45	**23-V-51**	27-Co-59 >>
<< MT179 (^{3}He,3n+2p)	**MT182 (^{3}He,d+t) or MT5 (V49 production)**	MT184 (^{3}He,n+p+t) >>

V51 (^{3}He,d+t) or V49 production log-log



V51 (^{3}He,d+t) or V49 production lin-log



Reaction	Q-Value
V51(He3,n+α)V49	193.09 keV
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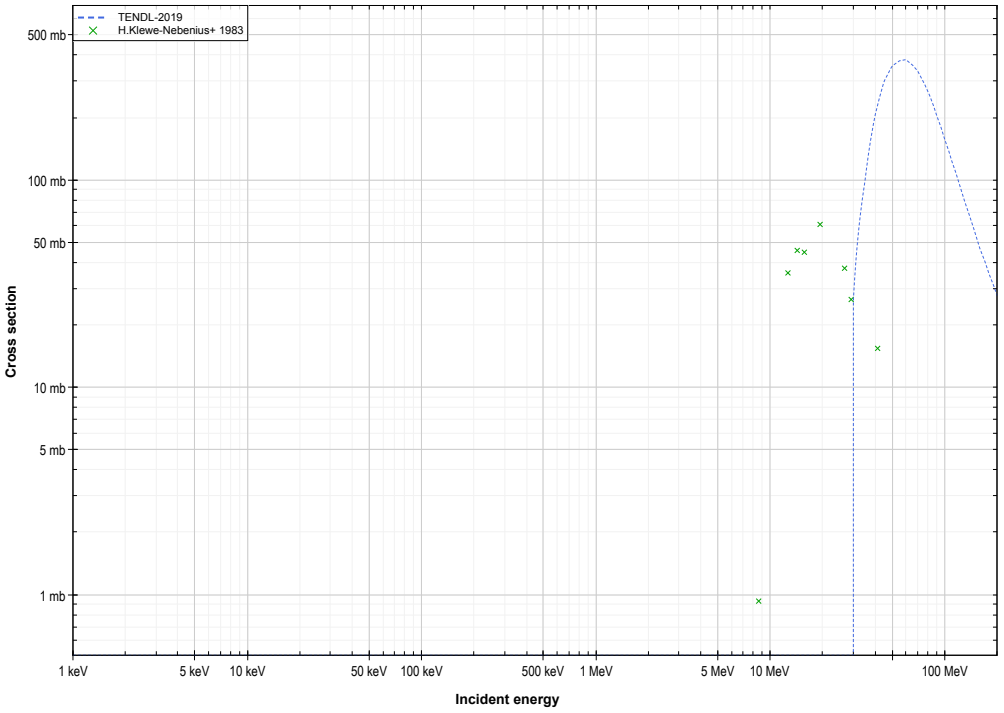
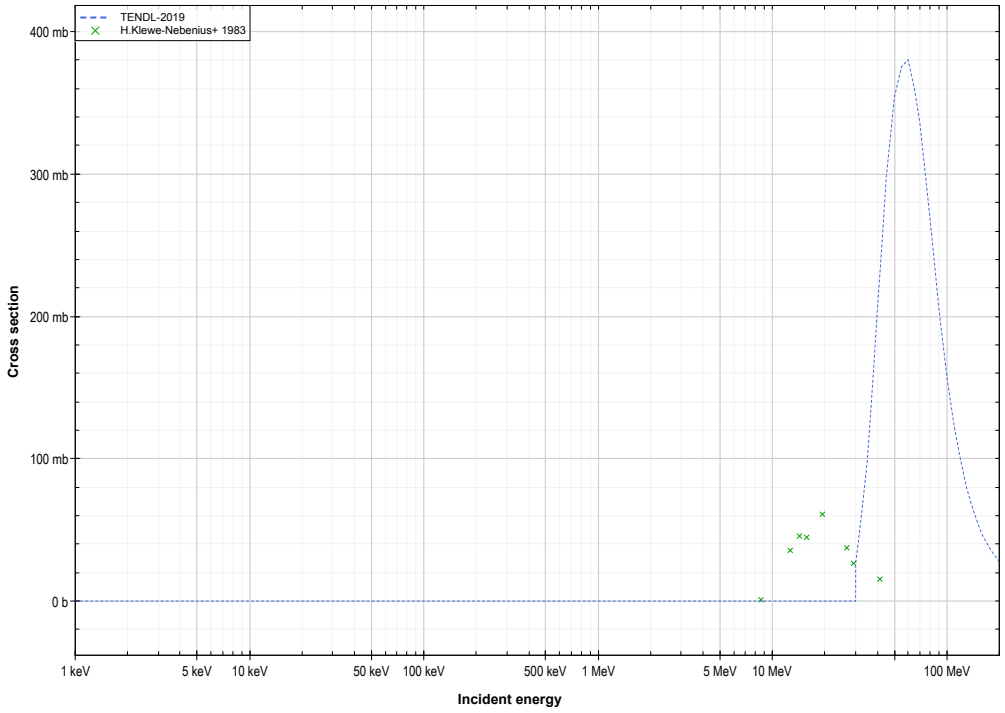
V51(He3,2n+p+d)V49	-25878.01 keV
V51(He3,3n+2p)V49	-28102.57 keV

<< 21-Sc-45	**23-V-51**	27-Co-59 >>
<< MT182 (^{3}He,d+t)	**MT184 (^{3}He,n+p+t) or MT5 (V49 production)**	24-Cr-50 MT16 (^{3}He,2n) >>

V51 (^{3}He,n+p+t) or V49 production log-log



V51 (^{3}He,n+p+t) or V49 production lin-log



Reaction	Q-Value
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V51(He3,d+t)V49	-17396.21 keV
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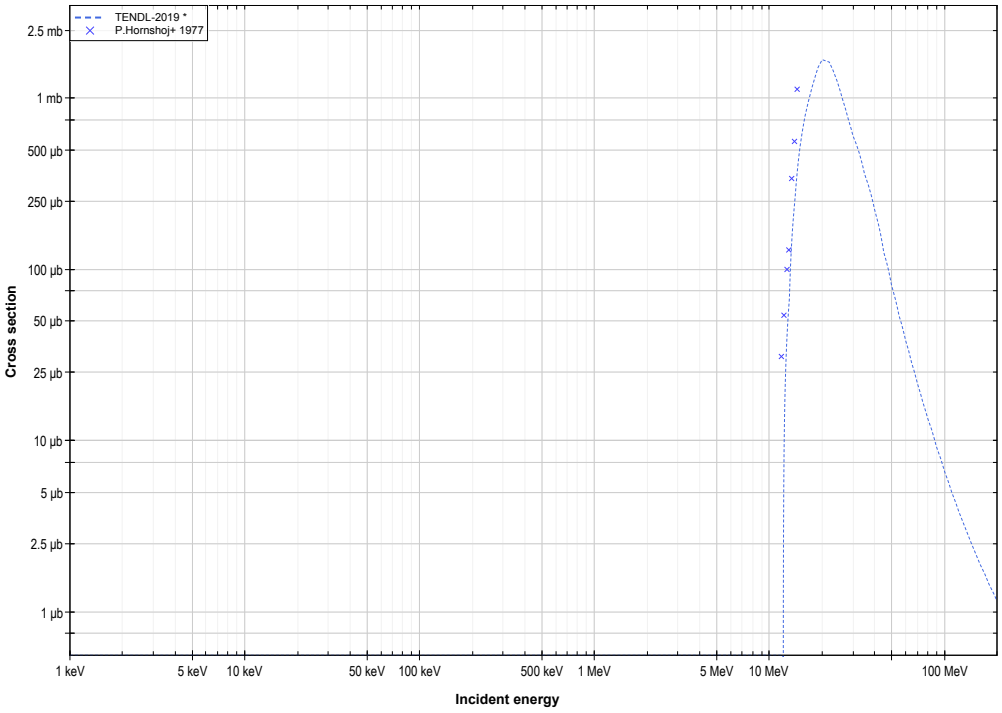
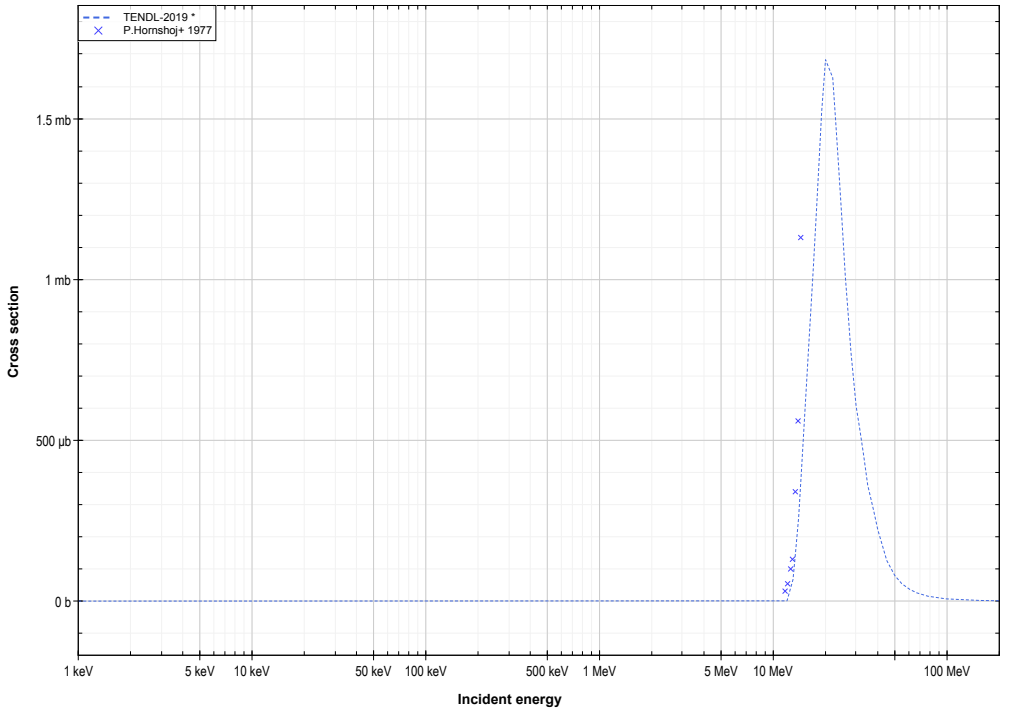
V51(He3,n+2d)V49	-23653.44 keV
V51(He3,2n+p+d)V49	-25878.01 keV
V51(He3,3n+2p)V49	-28102.57 keV

<< 17-Cl-37	**24-Cr-50**	25-Mn-55 >>
<< 23-V-51 MT184 (^{3}He,n+p+t)	**MT16 (^{3}He,2n) or MT5 (Fe51 production)**	24-Cr-52 MT17 (^{3}He,3n) >>

Cr50 (^{3}He,2n) or Fe51 production log-log



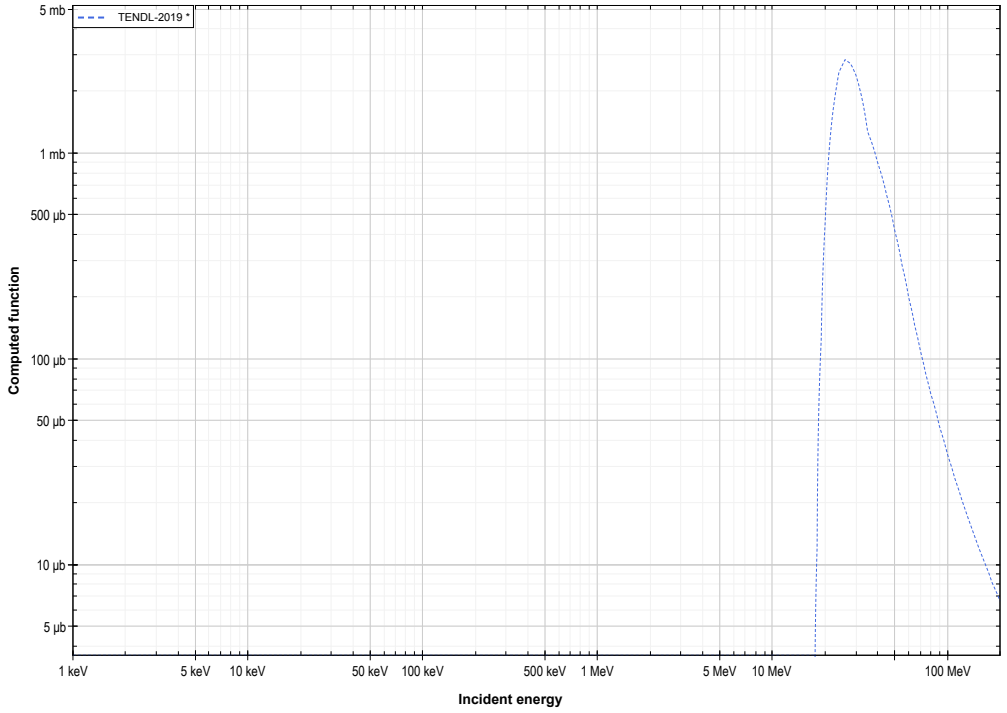
Cr50 (^{3}He,2n) or Fe51 production lin-log



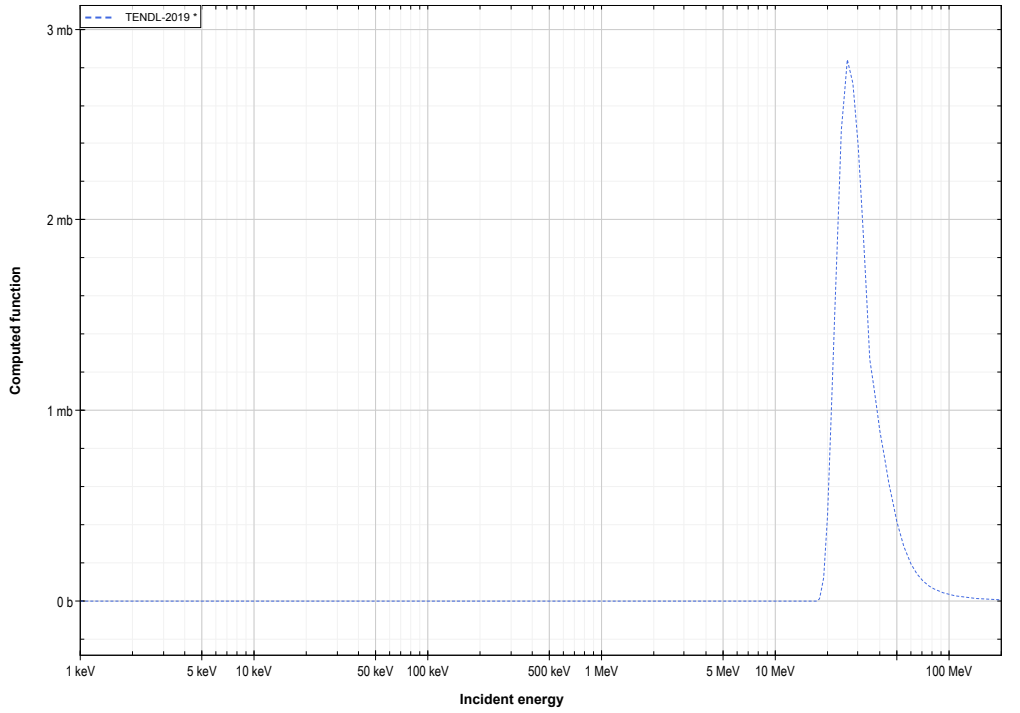
Reaction	Q-Value
Cr50(He3,2n)Fe51	-11270.52 keV

	24-Cr-52	25-Mn-55 >>
<< 24-Cr-50 MT16 (^{3}He,2n)	**MT17 (^{3}He,3n) or MT5 (Fe52 production)**	MT32 (^{3}He,n+d) >>

Cr52 (^{3}He,3n) or Fe52 production log-log



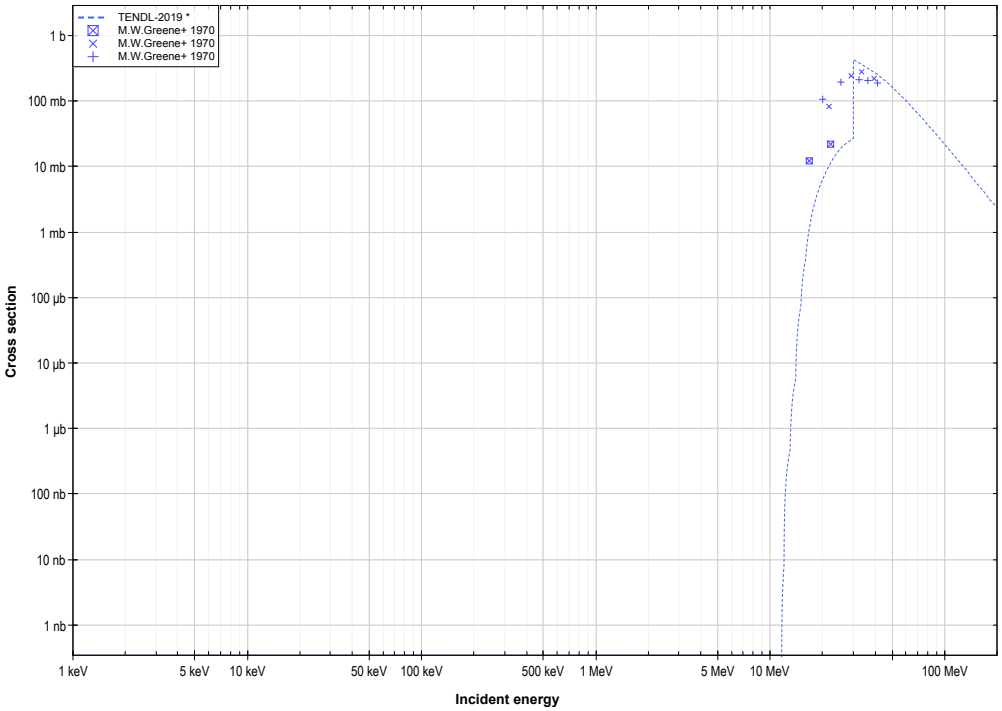
Cr52 (^{3}He,3n) or Fe52 production lin-log



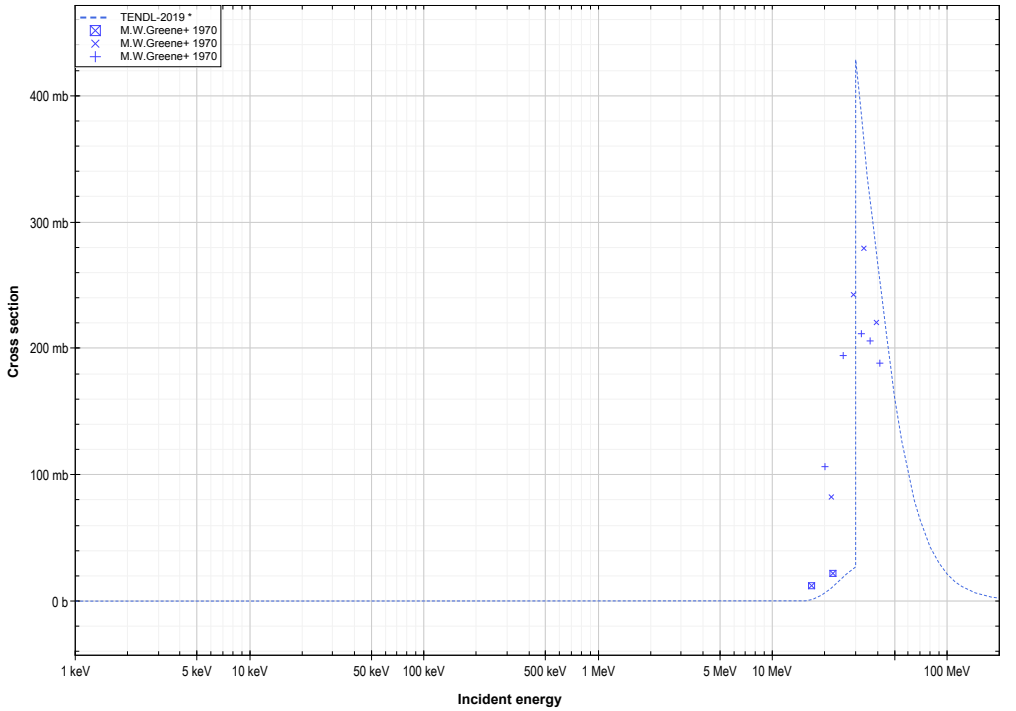
Reaction	Q-Value
Cr52(He3,3n)Fe52	-16371.93 keV

<< 21-Sc-45	**24-Cr-52**	26-Fe-56 >>
<< MT17 (³He,3n)	**MT32 (³He,n+d) or MT5 (Mn52 production)**	MT41 (³He,2n+p) >>

Cr52 (³He,n+d) or Mn52 production log-log



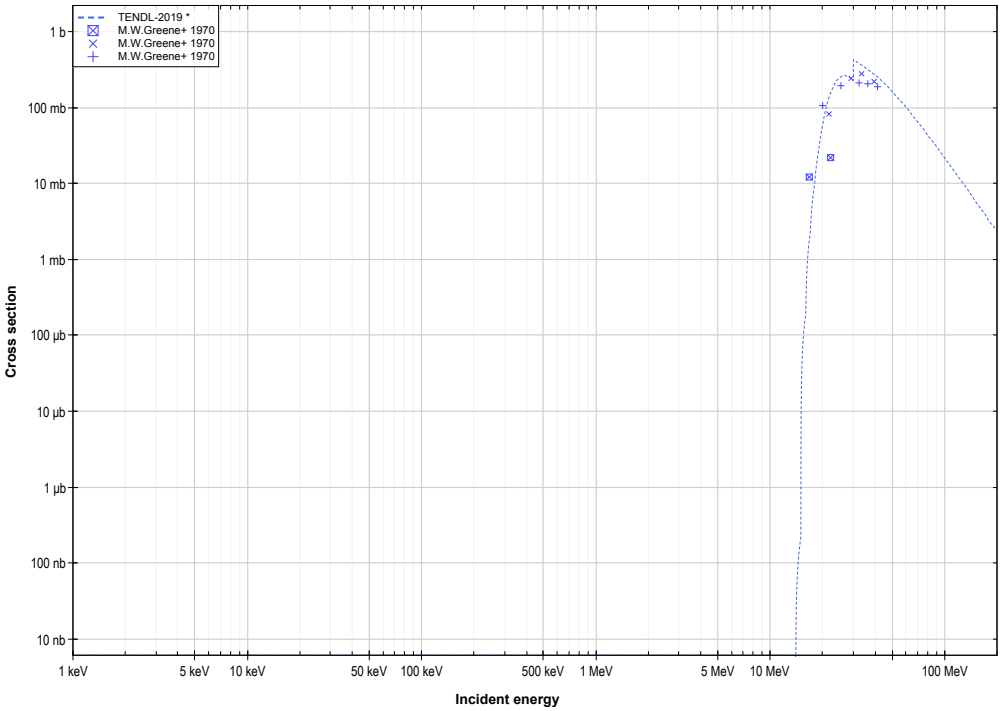
Cr52 (³He,n+d) or Mn52 production lin-log



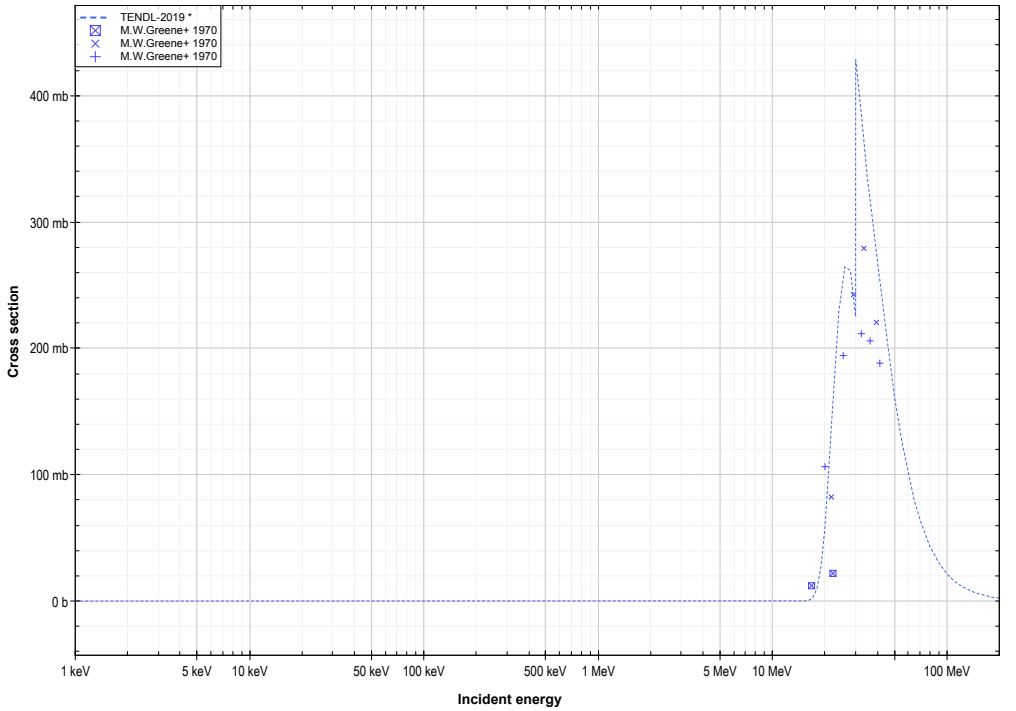
Reaction	Q-Value
Cr52(He3,t)Mn52	-4730.49 keV
Cr52(He3,n+d)Mn52	-10987.72 keV
Cr52(He3,2n+p)Mn52	-13212.29 keV

<< 21-Sc-45	**24-Cr-52**	26-Fe-56 >>
<< MT32 (³He,n+d)	**MT41 (³He,2n+p) or MT5 (Mn52 production)**	MT105 (³He,t) >>

Cr52 (³He,2n+p) or Mn52 production log-log



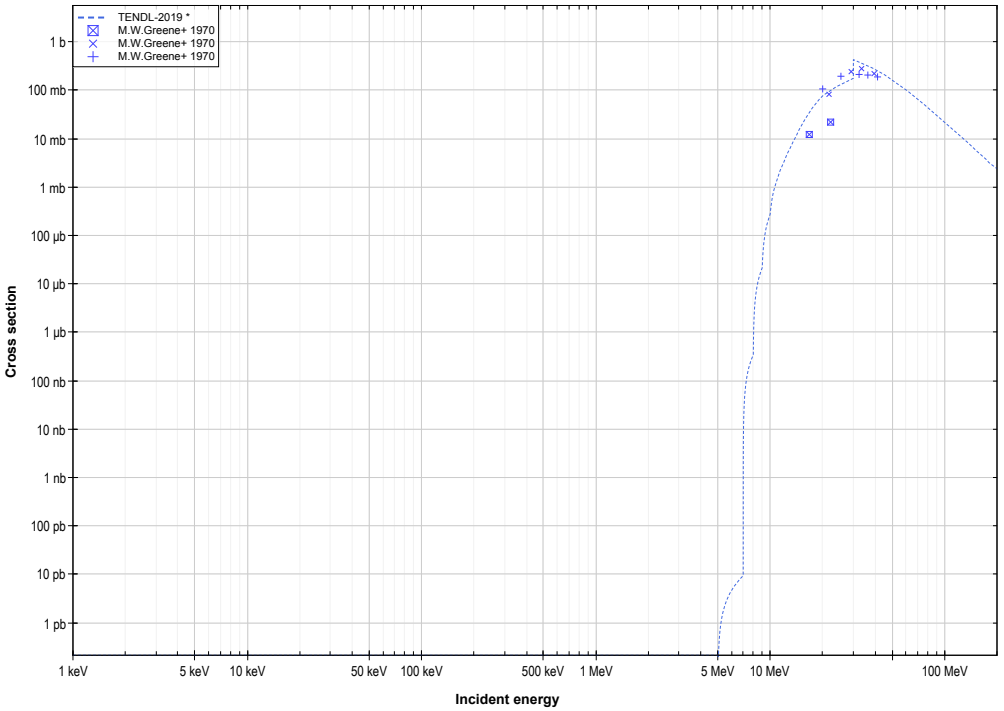
Cr52 (³He,2n+p) or Mn52 production lin-log



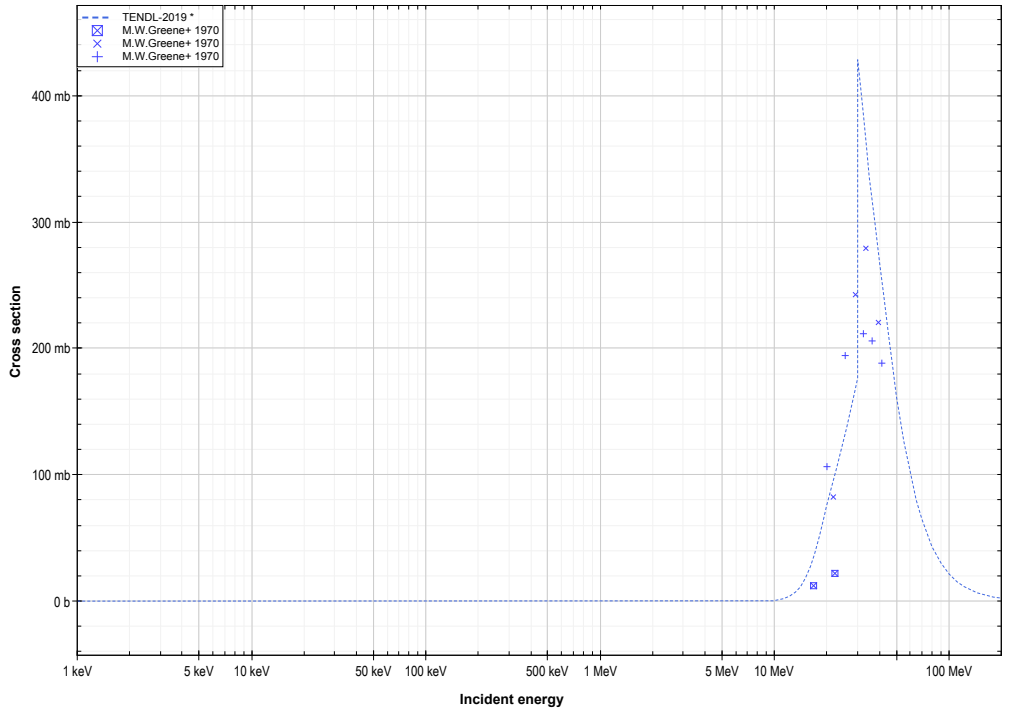
Reaction	Q-Value
Cr52(He3,t)Mn52	-4730.49 keV
Cr52(He3,n+d)Mn52	-10987.72 keV
Cr52(He3,2n+p)Mn52	-13212.29 keV

<< 21-Sc-45	**24-Cr-52**	26-Fe-56 >>
<< MT41 (³He,2n+p)	**MT105 (³He,t) or MT5 (Mn52 production)**	25-Mn-55 MT4 (³He,n) >>

Cr52 (³He,t) or Mn52 production log-log



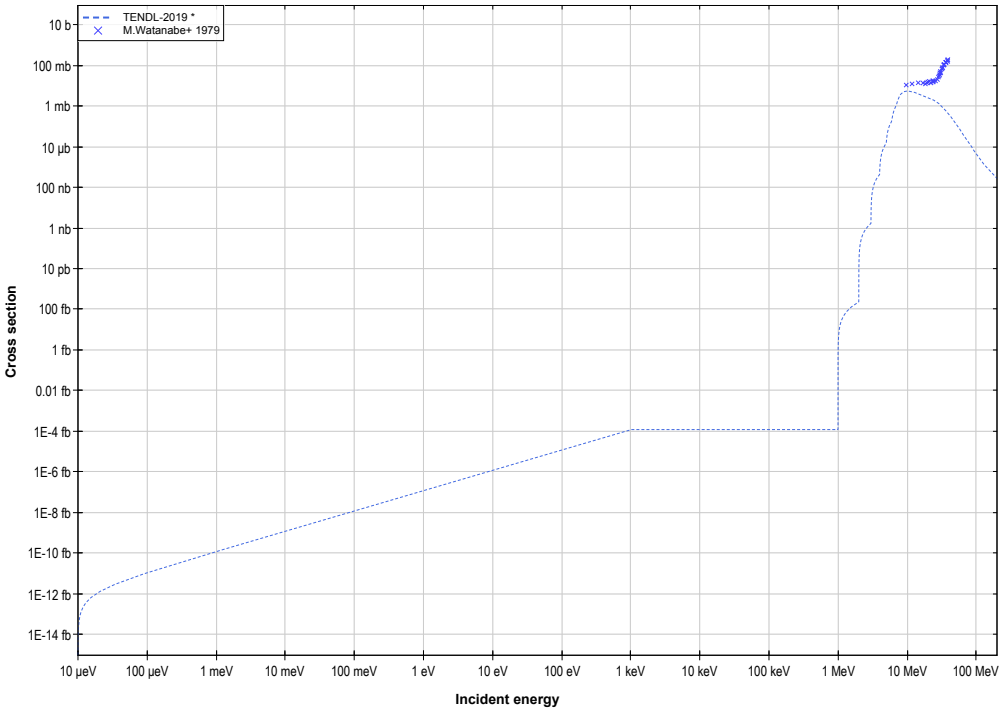
Cr52 (³He,t) or Mn52 production lin-log



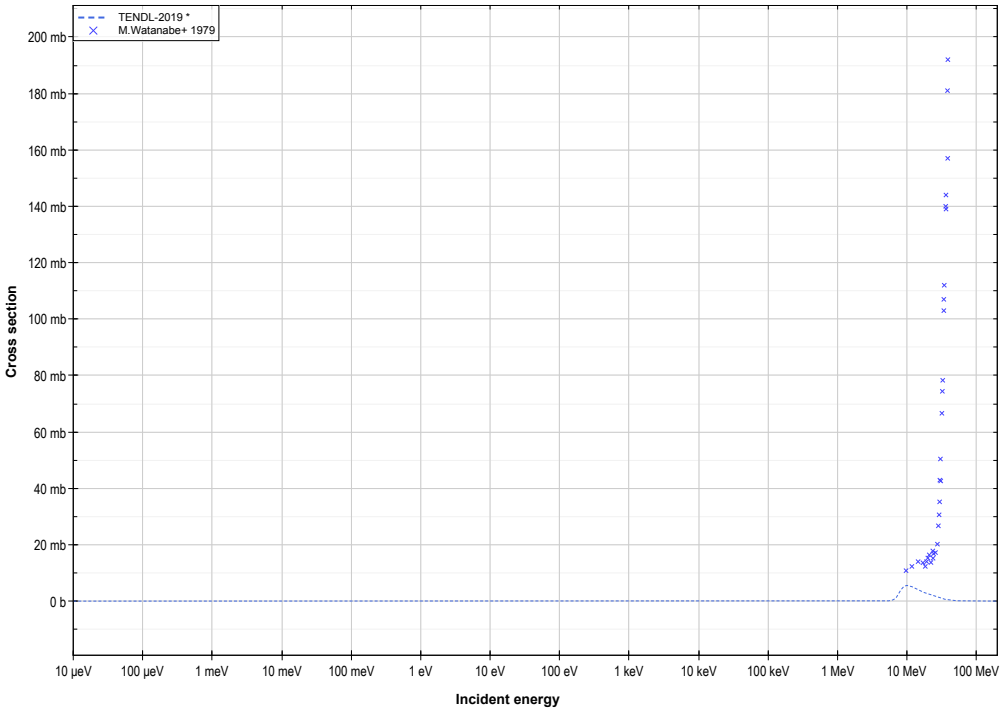
Reaction	Q-Value
Cr52(He3,t)Mn52	-4730.49 keV
Cr52(He3,n+d)Mn52	-10987.72 keV
Cr52(He3,2n+p)Mn52	-13212.29 keV

<< 14-Si-28	**25-Mn-55**	27-Co-59 >>
<< 24-Cr-52 MT105 (^{3}He,t)	**MT4 (^{3}He,n) or MT5 (Co57 production)**	MT16 (^{3}He,2n) >>

Mn55 (^{3}He,n) or Co57 production log-log



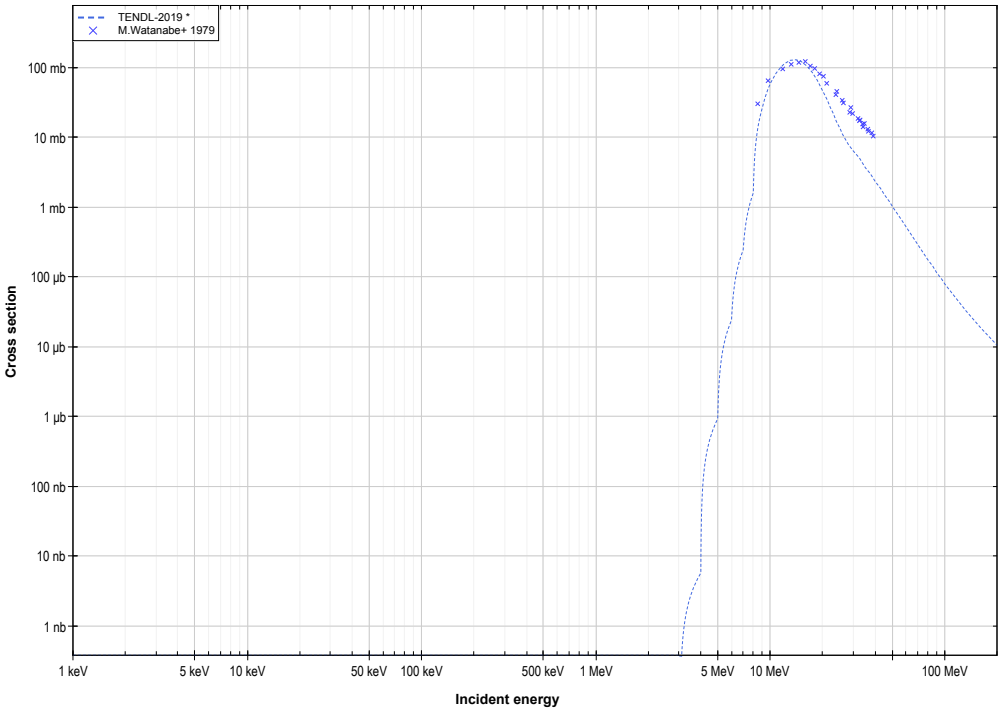
Mn55 (^{3}He,n) or Co57 production lin-log



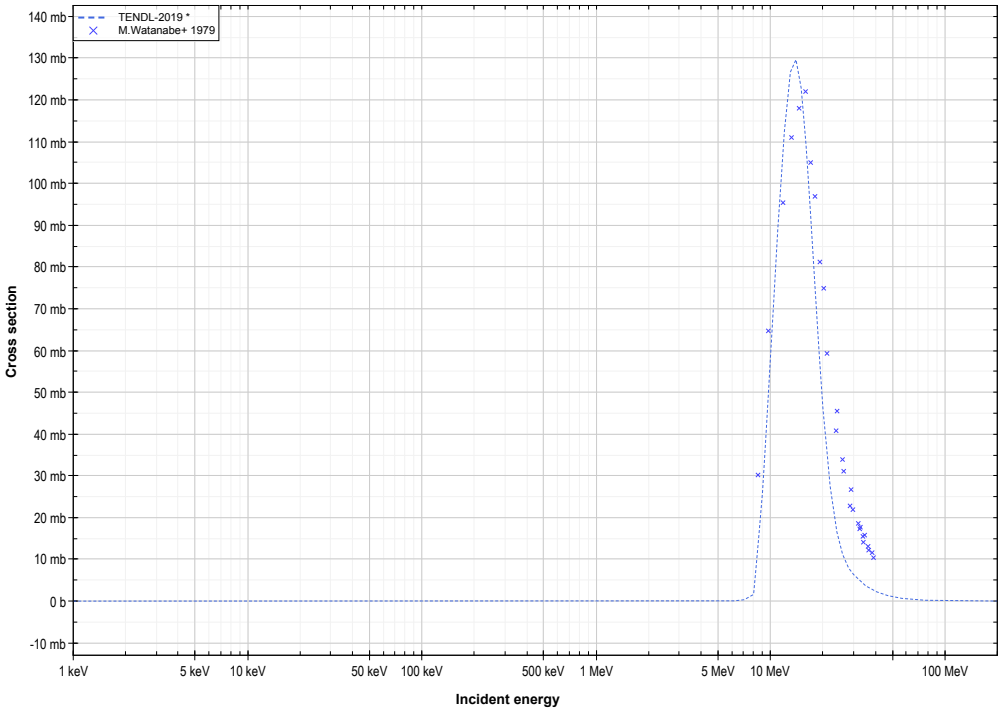
Reaction	Q-Value
Mn55(He3,n)Co57	8493.10 keV

<< 24-Cr-50	**25-Mn-55**	26-Fe-54 >>
<< MT4 (^{3}He,n)	**MT16 (^{3}He,2n) or MT5 (Co56 production)**	MT17 (^{3}He,3n) >>

Mn55 (^{3}He,2n) or Co56 production log-log



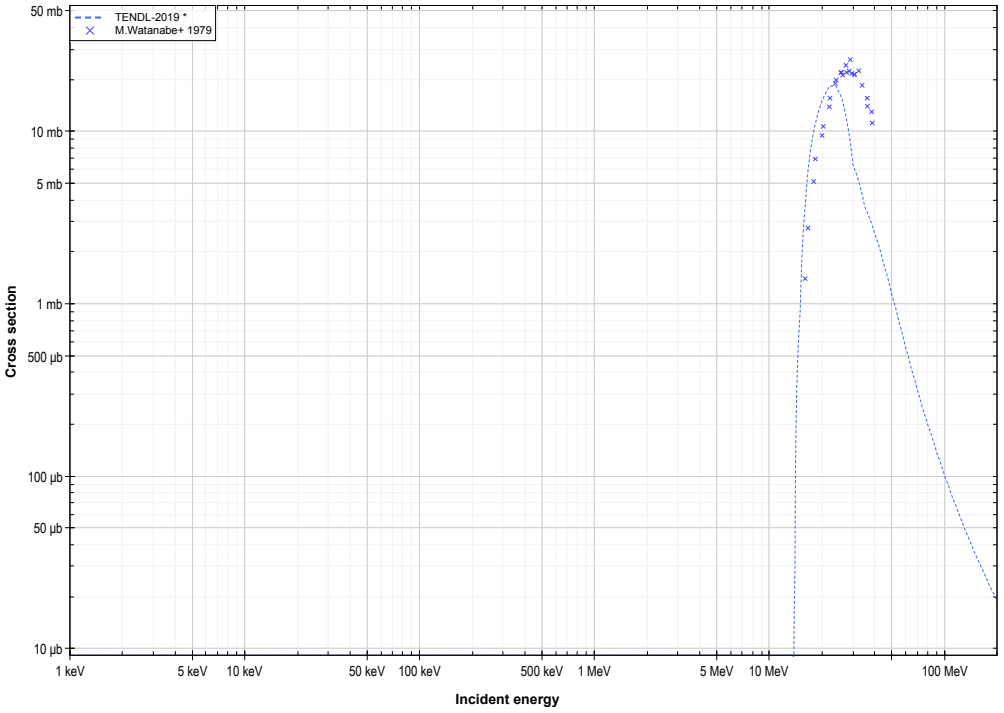
Mn55 (^{3}He,2n) or Co56 production lin-log



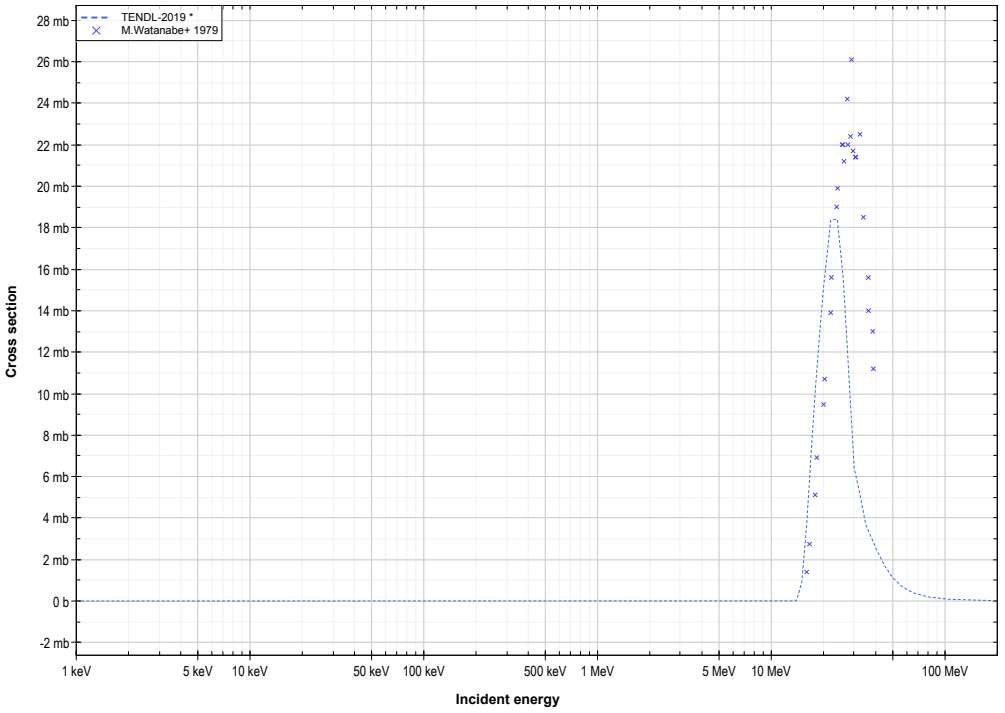
Reaction	Q-Value
Mn55(He3,2n)Co56	-2883.42 keV

<< 24-Cr-52	**25-Mn-55**	26-Fe-56 >>
<< MT16 (^{3}He,2n)	**MT17 (^{3}He,3n) or MT5 (Co55 production)**	MT34 (^{3}He,n+^{3}He) >>

Mn55 (^{3}He,3n) or Co55 production log-log



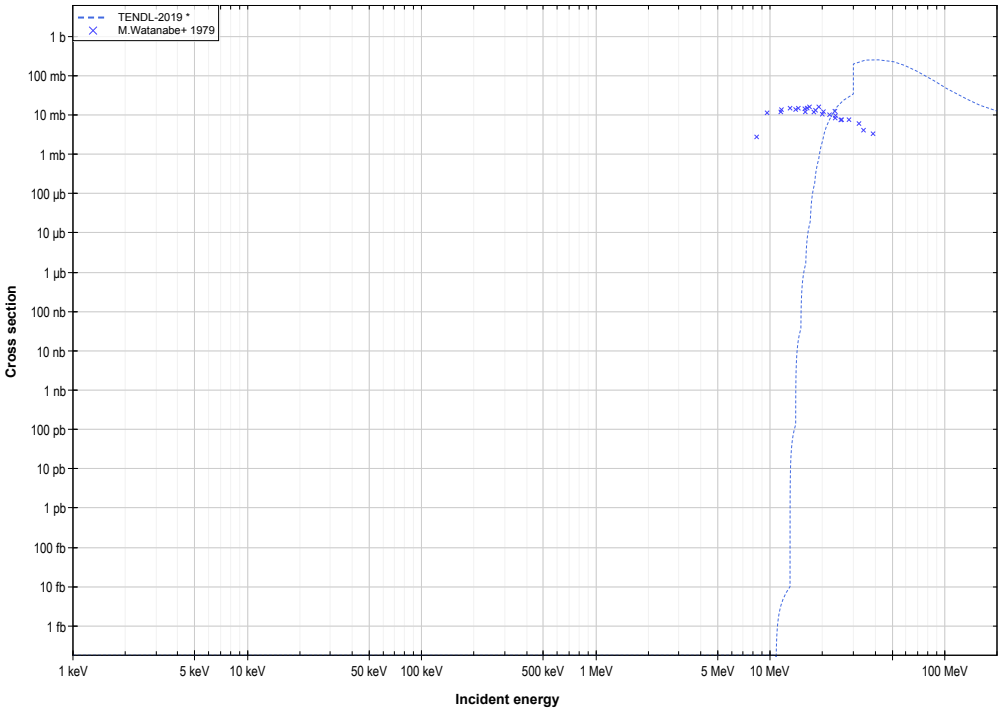
Mn55 (^{3}He,3n) or Co55 production lin-log



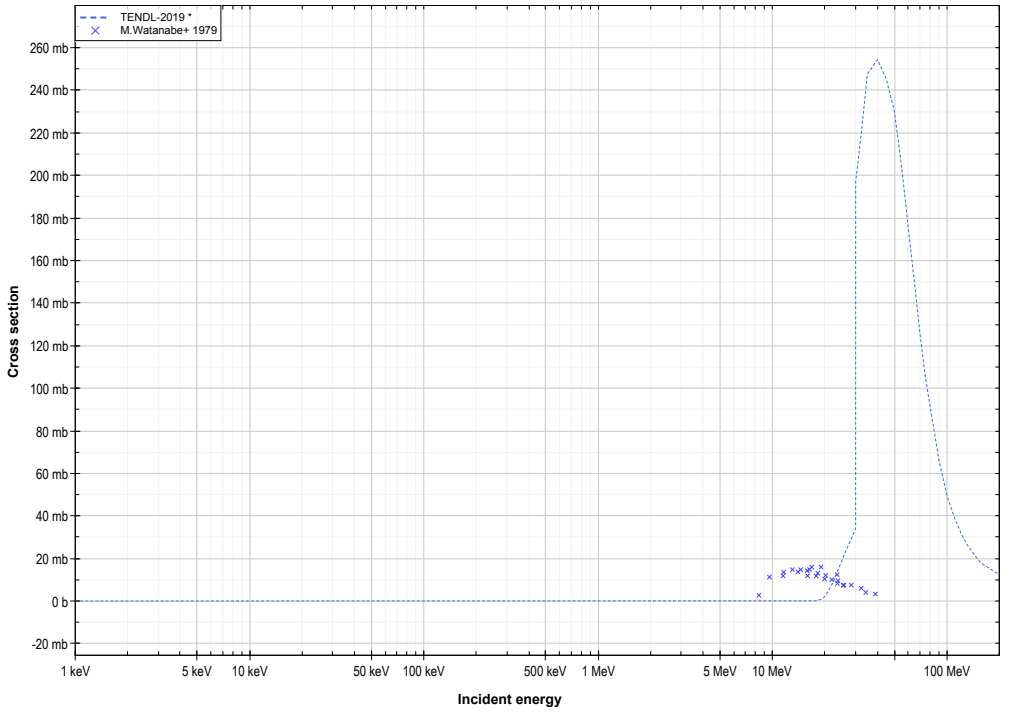
Reaction	Q-Value
Mn55(He3,3n)Co55	-12965.23 keV

<< 21-Sc-45	**25-Mn-55**	27-Co-59 >>
<< MT17 (³He,3n)	**MT34 (³He,n+³He) or MT5 (Mn54 production)**	MT107 (³He,α) >>

Mn55 (³He,n+³He) or Mn54 production log-log



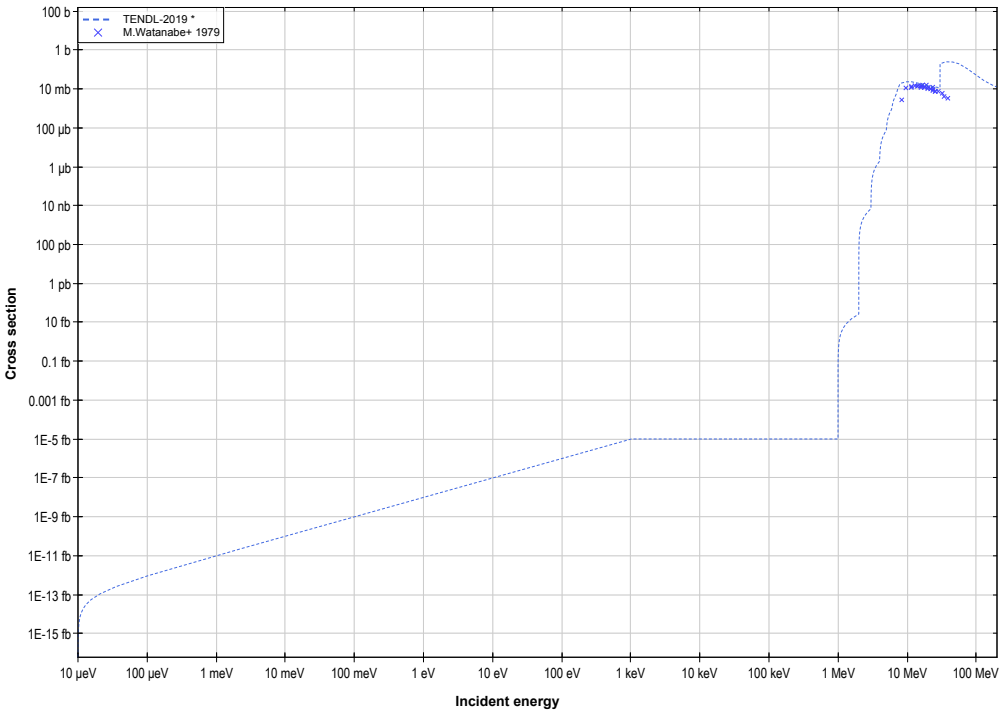
Mn55 (³He,n+³He) or Mn54 production lin-log



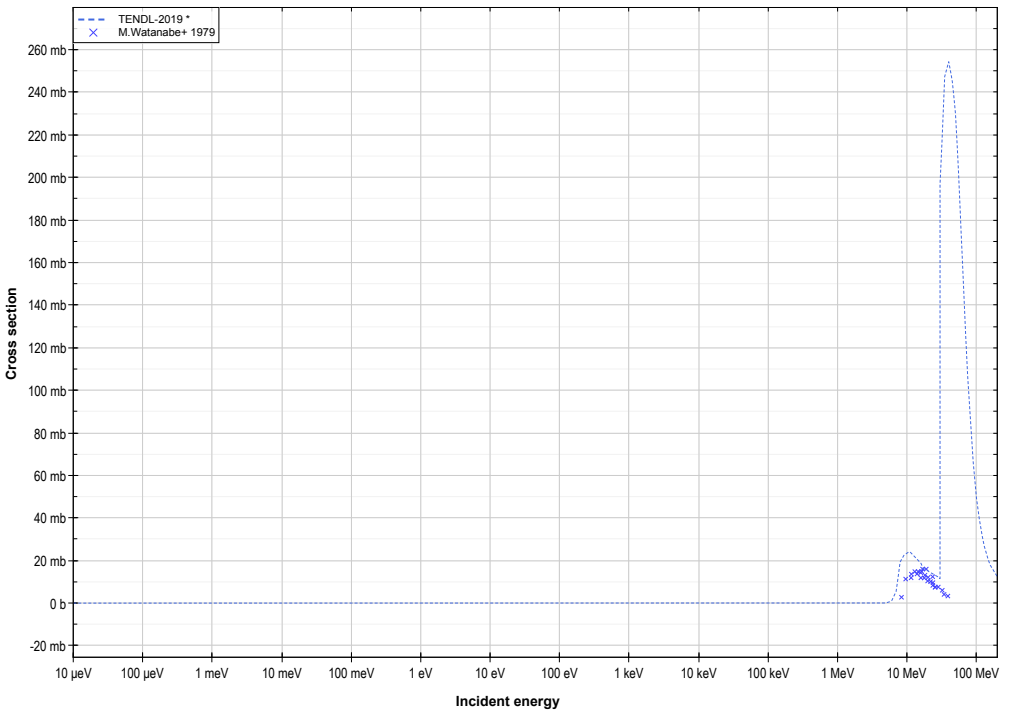
Reaction	Q-Value
Mn55(He3,α)Mn54	10351.50 keV
Mn55(He3,p+t)Mn54	-9462.36 keV
Mn55(He3,n+He3)Mn54	-10226.12 keV
Mn55(He3,2d)Mn54	-13495.03 keV
Mn55(He3,n+p+d)Mn54	-15719.59 keV
Mn55(He3,2n+2p)Mn54	-17944.16 keV

<< 21-Sc-45	**25-Mn-55**	27-Co-59 >>
<< MT34 (^{3}He,n+^{3}He)	**MT107 (^{3}He,α) or MT5 (Mn54 production)**	MT111 (^{3}He,2p) >>

Mn55 (^{3}He,α) or Mn54 production log-log



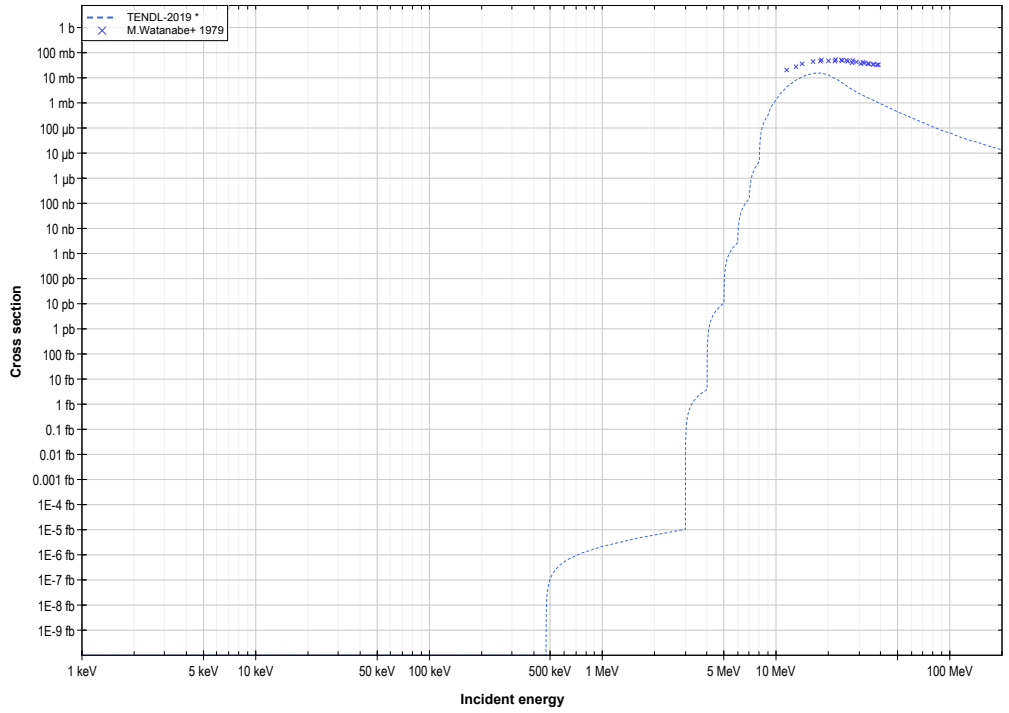
Mn55 (^{3}He,α) or Mn54 production lin-log



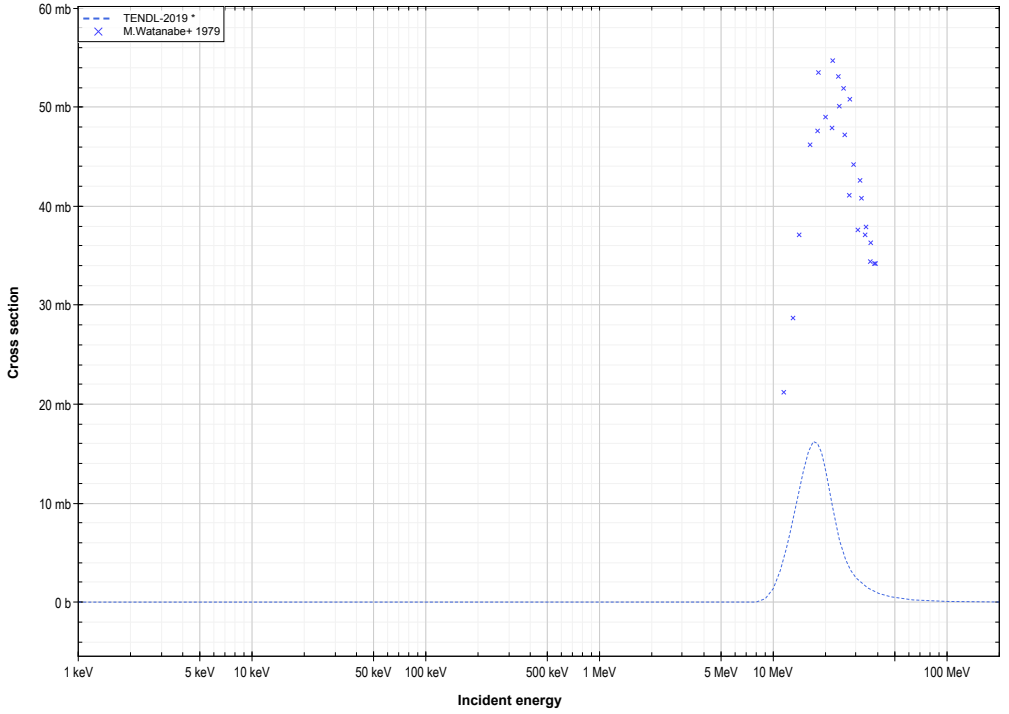
Reaction	Q-Value
Mn55(He3,α)Mn54	10351.50 keV
Mn55(He3,p+t)Mn54	-9462.36 keV
Mn55(He3,n+He3)Mn54	-10226.12 keV
Mn55(He3,2d)Mn54	-13495.03 keV
Mn55(He3,n+p+d)Mn54	-15719.59 keV
Mn55(He3,2n+2p)Mn54	-17944.16 keV

<< 21-Sc-45	**25-Mn-55**	27-Co-59 >>
<< MT107 (^{3}He,α)	**MT111 (^{3}He,2p) or MT5 (Mn56 production)**	MT116 (^{3}He,p+t) >>

Mn55 (^{3}He,2p) or Mn56 production log-log



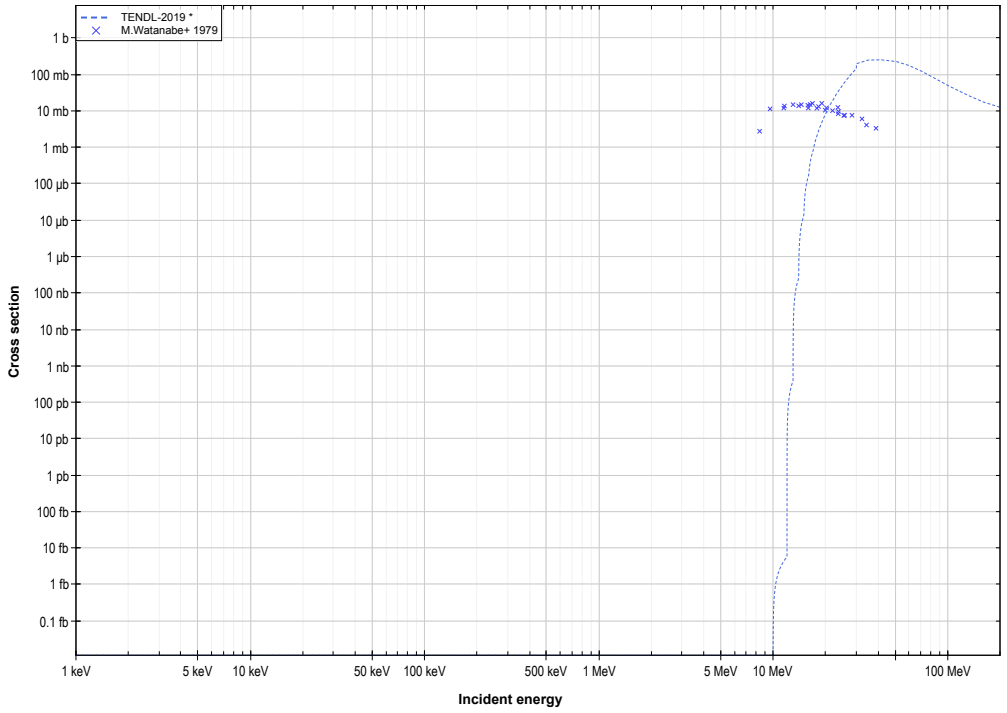
Mn55 (^{3}He,2p) or Mn56 production lin-log



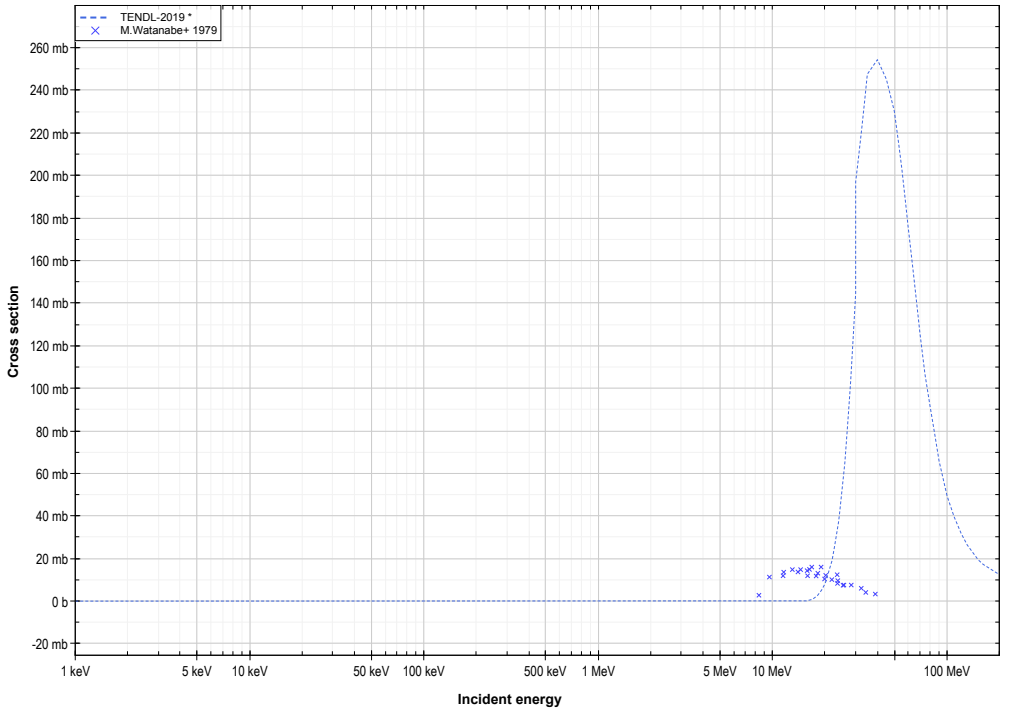
Reaction	Q-Value
Mn55(He3,2p)Mn56	-447.62 keV

<< 21-Sc-45	**25-Mn-55**	27-Co-59 >>
<< MT111 (^{3}He,2p)	**MT116 (^{3}He,p+t) or MT5 (Mn54 production)**	MT183 (^{3}He,n+p+d) >>

Mn55 (^{3}He,p+t) or Mn54 production log-log



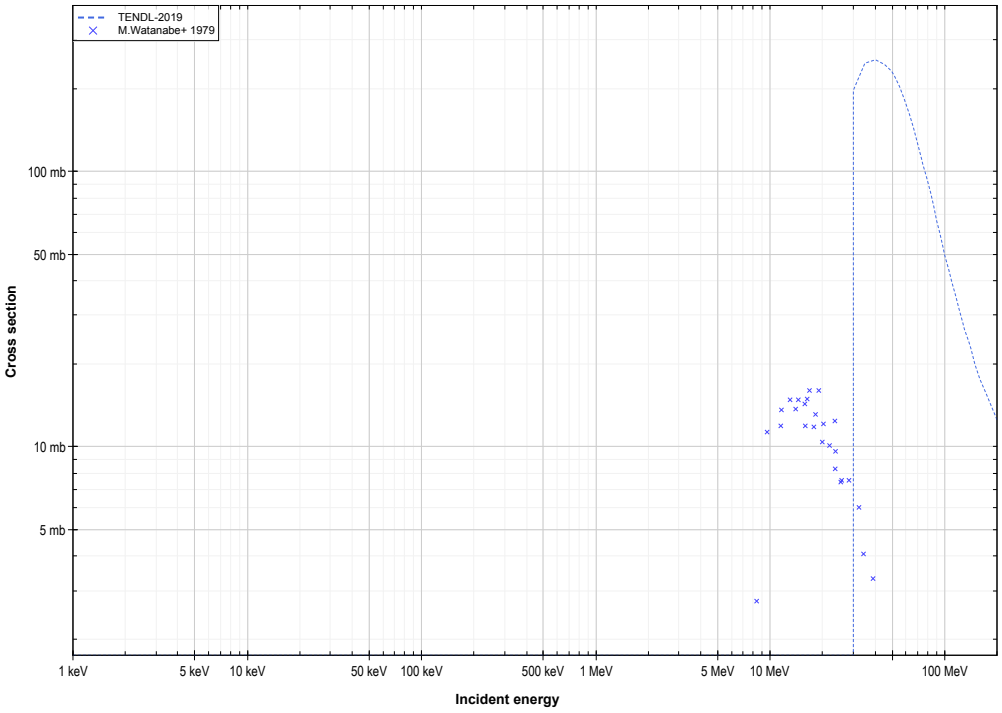
Mn55 (^{3}He,p+t) or Mn54 production lin-log



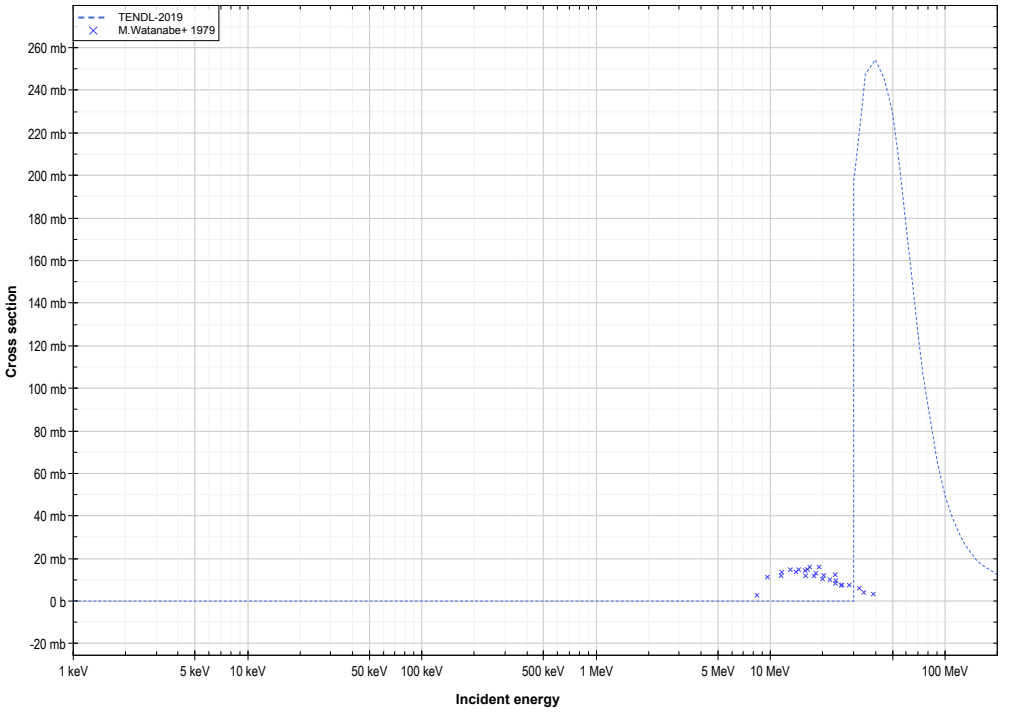
Reaction	Q-Value
Mn55(He3,α)Mn54	10351.50 keV
Mn55(He3,p+t)Mn54	-9462.36 keV
Mn55(He3,n+He3)Mn54	-10226.12 keV
Mn55(He3,2d)Mn54	-13495.03 keV
Mn55(He3,n+p+d)Mn54	-15719.59 keV
Mn55(He3,2n+2p)Mn54	-17944.16 keV

<< 21-Sc-45	**25-Mn-55**	27-Co-59 >>
<< MT116 (^{3}He,p+t)	**MT183 (^{3}He,n+p+d) or MT5 (Mn54 production)**	MT190 (^{3}He,2n+2p) >>

Mn55 (^{3}He,n+p+d) or Mn54 production log-log



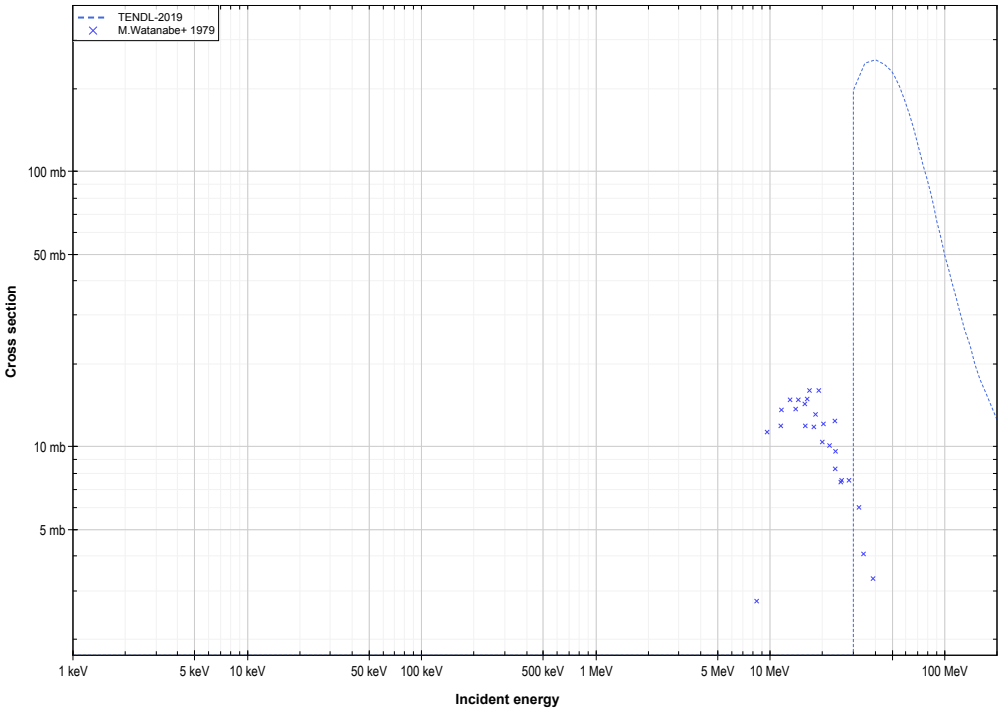
Mn55 (^{3}He,n+p+d) or Mn54 production lin-log



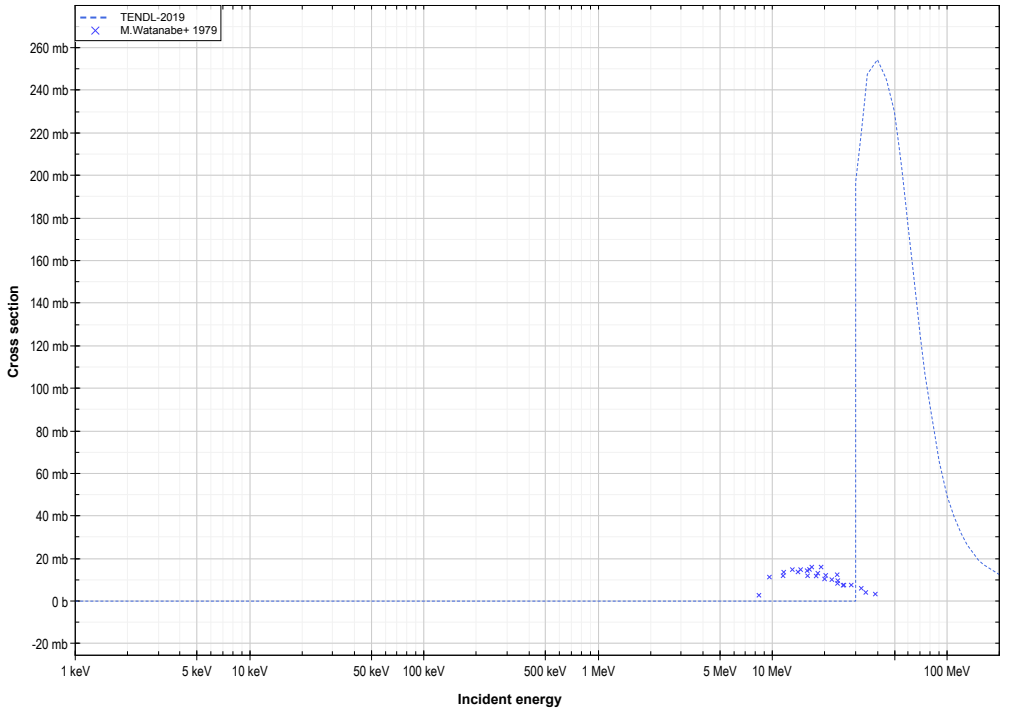
Reaction	Q-Value
Mn55(He3,α)Mn54	10351.50 keV
Mn55(He3,p+t)Mn54	-9462.36 keV
Mn55(He3,n+He3)Mn54	-10226.12 keV
Mn55(He3,2d)Mn54	-13495.03 keV
Mn55(He3,n+p+d)Mn54	-15719.59 keV
Mn55(He3,2n+2p)Mn54	-17944.16 keV

<< 21-Sc-45	**25-Mn-55**	27-Co-59 >>
<< MT183 (^{3}He,n+p+d)	**MT190 (^{3}He,2n+2p) or MT5 (Mn54 production)**	26-Fe-54 MT16 (^{3}He,2n) >>

Mn55 (^{3}He,2n+2p) or Mn54 production log-log



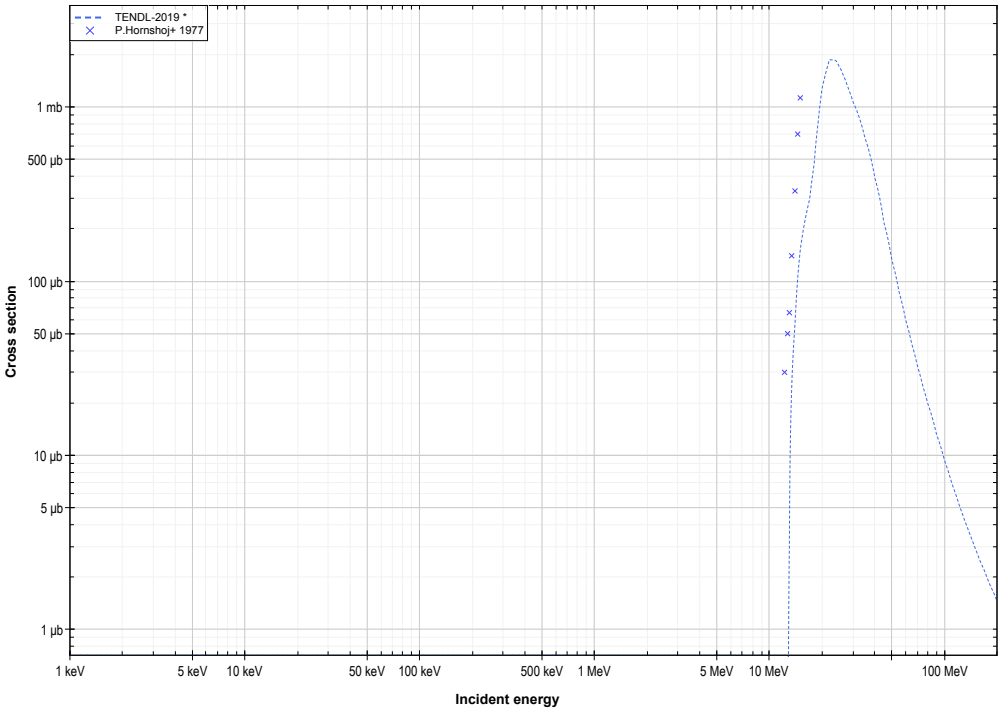
Mn55 (^{3}He,2n+2p) or Mn54 production lin-log



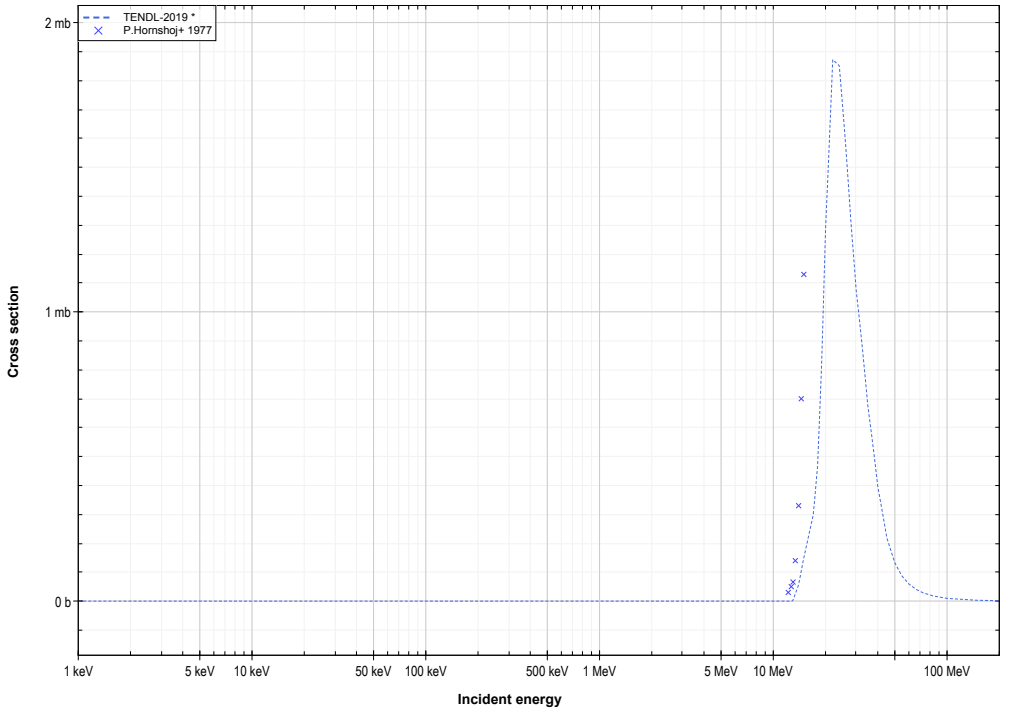
Reaction	Q-Value
Mn55(He3,α)Mn54	10351.50 keV
Mn55(He3,p+t)Mn54	-9462.36 keV
Mn55(He3,n+He3)Mn54	-10226.12 keV
Mn55(He3,2d)Mn54	-13495.03 keV
Mn55(He3,n+p+d)Mn54	-15719.59 keV
Mn55(He3,2n+2p)Mn54	-17944.16 keV

<< 25-Mn-55	**26-Fe-54**	26-Fe-56 >>
<< 25-Mn-55 MT190 (^{3}He,2n+2p)	**MT16 (^{3}He,2n) or MT5 (Ni55 production)**	26-Fe-56 MT16 (^{3}He,2n) >>

Fe54 (^{3}He,2n) or Ni55 production log-log



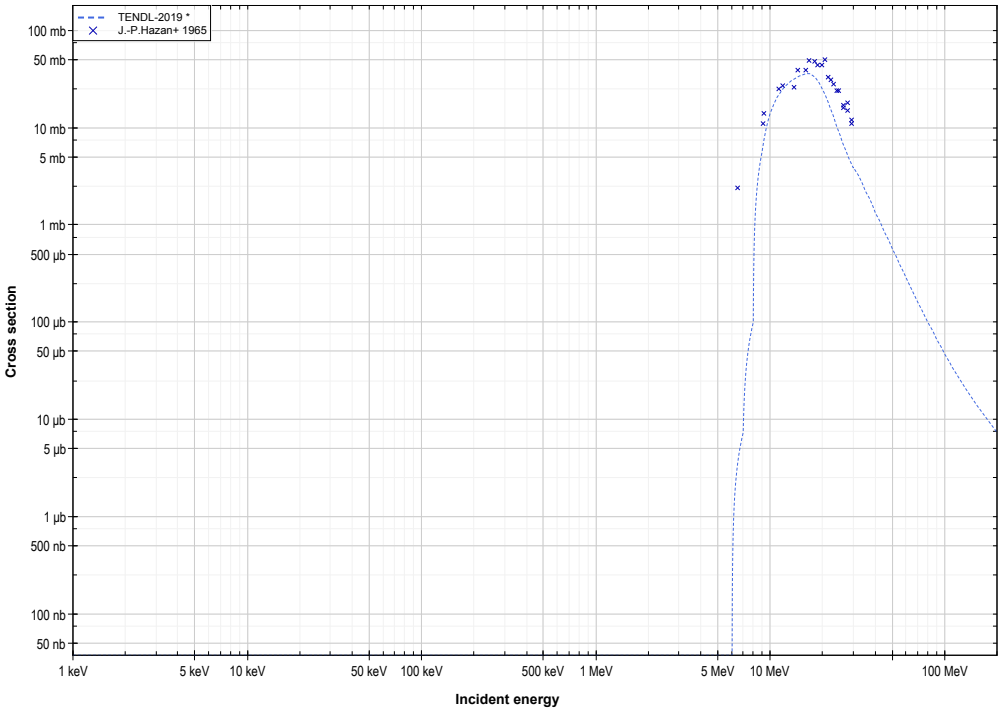
Fe54 (^{3}He,2n) or Ni55 production lin-log



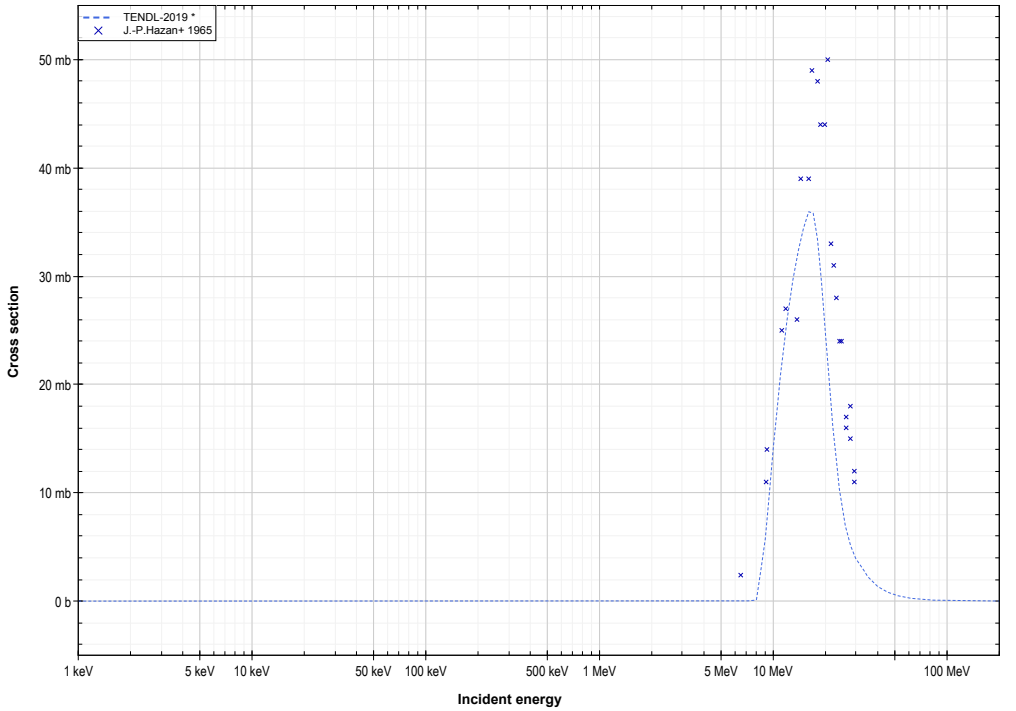
Reaction	Q-Value
Fe54(He3,2n)Ni55	-12130.12 keV

<< 26-Fe-54	**26-Fe-56**	27-Co-59 >>
<< 26-Fe-54 MT16 (^{3}He,2n)	**MT16 (^{3}He,2n) or MT5 (Ni57 production)**	MT17 (^{3}He,3n) >>

Fe56 (^{3}He,2n) or Ni57 production log-log



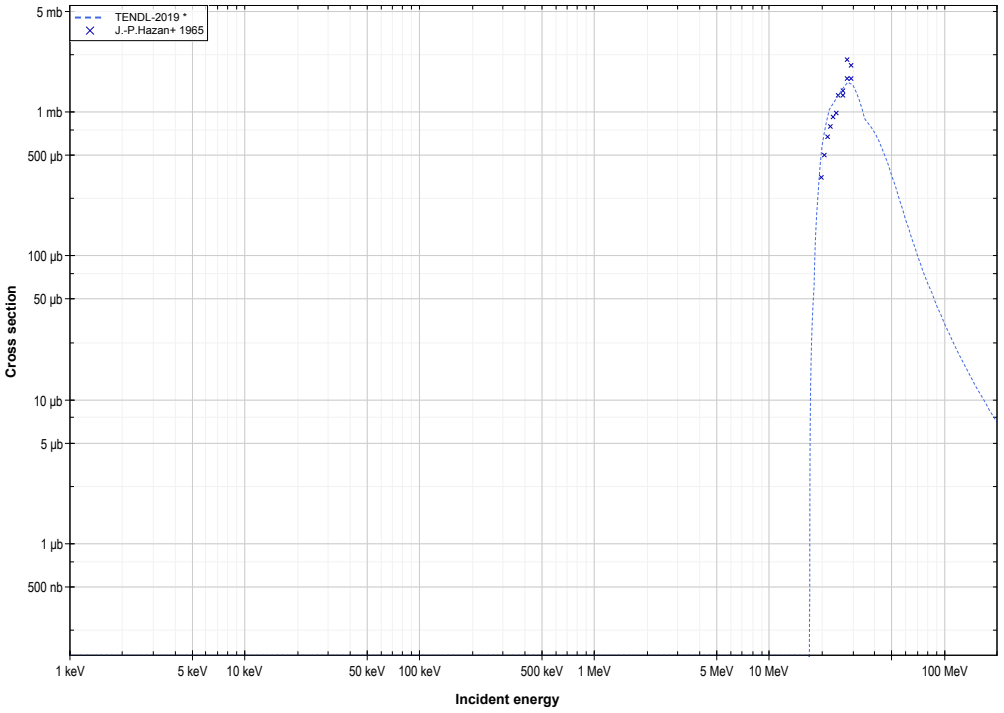
Fe56 (^{3}He,2n) or Ni57 production lin-log



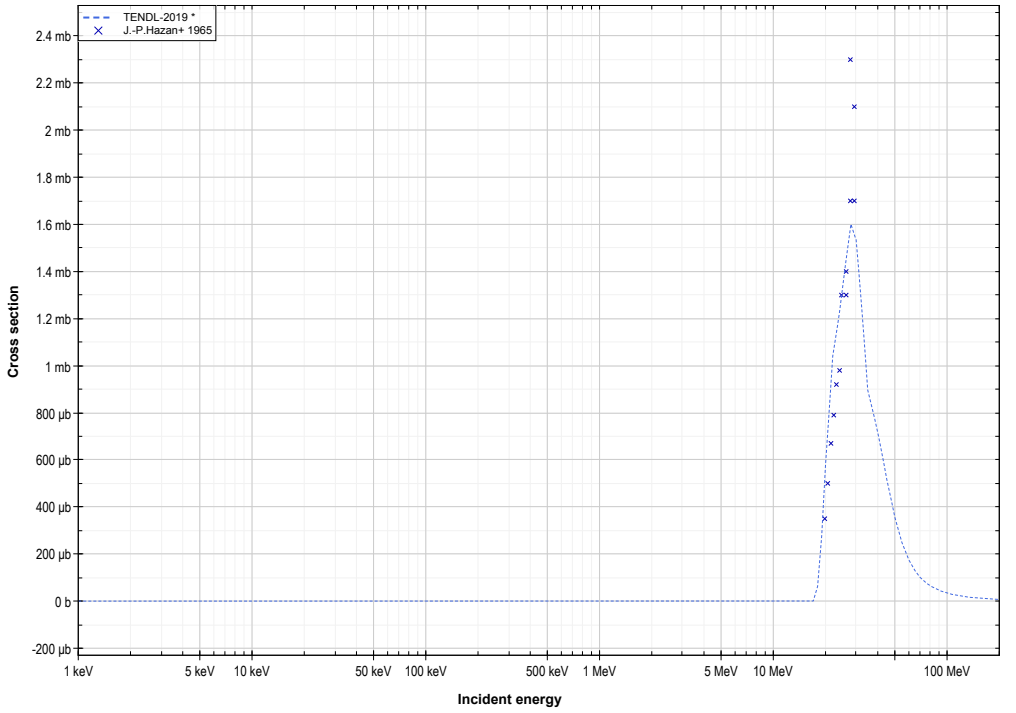
Reaction	Q-Value
Fe56(He3,2n)Ni57	-5734.72 keV

<< 25-Mn-55	**26-Fe-56**	29-Cu-65 >>
<< MT16 (³He,2n)	**MT17 (³He,3n) or MT5 (Ni56 production)**	MT28 (³He,n+p) >>

Fe56 (³He,3n) or Ni56 production log-log



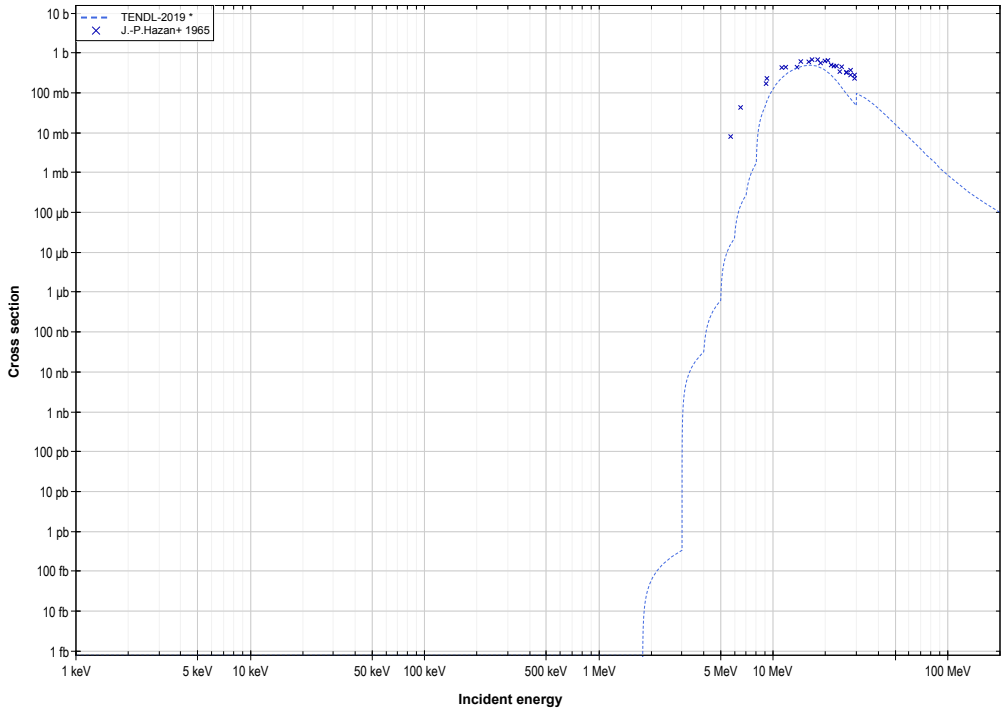
Fe56 (³He,3n) or Ni56 production lin-log



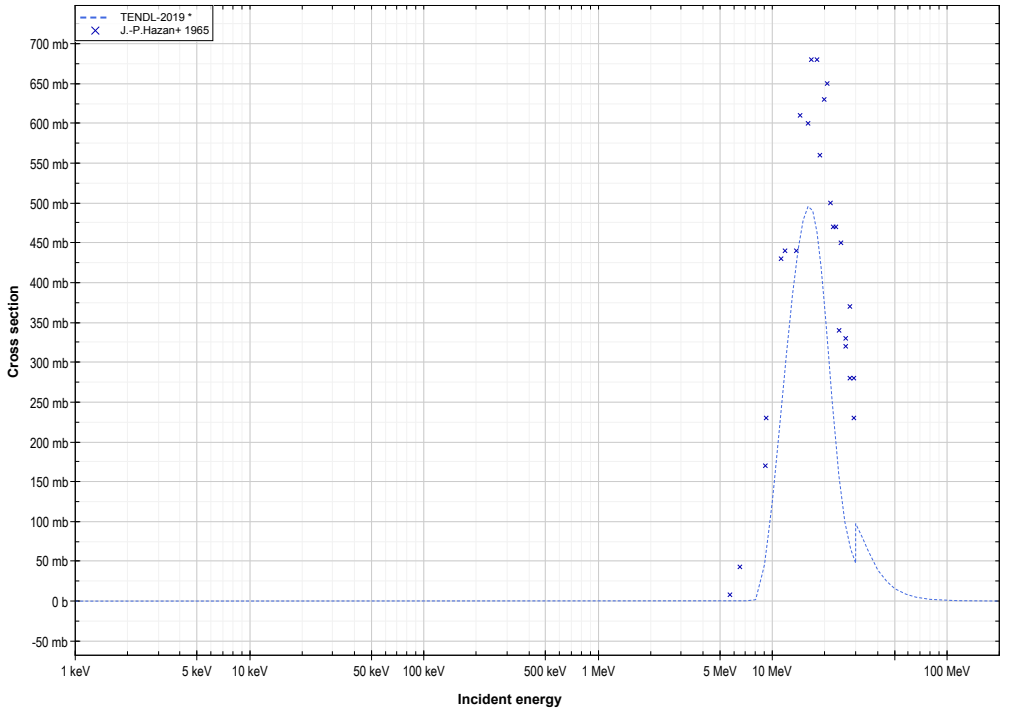
Reaction	Q-Value
Fe56(He3,3n)Ni56	-15982.33 keV

<< 14-Si-28	**26-Fe-56**	30-Zn-66 >>
<< MT17 (³He,3n)	**MT28 (³He,n+p) or MT5 (Co57 production)**	MT32 (³He,n+d) >>

Fe56 (³He,n+p) or Co57 production log-log



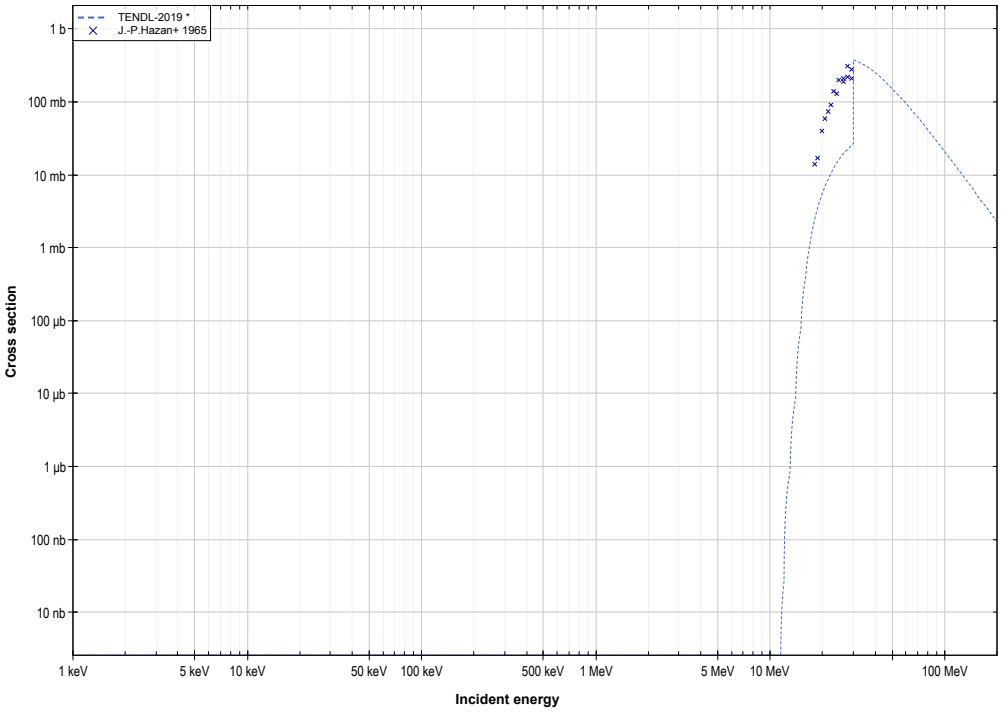
Fe56 (³He,n+p) or Co57 production lin-log



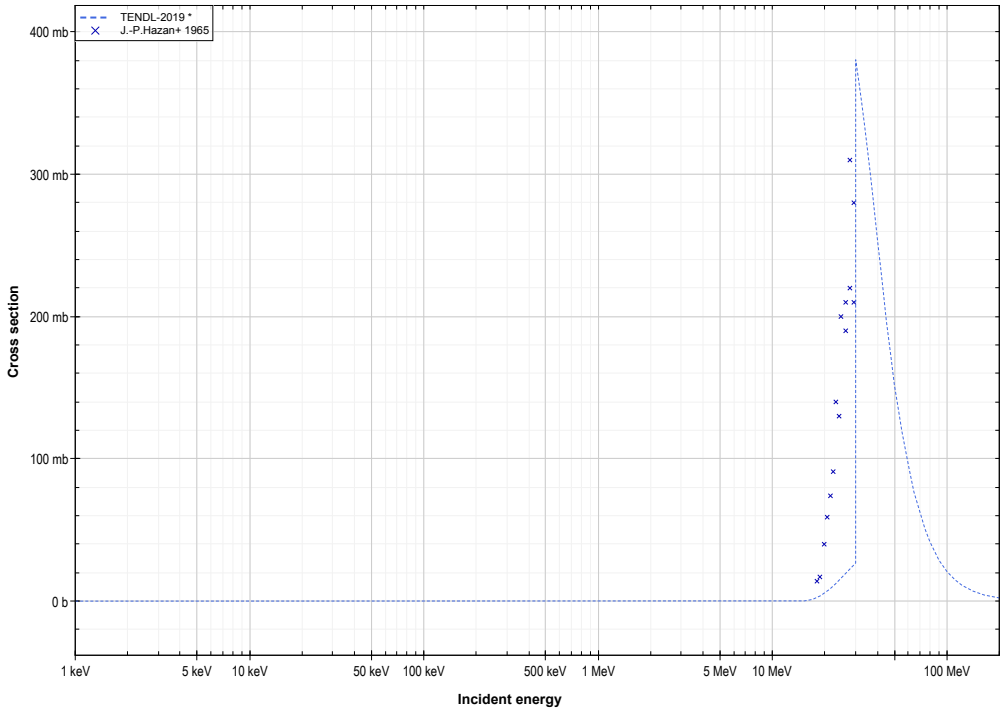
Reaction	Q-Value
Fe56(He3,d)Co57	534.00 keV
Fe56(He3,n+p)Co57	-1690.57 keV

<< 24-Cr-52	**26-Fe-56**	30-Zn-66 >>
<< MT28 (^{3}He,n+p)	**MT32 (^{3}He,n+d) or MT5 (Co56 production)**	MT41 (^{3}He,2n+p) >>

Fe56 (^{3}He,n+d) or Co56 production log-log



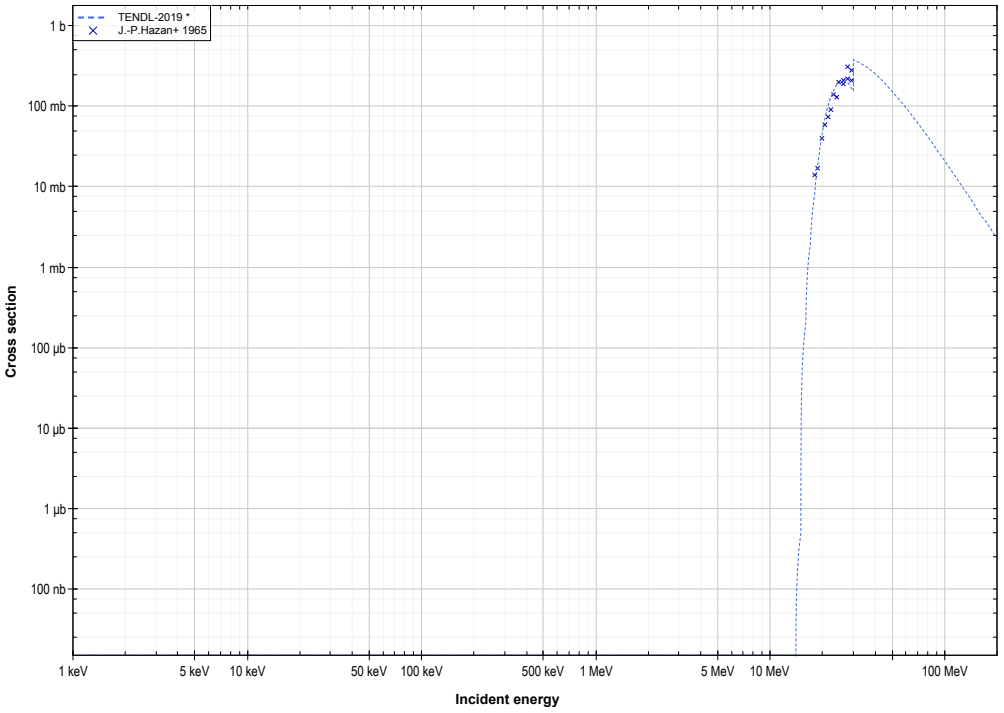
Fe56 (^{3}He,n+d) or Co56 production lin-log



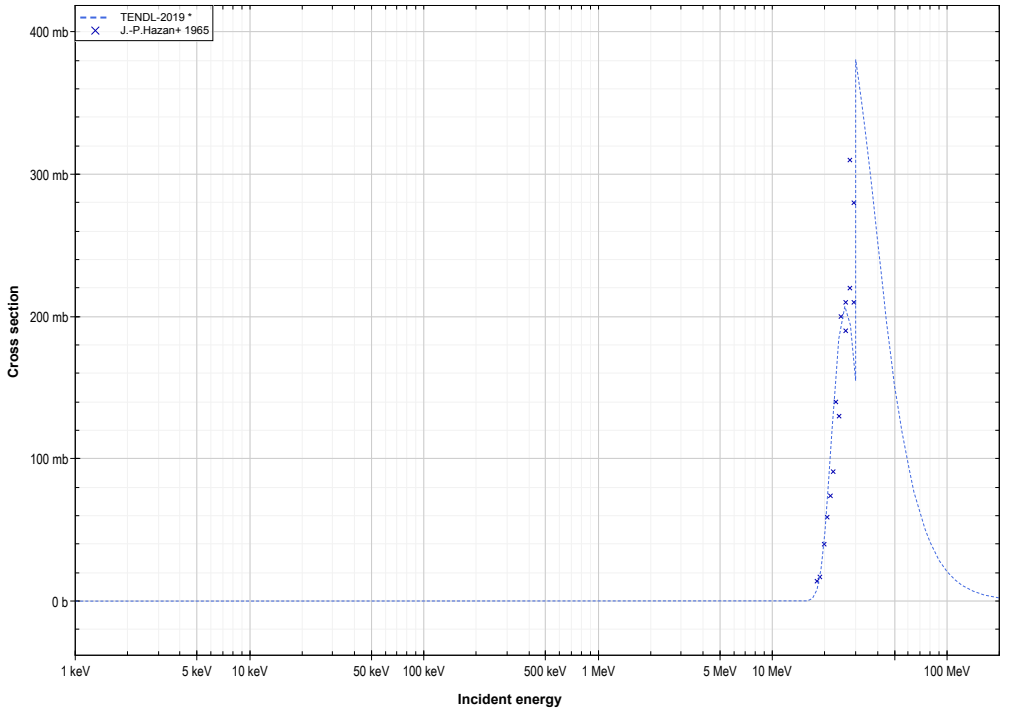
Reaction	Q-Value
Fe56(He3,t)Co56	-4585.29 keV
Fe56(He3,n+d)Co56	-10842.52 keV
Fe56(He3,2n+p)Co56	-13067.09 keV

<< 24-Cr-52	**26-Fe-56**	30-Zn-66 >>
<< MT32 (³He,n+d)	**MT41 (³He,2n+p) or MT5 (Co56 production)**	MT103 (³He,p) >>

Fe56 (³He,2n+p) or Co56 production log-log



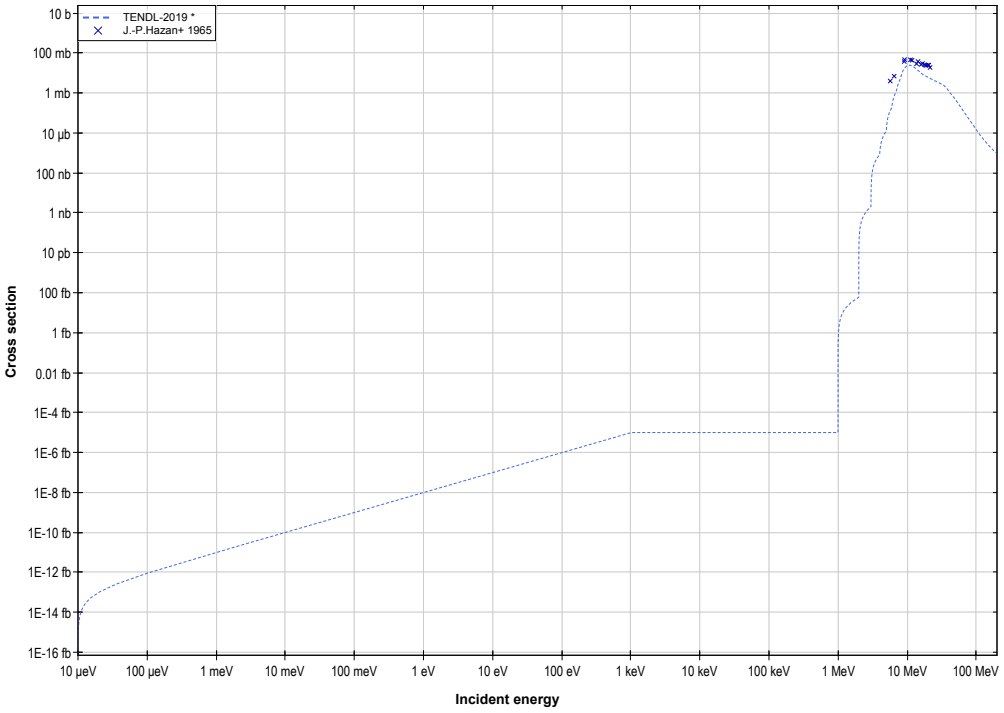
Fe56 (³He,2n+p) or Co56 production lin-log



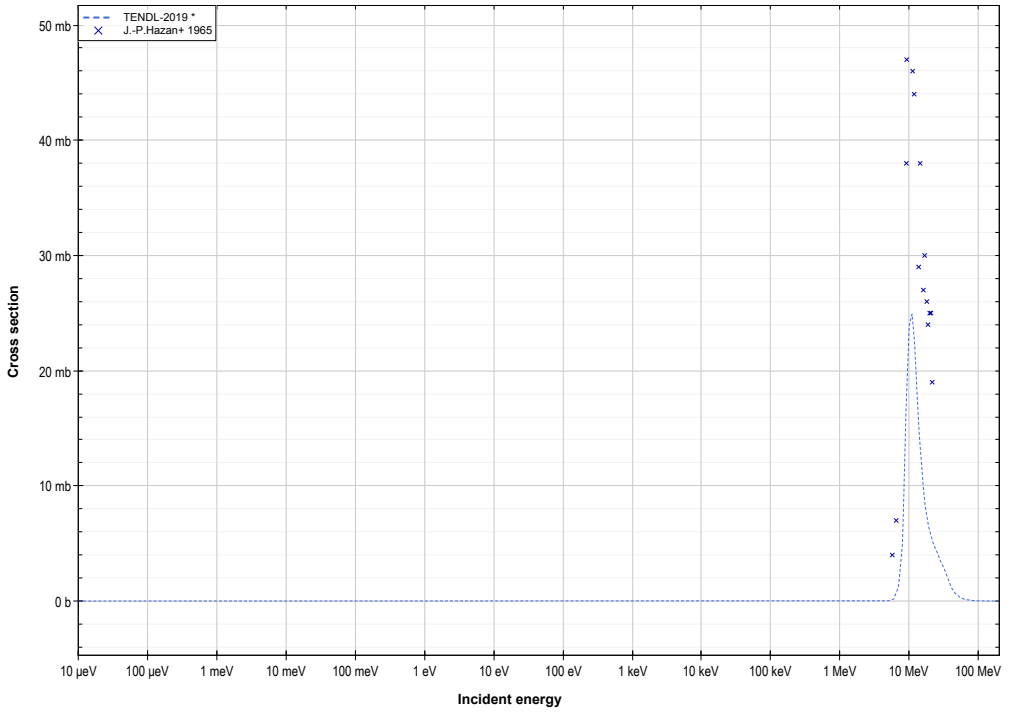
Reaction	Q-Value
Fe56(He3,t)Co56	-4585.29 keV
Fe56(He3,n+d)Co56	-10842.52 keV
Fe56(He3,2n+p)Co56	-13067.09 keV

<< 14-Si-28	**26-Fe-56**	29-Cu-63 >>
<< MT41 (³He,2n+p)	**MT103 (³He,p) or MT5 (Co58 production)**	MT104 (³He,d) >>

Fe56 (³He,p) or Co58 production log-log



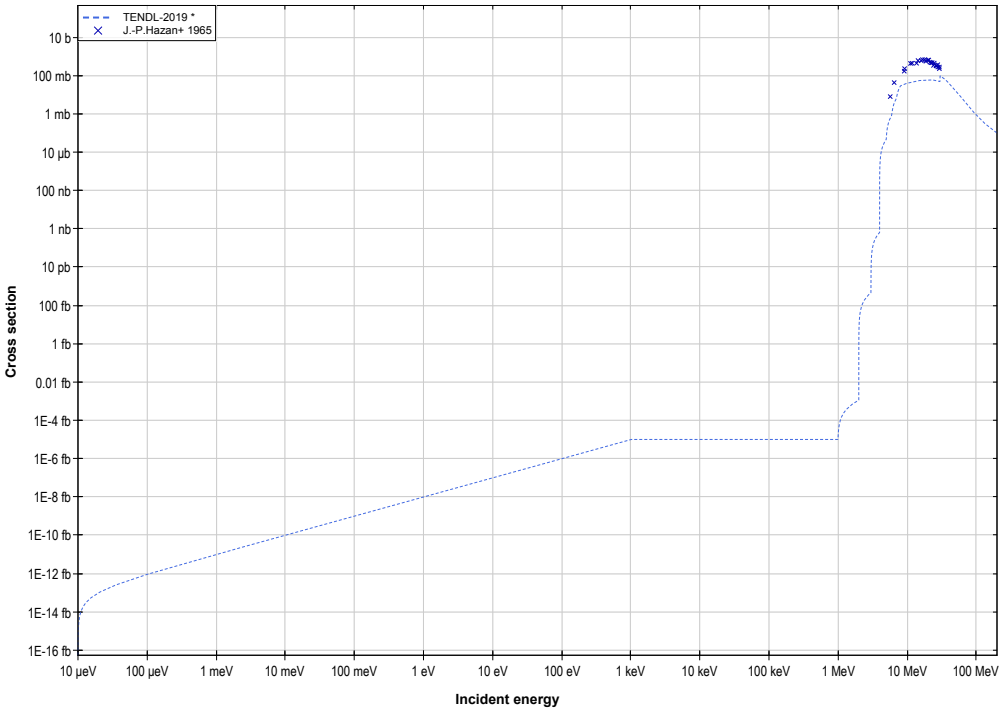
Fe56 (³He,p) or Co58 production lin-log



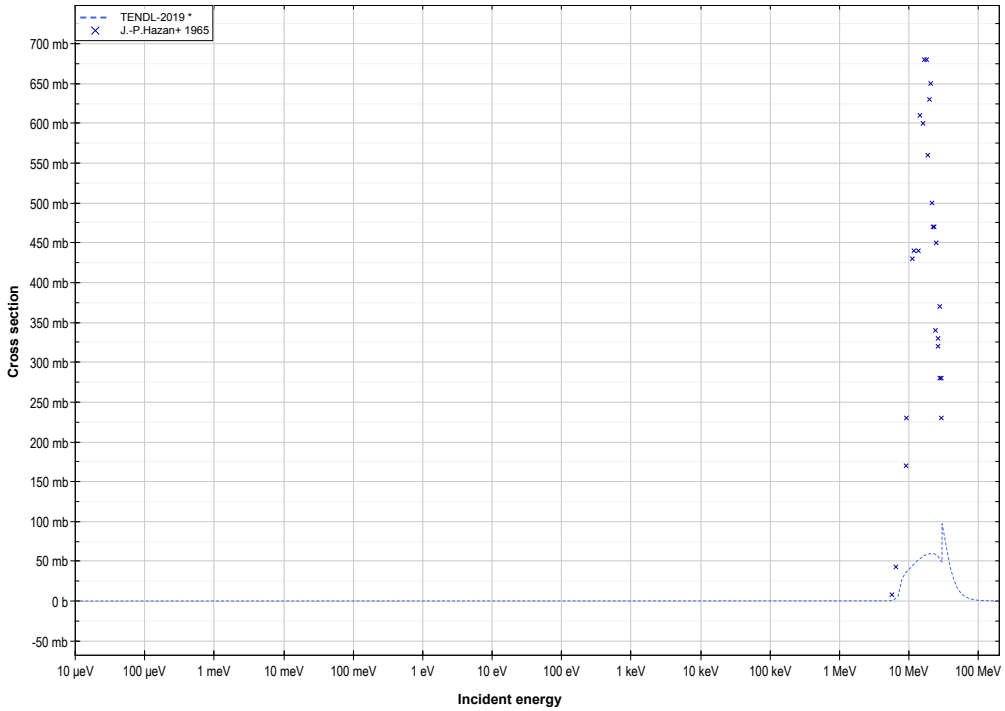
Reaction	Q-Value
Fe56(He3,p)Co58	6882.35 keV

<< 14-Si-28	**26-Fe-56**	30-Zn-66 >>
<< MT103 (³He,p)	**MT104 (³He,d) or MT5 (Co57 production)**	MT105 (³He,t) >>

Fe56 (³He,d) or Co57 production log-log



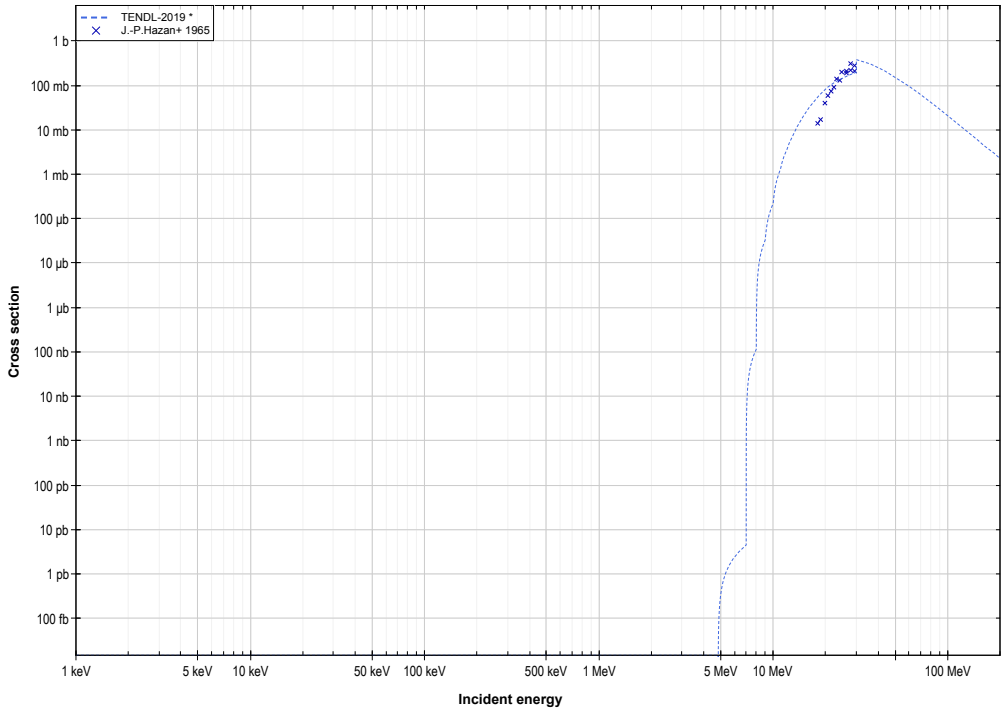
Fe56 (³He,d) or Co57 production lin-log



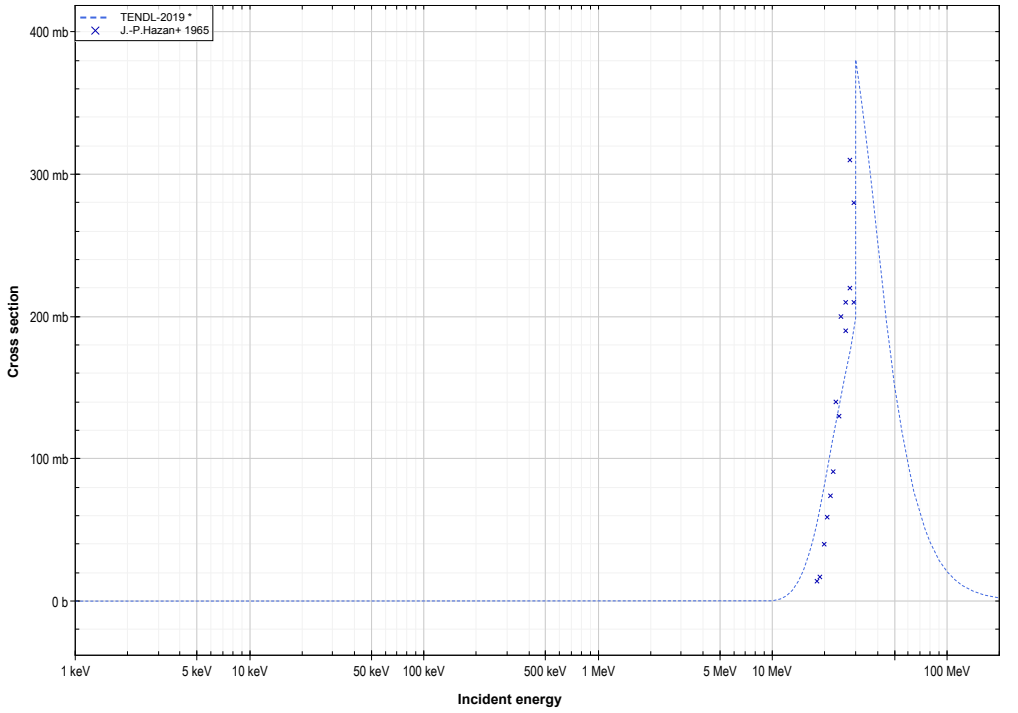
Reaction	Q-Value
Fe56(He3,d)Co57	534.00 keV
Fe56(He3,n+p)Co57	-1690.57 keV

<< 24-Cr-52	**26-Fe-56**	30-Zn-66 >>
<< MT104 (^{3}He,d)	**MT105 (^{3}He,t) or MT5 (Co56 production)**	27-Co-59 MT4 (^{3}He,n) >>

Fe56 (^{3}He,t) or Co56 production log-log



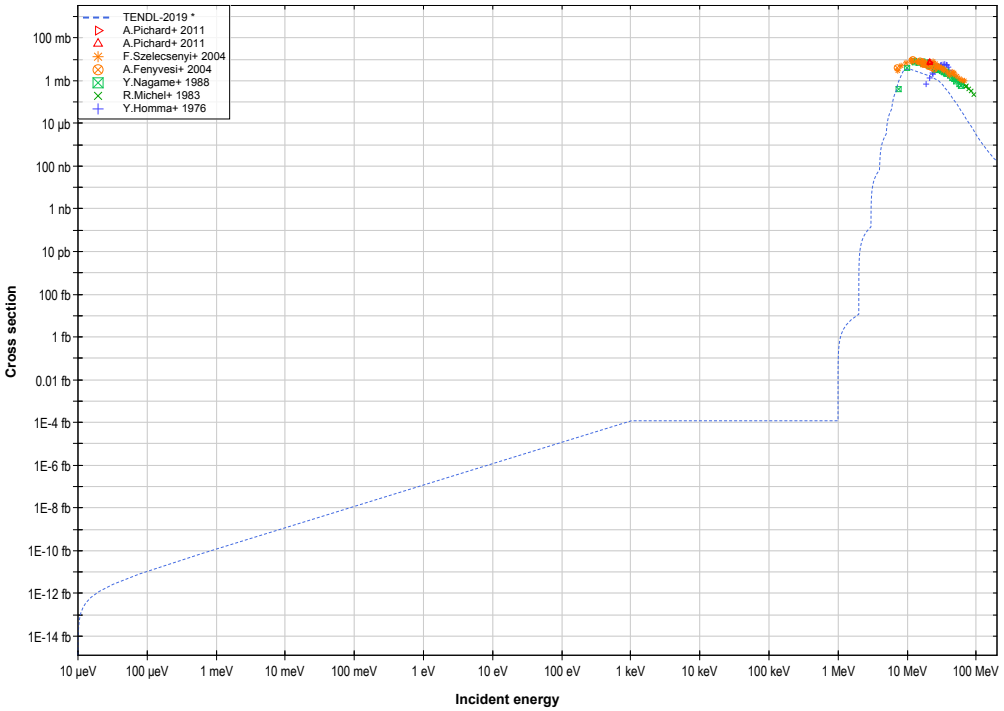
Fe56 (^{3}He,t) or Co56 production lin-log



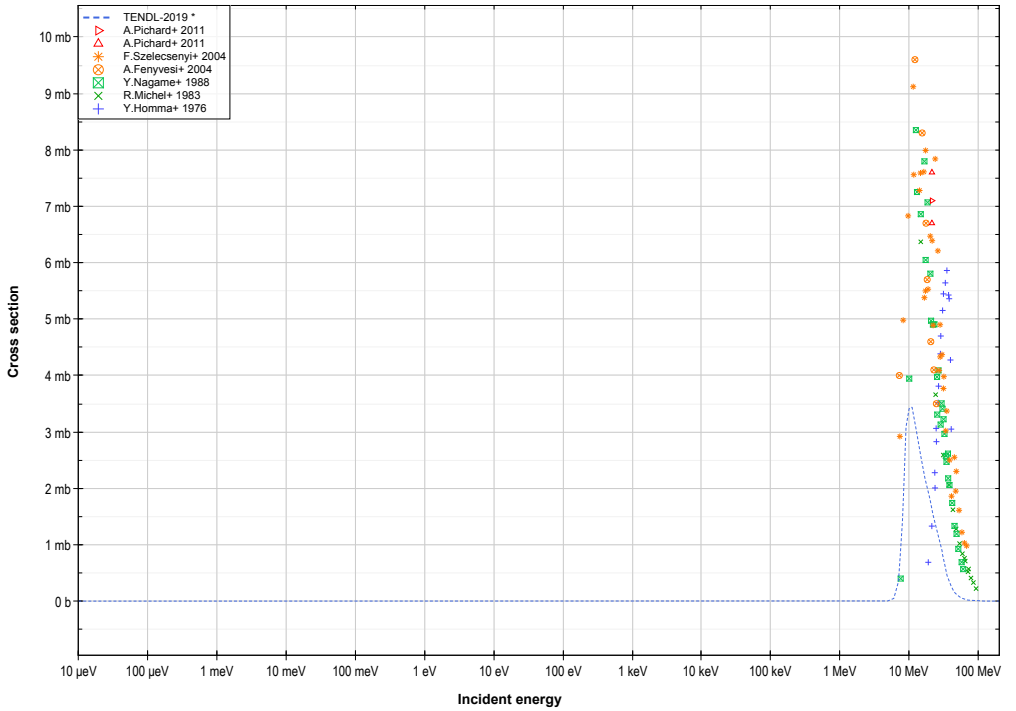
Reaction	Q-Value
Fe56(He3,t)Co56	-4585.29 keV
Fe56(He3,n+d)Co56	-10842.52 keV
Fe56(He3,2n+p)Co56	-13067.09 keV

<< 25-Mn-55	**27-Co-59**	29-Cu-63 >>
<< 26-Fe-56 MT105 (^{3}He,t)	**MT4 (^{3}He,n) or MT5 (Cu61 production)**	MT16 (^{3}He,2n) >>

Co59 (^{3}He,n) or Cu61 production log-log



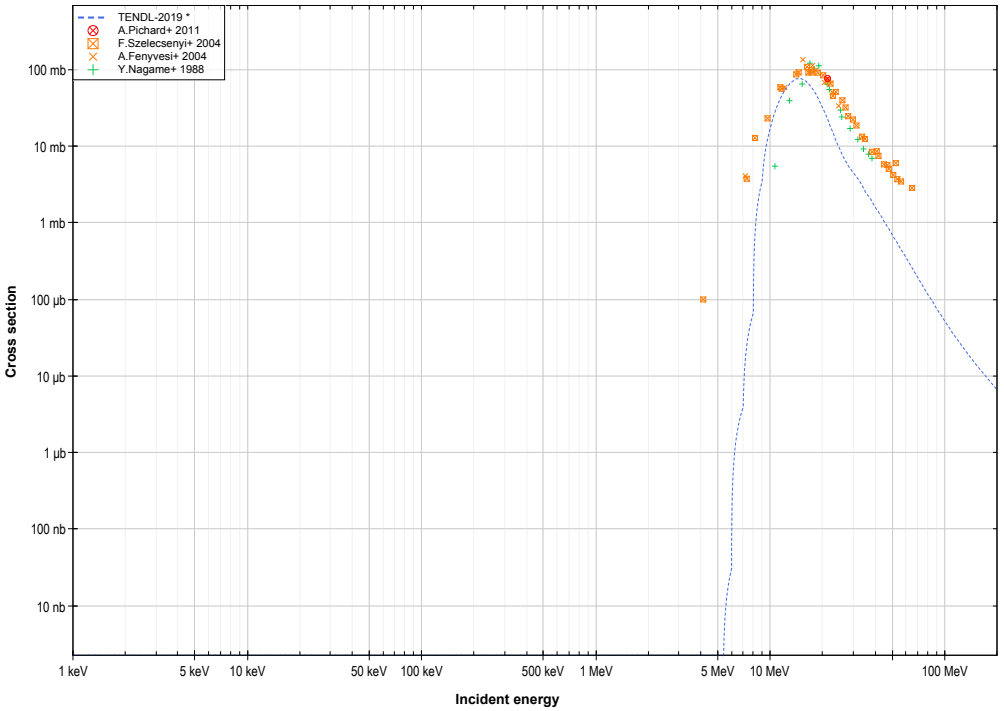
Co59 (^{3}He,n) or Cu61 production lin-log



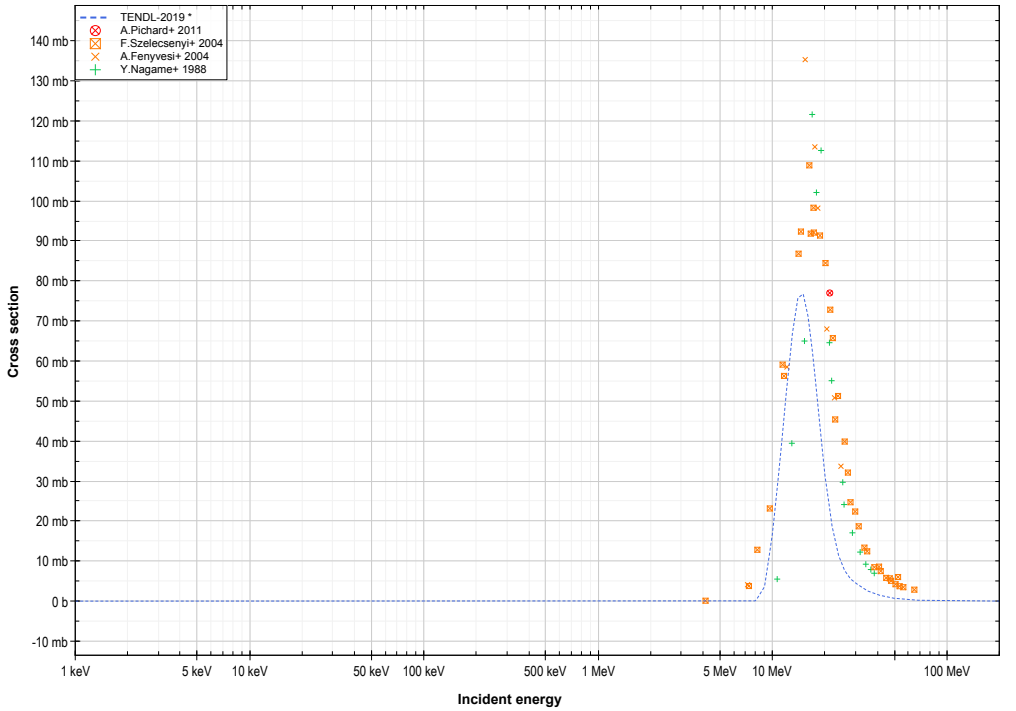
Reaction	Q-Value
Co59(He3,n)Cu61	6614.30 keV

<< 26-Fe-56	**27-Co-59**	29-Cu-63 >>
<< MT4 (^{3}He,n)	**MT16 (^{3}He,2n) or MT5 (Cu60 production)**	MT22 (^{3}He,n+α) >>

Co59 (^{3}He,2n) or Cu60 production log-log



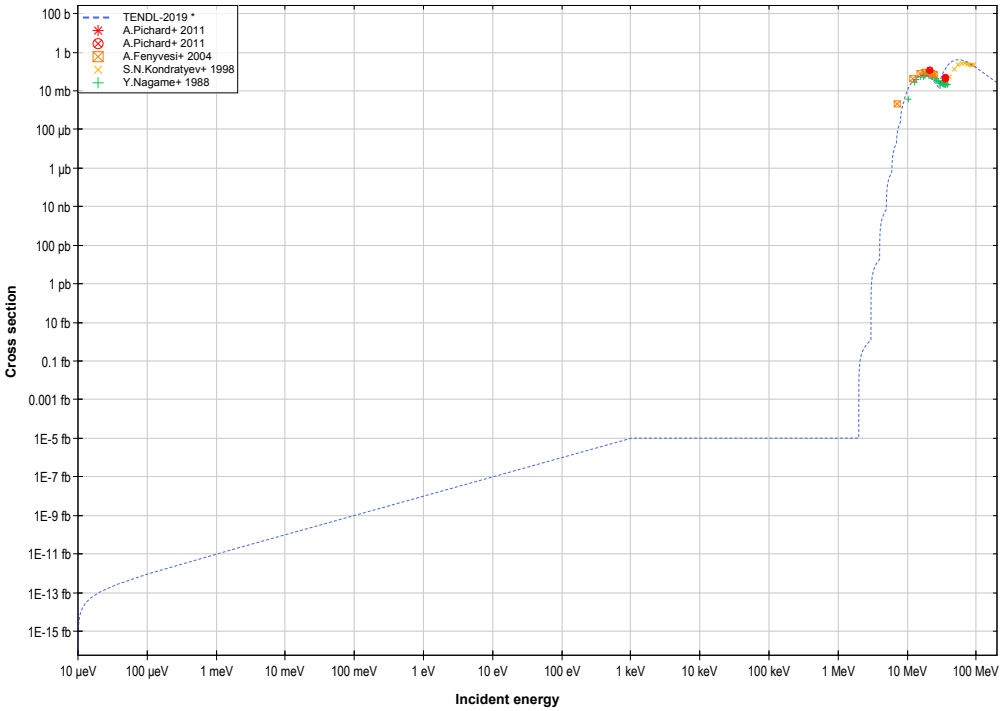
Co59 (^{3}He,2n) or Cu60 production lin-log



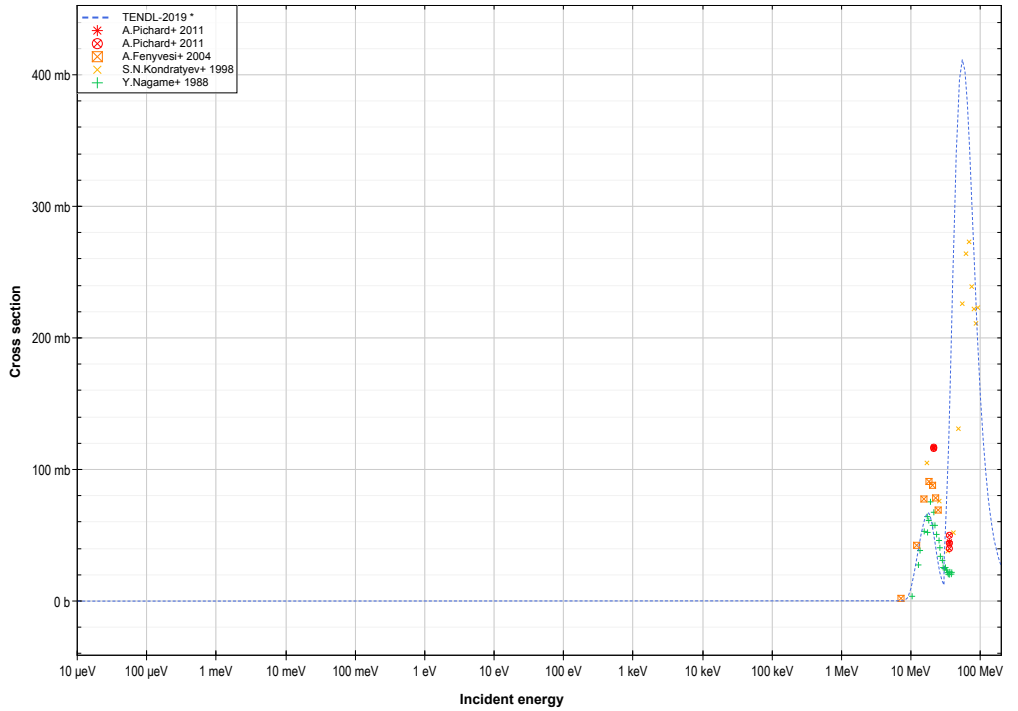
Reaction	Q-Value
Co59(He3,2n)Cu60	-5096.02 keV

<< 23-V-51	**27-Co-59**	29-Cu-63 >>
<< MT16 (³He,2n)	**MT22 (³He,n+α) or MT5 (Co57 production)**	MT24 (³He,2n+α) >>

Co59 (³He,n+α) or Co57 production log-log



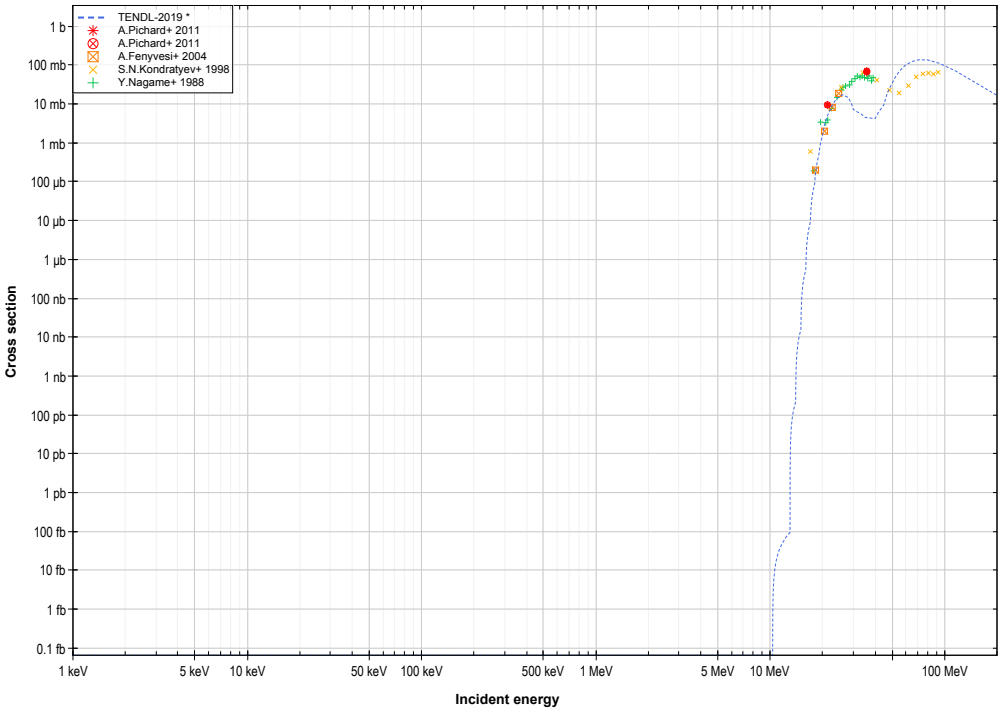
Co59 (³He,n+α) or Co57 production lin-log



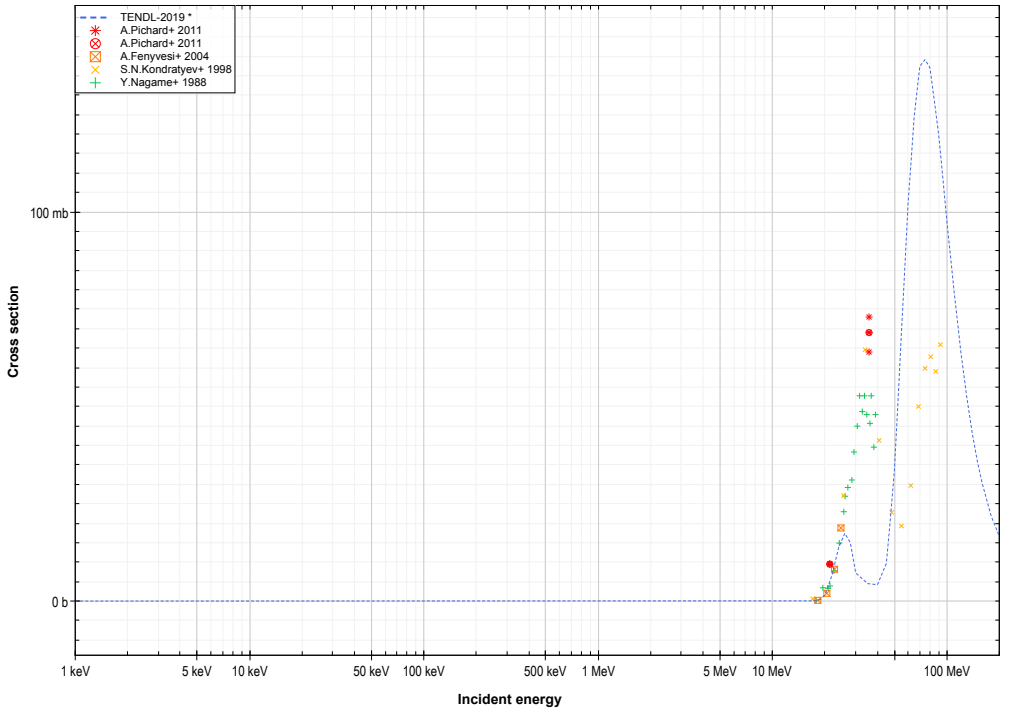
Reaction	Q-Value
Co59(He3,n+α)Co57	1550.89 keV
Co59(He3,d+t)Co57	-16038.41 keV
Co59(He3,n+p+t)Co57	-18262.98 keV
Co59(He3,2n+He3)Co57	-19026.73 keV
Co59(He3,n+2d)Co57	-22295.64 keV
Co59(He3,2n+p+d)Co57	-24520.21 keV
Co59(He3,3n+2p)Co57	-26744.77 keV

<< 13-Al-27	**27-Co-59**	47-Ag-107 >>
<< MT22 (^{3}He,n+α)	**MT24 (^{3}He,2n+α) or MT5 (Co56 production)**	MT34 (^{3}He,n+^{3}He) >>

Co59 (^{3}He,2n+α) or Co56 production log-log



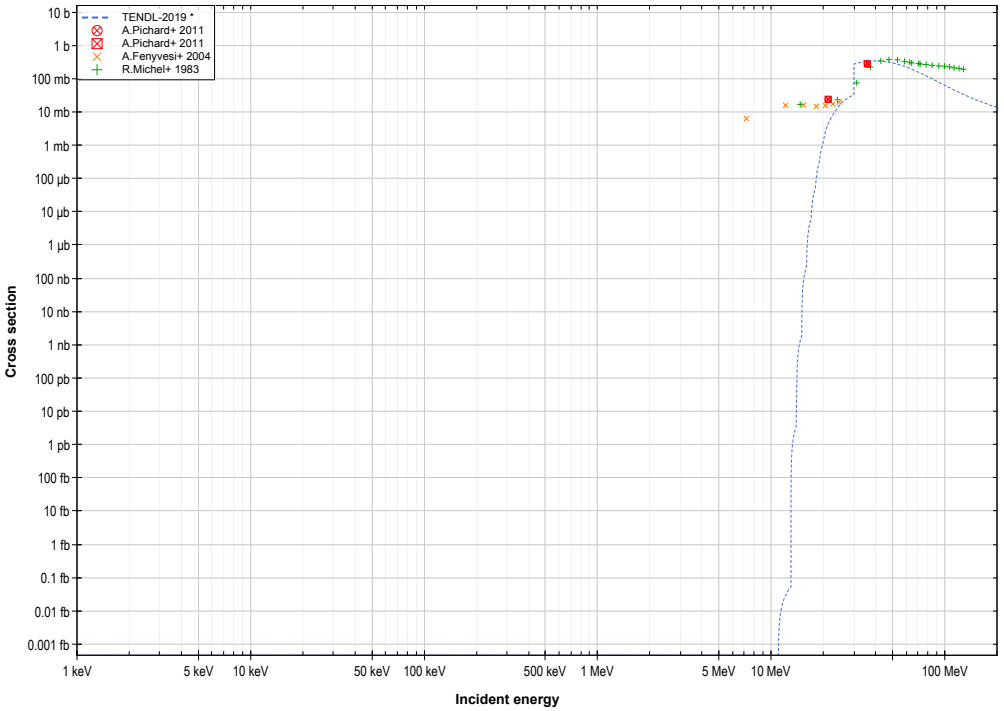
Co59 (^{3}He,2n+α) or Co56 production lin-log



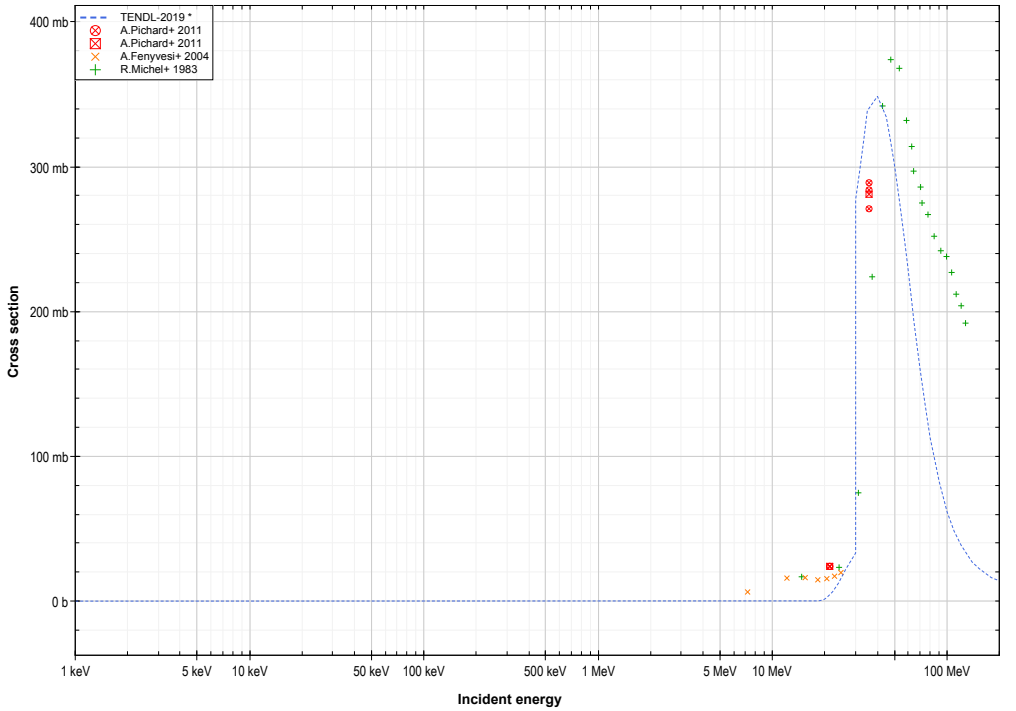
Reaction	Q-Value
Co59(He3,2n+α)Co56	-9825.63 keV
Co59(He3,2t)Co56	-21157.70 keV
Co59(He3,n+d+t)Co56	-27414.93 keV
Co59(He3,2n+p+t)Co56	-29639.50 keV
Co59(He3,3n+He3)Co56	-30403.25 keV
Co59(He3,2n+2d)Co56	-33672.16 keV
Co59(He3,3n+p+d)Co56	-35896.73 keV
Co59(He3,4n+2p)Co56	-38121.29 keV

<< 25-Mn-55	**27-Co-59**	29-Cu-65 >>
<< MT24 (³He,2n+α)	**MT34 (³He,n+³He) or MT5 (Co58 production)**	MT107 (³He,α) >>

Co59 (³He,n+³He) or Co58 production log-log



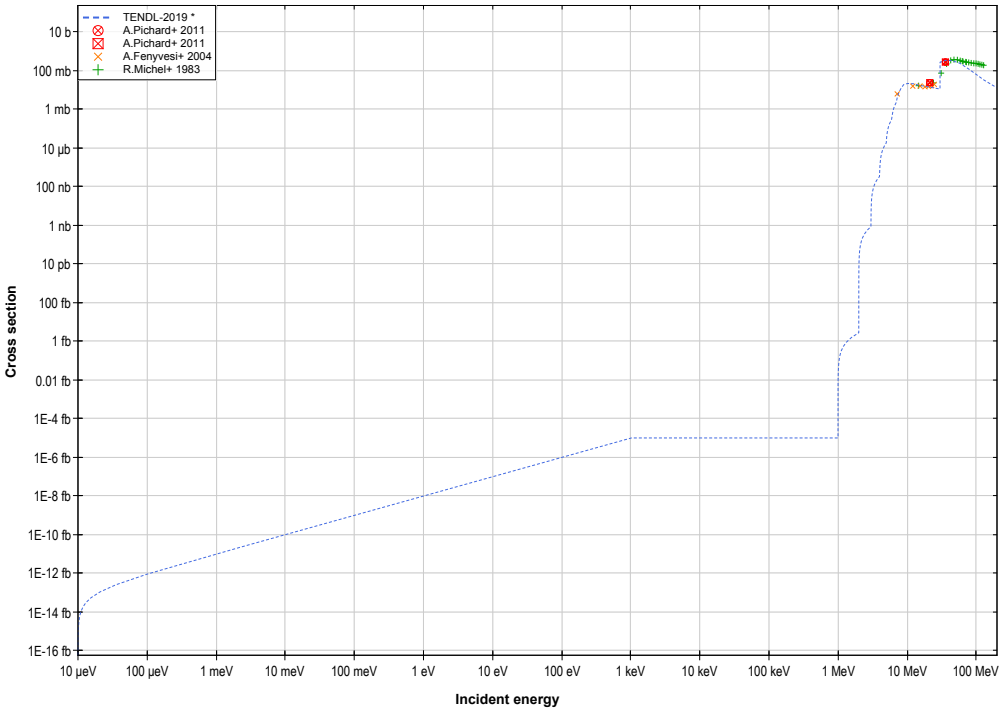
Co59 (³He,n+³He) or Co58 production lin-log



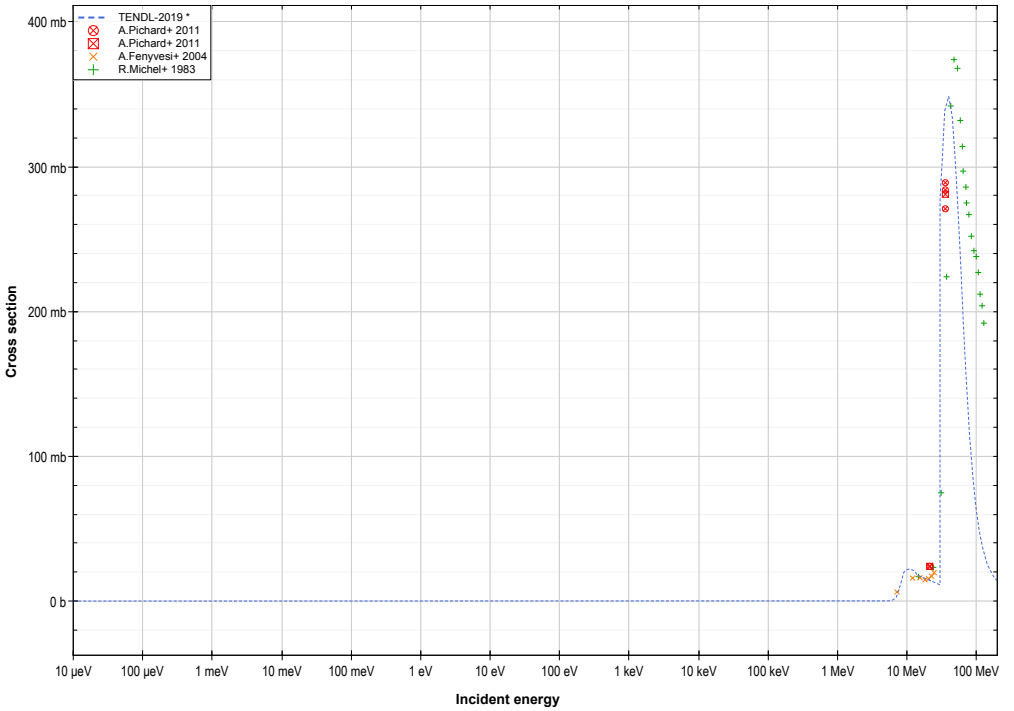
Reaction	Q-Value
Co59(He3,α)Co58	10123.80 keV
Co59(He3,p+t)Co58	-9690.06 keV
Co59(He3,n+He3)Co58	-10453.82 keV
Co59(He3,2d)Co58	-13722.73 keV
Co59(He3,n+p+d)Co58	-15947.29 keV
Co59(He3,2n+2p)Co58	-18171.86 keV

<< 25-Mn-55	**27-Co-59**	29-Cu-65 >>
<< MT34 (^{3}He,n+^{3}He)	**MT107 (^{3}He,α) or MT5 (Co58 production)**	MT108 (^{3}He,2α) >>

Co59 (^{3}He,α) or Co58 production log-log



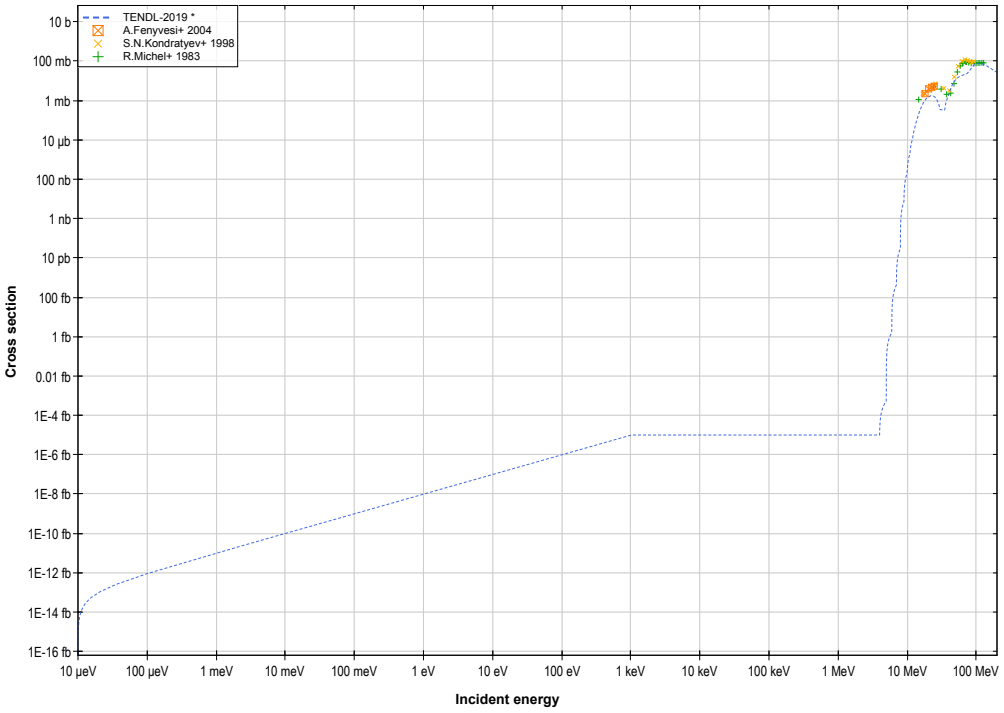
Co59 (^{3}He,α) or Co58 production lin-log



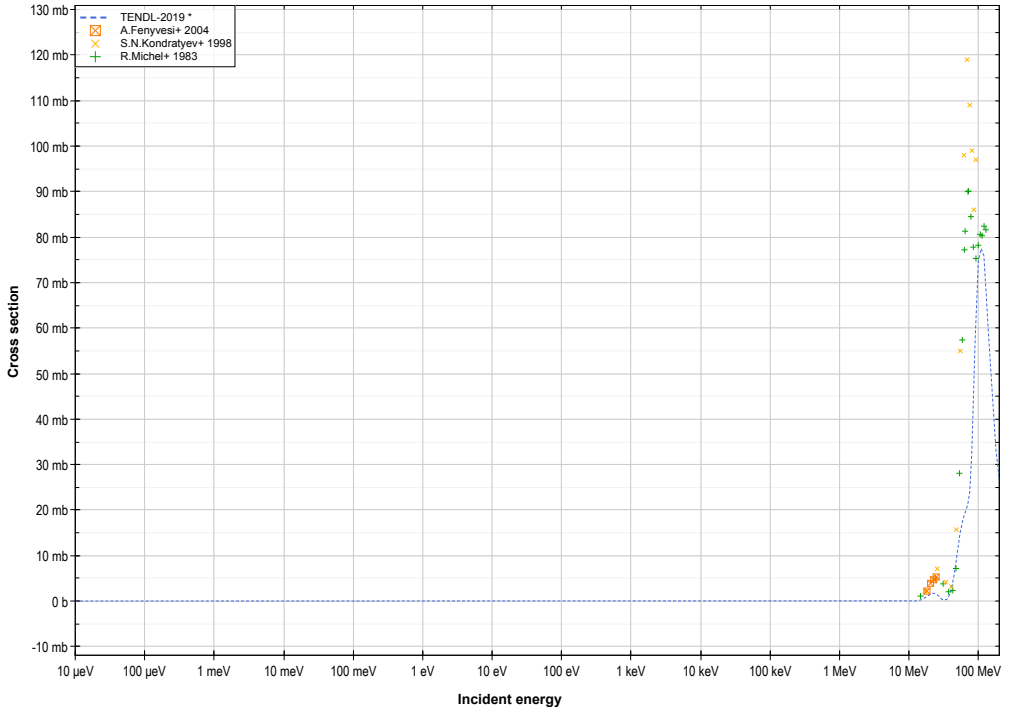
Reaction	Q-Value
Co59(He3,α)Co58	10123.80 keV
Co59(He3,p+t)Co58	-9690.06 keV
Co59(He3,n+He3)Co58	-10453.82 keV
Co59(He3,2d)Co58	-13722.73 keV
Co59(He3,n+p+d)Co58	-15947.29 keV
Co59(He3,2n+2p)Co58	-18171.86 keV

<< 19-K-39	**27-Co-59**	29-Cu-63 >>
<< MT107 (³He,α)	**MT108 (³He,2α) or MT5 (Mn54 production)**	MT111 (³He,2p) >>

Co59 (³He,2α) or Mn54 production log-log



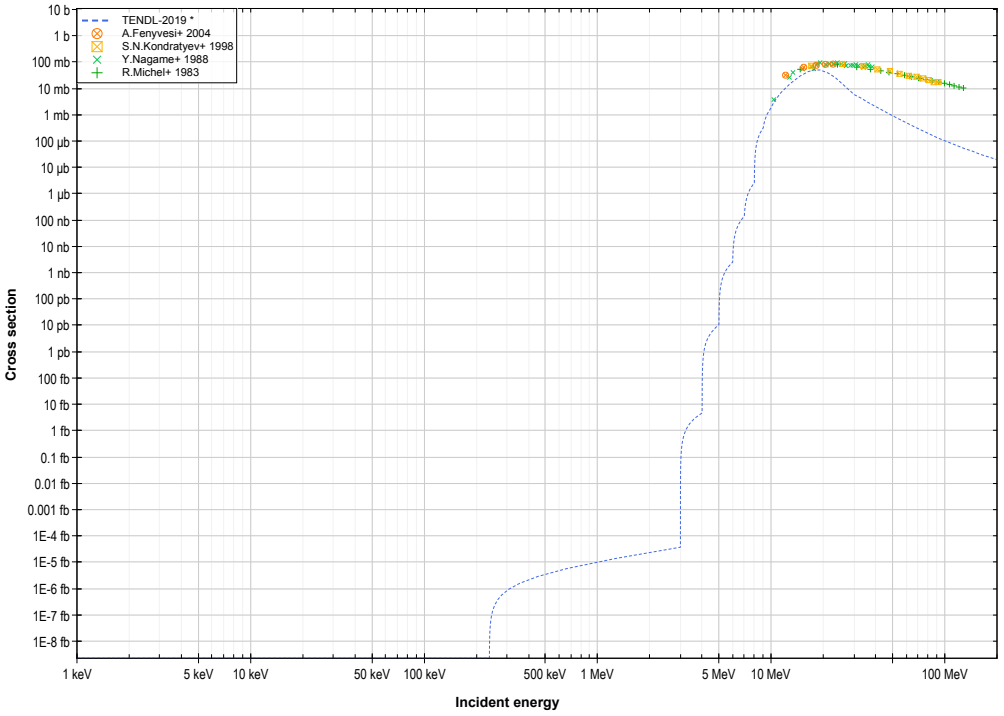
Co59 (³He,2α) or Mn54 production lin-log



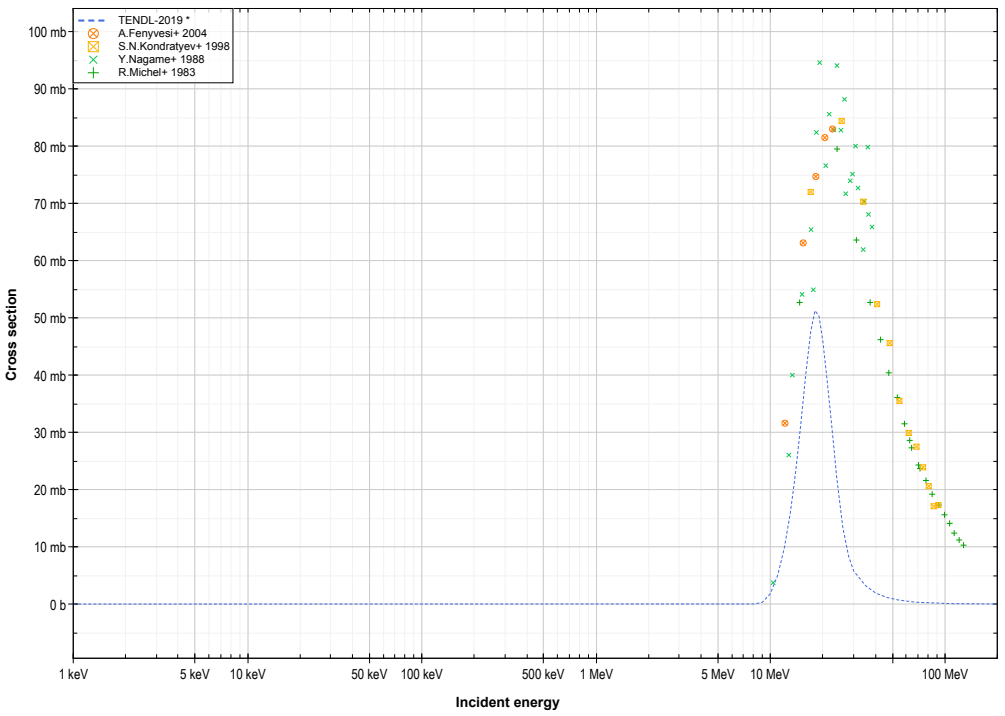
Reaction	Q-Value	Reaction	Q-Value
Co59(He3,2α)Mn54	3409.29 keV	Co59(He3,n+p+t+He3)Mn54	-36982.20 keV
Co59(He3,p+t+α)Mn54	-16404.58 keV	Co59(He3,2n+2He3)Mn54	-37745.95 keV
Co59(He3,n+He3+α)Mn54	-17168.33 keV	Co59(He3,p+2d+t)Mn54	-40251.11 keV
Co59(He3,2d+α)Mn54	-20437.24 keV	Co59(He3,n+2d+He3)Mn54	-41014.86 keV
Co59(He3,n+p+d+α)Mn54	-22661.81 keV	Co59(He3,n+2p+d+t)Mn54	-42475.67 keV
Co59(He3,2n+2p+α)Mn54	-24886.37 keV	Co59(He3,2n+p+d+He3)Mn54	-43239.43 keV
Co59(He3,d+t+He3)Mn54	-34757.63 keV	Co59(He3,4d)Mn54	-44283.77 keV
Co59(He3,2p+2t)Mn54	-36218.44 keV	Co59(He3,2n+3p+t)Mn54	-44700.24 keV

<< 25-Mn-55	**27-Co-59**	29-Cu-63 >>
<< MT108 (³He,2α)	**MT111 (³He,2p) or MT5 (Co60 production)**	MT116 (³He,p+t) >>

Co59 (³He,2p) or Co60 production log-log



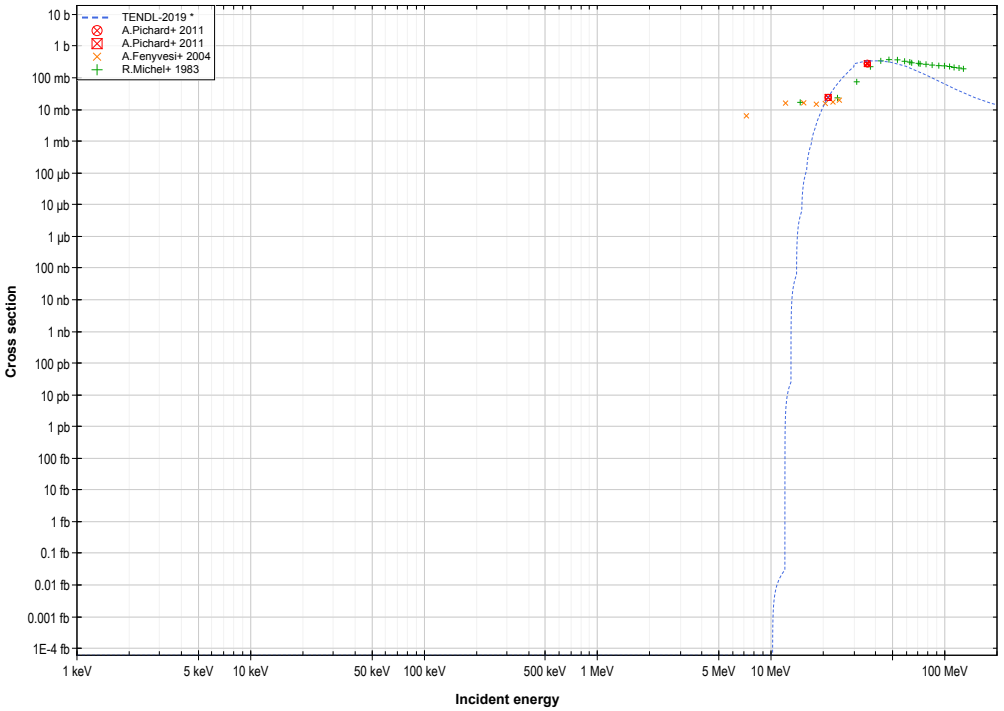
Co59 (³He,2p) or Co60 production lin-log



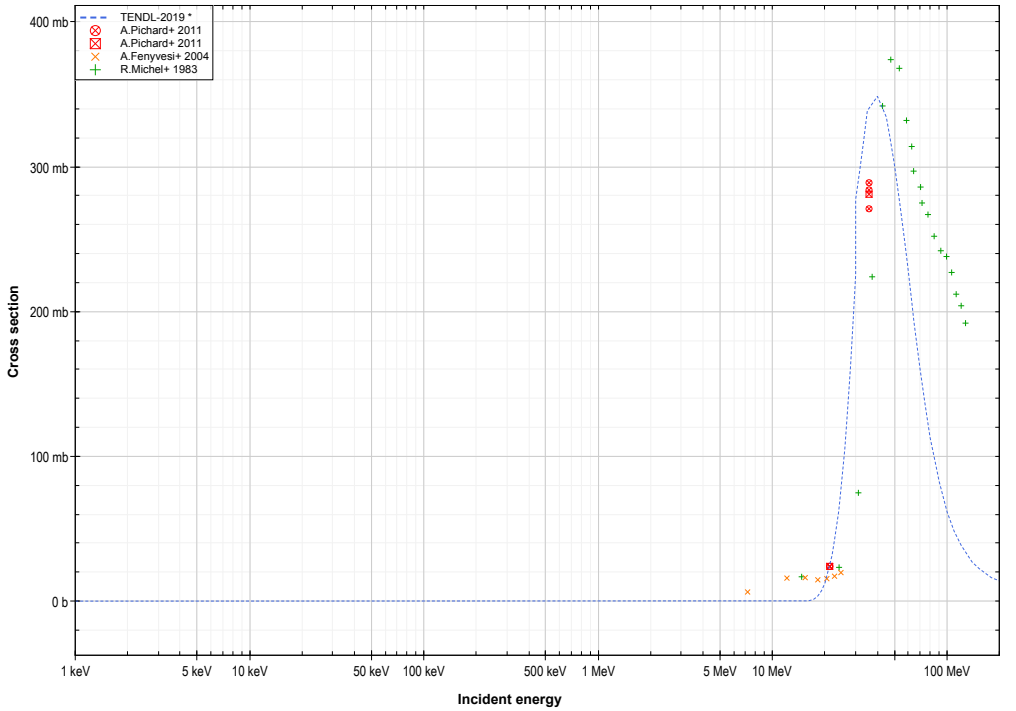
Reaction	Q-Value
Co59(He3,2p)Co60	-226.12 keV

<< 25-Mn-55	**27-Co-59**	29-Cu-65 >>
<< MT111 (^{3}He,2p)	**MT116 (^{3}He,p+t) or MT5 (Co58 production)**	MT154 (^{3}He,2n+t) >>

Co59 (^{3}He,p+t) or Co58 production log-log



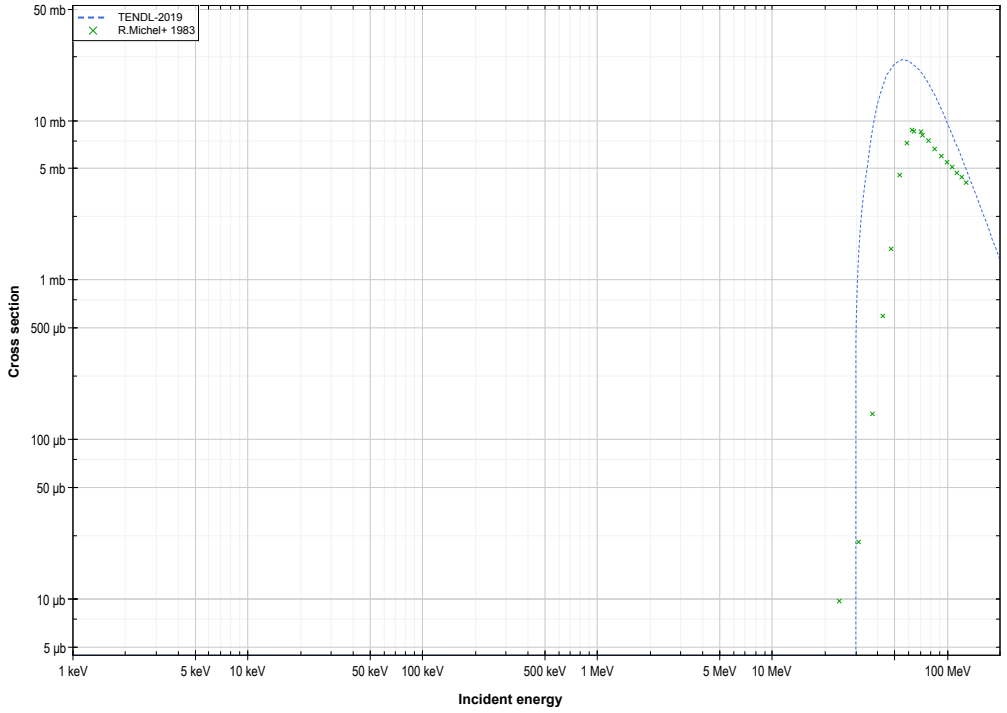
Co59 (^{3}He,p+t) or Co58 production lin-log



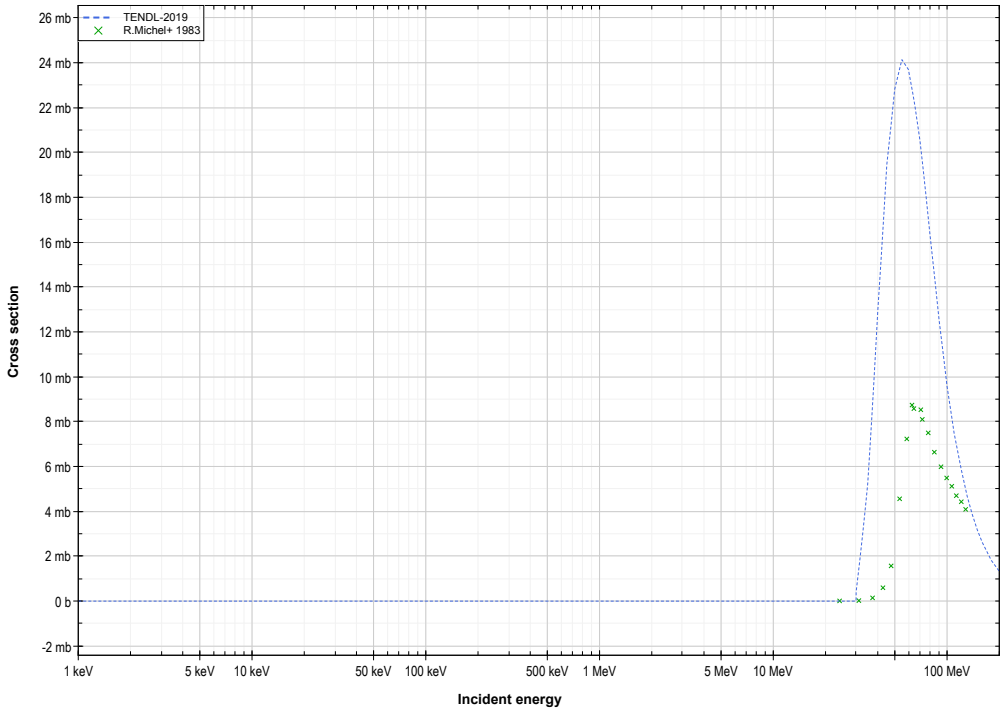
Reaction	Q-Value
Co59(He3,α)Co58	10123.80 keV
Co59(He3,p+t)Co58	-9690.06 keV
Co59(He3,n+He3)Co58	-10453.82 keV
Co59(He3,2d)Co58	-13722.73 keV
Co59(He3,n+p+d)Co58	-15947.29 keV
Co59(He3,2n+2p)Co58	-18171.86 keV

	27-Co-59	92-U-236 >>
<< MT116 (^{3}He,p+t)	**MT154 (^{3}He,2n+t) or MT5 (Ni57 production)**	MT156 (^{3}He,4n+p) >>

Co59 (^{3}He,2n+t) or Ni57 production log-log



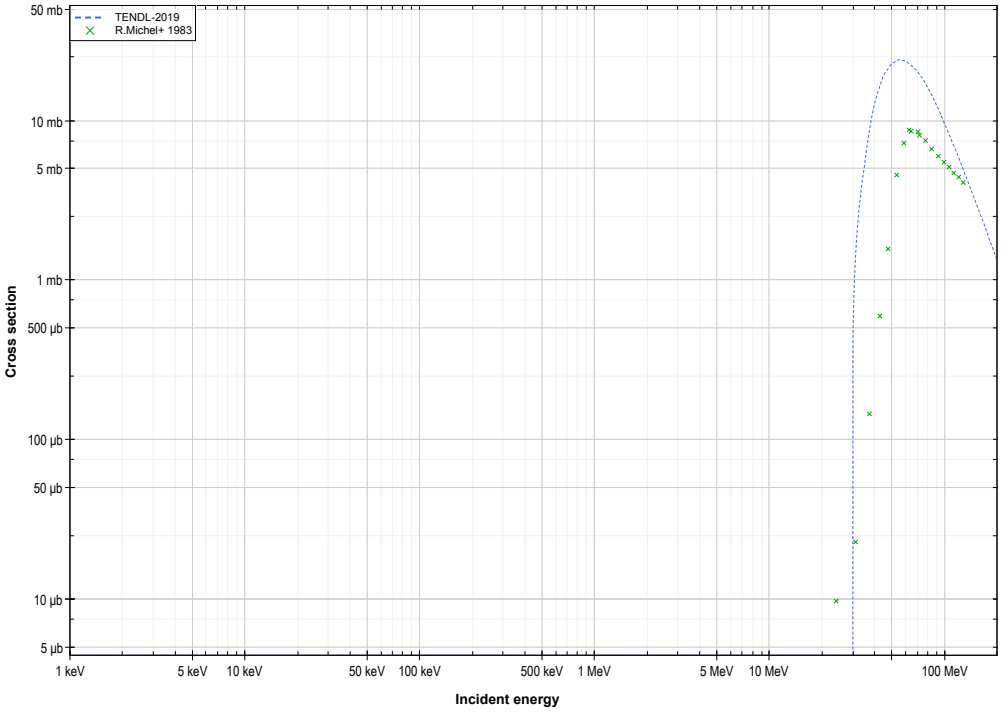
Co59 (^{3}He,2n+t) or Ni57 production lin-log



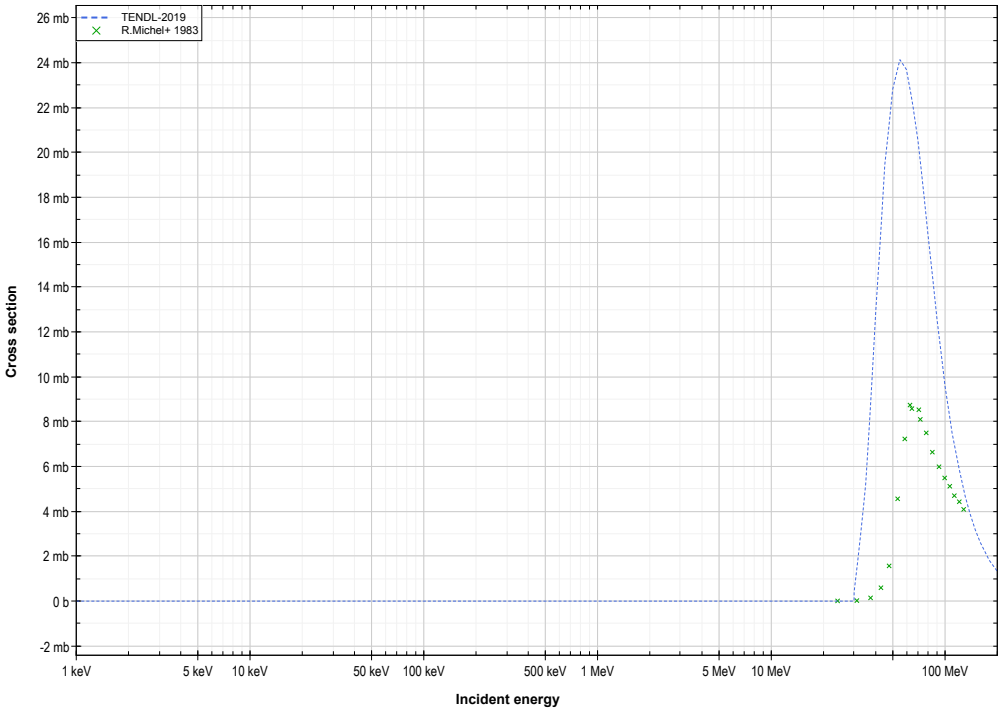
Reaction	Q-Value
Co59(He3,2n+t)Ni57	-22307.13 keV
Co59(He3,3n+d)Ni57	-28564.36 keV
Co59(He3,4n+p)Ni57	-30788.92 keV

	27-Co-59	92-U-236 >>
<< MT154 (^{3}He,2n+t)	**MT156 (^{3}He,4n+p) or MT5 (Ni57 production)**	MT157 (^{3}He,3n+d) >>

Co59 (^{3}He,4n+p) or Ni57 production log-log



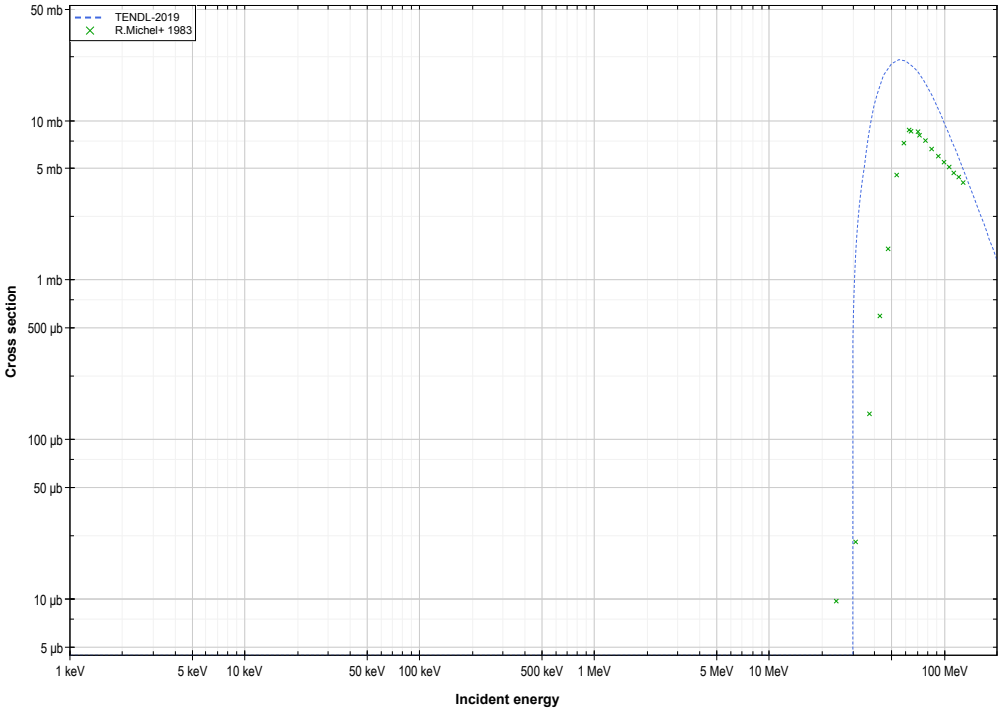
Co59 (^{3}He,4n+p) or Ni57 production lin-log



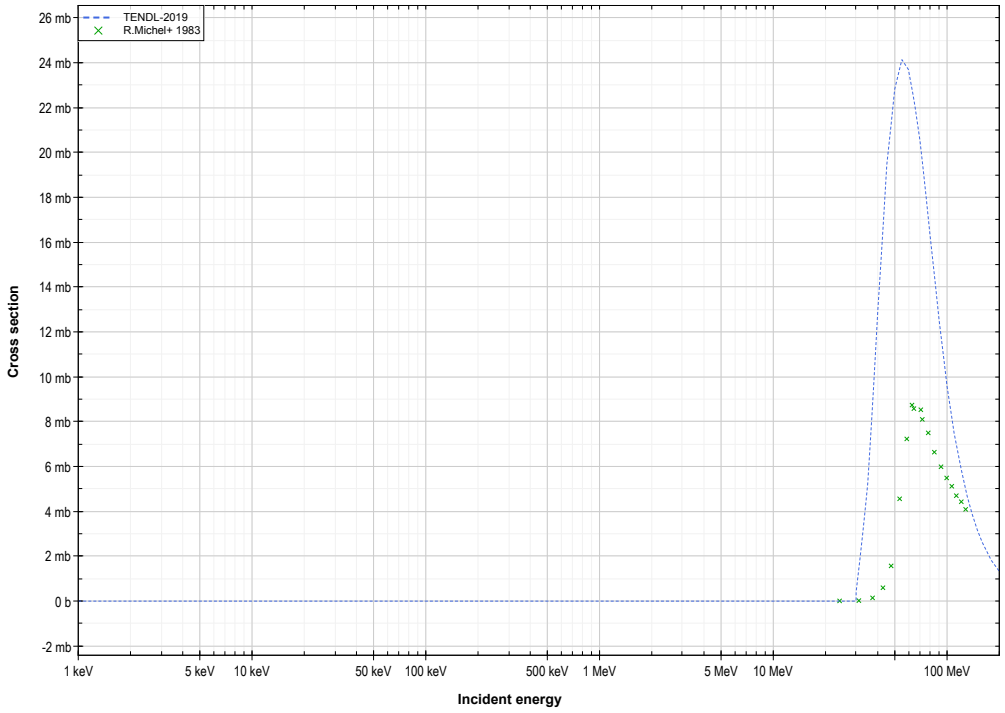
Reaction	Q-Value
Co59(He3,2n+t)Ni57	-22307.13 keV
Co59(He3,3n+d)Ni57	-28564.36 keV
Co59(He3,4n+p)Ni57	-30788.92 keV

	27-Co-59	92-U-236 >>
<< MT156 (^{3}He,4n+p)	**MT157 (^{3}He,3n+d) or MT5 (Ni57 production)**	MT176 (^{3}He,2n+^{3}He) >>

Co59 (^{3}He,3n+d) or Ni57 production log-log

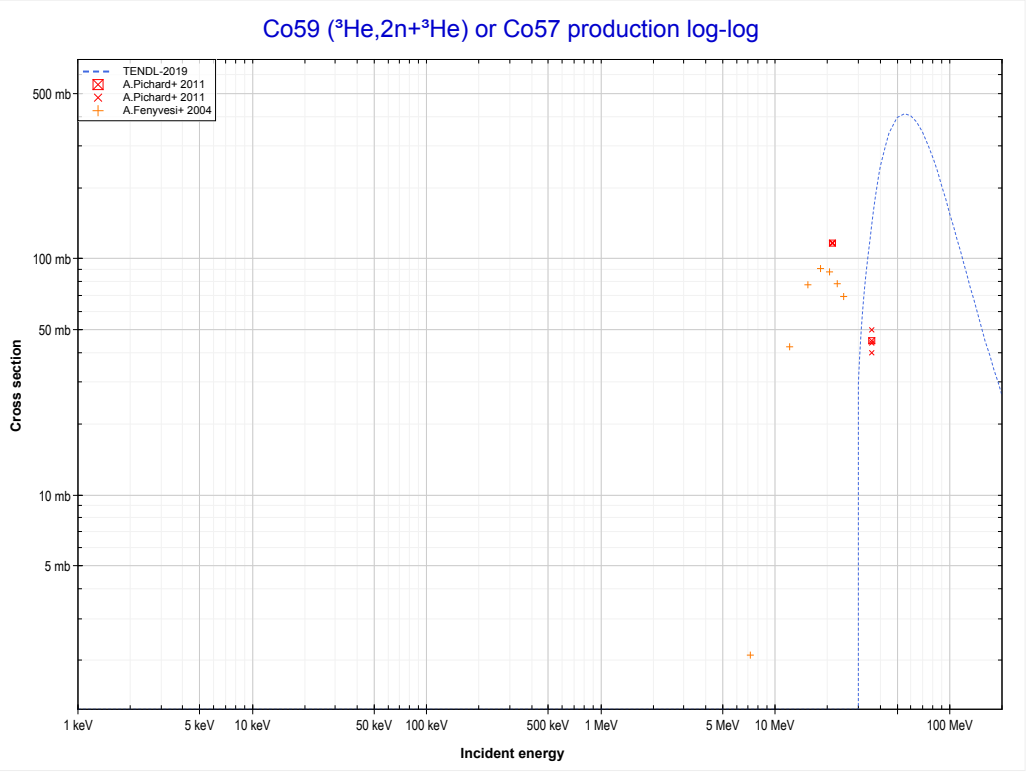


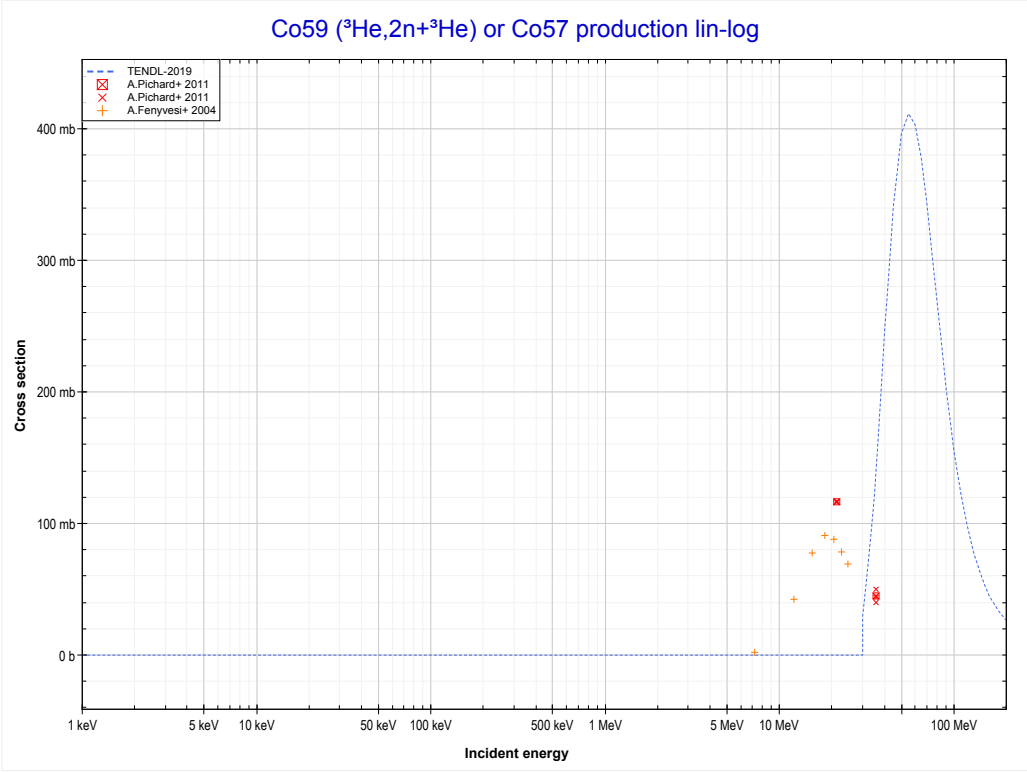
Co59 (^{3}He,3n+d) or Ni57 production lin-log



Reaction	Q-Value
Co59(He3,2n+t)Ni57	-22307.13 keV
Co59(He3,3n+d)Ni57	-28564.36 keV
Co59(He3,4n+p)Ni57	-30788.92 keV

<< 23-V-51	**27-Co-59**	29-Cu-63 >>
<< MT157 (^{3}He,3n+d)	**MT176 (^{3}He,2n+^{3}He) or MT5 (Co57 production)**	MT177 (^{3}He,3n+^{3}He) >>

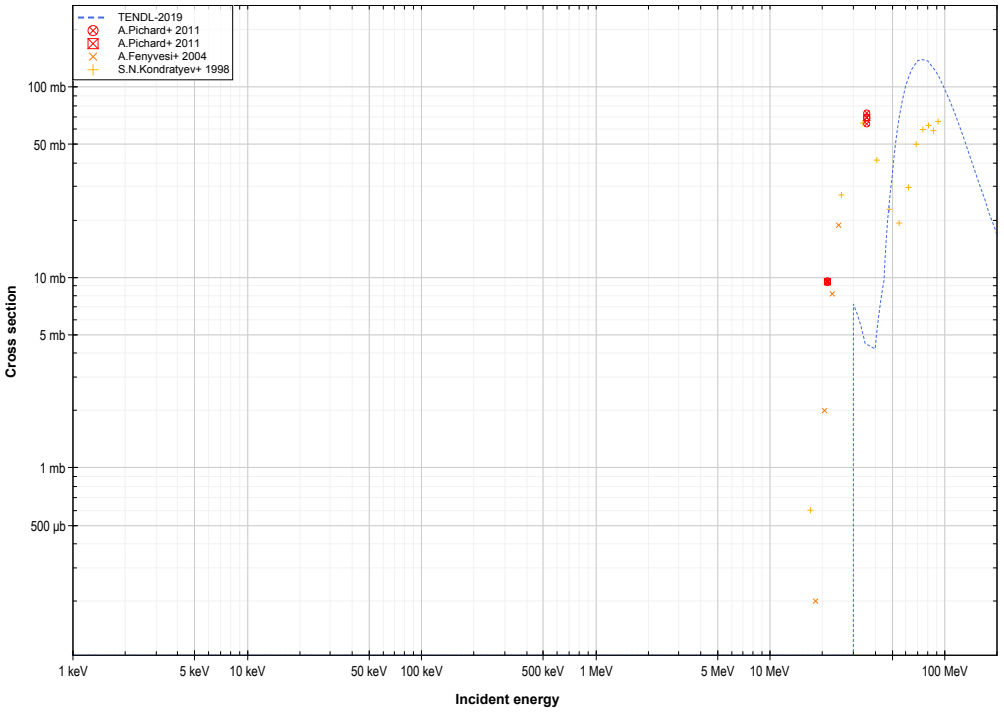




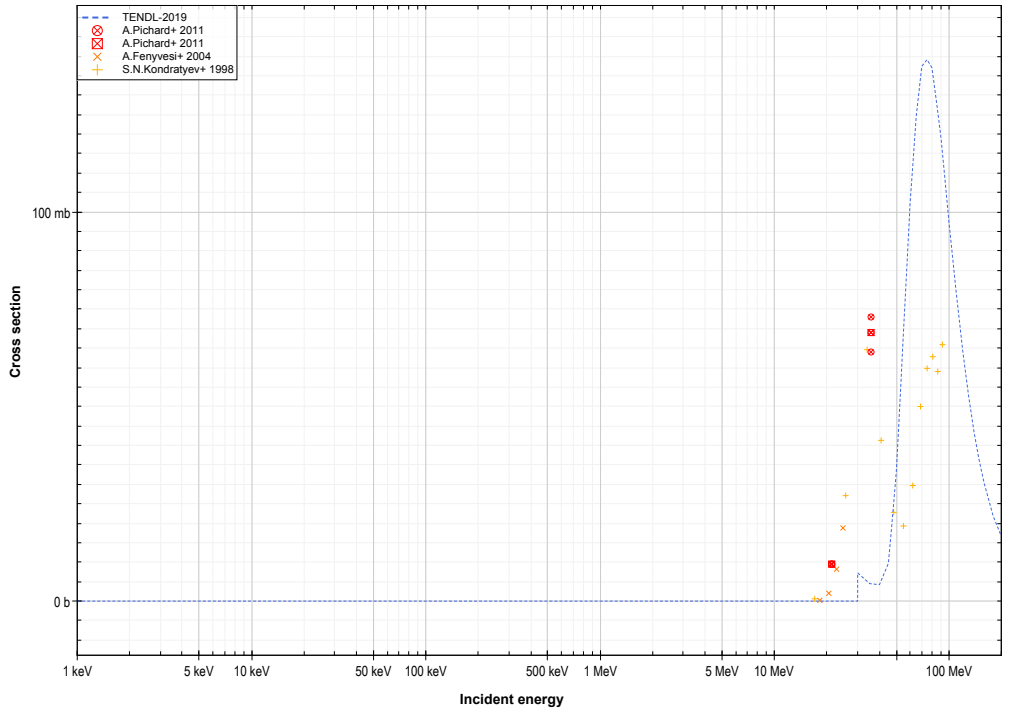
Reaction	Q-Value
Co59(He3,n+α)Co57	1550.89 keV
Co59(He3,d+t)Co57	-16038.41 keV
Co59(He3,n+p+t)Co57	-18262.98 keV
Co59(He3,2n+He3)Co57	-19026.73 keV
Co59(He3,n+2d)Co57	-22295.64 keV
Co59(He3,2n+p+d)Co57	-24520.21 keV
Co59(He3,3n+2p)Co57	-26744.77 keV

<< 13-Al-27	**27-Co-59**	47-Ag-107 >>
<< MT176 (^{3}He,2n+^{3}He)	**MT177 (^{3}He,3n+^{3}He) or MT5 (Co56 production)**	MT179 (^{3}He,3n+2p) >>

Co59 (^{3}He,3n+^{3}He) or Co56 production log-log



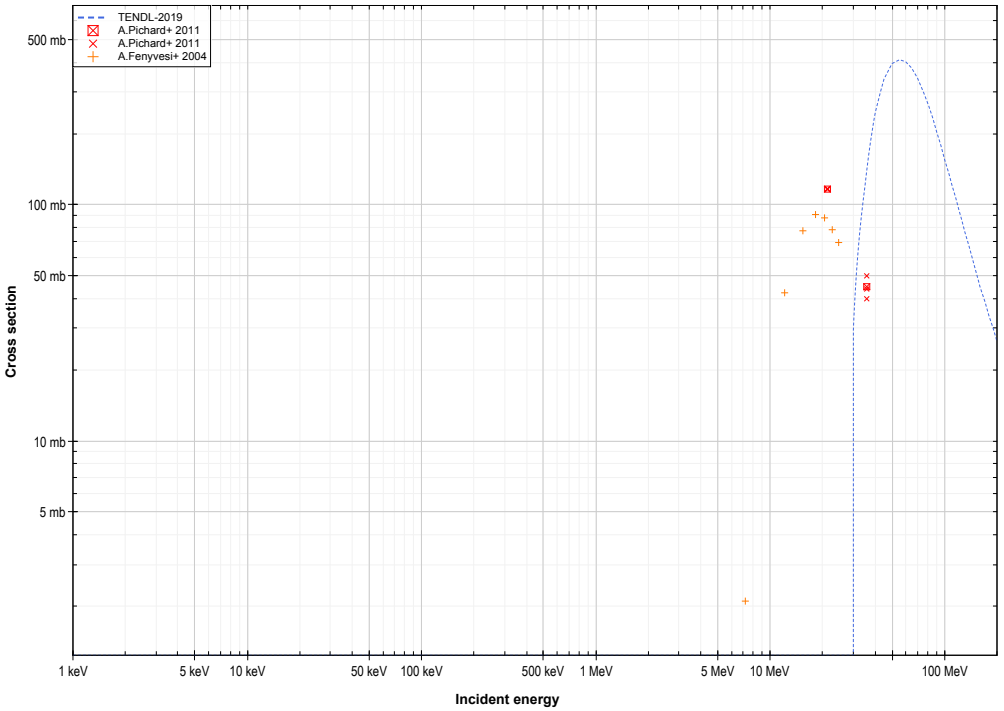
Co59 (^{3}He,3n+^{3}He) or Co56 production lin-log



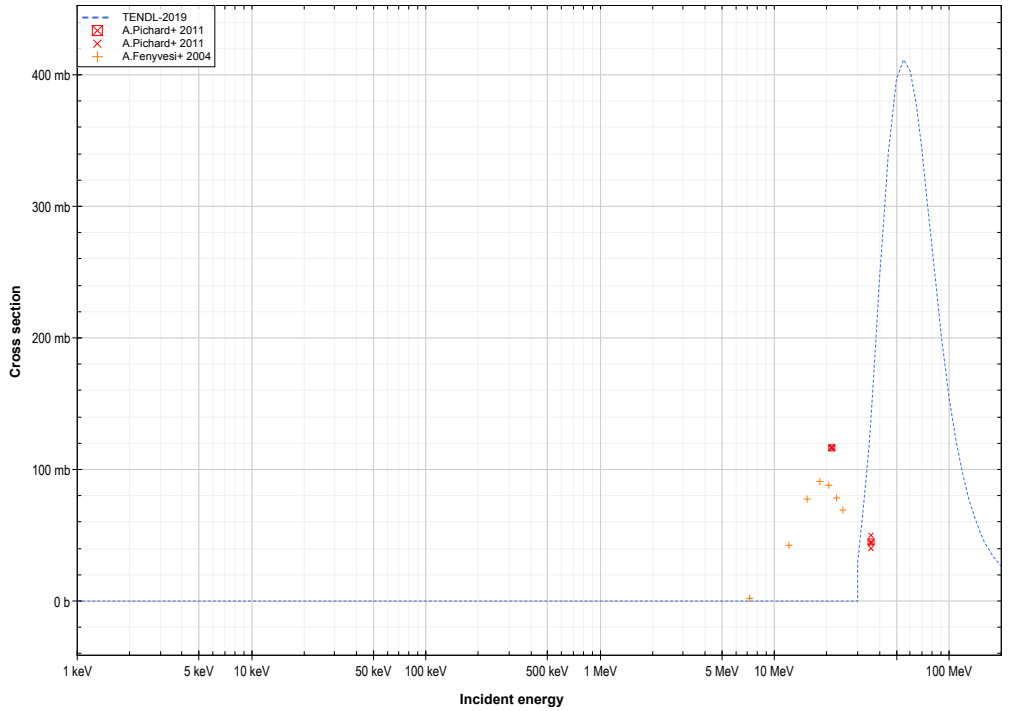
Reaction	Q-Value
Co59(He3,2n+α)Co56	-9825.63 keV
Co59(He3,2t)Co56	-21157.70 keV
Co59(He3,n+d+t)Co56	-27414.93 keV
Co59(He3,2n+p+t)Co56	-29639.50 keV
Co59(He3,3n+He3)Co56	-30403.25 keV
Co59(He3,2n+2d)Co56	-33672.16 keV
Co59(He3,3n+p+d)Co56	-35896.73 keV
Co59(He3,4n+2p)Co56	-38121.29 keV

<< 23-V-51	**27-Co-59**	29-Cu-63 >>
<< MT177 (^{3}He,3n+^{3}He)	**MT179 (^{3}He,3n+2p) or MT5 (Co57 production)**	MT182 (^{3}He,d+t) >>

Co59 (^{3}He,3n+2p) or Co57 production log-log



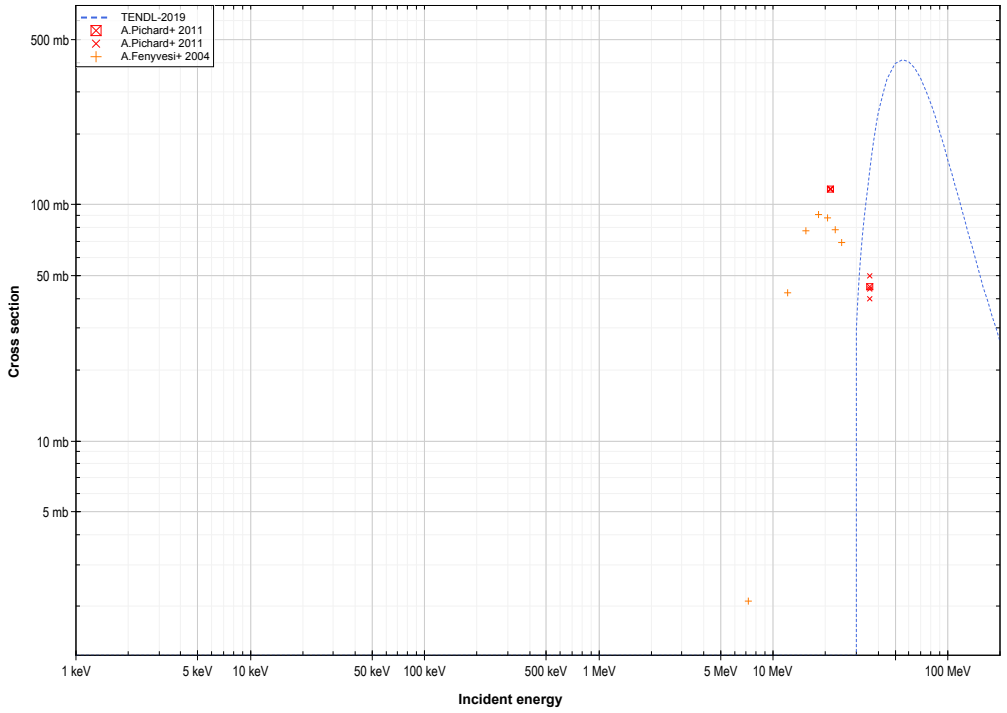
Co59 (^{3}He,3n+2p) or Co57 production lin-log



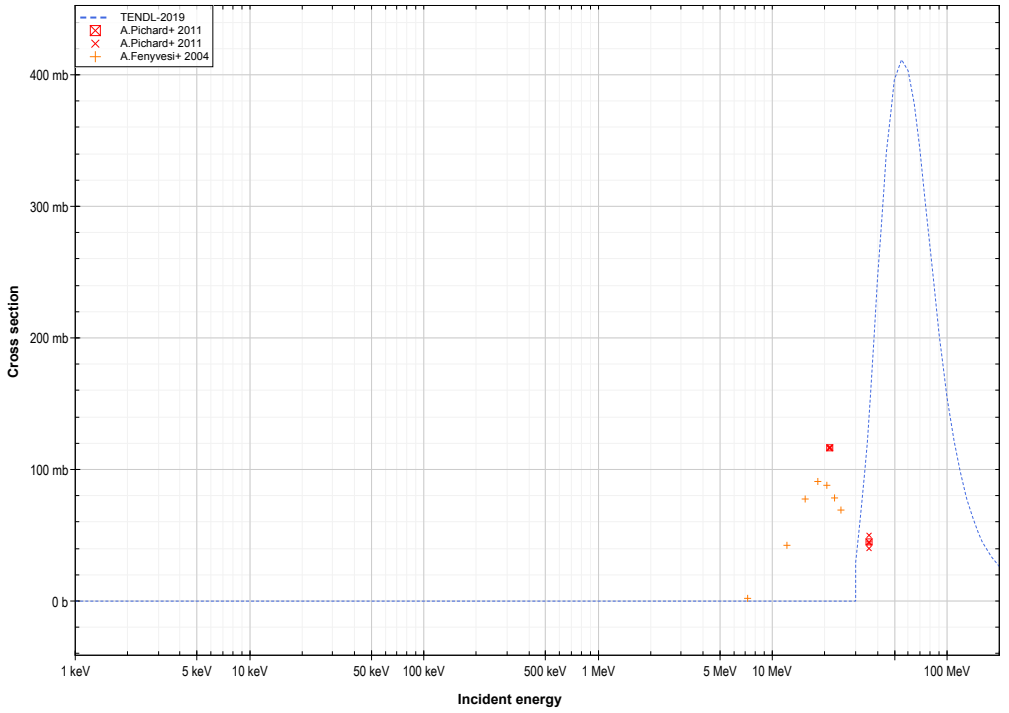
Reaction	Q-Value
Co59(He3,n+α)Co57	1550.89 keV
Co59(He3,d+t)Co57	-16038.41 keV
Co59(He3,n+p+t)Co57	-18262.98 keV
Co59(He3,2n+He3)Co57	-19026.73 keV
Co59(He3,n+2d)Co57	-22295.64 keV
Co59(He3,2n+p+d)Co57	-24520.21 keV
Co59(He3,3n+2p)Co57	-26744.77 keV

<< 23-V-51	**27-Co-59**	29-Cu-63 >>
<< MT179 (^{3}He,3n+2p)	**MT182 (^{3}He,d+t) or MT5 (Co57 production)**	MT183 (^{3}He,n+p+d) >>

Co59 (^{3}He,d+t) or Co57 production log-log



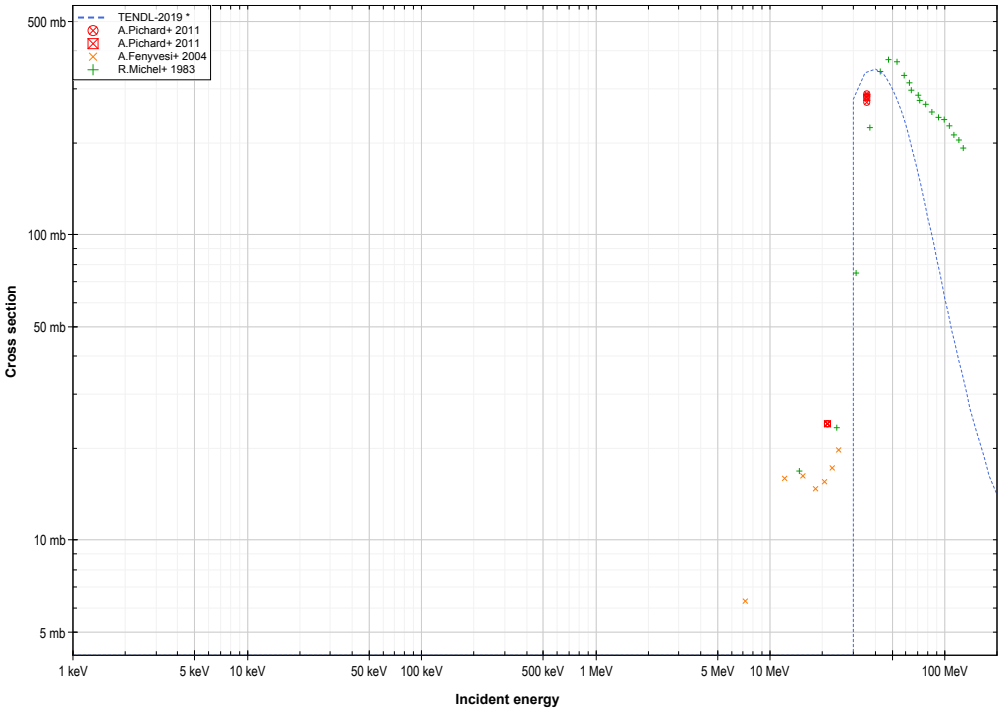
Co59 (^{3}He,d+t) or Co57 production lin-log



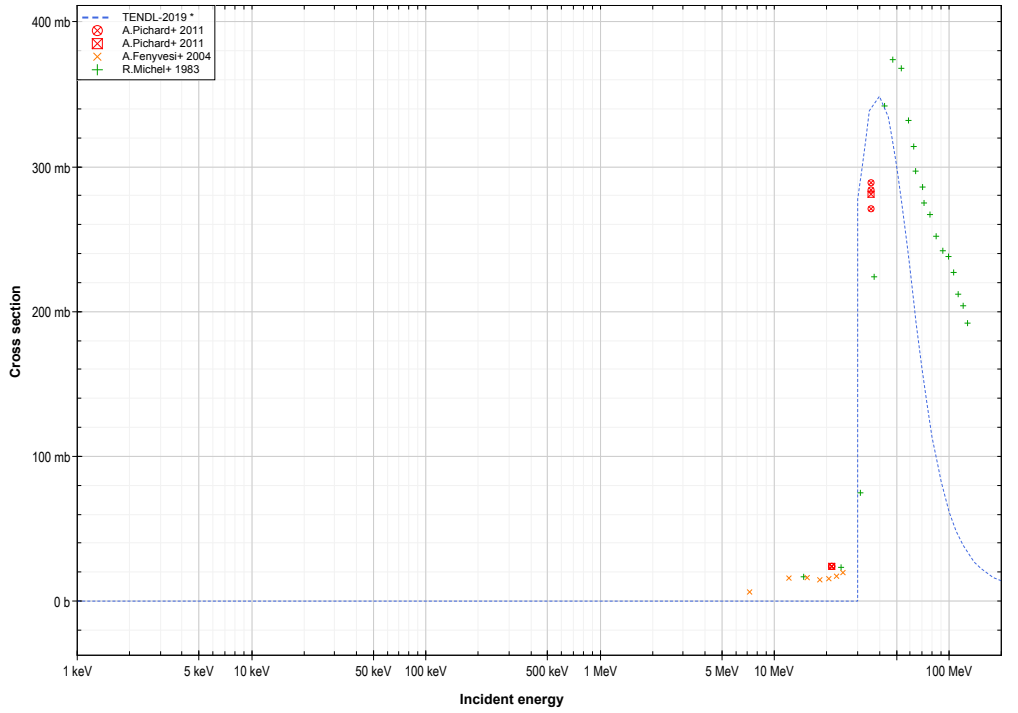
Reaction	Q-Value
Co59(He3,n+α)Co57	1550.89 keV
Co59(He3,d+t)Co57	-16038.41 keV
Co59(He3,n+p+t)Co57	-18262.98 keV
Co59(He3,2n+He3)Co57	-19026.73 keV
Co59(He3,n+2d)Co57	-22295.64 keV
Co59(He3,2n+p+d)Co57	-24520.21 keV
Co59(He3,3n+2p)Co57	-26744.77 keV

<< 25-Mn-55	**27-Co-59**	29-Cu-65 >>
<< MT182 (^{3}He,d+t)	**MT183 (^{3}He,n+p+d) or MT5 (Co58 production)**	MT184 (^{3}He,n+p+t) >>

Co59 (^{3}He,n+p+d) or Co58 production log-log



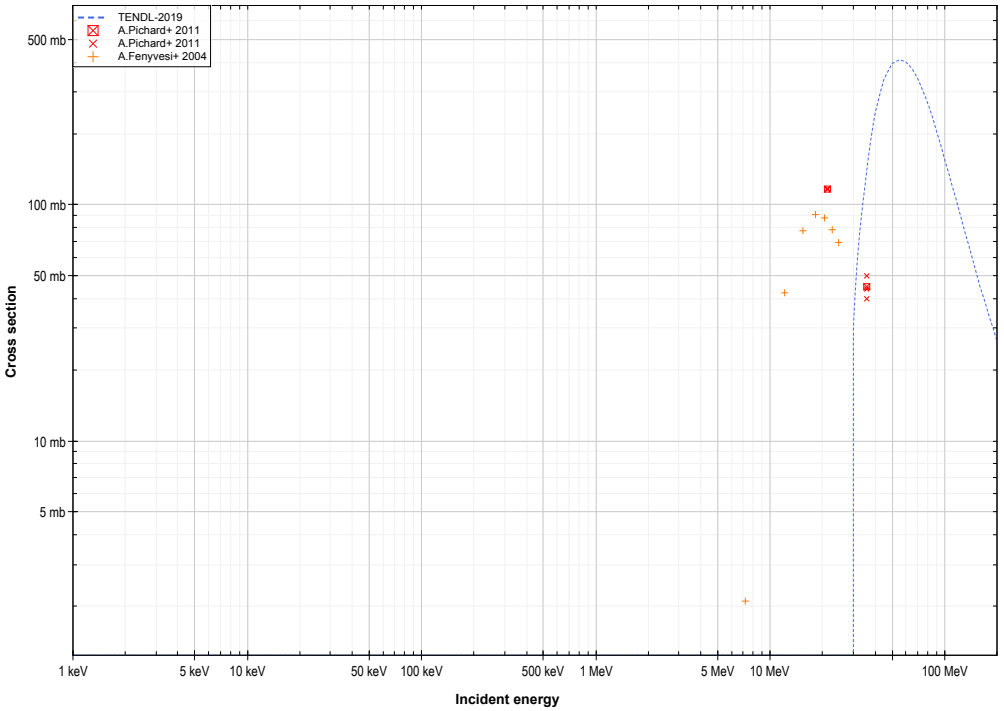
Co59 (^{3}He,n+p+d) or Co58 production lin-log



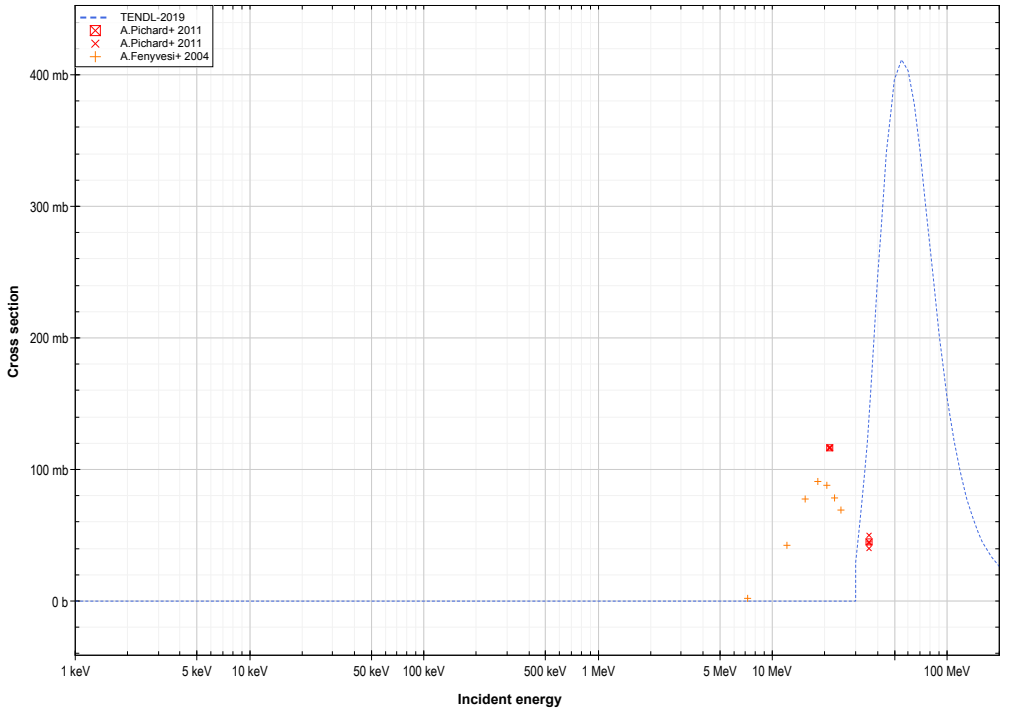
Reaction	Q-Value
Co59(He3,α)Co58	10123.80 keV
Co59(He3,p+t)Co58	-9690.06 keV
Co59(He3,n+He3)Co58	-10453.82 keV
Co59(He3,2d)Co58	-13722.73 keV
Co59(He3,n+p+d)Co58	-15947.29 keV
Co59(He3,2n+2p)Co58	-18171.86 keV

<< 23-V-51	**27-Co-59**	29-Cu-63 >>
<< MT183 (^{3}He,n+p+d)	**MT184 (^{3}He,n+p+t) or MT5 (Co57 production)**	MT185 (^{3}He,n+d+t) >>

Co59 (^{3}He,n+p+t) or Co57 production log-log

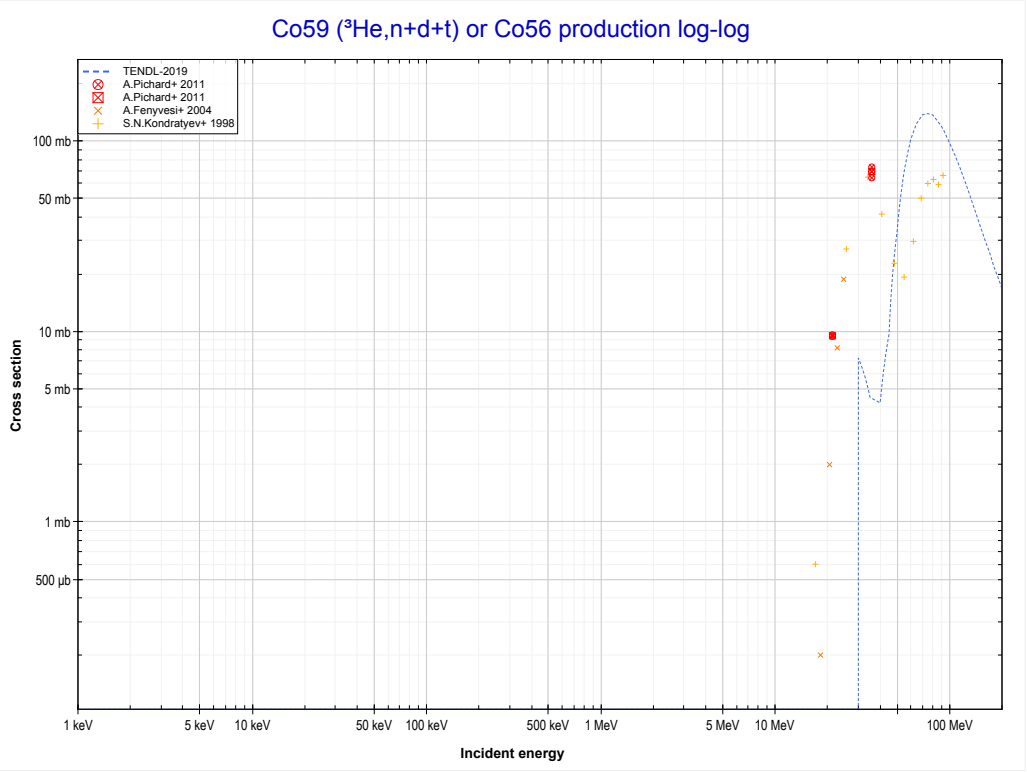


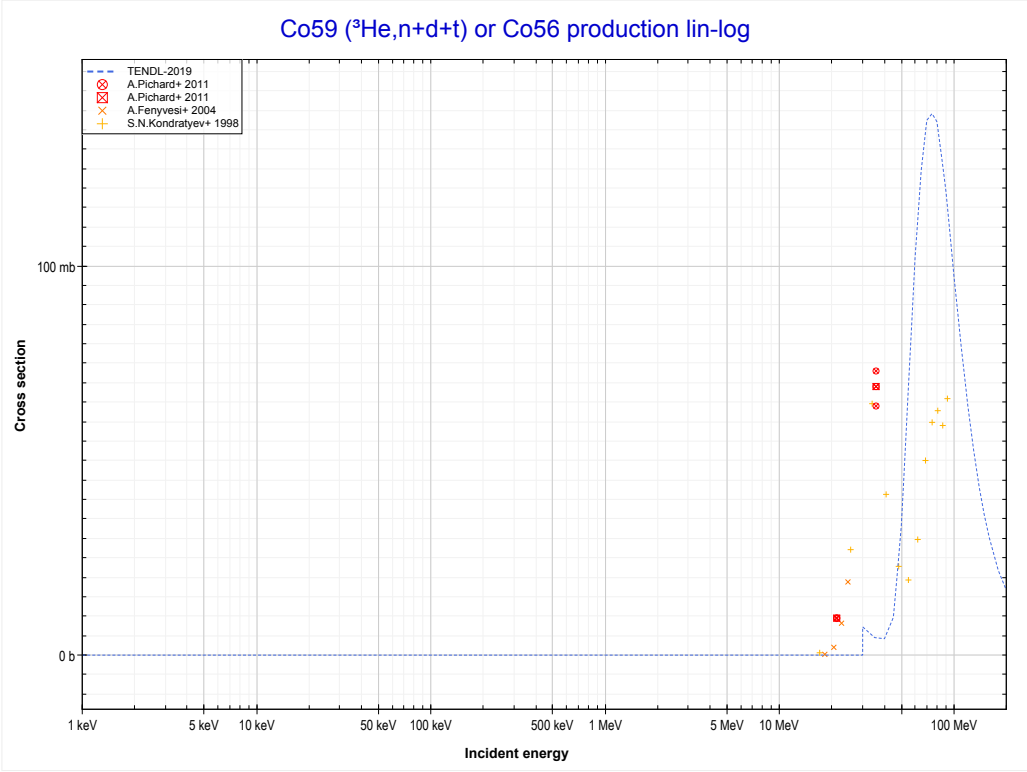
Co59 (^{3}He,n+p+t) or Co57 production lin-log



Reaction	Q-Value
Co59(He3,n+α)Co57	1550.89 keV
Co59(He3,d+t)Co57	-16038.41 keV
Co59(He3,n+p+t)Co57	-18262.98 keV
Co59(He3,2n+He3)Co57	-19026.73 keV
Co59(He3,n+2d)Co57	-22295.64 keV
Co59(He3,2n+p+d)Co57	-24520.21 keV
Co59(He3,3n+2p)Co57	-26744.77 keV

<< 13-Al-27	**27-Co-59**	47-Ag-107 >>
<< MT184 (^{3}He,n+p+t)	**MT185 (^{3}He,n+d+t) or MT5 (Co56 production)**	MT190 (^{3}He,2n+2p) >>

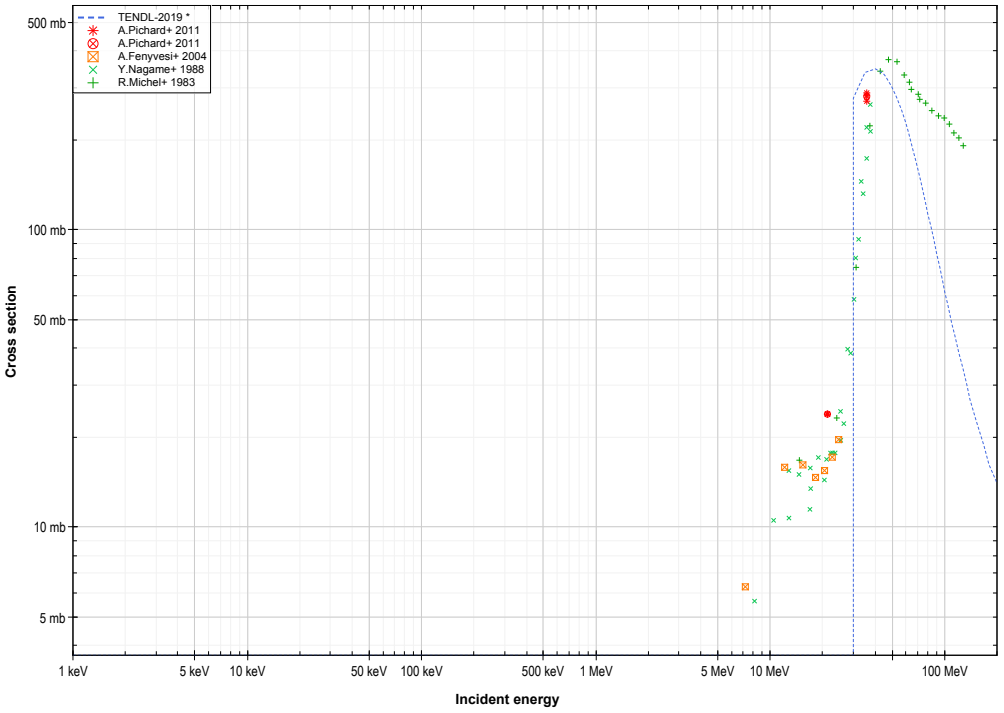




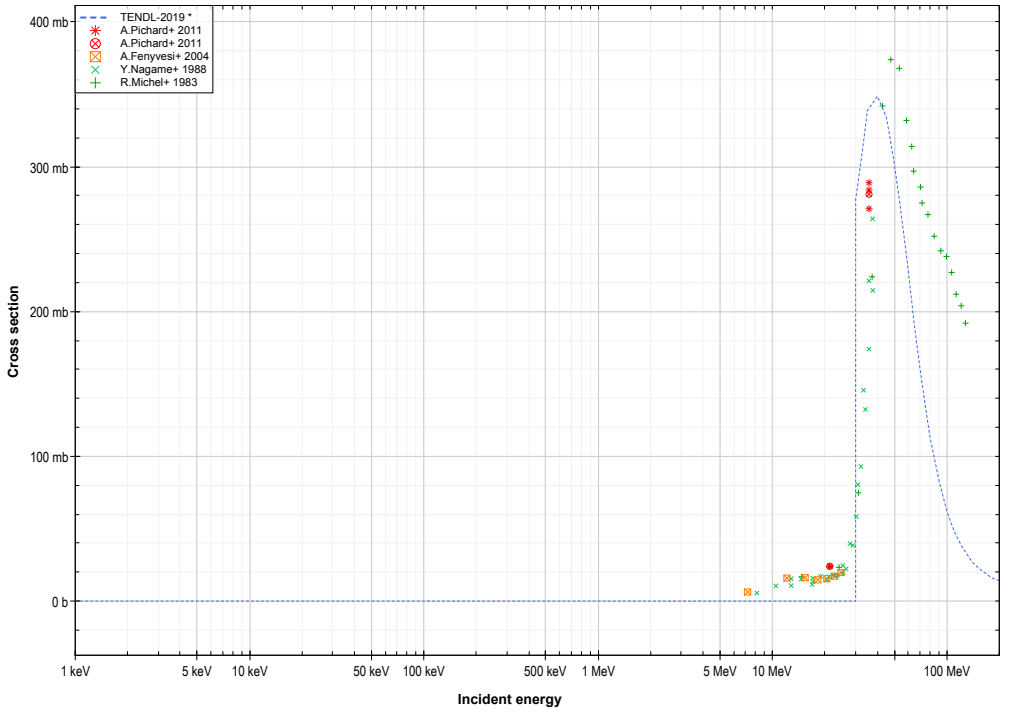
Reaction	Q-Value
Co59(He3,2n+α)Co56	-9825.63 keV
Co59(He3,2t)Co56	-21157.70 keV
Co59(He3,n+d+t)Co56	-27414.93 keV
Co59(He3,2n+p+t)Co56	-29639.50 keV
Co59(He3,3n+He3)Co56	-30403.25 keV
Co59(He3,2n+2d)Co56	-33672.16 keV
Co59(He3,3n+p+d)Co56	-35896.73 keV
Co59(He3,4n+2p)Co56	-38121.29 keV

<< 25-Mn-55	**27-Co-59**	29-Cu-65 >>
<< MT185 (^{3}He,n+d+t)	**MT190 (^{3}He,2n+2p) or MT5 (Co58 production)**	MT194 (^{3}He,4n+2p) >>

Co59 (^{3}He,2n+2p) or Co58 production log-log



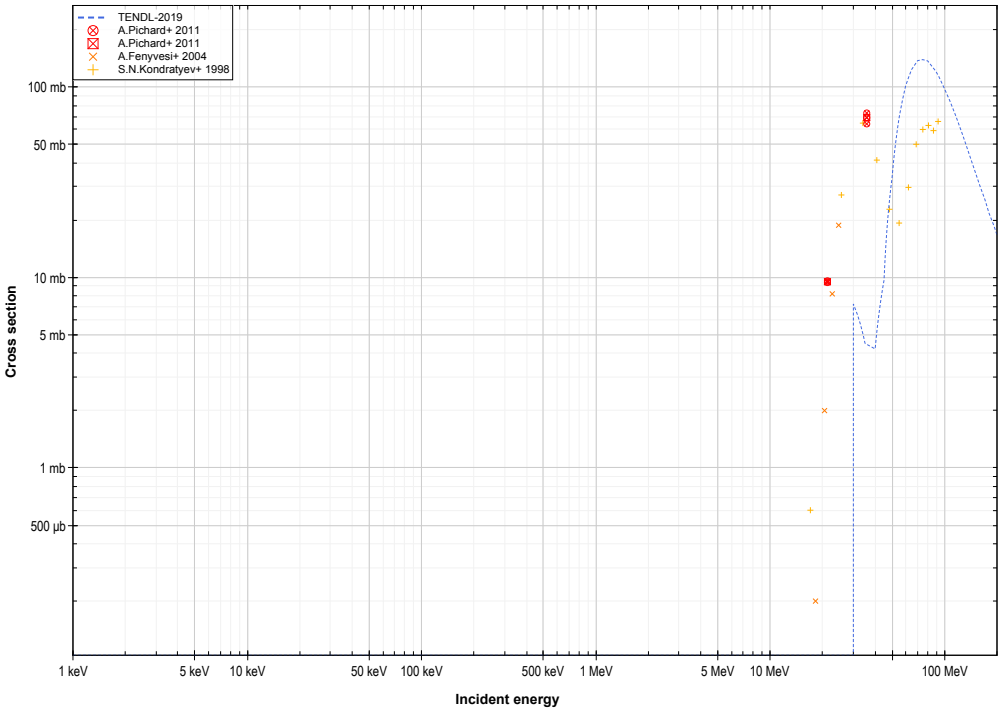
Co59 (^{3}He,2n+2p) or Co58 production lin-log



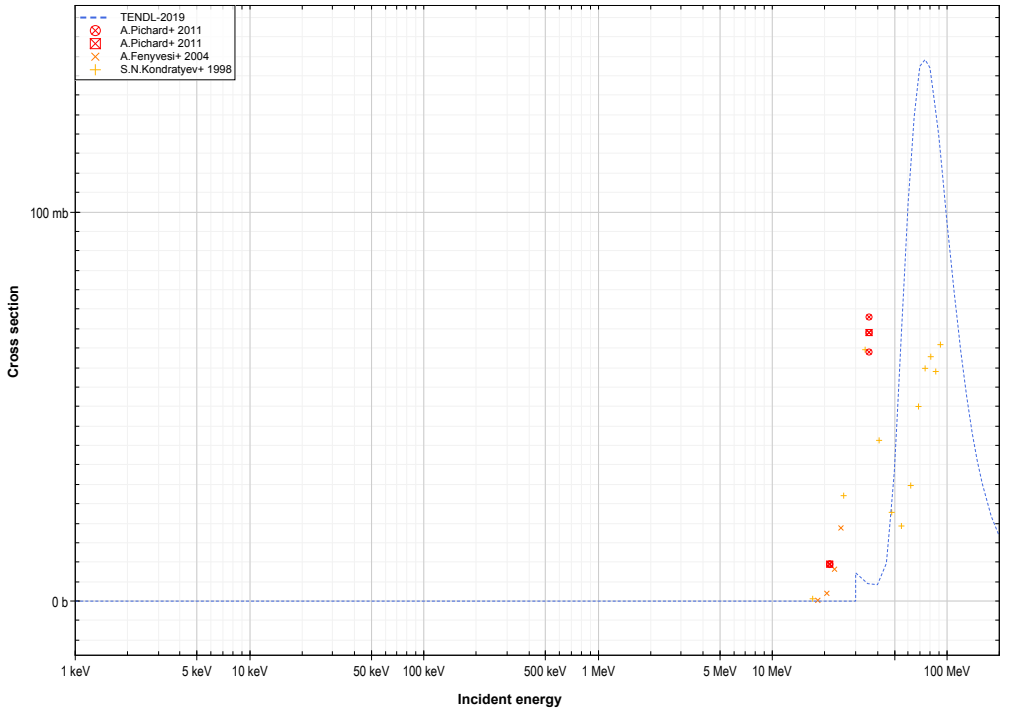
Reaction	Q-Value
Co59(He3,α)Co58	10123.80 keV
Co59(He3,p+t)Co58	-9690.06 keV
Co59(He3,n+He3)Co58	-10453.82 keV
Co59(He3,2d)Co58	-13722.73 keV
Co59(He3,n+p+d)Co58	-15947.29 keV
Co59(He3,2n+2p)Co58	-18171.86 keV

<< 13-Al-27	**27-Co-59**	47-Ag-107 >>
<< MT190 (^{3}He,2n+2p)	**MT194 (^{3}He,4n+2p) or MT5 (Co56 production)**	MT197 (^{3}He,3p) >>

Co59 (^{3}He,4n+2p) or Co56 production log-log



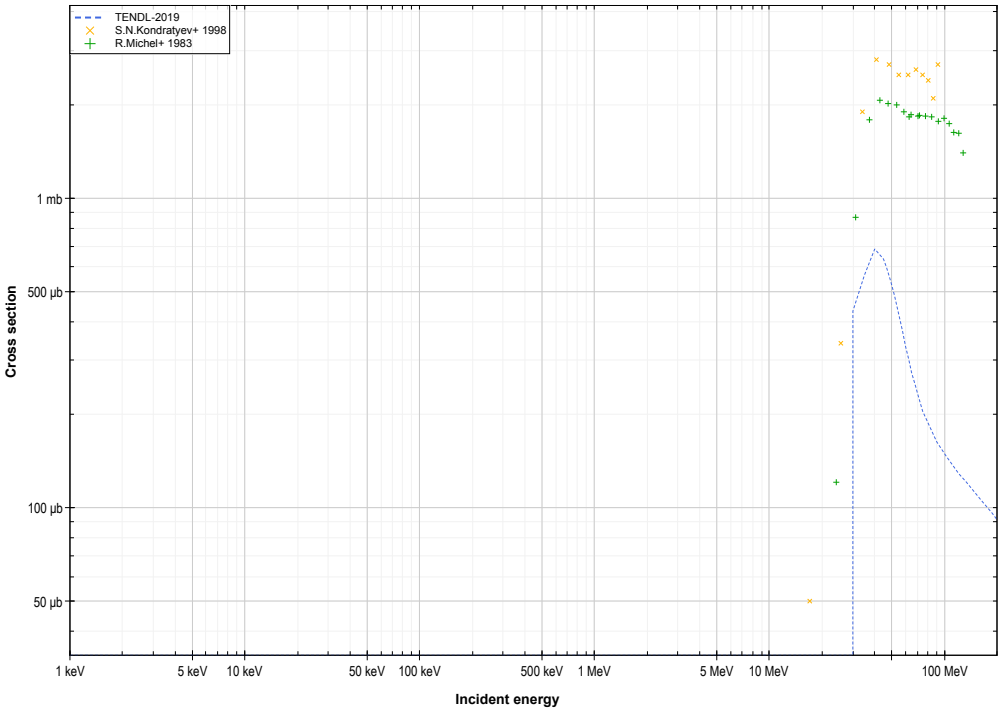
Co59 (^{3}He,4n+2p) or Co56 production lin-log



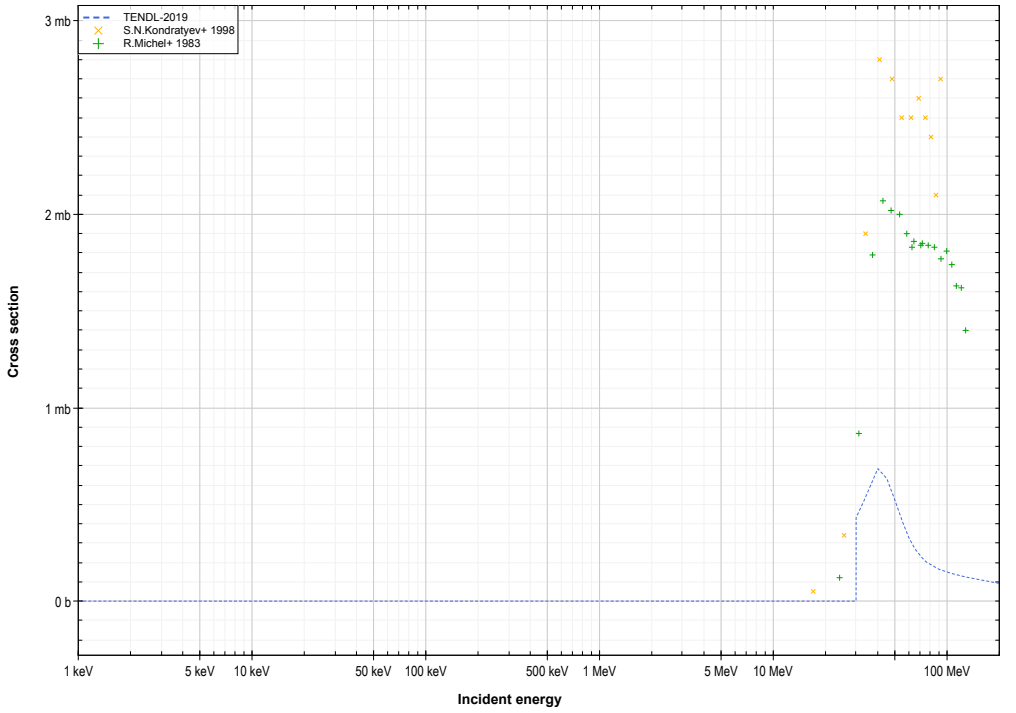
Reaction	Q-Value
Co59(He3,2n+α)Co56	-9825.63 keV
Co59(He3,2t)Co56	-21157.70 keV
Co59(He3,n+d+t)Co56	-27414.93 keV
Co59(He3,2n+p+t)Co56	-29639.50 keV
Co59(He3,3n+He3)Co56	-30403.25 keV
Co59(He3,2n+2d)Co56	-33672.16 keV
Co59(He3,3n+p+d)Co56	-35896.73 keV
Co59(He3,4n+2p)Co56	-38121.29 keV

<< 14-Si-28	**27-Co-59**	29-Cu-65 >>
<< MT194 (^{3}He,4n+2p)	**MT197 (^{3}He,3p) or MT5 (Fe59 production)**	29-Cu-63 MT4 (^{3}He,n) >>

Co59 (^{3}He,3p) or Fe59 production log-log



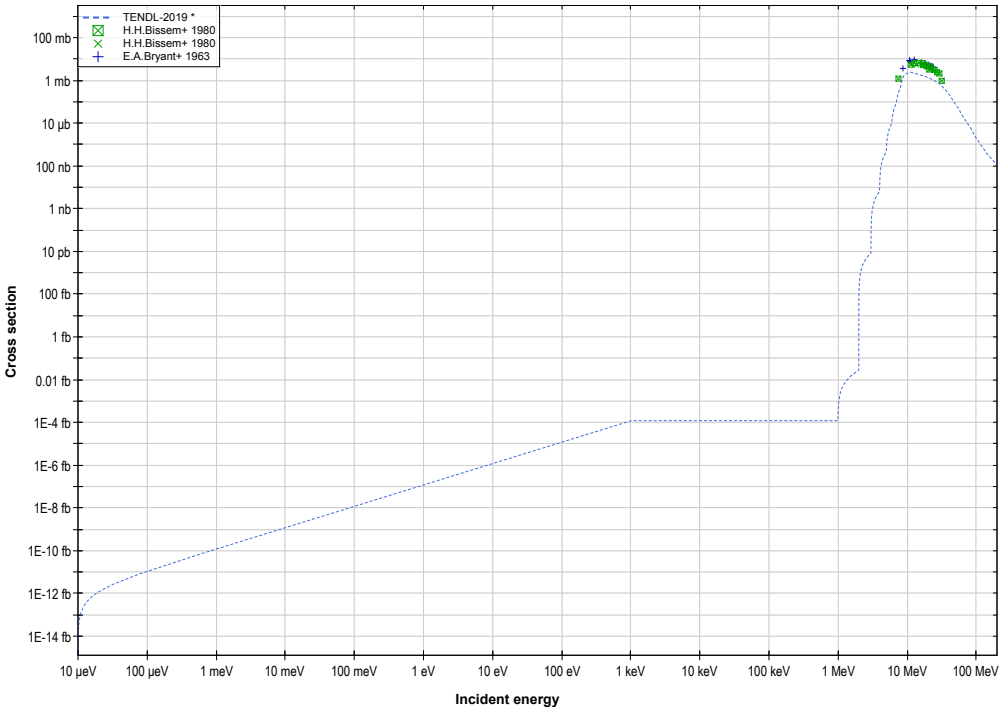
Co59 (^{3}He,3p) or Fe59 production lin-log



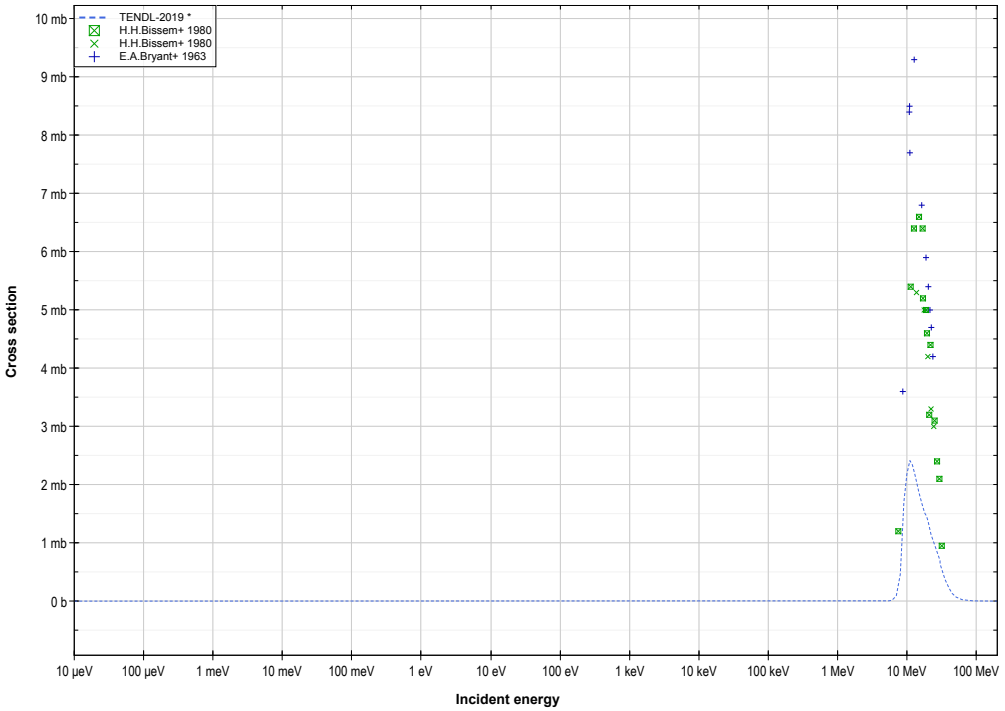
Reaction	Q-Value
Co59(He3,3p)Fe59	-8500.59 keV

<< 27-Co-59	**29-Cu-63**	29-Cu-65 >>
<< 27-Co-59 MT197 (^{3}He,3p)	**MT4 (^{3}He,n) or MT5 (Ga65 production)**	MT16 (^{3}He,2n) >>

Cu63 (^{3}He,n) or Ga65 production log-log



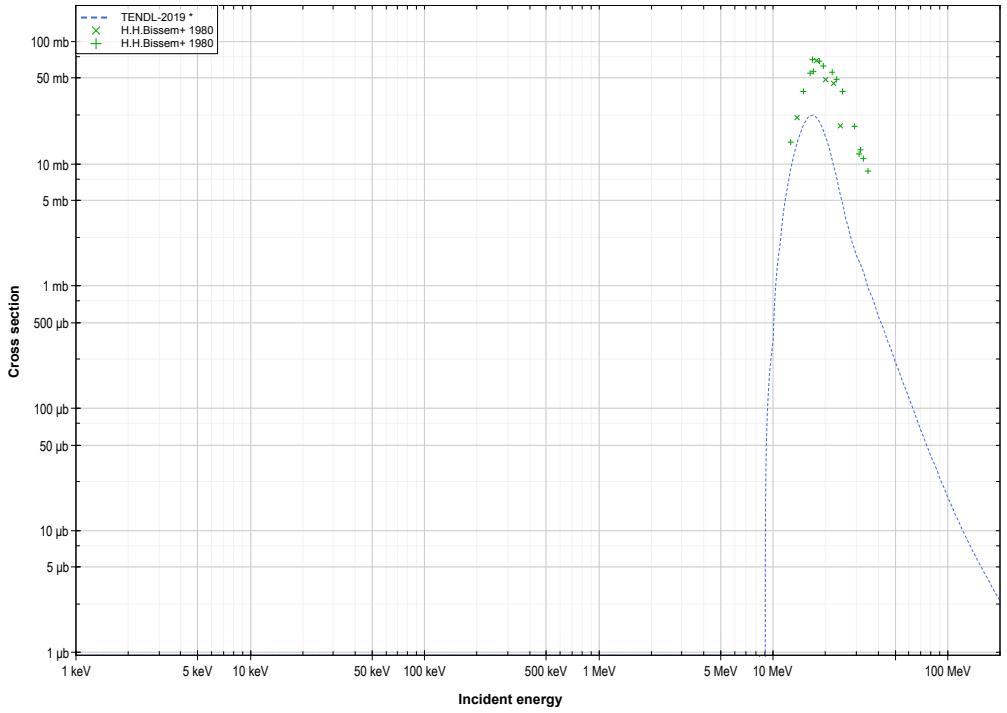
Cu63 (^{3}He,n) or Ga65 production lin-log



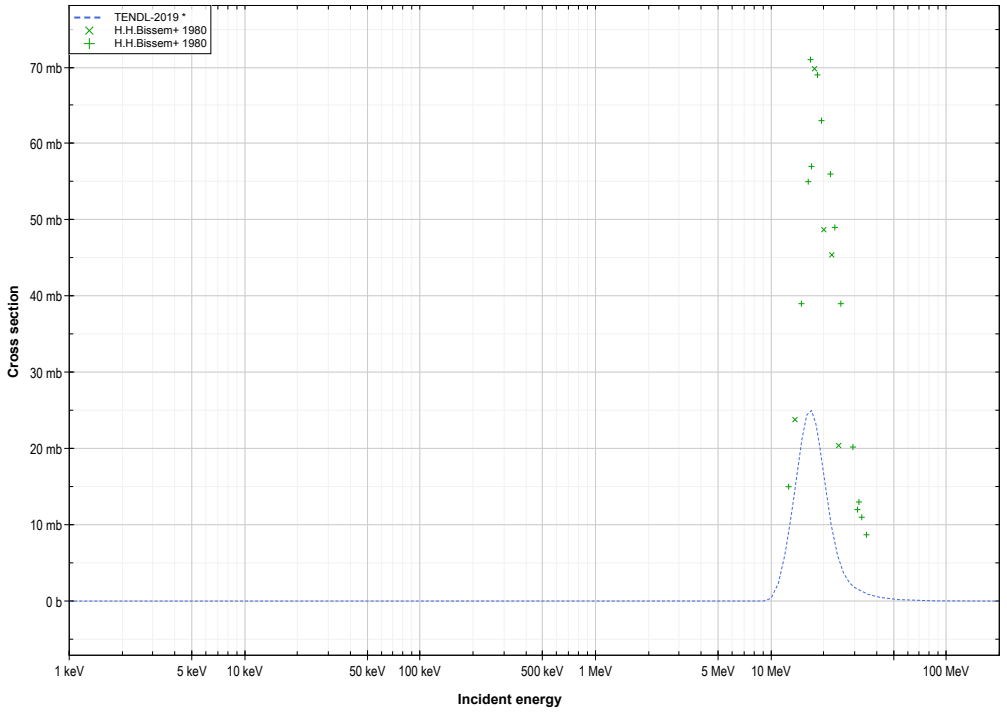
Reaction	Q-Value
Cu63(He3,n)Ga65	3937.60 keV

<< 27-Co-59	**29-Cu-63**	29-Cu-65 >>
<< MT4 (^{3}He,n)	**MT16 (^{3}He,2n) or MT5 (Ga64 production)**	MT22 (^{3}He,n+α) >>

Cu63 (^{3}He,2n) or Ga64 production log-log



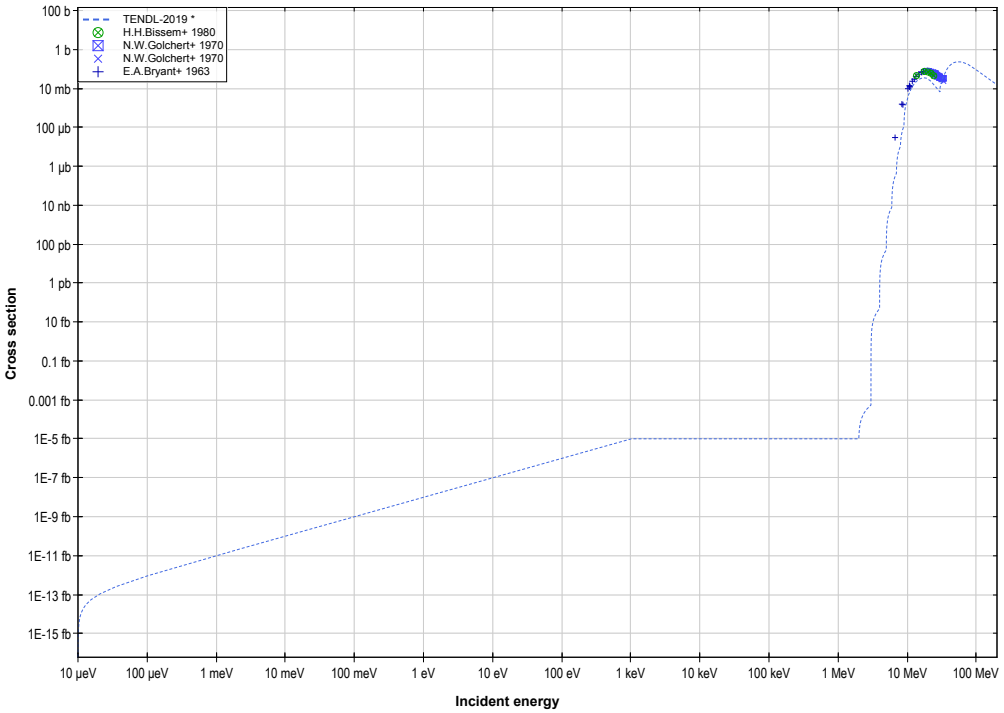
Cu63 (^{3}He,2n) or Ga64 production lin-log



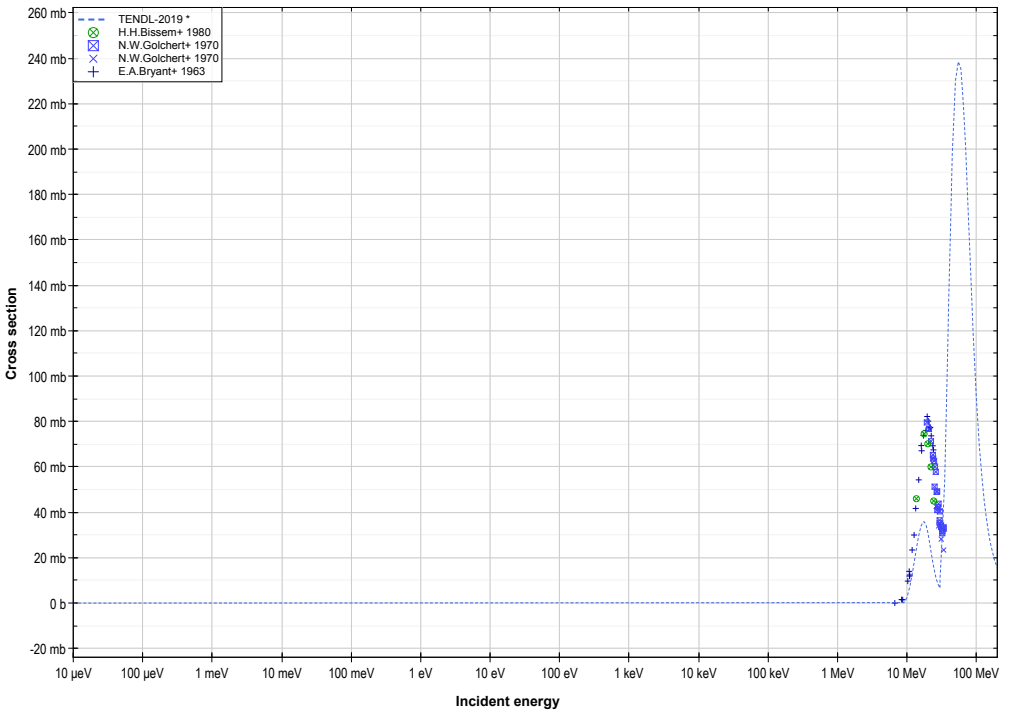
Reaction	Q-Value
Cu63(He3,2n)Ga64	-7958.42 keV

<< 27-Co-59	**29-Cu-63**	30-Zn-64 >>
<< MT16 (³He,2n)	**MT22 (³He,n+α) or MT5 (Cu61 production)**	MT29 (³He,n+2α) >>

Cu63 (³He,n+α) or Cu61 production log-log



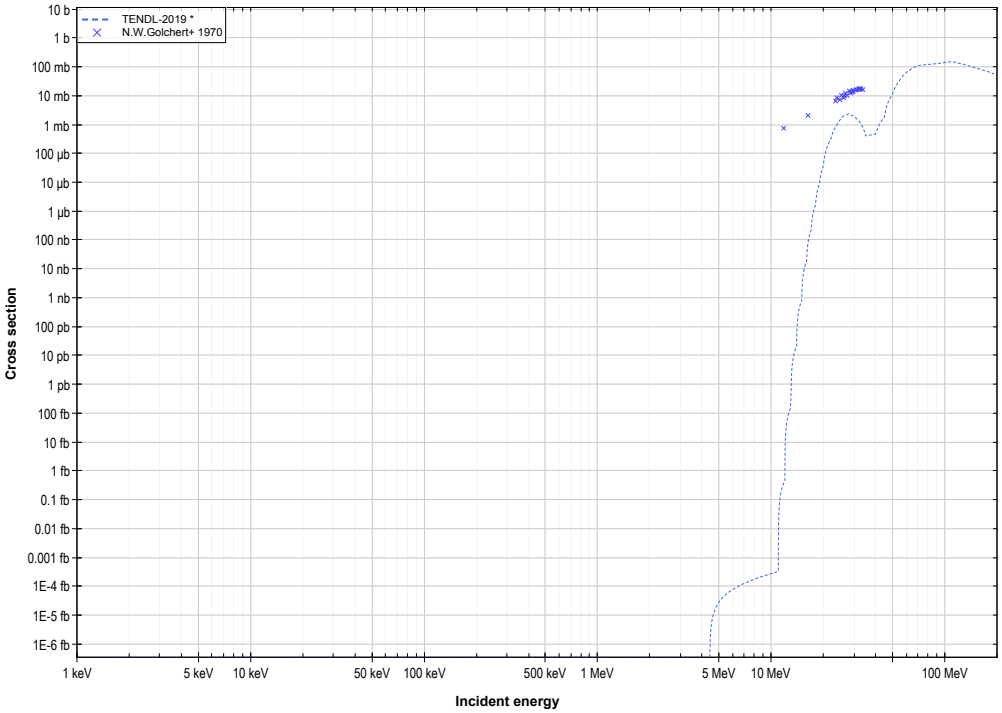
Cu63 (³He,n+α) or Cu61 production lin-log



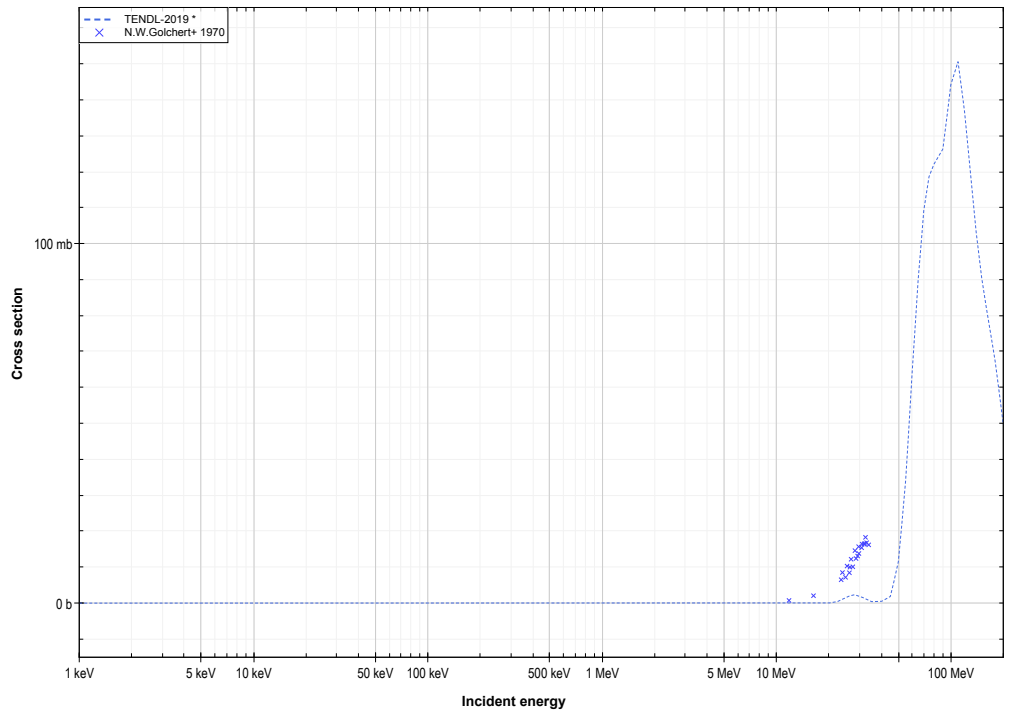
Reaction	Q-Value
Cu63(He3,n+α)Cu61	839.29 keV
Cu63(He3,d+t)Cu61	-16750.01 keV
Cu63(He3,n+p+t)Cu61	-18974.58 keV
Cu63(He3,2n+He3)Cu61	-19738.33 keV
Cu63(He3,n+2d)Cu61	-23007.24 keV
Cu63(He3,2n+p+d)Cu61	-25231.81 keV
Cu63(He3,3n+2p)Cu61	-27456.37 keV

	29-Cu-63	
<< MT22 (^{3}He,n+α)	**MT29 (^{3}He,n+2α) or MT5 (Co57 production)**	MT42 (^{3}He,3n+p) >>

Cu63 (^{3}He,n+2α) or Co57 production log-log



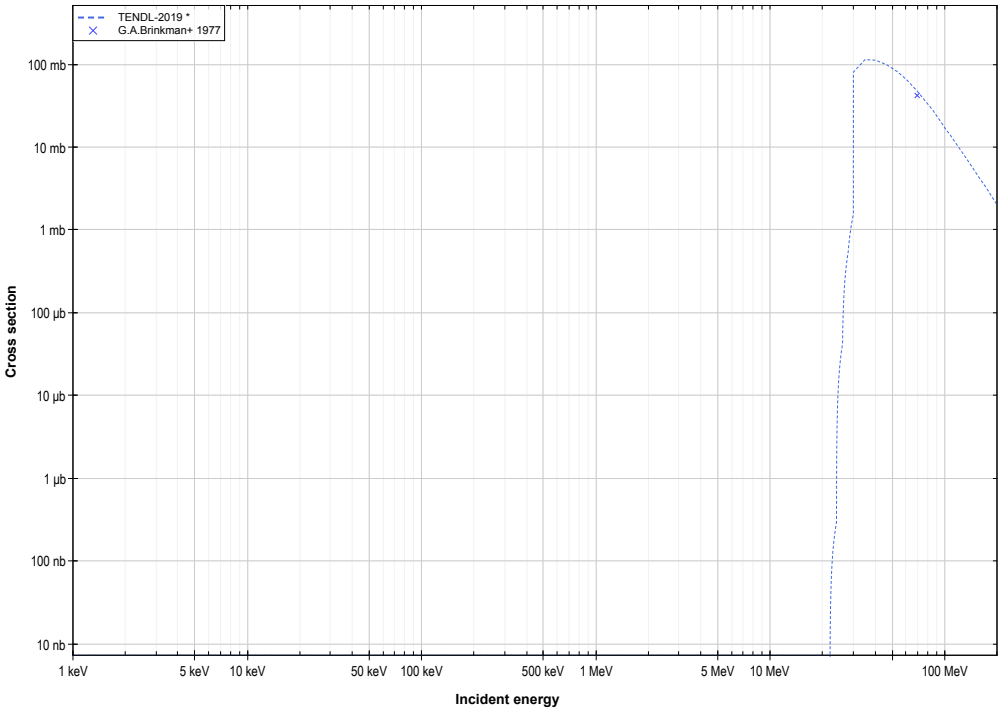
Cu63 (^{3}He,n+2α) or Co57 production lin-log



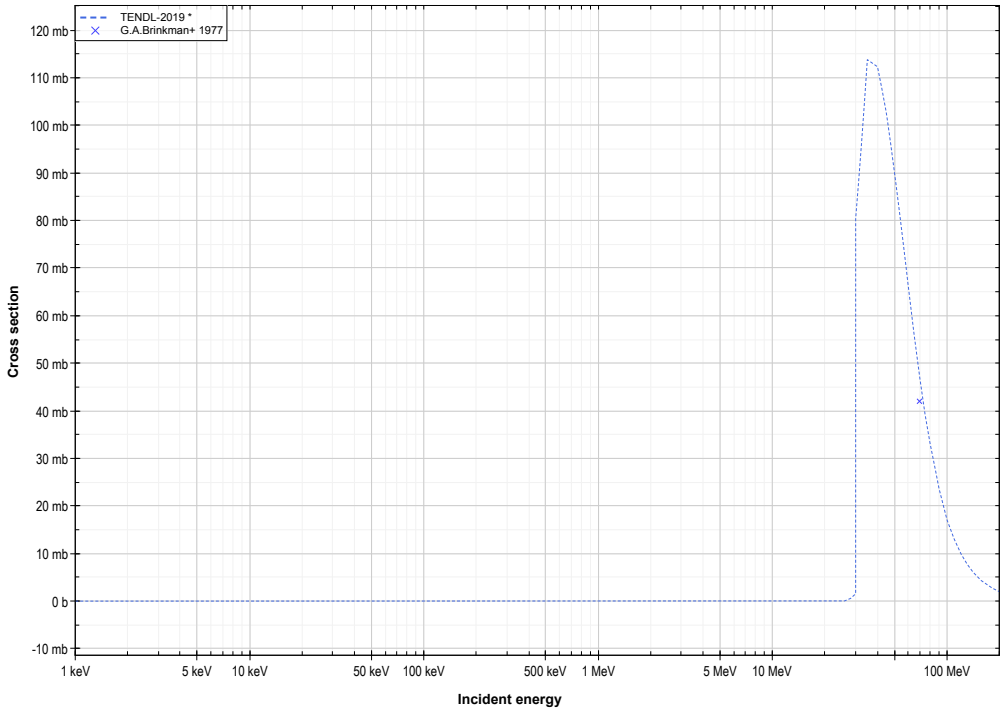
Reaction	Q-Value	Reaction	Q-Value
Cu63(He3,n+2α)Co57	-4224.13 keV	Cu63(He3,p+d+2t)Co57	-41627.29 keV
Cu63(He3,d+t+α)Co57	-21813.43 keV	Cu63(He3,n+d+t+He3)Co57	-42391.05 keV
Cu63(He3,n+p+t+α)Co57	-24038.00 keV	Cu63(He3,n+2p+2t)Co57	-43851.86 keV
Cu63(He3,2n+He3+α)Co57	-24801.75 keV	Cu63(He3,2n+p+t+He3)Co57	-44615.61 keV
Cu63(He3,n+2d+α)Co57	-28070.66 keV	Cu63(He3,3n+2He3)Co57	-45379.37 keV
Cu63(He3,2n+p+d+α)Co57	-30295.22 keV	Cu63(He3,3d+t)Co57	-45659.96 keV
Cu63(He3,3n+2p+α)Co57	-32519.79 keV	Cu63(He3,n+p+2d+t)Co57	-47884.52 keV
Cu63(He3,2t+He3)Co57	-36133.82 keV	Cu63(He3,2n+2d+He3)Co57	-48648.28 keV

<< 13-Al-27	**29-Cu-63**	34-Se-76 >>
<< MT29 (³He,n+2α)	**MT42 (³He,3n+p) or MT5 (Zn62 production)**	MT103 (³He,p) >>

Cu63 (³He,3n+p) or Zn62 production log-log



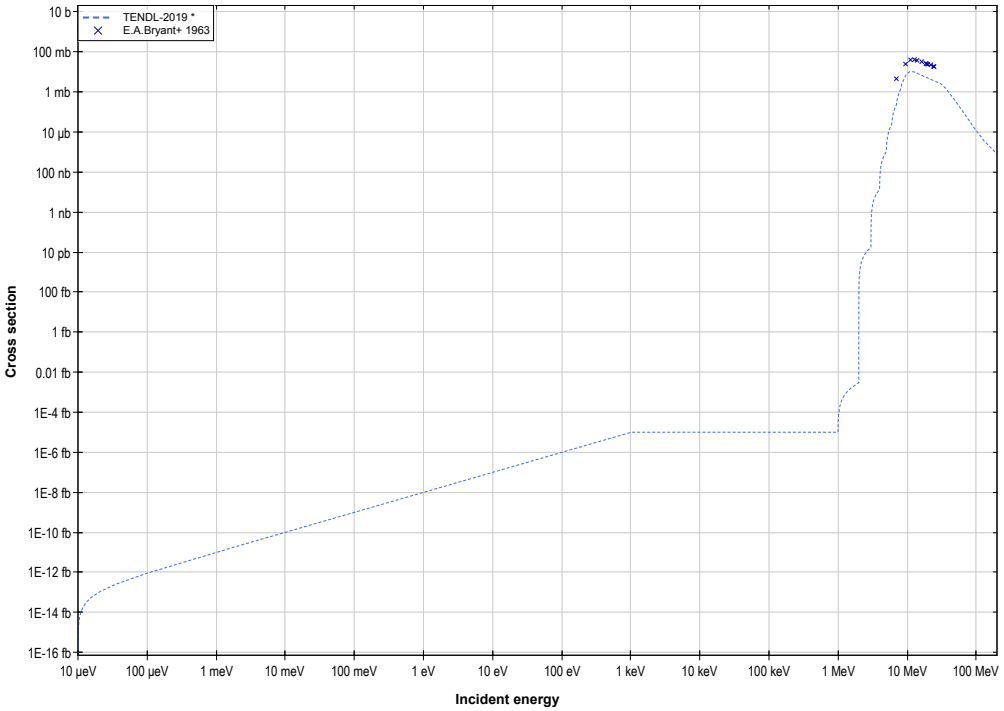
Cu63 (³He,3n+p) or Zn62 production lin-log



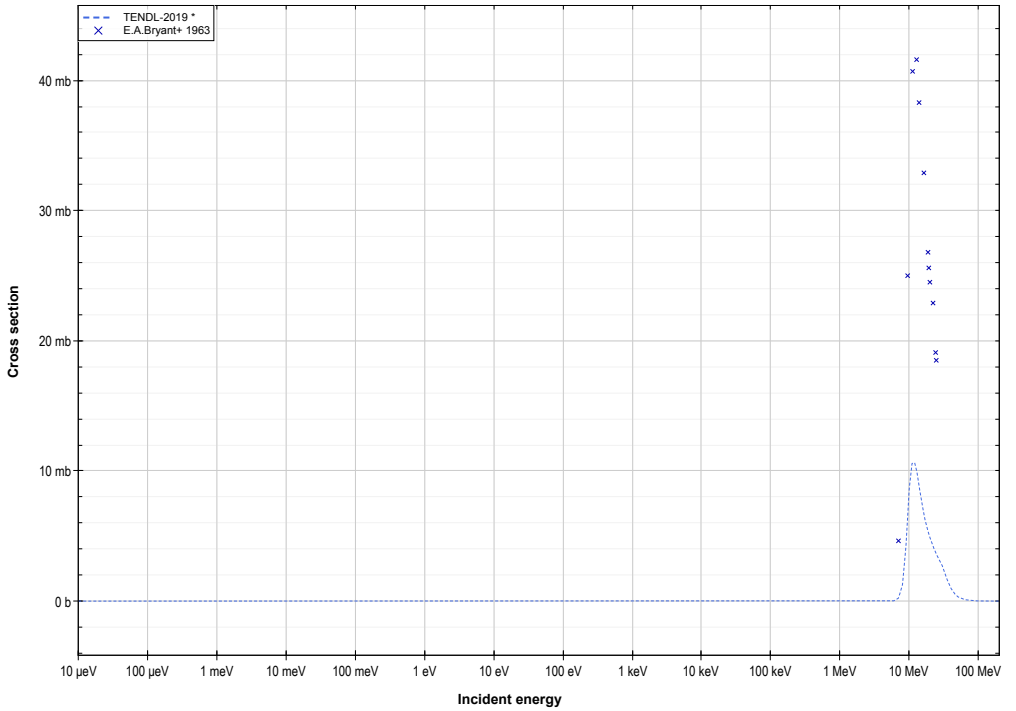
Reaction	Q-Value
Cu63(He3,n+t)Zn62	-12501.71 keV
Cu63(He3,2n+d)Zn62	-18758.94 keV
Cu63(He3,3n+p)Zn62	-20983.50 keV

<< 26-Fe-56	**29-Cu-63**	30-Zn-64 >>
<< MT42 (^{3}He,3n+p)	**MT103 (^{3}He,p) or MT5 (Zn65 production)**	MT108 (^{3}He,2α) >>

Cu63 (^{3}He,p) or Zn65 production log-log



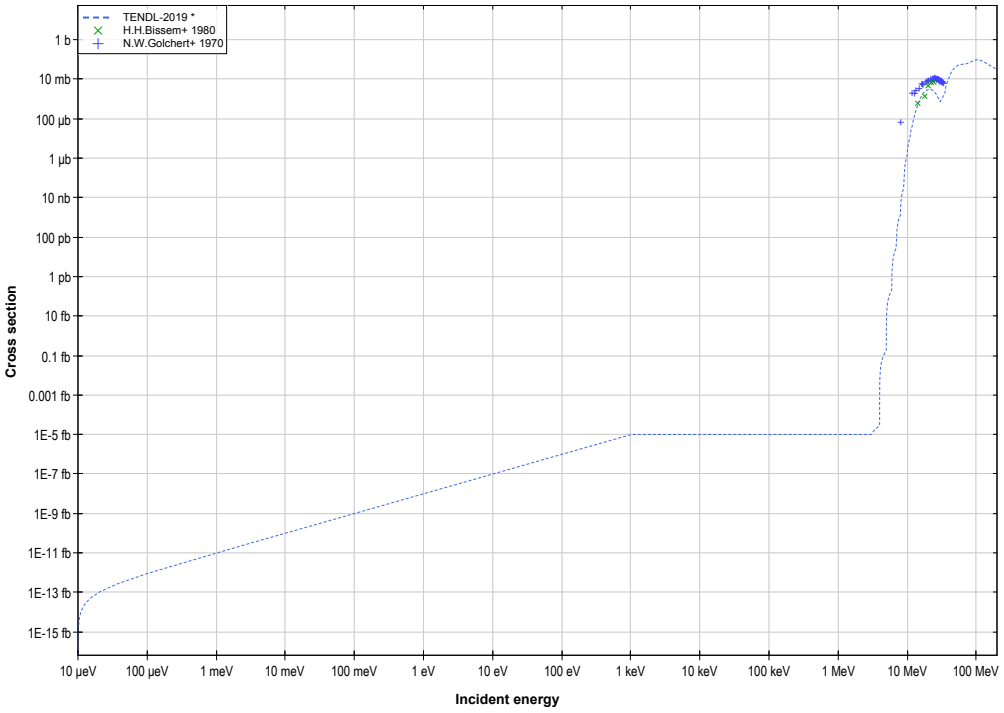
Cu63 (^{3}He,p) or Zn65 production lin-log



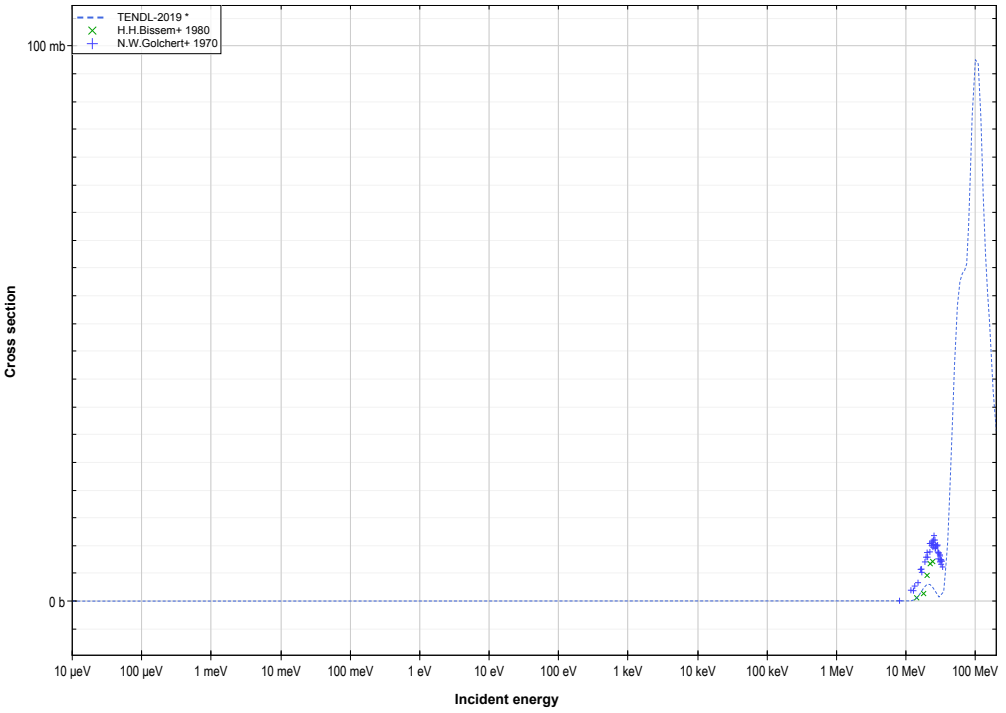
Reaction	Q-Value
Cu63(He3,p)Zn65	7974.45 keV

<< 27-Co-59	**29-Cu-63**	29-Cu-65 >>
<< MT103 (³He,p)	**MT108 (³He,2α) or MT5 (Co58 production)**	MT111 (³He,2p) >>

Cu63 (³He,2α) or Co58 production log-log



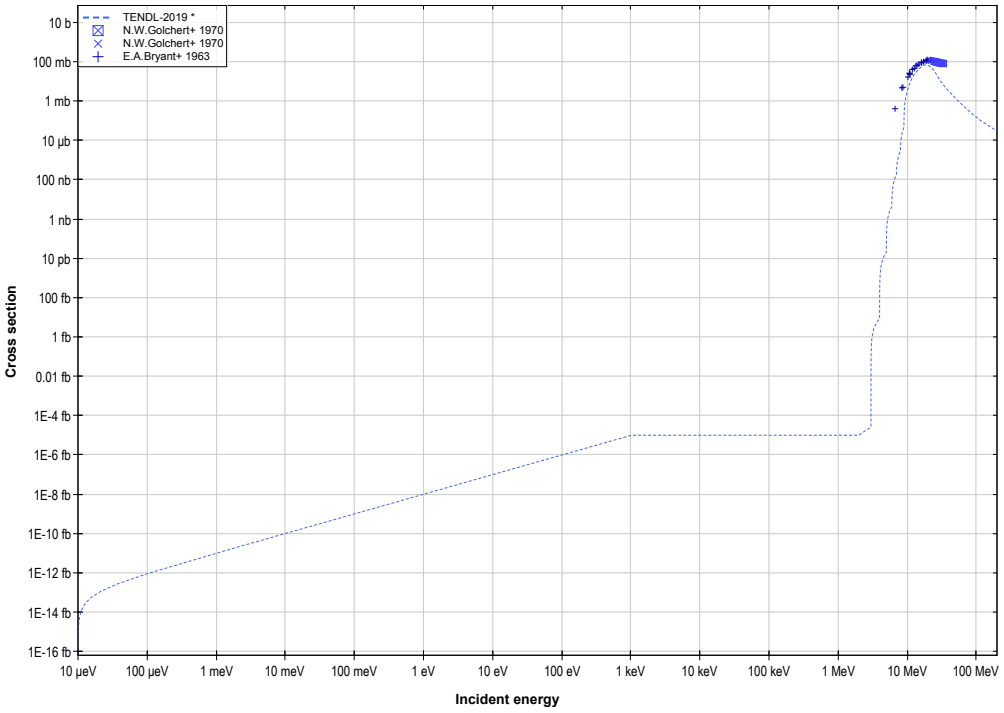
Cu63 (³He,2α) or Co58 production lin-log



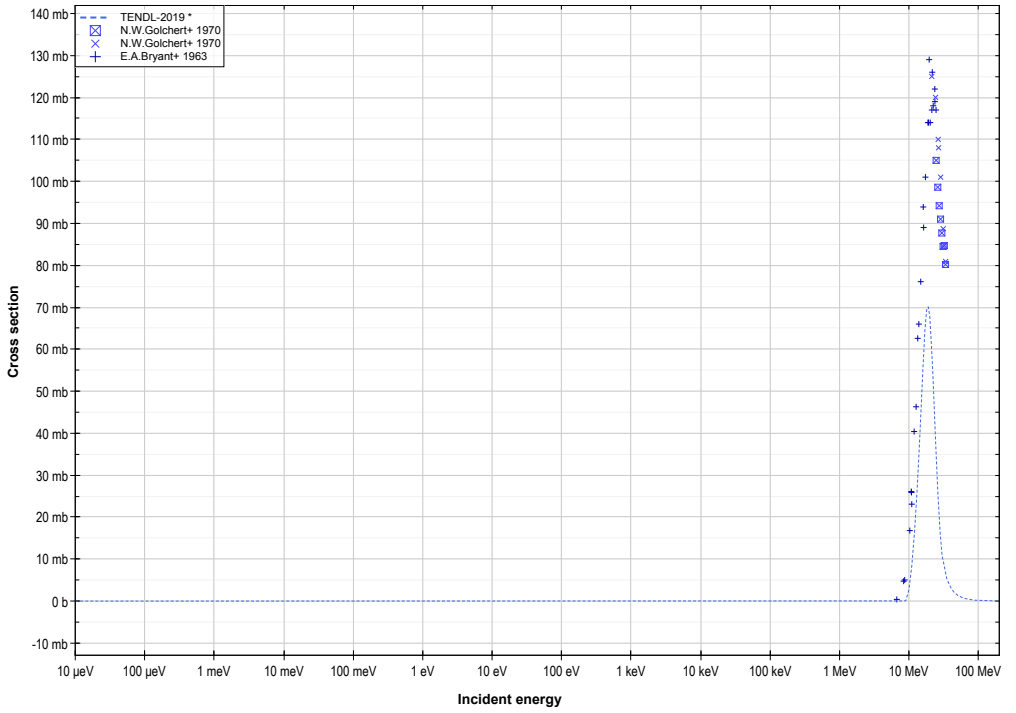
Reaction	Q-Value	Reaction	Q-Value
Cu63(He3,2α)Co58	4348.79 keV	Cu63(He3,n+p+t+He3)Co58	-36042.70 keV
Cu63(He3,p+t+α)Co58	-15465.08 keV	Cu63(He3,2n+2He3)Co58	-36806.45 keV
Cu63(He3,n+He3+α)Co58	-16228.83 keV	Cu63(He3,p+2d+t)Co58	-39311.61 keV
Cu63(He3,2d+α)Co58	-19497.74 keV	Cu63(He3,n+2d+He3)Co58	-40075.36 keV
Cu63(He3,n+p+d+α)Co58	-21722.31 keV	Cu63(He3,n+2p+d+t)Co58	-41536.17 keV
Cu63(He3,2n+2p+α)Co58	-23946.87 keV	Cu63(He3,2n+p+d+He3)Co58	-42299.93 keV
Cu63(He3,d+t+He3)Co58	-33818.13 keV	Cu63(He3,4d)Co58	-43344.27 keV
Cu63(He3,2p+2t)Co58	-35278.94 keV	Cu63(He3,2n+3p+t)Co58	-43760.74 keV

<< 27-Co-59	**29-Cu-63**	30-Zn-64 >>
<< MT108 (^{3}He,2α)	**MT111 (^{3}He,2p) or MT5 (Cu64 production)**	MT176 (^{3}He,2n+^{3}He) >>

Cu63 (^{3}He,2p) or Cu64 production log-log



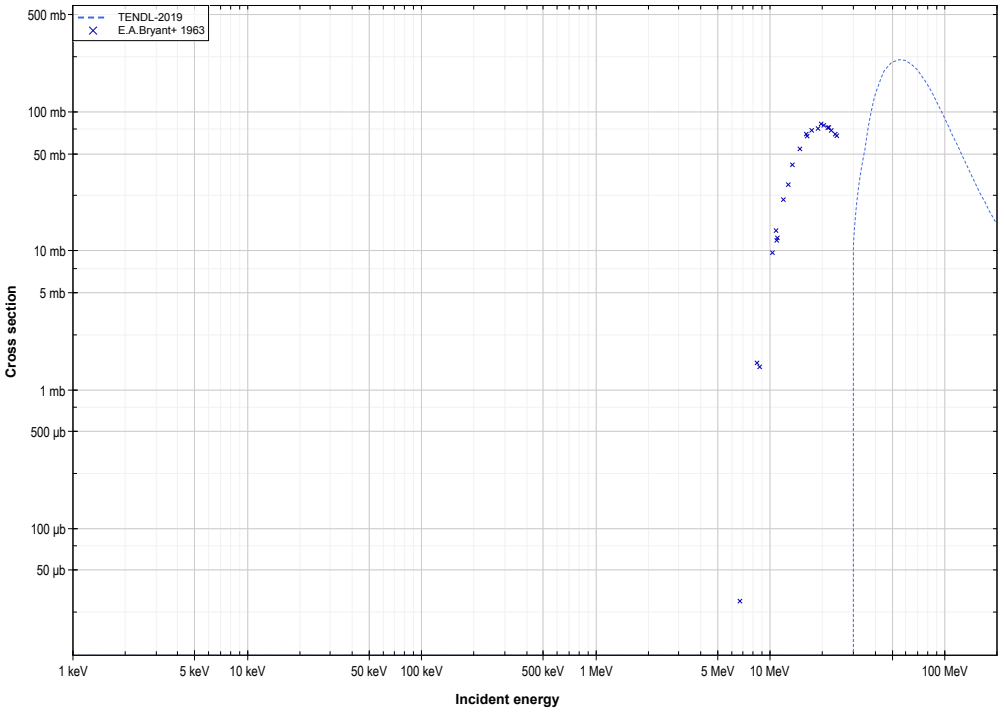
Cu63 (^{3}He,2p) or Cu64 production lin-log



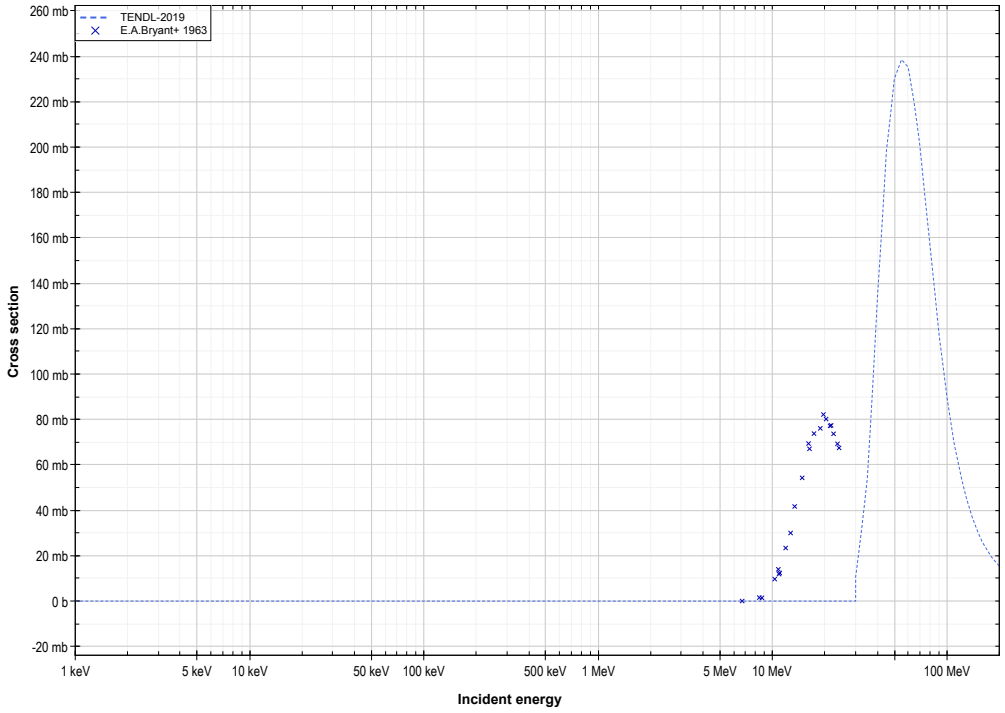
Reaction	Q-Value
Cu63(He3,2p)Cu64	197.98 keV

<< 27-Co-59	**29-Cu-63**	47-Ag-107 >>
<< MT111 (^{3}He,2p)	**MT176 (^{3}He,2n+^{3}He) or MT5 (Cu61 production)**	MT179 (^{3}He,3n+2p) >>

Cu63 (^{3}He,2n+^{3}He) or Cu61 production log-log



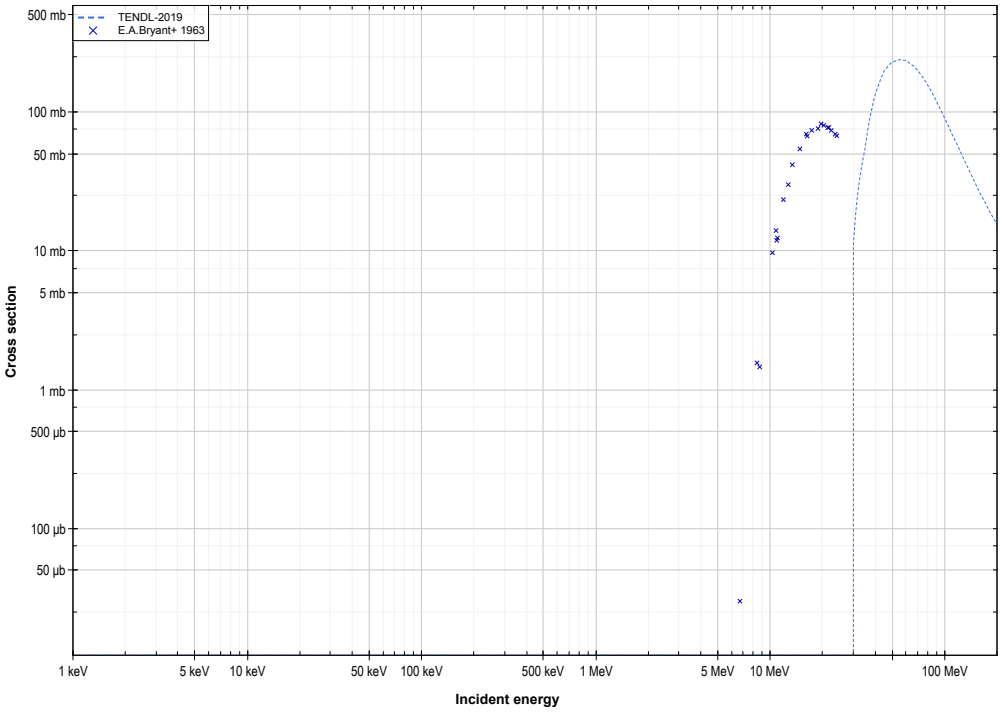
Cu63 (^{3}He,2n+^{3}He) or Cu61 production lin-log



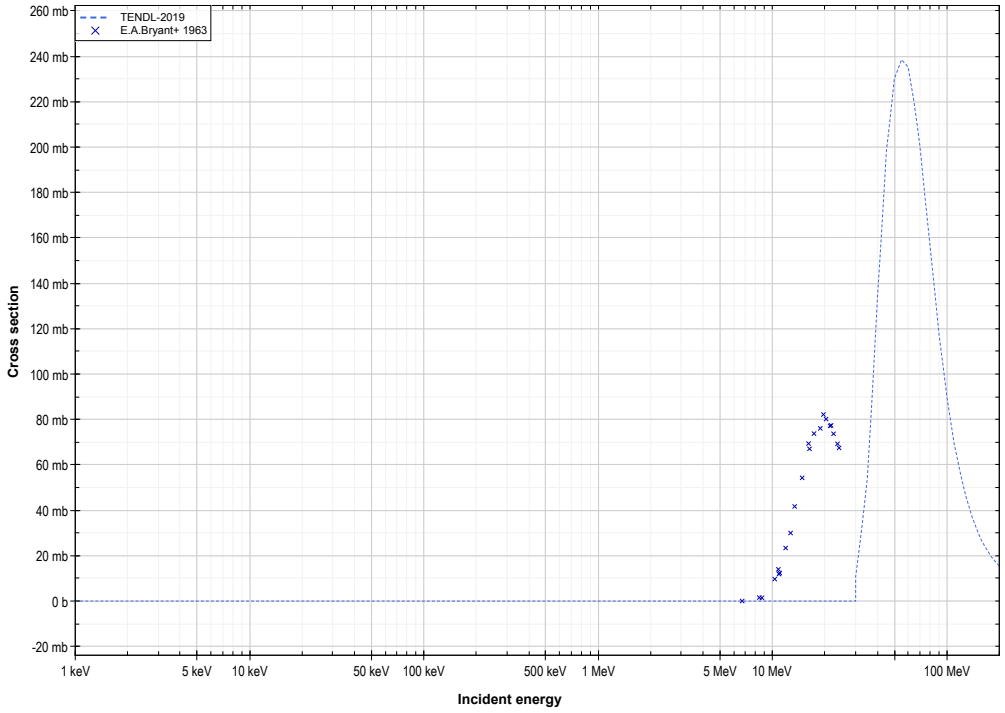
Reaction	Q-Value
Cu63(He3,n+α)Cu61	839.29 keV
Cu63(He3,d+t)Cu61	-16750.01 keV
Cu63(He3,n+p+t)Cu61	-18974.58 keV
Cu63(He3,2n+He3)Cu61	-19738.33 keV
Cu63(He3,n+2d)Cu61	-23007.24 keV
Cu63(He3,2n+p+d)Cu61	-25231.81 keV
Cu63(He3,3n+2p)Cu61	-27456.37 keV

<< 27-Co-59	**29-Cu-63**	47-Ag-107 >>
<< MT176 (^{3}He,2n+^{3}He)	**MT179 (^{3}He,3n+2p) or MT5 (Cu61 production)**	MT182 (^{3}He,d+t) >>

Cu63 (^{3}He,3n+2p) or Cu61 production log-log



Cu63 (^{3}He,3n+2p) or Cu61 production lin-log



Reaction	Q-Value
Cu63(He3,n+α)Cu61	839.29 keV
Cu63(He3,d+t)Cu61	-16750.01 keV
Cu63(He3,n+p+t)Cu61	-18974.58 keV
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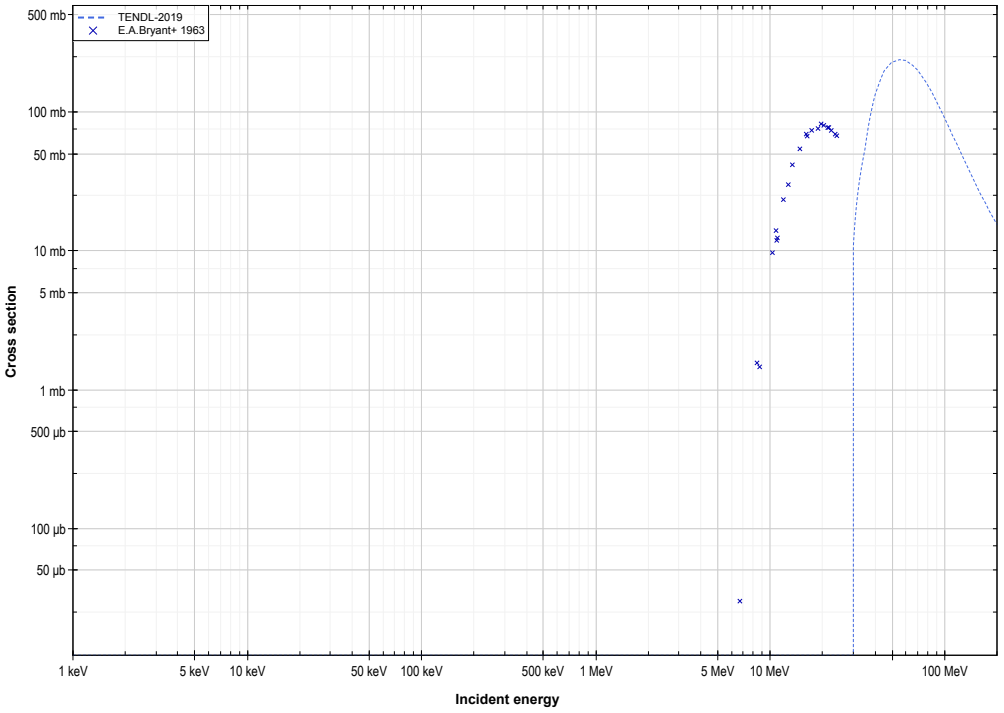
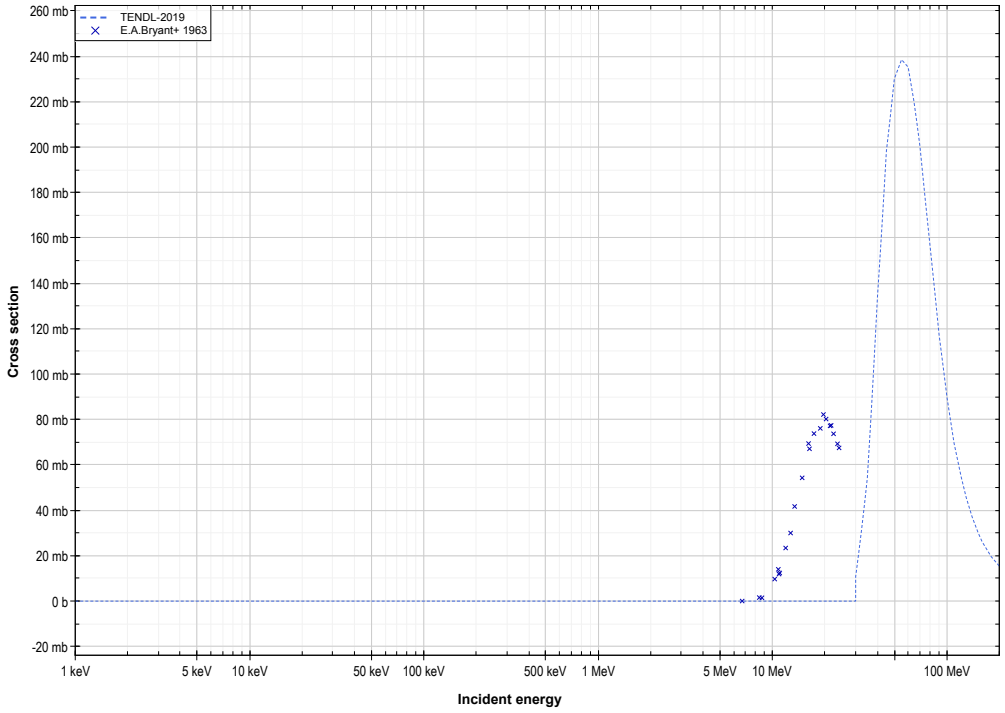
Cu63(He3,2n+p+d)Cu61	-25231.81 keV
Cu63(He3,3n+2p)Cu61	-27456.37 keV

<< 27-Co-59	**29-Cu-63**	47-Ag-107 >>
<< MT179 (^{3}He,3n+2p)	**MT182 (^{3}He,d+t) or MT5 (Cu61 production)**	MT184 (^{3}He,n+p+t) >>

Cu63 (^{3}He,d+t) or Cu61 production log-log



Cu63 (^{3}He,d+t) or Cu61 production lin-log



Reaction	Q-Value
Cu63(He3,n+α)Cu61	839.29 keV
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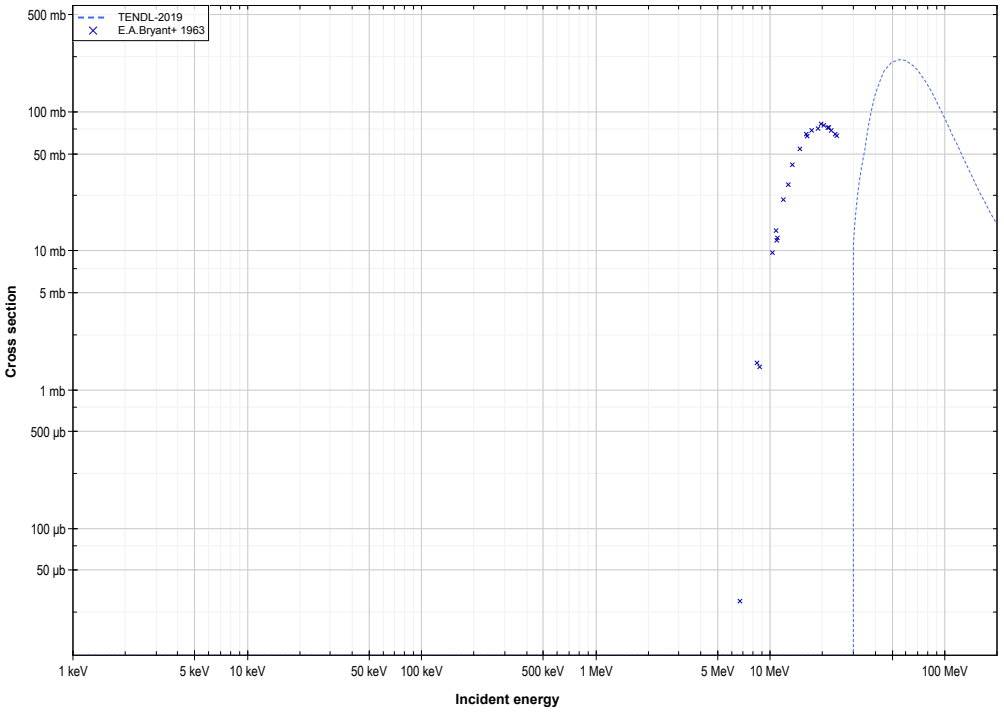
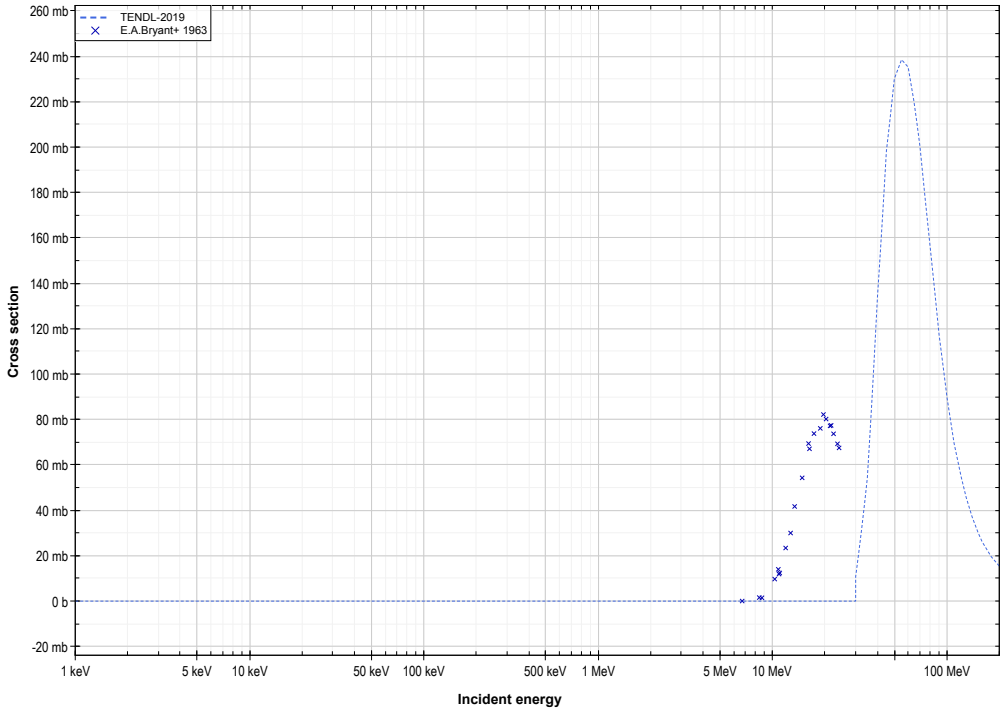
Cu63(He3,n+2d)Cu61	-23007.24 keV
Cu63(He3,2n+p+d)Cu61	-25231.81 keV
Cu63(He3,3n+2p)Cu61	-27456.37 keV

<< 27-Co-59	**29-Cu-63**	47-Ag-107 >>
<< MT182 (^{3}He,d+t)	**MT184 (^{3}He,n+p+t) or MT5 (Cu61 production)**	MT199 (^{3}He,3n+2p+α) >>

Cu63 (^{3}He,n+p+t) or Cu61 production log-log



Cu63 (^{3}He,n+p+t) or Cu61 production lin-log



Reaction	Q-Value
Cu63(He3,n+α)Cu61	839.29 keV
Cu63(He3,d+t)Cu61	-16750.01 keV
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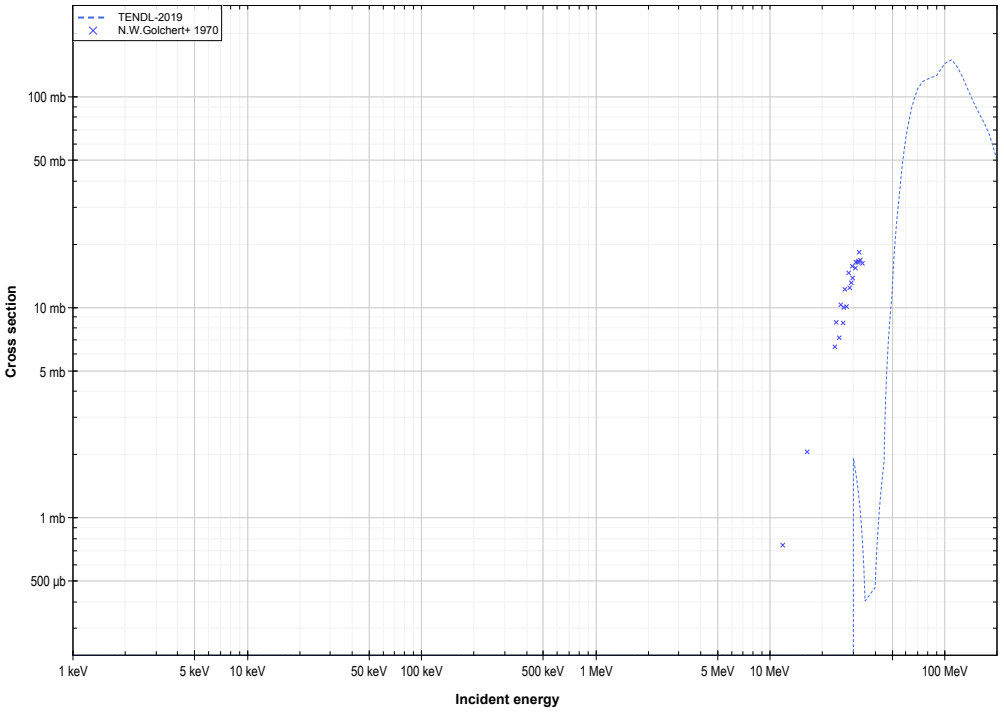
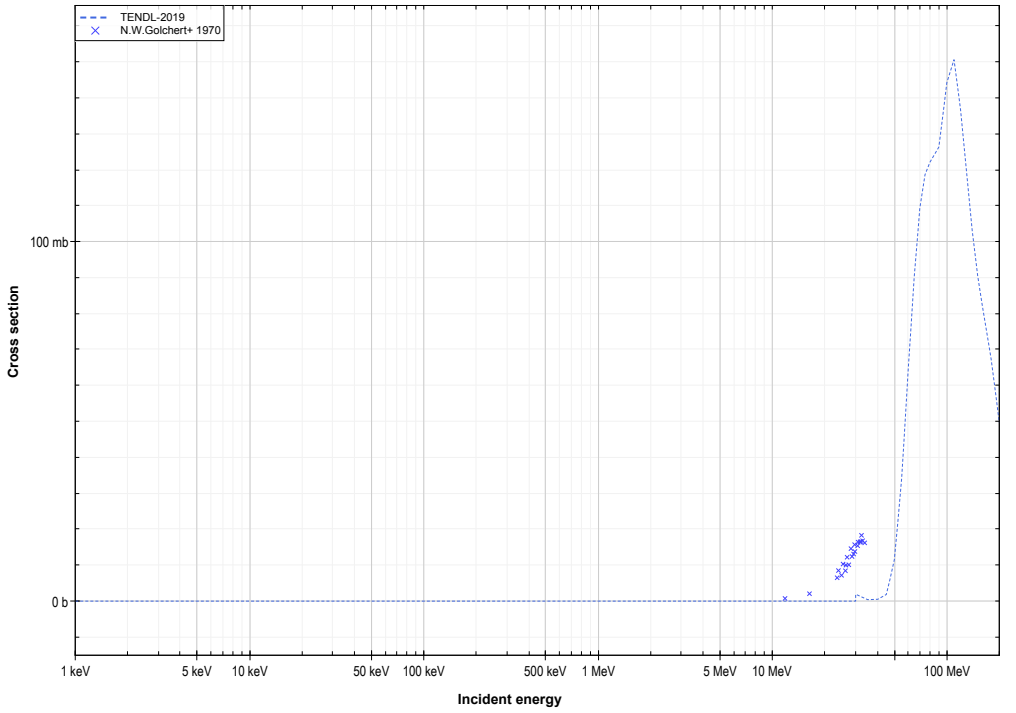
Cu63(He3,2n+He3)Cu61	-19738.33 keV
Cu63(He3,n+2d)Cu61	-23007.24 keV
Cu63(He3,2n+p+d)Cu61	-25231.81 keV
Cu63(He3,3n+2p)Cu61	-27456.37 keV

	29-Cu-63	
<< MT184 (^{3}He,n+p+t)	**MT199 (^{3}He,3n+2p+α) or MT5 (Co57 production)**	29-Cu-65 MT4 (^{3}He,n) >>

Cu63 (^{3}He,3n+2p+α) or Co57 production log-log



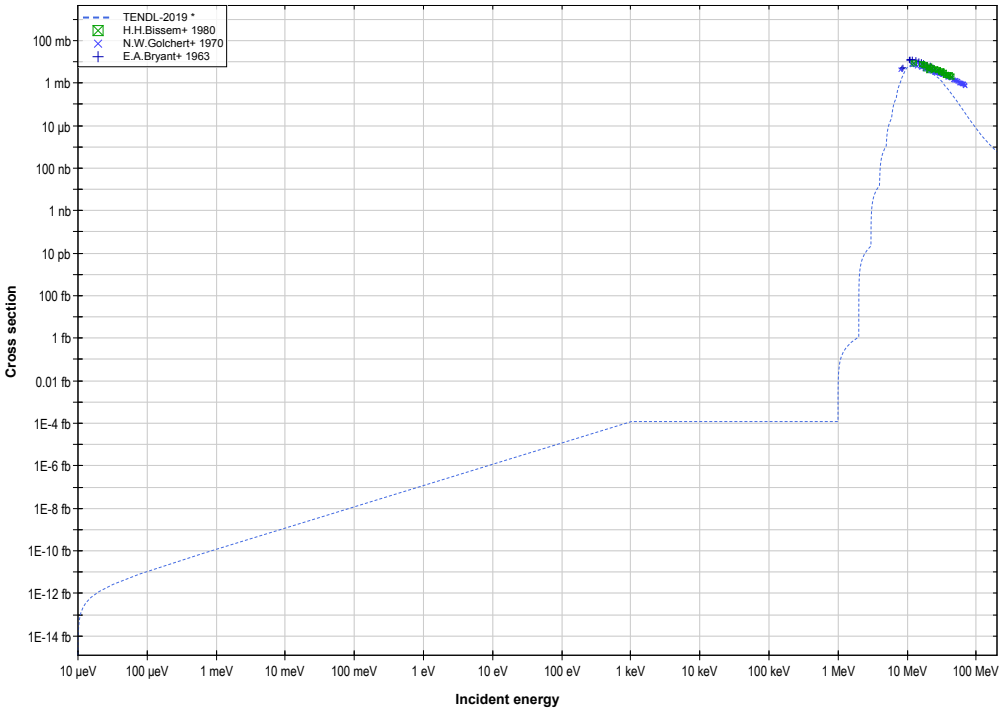
Cu63 (^{3}He,3n+2p+α) or Co57 production lin-log



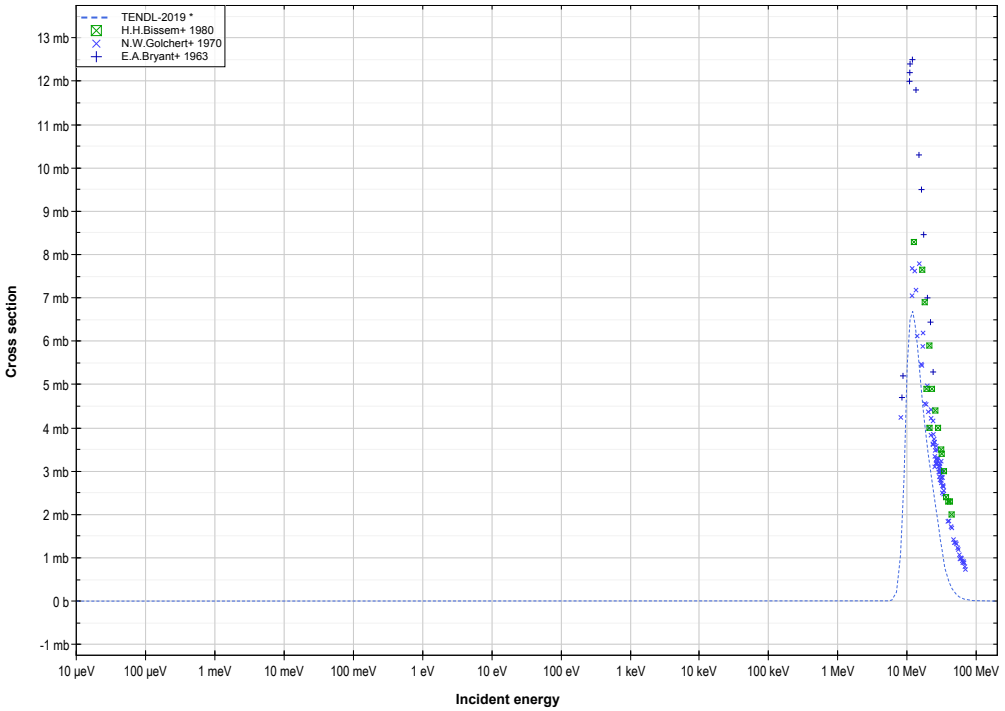
Reaction	Q-Value	Reaction	Q-Value
Cu63(He3,n+2α)Co57	-4224.13 keV	Cu63(He3,p+d+2t)Co57	-41627.29 keV
Cu63(He3,d+t+α)Co57	-21813.43 keV	Cu63(He3,n+d+t+He3)Co57	-42391.05 keV
Cu63(He3,n+p+t+α)Co57	-24038.00 keV	Cu63(He3,n+2p+2t)Co57	-43851.86 keV
Cu63(He3,2n+He3+α)Co57	-24801.75 keV	Cu63(He3,2n+p+t+He3)Co57	-44615.61 keV
Cu63(He3,n+2d+α)Co57	-28070.66 keV	Cu63(He3,3n+2He3)Co57	-45379.37 keV
Cu63(He3,2n+p+d+α)Co57	-30295.22 keV	Cu63(He3,3d+t)Co57	-45659.96 keV
Cu63(He3,3n+2p+α)Co57	-32519.79 keV	Cu63(He3,n+p+2d+t)Co57	-47884.52 keV
Cu63(He3,2t+He3)Co57	-36133.82 keV	Cu63(He3,2n+2d+He3)Co57	-48648.28 keV

<< 29-Cu-63	**29-Cu-65**	30-Zn-64 >>
<< 29-Cu-63 MT199 (^{3}He,3n+2p+α)	**MT4 (^{3}He,n) or MT5 (Ga67 production)**	MT16 (^{3}He,2n) >>

Cu65 (^{3}He,n) or Ga67 production log-log



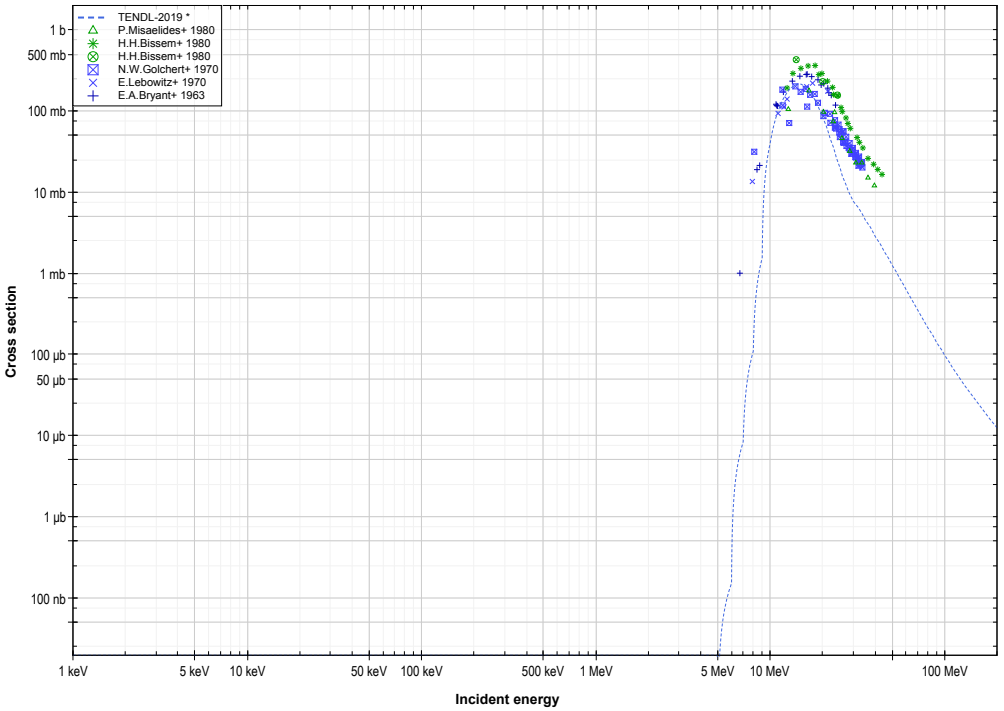
Cu65 (^{3}He,n) or Ga67 production lin-log



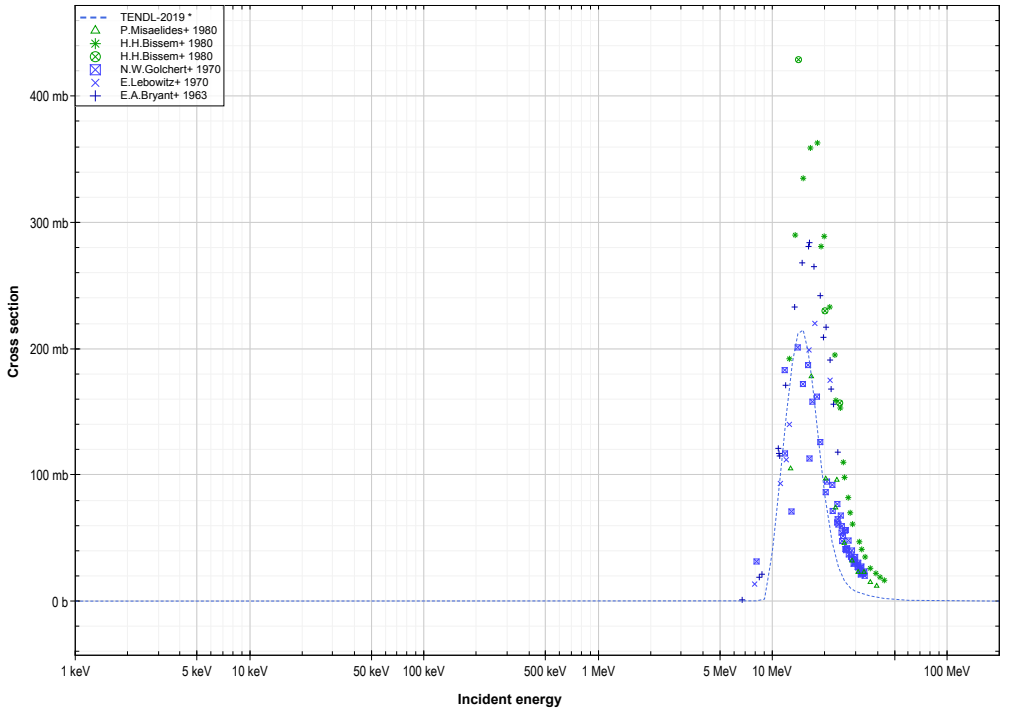
Reaction	Q-Value
Cu65(He3,n)Ga67	6475.20 keV

<< 29-Cu-63	**29-Cu-65**	30-Zn-66 >>
<< MT4 (^{3}He,n)	**MT16 (^{3}He,2n) or MT5 (Ga66 production)**	MT17 (^{3}He,3n) >>

Cu65 (^{3}He,2n) or Ga66 production log-log



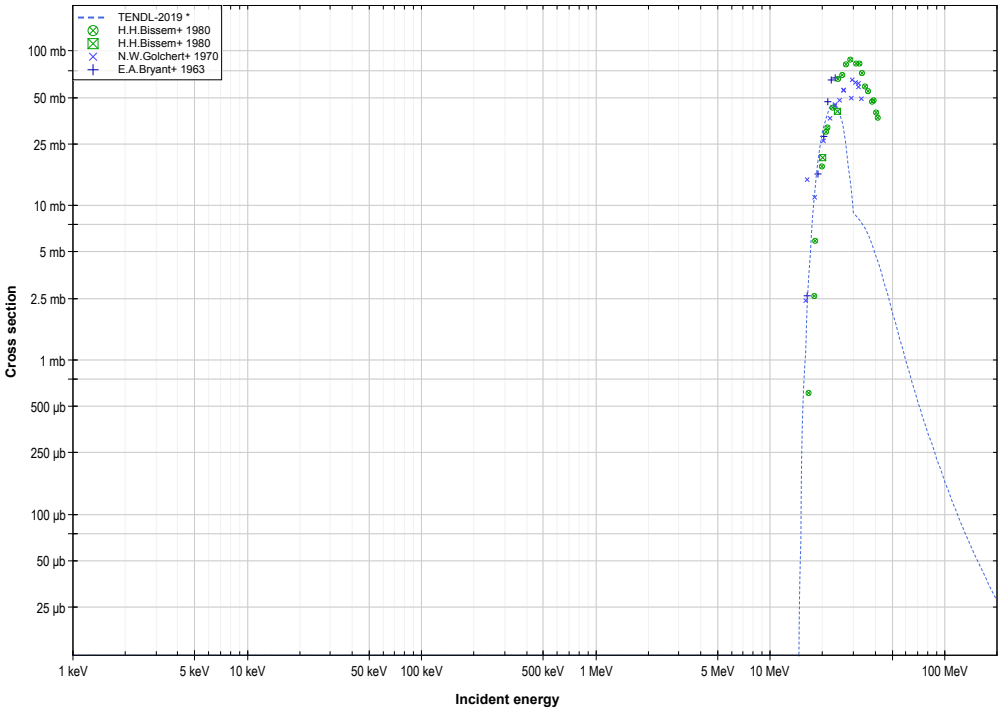
Cu65 (^{3}He,2n) or Ga66 production lin-log



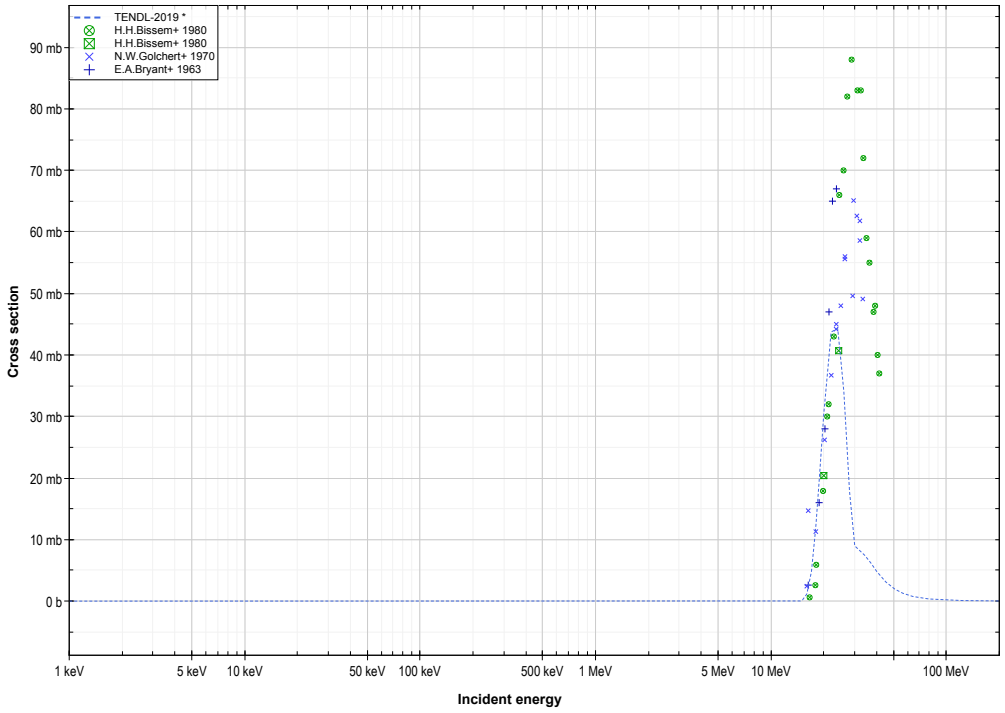
Reaction	Q-Value
Cu65(He3,2n)Ga66	-4751.42 keV

<< 26-Fe-56	**29-Cu-65**	30-Zn-68 >>
<< MT16 (^{3}He,2n)	**MT17 (^{3}He,3n) or MT5 (Ga65 production)**	MT30 (^{3}He,2n+2α) >>

Cu65 (^{3}He,3n) or Ga65 production log-log



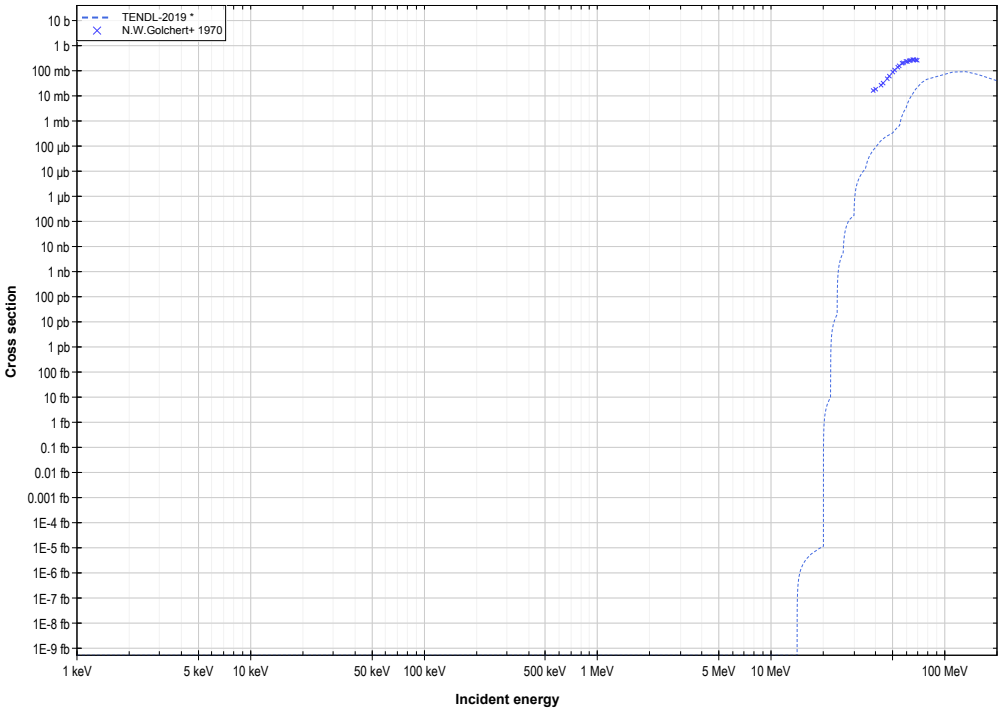
Cu65 (^{3}He,3n) or Ga65 production lin-log



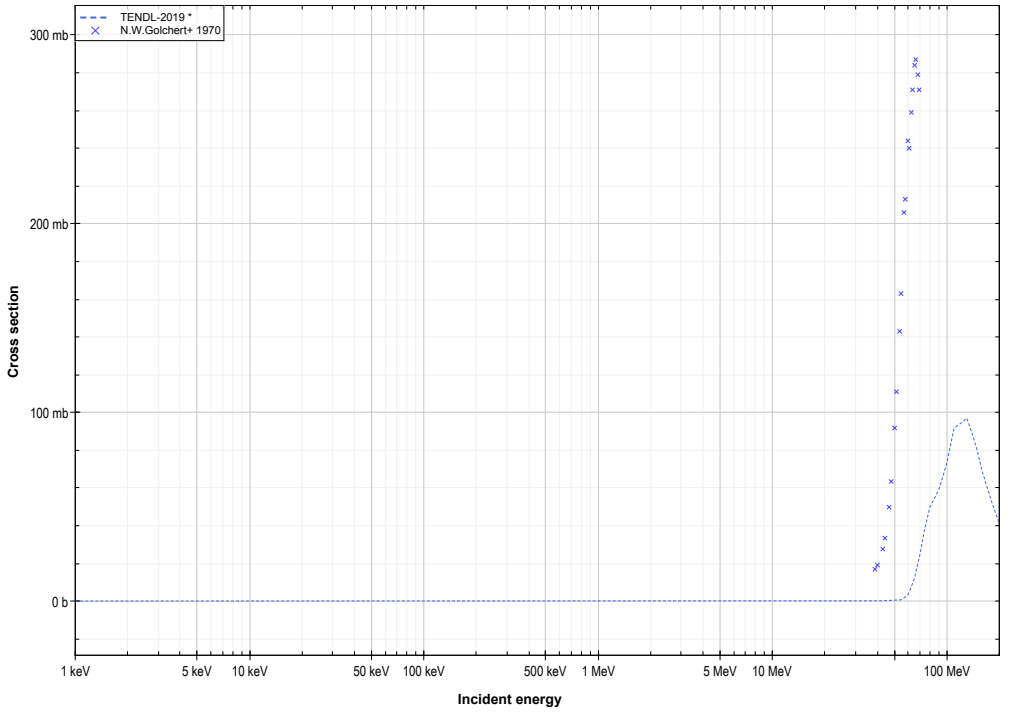
Reaction	Q-Value
Cu65(He3,3n)Ga65	-13888.93 keV

	29-Cu-65	
<< MT17 (³He,3n)	**MT30 (³He,2n+2α) or MT5 (Co58 production)**	MT34 (³He,n+³He) >>

Cu65 (³He,2n+2α) or Co58 production log-log



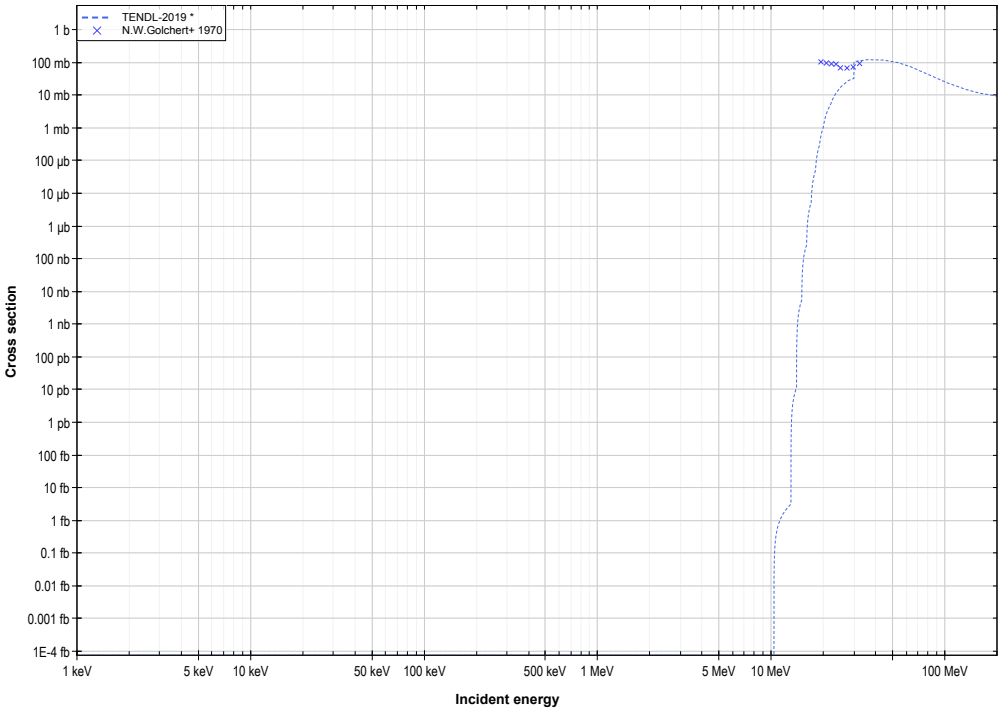
Cu65 (³He,2n+2α) or Co58 production lin-log



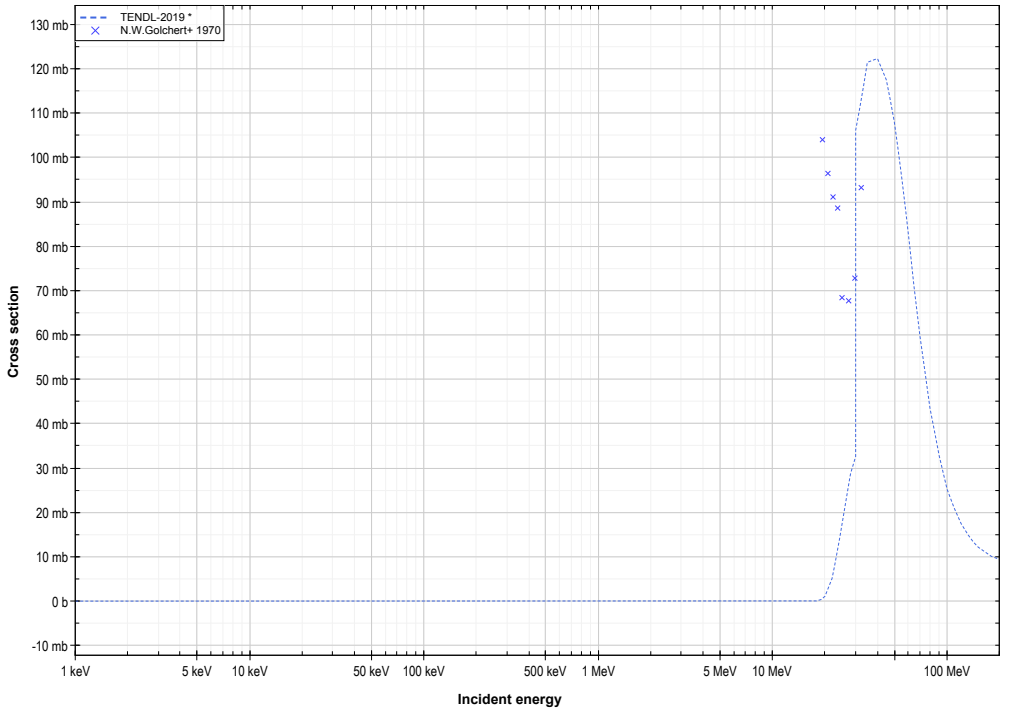
Reaction	Q-Value	Reaction	Q-Value
Cu65(He3,2n+2α)Co58	-13477.75 keV	Cu65(He3,p+3t)Co58	-44623.68 keV
Cu65(He3,2t+α)Co58	-24809.82 keV	Cu65(He3,n+2t+He3)Co58	-45387.44 keV
Cu65(He3,n+d+t+α)Co58	-31067.05 keV	Cu65(He3,2d+2t)Co58	-48656.35 keV
Cu65(He3,2n+p+t+α)Co58	-33291.61 keV	Cu65(He3,n+p+d+2t)Co58	-50880.91 keV
Cu65(He3,3n+He3+α)Co58	-34055.37 keV	Cu65(He3,2n+d+t+He3)Co58	-51644.67 keV
Cu65(He3,2n+2d+α)Co58	-37324.28 keV	Cu65(He3,2n+2p+2t)Co58	-53105.48 keV
Cu65(He3,3n+p+d+α)Co58	-39548.84 keV	Cu65(He3,3n+p+t+He3)Co58	-53869.23 keV
Cu65(He3,4n+2p+α)Co58	-41773.41 keV	Cu65(He3,4n+2He3)Co58	-54632.99 keV

<< 27-Co-59	**29-Cu-65**	45-Rh-103 >>
<< MT30 (^{3}He,2n+2α)	**MT34 (^{3}He,n+^{3}He) or MT5 (Cu64 production)**	MT37 (^{3}He,4n) >>

Cu65 (^{3}He,n+^{3}He) or Cu64 production log-log



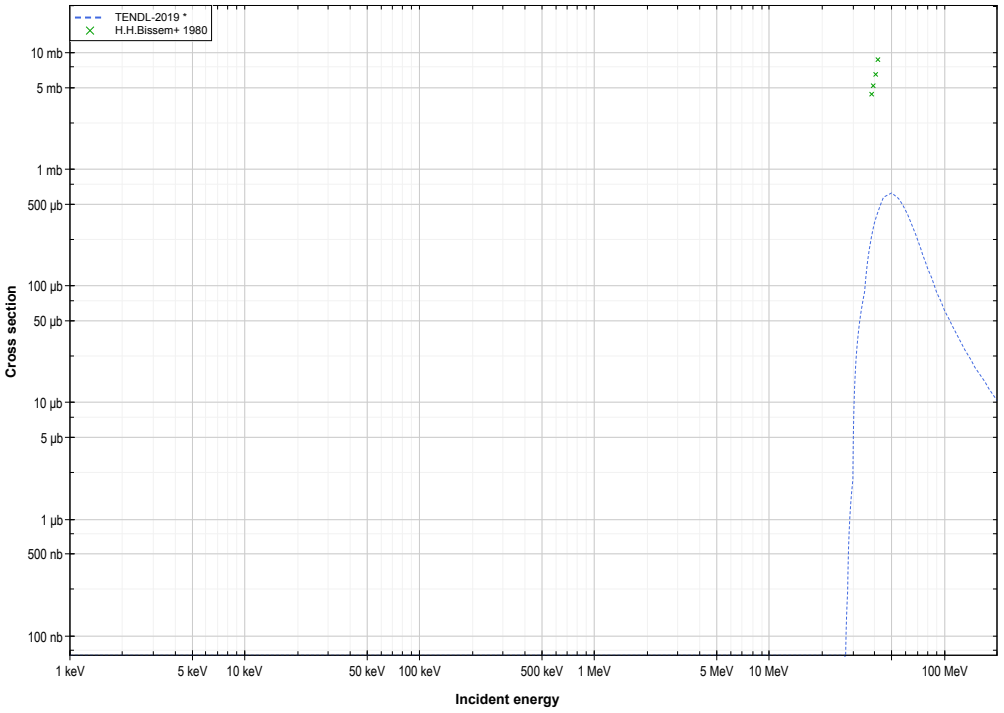
Cu65 (^{3}He,n+^{3}He) or Cu64 production lin-log



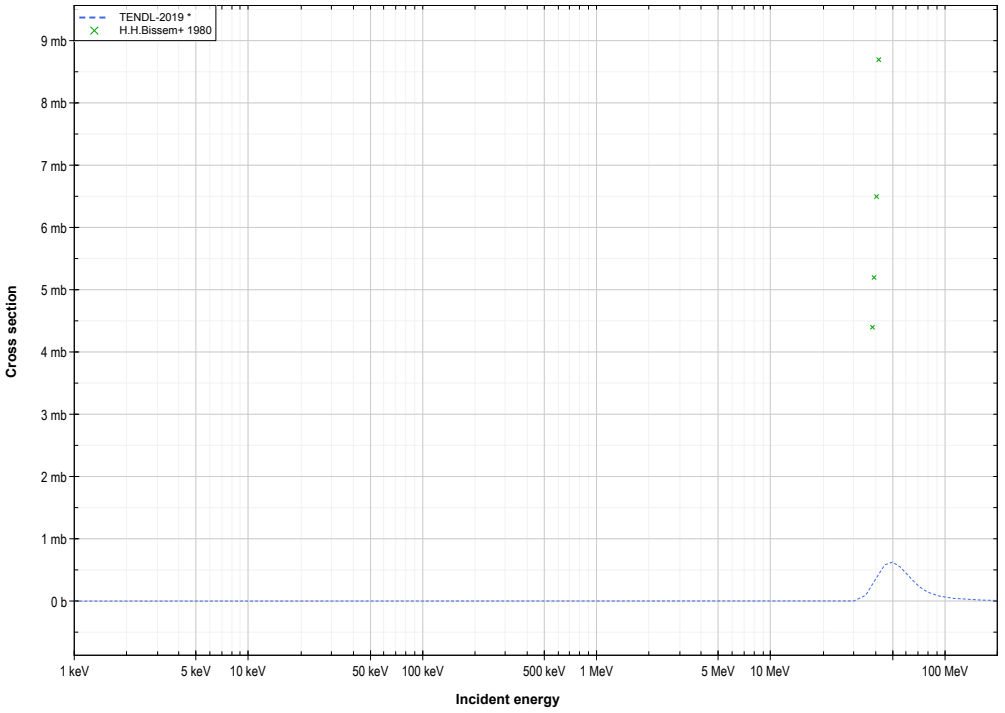
Reaction	Q-Value
Cu65(He3,α)Cu64	10667.10 keV
Cu65(He3,p+t)Cu64	-9146.76 keV
Cu65(He3,n+He3)Cu64	-9910.52 keV
Cu65(He3,2d)Cu64	-13179.43 keV
Cu65(He3,n+p+d)Cu64	-15403.99 keV
Cu65(He3,2n+2p)Cu64	-17628.56 keV

	29-Cu-65	33-As-75 >>
<< MT34 (³He,n+³He)	**MT37 (³He,4n) or MT5 (Ga64 production)**	MT107 (³He,α) >>

Cu65 (³He,4n) or Ga64 production log-log



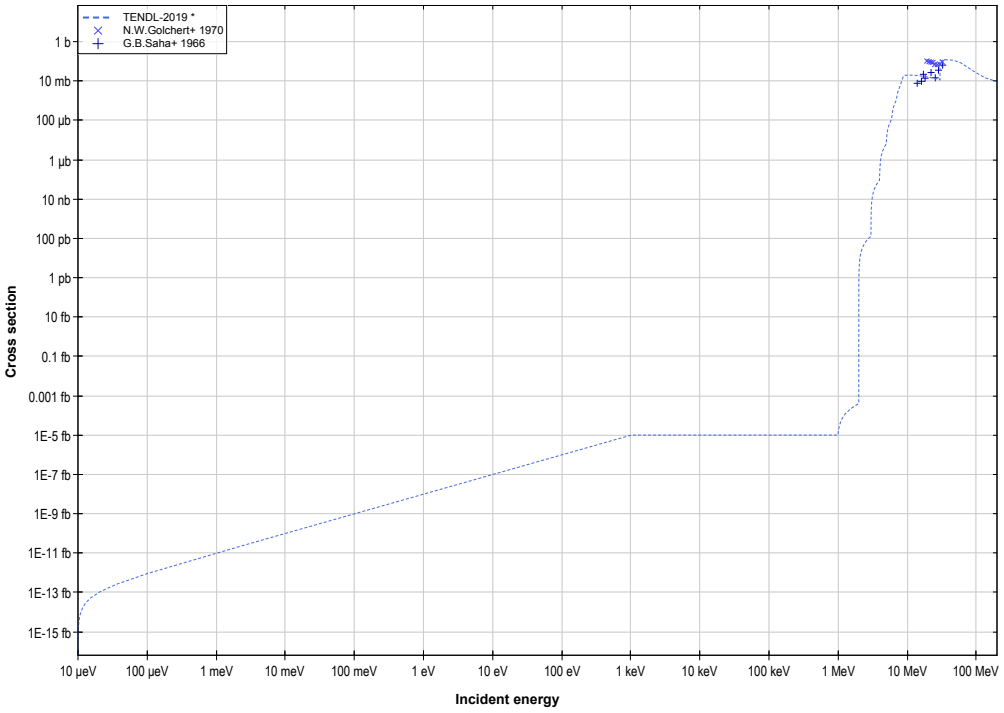
Cu65 (³He,4n) or Ga64 production lin-log



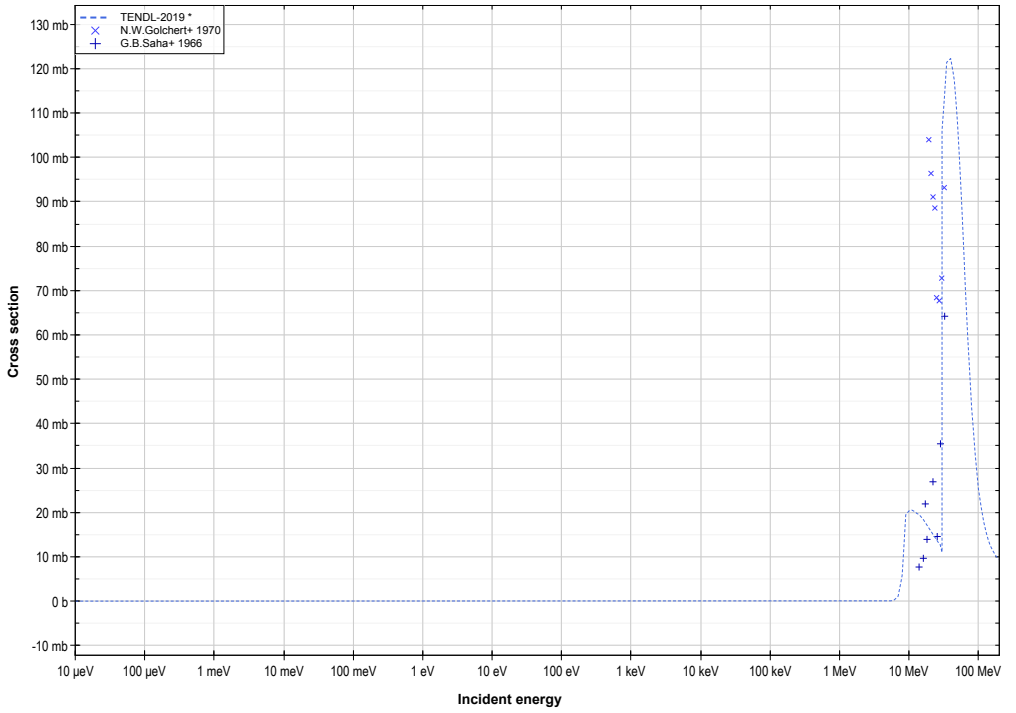
Reaction	Q-Value
Cu65(He3,4n)Ga64	-25784.95 keV

<< 27-Co-59	**29-Cu-65**	30-Zn-64 >>
<< MT37 (³He,4n)	**MT107 (³He,α) or MT5 (Cu64 production)**	MT108 (³He,2α) >>

Cu65 (³He,α) or Cu64 production log-log



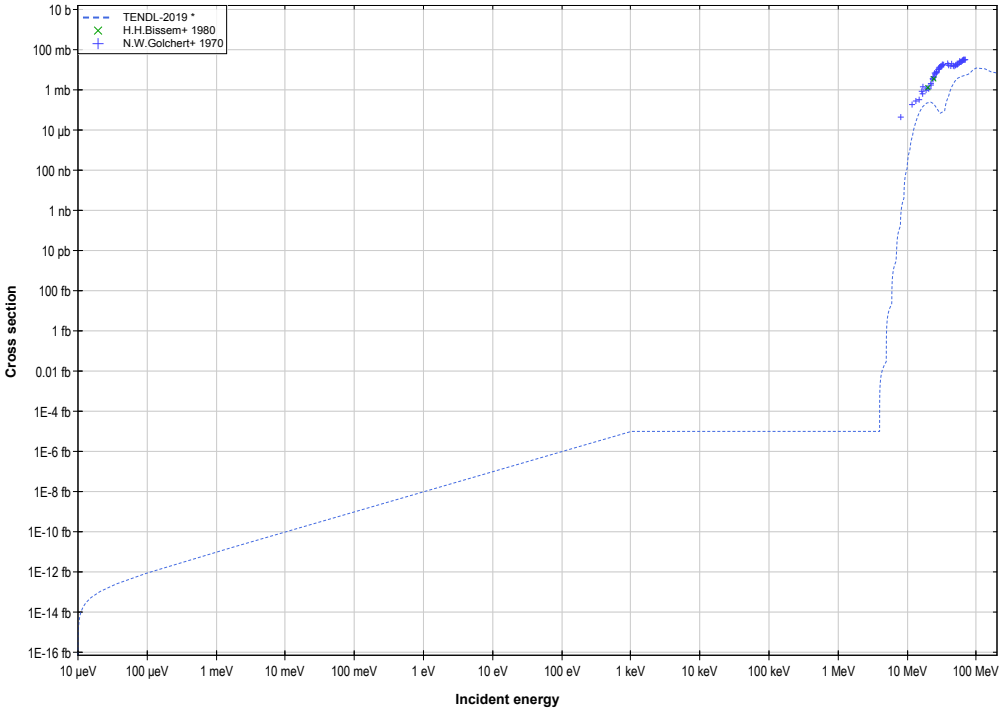
Cu65 (³He,α) or Cu64 production lin-log



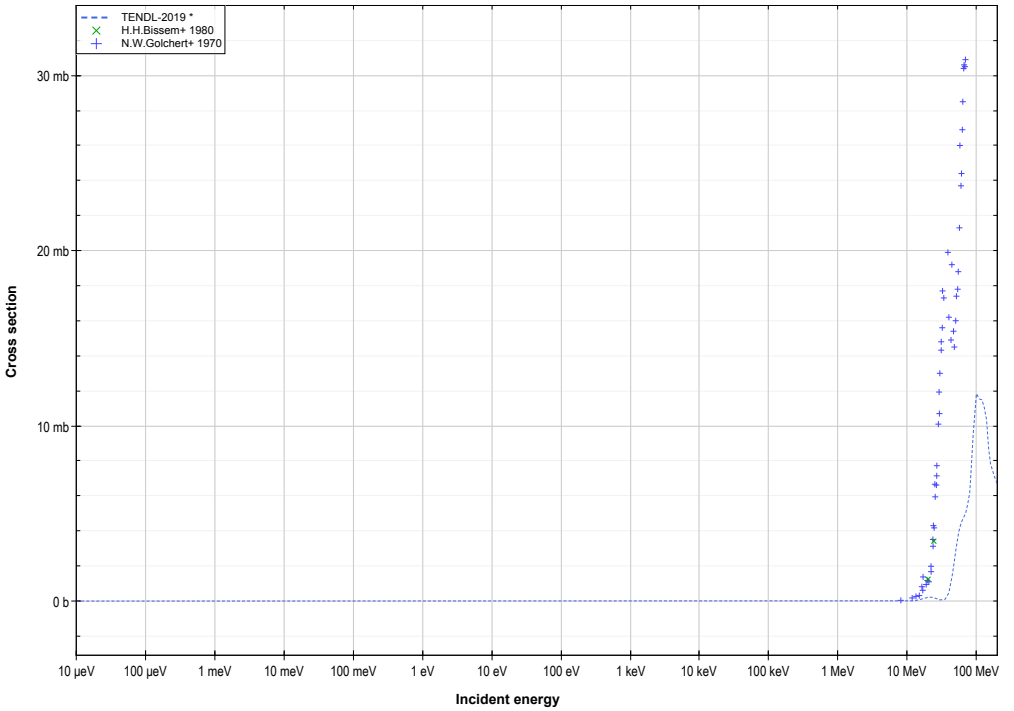
Reaction	Q-Value
Cu65(He3,α)Cu64	10667.10 keV
Cu65(He3,p+t)Cu64	-9146.76 keV
Cu65(He3,n+He3)Cu64	-9910.52 keV
Cu65(He3,2d)Cu64	-13179.43 keV
Cu65(He3,n+p+d)Cu64	-15403.99 keV
Cu65(He3,2n+2p)Cu64	-17628.56 keV

<< 29-Cu-63	**29-Cu-65**	
<< MT107 (³He,α)	**MT108 (³He,2α) or MT5 (Co60 production)**	MT116 (³He,p+t) >>

Cu65 (³He,2α) or Co60 production log-log



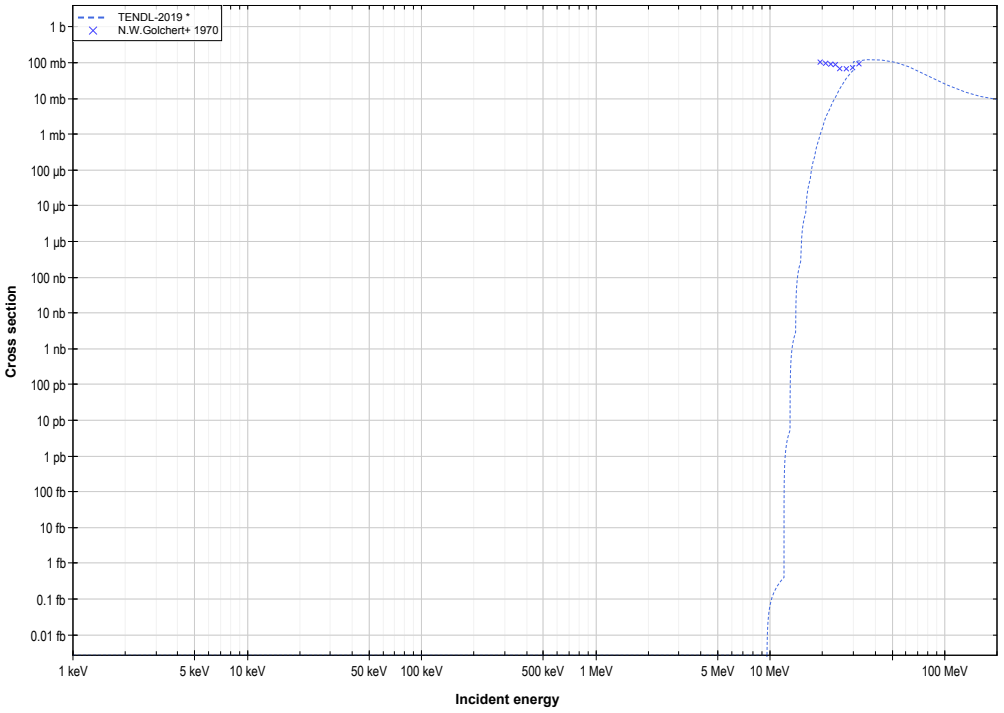
Cu65 (³He,2α) or Co60 production lin-log



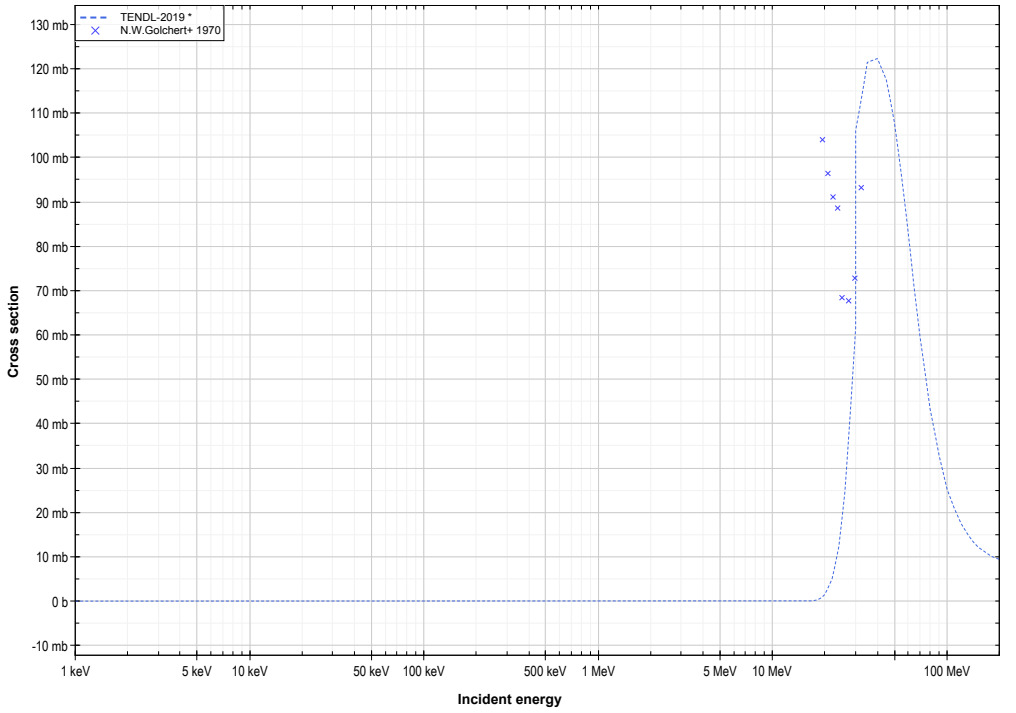
Reaction	Q-Value	Reaction	Q-Value
Cu65(He3,2α)Co60	4467.99 keV	Cu65(He3,n+p+t+He3)Co60	-35923.50 keV
Cu65(He3,p+t+α)Co60	-15345.88 keV	Cu65(He3,2n+2He3)Co60	-36687.25 keV
Cu65(He3,n+He3+α)Co60	-16109.63 keV	Cu65(He3,p+2d+t)Co60	-39192.41 keV
Cu65(He3,2d+α)Co60	-19378.54 keV	Cu65(He3,n+2d+He3)Co60	-39956.16 keV
Cu65(He3,n+p+d+α)Co60	-21603.11 keV	Cu65(He3,n+2p+d+t)Co60	-41416.97 keV
Cu65(He3,2n+2p+α)Co60	-23827.67 keV	Cu65(He3,2n+p+d+He3)Co60	-42180.73 keV
Cu65(He3,d+t+He3)Co60	-33698.93 keV	Cu65(He3,4d)Co60	-43225.07 keV
Cu65(He3,2p+2t)Co60	-35159.74 keV	Cu65(He3,2n+3p+t)Co60	-43641.54 keV

<< 27-Co-59	**29-Cu-65**	45-Rh-103 >>
<< MT108 (³He,2α)	**MT116 (³He,p+t) or MT5 (Cu64 production)**	MT180 (³He,3n+2α) >>

Cu65 (³He,p+t) or Cu64 production log-log



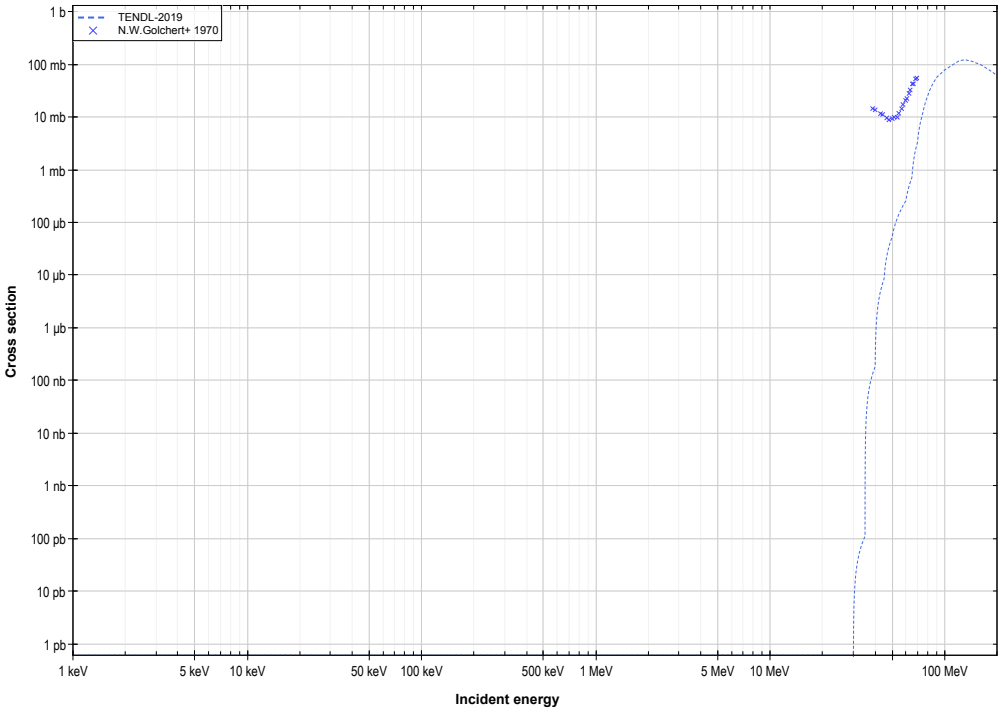
Cu65 (³He,p+t) or Cu64 production lin-log



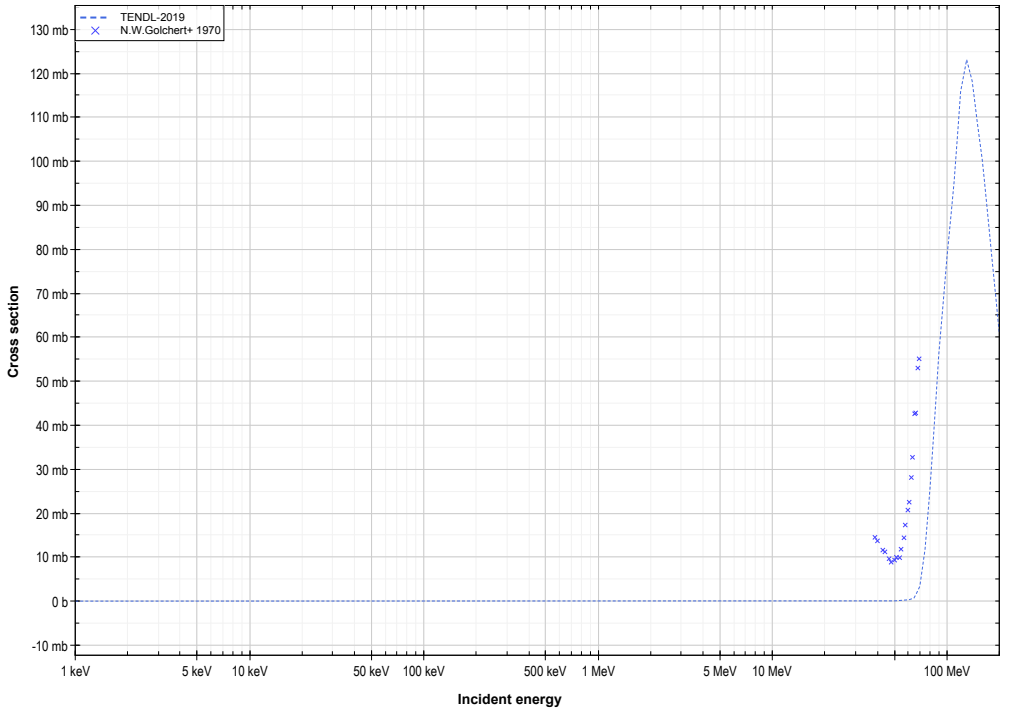
Reaction	Q-Value
Cu65(He3,α)Cu64	10667.10 keV
Cu65(He3,p+t)Cu64	-9146.76 keV
Cu65(He3,n+He3)Cu64	-9910.52 keV
Cu65(He3,2d)Cu64	-13179.43 keV
Cu65(He3,n+p+d)Cu64	-15403.99 keV
Cu65(He3,2n+2p)Cu64	-17628.56 keV

	29-Cu-65	
<< MT116 (^{3}He,p+t)	**MT180 (^{3}He,3n+2α) or MT5 (Co57 production)**	MT183 (^{3}He,n+p+d) >>

Cu65 (^{3}He,3n+2α) or Co57 production log-log



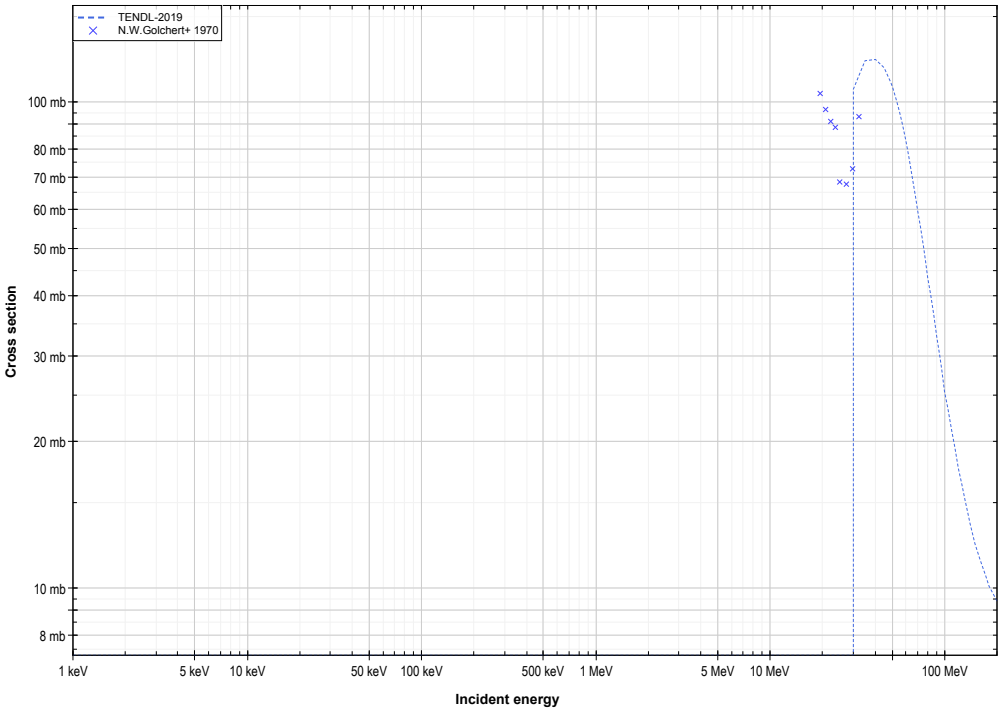
Cu65 (^{3}He,3n+2α) or Co57 production lin-log



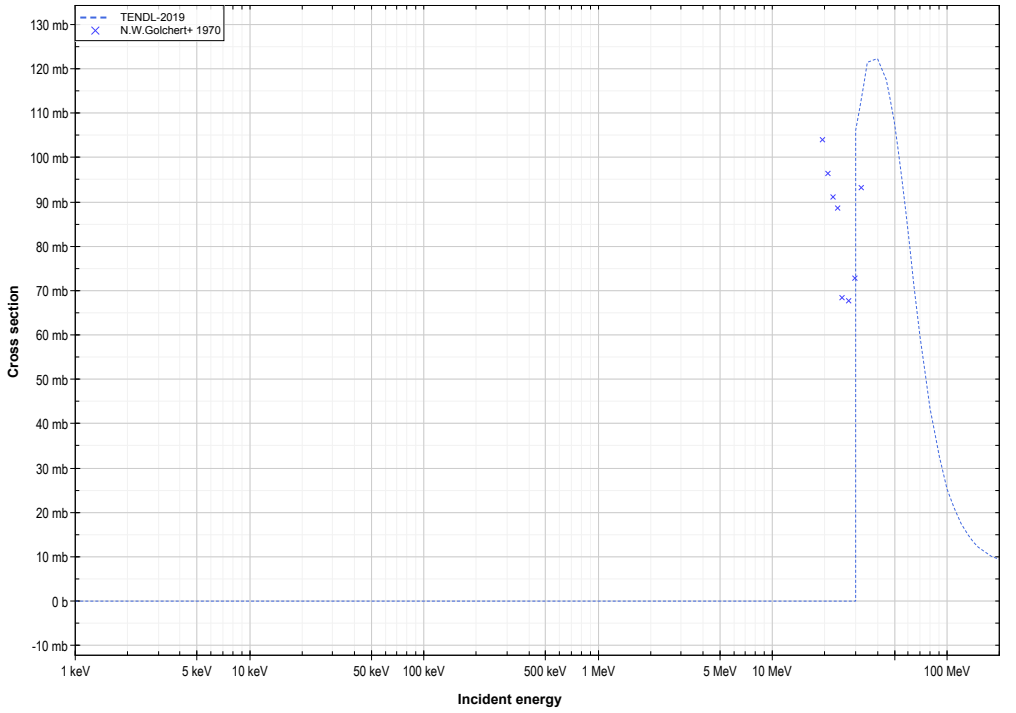
Reaction	Q-Value	Reaction	Q-Value
Cu65(He3,3n+2α)Co57	-22050.66 keV	Cu65(He3,d+3t)Co57	-50972.03 keV
Cu65(He3,n+2t+α)Co57	-33382.73 keV	Cu65(He3,n+p+3t)Co57	-53196.60 keV
Cu65(He3,2n+d+t+α)Co57	-39639.96 keV	Cu65(He3,2n+2t+He3)Co57	-53960.35 keV
Cu65(He3,3n+p+t+α)Co57	-41864.53 keV	Cu65(He3,n+2d+2t)Co57	-57229.26 keV
Cu65(He3,4n+He3+α)Co57	-42628.28 keV	Cu65(He3,2n+p+d+2t)Co57	-59453.83 keV
Cu65(He3,3n+2d+α)Co57	-45897.19 keV	Cu65(He3,3n+d+t+He3)Co57	-60217.58 keV
Cu65(He3,4n+p+d+α)Co57	-48121.76 keV	Cu65(He3,3n+2p+2t)Co57	-61678.39 keV
Cu65(He3,5n+2p+α)Co57	-50346.32 keV	Cu65(He3,4n+p+t+He3)Co57	-62442.15 keV

<< 27-Co-59	**29-Cu-65**	45-Rh-103 >>
<< MT180 (^{3}He,3n+2α)	**MT183 (^{3}He,n+p+d) or MT5 (Cu64 production)**	MT190 (^{3}He,2n+2p) >>

Cu65 (^{3}He,n+p+d) or Cu64 production log-log



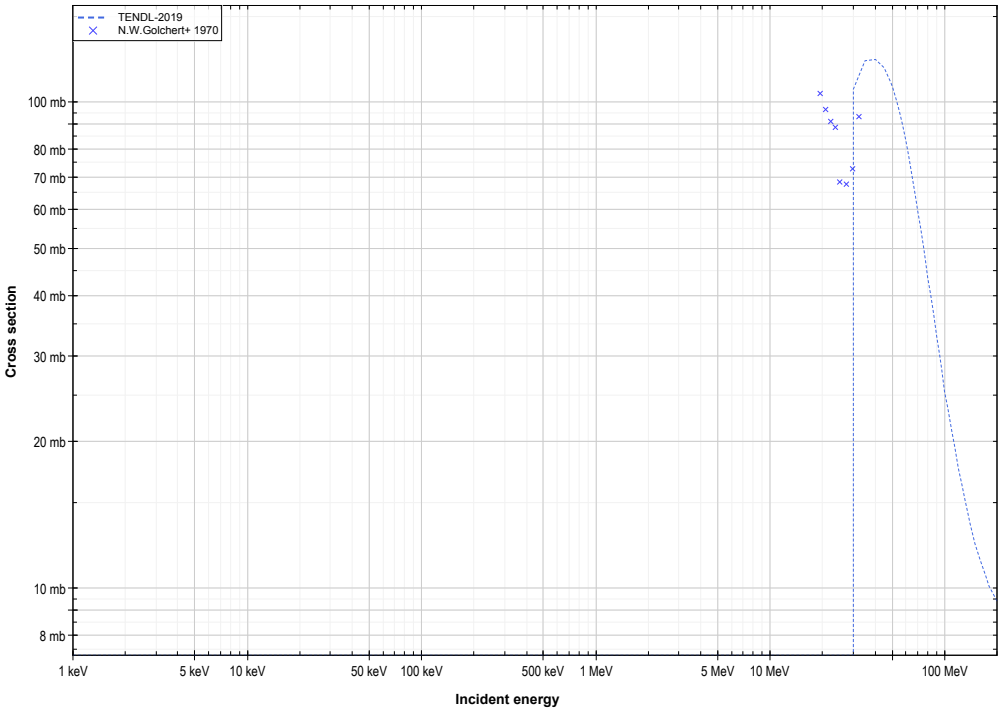
Cu65 (^{3}He,n+p+d) or Cu64 production lin-log



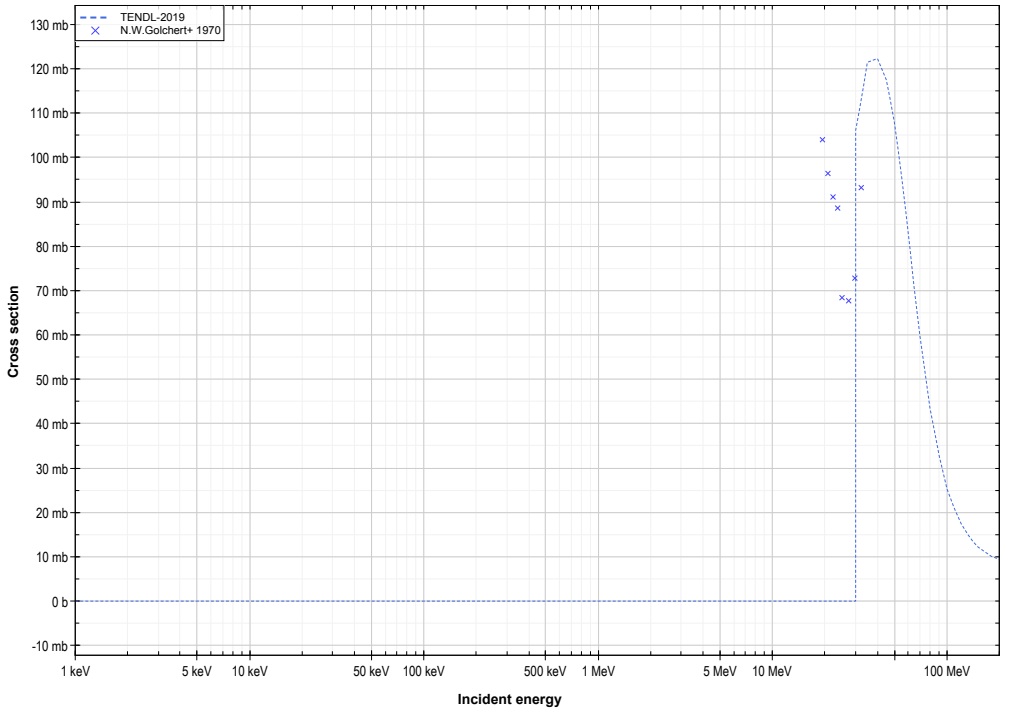
Reaction	Q-Value
Cu65(He3,α)Cu64	10667.10 keV
Cu65(He3,p+t)Cu64	-9146.76 keV
Cu65(He3,n+He3)Cu64	-9910.52 keV
Cu65(He3,2d)Cu64	-13179.43 keV
Cu65(He3,n+p+d)Cu64	-15403.99 keV
Cu65(He3,2n+2p)Cu64	-17628.56 keV

<< 27-Co-59	**29-Cu-65**	45-Rh-103 >>
<< MT183 (^{3}He,n+p+d)	**MT190 (^{3}He,2n+2p) or MT5 (Cu64 production)**	MT195 (^{3}He,4n+2α) >>

Cu65 (^{3}He,2n+2p) or Cu64 production log-log



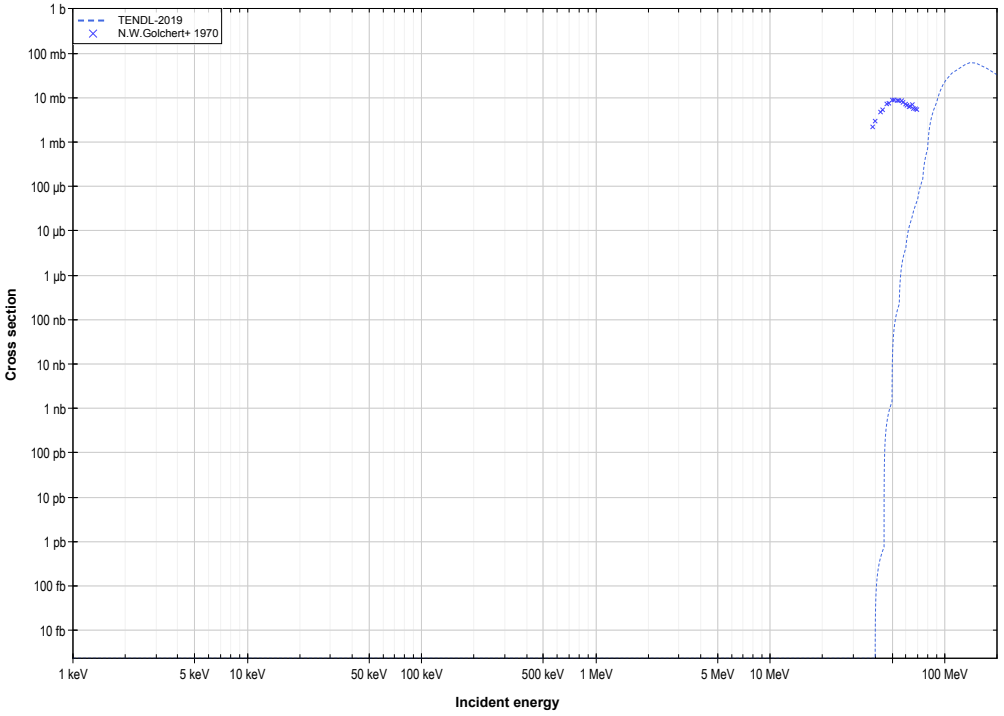
Cu65 (^{3}He,2n+2p) or Cu64 production lin-log



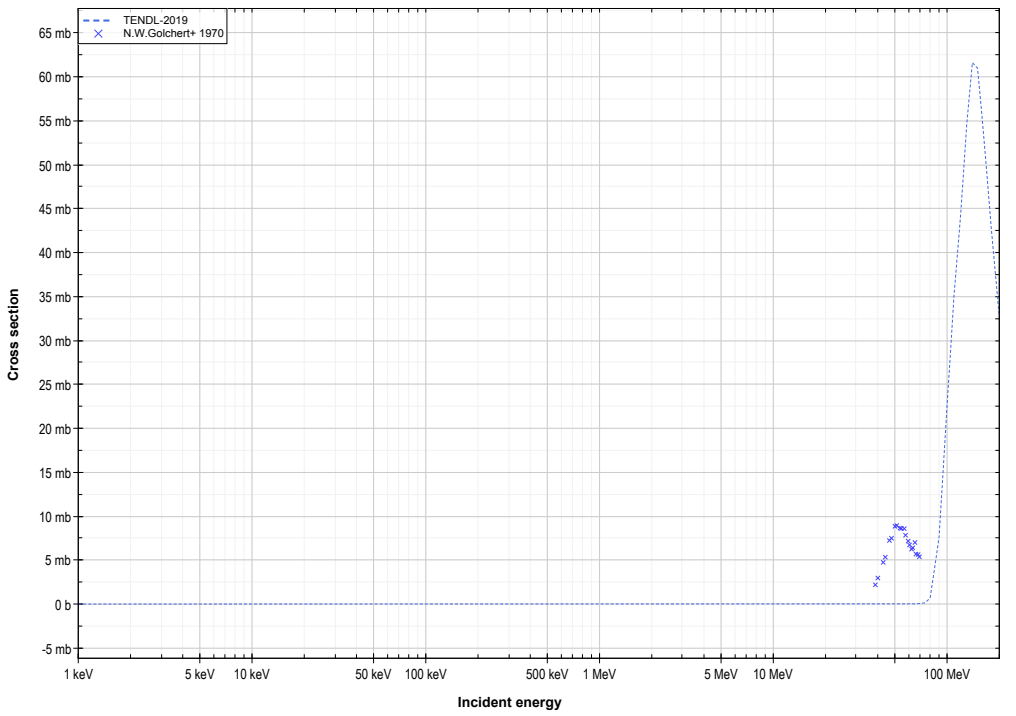
Reaction	Q-Value
Cu65(He3,α)Cu64	10667.10 keV
Cu65(He3,p+t)Cu64	-9146.76 keV
Cu65(He3,n+He3)Cu64	-9910.52 keV
Cu65(He3,2d)Cu64	-13179.43 keV
Cu65(He3,n+p+d)Cu64	-15403.99 keV
Cu65(He3,2n+2p)Cu64	-17628.56 keV

	29-Cu-65	
<< MT190 (^{3}He,2n+2p)	**MT195 (^{3}He,4n+2α) or MT5 (Co56 production)**	MT197 (^{3}He,3p) >>

Cu65 (^{3}He,4n+2α) or Co56 production log-log



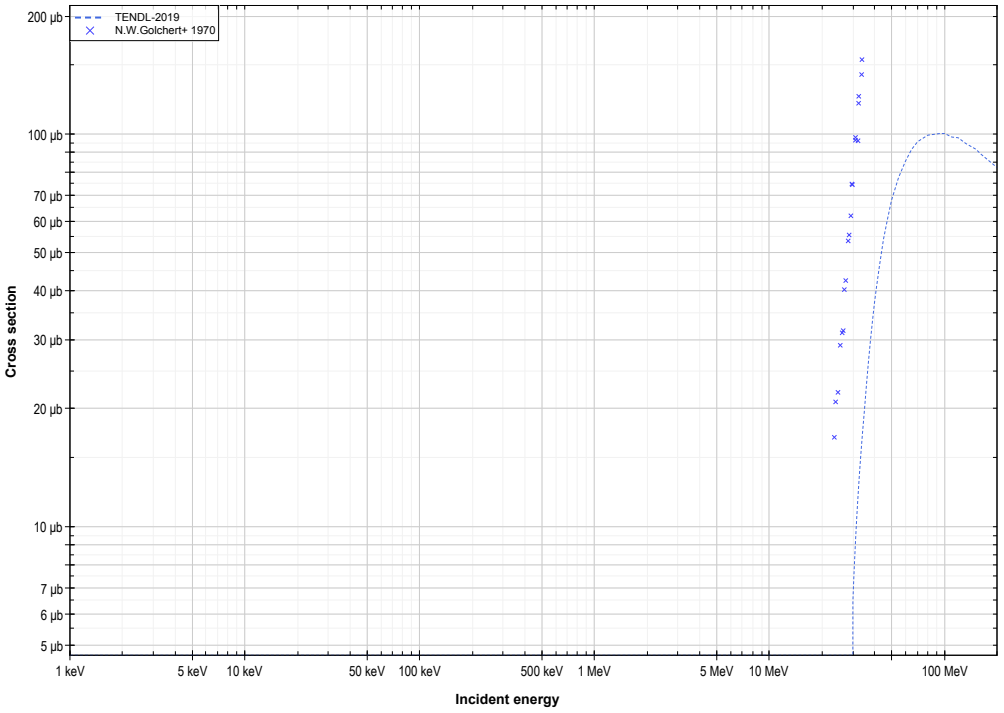
Cu65 (^{3}He,4n+2α) or Co56 production lin-log



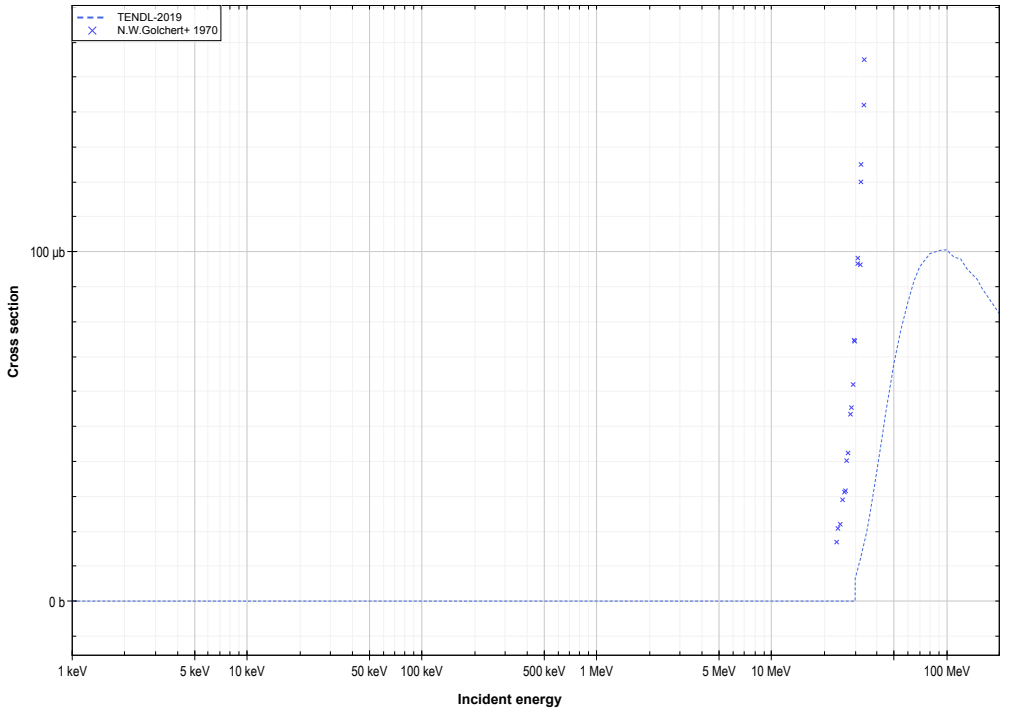
Reaction	Q-Value	Reaction	Q-Value
Cu65(He3,4n+2α)Co56	-33427.18 keV	Cu65(He3,6n+2p+α)Co56	-61722.84 keV
Cu65(He3,2n+2t+α)Co56	-44759.25 keV	Cu65(He3,n+d+3t)Co56	-62348.55 keV
Cu65(He3,3n+d+t+α)Co56	-51016.48 keV	Cu65(He3,2n+p+3t)Co56	-64573.12 keV
Cu65(He3,4n+p+t+α)Co56	-53241.05 keV	Cu65(He3,3n+2t+He3)Co56	-65336.87 keV
Cu65(He3,5n+He3+α)Co56	-54004.80 keV	Cu65(He3,2n+2d+2t)Co56	-68605.78 keV
Cu65(He3,4t)Co56	-56091.32 keV	Cu65(He3,3n+p+d+2t)Co56	-70830.35 keV
Cu65(He3,4n+2d+α)Co56	-57273.71 keV	Cu65(He3,4n+d+t+He3)Co56	-71594.10 keV
Cu65(He3,5n+p+d+α)Co56	-59498.28 keV	Cu65(He3,4n+2p+2t)Co56	-73054.91 keV

<< 27-Co-59	**29-Cu-65**	30-Zn-64 >>
<< MT195 (^{3}He,4n+2α)	**MT197 (^{3}He,3p) or MT5 (Ni65 production)**	30-Zn-64 MT4 (^{3}He,n) >>

Cu65 (^{3}He,3p) or Ni65 production log-log



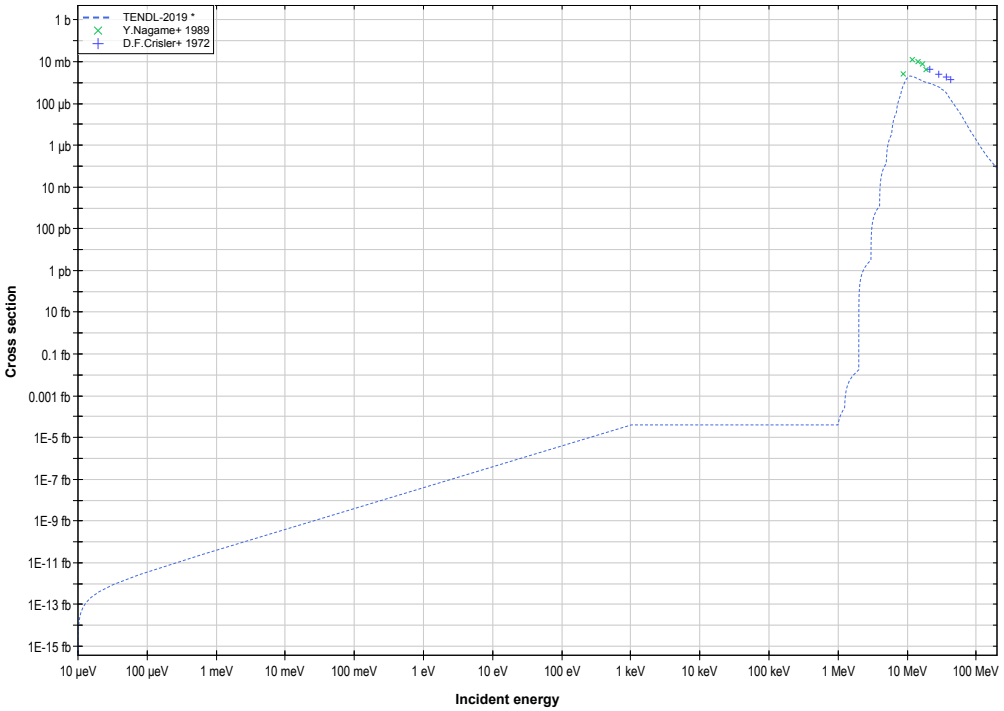
Cu65 (^{3}He,3p) or Ni65 production lin-log



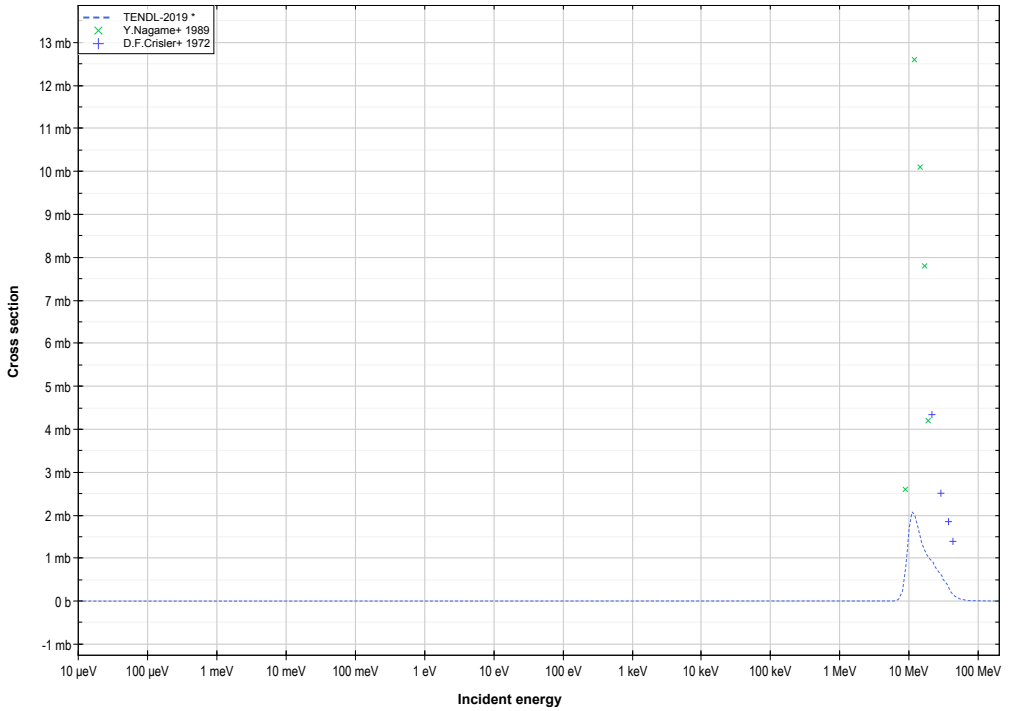
Reaction	Q-Value
Cu65(He3,3p)Ni65	-9073.69 keV

<< 29-Cu-65	**30-Zn-64**	31-Ga-69 >>
<< 29-Cu-65 MT197 (^{3}He,3p)	**MT4 (^{3}He,n) or MT5 (Ge66 production)**	MT22 (^{3}He,n+α) >>

Zn64 (^{3}He,n) or Ge66 production log-log



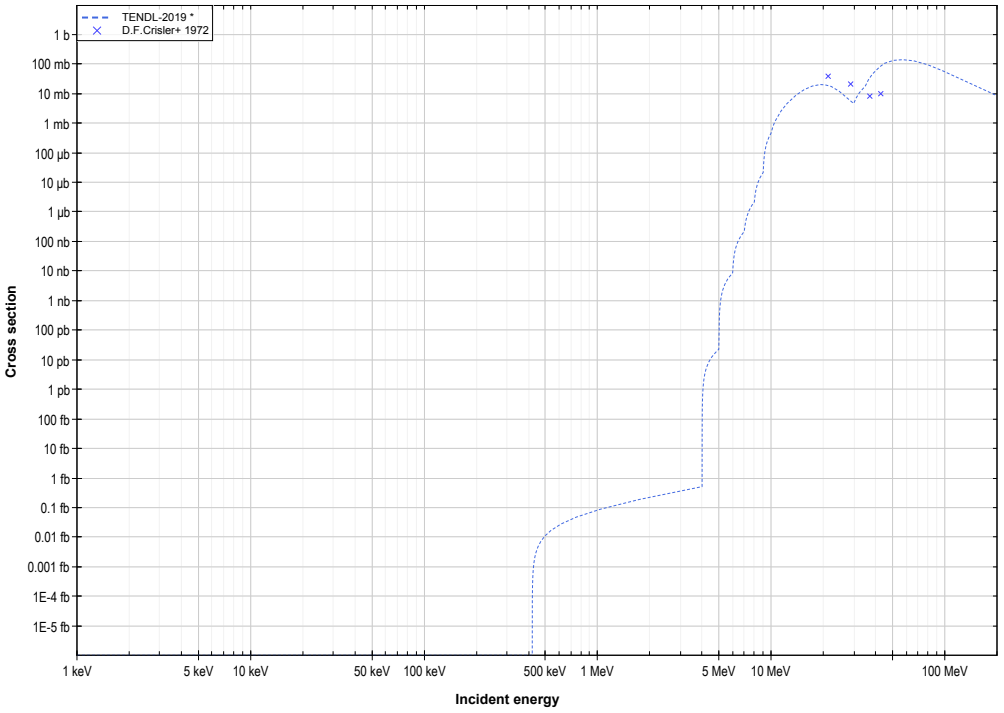
Zn64 (^{3}He,n) or Ge66 production lin-log



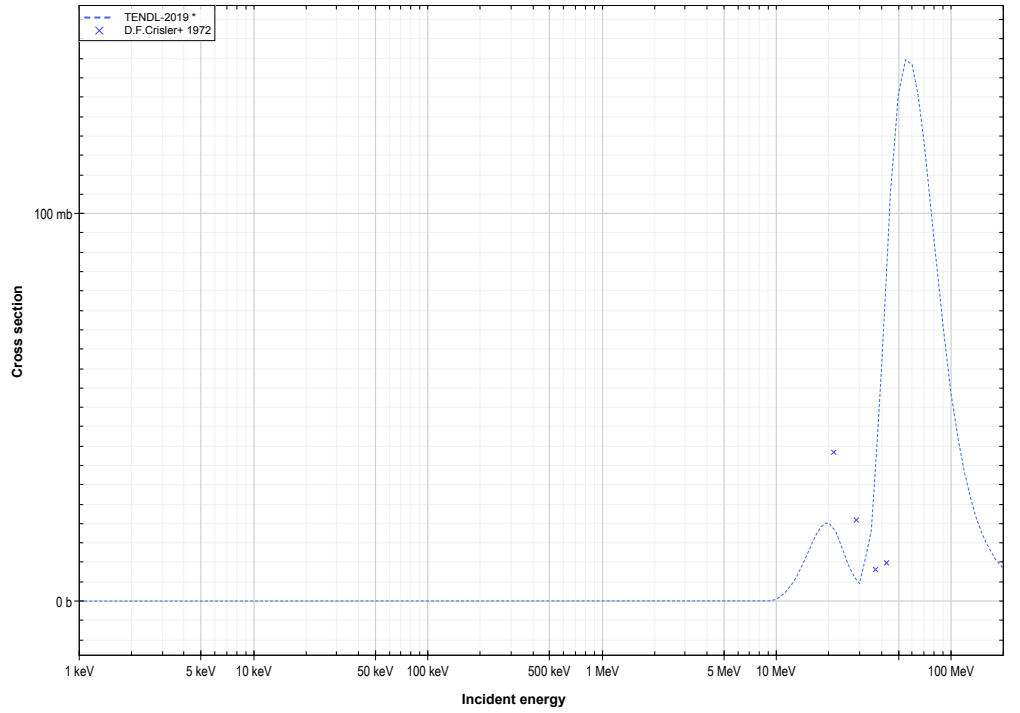
Reaction	Q-Value
Zn64(He3,n)Ge66	2462.90 keV

<< 29-Cu-63	**30-Zn-64**	31-Ga-69 >>
<< MT4 (^{3}He,n)	**MT22 (^{3}He,n+α) or MT5 (Zn62 production)**	MT103 (^{3}He,p) >>

Zn64 (^{3}He,n+α) or Zn62 production log-log



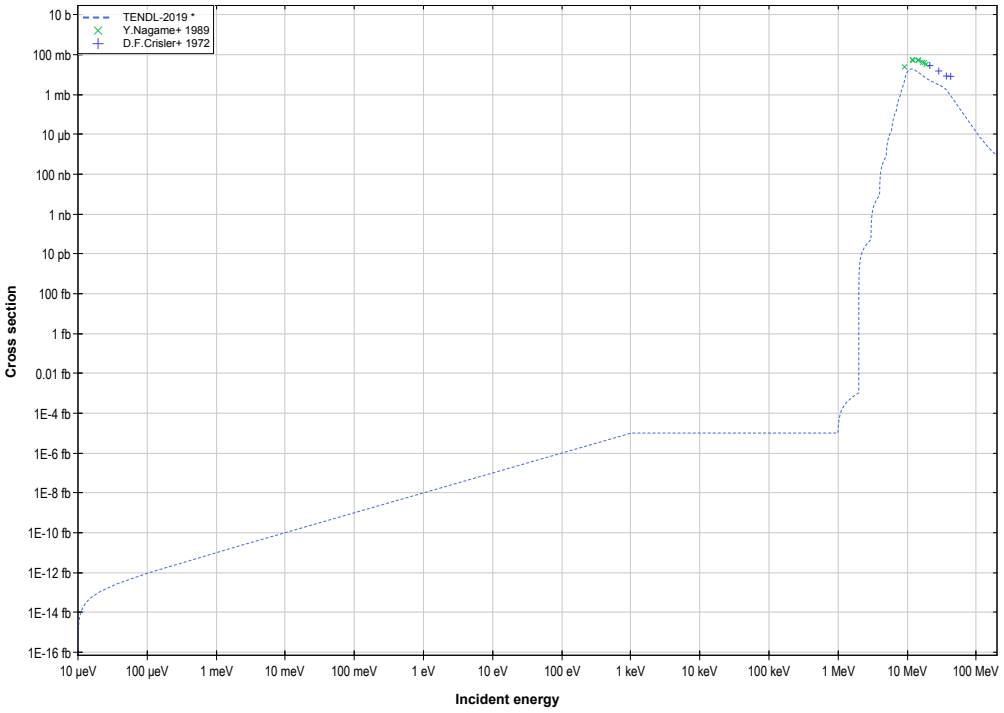
Zn64 (^{3}He,n+α) or Zn62 production lin-log



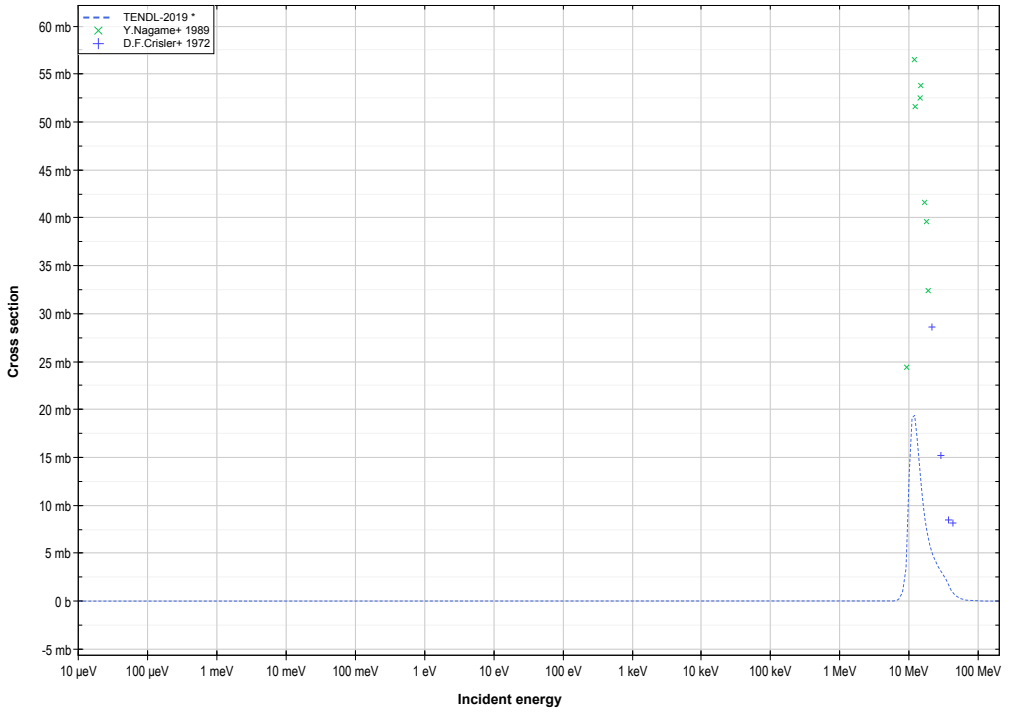
Reaction	Q-Value
Zn64(He3,n+α)Zn62	-401.01 keV
Zn64(He3,d+t)Zn62	-17990.31 keV
Zn64(He3,n+p+t)Zn62	-20214.88 keV
Zn64(He3,2n+He3)Zn62	-20978.63 keV
Zn64(He3,n+2d)Zn62	-24247.54 keV
Zn64(He3,2n+p+d)Zn62	-26472.11 keV
Zn64(He3,3n+2p)Zn62	-28696.67 keV

<< 29-Cu-63	**30-Zn-64**	38-Sr-88 >>
<< MT22 (³He,n+α)	**MT103 (³He,p) or MT5 (Ga66 production)**	MT107 (³He,α) >>

Zn64 (³He,p) or Ga66 production log-log



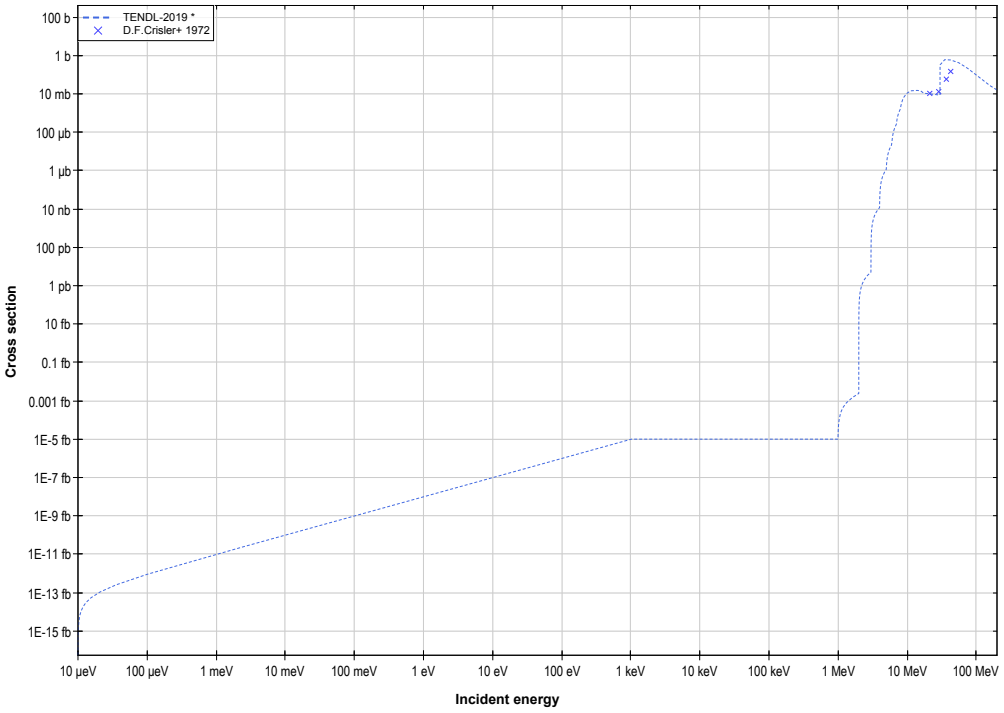
Zn64 (³He,p) or Ga66 production lin-log



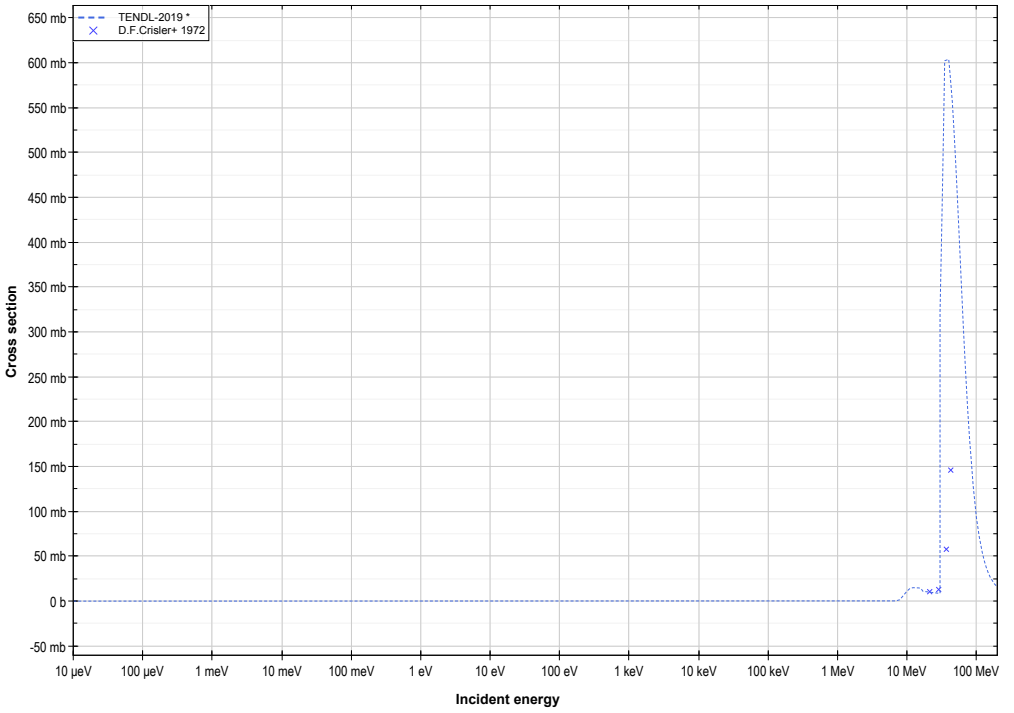
Reaction	Q-Value
Zn64(He3,p)Ga66	5361.95 keV

<< 29-Cu-65	**30-Zn-64**	31-Ga-69 >>
<< MT103 (^{3}He,p)	**MT107 (^{3}He,α) or MT5 (Zn63 production)**	MT111 (^{3}He,2p) >>

Zn64 (^{3}He,α) or Zn63 production log-log



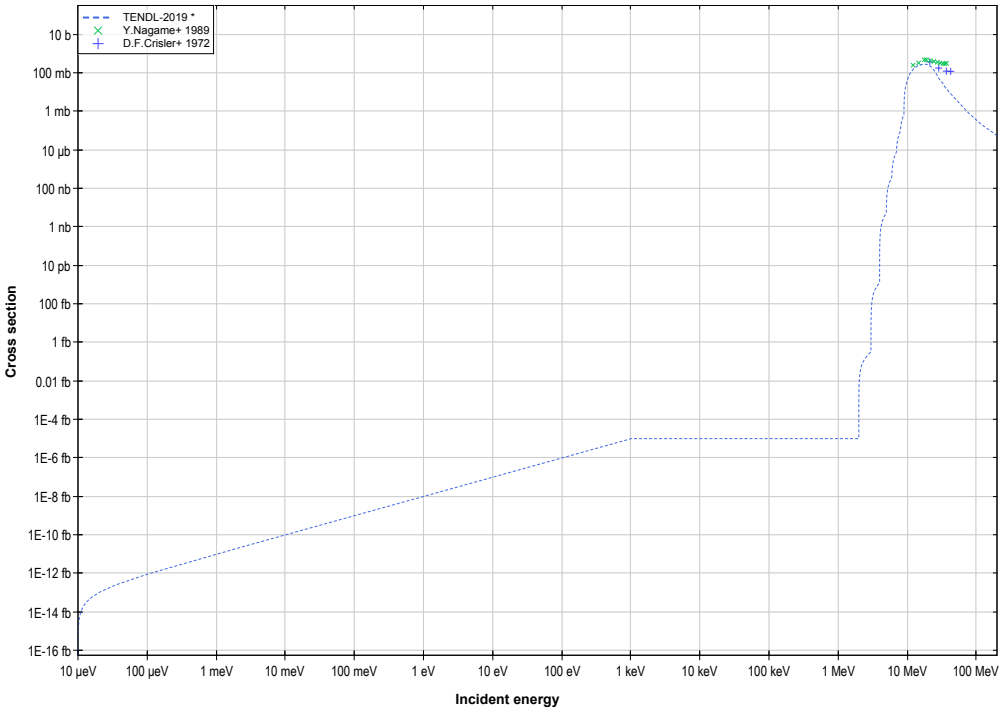
Zn64 (^{3}He,α) or Zn63 production lin-log



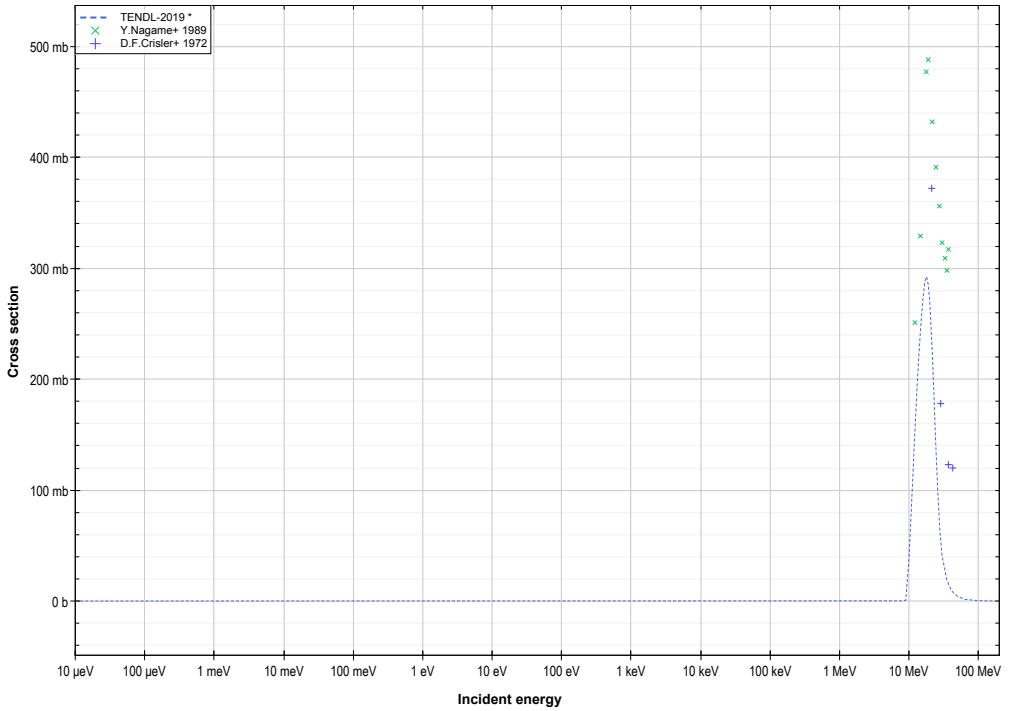
Reaction	Q-Value
Zn64(He3,α)Zn63	8715.70 keV
Zn64(He3,p+t)Zn63	-11098.16 keV
Zn64(He3,n+He3)Zn63	-11861.92 keV
Zn64(He3,2d)Zn63	-15130.83 keV
Zn64(He3,n+p+d)Zn63	-17355.39 keV
Zn64(He3,2n+2p)Zn63	-19579.96 keV

<< 29-Cu-63	**30-Zn-64**	30-Zn-68 >>
<< MT107 (³He,α)	**MT111 (³He,2p) or MT5 (Zn65 production)**	MT197 (³He,3p) >>

Zn64 (³He,2p) or Zn65 production log-log



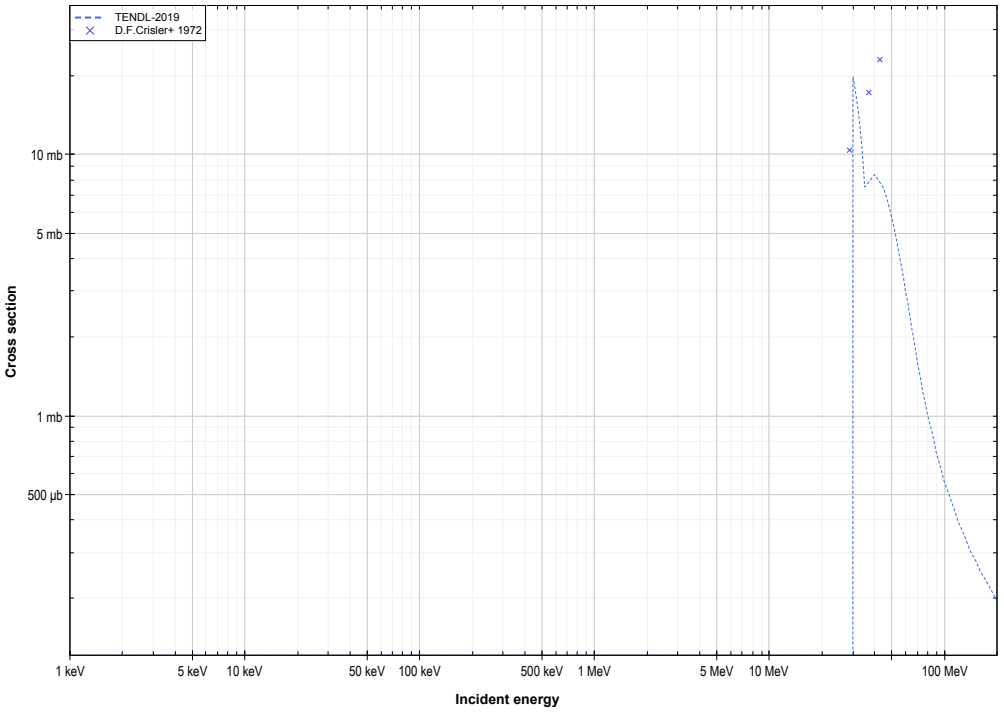
Zn64 (³He,2p) or Zn65 production lin-log



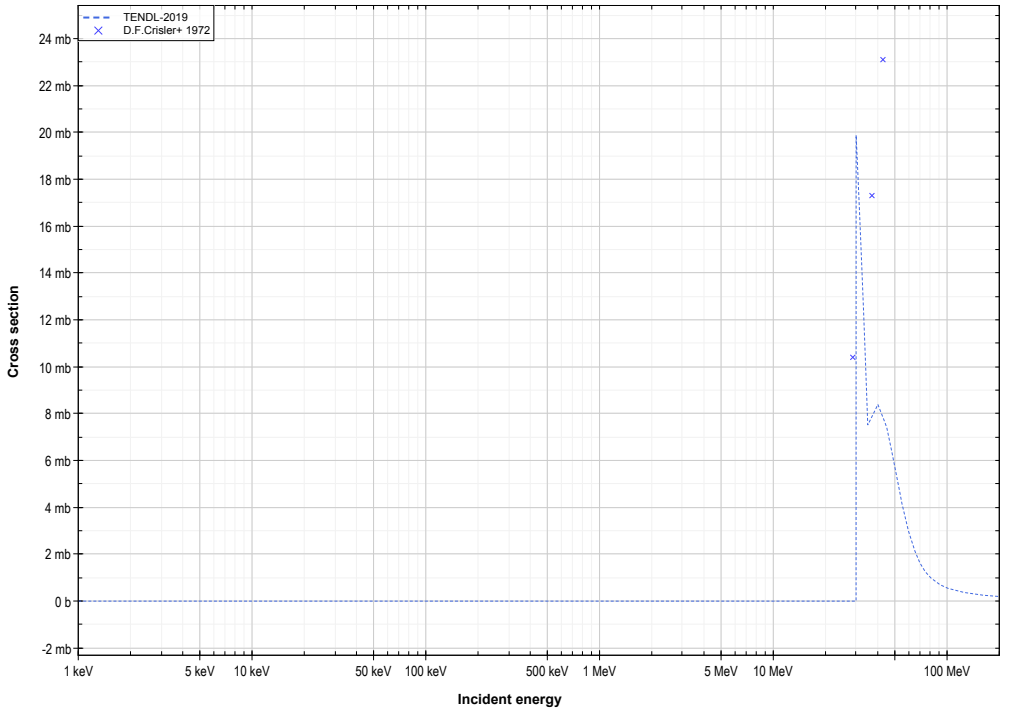
Reaction	Q-Value
Zn64(He3,2p)Zn65	261.28 keV

<< 29-Cu-65	**30-Zn-64**	
<< MT111 (^{3}He,2p)	**MT197 (^{3}He,3p) or MT5 (Cu64 production)**	30-Zn-66 MT16 (^{3}He,2n) >>

Zn64 (^{3}He,3p) or Cu64 production log-log



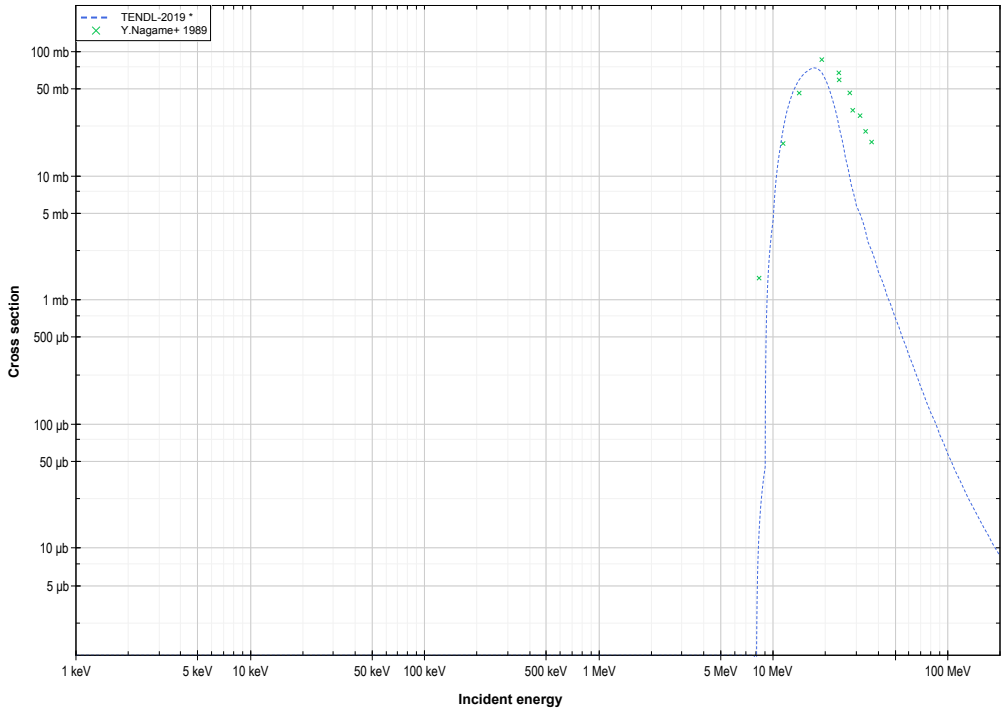
Zn64 (^{3}He,3p) or Cu64 production lin-log



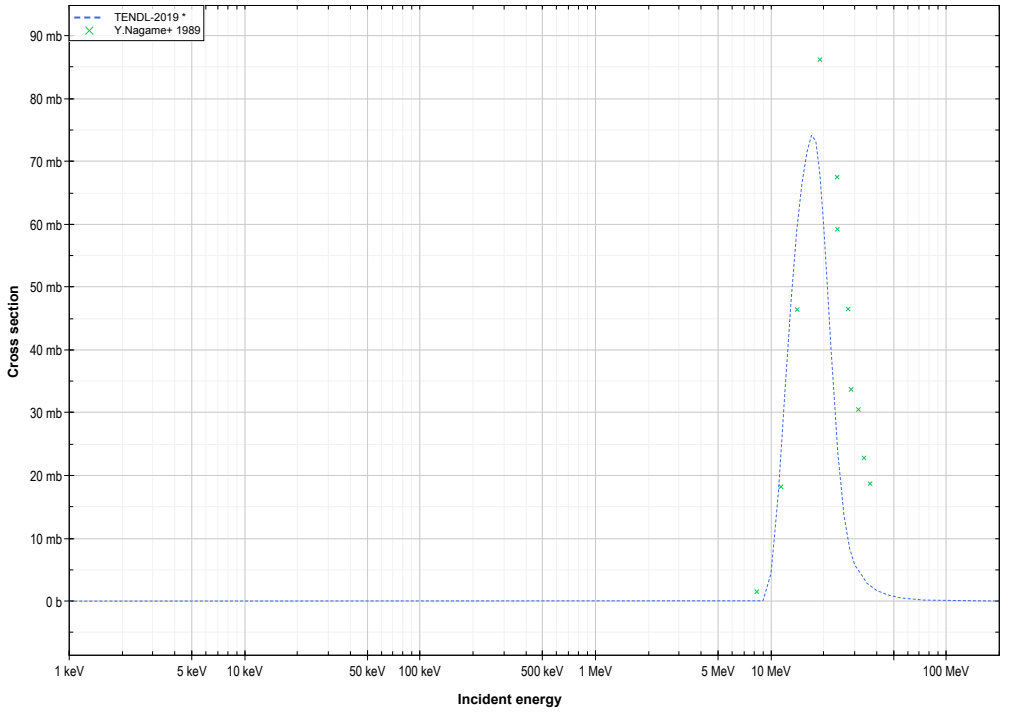
Reaction	Q-Value
Zn64(He3,3p)Cu64	-7515.19 keV

<< 29-Cu-65	**30-Zn-66**	30-Zn-68 >>
<< 30-Zn-64 MT197 (^{3}He,3p)	**MT16 (^{3}He,2n) or MT5 (Ge67 production)**	MT28 (^{3}He,n+p) >>

Zn66 (^{3}He,2n) or Ge67 production log-log



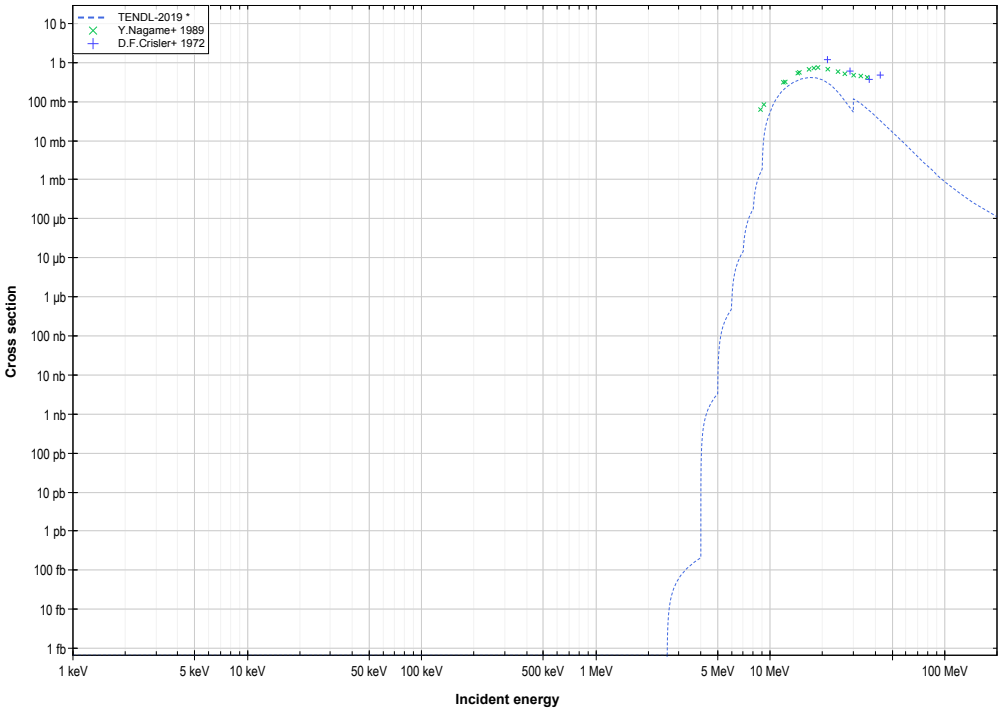
Zn66 (^{3}He,2n) or Ge67 production lin-log



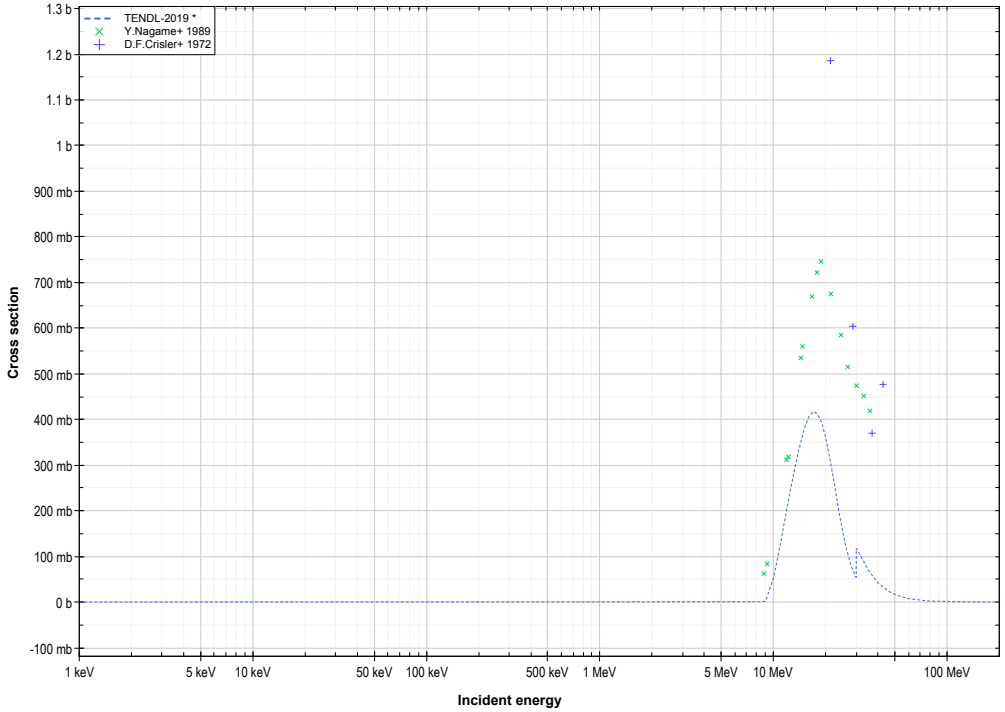
Reaction	Q-Value
Zn66(He3,2n)Ge67	-7452.62 keV

<< 26-Fe-56	**30-Zn-66**	34-Se-76 >>
<< MT16 (³He,2n)	**MT28 (³He,n+p) or MT5 (Ga67 production)**	MT32 (³He,n+d) >>

Zn66 (³He,n+p) or Ga67 production log-log



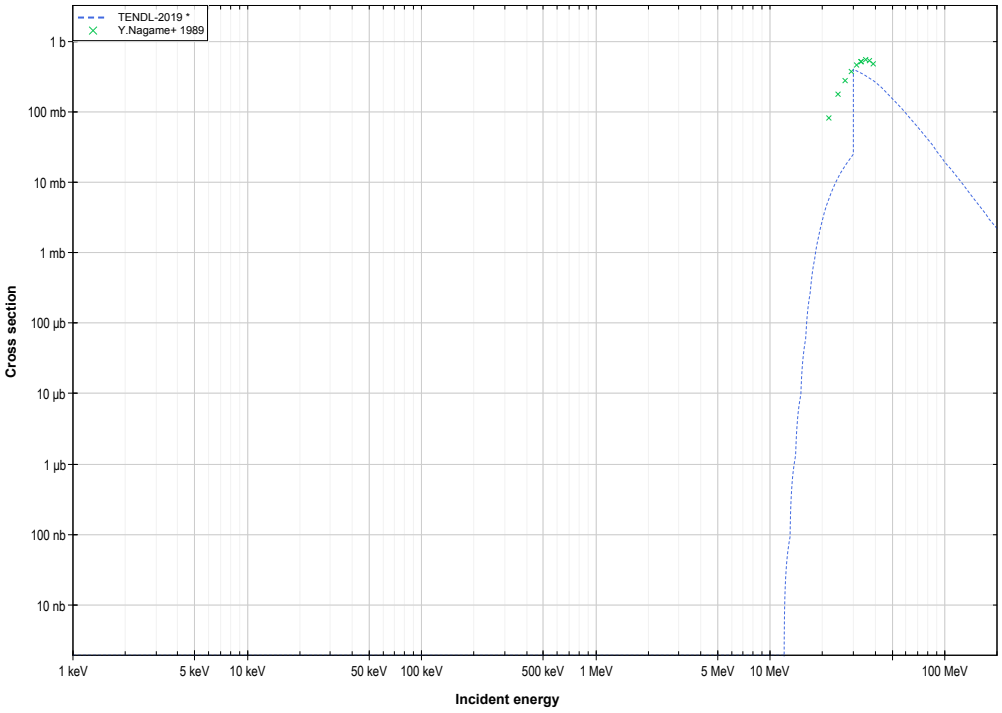
Zn66 (³He,n+p) or Ga67 production lin-log



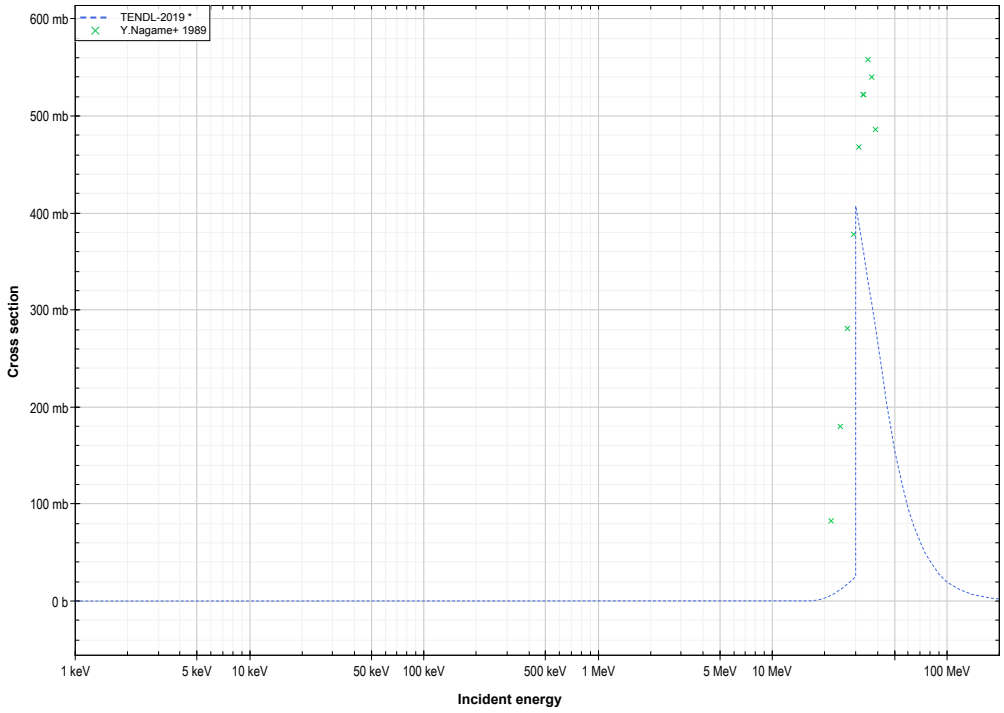
Reaction	Q-Value
Zn66(He3,d)Ga67	-224.70 keV
Zn66(He3,n+p)Ga67	-2449.27 keV

<< 26-Fe-56	**30-Zn-66**	30-Zn-68 >>
<< MT28 (^{3}He,n+p)	**MT32 (^{3}He,n+d) or MT5 (Ga66 production)**	MT41 (^{3}He,2n+p) >>

Zn66 (^{3}He,n+d) or Ga66 production log-log



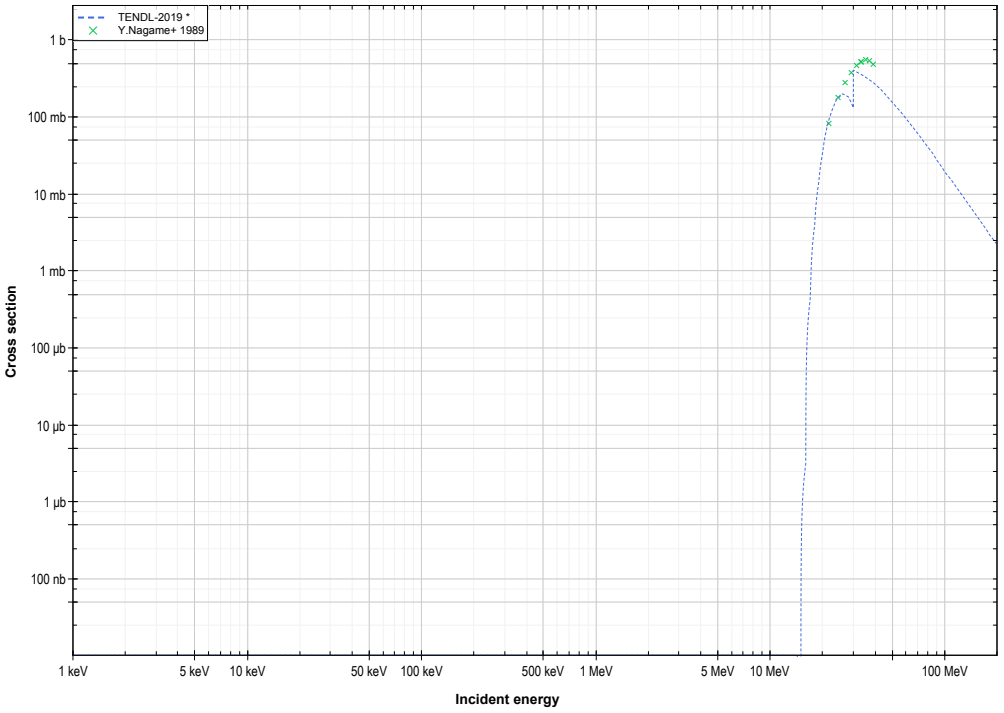
Zn66 (^{3}He,n+d) or Ga66 production lin-log



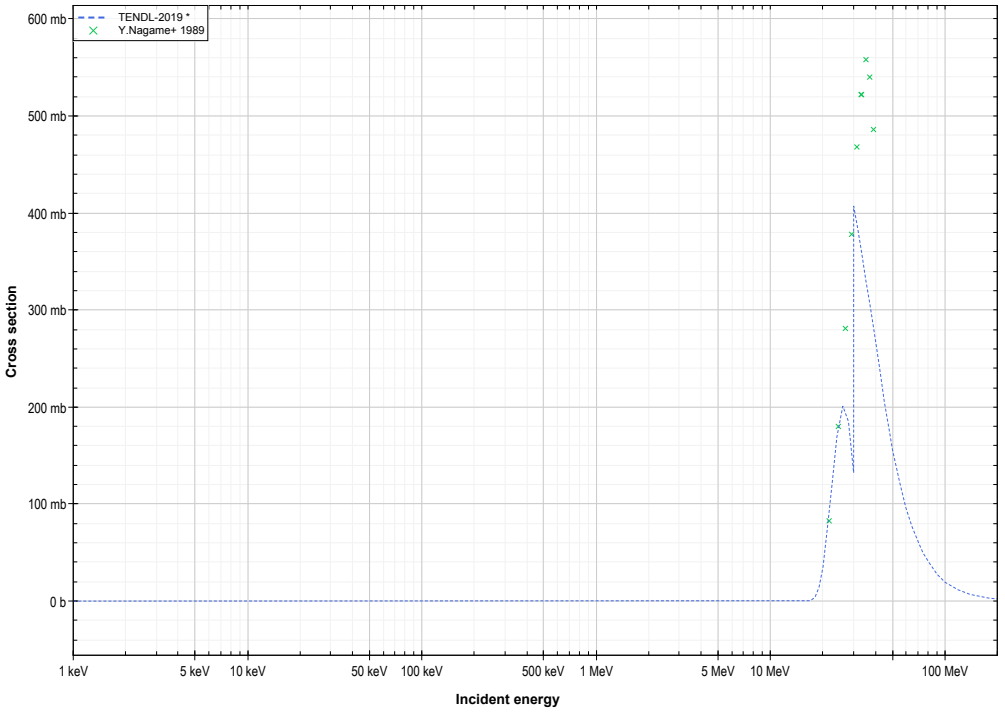
Reaction	Q-Value
Zn66(He3,t)Ga66	-5194.09 keV
Zn66(He3,n+d)Ga66	-11451.32 keV
Zn66(He3,2n+p)Ga66	-13675.89 keV

<< 26-Fe-56	**30-Zn-66**	30-Zn-68 >>
<< MT32 (³He,n+d)	**MT41 (³He,2n+p) or MT5 (Ga66 production)**	MT104 (³He,d) >>

Zn66 (³He,2n+p) or Ga66 production log-log



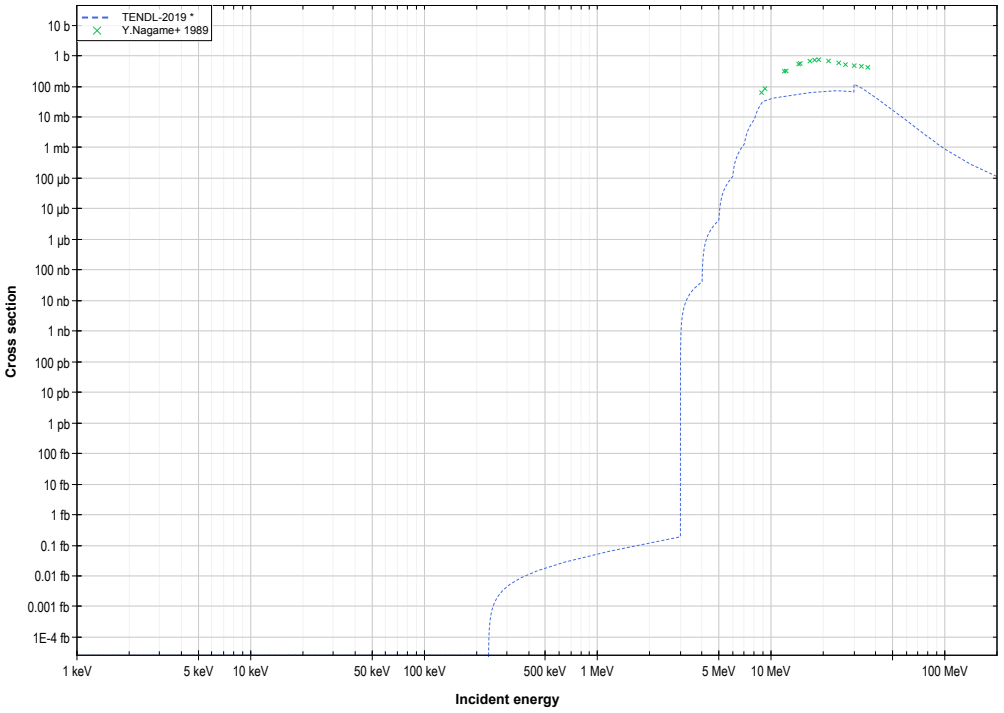
Zn66 (³He,2n+p) or Ga66 production lin-log



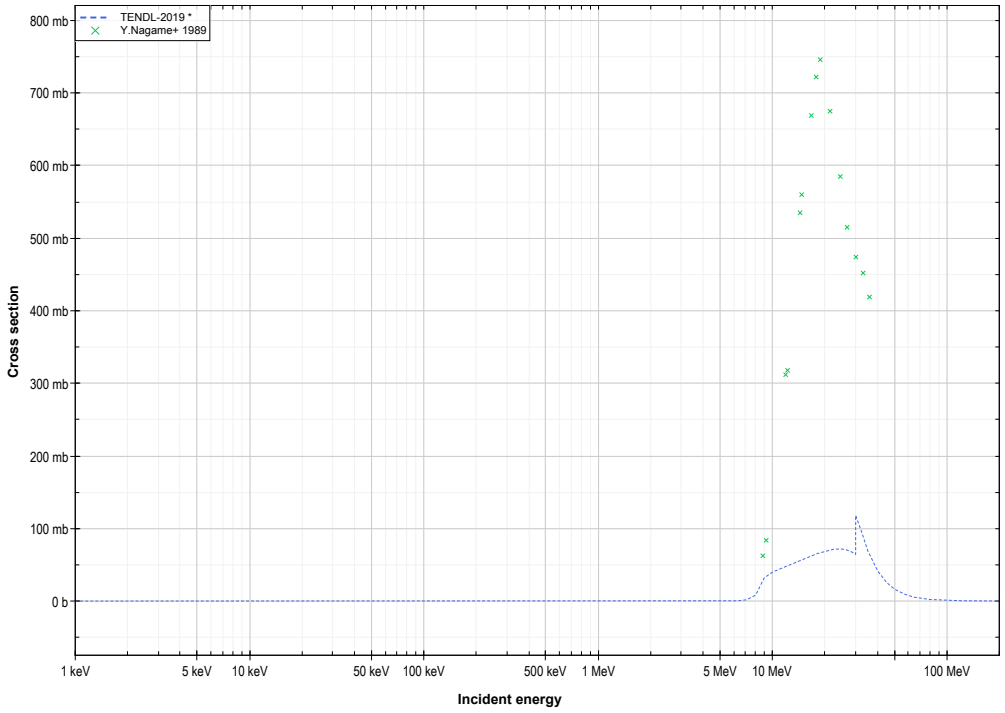
Reaction	Q-Value
Zn66(He3,t)Ga66	-5194.09 keV
Zn66(He3,n+d)Ga66	-11451.32 keV
Zn66(He3,2n+p)Ga66	-13675.89 keV

<< 26-Fe-56	**30-Zn-66**	44-Ru-101 >>
<< MT41 (³He,2n+p)	**MT104 (³He,d) or MT5 (Ga67 production)**	MT105 (³He,t) >>

Zn66 (³He,d) or Ga67 production log-log



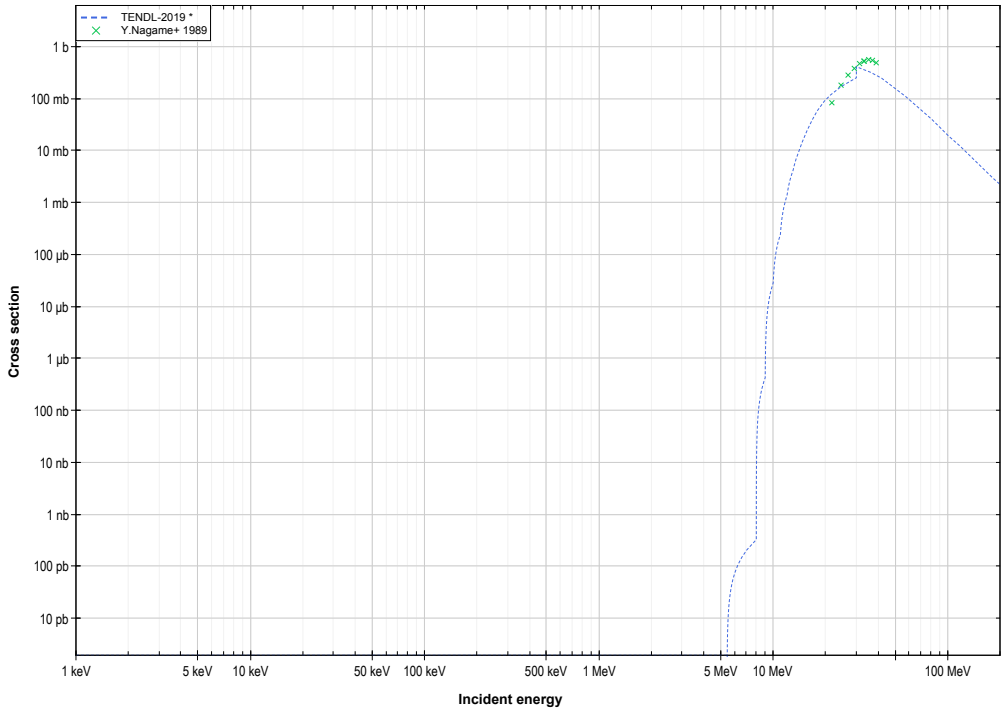
Zn66 (³He,d) or Ga67 production lin-log



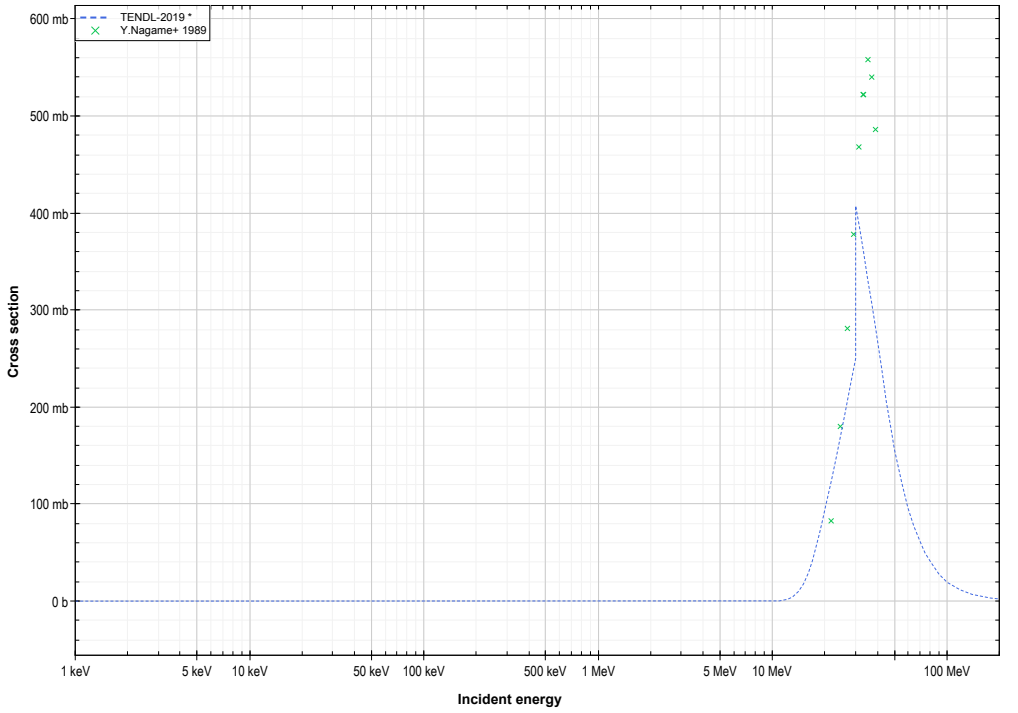
Reaction	Q-Value
Zn66(He3,d)Ga67	-224.70 keV
Zn66(He3,n+p)Ga67	-2449.27 keV

<< 26-Fe-56	**30-Zn-66**	30-Zn-68 >>
<< MT104 (^{3}He,d)	**MT105 (^{3}He,t) or MT5 (Ga66 production)**	30-Zn-68 MT16 (^{3}He,2n) >>

Zn66 (^{3}He,t) or Ga66 production log-log



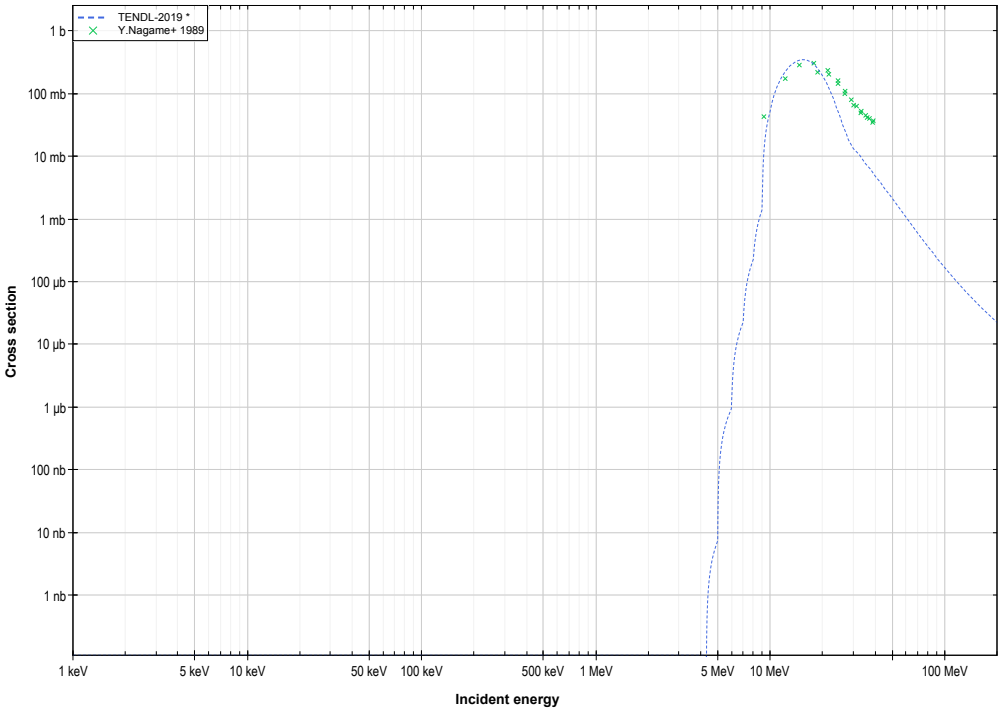
Zn66 (^{3}He,t) or Ga66 production lin-log



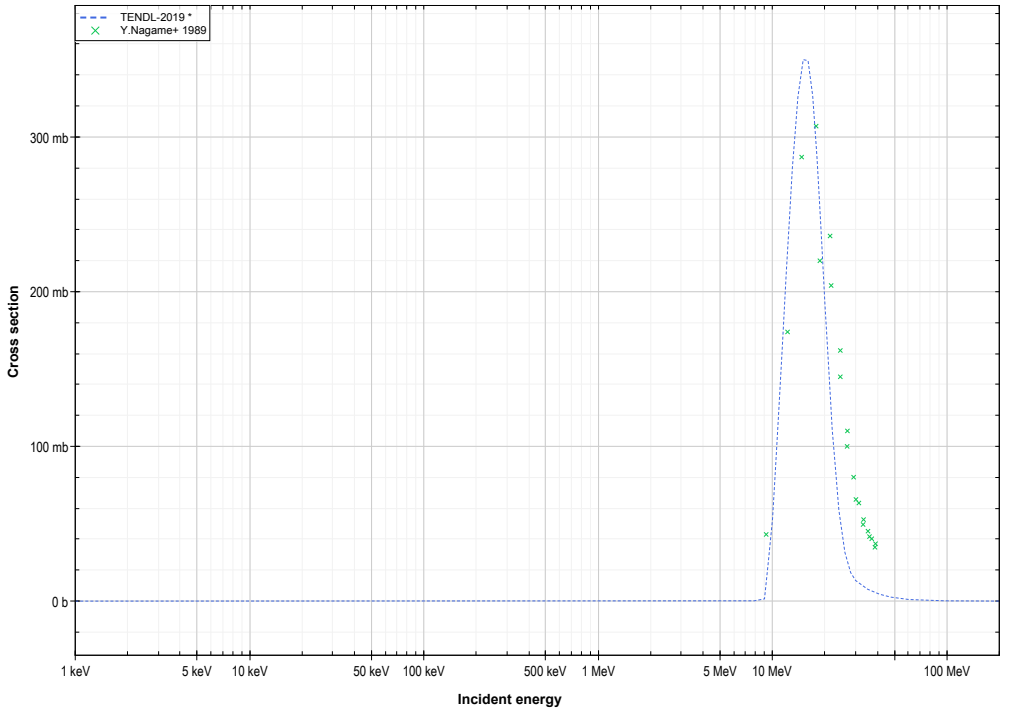
Reaction	Q-Value
Zn66(He3,t)Ga66	-5194.09 keV
Zn66(He3,n+d)Ga66	-11451.32 keV
Zn66(He3,2n+p)Ga66	-13675.89 keV

<< 30-Zn-66	**30-Zn-68**	31-Ga-69 >>
<< 30-Zn-66 MT105 (³He,t)	**MT16 (³He,2n) or MT5 (Ge69 production)**	MT17 (³He,3n) >>

Zn68 (³He,2n) or Ge69 production log-log



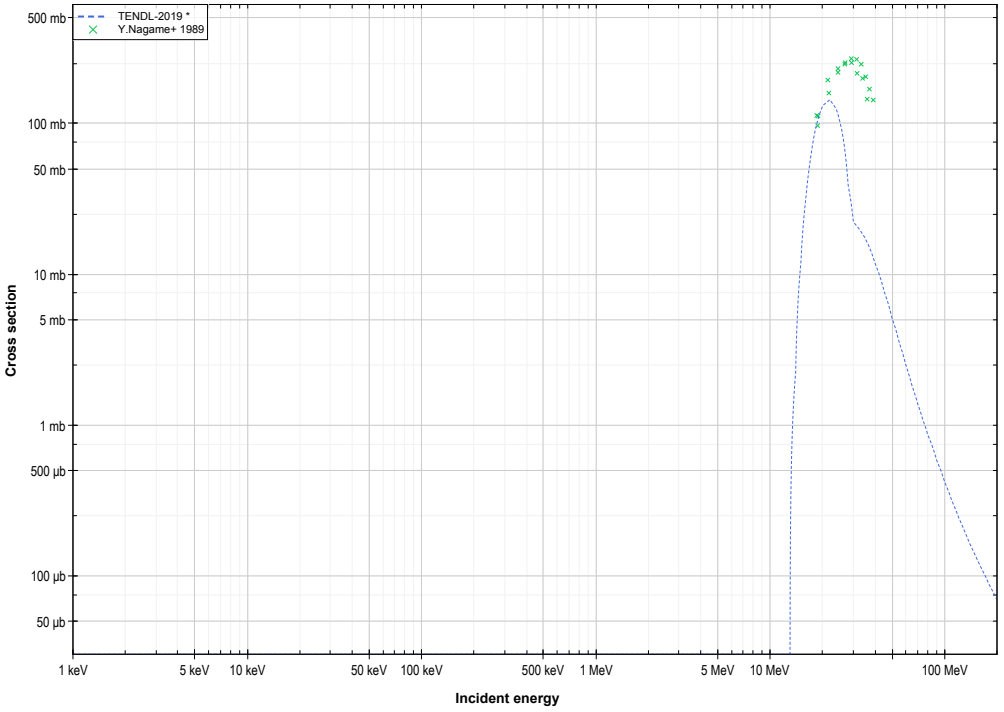
Zn68 (³He,2n) or Ge69 production lin-log



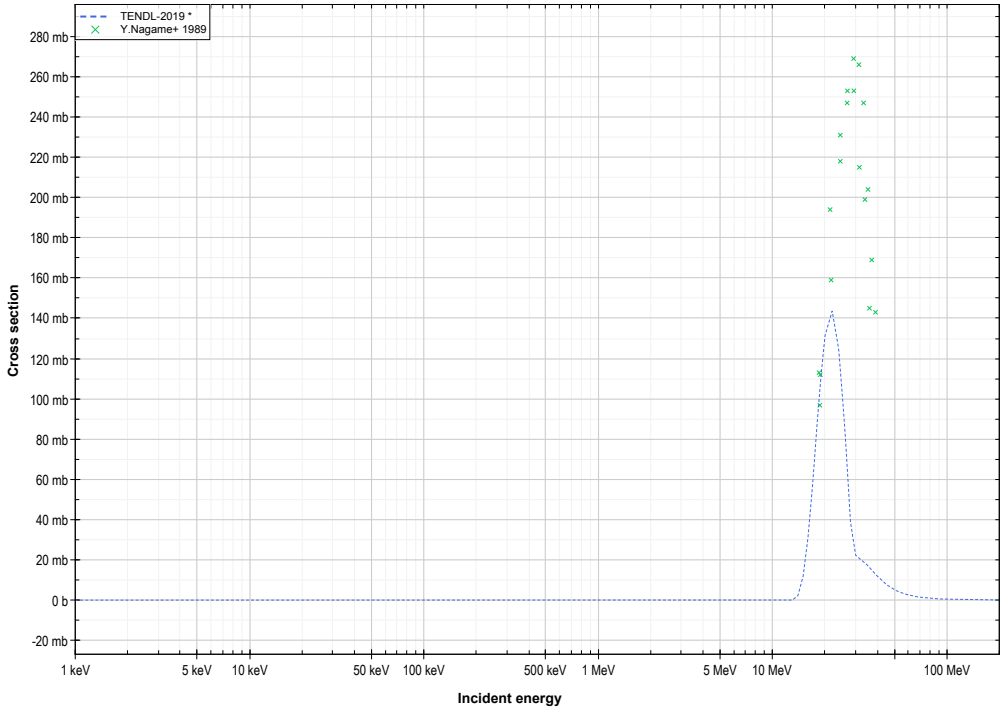
Reaction	Q-Value
Zn68(He3,2n)Ge69	-4117.82 keV

<< 29-Cu-65	**30-Zn-68**	33-As-75 >>
<< MT16 (³He,2n)	**MT17 (³He,3n) or MT5 (Ge68 production)**	MT32 (³He,n+d) >>

Zn68 (³He,3n) or Ge68 production log-log



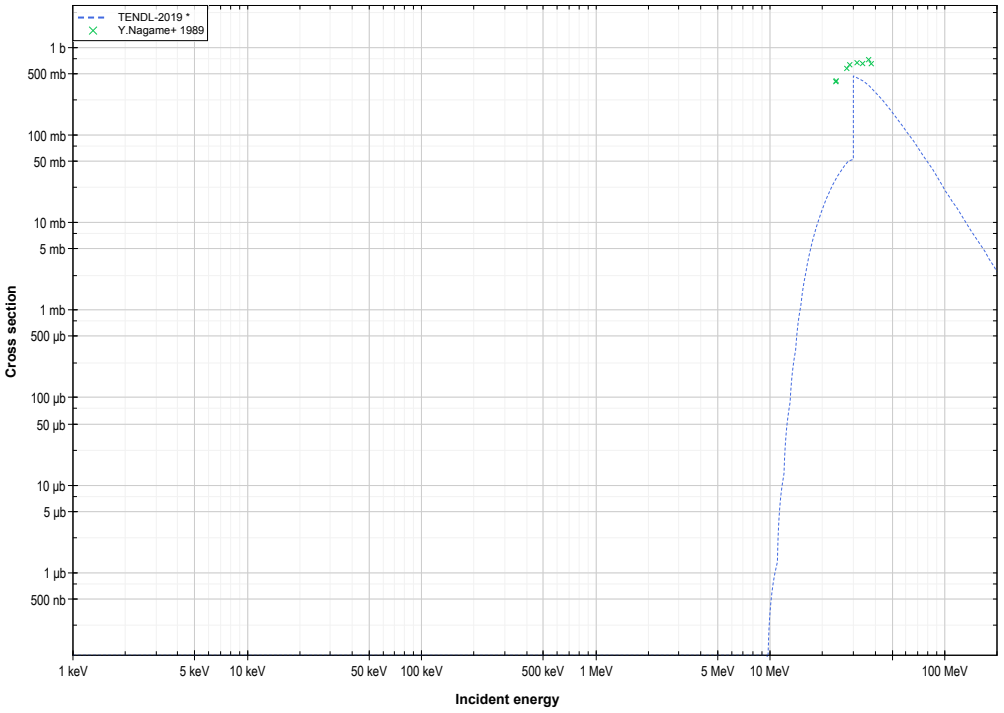
Zn68 (³He,3n) or Ge68 production lin-log



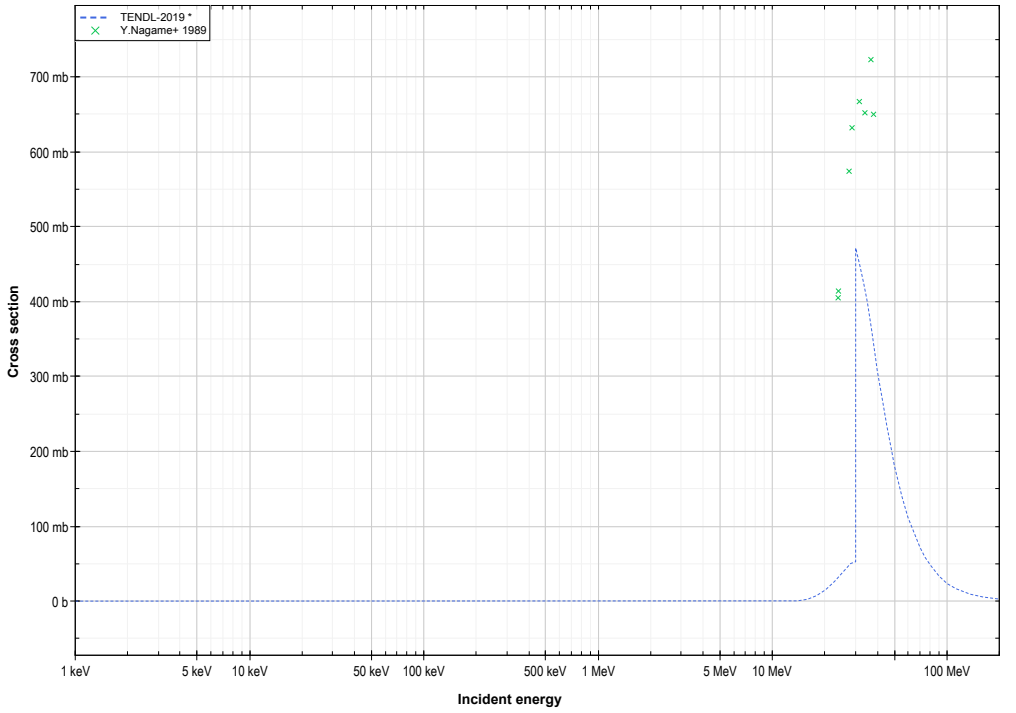
Reaction	Q-Value
Zn68(He3,3n)Ge68	-12311.03 keV

<< 30-Zn-66	**30-Zn-68**	44-Ru-102 >>
<< MT17 (³He,3n)	**MT32 (³He,n+d) or MT5 (Ga68 production)**	MT41 (³He,2n+p) >>

Zn68 (³He,n+d) or Ga68 production log-log



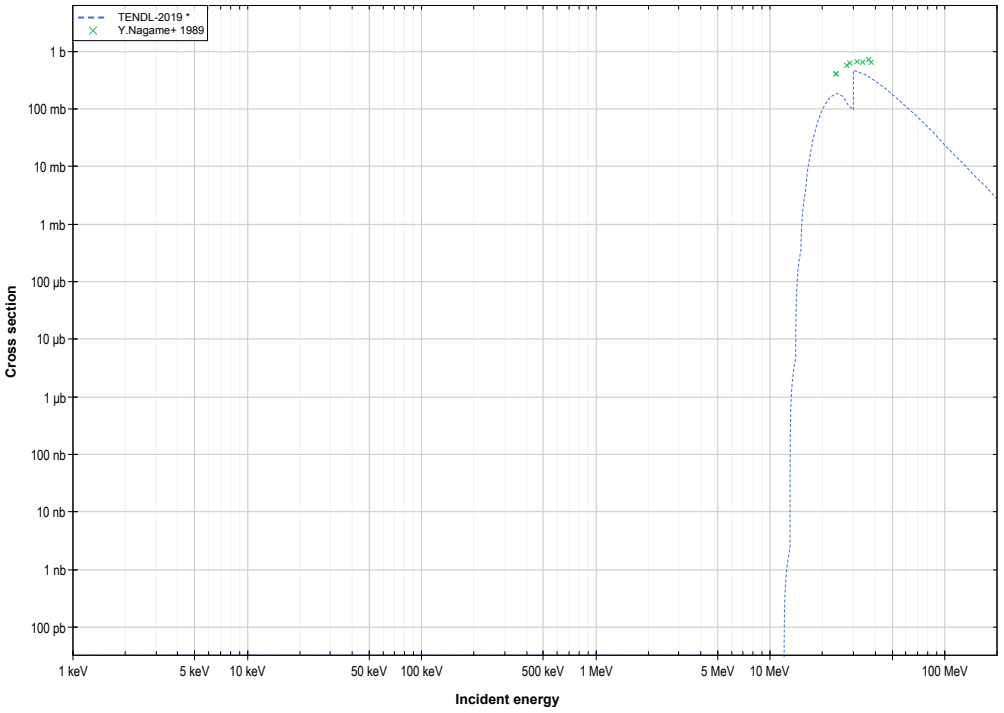
Zn68 (³He,n+d) or Ga68 production lin-log



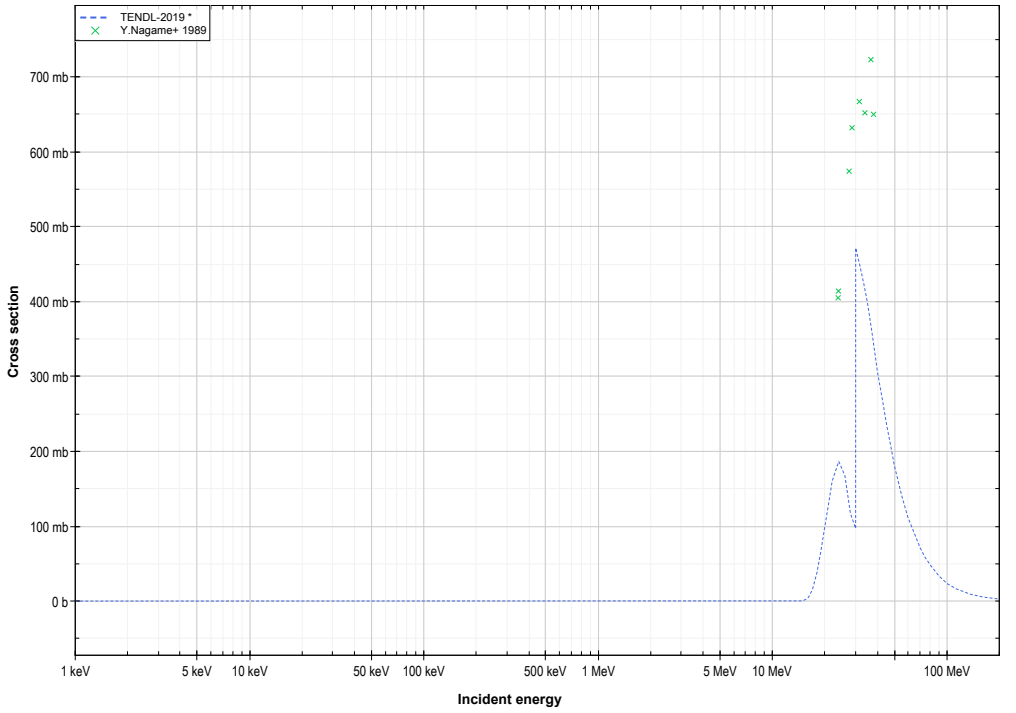
Reaction	Q-Value
Zn68(He3,t)Ga68	-2939.69 keV
Zn68(He3,n+d)Ga68	-9196.92 keV
Zn68(He3,2n+p)Ga68	-11421.49 keV

<< 30-Zn-66	**30-Zn-68**	34-Se-76 >>
<< MT32 (^{3}He,n+d)	**MT41 (^{3}He,2n+p) or MT5 (Ga68 production)**	MT105 (^{3}He,t) >>

Zn68 (^{3}He,2n+p) or Ga68 production log-log



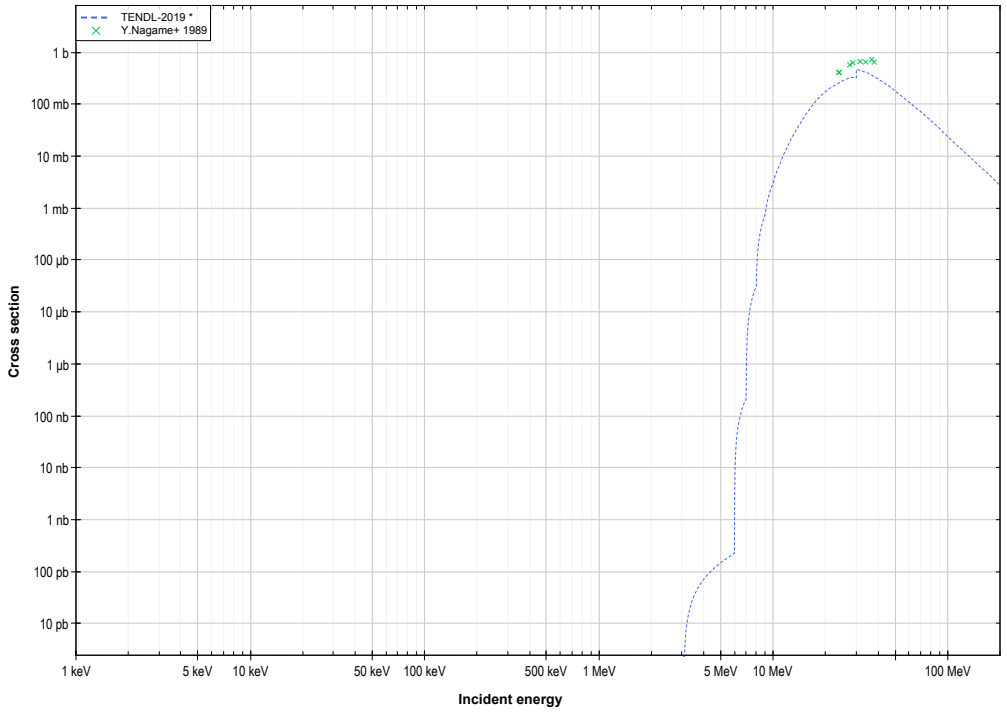
Zn68 (^{3}He,2n+p) or Ga68 production lin-log



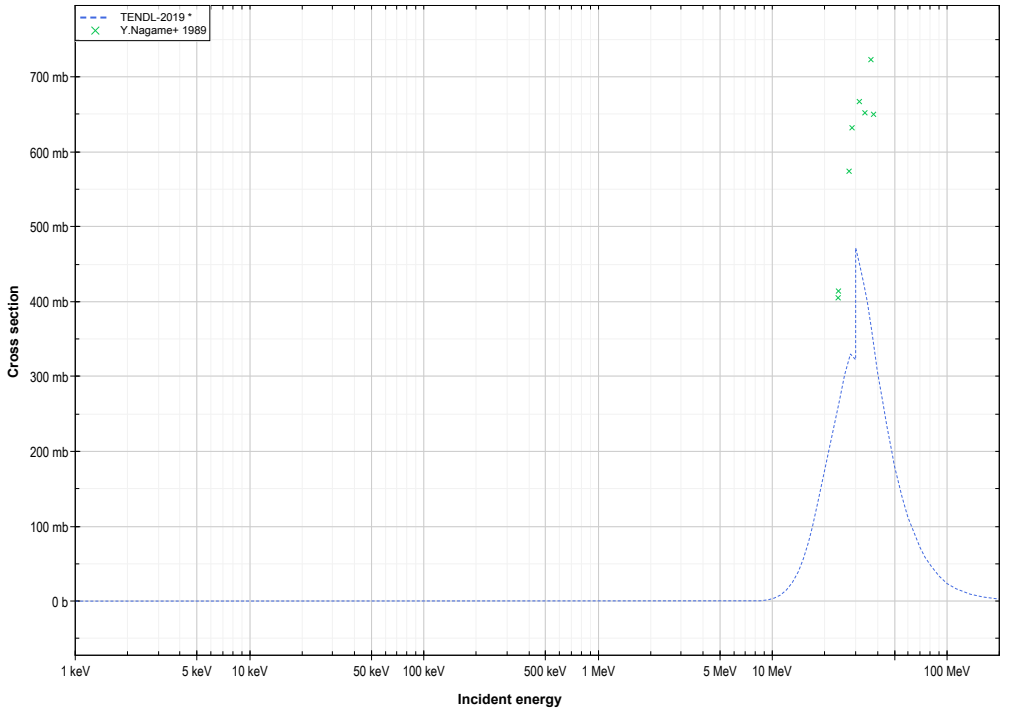
Reaction	Q-Value
Zn68(He3,t)Ga68	-2939.69 keV
Zn68(He3,n+d)Ga68	-9196.92 keV
Zn68(He3,2n+p)Ga68	-11421.49 keV

<< 30-Zn-66	**30-Zn-68**	44-Ru-102 >>
<< MT41 (^{3}He,2n+p)	**MT105 (^{3}He,t) or MT5 (Ga68 production)**	MT111 (^{3}He,2p) >>

Zn68 (^{3}He,t) or Ga68 production log-log



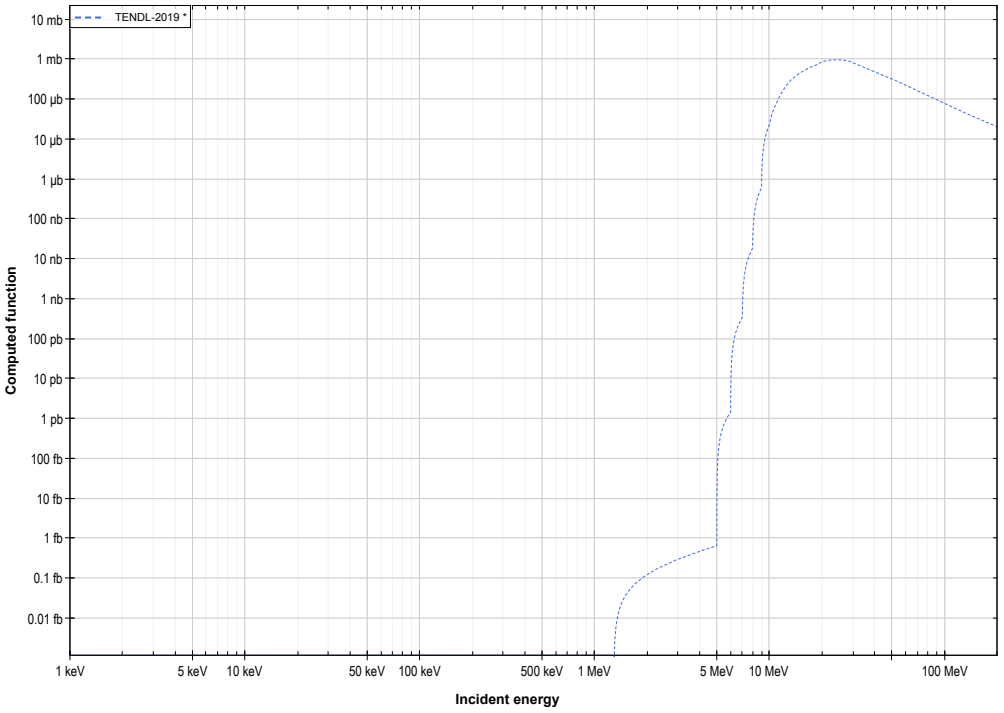
Zn68 (^{3}He,t) or Ga68 production lin-log



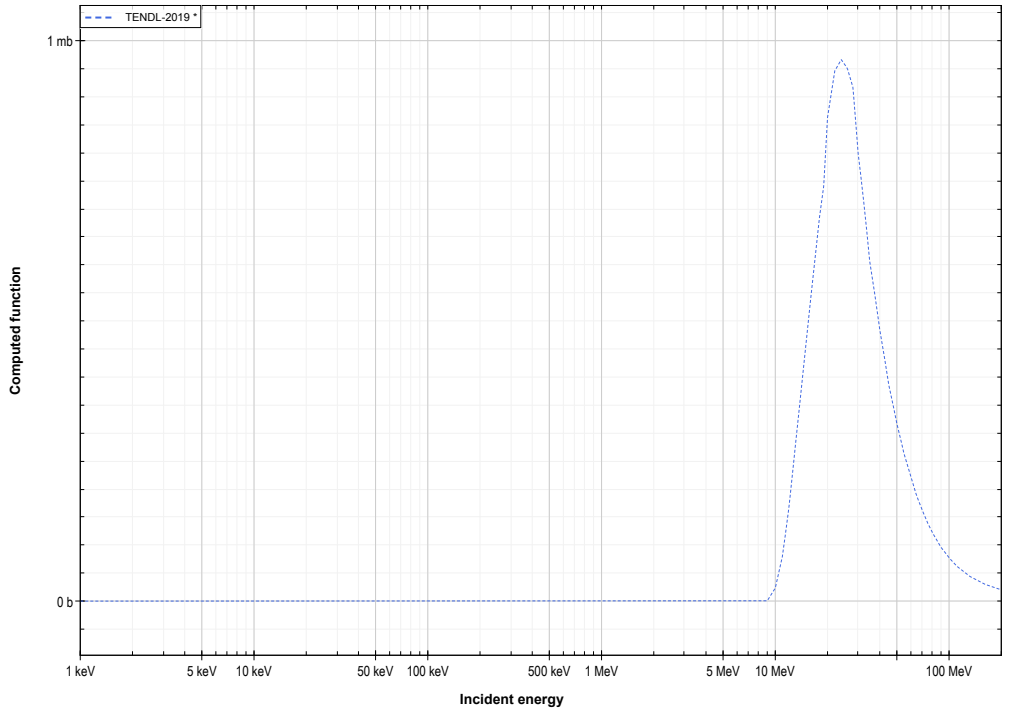
Reaction	Q-Value
Zn68(He3,t)Ga68	-2939.69 keV
Zn68(He3,n+d)Ga68	-9196.92 keV
Zn68(He3,2n+p)Ga68	-11421.49 keV

<< 30-Zn-64	**30-Zn-68**	31-Ga-71 >>
<< MT105 (^{3}He,t)	**MT111 (^{3}He,2p) or MT5 (Zn69 production)**	31-Ga-69 MT4 (^{3}He,n) >>

Zn68 (^{3}He,2p) or Zn69 production log-log



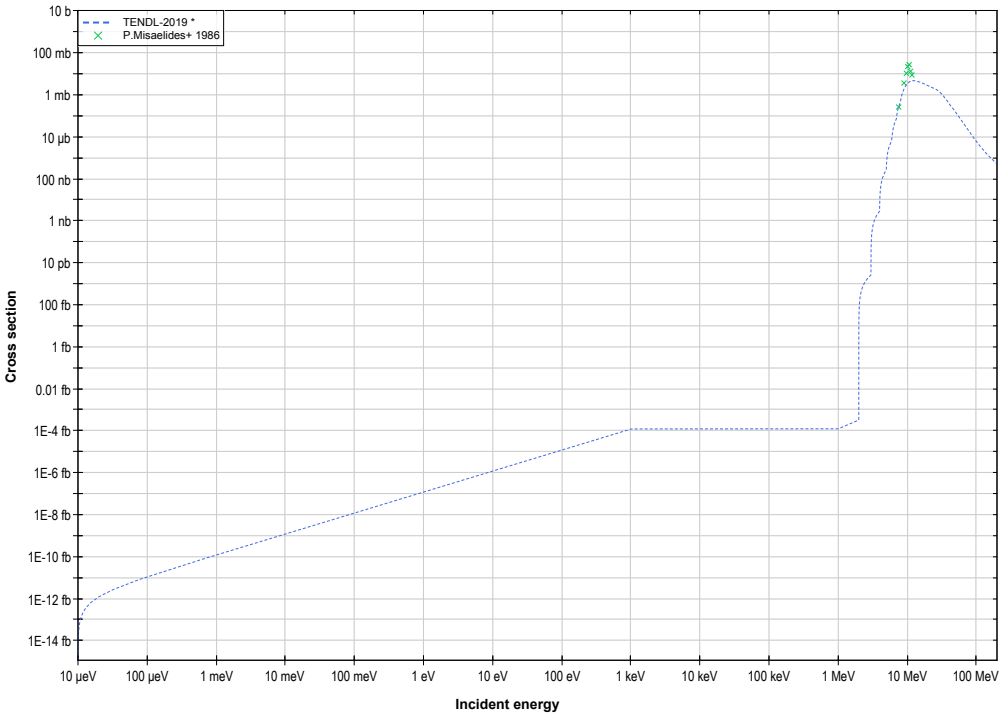
Zn68 (^{3}He,2p) or Zn69 production lin-log



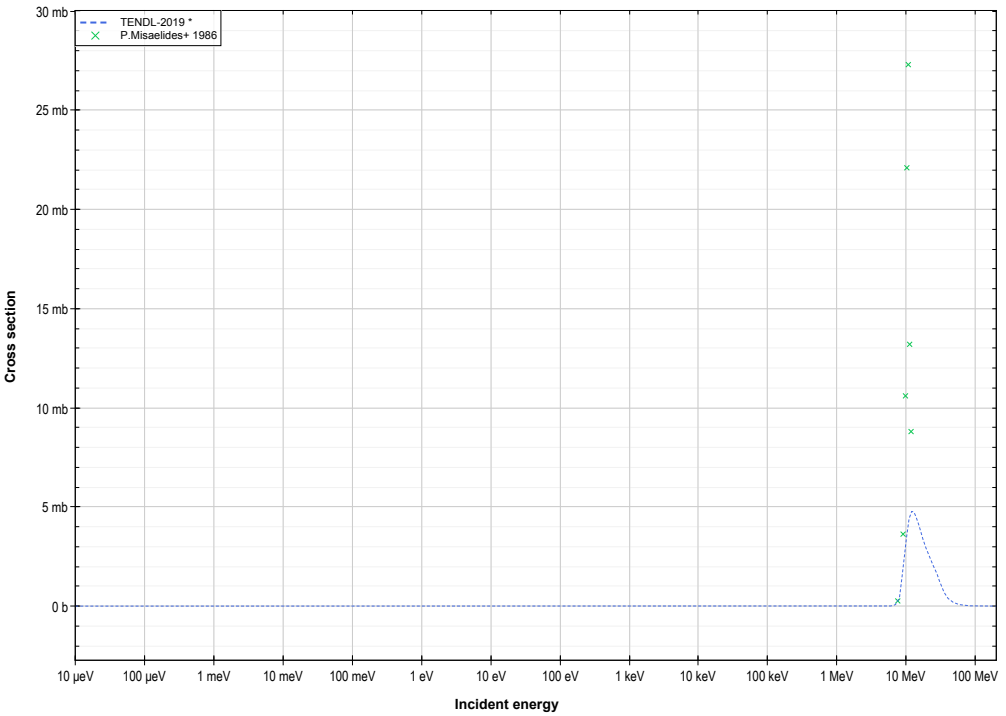
Reaction	Q-Value
Zn68(He3,2p)Zn69	-1236.02 keV

<< 30-Zn-64	**31-Ga-69**	33-As-75 >>
<< 30-Zn-68 MT111 (^{3}He,2p)	**MT4 (^{3}He,n) or MT5 (As71 production)**	MT16 (^{3}He,2n) >>

Ga69 (^{3}He,n) or As71 production log-log



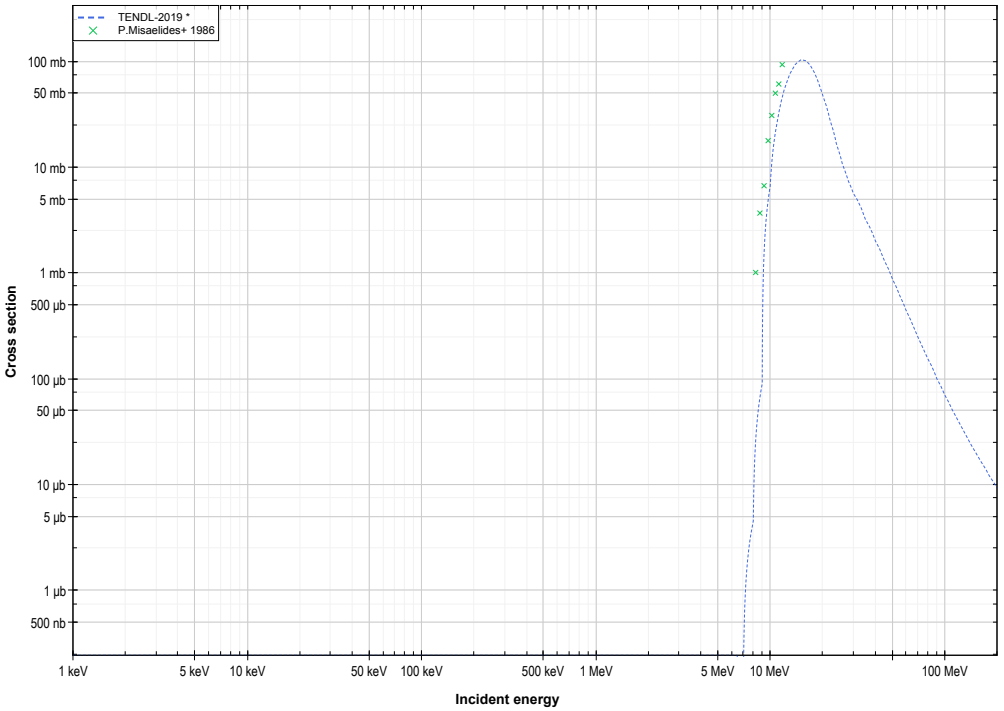
Ga69 (^{3}He,n) or As71 production lin-log



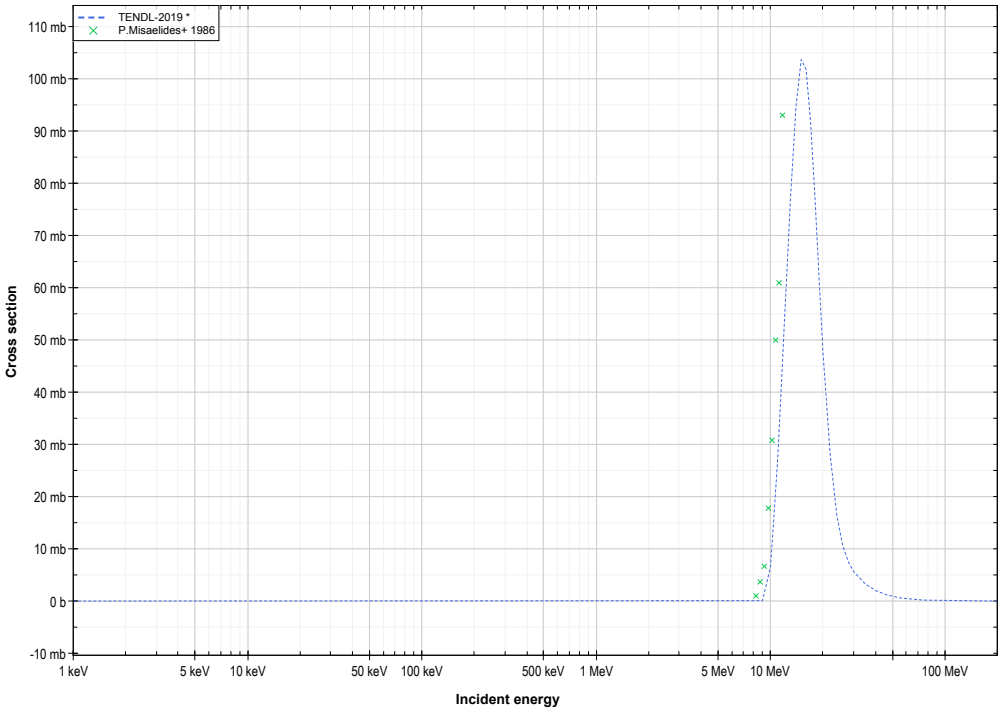
Reaction	Q-Value
Ga69(He3,n)As71	5425.10 keV

<< 30-Zn-68	**31-Ga-69**	31-Ga-71 >>
<< MT4 (^{3}He,n)	**MT16 (^{3}He,2n) or MT5 (As70 production)**	MT22 (^{3}He,n+α) >>

Ga69 (^{3}He,2n) or As70 production log-log



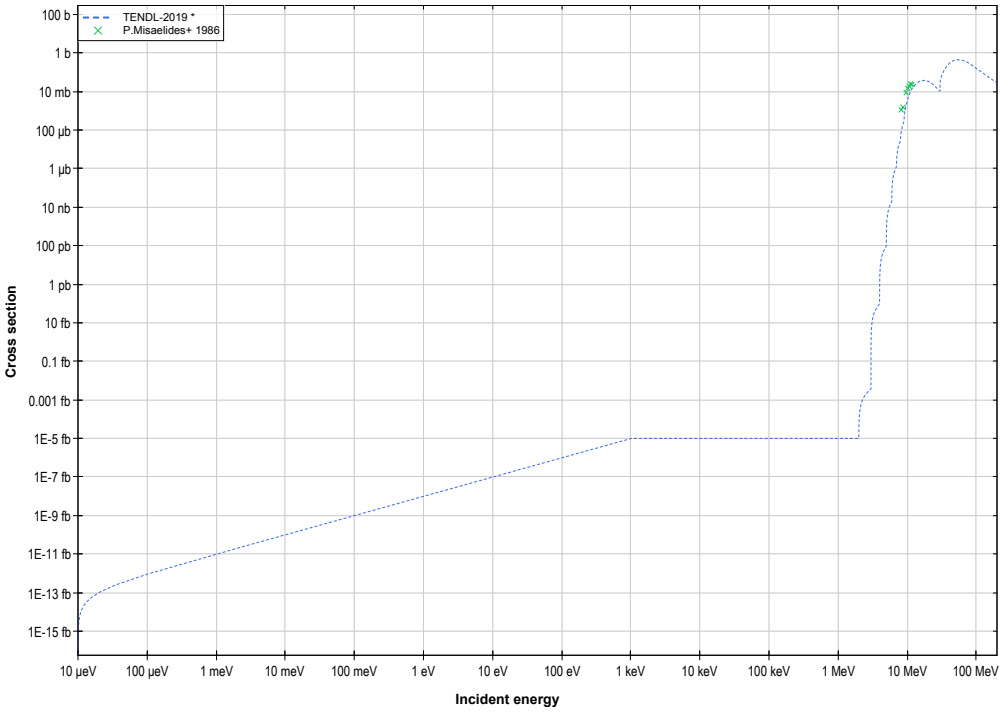
Ga69 (^{3}He,2n) or As70 production lin-log



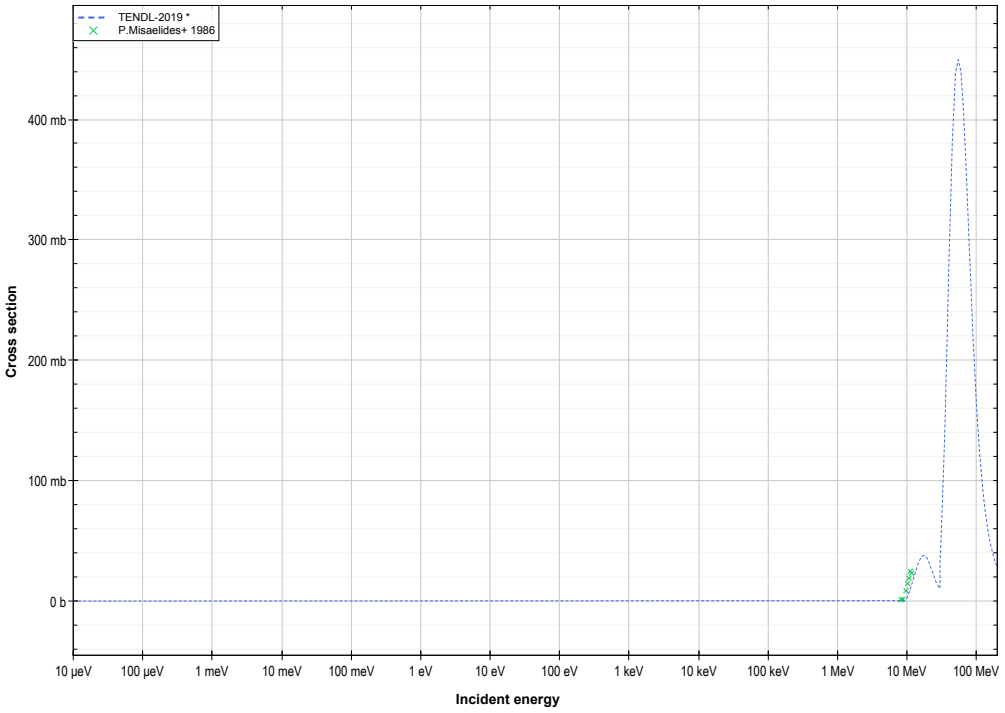
Reaction	Q-Value
Ga69(He3,2n)As70	-6199.22 keV

<< 30-Zn-64	**31-Ga-69**	34-Se-77 >>
<< MT16 (³He,2n)	**MT22 (³He,n+α) or MT5 (Ga67 production)**	MT107 (³He,α) >>

Ga69 (³He,n+α) or Ga67 production log-log



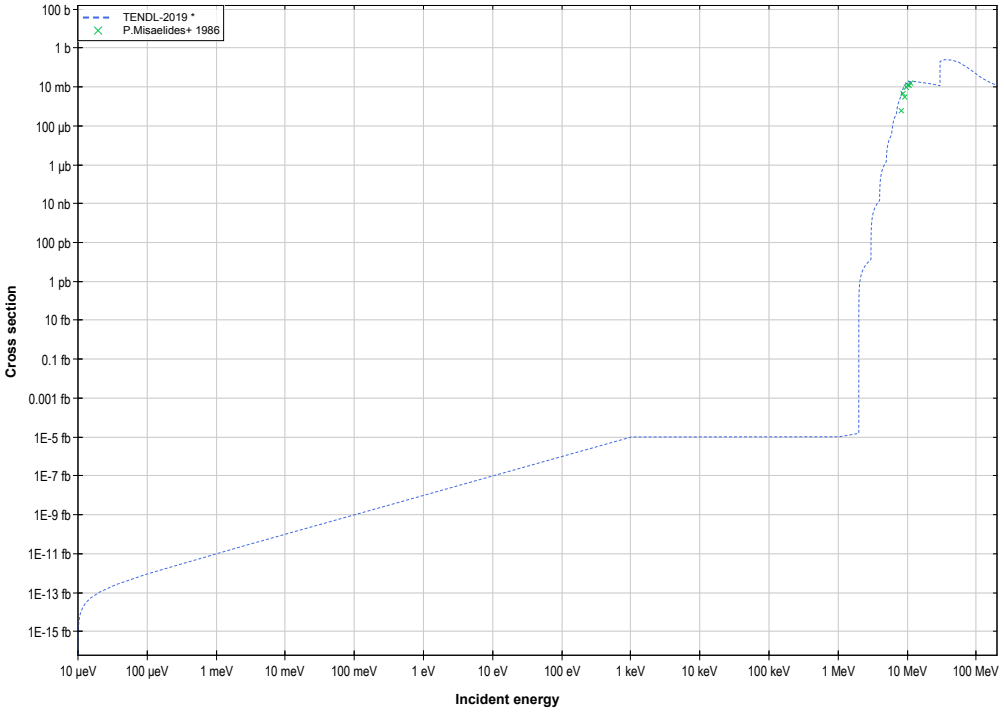
Ga69 (³He,n+α) or Ga67 production lin-log



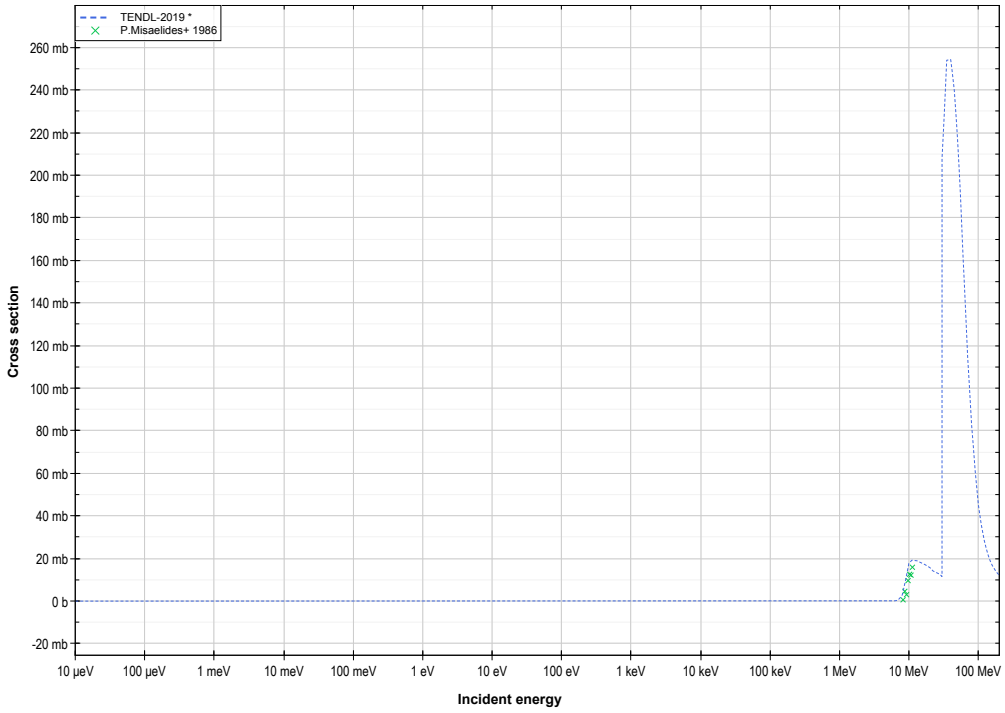
Reaction	Q-Value
Ga69(He3,n+α)Ga67	1986.19 keV
Ga69(He3,d+t)Ga67	-15603.11 keV
Ga69(He3,n+p+t)Ga67	-17827.68 keV
Ga69(He3,2n+He3)Ga67	-18591.43 keV
Ga69(He3,n+2d)Ga67	-21860.34 keV
Ga69(He3,2n+p+d)Ga67	-24084.91 keV
Ga69(He3,3n+2p)Ga67	-26309.47 keV

<< 30-Zn-64	**31-Ga-69**	34-Se-76 >>
<< MT22 (^{3}He,n+α)	**MT107 (^{3}He,α) or MT5 (Ga68 production)**	31-Ga-71 MT16 (^{3}He,2n) >>

Ga69 (^{3}He,α) or Ga68 production log-log



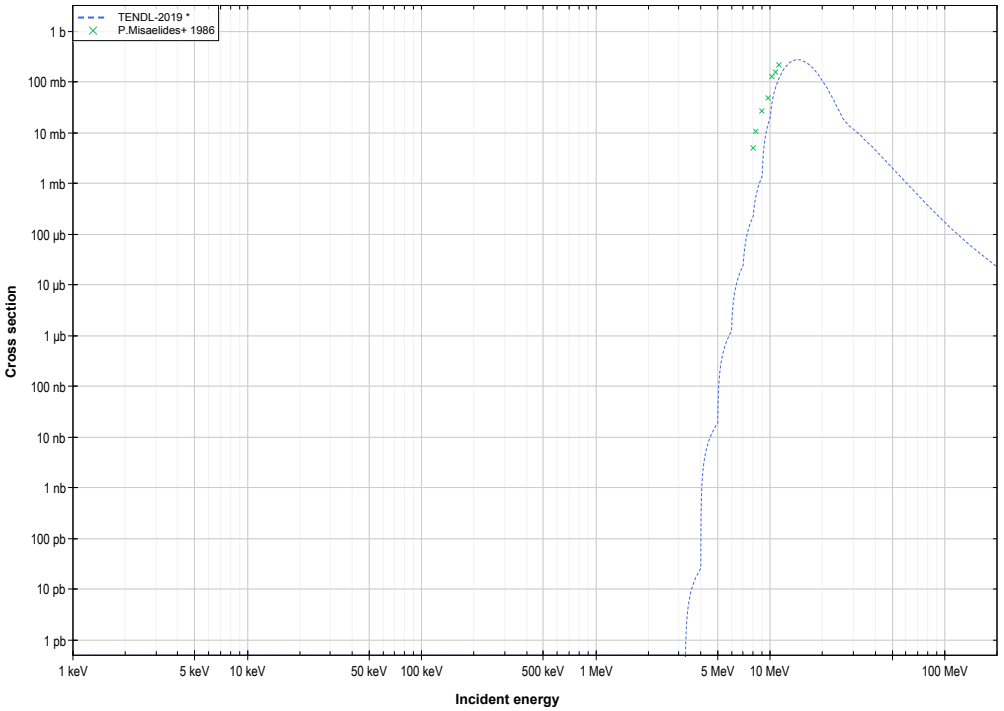
Ga69 (^{3}He,α) or Ga68 production lin-log



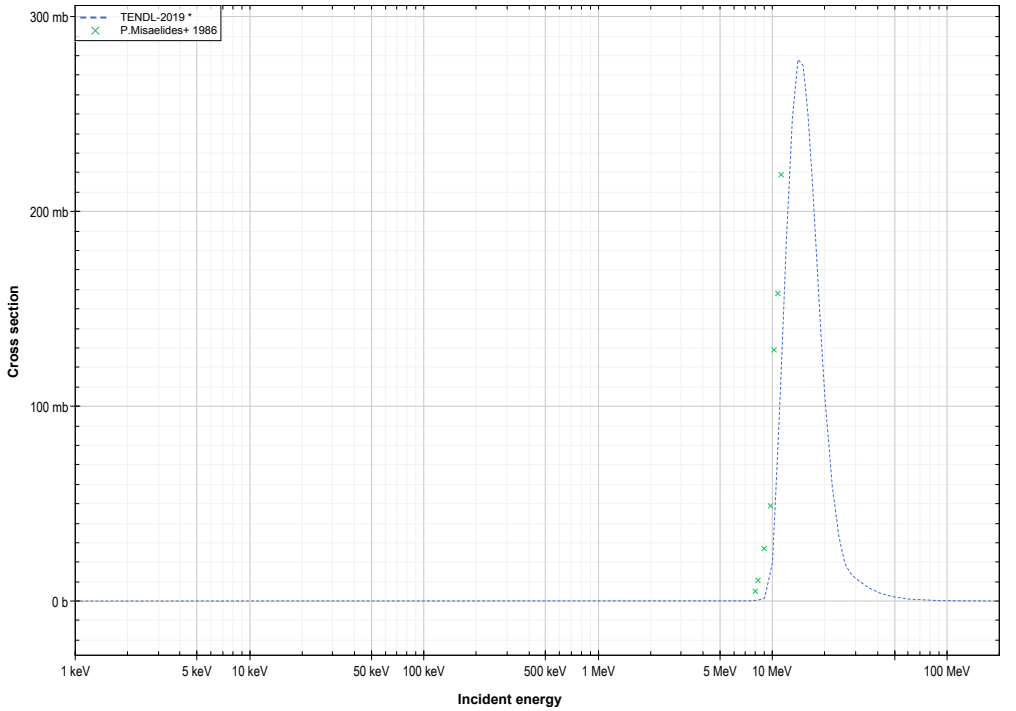
Reaction	Q-Value
Ga69(He3,α)Ga68	10264.50 keV
Ga69(He3,p+t)Ga68	-9549.36 keV
Ga69(He3,n+He3)Ga68	-10313.12 keV
Ga69(He3,2d)Ga68	-13582.03 keV
Ga69(He3,n+p+d)Ga68	-15806.59 keV
Ga69(He3,2n+2p)Ga68	-18031.16 keV

<< 31-Ga-69	**31-Ga-71**	33-As-75 >>
<< 31-Ga-69 MT107 (^{3}He,α)	**MT16 (^{3}He,2n) or MT5 (As72 production)**	MT102 (^{3}He,γ) >>

Ga71 (^{3}He,2n) or As72 production log-log



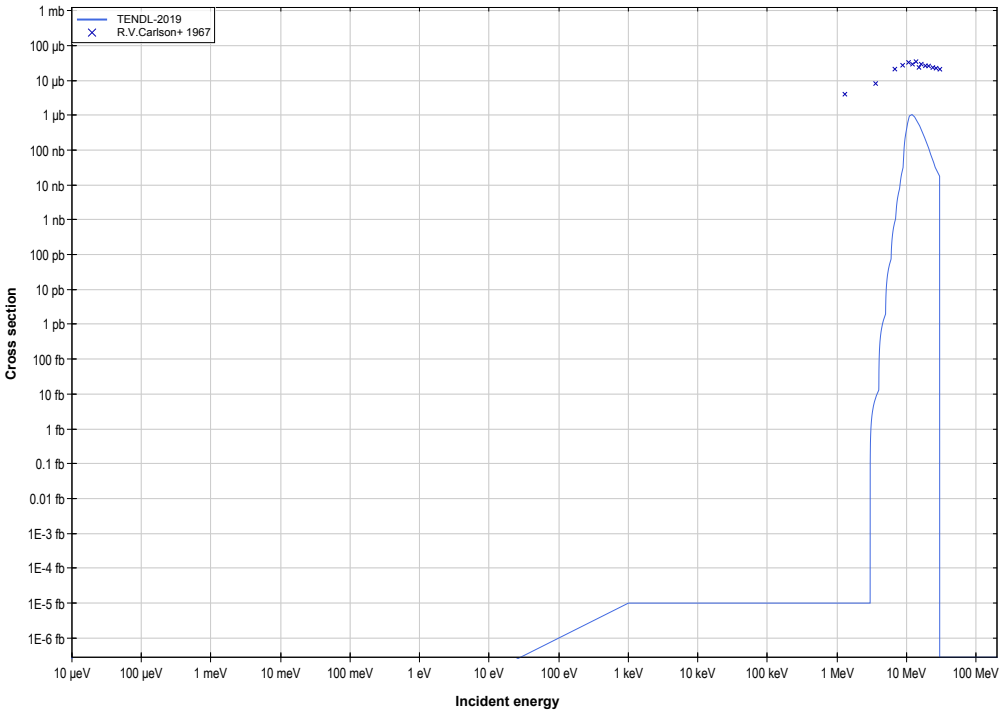
Ga71 (^{3}He,2n) or As72 production lin-log



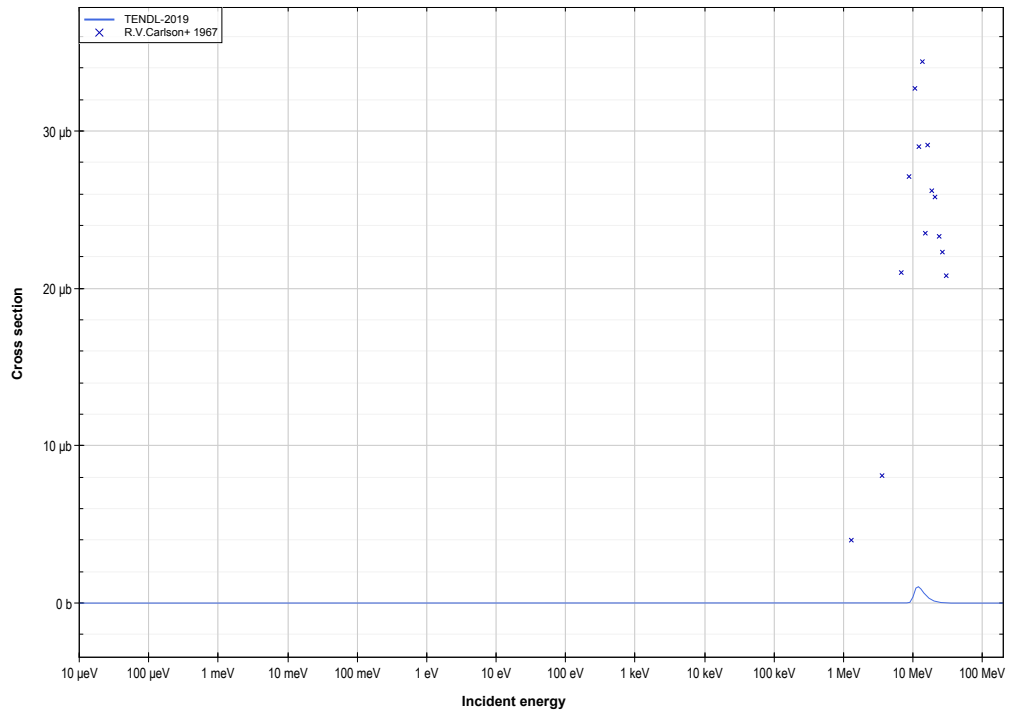
Reaction	Q-Value
Ga71(He3,2n)As72	-3120.52 keV

<< 21-Sc-45	**31-Ga-71**	41-Nb-93 >>
<< MT16 (^{3}He,2n)	**MT102 (^{3}He,γ) or MT5 (As74 production)**	MT111 (^{3}He,2p) >>

Ga71 (^{3}He,γ) or As74 production log-log



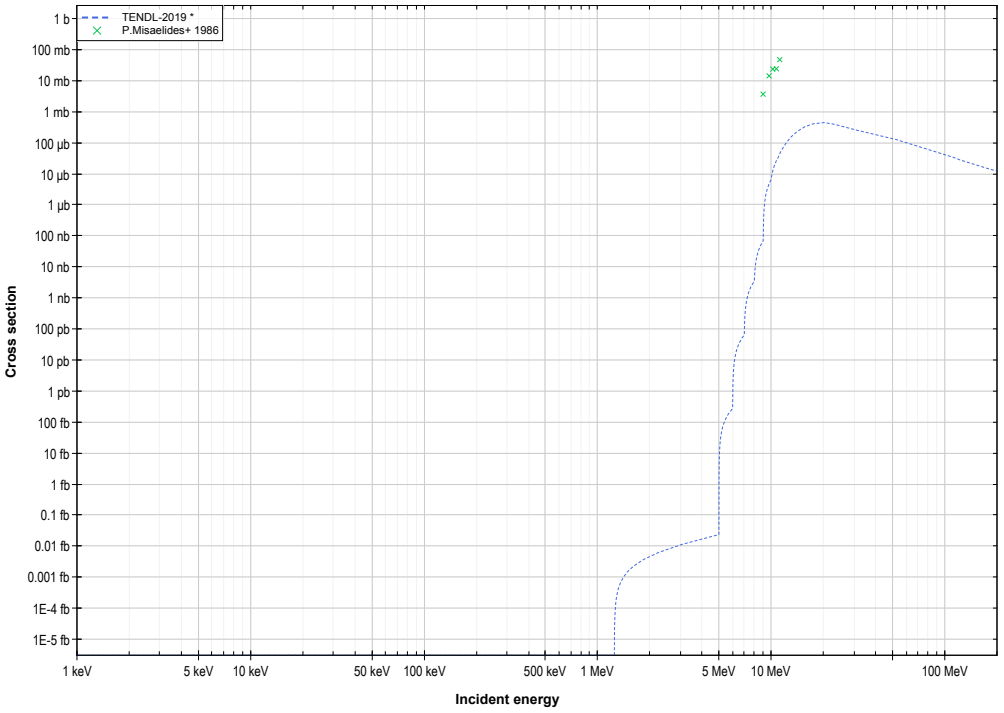
Ga71 (^{3}He,γ) or As74 production lin-log



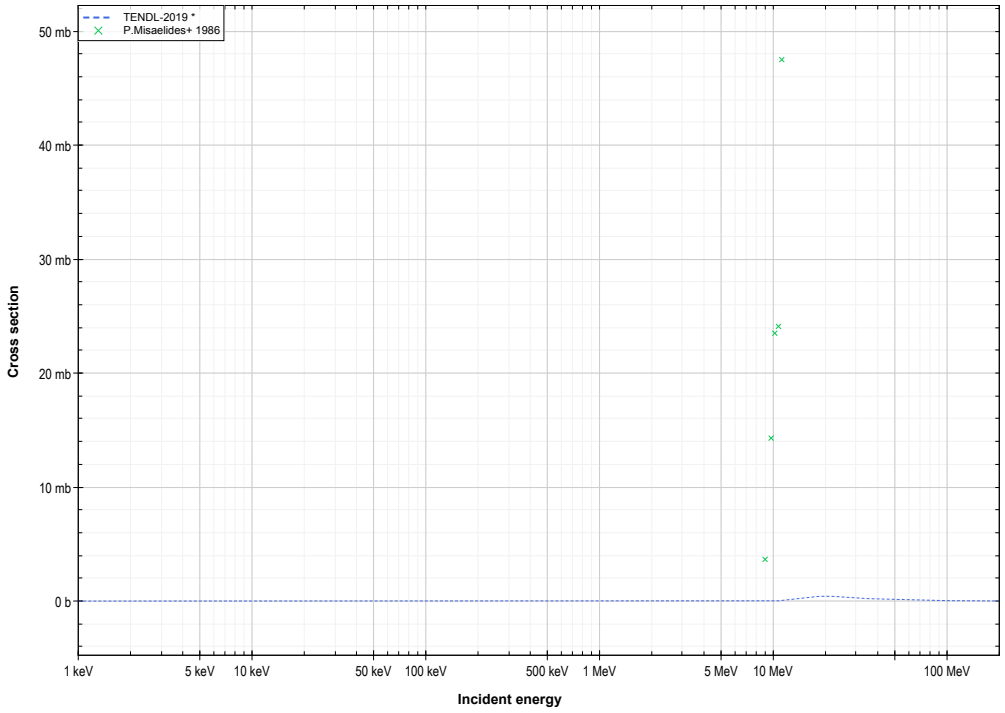
Reaction	Q-Value
Ga71(He3,γ)As74	15652.22 keV

<< 30-Zn-68	**31-Ga-71**	44-Ru-102 >>
<< MT102 (^{3}He,γ)	**MT111 (^{3}He,2p) or MT5 (Ga72 production)**	33-As-75 MT4 (^{3}He,n) >>

Ga71 (^{3}He,2p) or Ga72 production log-log



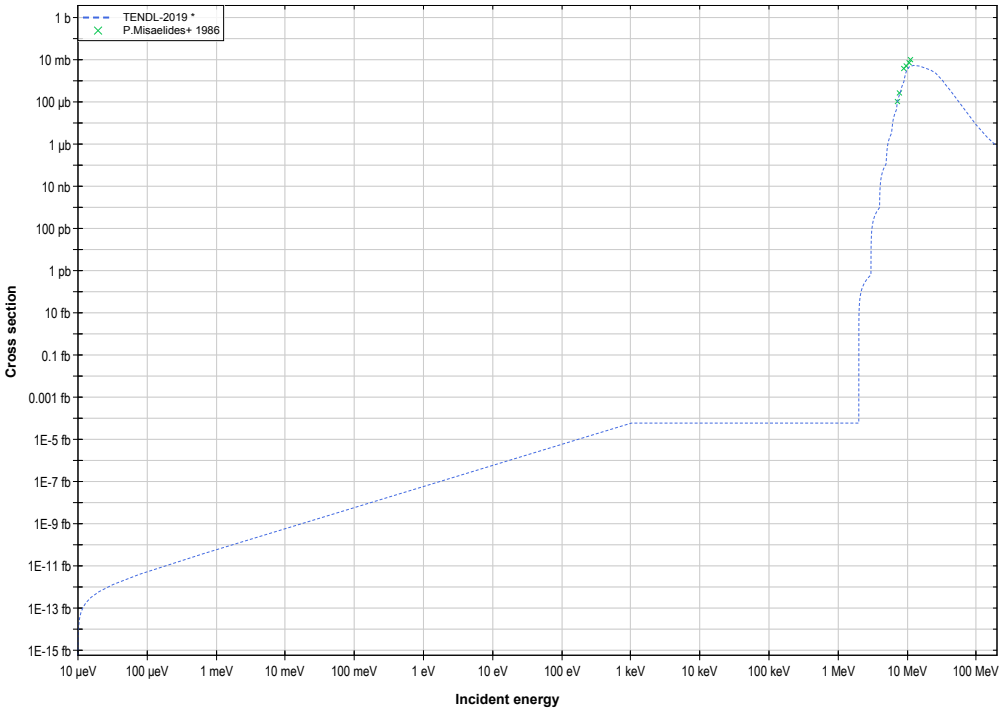
Ga71 (^{3}He,2p) or Ga72 production lin-log



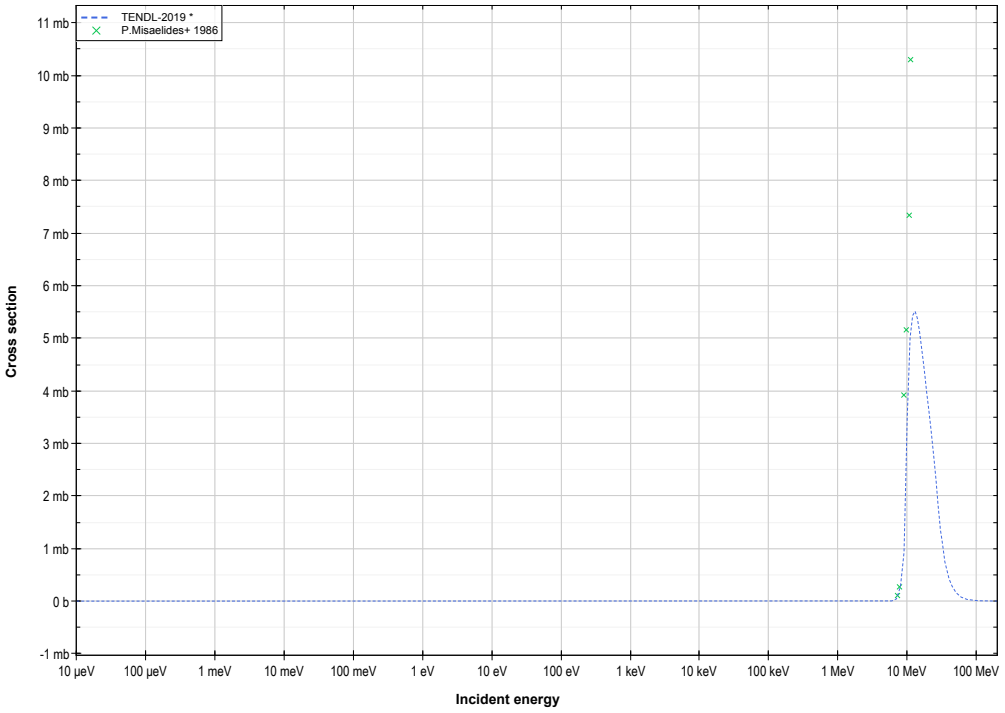
Reaction	Q-Value
Ga71(He3,2p)Ga72	-1197.52 keV

<< 31-Ga-69	**33-As-75**	34-Se-77 >>
<< 31-Ga-71 MT111 (^{3}He,2p)	**MT4 (^{3}He,n) or MT5 (Br77 production)**	MT16 (^{3}He,2n) >>

As75 (^{3}He,n) or Br77 production log-log



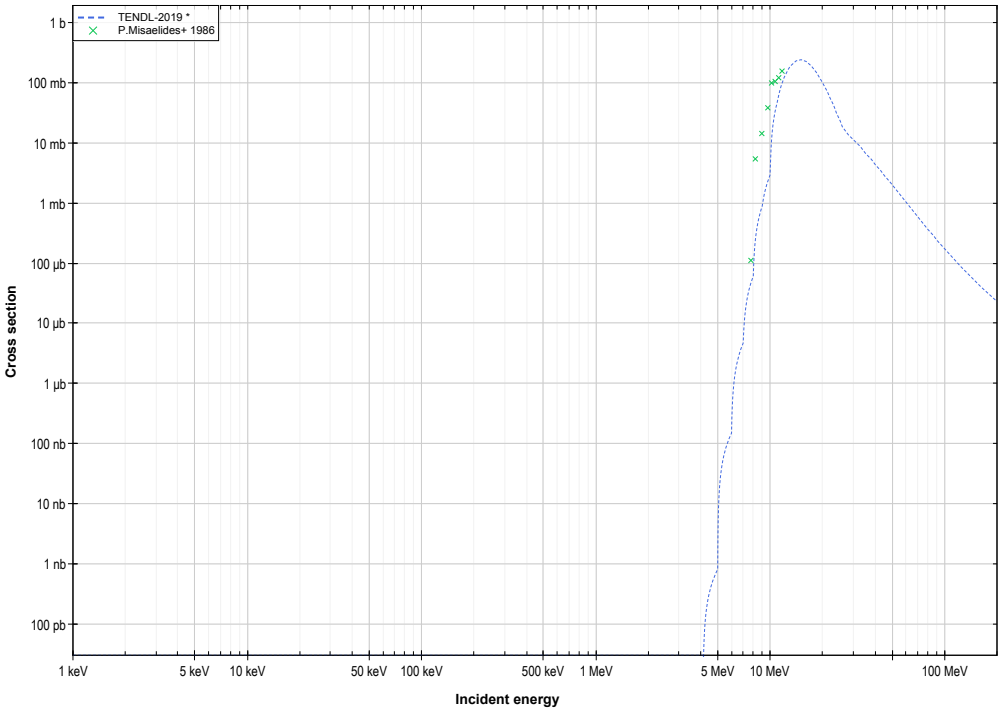
As75 (^{3}He,n) or Br77 production lin-log



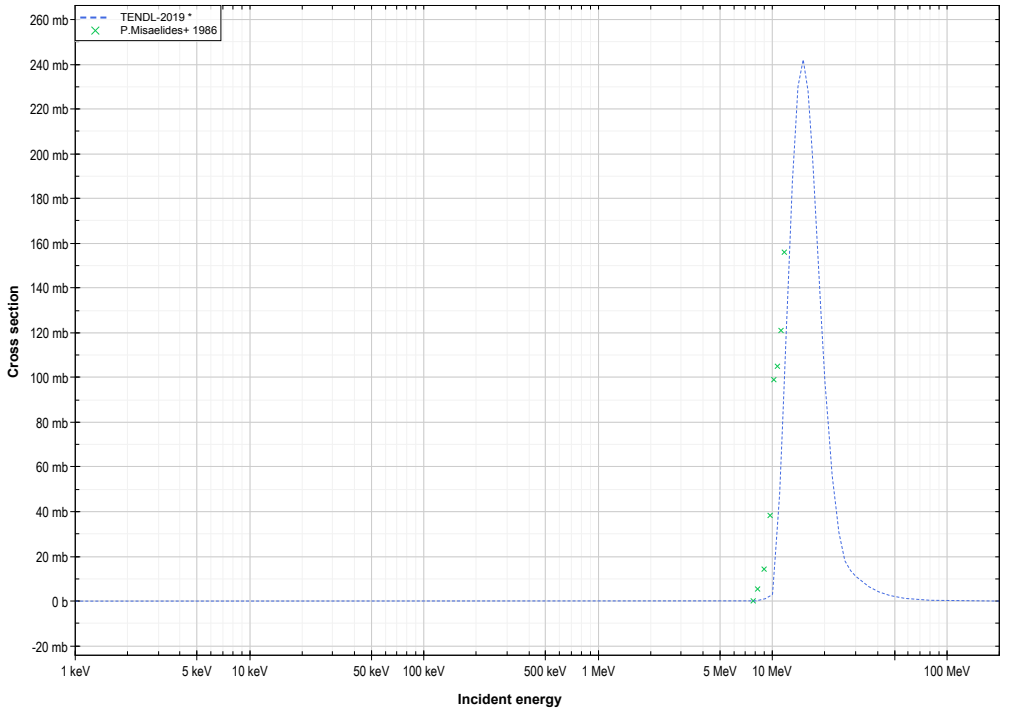
Reaction	Q-Value
As75(He3,n)Br77	7060.50 keV

<< 31-Ga-71	**33-As-75**	34-Se-76 >>
<< MT4 (^{3}He,n)	**MT16 (^{3}He,2n) or MT5 (Br76 production)**	MT17 (^{3}He,3n) >>

As75 (^{3}He,2n) or Br76 production log-log



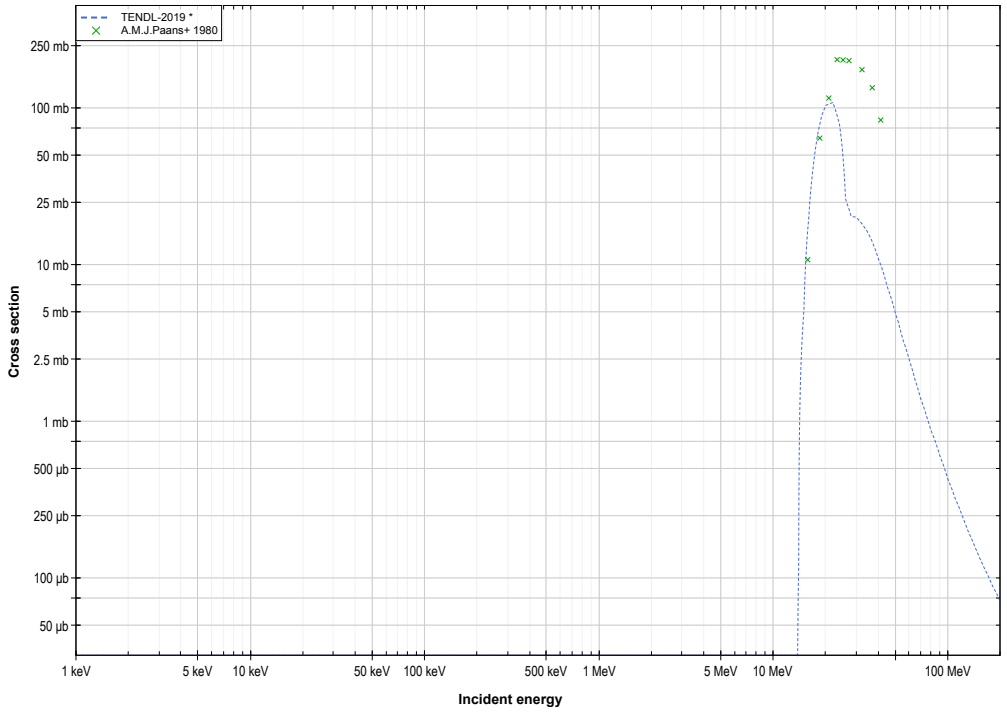
As75 (^{3}He,2n) or Br76 production lin-log



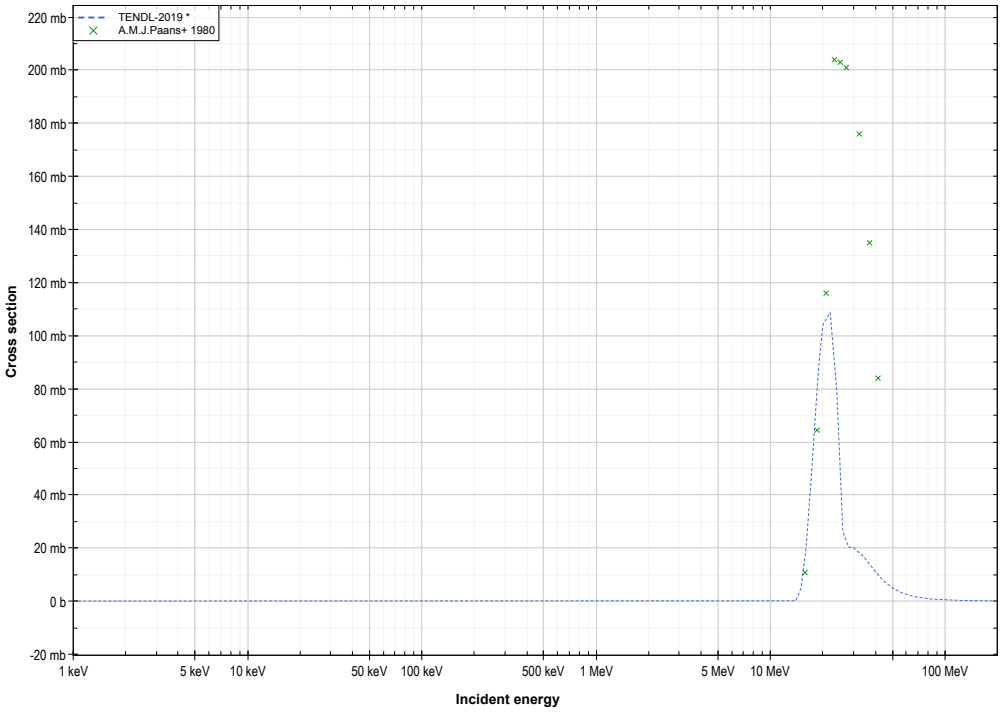
Reaction	Q-Value
As75(He3,2n)Br76	-3956.62 keV

<< 30-Zn-68	**33-As-75**	34-Se-76 >>
<< MT16 (^{3}He,2n)	**MT17 (^{3}He,3n) or MT5 (Br75 production)**	MT37 (^{3}He,4n) >>

As75 (^{3}He,3n) or Br75 production log-log



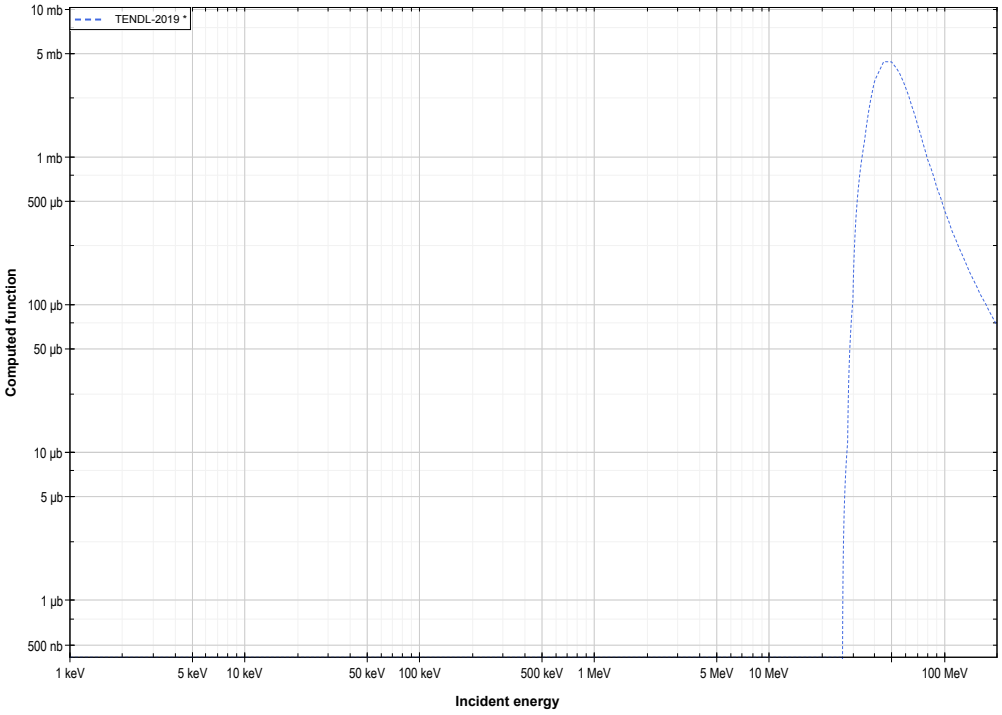
As75 (^{3}He,3n) or Br75 production lin-log



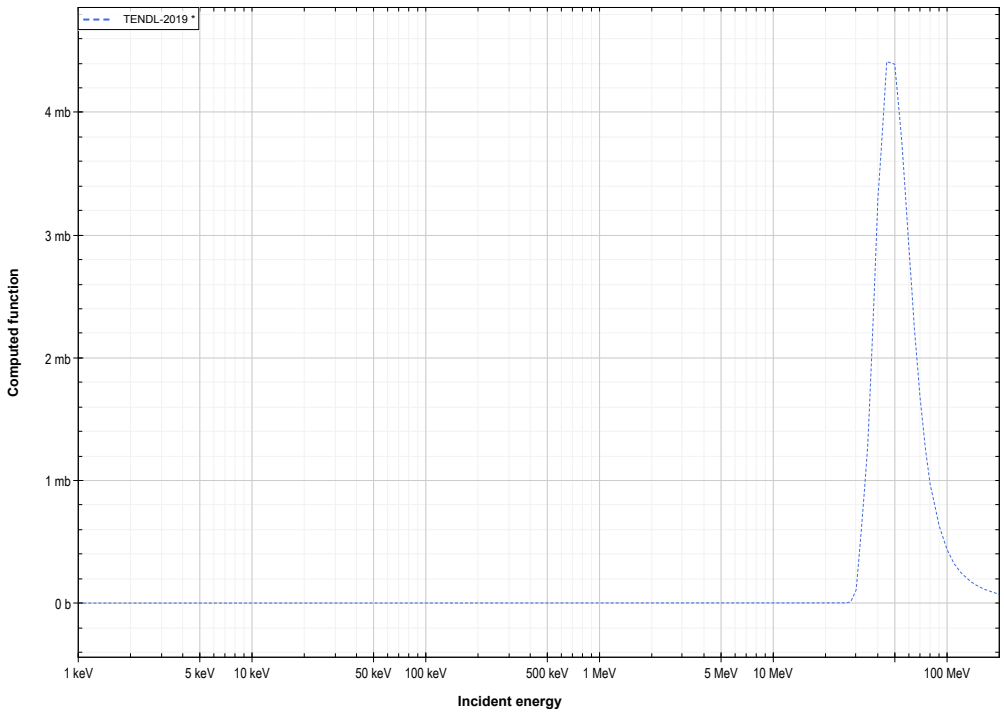
Reaction	Q-Value
As75(He3,3n)Br75	-13209.93 keV

<< 29-Cu-65	**33-As-75**	34-Se-77 >>
<< MT17 (^{3}He,3n)	**MT37 (^{3}He,4n) or MT5 (Br74 production)**	34-Se-76 MT16 (^{3}He,2n) >>

As75 (^{3}He,4n) or Br74 production log-log



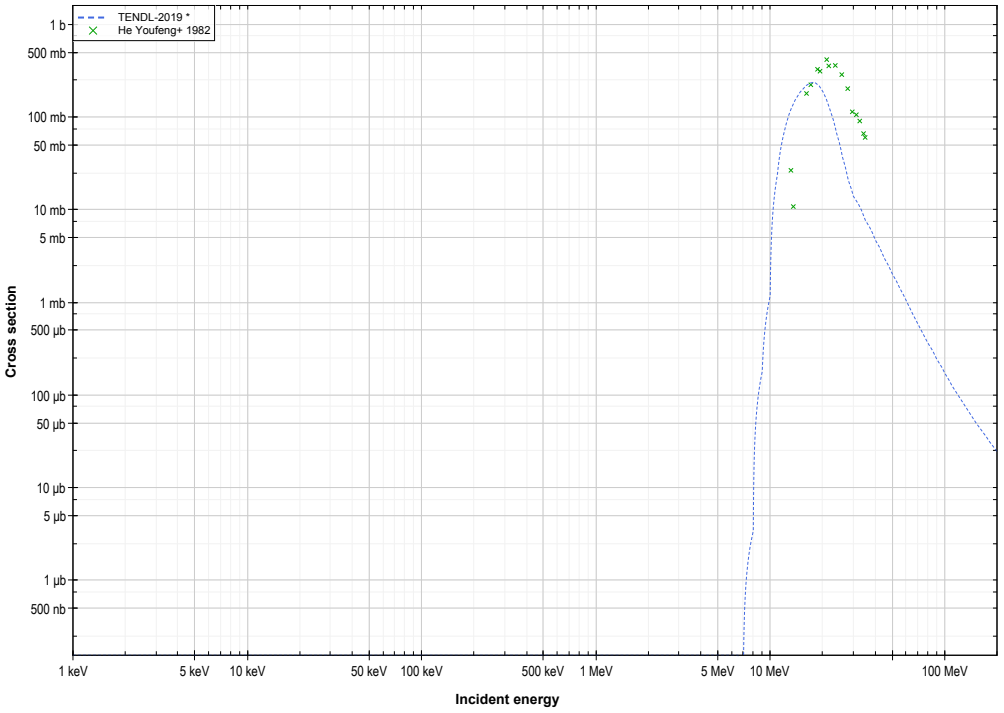
As75 (^{3}He,4n) or Br74 production lin-log



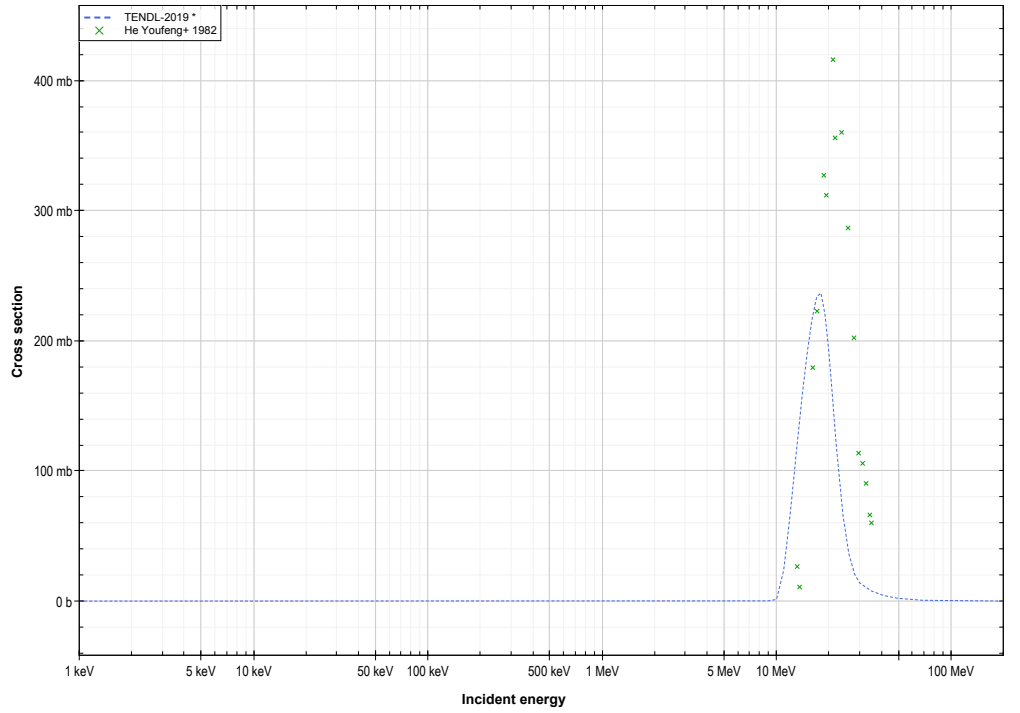
Reaction	Q-Value
As75(He3,4n)Br74	-25100.25 keV

<< 33-As-75	**34-Se-76**	35-Br-81 >>
<< 33-As-75 MT37 (^{3}He,4n)	**MT16 (^{3}He,2n) or MT5 (Kr77 production)**	MT17 (^{3}He,3n) >>

Se76 (^{3}He,2n) or Kr77 production log-log



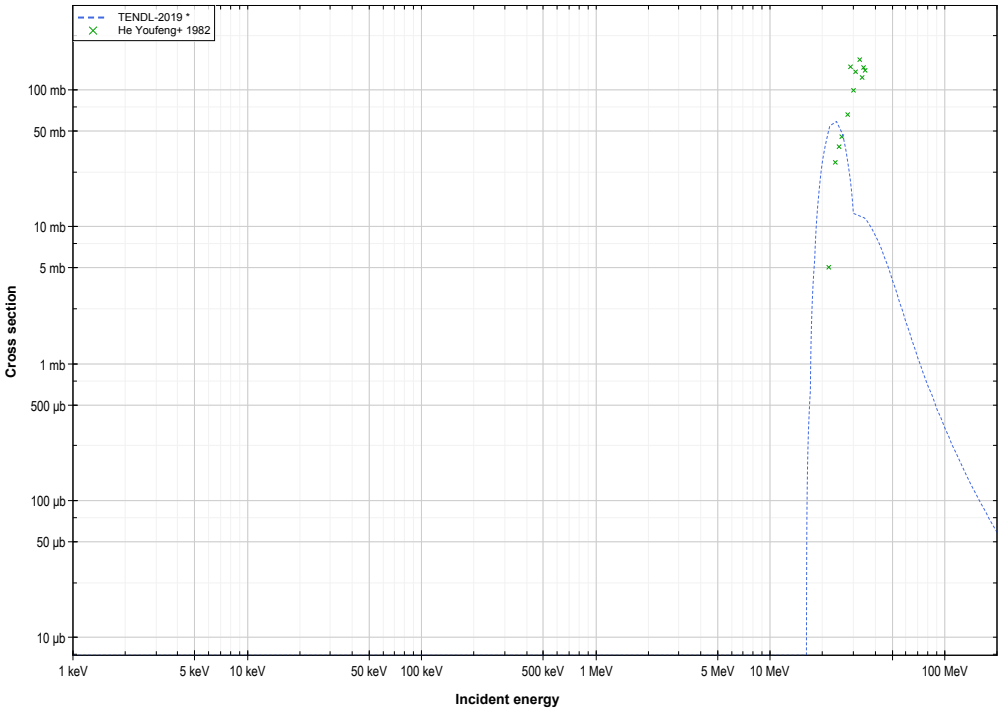
Se76 (^{3}He,2n) or Kr77 production lin-log



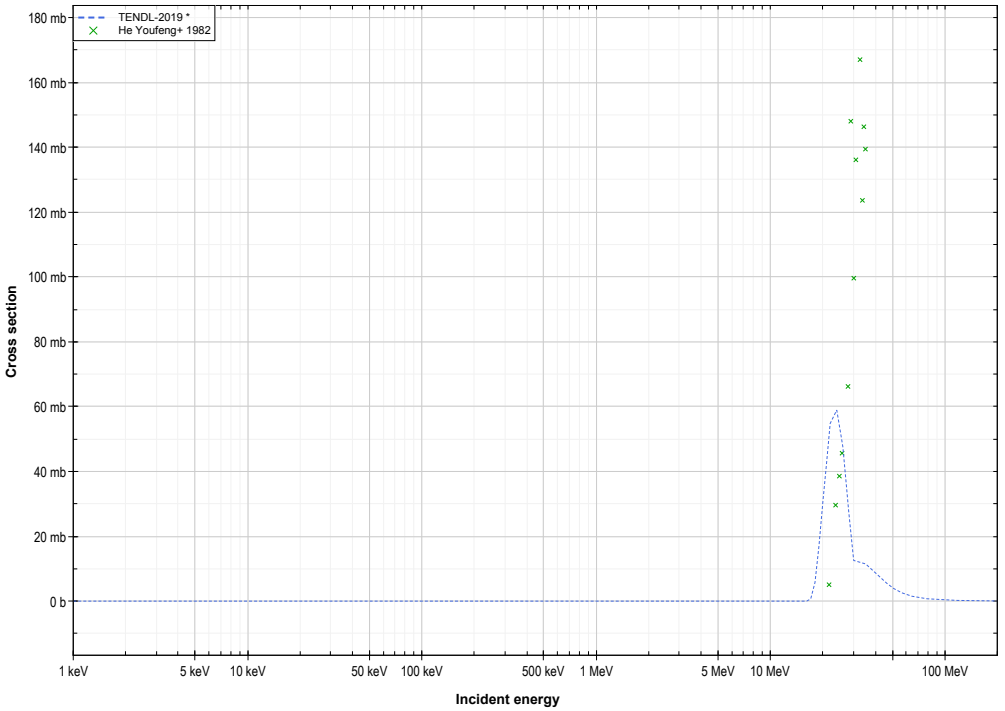
Reaction	Q-Value
Se76(He3,2n)Kr77	-6293.97 keV

<< 33-As-75	**34-Se-76**	34-Se-77 >>
<< MT16 (^{3}He,2n)	**MT17 (^{3}He,3n) or MT5 (Kr76 production)**	MT28 (^{3}He,n+p) >>

Se76 (^{3}He,3n) or Kr76 production log-log



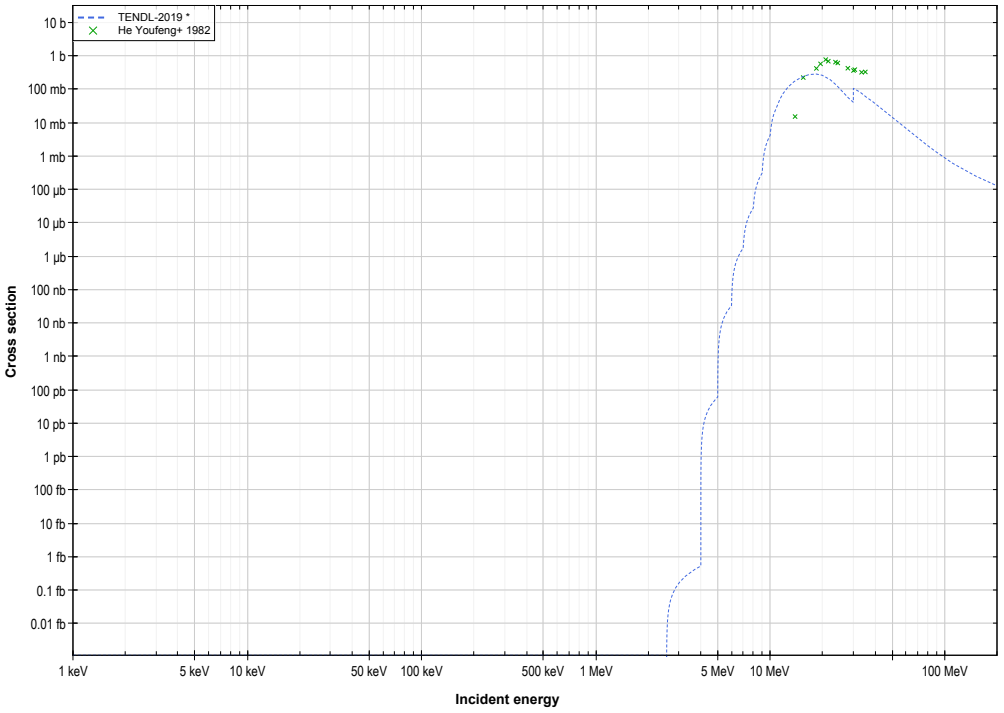
Se76 (^{3}He,3n) or Kr76 production lin-log



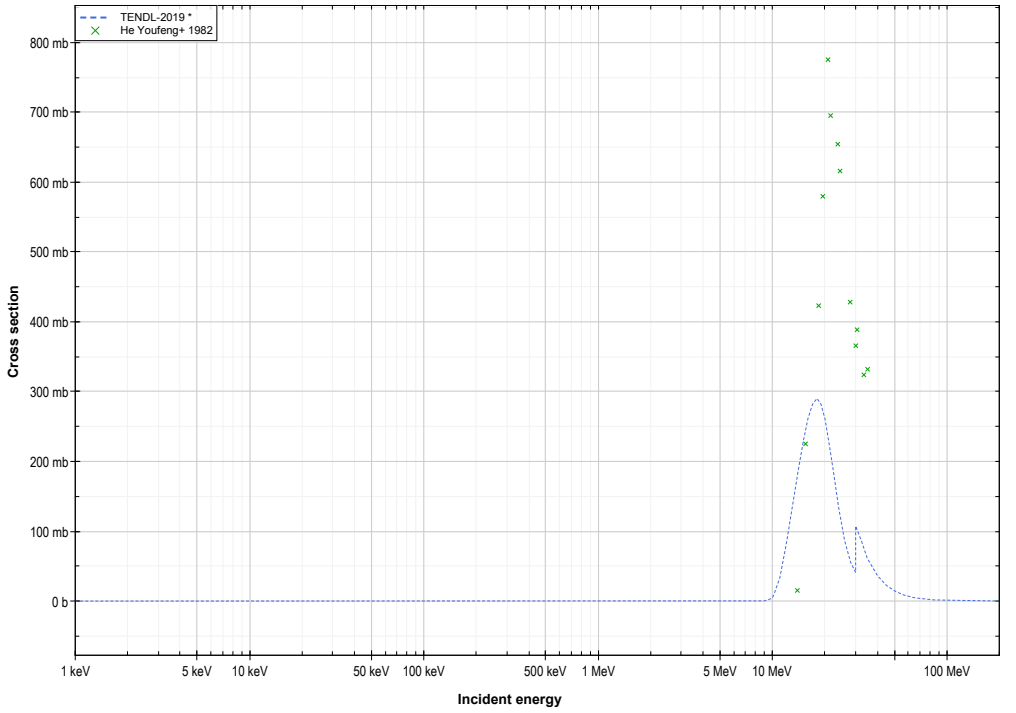
Reaction	Q-Value
Se76(He3,3n)Kr76	-15520.68 keV

<< 30-Zn-66	**34-Se-76**	34-Se-77 >>
<< MT17 (^{3}He,3n)	**MT28 (^{3}He,n+p) or MT5 (Br77 production)**	MT41 (^{3}He,2n+p) >>

Se76 (^{3}He,n+p) or Br77 production log-log



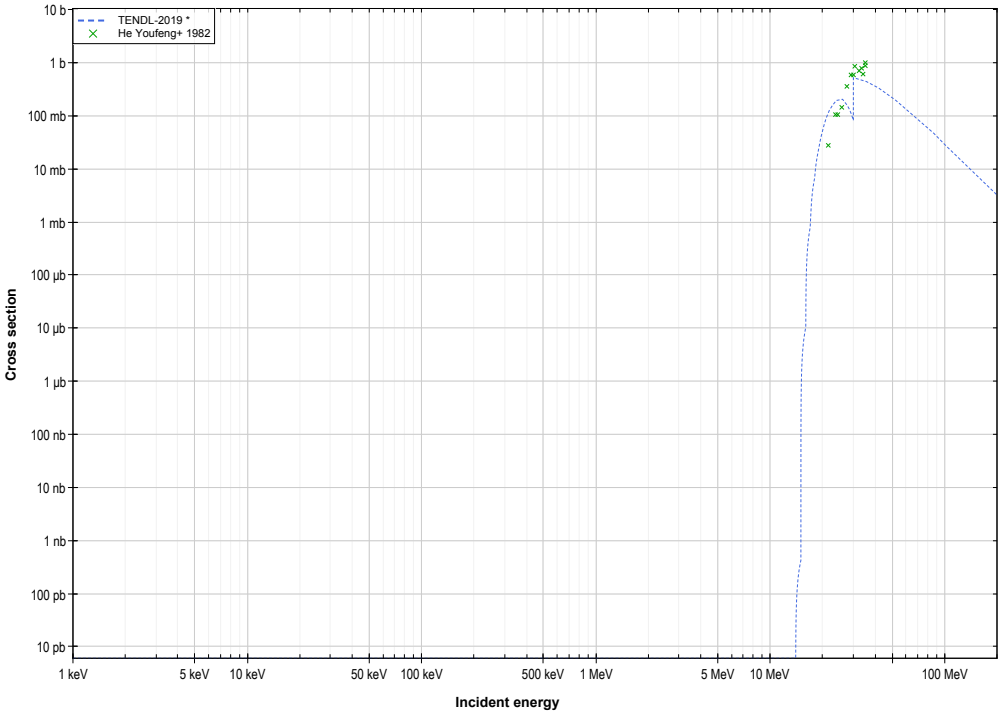
Se76 (^{3}He,n+p) or Br77 production lin-log



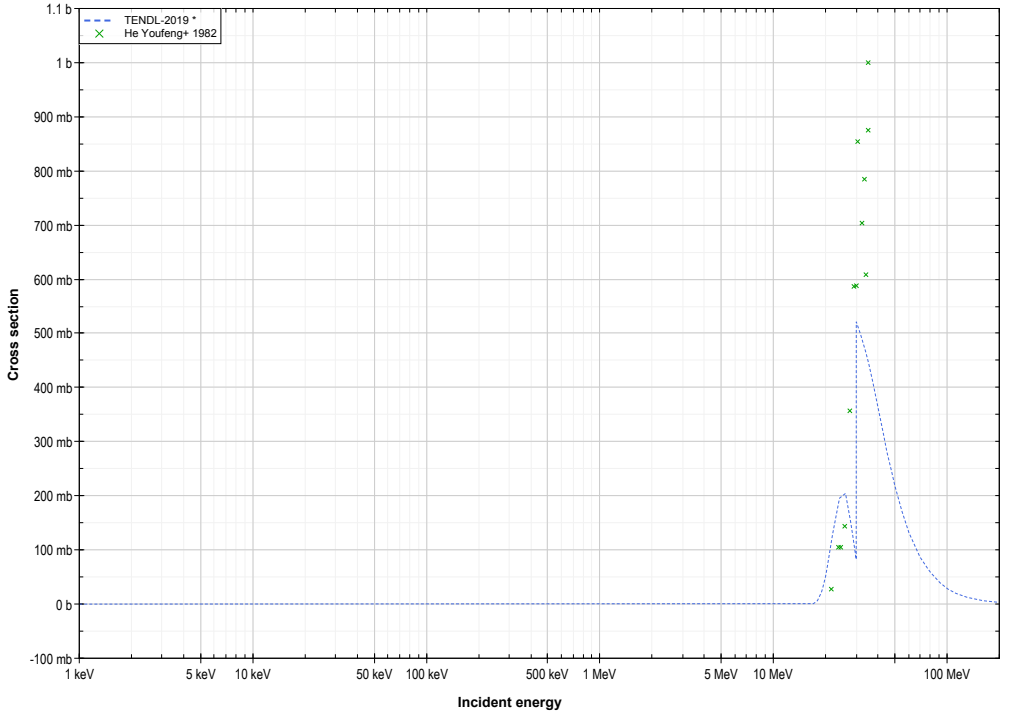
Reaction	Q-Value
Se76(He3,d)Br77	-221.65 keV
Se76(He3,n+p)Br77	-2446.22 keV

<< 30-Zn-68	**34-Se-76**	34-Se-77 >>
<< MT28 (^{3}He,n+p)	**MT41 (^{3}He,2n+p) or MT5 (Br76 production)**	MT42 (^{3}He,3n+p) >>

Se76 (^{3}He,2n+p) or Br76 production log-log



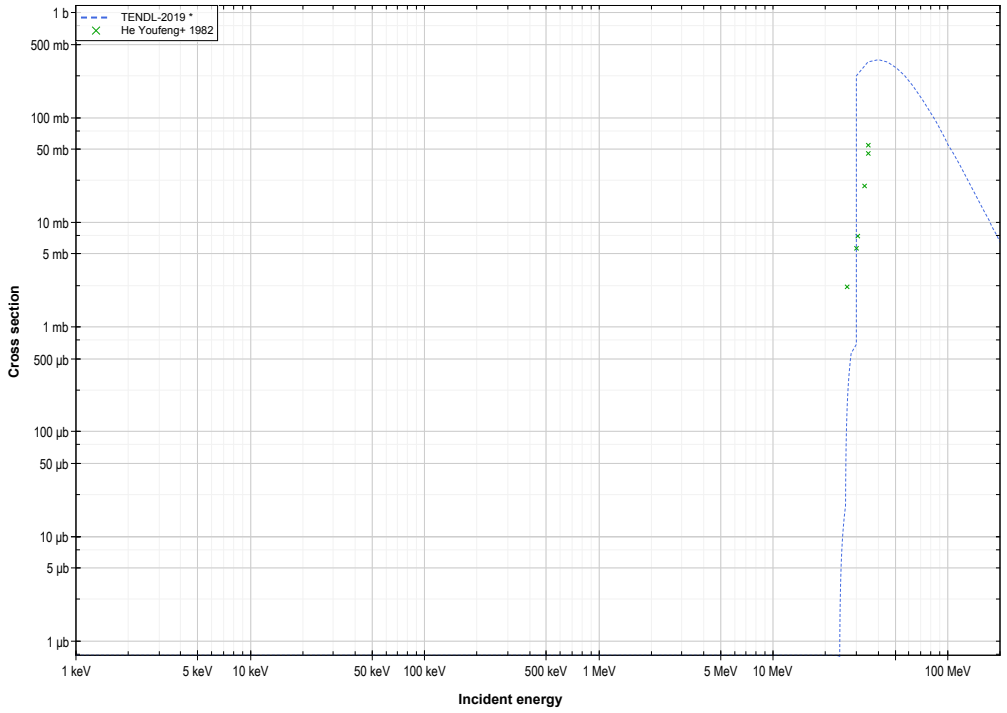
Se76 (^{3}He,2n+p) or Br76 production lin-log



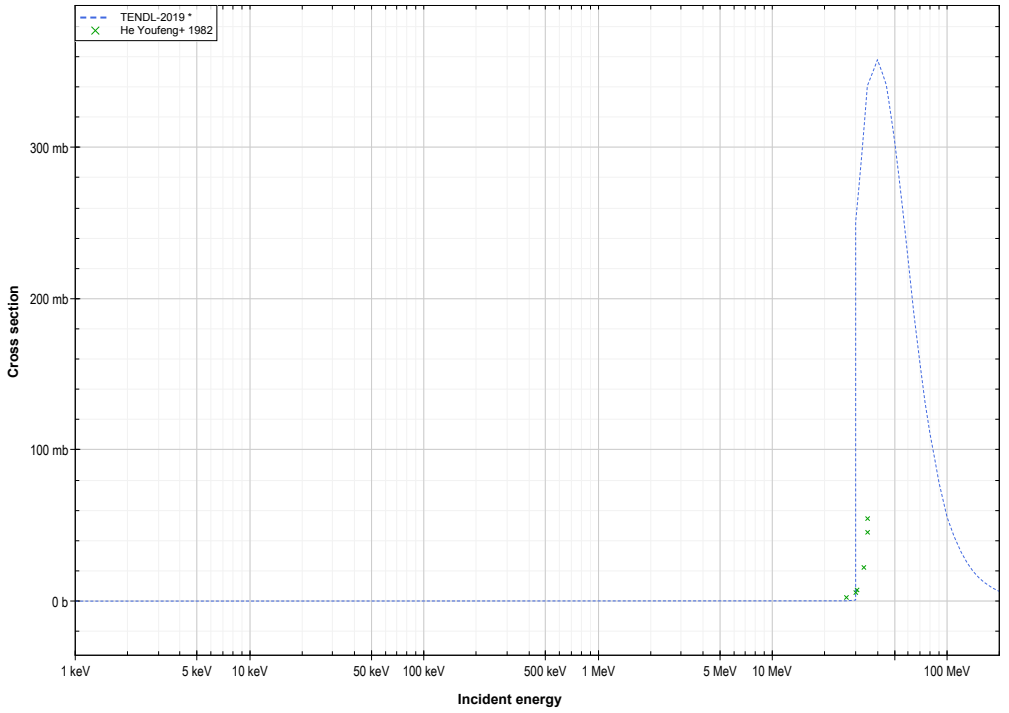
Reaction	Q-Value
Se76(He3,t)Br76	-4981.54 keV
Se76(He3,n+d)Br76	-11238.77 keV
Se76(He3,2n+p)Br76	-13463.34 keV

<< 29-Cu-63	**34-Se-76**	34-Se-77 >>
<< MT41 (³He,2n+p)	**MT42 (³He,3n+p) or MT5 (Br75 production)**	MT107 (³He,α) >>

Se76 (³He,3n+p) or Br75 production log-log



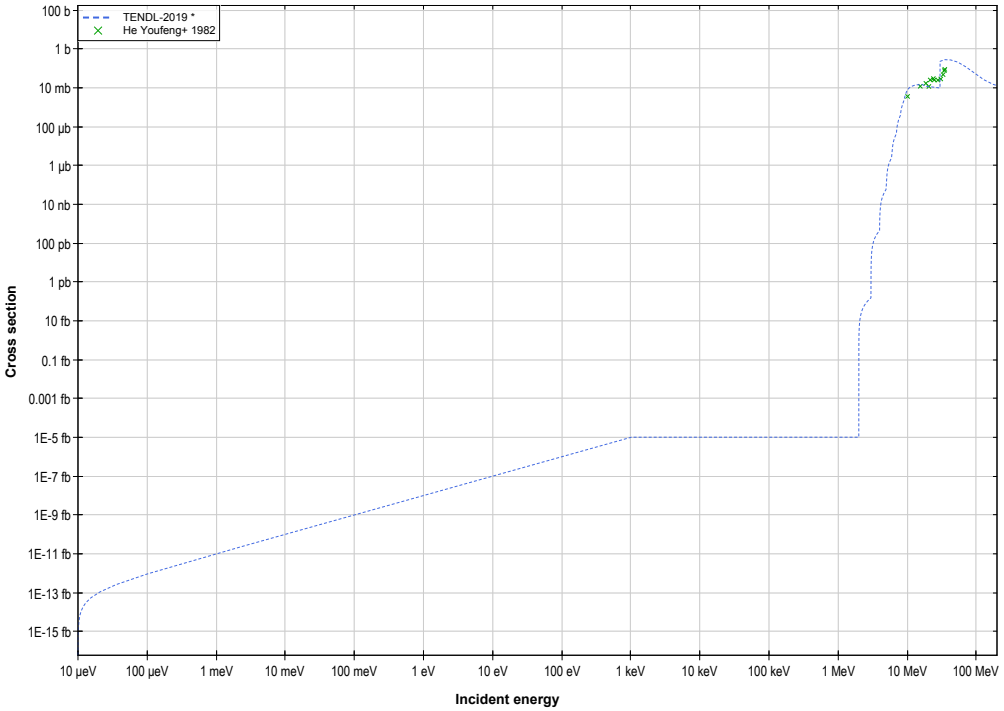
Se76 (³He,3n+p) or Br75 production lin-log



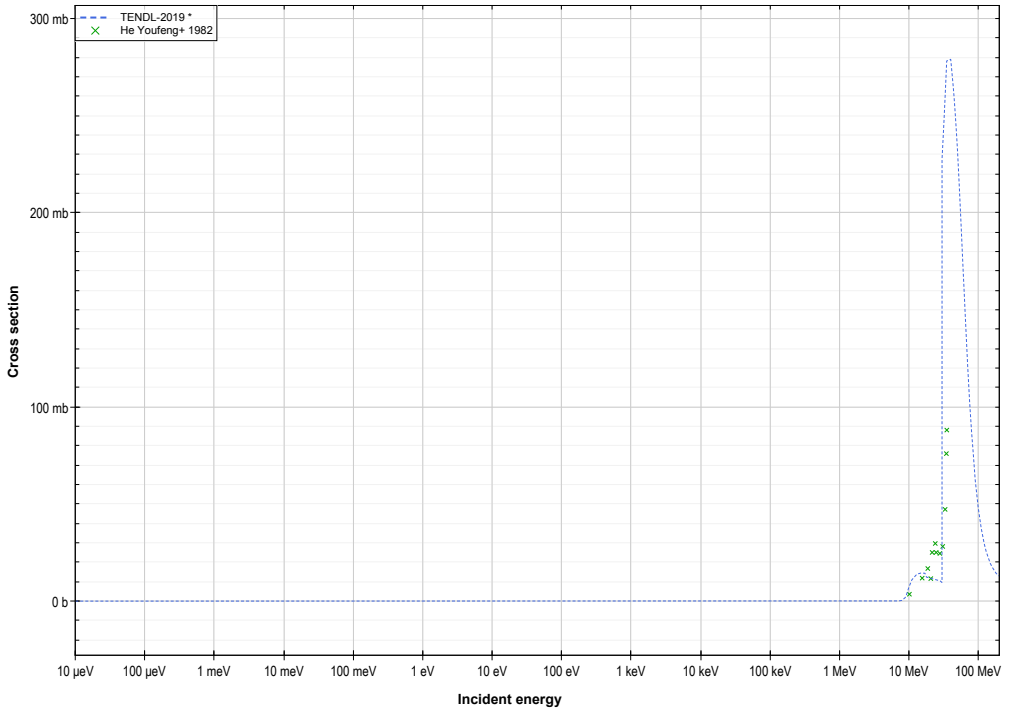
Reaction	Q-Value
Se76(He3,n+t)Br75	-14234.86 keV
Se76(He3,2n+d)Br75	-20492.09 keV
Se76(He3,3n+p)Br75	-22716.65 keV

<< 31-Ga-69	**34-Se-76**	45-Rh-103 >>
<< MT42 (³He,3n+p)	**MT107 (³He,α) or MT5 (Se75 production)**	34-Se-77 MT4 (³He,n) >>

Se76 (³He,α) or Se75 production log-log



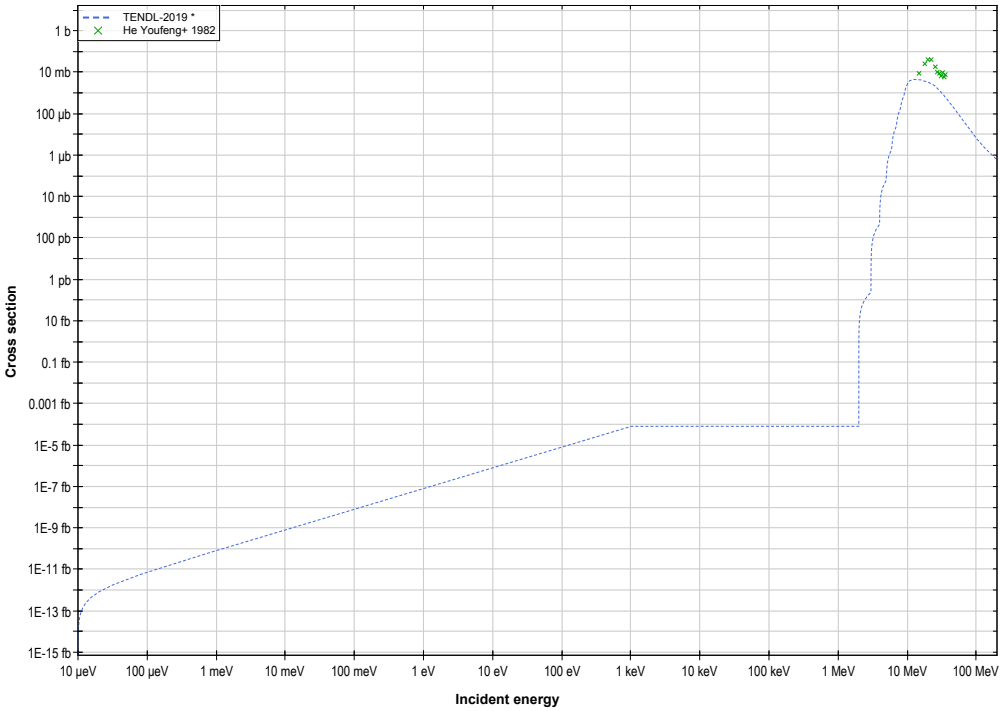
Se76 (³He,α) or Se75 production lin-log



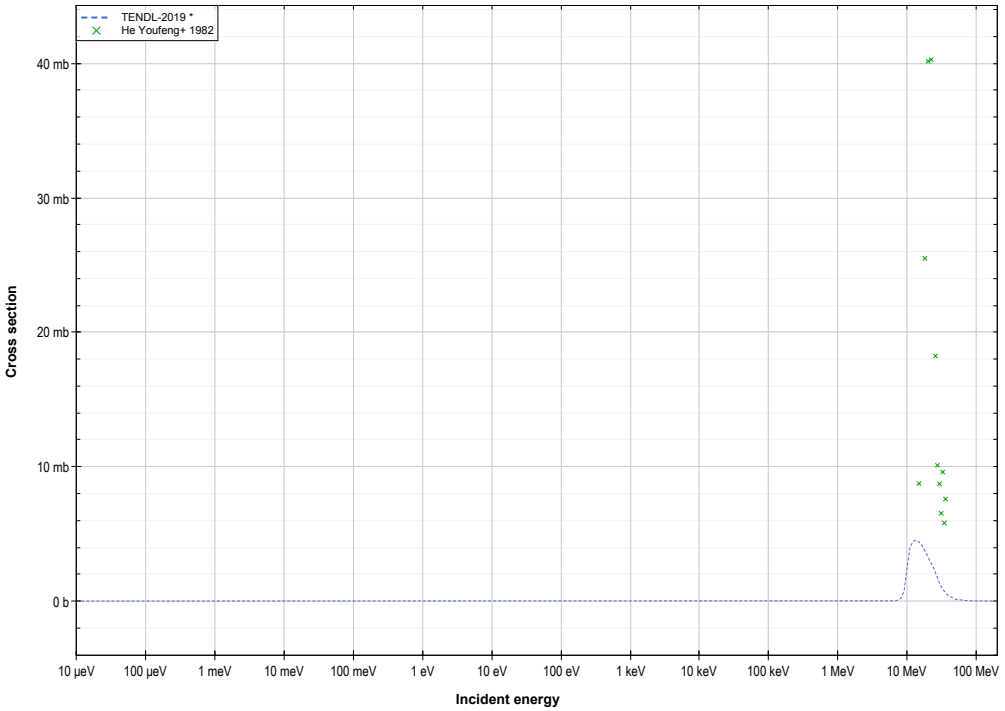
Reaction	Q-Value
Se76(He3,α)Se75	9423.83 keV
Se76(He3,p+t)Se75	-10390.03 keV
Se76(He3,n+He3)Se75	-11153.79 keV
Se76(He3,2d)Se75	-14422.70 keV
Se76(He3,n+p+d)Se75	-16647.26 keV
Se76(He3,2n+2p)Se75	-18871.83 keV

<< 33-As-75	**34-Se-77**	41-Nb-93 >>
<< 34-Se-76 MT107 (³He,α)	**MT4 (³He,n) or MT5 (Kr79 production)**	MT17 (³He,3n) >>

Se77 (³He,n) or Kr79 production log-log



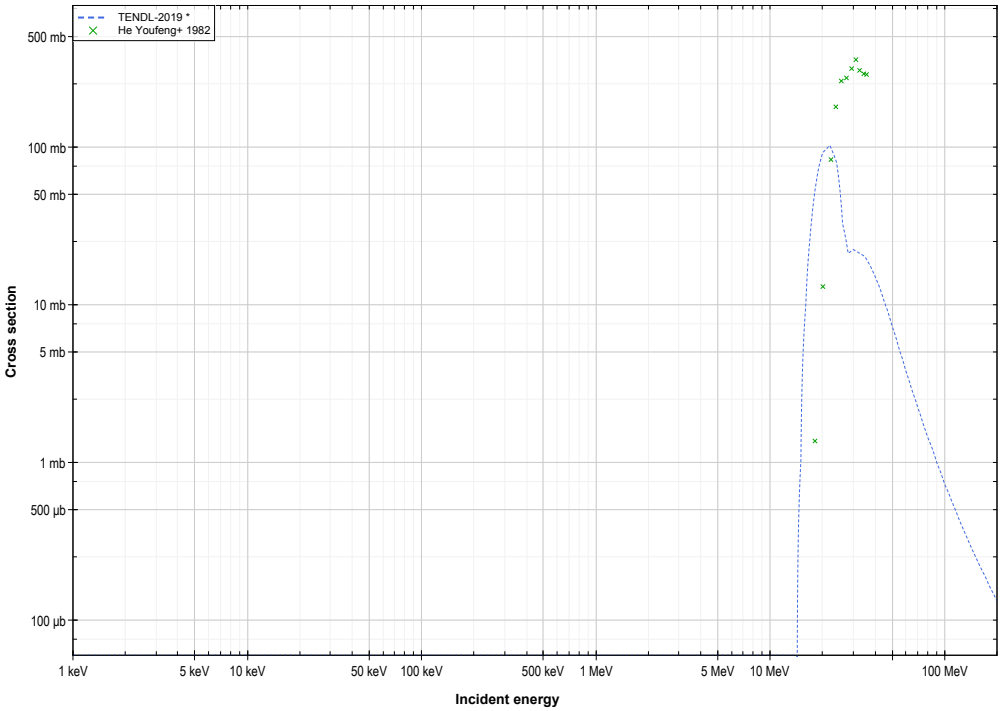
Se77 (³He,n) or Kr79 production lin-log



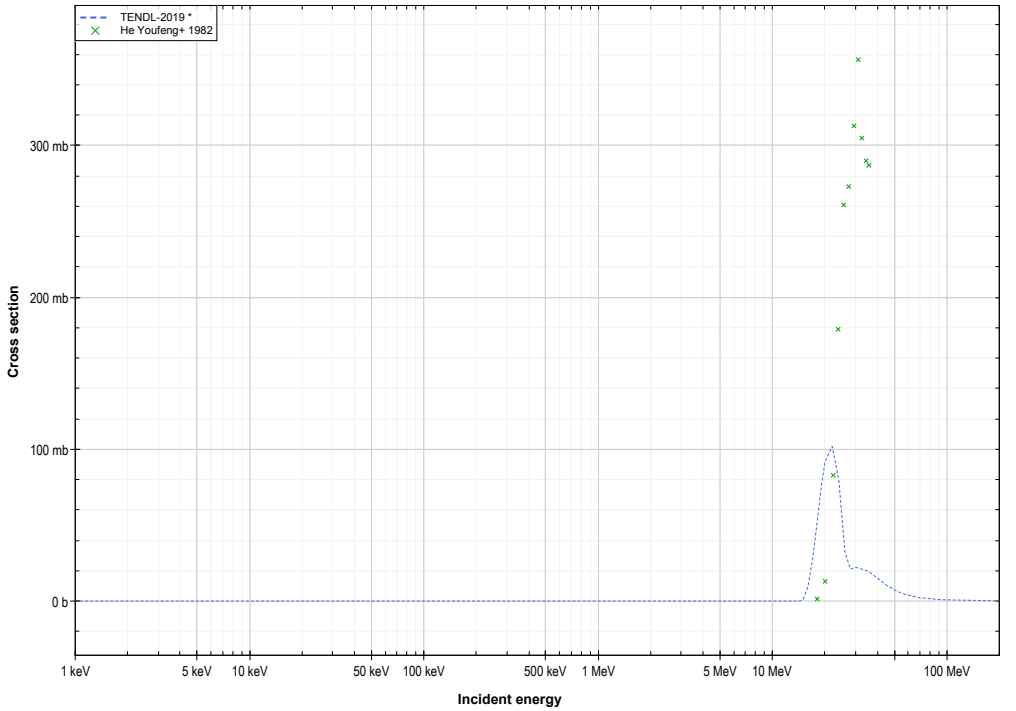
Reaction	Q-Value
Se77(He3,n)Kr79	6702.41 keV

<< 34-Se-76	**34-Se-77**	41-Nb-93 >>
<< MT4 (^{3}He,n)	**MT17 (^{3}He,3n) or MT5 (Kr77 production)**	MT22 (^{3}He,n+α) >>

Se77 (^{3}He,3n) or Kr77 production log-log



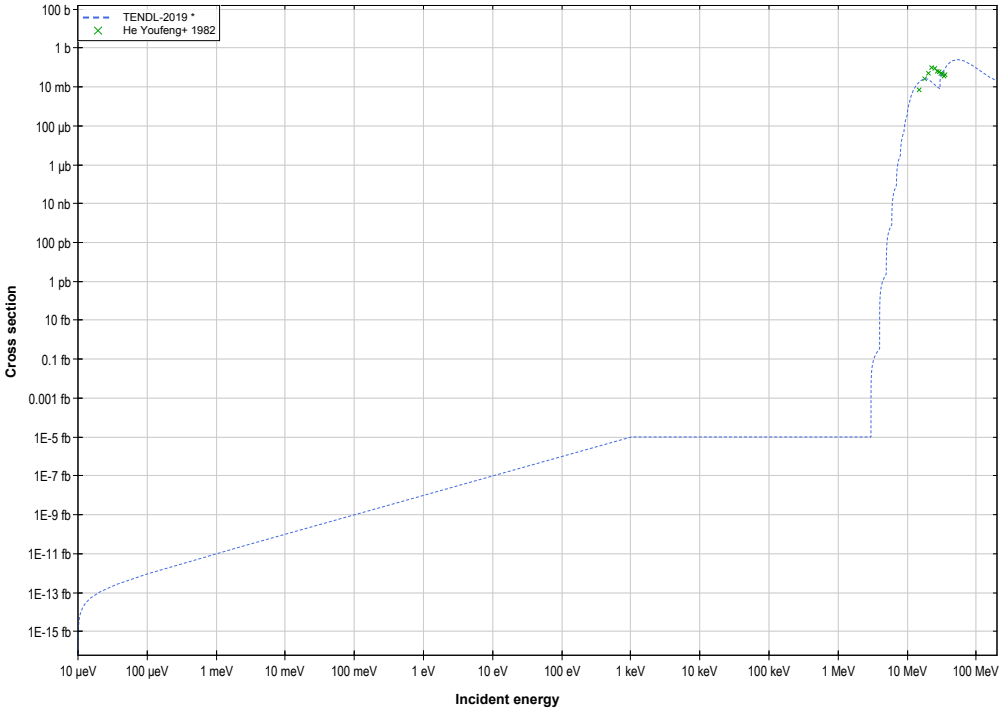
Se77 (^{3}He,3n) or Kr77 production lin-log



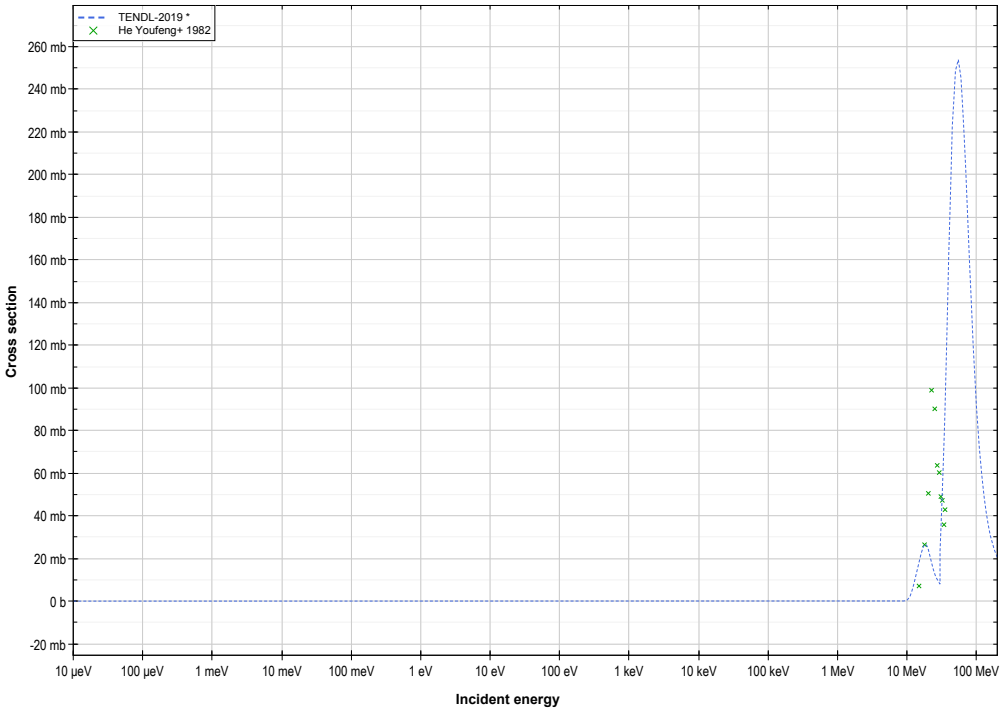
Reaction	Q-Value
Se77(He3,3n)Kr77	-13712.82 keV

<< 31-Ga-69	**34-Se-77**	47-Ag-107 >>
<< MT17 (³He,3n)	**MT22 (³He,n+α) or MT5 (Se75 production)**	MT28 (³He,n+p) >>

Se77 (³He,n+α) or Se75 production log-log



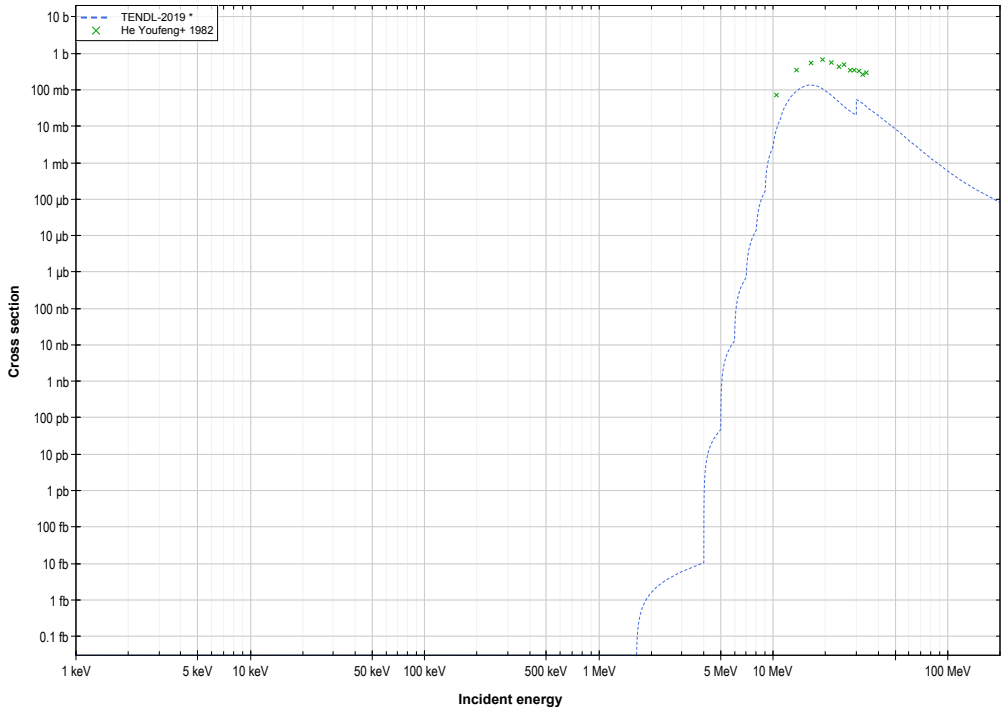
Se77 (³He,n+α) or Se75 production lin-log



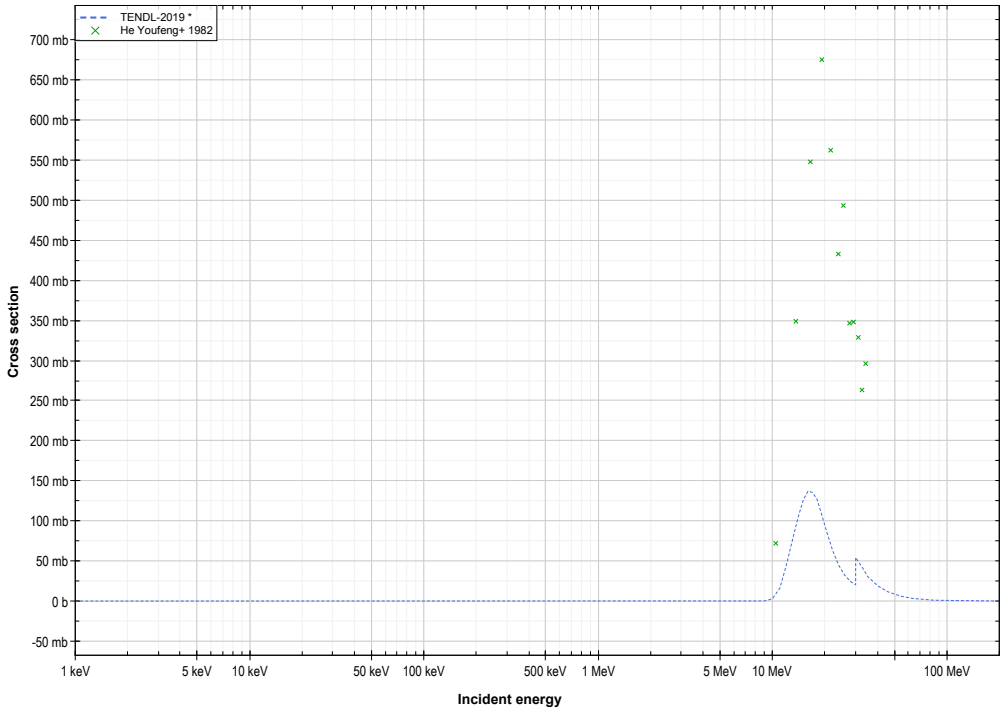
Reaction	Q-Value
Se77(He3,n+α)Se75	2004.98 keV
Se77(He3,d+t)Se75	-15584.32 keV
Se77(He3,n+p+t)Se75	-17808.89 keV
Se77(He3,2n+He3)Se75	-18572.64 keV
Se77(He3,n+2d)Se75	-21841.55 keV
Se77(He3,2n+p+d)Se75	-24066.12 keV
Se77(He3,3n+2p)Se75	-26290.68 keV

<< 34-Se-76	**34-Se-77**	44-Ru-101 >>
<< MT22 (^{3}He,n+α)	**MT28 (^{3}He,n+p) or MT5 (Br78 production)**	MT37 (^{3}He,4n) >>

Se77 (^{3}He,n+p) or Br78 production log-log



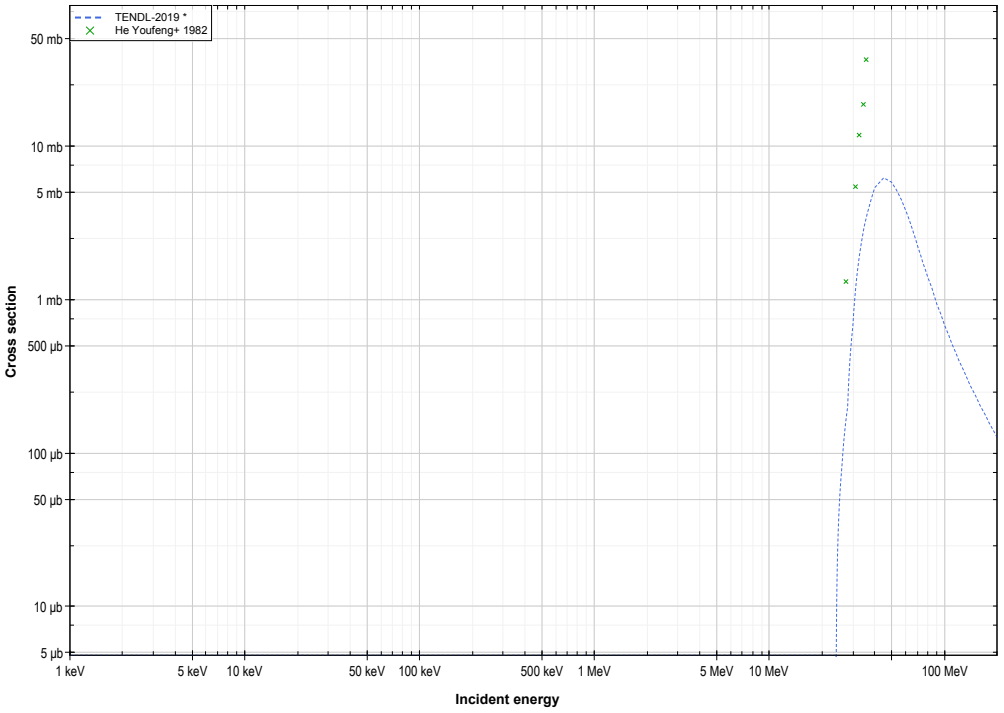
Se77 (^{3}He,n+p) or Br78 production lin-log



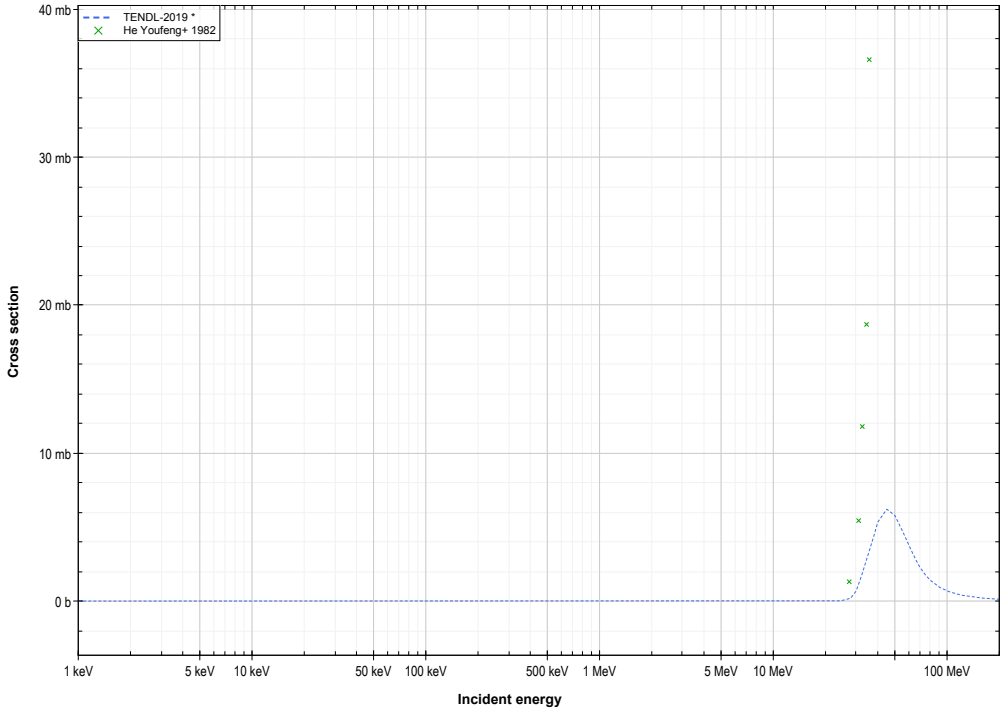
Reaction	Q-Value
Se77(He3,d)Br78	648.01 keV
Se77(He3,n+p)Br78	-1576.56 keV

<< 33-As-75	**34-Se-77**	41-Nb-93 >>
<< MT28 (^{3}He,n+p)	**MT37 (^{3}He,4n) or MT5 (Kr76 production)**	MT41 (^{3}He,2n+p) >>

Se77 (^{3}He,4n) or Kr76 production log-log



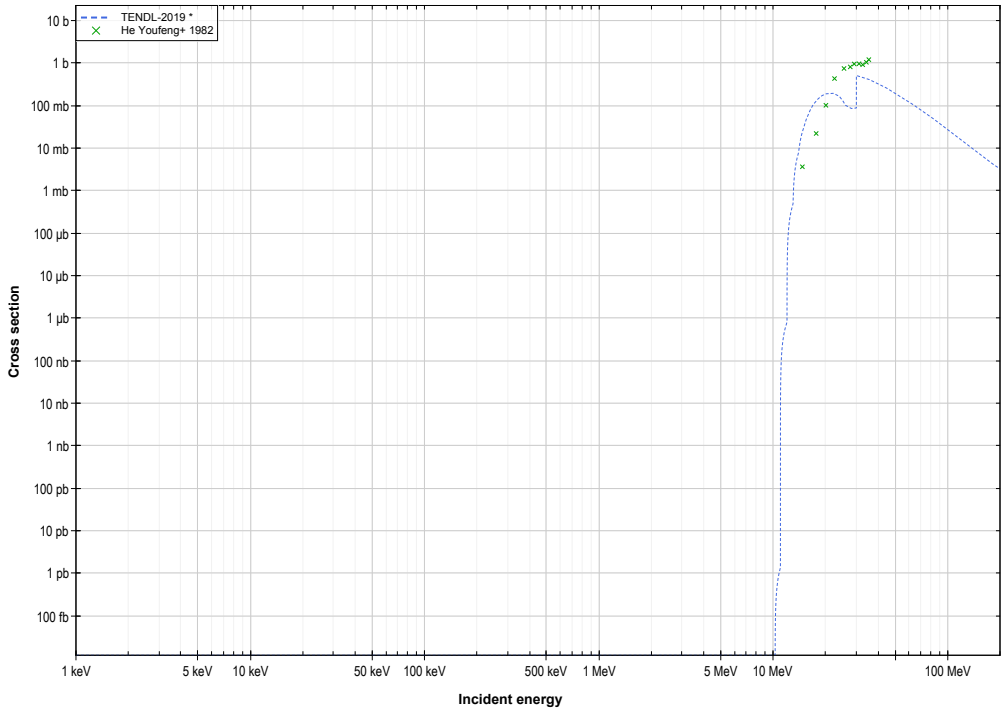
Se77 (^{3}He,4n) or Kr76 production lin-log



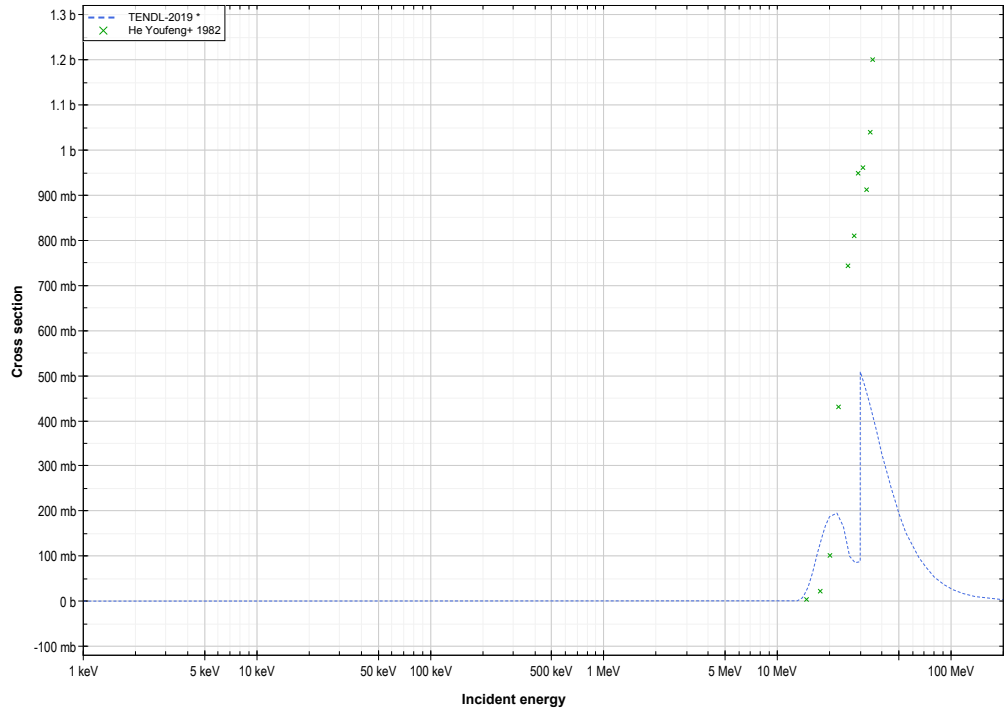
Reaction	Q-Value
Se77(He3,4n)Kr76	-22939.54 keV

<< 34-Se-76	**34-Se-77**	44-Ru-102 >>
<< MT37 (^{3}He,4n)	**MT41 (^{3}He,2n+p) or MT5 (Br77 production)**	MT42 (^{3}He,3n+p) >>

Se77 (^{3}He,2n+p) or Br77 production log-log



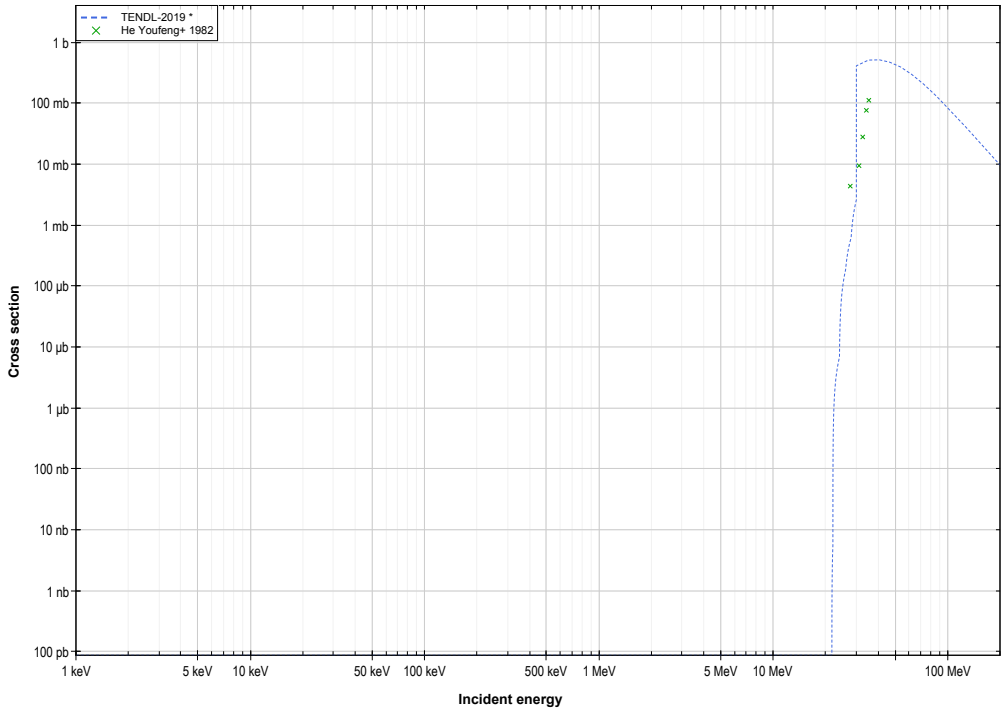
Se77 (^{3}He,2n+p) or Br77 production lin-log



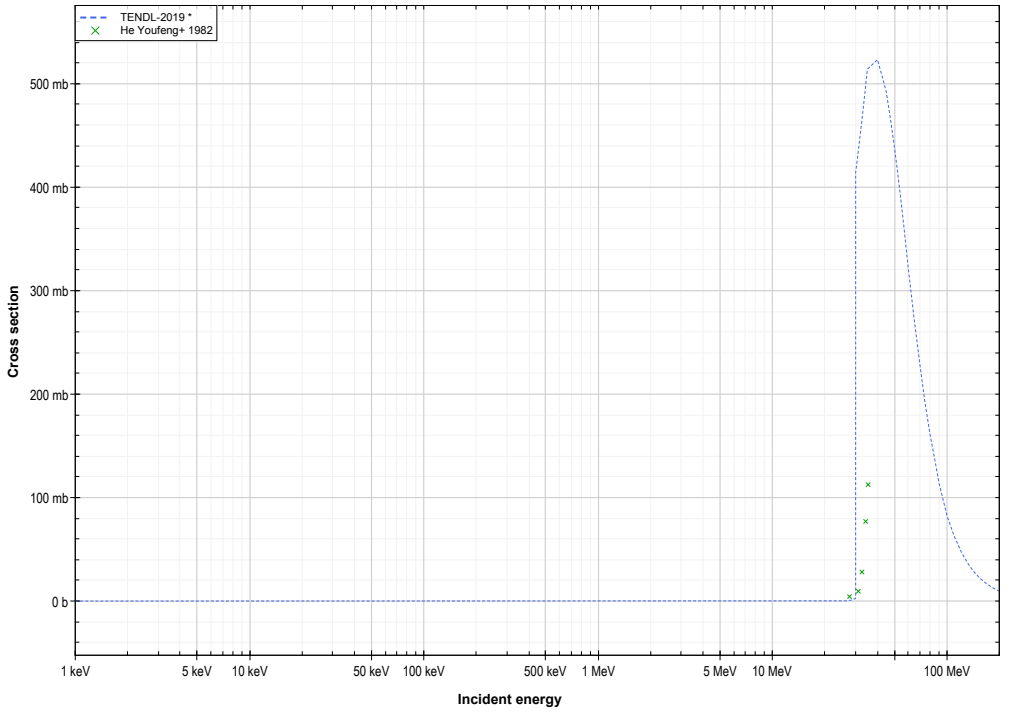
Reaction	Q-Value
Se77(He3,t)Br77	-1383.28 keV
Se77(He3,n+d)Br77	-7640.51 keV
Se77(He3,2n+p)Br77	-9865.08 keV

<< 34-Se-76	**34-Se-77**	62-Sm-147 >>
<< MT41 (³He,2n+p)	**MT42 (³He,3n+p) or MT5 (Br76 production)**	35-Br-81 MT16 (³He,2n) >>

Se77 (³He,3n+p) or Br76 production log-log



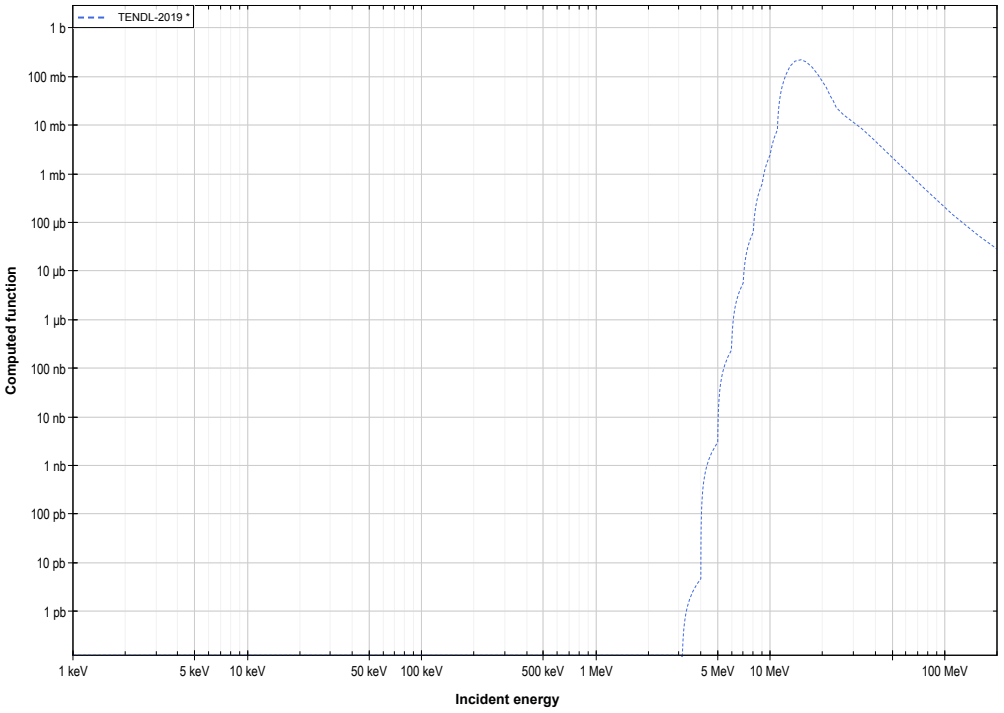
Se77 (³He,3n+p) or Br76 production lin-log



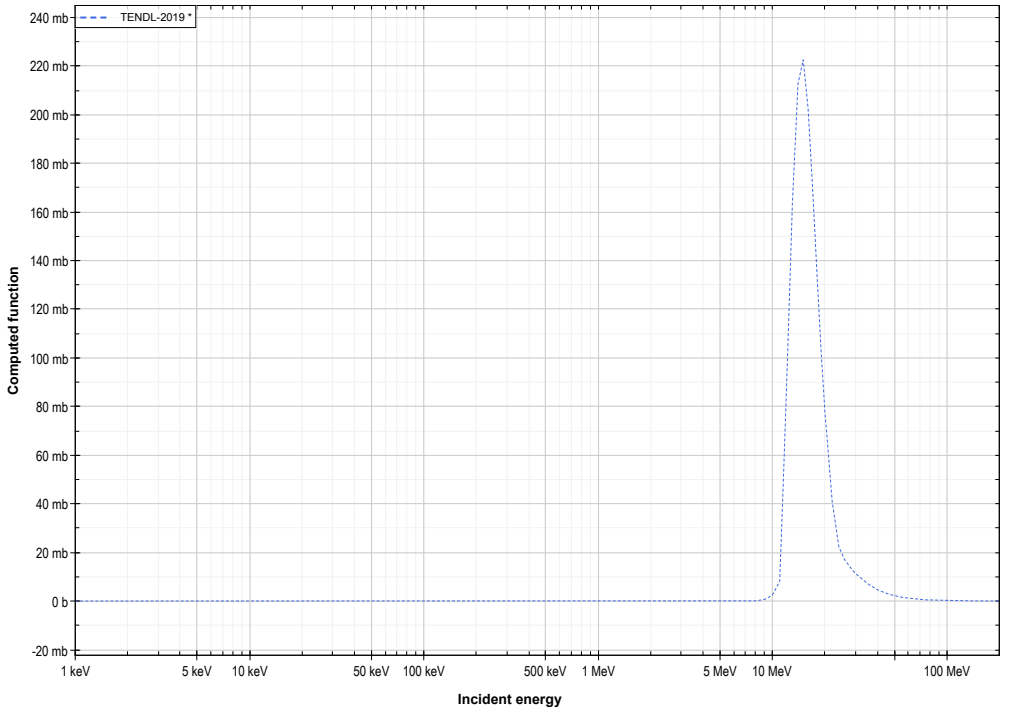
Reaction	Q-Value
Se77(He3,n+t)Br76	-12400.40 keV
Se77(He3,2n+d)Br76	-18657.63 keV
Se77(He3,3n+p)Br76	-20882.19 keV

<< 34-Se-76	**35-Br-81**	41-Nb-93 >>
<< 34-Se-77 MT42 (^{3}He,3n+p)	**MT16 (^{3}He,2n) or MT5 (Rb82 production)**	38-Sr-88 MT103 (^{3}He,p) >>

Br81 (^{3}He,2n) or Rb82 production log-log



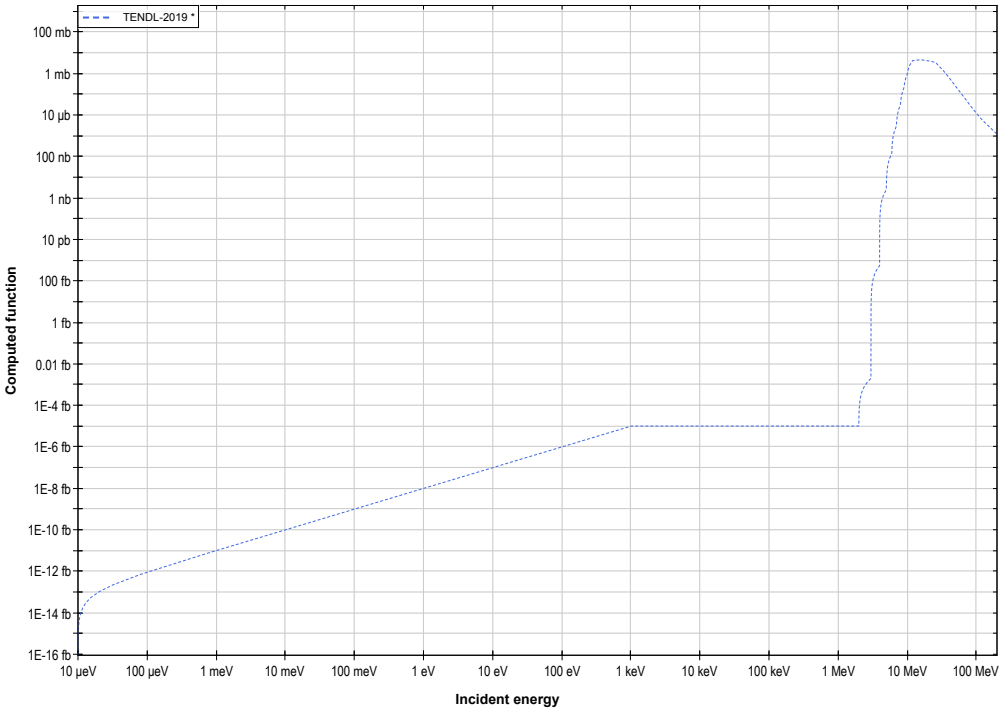
Br81 (^{3}He,2n) or Rb82 production lin-log



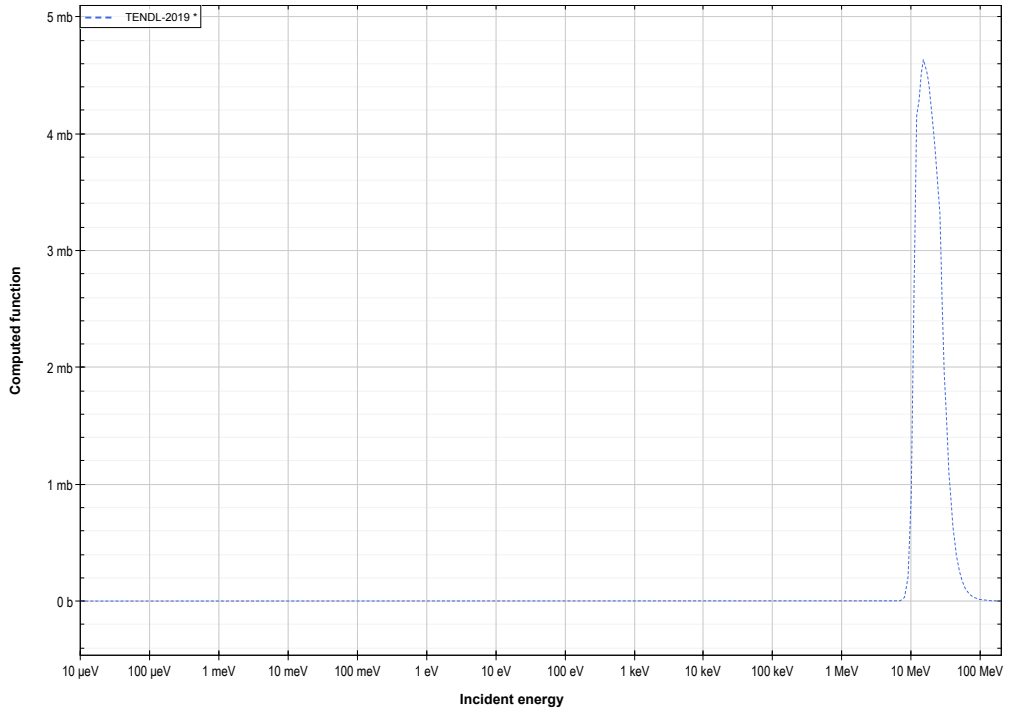
Reaction	Q-Value
Br81(He3,2n)Rb82	-3000.42 keV

<< 30-Zn-64	**38-Sr-88**	74-W-186 >>
<< 35-Br-81 MT16 (^{3}He,2n)	**MT103 (^{3}He,p) or MT5 (Y90 production)**	41-Nb-93 MT4 (^{3}He,n) >>

Sr88 (^{3}He,p) or Y90 production log-log



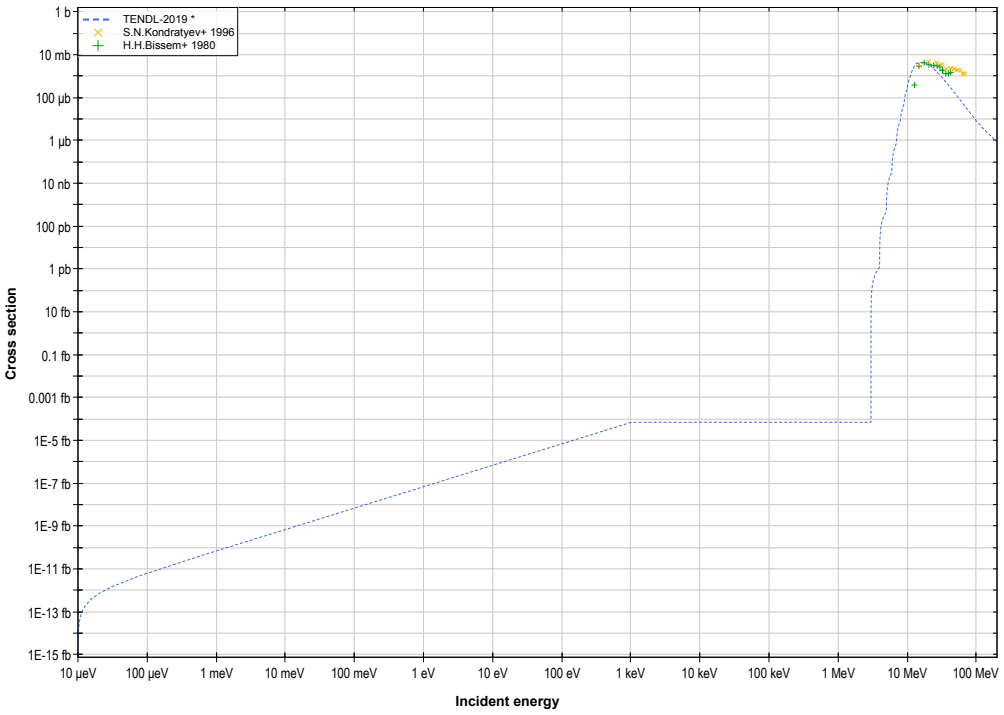
Sr88 (^{3}He,p) or Y90 production lin-log



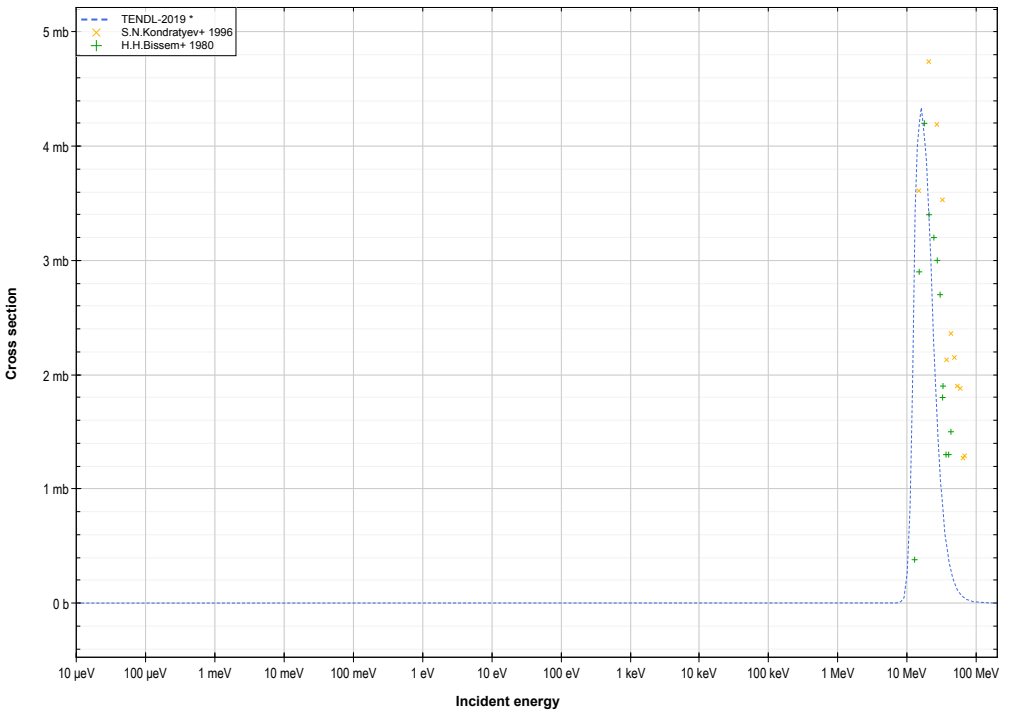
Reaction	Q-Value
Sr88(He3,p)Y90	6214.73 keV

<< 34-Se-77	**41-Nb-93**	44-Ru-101 >>
<< 38-Sr-88 MT103 (^{3}He,p)	**MT4 (^{3}He,n) or MT5 (Tc95 production)**	MT16 (^{3}He,2n) >>

Nb93 (^{3}He,n) or Tc95 production log-log



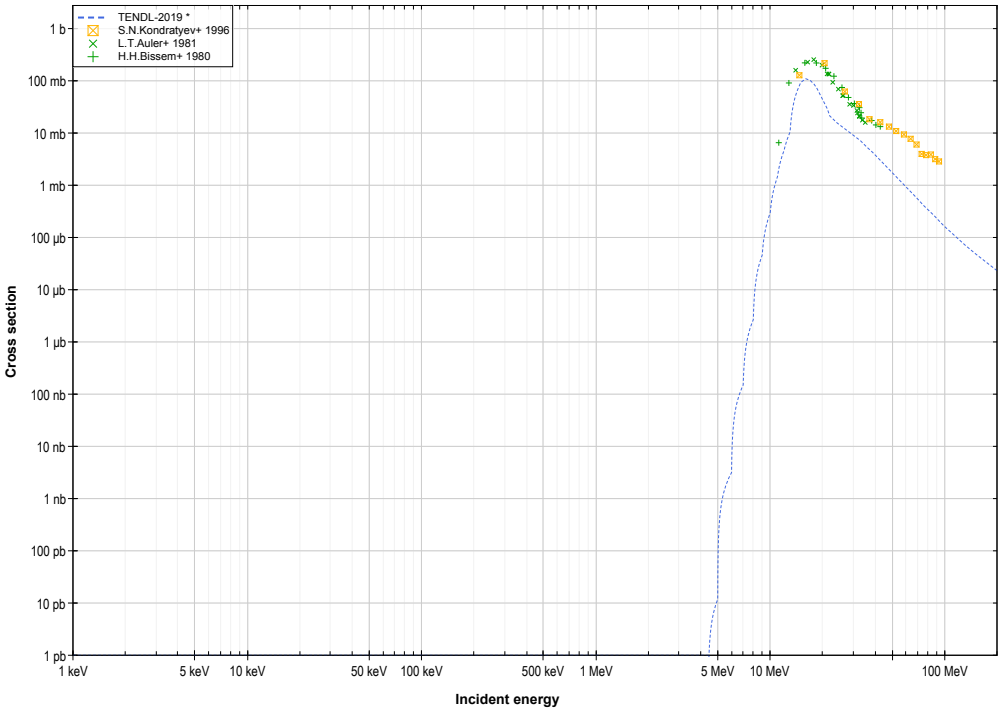
Nb93 (^{3}He,n) or Tc95 production lin-log



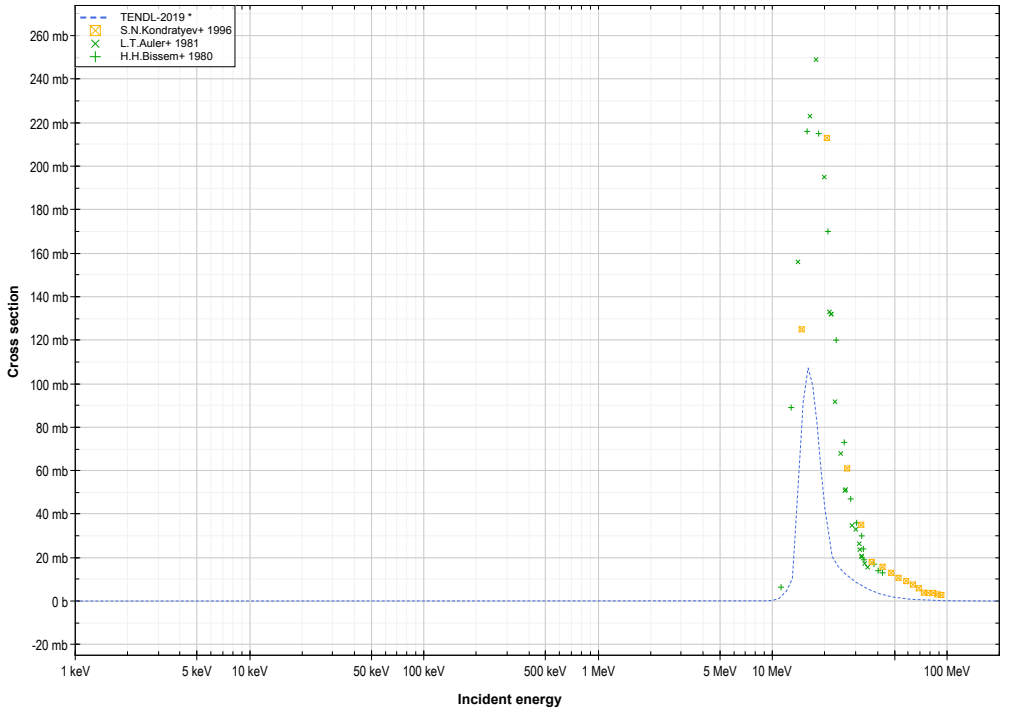
Reaction	Q-Value
Nb93(He3,n)Tc95	5668.10 keV

<< 35-Br-81	**41-Nb-93**	44-Ru-102 >>
<< MT4 (^{3}He,n)	**MT16 (^{3}He,2n) or MT5 (Tc94 production)**	MT17 (^{3}He,3n) >>

Nb93 (^{3}He,2n) or Tc94 production log-log



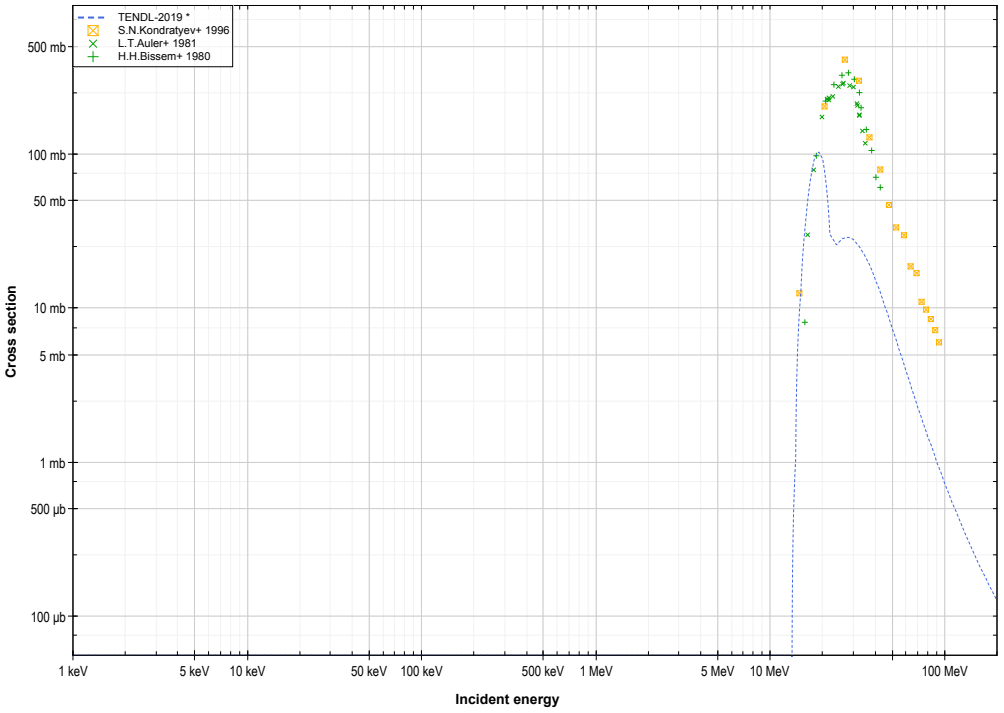
Nb93 (^{3}He,2n) or Tc94 production lin-log



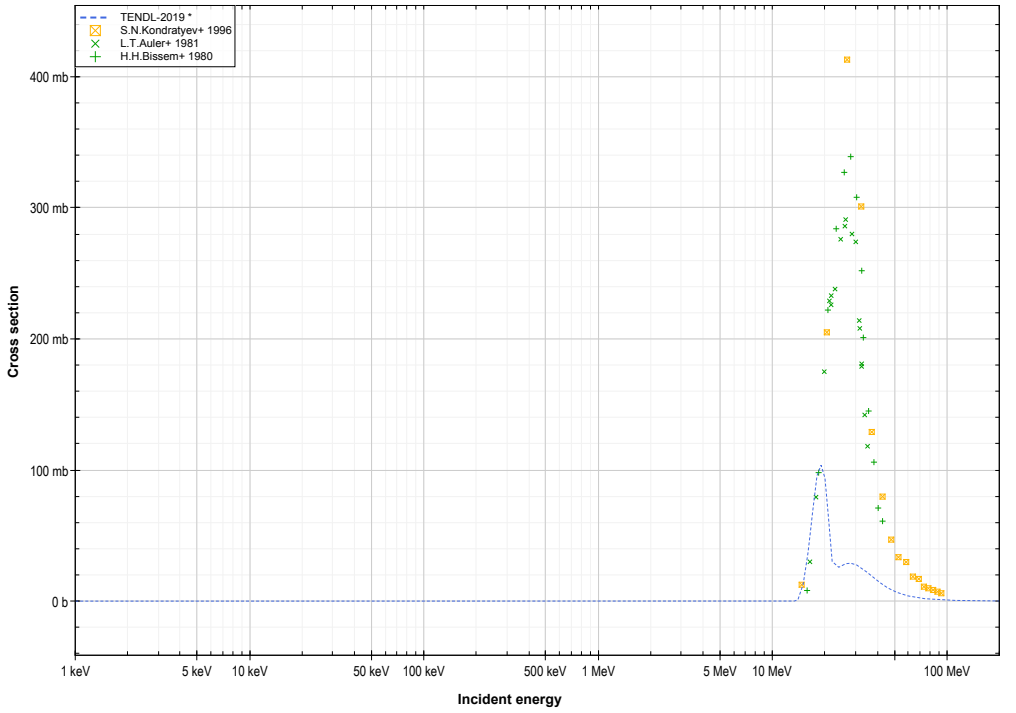
Reaction	Q-Value
Nb93(He3,2n)Tc94	-4266.22 keV

<< 34-Se-77	**41-Nb-93**	44-Ru-101 >>
<< MT16 (^{3}He,2n)	**MT17 (^{3}He,3n) or MT5 (Tc93 production)**	MT37 (^{3}He,4n) >>

Nb93 (^{3}He,3n) or Tc93 production log-log



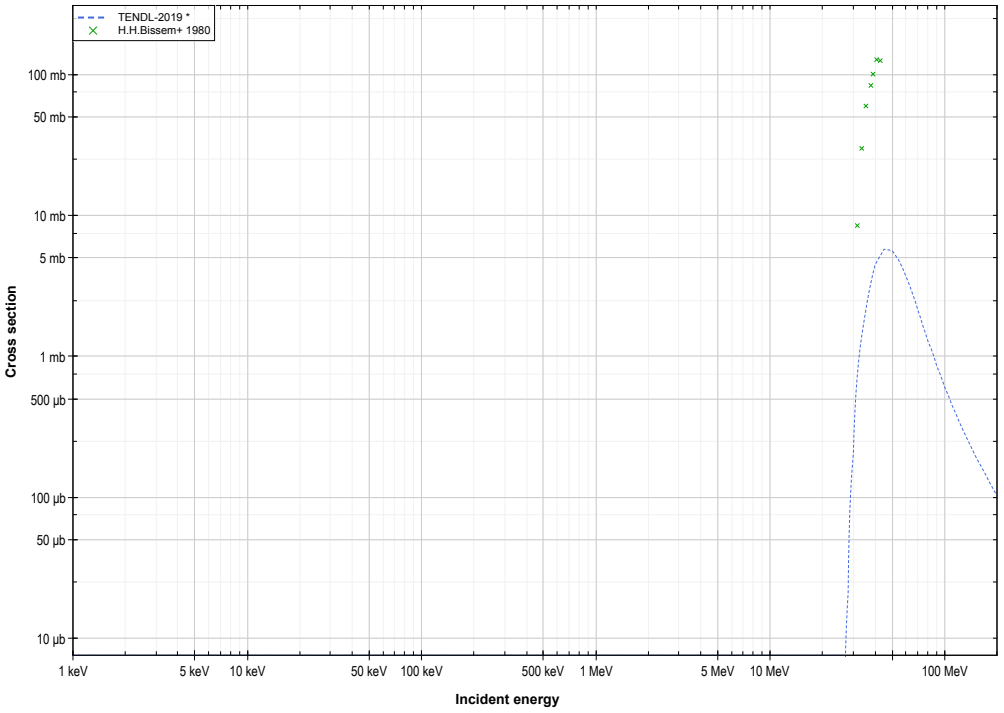
Nb93 (^{3}He,3n) or Tc93 production lin-log



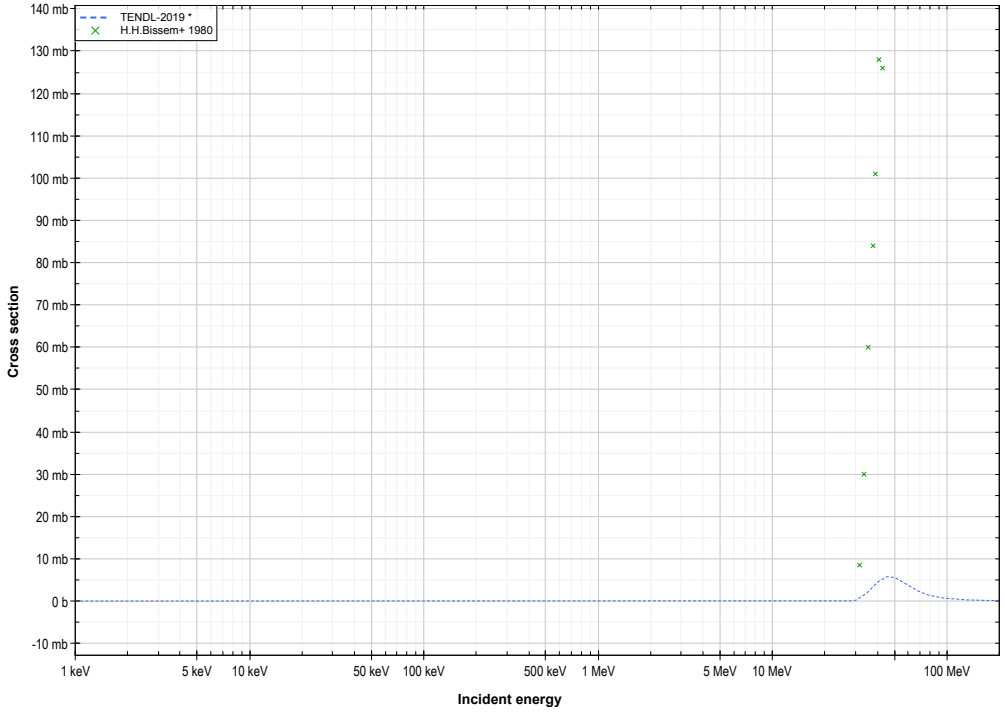
Reaction	Q-Value
Nb93(He3,3n)Tc93	-12889.43 keV

<< 34-Se-77	**41-Nb-93**	44-Ru-101 >>
<< MT17 (^{3}He,3n)	**MT37 (^{3}He,4n) or MT5 (Tc92 production)**	MT102 (^{3}He,γ) >>

Nb93 (^{3}He,4n) or Tc92 production log-log



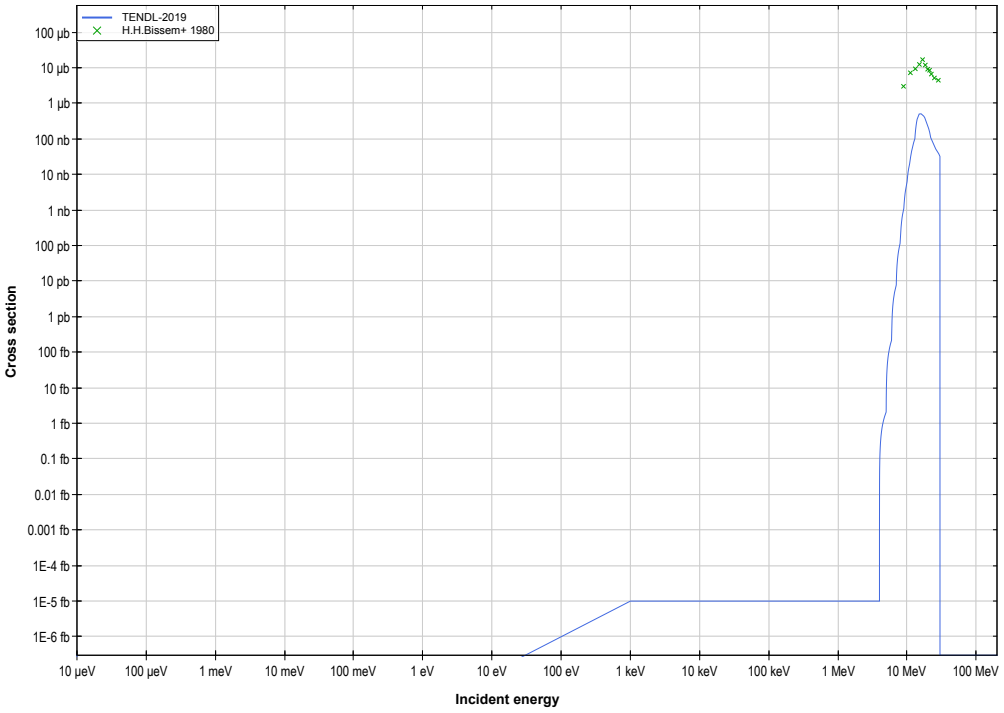
Nb93 (^{3}He,4n) or Tc92 production lin-log



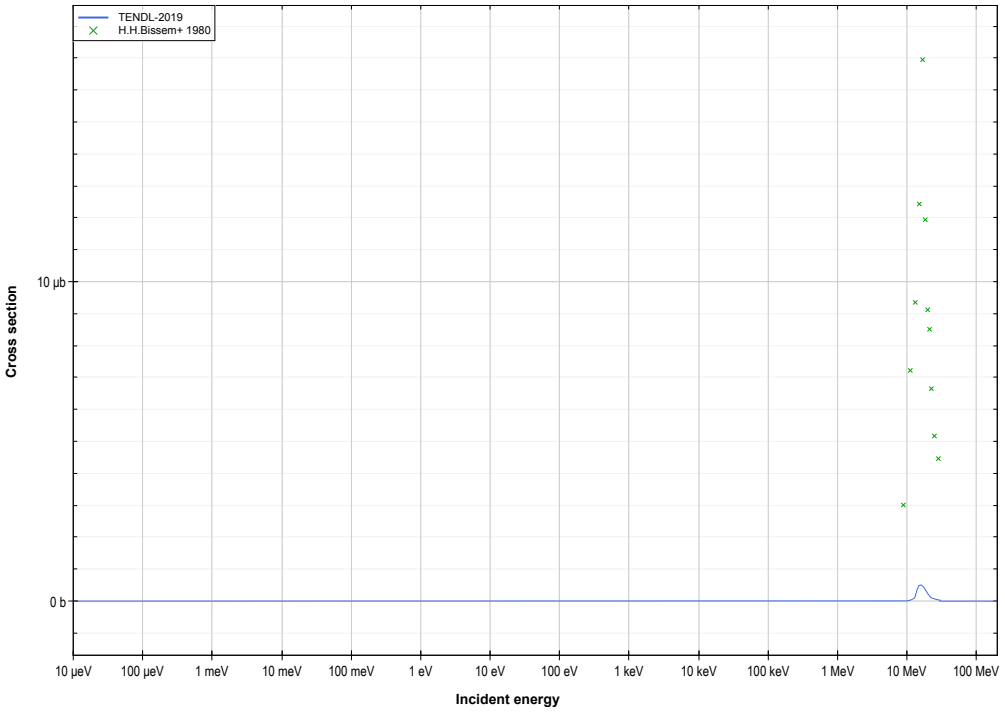
Reaction	Q-Value
Nb93(He3,4n)Tc92	-25640.85 keV

<< 31-Ga-71	**41-Nb-93**	
<< MT37 (³He,4n)	**MT102 (³He,γ) or MT5 (Tc96 production)**	MT109 (³He,3α) >>

Nb93 (³He,γ) or Tc96 production log-log



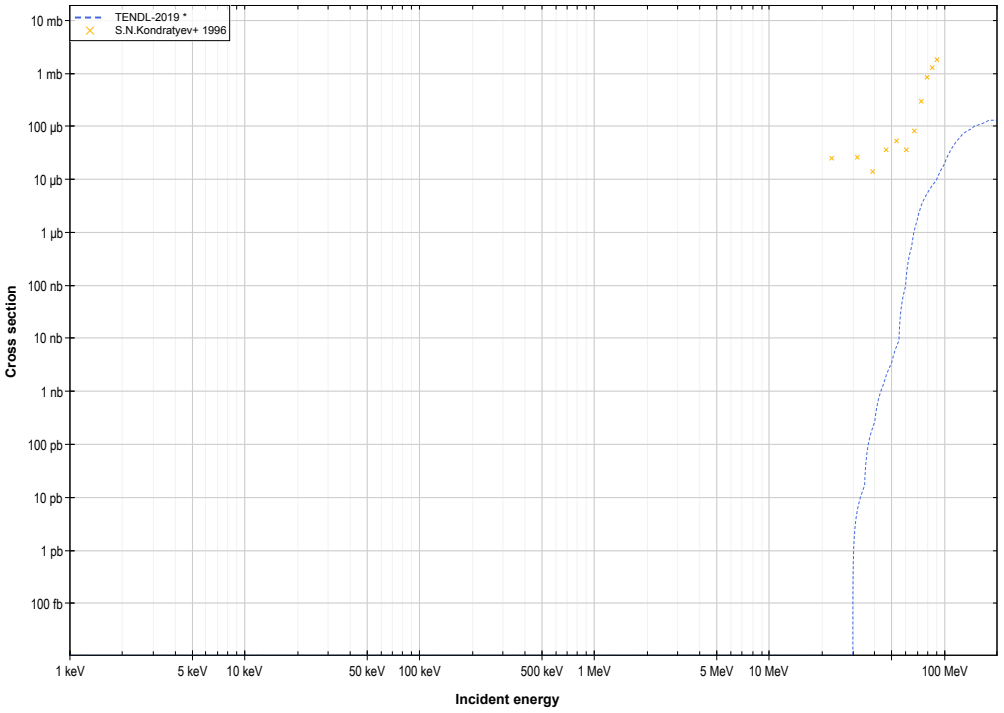
Nb93 (³He,γ) or Tc96 production lin-log



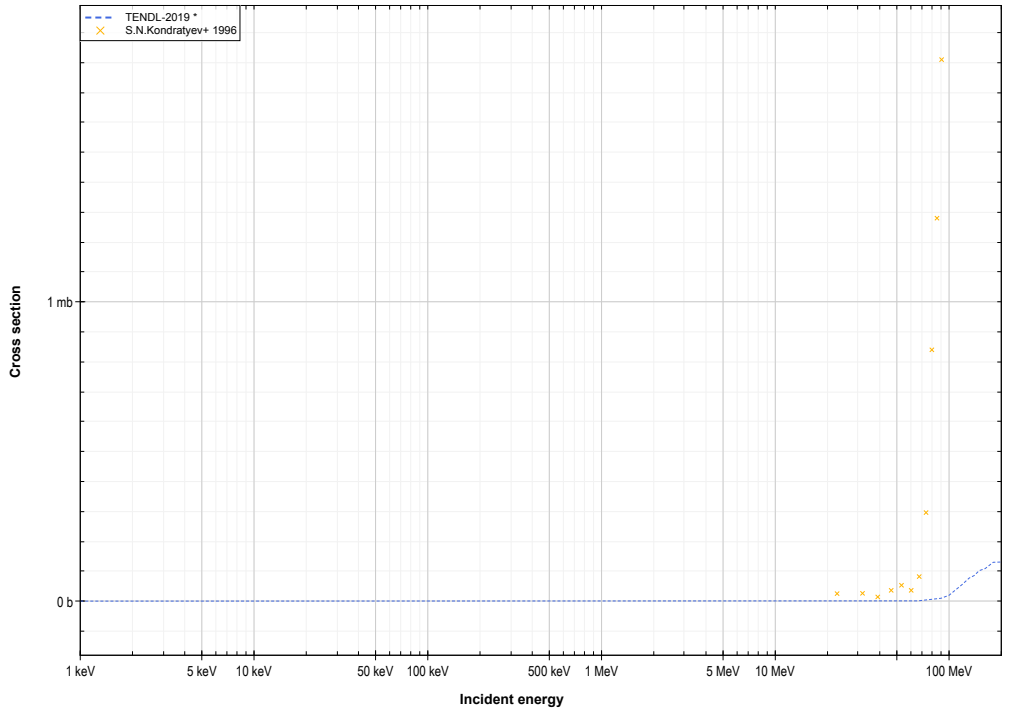
Reaction	Q-Value
Nb93(He3,γ)Tc96	13540.42 keV

<< 8-O-16	**41-Nb-93**	
<< MT102 (^{3}He,γ)	**MT109 (^{3}He,3α) or MT5 (Rb84 production)**	44-Ru-101 MT4 (^{3}He,n) >>

Nb93 (^{3}He,3α) or Rb84 production log-log



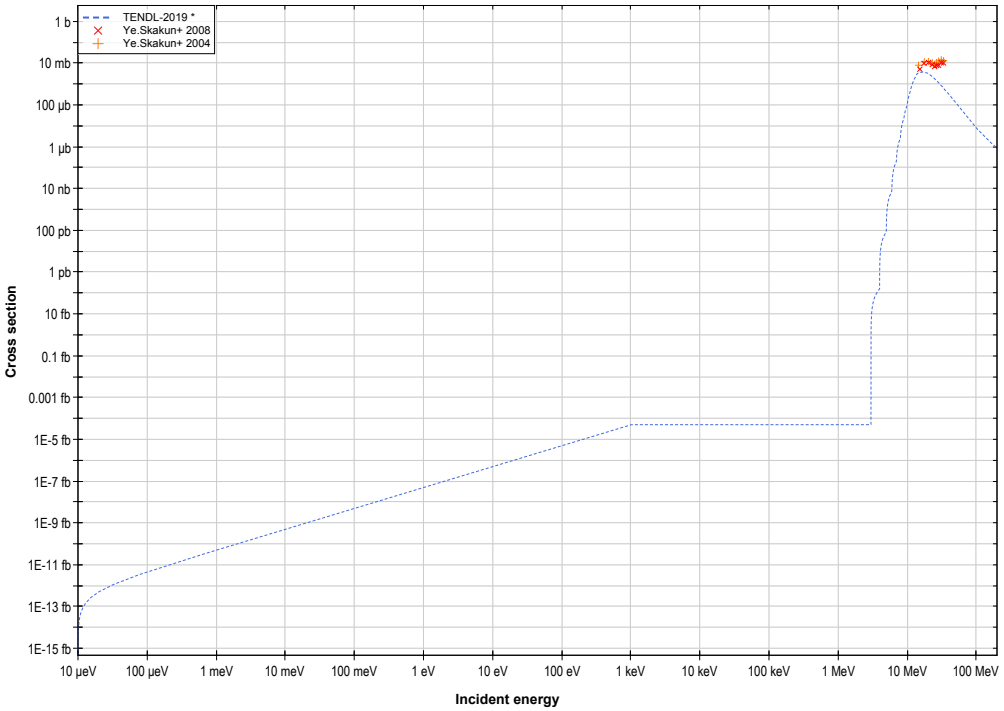
Nb93 (^{3}He,3α) or Rb84 production lin-log



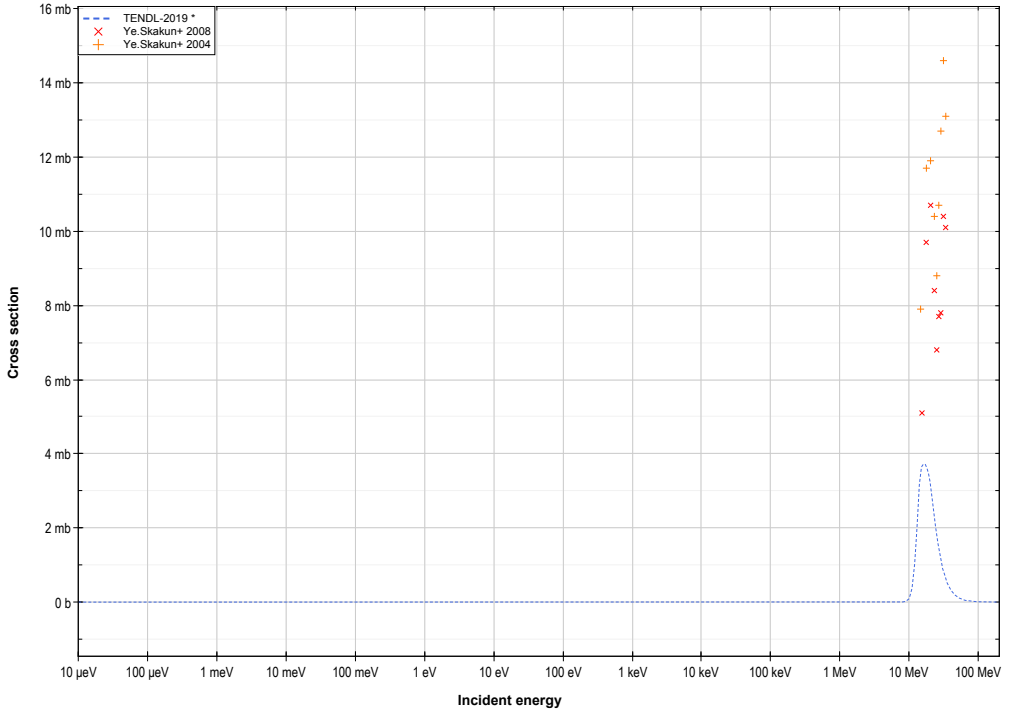
Reaction	Q-Value	Reaction	Q-Value
Nb93(He3,3α)Rb84	202.67 keV	Nb93(He3,n+p+t+He3+α)Rb84	-40188.81 keV
Nb93(He3,p+t+2α)Rb84	-19611.19 keV	Nb93(He3,2n+2He3+α)Rb84	-40952.57 keV
Nb93(He3,n+He3+2α)Rb84	-20374.95 keV	Nb93(He3,p+2d+t+α)Rb84	-43457.72 keV
Nb93(He3,2d+2α)Rb84	-23643.86 keV	Nb93(He3,n+2d+He3+α)Rb84	-44221.48 keV
Nb93(He3,n+p+d+2α)Rb84	-25868.42 keV	Nb93(He3,n+2p+d+t+α)Rb84	-45682.29 keV
Nb93(He3,2n+2p+2α)Rb84	-28092.99 keV	Nb93(He3,2n+p+d+He3+α)Rb84	-46446.04 keV
Nb93(He3,d+t+He3+α)Rb84	-37964.25 keV	Nb93(He3,4d+α)Rb84	-47490.38 keV
Nb93(He3,2p+2t+α)Rb84	-39425.06 keV	Nb93(He3,2n+3p+t+α)Rb84	-47906.85 keV

<< 41-Nb-93	**44-Ru-101**	45-Rh-103 >>
<< 41-Nb-93 MT109 (³He,3α)	**MT4 (³He,n) or MT5 (Pd103 production)**	MT17 (³He,3n) >>

Ru101 (³He,n) or Pd103 production log-log



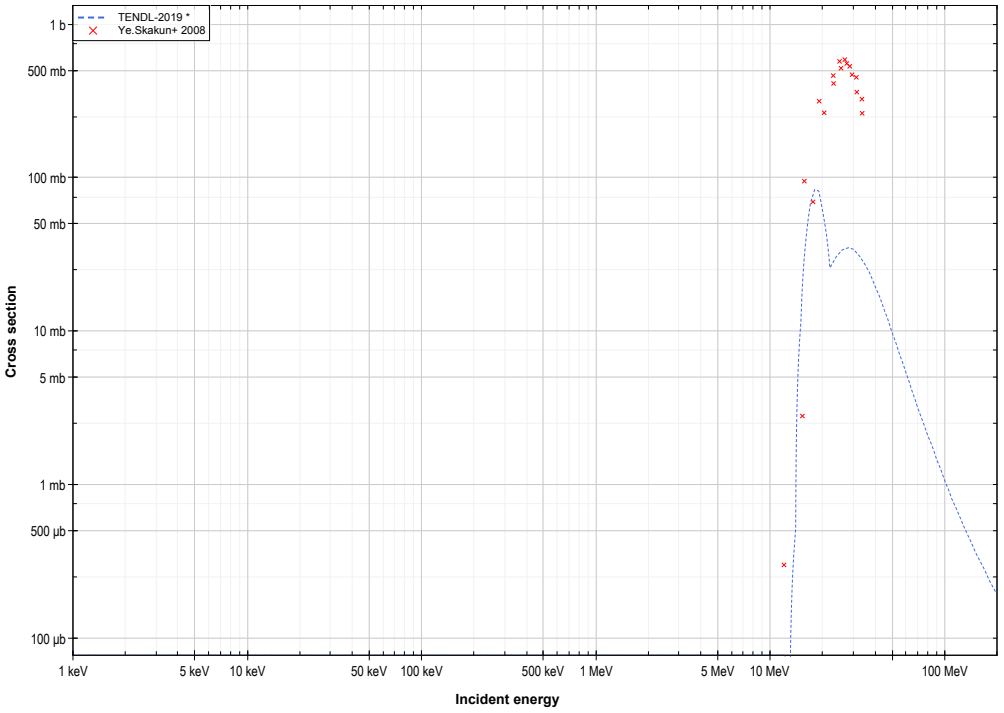
Ru101 (³He,n) or Pd103 production lin-log



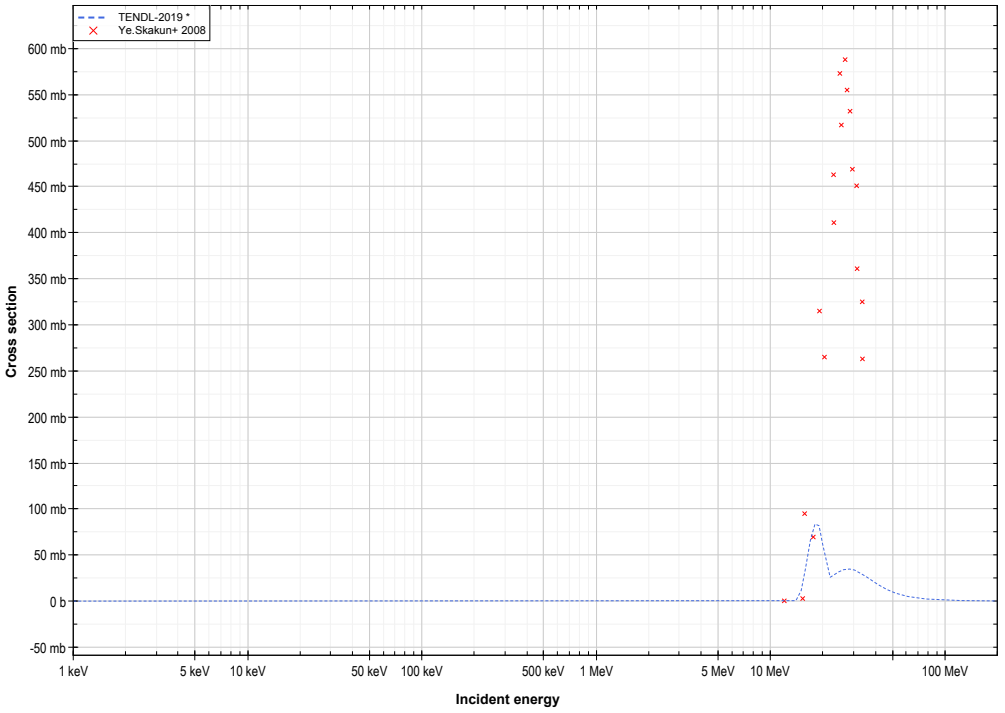
Reaction	Q-Value
Ru101(He3,n)Pd103	6359.00 keV

<< 41-Nb-93	**44-Ru-101**	45-Rh-103 >>
<< MT4 (^{3}He,n)	**MT17 (^{3}He,3n) or MT5 (Pd101 production)**	MT25 (^{3}He,3n+α) >>

Ru101 (^{3}He,3n) or Pd101 production log-log



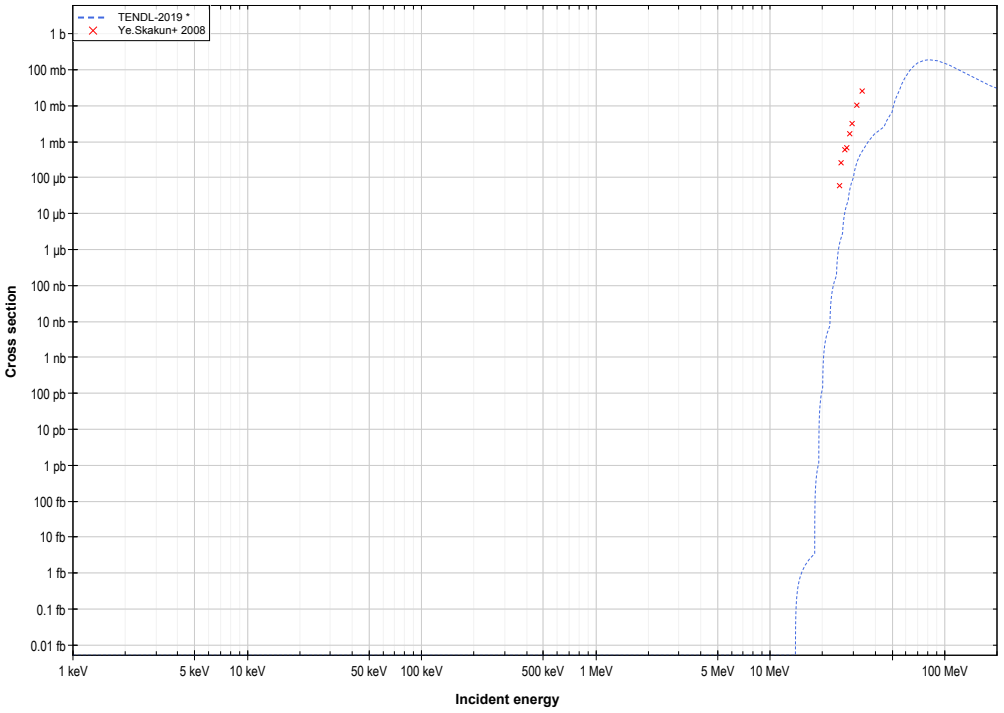
Ru101 (^{3}He,3n) or Pd101 production lin-log



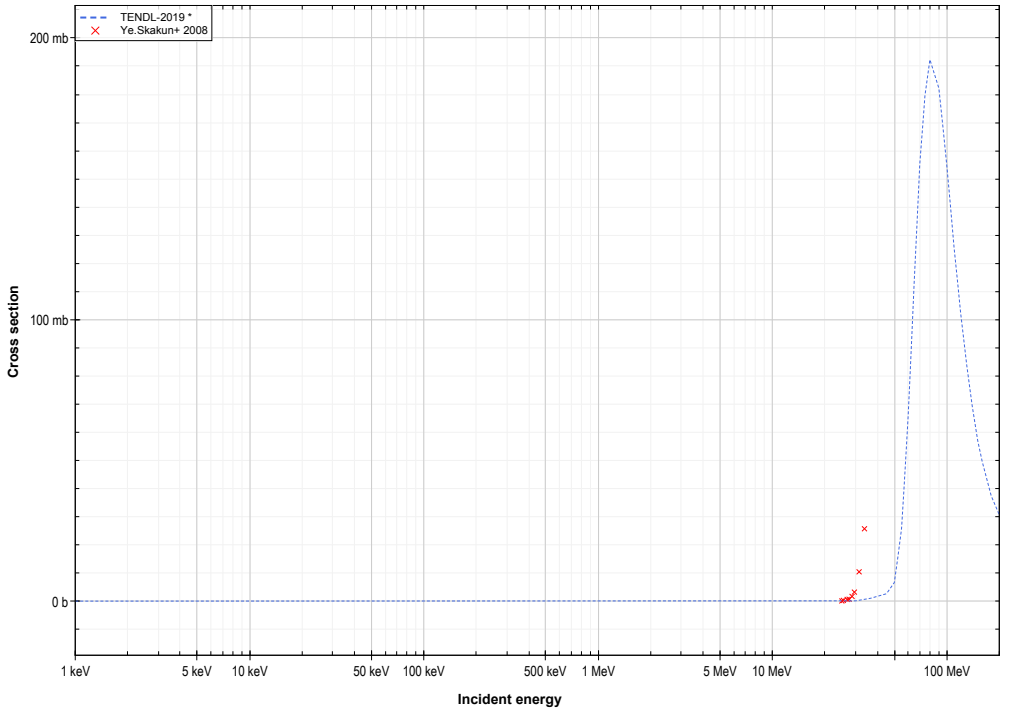
Reaction	Q-Value
Ru101(He3,3n)Pd101	-11808.83 keV

	44-Ru-101	47-Ag-107 >>
<< MT17 (³He,3n)	**MT25 (³He,3n+α) or MT5 (Ru97 production)**	MT28 (³He,n+p) >>

Ru101 (³He,3n+α) or Ru97 production log-log



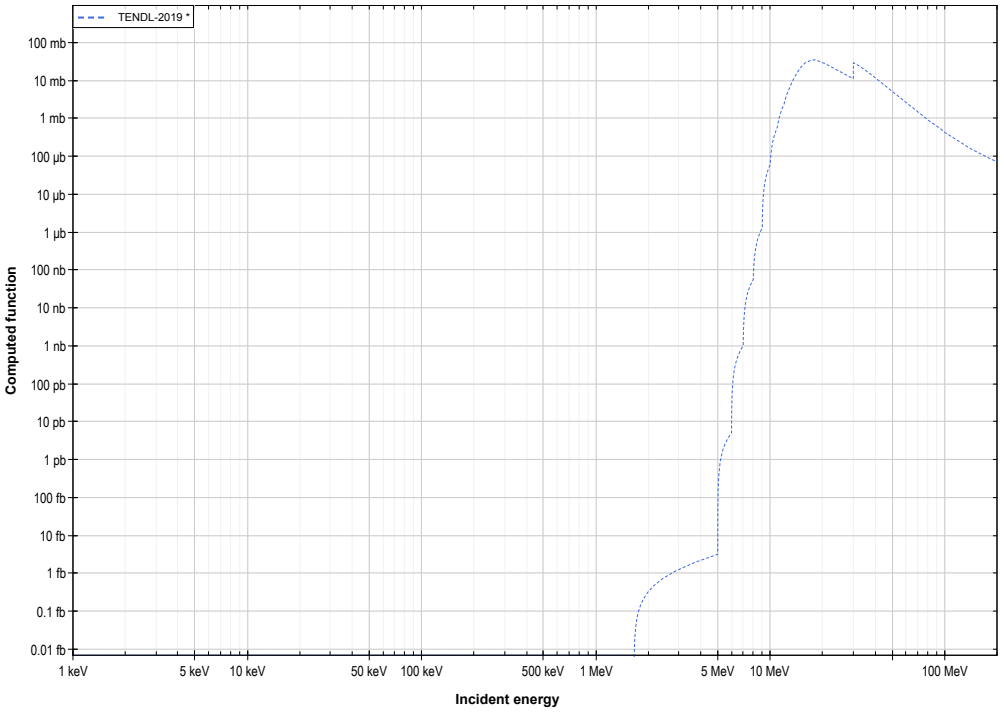
Ru101 (³He,3n+α) or Ru97 production lin-log



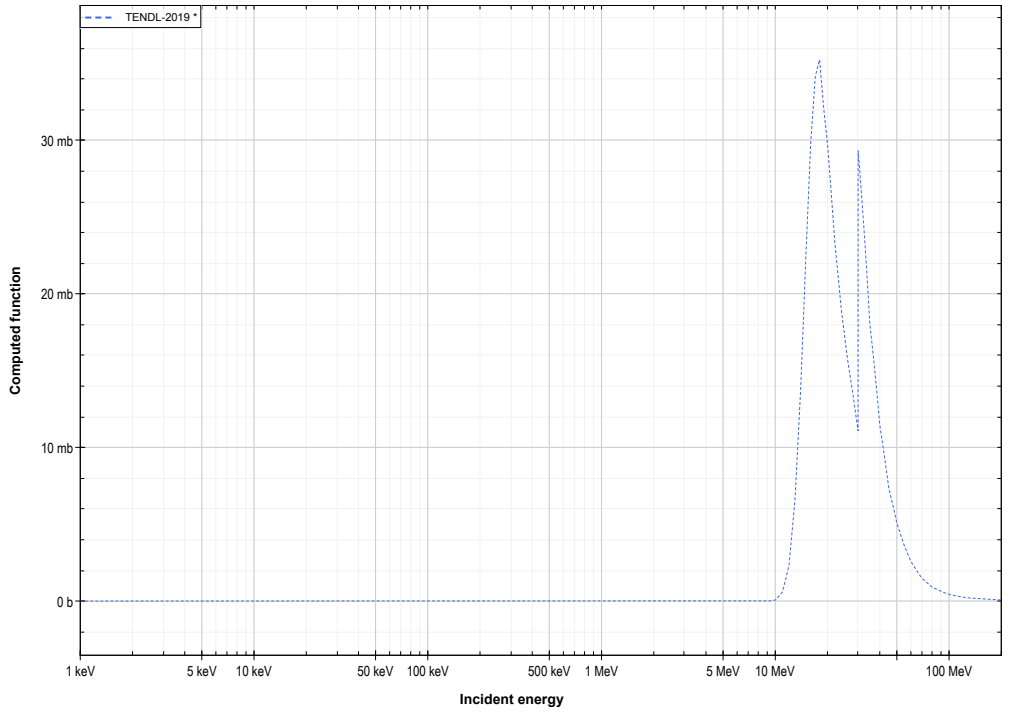
Reaction	Q-Value
Ru101(He3,3n+α)Ru97	-13545.15 keV
Ru101(He3,n+2t)Ru97	-24877.22 keV
Ru101(He3,2n+d+t)Ru97	-31134.45 keV
Ru101(He3,3n+p+t)Ru97	-33359.01 keV
Ru101(He3,4n+He3)Ru97	-34122.77 keV
Ru101(He3,3n+2d)Ru97	-37391.68 keV
Ru101(He3,4n+p+d)Ru97	-39616.24 keV
Ru101(He3,5n+2p)Ru97	-41840.81 keV

<< 34-Se-77	**44-Ru-101**	62-Sm-147 >>
<< MT25 (^{3}He,3n+α)	**MT28 (^{3}He,n+p) or MT5 (Rh102 production)**	MT37 (^{3}He,4n) >>

Ru101 (^{3}He,n+p) or Rh102 production log-log



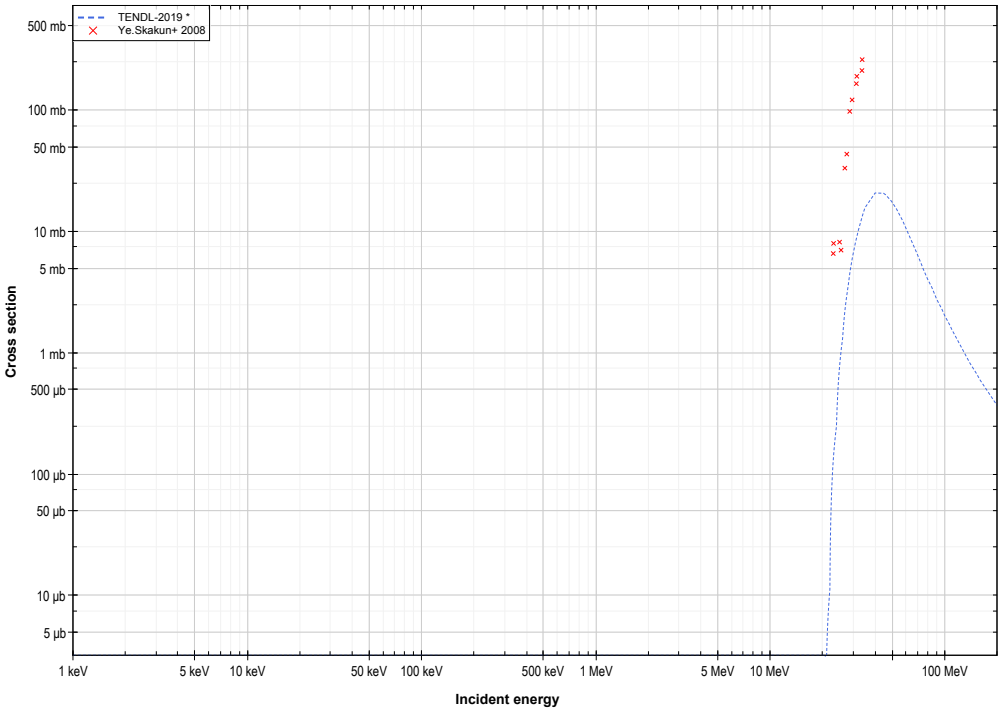
Ru101 (^{3}He,n+p) or Rh102 production lin-log



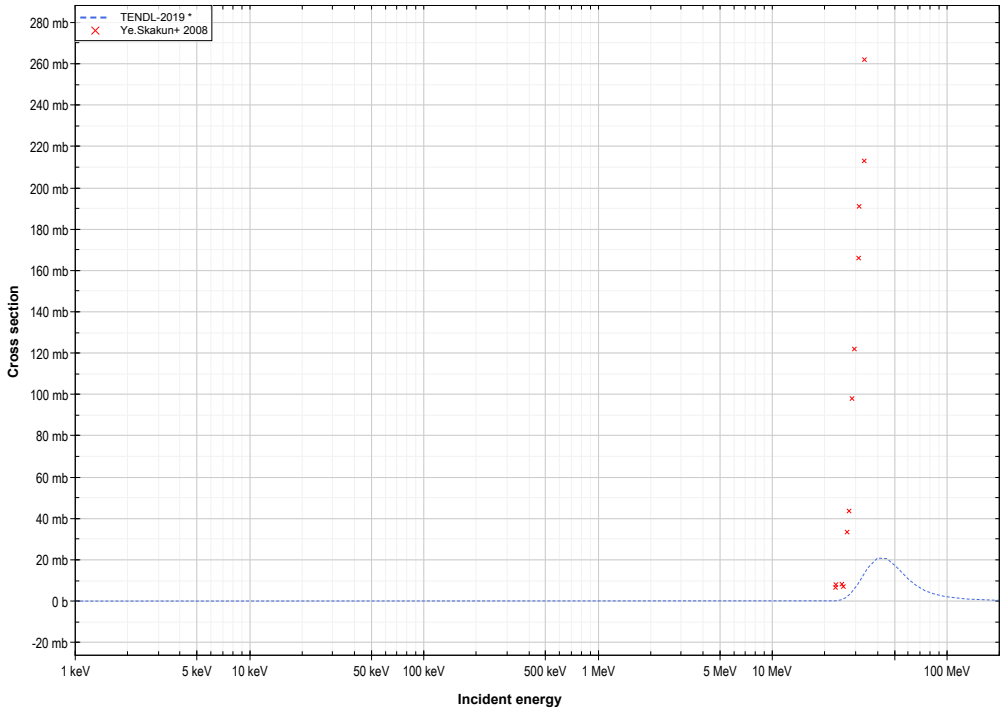
Reaction	Q-Value
Ru101(He3,d)Rh102	620.40 keV
Ru101(He3,n+p)Rh102	-1604.17 keV

<< 41-Nb-93	**44-Ru-101**	44-Ru-102 >>
<< MT28 (^{3}He,n+p)	**MT37 (^{3}He,4n) or MT5 (Pd100 production)**	MT104 (^{3}He,d) >>

Ru101 (^{3}He,4n) or Pd100 production log-log



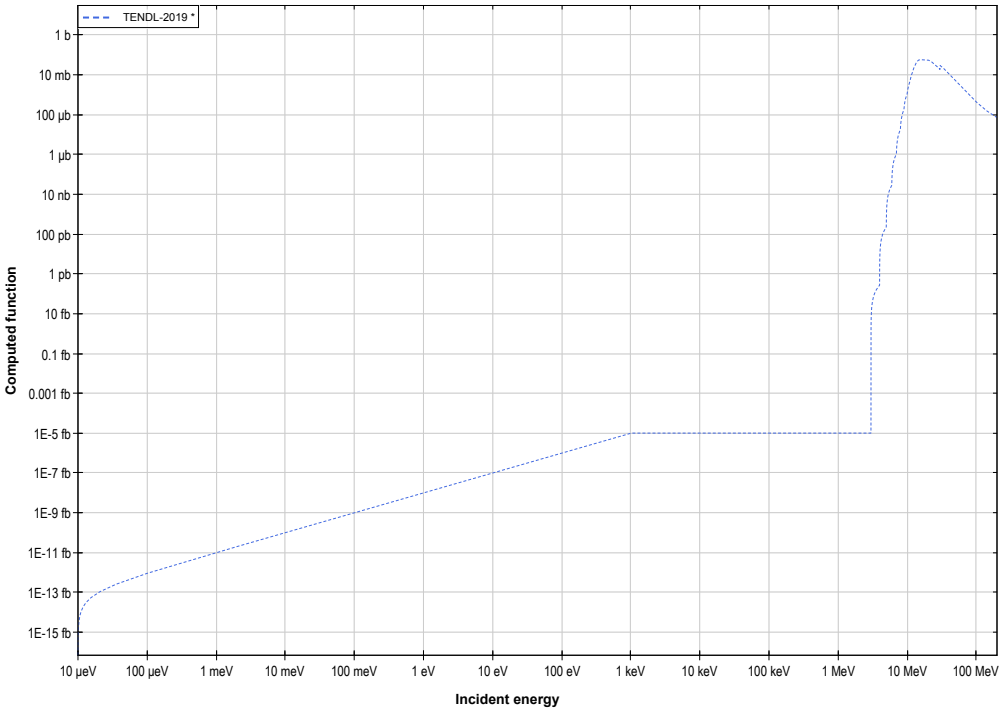
Ru101 (^{3}He,4n) or Pd100 production lin-log



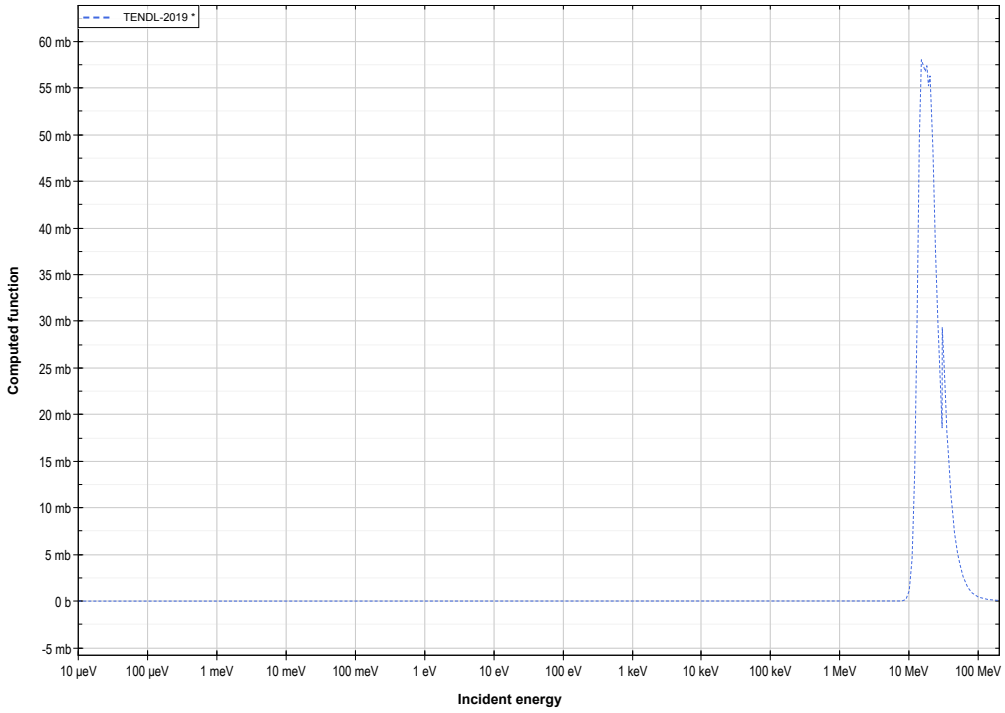
Reaction	Q-Value
Ru101(He3,4n)Pd100	-20099.15 keV

<< 30-Zn-66	**44-Ru-101**	62-Sm-147 >>
<< MT37 (^{3}He,4n)	**MT104 (^{3}He,d) or MT5 (Rh102 production)**	MT112 (^{3}He,p+α) >>

Ru101 (^{3}He,d) or Rh102 production log-log



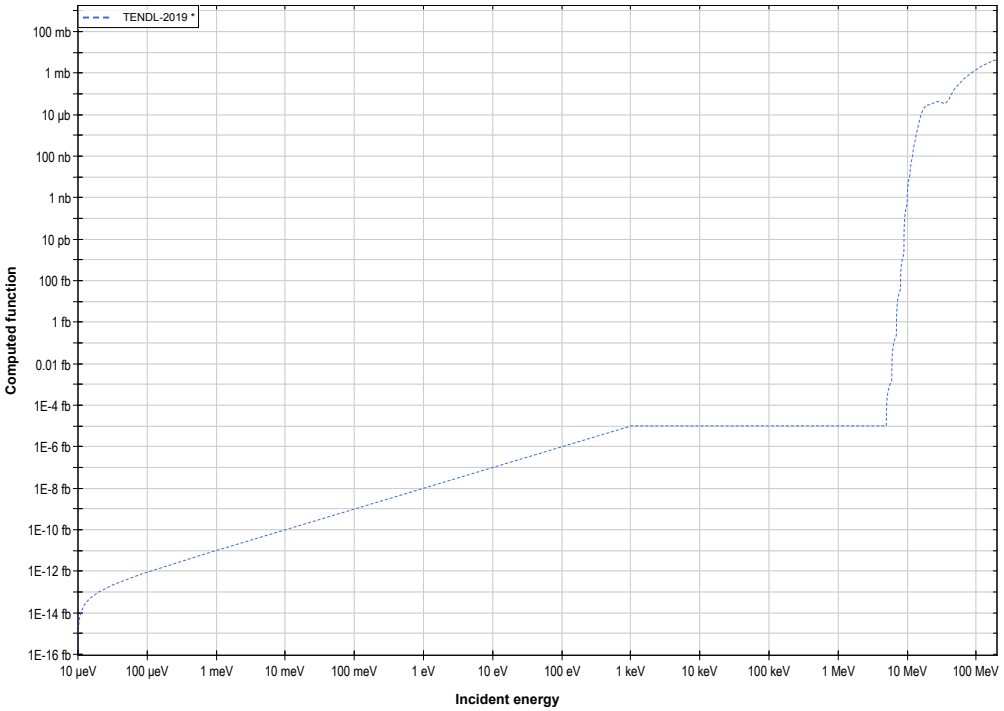
Ru101 (^{3}He,d) or Rh102 production lin-log



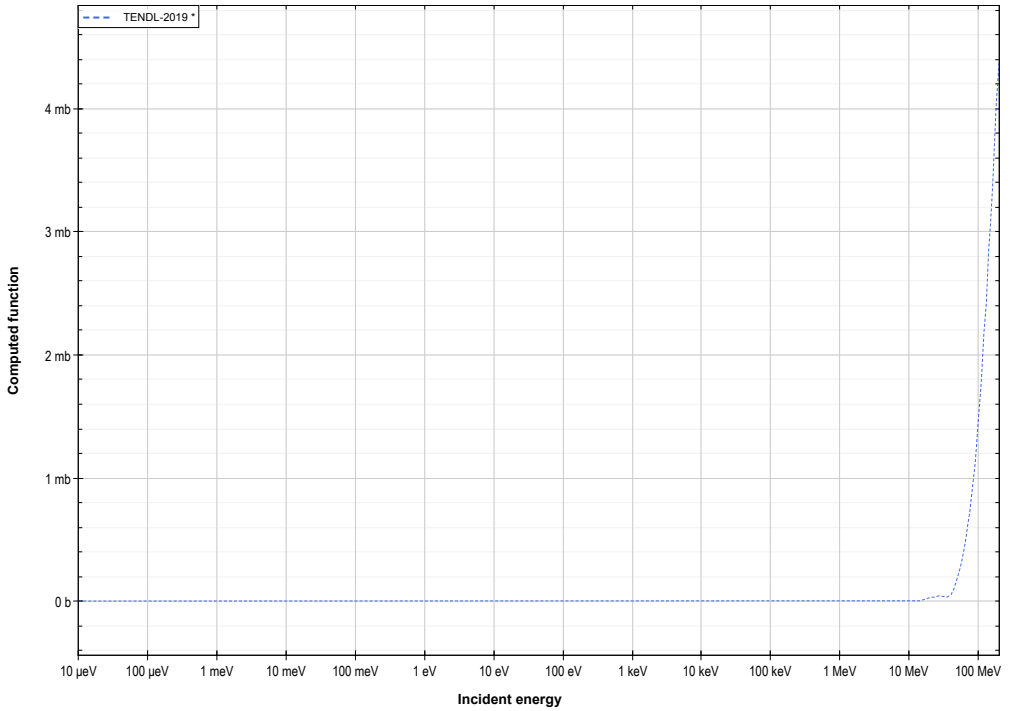
Reaction	Q-Value
Ru101(He3,d)Rh102	620.40 keV
Ru101(He3,n+p)Rh102	-1604.17 keV

<< 3-Li-6	**44-Ru-101**	
<< MT104 (^{3}He,d)	**MT112 (^{3}He,p+α) or MT5 (Tc99 production)**	44-Ru-102 MT16 (^{3}He,2n) >>

Ru101 (^{3}He,p+α) or Tc99 production log-log



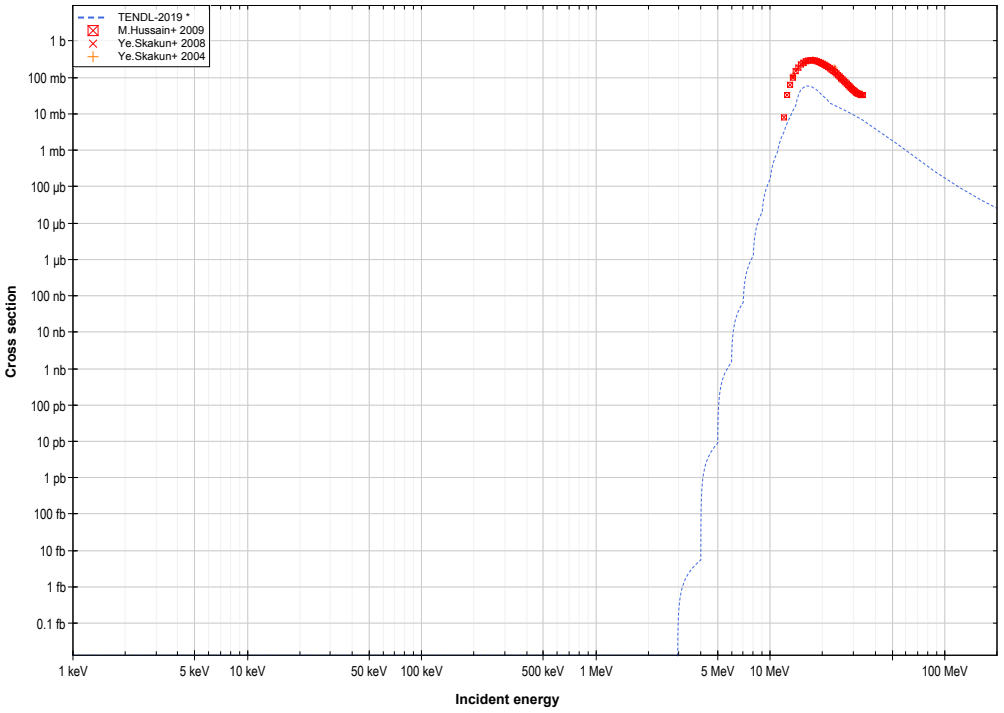
Ru101 (^{3}He,p+α) or Tc99 production lin-log



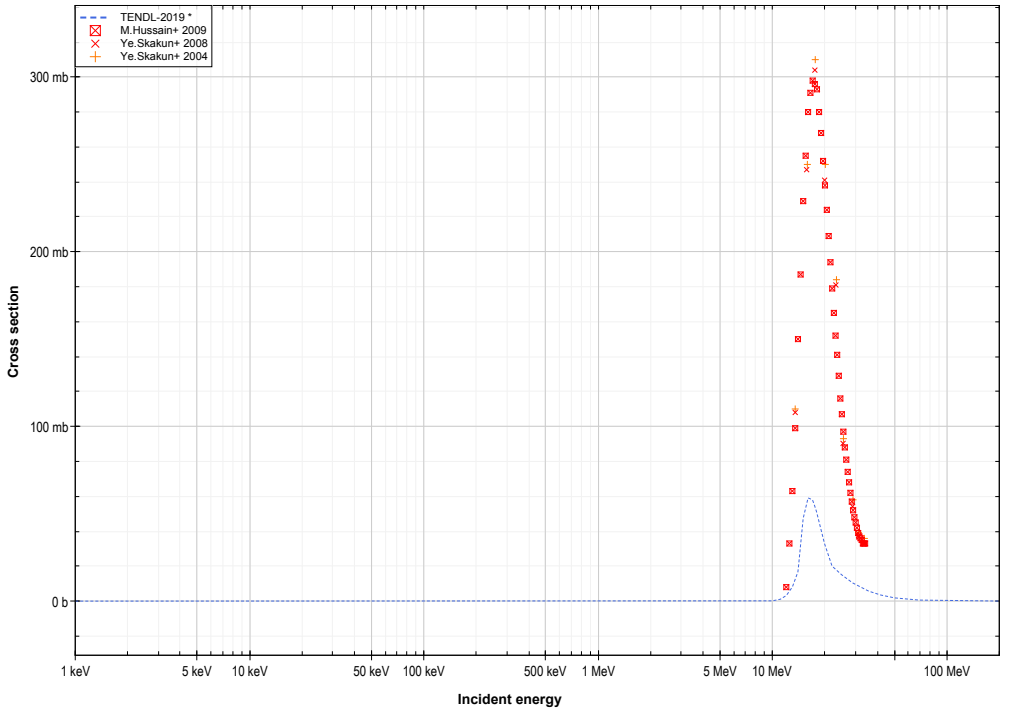
Reaction	Q-Value
Ru101(He3,p+α)Tc99	4587.13 keV
Ru101(He3,d+He3)Tc99	-13765.92 keV
Ru101(He3,2p+t)Tc99	-15226.73 keV
Ru101(He3,n+p+He3)Tc99	-15990.49 keV
Ru101(He3,p+2d)Tc99	-19259.40 keV
Ru101(He3,n+2p+d)Tc99	-21483.96 keV
Ru101(He3,2n+3p)Tc99	-23708.53 keV

<< 41-Nb-93	**44-Ru-102**	45-Rh-103 >>
<< 44-Ru-101 MT112 (³He,p+α)	**MT16 (³He,2n) or MT5 (Pd103 production)**	MT32 (³He,n+d) >>

Ru102 (³He,2n) or Pd103 production log-log



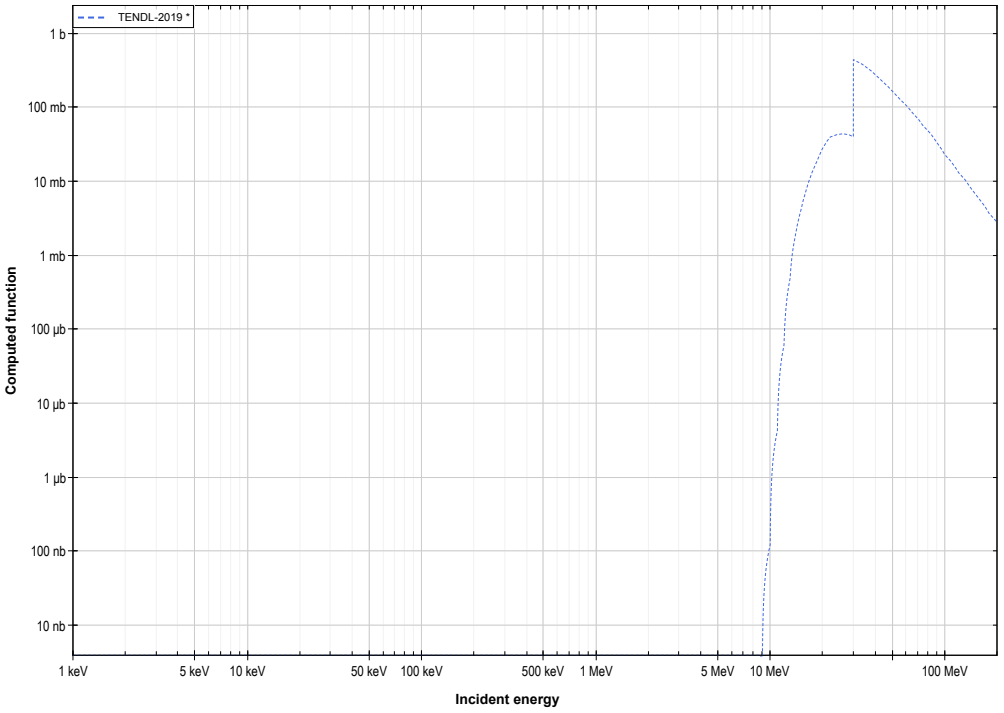
Ru102 (³He,2n) or Pd103 production lin-log



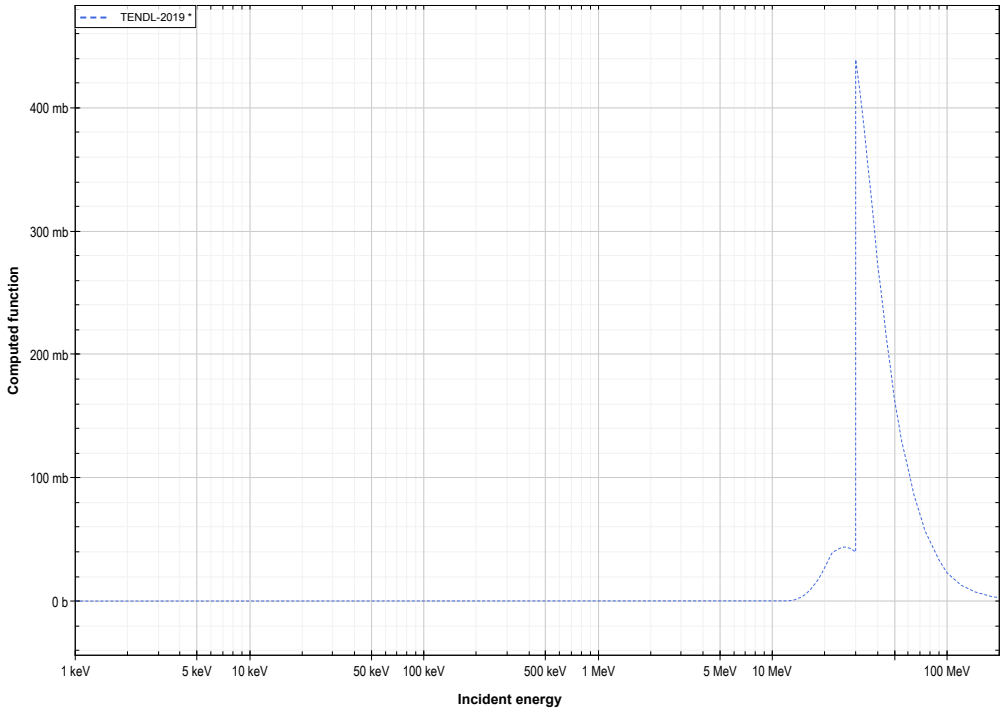
Reaction	Q-Value
Ru102(He3,2n)Pd103	-2860.62 keV

<< 30-Zn-68	**44-Ru-102**	47-Ag-107 >>
<< MT16 (³He,2n)	**MT32 (³He,n+d) or MT5 (Rh102 production)**	MT37 (³He,4n) >>

Ru102 (³He,n+d) or Rh102 production log-log



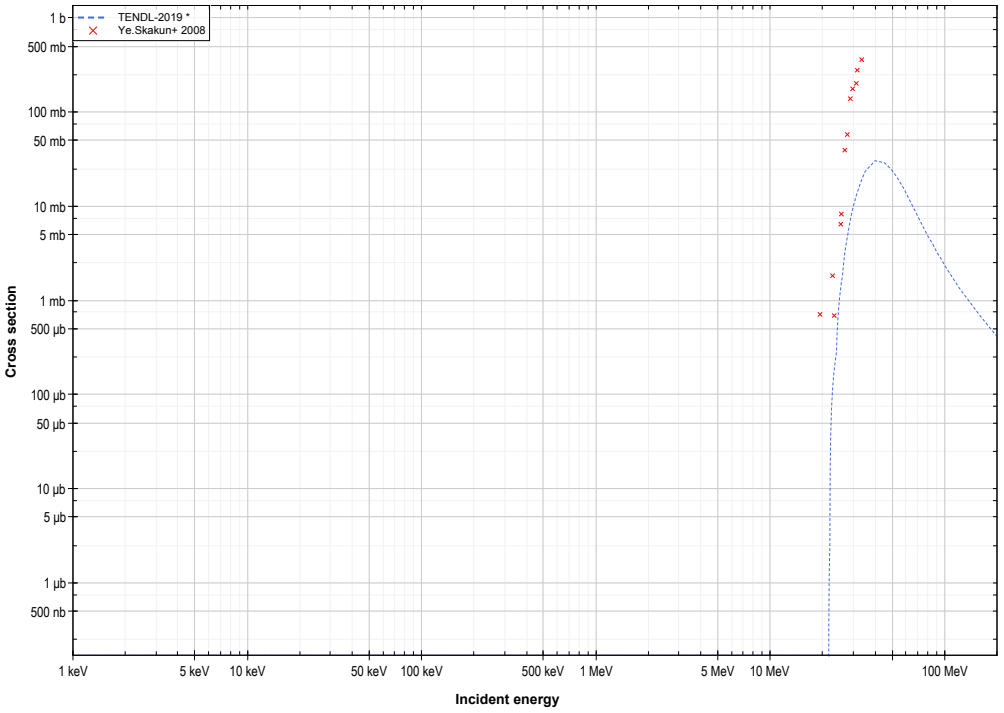
Ru102 (³He,n+d) or Rh102 production lin-log



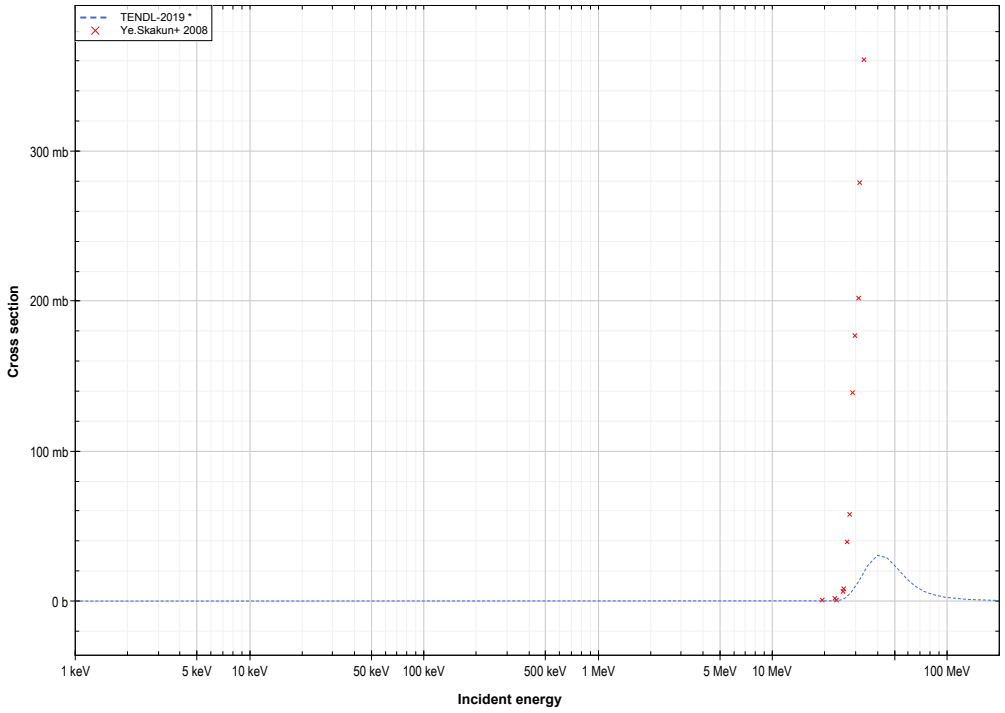
Reaction	Q-Value
Ru102(He3,t)Rh102	-2341.99 keV
Ru102(He3,n+d)Rh102	-8599.22 keV
Ru102(He3,2n+p)Rh102	-10823.79 keV

<< 44-Ru-101	**44-Ru-102**	47-Ag-107 >>
<< MT32 (^{3}He,n+d)	**MT37 (^{3}He,4n) or MT5 (Pd101 production)**	MT41 (^{3}He,2n+p) >>

Ru102 (^{3}He,4n) or Pd101 production log-log



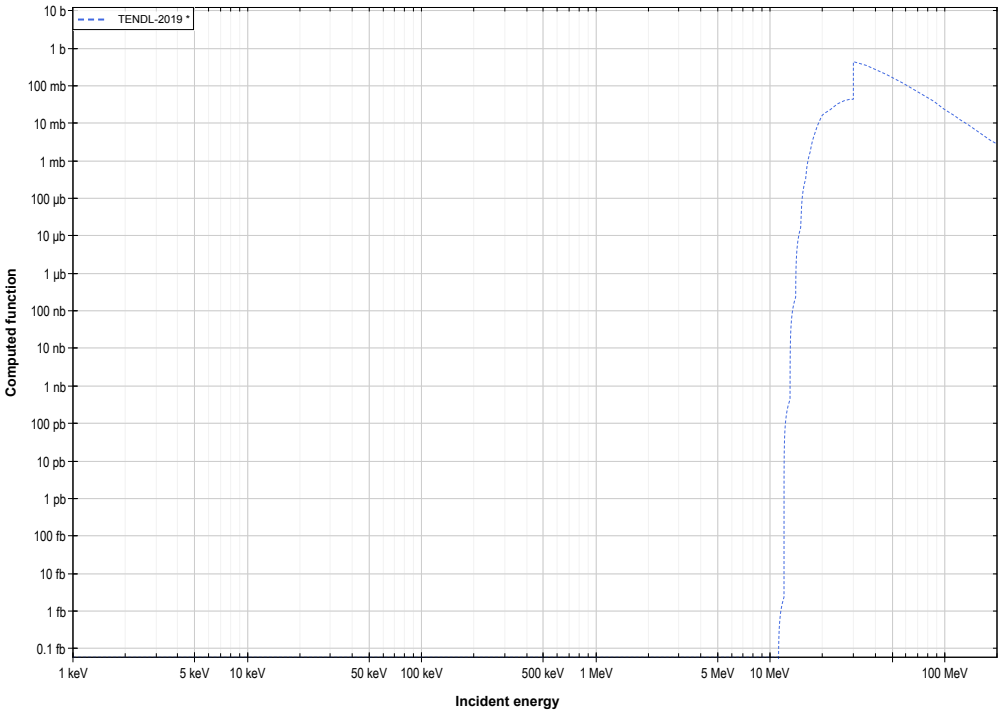
Ru102 (^{3}He,4n) or Pd101 production lin-log



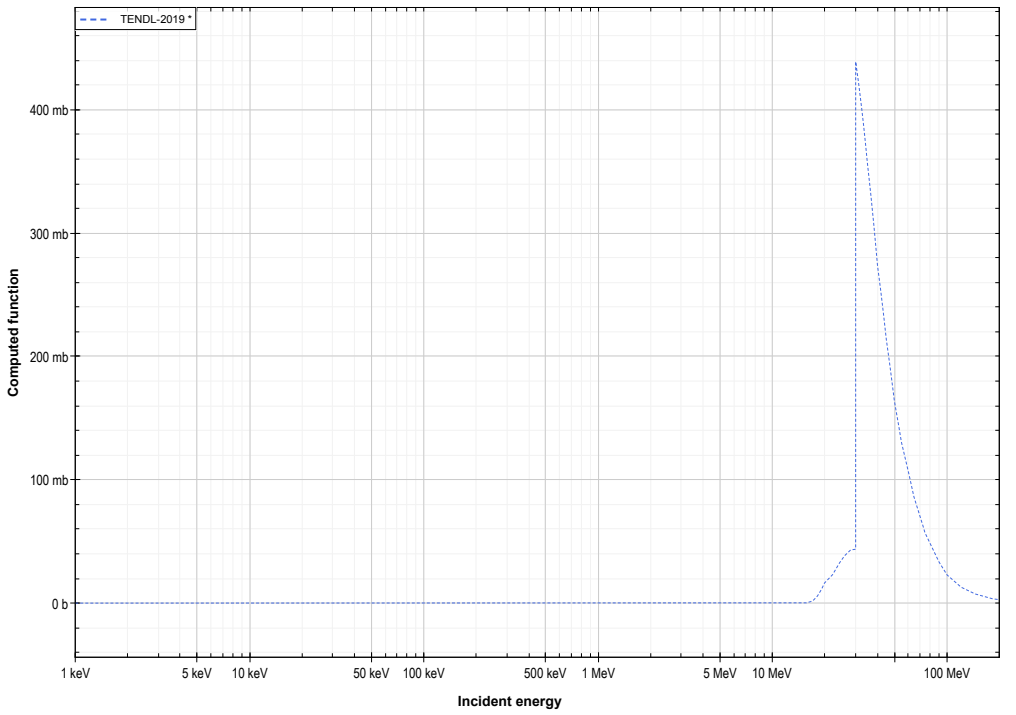
Reaction	Q-Value
Ru102(He3,4n)Pd101	-21028.45 keV

<< 34-Se-77	**44-Ru-102**	47-Ag-107 >>
<< MT37 (^{3}He,4n)	**MT41 (^{3}He,2n+p) or MT5 (Rh102 production)**	MT105 (^{3}He,t) >>

Ru102 (^{3}He,2n+p) or Rh102 production log-log



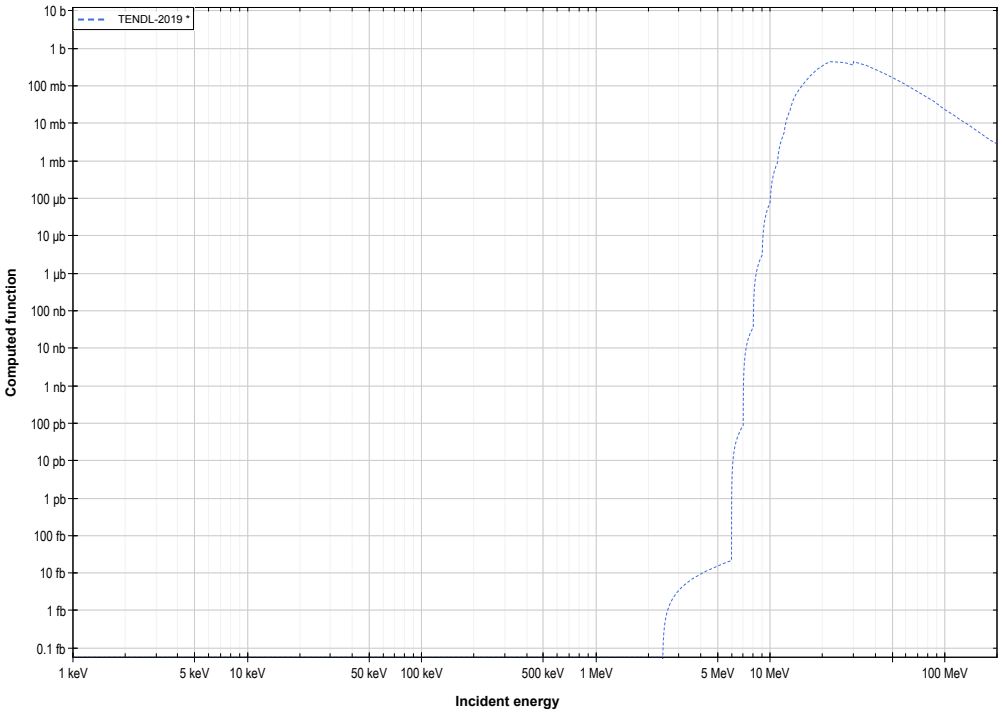
Ru102 (^{3}He,2n+p) or Rh102 production lin-log



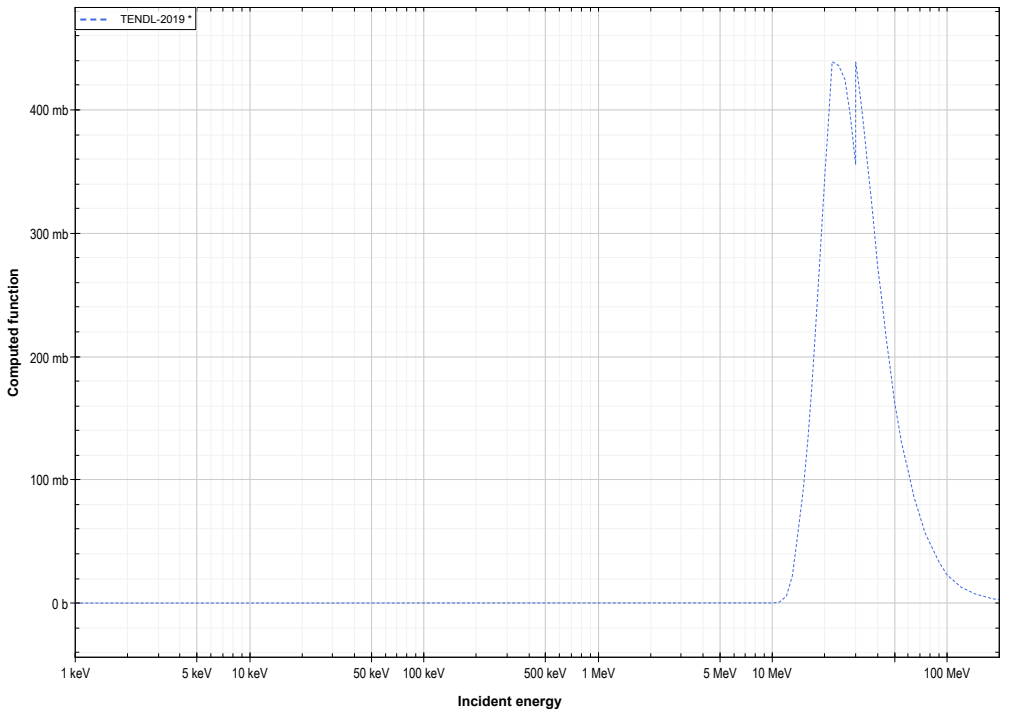
Reaction	Q-Value
Ru102(He3,t)Rh102	-2341.99 keV
Ru102(He3,n+d)Rh102	-8599.22 keV
Ru102(He3,2n+p)Rh102	-10823.79 keV

<< 30-Zn-68	**44-Ru-102**	47-Ag-107 >>
<< MT41 (^{3}He,2n+p)	**MT105 (^{3}He,t) or MT5 (Rh102 production)**	MT111 (^{3}He,2p) >>

Ru102 (^{3}He,t) or Rh102 production log-log



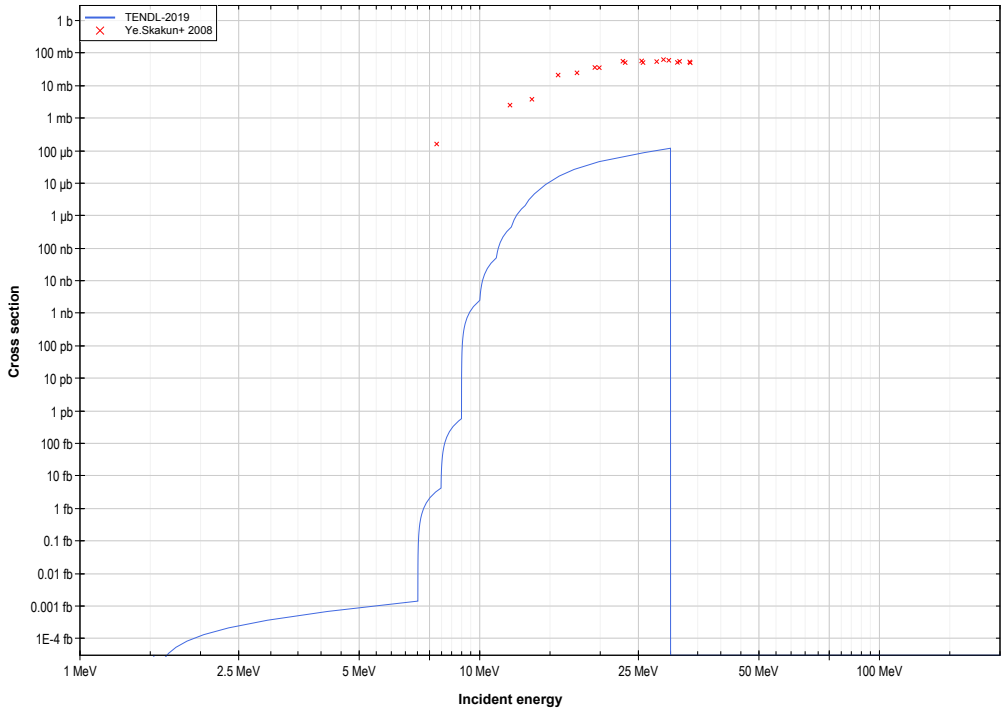
Ru102 (^{3}He,t) or Rh102 production lin-log



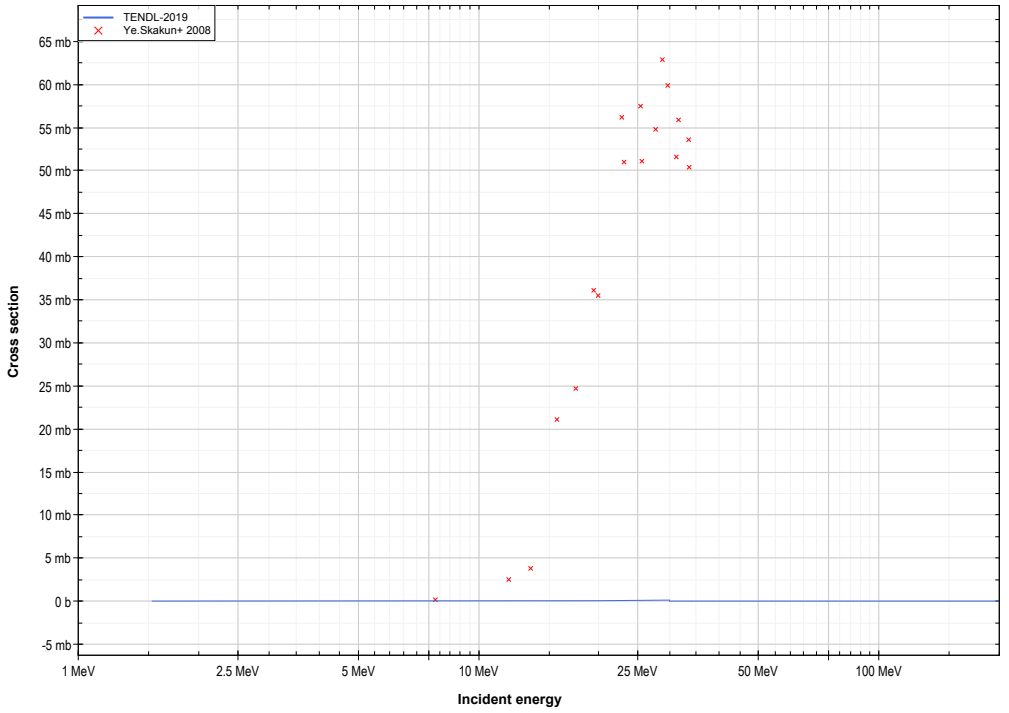
Reaction	Q-Value
Ru102(He3,t)Rh102	-2341.99 keV
Ru102(He3,n+d)Rh102	-8599.22 keV
Ru102(He3,2n+p)Rh102	-10823.79 keV

<< 31-Ga-71	**44-Ru-102**	47-Ag-109 >>
<< MT105 (³He,t)	**MT111 (³He,2p) or MT5 (Ru103 production)**	45-Rh-103 MT4 (³He,n) >>

Ru102 (³He,2p) or Ru103 production log-log



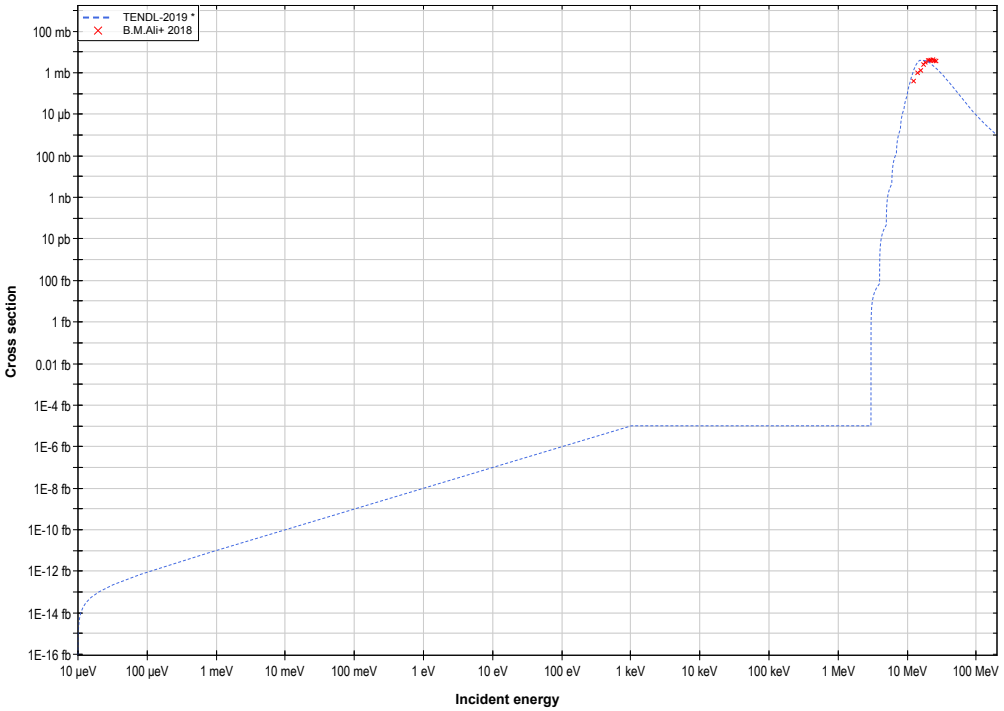
Ru102 (³He,2p) or Ru103 production lin-log



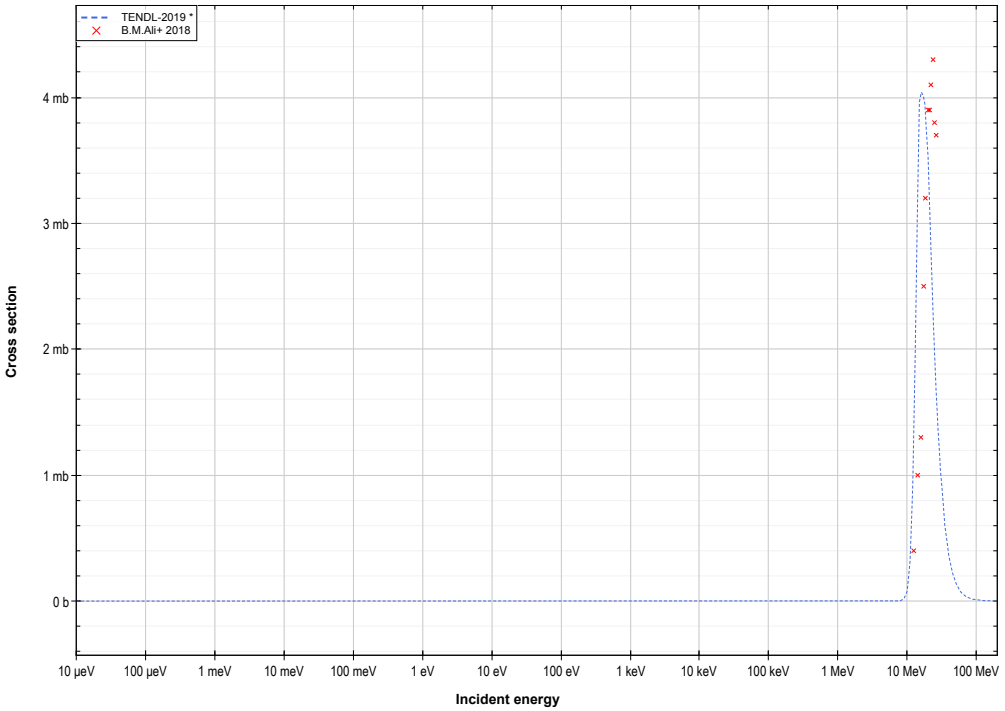
Reaction	Q-Value
Ru102(He3,2p)Ru103	-1485.92 keV

<< 44-Ru-101	**45-Rh-103**	47-Ag-107 >>
<< 44-Ru-102 MT111 (³He,2p)	**MT4 (³He,n) or MT5 (Ag105 production)**	MT16 (³He,2n) >>

Rh103 (³He,n) or Ag105 production log-log



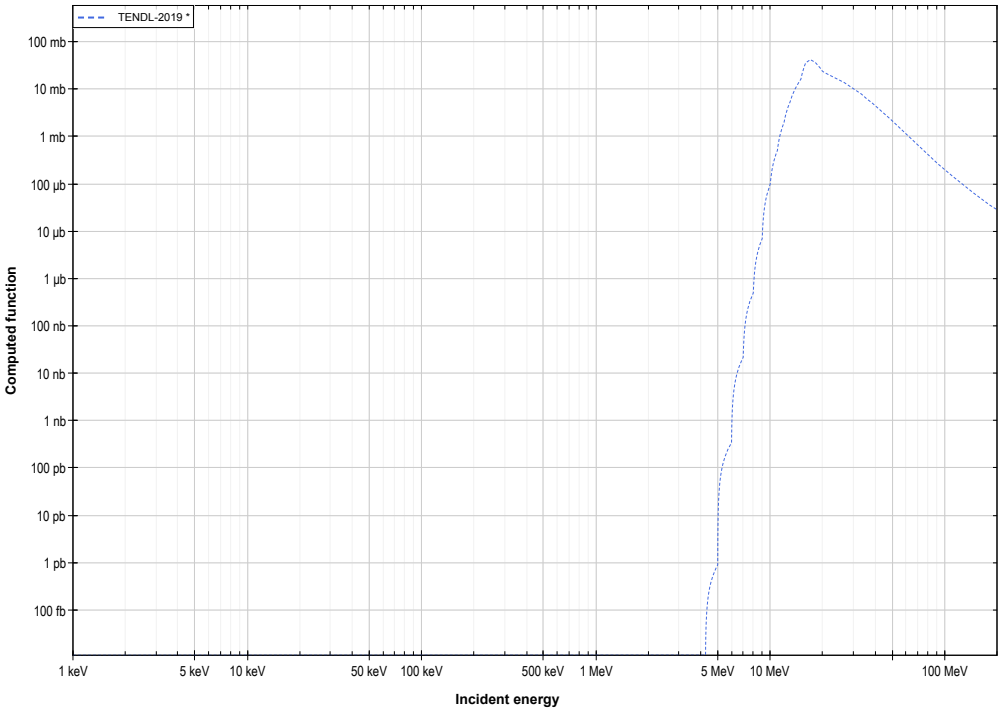
Rh103 (³He,n) or Ag105 production lin-log



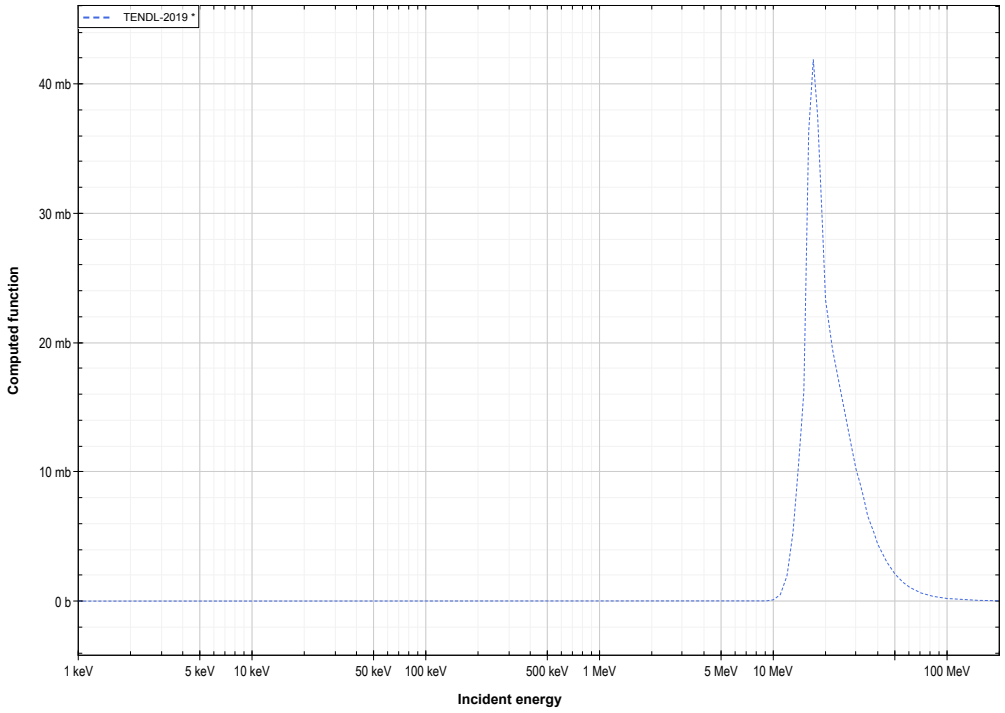
Reaction	Q-Value
Rh103(He3,n)Ag105	5899.20 keV

<< 44-Ru-102	**45-Rh-103**	47-Ag-107 >>
<< MT4 (³He,n)	**MT16 (³He,2n) or MT5 (Ag104 production)**	MT17 (³He,3n) >>

Rh103 (³He,2n) or Ag104 production log-log



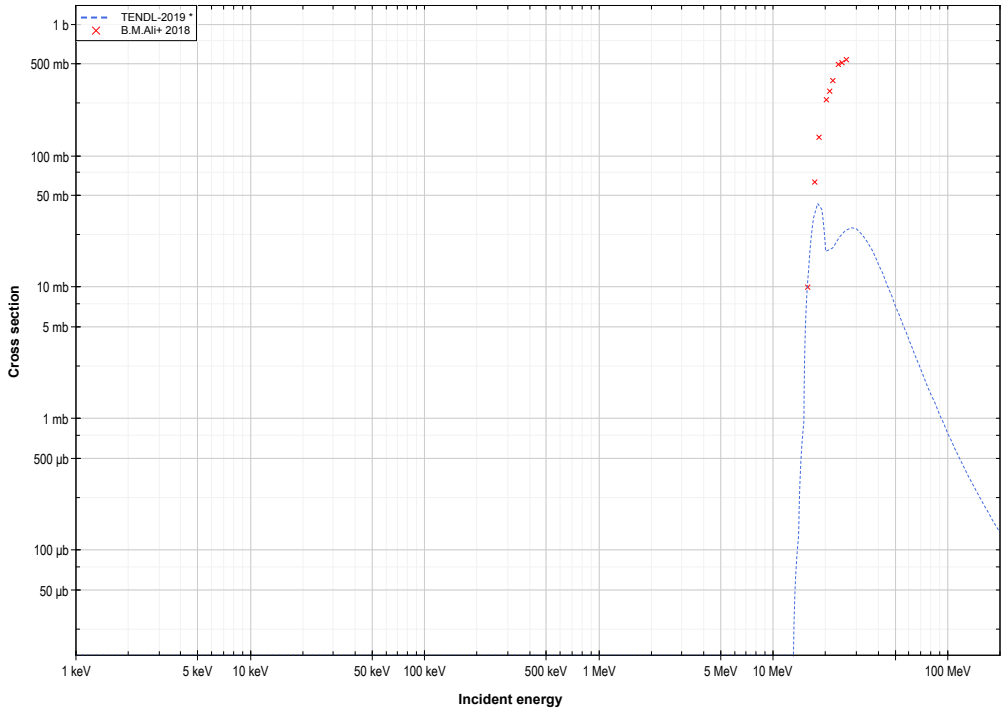
Rh103 (³He,2n) or Ag104 production lin-log



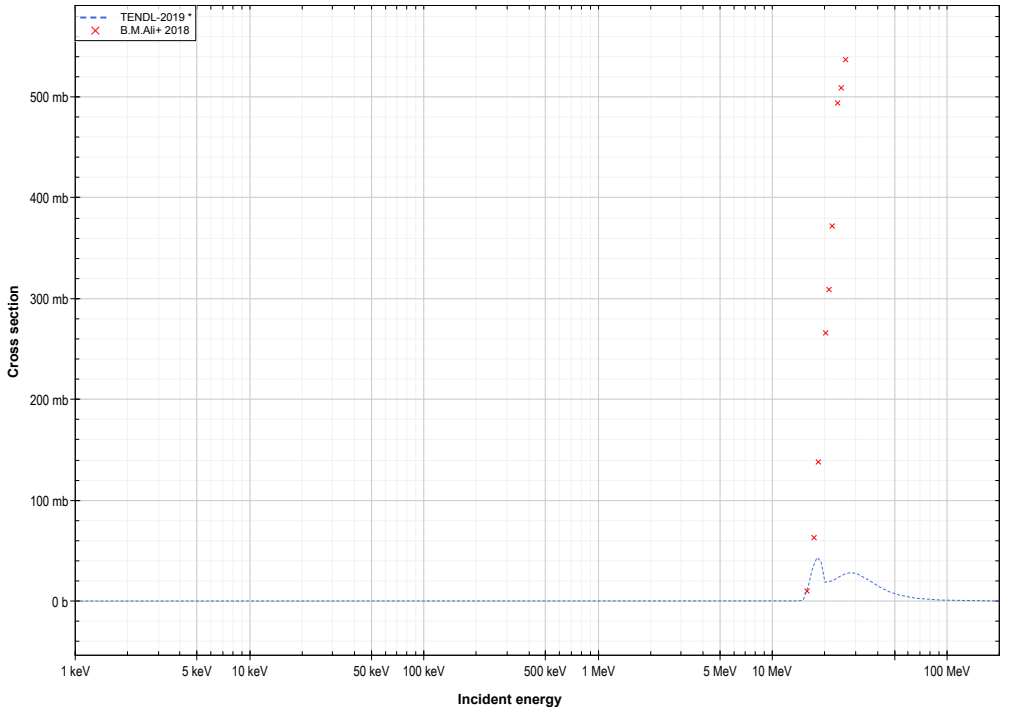
Reaction	Q-Value
Rh103(He3,2n)Ag104	-4127.12 keV

<< 44-Ru-101	**45-Rh-103**	47-Ag-107 >>
<< MT16 (^{3}He,2n)	**MT17 (^{3}He,3n) or MT5 (Ag103 production)**	MT34 (^{3}He,n+^{3}He) >>

Rh103 (^{3}He,3n) or Ag103 production log-log



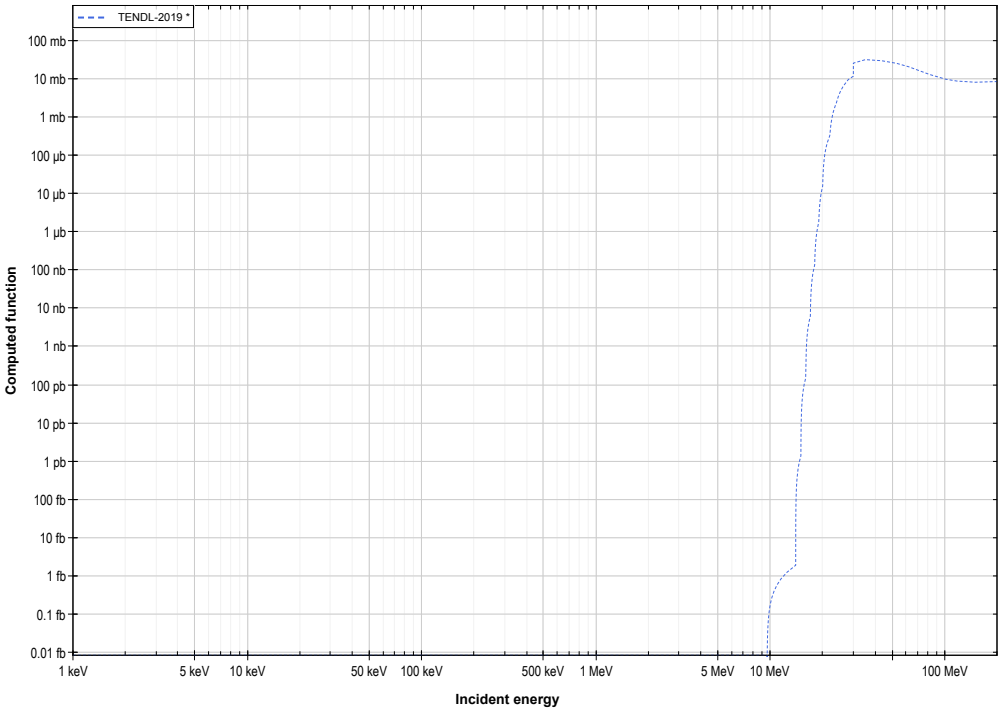
Rh103 (^{3}He,3n) or Ag103 production lin-log



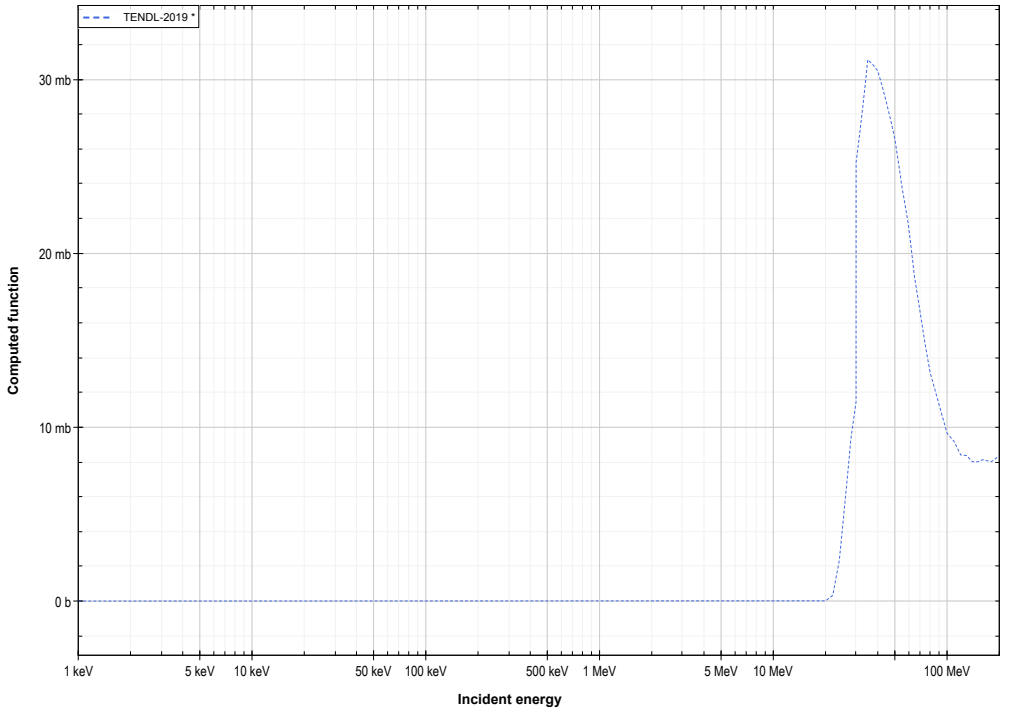
Reaction	Q-Value
Rh103(He3,3n)Ag103	-12511.43 keV

<< 29-Cu-65	**45-Rh-103**	79-Au-197 >>
<< MT17 (³He,3n)	**MT34 (³He,n+³He) or MT5 (Rh102 production)**	MT107 (³He,α) >>

Rh103 (³He,n+³He) or Rh102 production log-log



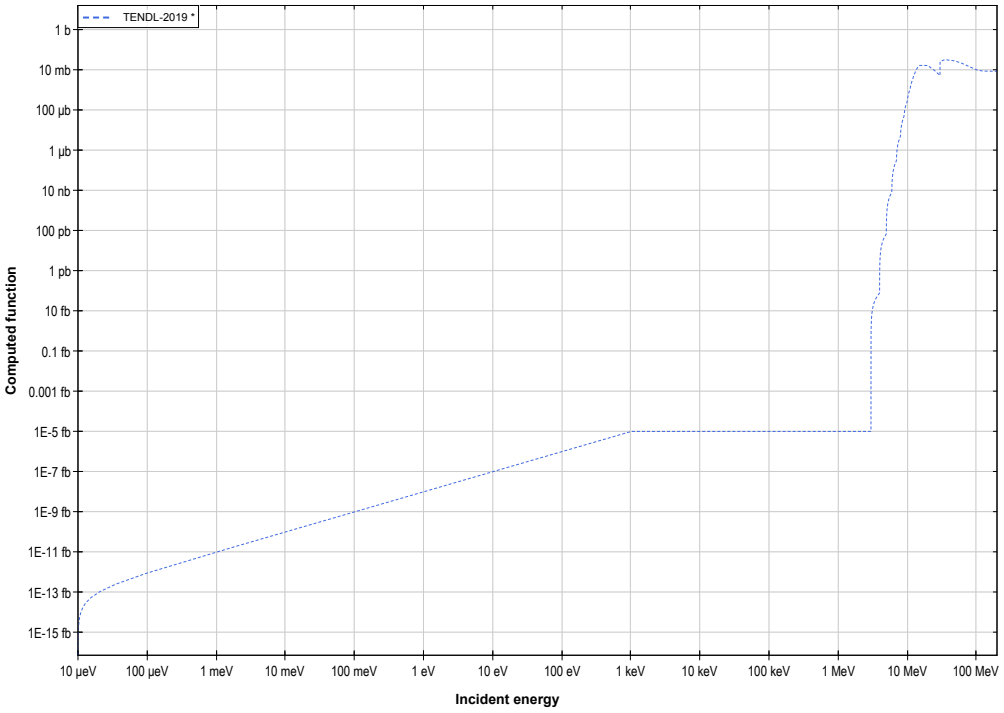
Rh103 (³He,n+³He) or Rh102 production lin-log



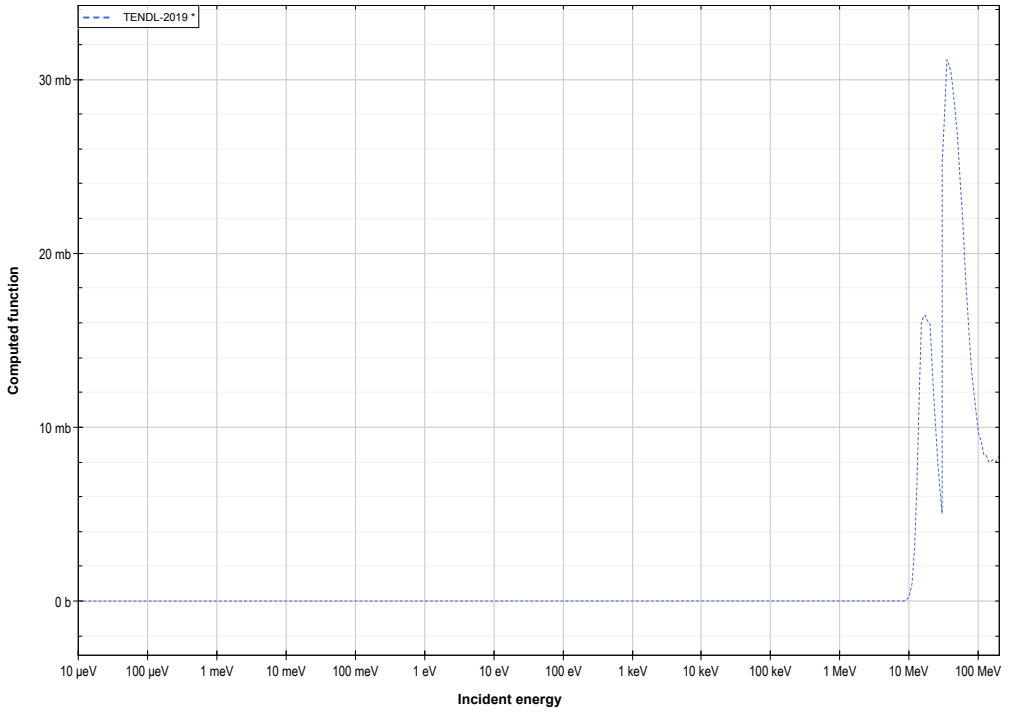
Reaction	Q-Value
Rh103(He3,α)Rh102	11257.60 keV
Rh103(He3,p+t)Rh102	-8556.26 keV
Rh103(He3,n+He3)Rh102	-9320.02 keV
Rh103(He3,2d)Rh102	-12588.93 keV
Rh103(He3,n+p+d)Rh102	-14813.49 keV
Rh103(He3,2n+2p)Rh102	-17038.06 keV

<< 34-Se-76	**45-Rh-103**	47-Ag-107 >>
<< MT34 (^{3}He,n+^{3}He)	**MT107 (^{3}He,α) or MT5 (Rh102 production)**	MT116 (^{3}He,p+t) >>

Rh103 (^{3}He,α) or Rh102 production log-log



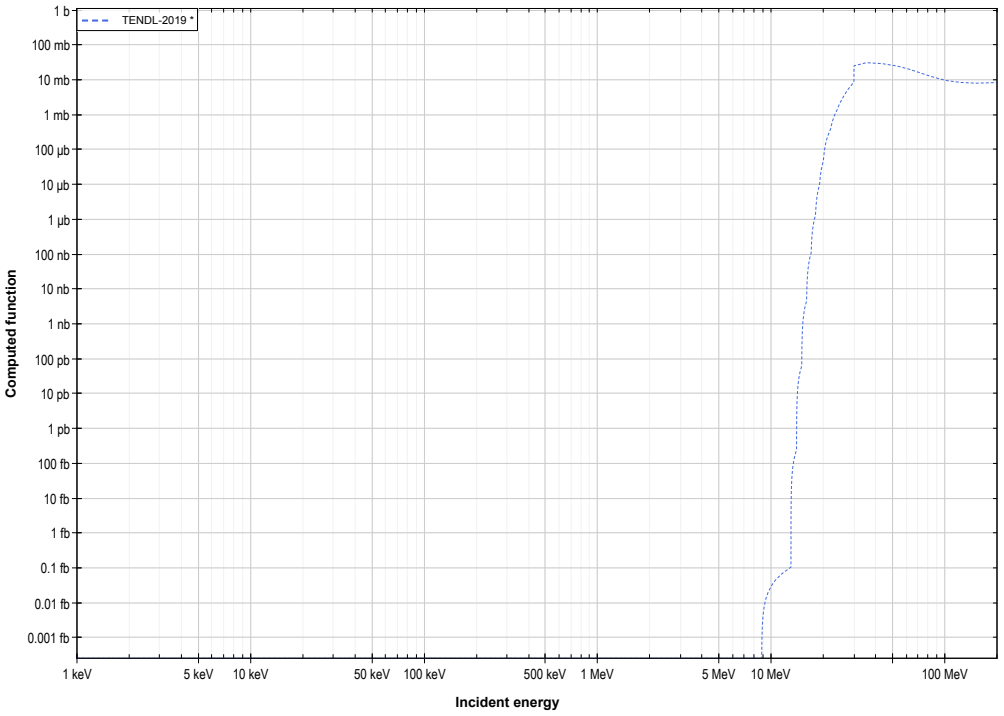
Rh103 (^{3}He,α) or Rh102 production lin-log



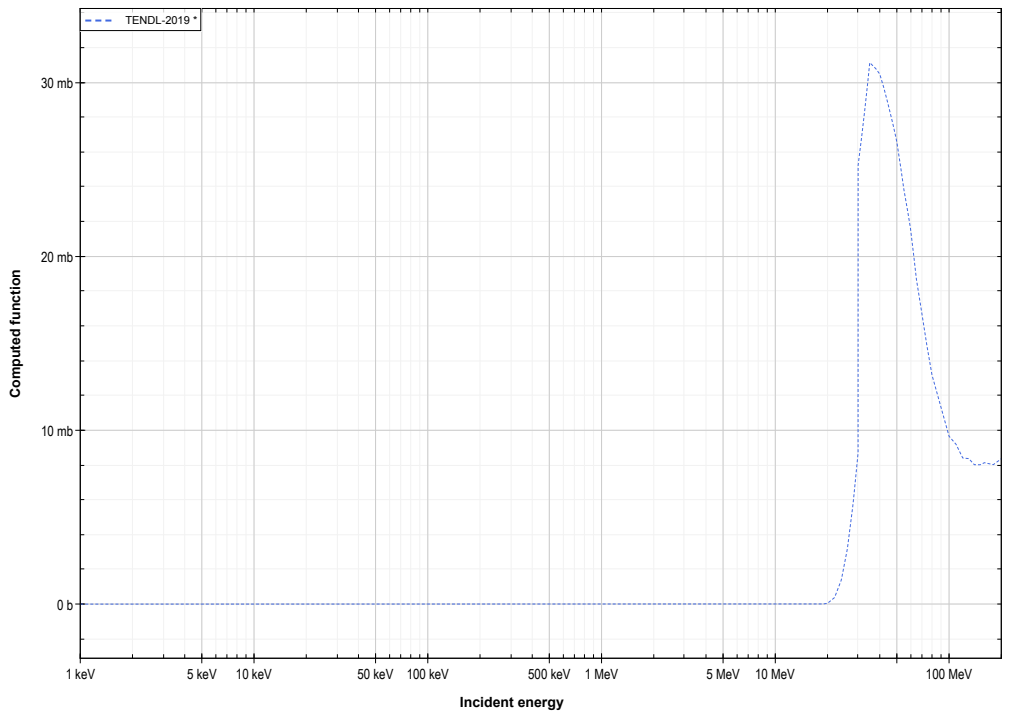
Reaction	Q-Value
Rh103(He3,α)Rh102	11257.60 keV
Rh103(He3,p+t)Rh102	-8556.26 keV
Rh103(He3,n+He3)Rh102	-9320.02 keV
Rh103(He3,2d)Rh102	-12588.93 keV
Rh103(He3,n+p+d)Rh102	-14813.49 keV
Rh103(He3,2n+2p)Rh102	-17038.06 keV

<< 29-Cu-65	**45-Rh-103**	79-Au-197 >>
<< MT107 (^{3}He,α)	**MT116 (^{3}He,p+t) or MT5 (Rh102 production)**	MT183 (^{3}He,n+p+d) >>

Rh103 (^{3}He,p+t) or Rh102 production log-log



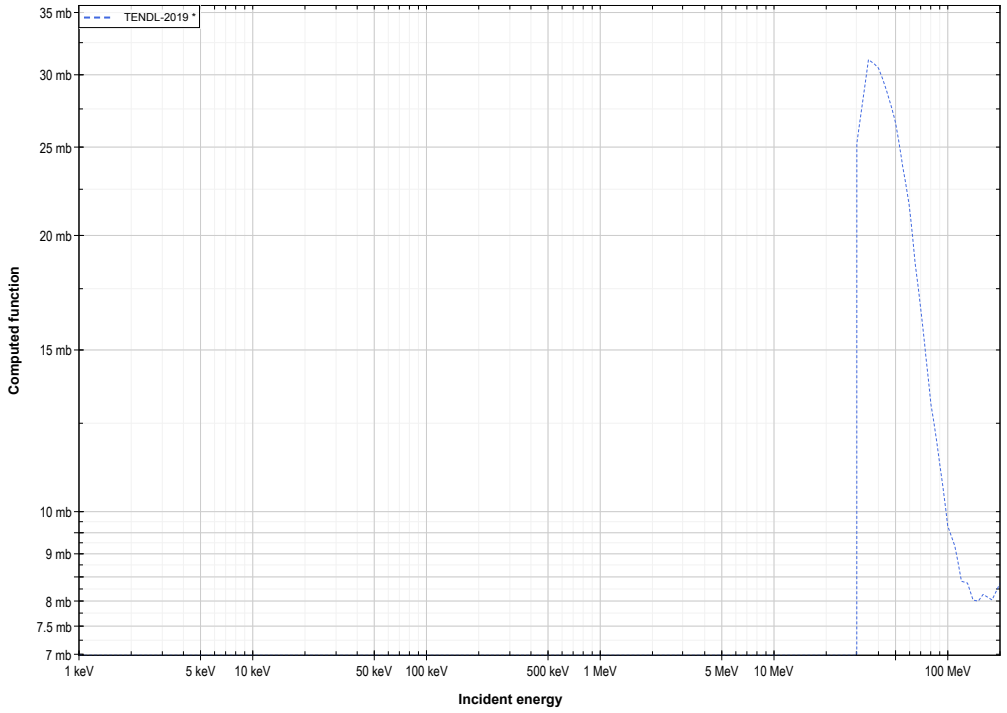
Rh103 (^{3}He,p+t) or Rh102 production lin-log



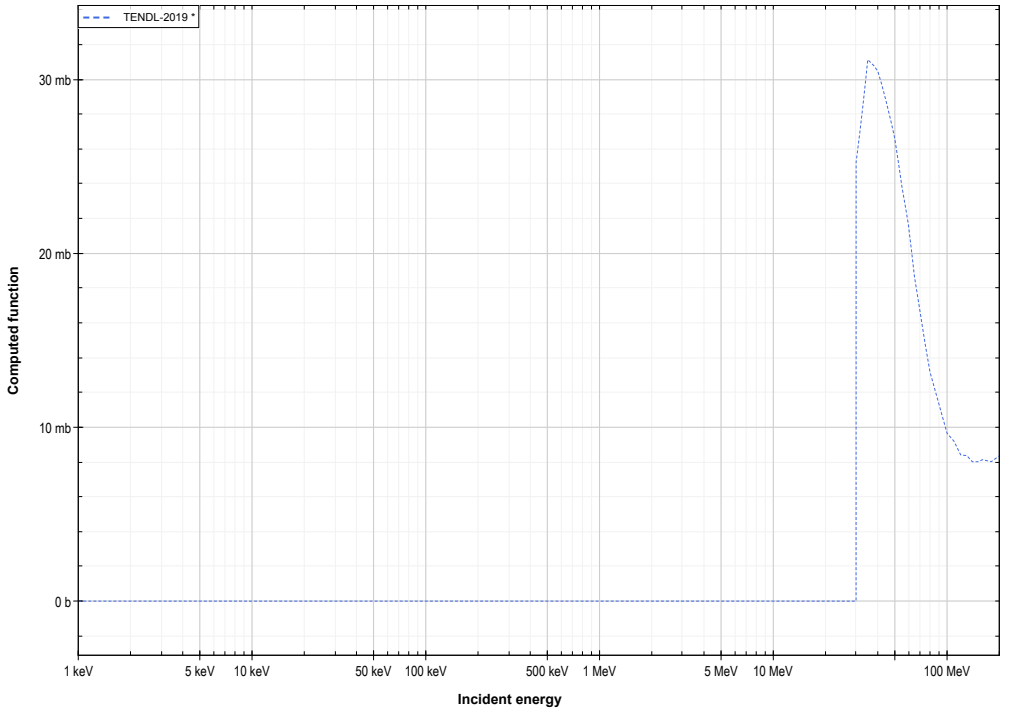
Reaction	Q-Value
Rh103(He3,α)Rh102	11257.60 keV
Rh103(He3,p+t)Rh102	-8556.26 keV
Rh103(He3,n+He3)Rh102	-9320.02 keV
Rh103(He3,2d)Rh102	-12588.93 keV
Rh103(He3,n+p+d)Rh102	-14813.49 keV
Rh103(He3,2n+2p)Rh102	-17038.06 keV

<< 29-Cu-65	**45-Rh-103**	79-Au-197 >>
<< MT116 (³He,p+t)	**MT183 (³He,n+p+d) or MT5 (Rh102 production)**	MT190 (³He,2n+2p) >>

Rh103 (³He,n+p+d) or Rh102 production log-log



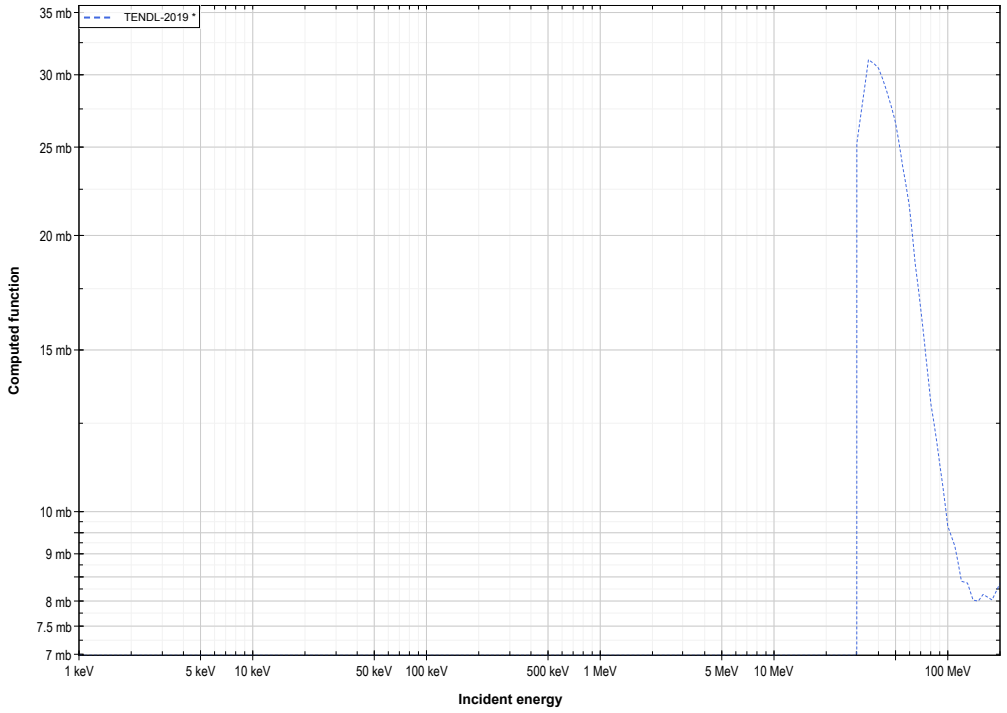
Rh103 (³He,n+p+d) or Rh102 production lin-log



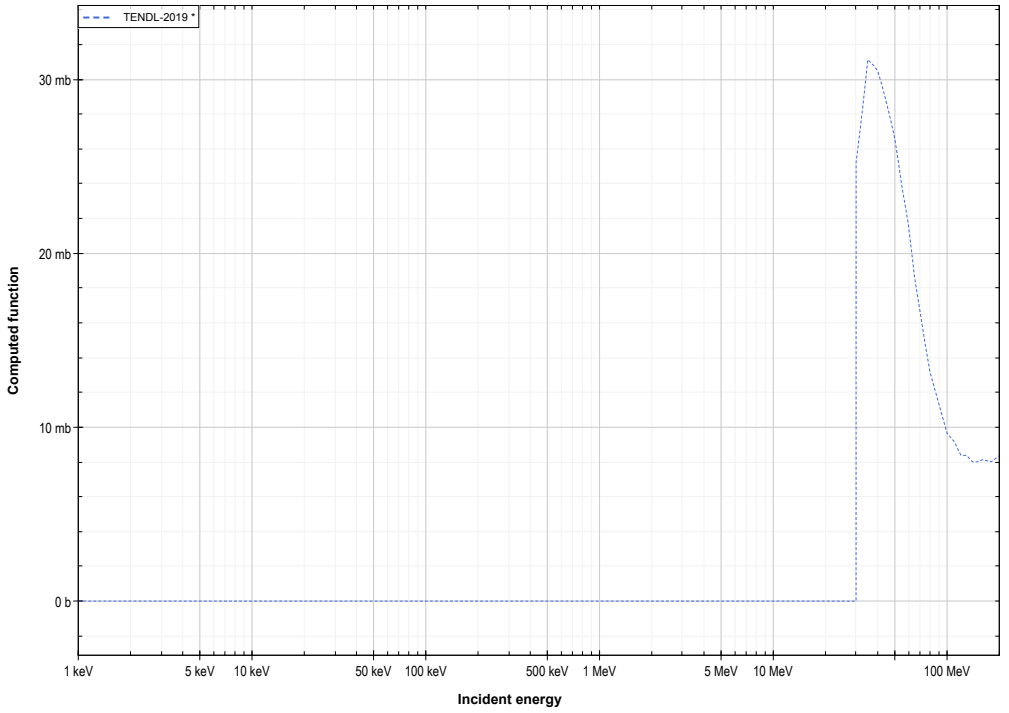
Reaction	Q-Value
Rh103(He3,α)Rh102	11257.60 keV
Rh103(He3,p+t)Rh102	-8556.26 keV
Rh103(He3,n+He3)Rh102	-9320.02 keV
Rh103(He3,2d)Rh102	-12588.93 keV
Rh103(He3,n+p+d)Rh102	-14813.49 keV
Rh103(He3,2n+2p)Rh102	-17038.06 keV

<< 29-Cu-65	**45-Rh-103**	79-Au-197 >>
<< MT183 (³He,n+p+d)	**MT190 (³He,2n+2p) or MT5 (Rh102 production)**	47-Ag-107 MT4 (³He,n) >>

Rh103 (³He,2n+2p) or Rh102 production log-log



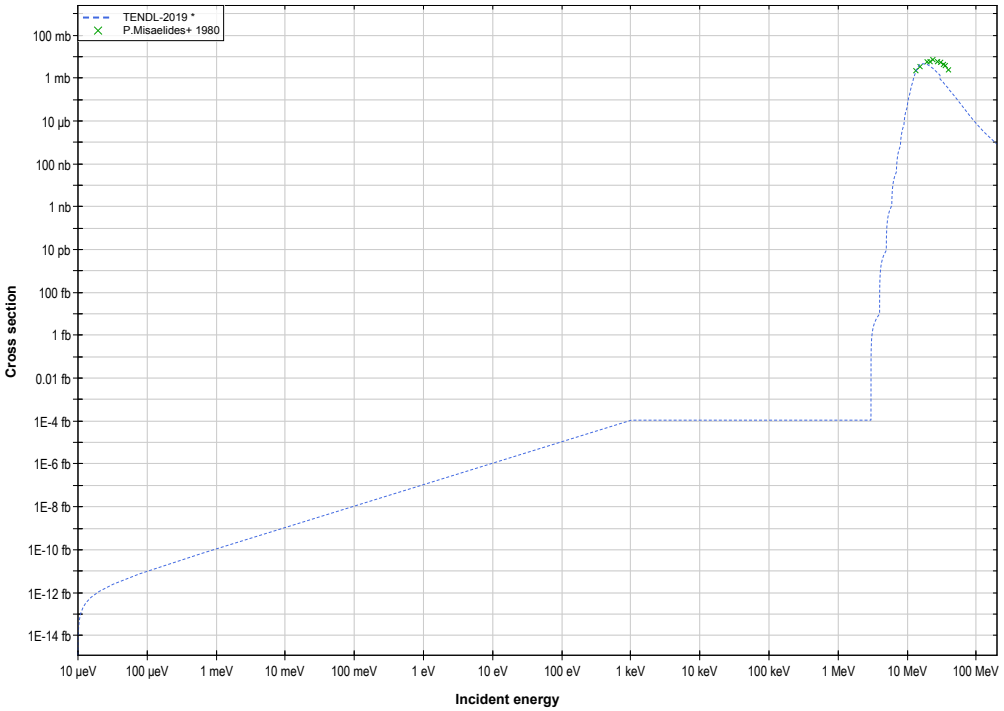
Rh103 (³He,2n+2p) or Rh102 production lin-log



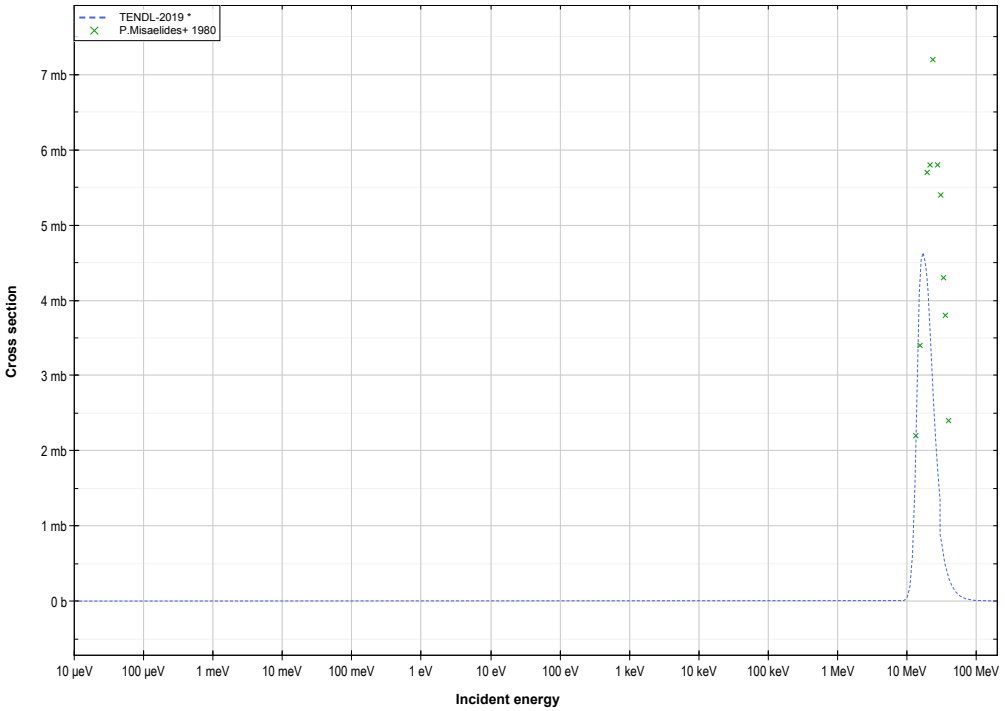
Reaction	Q-Value
Rh103(He3,α)Rh102	11257.60 keV
Rh103(He3,p+t)Rh102	-8556.26 keV
Rh103(He3,n+He3)Rh102	-9320.02 keV
Rh103(He3,2d)Rh102	-12588.93 keV
Rh103(He3,n+p+d)Rh102	-14813.49 keV
Rh103(He3,2n+2p)Rh102	-17038.06 keV

<< 45-Rh-103	**47-Ag-107**	47-Ag-109 >>
<< 45-Rh-103 MT190 (^{3}He,2n+2p)	**MT4 (^{3}He,n) or MT5 (In109 production)**	MT16 (^{3}He,2n) >>

Ag107 (^{3}He,n) or In109 production log-log



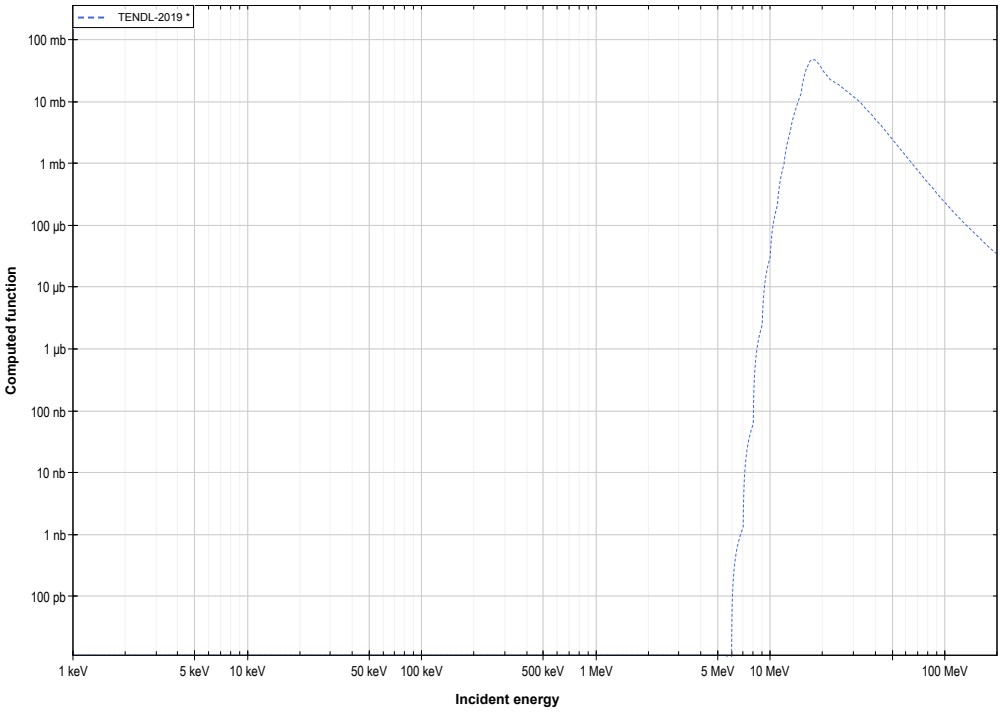
Ag107 (^{3}He,n) or In109 production lin-log



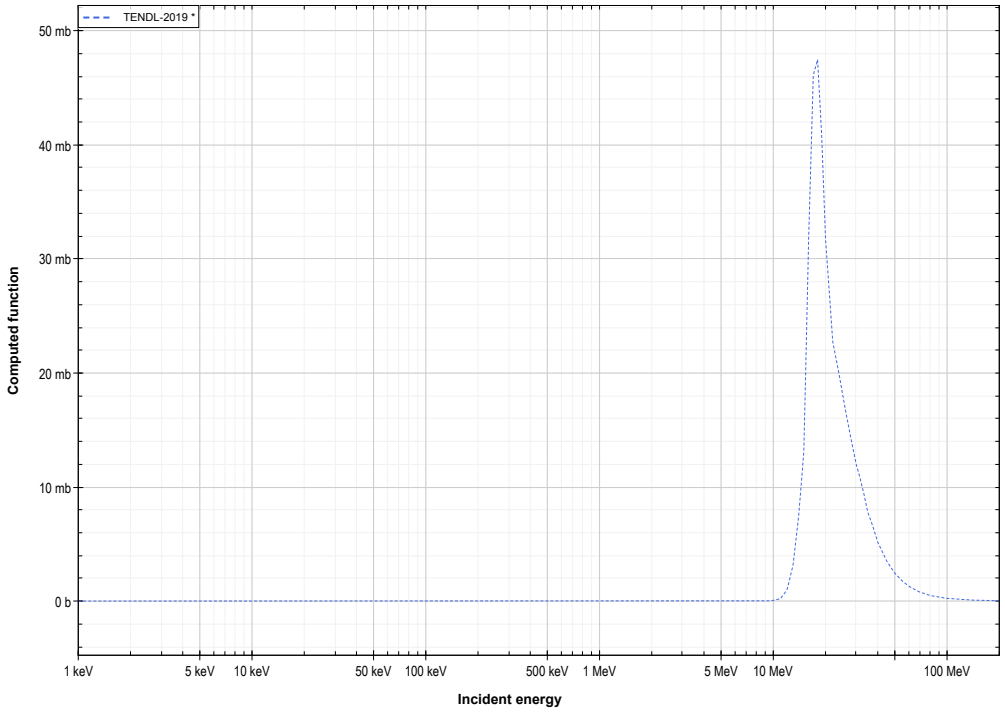
Reaction	Q-Value
Ag107(He3,n)In109	4943.20 keV

<< 45-Rh-103	**47-Ag-107**	47-Ag-109 >>
<< MT4 (^{3}He,n)	**MT16 (^{3}He,2n) or MT5 (In108 production)**	MT17 (^{3}He,3n) >>

Ag107 (^{3}He,2n) or In108 production log-log



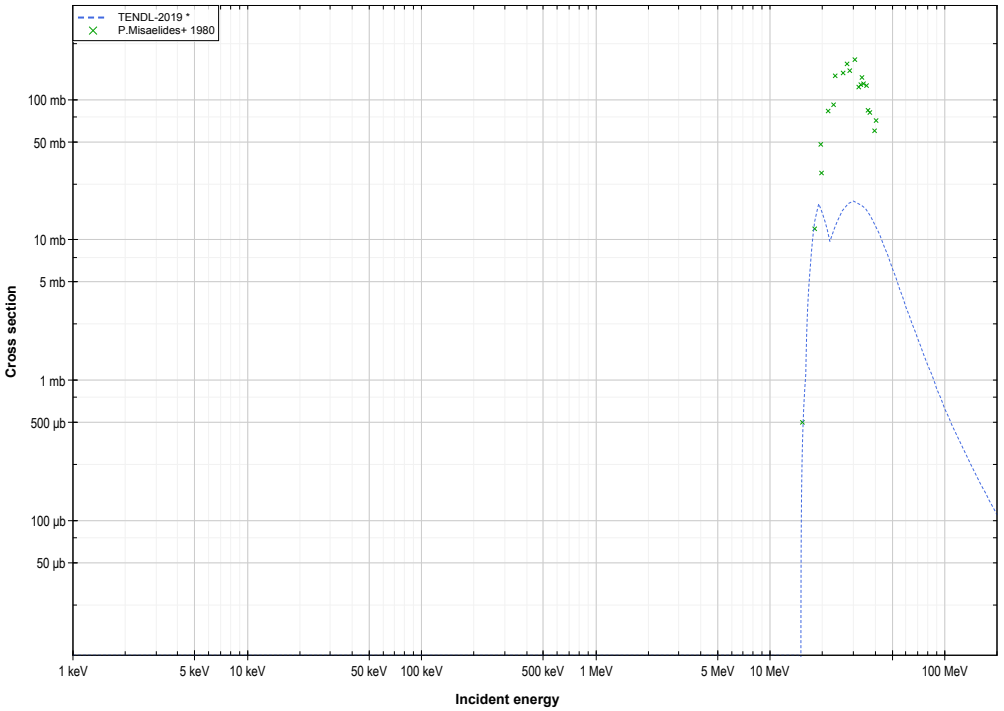
Ag107 (^{3}He,2n) or In108 production lin-log



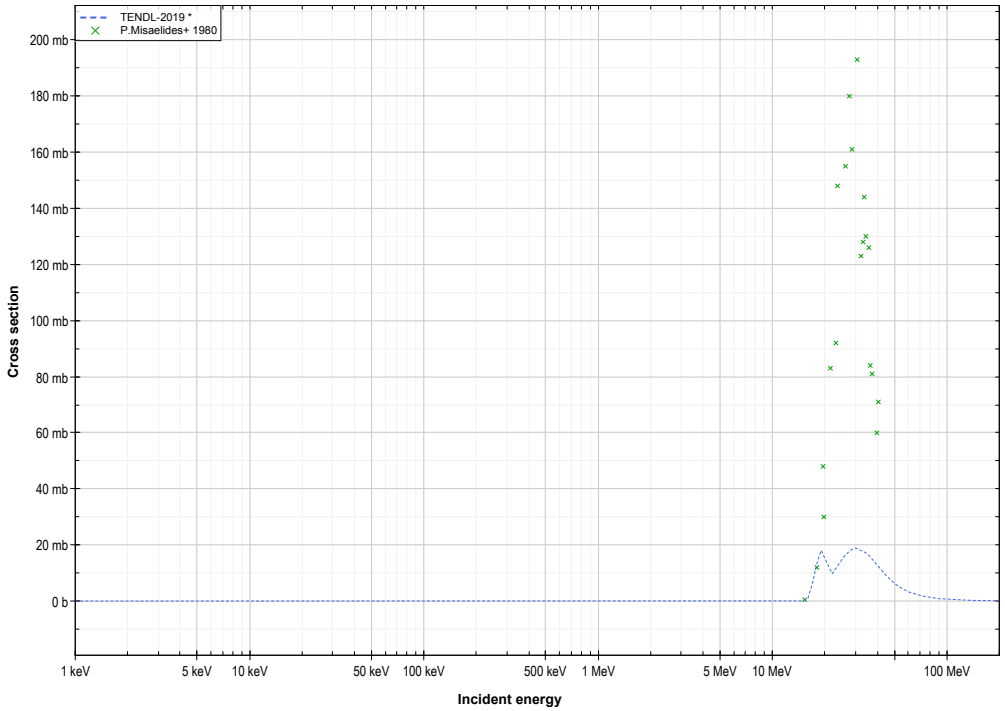
Reaction	Q-Value
Ag107(He3,2n)In108	-5498.12 keV

<< 45-Rh-103	**47-Ag-107**	47-Ag-109 >>
<< MT16 (^{3}He,2n)	**MT17 (^{3}He,3n) or MT5 (In107 production)**	MT22 (^{3}He,n+α) >>

Ag107 (^{3}He,3n) or In107 production log-log



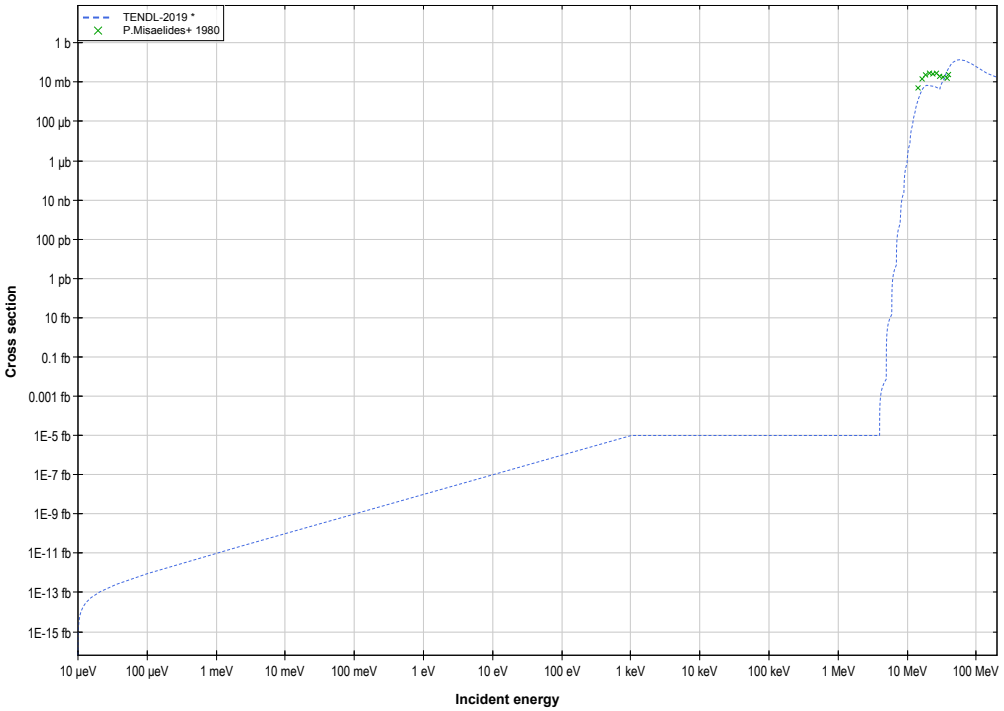
Ag107 (^{3}He,3n) or In107 production lin-log



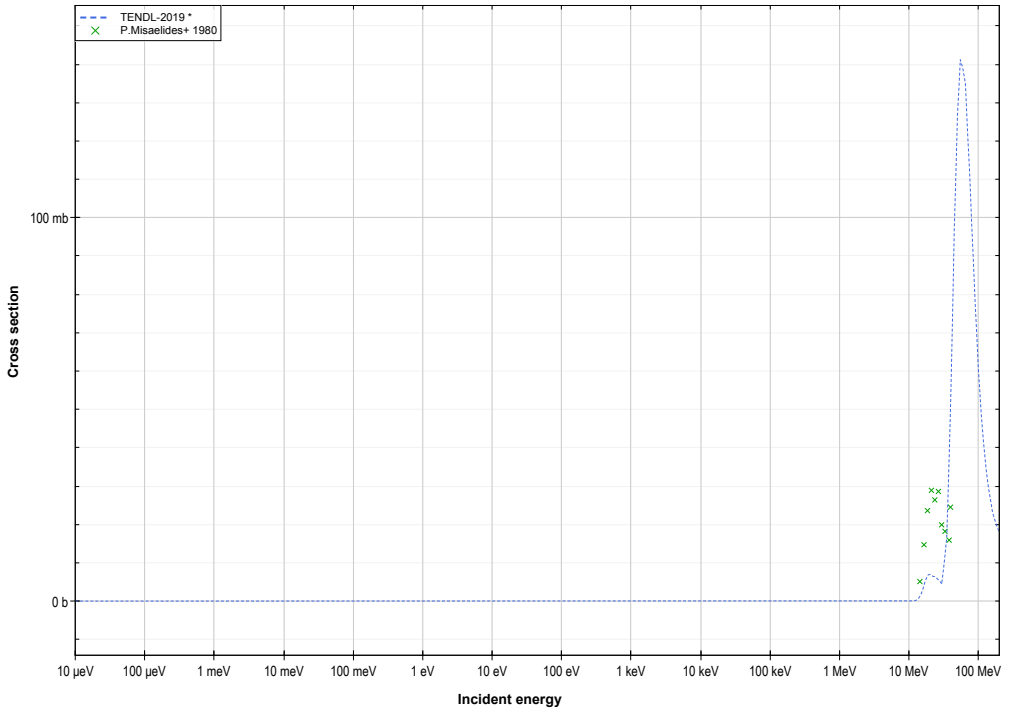
Reaction	Q-Value
Ag107(He3,3n)In107	-14125.43 keV

<< 34-Se-77	**47-Ag-107**	
<< MT17 (³He,3n)	**MT22 (³He,n+α) or MT5 (Ag105 production)**	MT24 (³He,2n+α) >>

Ag107 (³He,n+α) or Ag105 production log-log



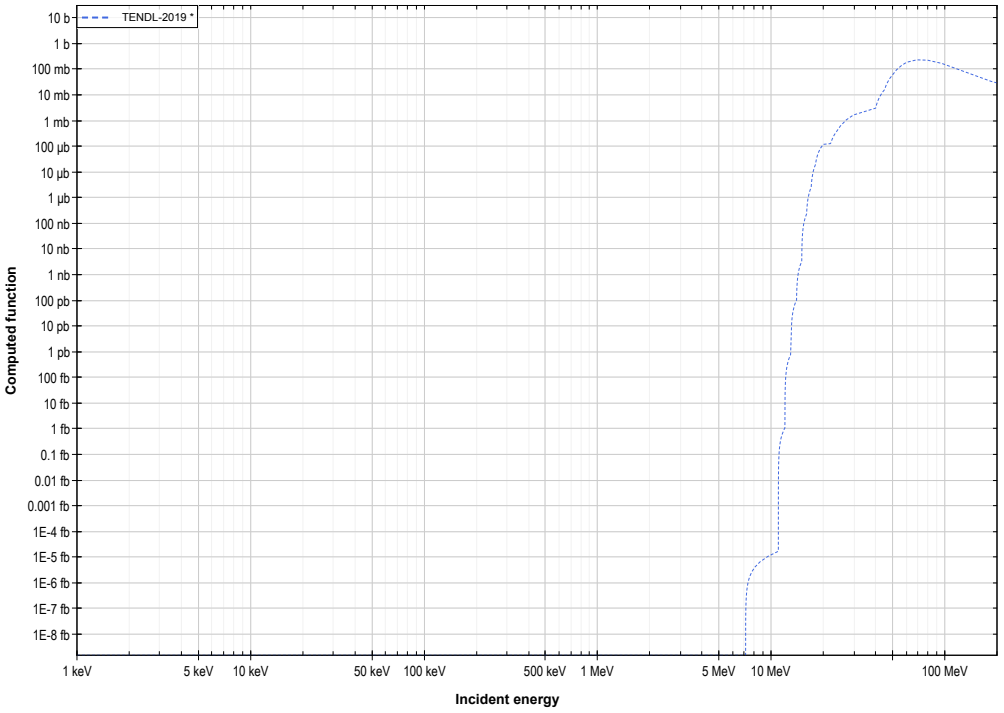
Ag107 (³He,n+α) or Ag105 production lin-log



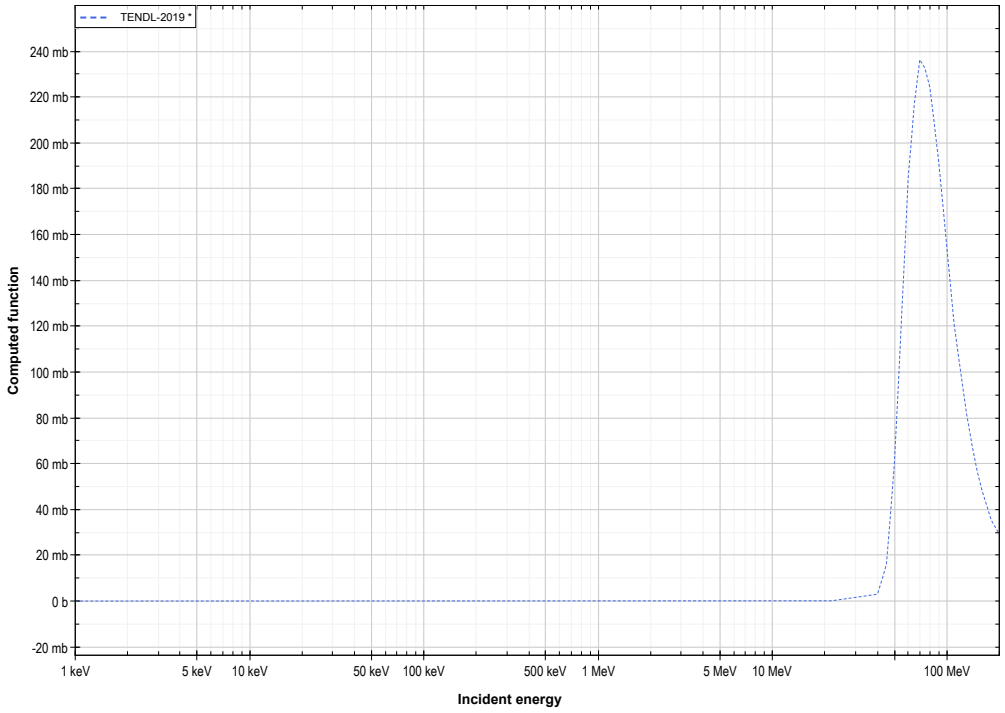
Reaction	Q-Value
Ag107(He3,n+α)Ag105	3099.29 keV
Ag107(He3,d+t)Ag105	-14490.01 keV
Ag107(He3,n+p+t)Ag105	-16714.58 keV
Ag107(He3,2n+He3)Ag105	-17478.33 keV
Ag107(He3,n+2d)Ag105	-20747.24 keV
Ag107(He3,2n+p+d)Ag105	-22971.81 keV
Ag107(He3,3n+2p)Ag105	-25196.37 keV

<< 27-Co-59	**47-Ag-107**	73-Ta-181 >>
<< MT22 (³He,n+α)	**MT24 (³He,2n+α) or MT5 (Ag104 production)**	MT25 (³He,3n+α) >>

Ag107 (³He,2n+α) or Ag104 production log-log



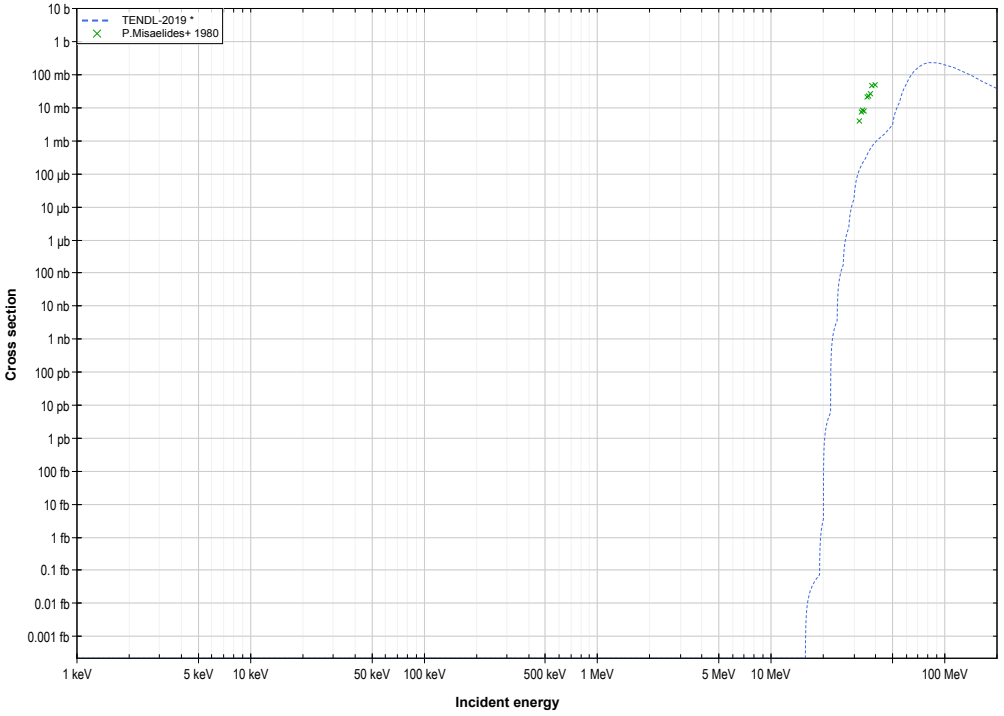
Ag107 (³He,2n+α) or Ag104 production lin-log



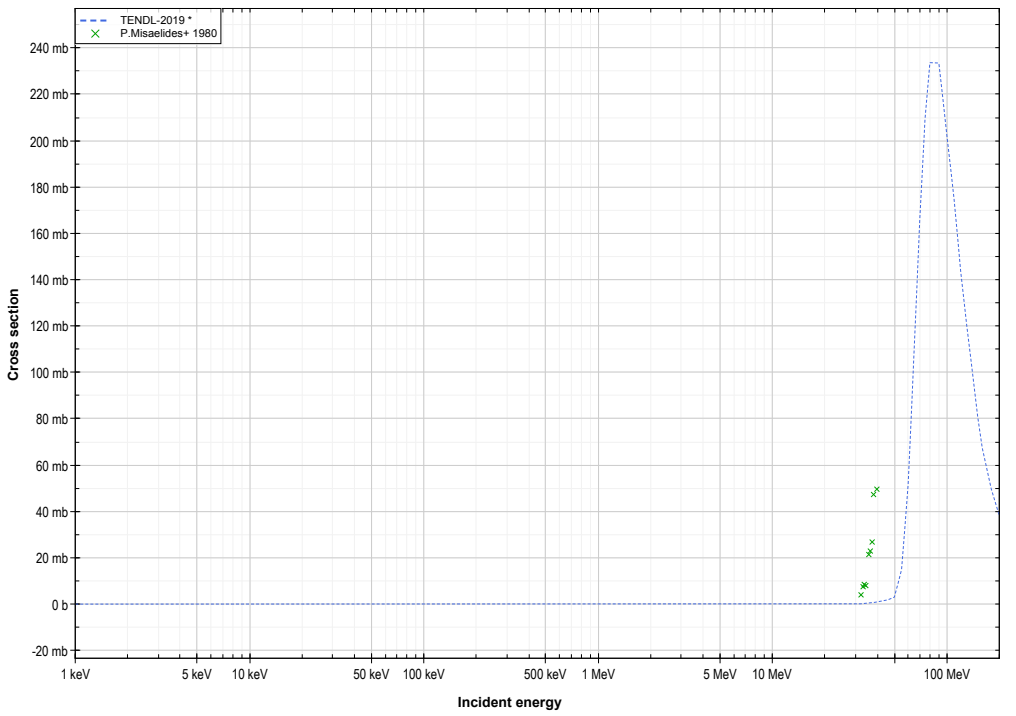
Reaction	Q-Value
Ag107(He3,2n+α)Ag104	-6927.03 keV
Ag107(He3,2t)Ag104	-18259.10 keV
Ag107(He3,n+d+t)Ag104	-24516.33 keV
Ag107(He3,2n+p+t)Ag104	-26740.90 keV
Ag107(He3,3n+He3)Ag104	-27504.65 keV
Ag107(He3,2n+2d)Ag104	-30773.56 keV
Ag107(He3,3n+p+d)Ag104	-32998.13 keV
Ag107(He3,4n+2p)Ag104	-35222.69 keV

<< 44-Ru-101	**47-Ag-107**	47-Ag-109 >>
<< MT24 (³He,2n+α)	**MT25 (³He,3n+α) or MT5 (Ag103 production)**	MT32 (³He,n+d) >>

Ag107 (³He,3n+α) or Ag103 production log-log



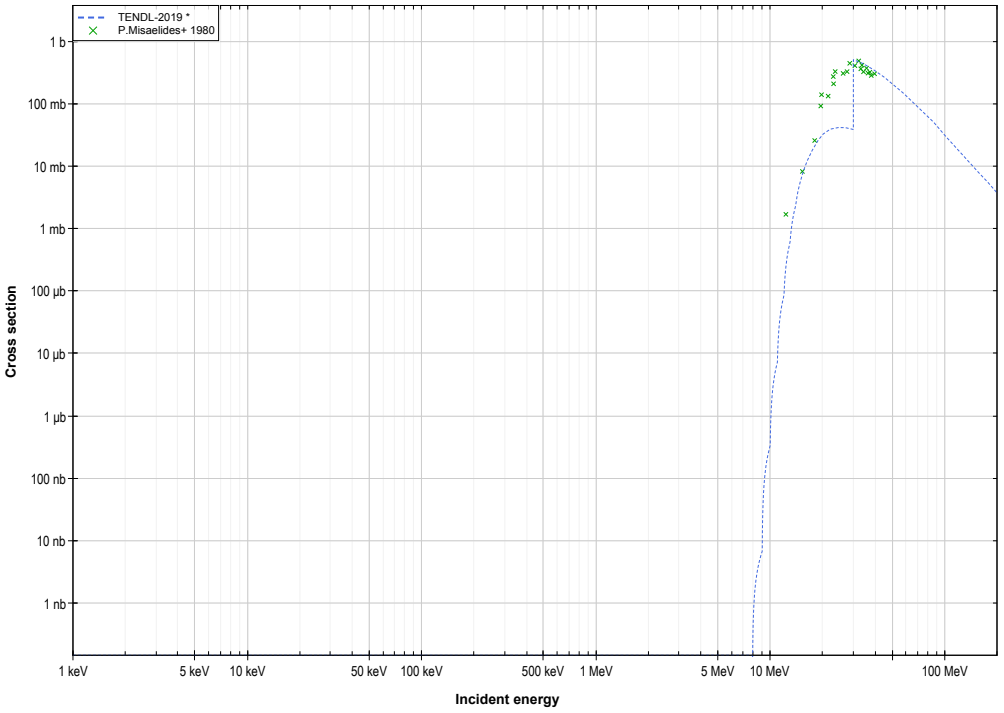
Ag107 (³He,3n+α) or Ag103 production lin-log



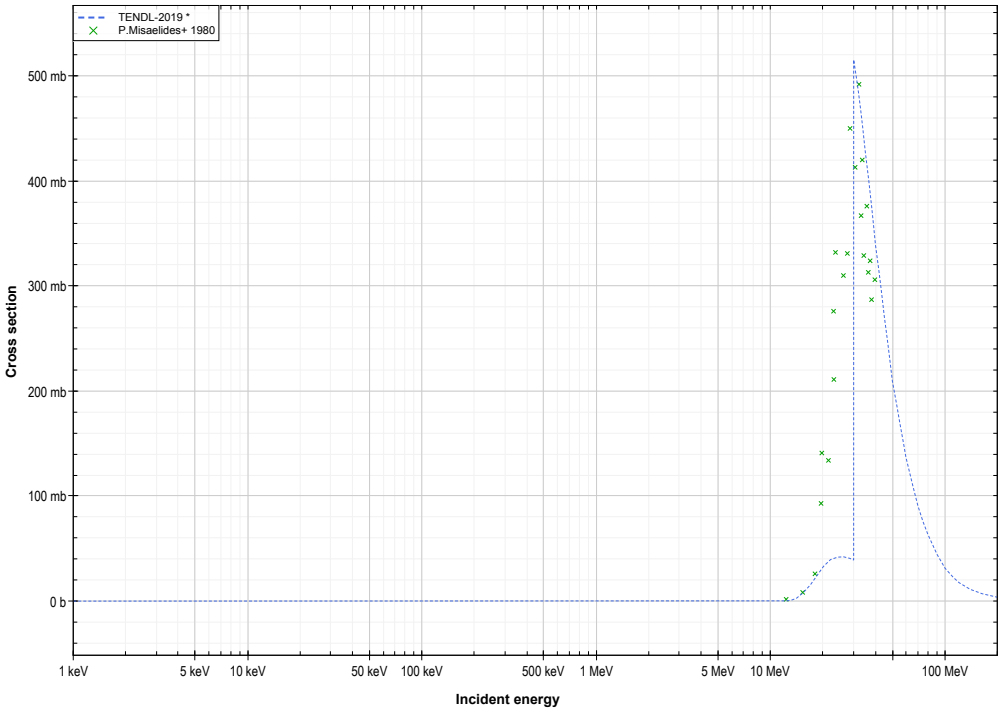
Reaction	Q-Value
Ag107(He3,3n+α)Ag103	-15311.35 keV
Ag107(He3,n+2t)Ag103	-26643.42 keV
Ag107(He3,2n+d+t)Ag103	-32900.65 keV
Ag107(He3,3n+p+t)Ag103	-35125.21 keV
Ag107(He3,4n+He3)Ag103	-35888.97 keV
Ag107(He3,3n+2d)Ag103	-39157.88 keV
Ag107(He3,4n+p+d)Ag103	-41382.44 keV
Ag107(He3,5n+2p)Ag103	-43607.01 keV

<< 44-Ru-102	**47-Ag-107**	62-Sm-147 >>
<< MT25 (^{3}He,3n+α)	**MT32 (^{3}He,n+d) or MT5 (Cd107 production)**	MT37 (^{3}He,4n) >>

Ag107 (^{3}He,n+d) or Cd107 production log-log



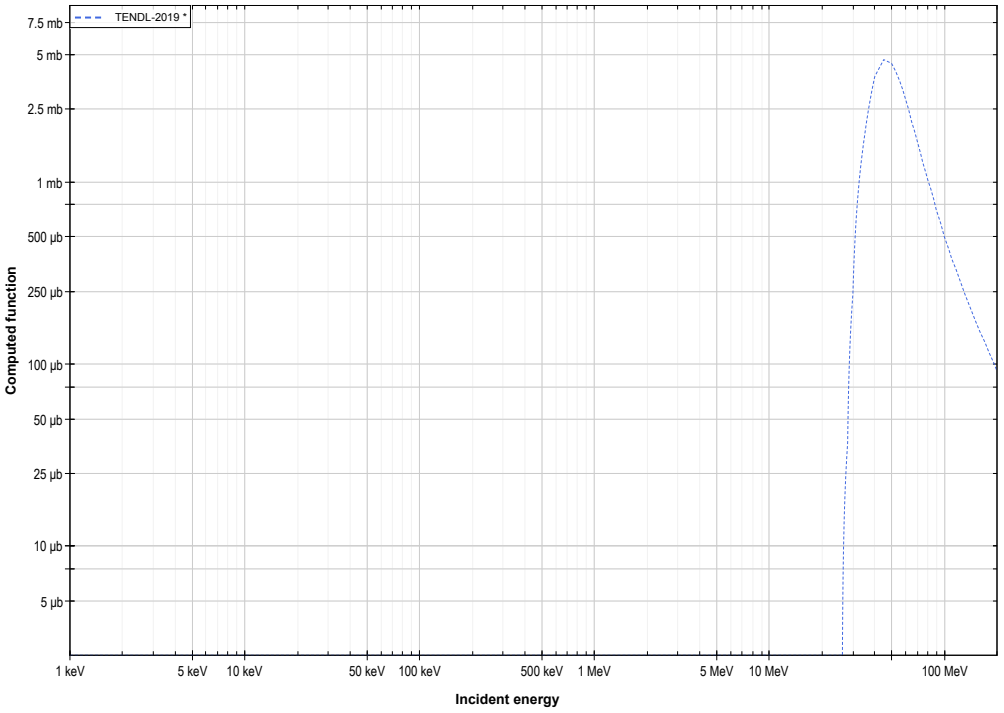
Ag107 (^{3}He,n+d) or Cd107 production lin-log



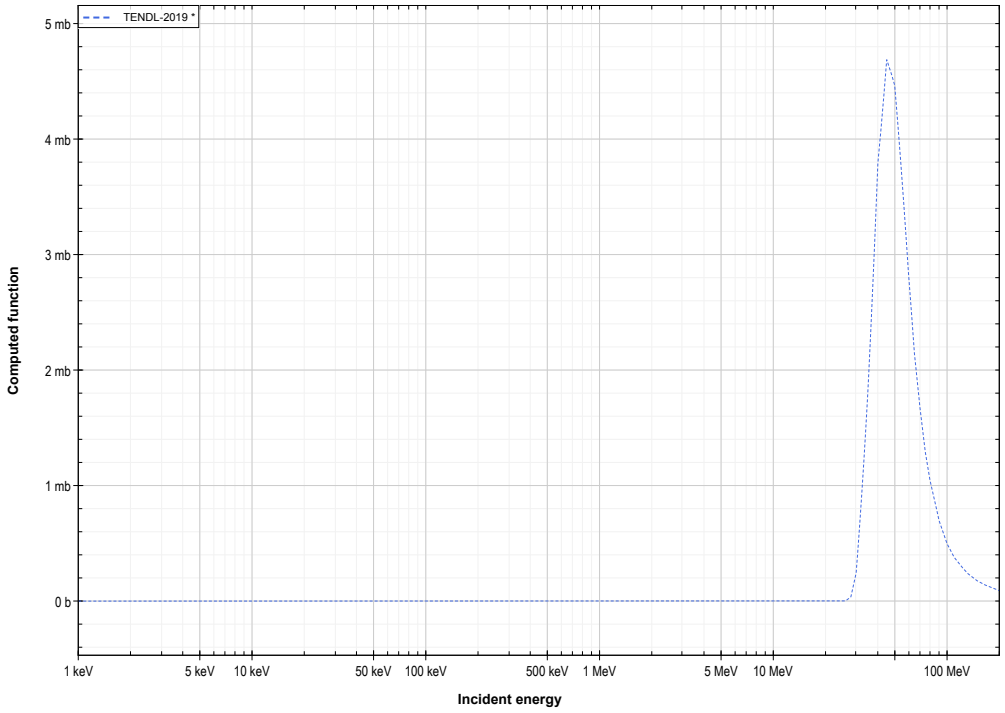
Reaction	Q-Value
Ag107(He3,t)Cd107	-1434.99 keV
Ag107(He3,n+d)Cd107	-7692.22 keV
Ag107(He3,2n+p)Cd107	-9916.79 keV

<< 44-Ru-102	**47-Ag-107**	47-Ag-109 >>
<< MT32 (^{3}He,n+d)	**MT37 (^{3}He,4n) or MT5 (In106 production)**	MT41 (^{3}He,2n+p) >>

Ag107 (^{3}He,4n) or In106 production log-log



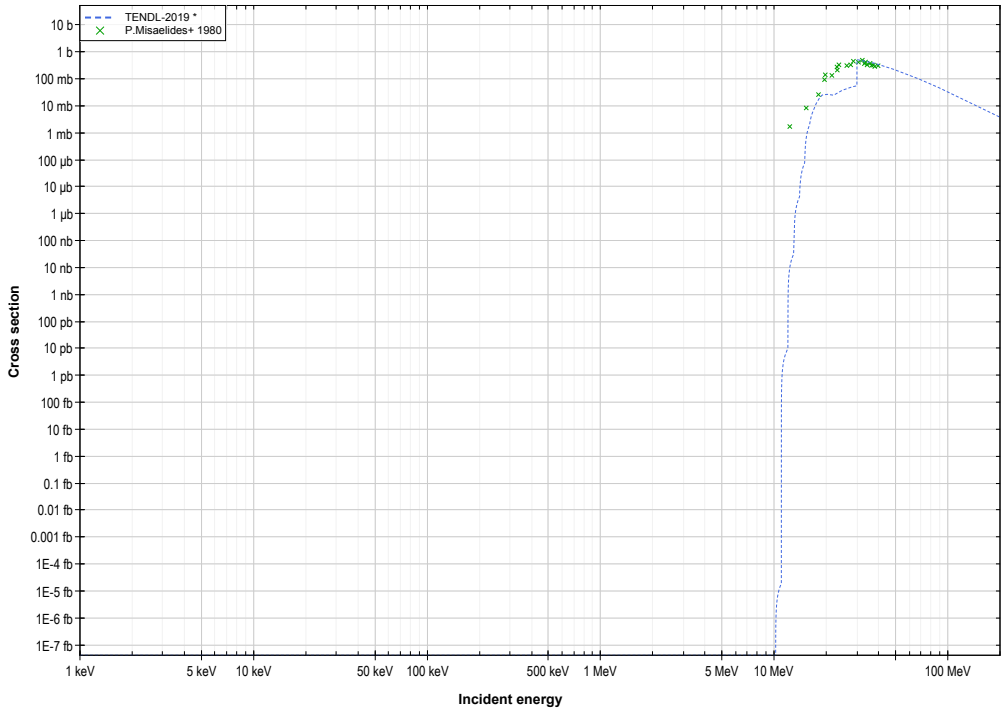
Ag107 (^{3}He,4n) or In106 production lin-log



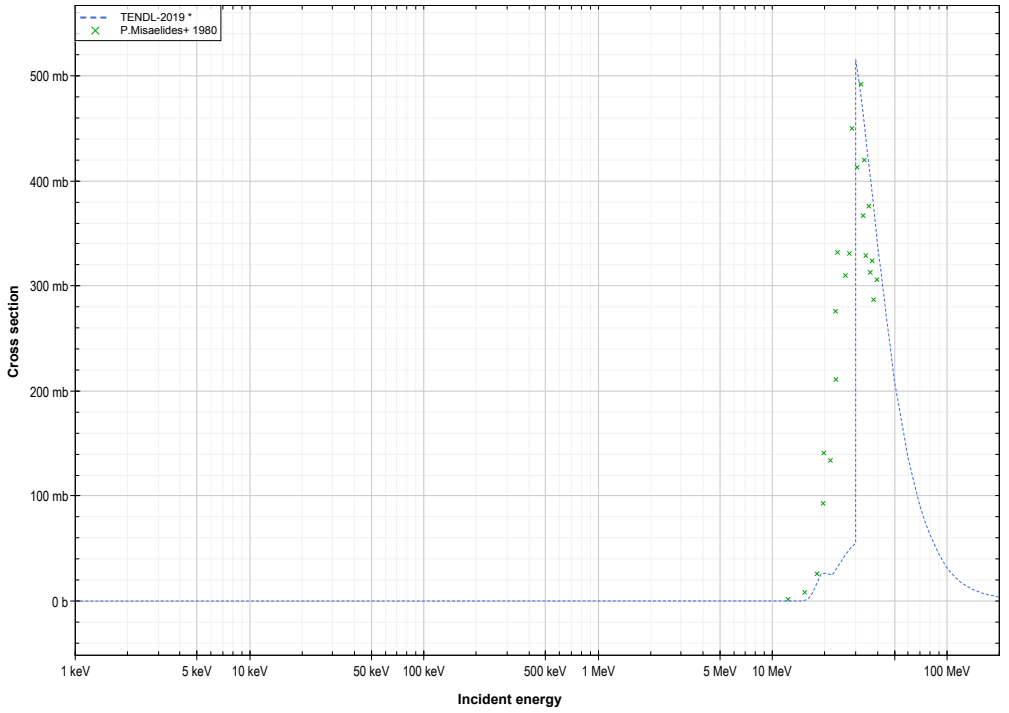
Reaction	Q-Value
Ag107(He3,4n)In106	-25152.75 keV

<< 44-Ru-102	**47-Ag-107**	47-Ag-109 >>
<< MT37 (^{3}He,4n)	**MT41 (^{3}He,2n+p) or MT5 (Cd107 production)**	MT105 (^{3}He,t) >>

Ag107 (^{3}He,2n+p) or Cd107 production log-log



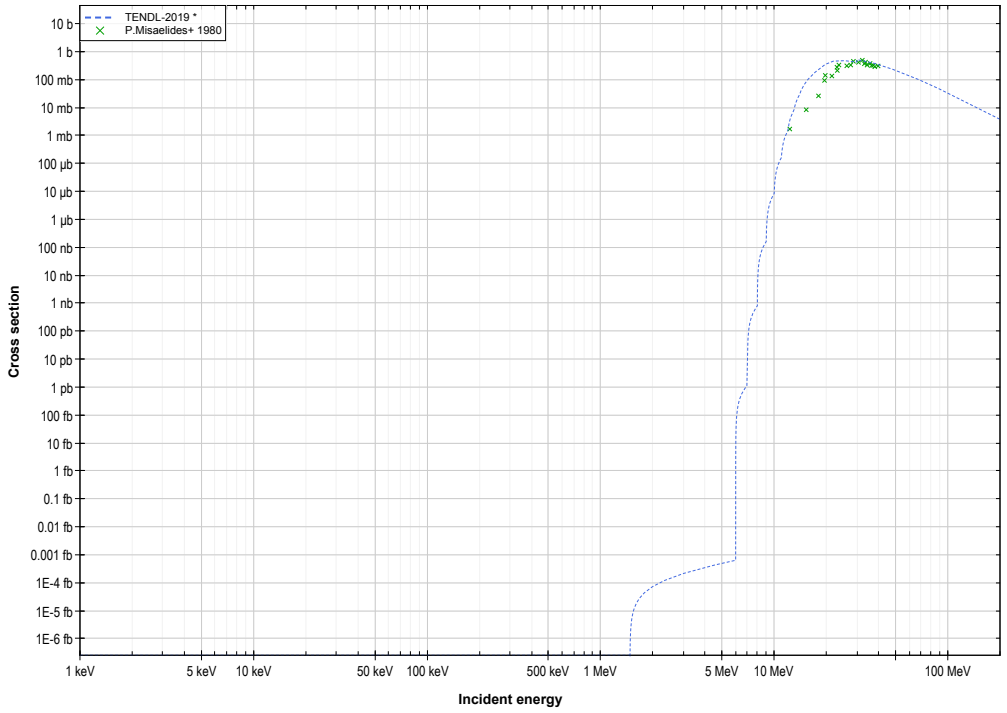
Ag107 (^{3}He,2n+p) or Cd107 production lin-log



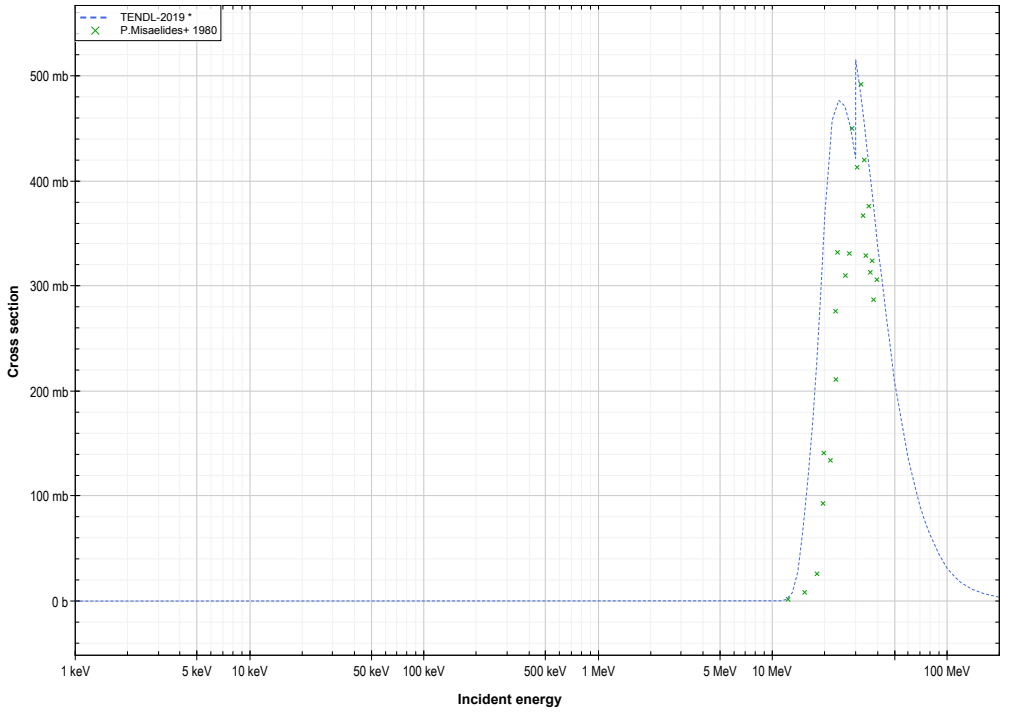
Reaction	Q-Value
Ag107(He3,t)Cd107	-1434.99 keV
Ag107(He3,n+d)Cd107	-7692.22 keV
Ag107(He3,2n+p)Cd107	-9916.79 keV

<< 44-Ru-102	**47-Ag-107**	62-Sm-147 >>
<< MT41 (^{3}He,2n+p)	**MT105 (^{3}He,t) or MT5 (Cd107 production)**	MT107 (^{3}He,α) >>

Ag107 (^{3}He,t) or Cd107 production log-log



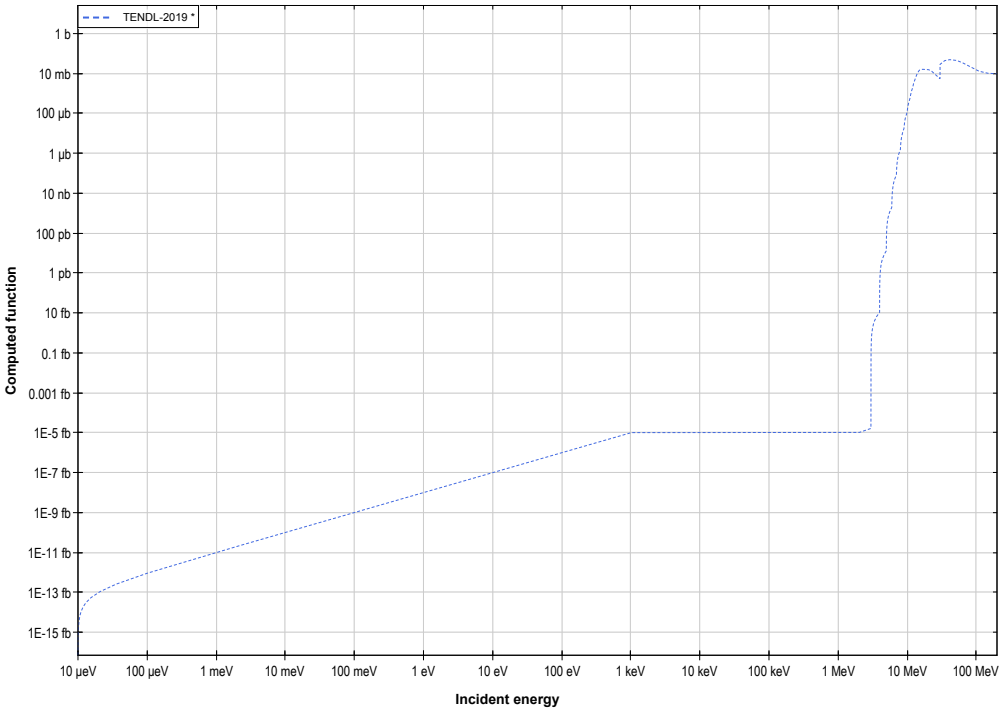
Ag107 (^{3}He,t) or Cd107 production lin-log



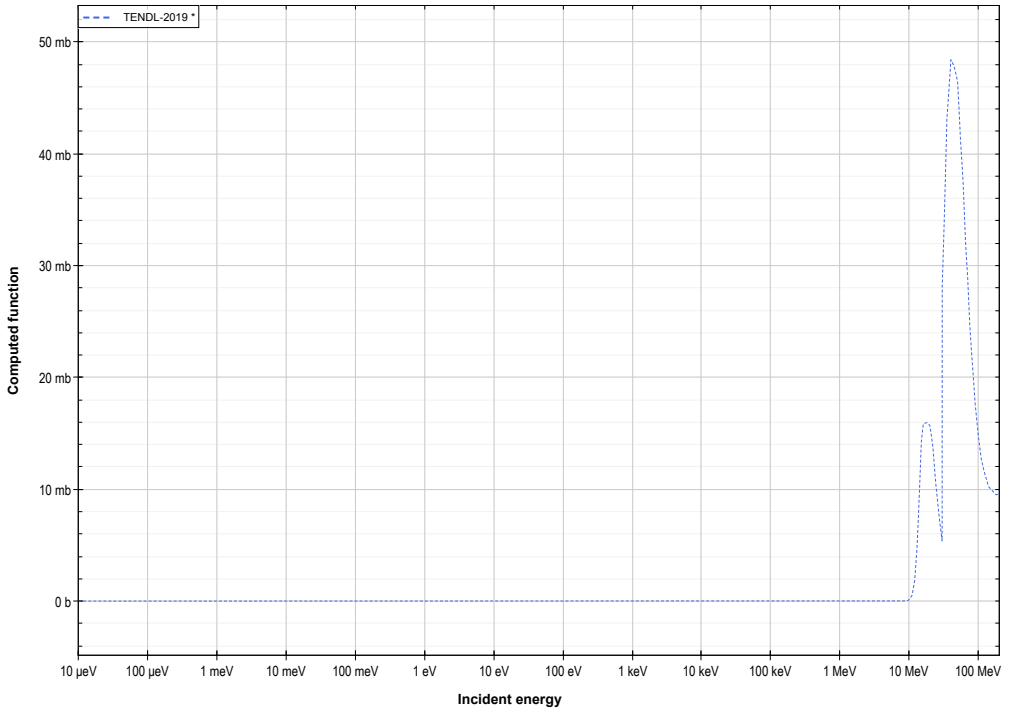
Reaction	Q-Value
Ag107(He3,t)Cd107	-1434.99 keV
Ag107(He3,n+d)Cd107	-7692.22 keV
Ag107(He3,2n+p)Cd107	-9916.79 keV

<< 45-Rh-103	**47-Ag-107**	48-Cd-116 >>
<< MT105 (^{3}He,t)	**MT107 (^{3}He,α) or MT5 (Ag106 production)**	MT176 (^{3}He,2n+^{3}He) >>

Ag107 (^{3}He,α) or Ag106 production log-log



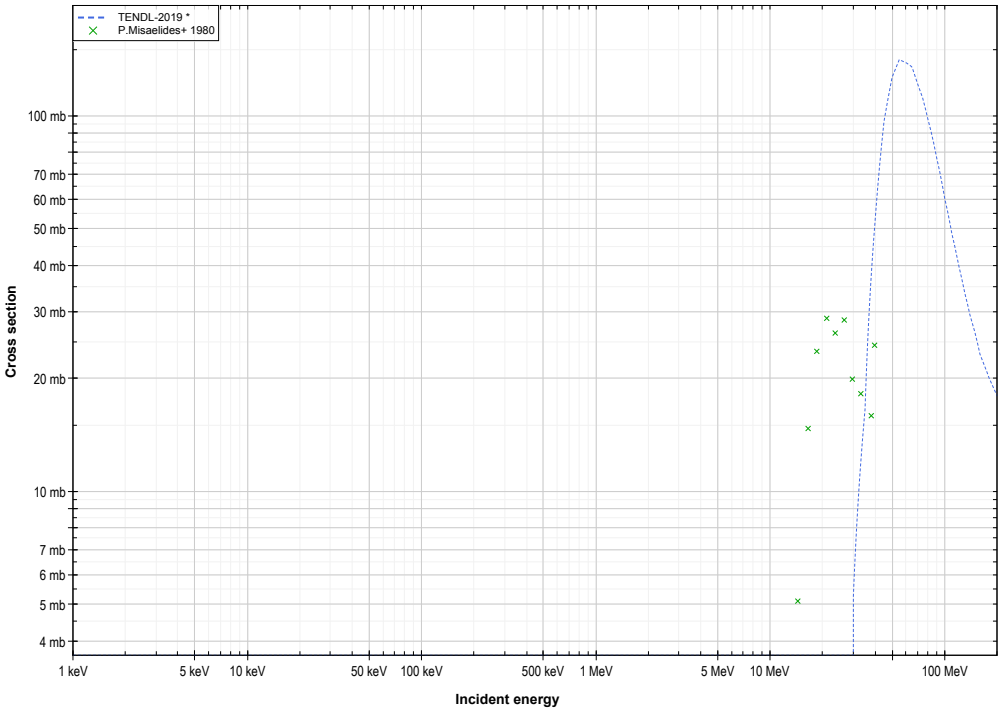
Ag107 (^{3}He,α) or Ag106 production lin-log



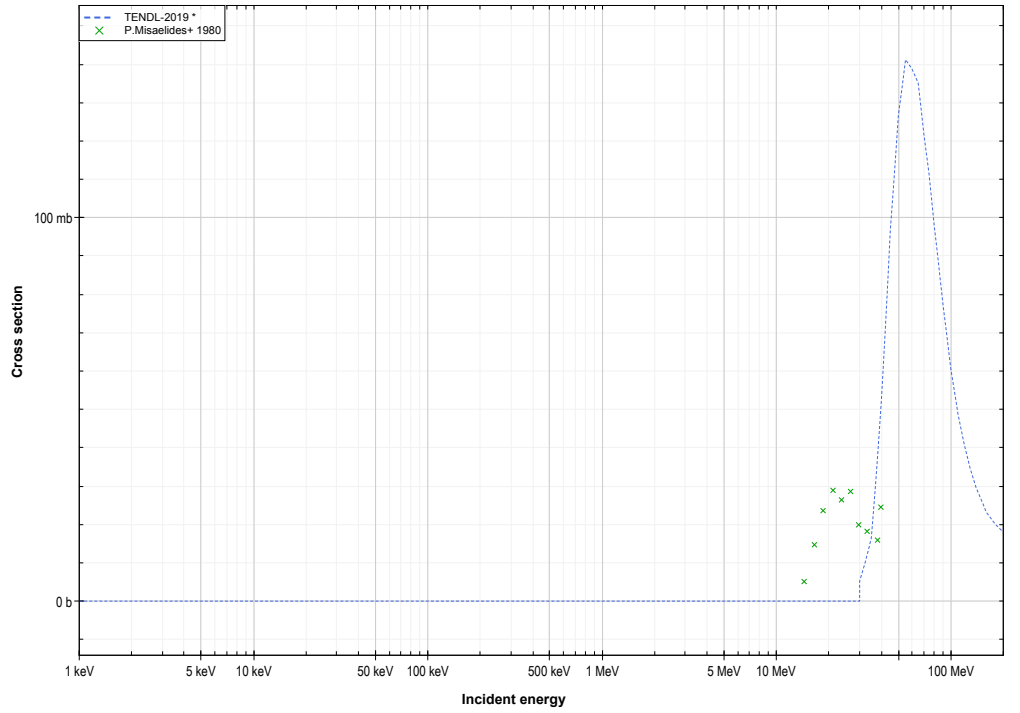
Reaction	Q-Value
Ag107(He3,α)Ag106	11041.60 keV
Ag107(He3,p+t)Ag106	-8772.26 keV
Ag107(He3,n+He3)Ag106	-9536.02 keV
Ag107(He3,2d)Ag106	-12804.93 keV
Ag107(He3,n+p+d)Ag106	-15029.49 keV
Ag107(He3,2n+2p)Ag106	-17254.06 keV

<< 29-Cu-63	**47-Ag-107**	
<< MT107 (^{3}He,α)	**MT176 (^{3}He,2n+^{3}He) or MT5 (Ag105 production)**	MT177 (^{3}He,3n+^{3}He) >>

Ag107 (^{3}He,2n+^{3}He) or Ag105 production log-log



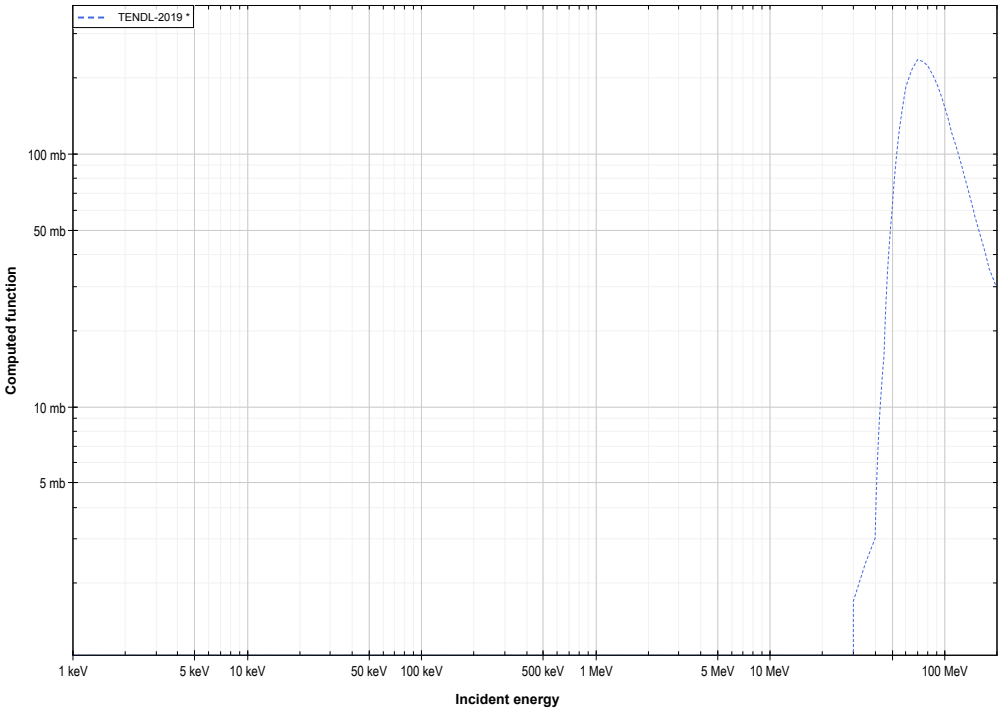
Ag107 (^{3}He,2n+^{3}He) or Ag105 production lin-log



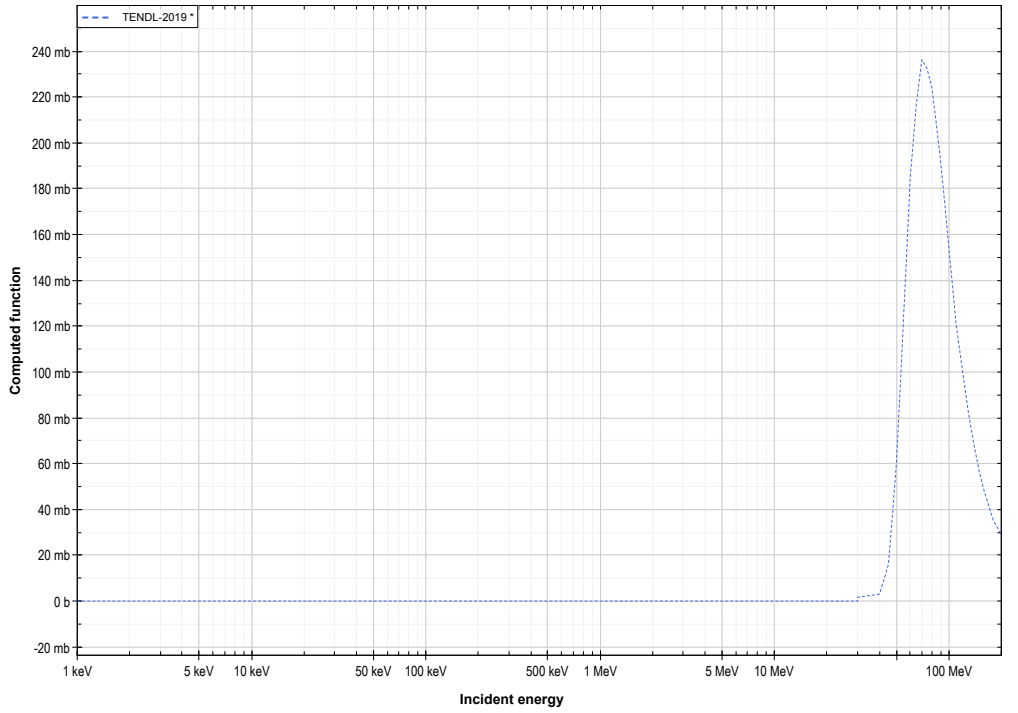
Reaction	Q-Value
Ag107(He3,n+α)Ag105	3099.29 keV
Ag107(He3,d+t)Ag105	-14490.01 keV
Ag107(He3,n+p+t)Ag105	-16714.58 keV
Ag107(He3,2n+He3)Ag105	-17478.33 keV
Ag107(He3,n+2d)Ag105	-20747.24 keV
Ag107(He3,2n+p+d)Ag105	-22971.81 keV
Ag107(He3,3n+2p)Ag105	-25196.37 keV

<< 27-Co-59	**47-Ag-107**	
<< MT176 (^{3}He,2n+^{3}He)	**MT177 (^{3}He,3n+^{3}He) or MT5 (Ag104 production)**	MT178 (^{3}He,4n+^{3}He) >>

Ag107 (^{3}He,3n+^{3}He) or Ag104 production log-log



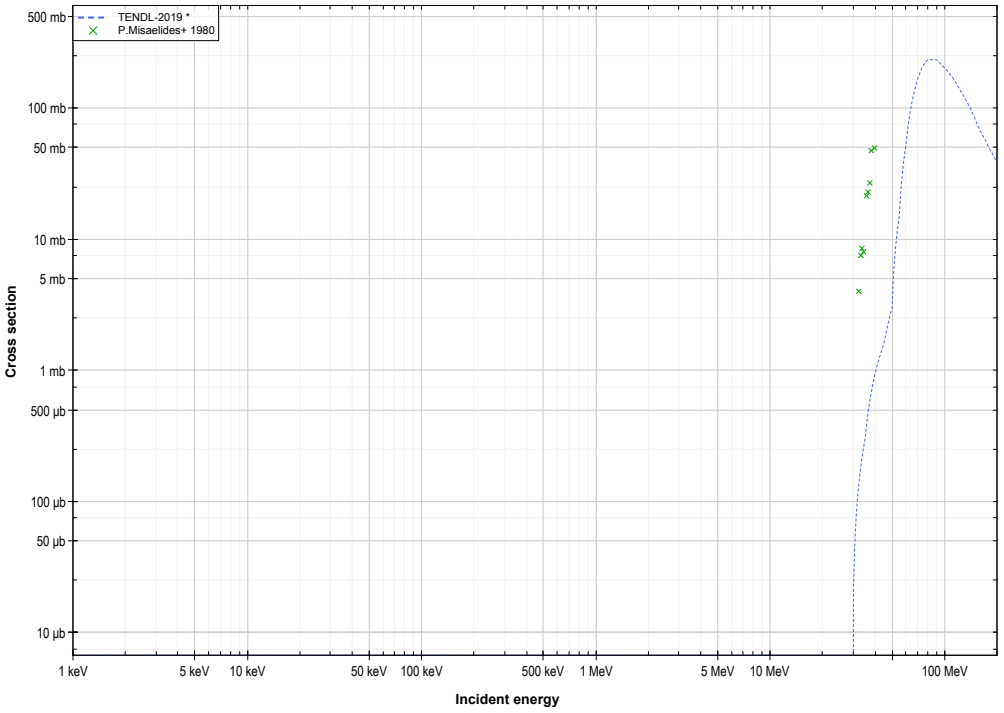
Ag107 (^{3}He,3n+^{3}He) or Ag104 production lin-log



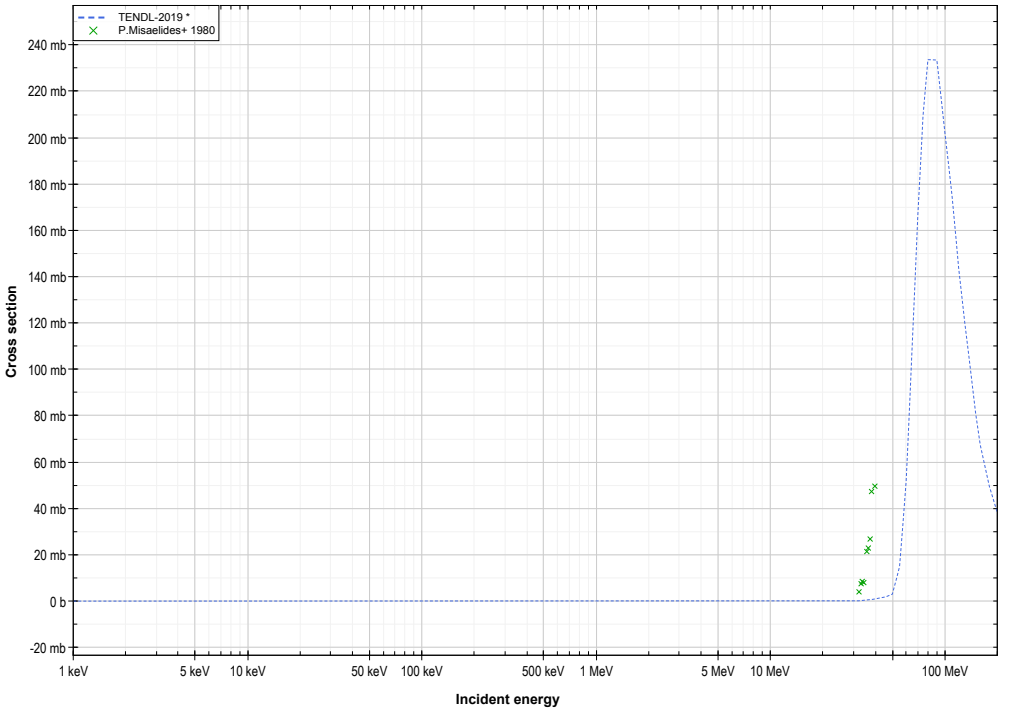
Reaction	Q-Value
Ag107(He3,2n+α)Ag104	-6927.03 keV
Ag107(He3,2t)Ag104	-18259.10 keV
Ag107(He3,n+d+t)Ag104	-24516.33 keV
Ag107(He3,2n+p+t)Ag104	-26740.90 keV
Ag107(He3,3n+He3)Ag104	-27504.65 keV
Ag107(He3,2n+2d)Ag104	-30773.56 keV
Ag107(He3,3n+p+d)Ag104	-32998.13 keV
Ag107(He3,4n+2p)Ag104	-35222.69 keV

	47-Ag-107	47-Ag-109 >>
<< MT177 (^{3}He,3n+^{3}He)	**MT178 (^{3}He,4n+^{3}He) or MT5 (Ag103 production)**	MT179 (^{3}He,3n+2p) >>

Ag107 (^{3}He,4n+^{3}He) or Ag103 production log-log



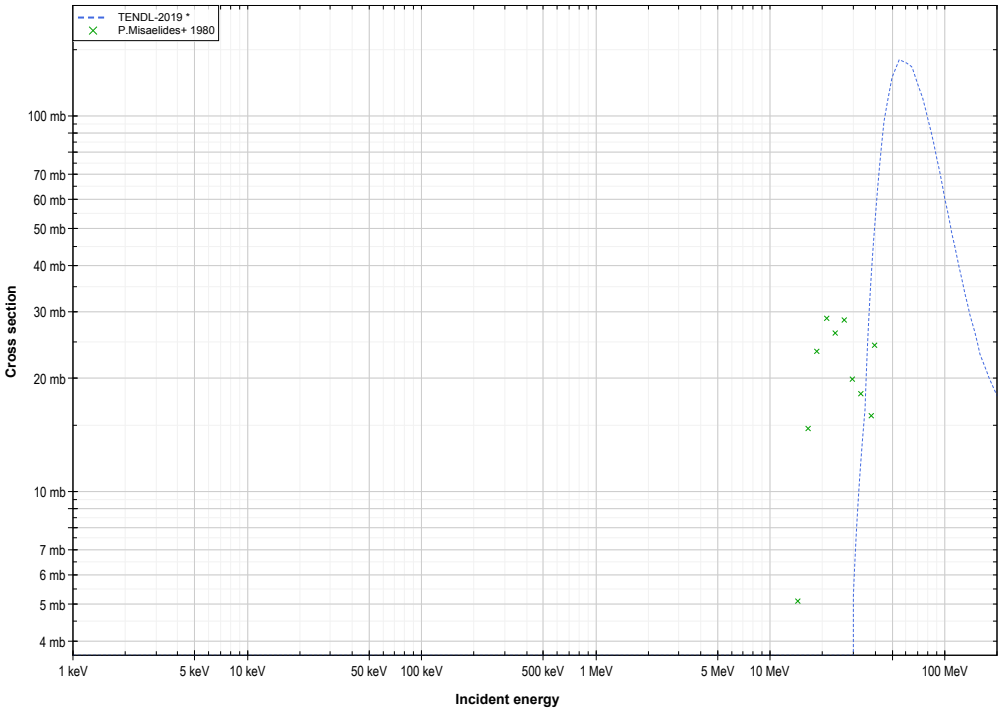
Ag107 (^{3}He,4n+^{3}He) or Ag103 production lin-log



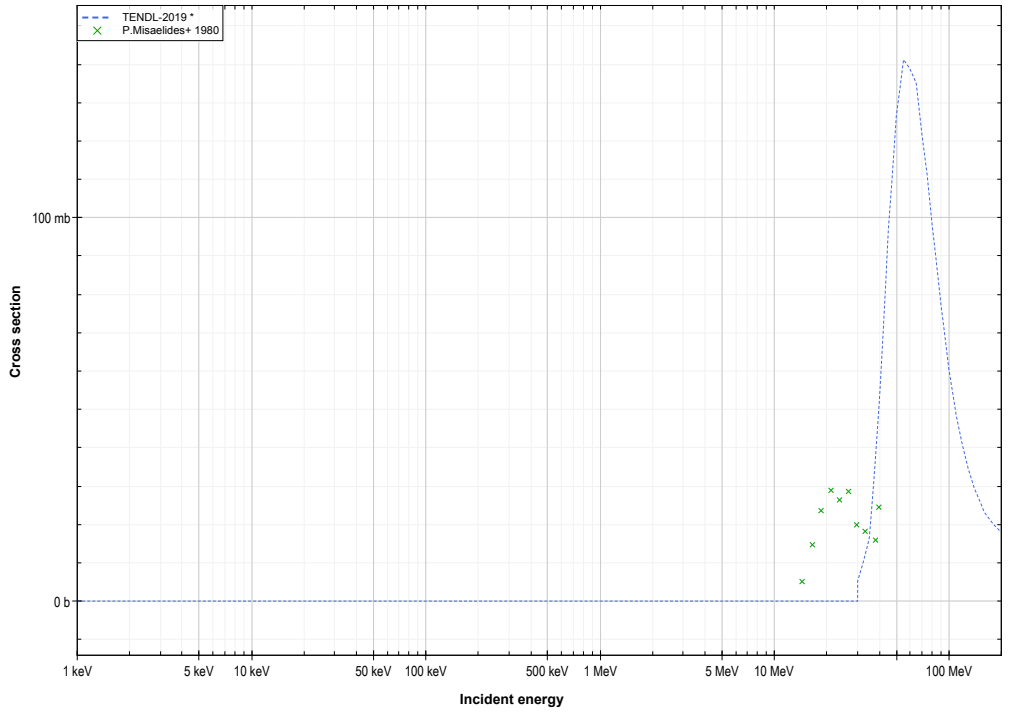
Reaction	Q-Value
Ag107(He3,3n+α)Ag103	-15311.35 keV
Ag107(He3,n+2t)Ag103	-26643.42 keV
Ag107(He3,2n+d+t)Ag103	-32900.65 keV
Ag107(He3,3n+p+t)Ag103	-35125.21 keV
Ag107(He3,4n+He3)Ag103	-35888.97 keV
Ag107(He3,3n+2d)Ag103	-39157.88 keV
Ag107(He3,4n+p+d)Ag103	-41382.44 keV
Ag107(He3,5n+2p)Ag103	-43607.01 keV

<< 29-Cu-63	**47-Ag-107**	
<< MT178 (^{3}He,4n+^{3}He)	**MT179 (^{3}He,3n+2p) or MT5 (Ag105 production)**	MT182 (^{3}He,d+t) >>

Ag107 (^{3}He,3n+2p) or Ag105 production log-log



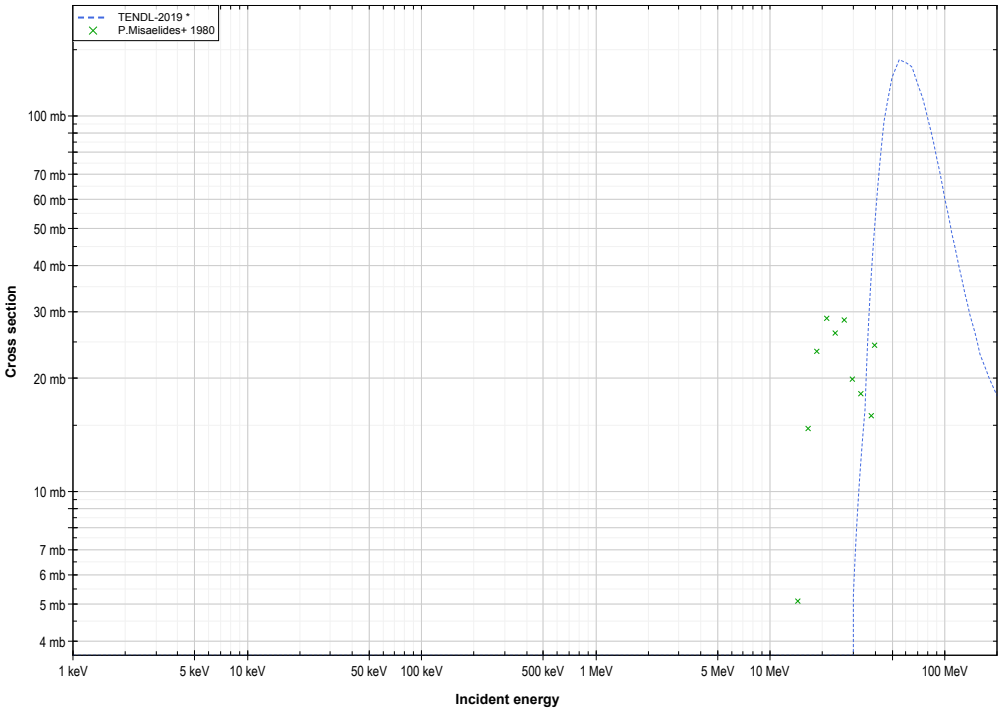
Ag107 (^{3}He,3n+2p) or Ag105 production lin-log



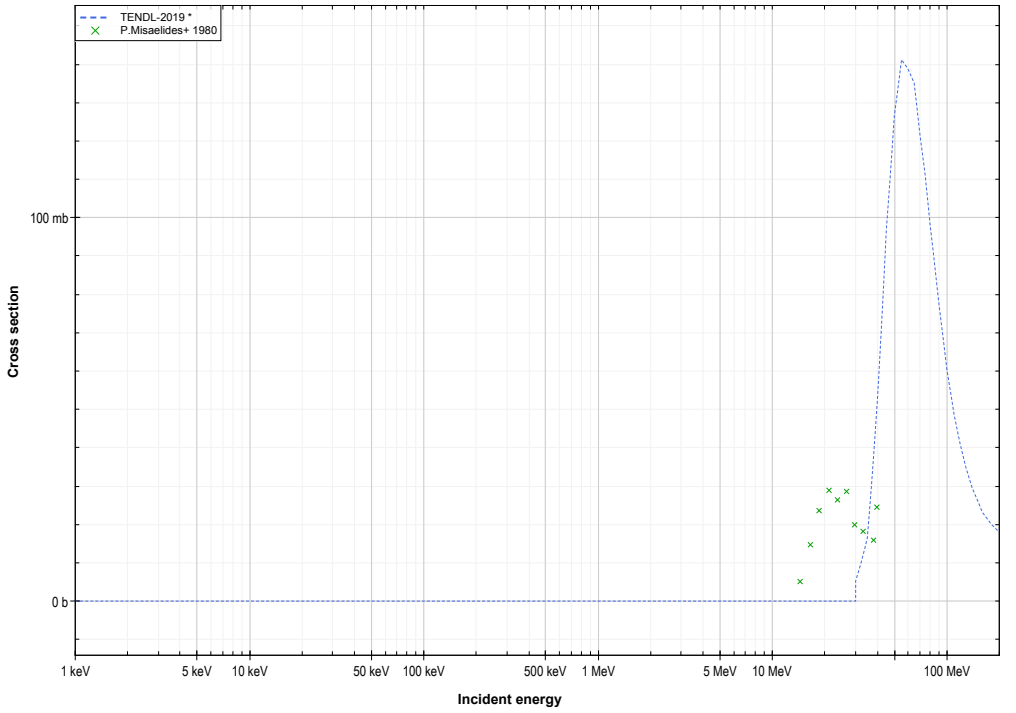
Reaction	Q-Value
Ag107(He3,n+α)Ag105	3099.29 keV
Ag107(He3,d+t)Ag105	-14490.01 keV
Ag107(He3,n+p+t)Ag105	-16714.58 keV
Ag107(He3,2n+He3)Ag105	-17478.33 keV
Ag107(He3,n+2d)Ag105	-20747.24 keV
Ag107(He3,2n+p+d)Ag105	-22971.81 keV
Ag107(He3,3n+2p)Ag105	-25196.37 keV

<< 29-Cu-63	**47-Ag-107**	
<< MT179 (^{3}He,3n+2p)	**MT182 (^{3}He,d+t) or MT5 (Ag105 production)**	MT184 (^{3}He,n+p+t) >>

Ag107 (^{3}He,d+t) or Ag105 production log-log



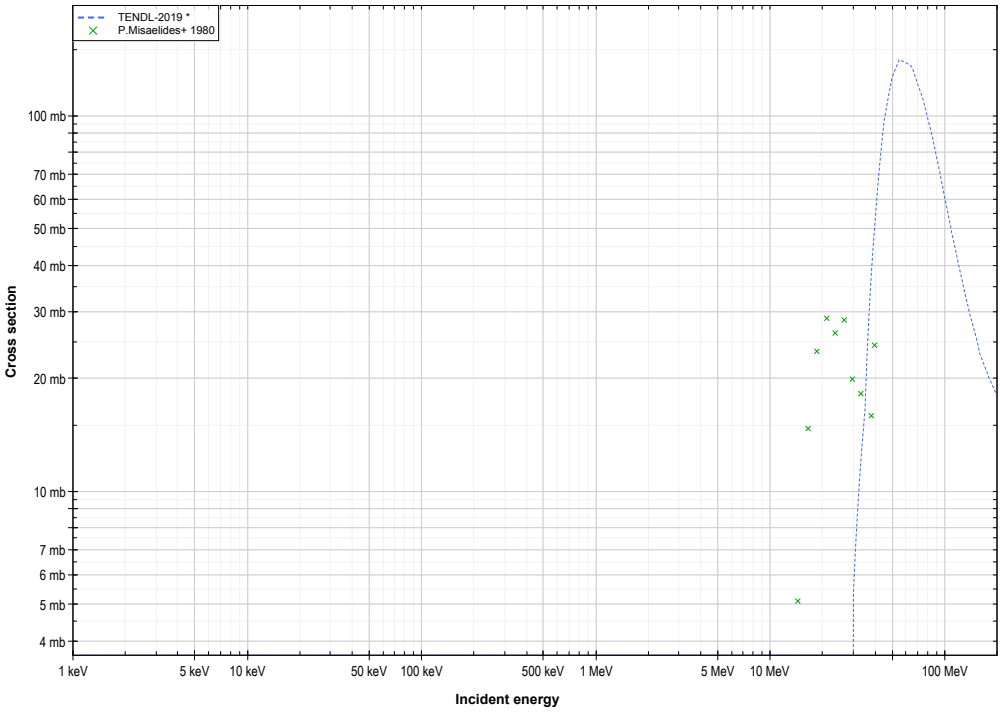
Ag107 (^{3}He,d+t) or Ag105 production lin-log



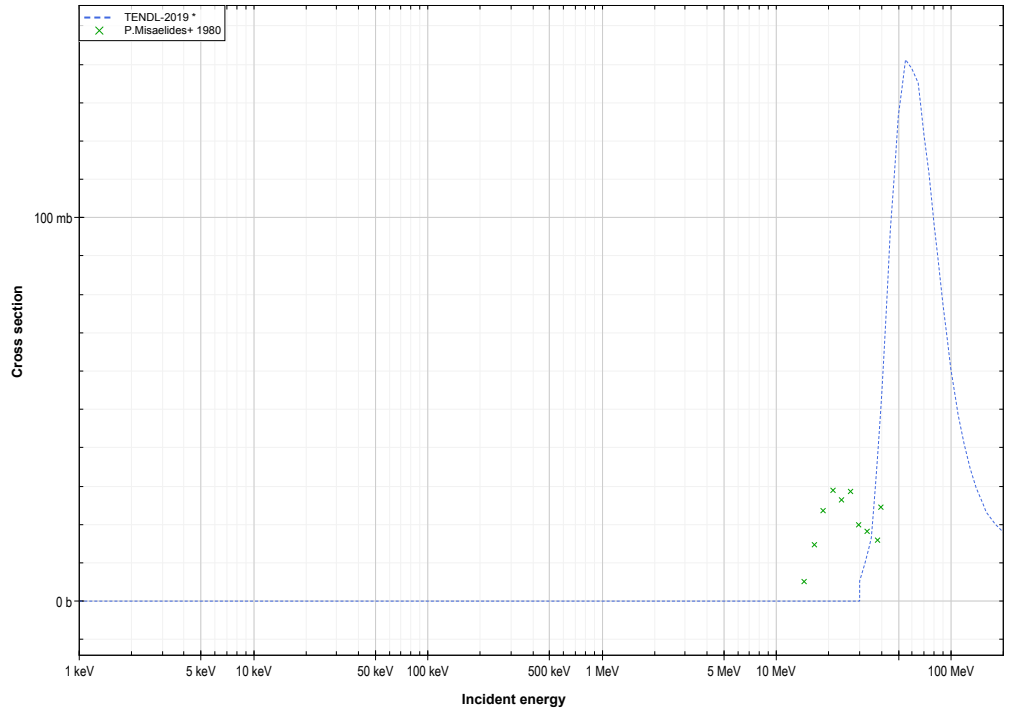
Reaction	Q-Value
Ag107(He3,n+α)Ag105	3099.29 keV
Ag107(He3,d+t)Ag105	-14490.01 keV
Ag107(He3,n+p+t)Ag105	-16714.58 keV
Ag107(He3,2n+He3)Ag105	-17478.33 keV
Ag107(He3,n+2d)Ag105	-20747.24 keV
Ag107(He3,2n+p+d)Ag105	-22971.81 keV
Ag107(He3,3n+2p)Ag105	-25196.37 keV

<< 29-Cu-63	**47-Ag-107**	
<< MT182 (^{3}He,d+t)	**MT184 (^{3}He,n+p+t) or MT5 (Ag105 production)**	MT185 (^{3}He,n+d+t) >>

Ag107 (^{3}He,n+p+t) or Ag105 production log-log



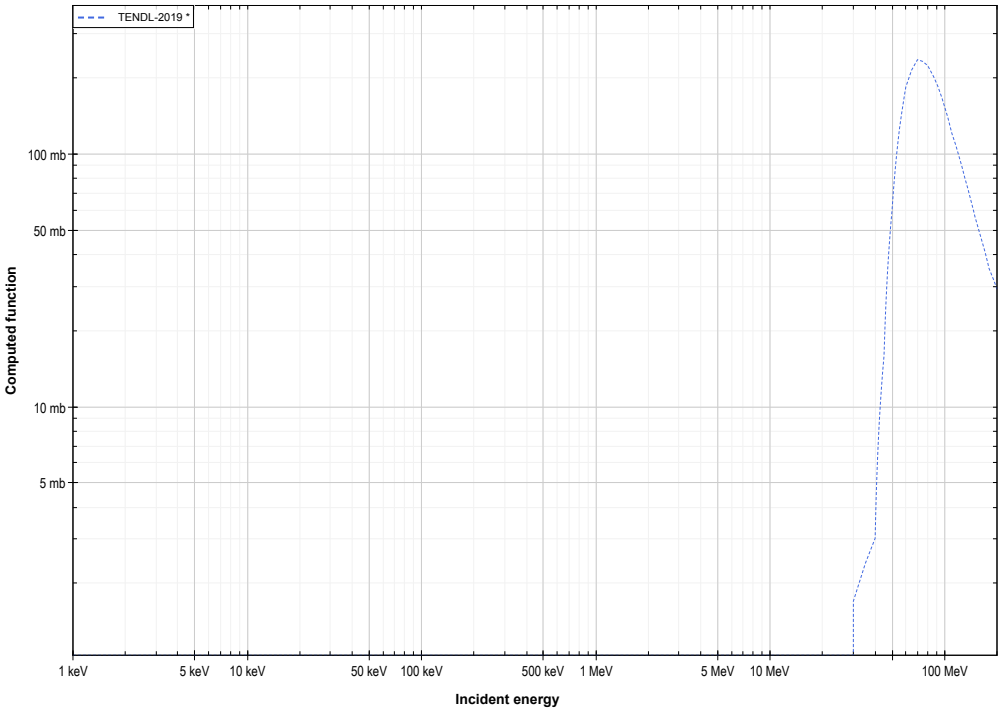
Ag107 (^{3}He,n+p+t) or Ag105 production lin-log



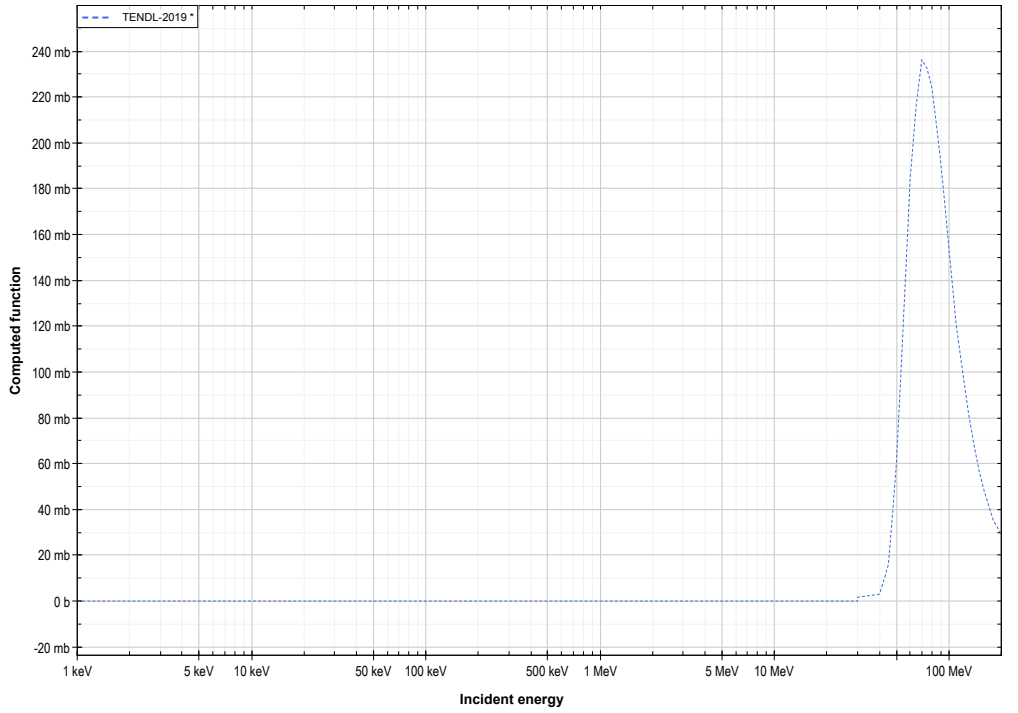
Reaction	Q-Value
Ag107(He3,n+α)Ag105	3099.29 keV
Ag107(He3,d+t)Ag105	-14490.01 keV
Ag107(He3,n+p+t)Ag105	-16714.58 keV
Ag107(He3,2n+He3)Ag105	-17478.33 keV
Ag107(He3,n+2d)Ag105	-20747.24 keV
Ag107(He3,2n+p+d)Ag105	-22971.81 keV
Ag107(He3,3n+2p)Ag105	-25196.37 keV

<< 27-Co-59	**47-Ag-107**	
<< MT184 (^{3}He,n+p+t)	**MT185 (^{3}He,n+d+t) or MT5 (Ag104 production)**	MT194 (^{3}He,4n+2p) >>

Ag107 (^{3}He,n+d+t) or Ag104 production log-log



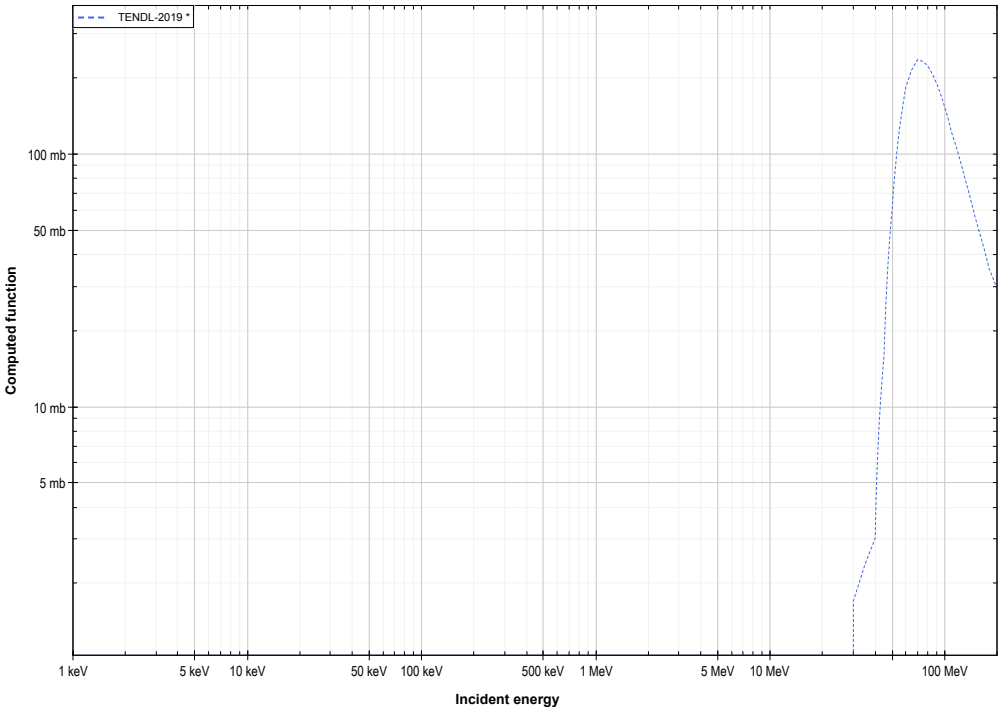
Ag107 (^{3}He,n+d+t) or Ag104 production lin-log



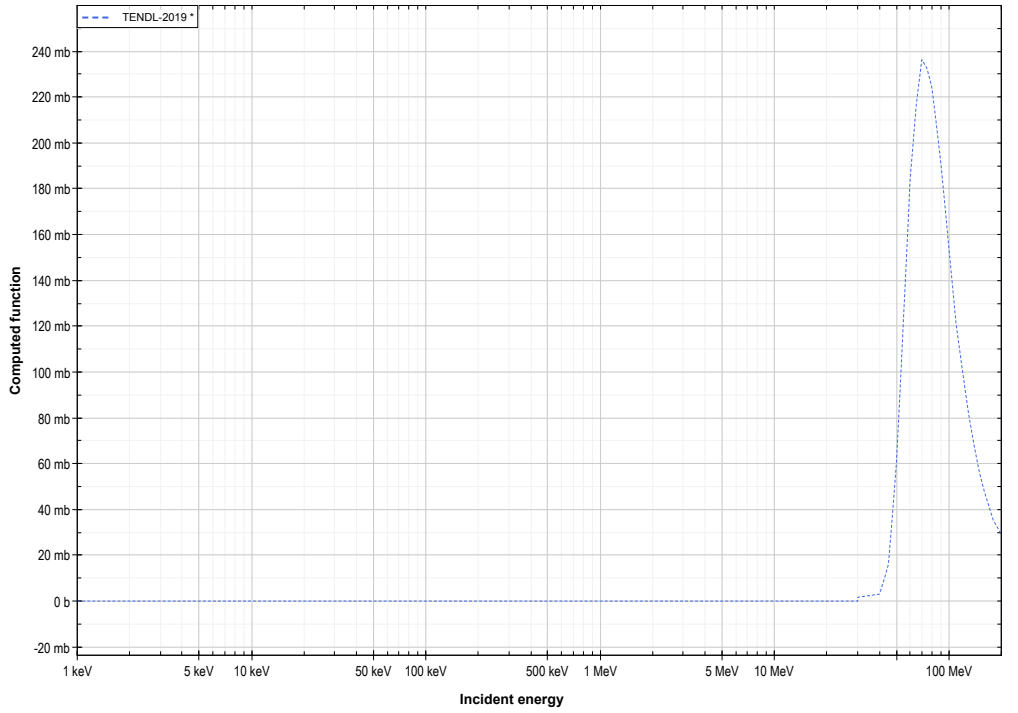
Reaction	Q-Value
Ag107(He3,2n+α)Ag104	-6927.03 keV
Ag107(He3,2t)Ag104	-18259.10 keV
Ag107(He3,n+d+t)Ag104	-24516.33 keV
Ag107(He3,2n+p+t)Ag104	-26740.90 keV
Ag107(He3,3n+He3)Ag104	-27504.65 keV
Ag107(He3,2n+2d)Ag104	-30773.56 keV
Ag107(He3,3n+p+d)Ag104	-32998.13 keV
Ag107(He3,4n+2p)Ag104	-35222.69 keV

<< 27-Co-59	**47-Ag-107**	
<< MT185 (^{3}He,n+d+t)	**MT194 (^{3}He,4n+2p) or MT5 (Ag104 production)**	MT200 (^{3}He,5n+2p) >>

Ag107 (^{3}He,4n+2p) or Ag104 production log-log



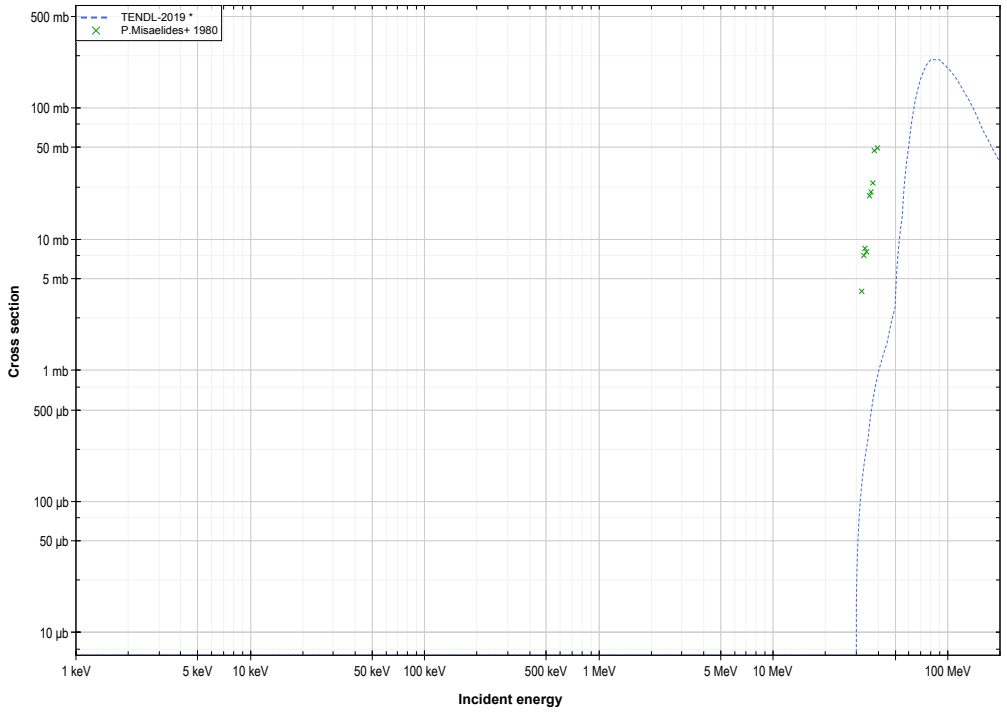
Ag107 (^{3}He,4n+2p) or Ag104 production lin-log



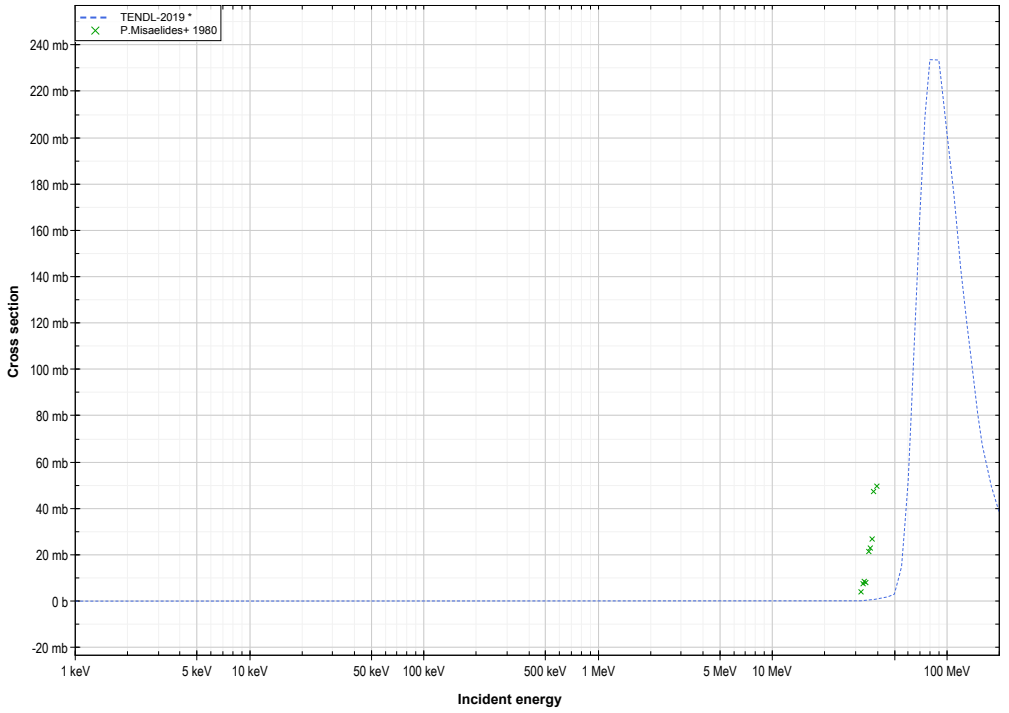
Reaction	Q-Value
Ag107(He3,2n+α)Ag104	-6927.03 keV
Ag107(He3,2t)Ag104	-18259.10 keV
Ag107(He3,n+d+t)Ag104	-24516.33 keV
Ag107(He3,2n+p+t)Ag104	-26740.90 keV
Ag107(He3,3n+He3)Ag104	-27504.65 keV
Ag107(He3,2n+2d)Ag104	-30773.56 keV
Ag107(He3,3n+p+d)Ag104	-32998.13 keV
Ag107(He3,4n+2p)Ag104	-35222.69 keV

	47-Ag-107	47-Ag-109 >>
<< MT194 (³He,4n+2p)	**MT200 (³He,5n+2p) or MT5 (Ag103 production)**	47-Ag-109 MT4 (³He,n) >>

Ag107 (³He,5n+2p) or Ag103 production log-log



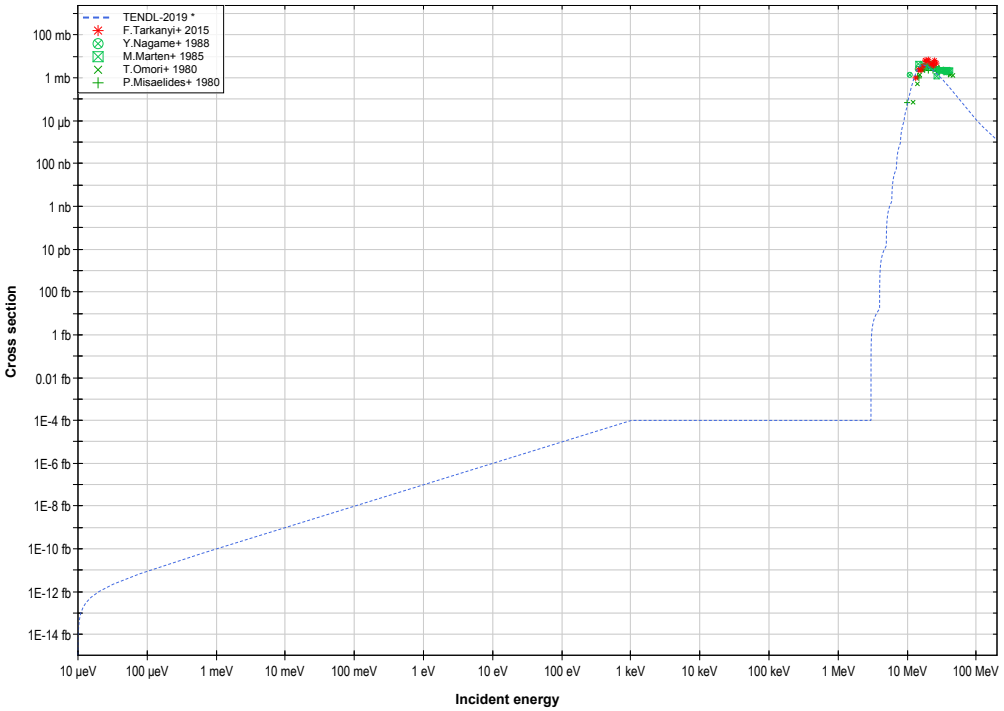
Ag107 (³He,5n+2p) or Ag103 production lin-log



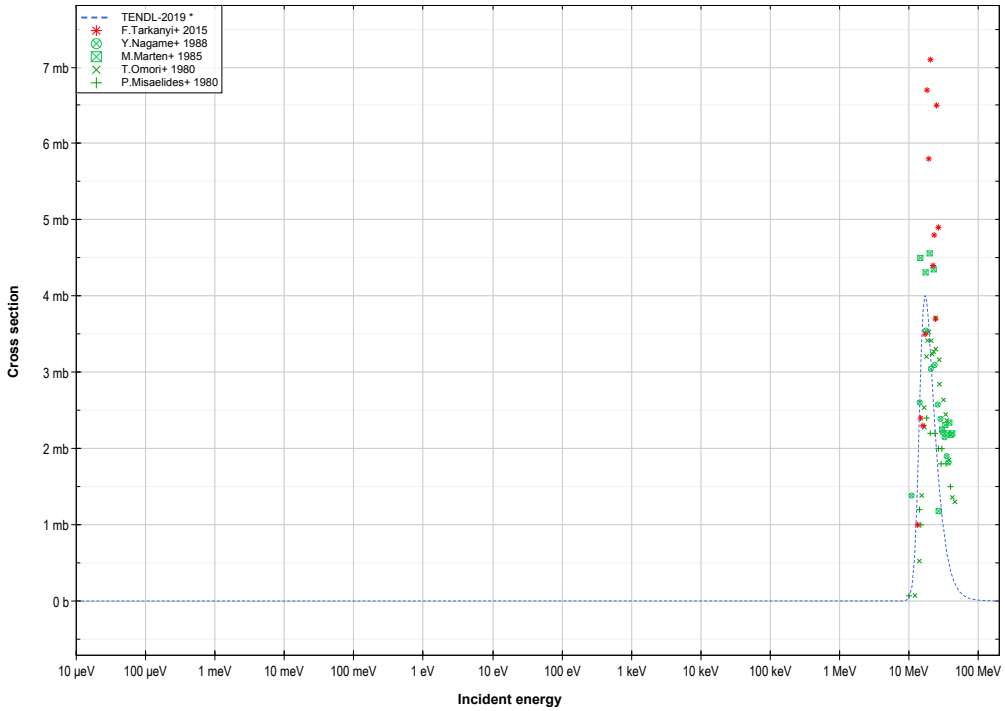
Reaction	Q-Value
Ag107(He3,3n+α)Ag103	-15311.35 keV
Ag107(He3,n+2t)Ag103	-26643.42 keV
Ag107(He3,2n+d+t)Ag103	-32900.65 keV
Ag107(He3,3n+p+t)Ag103	-35125.21 keV
Ag107(He3,4n+He3)Ag103	-35888.97 keV
Ag107(He3,3n+2d)Ag103	-39157.88 keV
Ag107(He3,4n+p+d)Ag103	-41382.44 keV
Ag107(He3,5n+2p)Ag103	-43607.01 keV

<< 47-Ag-107	**47-Ag-109**	62-Sm-147 >>
<< 47-Ag-107 MT200 (^{3}He,5n+2p)	**MT4 (^{3}He,n) or MT5 (In111 production)**	MT16 (^{3}He,2n) >>

Ag109 (^{3}He,n) or In111 production log-log



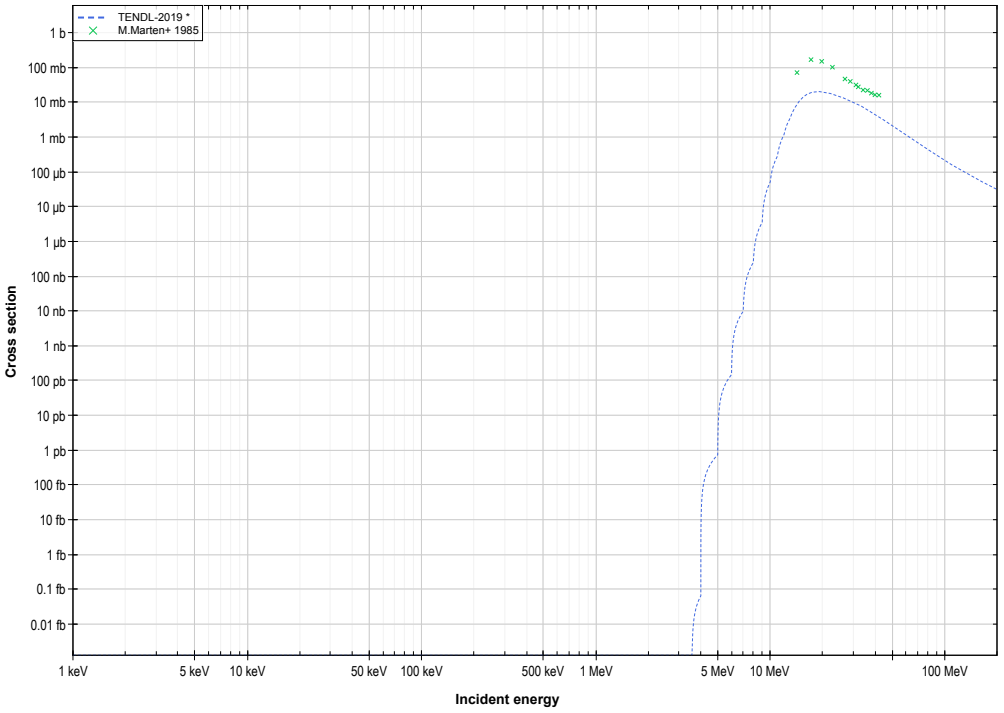
Ag109 (^{3}He,n) or In111 production lin-log



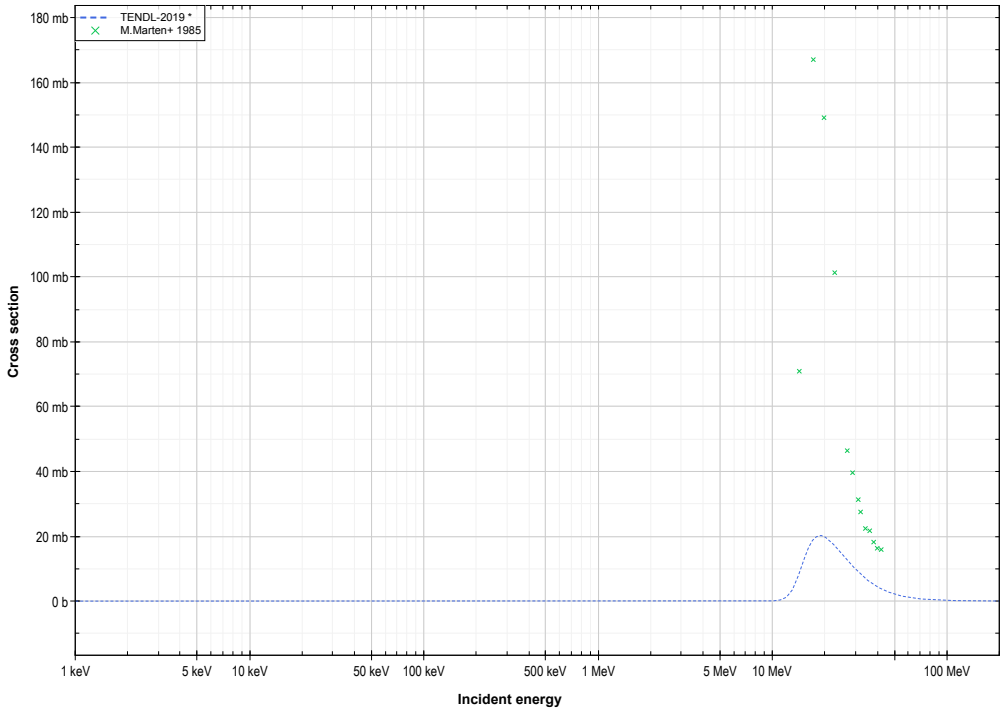
Reaction	Q-Value
Ag109(He3,n)In111	6532.50 keV

<< 47-Ag-107	**47-Ag-109**	48-Cd-116 >>
<< MT4 (^{3}He,n)	**MT16 (^{3}He,2n) or MT5 (In110 production)**	MT17 (^{3}He,3n) >>

Ag109 (^{3}He,2n) or In110 production log-log



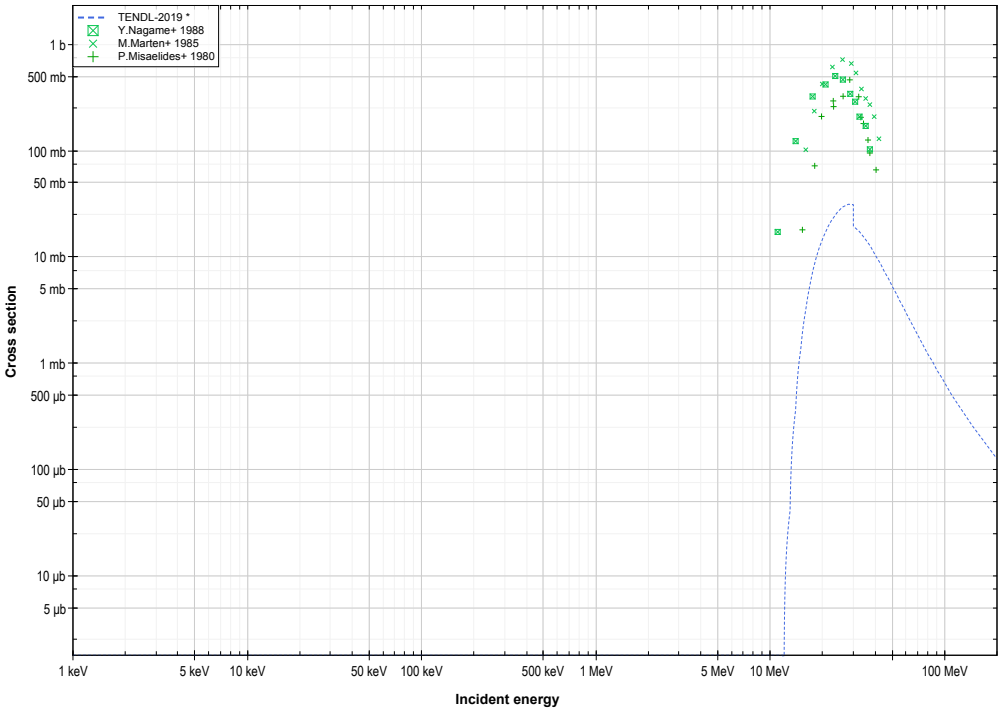
Ag109 (^{3}He,2n) or In110 production lin-log



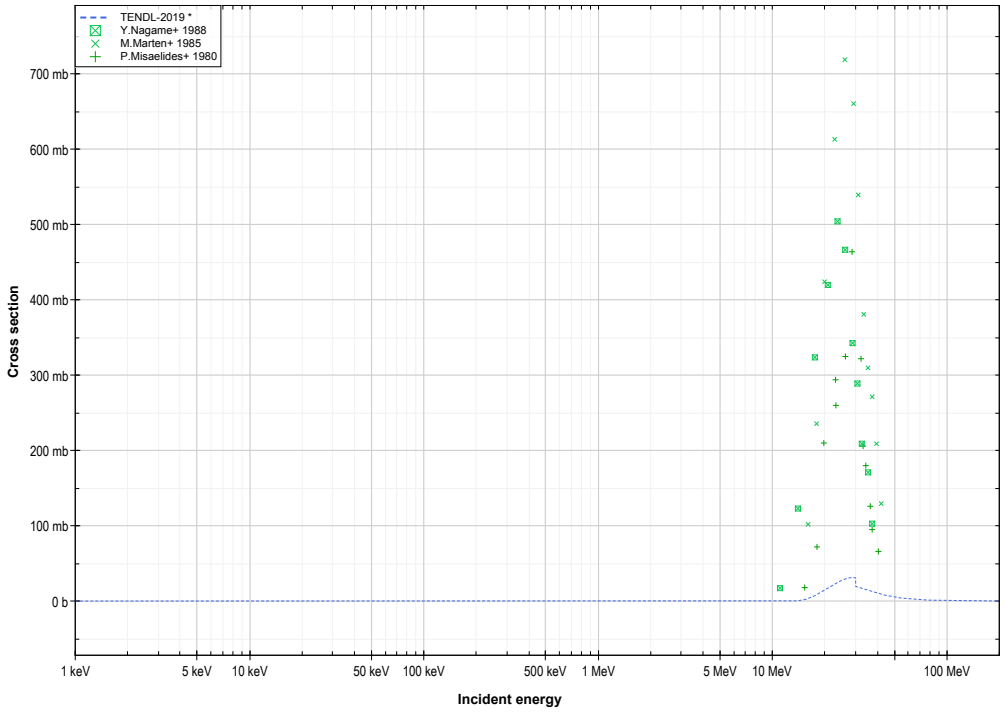
Reaction	Q-Value
Ag109(He3,2n)In110	-3460.82 keV

<< 47-Ag-107	**47-Ag-109**	51-Sb-123 >>
<< MT16 (³He,2n)	**MT17 (³He,3n) or MT5 (In109 production)**	MT25 (³He,3n+α) >>

Ag109 (³He,3n) or In109 production log-log



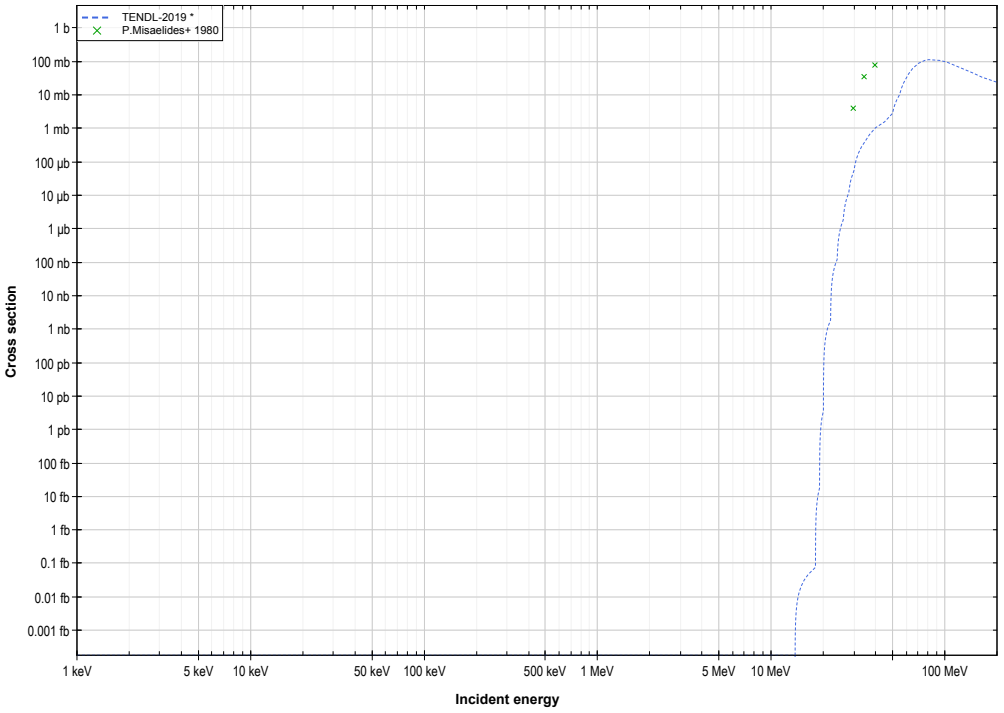
Ag109 (³He,3n) or In109 production lin-log



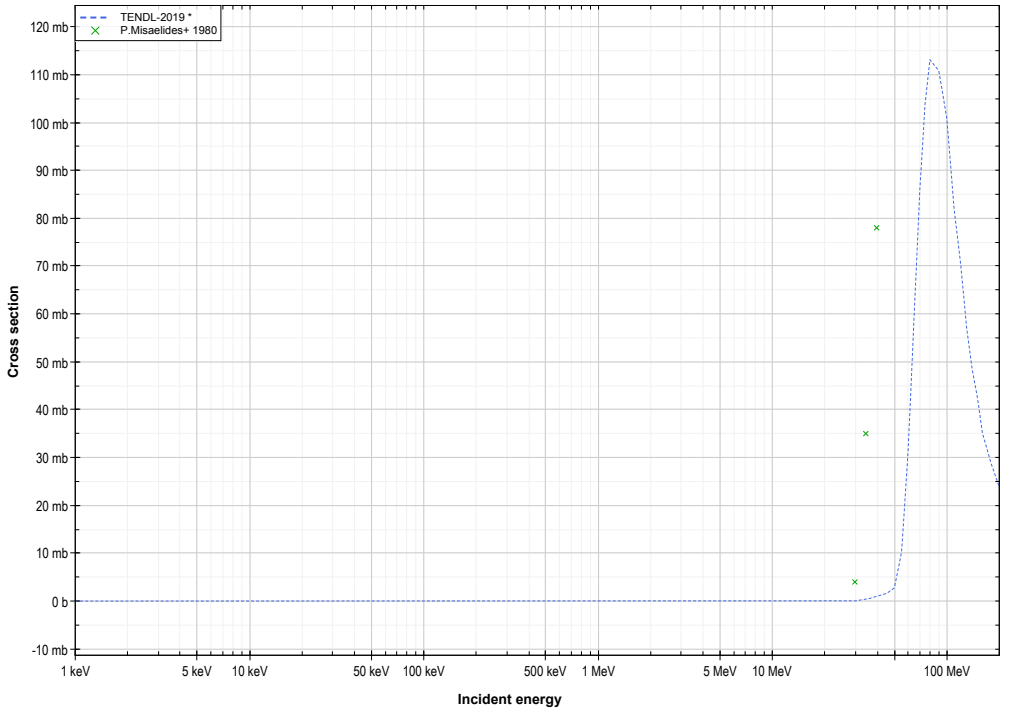
Reaction	Q-Value
Ag109(He3,3n)In109	-11512.13 keV

<< 47-Ag-107	**47-Ag-109**	
<< MT17 (³He,3n)	**MT25 (³He,3n+α) or MT5 (Ag105 production)**	MT37 (³He,4n) >>

Ag109 (³He,3n+α) or Ag105 production log-log



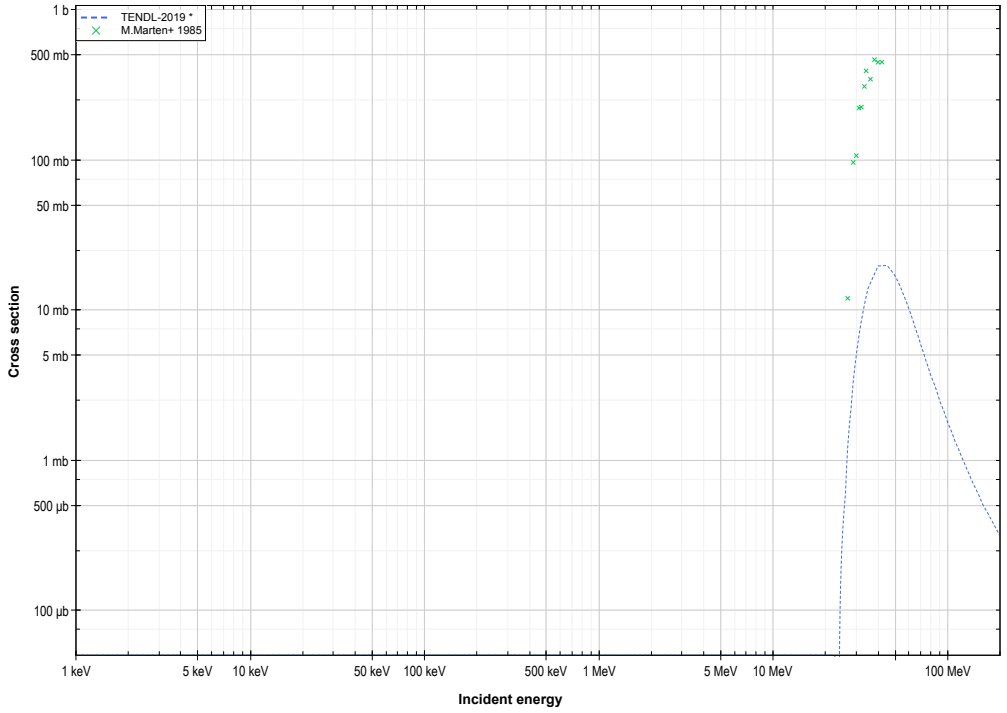
Ag109 (³He,3n+α) or Ag105 production lin-log



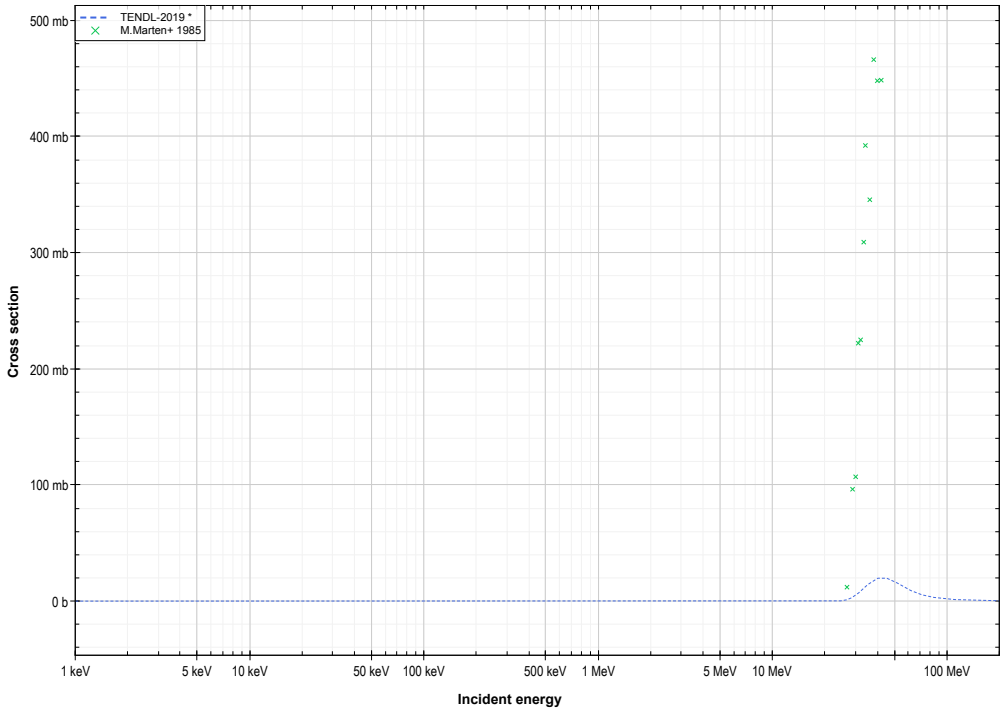
Reaction	Q-Value
Ag109(He3,3n+α)Ag105	-13356.05 keV
Ag109(He3,n+2t)Ag105	-24688.12 keV
Ag109(He3,2n+d+t)Ag105	-30945.35 keV
Ag109(He3,3n+p+t)Ag105	-33169.91 keV
Ag109(He3,4n+He3)Ag105	-33933.67 keV
Ag109(He3,3n+2d)Ag105	-37202.58 keV
Ag109(He3,4n+p+d)Ag105	-39427.14 keV
Ag109(He3,5n+2p)Ag105	-41651.71 keV

<< 47-Ag-107	**47-Ag-109**	62-Sm-147 >>
<< MT25 (^{3}He,3n+α)	**MT37 (^{3}He,4n) or MT5 (In108 production)**	MT41 (^{3}He,2n+p) >>

Ag109 (^{3}He,4n) or In108 production log-log



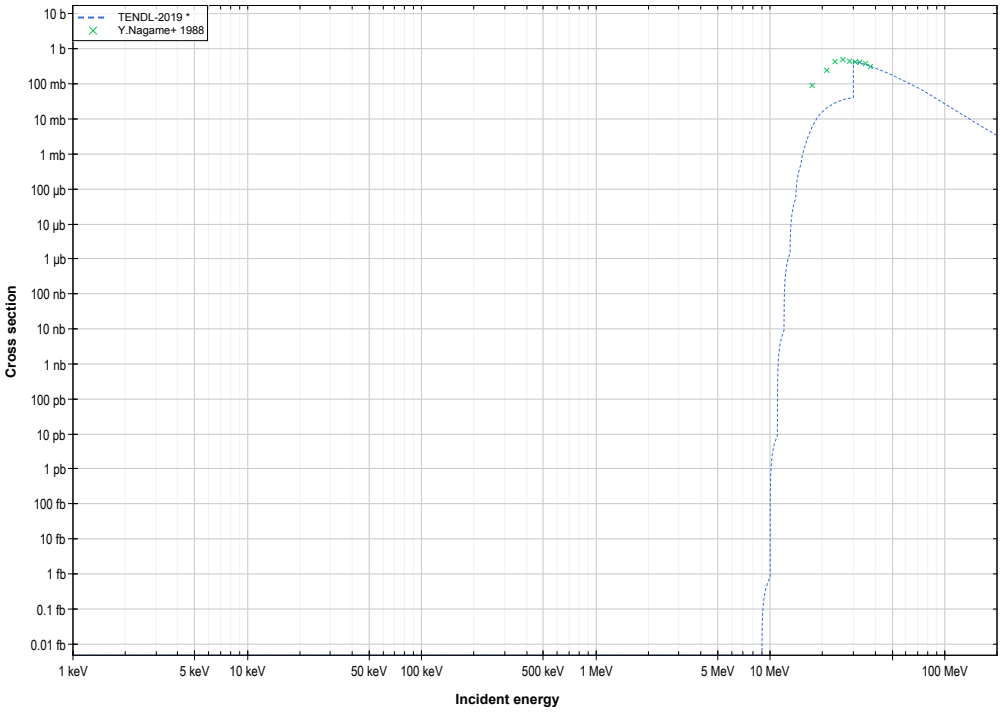
Ag109 (^{3}He,4n) or In108 production lin-log



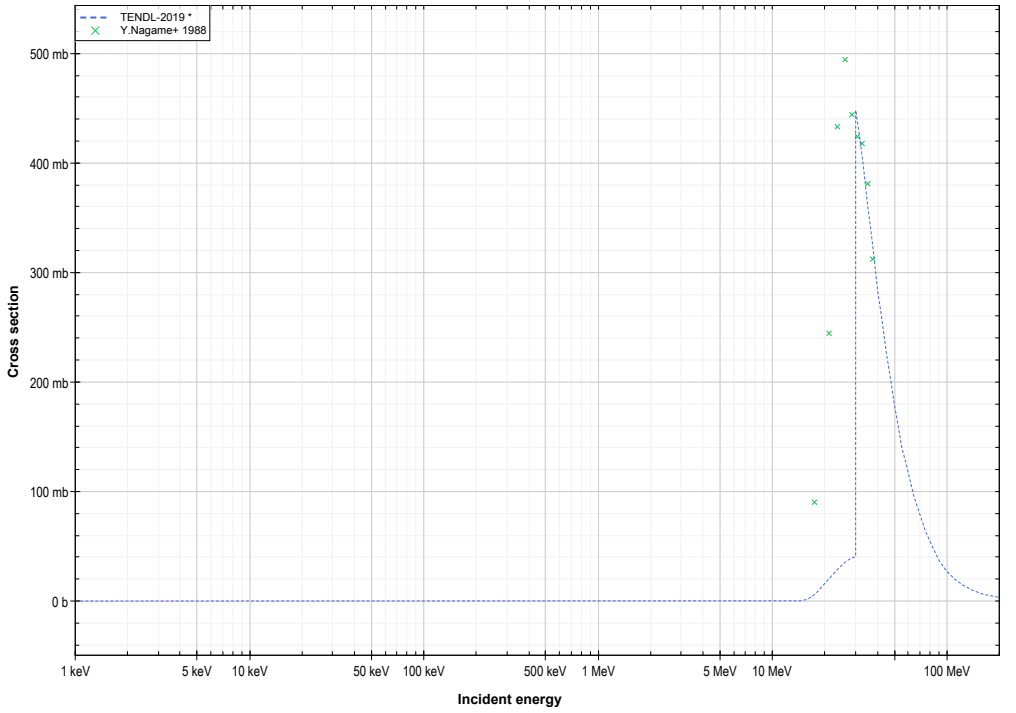
Reaction	Q-Value
Ag109(He3,4n)In108	-21953.45 keV

<< 47-Ag-107	**47-Ag-109**	62-Sm-147 >>
<< MT37 (^{3}He,4n)	**MT41 (^{3}He,2n+p) or MT5 (Cd109 production)**	MT111 (^{3}He,2p) >>

Ag109 (^{3}He,2n+p) or Cd109 production log-log



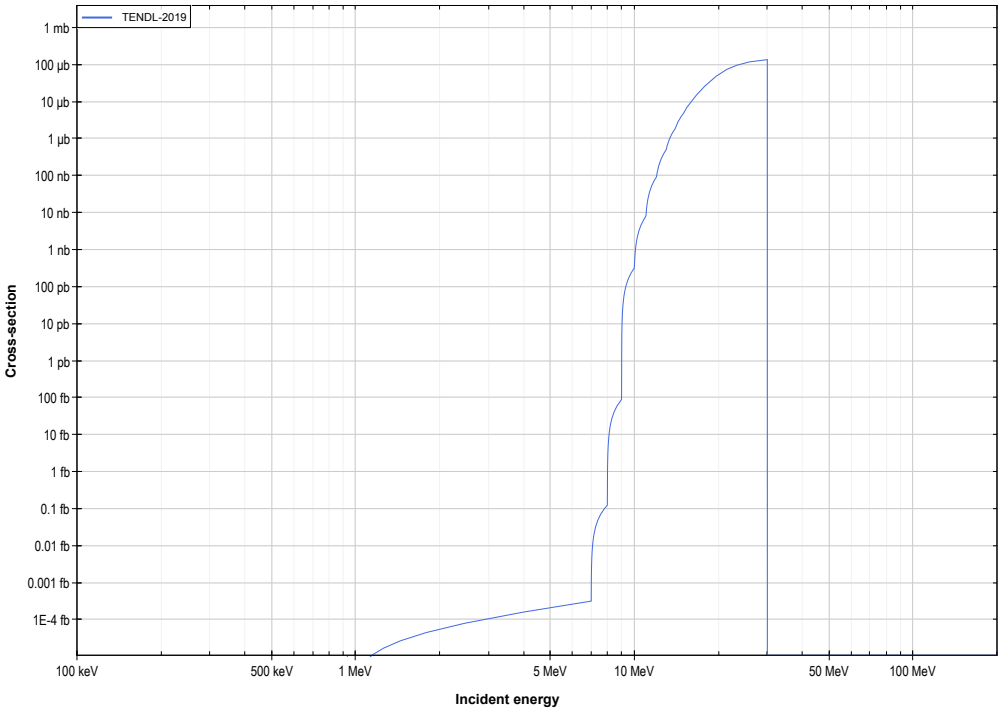
Ag109 (^{3}He,2n+p) or Cd109 production lin-log



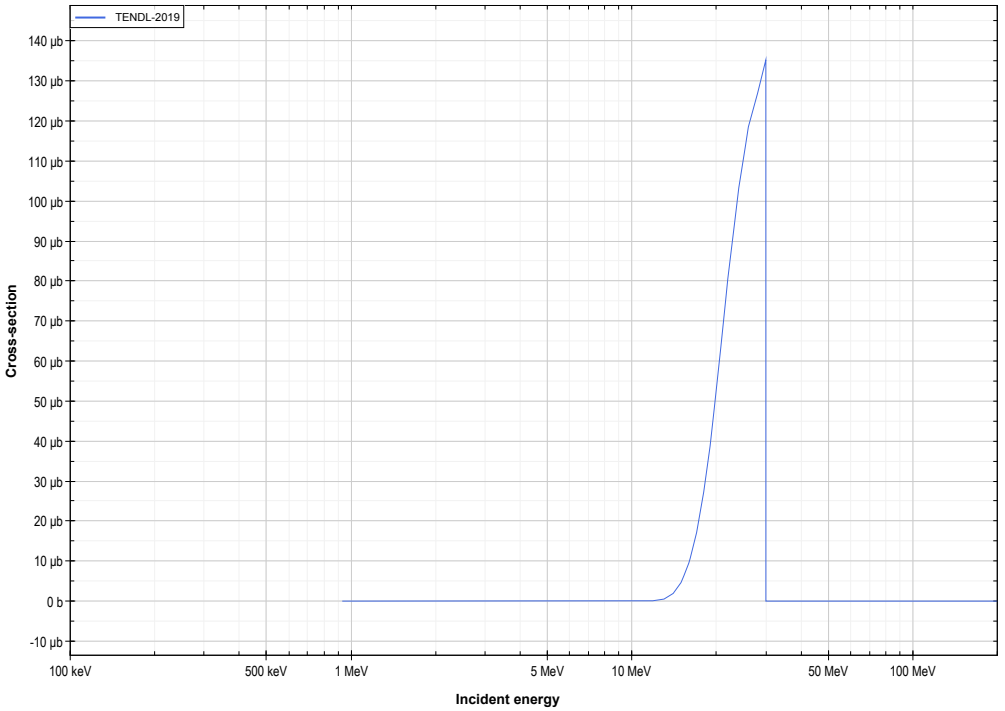
Reaction	Q-Value
Ag109(He3,t)Cd109	-233.69 keV
Ag109(He3,n+d)Cd109	-6490.92 keV
Ag109(He3,2n+p)Cd109	-8715.49 keV

<< 44-Ru-102	**47-Ag-109**	74-W-186 >>
<< MT41 (³He,2n+p)	**MT111 (³He,2p) or MT5 (Ag110 production)**	MT178 (³He,4n+³He) >>

Ag109 (³He,2p) or Ag110 production log-log



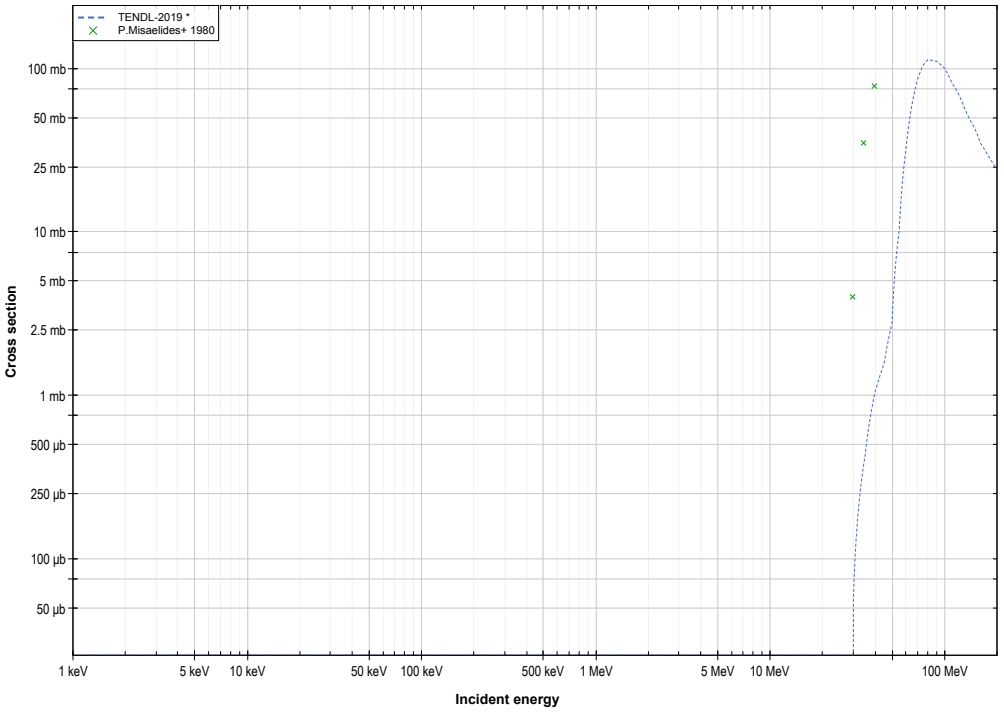
Ag109 (³He,2p) or Ag110 production lin-log



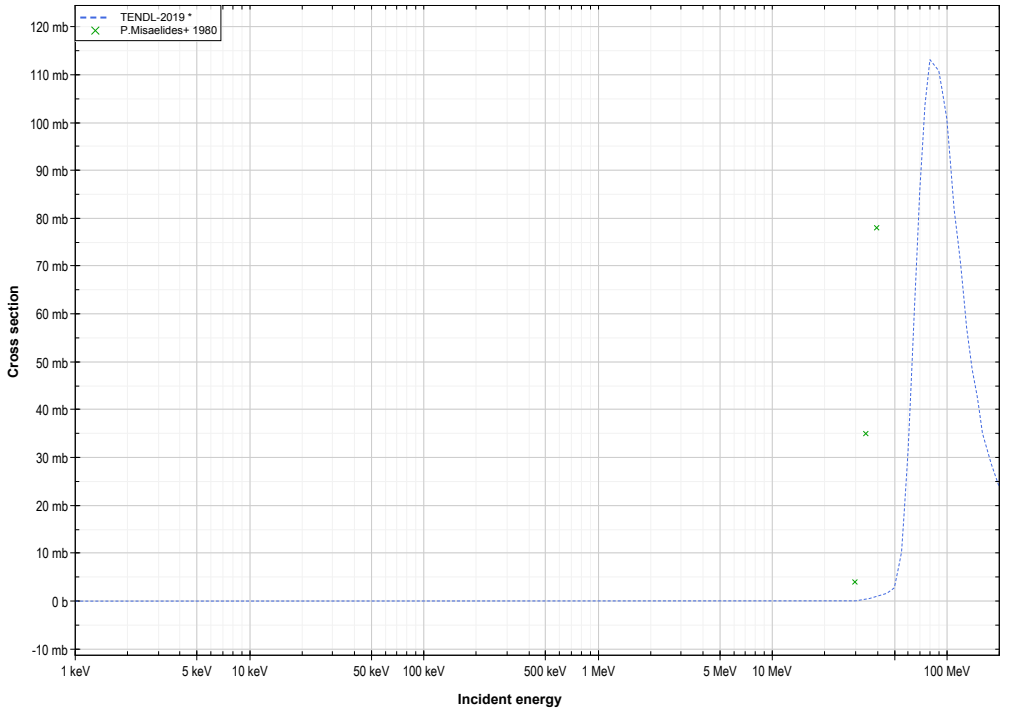
Reaction	Q-Value
Ag109(He3,2p)Ag110	-908.82 keV

<< 47-Ag-107	**47-Ag-109**	
<< MT111 (^{3}He,2p)	**MT178 (^{3}He,4n+^{3}He) or MT5 (Ag105 production)**	MT200 (^{3}He,5n+2p) >>

Ag109 (^{3}He,4n+^{3}He) or Ag105 production log-log



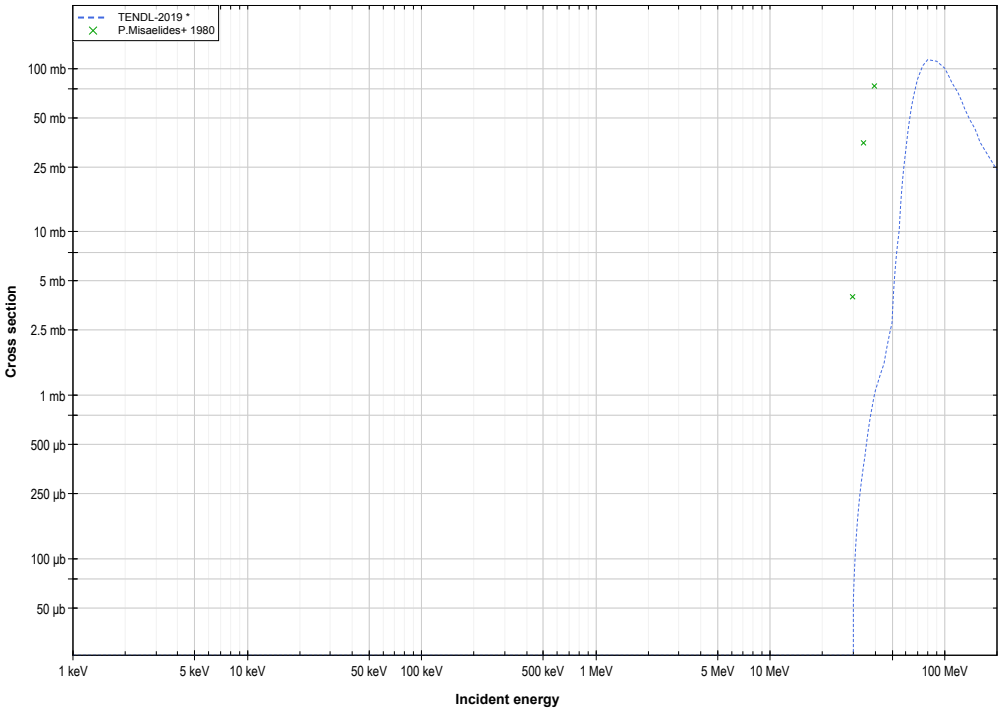
Ag109 (^{3}He,4n+^{3}He) or Ag105 production lin-log



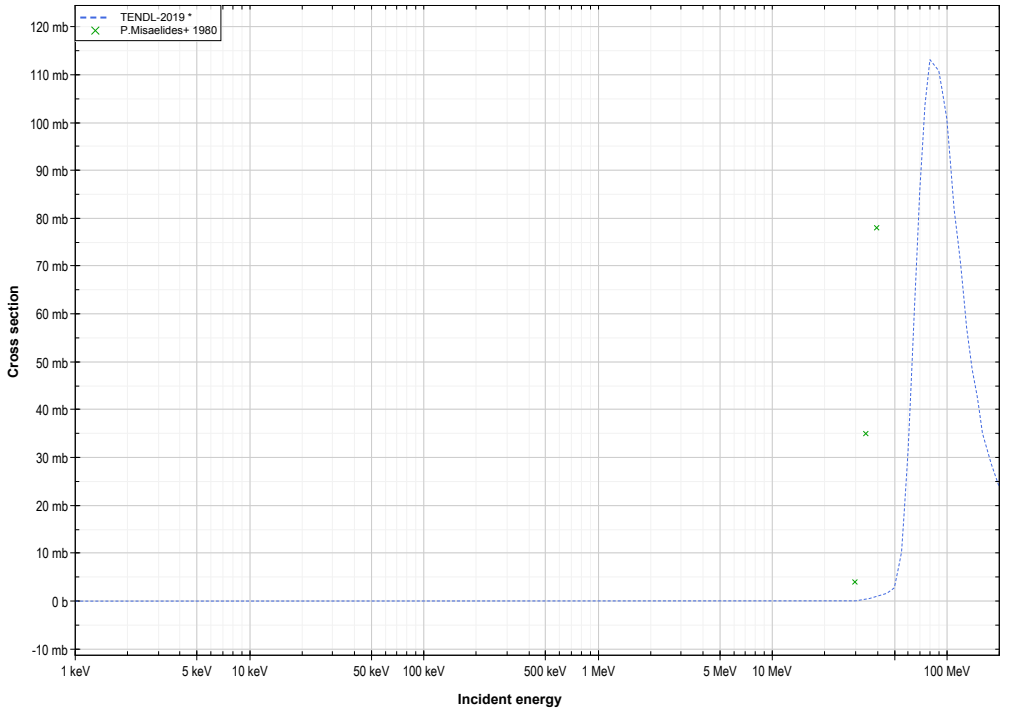
Reaction	Q-Value
Ag109(He3,3n+α)Ag105	-13356.05 keV
Ag109(He3,n+2t)Ag105	-24688.12 keV
Ag109(He3,2n+d+t)Ag105	-30945.35 keV
Ag109(He3,3n+p+t)Ag105	-33169.91 keV
Ag109(He3,4n+He3)Ag105	-33933.67 keV
Ag109(He3,3n+2d)Ag105	-37202.58 keV
Ag109(He3,4n+p+d)Ag105	-39427.14 keV
Ag109(He3,5n+2p)Ag105	-41651.71 keV

<< 47-Ag-107	**47-Ag-109**	
<< MT178 (^{3}He,4n+^{3}He)	**MT200 (^{3}He,5n+2p) or MT5 (Ag105 production)**	48-Cd-116 MT16 (^{3}He,2n) >>

Ag109 (^{3}He,5n+2p) or Ag105 production log-log



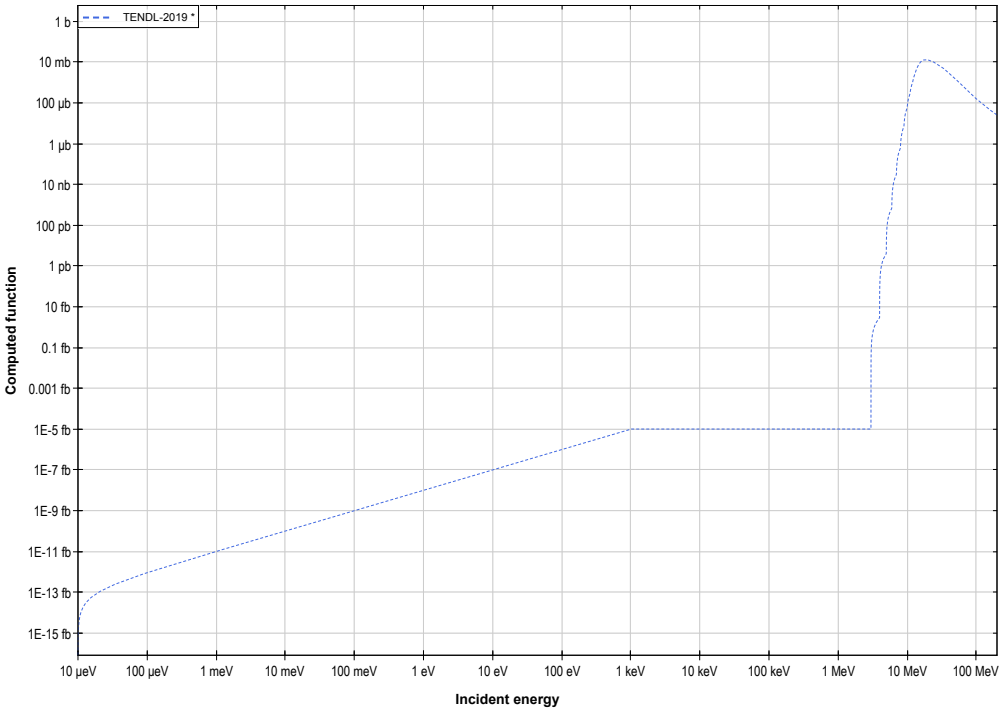
Ag109 (^{3}He,5n+2p) or Ag105 production lin-log



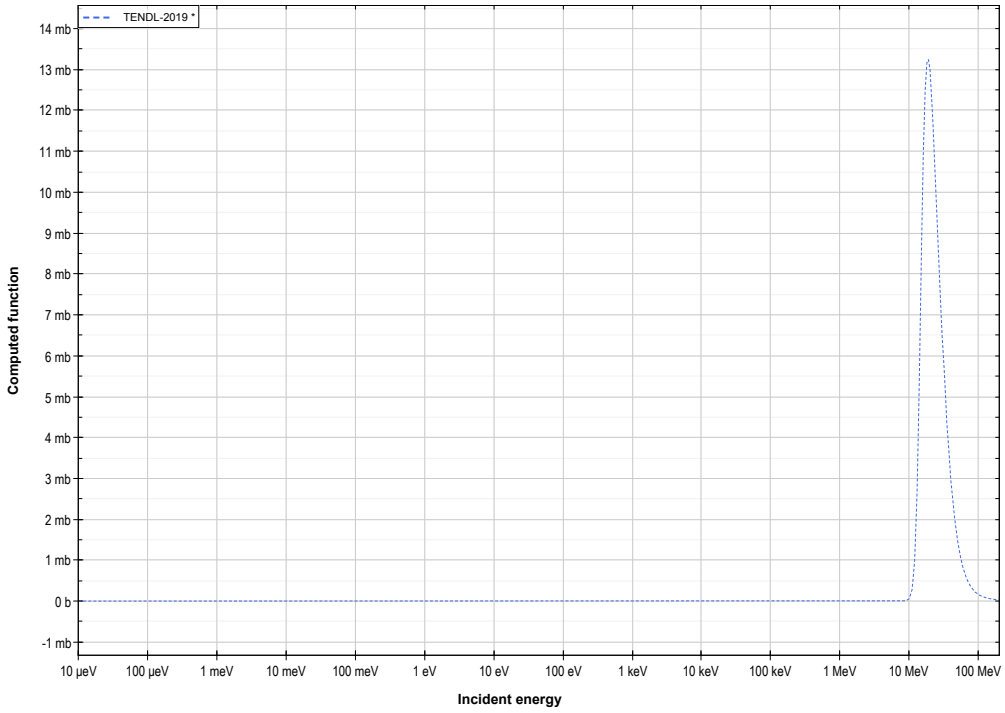
Reaction	Q-Value
Ag109(He3,3n+α)Ag105	-13356.05 keV
Ag109(He3,n+2t)Ag105	-24688.12 keV
Ag109(He3,2n+d+t)Ag105	-30945.35 keV
Ag109(He3,3n+p+t)Ag105	-33169.91 keV
Ag109(He3,4n+He3)Ag105	-33933.67 keV
Ag109(He3,3n+2d)Ag105	-37202.58 keV
Ag109(He3,4n+p+d)Ag105	-39427.14 keV
Ag109(He3,5n+2p)Ag105	-41651.71 keV

<< 47-Ag-109	**48-Cd-116**	51-Sb-123 >>
<< 47-Ag-109 MT200 (^{3}He,5n+2p)	**MT16 (^{3}He,2n) or MT5 (Sn117 production)**	MT107 (^{3}He,α) >>

Cd116 (^{3}He,2n) or Sn117 production log-log



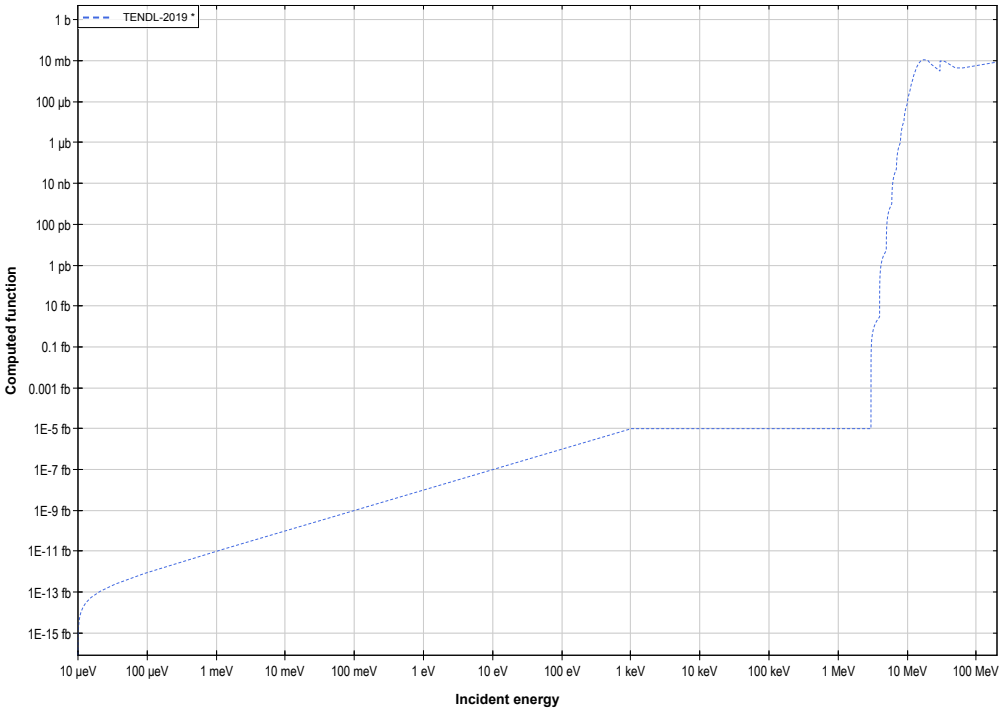
Cd116 (^{3}He,2n) or Sn117 production lin-log



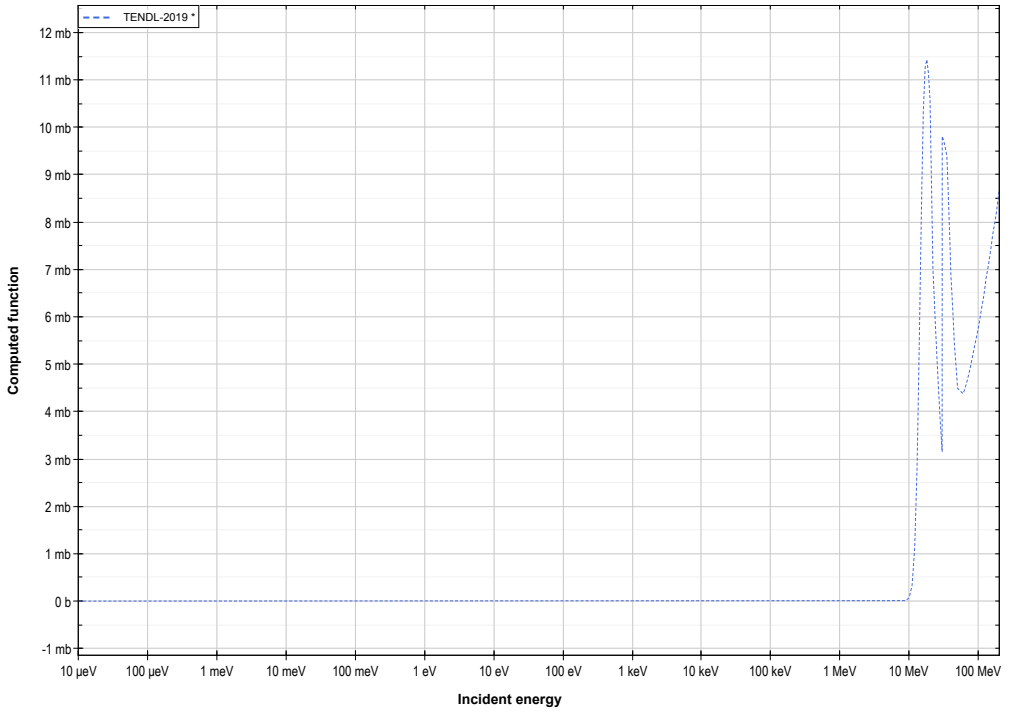
Reaction	Q-Value
Cd116(He3,2n)Sn117	473.90 keV

<< 47-Ag-107	**48-Cd-116**	73-Ta-181 >>
<< MT16 (^{3}He,2n)	**MT107 (^{3}He,α) or MT5 (Cd115 production)**	51-Sb-123 MT16 (^{3}He,2n) >>

Cd116 (^{3}He,α) or Cd115 production log-log



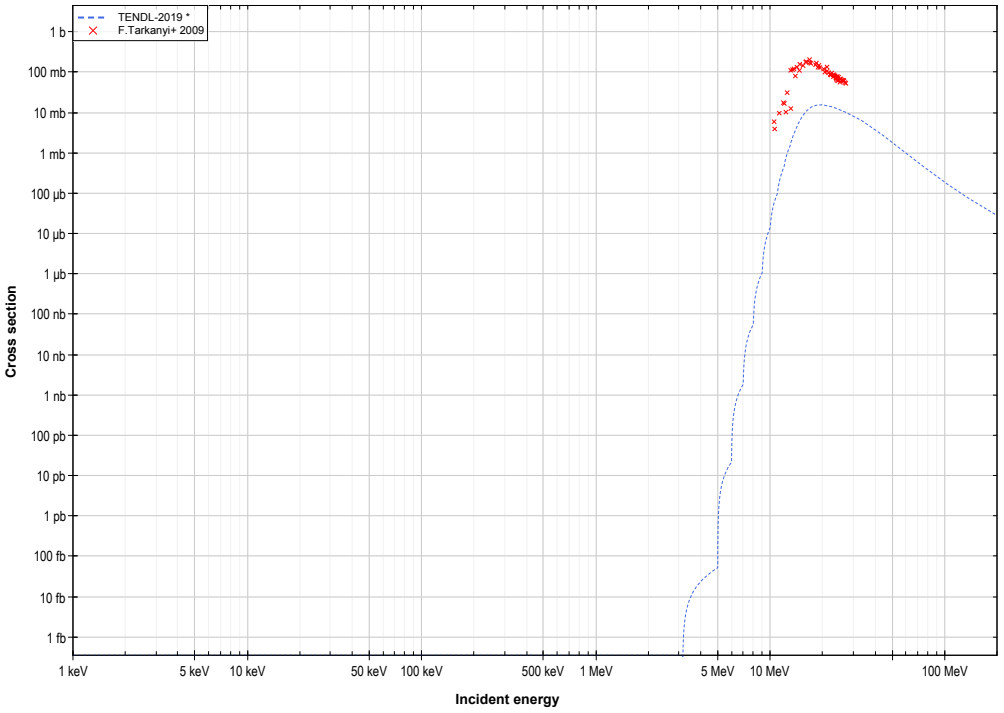
Cd116 (^{3}He,α) or Cd115 production lin-log



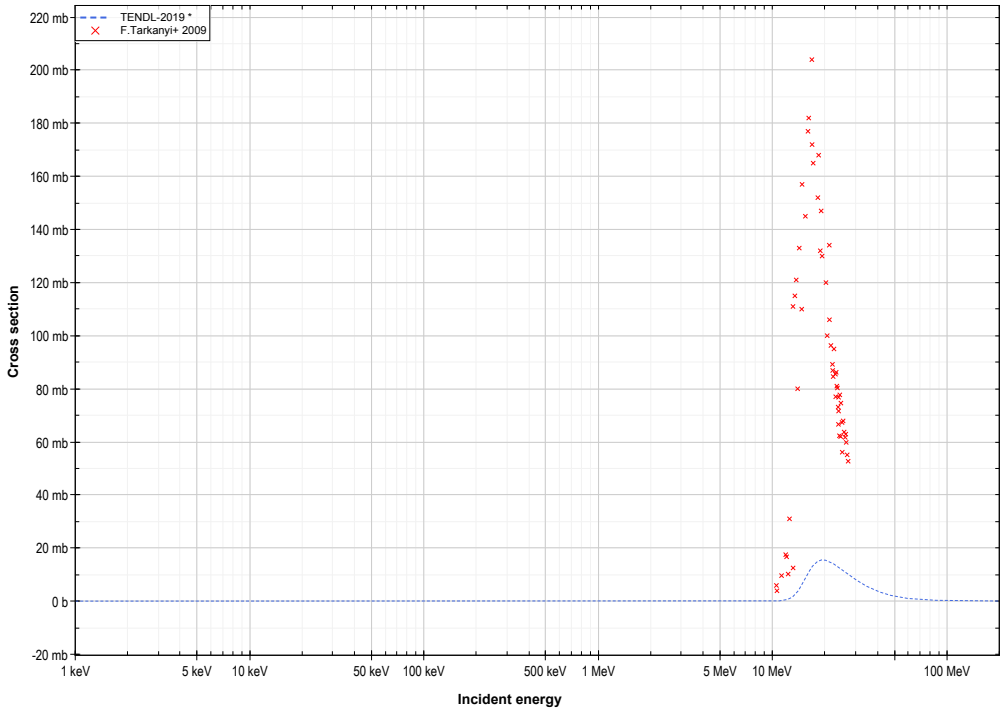
Reaction	Q-Value
Cd116(He3,α)Cd115	11878.32 keV
Cd116(He3,p+t)Cd115	-7935.54 keV
Cd116(He3,n+He3)Cd115	-8699.30 keV
Cd116(He3,2d)Cd115	-11968.21 keV
Cd116(He3,n+p+d)Cd115	-14192.77 keV
Cd116(He3,2n+2p)Cd115	-16417.34 keV

<< 48-Cd-116	**51-Sb-123**	67-Ho-165 >>
<< 48-Cd-116 MT107 (³He,α)	**MT16 (³He,2n) or MT5 (I124 production)**	MT17 (³He,3n) >>

Sb123 (³He,2n) or I124 production log-log



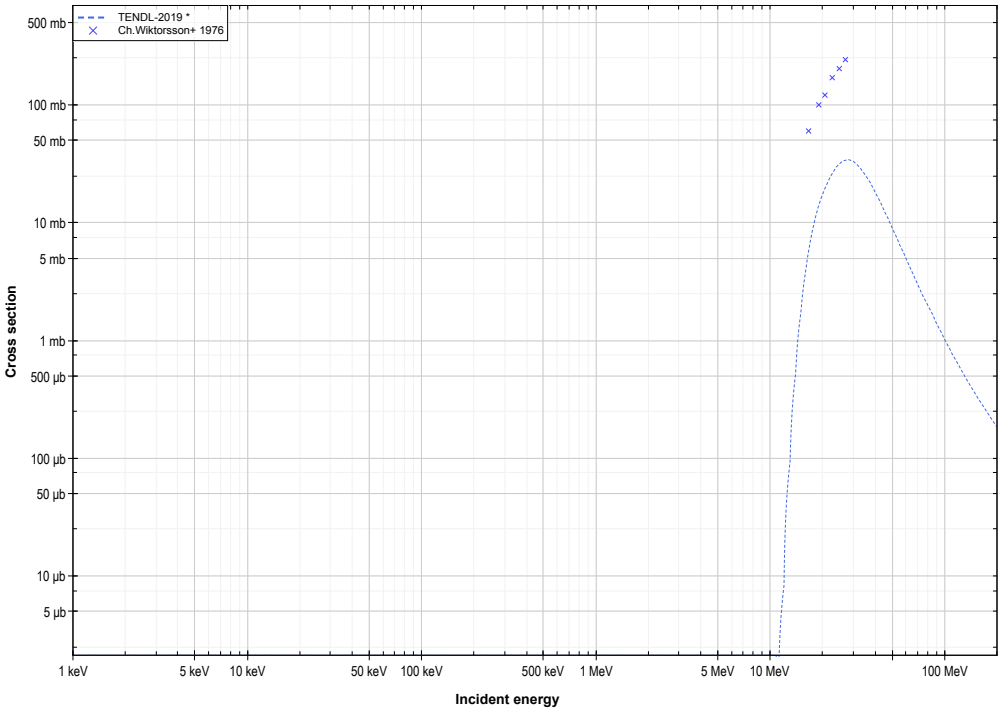
Sb123 (³He,2n) or I124 production lin-log



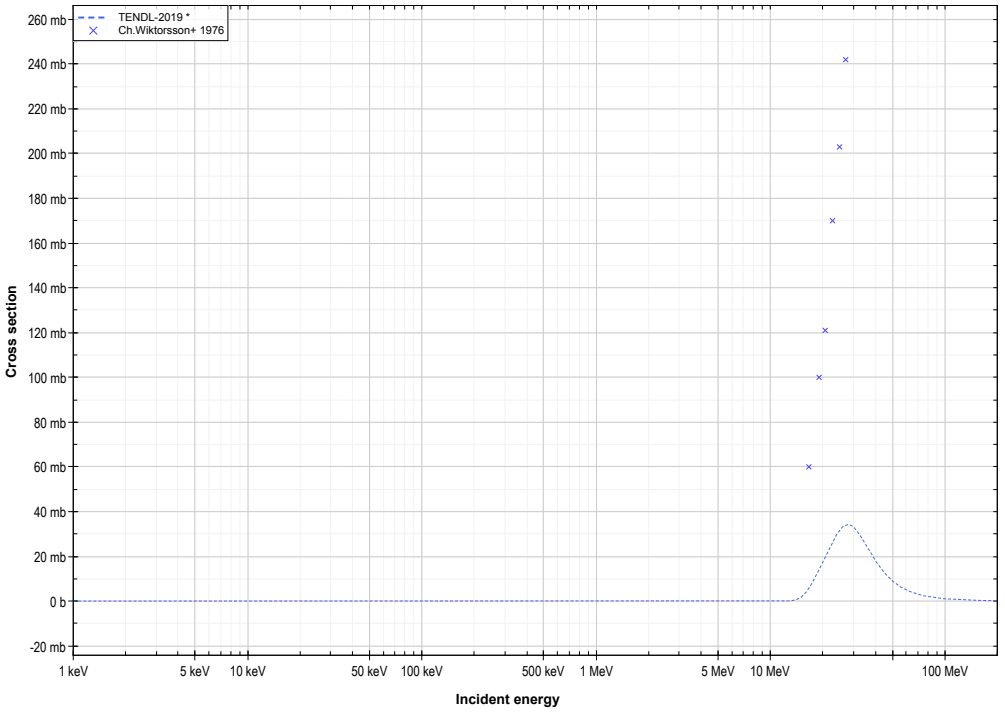
Reaction	Q-Value
Sb123(He3,2n)I124	-3069.82 keV

<< 47-Ag-109	**51-Sb-123**	62-Sm-147 >>
<< MT16 (³He,2n)	**MT17 (³He,3n) or MT5 (I123 production)**	62-Sm-147 MT4 (³He,n) >>

Sb123 (³He,3n) or I123 production log-log



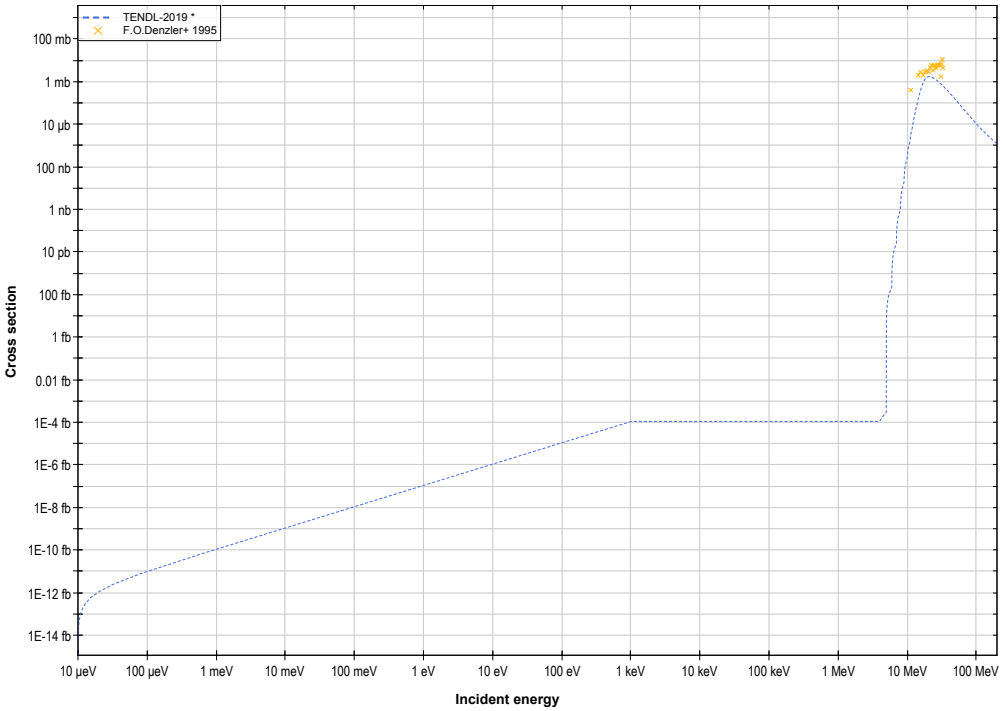
Sb123 (³He,3n) or I123 production lin-log



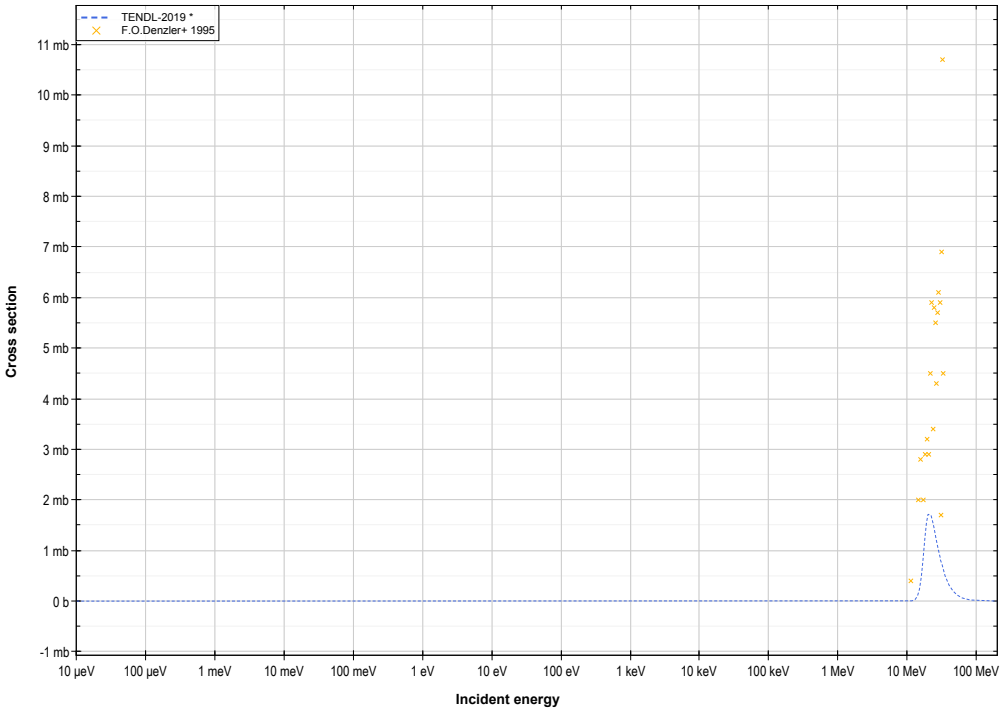
Reaction	Q-Value
Sb123(He3,3n)I123	-10562.83 keV

<< 47-Ag-109	**62-Sm-147**	73-Ta-181 >>
<< 51-Sb-123 MT17 (^{3}He,3n)	**MT4 (^{3}He,n) or MT5 (Gd149 production)**	MT11 (^{3}He,2n+d) >>

Sm147 (^{3}He,n) or Gd149 production log-log



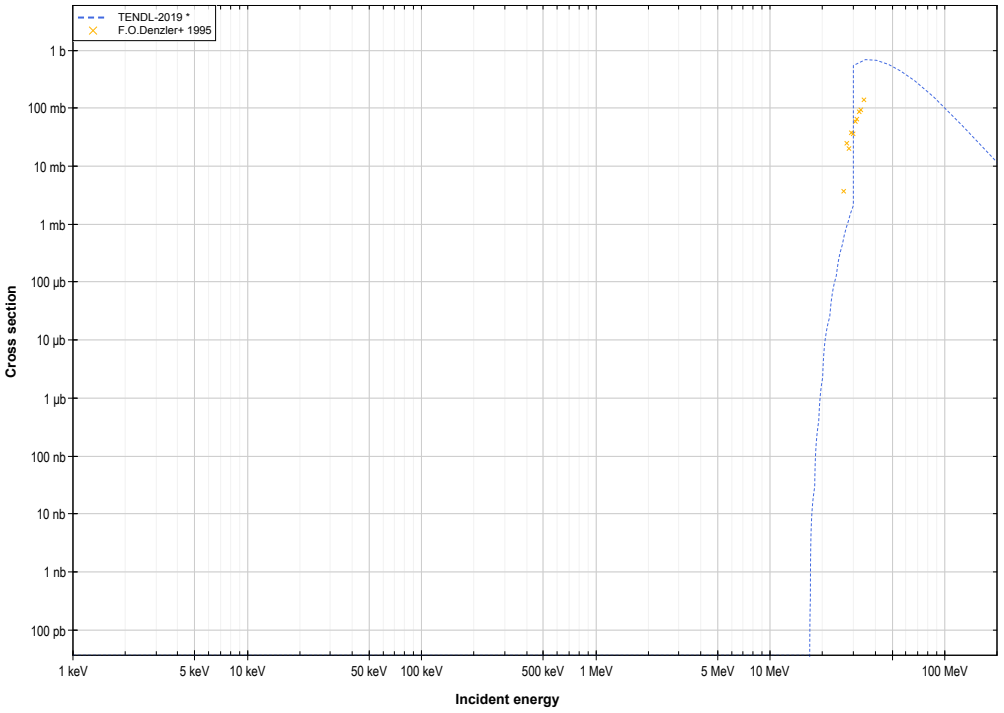
Sm147 (^{3}He,n) or Gd149 production lin-log



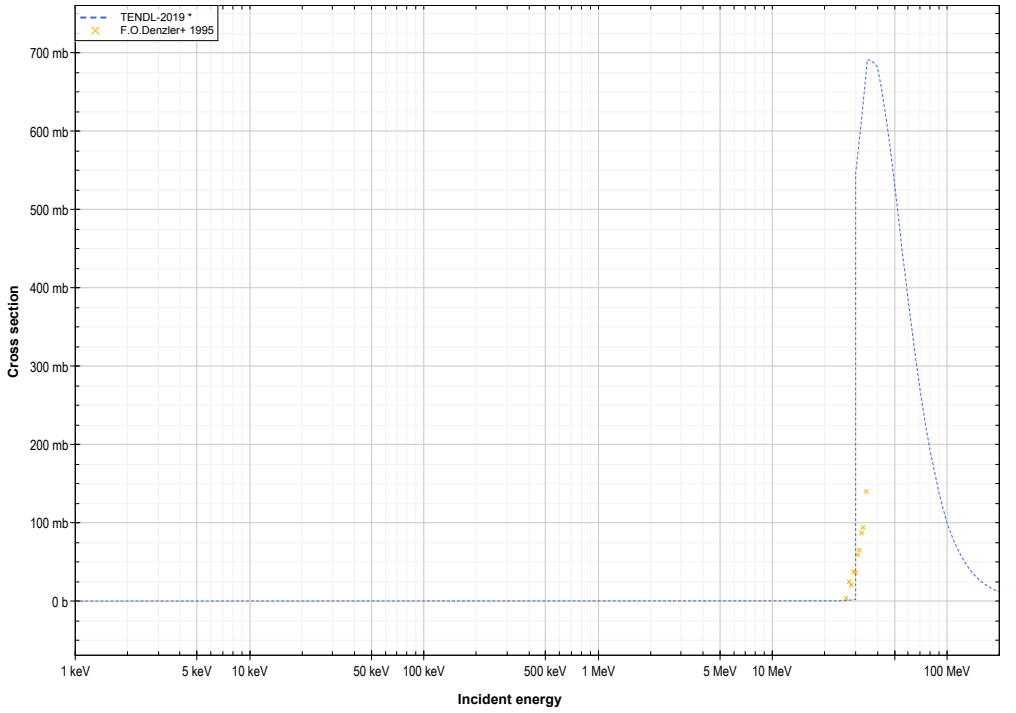
Reaction	Q-Value
Sm147(He3,n)Gd149	2720.50 keV

<< 13-Al-27	**62-Sm-147**	92-U-235 >>
<< MT4 (^{3}He,n)	**MT11 (^{3}He,2n+d) or MT5 (Eu146 production)**	MT17 (^{3}He,3n) >>

Sm147 (^{3}He,2n+d) or Eu146 production log-log



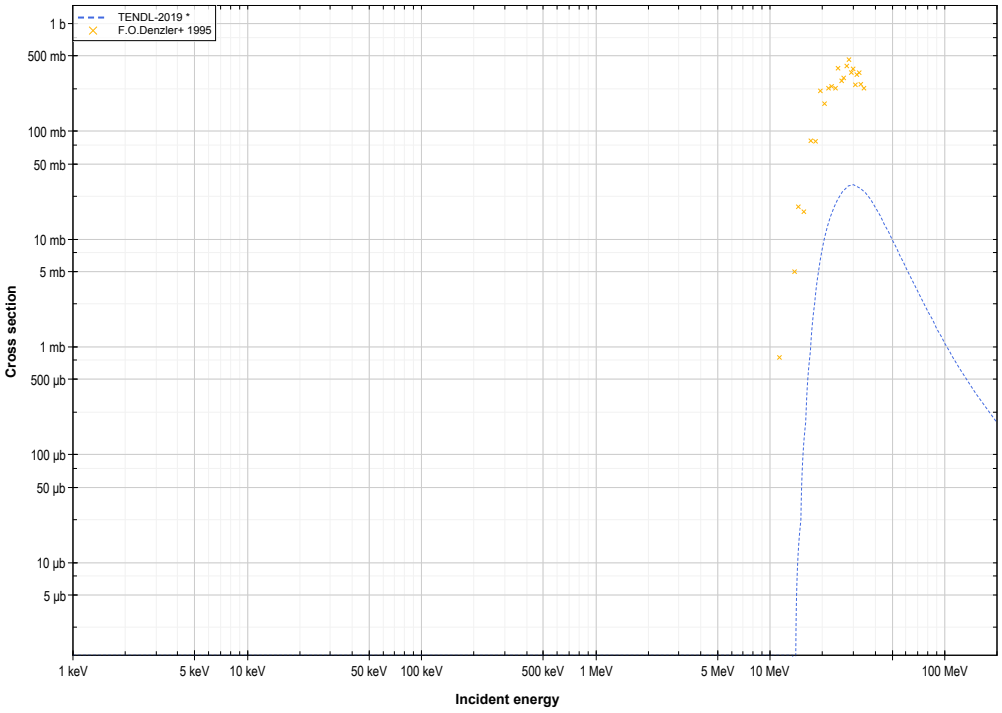
Sm147 (^{3}He,2n+d) or Eu146 production lin-log



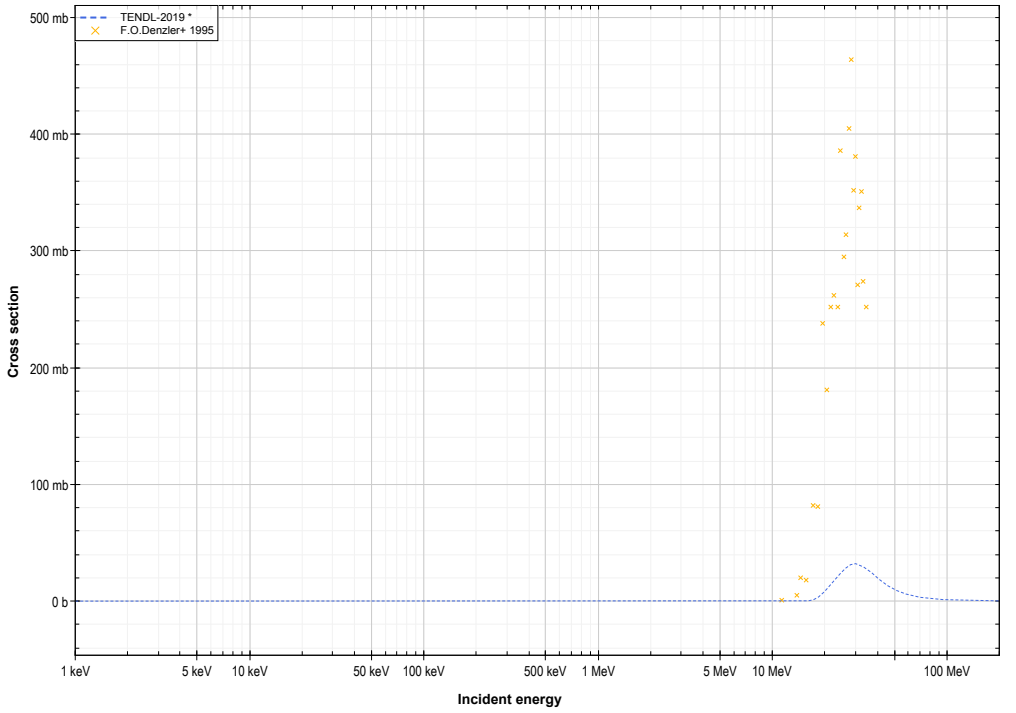
Reaction	Q-Value
Sm147(He3,n+t)Eu146	-10238.31 keV
Sm147(He3,2n+d)Eu146	-16495.54 keV
Sm147(He3,3n+p)Eu146	-18720.10 keV

<< 51-Sb-123	**62-Sm-147**	67-Ho-165 >>
<< MT11 (^{3}He,2n+d)	**MT17 (^{3}He,3n) or MT5 (Gd147 production)**	MT28 (^{3}He,n+p) >>

Sm147 (^{3}He,3n) or Gd147 production log-log



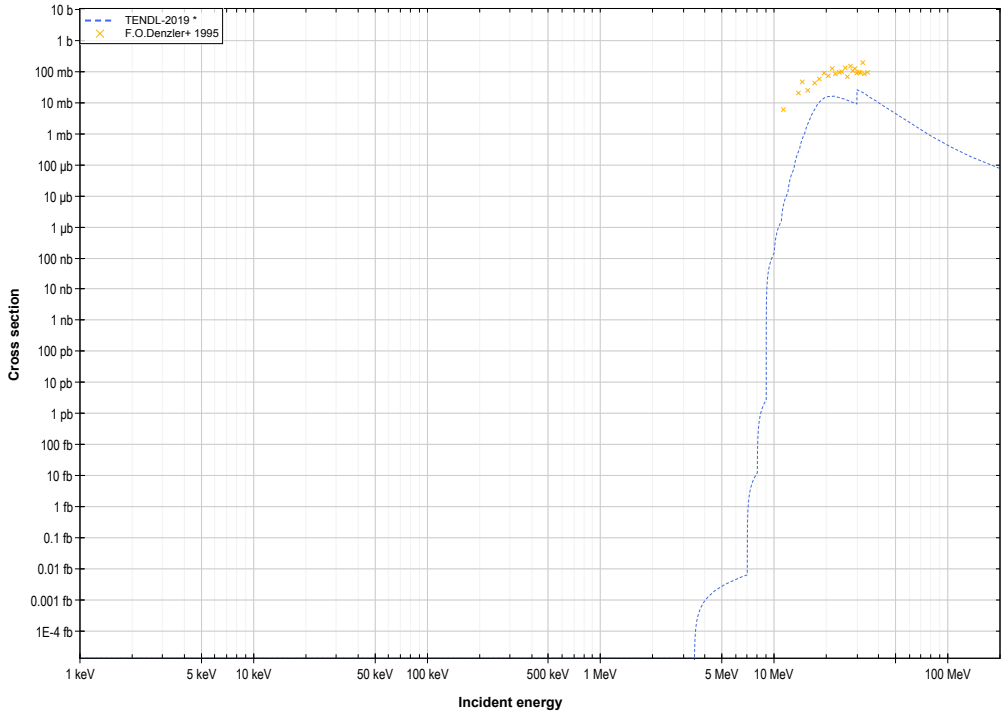
Sm147 (^{3}He,3n) or Gd147 production lin-log



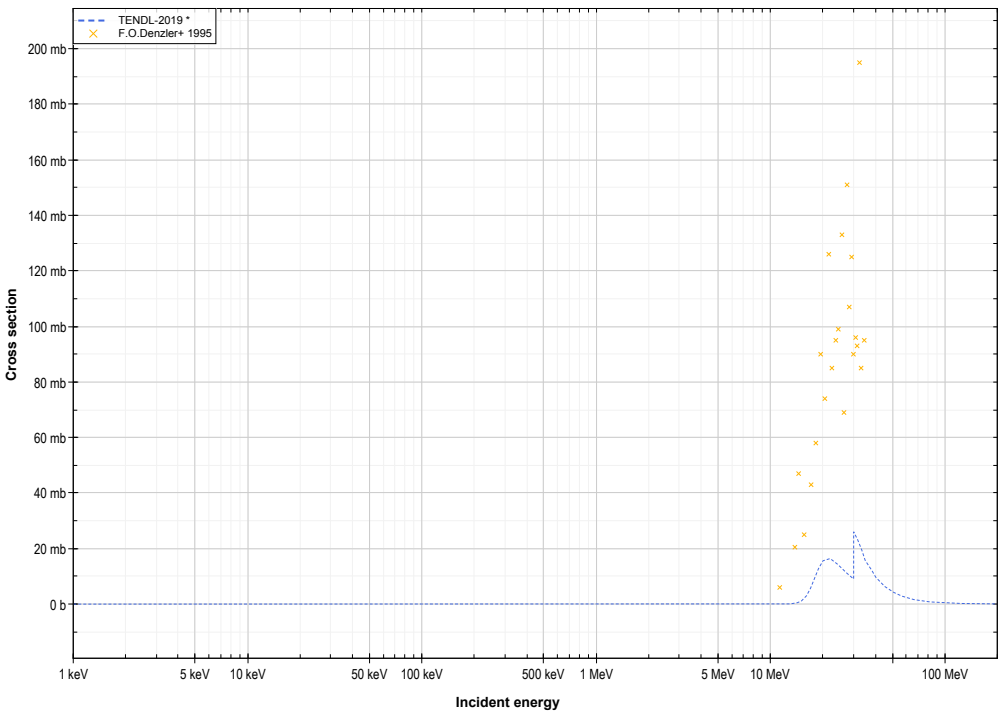
Reaction	Q-Value
Sm147(He3,3n)Gd147	-13192.23 keV

<< 44-Ru-101	**62-Sm-147**	74-W-183 >>
<< MT17 (^{3}He,3n)	**MT28 (^{3}He,n+p) or MT5 (Eu148 production)**	MT32 (^{3}He,n+d) >>

Sm147 (^{3}He,n+p) or Eu148 production log-log



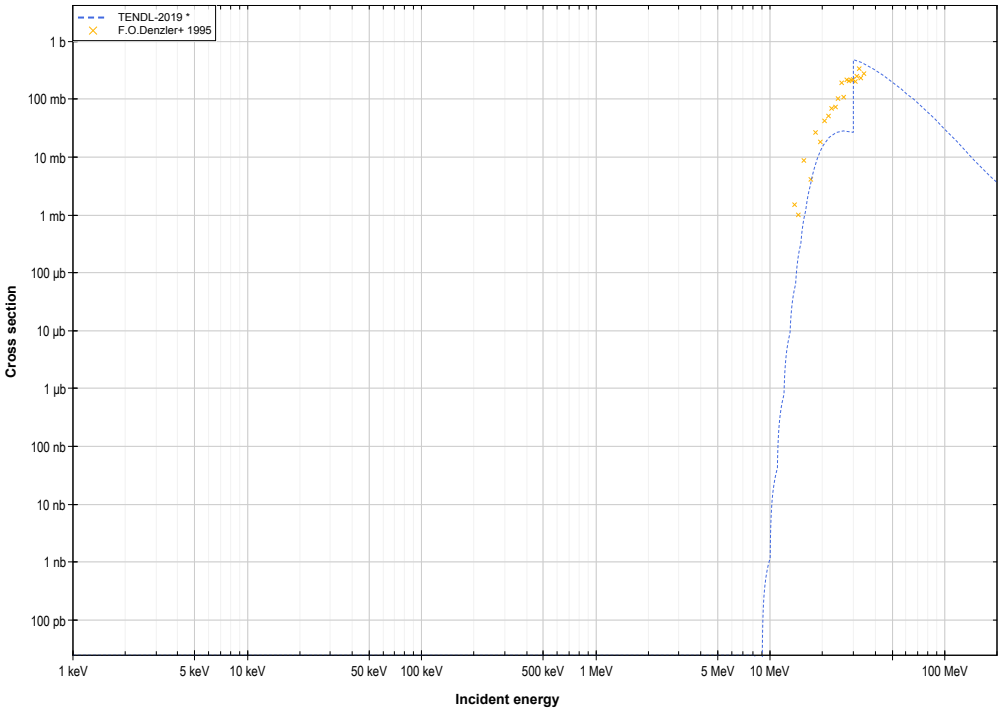
Sm147 (^{3}He,n+p) or Eu148 production lin-log



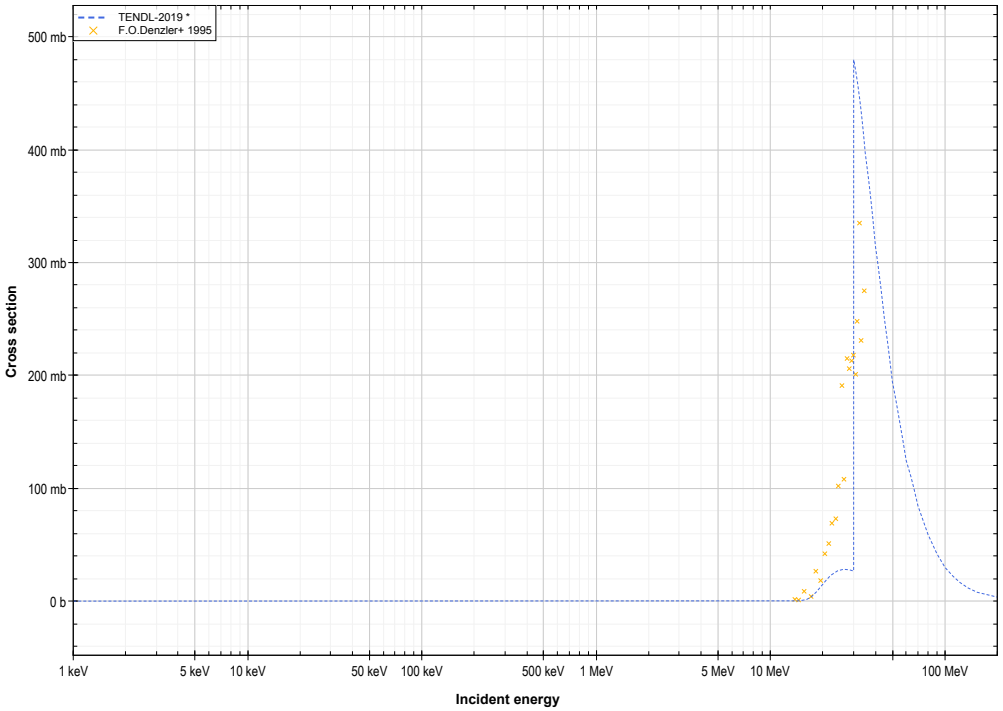
Reaction	Q-Value
Sm147(He3,d)Eu148	-1171.90 keV
Sm147(He3,n+p)Eu148	-3396.47 keV

<< 47-Ag-107	**62-Sm-147**	74-W-186 >>
<< MT28 (^{3}He,n+p)	**MT32 (^{3}He,n+d) or MT5 (Eu147 production)**	MT33 (^{3}He,n+t) >>

Sm147 (^{3}He,n+d) or Eu147 production log-log



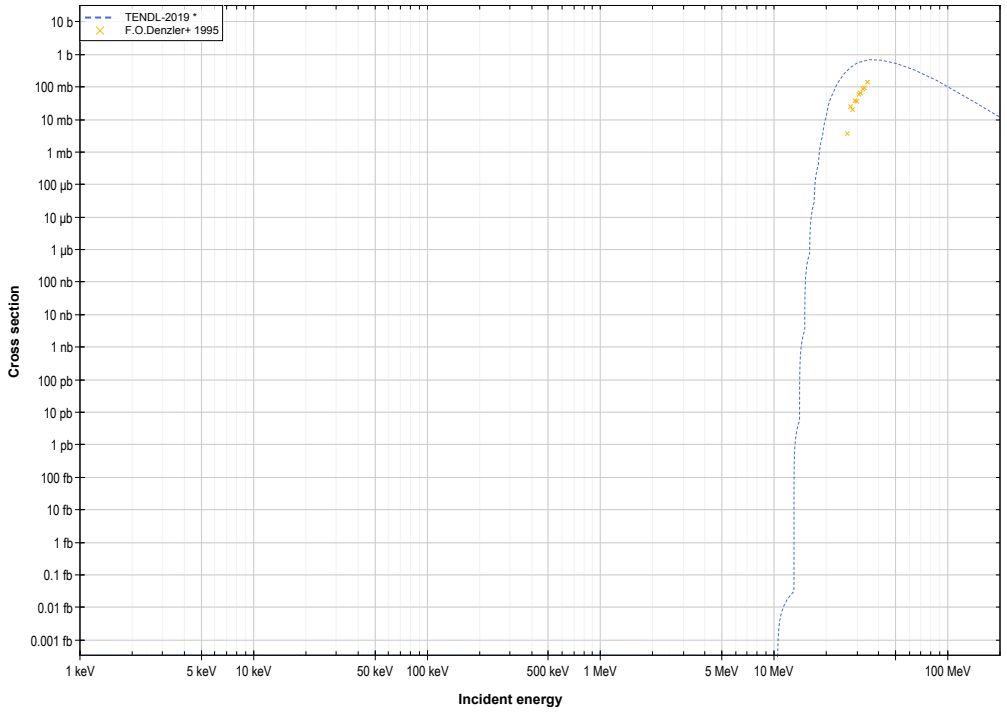
Sm147 (^{3}He,n+d) or Eu147 production lin-log



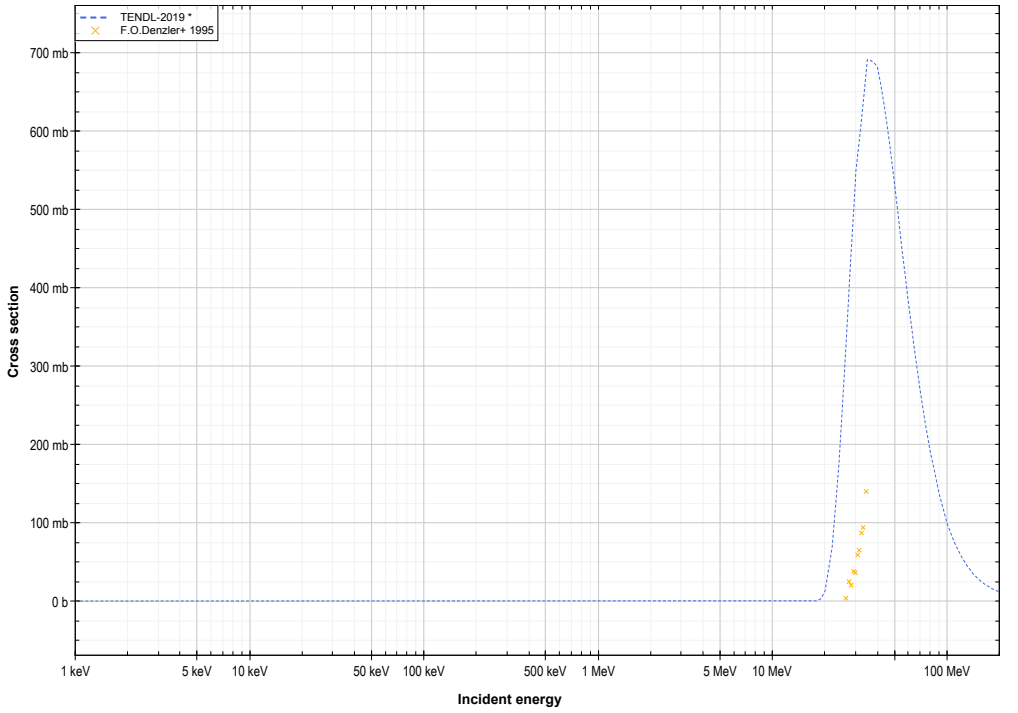
Reaction	Q-Value
Sm147(He3,t)Eu147	-1740.19 keV
Sm147(He3,n+d)Eu147	-7997.42 keV
Sm147(He3,2n+p)Eu147	-10221.99 keV

<< 13-Al-27	**62-Sm-147**	92-U-235 >>
<< MT32 (^{3}He,n+d)	**MT33 (^{3}He,n+t) or MT5 (Eu146 production)**	MT37 (^{3}He,4n) >>

Sm147 (^{3}He,n+t) or Eu146 production log-log



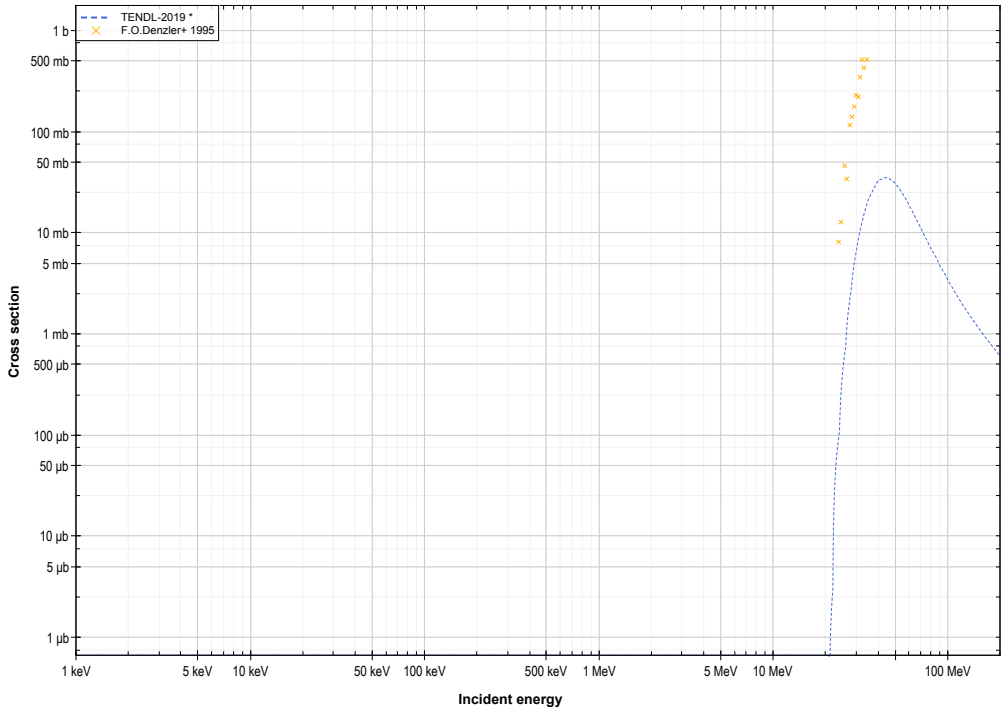
Sm147 (^{3}He,n+t) or Eu146 production lin-log



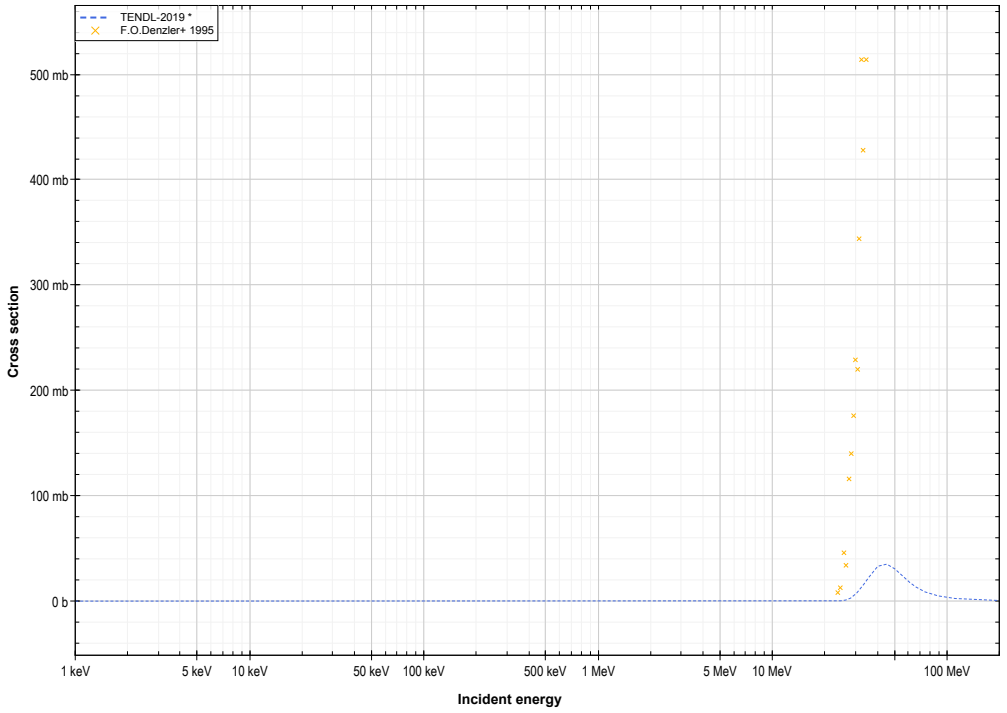
Reaction	Q-Value
Sm147(He3,n+t)Eu146	-10238.31 keV
Sm147(He3,2n+d)Eu146	-16495.54 keV
Sm147(He3,3n+p)Eu146	-18720.10 keV

<< 47-Ag-109	**62-Sm-147**	73-Ta-181 >>
<< MT33 (^{3}He,n+t)	**MT37 (^{3}He,4n) or MT5 (Gd146 production)**	MT41 (^{3}He,2n+p) >>

Sm147 (^{3}He,4n) or Gd146 production log-log



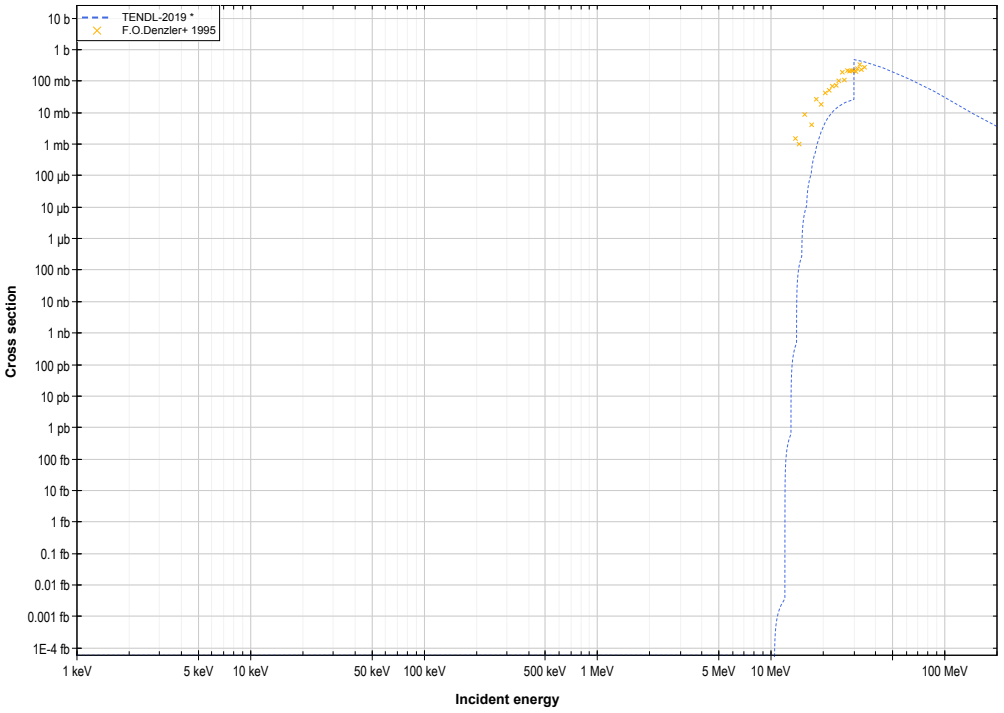
Sm147 (^{3}He,4n) or Gd146 production lin-log



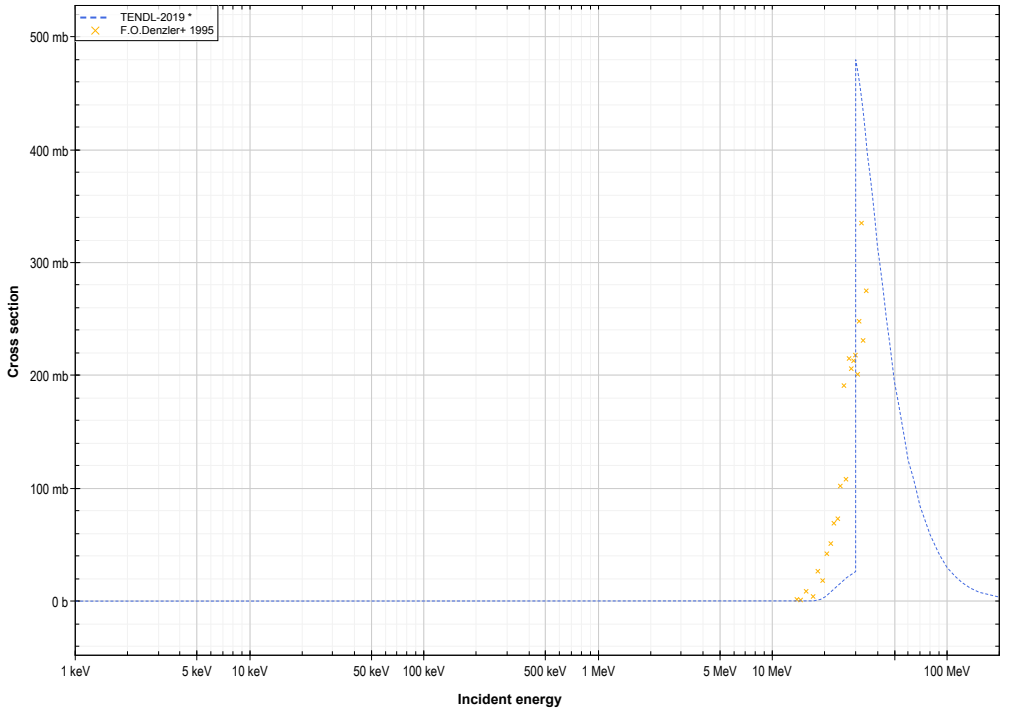
Reaction	Q-Value
Sm147(He3,4n)Gd146	-20534.45 keV

<< 47-Ag-109	**62-Sm-147**	74-W-186 >>
<< MT37 (^{3}He,4n)	**MT41 (^{3}He,2n+p) or MT5 (Eu147 production)**	MT42 (^{3}He,3n+p) >>

Sm147 (^{3}He,2n+p) or Eu147 production log-log



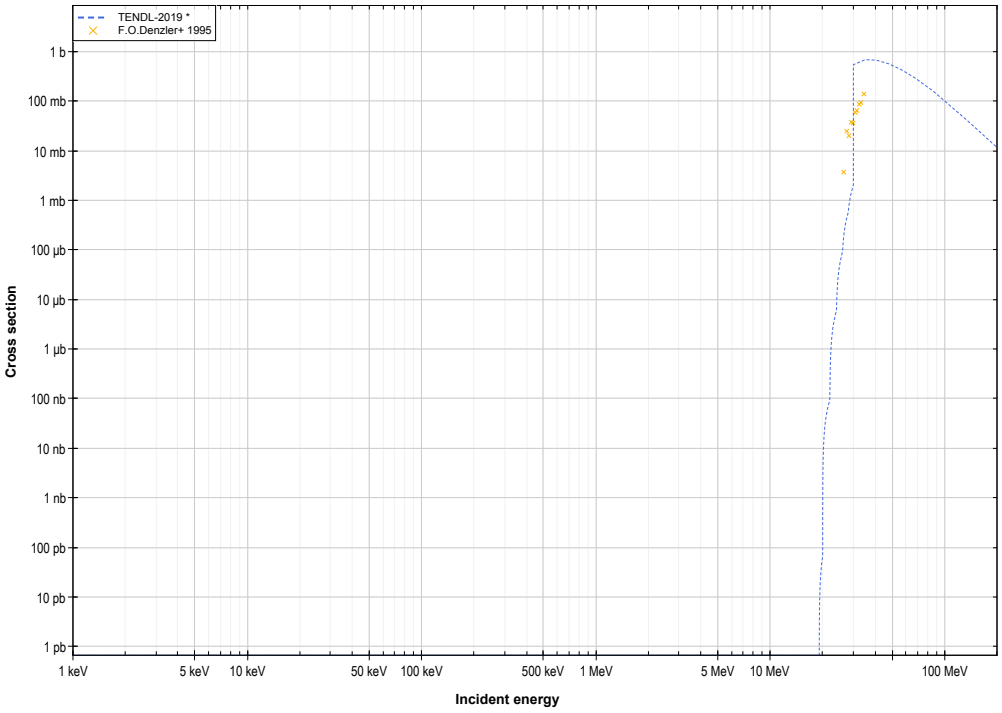
Sm147 (^{3}He,2n+p) or Eu147 production lin-log



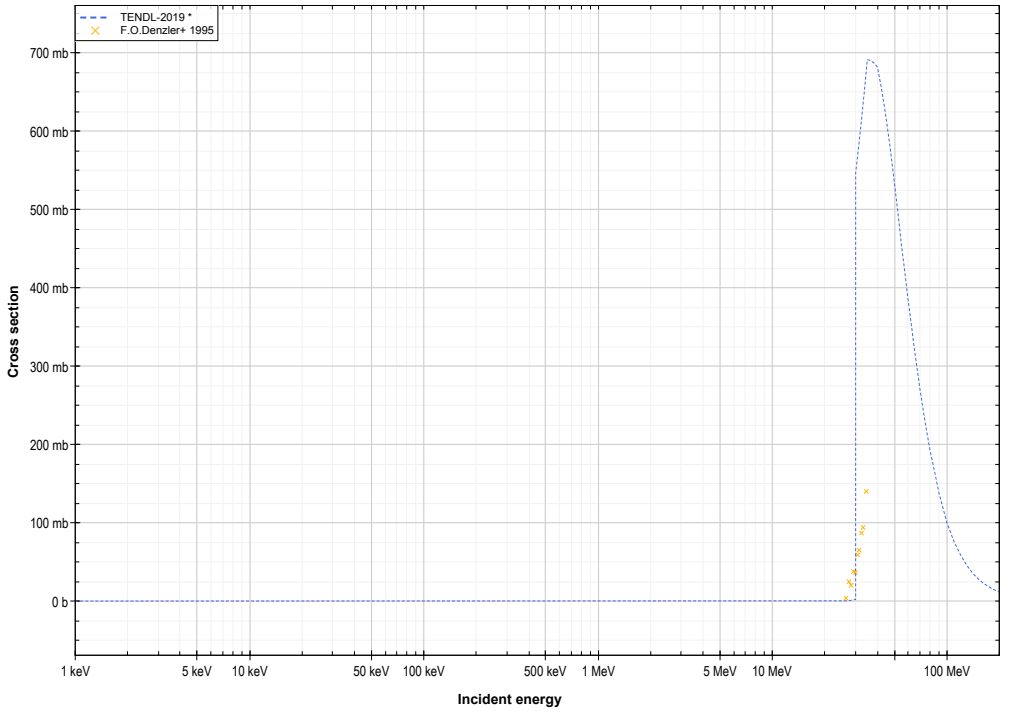
Reaction	Q-Value
Sm147(He3,t)Eu147	-1740.19 keV
Sm147(He3,n+d)Eu147	-7997.42 keV
Sm147(He3,2n+p)Eu147	-10221.99 keV

<< 34-Se-77	**62-Sm-147**	92-U-235 >>
<< MT41 (^{3}He,2n+p)	**MT42 (^{3}He,3n+p) or MT5 (Eu146 production)**	MT104 (^{3}He,d) >>

Sm147 (^{3}He,3n+p) or Eu146 production log-log



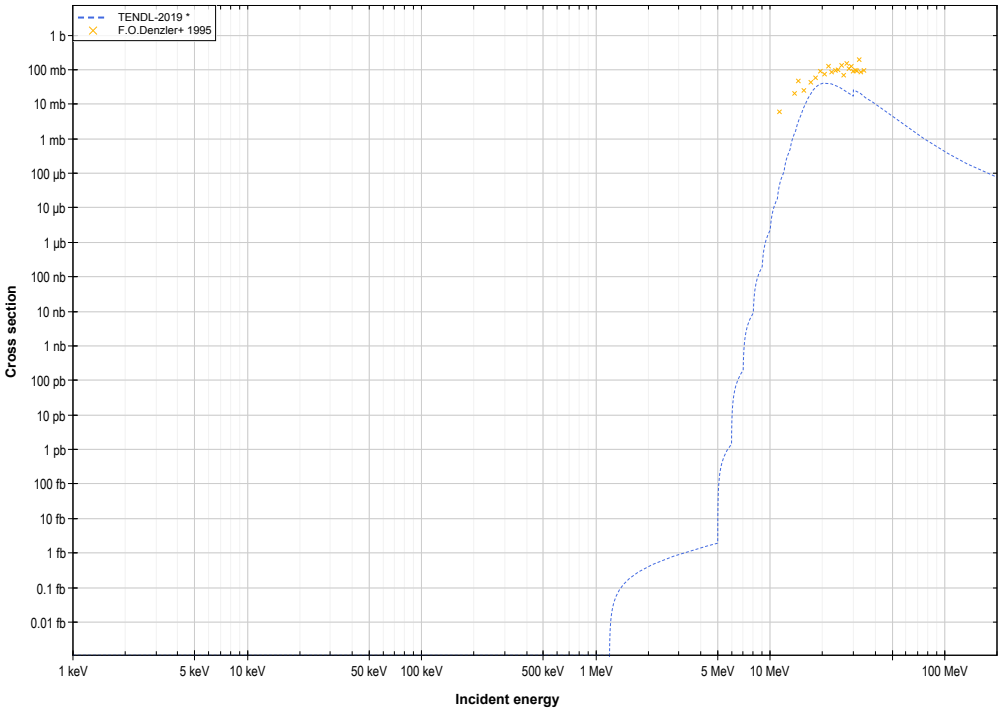
Sm147 (^{3}He,3n+p) or Eu146 production lin-log



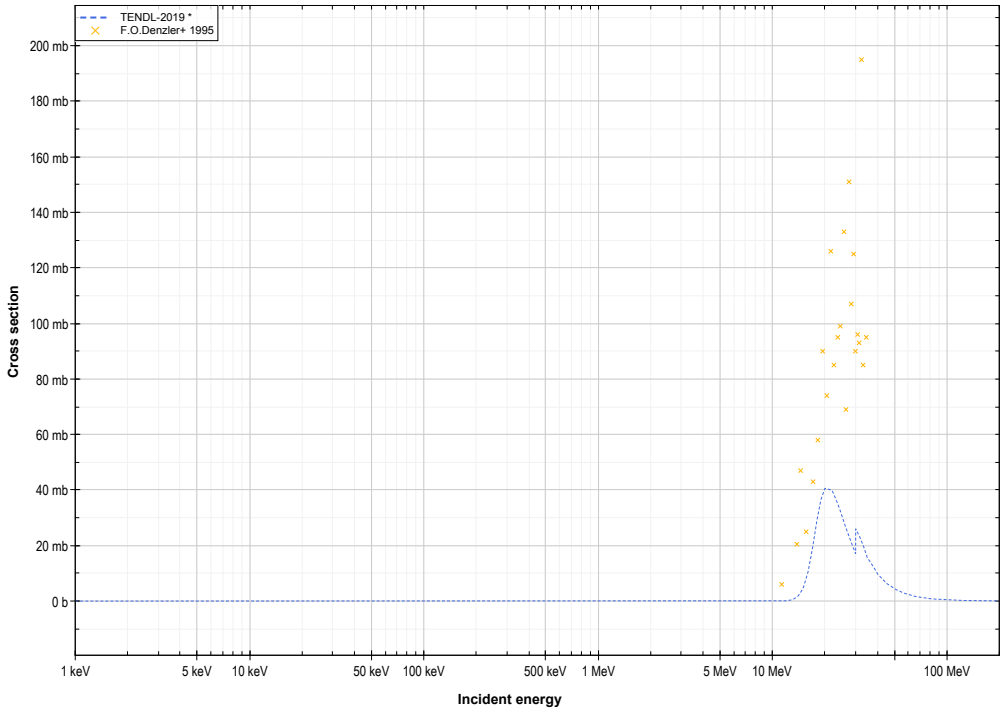
Reaction	Q-Value
Sm147(He3,n+t)Eu146	-10238.31 keV
Sm147(He3,2n+d)Eu146	-16495.54 keV
Sm147(He3,3n+p)Eu146	-18720.10 keV

<< 44-Ru-101	**62-Sm-147**	74-W-183 >>
<< MT42 (³He,3n+p)	**MT104 (³He,d) or MT5 (Eu148 production)**	MT105 (³He,t) >>

Sm147 (³He,d) or Eu148 production log-log



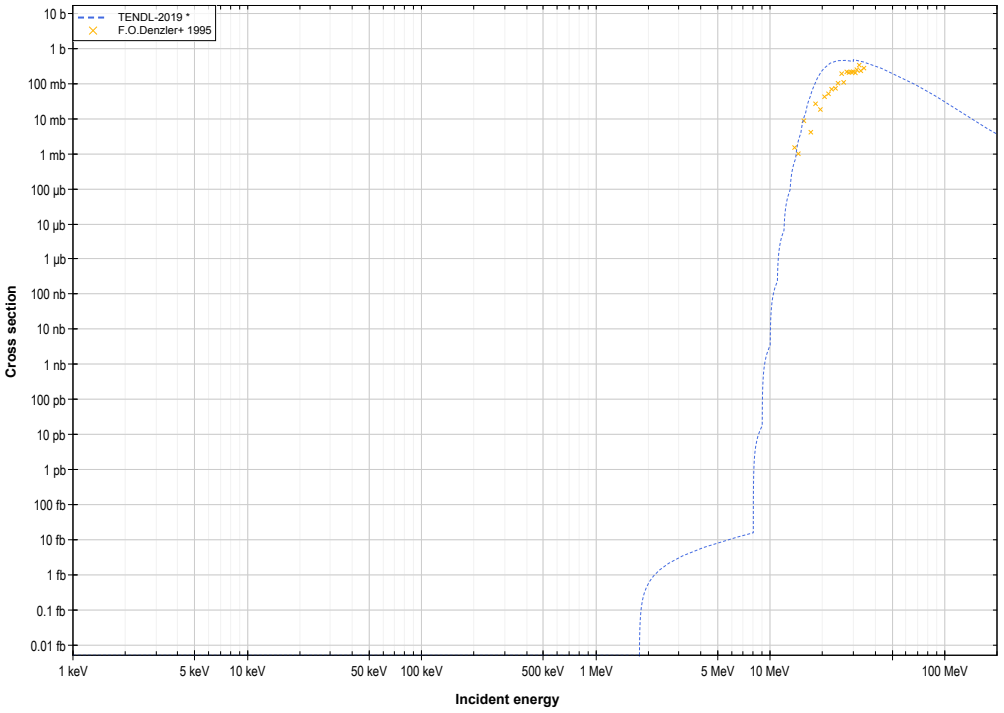
Sm147 (³He,d) or Eu148 production lin-log



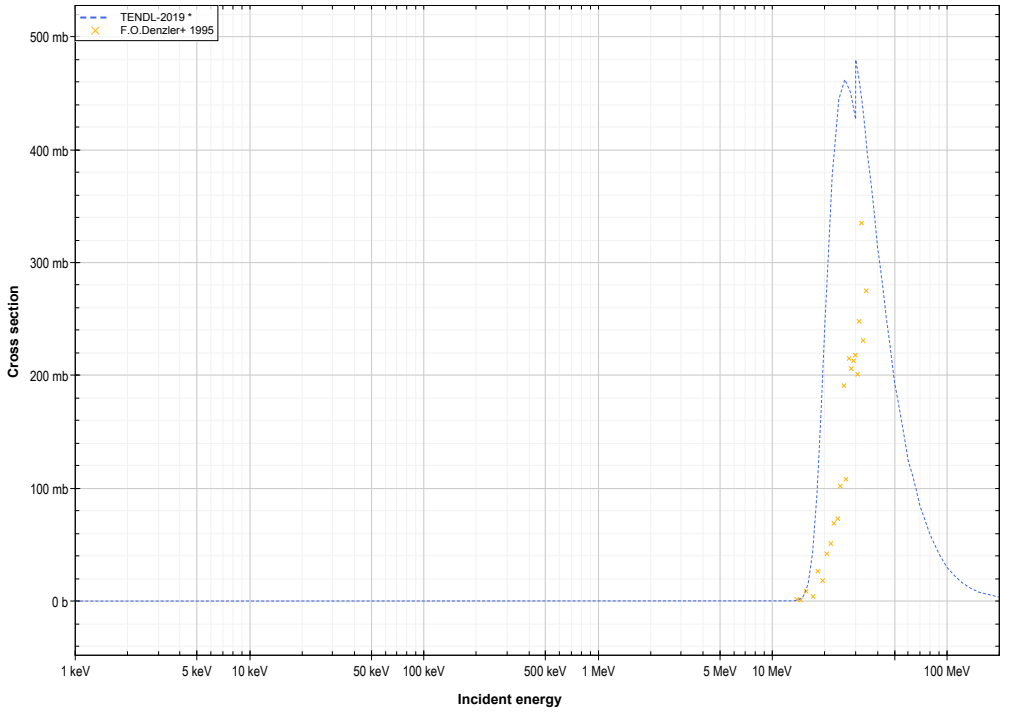
Reaction	Q-Value
Sm147(He3,d)Eu148	-1171.90 keV
Sm147(He3,n+p)Eu148	-3396.47 keV

<< 47-Ag-107	**62-Sm-147**	74-W-186 >>
<< MT104 (^{3}He,d)	**MT105 (^{3}He,t) or MT5 (Eu147 production)**	67-Ho-165 MT16 (^{3}He,2n) >>

Sm147 (^{3}He,t) or Eu147 production log-log



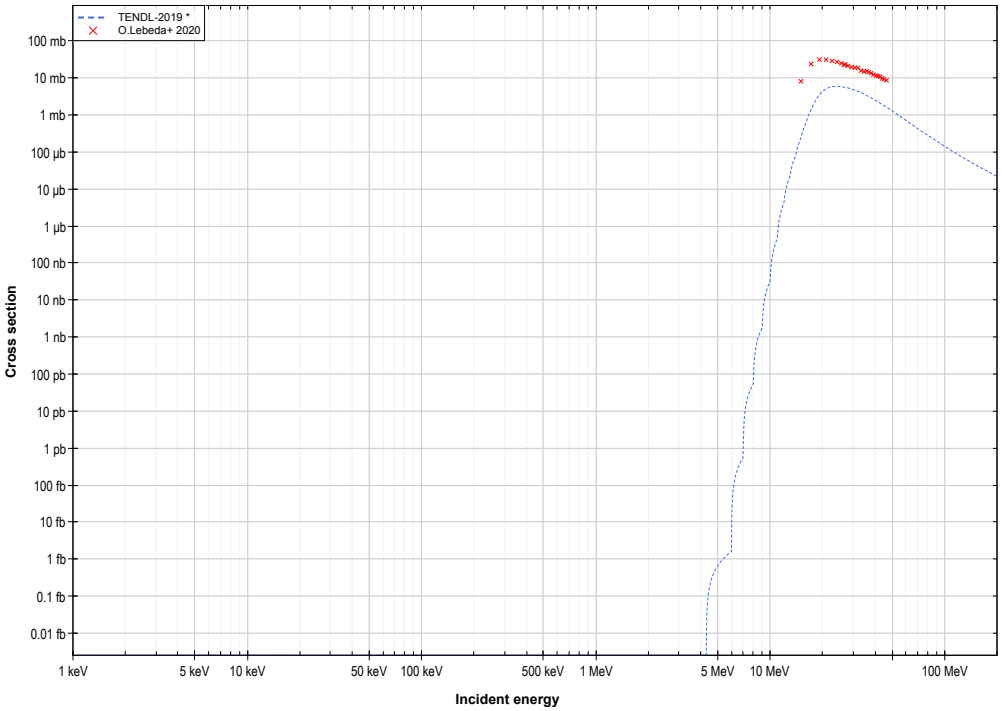
Sm147 (^{3}He,t) or Eu147 production lin-log



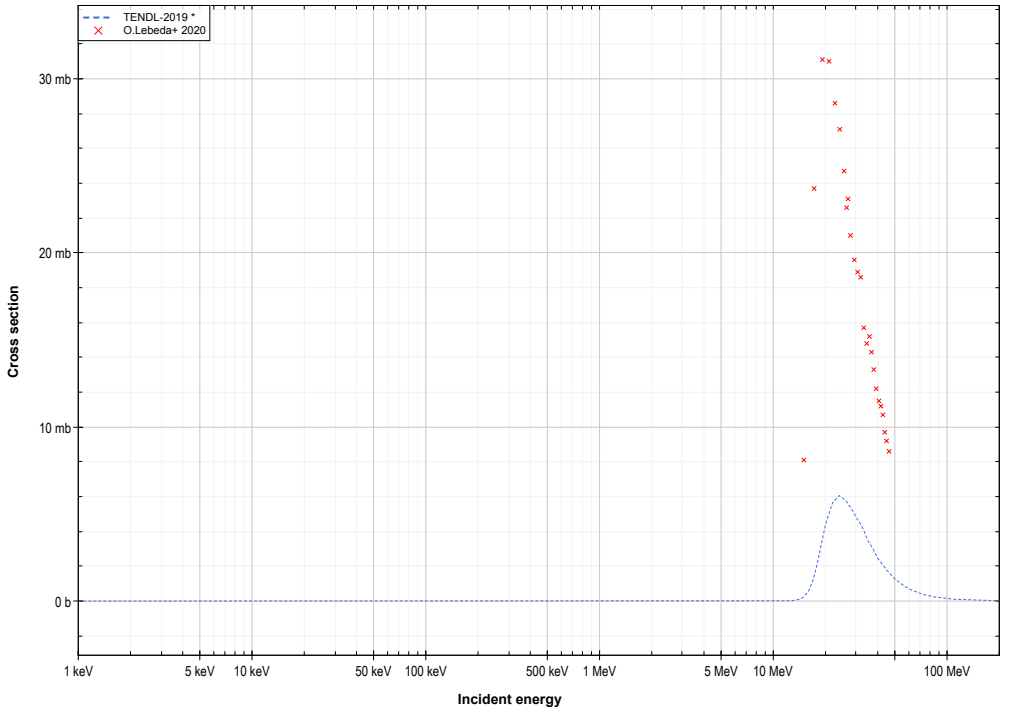
Reaction	Q-Value
Sm147(He3,t)Eu147	-1740.19 keV
Sm147(He3,n+d)Eu147	-7997.42 keV
Sm147(He3,2n+p)Eu147	-10221.99 keV

<< 51-Sb-123	**67-Ho-165**	73-Ta-181 >>
<< 62-Sm-147 MT105 (³He,t)	**MT16 (³He,2n) or MT5 (Tm166 production)**	MT17 (³He,3n) >>

Ho165 (³He,2n) or Tm166 production log-log



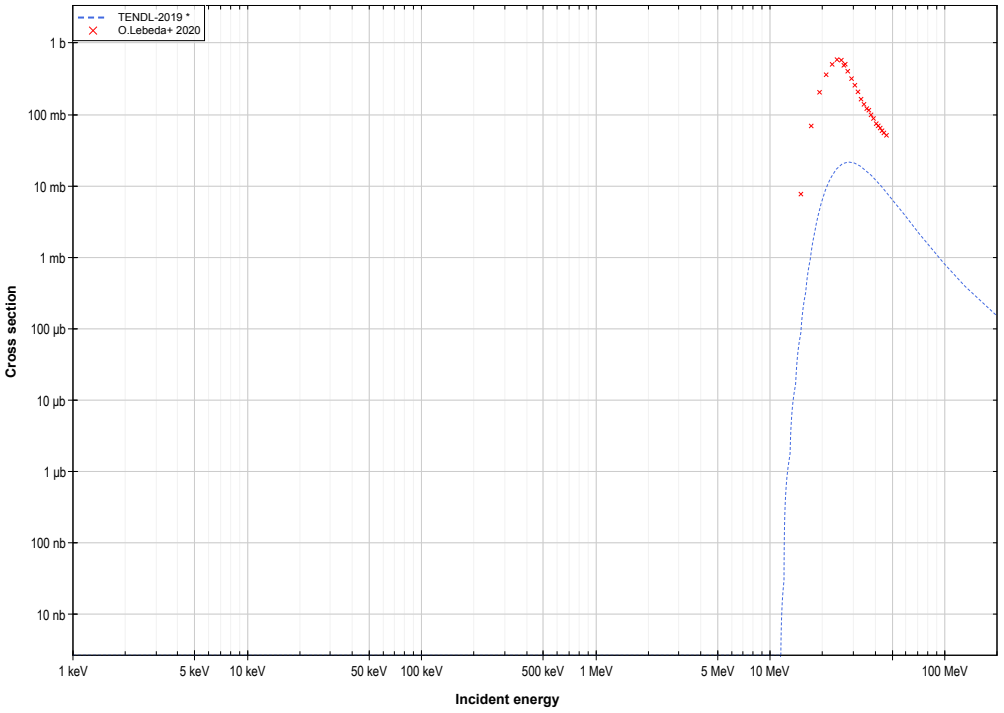
Ho165 (³He,2n) or Tm166 production lin-log



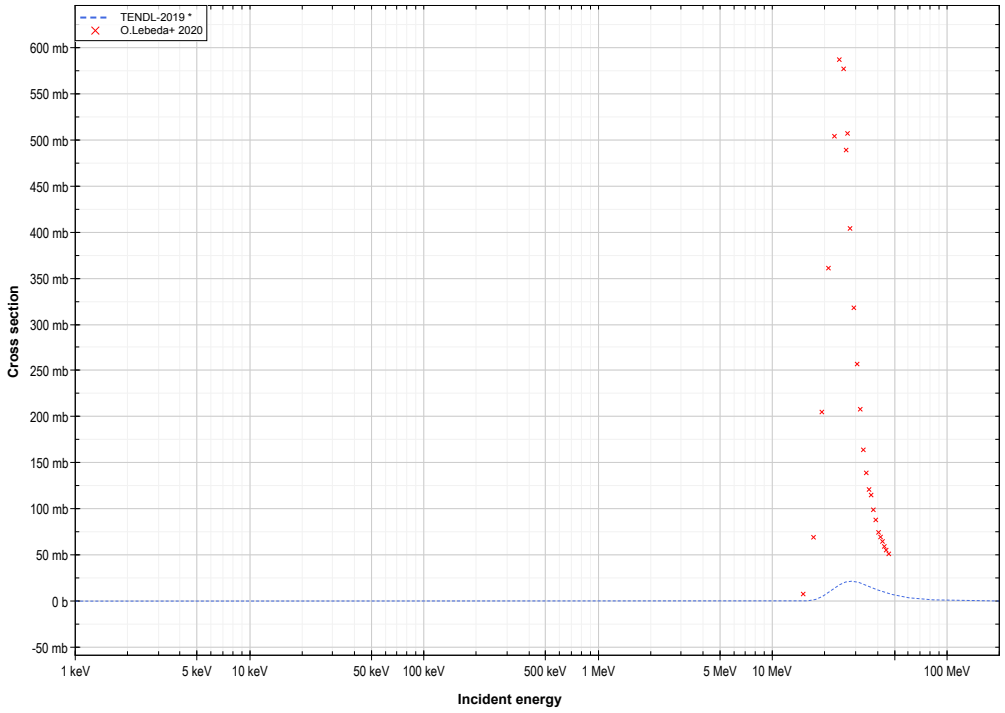
Reaction	Q-Value
Ho165(He3,2n)Tm166	-4222.42 keV

<< 62-Sm-147	**67-Ho-165**	73-Ta-181 >>
<< MT16 (^{3}He,2n)	**MT17 (^{3}He,3n) or MT5 (Tm165 production)**	MT152 (^{3}He,5n) >>

Ho165 (^{3}He,3n) or Tm165 production log-log



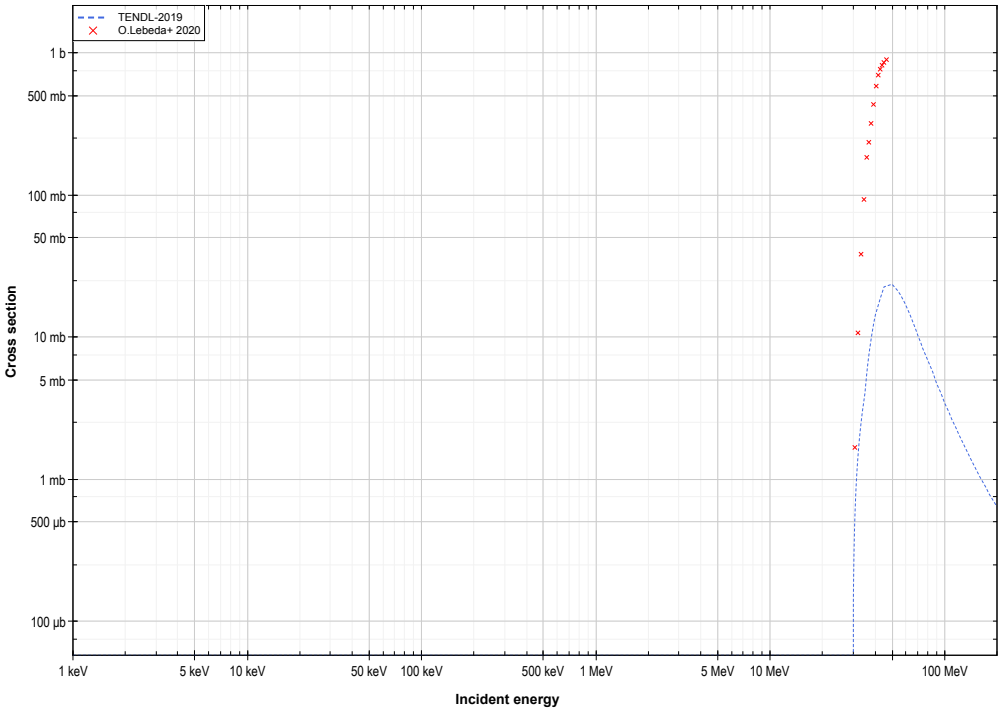
Ho165 (^{3}He,3n) or Tm165 production lin-log



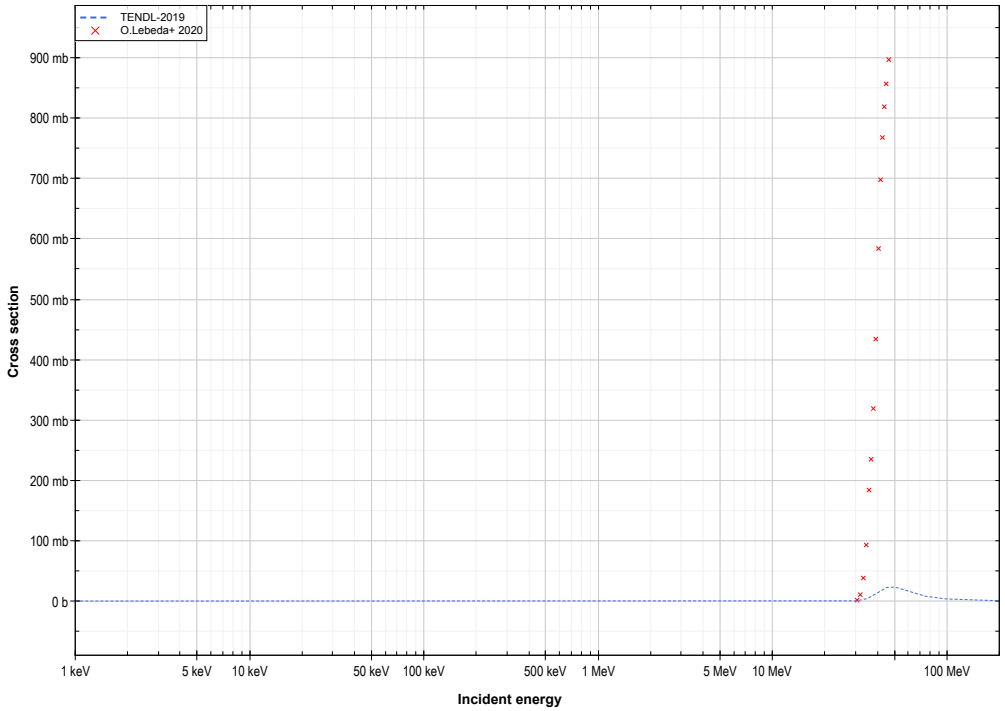
Reaction	Q-Value
Ho165(He3,3n)Tm165	-11252.13 keV

	67-Ho-165	73-Ta-181 >>
<< MT17 (³He,3n)	**MT152 (³He,5n) or MT5 (Tm163 production)**	73-Ta-181 MT4 (³He,n) >>

Ho165 (³He,5n) or Tm163 production log-log



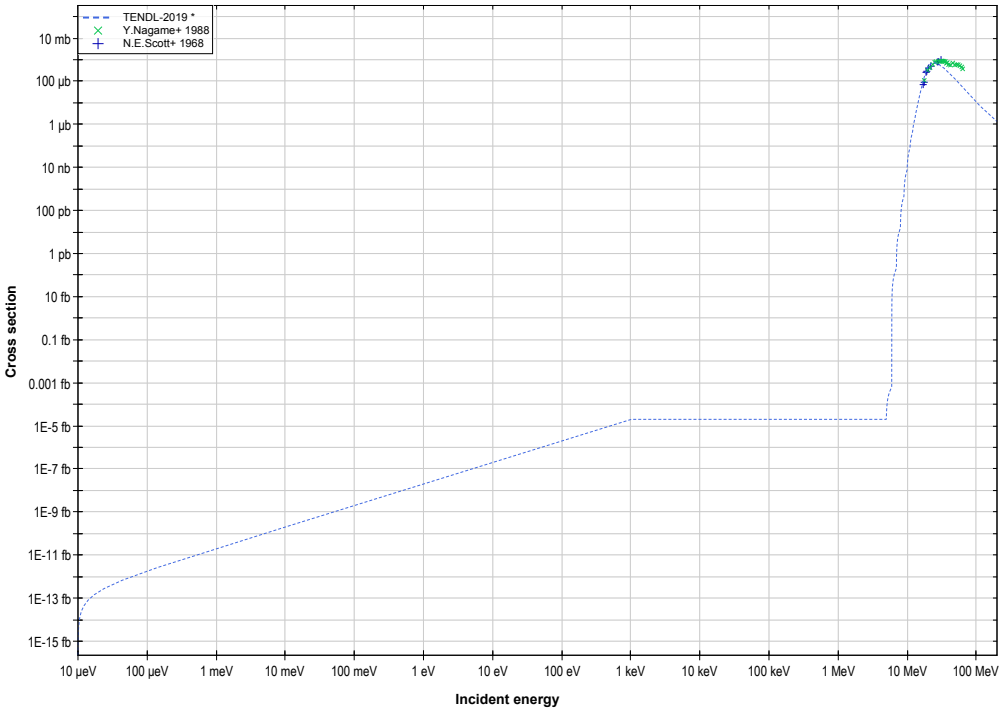
Ho165 (³He,5n) or Tm163 production lin-log



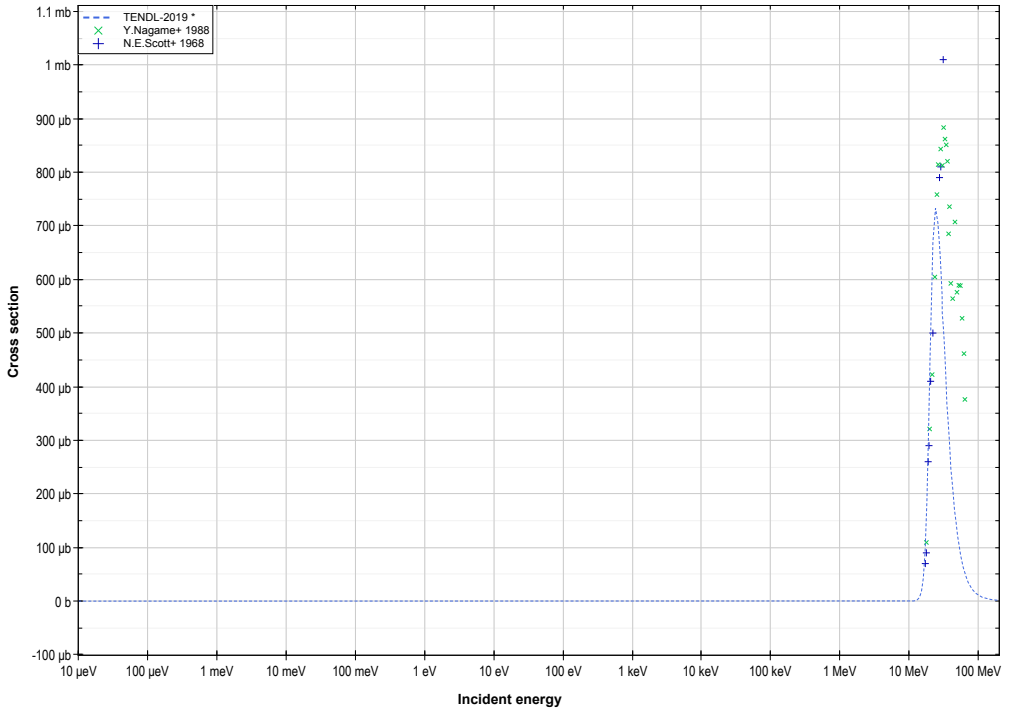
Reaction	Q-Value
Ho165(He3,5n)Tm163	-27595.37 keV

<< 62-Sm-147	**73-Ta-181**	82-Pb-208 >>
<< 67-Ho-165 MT152 (^{3}He,5n)	**MT4 (^{3}He,n) or MT5 (Re183 production)**	MT16 (^{3}He,2n) >>

Ta181 (^{3}He,n) or Re183 production log-log



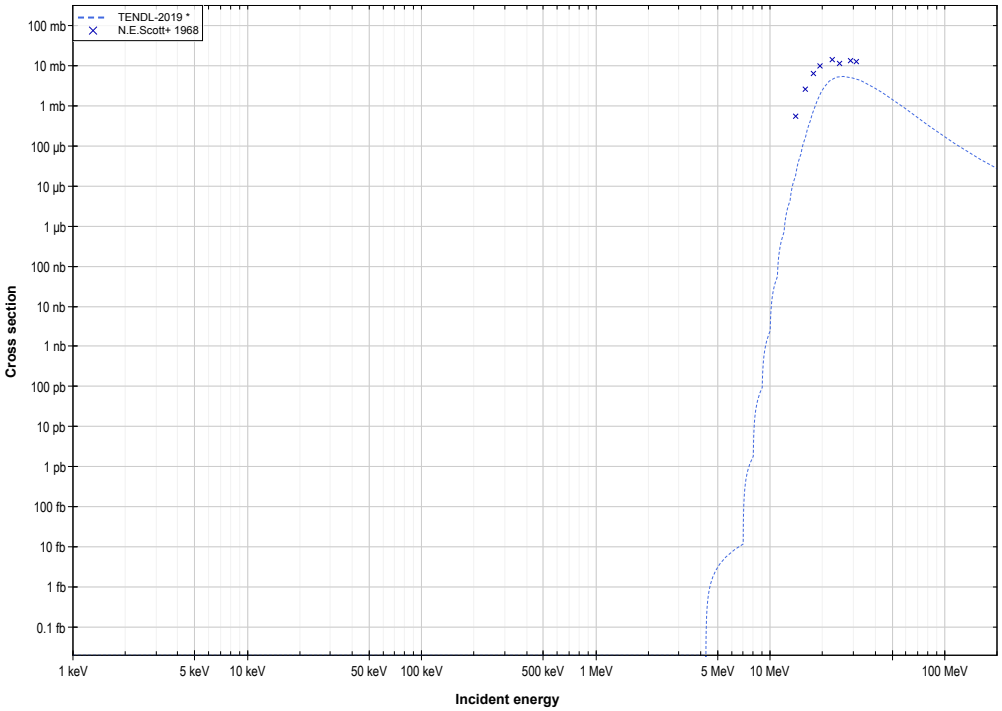
Ta181 (^{3}He,n) or Re183 production lin-log



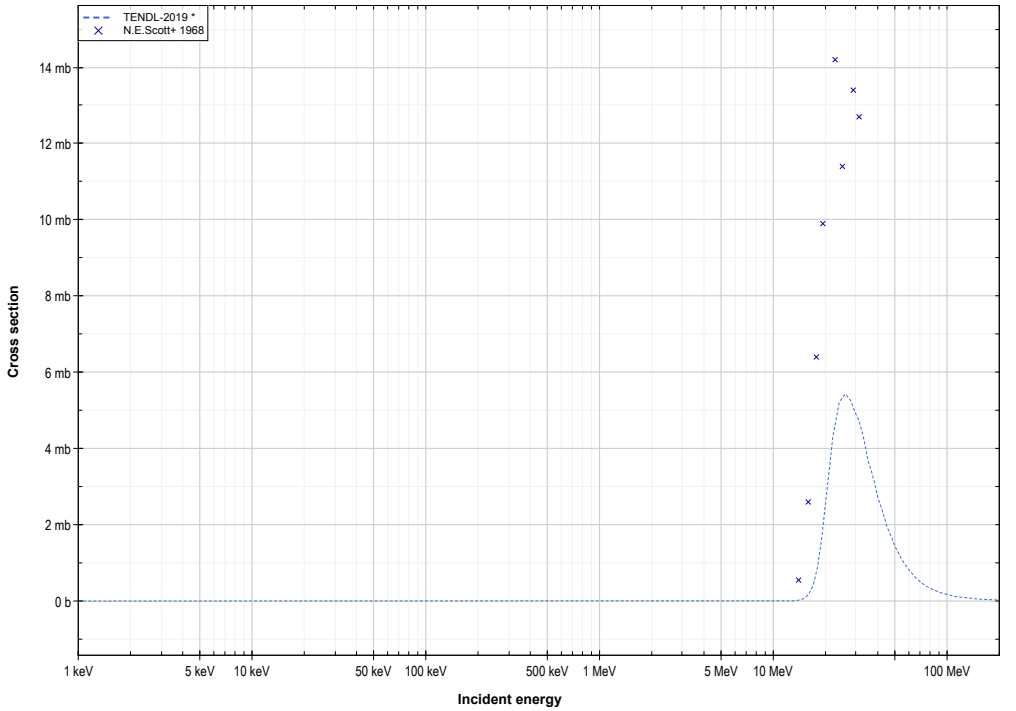
Reaction	Q-Value
Ta181(He3,n)Re183	4231.60 keV

<< 67-Ho-165	**73-Ta-181**	78-Pt-194 >>
<< MT4 (^{3}He,n)	**MT16 (^{3}He,2n) or MT5 (Re182 production)**	MT17 (^{3}He,3n) >>

Ta181 (^{3}He,2n) or Re182 production log-log



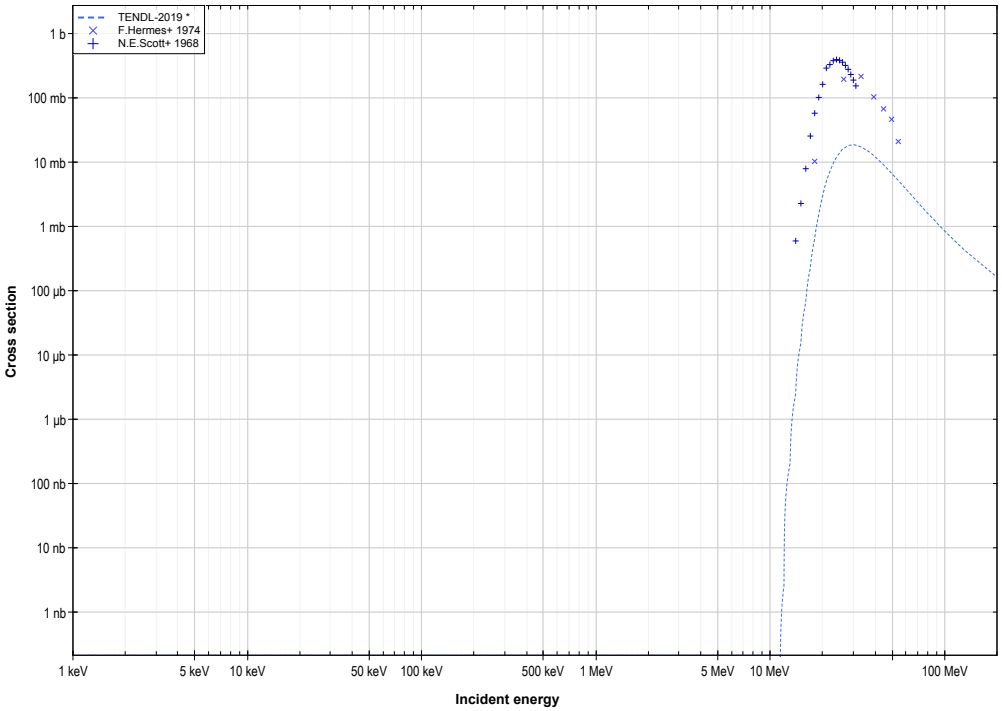
Ta181 (^{3}He,2n) or Re182 production lin-log



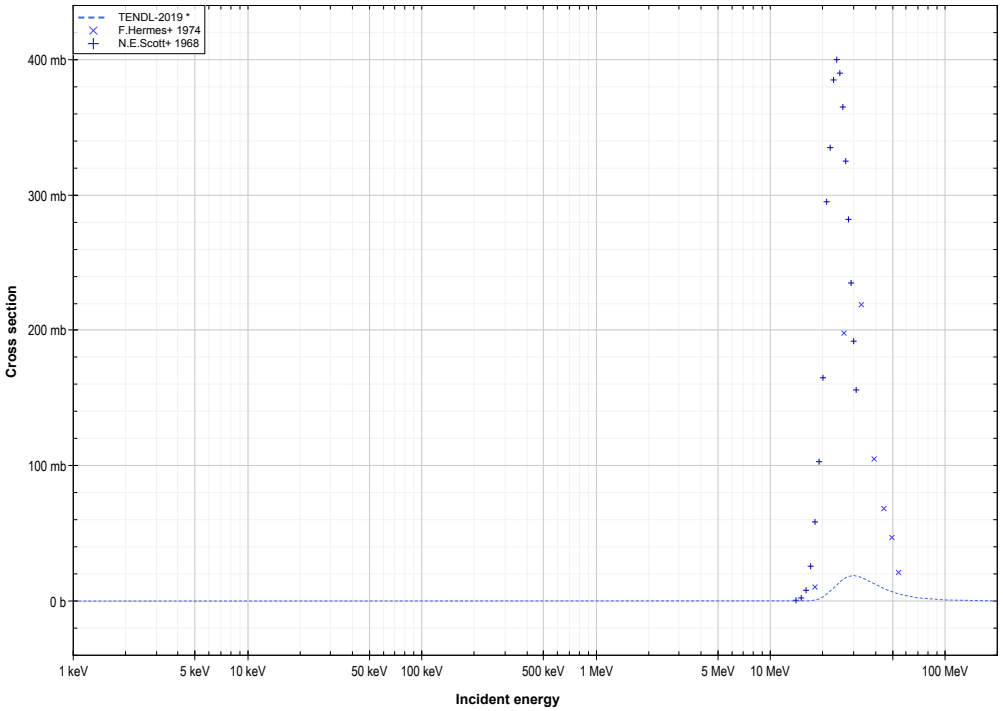
Reaction	Q-Value
Ta181(He3,2n)Re182	-4199.72 keV

<< 67-Ho-165	**73-Ta-181**	75-Re-187 >>
<< MT16 (³He,2n)	**MT17 (³He,3n) or MT5 (Re181 production)**	MT18 (³He,fission) >>

Ta181 (³He,3n) or Re181 production log-log



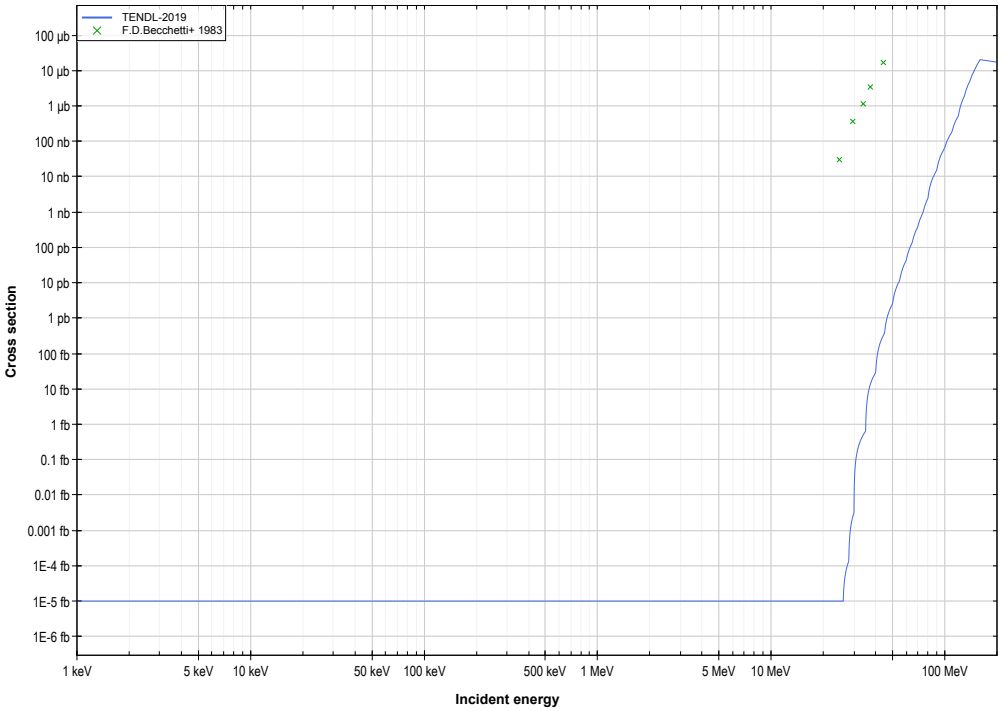
Ta181 (³He,3n) or Re181 production lin-log



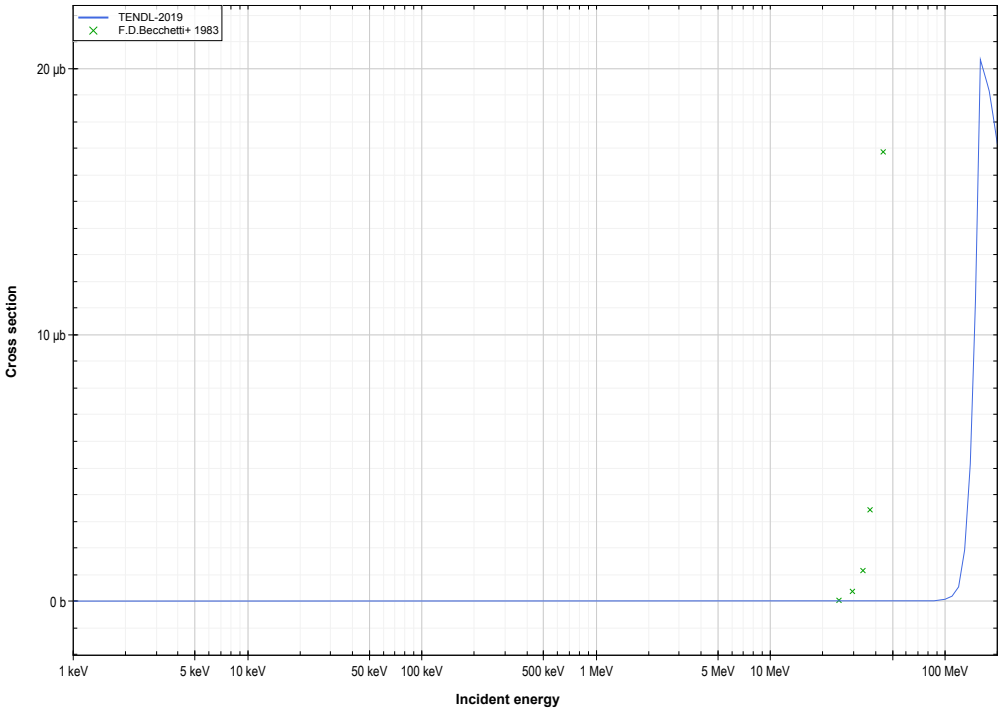
Reaction	Q-Value
Ta181(He3,3n)Re181	-11204.03 keV

	73-Ta-181	79-Au-197 >>
<< MT17 (³He,3n)	**MT18 (³He,fission)**	MT24 (³He,2n+α) >>

Ta181 (³He,fission) log-log

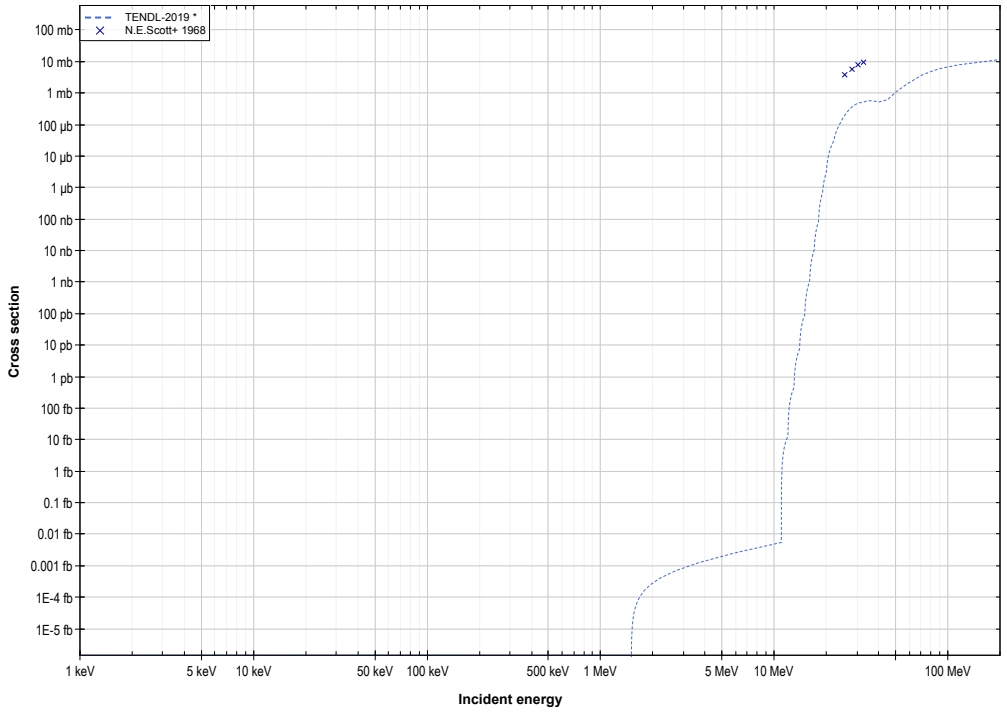


Ta181 (³He,fission) lin-log

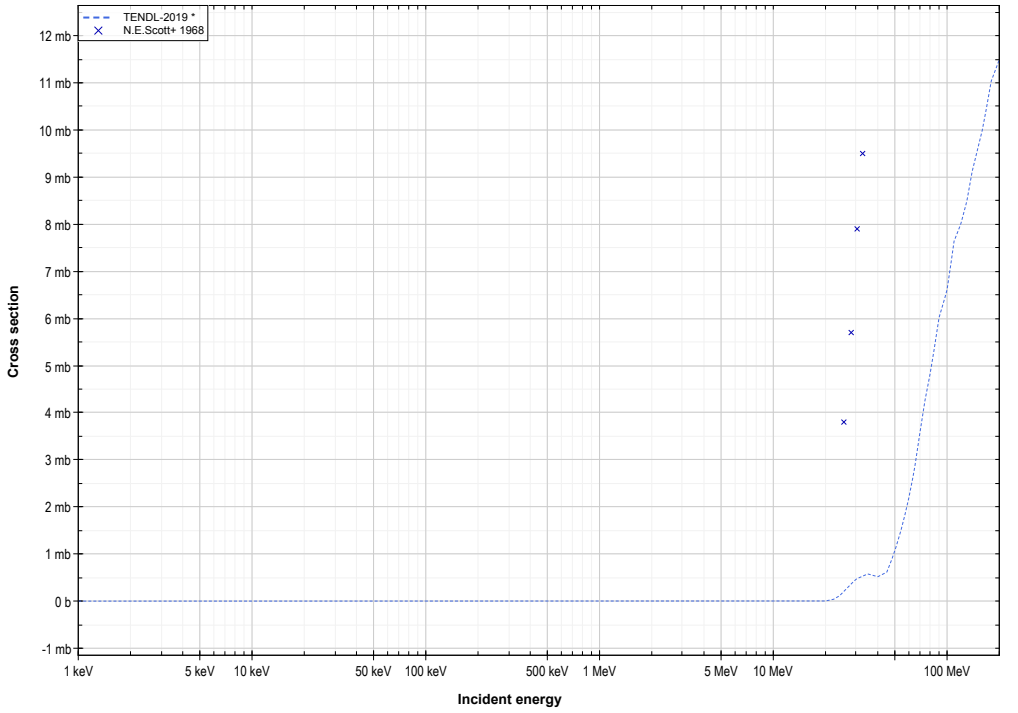


<< 47-Ag-107	**73-Ta-181**	83-Bi-209 >>
<< MT18 (³He,fission)	**MT24 (³He,2n+α) or MT5 (Ta178 production)**	MT37 (³He,4n) >>

Ta181 (³He,2n+α) or Ta178 production log-log



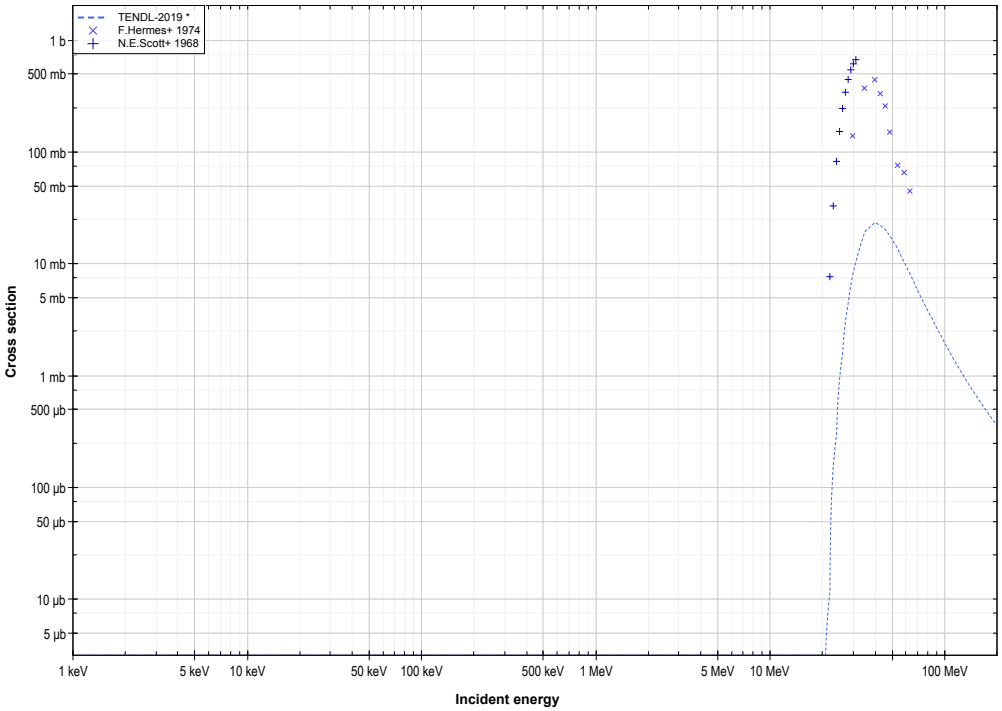
Ta181 (³He,2n+α) or Ta178 production lin-log



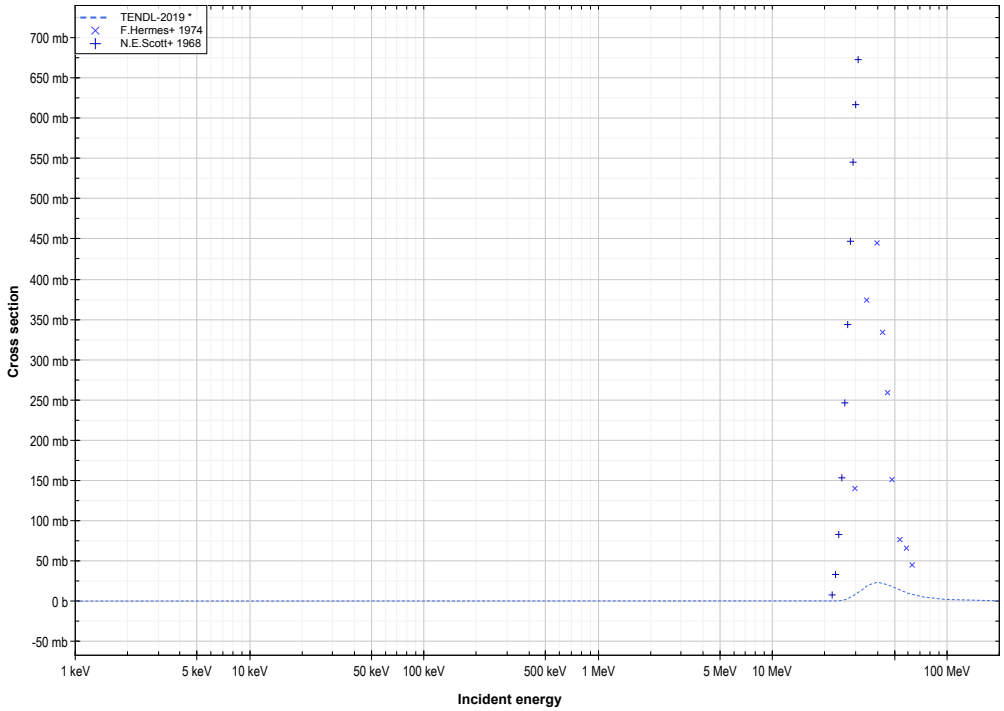
Reaction	Q-Value
Ta181(He3,2n+α)Ta178	-1474.63 keV
Ta181(He3,2t)Ta178	-12806.70 keV
Ta181(He3,n+d+t)Ta178	-19063.93 keV
Ta181(He3,2n+p+t)Ta178	-21288.50 keV
Ta181(He3,3n+He3)Ta178	-22052.25 keV
Ta181(He3,2n+2d)Ta178	-25321.16 keV
Ta181(He3,3n+p+d)Ta178	-27545.73 keV
Ta181(He3,4n+2p)Ta178	-29770.29 keV

<< 62-Sm-147	**73-Ta-181**	75-Re-187 >>
<< MT24 (^{3}He,2n+α)	**MT37 (^{3}He,4n) or MT5 (Re180 production)**	MT107 (^{3}He,α) >>

Ta181 (^{3}He,4n) or Re180 production log-log



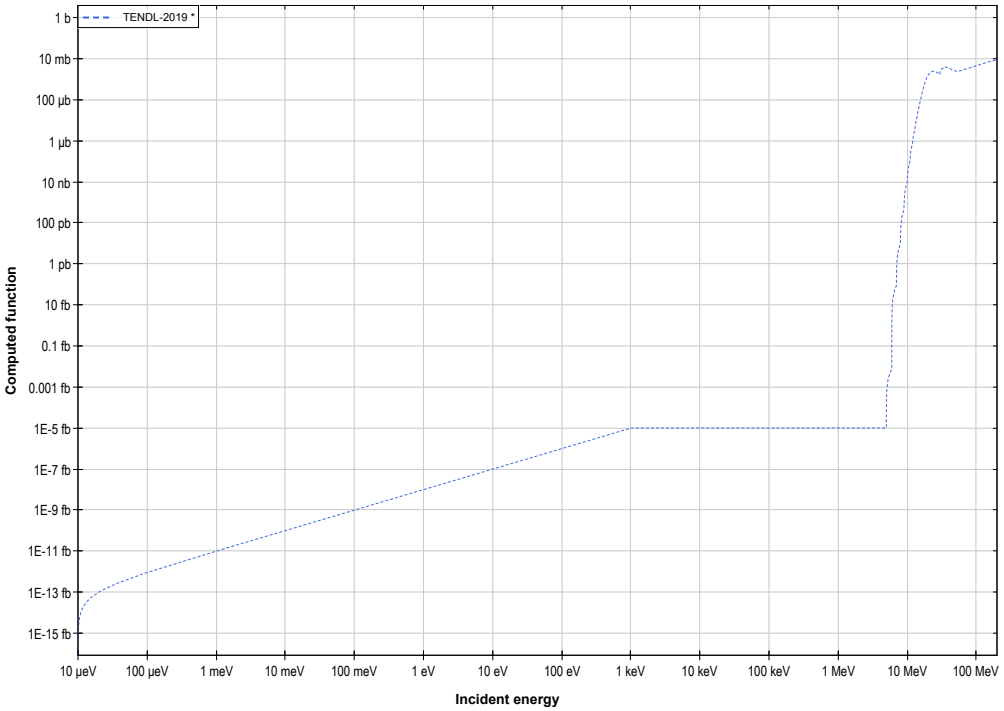
Ta181 (^{3}He,4n) or Re180 production lin-log



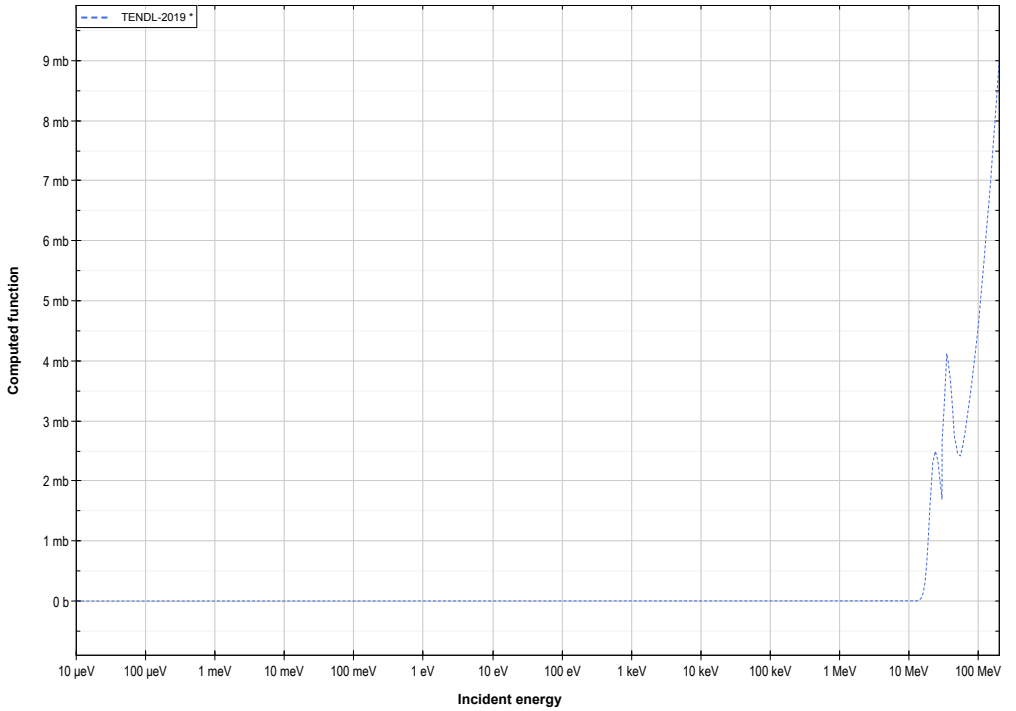
Reaction	Q-Value
Ta181(He3,4n)Re180	-19955.35 keV

<< 48-Cd-116	**73-Ta-181**	75-Re-185 >>
<< MT37 (^{3}He,4n)	**MT107 (^{3}He,α) or MT5 (Ta180 production)**	MT152 (^{3}He,5n) >>

Ta181 (^{3}He,α) or Ta180 production log-log



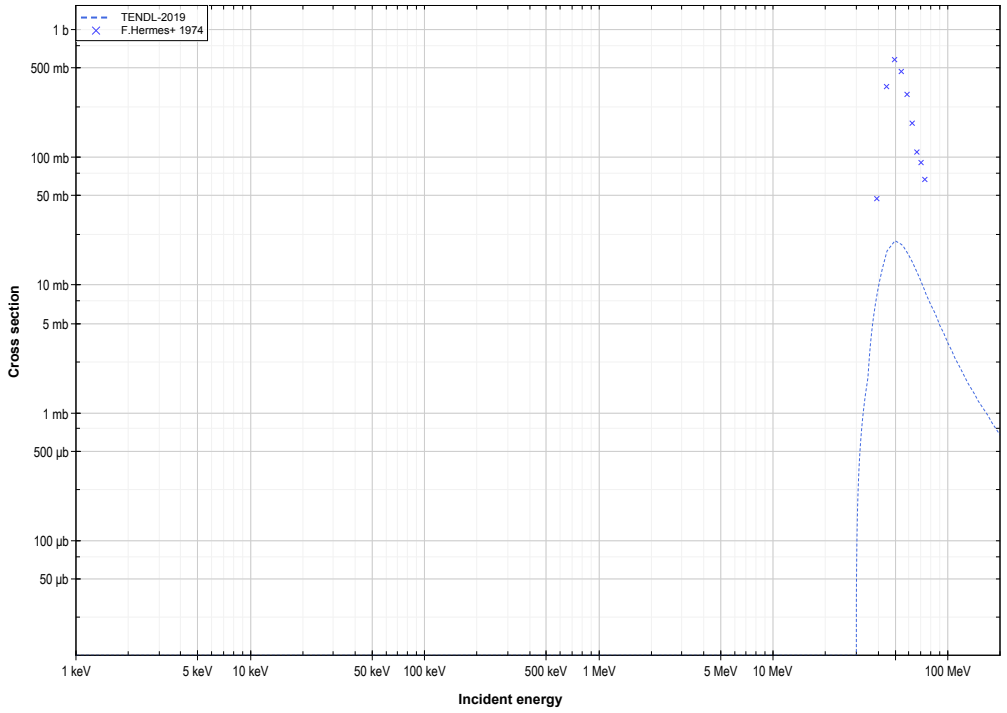
Ta181 (^{3}He,α) or Ta180 production lin-log



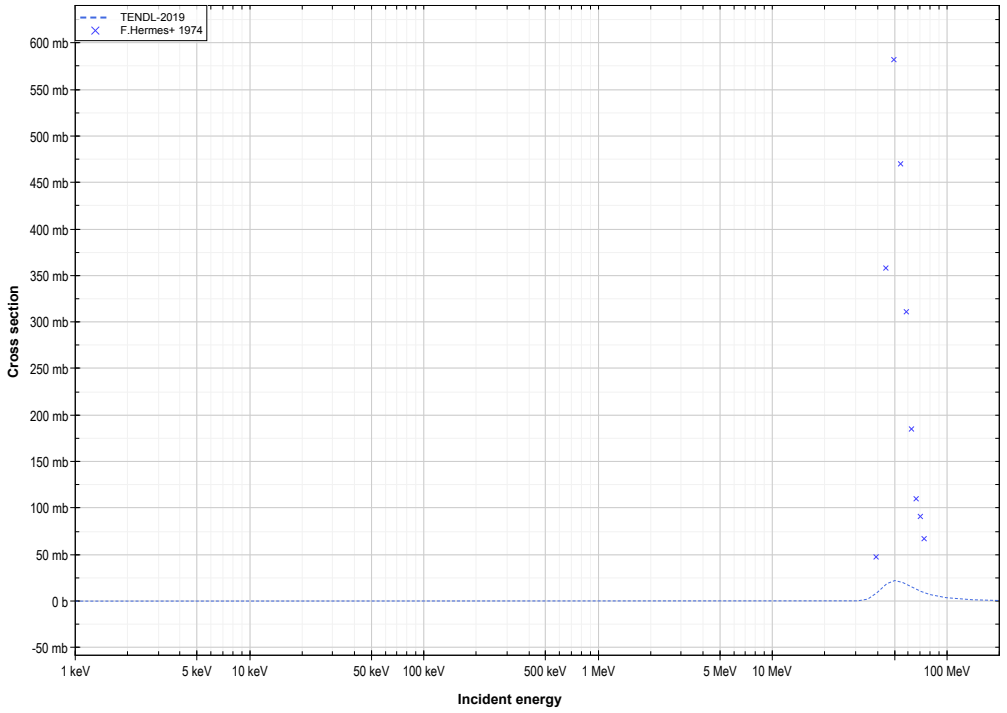
Reaction	Q-Value
Ta181(He3,α)Ta180	13000.90 keV
Ta181(He3,p+t)Ta180	-6812.96 keV
Ta181(He3,n+He3)Ta180	-7576.72 keV
Ta181(He3,2d)Ta180	-10845.63 keV
Ta181(He3,n+p+d)Ta180	-13070.19 keV
Ta181(He3,2n+2p)Ta180	-15294.76 keV

<< 67-Ho-165	**73-Ta-181**	75-Re-187 >>
<< MT107 (^{3}He,α)	**MT152 (^{3}He,5n) or MT5 (Re179 production)**	MT153 (^{3}He,6n) >>

Ta181 (^{3}He,5n) or Re179 production log-log



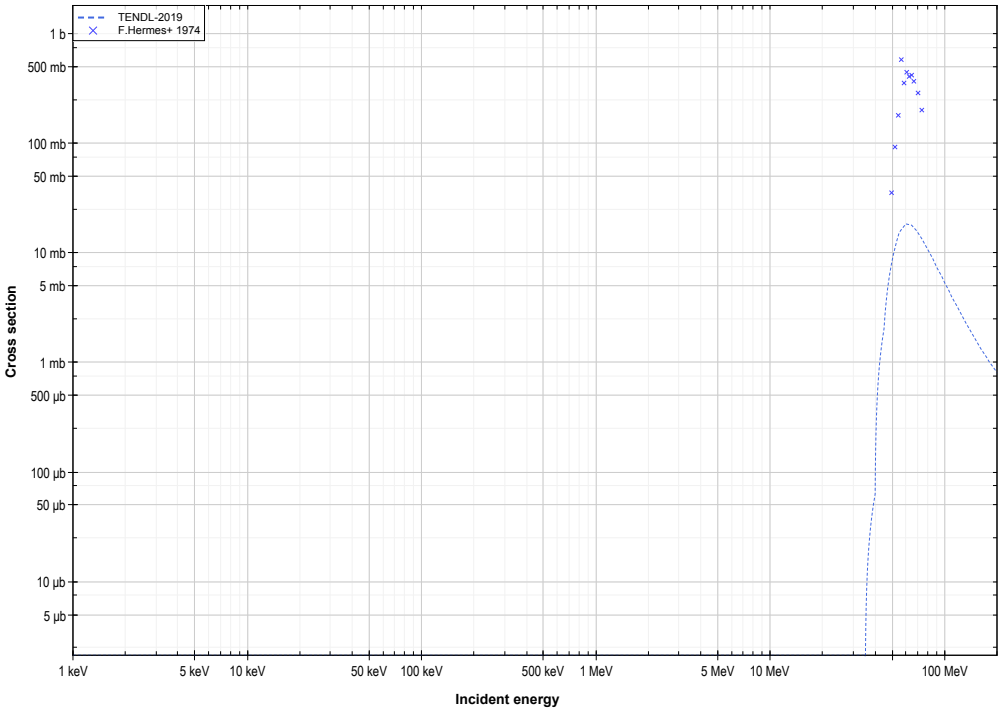
Ta181 (^{3}He,5n) or Re179 production lin-log



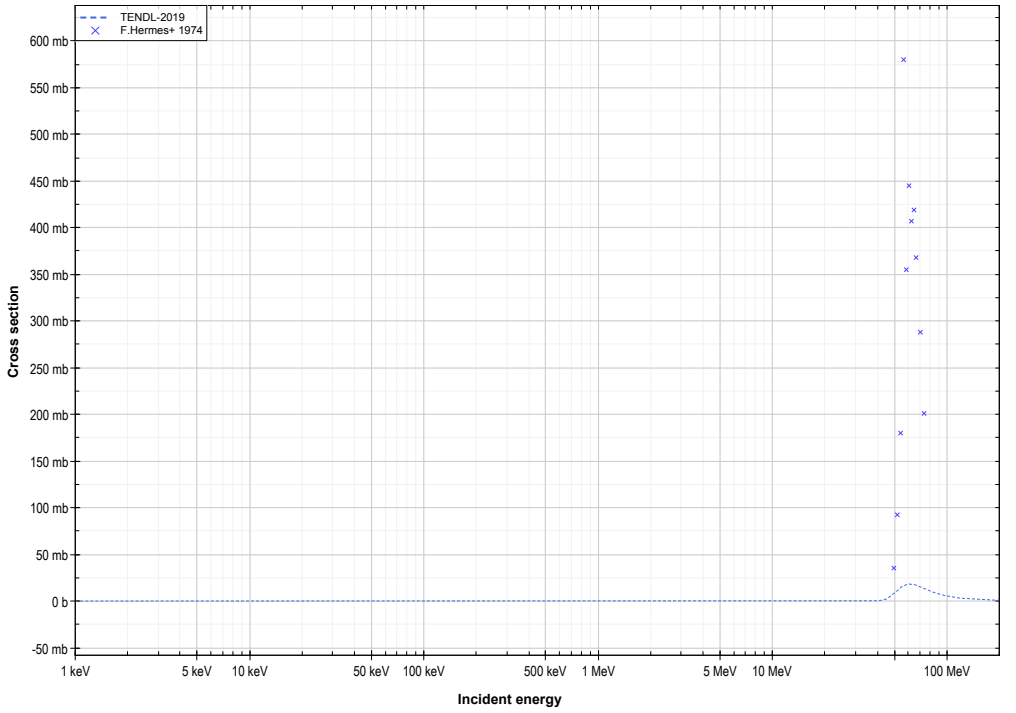
Reaction	Q-Value
Ta181(He3,5n)Re179	-27279.67 keV

	73-Ta-181	75-Re-187 >>
<< MT152 (^{3}He,5n)	**MT153 (^{3}He,6n) or MT5 (Re178 production)**	MT160 (^{3}He,7n) >>

Ta181 (^{3}He,6n) or Re178 production log-log



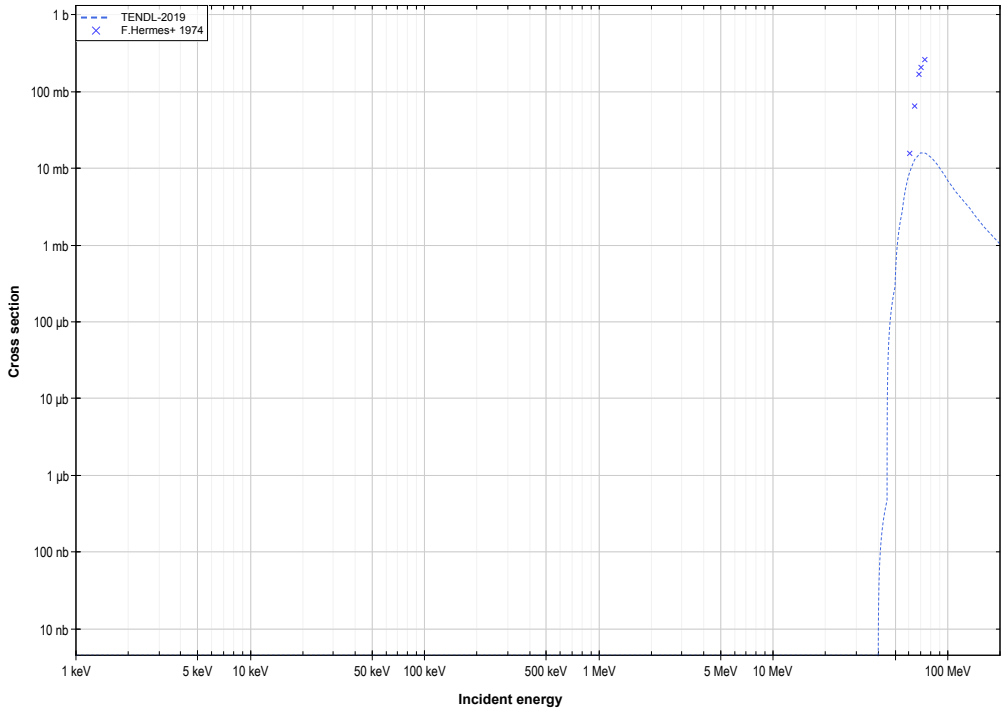
Ta181 (^{3}He,6n) or Re178 production lin-log



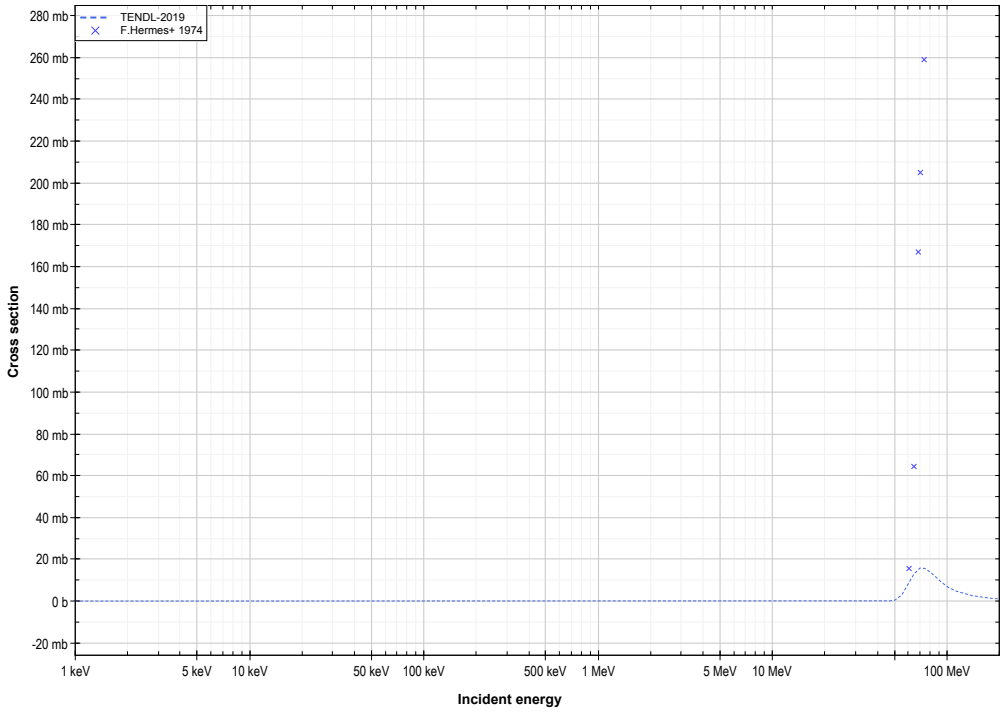
Reaction	Q-Value
Ta181(He3,6n)Re178	-36281.98 keV

	73-Ta-181	81-Tl-205 >>
<< MT153 (^{3}He,6n)	**MT160 (^{3}He,7n) or MT5 (Re177 production)**	74-W-183 MT28 (^{3}He,n+p) >>

Ta181 (^{3}He,7n) or Re177 production log-log



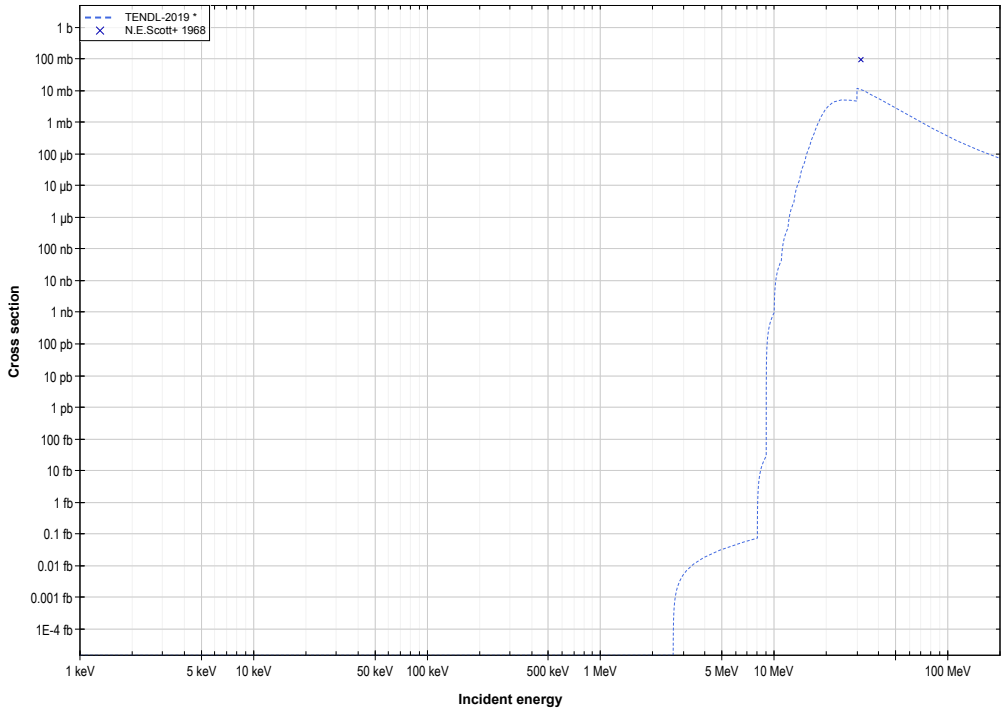
Ta181 (^{3}He,7n) or Re177 production lin-log



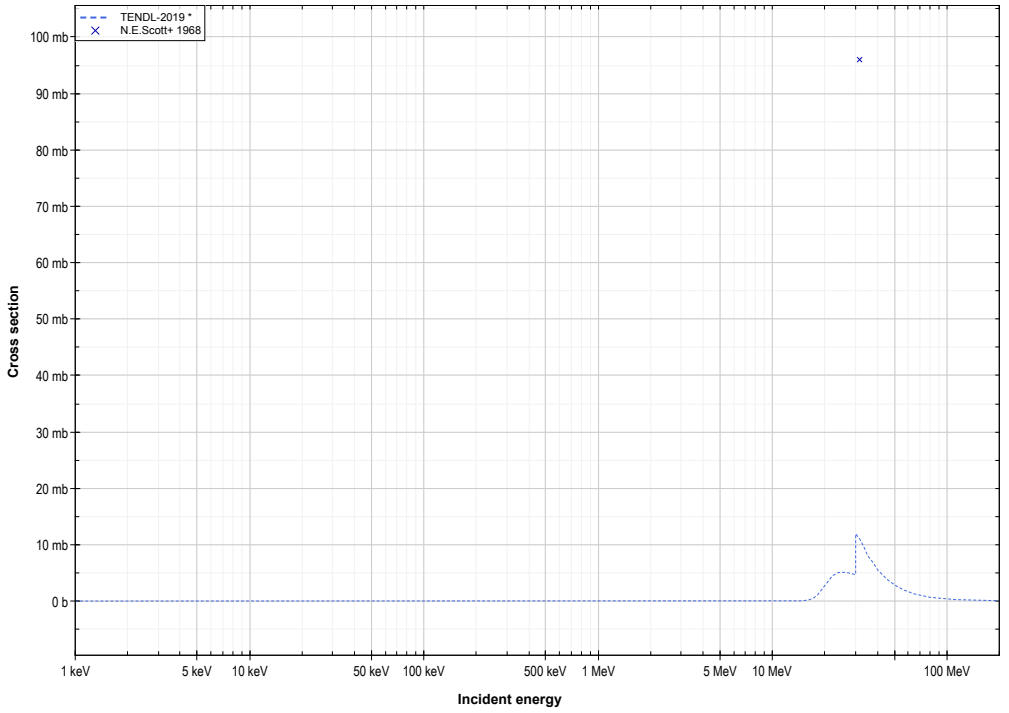
Reaction	Q-Value
Ta181(He3,7n)Re177	-43737.30 keV

<< 62-Sm-147	**74-W-183**	83-Bi-209 >>
<< 73-Ta-181 MT160 (^{3}He,7n)	**MT28 (^{3}He,n+p) or MT5 (Re184 production)**	MT104 (^{3}He,d) >>

W183 (^{3}He,n+p) or Re184 production log-log



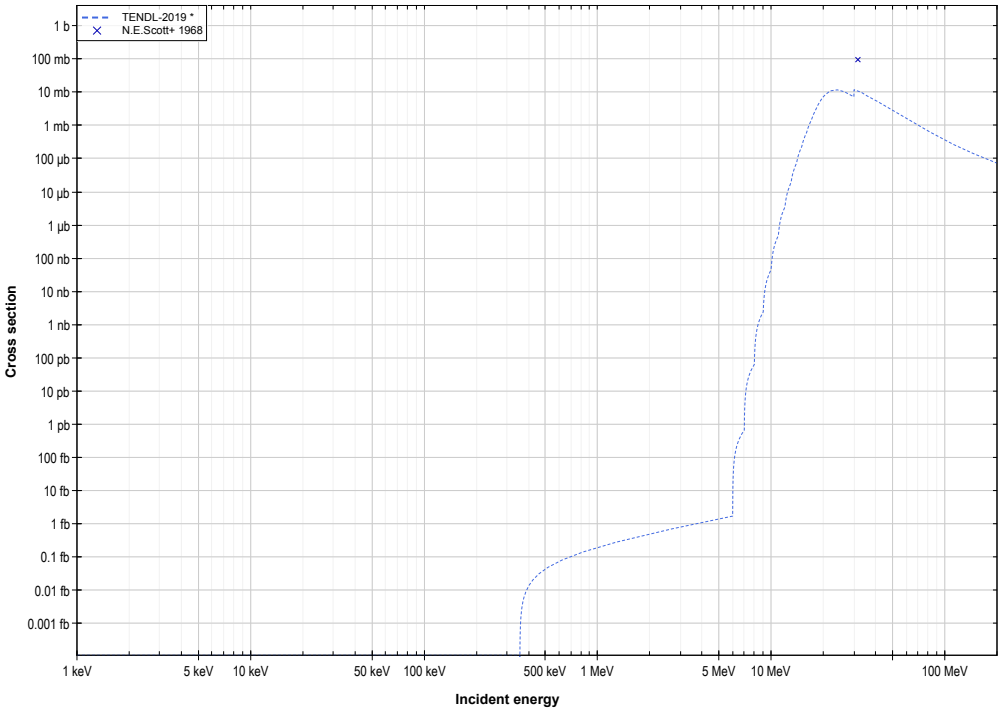
W183 (^{3}He,n+p) or Re184 production lin-log



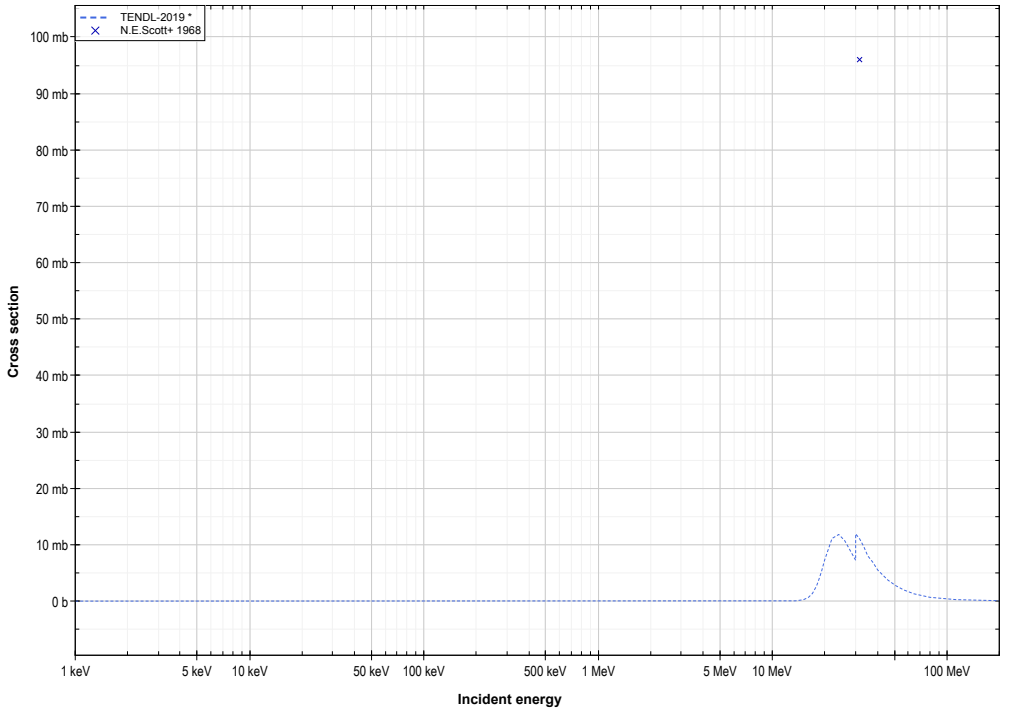
Reaction	Q-Value
W183(He3,d)Re184	-350.10 keV
W183(He3,n+p)Re184	-2574.67 keV

<< 62-Sm-147	**74-W-183**	83-Bi-209 >>
<< MT28 (³He,n+p)	**MT104 (³He,d) or MT5 (Re184 production)**	74-W-186 MT32 (³He,n+d) >>

W183 (³He,d) or Re184 production log-log



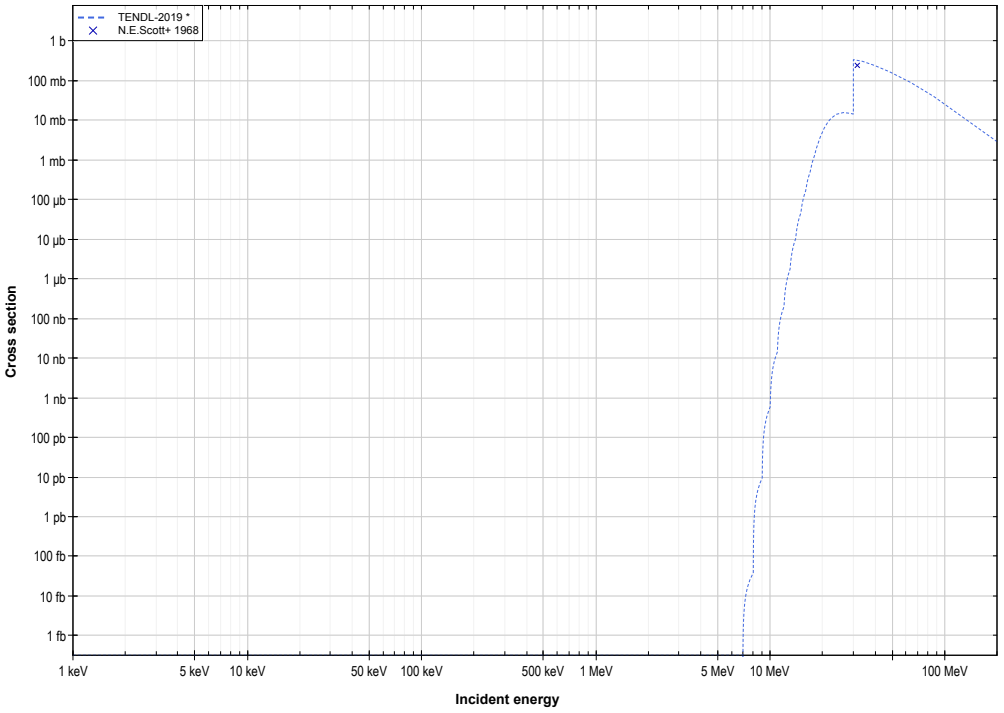
W183 (³He,d) or Re184 production lin-log



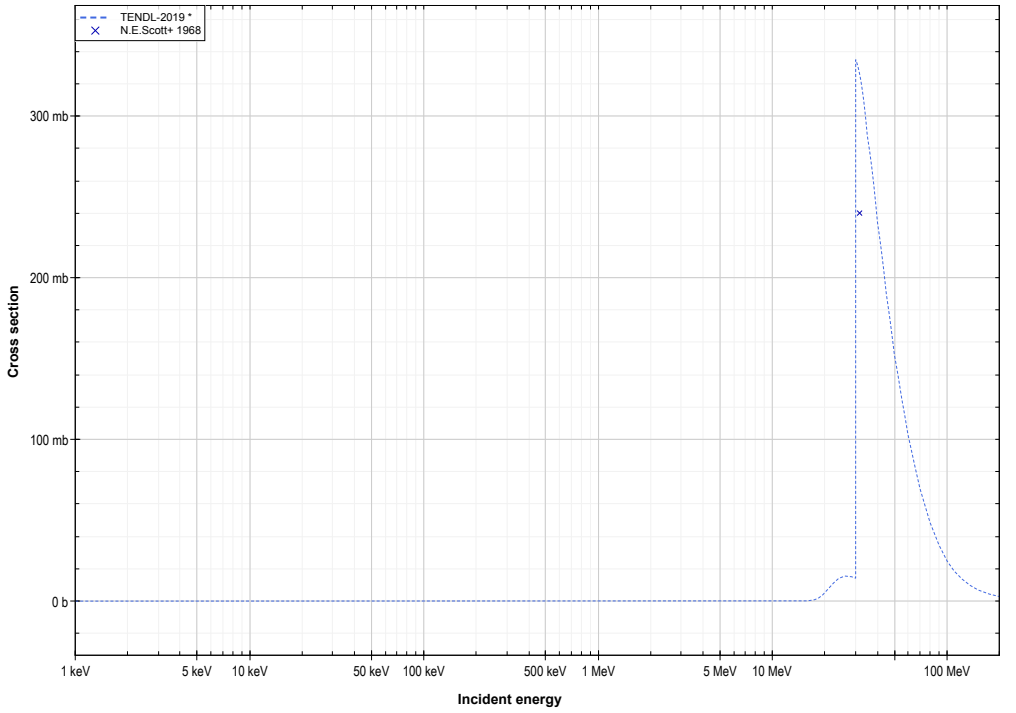
Reaction	Q-Value
W183(He3,d)Re184	-350.10 keV
W183(He3,n+p)Re184	-2574.67 keV

<< 62-Sm-147	**74-W-186**	78-Pt-194 >>
<< 74-W-183 MT104 (³He,d)	**MT32 (³He,n+d) or MT5 (Re186 production)**	MT41 (³He,2n+p) >>

W186 (³He,n+d) or Re186 production log-log



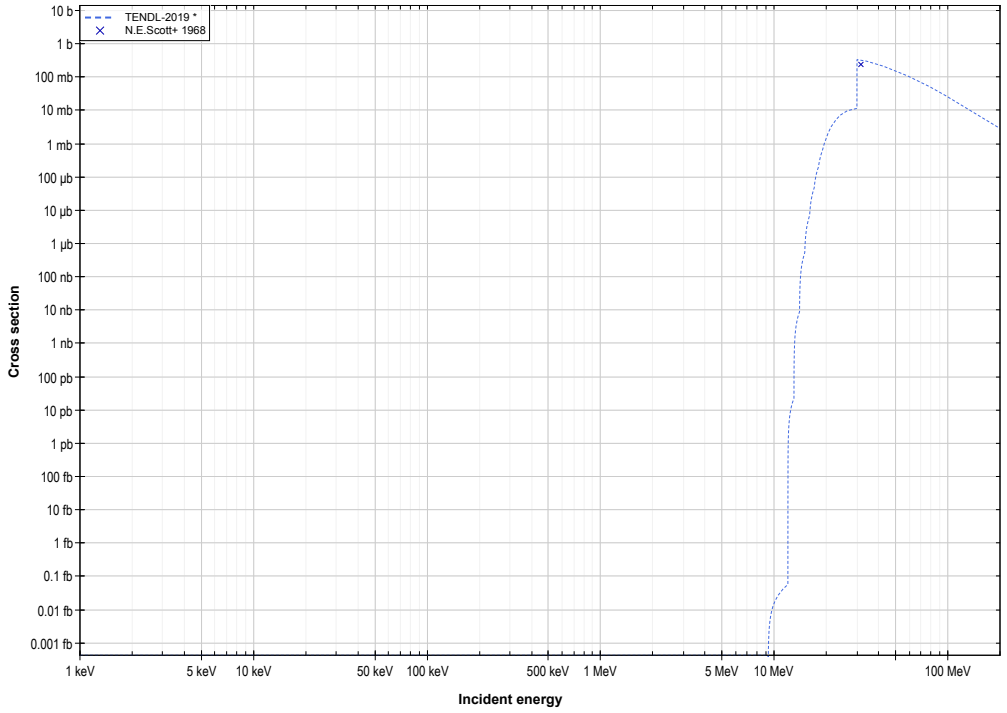
W186 (³He,n+d) or Re186 production lin-log



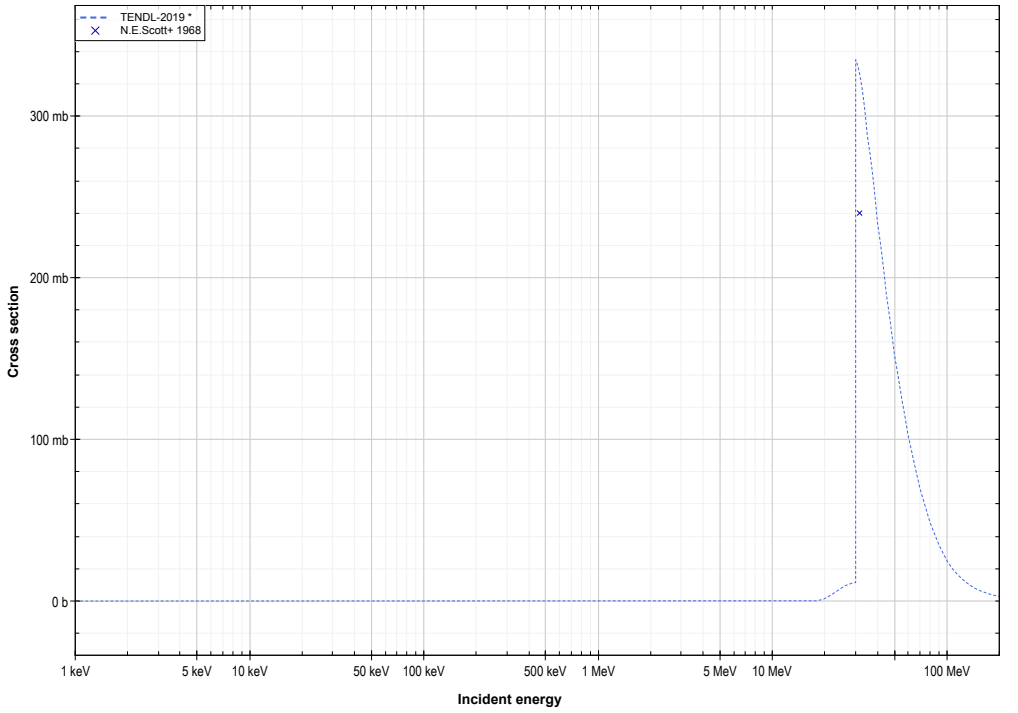
Reaction	Q-Value
W186(He3,t)Re186	-599.99 keV
W186(He3,n+d)Re186	-6857.22 keV
W186(He3,2n+p)Re186	-9081.79 keV

<< 62-Sm-147	**74-W-186**	78-Pt-194 >>
<< MT32 (^{3}He,n+d)	**MT41 (^{3}He,2n+p) or MT5 (Re186 production)**	MT103 (^{3}He,p) >>

W186 (^{3}He,2n+p) or Re186 production log-log



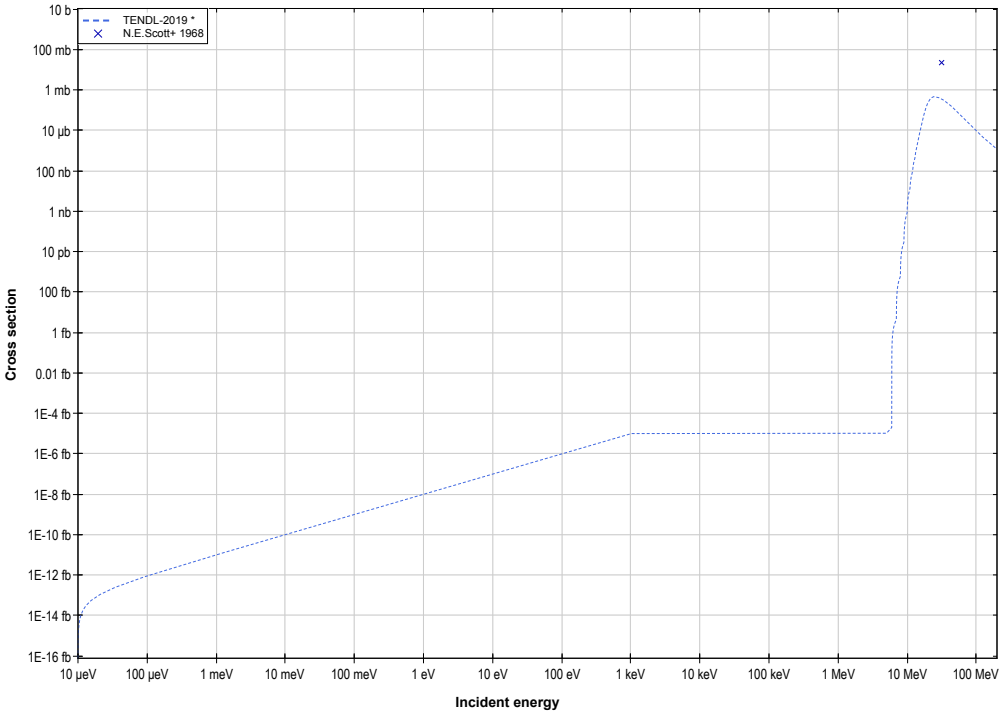
W186 (^{3}He,2n+p) or Re186 production lin-log



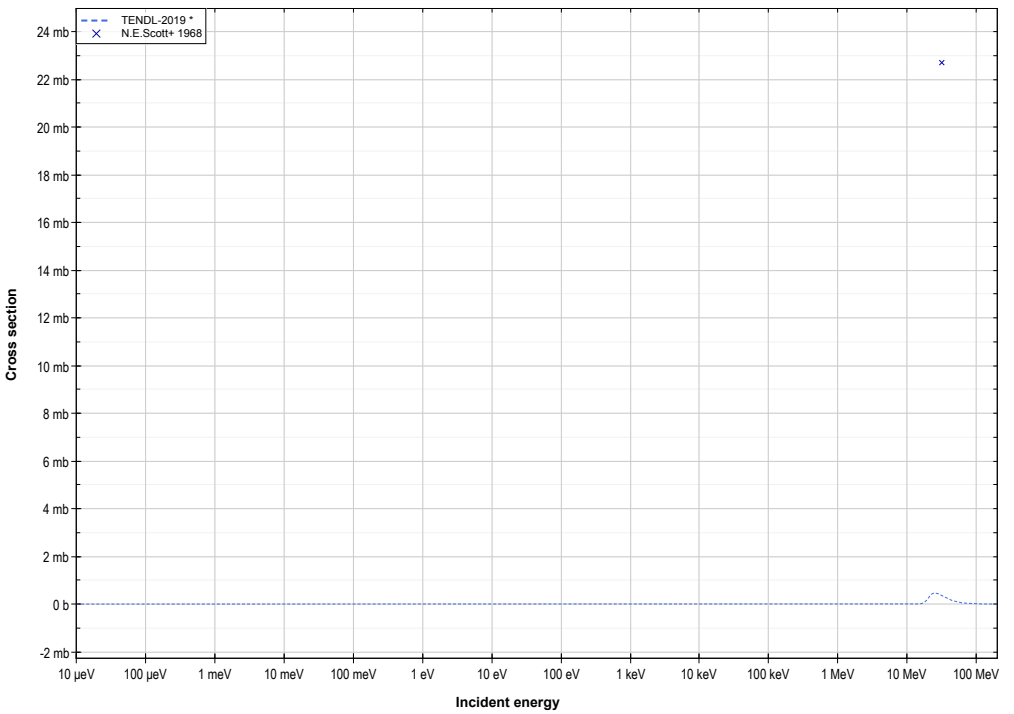
Reaction	Q-Value
W186(He3,t)Re186	-599.99 keV
W186(He3,n+d)Re186	-6857.22 keV
W186(He3,2n+p)Re186	-9081.79 keV

<< 38-Sr-88	**74-W-186**	78-Pt-194 >>
<< MT41 (³He,2n+p)	**MT103 (³He,p) or MT5 (Re188 production)**	MT105 (³He,t) >>

W186 (³He,p) or Re188 production log-log



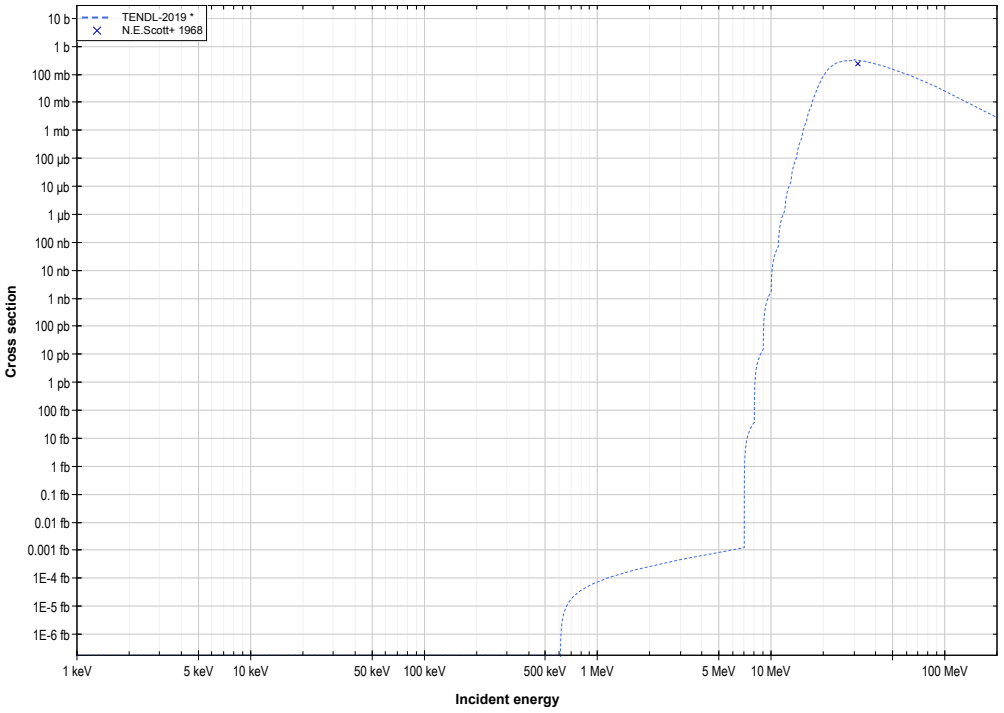
W186 (³He,p) or Re188 production lin-log



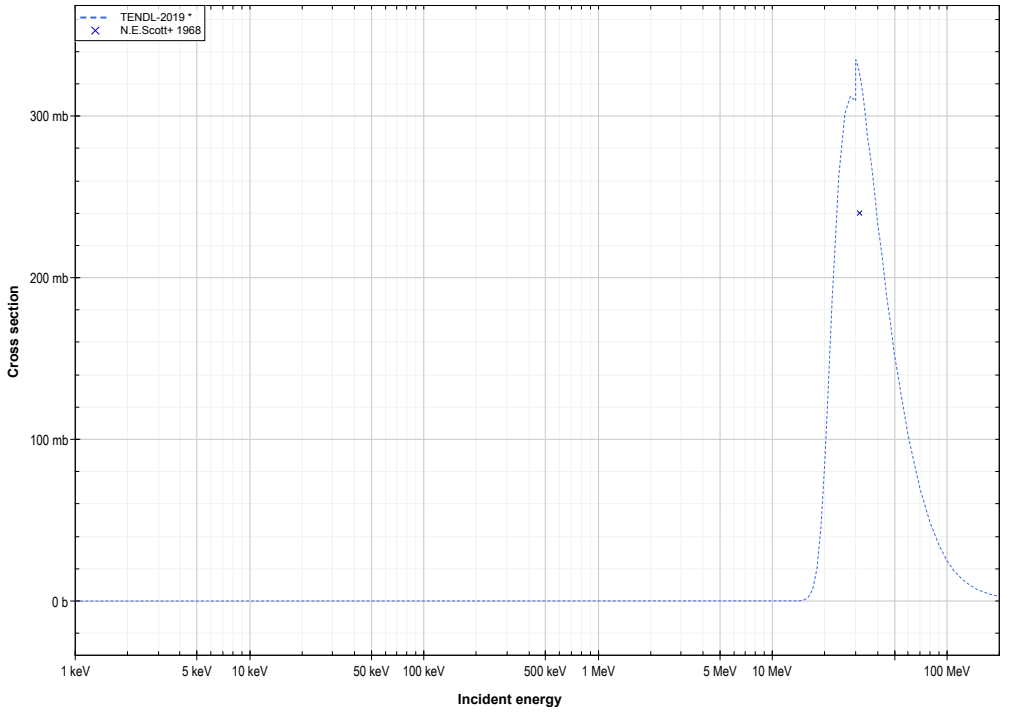
Reaction	Q-Value
W186(He3,p)Re188	4150.55 keV

<< 62-Sm-147	**74-W-186**	78-Pt-194 >>
<< MT103 (^{3}He,p)	**MT105 (^{3}He,t) or MT5 (Re186 production)**	MT111 (^{3}He,2p) >>

W186 (^{3}He,t) or Re186 production log-log



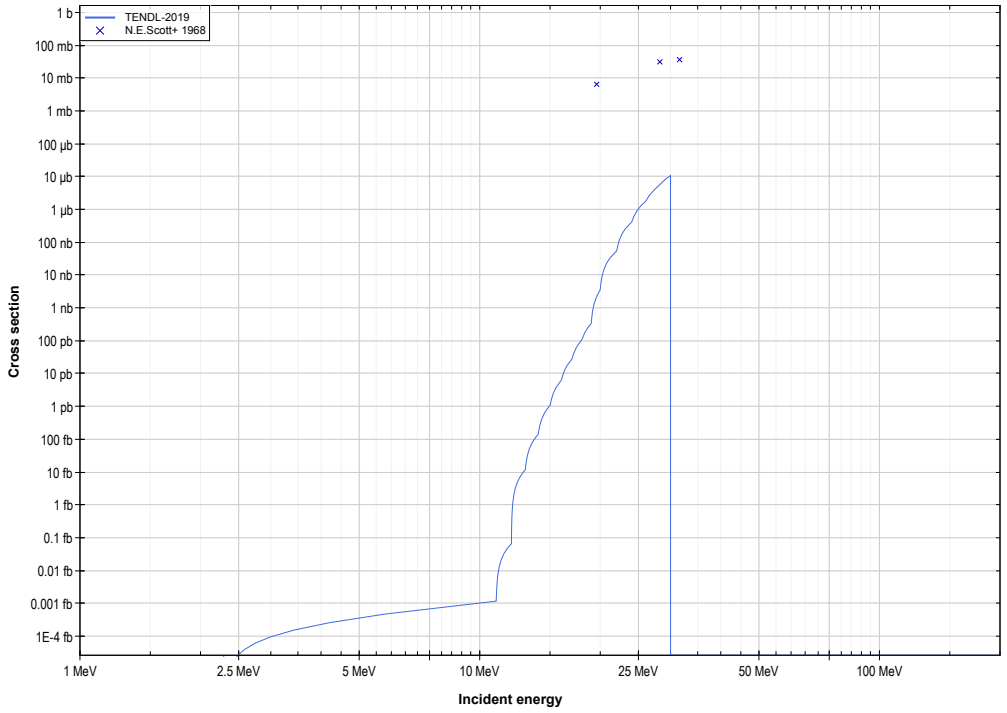
W186 (^{3}He,t) or Re186 production lin-log



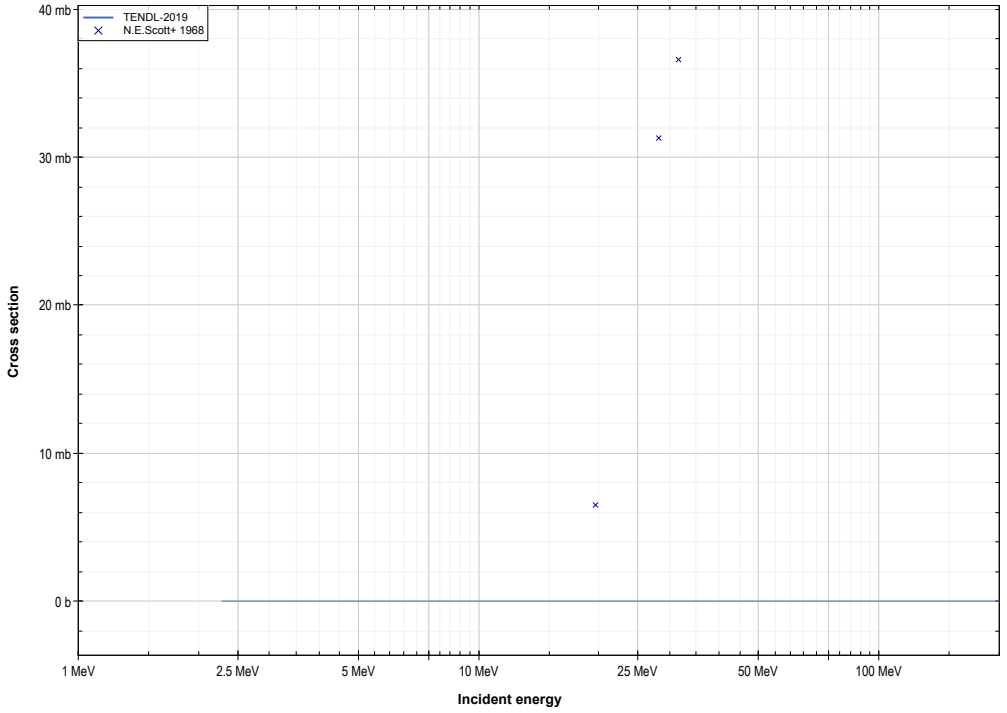
Reaction	Q-Value
W186(He3,t)Re186	-599.99 keV
W186(He3,n+d)Re186	-6857.22 keV
W186(He3,2n+p)Re186	-9081.79 keV

<< 47-Ag-109	**74-W-186**	75-Re-185 >>
<< MT105 (^{3}He,t)	**MT111 (^{3}He,2p) or MT5 (W187 production)**	75-Re-185 MT107 (^{3}He,α) >>

W186 (^{3}He,2p) or W187 production log-log



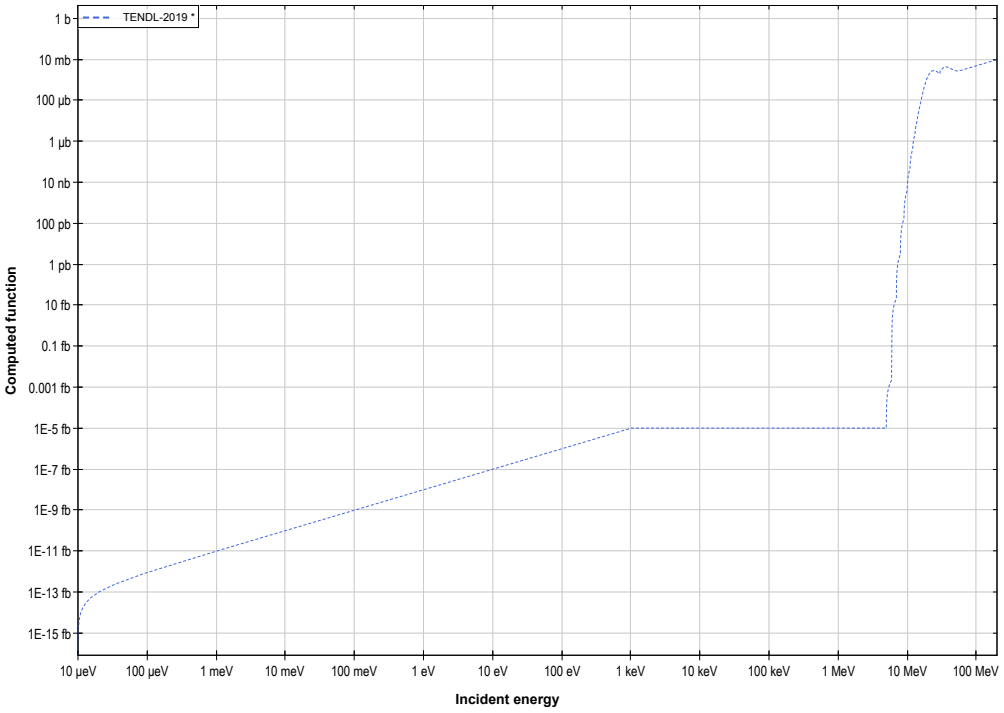
W186 (^{3}He,2p) or W187 production lin-log



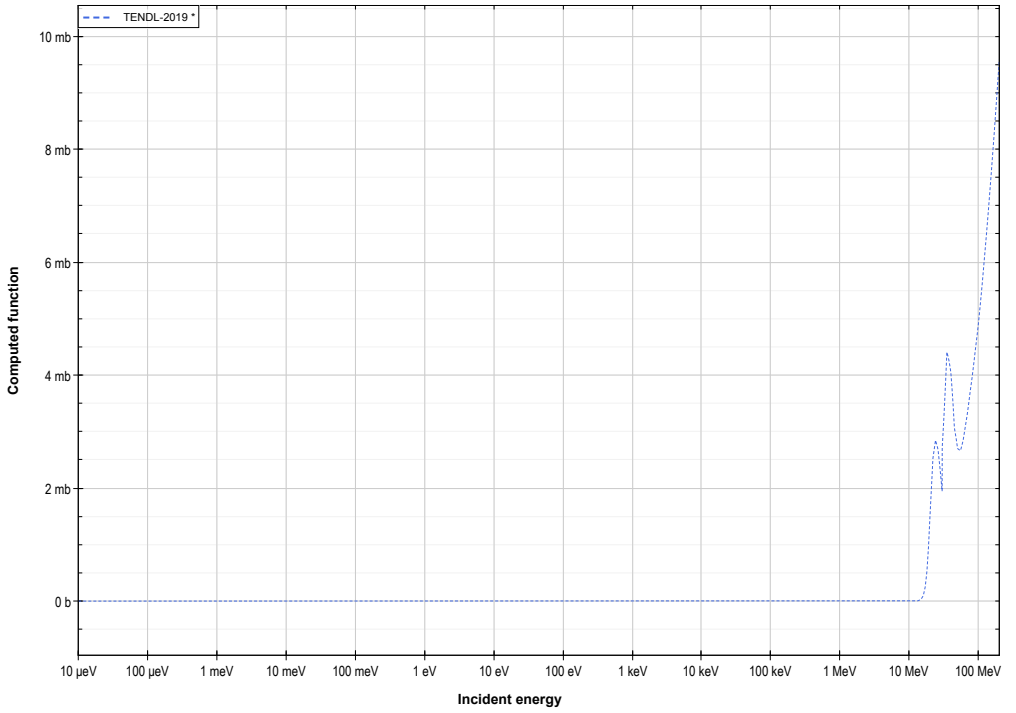
Reaction	Q-Value
W186(He3,2p)W187	-2251.22 keV

<< 73-Ta-181	**75-Re-185**	75-Re-187 >>
<< 74-W-186 MT111 (³He,2p)	**MT107 (³He,α) or MT5 (Re184 production)**	MT111 (³He,2p) >>

Re185 (³He,α) or Re184 production log-log



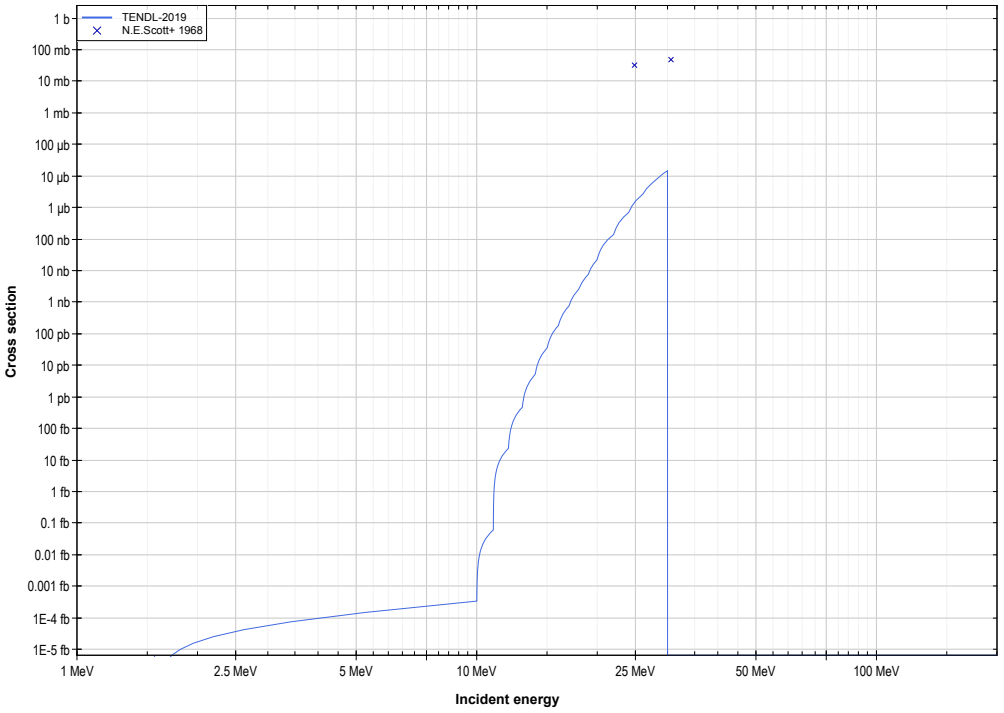
Re185 (³He,α) or Re184 production lin-log



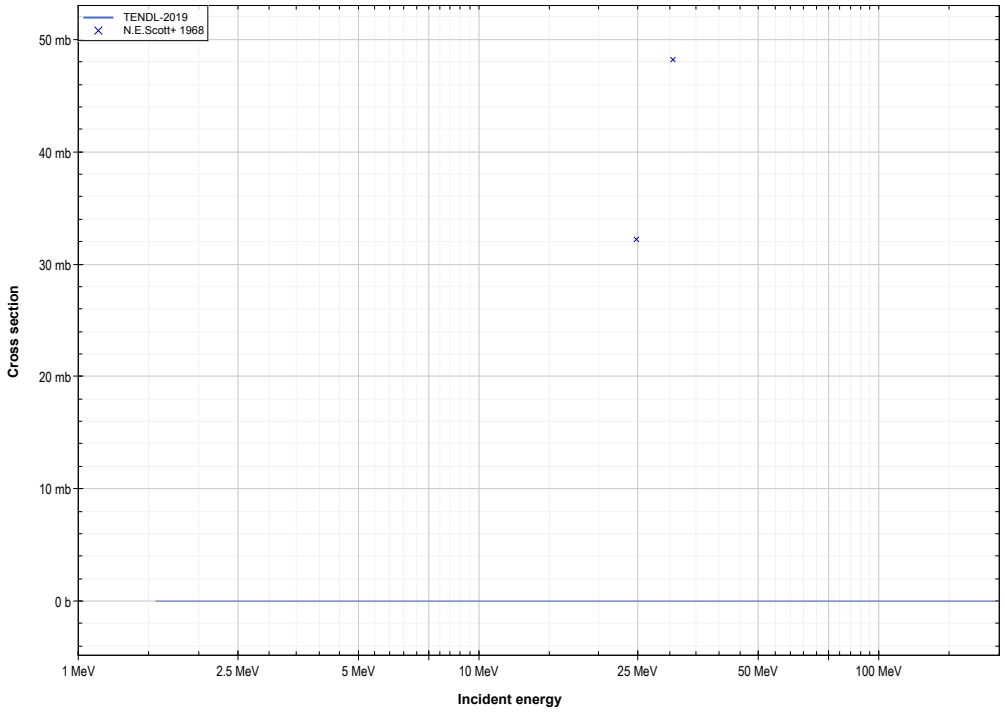
Reaction	Q-Value
Re185(He3,α)Re184	12907.30 keV
Re185(He3,p+t)Re184	-6906.56 keV
Re185(He3,n+He3)Re184	-7670.32 keV
Re185(He3,2d)Re184	-10939.23 keV
Re185(He3,n+p+d)Re184	-13163.79 keV
Re185(He3,2n+2p)Re184	-15388.36 keV

<< 74-W-186	**75-Re-185**	79-Au-197 >>
<< MT107 (^{3}He,α)	**MT111 (^{3}He,2p) or MT5 (Re186 production)**	75-Re-187 MT17 (^{3}He,3n) >>

Re185 (^{3}He,2p) or Re186 production log-log



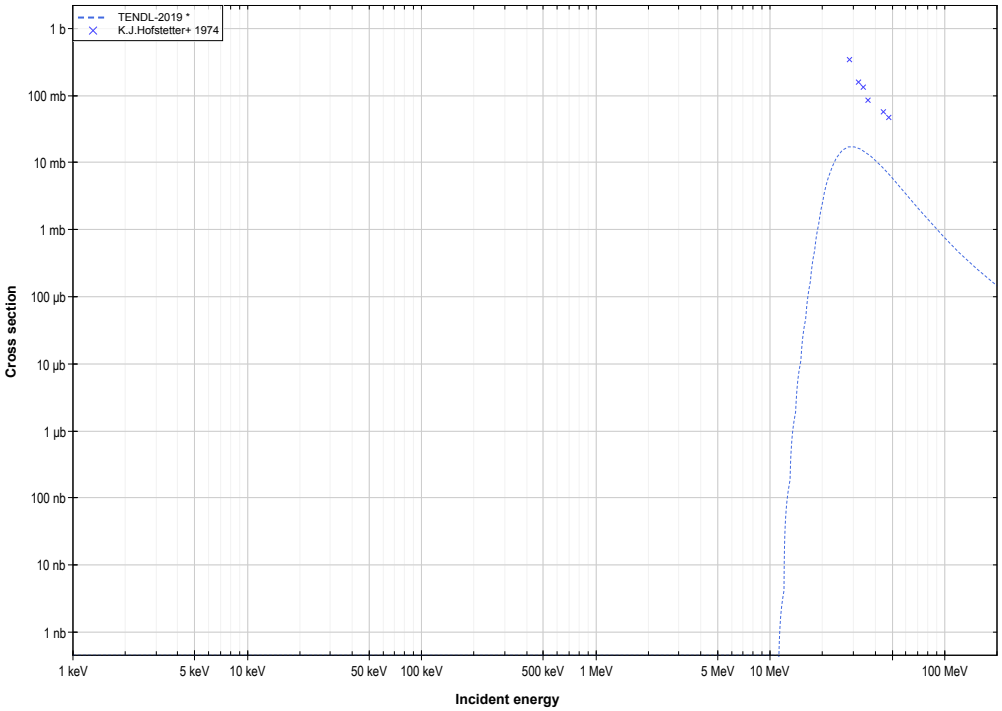
Re185 (^{3}He,2p) or Re186 production lin-log



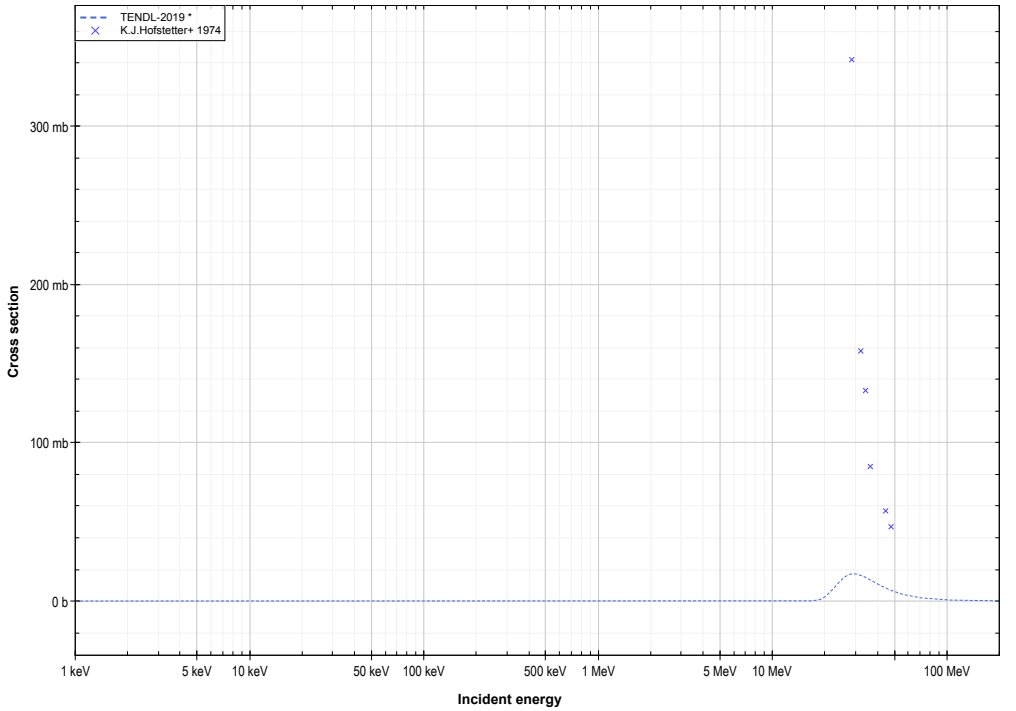
Reaction	Q-Value
Re185(He3,2p)Re186	-1538.62 keV

<< 73-Ta-181	**75-Re-187**	79-Au-197 >>
<< 75-Re-185 MT111 (^{3}He,2p)	**MT17 (^{3}He,3n) or MT5 (Ir187 production)**	MT37 (^{3}He,4n) >>

Re187 (^{3}He,3n) or Ir187 production log-log



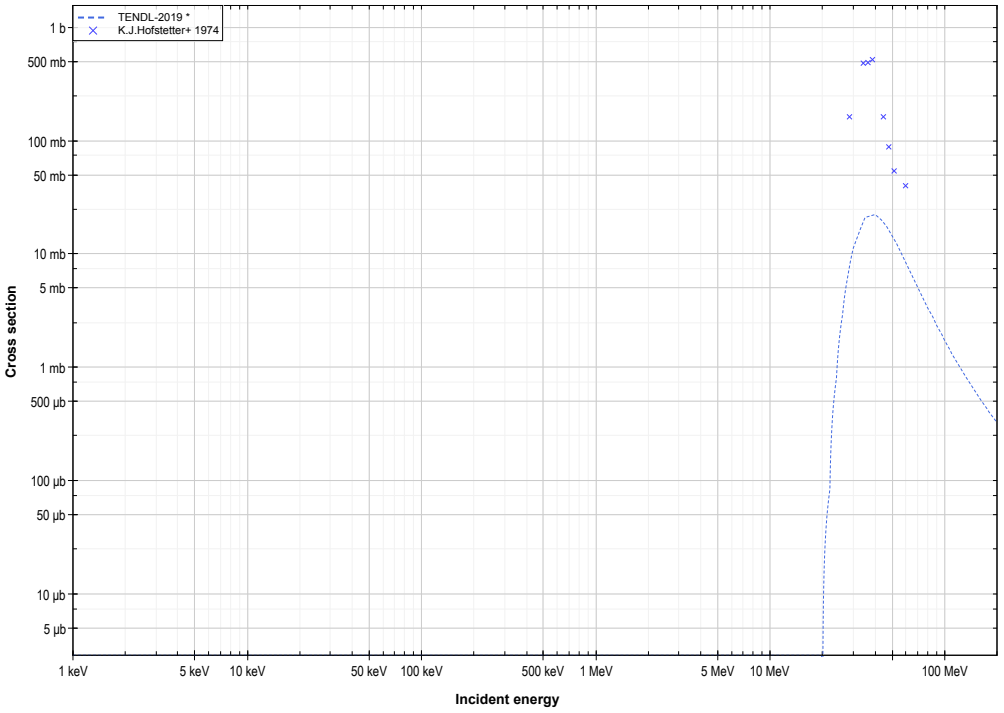
Re187 (^{3}He,3n) or Ir187 production lin-log



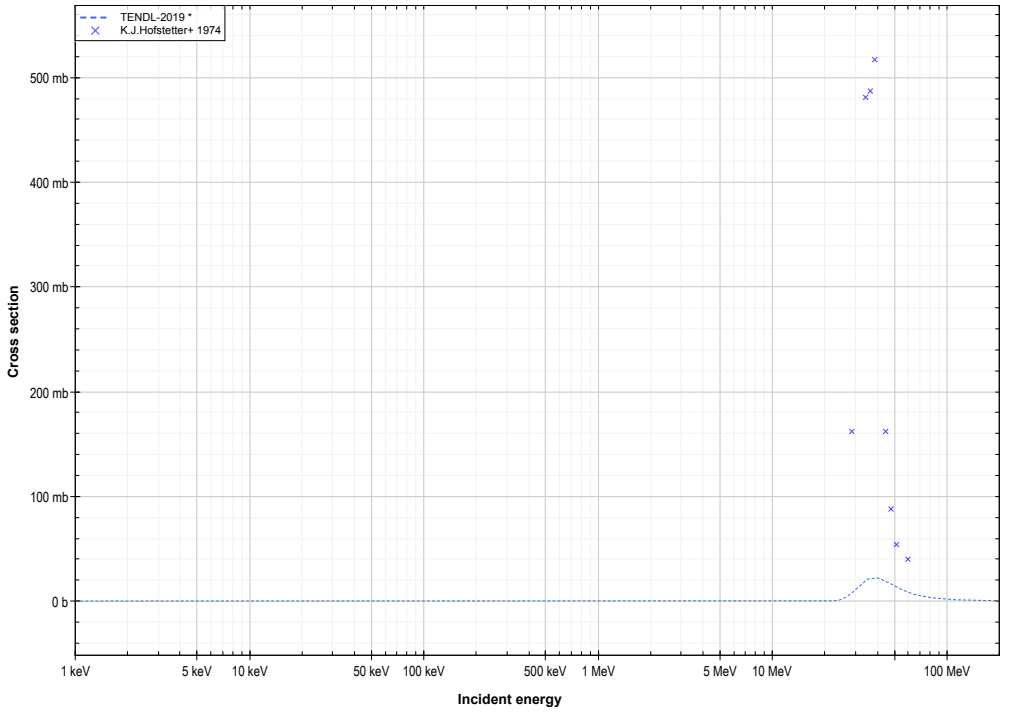
Reaction	Q-Value
Re187(He3,3n)Ir187	-10950.23 keV

<< 73-Ta-181	**75-Re-187**	76-Os-192 >>
<< MT17 (³He,3n)	**MT37 (³He,4n) or MT5 (Ir186 production)**	MT107 (³He,α) >>

Re187 (³He,4n) or Ir186 production log-log



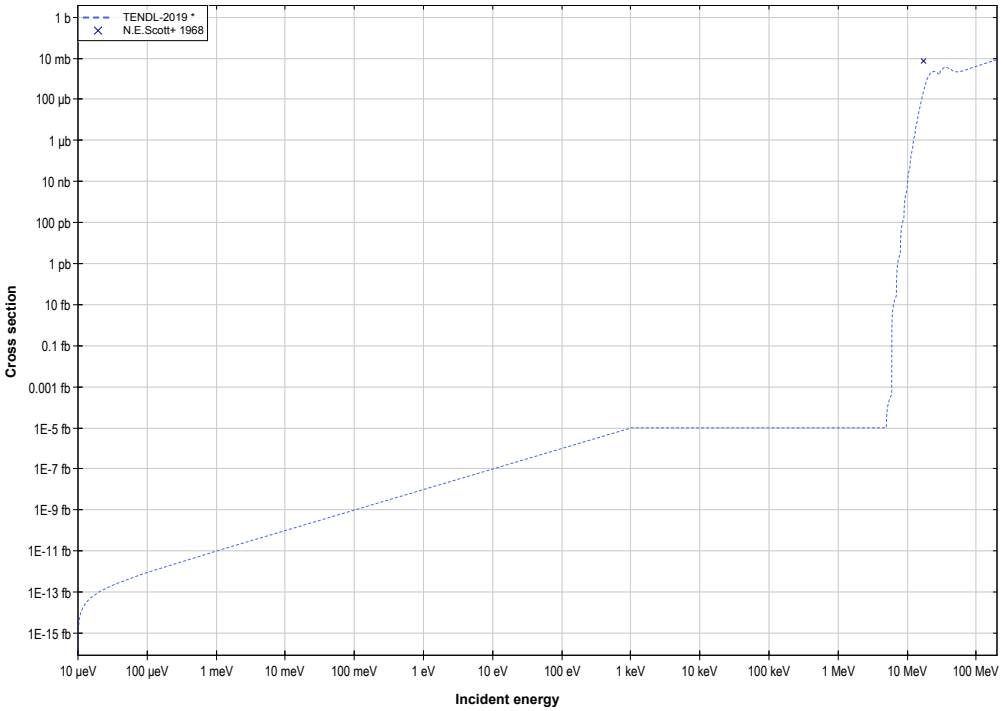
Re187 (³He,4n) or Ir186 production lin-log



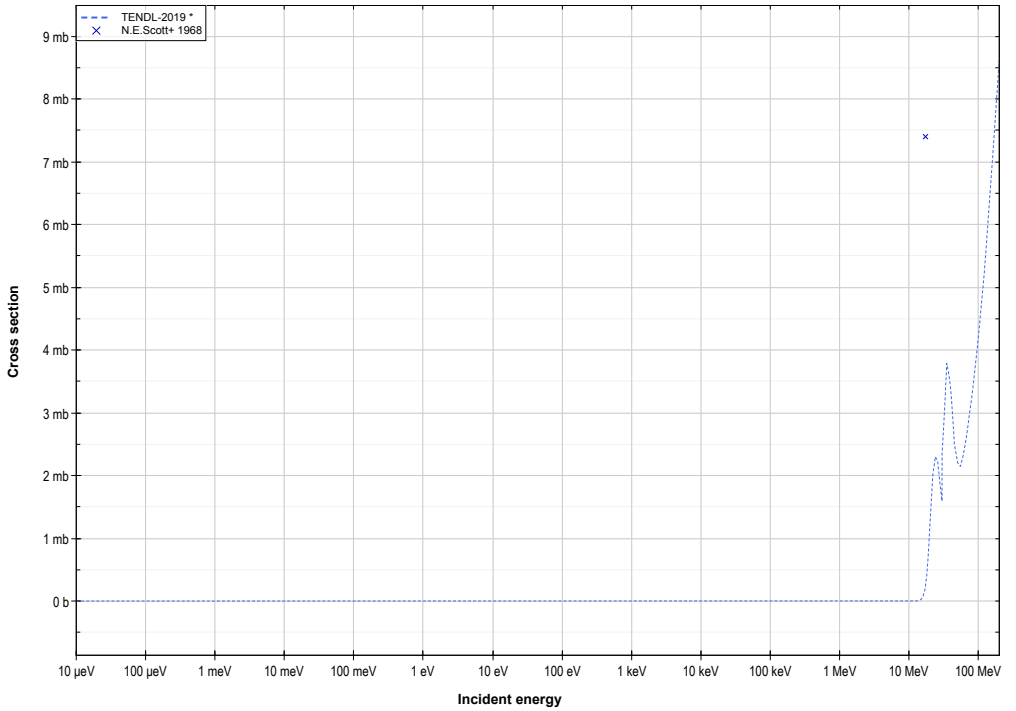
Reaction	Q-Value
Re187(He3,4n)Ir186	-19398.55 keV

<< 75-Re-185	**75-Re-187**	79-Au-197 >>
<< MT37 (³He,4n)	**MT107 (³He,α) or MT5 (Re186 production)**	MT152 (³He,5n) >>

Re187 (³He,α) or Re186 production log-log



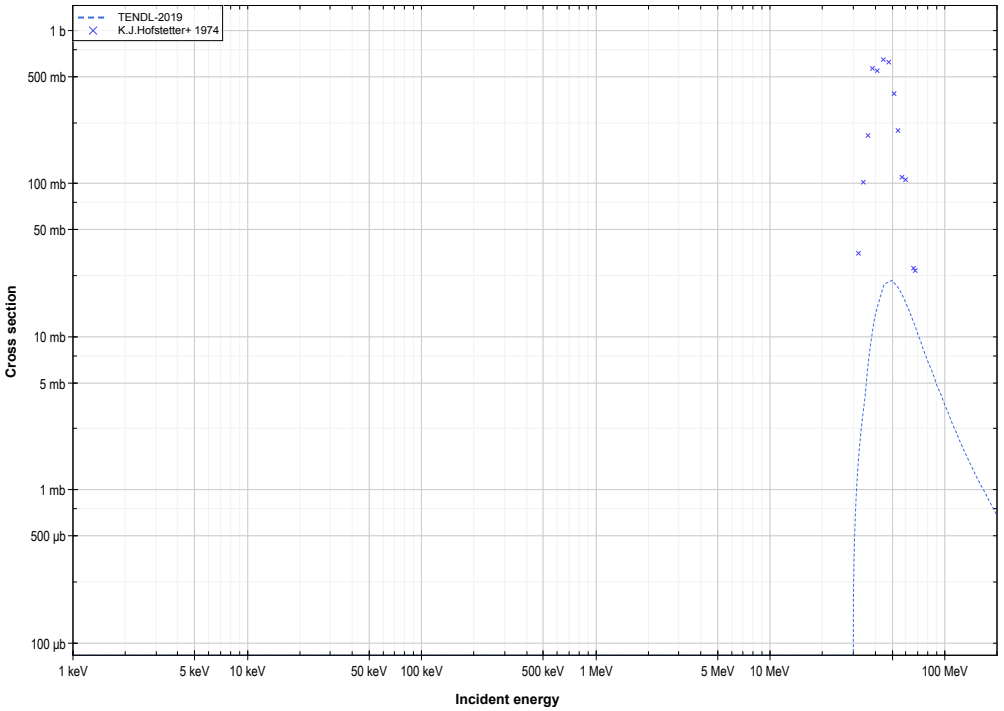
Re187 (³He,α) or Re186 production lin-log



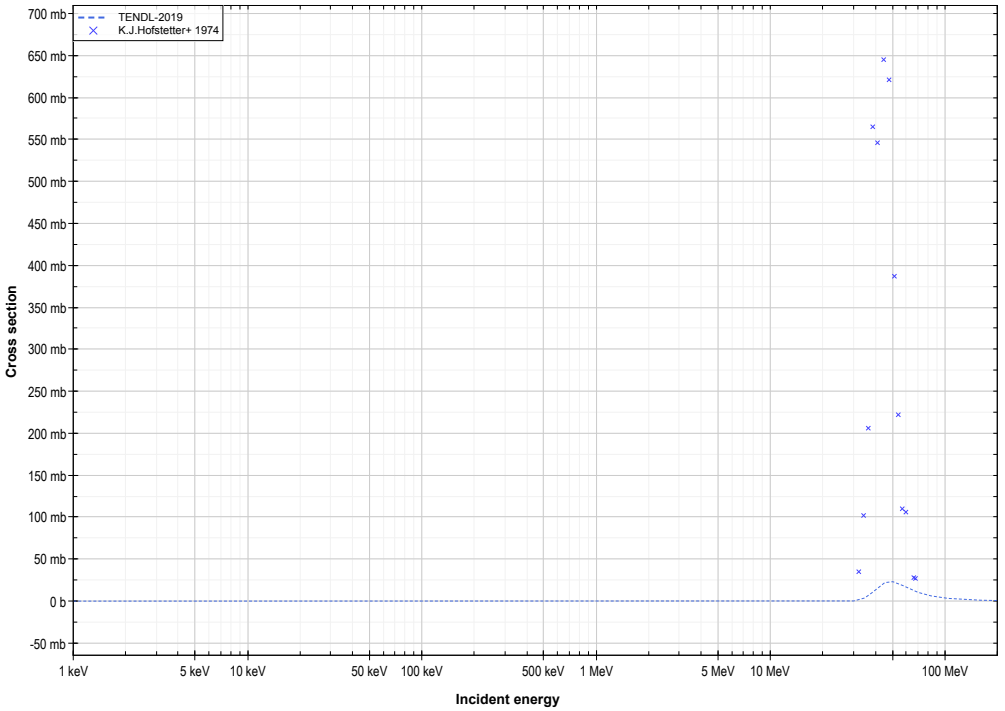
Reaction	Q-Value
Re187(He3,α)Re186	13216.90 keV
Re187(He3,p+t)Re186	-6596.96 keV
Re187(He3,n+He3)Re186	-7360.72 keV
Re187(He3,2d)Re186	-10629.63 keV
Re187(He3,n+p+d)Re186	-12854.19 keV
Re187(He3,2n+2p)Re186	-15078.76 keV

<< 73-Ta-181	**75-Re-187**	79-Au-197 >>
<< MT107 (^{3}He,α)	**MT152 (^{3}He,5n) or MT5 (Ir185 production)**	MT153 (^{3}He,6n) >>

Re187 (^{3}He,5n) or Ir185 production log-log



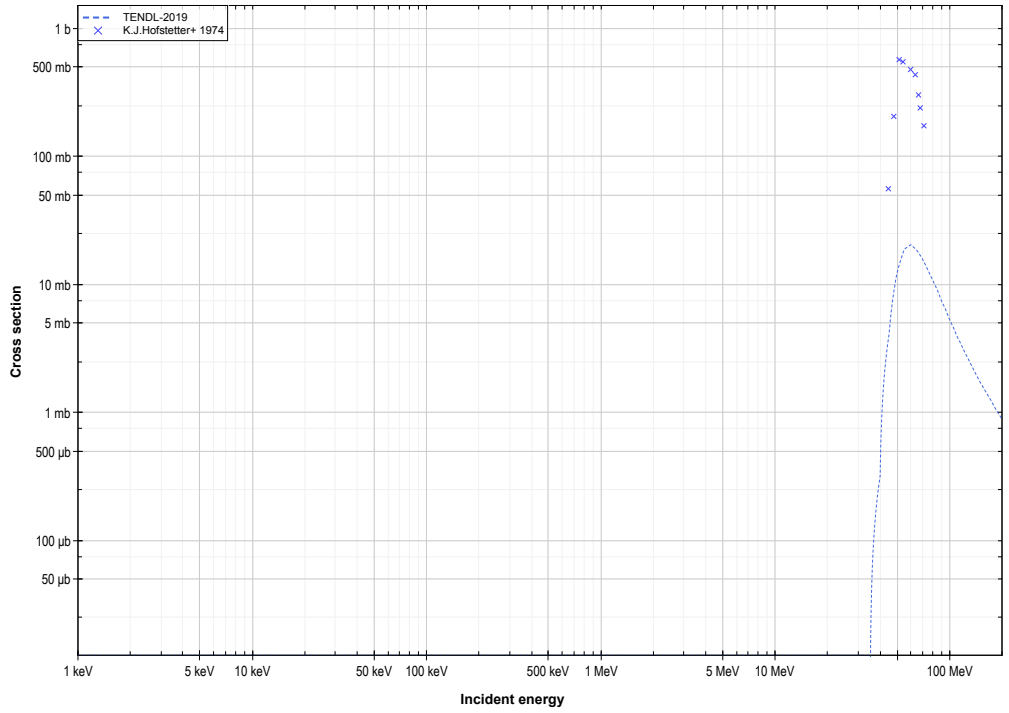
Re187 (^{3}He,5n) or Ir185 production lin-log



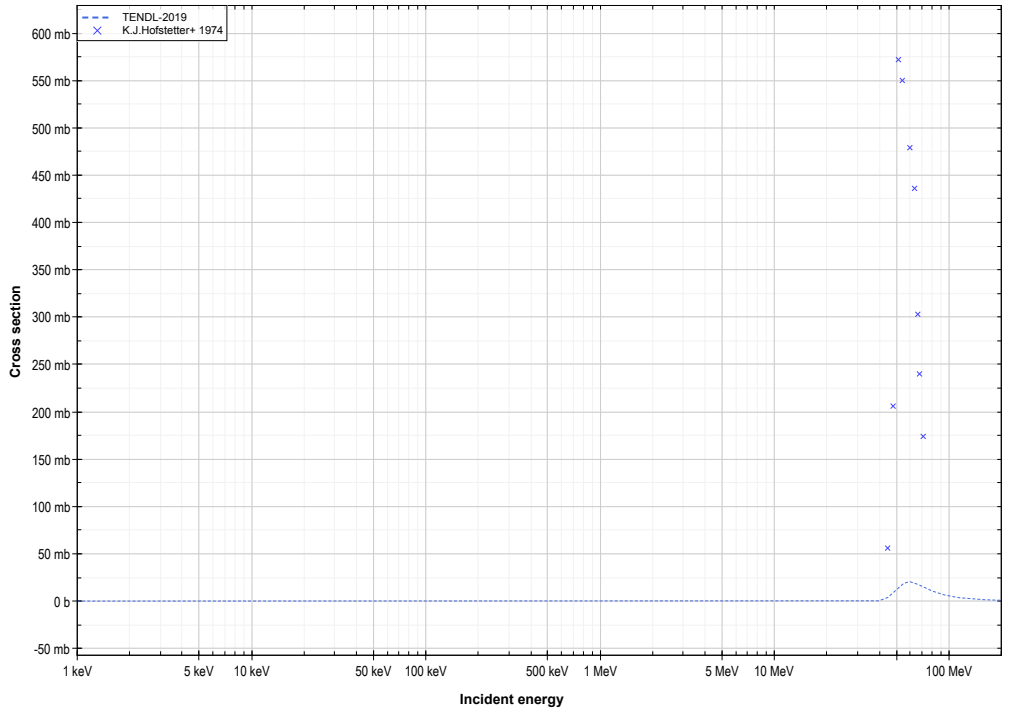
Reaction	Q-Value
Re187(He3,5n)Ir185	-26305.87 keV

<< 73-Ta-181	**75-Re-187**	79-Au-197 >>
<< MT152 (^{3}He,5n)	**MT153 (^{3}He,6n) or MT5 (Ir184 production)**	76-Os-192 MT37 (^{3}He,4n) >>

Re187 (^{3}He,6n) or Ir184 production log-log



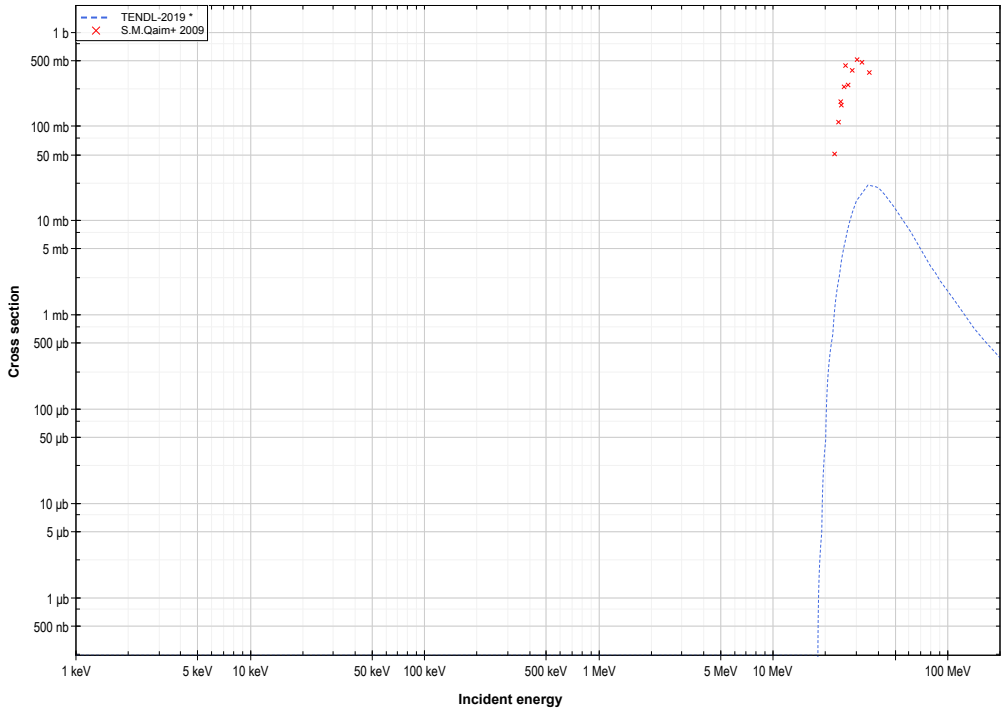
Re187 (^{3}He,6n) or Ir184 production lin-log



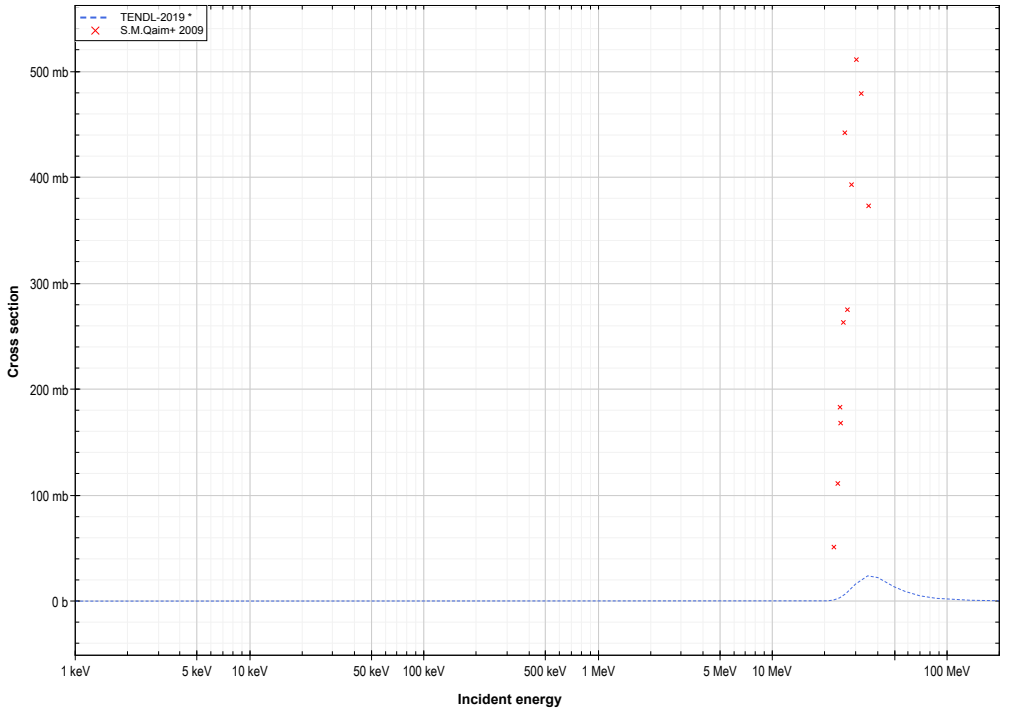
Reaction	Q-Value
Re187(He3,6n)Ir184	-35102.18 keV

<< 75-Re-187	**76-Os-192**	79-Au-197 >>
<< 75-Re-187 MT153 (^{3}He,6n)	**MT37 (^{3}He,4n) or MT5 (Pt191 production)**	78-Pt-194 MT16 (^{3}He,2n) >>

Os192 (^{3}He,4n) or Pt191 production log-log



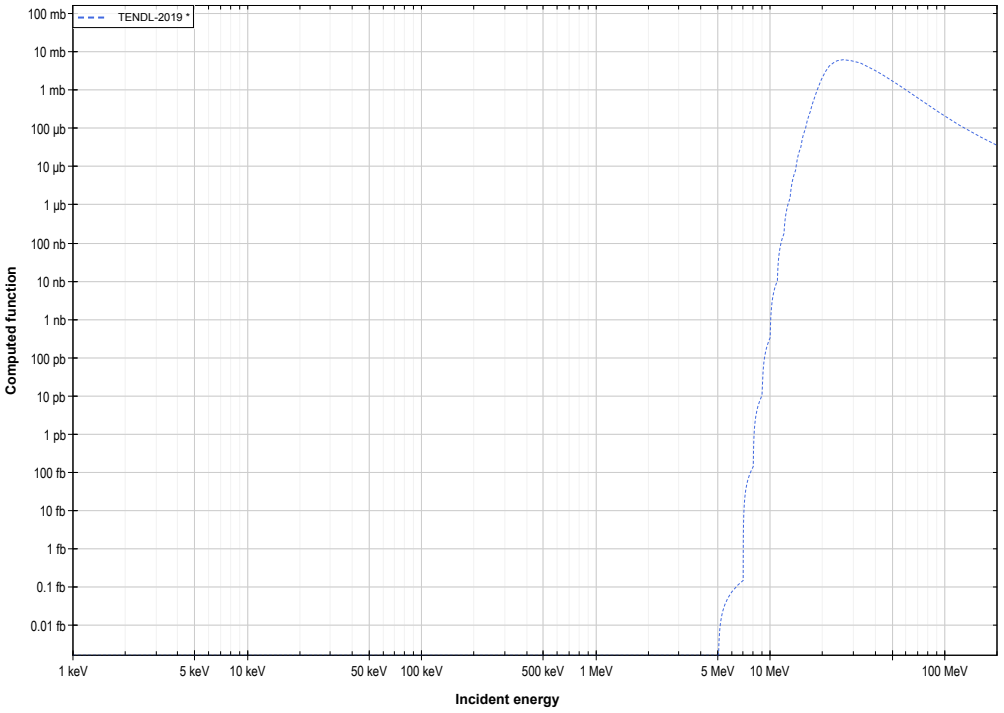
Os192 (^{3}He,4n) or Pt191 production lin-log



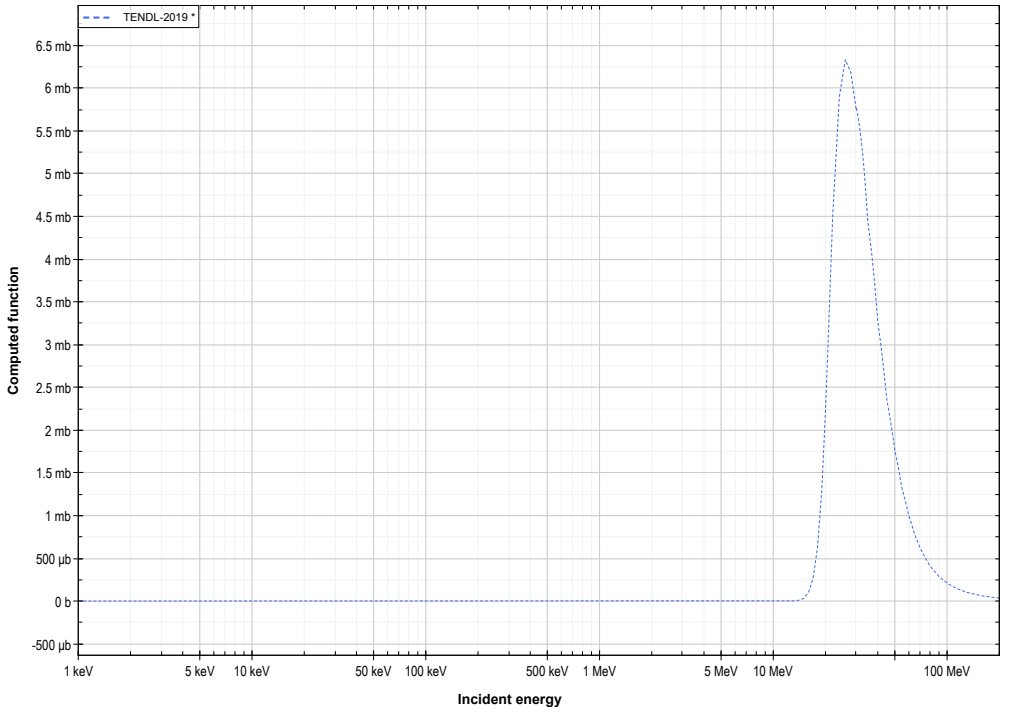
Reaction	Q-Value
Os192(He3,4n)Pt191	-17538.25 keV

<< 73-Ta-181	**78-Pt-194**	79-Au-197 >>
<< 76-Os-192 MT37 (³He,4n)	**MT16 (³He,2n) or MT5 (Hg195 production)**	MT32 (³He,n+d) >>

Pt194 (³He,2n) or Hg195 production log-log



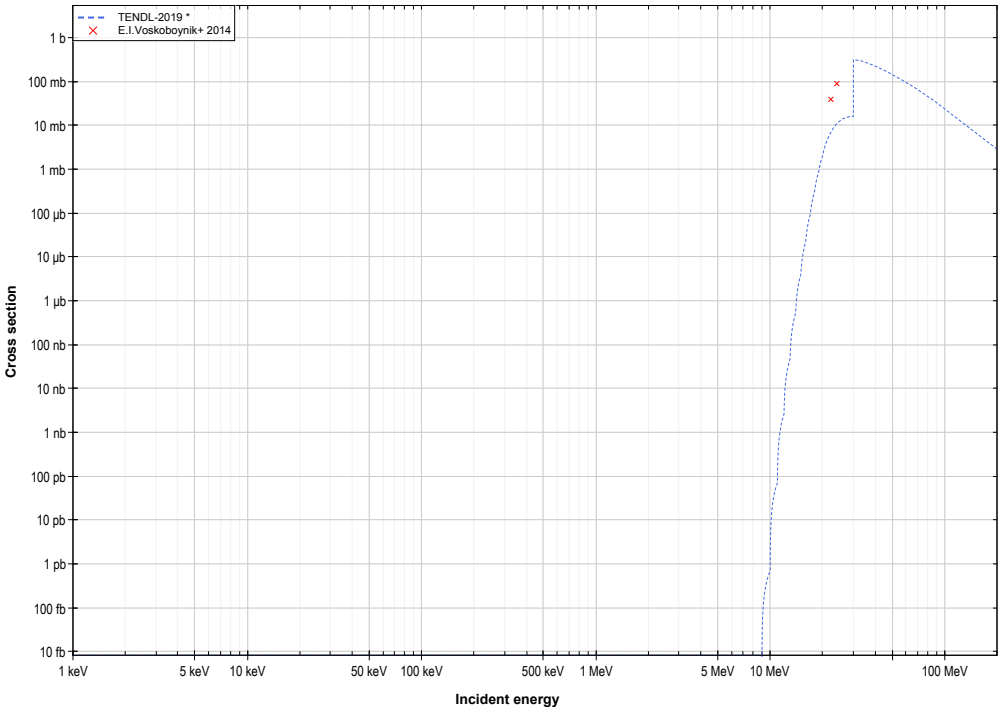
Pt194 (³He,2n) or Hg195 production lin-log



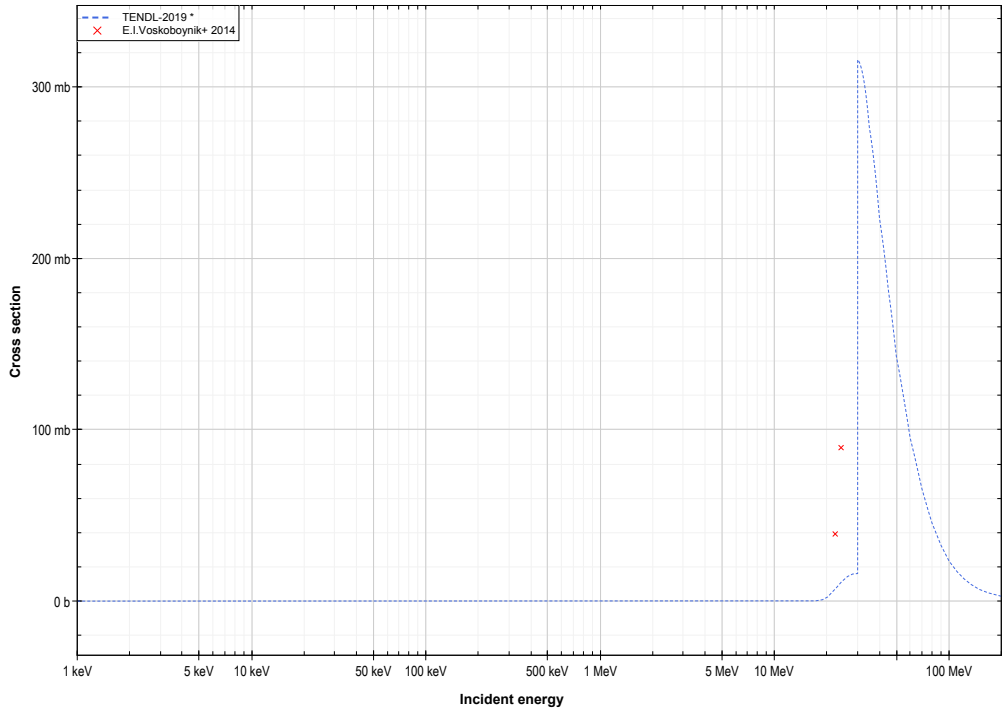
Reaction	Q-Value
Pt194(He3,2n)Hg195	-4958.52 keV

<< 74-W-186	**78-Pt-194**	92-U-235 >>
<< MT16 (³He,2n)	**MT32 (³He,n+d) or MT5 (Au194 production)**	MT41 (³He,2n+p) >>

Pt194 (³He,n+d) or Au194 production log-log



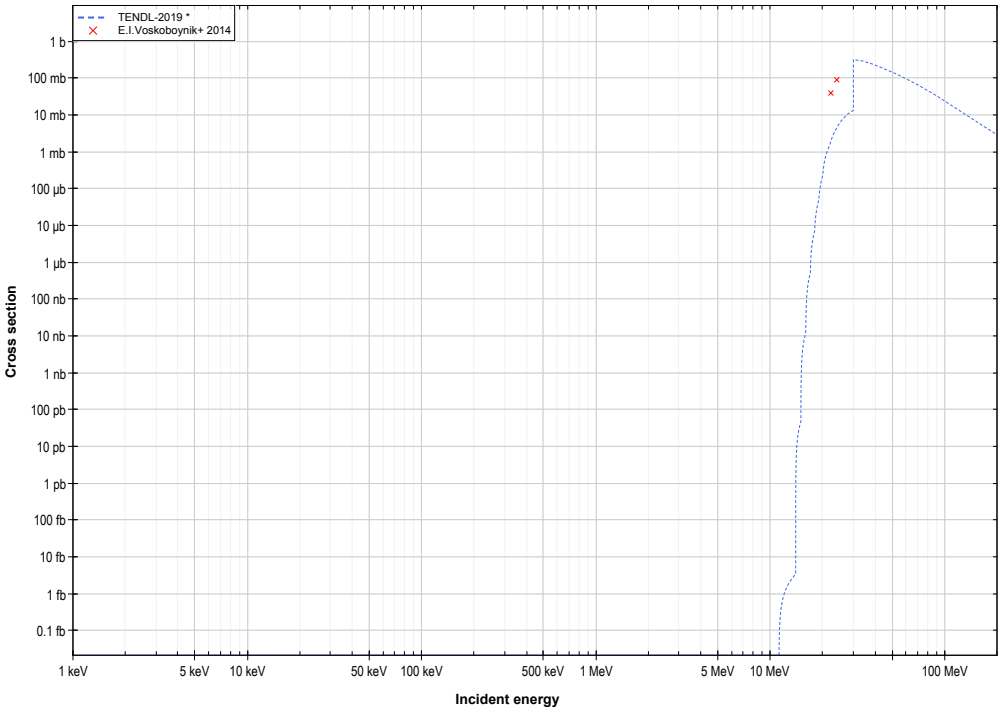
Pt194 (³He,n+d) or Au194 production lin-log



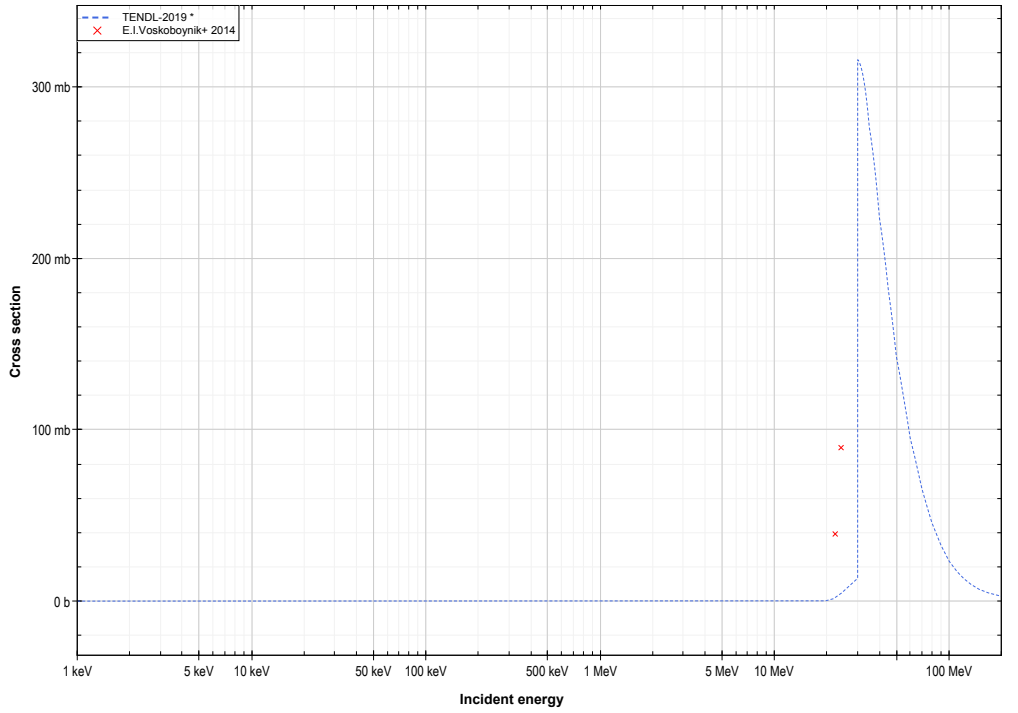
Reaction	Q-Value
Pt194(He3,t)Au194	-2566.79 keV
Pt194(He3,n+d)Au194	-8824.02 keV
Pt194(He3,2n+p)Au194	-11048.59 keV

<< 74-W-186	**78-Pt-194**	92-U-235 >>
<< MT32 (^{3}He,n+d)	**MT41 (^{3}He,2n+p) or MT5 (Au194 production)**	MT103 (^{3}He,p) >>

Pt194 (^{3}He,2n+p) or Au194 production log-log



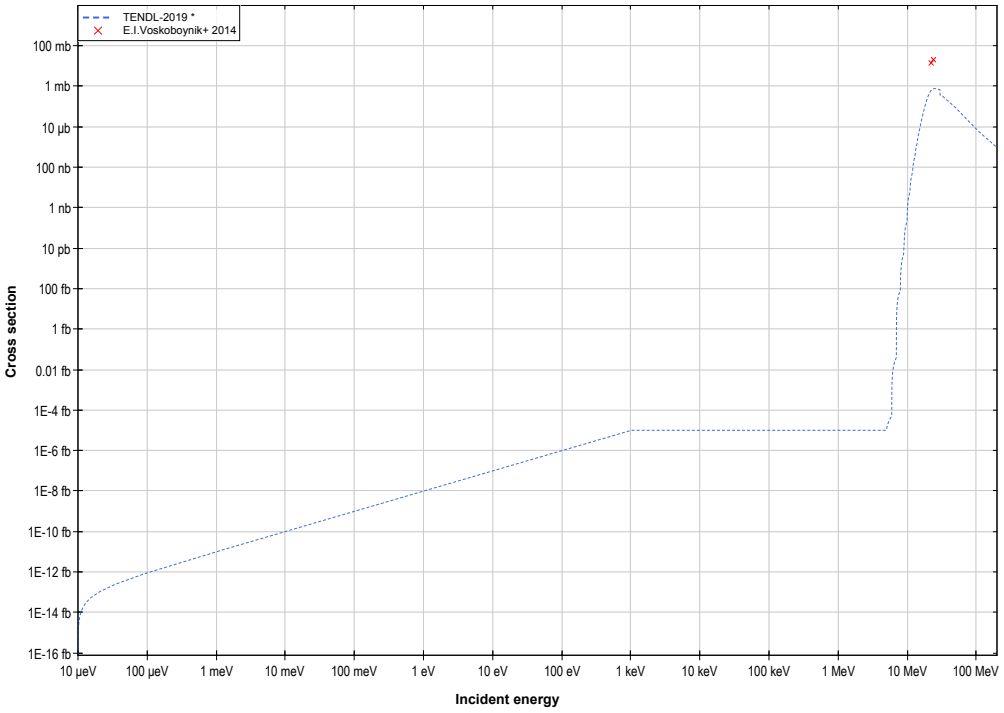
Pt194 (^{3}He,2n+p) or Au194 production lin-log



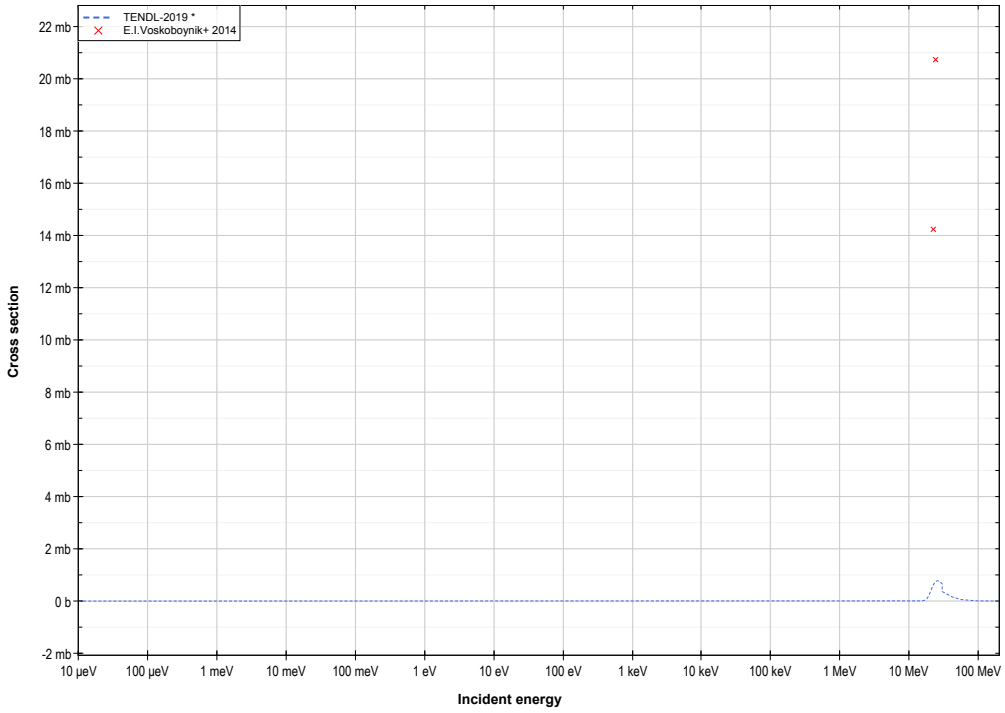
Reaction	Q-Value
Pt194(He3,t)Au194	-2566.79 keV
Pt194(He3,n+d)Au194	-8824.02 keV
Pt194(He3,2n+p)Au194	-11048.59 keV

<< 74-W-186	**78-Pt-194**	
<< MT41 (³He,2n+p)	**MT103 (³He,p) or MT5 (Au196 production)**	MT105 (³He,t) >>

Pt194 (³He,p) or Au196 production log-log



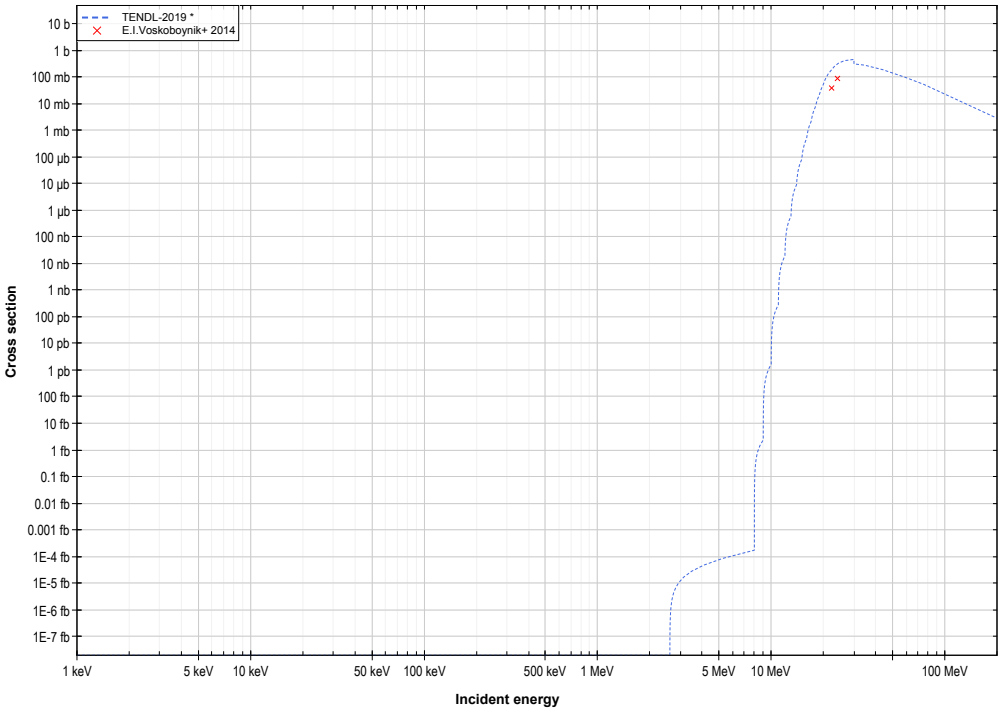
Pt194 (³He,p) or Au196 production lin-log



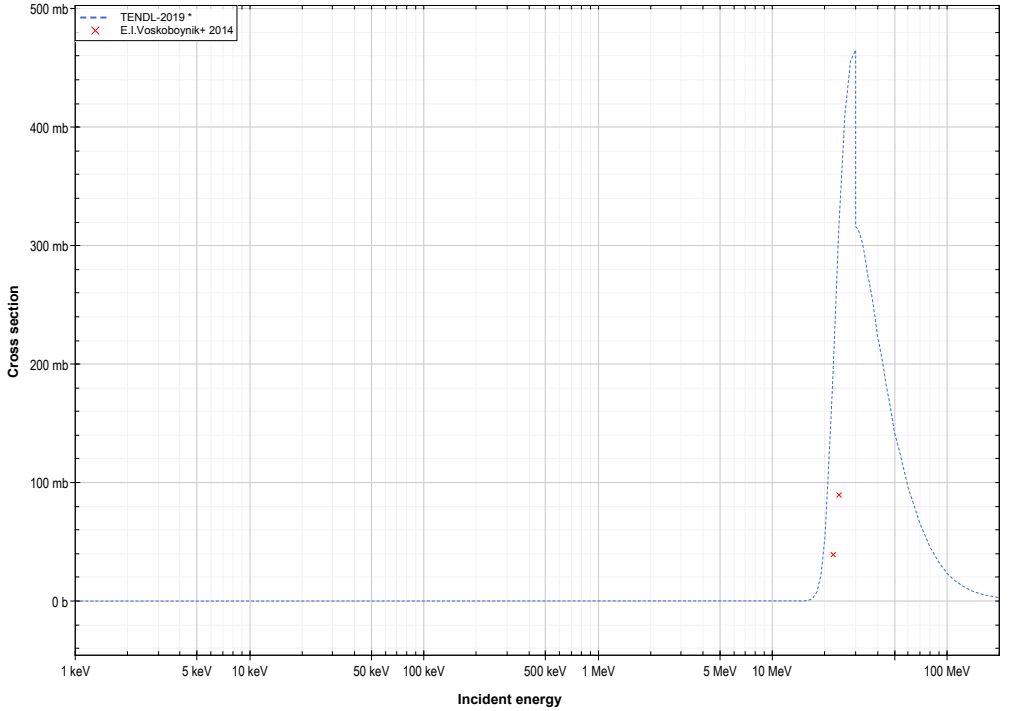
Reaction	Q-Value
Pt194(He3,p)Au196	4020.85 keV

<< 74-W-186	**78-Pt-194**	92-U-235 >>
<< MT103 (^{3}He,p)	**MT105 (^{3}He,t) or MT5 (Au194 production)**	79-Au-197 MT16 (^{3}He,2n) >>

Pt194 (^{3}He,t) or Au194 production log-log



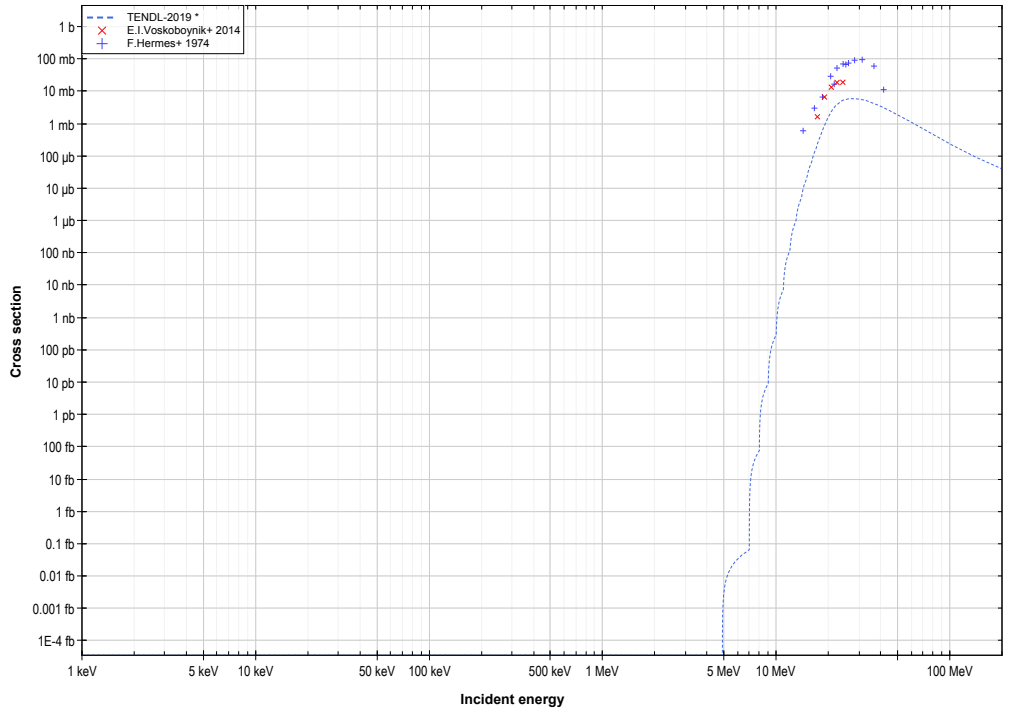
Pt194 (^{3}He,t) or Au194 production lin-log



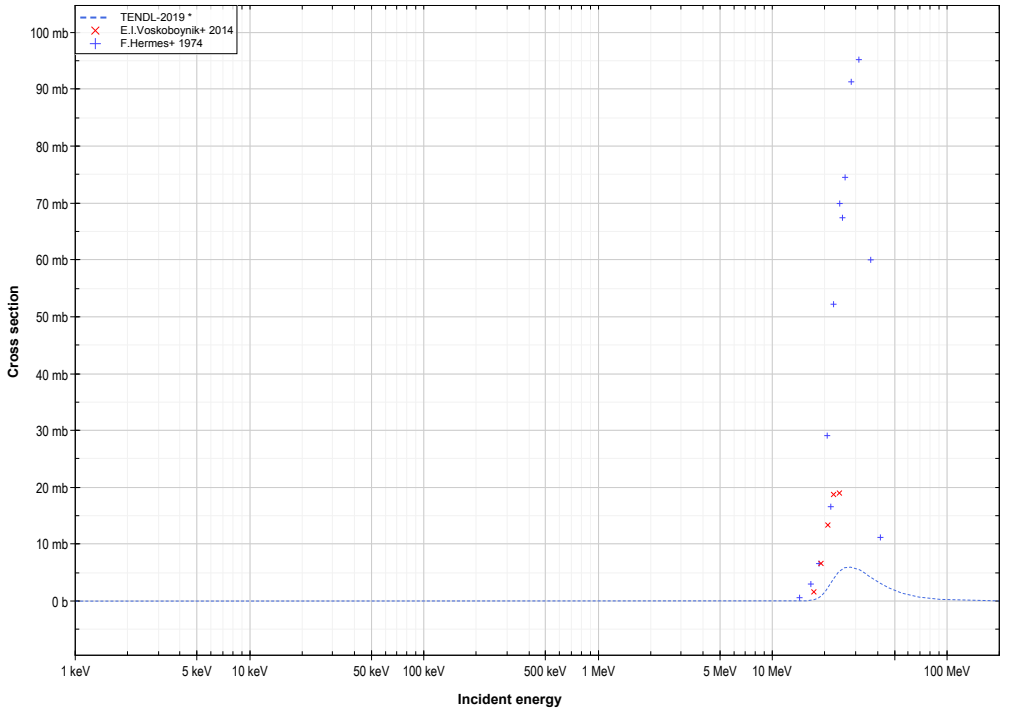
Reaction	Q-Value
Pt194(He3,t)Au194	-2566.79 keV
Pt194(He3,n+d)Au194	-8824.02 keV
Pt194(He3,2n+p)Au194	-11048.59 keV

<< 78-Pt-194	**79-Au-197**	82-Pb-207 >>
<< 78-Pt-194 MT105 (^{3}He,t)	**MT16 (^{3}He,2n) or MT5 (Tl198 production)**	MT17 (^{3}He,3n) >>

Au197 (^{3}He,2n) or Tl198 production log-log



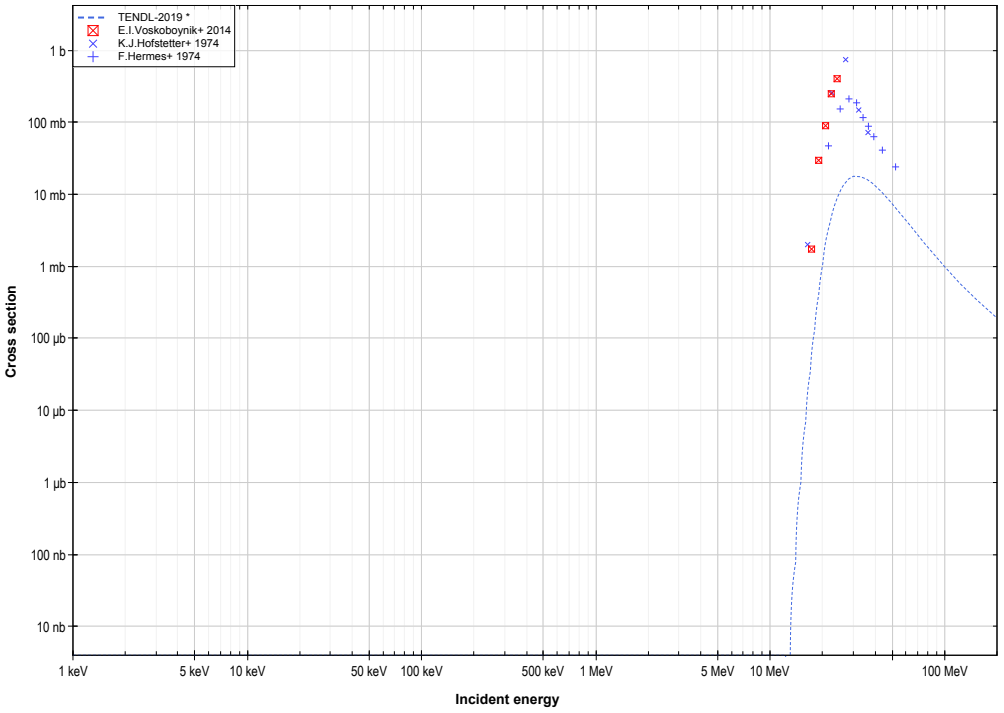
Au197 (^{3}He,2n) or Tl198 production lin-log



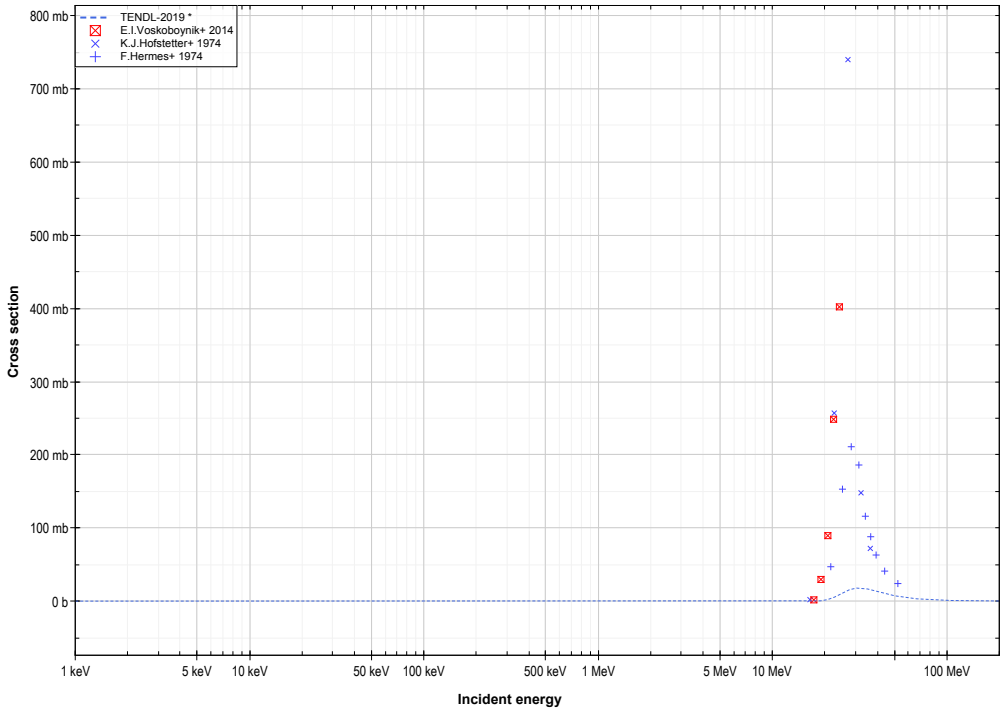
Reaction	Q-Value
Au197(He3,2n)Tl198	-4822.12 keV

<< 75-Re-187	**79-Au-197**	82-Pb-207 >>
<< MT16 (³He,2n)	**MT17 (³He,3n) or MT5 (Tl197 production)**	MT18 (³He,fission) >>

Au197 (³He,3n) or Tl197 production log-log



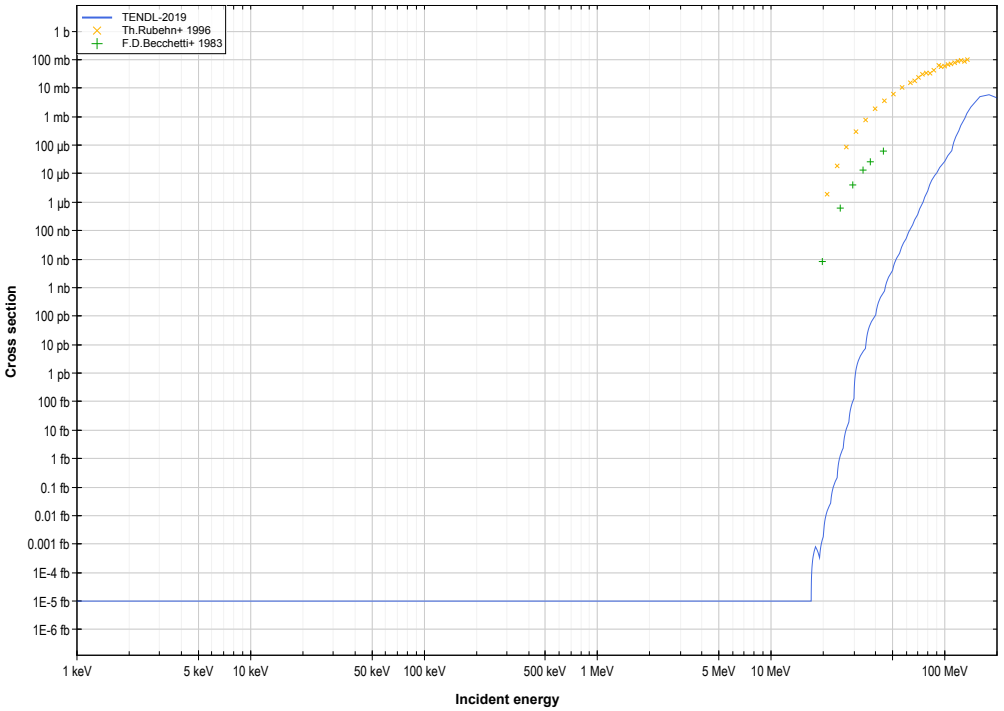
Au197 (³He,3n) or Tl197 production lin-log



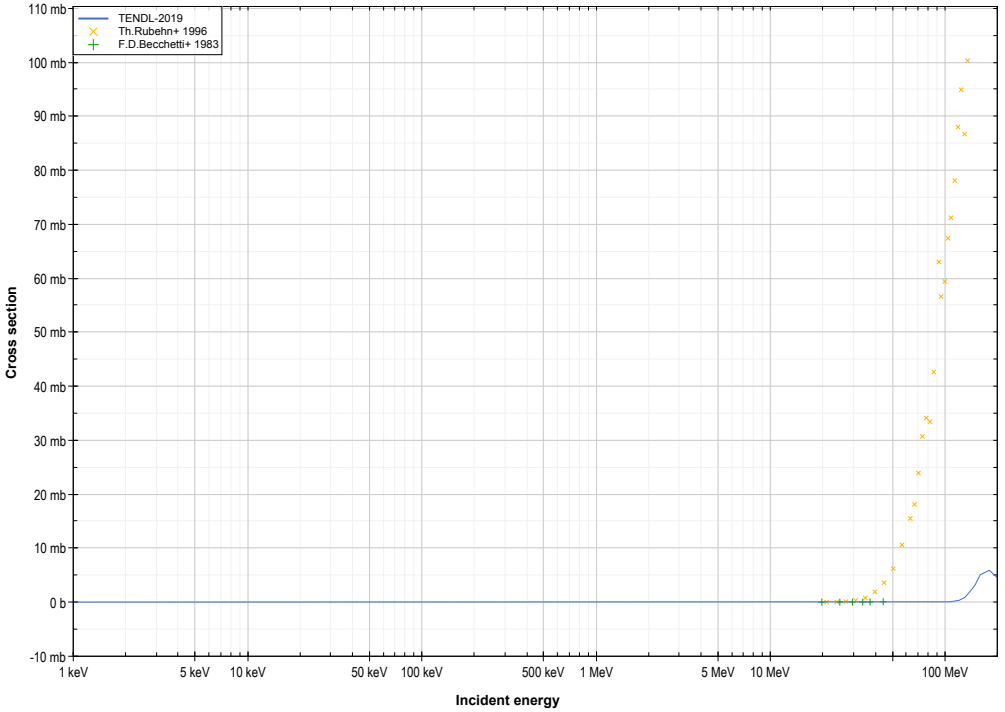
Reaction	Q-Value
Au197(He3,3n)Tl197	-12080.43 keV

<< 73-Ta-181	**79-Au-197**	82-Pb-208 >>
<< MT17 (³He,3n)	**MT18 (³He,fission)**	MT34 (³He,n+³He) >>

Au197 (³He,fission) log-log

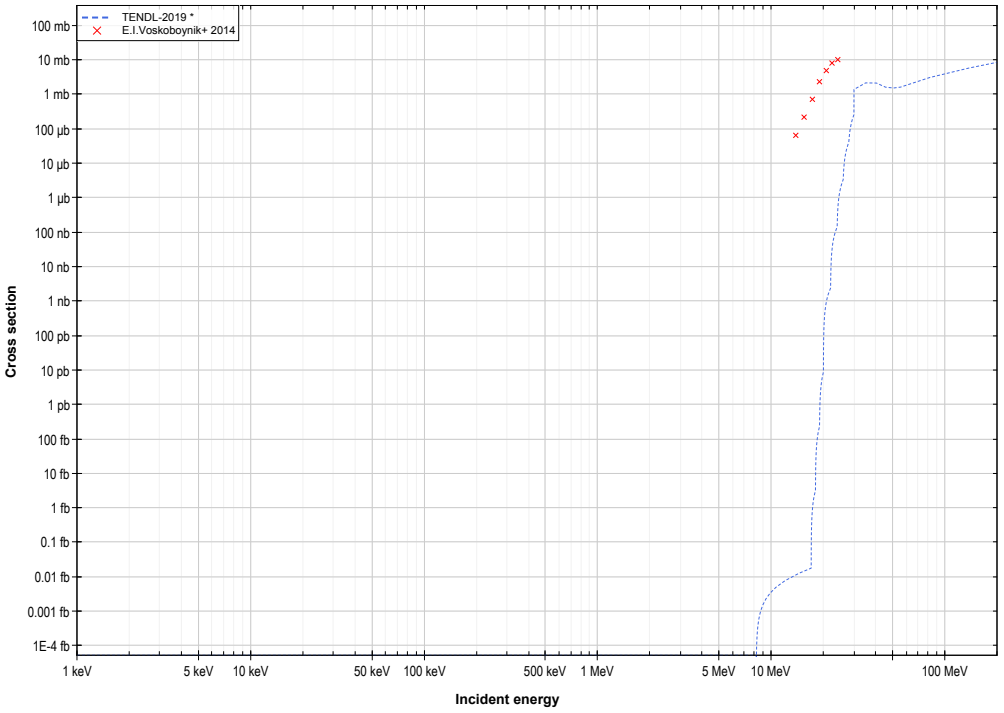


Au197 (³He,fission) lin-log

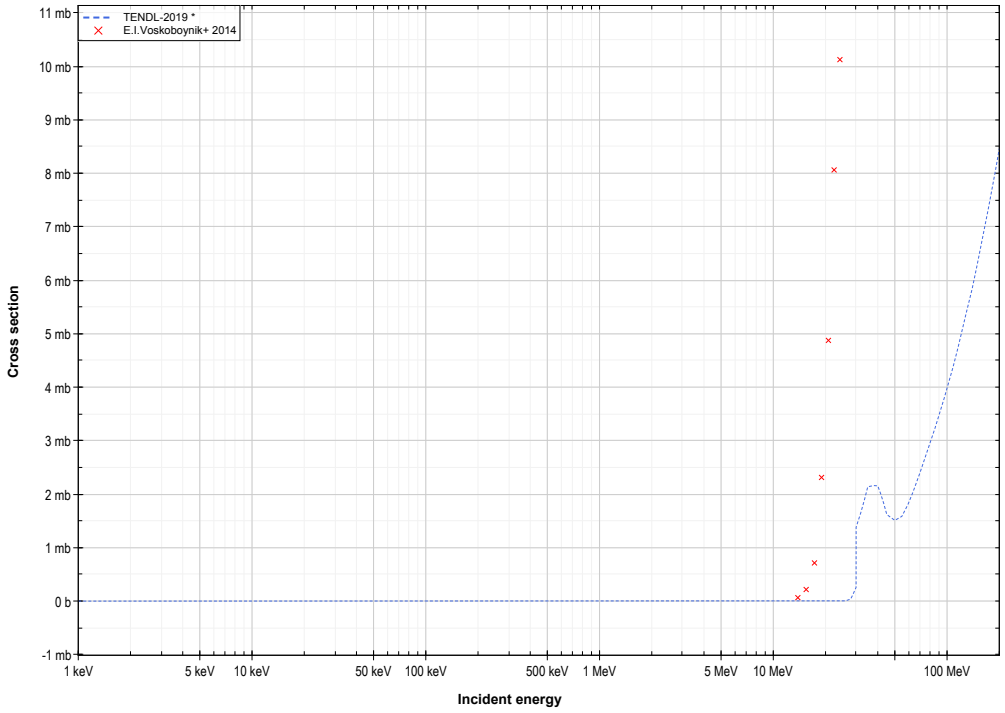


<< 45-Rh-103	**79-Au-197**	
<< MT18 (³He,fission)	**MT34 (³He,n+³He) or MT5 (Au196 production)**	MT37 (³He,4n) >>

Au197 (³He,n+³He) or Au196 production log-log



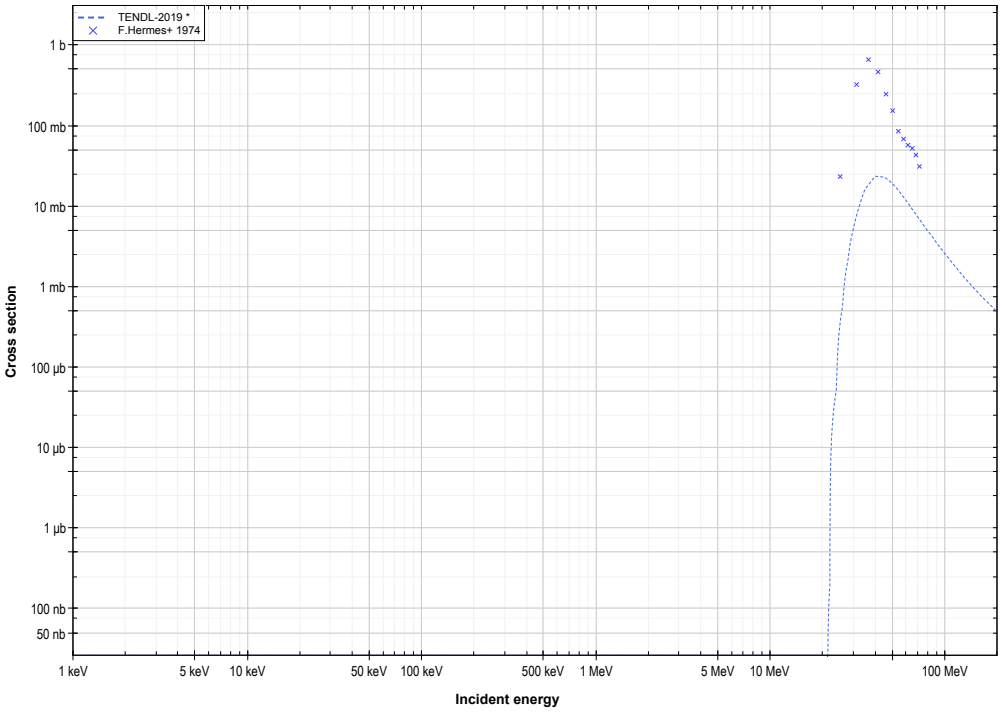
Au197 (³He,n+³He) or Au196 production lin-log



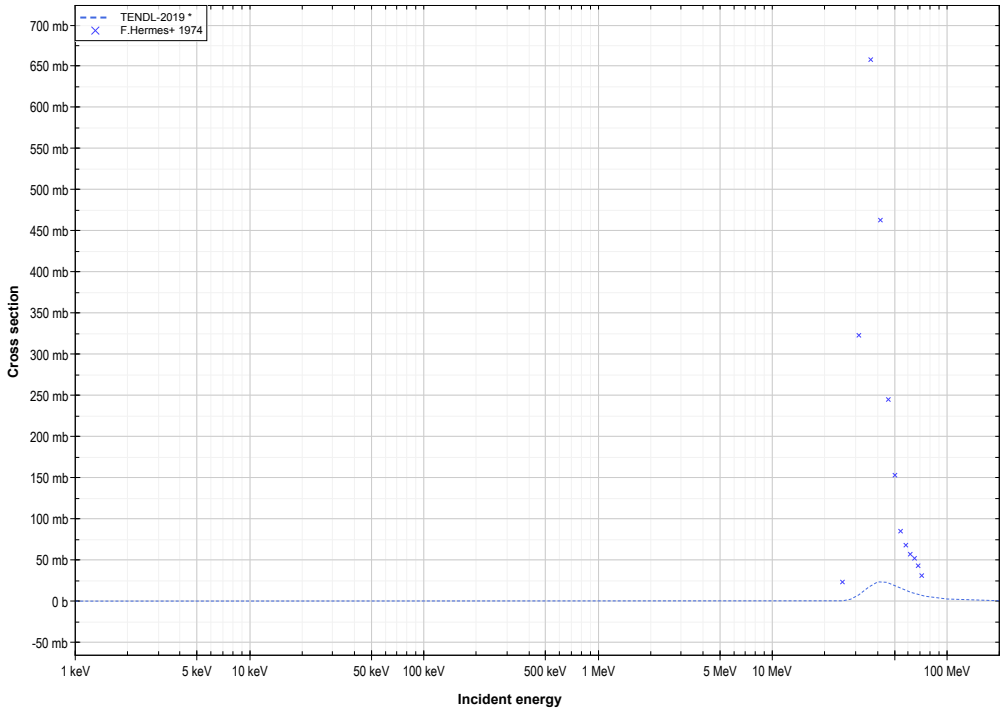
Reaction	Q-Value
Au197(He3,α)Au196	12505.30 keV
Au197(He3,p+t)Au196	-7308.56 keV
Au197(He3,n+He3)Au196	-8072.32 keV
Au197(He3,2d)Au196	-11341.23 keV
Au197(He3,n+p+d)Au196	-13565.79 keV
Au197(He3,2n+2p)Au196	-15790.36 keV

<< 76-Os-192	**79-Au-197**	81-Tl-203 >>
<< MT34 (^{3}He,n+^{3}He)	**MT37 (^{3}He,4n) or MT5 (Tl196 production)**	MT107 (^{3}He,α) >>

Au197 (^{3}He,4n) or Tl196 production log-log



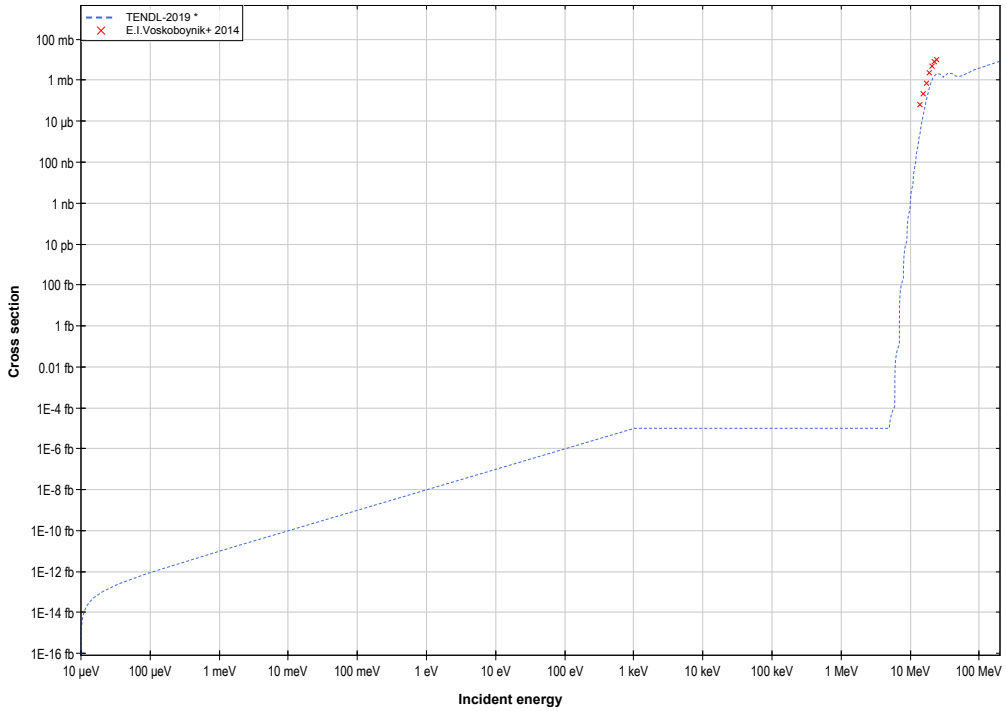
Au197 (^{3}He,4n) or Tl196 production lin-log



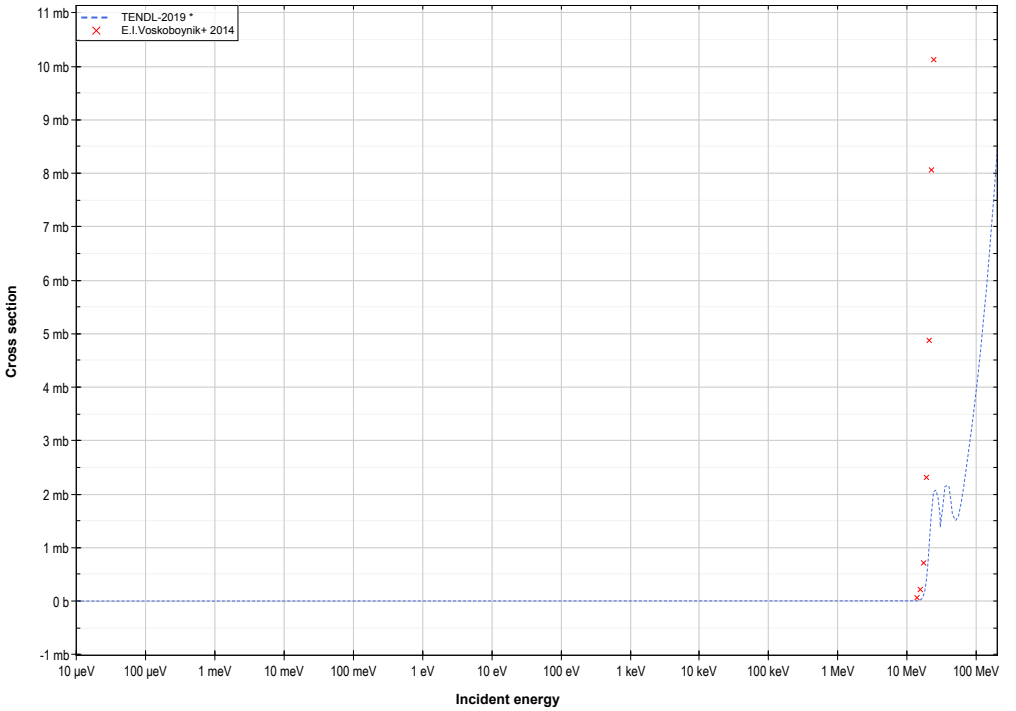
Reaction	Q-Value
Au197(He3,4n)Tl196	-20996.75 keV

<< 75-Re-187	**79-Au-197**	
<< MT37 (^{3}He,4n)	**MT107 (^{3}He,α) or MT5 (Au196 production)**	MT111 (^{3}He,2p) >>

Au197 (^{3}He,α) or Au196 production log-log



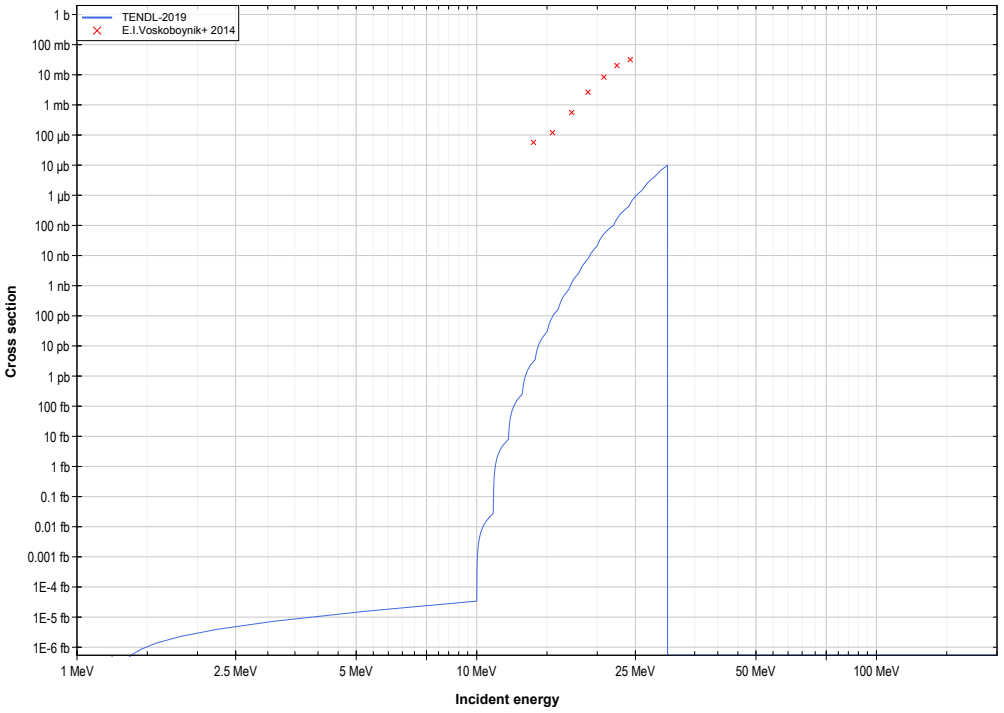
Au197 (^{3}He,α) or Au196 production lin-log



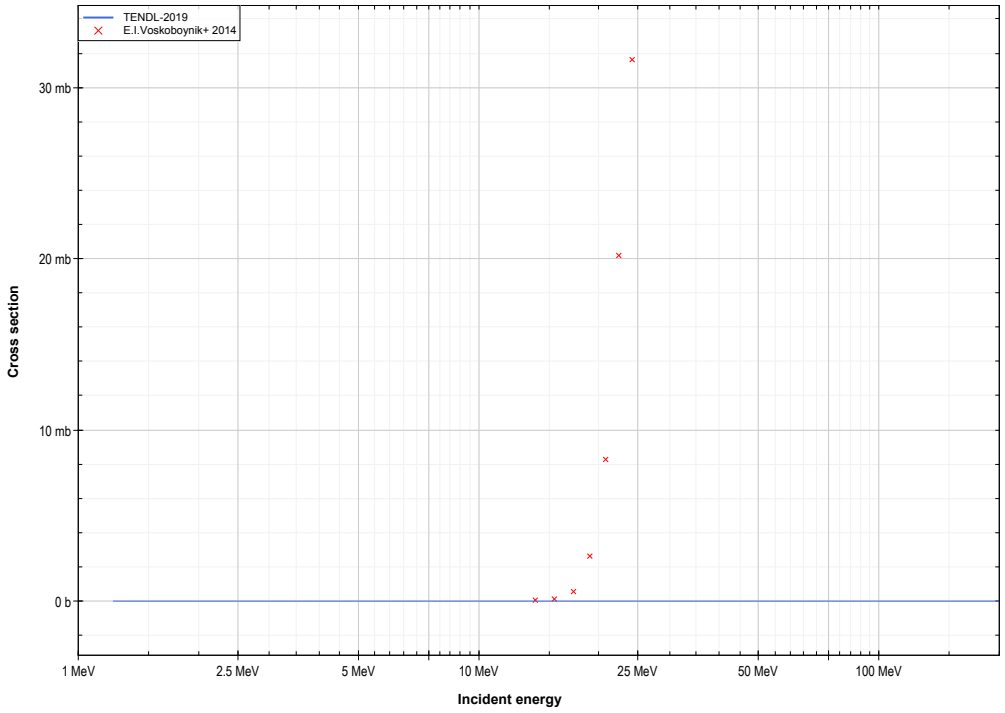
Reaction	Q-Value
Au197(He3,α)Au196	12505.30 keV
Au197(He3,p+t)Au196	-7308.56 keV
Au197(He3,n+He3)Au196	-8072.32 keV
Au197(He3,2d)Au196	-11341.23 keV
Au197(He3,n+p+d)Au196	-13565.79 keV
Au197(He3,2n+2p)Au196	-15790.36 keV

<< 75-Re-185	**79-Au-197**	93-Np-237 >>
<< MT107 (^{3}He,α)	**MT111 (^{3}He,2p) or MT5 (Au198 production)**	MT116 (^{3}He,p+t) >>

Au197 (^{3}He,2p) or Au198 production log-log



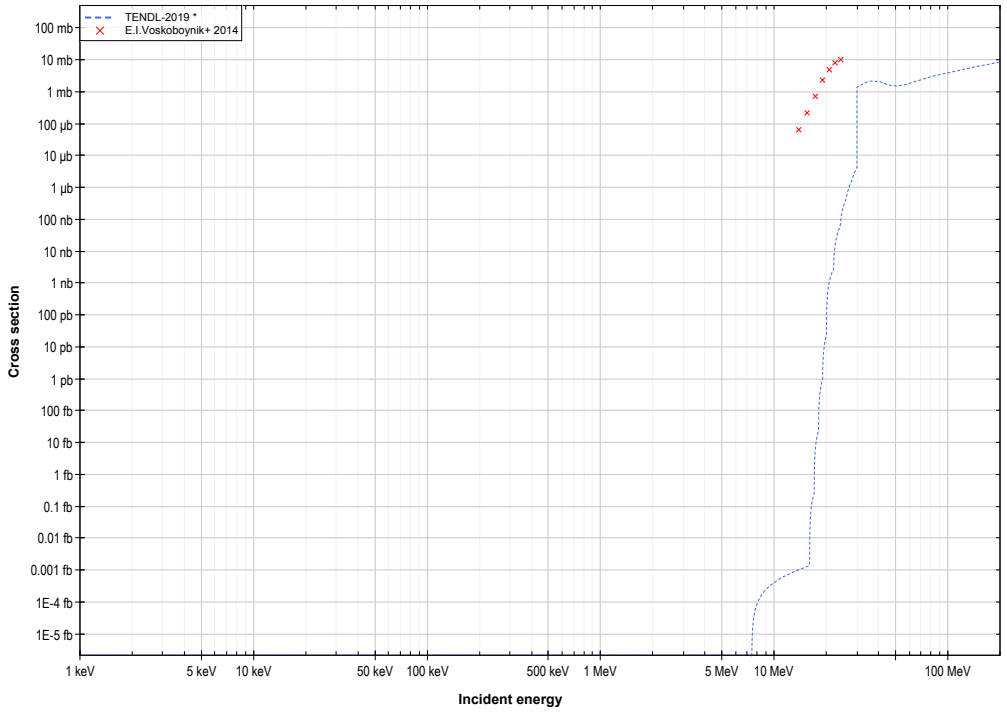
Au197 (^{3}He,2p) or Au198 production lin-log



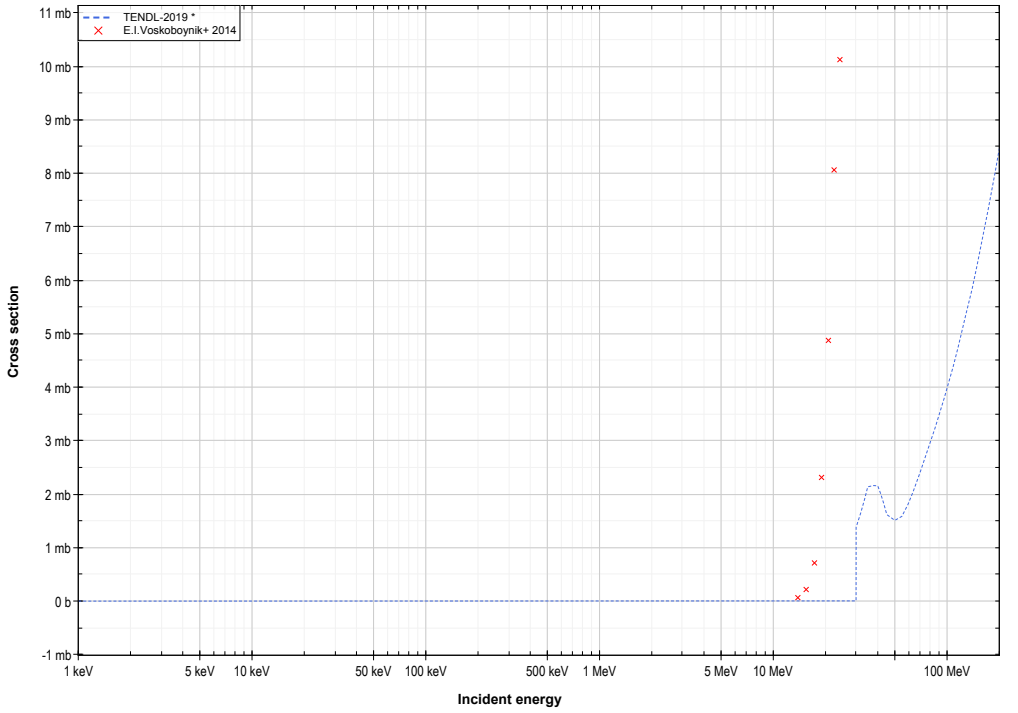
Reaction	Q-Value
Au197(He3,2p)Au198	-1205.62 keV

<< 45-Rh-103	**79-Au-197**	
<< MT111 (^{3}He,2p)	**MT116 (^{3}He,p+t) or MT5 (Au196 production)**	MT152 (^{3}He,5n) >>

Au197 (^{3}He,p+t) or Au196 production log-log



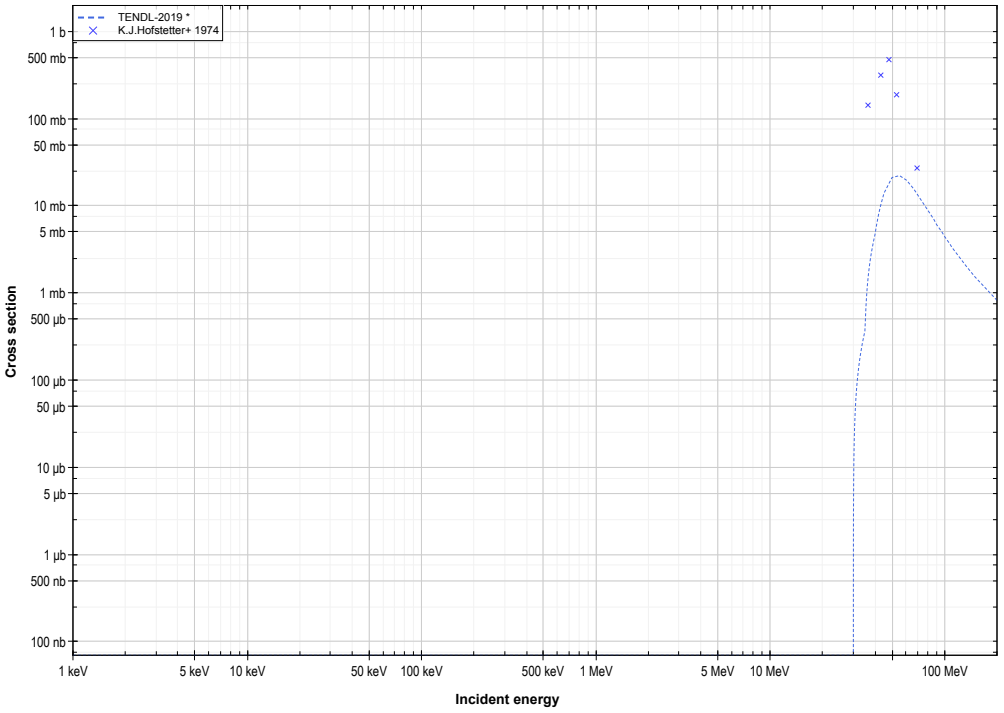
Au197 (^{3}He,p+t) or Au196 production lin-log



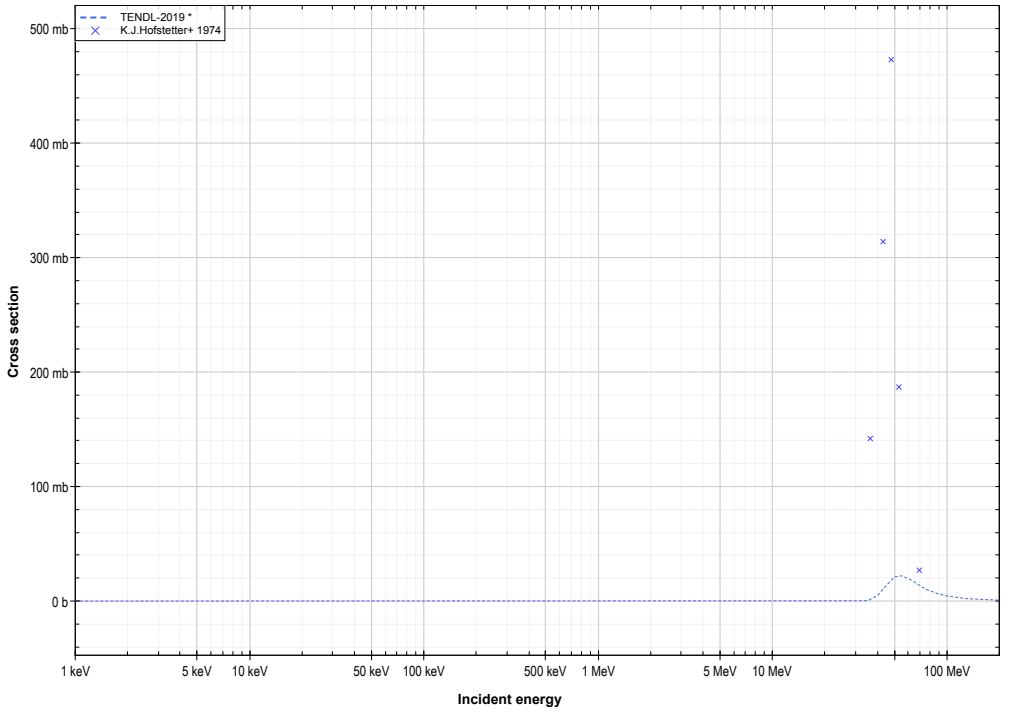
Reaction	Q-Value
Au197(He3,α)Au196	12505.30 keV
Au197(He3,p+t)Au196	-7308.56 keV
Au197(He3,n+He3)Au196	-8072.32 keV
Au197(He3,2d)Au196	-11341.23 keV
Au197(He3,n+p+d)Au196	-13565.79 keV
Au197(He3,2n+2p)Au196	-15790.36 keV

<< 75-Re-187	**79-Au-197**	81-Tl-203 >>
<< MT116 (^{3}He,p+t)	**MT152 (^{3}He,5n) or MT5 (Tl195 production)**	MT153 (^{3}He,6n) >>

Au197 (^{3}He,5n) or Tl195 production log-log



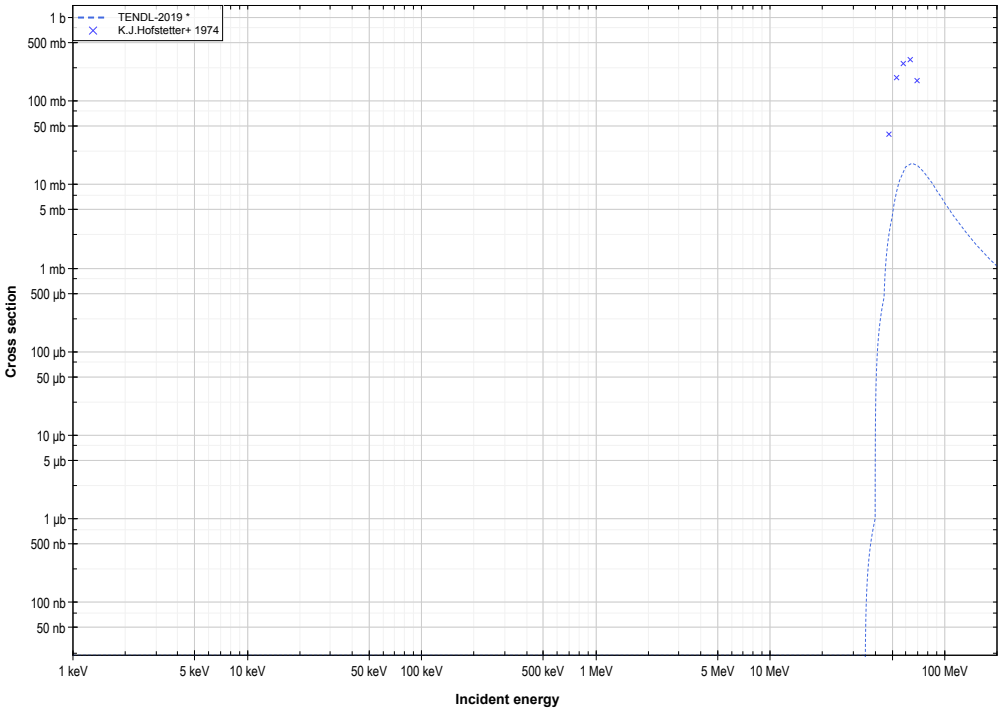
Au197 (^{3}He,5n) or Tl195 production lin-log



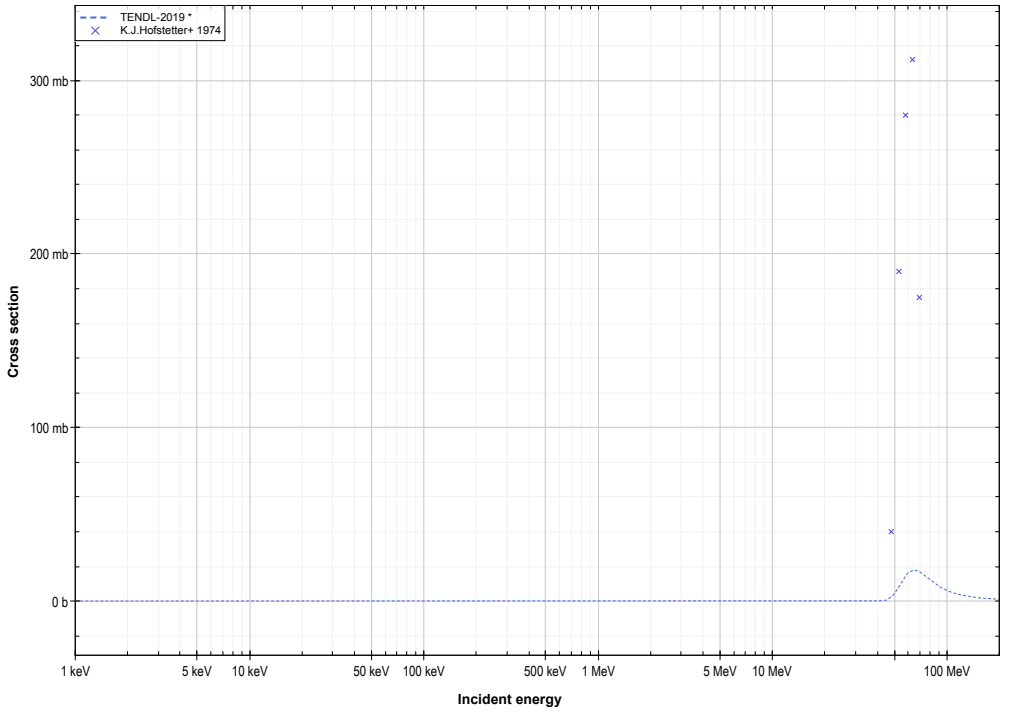
Reaction	Q-Value
Au197(He3,5n)Tl195	-28410.07 keV

<< 75-Re-187	**79-Au-197**	81-Tl-203 >>
<< MT152 (^{3}He,5n)	**MT153 (^{3}He,6n) or MT5 (Tl194 production)**	MT183 (^{3}He,n+p+d) >>

Au197 (^{3}He,6n) or Tl194 production log-log



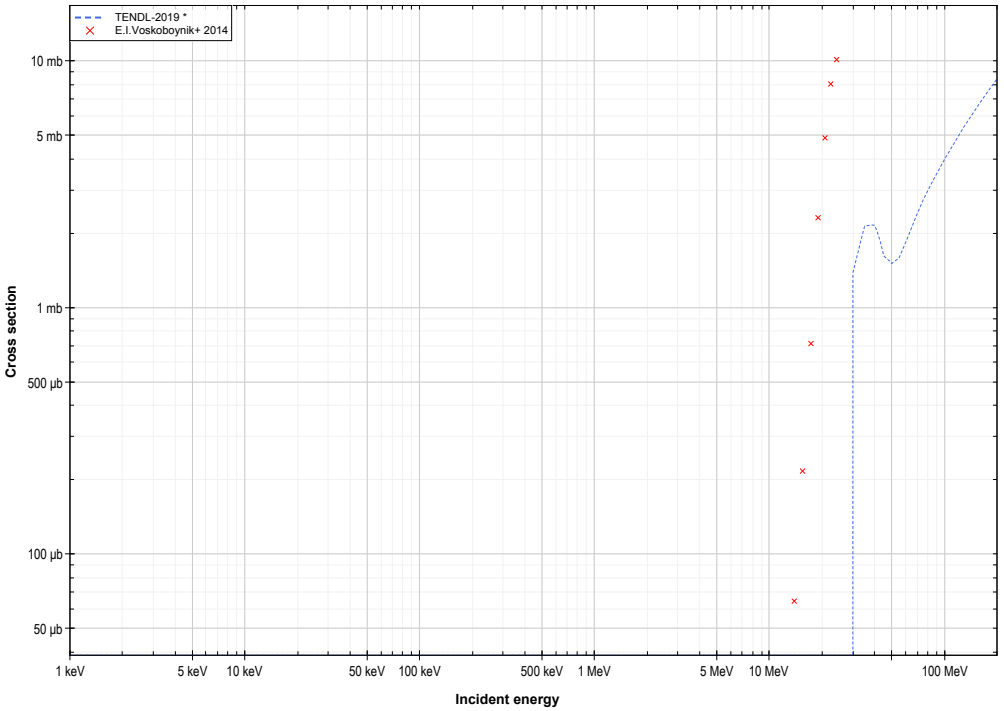
Au197 (^{3}He,6n) or Tl194 production lin-log



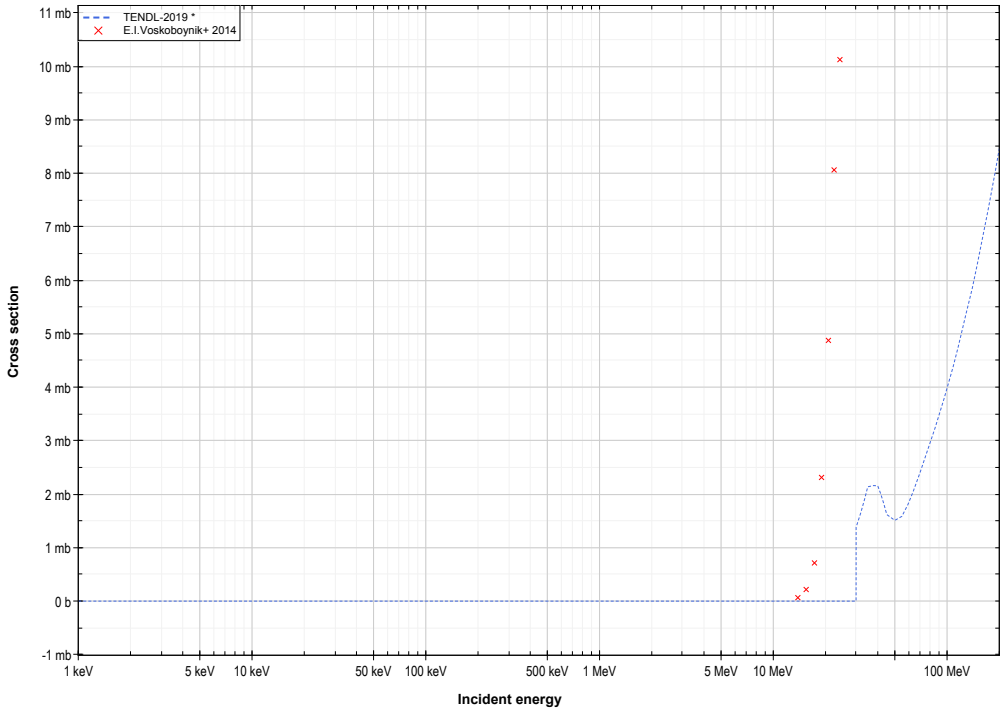
Reaction	Q-Value
Au197(He3,6n)Tl194	-37699.38 keV

<< 45-Rh-103	**79-Au-197**	
<< MT153 (^{3}He,6n)	**MT183 (^{3}He,n+p+d) or MT5 (Au196 production)**	MT190 (^{3}He,2n+2p) >>

Au197 (^{3}He,n+p+d) or Au196 production log-log



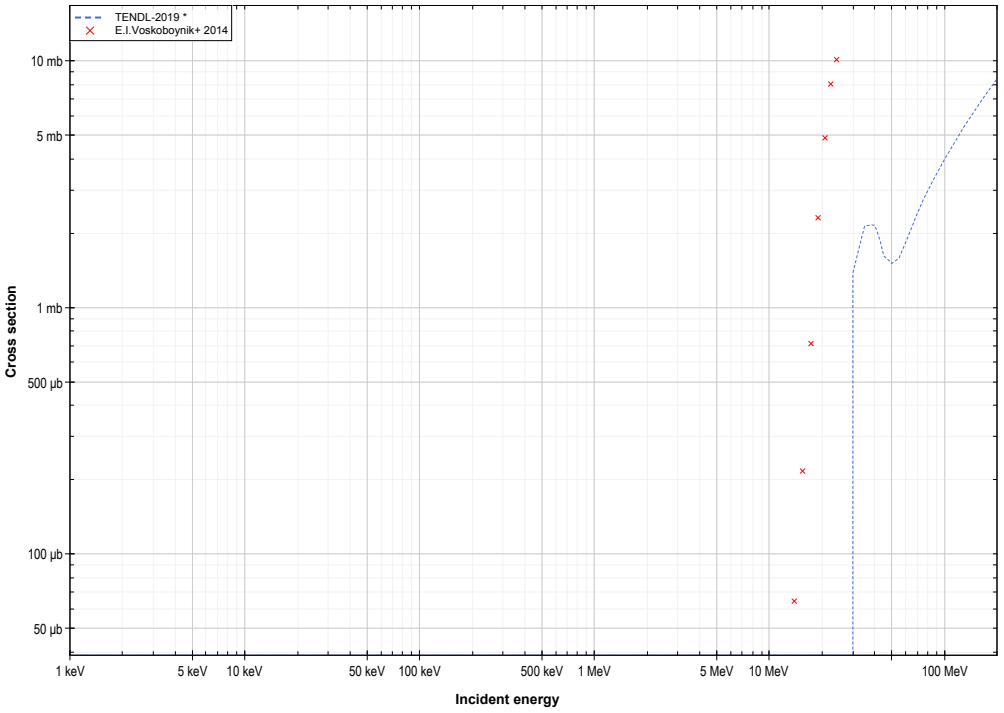
Au197 (^{3}He,n+p+d) or Au196 production lin-log



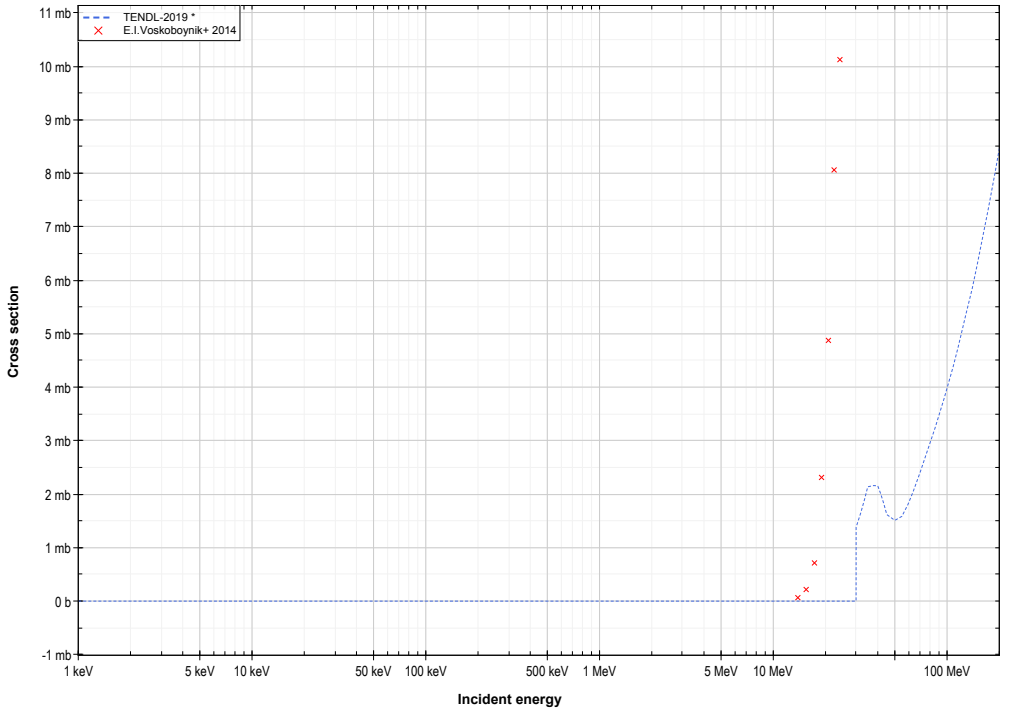
Reaction	Q-Value
Au197(He3,α)Au196	12505.30 keV
Au197(He3,p+t)Au196	-7308.56 keV
Au197(He3,n+He3)Au196	-8072.32 keV
Au197(He3,2d)Au196	-11341.23 keV
Au197(He3,n+p+d)Au196	-13565.79 keV
Au197(He3,2n+2p)Au196	-15790.36 keV

<< 45-Rh-103	**79-Au-197**	
<< MT183 (^{3}He,n+p+d)	**MT190 (^{3}He,2n+2p) or MT5 (Au196 production)**	81-Tl-203 MT37 (^{3}He,4n) >>

Au197 (^{3}He,2n+2p) or Au196 production log-log



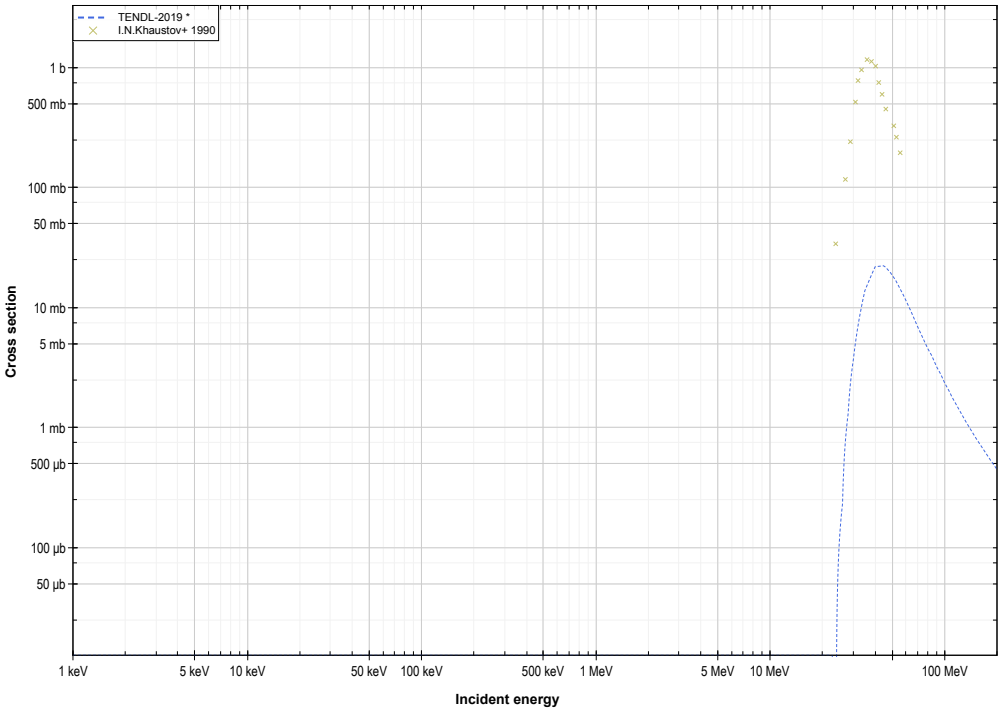
Au197 (^{3}He,2n+2p) or Au196 production lin-log



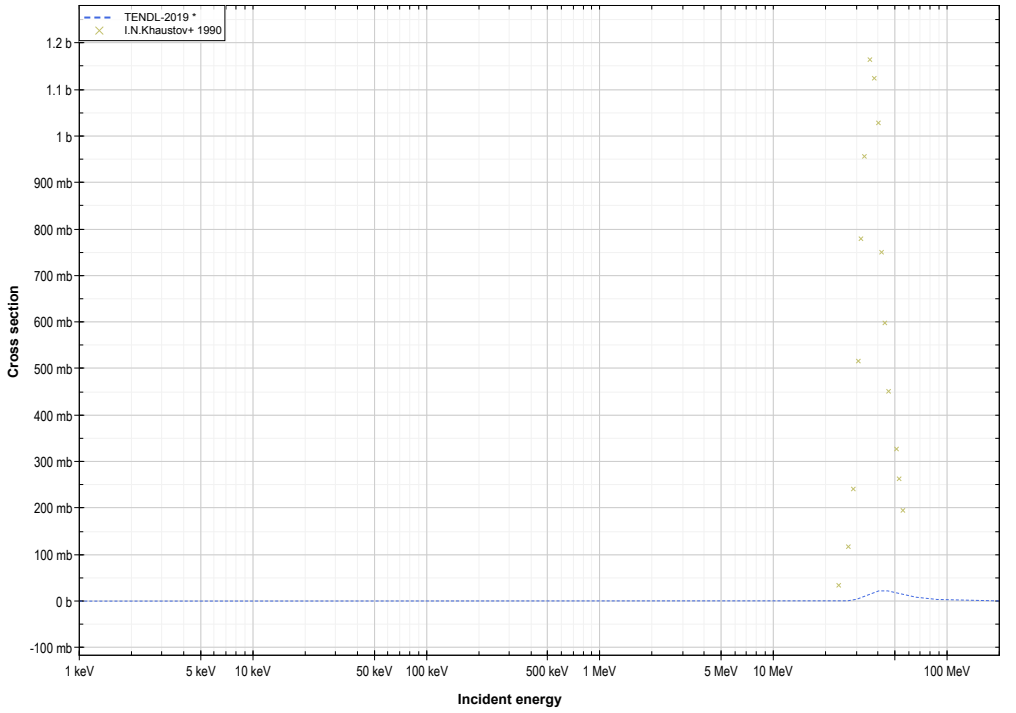
Reaction	Q-Value
Au197(He3,α)Au196	12505.30 keV
Au197(He3,p+t)Au196	-7308.56 keV
Au197(He3,n+He3)Au196	-8072.32 keV
Au197(He3,2d)Au196	-11341.23 keV
Au197(He3,n+p+d)Au196	-13565.79 keV
Au197(He3,2n+2p)Au196	-15790.36 keV

<< 79-Au-197	**81-Tl-203**	82-Pb-207 >>
<< 79-Au-197 MT190 (^{3}He,2n+2p)	**MT37 (^{3}He,4n) or MT5 (Bi202 production)**	MT152 (^{3}He,5n) >>

Tl203 (^{3}He,4n) or Bi202 production log-log



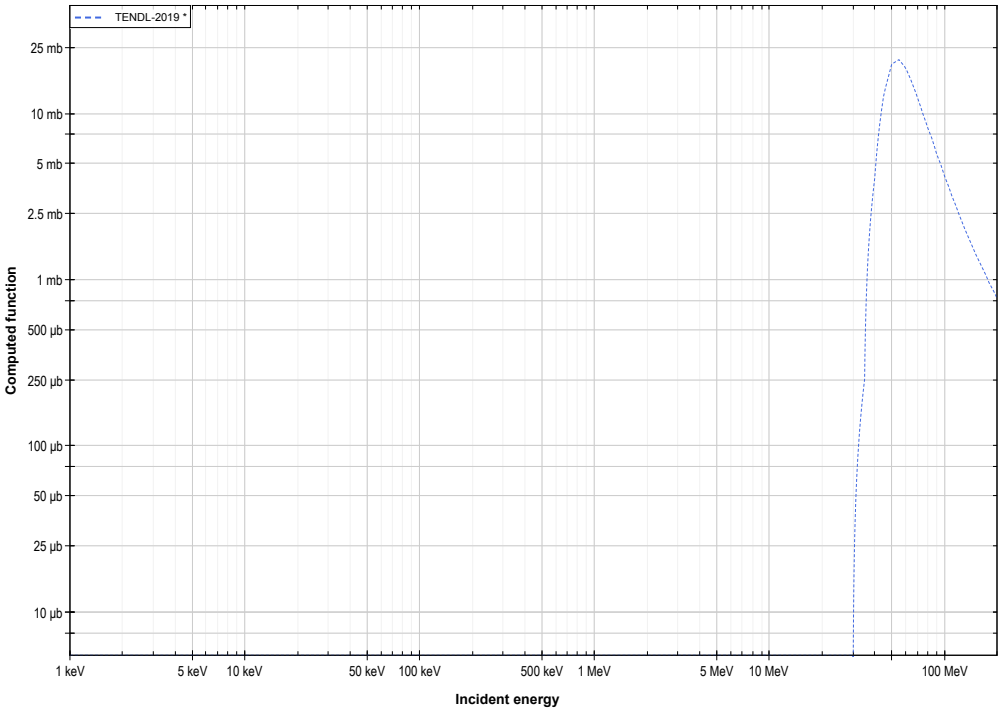
Tl203 (^{3}He,4n) or Bi202 production lin-log



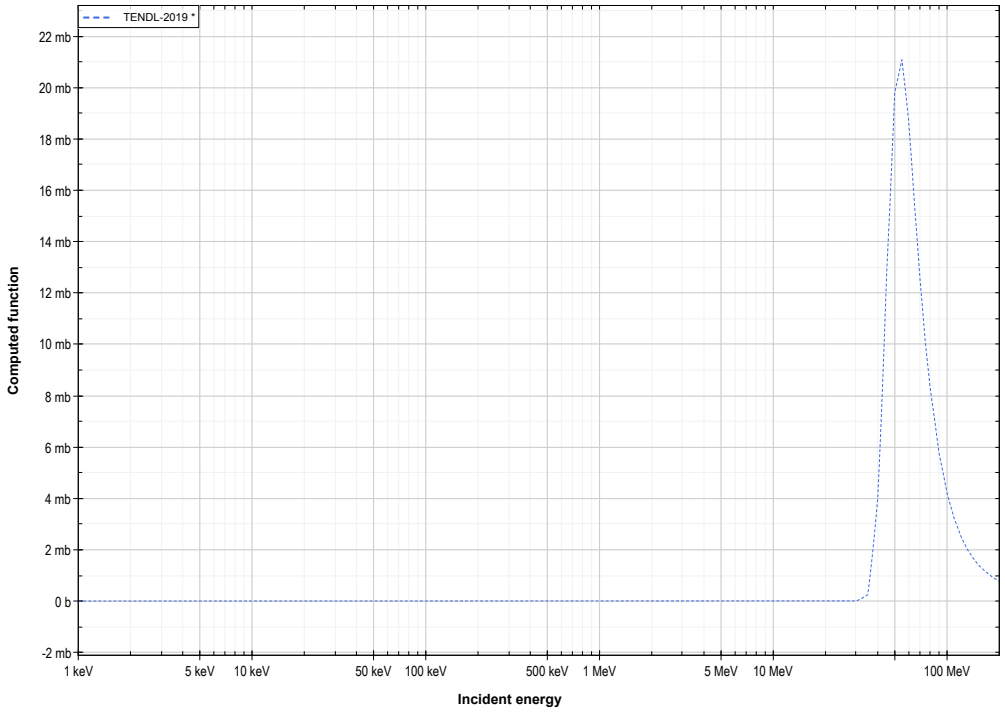
Reaction	Q-Value
Tl203(He3,4n)Bi202	-22374.45 keV

<< 79-Au-197	**81-Tl-203**	83-Bi-209 >>
<< MT37 (^{3}He,4n)	**MT152 (^{3}He,5n) or MT5 (Bi201 production)**	MT153 (^{3}He,6n) >>

Tl203 (^{3}He,5n) or Bi201 production log-log



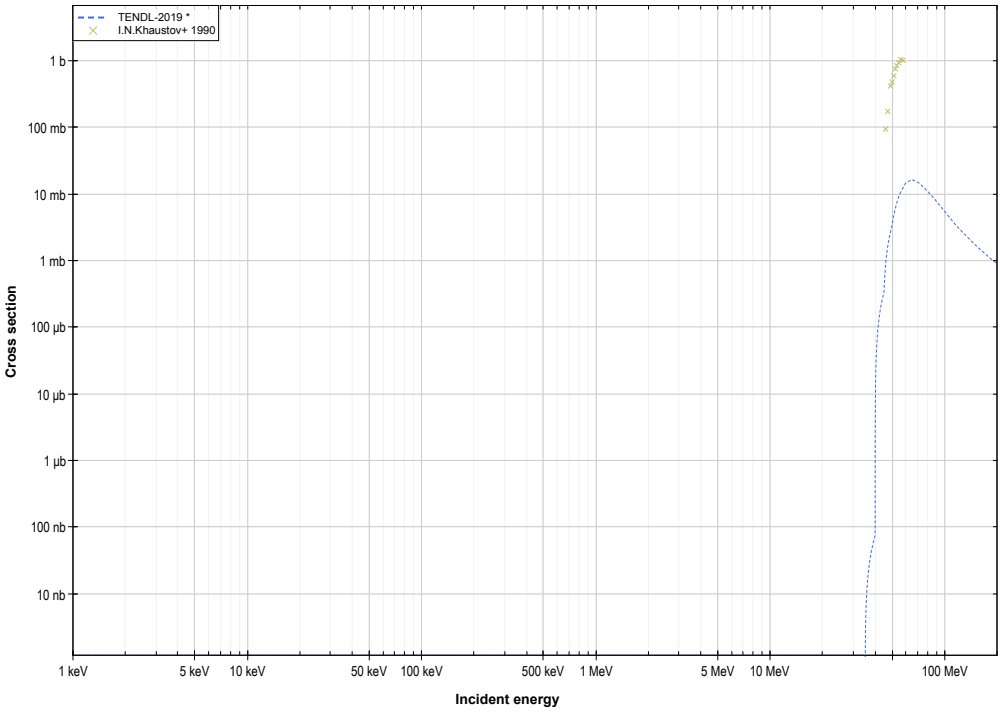
Tl203 (^{3}He,5n) or Bi201 production lin-log



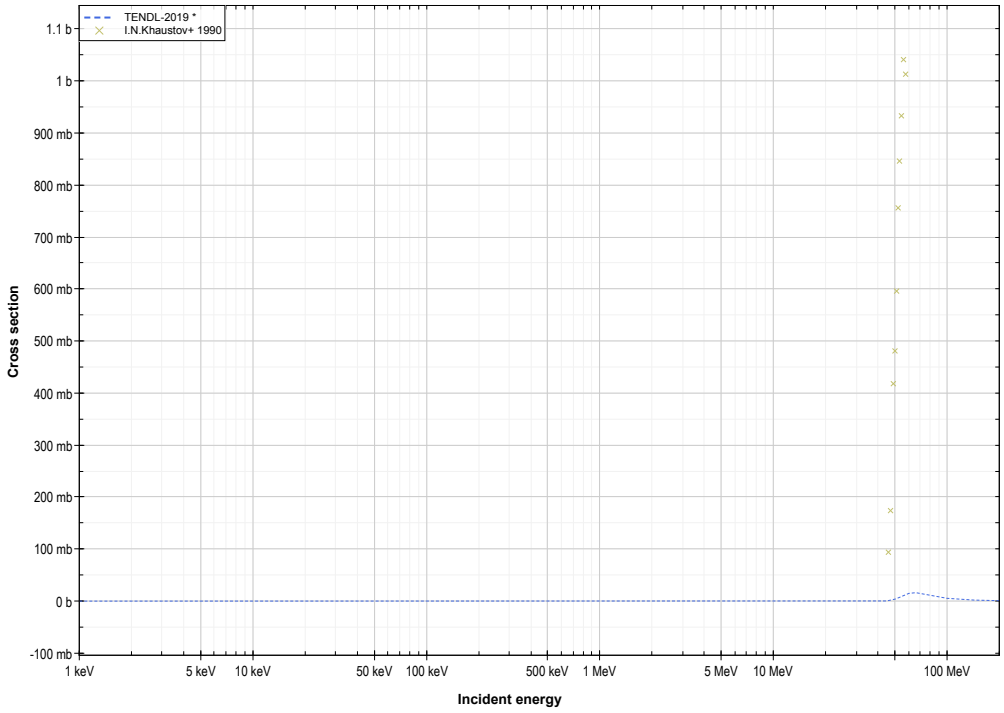
Reaction	Q-Value
Tl203(He3,5n)Bi201	-29770.77 keV

<< 79-Au-197	**81-Tl-203**	81-Tl-205 >>
<< MT152 (^{3}He,5n)	**MT153 (^{3}He,6n) or MT5 (Bi200 production)**	81-Tl-205 MT153 (^{3}He,6n) >>

Tl203 (^{3}He,6n) or Bi200 production log-log



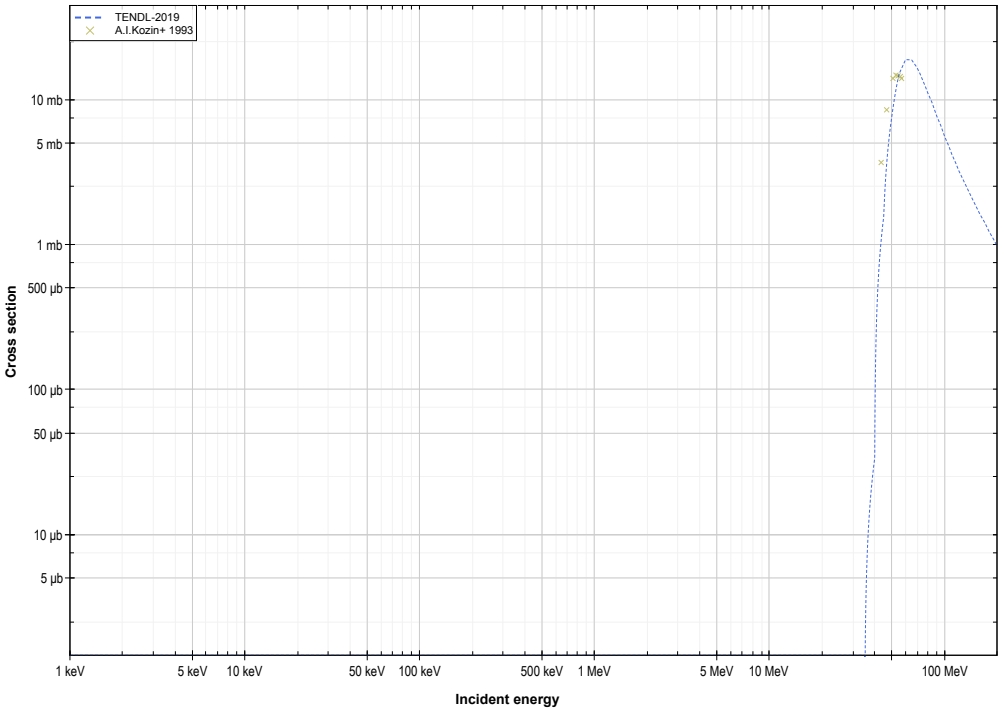
Tl203 (^{3}He,6n) or Bi200 production lin-log



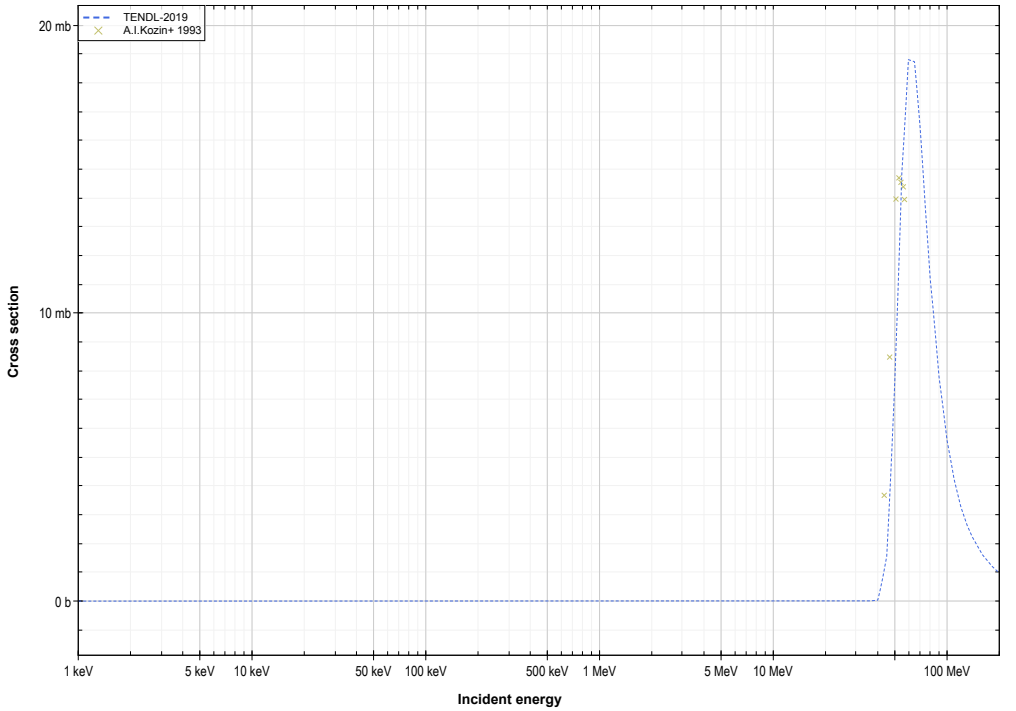
Reaction	Q-Value
Tl203(He3,6n)Bi200	-38887.08 keV

<< 81-Tl-203	**81-Tl-205**	83-Bi-209 >>
<< 81-Tl-203 MT153 (^{3}He,6n)	**MT153 (^{3}He,6n) or MT5 (Bi202 production)**	MT160 (^{3}He,7n) >>

Tl205 (^{3}He,6n) or Bi202 production log-log



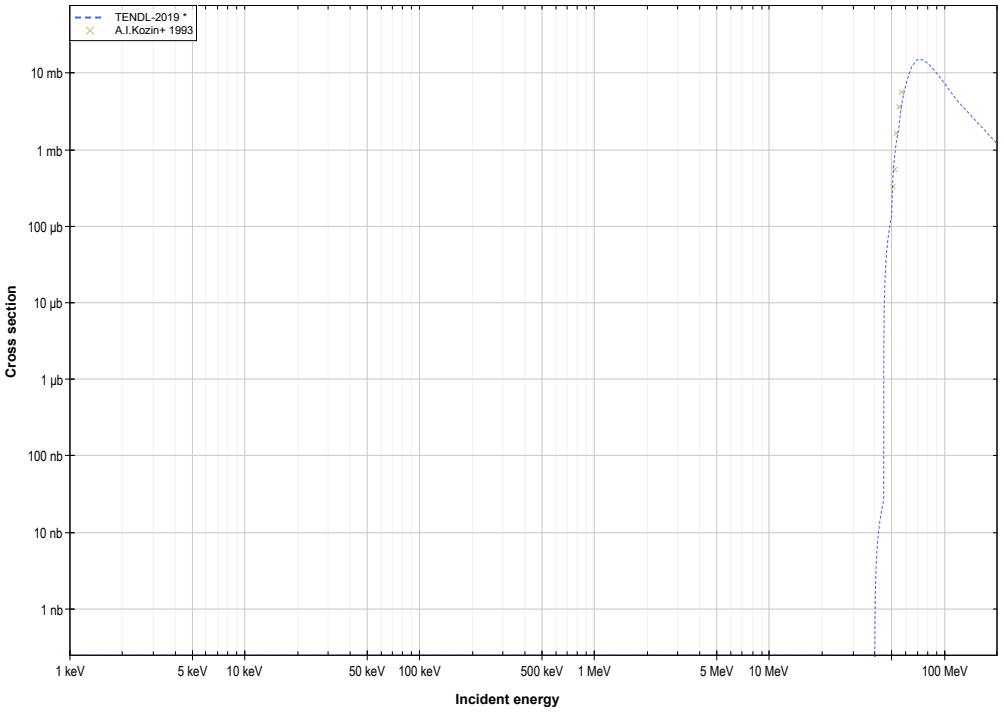
Tl205 (^{3}He,6n) or Bi202 production lin-log



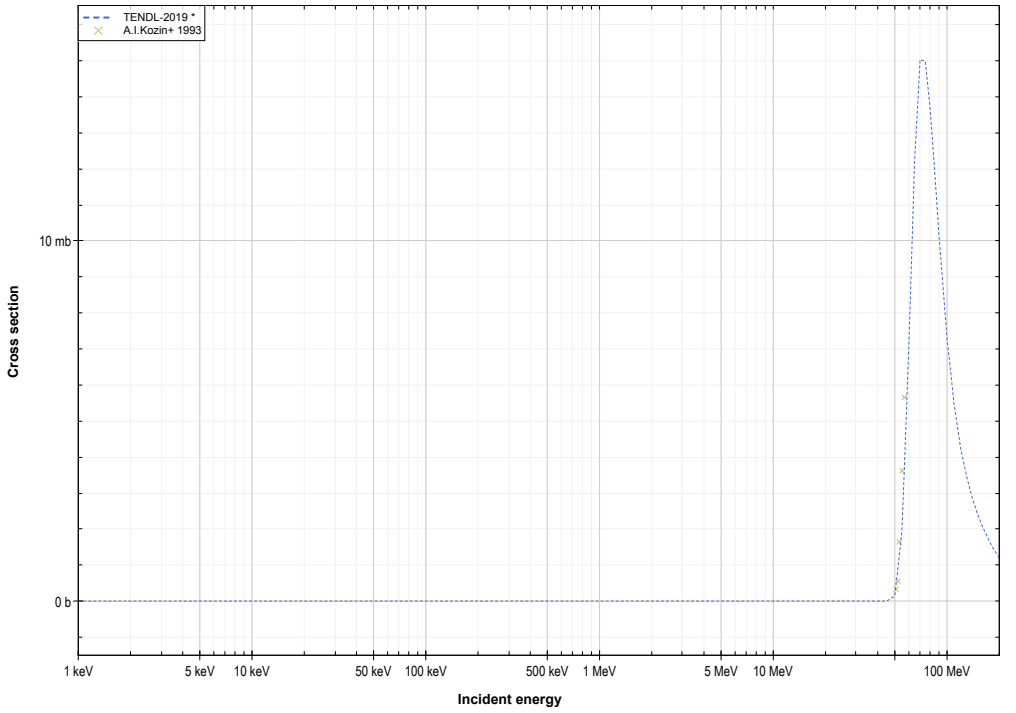
Reaction	Q-Value
Tl205(He3,6n)Bi202	-36576.58 keV

<< 73-Ta-181	**81-Tl-205**	83-Bi-209 >>
<< MT153 (^{3}He,6n)	**MT160 (^{3}He,7n) or MT5 (Bi201 production)**	MT161 (^{3}He,8n) >>

Tl205 (^{3}He,7n) or Bi201 production log-log



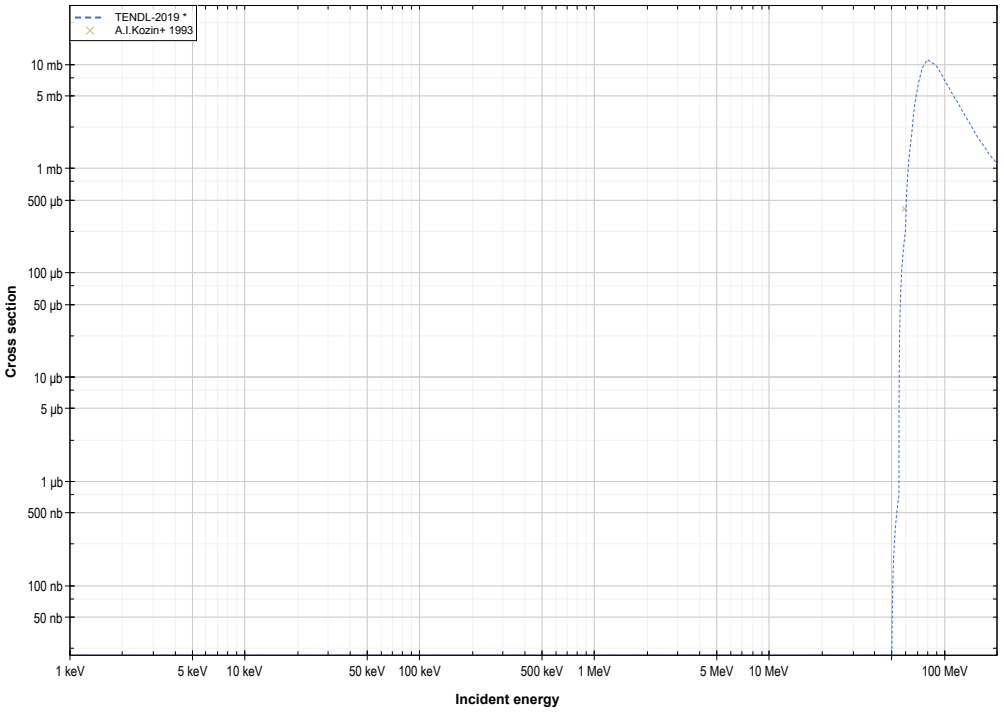
Tl205 (^{3}He,7n) or Bi201 production lin-log



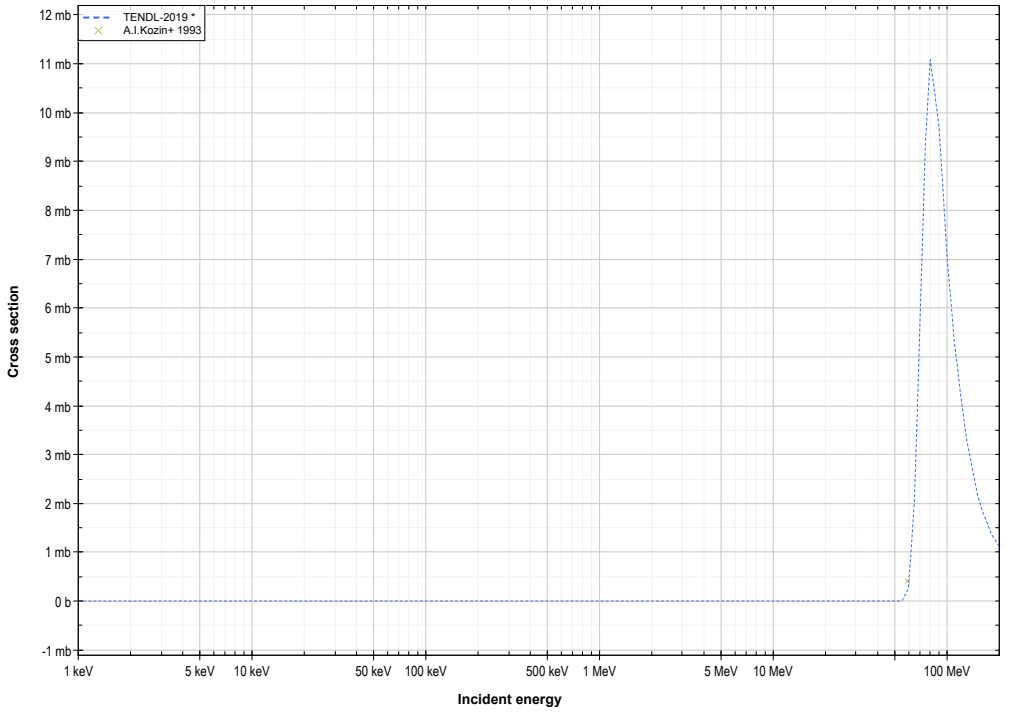
Reaction	Q-Value
Tl205(He3,7n)Bi201	-43972.90 keV

	81-Tl-205	
<< MT160 (^{3}He,7n)	**MT161 (^{3}He,8n) or MT5 (Bi200 production)**	82-Pb-207 MT16 (^{3}He,2n) >>

Tl205 (^{3}He,8n) or Bi200 production log-log



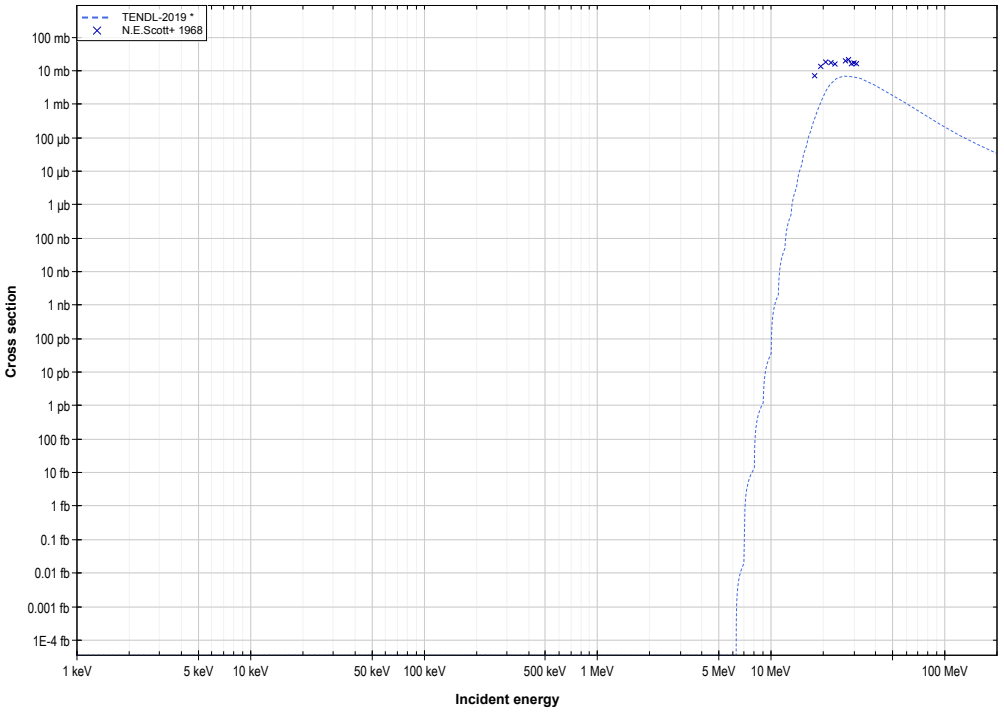
Tl205 (^{3}He,8n) or Bi200 production lin-log



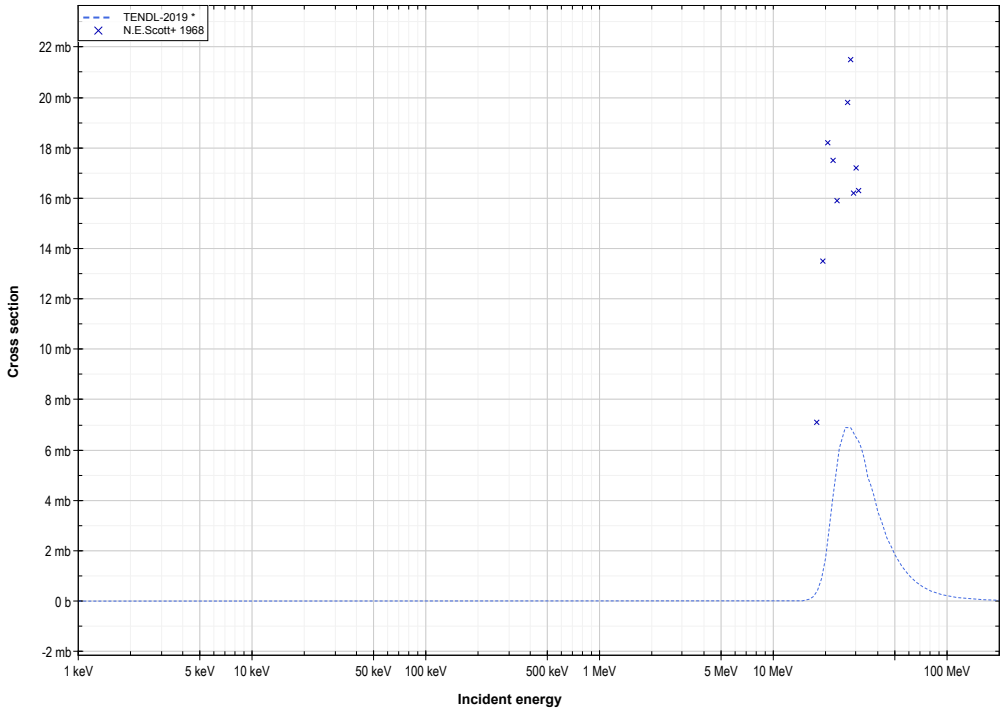
Reaction	Q-Value
Tl205(He3,8n)Bi200	-53089.22 keV

<< 79-Au-197	**82-Pb-207**	83-Bi-209 >>
<< 81-Tl-205 MT161 (^{3}He,8n)	**MT16 (^{3}He,2n) or MT5 (Po208 production)**	MT17 (^{3}He,3n) >>

Pb207 (^{3}He,2n) or Po208 production log-log



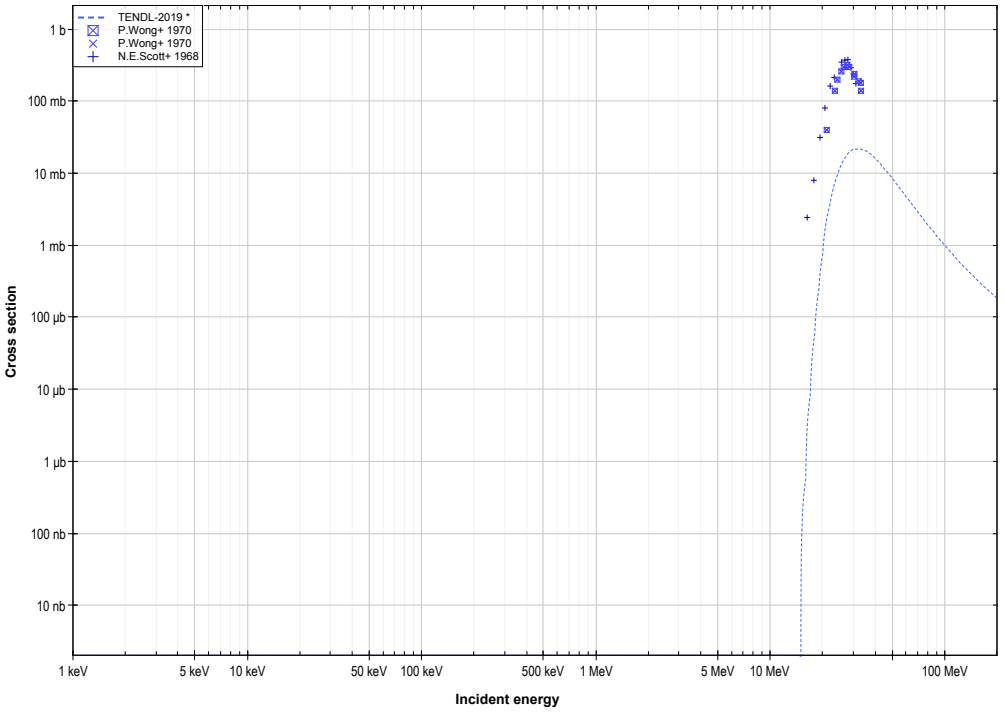
Pb207 (^{3}He,2n) or Po208 production lin-log



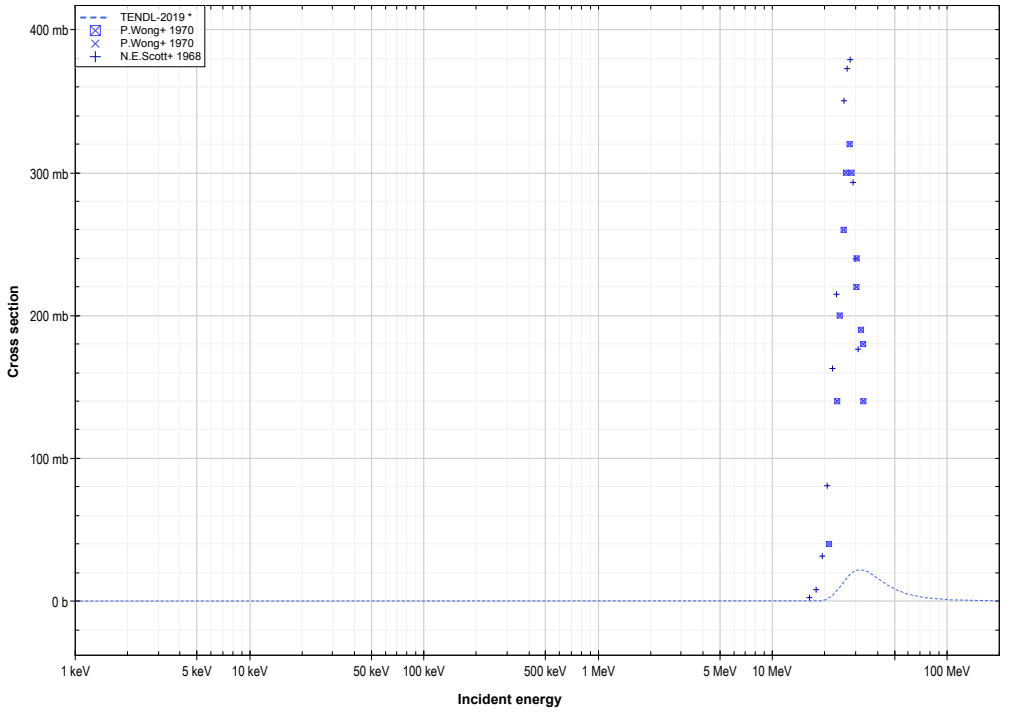
Reaction	Q-Value
Pb207(He3,2n)Po208	-6193.82 keV

<< 79-Au-197	**82-Pb-207**	82-Pb-208 >>
<< MT16 (^{3}He,2n)	**MT17 (^{3}He,3n) or MT5 (Po207 production)**	MT37 (^{3}He,4n) >>

Pb207 (^{3}He,3n) or Po207 production log-log



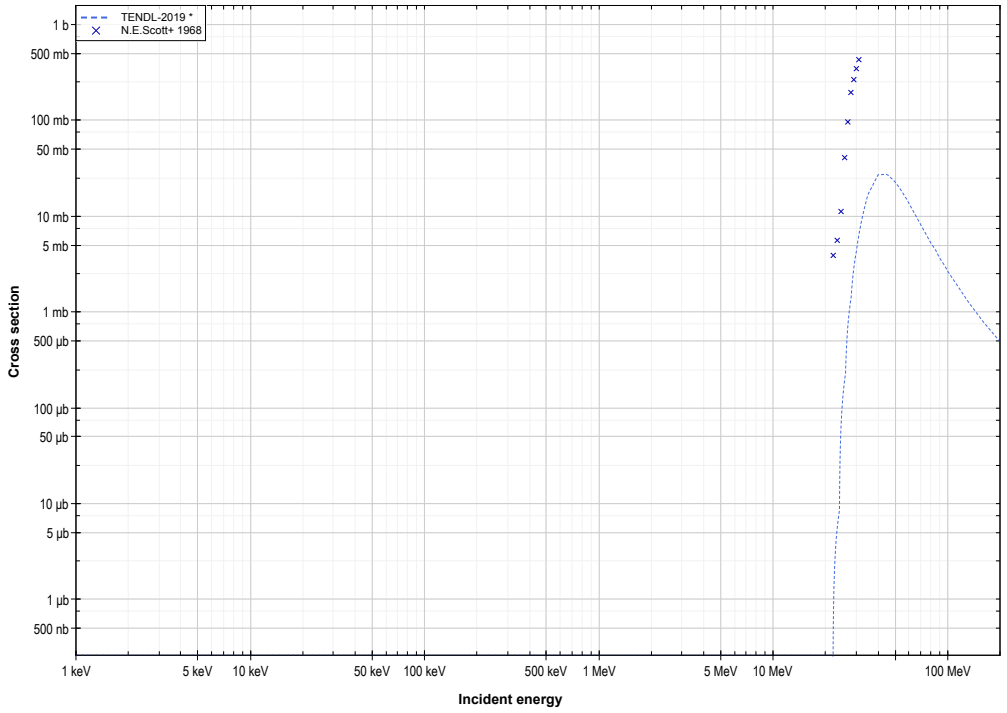
Pb207 (^{3}He,3n) or Po207 production lin-log



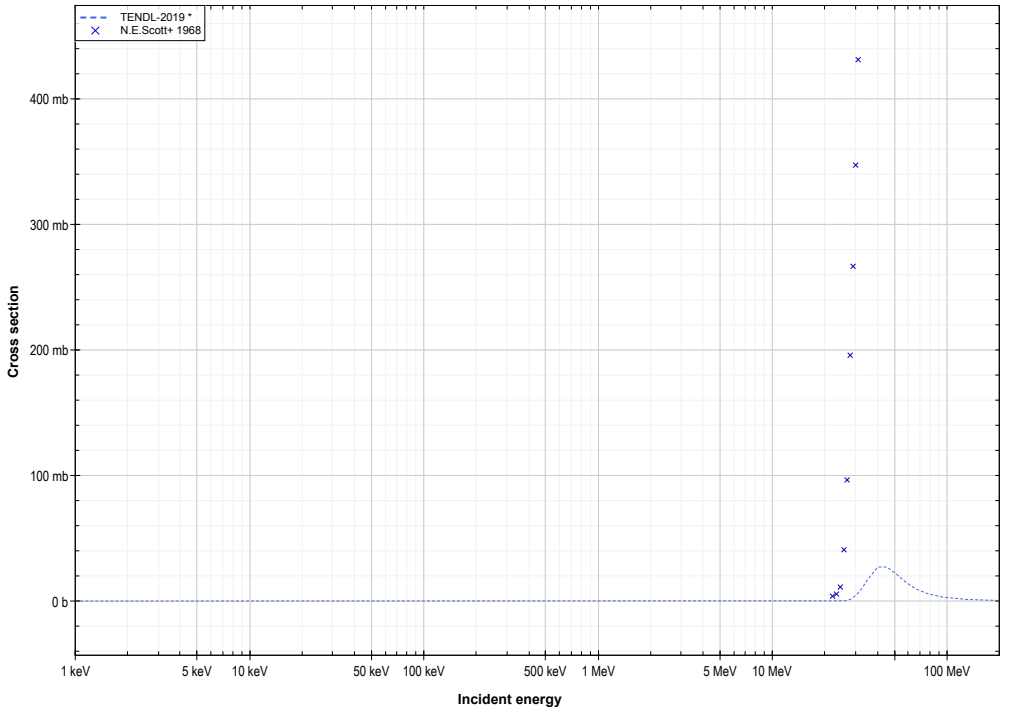
Reaction	Q-Value
Pb207(He3,3n)Po207	-14588.73 keV

<< 81-Tl-203	**82-Pb-207**	82-Pb-208 >>
<< MT17 (^{3}He,3n)	**MT37 (^{3}He,4n) or MT5 (Po206 production)**	82-Pb-208 MT4 (^{3}He,n) >>

Pb207 (^{3}He,4n) or Po206 production log-log



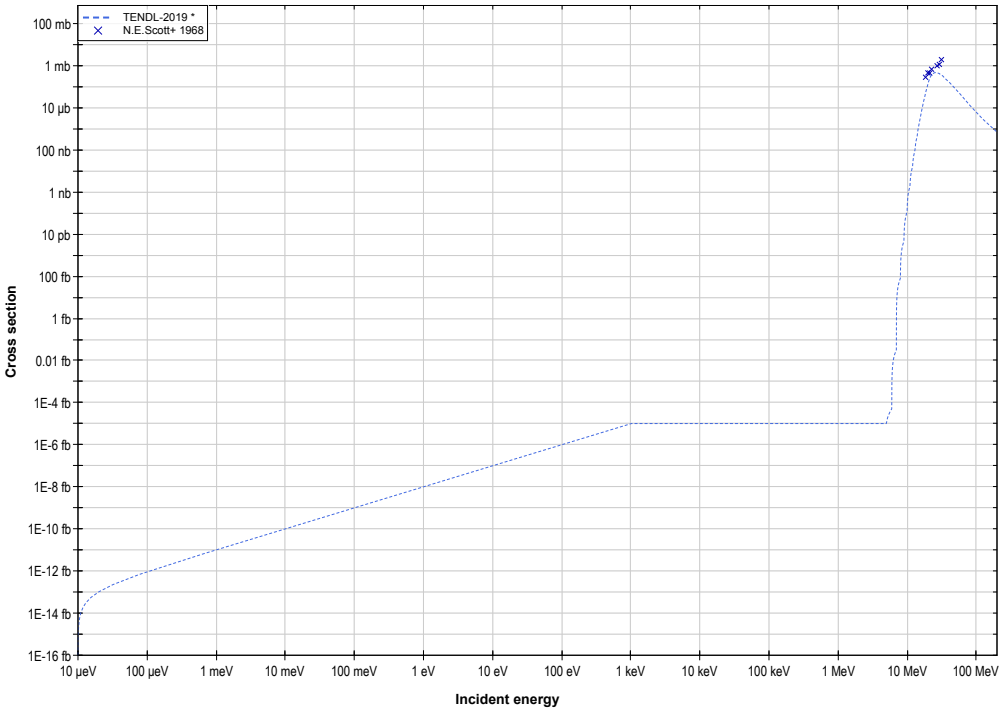
Pb207 (^{3}He,4n) or Po206 production lin-log



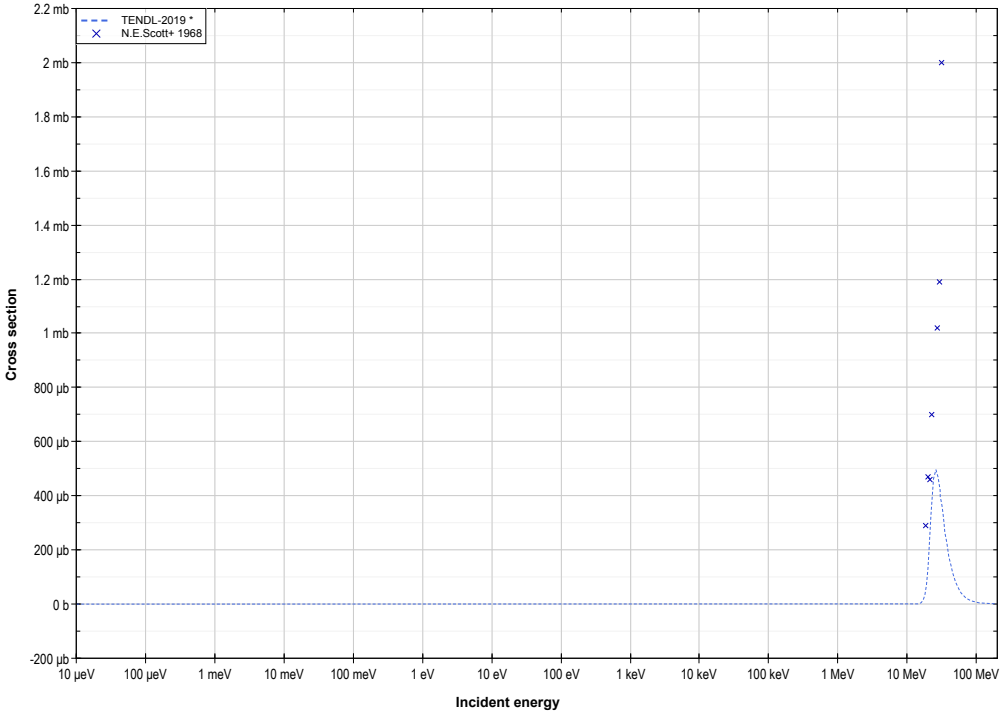
Reaction	Q-Value
Pb207(He3,4n)Po206	-21617.05 keV

<< 73-Ta-181	**82-Pb-208**	83-Bi-209 >>
<< 82-Pb-207 MT37 (^{3}He,4n)	**MT4 (^{3}He,n) or MT5 (Po210 production)**	MT17 (^{3}He,3n) >>

Pb208 (^{3}He,n) or Po210 production log-log



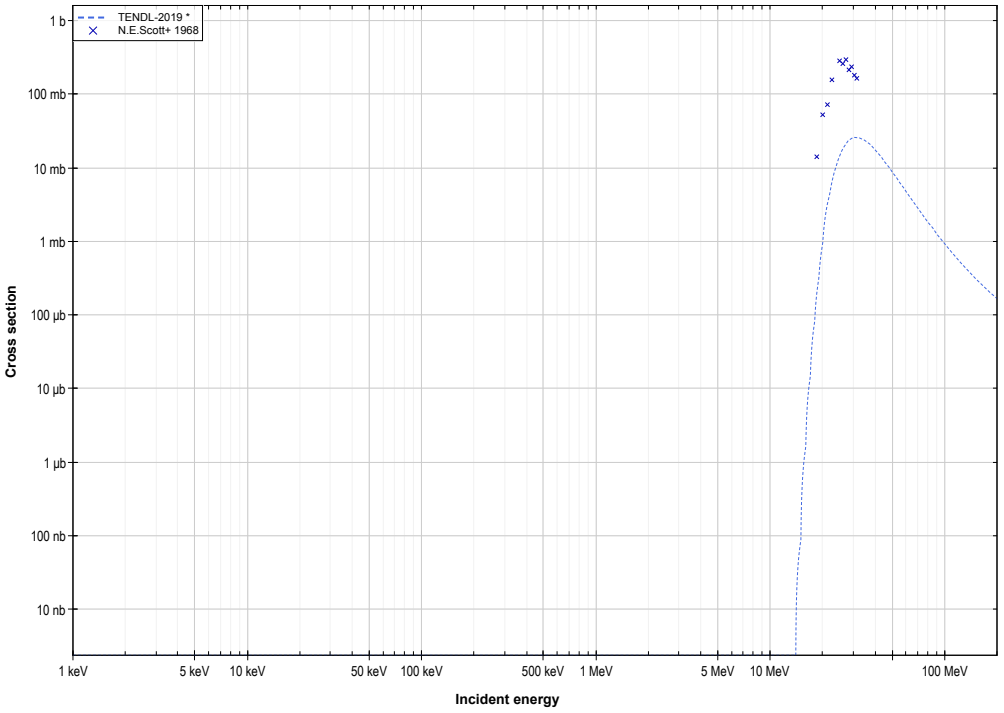
Pb208 (^{3}He,n) or Po210 production lin-log



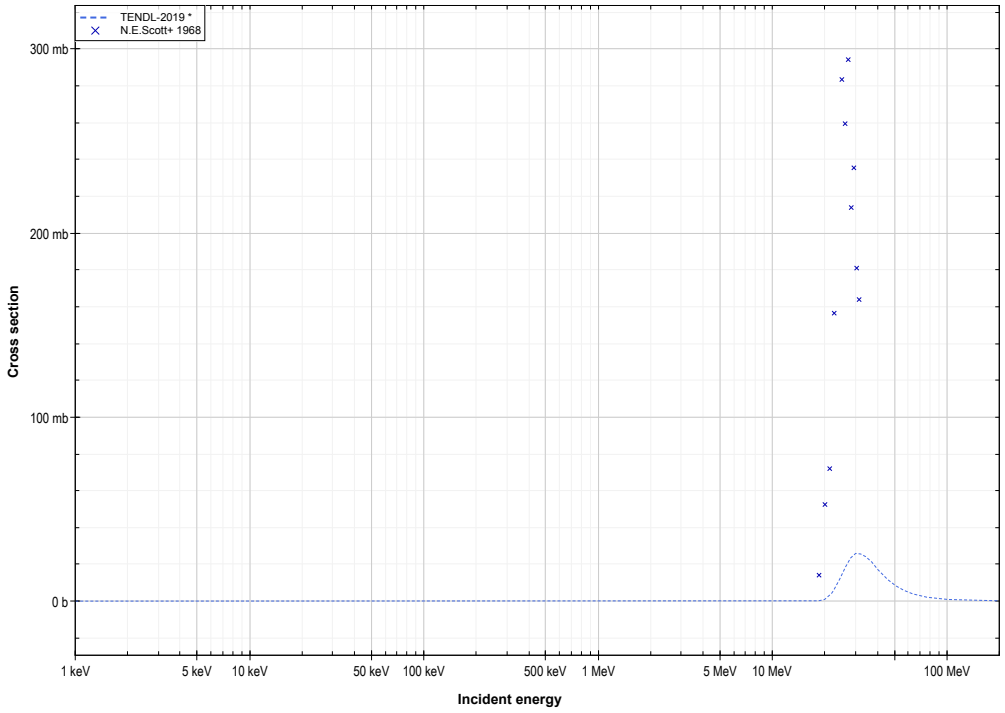
Reaction	Q-Value
Pb208(He3,n)Po210	1064.40 keV

<< 82-Pb-207	**82-Pb-208**	83-Bi-209 >>
<< MT4 (^{3}He,n)	**MT17 (^{3}He,3n) or MT5 (Po208 production)**	MT18 (^{3}He,fission) >>

Pb208 (^{3}He,3n) or Po208 production log-log



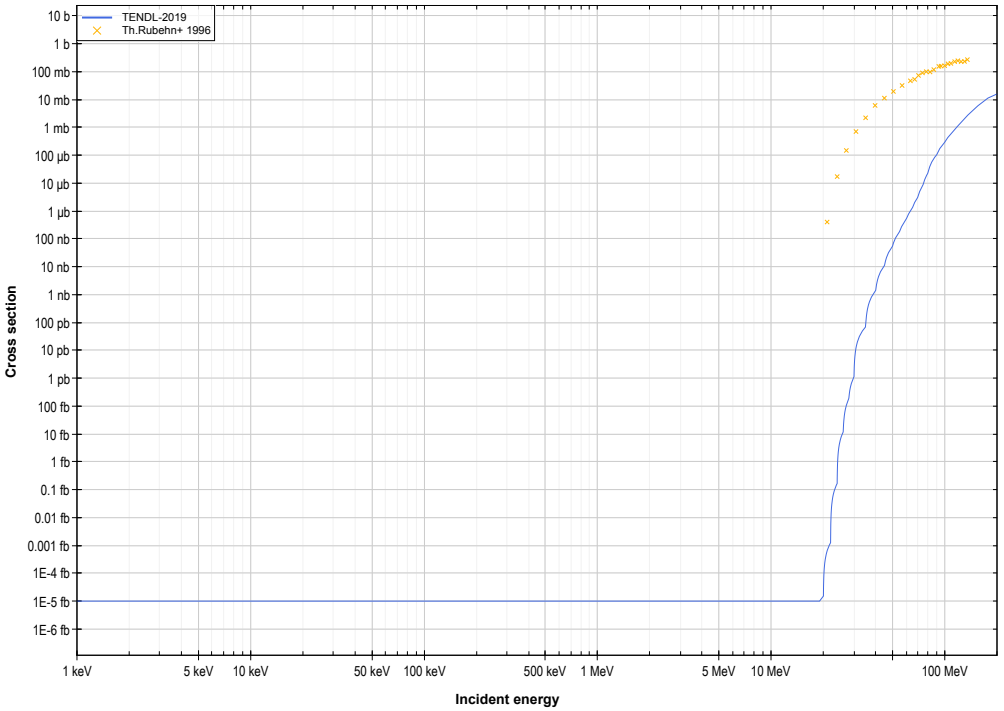
Pb208 (^{3}He,3n) or Po208 production lin-log



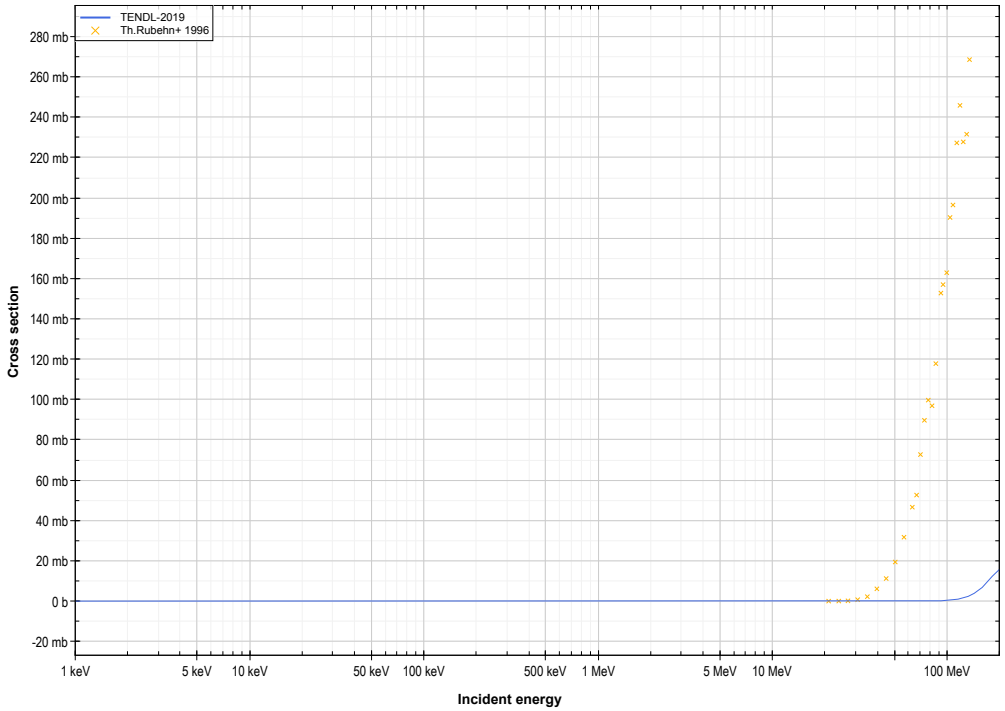
Reaction	Q-Value
Pb208(He3,3n)Po208	-13561.73 keV

<< 79-Au-197	**82-Pb-208**	83-Bi-209 >>
<< MT17 (³He,3n)	**MT18 (³He,fission)**	MT37 (³He,4n) >>

Pb208 (³He,fission) log-log

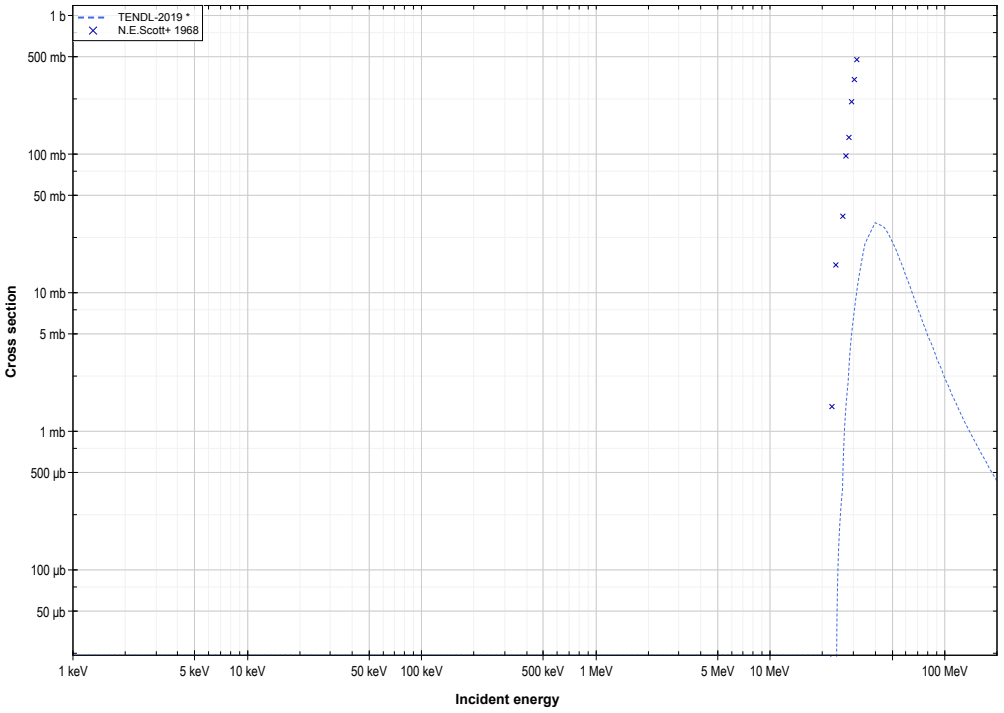


Pb208 (³He,fission) lin-log

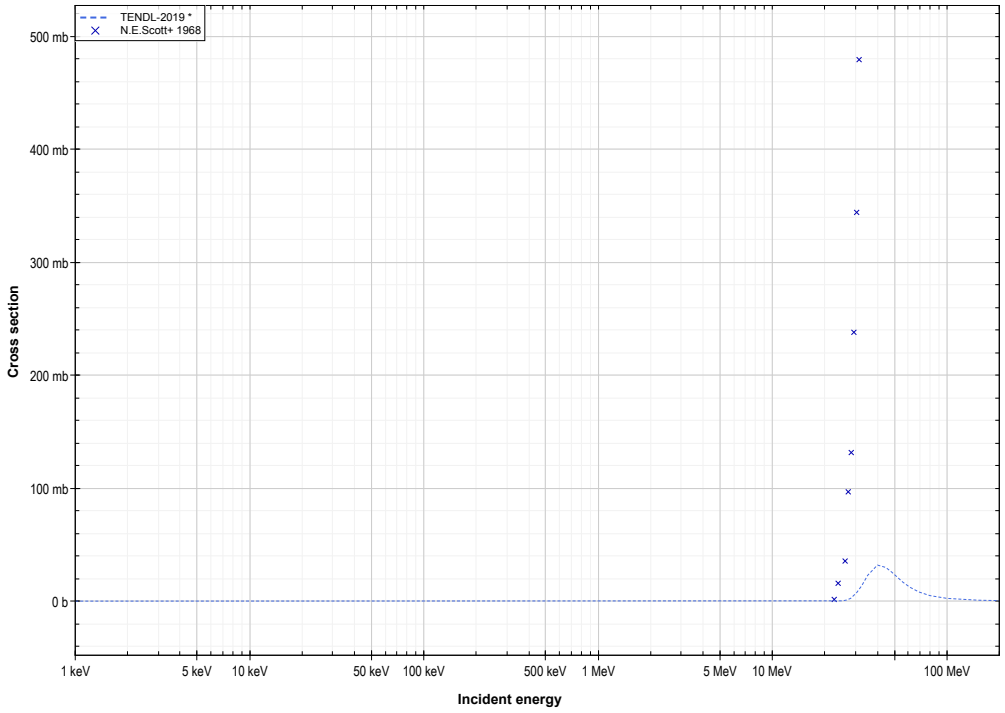


<< 82-Pb-207	**82-Pb-208**	83-Bi-209 >>
<< MT18 (³He,fission)	**MT37 (³He,4n) or MT5 (Po207 production)**	83-Bi-209 MT4 (³He,n) >>

Pb208 (³He,4n) or Po207 production log-log



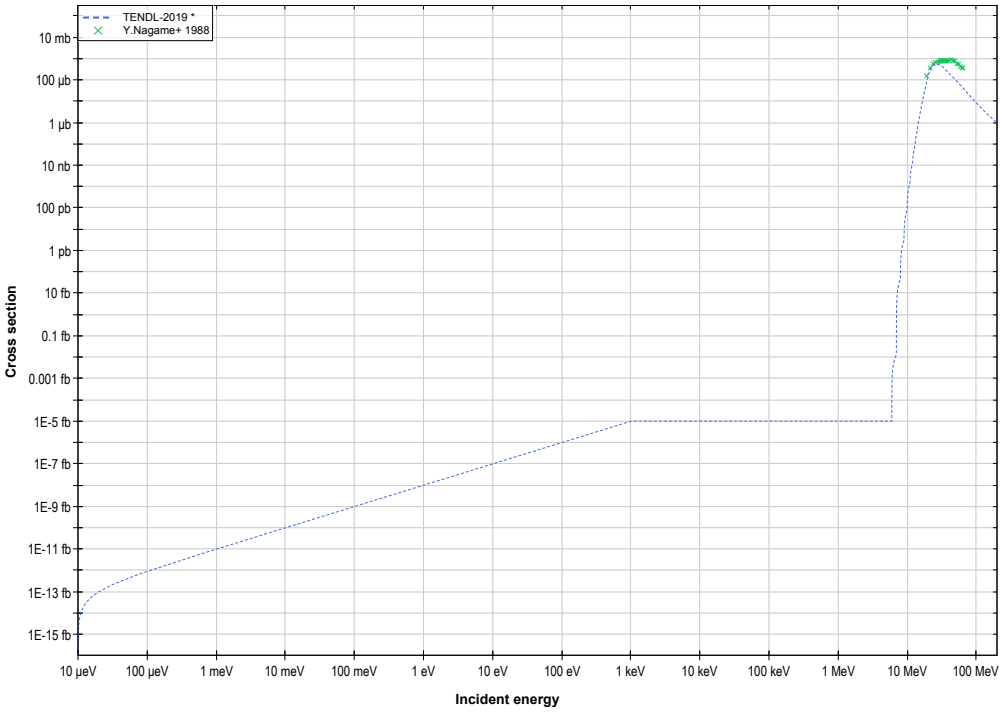
Pb208 (³He,4n) or Po207 production lin-log



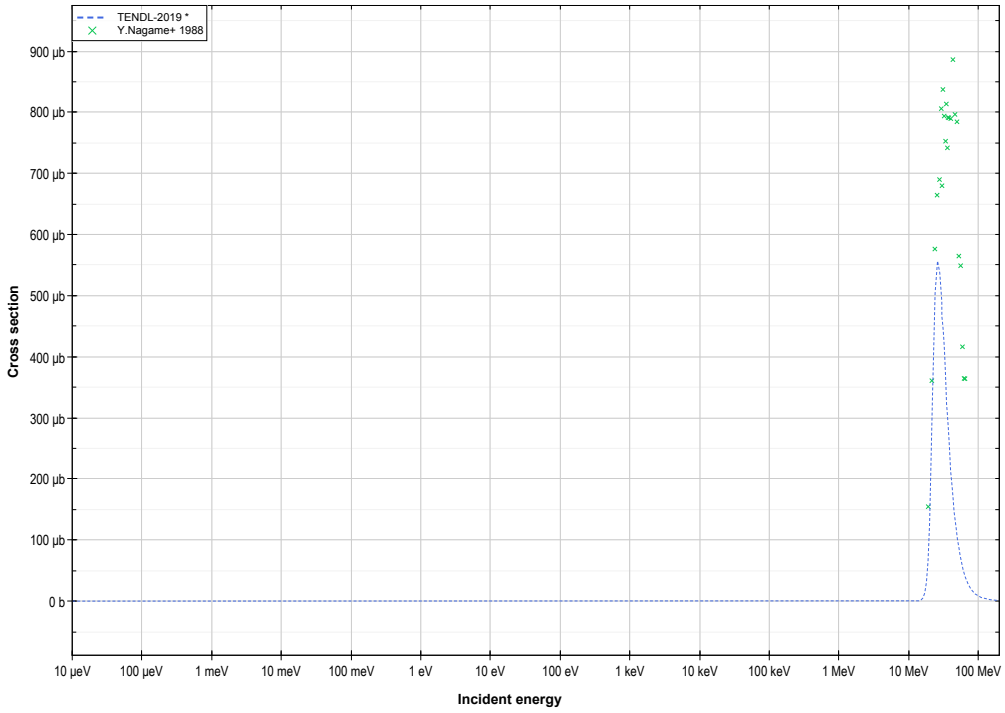
Reaction	Q-Value
Pb208(He3,4n)Po207	-21956.65 keV

<< 82-Pb-208	**83-Bi-209**	92-U-235 >>
<< 82-Pb-208 MT37 (^{3}He,4n)	**MT4 (^{3}He,n) or MT5 (At211 production)**	MT16 (^{3}He,2n) >>

Bi209 (^{3}He,n) or At211 production log-log



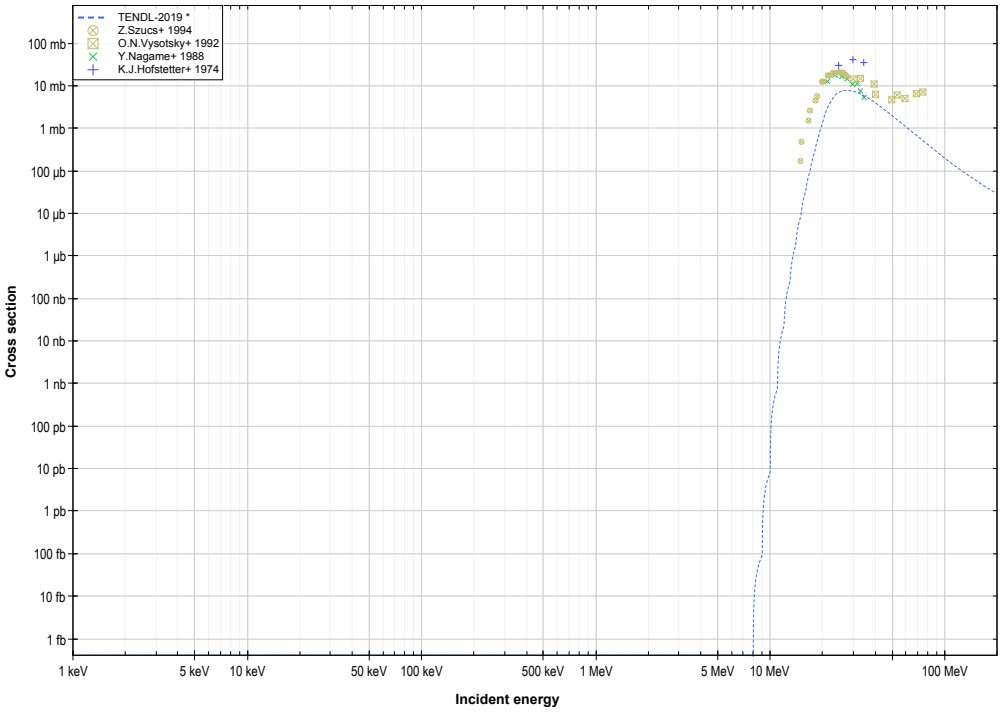
Bi209 (^{3}He,n) or At211 production lin-log



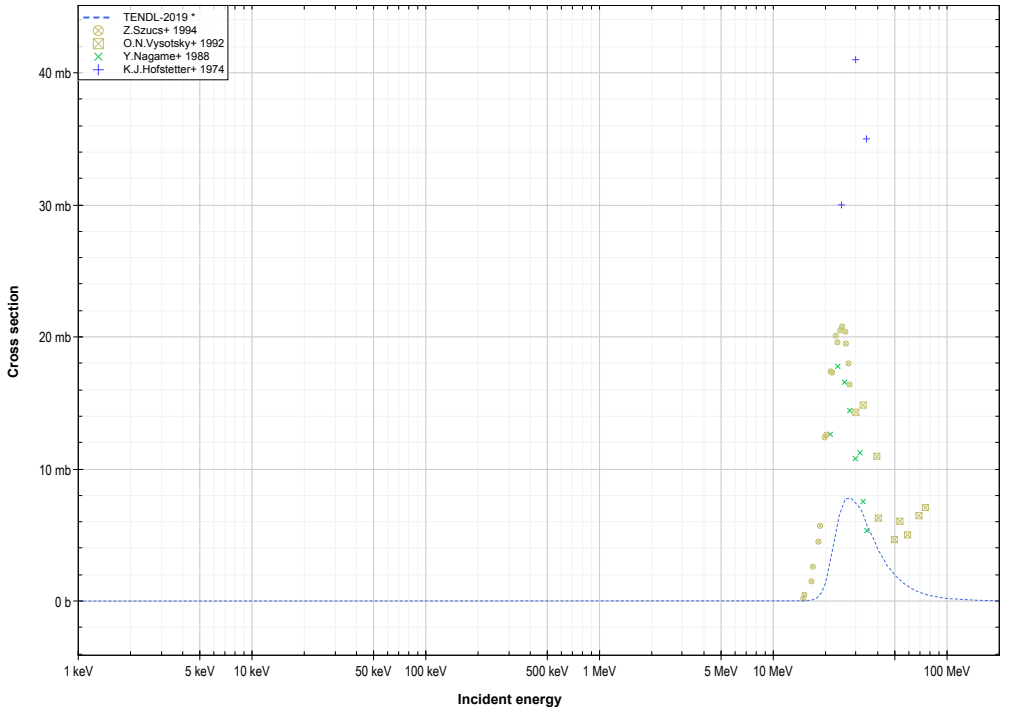
Reaction	Q-Value
Bi209(He3,n)At211	248.50 keV

<< 82-Pb-207	**83-Bi-209**	92-U-235 >>
<< MT4 (^{3}He,n)	**MT16 (^{3}He,2n) or MT5 (At210 production)**	MT17 (^{3}He,3n) >>

Bi209 (^{3}He,2n) or At210 production log-log



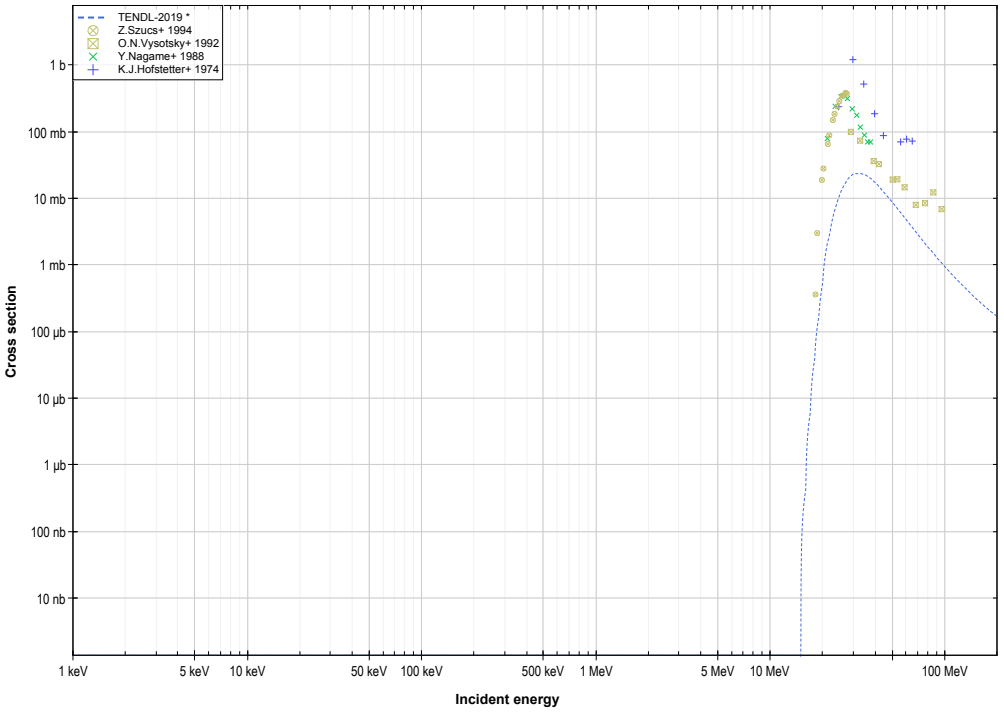
Bi209 (^{3}He,2n) or At210 production lin-log



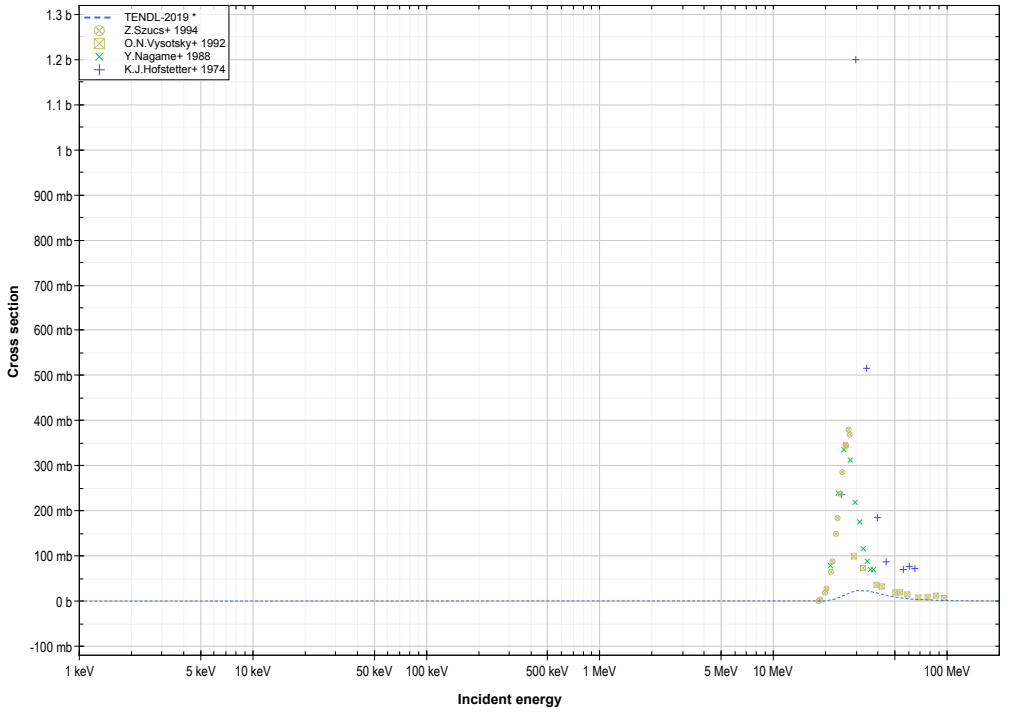
Reaction	Q-Value
Bi209(He3,2n)At210	-7498.12 keV

<< 82-Pb-208	**83-Bi-209**	90-Th-230 >>
<< MT16 (³He,2n)	**MT17 (³He,3n) or MT5 (At209 production)**	MT18 (³He,fission) >>

Bi209 (³He,3n) or At209 production log-log



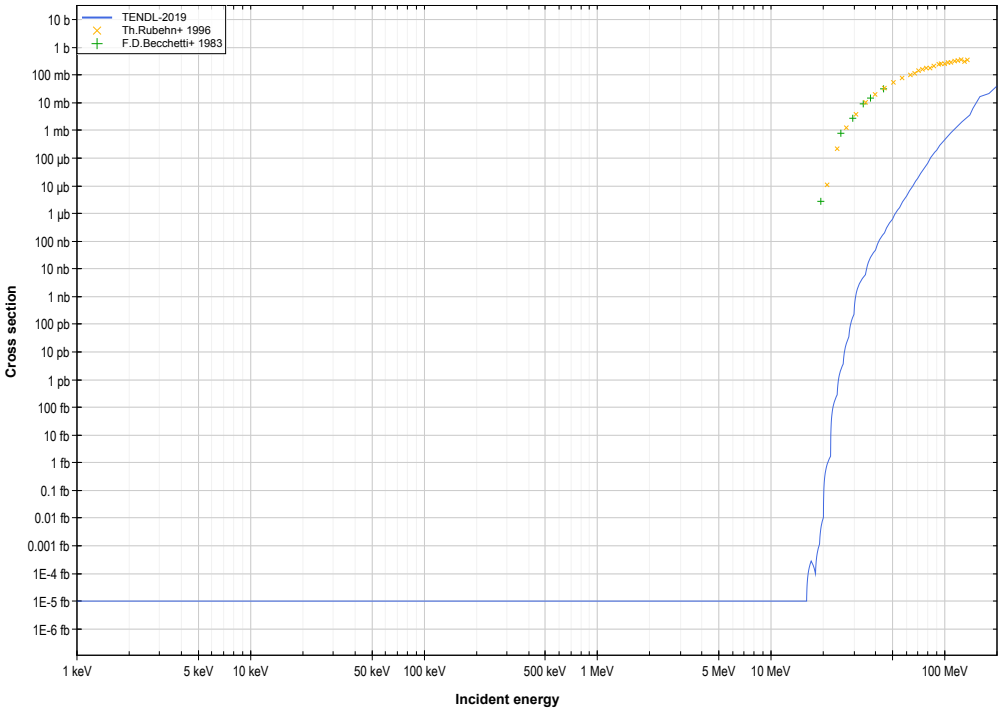
Bi209 (³He,3n) or At209 production lin-log



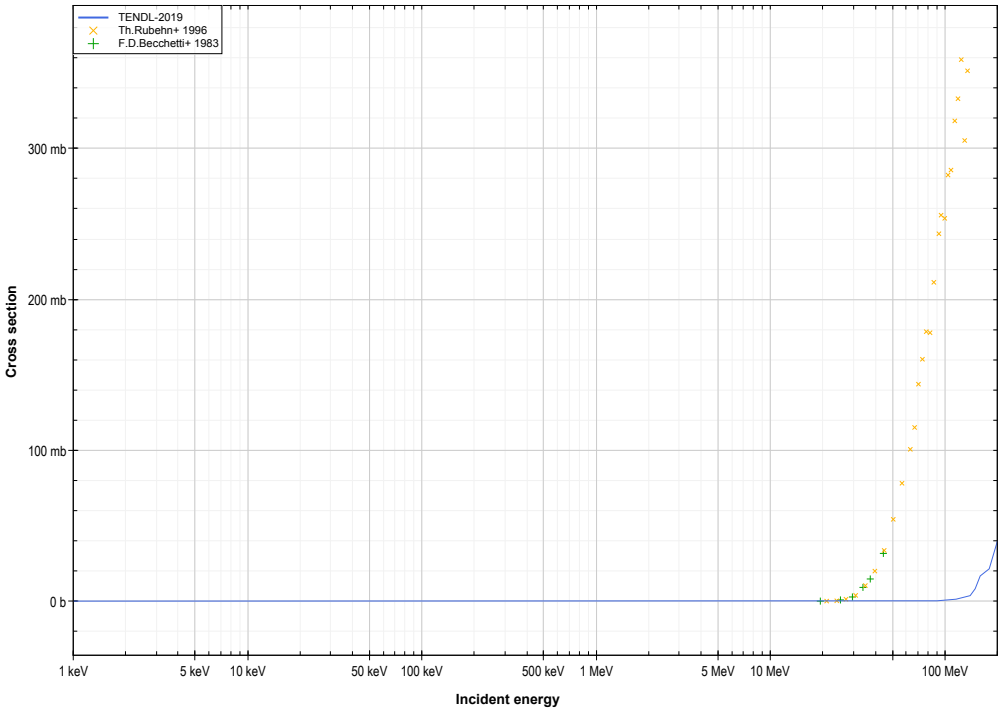
Reaction	Q-Value
Bi209(He3,3n)At209	-14658.43 keV

<< 82-Pb-208	**83-Bi-209**	90-Th-232 >>
<< MT17 (³He,3n)	**MT18 (³He,fission)**	MT24 (³He,2n+α) >>

Bi209 (³He,fission) log-log

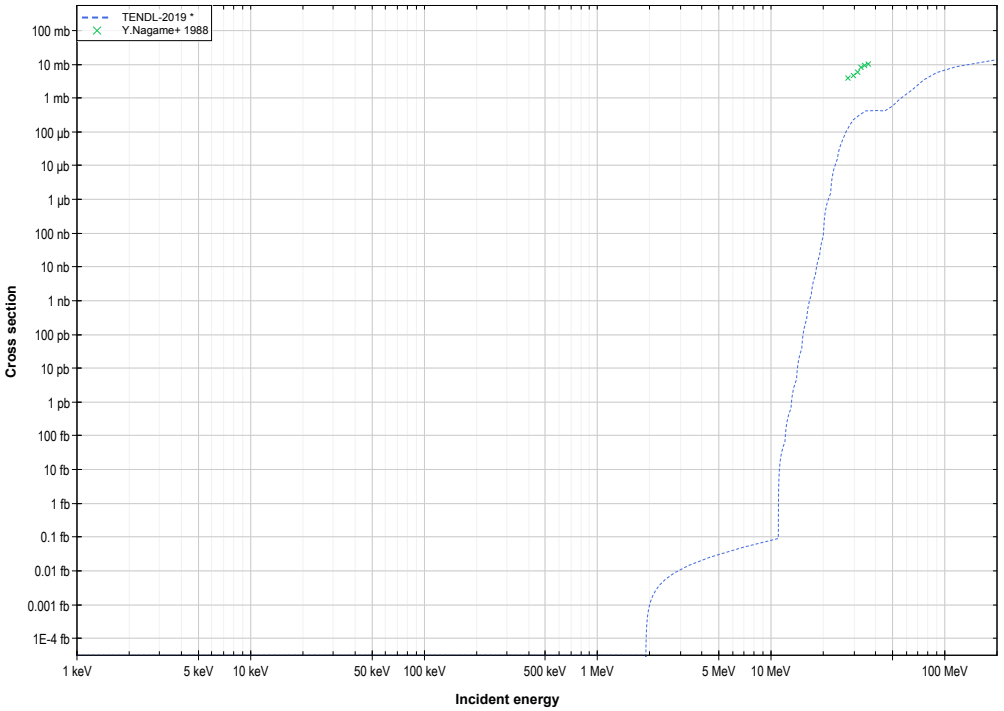


Bi209 (³He,fission) lin-log

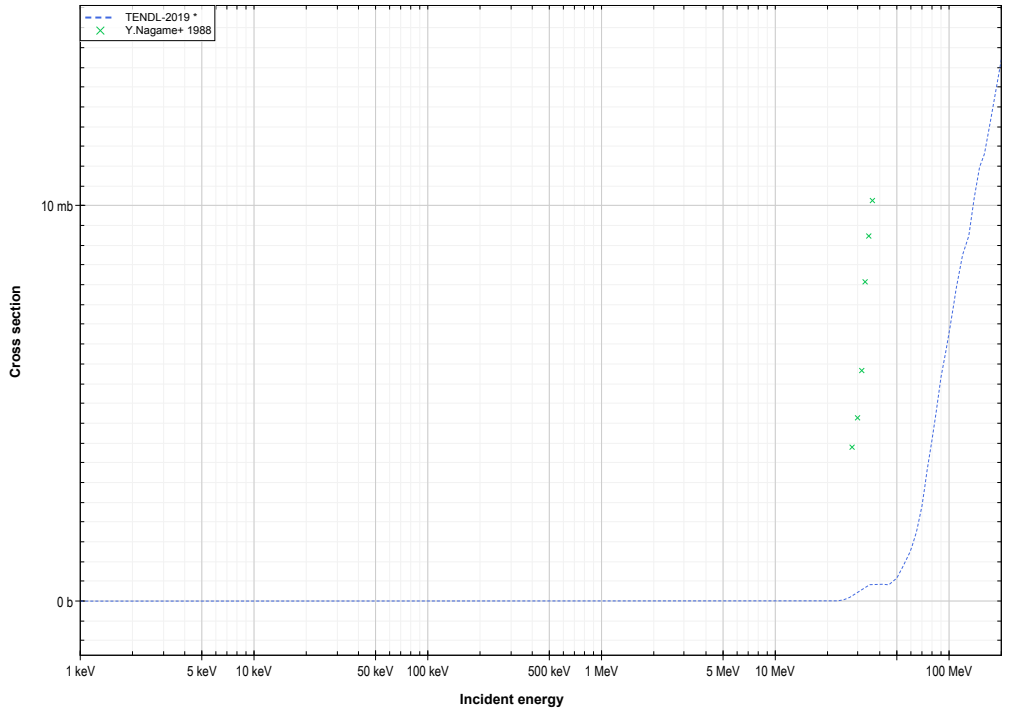


<< 73-Ta-181	**83-Bi-209**	
<< MT18 (³He,fission)	**MT24 (³He,2n+α) or MT5 (Bi206 production)**	MT28 (³He,n+p) >>

Bi209 (³He,2n+α) or Bi206 production log-log



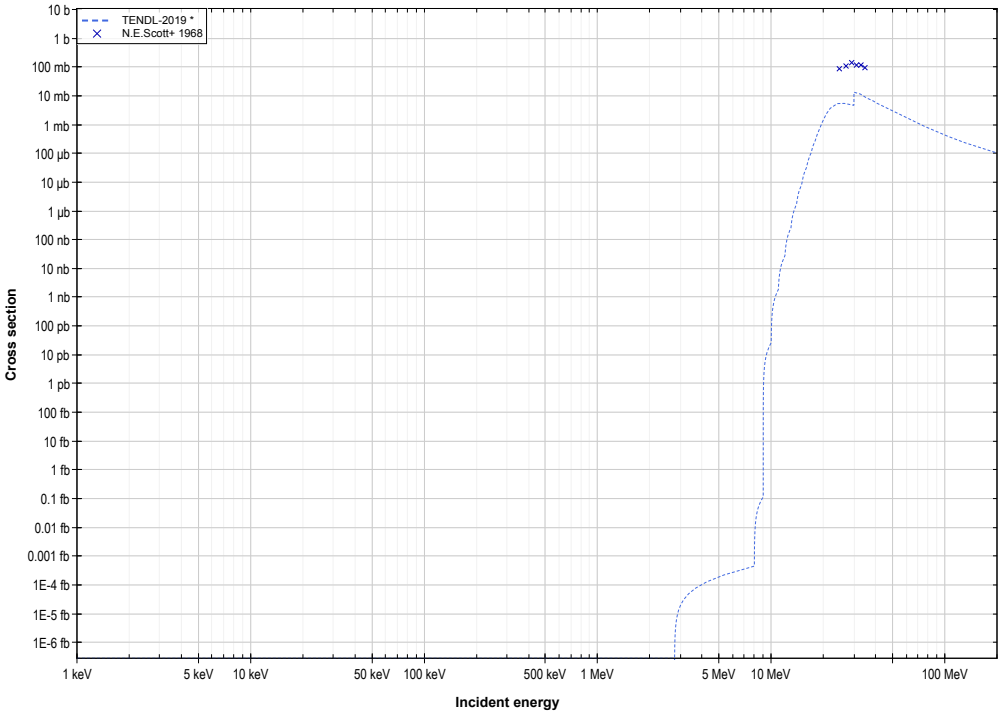
Bi209 (³He,2n+α) or Bi206 production lin-log



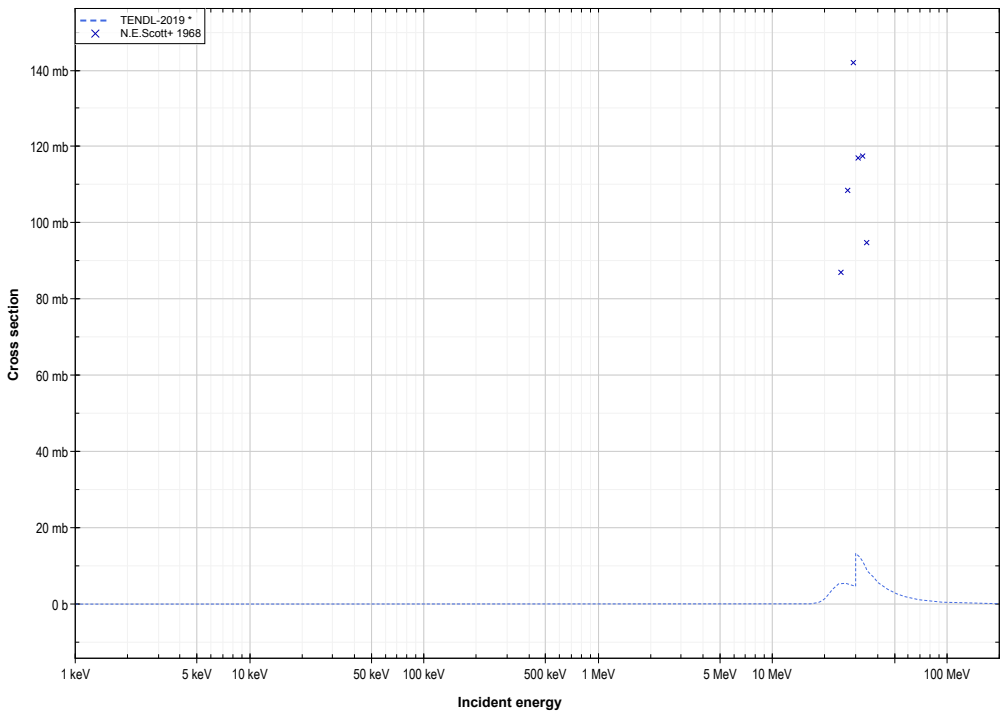
Reaction	Q-Value
Bi209(He3,2n+α)Bi206	-1867.03 keV
Bi209(He3,2t)Bi206	-13199.10 keV
Bi209(He3,n+d+t)Bi206	-19456.33 keV
Bi209(He3,2n+p+t)Bi206	-21680.90 keV
Bi209(He3,3n+He3)Bi206	-22444.65 keV
Bi209(He3,2n+2d)Bi206	-25713.56 keV
Bi209(He3,3n+p+d)Bi206	-27938.13 keV
Bi209(He3,4n+2p)Bi206	-30162.69 keV

<< 74-W-183	**83-Bi-209**	93-Np-237 >>
<< MT24 (^{3}He,2n+α)	**MT28 (^{3}He,n+p) or MT5 (Po210 production)**	MT37 (^{3}He,4n) >>

Bi209 (^{3}He,n+p) or Po210 production log-log



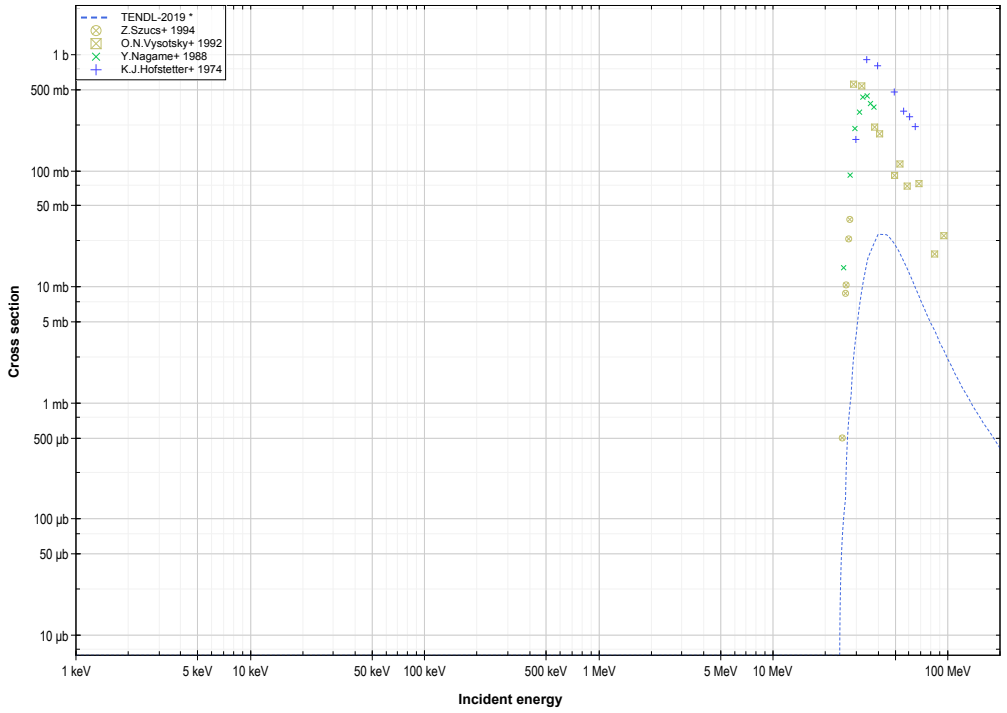
Bi209 (^{3}He,n+p) or Po210 production lin-log



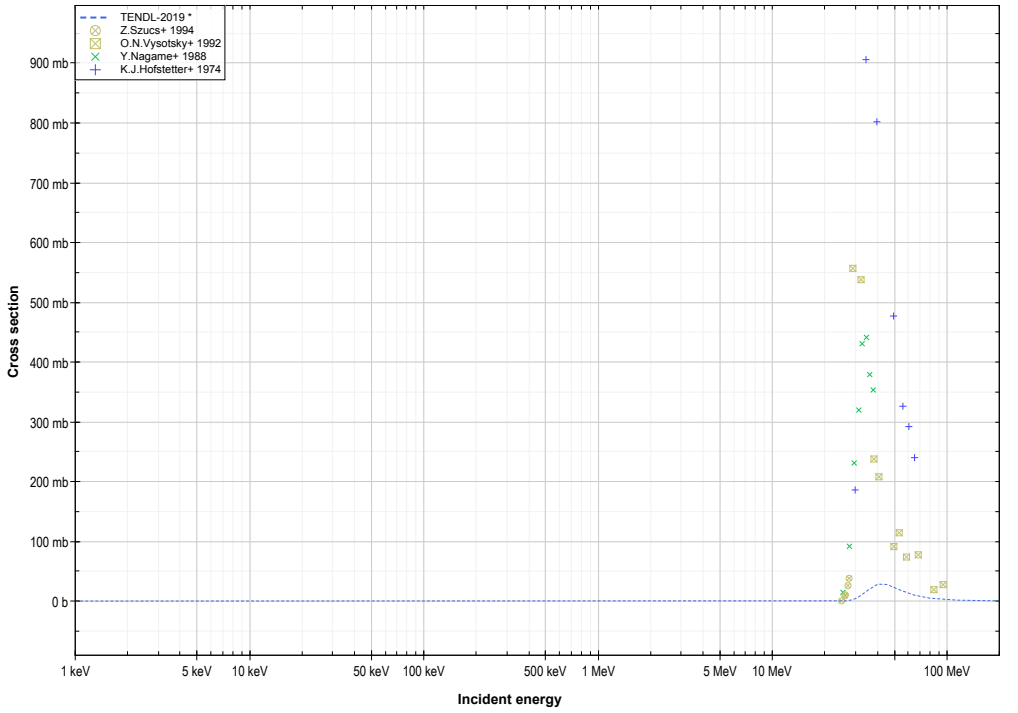
Reaction	Q-Value
Bi209(He3,d)Po210	-510.10 keV
Bi209(He3,n+p)Po210	-2734.67 keV

<< 82-Pb-208	**83-Bi-209**	92-U-235 >>
<< MT28 (^{3}He,n+p)	**MT37 (^{3}He,4n) or MT5 (At208 production)**	MT104 (^{3}He,d) >>

Bi209 (^{3}He,4n) or At208 production log-log



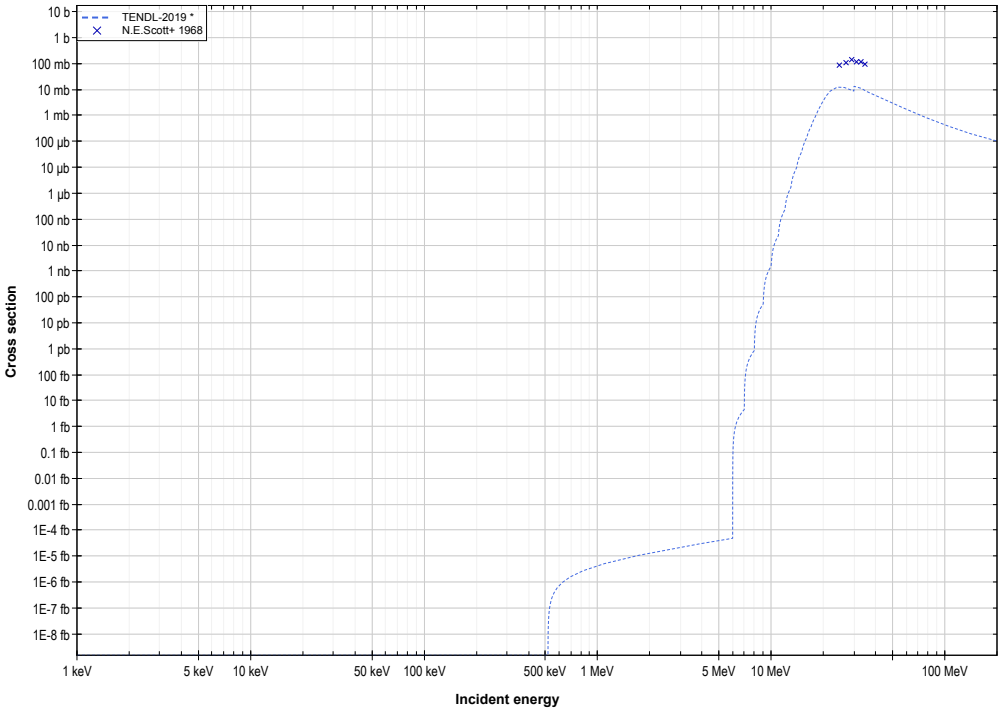
Bi209 (^{3}He,4n) or At208 production lin-log



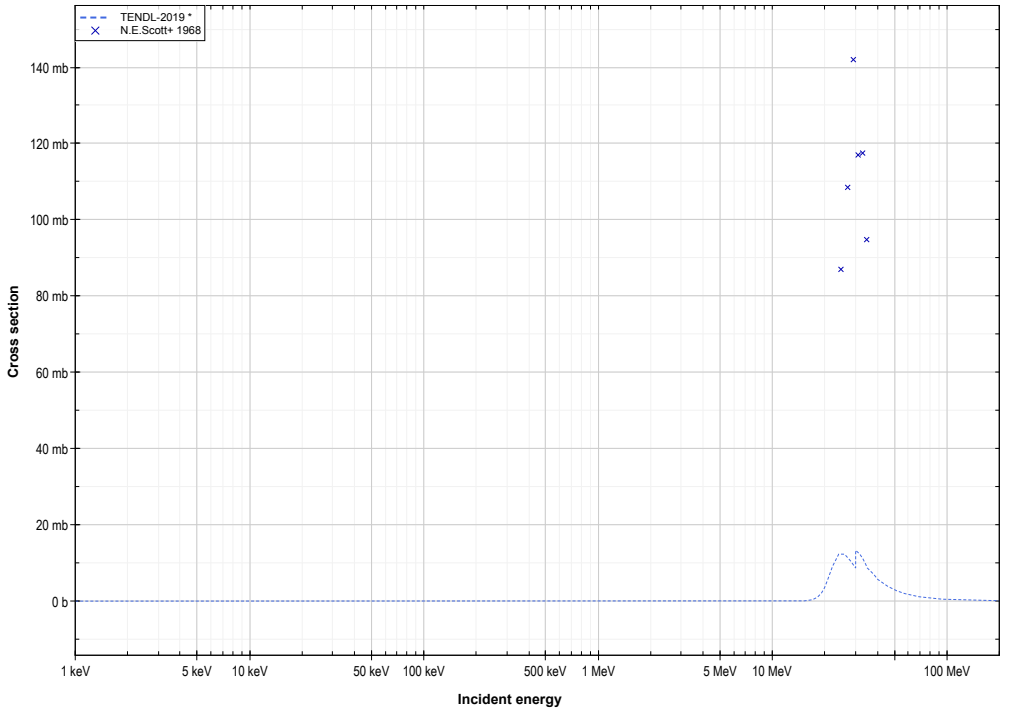
Reaction	Q-Value
Bi209(He3,4n)At208	-23142.75 keV

<< 74-W-183	**83-Bi-209**	93-Np-237 >>
<< MT37 (^{3}He,4n)	**MT104 (^{3}He,d) or MT5 (Po210 production)**	MT152 (^{3}He,5n) >>

Bi209 (^{3}He,d) or Po210 production log-log



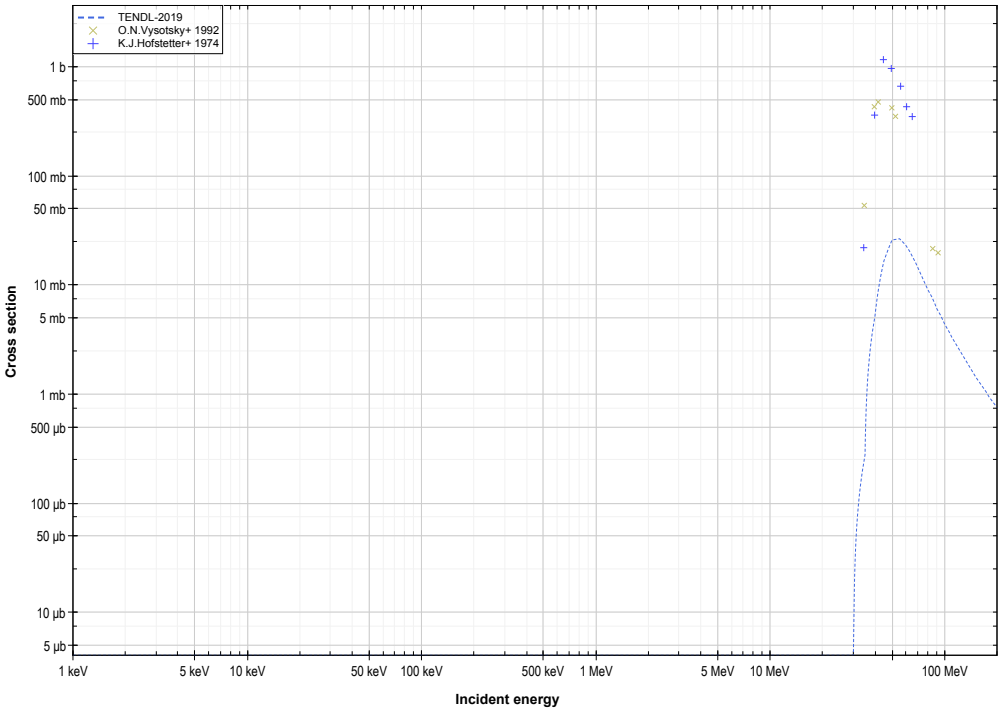
Bi209 (^{3}He,d) or Po210 production lin-log



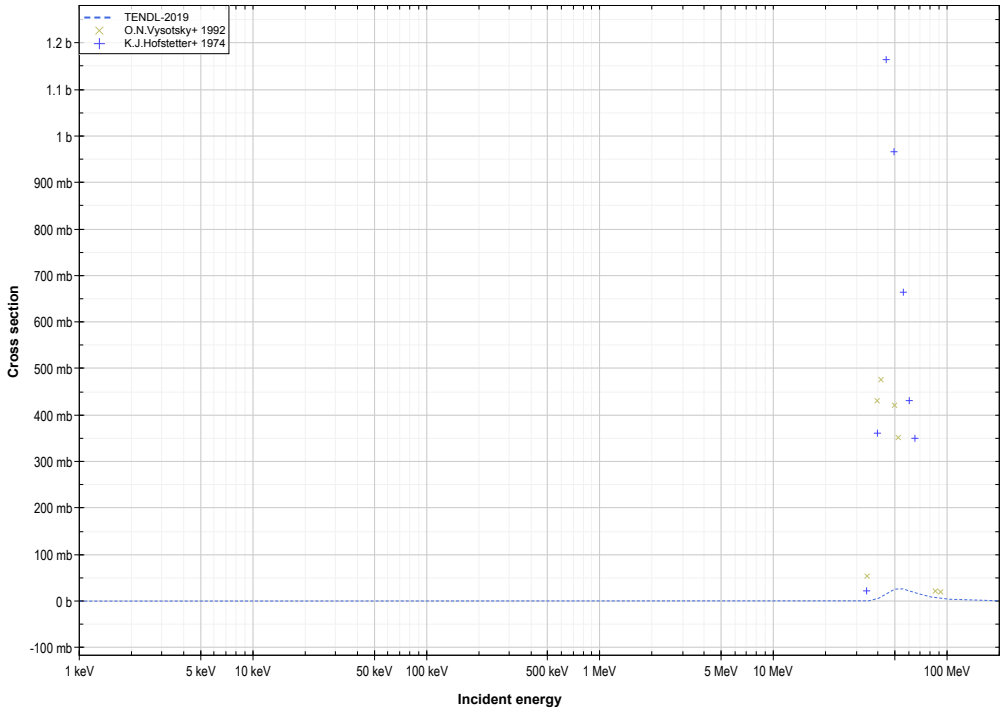
Reaction	Q-Value
Bi209(He3,d)Po210	-510.10 keV
Bi209(He3,n+p)Po210	-2734.67 keV

<< 81-Tl-203	**83-Bi-209**	
<< MT104 (^{3}He,d)	**MT152 (^{3}He,5n) or MT5 (At207 production)**	MT153 (^{3}He,6n) >>

Bi209 (^{3}He,5n) or At207 production log-log



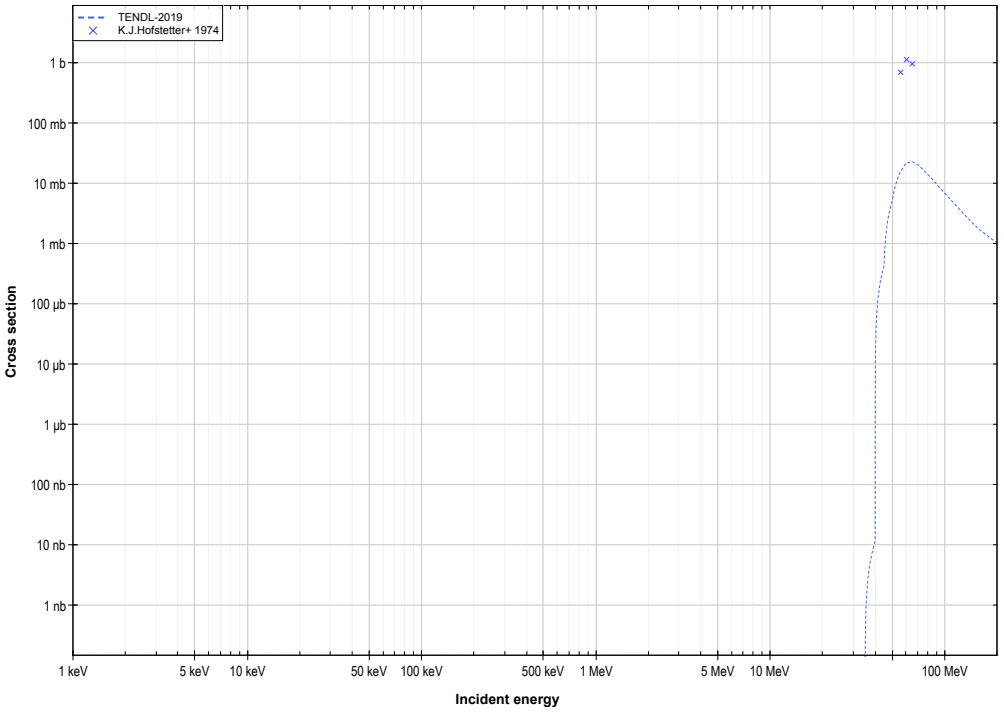
Bi209 (^{3}He,5n) or At207 production lin-log



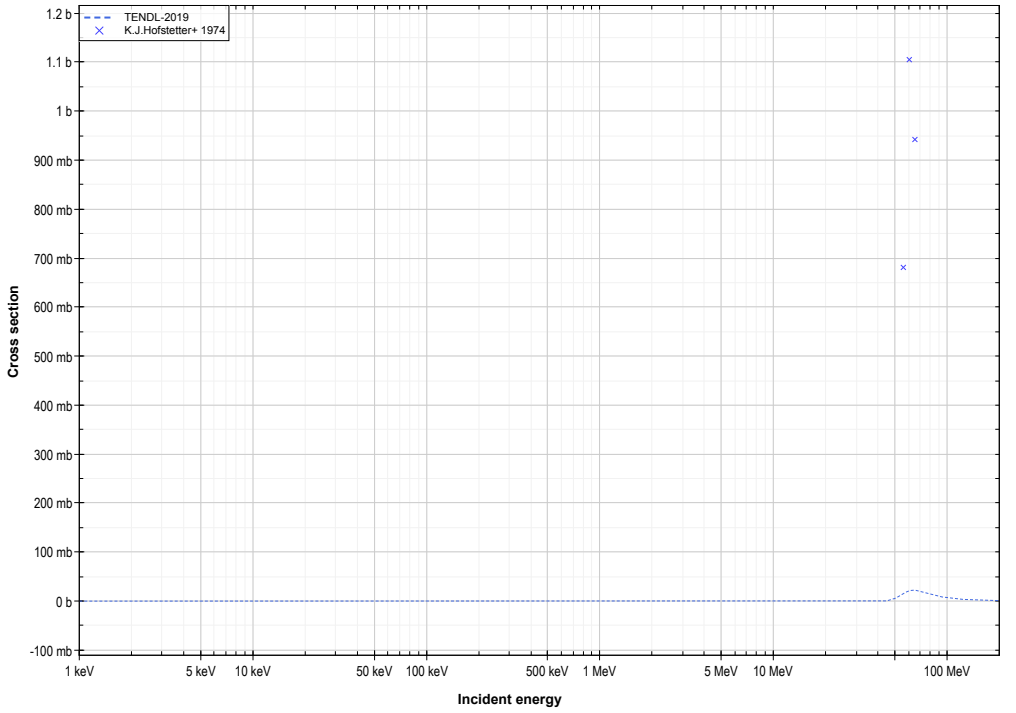
Reaction	Q-Value
Bi209(He3,5n)At207	-30457.07 keV

<< 81-Tl-205	**83-Bi-209**	
<< MT152 (^{3}He,5n)	**MT153 (^{3}He,6n) or MT5 (At206 production)**	MT160 (^{3}He,7n) >>

Bi209 (^{3}He,6n) or At206 production log-log



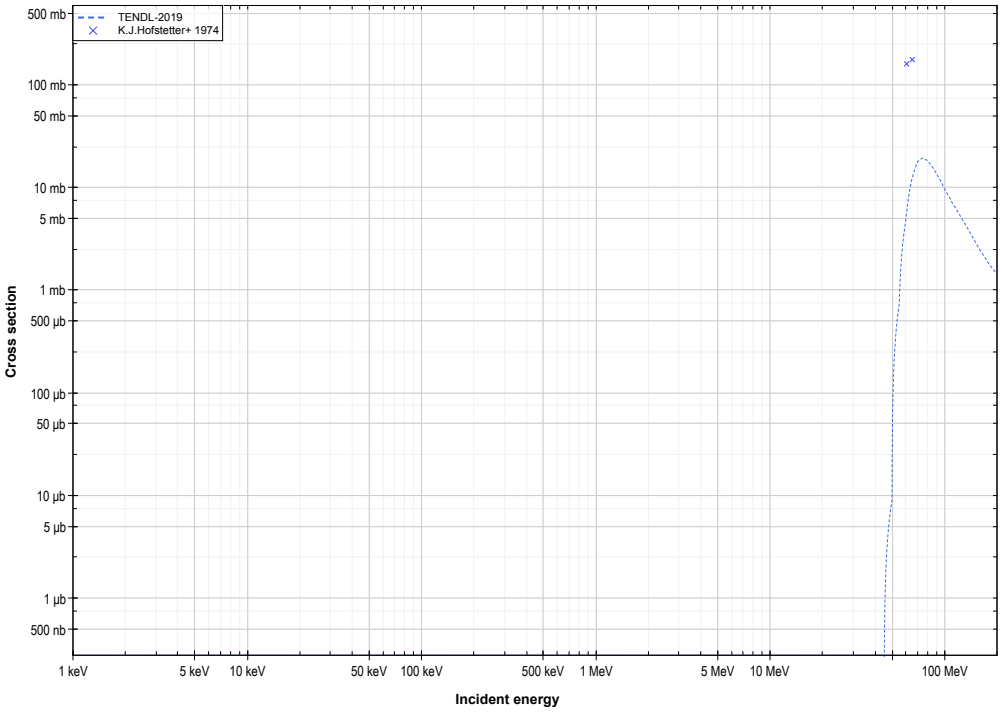
Bi209 (^{3}He,6n) or At206 production lin-log



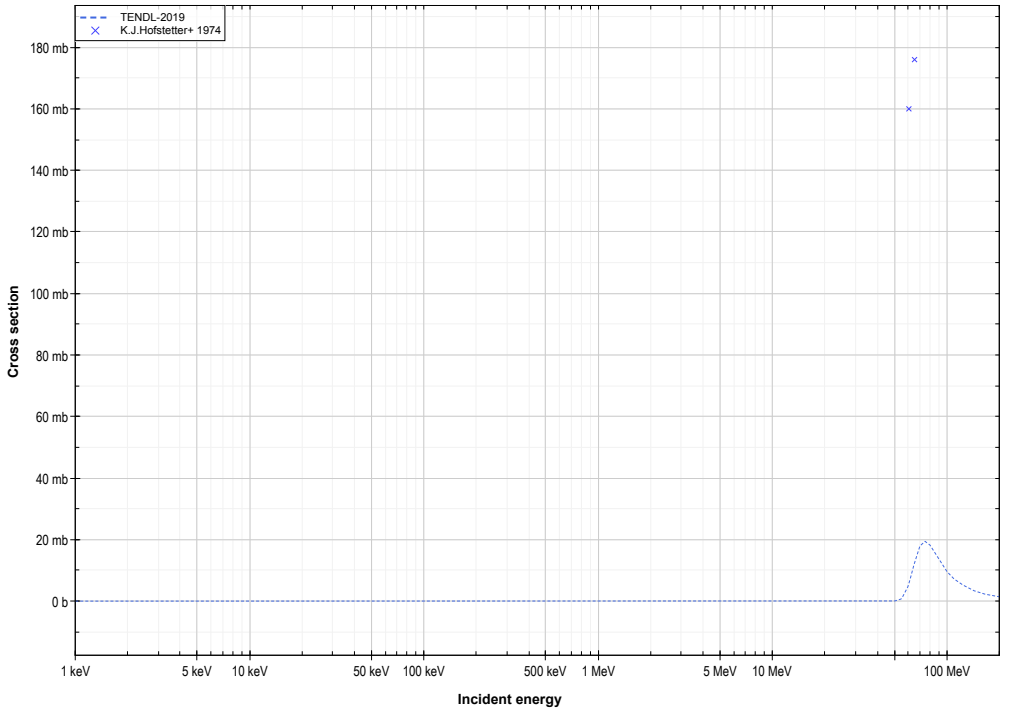
Reaction	Q-Value
Bi209(He3,6n)At206	-39325.38 keV

<< 81-Tl-205	**83-Bi-209**	
<< MT153 (^{3}He,6n)	**MT160 (^{3}He,7n) or MT5 (At205 production)**	90-Th-230 MT17 (^{3}He,3n) >>

Bi209 (^{3}He,7n) or At205 production log-log



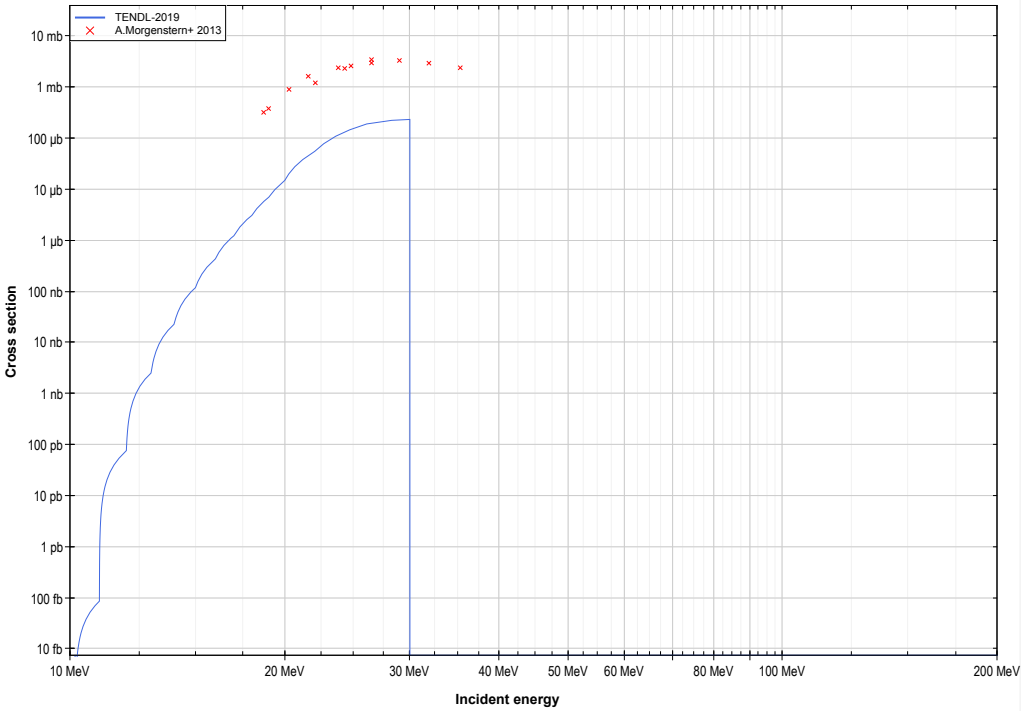
Bi209 (^{3}He,7n) or At205 production lin-log



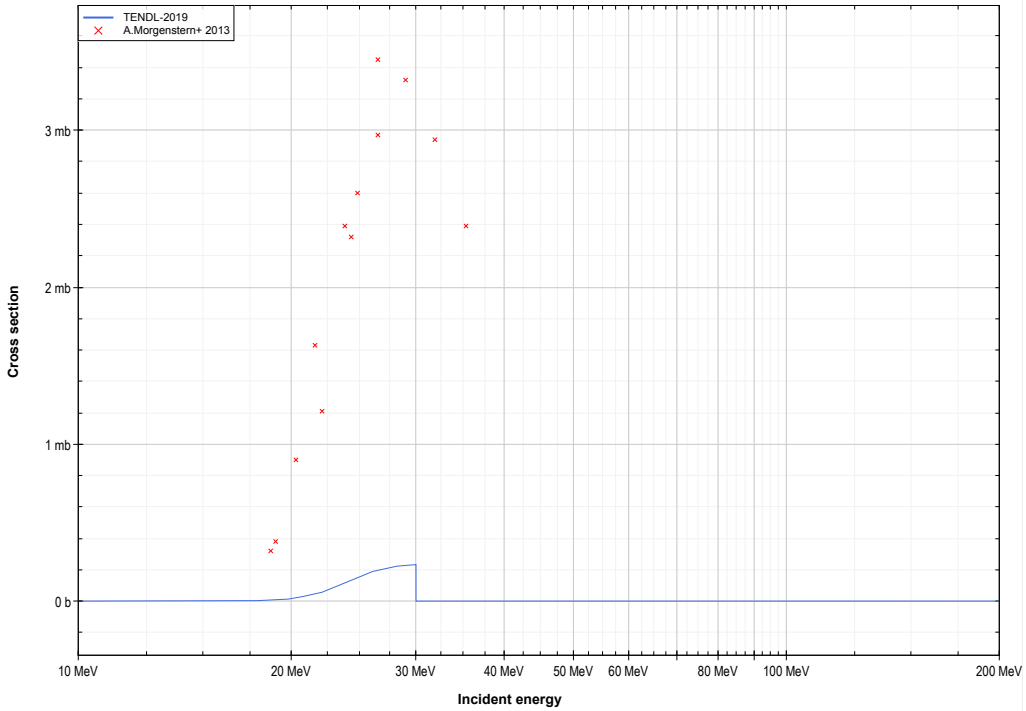
Reaction	Q-Value
Bi209(He3,7n)At205	-46854.70 keV

<< 83-Bi-209	**90-Th-230**	93-Np-237 >>
<< 83-Bi-209 MT160 (³He,7n)	**MT17 (³He,3n) or MT5 (U230 production)**	90-Th-232 MT18 (³He,fission) >>

Th230 (³He,3n) or U230 production log-log



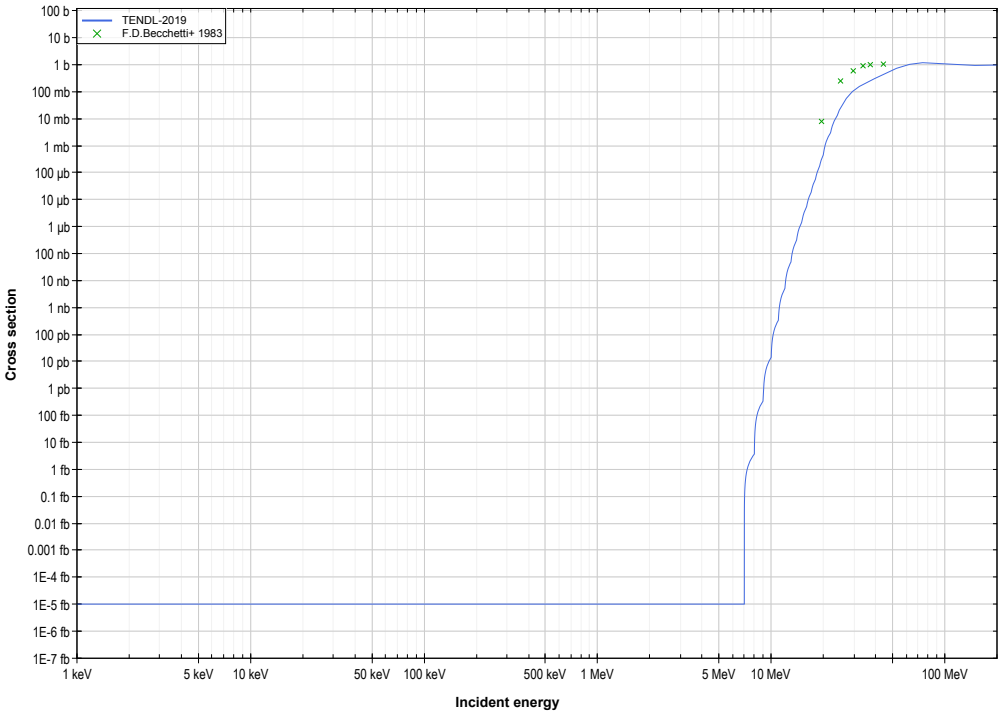
Th230 (³He,3n) or U230 production lin-log



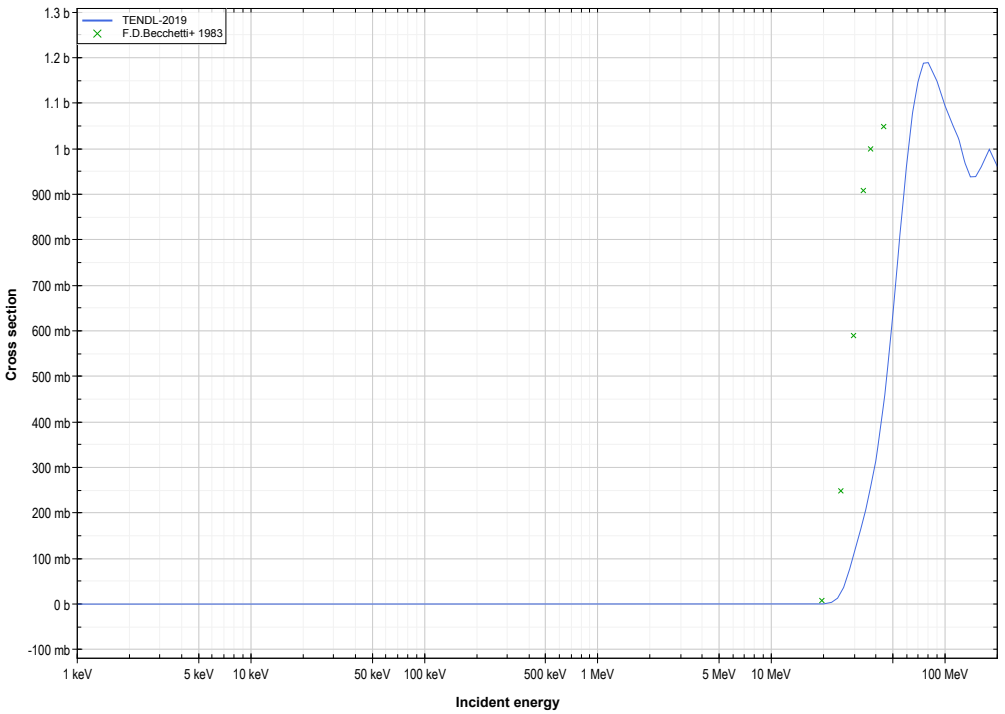
Reaction	Q-Value
Th230(He3,3n)U230	-10035.13 keV

<< 83-Bi-209	**90-Th-232**	92-U-238 >>
<< 90-Th-230 MT17 (^{3}He,3n)	**MT18 (^{3}He,fission)**	92-U-235 MT4 (^{3}He,n) >>

Th232 (^{3}He,fission) log-log

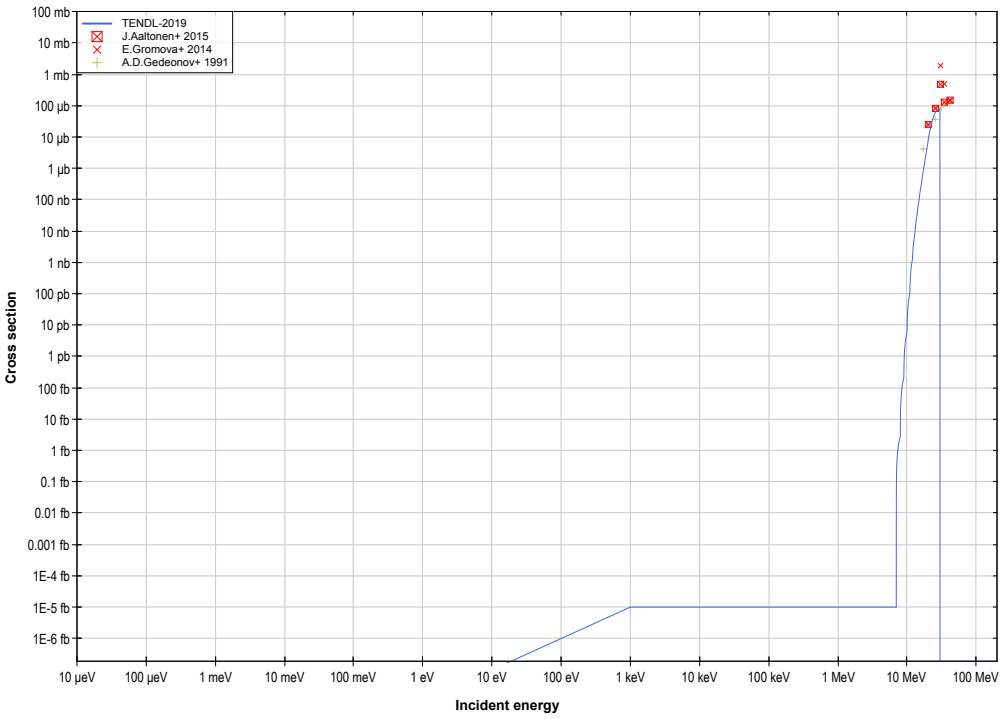


Th232 (^{3}He,fission) lin-log

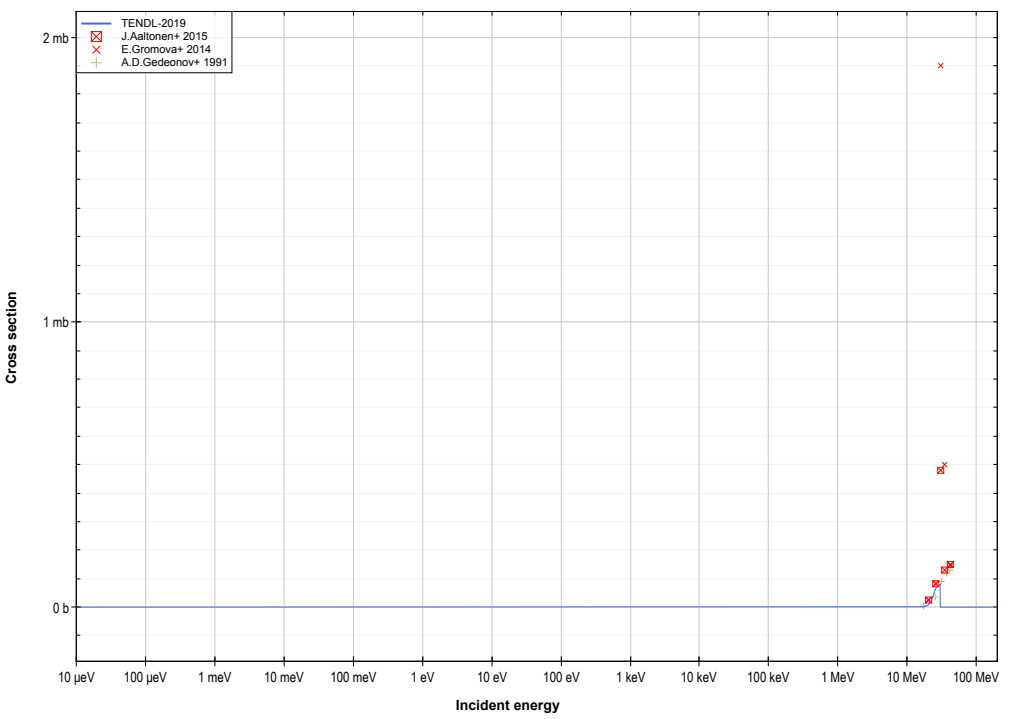


<< 83-Bi-209	**92-U-235**	93-Np-237 >>
<< 90-Th-232 MT18 (^{3}He,fission)	**MT4 (^{3}He,n) or MT5 (Pu237 production)**	MT11 (^{3}He,2n+d) >>

U235 (^{3}He,n) or Pu237 production log-log



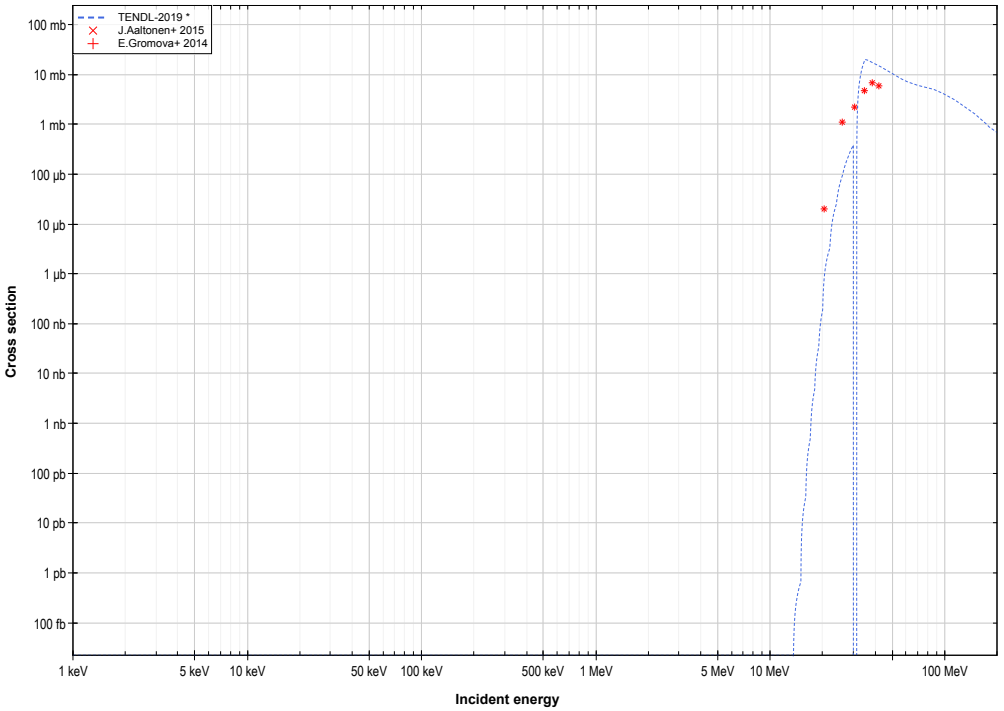
U235 (^{3}He,n) or Pu237 production lin-log



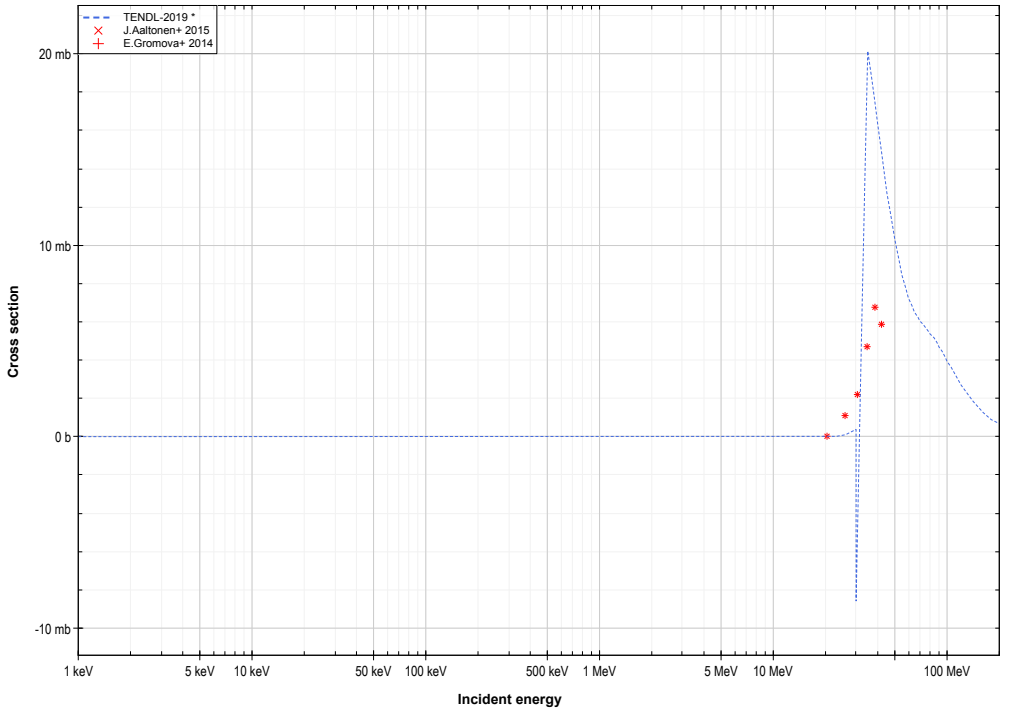
Reaction	Q-Value
U235(He3,n)Pu237	2687.00 keV

<< 62-Sm-147	**92-U-235**	92-U-236 >>
<< MT4 (^{3}He,n)	**MT11 (^{3}He,2n+d) or MT5 (Np234 production)**	MT16 (^{3}He,2n) >>

U235 (^{3}He,2n+d) or Np234 production log-log



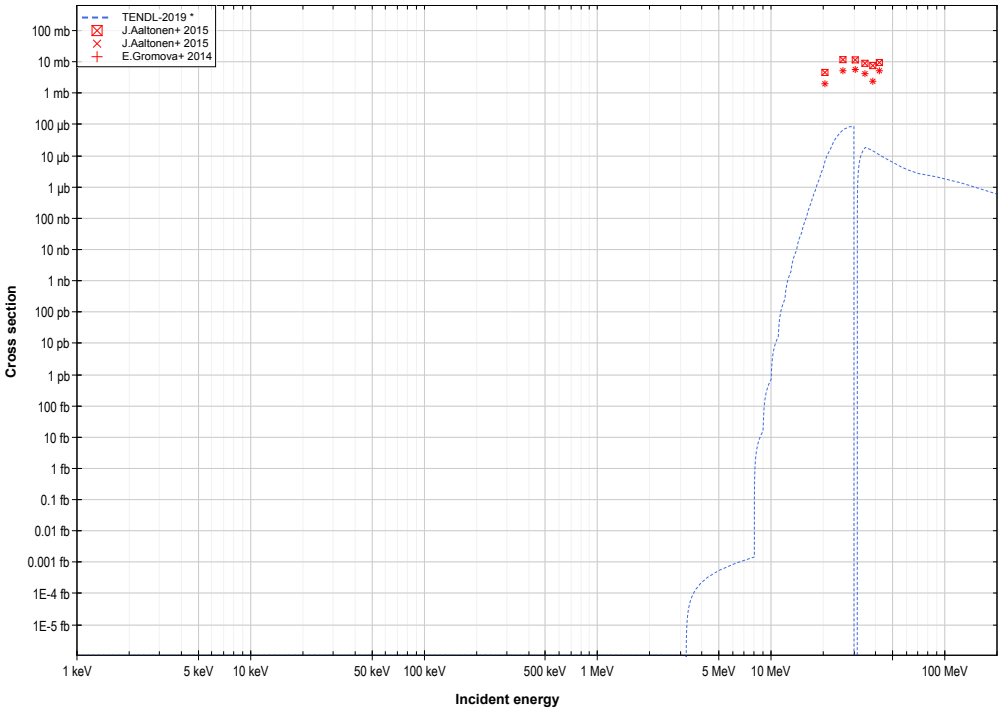
U235 (^{3}He,2n+d) or Np234 production lin-log



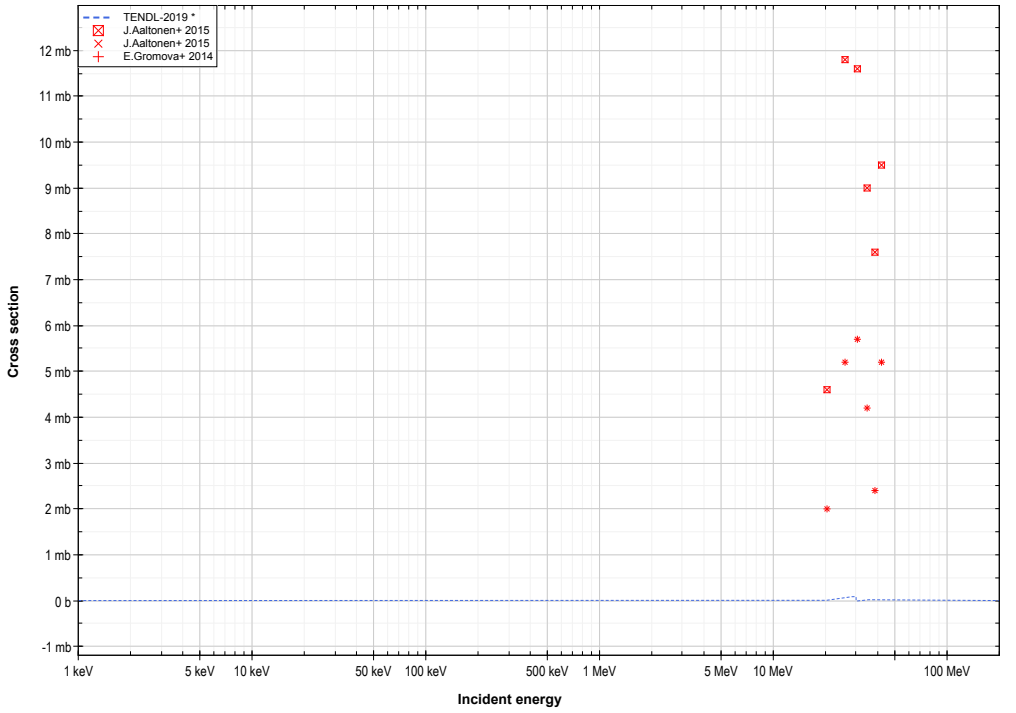
Reaction	Q-Value
U235(He3,n+t)Np234	-7126.11 keV
U235(He3,2n+d)Np234	-13383.34 keV
U235(He3,3n+p)Np234	-15607.90 keV

<< 83-Bi-209	**92-U-235**	92-U-236 >>
<< MT11 (^{3}He,2n+d)	**MT16 (^{3}He,2n) or MT5 (Pu236 production)**	MT32 (^{3}He,n+d) >>

U235 (^{3}He,2n) or Pu236 production log-log



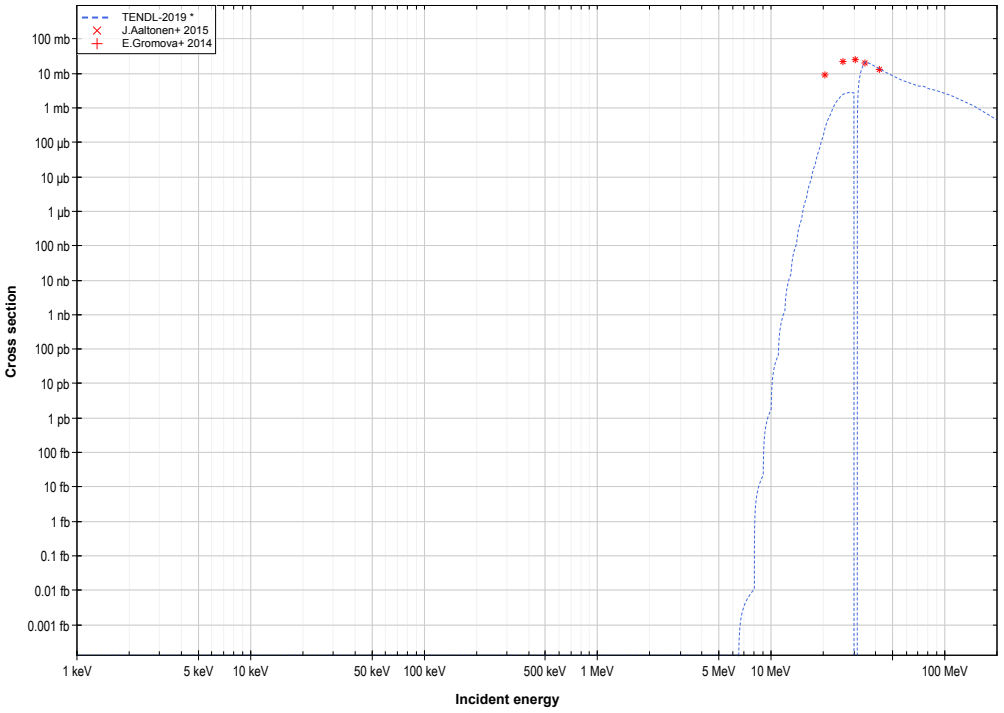
U235 (^{3}He,2n) or Pu236 production lin-log



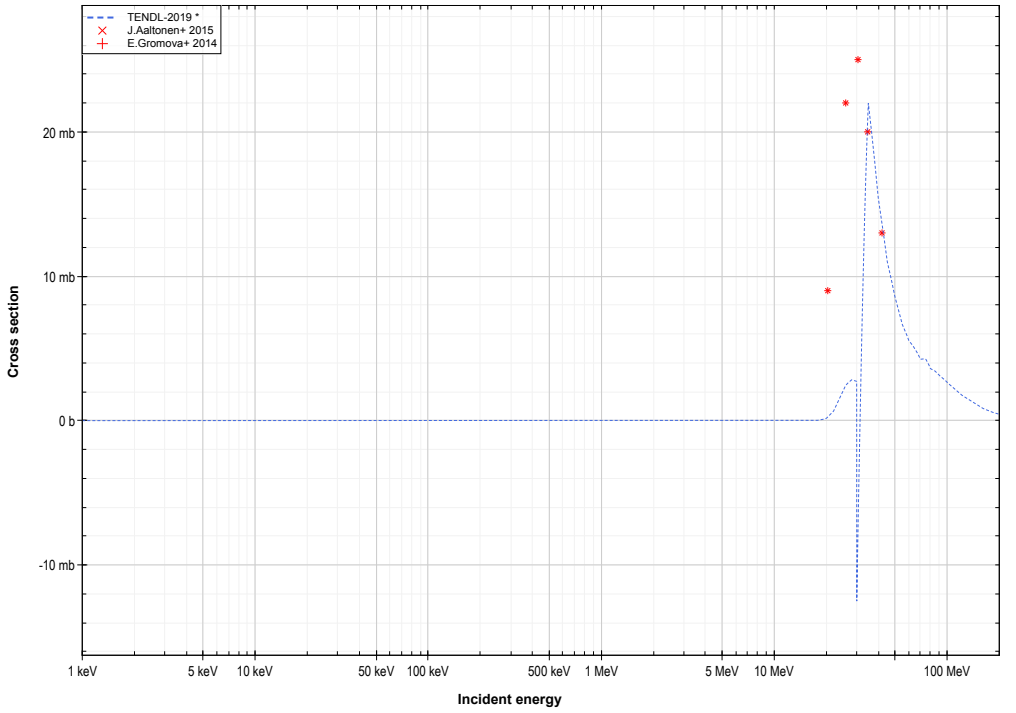
Reaction	Q-Value
U235(He3,2n)Pu236	-3194.22 keV

<< 78-Pt-194	**92-U-235**	
<< MT16 (³He,2n)	**MT32 (³He,n+d) or MT5 (Np235 production)**	MT33 (³He,n+t) >>

U235 (³He,n+d) or Np235 production log-log



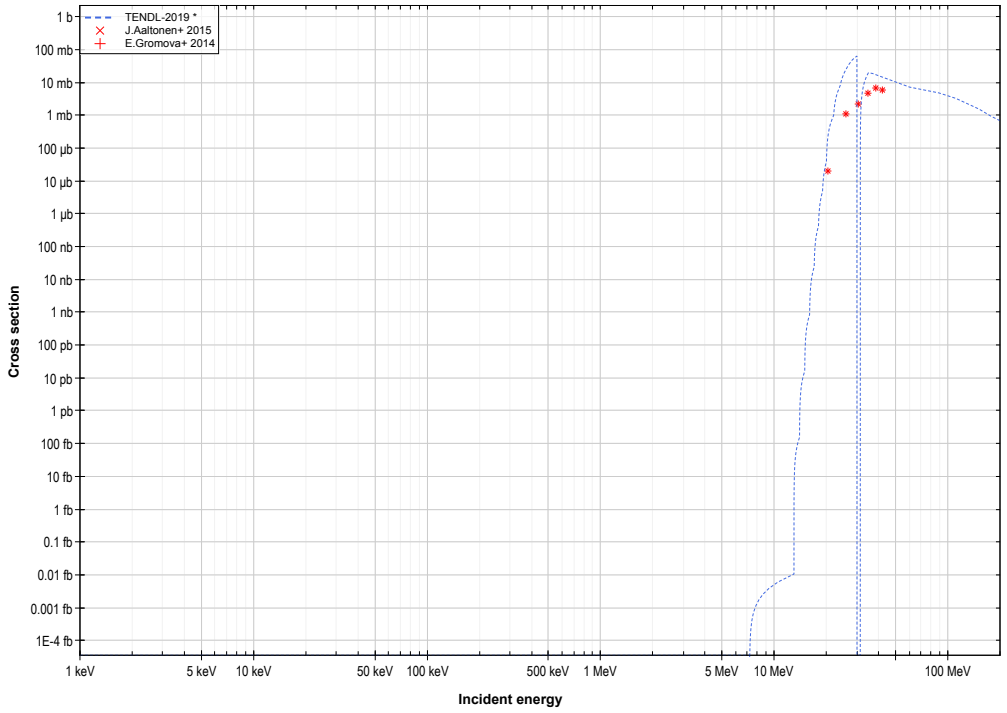
U235 (³He,n+d) or Np235 production lin-log



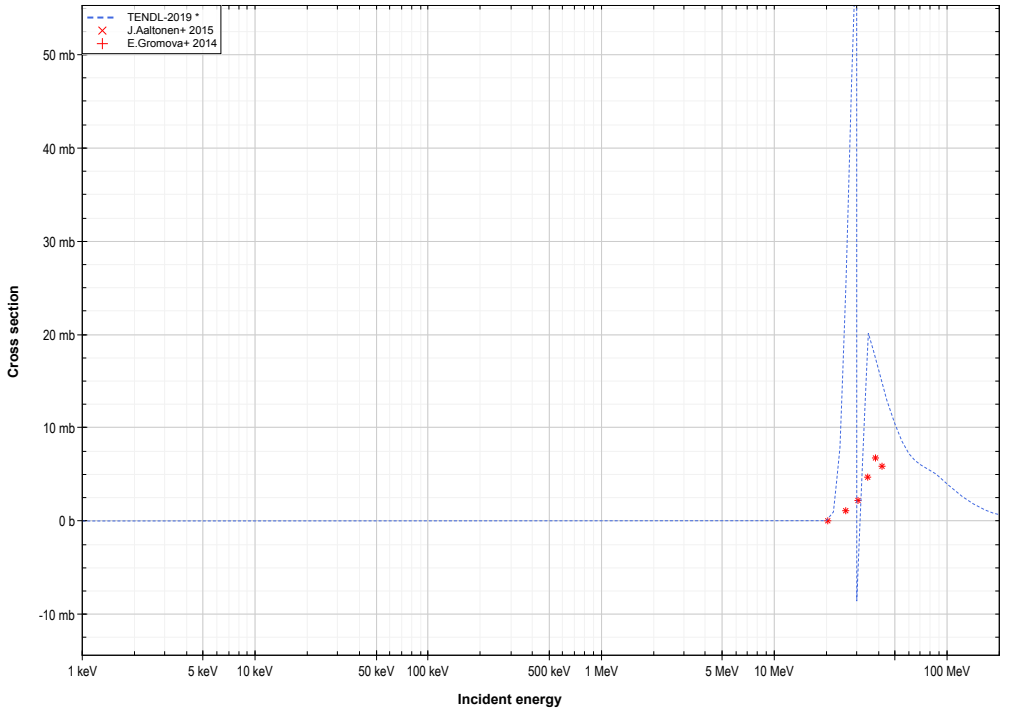
Reaction	Q-Value
U235(He3,t)Np235	-142.89 keV
U235(He3,n+d)Np235	-6400.12 keV
U235(He3,2n+p)Np235	-8624.69 keV

<< 62-Sm-147	**92-U-235**	92-U-236 >>
<< MT32 (^{3}He,n+d)	**MT33 (^{3}He,n+t) or MT5 (Np234 production)**	MT37 (^{3}He,4n) >>

U235 (^{3}He,n+t) or Np234 production log-log



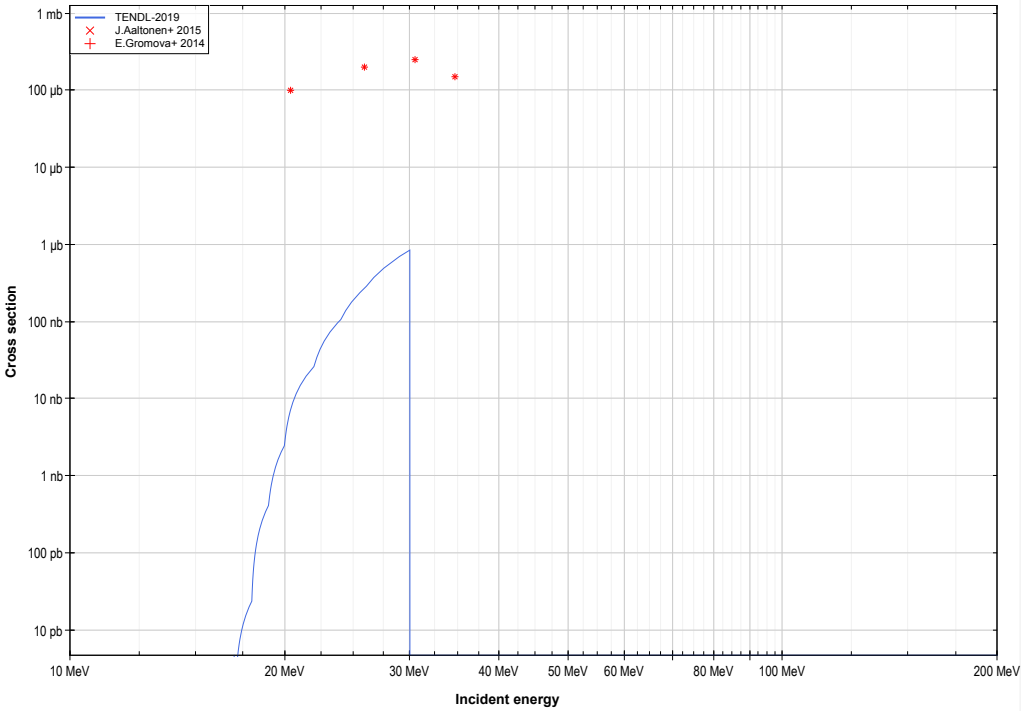
U235 (^{3}He,n+t) or Np234 production lin-log



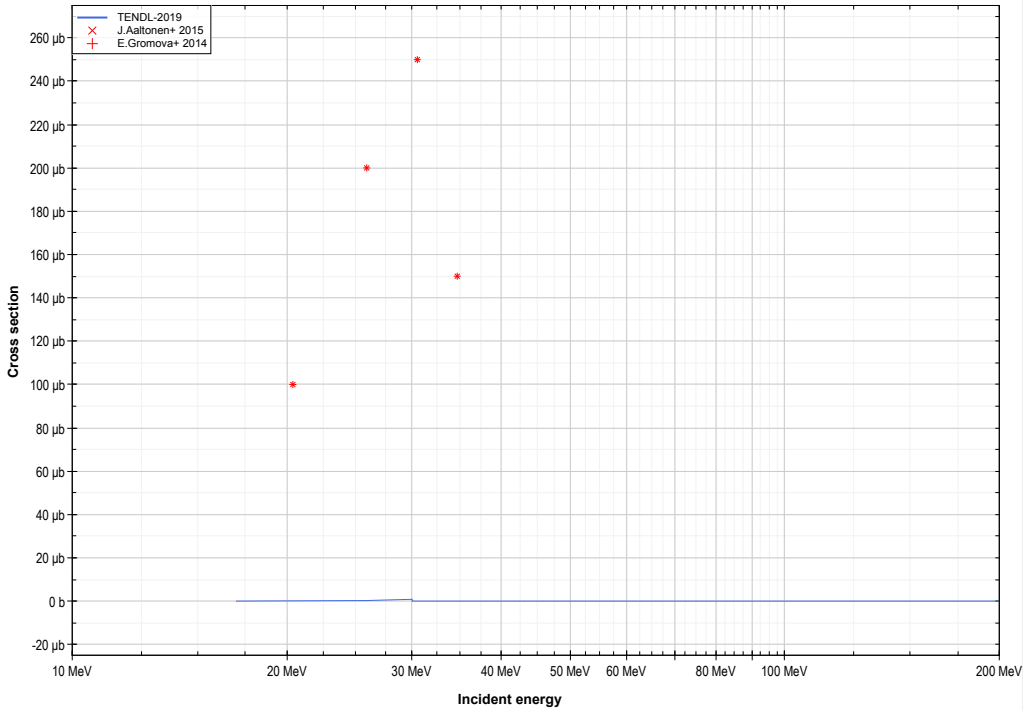
Reaction	Q-Value
U235(He3,n+t)Np234	-7126.11 keV
U235(He3,2n+d)Np234	-13383.34 keV
U235(He3,3n+p)Np234	-15607.90 keV

<< 83-Bi-209	**92-U-235**	
<< MT33 (³He,n+t)	**MT37 (³He,4n) or MT5 (Pu234 production)**	MT41 (³He,2n+p) >>

U235 (³He,4n) or Pu234 production log-log



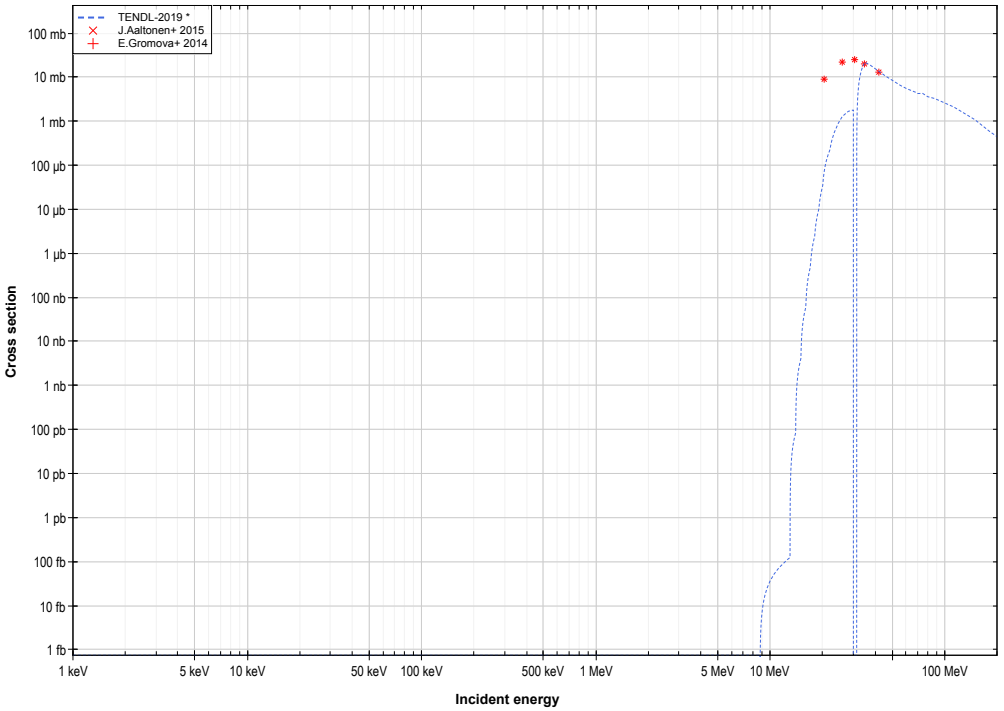
U235 (³He,4n) or Pu234 production lin-log



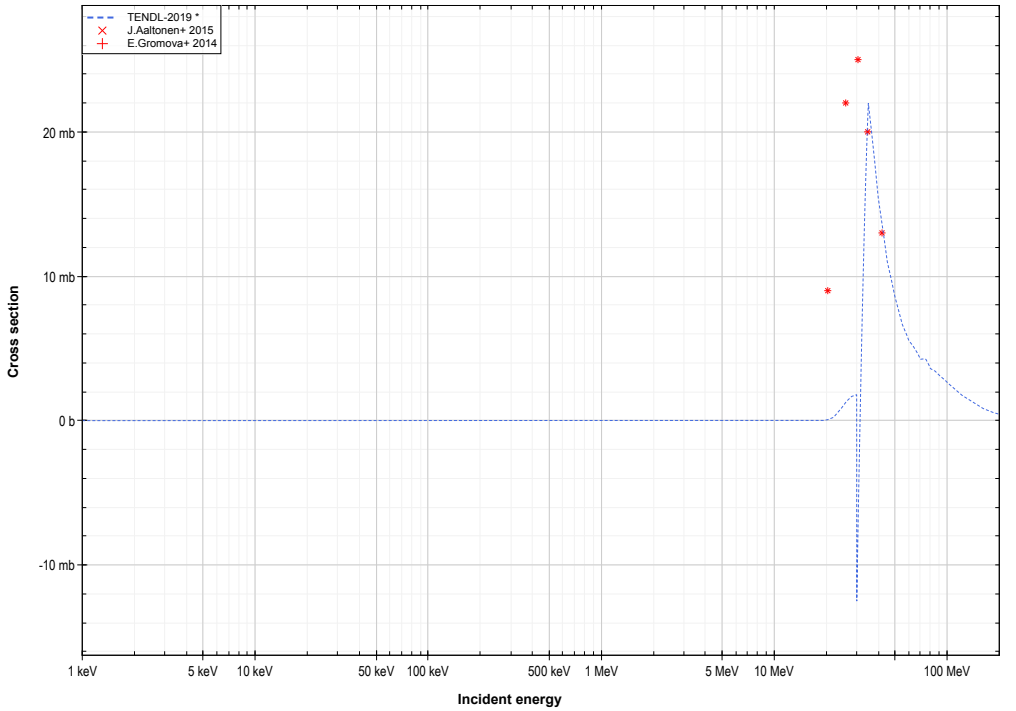
Reaction	Q-Value
U235(He3,4n)Pu234	-16785.25 keV

<< 78-Pt-194	**92-U-235**	
<< MT37 (^{3}He,4n)	**MT41 (^{3}He,2n+p) or MT5 (Np235 production)**	MT42 (^{3}He,3n+p) >>

U235 (^{3}He,2n+p) or Np235 production log-log



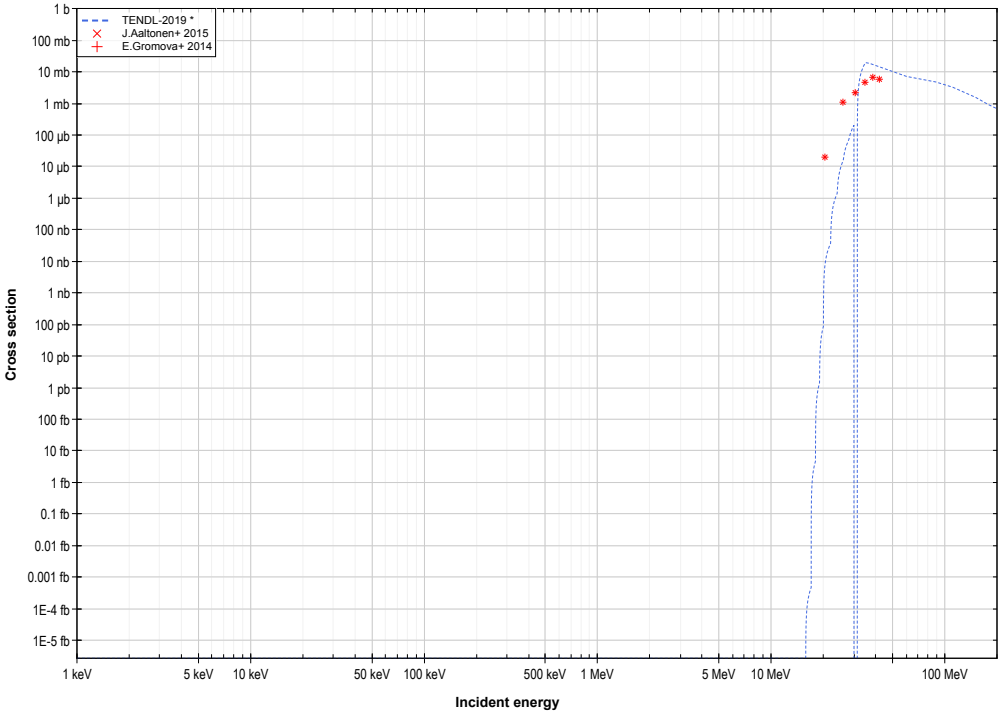
U235 (^{3}He,2n+p) or Np235 production lin-log



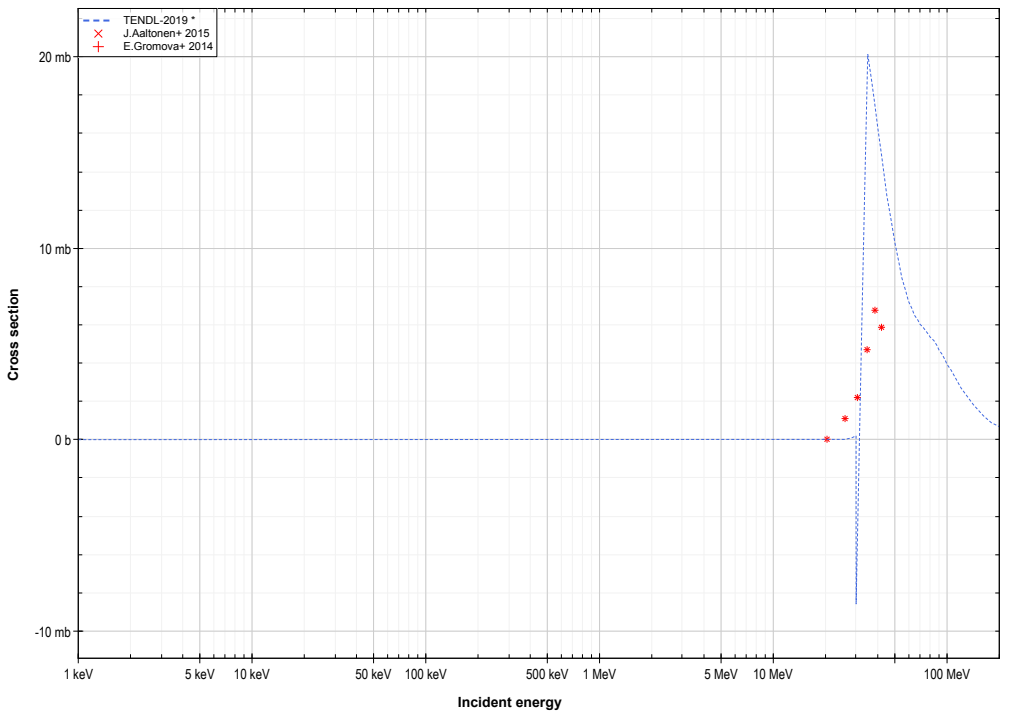
Reaction	Q-Value
U235(He3,t)Np235	-142.89 keV
U235(He3,n+d)Np235	-6400.12 keV
U235(He3,2n+p)Np235	-8624.69 keV

<< 62-Sm-147	**92-U-235**	92-U-236 >>
<< MT41 (³He,2n+p)	**MT42 (³He,3n+p) or MT5 (Np234 production)**	MT105 (³He,t) >>

U235 (³He,3n+p) or Np234 production log-log



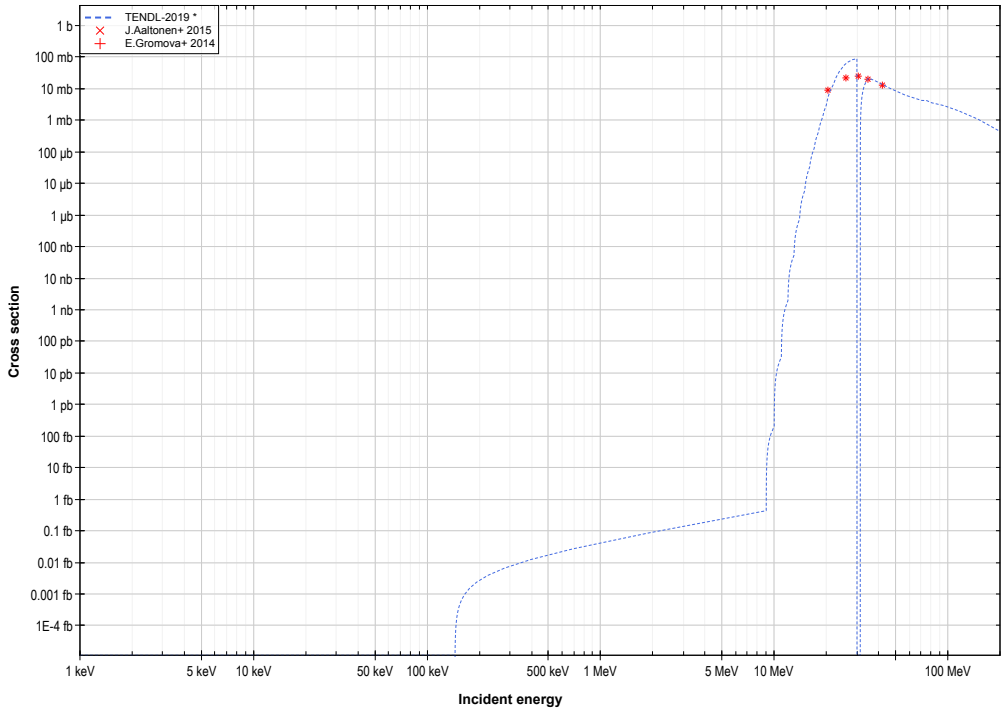
U235 (³He,3n+p) or Np234 production lin-log



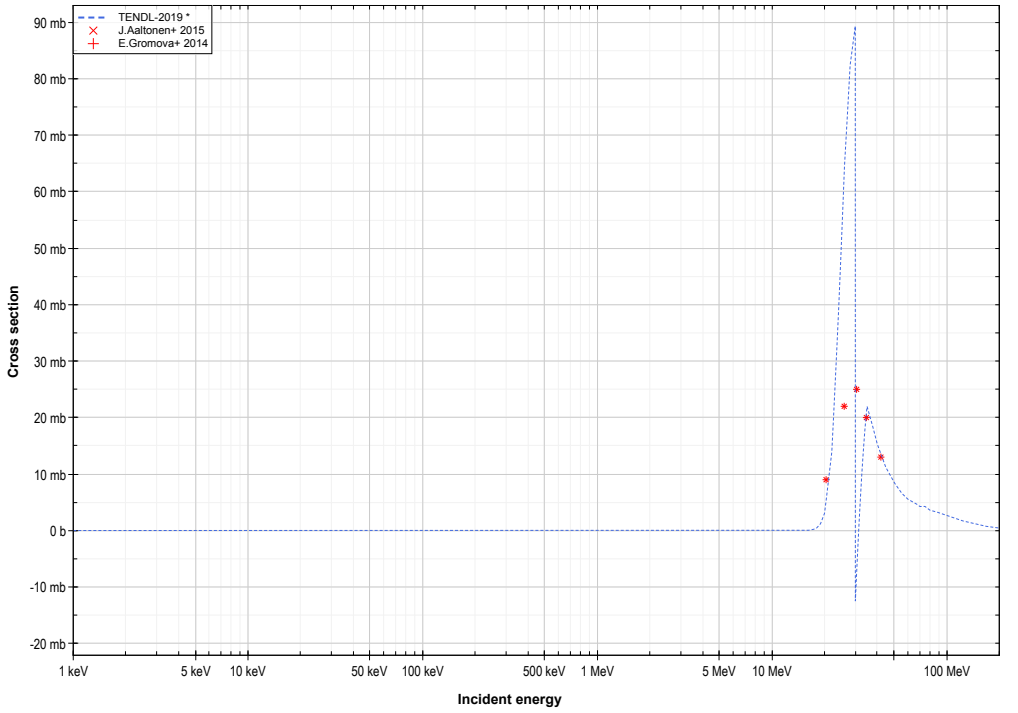
Reaction	Q-Value
U235(He3,n+t)Np234	-7126.11 keV
U235(He3,2n+d)Np234	-13383.34 keV
U235(He3,3n+p)Np234	-15607.90 keV

<< 78-Pt-194	**92-U-235**	
<< MT42 (^{3}He,3n+p)	**MT105 (^{3}He,t) or MT5 (Np235 production)**	92-U-236 MT11 (^{3}He,2n+d) >>

U235 (^{3}He,t) or Np235 production log-log



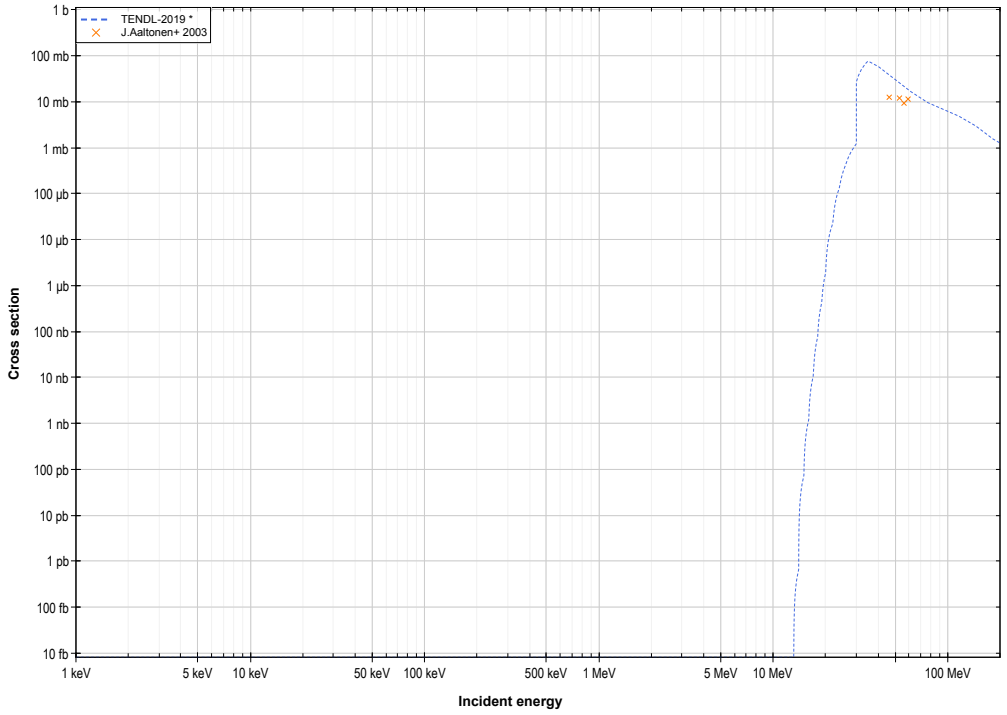
U235 (^{3}He,t) or Np235 production lin-log



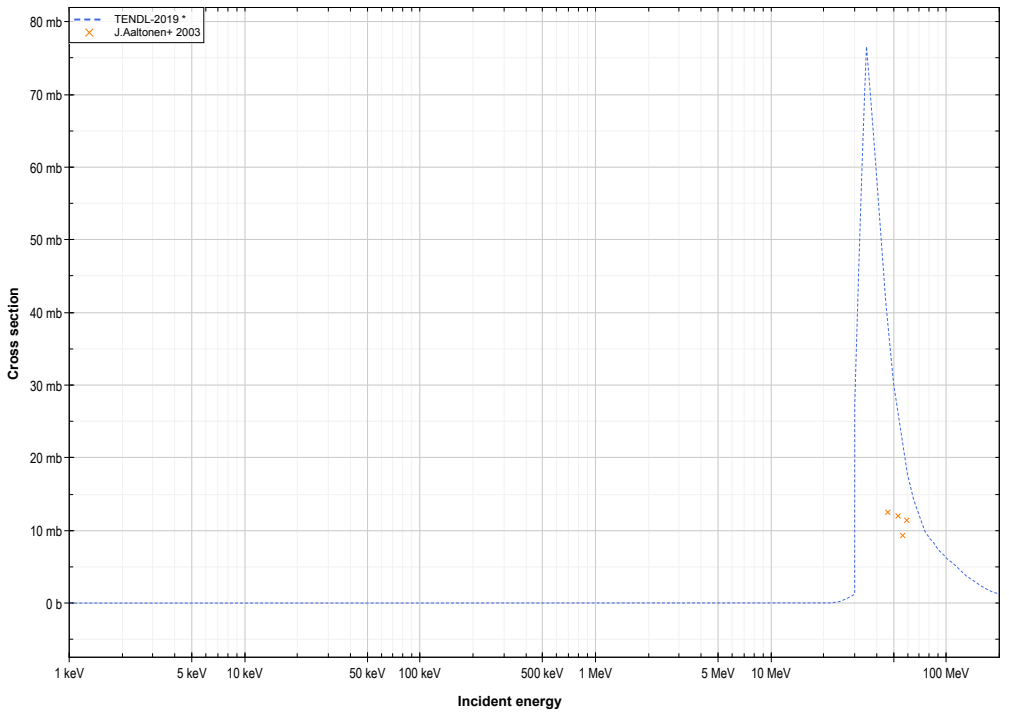
Reaction	Q-Value
U235(He3,t)Np235	-142.89 keV
U235(He3,n+d)Np235	-6400.12 keV
U235(He3,2n+p)Np235	-8624.69 keV

<< 92-U-235	**92-U-236**	93-Np-237 >>
<< 92-U-235 MT105 (³He,t)	**MT11 (³He,2n+d) or MT5 (Np235 production)**	MT16 (³He,2n) >>

U236 (³He,2n+d) or Np235 production log-log



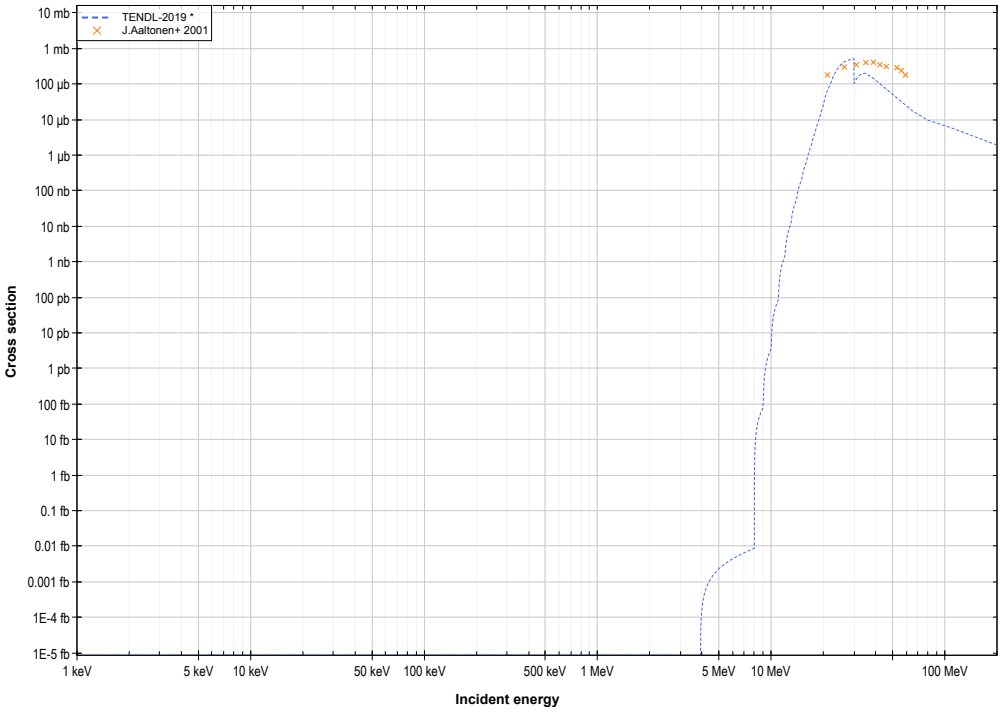
U236 (³He,2n+d) or Np235 production lin-log



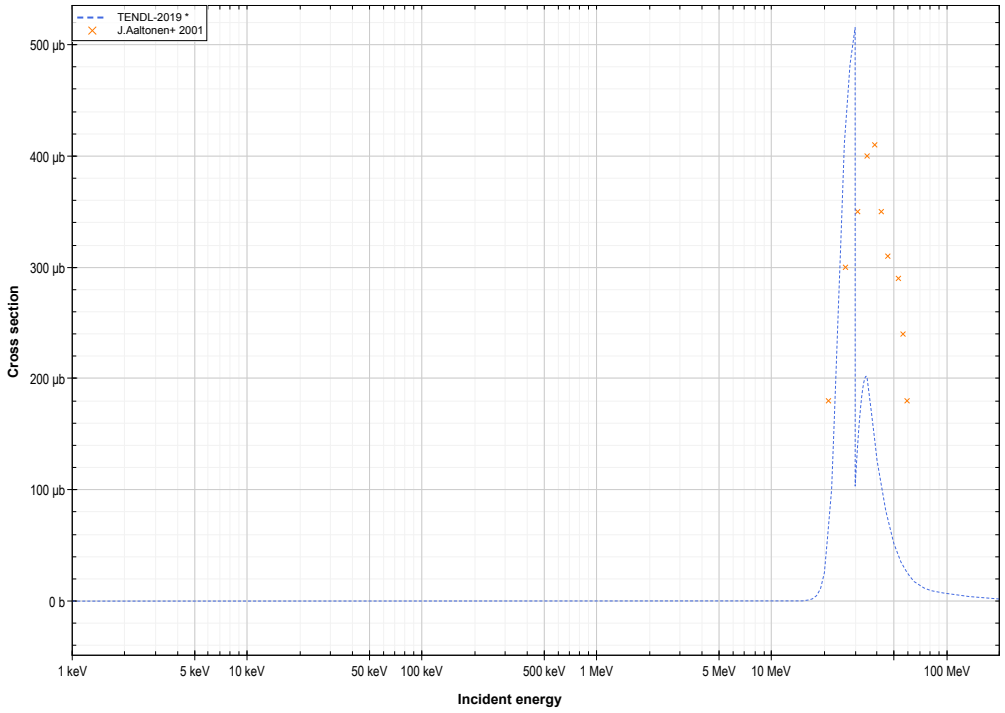
Reaction	Q-Value
U236(He3,n+t)Np235	-6688.41 keV
U236(He3,2n+d)Np235	-12945.64 keV
U236(He3,3n+p)Np235	-15170.20 keV

<< 92-U-235	**92-U-236**	
<< MT11 (³He,2n+d)	**MT16 (³He,2n) or MT5 (Pu237 production)**	MT33 (³He,n+t) >>

U236 (³He,2n) or Pu237 production log-log



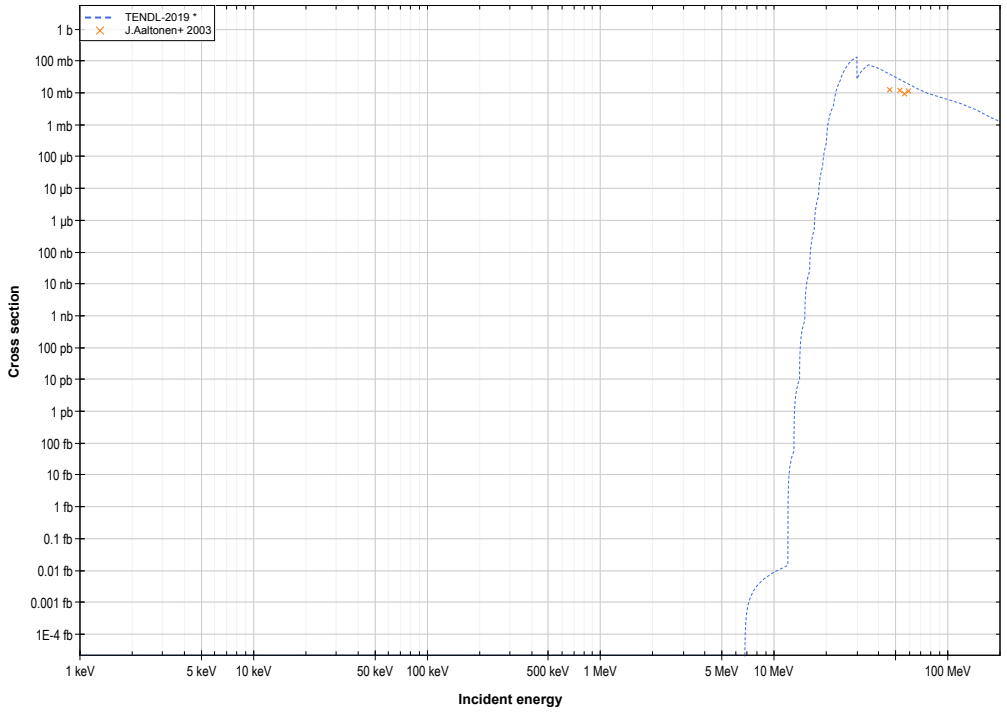
U236 (³He,2n) or Pu237 production lin-log



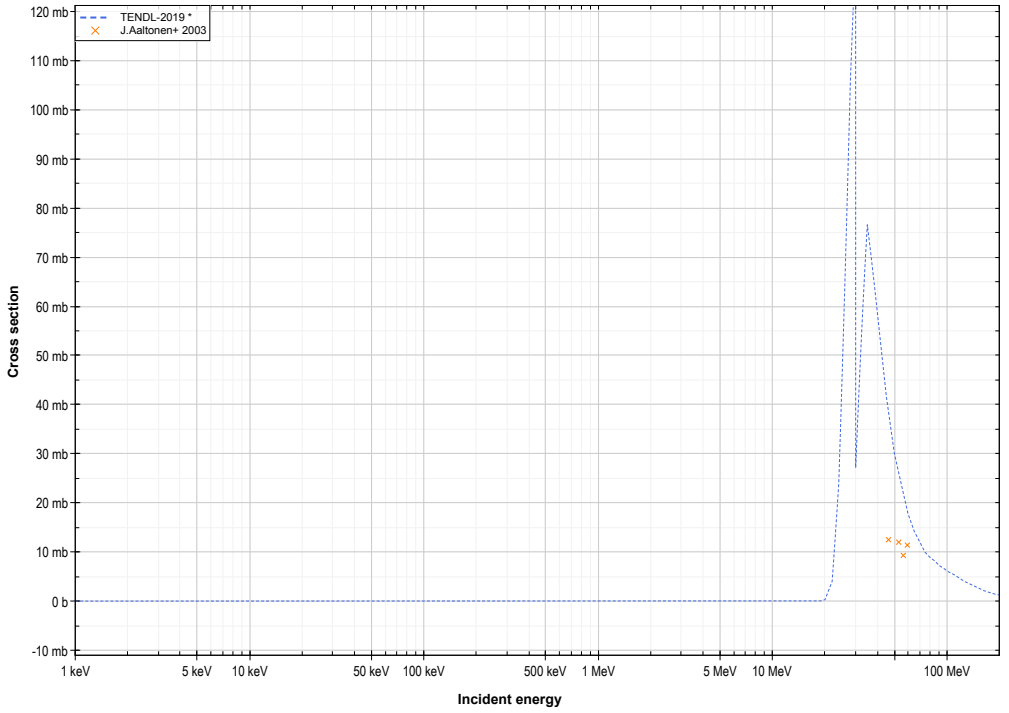
Reaction	Q-Value
U236(He3,2n)Pu237	-3858.52 keV

<< 92-U-235	**92-U-236**	93-Np-237 >>
<< MT16 (³He,2n)	**MT33 (³He,n+t) or MT5 (Np235 production)**	MT42 (³He,3n+p) >>

U236 (³He,n+t) or Np235 production log-log



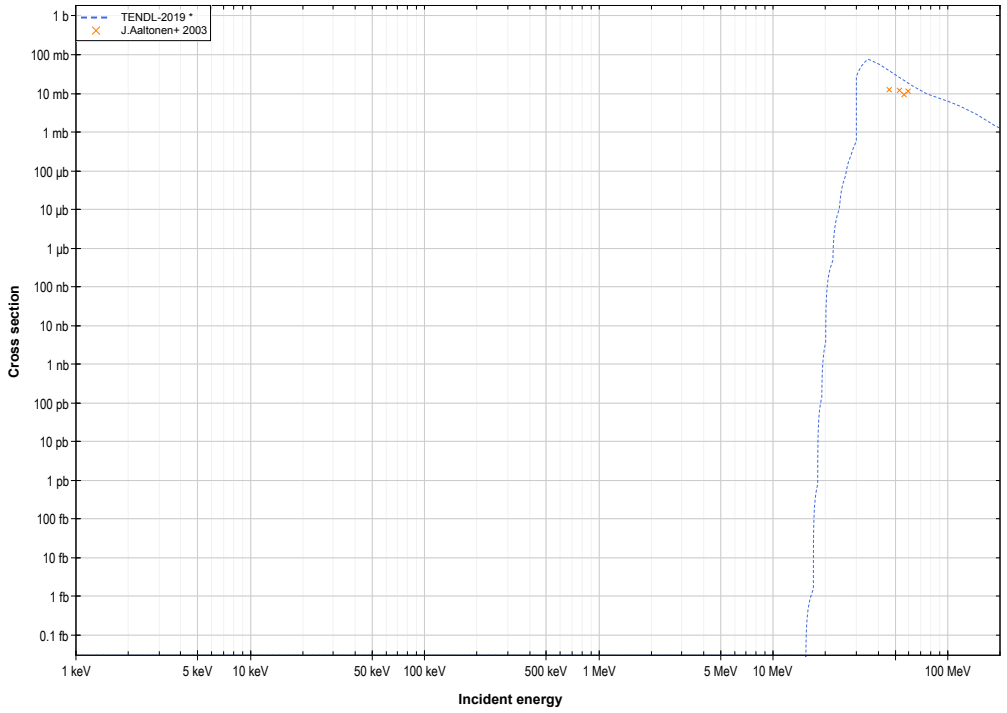
U236 (³He,n+t) or Np235 production lin-log



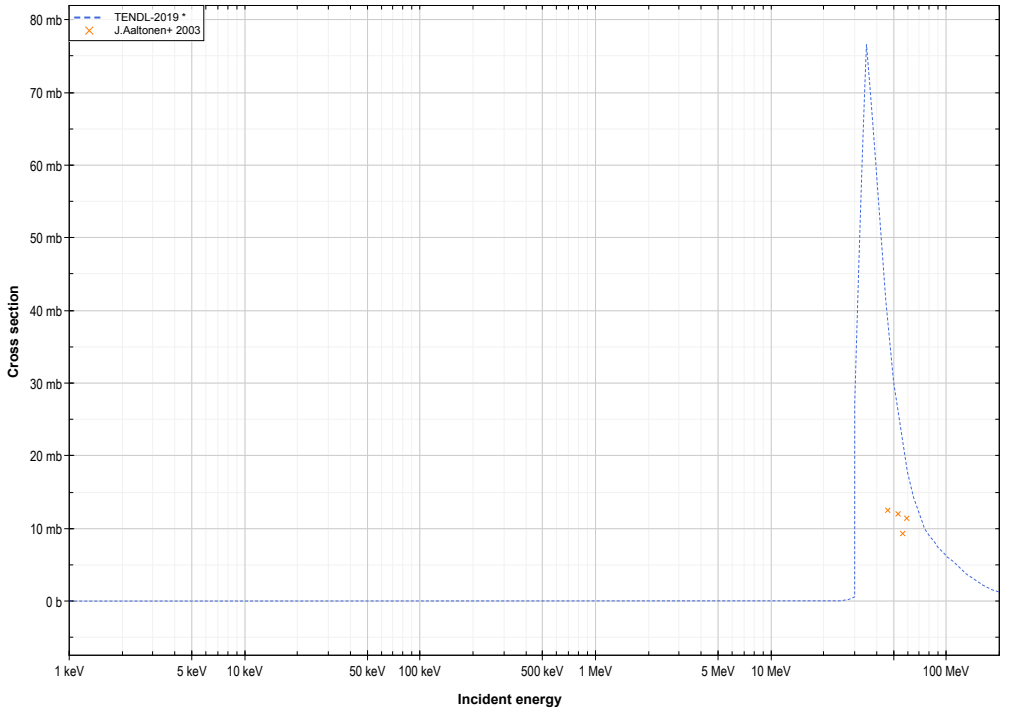
Reaction	Q-Value
U236(He3,n+t)Np235	-6688.41 keV
U236(He3,2n+d)Np235	-12945.64 keV
U236(He3,3n+p)Np235	-15170.20 keV

<< 92-U-235	**92-U-236**	93-Np-237 >>
<< MT33 (^{3}He,n+t)	**MT42 (^{3}He,3n+p) or MT5 (Np235 production)**	MT154 (^{3}He,2n+t) >>

U236 (^{3}He,3n+p) or Np235 production log-log



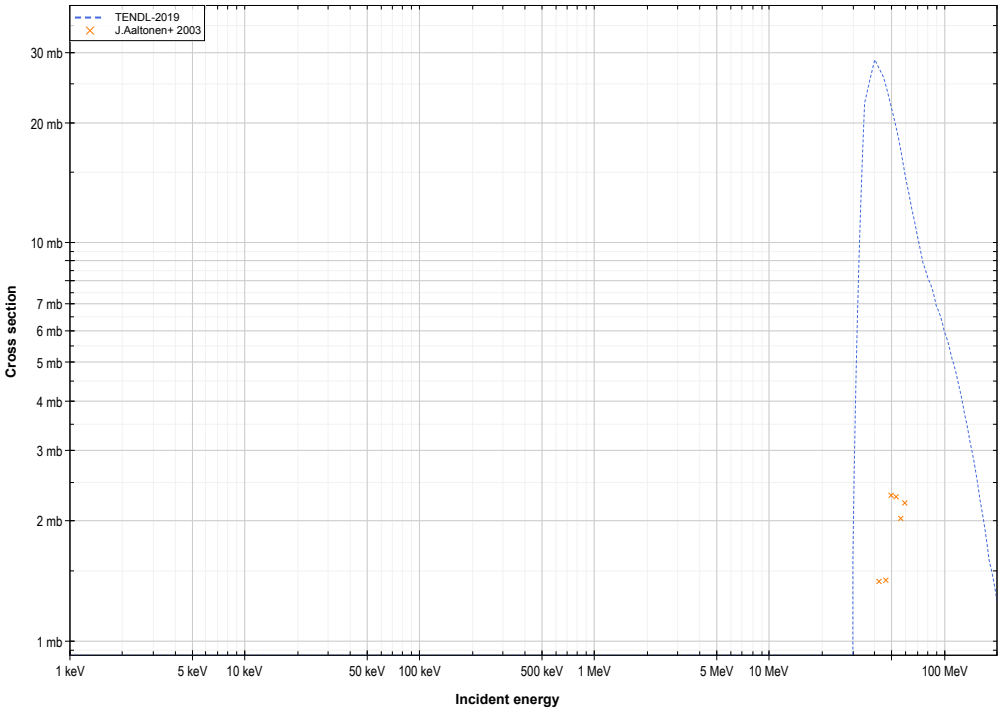
U236 (^{3}He,3n+p) or Np235 production lin-log



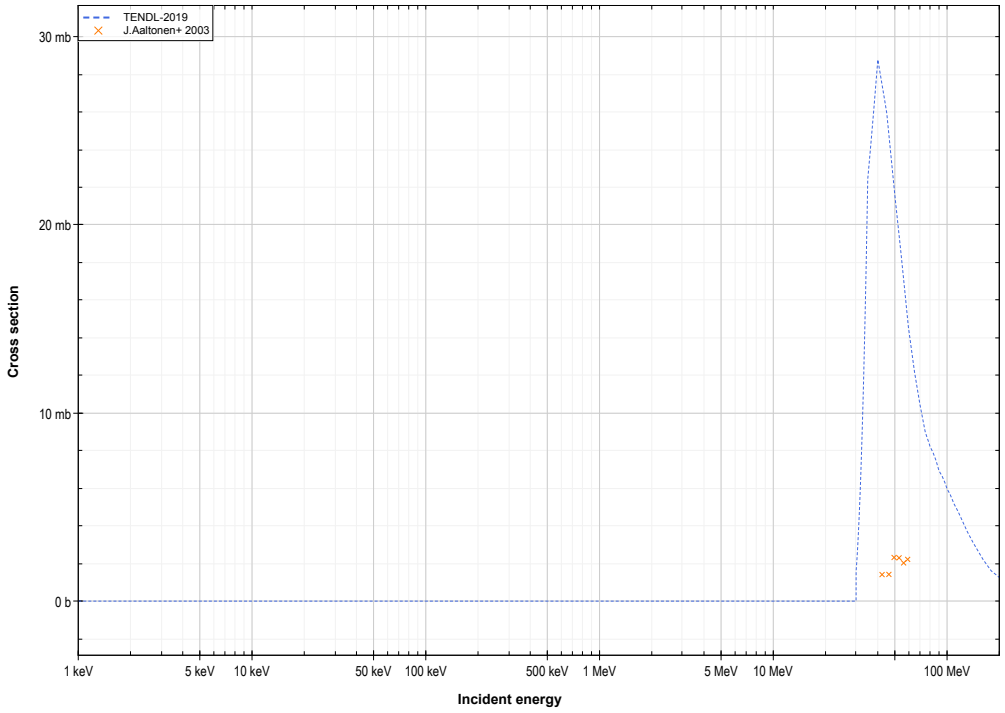
Reaction	Q-Value
U236(He3,n+t)Np235	-6688.41 keV
U236(He3,2n+d)Np235	-12945.64 keV
U236(He3,3n+p)Np235	-15170.20 keV

<< 27-Co-59	**92-U-236**	
<< MT42 (³He,3n+p)	**MT154 (³He,2n+t) or MT5 (Np234 production)**	MT156 (³He,4n+p) >>

U236 (³He,2n+t) or Np234 production log-log



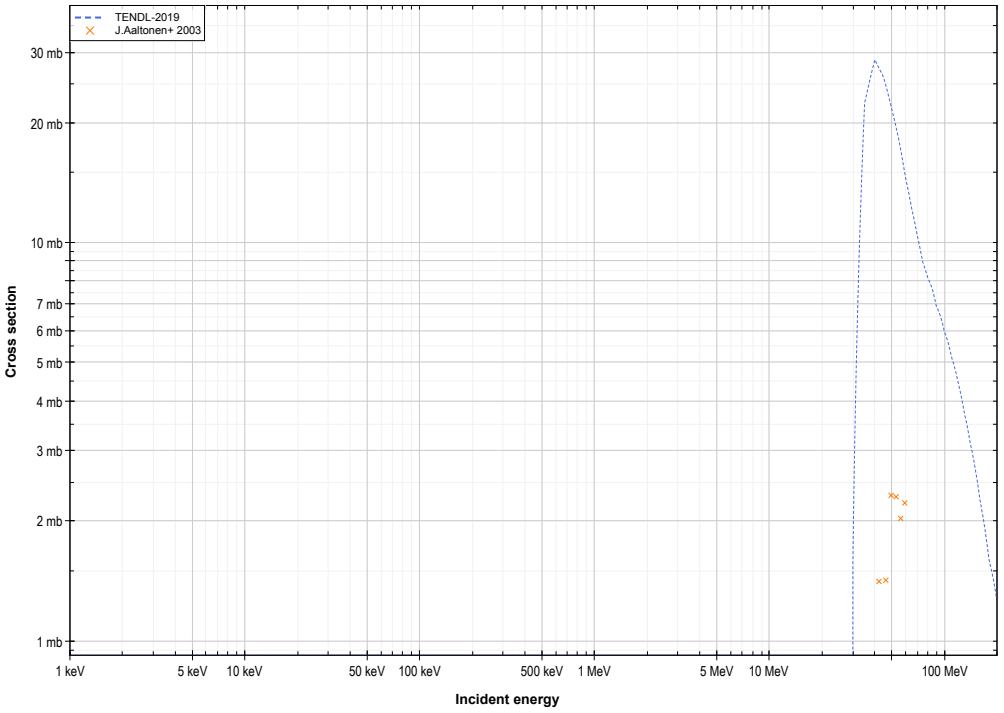
U236 (³He,2n+t) or Np234 production lin-log



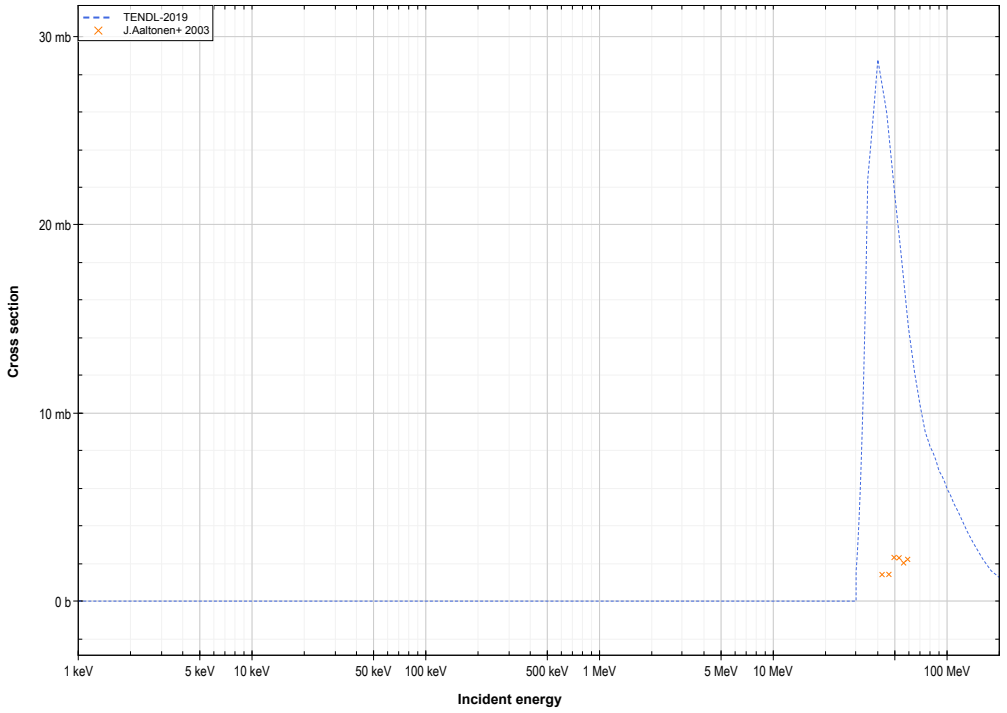
Reaction	Q-Value
U236(He3,2n+t)Np234	-13671.63 keV
U236(He3,3n+d)Np234	-19928.86 keV
U236(He3,4n+p)Np234	-22153.42 keV

<< 27-Co-59	**92-U-236**	
<< MT154 (^{3}He,2n+t)	**MT156 (^{3}He,4n+p) or MT5 (Np234 production)**	MT157 (^{3}He,3n+d) >>

U236 (^{3}He,4n+p) or Np234 production log-log



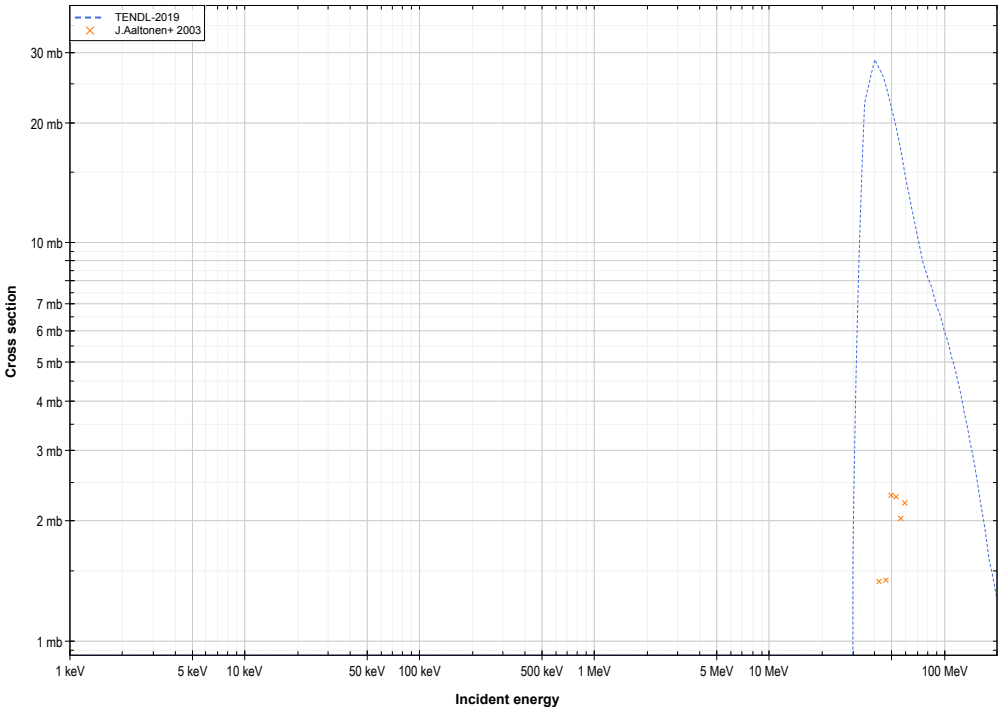
U236 (^{3}He,4n+p) or Np234 production lin-log



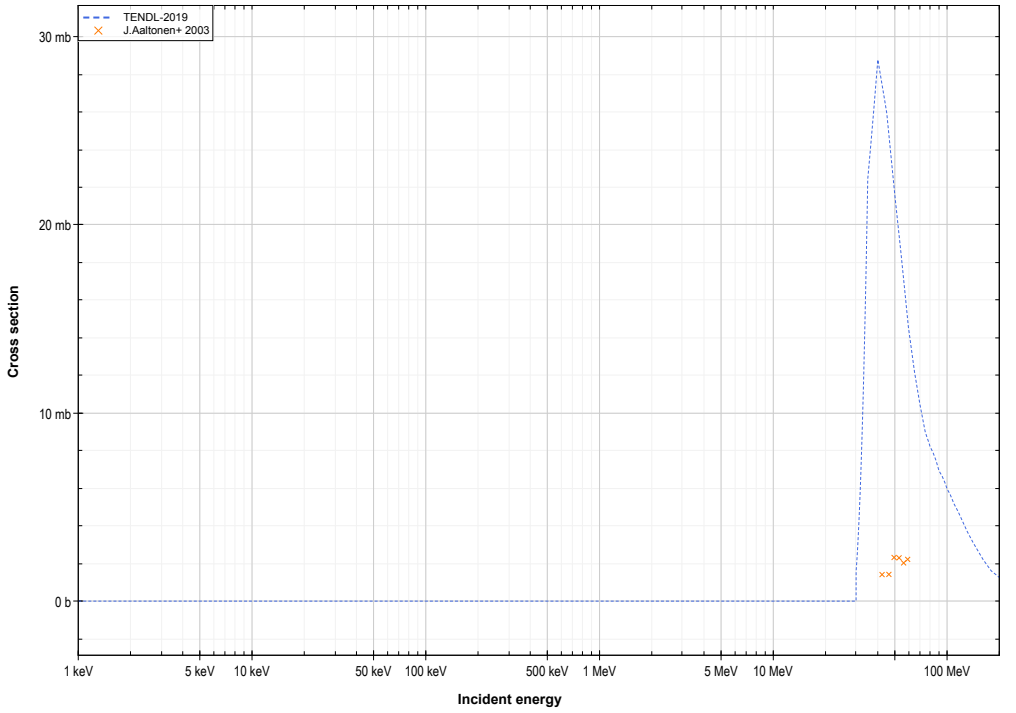
Reaction	Q-Value
U236(He3,2n+t)Np234	-13671.63 keV
U236(He3,3n+d)Np234	-19928.86 keV
U236(He3,4n+p)Np234	-22153.42 keV

<< 27-Co-59	**92-U-236**	
<< MT156 (^{3}He,4n+p)	**MT157 (^{3}He,3n+d) or MT5 (Np234 production)**	92-U-238 MT18 (^{3}He,fission) >>

U236 (^{3}He,3n+d) or Np234 production log-log



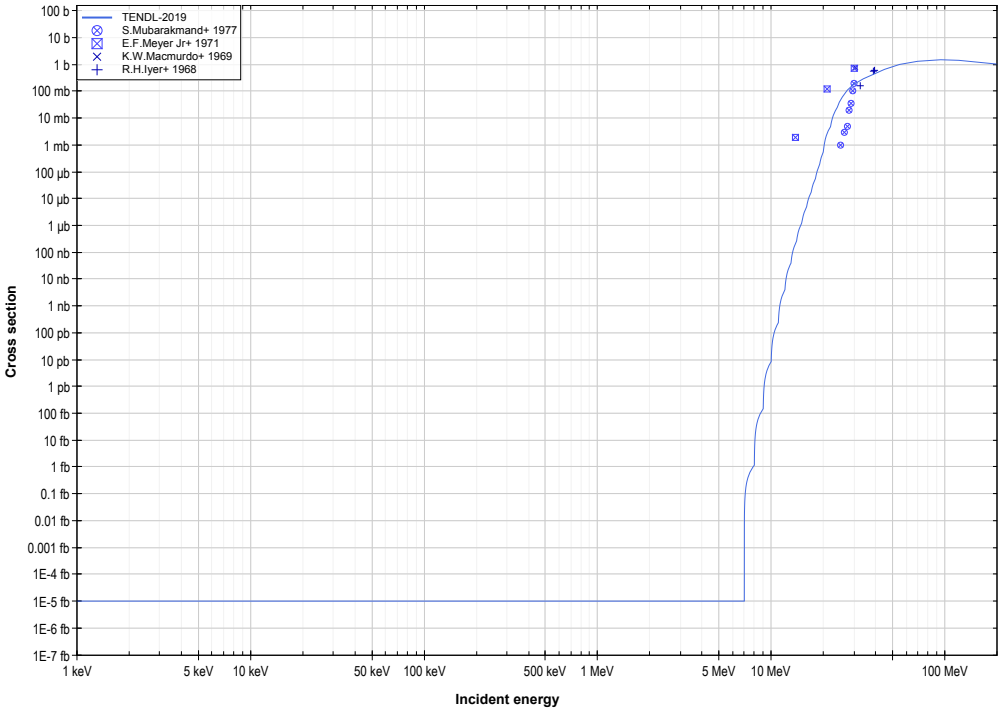
U236 (^{3}He,3n+d) or Np234 production lin-log



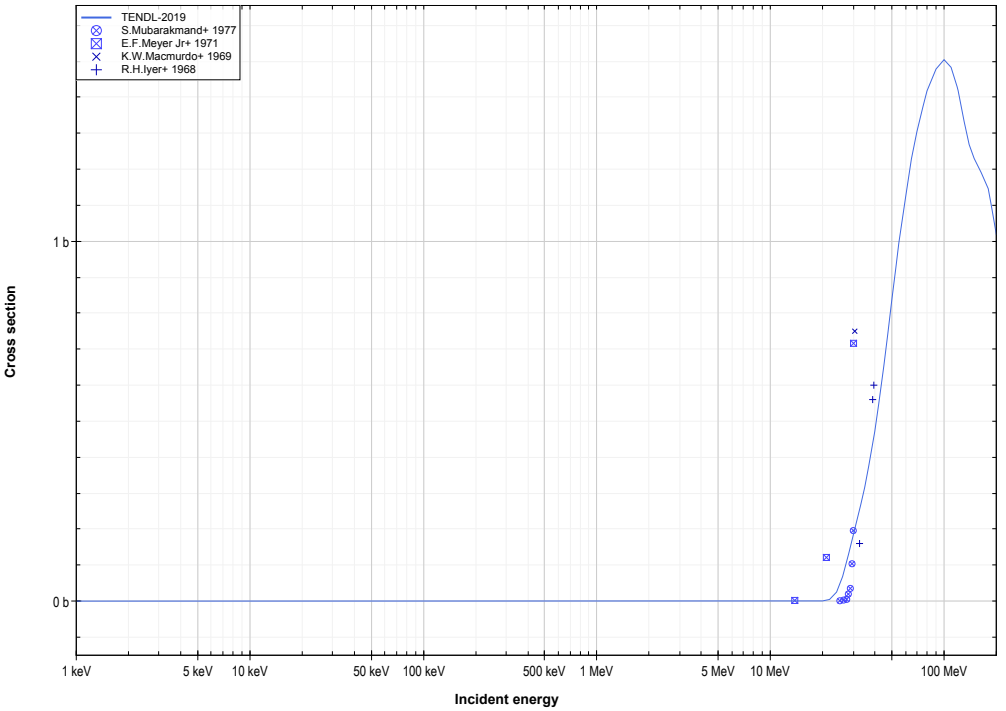
Reaction	Q-Value
U236(He3,2n+t)Np234	-13671.63 keV
U236(He3,3n+d)Np234	-19928.86 keV
U236(He3,4n+p)Np234	-22153.42 keV

<< 90-Th-232	**92-U-238**	
<< 92-U-236 MT157 (³He,3n+d)	**MT18 (³He,fission)**	93-Np-237 MT4 (³He,n) >>

U238 (³He,fission) log-log

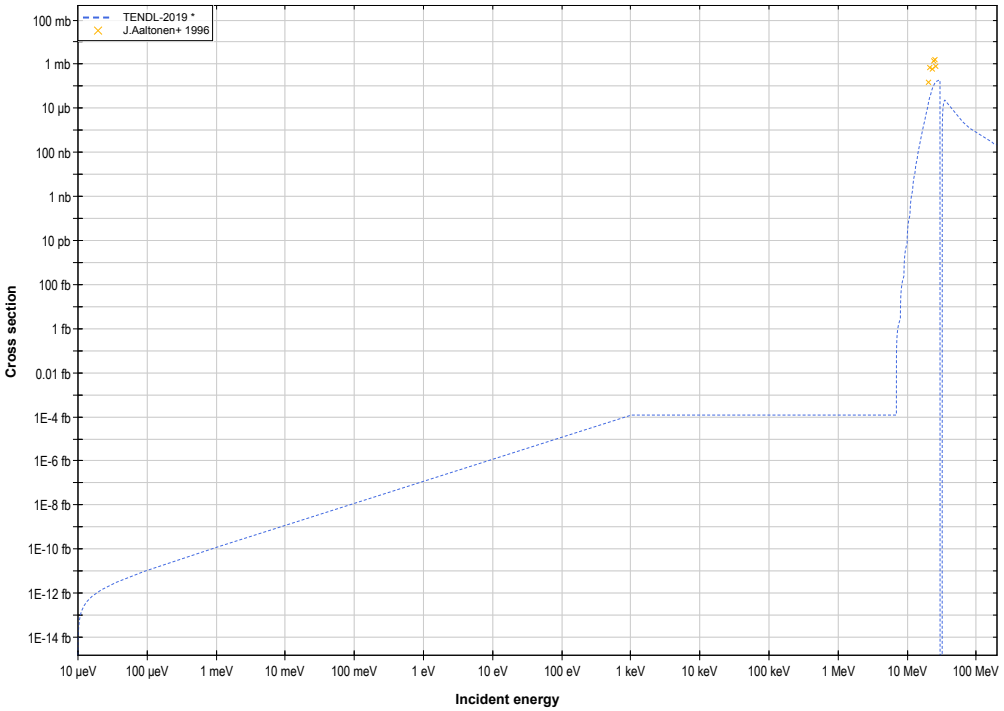


U238 (³He,fission) lin-log

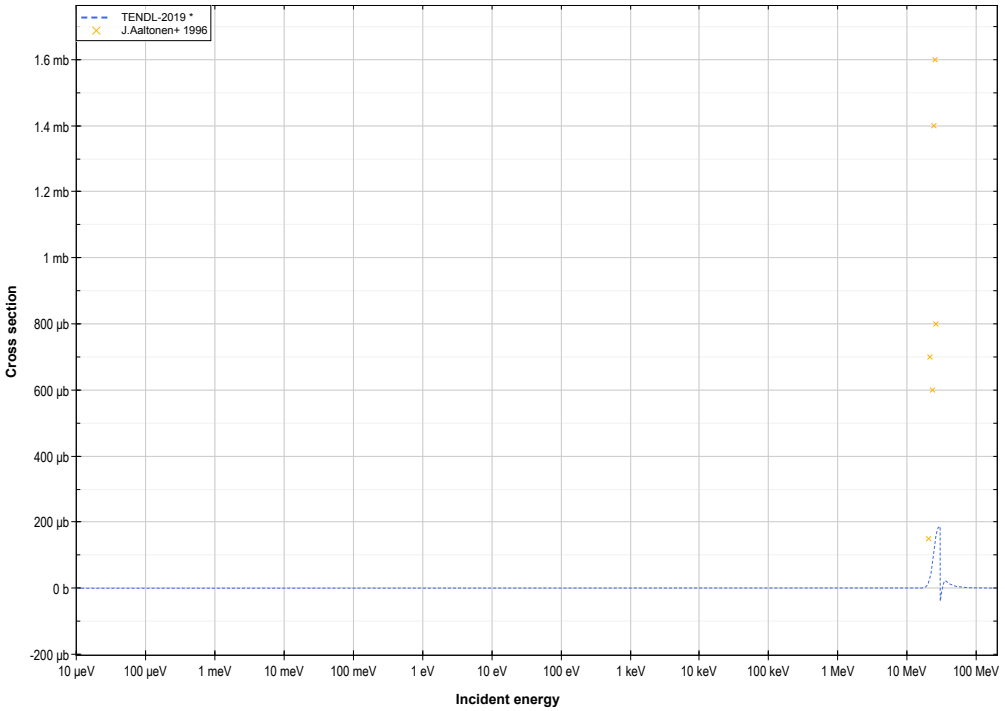


<< 92-U-235	**93-Np-237**	
<< 92-U-238 MT18 (³He,fission)	**MT4 (³He,n) or MT5 (Am239 production)**	MT11 (³He,2n+d) >>

Np237 (³He,n) or Am239 production log-log



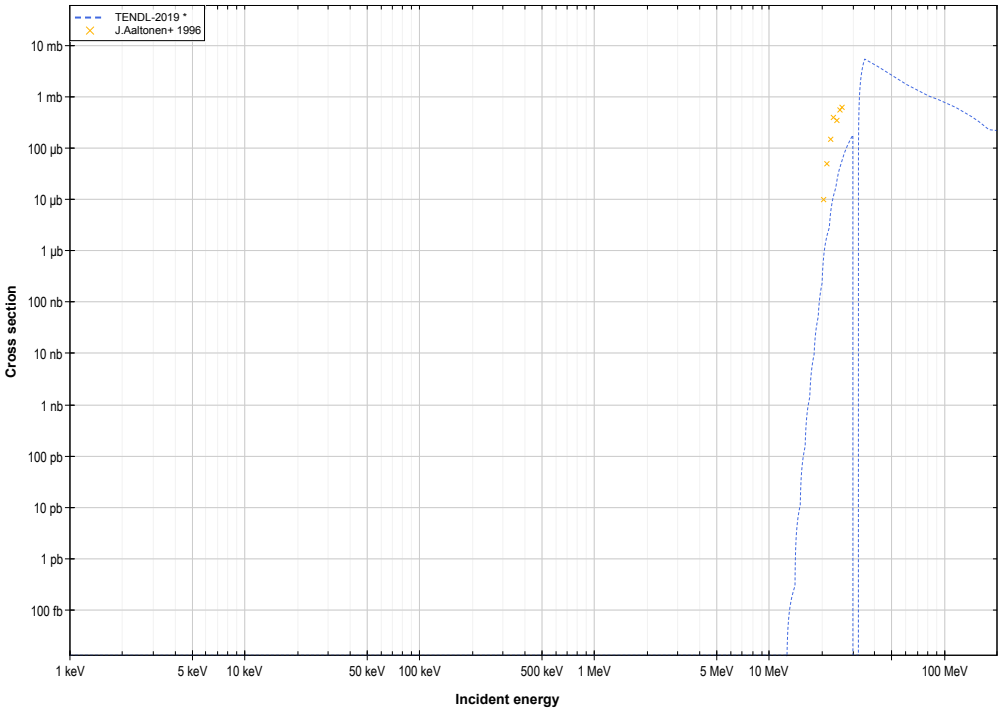
Np237 (³He,n) or Am239 production lin-log



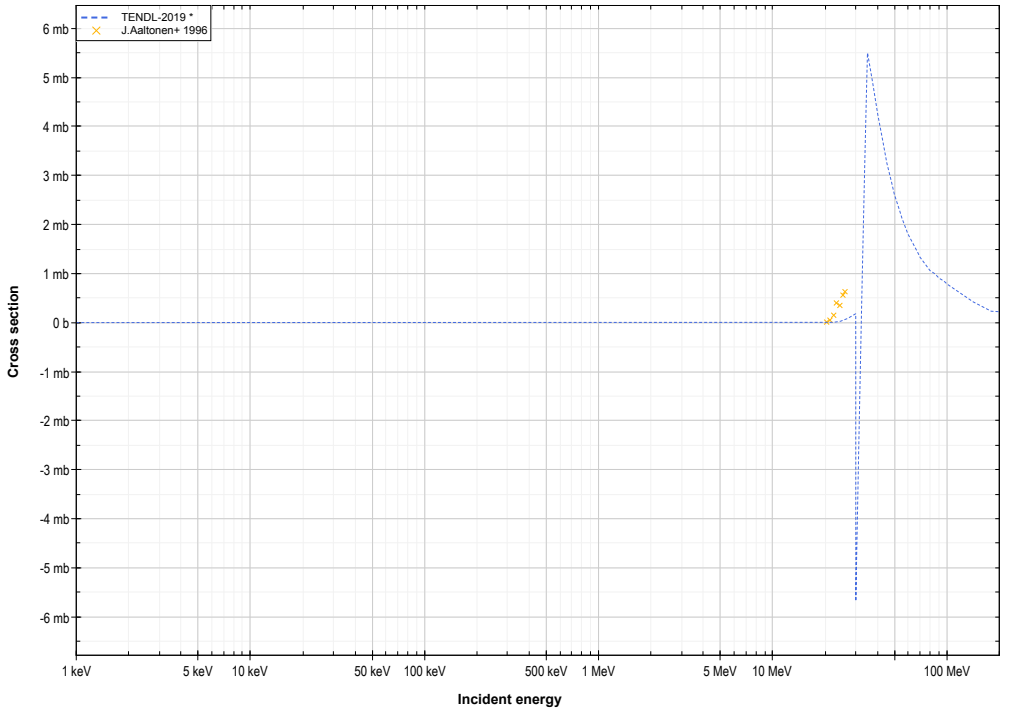
Reaction	Q-Value
Np237(He3,n)Am239	2341.20 keV

<< 92-U-236	**93-Np-237**	
<< MT4 (³He,n)	**MT11 (³He,2n+d) or MT5 (Pu236 production)**	MT17 (³He,3n) >>

Np237 (³He,2n+d) or Pu236 production log-log



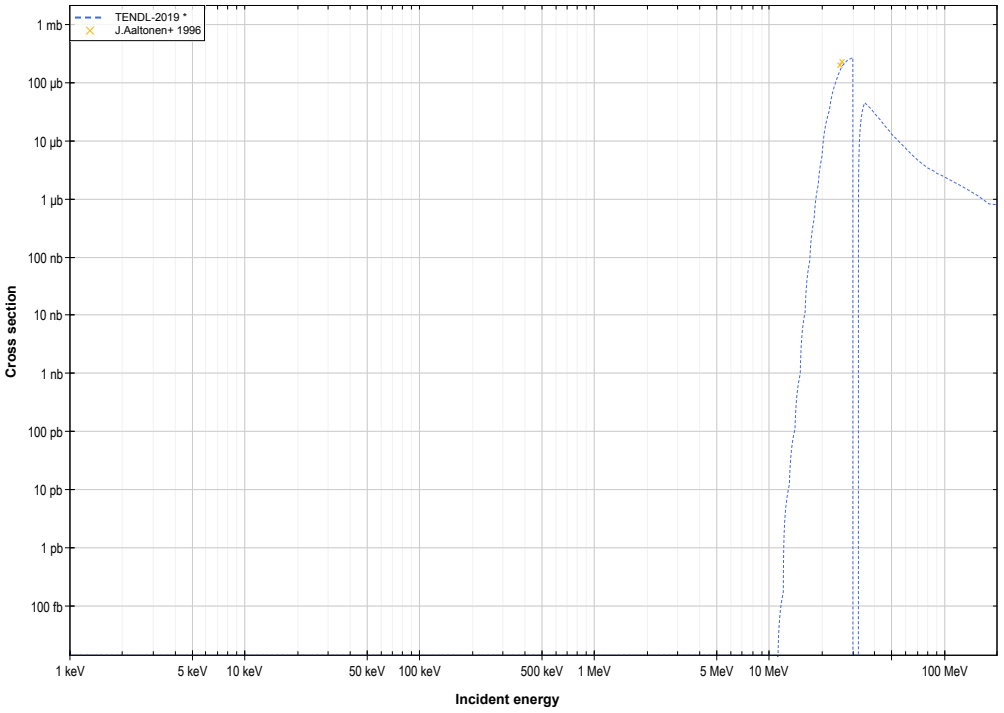
Np237 (³He,2n+d) or Pu236 production lin-log



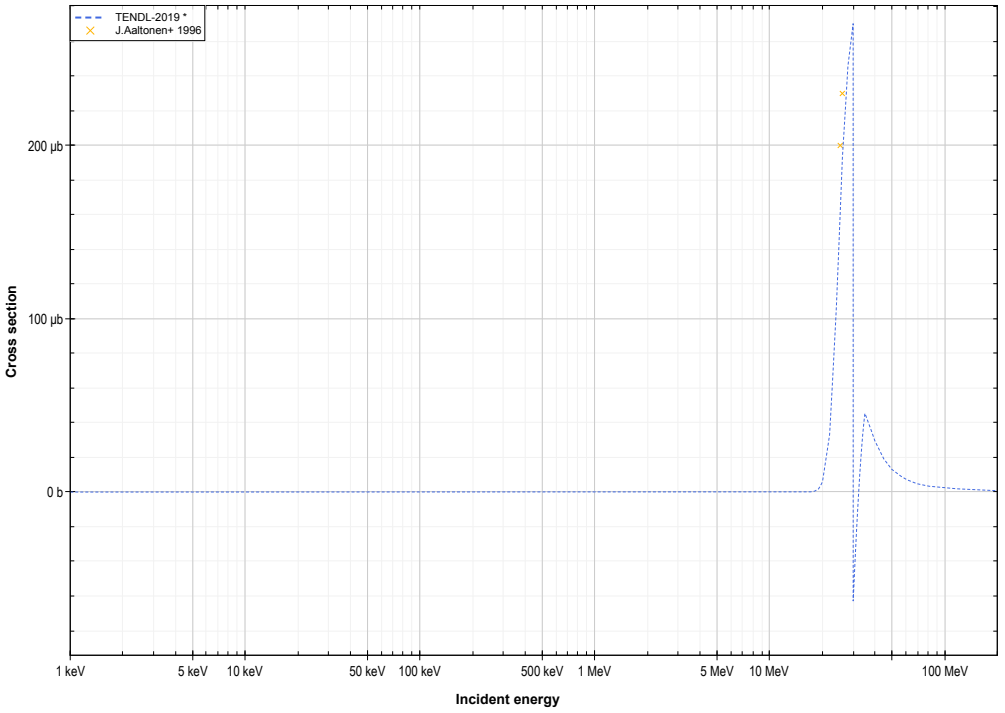
Reaction	Q-Value
Np237(He3,n+t)Pu236	-6119.81 keV
Np237(He3,2n+d)Pu236	-12377.04 keV
Np237(He3,3n+p)Pu236	-14601.60 keV

<< 90-Th-230	**93-Np-237**	
<< MT11 (³He,2n+d)	**MT17 (³He,3n) or MT5 (Am237 production)**	MT28 (³He,n+p) >>

Np237 (³He,3n) or Am237 production log-log



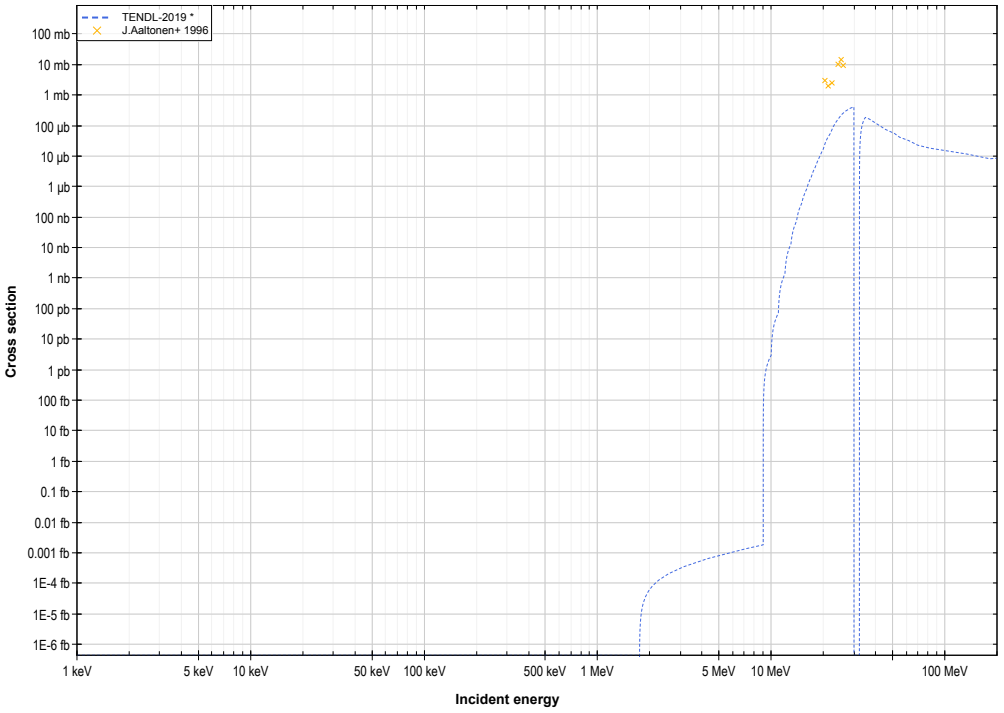
Np237 (³He,3n) or Am237 production lin-log



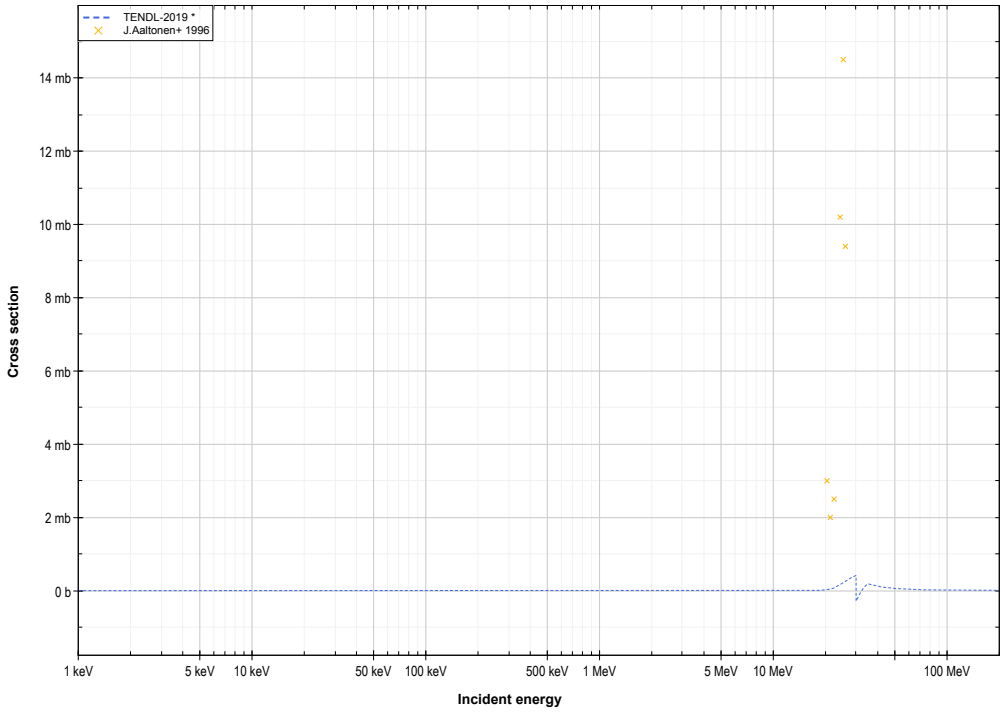
Reaction	Q-Value
Np237(He3,3n)Am237	-10981.03 keV

<< 83-Bi-209	**93-Np-237**	
<< MT17 (³He,3n)	**MT28 (³He,n+p) or MT5 (Pu238 production)**	MT33 (³He,n+t) >>

Np237 (³He,n+p) or Pu238 production log-log



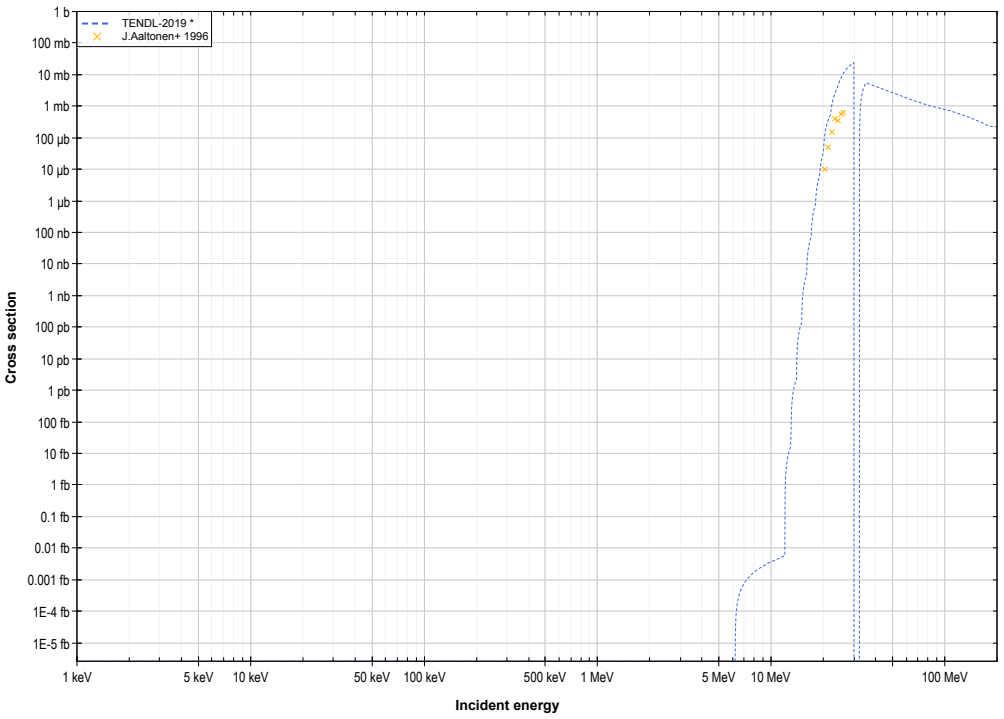
Np237 (³He,n+p) or Pu238 production lin-log



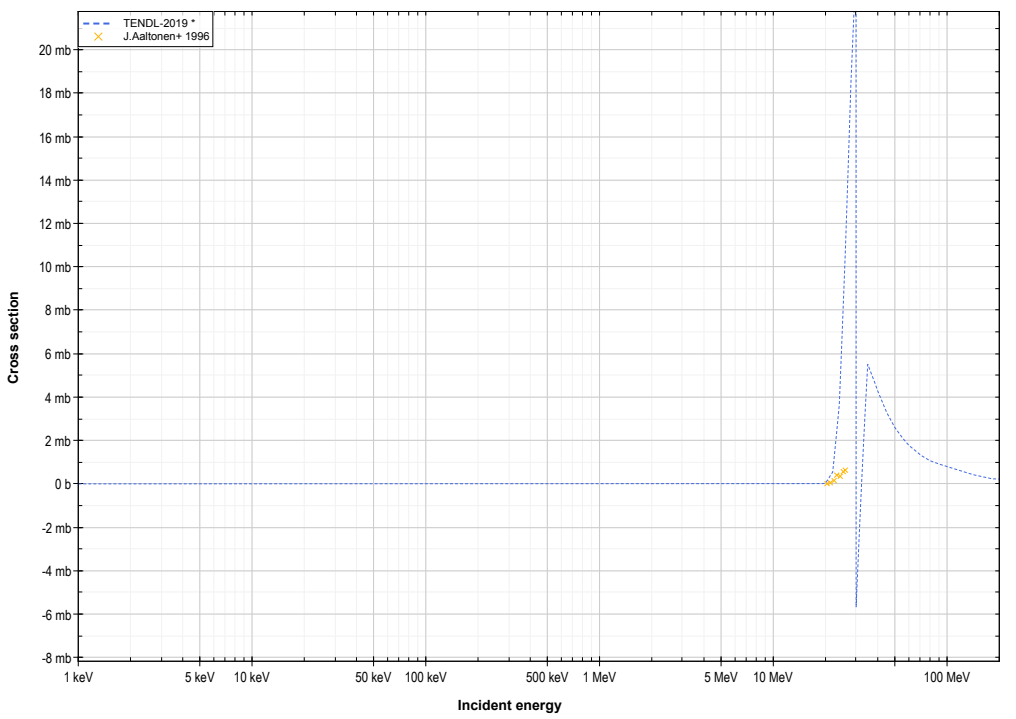
Reaction	Q-Value
Np237(He3,d)Pu238	504.00 keV
Np237(He3,n+p)Pu238	-1720.57 keV

<< 92-U-236	**93-Np-237**	
<< MT28 (³He,n+p)	**MT33 (³He,n+t) or MT5 (Pu236 production)**	MT42 (³He,3n+p) >>

Np237 (³He,n+t) or Pu236 production log-log



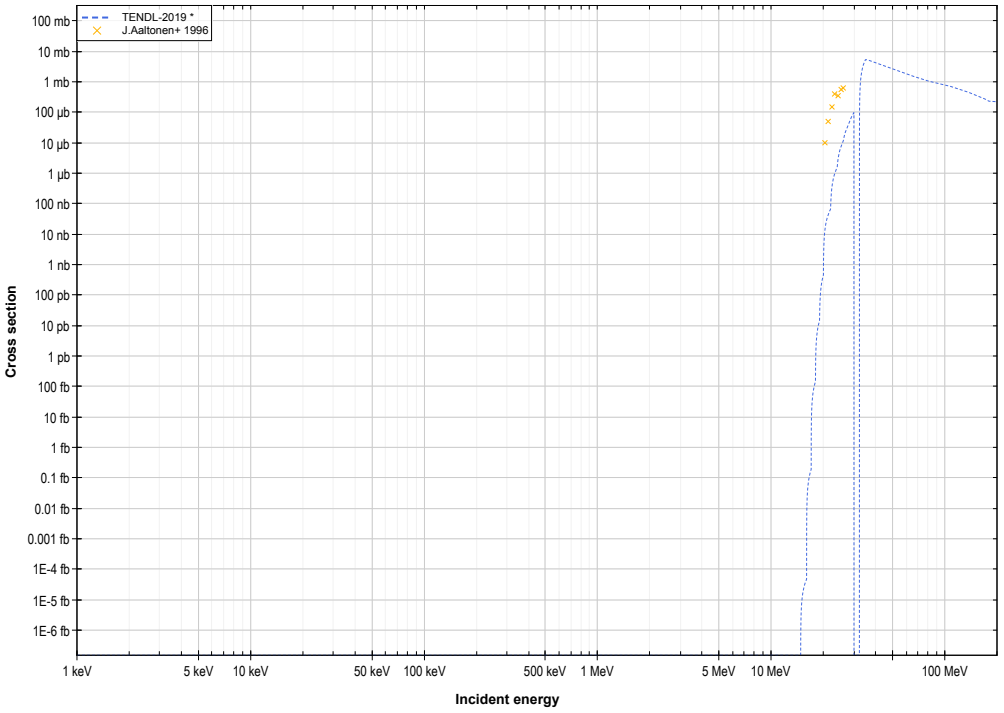
Np237 (³He,n+t) or Pu236 production lin-log



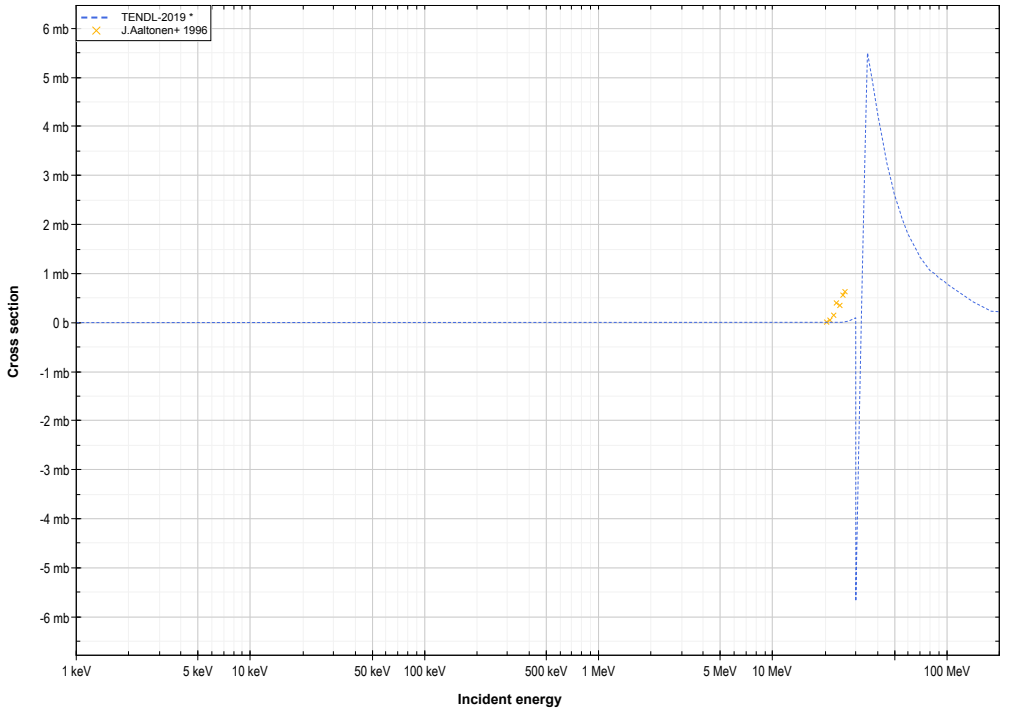
Reaction	Q-Value
Np237(He3,n+t)Pu236	-6119.81 keV
Np237(He3,2n+d)Pu236	-12377.04 keV
Np237(He3,3n+p)Pu236	-14601.60 keV

<< 92-U-236	**93-Np-237**	
<< MT33 (^{3}He,n+t)	**MT42 (^{3}He,3n+p) or MT5 (Pu236 production)**	MT104 (^{3}He,d) >>

Np237 (^{3}He,3n+p) or Pu236 production log-log



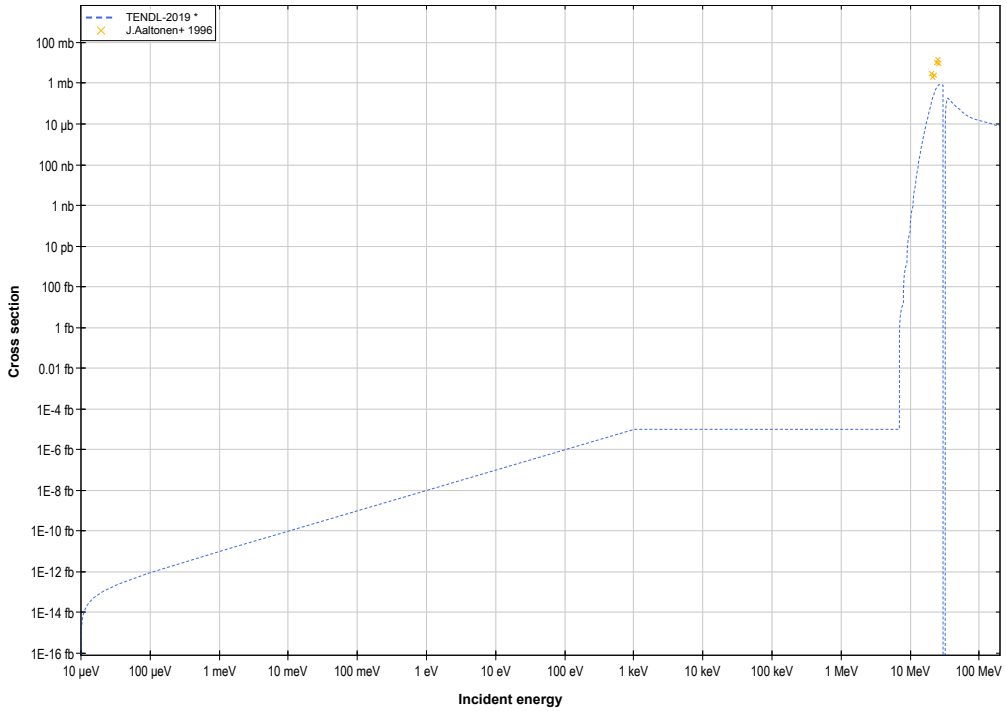
Np237 (^{3}He,3n+p) or Pu236 production lin-log



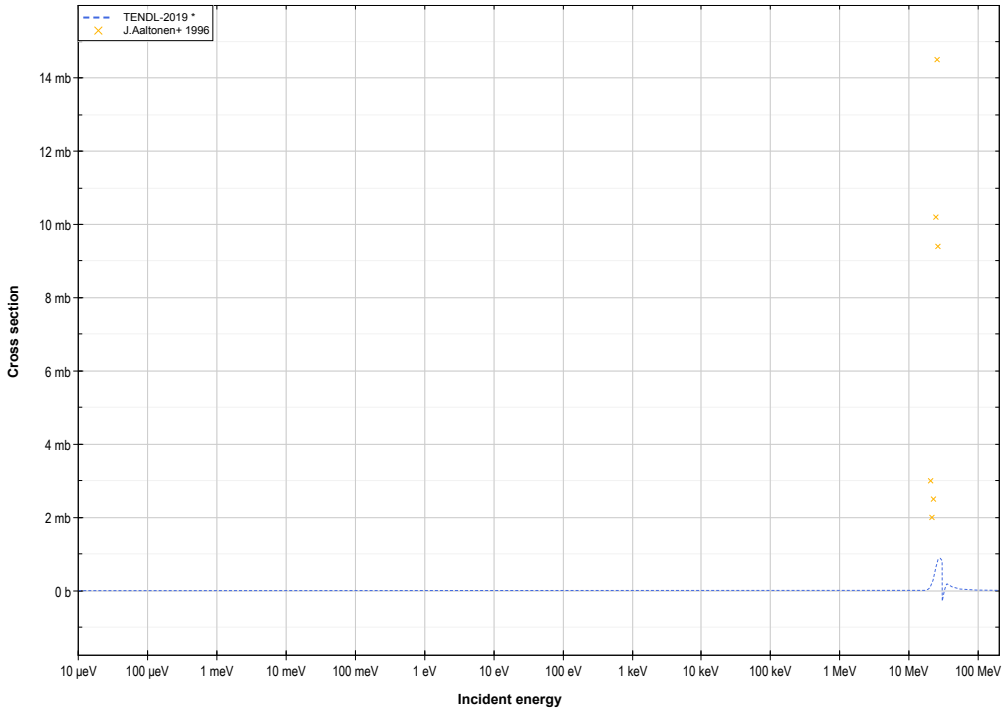
Reaction	Q-Value
Np237(He3,n+t)Pu236	-6119.81 keV
Np237(He3,2n+d)Pu236	-12377.04 keV
Np237(He3,3n+p)Pu236	-14601.60 keV

<< 83-Bi-209	**93-Np-237**	
<< MT42 (³He,3n+p)	**MT104 (³He,d) or MT5 (Pu238 production)**	MT111 (³He,2p) >>

Np237 (³He,d) or Pu238 production log-log



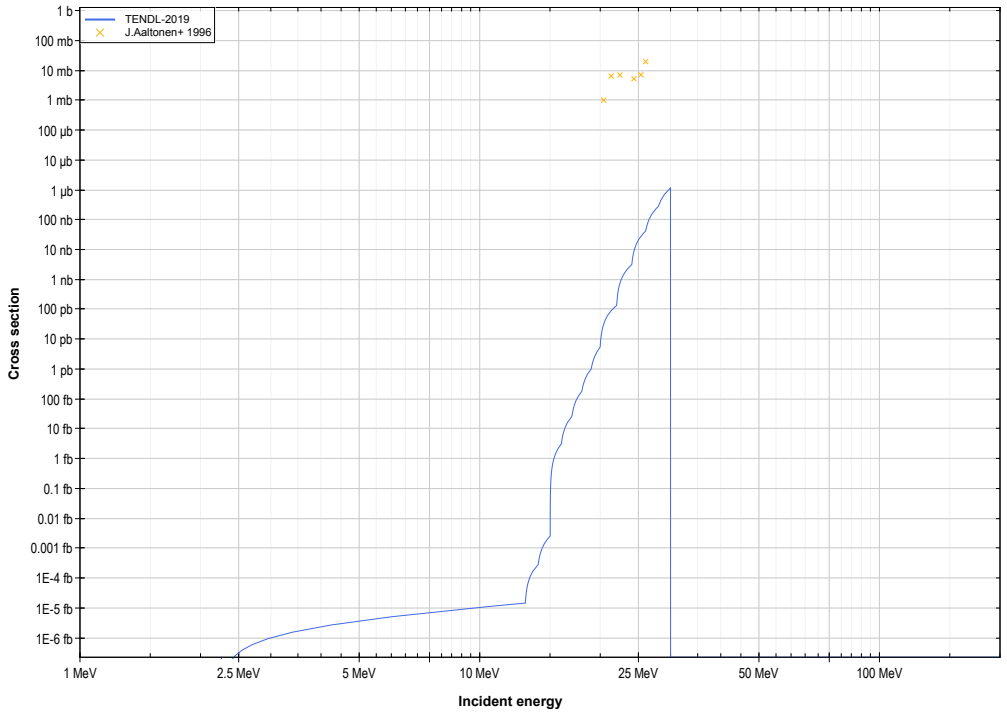
Np237 (³He,d) or Pu238 production lin-log



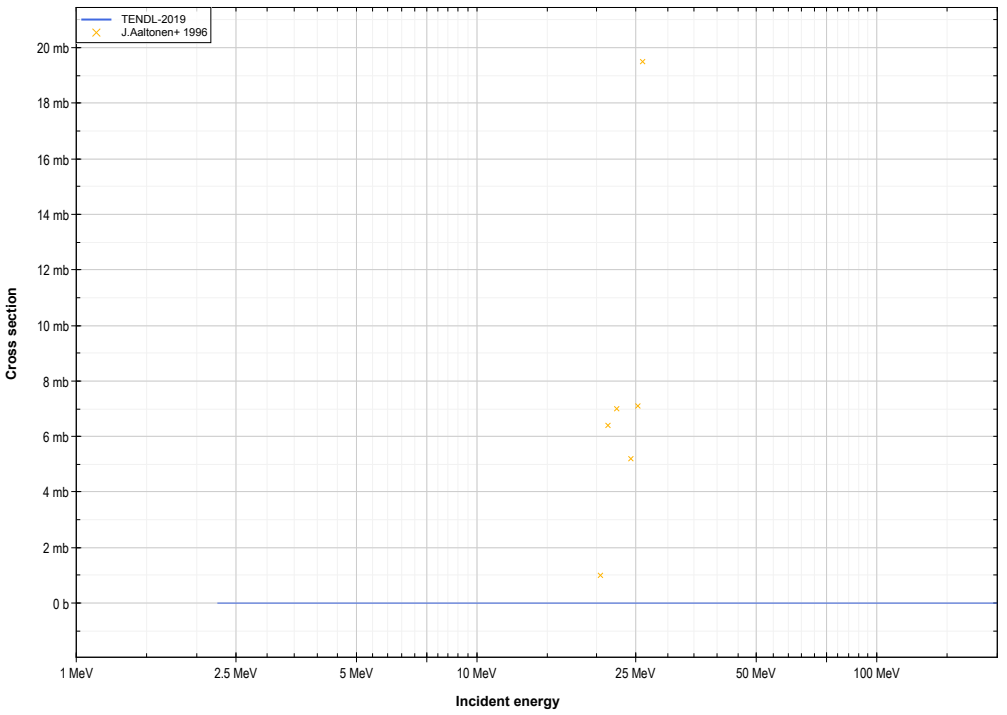
Reaction	Q-Value
Np237(He3,d)Pu238	504.00 keV
Np237(He3,n+p)Pu238	-1720.57 keV

<< 79-Au-197	**93-Np-237**	
<< MT104 (^{3}He,d)	**MT111 (^{3}He,2p) or MT5 (Np238 production)**	

Np237 (^{3}He,2p) or Np238 production log-log



Np237 (^{3}He,2p) or Np238 production lin-log



Reaction	Q-Value
Np237(He3,2p)Np238	-2229.72 keV