



JANIS Book

of deuteron-induced cross-sections

Comparison of evaluated and experimental data from
ENDF/B-VII.1, TENDL-2011 and EXFOR

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OECD NEA Data Bank

Introduction

This document compares evaluated cross-sections below 200 MeV with corresponding experimental data from the EXFOR database for a number of evaluated libraries (Table 1), nuclear reactions and associated reaction products (Table 2). This document was produced using tools based on the NEA Java-based nuclear information software (JANIS) and associated databases [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 their EXFOR entry number. 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 2003 Nubase and Atomic Mass Evaluation [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

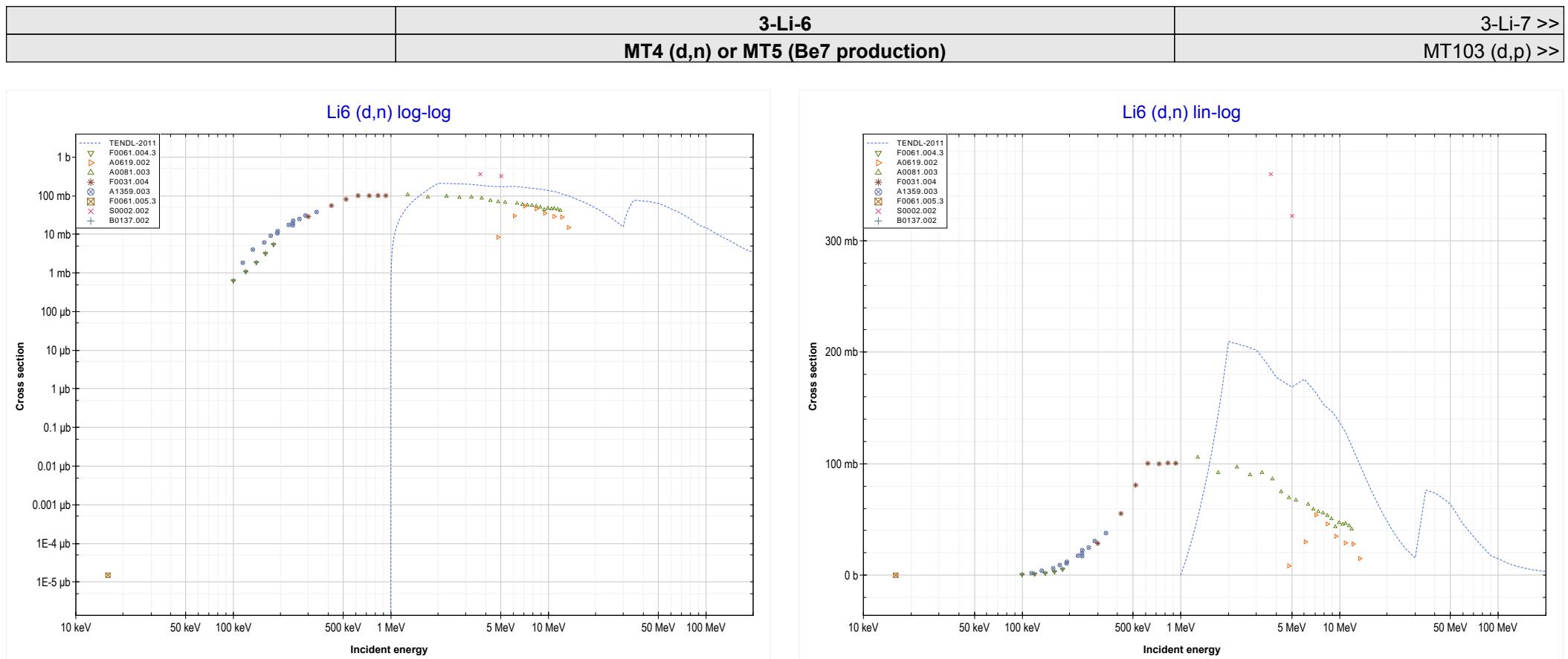
- [1] N. Soppera *et al.*, *Journal of the Korean Physical Society*, 59 (2011) 1329.
See also www.oecd-nea.org/janis.
- [2] G. Audi, A.H. Wapstra, *et al.*, *Nuclear Physics A* 729 (2003) 3-676.

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

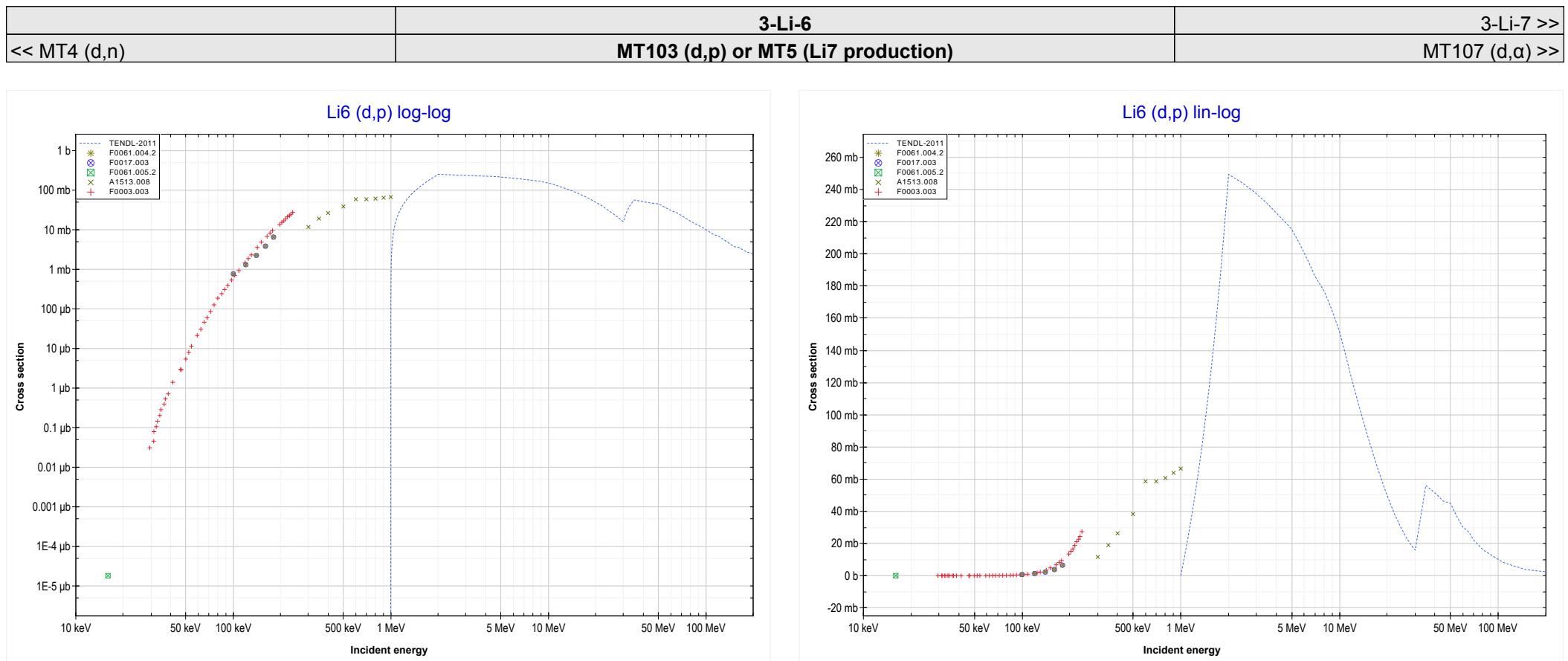
Library	Release date
ENDF/B-VII.1	December 2011
TENDL-2011	December 2011
EXFOR	May 2012

Table 2: list of exclusive reactions used in the inter-comparison

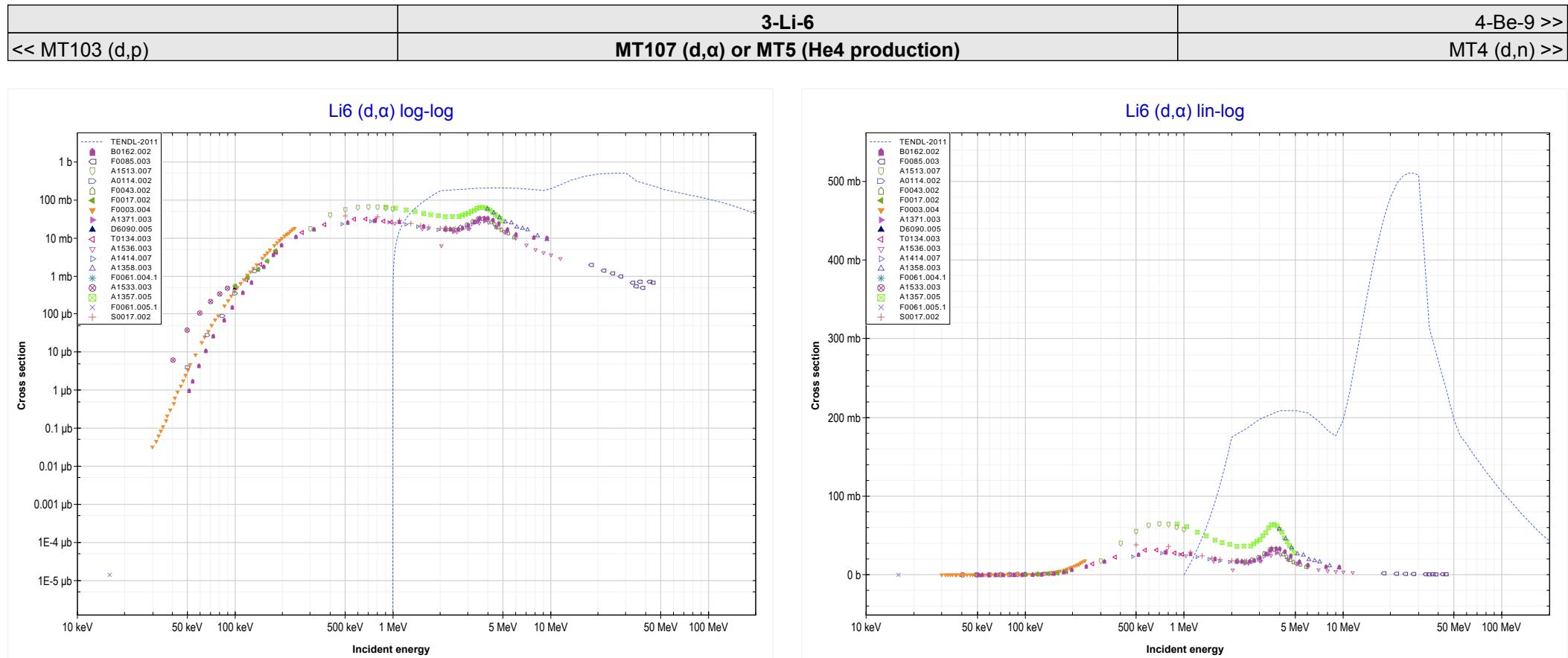
MT	Reaction	MT	Reaction	MT	Reaction	MT	Reaction
4	n	102	gamma	159	2n+p+a	181	3n+p+a
11	2n+d	103	p	160	7n	182	d+t
16	2n	104	d	161	8n	183	n+p+d
17	3n	105	t	162	5n+p	184	n+p+t
18	fission	106	h	163	6n+p	185	n+d+t
22	n+a	107	a	164	7n+p	186	n+p+h
23	n+3a	108	2a	165	4n+a	187	n+d+h
24	2n+a	109	3a	166	5n+a	188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



Reaction	Q-Value
Li6(d,n)Be7	3381.17 keV

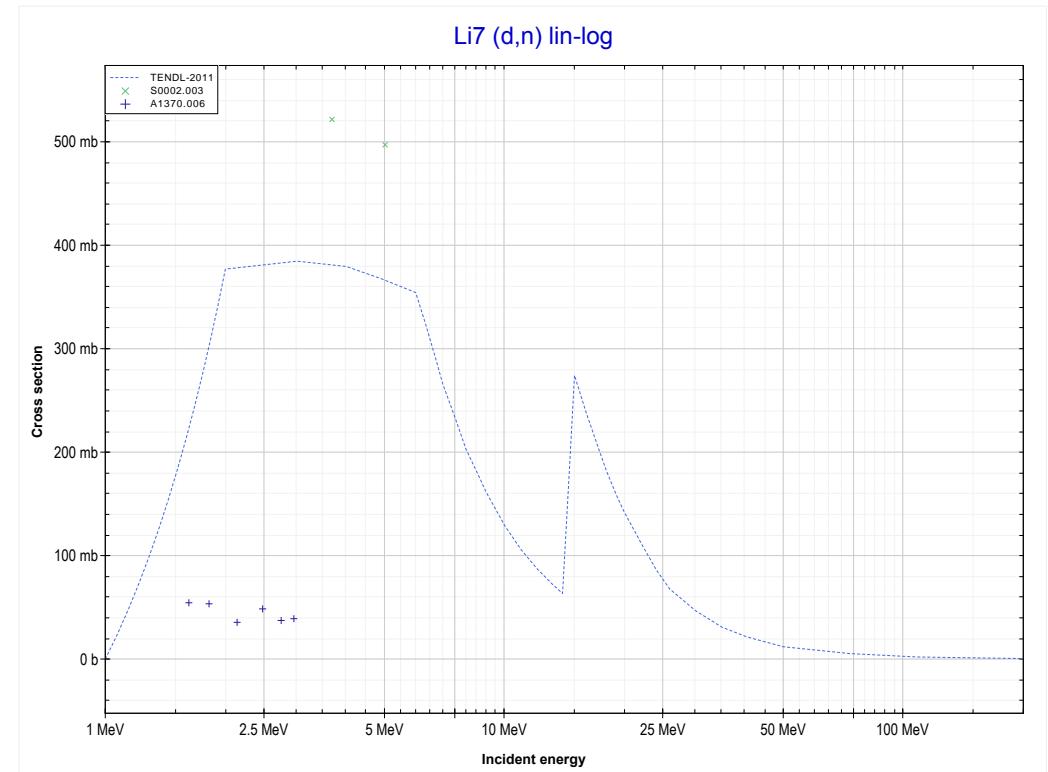
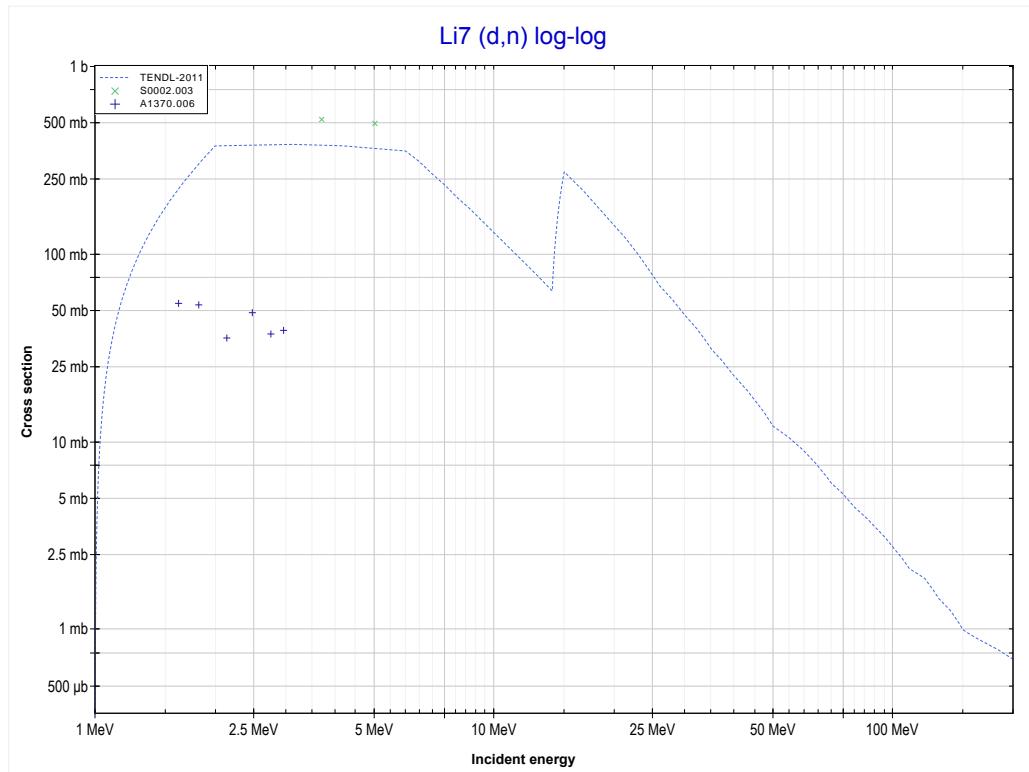


Reaction	Q-Value
Li6(d,p)Li7	5025.40 keV



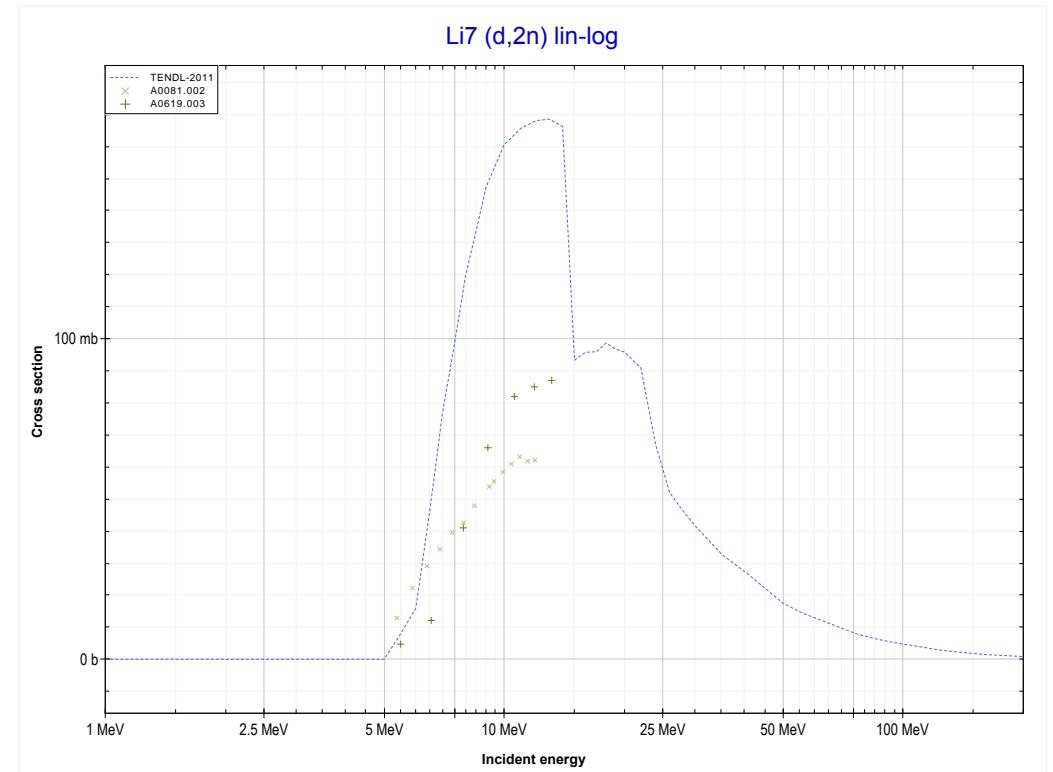
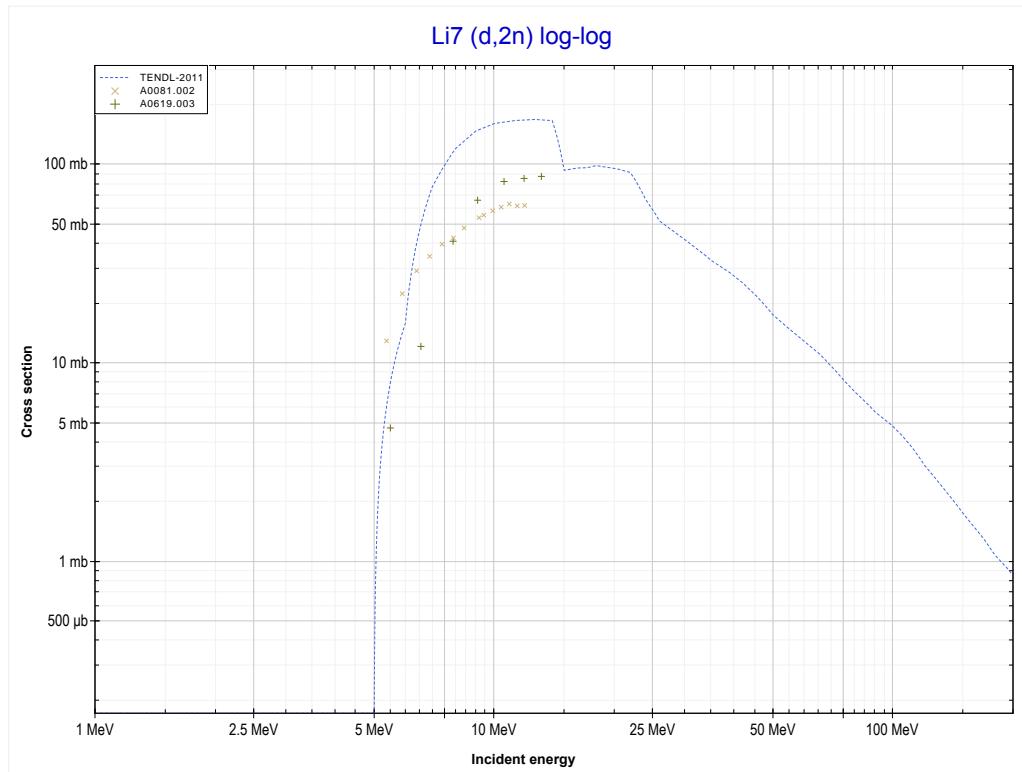
Reaction	Q-Value
Li6(d, α)He4	22372.68 keV
Li6(d,p+t)He4	2558.82 keV
Li6(d,n+He3)He4	1795.07 keV
Li6(d,2d)He4	-1473.84 keV
Li6(d,n+p+d)He4	-3698.41 keV
Li6(d,2n+2p)He4	-5922.98 keV

<< 3-Li-6	3-Li-7 MT4 (d,n) or MT5 (Be8 production)	5-B-10 >> MT16 (d,2n) >>
<< MT107 (d, α)		

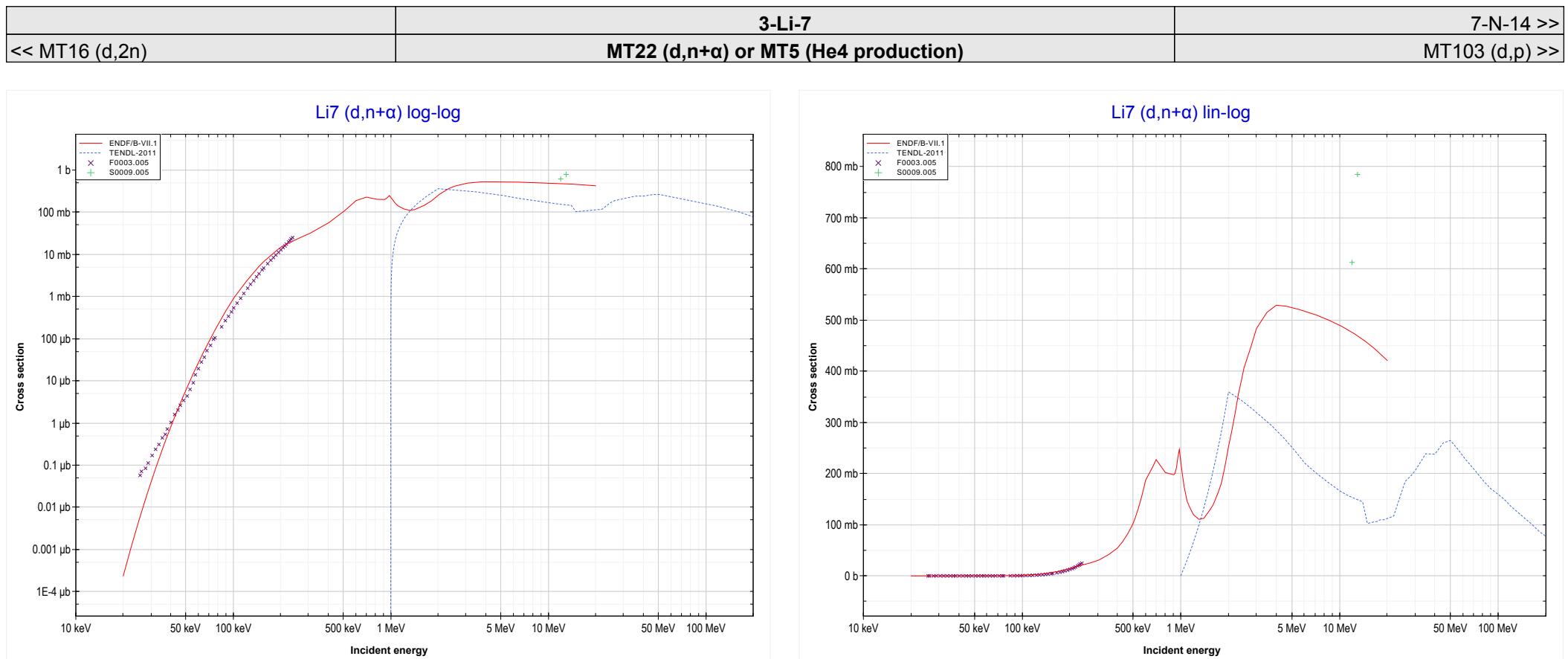


Reaction	Q-Value
Li7(d,n)Be8	15030.87 keV

<< MT4 (d,n)	3-Li-7 MT16 (d,2n) or MT5 (Be7 production)	5-B-11 >> MT22 (d,n+α) >>
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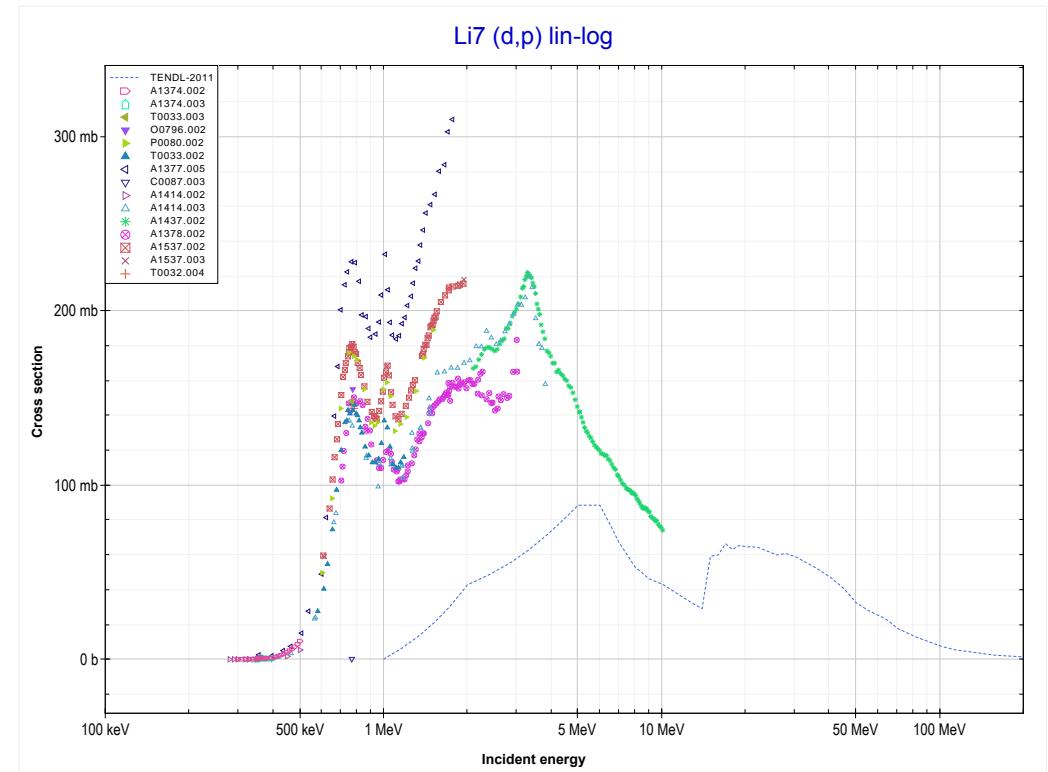
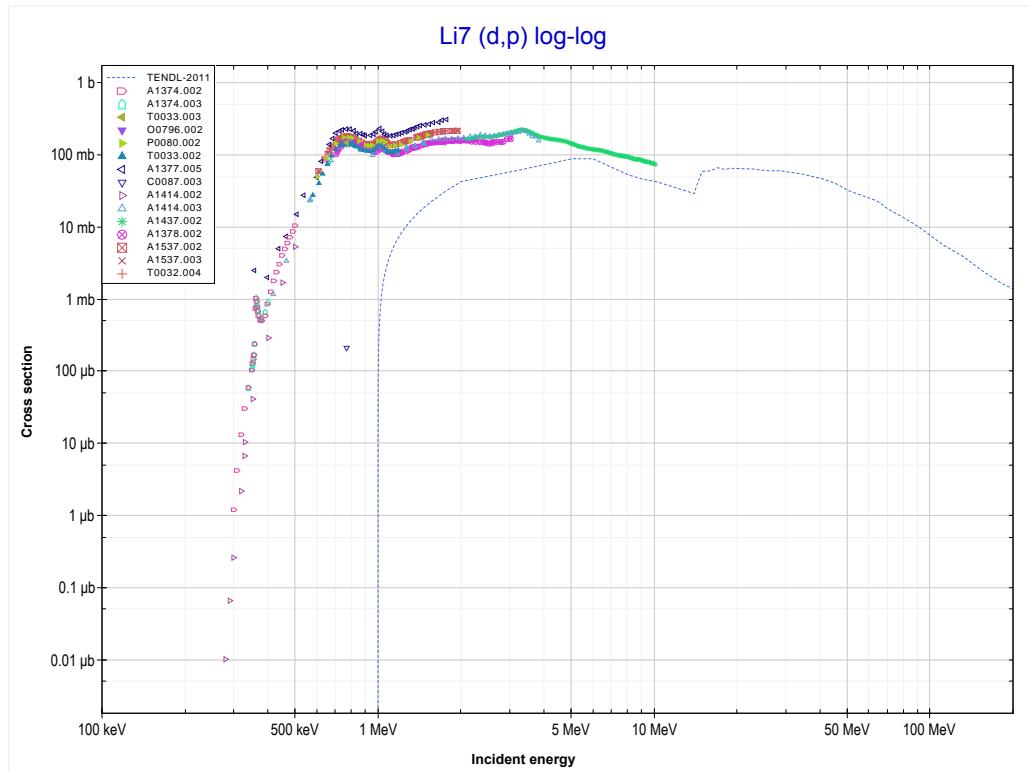


Reaction	Q-Value
Li7(d,2n)Be7	-3868.80 keV



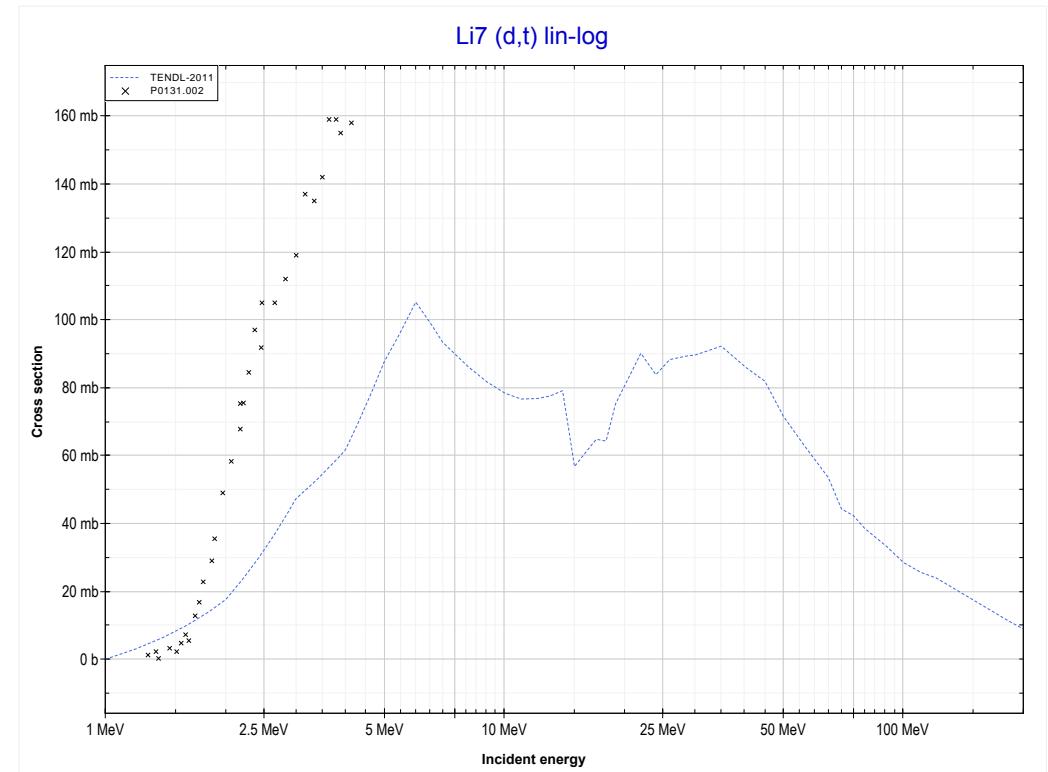
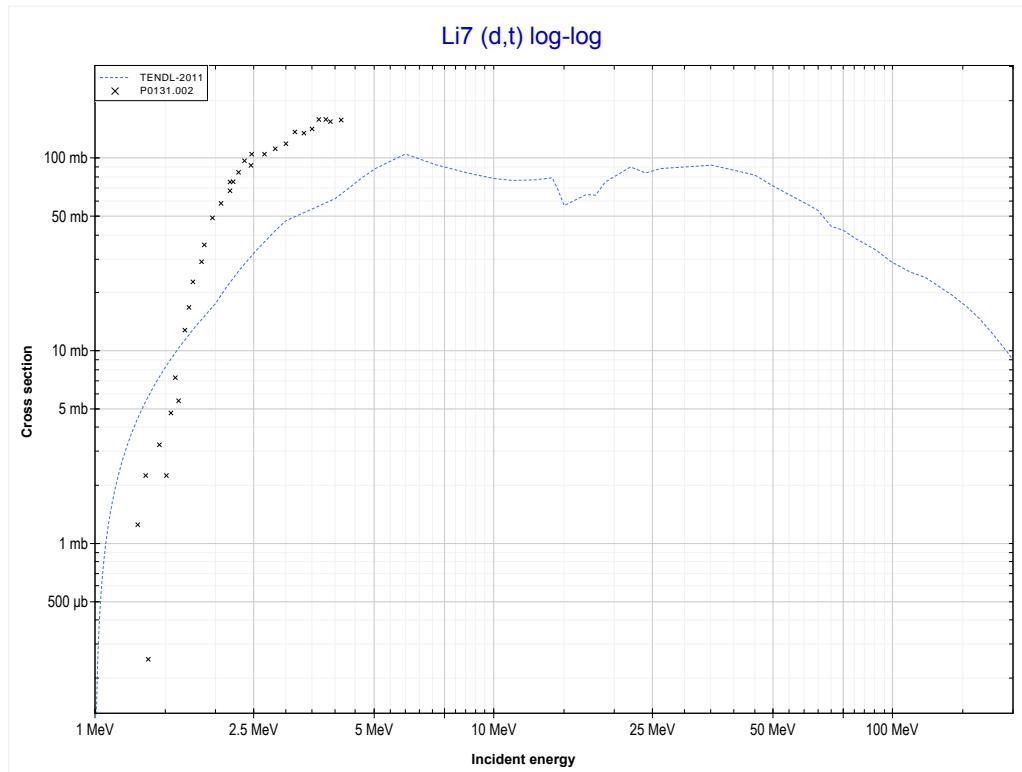
Reaction	Q-Value
Li7(d,n+α)He4	15122.71 keV
Li7(d,d+t)He4	-2466.58 keV
Li7(d,n+p+t)He4	-4691.15 keV
Li7(d,2n+He3)He4	-5454.90 keV
Li7(d,n+2d)He4	-8723.81 keV
Li7(d,2n+p+d)He4	-10948.38 keV
Li7(d,3n+2p)He4	-13172.95 keV

<< 3-Li-6	3-Li-7	4-Be-9 >>
<< MT22 (d,n+α)	MT103 (d,p) or MT5 (Li8 production)	MT105 (d,t) >>



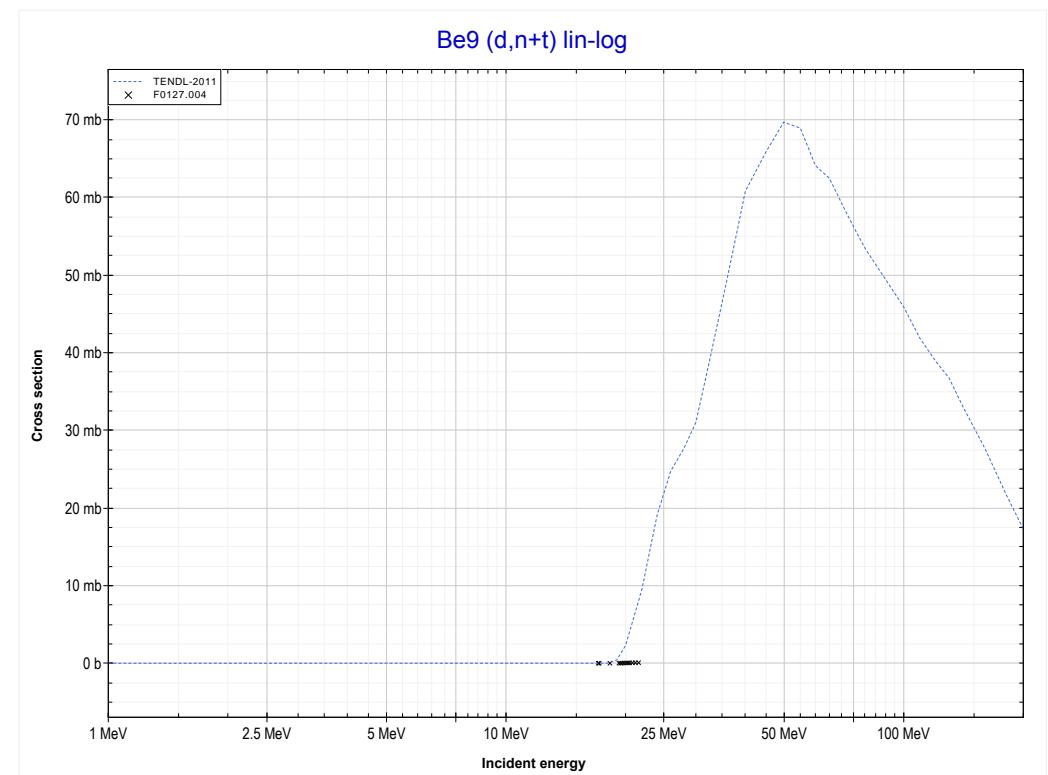
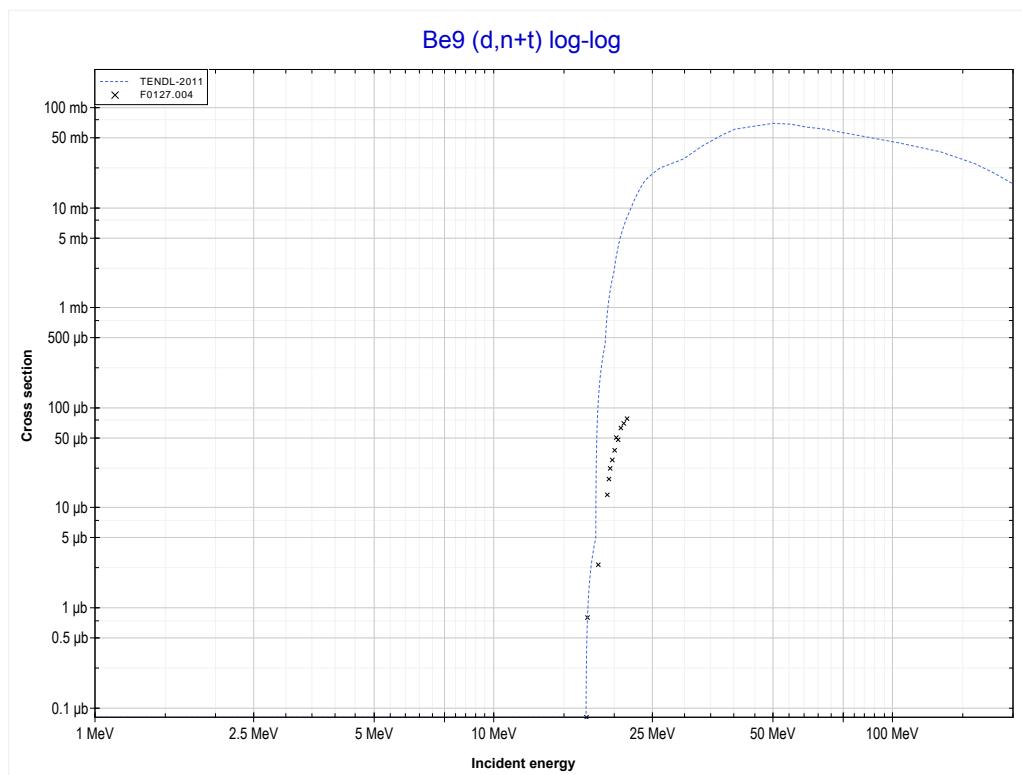
Reaction	Q-Value
Li7(d,p)Li8	-191.95 keV

<< MT103 (d,p)	3-Li-7 MT105 (d,t) or MT5 (Li6 production)	4-Be-9 >> MT33 (d,n+t) >>
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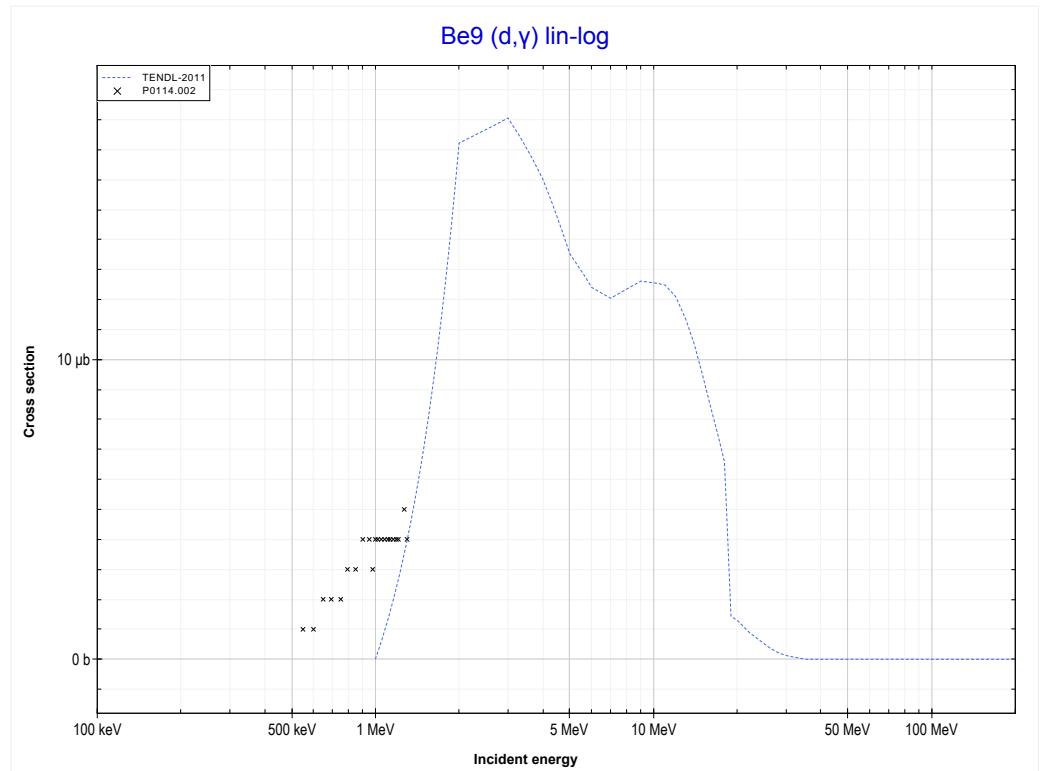
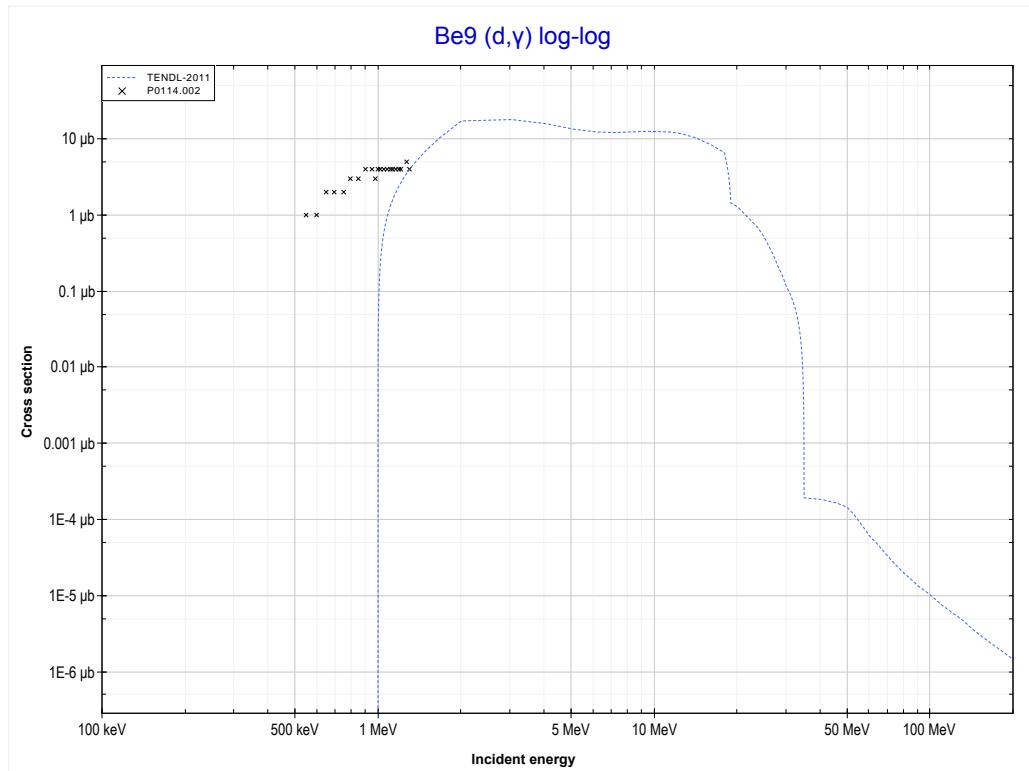
Reaction	Q-Value
Li7(d,t)Li6	-992.74 keV
Li7(d,n+d)Li6	-7249.97 keV
Li7(d,2n+p)Li6	-9474.54 keV

	4-Be-9 MT33 (d,n+t) or MT5 (Be7 production)	23-V-51 >>
<< MT105 (d,t)		MT102 (d,y) >>



Reaction	Q-Value
Be9(d,n+t)Be7	-14307.83 keV
Be9(d,2n+d)Be7	-20565.06 keV
Be9(d,3n+p)Be7	-22789.63 keV

<< MT33 (d,n+t)	4-Be-9 MT102 (d, γ) or MT5 (B11 production)	14-Si-30 >> MT103 (d,p) >>
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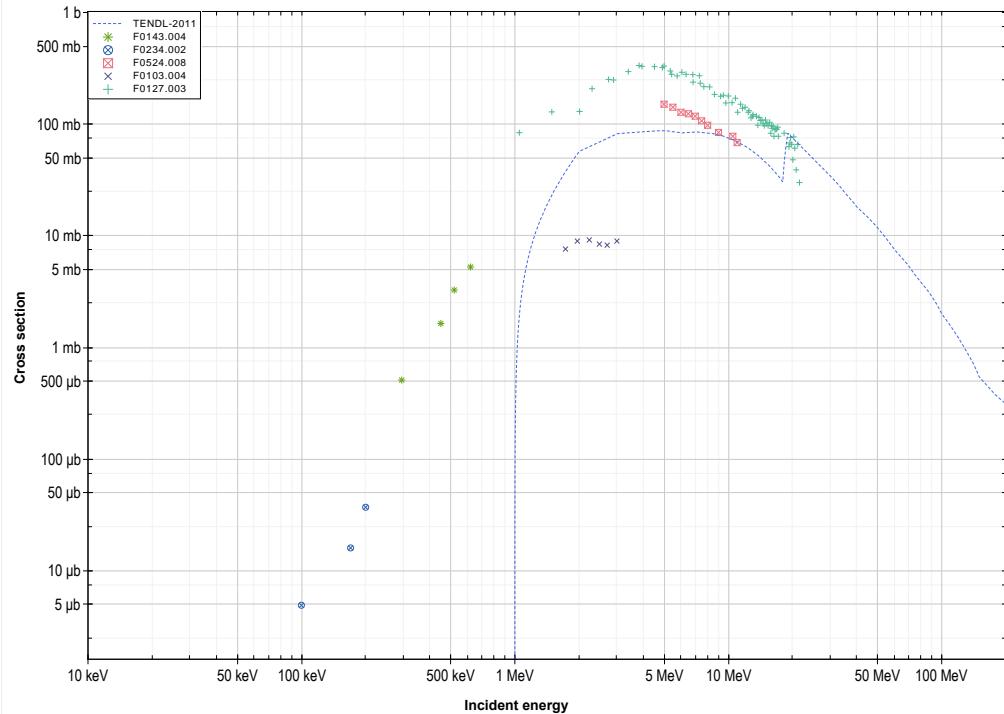
Reaction	Q-Value
Be9(d, γ)B11	15815.42 keV

<< 3-Li-7	
<< MT102 (d, γ)	

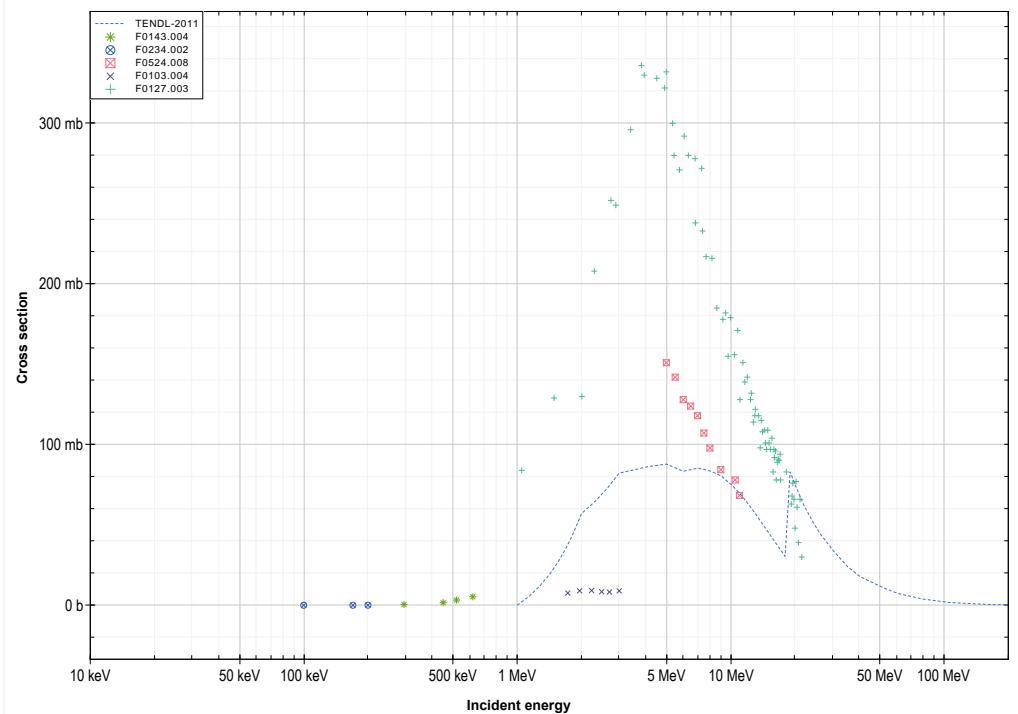
4-Be-9
MT103 (d,p) or MT5 (Be10 production)

5-B-11 >>
MT105 (d,t) >>

Be9 (d,p) log-log



Be9 (d,p) lin-log



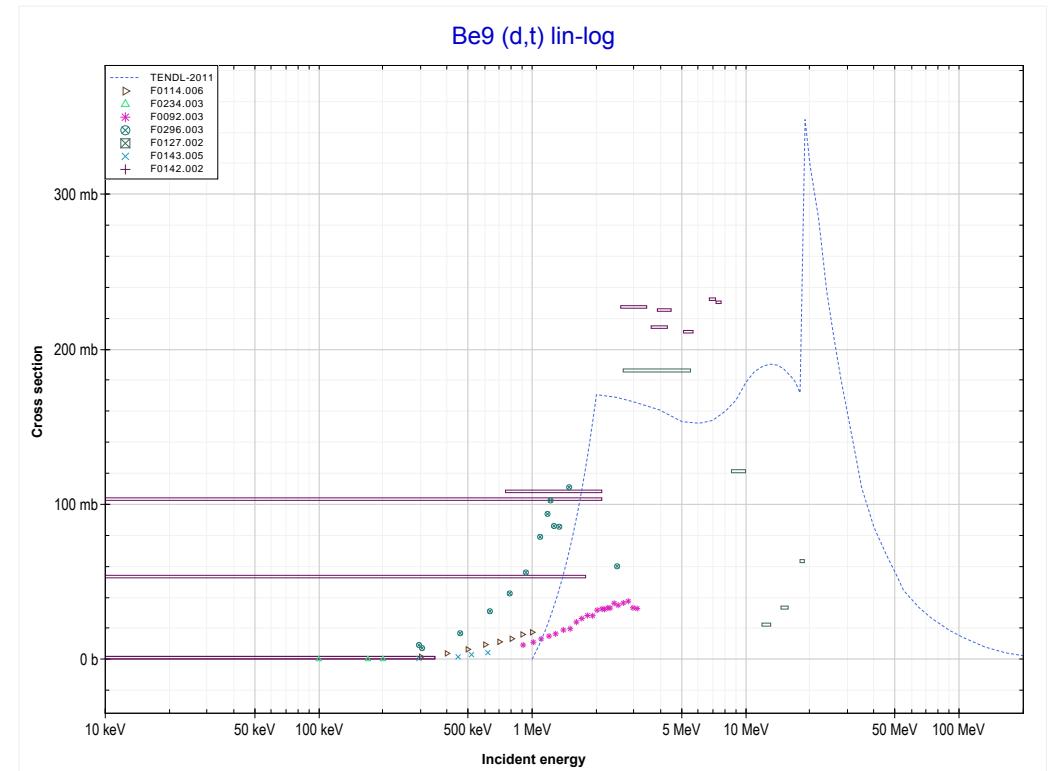
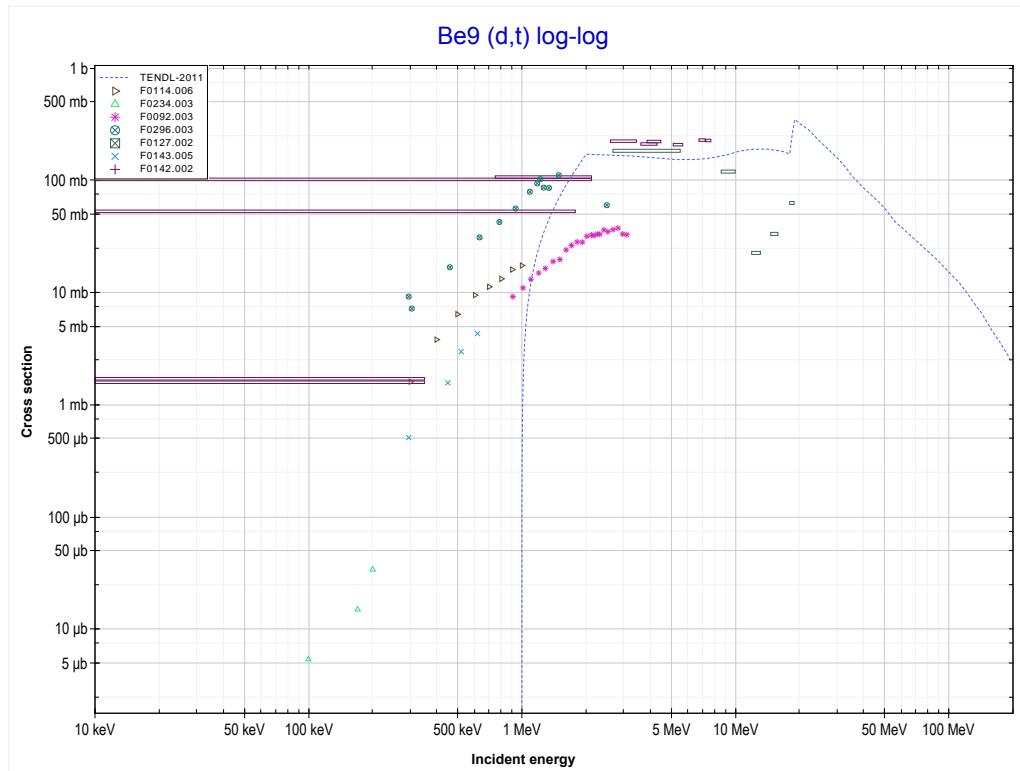
Reaction
Be9(d,p)Be10

Q-Value
4587.65 keV

<< 3-Li-7	
<< MT103 (d,p)	

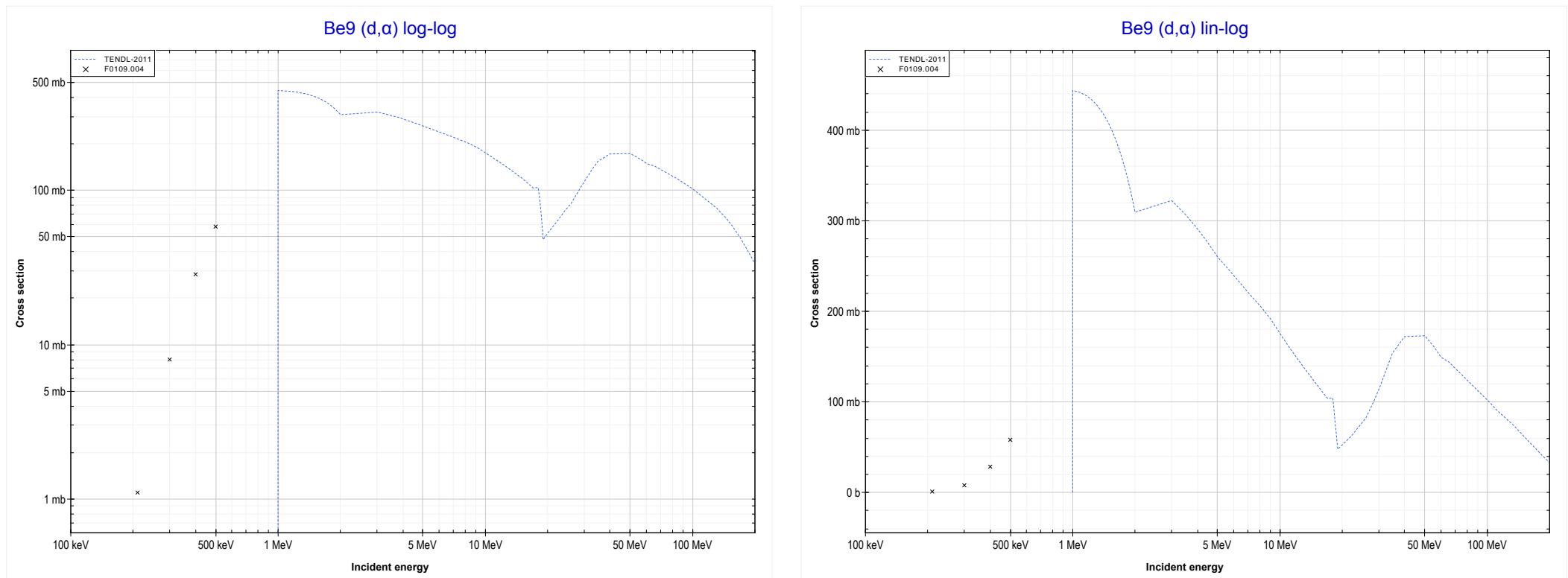
4-Be-9
MT105 (d,t) or MT5 (Be8 production)

7-N-14 >>
MT107 (d, α) >>



Reaction	Q-Value
Be9(d,t)Be8	4591.85 keV
Be9(d,n+d)Be8	-1665.39 keV
Be9(d,2n+p)Be8	-3889.95 keV

<< 3-Li-6	4-Be-9 MT107 (d,α) or MT5 (Li7 production)	6-C-12 >>
<< MT105 (d,t)		MT4 (d,n) >>



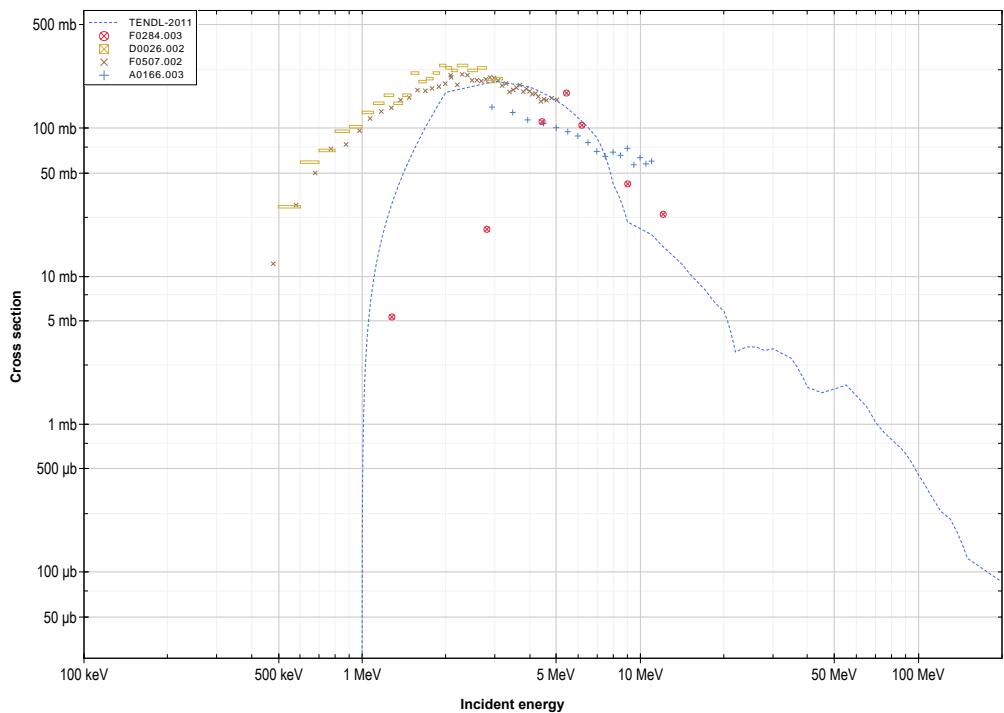
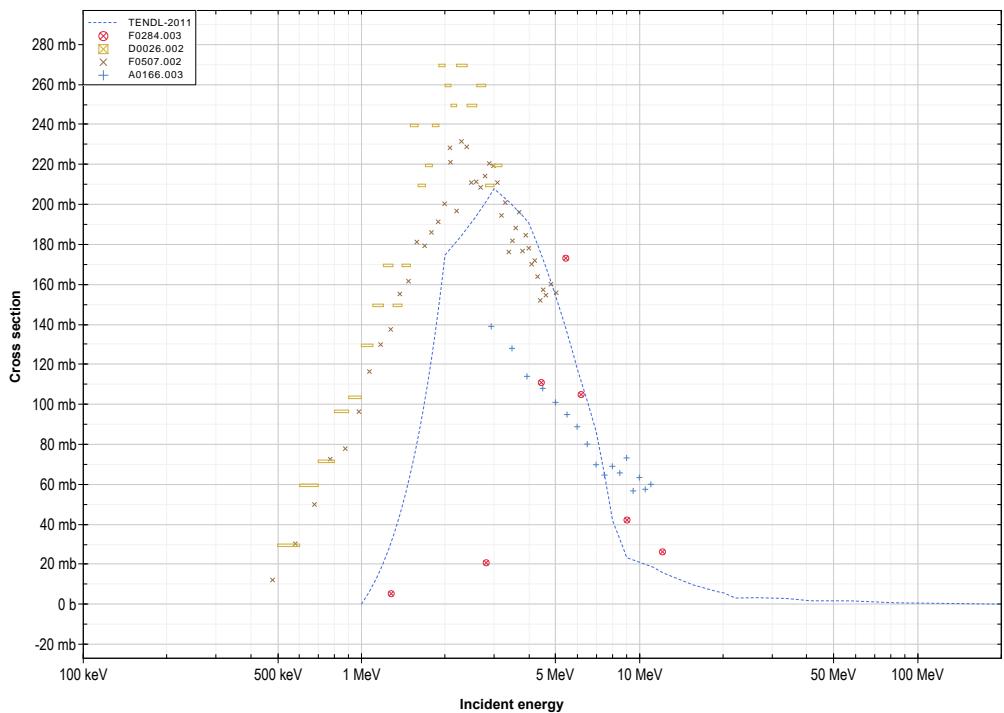
Reaction	Q-Value
$\text{Be}^9(\text{d},\alpha)\text{Li}^7$	7150.27 keV
$\text{Be}^9(\text{d},\text{p}+\text{t})\text{Li}^7$	-12663.59 keV
$\text{Be}^9(\text{d},\text{n}+\text{He}^3)\text{Li}^7$	-13427.35 keV
$\text{Be}^9(\text{d},2\text{d})\text{Li}^7$	-16696.26 keV
$\text{Be}^9(\text{d},\text{n}+\text{p}+\text{d})\text{Li}^7$	-18920.83 keV
$\text{Be}^9(\text{d},2\text{n}+2\text{p})\text{Li}^7$	-21145.39 keV

<< 3-Li-7	
<< MT107 (d,α)	

5-B-10

MT4 (d,n) or MT5 (C11 production)

5-B-11 >>

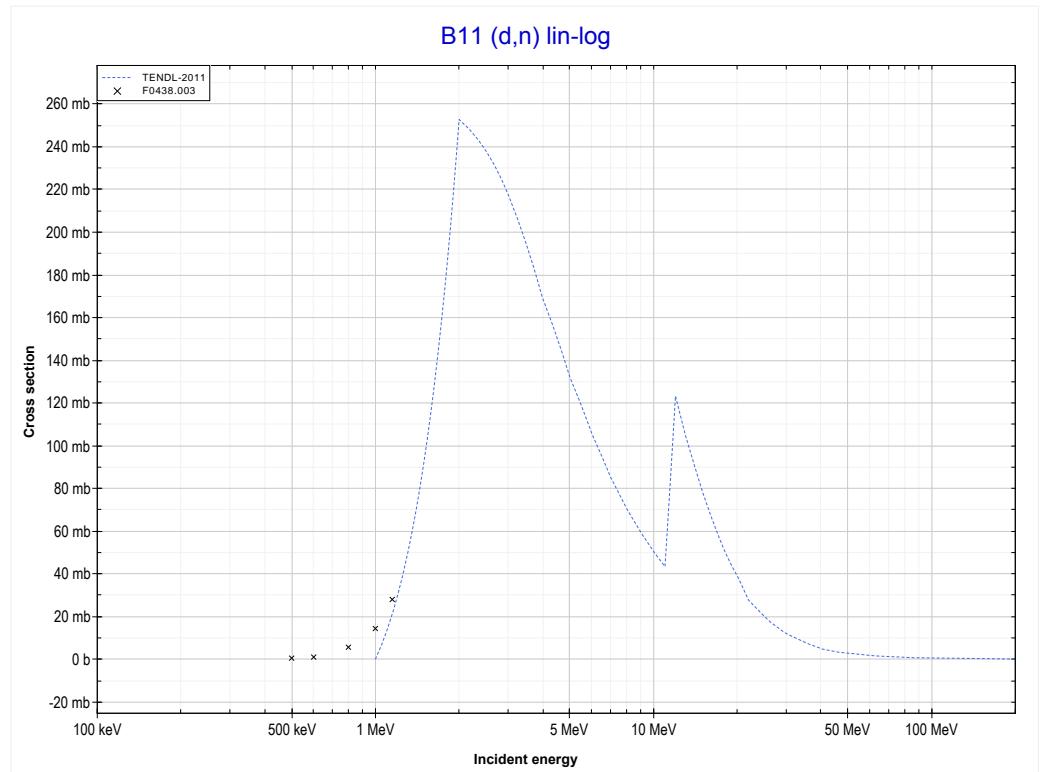
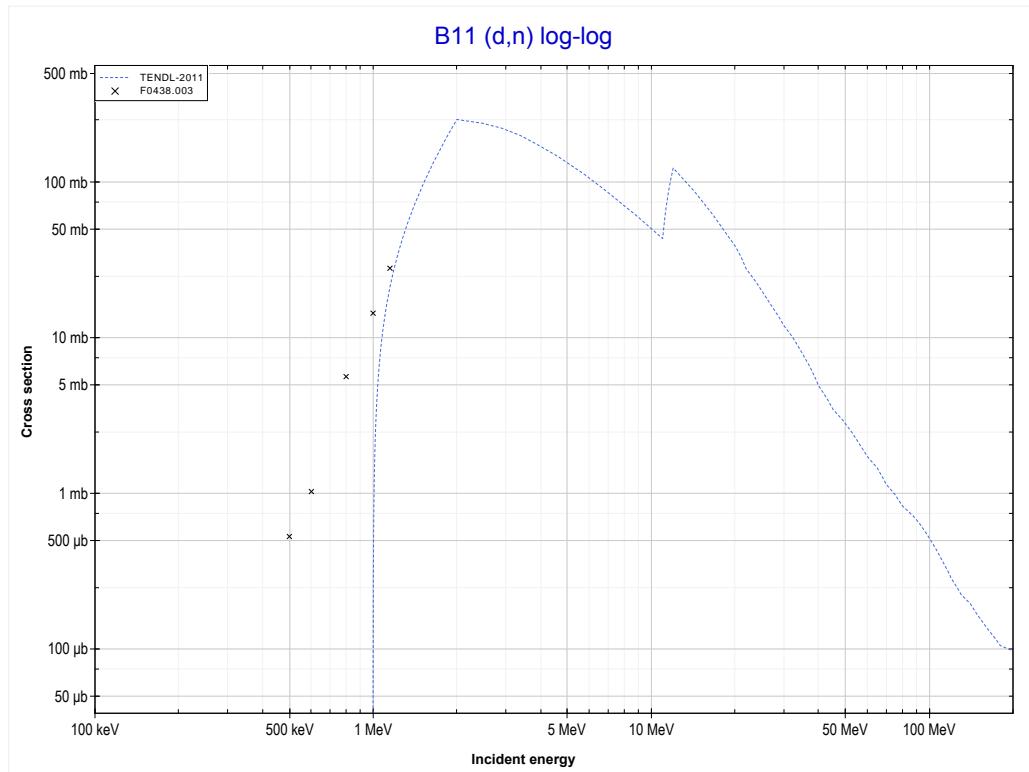
MT4 (d,n) >>B10 (d,n) log-logB10 (d,n) lin-log

Reaction
B10(d,n)C11

Q-Value

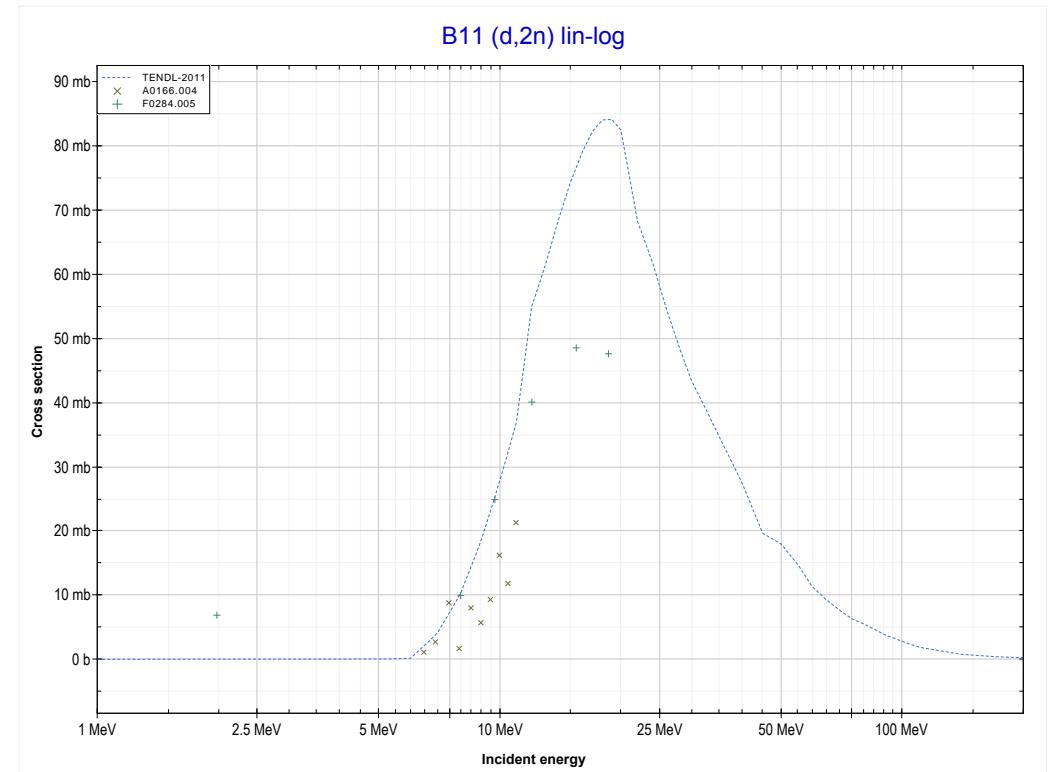
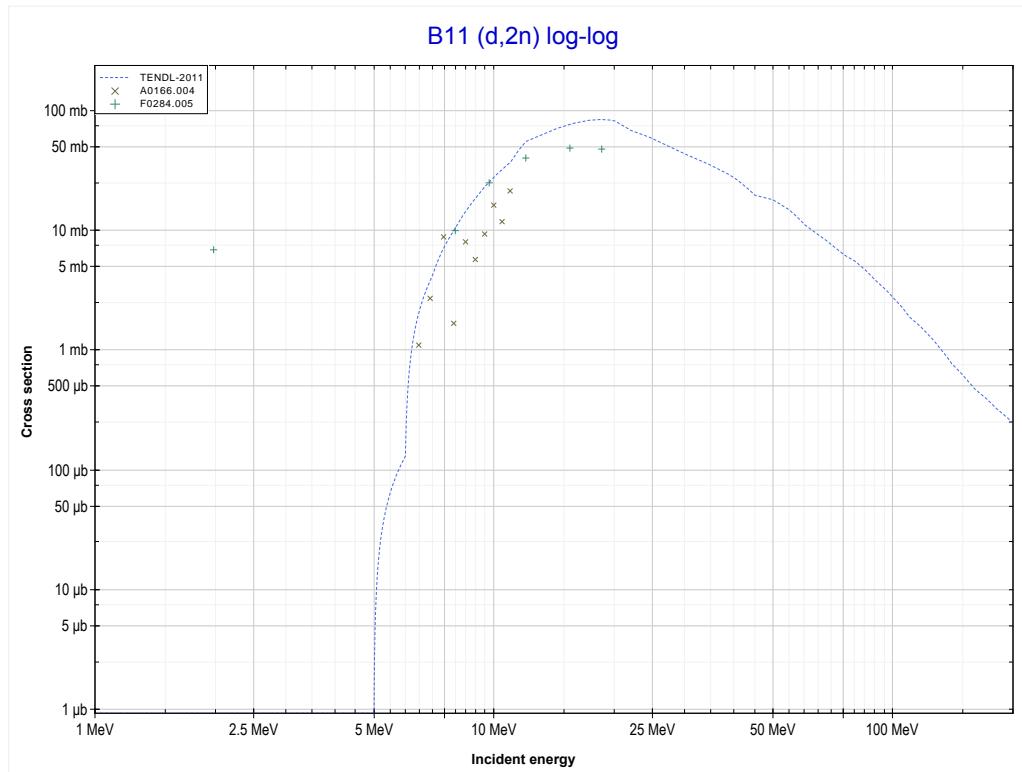
6464.80 keV

<< 5-B-10	5-B-11 MT4 (d,n) or MT5 (C12 production)	6-C-12 >>
<< MT4 (d,n)		MT16 (d,2n) >>



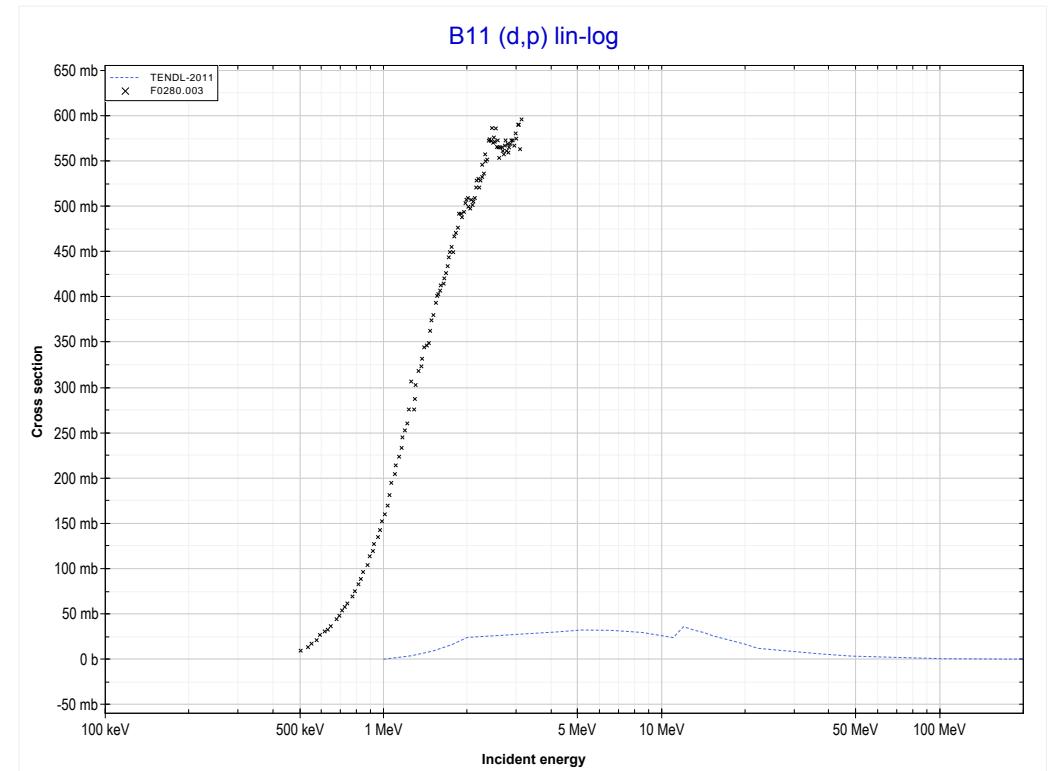
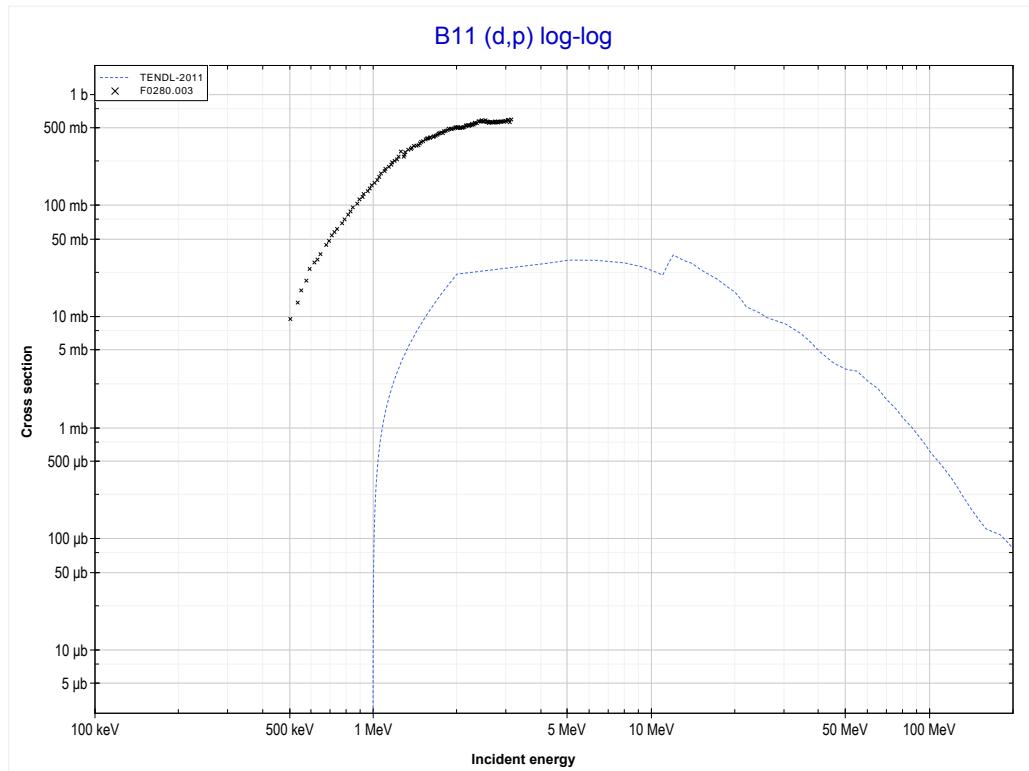
Reaction	Q-Value
B11(d,n)C12	13732.30 keV

<< 3-Li-7	5-B-11 MT16 (d,2n) or MT5 (C11 production)	20-Ca-48 >>
<< MT4 (d,n)		MT103 (d,p) >>



Reaction	Q-Value
$\text{B}^{11}(\text{d},\text{2n})\text{C}^{11}$	-4989.31 keV

<< 4-Be-9	5-B-11 MT103 (d,p) or MT5 (B12 production)	6-C-12 >>
<< MT16 (d,2n)		MT4 (d,n) >>



Reaction	Q-Value
B11(d,p)B12	1145.75 keV

<< 5-B-11	
<< MT103 (d,p) >>	

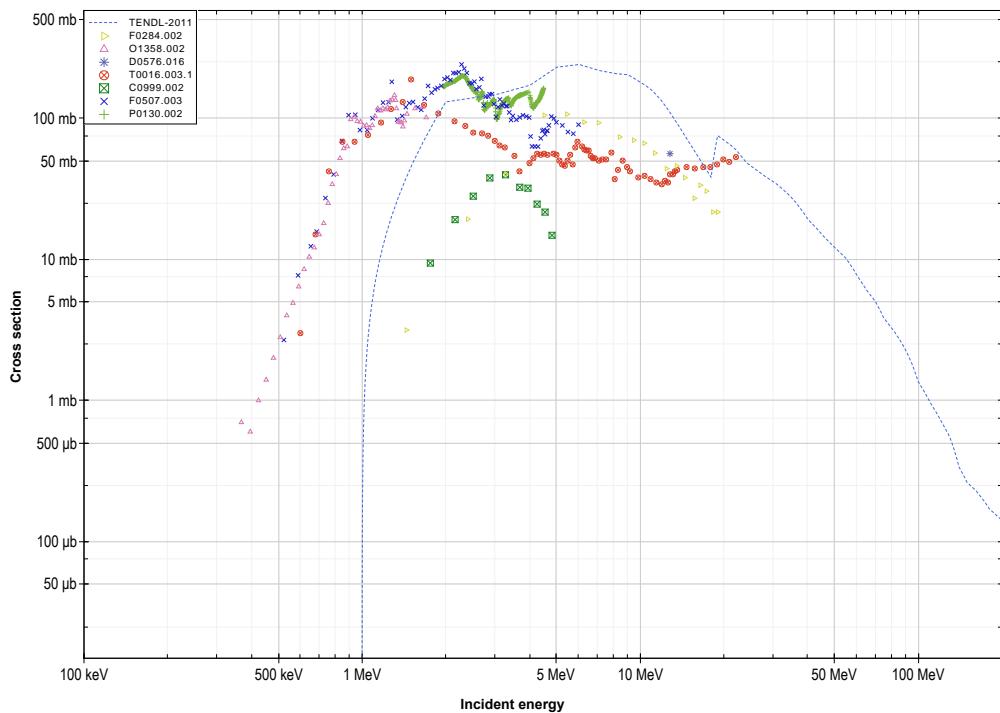
6-C-12

MT4 (d,n) or MT5 (N13 production)

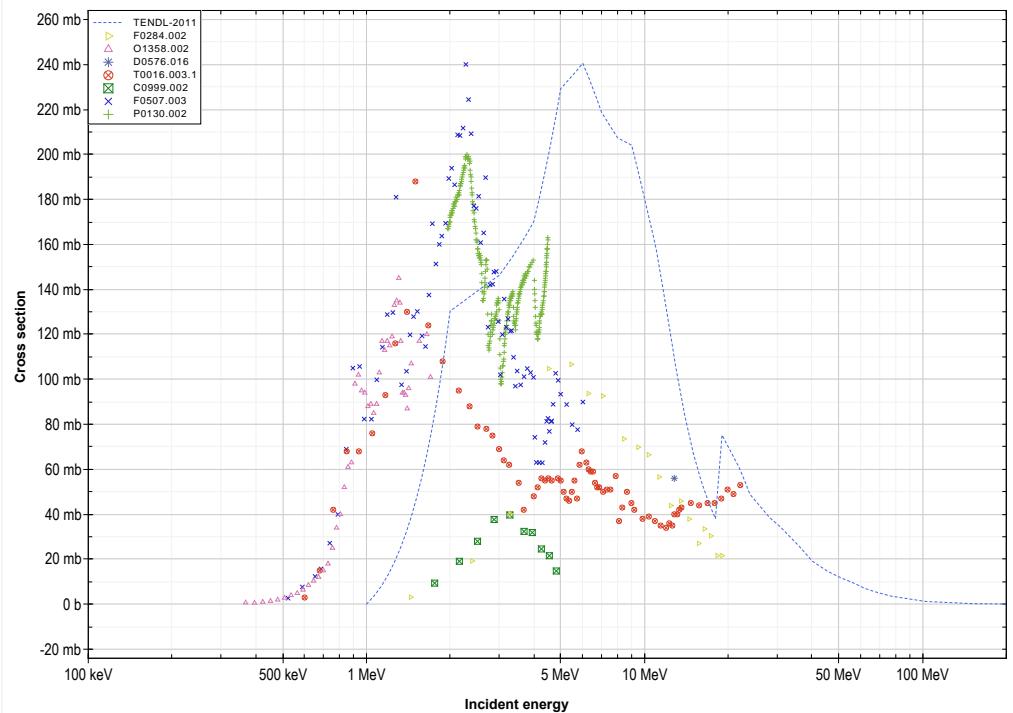
6-C-13 >>

MT41 (d,2n+p) >>

C12 (d,n) log-log



C12 (d,n) lin-log

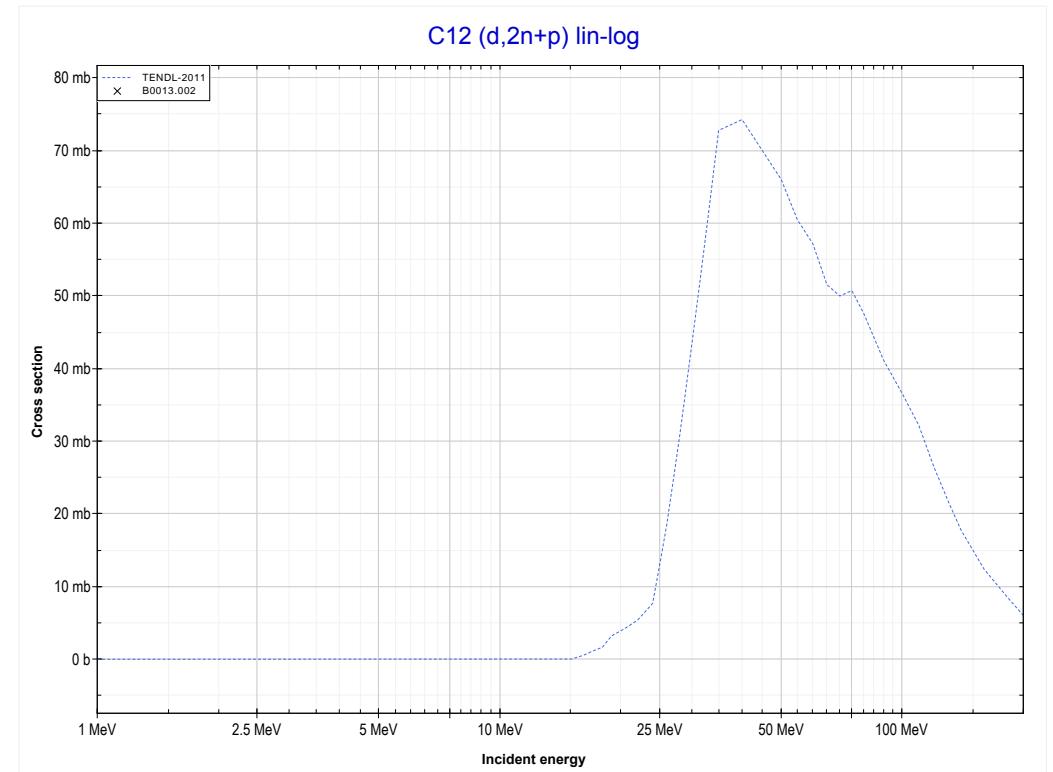
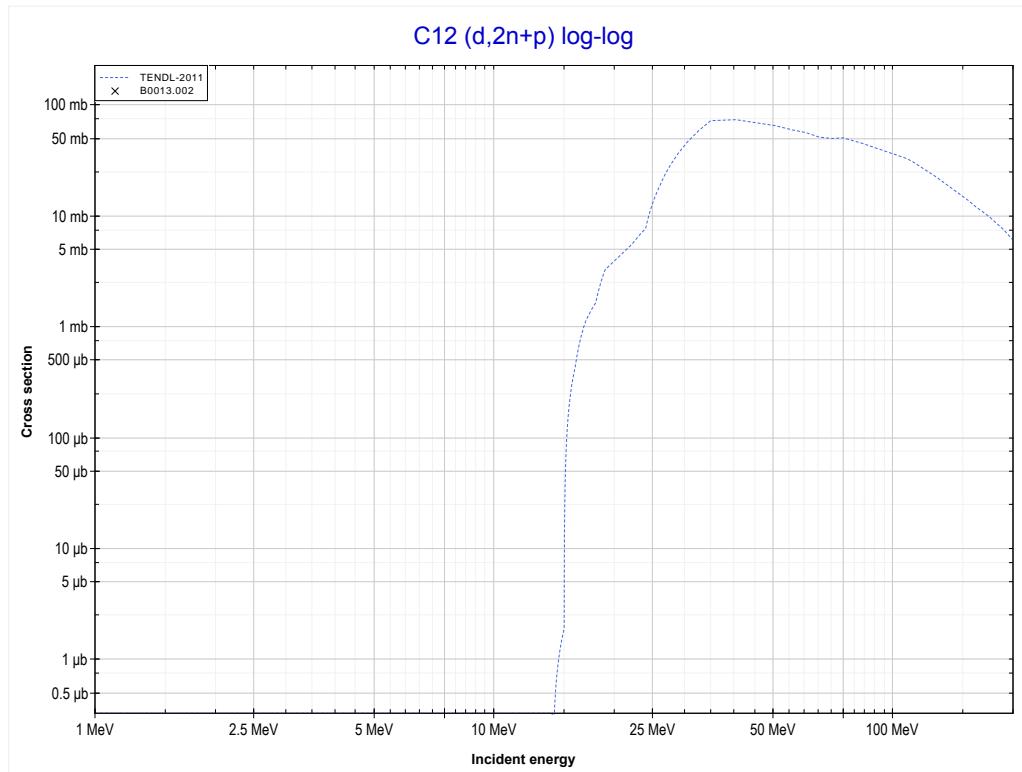


Reaction
C12(d,n)N13

Q-Value

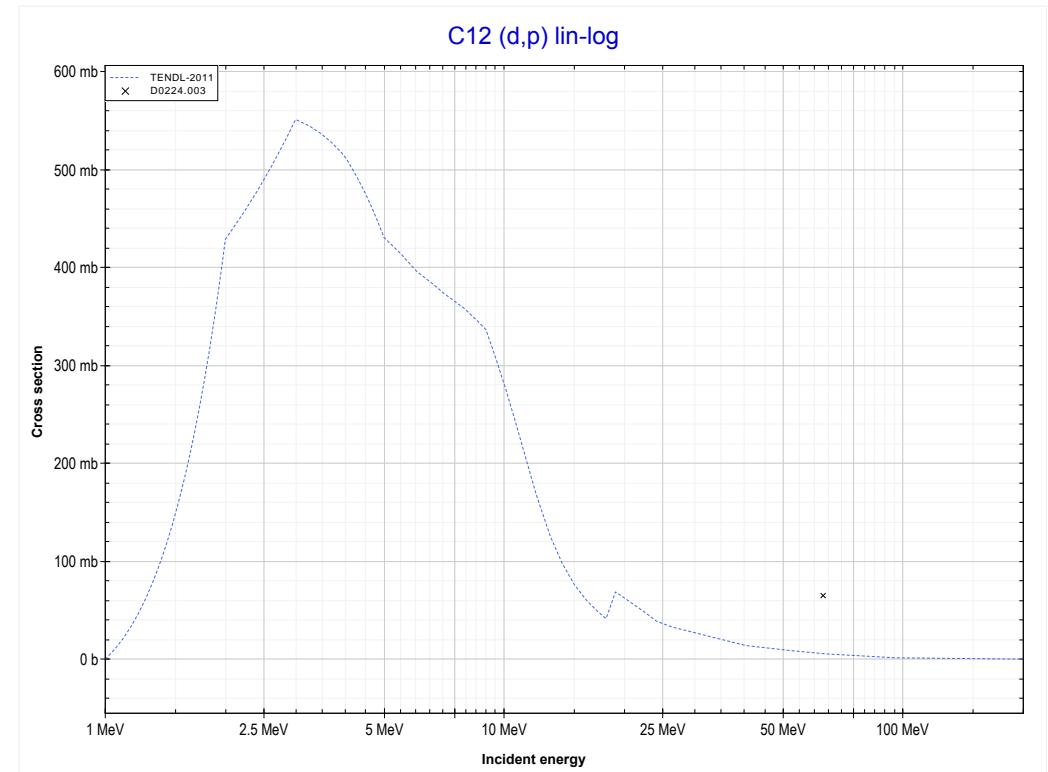
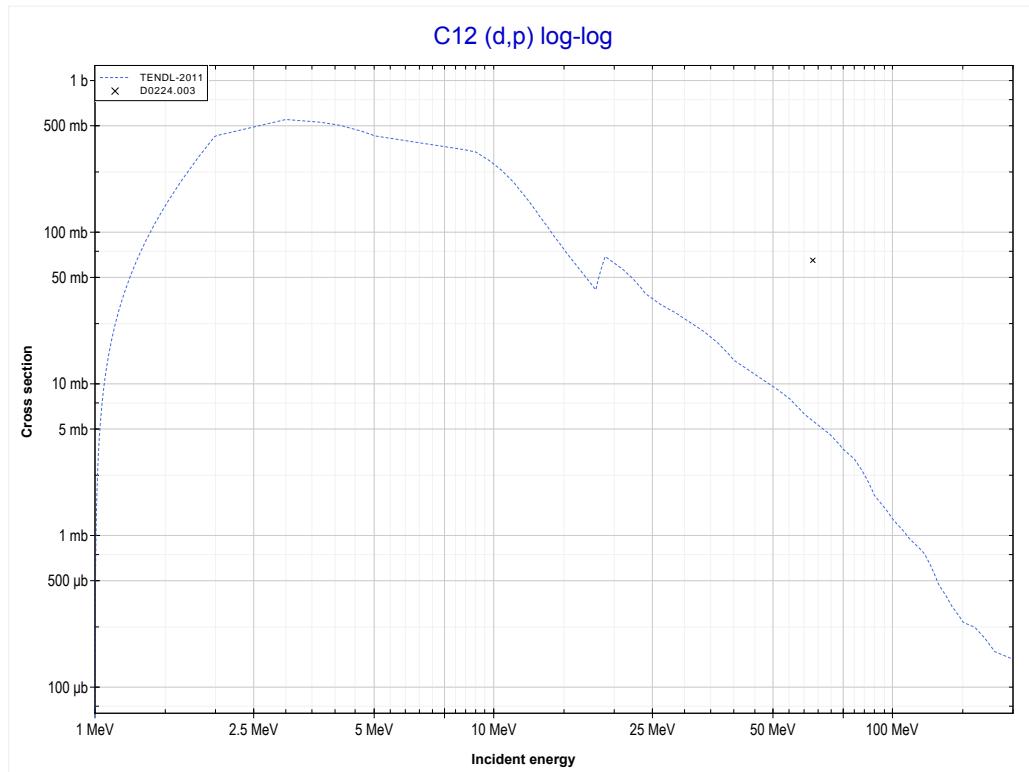
-281.08 keV

	6-C-12 MT41 (d,2n+p) or MT5 (C11 production)	28-Ni-58 >> MT103 (d,p) >>
<< MT4 (d,n)		

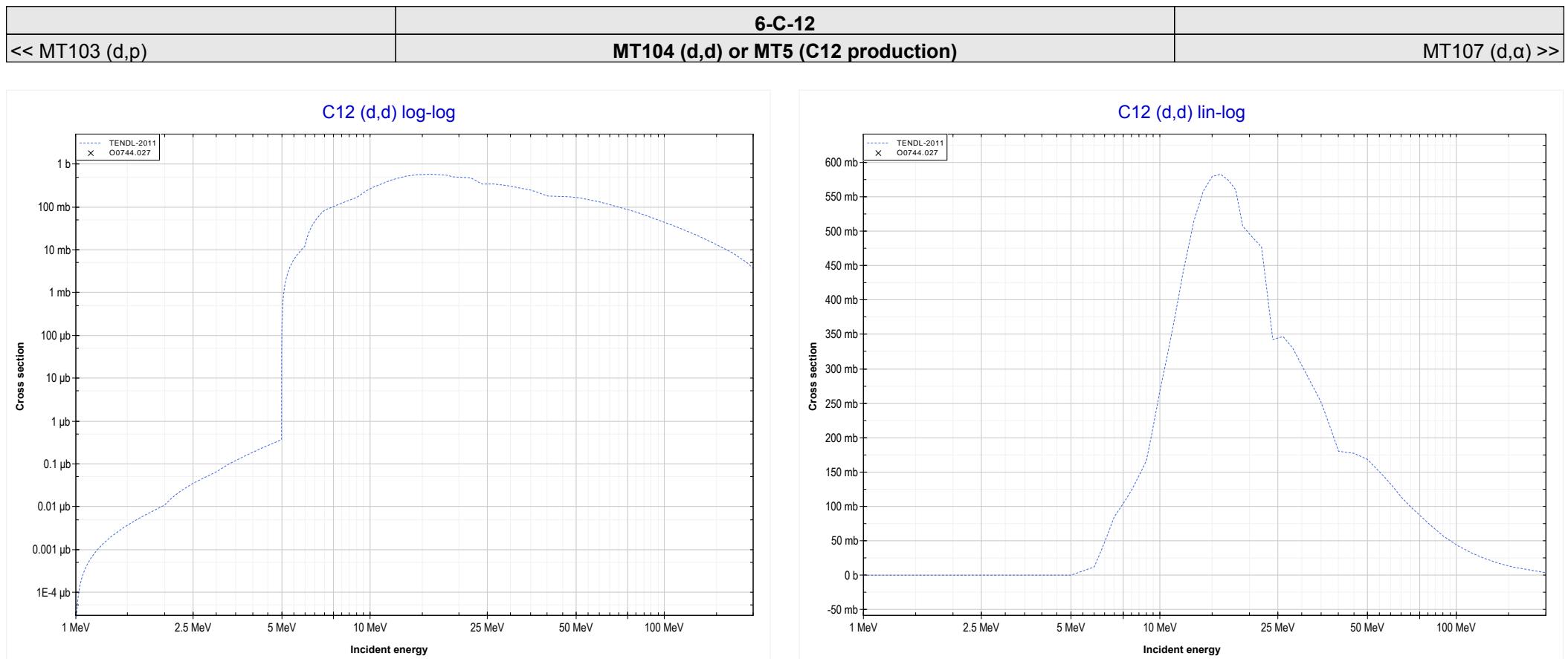


Reaction	Q-Value
$\text{C}^{12}(\text{d},\text{t})\text{C}^{11}$	-12464.38 keV
$\text{C}^{12}(\text{d},\text{n}+\text{d})\text{C}^{11}$	-18721.62 keV
$\text{C}^{12}(\text{d},\text{2n}+\text{p})\text{C}^{11}$	-20946.18 keV

<< 5-B-11	6-C-12 MT103 (d,p) or MT5 (C13 production)	6-C-13 >> MT104 (d,d) >>
<< MT41 (d,2n+p)		

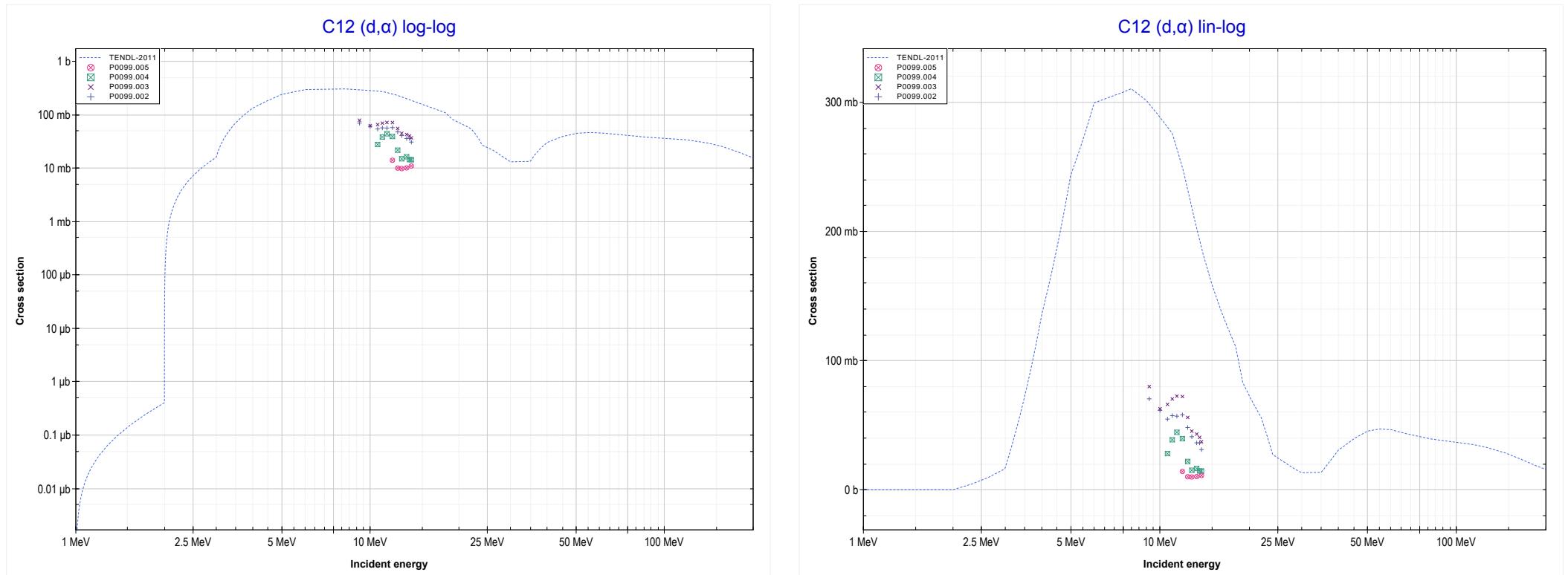


Reaction	Q-Value
C12(d,p)C13	2721.74 keV



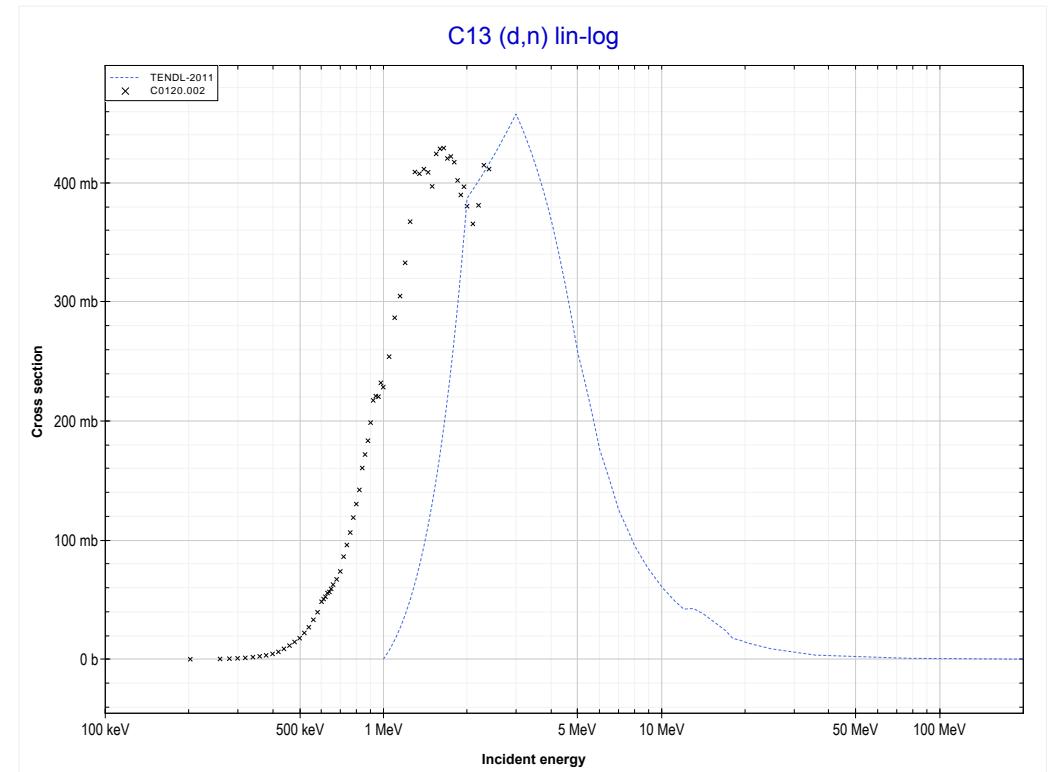
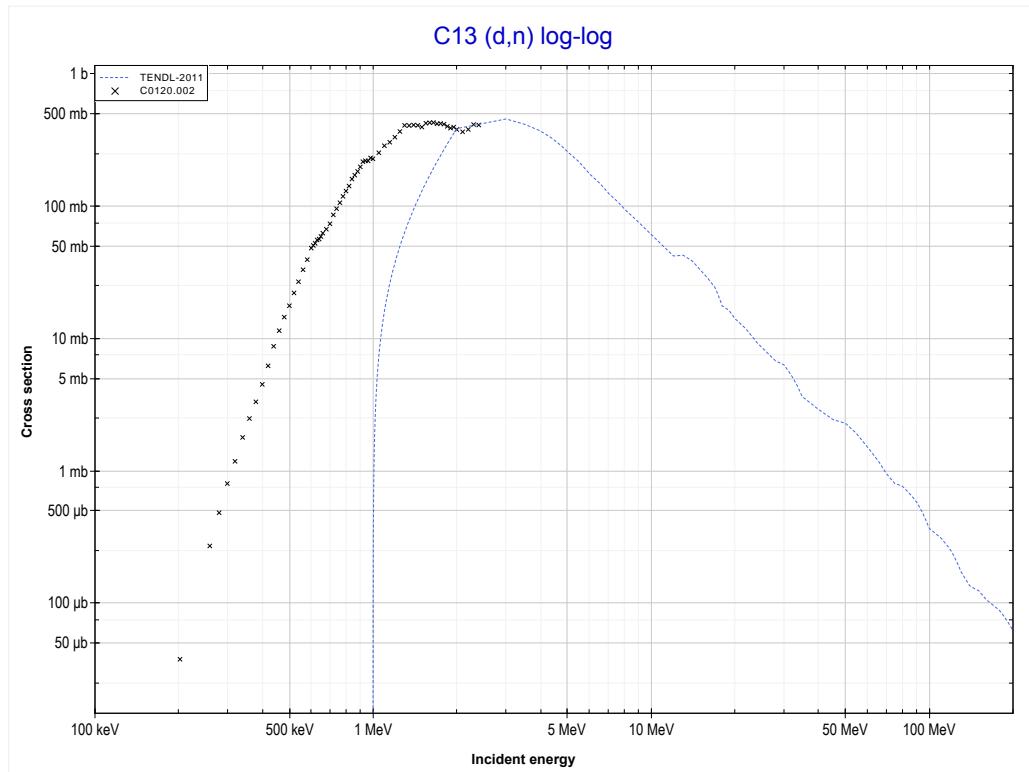
Reaction	Q-Value
C12(d,d)C12	0.00 keV
C12(d,n+p)C12	-2224.57 keV

<< 4-Be-9	6-C-12 MT107 (d,α) or MT5 (B10 production)	8-O-16 >>
<< MT104 (d,d)		MT4 (d,n) >>



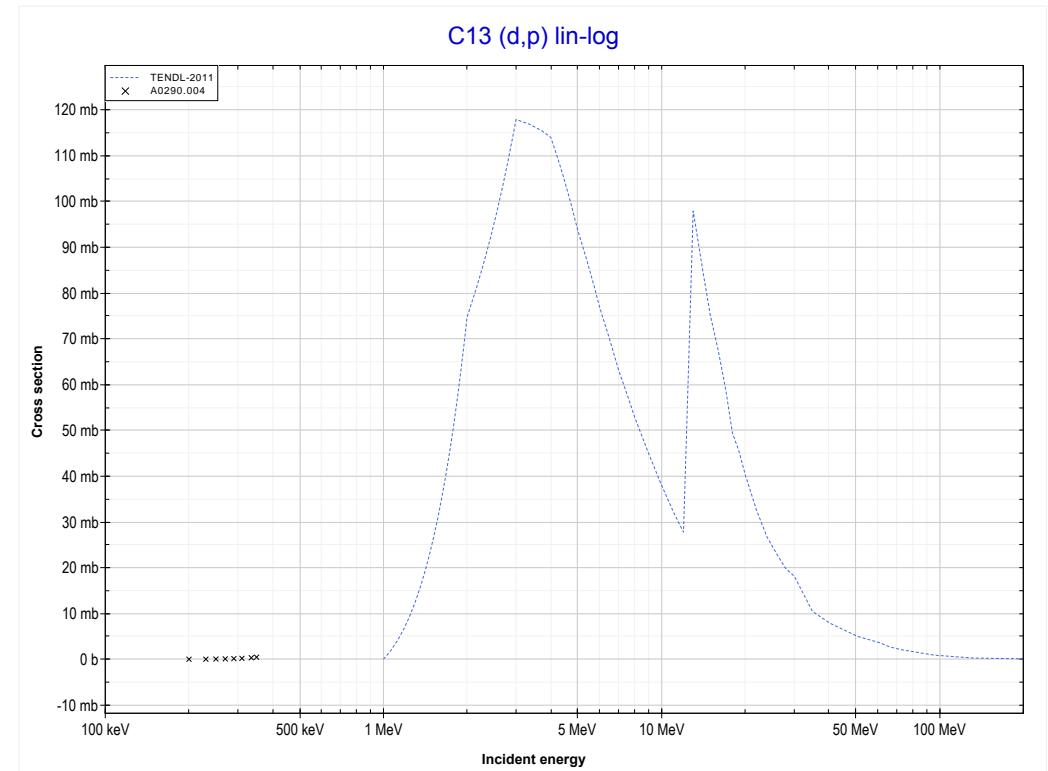
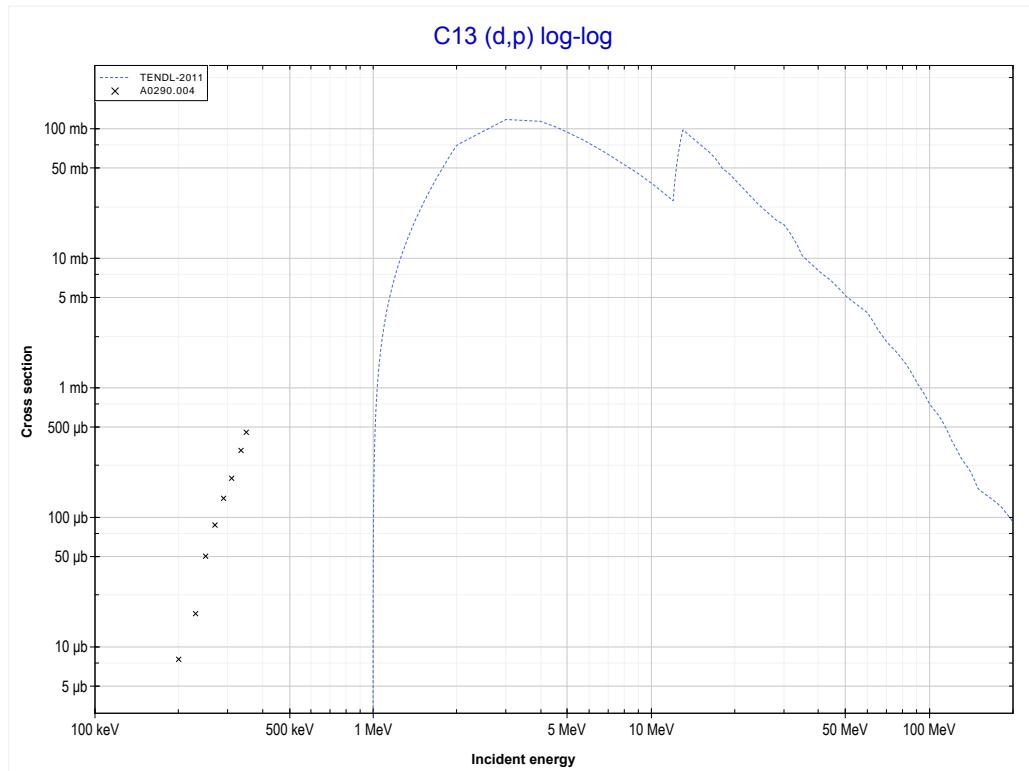
Reaction	Q-Value
C12(d,α)B10	-1339.89 keV
C12($d,p+t$)B10	-21153.75 keV
C12($d,n+He3$)B10	-21917.51 keV
C12($d,2d$)B10	-25186.42 keV
C12($d,n+p+d$)B10	-27410.99 keV
C12($d,2n+2p$)B10	-29635.55 keV

<< 6-C-12	6-C-13 MT4 (d,n) or MT5 (N14 production)	6-C-14 >> MT103 (d,p) >>
<< MT107 (d, α)		



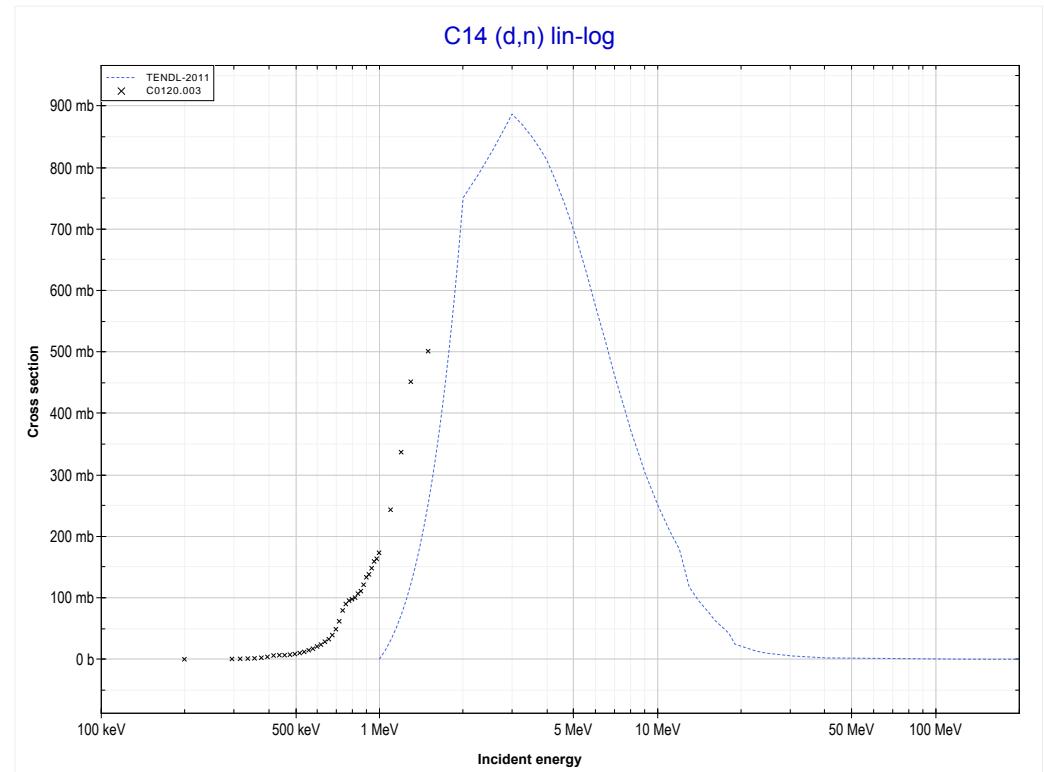
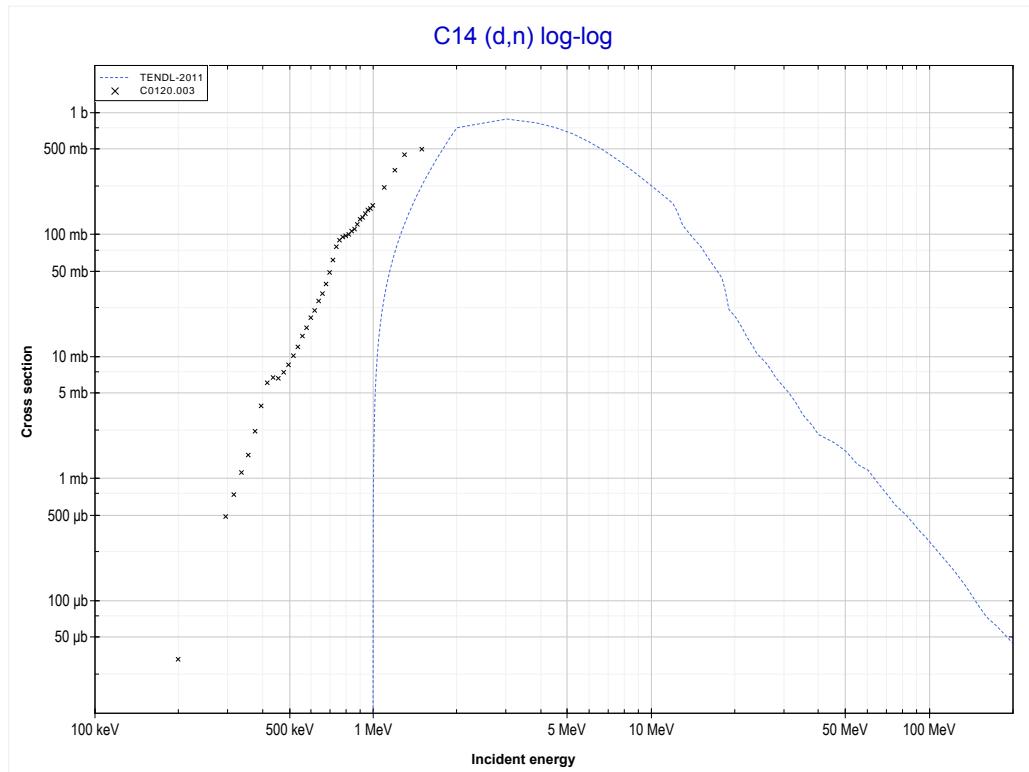
Reaction	Q-Value
C13(d,n)N14	5326.00 keV

<< 6-C-12	6-C-13	7-N-15 >>
<< MT4 (d,n)	MT103 (d,p) or MT5 (C14 production)	MT4 (d,n) >>



Reaction	Q-Value
C13(d,p)C14	5951.87 keV

<< 6-C-13	6-C-14	7-N-14 >>
<< MT103 (d,p)	MT4 (d,n) or MT5 (N15 production)	MT4 (d,n) >>

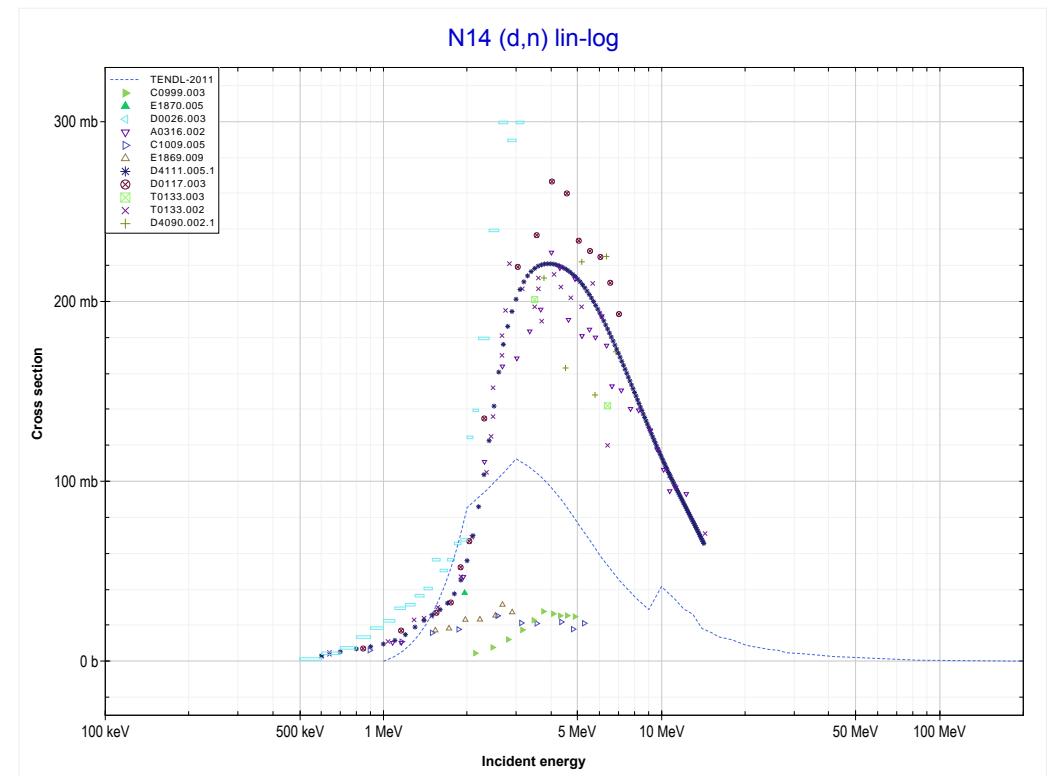
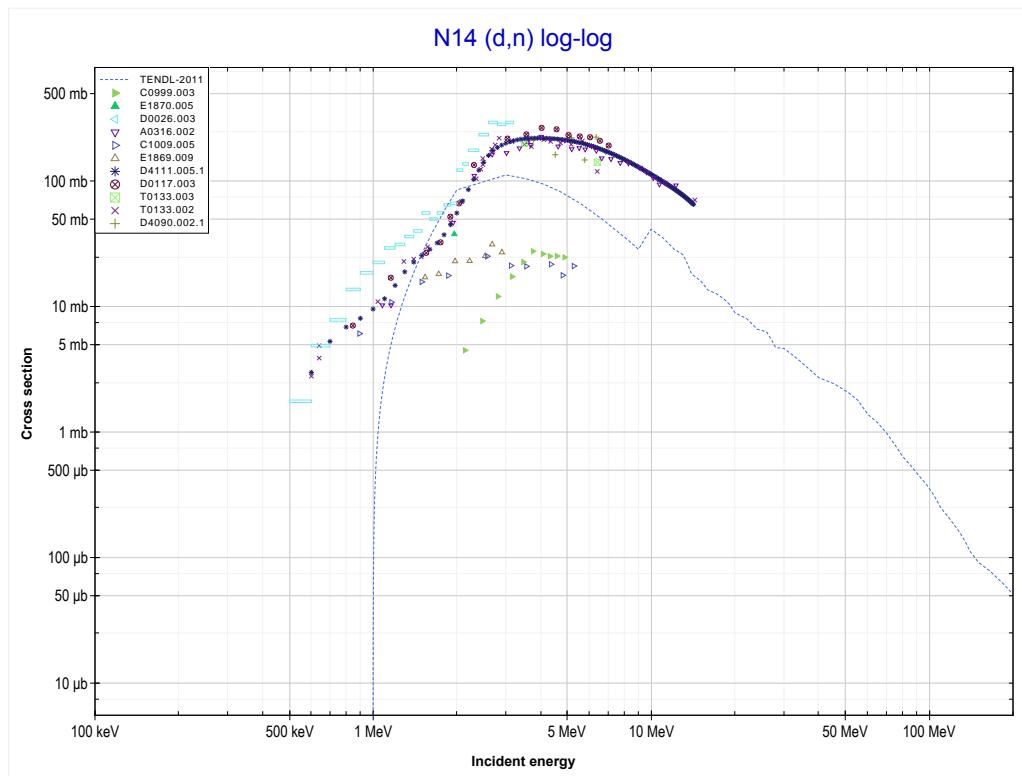


Reaction	Q-Value
$\text{C}^{14}(\text{d},\text{n})\text{N}^{15}$	7982.86 keV

<< 6-C-14	
<< MT4 (d,n)	

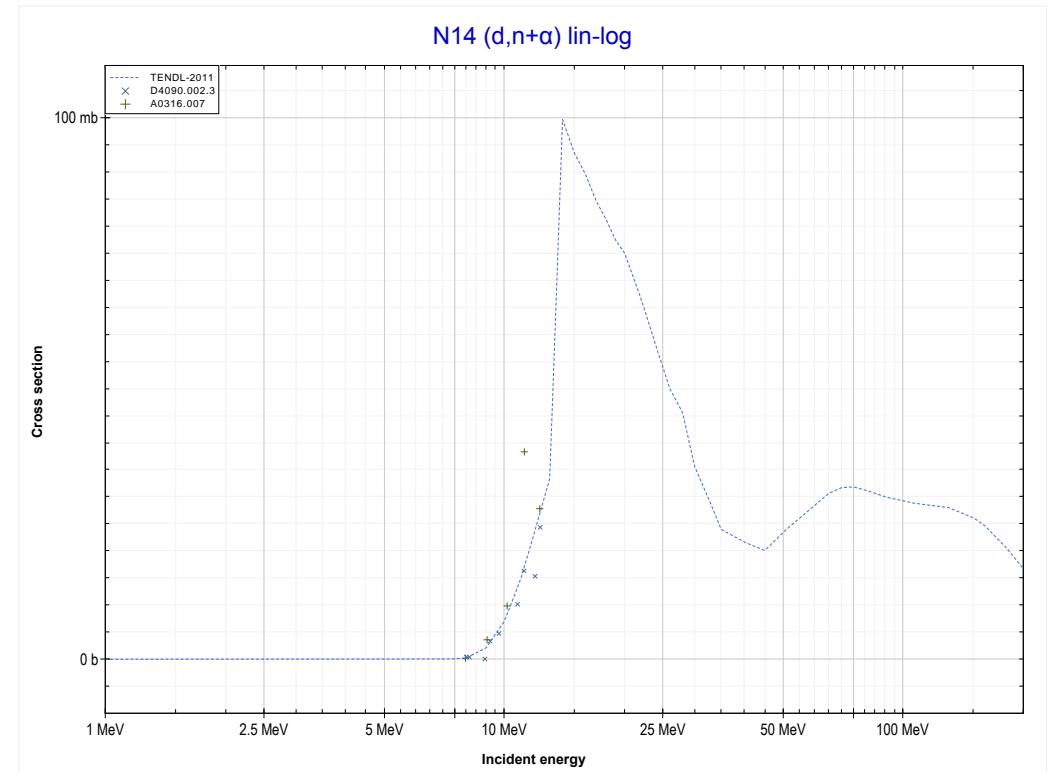
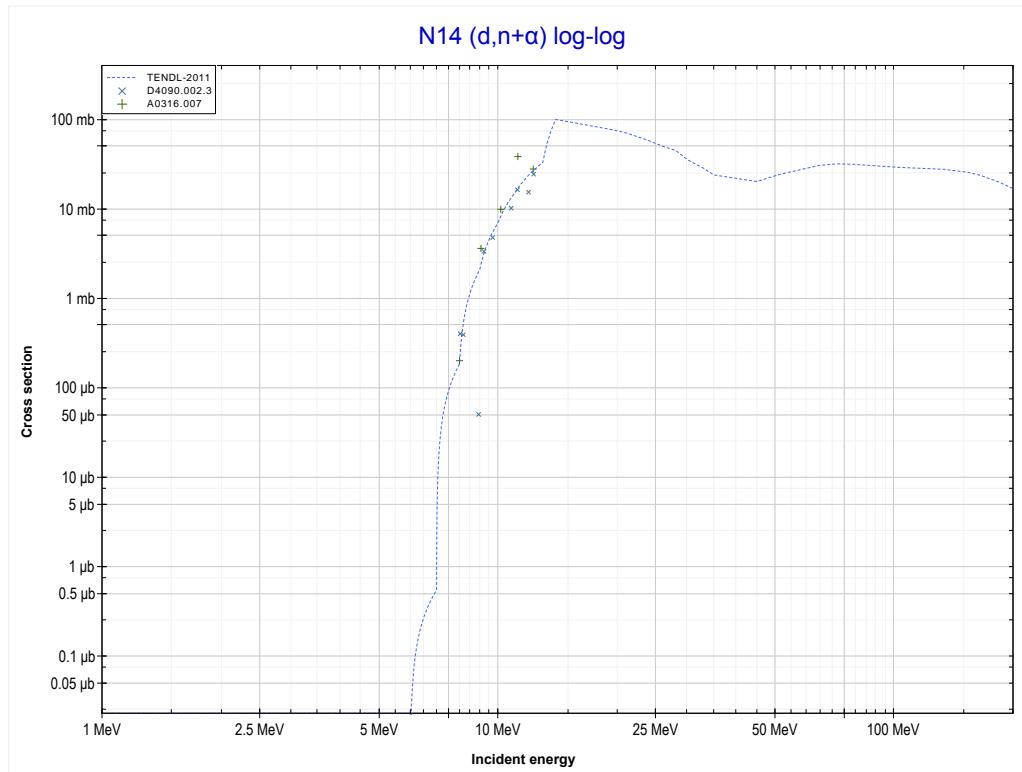
7-N-14
MT4 (d,n) or MT5 (O15 production)

	8-O-16 >>
	MT22 (d,n+α) >>



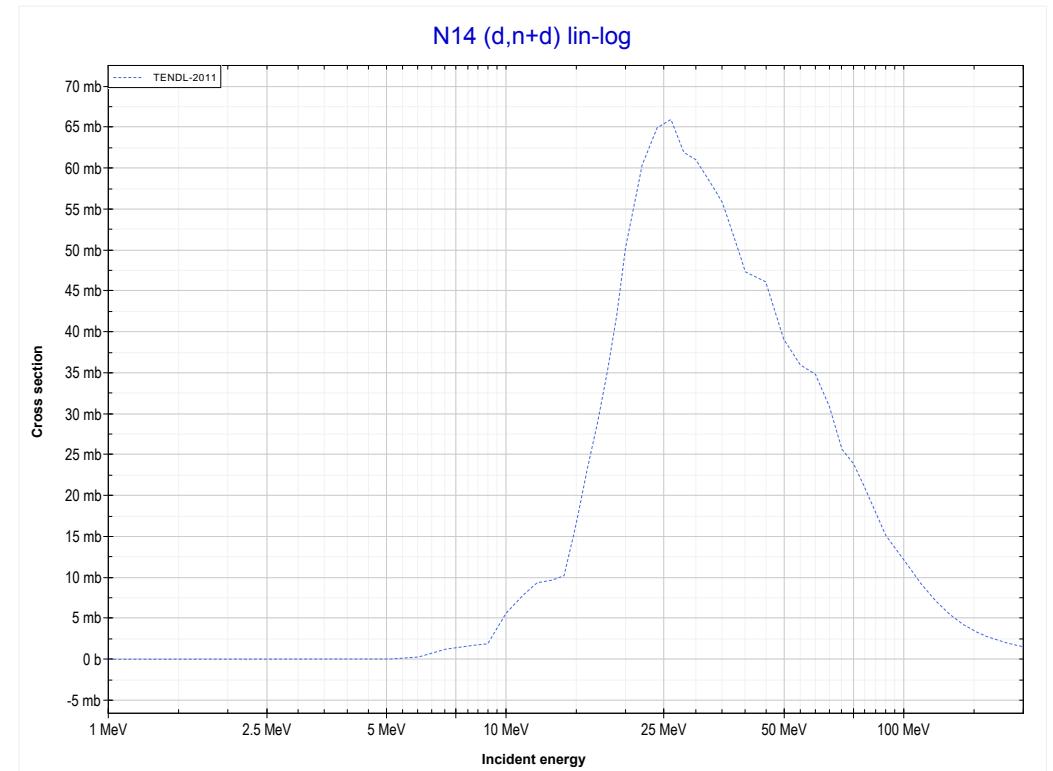
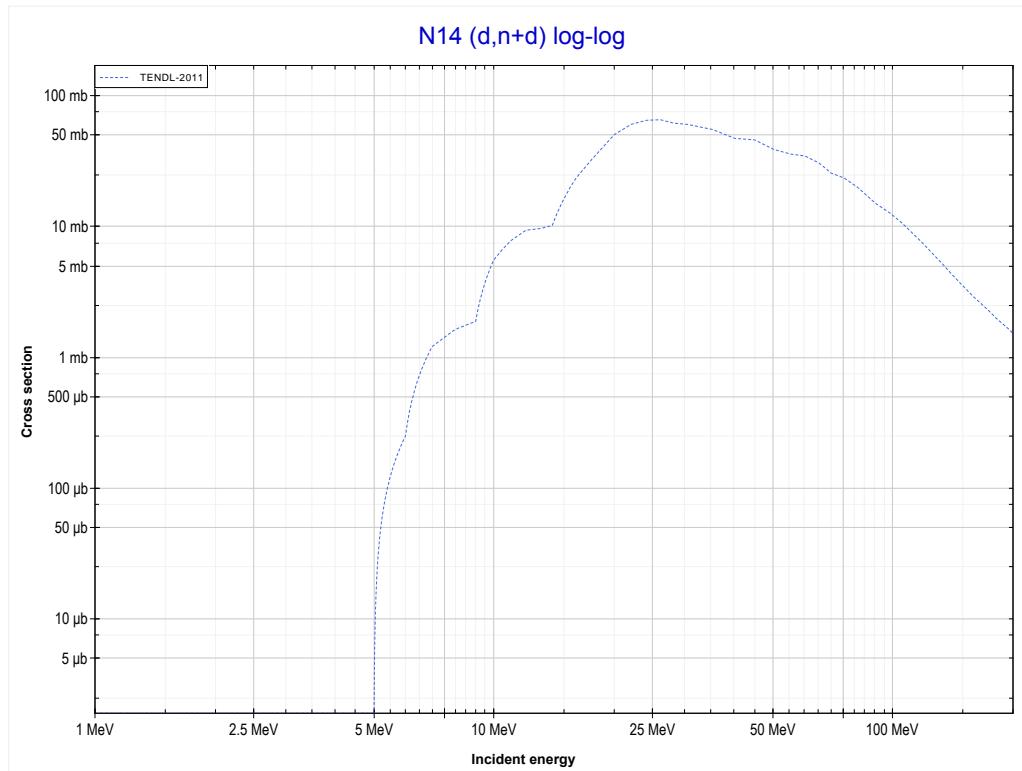
Reaction	Q-Value
N14(d,n)O15	5072.22 keV

<< 3-Li-7	7-N-14 MT22 (d,n+α) or MT5 (C11 production)	22-Ti-47 >>
<< MT4 (d,n)		MT32 (d,n+d) >>



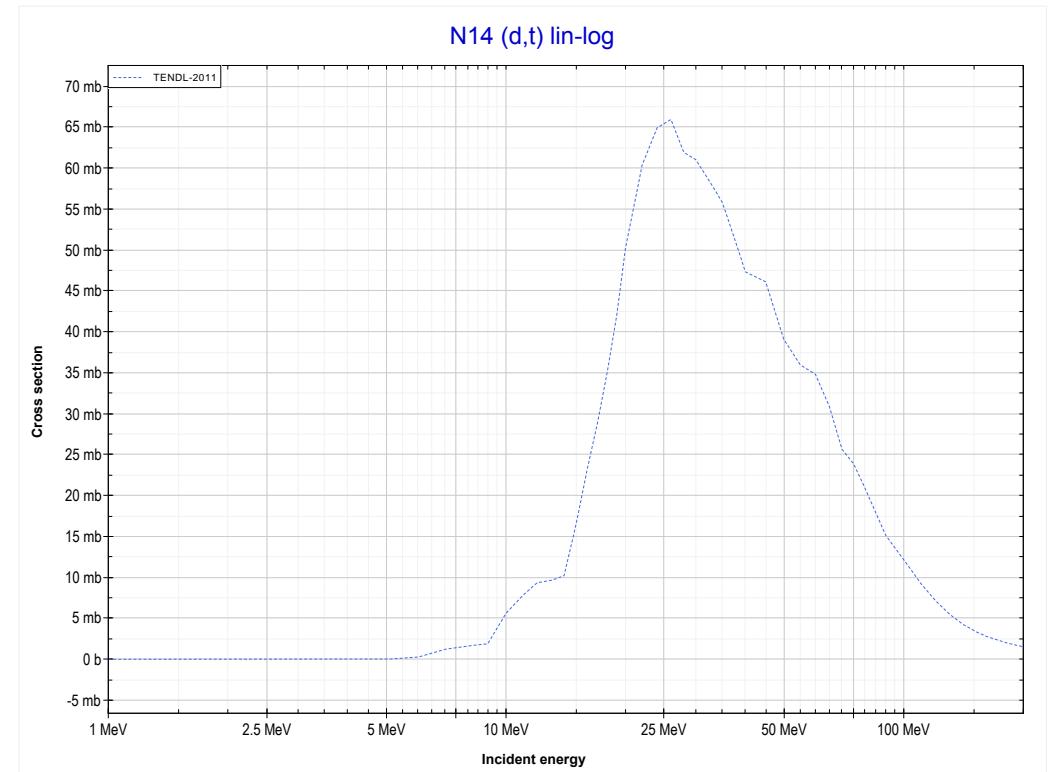
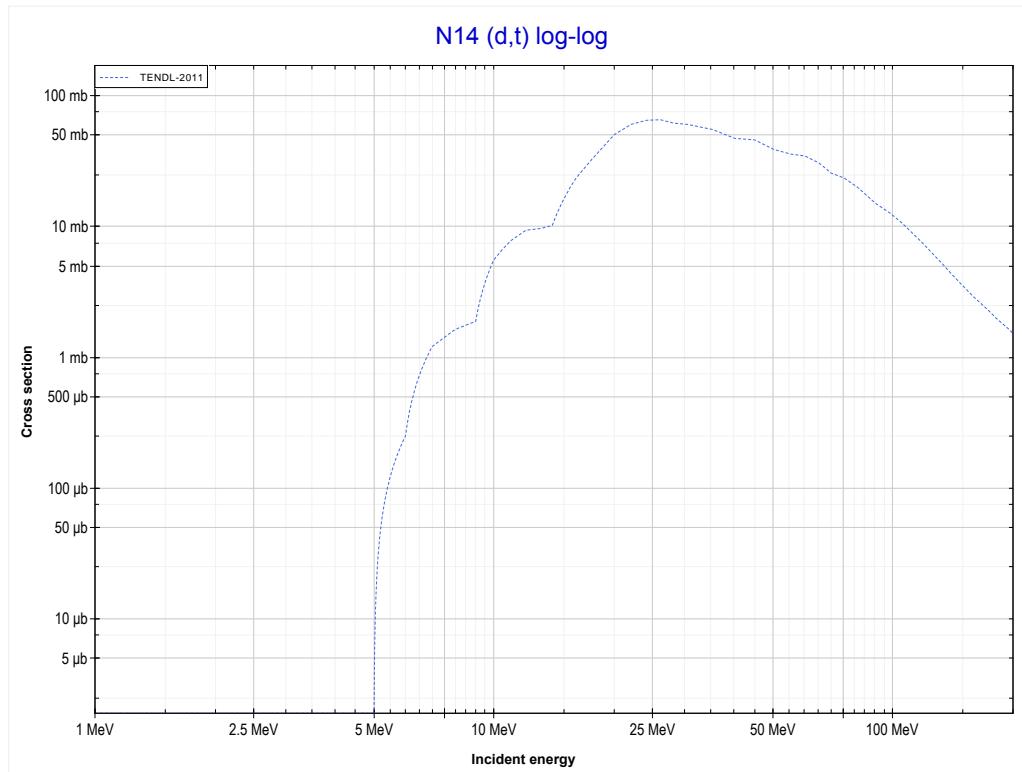
Reaction	Q-Value
$\text{N}^{14}(\text{d},\text{n}+\alpha)\text{C}^{11}$	-5147.39 keV
$\text{N}^{14}(\text{d},\text{d}+\text{t})\text{C}^{11}$	-22736.69 keV
$\text{N}^{14}(\text{d},\text{n}+\text{p}+\text{t})\text{C}^{11}$	-24961.25 keV
$\text{N}^{14}(\text{d},2\text{n}+\text{He}^3)\text{C}^{11}$	-25725.01 keV
$\text{N}^{14}(\text{d},\text{n}+2\text{d})\text{C}^{11}$	-28993.92 keV
$\text{N}^{14}(\text{d},2\text{n}+\text{p}+\text{d})\text{C}^{11}$	-31218.49 keV
$\text{N}^{14}(\text{d},3\text{n}+2\text{p})\text{C}^{11}$	-33443.05 keV

<< MT22 (d,n+α)	7-N-14 MT32 (d,n+d) or MT5 (N13 production)	28-Ni-58 >> MT105 (d,t) >>
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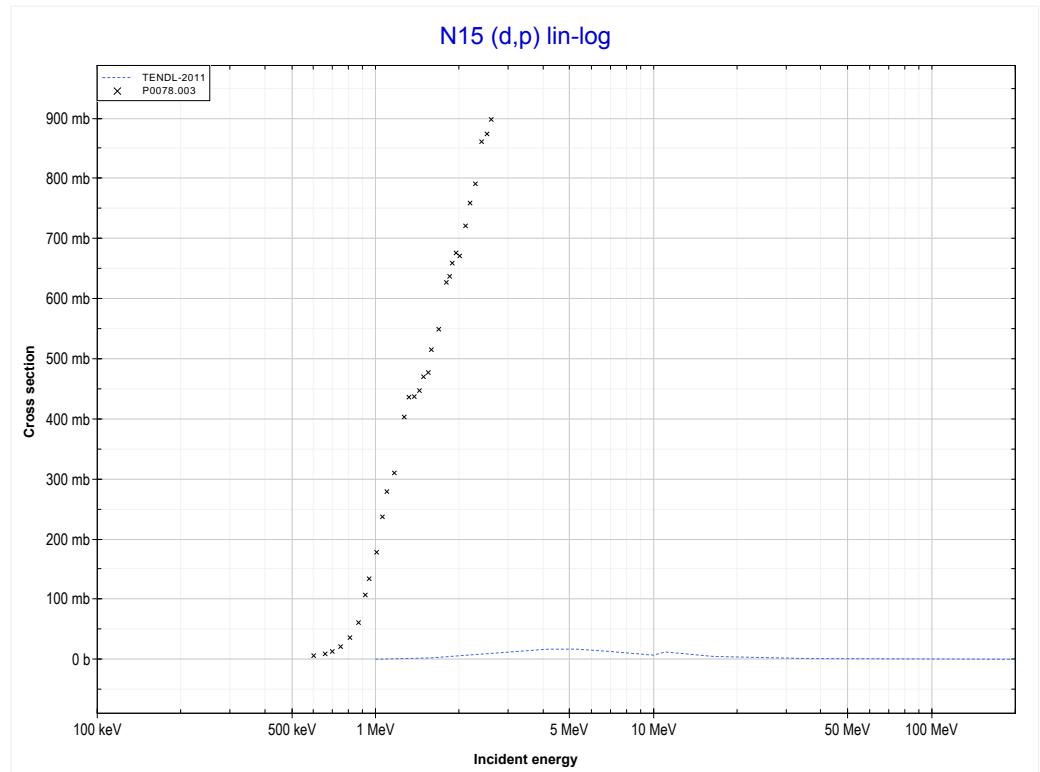
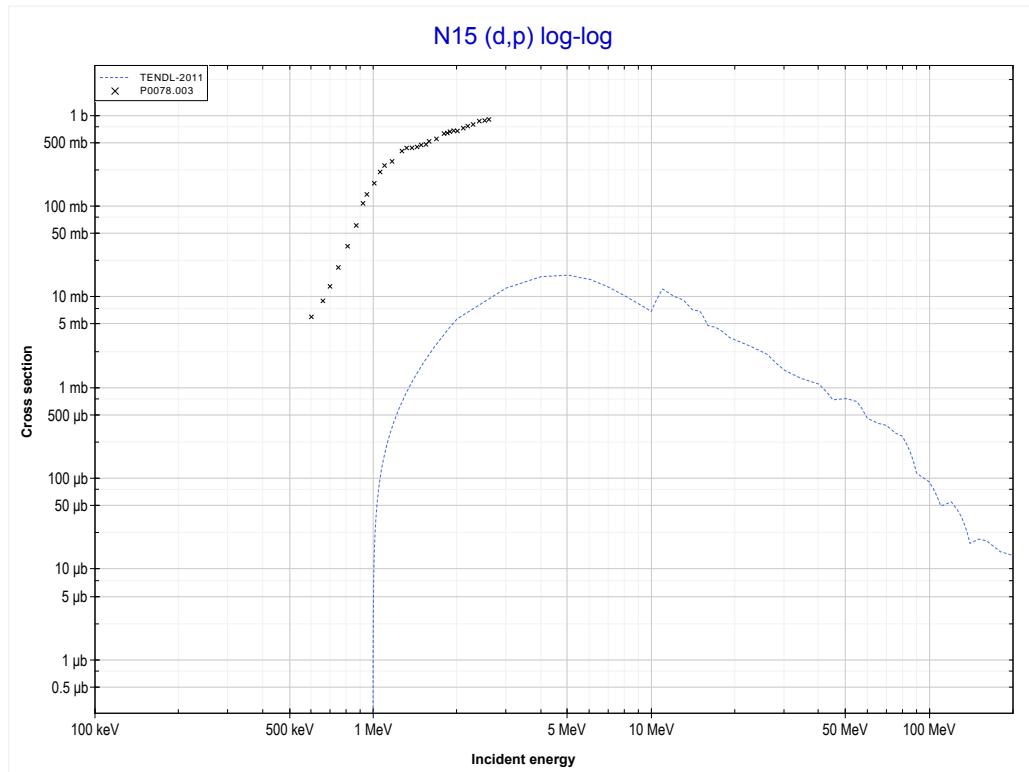
Reaction	Q-Value
$\text{N}^{14}(\text{d},\text{t})\text{N}^{13}$	-4296.15 keV
$\text{N}^{14}(\text{d},\text{n}+\text{d})\text{N}^{13}$	-10553.38 keV
$\text{N}^{14}(\text{d},2\text{n}+\text{p})\text{N}^{13}$	-12777.95 keV

<< 4-Be-9	7-N-14 MT105 (d,t) or MT5 (N13 production)	9-F-19 >> MT103 (d,p) >>
<< MT32 (d,n+d)		



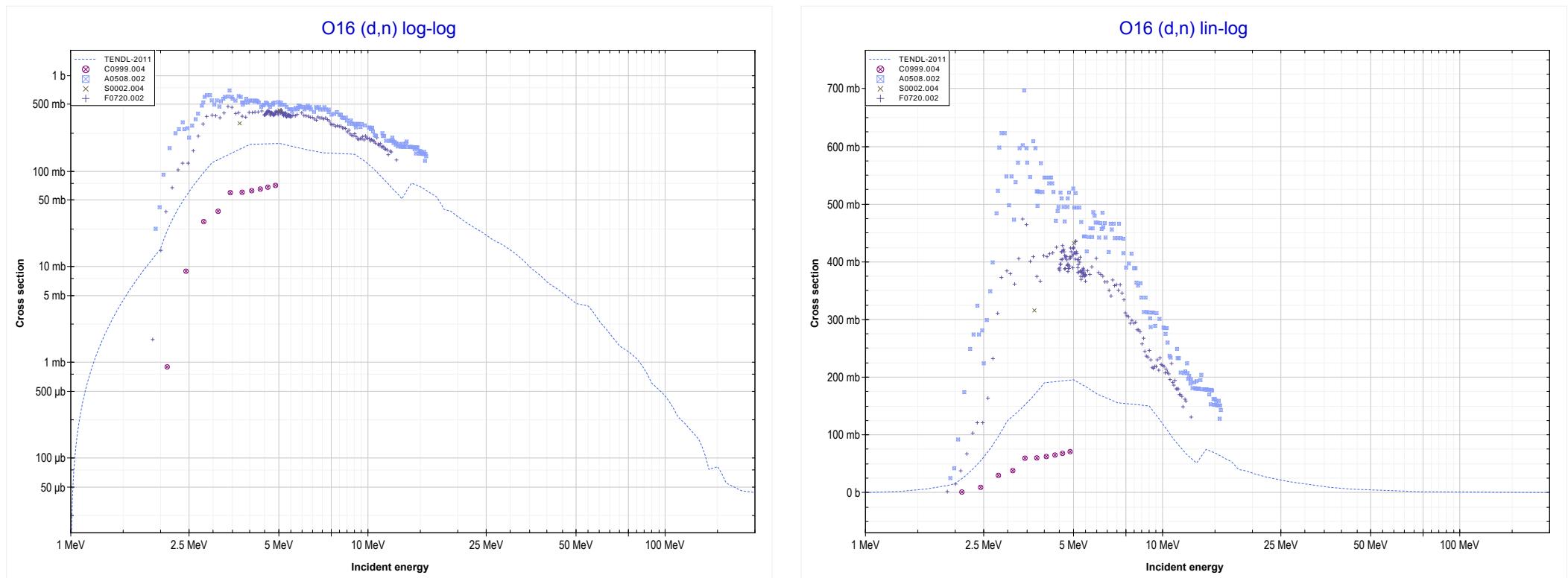
Reaction	Q-Value
N14(d,t)N13	-4296.15 keV
N14(d,n+d)N13	-10553.38 keV
N14(d,2n+p)N13	-12777.95 keV

<< 6-C-13	7-N-15 MT103 (d,p) or MT5 (N16 production)	8-O-18 >>
<< MT105 (d,t)		MT4 (d,n) >>



Reaction	Q-Value
$\text{N}^{15}(\text{d},\text{p})\text{N}^{16}$	264.49 keV

<< 7-N-14	8-O-16 MT4 (d,n) or MT5 (F17 production)	10-Ne-20 >>
<< MT103 (d,p)		MT107 (d, α) >>

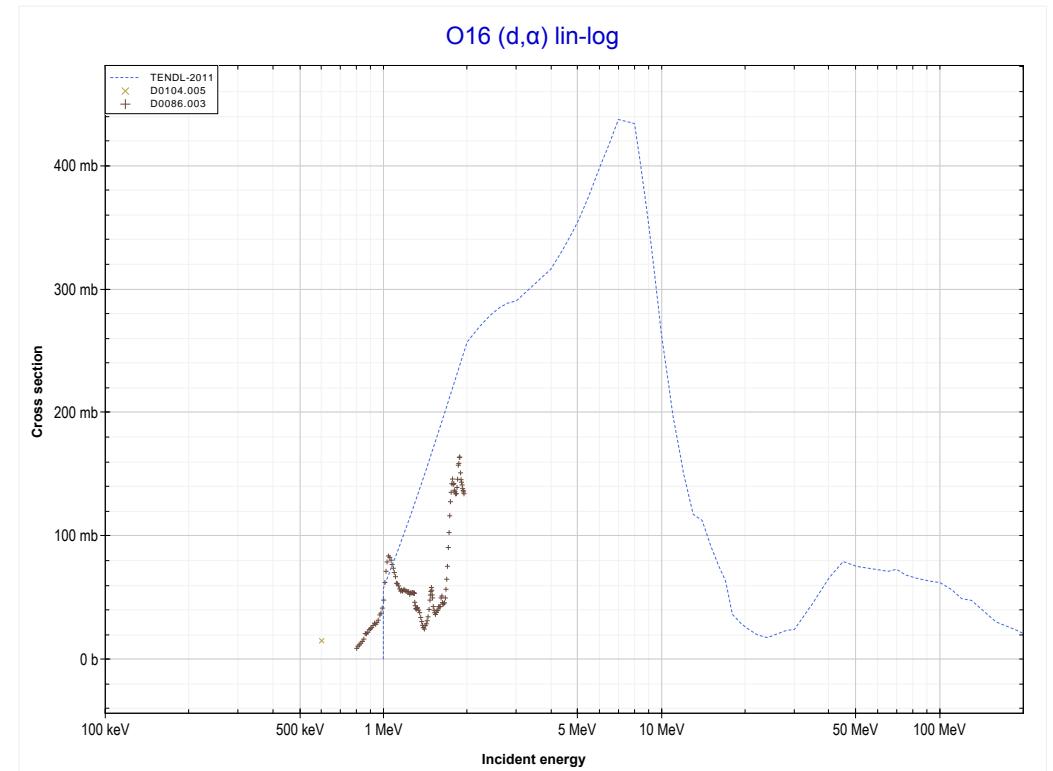
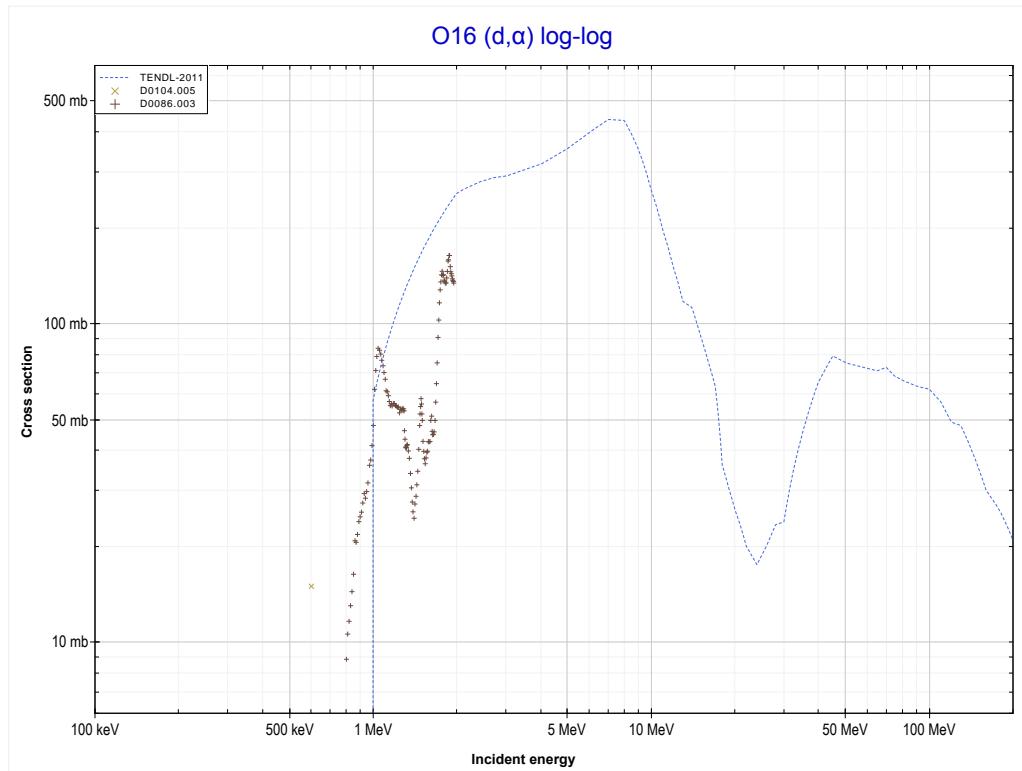


Reaction	Q-Value
$O^{16}(d,n)O^{17}$	-1624.30 keV

<< 6-C-12	
<< MT4 (d,n)	

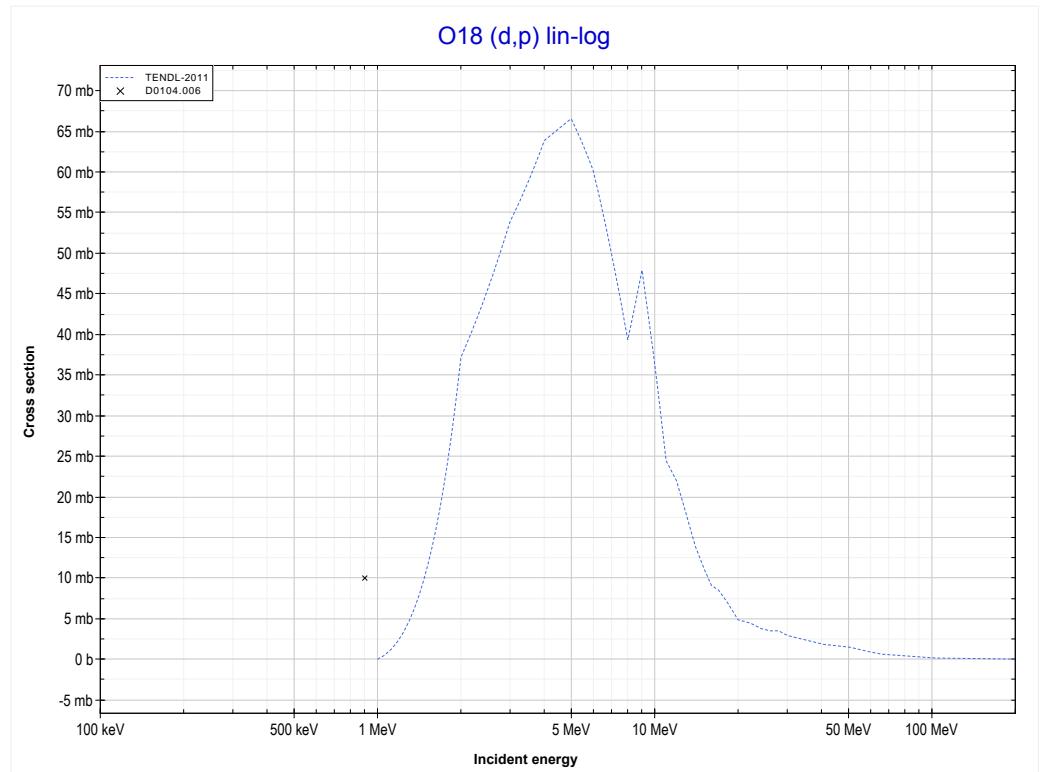
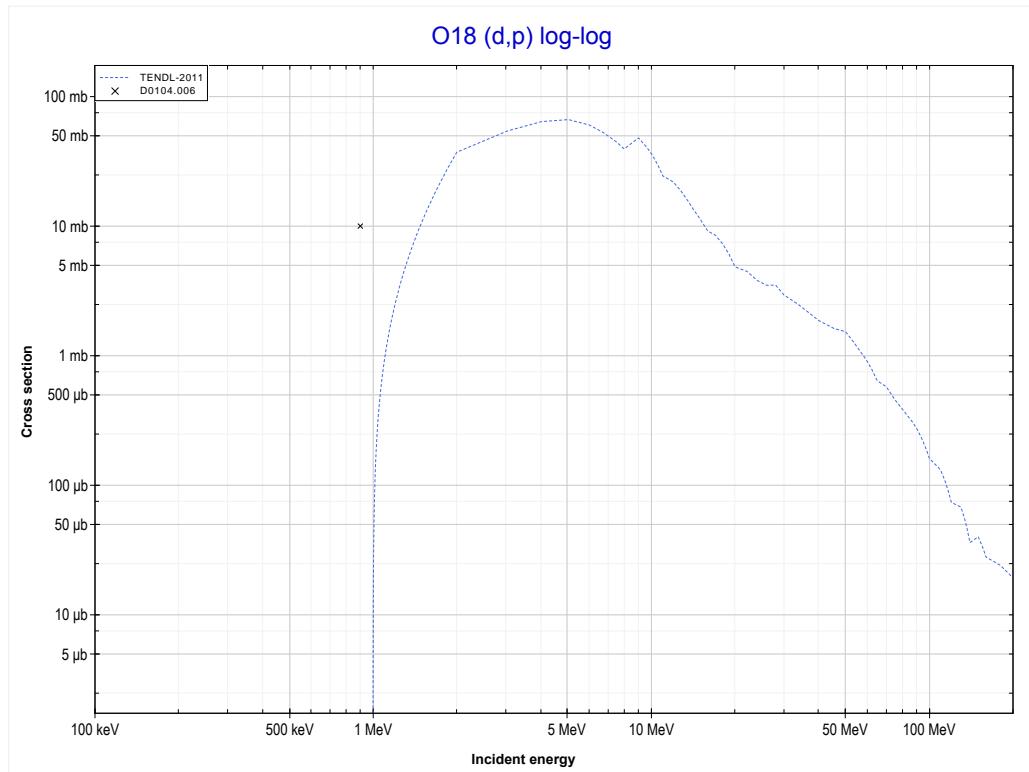
8-O-16
MT107 (d,α) or MT5 (N14 production)

8-O-18 >>
MT103 (d,p) >>



Reaction	Q-Value
O16(d,α)N14	3110.39 keV
O16($d,p+t$)N14	-16703.47 keV
O16($d,n+He3$)N14	-17467.23 keV
O16($d,2d$)N14	-20736.14 keV
O16($d,n+p+d$)N14	-22960.71 keV
O16($d,2n+2p$)N14	-25185.27 keV

<< 7-N-15	8-O-18 MT103 (d,p) or MT5 (O19 production)	10-Ne-22 >>
<< MT107 (d, α)		MT107 (d, α) >>

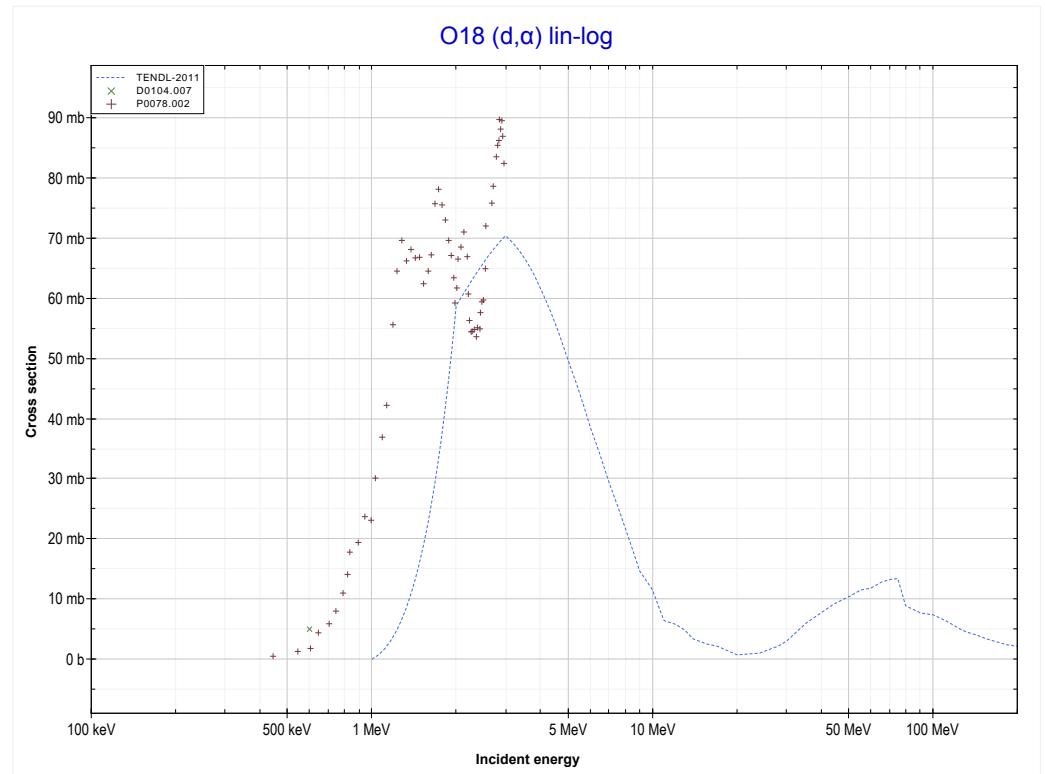
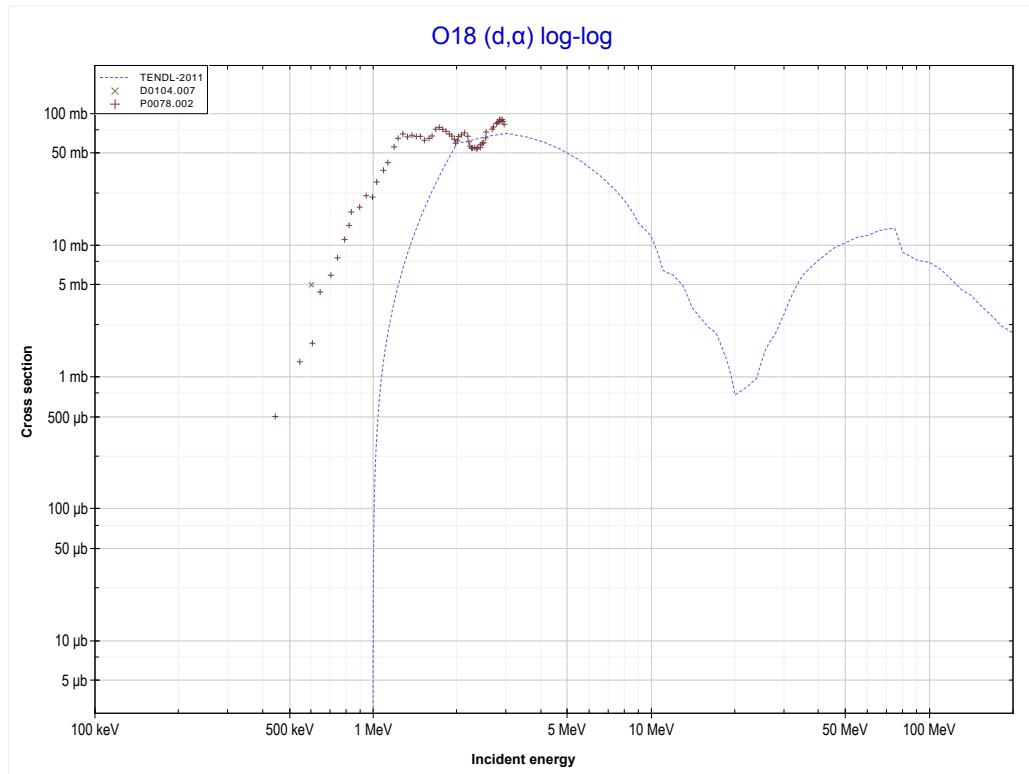


Reaction	Q-Value
O18(d,p)O19	1730.35 keV

<< 8-O-16		
<< MT103 (d,p)		

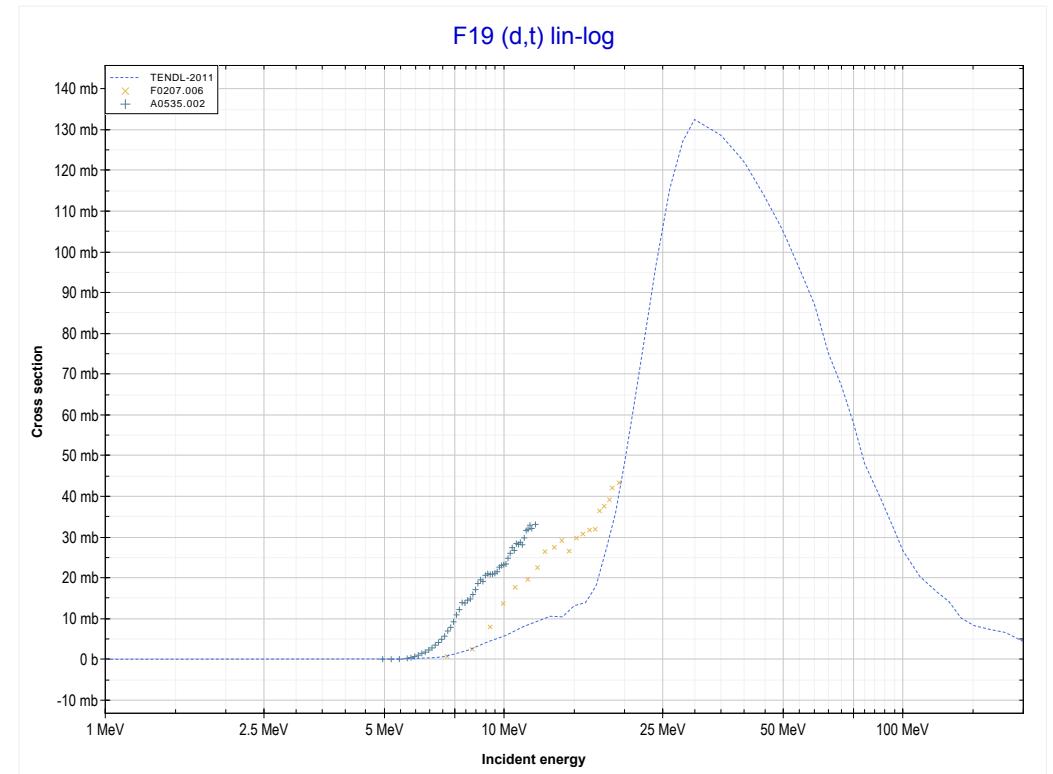
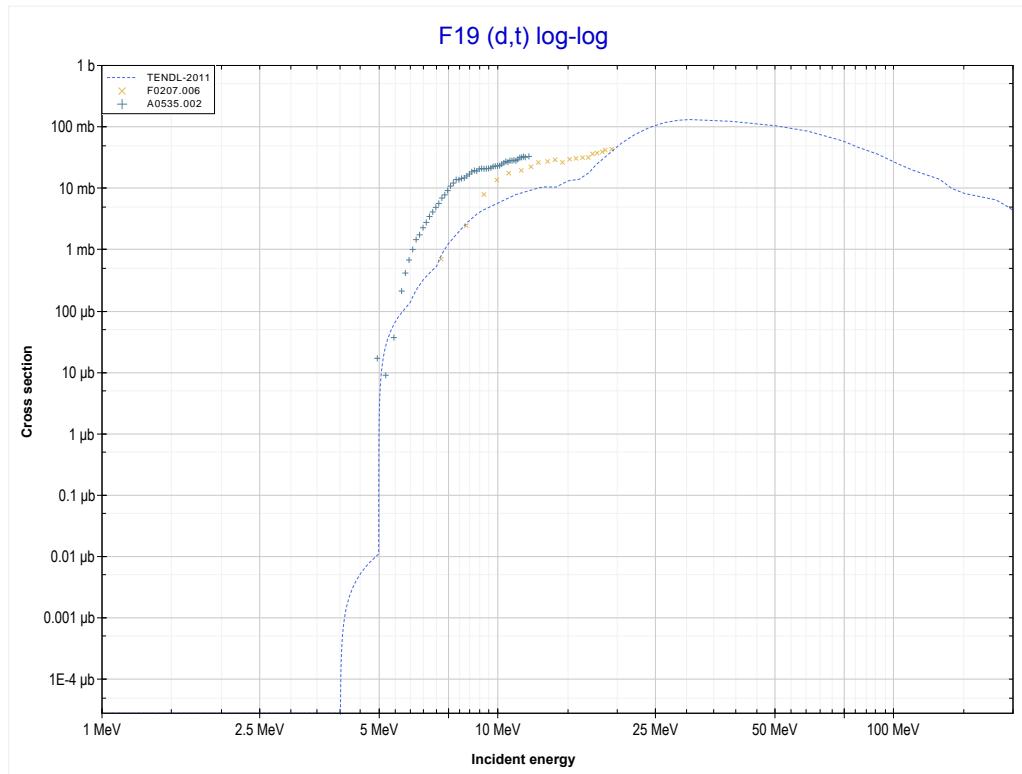
8-O-18
MT107 (d,α) or MT5 (N16 production)

	10-Ne-20 >>
	MT105 (d,t) >>



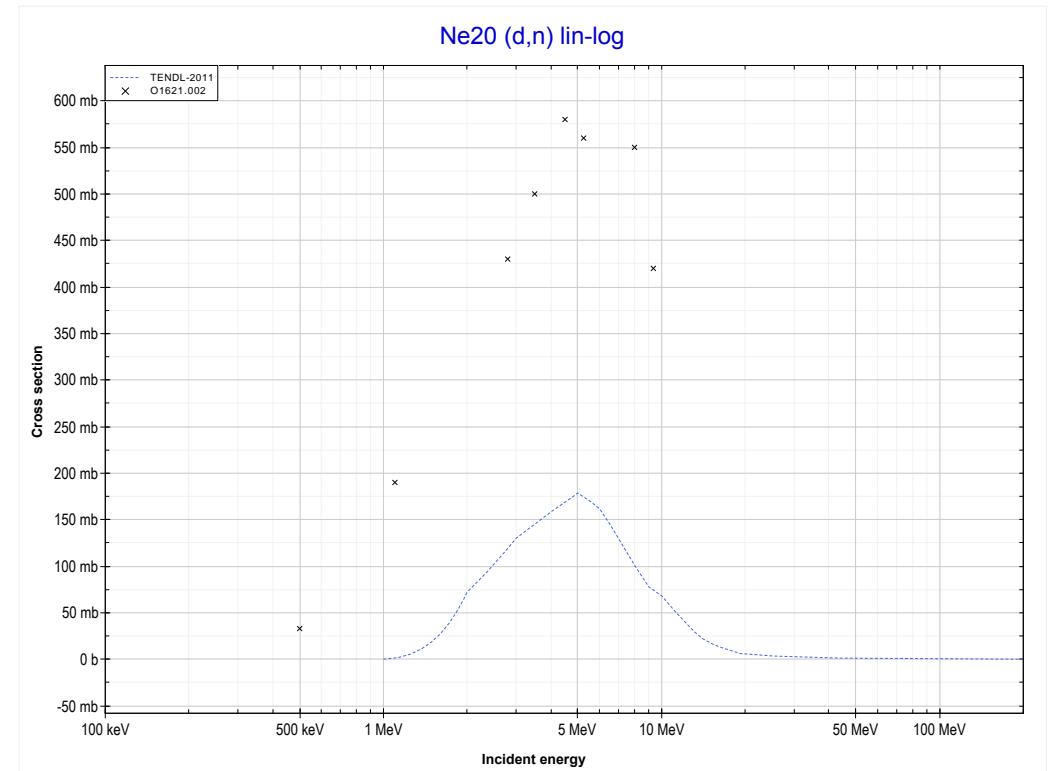
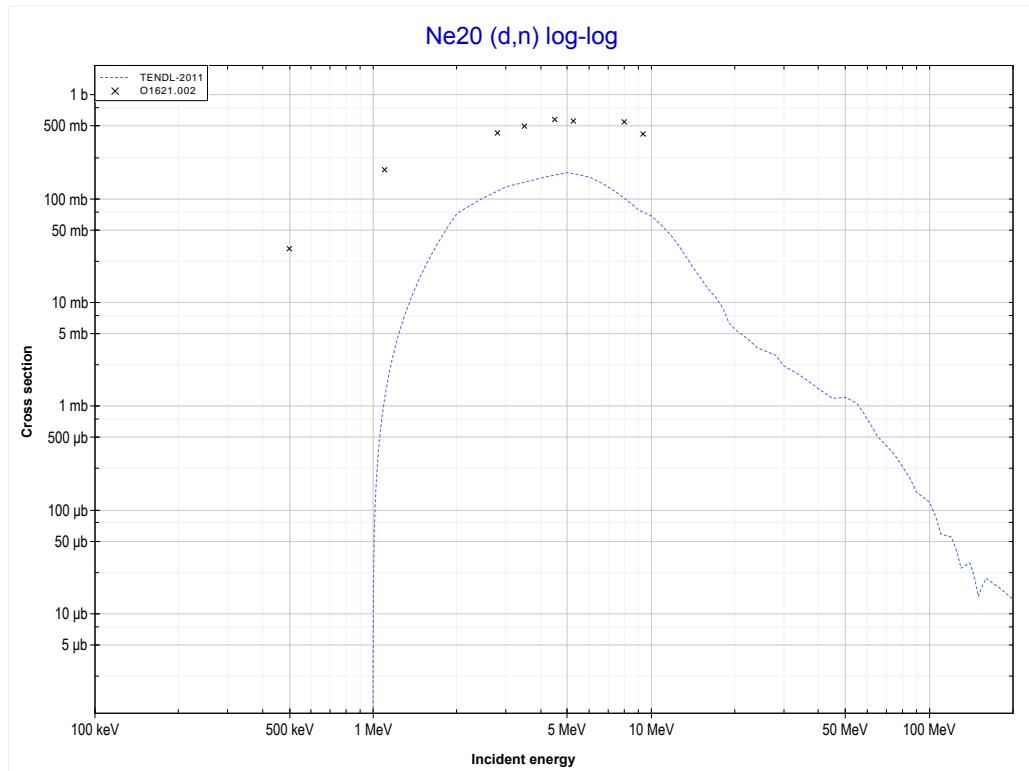
Reaction	Q-Value
O18(d, α)N16	4245.61 keV
O18(d,p+t)N16	-15568.25 keV
O18(d,n+He3)N16	-16332.01 keV
O18(d,2d)N16	-19600.92 keV
O18(d,n+p+d)N16	-21825.49 keV
O18(d,2n+2p)N16	-24050.05 keV

<< 7-N-14	9-F-19 MT105 (d,t) or MT5 (F18 production)	21-Sc-45 >> MT4 (d,n) >>
<< MT107 (d, α)		



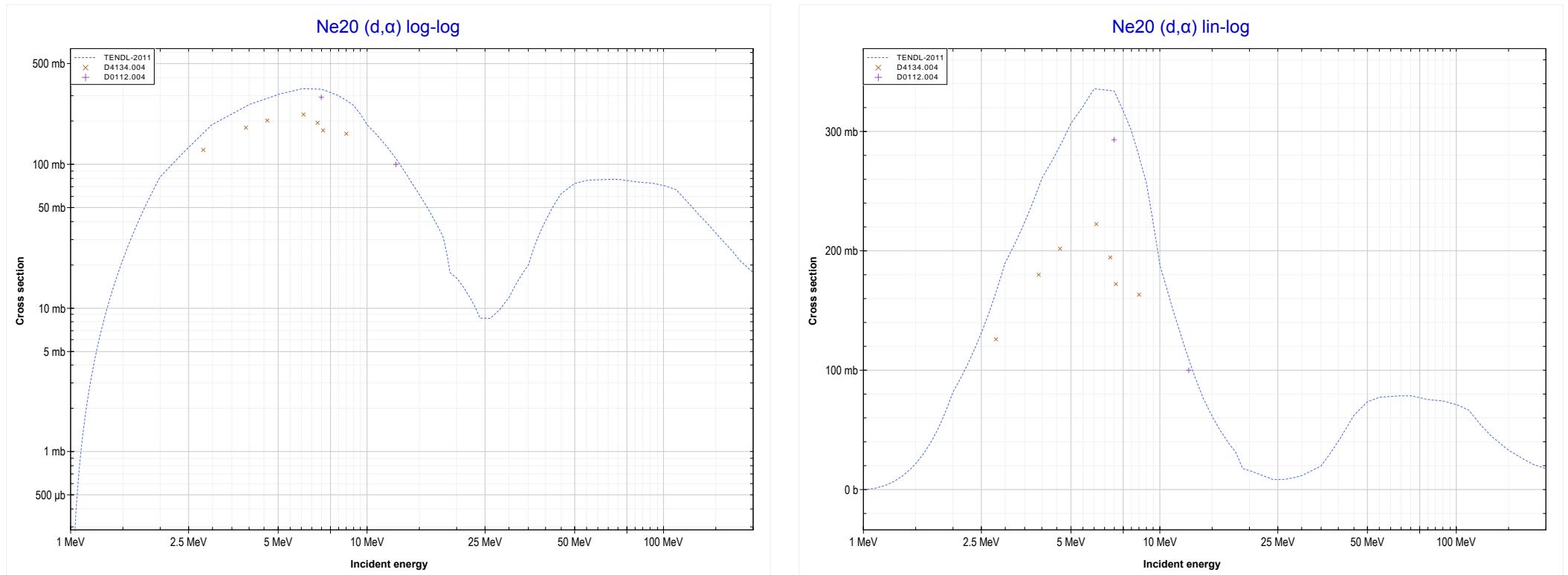
Reaction	Q-Value
F19(d,t)F18	-4175.17 keV
F19(d,n+d)F18	-10432.41 keV
F19(d,2n+p)F18	-12656.97 keV

<< 8-O-16	10-Ne-20 MT4 (d,n) or MT5 (Na21 production)	20-Ca-42 >>
<< MT105 (d,t)		MT107 (d, α) >>



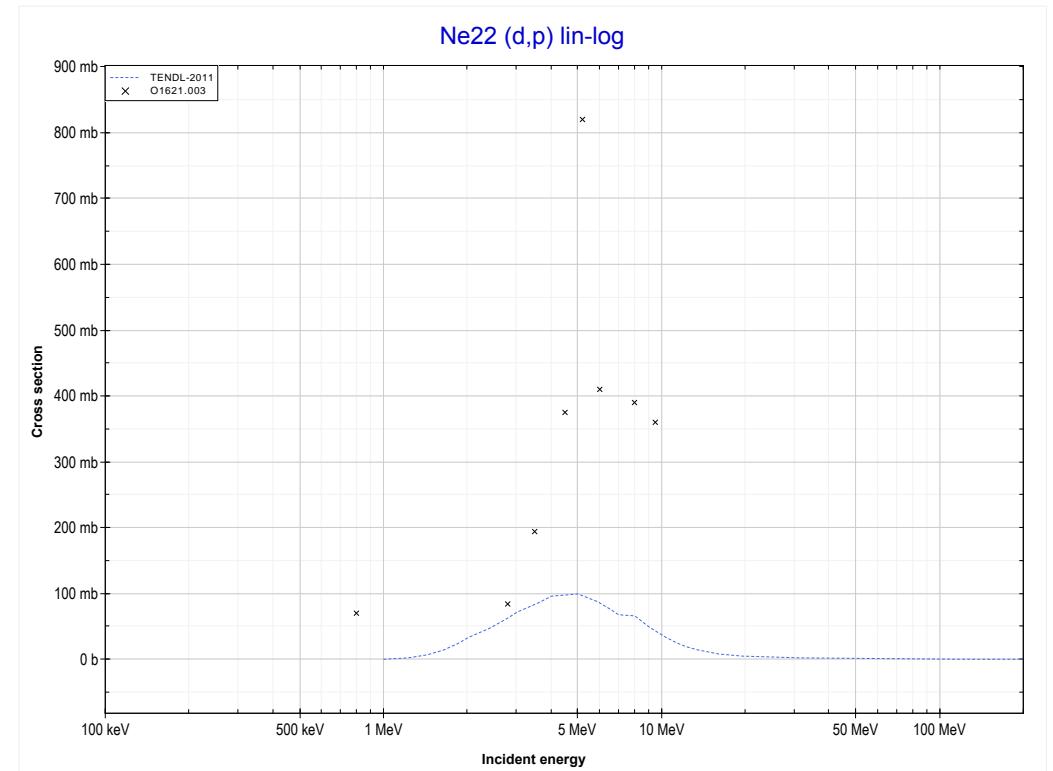
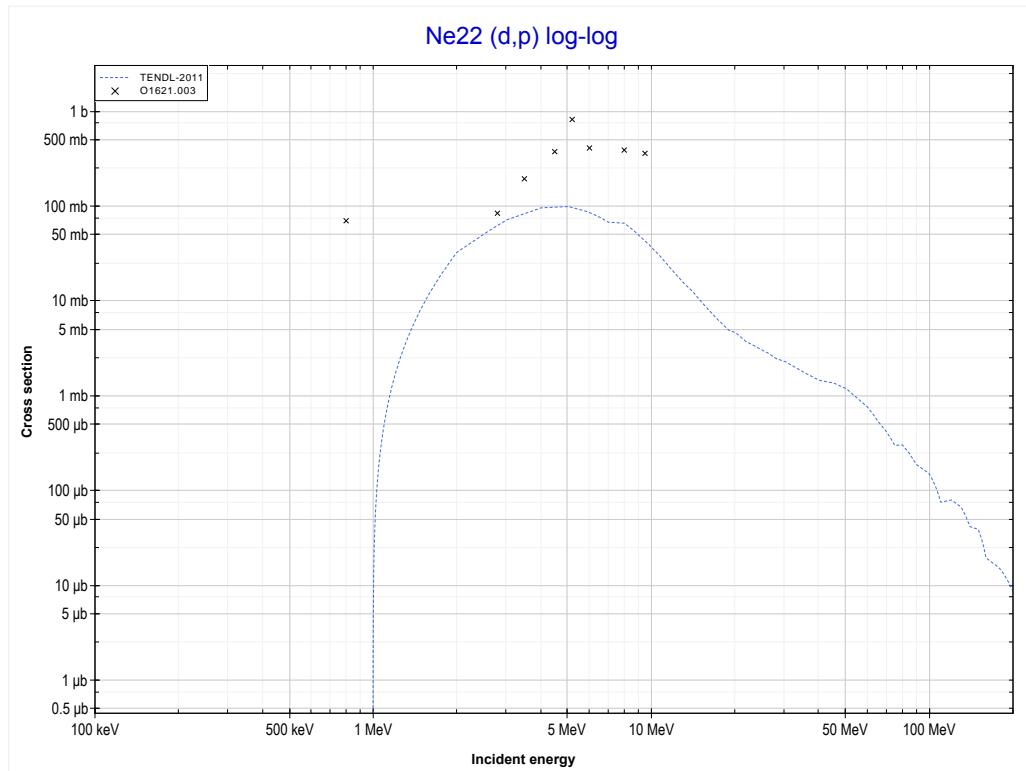
Reaction	Q-Value
Ne20(d,n)Na21	206.67 keV

<< 8-O-18	10-Ne-20 MT107 (d,α) or MT5 (F18 production)	>> 12-Mg-24
<< MT4 (d,n)		MT103 (d,p) >>



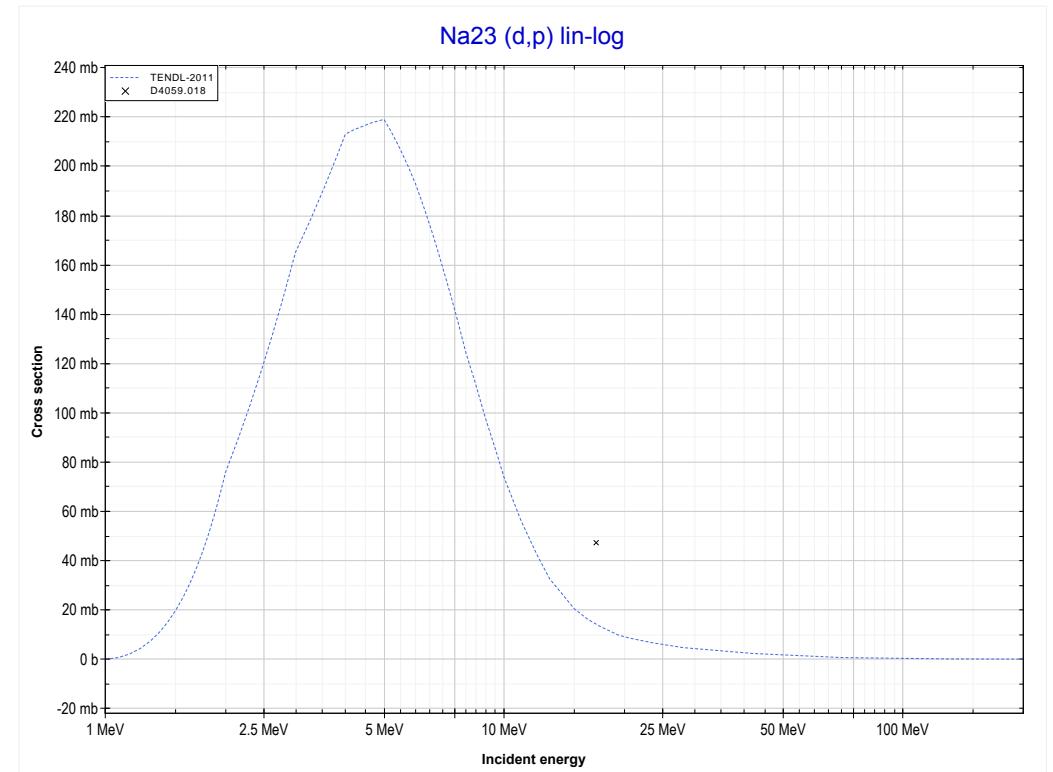
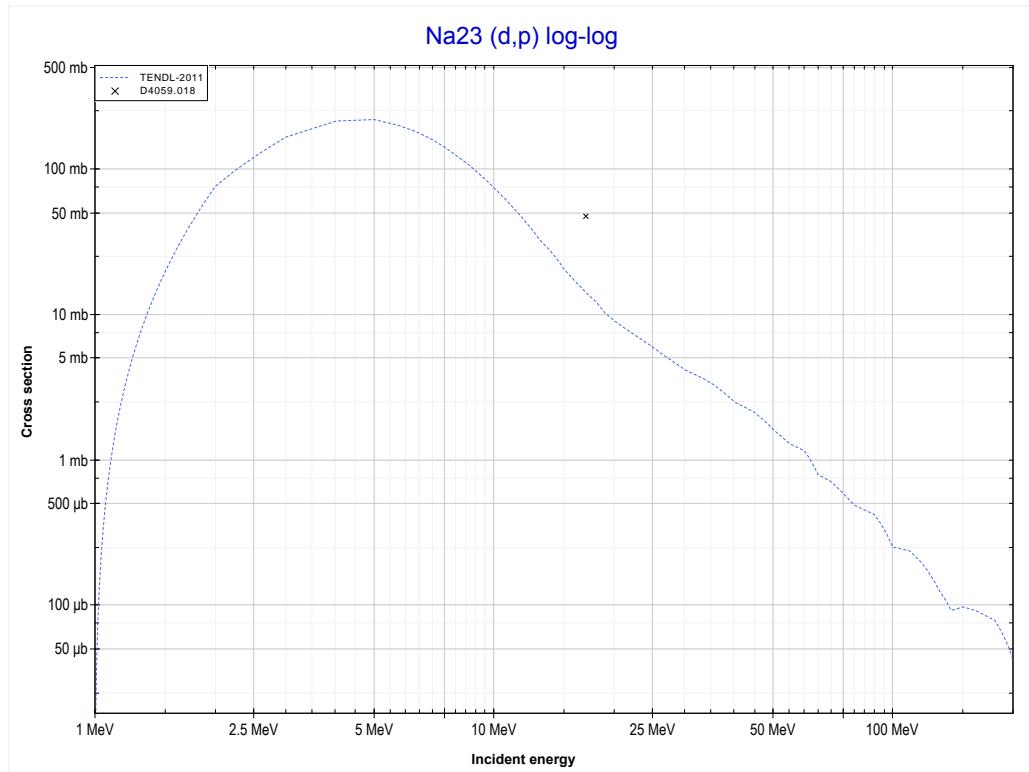
Reaction	Q-Value
Ne20(d,α)F18	2795.17 keV
Ne20($d,p+t$)F18	-17018.69 keV
Ne20($d,n+He3$)F18	-17782.44 keV
Ne20($d,2d$)F18	-21051.35 keV
Ne20($d,n+p+d$)F18	-23275.92 keV
Ne20($d,2n+2p$)F18	-25500.48 keV

<< 8-O-18	10-Ne-22 MT103 (d,p) or MT5 (Ne23 production)	>> 11-Na-23
<< MT107 (d, α)		MT103 (d,p) >>



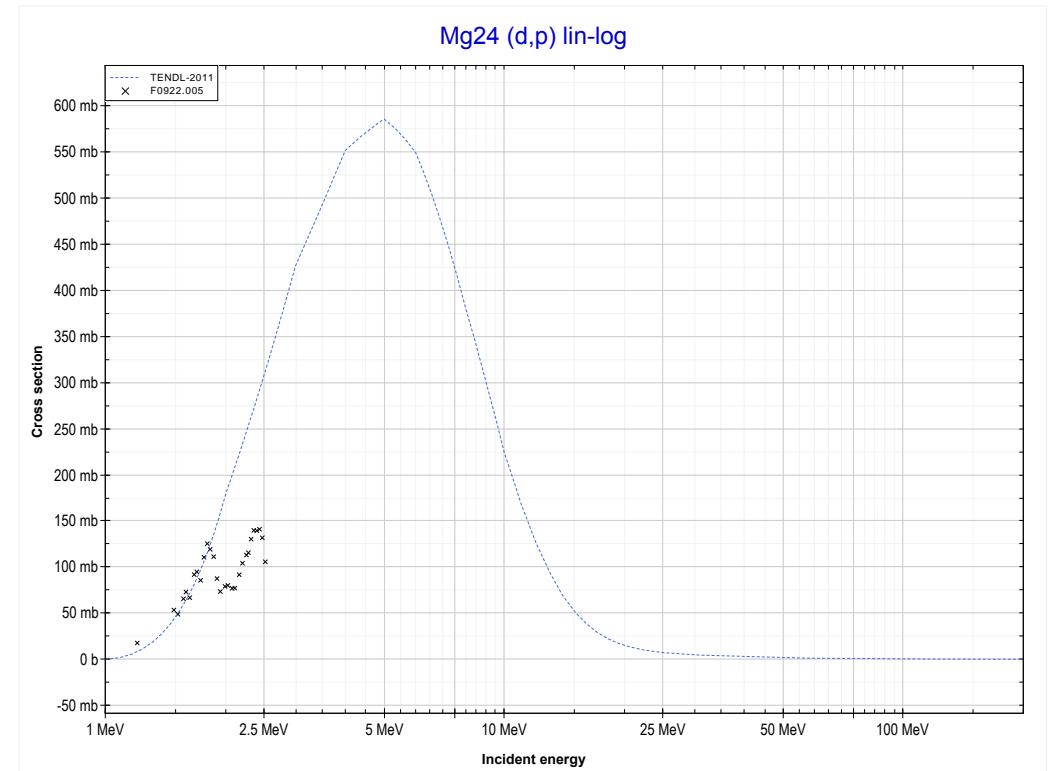
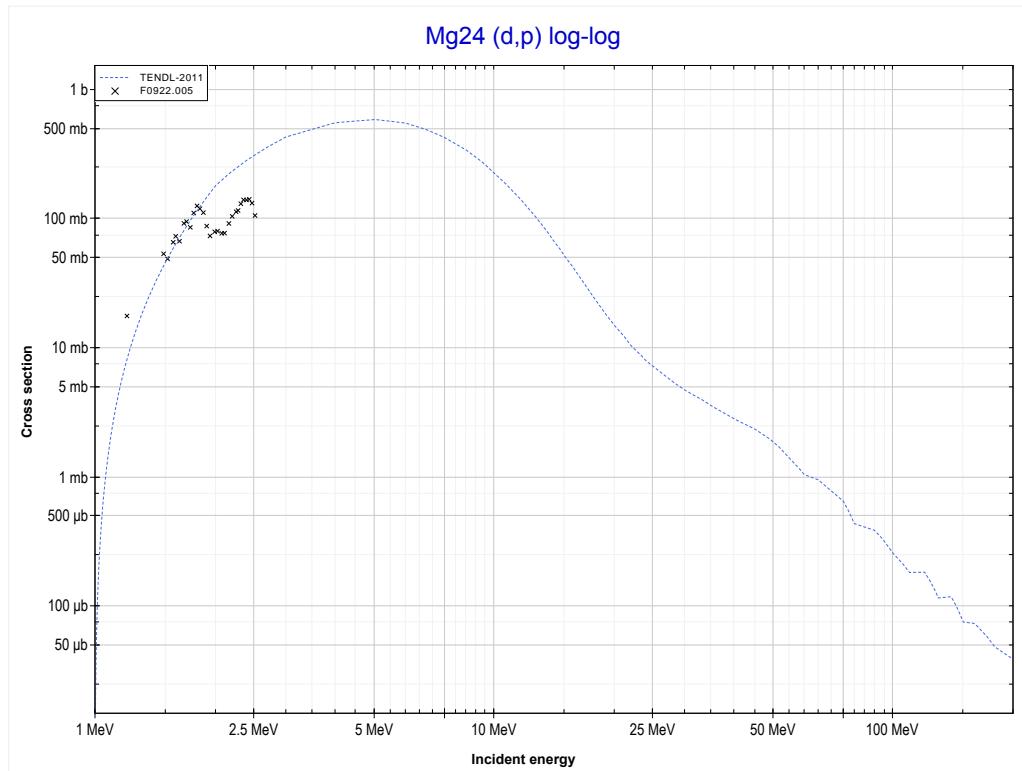
Reaction	Q-Value
$\text{Ne}^{22}(\text{d},\text{p})\text{Ne}^{23}$	2976.09 keV

<< 10-Ne-22	11-Na-23 MT103 (d,p) or MT5 (Na24 production)	12-Mg-24 >>
<< MT103 (d,p)		MT103 (d,p) >>



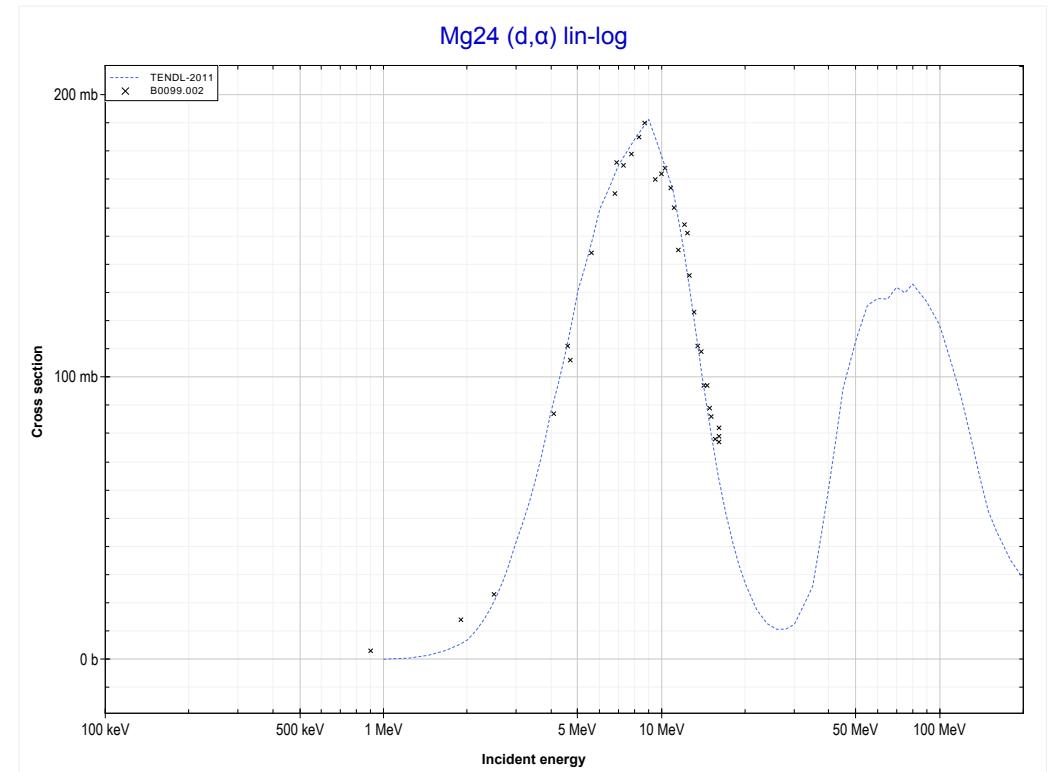
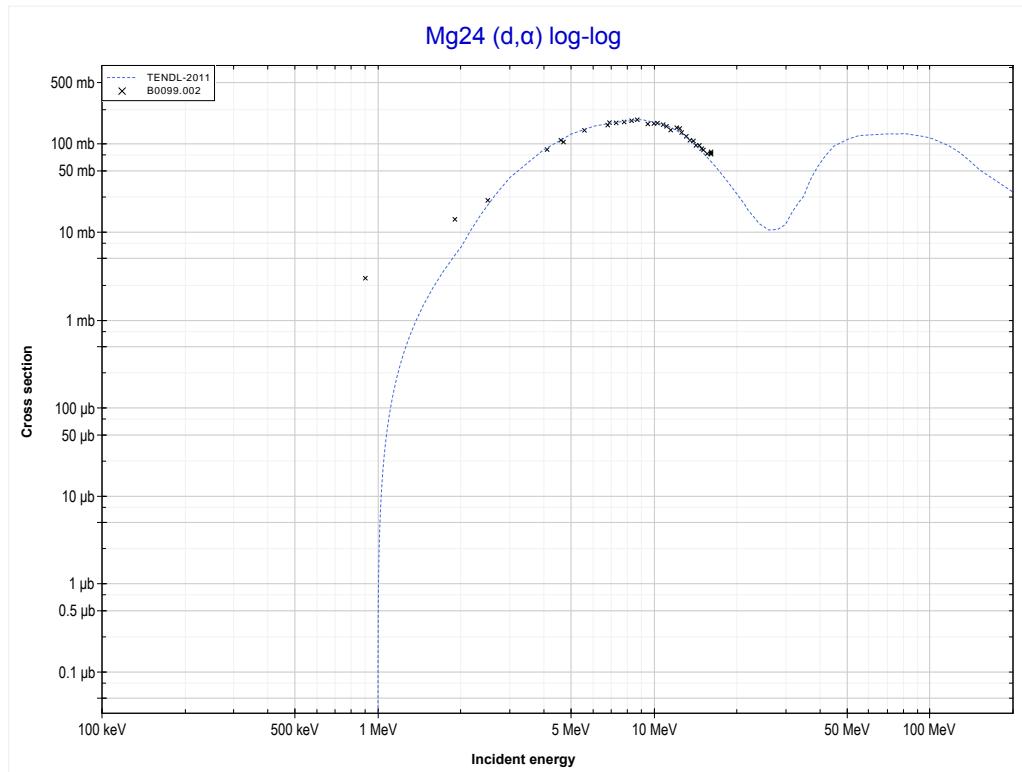
Reaction	Q-Value
$\text{Na}^{23}(\text{d},\text{p})\text{Na}^{24}$	4735.01 keV

<< 11-Na-23	12-Mg-24 MT103 (d,p) or MT5 (Mg25 production)	13-Al-27 >>
<< MT103 (d,p)		MT107 (d, α) >>



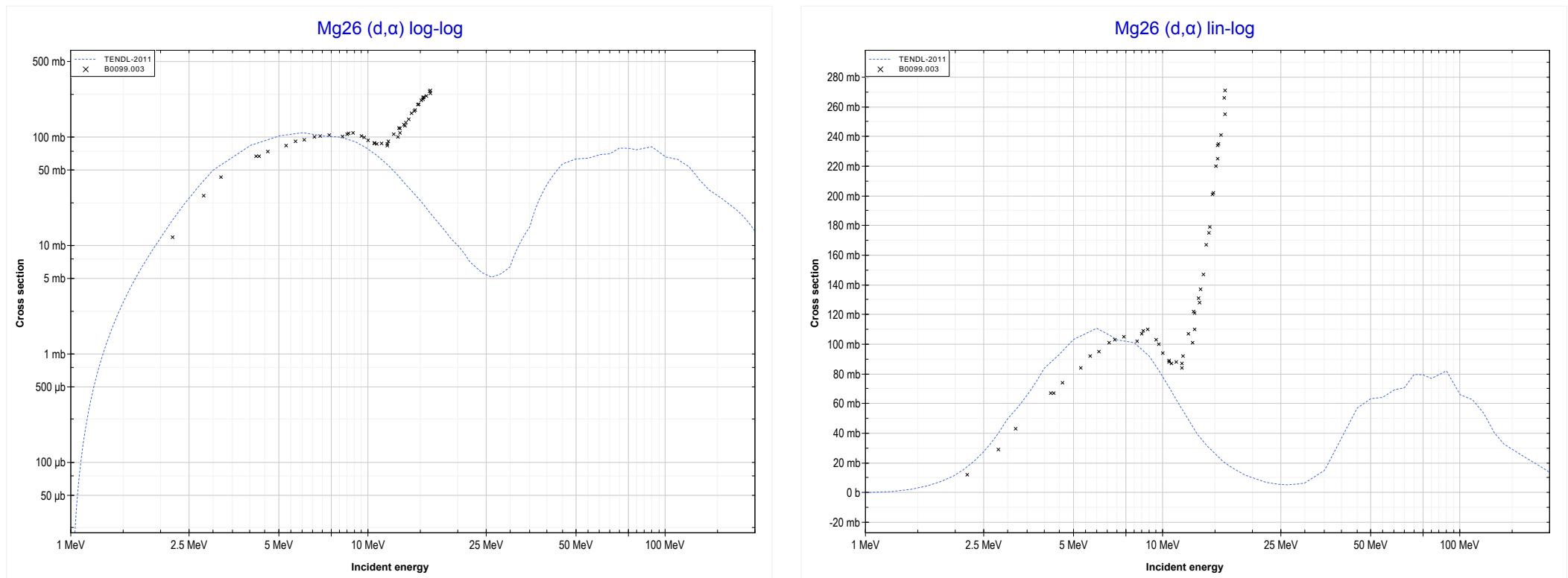
Reaction	Q-Value
Mg24(d,p)Mg25	5106.01 keV

<< 10-Ne-20	12-Mg-24 MT107 (d,α) or MT5 (Na22 production)	12-Mg-26 >>
<< MT103 (d,p) >>		MT107 (d, α) >>



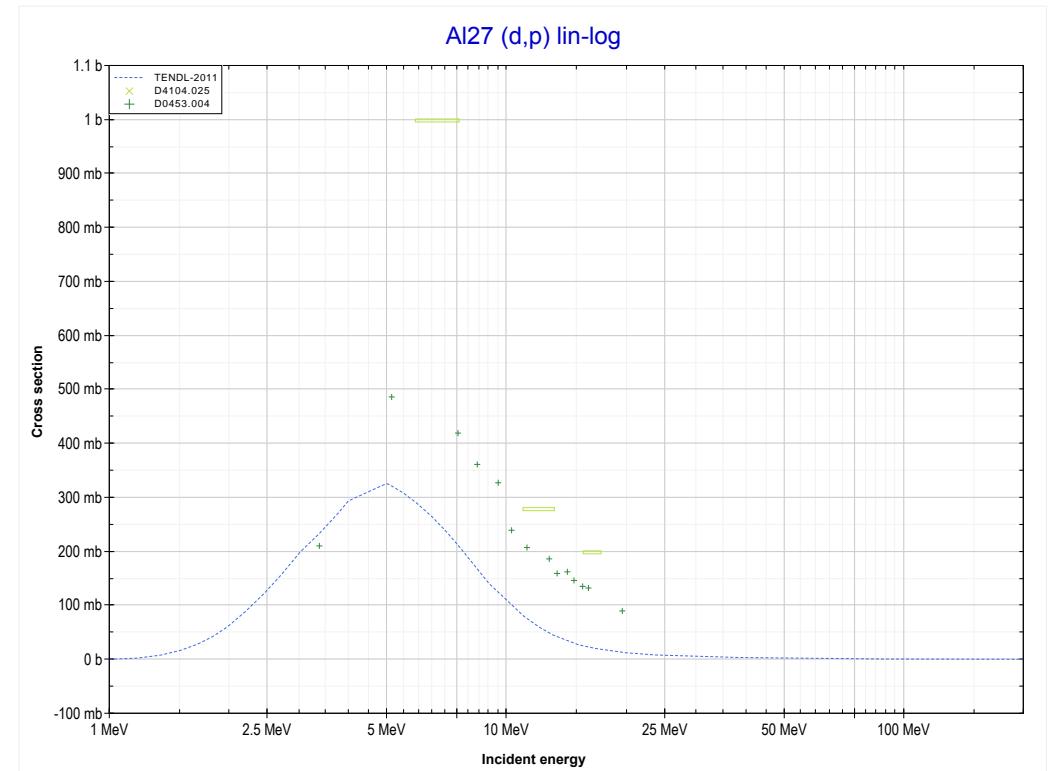
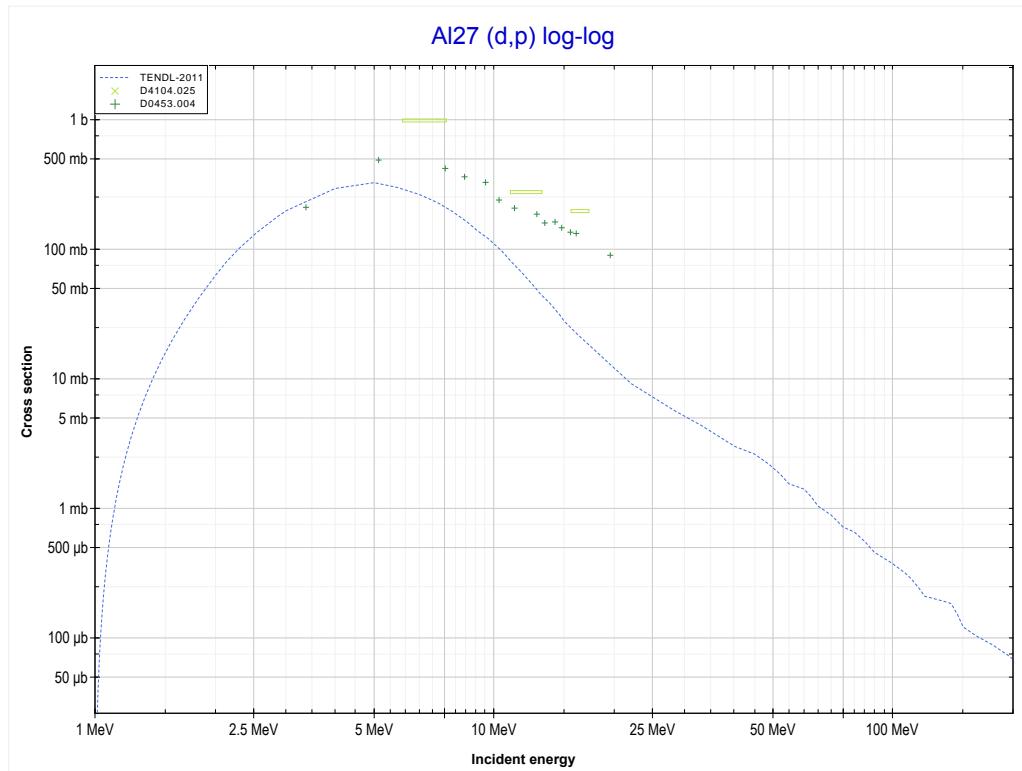
Reaction	Q-Value
Mg24(d, α)Na22	1959.64 keV
Mg24(d,p+t)Na22	-17854.22 keV
Mg24(d,n+He3)Na22	-18617.98 keV
Mg24(d,2d)Na22	-21886.89 keV
Mg24(d,n+p+d)Na22	-24111.45 keV
Mg24(d,2n+2p)Na22	-26336.02 keV

<< 12-Mg-24	12-Mg-26 MT107 (d,α) or MT5 (Na24 production)	16-S-32 >>
<< MT107 (d,α)		MT103 (d,p) >>



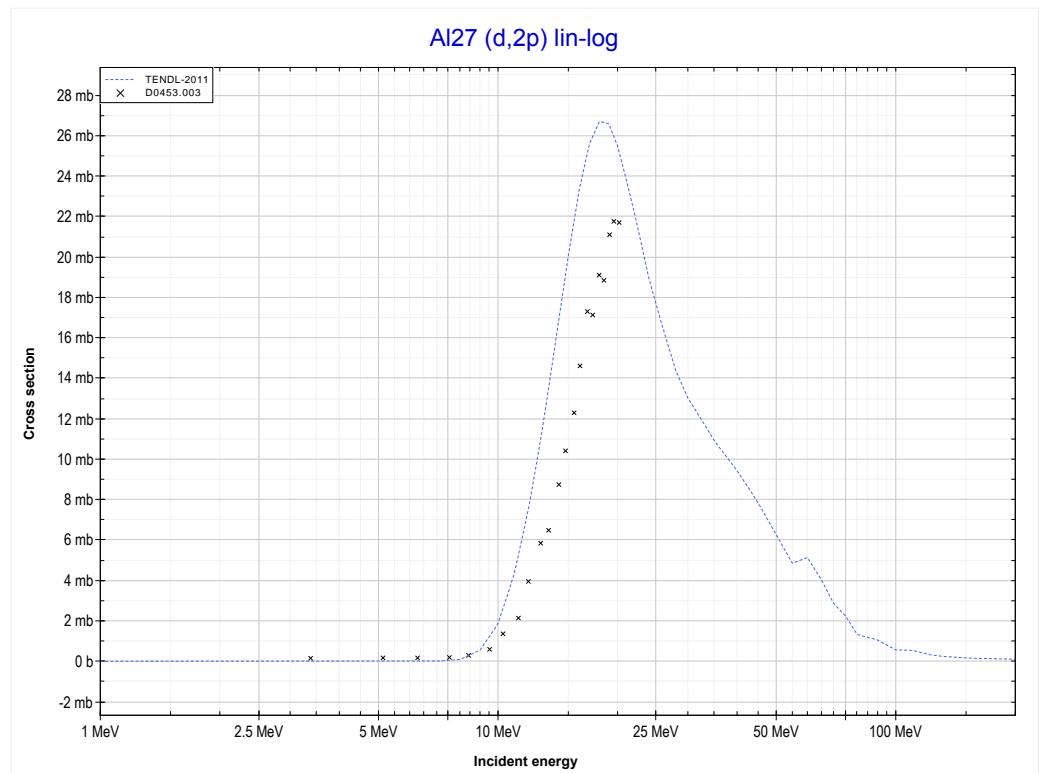
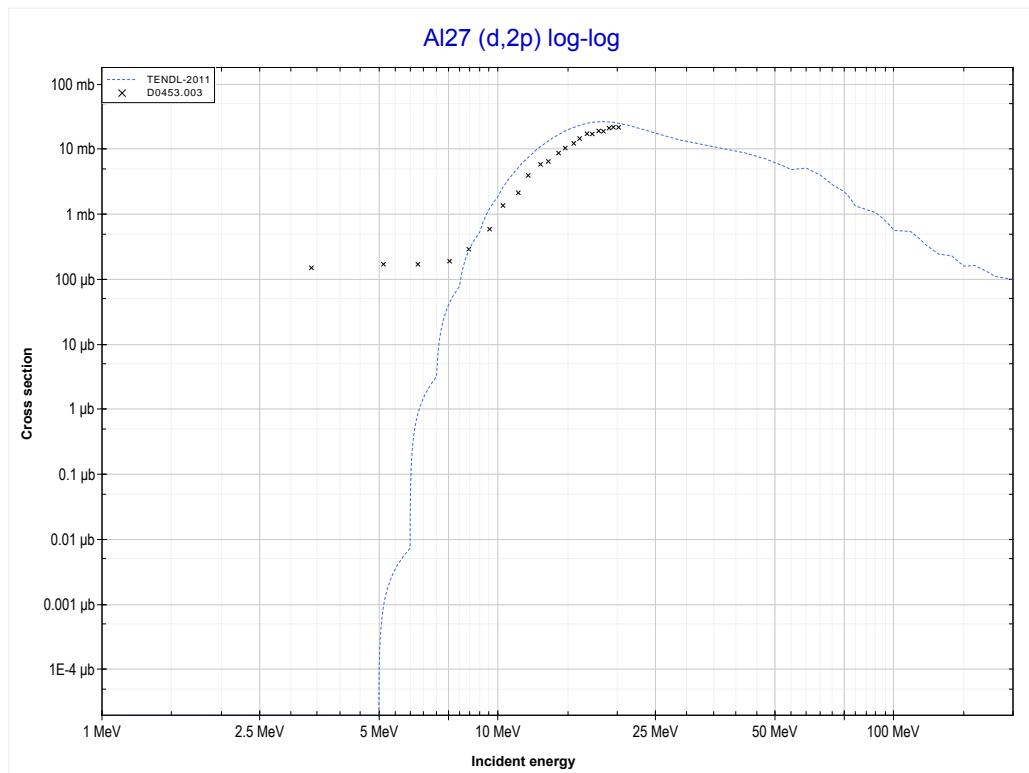
Reaction	Q-Value
$Mg^{26}(d,\alpha)Na^{24}$	2914.33 keV
$Mg^{26}(d,p+t)Na^{24}$	-16899.53 keV
$Mg^{26}(d,n+He^3)Na^{24}$	-17663.28 keV
$Mg^{26}(d,2d)Na^{24}$	-20932.19 keV
$Mg^{26}(d,n+p+d)Na^{24}$	-23156.76 keV
$Mg^{26}(d,2n+2p)Na^{24}$	-25381.33 keV

<< 12-Mg-24	13-Al-27 MT103 (d,p) or MT5 (Al28 production)	19-K-41 >> MT111 (d,2p) >>
<< MT107 (d, α)		

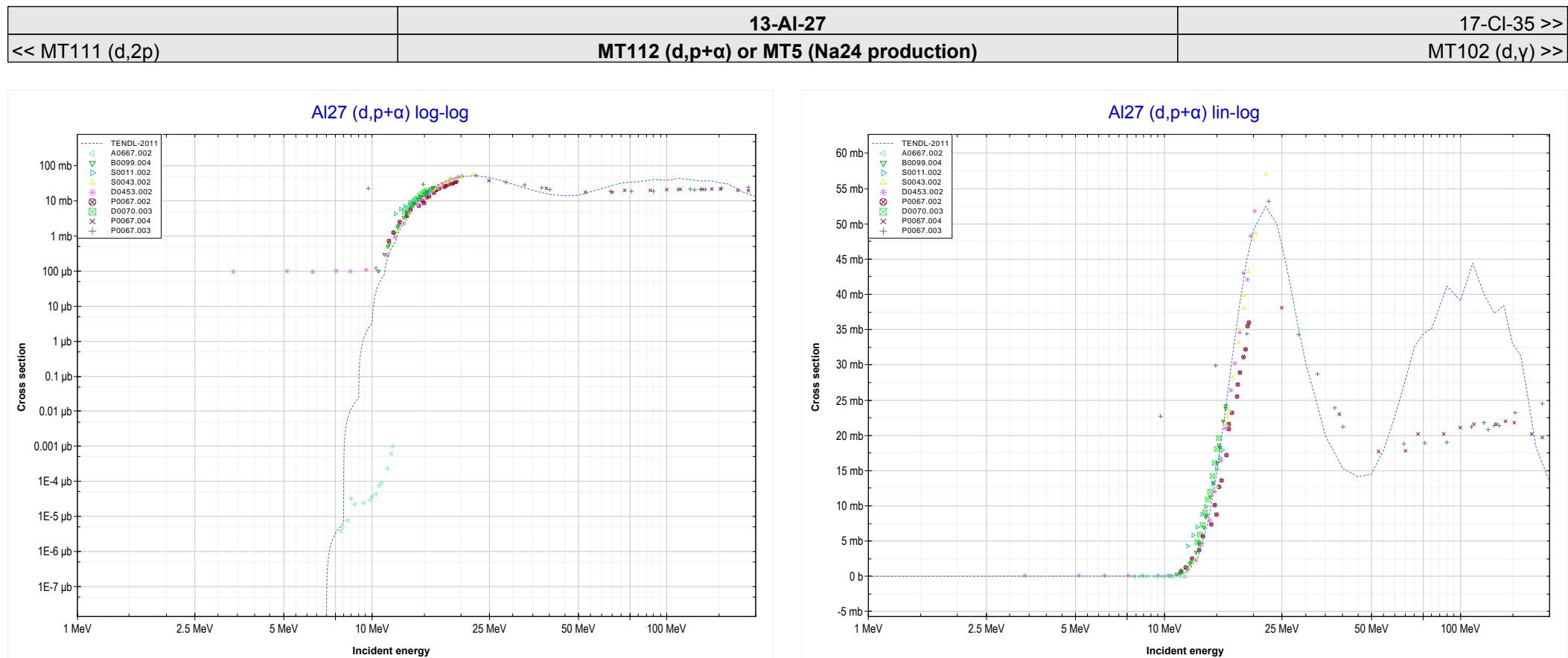


Reaction	Q-Value
AI27(d,p)Al28	5500.53 keV

	13-AI-27 MT111 (d,2p) or MT5 (Mg27 production)	16-S-32 >> MT112 (d,p+ α) >>
<< MT103 (d,p)		

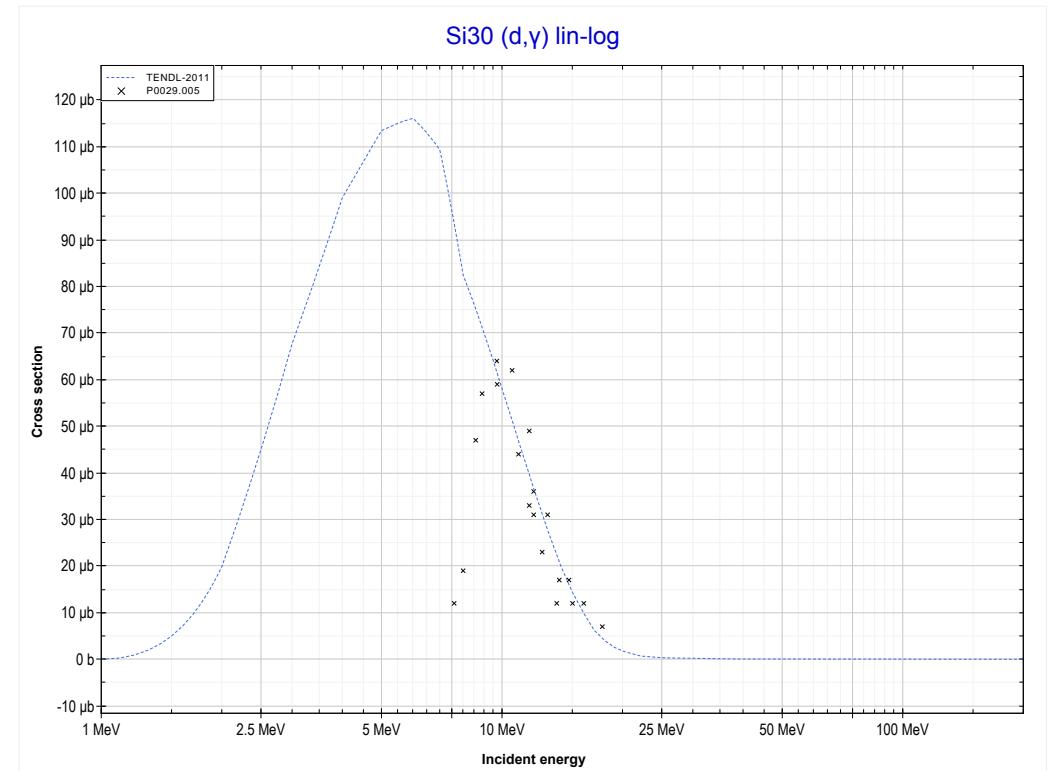
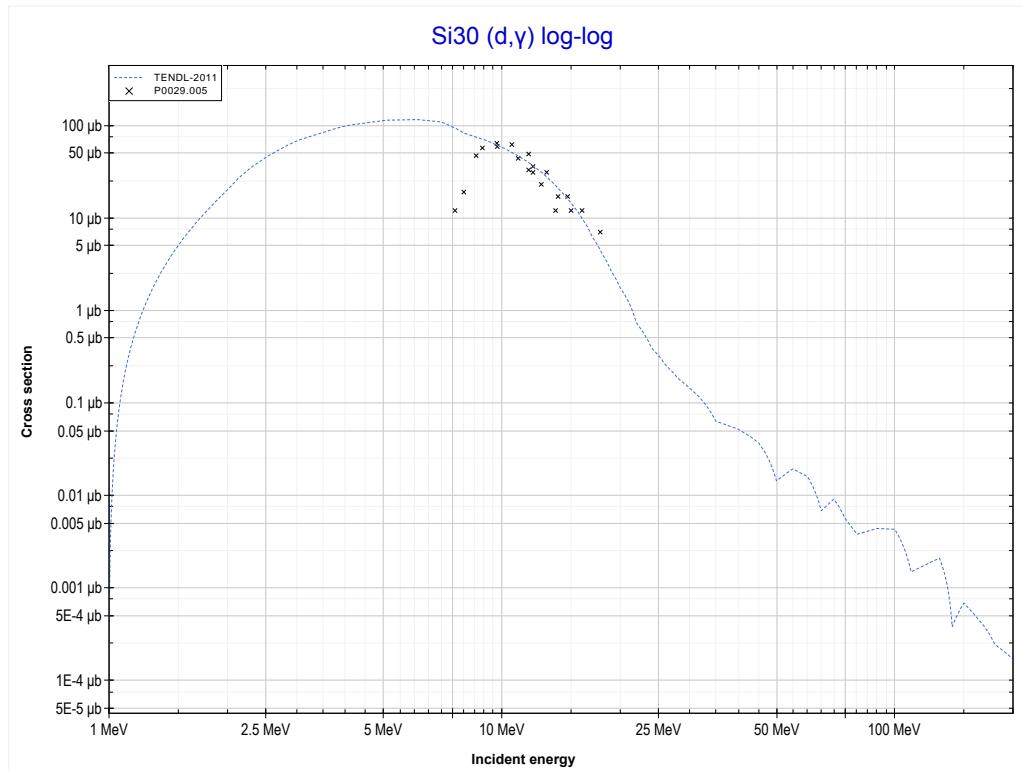


Reaction	Q-Value
AI27(d,2p)Mg27	-4052.23 keV



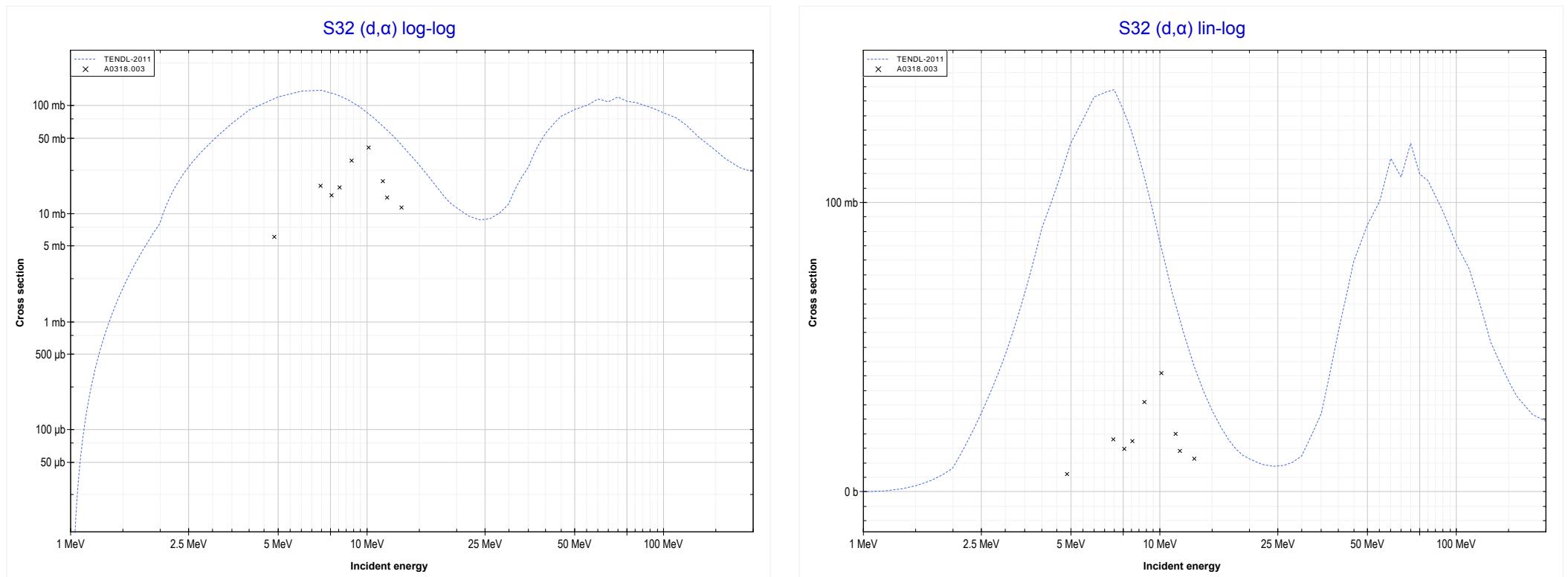
Reaction	Q-Value
Al27(d,p+ α)Na24	-5356.71 keV
Al27(d,d+He3)Na24	-23709.76 keV
Al27(d,2p+t)Na24	-25170.58 keV
Al27(d,n+p+He3)Na24	-25934.33 keV
Al27(d,p+2d)Na24	-29203.24 keV
Al27(d,n+2p+d)Na24	-31427.81 keV
Al27(d,2n+3p)Na24	-33652.37 keV

<< 4-Be-9	14-Si-30 MT102 (d,γ) or MT5 (P32 production)	>> 24-Cr-54
<< MT112 ($d,p+\alpha$)		MT107 (d,α) >>



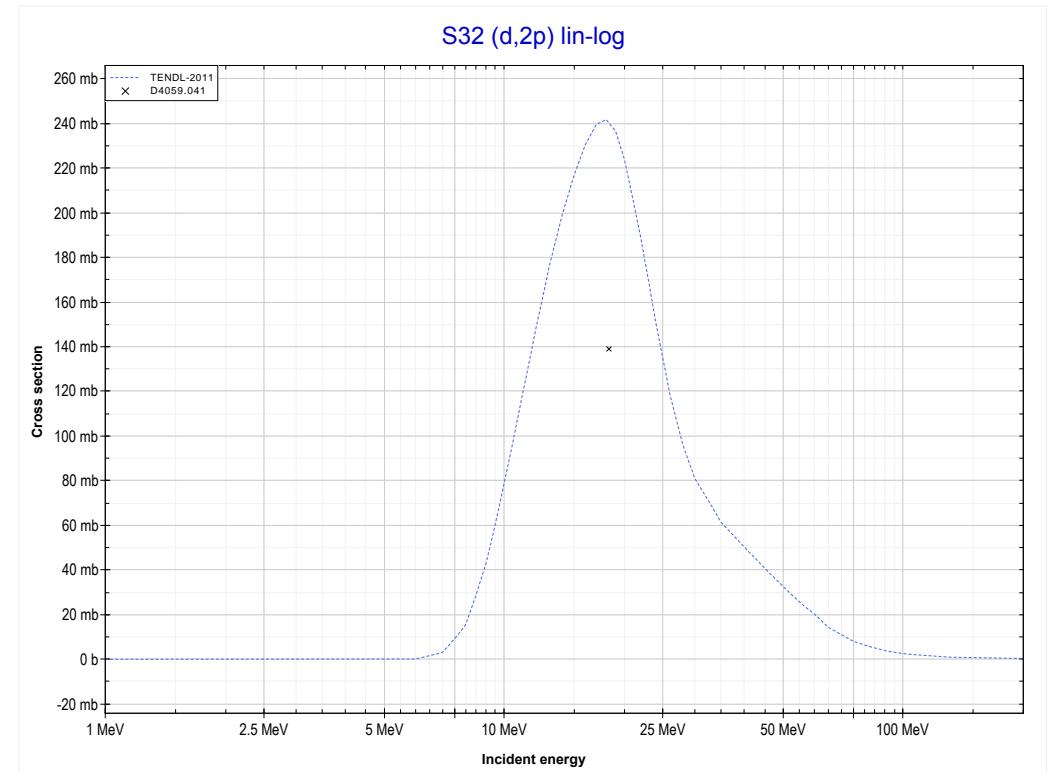
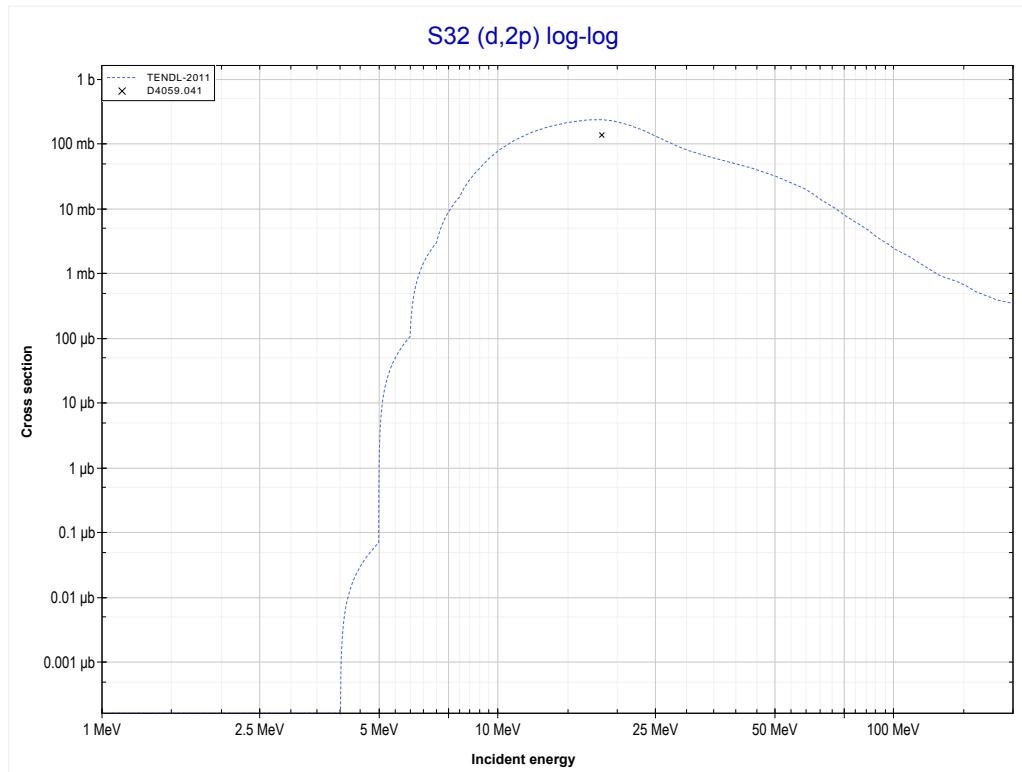
Reaction	Q-Value
Si30(d,γ)P32	13008.01 keV

<< 12-Mg-26	16-S-32 MT107 (d,α) or MT5 (P30 production)	16-S-34 >> MT111 ($d,2p$) >>
<< MT102 (d,γ)		



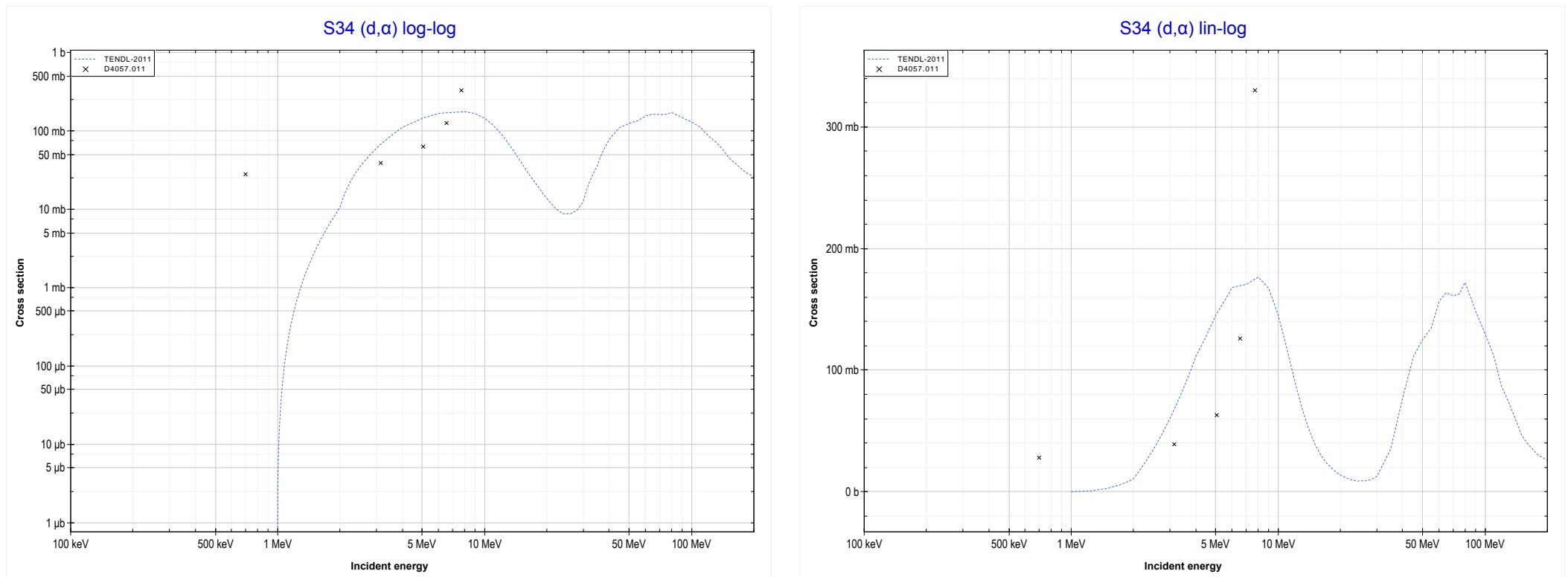
Reaction	Q-Value
S32(d,α)P30	4895.71 keV
S32($d,p+t$)P30	-14918.15 keV
S32($d,n+He3$)P30	-15681.91 keV
S32($d,2d$)P30	-18950.82 keV
S32($d,n+p+d$)P30	-21175.39 keV
S32($d,2n+2p$)P30	-23399.95 keV

<< 13-Al-27	16-S-32 MT111 (d,2p) or MT5 (P32 production)	22-Ti-46 >> MT107 (d, α) >>
<< MT107 (d, α)		



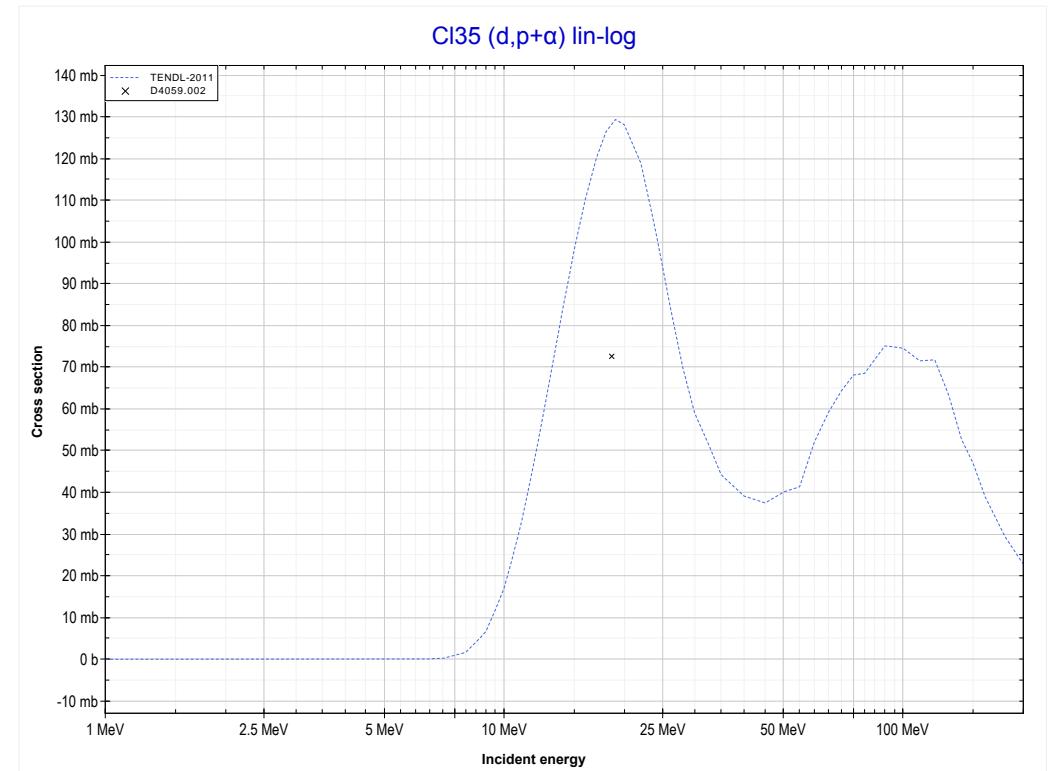
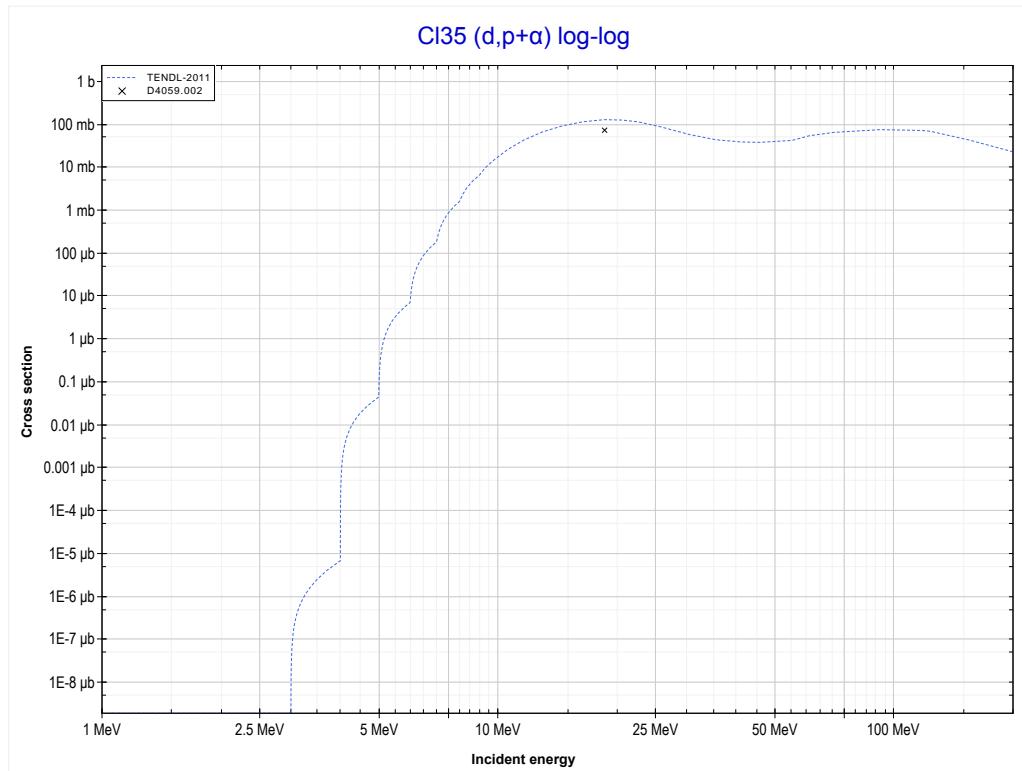
Reaction	Q-Value
S32(d,2p)P32	-3152.70 keV

<< 16-S-32	16-S-34 MT107 (d,α) or MT5 (P32 production)	18-Ar-40 >>
<< MT111 ($d,2p$)		MT112 ($d,p+\alpha$) >>

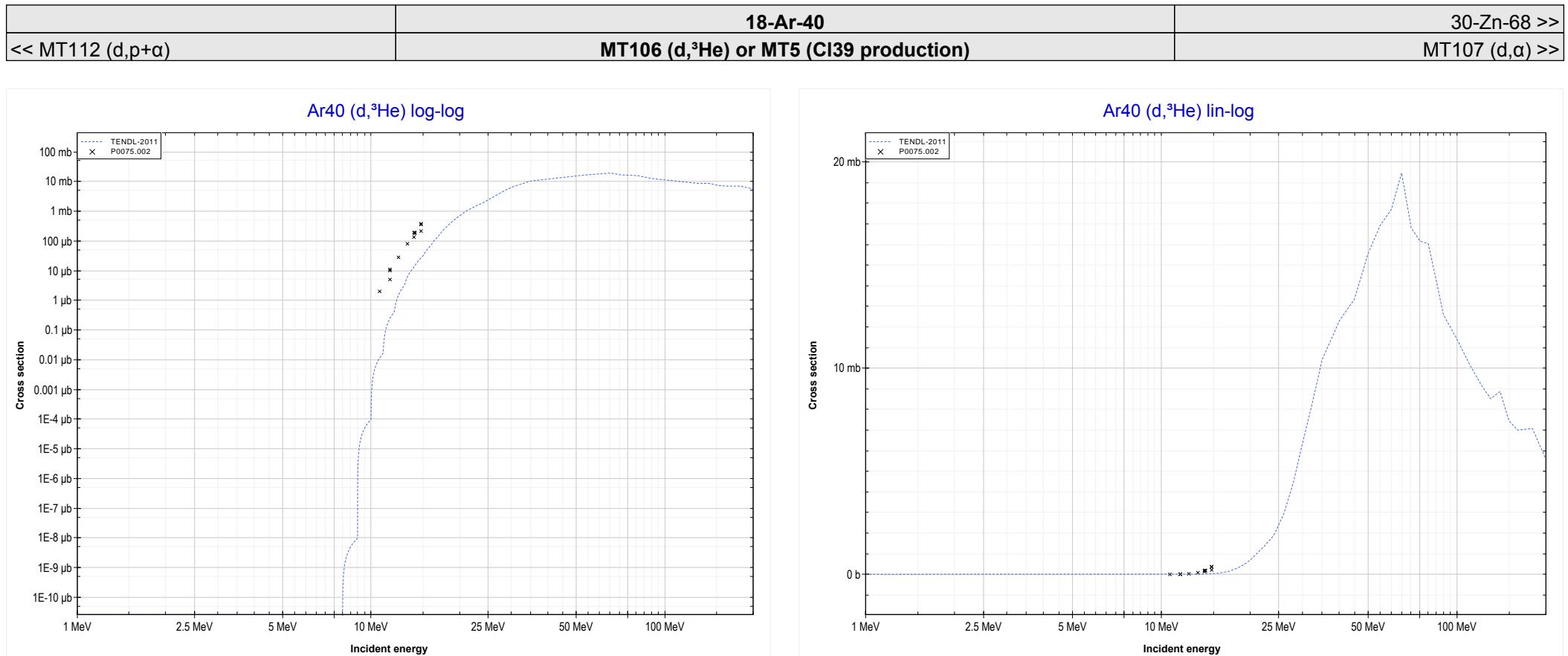


Reaction	Q-Value
$S^{34}(d,\alpha)P^{32}$	5084.24 keV
$S^{34}(d,p+t)P^{32}$	-14729.62 keV
$S^{34}(d,n+He^3)P^{32}$	-15493.38 keV
$S^{34}(d,2d)P^{32}$	-18762.29 keV
$S^{34}(d,n+p+d)P^{32}$	-20986.86 keV
$S^{34}(d,2n+2p)P^{32}$	-23211.42 keV

<< 13-Al-27	17-CI-35 MT112 (d,p+ α) or MT5 (P32 production)	27-Co-59 >> MT106 (d, ^3He) >>
<< MT107 (d, α)		

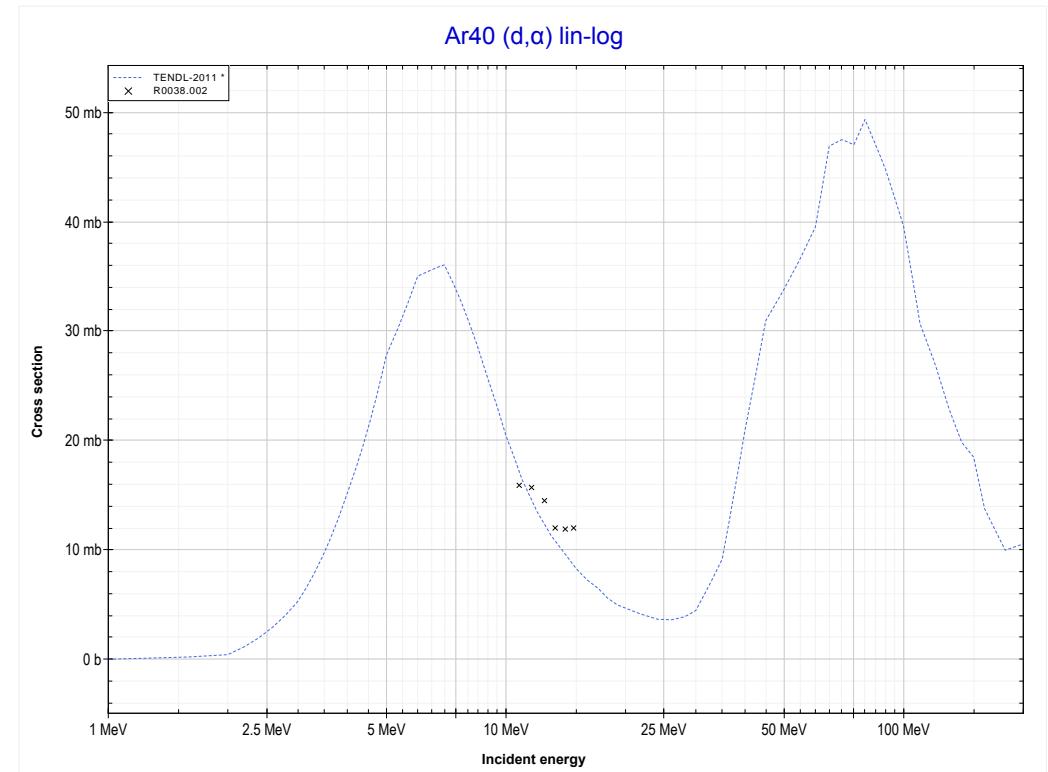
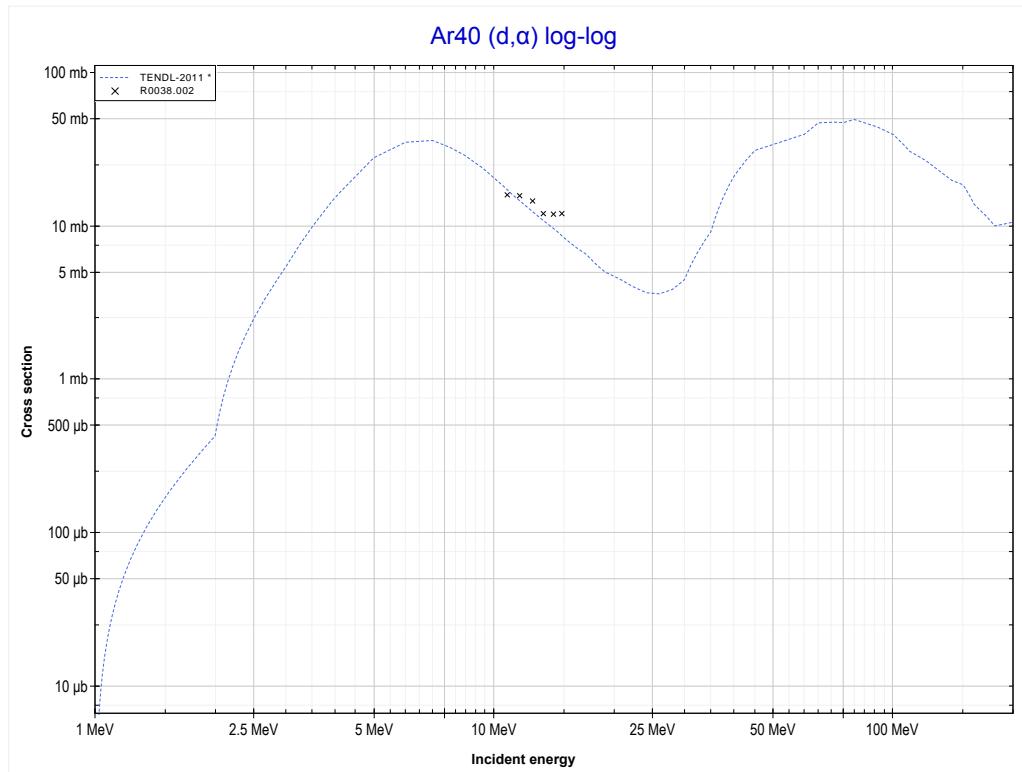


Reaction	Q-Value
CI35(d,p+ α)P32	-1286.48 keV
CI35(d,d+He3)P32	-19639.53 keV
CI35(d,2p+t)P32	-21100.35 keV
CI35(d,n+p+He3)P32	-21864.10 keV
CI35(d,p+2d)P32	-25133.01 keV
CI35(d,n+2p+d)P32	-27357.58 keV
CI35(d,2n+3p)P32	-29582.14 keV



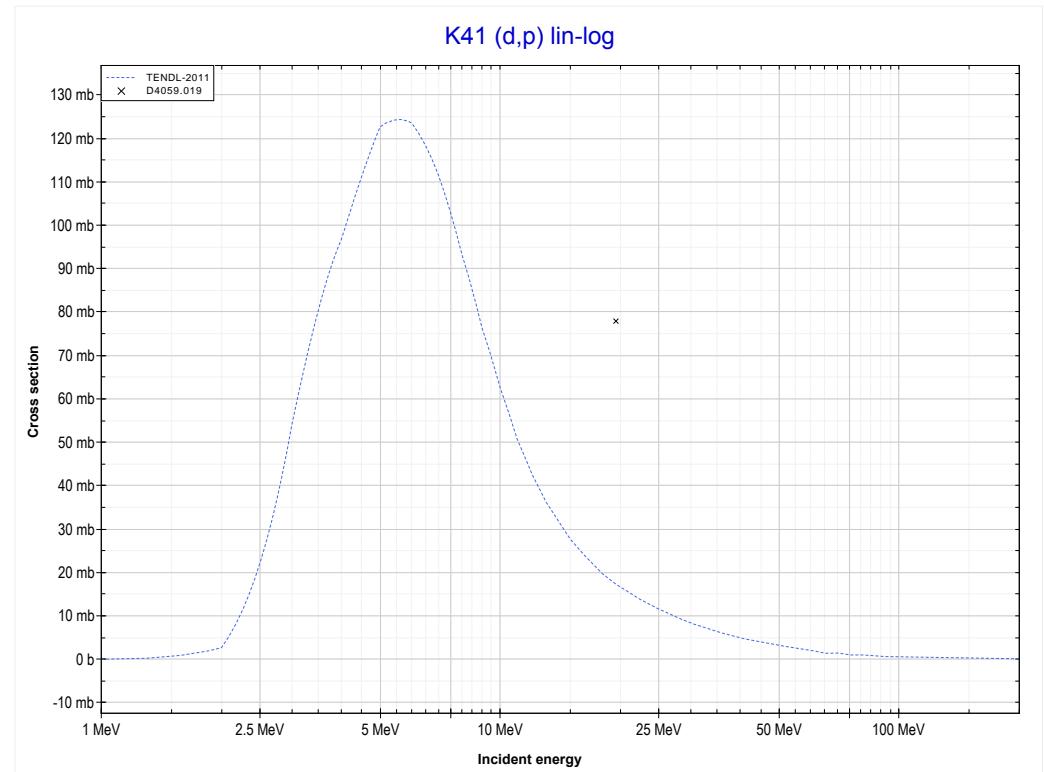
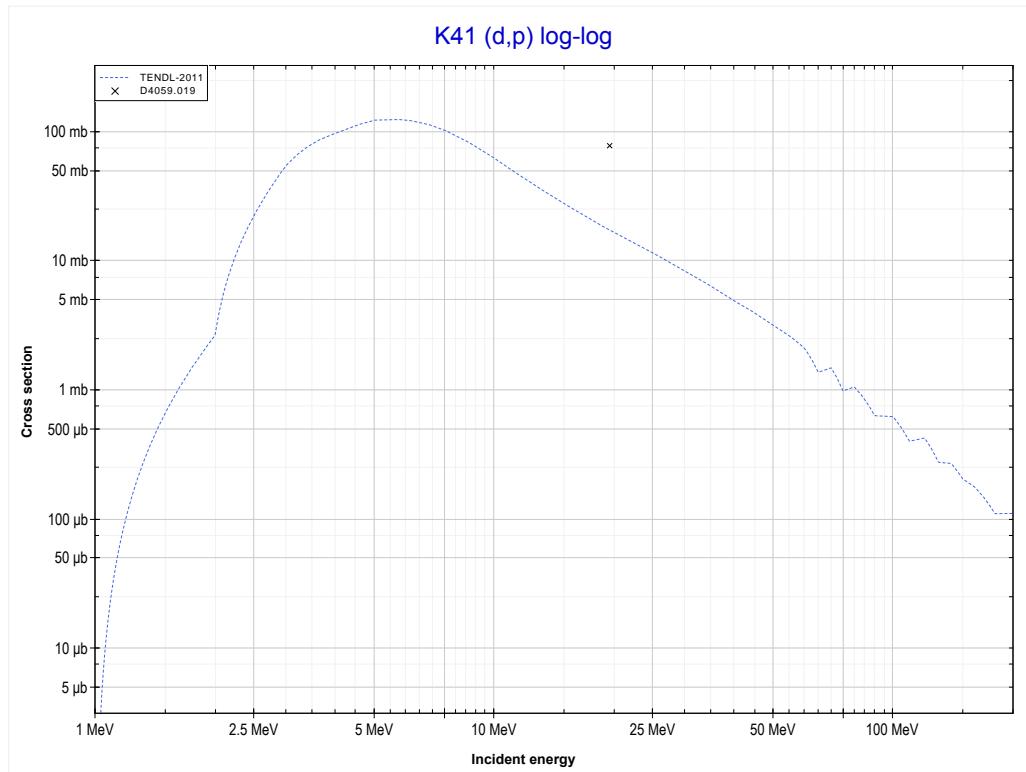
Reaction	Q-Value
Ar40(d,He3)Cl39	-7035.19 keV
Ar40(d,p+d)Cl39	-12528.67 keV
Ar40(d,n+2p)Cl39	-14753.23 keV

<< 16-S-34	18-Ar-40 MT107 (d, α) or MT5 (Cl38 production)	20-Ca-40 >>
<< MT106 (d, ^3He)		MT103 (d,p) >>



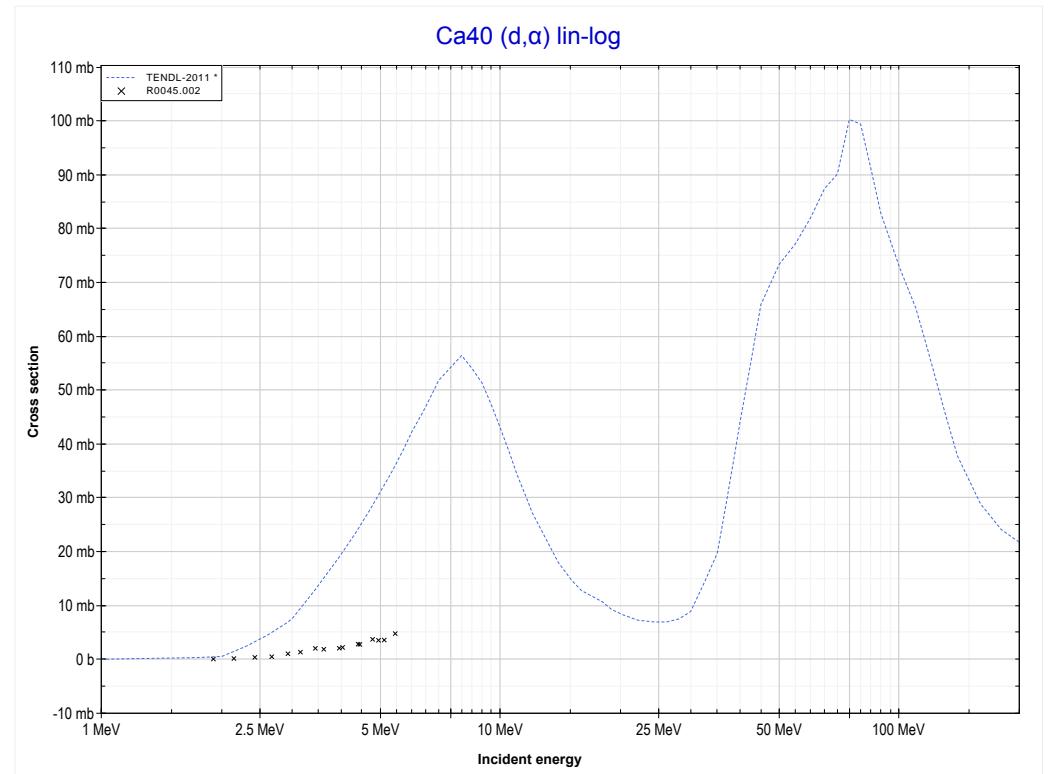
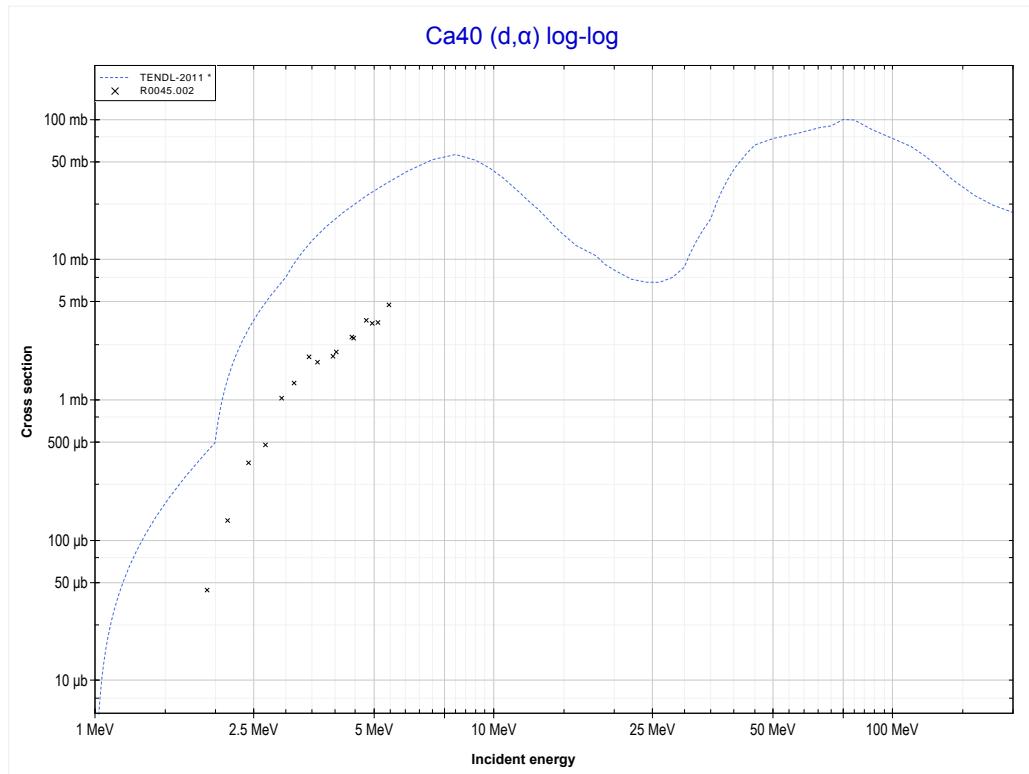
Reaction	Q-Value
Ar40(d, α)Cl38	5469.01 keV
Ar40(d,p+t)Cl38	-14344.85 keV
Ar40(d,n+He3)Cl38	-15108.61 keV
Ar40(d,2d)Cl38	-18377.52 keV
Ar40(d,n+p+d)Cl38	-20602.08 keV
Ar40(d,2n+2p)Cl38	-22826.65 keV

<< 13-Al-27	19-K-41 MT103 (d,p) or MT5 (K42 production)	20-Ca-48 >>
<< MT107 (d, α)		MT107 (d, α) >>



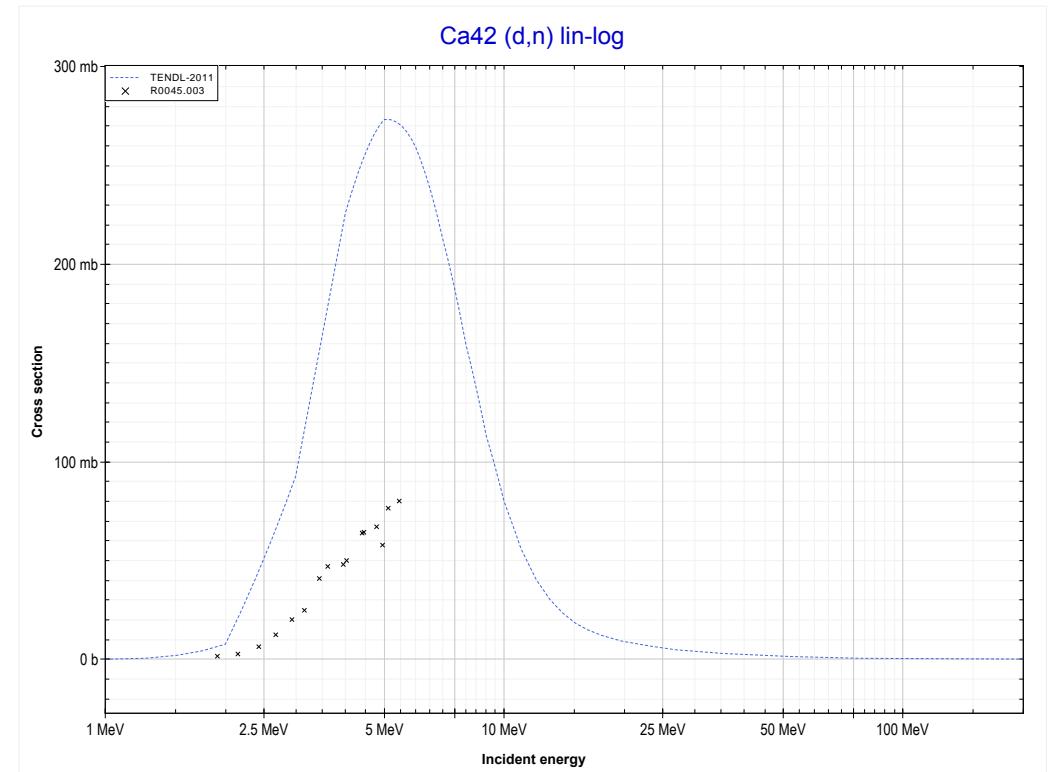
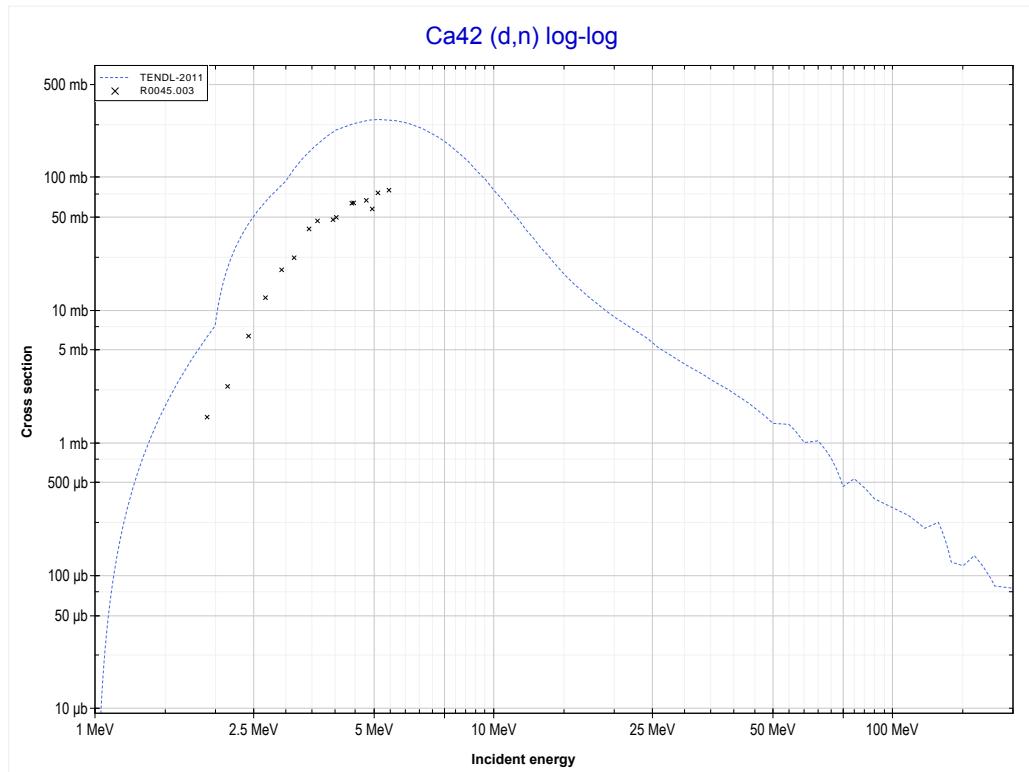
Reaction	Q-Value
K41(d,p)K42	5309.24 keV

<< 18-Ar-40	20-Ca-40 MT107 (d, α) or MT5 (K38 production)	>> 22-Ti-46
<< MT103 (d,p)		>> MT4 (d,n) >>



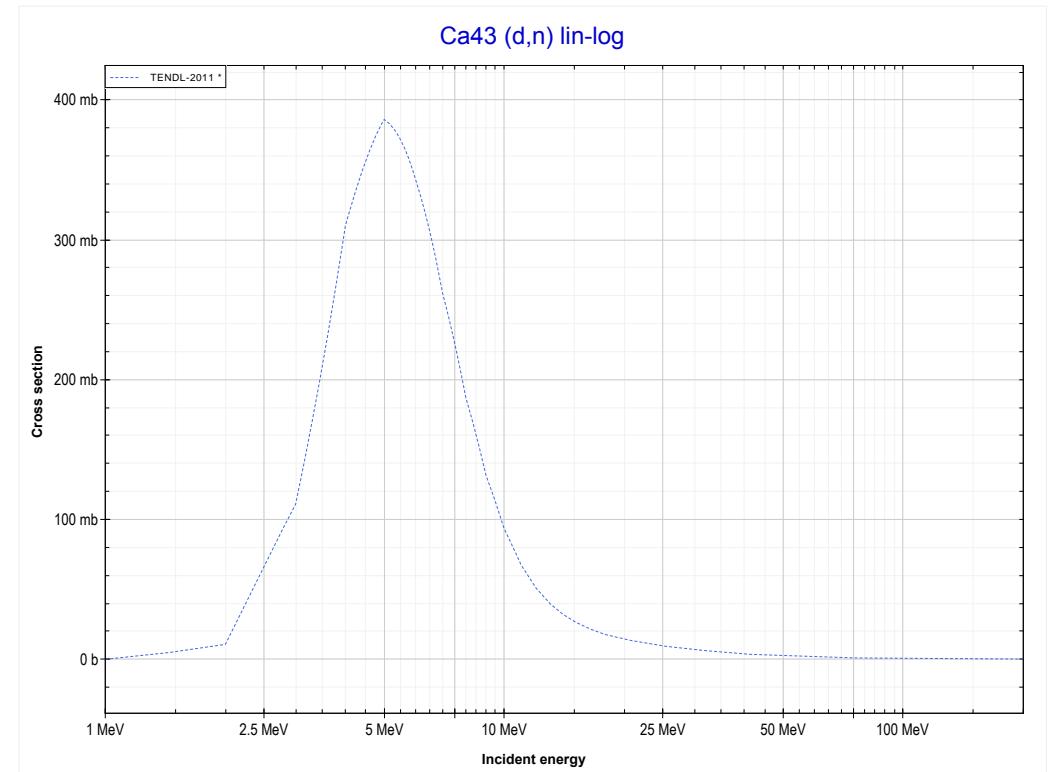
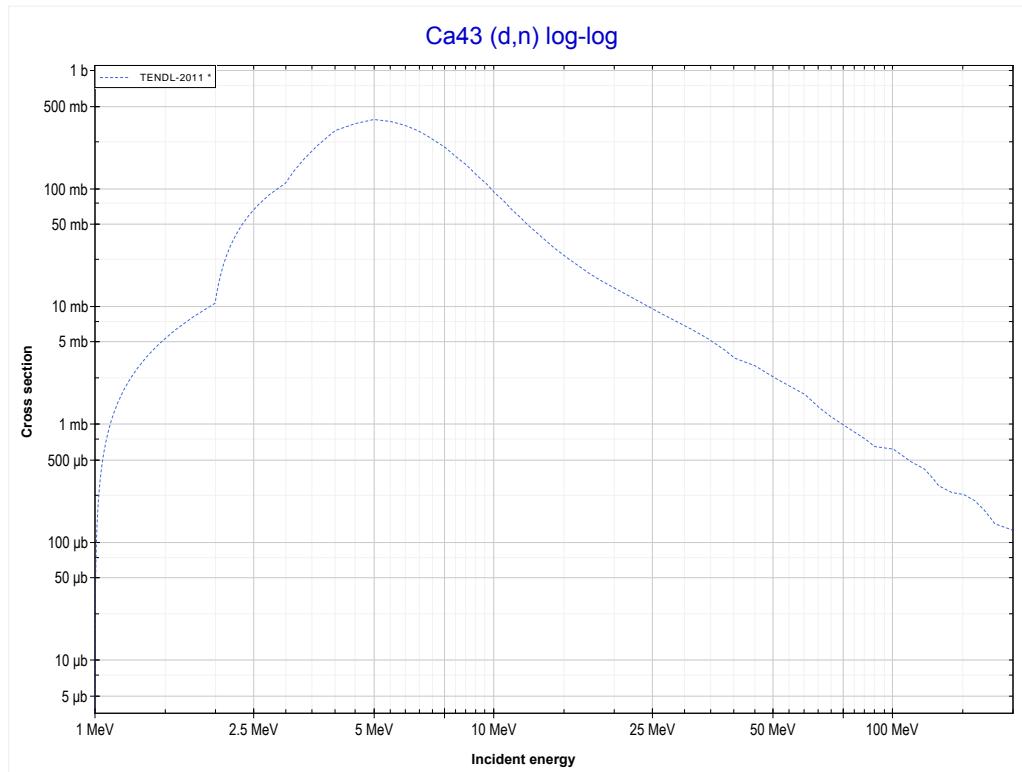
Reaction	Q-Value
Ca40(d, α)K38	4665.24 keV
Ca40(d,p+t)K38	-15148.62 keV
Ca40(d,n+He3)K38	-15912.38 keV
Ca40(d,2d)K38	-19181.29 keV
Ca40(d,n+p+d)K38	-21405.86 keV
Ca40(d,2n+2p)K38	-23630.42 keV

<< 10-Ne-20	20-Ca-42 MT4 (d,n) or MT5 (Sc43 production)	20-Ca-43 >>
<< MT107 (d, α)		MT4 (d,n) >>



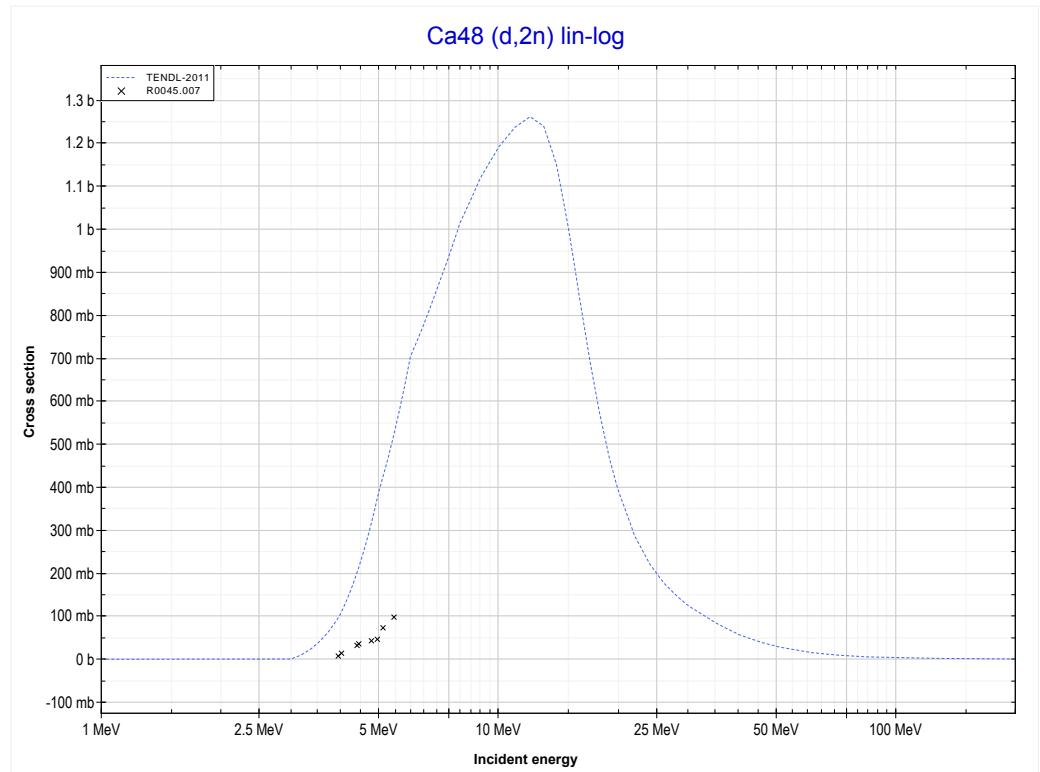
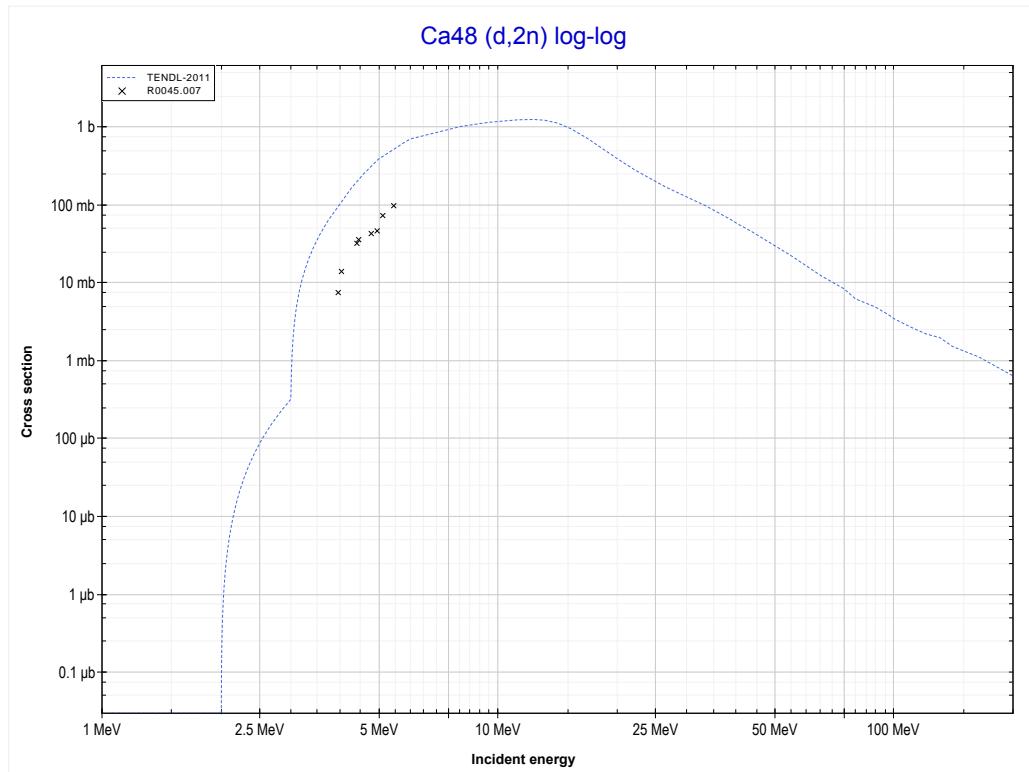
Reaction	Q-Value
Ca42(d,n)Sc43	2705.23 keV

<< 20-Ca-42	20-Ca-43 MT4 (d,n) or MT5 (Sc44 production)	>> 22-Ti-46
<< MT4 (d,n)		>> MT16 (d,2n)



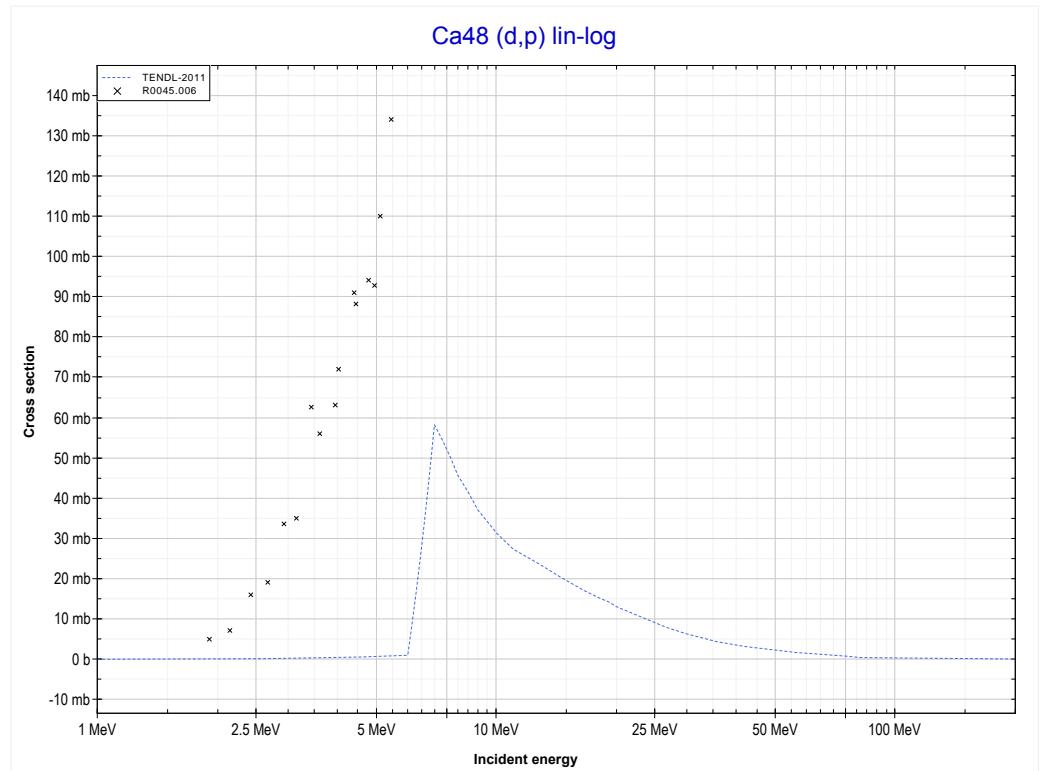
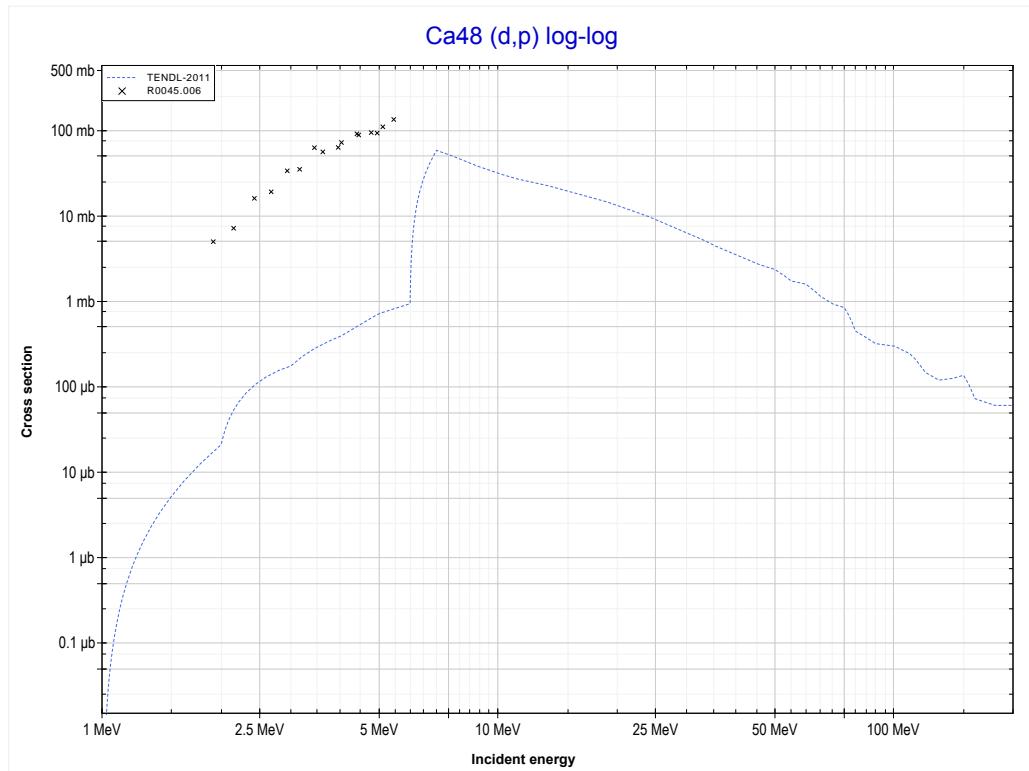
Reaction	Q-Value
Ca43(d,n)Sc44	4471.90 keV

<< 5-B-11	20-Ca-48 MT16 (d,2n) or MT5 (Sc48 production)	>> 22-Ti-47
<< MT4 (d,n)		MT103 (d,p) >>



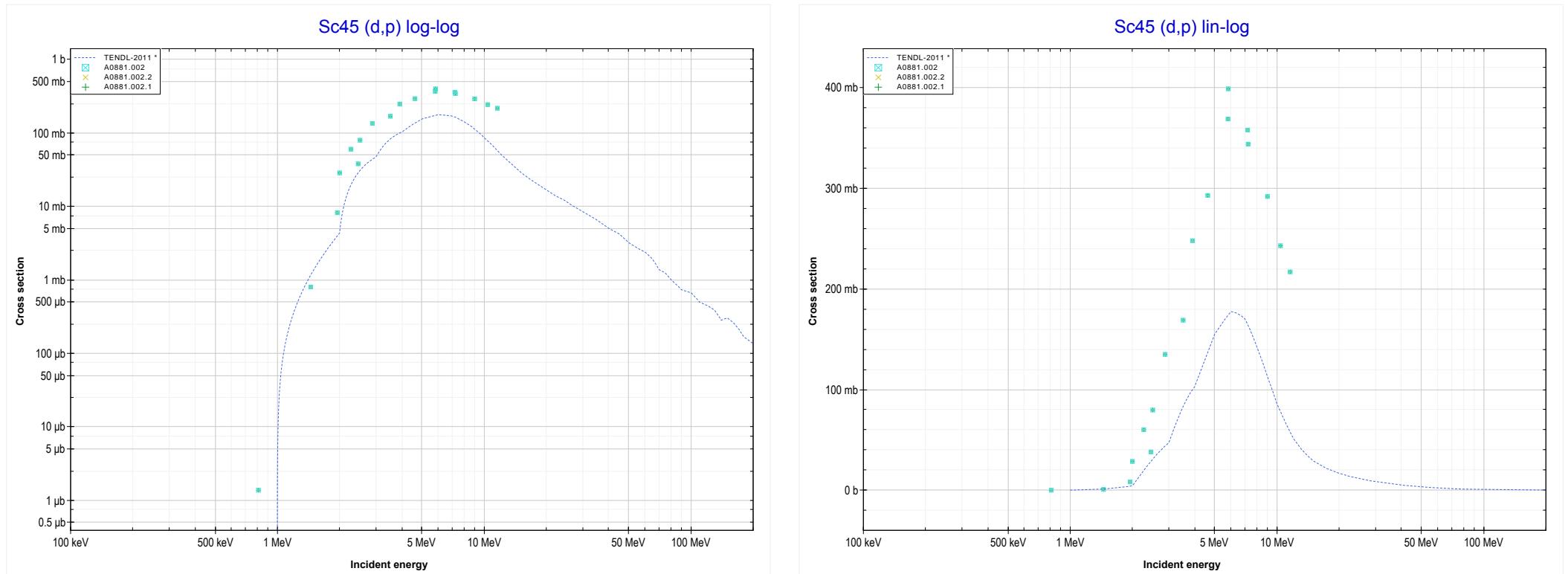
Reaction	Q-Value
Ca48(d,2n)Sc48	-2724.91 keV

<< 19-K-41	20-Ca-48 MT103 (d,p) or MT5 (Ca49 production)	21-Sc-45 >>
<< MT16 (d,2n)		MT103 (d,p) >>



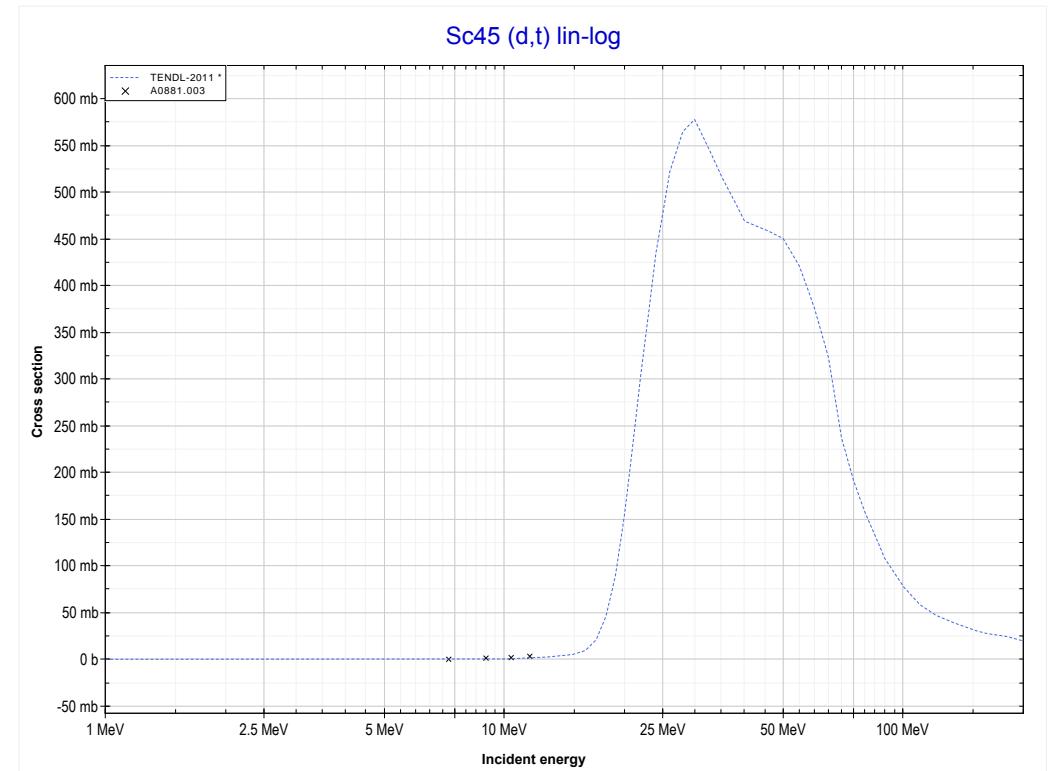
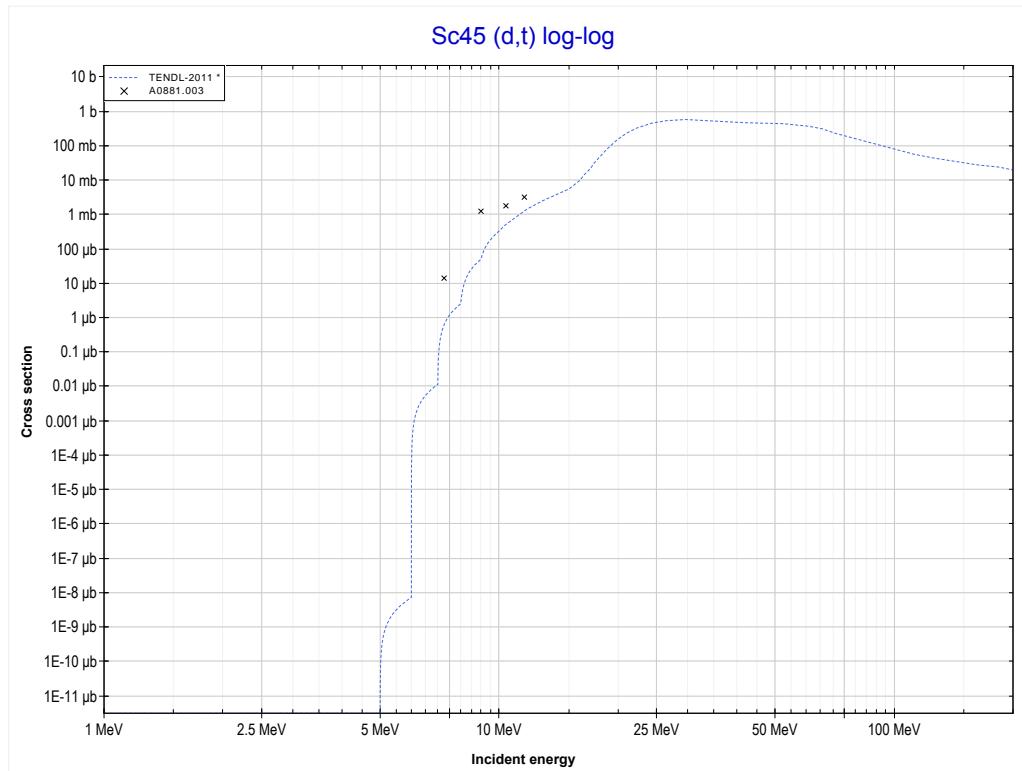
Reaction	Q-Value
Ca48(d,p)Ca49	2921.75 keV

<< 20-Ca-48	21-Sc-45 MT103 (d,p) or MT5 (Sc46 production)	24-Cr-50 >>
<< MT103 (d,p)		MT105 (d,t) >>



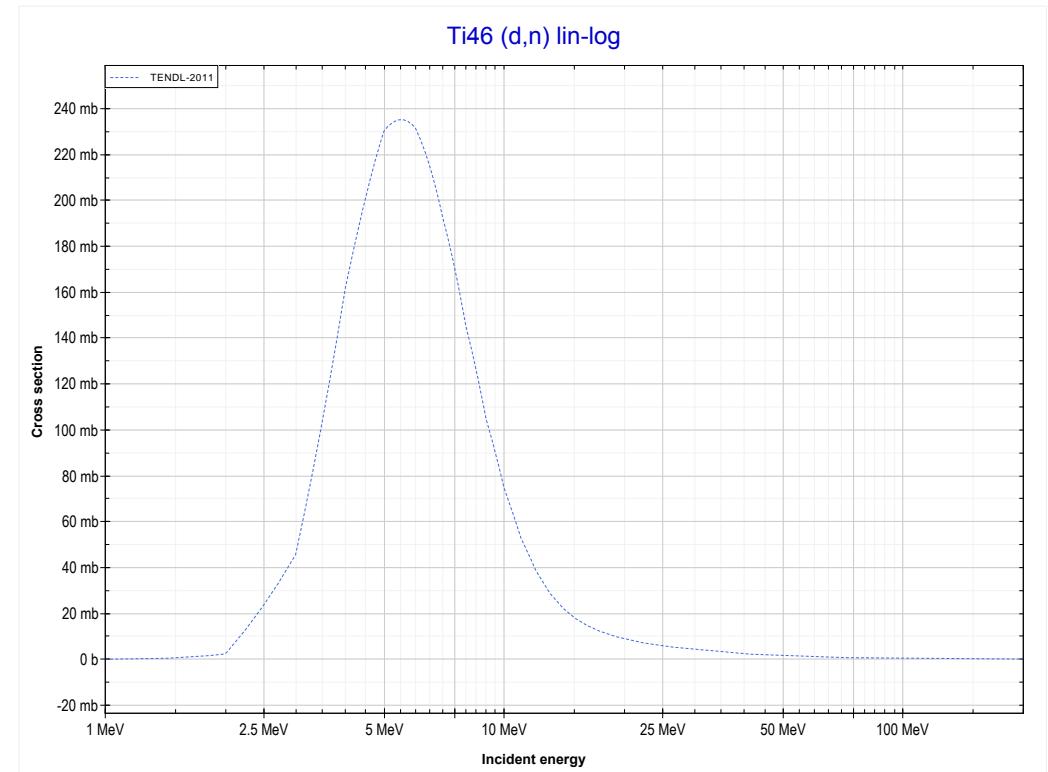
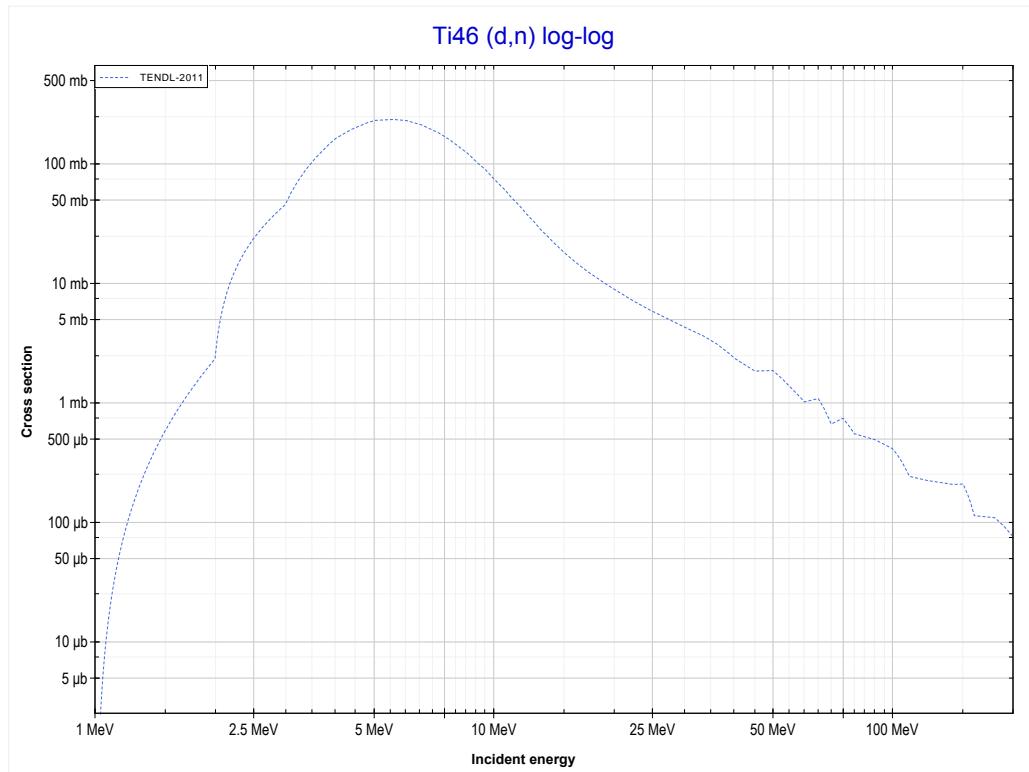
Reaction	Q-Value
Sc45(d,p)Sc46	6536.05 keV

<< 9-F-19	21-Sc-45 MT105 (d,t) or MT5 (Sc44 production)	24-Cr-50 >> MT4 (d,n) >>
<< MT103 (d,p)		



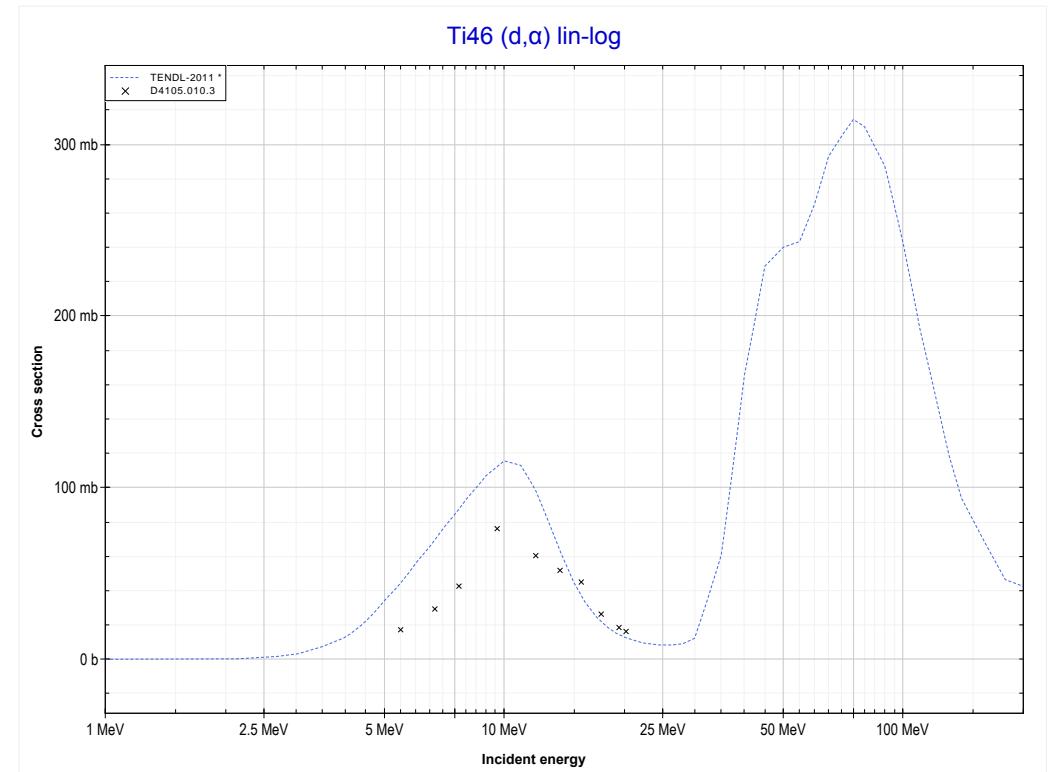
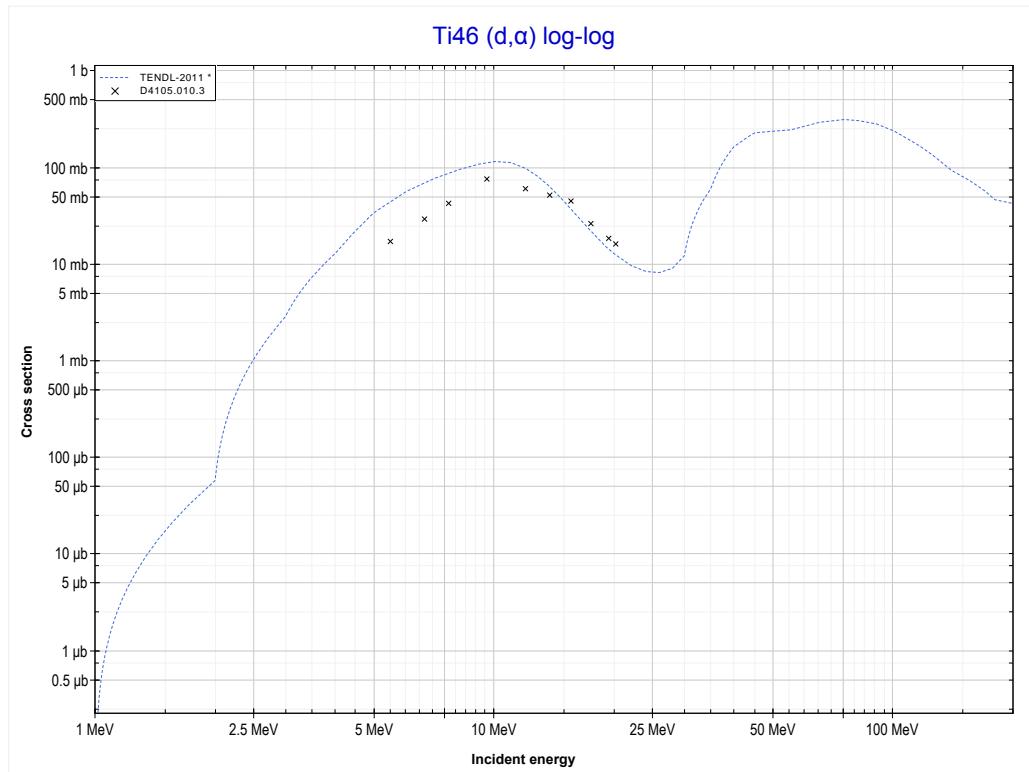
Reaction	Q-Value
Sc45(d,t)Sc44	-5065.78 keV
Sc45(d,n+d)Sc44	-11323.02 keV
Sc45(d,2n+p)Sc44	-13547.58 keV

<< 20-Ca-43	22-Ti-46 MT4 (d,n) or MT5 (V47 production)	22-Ti-47 >>
<< MT105 (d,t)		MT107 (d, α) >>



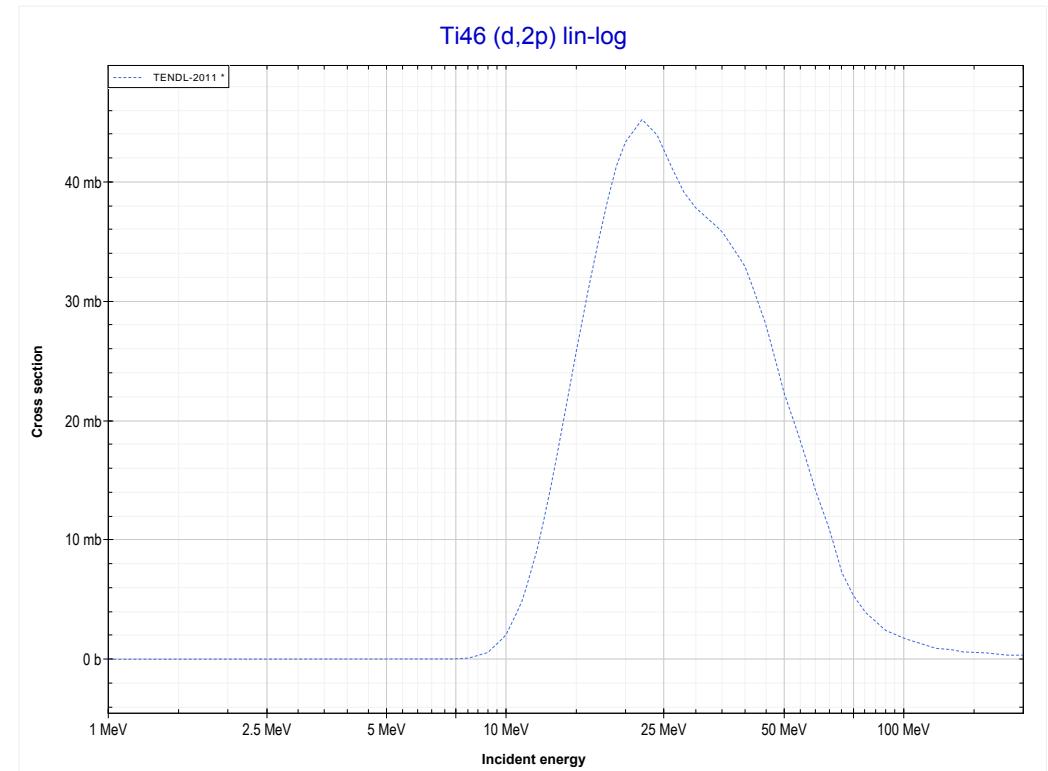
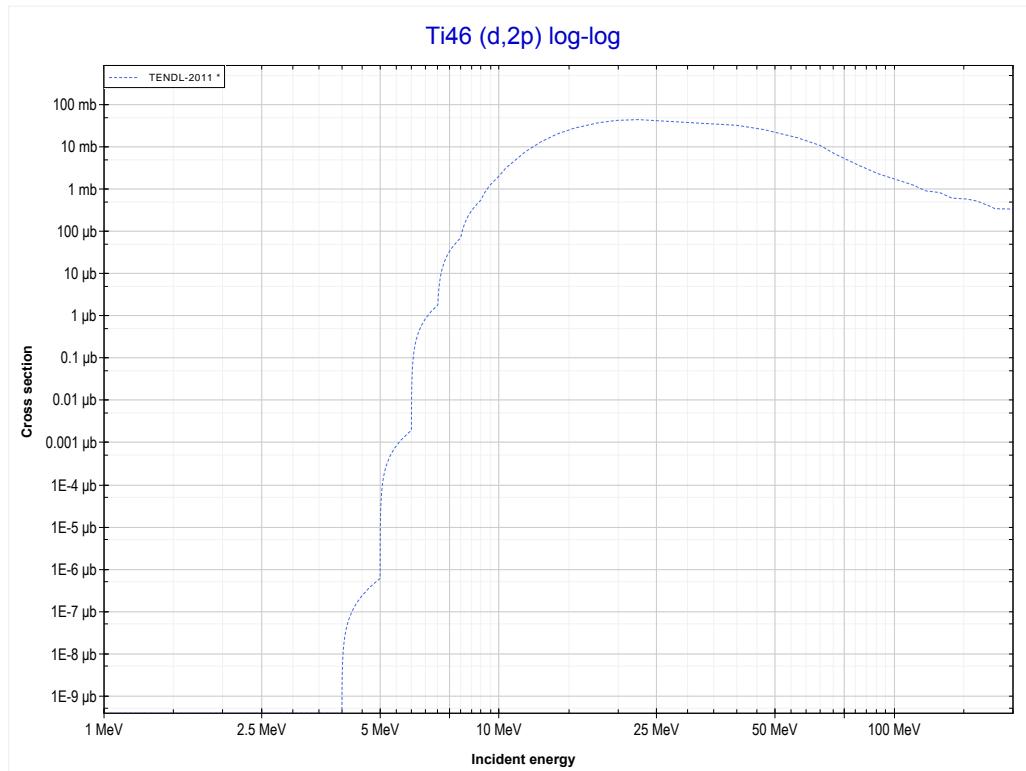
Reaction	Q-Value
$\text{Ti}^{46}(\text{d},\text{n})\text{V}47$	2943.10 keV

<< 20-Ca-40	22-Ti-46 MT107 (d, α) or MT5 (Sc44 production)	22-Ti-48 >> MT111 (d,2p) >>
<< MT4 (d,n)		



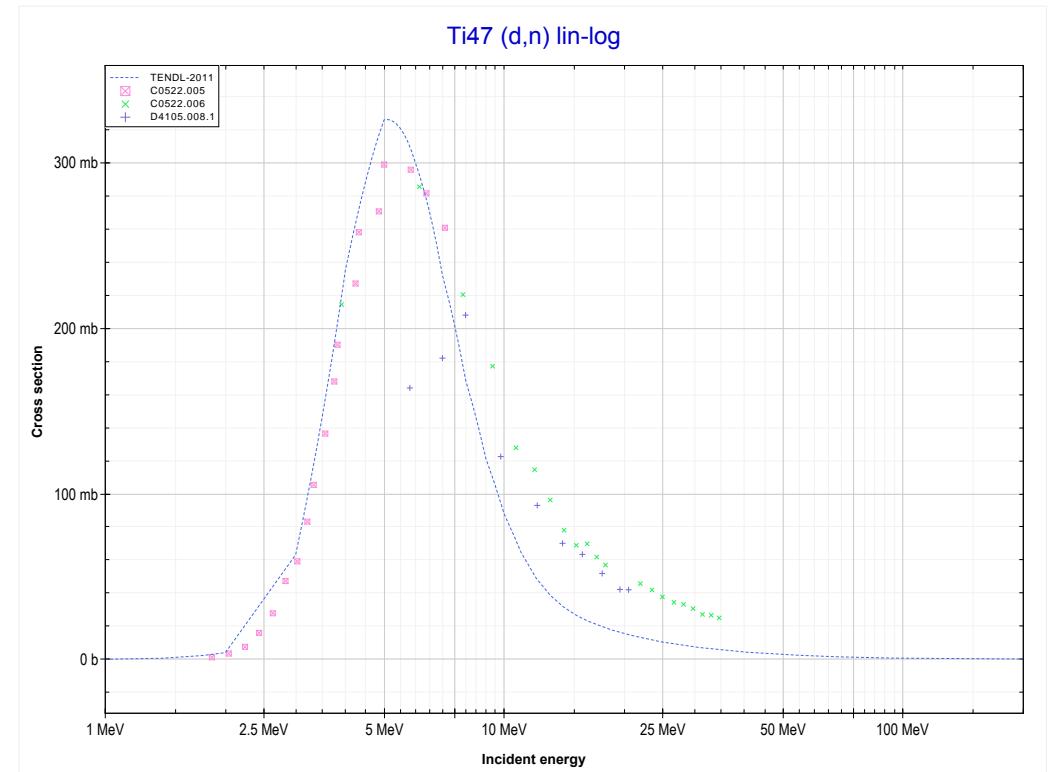
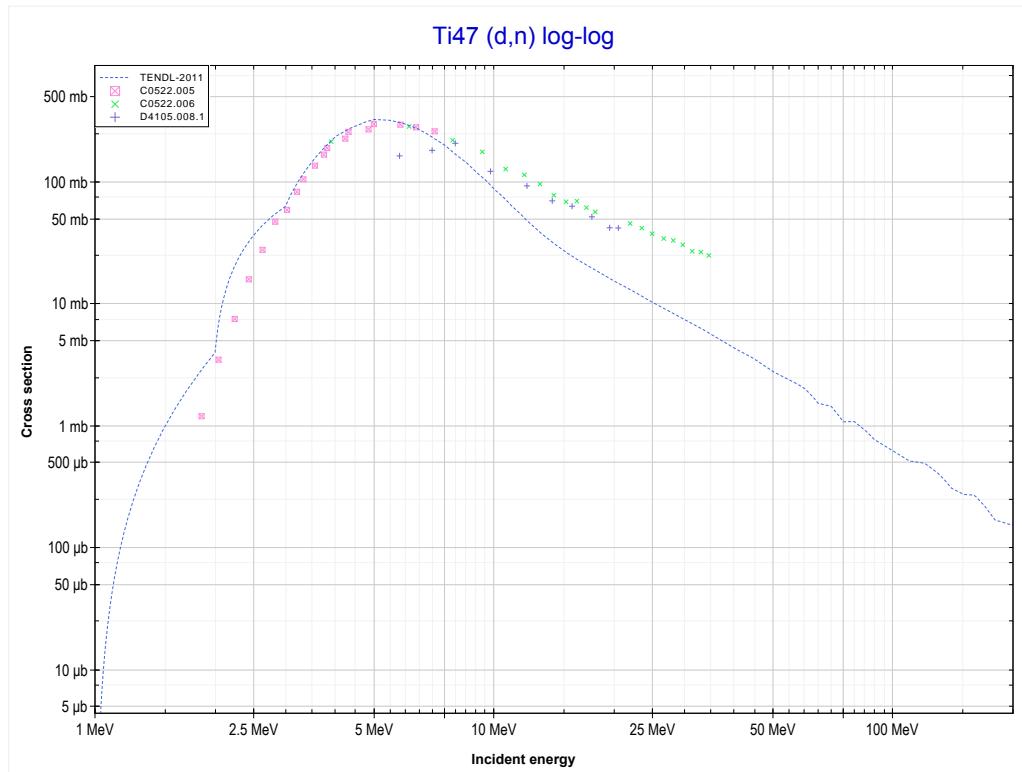
Reaction	Q-Value
Ti46(d, α)Sc44	4403.51 keV
Ti46(d,p+t)Sc44	-15410.35 keV
Ti46(d,n+He3)Sc44	-16174.11 keV
Ti46(d,2d)Sc44	-19443.02 keV
Ti46(d,n+p+d)Sc44	-21667.59 keV
Ti46(d,2n+2p)Sc44	-23892.15 keV

<< 16-S-32	22-Ti-46 MT111 (d,2p) or MT5 (Sc46 production)	>> 22-Ti-47
<< MT107 (d, α)		MT4 (d,n) >>



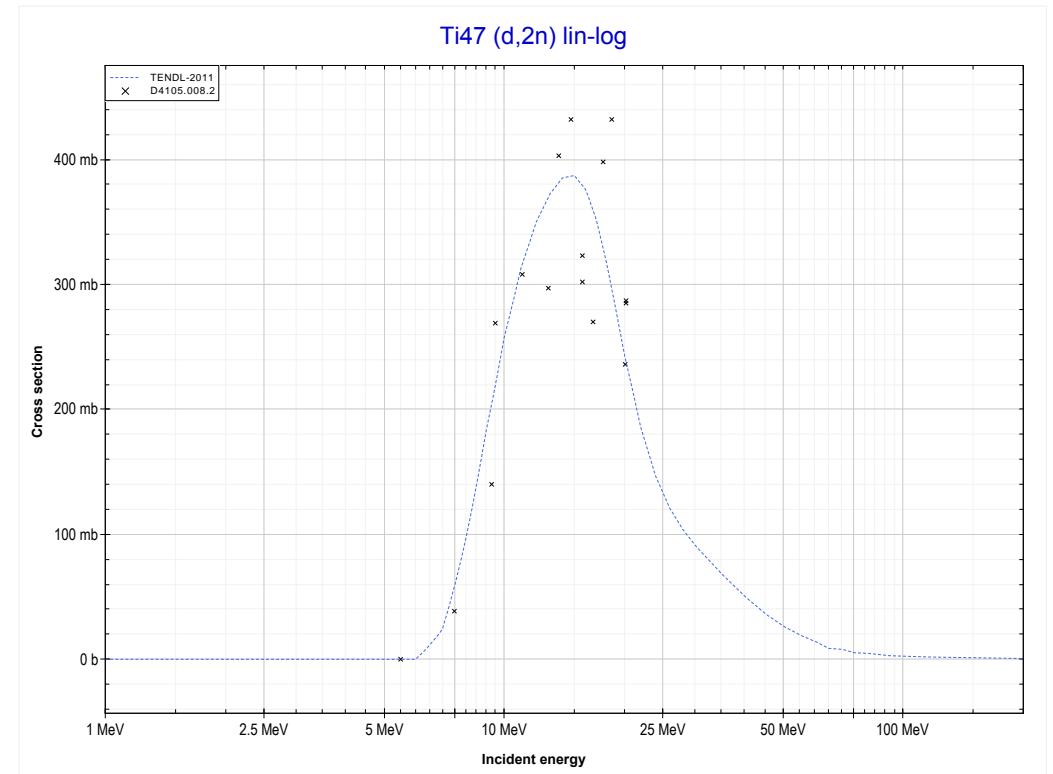
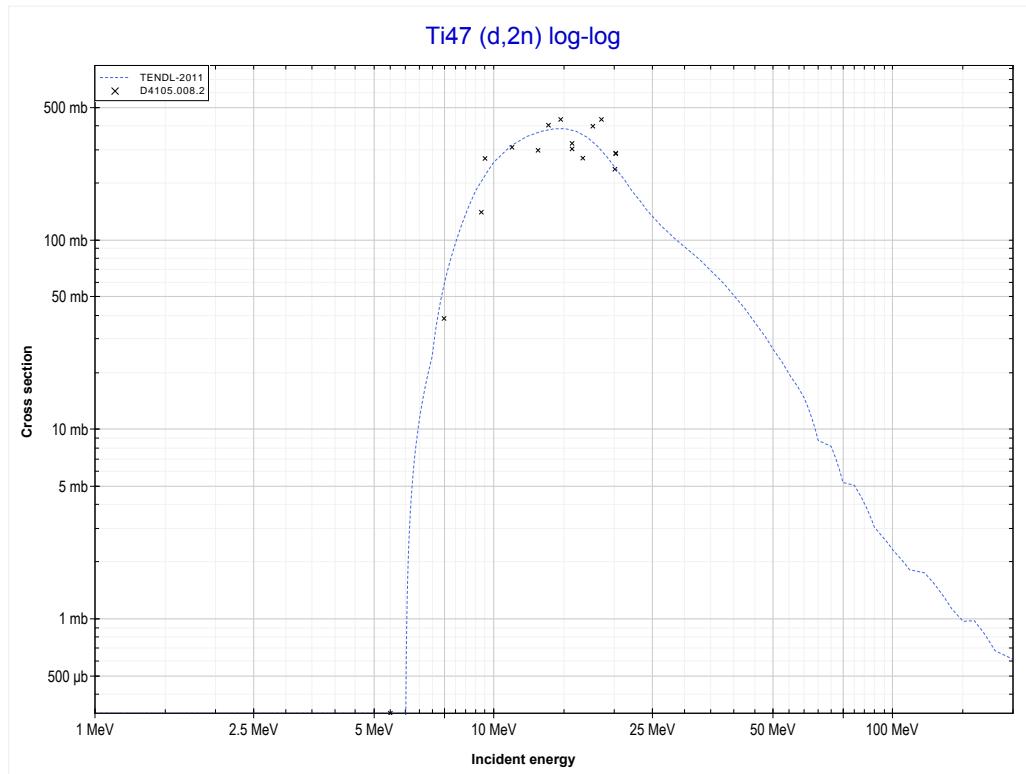
Reaction	Q-Value
Ti46(d,2p)Sc46	-3808.52 keV

<< 22-Ti-46	22-Ti-47 MT4 (d,n) or MT5 (V48 production)	24-Cr-50 >>
<< MT111 (d,2p)		MT16 (d,2n) >>



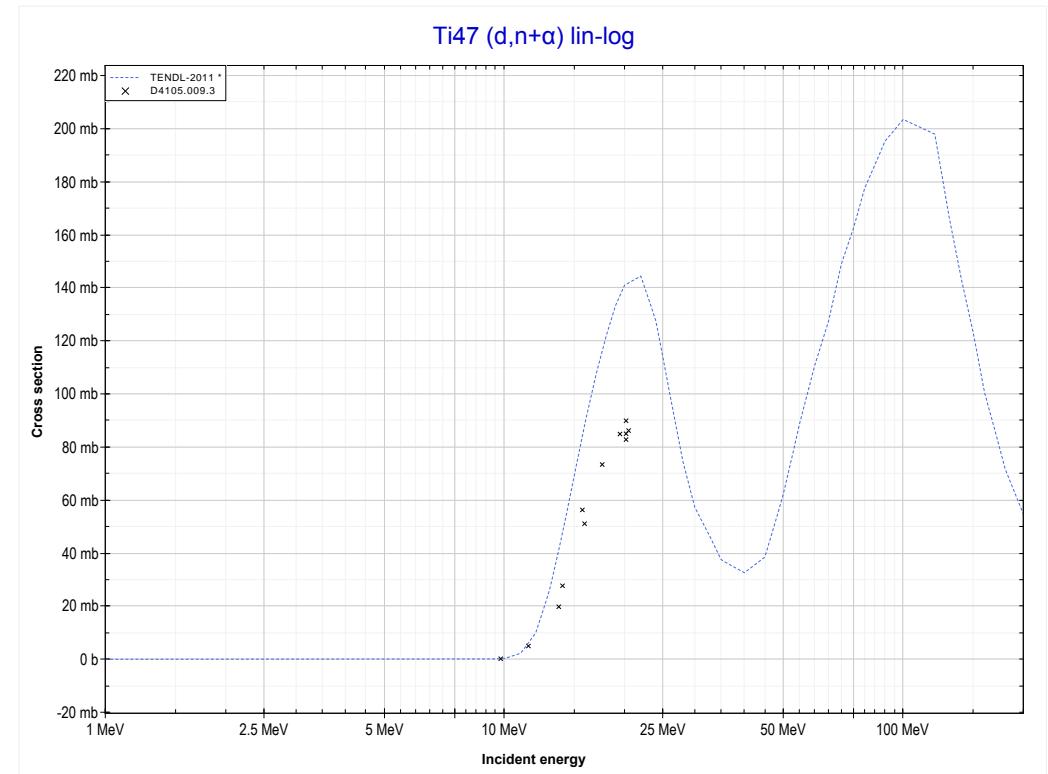
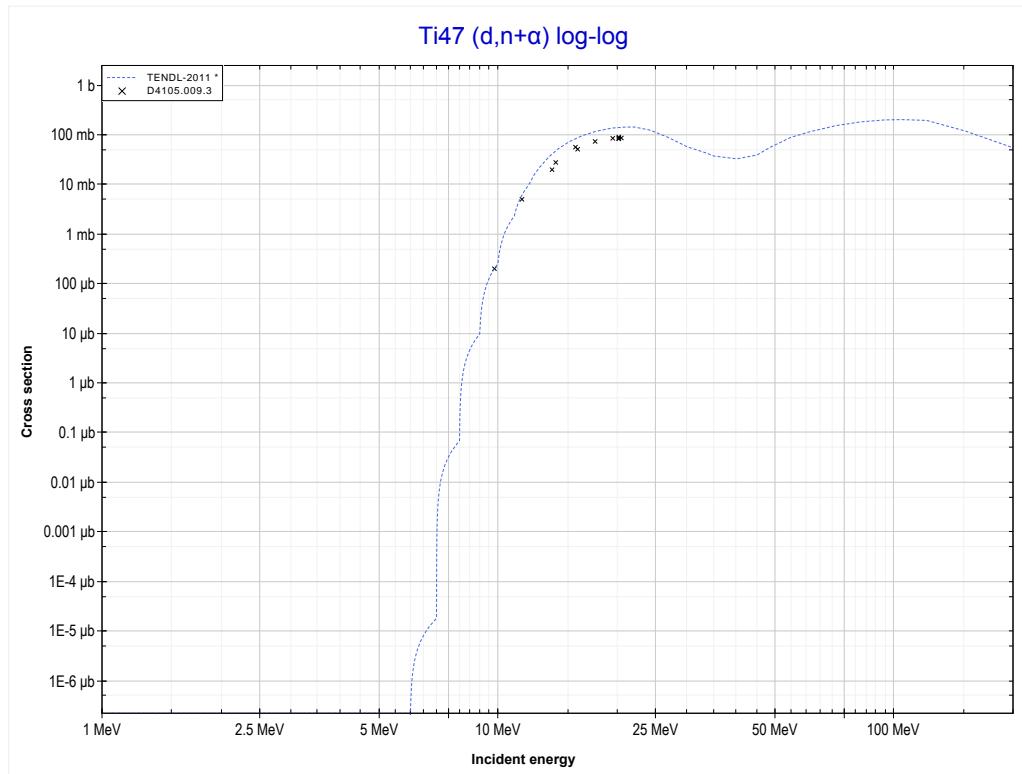
Reaction	Q-Value
Ti47(d,n)V48	4607.40 keV

<< 20-Ca-48	22-Ti-47 MT16 (d,2n) or MT5 (V47 production)	22-Ti-48 >>
<< MT4 (d,n)		MT22 (d,n+α) >>



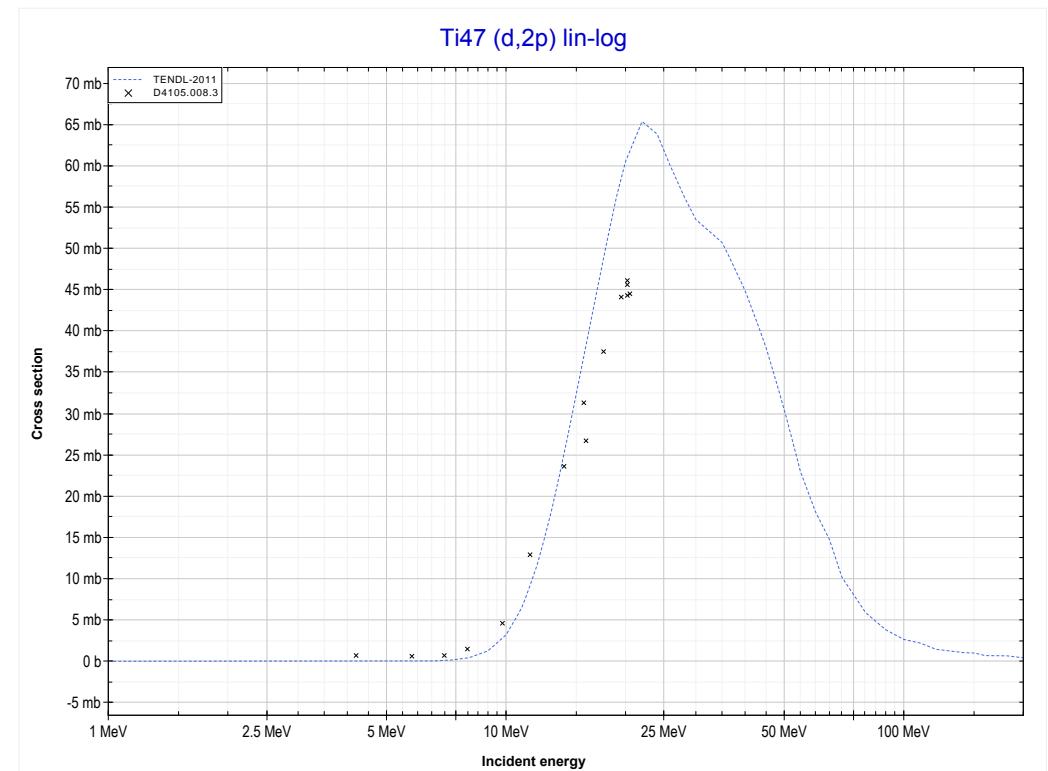
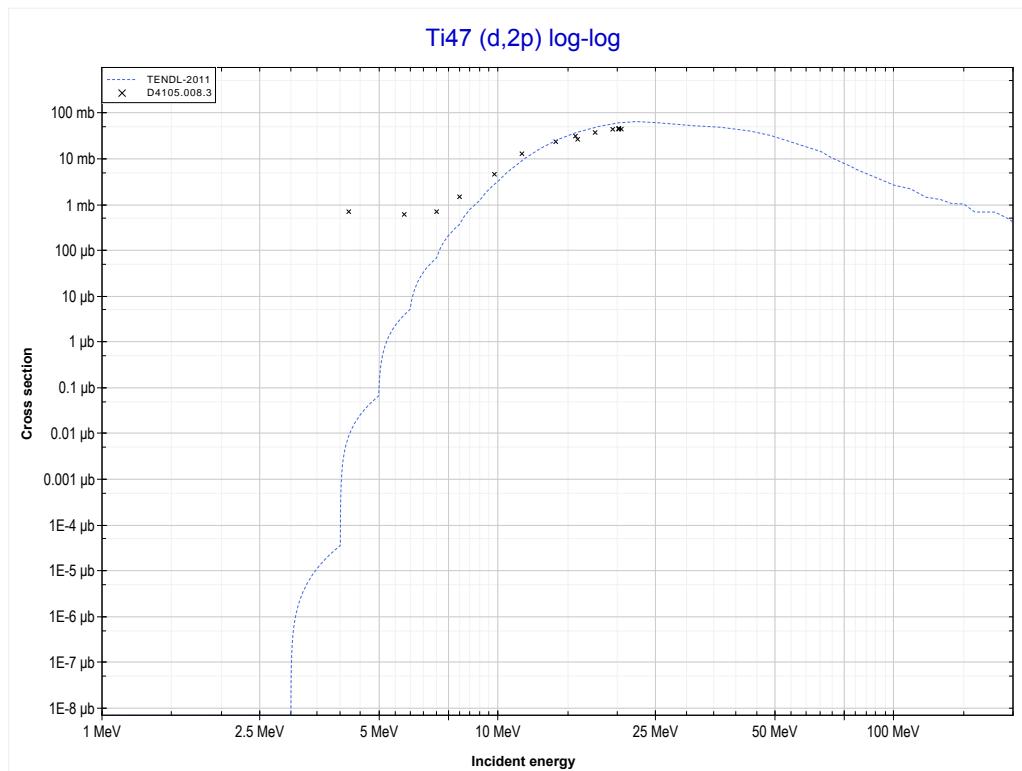
Reaction	Q-Value
Ti47(d,2n)V47	-5937.21 keV

<< 7-N-14	22-Ti-47 MT22 (d,n+α) or MT5 (Sc44 production)	22-Ti-49 >> MT111 (d,2p) >>
<< MT16 (d,2n)		



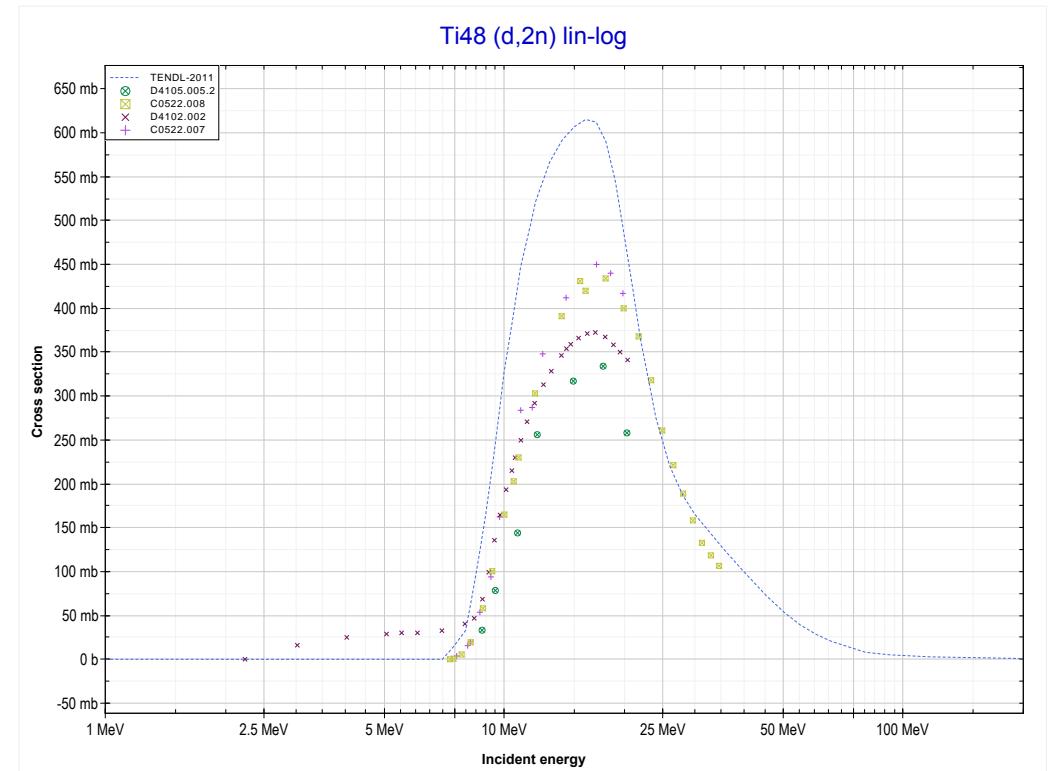
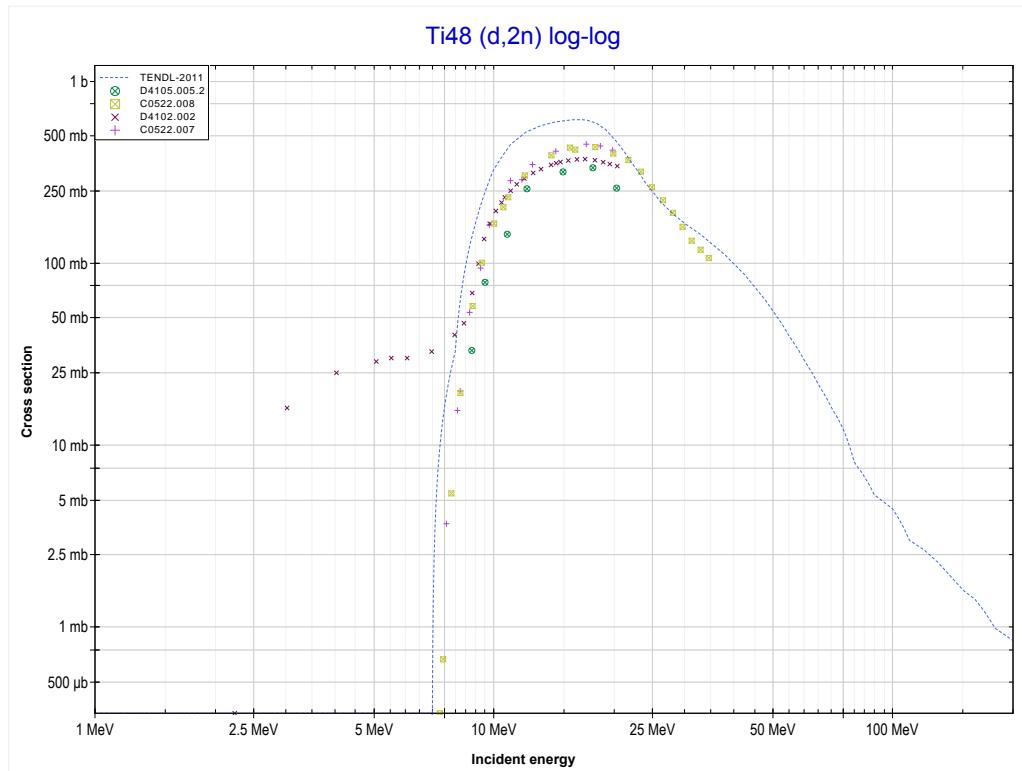
Reaction	Q-Value
Ti47(d,n+α)Sc44	-4476.81 keV
Ti47(d,d+t)Sc44	-22066.11 keV
Ti47(d,n+p+t)Sc44	-24290.67 keV
Ti47(d,2n+He3)Sc44	-25054.43 keV
Ti47(d,n+2d)Sc44	-28323.34 keV
Ti47(d,2n+p+d)Sc44	-30547.90 keV
Ti47(d,3n+2p)Sc44	-32772.47 keV

<< 22-Ti-46	22-Ti-47 MT111 (d,2p) or MT5 (Sc47 production)	24-Cr-52 >>
<< MT22 (d,n+α)		MT16 (d,2n) >>

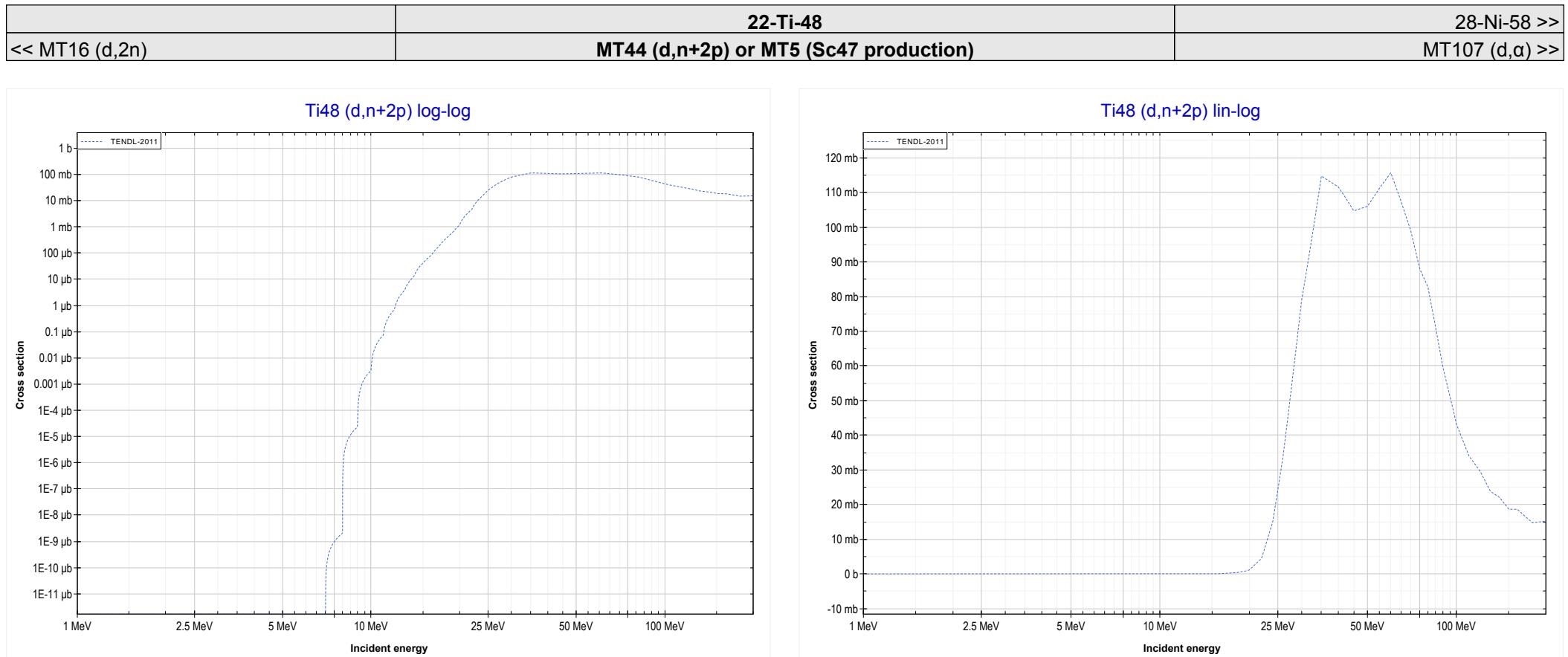


Reaction	Q-Value
Ti47(d,2p)Sc47	-2042.52 keV

<< 22-Ti-47	22-Ti-48 MT16 (d,2n) or MT5 (V48 production)	>> 23-V-51
<< MT111 (d,2p) >>		MT44 (d,n+2p) >>

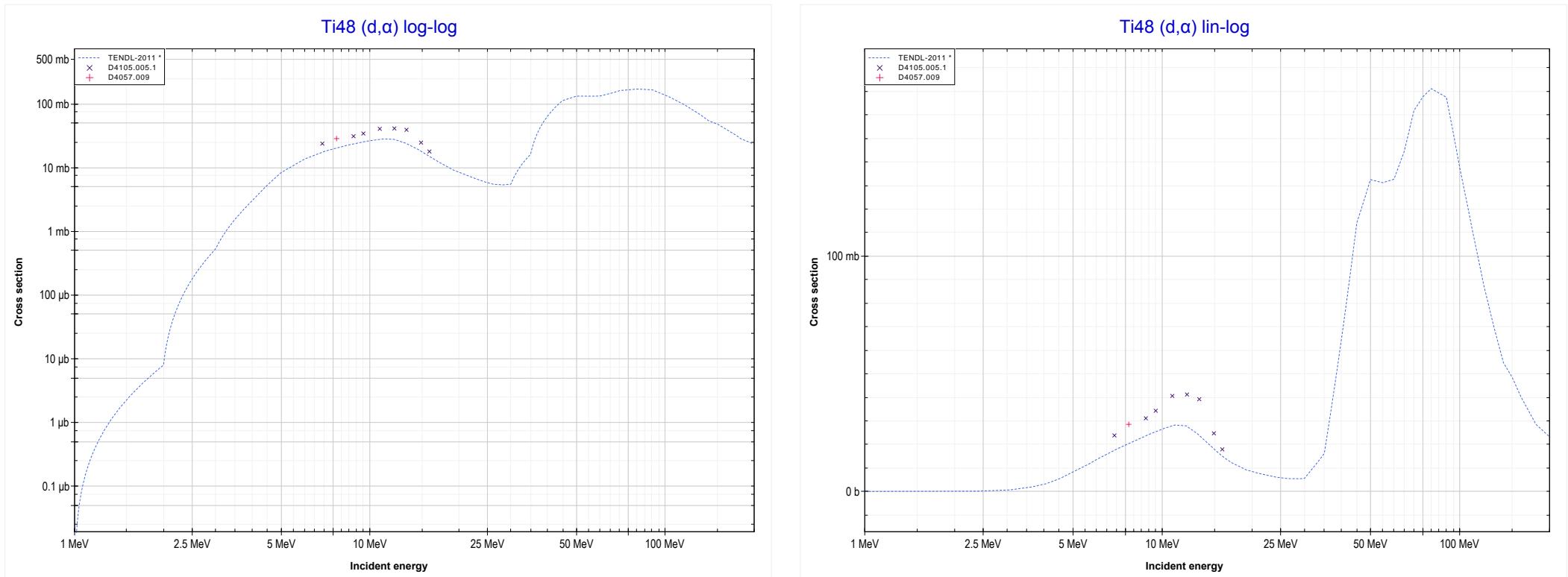


Reaction	Q-Value
Ti48(d,2n)V48	-7019.21 keV



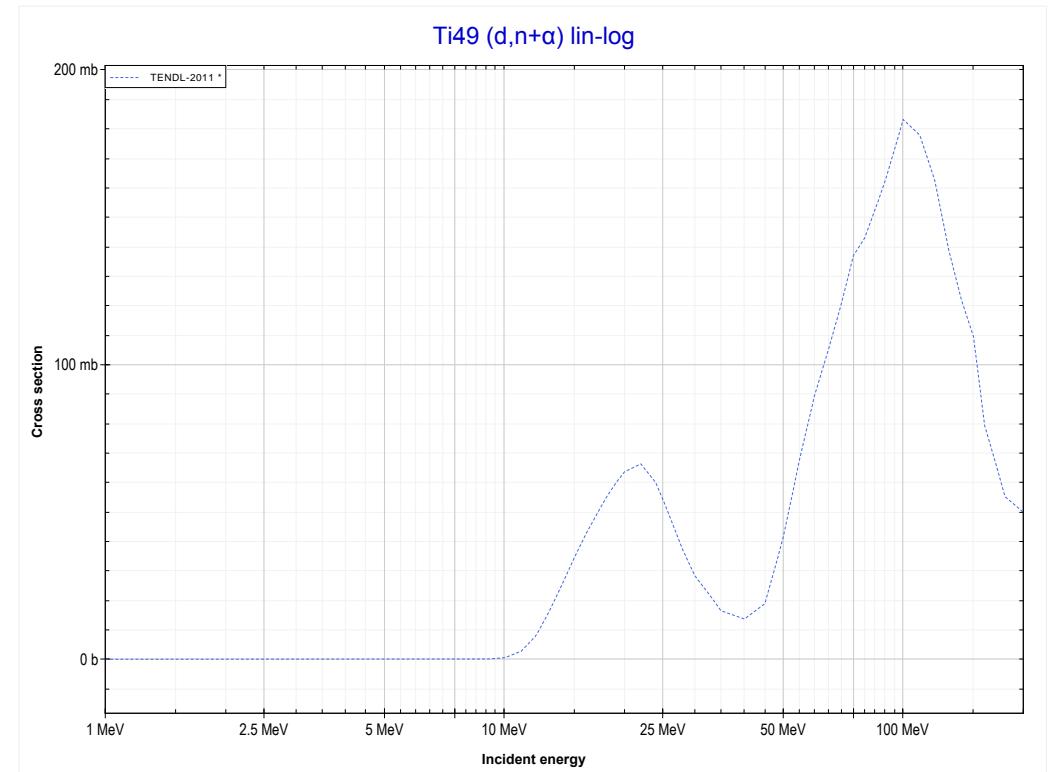
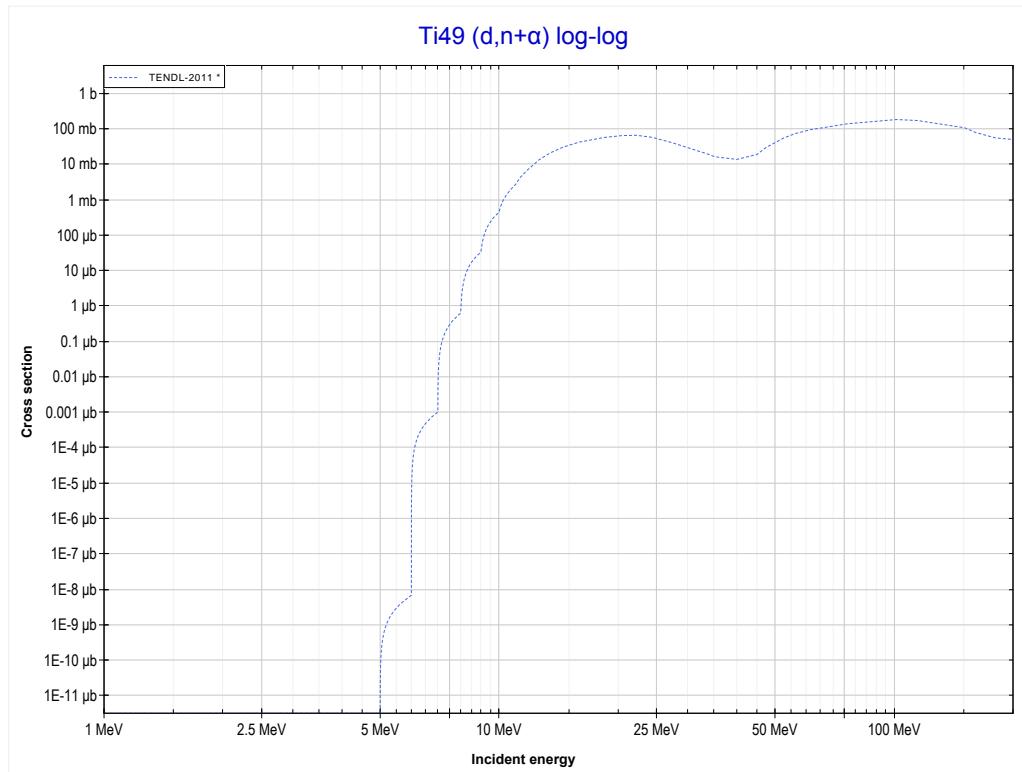
Reaction	Q-Value
Ti48(d,He3)Sc47	-5951.09 keV
Ti48(d,p+d)Sc47	-11444.57 keV
Ti48(d,n+2p)Sc47	-13669.14 keV

<< 22-Ti-46	22-Ti-48 MT107 (d, α) or MT5 (Sc46 production)	22-Ti-49 >>
<< MT44 (d,n+2p)		MT22 (d,n+ α) >>



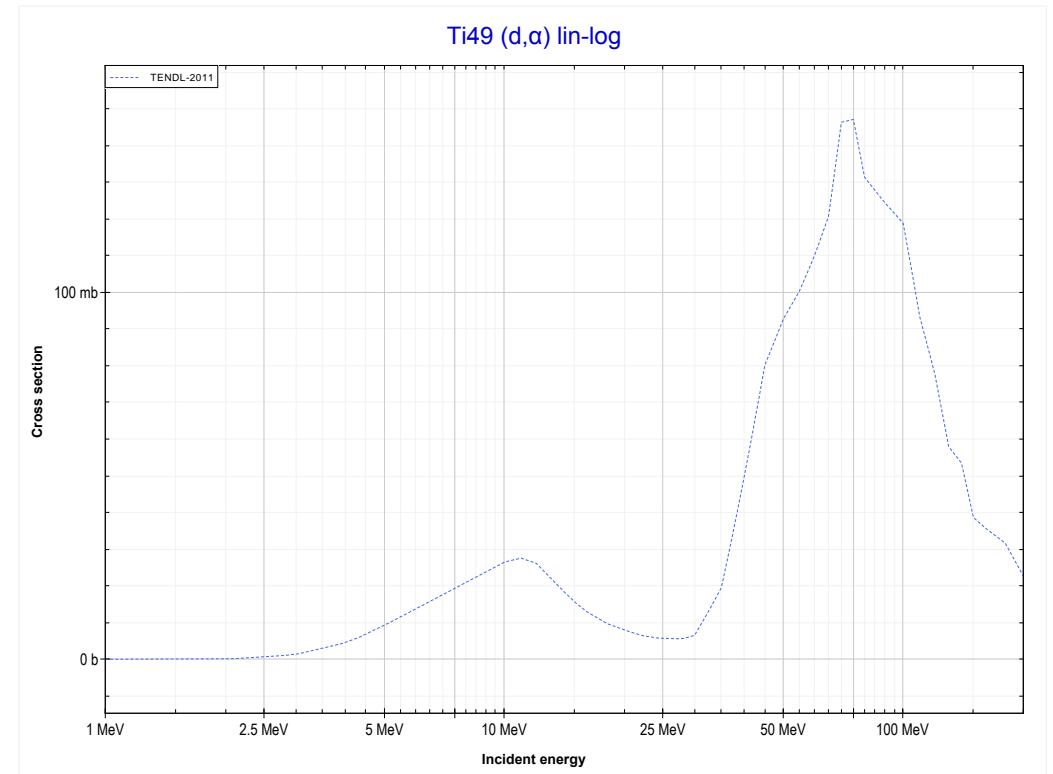
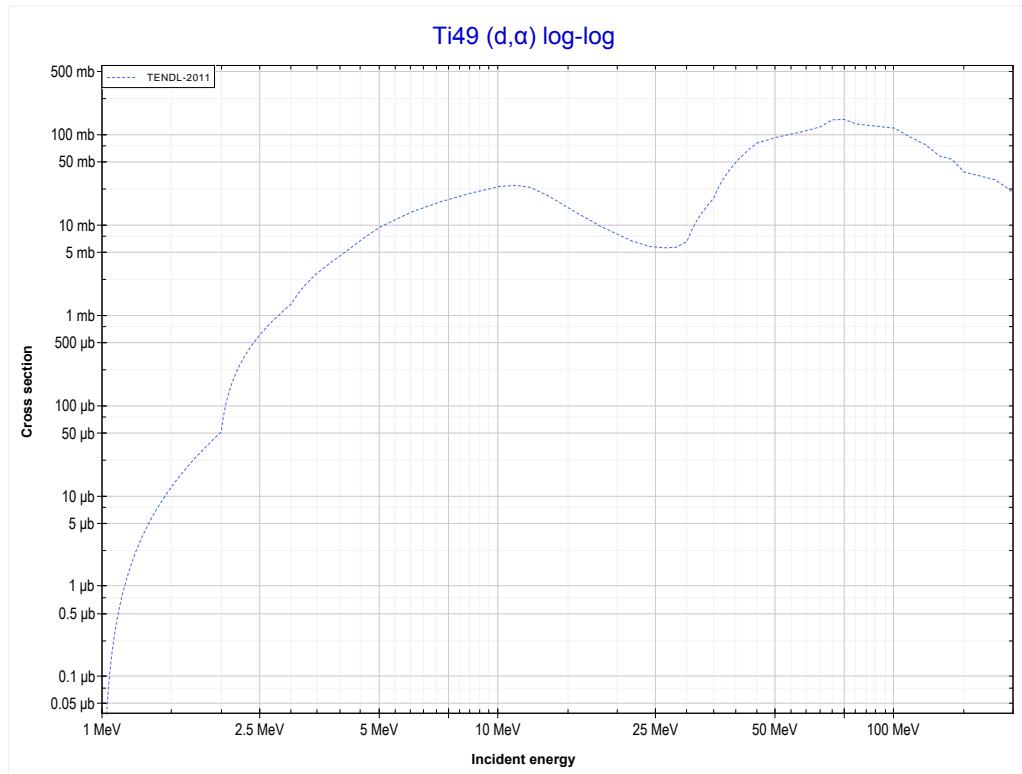
Reaction	Q-Value
Ti48(d, α)Sc46	3980.21 keV
Ti48(d,p+t)Sc46	-15833.65 keV
Ti48(d,n+He3)Sc46	-16597.41 keV
Ti48(d,2d)Sc46	-19866.32 keV
Ti48(d,n+p+d)Sc46	-22090.89 keV
Ti48(d,2n+2p)Sc46	-24315.45 keV

<< 22-Ti-47	22-Ti-49	22-Ti-50 >>
<< MT107 (d, α)	MT22 (d,n+α) or MT5 (Sc46 production)	MT107 (d, α) >>



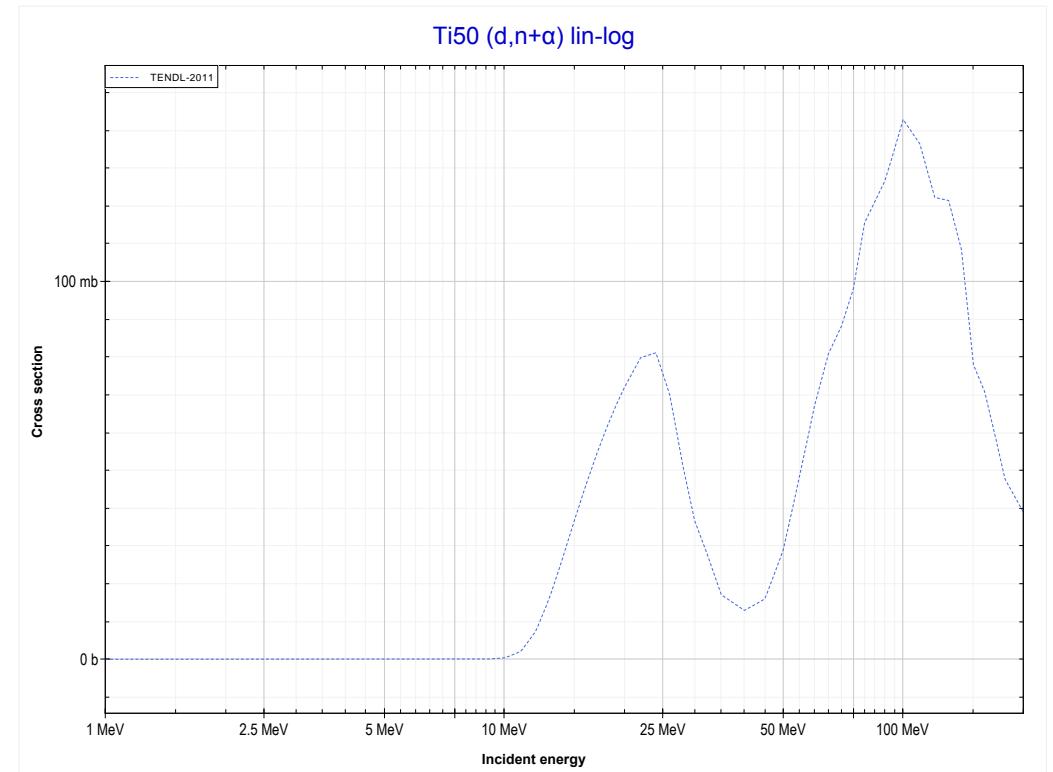
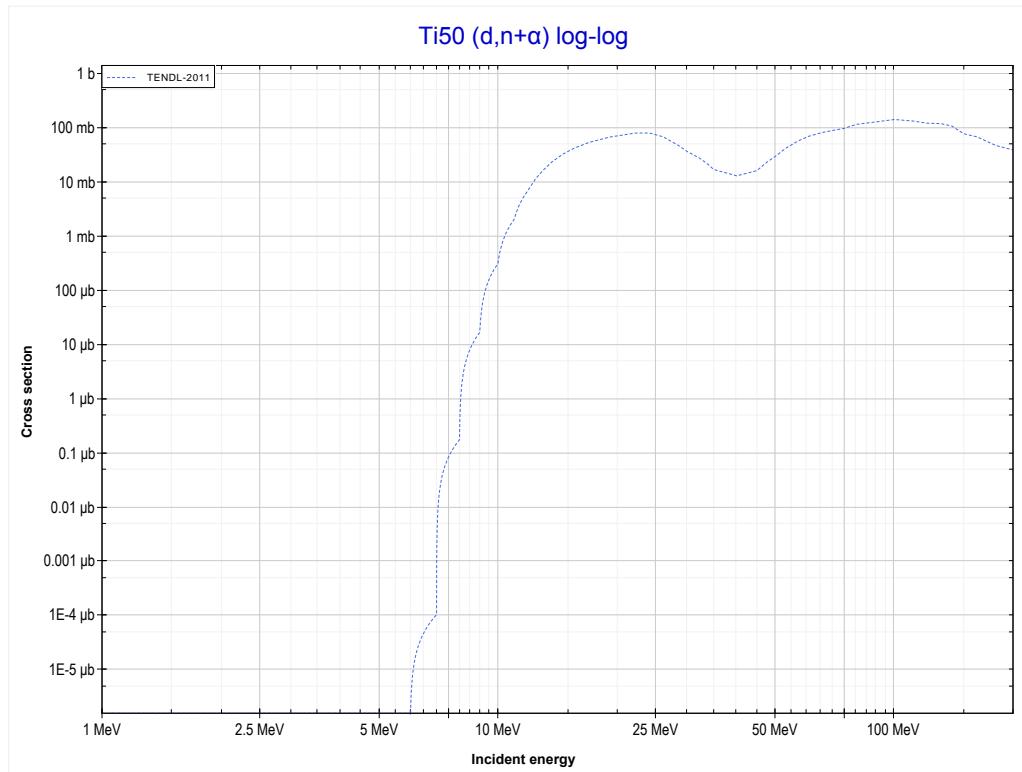
Reaction	Q-Value
Ti49(d,n+ α)Sc46	-4162.21 keV
Ti49(d,d+t)Sc46	-21751.51 keV
Ti49(d,n+p+t)Sc46	-23976.07 keV
Ti49(d,2n+He3)Sc46	-24739.83 keV
Ti49(d,n+2d)Sc46	-28008.74 keV
Ti49(d,2n+p+d)Sc46	-30233.30 keV
Ti49(d,3n+2p)Sc46	-32457.87 keV

<< 22-Ti-48	22-Ti-49 MT107 (d, α) or MT5 (Sc47 production)	24-Cr-50 >>
<< MT22 (d,n+ α)		MT22 (d,n+ α) >>



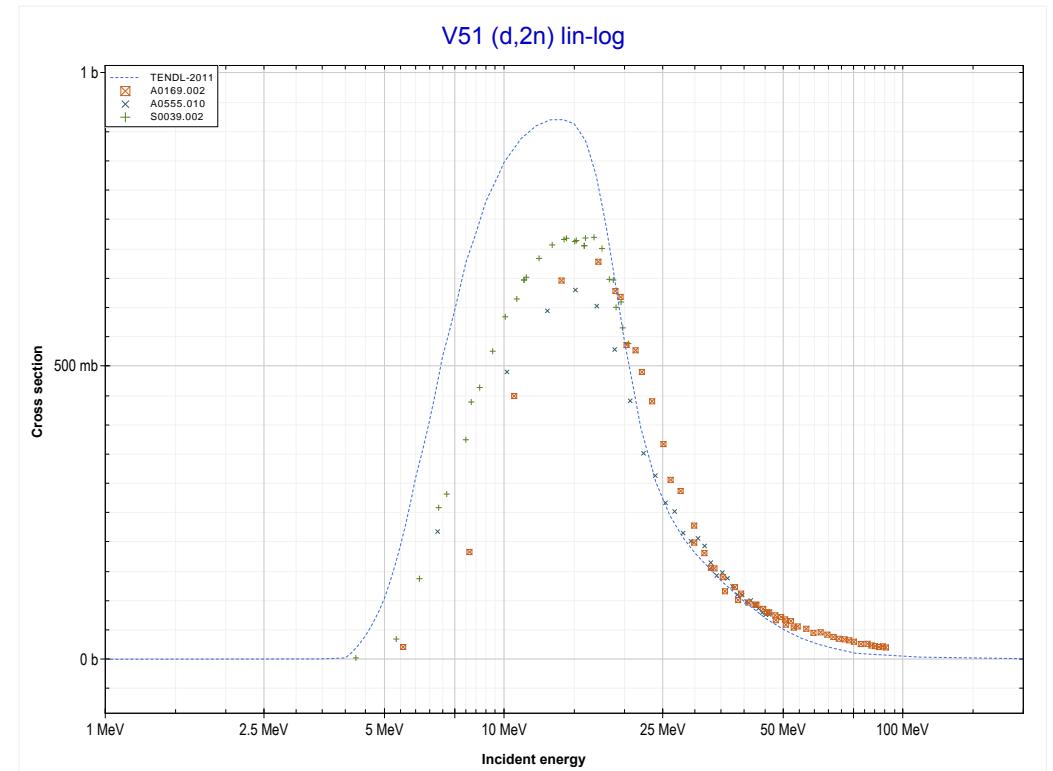
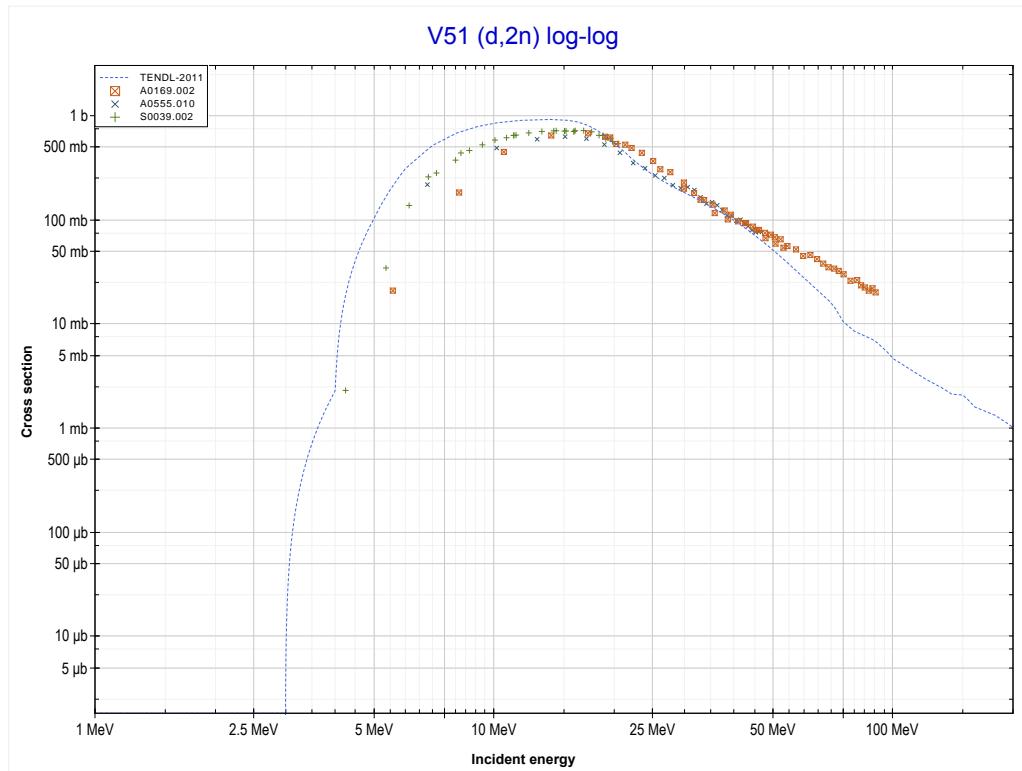
Reaction	Q-Value
Ti49(d, α)Sc47	6484.11 keV
Ti49(d,p+t)Sc47	-13329.75 keV
Ti49(d,n+He3)Sc47	-14093.51 keV
Ti49(d,2d)Sc47	-17362.42 keV
Ti49(d,n+p+d)Sc47	-19586.99 keV
Ti49(d,2n+2p)Sc47	-21811.55 keV

<< 22-Ti-49	22-Ti-50	>> 26-Fe-57
<< MT107 (d, α)	MT22 (d,n+α) or MT5 (Sc47 production)	>> MT16 (d,2n)



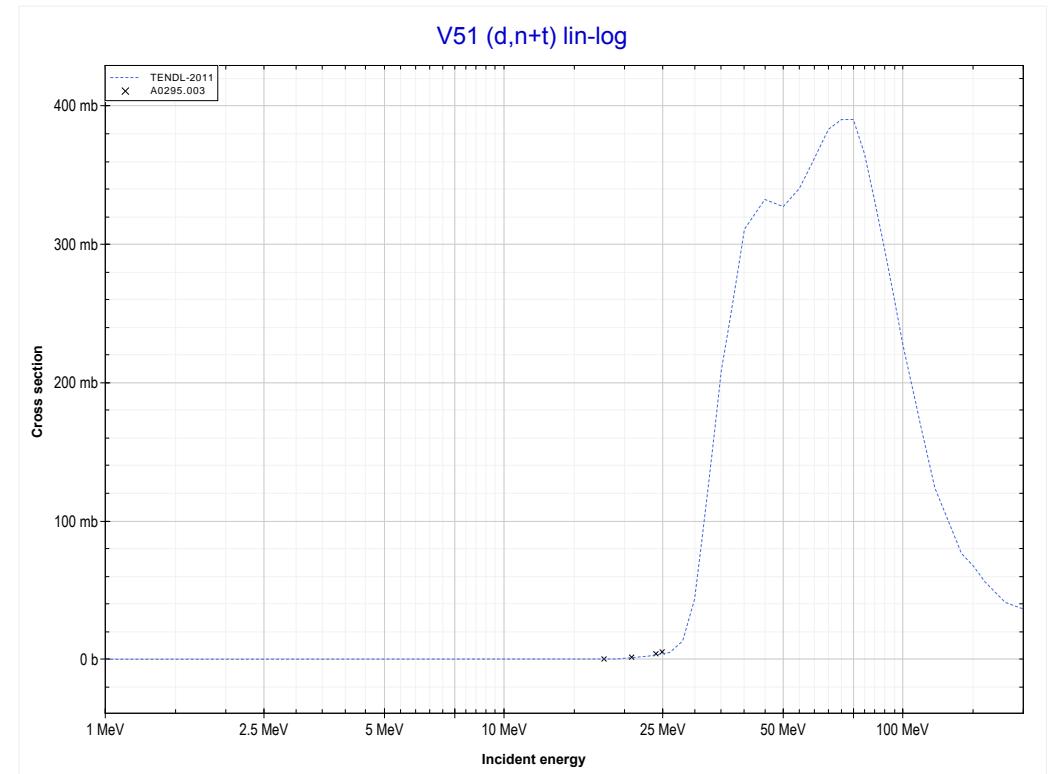
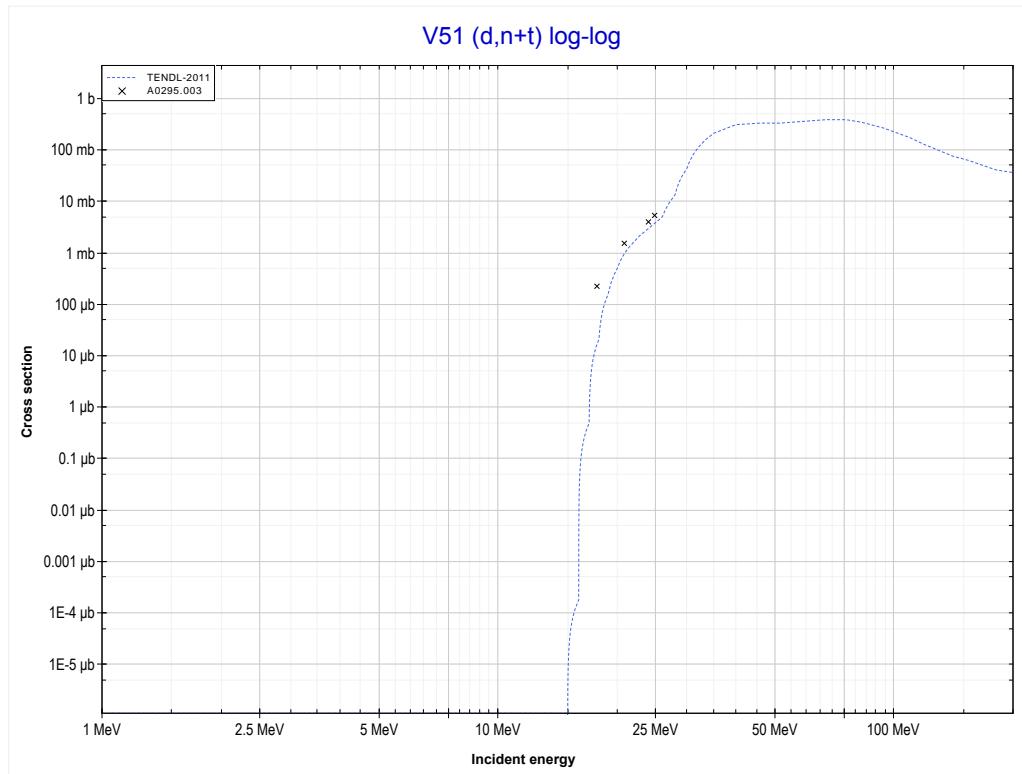
Reaction	Q-Value
$\text{Ti}^{50}(\text{d},\text{n}+\alpha)\text{Sc}^{47}$	-4455.11 keV
$\text{Ti}^{50}(\text{d},\text{d}+\text{t})\text{Sc}^{47}$	-22044.41 keV
$\text{Ti}^{50}(\text{d},\text{n}+\text{p}+\text{t})\text{Sc}^{47}$	-24268.97 keV
$\text{Ti}^{50}(\text{d},2\text{n}+\text{He}^3)\text{Sc}^{47}$	-25032.73 keV
$\text{Ti}^{50}(\text{d},\text{n}+2\text{d})\text{Sc}^{47}$	-28301.64 keV
$\text{Ti}^{50}(\text{d},2\text{n}+\text{p}+\text{d})\text{Sc}^{47}$	-30526.20 keV
$\text{Ti}^{50}(\text{d},3\text{n}+2\text{p})\text{Sc}^{47}$	-32750.77 keV

<< 22-Ti-48	23-V-51 MT16 (d,2n) or MT5 (Cr51 production)	24-Cr-50 >>
<< MT22 (d,n+α)		MT33 (d,n+t) >>



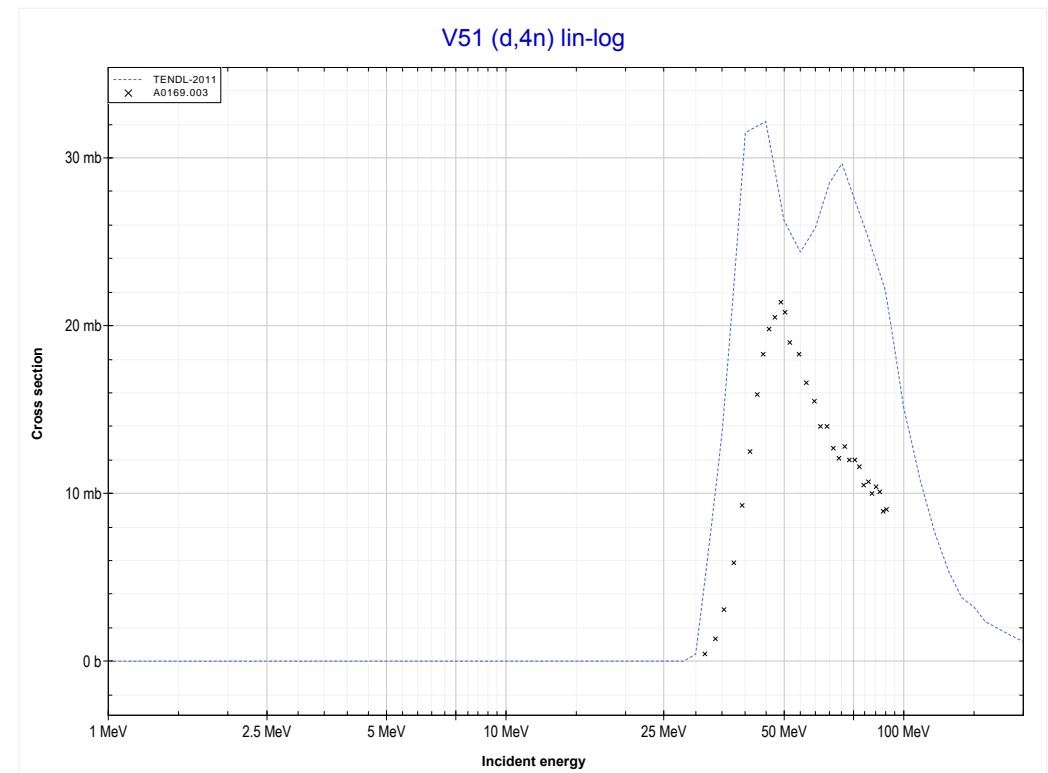
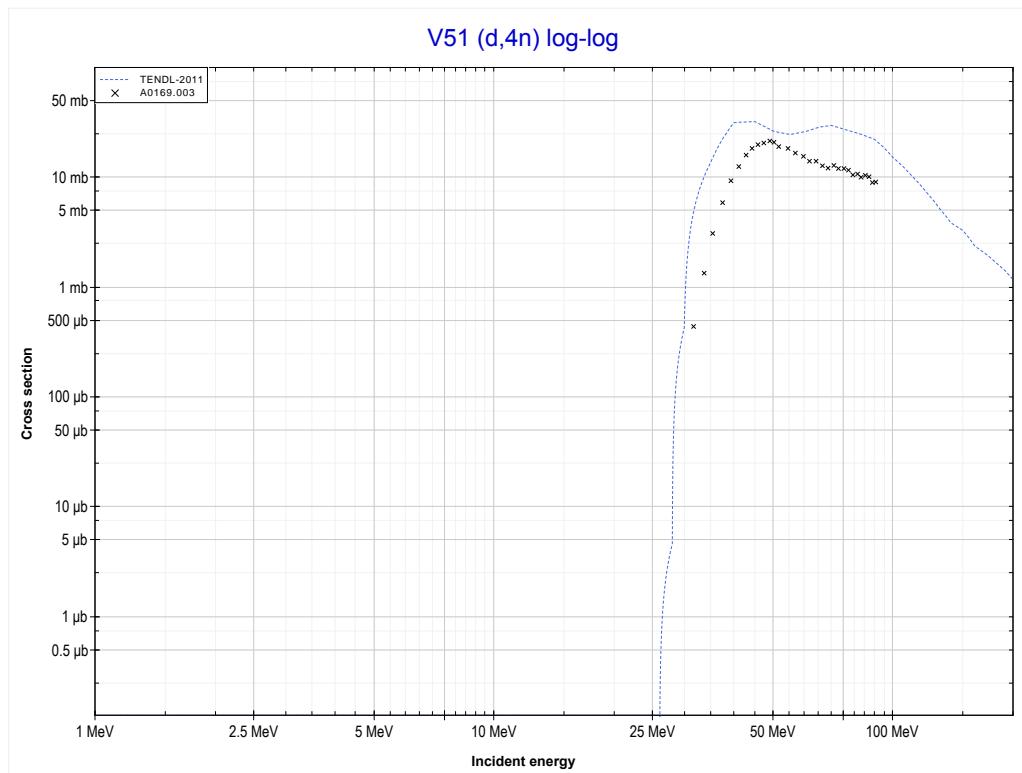
Reaction	Q-Value
V51(d,2n)Cr51	-3759.51 keV

<< 4-Be-9	23-V-51 MT33 (d,n+t) or MT5 (V49 production)	MT37 (d,4n) >>
<< MT16 (d,2n)		



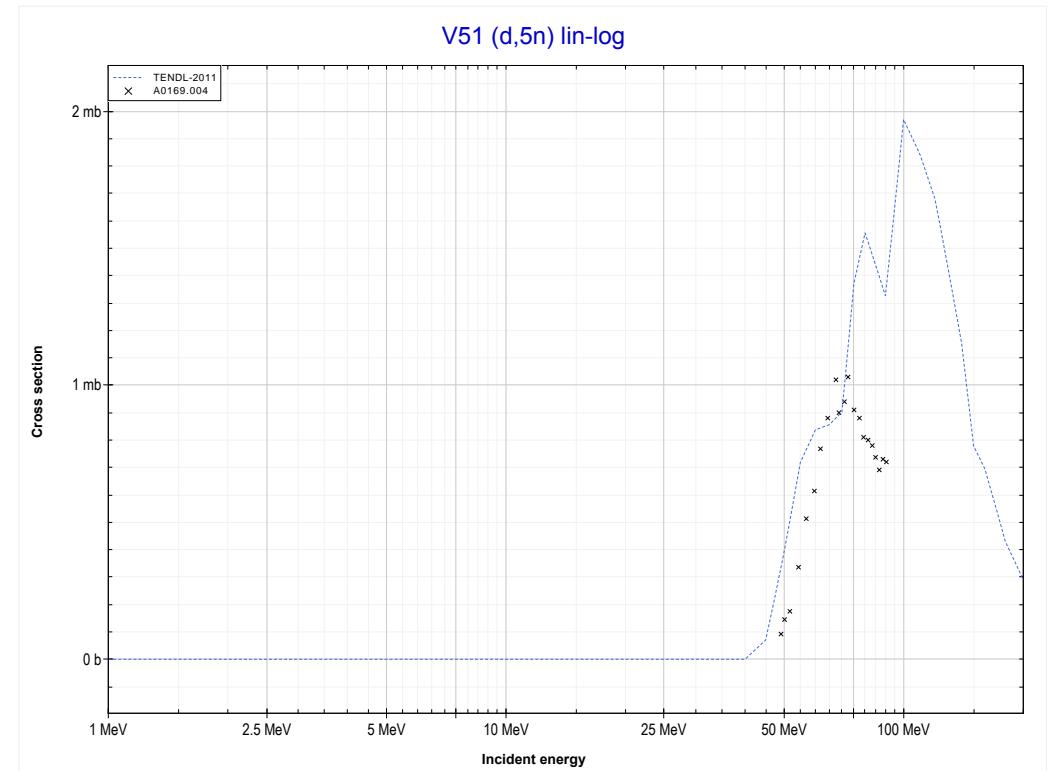
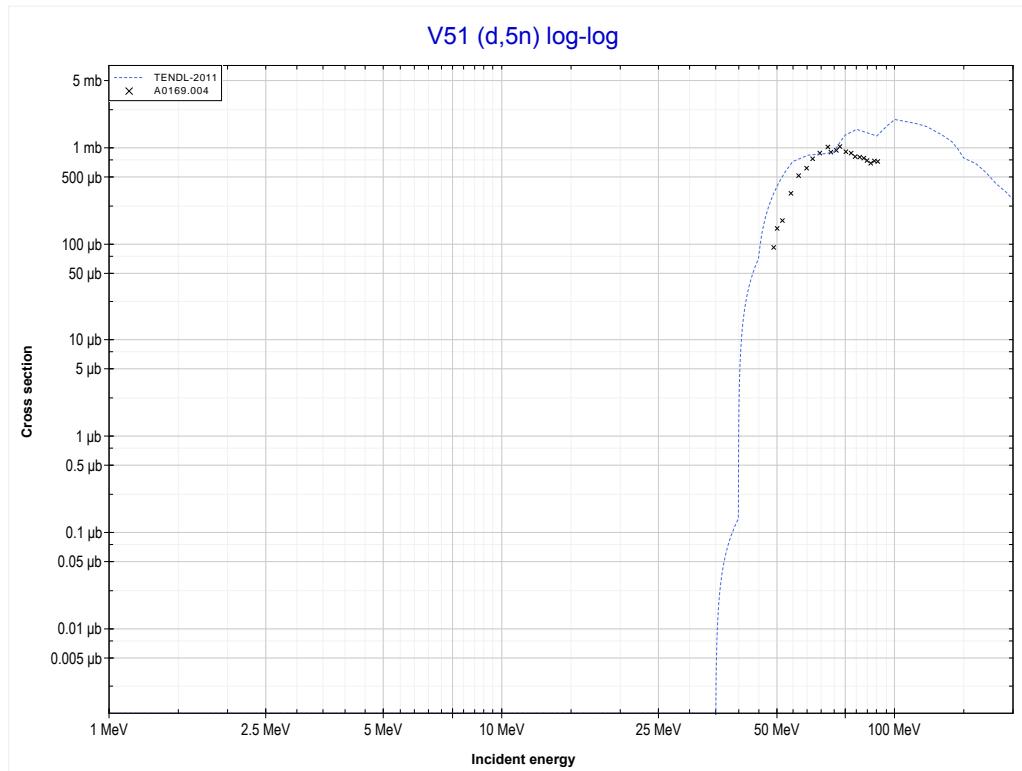
Reaction	Q-Value
V51(d,n+t)V49	-14129.90 keV
V51(d,2n+d)V49	-20387.13 keV
V51(d,3n+p)V49	-22611.70 keV

	23-V-51 MT37 (d,4n) or MT5 (Cr49 production)	27-Co-59 >> MT152 (d,5n) >>
<< MT33 (d,n+t)		



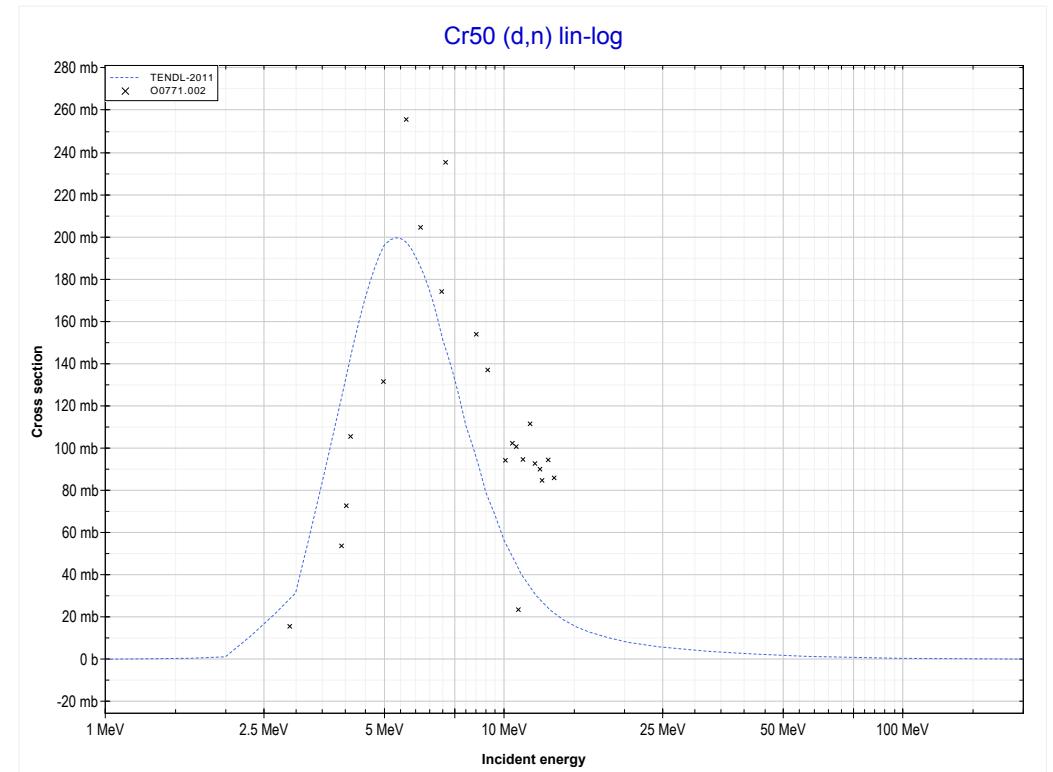
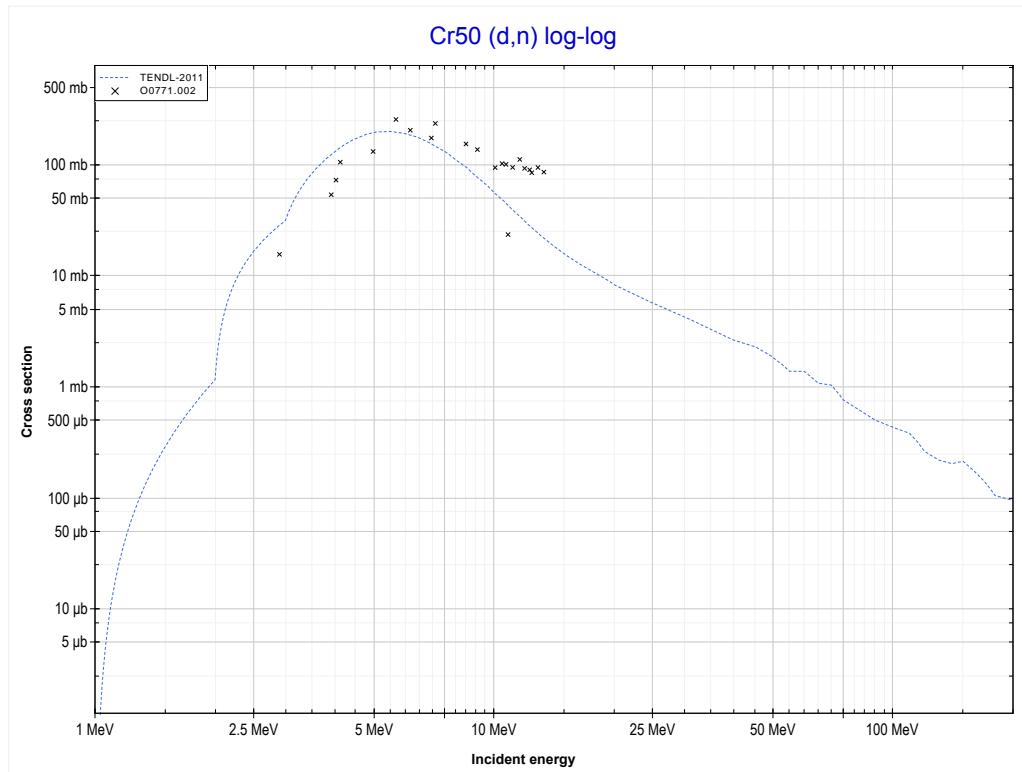
Reaction	Q-Value
V51(d,4n)Cr49	-26020.45 keV

<< MT37 (d,4n)	23-V-51 MT152 (d,5n) or MT5 (Cr48 production)	27-Co-59 >> MT4 (d,n) >>
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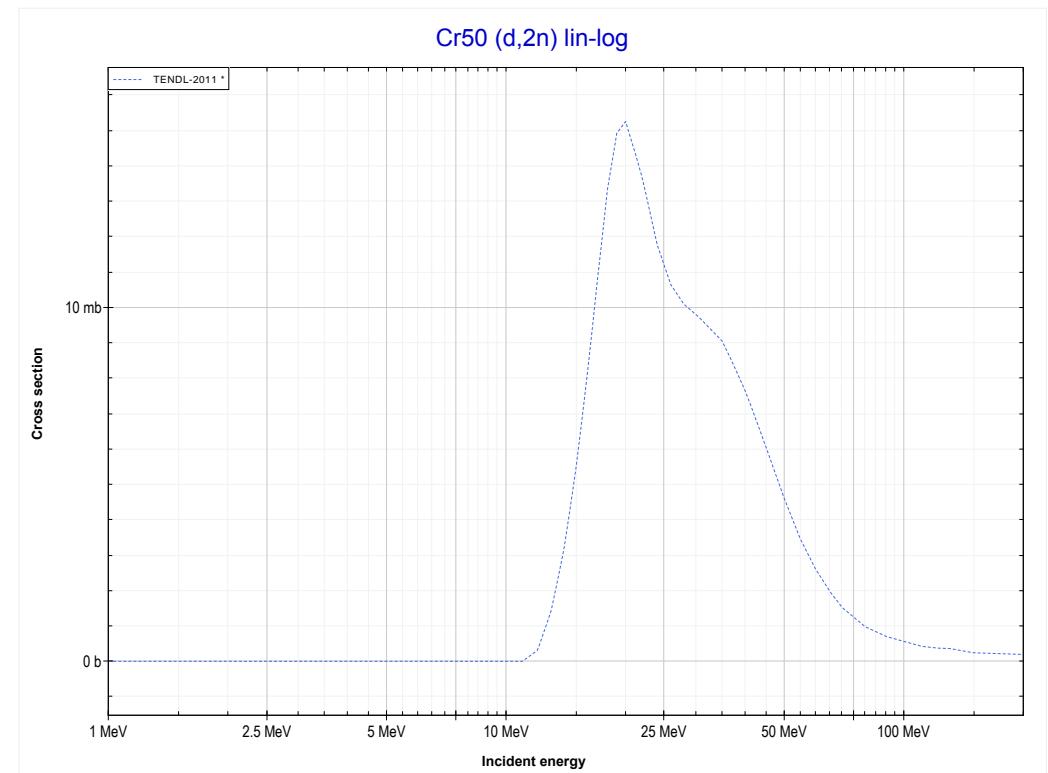
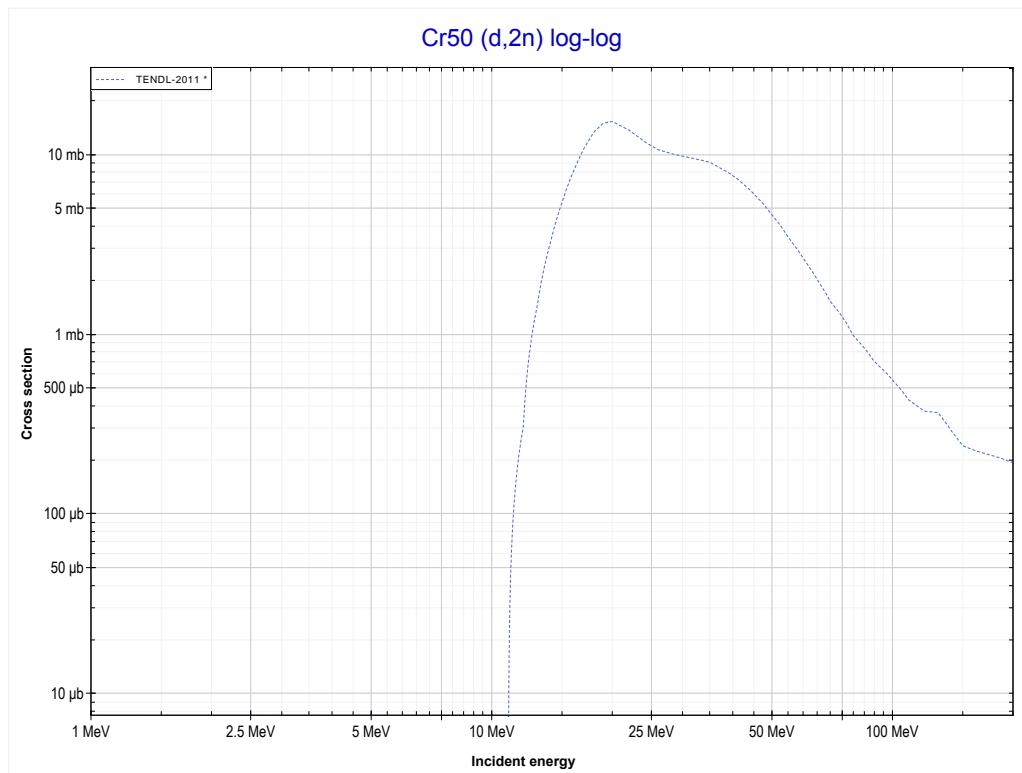
Reaction	Q-Value
V51(d,5n)Cr48	-36603.26 keV

<< 22-Ti-47	24-Cr-50 MT4 (d,n) or MT5 (Mn51 production)	>> 26-Fe-54
<< MT152 (d,5n)		MT16 (d,2n) >>



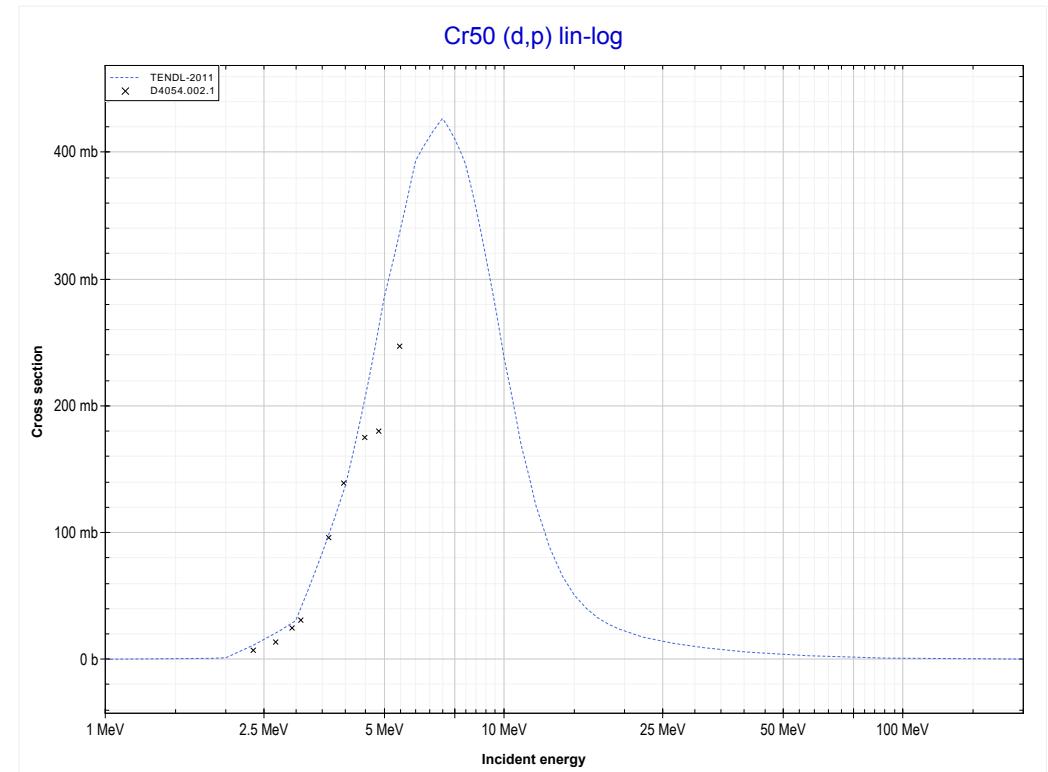
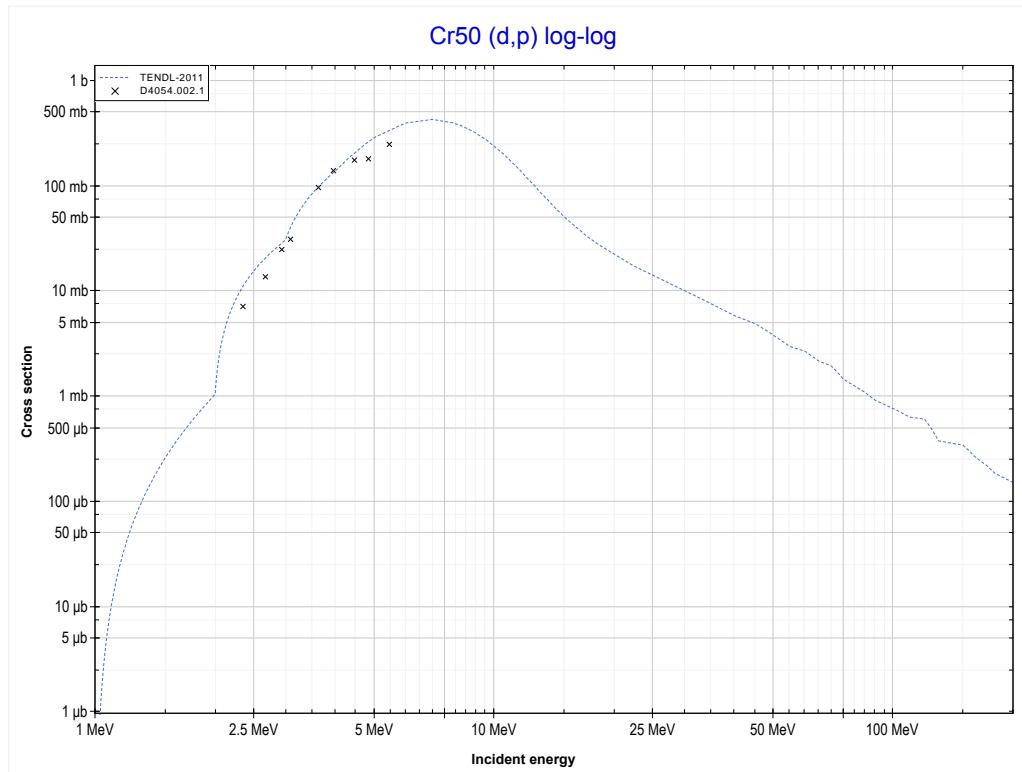
Reaction	Q-Value
Cr50(d,n)Mn51	3046.20 keV

<< 23-V-51	24-Cr-50 MT16 (d,2n) or MT5 (Mn50 production)	24-Cr-52 >>
<< MT4 (d,n)		MT103 (d,p) >>



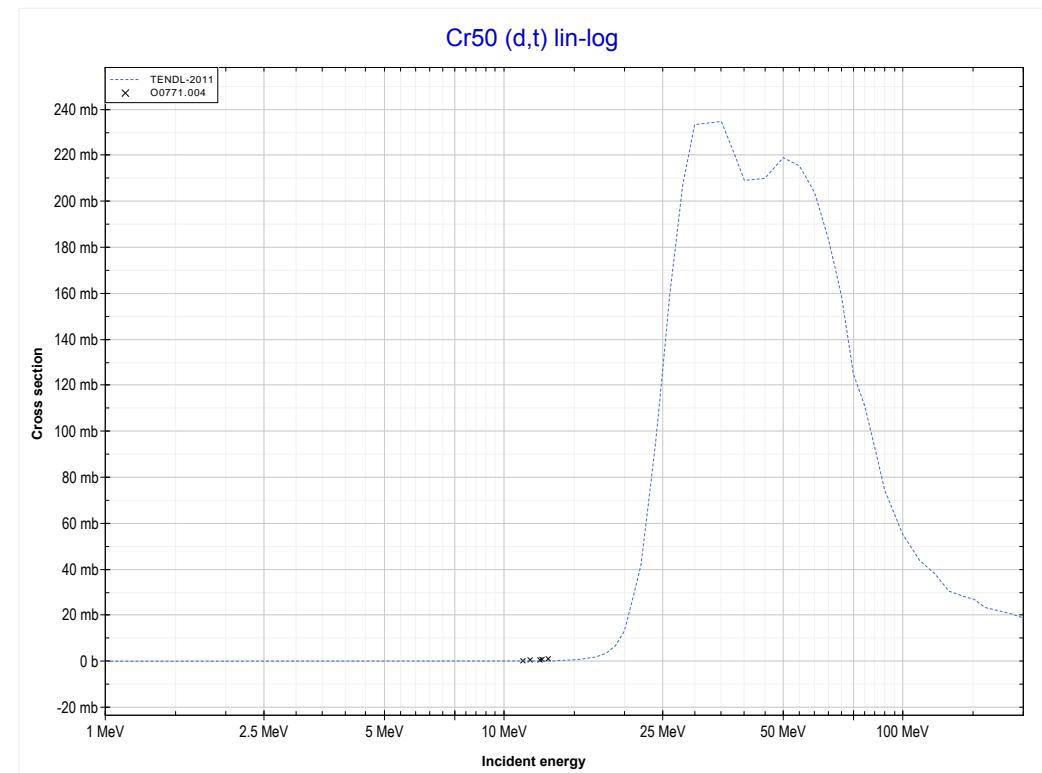
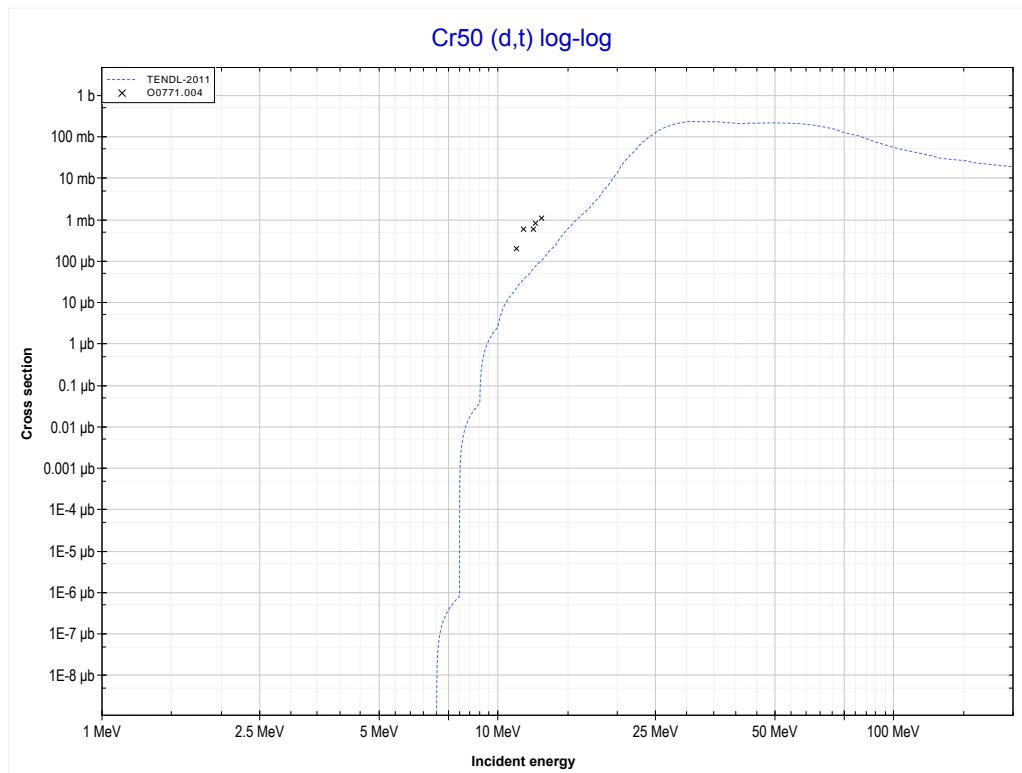
Reaction	Q-Value
$\text{Cr}^{50}(\text{d},\text{2n})\text{Mn}^{50}$	-10639.61 keV

<< 21-Sc-45	24-Cr-50 MT103 (d,p) or MT5 (Cr51 production)	24-Cr-54 >>
<< MT16 (d,2n)		MT105 (d,t) >>



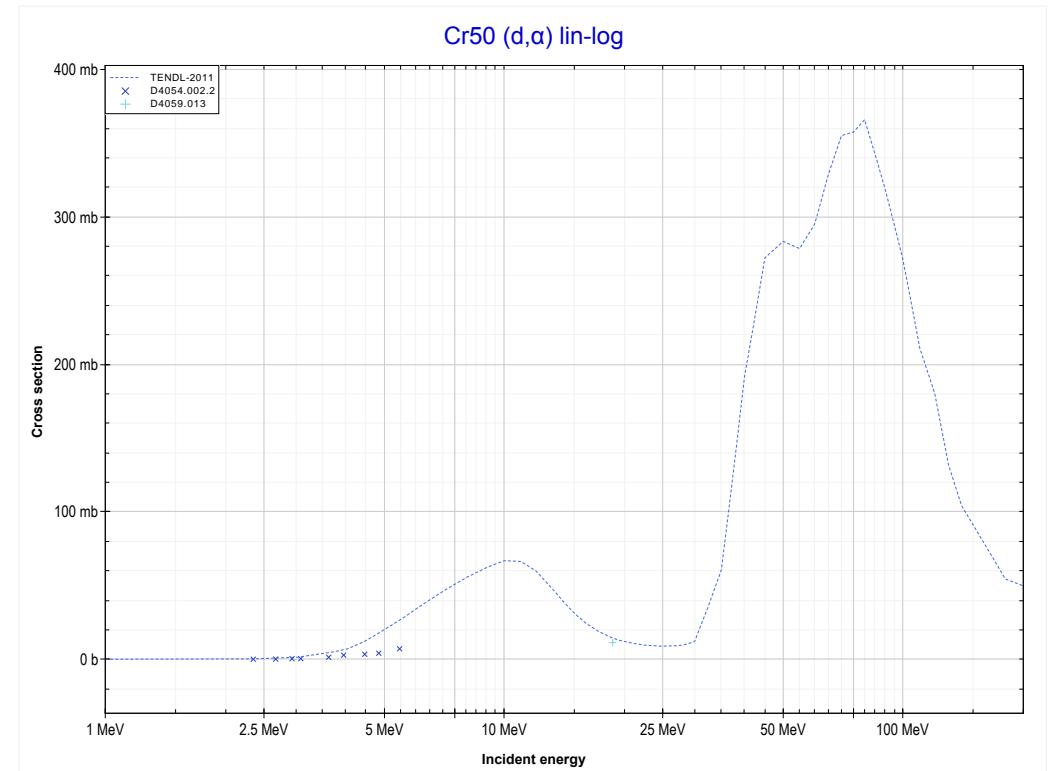
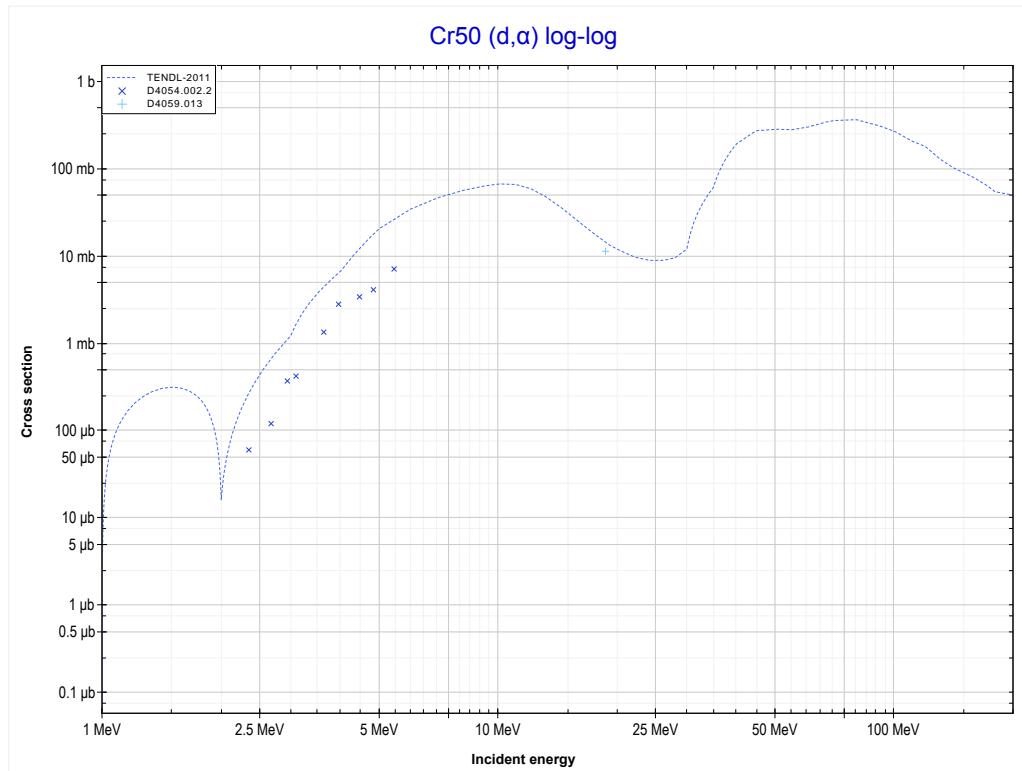
Reaction	Q-Value
$\text{Cr}^{50}(\text{d},\text{p})\text{Cr}^{51}$	7036.05 keV

<< 21-Sc-45	24-Cr-50 MT105 (d,t) or MT5 (Cr49 production)	>> 26-Fe-54
<< MT103 (d,p)		MT107 (d, α) >>



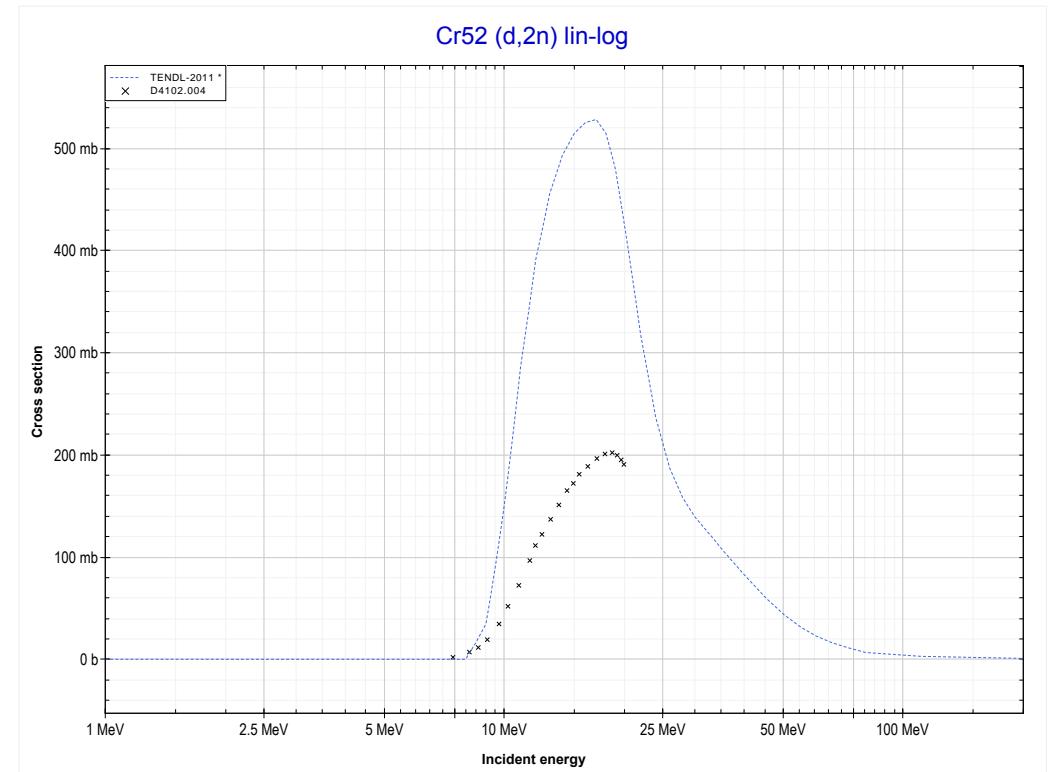
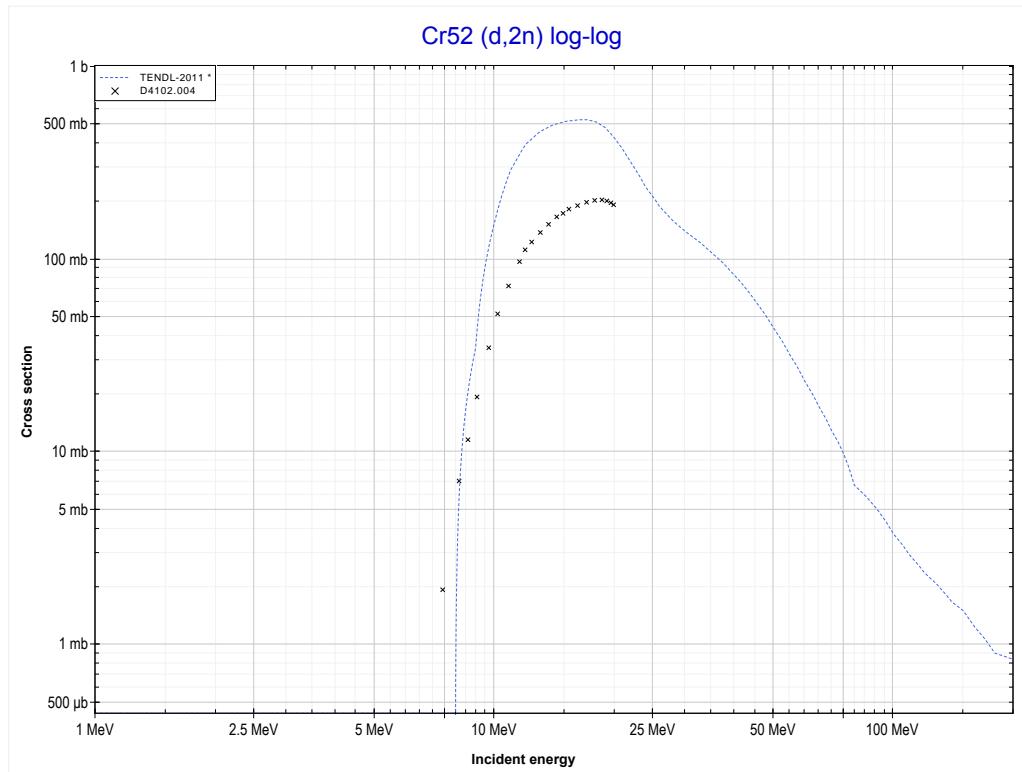
Reaction	Q-Value
$\text{Cr}^{50}(\text{d},\text{t})\text{Cr}^{49}$	-6743.08 keV
$\text{Cr}^{50}(\text{d},\text{n+d})\text{Cr}^{49}$	-13000.32 keV
$\text{Cr}^{50}(\text{d},2\text{n+p})\text{Cr}^{49}$	-15224.88 keV

<< 22-Ti-49	24-Cr-50 MT107 (d,α) or MT5 (V48 production)	26-Fe-54 >>
<< MT105 (d,t) >>		MT16 (d,2n) >>



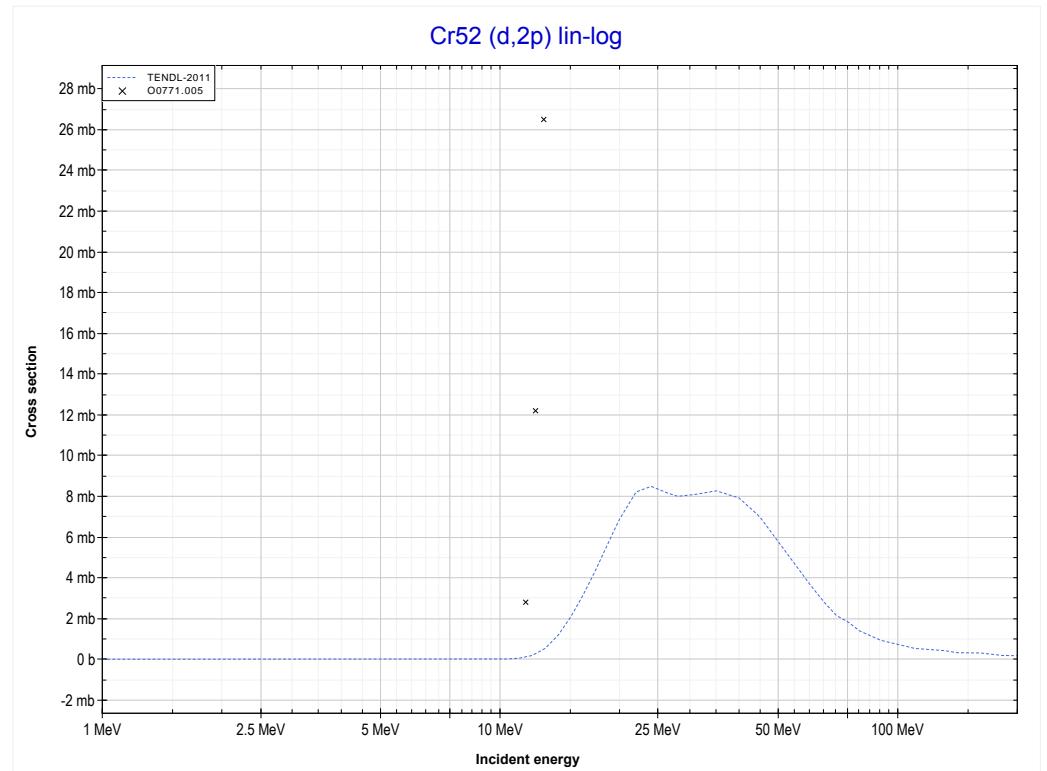
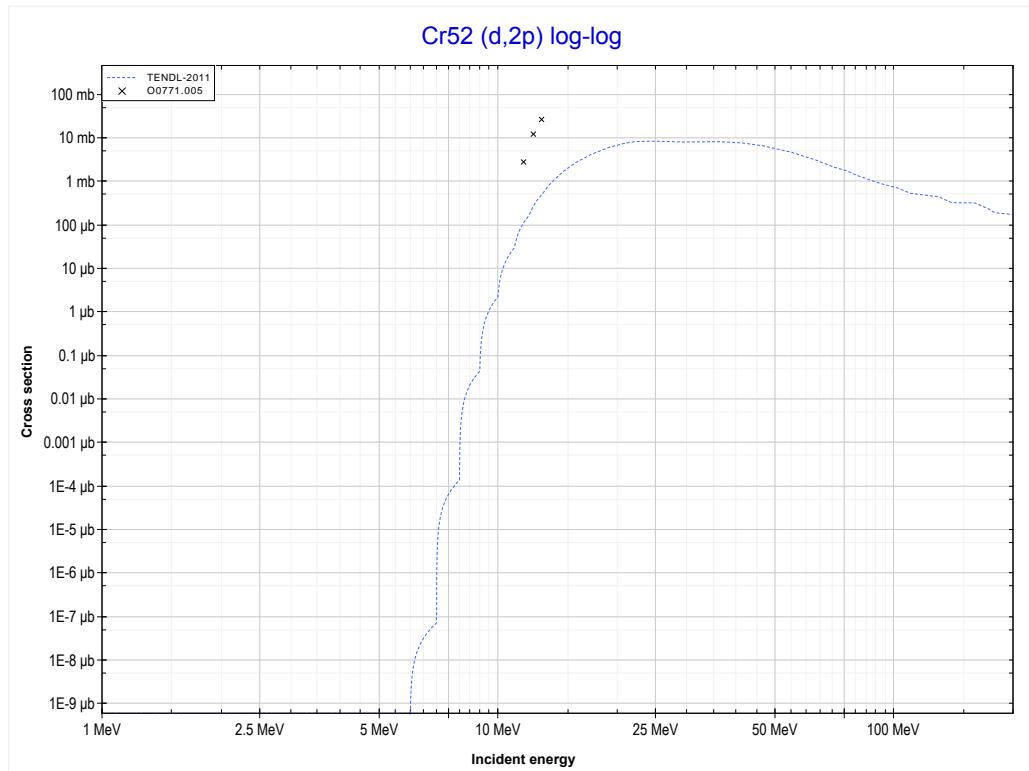
Reaction	Q-Value
Cr50(d, α)V48	4926.71 keV
Cr50(d,p+t)V48	-14887.15 keV
Cr50(d,n+He3)V48	-15650.91 keV
Cr50(d,2d)V48	-18919.82 keV
Cr50(d,n+p+d)V48	-21144.39 keV
Cr50(d,2n+2p)V48	-23368.95 keV

<< 24-Cr-50	24-Cr-52 MT16 (d,2n) or MT5 (Mn52 production)	>> 26-Fe-56
<< MT107 (d, α)		MT111 (d,2p) >>



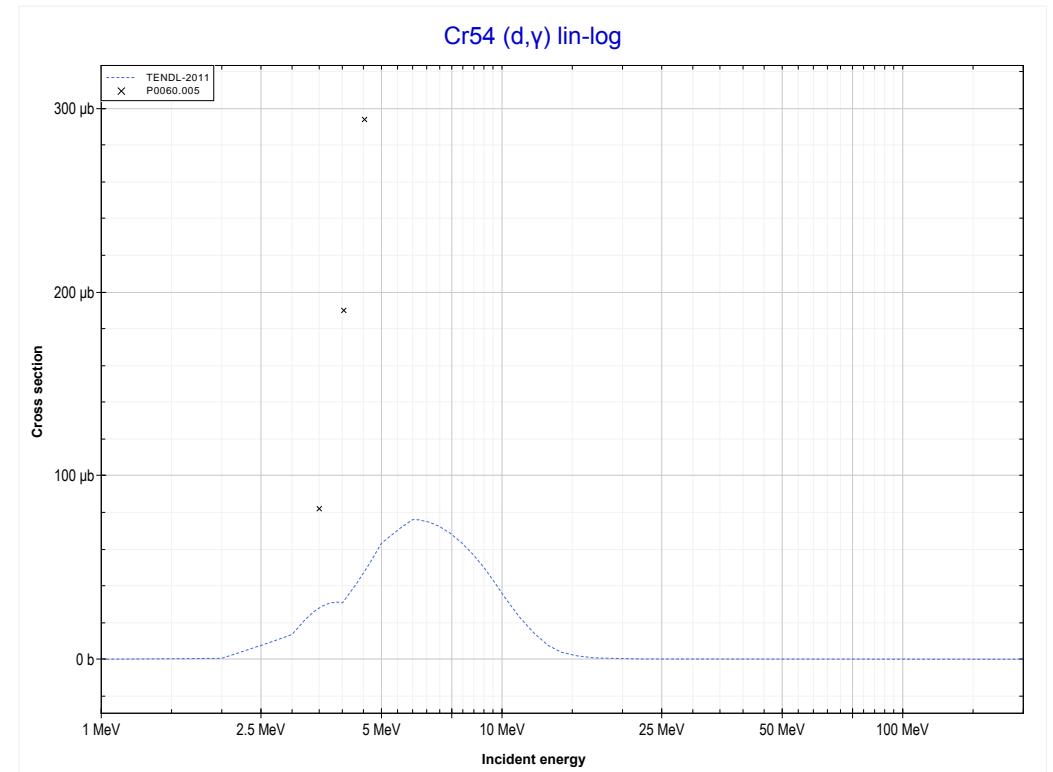
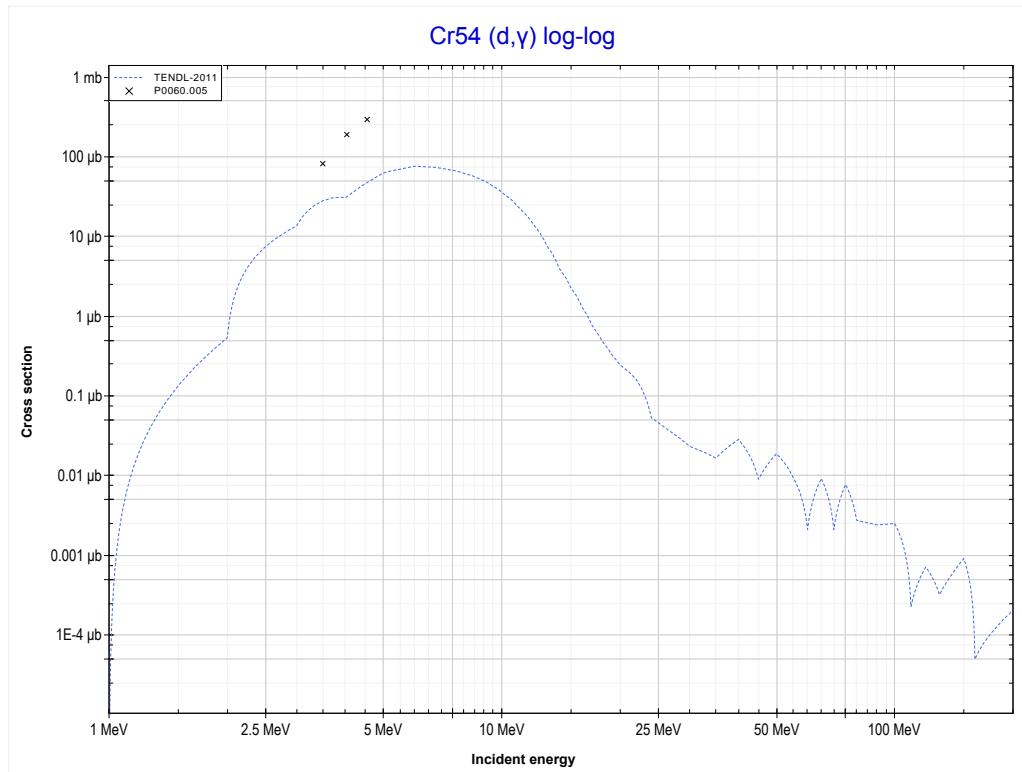
Reaction	Q-Value
Cr52(d,2n)Mn52	-7718.41 keV

<< 22-Ti-47	24-Cr-52 MT111 (d,2p) or MT5 (V52 production)	>> 26-Fe-56
<< MT16 (d,2n)		MT102 (d,y) >>



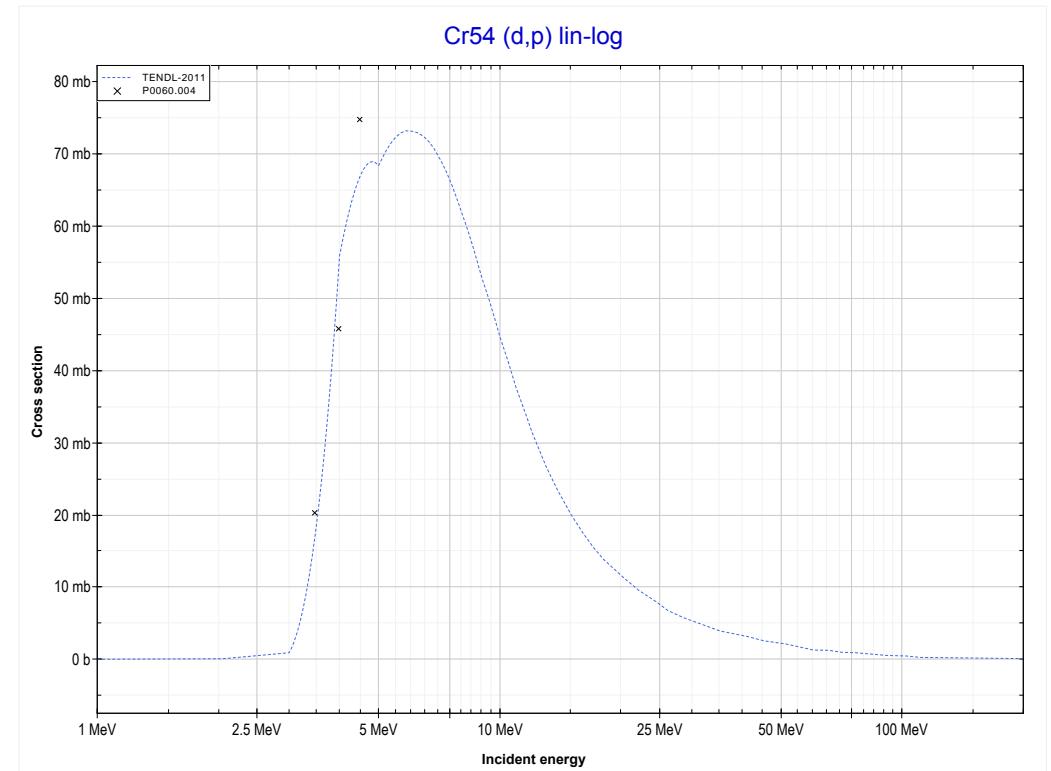
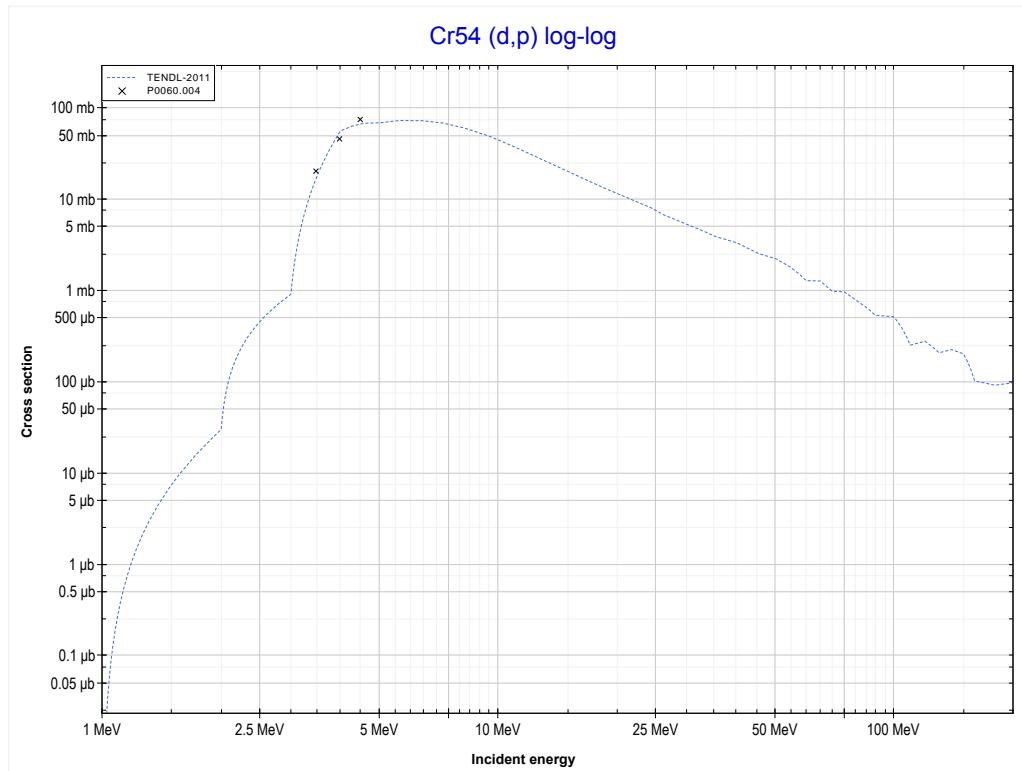
Reaction	Q-Value
Cr52(d,2p)V52	-5417.82 keV

<< 14-Si-30	24-Cr-54 MT102 (d, γ) or MT5 (Mn56 production)	28-Ni-58 >>
<< MT111 (d,2p)		MT103 (d,p) >>



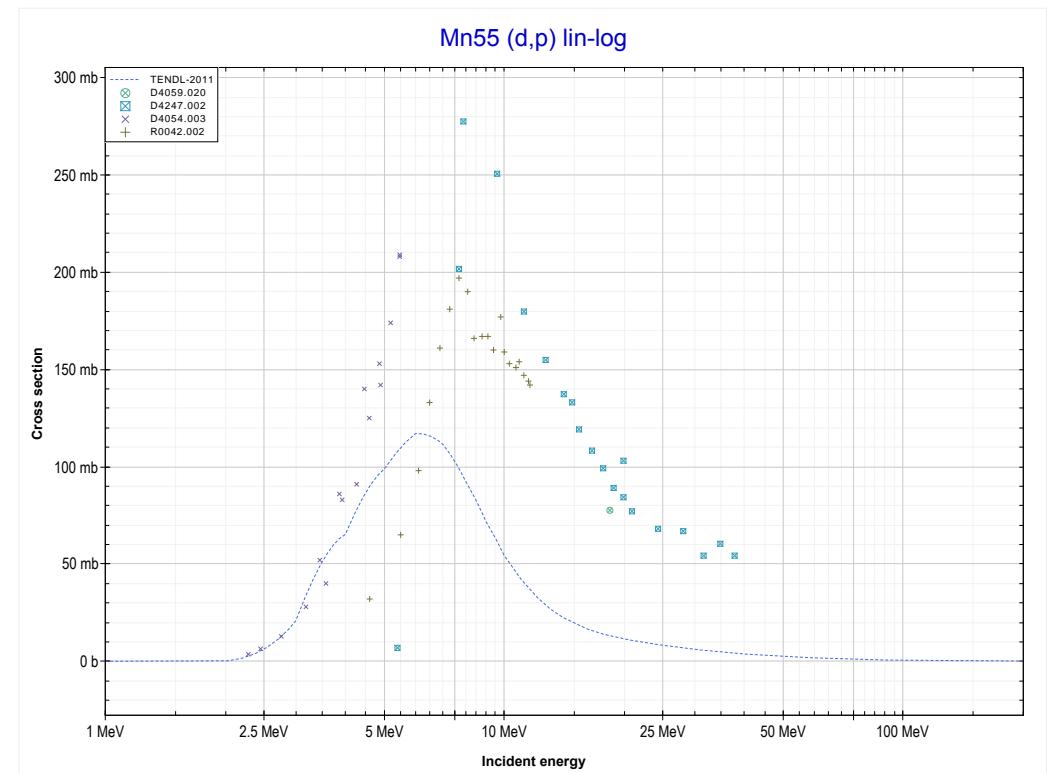
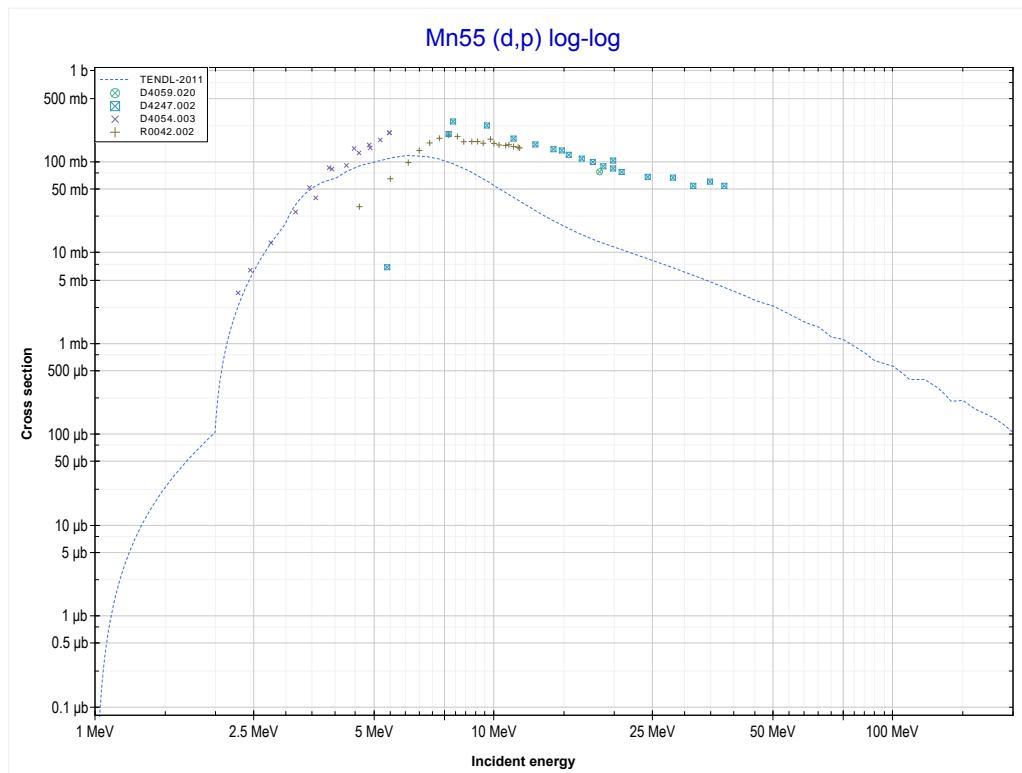
Reaction	Q-Value
Cr54(d, γ)Mn56	13112.92 keV

<< 24-Cr-50	24-Cr-54 MT103 (d,p) or MT5 (Cr55 production)	25-Mn-55 >>
<< MT102 (d, γ)		MT103 (d,p) >>



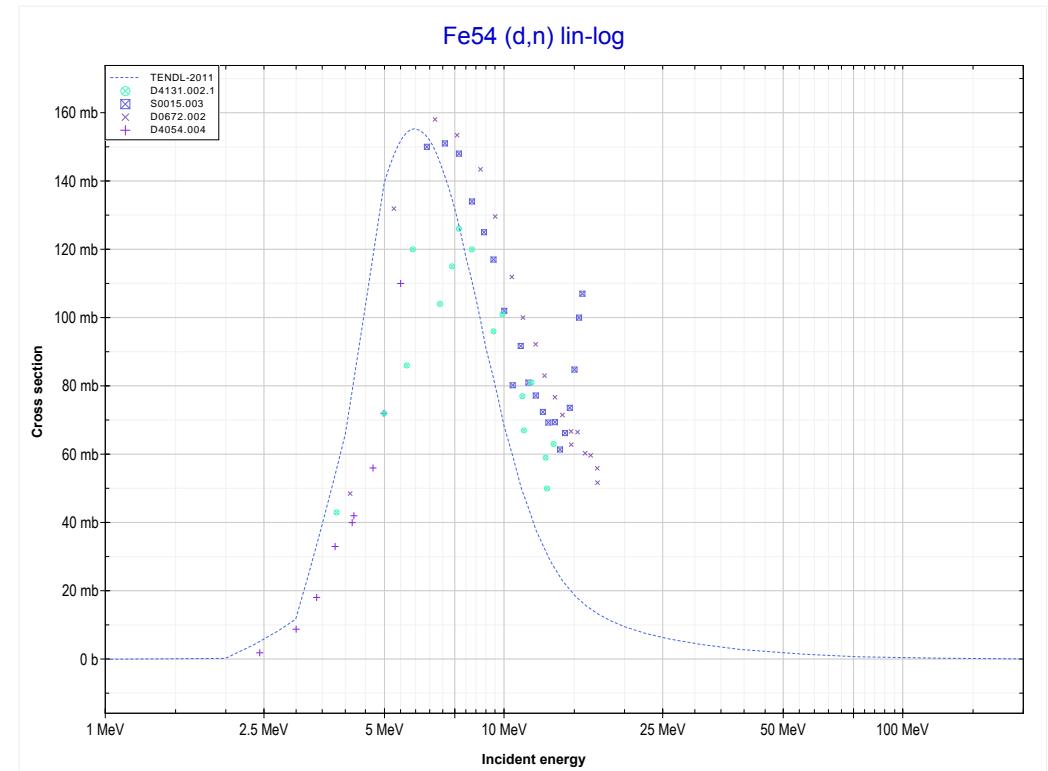
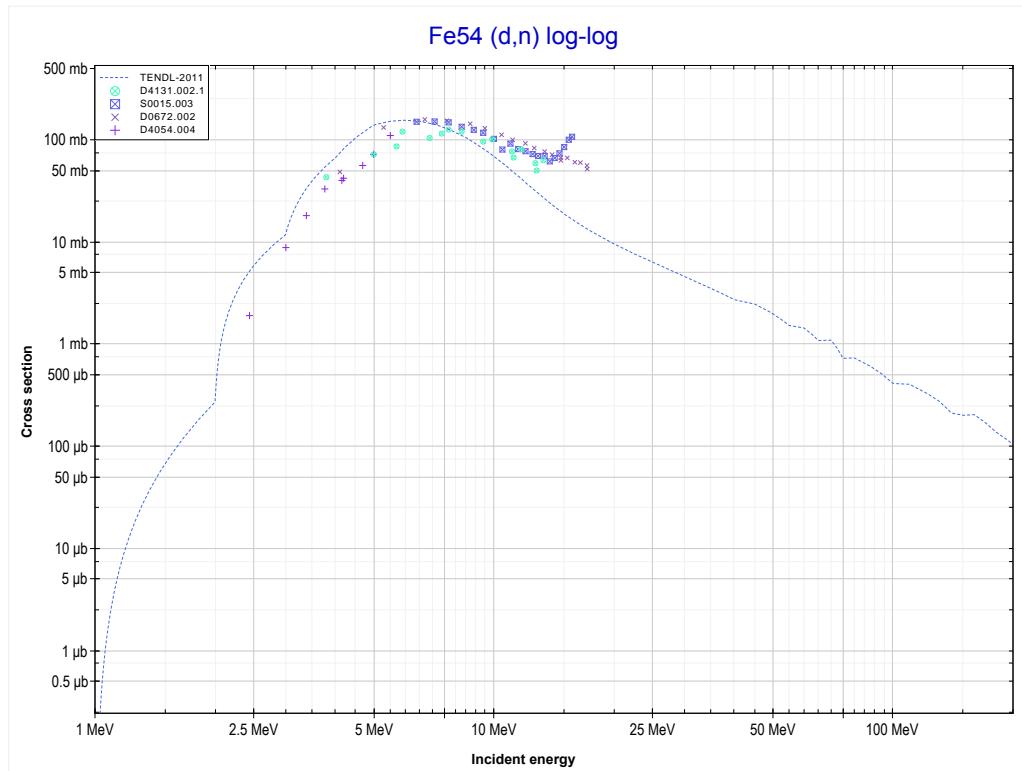
Reaction	Q-Value
Cr54(d,p)Cr55	4021.75 keV

<< 24-Cr-54	25-Mn-55 MT103 (d,p) or MT5 (Mn56 production)	>> 26-Fe-58
<< MT103 (d,p)		MT4 (d,n) >>



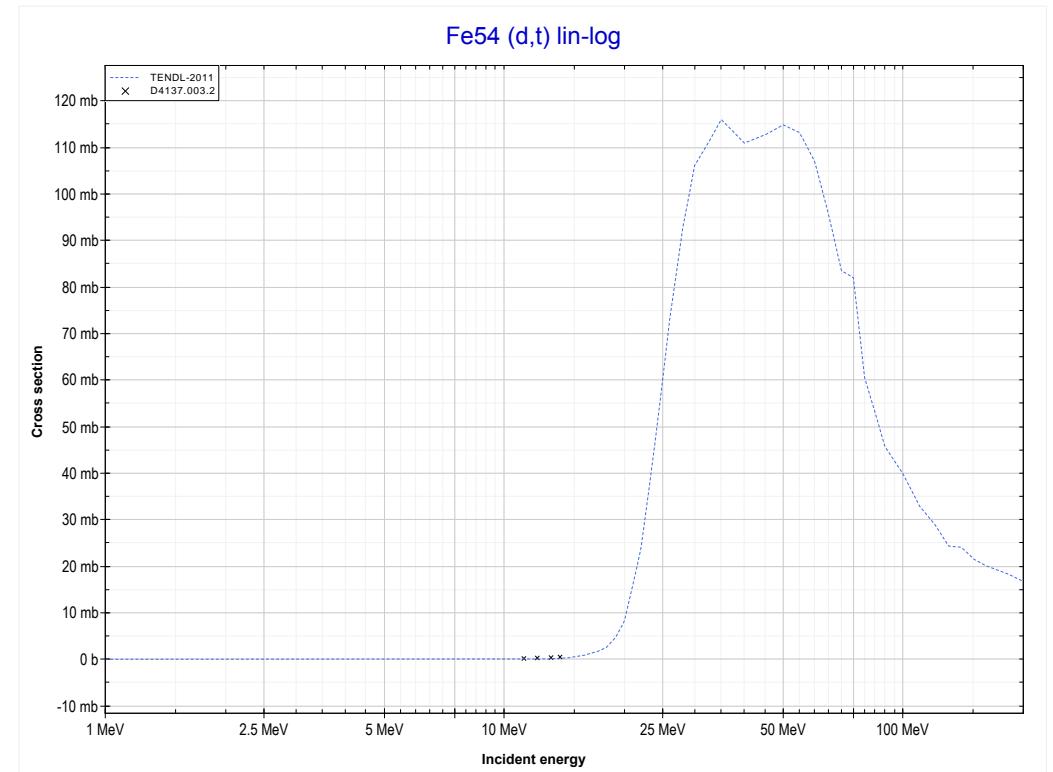
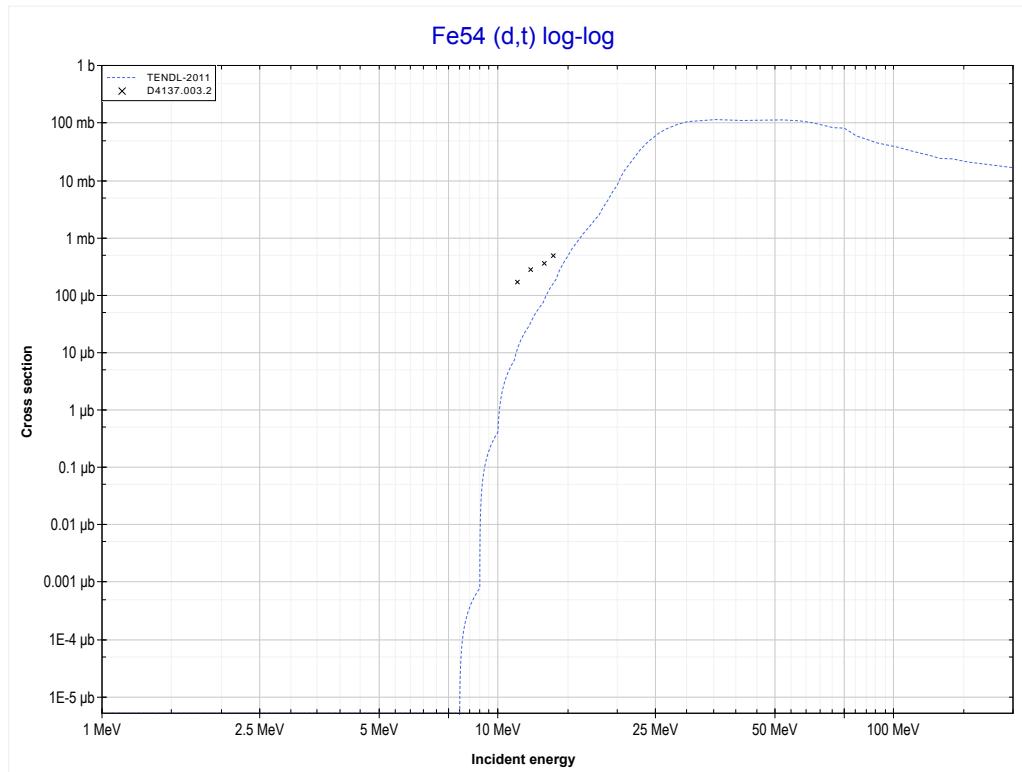
Reaction	Q-Value
Mn55(d,p)Mn56	5045.85 keV

<< 24-Cr-50	26-Fe-54 MT4 (d,n) or MT5 (Co55 production)	26-Fe-56 >>
<< MT103 (d,p) >>		MT105 (d,t) >>



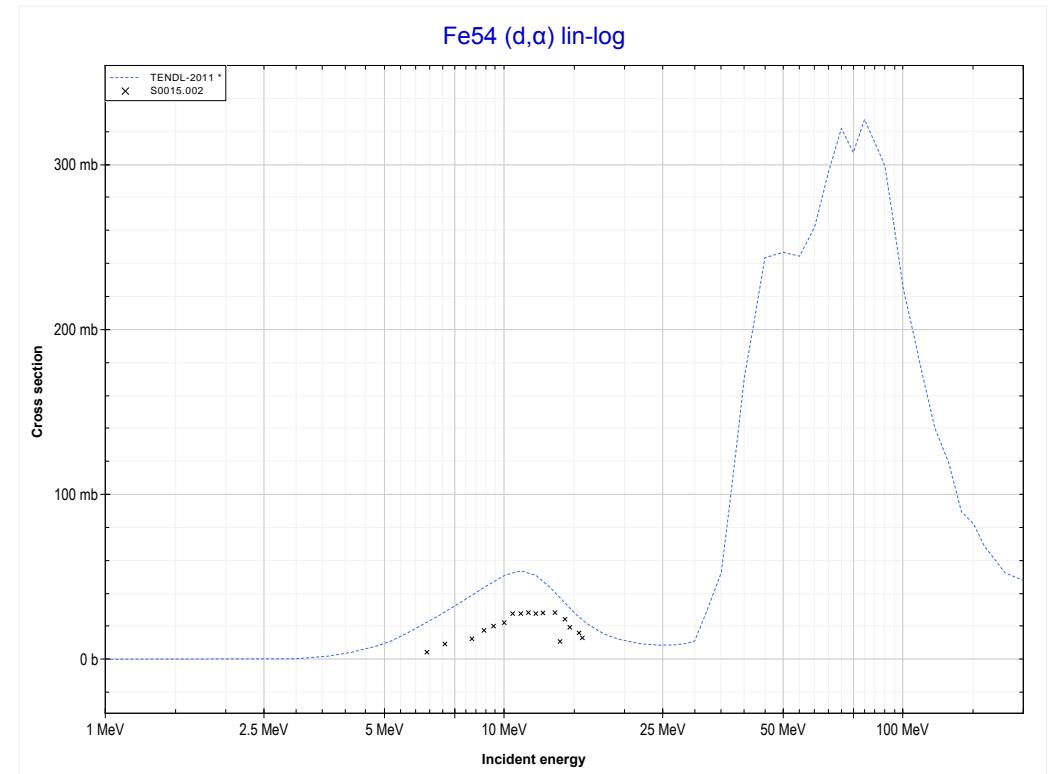
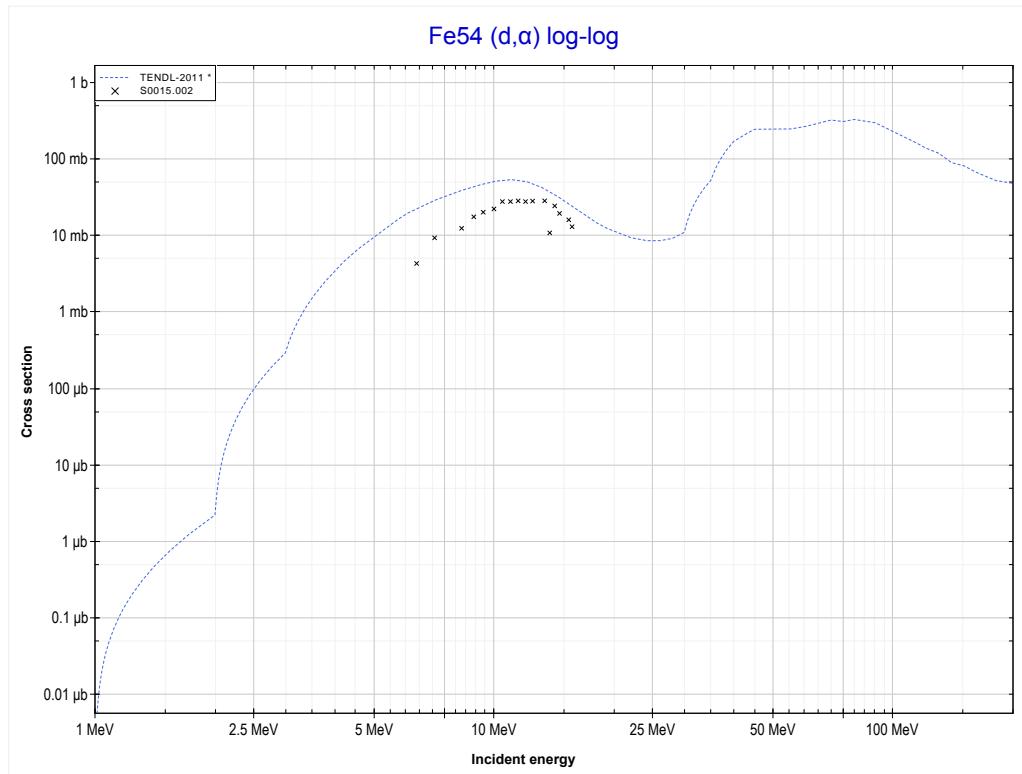
Reaction	Q-Value
Fe54(d,n)Co55	2839.50 keV

<< 24-Cr-50	26-Fe-54 MT105 (d,t) or MT5 (Fe53 production)	28-Ni-58 >>
<< MT4 (d,n)		MT107 (d, α) >>



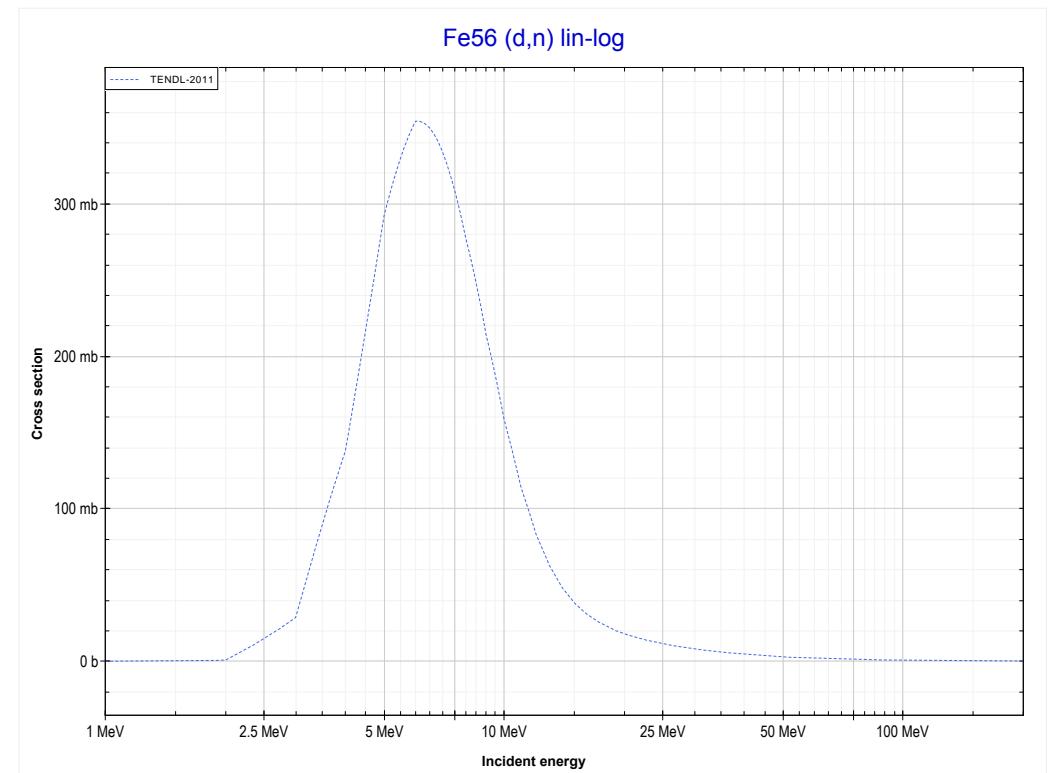
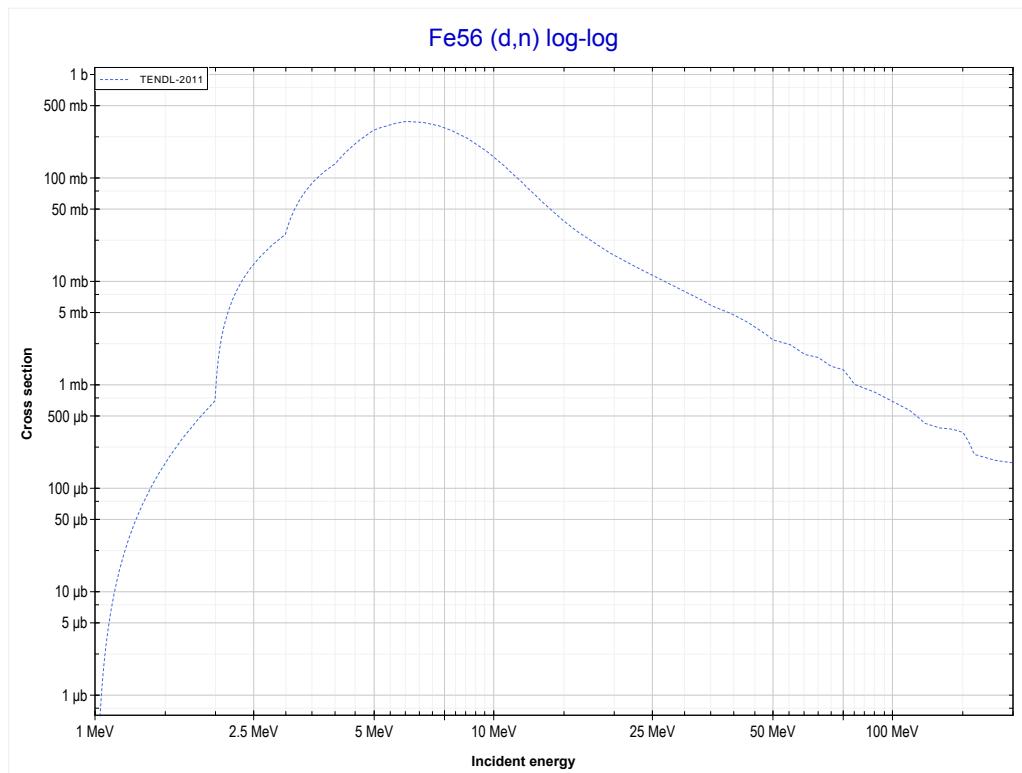
Reaction	Q-Value
Fe54(d,t)Fe53	-7121.28 keV
Fe54(d,n+d)Fe53	-13378.52 keV
Fe54(d,2n+p)Fe53	-15603.08 keV

<< 24-Cr-50	26-Fe-54 MT107 (d,α) or MT5 (Mn52 production)	26-Fe-56 >>
<< MT105 (d,t)		MT4 (d,n) >>



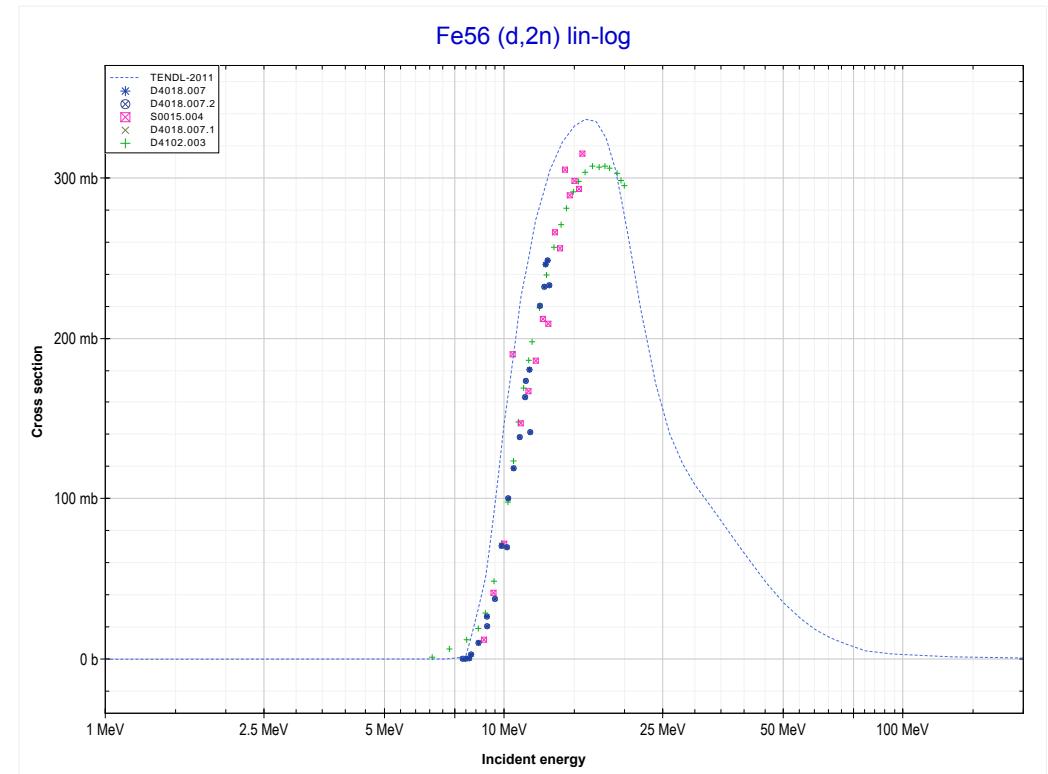
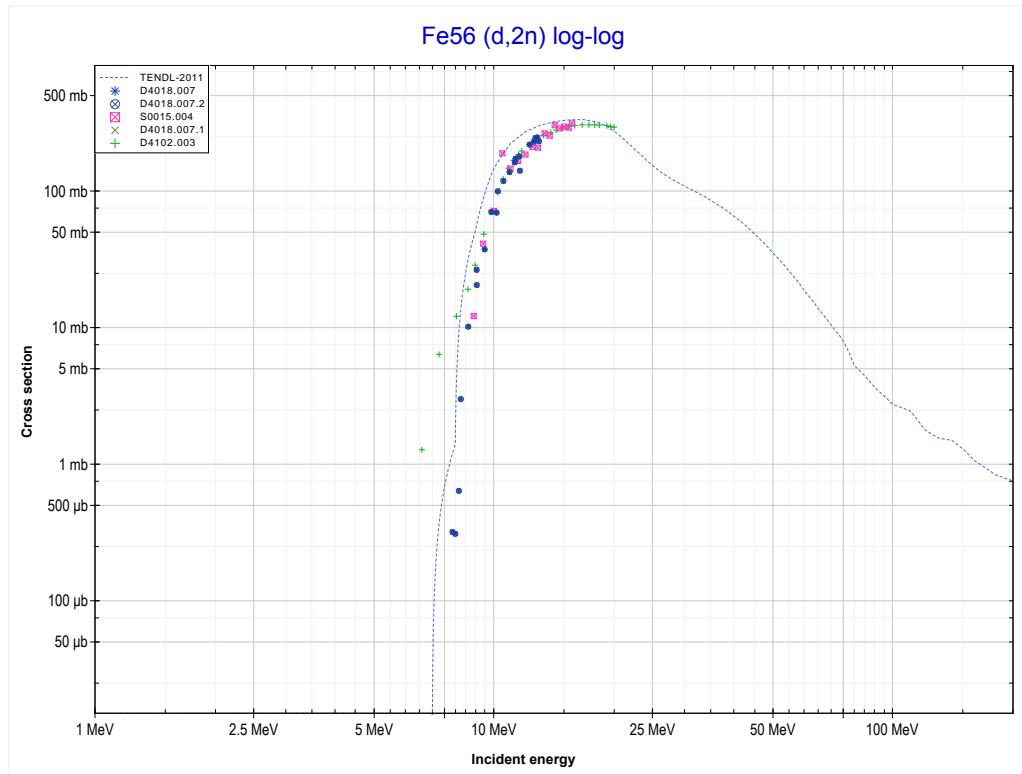
Reaction	Q-Value
Fe54(d,α)Mn52	5163.71 keV
Fe54($d,p+t$)Mn52	-14650.15 keV
Fe54($d,n+He3$)Mn52	-15413.91 keV
Fe54($d,2d$)Mn52	-18682.82 keV
Fe54($d,n+p+d$)Mn52	-20907.39 keV
Fe54($d,2n+2p$)Mn52	-23131.95 keV

<< 26-Fe-54	26-Fe-56 MT4 (d,n) or MT5 (Co57 production)	28-Ni-58 >>
<< MT107 (d, α)		MT16 (d,2n) >>



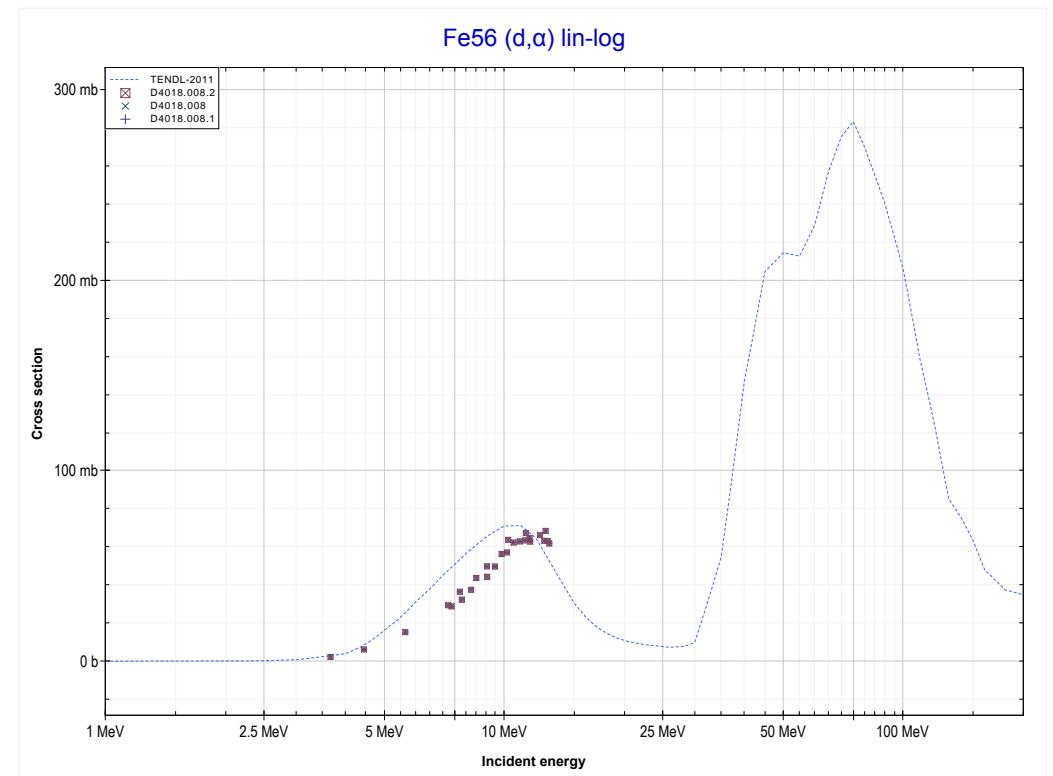
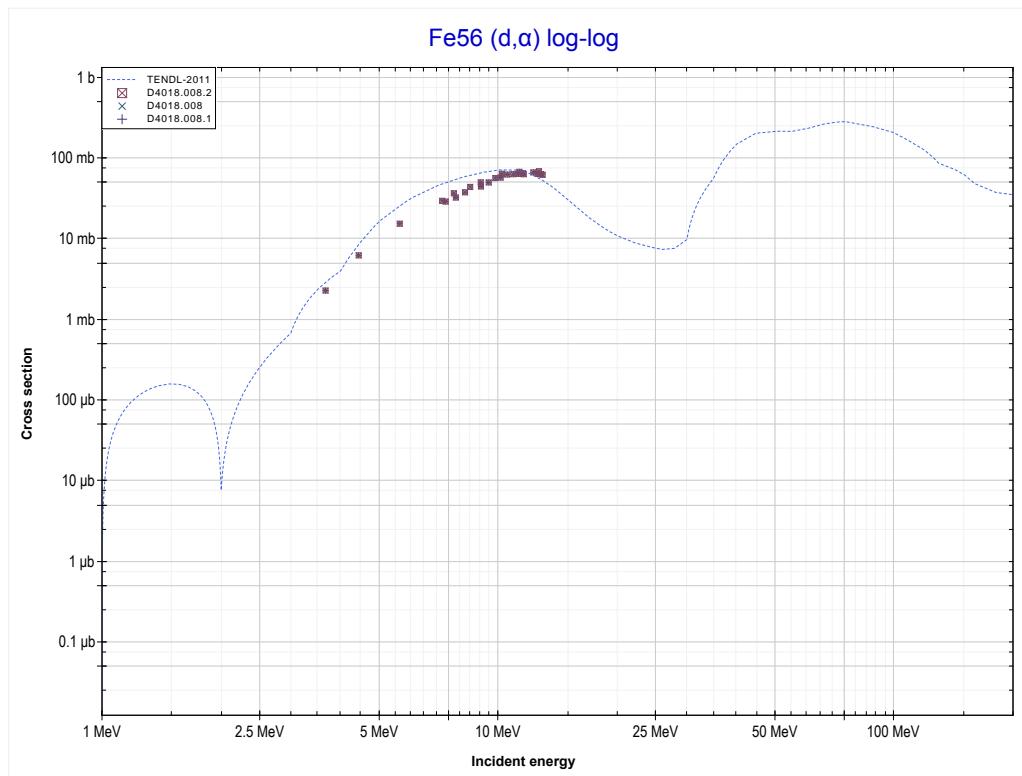
Reaction	Q-Value
Fe56(d,n)Co57	3803.20 keV

<< 24-Cr-52	26-Fe-56 MT16 (d,2n) or MT5 (Co56 production)	>> 26-Fe-57
<< MT4 (d,n)		MT107 (d, α) >>



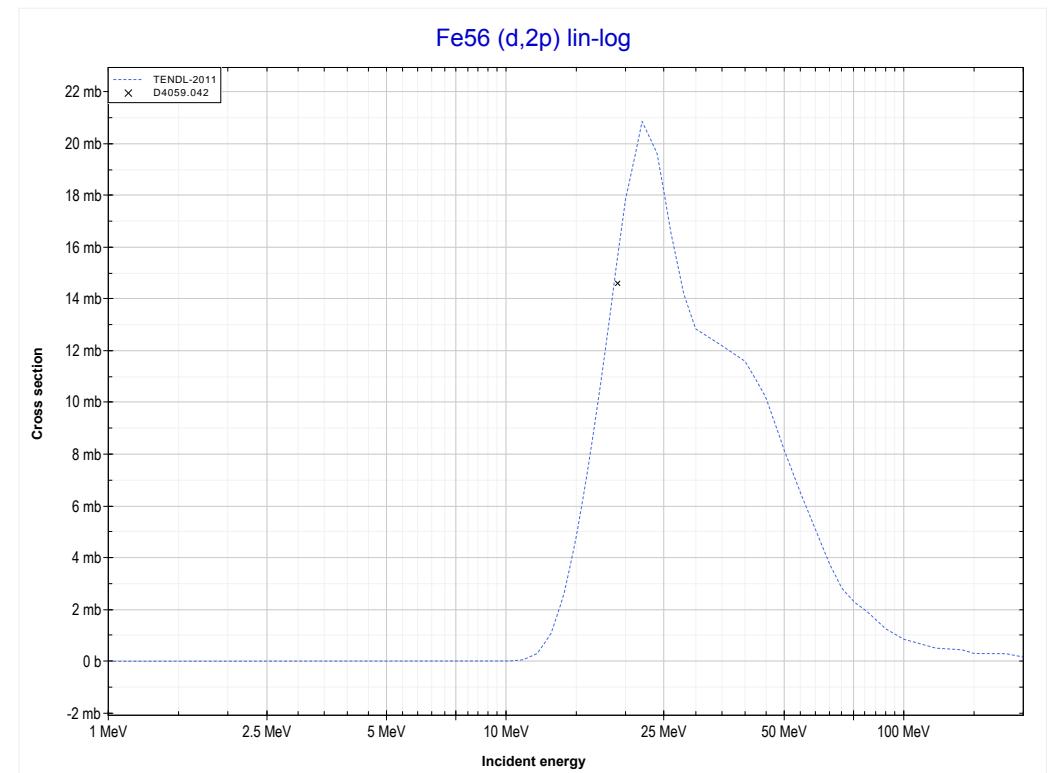
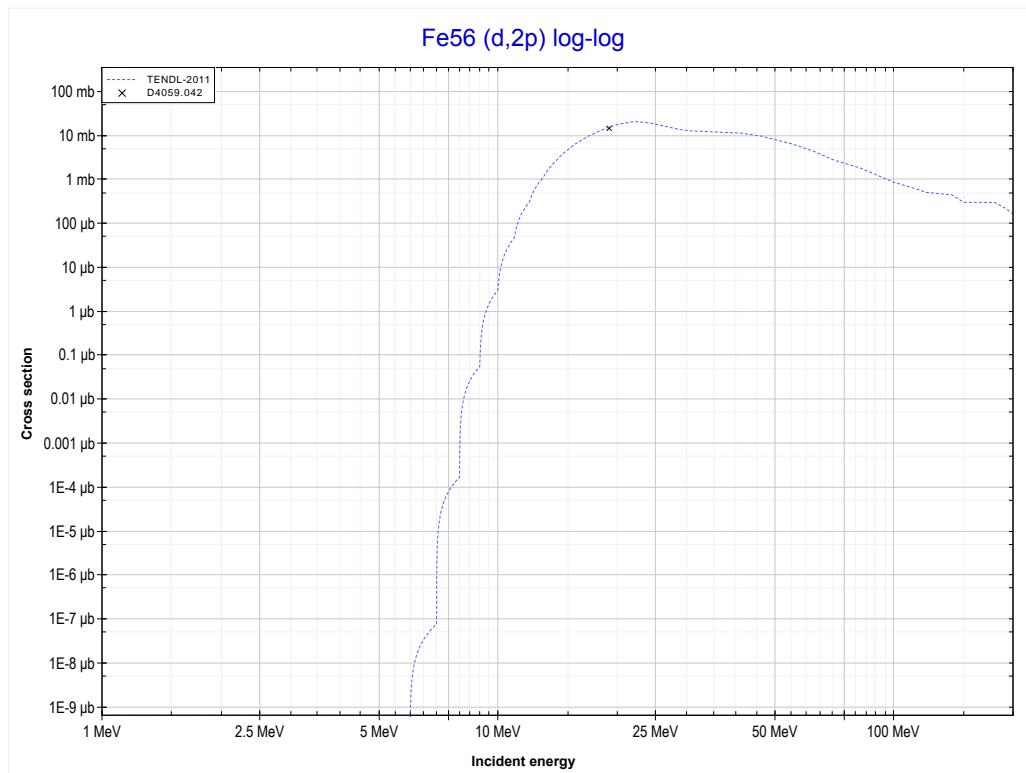
Reaction	Q-Value
Fe56(d,2n)Co56	-7572.91 keV

<< 26-Fe-54	26-Fe-56 MT107 (d,α) or MT5 (Mn54 production)	28-Ni-58 >>
<< MT16 ($d,2n$)		MT111 ($d,2p$) >>



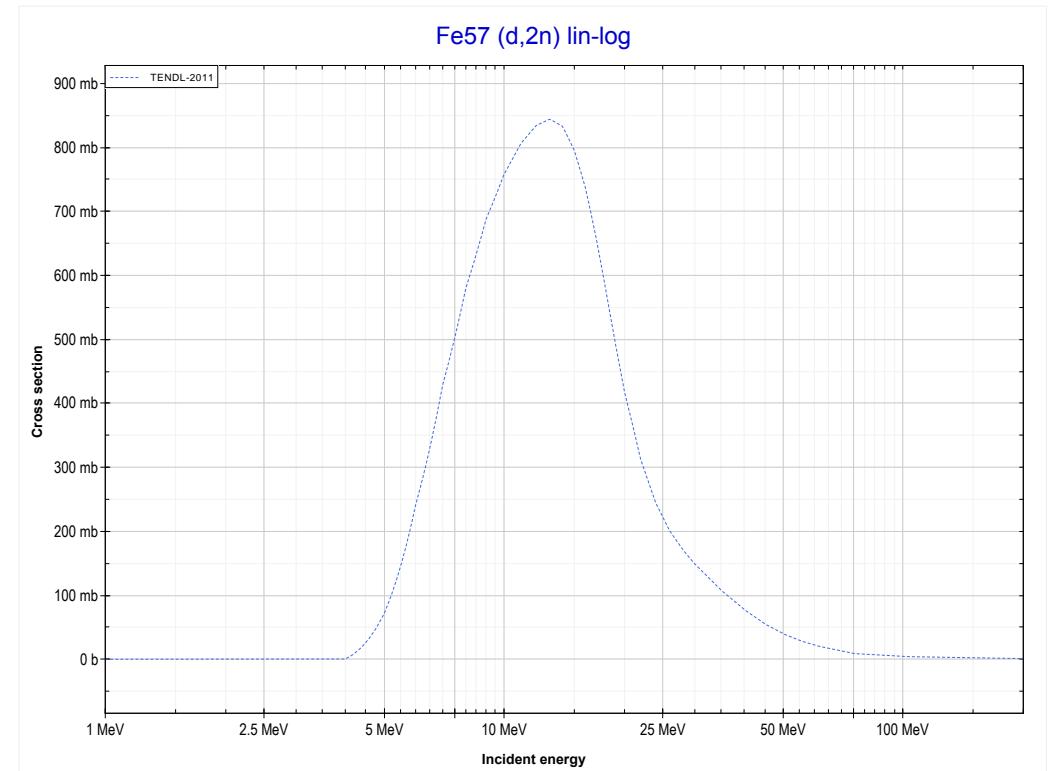
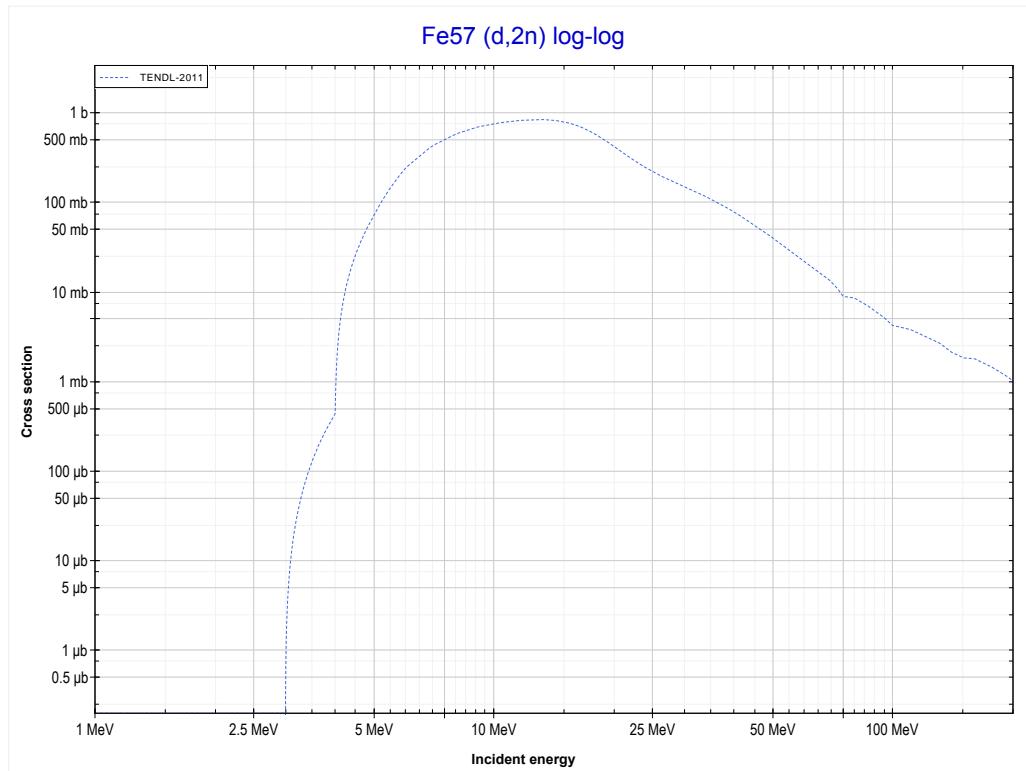
Reaction	Q-Value
Fe56(d,α)Mn54	5660.81 keV
Fe56($d,p+t$)Mn54	-14153.05 keV
Fe56($d,n+He3$)Mn54	-14916.81 keV
Fe56($d,2d$)Mn54	-18185.72 keV
Fe56($d,n+p+d$)Mn54	-20410.29 keV
Fe56($d,2n+2p$)Mn54	-22634.85 keV

<< 24-Cr-52	26-Fe-56	>> 27-Co-59
<< MT107 (d,α)	MT111 ($d,2p$) or MT5 (Mn56 production)	>> MT16 ($d,2n$)



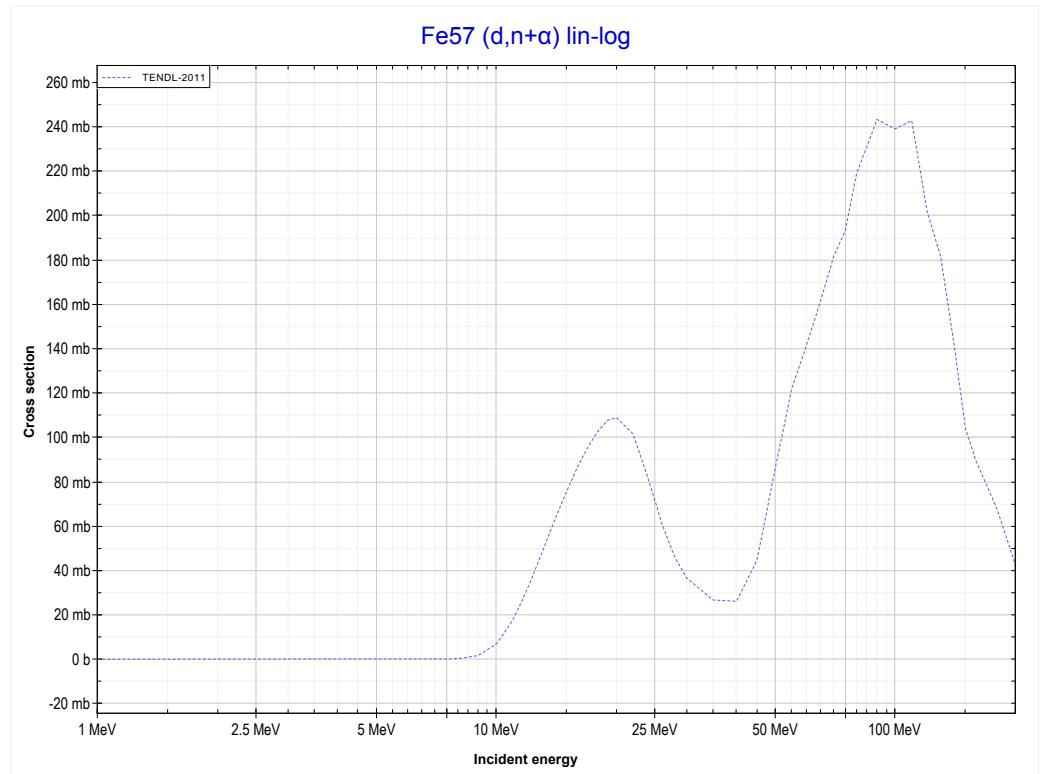
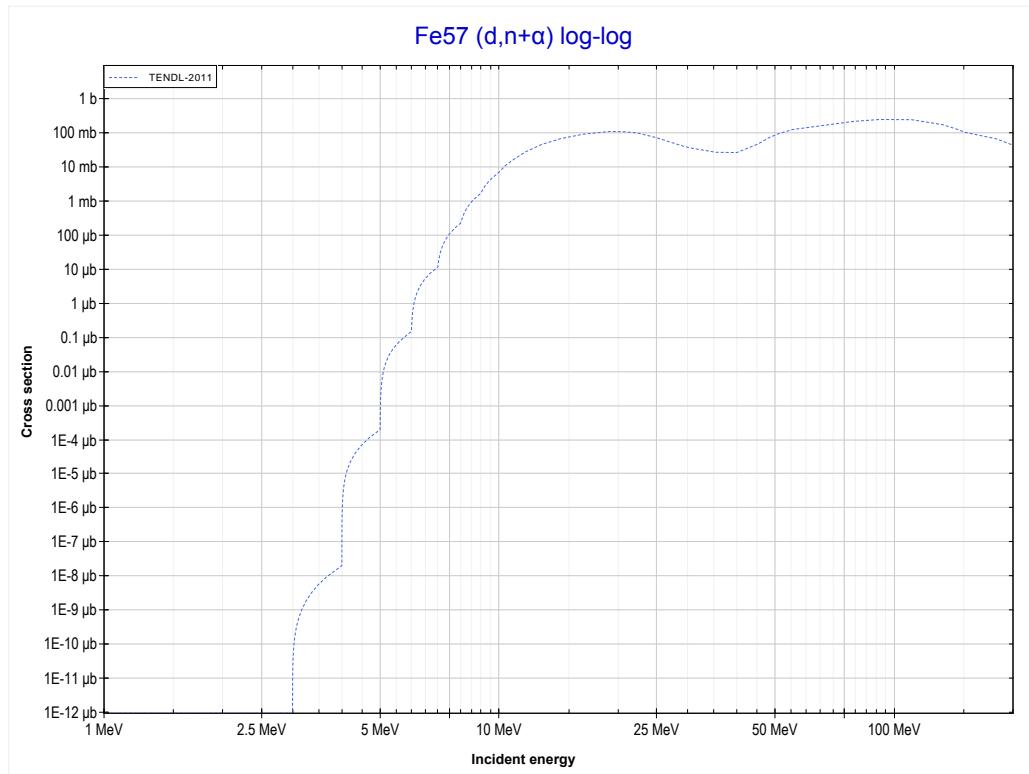
Reaction	Q-Value
Fe56($d,2p$)Mn56	-5137.92 keV

<< 26-Fe-56	26-Fe-57 MT16 (d,2n) or MT5 (Co57 production)	28-Ni-60 >>
<< MT111 (d,2p)		MT22 (d,n+α) >>



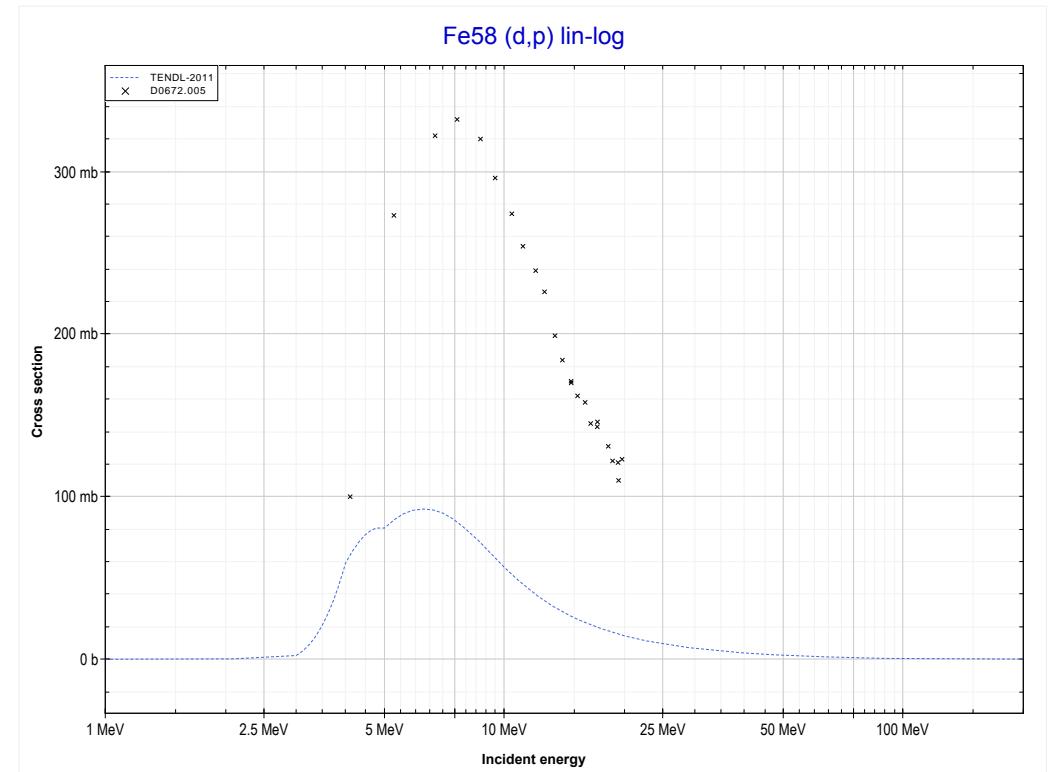
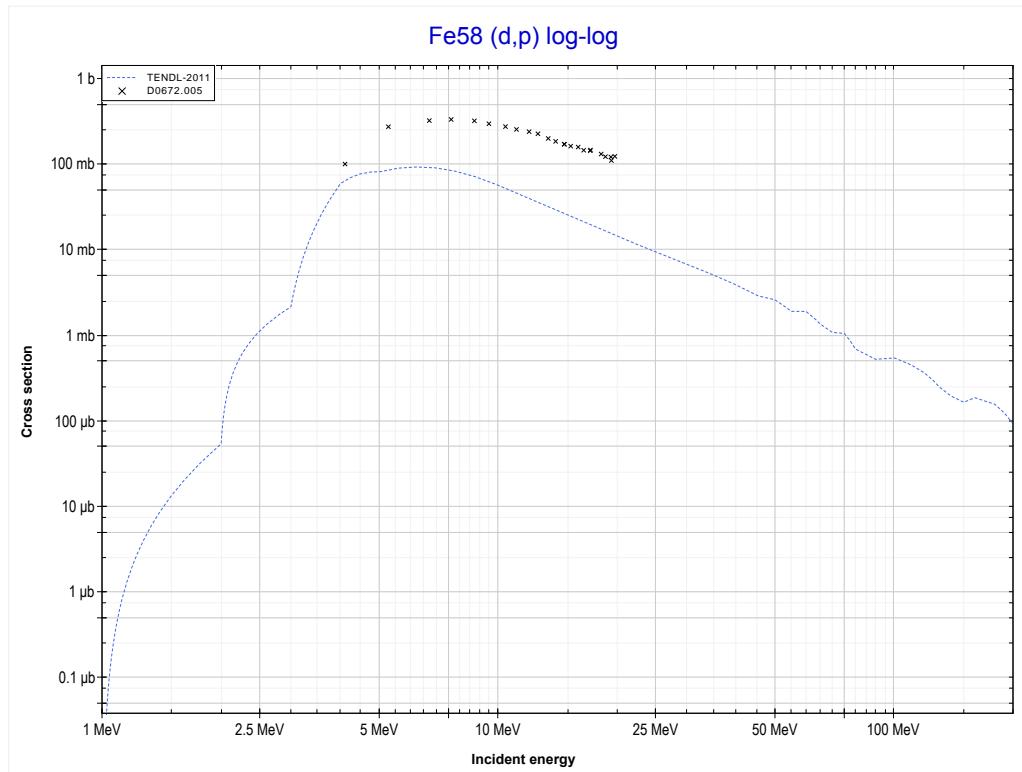
Reaction	Q-Value
Fe57(d,2n)Co57	-3842.81 keV

<< 22-Ti-50	26-Fe-57 MT22 (d,n+α) or MT5 (Mn54 production)	>> 28-Ni-58
<< MT16 (d,2n)		MT103 (d,p) >>



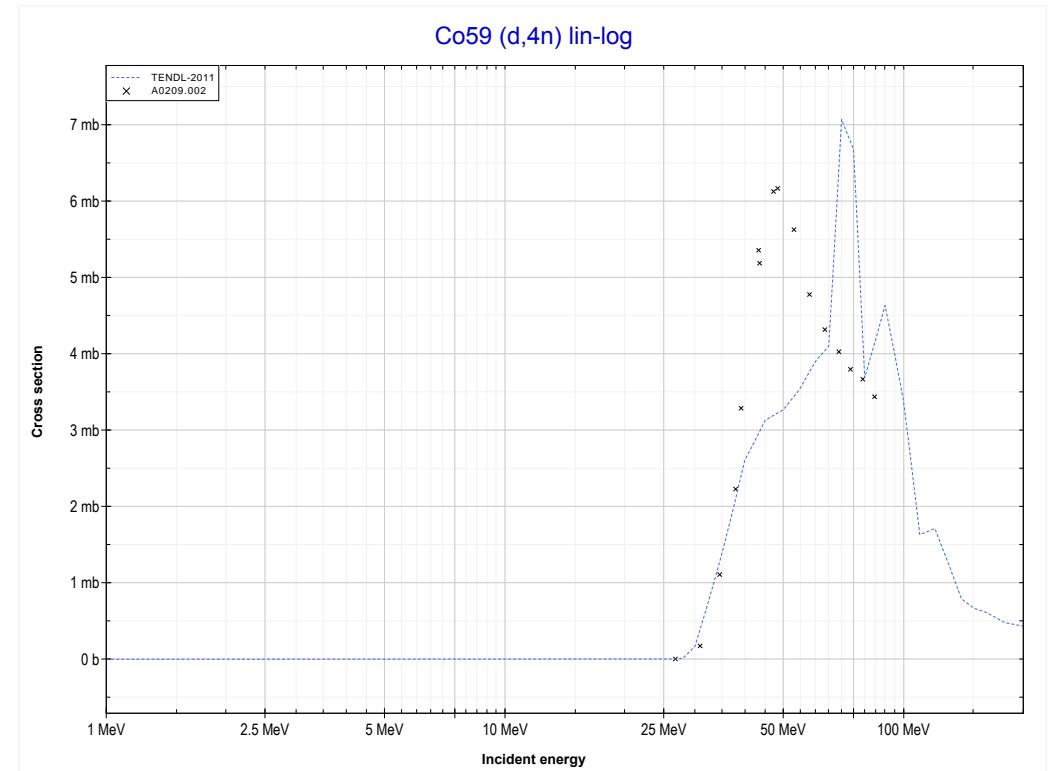
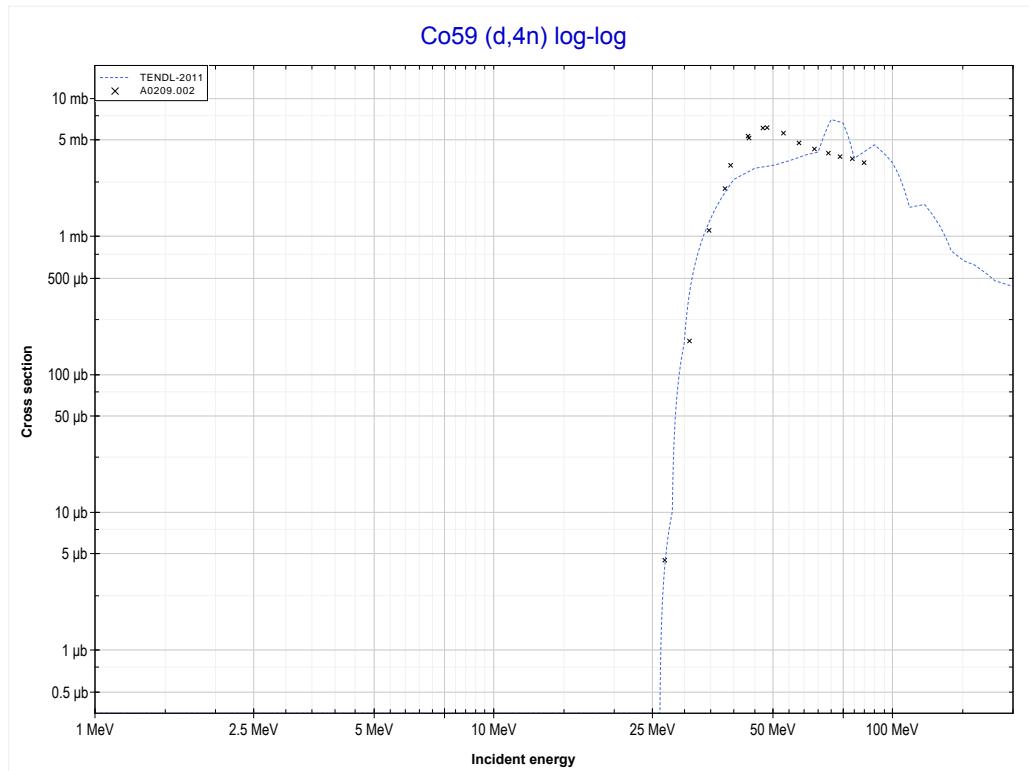
Reaction	Q-Value
Fe57(d,n+α)Mn54	-1985.21 keV
Fe57(d,d+t)Mn54	-19574.51 keV
Fe57(d,n+p+t)Mn54	-21799.07 keV
Fe57(d,2n+He3)Mn54	-22562.83 keV
Fe57(d,n+2d)Mn54	-25831.74 keV
Fe57(d,2n+p+d)Mn54	-28056.30 keV
Fe57(d,3n+2p)Mn54	-30280.87 keV

<< 25-Mn-55	26-Fe-58 MT103 (d,p) or MT5 (Fe59 production)	>> 27-Co-59
<< MT22 (d,n+α)		>> MT37 (d,4n) >>



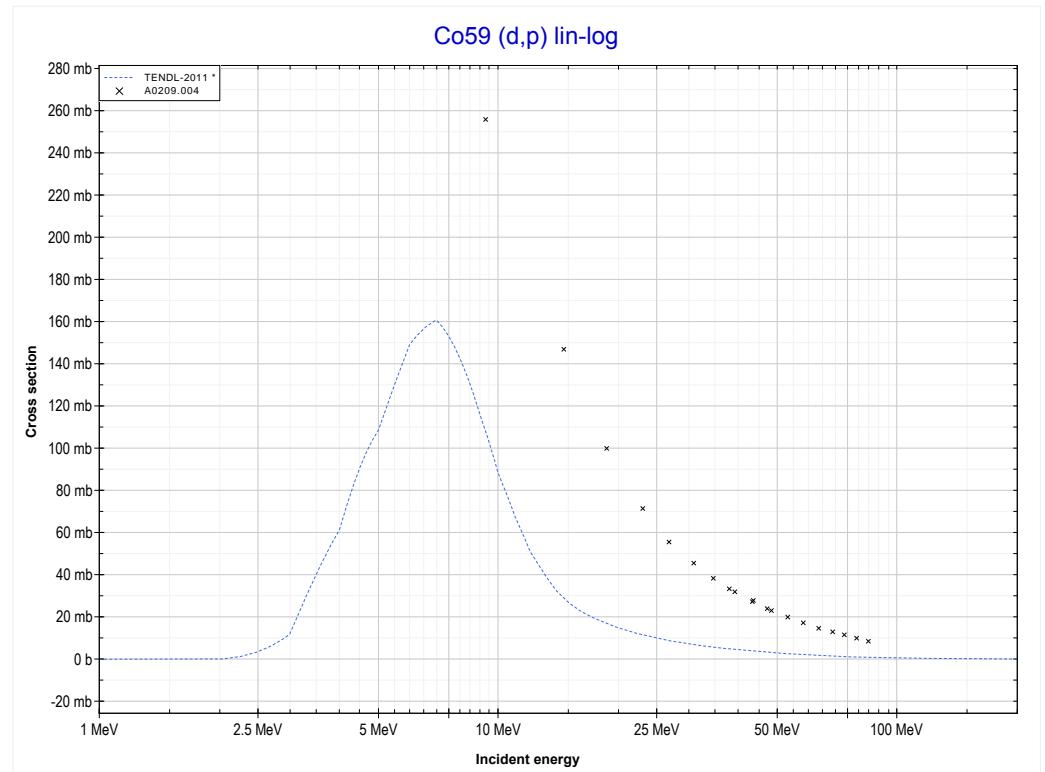
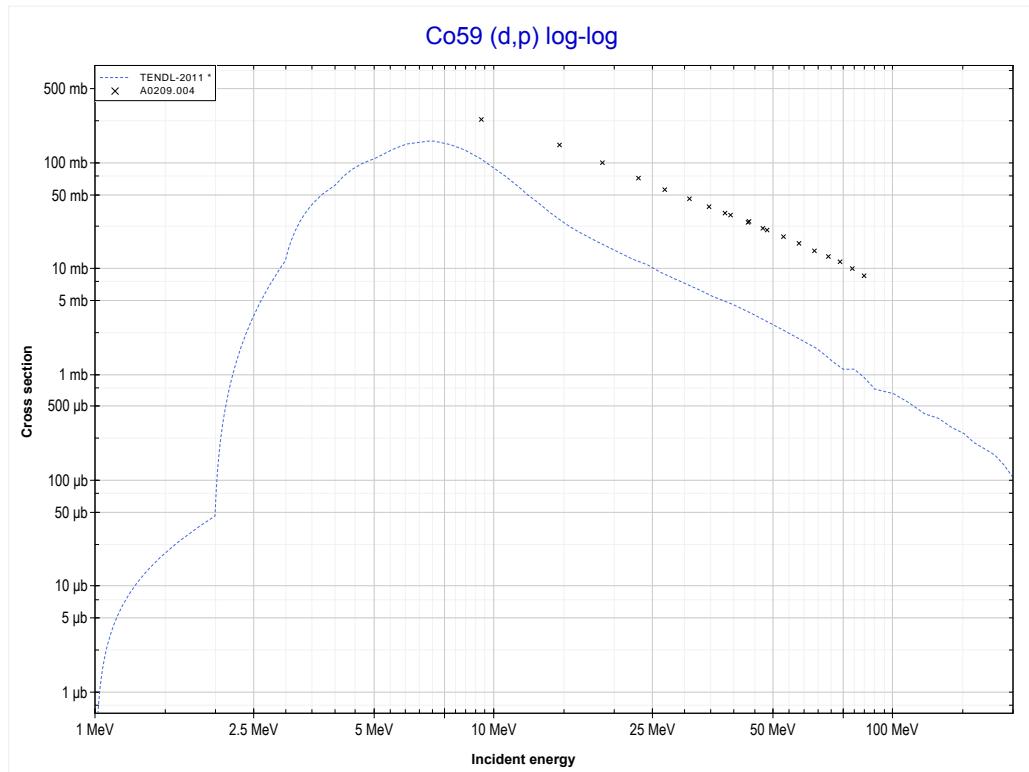
Reaction	Q-Value
Fe58(d,p)Fe59	4356.45 keV

<< 23-V-51	27-Co-59 MT37 (d,4n) or MT5 (Ni57 production)	33-As-75 >>
<< MT103 (d,p)		MT103 (d,p) >>



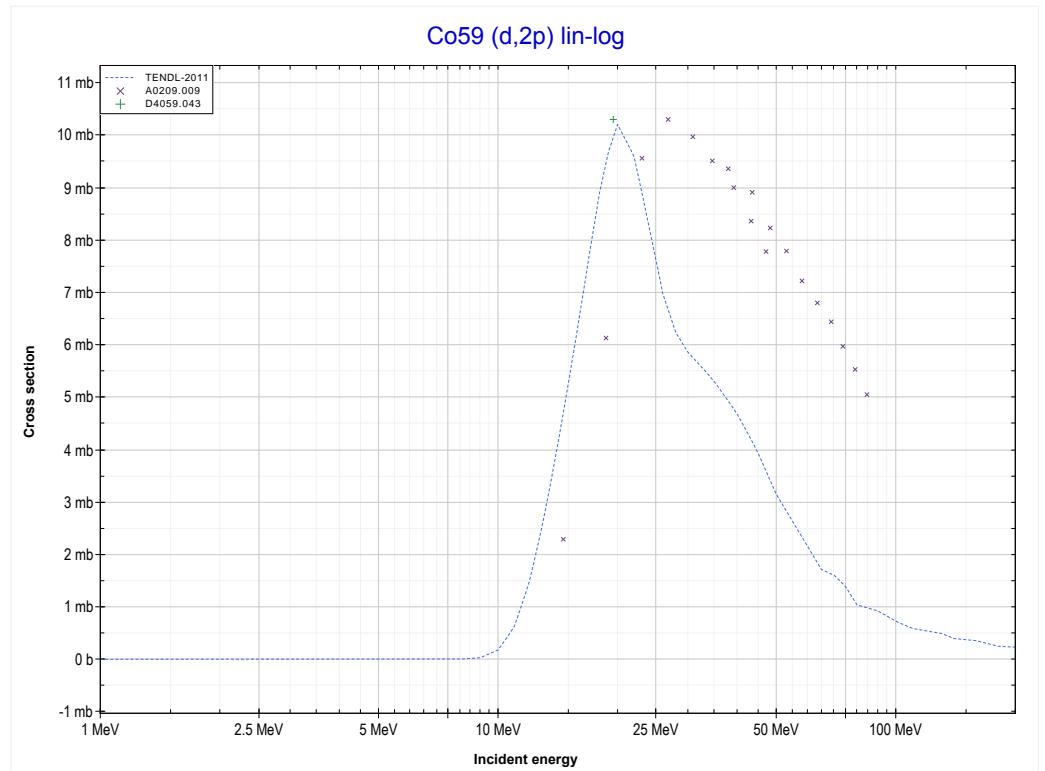
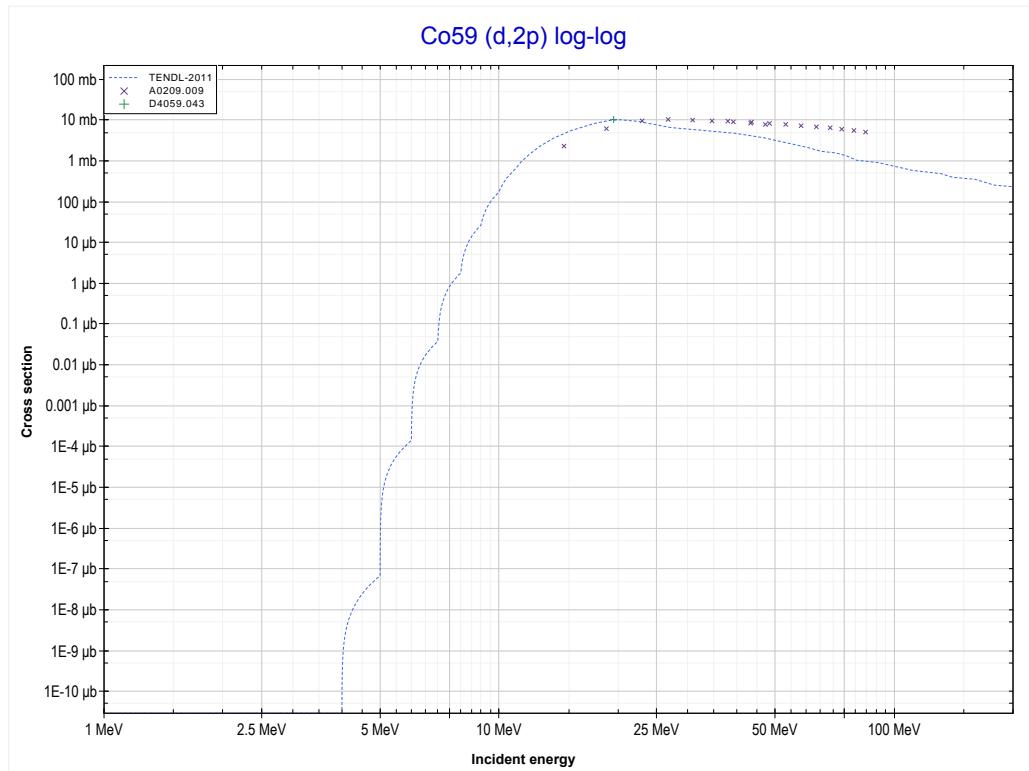
Reaction	Q-Value
Co59(d,4n)Ni57	-25295.95 keV

<< 26-Fe-58	27-Co-59 MT103 (d,p) or MT5 (Co60 production)	28-Ni-64 >>
<< MT37 (d,4n)		MT111 (d,2p) >>



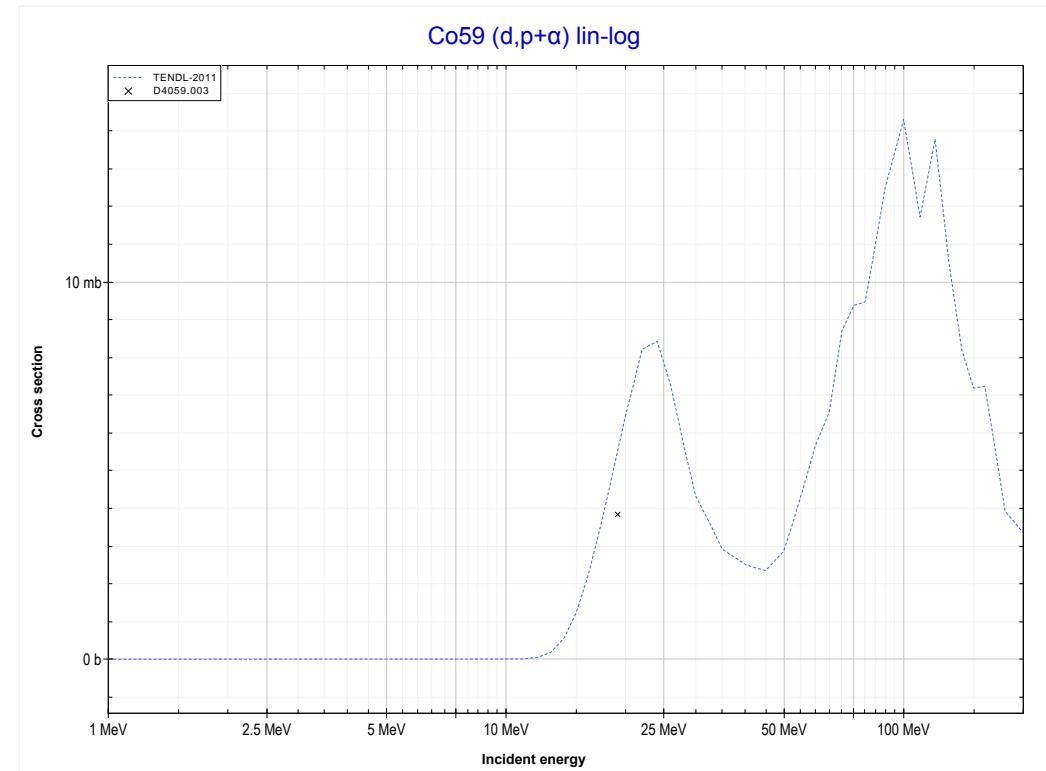
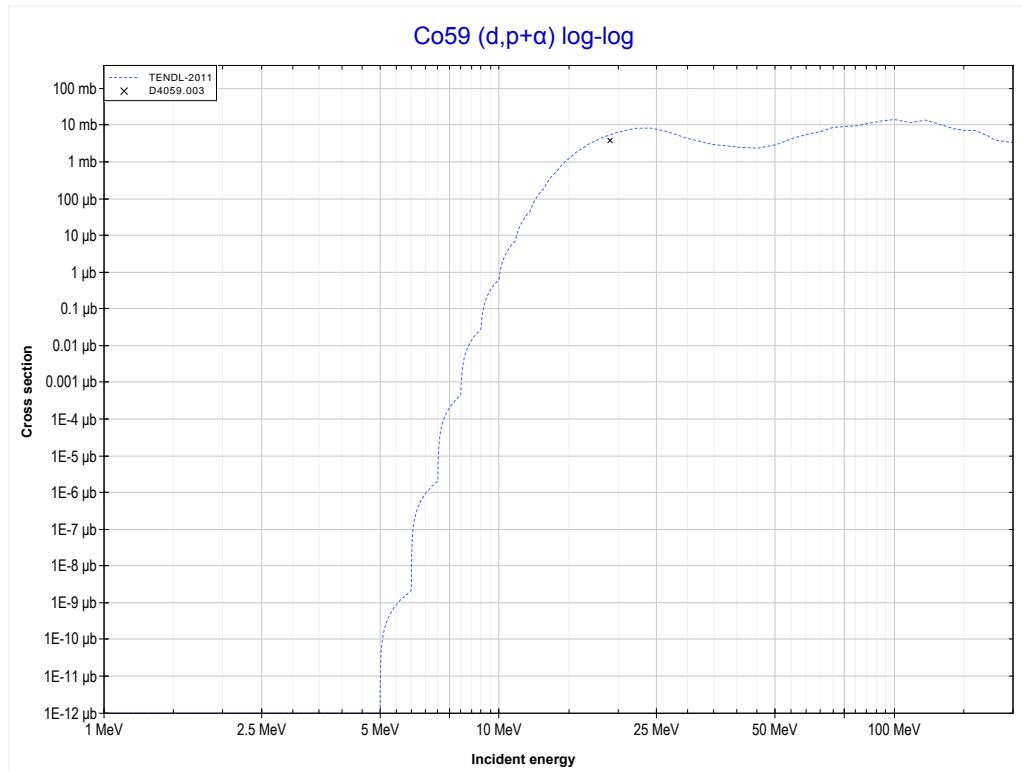
Reaction	Q-Value
Co59(d,p)Co60	5267.35 keV

<< 26-Fe-56	27-Co-59	28-Ni-58 >>
<< MT103 (d,p) >>	MT111 (d,2p) or MT5 (Fe59 production)	MT112 (d,p+α) >>



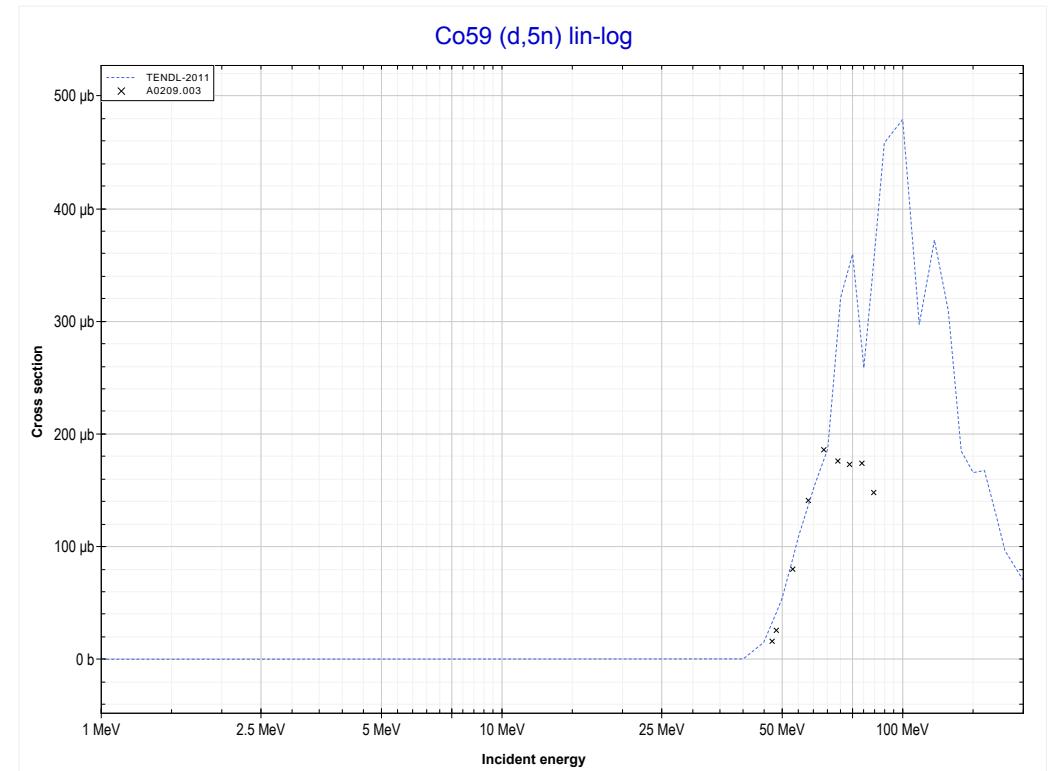
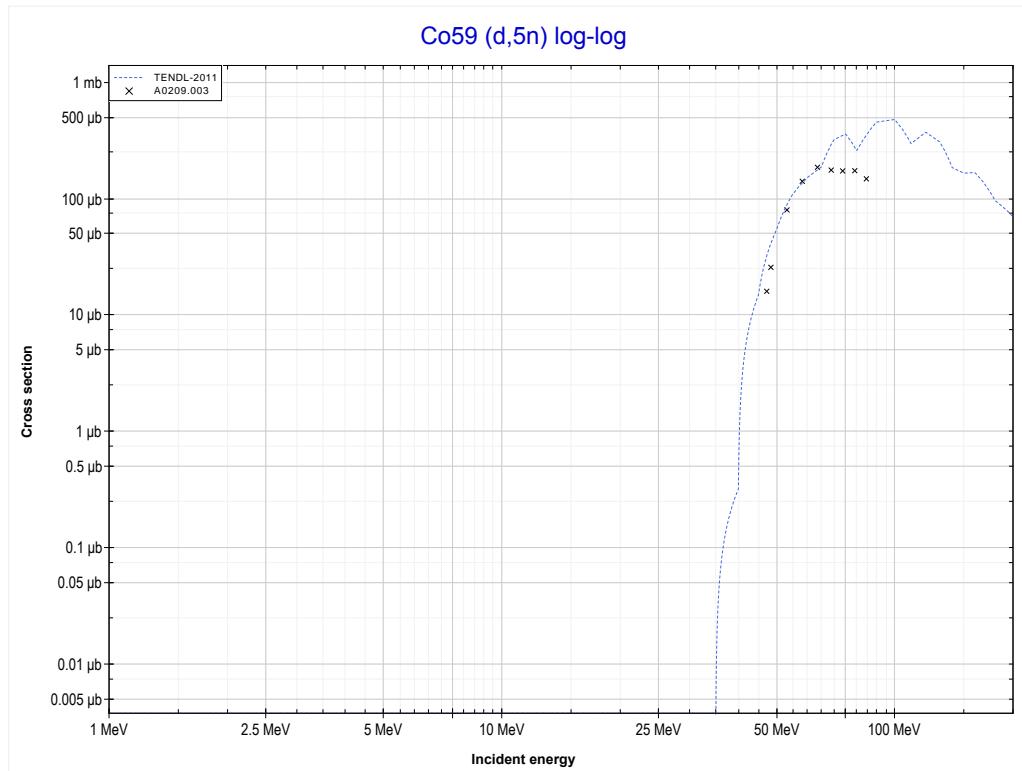
Reaction	Q-Value
Co59(d,2p)Fe59	-3007.52 keV

<< 17-CI-35	27-Co-59 MT112 (d,p+α) or MT5 (Mn56 production)	>> 28-Ni-58
<< MT111 (d,2p)		>> MT152 (d,5n)



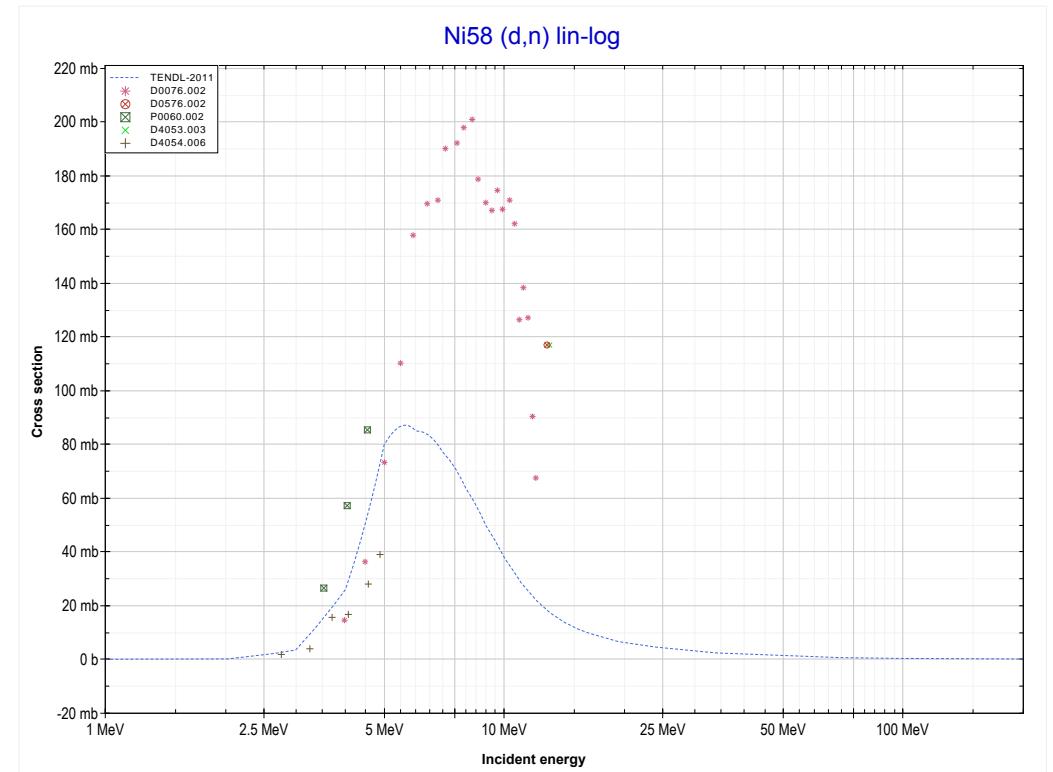
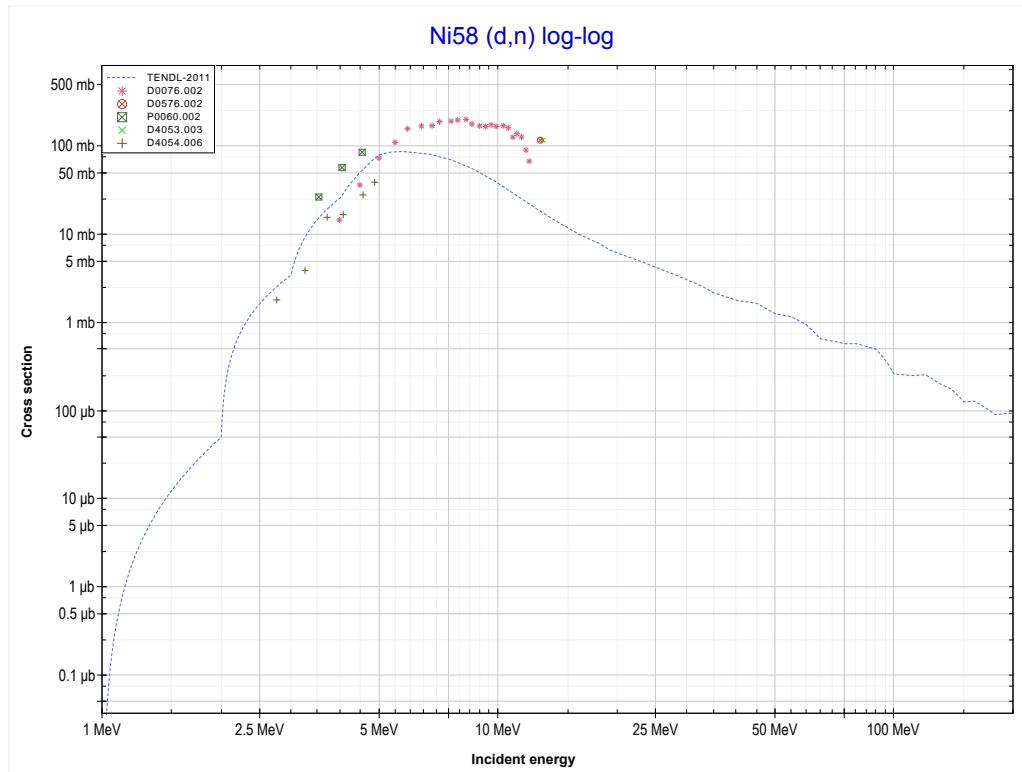
Reaction	Q-Value
Co59(d,p+α)Mn56	-1896.86 keV
Co59(d,d+He3)Mn56	-20249.91 keV
Co59(d,2p+t)Mn56	-21710.73 keV
Co59(d,n+p+He3)Mn56	-22474.48 keV
Co59(d,p+2d)Mn56	-25743.39 keV
Co59(d,n+2p+d)Mn56	-27967.96 keV
Co59(d,2n+3p)Mn56	-30192.52 keV

<< 23-V-51	27-Co-59 MT152 (d,5n) or MT5 (Ni56 production)	>> 33-As-75
<< MT112 (d,p+ α)		MT4 (d,n) >>



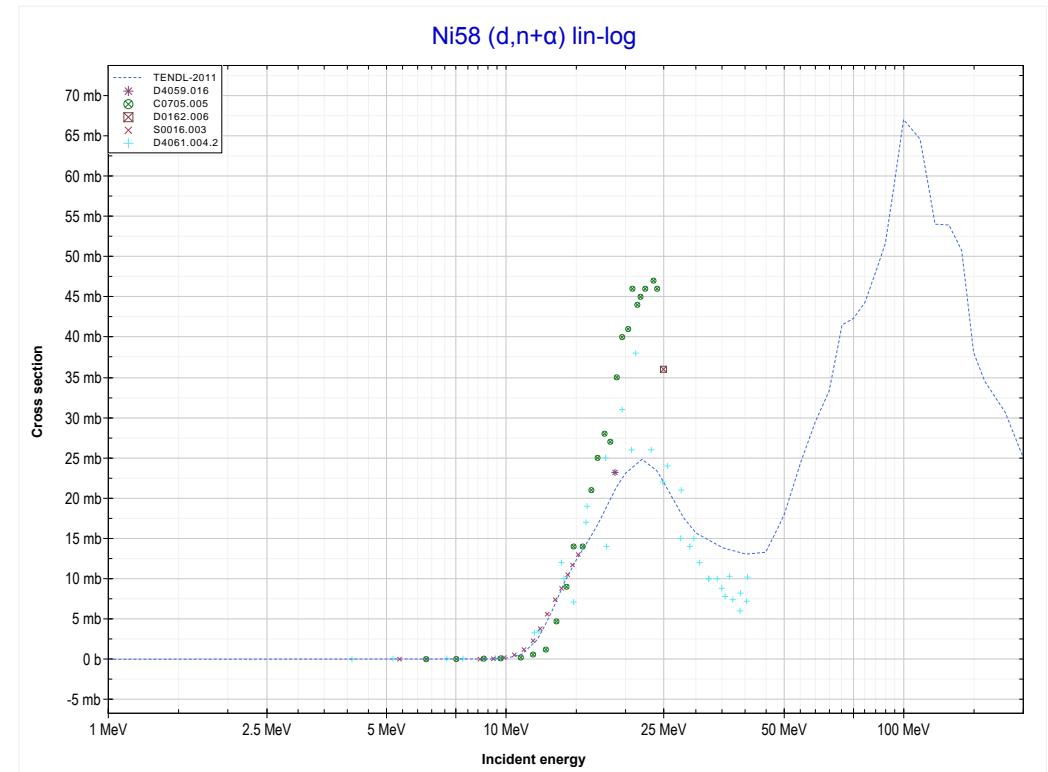
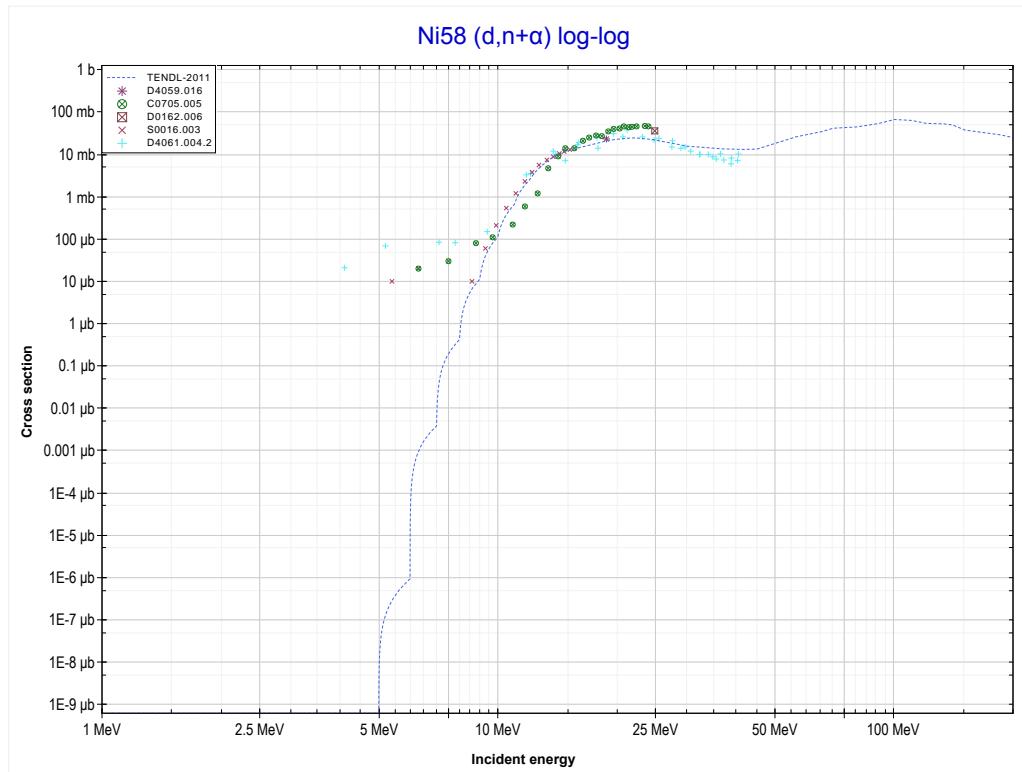
Reaction	Q-Value
Co59(d,5n)Ni56	-35545.26 keV

<< 26-Fe-56	28-Ni-58 MT4 (d,n) or MT5 (Cu59 production)	28-Ni-60 >>
<< MT152 (d,5n)		MT22 (d,n+α) >>

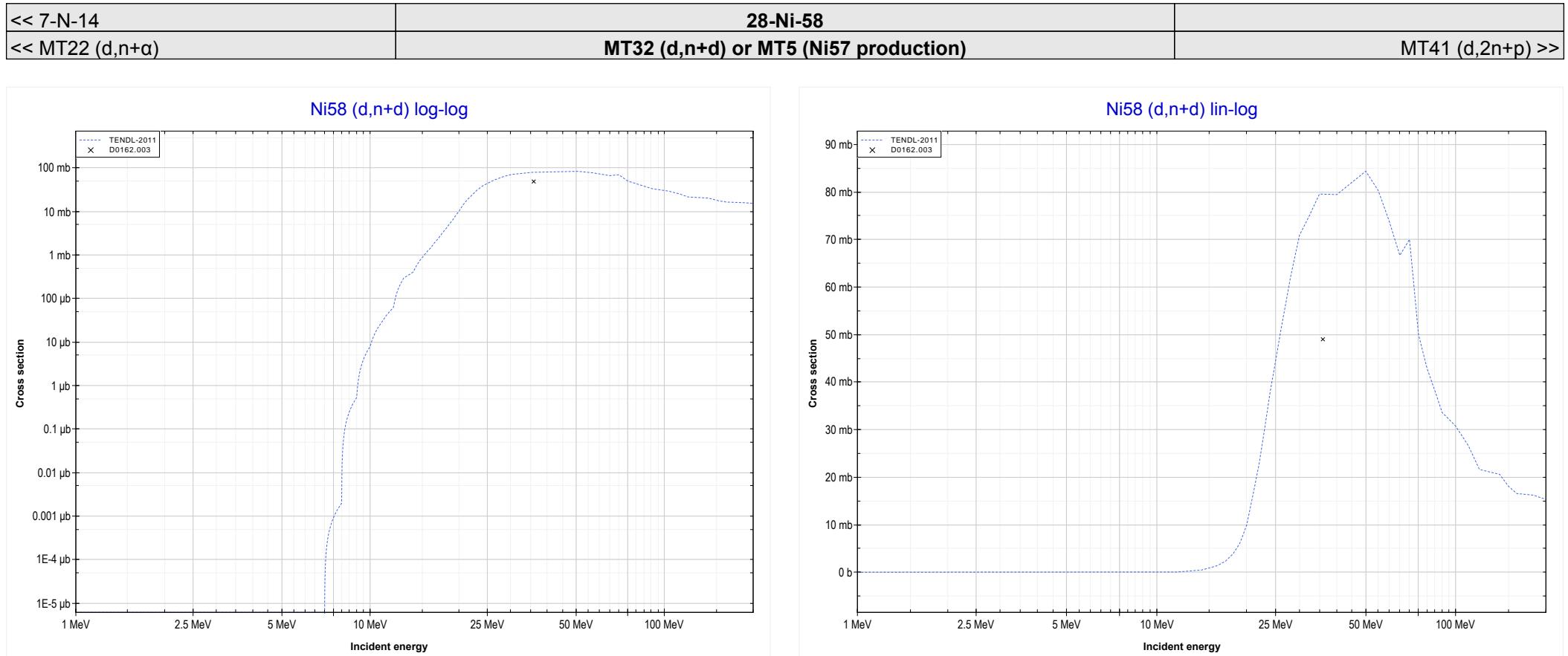


Reaction	Q-Value
Ni58(d,n)Cu59	1193.90 keV

<< 26-Fe-57	28-Ni-58	>> 30-Zn-64
<< MT4 (d,n) >>	MT22 (d,n+α) or MT5 (Co55 production)	MT32 (d,n+d) >>

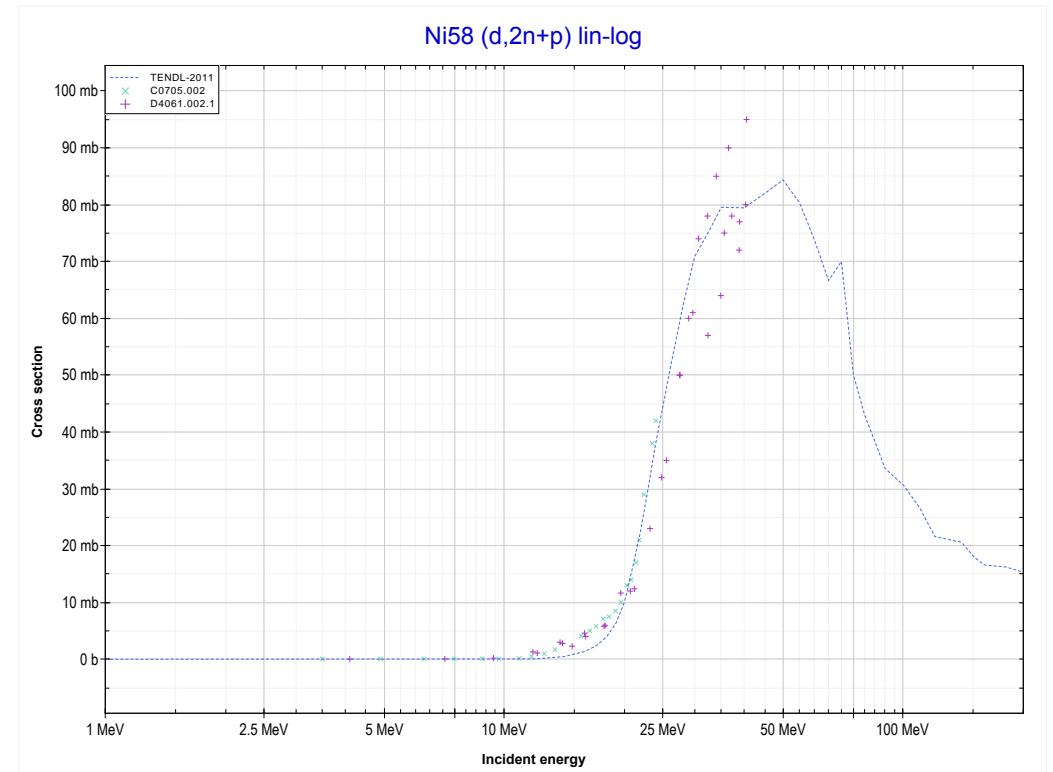
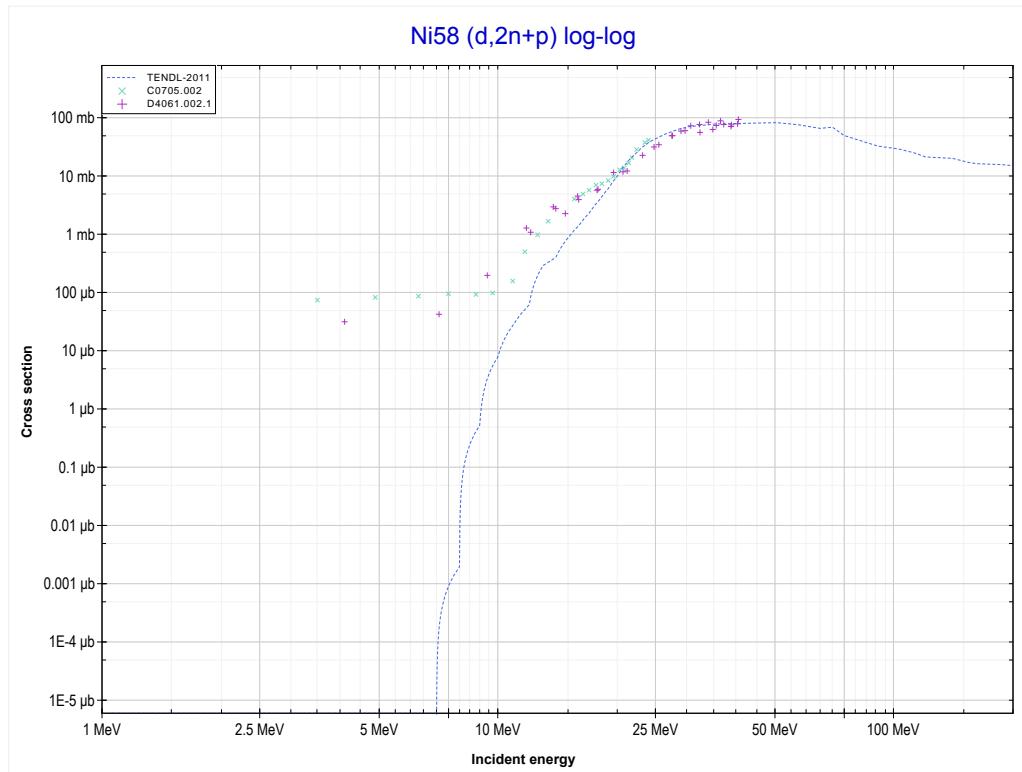


Reaction	Q-Value
Ni58(d,n+α)Co55	-3560.61 keV
Ni58(d,d+t)Co55	-21149.91 keV
Ni58(d,n+p+t)Co55	-23374.47 keV
Ni58(d,2n+He3)Co55	-24138.23 keV
Ni58(d,n+2d)Co55	-27407.14 keV
Ni58(d,2n+p+d)Co55	-29631.70 keV
Ni58(d,3n+2p)Co55	-31856.27 keV

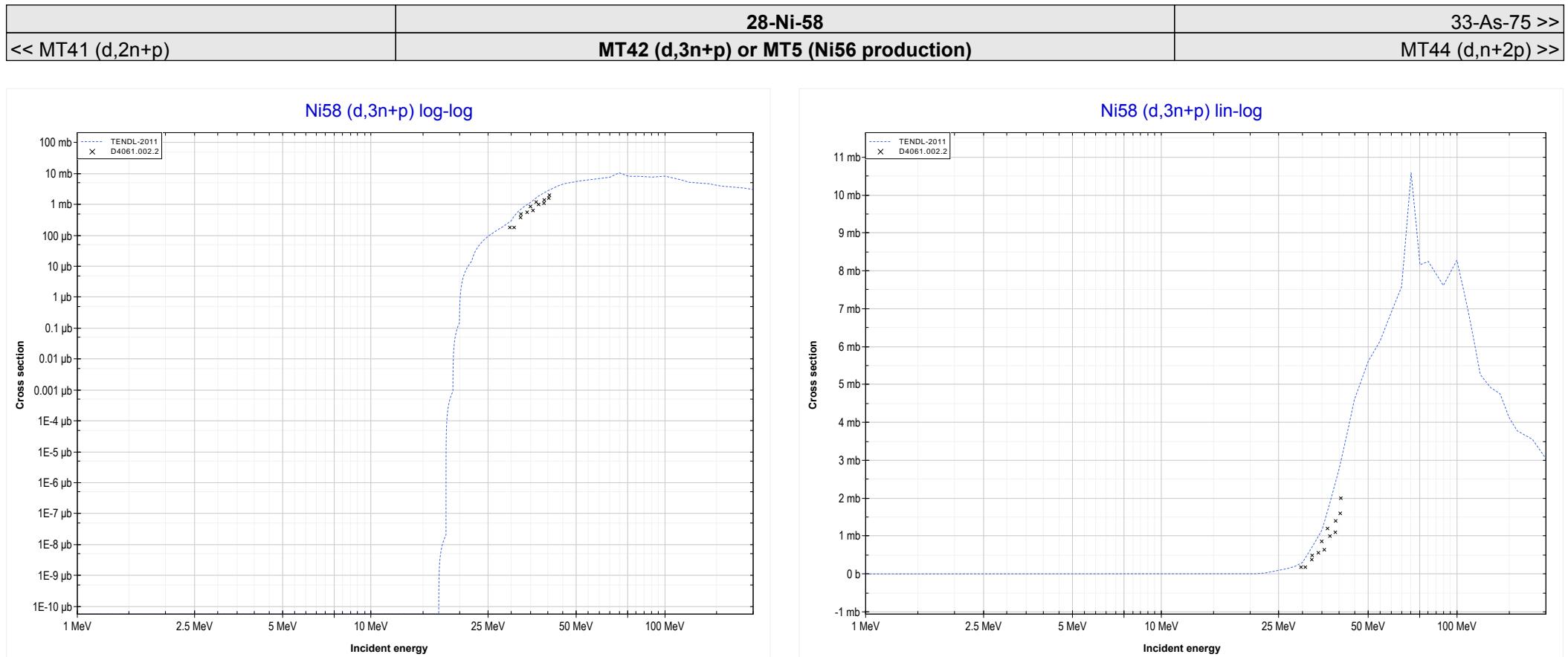


Reaction	Q-Value
Ni58(d,t)Ni57	-5959.78 keV
Ni58(d,n+d)Ni57	-12217.02 keV
Ni58(d,2n+p)Ni57	-14441.58 keV

<< 6-C-12	28-Ni-58 MT41 (d,2n+p) or MT5 (Ni57 production)	>> 33-As-75
<< MT32 (d,n+d)		>> MT42 (d,3n+p) >>

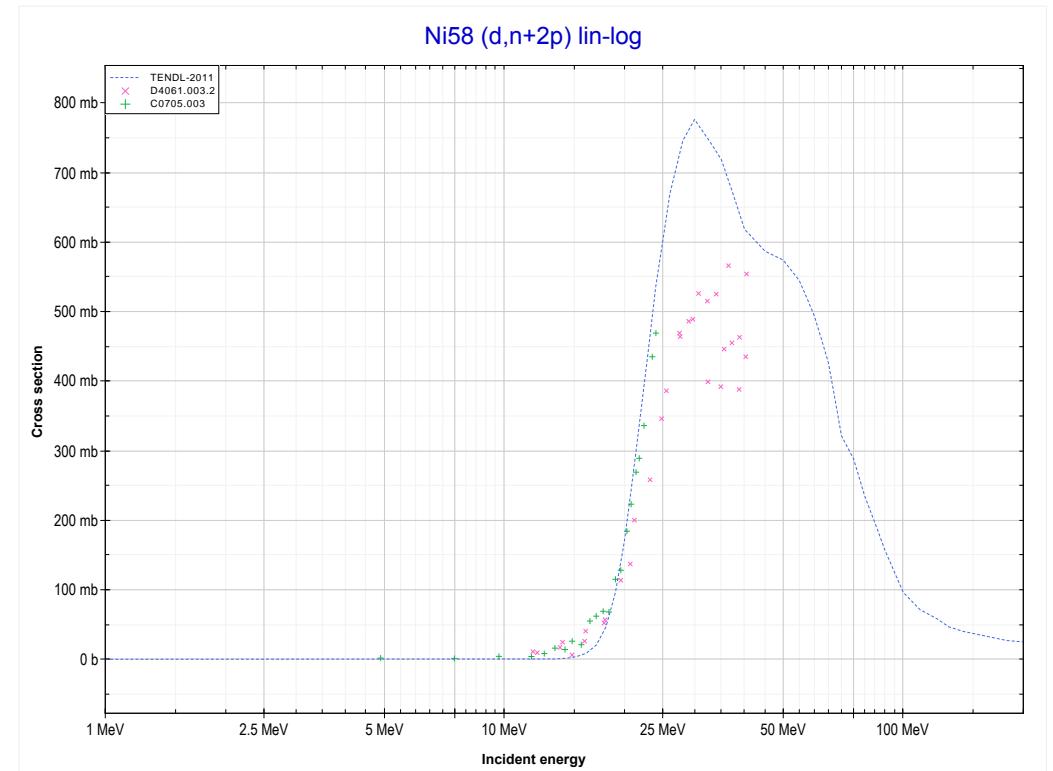
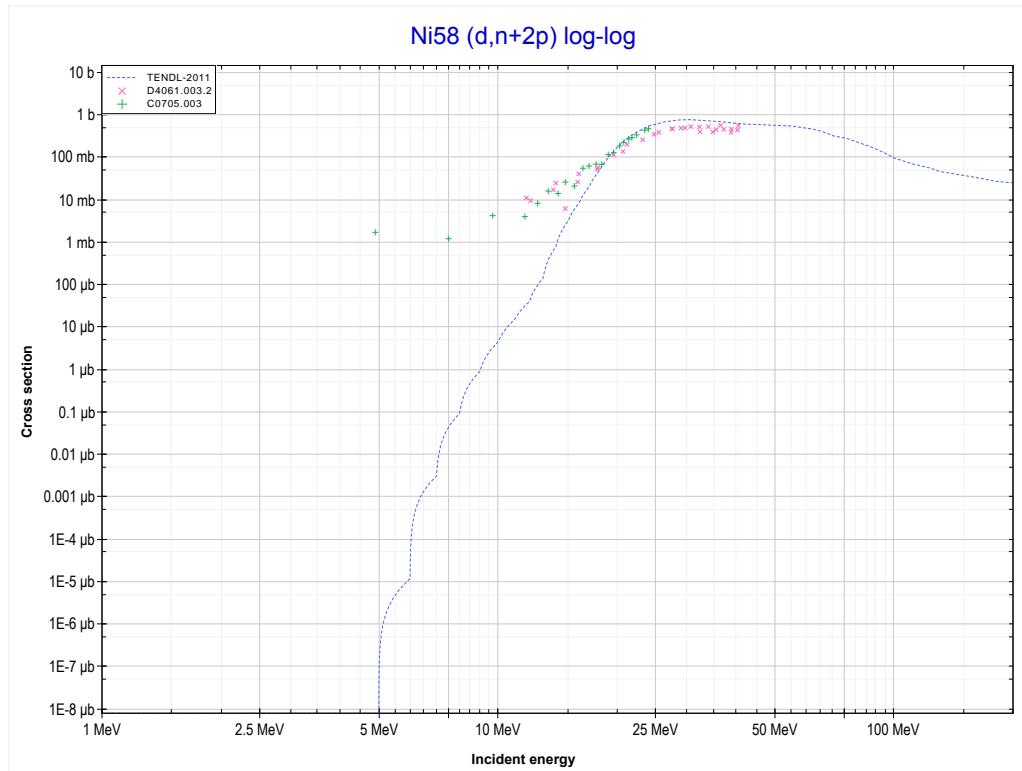


Reaction	Q-Value
Ni58(d,t)Ni57	-5959.78 keV
Ni58(d,n+d)Ni57	-12217.02 keV
Ni58(d,2n+p)Ni57	-14441.58 keV



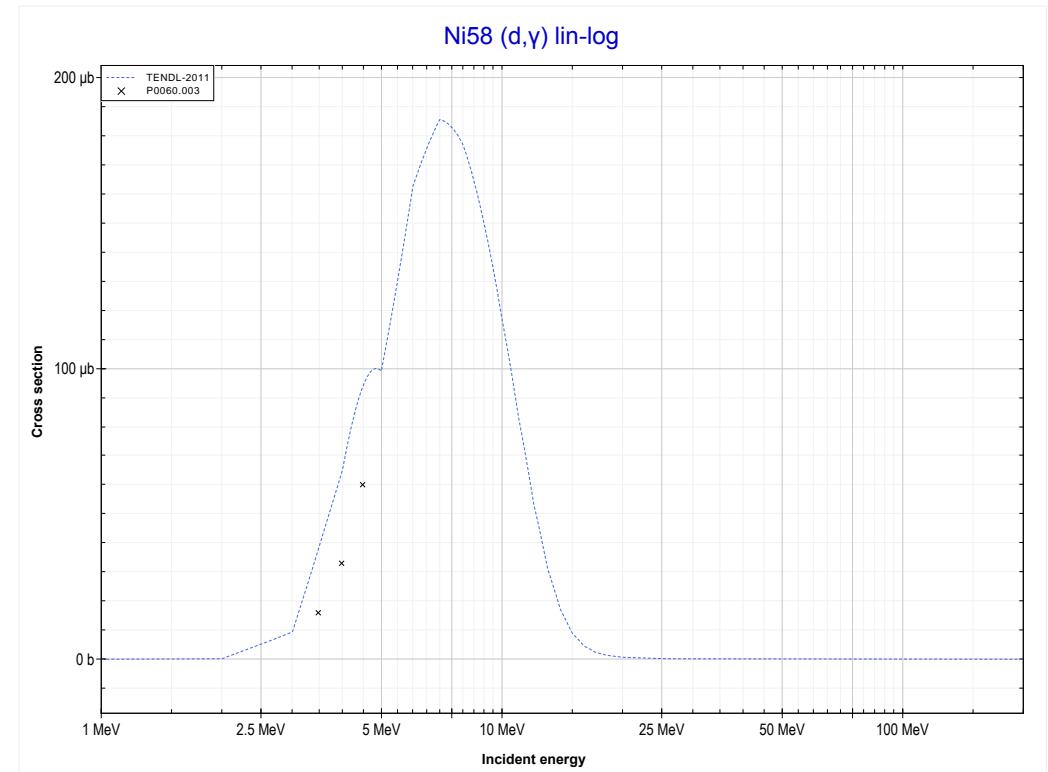
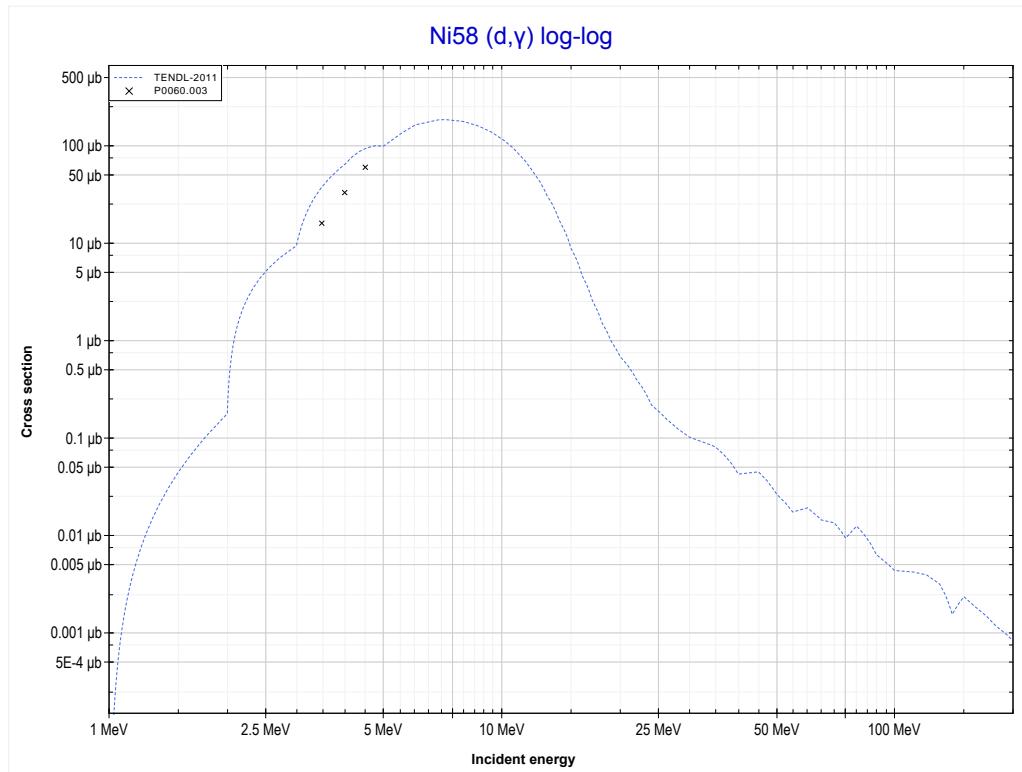
Reaction	Q-Value
Ni58(d,n+t)Ni56	-16209.10 keV
Ni58(d,2n+d)Ni56	-22466.33 keV
Ni58(d,3n+p)Ni56	-24690.90 keV

<< 22-Ti-48	28-Ni-58	58-Ce-142 >>
<< MT42 (d,3n+p)	MT44 (d,n+2p) or MT5 (Co57 production)	MT102 (d,y) >>



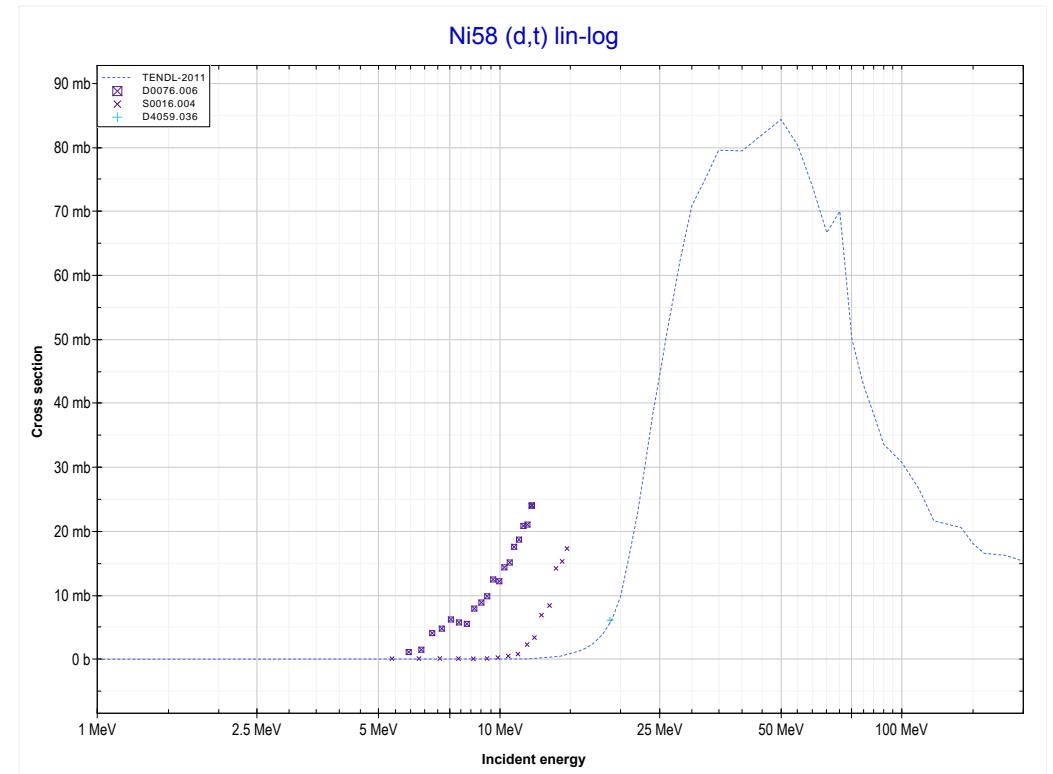
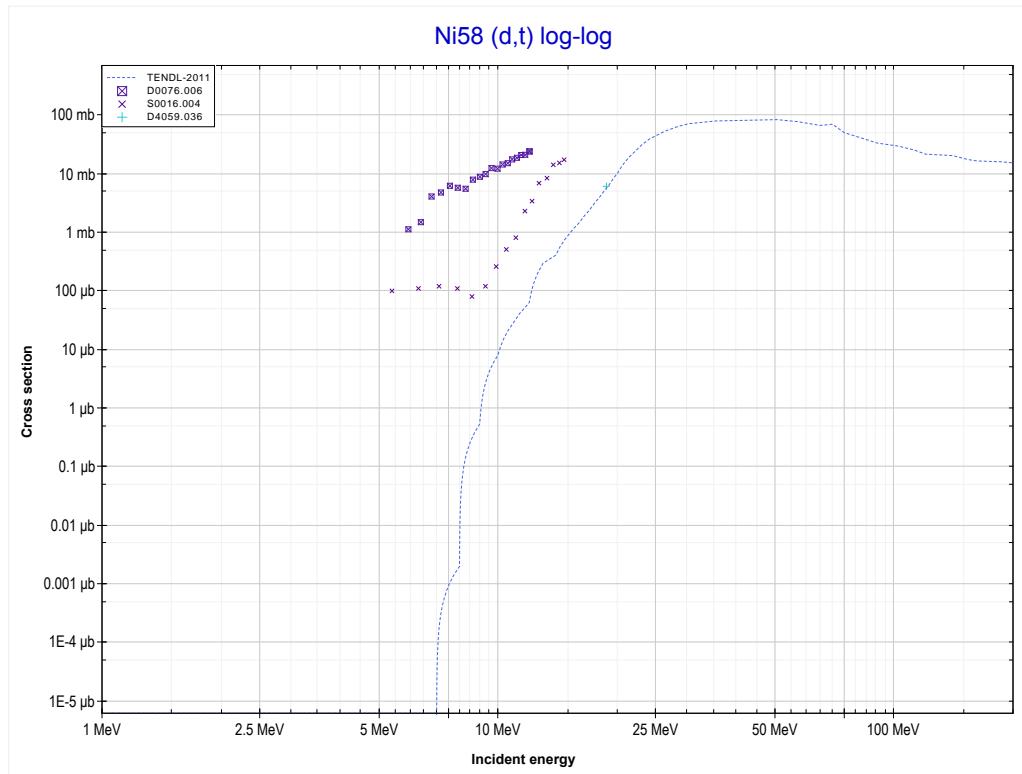
Reaction	Q-Value
Ni58(d,He3)Co57	-2678.99 keV
Ni58(d,p+d)Co57	-8172.47 keV
Ni58(d,n+2p)Co57	-10397.04 keV

<< 24-Cr-54	28-Ni-58 MT102 (d, γ) or MT5 (Cu60 production)	>> 56-Ba-138
<< MT44 (d,n+2p)		MT105 (d,t) >>



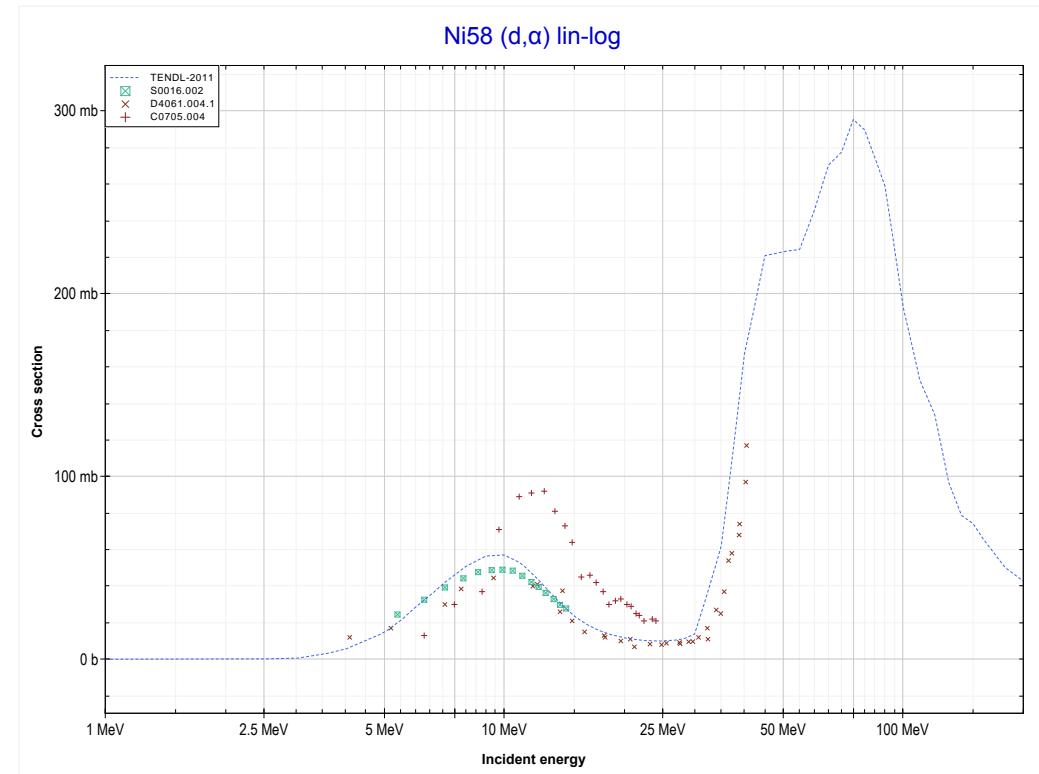
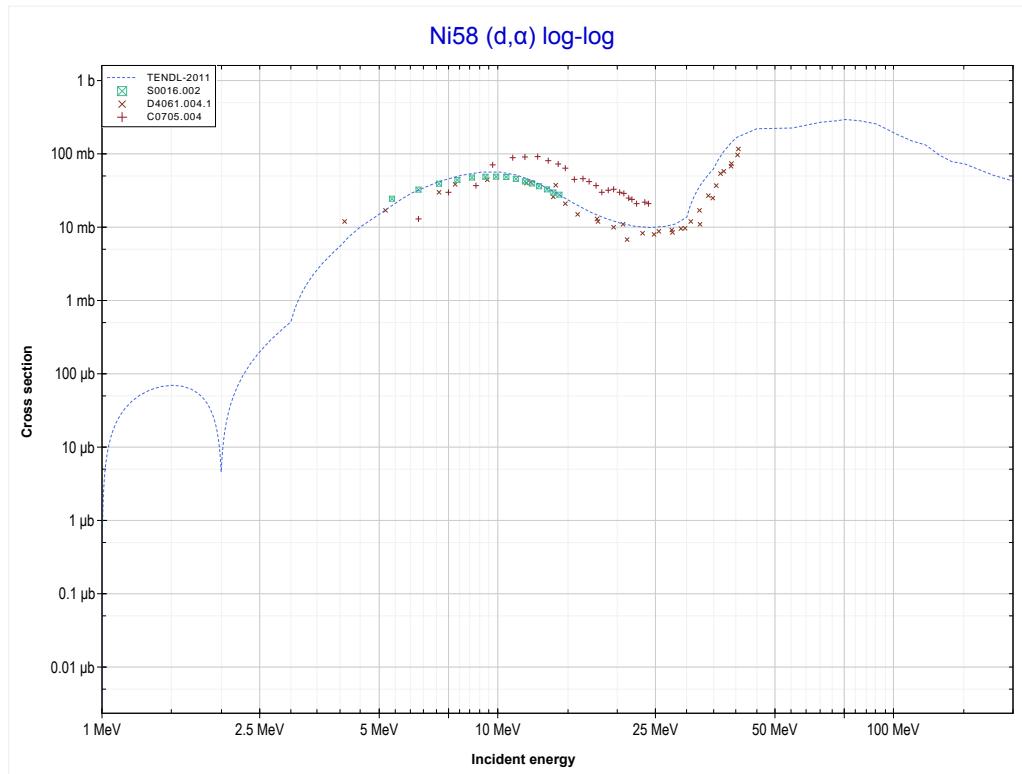
Reaction	Q-Value
Ni58(d, γ)Cu60	11252.12 keV

<< 26-Fe-54	28-Ni-58 MT105 (d,t) or MT5 (Ni57 production)	>> 33-As-75
<< MT102 (d, γ)		>> MT107 (d, α)



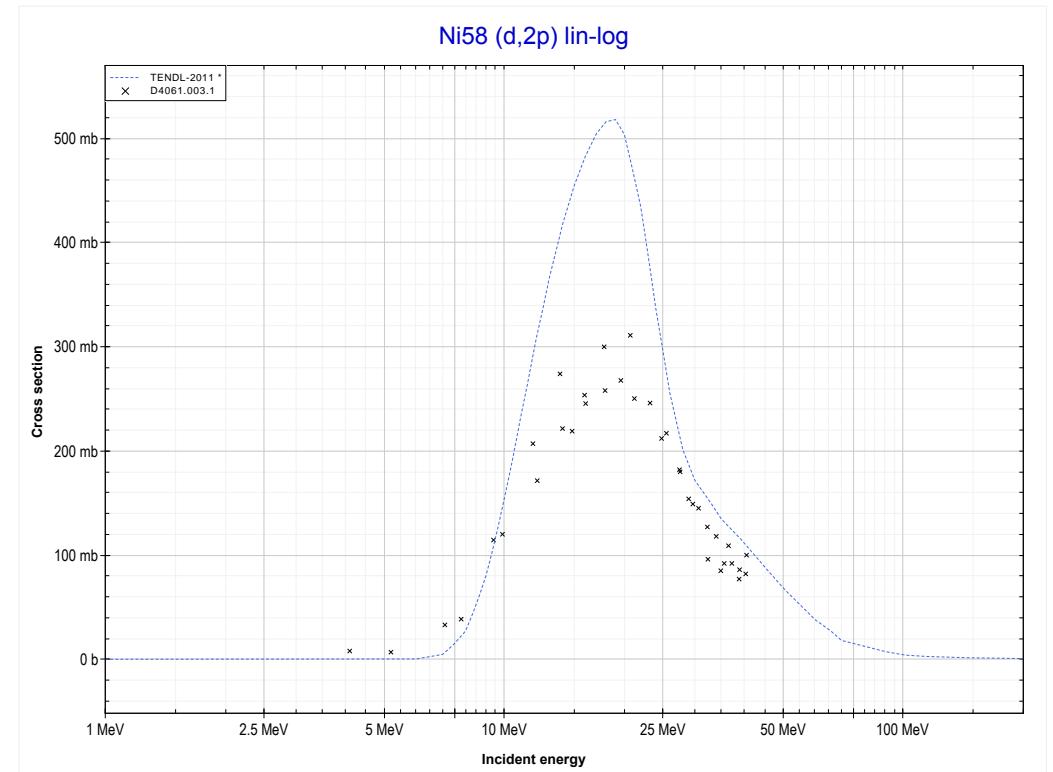
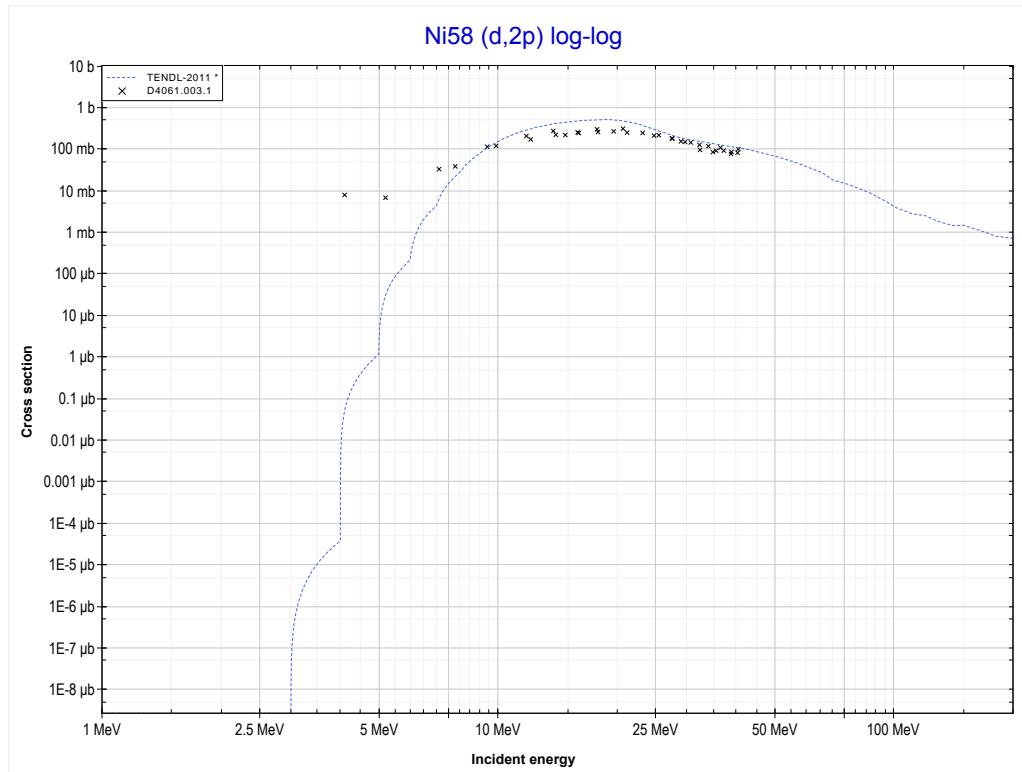
Reaction	Q-Value
Ni58(d,t)Ni57	-5959.78 keV
Ni58(d,n+d)Ni57	-12217.02 keV
Ni58(d,2n+p)Ni57	-14441.58 keV

<< 26-Fe-56	28-Ni-58 MT107 (d,α) or MT5 (Co56 production)	>> 30-Zn-66
<< MT105 (d,t)		>> MT111 ($d,2p$) >>



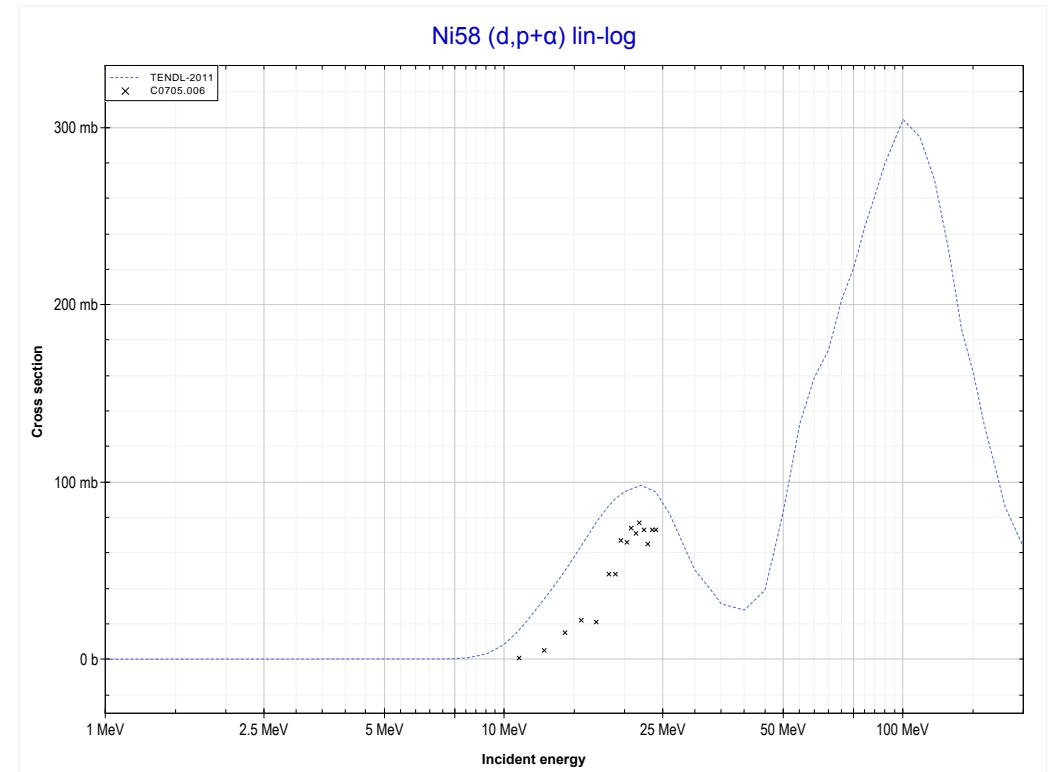
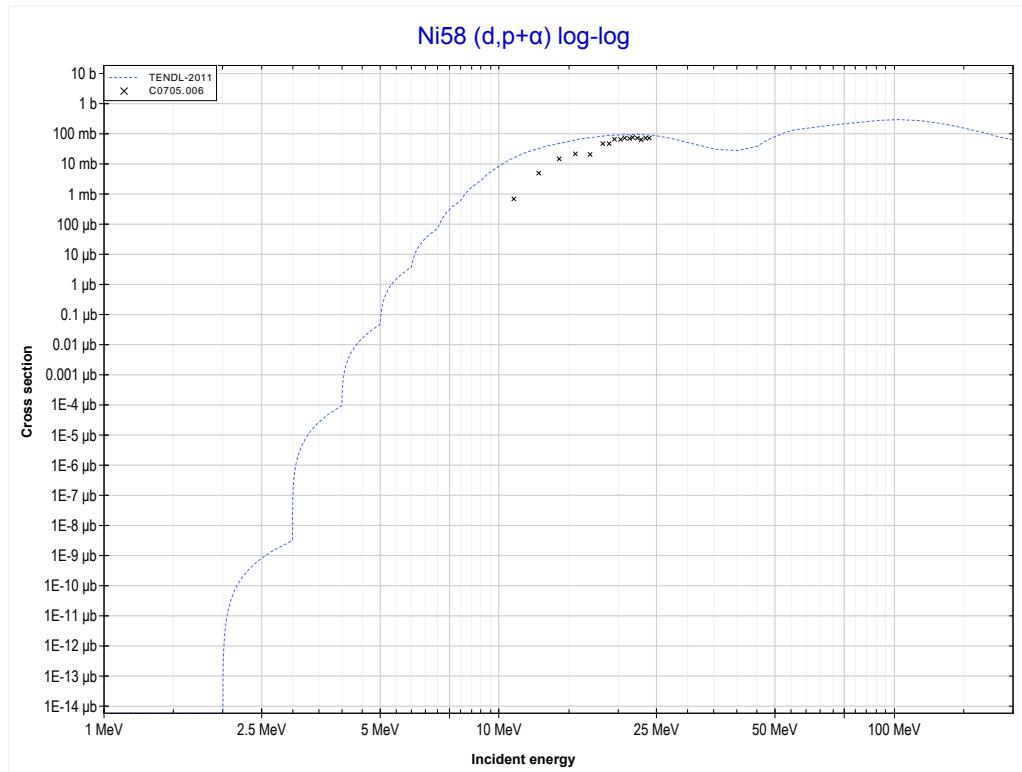
Reaction	Q-Value
Ni58(d,α)Co56	6522.51 keV
Ni58($d,p+t$)Co56	-13291.35 keV
Ni58($d,n+He3$)Co56	-14055.11 keV
Ni58($d,2d$)Co56	-17324.02 keV
Ni58($d,n+p+d$)Co56	-19548.59 keV
Ni58($d,2n+2p$)Co56	-21773.15 keV

<< 27-Co-59	28-Ni-58 MT111 (d,2p) or MT5 (Co58 production)	29-Cu-65 >>
<< MT107 (d, α)		MT112 (d,p+ α) >>



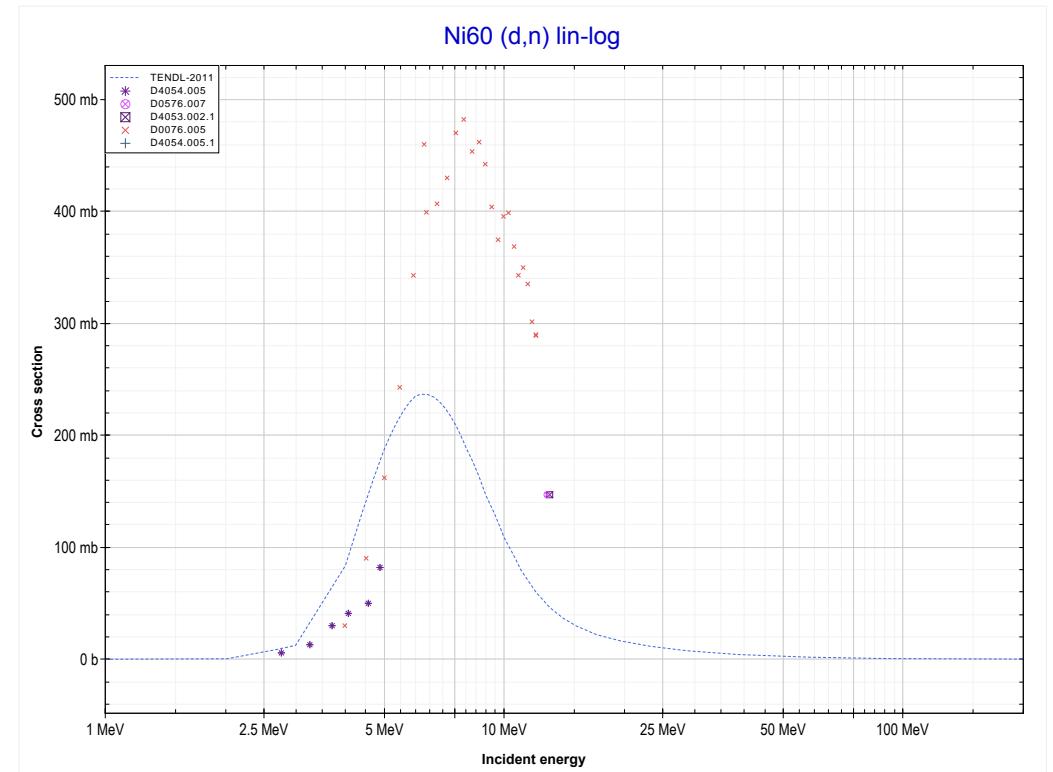
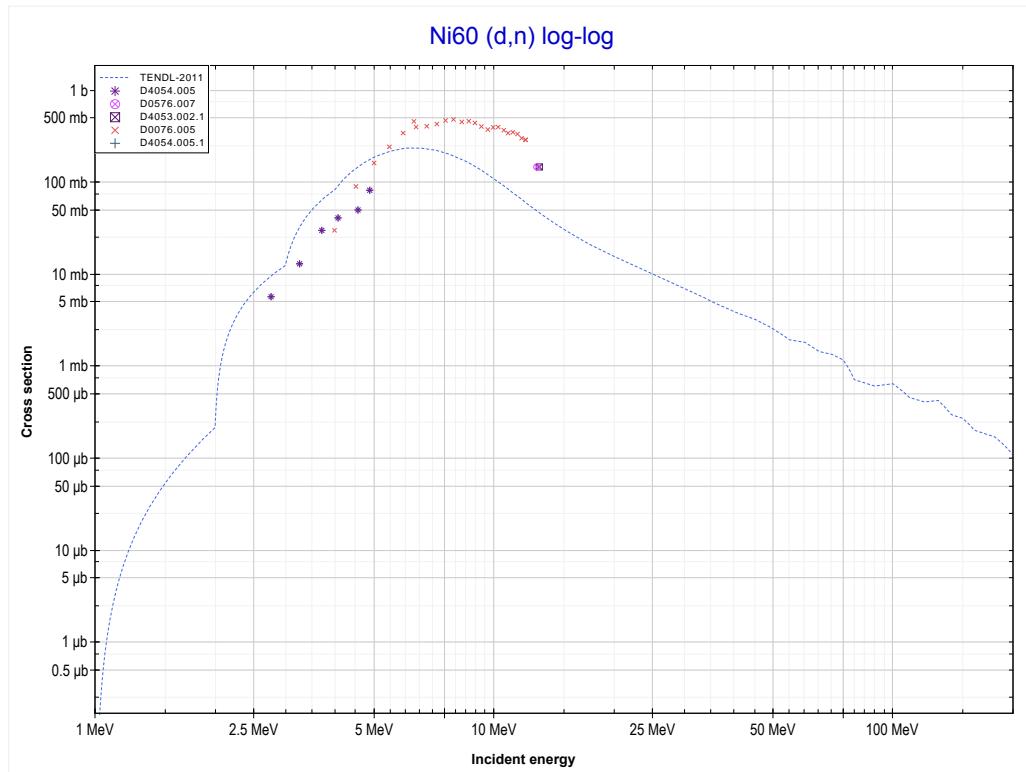
Reaction	Q-Value
Ni58(d,2p)Co58	-1824.02 keV

<< 27-Co-59	28-Ni-58 MT112 (d,p+α) or MT5 (Fe55 production)	28-Ni-62 >>
<< MT111 (d,2p)		MT4 (d,n) >>



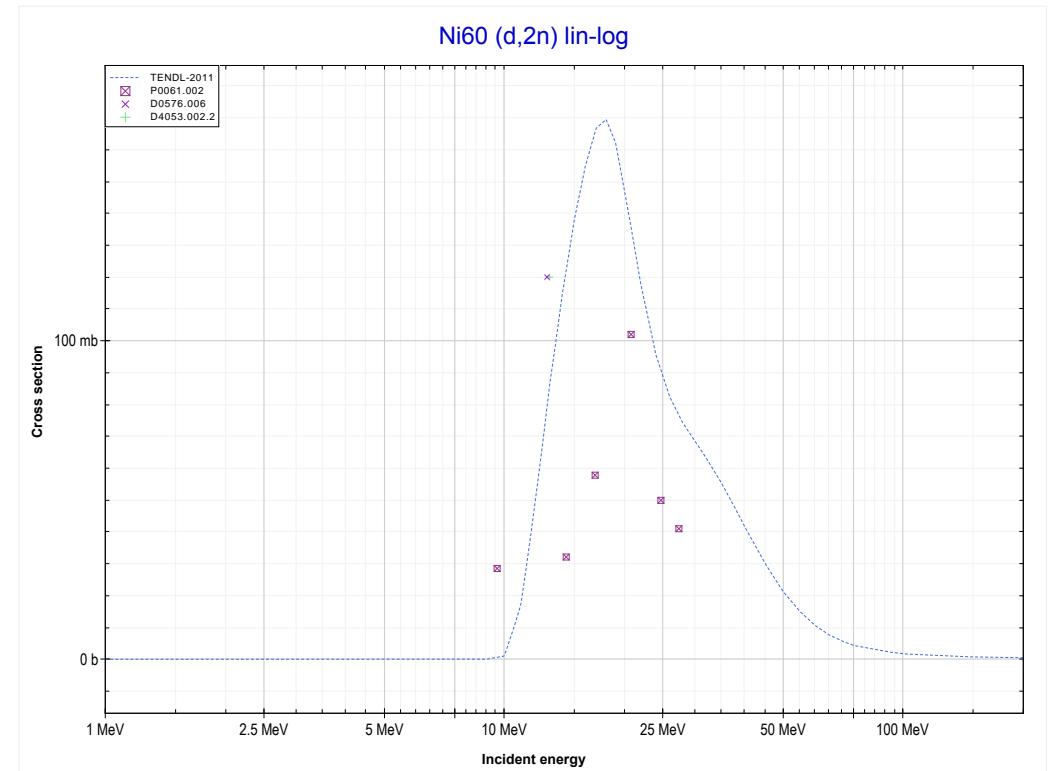
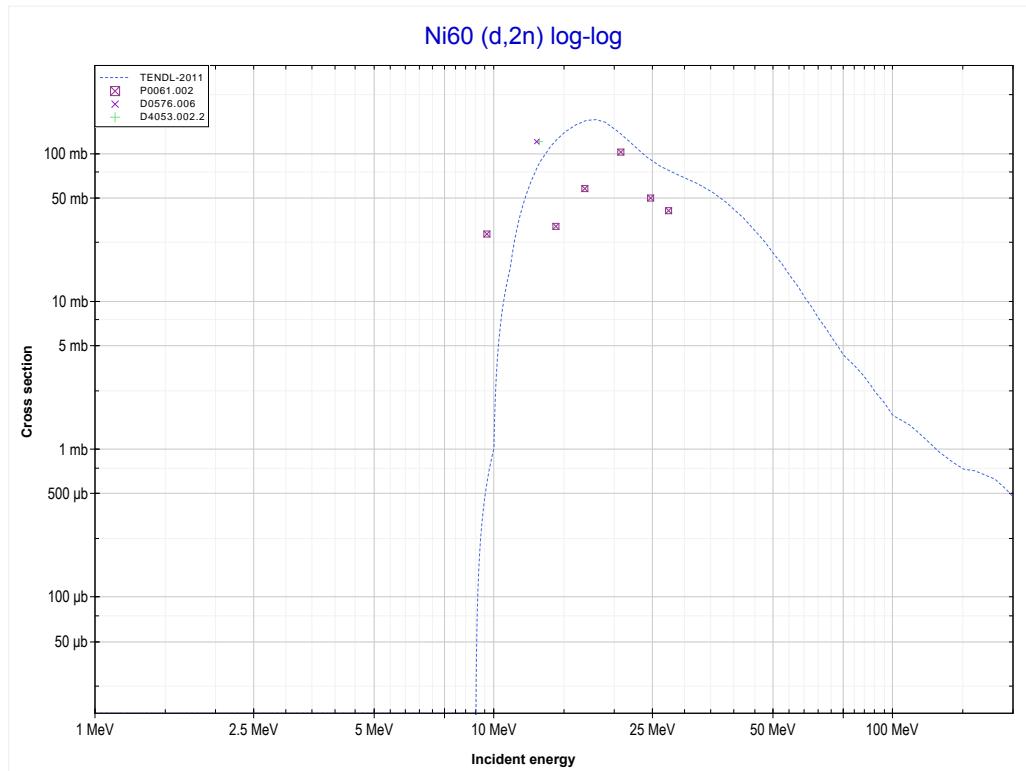
Reaction	Q-Value
Ni58(d,p+α)Fe55	673.54 keV
Ni58(d,d+He3)Fe55	-17679.51 keV
Ni58(d,2p+t)Fe55	-19140.33 keV
Ni58(d,n+p+He3)Fe55	-19904.08 keV
Ni58(d,p+2d)Fe55	-23172.99 keV
Ni58(d,n+2p+d)Fe55	-25397.56 keV
Ni58(d,2n+3p)Fe55	-27622.12 keV

<< 28-Ni-58	28-Ni-60 MT4 (d,n) or MT5 (Cu61 production)	>> 28-Ni-61
<< MT112 (d,p+α)		>> MT16 (d,2n) >>



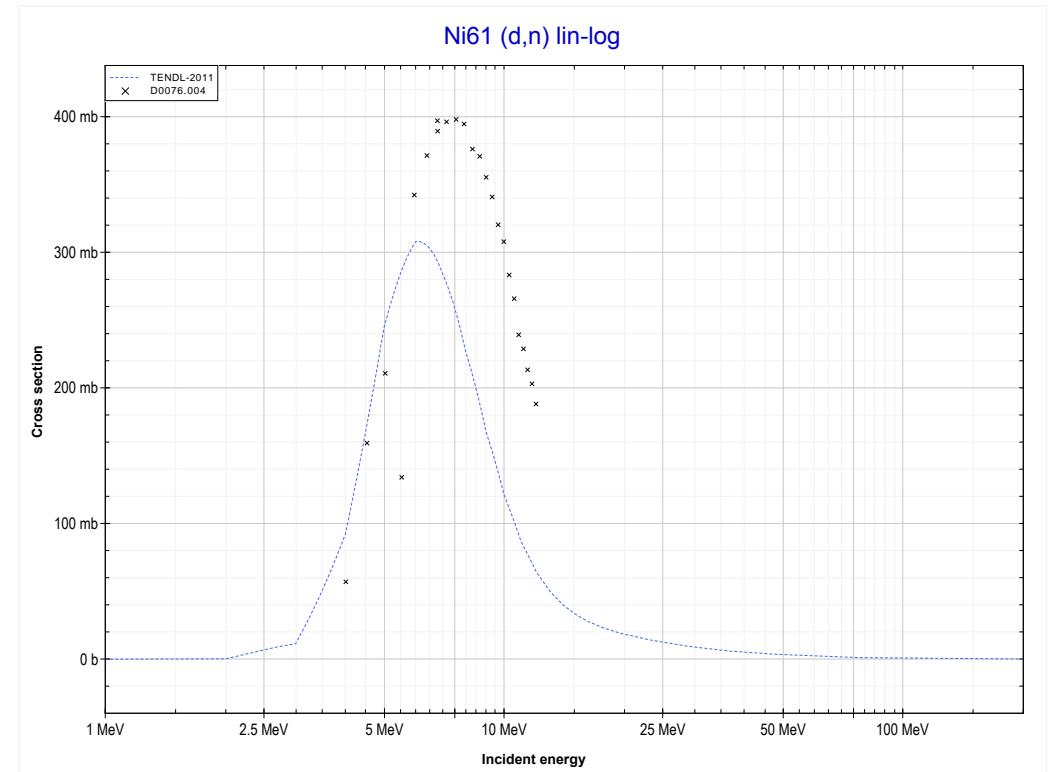
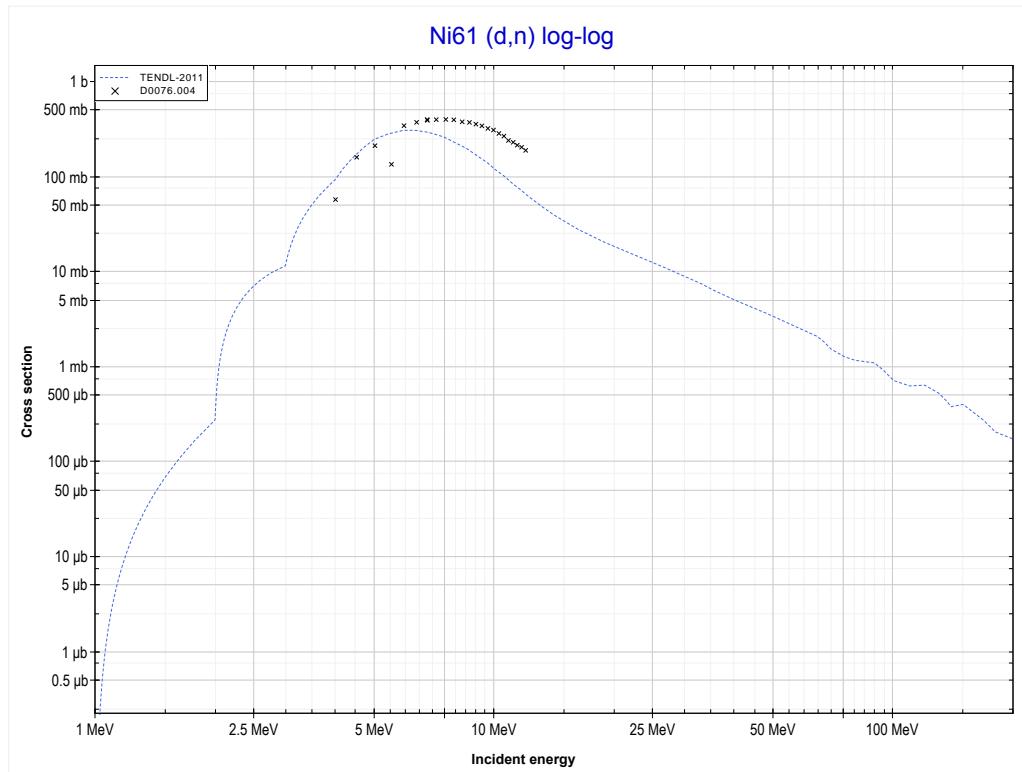
Reaction	Q-Value
Ni60(d,n)Cu61	2575.90 keV

<< 26-Fe-57	28-Ni-60 MT16 (d,2n) or MT5 (Cu60 production)	28-Ni-62 >>
<< MT4 (d,n)		MT4 (d,n) >>



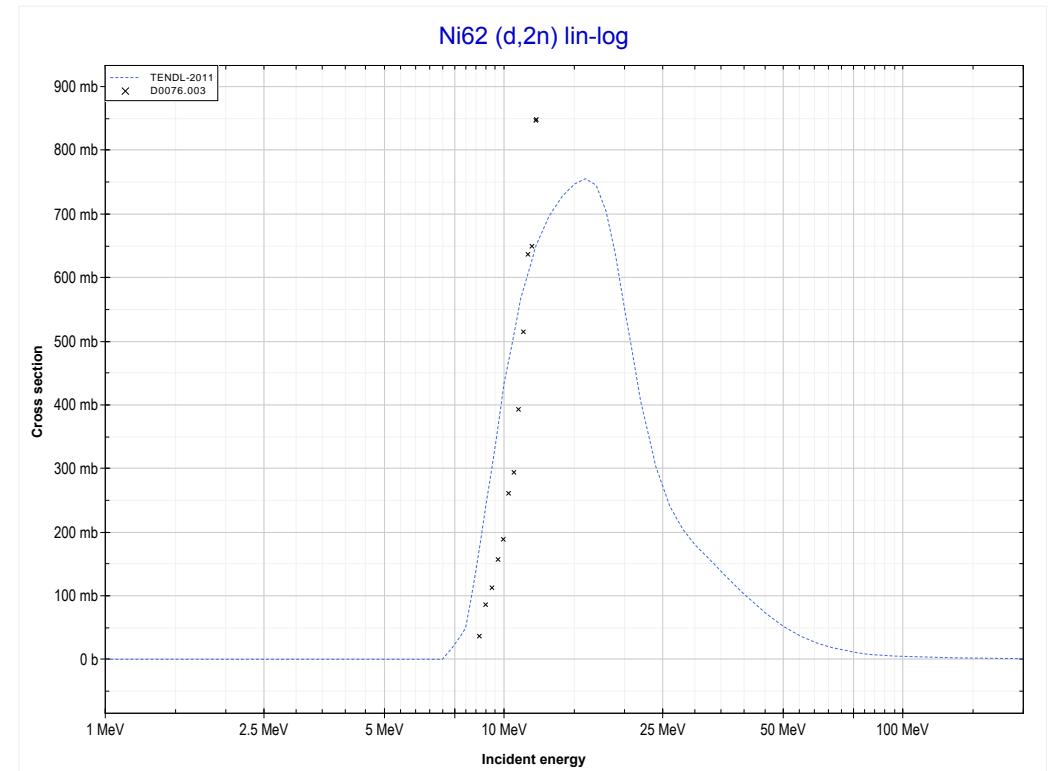
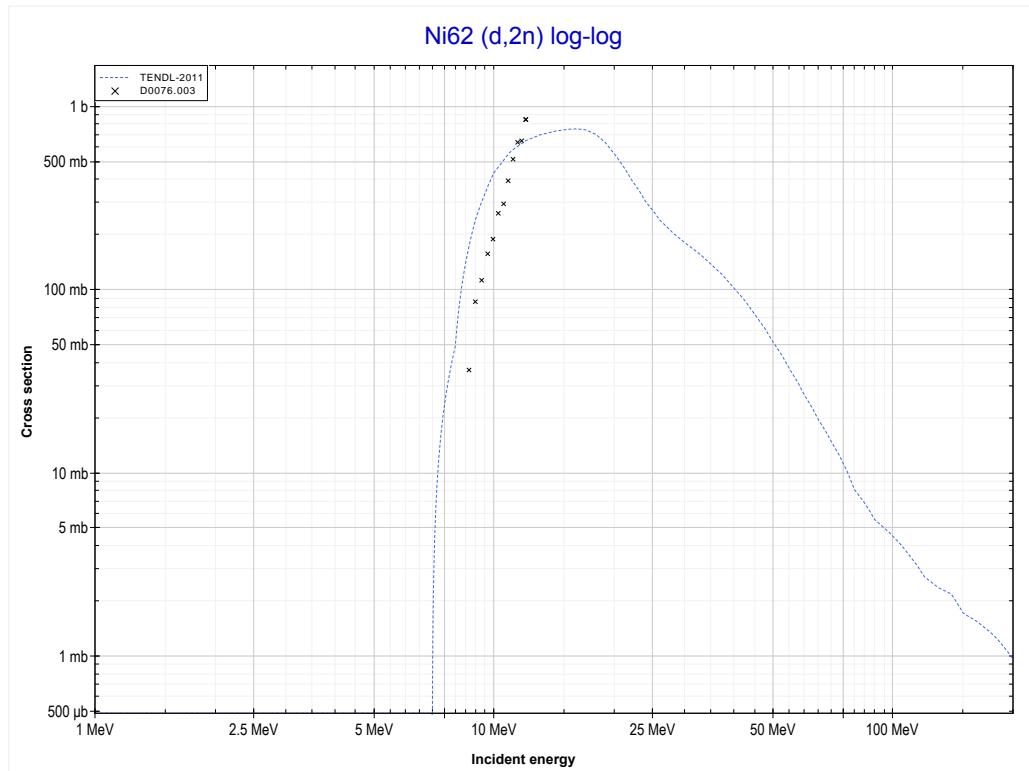
Reaction	Q-Value
Ni60(d,2n)Cu60	-9134.91 keV

<< 28-Ni-60	28-Ni-61 MT4 (d,n) or MT5 (Cu62 production)	30-Zn-64 >>
<< MT16 (d,2n)		MT16 (d,2n) >>



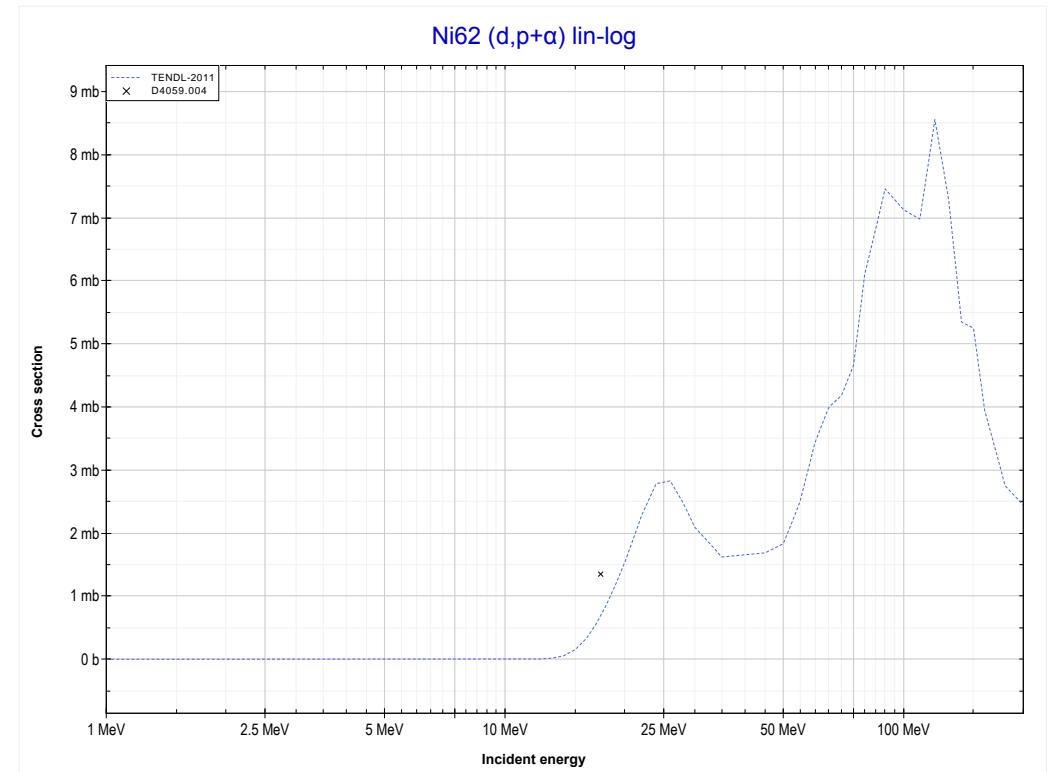
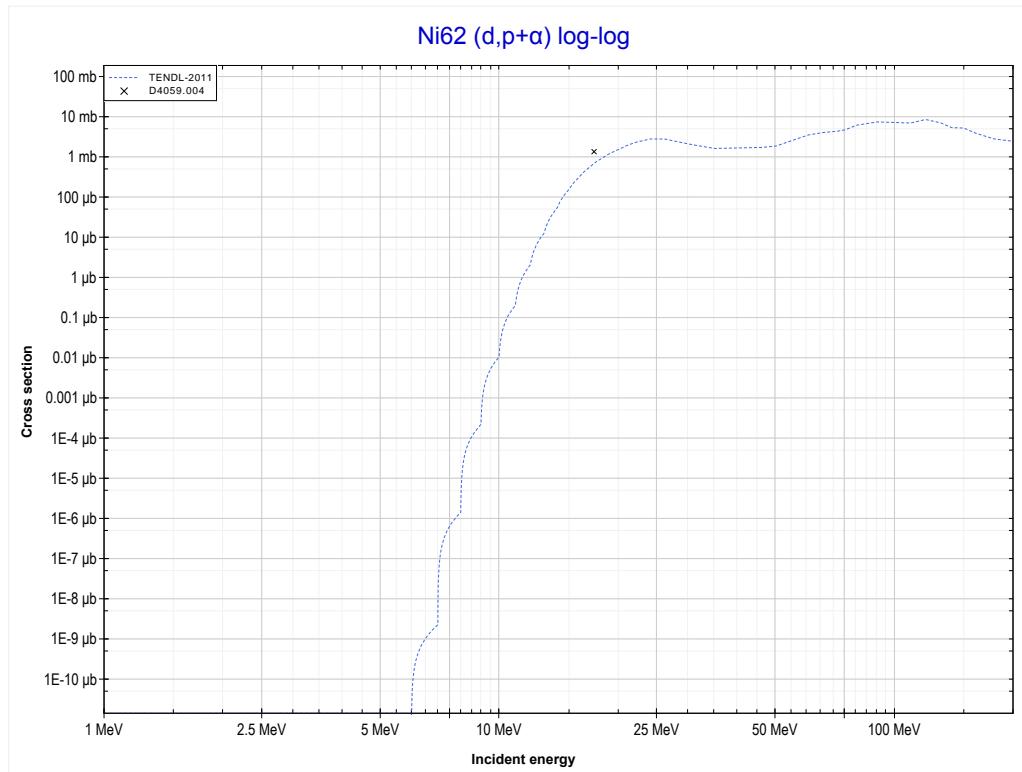
Reaction	Q-Value
Ni61(d,n)Cu62	3641.50 keV

<< 28-Ni-60	28-Ni-62 MT16 (d,2n) or MT5 (Cu62 production)	28-Ni-64 >>
<< MT4 (d,n)		MT112 (d,p+α) >>



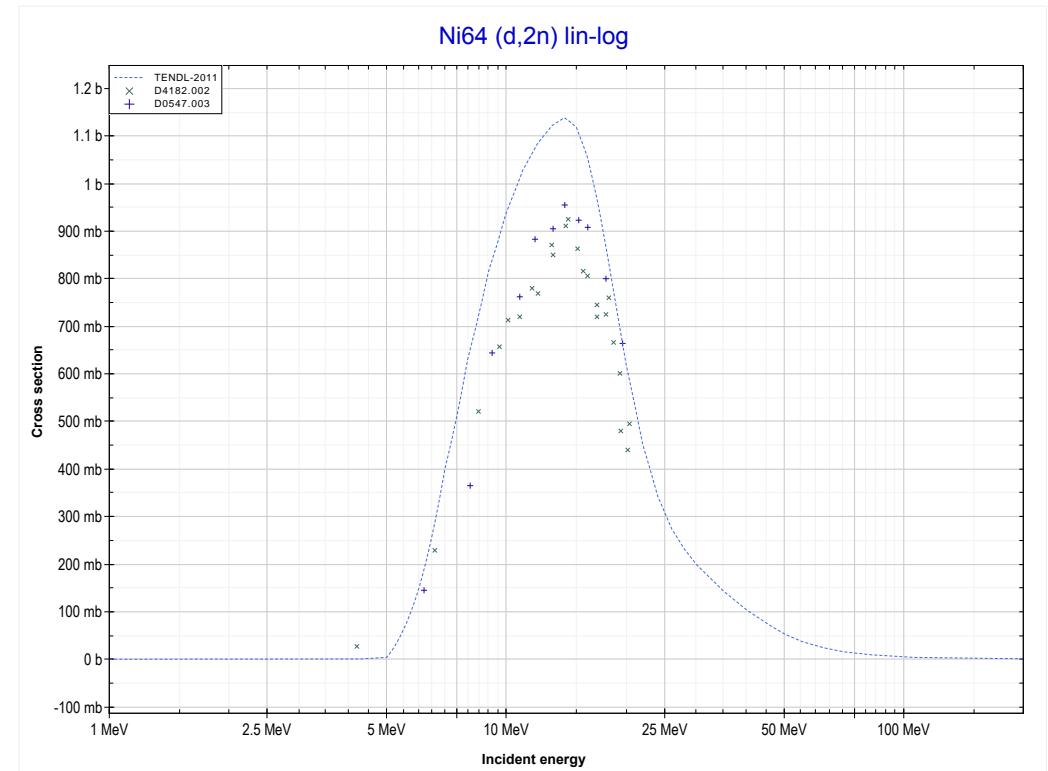
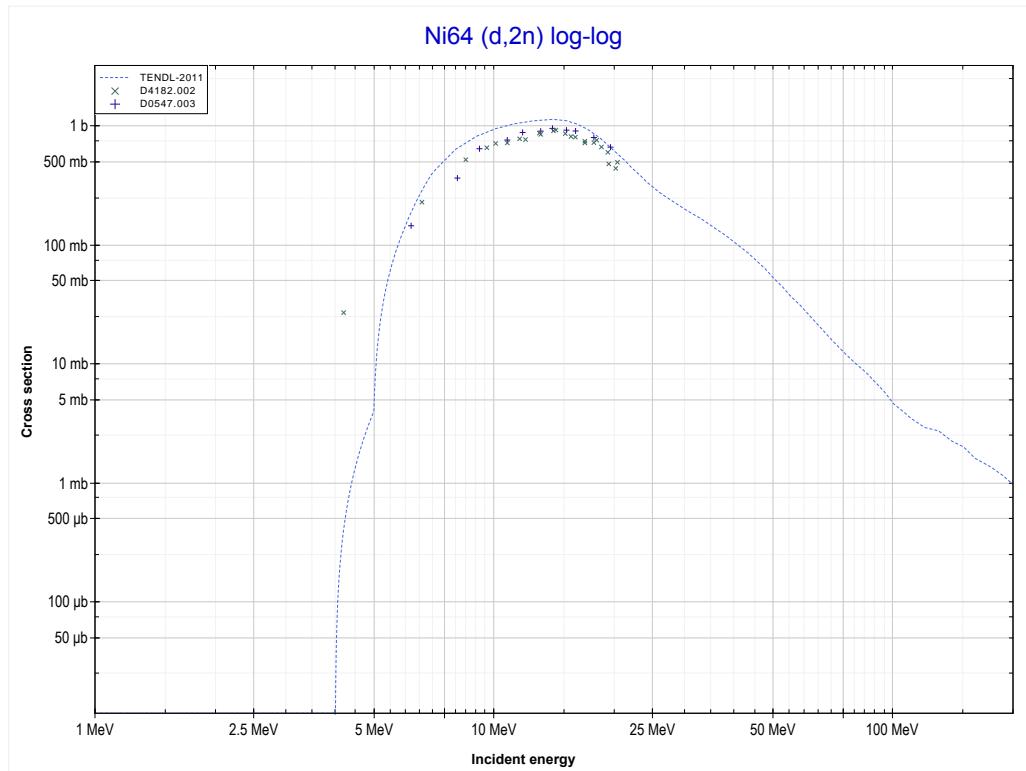
Reaction	Q-Value
Ni62(d,2n)Cu62	-6955.01 keV

<< 28-Ni-58	28-Ni-62 MT112 (d,p+α) or MT5 (Fe59 production)	>> 30-Zn-68
<< MT16 (d,2n)		MT16 (d,2n) >>



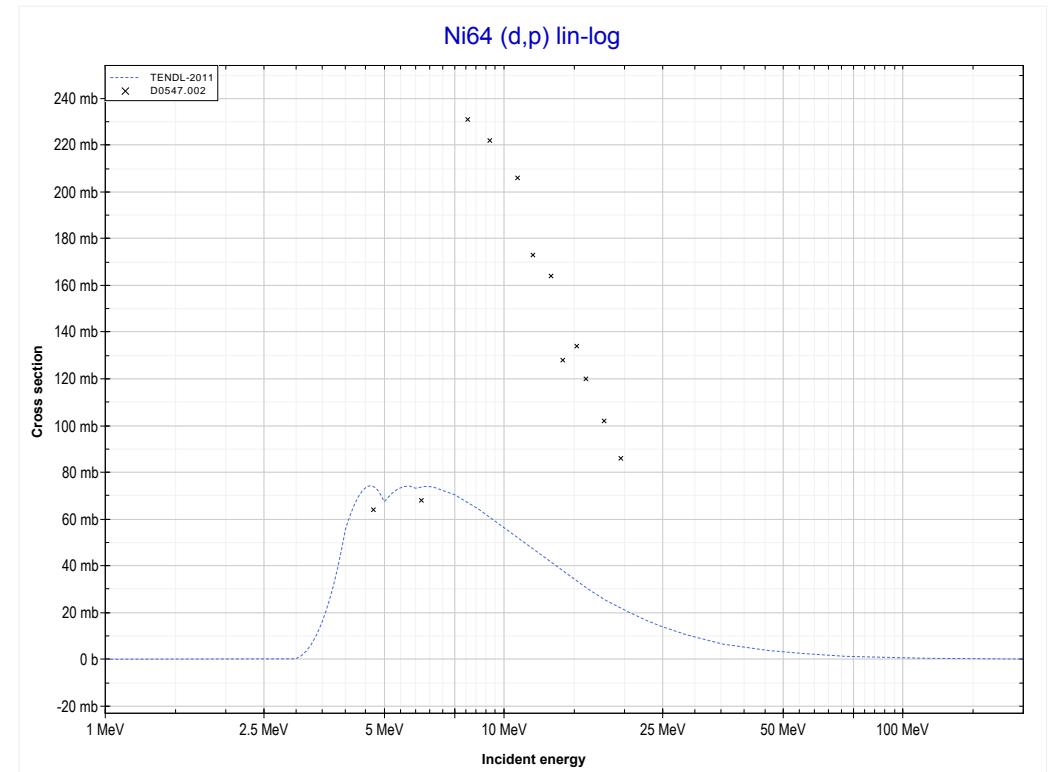
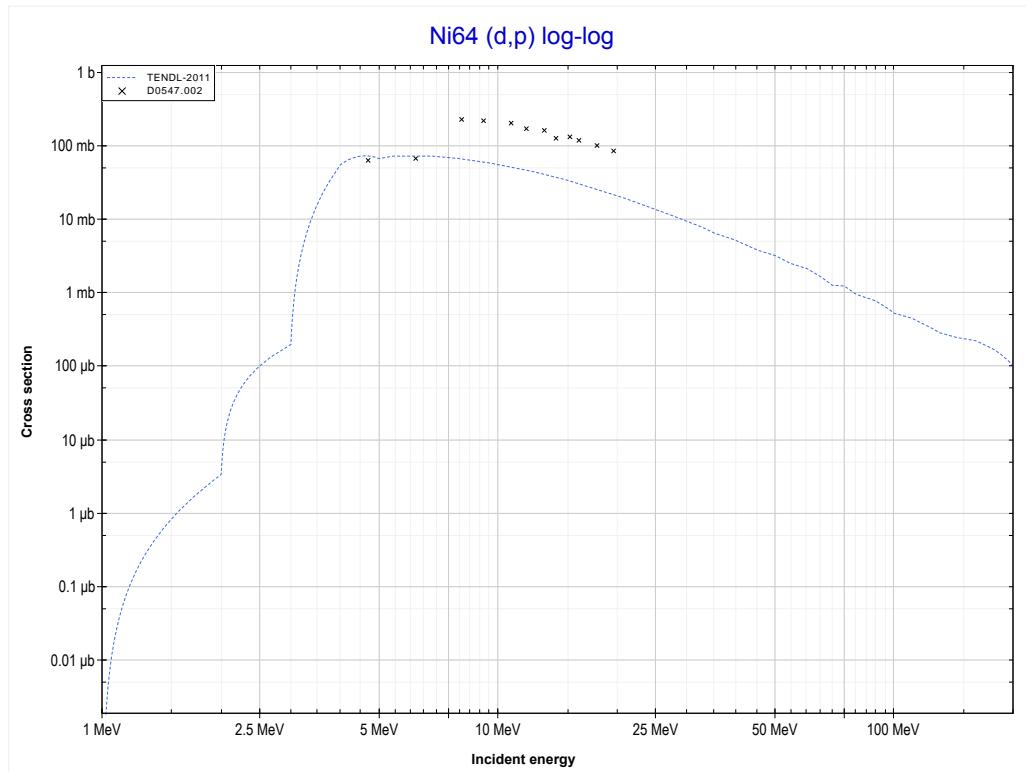
Reaction	Q-Value
Ni62(d,p+α)Fe59	-2661.16 keV
Ni62(d,d+He3)Fe59	-21014.21 keV
Ni62(d,2p+t)Fe59	-22475.03 keV
Ni62(d,n+p+He3)Fe59	-23238.78 keV
Ni62(d,p+2d)Fe59	-26507.69 keV
Ni62(d,n+2p+d)Fe59	-28732.26 keV
Ni62(d,2n+3p)Fe59	-30956.82 keV

<< 28-Ni-62	28-Ni-64 MT16 (d,2n) or MT5 (Cu64 production)	>> 29-Cu-63
<< MT112 (d,p+α)		MT103 (d,p) >>



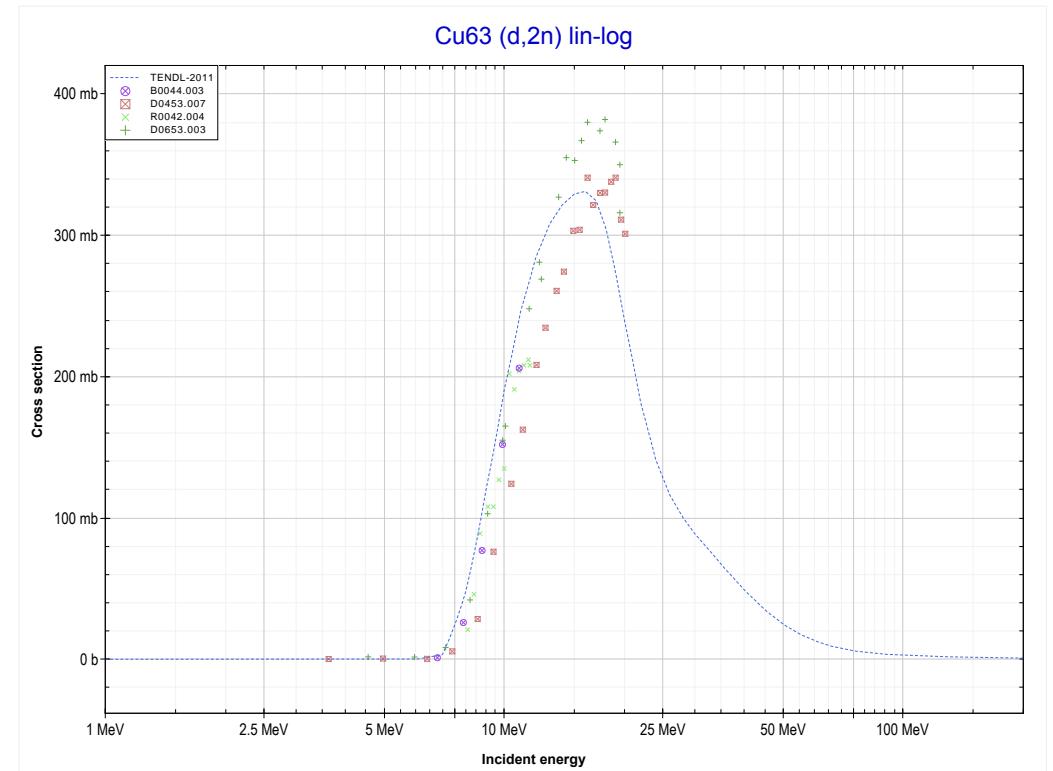
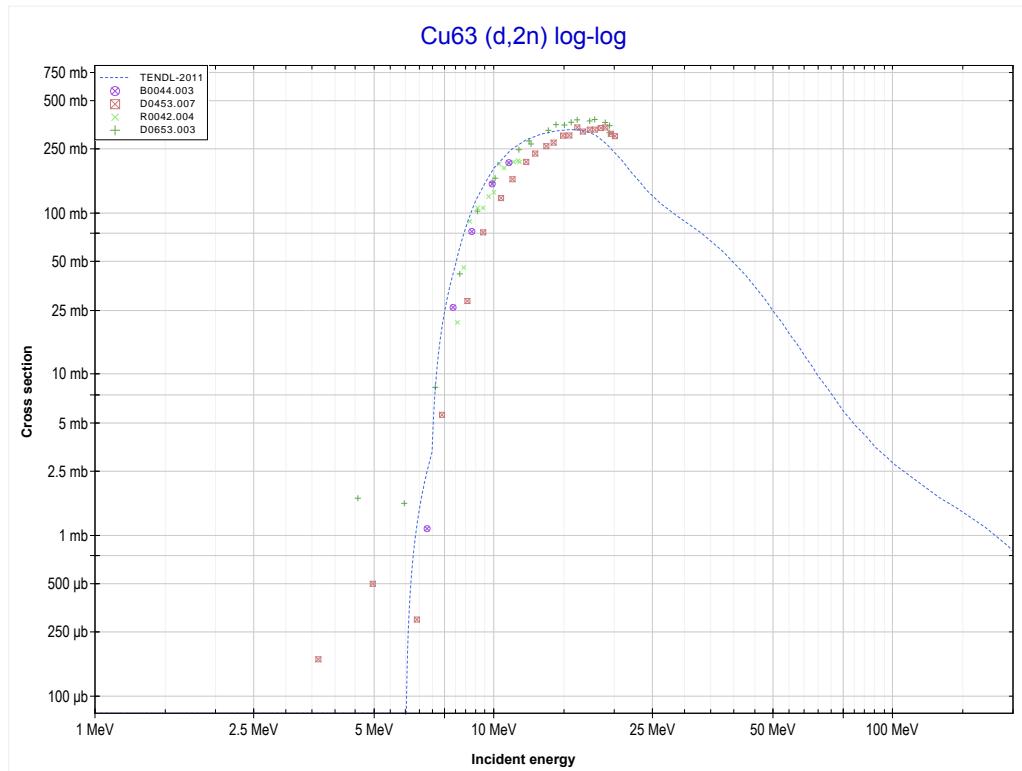
Reaction	Q-Value
Ni64(d,2n)Cu64	-4682.01 keV

<< 27-Co-59	28-Ni-64 MT103 (d,p) or MT5 (Ni65 production)	>> 29-Cu-63
<< MT16 (d,2n)		>> MT16 (d,2n) >>

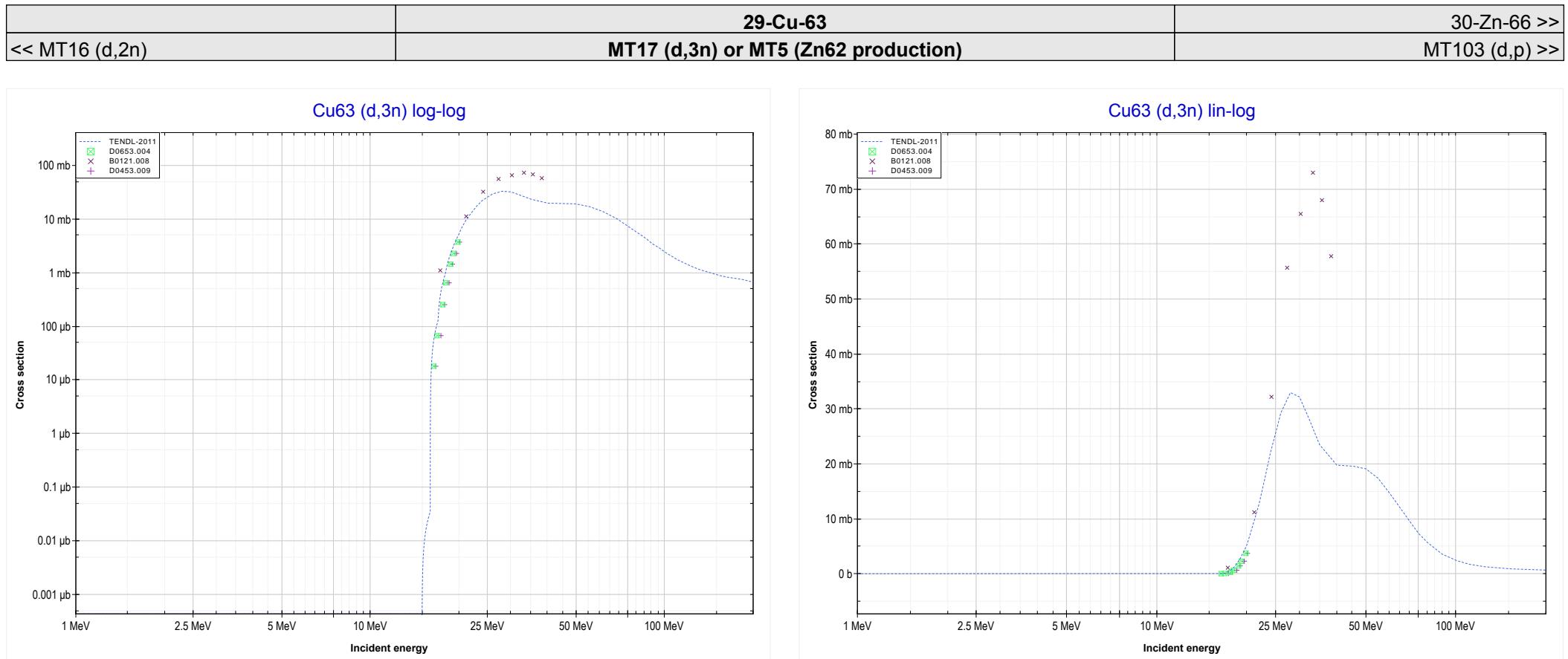


Reaction	Q-Value
Ni64(d,p)Ni65	3873.55 keV

<< 28-Ni-64	29-Cu-63 MT16 (d,2n) or MT5 (Zn63 production)	>> 29-Cu-65
<< MT103 (d,p)		>> MT17 (d,3n) >>

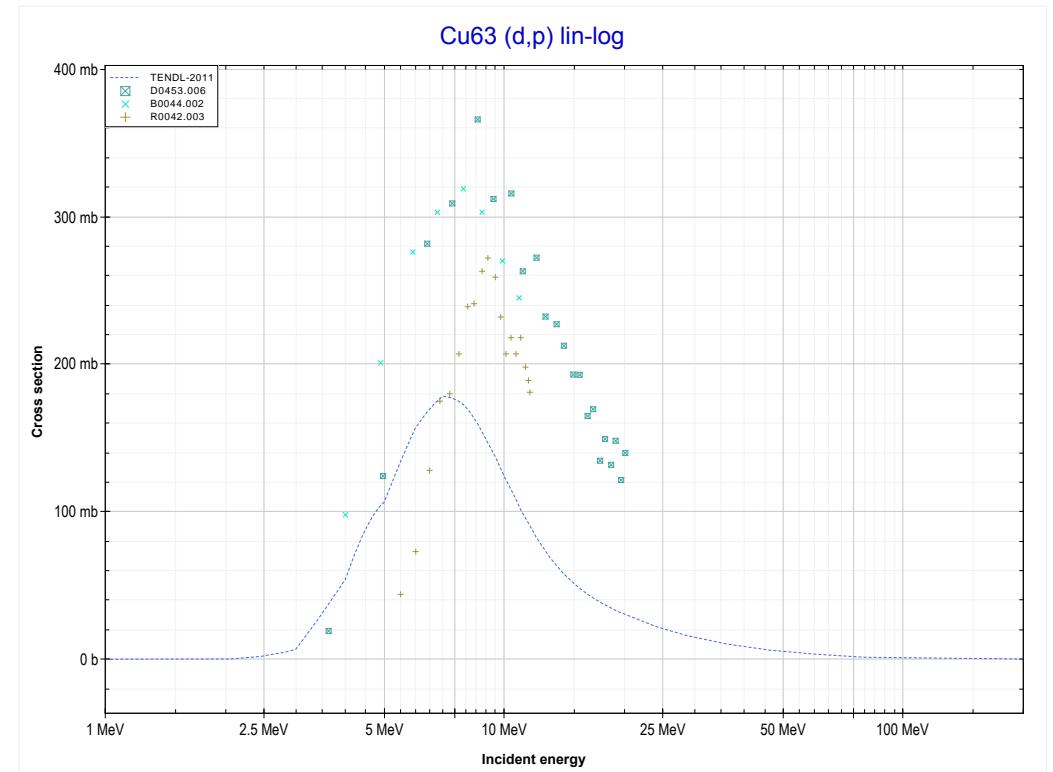
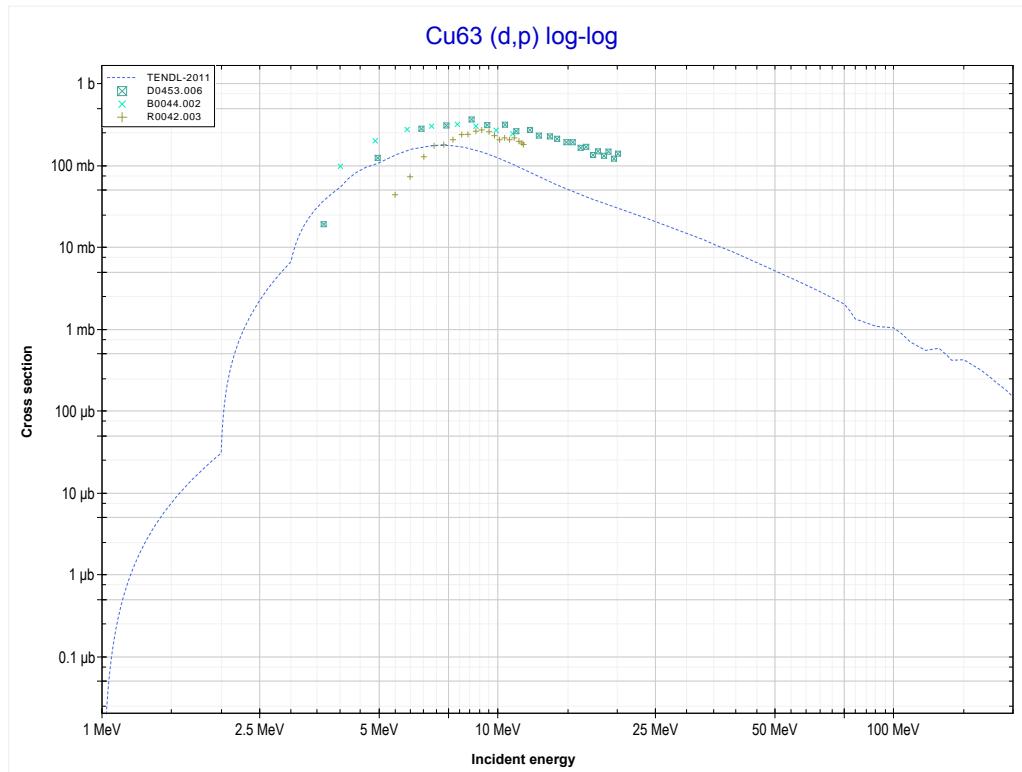


Reaction	Q-Value
$\text{Cu}^{63}(\text{d},\text{2n})\text{Zn}^{63}$	-6373.41 keV



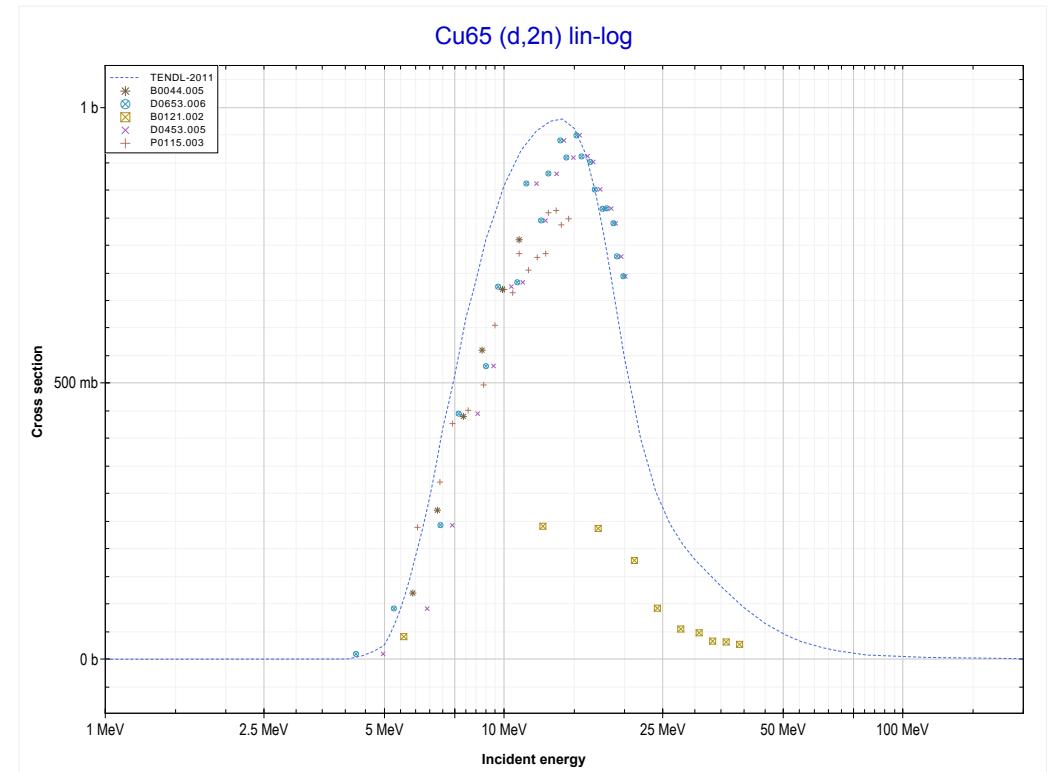
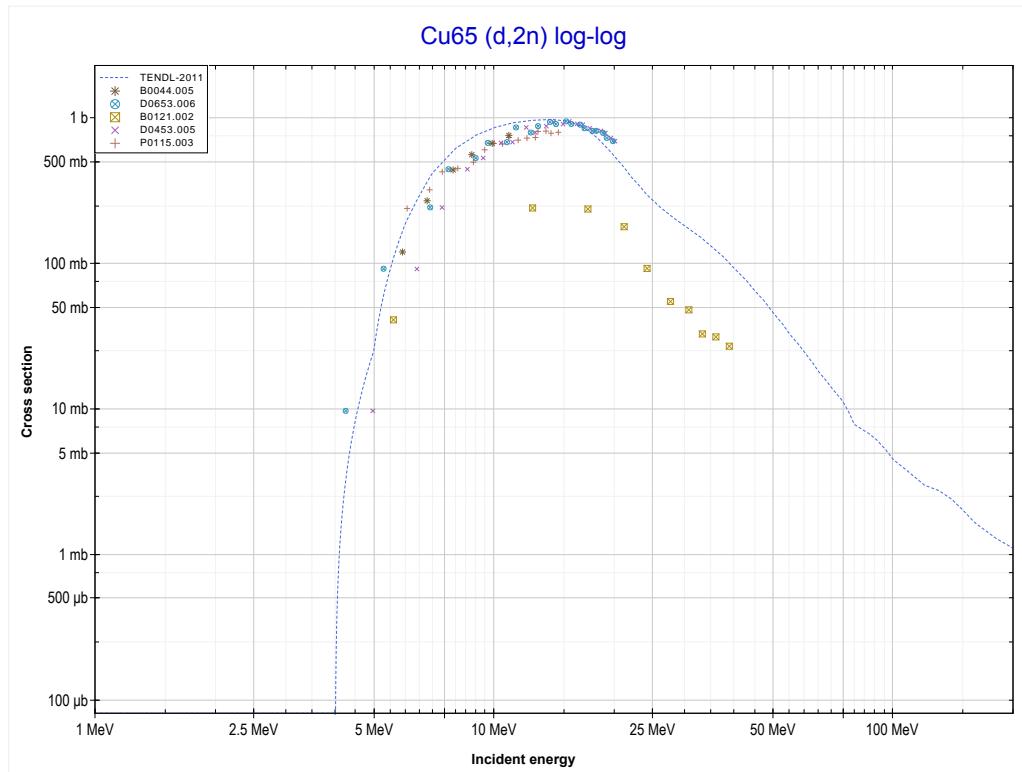
Reaction	Q-Value
Cu63(d,3n)Zn62	-15486.73 keV

<< 28-Ni-64	29-Cu-63 MT103 (d,p) or MT5 (Cu64 production)	>> 29-Cu-65
<< MT17 (d,3n)		>> MT16 (d,2n) >>



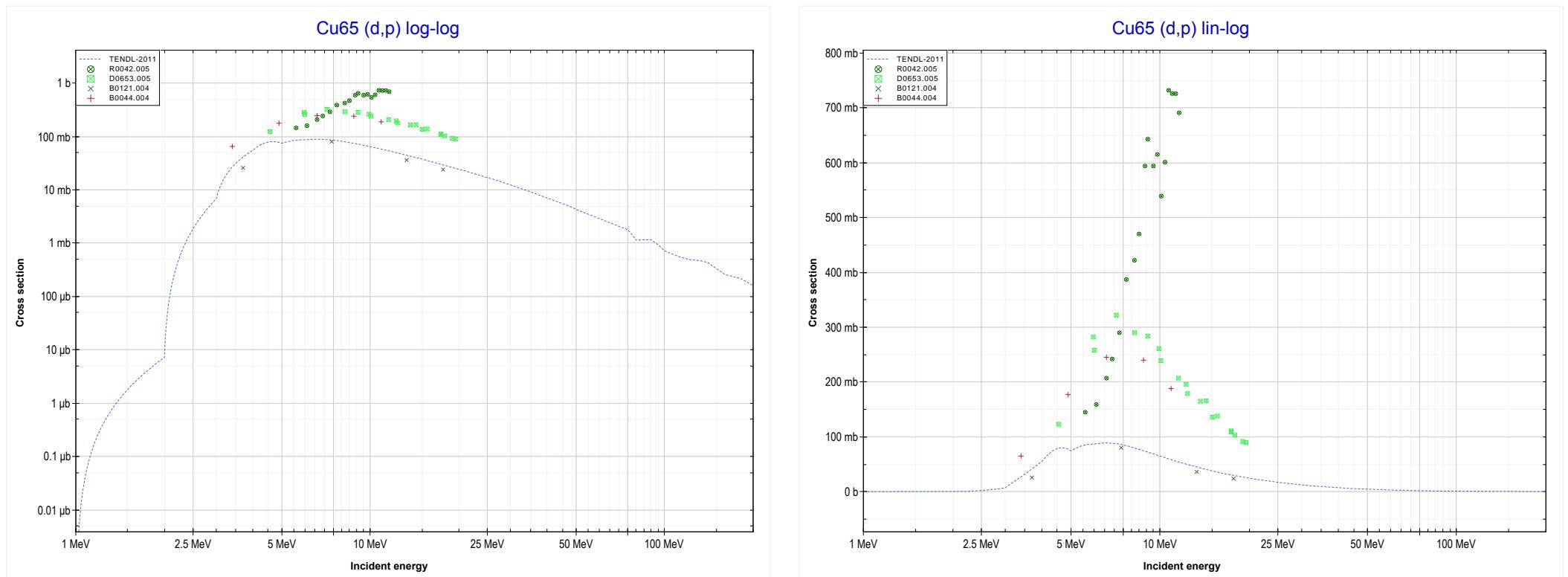
Reaction	Q-Value
Cu63(d,p)Cu64	5691.45 keV

<< 29-Cu-63	29-Cu-65 MT16 (d,2n) or MT5 (Zn65 production)	>> 30-Zn-64
<< MT103 (d,p)		MT103 (d,p) >>



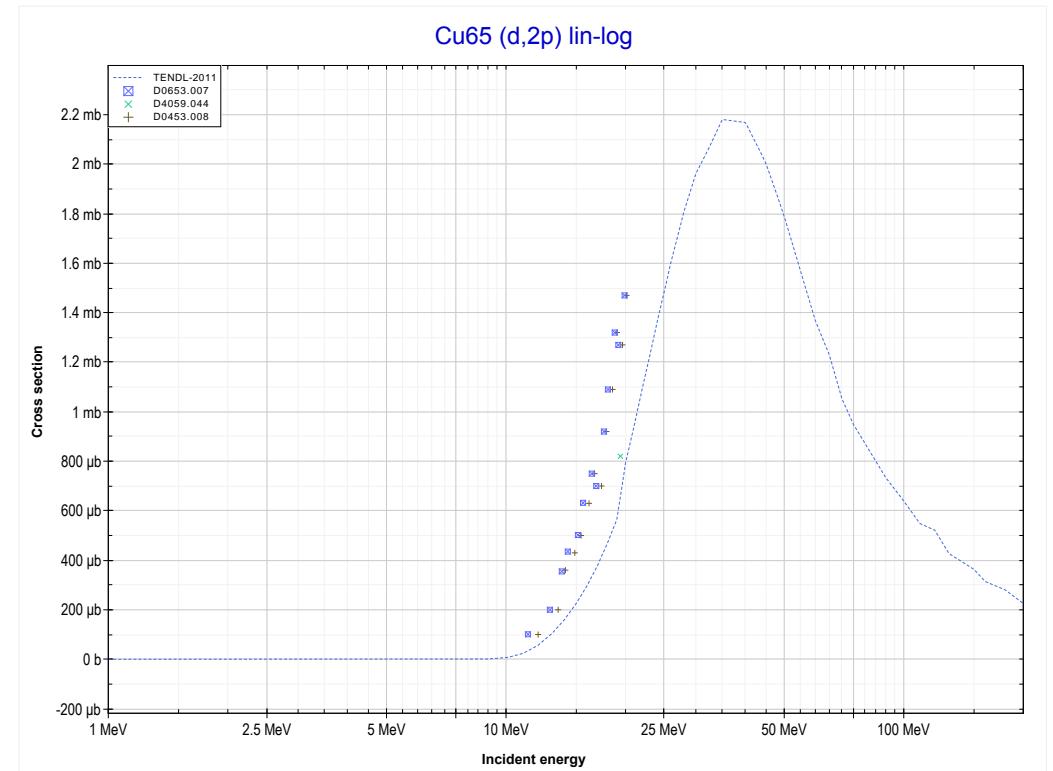
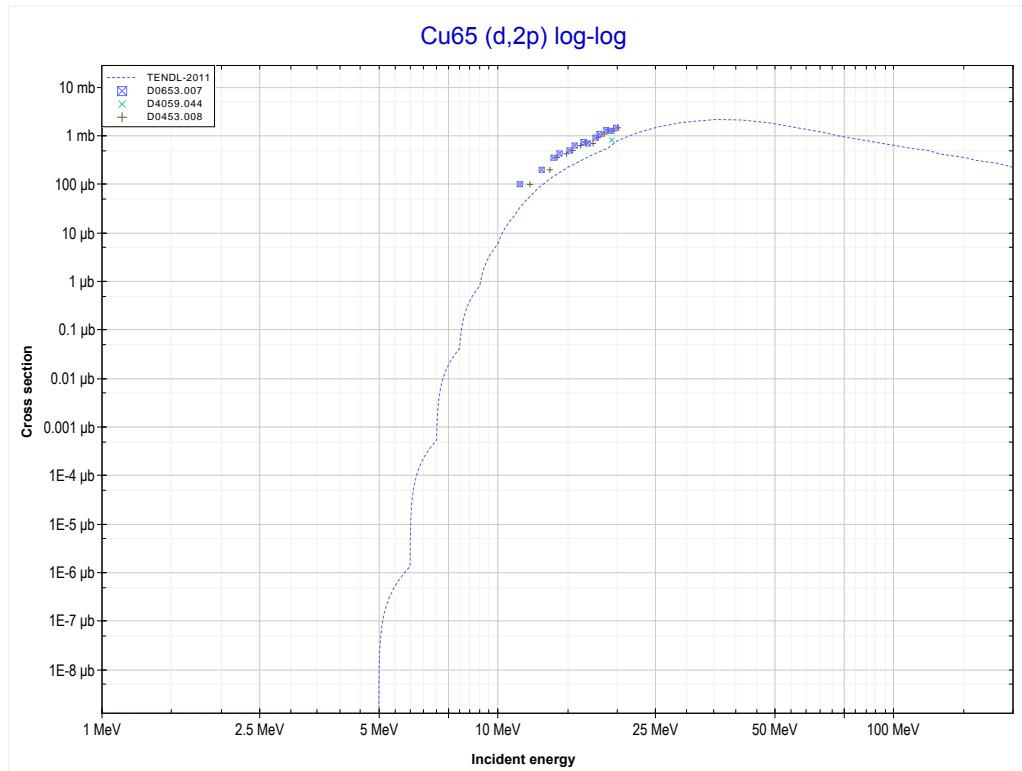
Reaction	Q-Value
Cu65(d,2n)Zn65	-4359.01 keV

<< 29-Cu-63	29-Cu-65 MT103 (d,p) or MT5 (Cu66 production)	>> 30-Zn-68
<< MT16 (d,2n)		>> MT111 (d,2p) >>



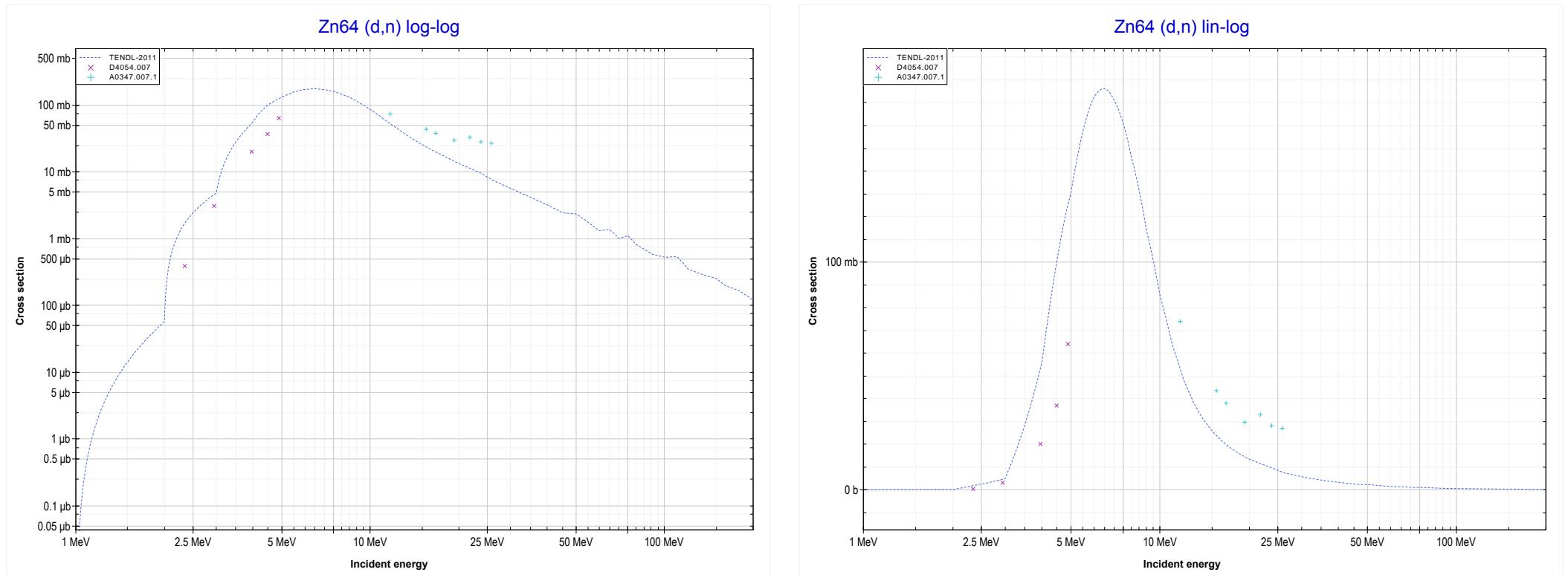
Reaction	Q-Value
Cu65(d,p)Cu66	4841.35 keV

<< 28-Ni-58	29-Cu-65 MT111 (d,2p) or MT5 (Ni65 production)	>> 30-Zn-64
<< MT103 (d,p)		>> MT4 (d,n) >>



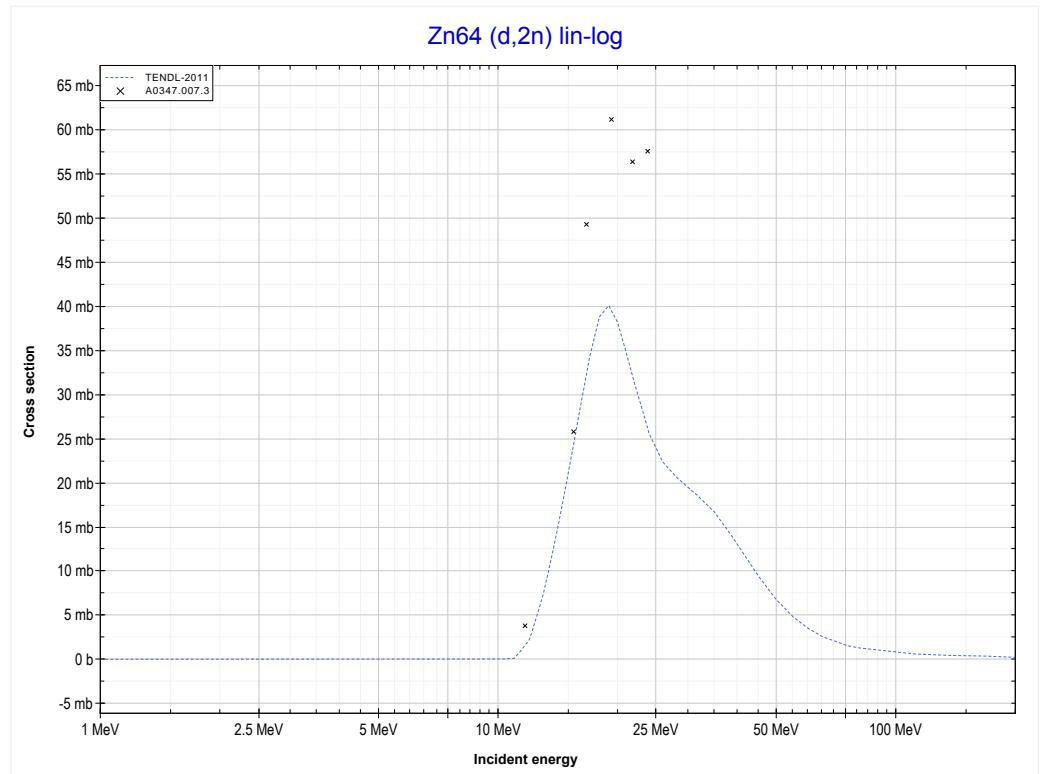
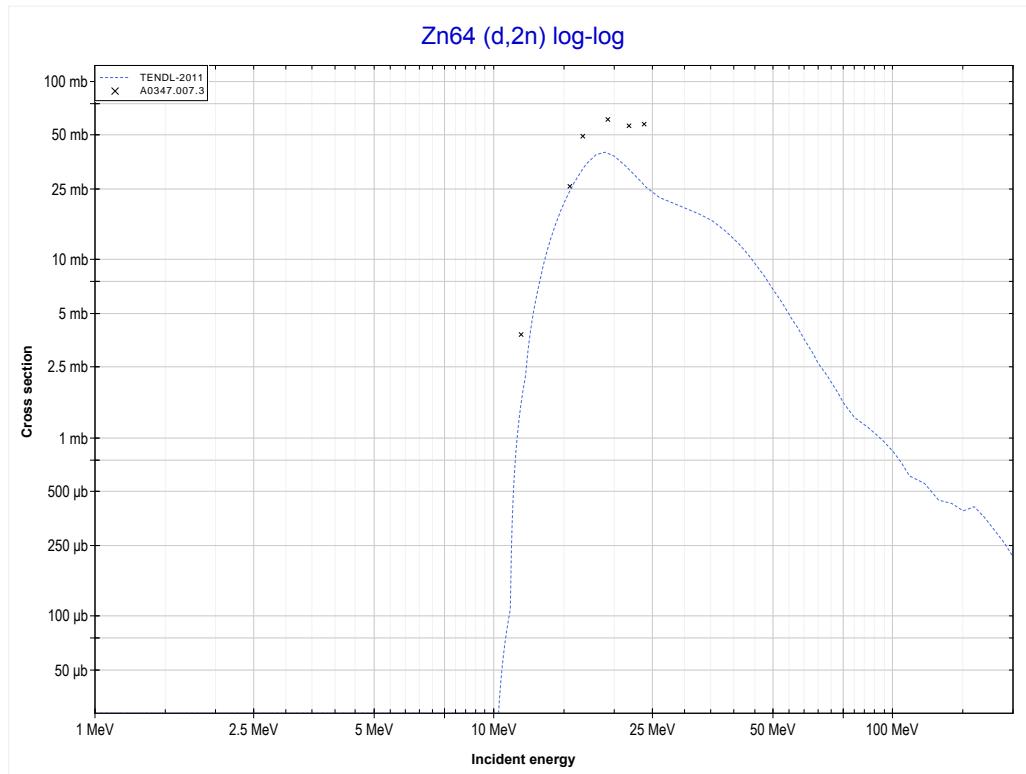
Reaction	Q-Value
Cu65(d,2p)Ni65	-3579.82 keV

<< 28-Ni-61	30-Zn-64 MT4 (d,n) or MT5 (Ga65 production)	30-Zn-66 >>
<< MT111 (d,2p)		MT16 (d,2n) >>



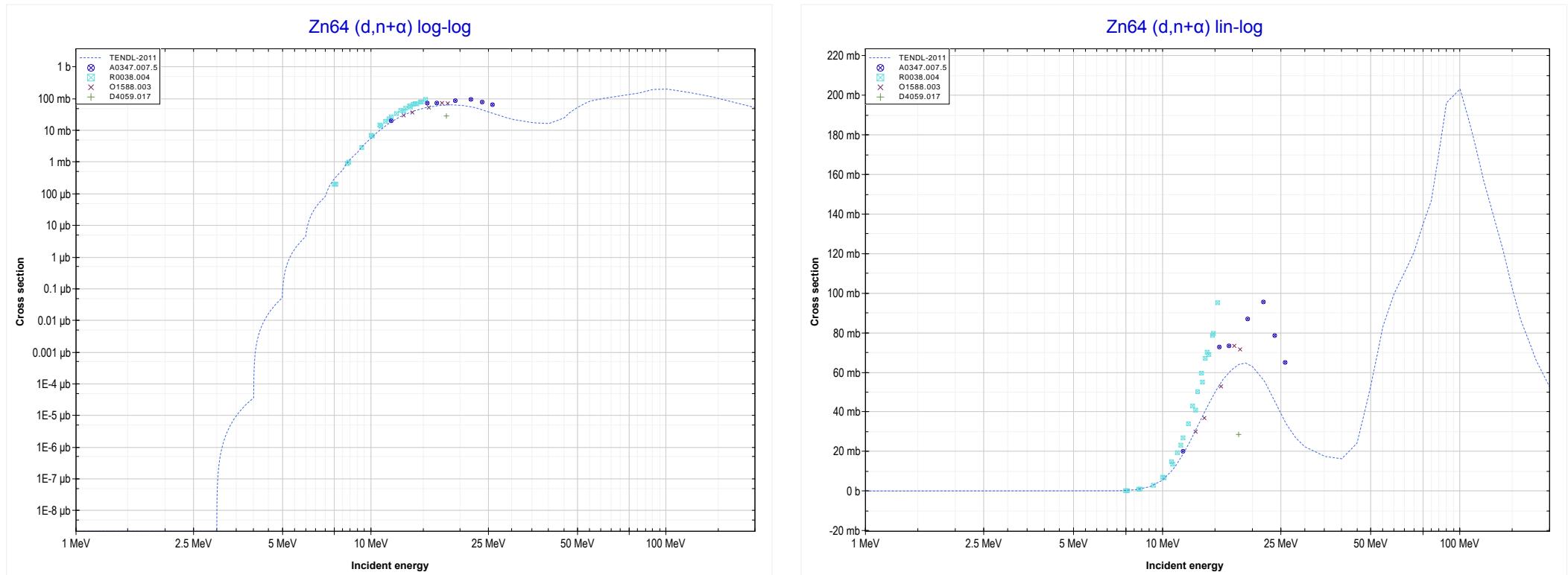
Reaction	Q-Value
Zn64(d,n)Ga65	1718.00 keV

<< 29-Cu-65	30-Zn-64 MT16 (d,2n) or MT5 (Ga64 production)	30-Zn-66 >>
<< MT4 (d,n)		MT22 (d,n+α) >>

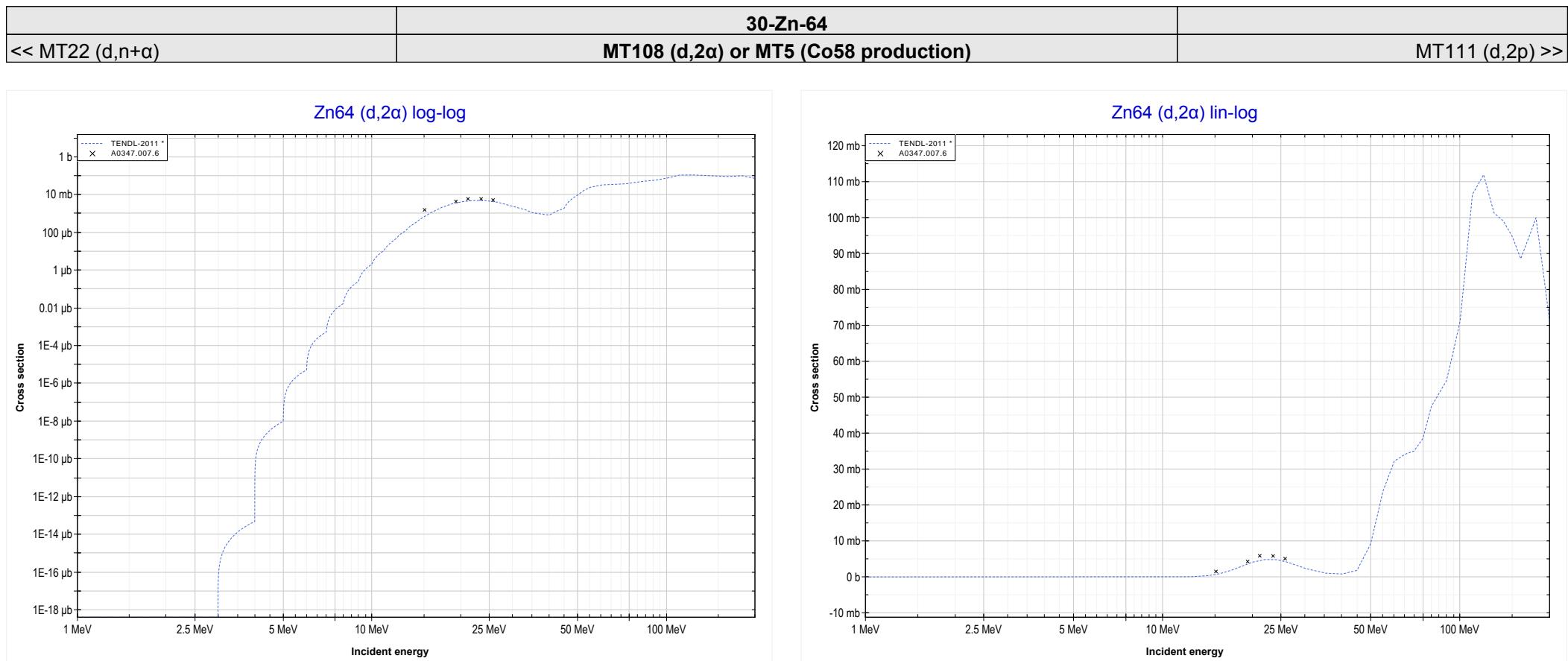


Reaction	Q-Value
Zn64(d,2n)Ga64	-10176.21 keV

<< 28-Ni-58	30-Zn-64 MT22 (d,n+α) or MT5 (Cu61 production)	30-Zn-67 >>
<< MT16 (d,2n)		MT108 (d,2α) >>

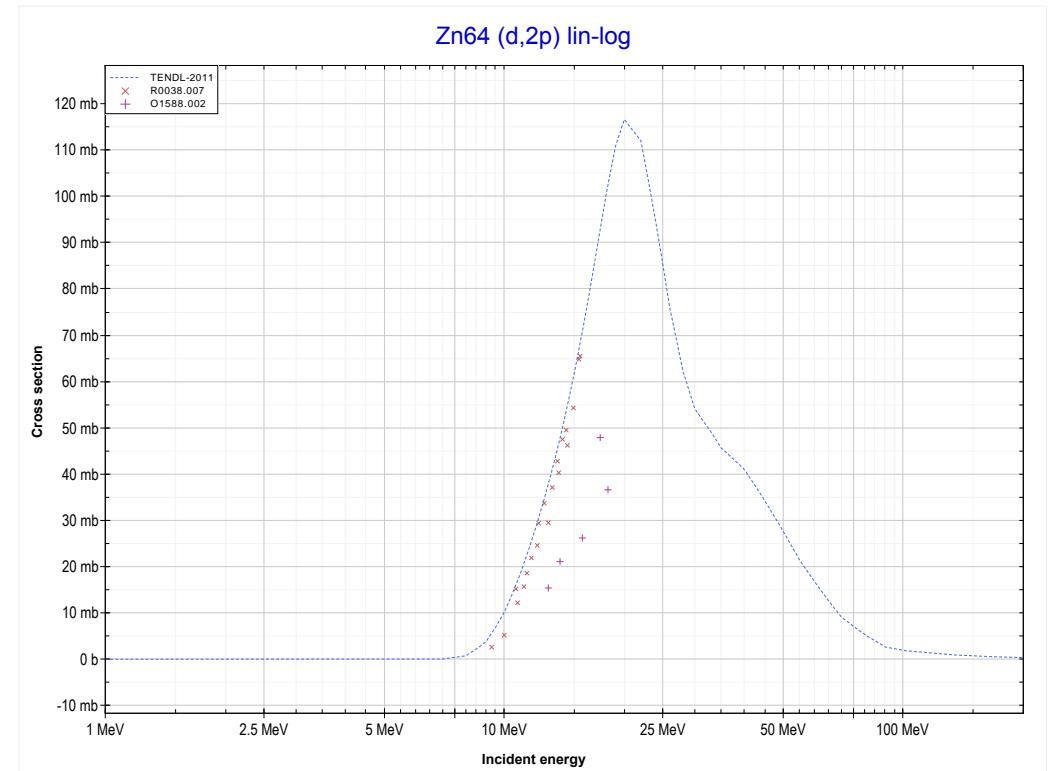
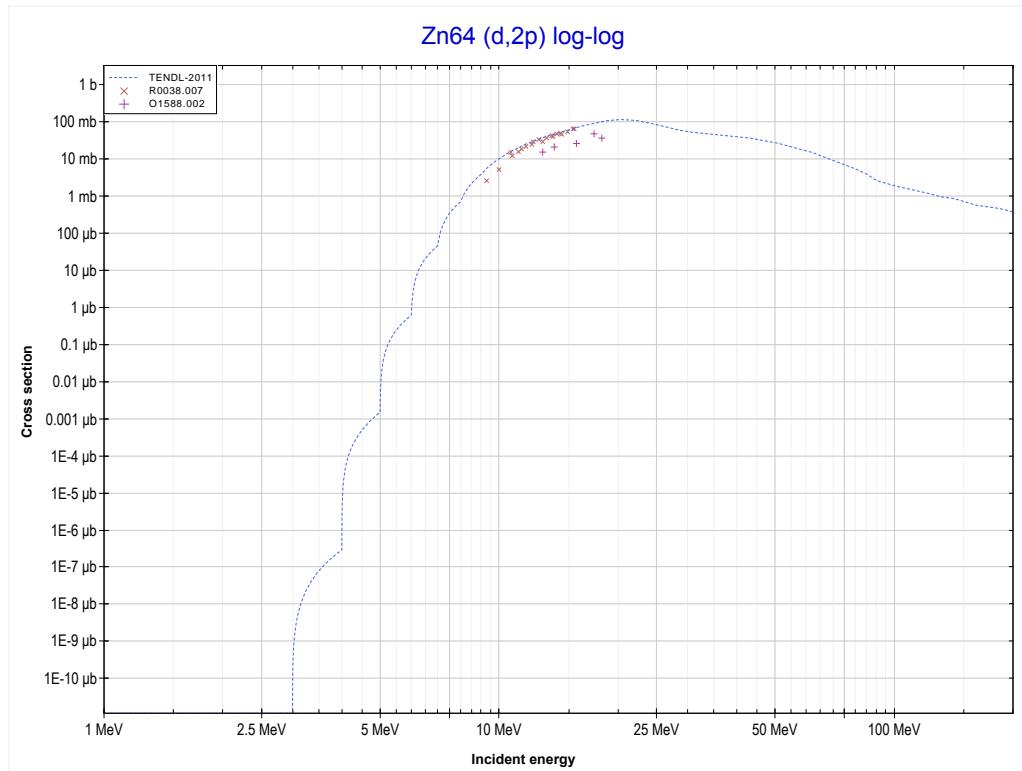


Reaction	Q-Value
Zn64(d,n+α)Cu61	-1380.51 keV
Zn64(d,d+t)Cu61	-18969.81 keV
Zn64(d,n+p+t)Cu61	-21194.37 keV
Zn64(d,2n+He3)Cu61	-21958.13 keV
Zn64(d,n+2d)Cu61	-25227.04 keV
Zn64(d,2n+p+d)Cu61	-27451.60 keV
Zn64(d,3n+2p)Cu61	-29676.17 keV



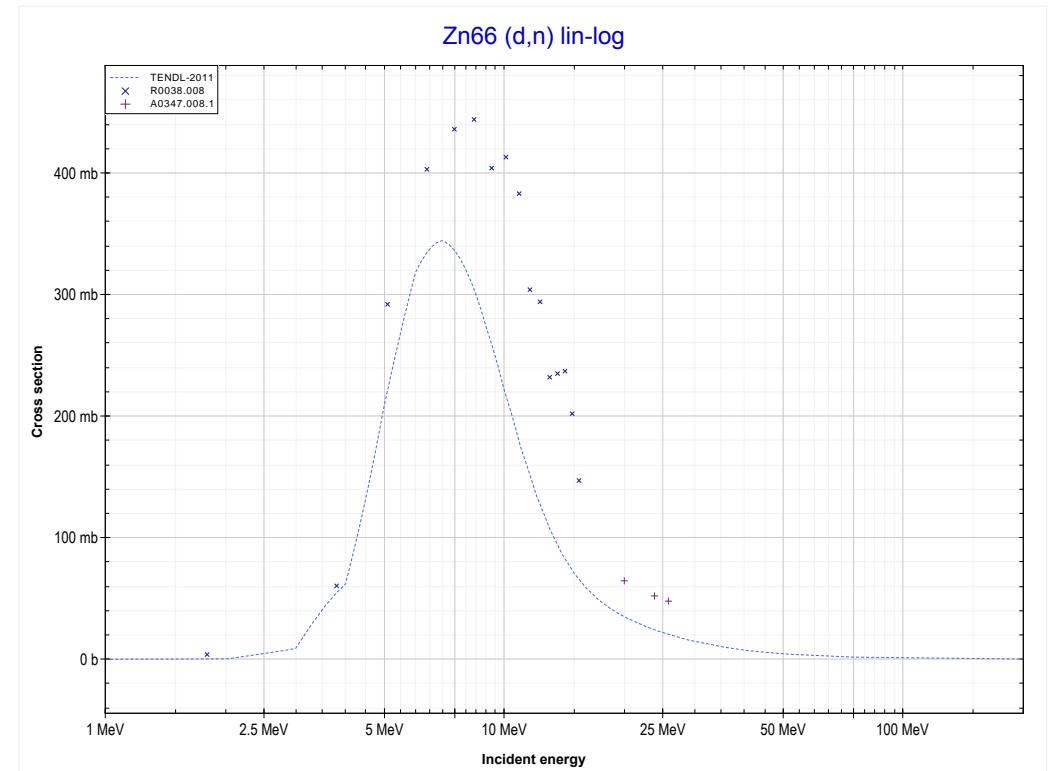
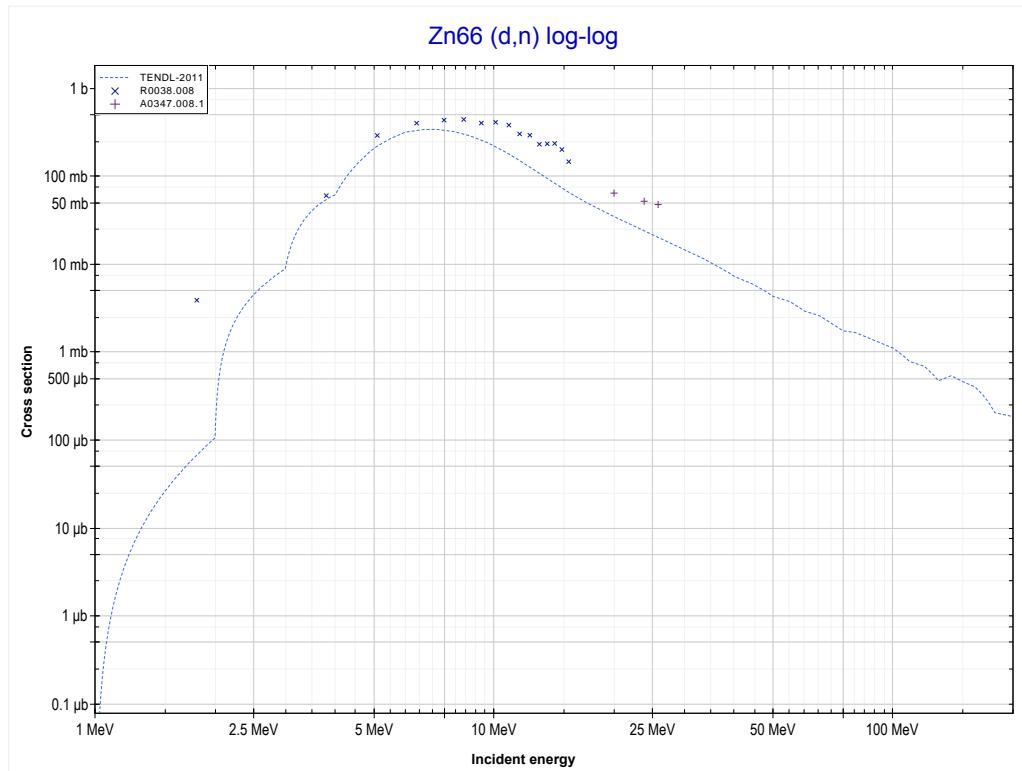
Reaction	Q-Value	Reaction	Q-Value
Zn64(d,2 α)Co58	2128.19 keV	Zn64(d,n+p+t+He3)Co58	-38263.29 keV
Zn64(d,p+t+a)Co58	-17685.67 keV	Zn64(d,2n+2He3)Co58	-39027.04 keV
Zn64(d,n+He3+a)Co58	-18449.43 keV	Zn64(d,p+2d+t)Co58	-41532.20 keV
Zn64(d,2d+a)Co58	-21718.34 keV	Zn64(d,n+2d+He3)Co58	-42295.95 keV
Zn64(d,n+p+d+a)Co58	-23942.90 keV	Zn64(d,n+2p+d+t)Co58	-43756.76 keV
Zn64(d,2n+2p+a)Co58	-26167.47 keV	Zn64(d,2n+p+d+He3)Co58	-44520.52 keV
Zn64(d,d+t+He3)Co58	-36038.72 keV	Zn64(d,4d)Co58	-45564.86 keV
Zn64(d,2p+2t)Co58	-37499.53 keV	Zn64(d,2n+3p+t)Co58	-45981.33 keV

<< 29-Cu-65	30-Zn-64	30-Zn-67 >>
<< MT108 (d,2α)	MT111 (d,2p) or MT5 (Cu64 production)	MT4 (d,n) >>



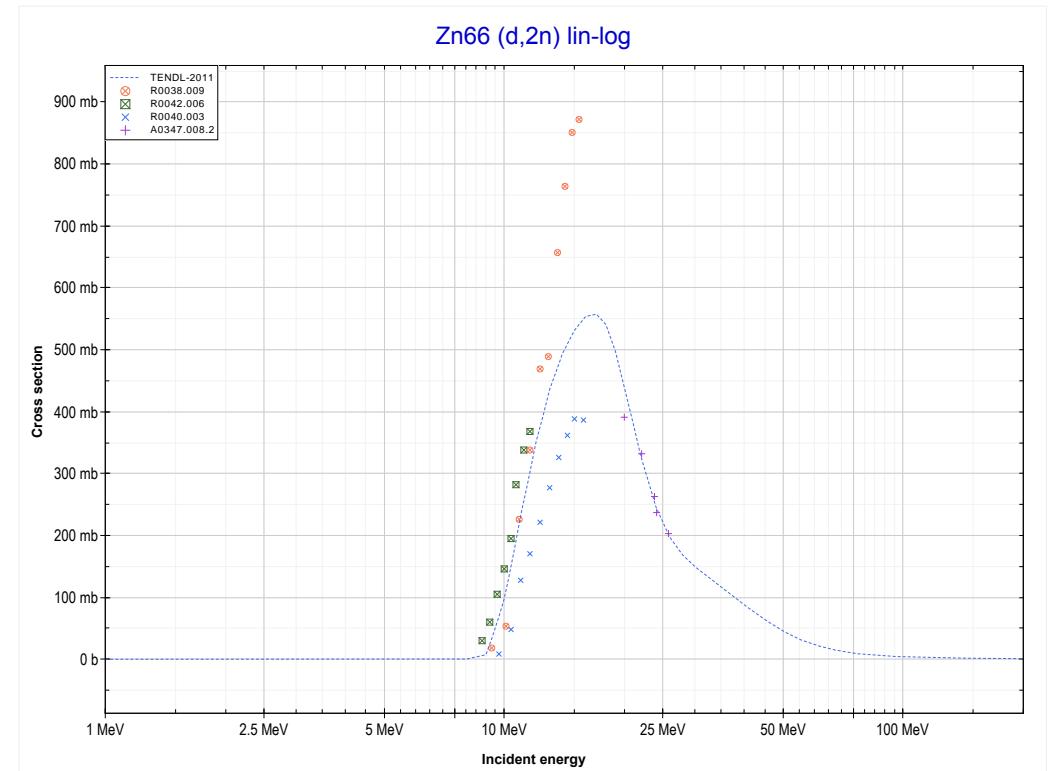
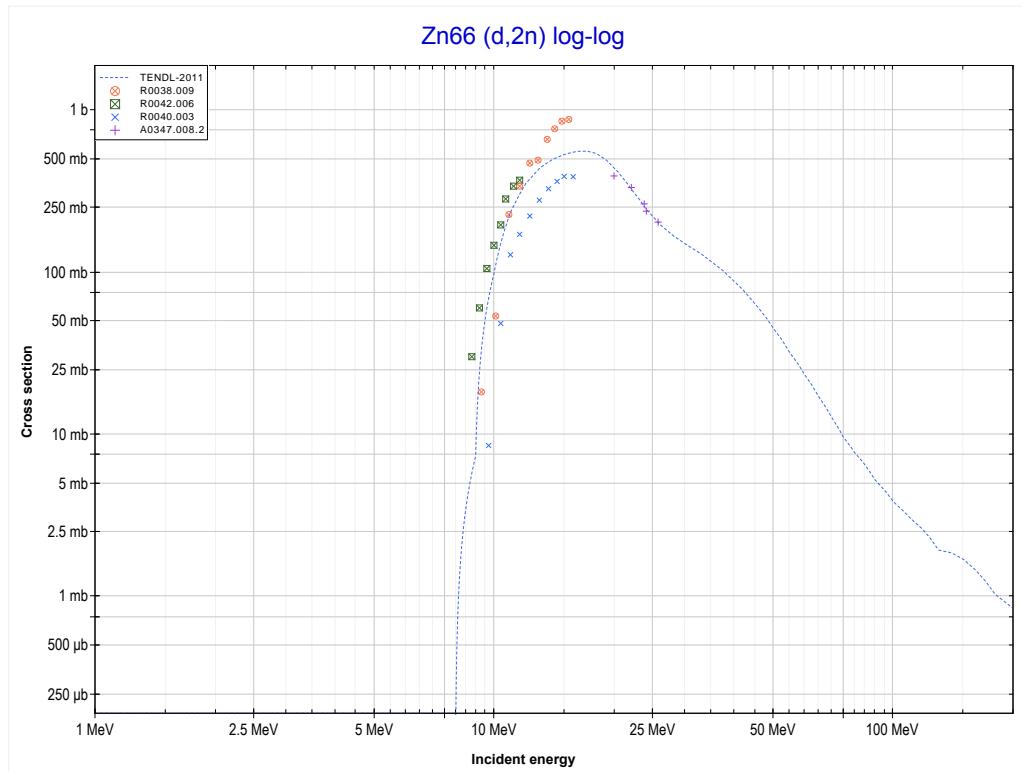
Reaction	Q-Value
Zn64(d,2p)Cu64	-2021.62 keV

<< 30-Zn-64	30-Zn-66 MT4 (d,n) or MT5 (Ga67 production)	32-Ge-70 >>
<< MT111 (d,2p)		MT16 (d,2n) >>



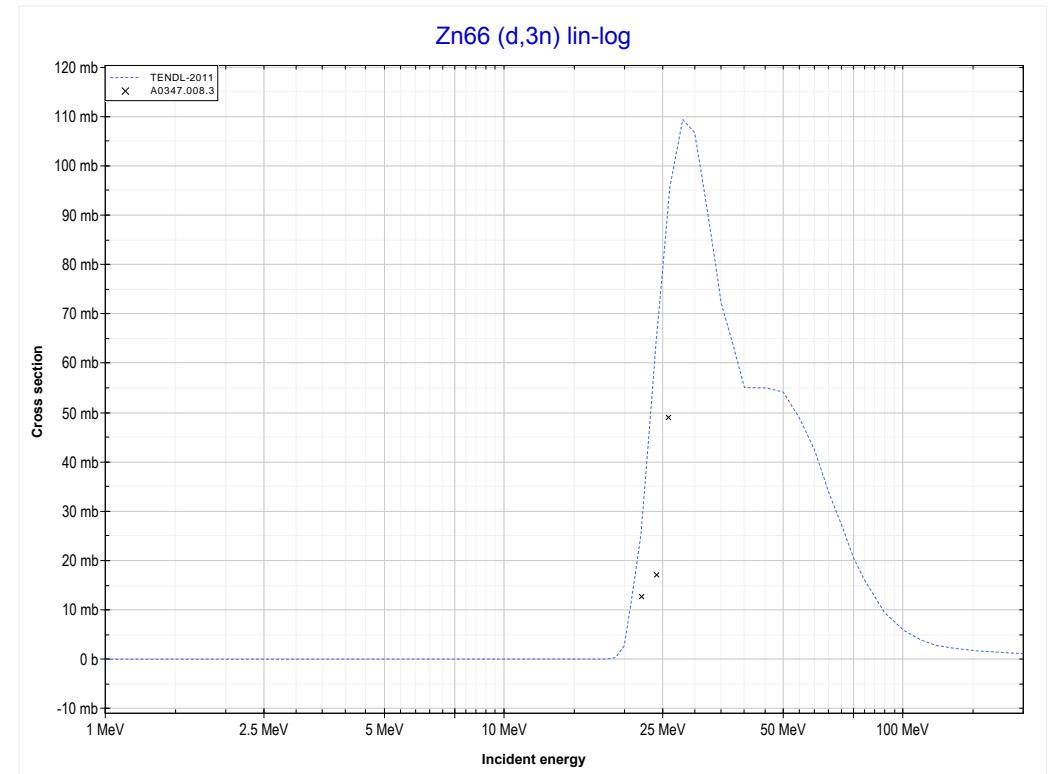
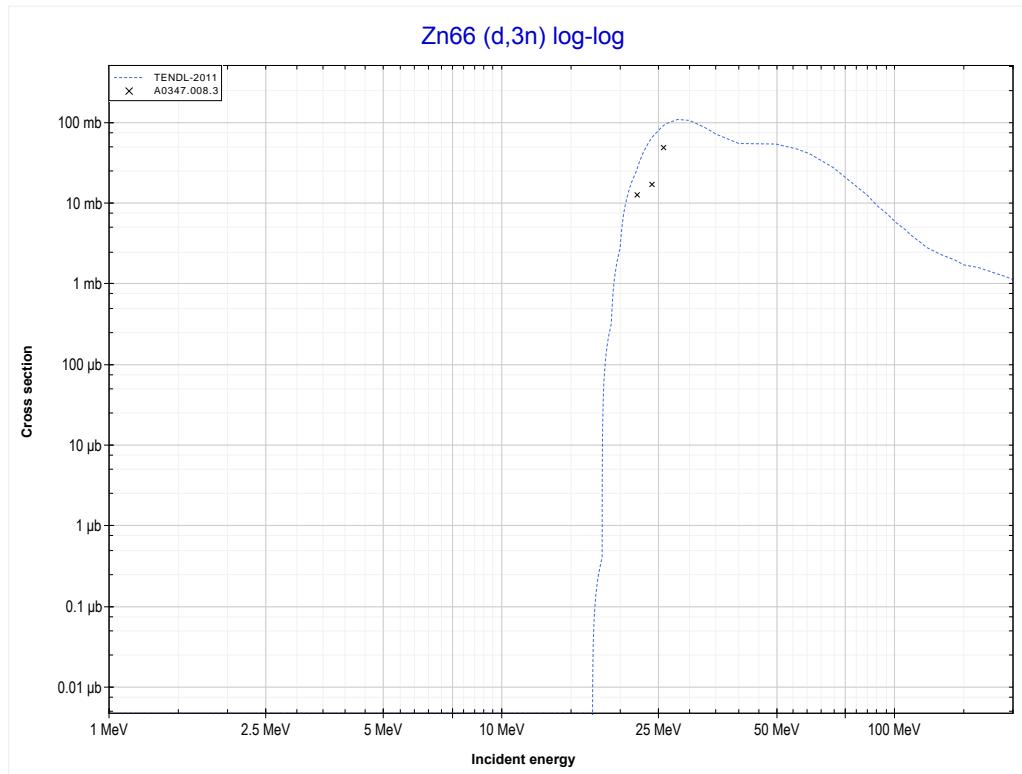
Reaction	Q-Value
Zn66(d,n)Ga67	3044.70 keV

<< 30-Zn-64	30-Zn-66 MT16 (d,2n) or MT5 (Ga66 production)	>> 30-Zn-68
<< MT4 (d,n)		>> MT17 (d,3n)



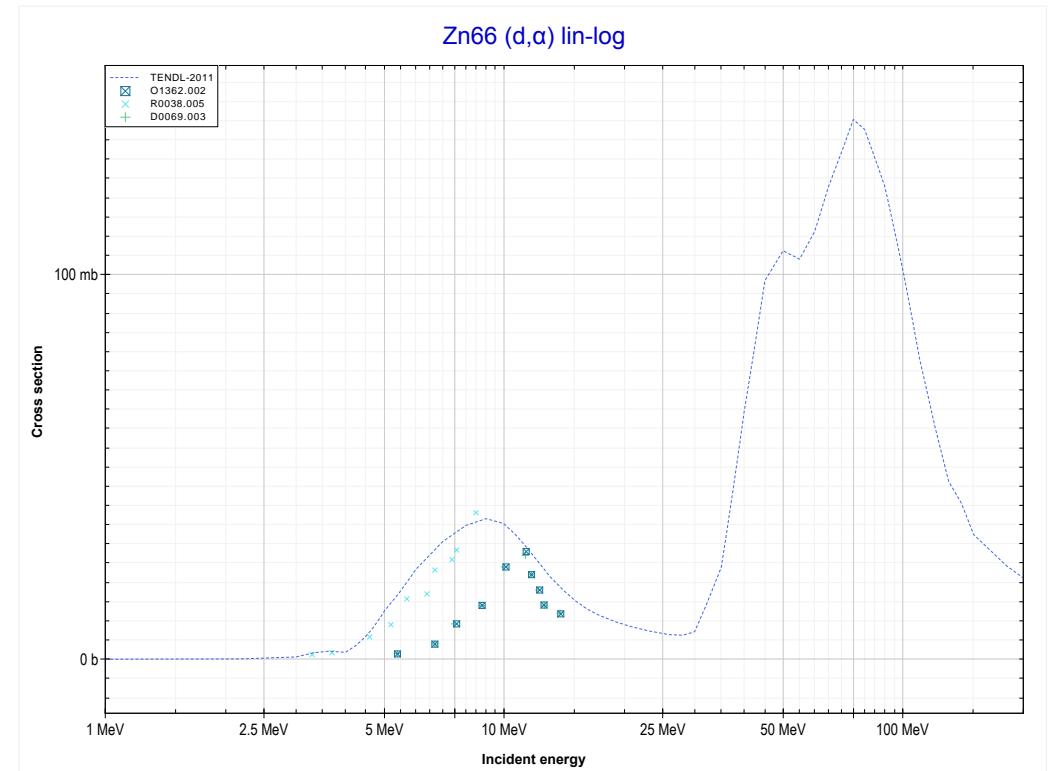
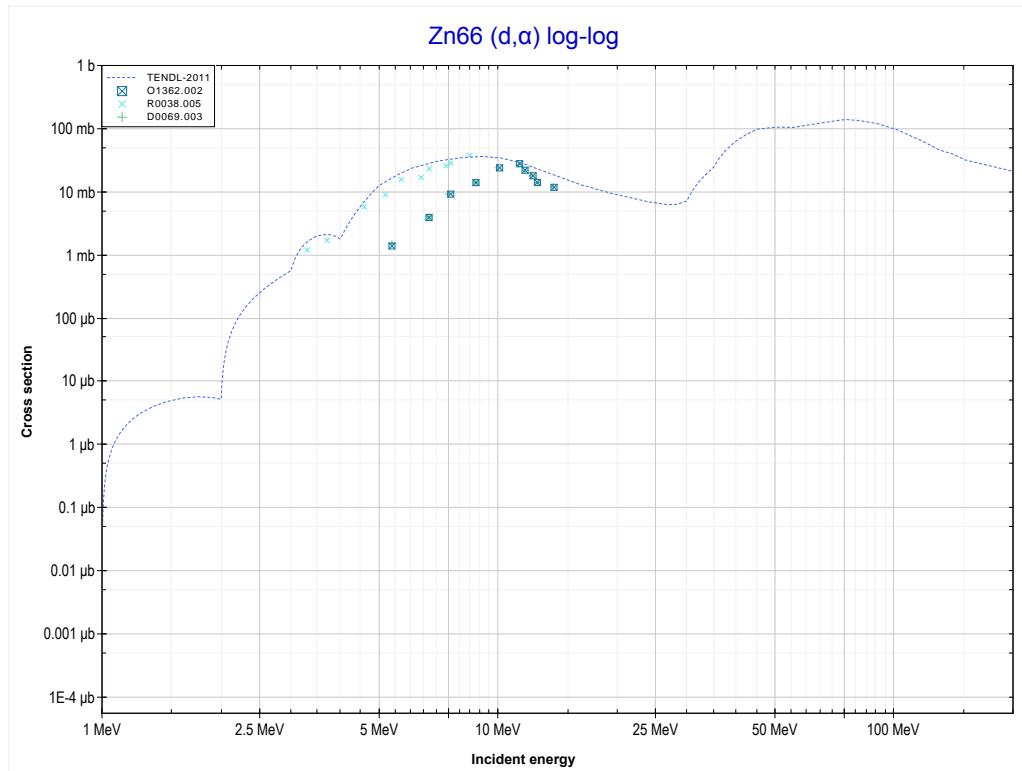
Reaction	Q-Value
Zn66(d,2n)Ga66	-8182.31 keV

<< 29-Cu-63	30-Zn-66 MT17 (d,3n) or MT5 (Ga65 production)	>> 34-Se-76
<< MT16 (d,2n)		MT107 (d, α) >>



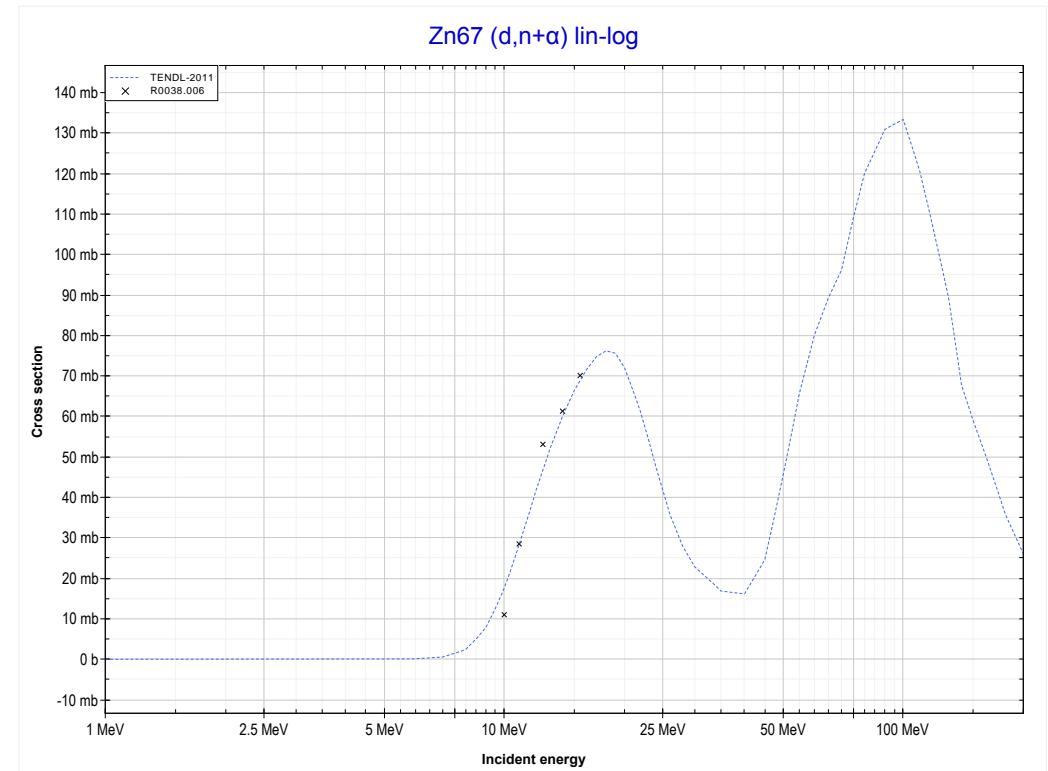
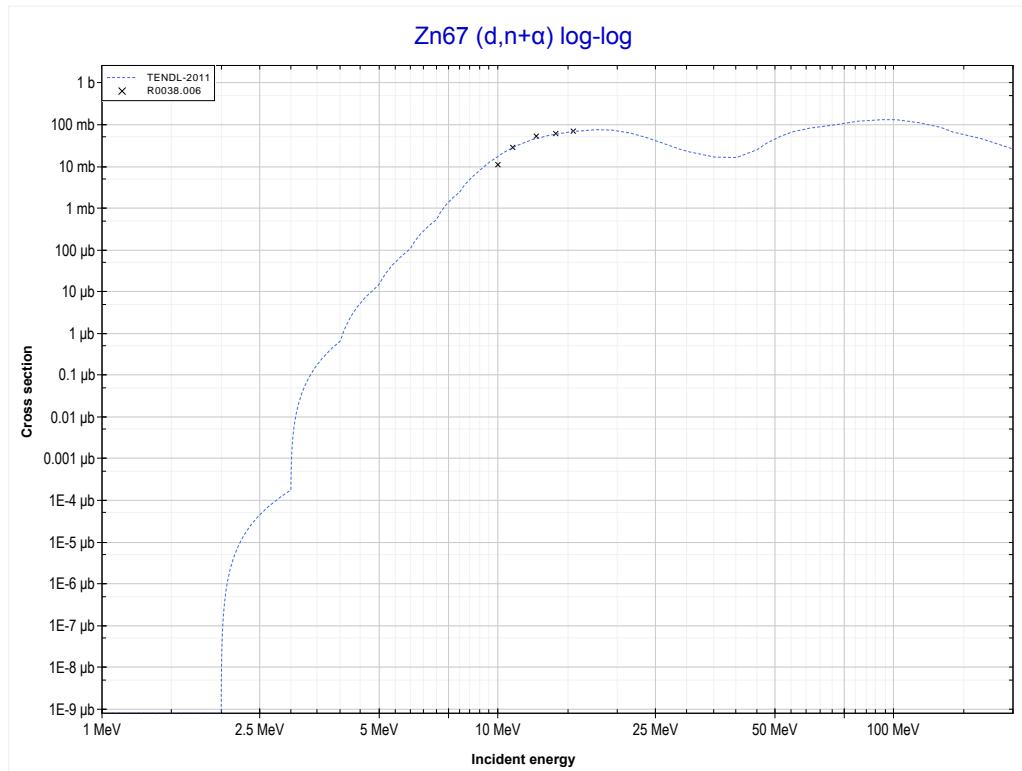
Reaction	Q-Value
Zn66(d,3n)Ga65	-17320.43 keV

<< 28-Ni-58	30-Zn-66 MT107 (d,α) or MT5 (Cu64 production)	32-Ge-70 >>
<< MT17 ($d,3n$)		MT22 ($d,n+\alpha$) >>



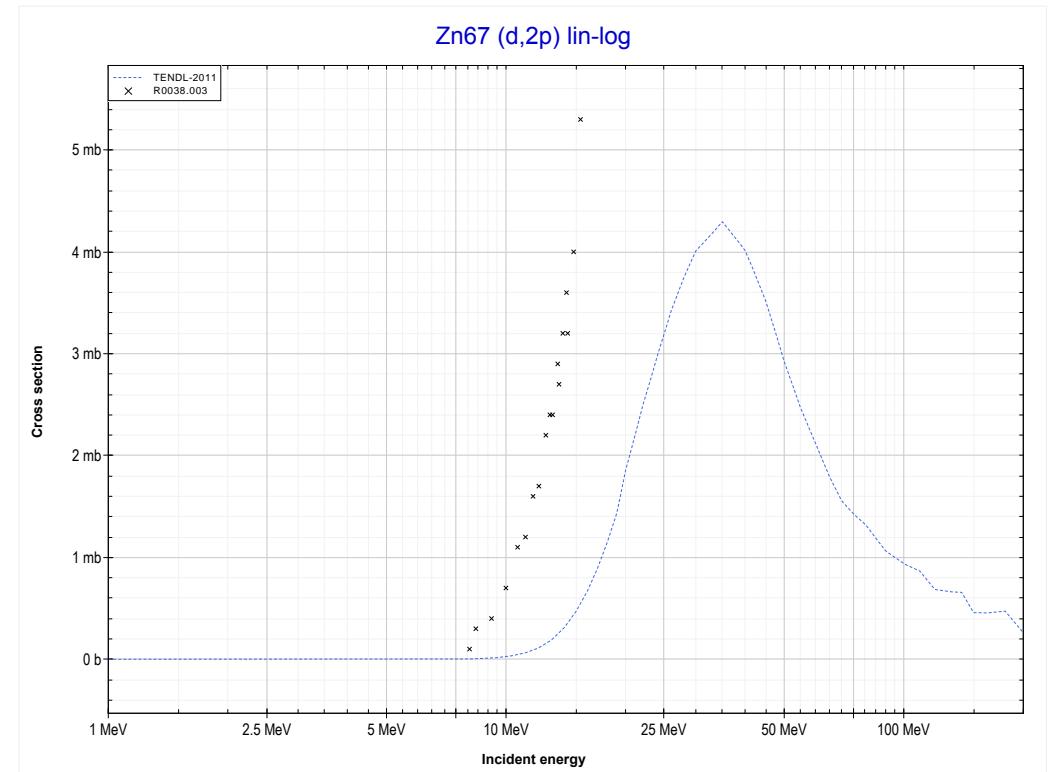
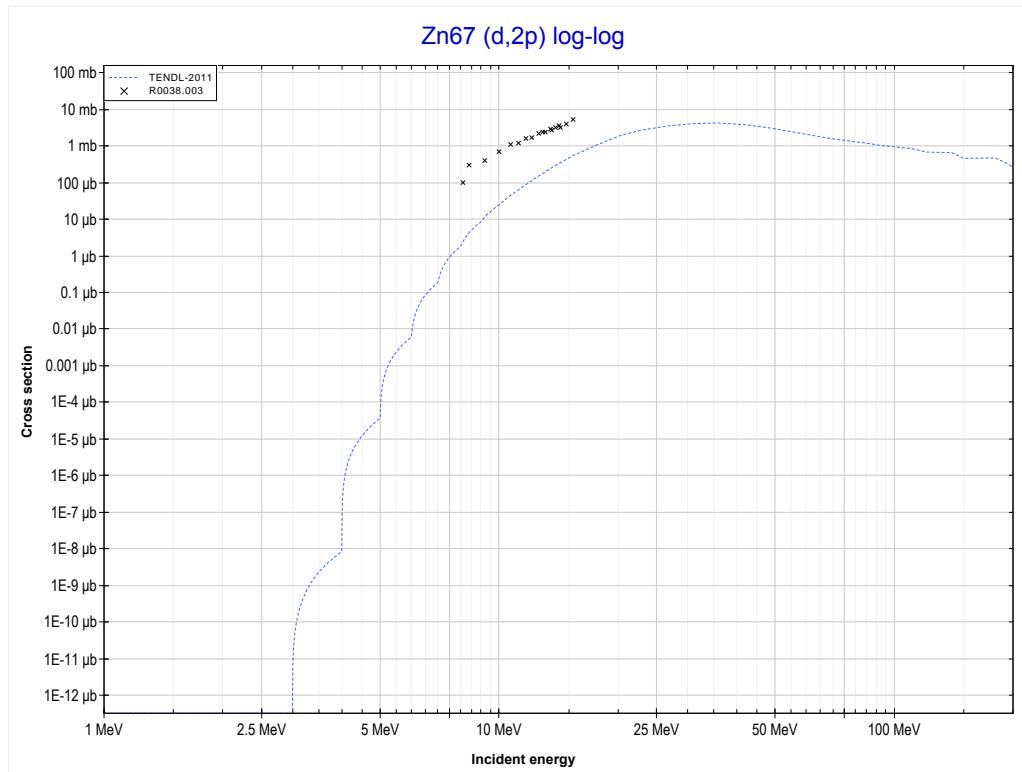
Reaction	Q-Value
Zn66(d,α)Cu64	7235.61 keV
Zn66($d,p+t$)Cu64	-12578.25 keV
Zn66($d,n+He3$)Cu64	-13342.01 keV
Zn66($d,2d$)Cu64	-16610.92 keV
Zn66($d,n+p+d$)Cu64	-18835.49 keV
Zn66($d,2n+2p$)Cu64	-21060.05 keV

<< 30-Zn-64	30-Zn-67 MT22 (d,n+α) or MT5 (Cu64 production)	>> 36-Kr-78
<< MT107 (d,α)		>> MT111 (d,2p) >>



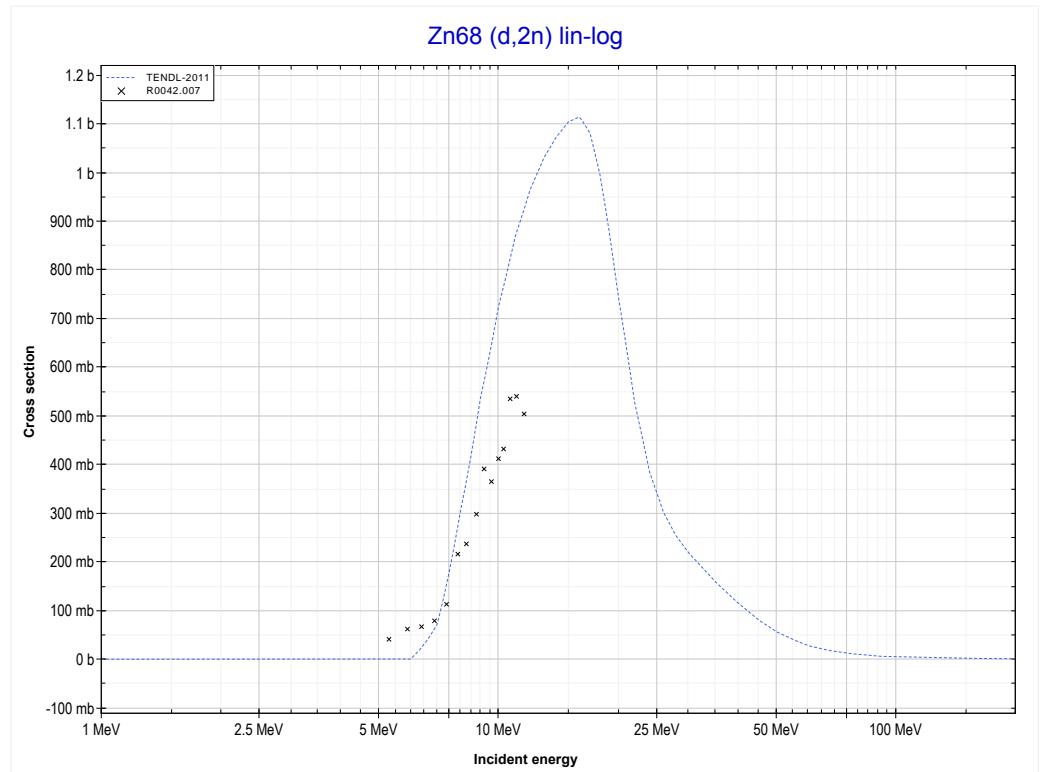
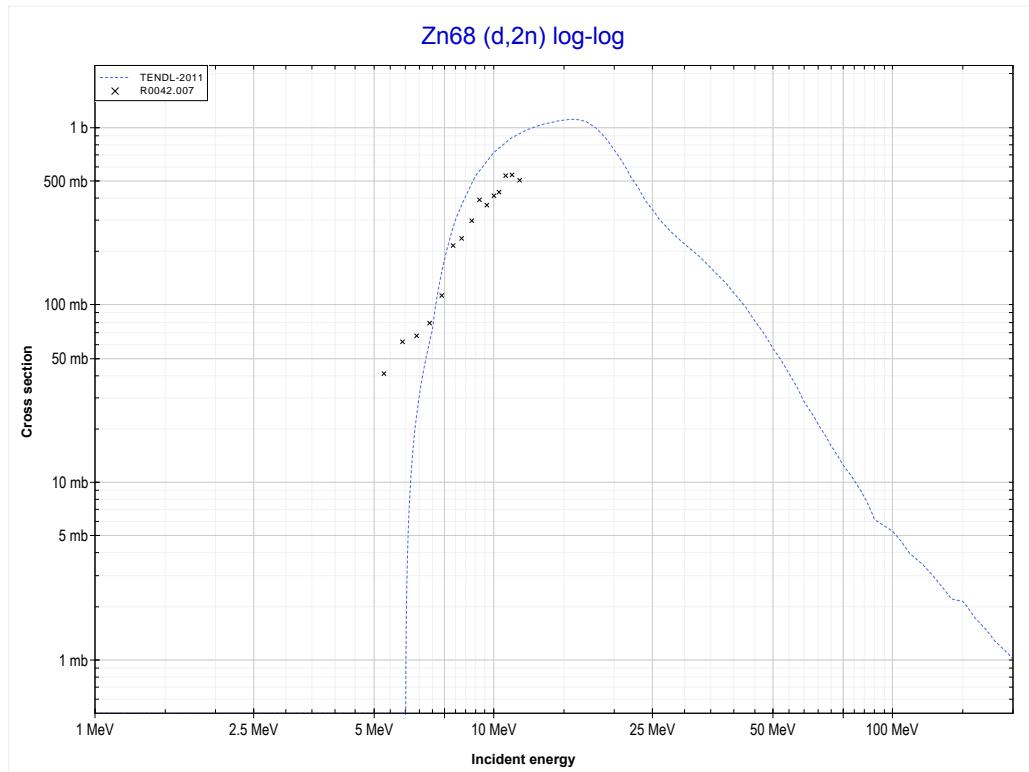
Reaction	Q-Value
Zn67(d,n+α)Cu64	183.29 keV
Zn67(d,d+t)Cu64	-17406.01 keV
Zn67(d,n+p+t)Cu64	-19630.57 keV
Zn67(d,2n+He3)Cu64	-20394.33 keV
Zn67(d,n+2d)Cu64	-23663.24 keV
Zn67(d,2n+p+d)Cu64	-25887.80 keV
Zn67(d,3n+2p)Cu64	-28112.37 keV

<< 30-Zn-64	30-Zn-67 MT111 (d,2p) or MT5 (Cu67 production)	39-Y-89 >>
<< MT22 (d,n+α)		MT16 (d,2n) >>



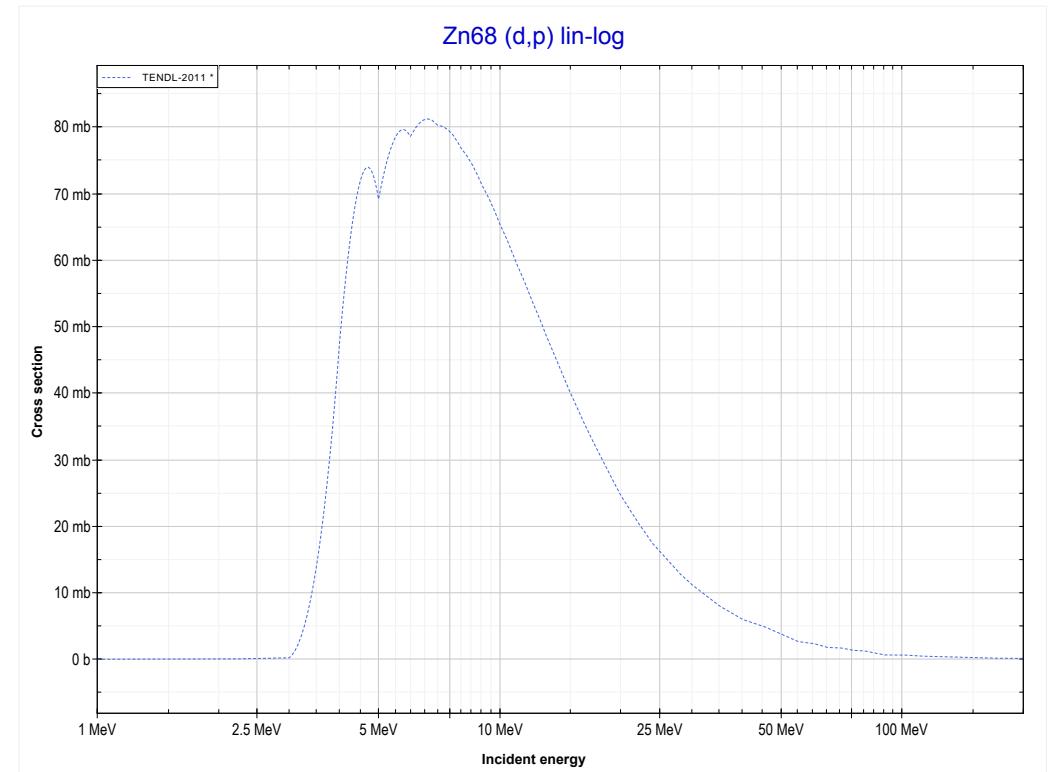
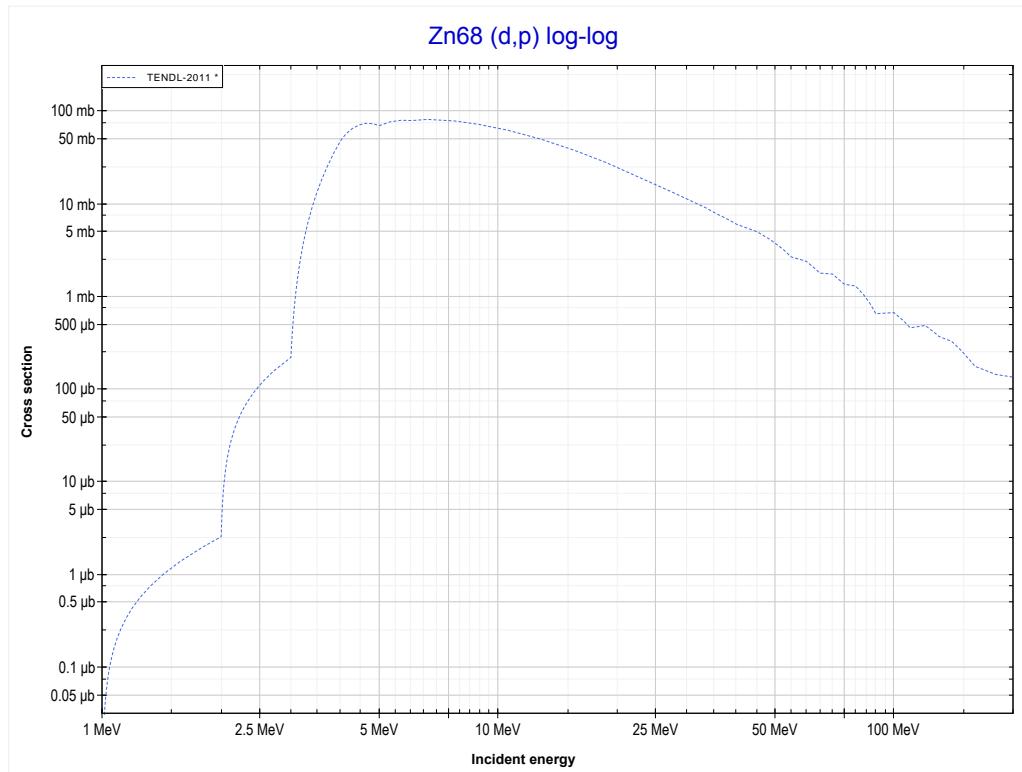
Reaction	Q-Value
$Zn^{67}(d,2p)Cu^{67}$	-2003.82 keV

<< 30-Zn-66	30-Zn-68 MT16 (d,2n) or MT5 (Ga68 production)	31-Ga-69 >>
<< MT111 (d,2p)		MT103 (d,p) >>

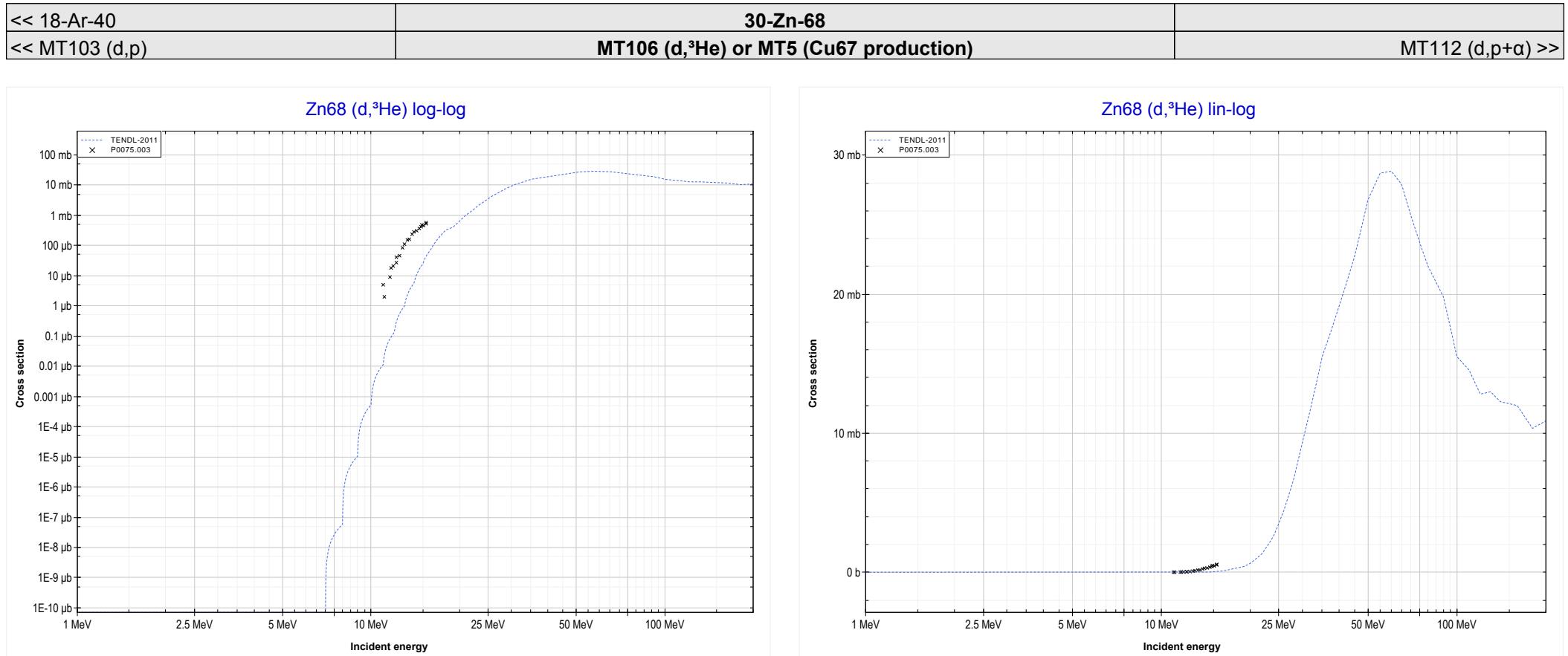


Reaction	Q-Value
Zn68(d,2n)Ga68	-5928.01 keV

<< 29-Cu-65	30-Zn-68 MT103 (d,p) or MT5 (Zn69 production)	>> 31-Ga-71
<< MT16 (d,2n)		>> MT106 (d, ³ He) >>

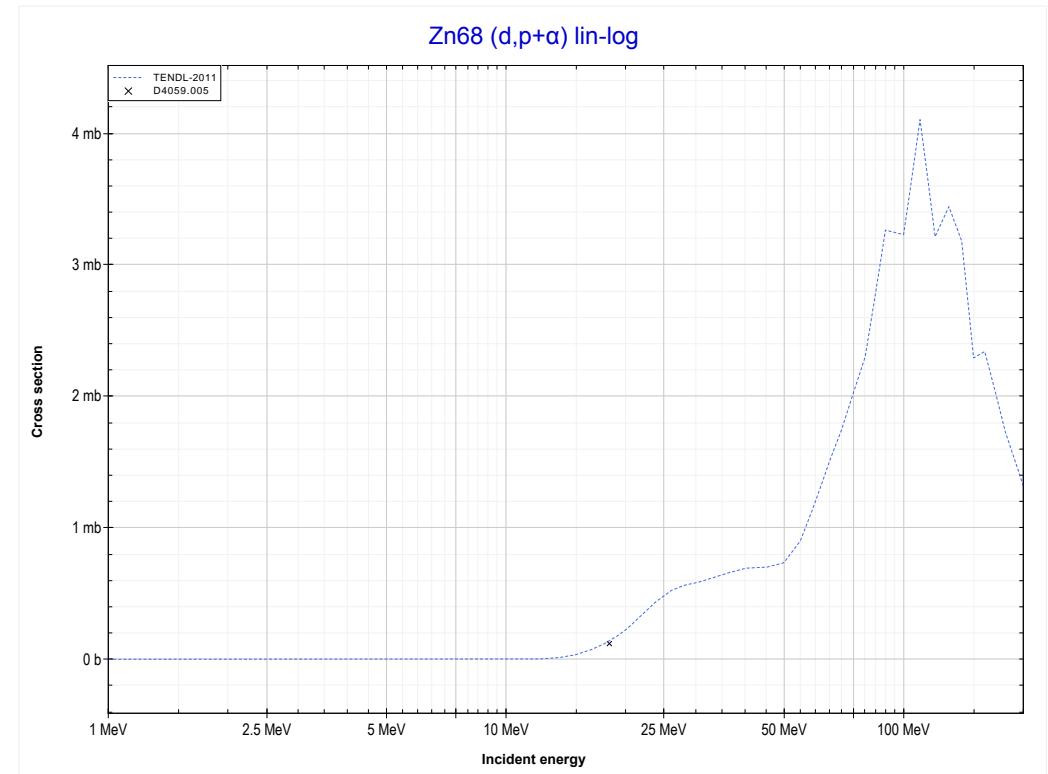
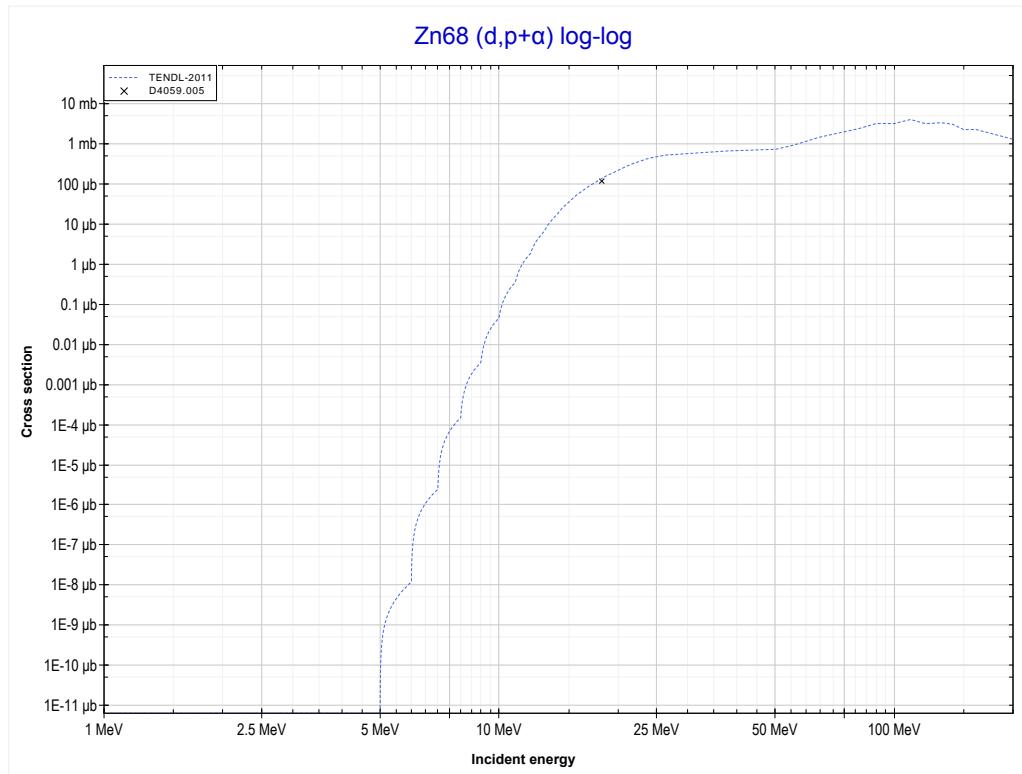


Reaction	Q-Value
Zn68(d,p)Zn69	4257.55 keV



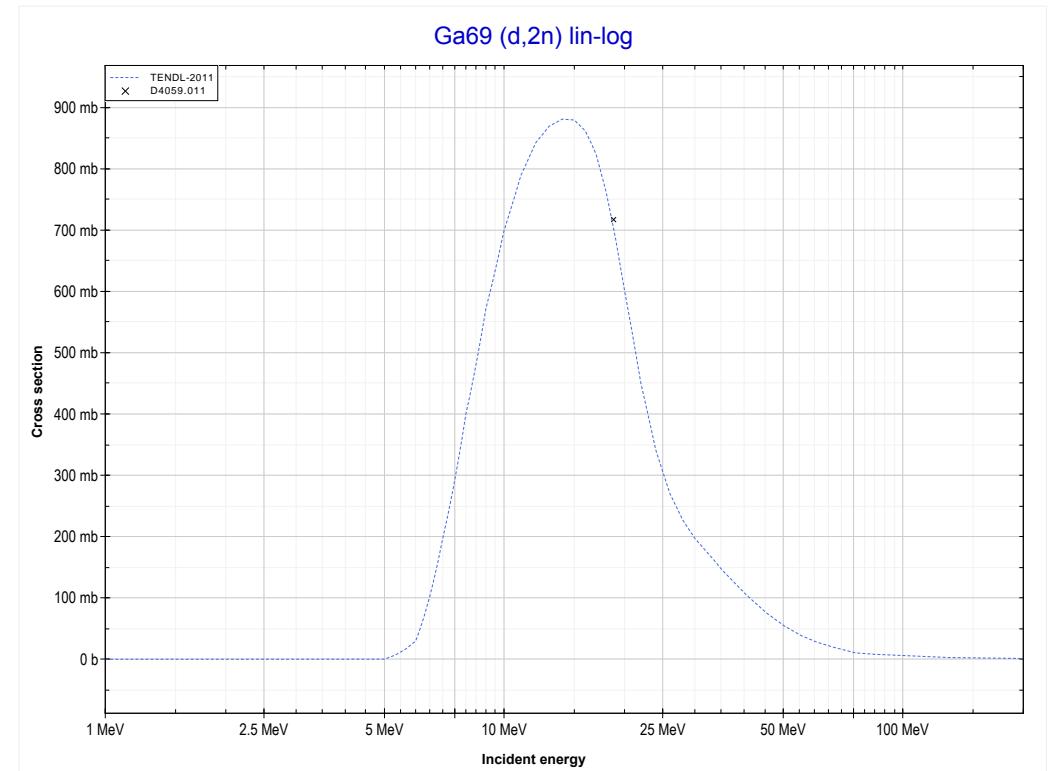
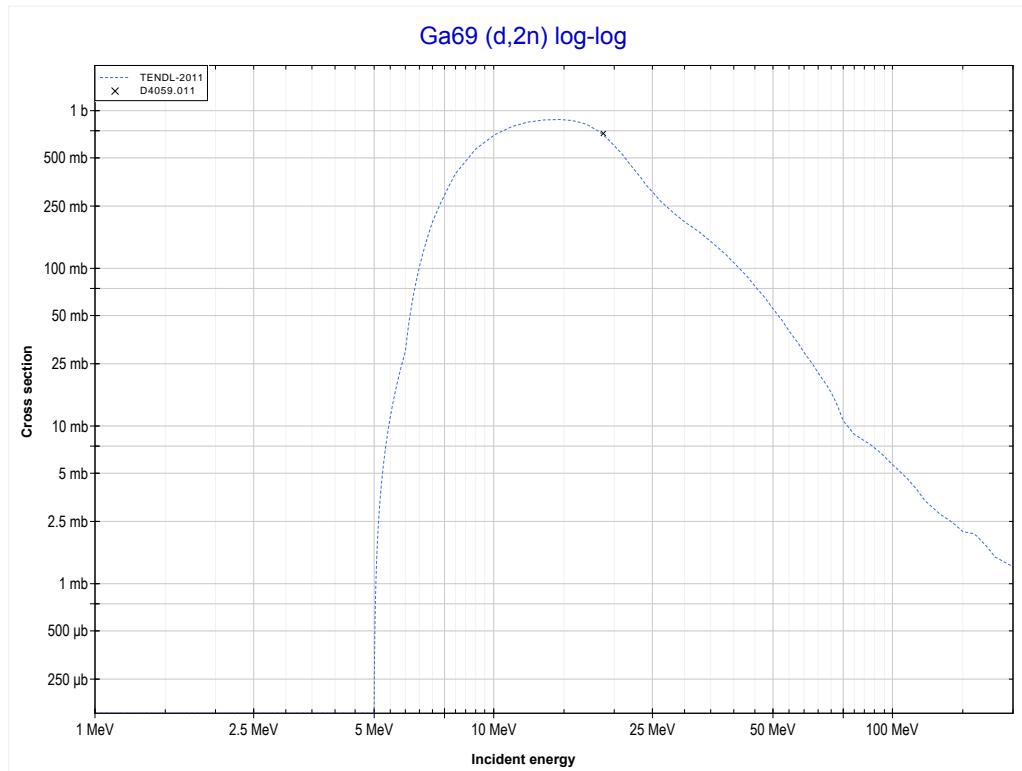
Reaction	Q-Value
$Zn68(d,He3)Cu67$	-4483.89 keV
$Zn68(d,p+d)Cu67$	-9977.37 keV
$Zn68(d,n+2p)Cu67$	-12201.94 keV

<< 28-Ni-62	30-Zn-68 MT112 (d,p+α) or MT5 (Ni65 production)	33-As-75 >>
<< MT106 (d, ³ He)		MT16 (d,2n) >>



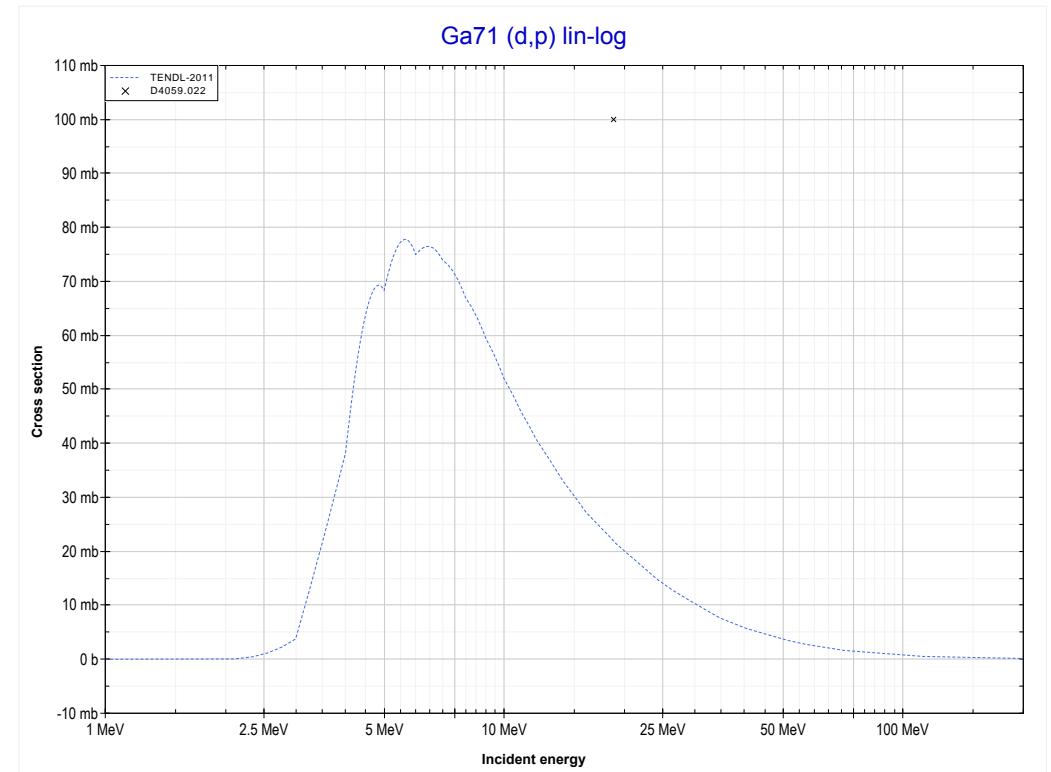
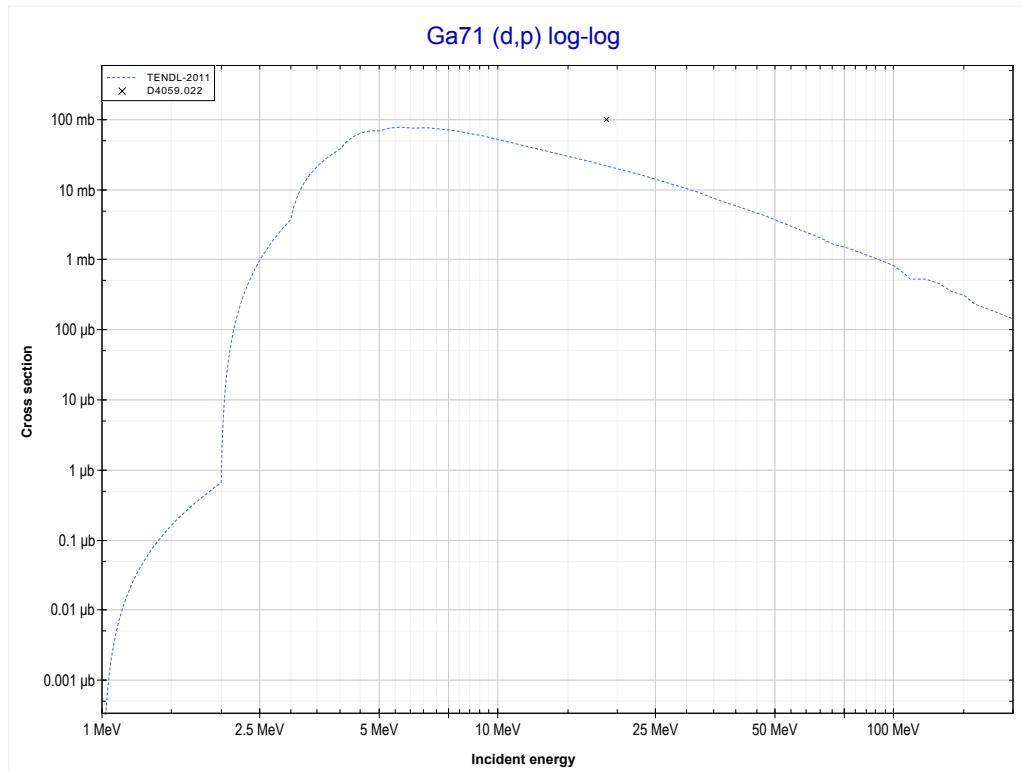
Reaction	Q-Value
Zn68(d,p+α)Ni65	-1459.26 keV
Zn68(d,d+He3)Ni65	-19812.31 keV
Zn68(d,2p+t)Ni65	-21273.13 keV
Zn68(d,n+p+He3)Ni65	-22036.88 keV
Zn68(d,p+2d)Ni65	-25305.79 keV
Zn68(d,n+2p+d)Ni65	-27530.36 keV
Zn68(d,2n+3p)Ni65	-29754.92 keV

<< 30-Zn-68	31-Ga-69 MT16 (d,2n) or MT5 (Ge69 production)	32-Ge-74 >>
<< MT112 (d,p+ α)		MT103 (d,p) >>



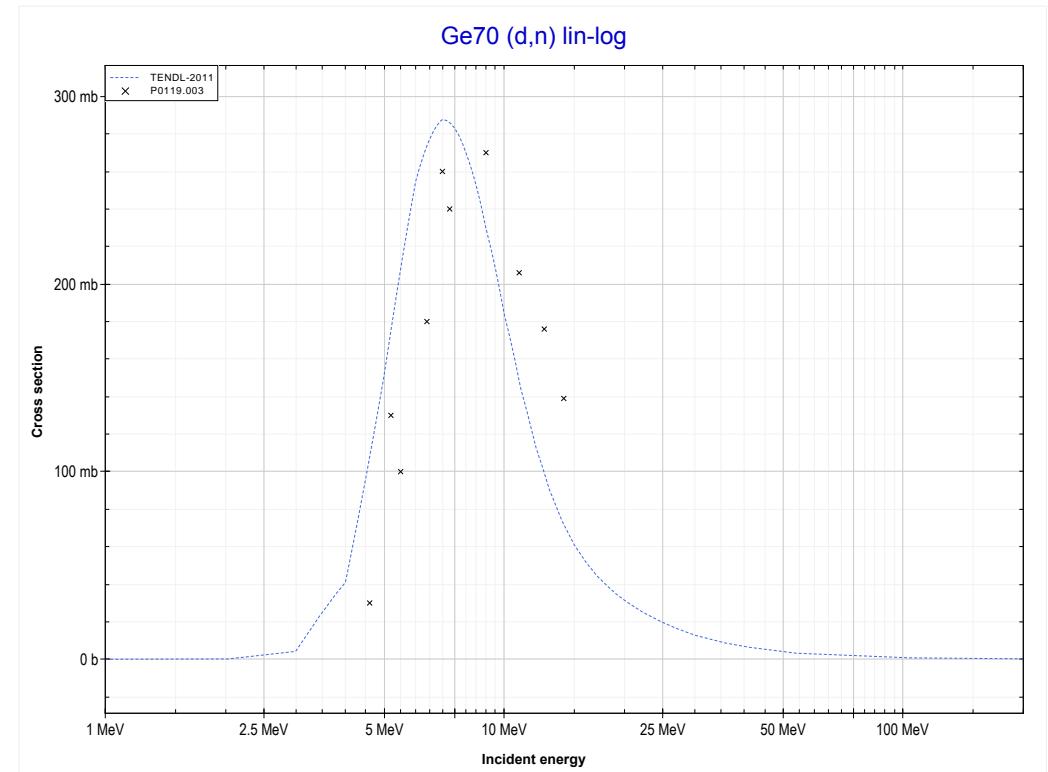
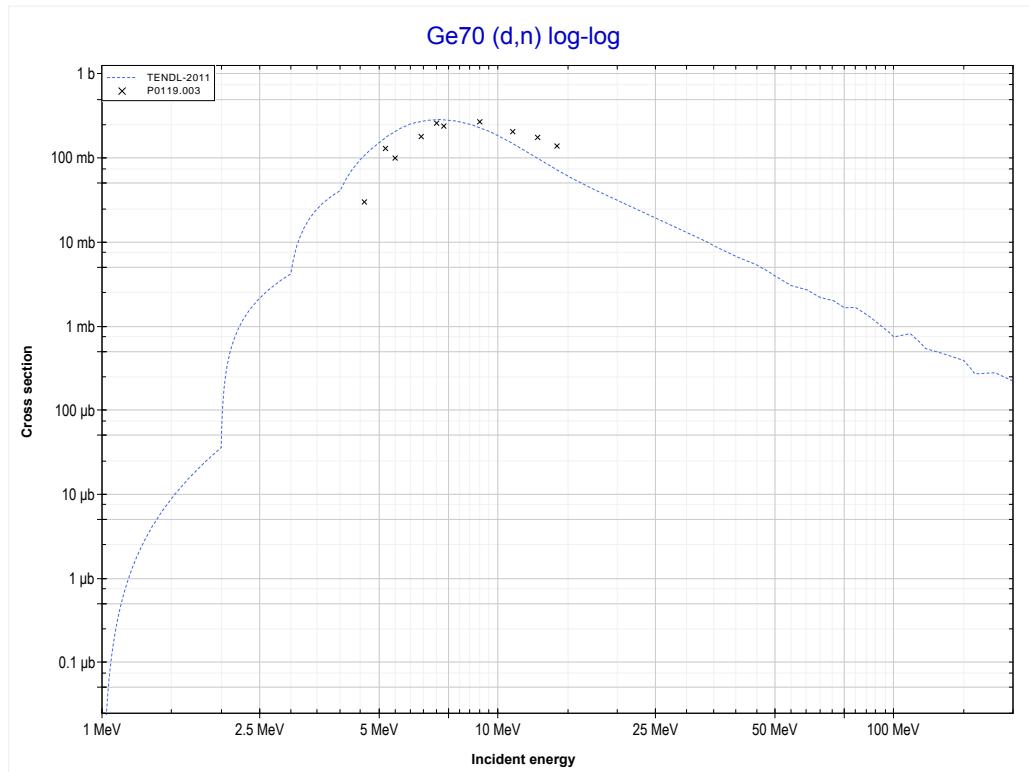
Reaction	Q-Value
$\text{Ga}^{69}(\text{d},\text{2n})\text{Ge}^{69}$	-5234.11 keV

<< 30-Zn-68	31-Ga-71 MT103 (d,p) or MT5 (Ga72 production)	>> 32-Ge-70
<< MT16 (d,2n)		MT4 (d,n) >>



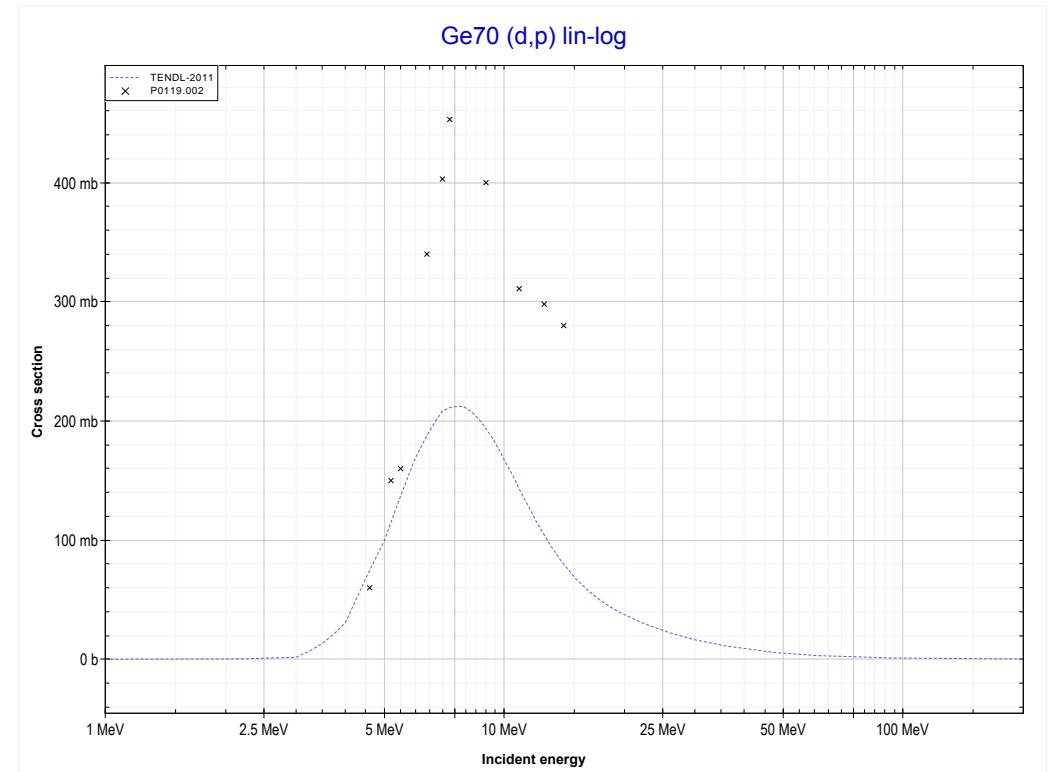
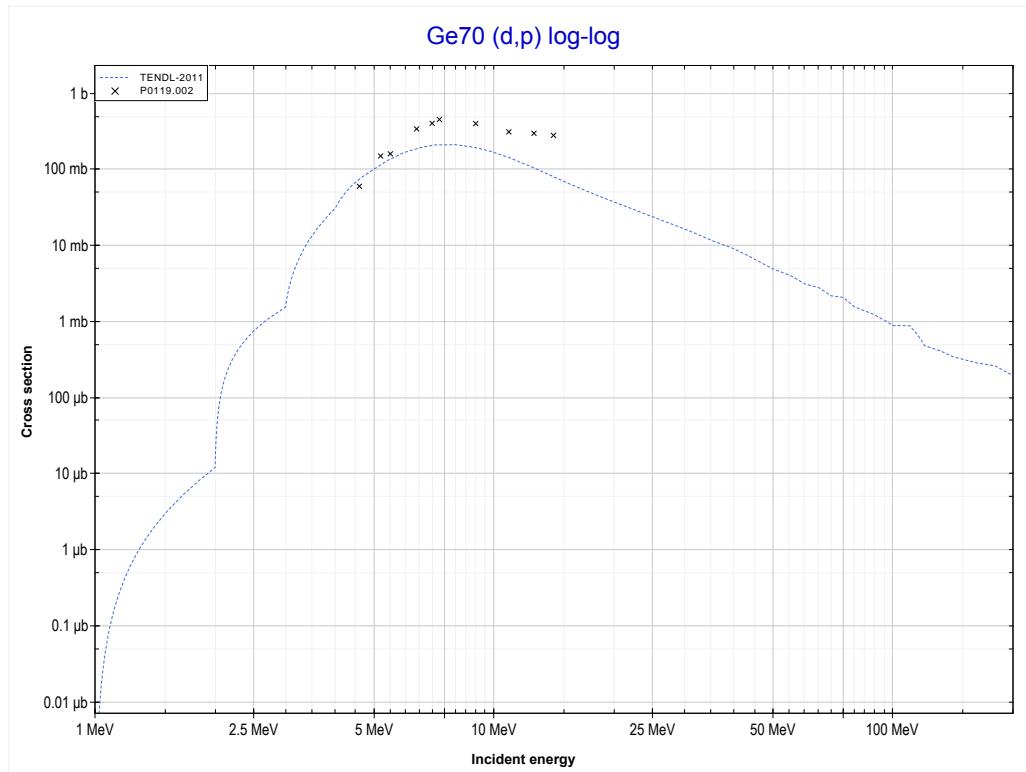
Reaction	Q-Value
Ga71(d,p)Ga72	4295.95 keV

<< 30-Zn-66	32-Ge-70 MT4 (d,n) or MT5 (As71 production)	>> 34-Se-74
<< MT103 (d,p)		MT103 (d,p) >>



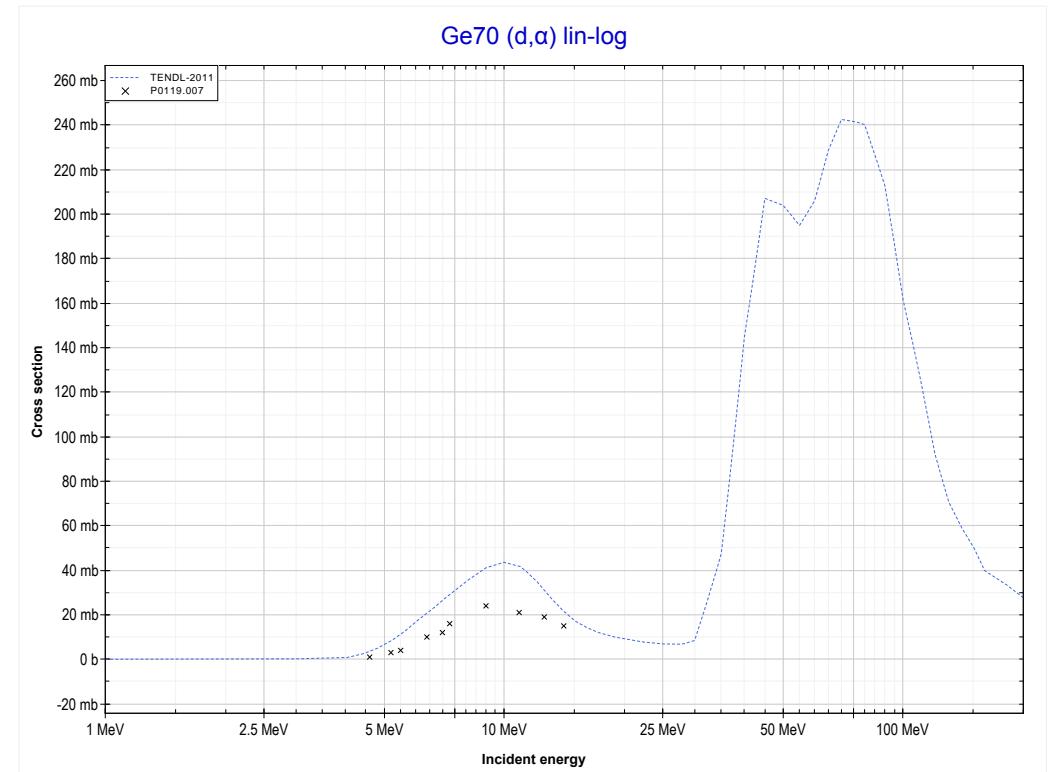
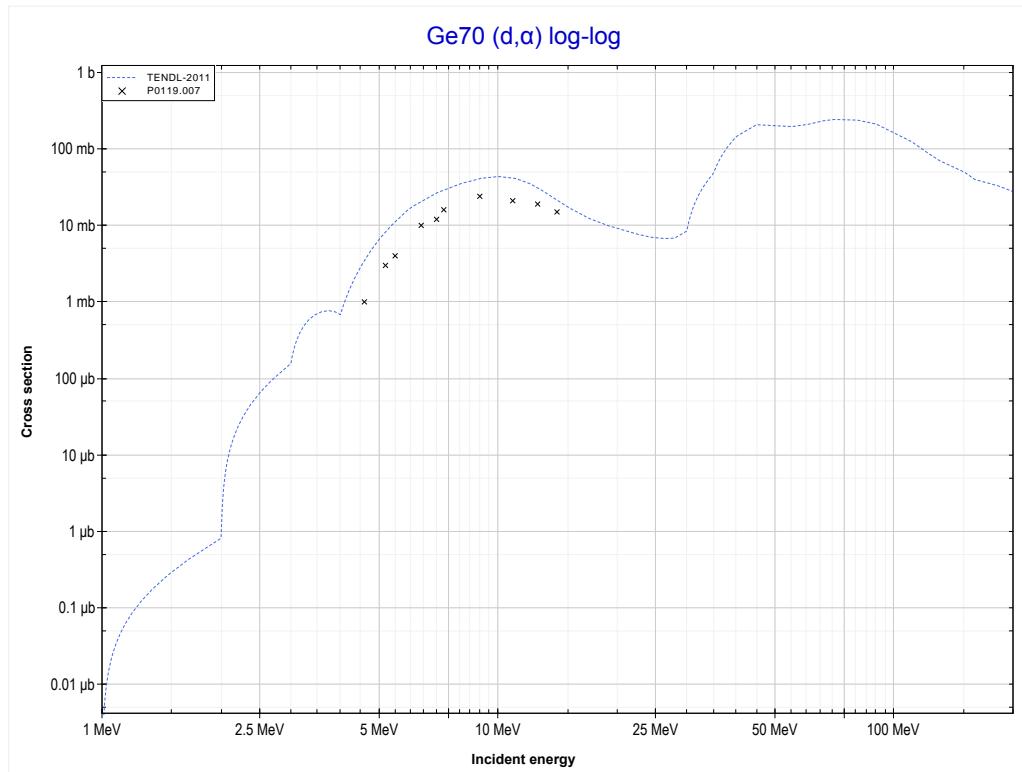
Reaction	Q-Value
Ge70(d,n)As71	2395.30 keV

<< 31-Ga-71	32-Ge-70 MT103 (d,p) or MT5 (Ge71 production)	>> 33-As-75
<< MT4 (d,n)		>> MT107 (d, α)



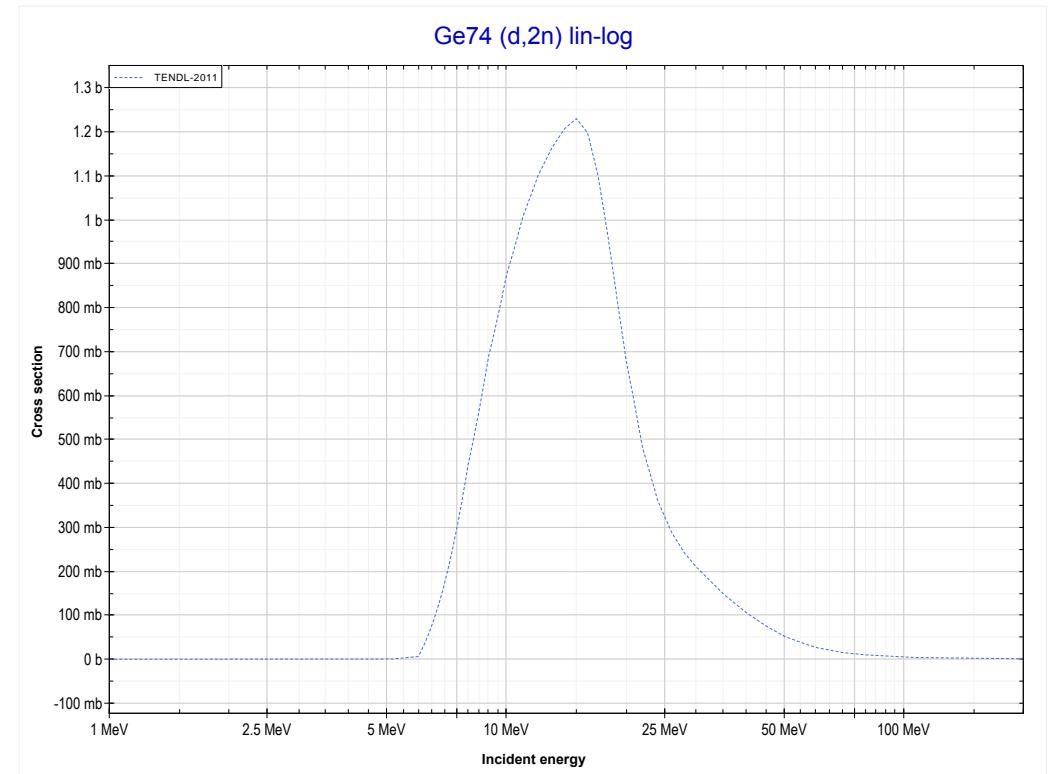
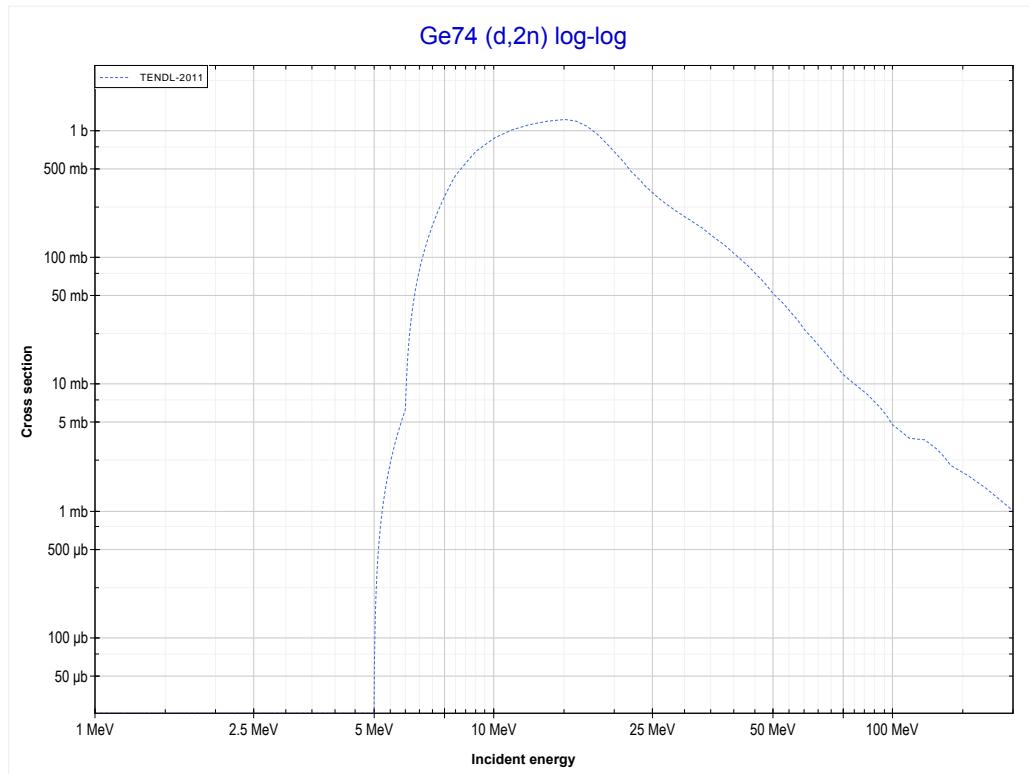
Reaction	Q-Value
Ge70(d,p)Ge71	5191.35 keV

<< 30-Zn-66	32-Ge-70 MT107 (d, α) or MT5 (Ga68 production)	>> 36-Kr-78
<< MT103 (d,p) >>		MT16 (d,2n) >>



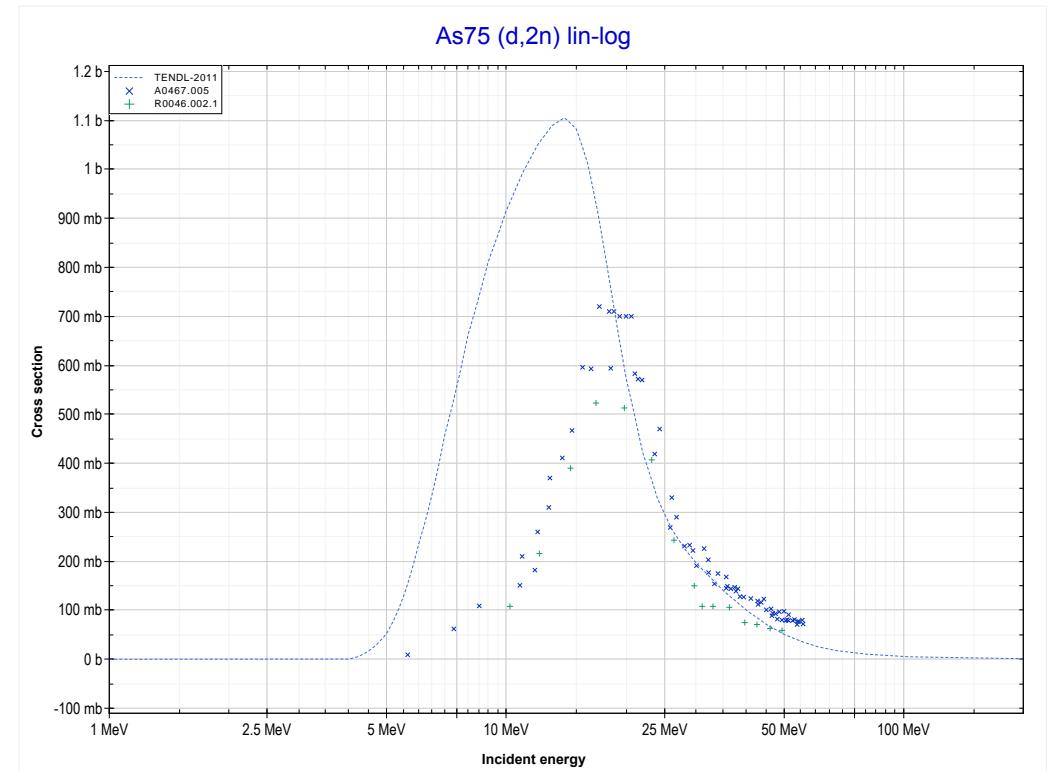
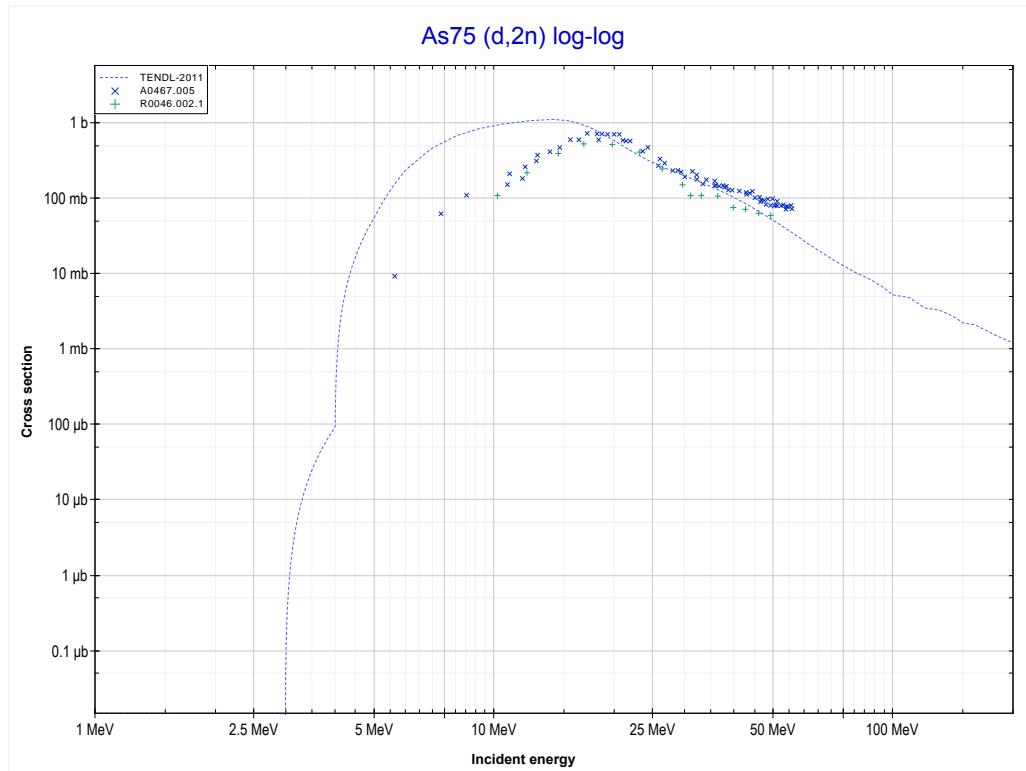
Reaction	Q-Value
Ge70(d, α)Ga68	7233.81 keV
Ge70(d,p+t)Ga68	-12580.05 keV
Ge70(d,n+He3)Ga68	-13343.81 keV
Ge70(d,2d)Ga68	-16612.72 keV
Ge70(d,n+p+d)Ga68	-18837.29 keV
Ge70(d,2n+2p)Ga68	-21061.85 keV

<< 31-Ga-69	32-Ge-74 MT16 (d,2n) or MT5 (As74 production)	>> 33-As-75
<< MT107 (d, α)		MT16 (d,2n) >>



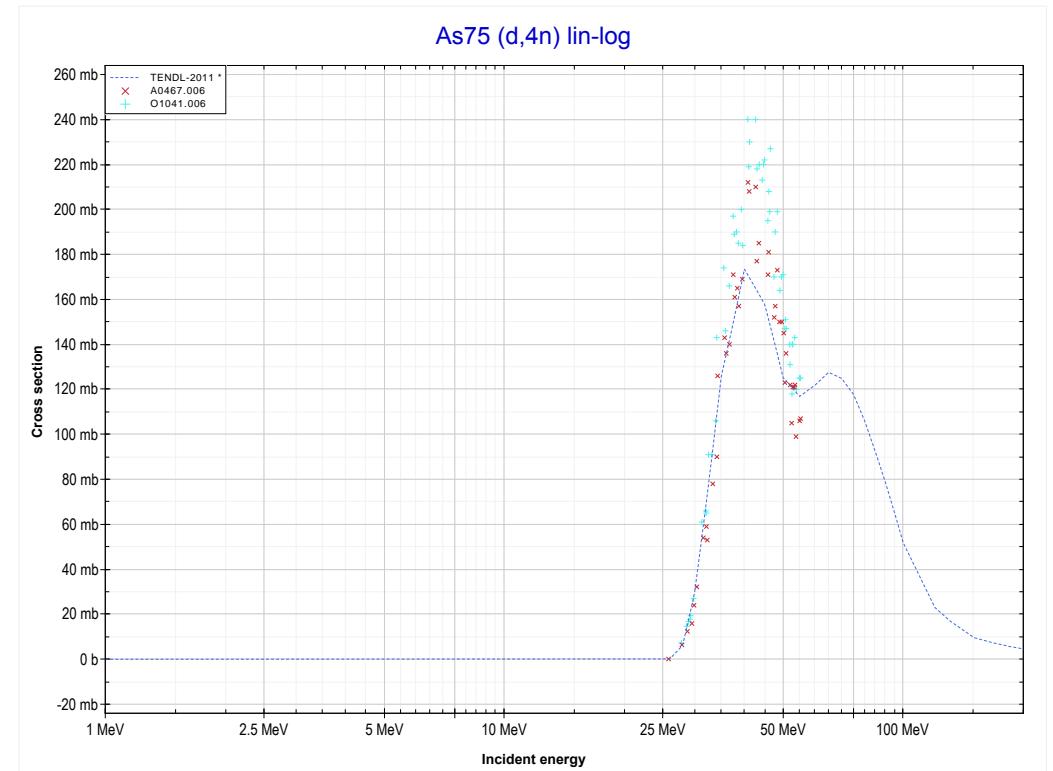
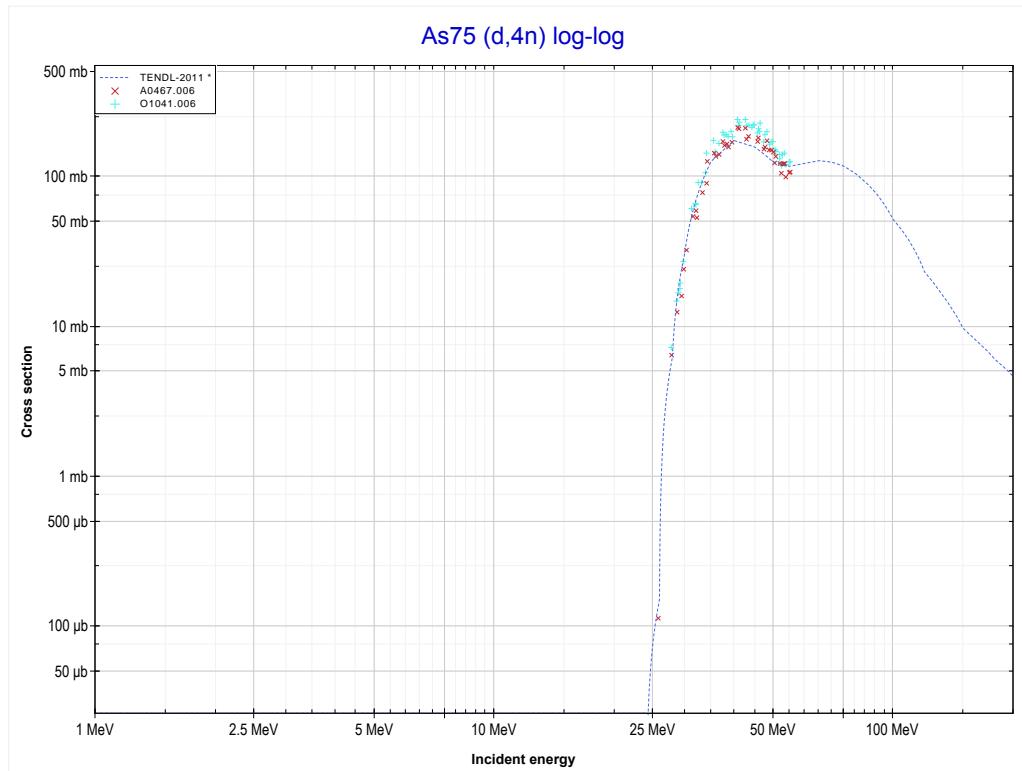
Reaction	Q-Value
$^{74}\text{Ge}(d,2n)^{74}\text{As}$	-5569.31 keV

<< 32-Ge-74	33-As-75 MT16 (d,2n) or MT5 (Se75 production)	>> 34-Se-74
<< MT16 (d,2n)		>> MT37 (d,4n)



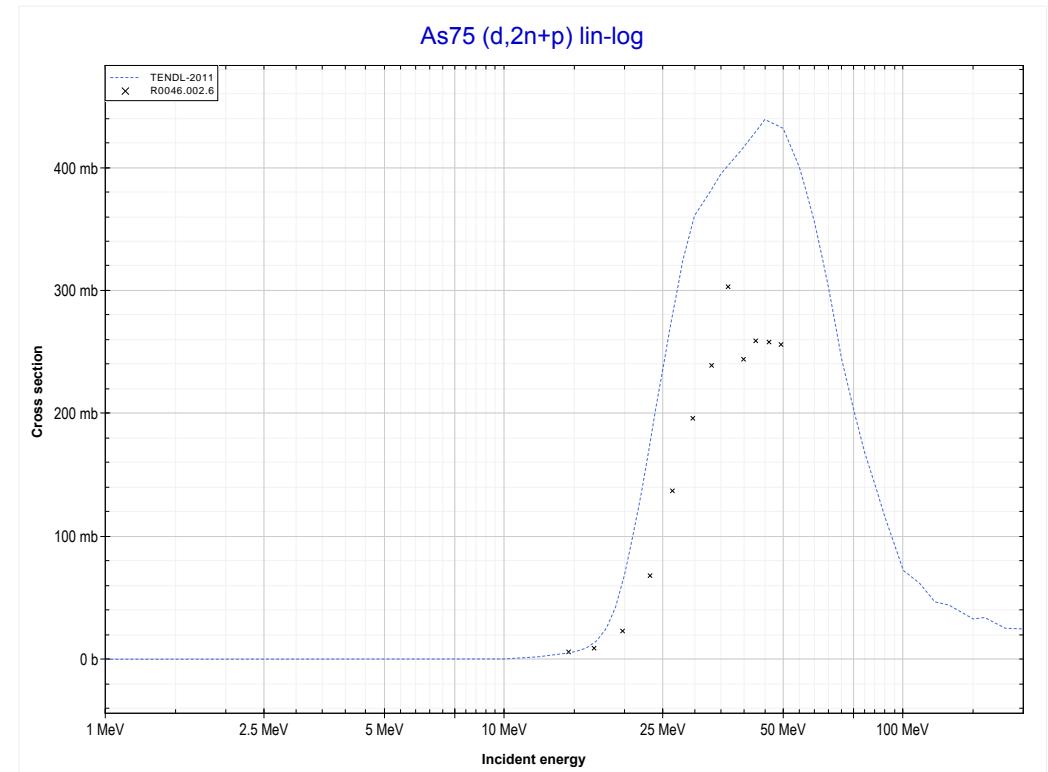
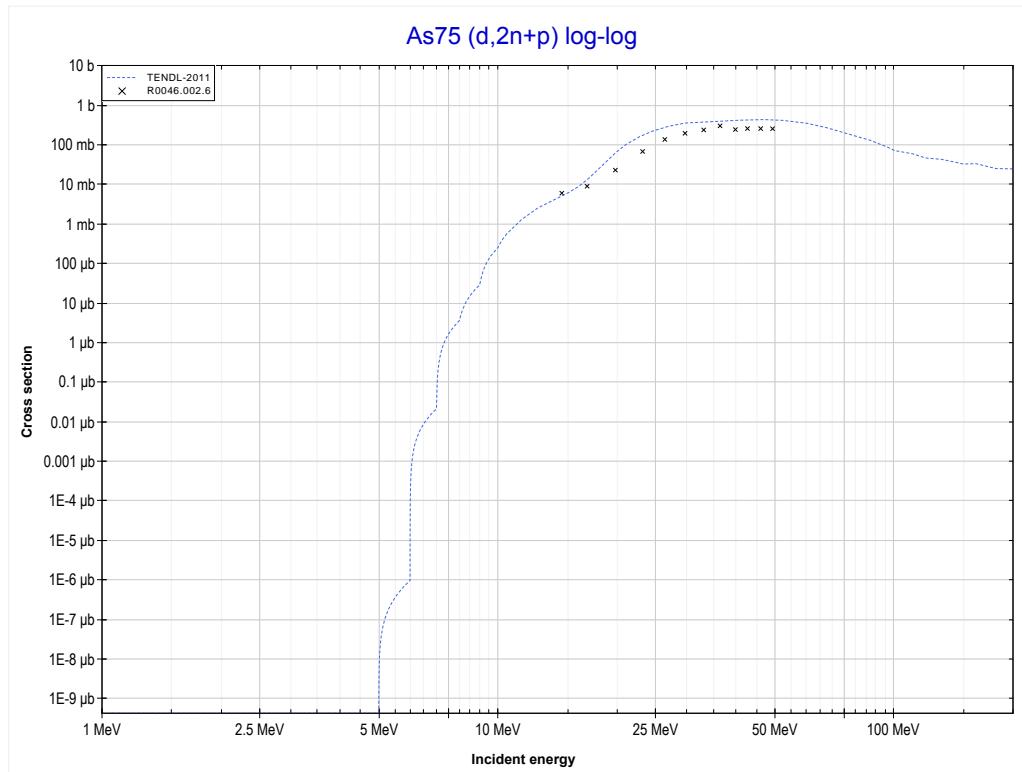
Reaction	Q-Value
$\text{As}^{75}(d,2n)\text{Se}^{75}$	-3870.31 keV

<< 27-Co-59	33-As-75 MT37 (d,4n) or MT5 (Se73 production)	34-Se-76 >>
<< MT16 (d,2n) >>		MT41 (d,2n+p) >>



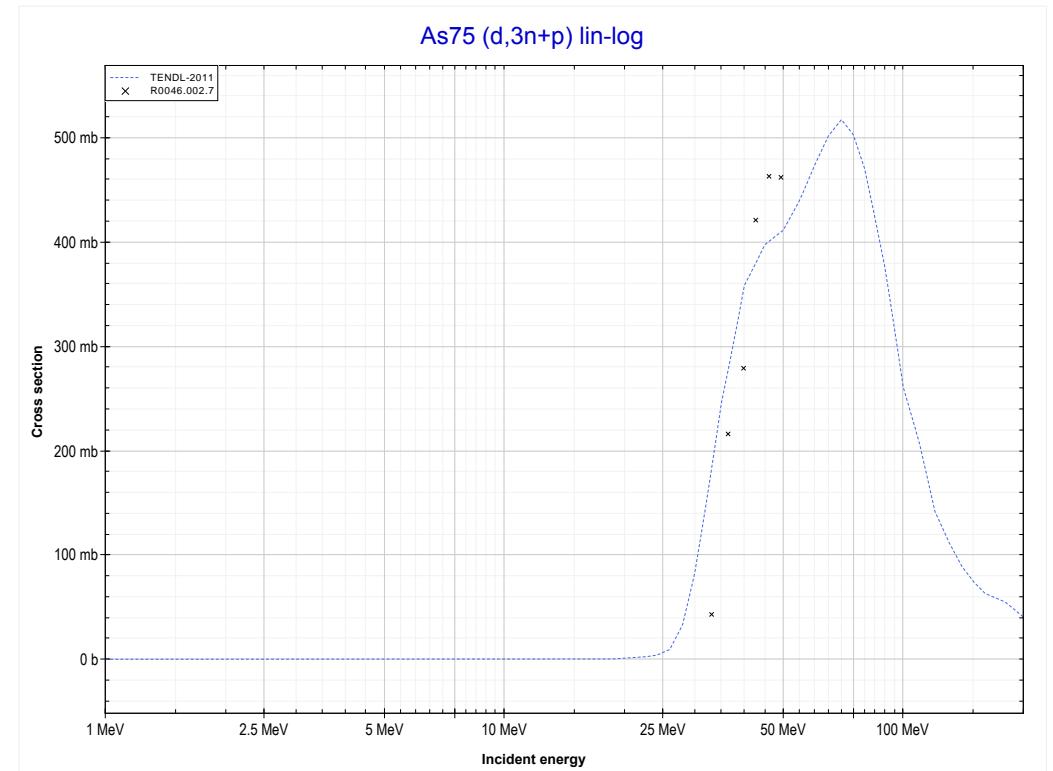
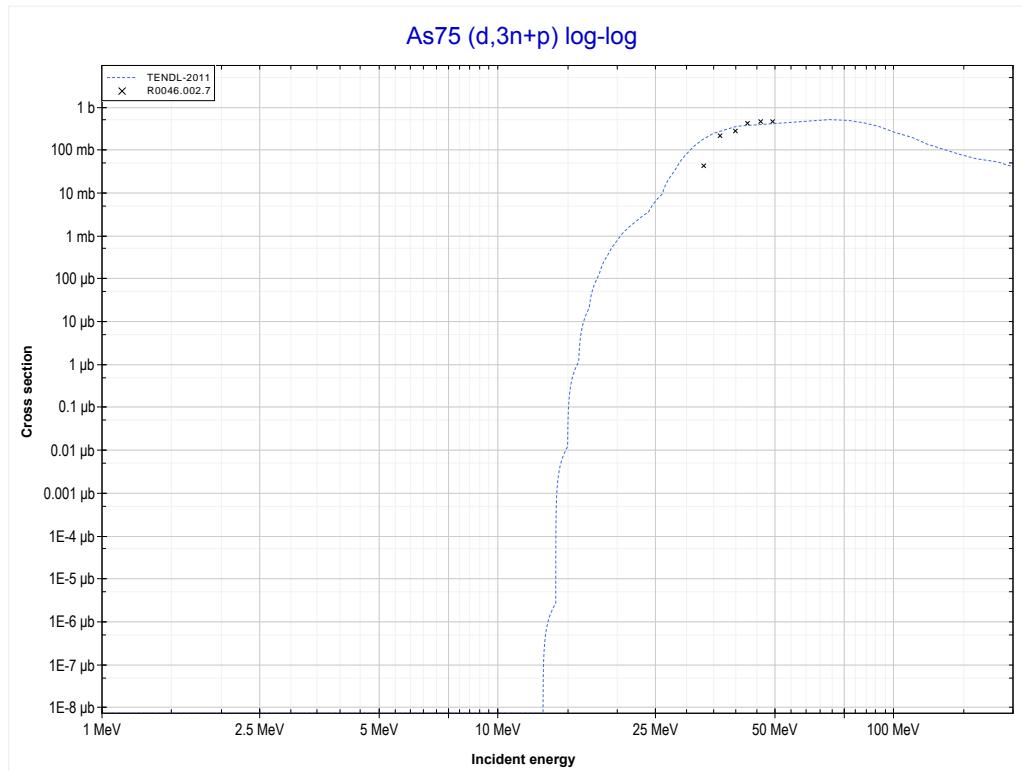
Reaction	Q-Value
$\text{As}^{75}(\text{d},\text{4n})\text{Se}^{73}$	-23963.95 keV

<< 28-Ni-58	33-As-75 MT41 (d,2n+p) or MT5 (As74 production)	39-Y-89 >>
<< MT37 (d,4n)		MT42 (d,3n+p) >>



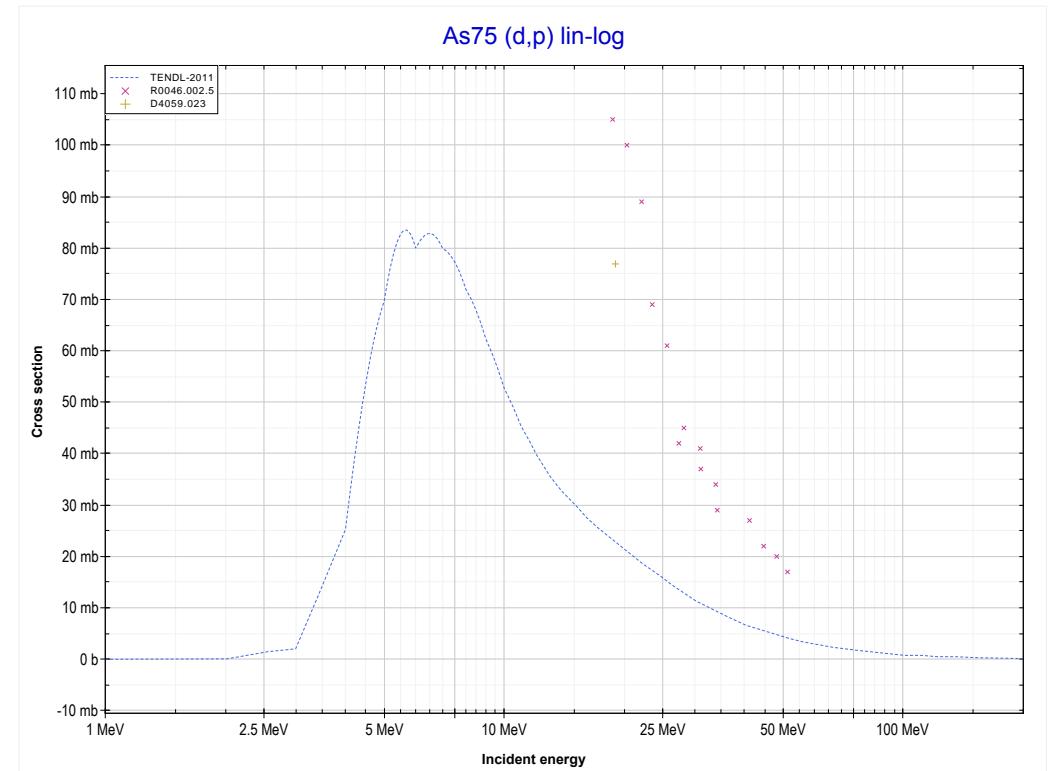
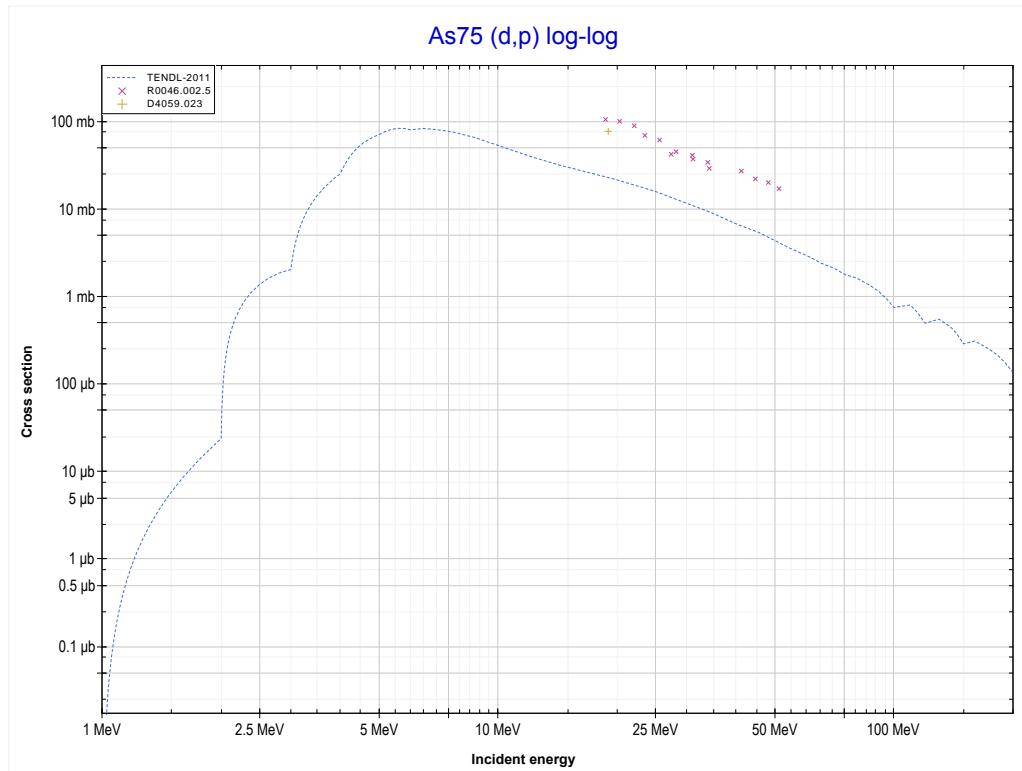
Reaction	Q-Value
As75(d,t)As74	-3986.48 keV
As75(d,n+d)As74	-10243.72 keV
As75(d,2n+p)As74	-12468.28 keV

<< 28-Ni-58	33-As-75 MT42 (d,3n+p) or MT5 (As73 production)	>> 83-Bi-209
<< MT41 (d,2n+p)		MT103 (d,p) >>



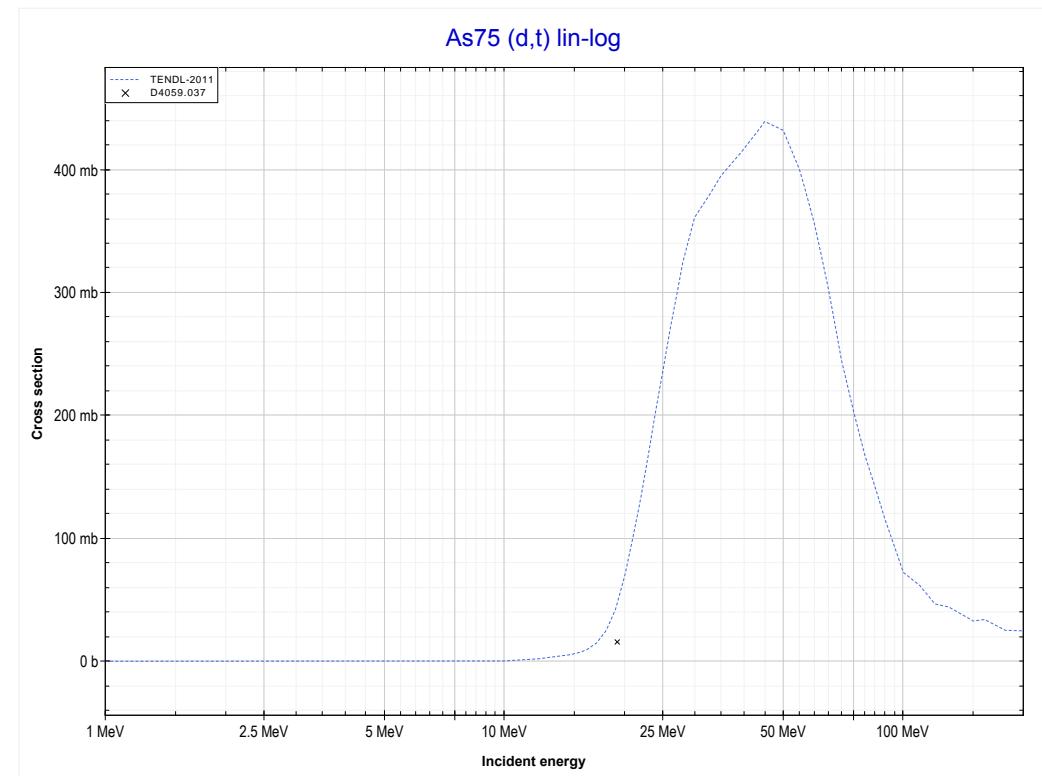
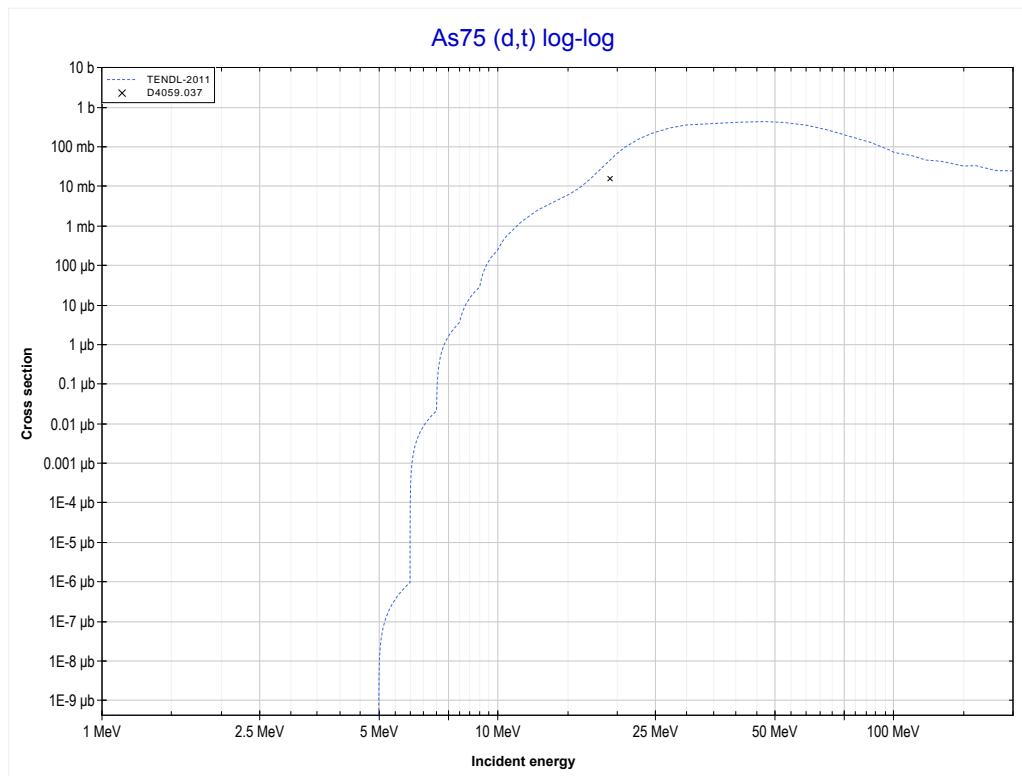
Reaction	Q-Value
As75(d,n+t)As73	-11960.80 keV
As75(d,2n+d)As73	-18218.03 keV
As75(d,3n+p)As73	-20442.60 keV

<< 32-Ge-70	33-As-75 MT103 (d,p) or MT5 (As76 production)	>> 35-Br-81
<< MT42 (d,3n+p)		MT105 (d,t) >>



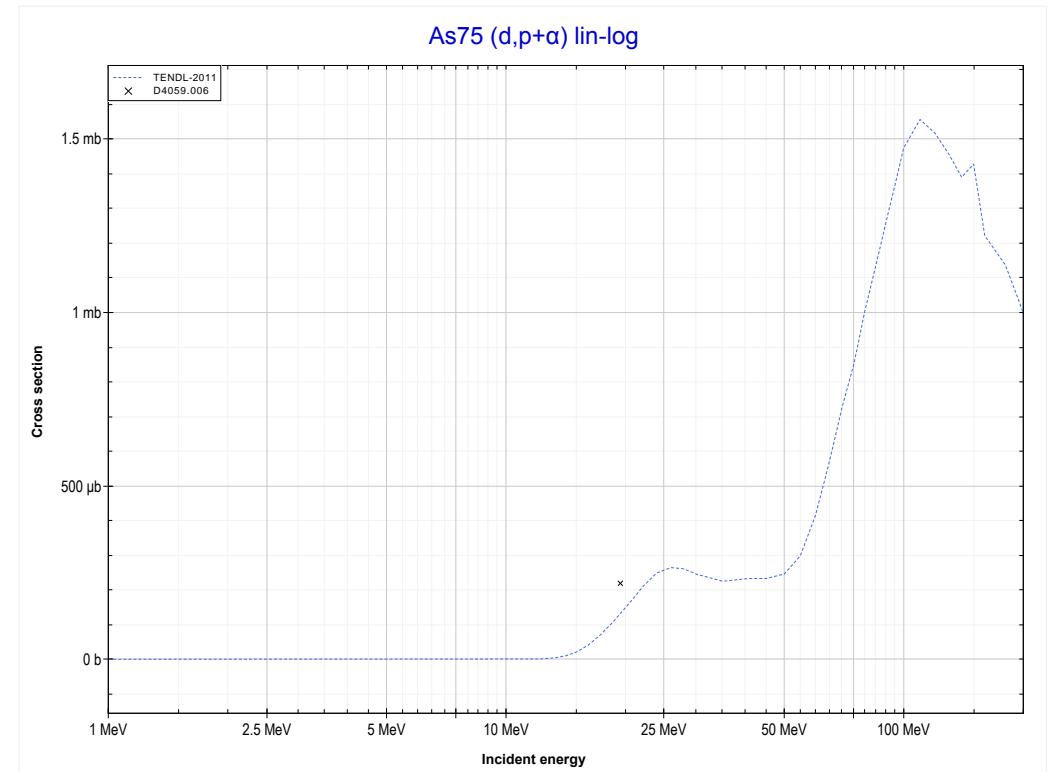
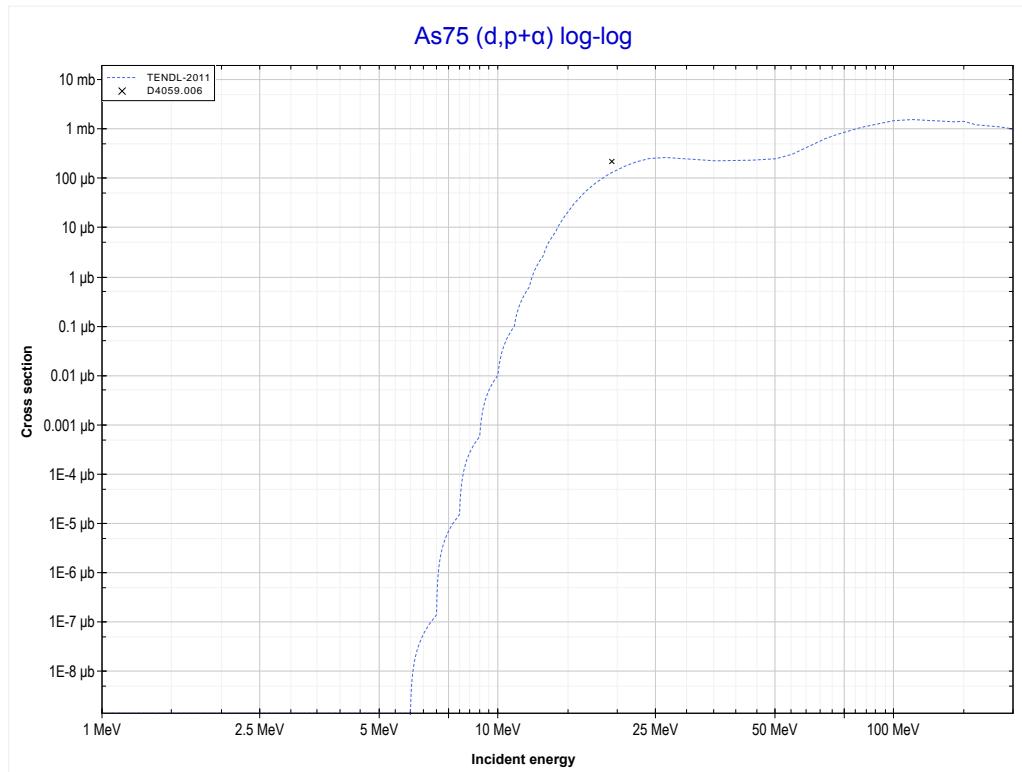
Reaction	Q-Value
$\text{As}^{75}(\text{d},\text{p})\text{As}^{76}$	5103.85 keV

<< 28-Ni-58	33-As-75 MT105 (d,t) or MT5 (As74 production)	39-Y-89 >>
<< MT103 (d,p)		MT112 (d,p+ α) >>



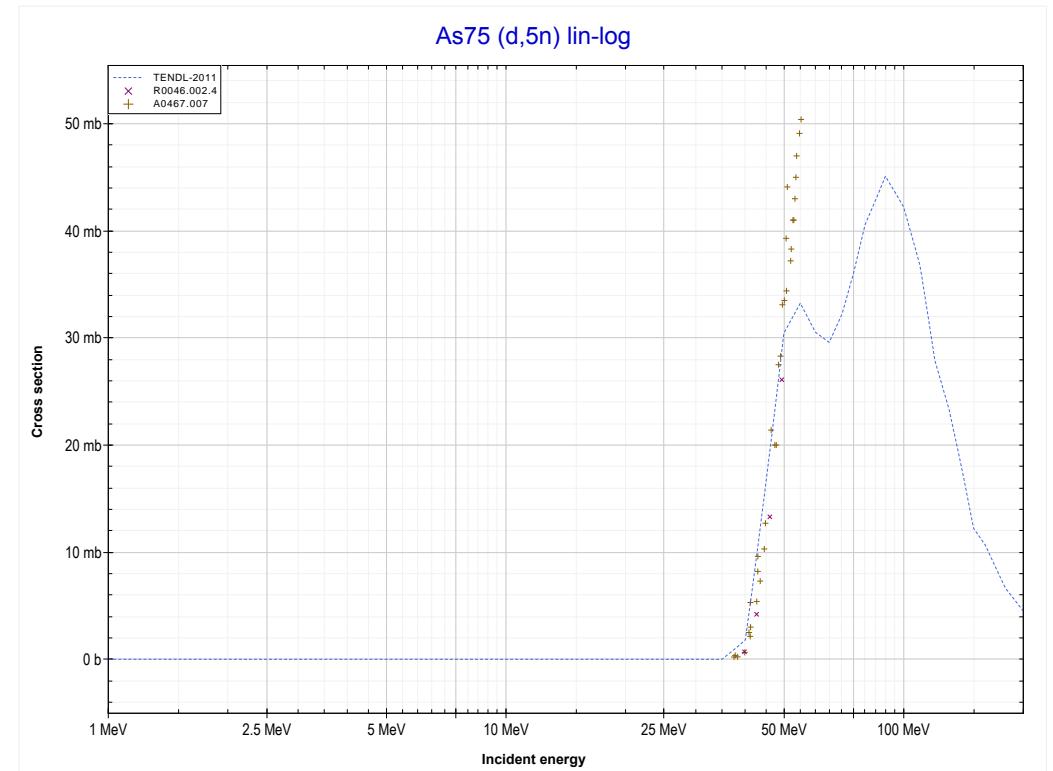
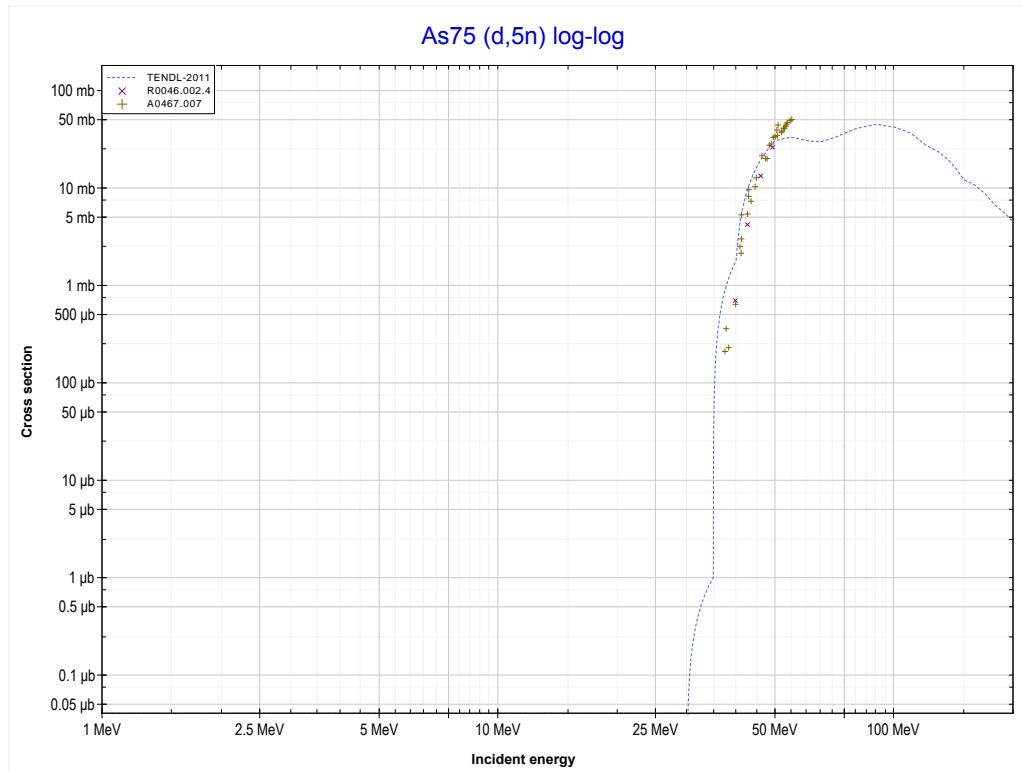
Reaction	Q-Value
$\text{As}^{75}(\text{d},\text{t})\text{As}^{74}$	-3986.48 keV
$\text{As}^{75}(\text{d},\text{n}+\text{d})\text{As}^{74}$	-10243.72 keV
$\text{As}^{75}(\text{d},2\text{n}+\text{p})\text{As}^{74}$	-12468.28 keV

<< 30-Zn-68	33-As-75 MT112 (d,p+α) or MT5 (Ga72 production)	>> 35-Br-79
<< MT105 (d,t)		MT152 (d,5n) >>



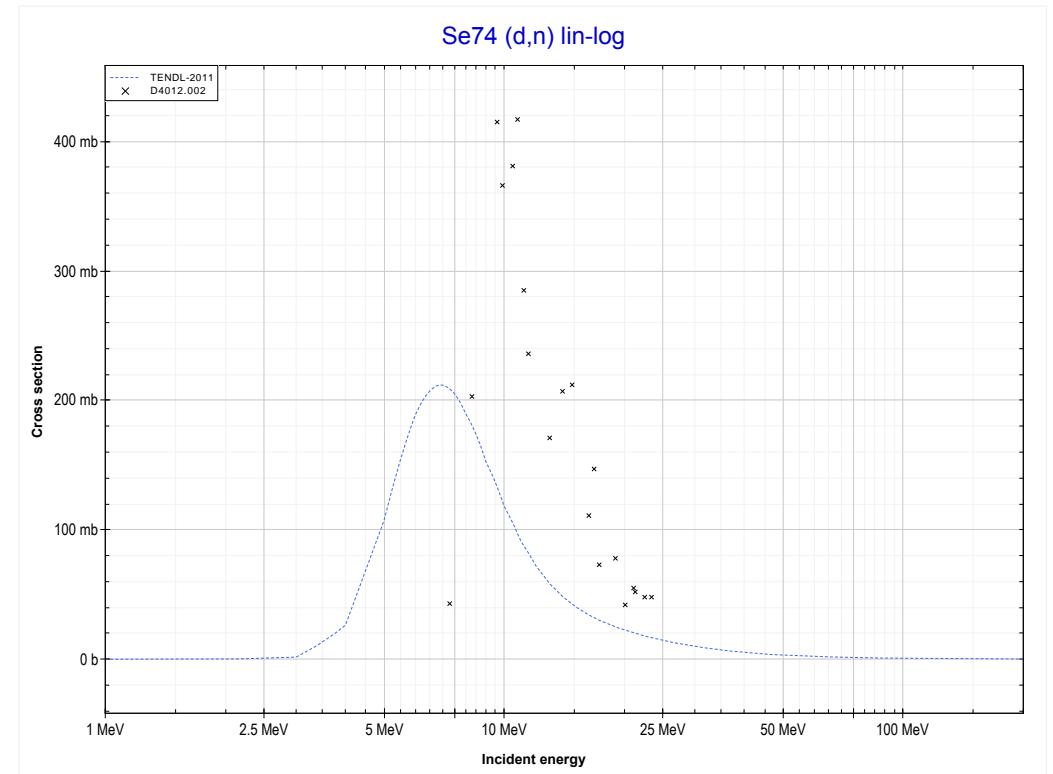
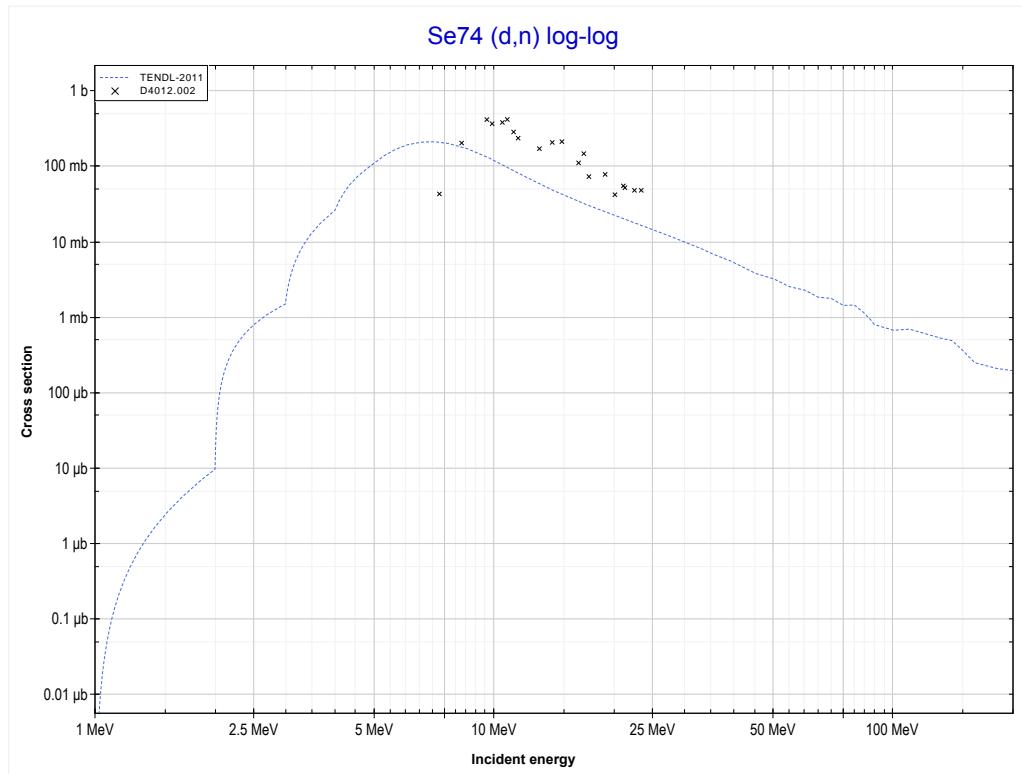
Reaction	Q-Value
$\text{As}^{75}(\text{d},\text{p}+\alpha)\text{Ga}^{72}$	-1021.16 keV
$\text{As}^{75}(\text{d},\text{d}+\text{He}^3)\text{Ga}^{72}$	-19374.21 keV
$\text{As}^{75}(\text{d},2\text{p}+\text{t})\text{Ga}^{72}$	-20835.03 keV
$\text{As}^{75}(\text{d},\text{n}+\text{p}+\text{He}^3)\text{Ga}^{72}$	-21598.78 keV
$\text{As}^{75}(\text{d},\text{p}+2\text{d})\text{Ga}^{72}$	-24867.69 keV
$\text{As}^{75}(\text{d},\text{n}+2\text{p}+\text{d})\text{Ga}^{72}$	-27092.26 keV
$\text{As}^{75}(\text{d},2\text{n}+3\text{p})\text{Ga}^{72}$	-29316.82 keV

<< 27-Co-59	33-As-75 MT152 (d,5n) or MT5 (Se72 production)	45-Rh-103 >>
<< MT112 (d,p+ α)		MT4 (d,n) >>



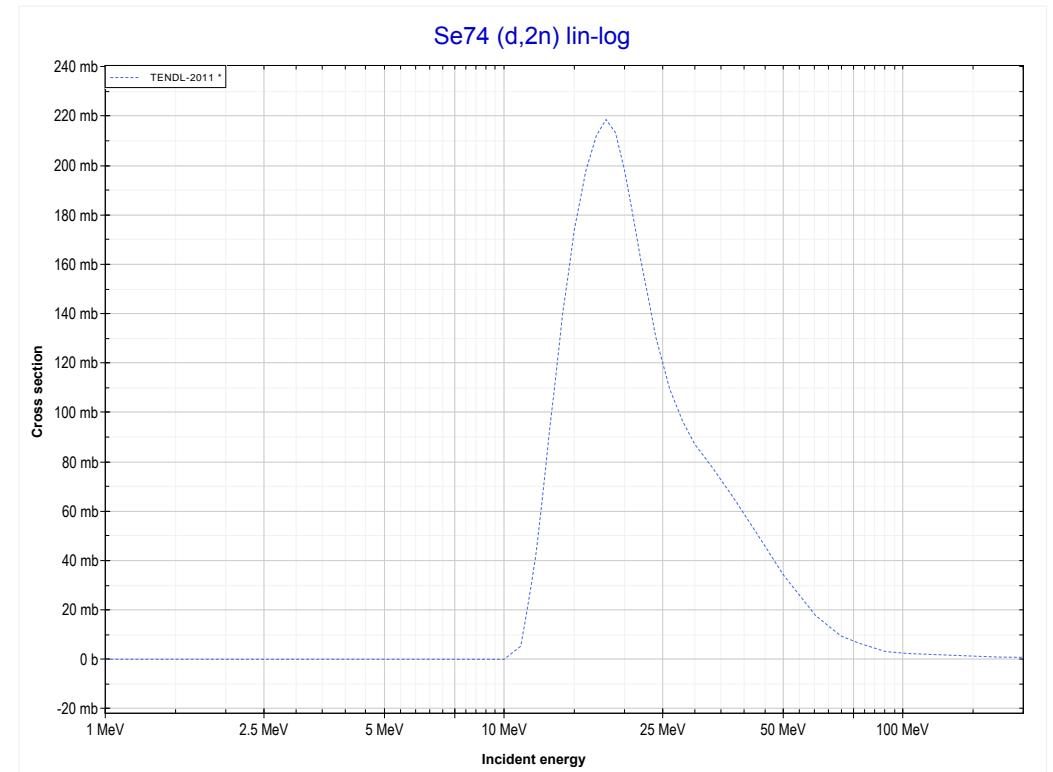
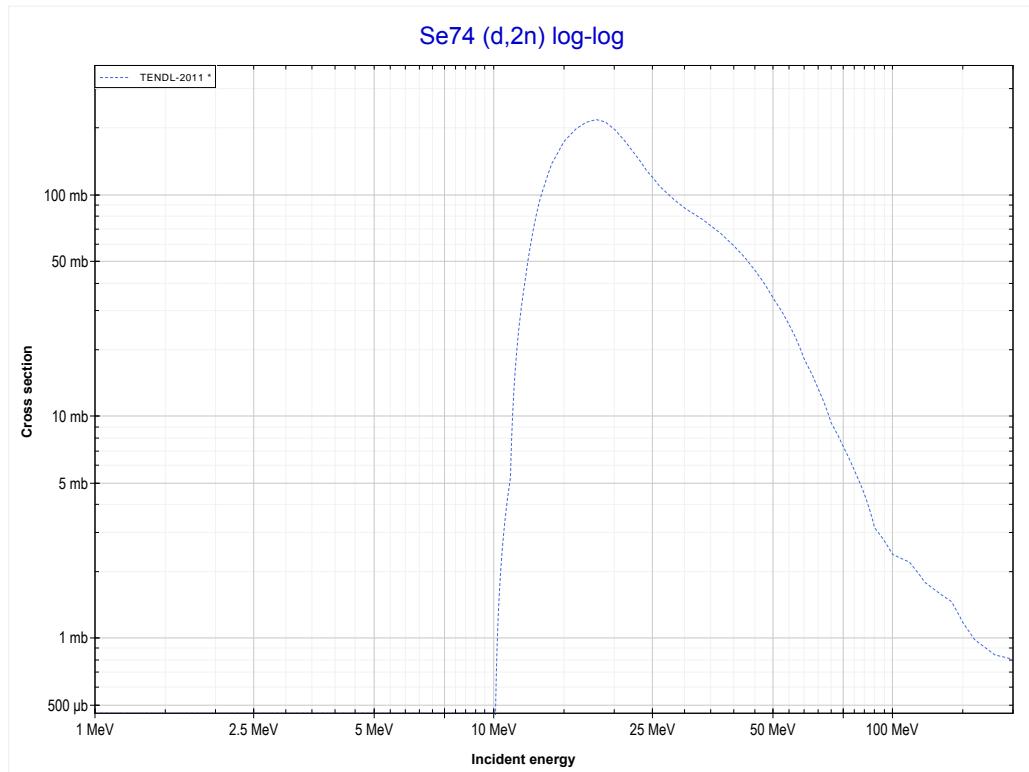
Reaction	Q-Value
As75(d,5n)Se72	-32359.26 keV

<< 32-Ge-70	34-Se-74 MT4 (d,n) or MT5 (Br75 production)	36-Kr-78 >>
<< MT152 (d,5n)		MT16 (d,2n) >>



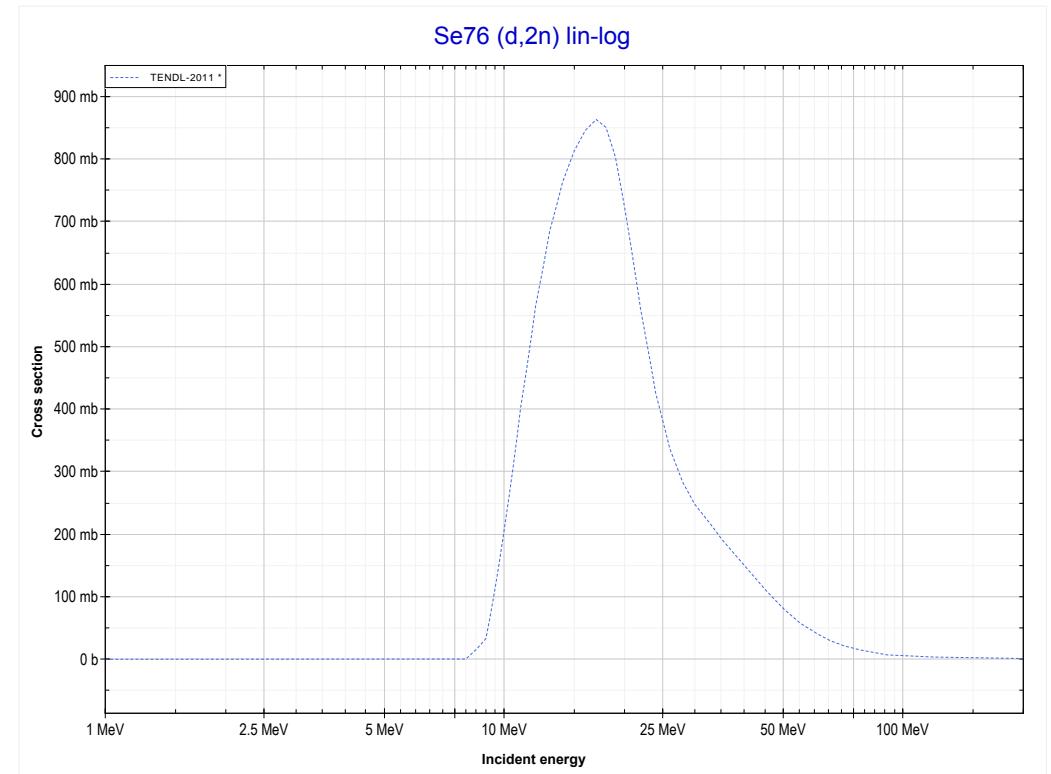
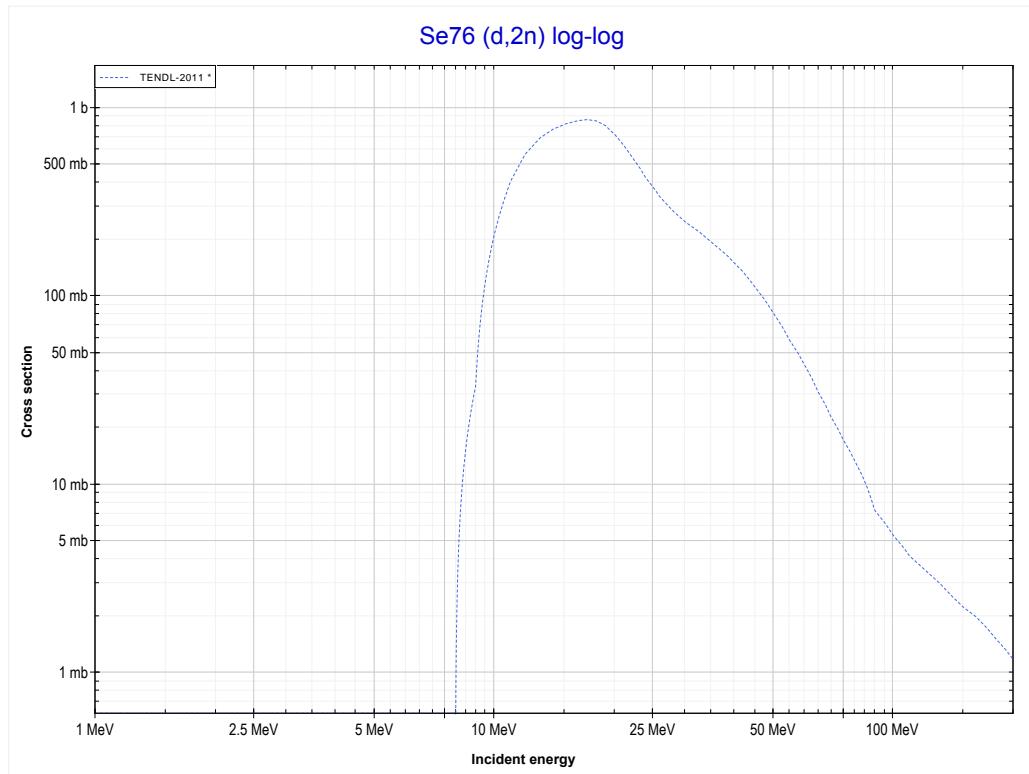
Reaction	Q-Value
$\text{Se}^{74}(\text{d},\text{n})\text{Br}^{75}$	1990.70 keV

<< 33-As-75	34-Se-74 MT16 (d,2n) or MT5 (Br74 production)	>> 34-Se-76
<< MT4 (d,n)		MT16 (d,2n) >>



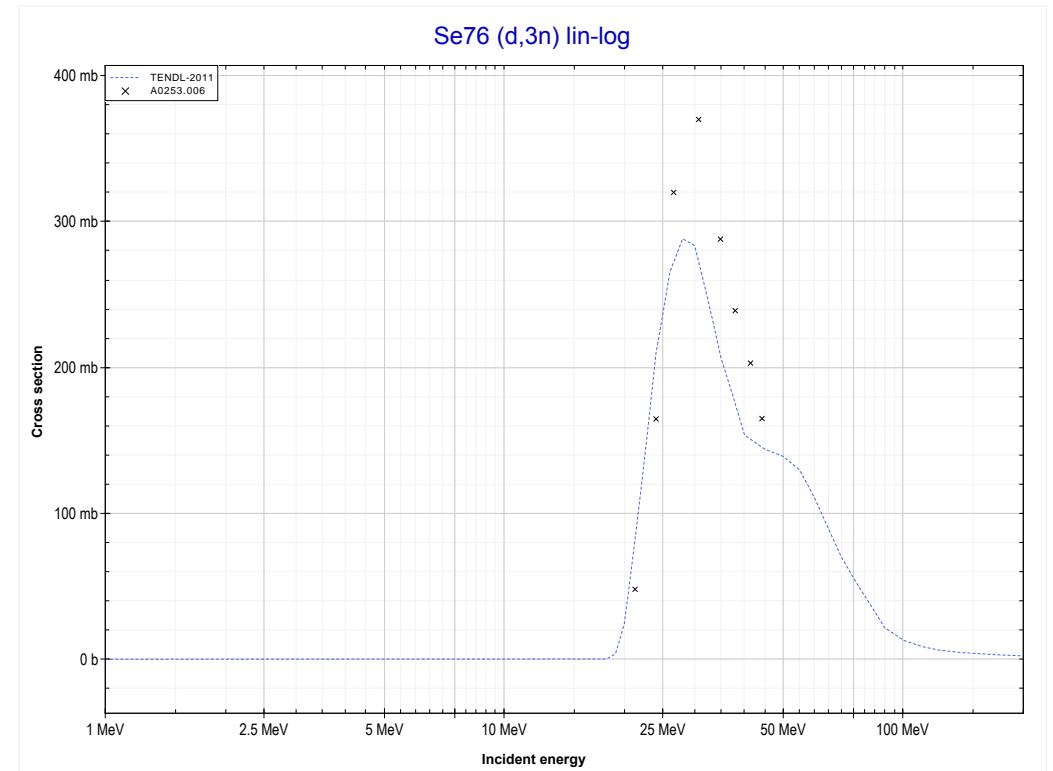
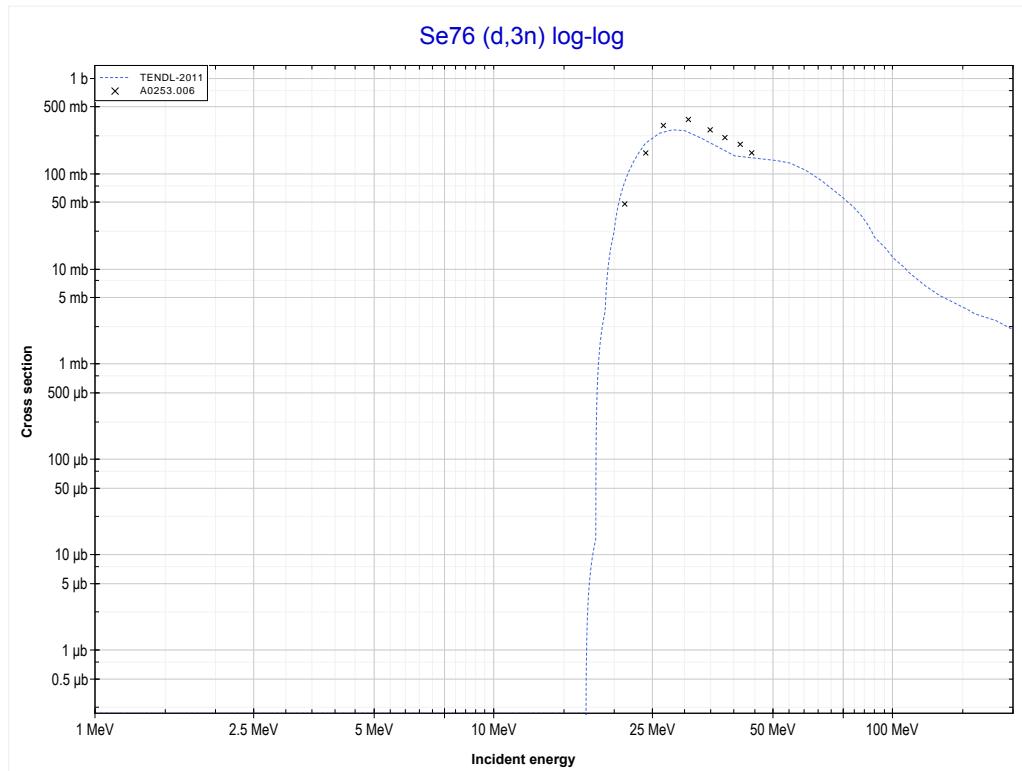
Reaction	Q-Value
$\text{Se}^{74}(\text{d},\text{2n})\text{Br}^{74}$	-9913.61 keV

<< 34-Se-74	34-Se-76 MT16 (d,2n) or MT5 (Br76 production)	>> 35-Br-79
<< MT16 (d,2n)		>> MT17 (d,3n)



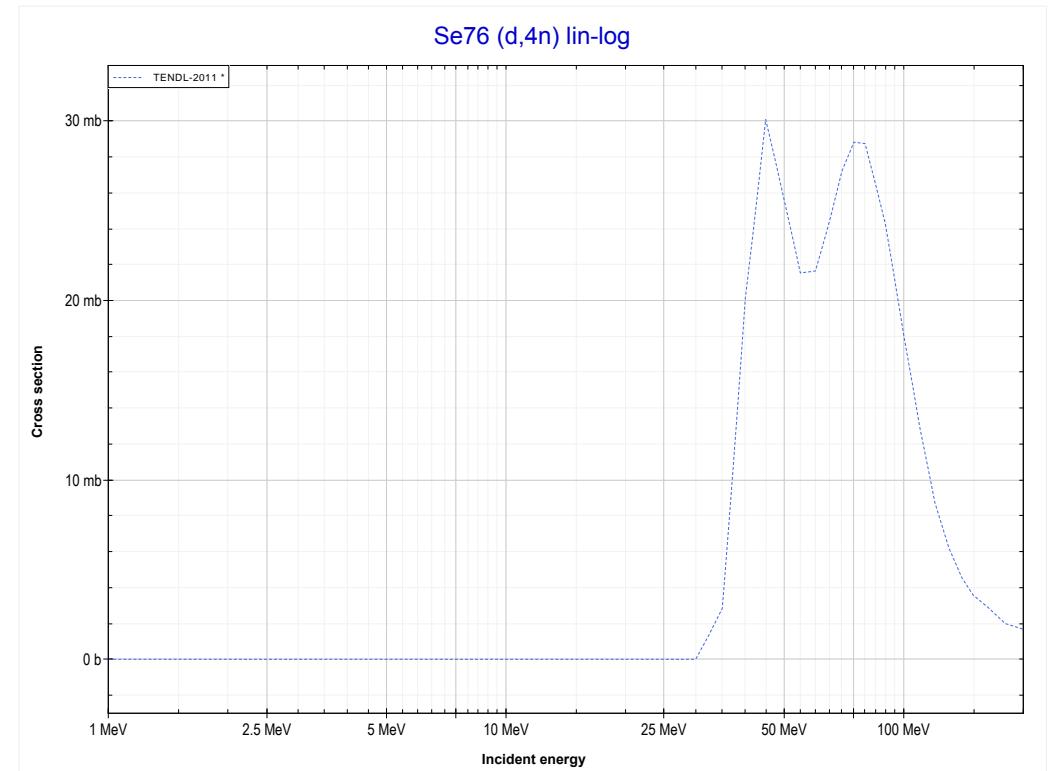
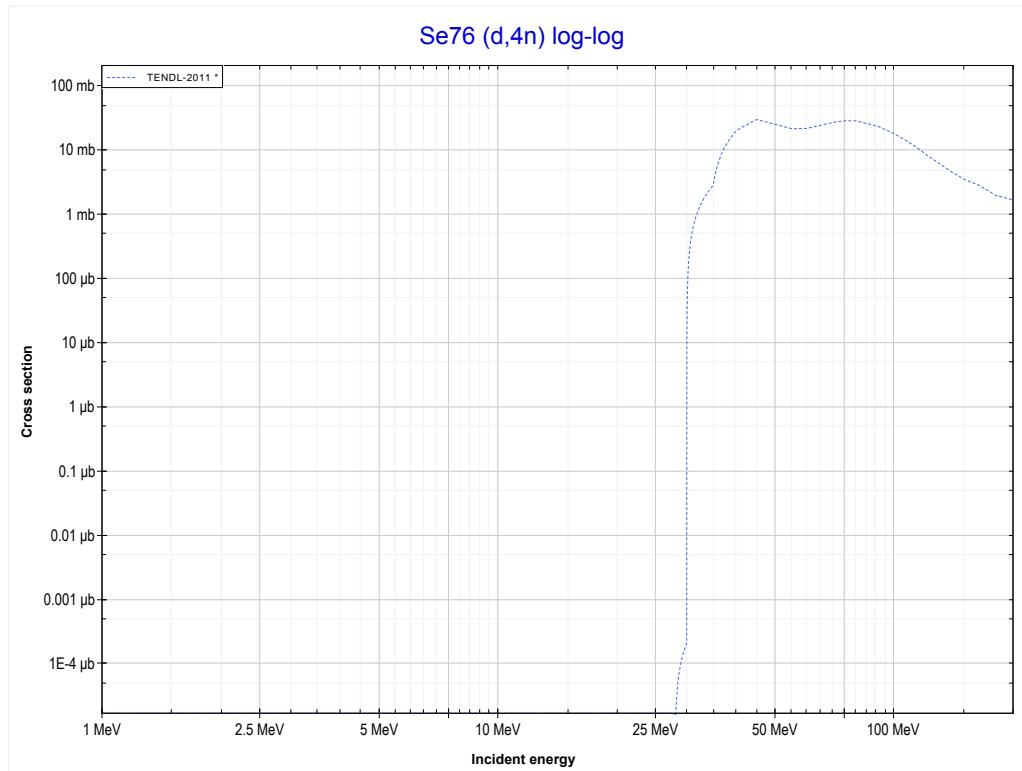
Reaction	Q-Value
$\text{Se}^{76}(\text{d},\text{2n})\text{Br}^{76}$	-7970.01 keV

<< 30-Zn-66	34-Se-76 MT17 (d,3n) or MT5 (Br75 production)	>> 39-Y-89
<< MT16 (d,2n)		>> MT37 (d,4n)



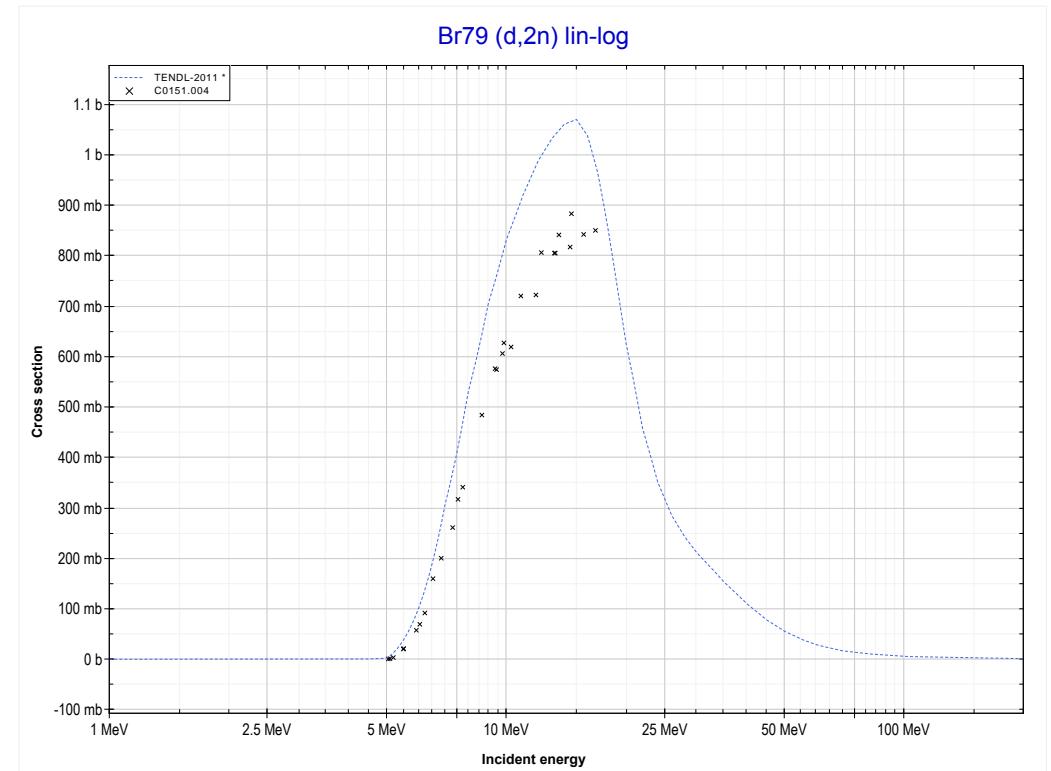
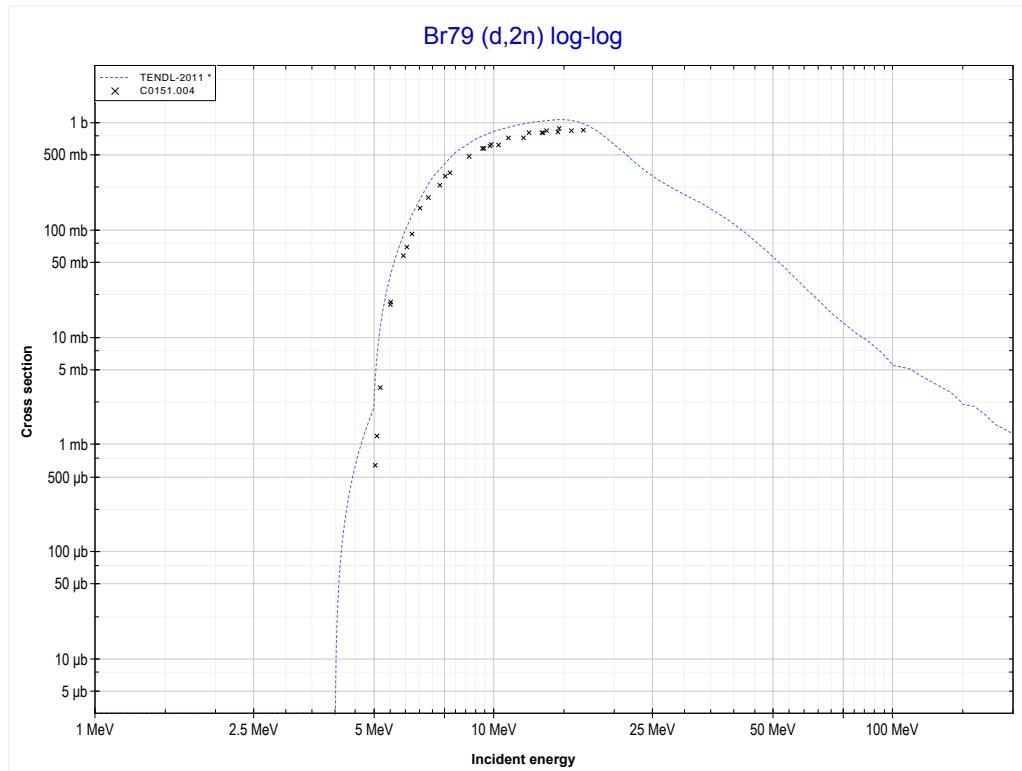
Reaction	Q-Value
Se76(d,3n)Br75	-17191.33 keV

<< 33-As-75	34-Se-76 MT37 (d,4n) or MT5 (Br74 production)	45-Rh-103 >>
<< MT17 (d,3n)		MT16 (d,2n) >>



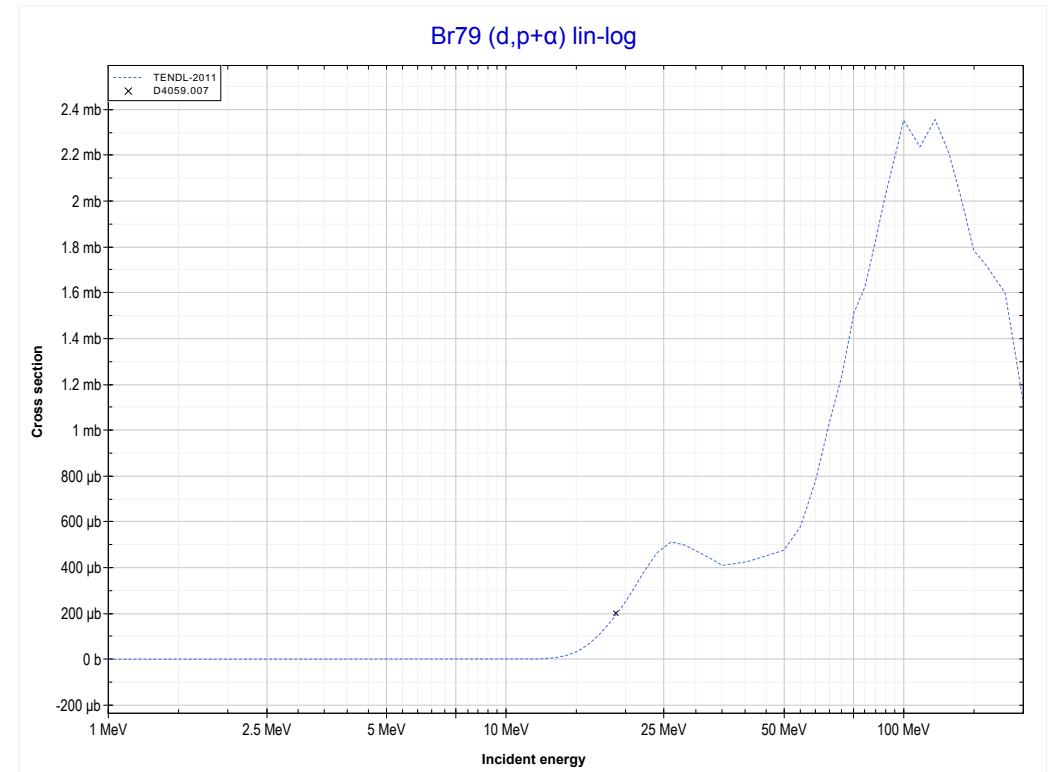
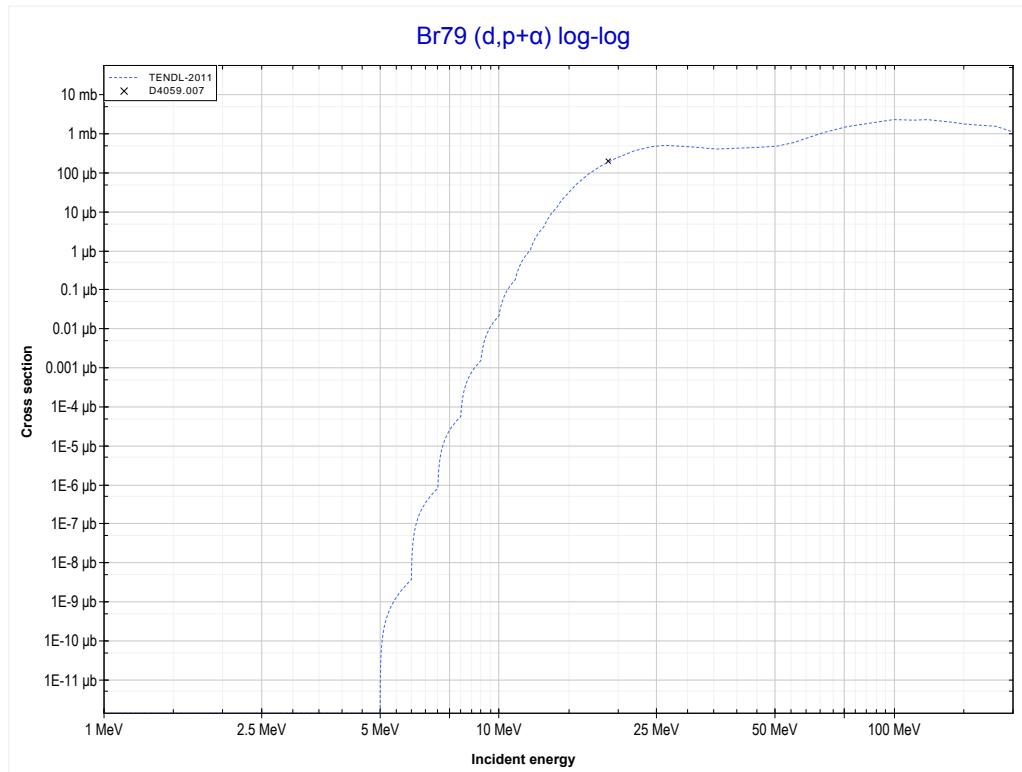
Reaction	Q-Value
$\text{Se}^{76}(\text{d},\text{4n})\text{Br}^{74}$	-29095.65 keV

<< 34-Se-76	35-Br-79 MT16 (d,2n) or MT5 (Kr79 production)	35-Br-81 >>
<< MT37 (d,4n)		MT112 (d,p+α) >>



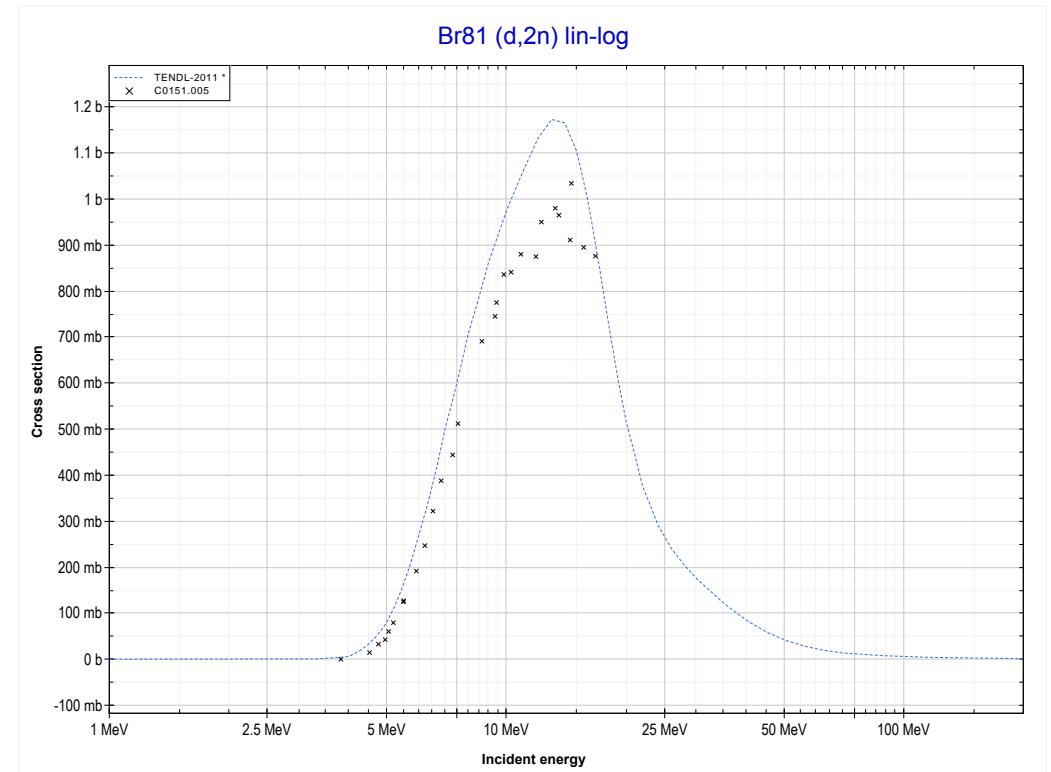
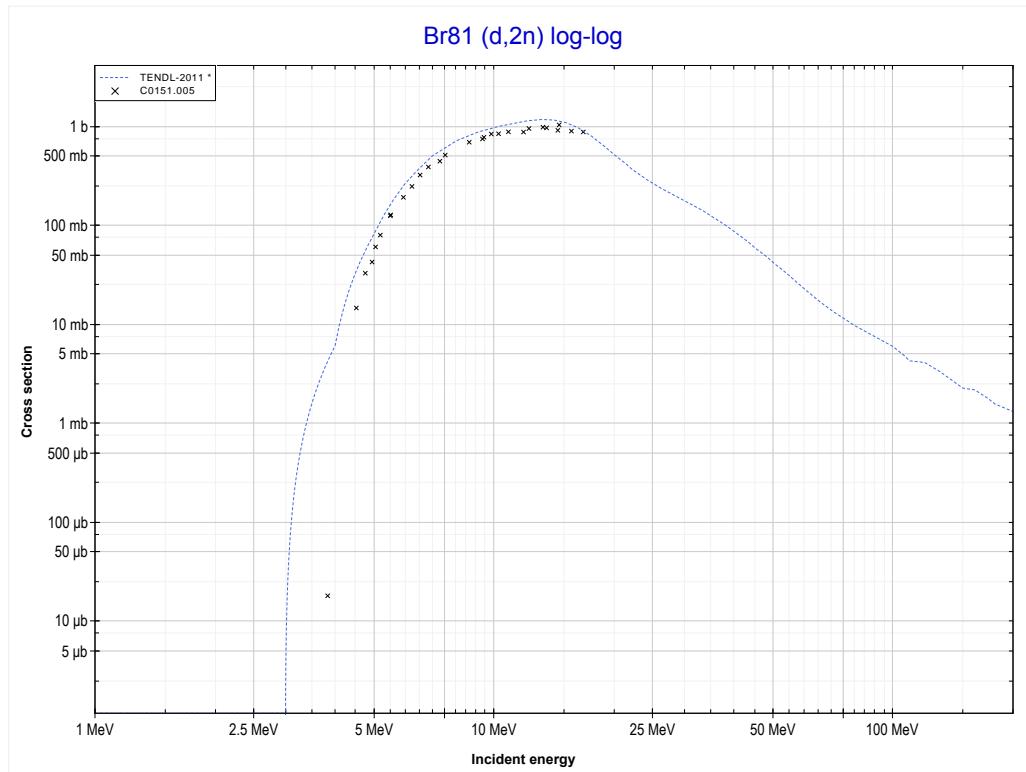
Reaction	Q-Value
$\text{Br}^{79}(d,2n)\text{Kr}^{79}$	-4632.41 keV

<< 33-As-75	35-Br-79 MT112 (d,p+α) or MT5 (As76 production)	>> 49-In-115
<< MT16 (d,2n)		MT16 (d,2n) >>



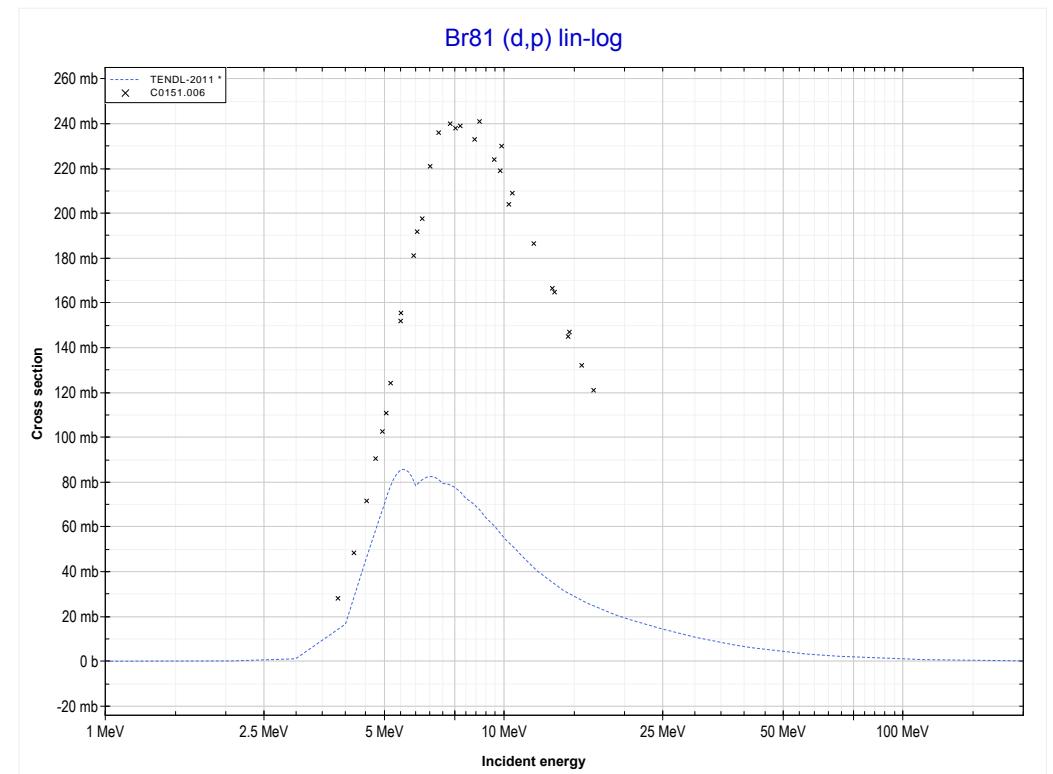
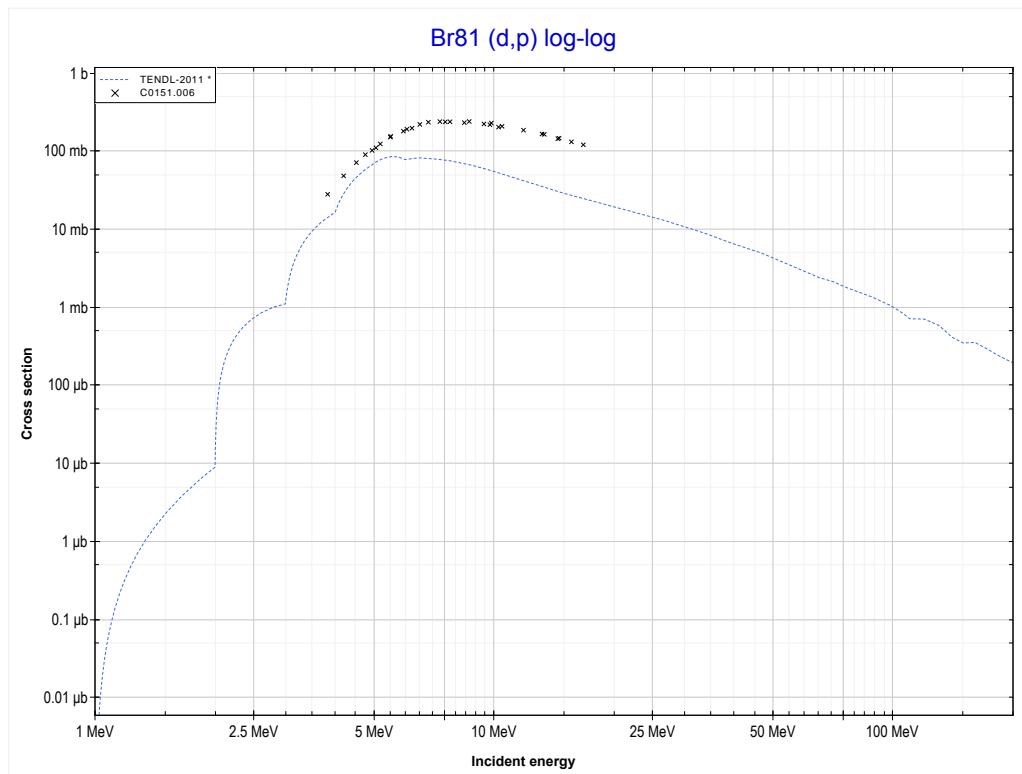
Reaction	Q-Value
Br79(d,p+α)As76	-357.16 keV
Br79(d,d+He3)As76	-18710.21 keV
Br79(d,2p+t)As76	-20171.03 keV
Br79(d,n+p+He3)As76	-20934.78 keV
Br79(d,p+2d)As76	-24203.69 keV
Br79(d,n+2p+d)As76	-26428.26 keV
Br79(d,2n+3p)As76	-28652.82 keV

<< 35-Br-79	35-Br-81 MT16 (d,2n) or MT5 (Kr81 production)	39-Y-89 >>
<< MT112 (d,p+α)		MT103 (d,p) >>



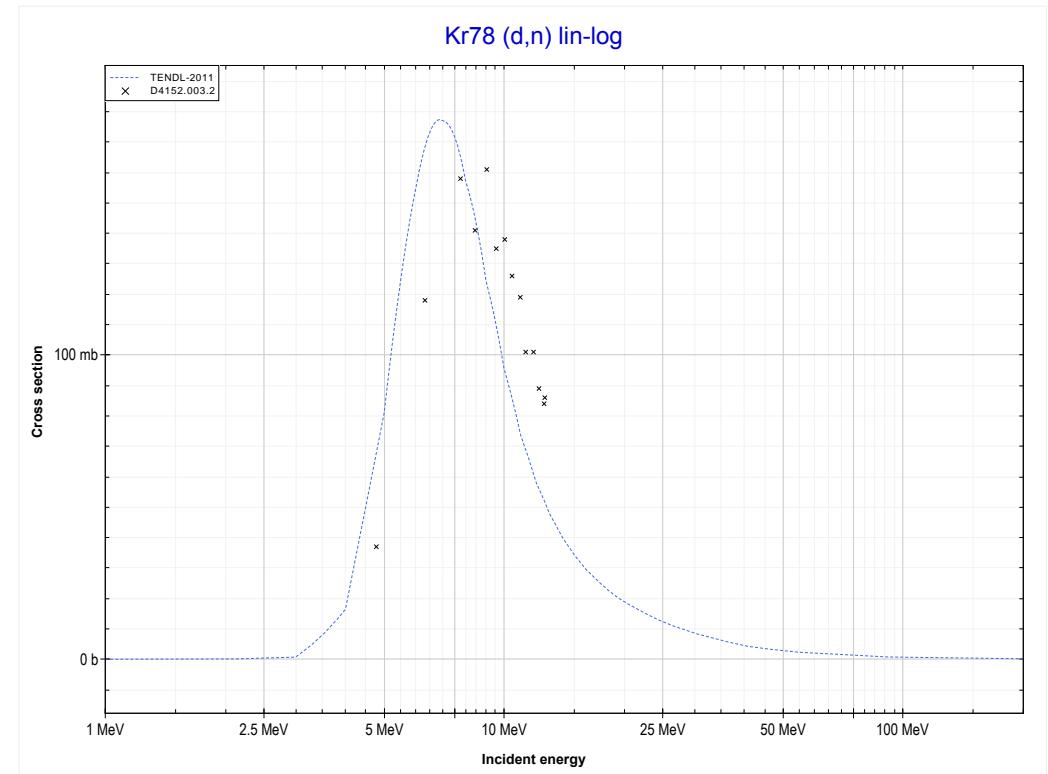
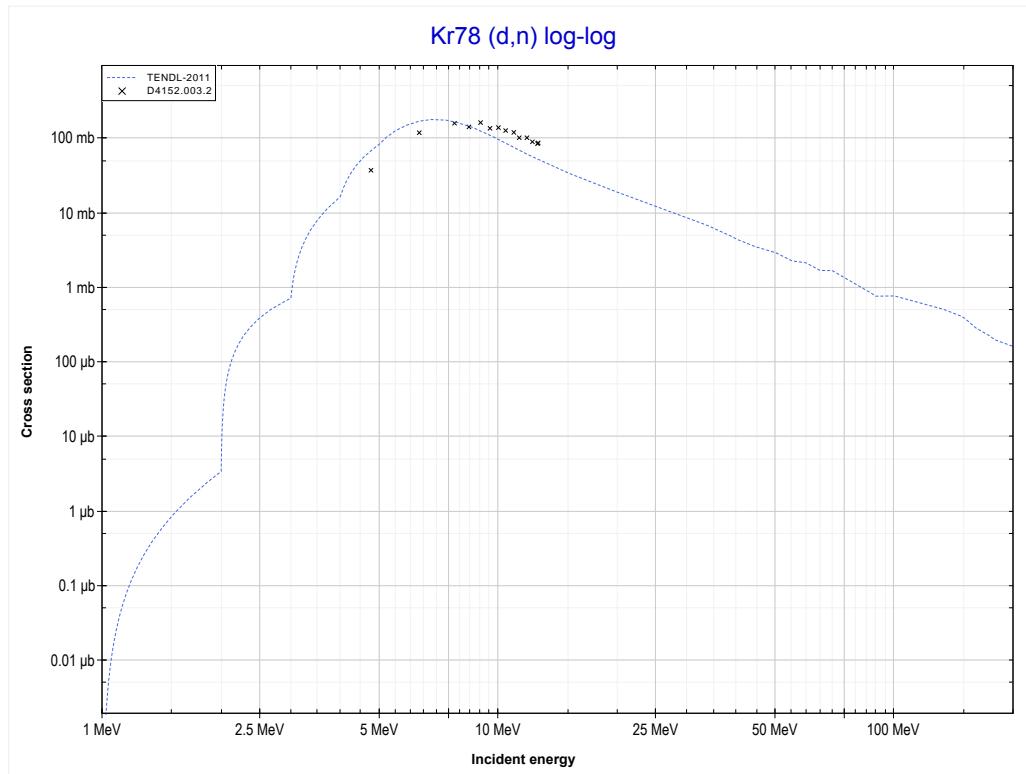
Reaction	Q-Value
Br81(d,2n)Kr81	-3287.71 keV

<< 33-As-75	35-Br-81 MT103 (d,p) or MT5 (Br82 production)	>> 39-Y-89
<< MT16 (d,2n)		>> MT4 (d,n) >>



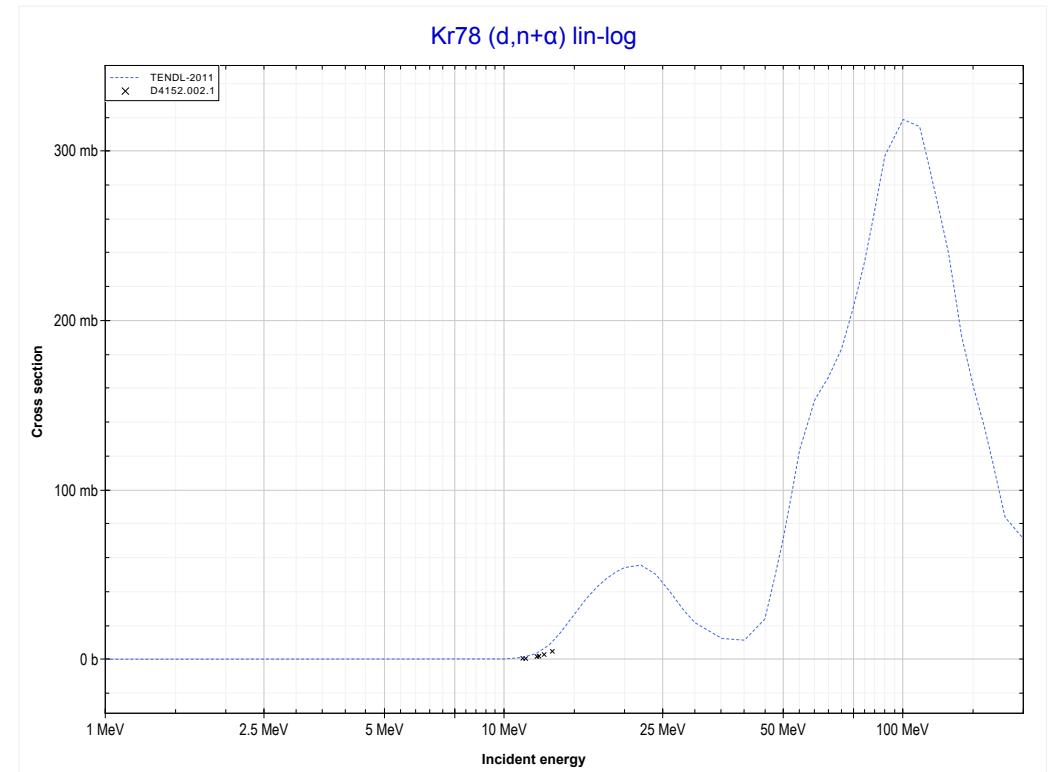
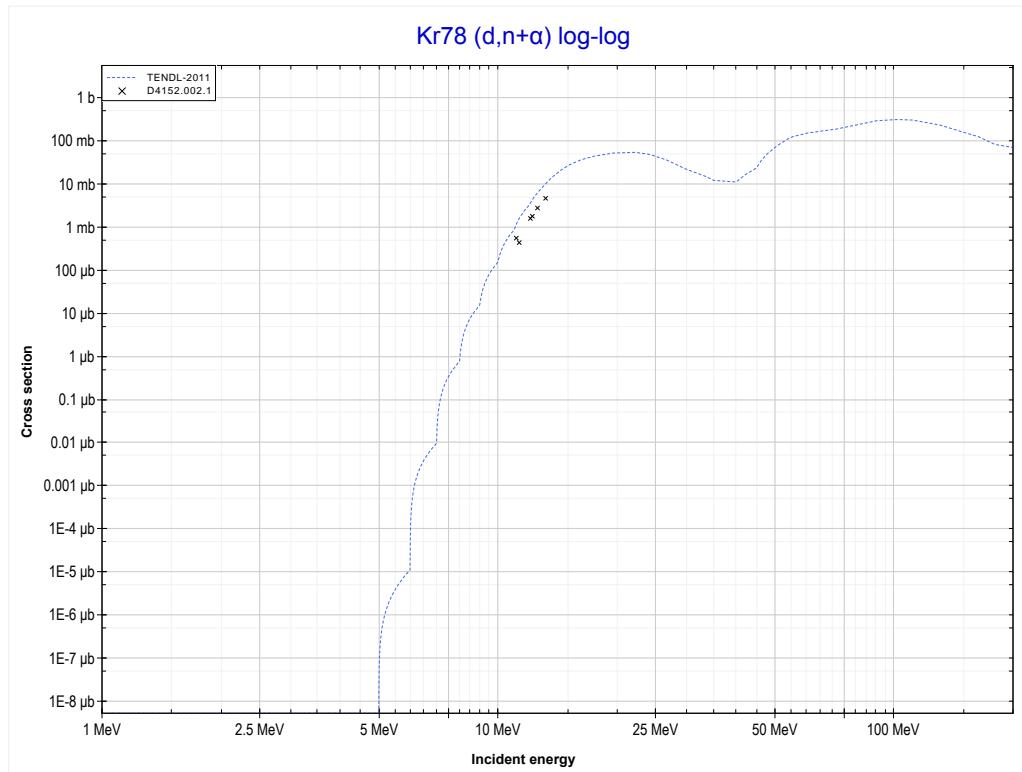
Reaction	Q-Value
Br81(d,p)Br82	5368.45 keV

<< 34-Se-74	36-Kr-78 MT4 (d,n) or MT5 (Rb79 production)	36-Kr-80 >>
<< MT103 (d,p) >>		MT22 (d,n+ α) >>



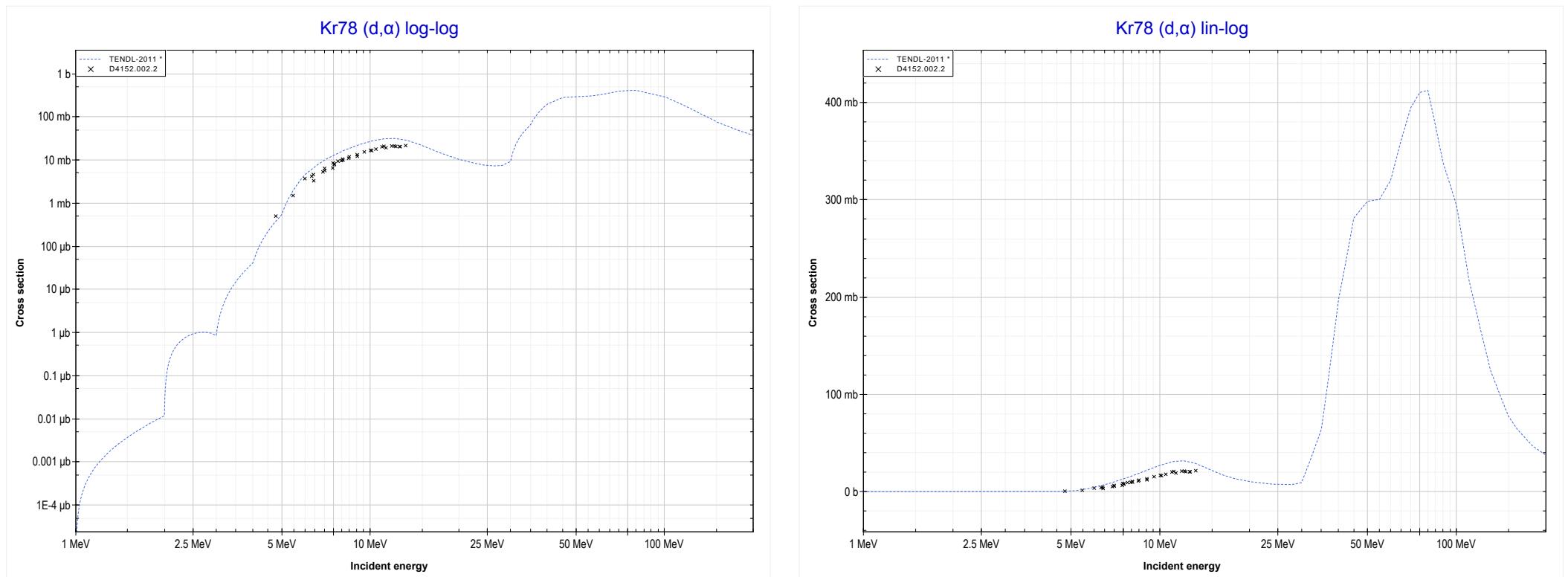
Reaction	Q-Value
Kr78(d,n)Rb79	1687.70 keV

<< 30-Zn-67	36-Kr-78 MT22 (d,n+α) or MT5 (Br75 production)	>> 48-Cd-114
<< MT4 (d,n)		MT107 (d,α) >>



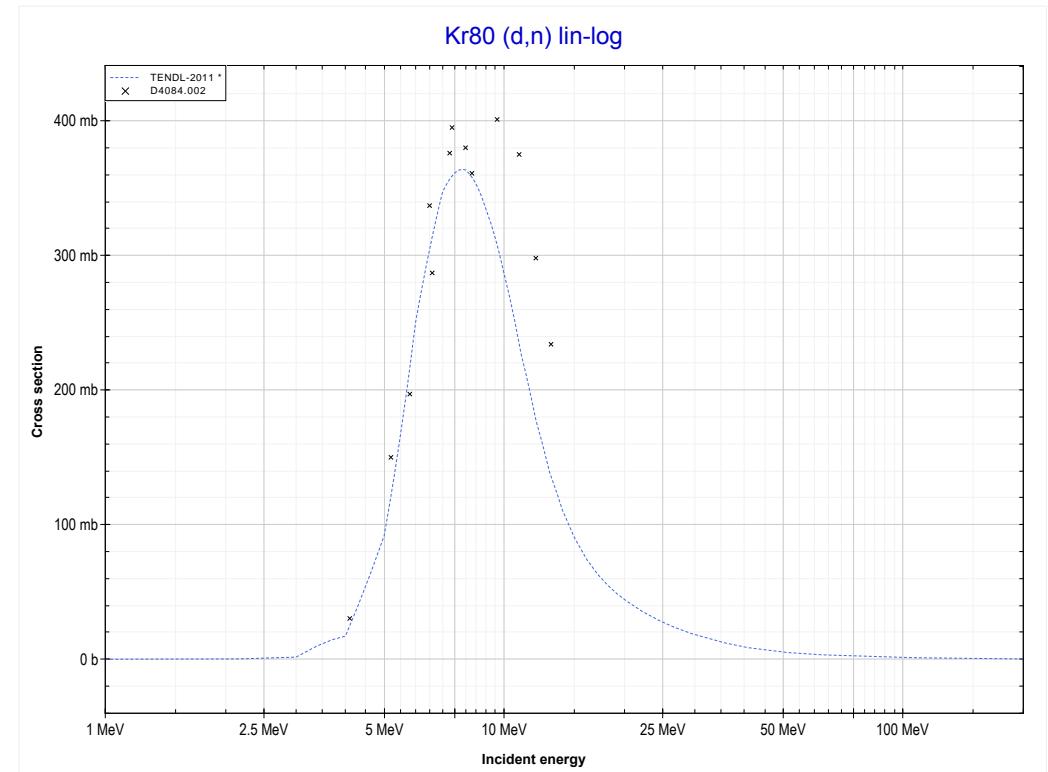
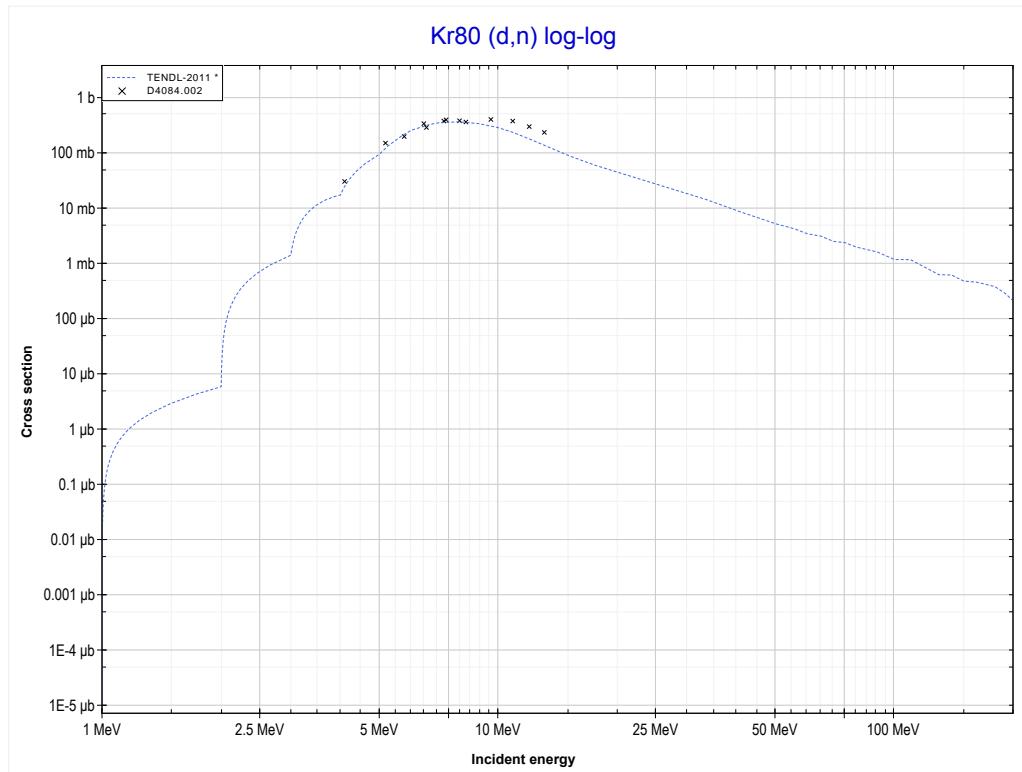
Reaction	Q-Value
Kr78(d,n+α)Br75	-2401.21 keV
Kr78(d,d+t)Br75	-19990.51 keV
Kr78(d,n+p+t)Br75	-22215.07 keV
Kr78(d,2n+He3)Br75	-22978.83 keV
Kr78(d,n+2d)Br75	-26247.74 keV
Kr78(d,2n+p+d)Br75	-28472.30 keV
Kr78(d,3n+2p)Br75	-30696.87 keV

<< 32-Ge-70	36-Kr-78 MT107 (d,α) or MT5 (Br76 production)	39-Y-89 >>
<< MT22 ($d,n+\alpha$)		MT4 (d,n) >>



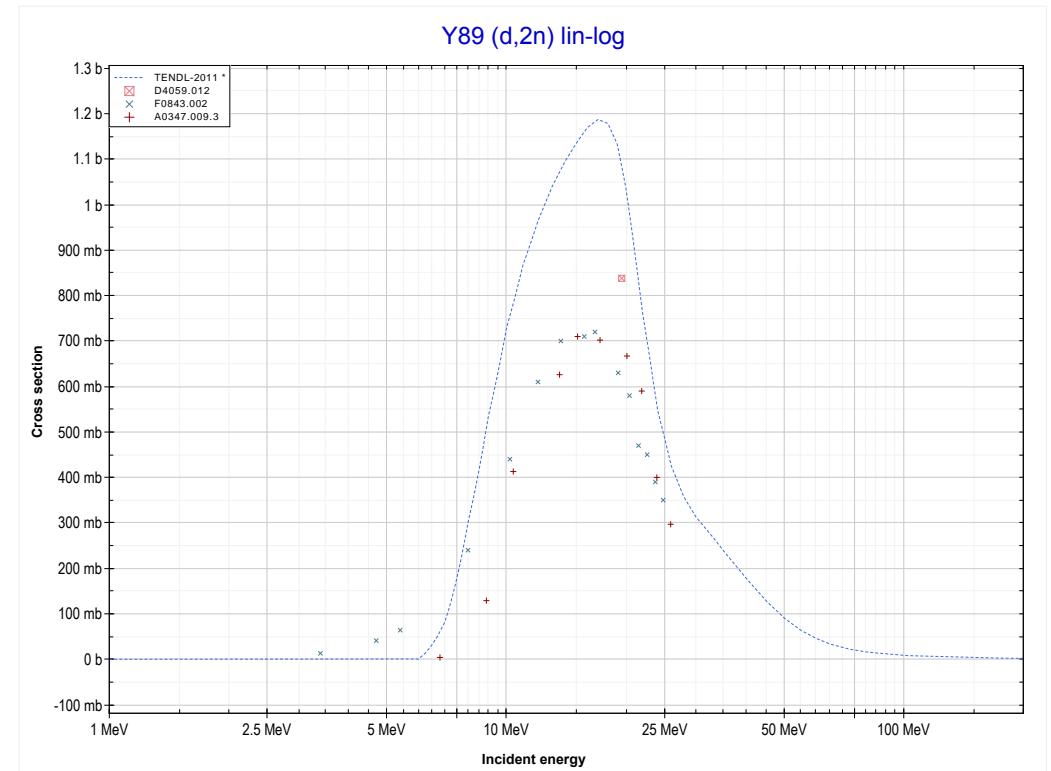
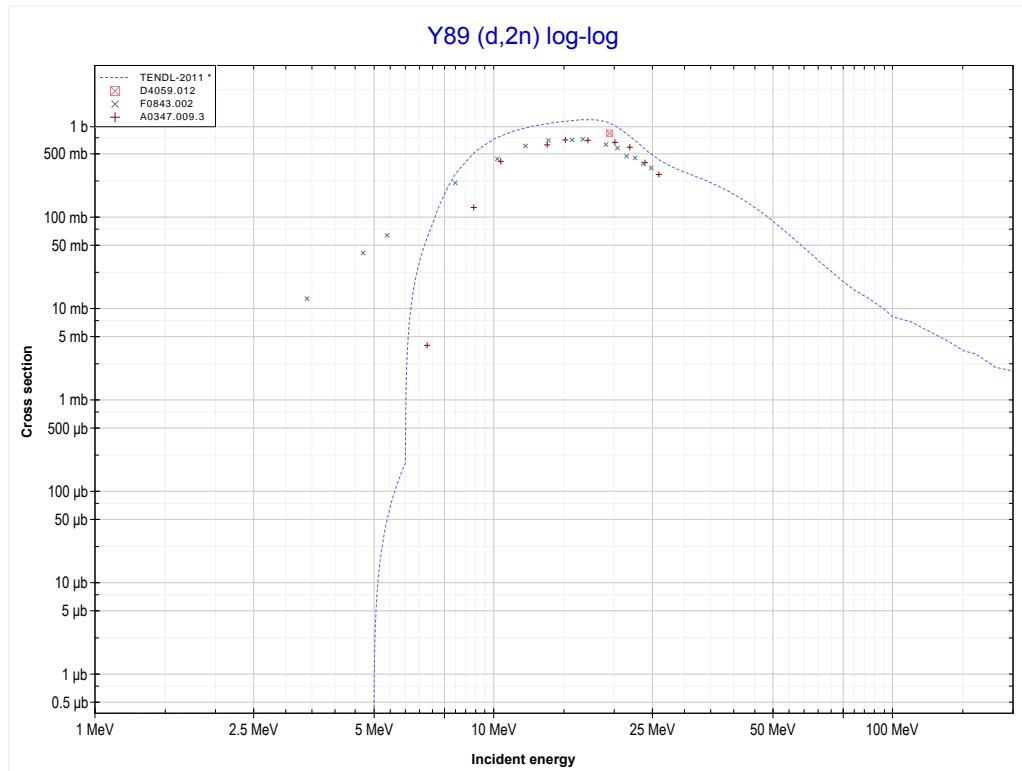
Reaction	Q-Value
Kr78(d,α)Br76	6820.11 keV
Kr78($d,p+t$)Br76	-12993.75 keV
Kr78($d,n+He3$)Br76	-13757.51 keV
Kr78($d,2d$)Br76	-17026.42 keV
Kr78($d,n+p+d$)Br76	-19250.99 keV
Kr78($d,2n+2p$)Br76	-21475.55 keV

<< 36-Kr-78	36-Kr-80 MT4 (d,n) or MT5 (Rb81 production)	>> 40-Zr-96
<< MT107 (d, α)		>> MT16 (d,2n) >>



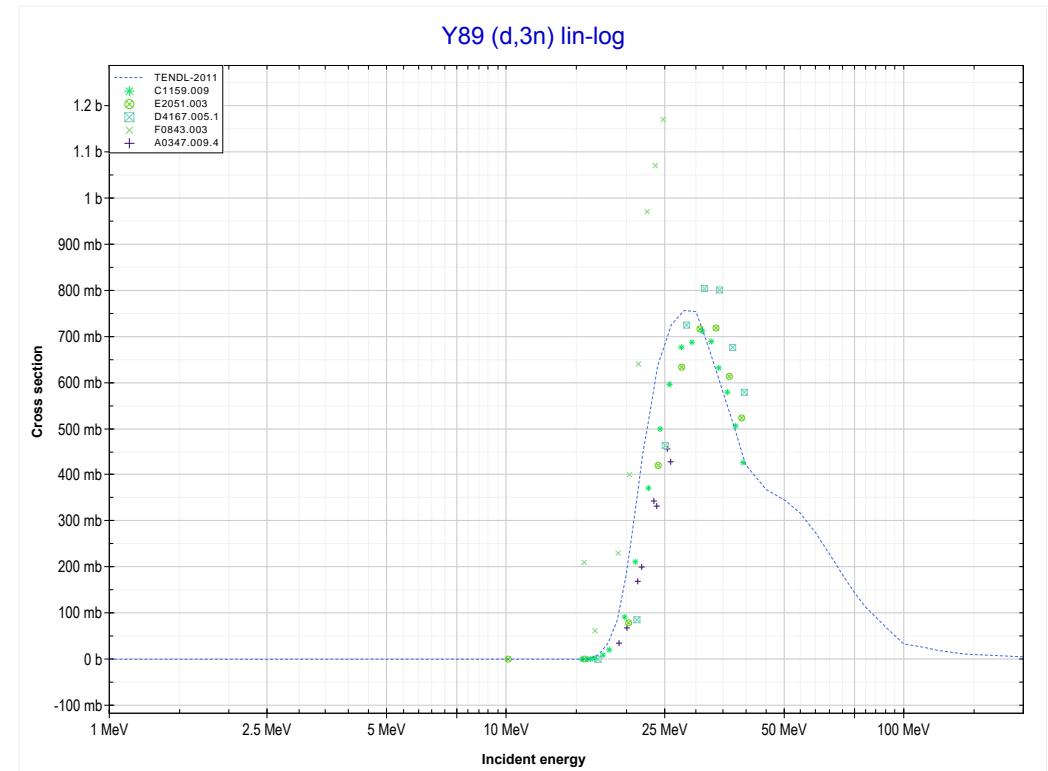
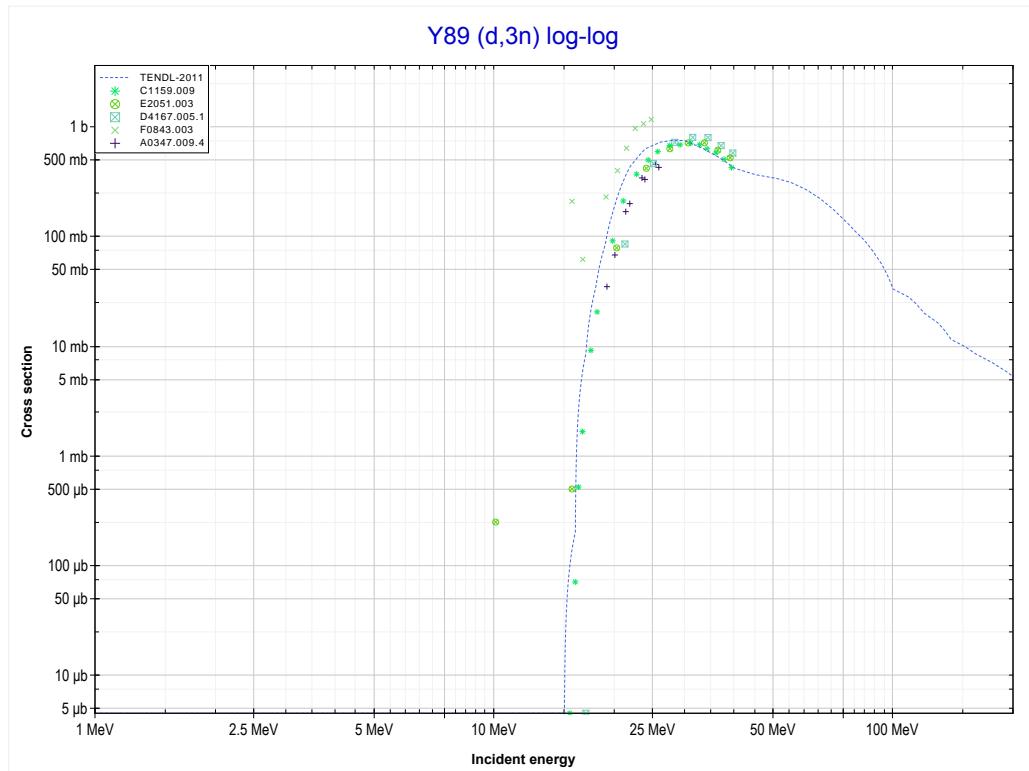
Reaction	Q-Value
Kr80(d,n)Rb81	2626.90 keV

<< 35-Br-81	39-Y-89 MT16 (d,2n) or MT5 (Zr89 production)	40-Zr-96 >> MT17 (d,3n) >>
<< MT4 (d,n)		

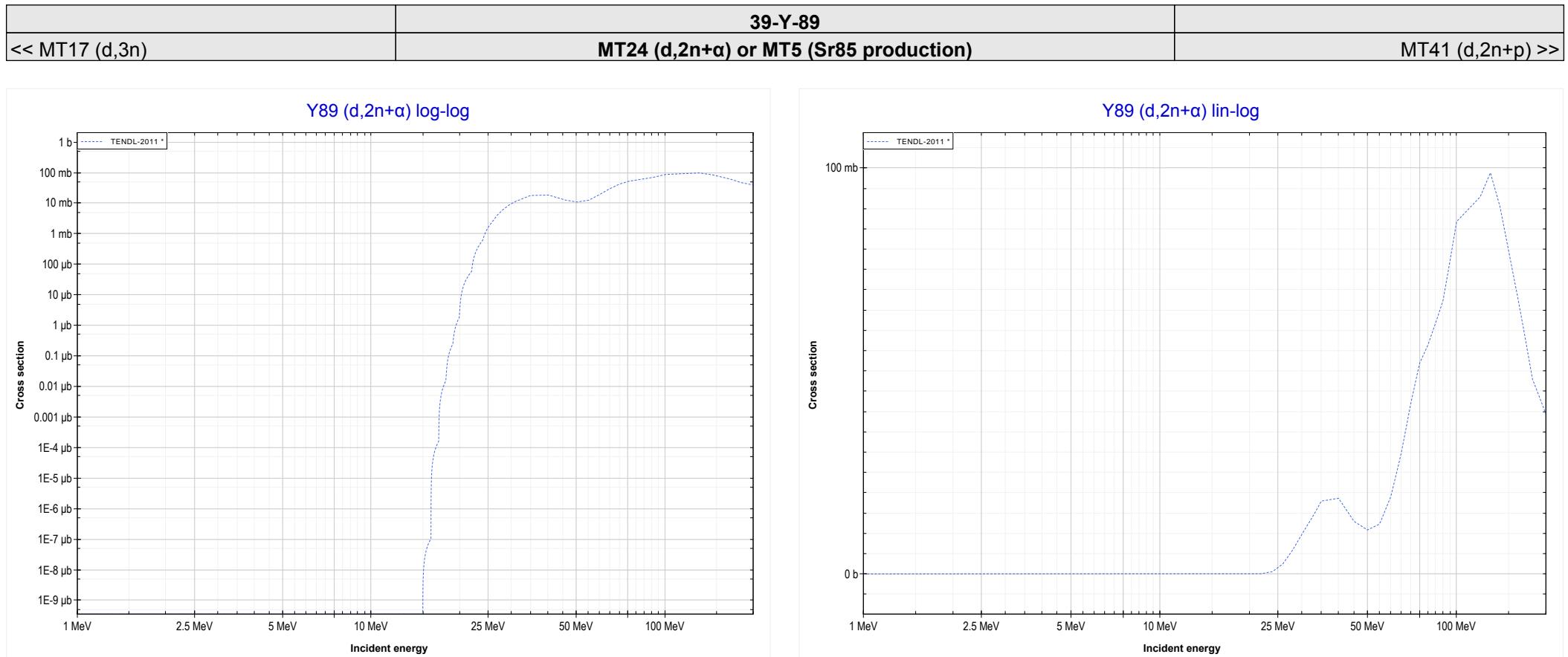


Reaction	Q-Value
Y89(d,2n)Zr89	-5839.61 keV

<< 34-Se-76	39-Y-89 MT17 (d,3n) or MT5 (Zr88 production)	42-Mo-100 >>
<< MT16 (d,2n) >>		MT24 (d,2n+α) >>

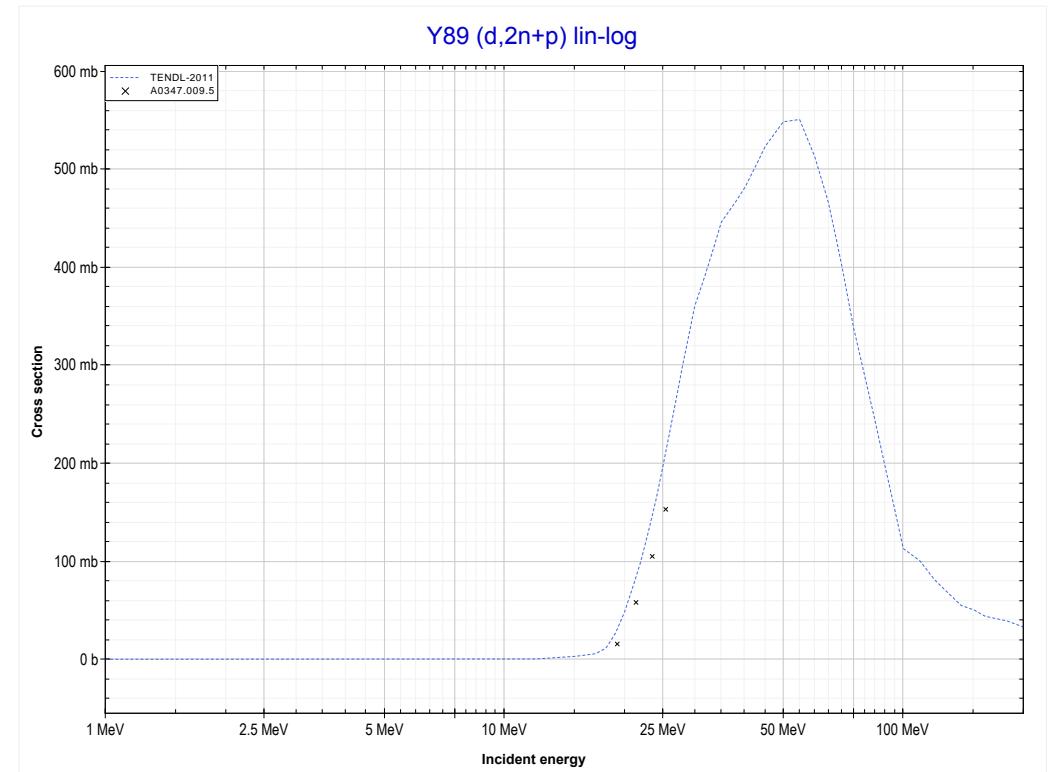
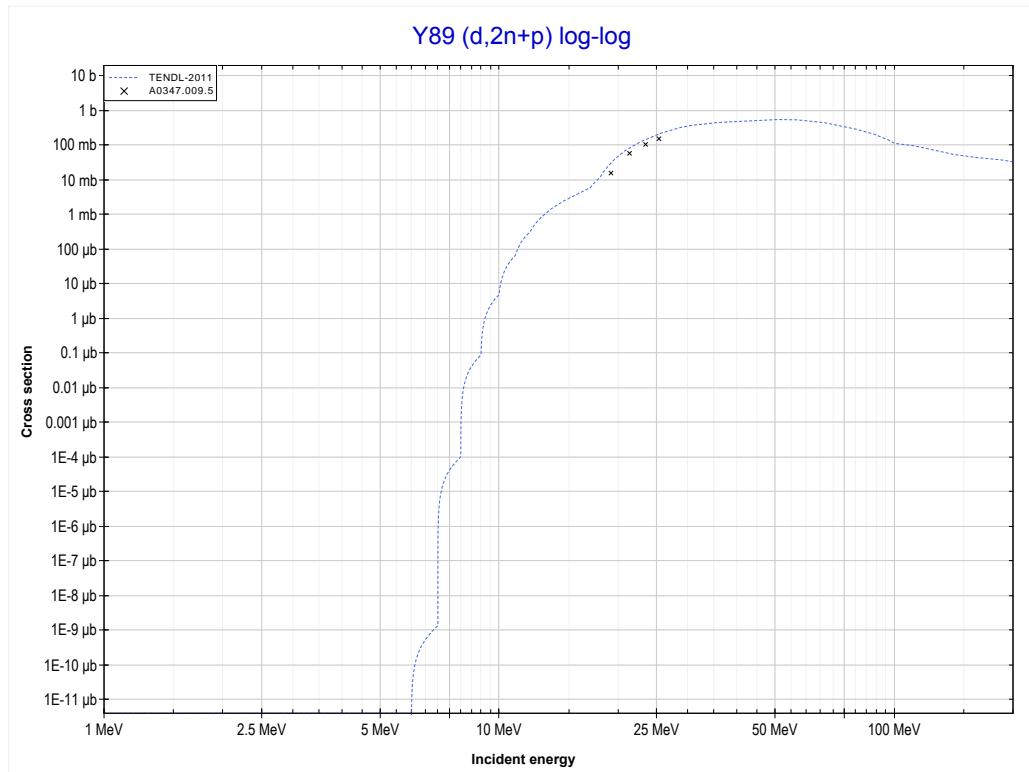


Reaction	Q-Value
$\text{Y}^{89}(\text{d},\text{3n})\text{Zr}^{88}$	-15156.93 keV



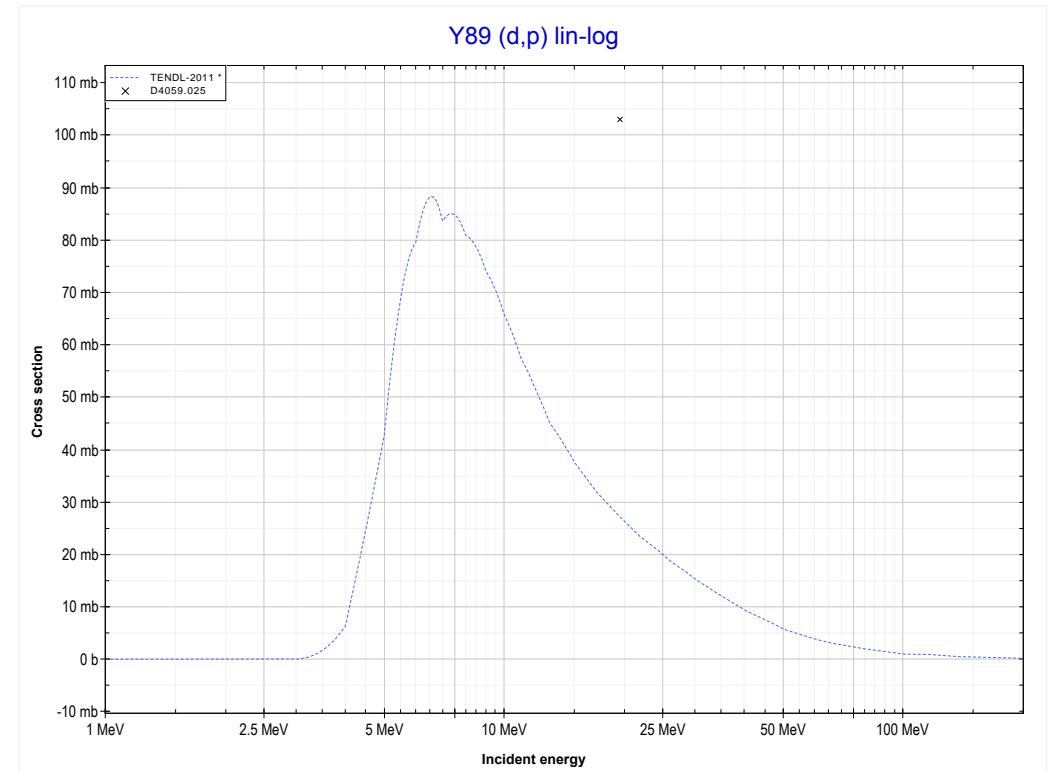
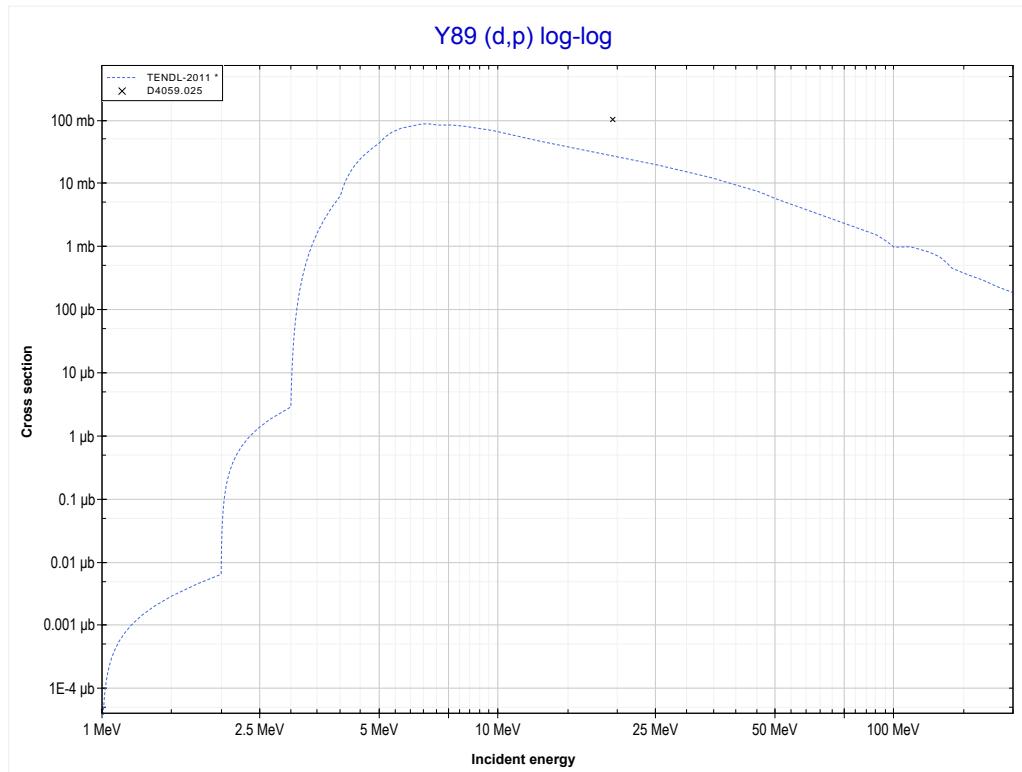
Reaction	Q-Value
Y89(d,2n+α)Sr85	-12030.93 keV
Y89(d,2t)Sr85	-23362.99 keV
Y89(d,n+d+t)Sr85	-29620.22 keV
Y89(d,2n+p+t)Sr85	-31844.79 keV
Y89(d,3n+He3)Sr85	-32608.54 keV
Y89(d,2n+2d)Sr85	-35877.46 keV
Y89(d,3n+p+d)Sr85	-38102.02 keV
Y89(d,4n+2p)Sr85	-40326.59 keV

<< 33-As-75	39-Y-89 MT41 (d,2n+p) or MT5 (Y88 production)	52-Te-122 >>
<< MT24 (d,2n+α)		MT103 (d,p) >>



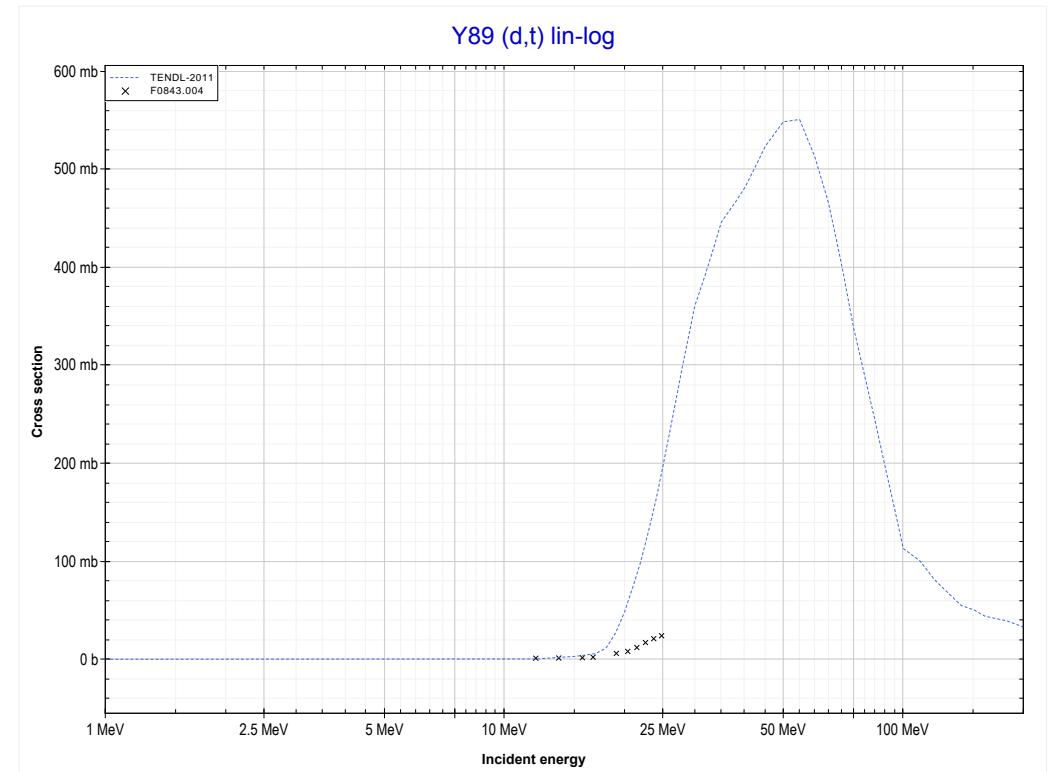
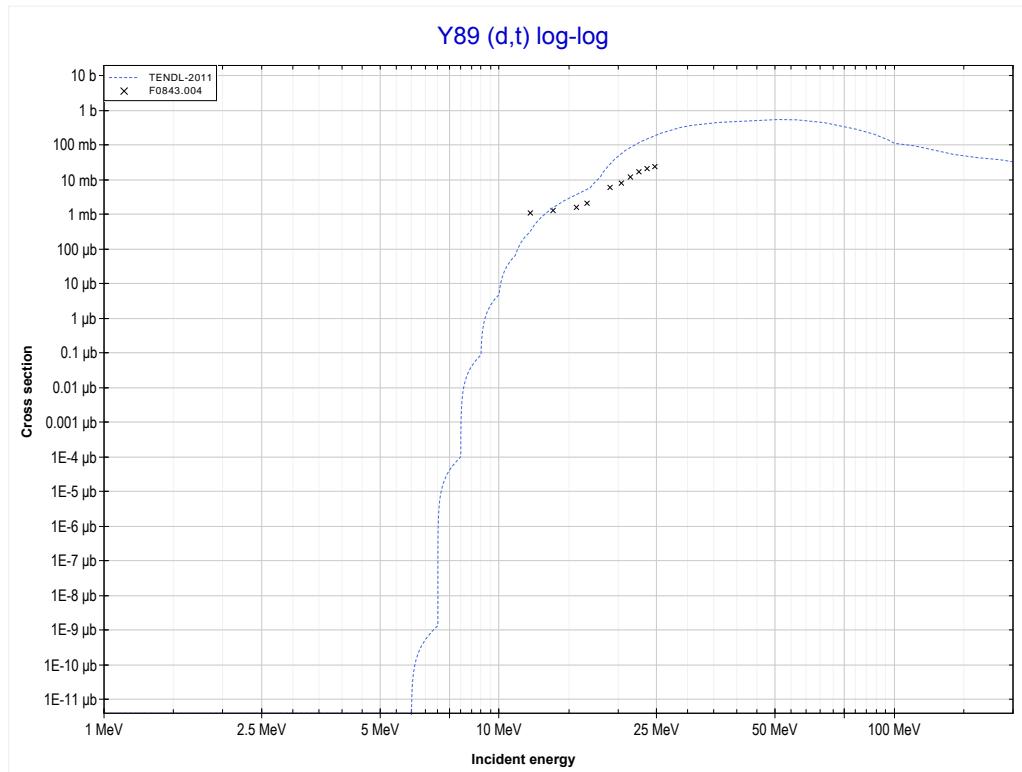
Reaction	Q-Value
Y89(d,t)Y88	-5216.68 keV
Y89(d,n+d)Y88	-11473.92 keV
Y89(d,2n+p)Y88	-13698.48 keV

<< 35-Br-81	39-Y-89 MT103 (d,p) or MT5 (Y90 production)	40-Zr-96 >>
<< MT41 (d,2n+p)		MT105 (d,t) >>



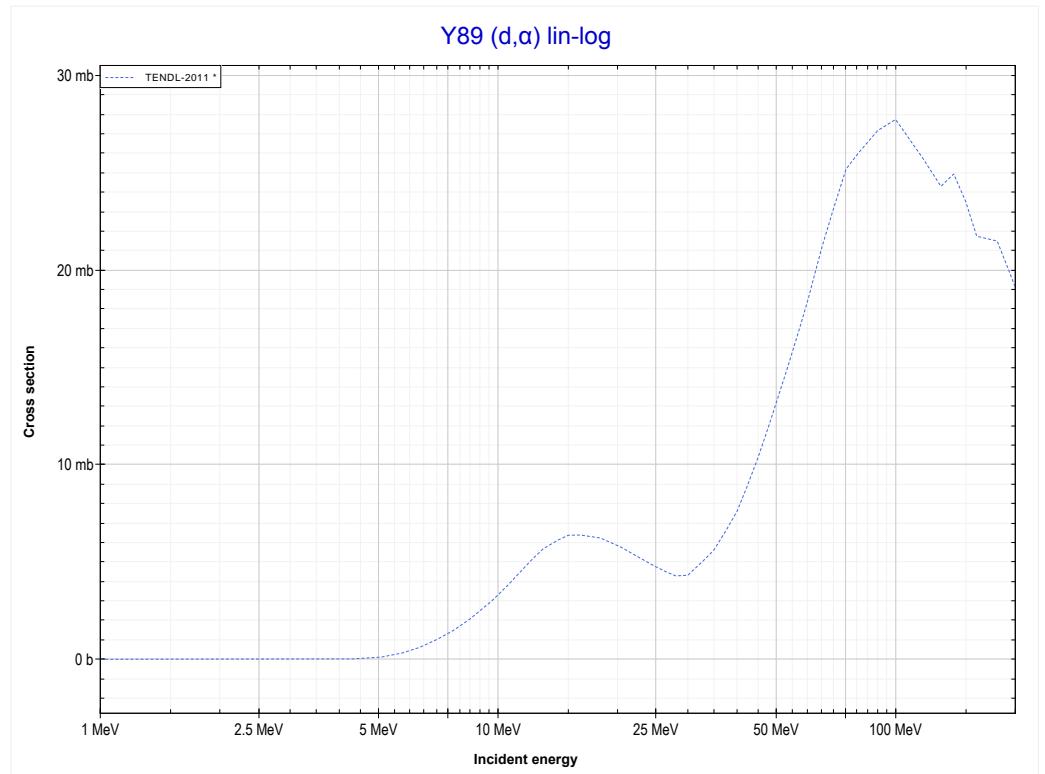
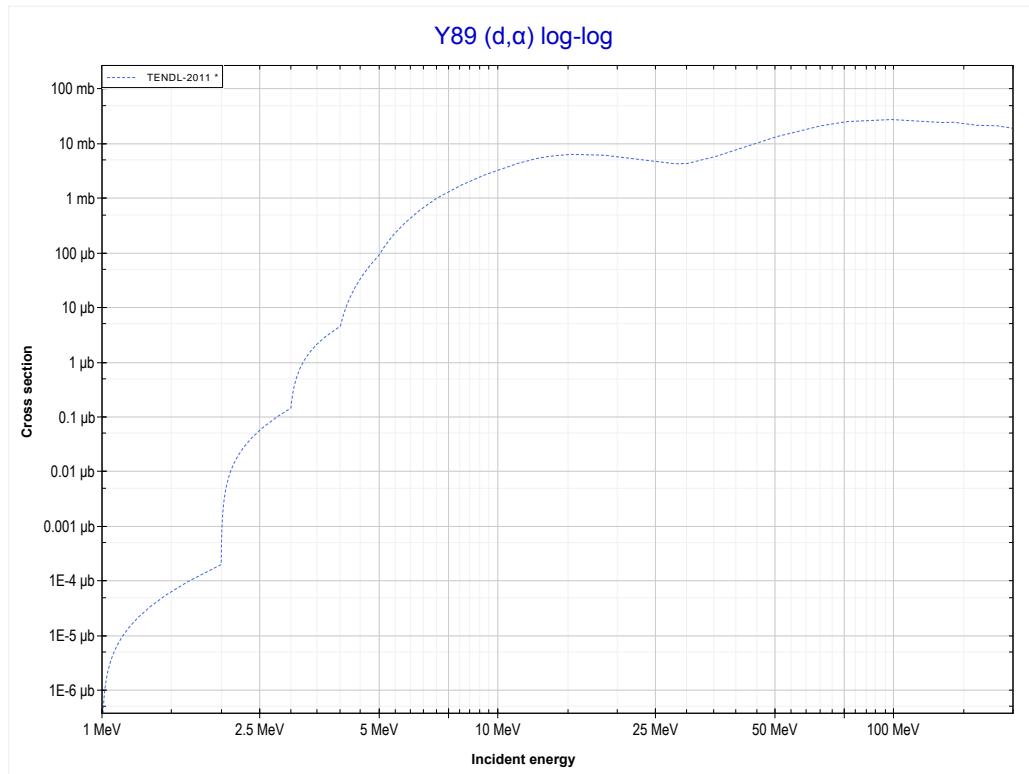
Reaction	Q-Value
Y89(d,p)Y90	4632.55 keV

<< 33-As-75	39-Y-89 MT105 (d,t) or MT5 (Y88 production)	>> 40-Zr-90
<< MT103 (d,p)		>> MT107 (d, α)



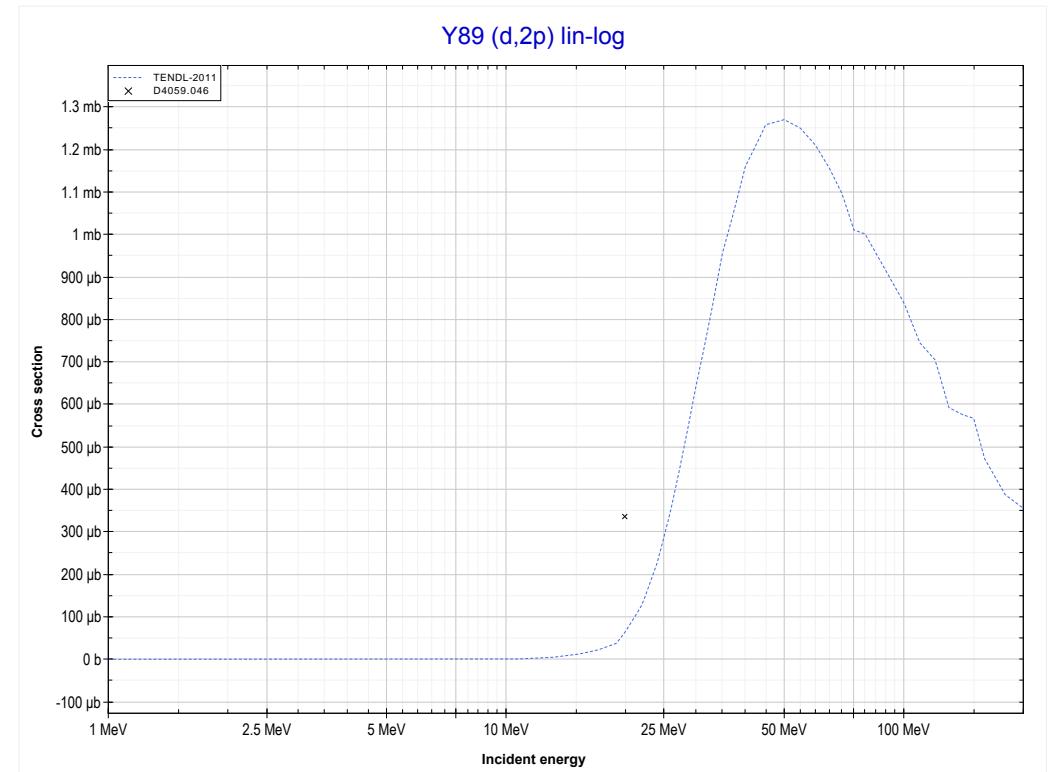
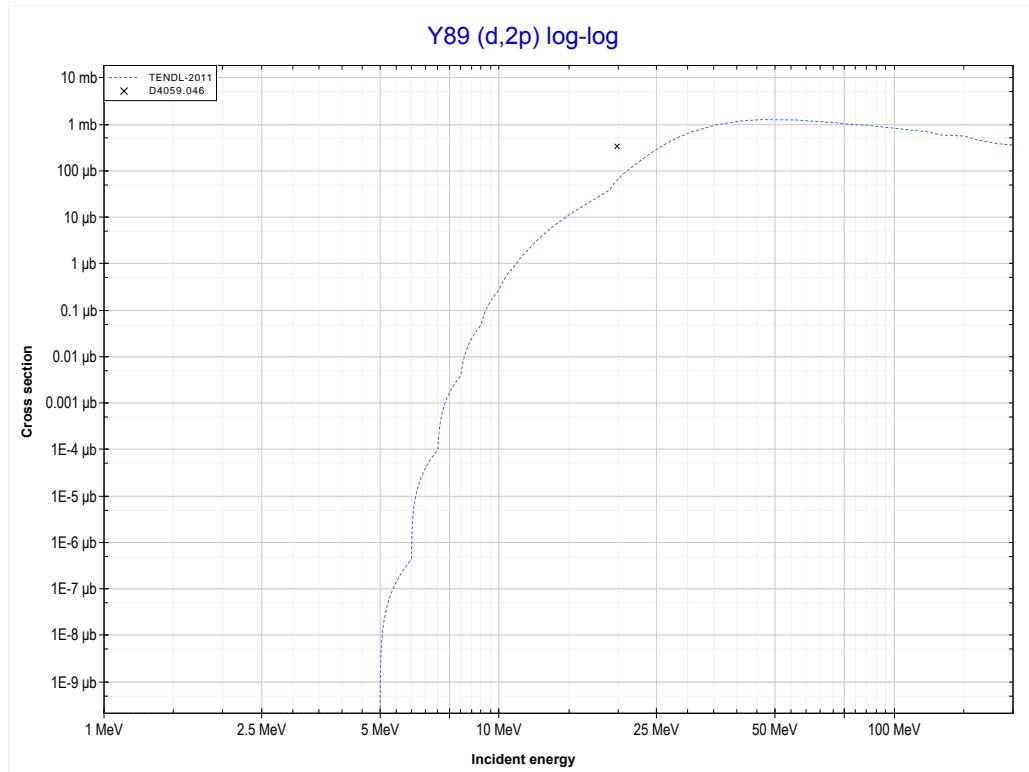
Reaction	Q-Value
Y89(d,t)Y88	-5216.68 keV
Y89(d,n+d)Y88	-11473.92 keV
Y89(d,2n+p)Y88	-13698.48 keV

<< 36-Kr-78	39-Y-89 MT107 (d,α) or MT5 (Sr87 production)	40-Zr-90 >>
<< MT105 (d,t)		MT111 ($d,2p$) >>



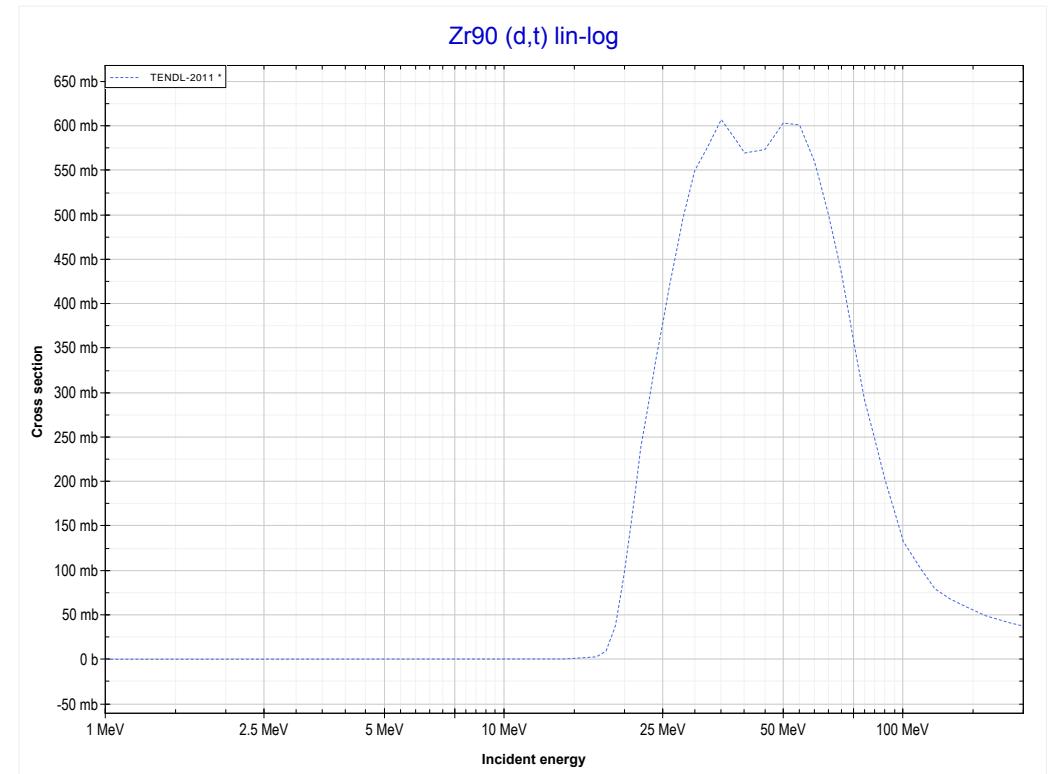
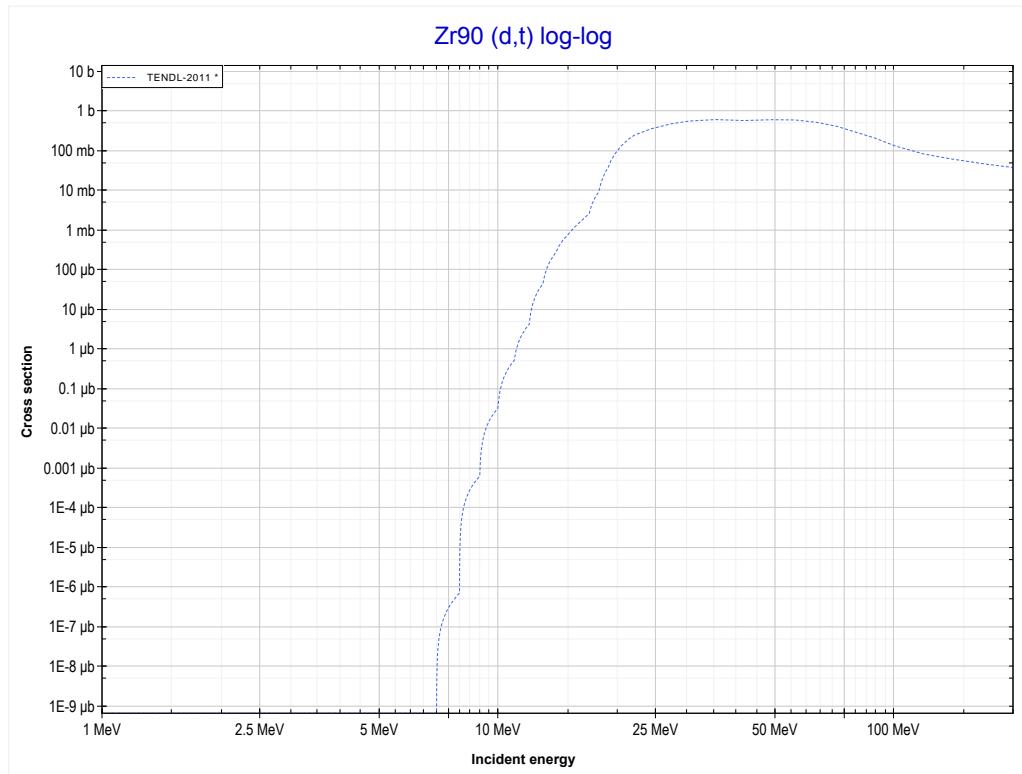
Reaction	Q-Value
Y89(d,α)Sr87	7889.51 keV
Y89($d,p+t$)Sr87	-11924.35 keV
Y89($d,n+He3$)Sr87	-12688.11 keV
Y89($d,2d$)Sr87	-15957.02 keV
Y89($d,n+p+d$)Sr87	-18181.59 keV
Y89($d,2n+2p$)Sr87	-20406.15 keV

<< 30-Zn-67	39-Y-89 MT111 (d,2p) or MT5 (Sr89 production)	45-Rh-103 >>
<< MT107 (d, α)		MT105 (d,t) >>



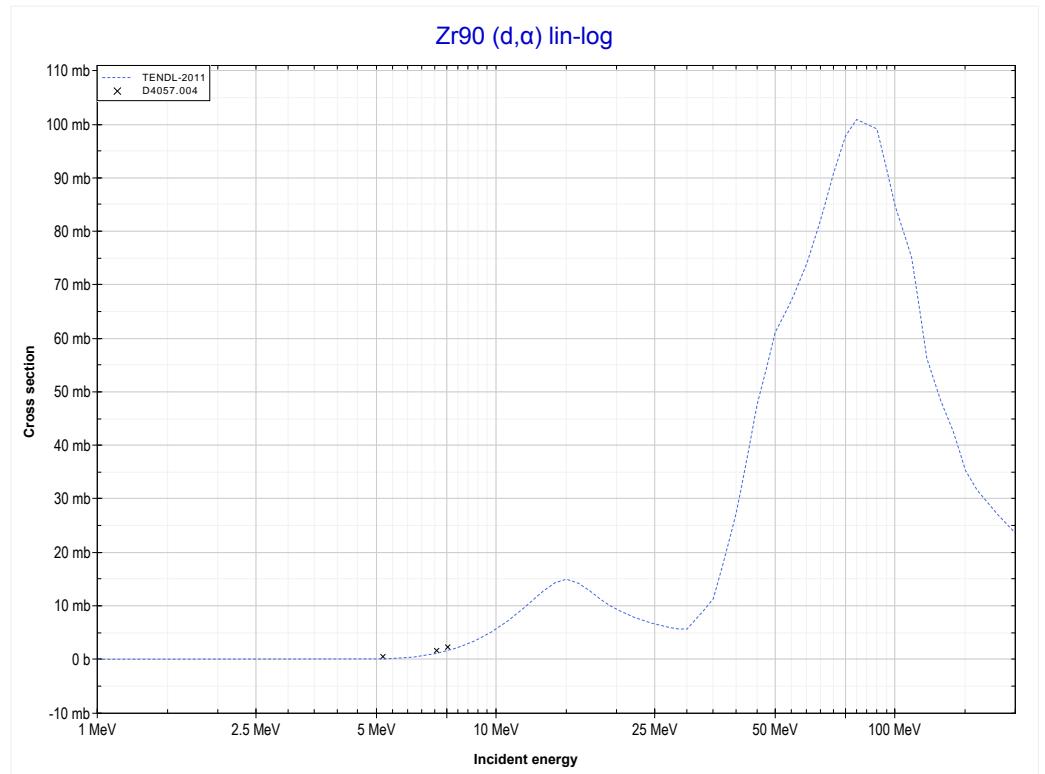
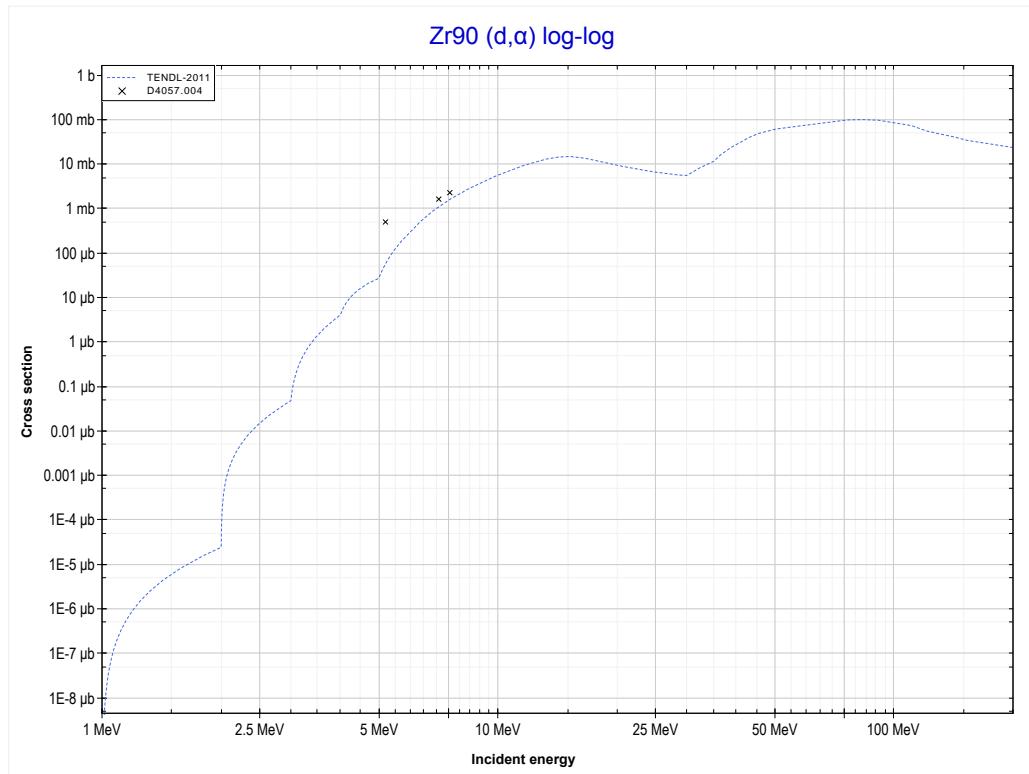
Reaction	Q-Value
Y89(d,2p)Sr89	-2934.82 keV

<< 39-Y-89	40-Zr-90 MT105 (d,t) or MT5 (Zr89 production)	>> 47-Ag-107
<< MT111 (d,2p)		MT107 (d, α) >>



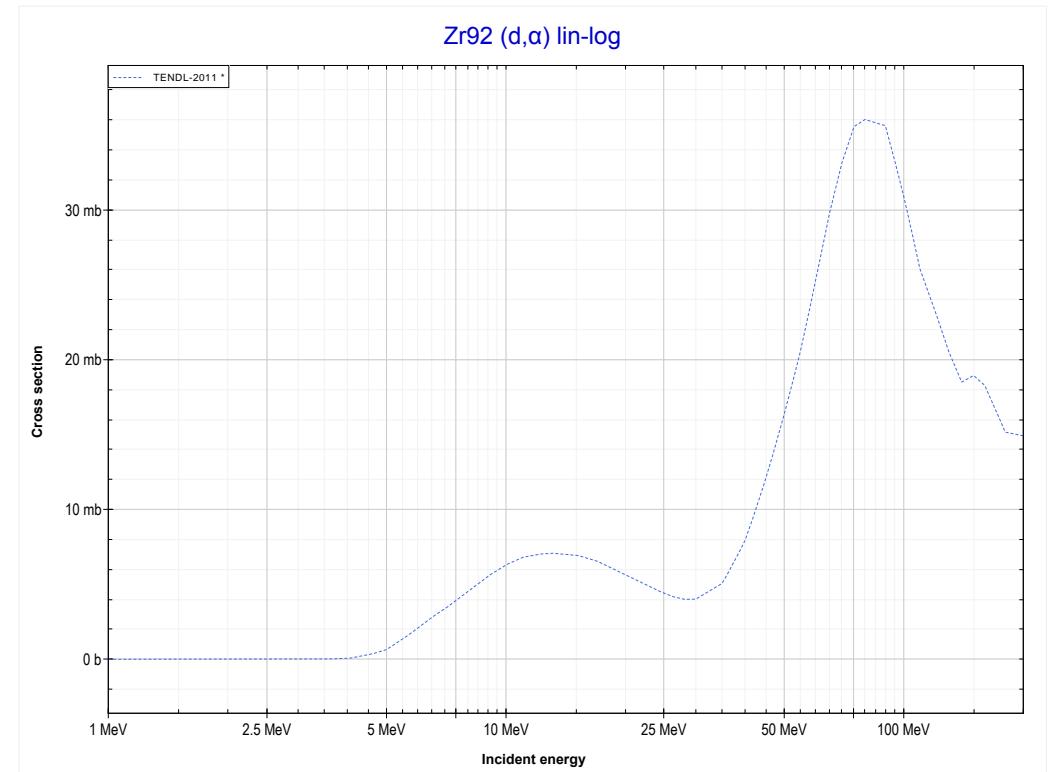
Reaction	Q-Value
Zr90(d,t)Zr89	-5712.38 keV
Zr90(d,n+d)Zr89	-11969.62 keV
Zr90(d,2n+p)Zr89	-14194.18 keV

<< 39-Y-89	40-Zr-90 MT107 (d,α) or MT5 (Y88 production)	40-Zr-92 >>
<< MT105 (d,t)		MT107 (d,α) >>



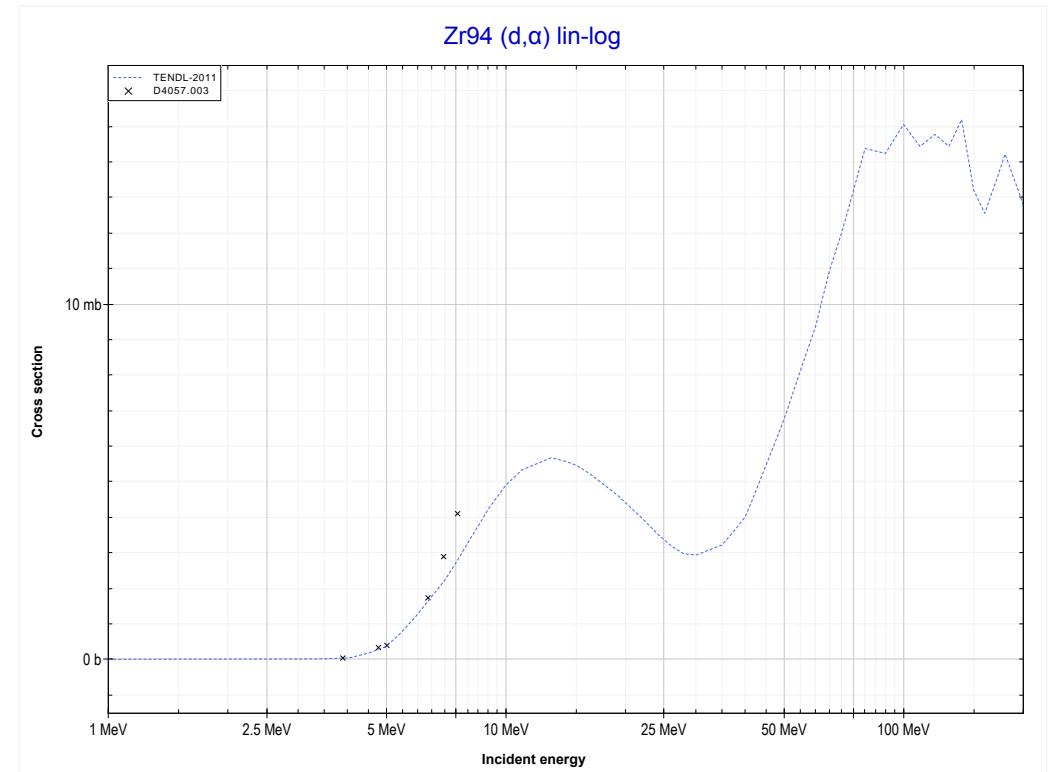
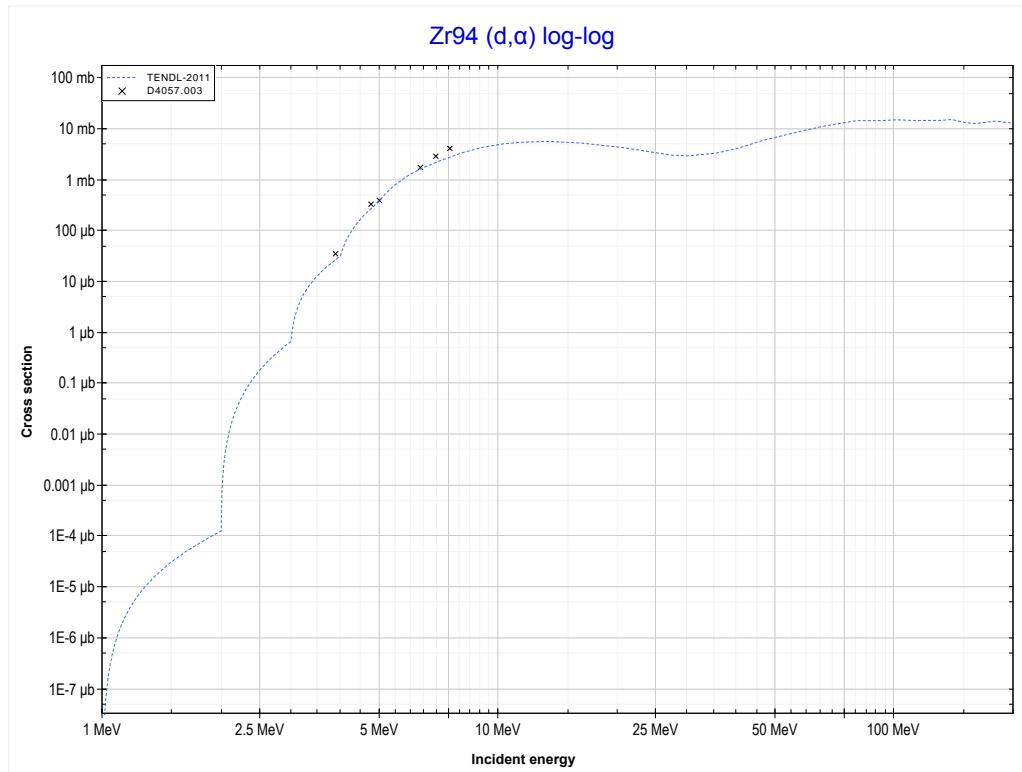
Reaction	Q-Value
Zr90(d,α)Y88	6242.61 keV
Zr90($d,p+t$)Y88	-13571.25 keV
Zr90($d,n+He3$)Y88	-14335.01 keV
Zr90($d,2d$)Y88	-17603.92 keV
Zr90($d,n+p+d$)Y88	-19828.49 keV
Zr90($d,2n+2p$)Y88	-22053.05 keV

<< 40-Zr-90	40-Zr-92 MT107 (d,α) or MT5 (Y90 production)	>> 40-Zr-94 >>
<< MT107 (d, α)		MT107 (d, α) >>



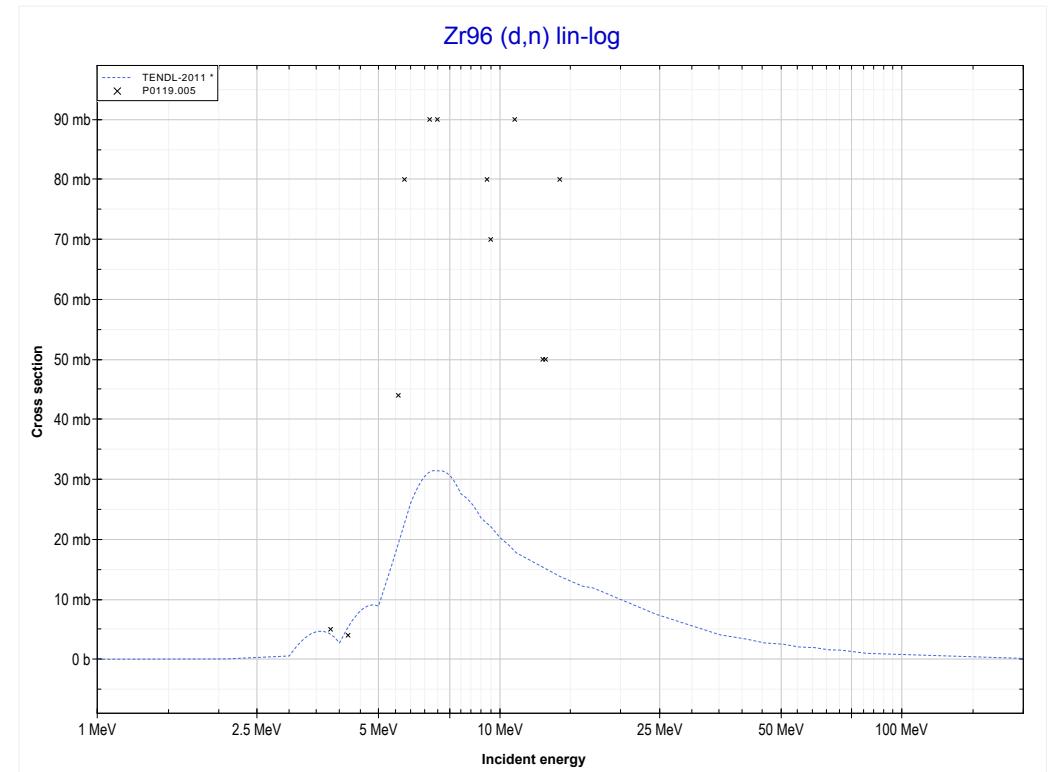
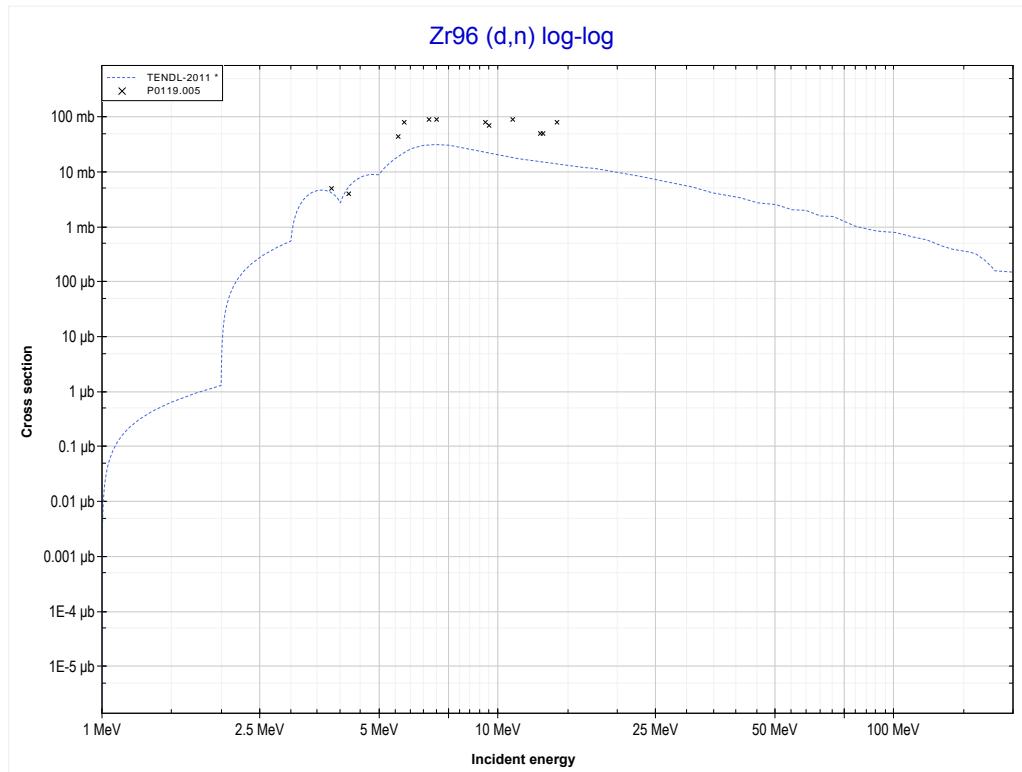
Reaction	Q-Value
Zr92(d, α)Y90	8744.41 keV
Zr92(d,p+t)Y90	-11069.45 keV
Zr92(d,n+He3)Y90	-11833.21 keV
Zr92(d,2d)Y90	-15102.12 keV
Zr92(d,n+p+d)Y90	-17326.69 keV
Zr92(d,2n+2p)Y90	-19551.25 keV

<< 40-Zr-92	40-Zr-94 MT107 (d, α) or MT5 (Y92 production)	42-Mo-92 >>
<< MT107 (d, α)		MT4 (d,n) >>



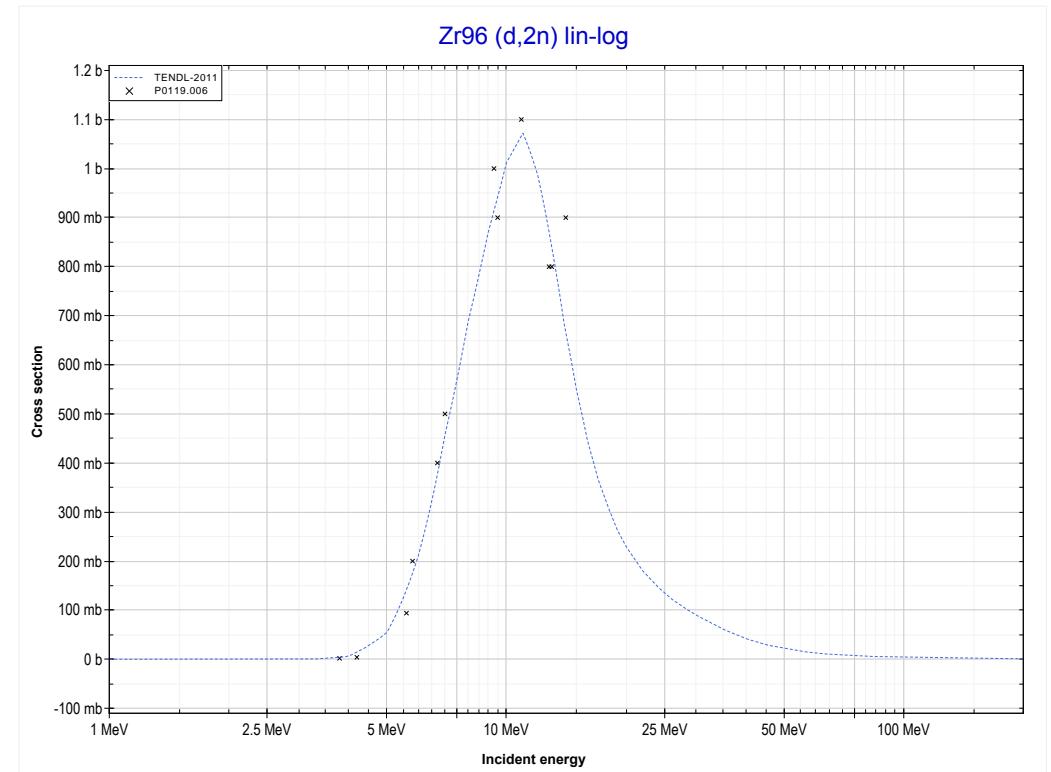
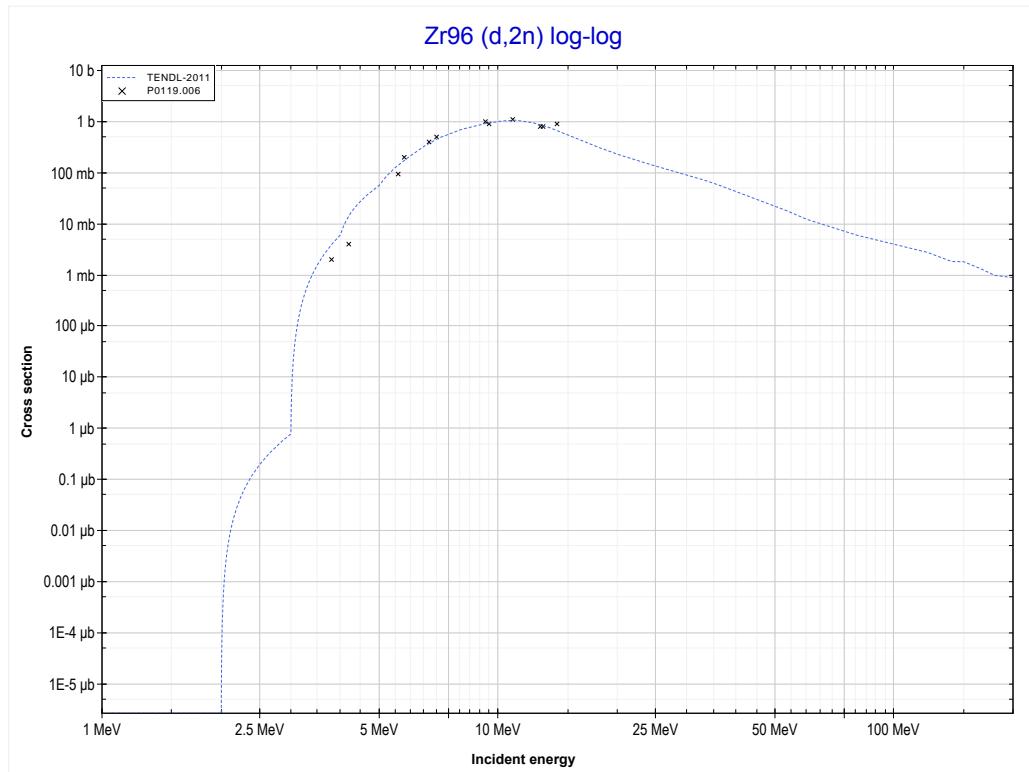
Reaction	Q-Value
Zr94(d, α)Y92	8257.01 keV
Zr94(d,p+t)Y92	-11556.85 keV
Zr94(d,n+He3)Y92	-12320.61 keV
Zr94(d,2d)Y92	-15589.52 keV
Zr94(d,n+p+d)Y92	-17814.09 keV
Zr94(d,2n+2p)Y92	-20038.65 keV

<< 36-Kr-80	40-Zr-96 MT4 (d,n) or MT5 (Nb97 production)	42-Mo-92 >>
<< MT107 (d, α)		MT16 (d,2n) >>



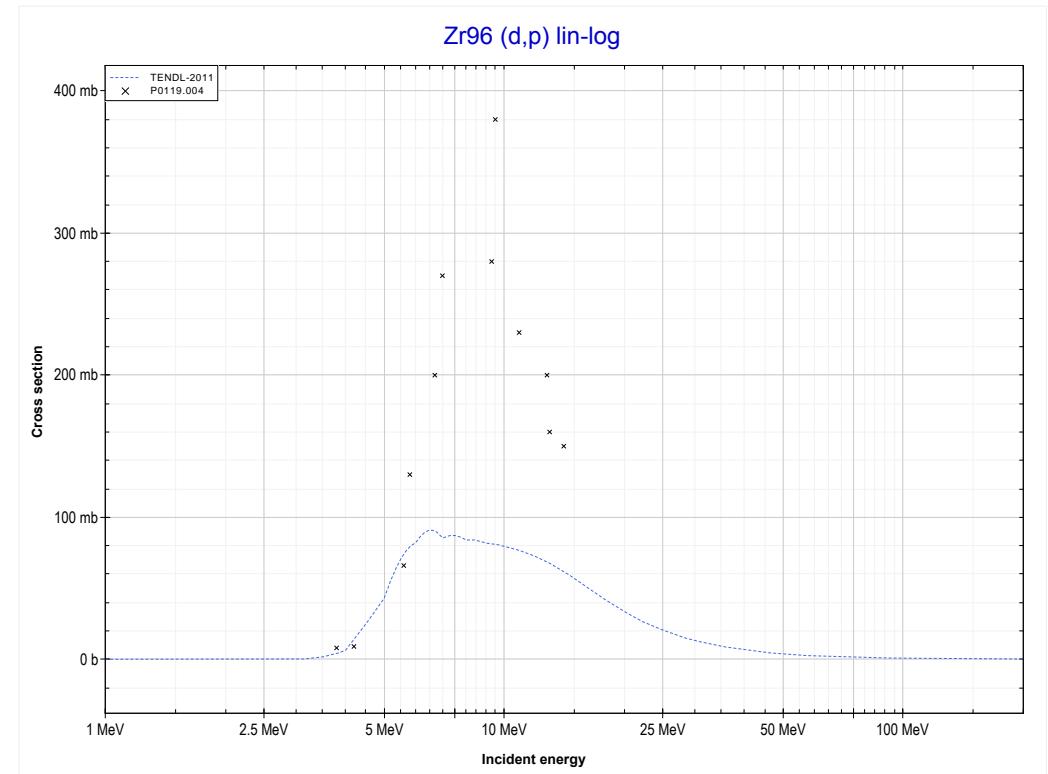
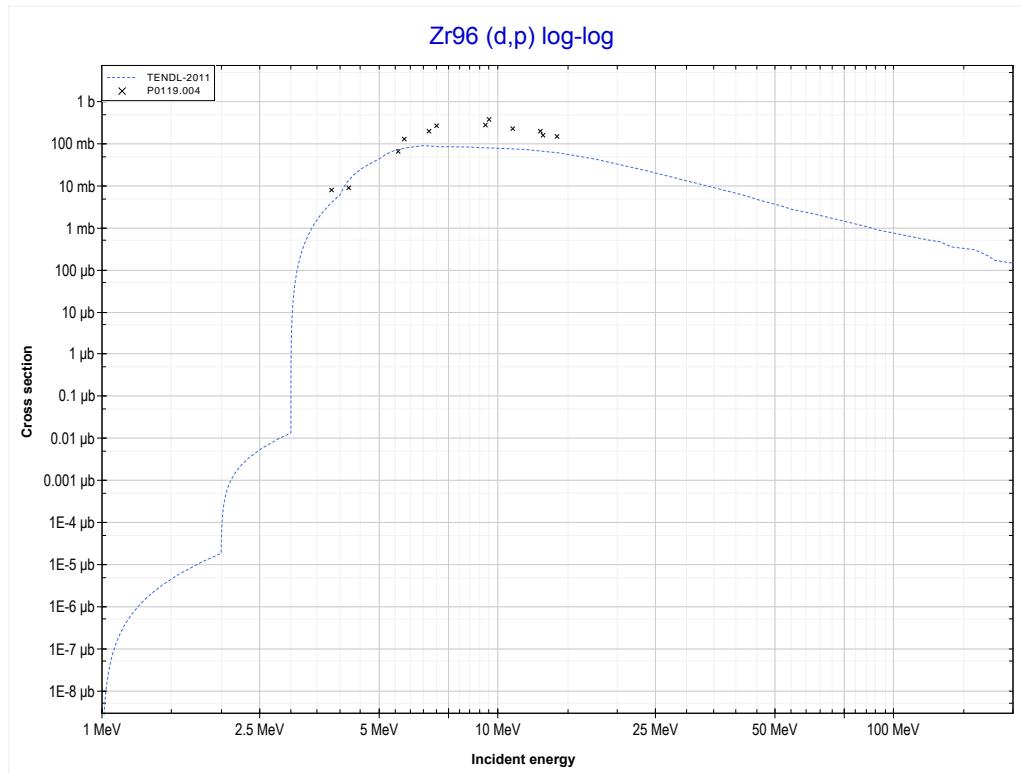
Reaction	Q-Value
Zr96(d,n)Nb97	5227.20 keV

<< 39-Y-89	40-Zr-96 MT16 (d,2n) or MT5 (Nb96 production)	>> 41-Nb-93
<< MT4 (d,n)		MT103 (d,p) >>



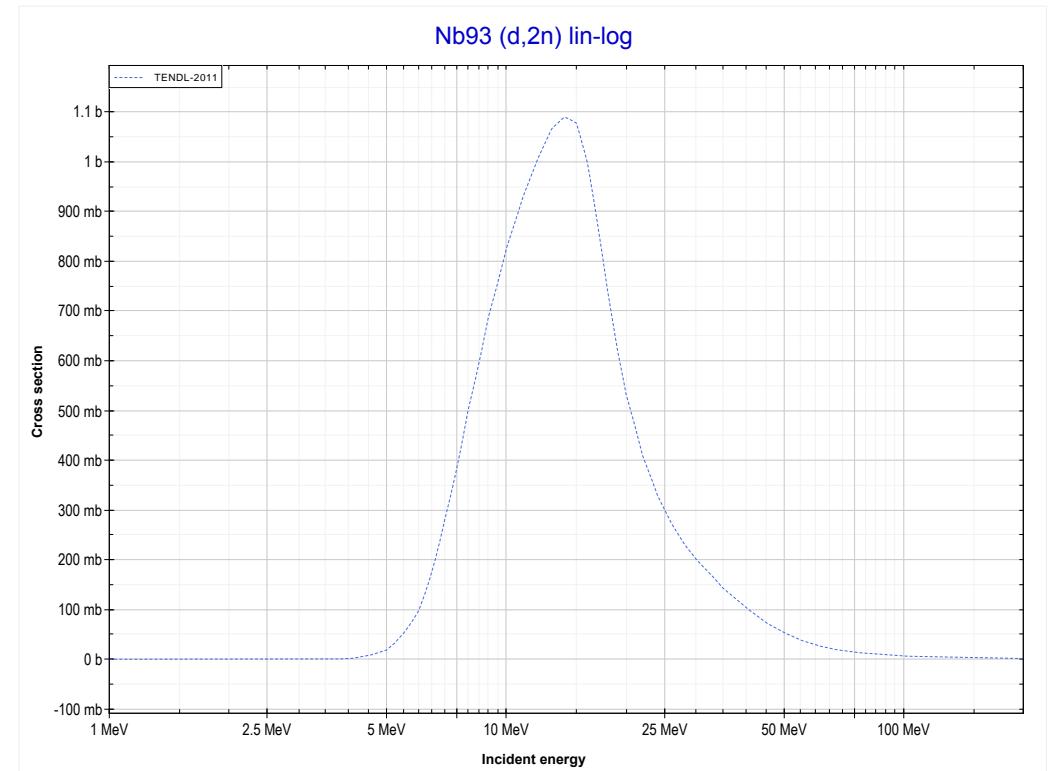
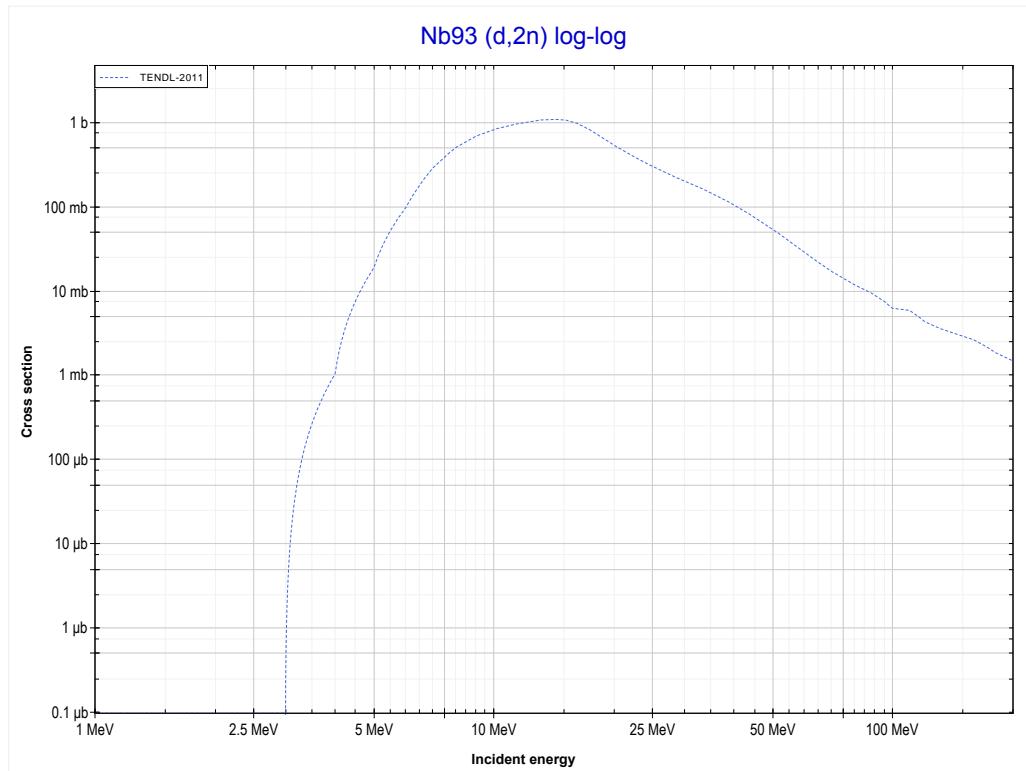
Reaction	Q-Value
Zr96(d,2n)Nb96	-2845.71 keV

<< 39-Y-89	40-Zr-96 MT103 (d,p) or MT5 (Zr97 production)	>> 42-Mo-98 >>
<< MT16 (d,2n)		MT16 (d,2n) >>



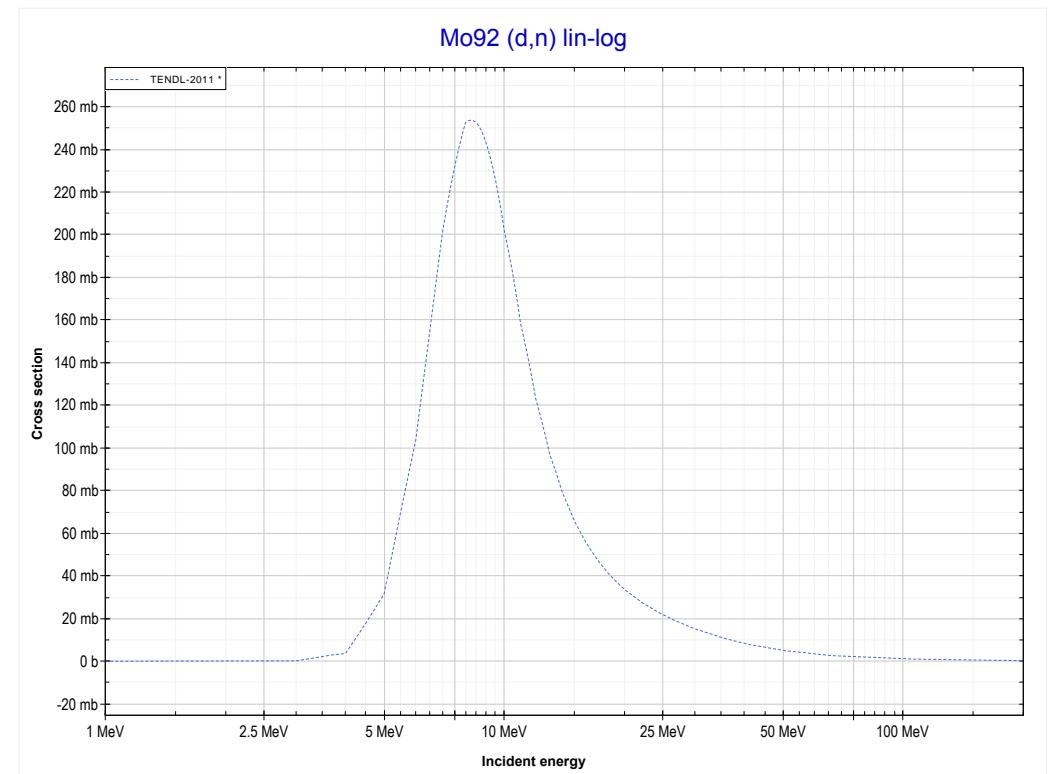
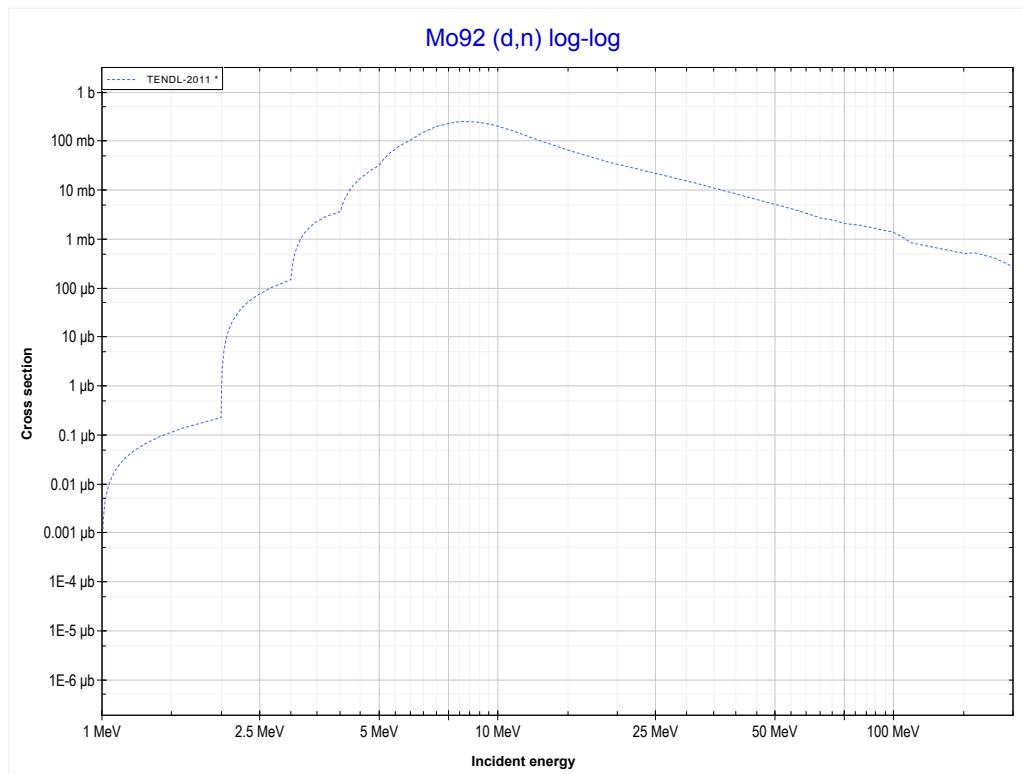
Reaction	Q-Value
Zr96(d,p)Zr97	3350.55 keV

<< 40-Zr-96	41-Nb-93 MT16 (d,2n) or MT5 (Mo93 production)	>> 42-Mo-94
<< MT103 (d,p)		MT4 (d,n) >>



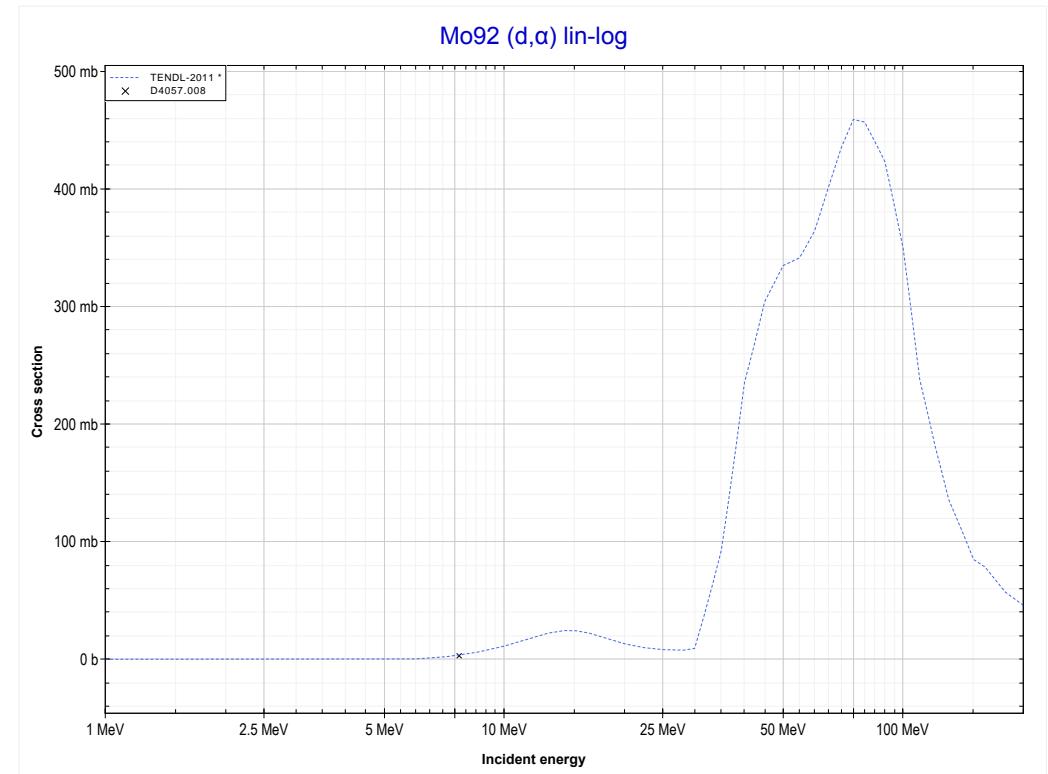
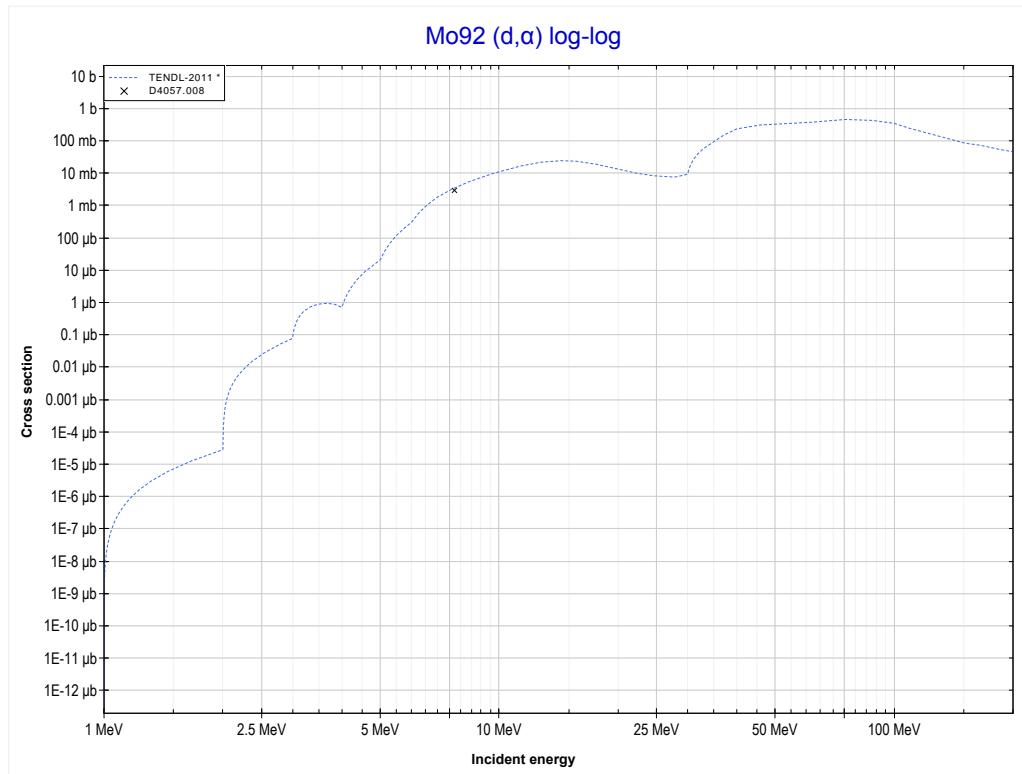
Reaction	Q-Value
Nb93(d,2n)Mo93	-3412.21 keV

<< 40-Zr-96	42-Mo-92 MT4 (d,n) or MT5 (Tc93 production)	42-Mo-94 >>
<< MT16 (d,2n)		MT107 (d, α) >>



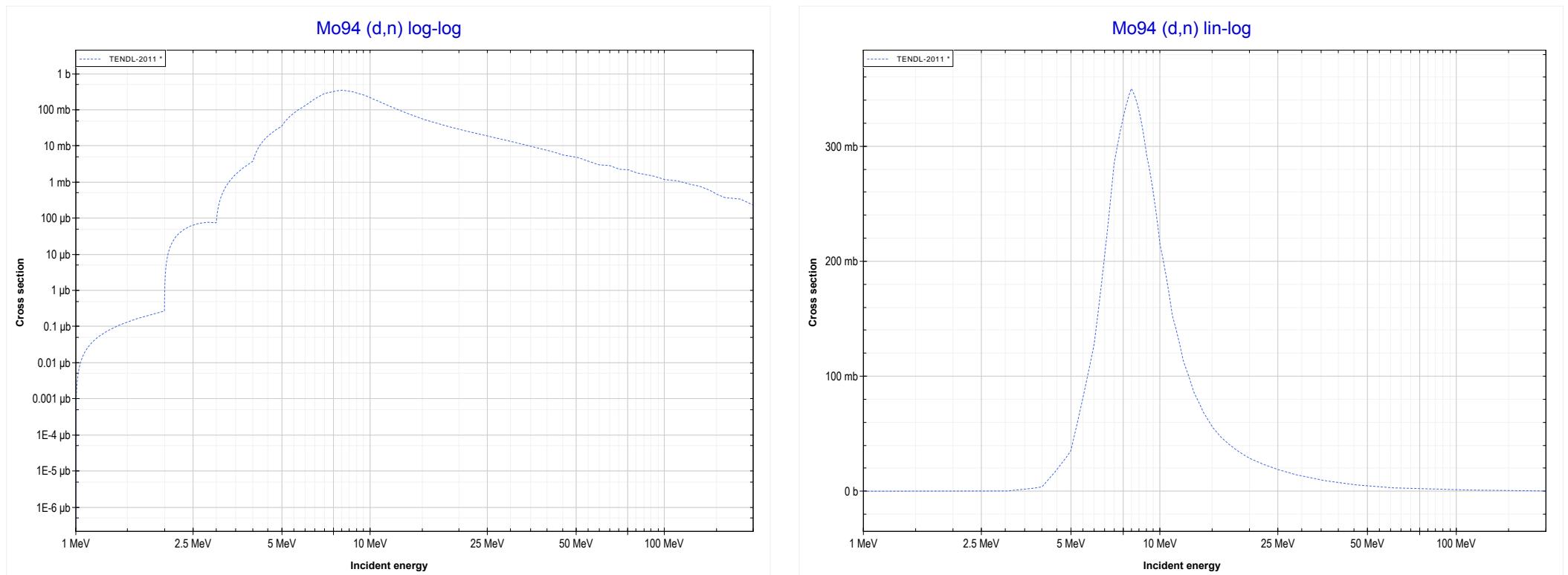
Reaction	Q-Value
Mo92(d,n)Tc93	1862.40 keV

<< 40-Zr-94	42-Mo-92 MT107 (d,α) or MT5 (Nb90 production)	42-Mo-97 >>
<< MT4 (d,n)		MT4 (d,n) >>



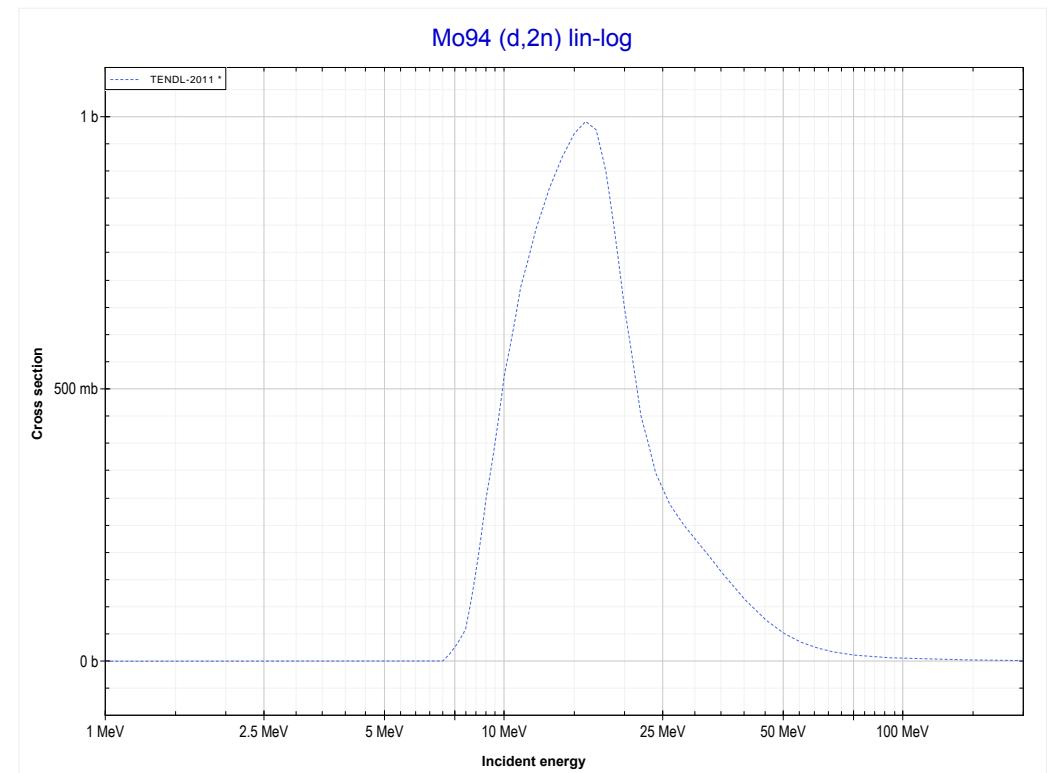
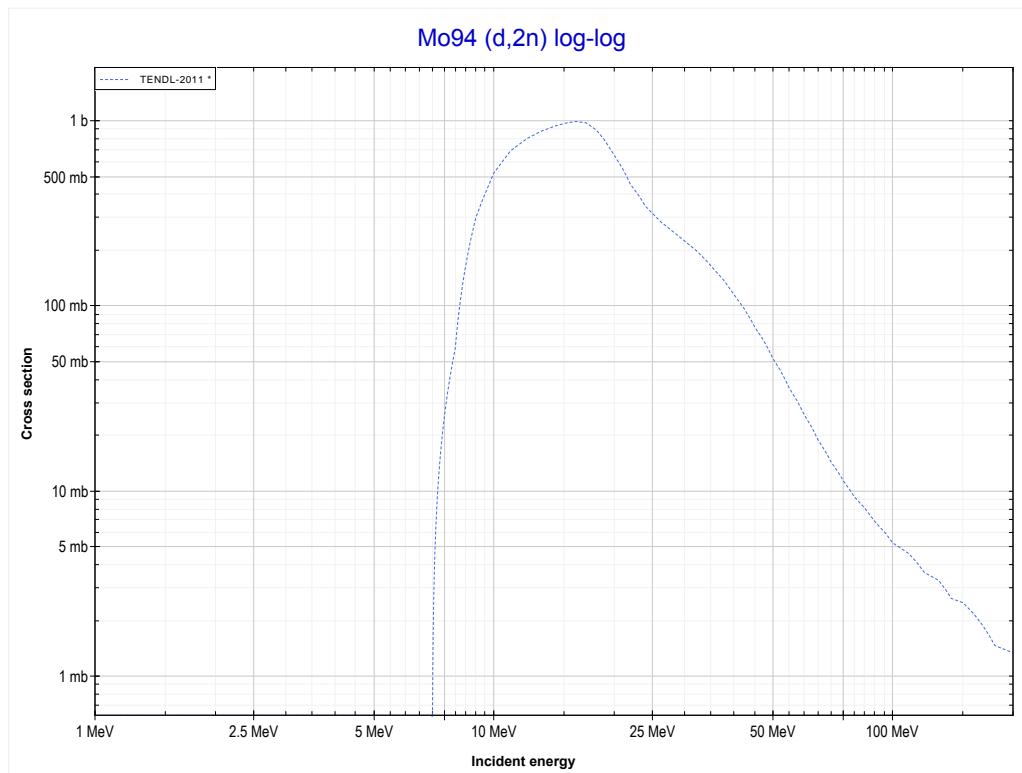
Reaction	Q-Value
Mo92(d, α)Nb90	6561.81 keV
Mo92(d,p+t)Nb90	-13252.05 keV
Mo92(d,n+He3)Nb90	-14015.81 keV
Mo92(d,2d)Nb90	-17284.72 keV
Mo92(d,n+p+d)Nb90	-19509.29 keV
Mo92(d,2n+2p)Nb90	-21733.85 keV

<< 42-Mo-92	42-Mo-94 MT4 (d,n) or MT5 (Tc95 production)	42-Mo-96 >>
<< MT107 (d, α)		MT16 (d,2n) >>



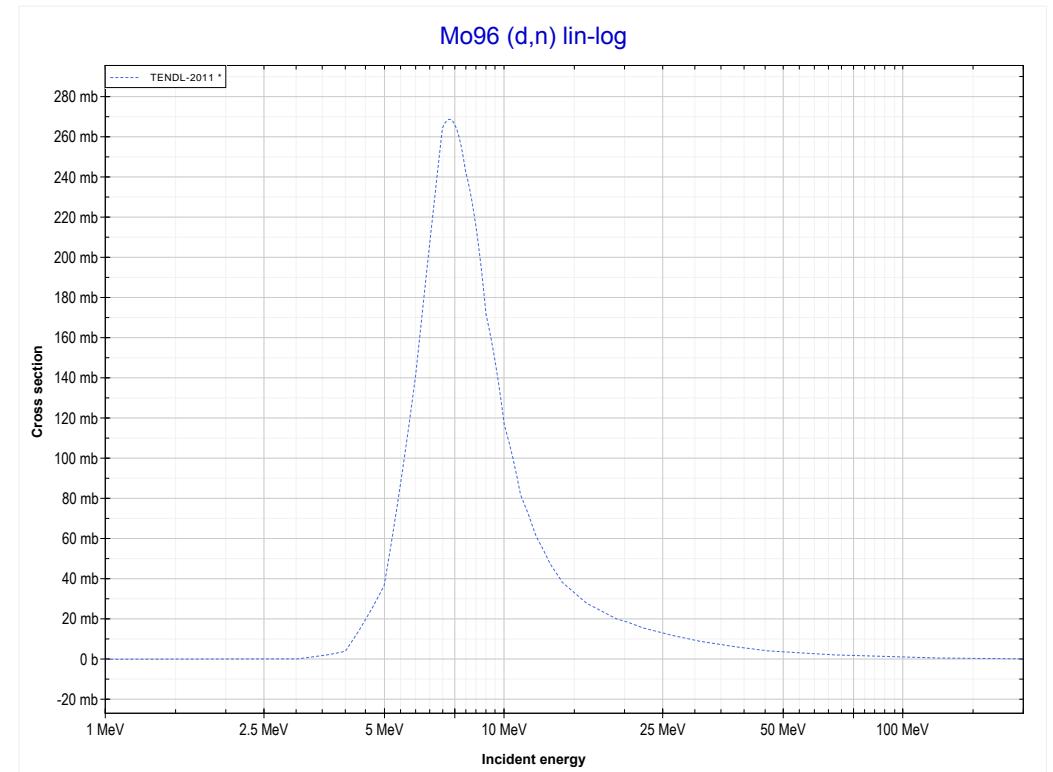
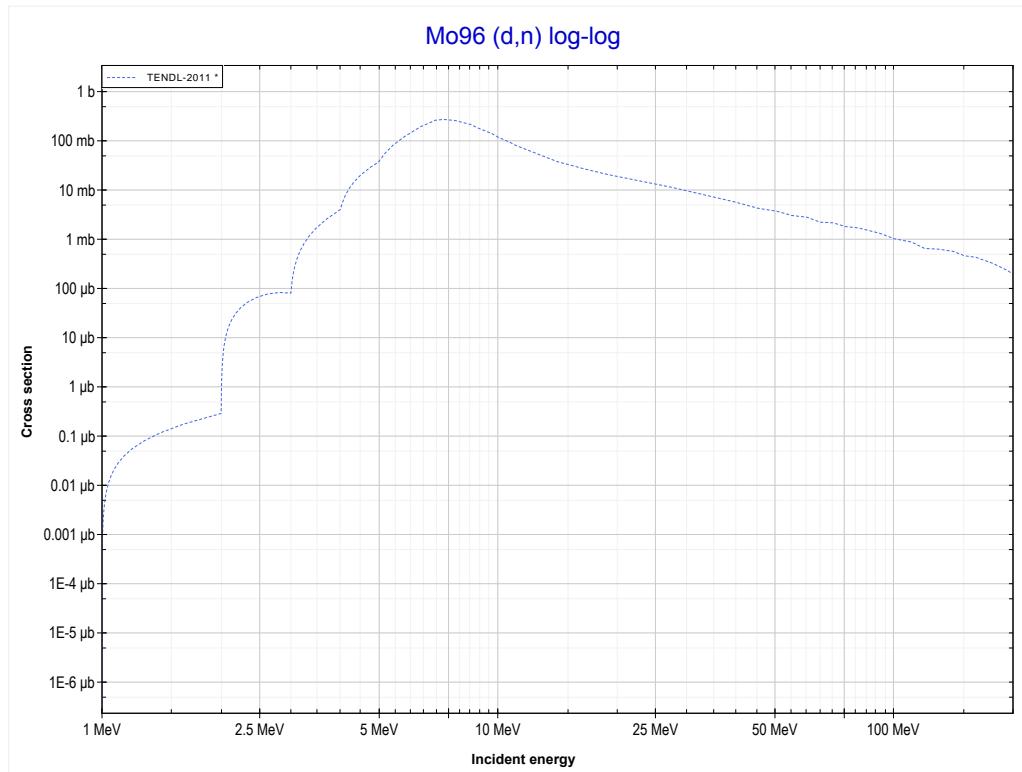
Reaction	Q-Value
Mo94(d,n)Tc95	2671.70 keV

<< 41-Nb-93	42-Mo-94 MT16 (d,2n) or MT5 (Tc94 production)	45-Rh-103 >>
<< MT4 (d,n)		MT4 (d,n) >>



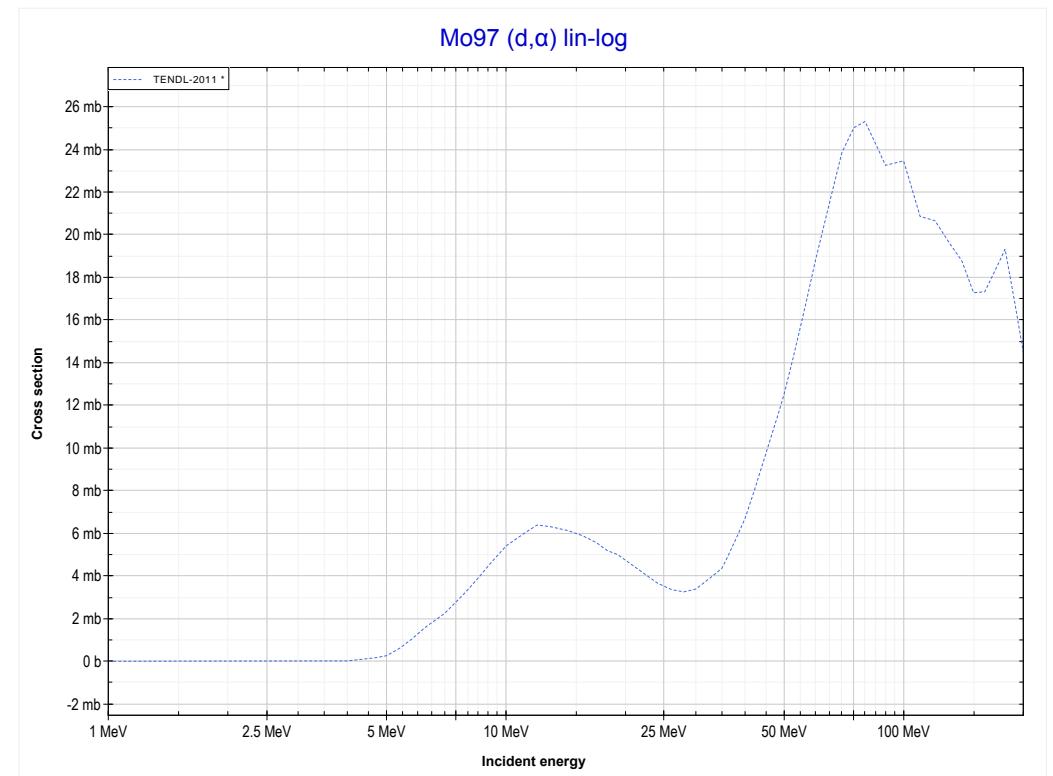
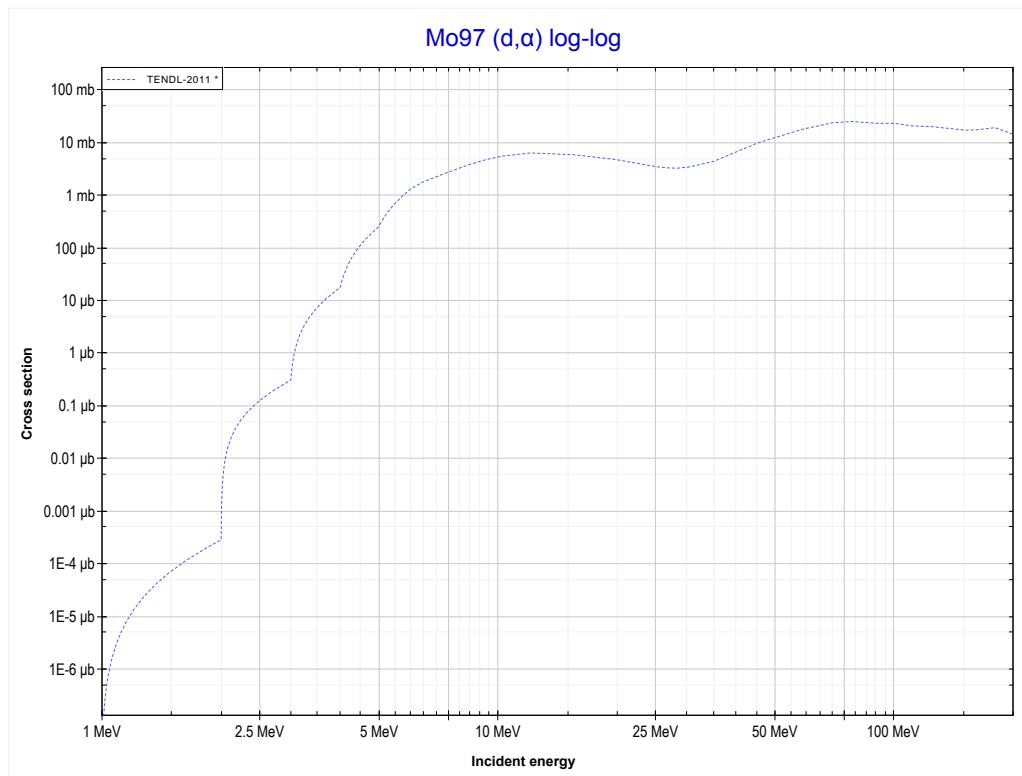
Reaction	Q-Value
Mo94(d,2n)Tc94	-7262.61 keV

<< 42-Mo-94	42-Mo-96 MT4 (d,n) or MT5 (Tc97 production)	>> 42-Mo-98
<< MT16 (d,2n)		MT107 (d, α) >>



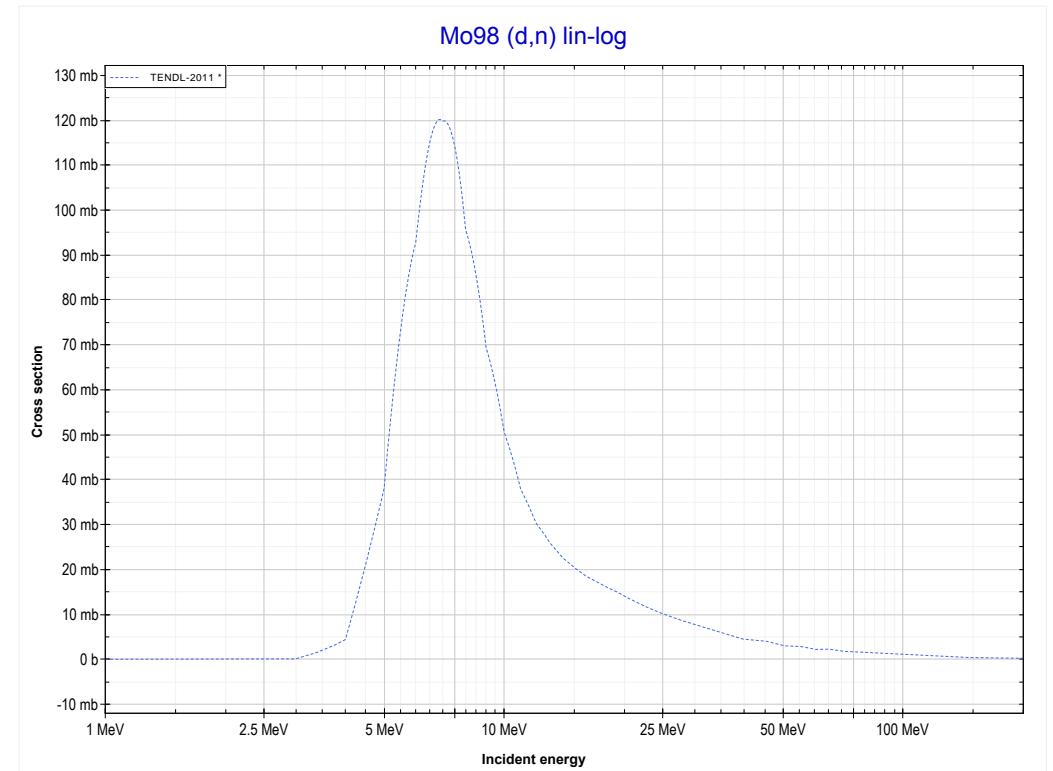
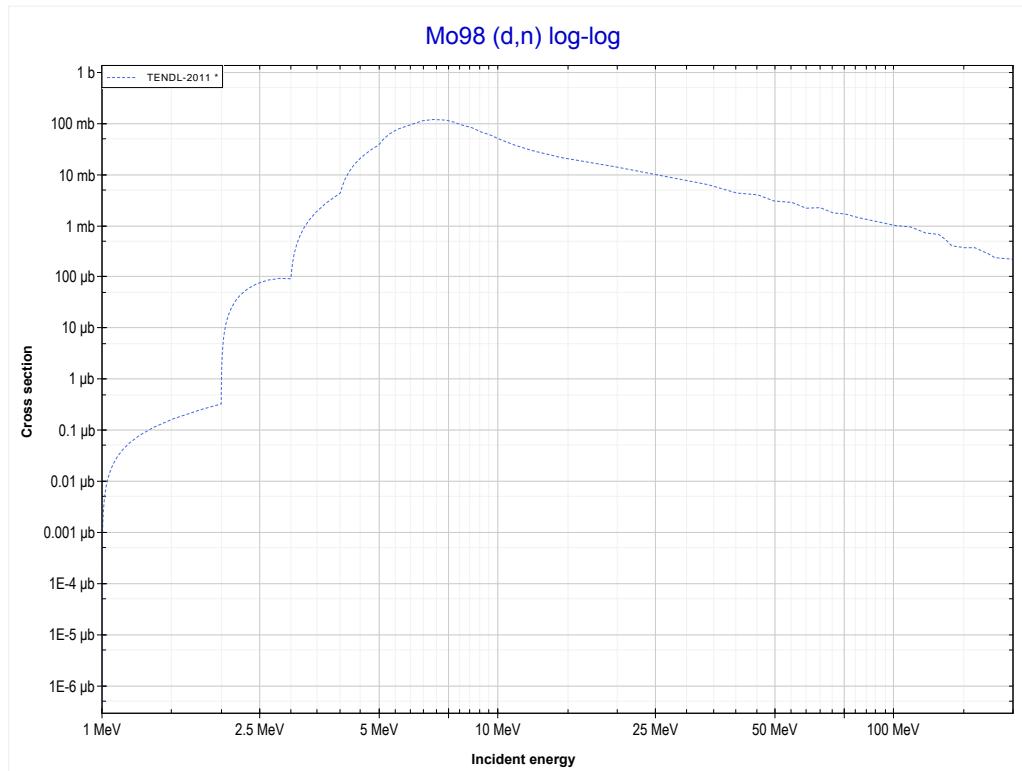
Reaction	Q-Value
Mo96(d,n)Tc97	3493.90 keV

<< 42-Mo-92	42-Mo-97 MT107 (d,α) or MT5 (Nb95 production)	42-Mo-98 >>
<< MT4 (d,n)		MT4 (d,n) >>



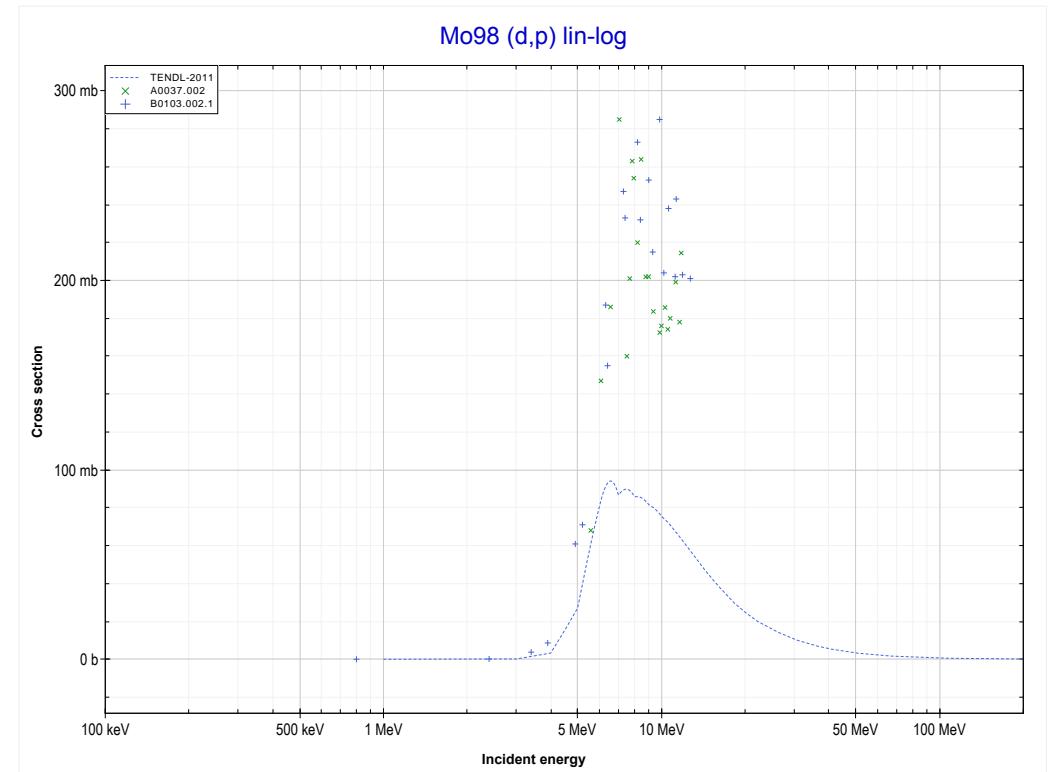
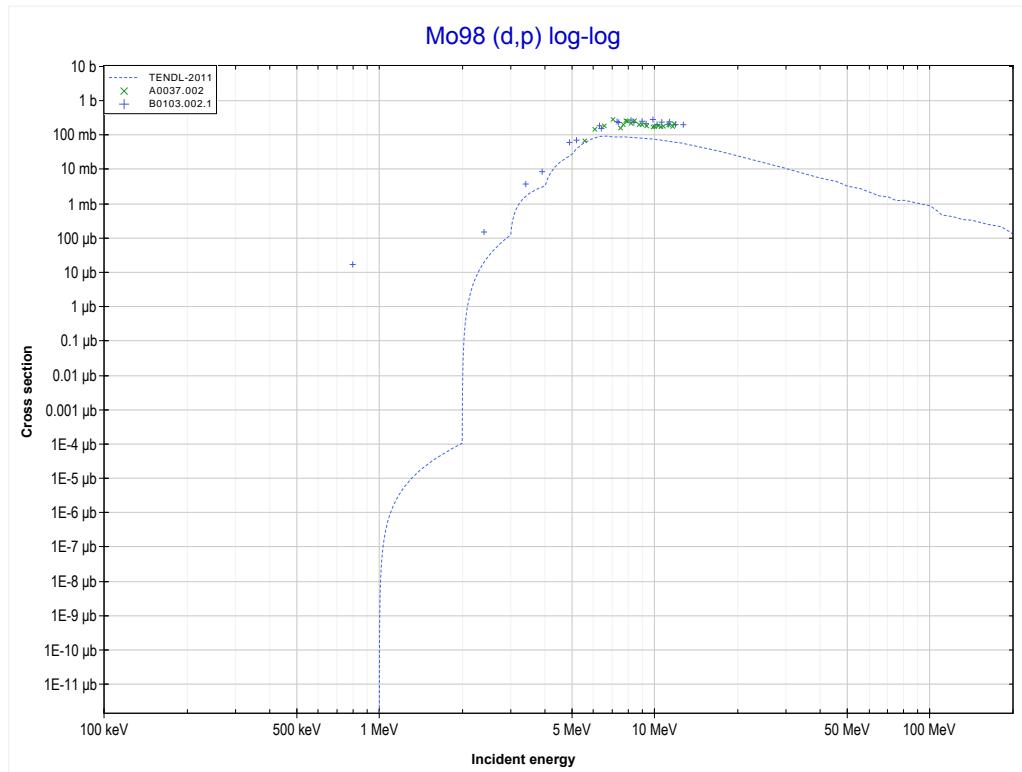
Reaction	Q-Value
Mo97(d,α)Nb95	9952.31 keV
Mo97($d,p+t$)Nb95	-9861.55 keV
Mo97($d,n+He3$)Nb95	-10625.31 keV
Mo97($d,2d$)Nb95	-13894.22 keV
Mo97($d,n+p+d$)Nb95	-16118.79 keV
Mo97($d,2n+2p$)Nb95	-18343.35 keV

<< 42-Mo-96	42-Mo-98 MT4 (d,n) or MT5 (Tc99 production)	42-Mo-100 >>
<< MT107 (d, α)		MT103 (d,p) >>



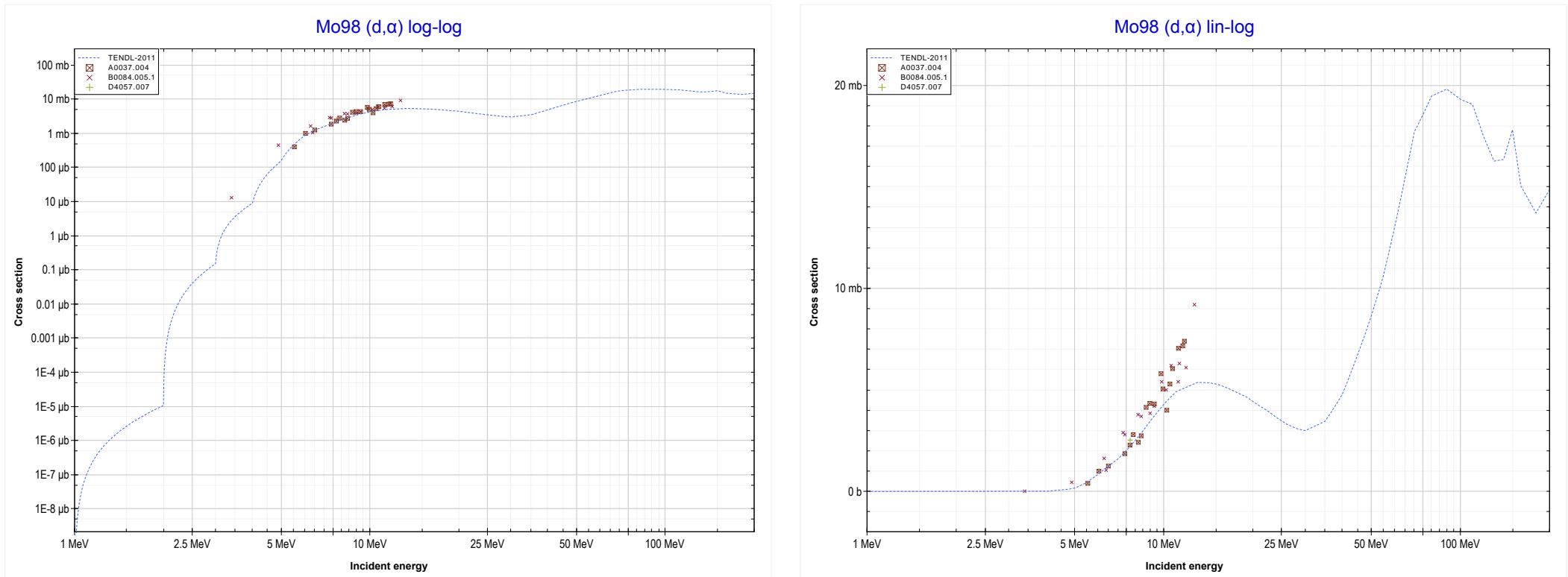
Reaction	Q-Value
Mo98(d,n)Tc99	4275.80 keV

<< 40-Zr-96	42-Mo-98 MT103 (d,p) or MT5 (Mo99 production)	42-Mo-100 >>
<< MT4 (d,n)		MT107 (d, α) >>



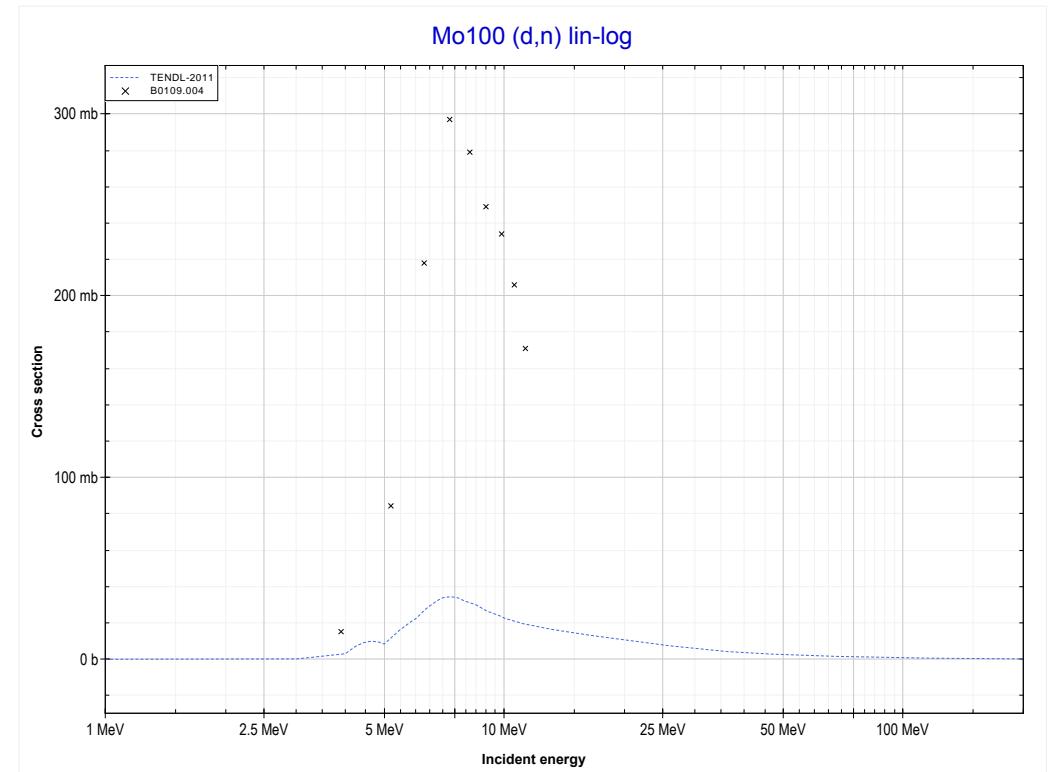
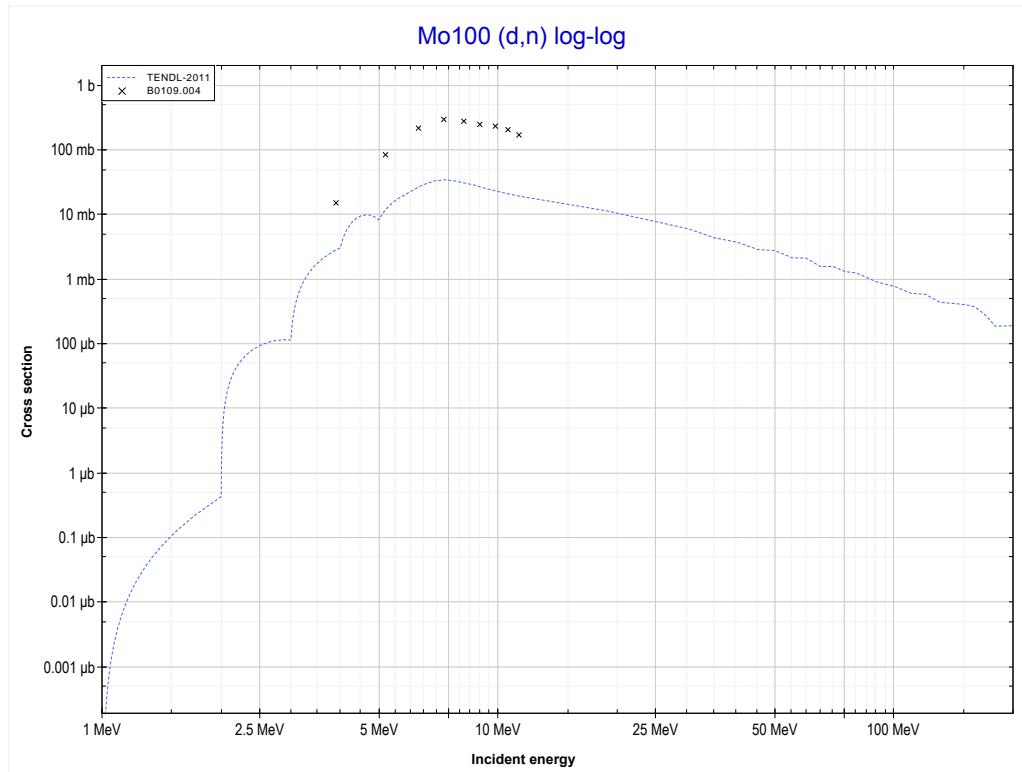
Reaction	Q-Value
Mo98(d,p)Mo99	3700.85 keV

<< 42-Mo-97	42-Mo-98 MT107 (d,α) or MT5 (Nb96 production)	48-Cd-114 >>
<< MT103 (d,p) >>		MT4 (d,n) >>



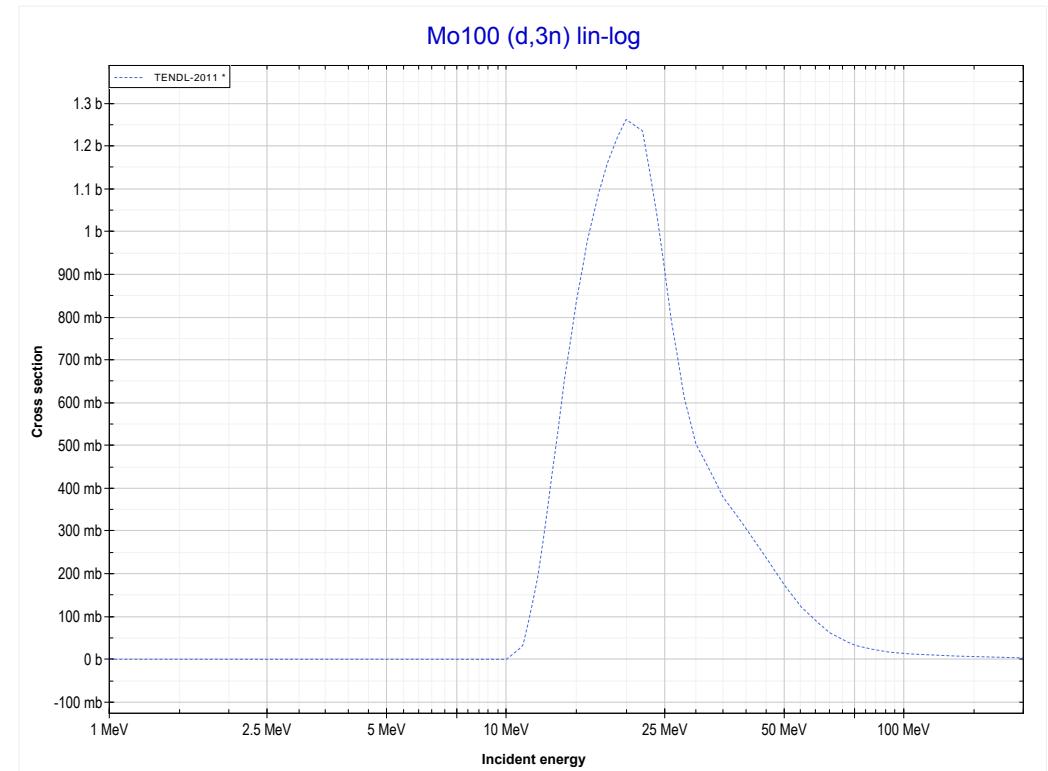
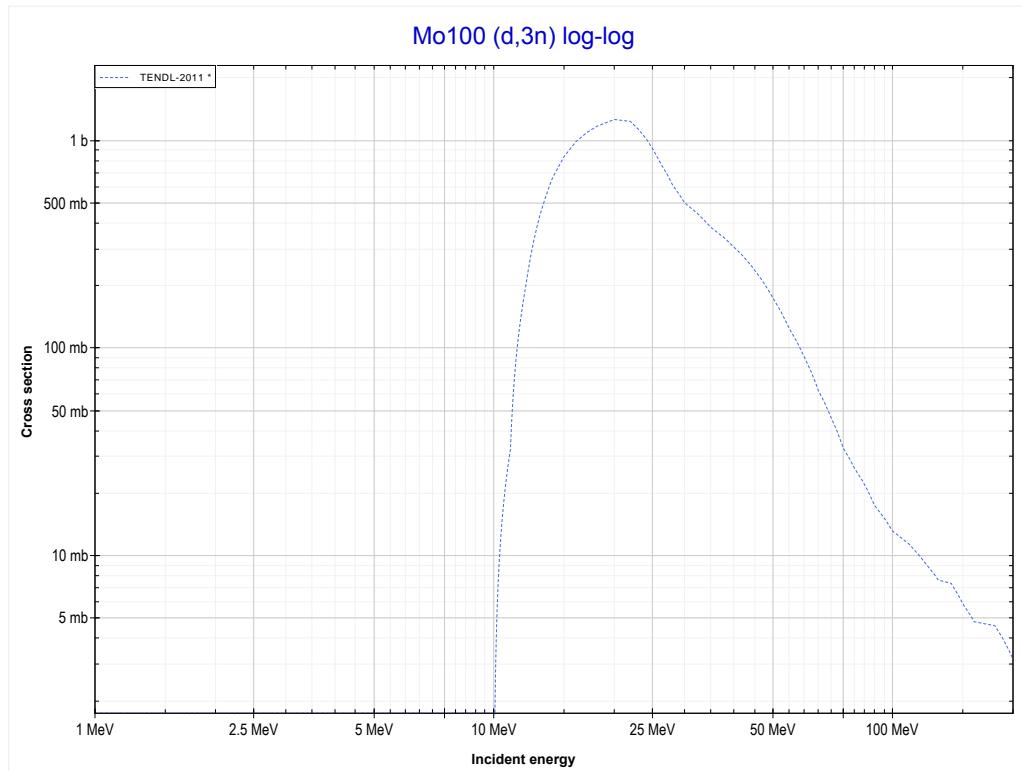
Reaction	Q-Value
Mo98(d,α)Nb96	8203.11 keV
Mo98($d,p+t$)Nb96	-11610.75 keV
Mo98($d,n+He3$)Nb96	-12374.51 keV
Mo98($d,2d$)Nb96	-15643.42 keV
Mo98($d,n+p+d$)Nb96	-17867.99 keV
Mo98($d,2n+2p$)Nb96	-20092.55 keV

<< 42-Mo-98	42-Mo-100 MT4 (d,n) or MT5 (Tc101 production)	>> 46-Pd-110
<< MT107 (d, α)		MT17 (d,3n) >>



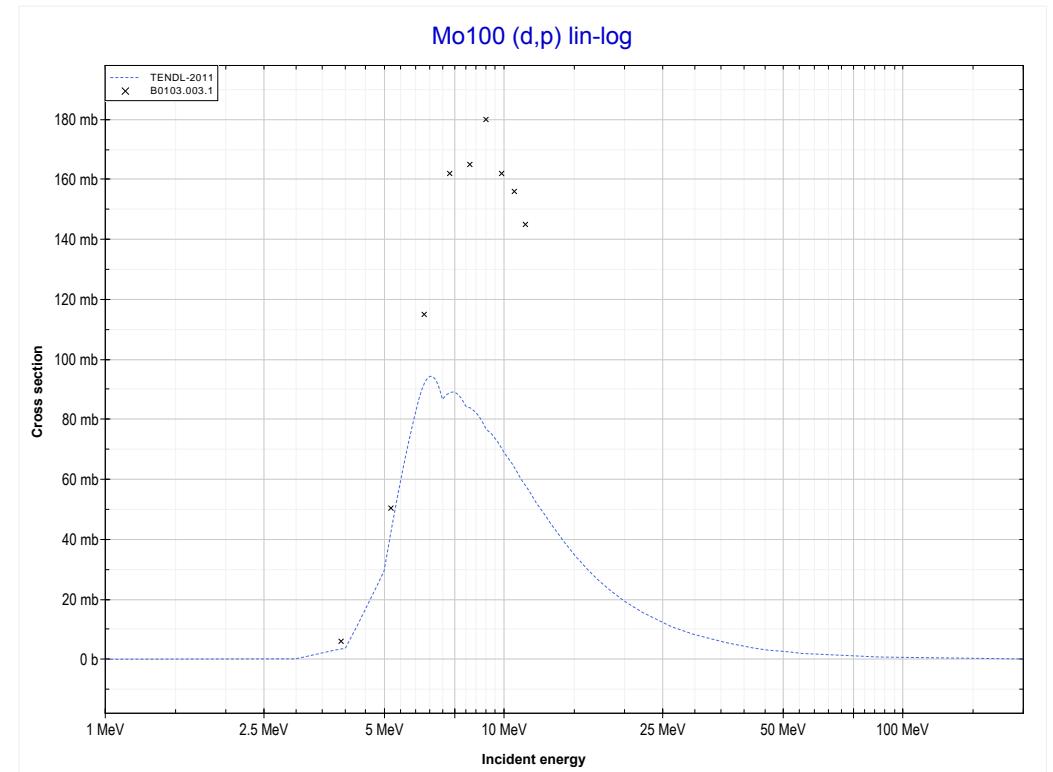
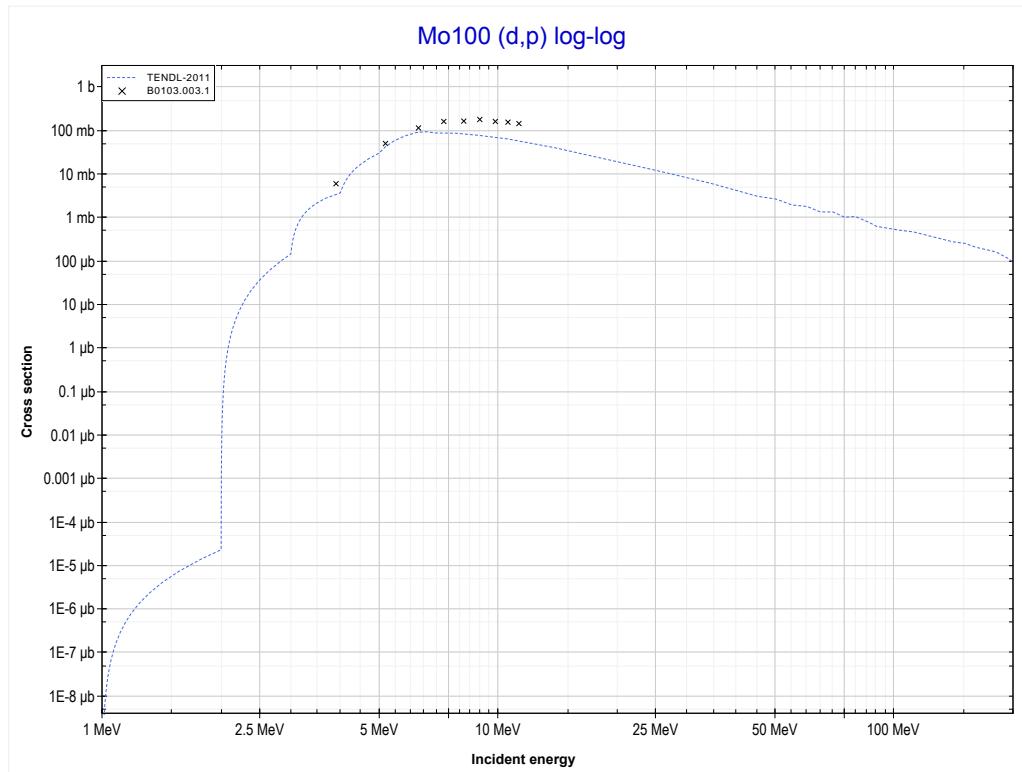
Reaction	Q-Value
Mo100(d,n)Tc101	5216.40 keV

<< 39-Y-89	42-Mo-100 MT17 (d,3n) or MT5 (Tc99 production)	>> 48-Cd-111
<< MT4 (d,n)		MT103 (d,p) >>



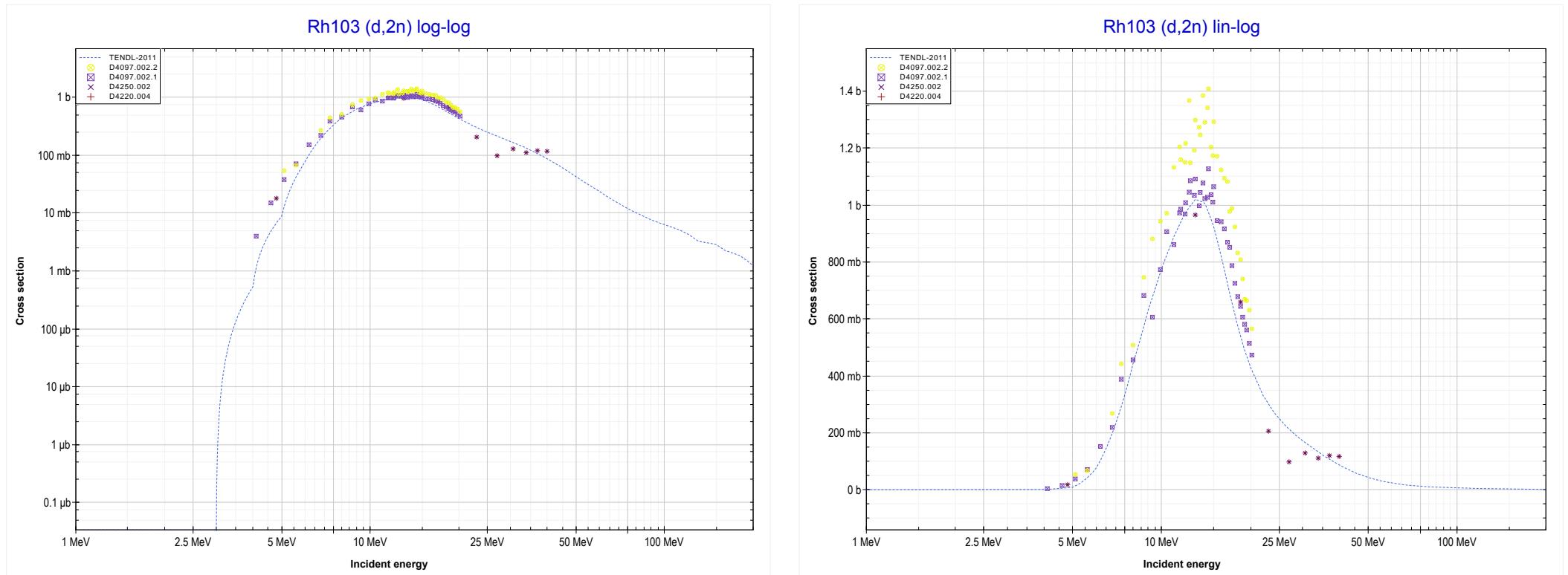
Reaction	Q-Value
Mo100(d,3n)Tc99	-9939.13 keV

<< 42-Mo-98	42-Mo-100 MT103 (d,p) or MT5 (Mo101 production)	>> 47-Ag-109
<< MT17 (d,3n)		MT16 (d,2n) >>



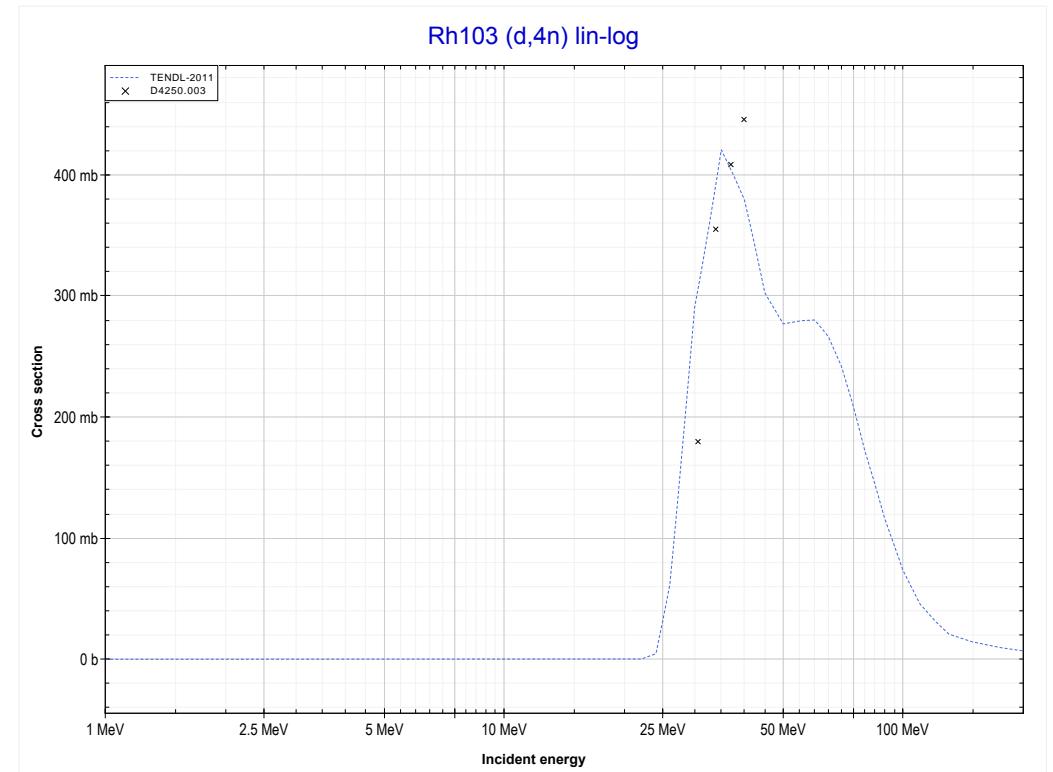
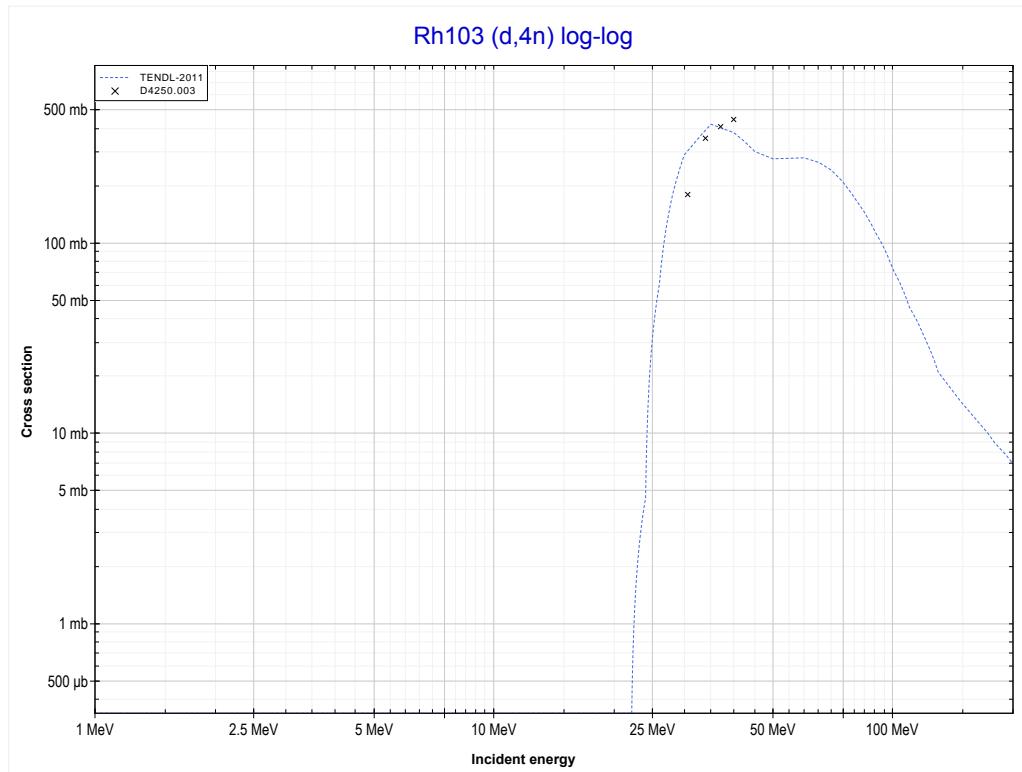
Reaction	Q-Value
Mo100(d,p)Mo101	3173.75 keV

<< 42-Mo-94	45-Rh-103 MT16 (d,2n) or MT5 (Pd103 production)	46-Pd-110 >>
<< MT103 (d,p)		MT37 (d,4n) >>



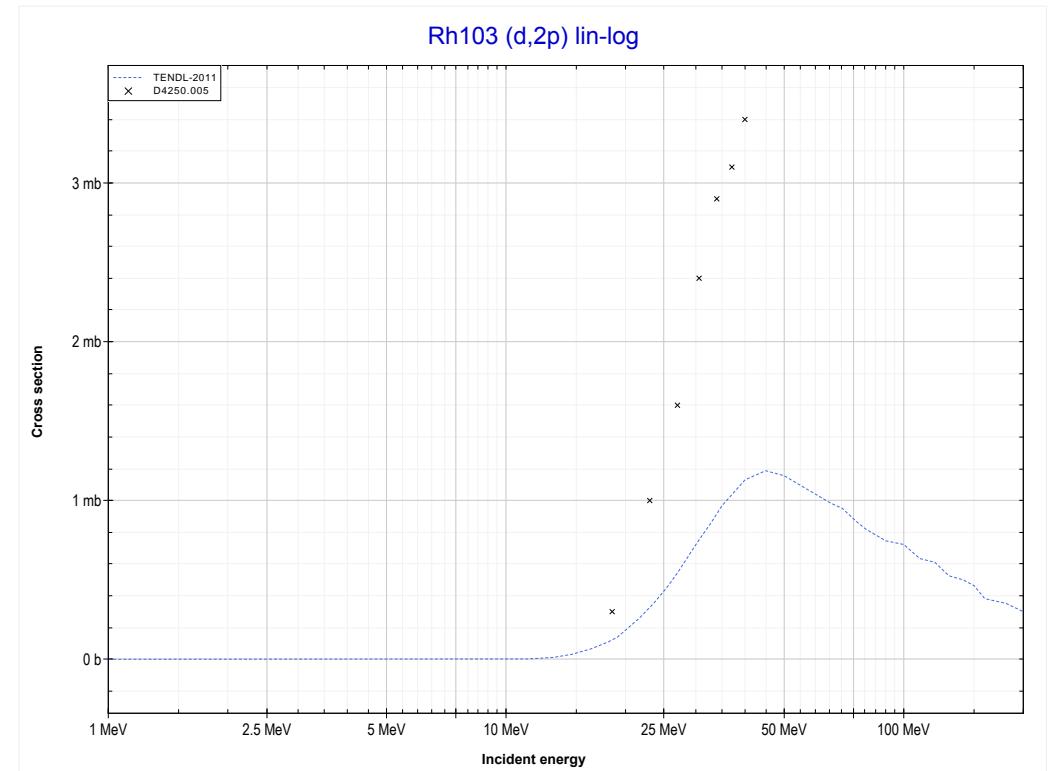
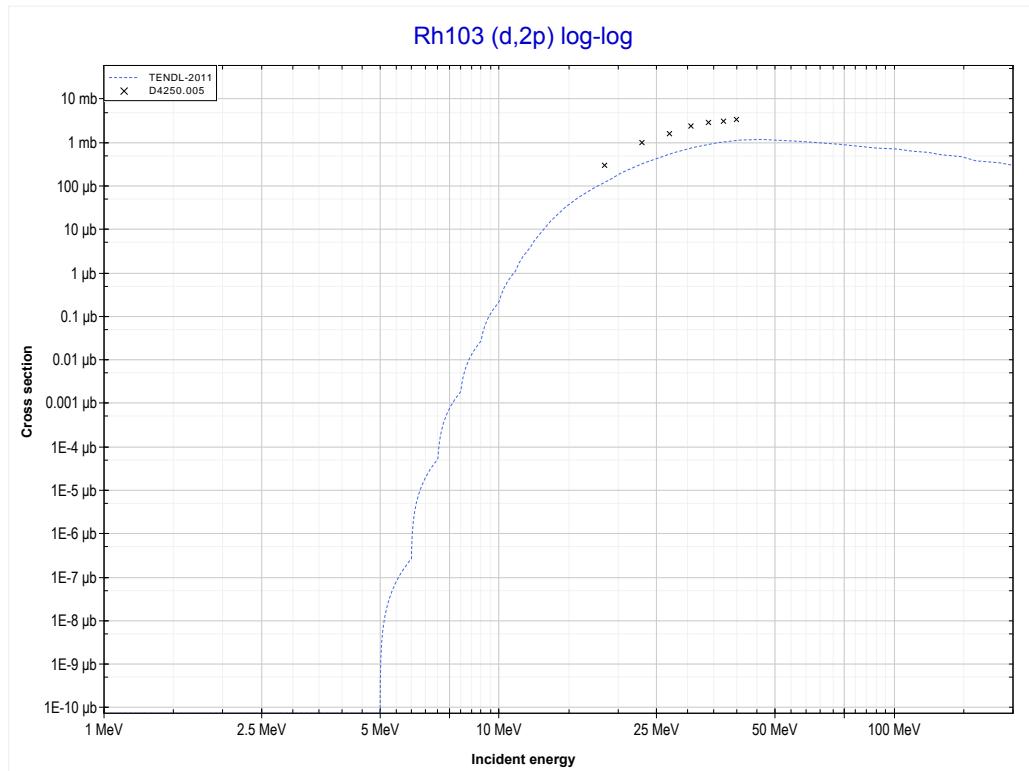
Reaction	Q-Value
Rh103(d,2n)Pd103	-3550.01 keV

<< 34-Se-76	45-Rh-103 MT37 (d,4n) or MT5 (Pd101 production)	50-Sn-120 >>
<< MT16 (d,2n)		MT111 (d,2p) >>



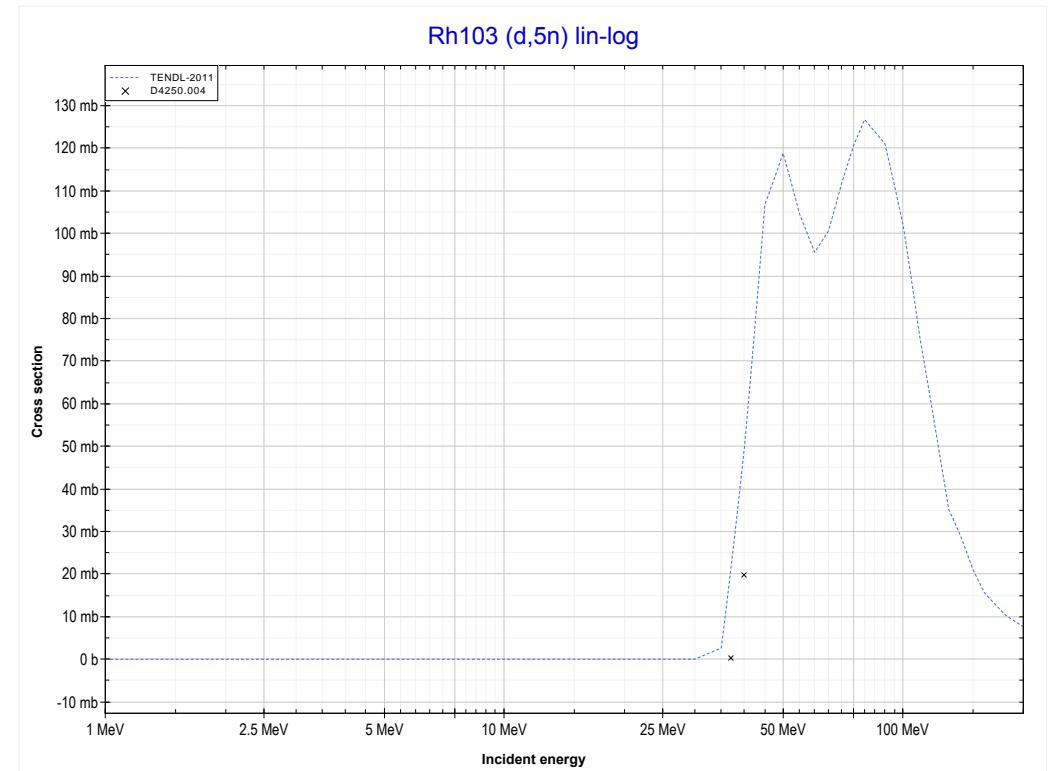
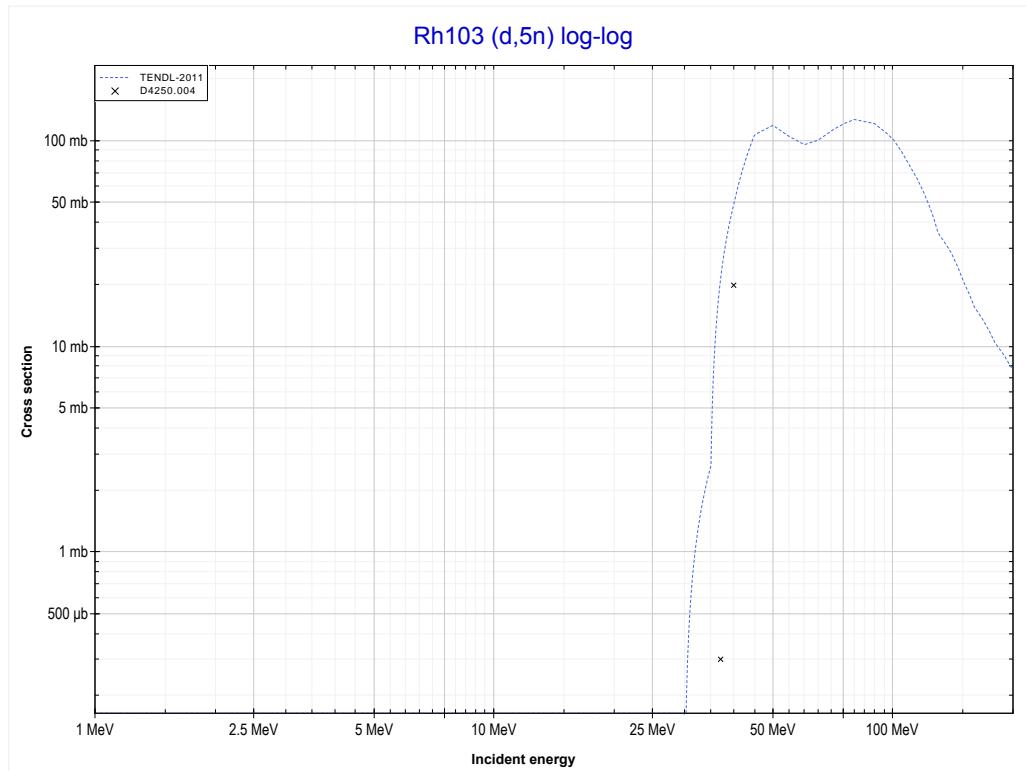
Reaction	Q-Value
Rh103(d,4n)Pd101	-21743.75 keV

<< 39-Y-89	45-Rh-103 MT111 (d,2p) or MT5 (Ru103 production)	73-Ta-181 >>
<< MT37 (d,4n)		MT152 (d,5n) >>



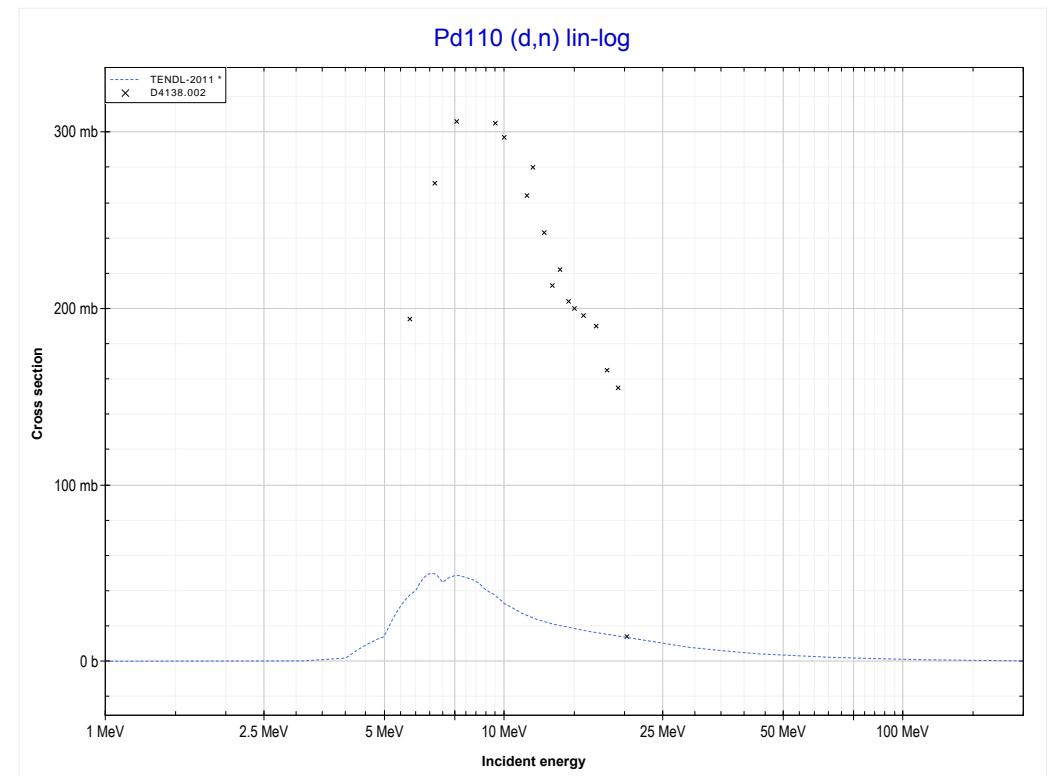
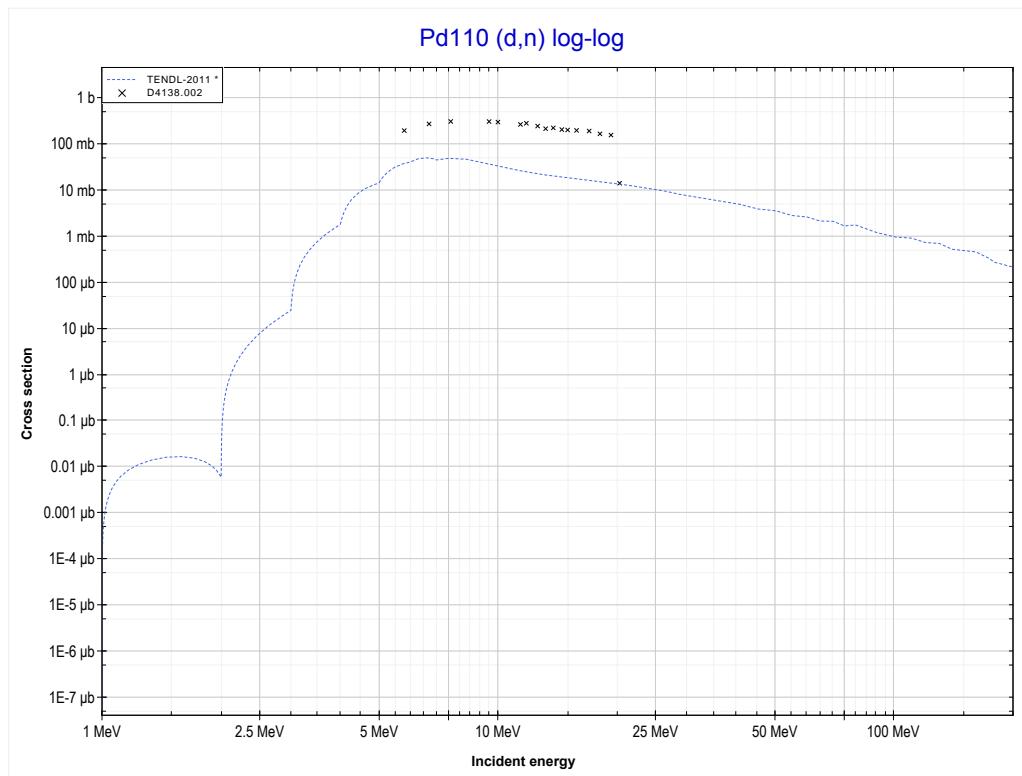
Reaction	Q-Value
Rh103(d,2p)Ru103	-2205.62 keV

<< 33-As-75	45-Rh-103 MT152 (d,5n) or MT5 (Pd100 production)	50-Sn-118 >>
<< MT111 (d,2p)		MT4 (d,n) >>



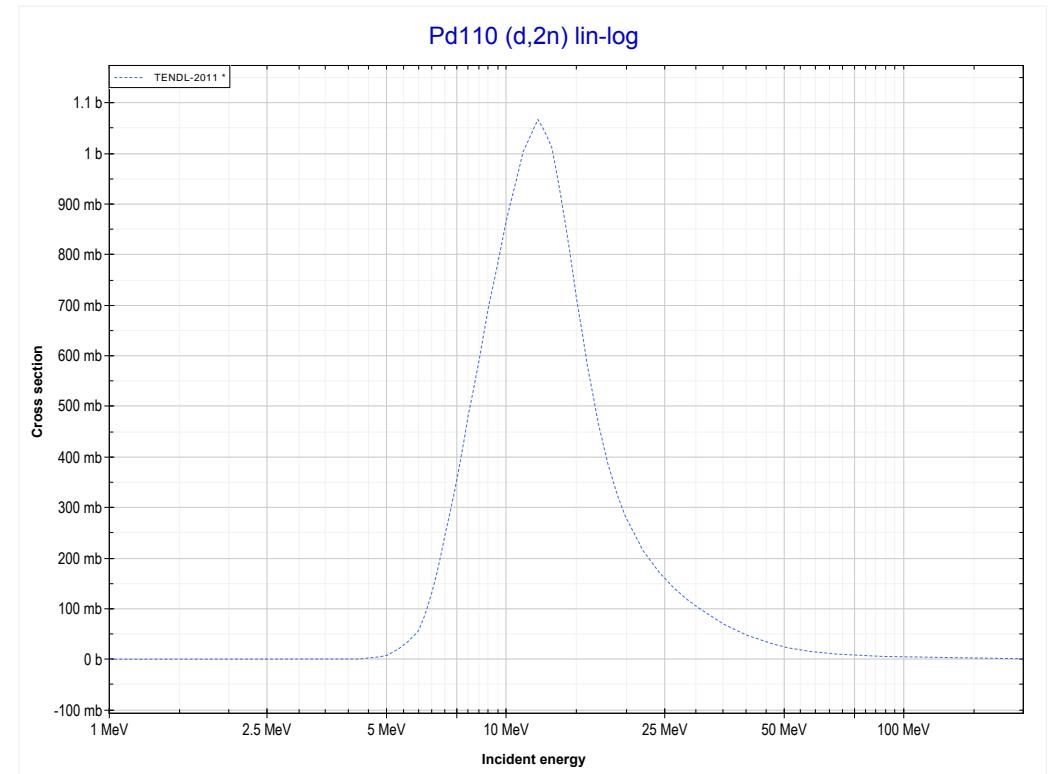
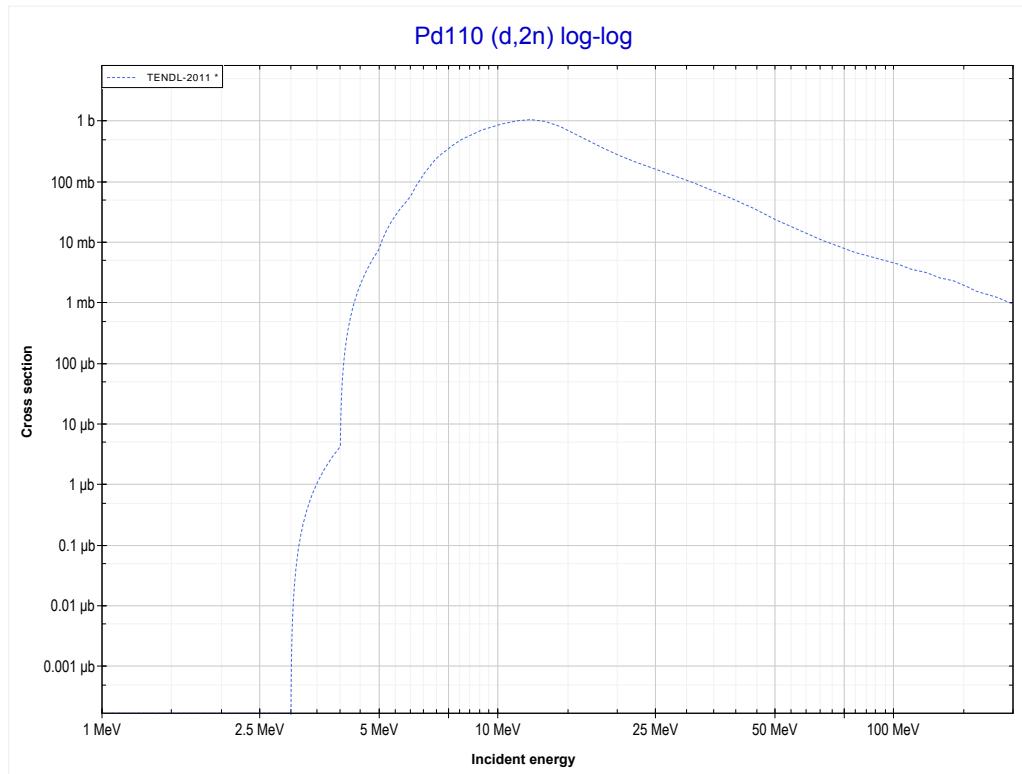
Reaction	Q-Value
Rh103(d,5n)Pd100	-30017.06 keV

<< 42-Mo-100	46-Pd-110 MT4 (d,n) or MT5 (Ag111 production)	48-Cd-114 >>
<< MT152 (d,5n)		MT16 (d,2n) >>



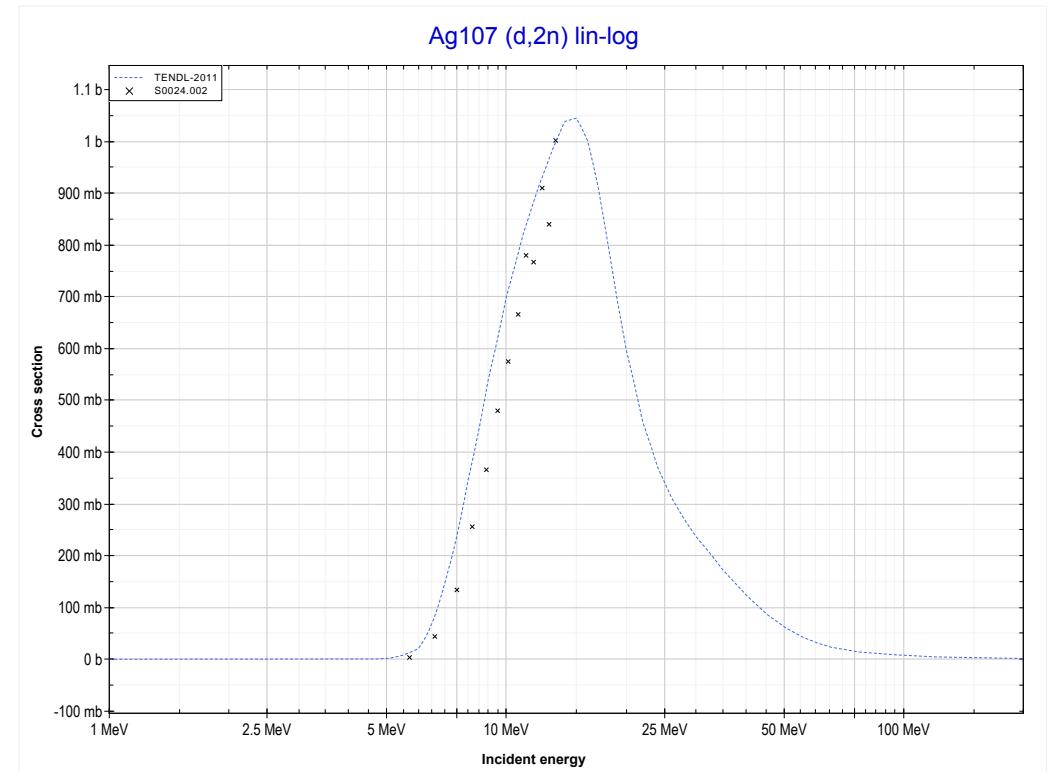
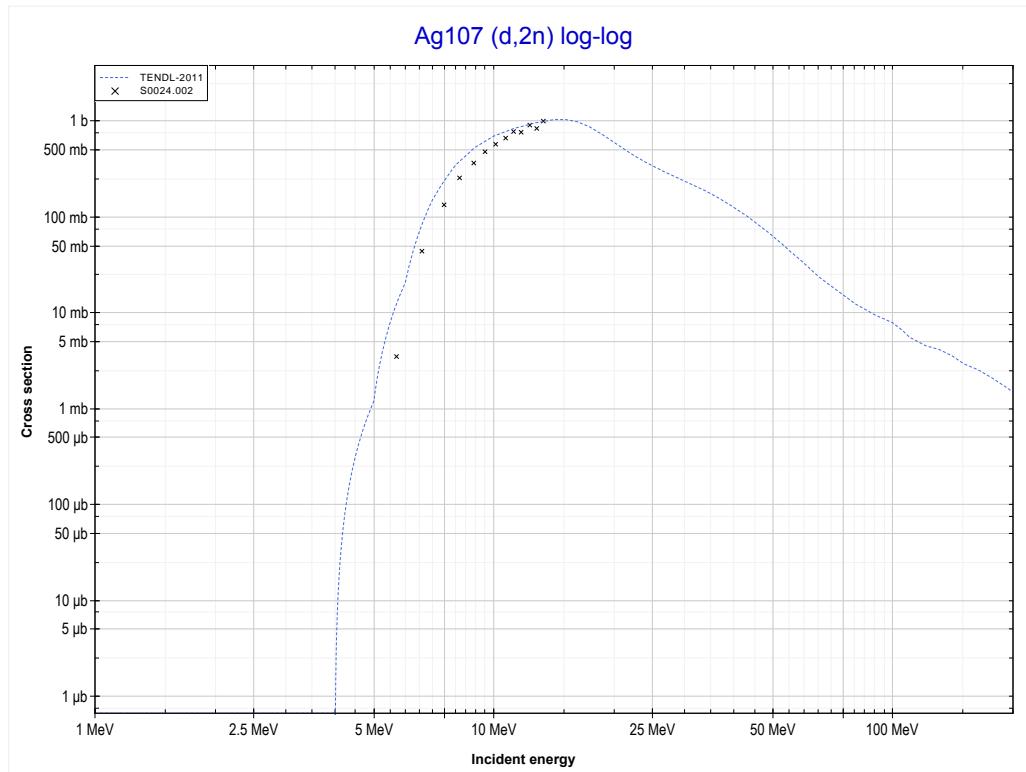
Reaction	Q-Value
Pd110(d,n)Ag111	4936.40 keV

<< 45-Rh-103	46-Pd-110 MT16 (d,2n) or MT5 (Ag110 production)	47-Ag-107 >>
<< MT4 (d,n)		MT16 (d,2n) >>



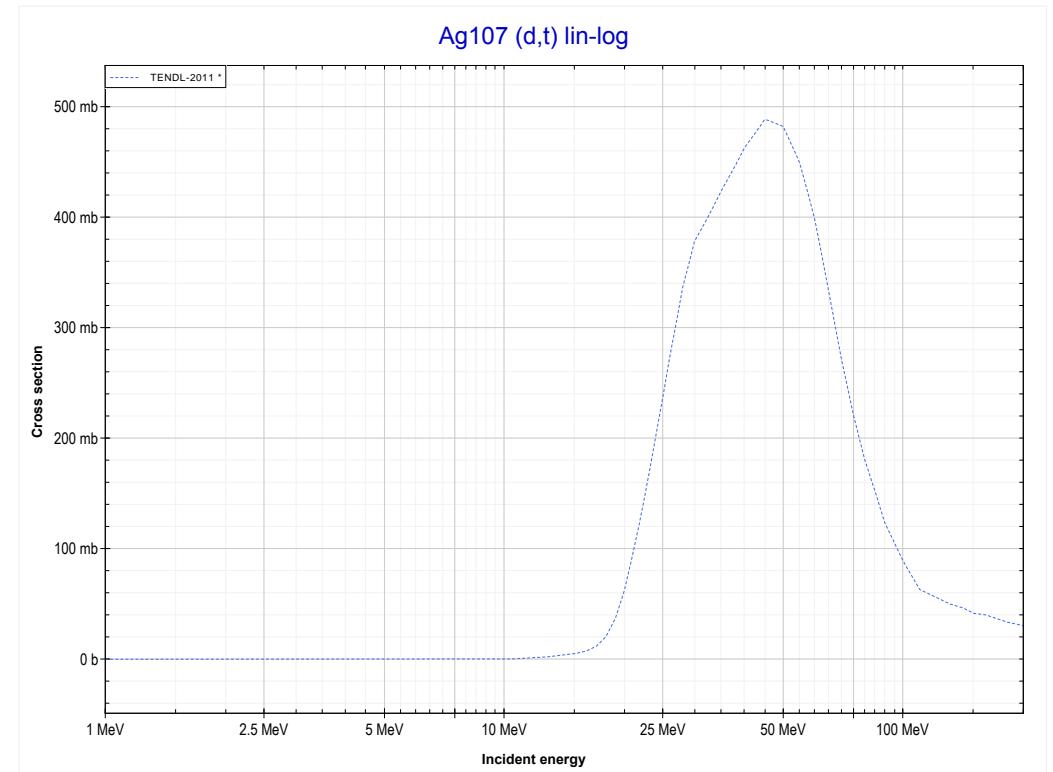
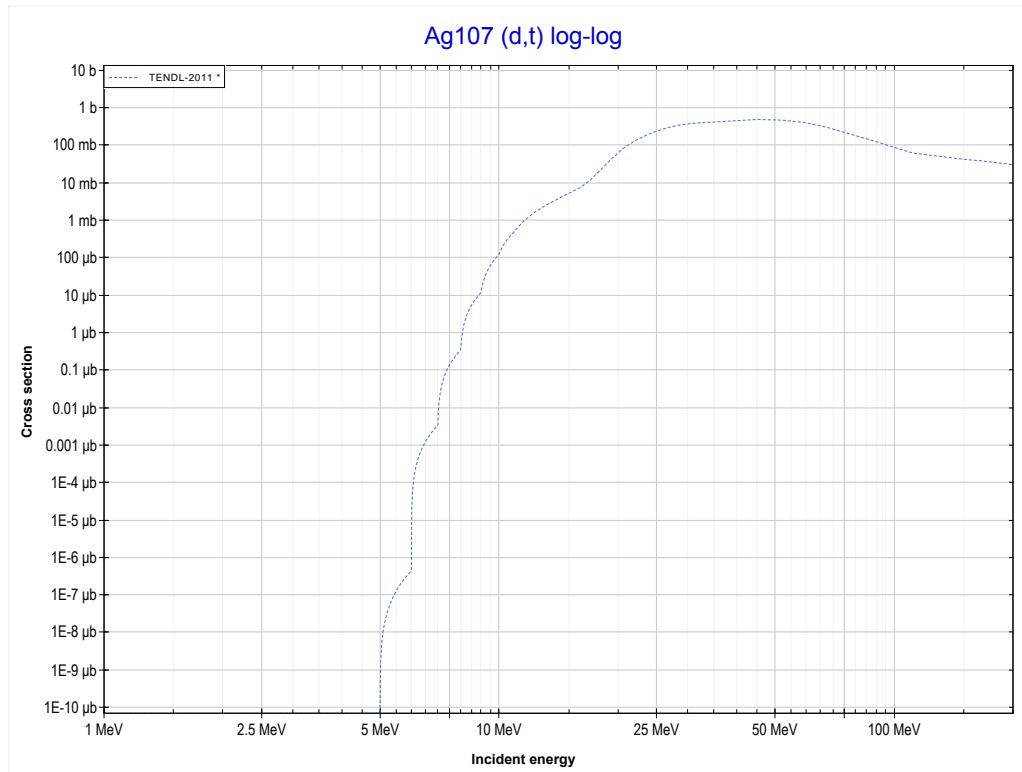
Reaction	Q-Value
Pd110(d,2n)Ag110	-3895.31 keV

<< 46-Pd-110	47-Ag-107 MT16 (d,2n) or MT5 (Cd107 production)	47-Ag-109 >> MT105 (d,t) >>
<< MT16 (d,2n)		



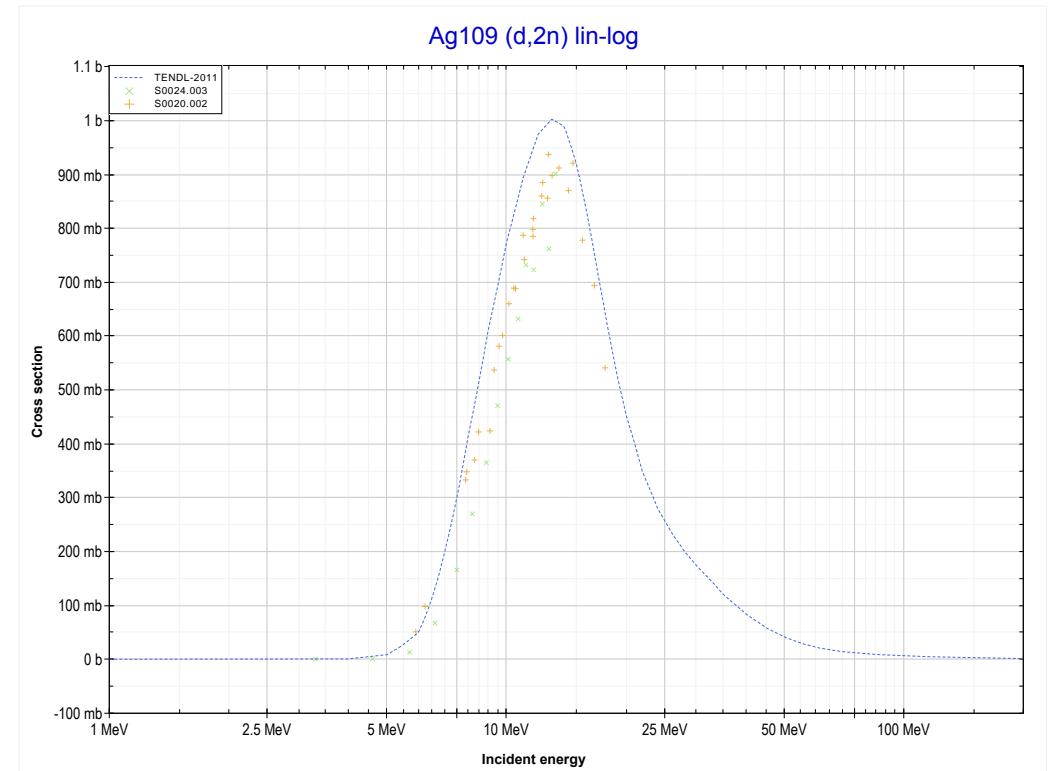
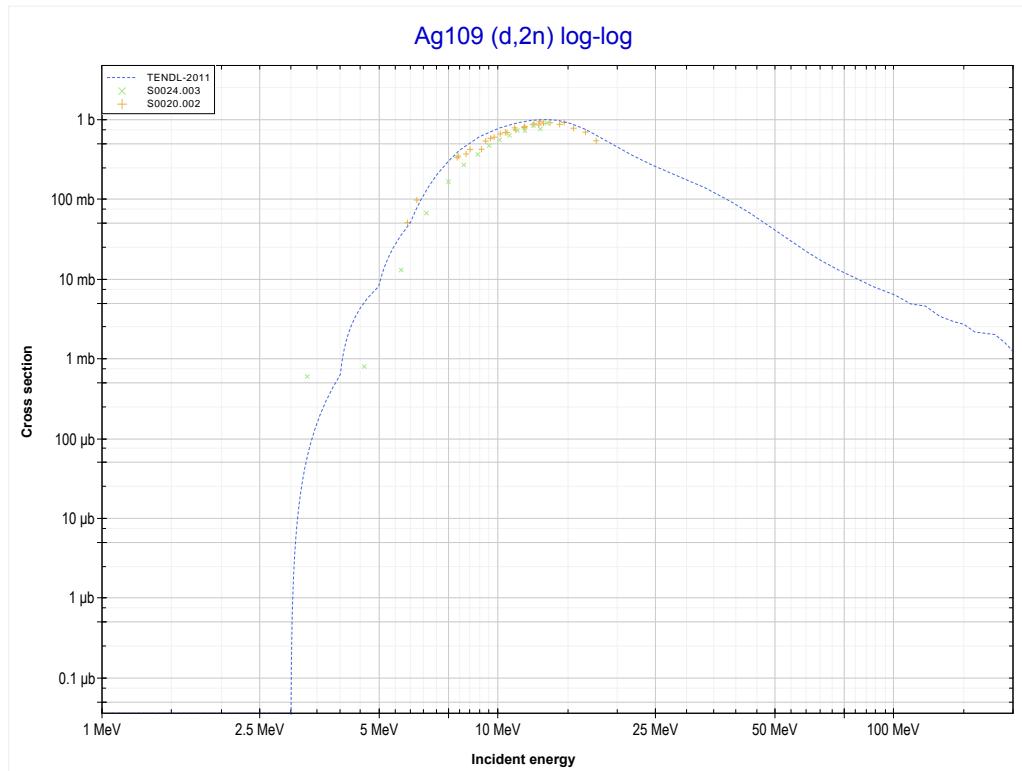
Reaction	Q-Value
$\text{Ag}^{107}(\text{d},\text{2n})\text{Cd}^{107}$	-4423.91 keV

<< 40-Zr-90	47-Ag-107 MT105 (d,t) or MT5 (Ag106 production)	53-I-127 >>
<< MT16 (d,2n)		MT16 (d,2n) >>



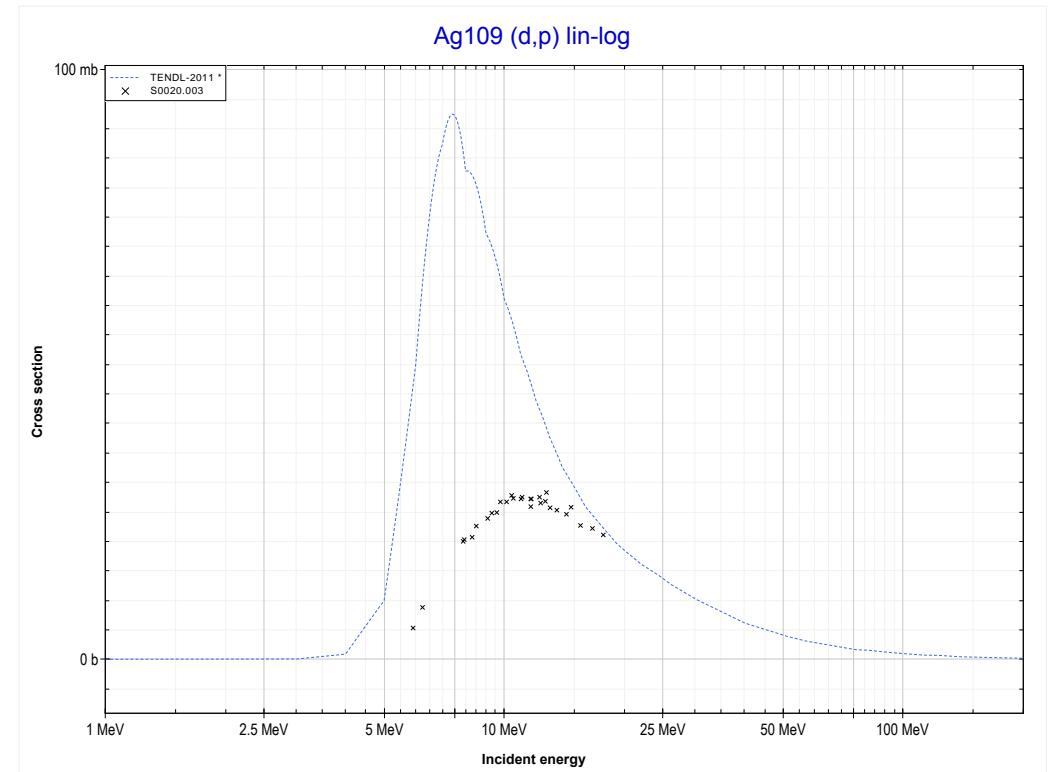
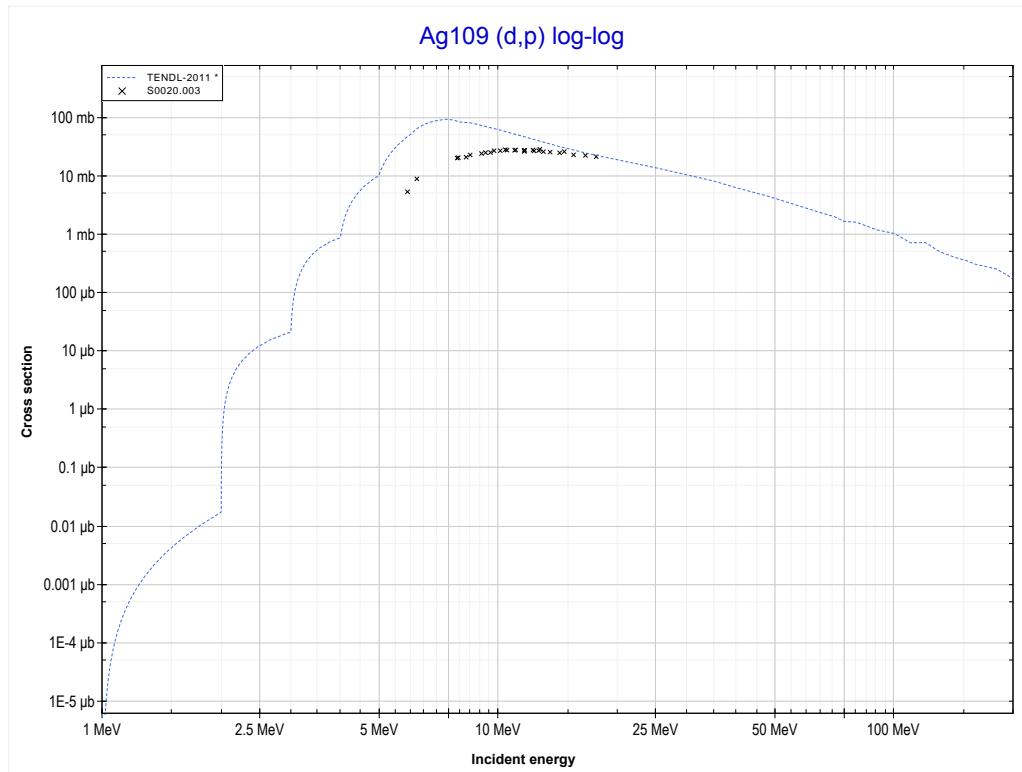
Reaction	Q-Value
Ag107(d,t)Ag106	-3279.08 keV
Ag107(d,n+d)Ag106	-9536.32 keV
Ag107(d,2n+p)Ag106	-11760.88 keV

<< 47-Ag-107	47-Ag-109 MT16 (d,2n) or MT5 (Cd109 production)	48-Cd-110 >>
<< MT105 (d,t) >>		MT103 (d,p) >>



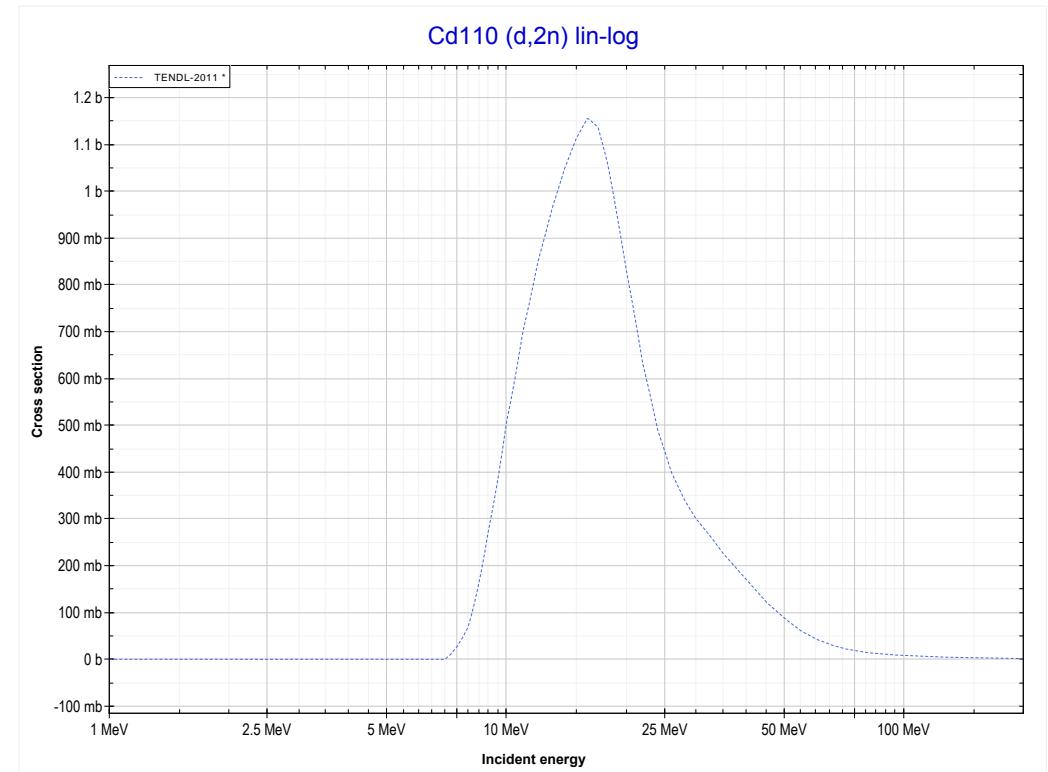
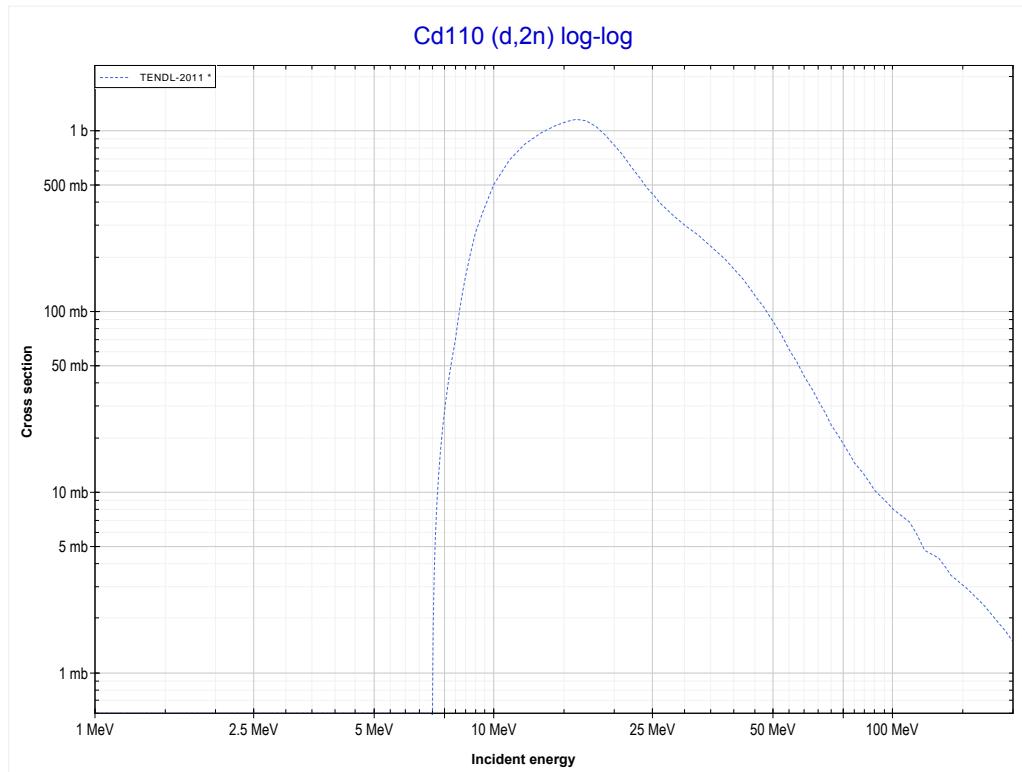
Reaction	Q-Value
Ag109(d,2n)Cd109	-3221.61 keV

<< 42-Mo-100	47-Ag-109 MT103 (d,p) or MT5 (Ag110 production)	48-Cd-114 >>
<< MT16 (d,2n)		MT16 (d,2n) >>



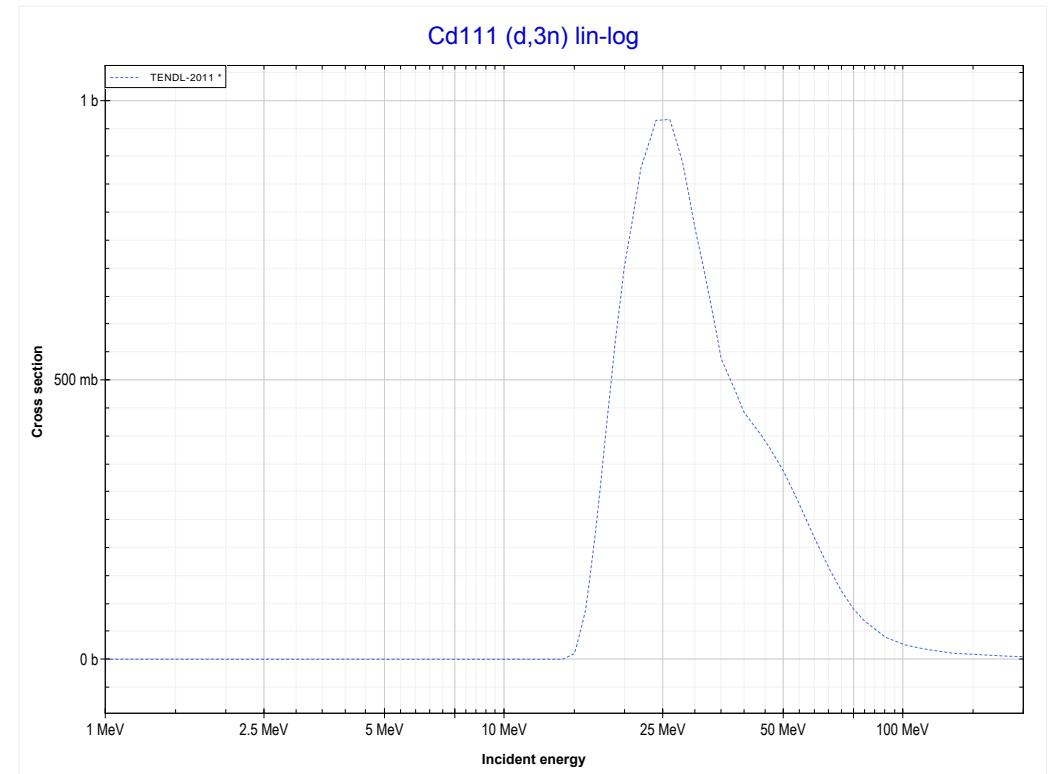
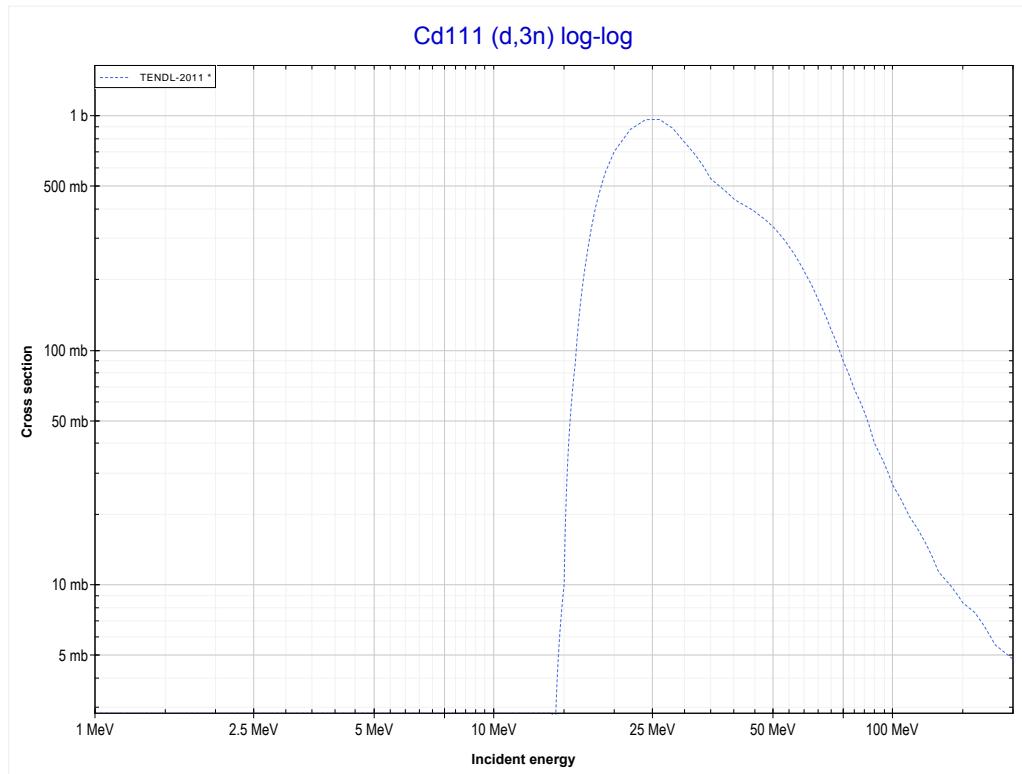
Reaction	Q-Value
Ag109(d,p)Ag110	4584.65 keV

<< 47-Ag-109	48-Cd-110 MT16 (d,2n) or MT5 (In110 production)	48-Cd-114 >>
<< MT103 (d,p)		MT17 (d,3n) >>



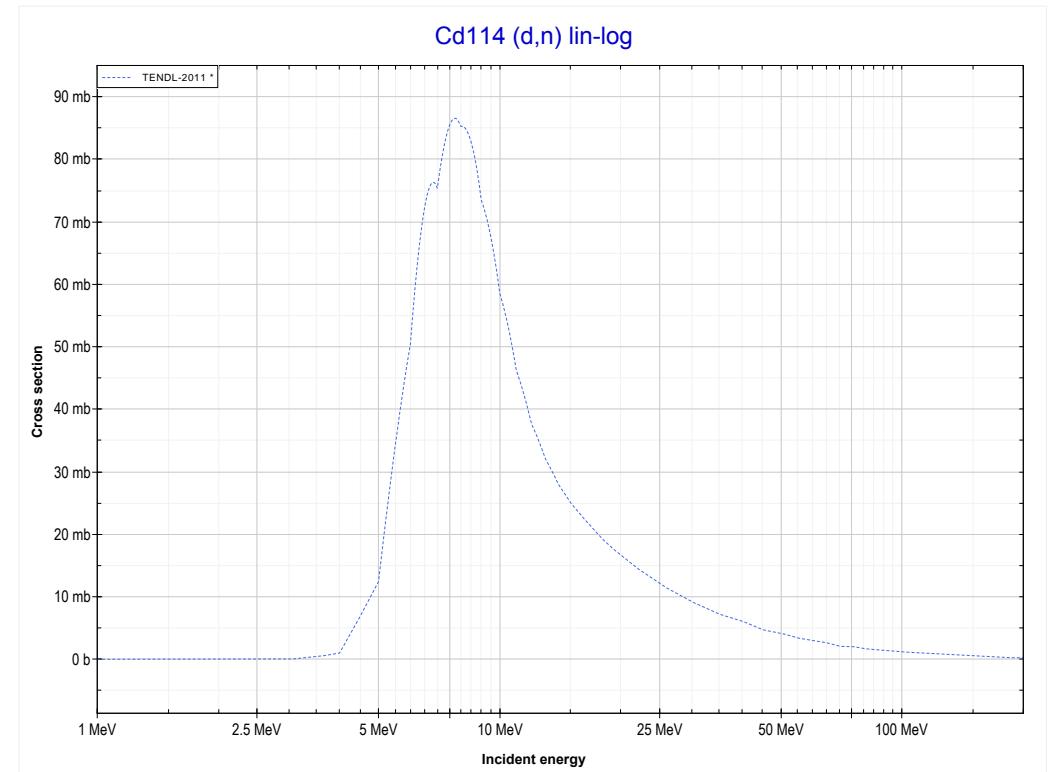
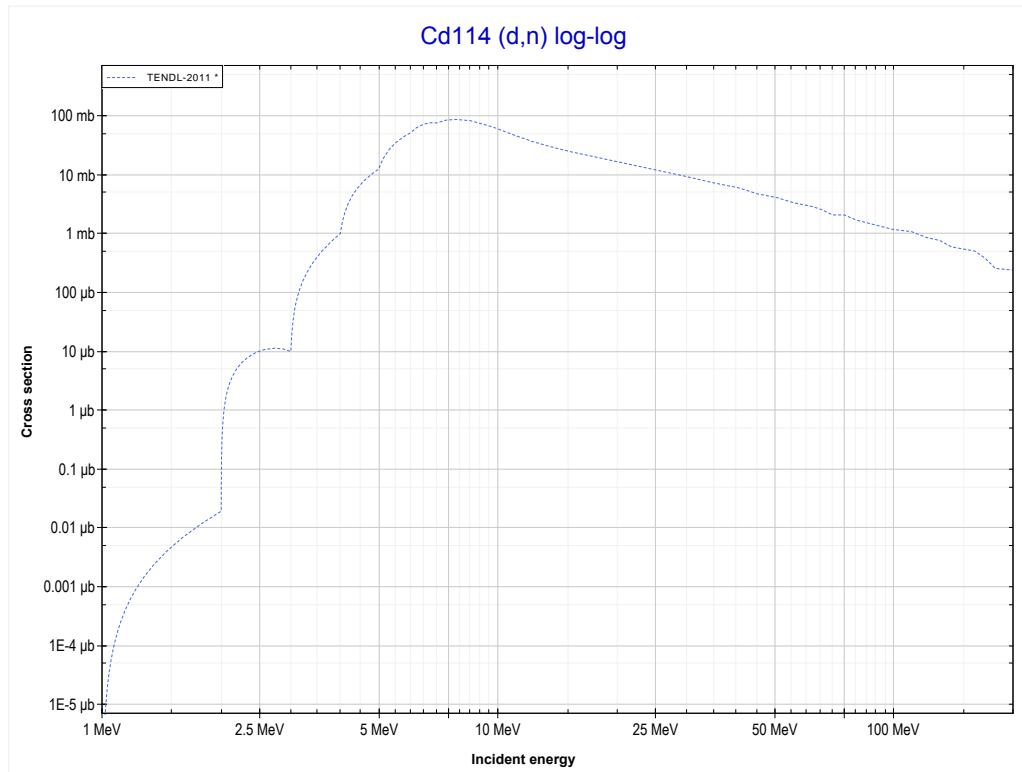
Reaction	Q-Value
Cd110(d,2n)In110	-6884.91 keV

<< 42-Mo-100	48-Cd-111 MT17 (d,3n) or MT5 (In110 production)	48-Cd-114 >>
<< MT16 (d,2n)		MT4 (d,n) >>



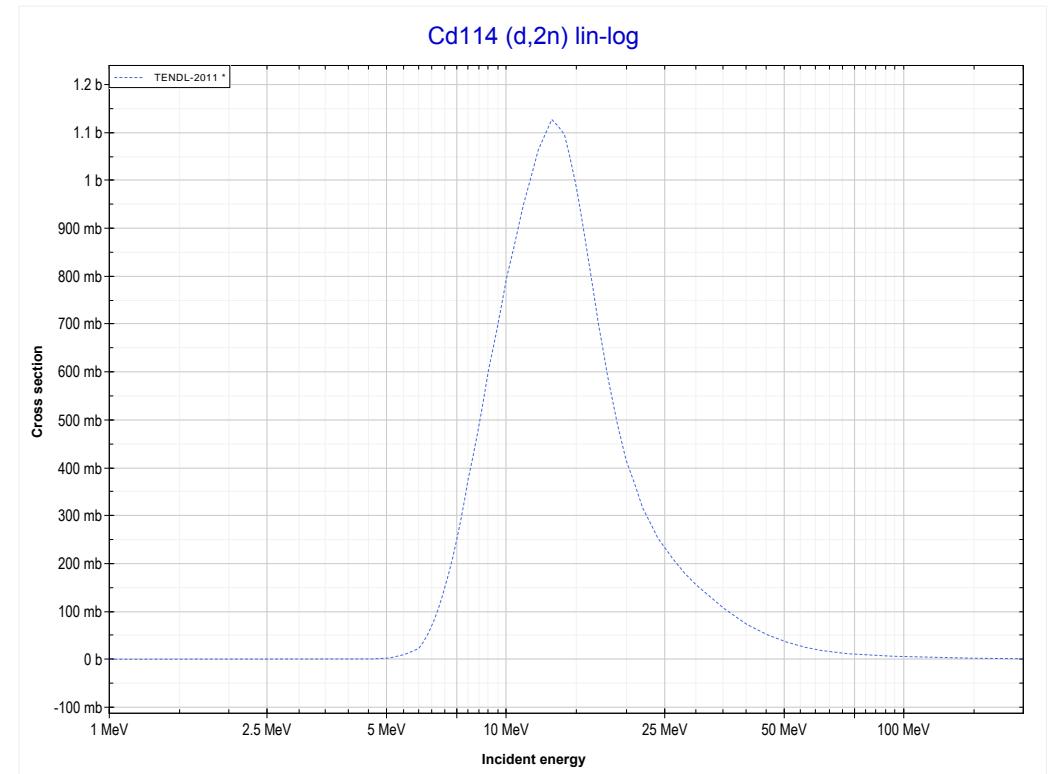
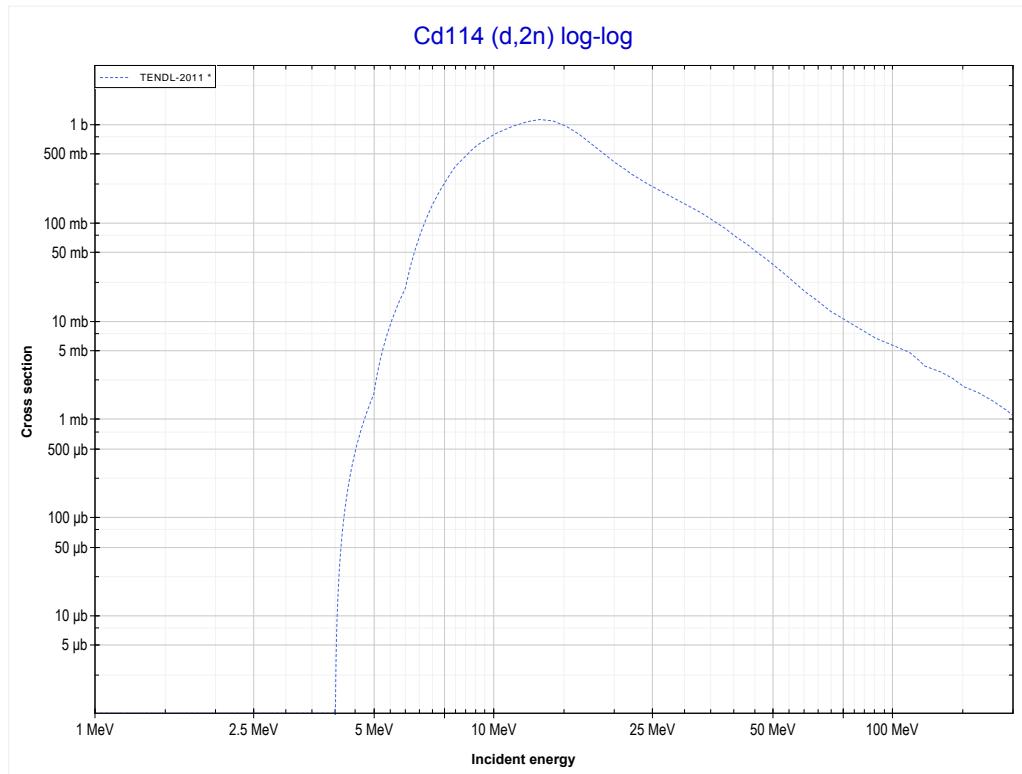
Reaction	Q-Value
Cd111(d,3n)In110	-13860.73 keV

<< 46-Pd-110	48-Cd-114 MT4 (d,n) or MT5 (In115 production)	52-Te-122 >>
<< MT17 (d,3n)		MT16 (d,2n) >>



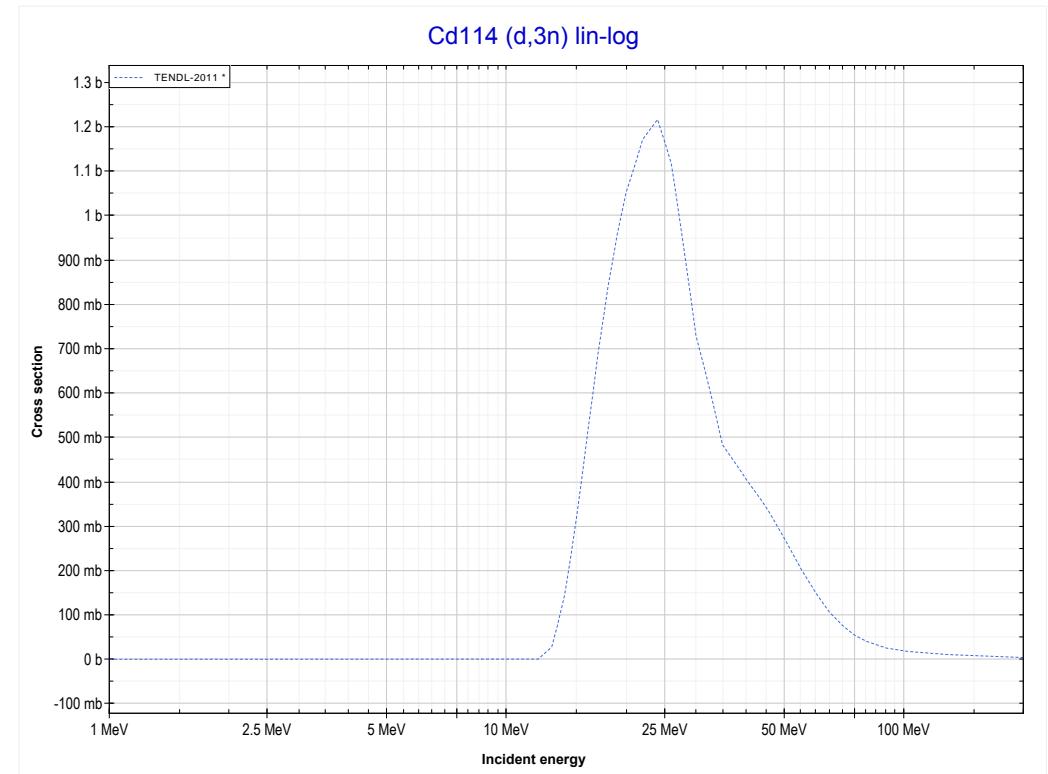
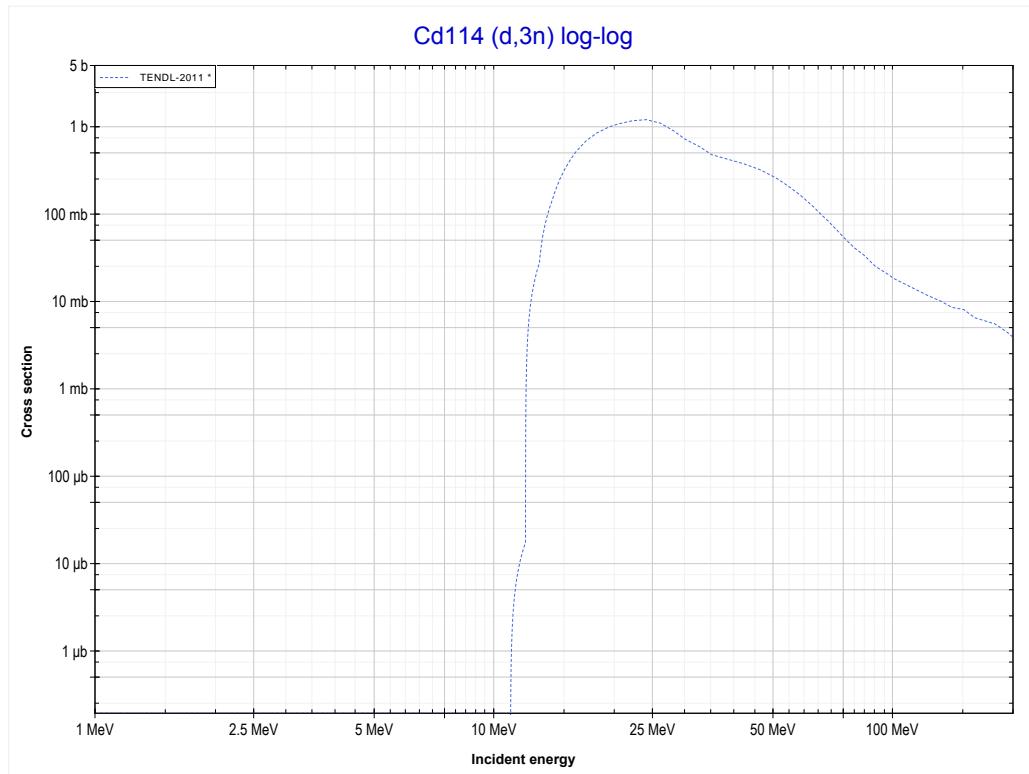
Reaction	Q-Value
Cd114(d,n)In115	4580.50 keV

<< 48-Cd-110	48-Cd-114 MT16 (d,2n) or MT5 (In114 production)	48-Cd-116 >>
<< MT4 (d,n)		MT17 (d,3n) >>



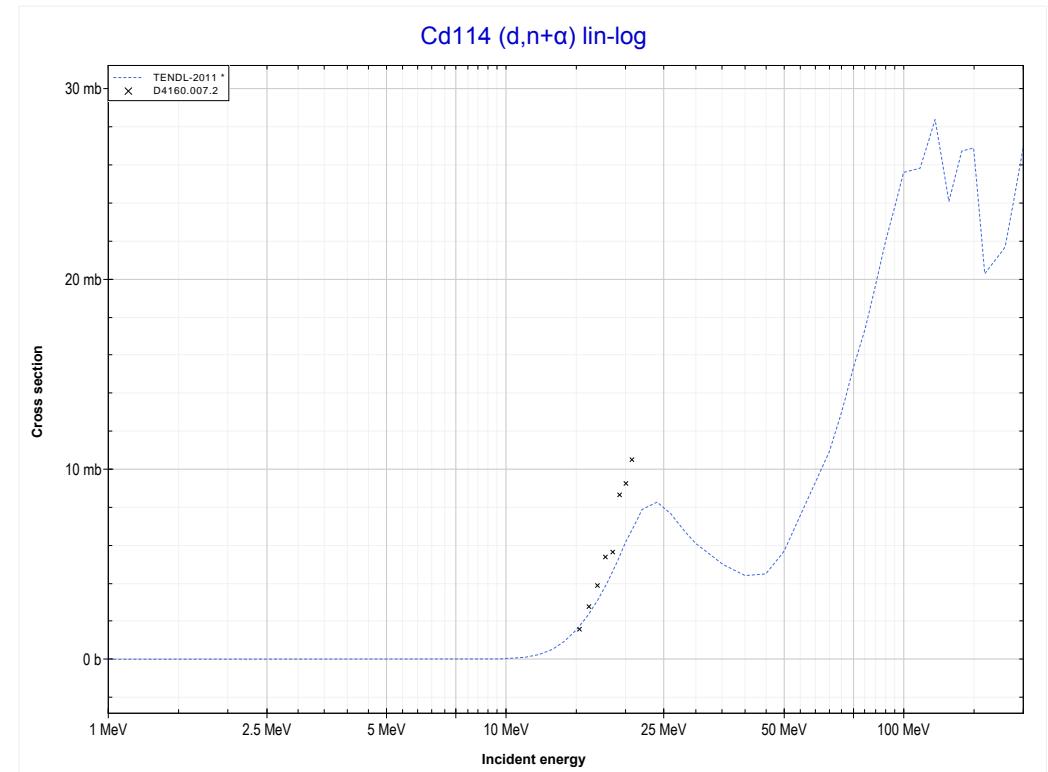
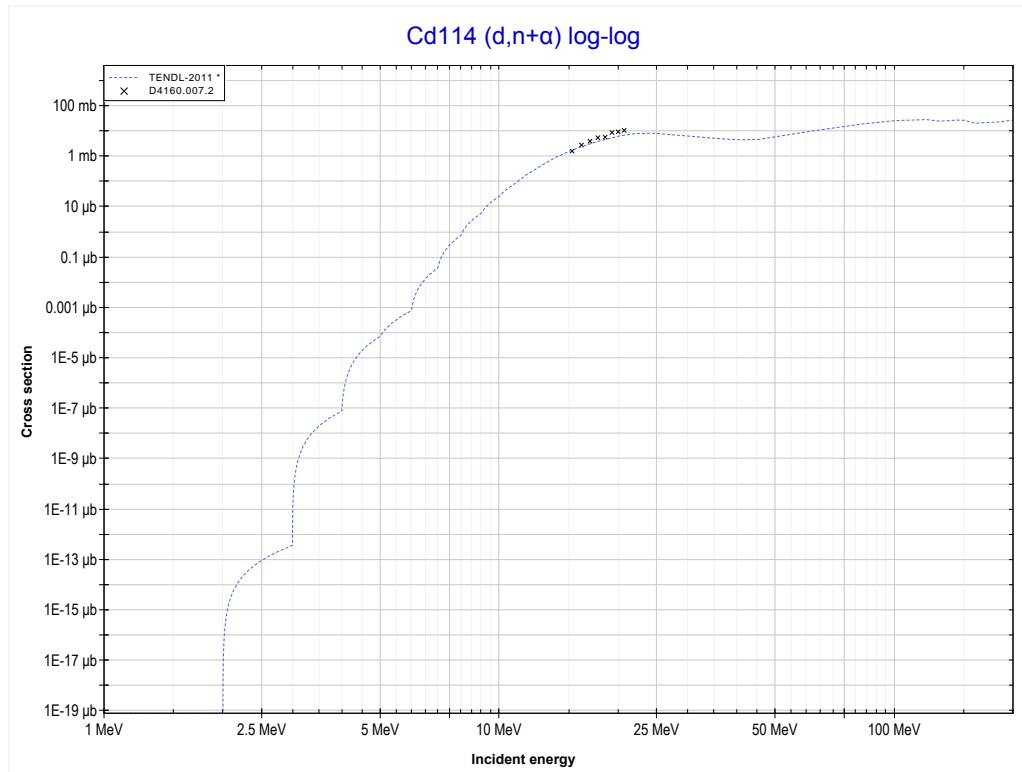
Reaction	Q-Value
Cd114(d,2n)In114	-4455.81 keV

<< 48-Cd-111	48-Cd-114 MT17 (d,3n) or MT5 (In113 production)	52-Te-122 >>
<< MT16 (d,2n)		MT22 (d,n+α) >>



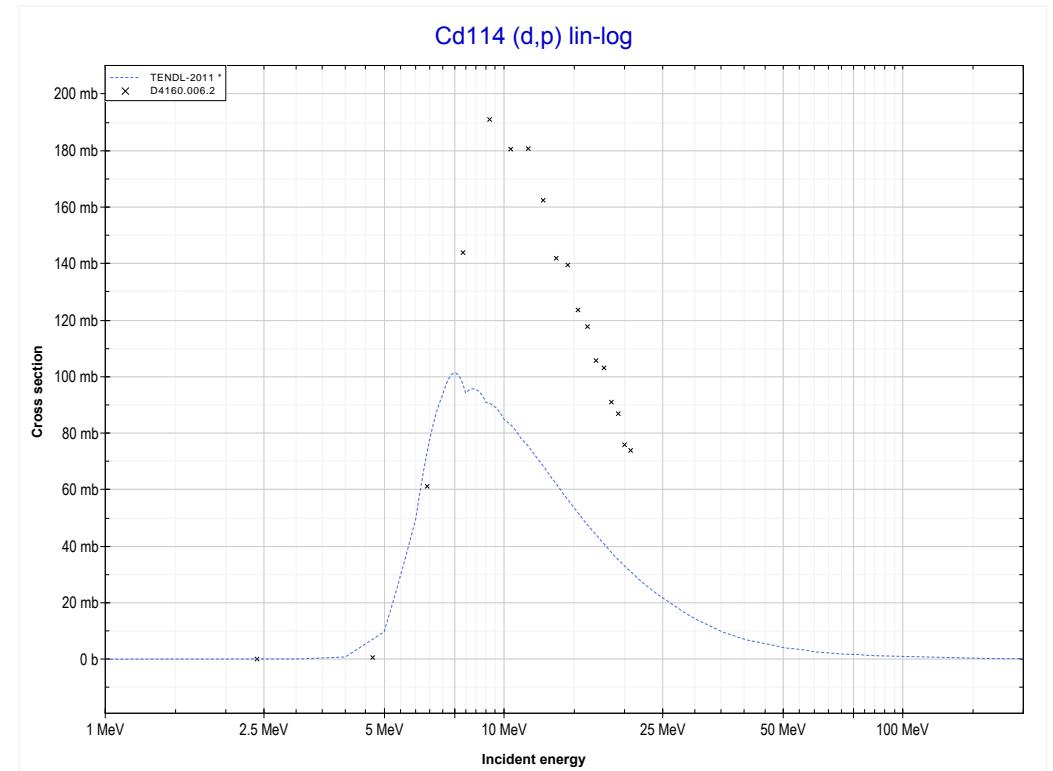
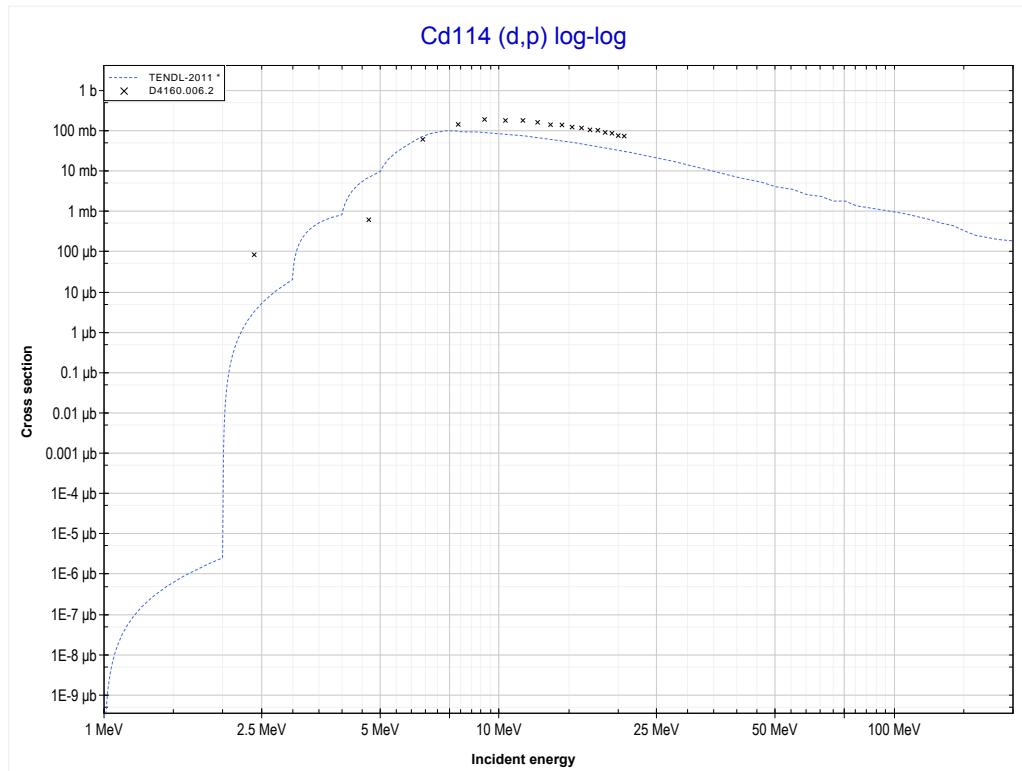
Reaction	Q-Value
Cd114(d,3n)In113	-11729.13 keV

<< 36-Kr-78	48-Cd-114 MT22 (d,n+α) or MT5 (Ag111 production)	74-W-186 >>
<< MT17 (d,3n)		MT103 (d,p) >>



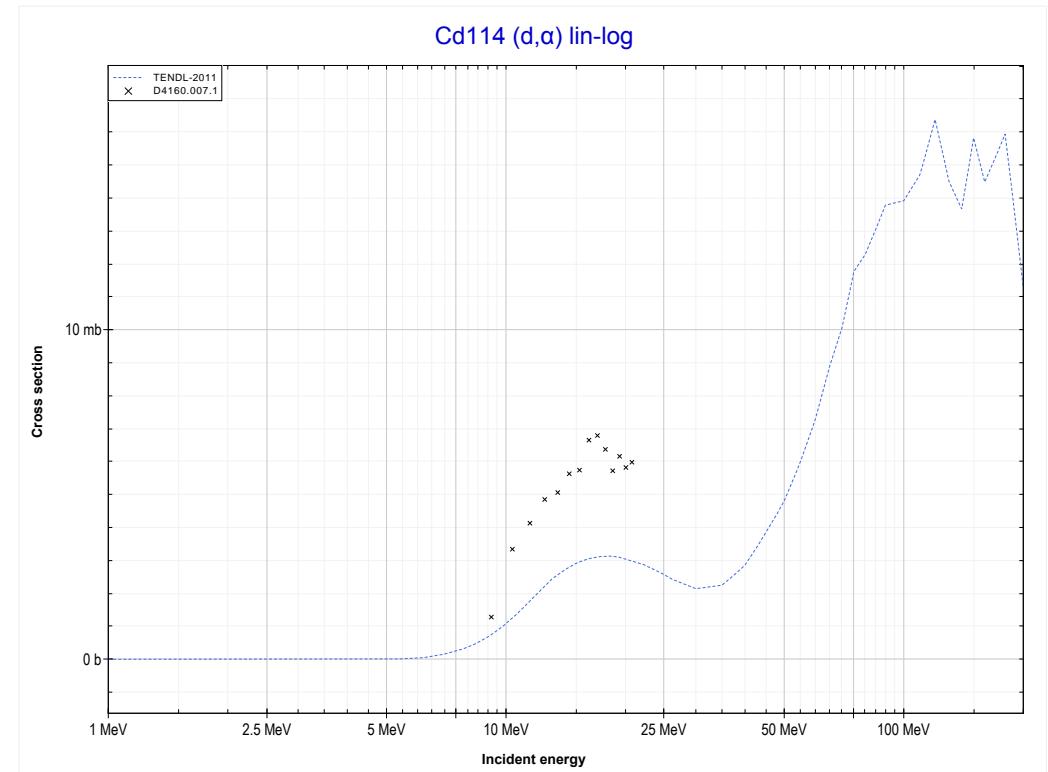
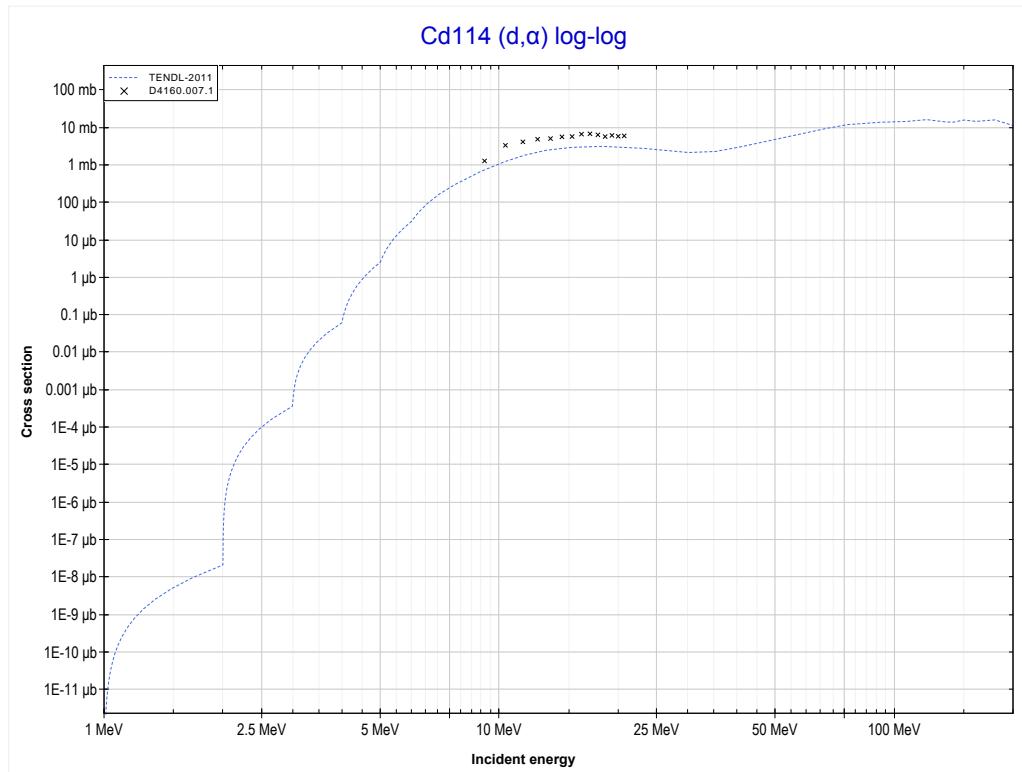
Reaction	Q-Value
Cd114(d,n+α)Ag111	839.59 keV
Cd114(d,d+t)Ag111	-16749.71 keV
Cd114(d,n+p+t)Ag111	-18974.27 keV
Cd114(d,2n+He3)Ag111	-19738.03 keV
Cd114(d,n+2d)Ag111	-23006.94 keV
Cd114(d,2n+p+d)Ag111	-25231.50 keV
Cd114(d,3n+2p)Ag111	-27456.07 keV

<< 47-Ag-109	48-Cd-114 MT103 (d,p) or MT5 (Cd115 production)	48-Cd-116 >>
<< MT22 (d,n+α)		MT107 (d,α) >>



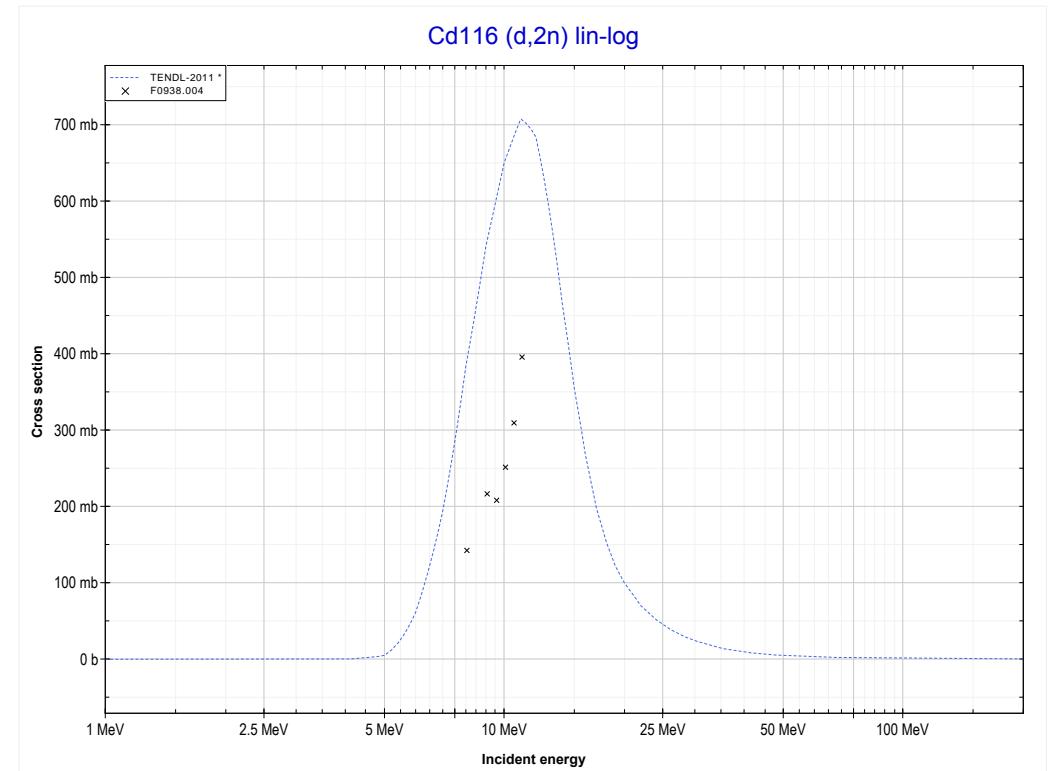
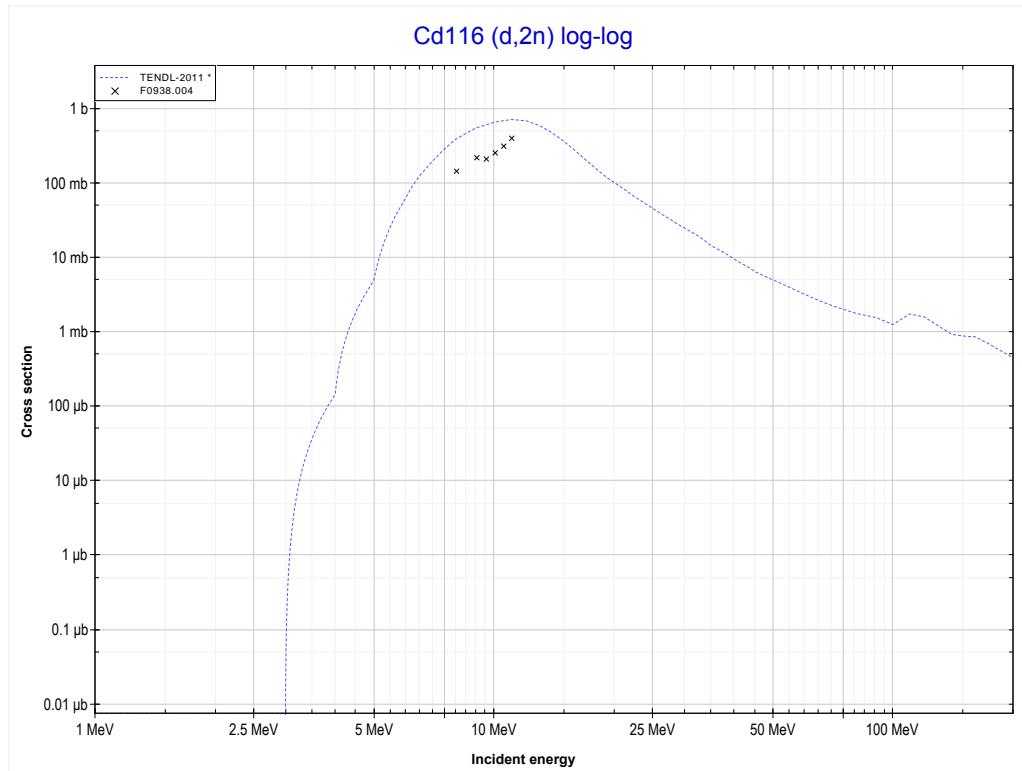
Reaction	Q-Value
Cd114(d,p)Cd115	3916.35 keV

<< 42-Mo-98	48-Cd-114 MT107 (d,α) or MT5 (Ag112 production)	52-Te-122 >>
<< MT103 (d,p)		MT16 ($d,2n$) >>



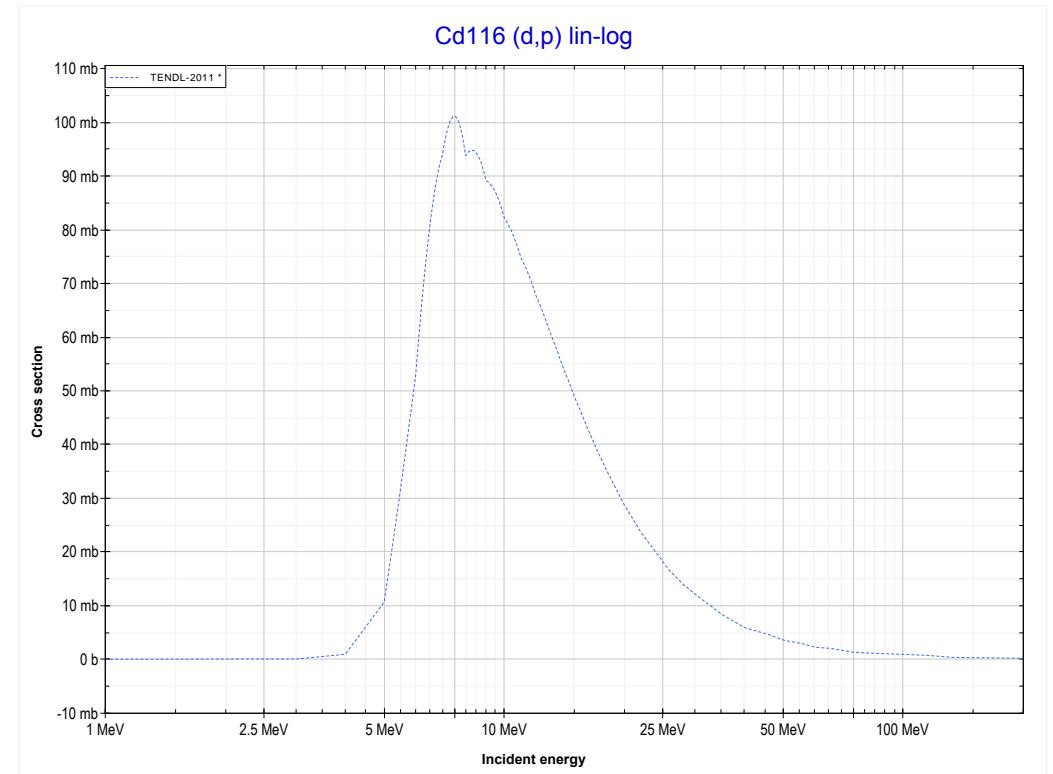
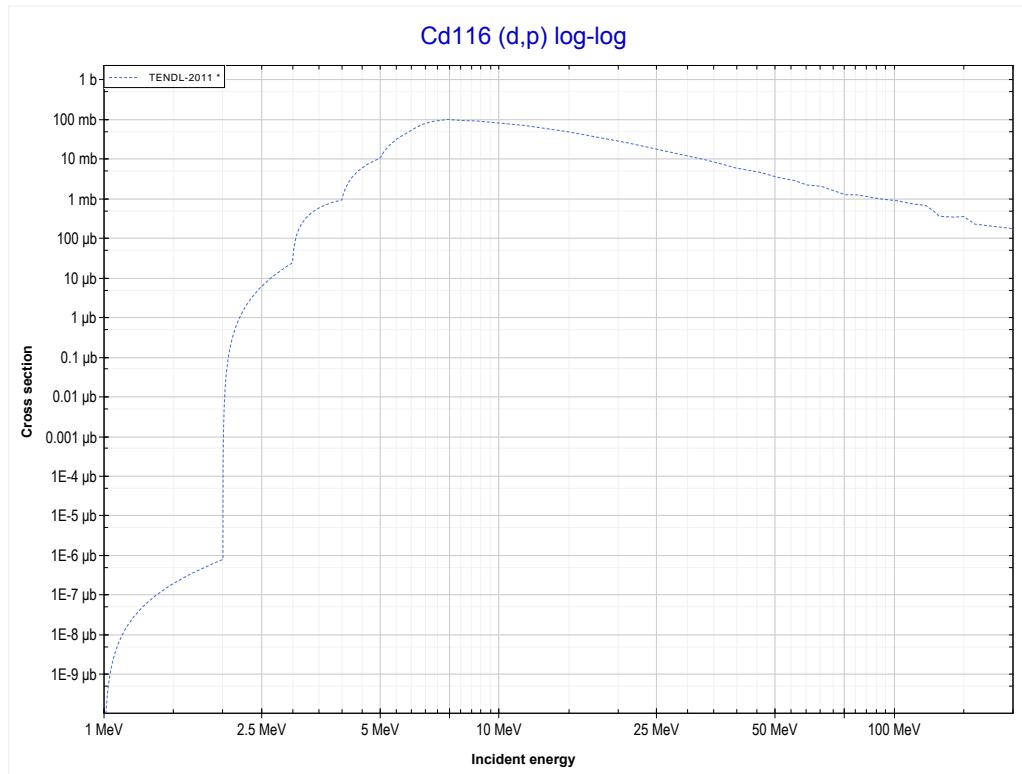
Reaction	Q-Value
Cd114(d,α)Ag112	7313.91 keV
Cd114($d,p+t$)Ag112	-12499.95 keV
Cd114($d,n+He3$)Ag112	-13263.71 keV
Cd114($d,2d$)Ag112	-16532.62 keV
Cd114($d,n+p+d$)Ag112	-18757.19 keV
Cd114($d,2n+2p$)Ag112	-20981.75 keV

<< 48-Cd-114	48-Cd-116 MT16 (d,2n) or MT5 (In116 production)	50-Sn-118 >>
<< MT107 (d, α)		MT103 (d,p) >>



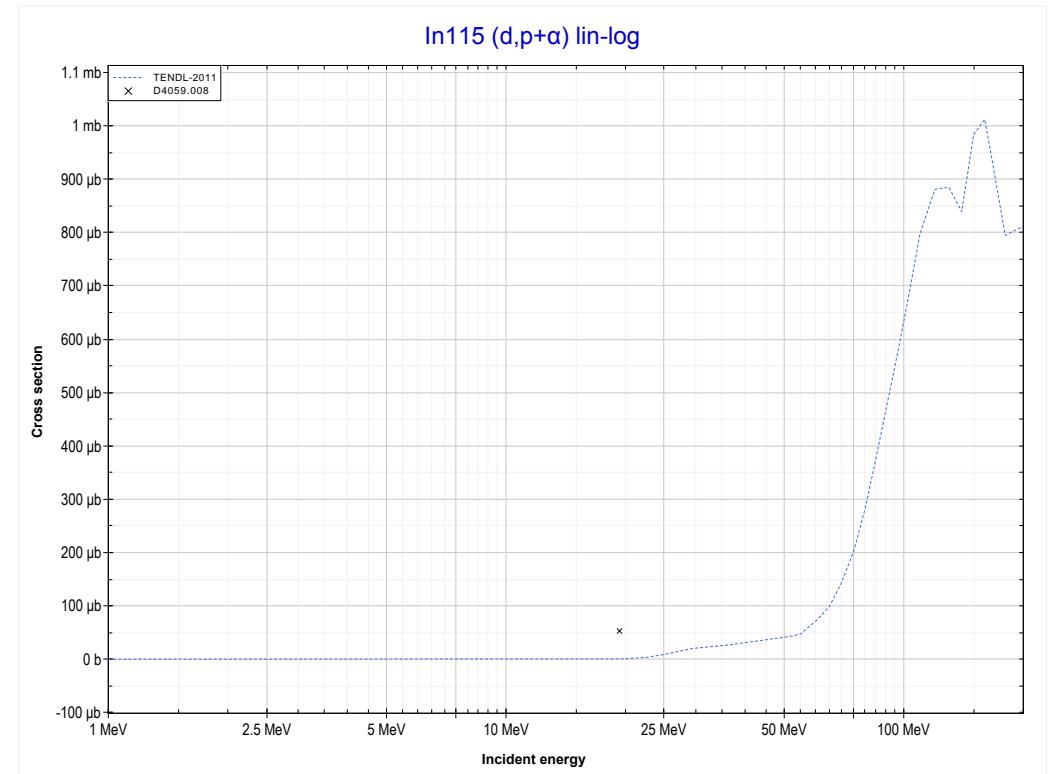
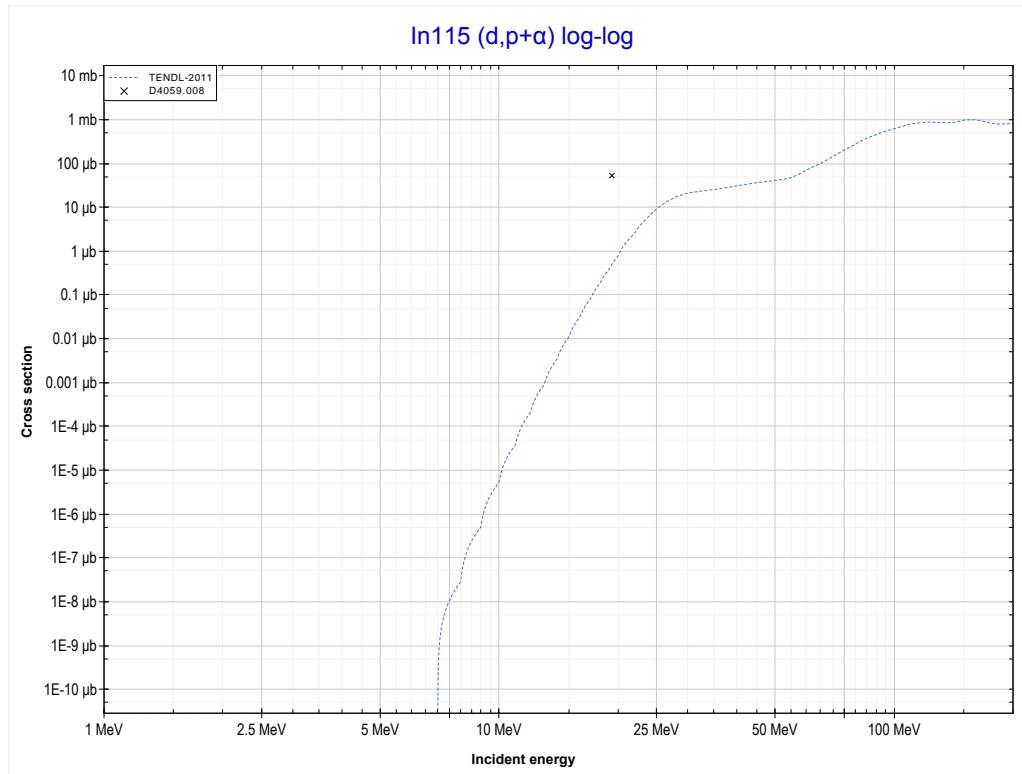
Reaction	Q-Value
Cd116(d,2n)In116	-3475.91 keV

<< 48-Cd-114	48-Cd-116 MT103 (d,p) or MT5 (Cd117 production)	>> 52-Te-122
<< MT16 (d,2n)		MT112 (d,p+α) >>



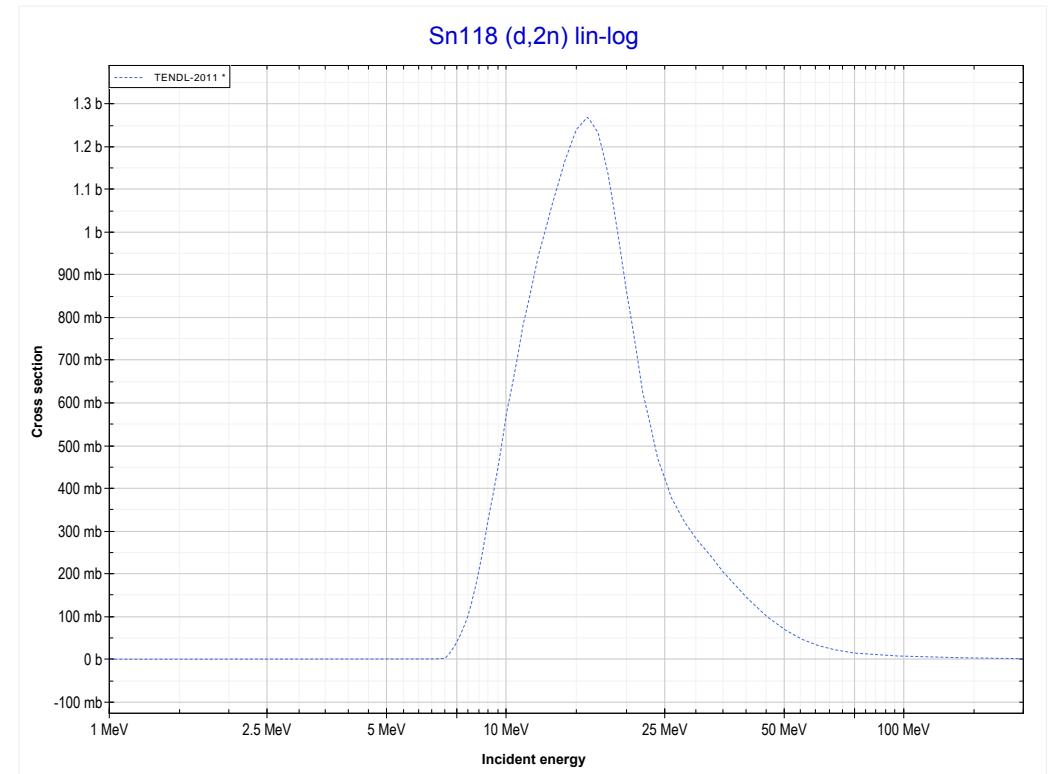
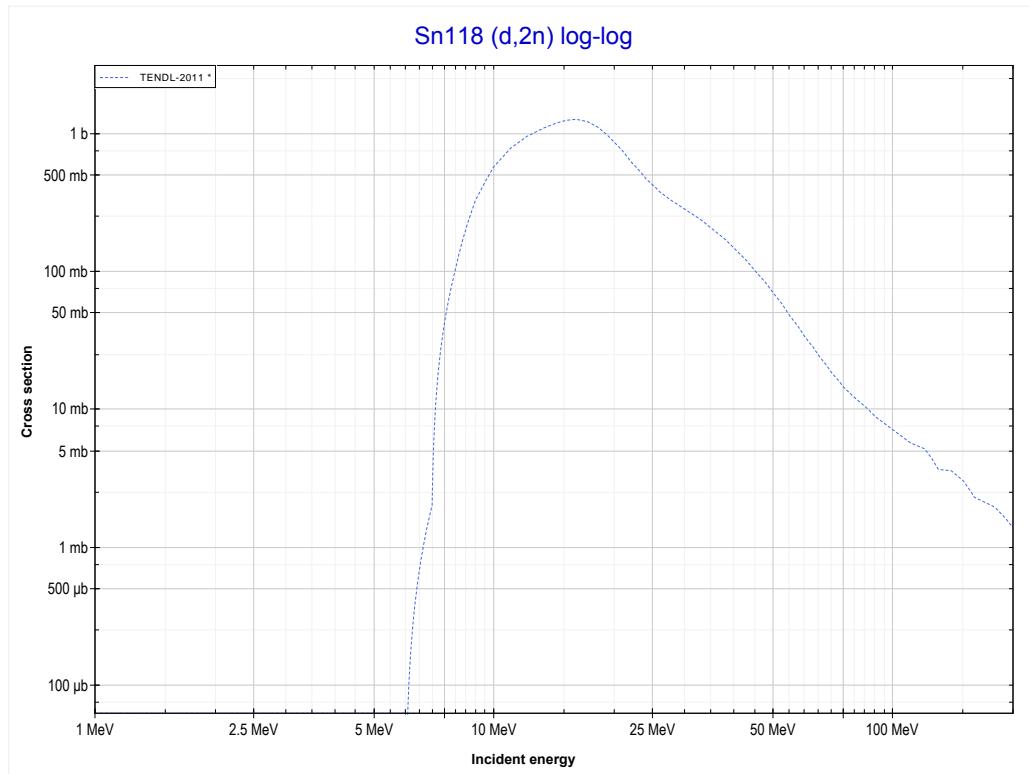
Reaction	Q-Value
Cd116(d,p)Cd117	3552.75 keV

<< 35-Br-79	49-In-115 MT112 (d,p+α) or MT5 (Ag112 production)	>> 57-La-139
<< MT103 (d,p)		MT16 (d,2n) >>



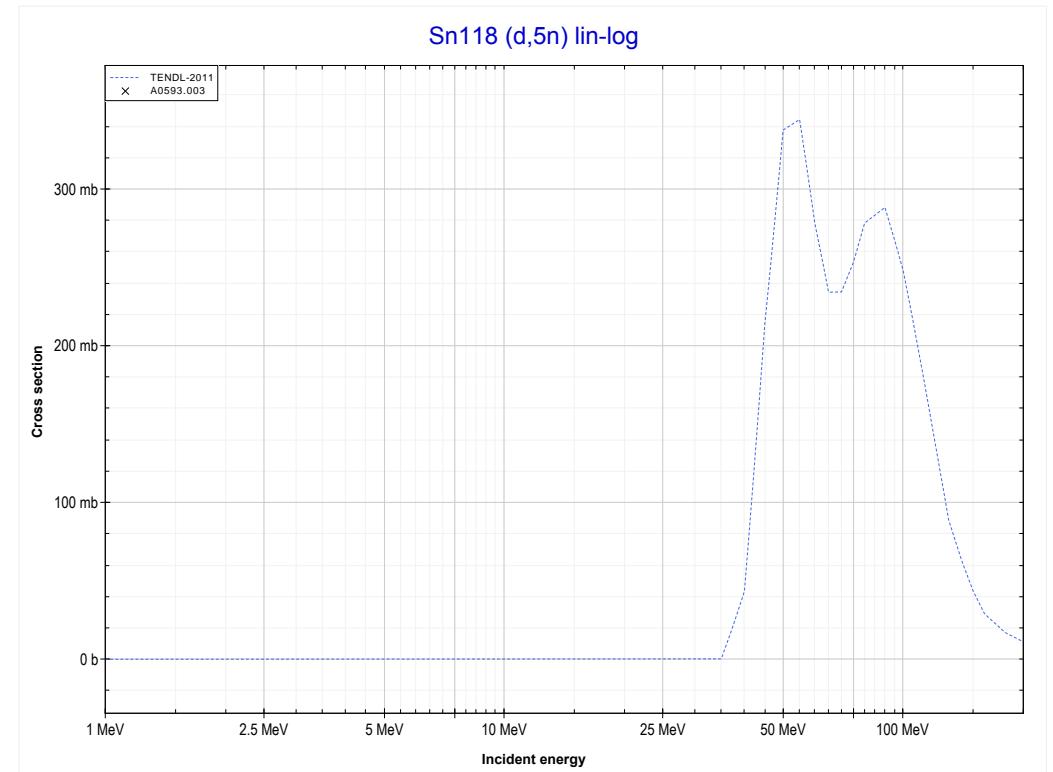
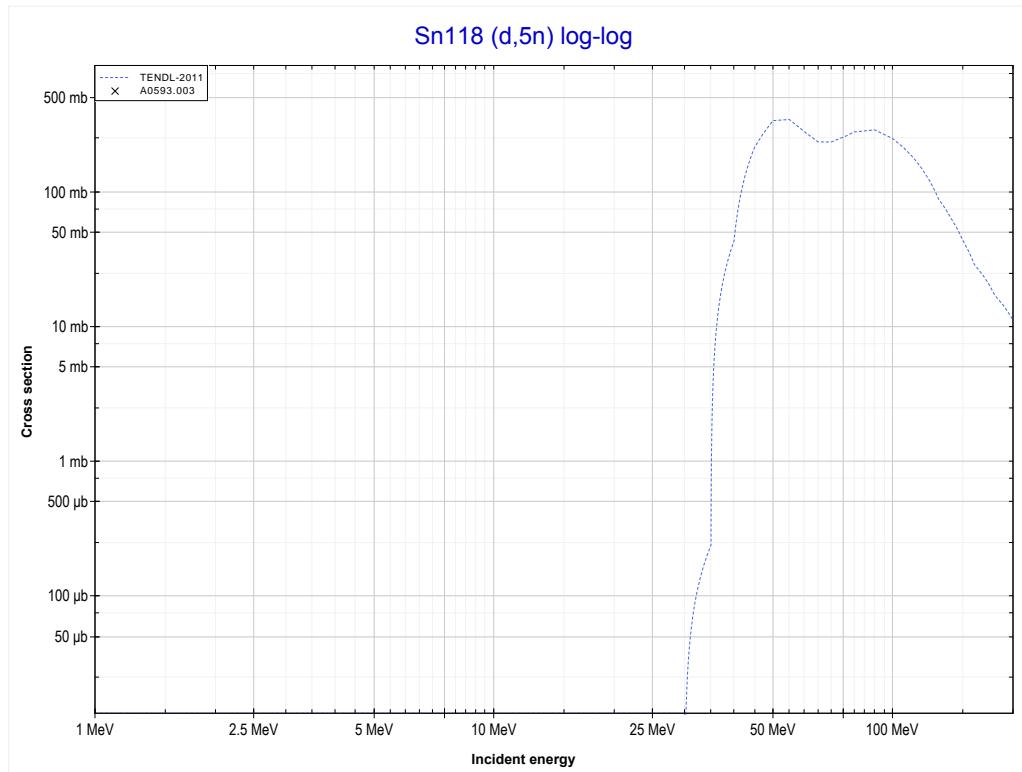
Reaction	Q-Value
In115(d,p+α)Ag112	508.84 keV
In115(d,d+He3)Ag112	-17844.21 keV
In115(d,2p+t)Ag112	-19305.03 keV
In115(d,n+p+He3)Ag112	-20068.78 keV
In115(d,p+2d)Ag112	-23337.69 keV
In115(d,n+2p+d)Ag112	-25562.26 keV
In115(d,2n+3p)Ag112	-27786.82 keV

<< 48-Cd-116	50-Sn-118 MT16 (d,2n) or MT5 (Sb118 production)	50-Sn-120 >>
<< MT112 (d,p+α)		MT152 (d,5n) >>



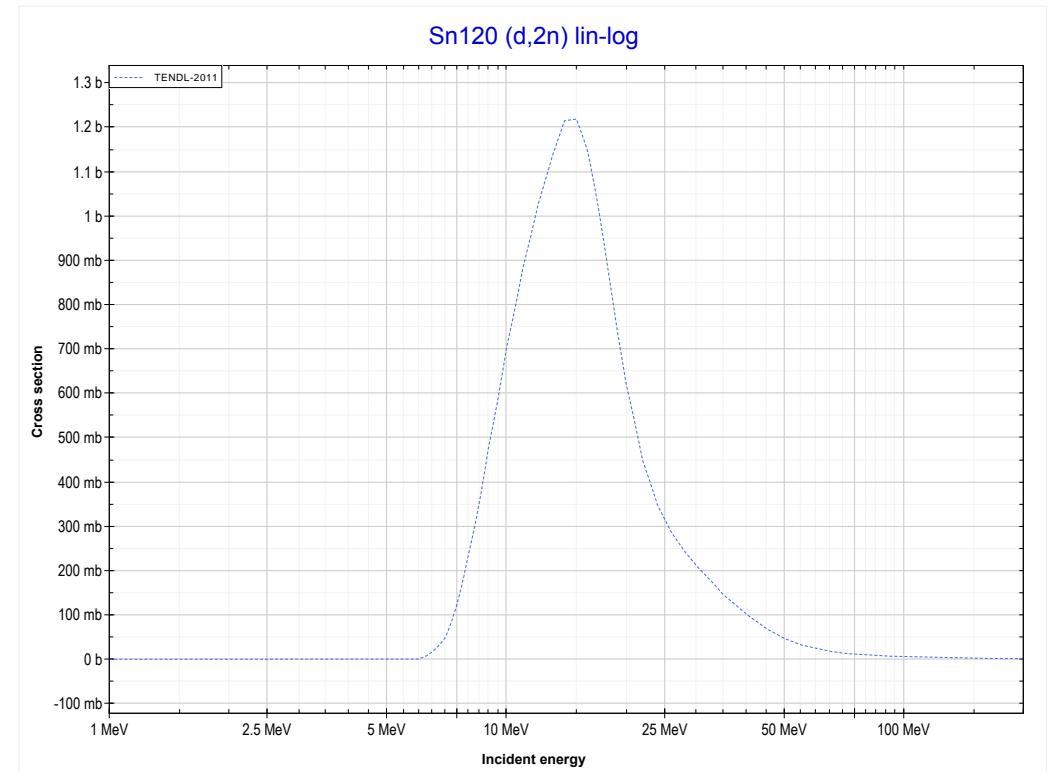
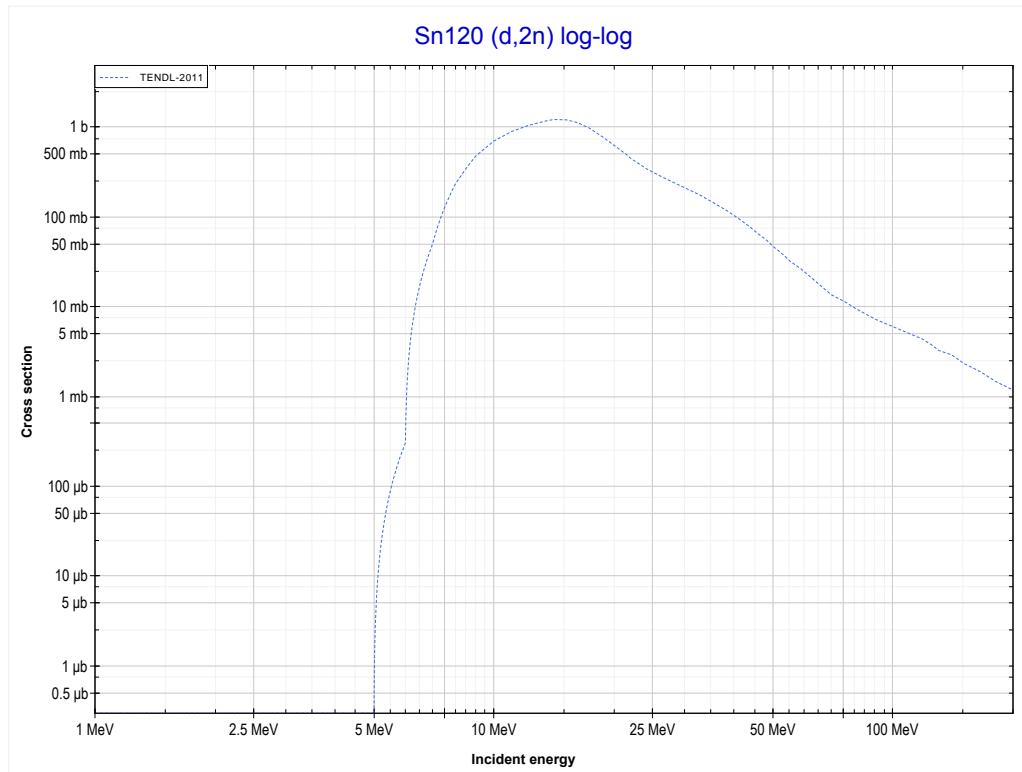
Reaction	Q-Value
$\text{Sn}^{118}(\text{d},\text{2n})\text{Sb}^{118}$	-6664.01 keV

<< 45-Rh-103	50-Sn-118 MT152 (d,5n) or MT5 (Sb115 production)	>> 69-Tm-169
<< MT16 (d,2n)		MT16 (d,2n) >>



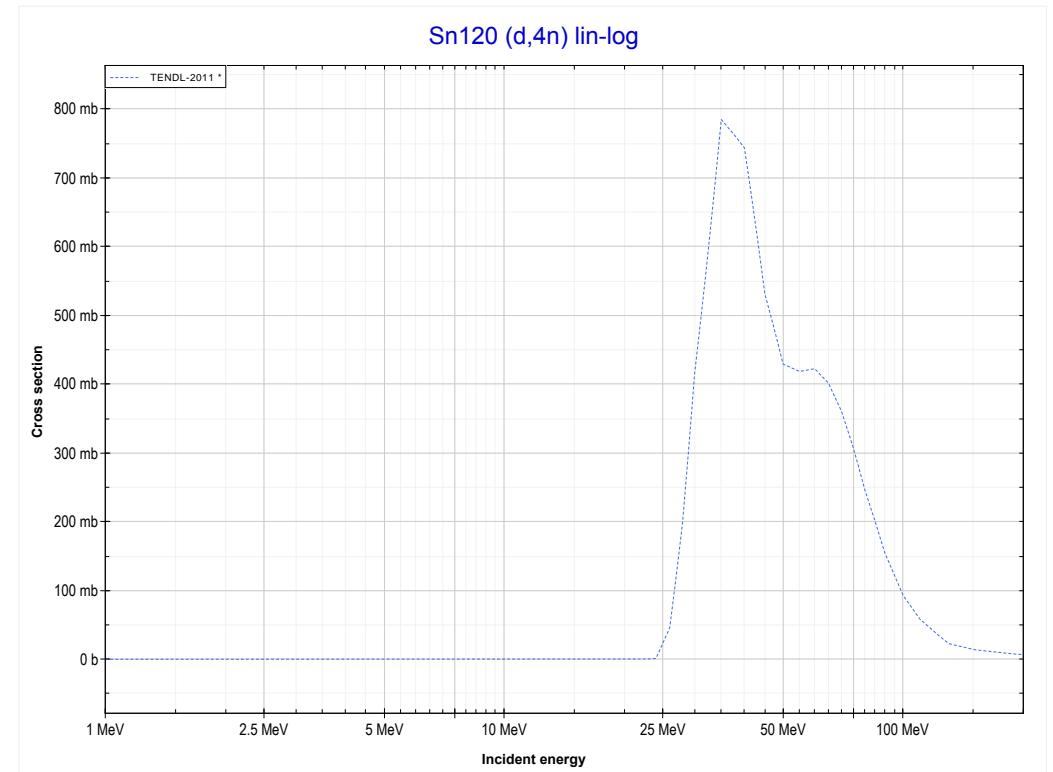
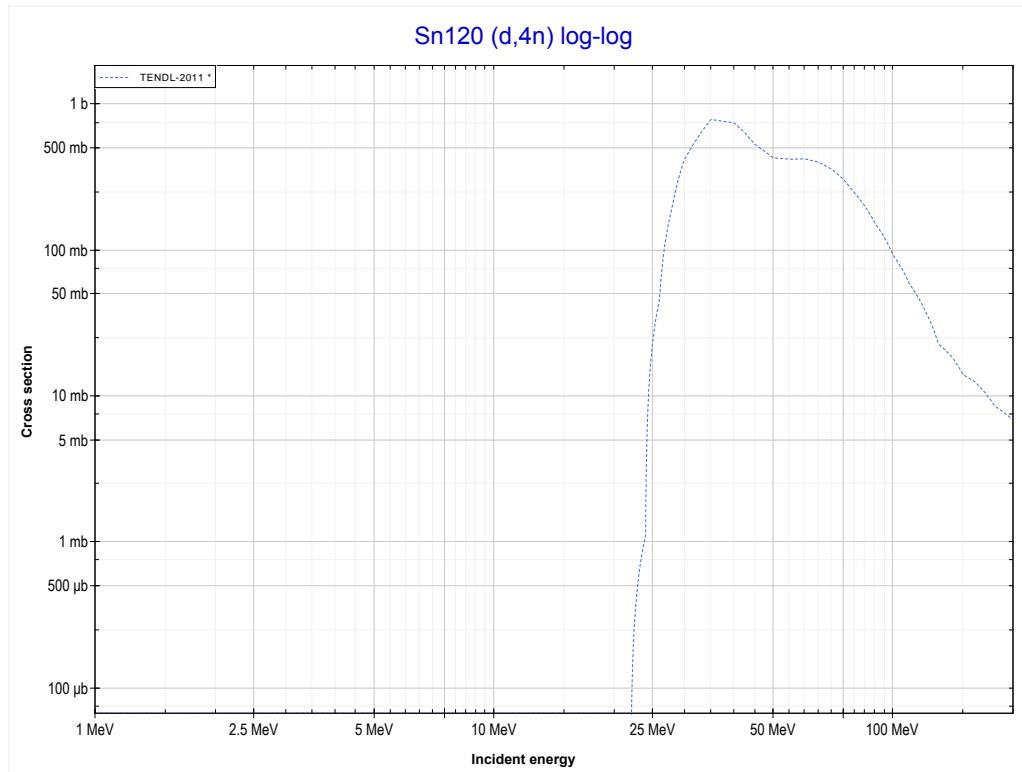
Reaction	Q-Value
$\text{Sn}^{118}(\text{d},\text{5n})\text{Sb}^{115}$	-31873.96 keV

<< 50-Sn-118	50-Sn-120 MT16 (d,2n) or MT5 (Sb120 production)	50-Sn-124 >>
<< MT152 (d,5n)		MT37 (d,4n) >>



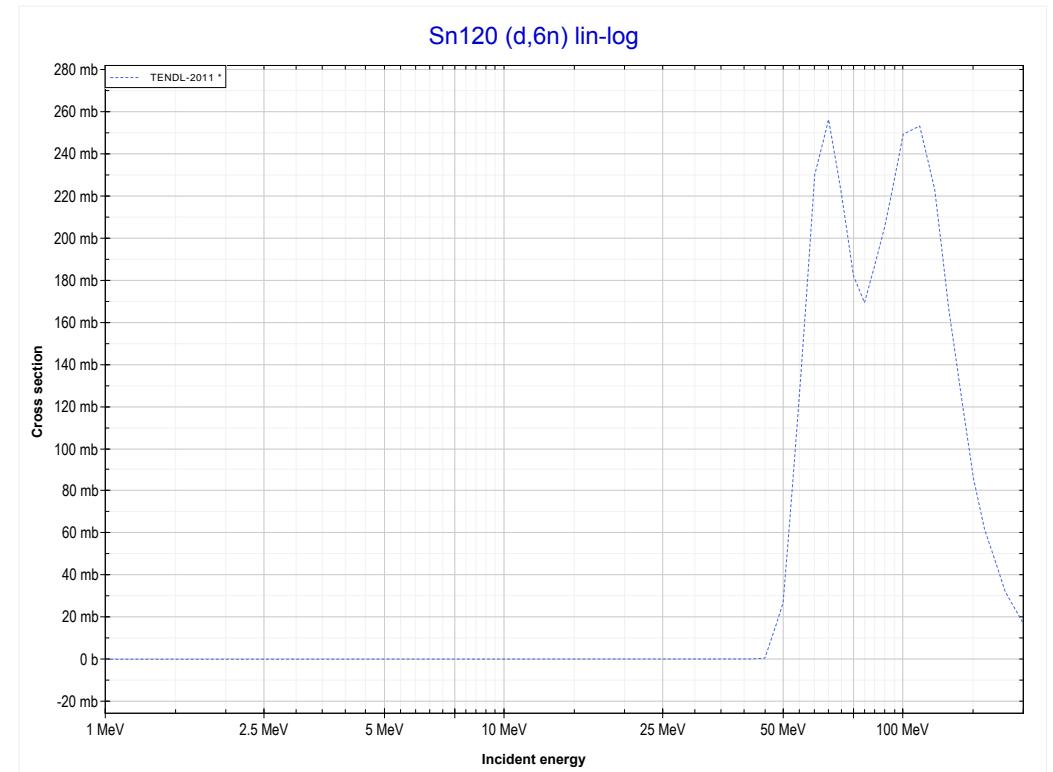
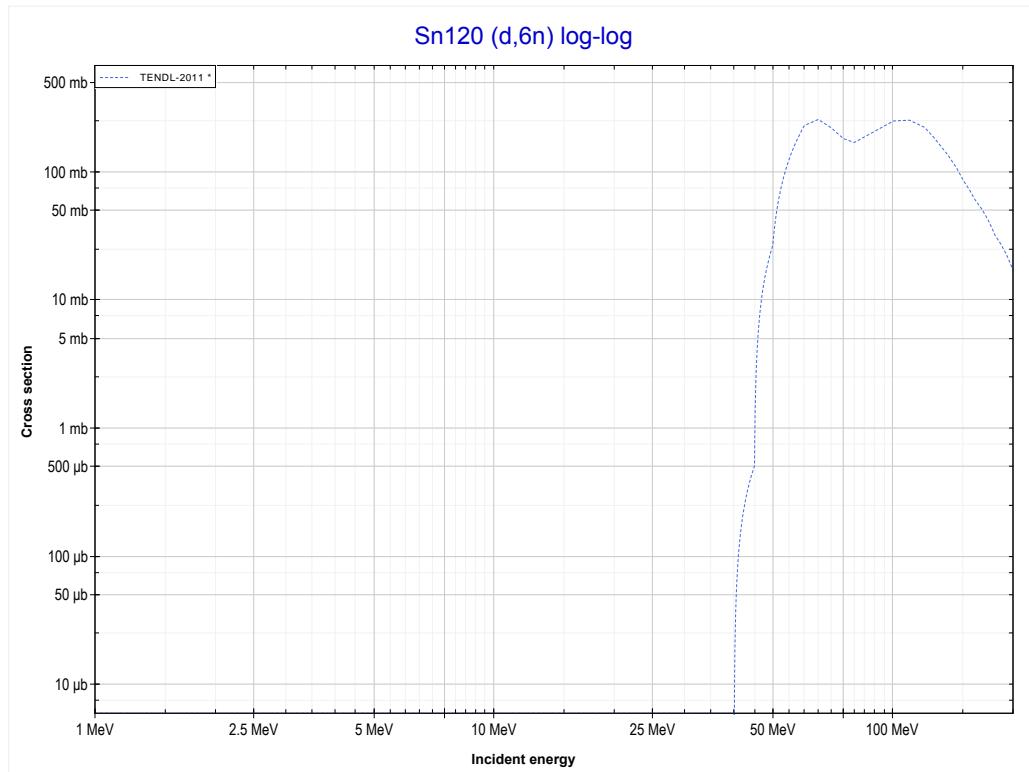
Reaction	Q-Value
$\text{Sn}^{120}(\text{d},\text{2n})\text{Sb}^{120}$	-5688.01 keV

<< 45-Rh-103	50-Sn-120 MT37 (d,4n) or MT5 (Sb118 production)	50-Sn-124 >> MT153 (d,6n) >>
<< MT16 (d,2n)		

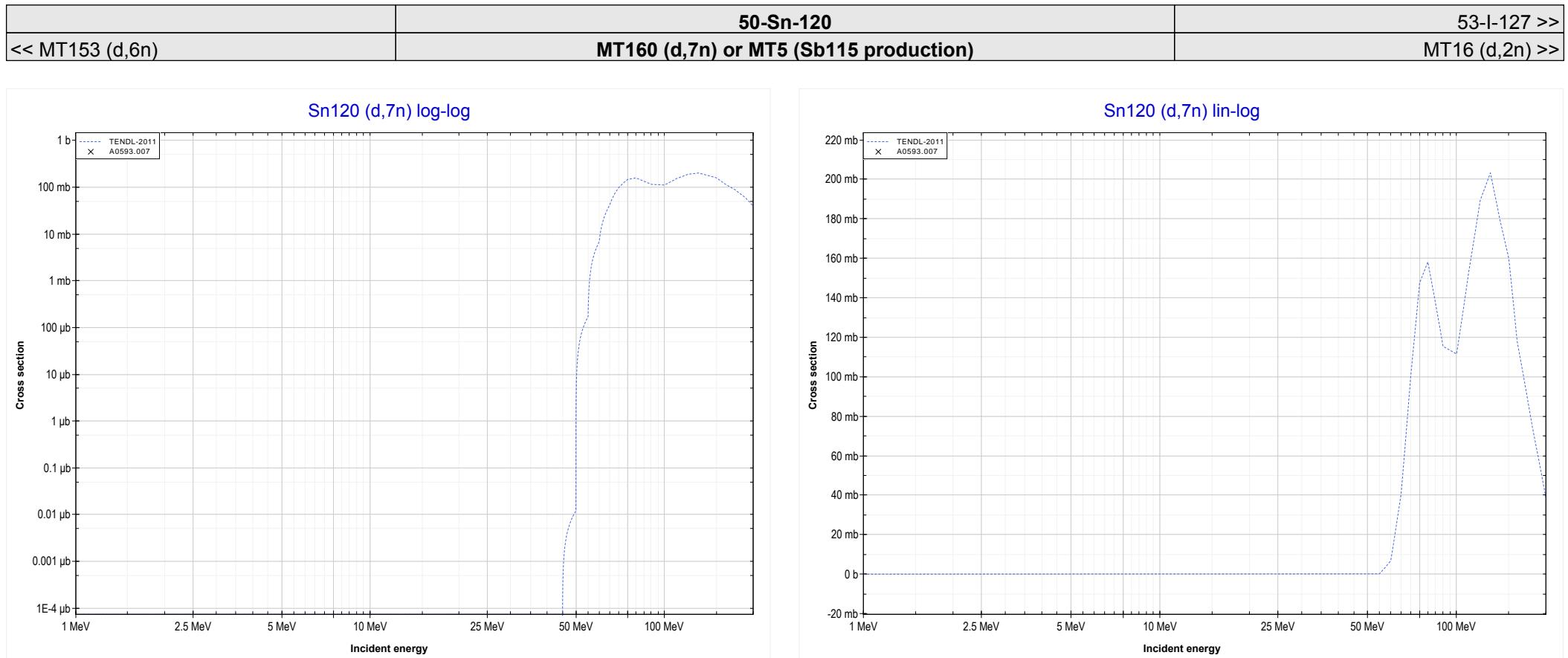


Reaction	Q-Value
$\text{Sn}^{120}(\text{d},\text{4n})\text{Sb}^{118}$	-22255.65 keV

<< MT37 (d,4n)	50-Sn-120 MT153 (d,6n) or MT5 (Sb116 production)	50-Sn-124 >> MT160 (d,7n) >>
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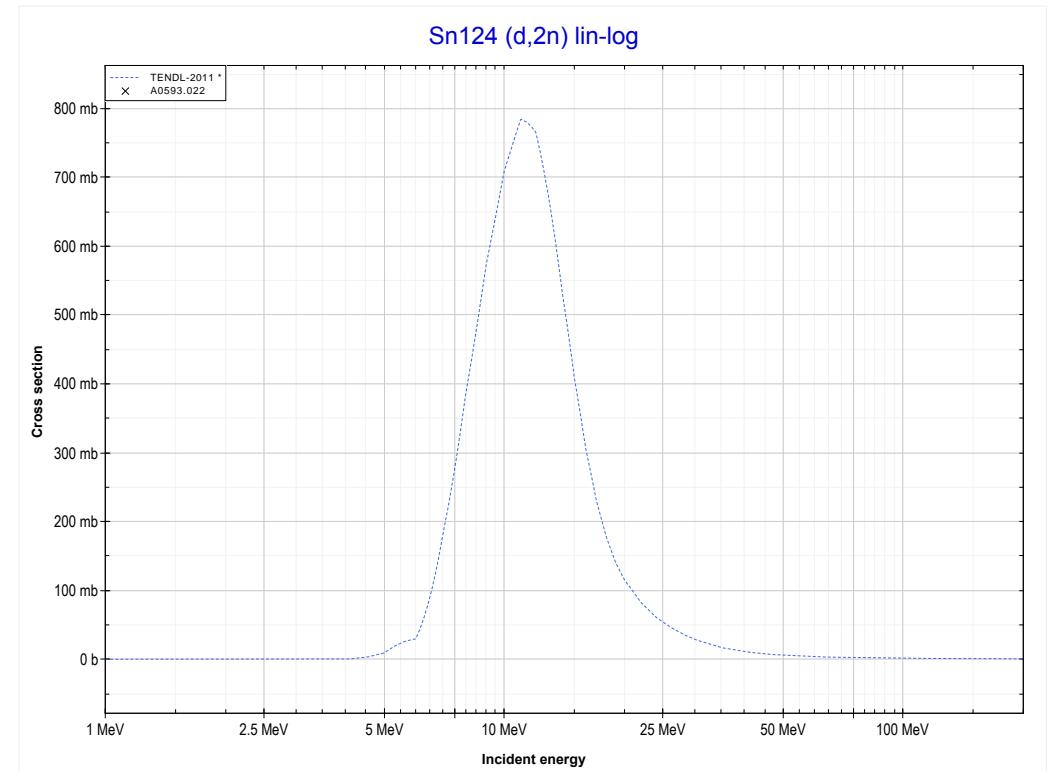
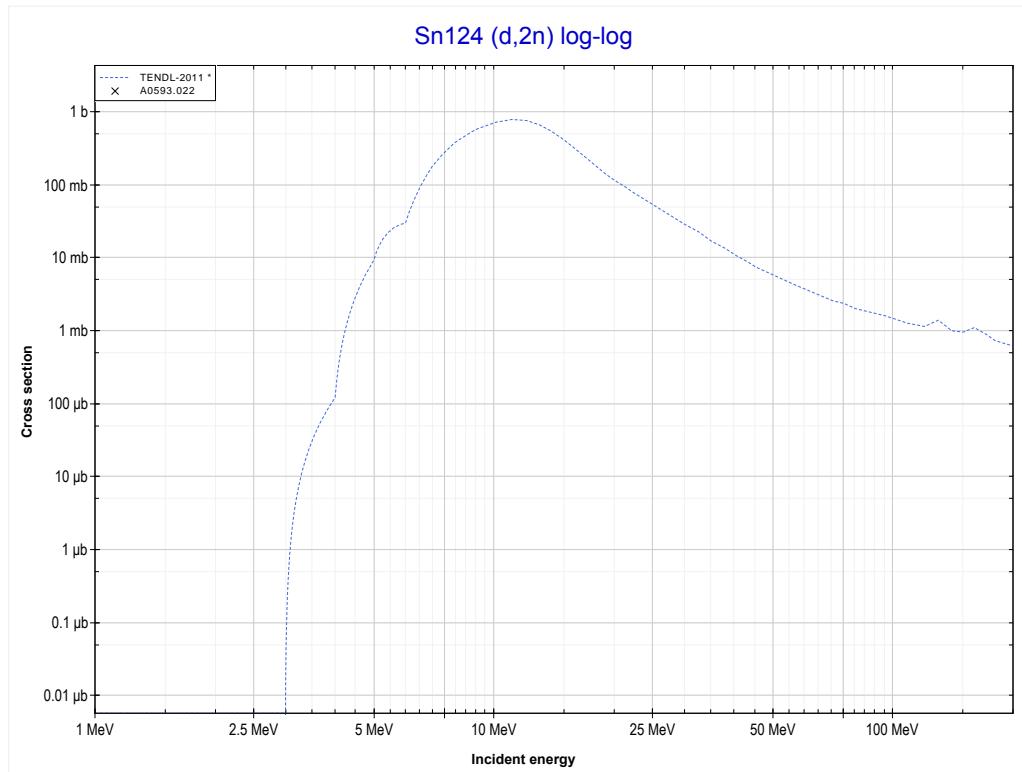


Reaction	Q-Value
Sn120(d,6n)Sb116	-39576.28 keV



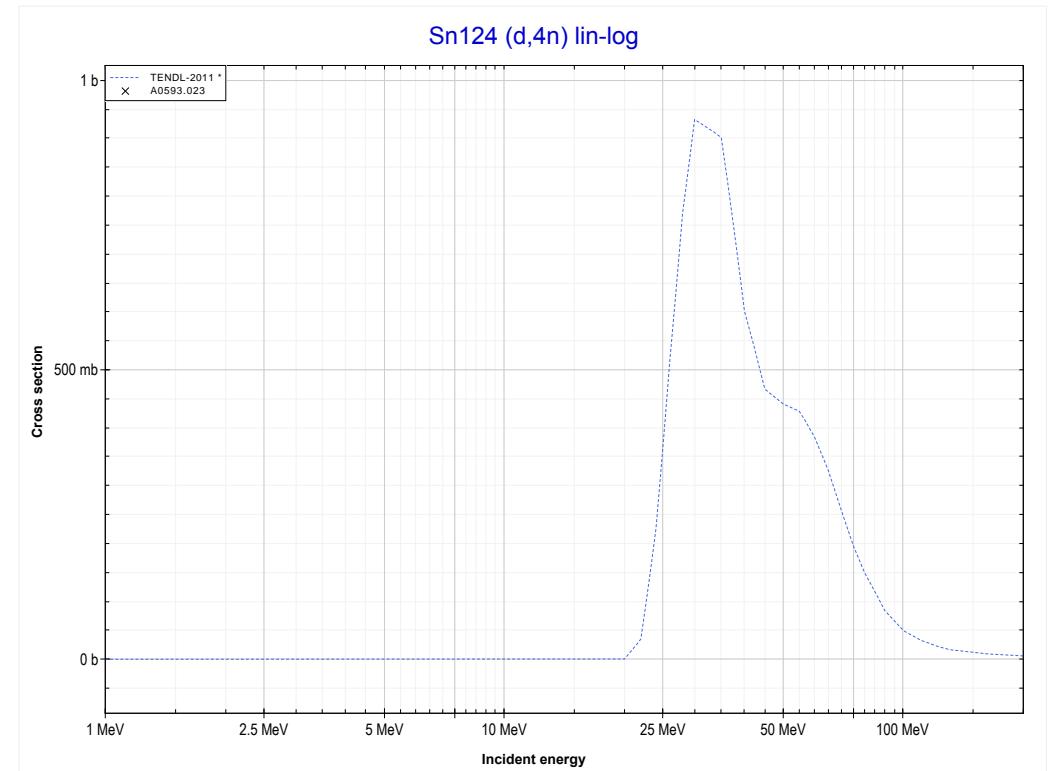
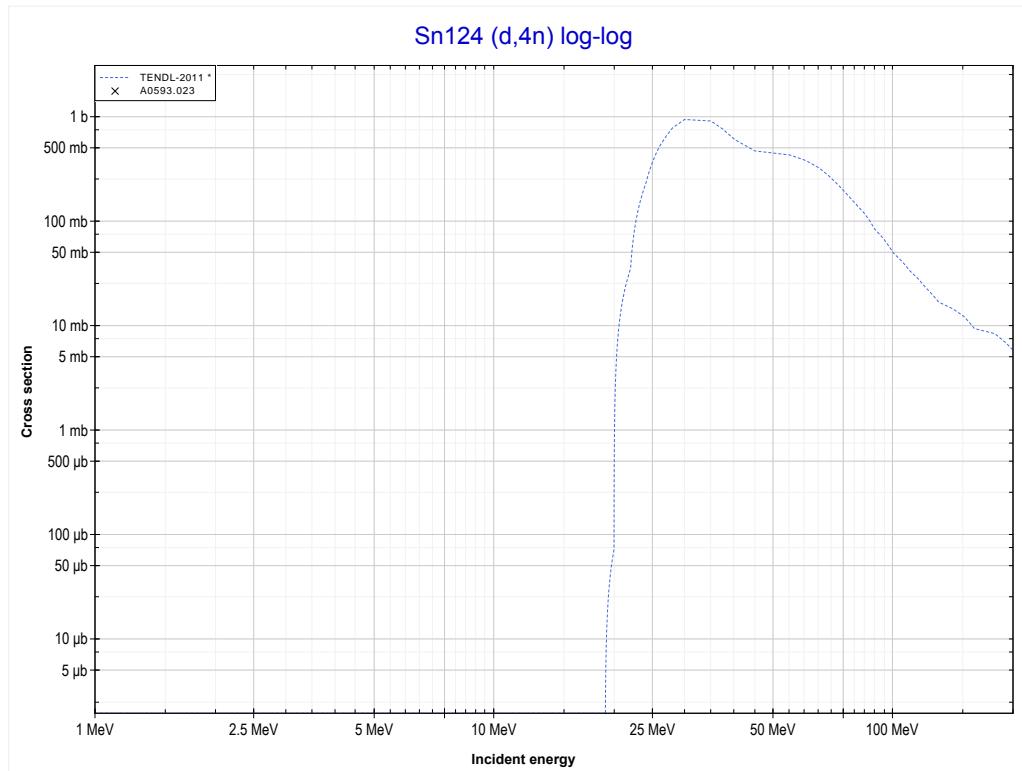
Reaction	Q-Value
Sn120(d,7n)Sb115	-47465.60 keV

<< 50-Sn-120	50-Sn-124 MT16 (d,2n) or MT5 (Sb124 production)	52-Te-122 >>
<< MT160 (d,7n)		MT37 (d,4n) >>



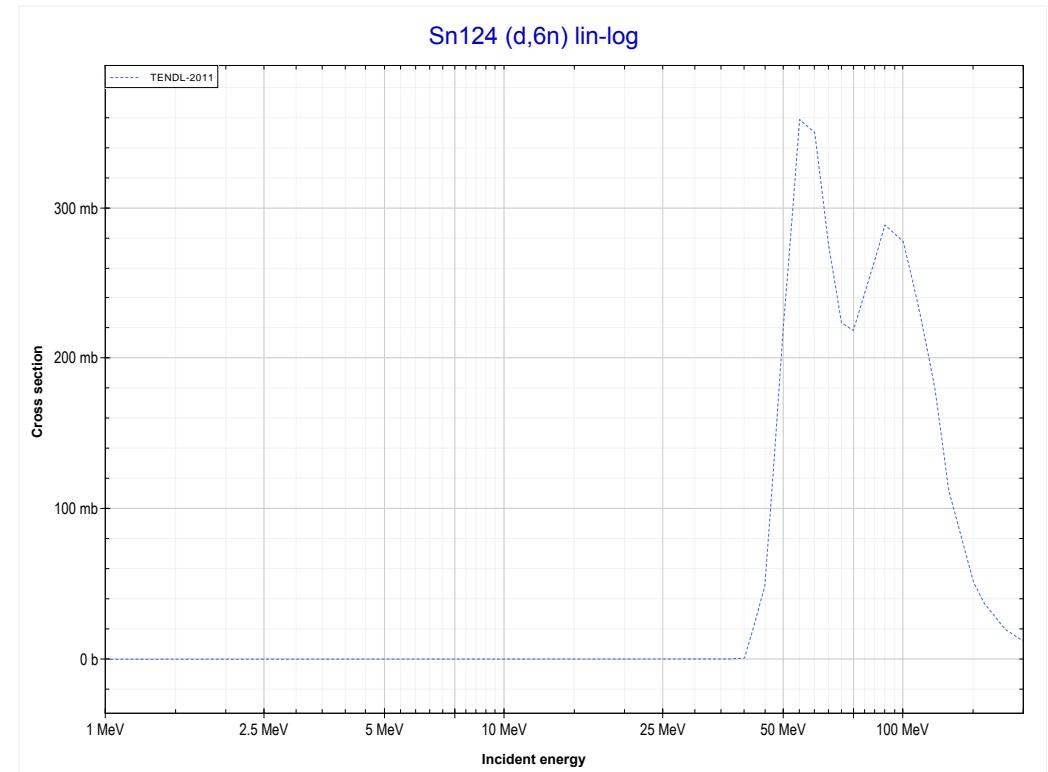
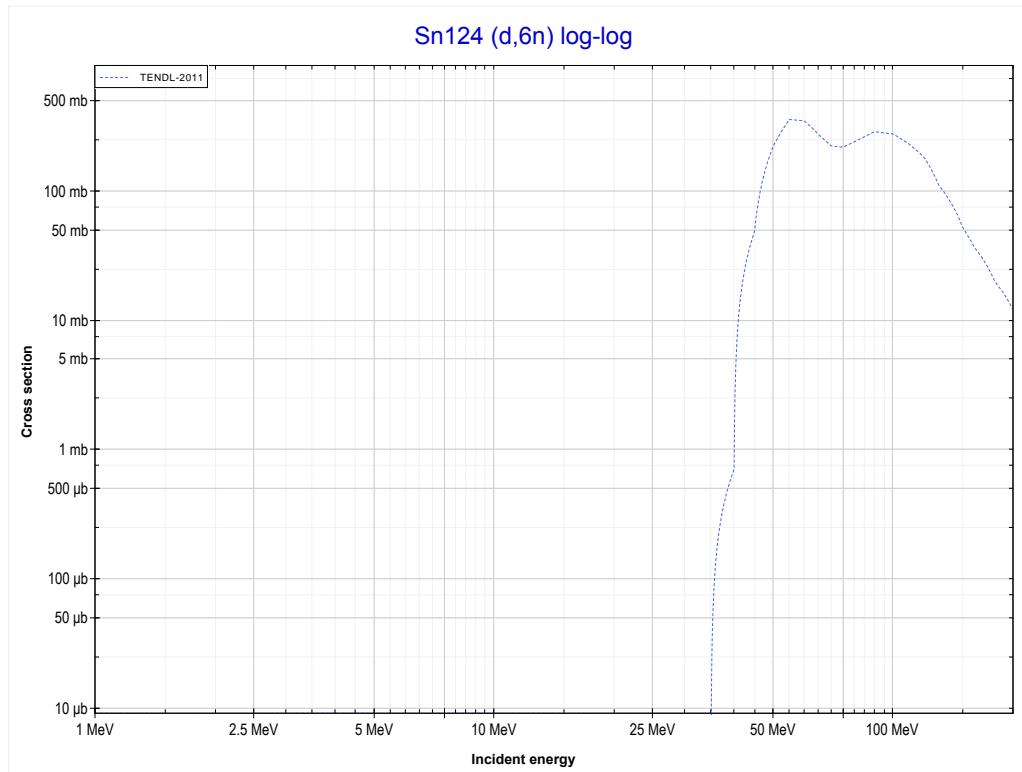
Reaction	Q-Value
$\text{Sn}^{124}(\text{d},\text{2n})\text{Sb}^{124}$	-3623.41 keV

<< 50-Sn-120	50-Sn-124 MT37 (d,4n) or MT5 (Sb122 production)	59-Pr-141 >>
<< MT16 (d,2n)		MT153 (d,6n) >>



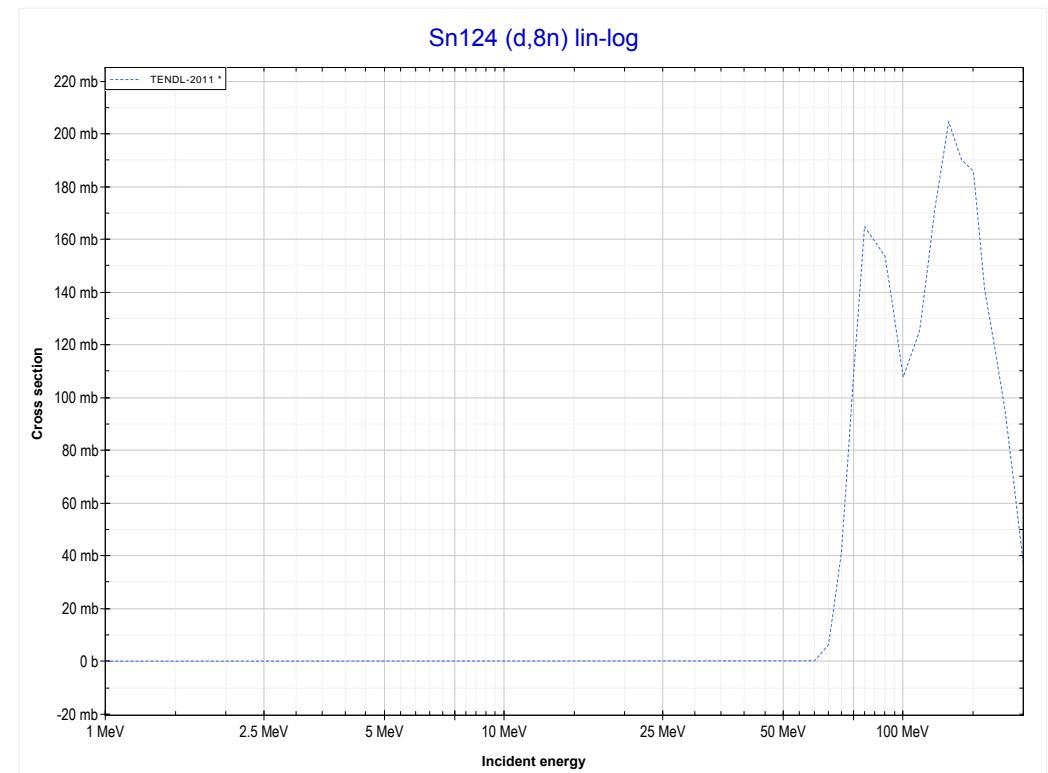
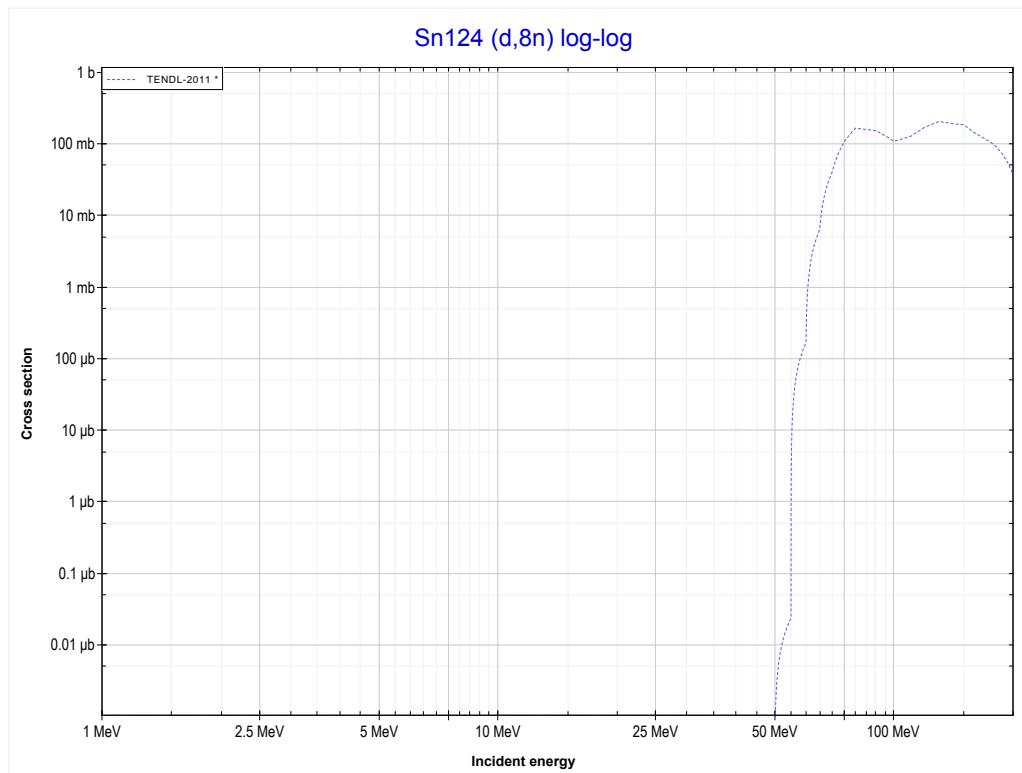
Reaction	Q-Value
$\text{Sn}^{124}(\text{d},\text{4n})\text{Sb}^{122}$	-19056.15 keV

<< 50-Sn-120	50-Sn-124 MT153 (d,6n) or MT5 (Sb120 production)	53-I-127 >>
<< MT37 (d,4n)		MT161 (d,8n) >>



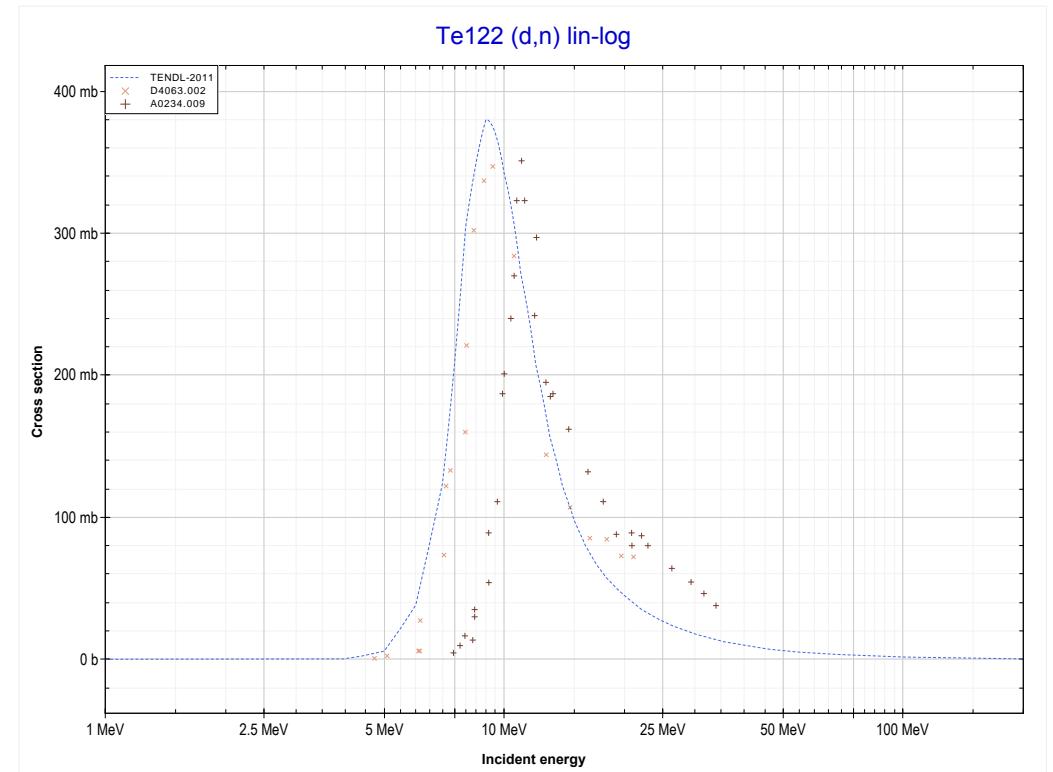
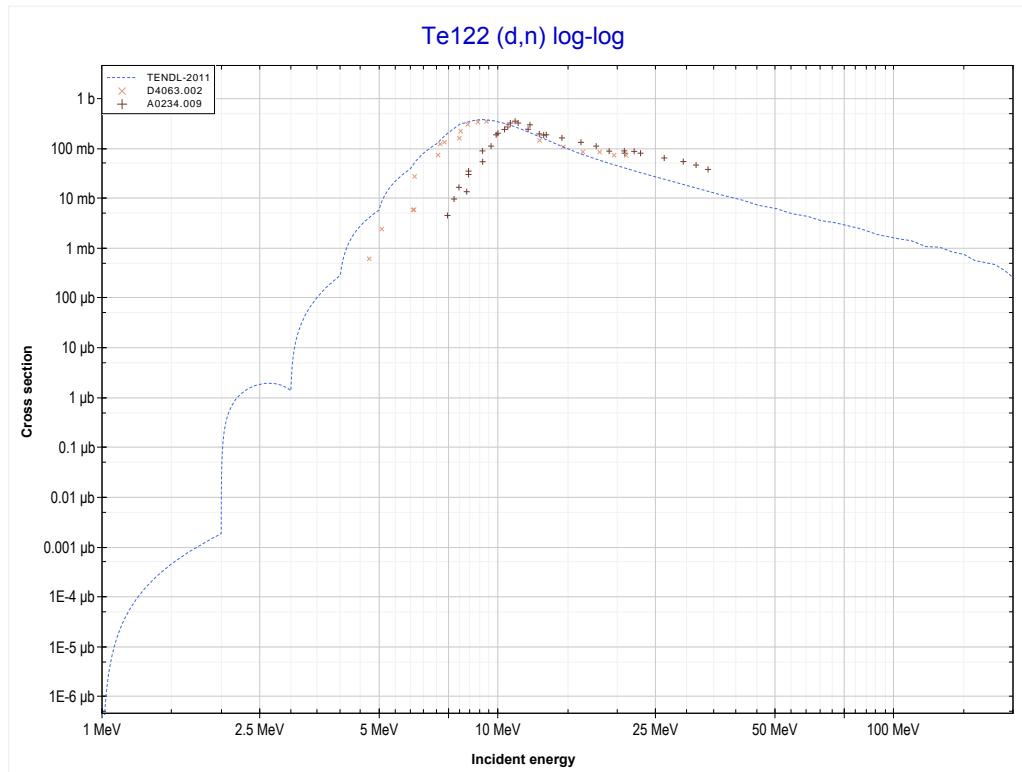
Reaction	Q-Value
$\text{Sn}^{124}(\text{d},\text{6n})\text{Sb}^{120}$	-35104.98 keV

	50-Sn-124 MT161 (d,8n) or MT5 (Sb118 production)	53-I-127 >>
<< MT153 (d,6n)		MT4 (d,n) >>



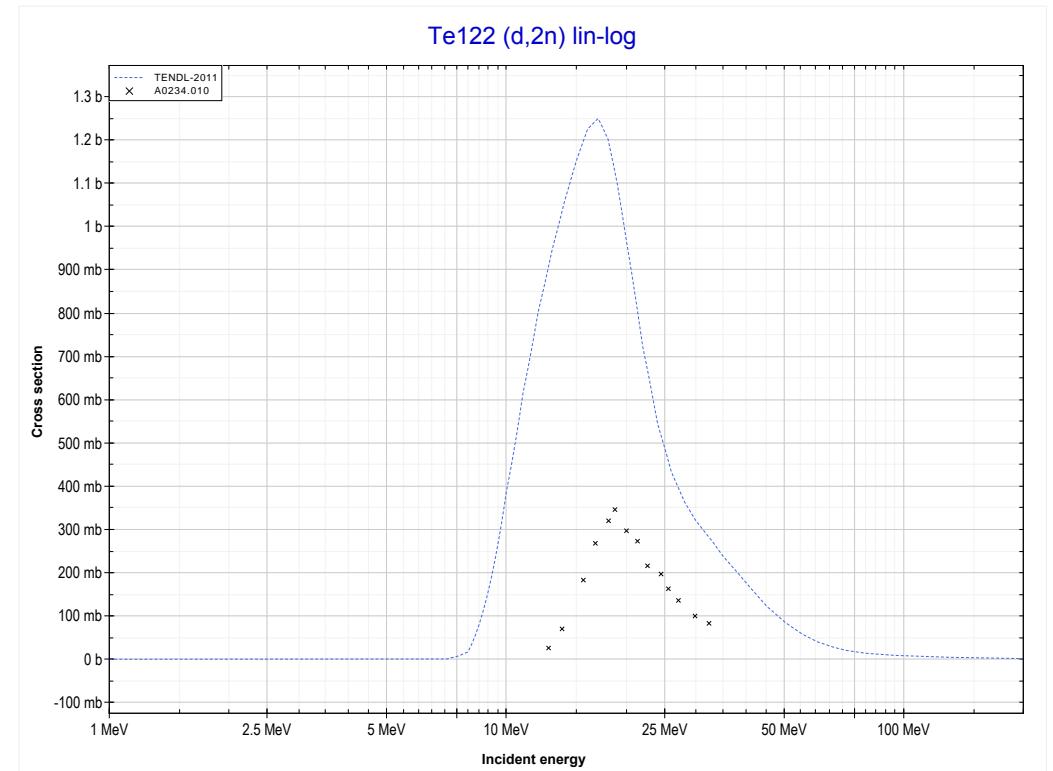
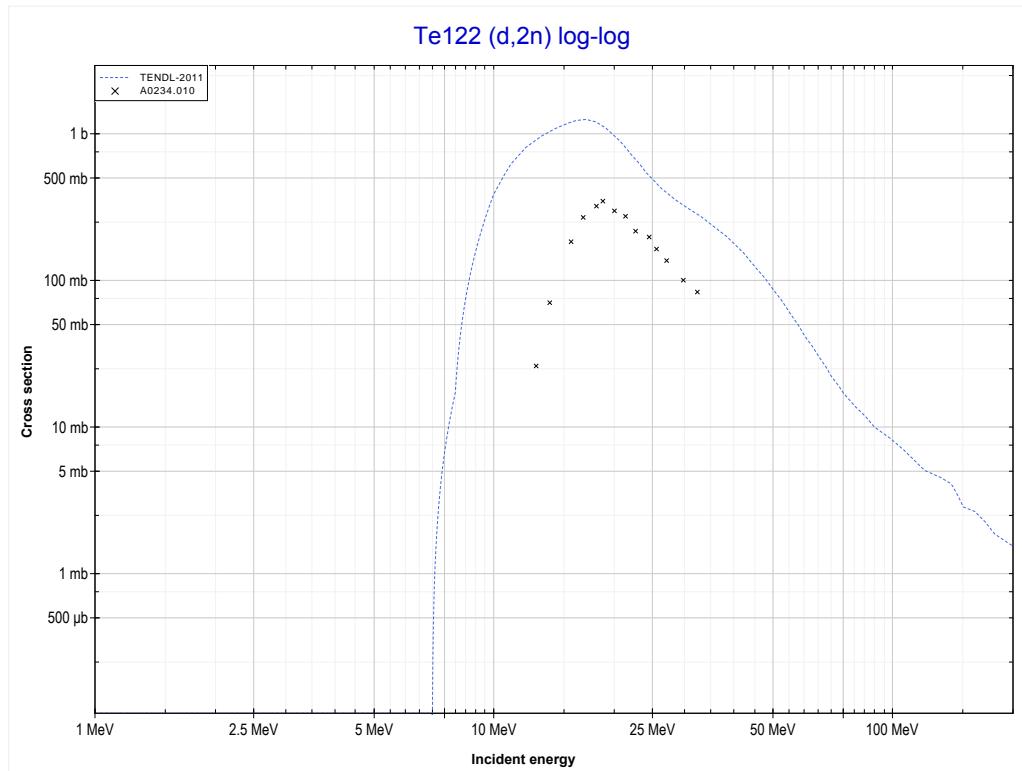
Reaction	Q-Value
$\text{Sn}^{124}(\text{d},\text{8n})\text{Sb}^{118}$	-51672.62 keV

<< 48-Cd-114	52-Te-122 MT4 (d,n) or MT5 (I123 production)	52-Te-123 >>
<< MT161 (d,8n)		MT16 (d,2n) >>



Reaction	Q-Value
Te122(d,n)I123	2693.40 keV

<< 50-Sn-124	52-Te-122 MT16 (d,2n) or MT5 (I122 production)	52-Te-123 >>
<< MT4 (d,n)		MT17 (d,3n) >>

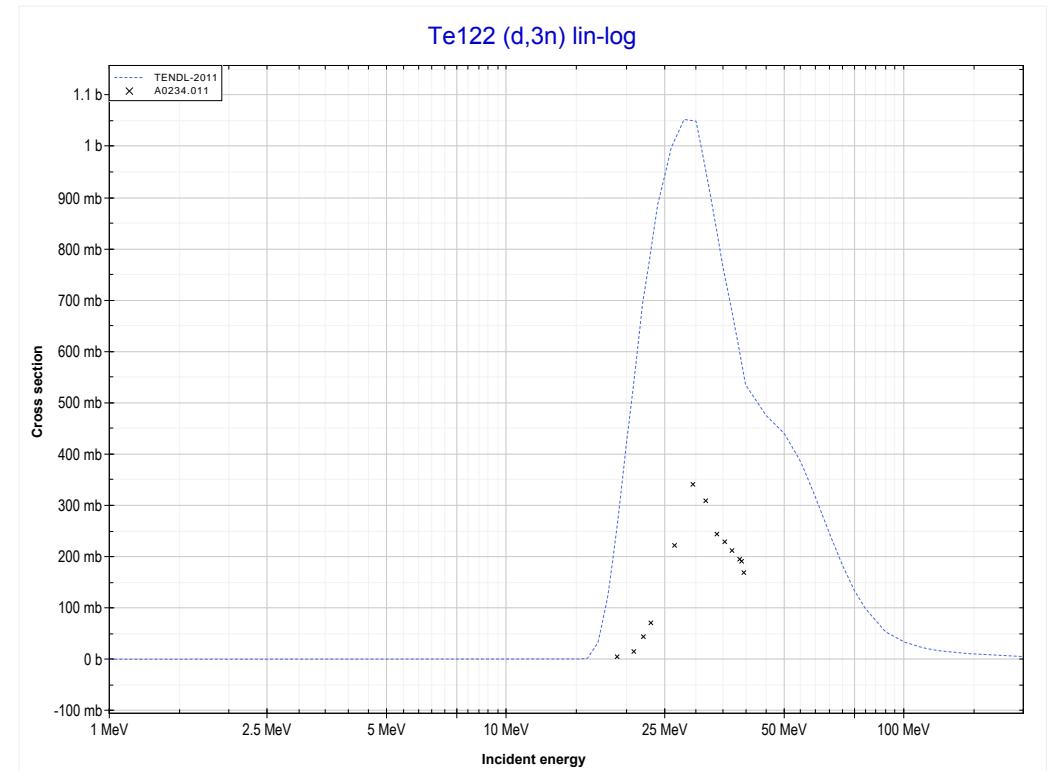
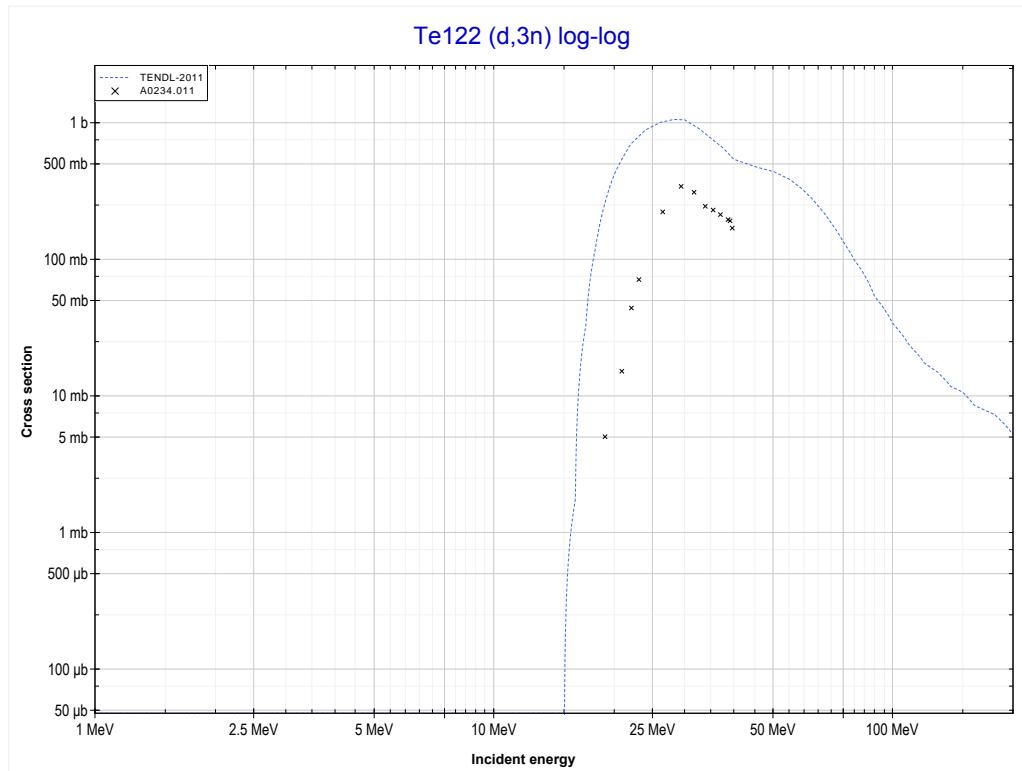


Reaction	Q-Value
Te122(d,2n)I122	-7240.91 keV

<< 48-Cd-114	
<< MT16 (d,2n)	

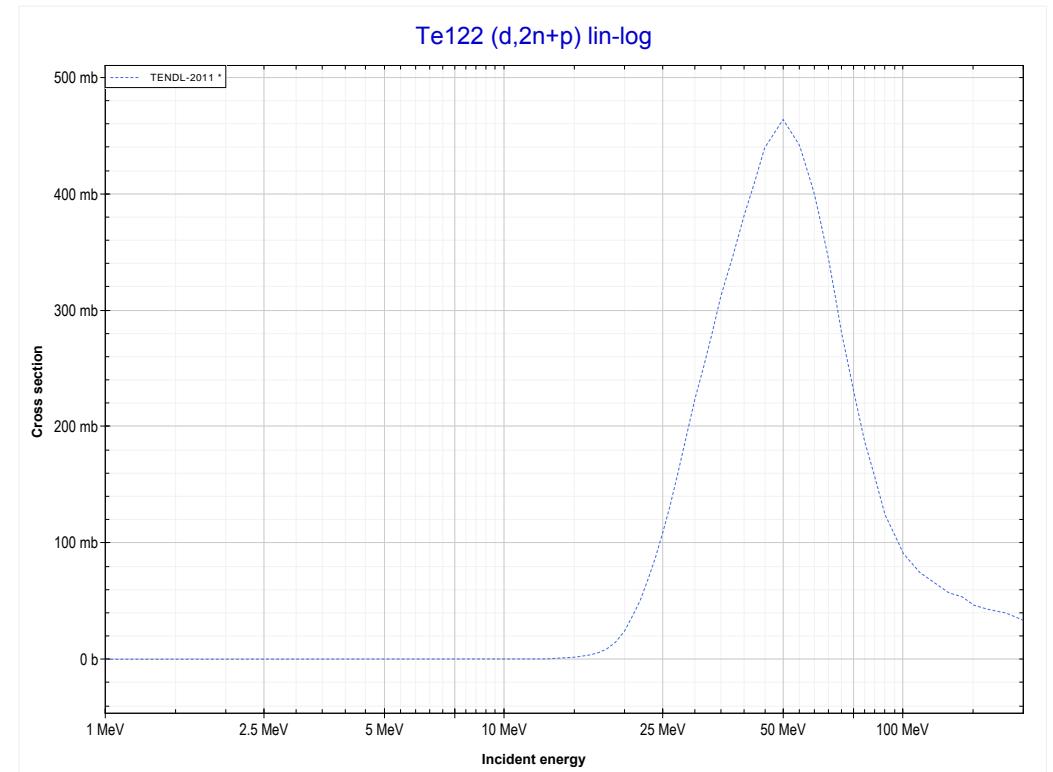
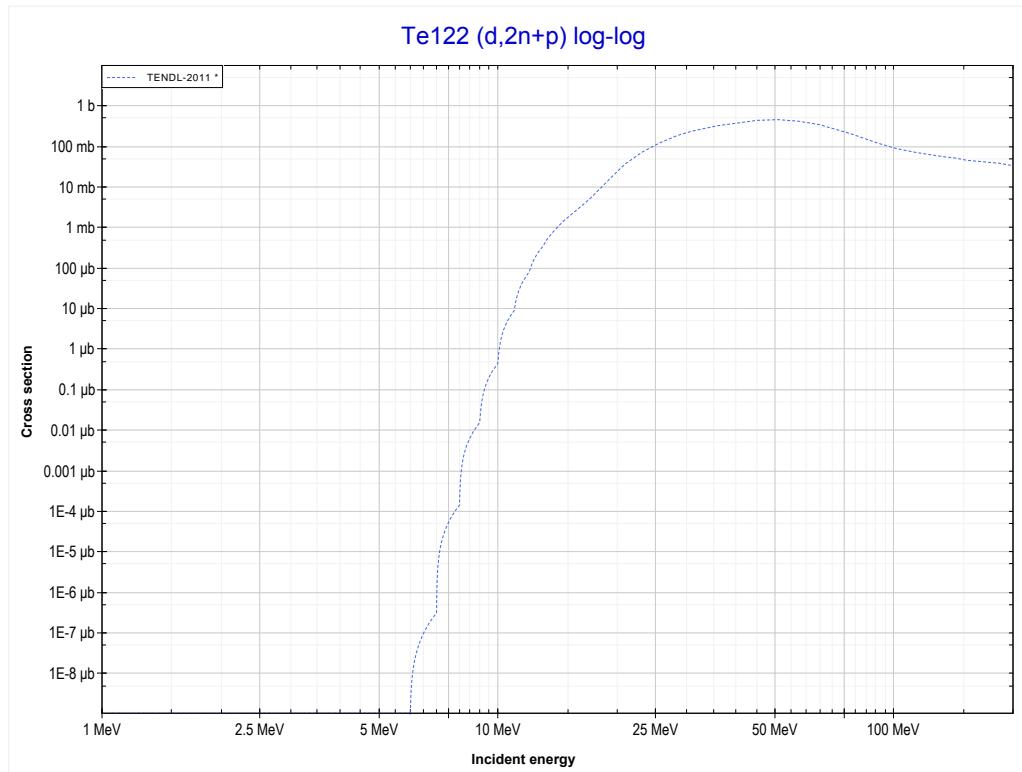
52-Te-122
MT17 (d,3n) or MT5 (I121 production)

52-Te-124 >>
MT41 (d,2n+p) >>



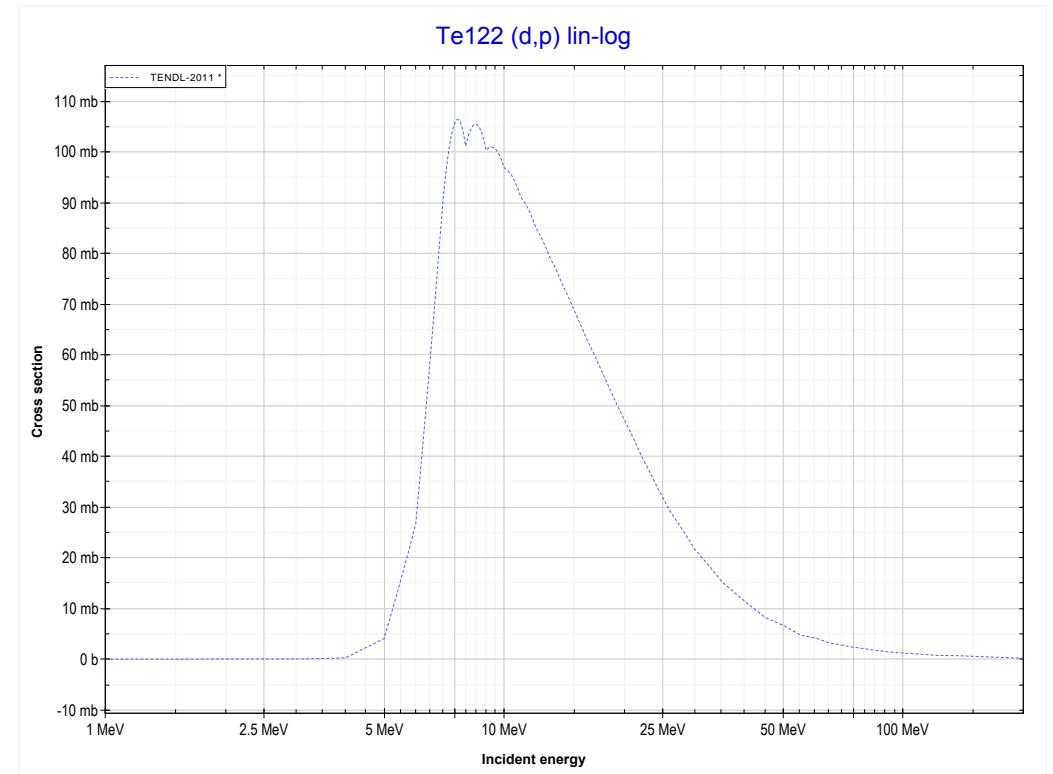
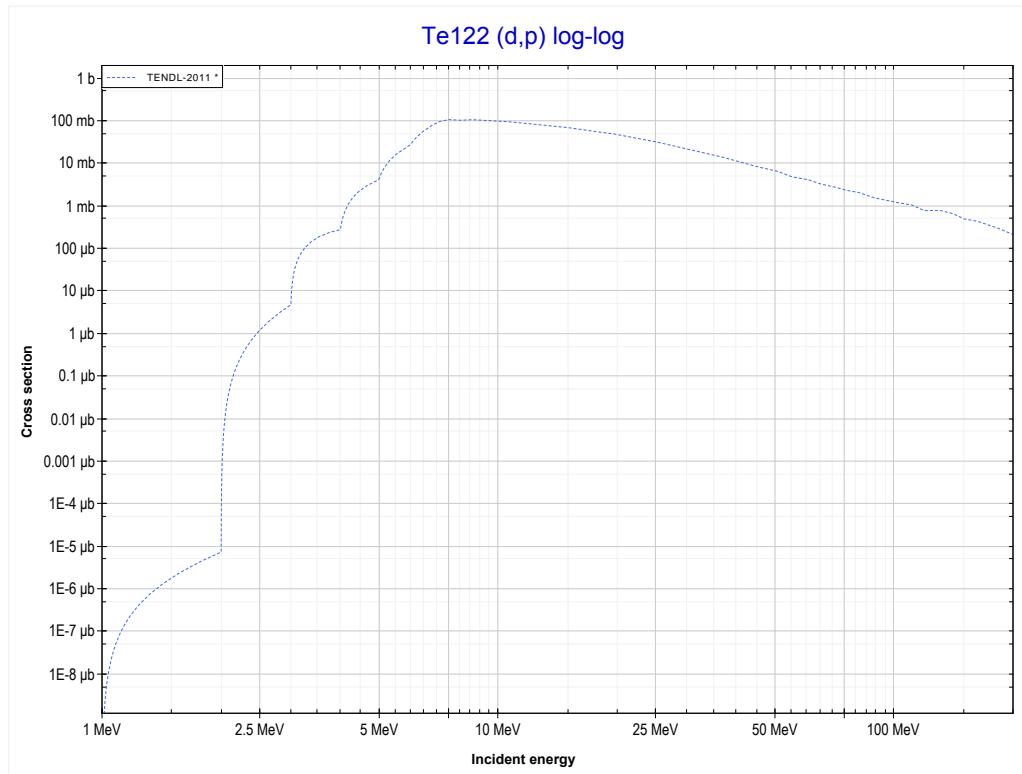
Reaction	Q-Value
Te122(d,3n)I121	-15105.23 keV

<< 39-Y-89	52-Te-122 MT41 (d,2n+p) or MT5 (Te121 production)	>> 69-Tm-169
<< MT17 (d,3n)		MT103 (d,p) >>



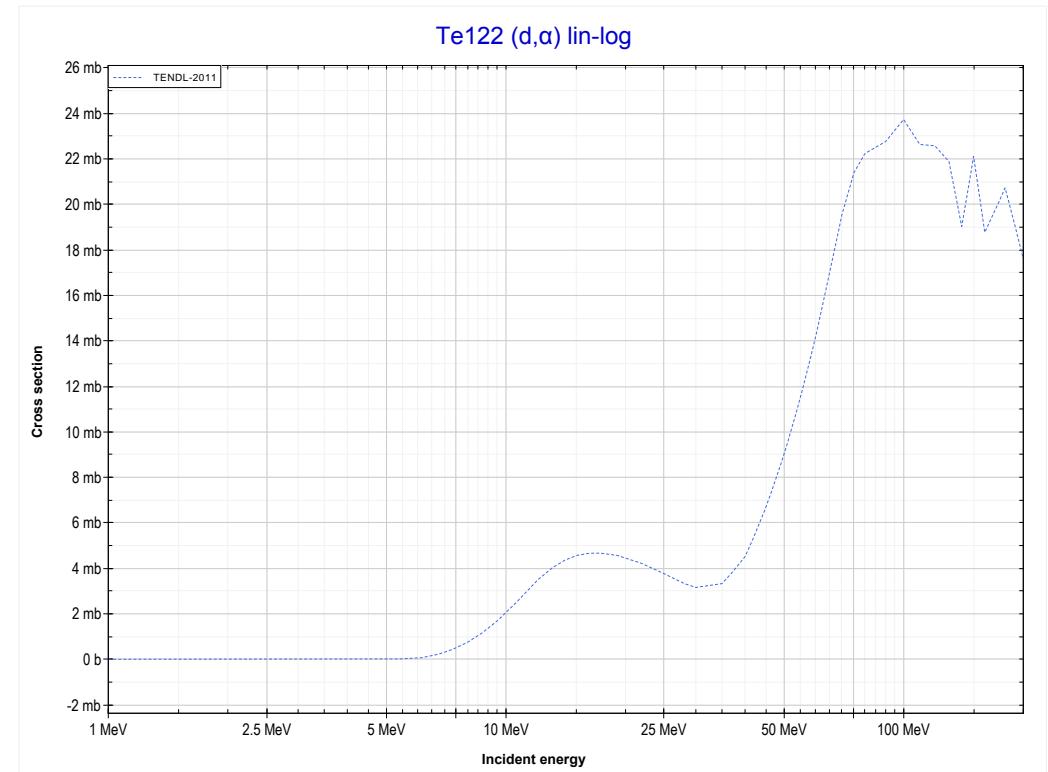
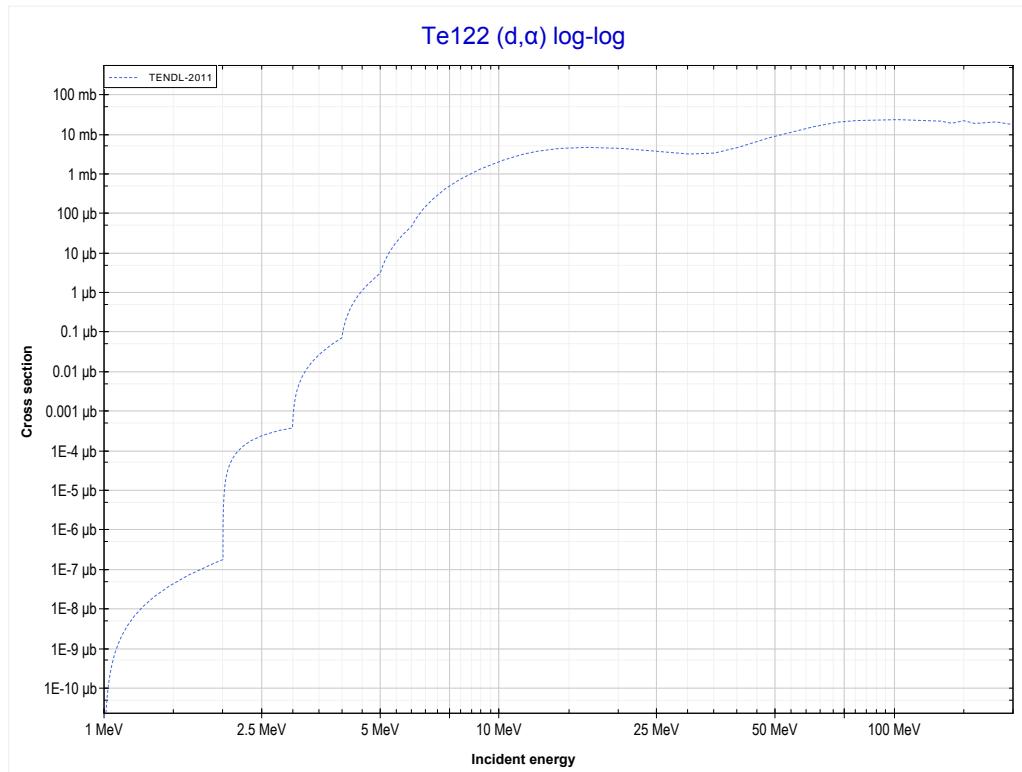
Reaction	Q-Value
Te122(d,t)Te121	-3577.08 keV
Te122(d,n+d)Te121	-9834.32 keV
Te122(d,2n+p)Te121	-12058.88 keV

<< 48-Cd-116	52-Te-122 MT103 (d,p) or MT5 (Te123 production)	52-Te-130 >>
<< MT41 (d,2n+p)		MT107 (d, α) >>



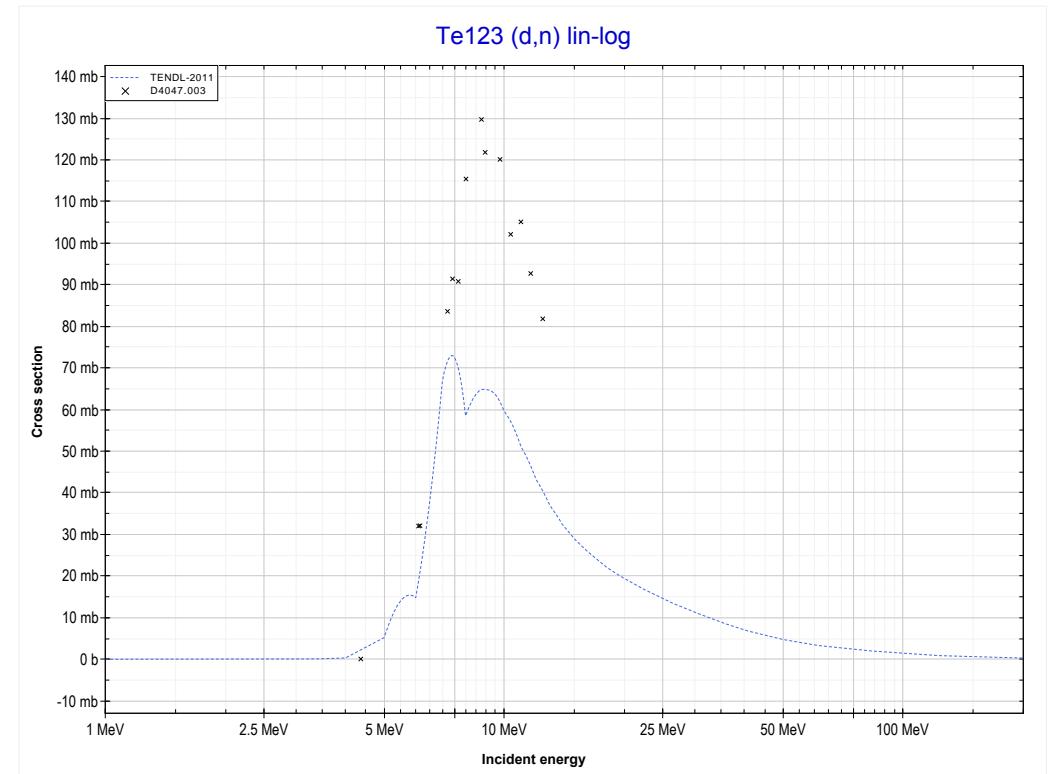
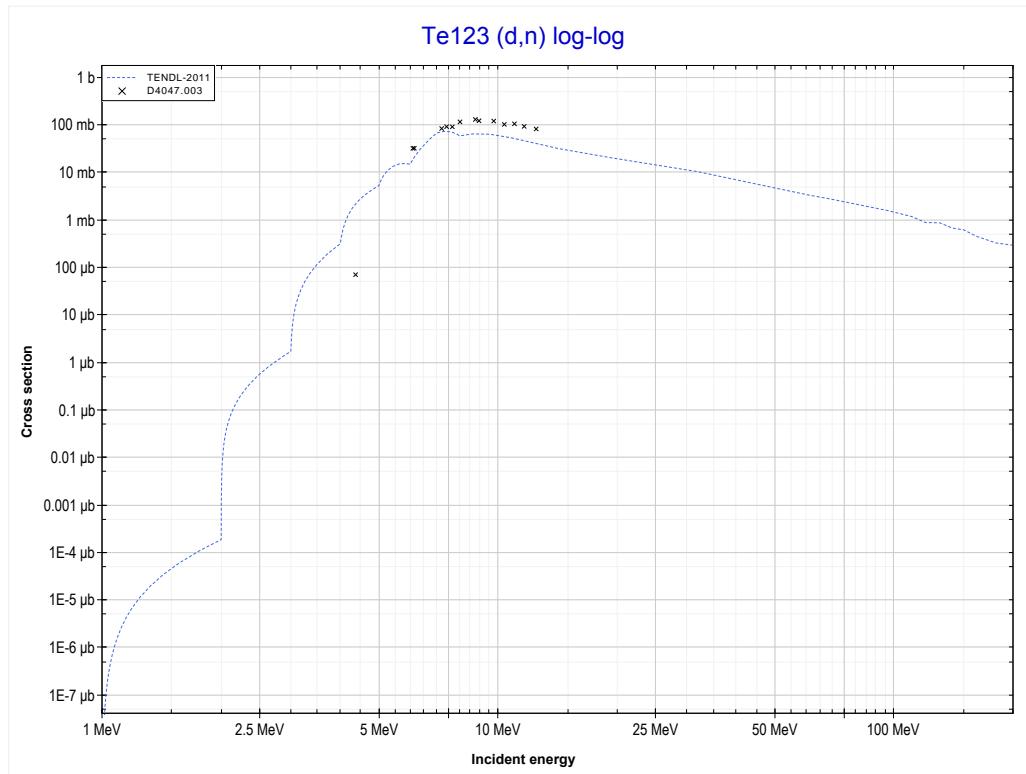
Reaction	Q-Value
Te122(d,p)Te123	4704.65 keV

<< 48-Cd-114	52-Te-122 MT107 (d,α) or MT5 (Sb120 production)	>> 74-W-184
<< MT103 (d,p)		MT4 (d,n) >>



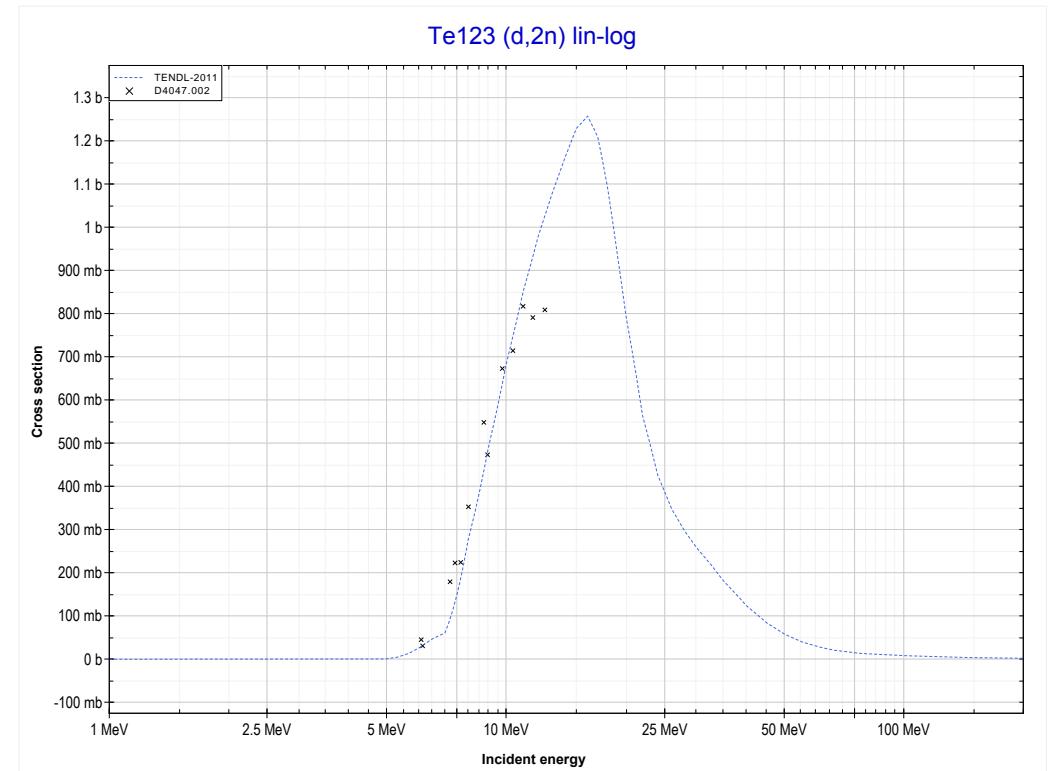
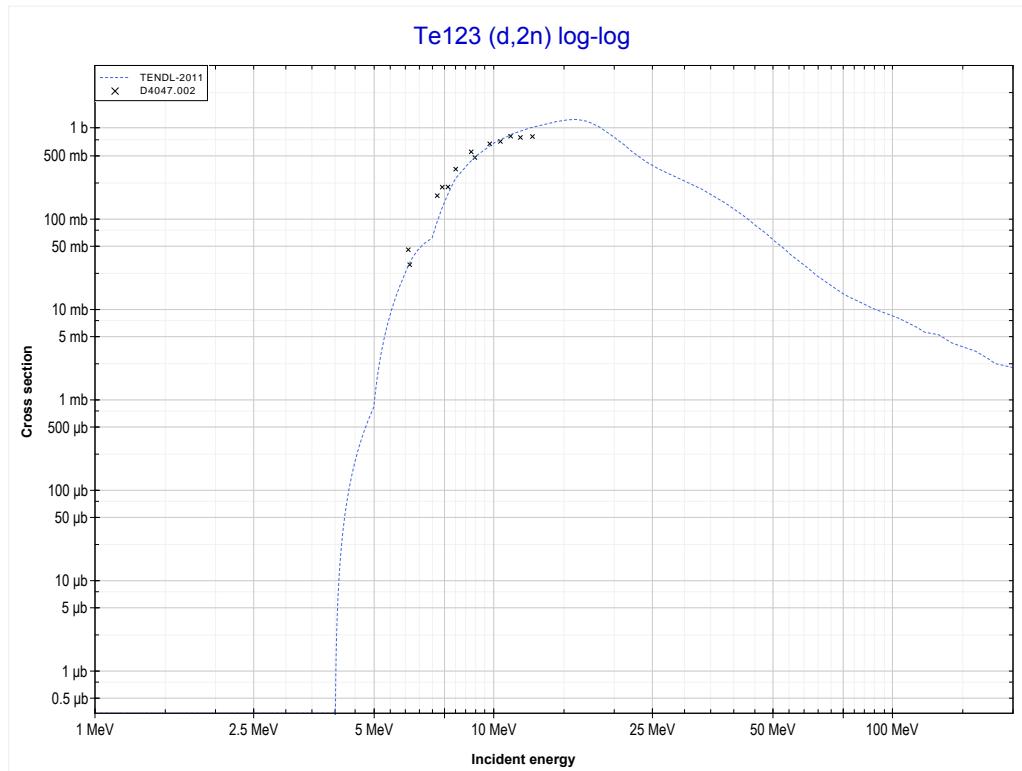
Reaction	Q-Value
Te122(d,α)Sb120	8820.81 keV
Te122($d,p+t$)Sb120	-10993.05 keV
Te122($d,n+He3$)Sb120	-11756.81 keV
Te122($d,2d$)Sb120	-15025.72 keV
Te122($d,n+p+d$)Sb120	-17250.29 keV
Te122($d,2n+2p$)Sb120	-19474.85 keV

<< 52-Te-122	52-Te-123 MT4 (d,n) or MT5 (I124 production)	52-Te-124 >>
<< MT107 (d, α)		MT16 (d,2n) >>



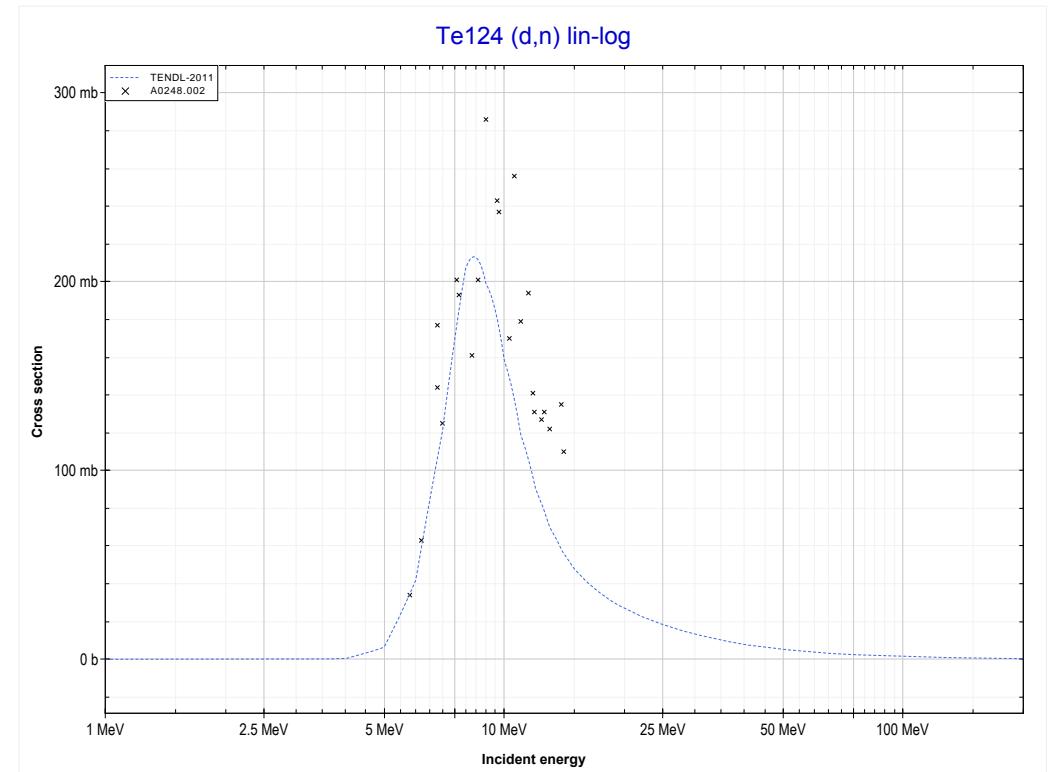
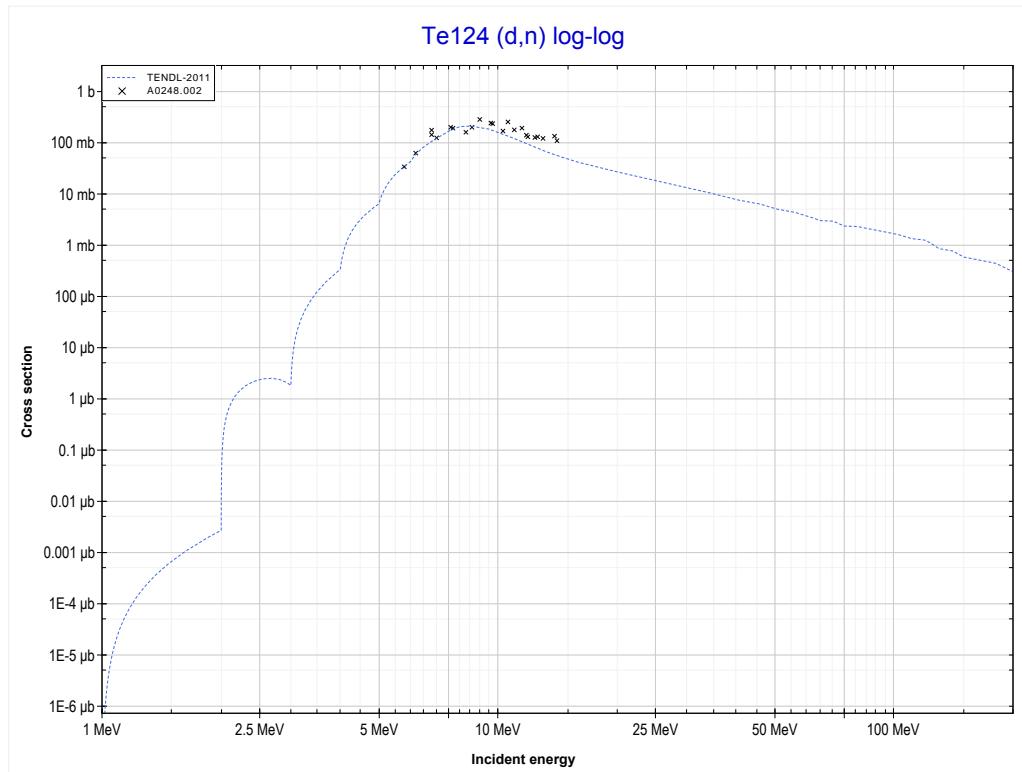
Reaction	Q-Value
Te123(d,n)I124	3257.50 keV

<< 52-Te-122	52-Te-123 MT16 (d,2n) or MT5 (I123 production)	52-Te-124 >>
<< MT4 (d,n)		MT4 (d,n) >>



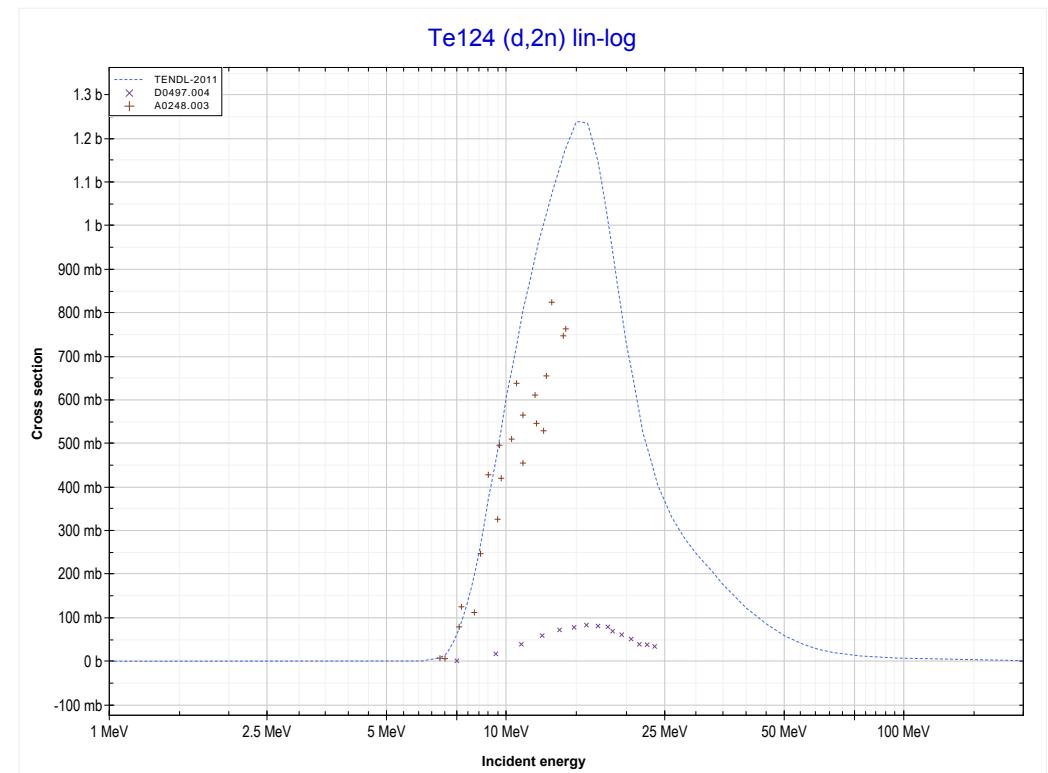
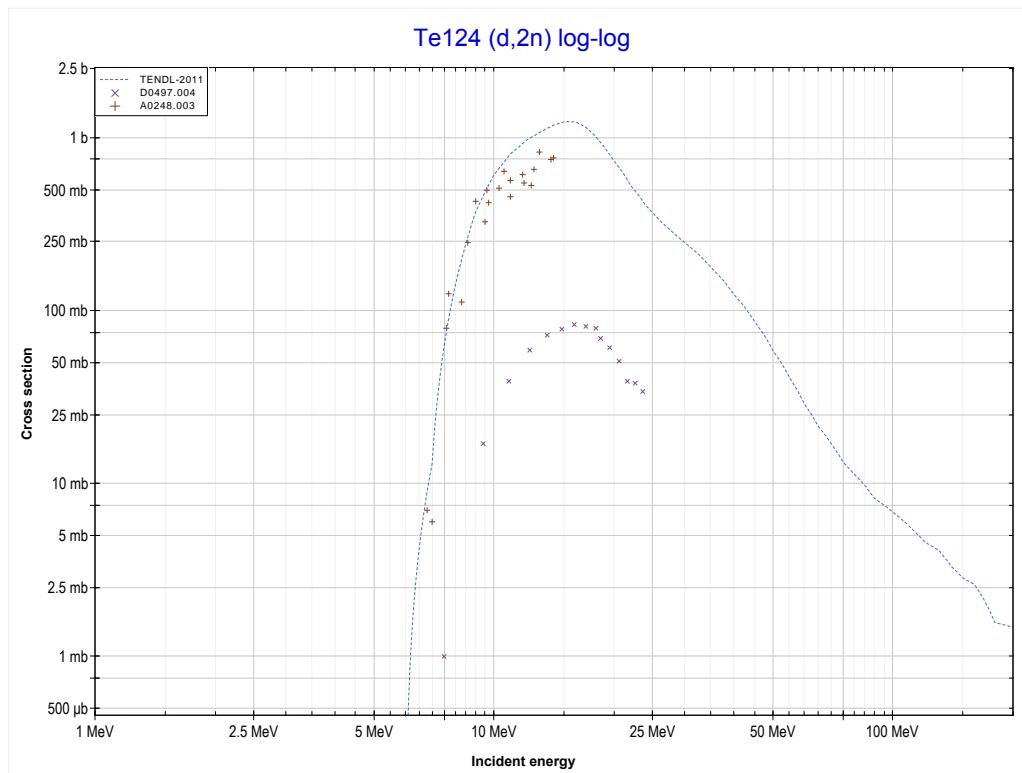
Reaction	Q-Value
Te123(d,2n)I123	-4235.81 keV

<< 52-Te-123	52-Te-124 MT4 (d,n) or MT5 (I125 production)	>> 68-Er-167
<< MT16 (d,2n)		MT16 (d,2n) >>



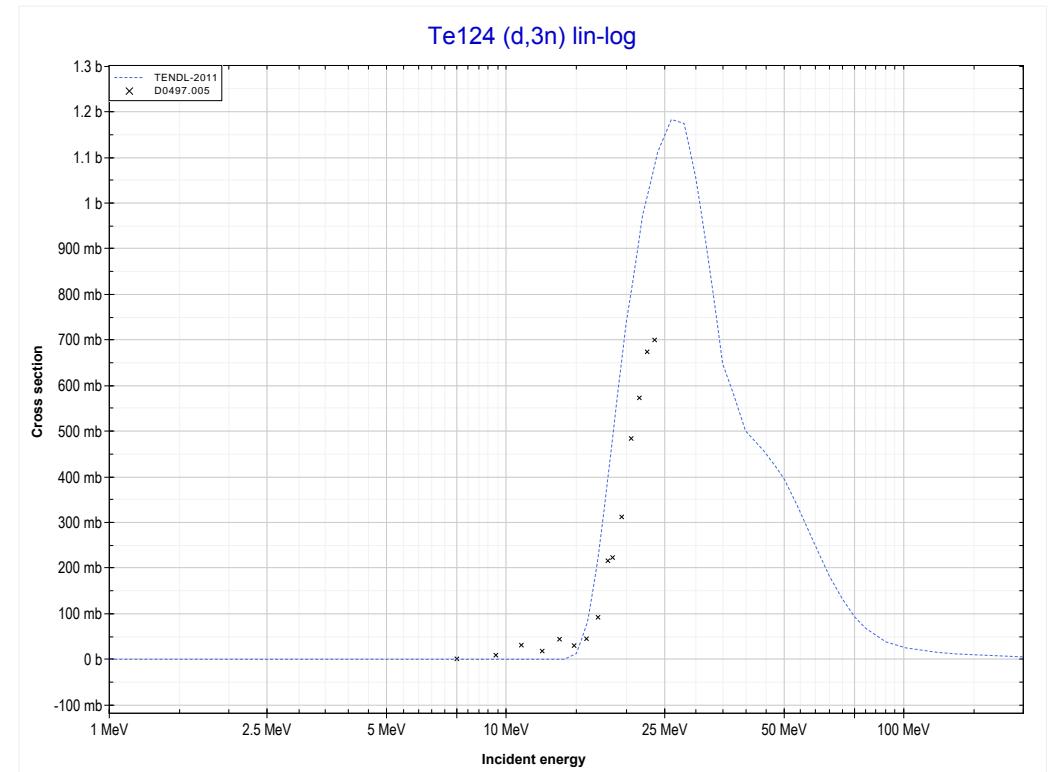
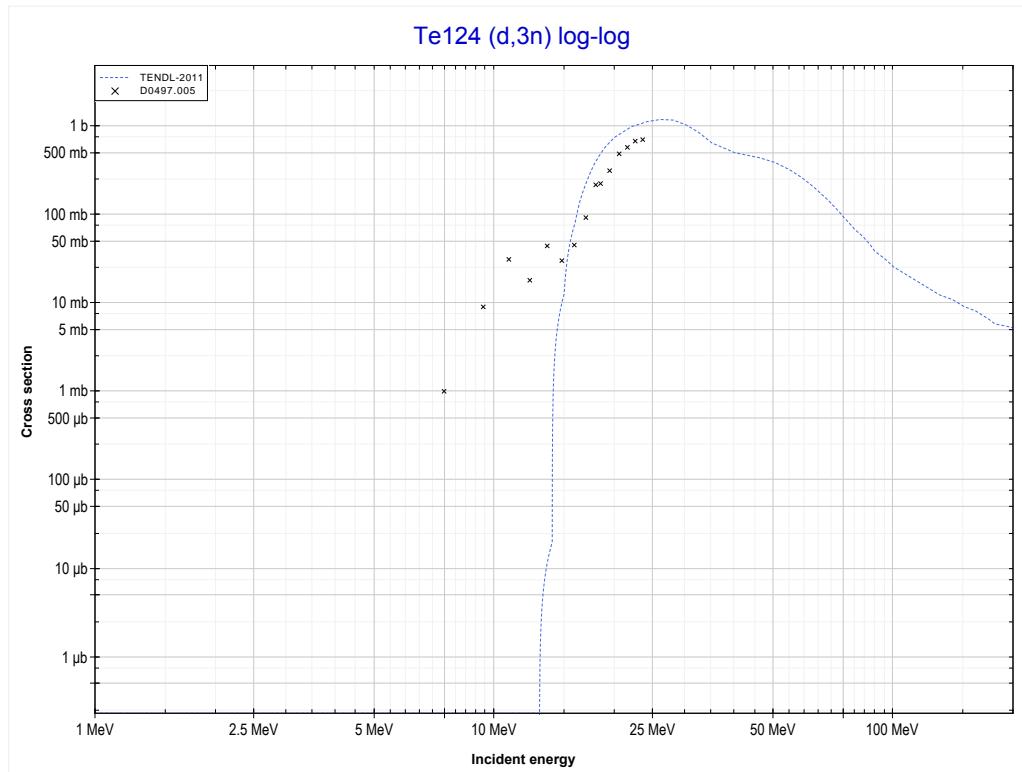
Reaction	Q-Value
Te124(d,n)I125	3376.30 keV

<< 52-Te-123	52-Te-124 MT16 (d,2n) or MT5 (I124 production)	52-Te-126 >>
<< MT4 (d,n)		MT17 (d,3n) >>



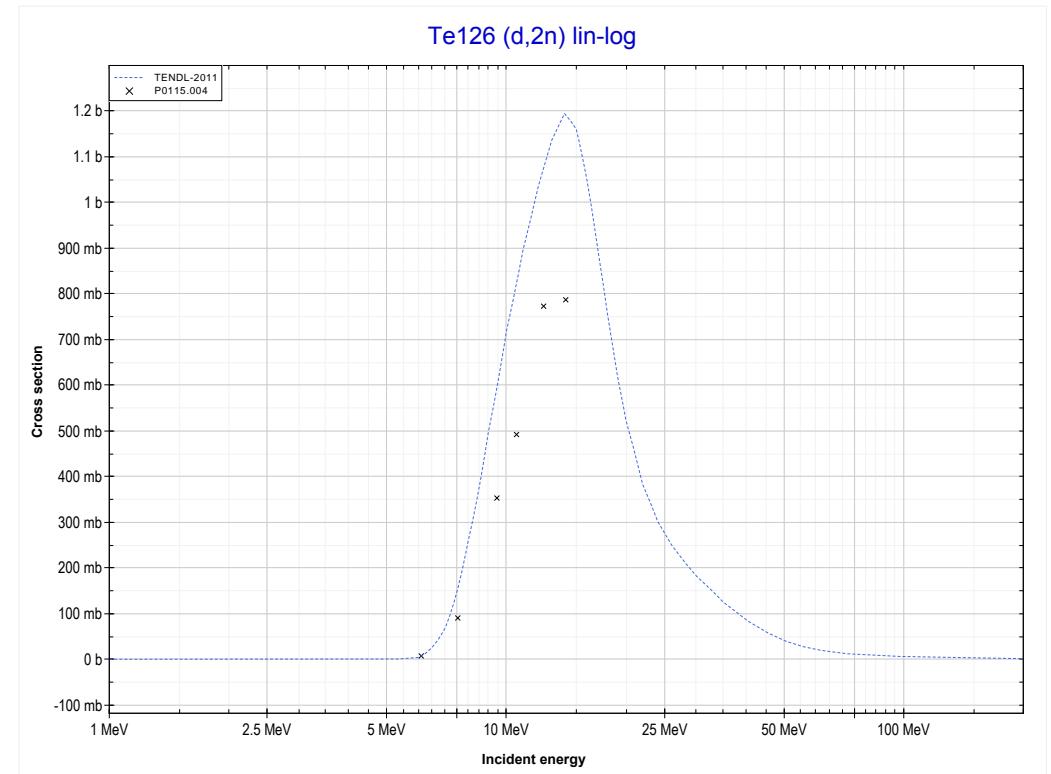
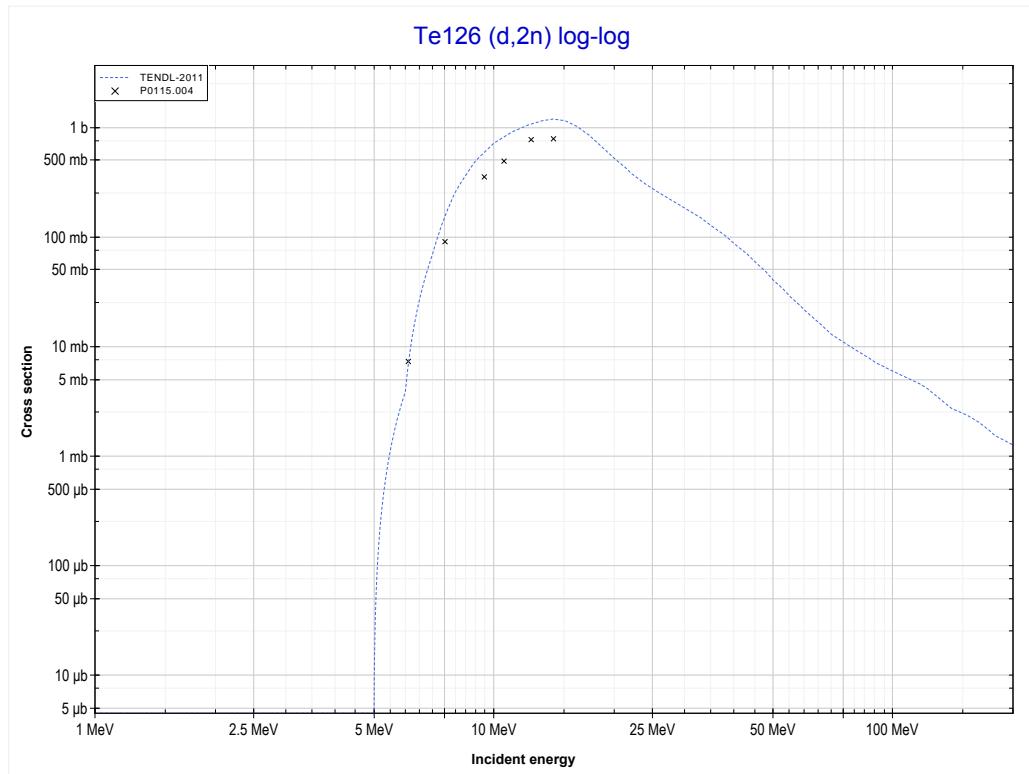
Reaction	Q-Value
$\text{Te}^{124}(\text{d},\text{2n})\text{I}^{124}$	-6166.41 keV

<< 52-Te-122	52-Te-124 MT17 (d,3n) or MT5 (I123 production)	59-Pr-141 >>
<< MT16 (d,2n)		MT16 (d,2n) >>



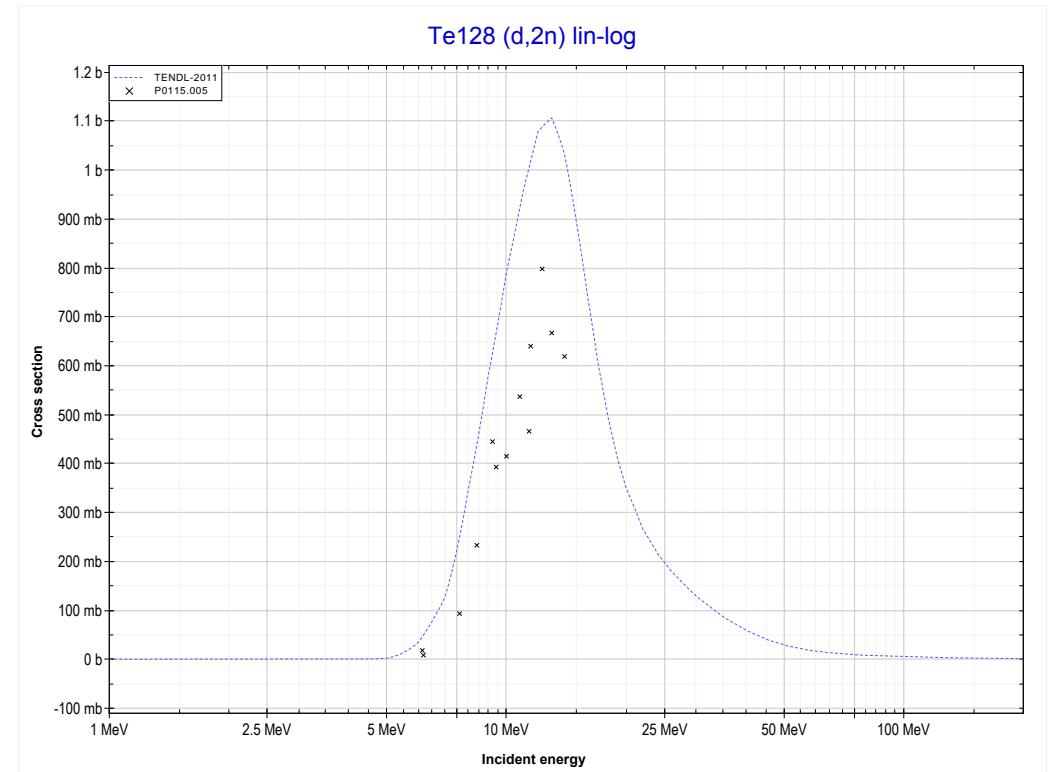
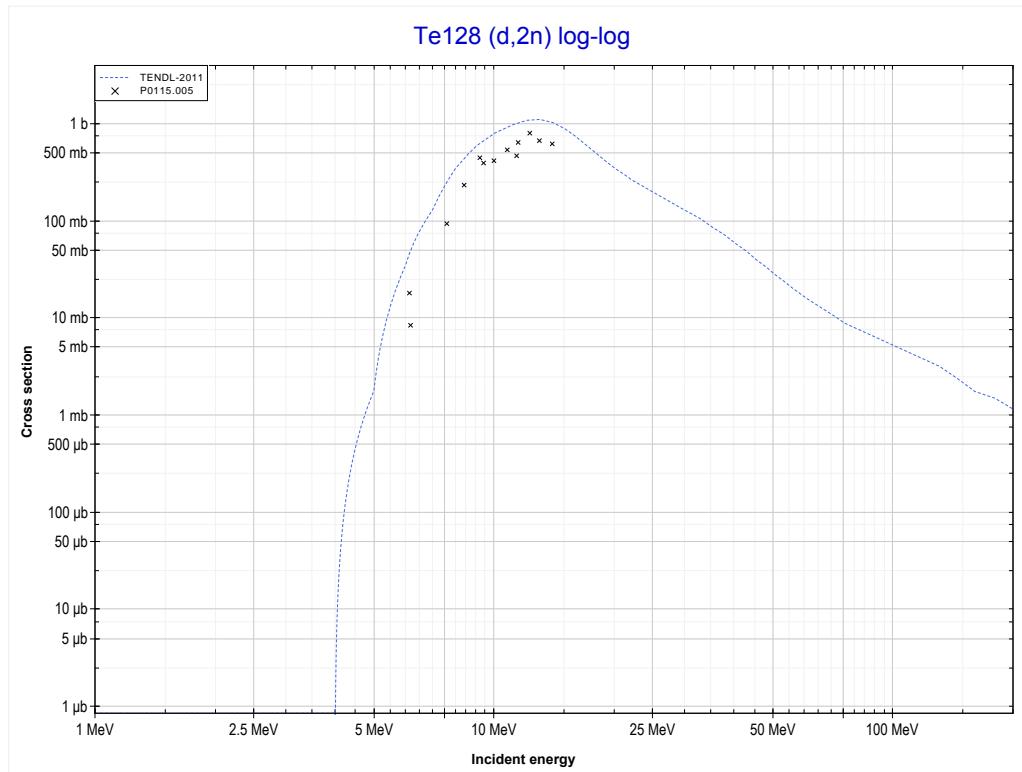
Reaction	Q-Value
Te124(d,3n)I123	-13659.73 keV

<< 52-Te-124	52-Te-126 MT16 (d,2n) or MT5 (I126 production)	52-Te-128 >>
<< MT17 (d,3n)		MT16 (d,2n) >>



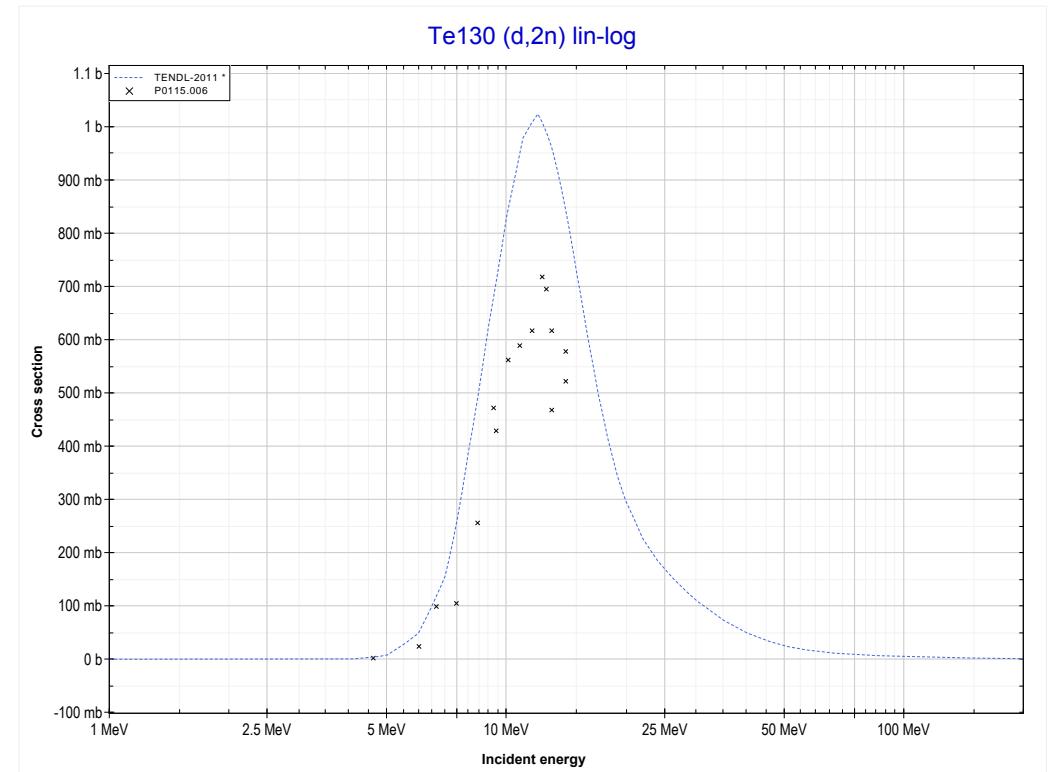
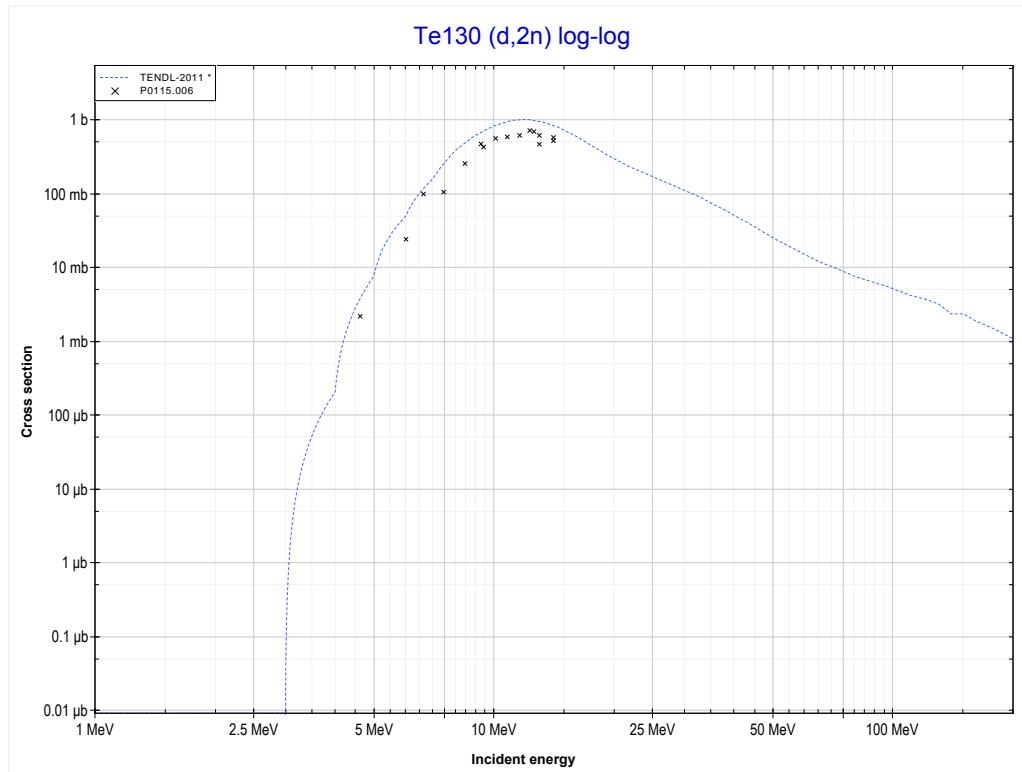
Reaction	Q-Value
Te126(d,2n)I126	-5160.51 keV

<< 52-Te-126	52-Te-128	52-Te-130 >>
<< MT16 (d,2n)	MT16 (d,2n) or MT5 (I128 production)	MT16 (d,2n) >>



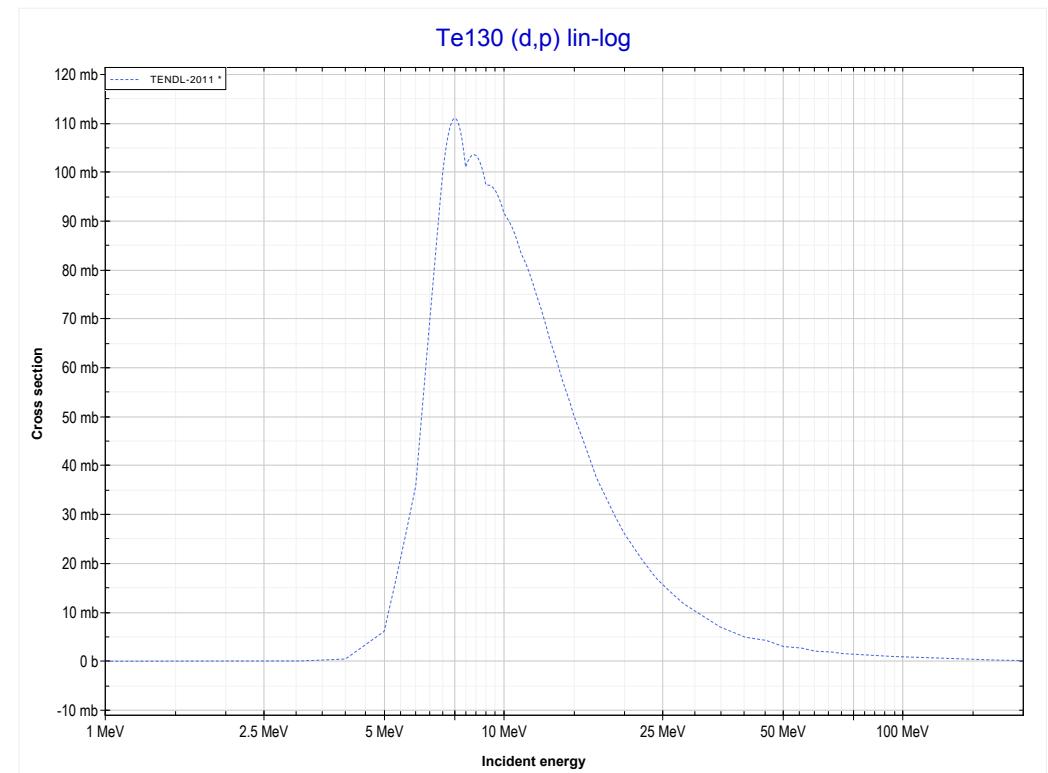
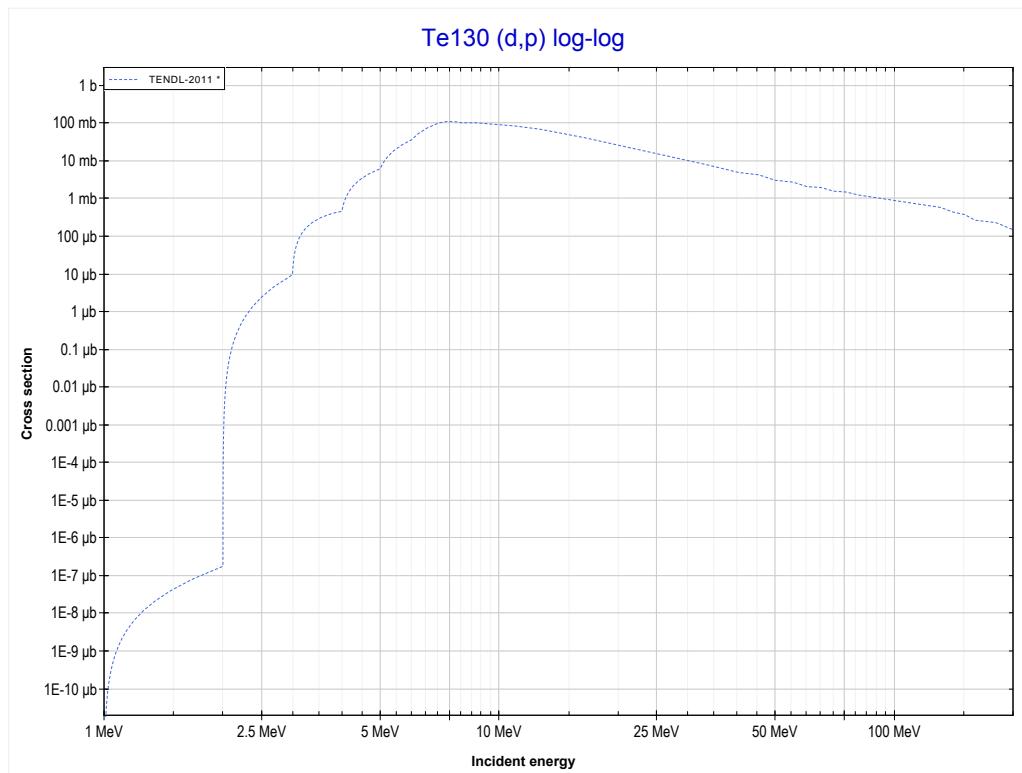
Reaction	Q-Value
Te128(d,2n)I128	-4261.01 keV

<< 52-Te-128	52-Te-130 MT16 (d,2n) or MT5 (I130 production)	53-I-127 >>
<< MT16 (d,2n)		MT103 (d,p) >>



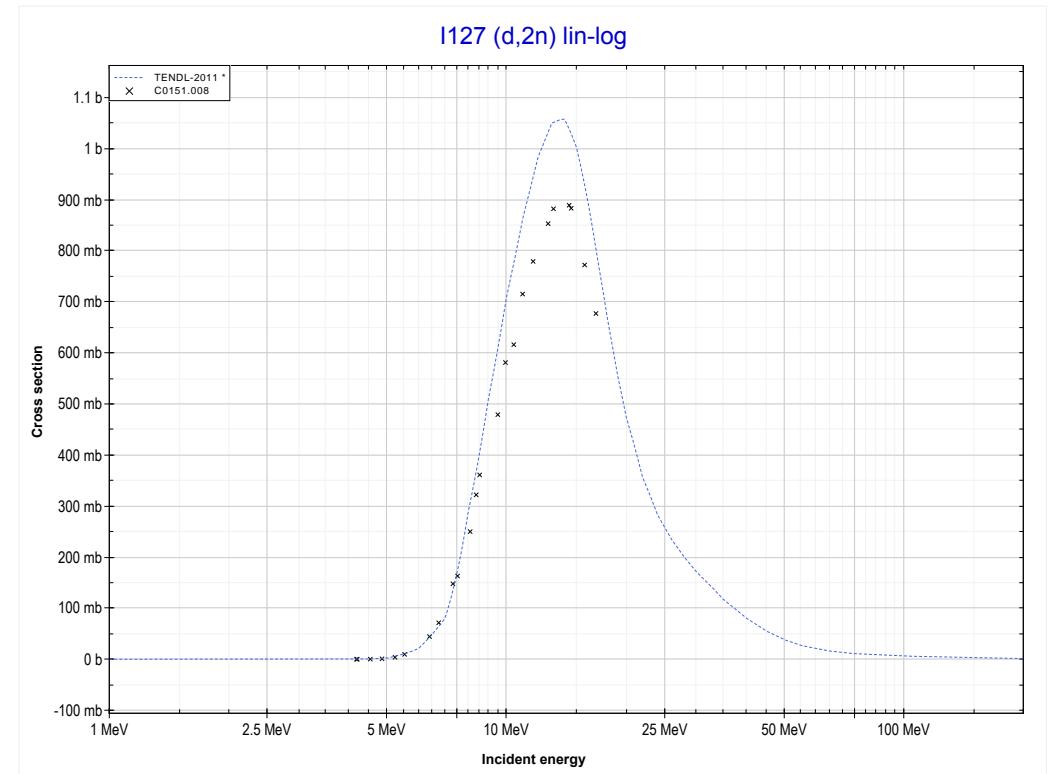
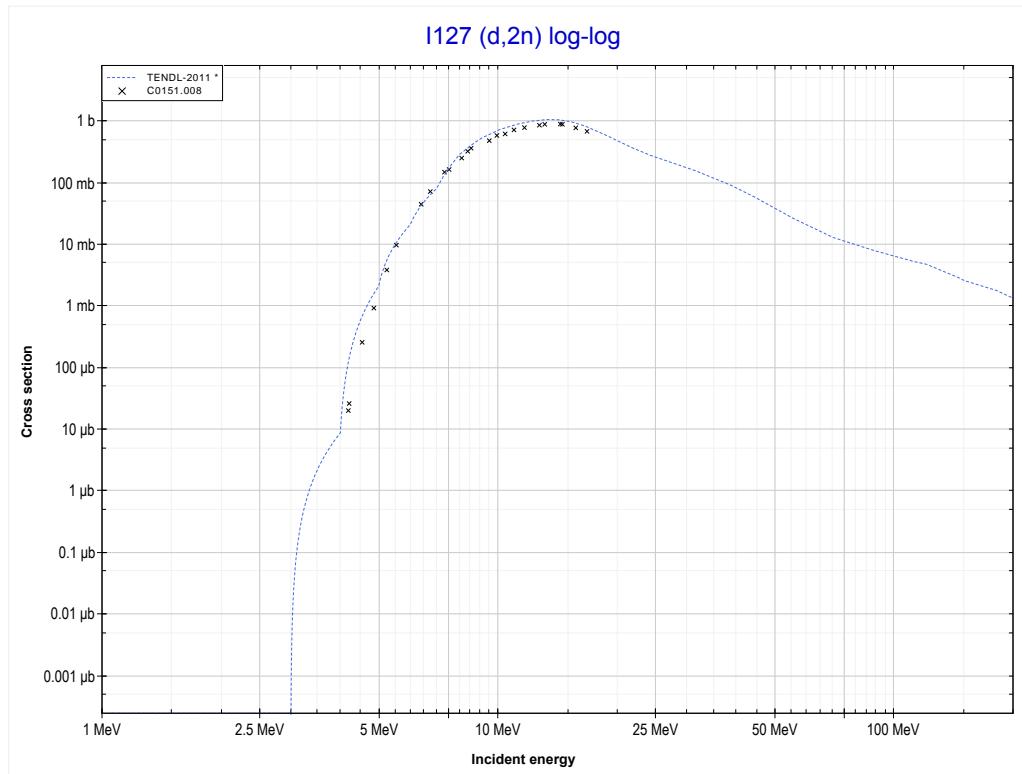
Reaction	Q-Value
$\text{Te}^{130}(\text{d},\text{2n})\text{I}^{130}$	-3426.31 keV

<< 52-Te-122	52-Te-130 MT103 (d,p) or MT5 (Te131 production)	>> 55-Cs-133
<< MT16 (d,2n)		MT16 (d,2n) >>



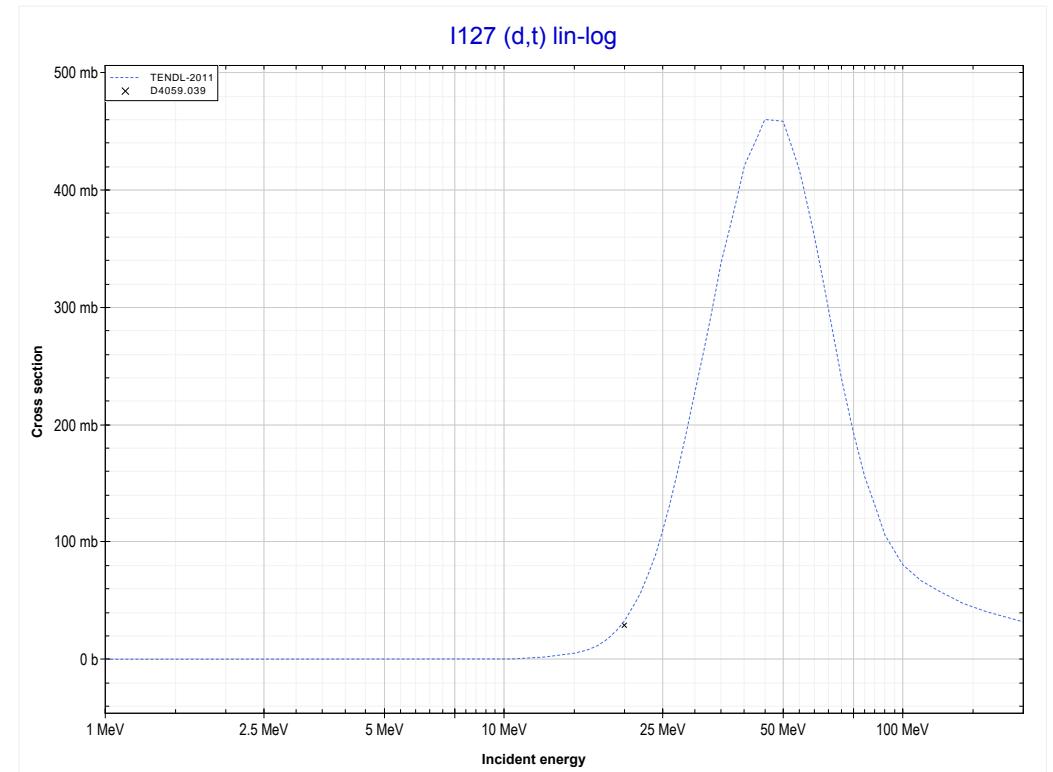
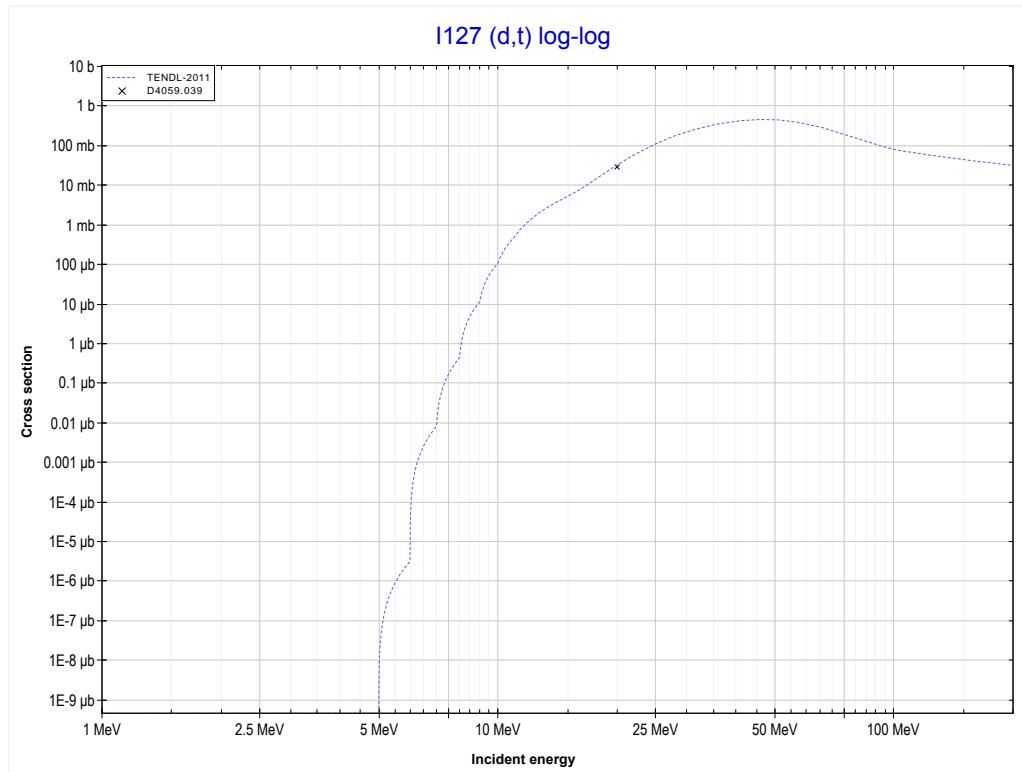
Reaction	Q-Value
Te130(d,p)Te131	3704.85 keV

<< 52-Te-130	53-I-127	55-Cs-133 >>
<< MT103 (d,p)	MT16 (d,2n) or MT5 (Xe127 production)	MT105 (d,t) >>



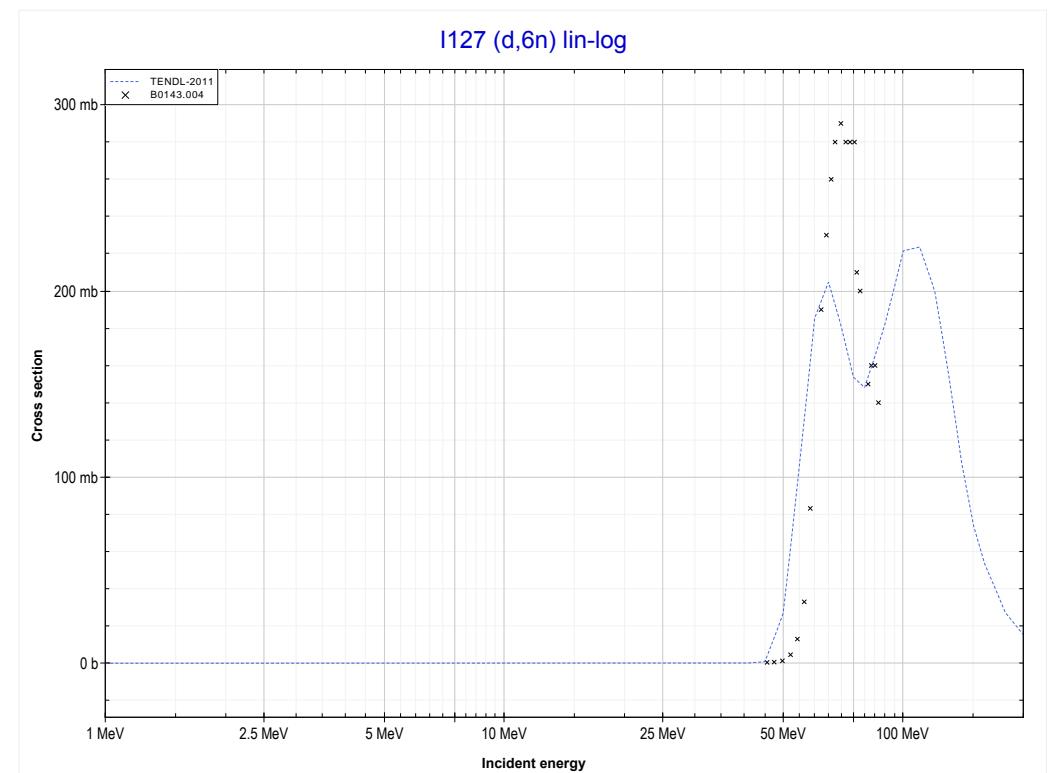
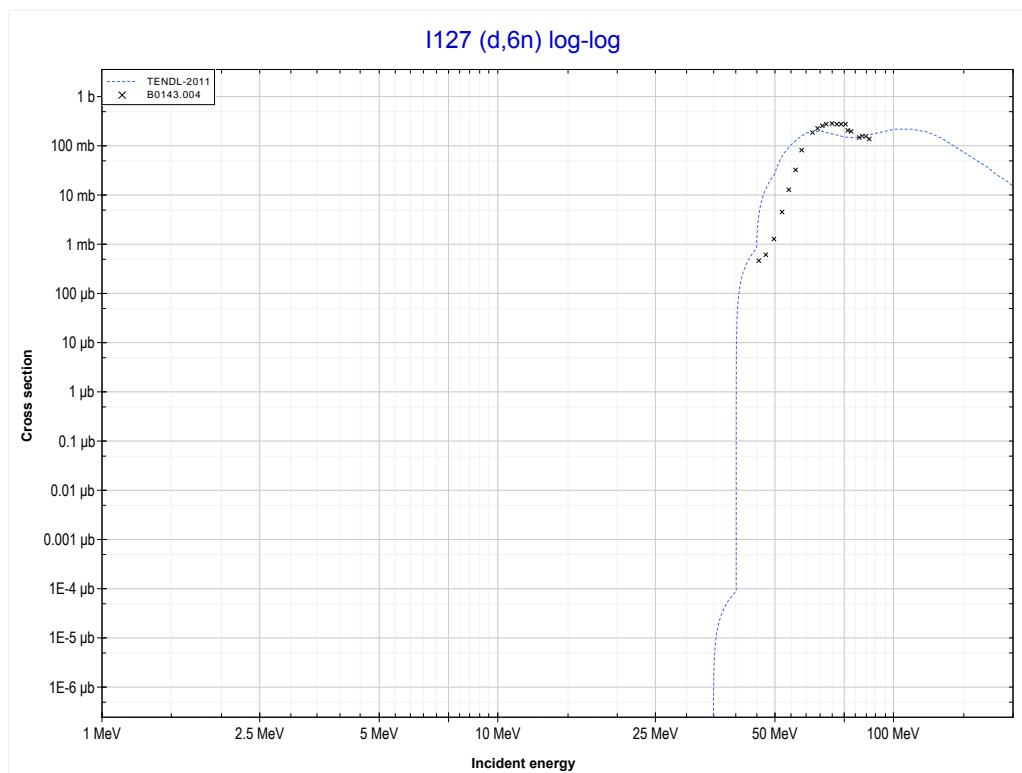
Reaction	Q-Value
$\text{I}^{127}(\text{d},\text{2n})\text{Xe}^{127}$	-3668.91 keV

<< 47-Ag-107	53-I-127 MT105 (d,t) or MT5 (I126 production)	79-Au-197 >>
<< MT16 (d,2n)		MT153 (d,6n) >>



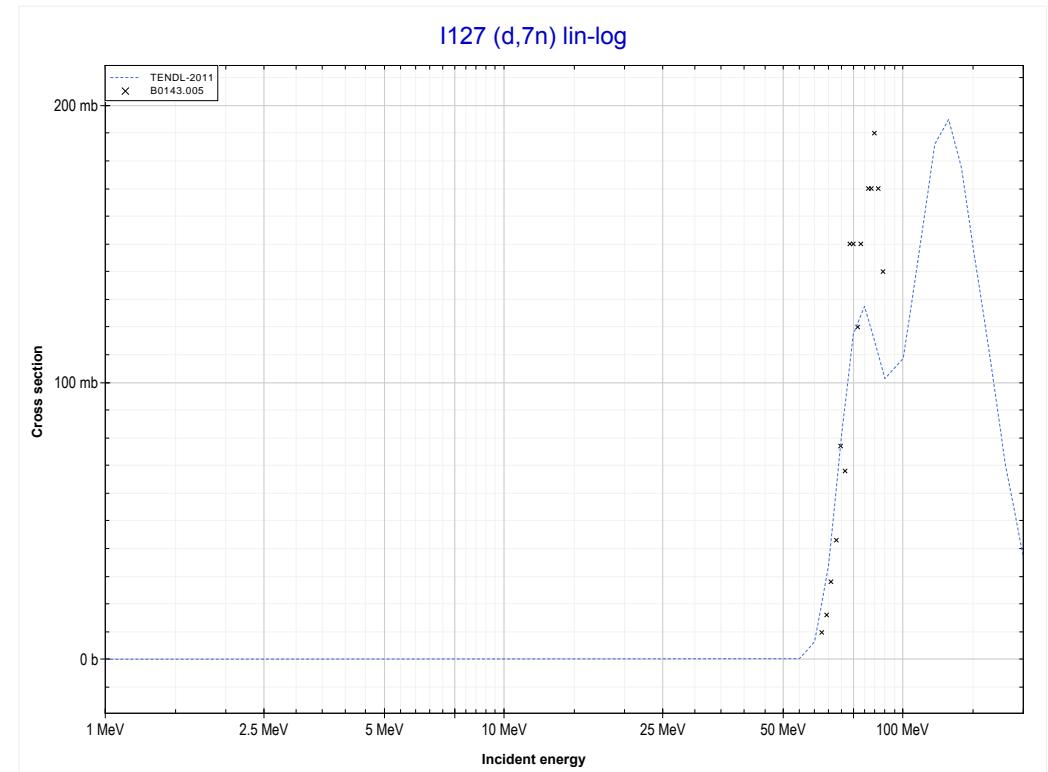
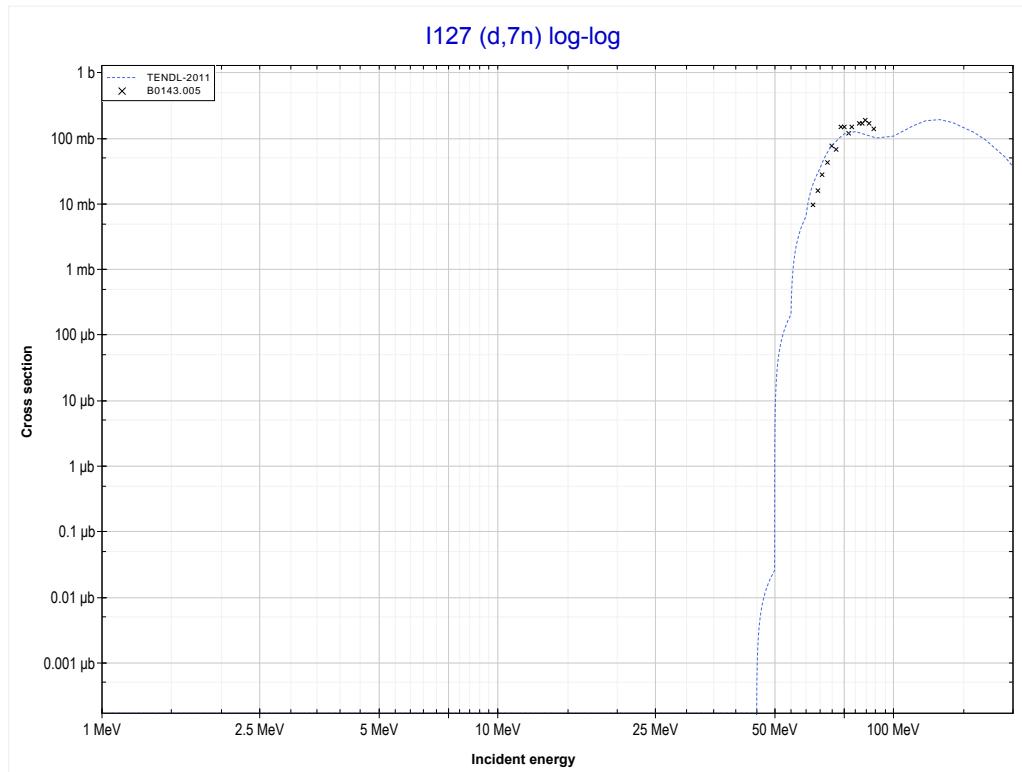
Reaction	Q-Value
I127(d,t)I126	-2886.08 keV
I127(d,n+d)I126	-9143.32 keV
I127(d,2n+p)I126	-11367.88 keV

<< 50-Sn-124	53-I-127 MT153 (d,6n) or MT5 (Xe123 production)	73-Ta-181 >>
<< MT105 (d,t)		MT160 (d,7n) >>



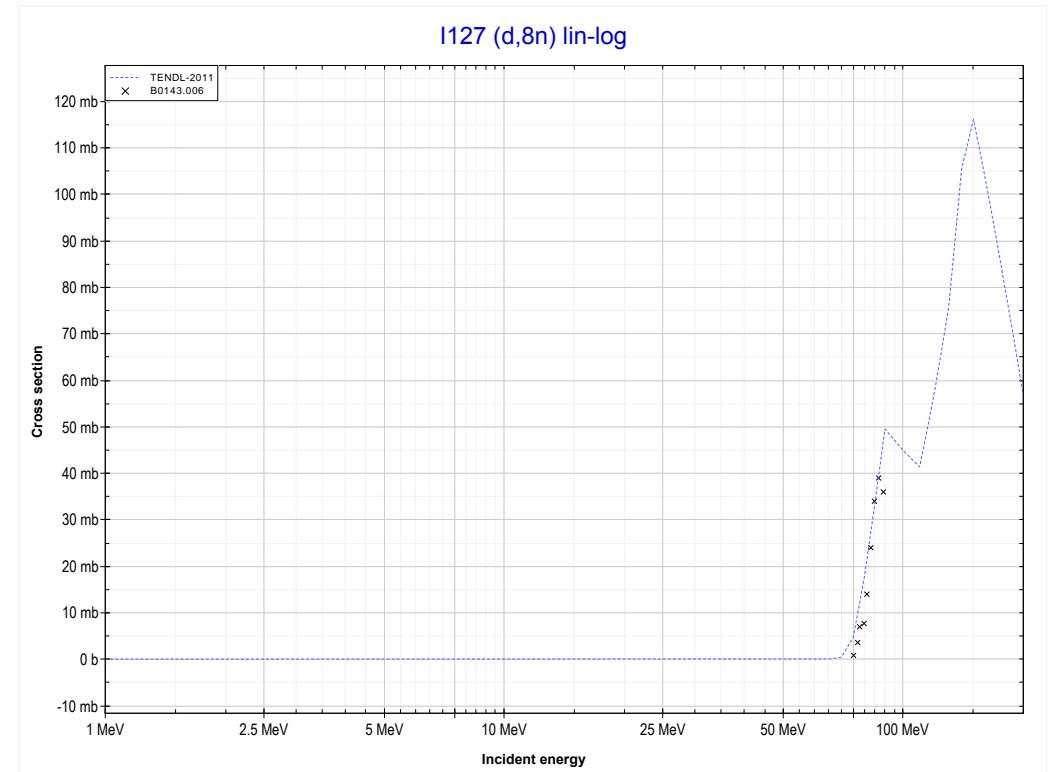
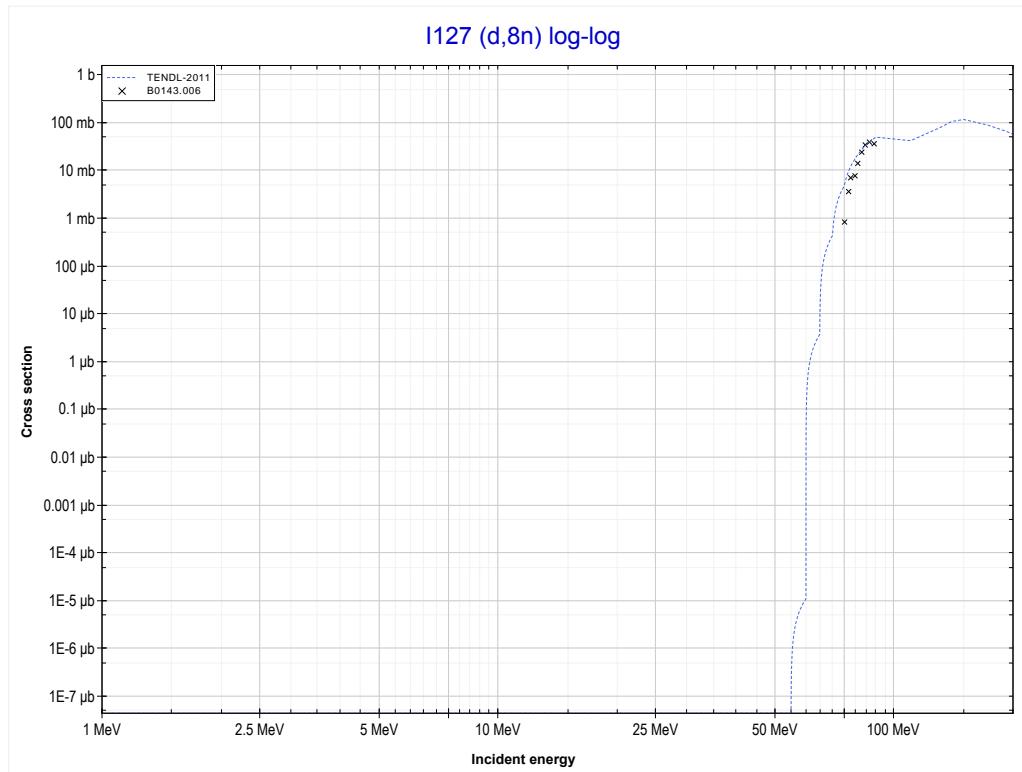
Reaction	Q-Value
I127(d,6n)Xe123	-39026.18 keV

<< 50-Sn-120	53-I-127 MT160 (d,7n) or MT5 (Xe122 production)	73-Ta-181 >>
<< MT153 (d,6n)		MT161 (d,8n) >>



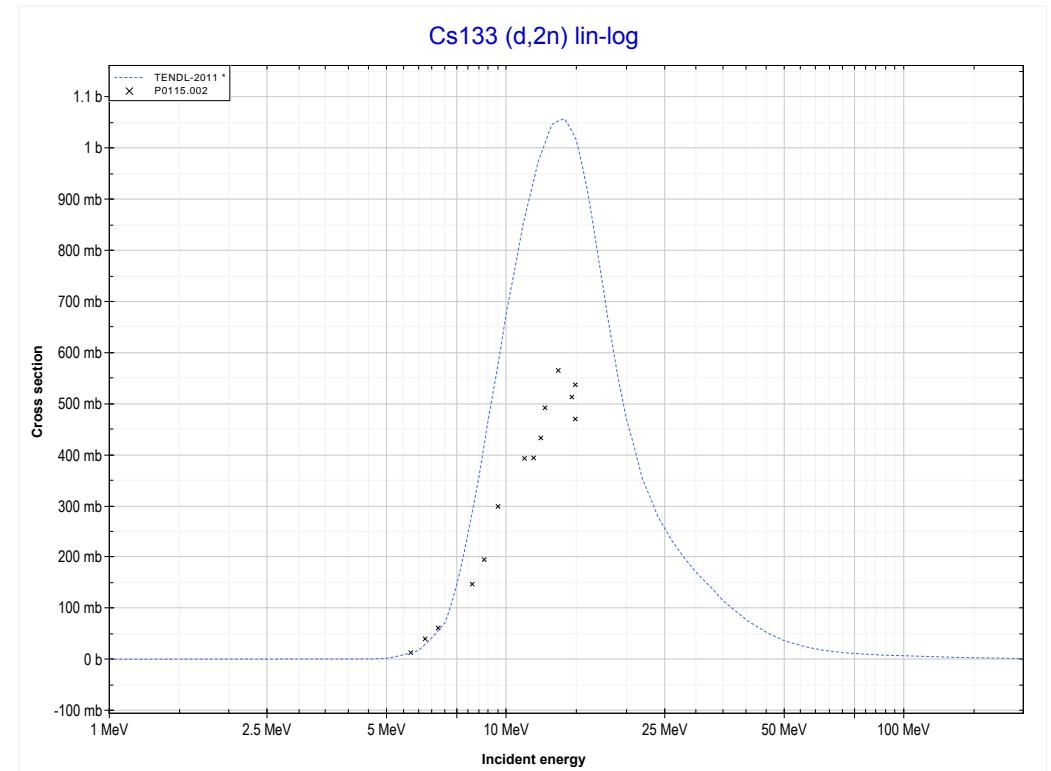
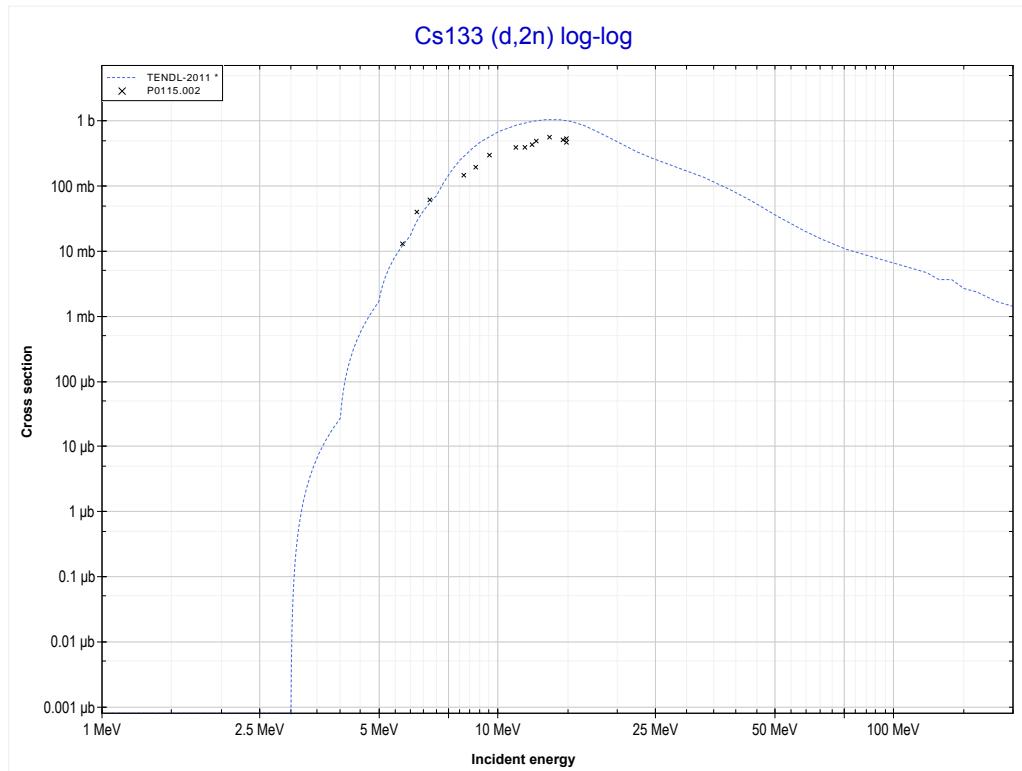
Reaction	Q-Value
I127(d,7n)Xe122	-46991.50 keV

<< 50-Sn-124	53-I-127 MT161 (d,8n) or MT5 (Xe121 production)	79-Au-197 >>
<< MT160 (d,7n)		MT16 (d,2n) >>



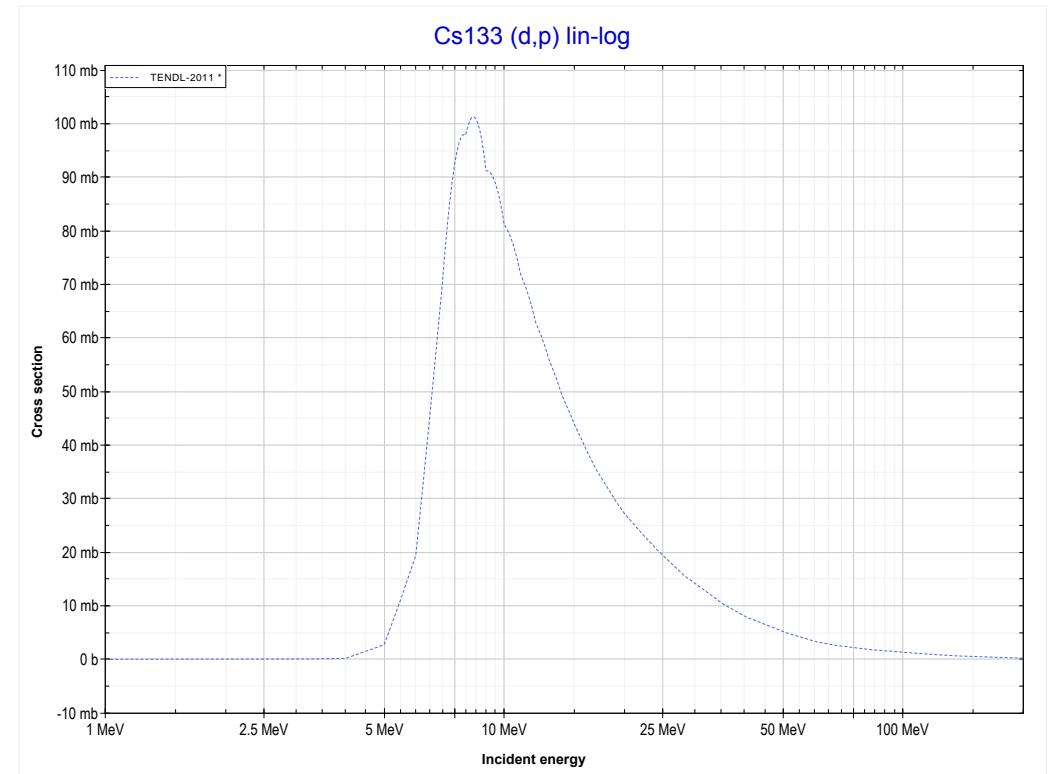
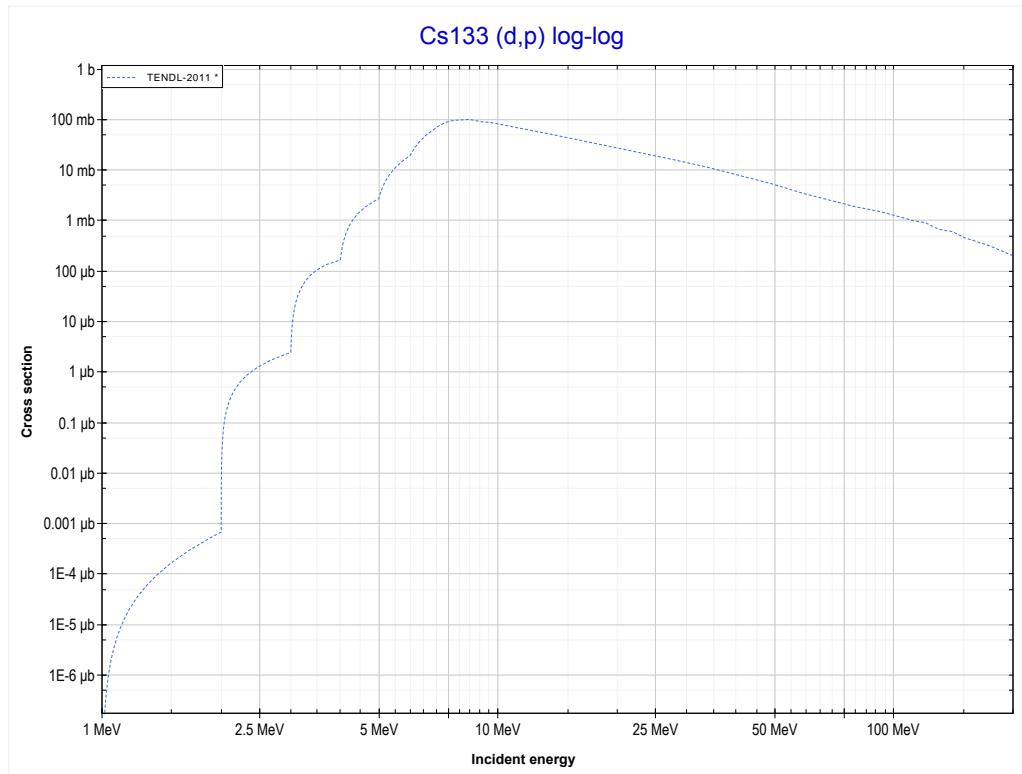
Reaction	Q-Value
I127(d,8n)Xe121	-57944.82 keV

<< 53-I-127	55-Cs-133 MT16 (d,2n) or MT5 (Ba133 production)	>> 59-Pr-141
<< MT161 (d,8n)		MT103 (d,p) >>



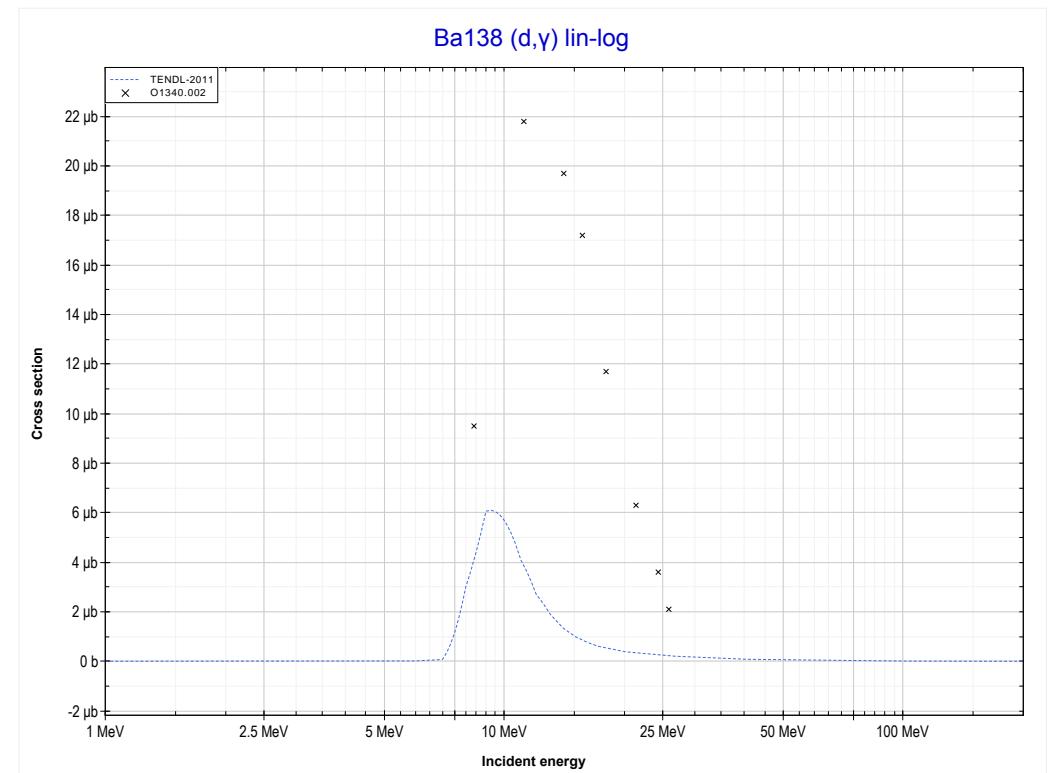
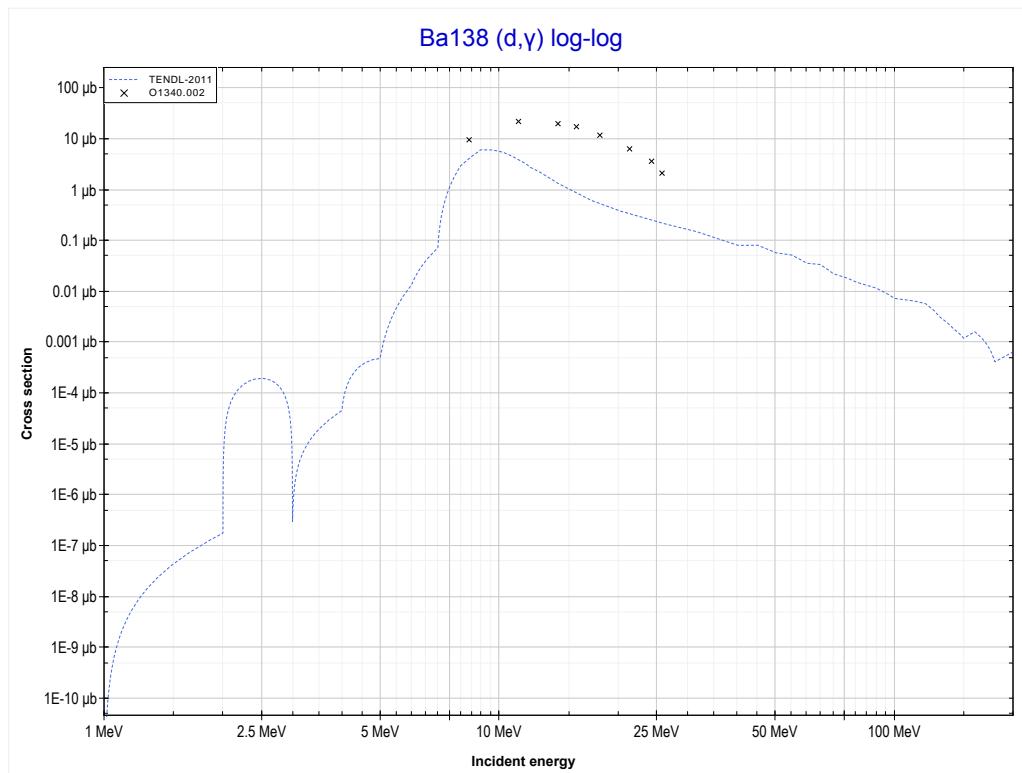
Reaction	Q-Value
Cs133(d,2n)Ba133	-3524.37 keV

<< 52-Te-130	55-Cs-133 MT103 (d,p) or MT5 (Cs134 production)	>> 56-Ba-138
<< MT16 (d,2n)		MT102 (d,y) >>



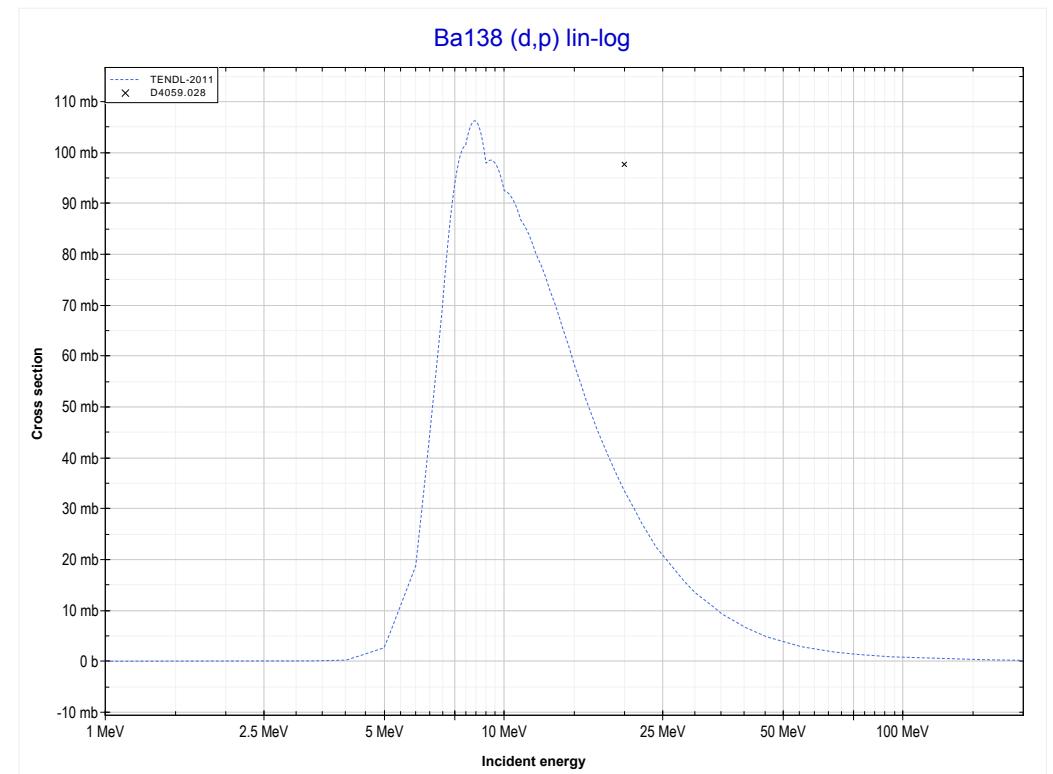
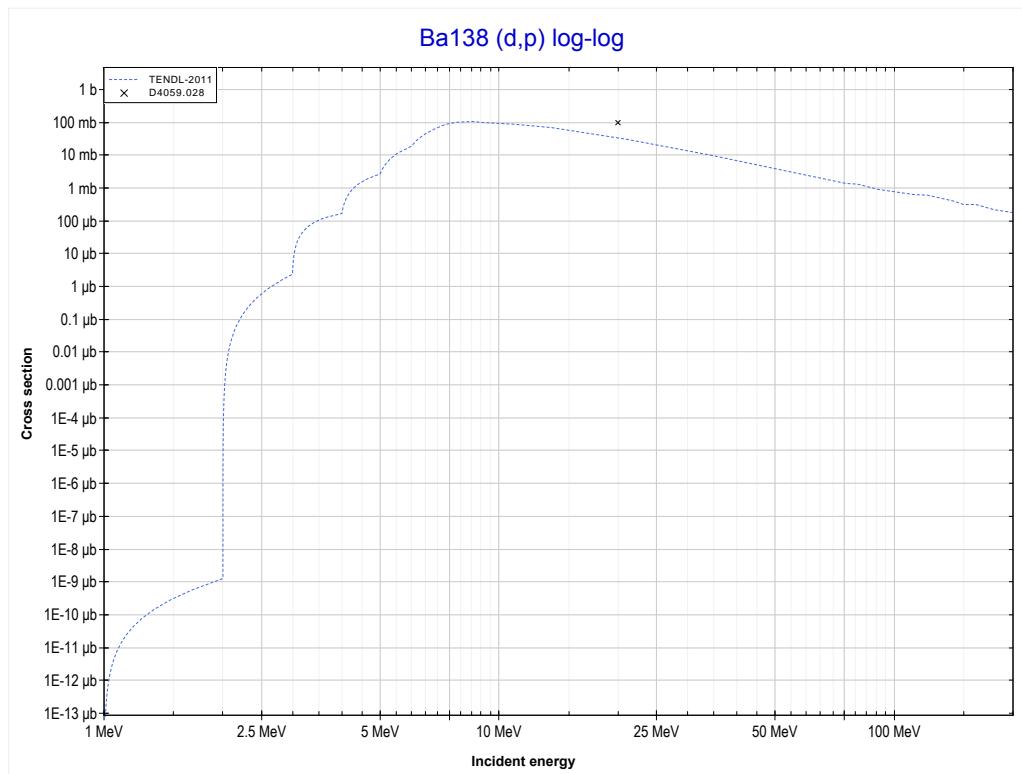
Reaction	Q-Value
Cs133(d,p)Cs134	4666.97 keV

<< 28-Ni-58	56-Ba-138 MT102 (d, γ) or MT5 (La140 production)	57-La-139 >>
<< MT103 (d,p)		MT103 (d,p) >>



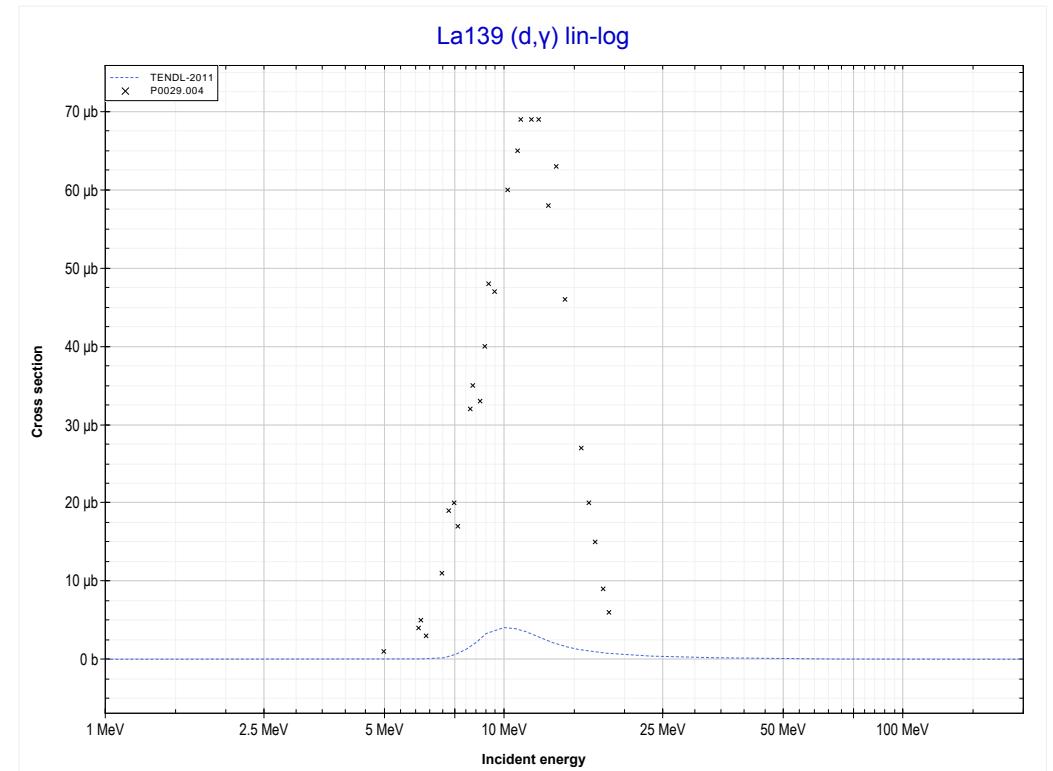
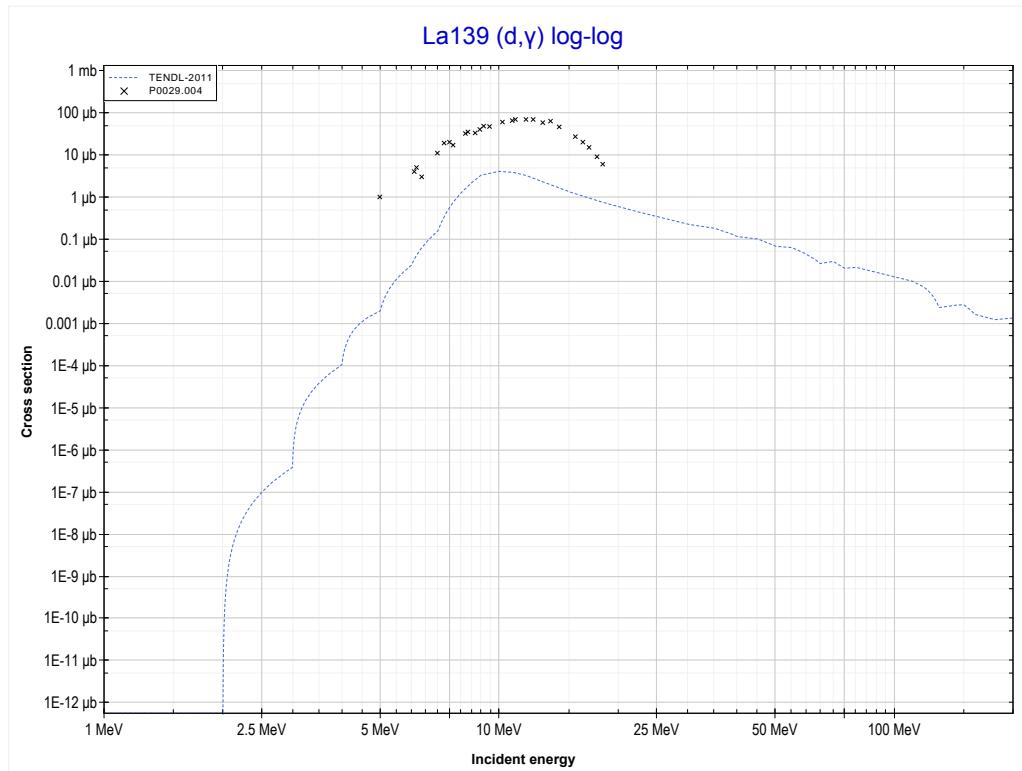
Reaction	Q-Value
Ba138(d, γ)La140	9195.12 keV

<< 55-Cs-133	56-Ba-138 MT103 (d,p) or MT5 (Ba139 production)	57-La-139 >>
<< MT102 (d, γ)		MT102 (d, γ) >>



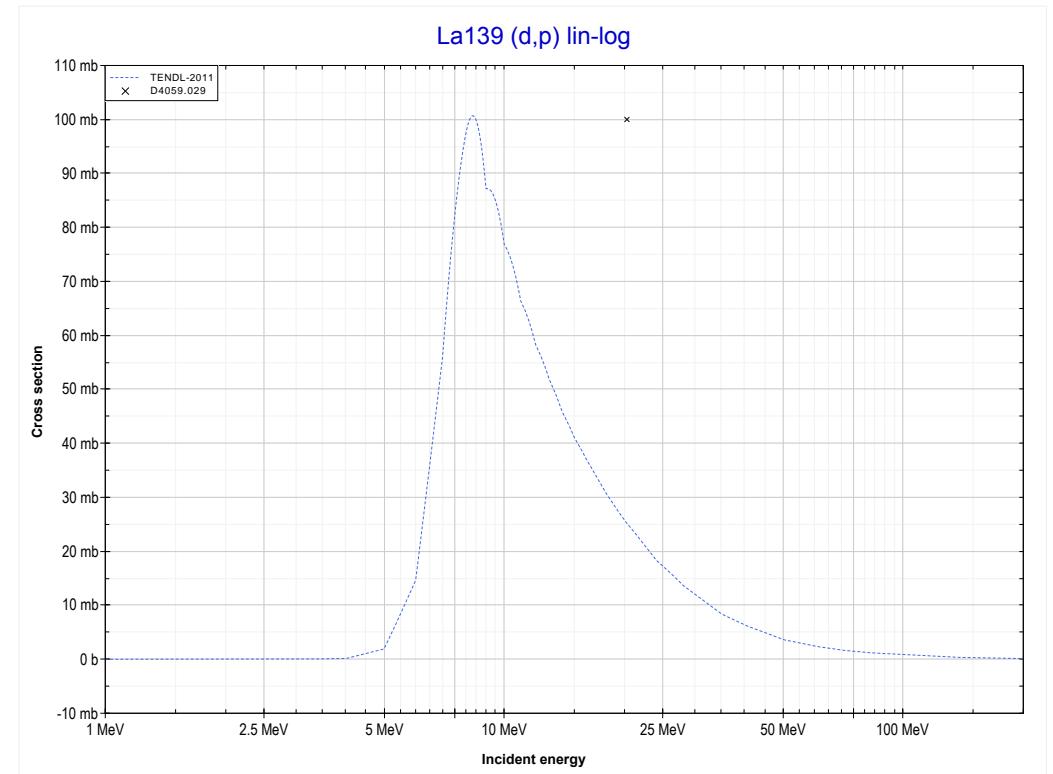
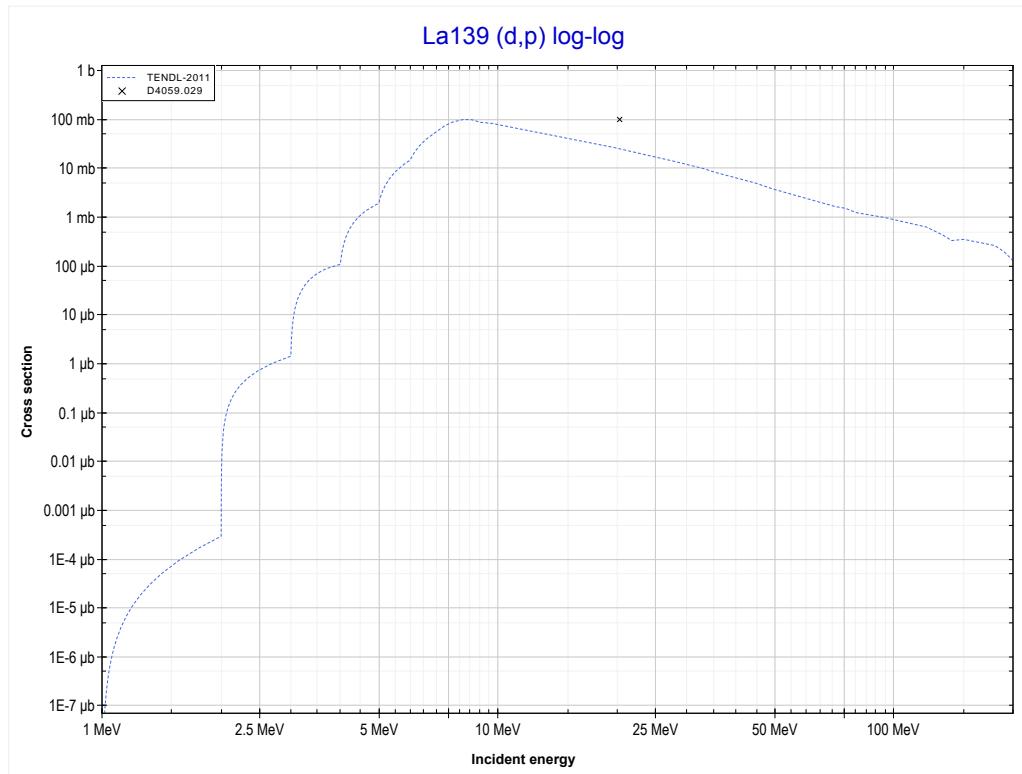
Reaction	Q-Value
Ba138(d,p)Ba139	2498.85 keV

<< 56-Ba-138	57-La-139 MT102 (d,y) or MT5 (Ce141 production)	>> 62-Sm-154
<< MT103 (d,p)		MT103 (d,p) >>



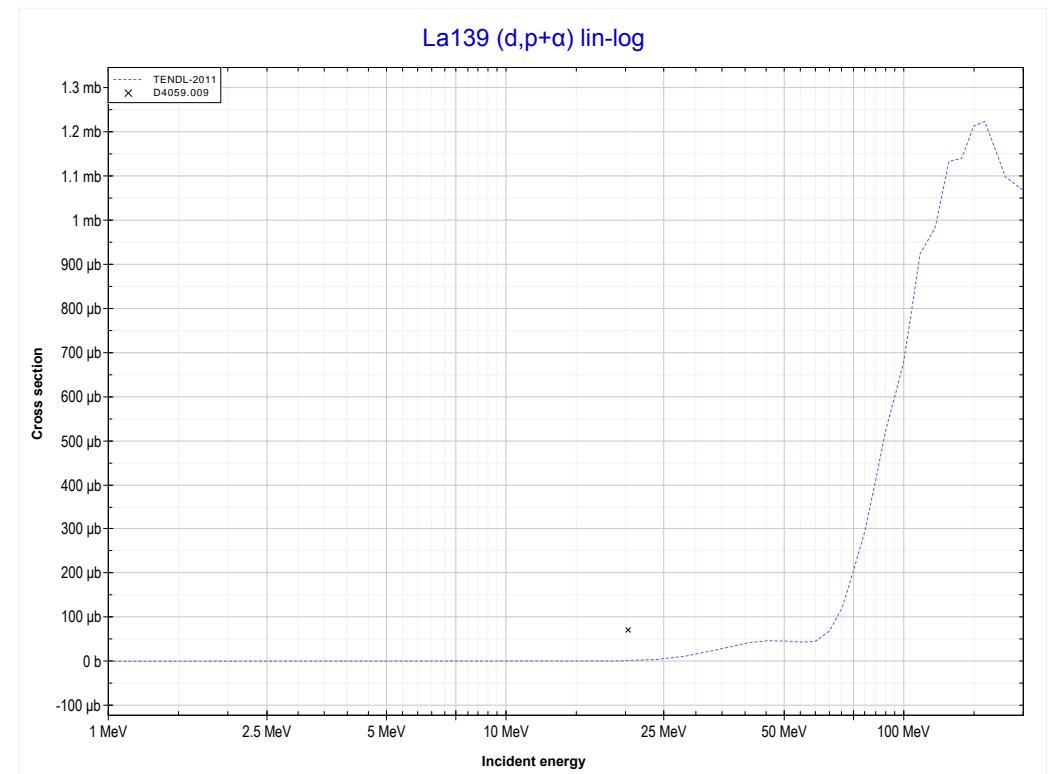
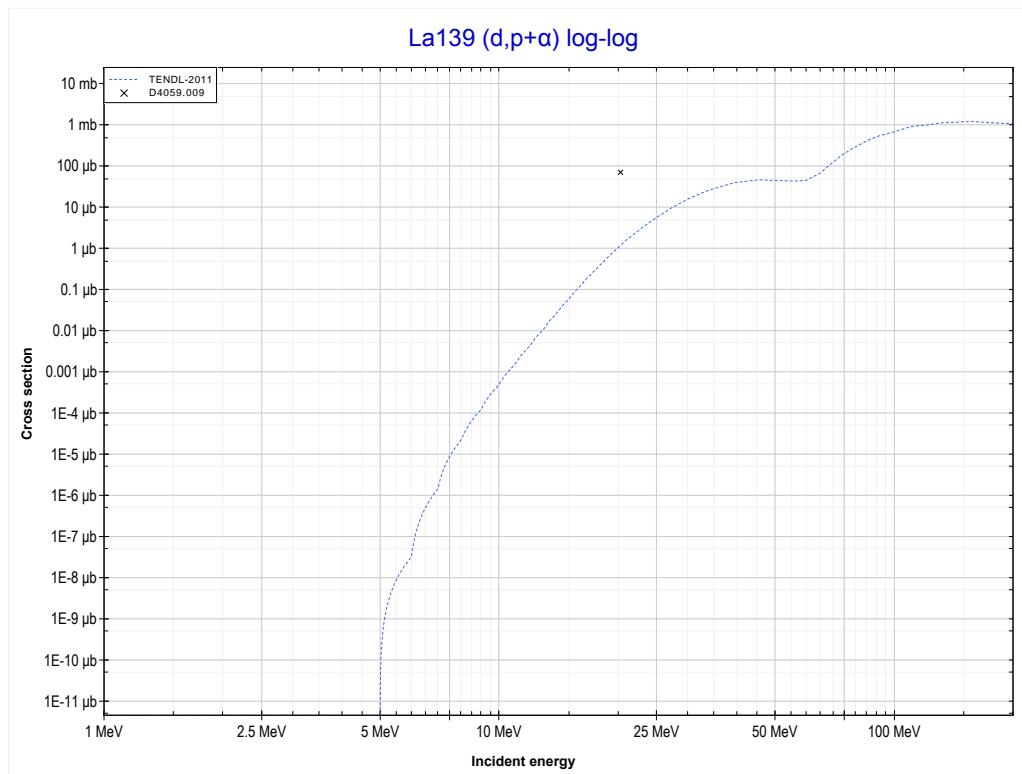
Reaction	Q-Value
La139(d,y)Ce141	11344.42 keV

<< 56-Ba-138	57-La-139 MT103 (d,p) or MT5 (La140 production)	>> 58-Ce-142
<< MT102 (d, γ)		>> MT112 (d,p+ α)



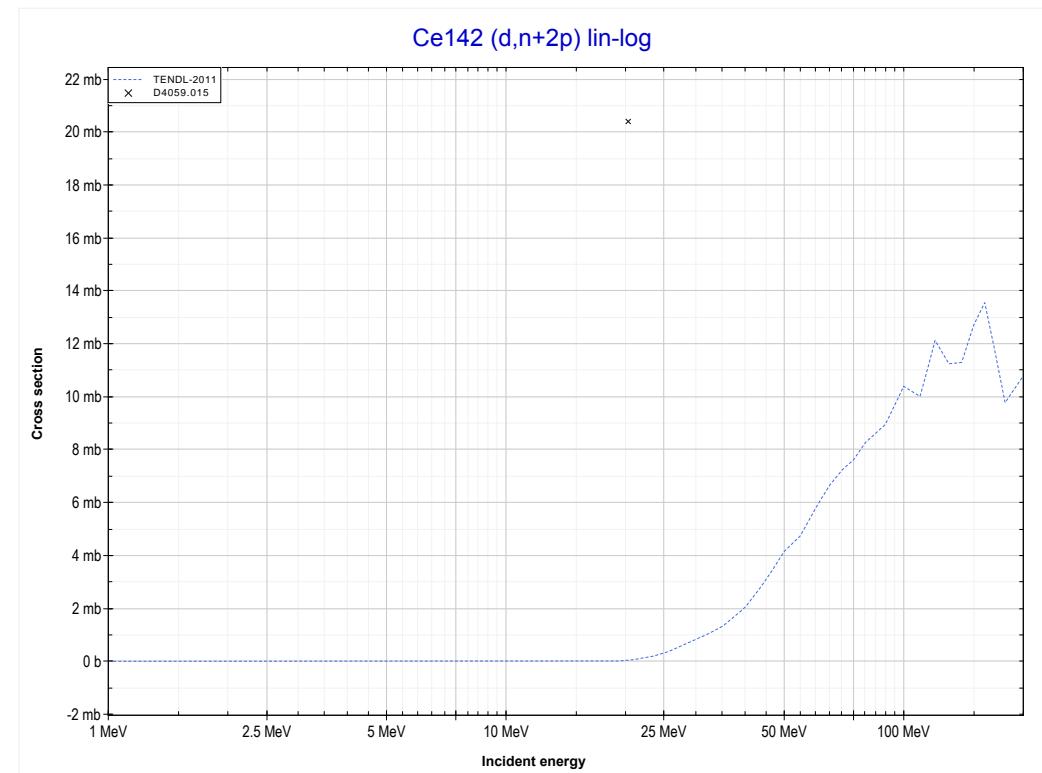
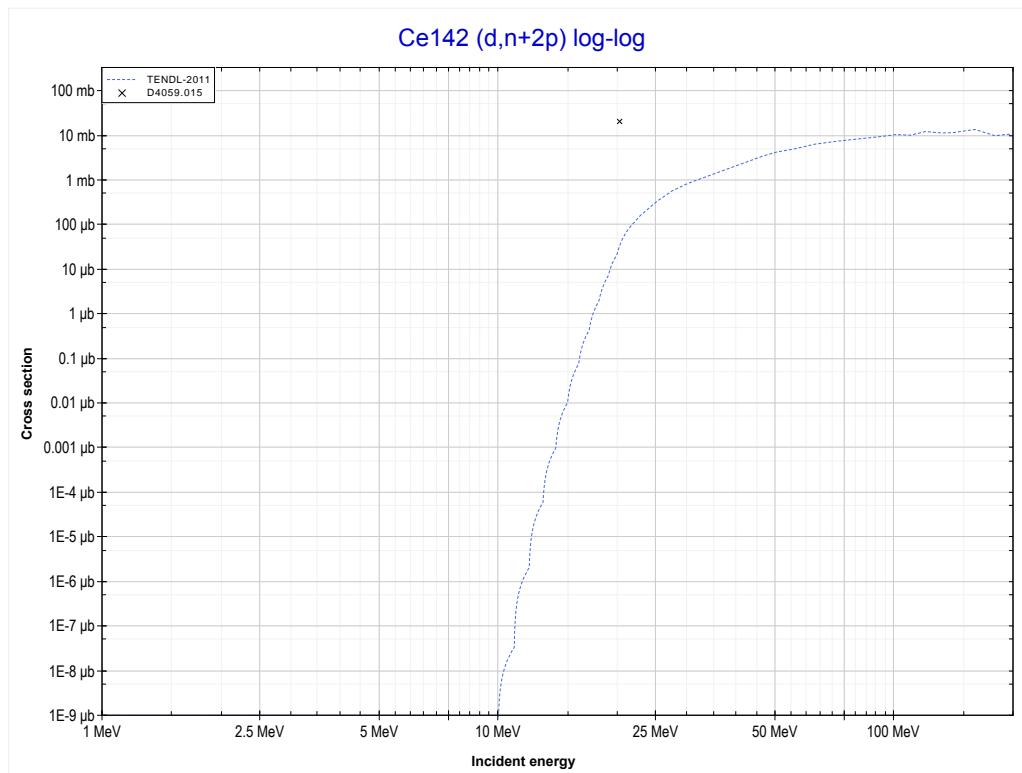
Reaction	Q-Value
La139(d,p)La140	2936.35 keV

<< 49-In-115	57-La-139 MT112 (d,p+α) or MT5 (Cs136 production)	MT44 (d,n+2p) >>
<< MT103 (d,p)		



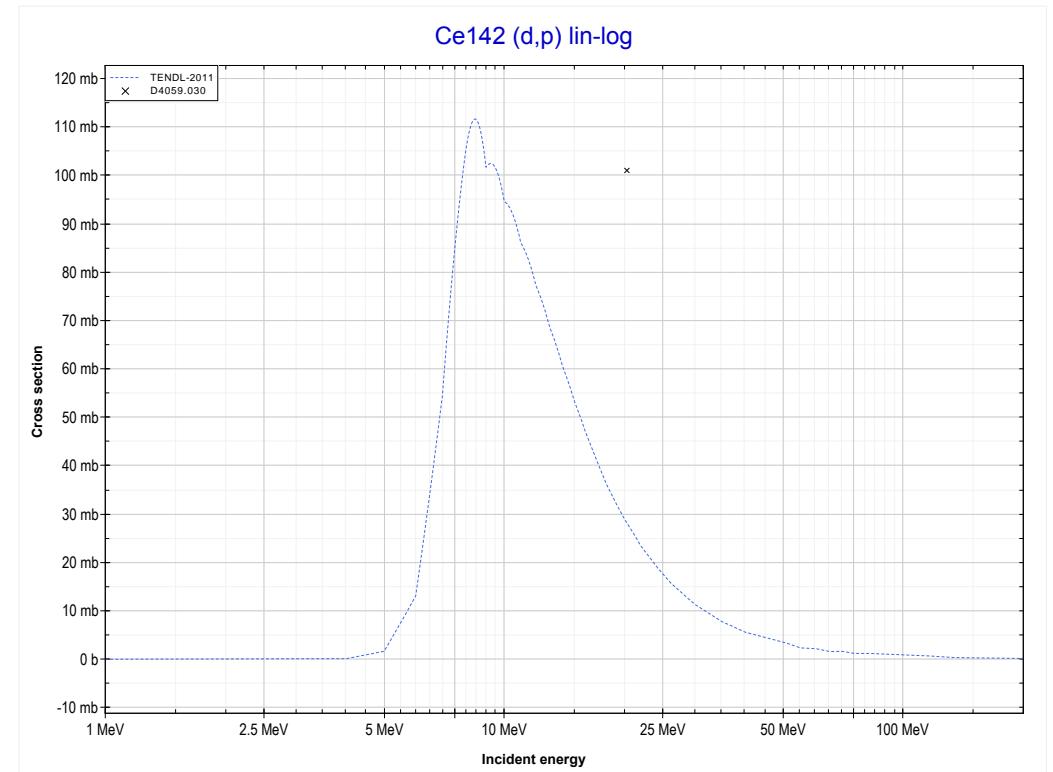
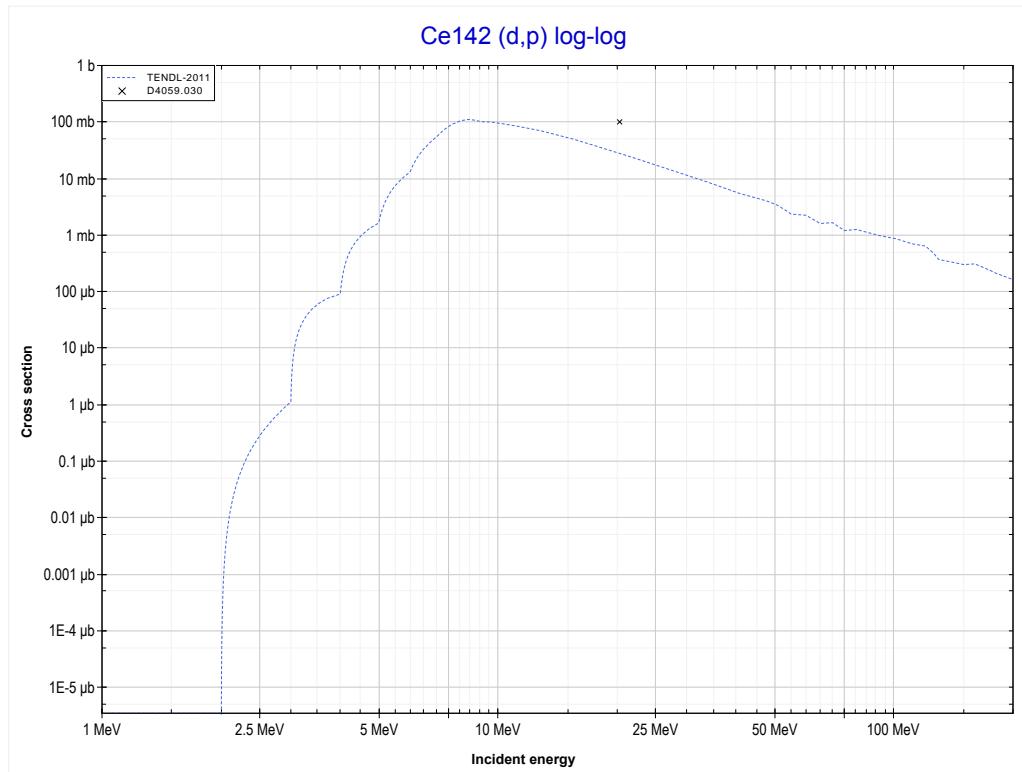
Reaction	Q-Value
La139(d,p+α)Cs136	2529.14 keV
La139(d,d+He3)Cs136	-15823.91 keV
La139(d,2p+t)Cs136	-17284.73 keV
La139(d,n+p+He3)Cs136	-18048.48 keV
La139(d,p+2d)Cs136	-21317.39 keV
La139(d,n+2p+d)Cs136	-23541.96 keV
La139(d,2n+3p)Cs136	-25766.52 keV

<< 28-Ni-58	58-Ce-142 MT44 (d,n+2p) or MT5 (La141 production)	>> 73-Ta-181
<< MT112 (d,p+α)		MT103 (d,p) >>



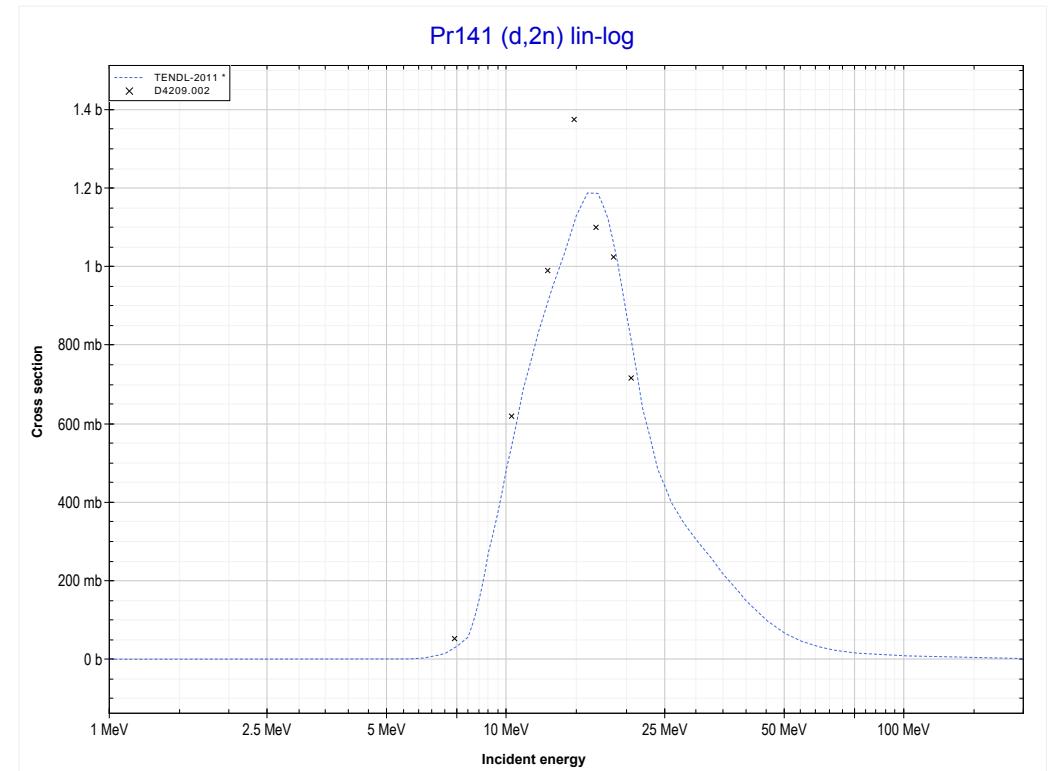
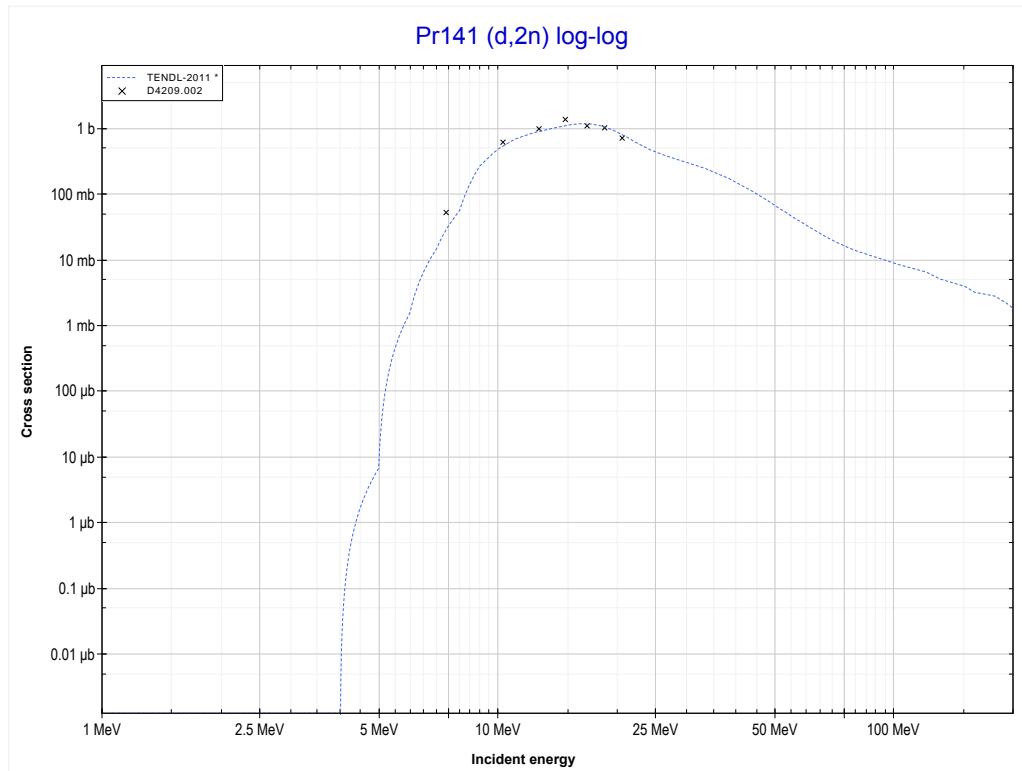
Reaction	Q-Value
Ce142(d,He3)La141	-3395.99 keV
Ce142(d,p+d)La141	-8889.47 keV
Ce142(d,n+2p)La141	-11114.04 keV

<< 57-La-139	58-Ce-142 MT103 (d,p) or MT5 (Ce143 production)	>> 59-Pr-141
<< MT44 (d,n+2p)		>> MT16 (d,2n) >>



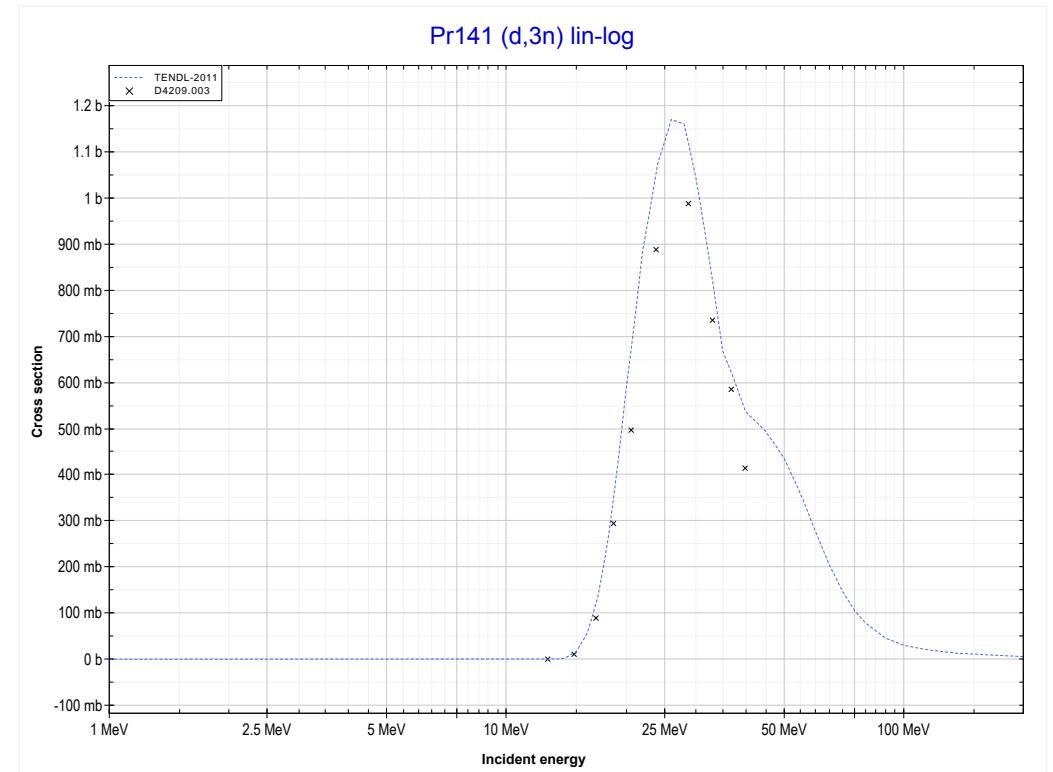
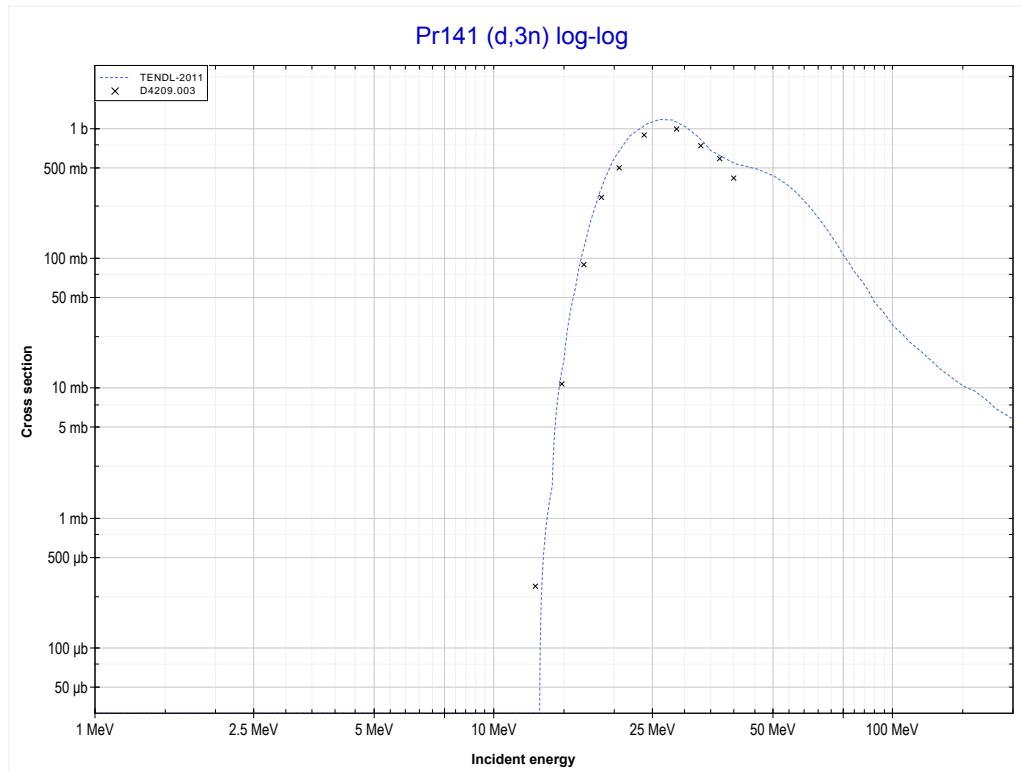
Reaction	Q-Value
Ce142(d,p)Ce143	2920.25 keV

<< 55-Cs-133	59-Pr-141 MT16 (d,2n) or MT5 (Nd141 production)	60-Nd-148 >>
<< MT103 (d,p)		MT17 (d,3n) >>



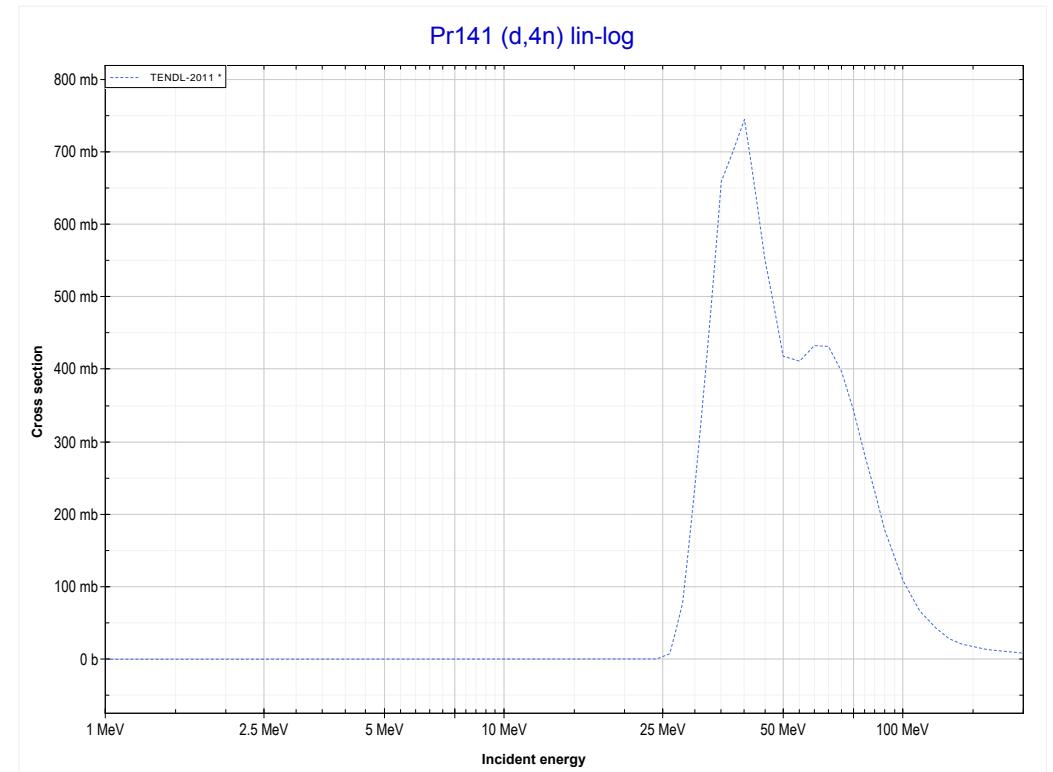
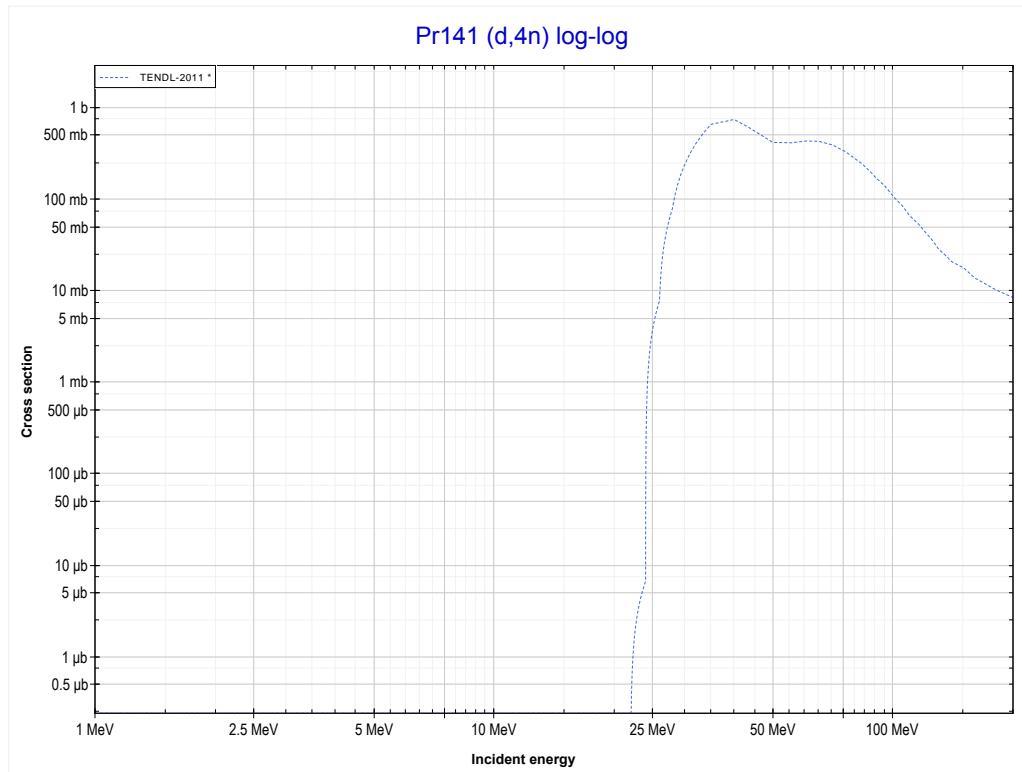
Reaction	Q-Value
Pr141(d,2n)Nd141	-4829.81 keV

<< 52-Te-124	59-Pr-141 MT17 (d,3n) or MT5 (Nd140 production)	68-Er-166 >>
<< MT16 (d,2n)		MT37 (d,4n) >>



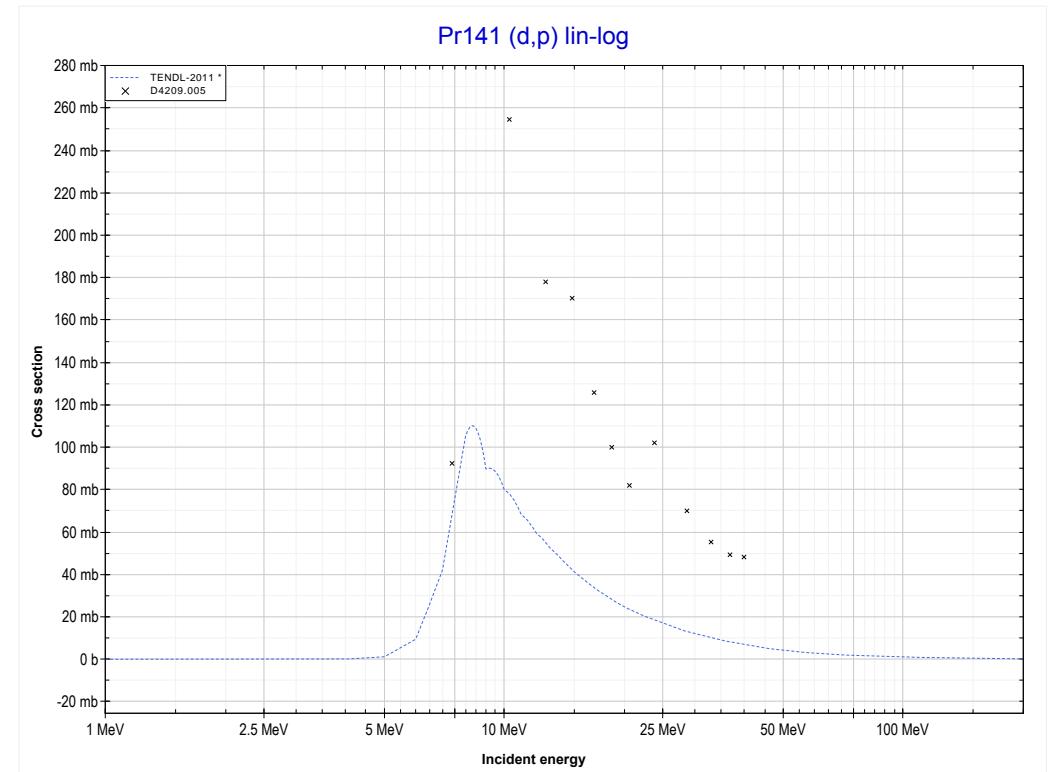
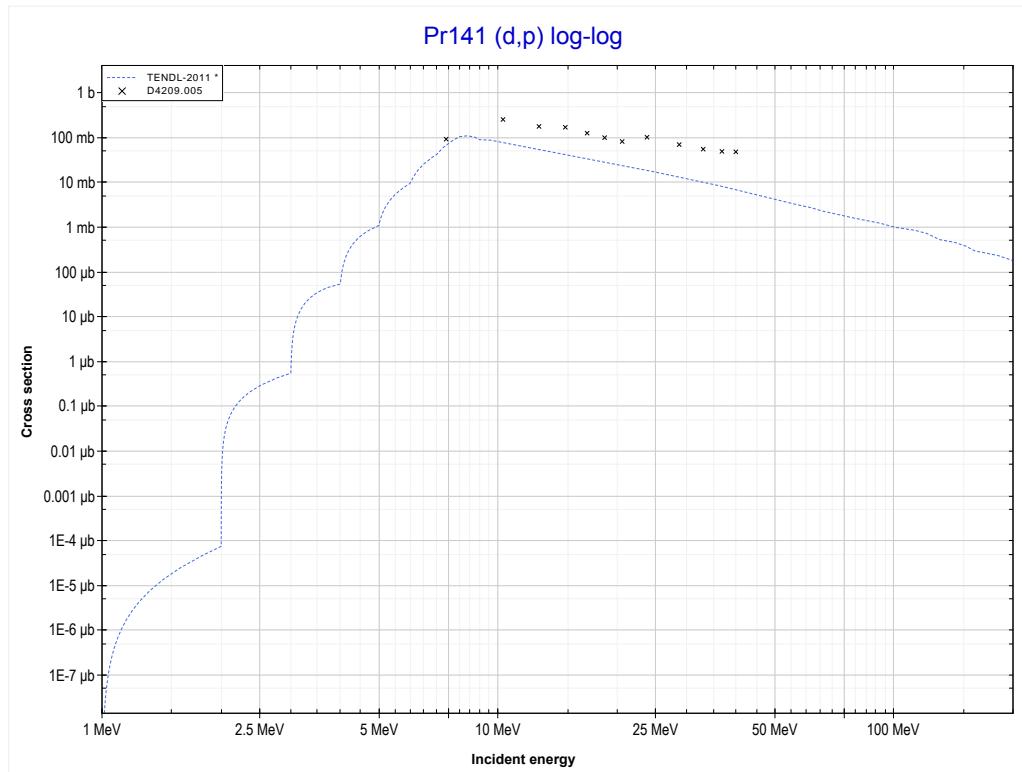
Reaction	Q-Value
Pr141(d,3n)Nd140	-12847.13 keV

<< 50-Sn-124	59-Pr-141 MT37 (d,4n) or MT5 (Nd139 production)	63-Eu-151 >>
<< MT17 (d,3n)		MT103 (d,p) >>



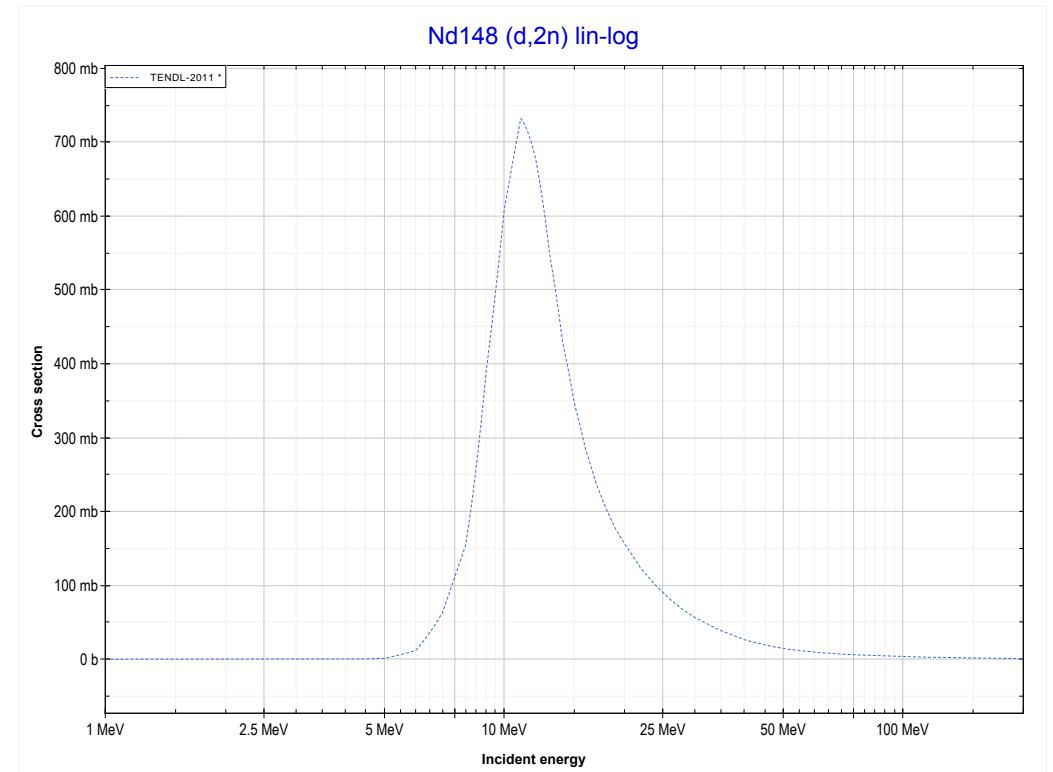
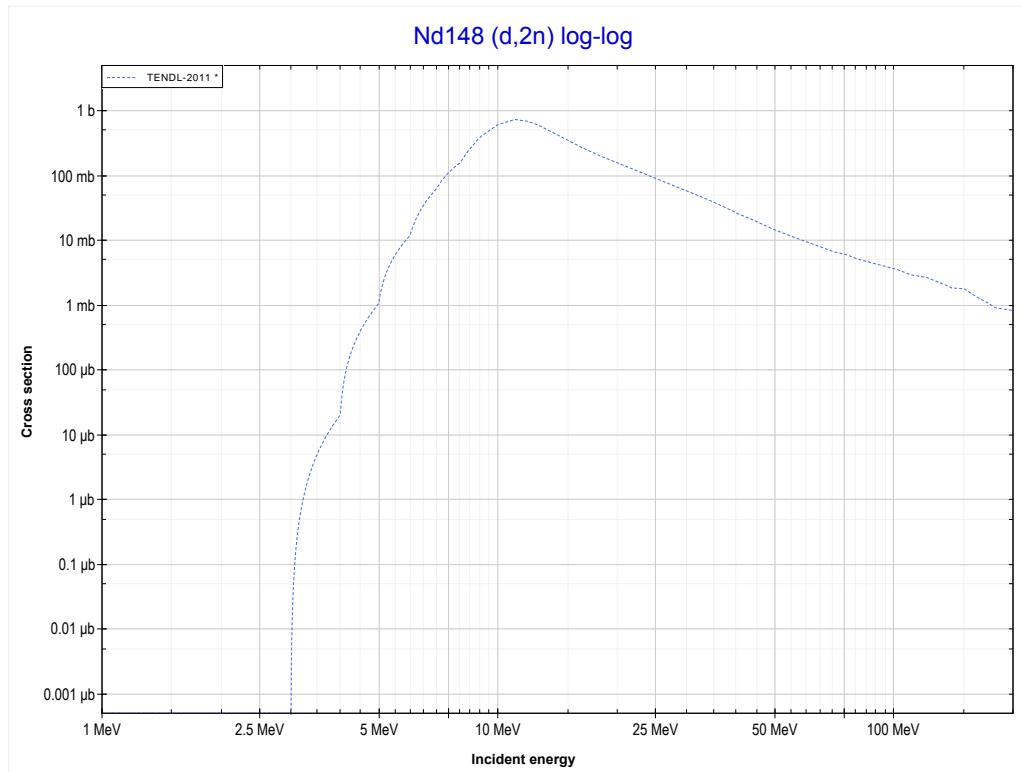
Reaction	Q-Value
Pr141(d,4n)Nd139	-23178.45 keV

<< 58-Ce-142	59-Pr-141 MT103 (d,p) or MT5 (Pr142 production)	>> 65-Tb-159
<< MT37 (d,4n)		MT16 (d,2n) >>



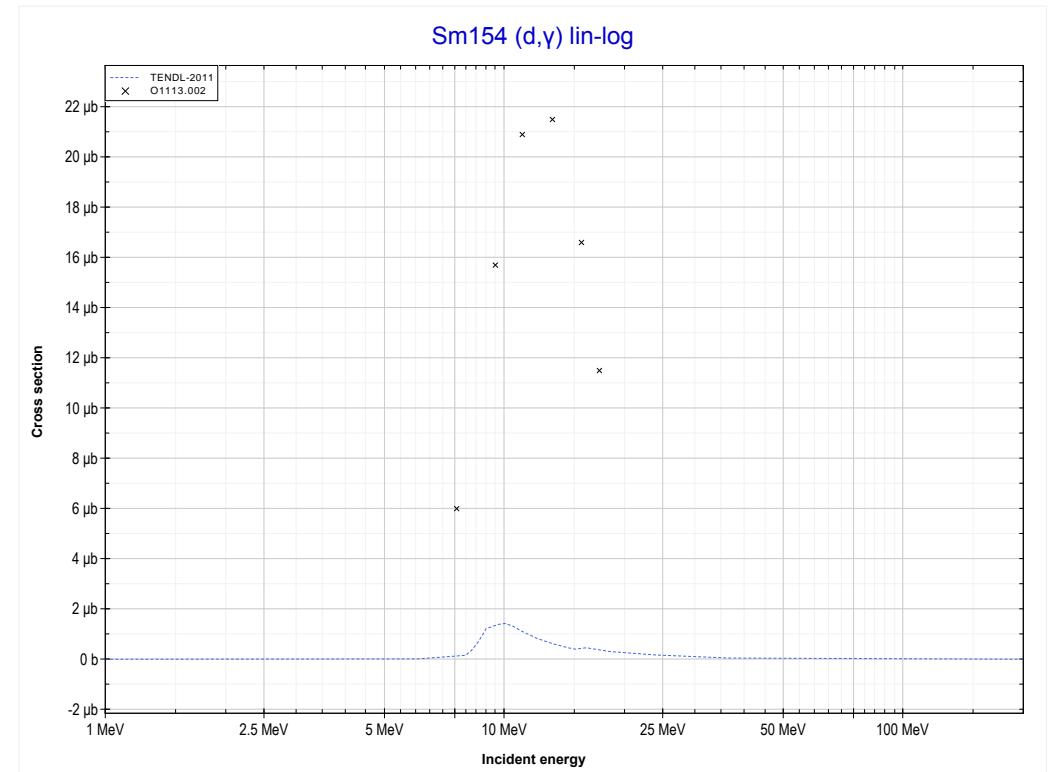
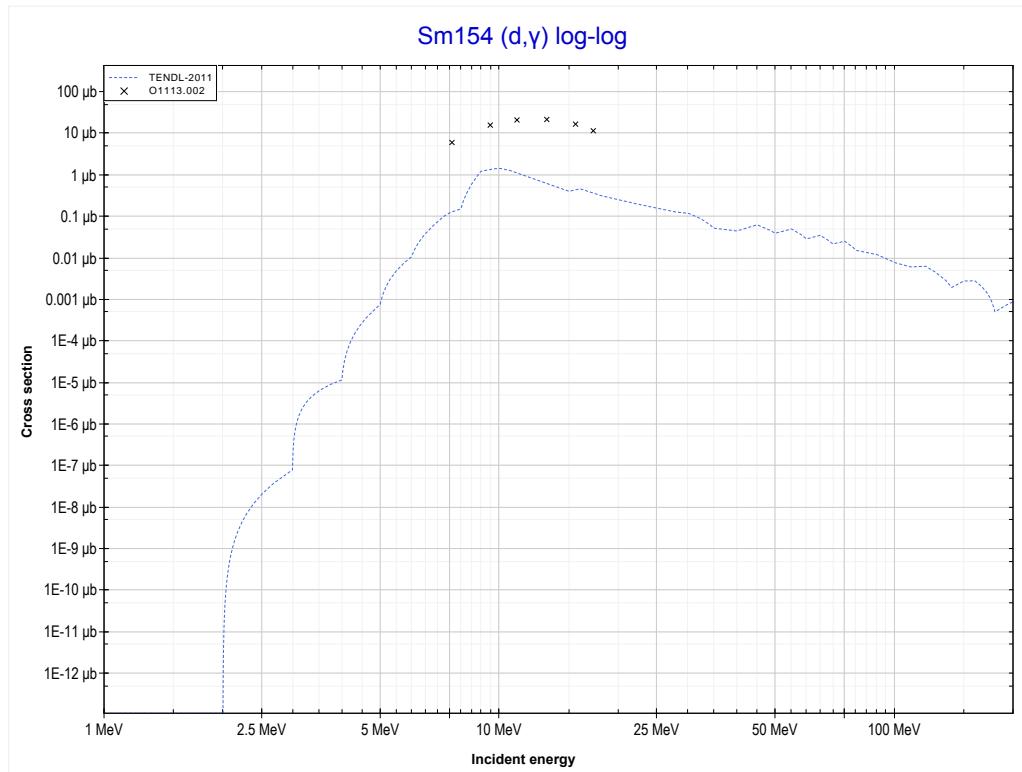
Reaction	Q-Value
Pr141(d,p)Pr142	3618.55 keV

<< 59-Pr-141	60-Nd-148 MT16 (d,2n) or MT5 (Pm148 production)	63-Eu-151 >>
<< MT103 (d,p)		MT102 (d,y) >>



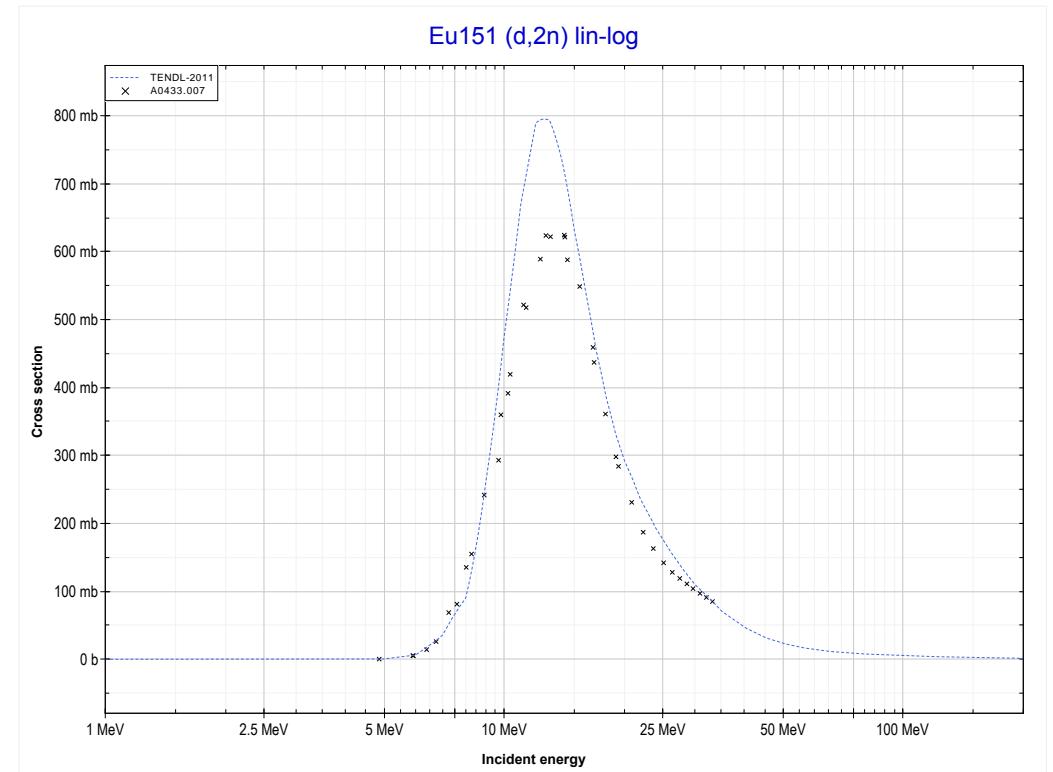
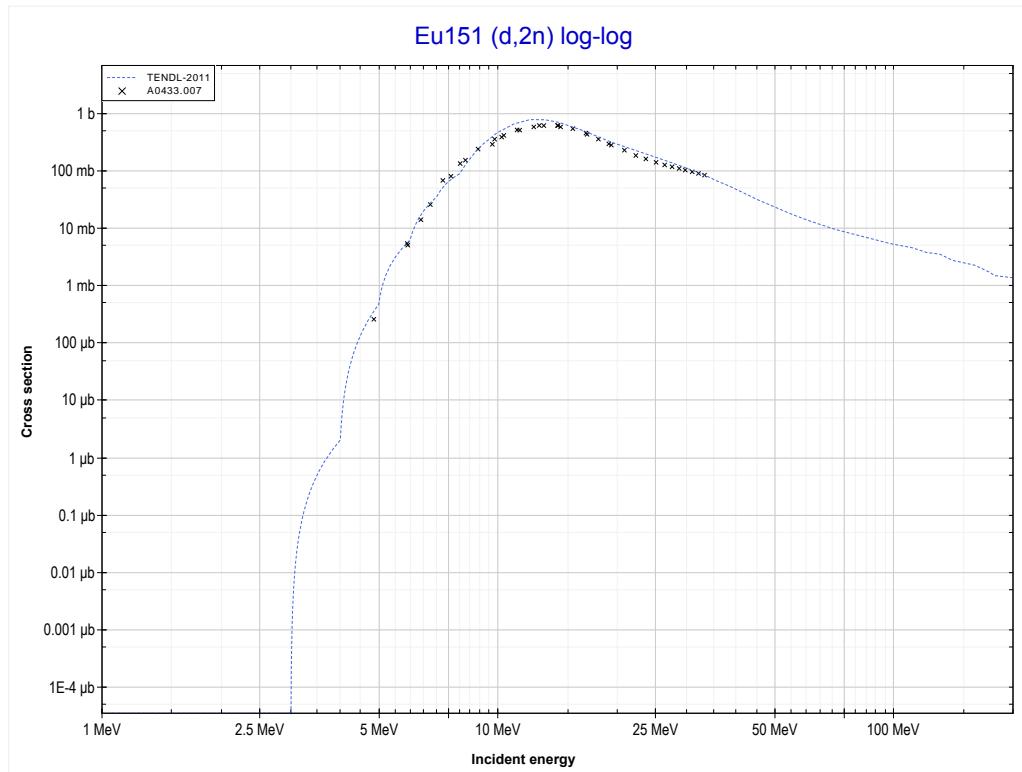
Reaction	Q-Value
Nd148(d,2n)Pm148	-3548.31 keV

<< 57-La-139	62-Sm-154 MT102 (d,γ) or MT5 (Eu156 production)	79-Au-197 >>
<< MT16 (d,2n)		MT16 (d,2n) >>



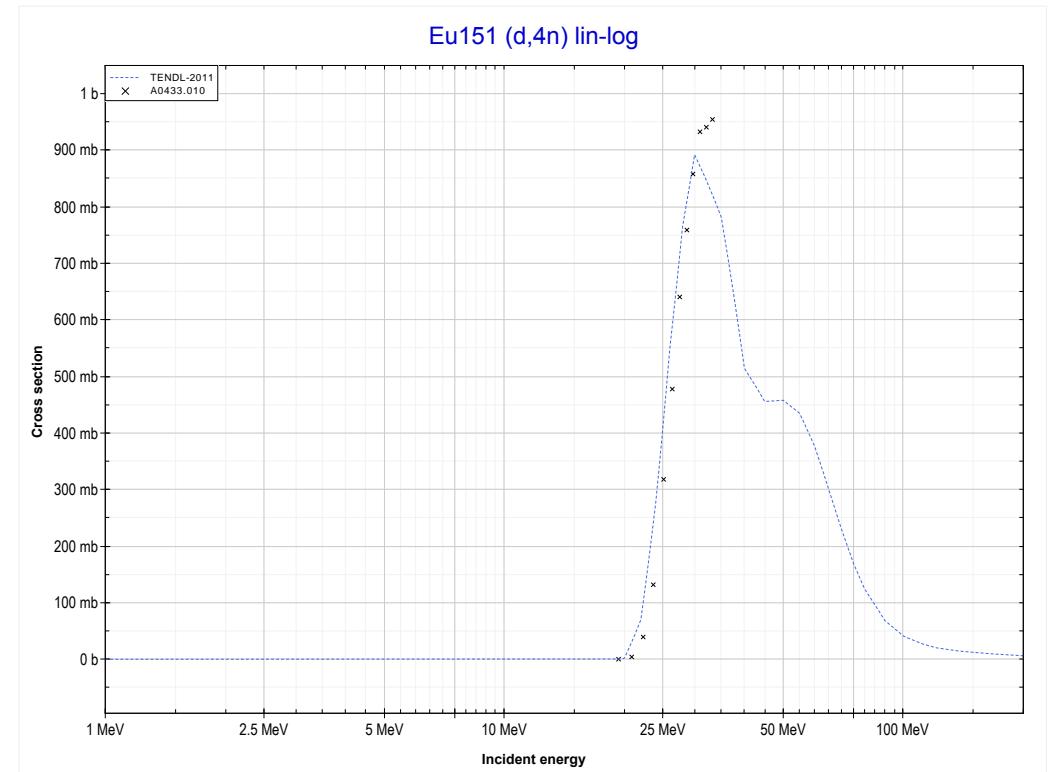
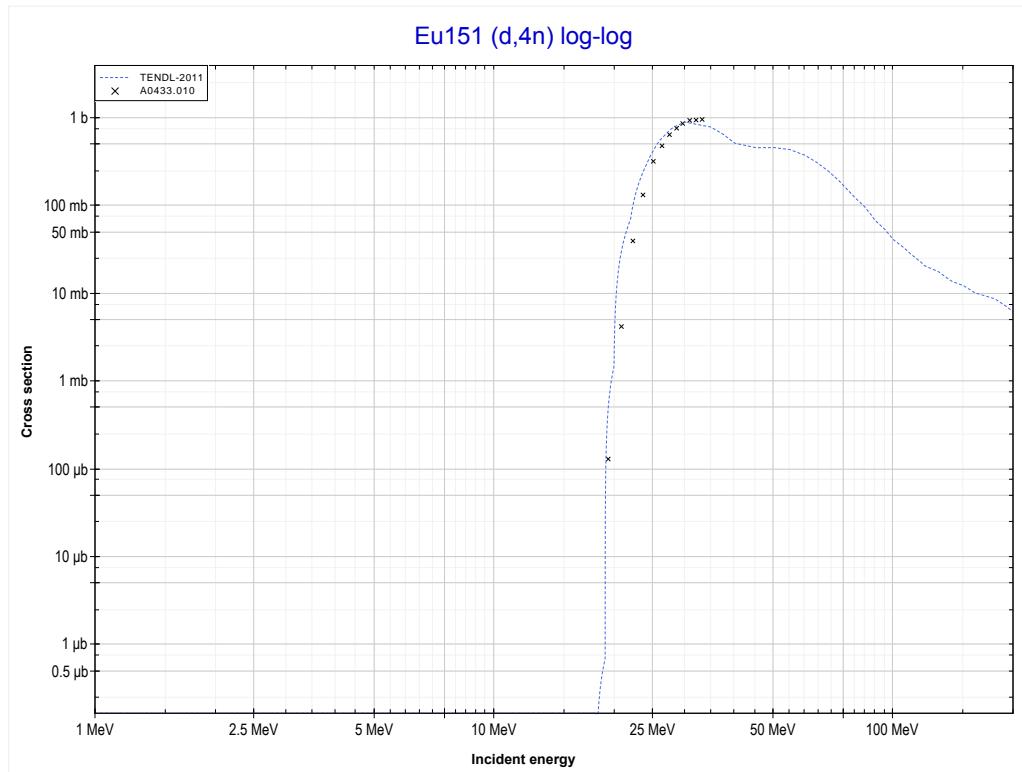
Reaction	Q-Value
Sm154(d, γ)Eu156	10767.12 keV

<< 60-Nd-148	63-Eu-151 MT16 (d,2n) or MT5 (Gd151 production)	63-Eu-153 >>
<< MT102 (d, γ)		MT37 (d,4n) >>



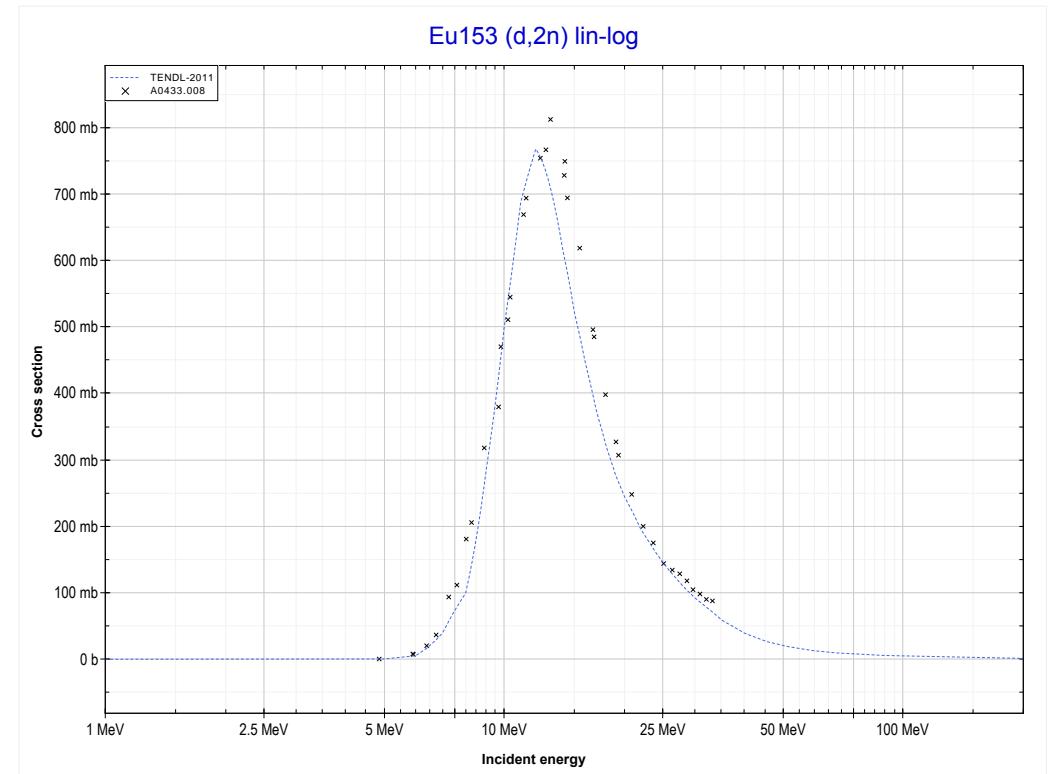
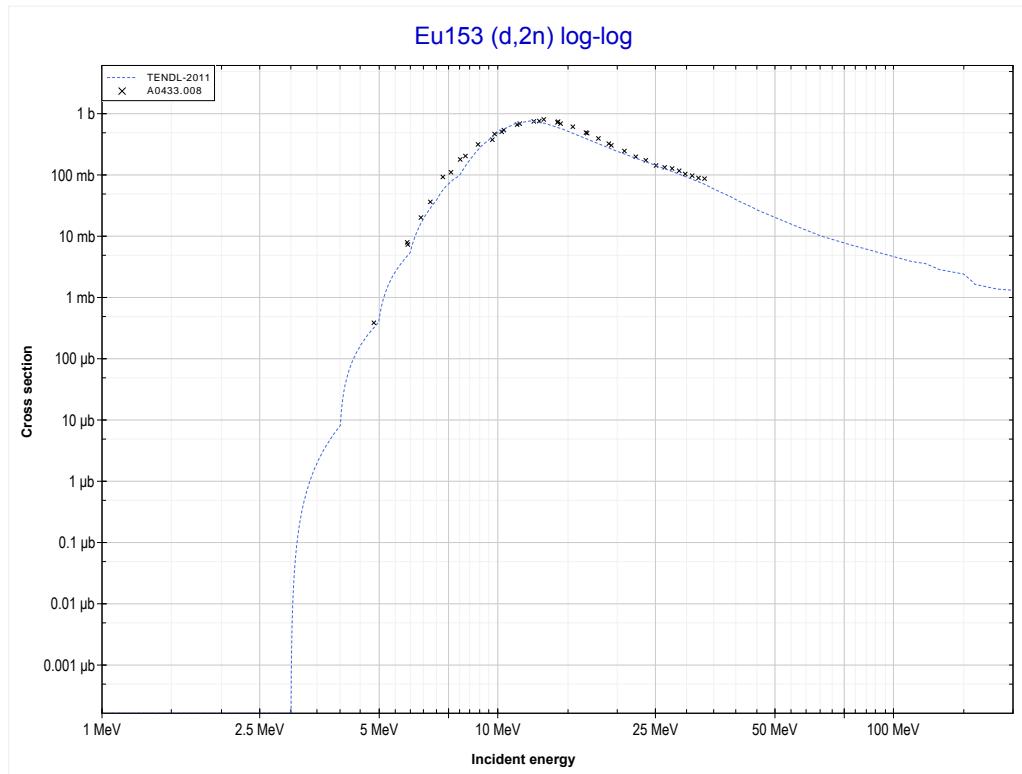
Reaction	Q-Value
Eu151(d,2n)Gd151	-3471.01 keV

<< 59-Pr-141	63-Eu-151 MT37 (d,4n) or MT5 (Gd149 production)	63-Eu-153 >>
<< MT16 (d,2n)		MT16 (d,2n) >>



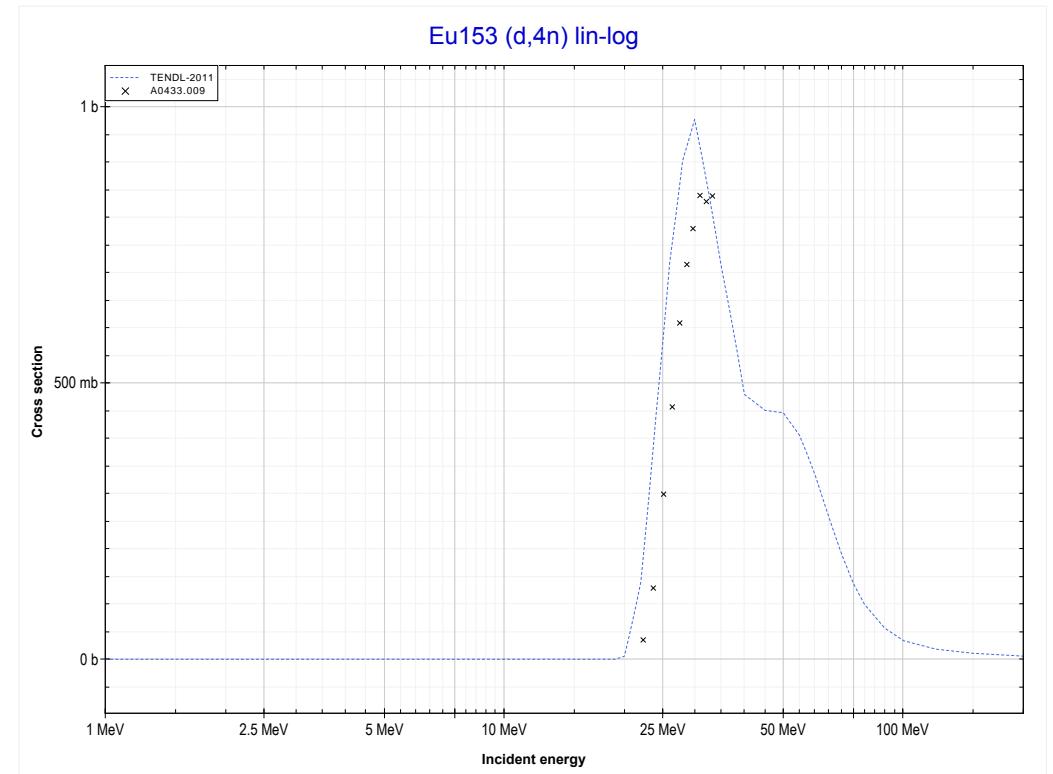
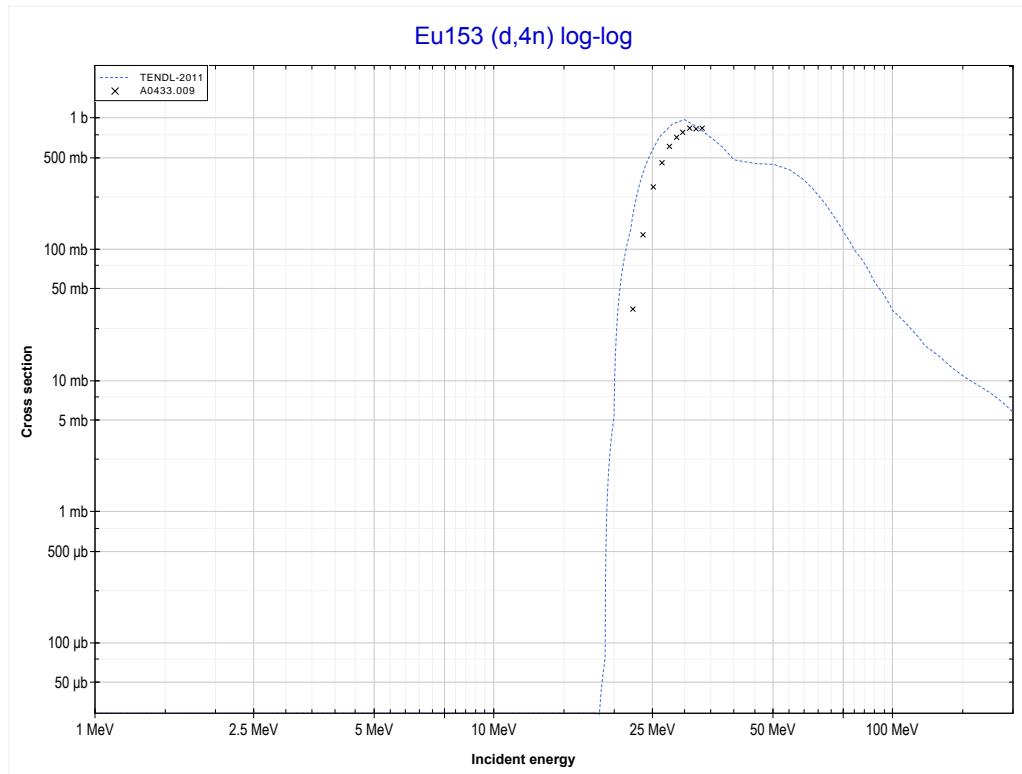
Reaction	Q-Value
Eu151(d,4n)Gd149	-18675.65 keV

<< 63-Eu-151	63-Eu-153 MT16 (d,2n) or MT5 (Gd153 production)	>> 65-Tb-159
<< MT37 (d,4n)		MT37 (d,4n) >>



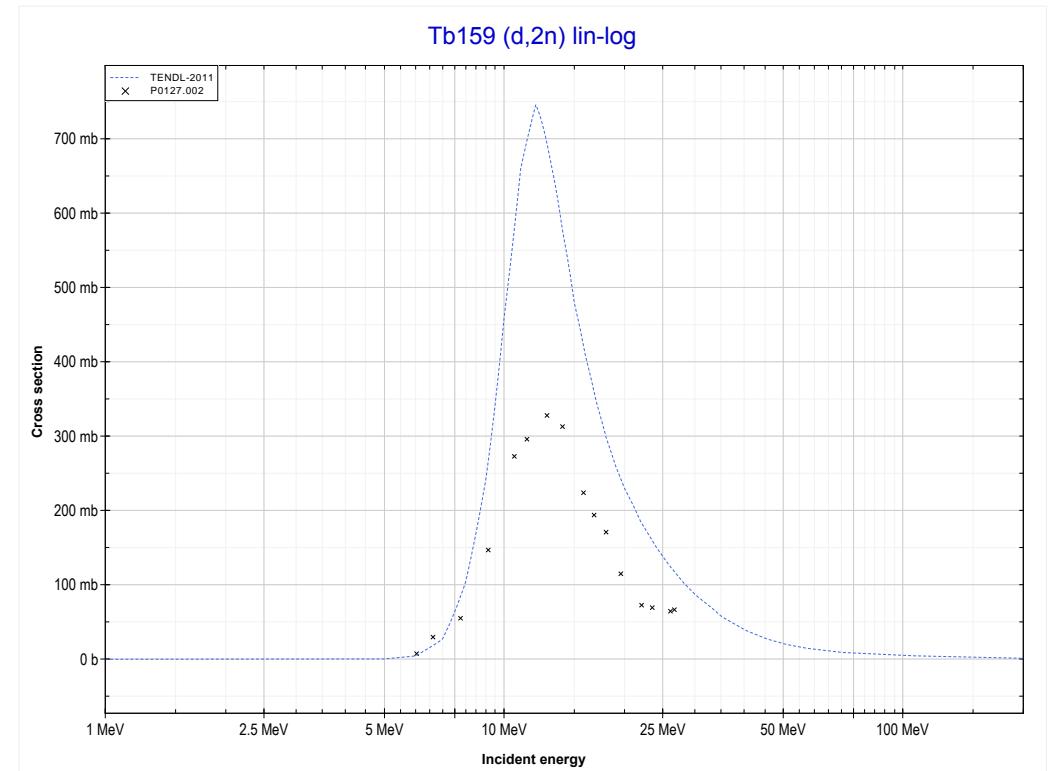
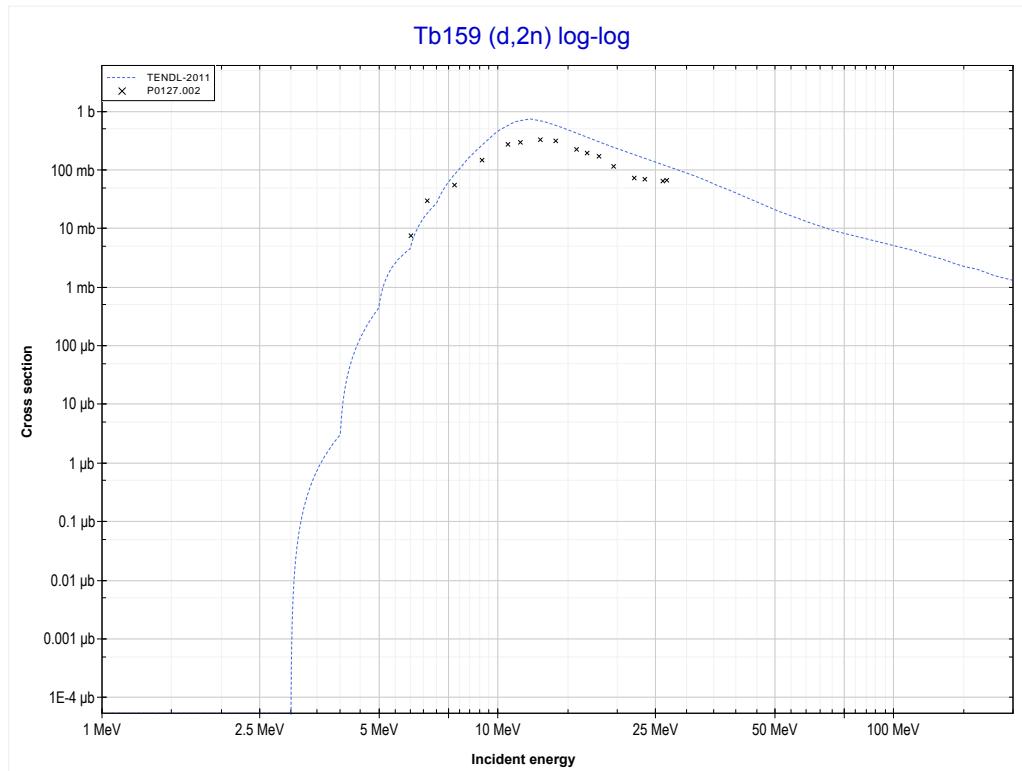
Reaction	Q-Value
Eu153(d,2n)Gd153	-3490.61 keV

<< 63-Eu-151	63-Eu-153 MT37 (d,4n) or MT5 (Gd151 production)	>> 65-Tb-159
<< MT16 (d,2n)		MT16 (d,2n) >>



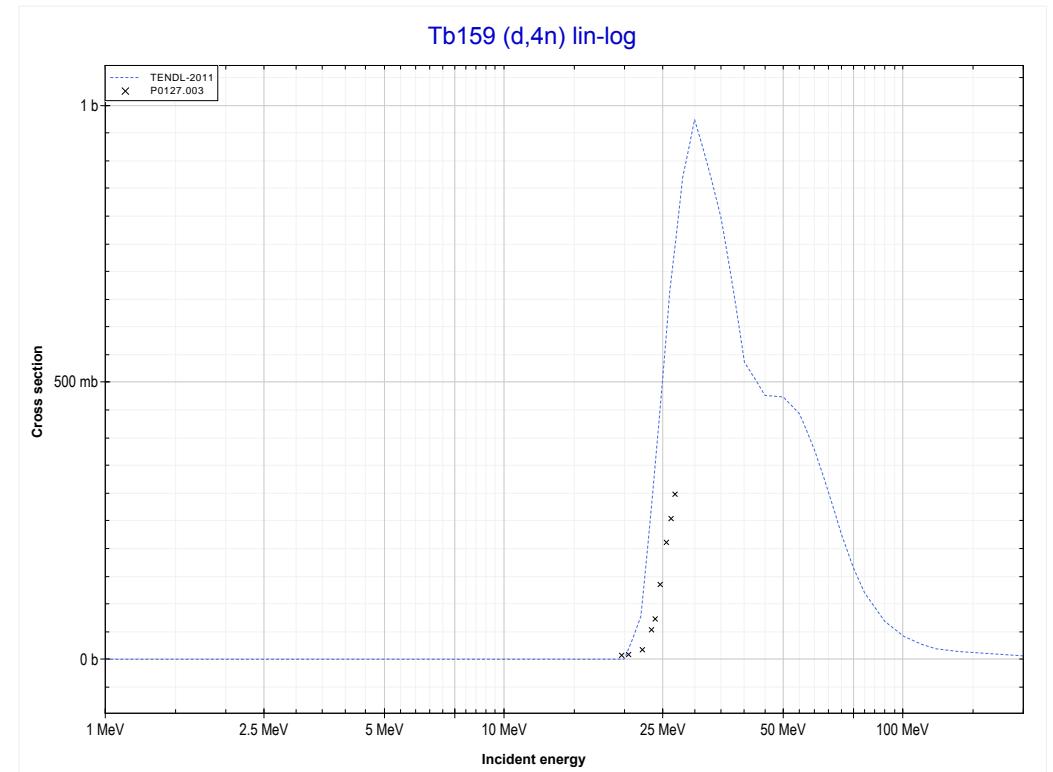
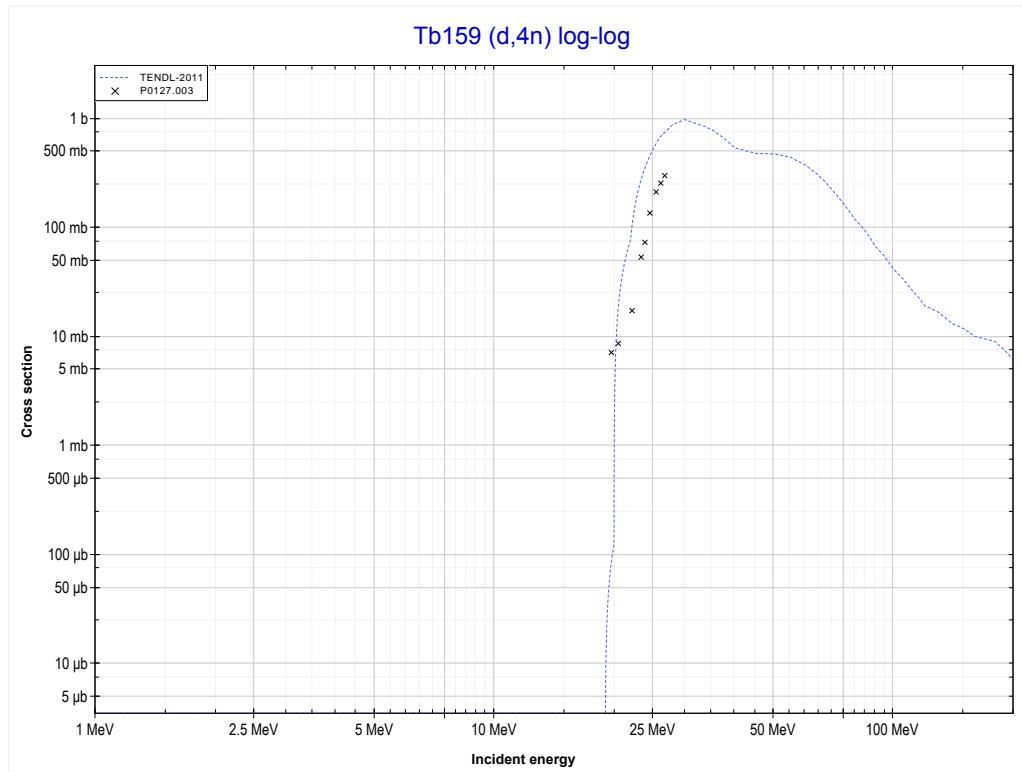
Reaction	Q-Value
Eu153(d,4n)Gd151	-18328.05 keV

<< 63-Eu-153	65-Tb-159 MT16 (d,2n) or MT5 (Dy159 production)	67-Ho-165 >>
<< MT37 (d,4n)		MT37 (d,4n) >>



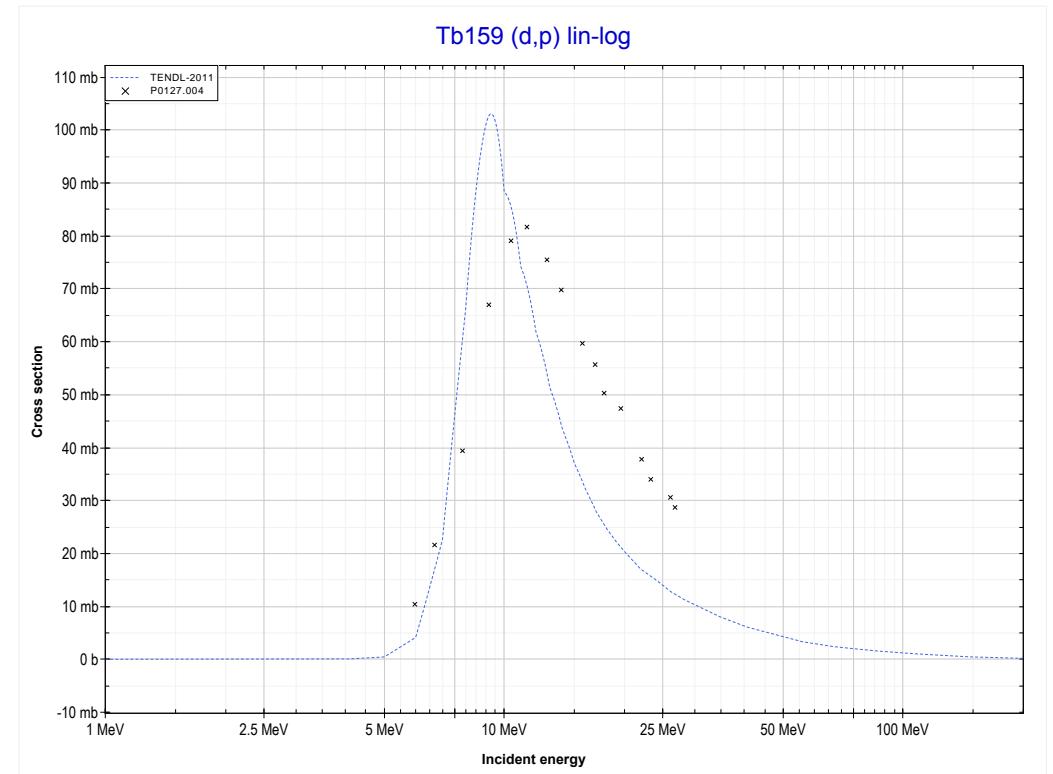
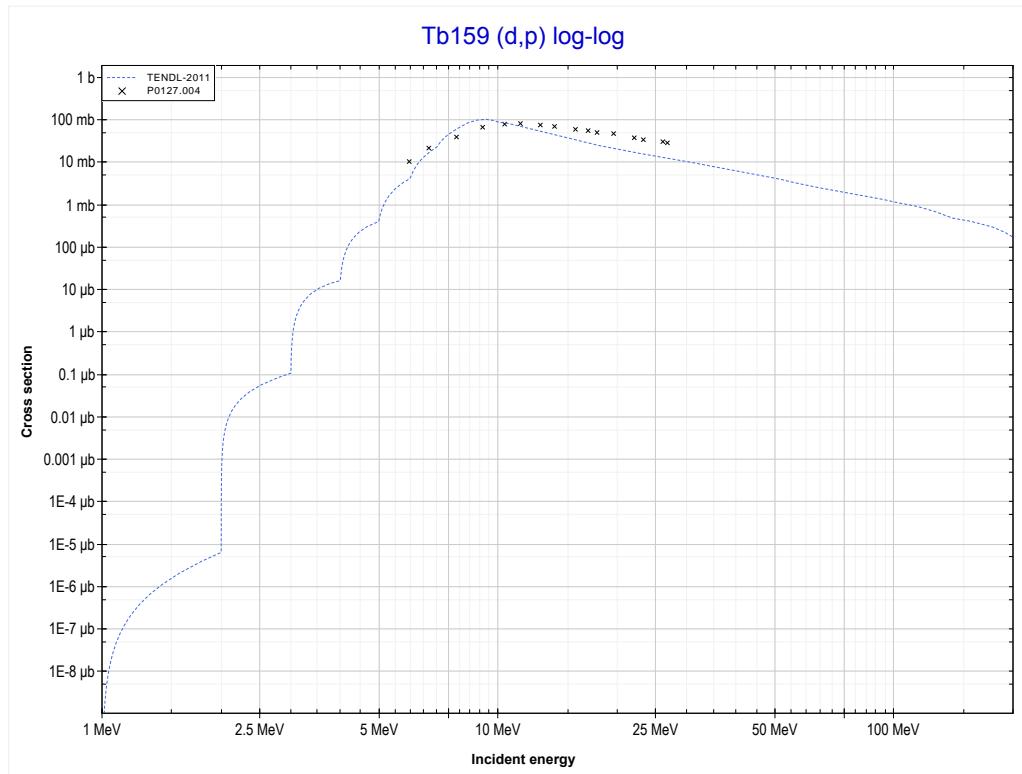
Reaction	Q-Value
$\text{Tb}^{159}(\text{d},\text{2n})\text{Dy}^{159}$	-3372.41 keV

<< 63-Eu-153	65-Tb-159 MT37 (d,4n) or MT5 (Dy157 production)	>> 79-Au-197
<< MT16 (d,2n)		MT103 (d,p) >>



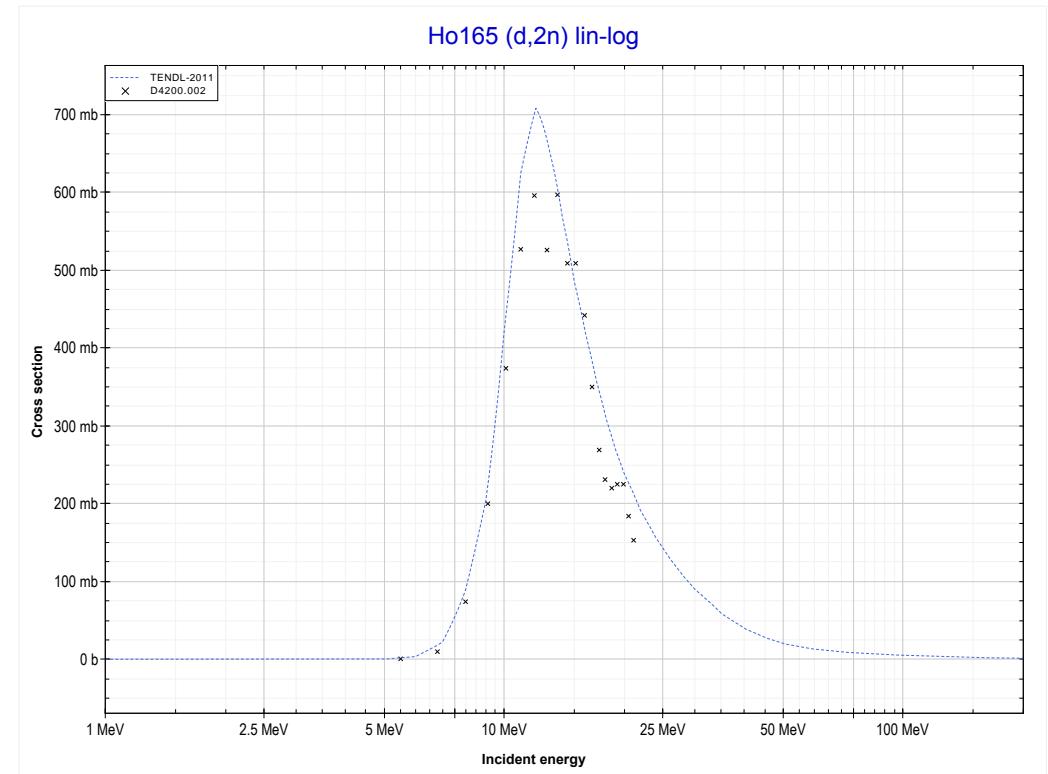
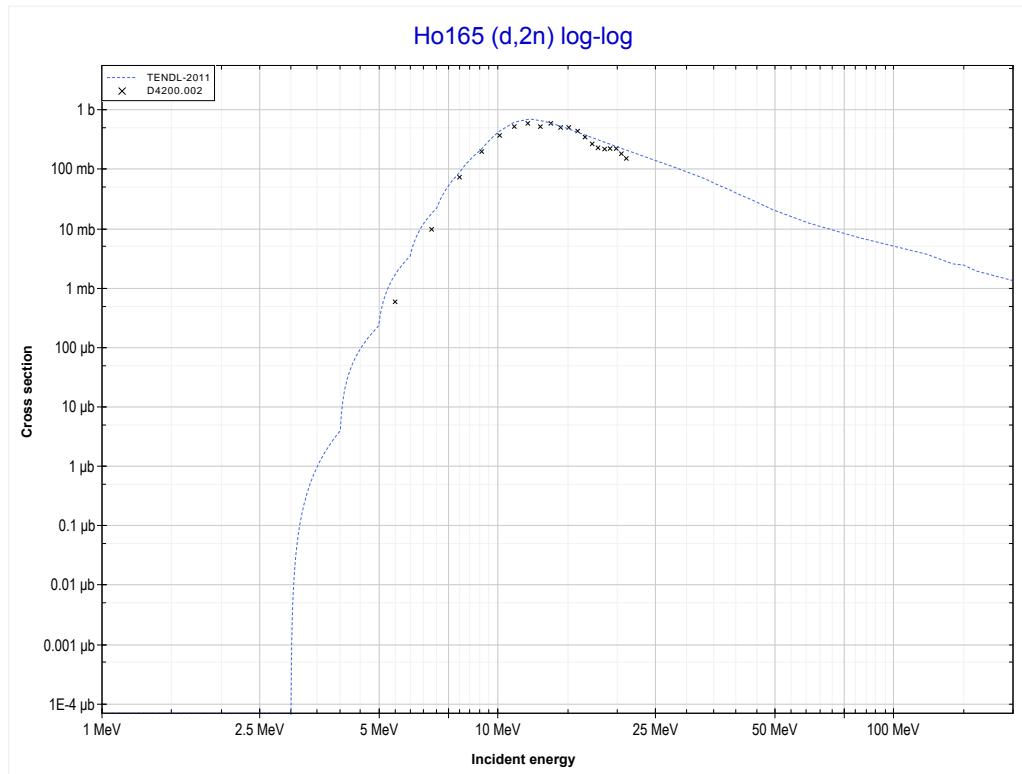
Reaction	Q-Value
Tb159(d,4n)Dy157	-19260.55 keV

<< 59-Pr-141	65-Tb-159 MT103 (d,p) or MT5 (Tb160 production)	>> 67-Ho-165
<< MT37 (d,4n)		>> MT16 (d,2n) >>



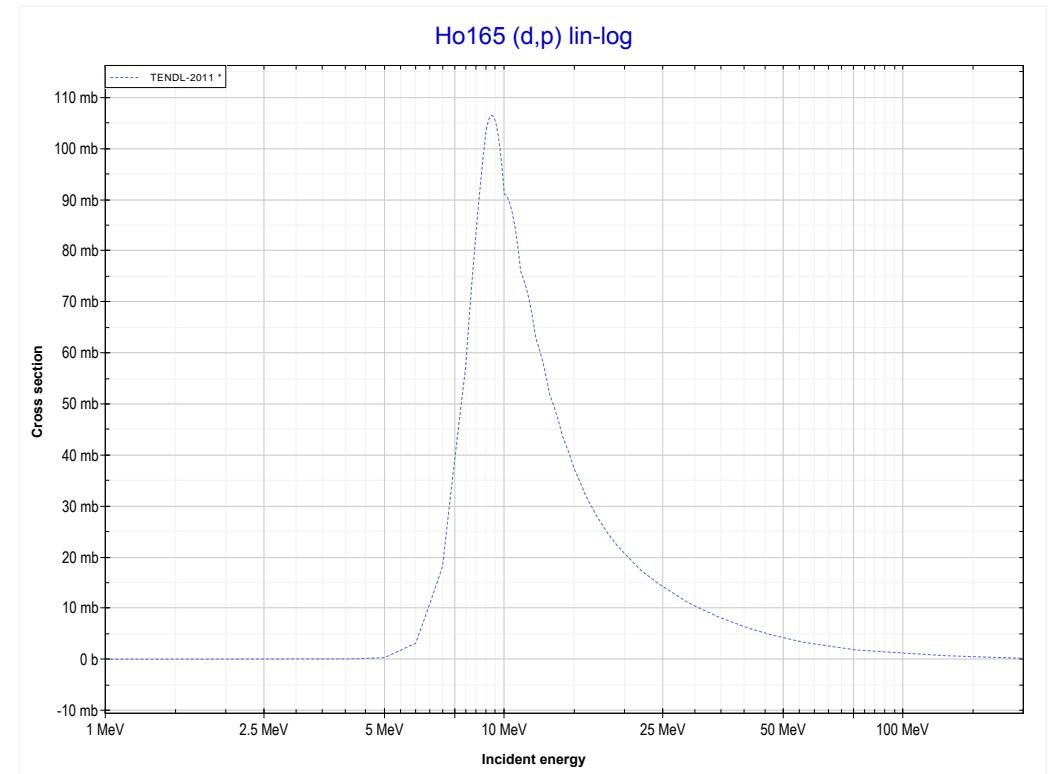
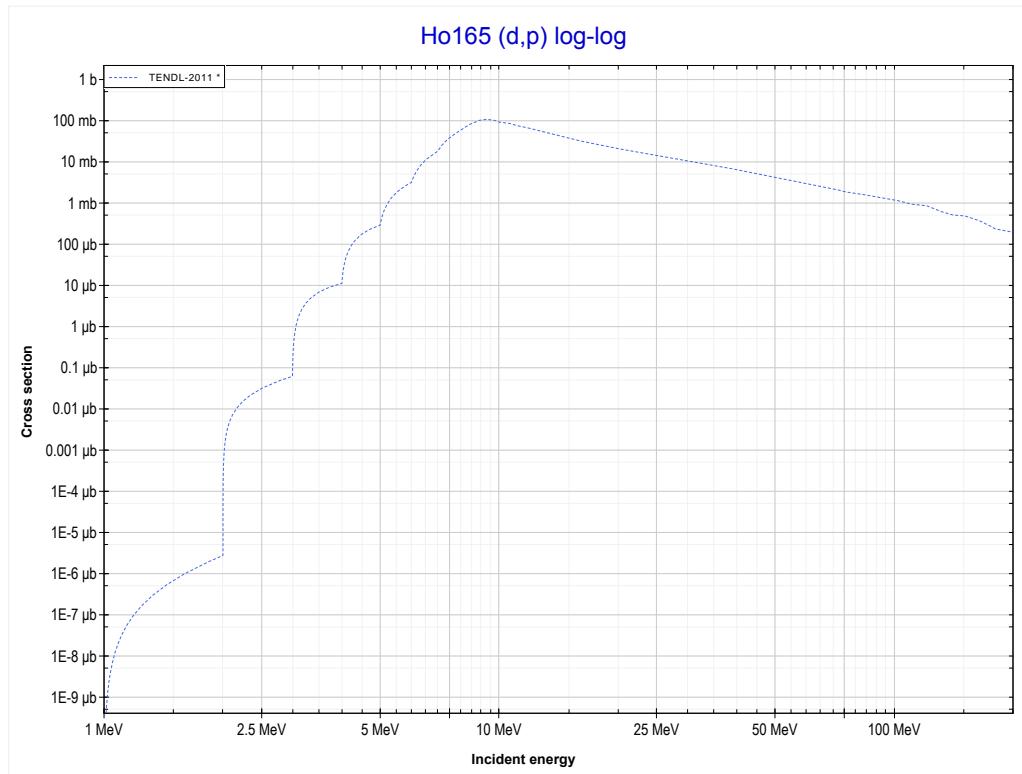
Reaction	Q-Value
$\text{Tb}^{159}(\text{d},\text{p})\text{Tb}^{160}$	4150.65 keV

<< 65-Tb-159	67-Ho-165 MT16 (d,2n) or MT5 (Er165 production)	68-Er-167 >>
<< MT103 (d,p)		MT103 (d,p) >>



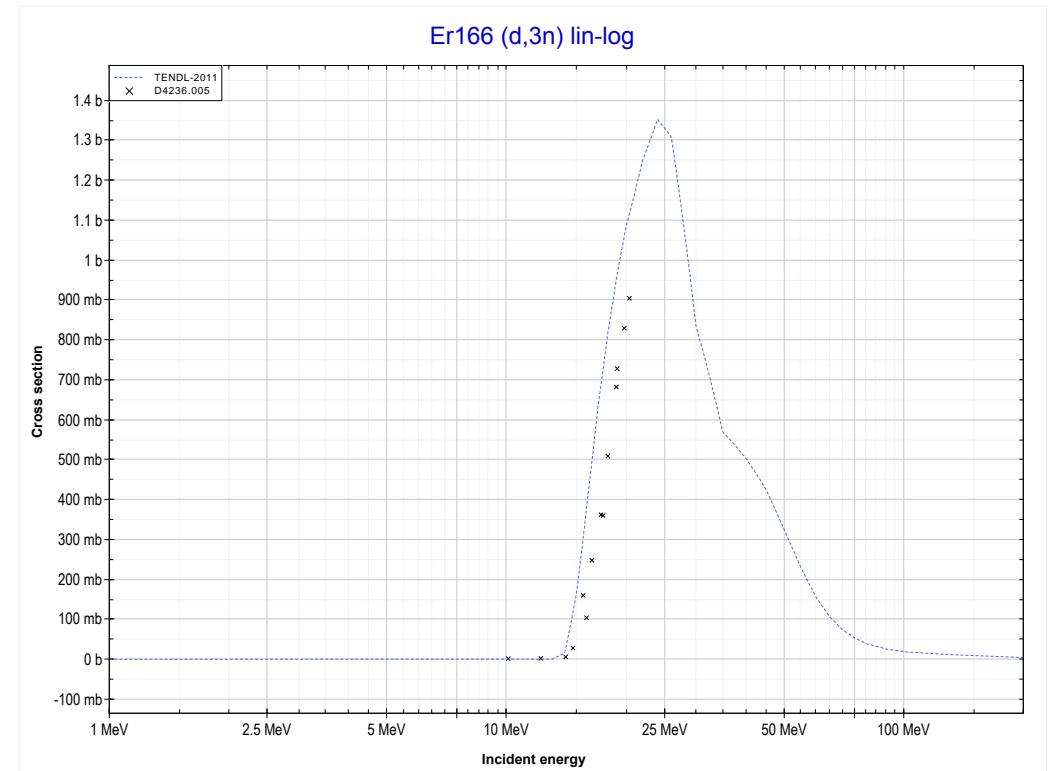
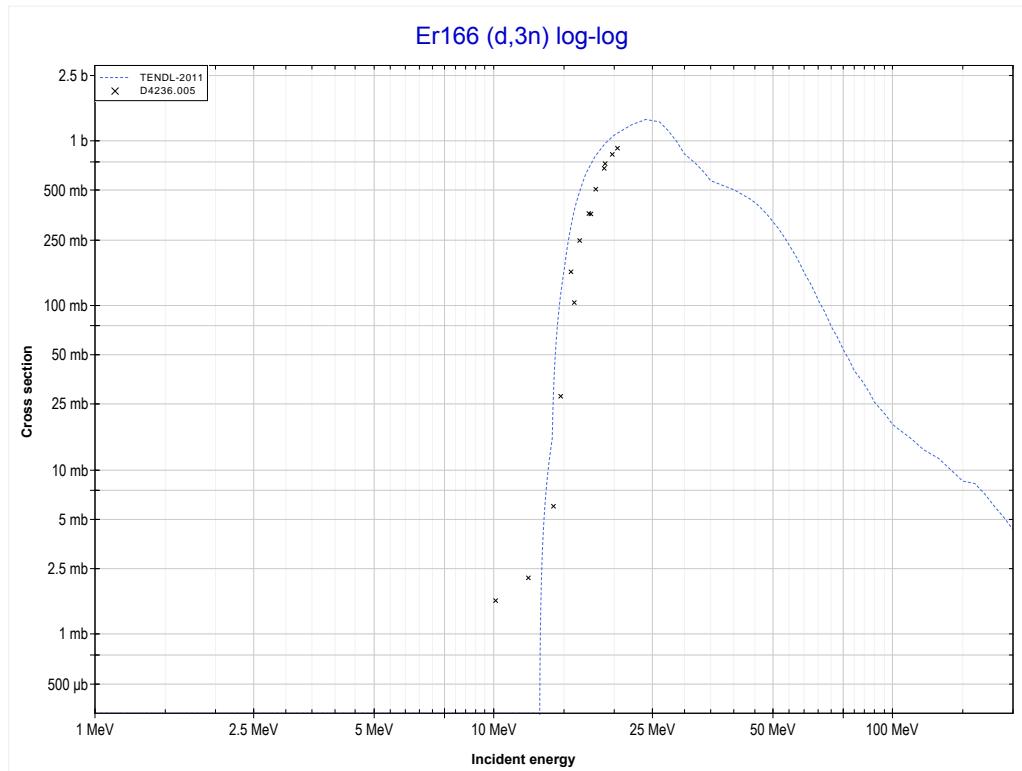
Reaction	Q-Value
Ho165(d,2n)Er165	-3383.51 keV

<< 65-Tb-159	67-Ho-165 MT103 (d,p) or MT5 (Ho166 production)	>> 70-Yb-176
<< MT16 (d,2n)		MT17 (d,3n) >>



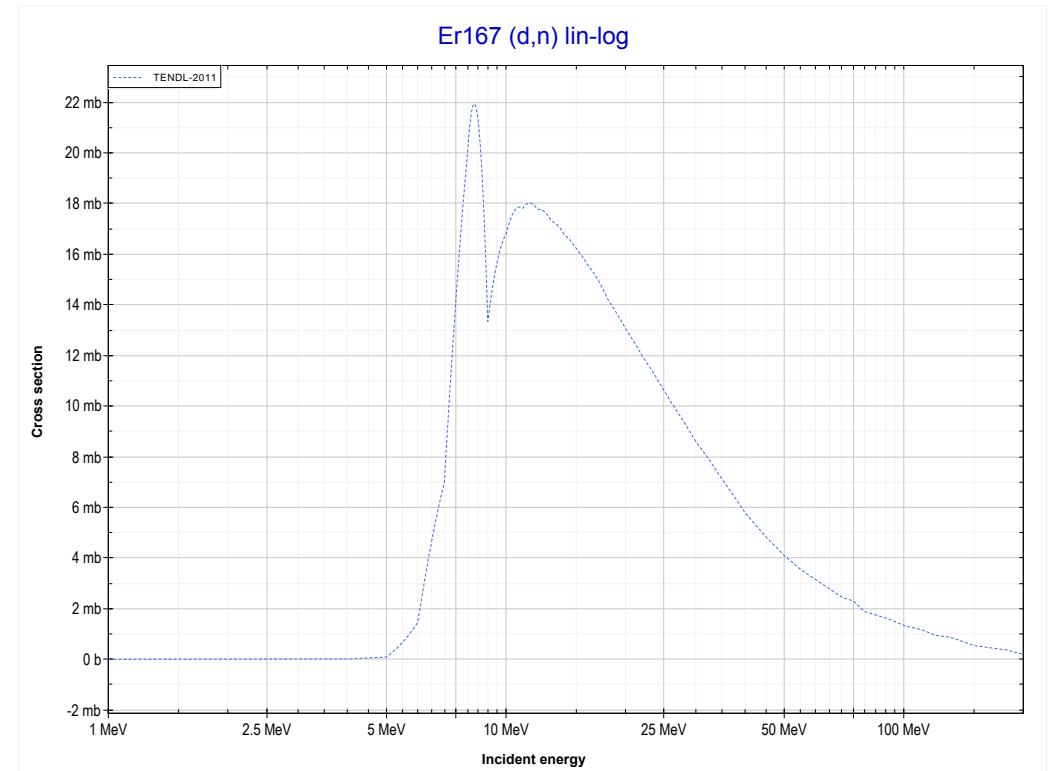
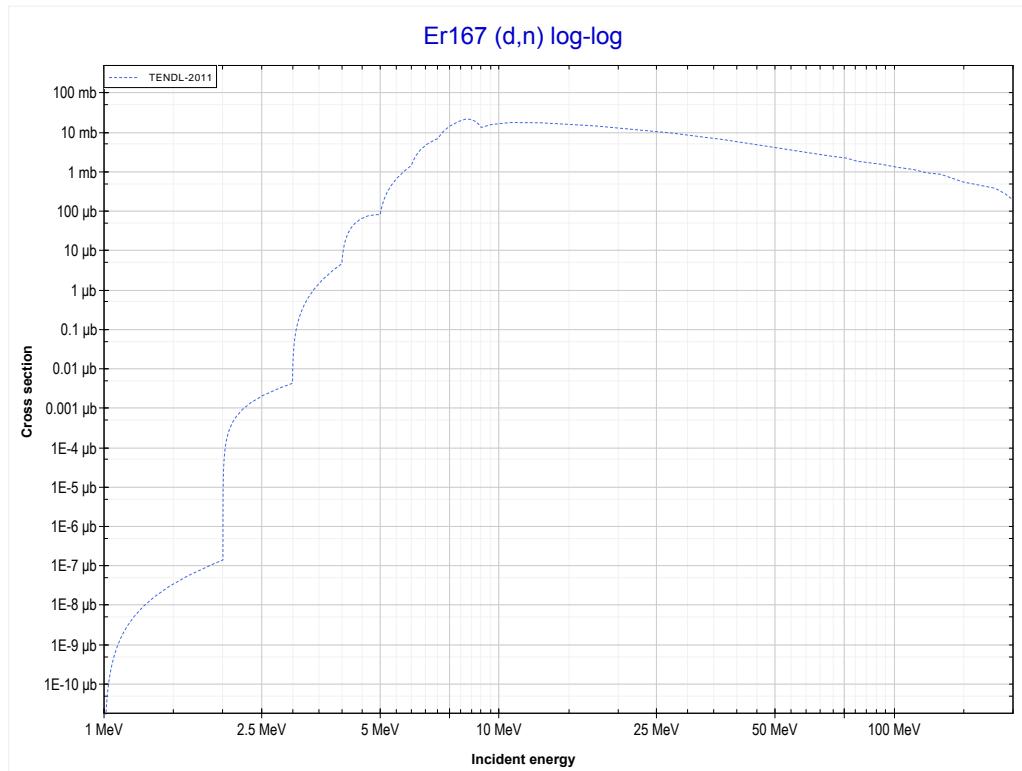
Reaction	Q-Value
Ho165(d,p)Ho166	4019.05 keV

<< 59-Pr-141	68-Er-166 MT17 (d,3n) or MT5 (Tm165 production)	68-Er-167 >>
<< MT103 (d,p)		MT4 (d,n) >>



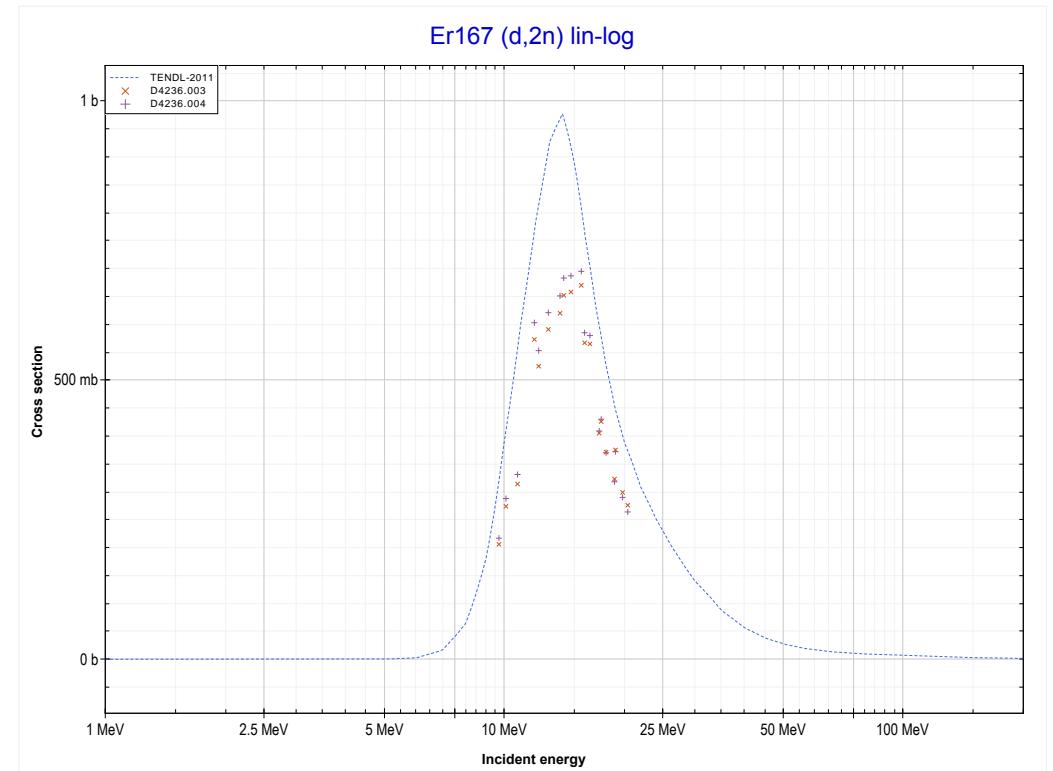
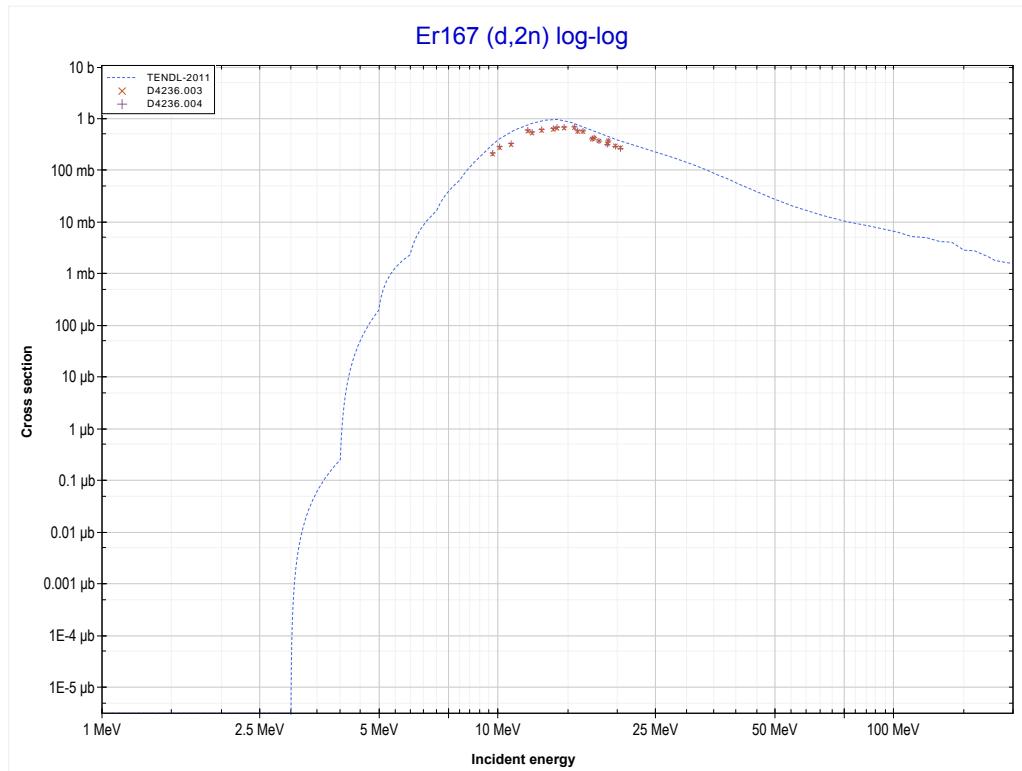
Reaction	Q-Value
Er166(d,3n)Tm165	-13073.83 keV

<< 52-Te-124	68-Er-167 MT4 (d,n) or MT5 (Tm168 production)	>> 70-Yb-176
<< MT17 (d,3n)		MT16 (d,2n) >>



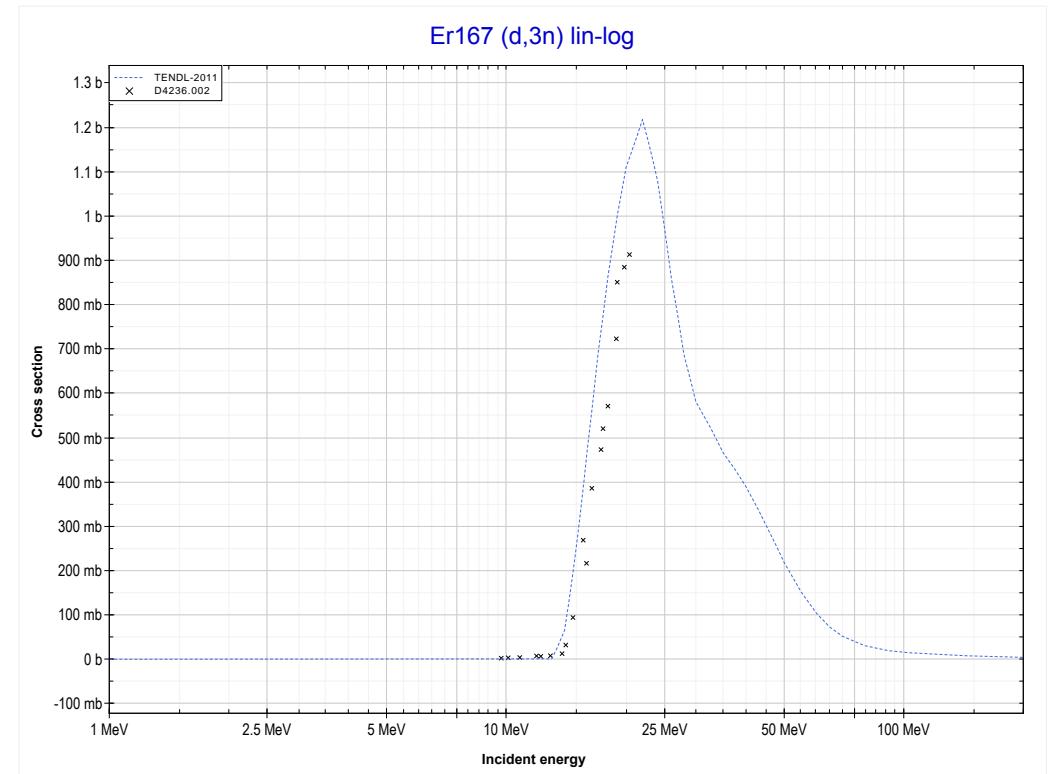
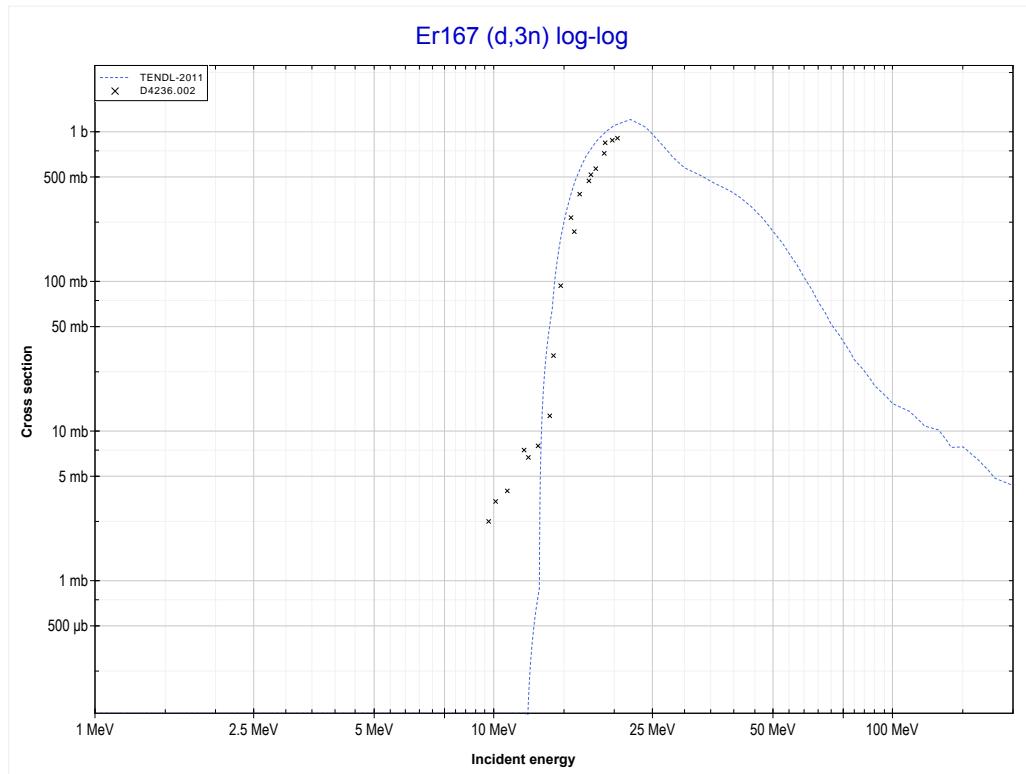
Reaction	Q-Value
$\text{Er}^{167}(\text{d},\text{n})\text{Tm}^{168}$	3085.40 keV

<< 67-Ho-165	68-Er-167 MT16 (d,2n) or MT5 (Tm167 production)	>> 69-Tm-169
<< MT4 (d,n)		MT17 (d,3n) >>



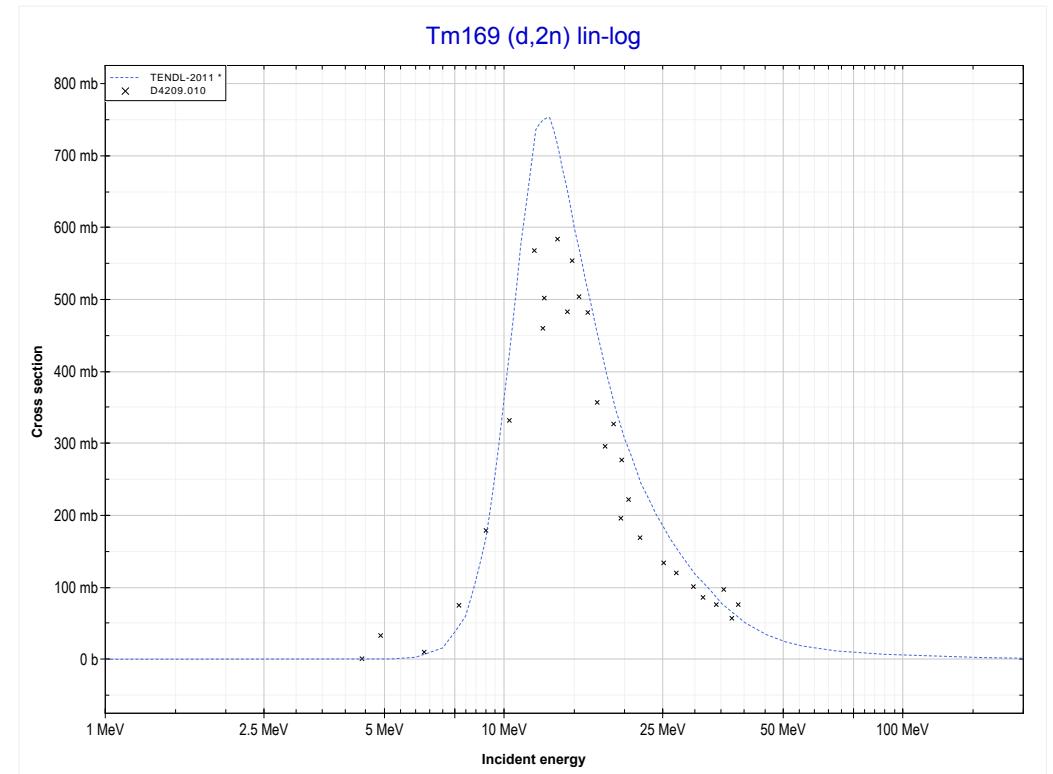
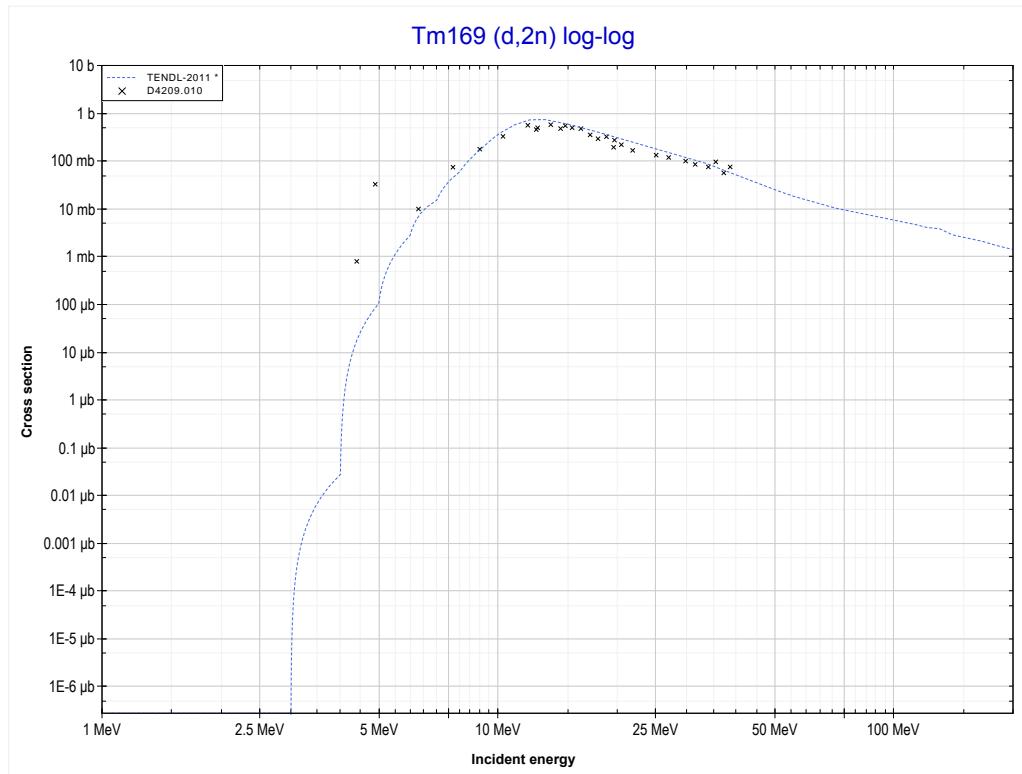
Reaction	Q-Value
Er167(d,2n)Tm167	-3755.31 keV

<< 68-Er-166	68-Er-167 MT17 (d,3n) or MT5 (Tm166 production)	81-Tl-203 >>
<< MT16 (d,2n)		MT16 (d,2n) >>



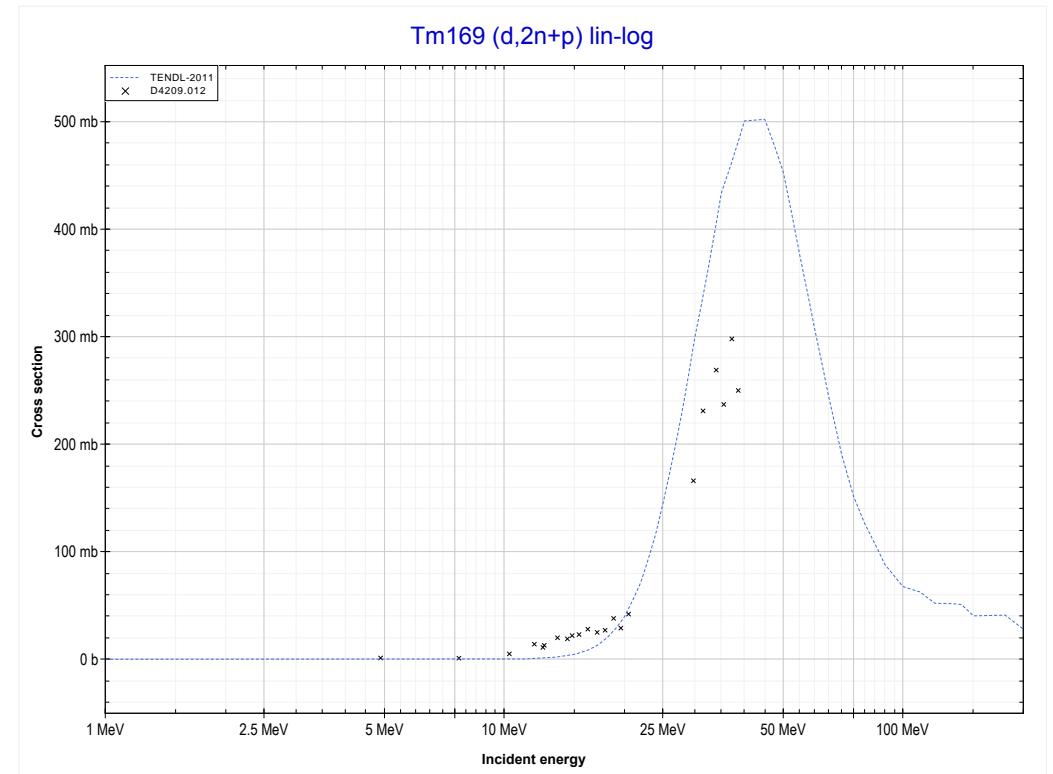
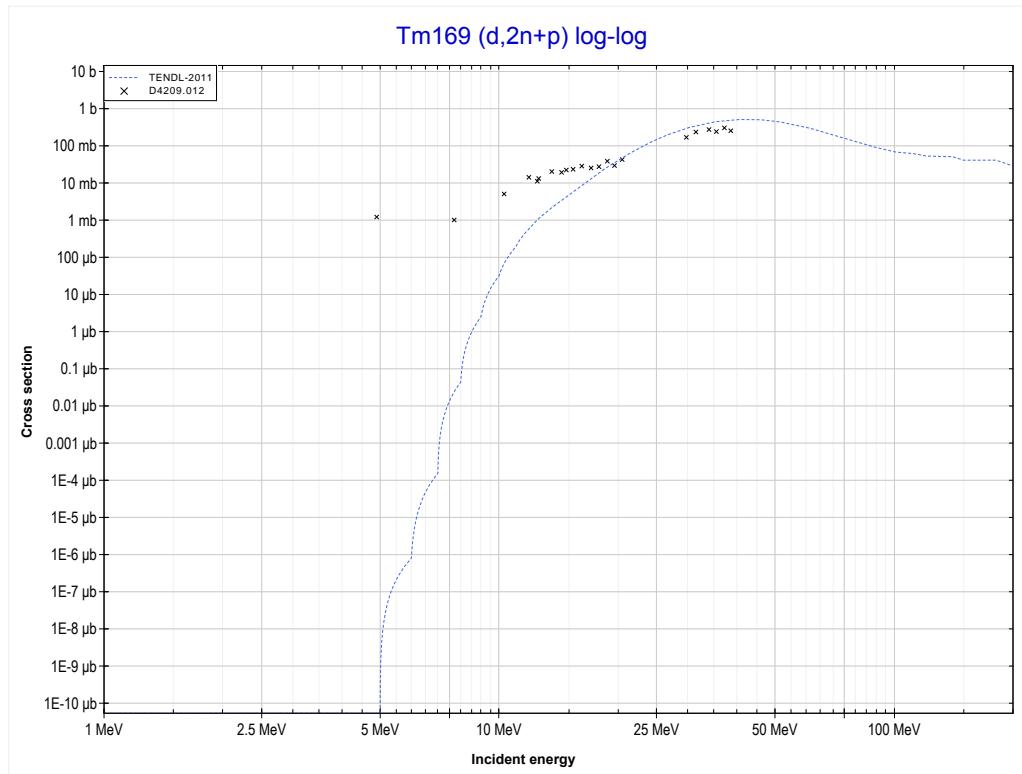
Reaction	Q-Value
Er167(d,3n)Tm166	-12480.93 keV

<< 68-Er-167	69-Tm-169 MT16 (d,2n) or MT5 (Yb169 production)	>> 72-Hf-174
<< MT17 (d,3n)		>> MT41 (d,2n+p) >>



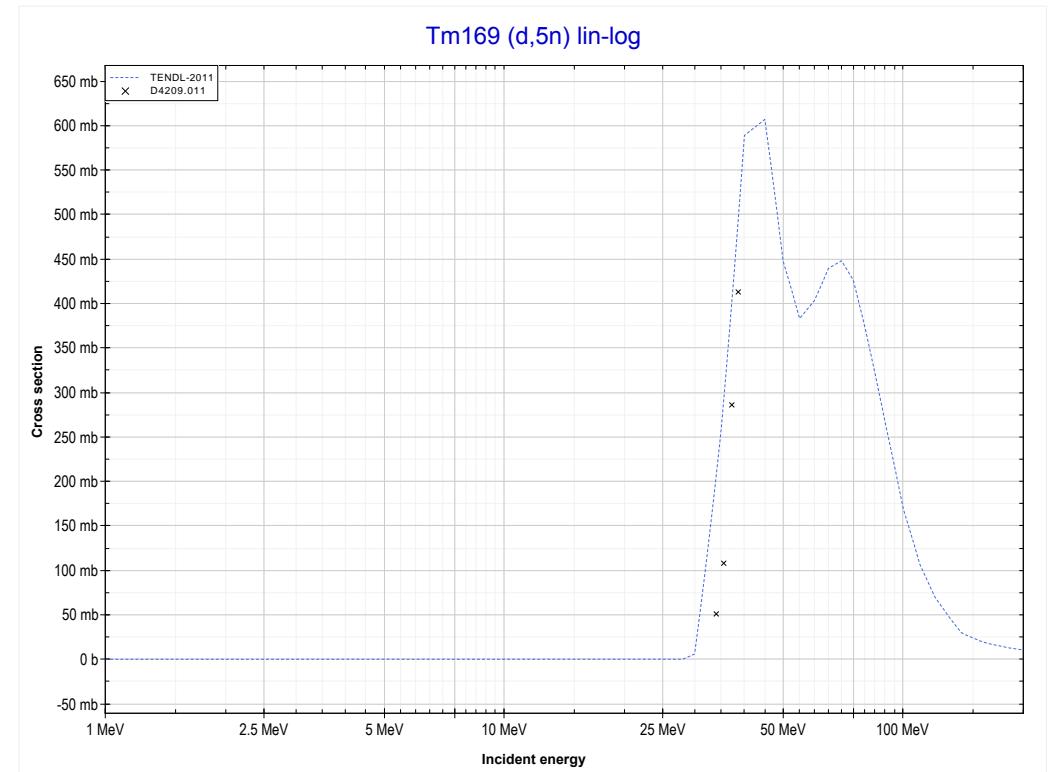
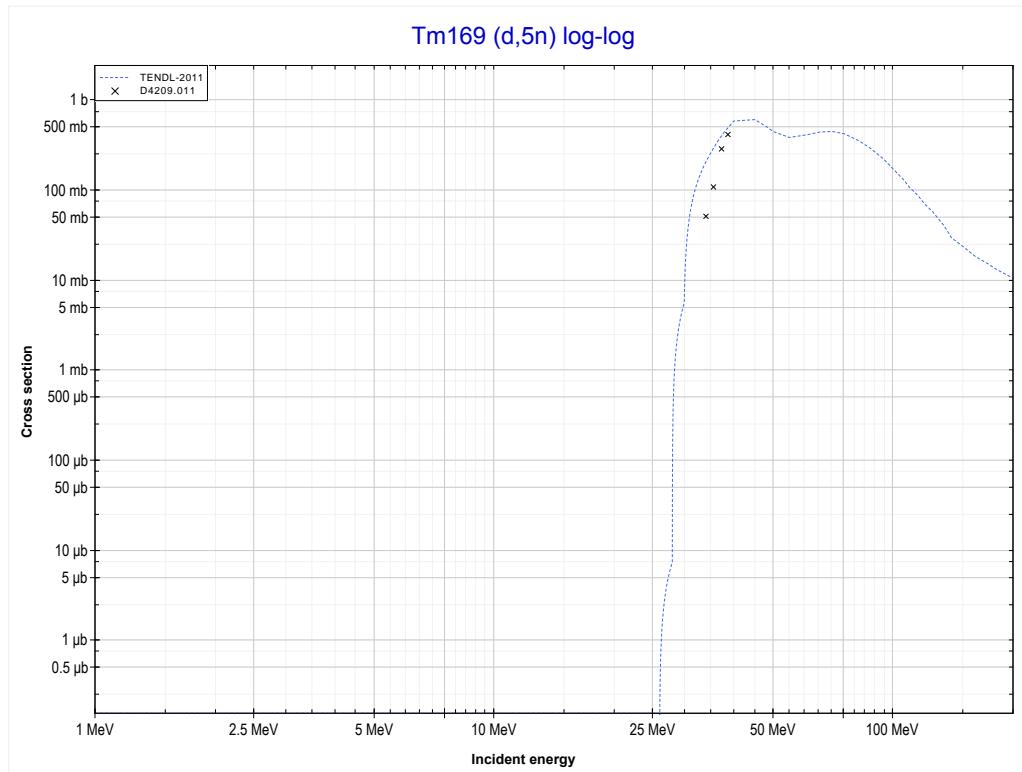
Reaction	Q-Value
Tm169(d,2n)Yb169	-3916.91 keV

<< 52-Te-122	69-Tm-169 MT41 (d,2n+p) or MT5 (Tm168 production)	>> 73-Ta-181
<< MT16 (d,2n)		>> MT152 (d,5n)



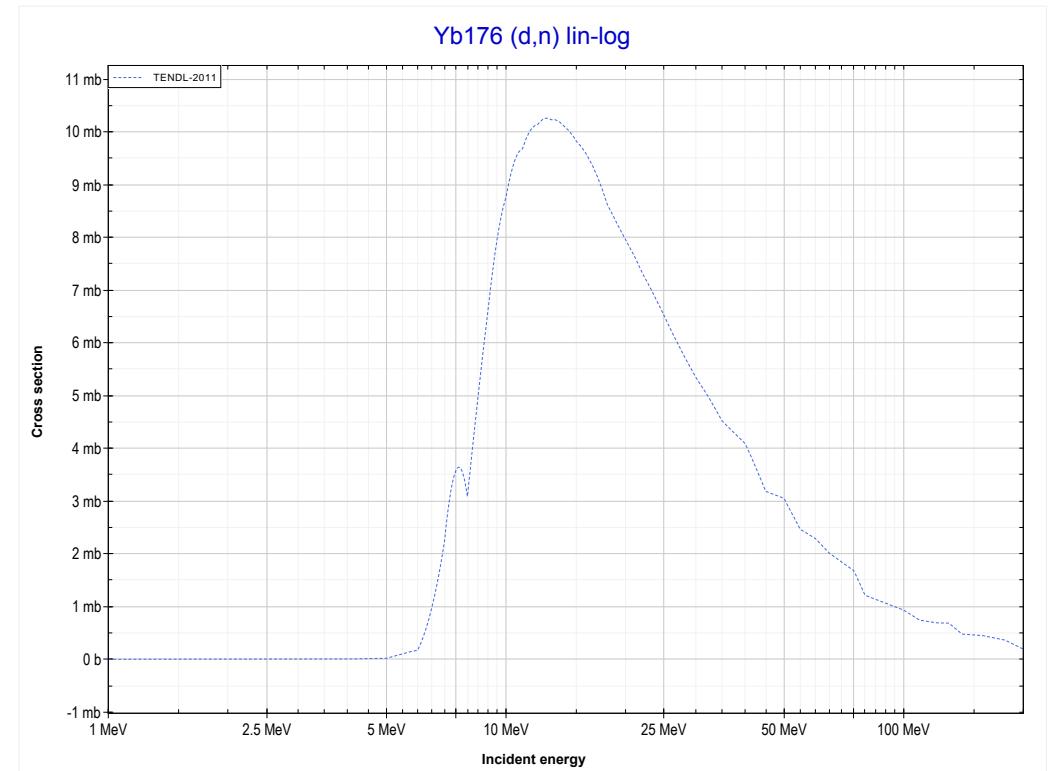
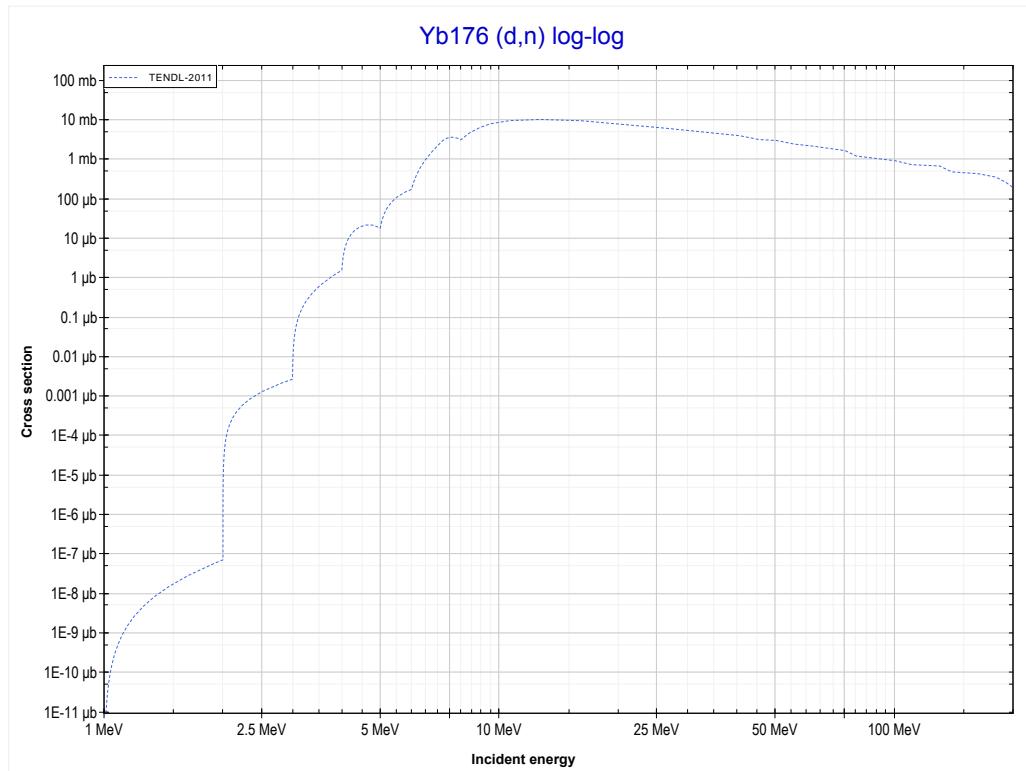
Reaction	Q-Value
Tm169(d,t)Tm168	-1776.38 keV
Tm169(d,n+d)Tm168	-8033.62 keV
Tm169(d,2n+p)Tm168	-10258.18 keV

<< 50-Sn-118	69-Tm-169 MT152 (d,5n) or MT5 (Yb166 production)	73-Ta-181 >>
<< MT41 (d,2n+p)		MT4 (d,n) >>



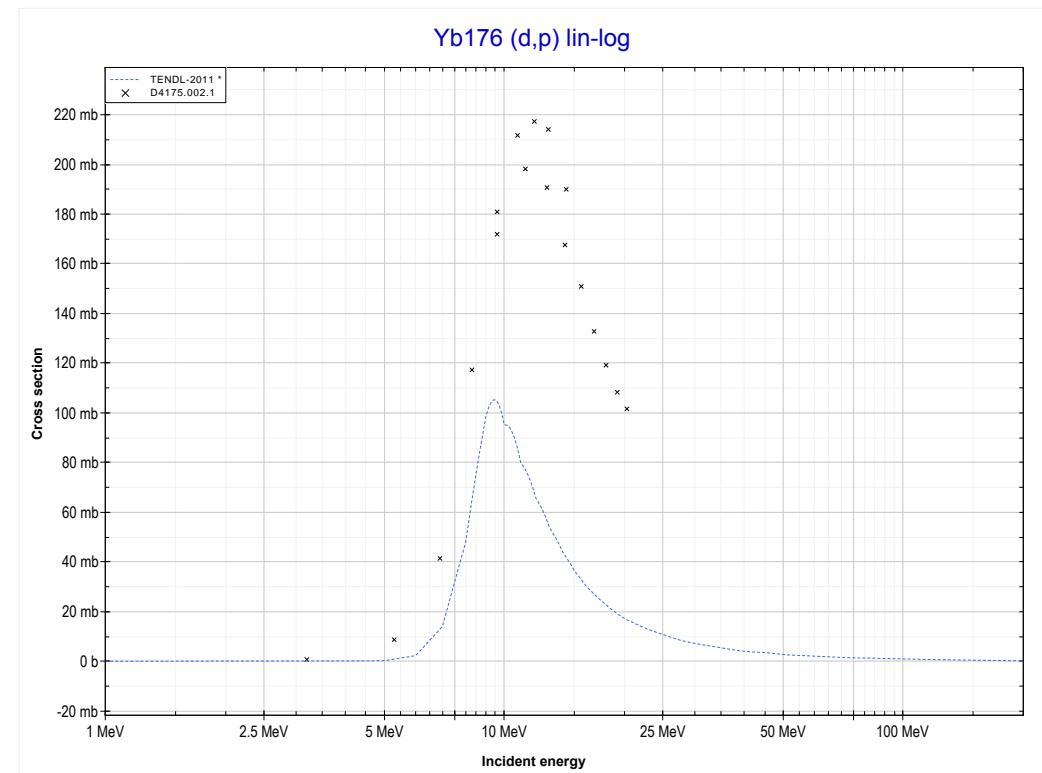
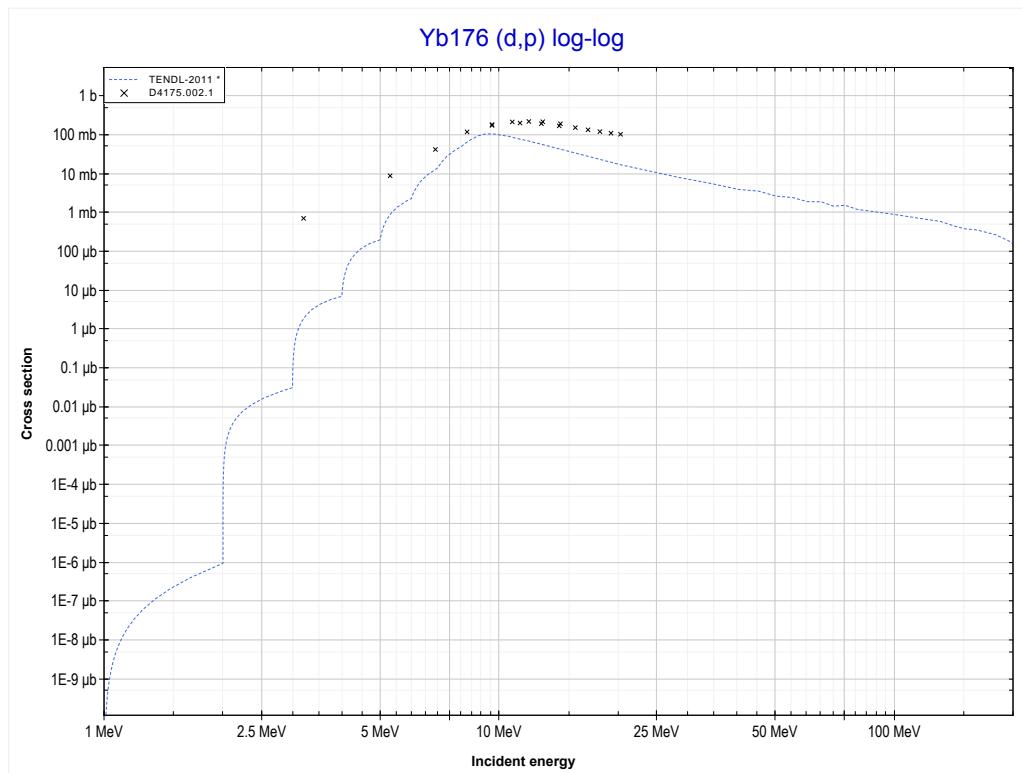
Reaction	Q-Value
Tm169(d,5n)Yb166	-26912.86 keV

<< 68-Er-167	70-Yb-176 MT4 (d,n) or MT5 (Lu177 production)	>> 83-Bi-209
<< MT152 (d,5n)		MT103 (d,p) >>



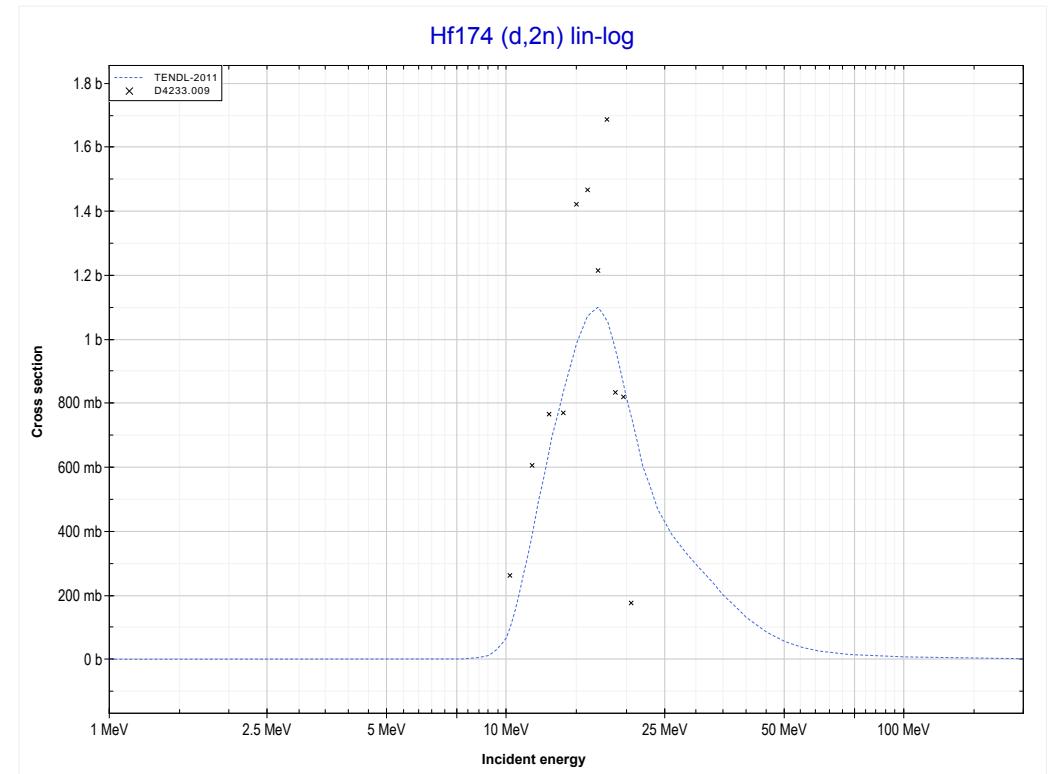
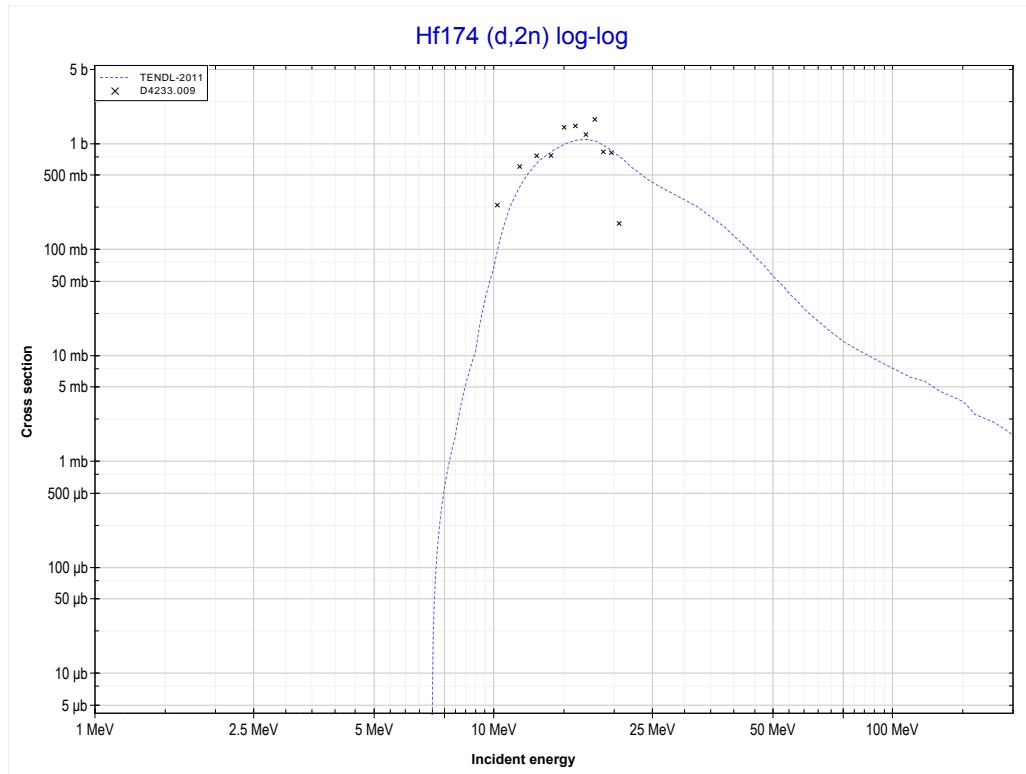
Reaction	Q-Value
Yb176(d,n)Lu177	3959.30 keV

<< 67-Ho-165	70-Yb-176 MT103 (d,p) or MT5 (Yb177 production)	>> 72-Hf-180
<< MT4 (d,n)		MT16 (d,2n) >>



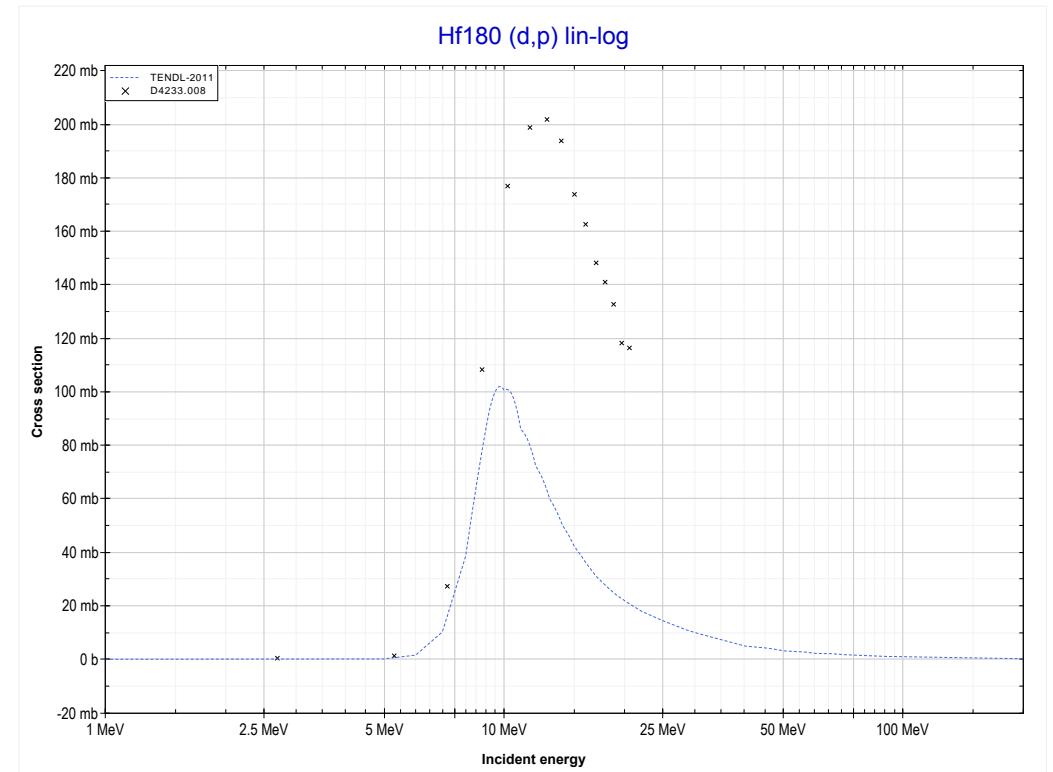
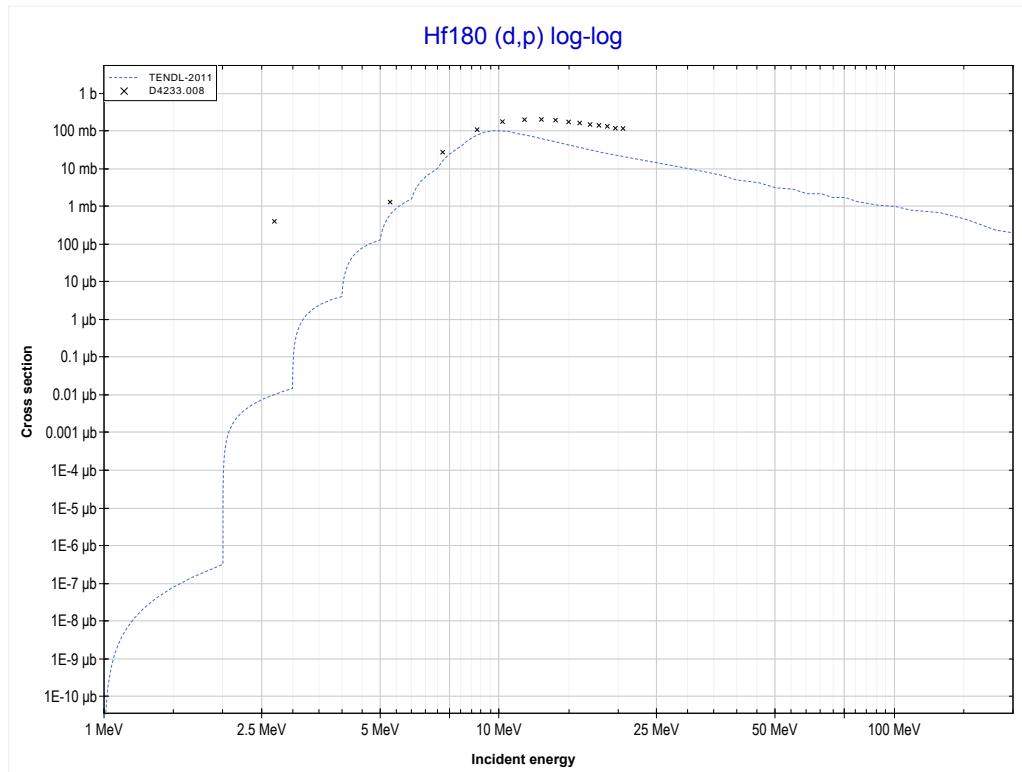
Reaction	Q-Value
Yb176(d,p)Yb177	3341.85 keV

<< 69-Tm-169	72-Hf-174 MT16 (d,2n) or MT5 (Ta174 production)	>> 73-Ta-181
<< MT103 (d,p)		MT103 (d,p) >>



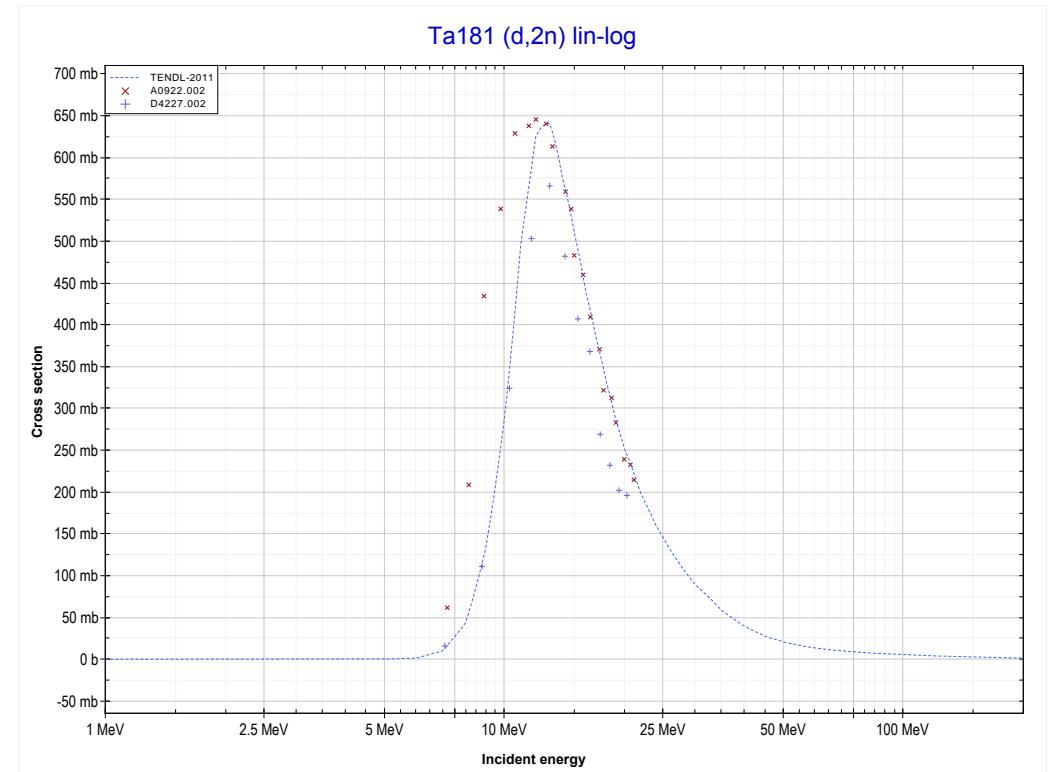
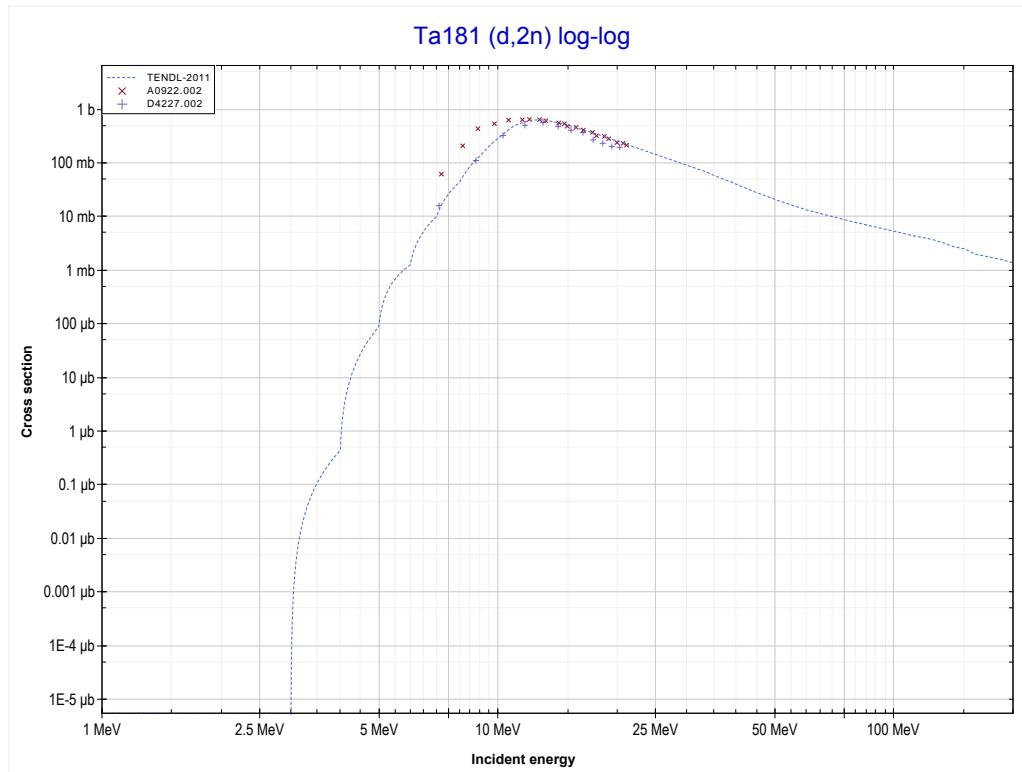
Reaction	Q-Value
Hf174(d,2n)Ta174	-7112.51 keV

<< 70-Yb-176	72-Hf-180 MT103 (d,p) or MT5 (Hf181 production)	>> 73-Ta-181
<< MT16 (d,2n)		MT16 (d,2n) >>



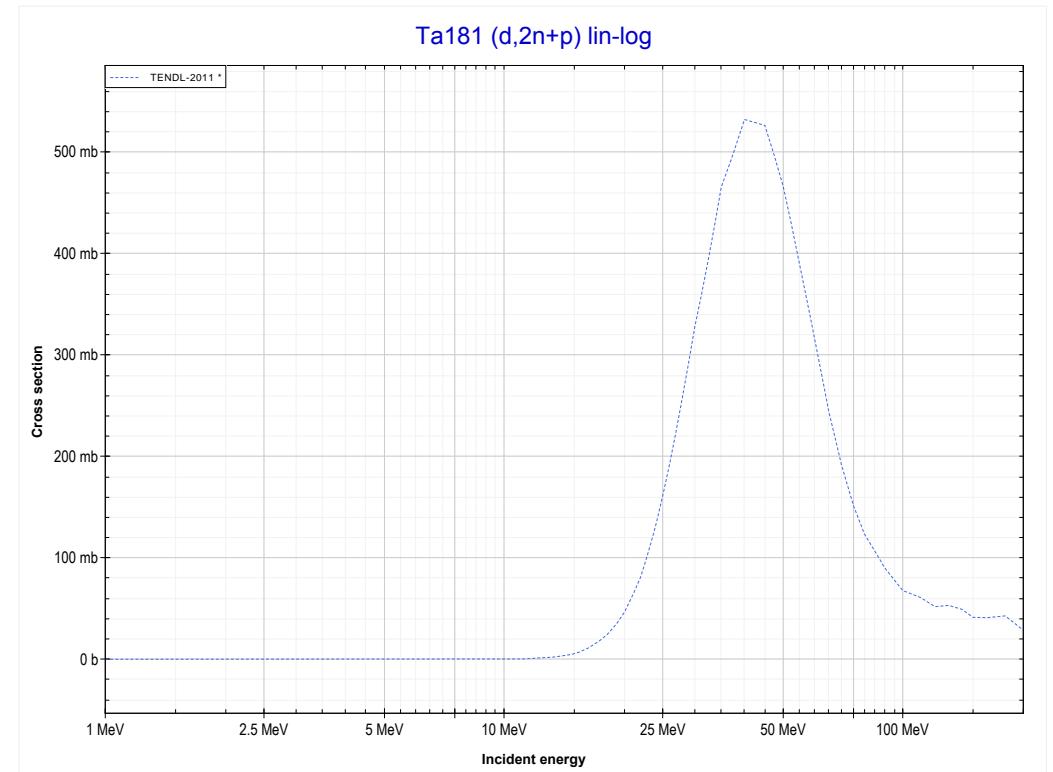
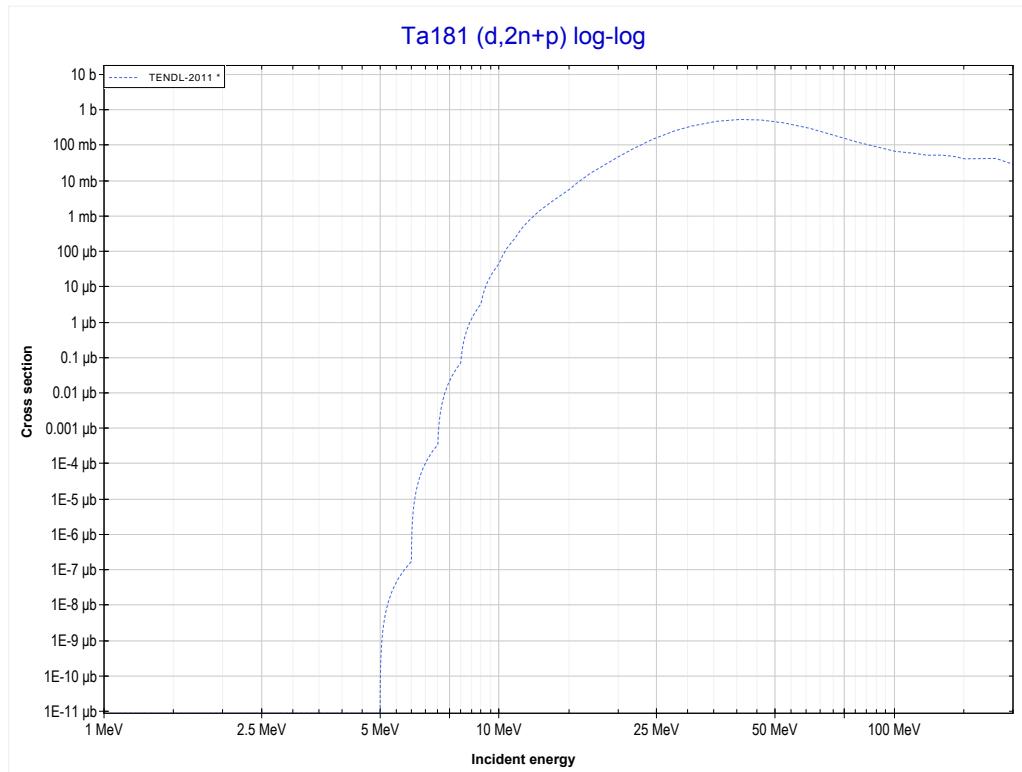
Reaction	Q-Value
$\text{Hf}^{180}(\text{d},\text{p})\text{Hf}^{181}$	3470.25 keV

<< 72-Hf-174	73-Ta-181 MT16 (d,2n) or MT5 (W181 production)	74-W-182 >>
<< MT103 (d,p) >>		MT41 (d,2n+p) >>



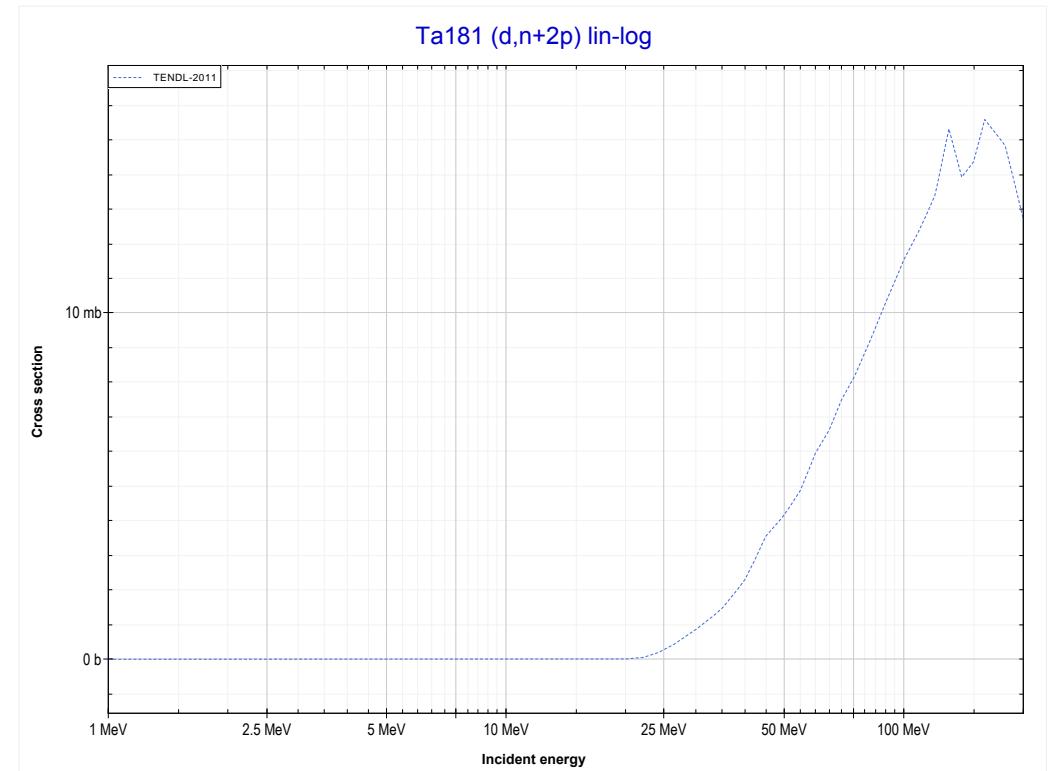
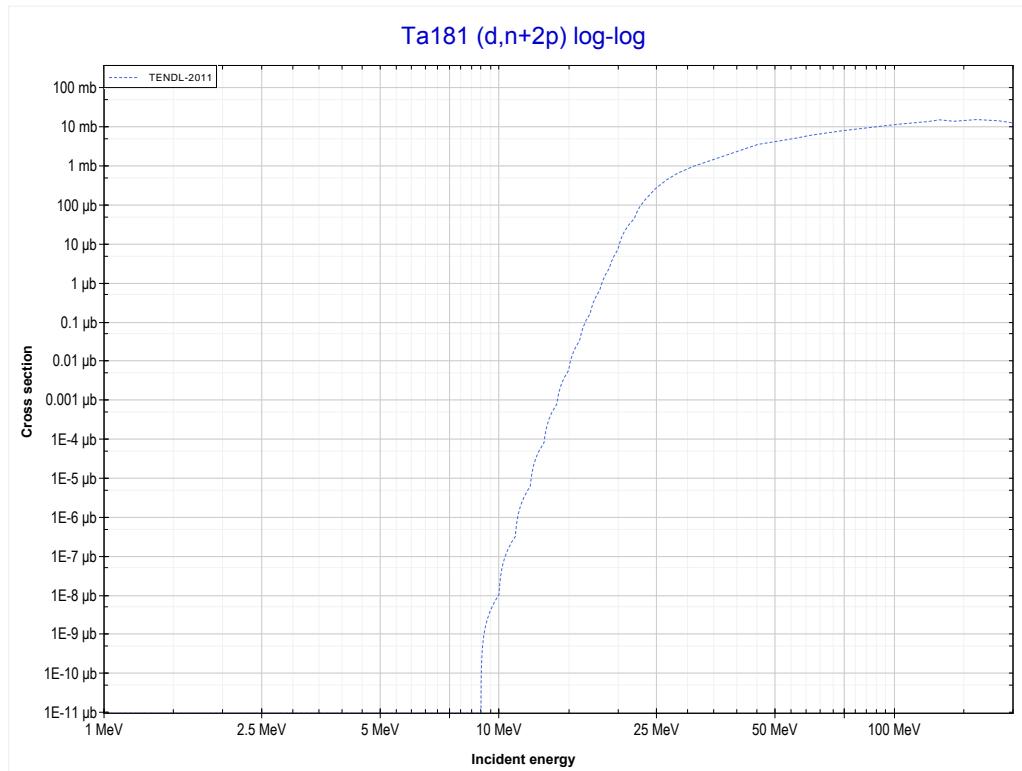
Reaction	Q-Value
Ta181(d,2n)W181	-3194.51 keV

<< 69-Tm-169	73-Ta-181 MT41 (d,2n+p) or MT5 (Ta180 production)	79-Au-197 >>
<< MT16 (d,2n)		MT44 (d,n+2p) >>



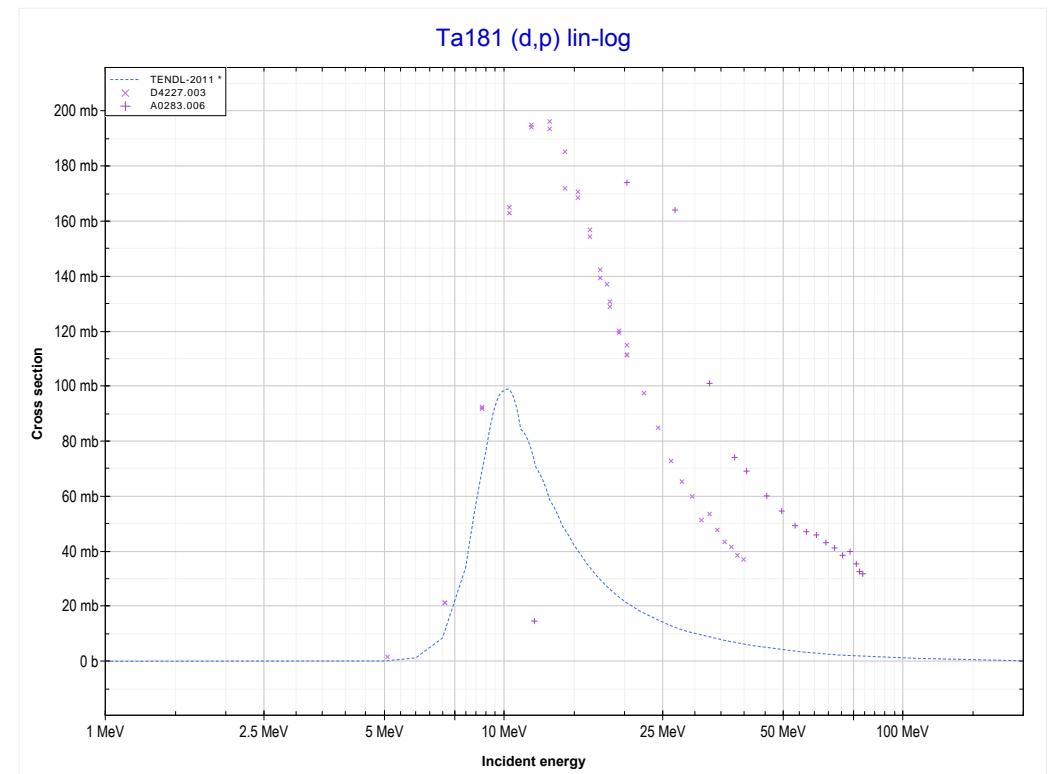
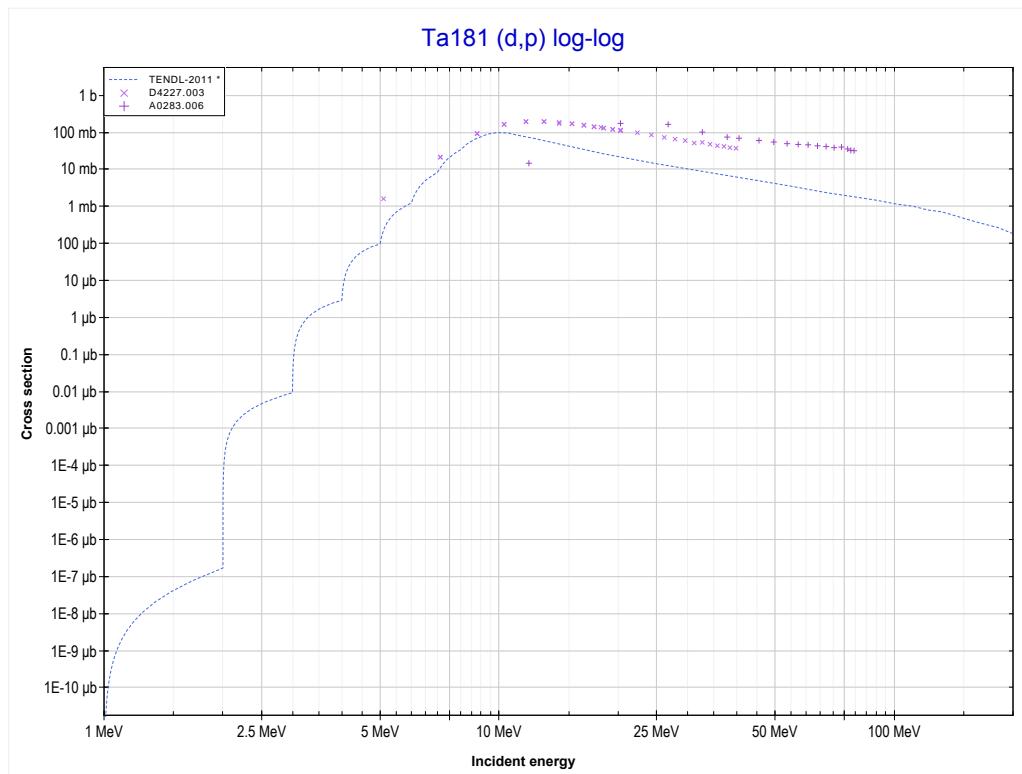
Reaction	Q-Value
Ta181(d,t)Ta180	-1319.48 keV
Ta181(d,n+d)Ta180	-7576.72 keV
Ta181(d,2n+p)Ta180	-9801.28 keV

<< 58-Ce-142	73-Ta-181 MT44 (d,n+2p) or MT5 (Hf180 production)	>> MT103 (d,p) >>
<< MT41 (d,2n+p)		



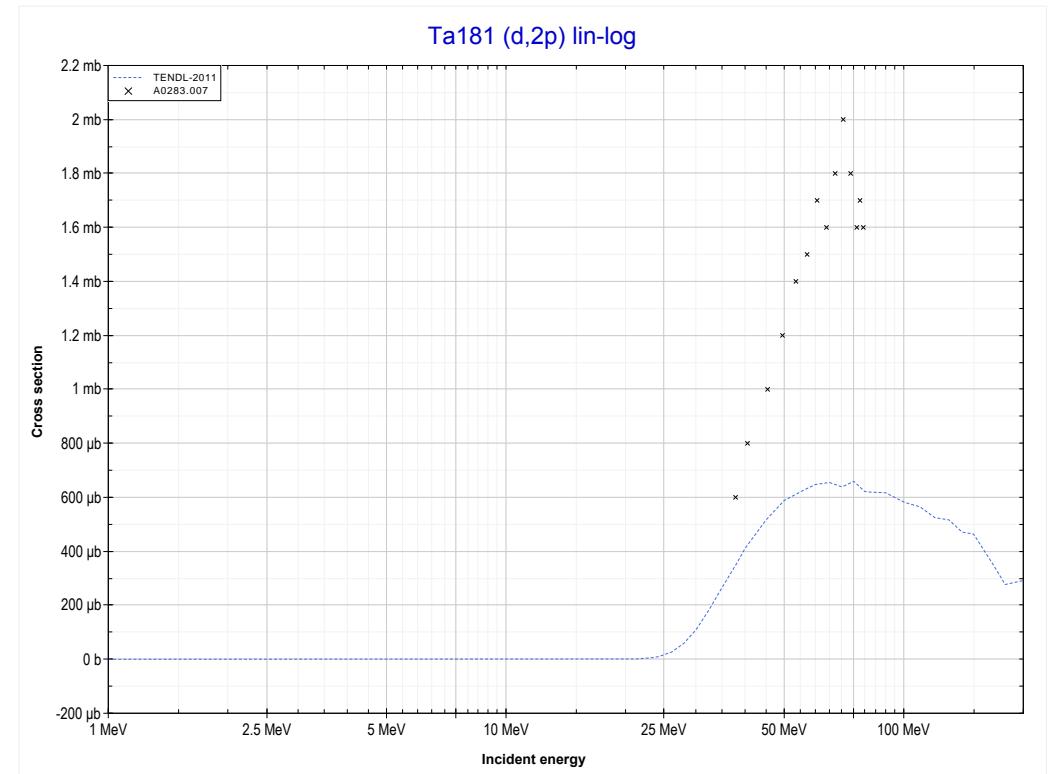
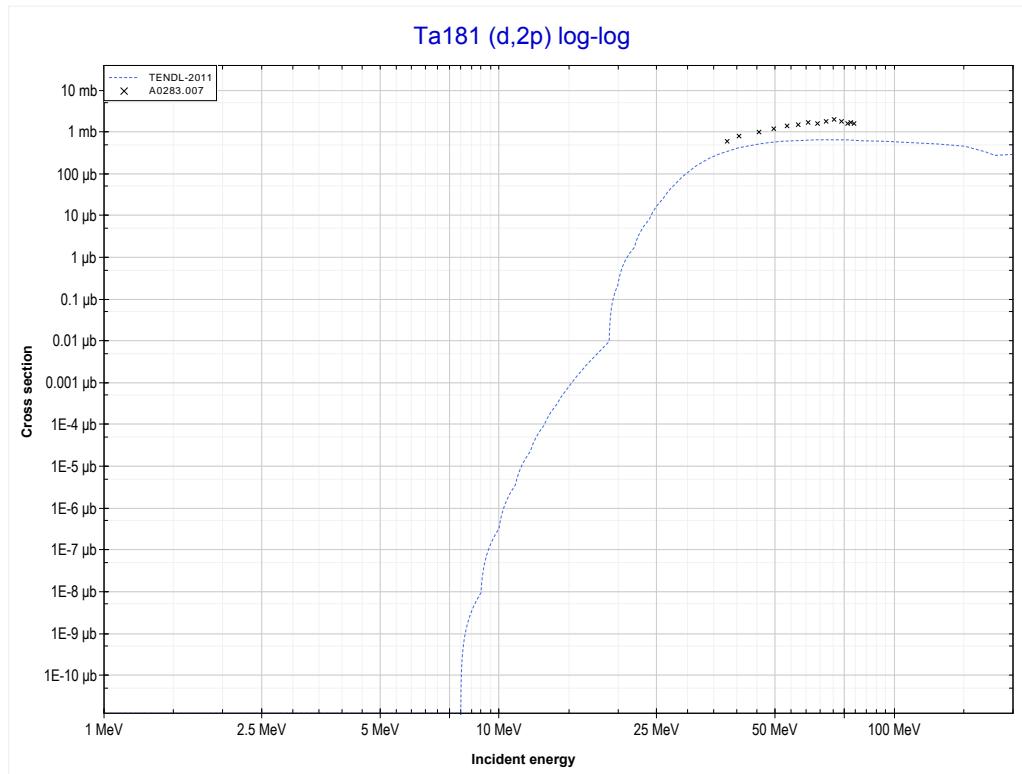
Reaction	Q-Value
Ta181(d,He3)Hf180	-448.69 keV
Ta181(d,p+d)Hf180	-5942.17 keV
Ta181(d,n+2p)Hf180	-8166.74 keV

<< 72-Hf-180	73-Ta-181 MT103 (d,p) or MT5 (Ta182 production)	>> 74-W-184
<< MT44 (d,n+2p)		MT111 (d,2p) >>



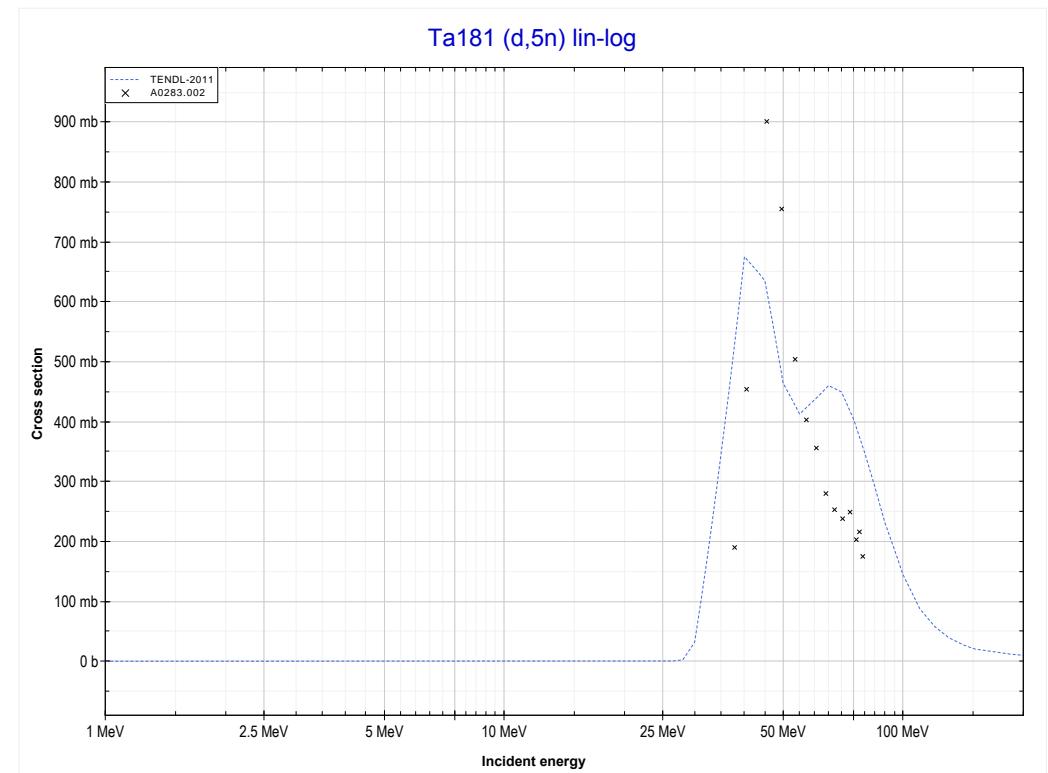
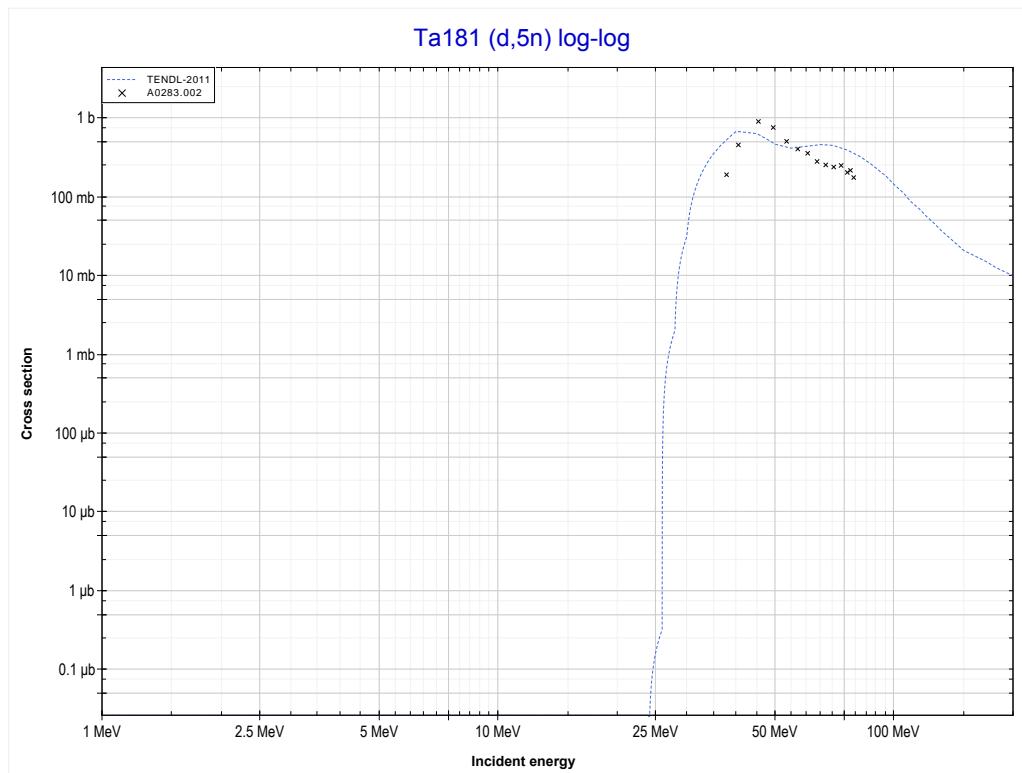
Reaction	Q-Value
Ta181(d,p)Ta182	3838.45 keV

<< 45-Rh-103	73-Ta-181 MT111 (d,2p) or MT5 (Hf181 production)	MT152 (d,5n) >>
<< MT103 (d,p)		



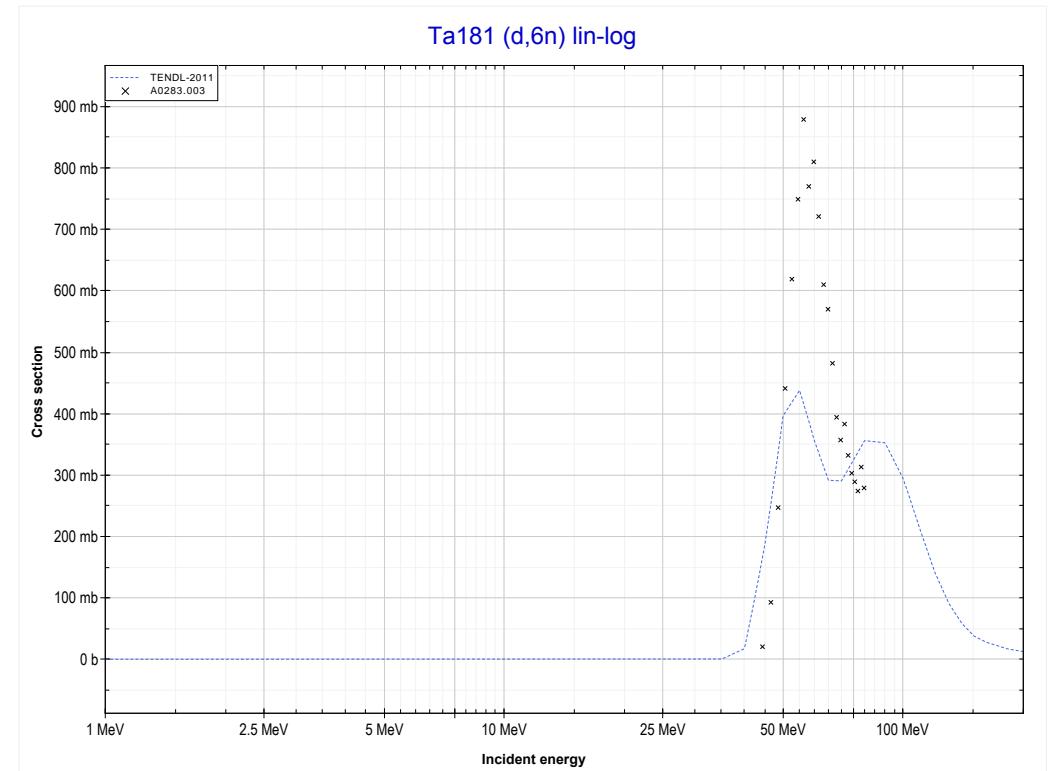
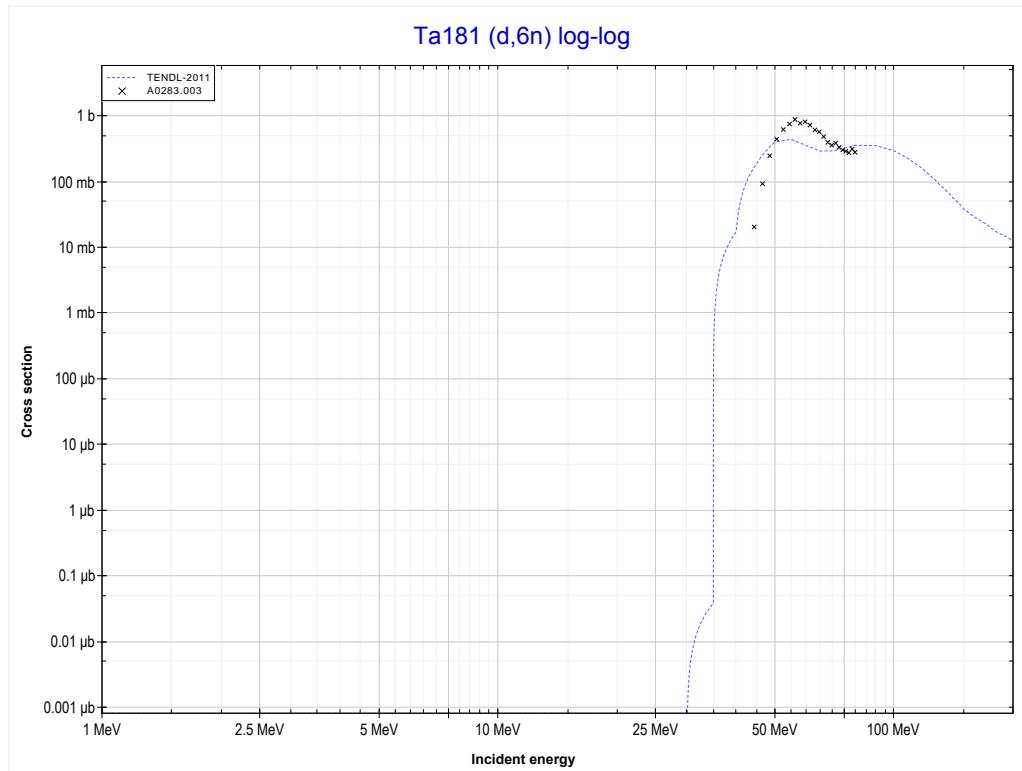
Reaction	Q-Value
Ta181(d,2p)Hf181	-2471.92 keV

<< 69-Tm-169	73-Ta-181 MT152 (d,5n) or MT5 (W178 production)	81-Tl-203 >>
<< MT111 (d,2p)		MT153 (d,6n) >>



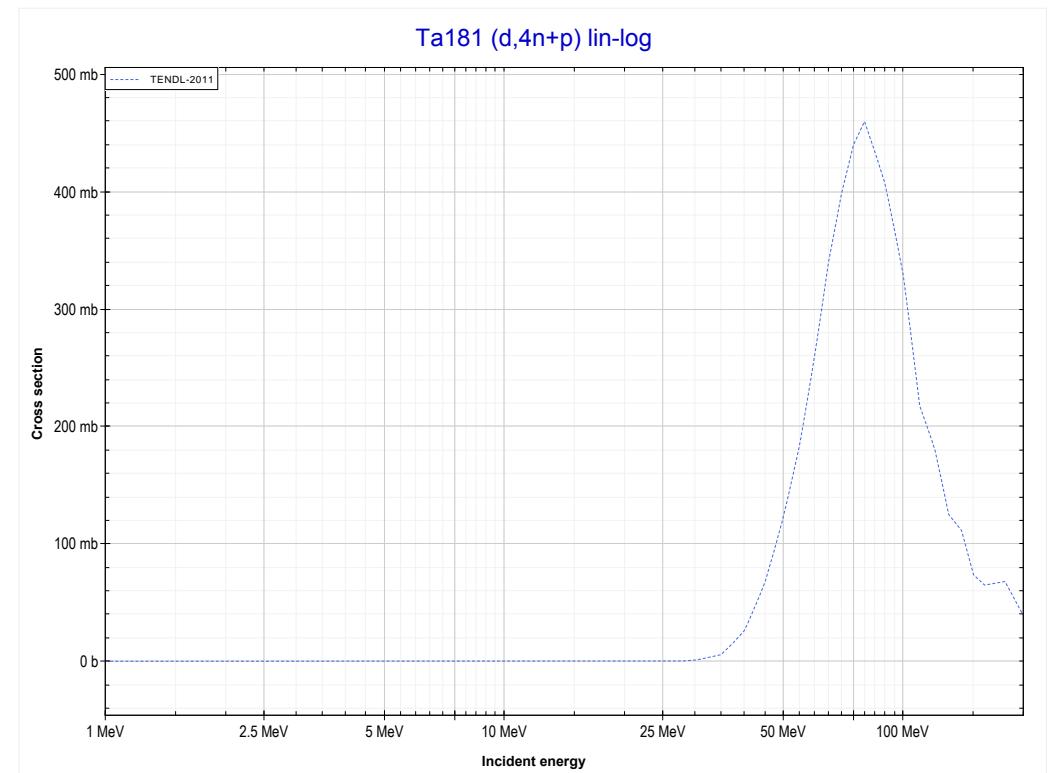
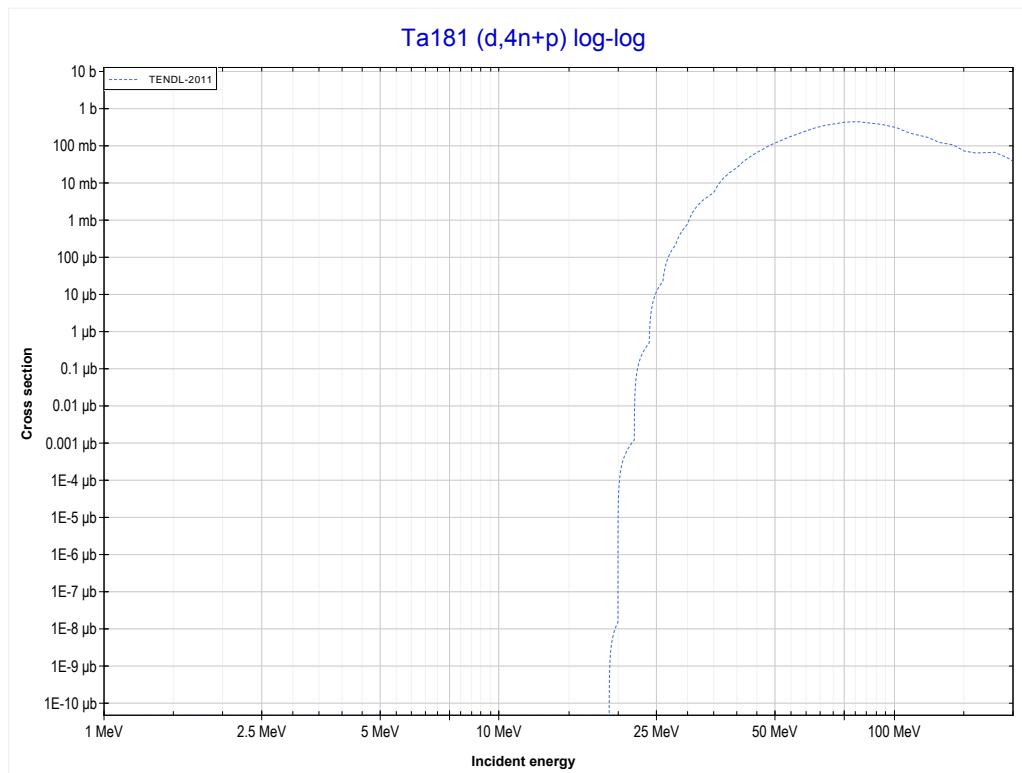
Reaction	Q-Value
Ta181(d,5n)W178	-25246.46 keV

<< 53-I-127	73-Ta-181 MT153 (d,6n) or MT5 (W177 production)	79-Au-197 >>
<< MT152 (d,5n) >>		MT156 (d,4n+p) >>



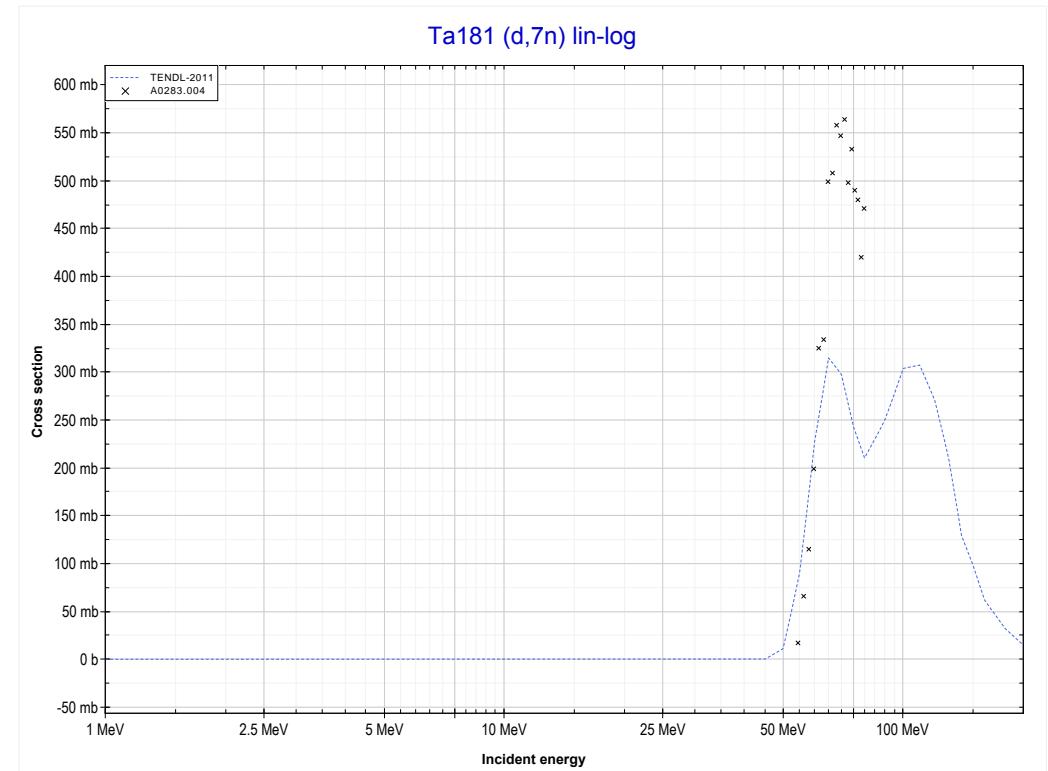
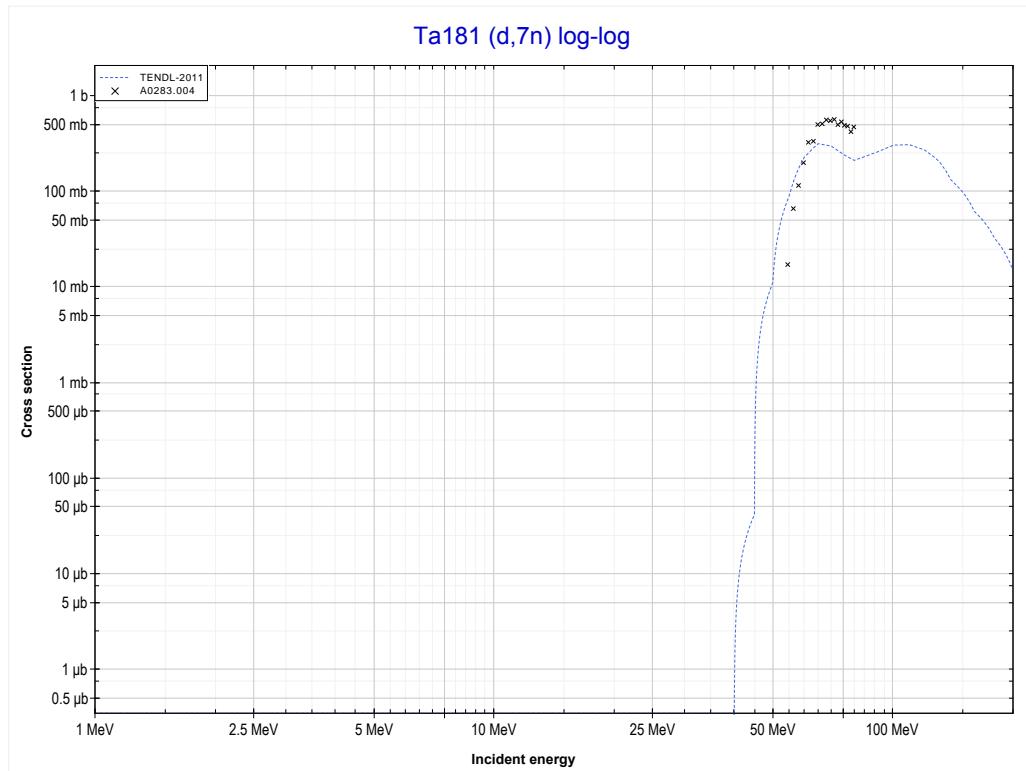
Reaction	Q-Value
Ta181(d,6n)W177	-34031.78 keV

<< MT153 (d,6n)	73-Ta-181 MT156 (d,4n+p) or MT5 (Ta178 production)	83-Bi-209 >> MT160 (d,7n) >>
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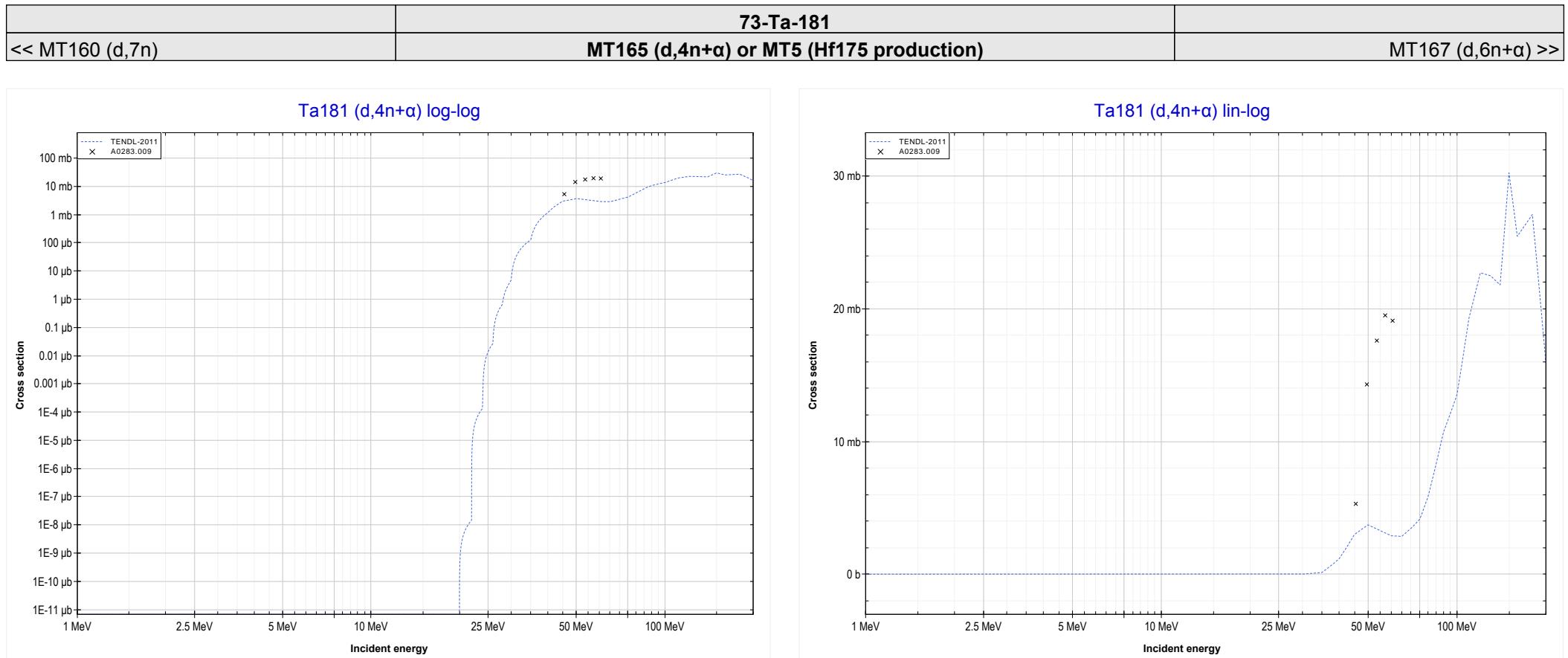


Reaction	Q-Value
Ta181(d,2n+t)Ta178	-15891.32 keV
Ta181(d,3n+d)Ta178	-22148.55 keV
Ta181(d,4n+p)Ta178	-24373.12 keV

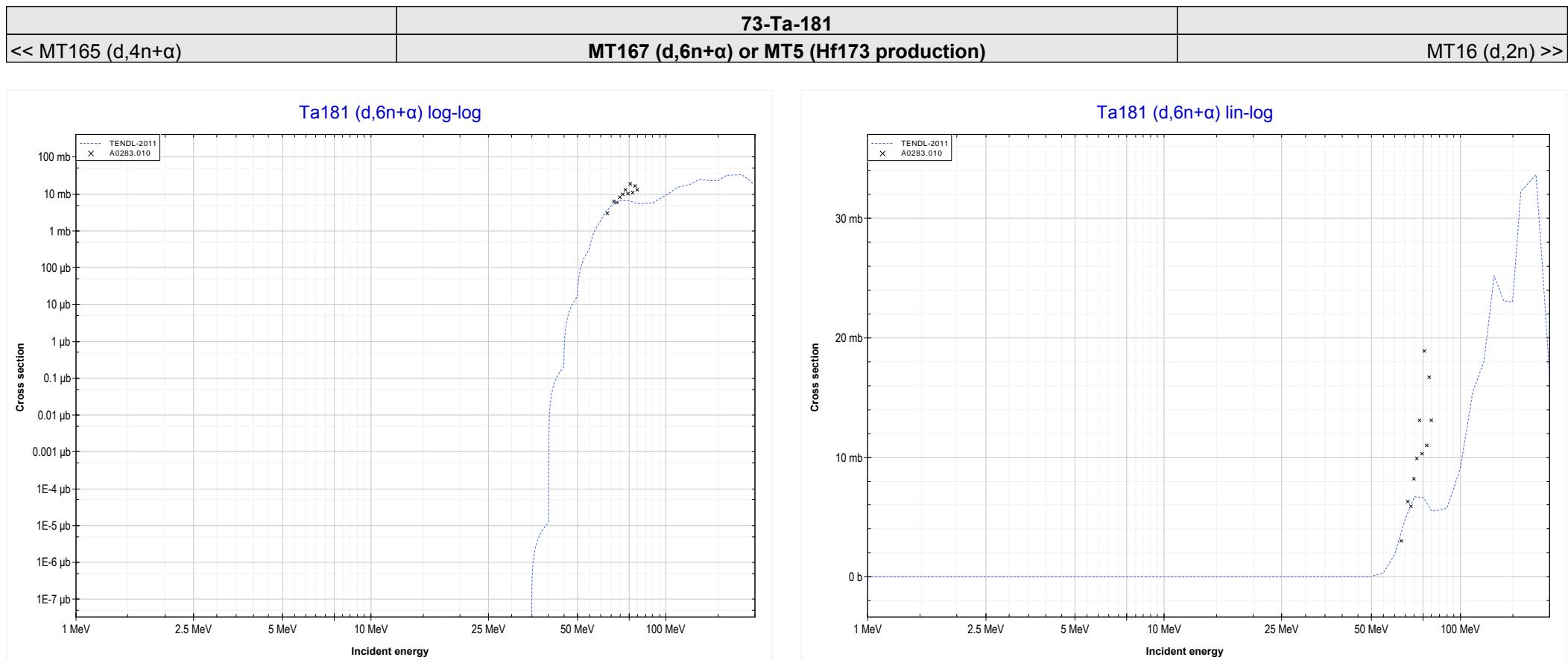
<< 53-I-127	73-Ta-181 MT160 (d,7n) or MT5 (W176 production)	79-Au-197 >>
<< MT156 (d,4n+p) >>		MT165 (d,4n+ α) >>



Reaction	Q-Value
Ta181(d,7n)W176	-41163.10 keV

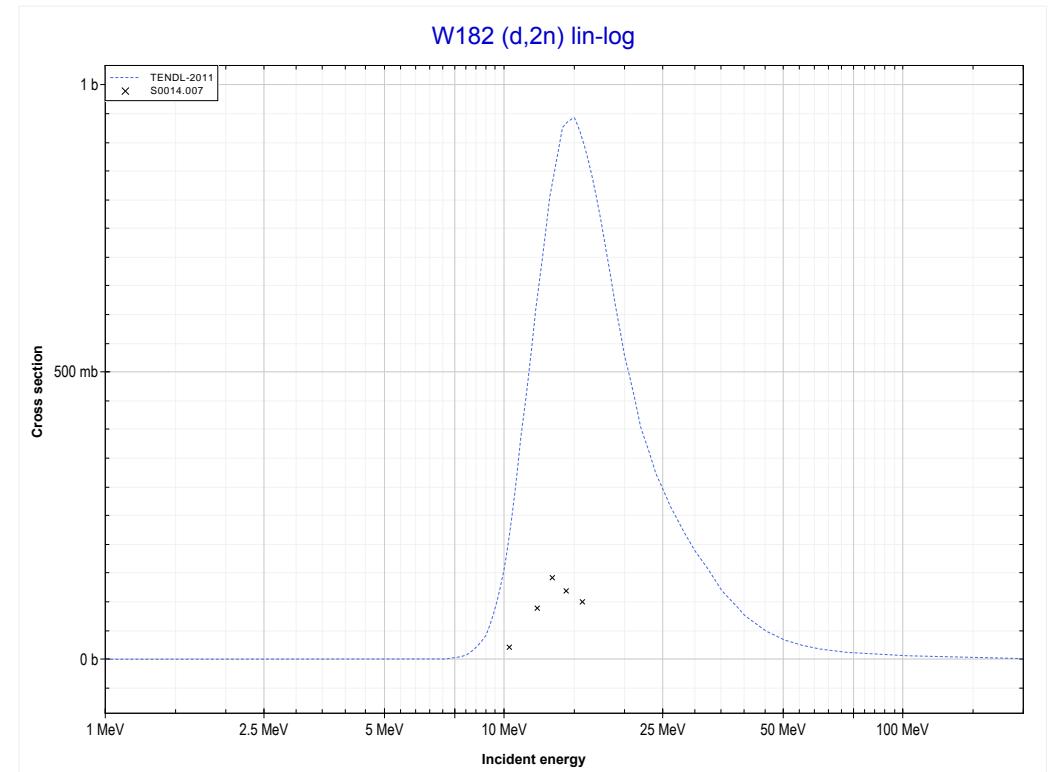
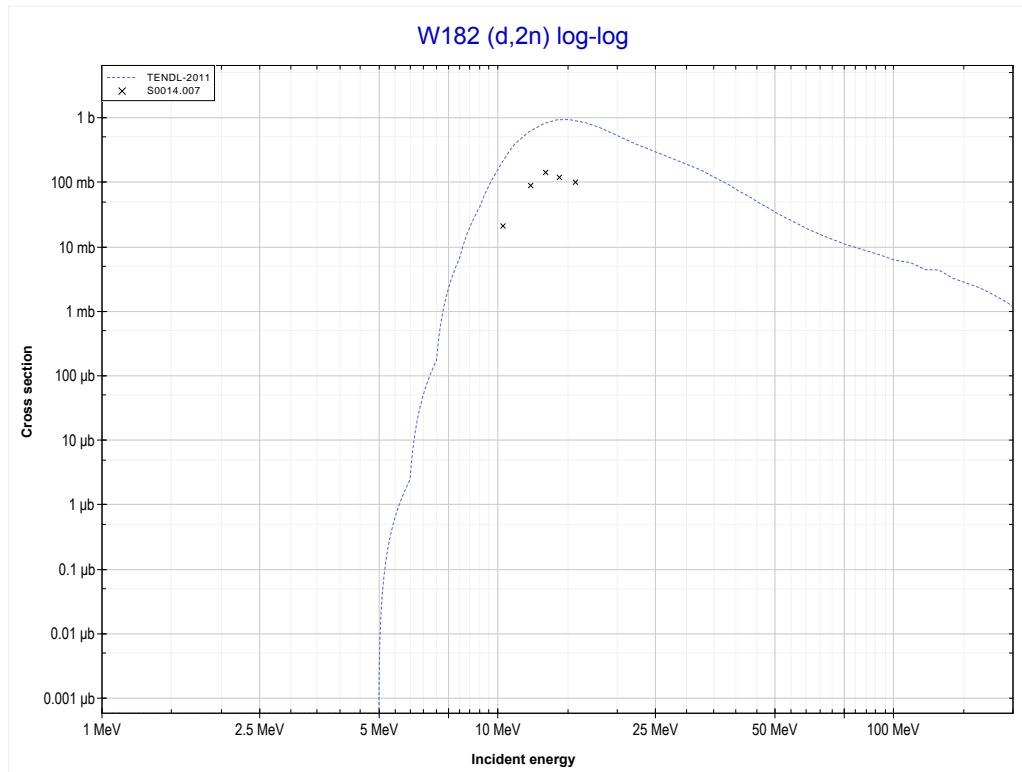


Reaction	Q-Value
$\text{Ta181}(d,4n+\alpha)\text{Hf175}$	-15532.26 keV
$\text{Ta181}(d,2n+2t)\text{Hf175}$	-26864.32 keV
$\text{Ta181}(d,3n+d+t)\text{Hf175}$	-33121.56 keV
$\text{Ta181}(d,4n+p+t)\text{Hf175}$	-35346.12 keV
$\text{Ta181}(d,5n+\text{He3})\text{Hf175}$	-36109.88 keV
$\text{Ta181}(d,4n+2d)\text{Hf175}$	-39378.79 keV
$\text{Ta181}(d,5n+p+d)\text{Hf175}$	-41603.36 keV
$\text{Ta181}(d,6n+2p)\text{Hf175}$	-43827.92 keV



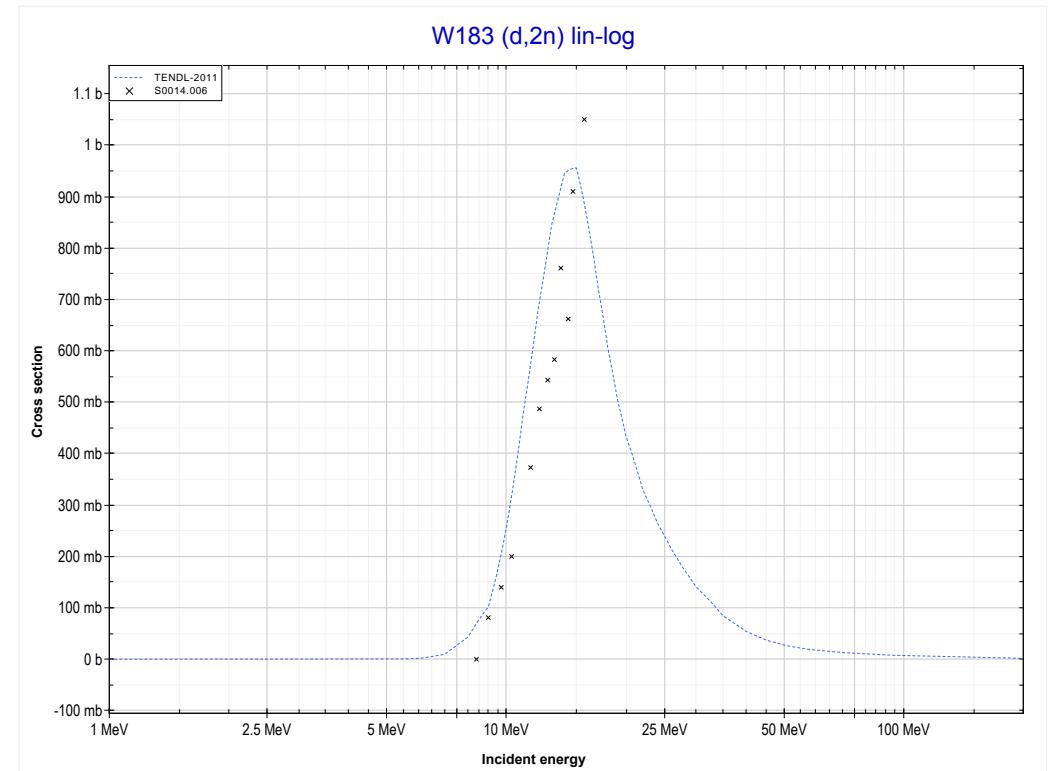
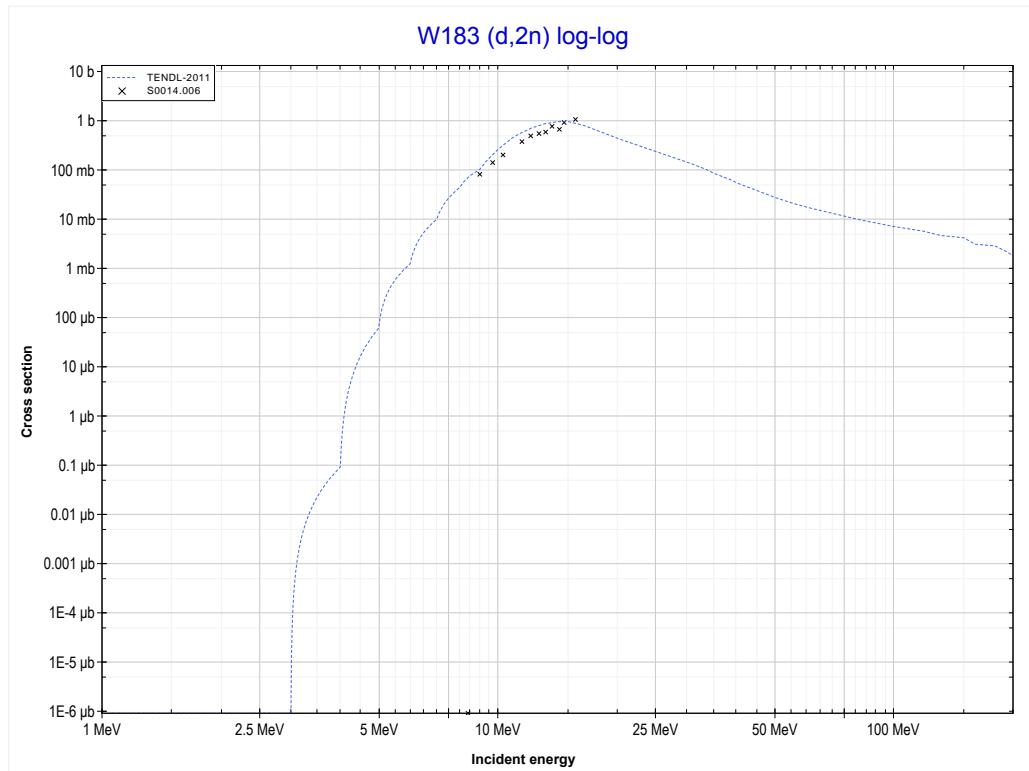
Reaction	Q-Value
Ta181(d,6n+α)Hf173	-30746.70 keV
Ta181(d,4n+2t)Hf173	-42078.76 keV
Ta181(d,5n+d+t)Hf173	-48335.99 keV
Ta181(d,6n+p+t)Hf173	-50560.56 keV
Ta181(d,7n+He3)Hf173	-51324.31 keV
Ta181(d,6n+2d)Hf173	-54593.22 keV
Ta181(d,7n+p+d)Hf173	-56817.79 keV
Ta181(d,8n+2p)Hf173	-59042.36 keV

<< 73-Ta-181	74-W-182 MT16 (d,2n) or MT5 (Re182 production)	74-W-183 >>
<< MT16 (d,6n+α)		MT16 (d,2n) >>



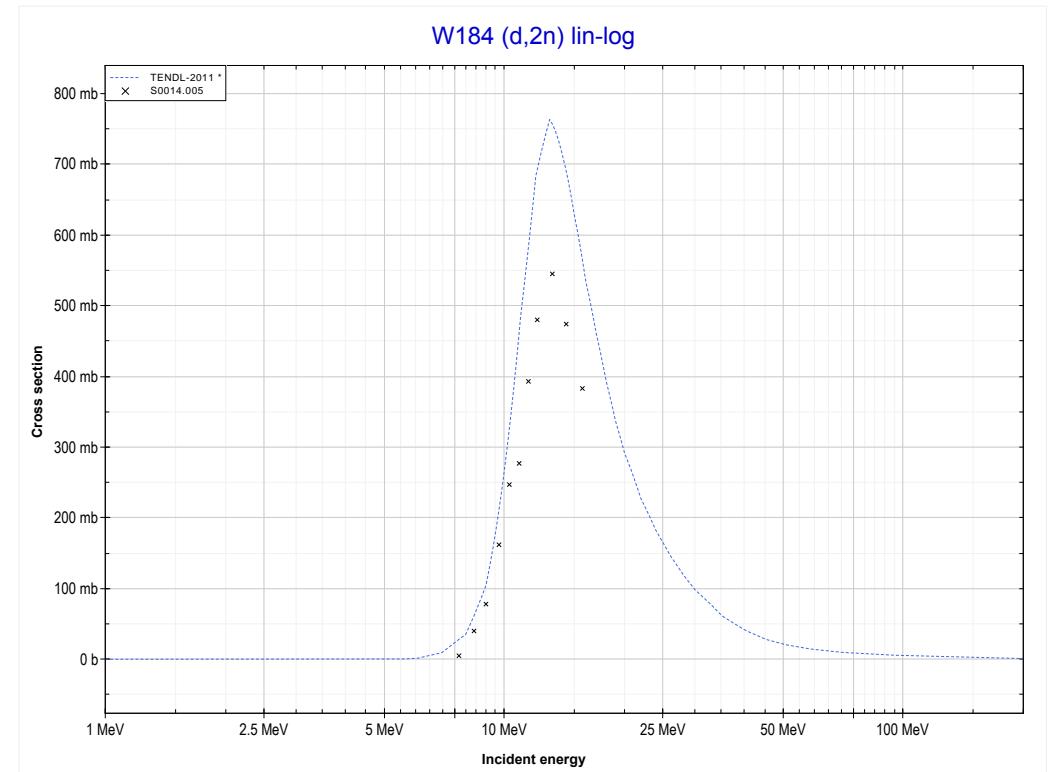
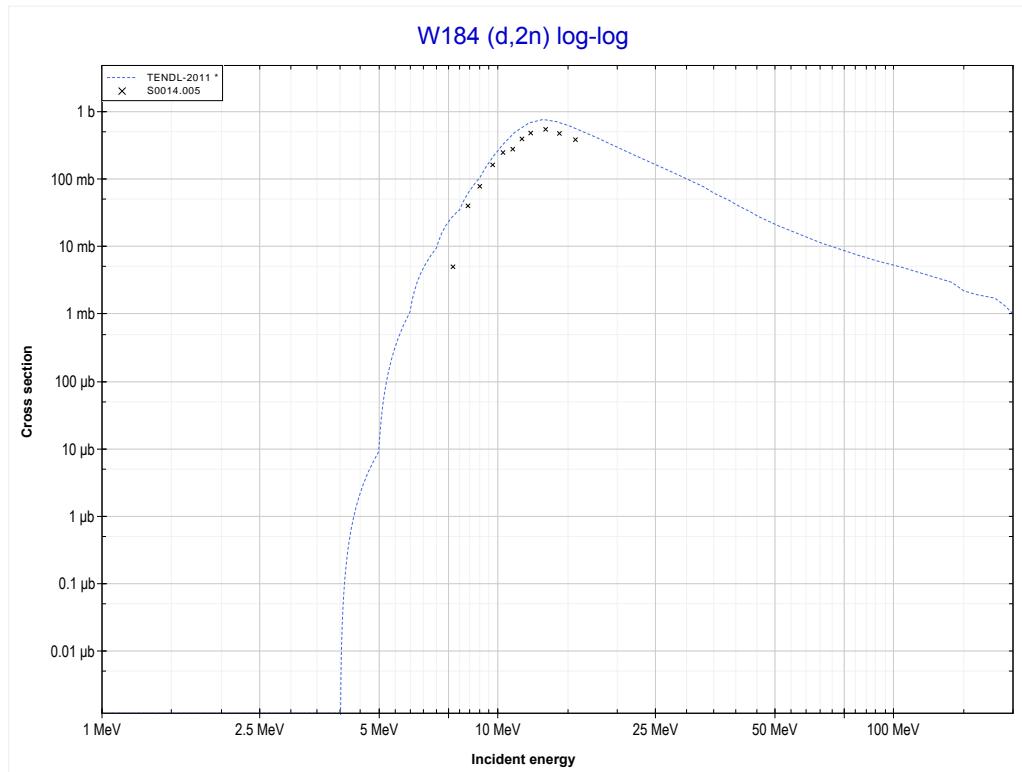
Reaction	Q-Value
W182(d,2n)Re182	-5804.41 keV

<< 74-W-182	74-W-183 MT16 (d,2n) or MT5 (Re183 production)	74-W-184 >>
<< MT16 (d,2n)		MT16 (d,2n) >>



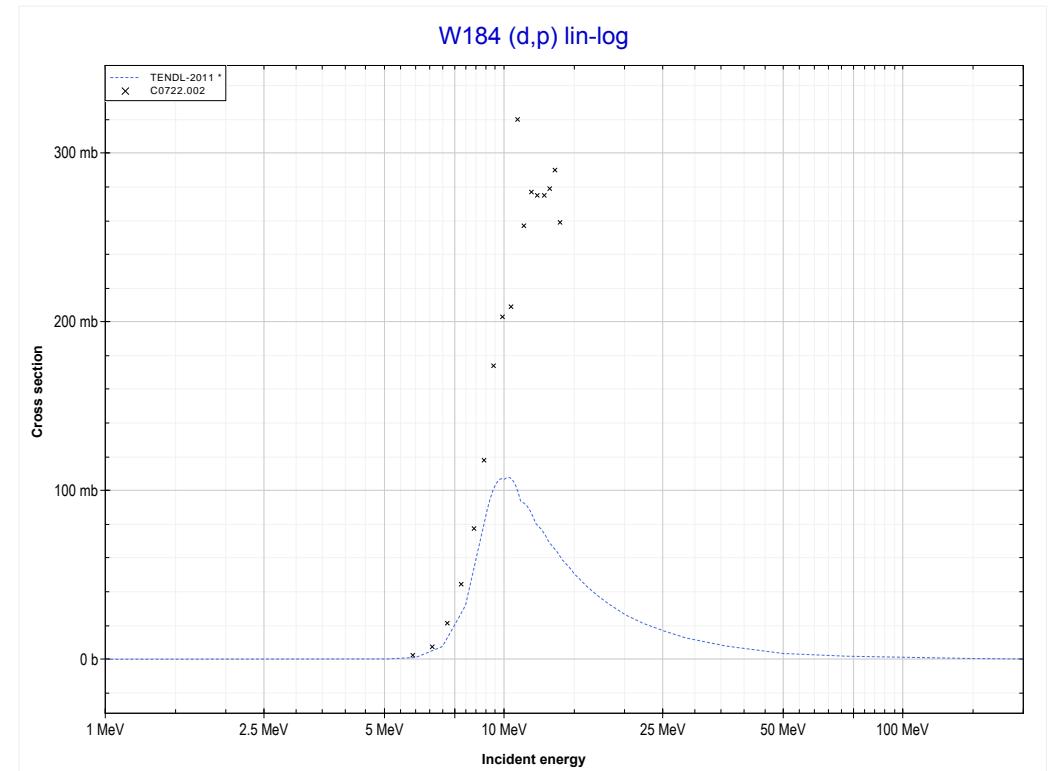
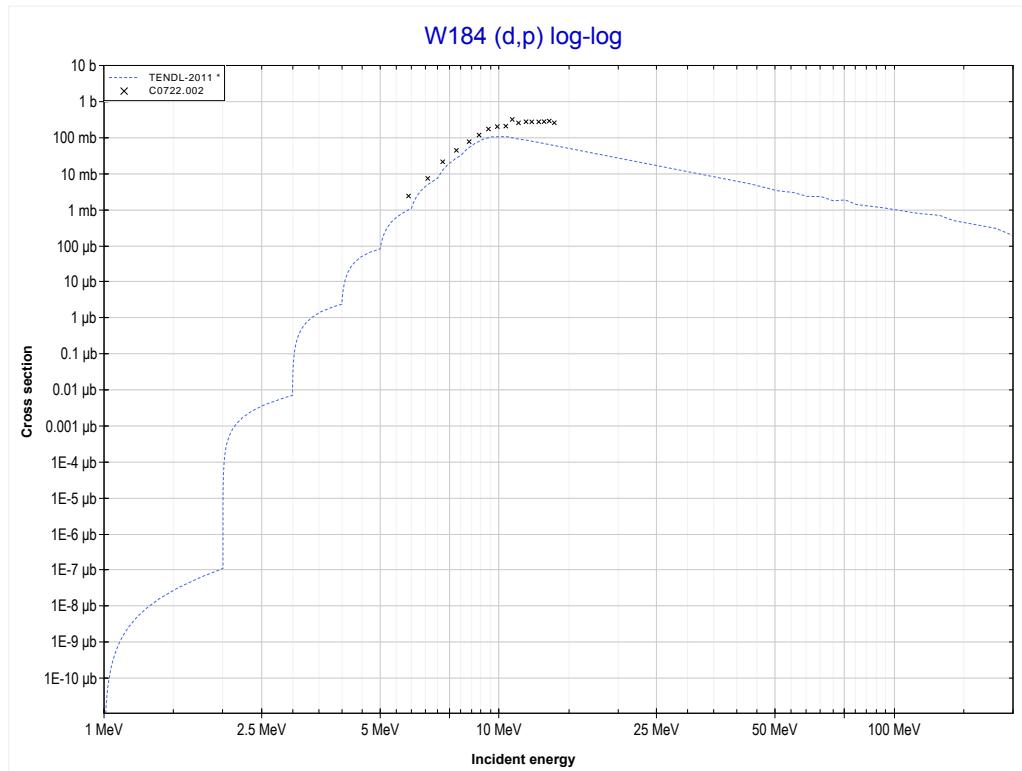
Reaction	Q-Value
$^{183}\text{W}(\text{d},\text{2n})^{183}\text{Re}$	-3562.91 keV

<< 74-W-183	74-W-184 MT16 (d,2n) or MT5 (Re184 production)	74-W-186 >>
<< MT16 (d,2n)		MT103 (d,p) >>



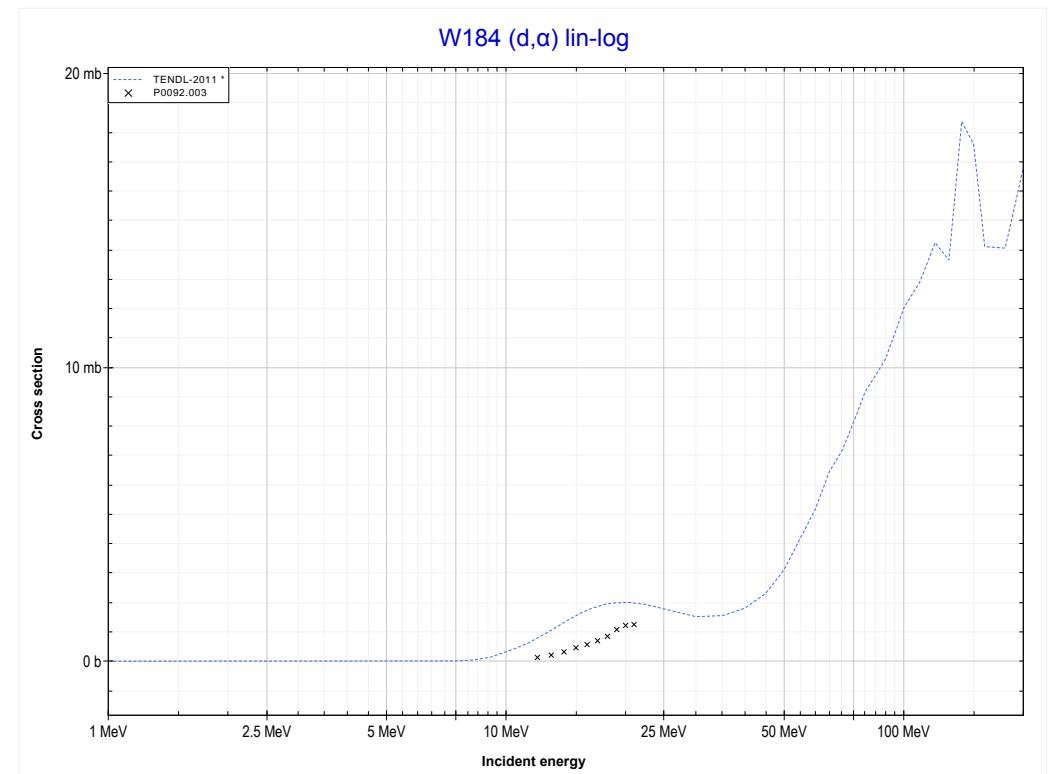
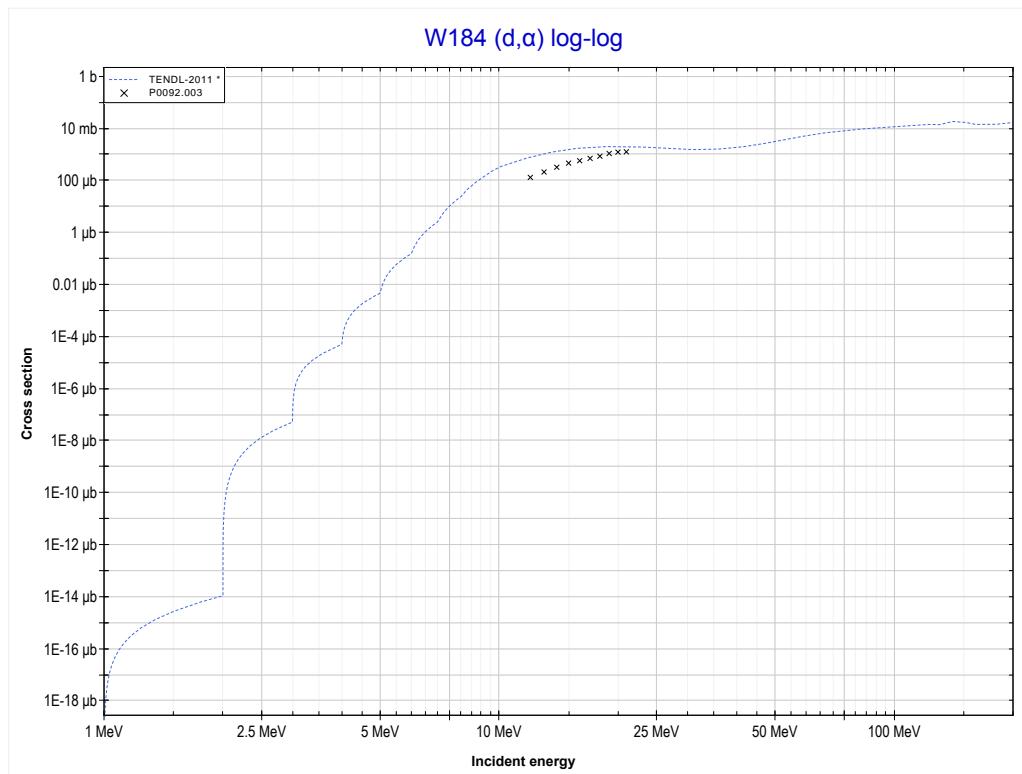
Reaction	Q-Value
W184(d,2n)Re184	-4487.21 keV

<< 73-Ta-181	74-W-184 MT103 (d,p) or MT5 (W185 production)	74-W-186 >>
<< MT16 (d,2n)		MT107 (d, α) >>



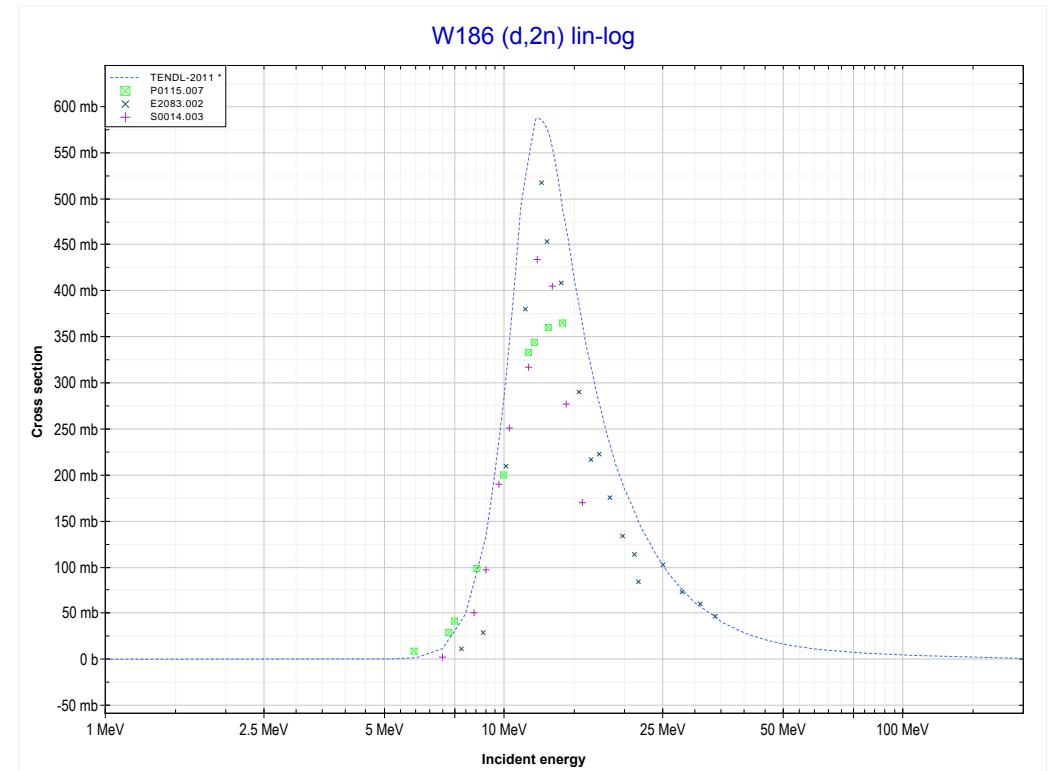
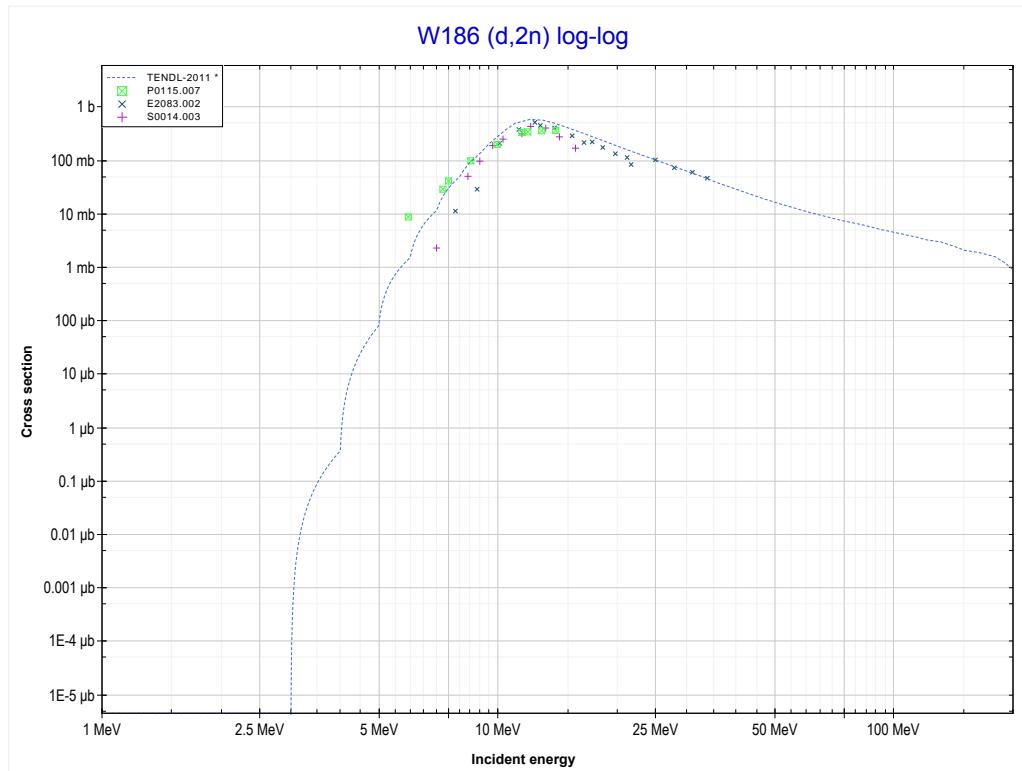
Reaction	Q-Value
W184(d,p)W185	3529.15 keV

<< 52-Te-122	74-W-184 MT107 (d,α) or MT5 (Ta182 production)	74-W-186 >>
<< MT103 (d,p) >>		MT16 (d,2n) >>



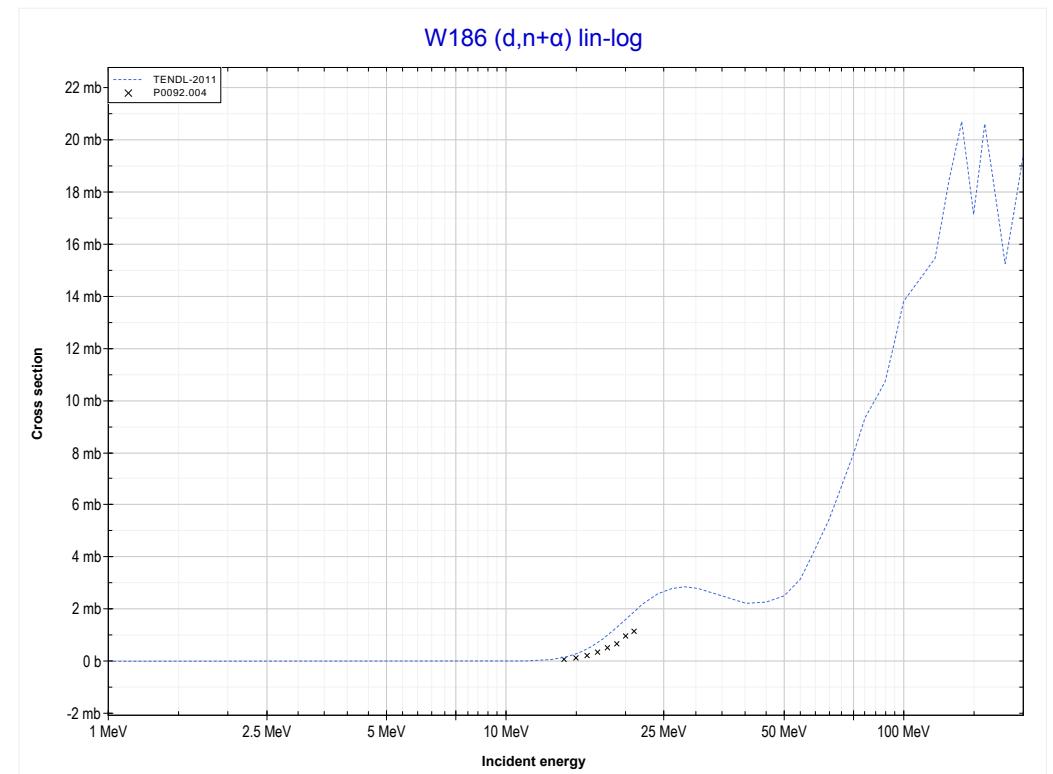
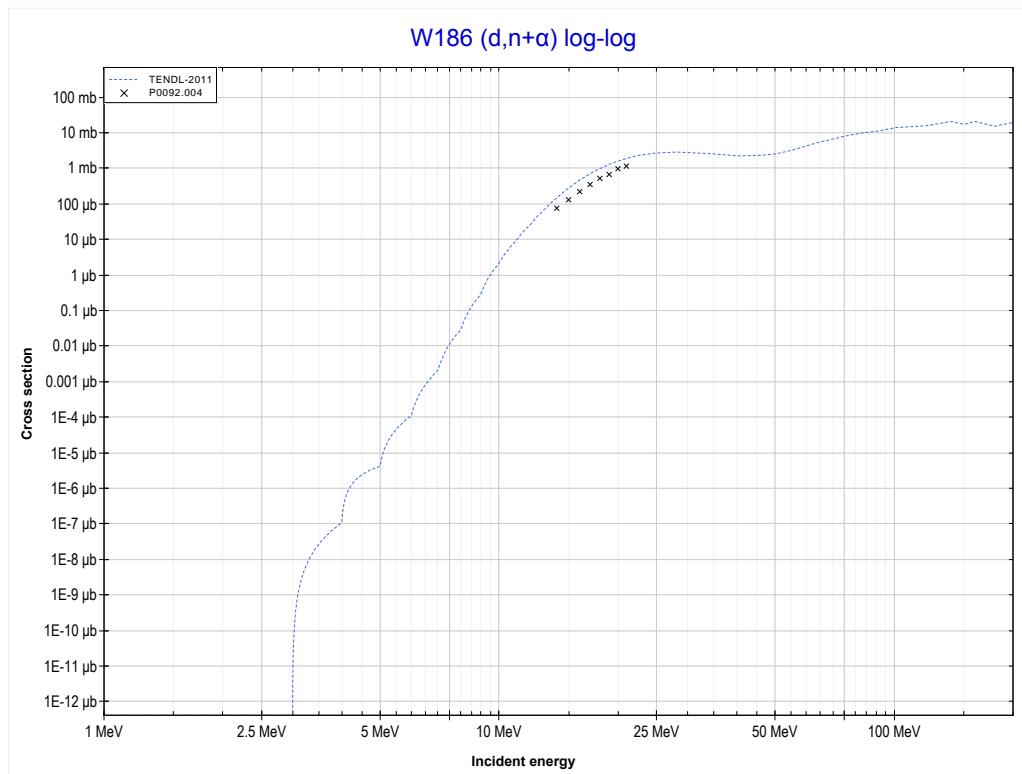
Reaction	Q-Value
$^{184}\text{W}(\text{d},\alpha)^{182}\text{Ta}$	11436.81 keV
$^{184}\text{W}(\text{d},\text{p}+\text{t})^{182}\text{Ta}$	-8377.05 keV
$^{184}\text{W}(\text{d},\text{n}+\text{He}3)^{182}\text{Ta}$	-9140.81 keV
$^{184}\text{W}(\text{d},2\text{d})^{182}\text{Ta}$	-12409.72 keV
$^{184}\text{W}(\text{d},\text{n}+\text{p}+\text{d})^{182}\text{Ta}$	-14634.29 keV
$^{184}\text{W}(\text{d},2\text{n}+2\text{p})^{182}\text{Ta}$	-16858.85 keV

<< 74-W-184	74-W-186 MT16 (d,2n) or MT5 (Re186 production)	76-Os-192 >>
<< MT107 (d, α)		MT22 (d,n+ α) >>



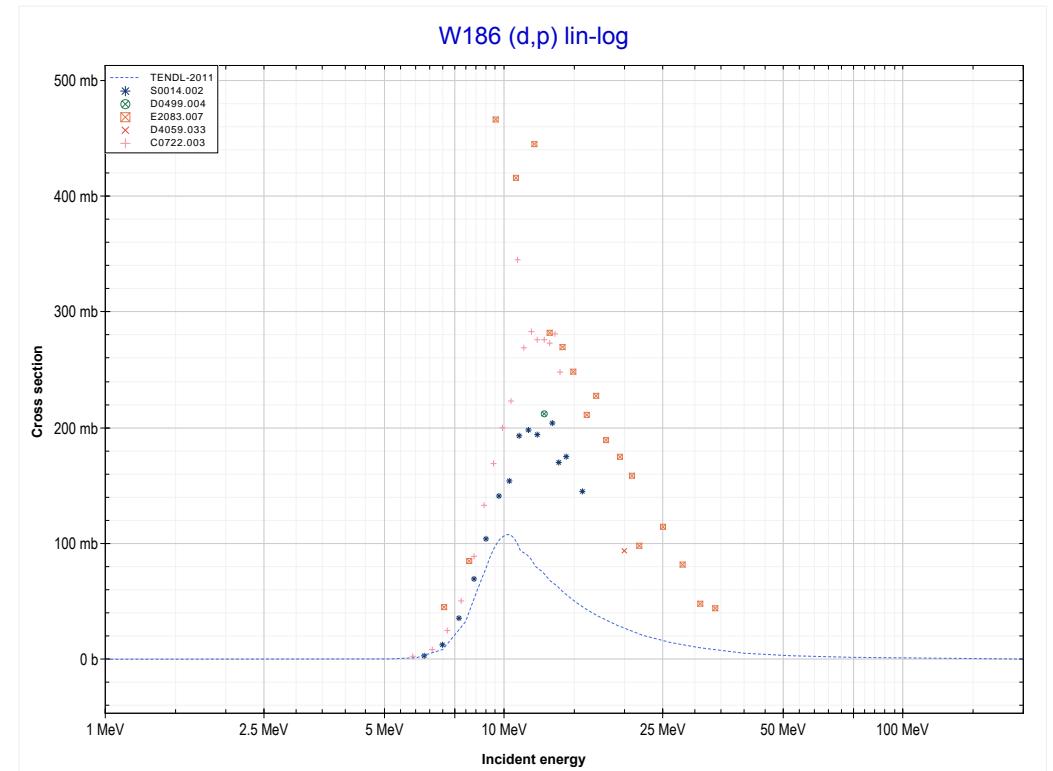
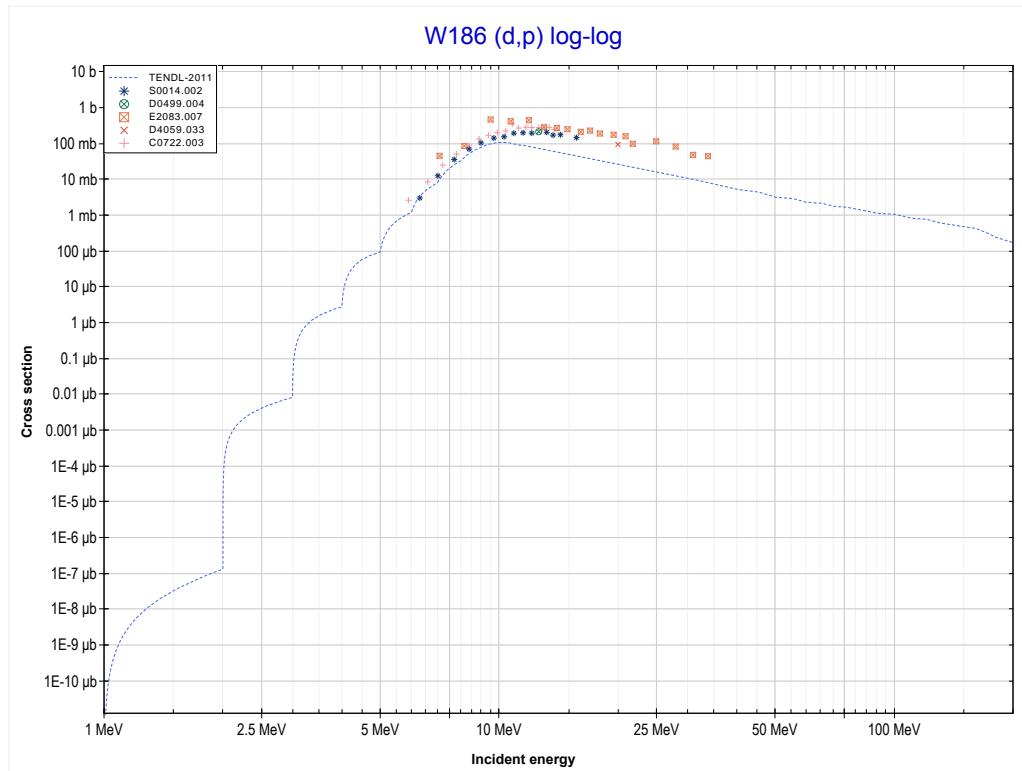
Reaction	Q-Value
W186(d,2n)Re186	-3586.21 keV

<< 48-Cd-114	74-W-186 MT22 (d,n+α) or MT5 (Ta183 production)	MT103 (d,p) >>
<< MT16 (d,2n)		



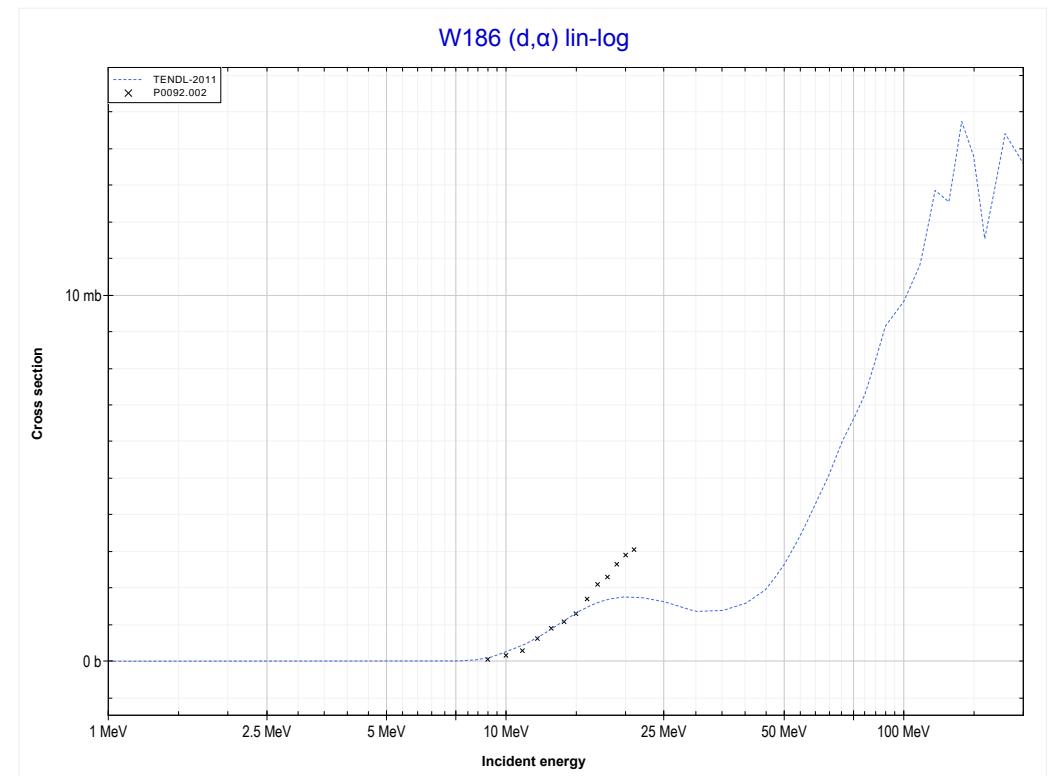
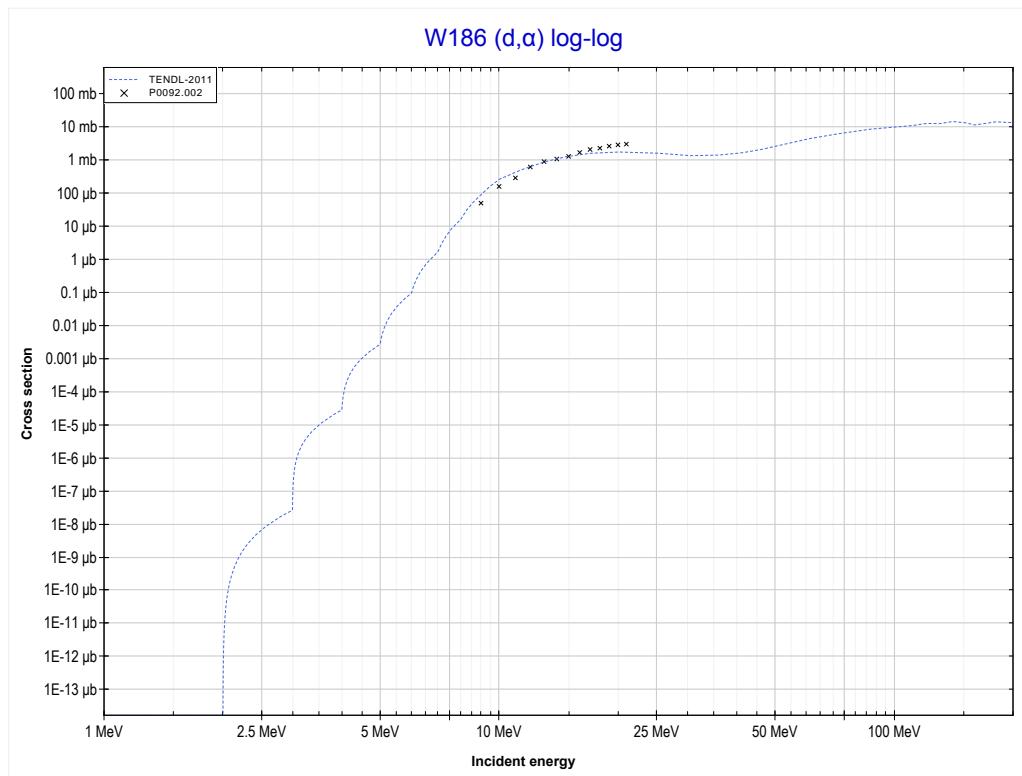
Reaction	Q-Value
W186(d,n+α)Ta183	5426.09 keV
W186(d,d+t)Ta183	-12163.21 keV
W186(d,n+p+t)Ta183	-14387.77 keV
W186(d,2n+He3)Ta183	-15151.53 keV
W186(d,n+2d)Ta183	-18420.44 keV
W186(d,2n+p+d)Ta183	-20645.00 keV
W186(d,3n+2p)Ta183	-22869.57 keV

<< 74-W-184	74-W-186 MT103 (d,p) or MT5 (W187 production)	>> 76-Os-192
<< MT22 (d,n+α)		MT107 (d,α) >>



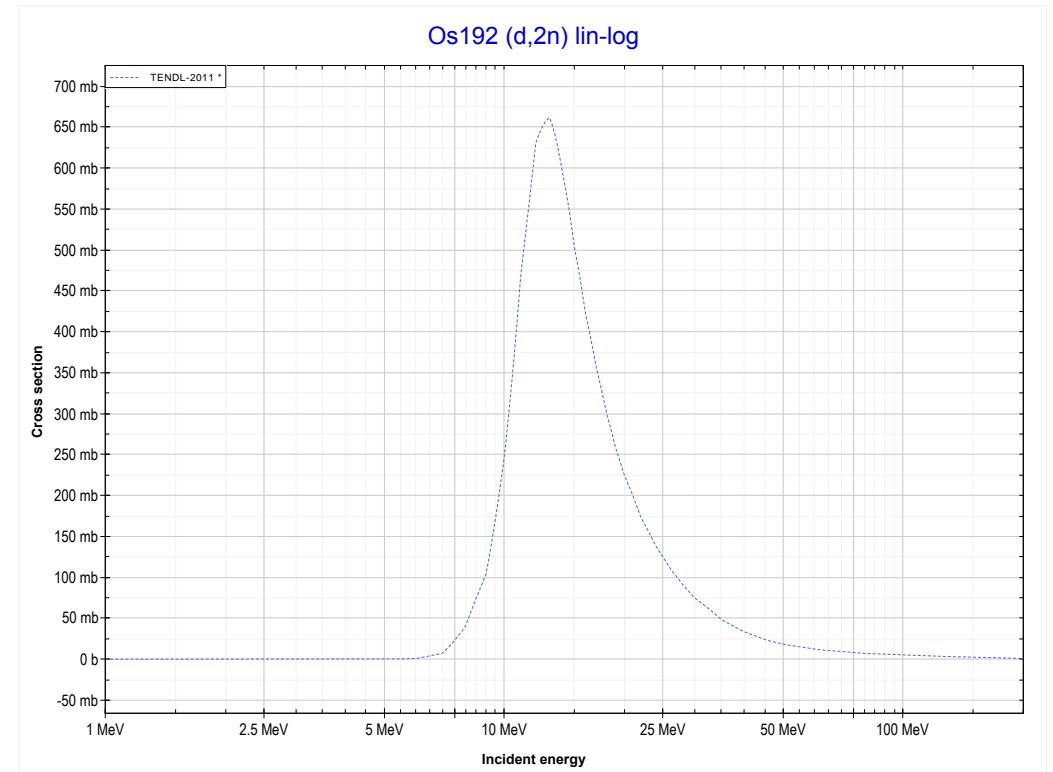
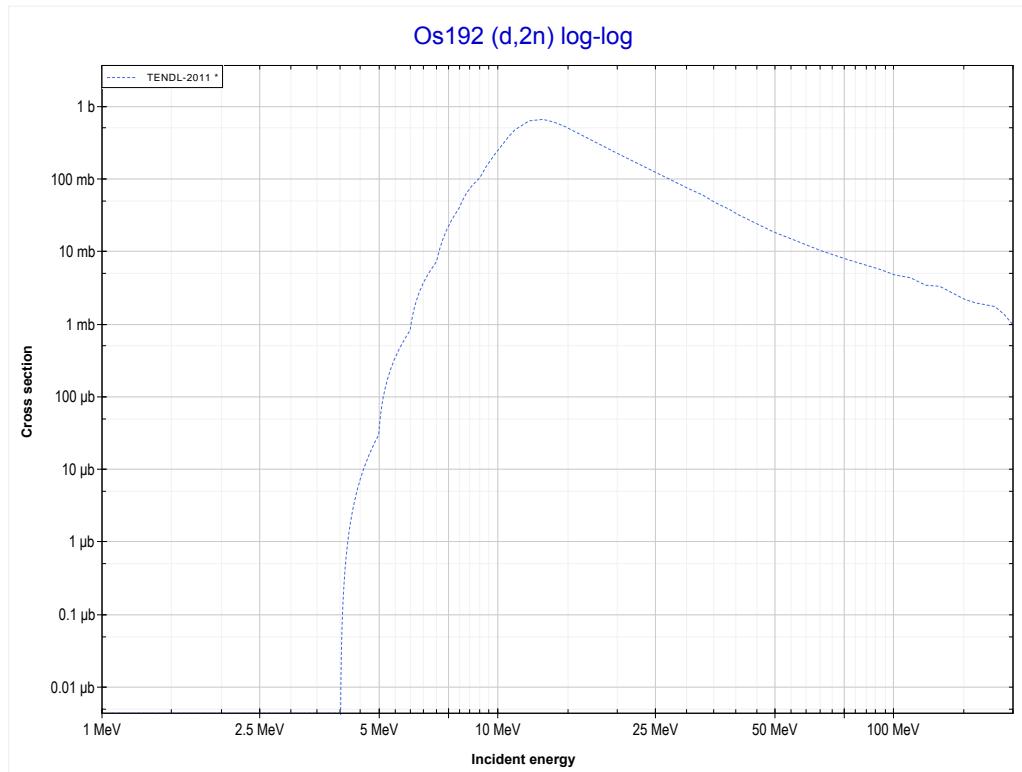
Reaction	Q-Value
W186(d,p)W187	3242.05 keV

<< 74-W-184	74-W-186	
<< MT103 (d,p)	MT107 (d,α) or MT5 (Ta184 production)	MT16 (d,2n) >>



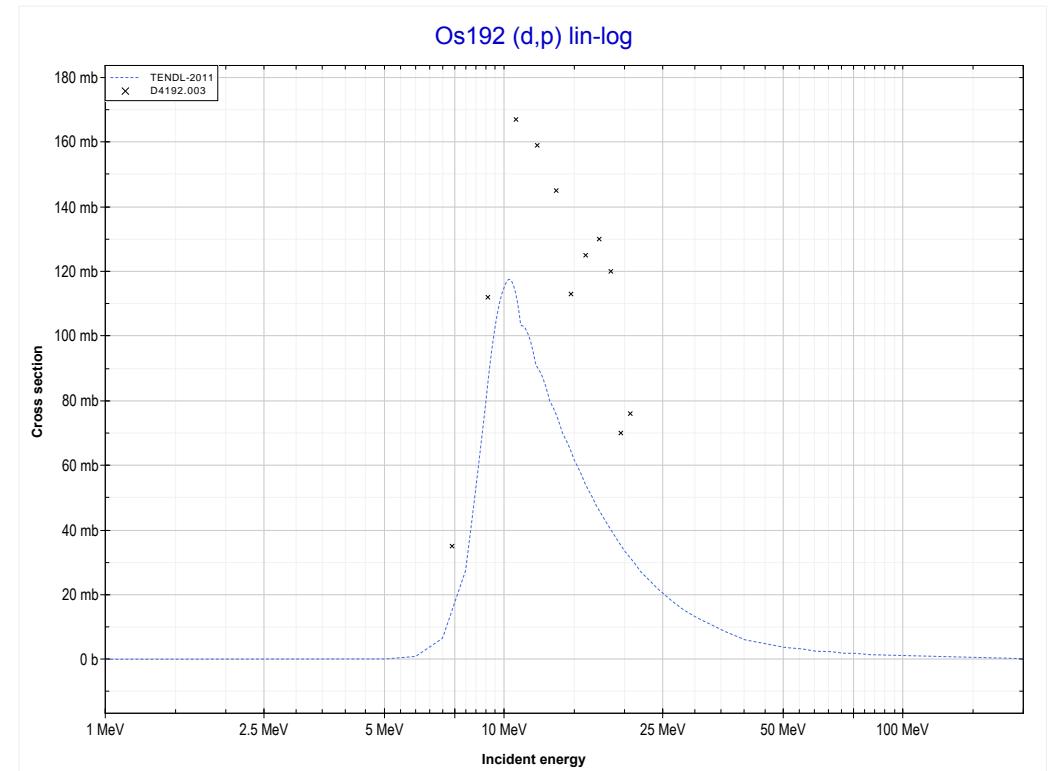
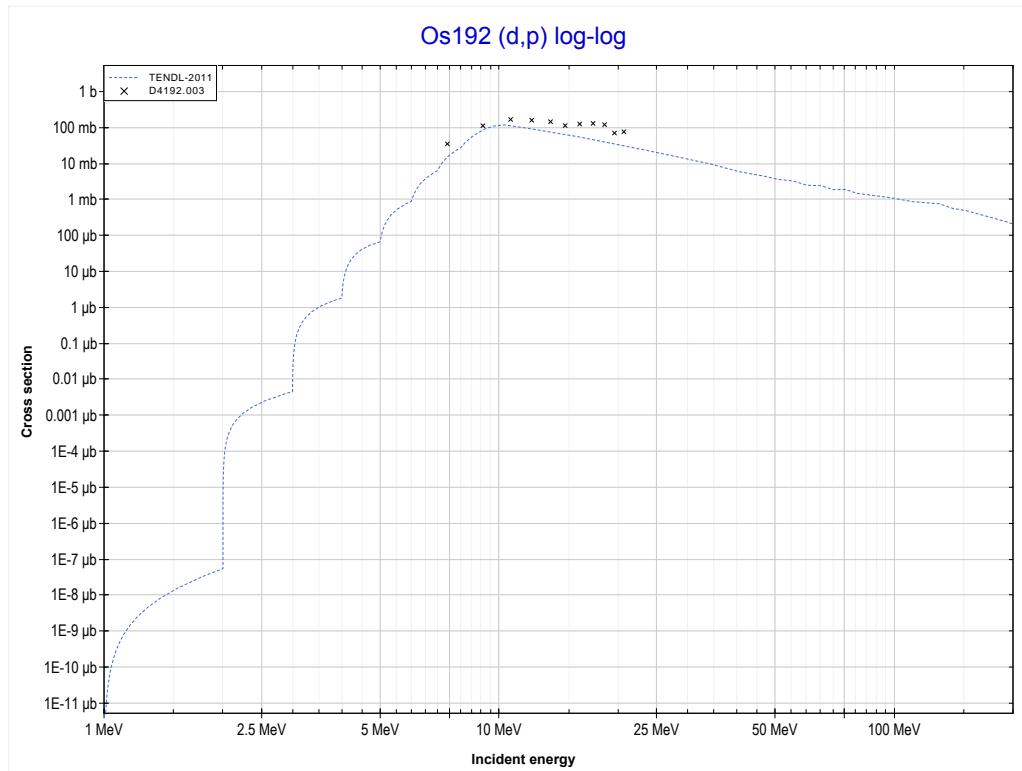
Reaction	Q-Value
W186(d, α)Ta184	11042.31 keV
W186(d,p+t)Ta184	-8771.55 keV
W186(d,n+He3)Ta184	-9535.31 keV
W186(d,2d)Ta184	-12804.22 keV
W186(d,n+p+d)Ta184	-15028.79 keV
W186(d,2n+2p)Ta184	-17253.35 keV

<< 74-W-186	76-Os-192 MT16 (d,2n) or MT5 (Ir192 production)	78-Pt-198 >>
<< MT107 (d, α)		MT103 (d,p) >>



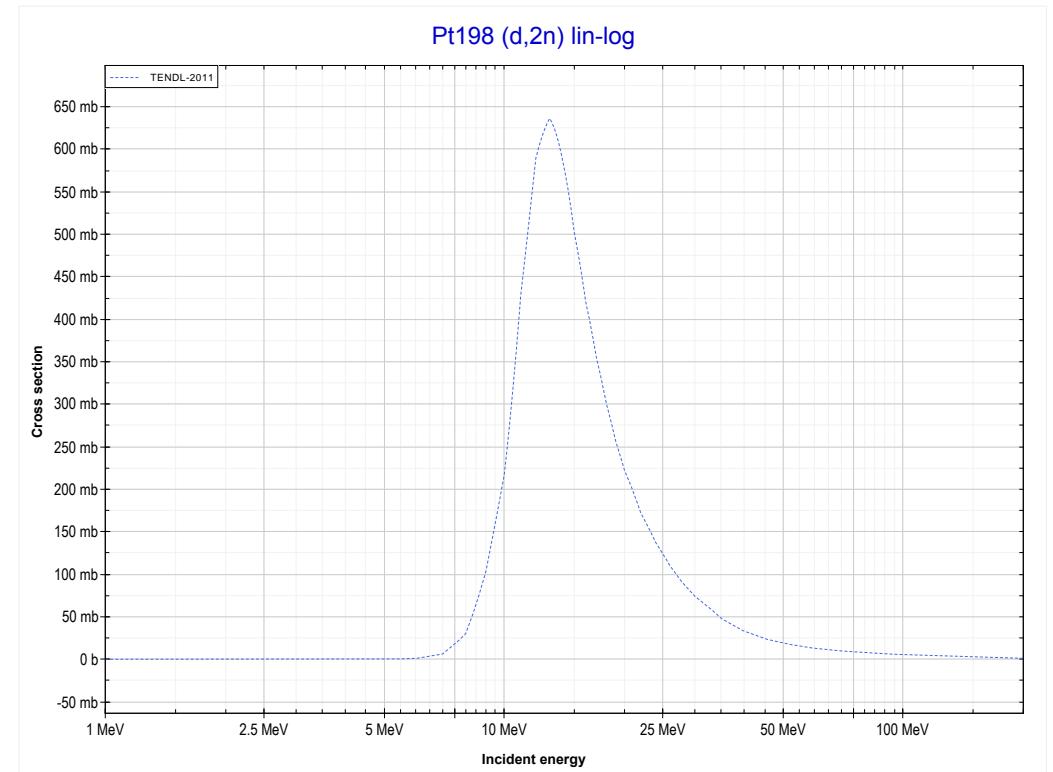
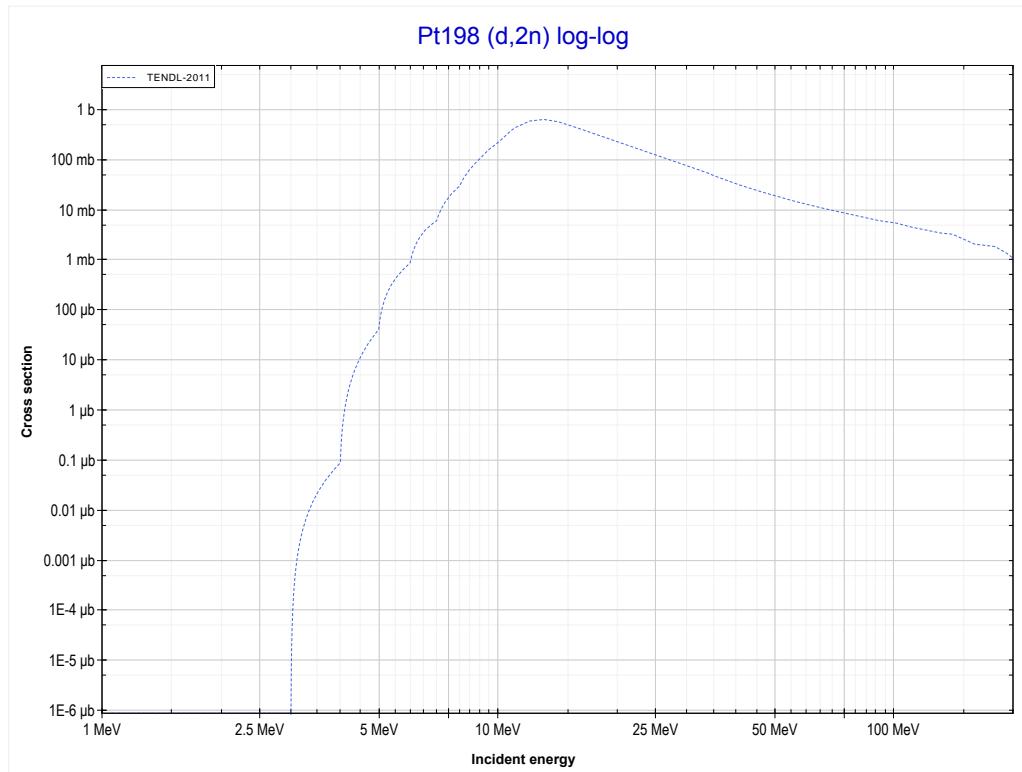
Reaction	Q-Value
$^{192}\text{Os}(d,2n)^{192}\text{Ir}$	-4054.21 keV

<< 74-W-186	76-Os-192 MT103 (d,p) or MT5 (Os193 production)	>> 79-Au-197
<< MT16 (d,2n)		MT16 (d,2n) >>



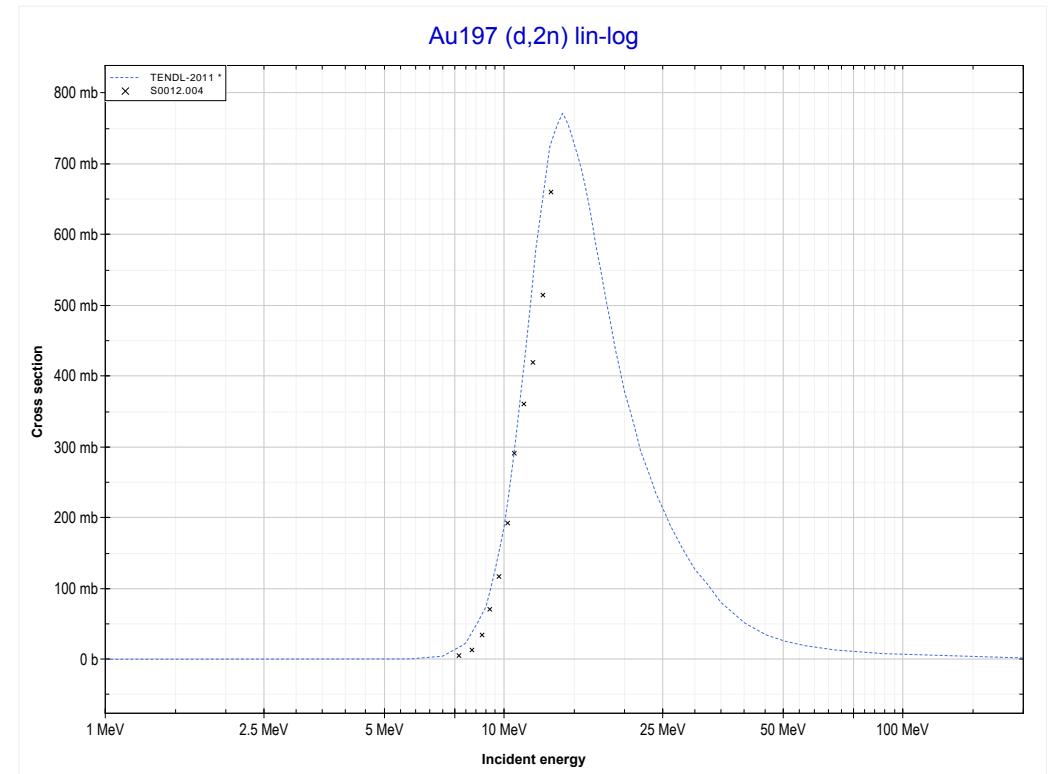
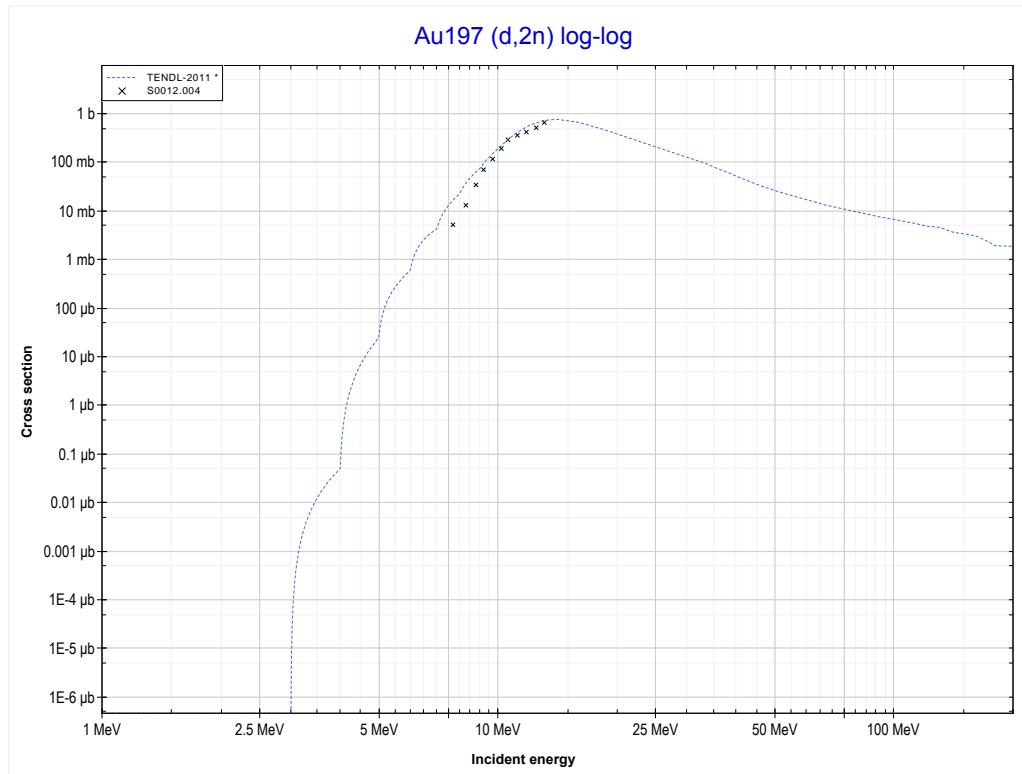
Reaction	Q-Value
Os192(d,p)Os193	3358.85 keV

<< 76-Os-192	78-Pt-198 MT16 (d,2n) or MT5 (Au198 production)	79-Au-197 >>
<< MT103 (d,p)		MT16 (d,2n) >>



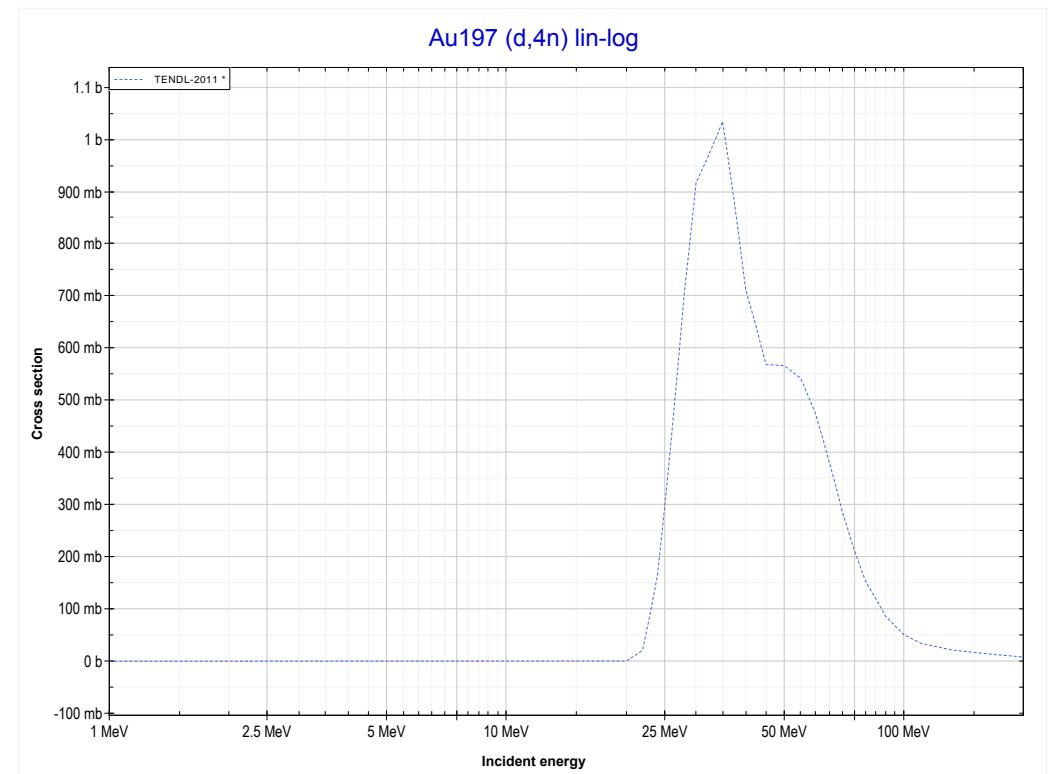
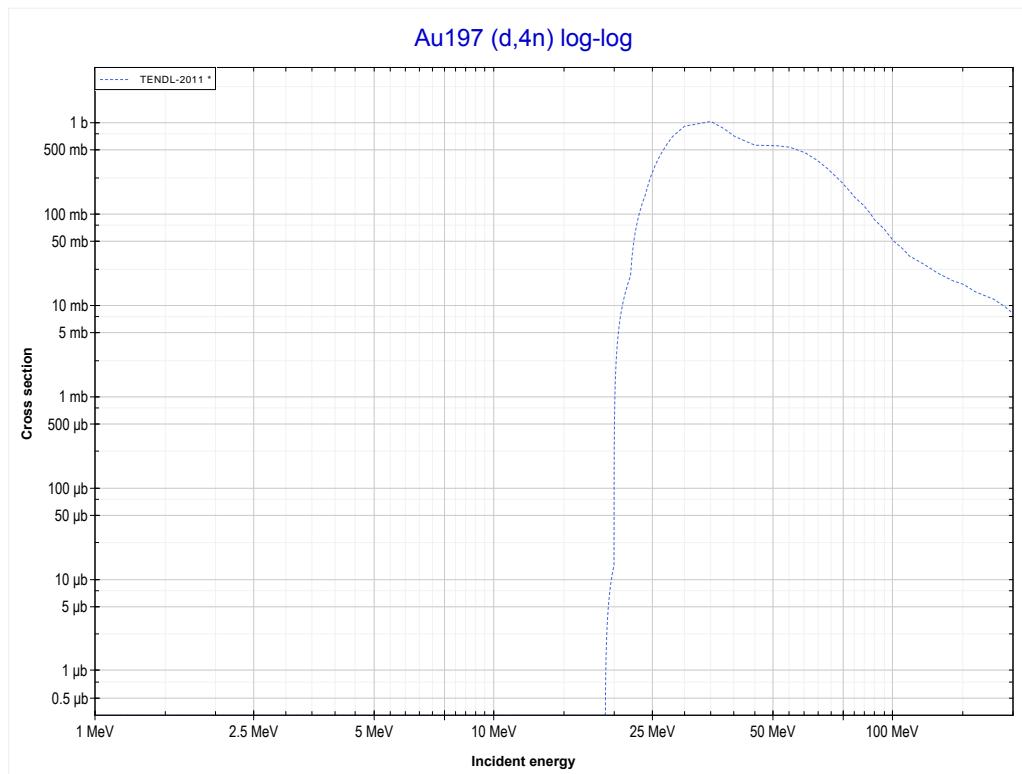
Reaction	Q-Value
Pt198(d,2n)Au198	-3332.81 keV

<< 78-Pt-198	79-Au-197 MT16 (d,2n) or MT5 (Hg197 production)	>> 83-Bi-209
<< MT16 (d,2n)		MT37 (d,4n) >>



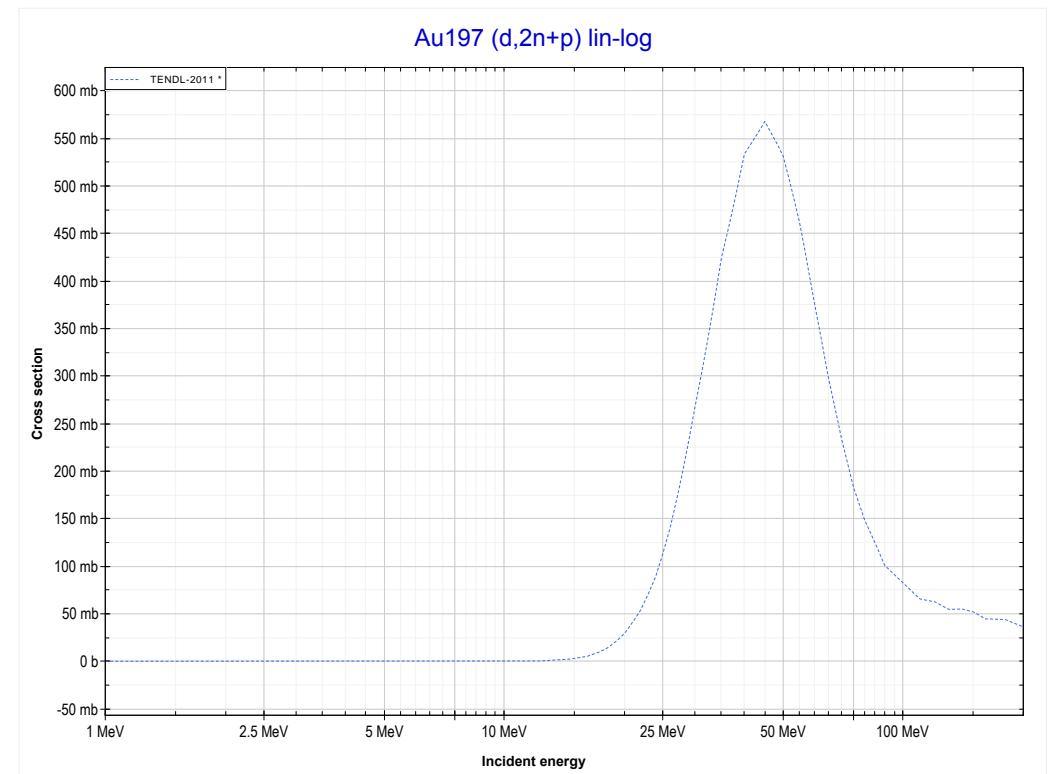
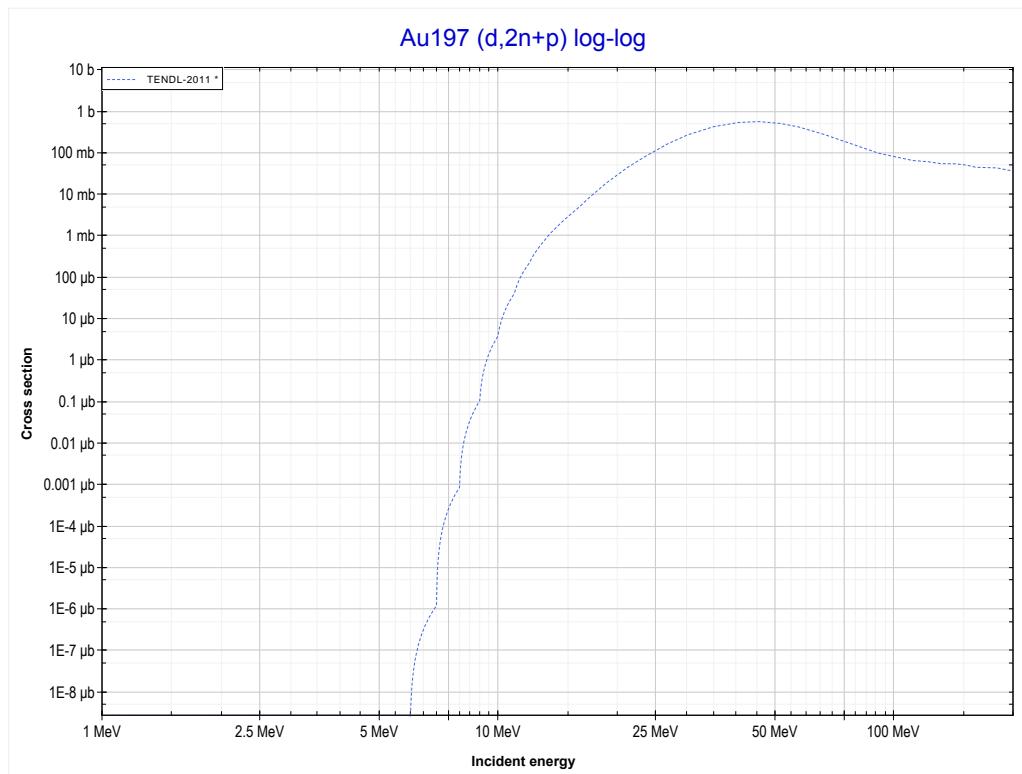
Reaction	Q-Value
Au197(d,2n)Hg197	-3607.01 keV

<< 65-Tb-159	79-Au-197 MT37 (d,4n) or MT5 (Hg195 production)	81-Tl-203 >>
<< MT16 (d,2n)		MT41 (d,2n+p) >>



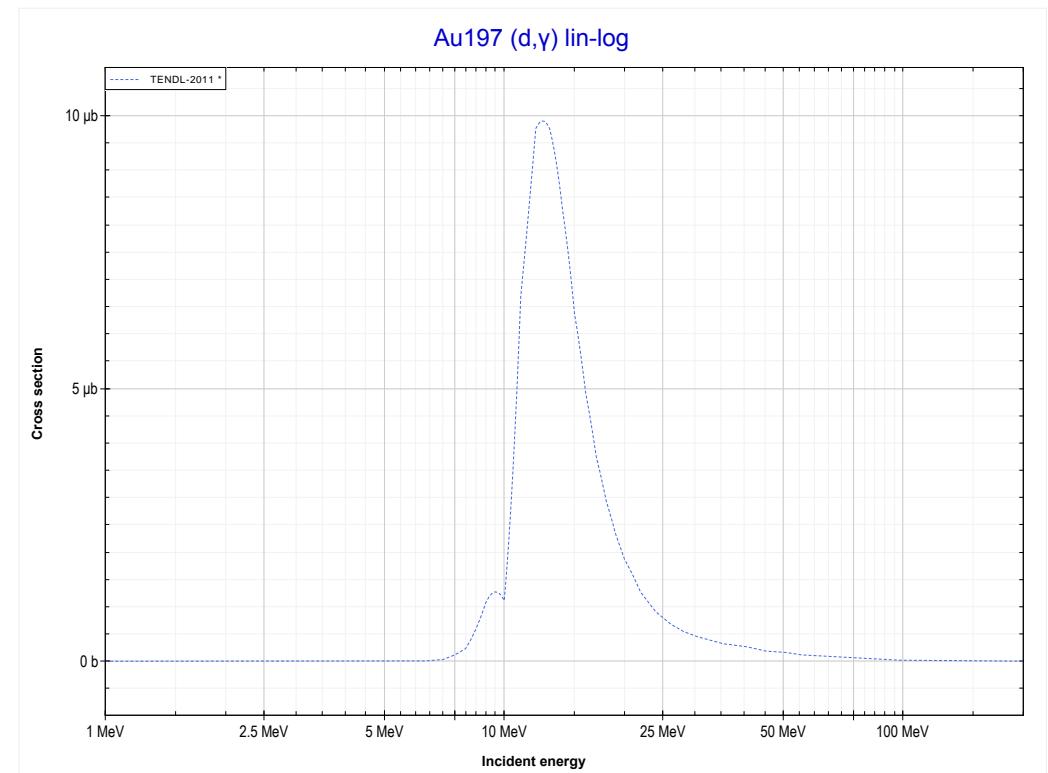
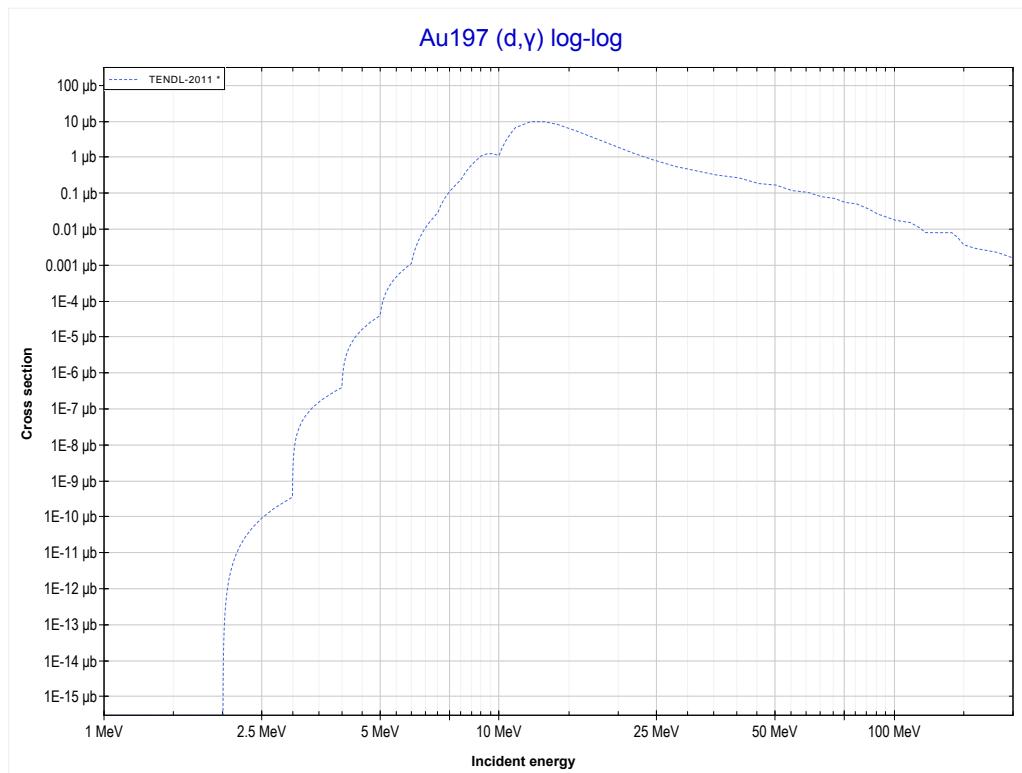
Reaction	Q-Value
Au197(d,4n)Hg195	-19290.65 keV

<< 73-Ta-181	79-Au-197 MT41 (d,2n+p) or MT5 (Au196 production)	>> MT102 (d,y)
<< MT37 (d,4n)		



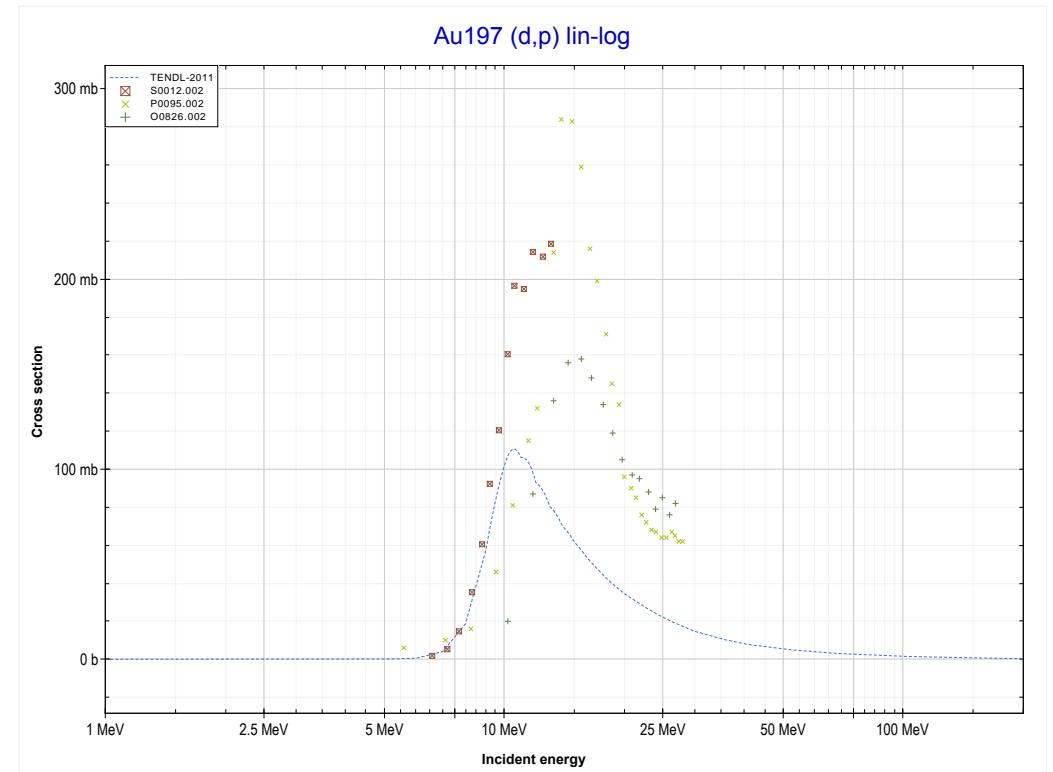
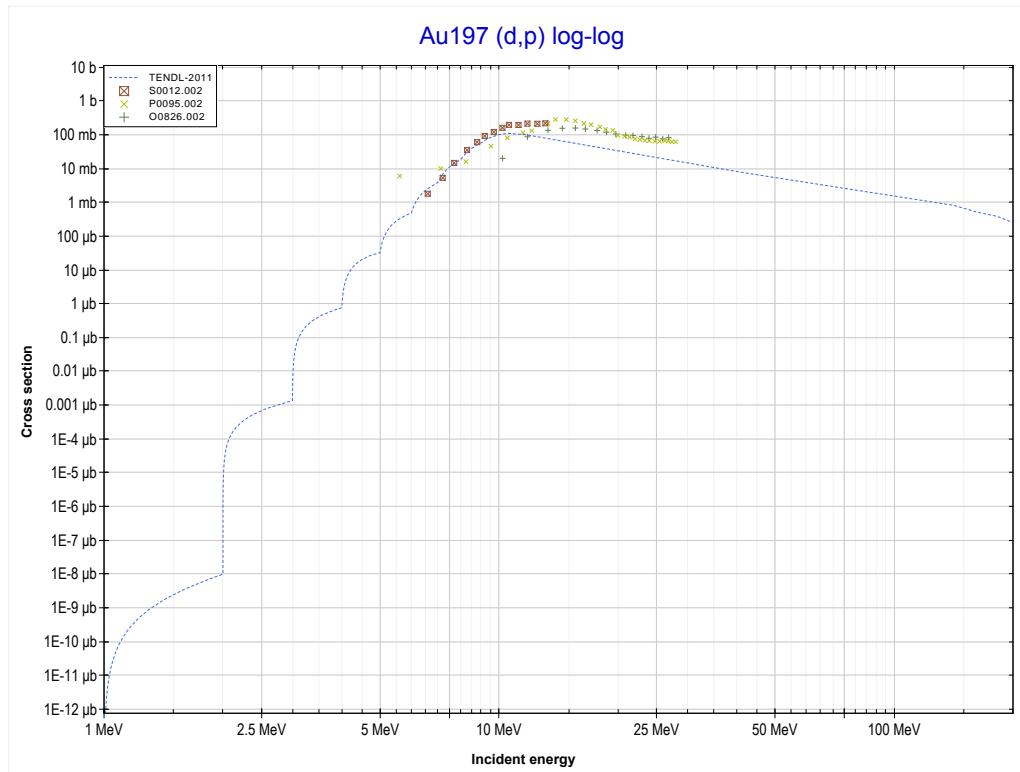
Reaction	Q-Value
$Au^{197}(d,t)Au^{196}$	-1815.18 keV
$Au^{197}(d,n+d)Au^{196}$	-8072.42 keV
$Au^{197}(d,2n+p)Au^{196}$	-10296.98 keV

<< 62-Sm-154	79-Au-197 MT102 (d, γ) or MT5 (Hg199 production)	83-Bi-209 >>
<< MT41 (d,2n+p)		MT103 (d,p) >>



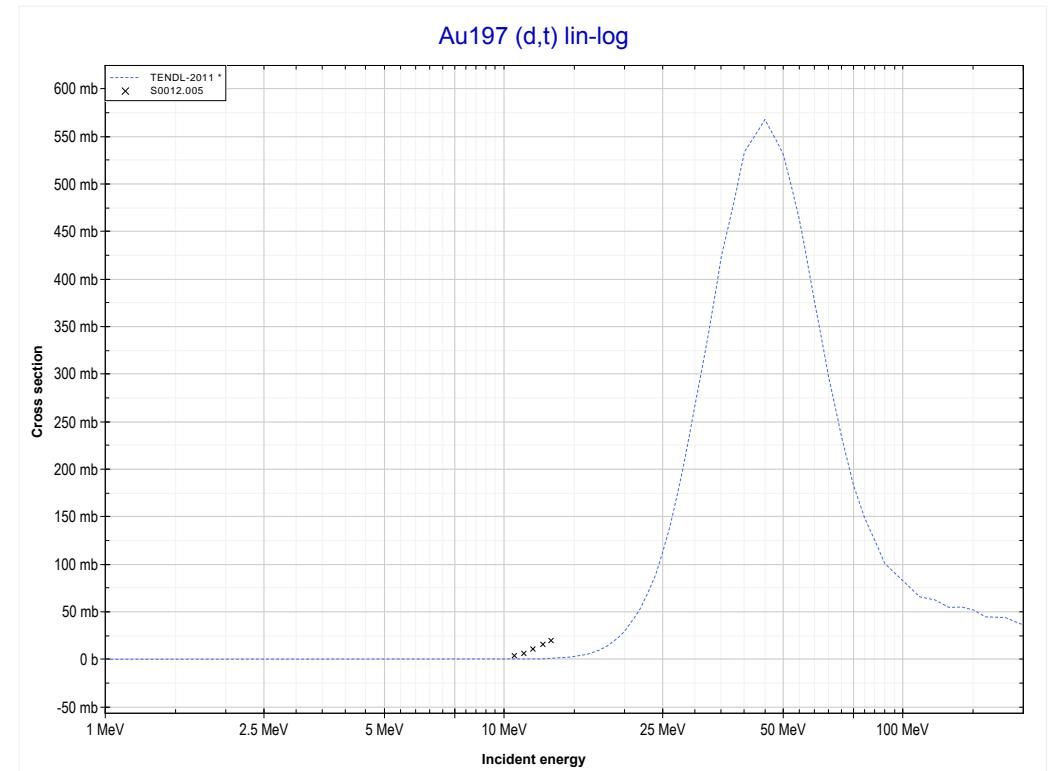
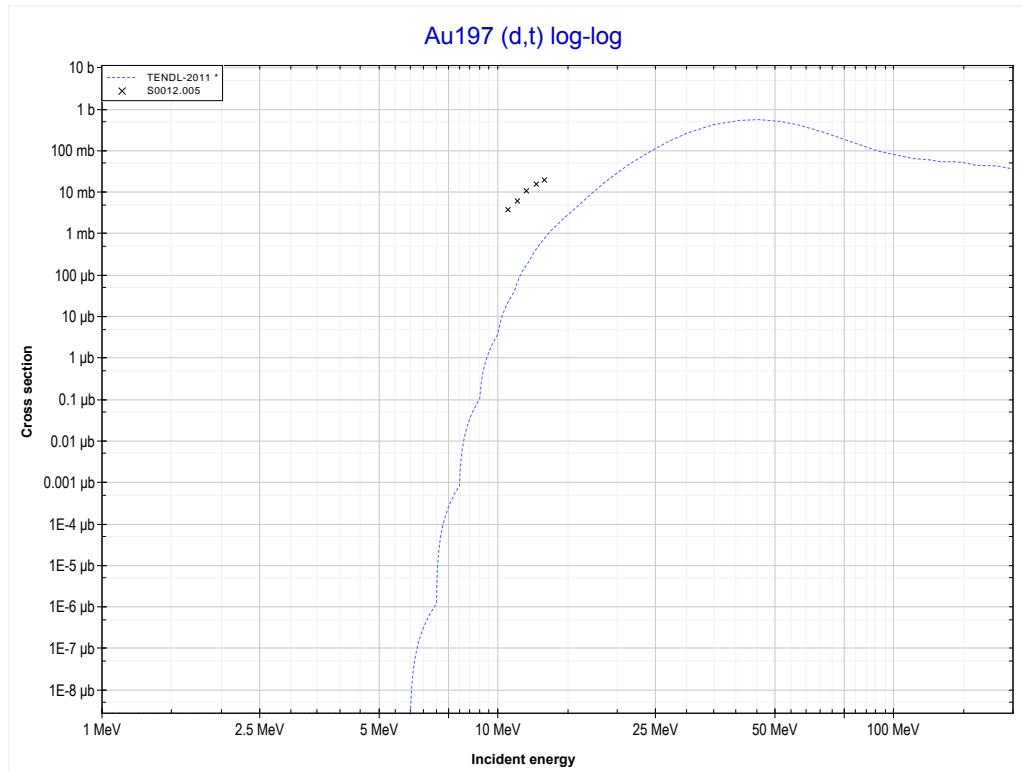
Reaction	Q-Value
Au197(d, γ)Hg199	11541.72 keV

<< 76-Os-192	79-Au-197 MT103 (d,p) or MT5 (Au198 production)	82-Pb-208 >> MT105 (d,t) >>
<< MT102 (d, γ)		



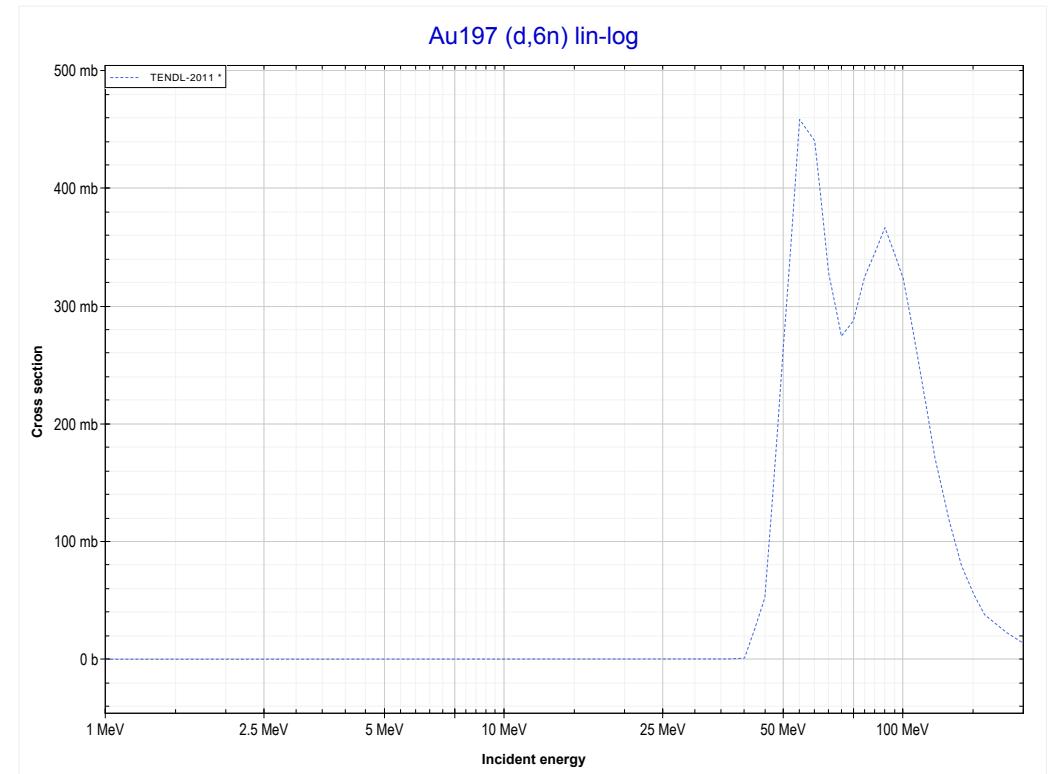
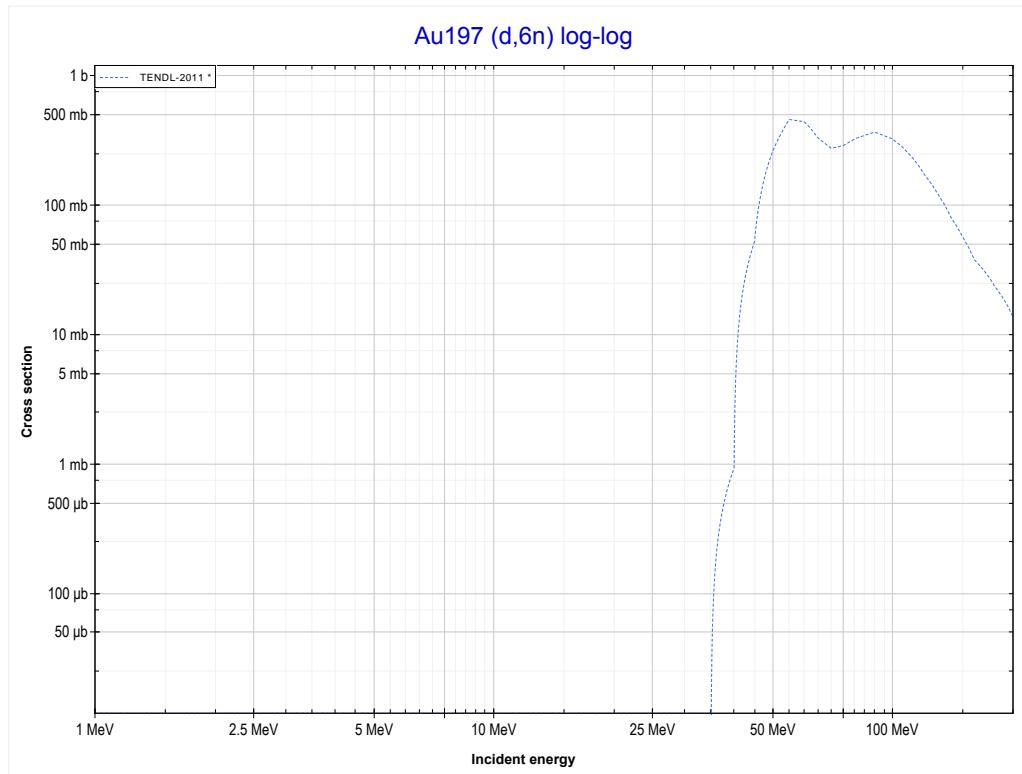
Reaction	Q-Value
Au197(d,p)Au198	4287.75 keV

<< 53-I-127	79-Au-197 MT105 (d,t) or MT5 (Au196 production)	92-U-238 >>
<< MT103 (d,p)		MT153 (d,6n) >>



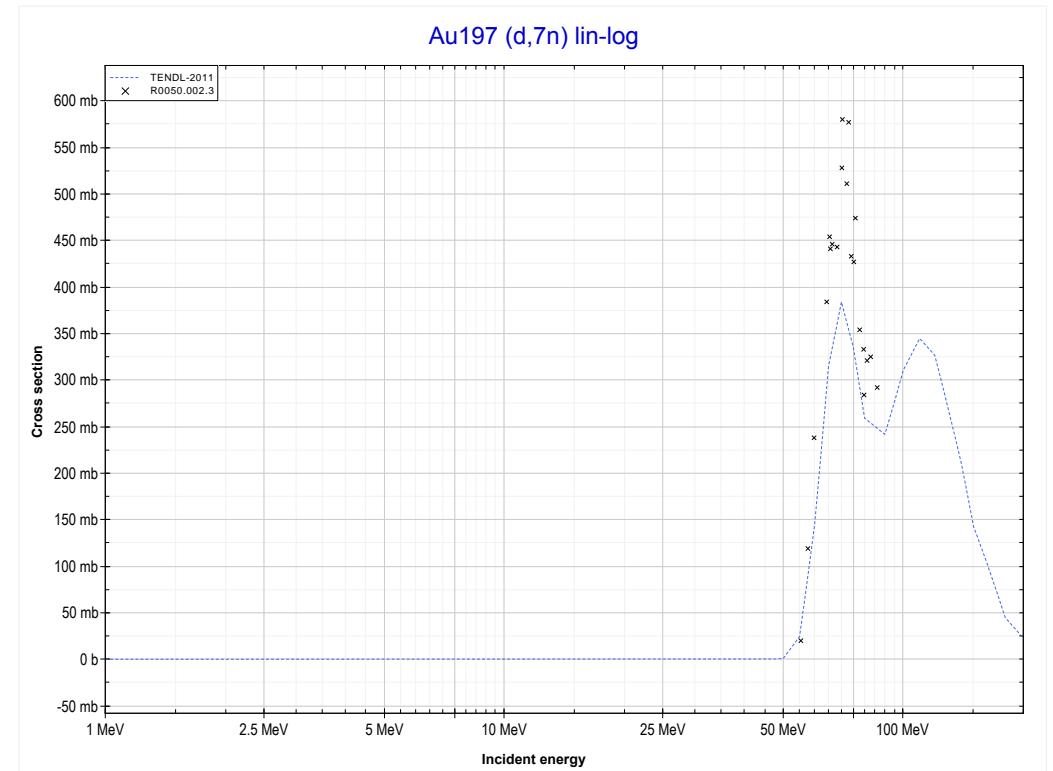
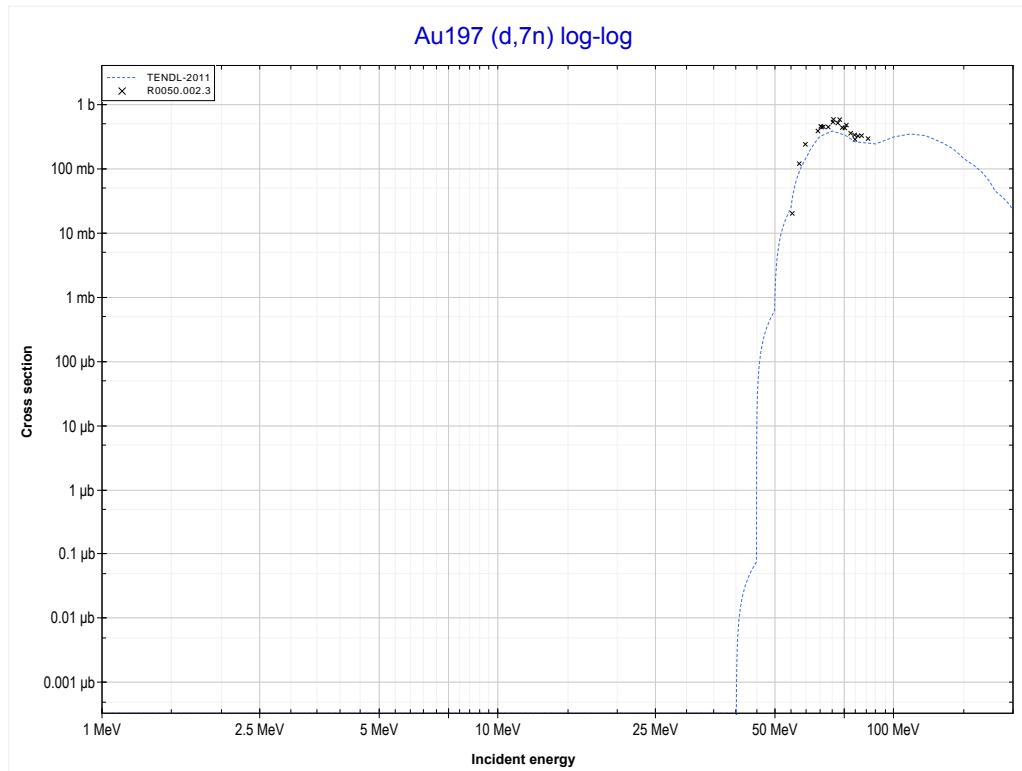
Reaction	Q-Value
Au197(d,t)Au196	-1815.18 keV
Au197(d,n+d)Au196	-8072.42 keV
Au197(d,2n+p)Au196	-10296.98 keV

<< 73-Ta-181	79-Au-197 MT153 (d,6n) or MT5 (Hg193 production)	83-Bi-209 >>
<< MT105 (d,t)		MT160 (d,7n) >>



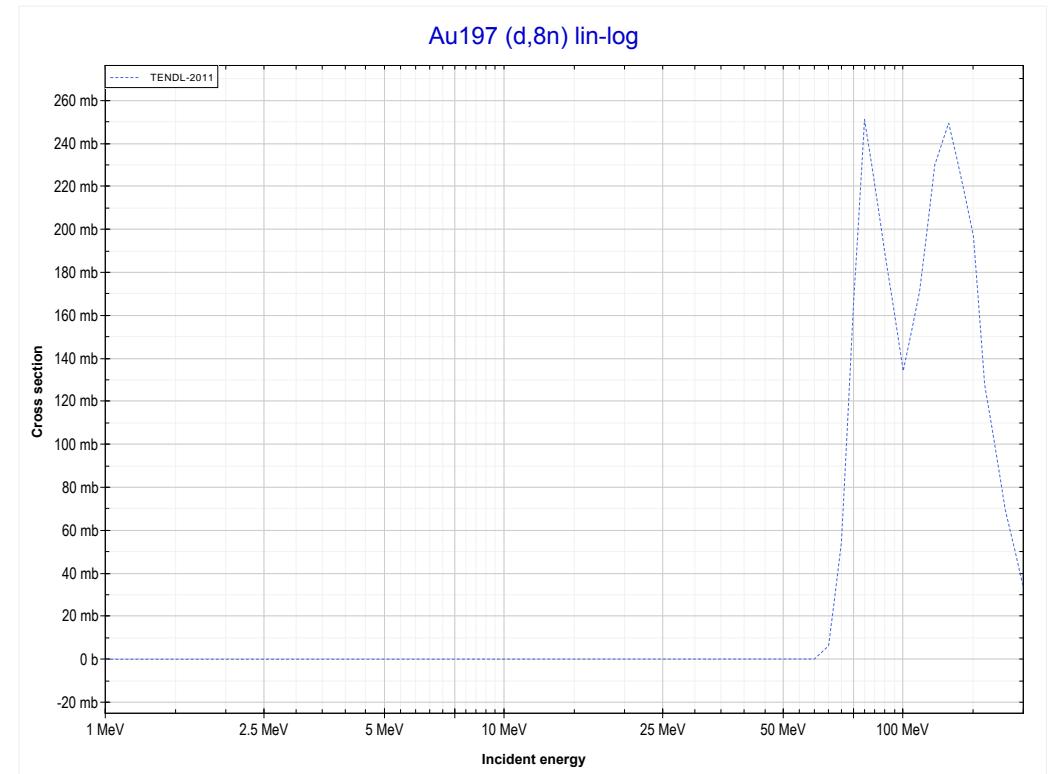
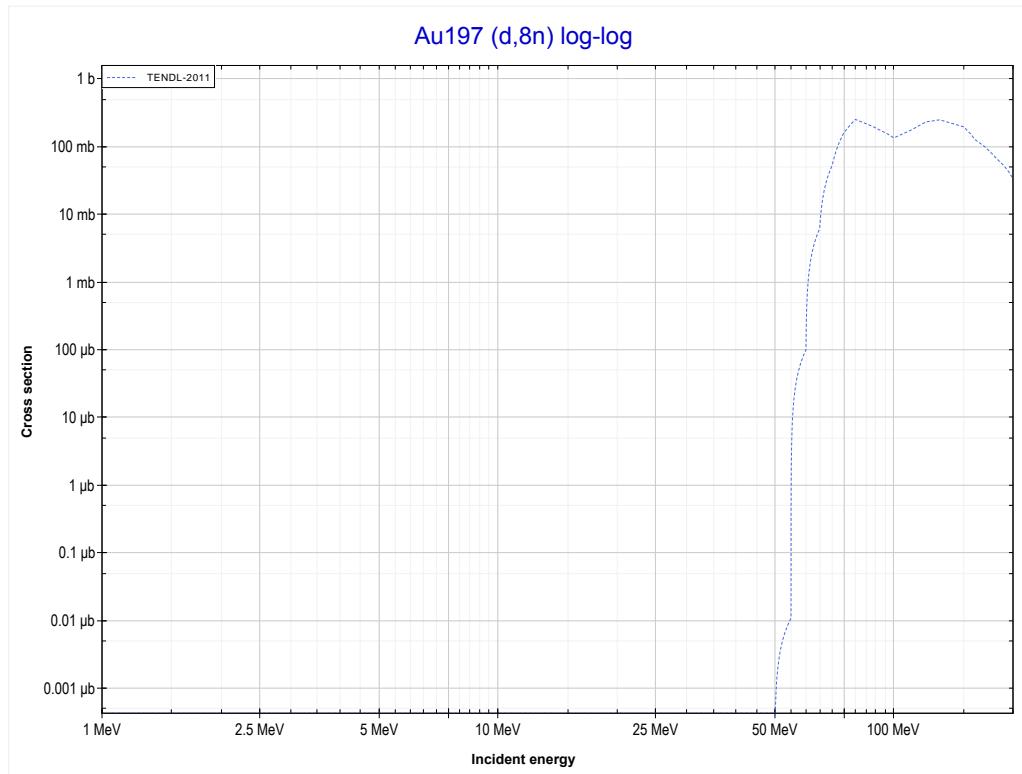
Reaction	Q-Value
Au197(d,6n)Hg193	-35382.28 keV

<< 73-Ta-181	79-Au-197 MT160 (d,7n) or MT5 (Hg192 production)	83-Bi-209 >>
<< MT153 (d,6n)		MT161 (d,8n) >>



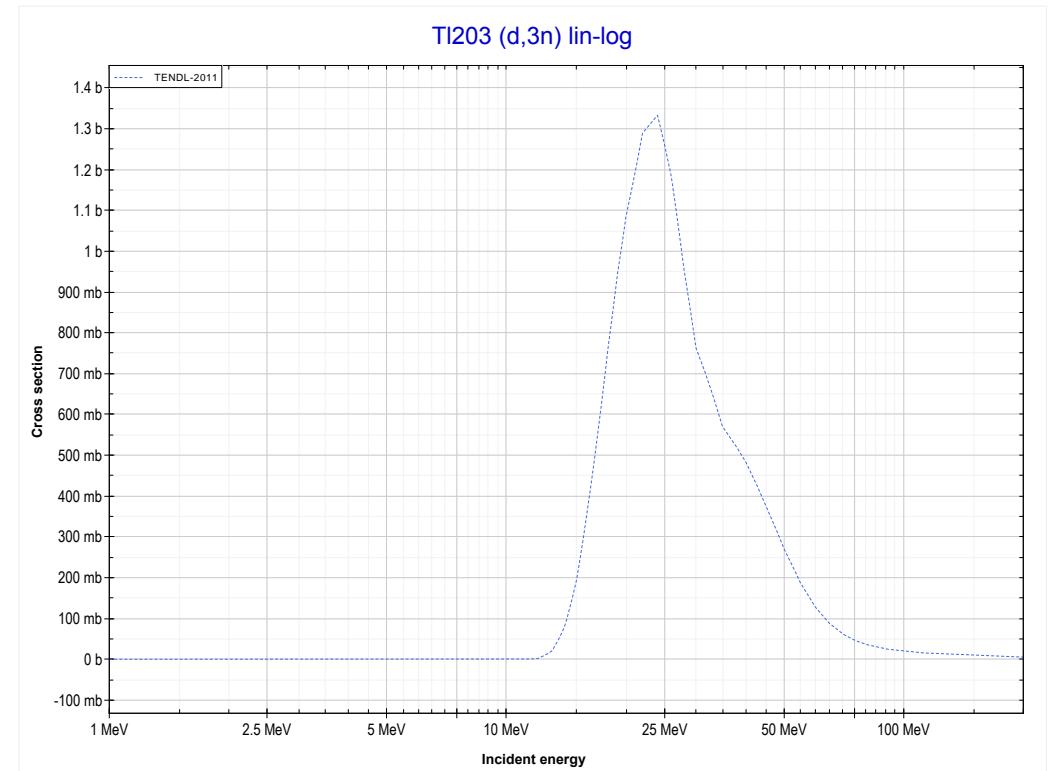
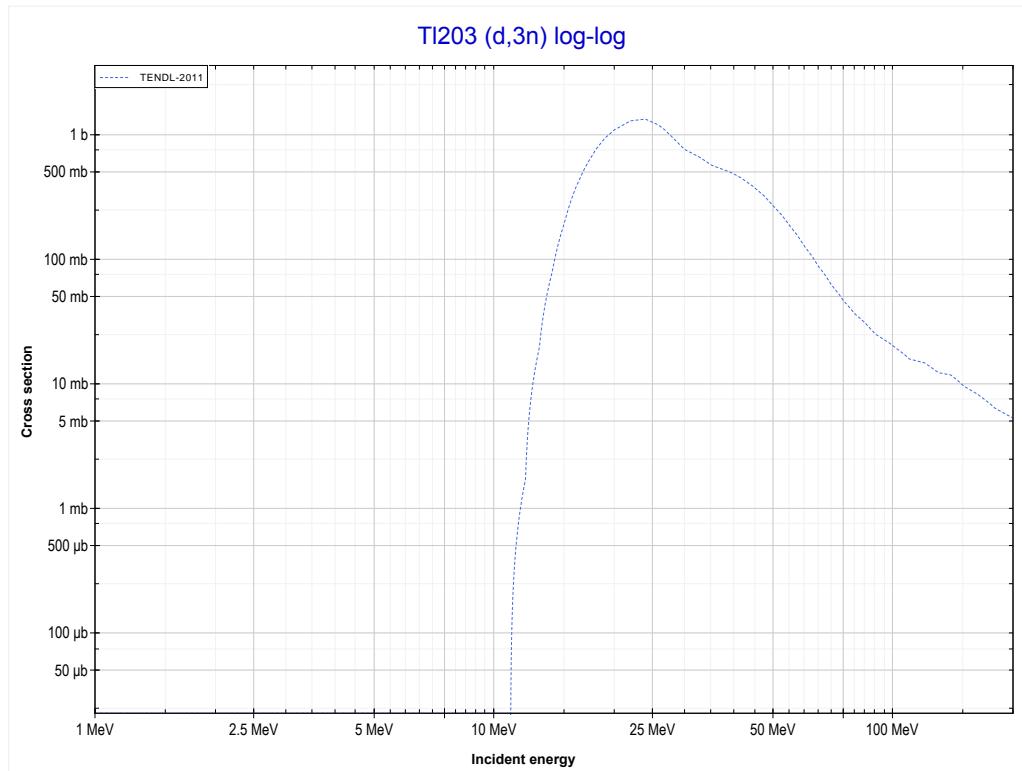
Reaction	Q-Value
Au197(d,7n)Hg192	-42493.60 keV

<< 53-I-127	79-Au-197 MT161 (d,8n) or MT5 (Hg191 production)	83-Bi-209 >>
<< MT160 (d,7n)		MT17 (d,3n) >>



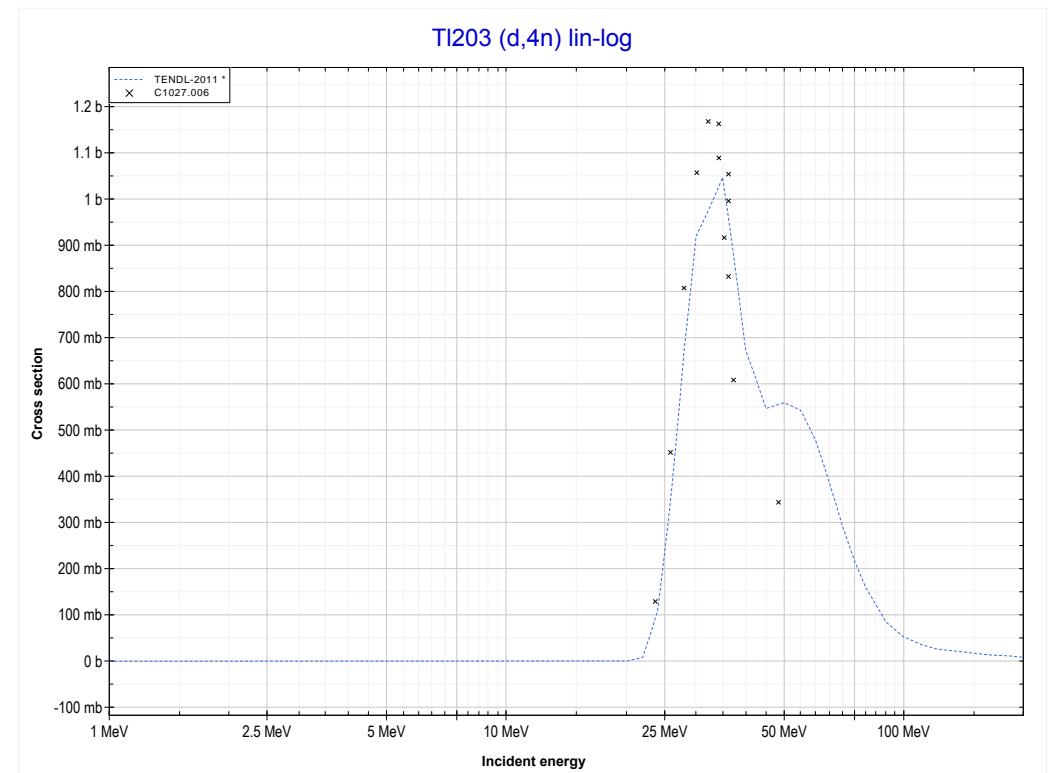
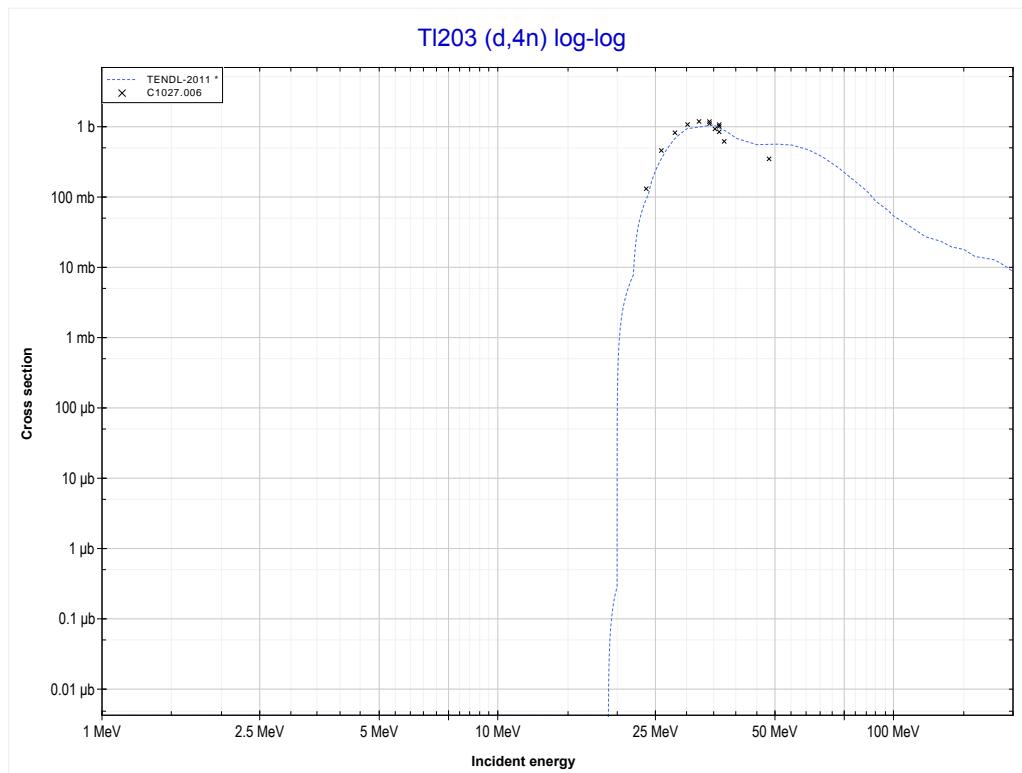
Reaction	Q-Value
Au197(d,8n)Hg191	-51982.92 keV

<< 68-Er-167	81-TI-203 MT17 (d,3n) or MT5 (Pb202 production)	81-TI-205 >> MT37 (d,4n) >>
<< MT161 (d,8n)		



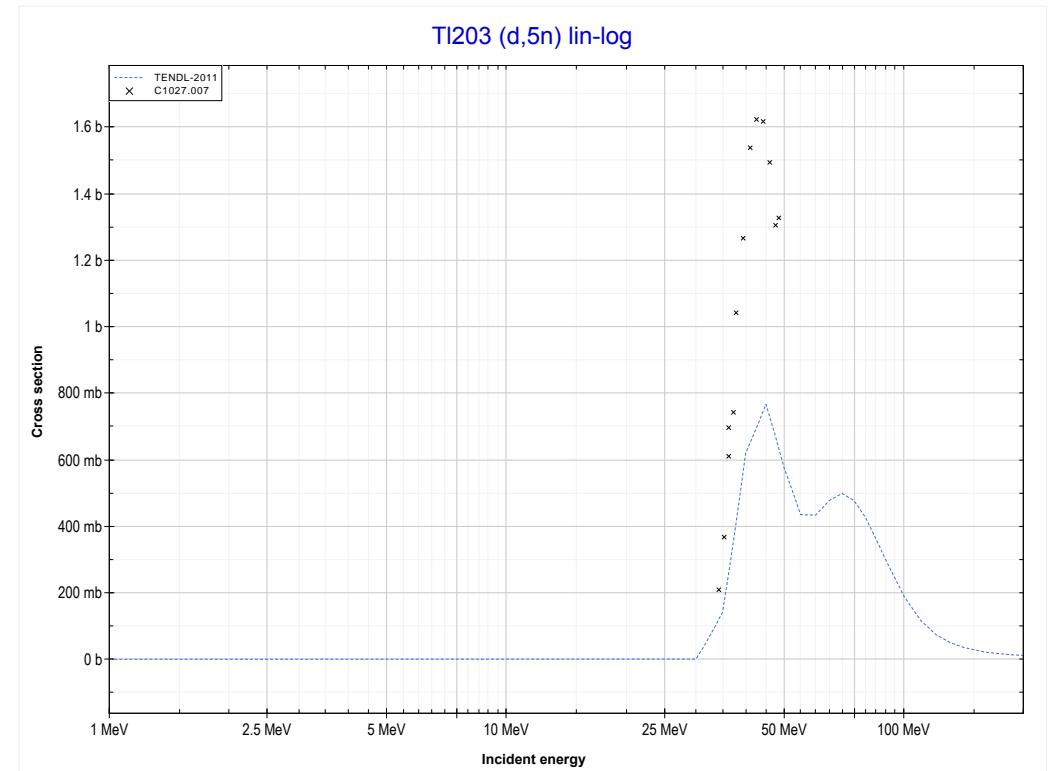
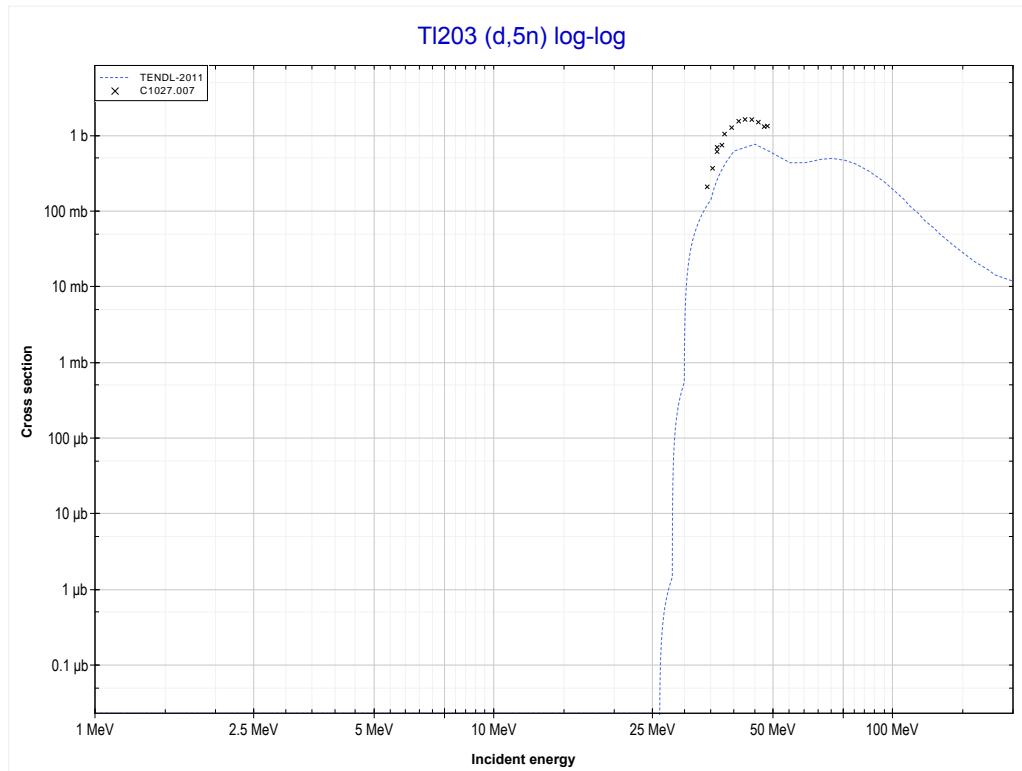
Reaction	Q-Value
TI203(d,3n)Pb202	-10905.43 keV

<< 79-Au-197	81-TI-203 MT37 (d,4n) or MT5 (Pb201 production)	81-TI-205 >>
<< MT17 (d,3n)		MT152 (d,5n) >>



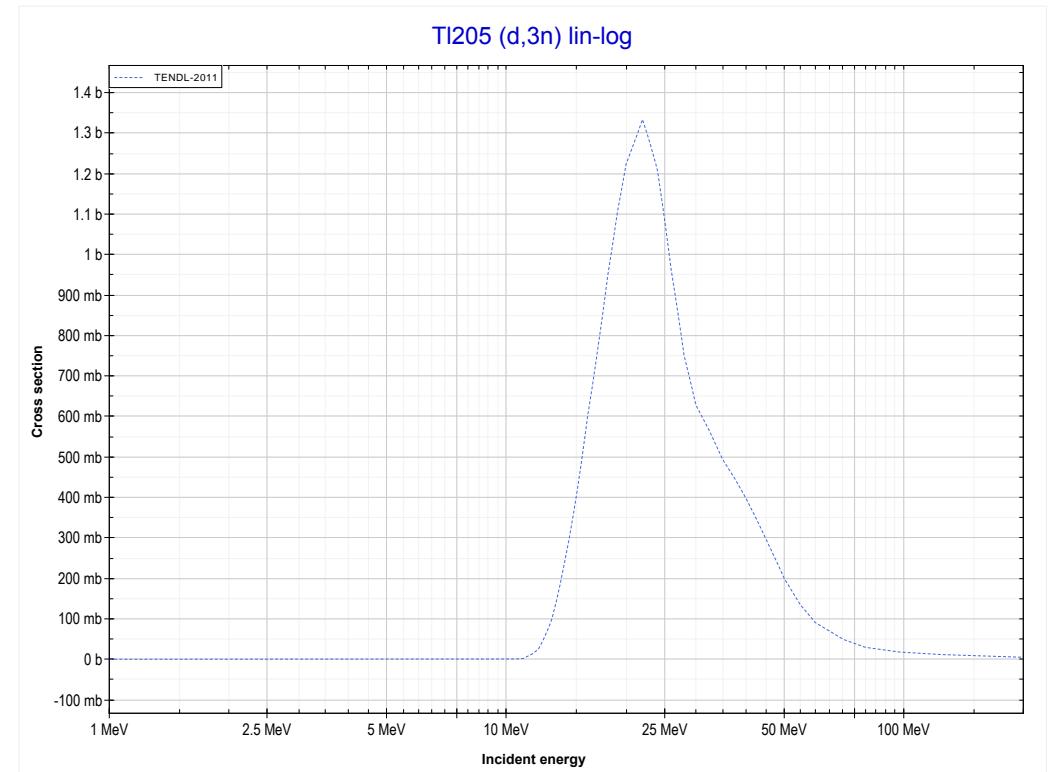
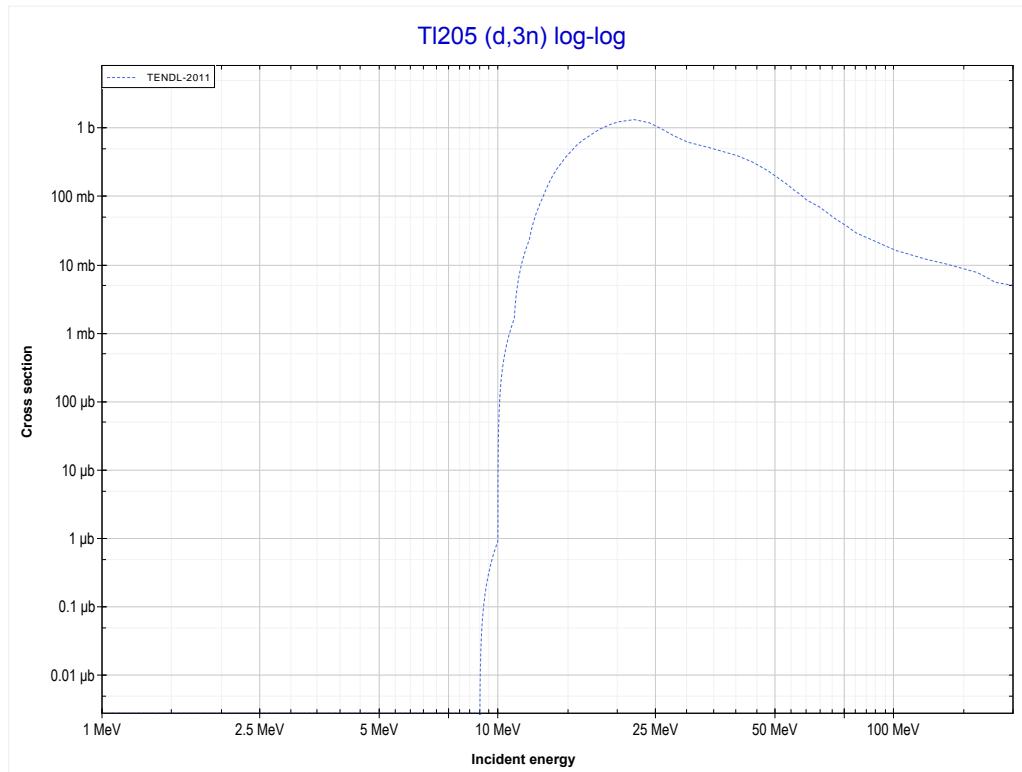
Reaction	Q-Value
TI203(d,4n)Pb201	-19652.75 keV

<< 73-Ta-181	81-TI-203 MT152 (d,5n) or MT5 (Pb200 production)	81-TI-205 >>
<< MT37 (d,4n)		MT17 (d,3n) >>



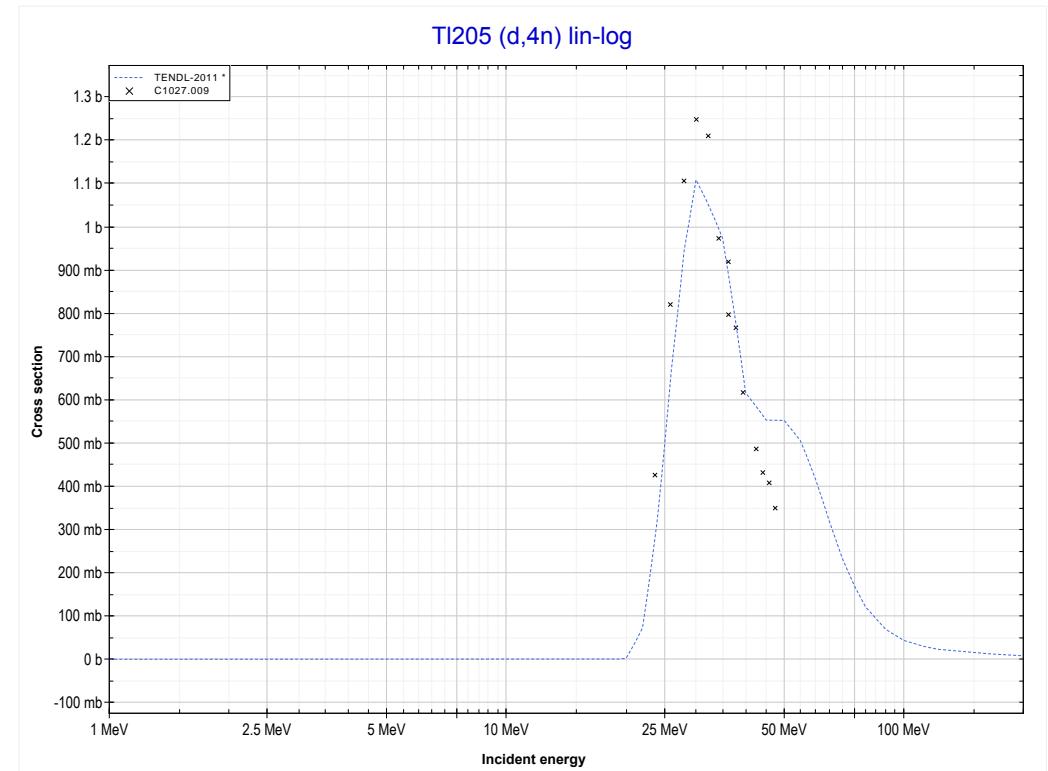
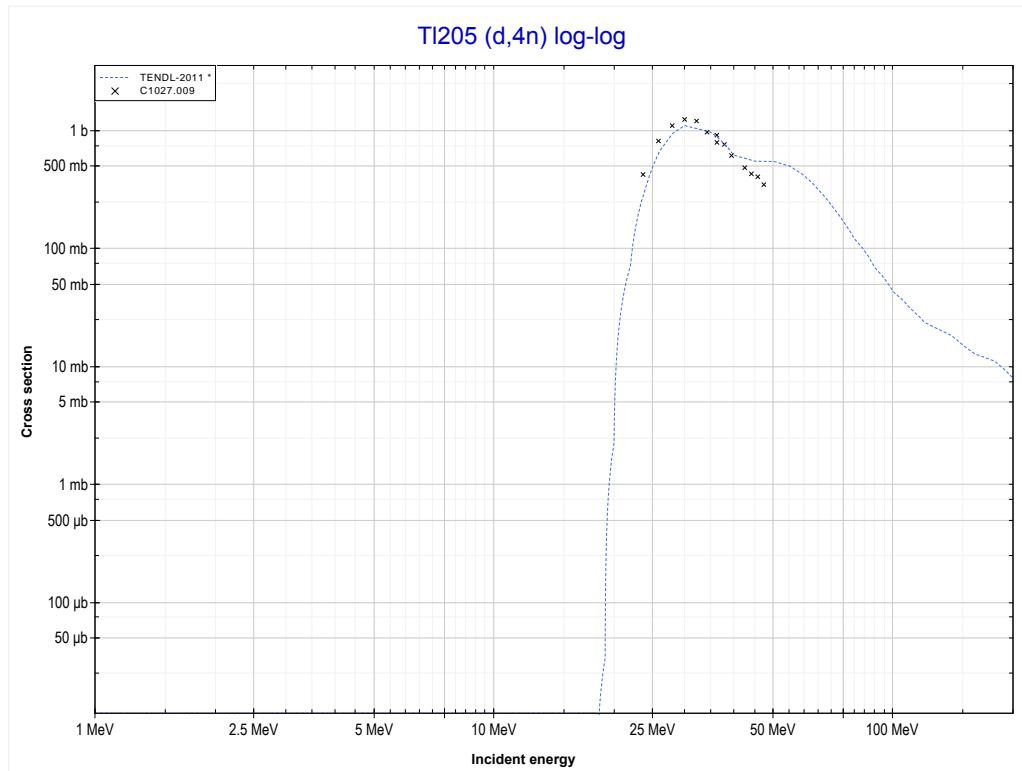
Reaction	Q-Value
TI203(d,5n)Pb200	-26739.06 keV

<< 81-TI-203	81-TI-205 MT17 (d,3n) or MT5 (Pb204 production)	83-Bi-209 >>
<< MT152 (d,5n)		MT37 (d,4n) >>



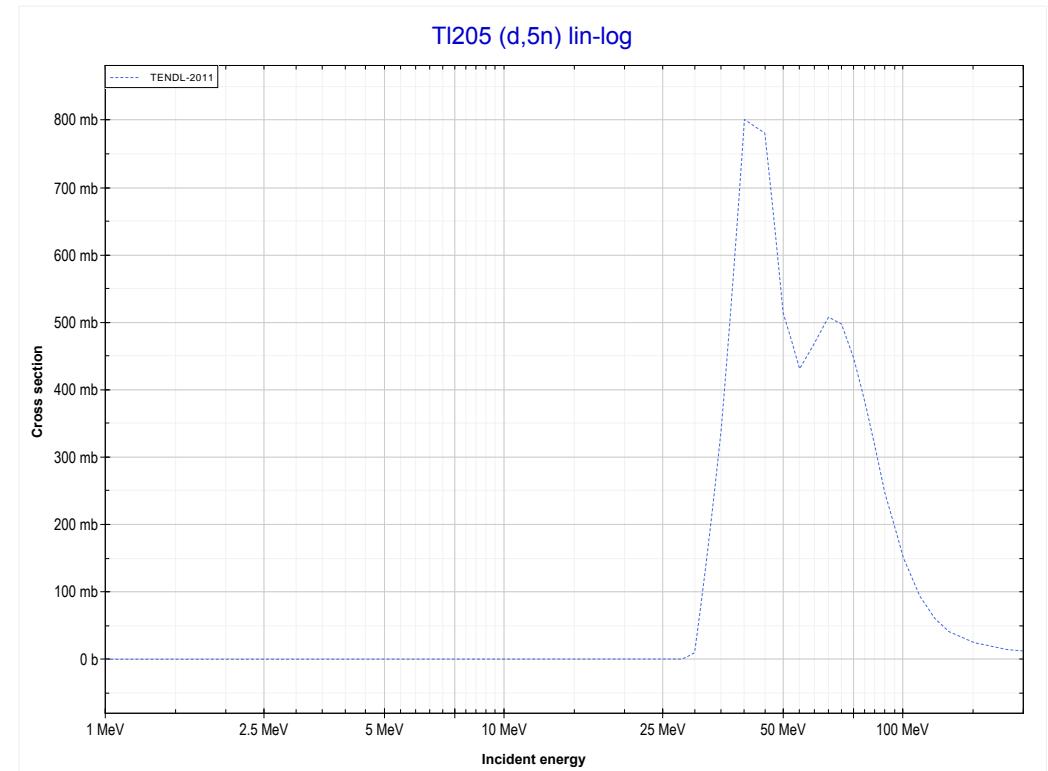
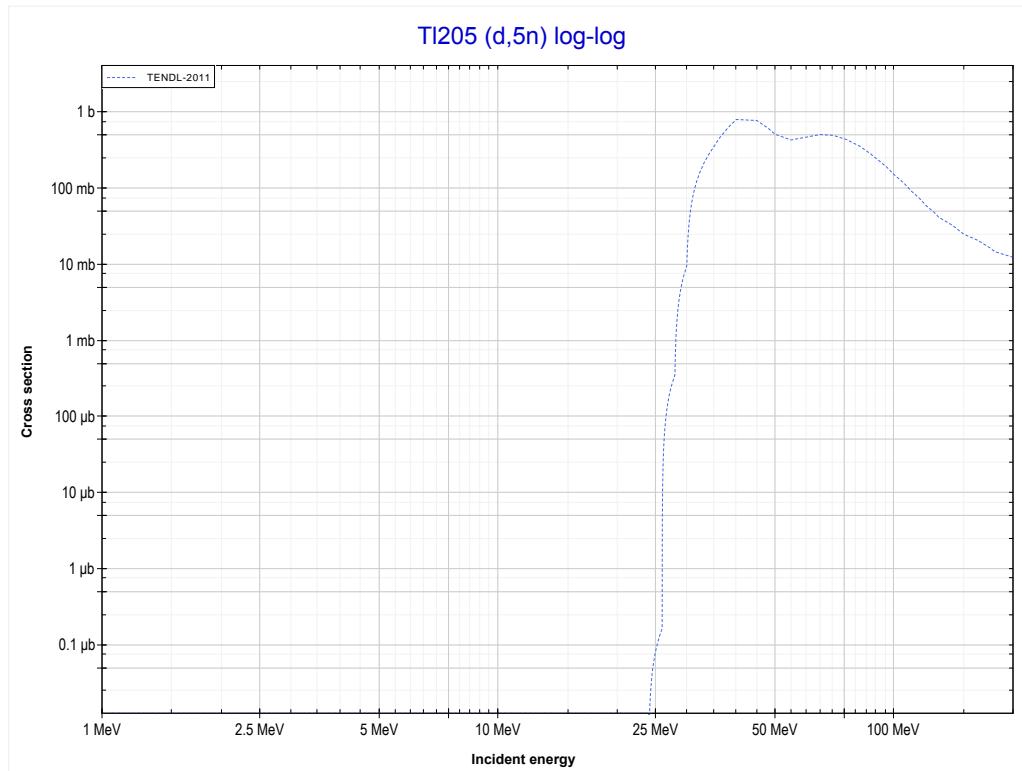
Reaction	Q-Value
$\text{TI}^{205}(\text{d},\text{3n})\text{Pb}^{204}$	-9789.13 keV

<< 81-TI-203	81-TI-205 MT37 (d,4n) or MT5 (Pb203 production)	83-Bi-209 >>
<< MT17 (d,3n)		MT152 (d,5n) >>



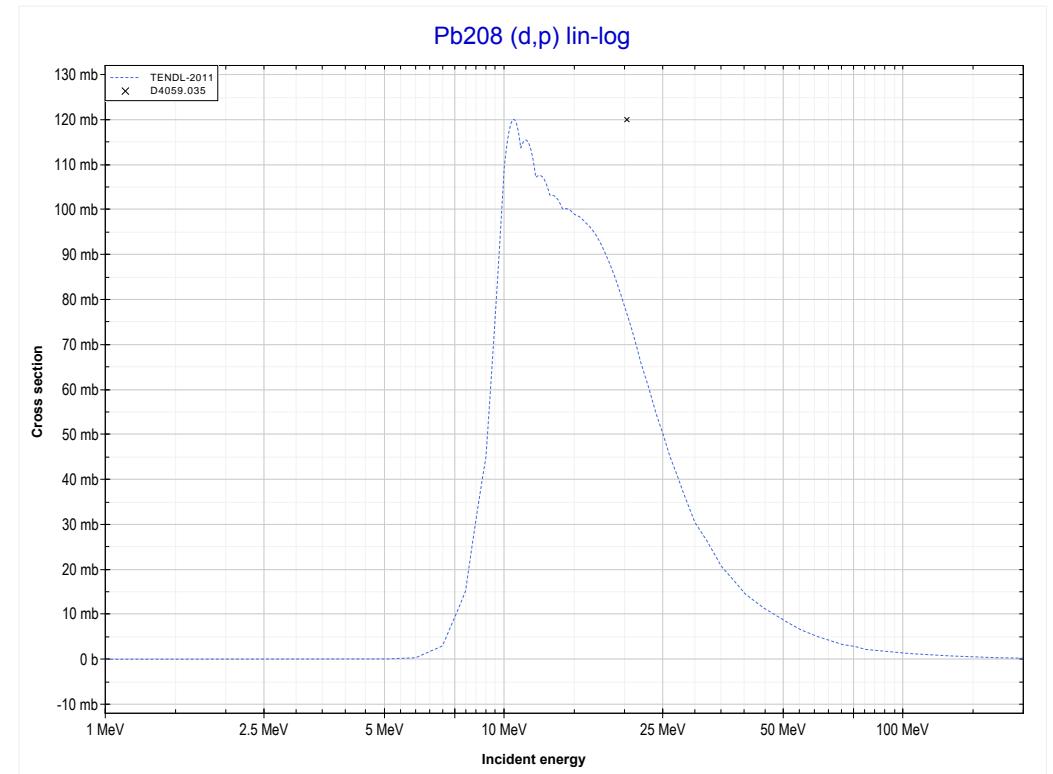
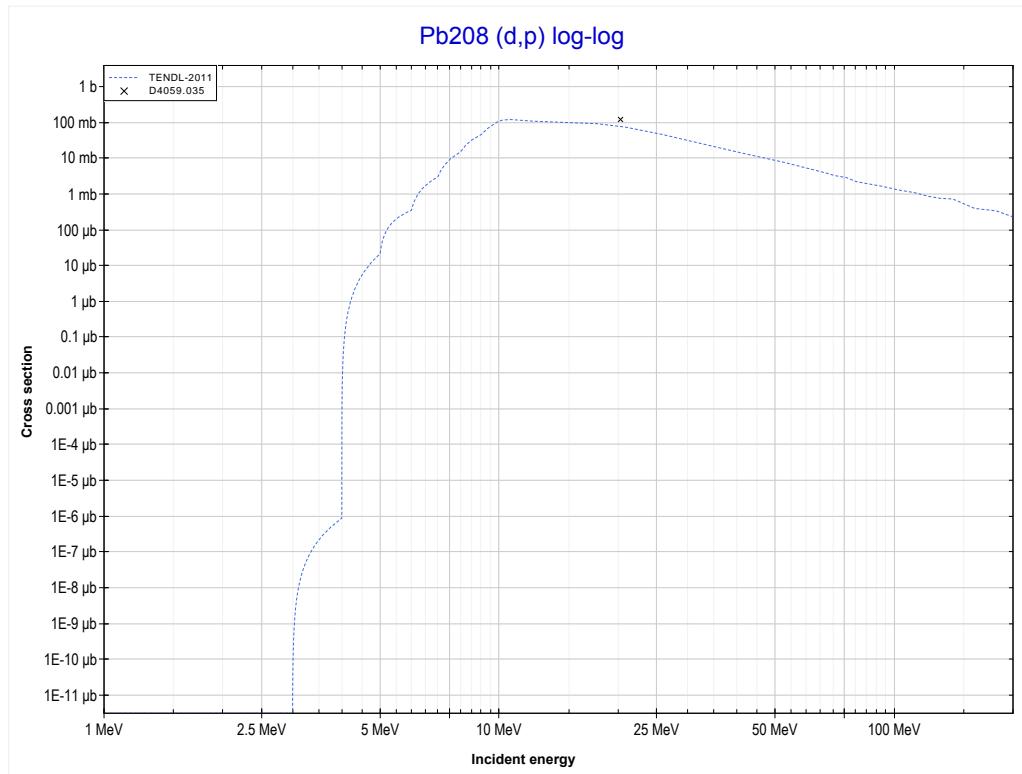
Reaction	Q-Value
$\text{TI}^{205}(\text{d},\text{4n})\text{Pb}^{203}$	-18183.15 keV

<< 81-TI-203	81-TI-205 MT152 (d,5n) or MT5 (Pb202 production)	83-Bi-209 >>
<< MT37 (d,4n)		MT103 (d,p) >>



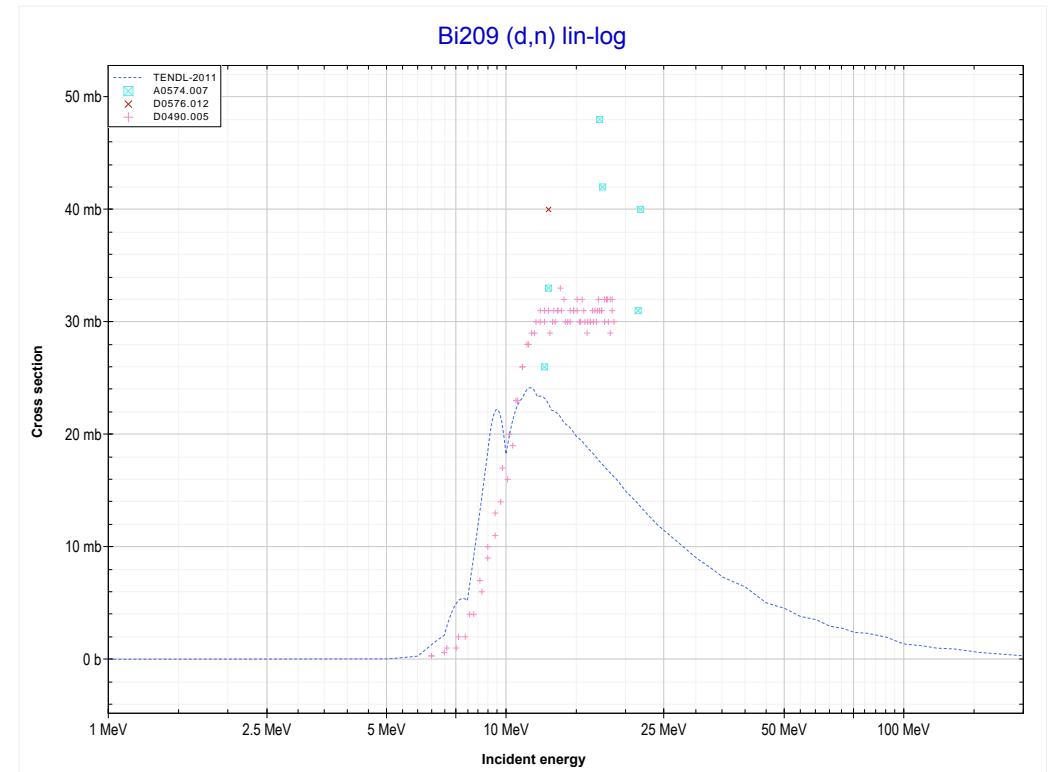
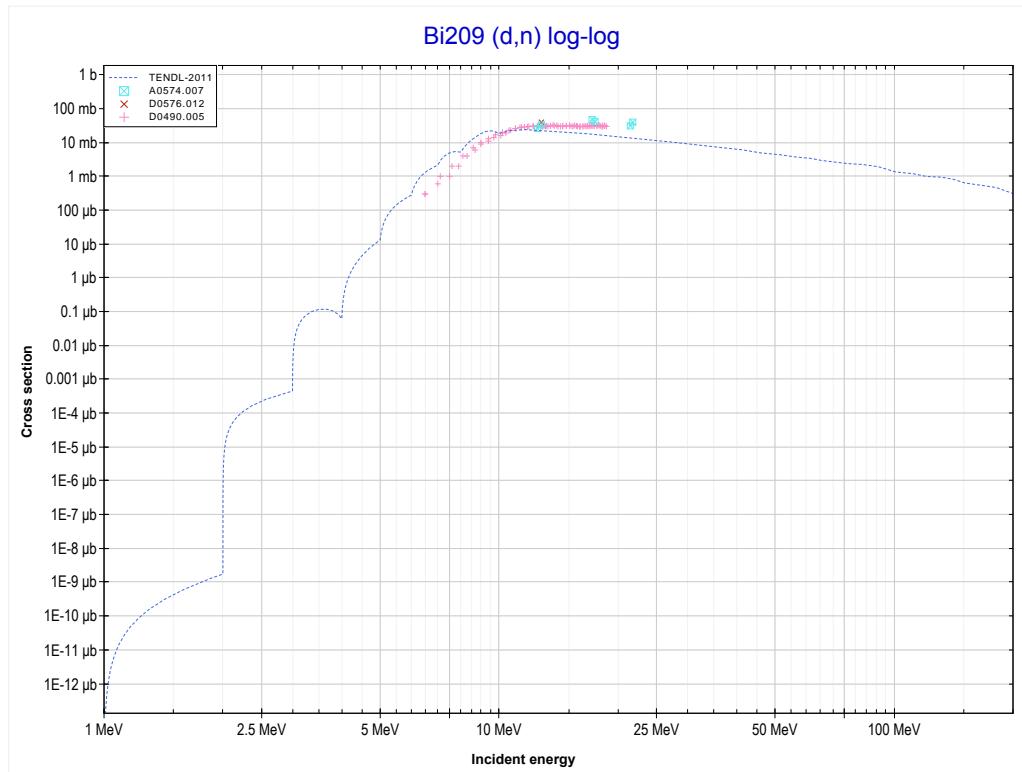
Reaction	Q-Value
$\text{TI}^{205}(\text{d},\text{5n})\text{Pb}^{202}$	-25107.46 keV

<< 79-Au-197	82-Pb-208 MT103 (d,p) or MT5 (Pb209 production)	83-Bi-209 >>
<< MT152 (d,5n)		MT4 (d,n) >>



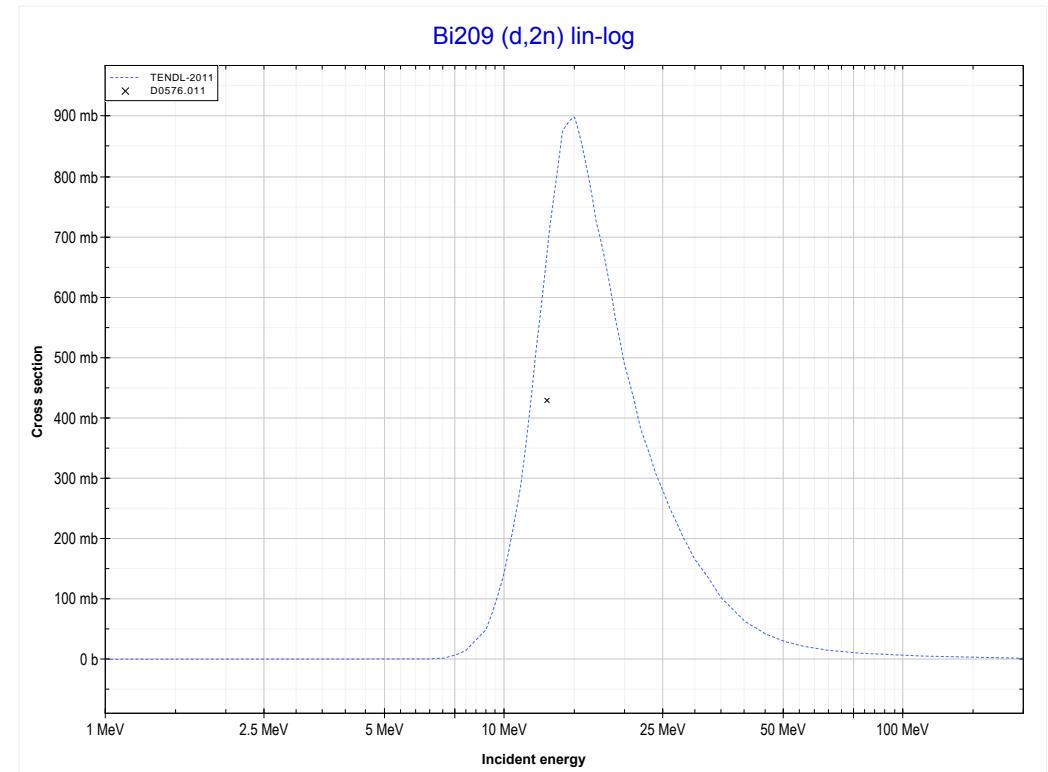
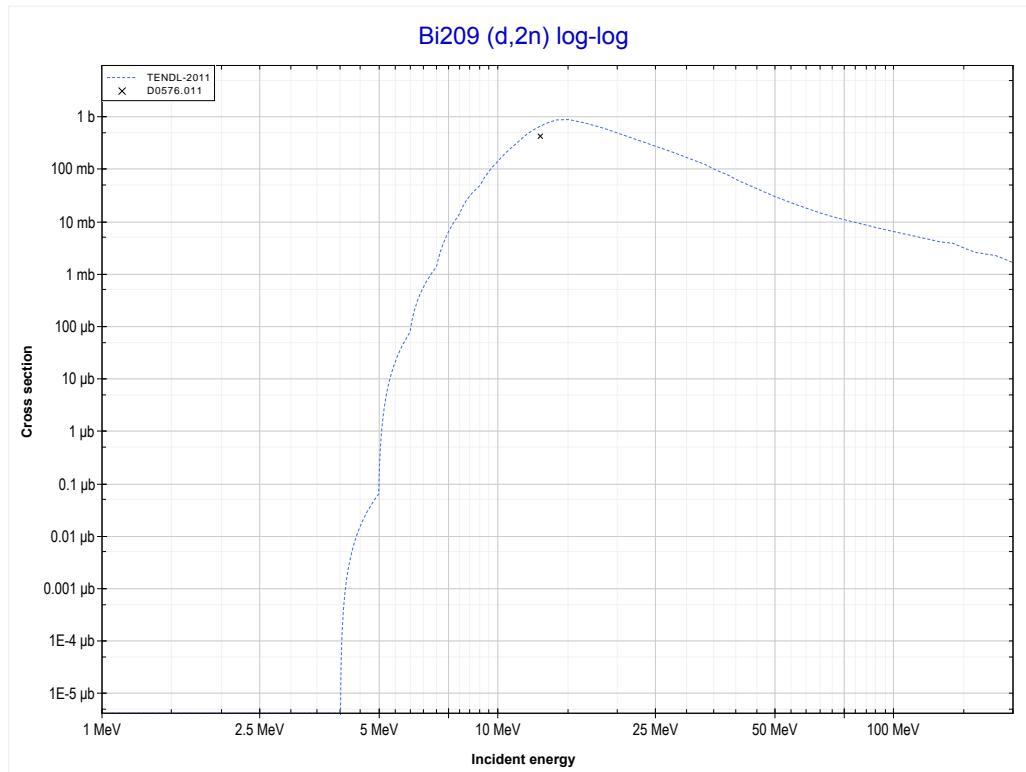
Reaction	Q-Value
Pb208(d,p)Pb209	1712.65 keV

<< 70-Yb-176	83-Bi-209 MT4 (d,n) or MT5 (Po210 production)	90-Th-232 >>
<< MT103 (d,p)		MT16 (d,2n) >>



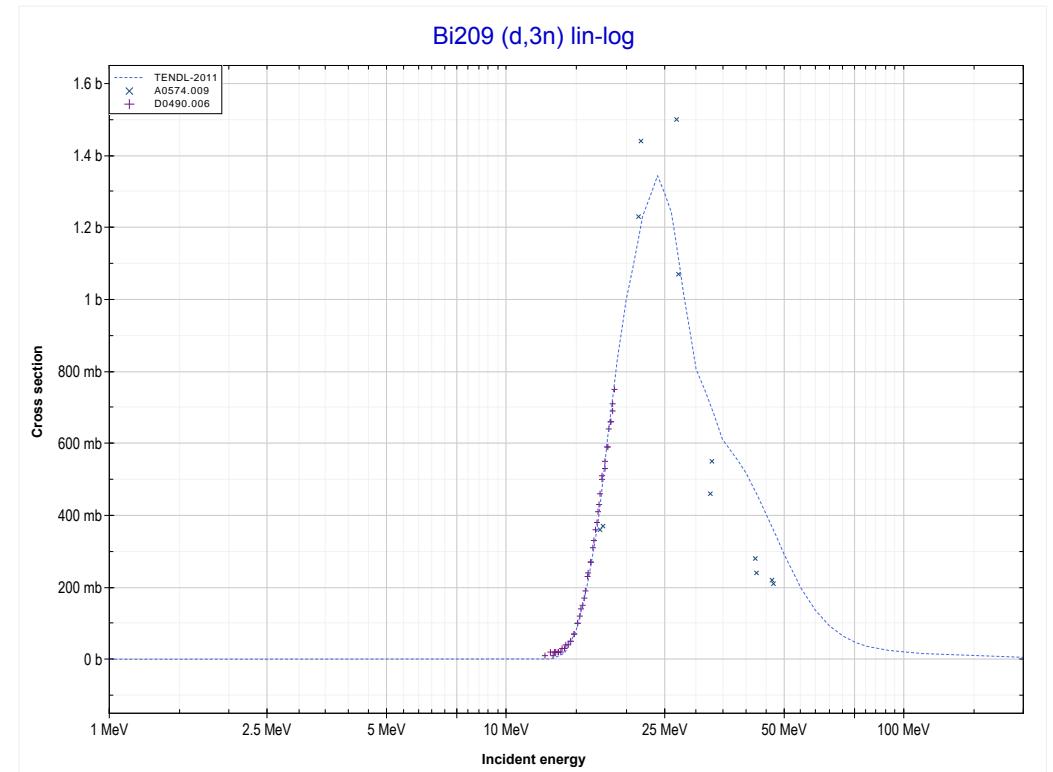
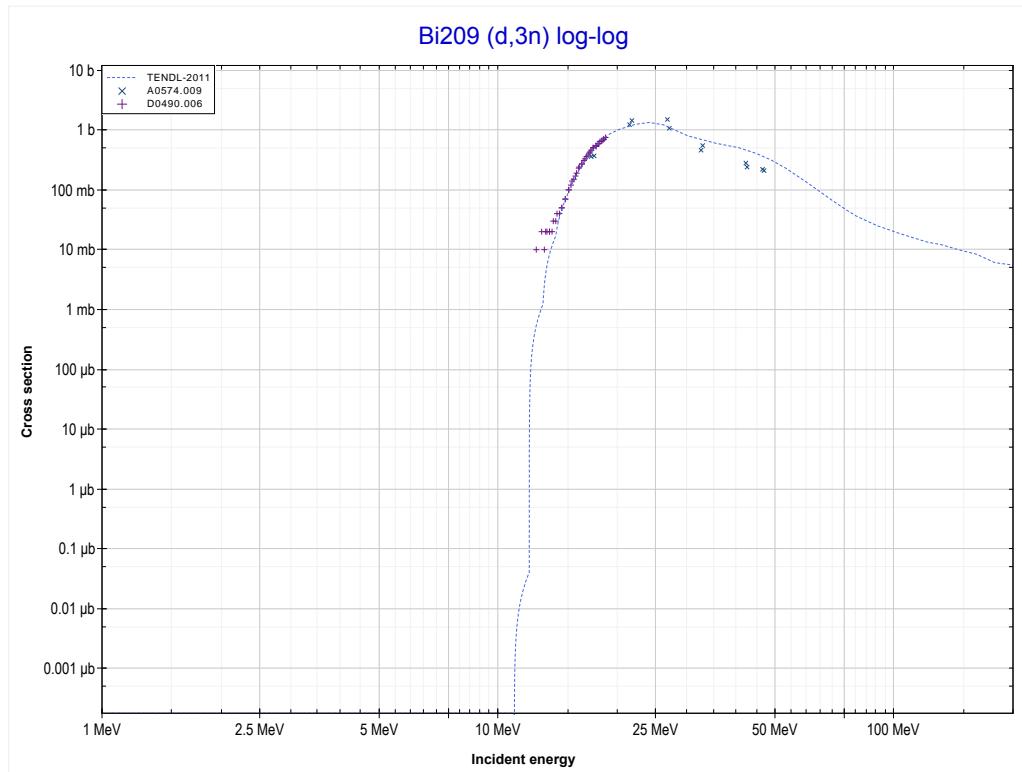
Reaction	Q-Value
Bi209(d,n)Po210	2759.00 keV

<< 79-Au-197	83-Bi-209 MT16 (d,2n) or MT5 (Po209 production)	90-Th-232 >>
<< MT4 (d,n)		MT17 (d,3n) >>



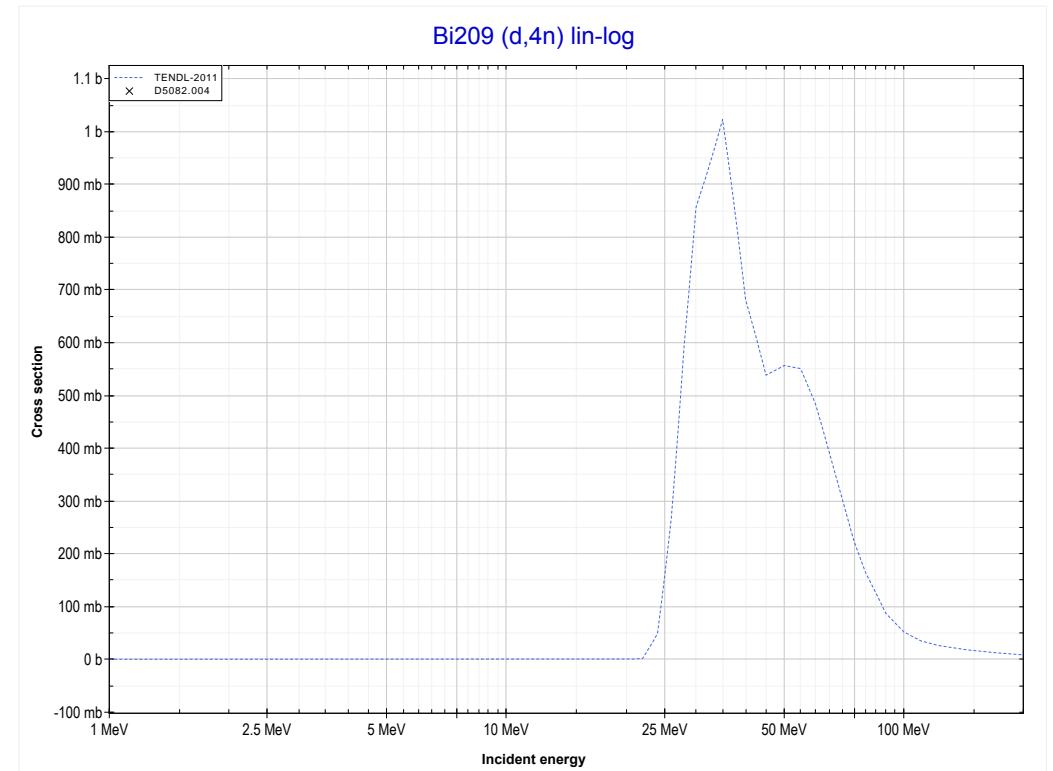
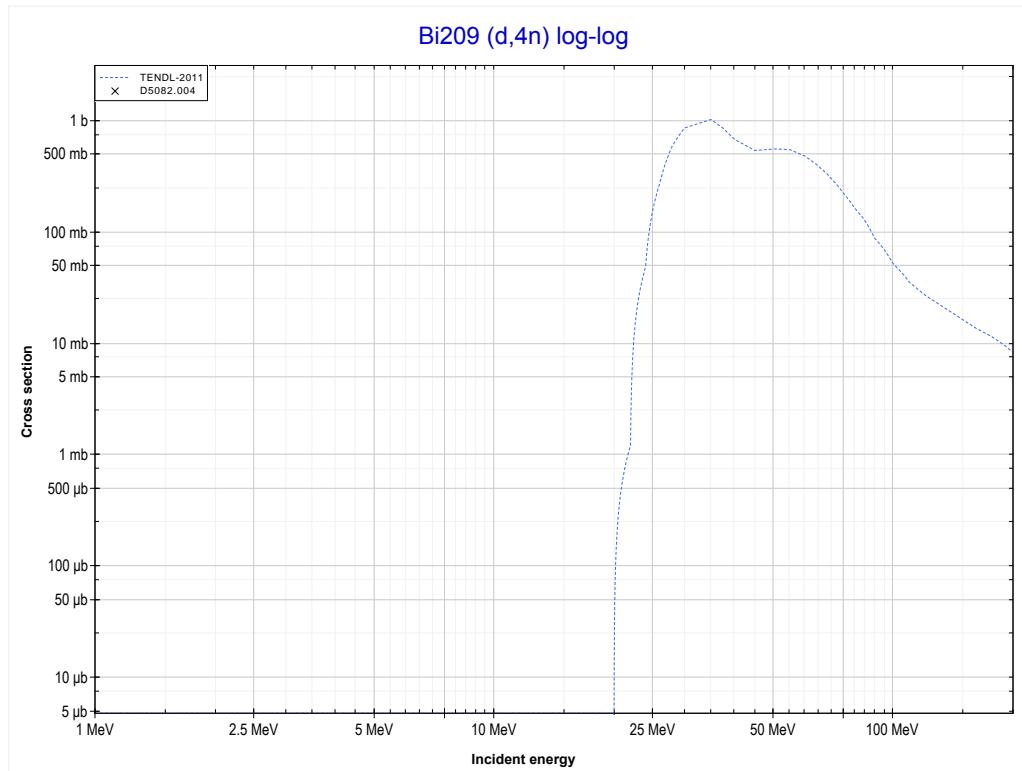
Reaction	Q-Value
$\text{Bi}^{209}(\text{d},\text{2n})\text{Po}^{209}$	-4899.51 keV

<< 81-TI-205	83-Bi-209 MT17 (d,3n) or MT5 (Po208 production)	91-Pa-231 >>
<< MT16 (d,2n)		MT37 (d,4n) >>

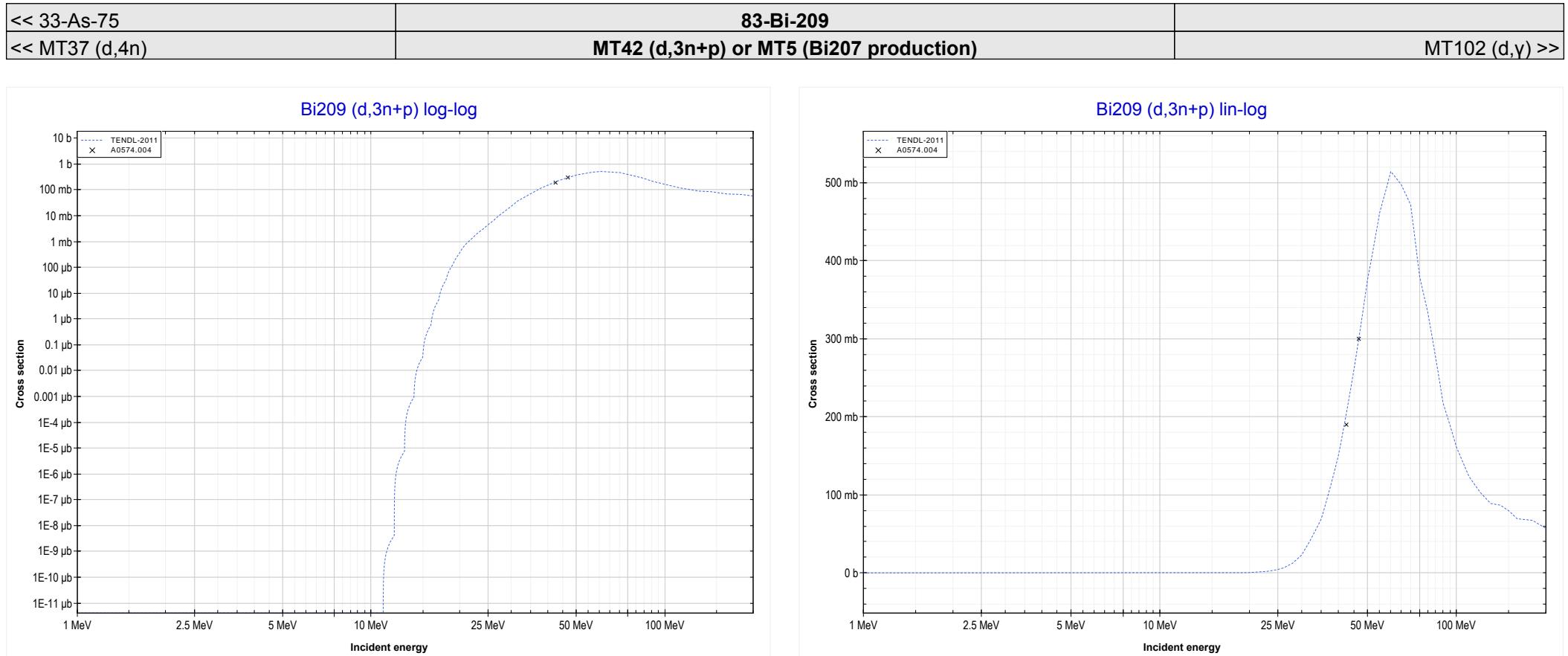


Reaction	Q-Value
$\text{Bi}^{209}(\text{d},\text{3n})\text{Po}^{208}$	-11867.23 keV

<< 81-TI-205	83-Bi-209 MT37 (d,4n) or MT5 (Po207 production)	90-Th-232 >>
<< MT17 (d,3n)		MT42 (d,3n+p) >>

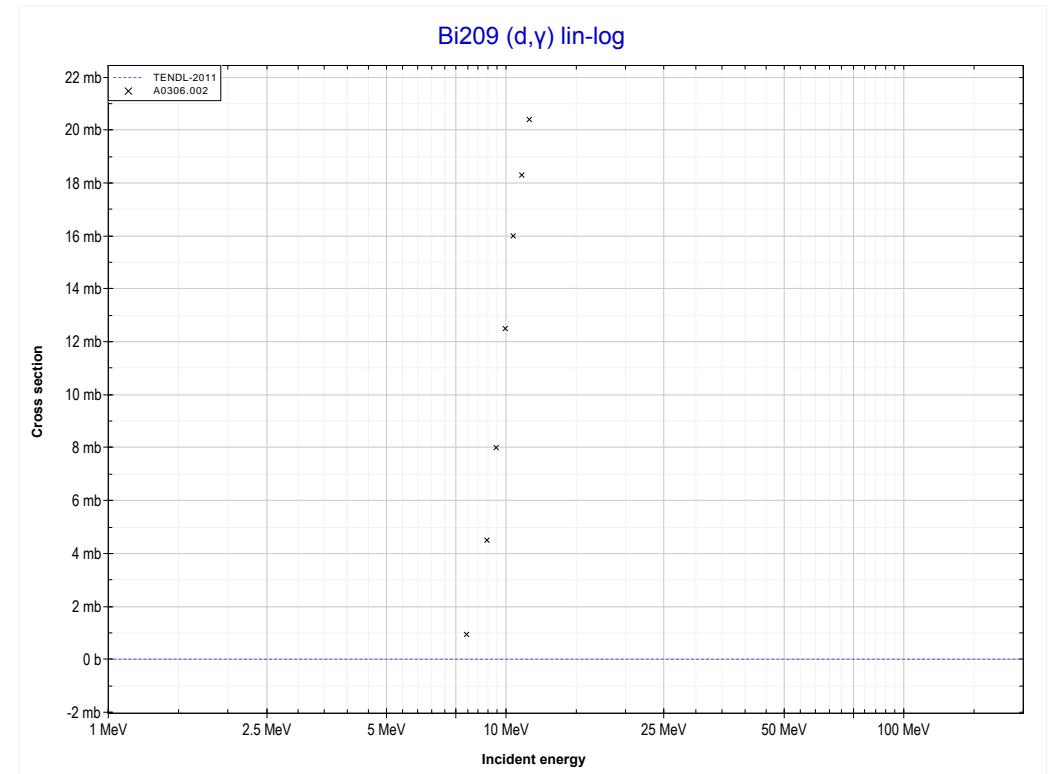
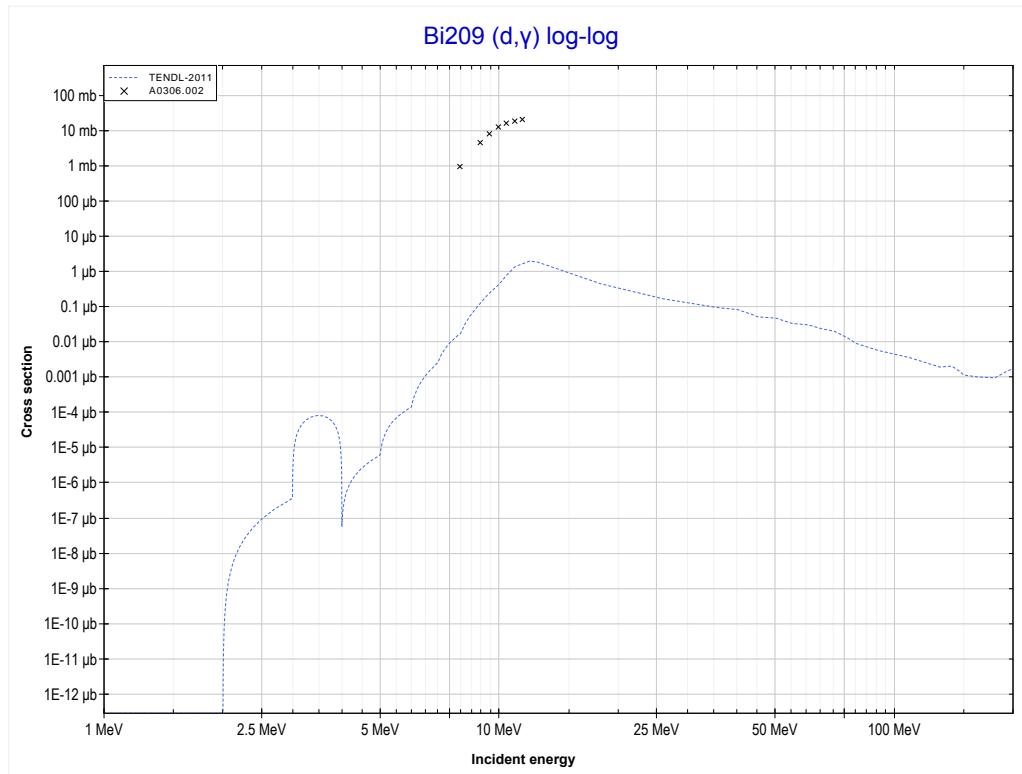


Reaction	Q-Value
$\text{Bi}^{209}(\text{d},\text{4n})\text{Po}^{207}$	-20262.05 keV



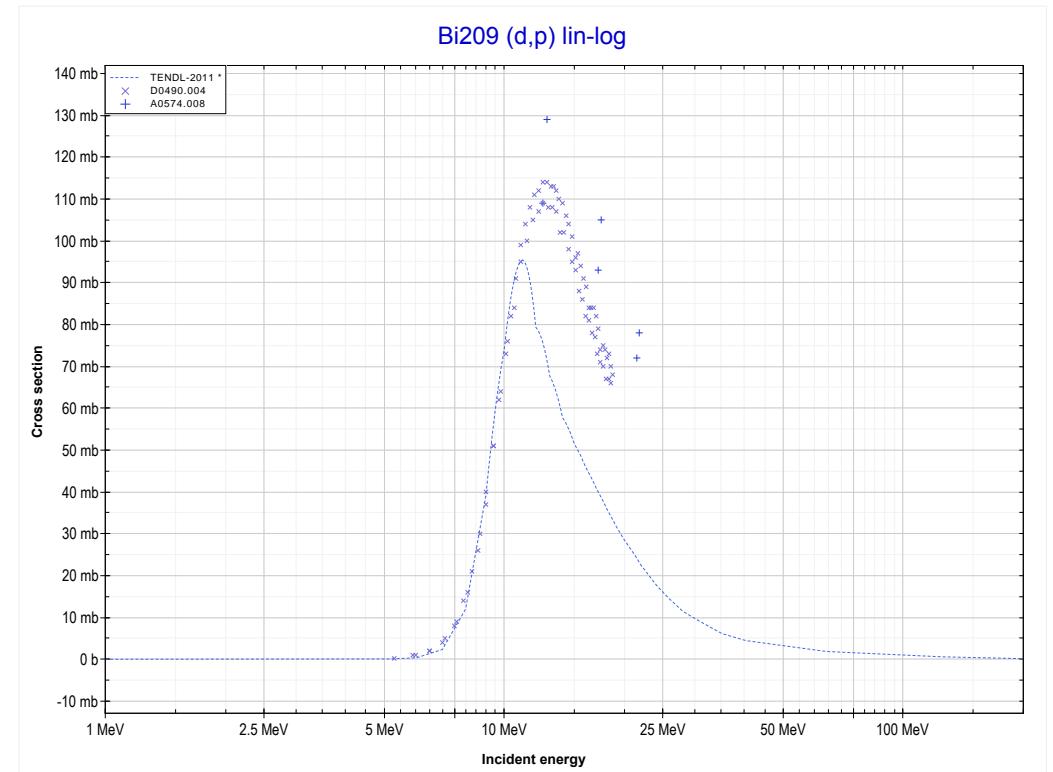
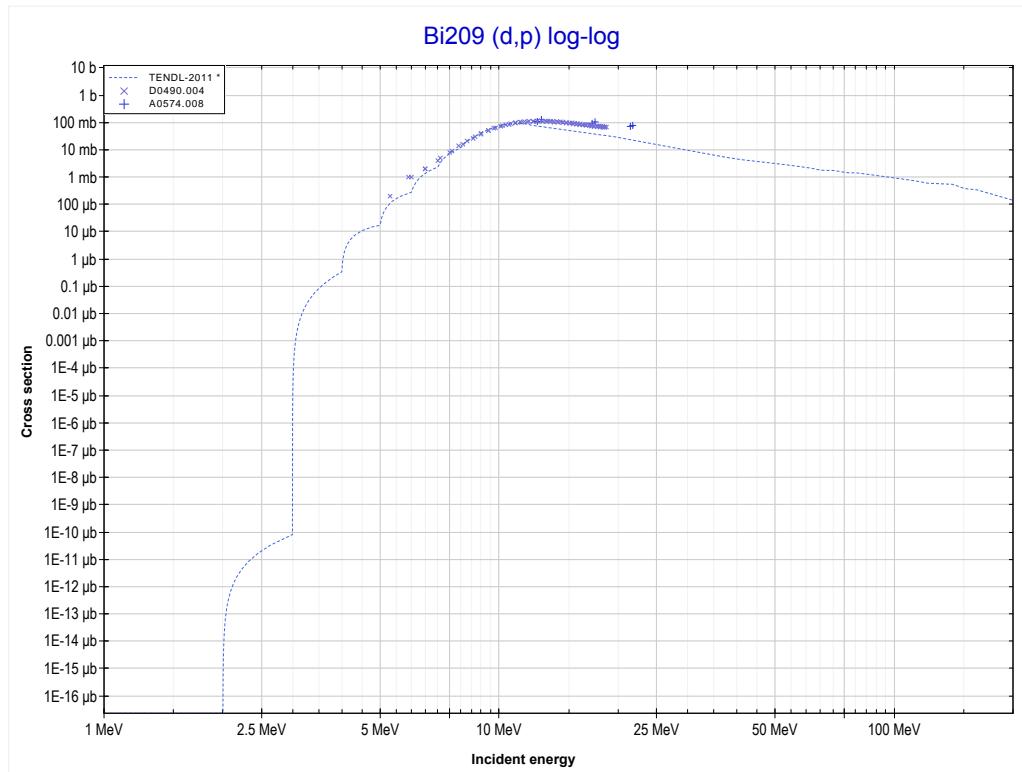
Reaction	Q-Value
Bi209(d,n+t)Bi207	-8089.50 keV
Bi209(d,2n+d)Bi207	-14346.73 keV
Bi209(d,3n+p)Bi207	-16571.30 keV

<< 79-Au-197	83-Bi-209 MT102 (d, γ) or MT5 (Po211 production)	92-U-234 >>
<< MT42 (d,3n+p)		MT103 (d,p) >>



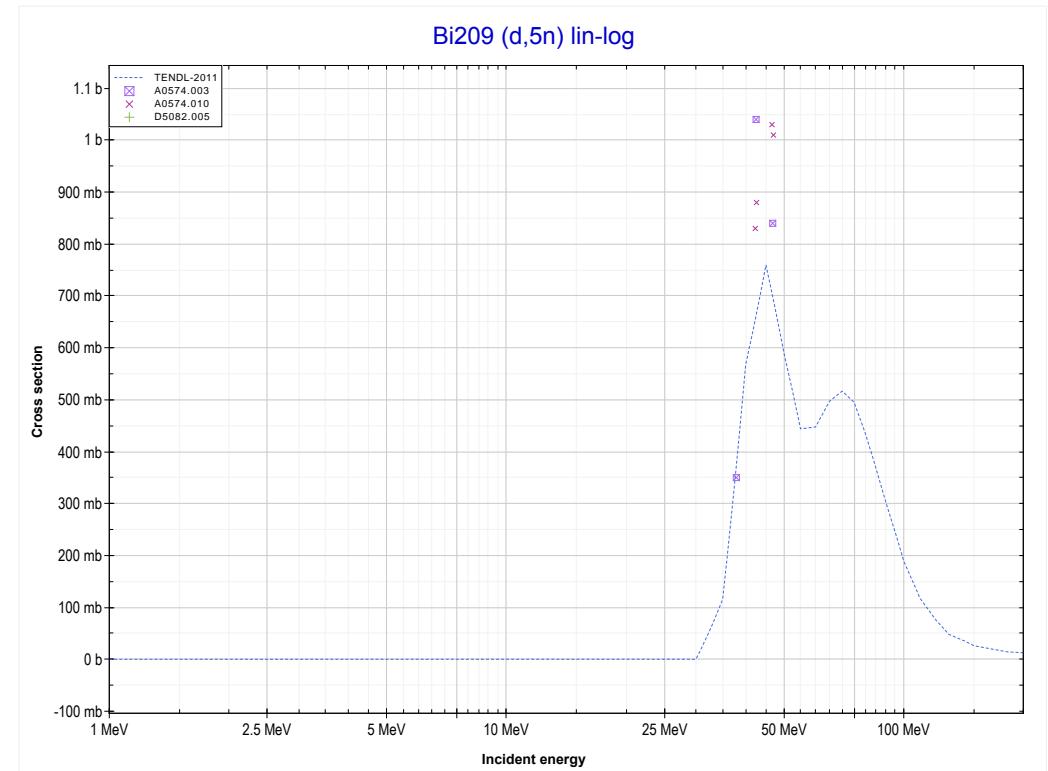
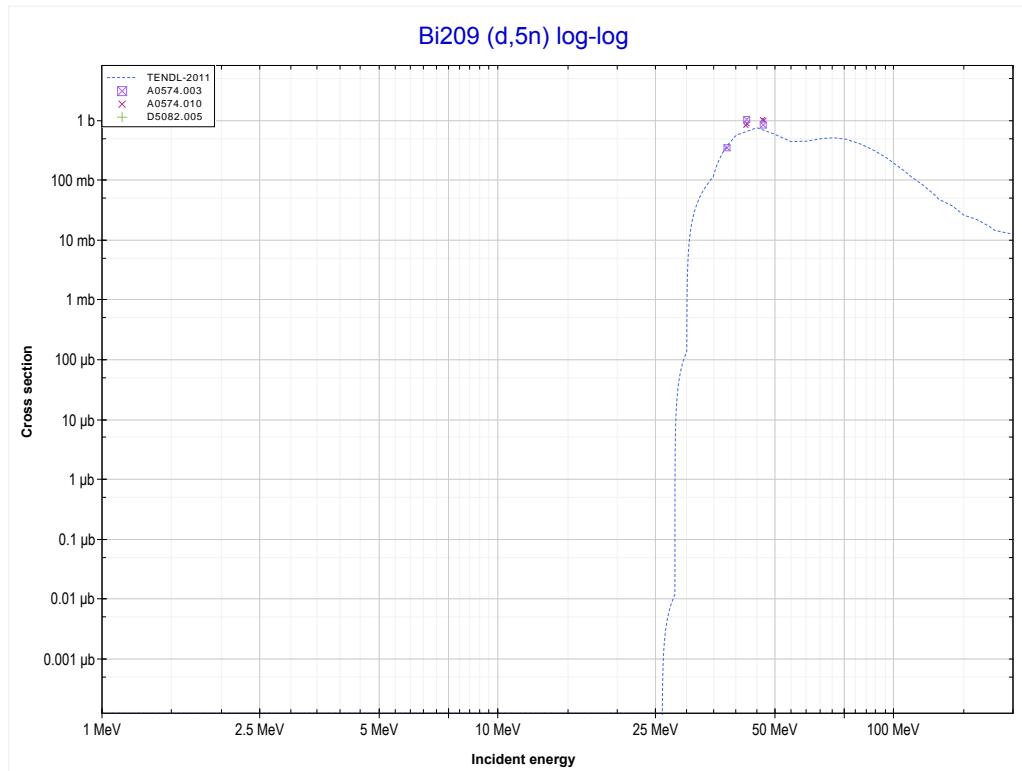
Reaction	Q-Value
Bi209(d, γ)Po211	7309.72 keV

<< 82-Pb-208	83-Bi-209 MT103 (d,p) or MT5 (Bi210 production)	90-Th-232 >>
<< MT102 (d, γ)		MT152 (d,5n) >>



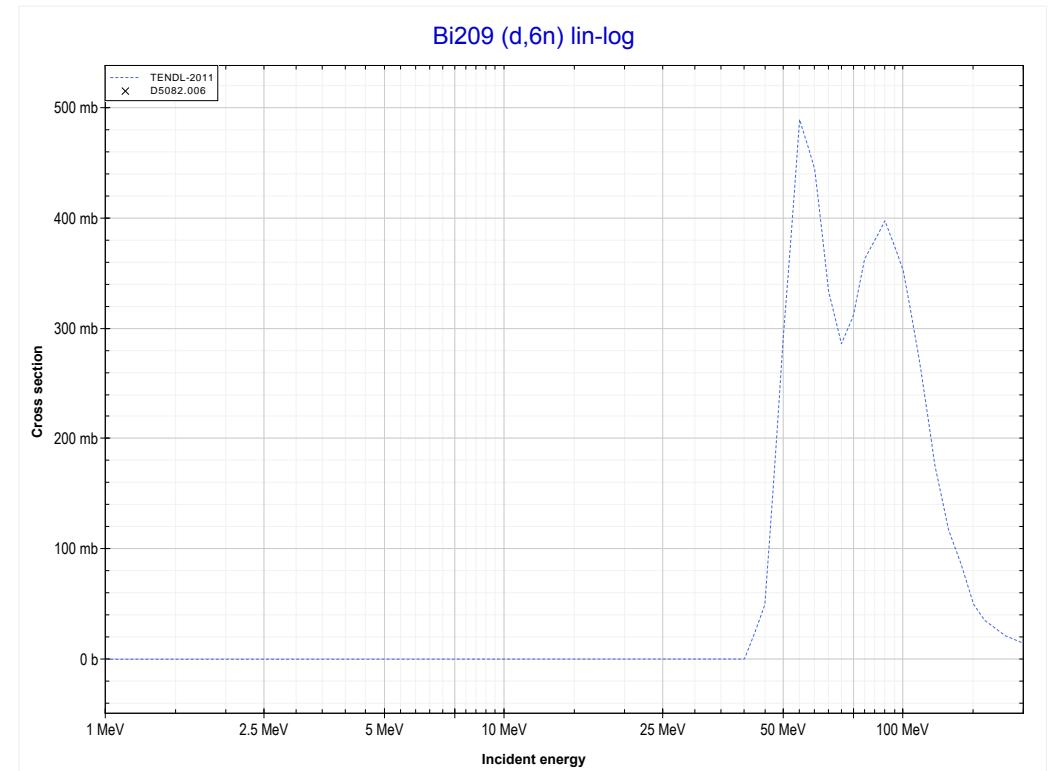
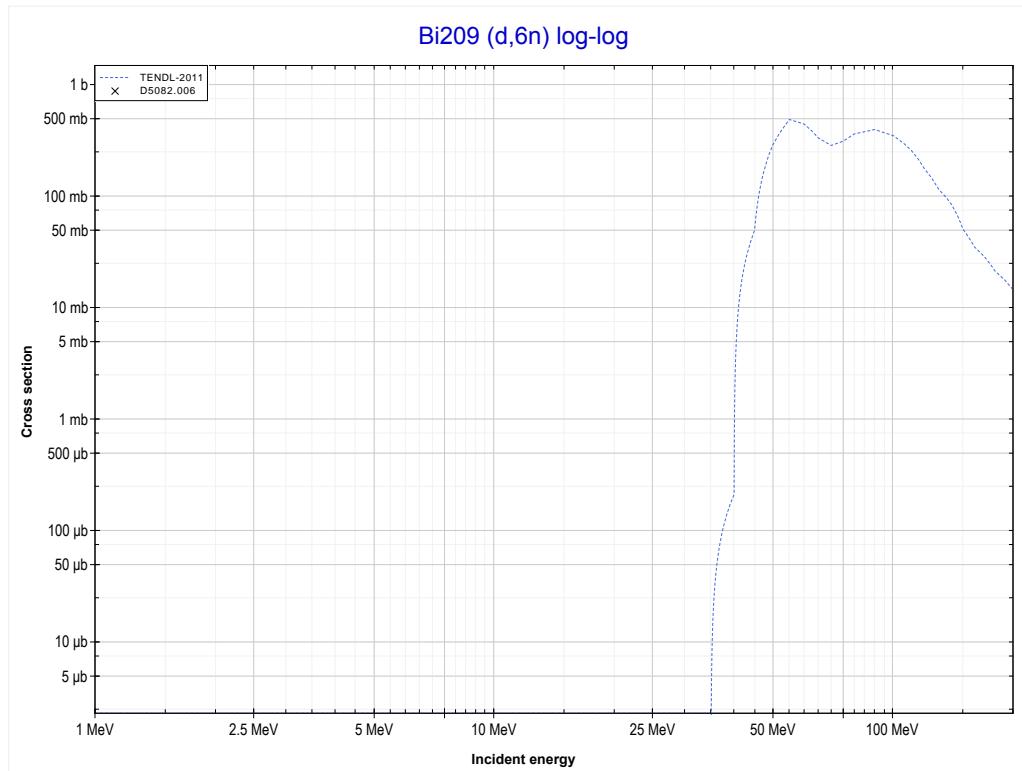
Reaction	Q-Value
Bi209(d,p)Bi210	2380.05 keV

<< 81-TI-205	83-Bi-209 MT152 (d,5n) or MT5 (Po206 production)	92-U-238 >>
<< MT103 (d,p)		MT153 (d,6n) >>



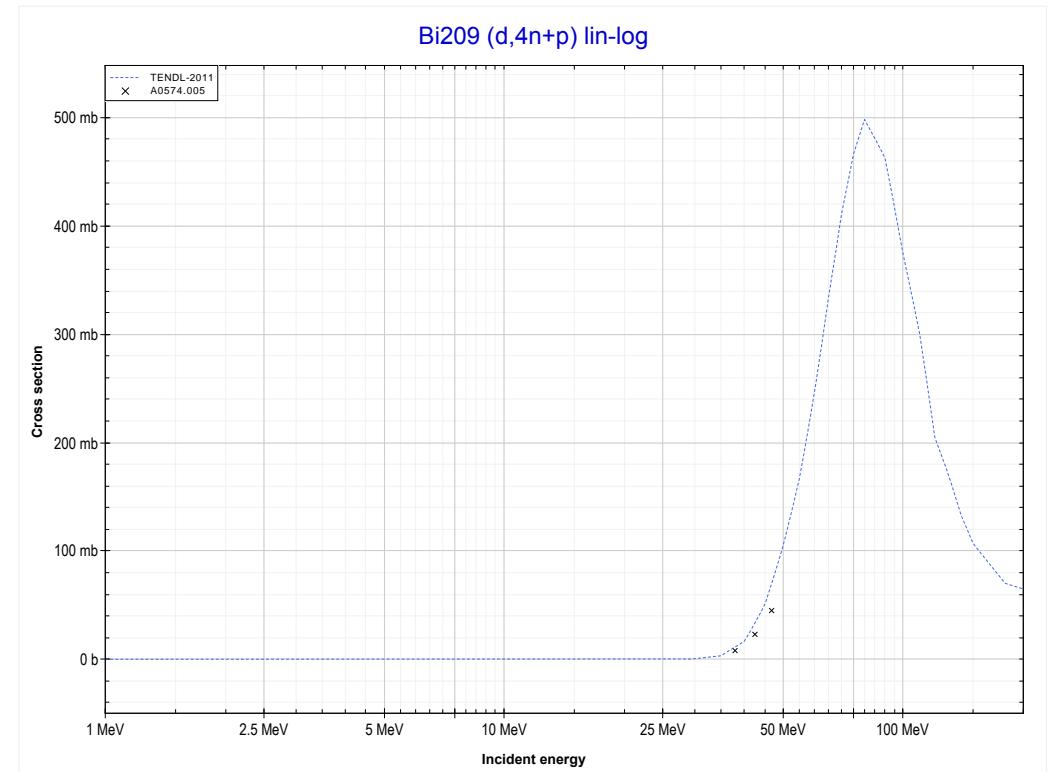
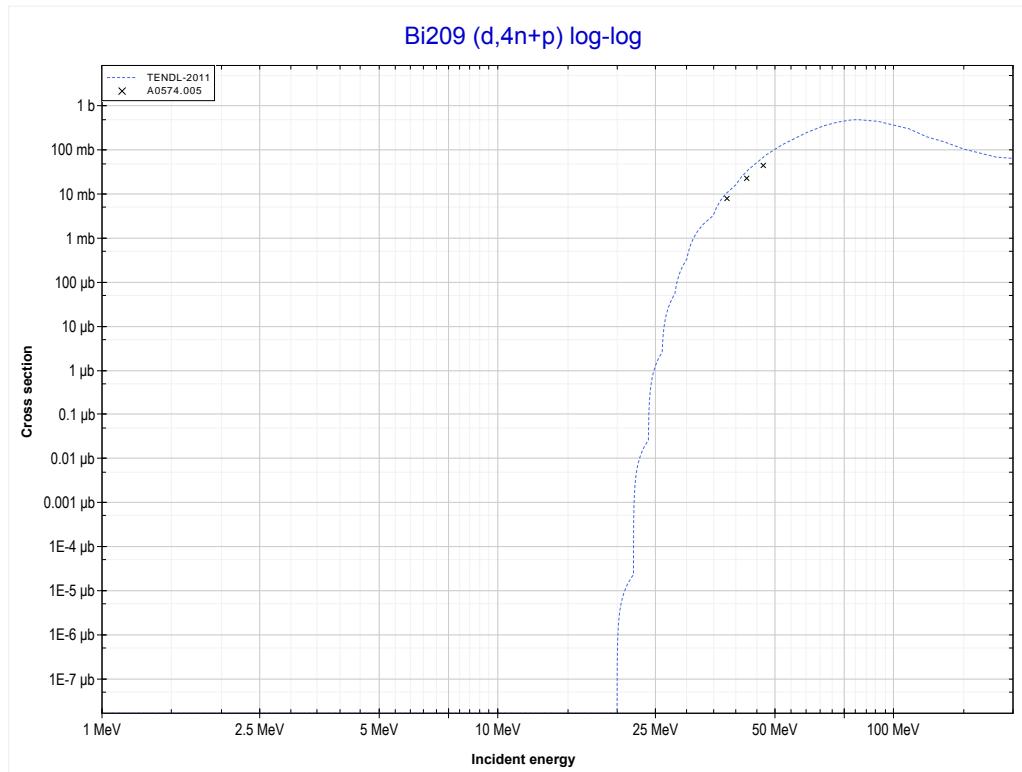
Reaction	Q-Value
Bi209(d,5n)Po206	-27297.36 keV

<< 79-Au-197	83-Bi-209 MT153 (d,6n) or MT5 (Po205 production)	90-Th-232 >>
<< MT152 (d,5n)		MT156 (d,4n+p) >>



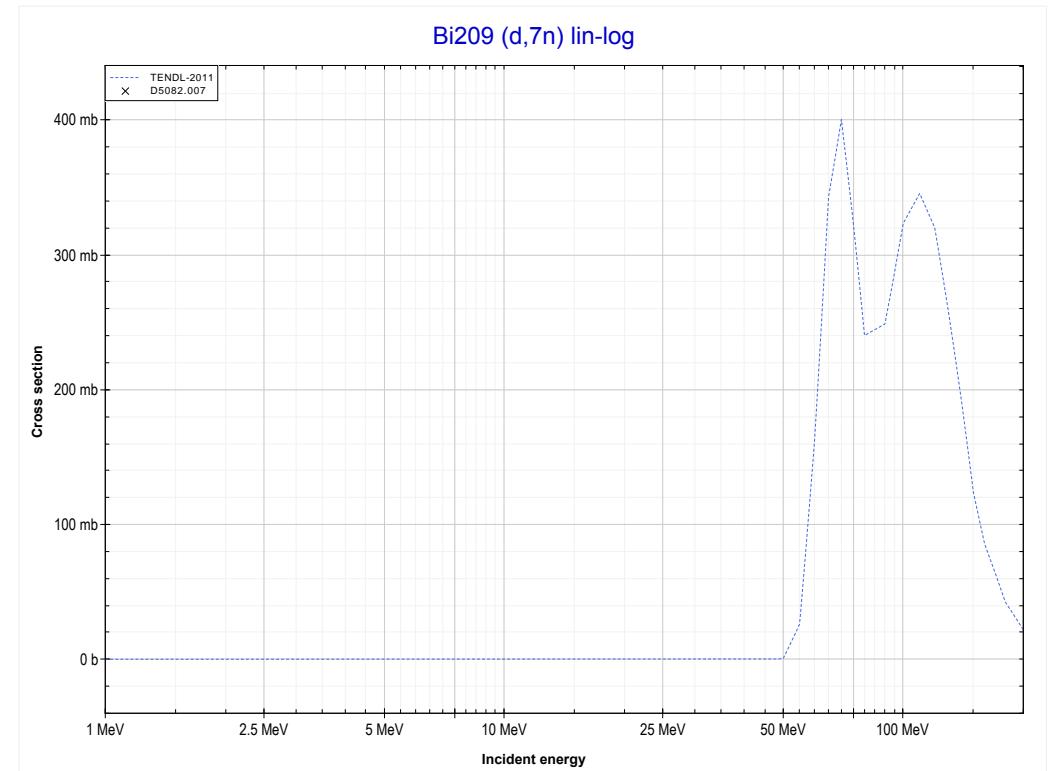
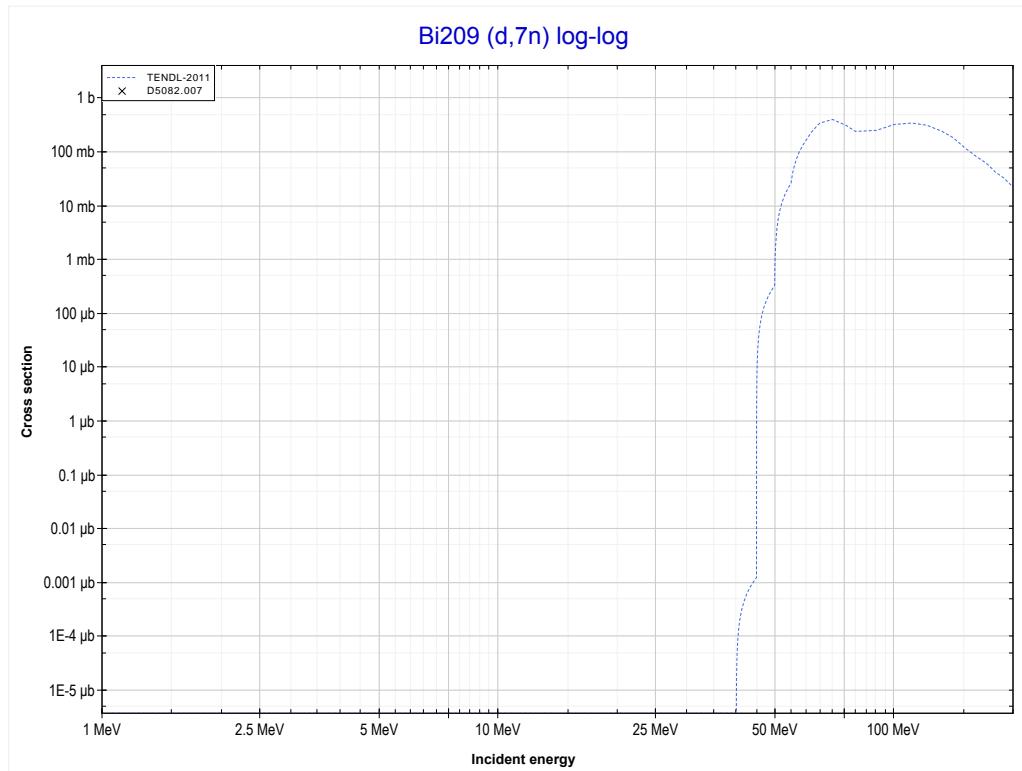
Reaction	Q-Value
$\text{Bi}^{209}(\text{d},\text{6n})\text{Po}^{205}$	-36041.68 keV

<< 73-Ta-181	83-Bi-209 MT156 (d,4n+p) or MT5 (Bi206 production)	MT160 (d,7n) >>
<< MT153 (d,6n)		



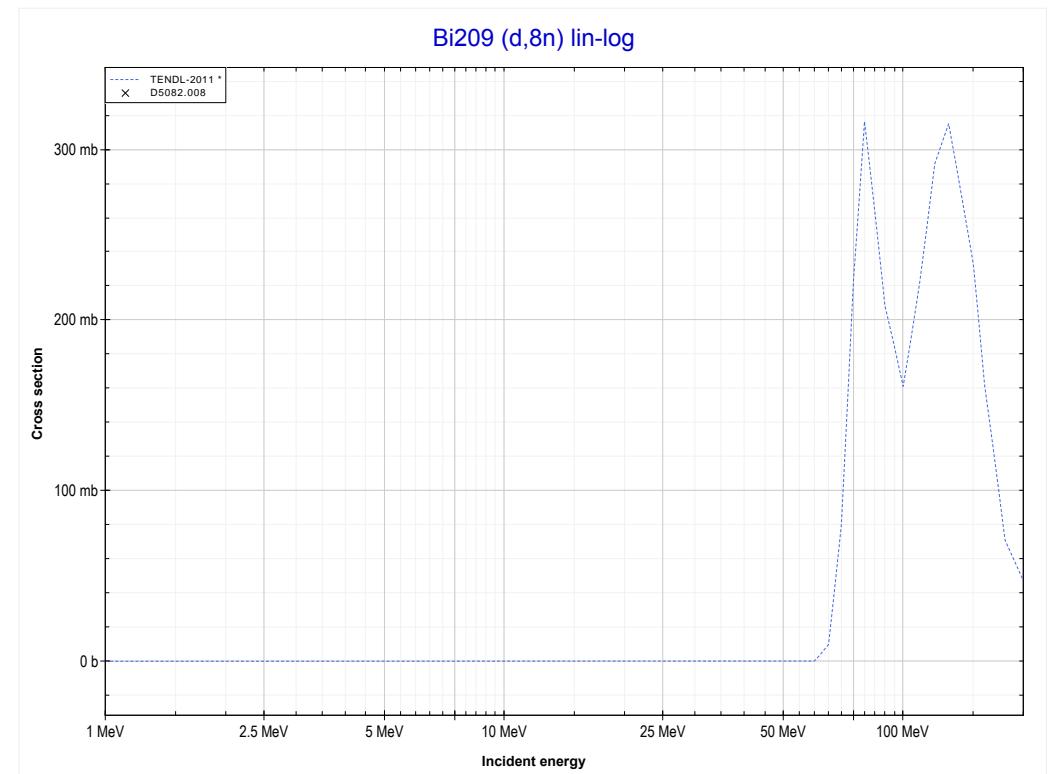
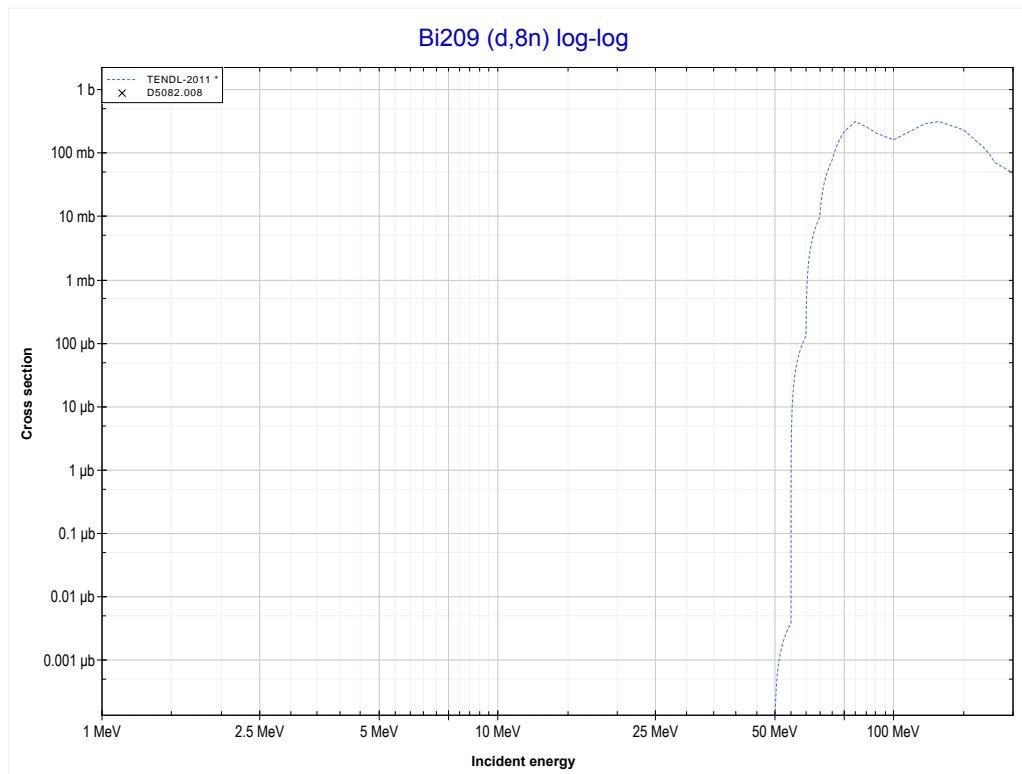
Reaction	Q-Value
Bi209(d,2n+t)Bi206	-16187.22 keV
Bi209(d,3n+d)Bi206	-22444.45 keV
Bi209(d,4n+p)Bi206	-24669.02 keV

<< 79-Au-197	83-Bi-209 MT160 (d,7n) or MT5 (Po204 production)	90-Th-232 >> MT161 (d,8n) >>
<< MT156 (d,4n+p)		



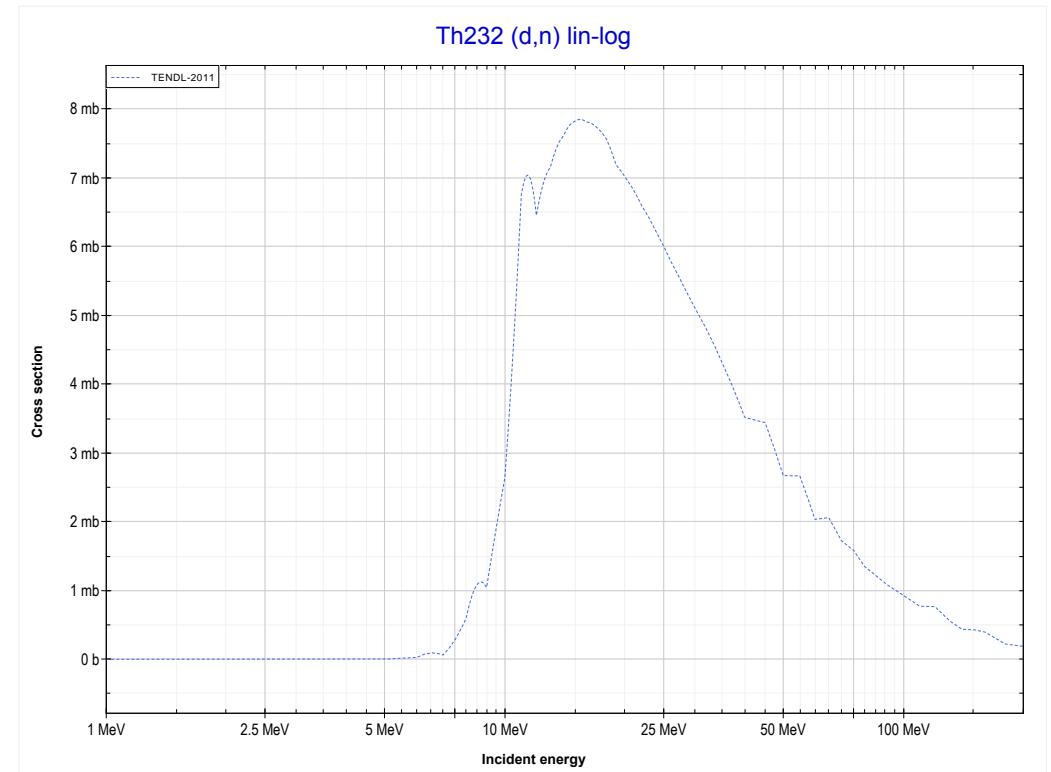
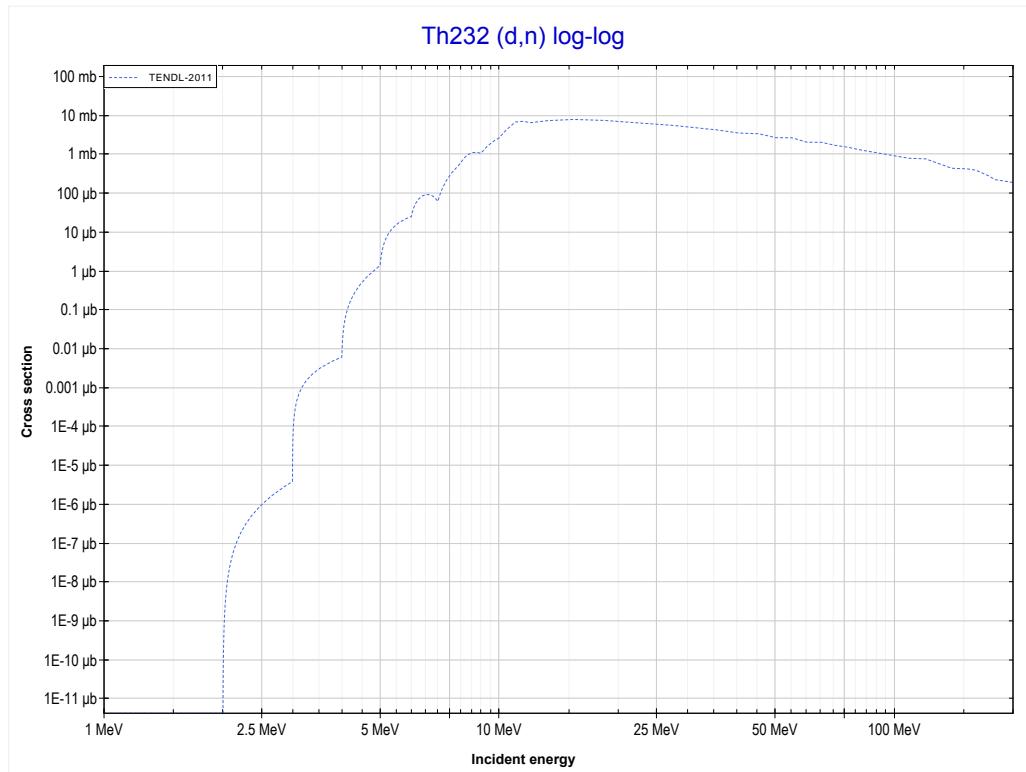
Reaction	Q-Value
Bi209(d,7n)Po204	-43288.00 keV

<< 79-Au-197	83-Bi-209 MT161 (d,8n) or MT5 (Po203 production)	
<< MT160 (d,7n)		MT4 (d,n) >>



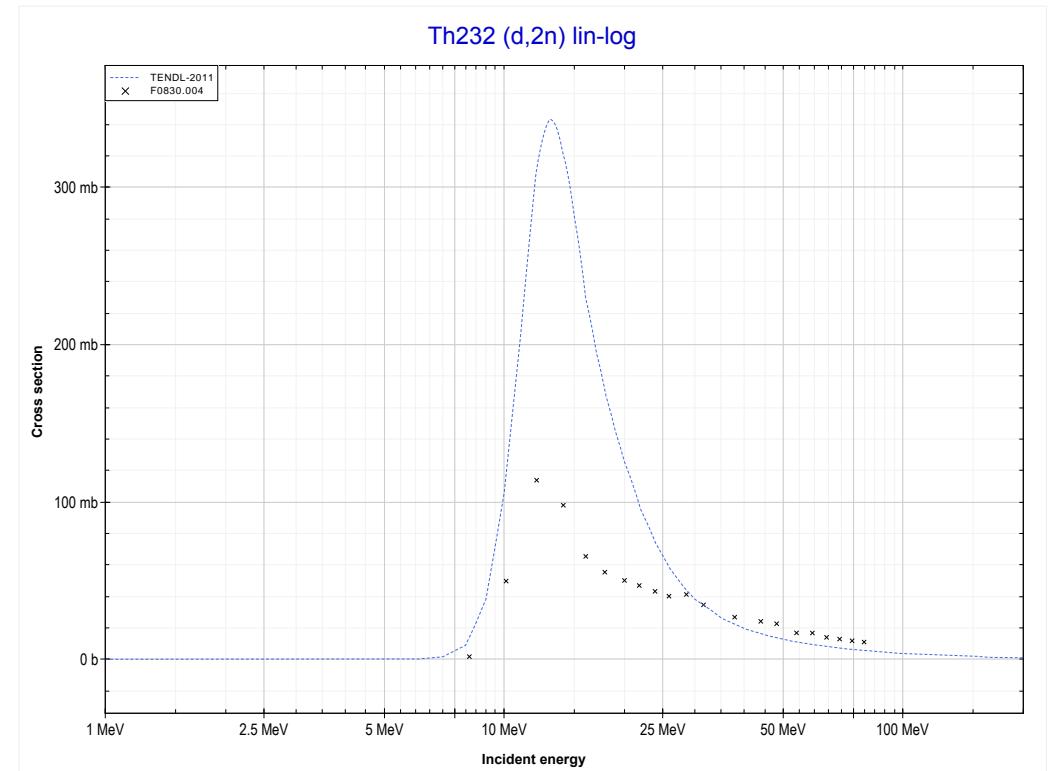
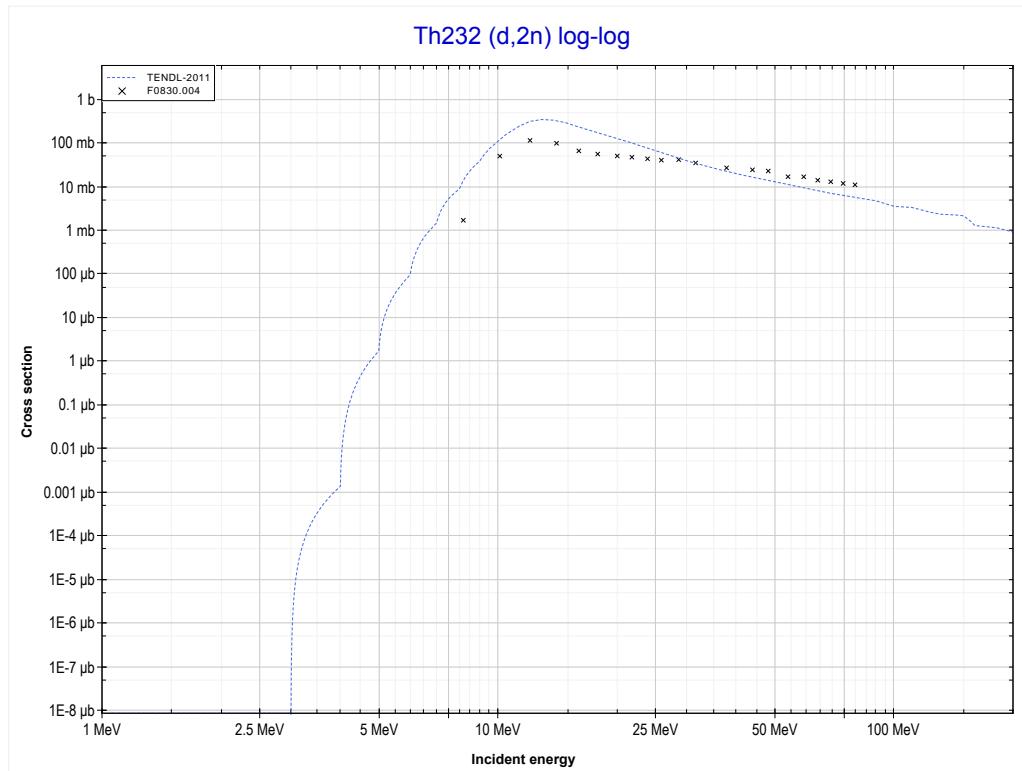
Reaction	Q-Value
$\text{Bi}^{209}(\text{d},\text{8n})\text{Po}^{203}$	-52386.32 keV

<< 83-Bi-209	90-Th-232 MT4 (d,n) or MT5 (Pa233 production)	92-U-234 >>
<< MT161 (d,8n)		MT16 (d,2n) >>



Reaction	Q-Value
Th232(d,n)Pa233	3022.60 keV

<< 83-Bi-209	90-Th-232 MT16 (d,2n) or MT5 (Pa232 production)	92-U-234 >>
<< MT4 (d,n)		MT37 (d,4n) >>

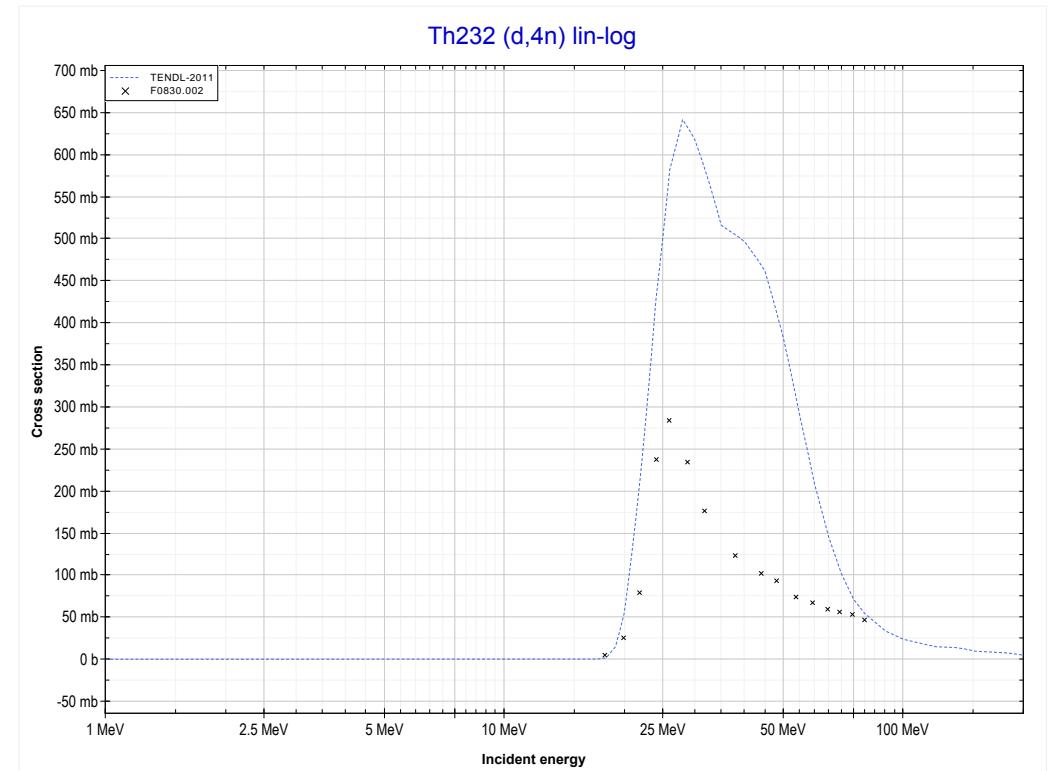
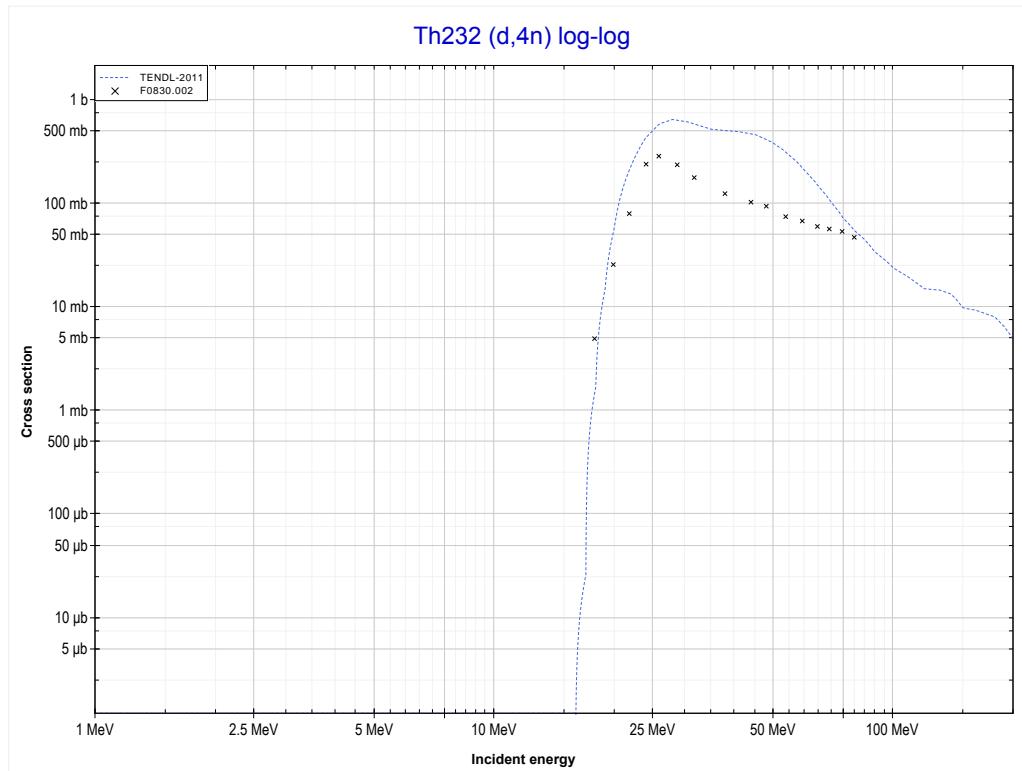


Reaction	Q-Value
Th232(d,2n)Pa232	-3506.61 keV

<< 83-Bi-209		
<< MT16 (d,2n)		

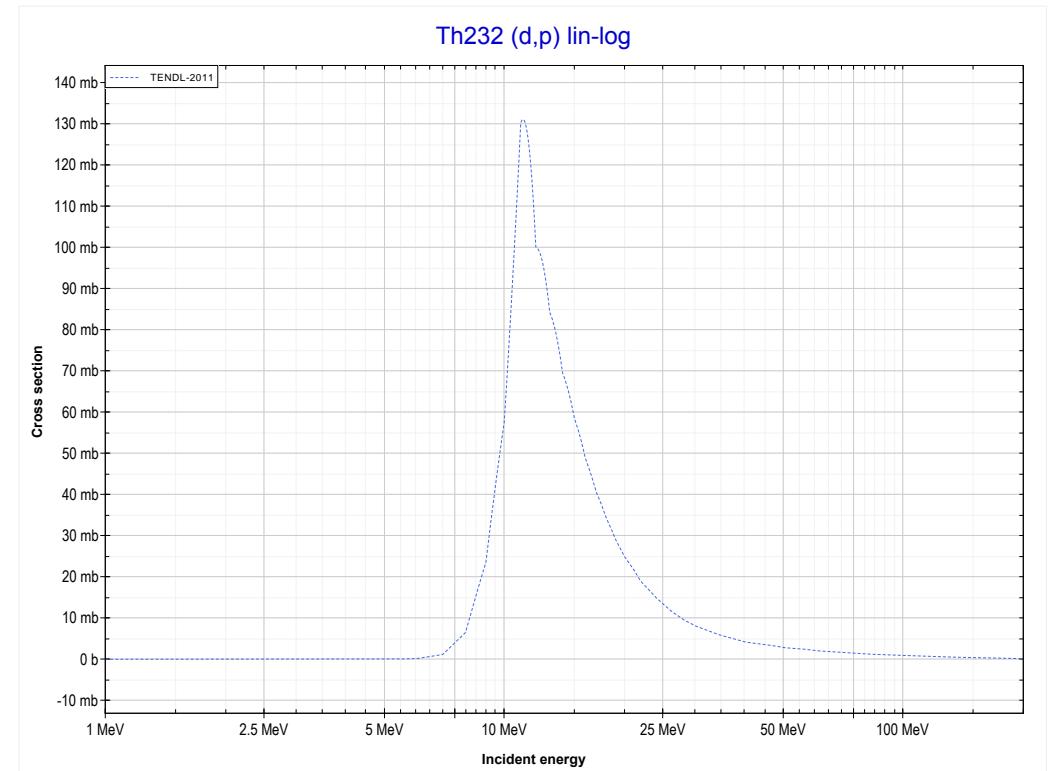
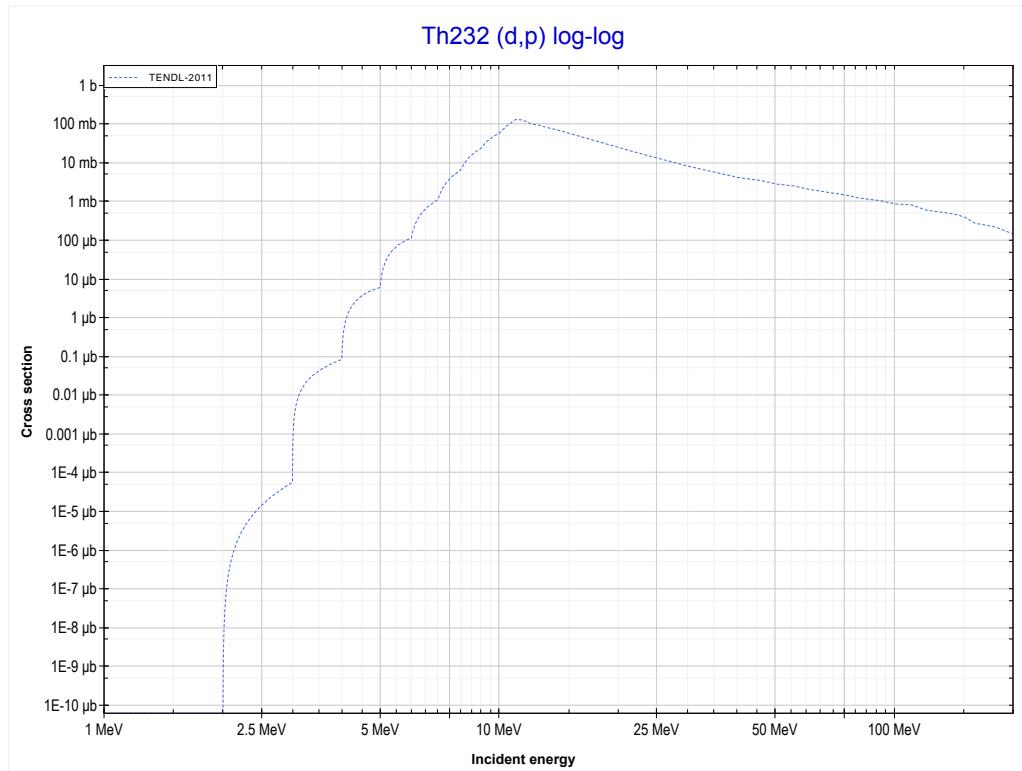
90-Th-232
MT37 (d,4n) or MT5 (Pa230 production)

92-U-238 >>
MT103 (d,p) >>



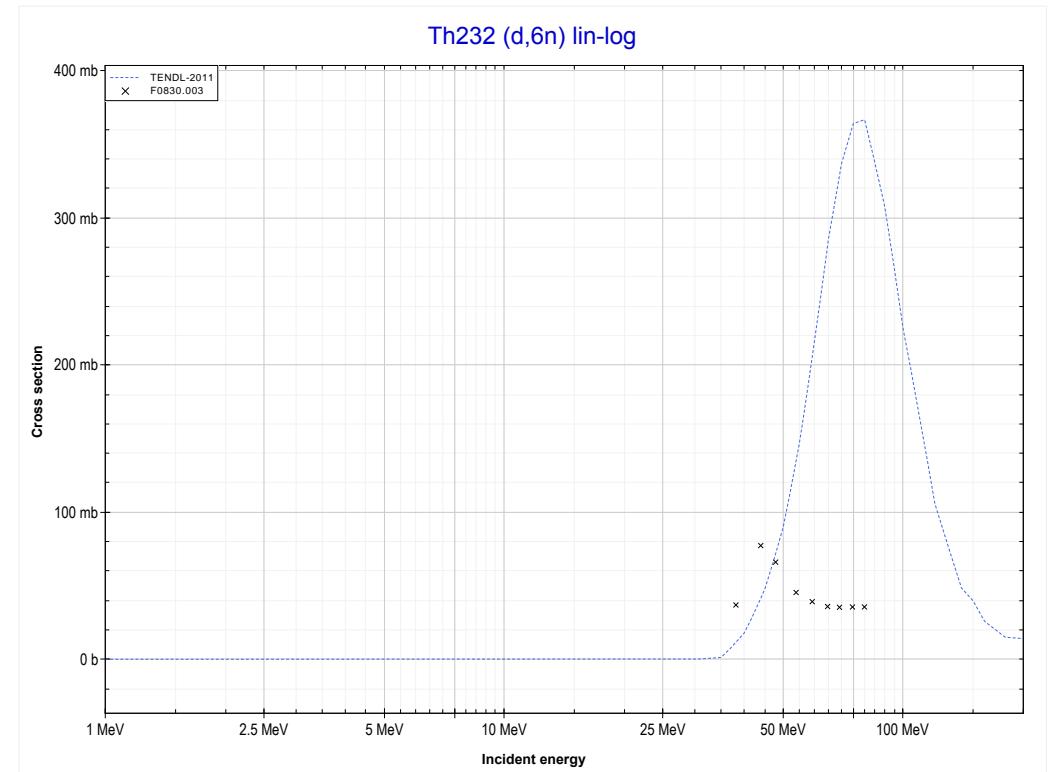
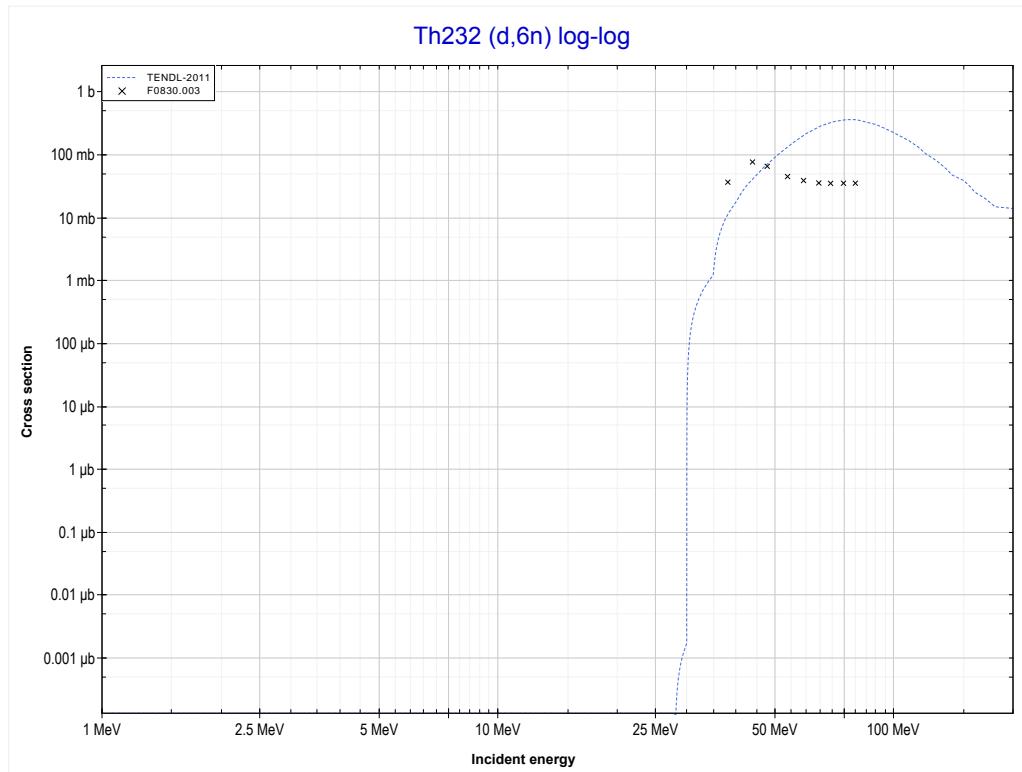
Reaction	Q-Value
Th232(d,4n)Pa230	-15876.25 keV

<< 83-Bi-209	90-Th-232 MT103 (d,p) or MT5 (Th233 production)	92-U-238 >>
<< MT37 (d,4n)		MT153 (d,6n) >>

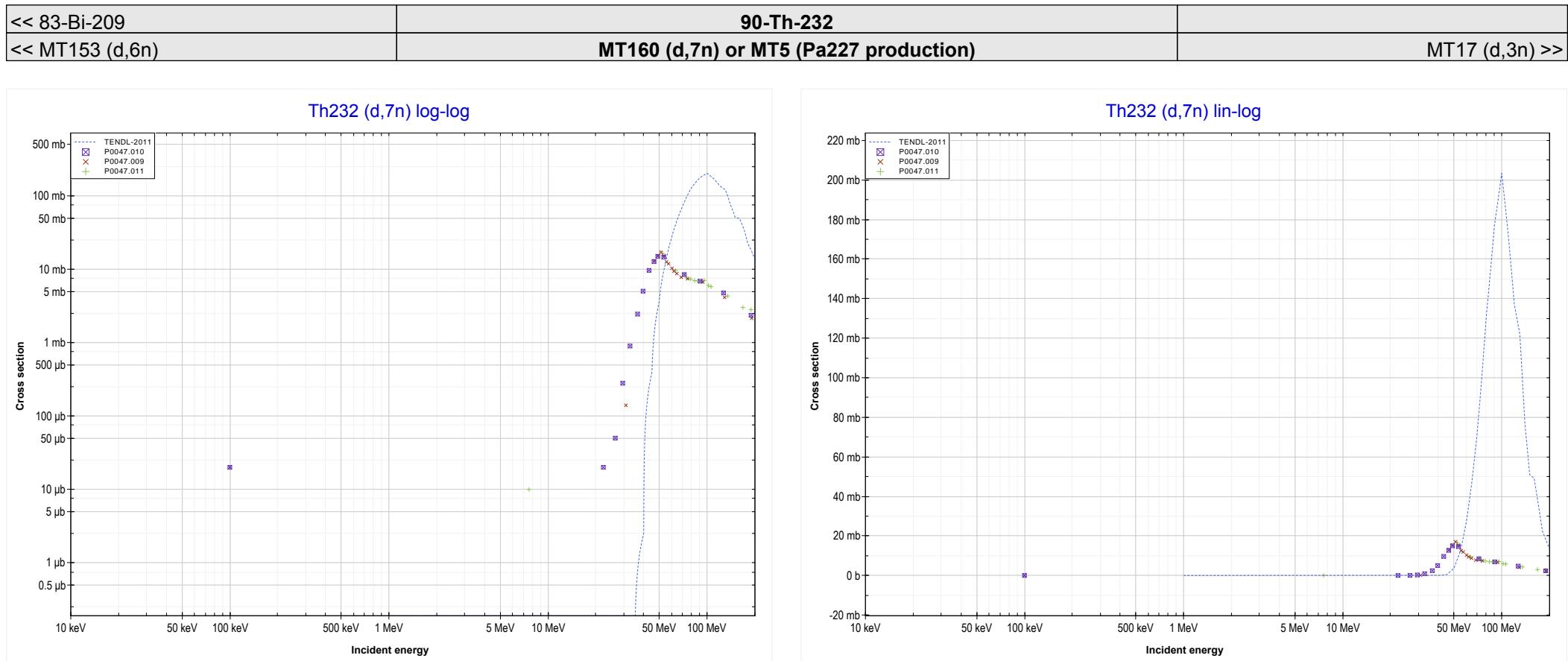


Reaction	Q-Value
Th232(d,p)Th233	2561.85 keV

<< 83-Bi-209	90-Th-232 MT153 (d,6n) or MT5 (Pa228 production)	MT160 (d,7n) >>
<< MT103 (d,p)		

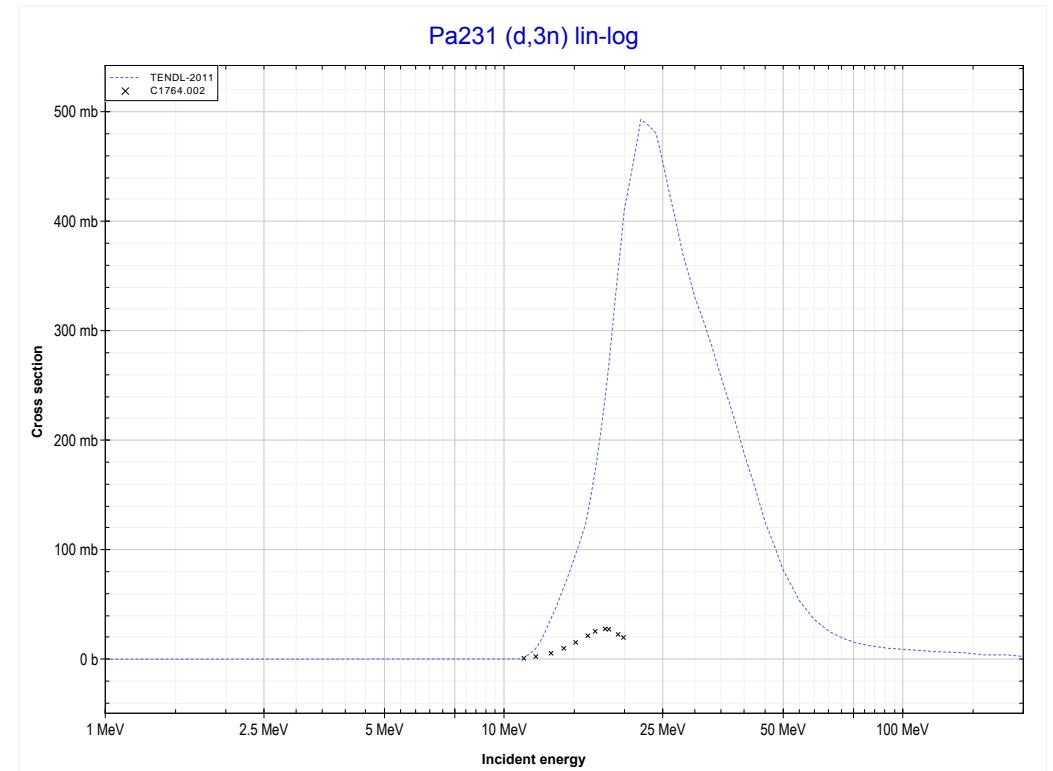
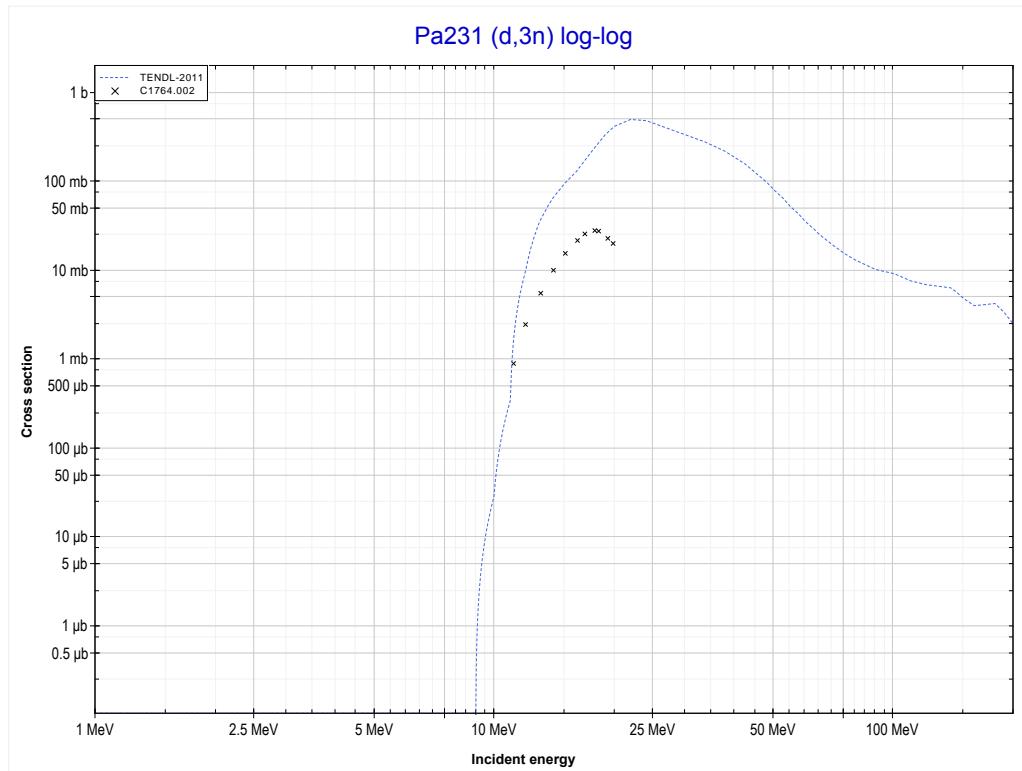


Reaction	Q-Value
Th232(d,6n)Pa228	-28767.88 keV



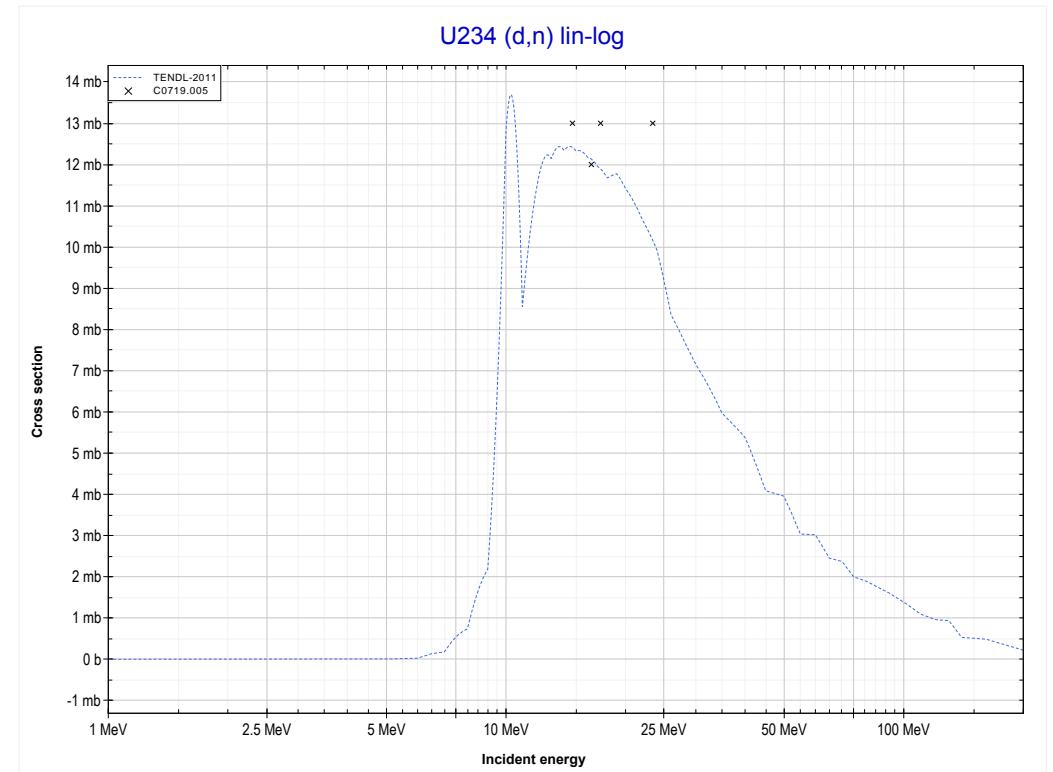
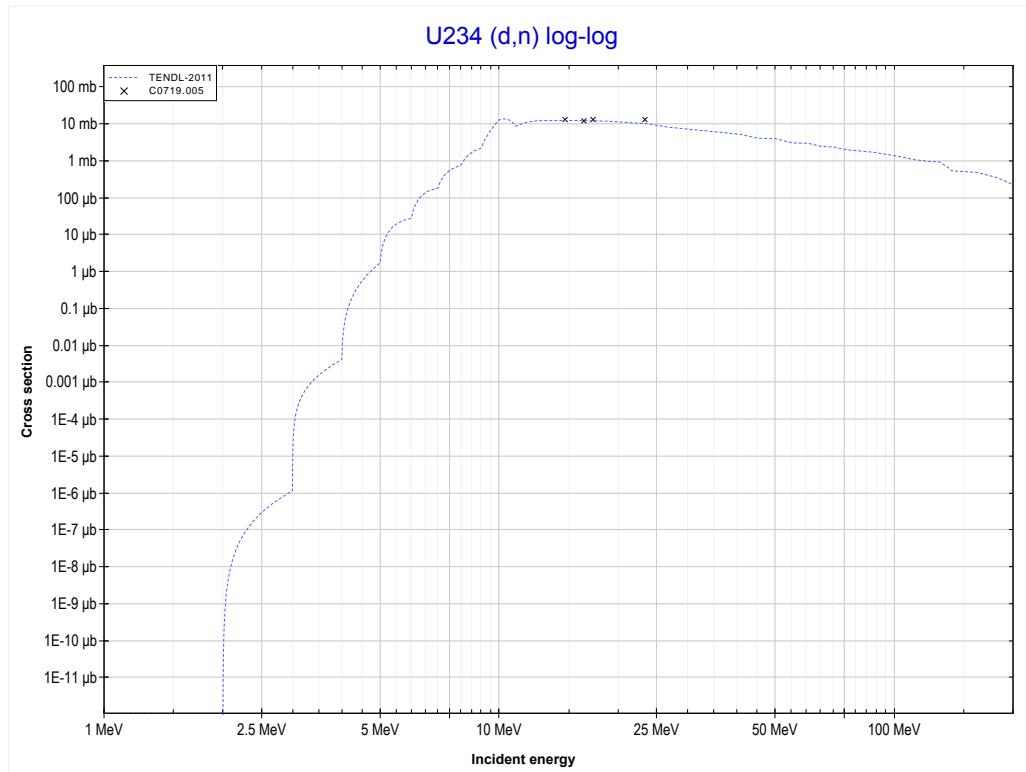
Reaction	Q-Value
Th232(d,7n)Pa227	-34747.20 keV

<< 83-Bi-209	91-Pa-231 MT17 (d,3n) or MT5 (U230 production)	92-U-234 >>
<< MT160 (d,7n)		MT4 (d,n) >>



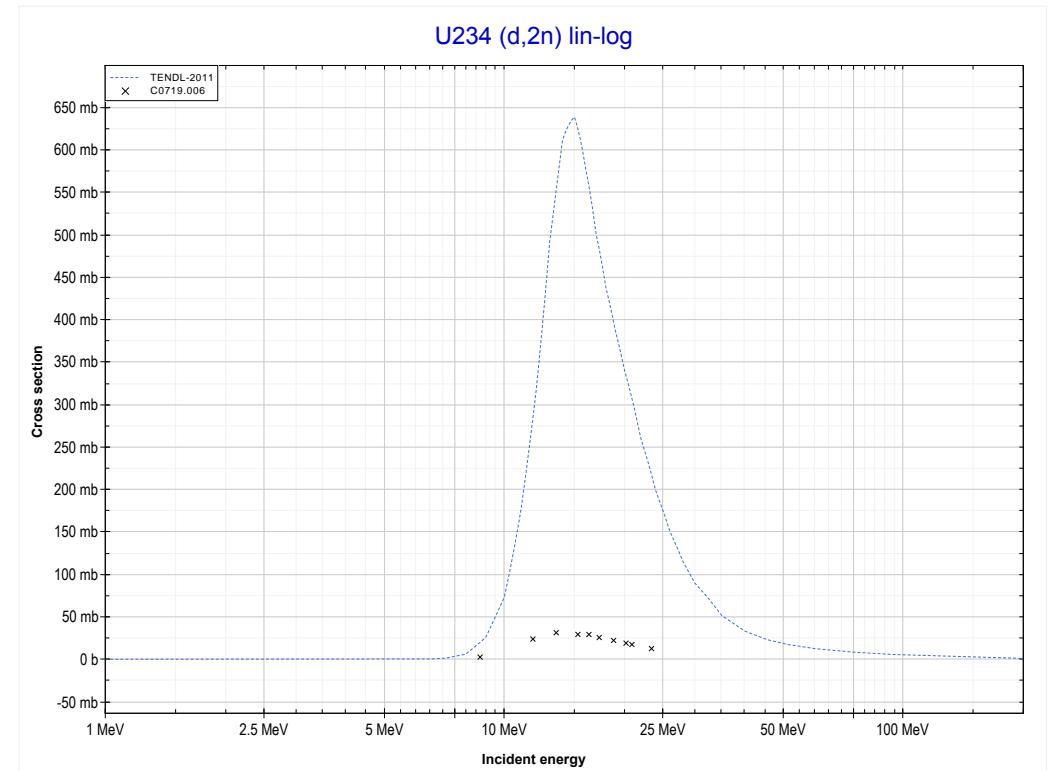
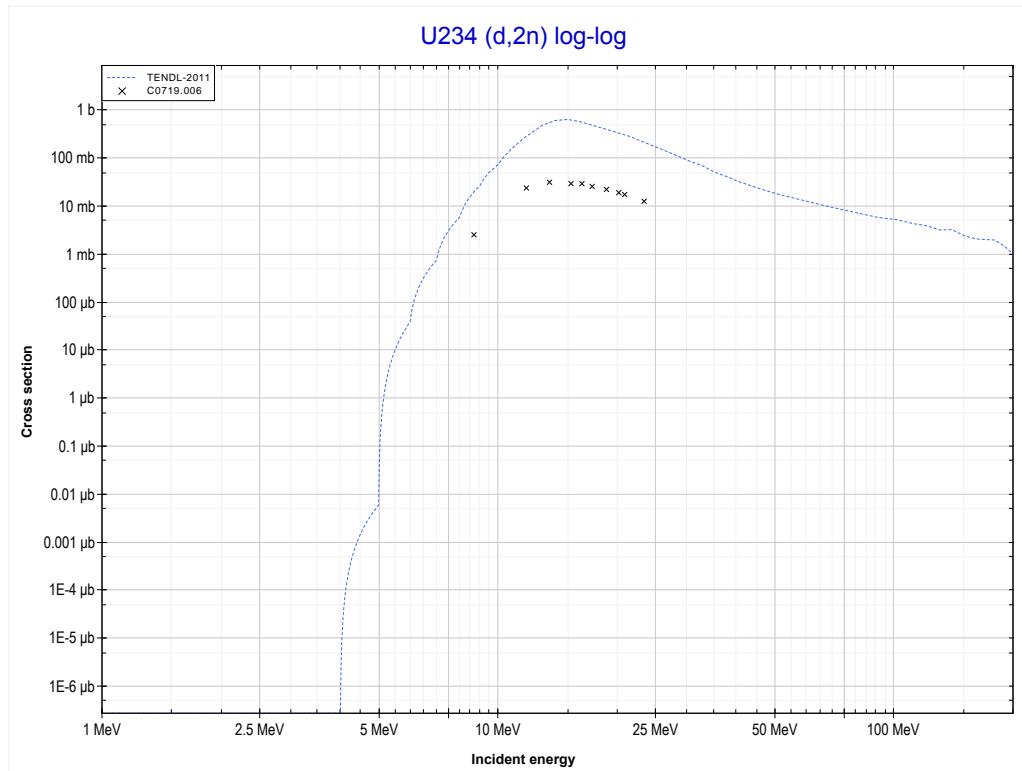
Reaction	Q-Value
Pa231(d,3n)U230	-9267.53 keV

<< 90-Th-232	92-U-234 MT4 (d,n) or MT5 (Np235 production)	92-U-235 >>
<< MT17 (d,3n)		MT16 (d,2n) >>



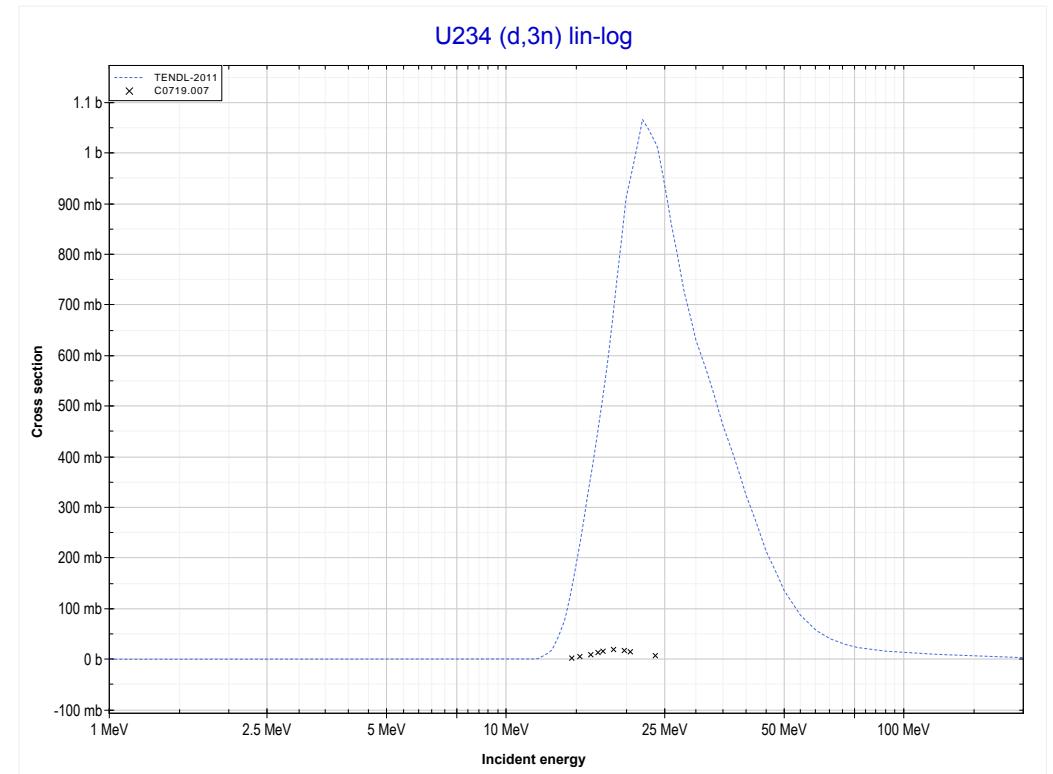
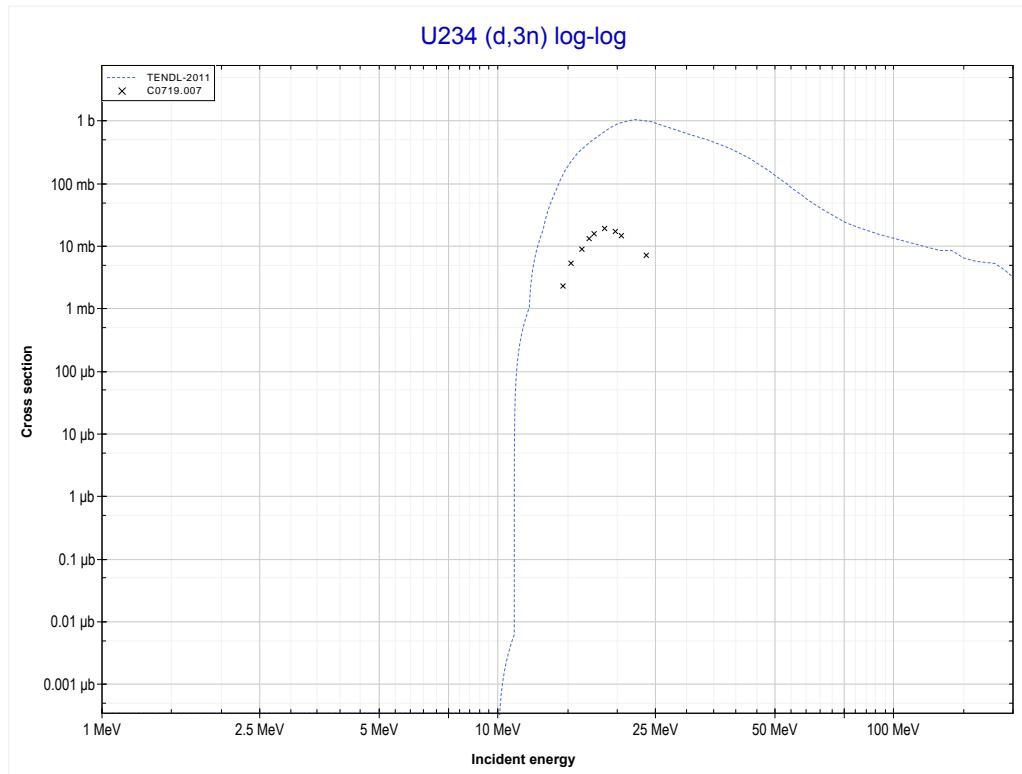
Reaction	Q-Value
U234(d,n)Np235	2166.30 keV

<< 90-Th-232	92-U-234 MT16 (d,2n) or MT5 (Np234 production)	92-U-235 >>
<< MT4 (d,n)		MT17 (d,3n) >>



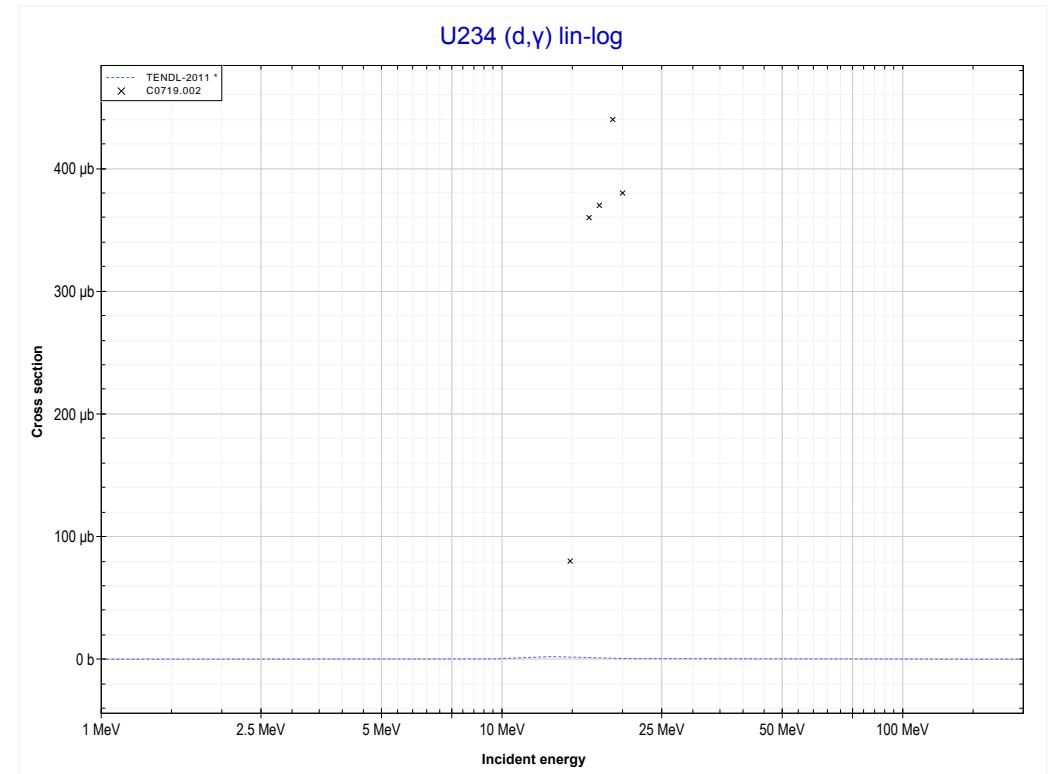
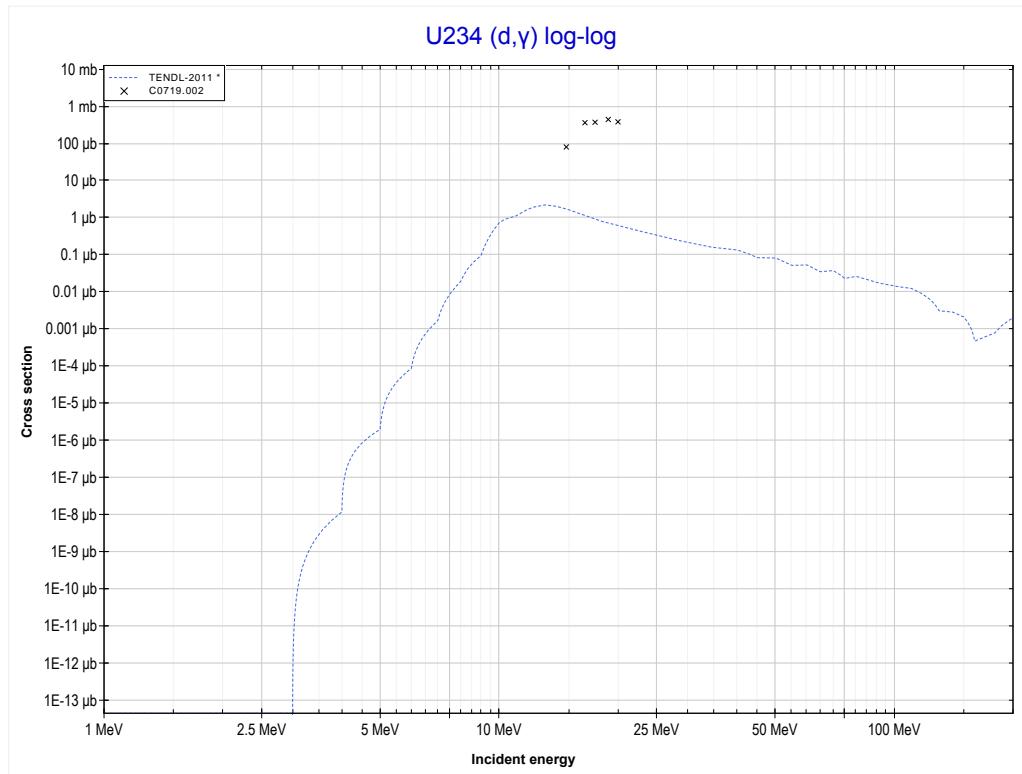
Reaction	Q-Value
$^{234}\text{U}(\text{d},2\text{n})\text{Np}^{234}$	-4816.31 keV

<< 91-Pa-231	92-U-234 MT17 (d,3n) or MT5 (Np233 production)	92-U-235 >>
<< MT16 (d,2n)		MT102 (d,y) >>



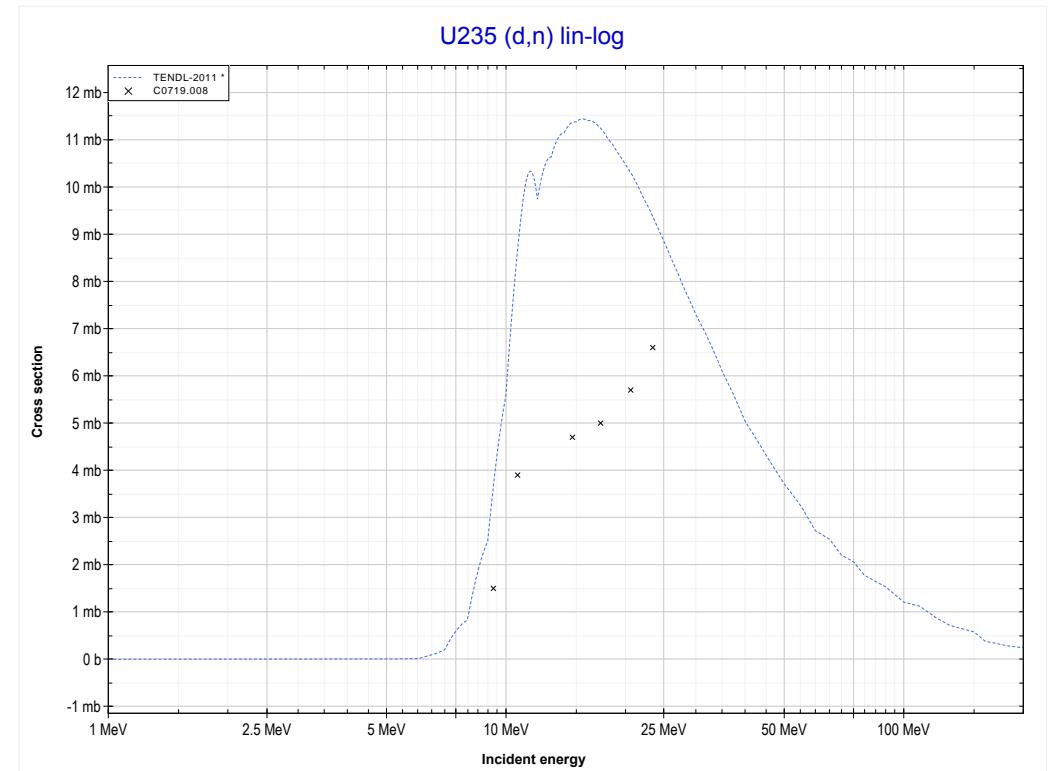
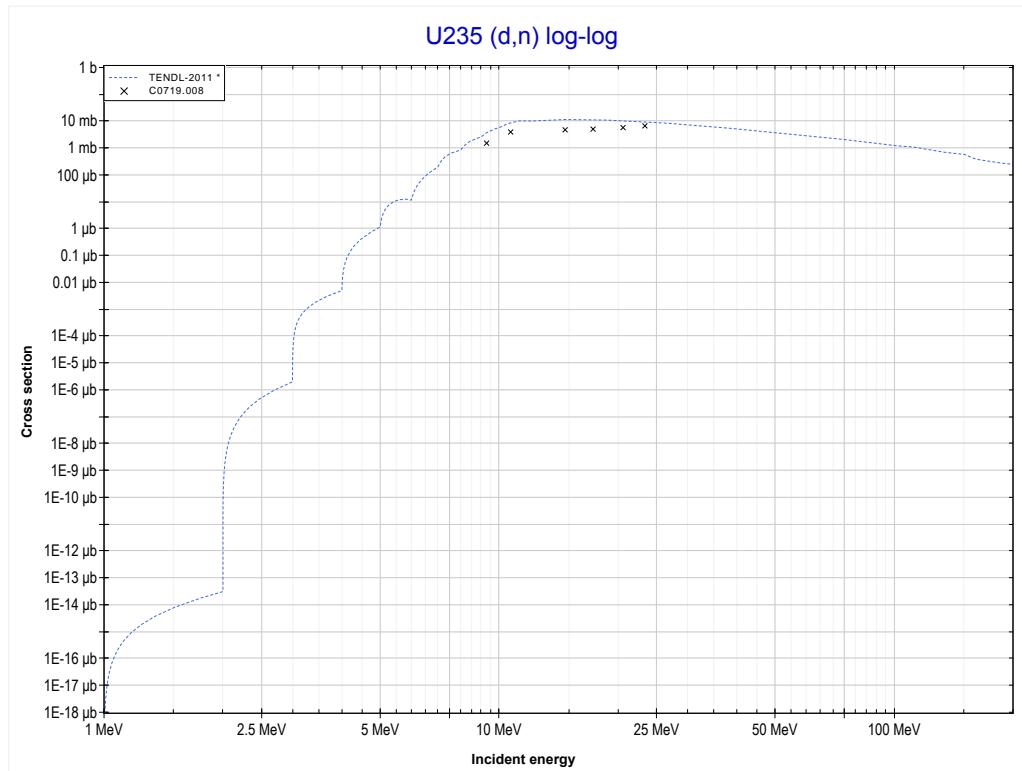
Reaction	Q-Value
U234(d,3n)Np233	-10881.63 keV

<< 83-Bi-209	92-U-234 MT102 (d, γ) or MT5 (Np236 production)	92-U-236 >>
<< MT17 (d,3n)		MT4 (d,n) >>



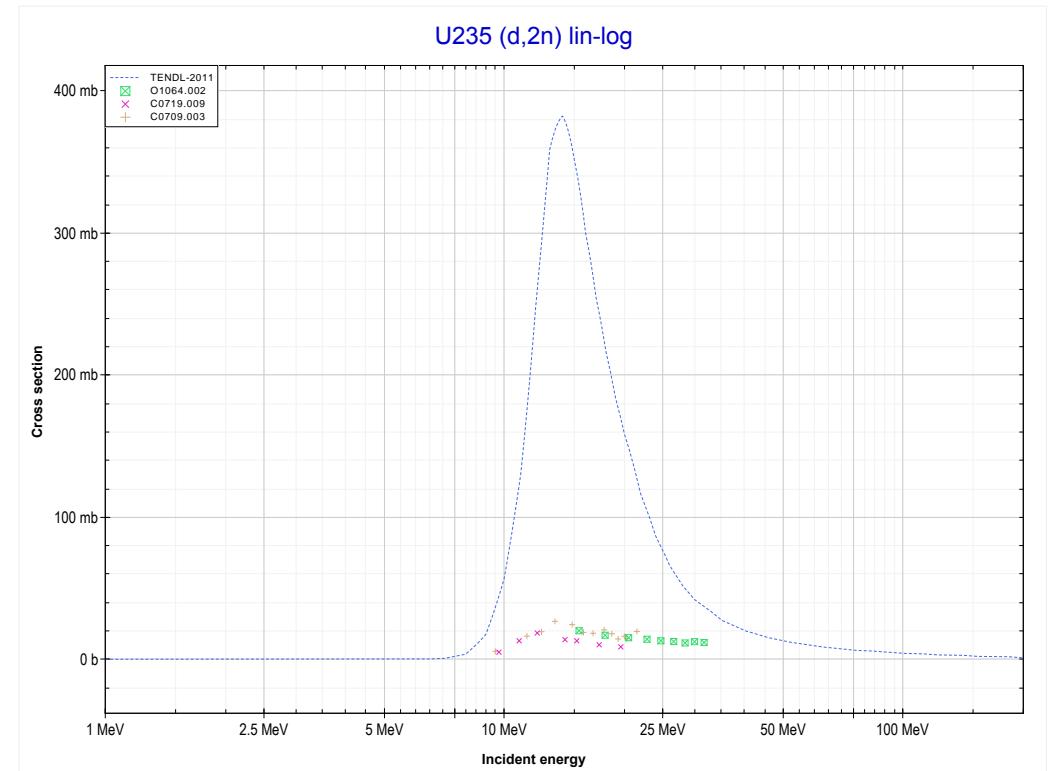
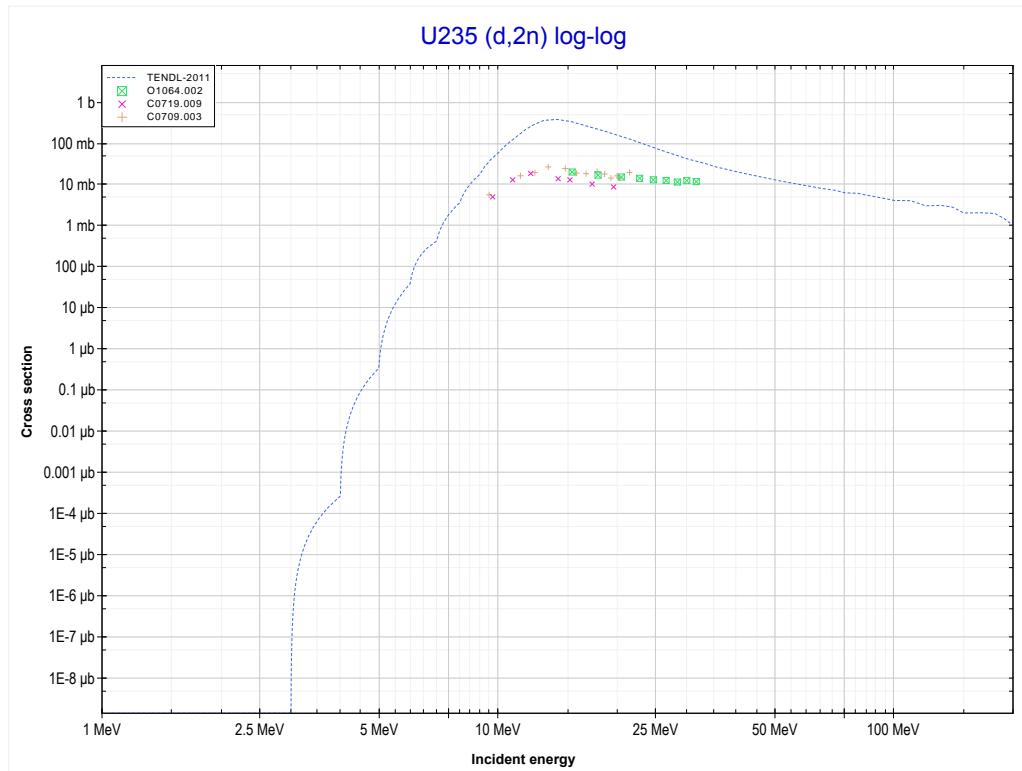
Reaction	Q-Value
U234(d, γ)Np236	7902.32 keV

<< 92-U-234	92-U-235 MT4 (d,n) or MT5 (Np236 production)	92-U-238 >>
<< MT102 (d, γ)		MT16 (d,2n) >>



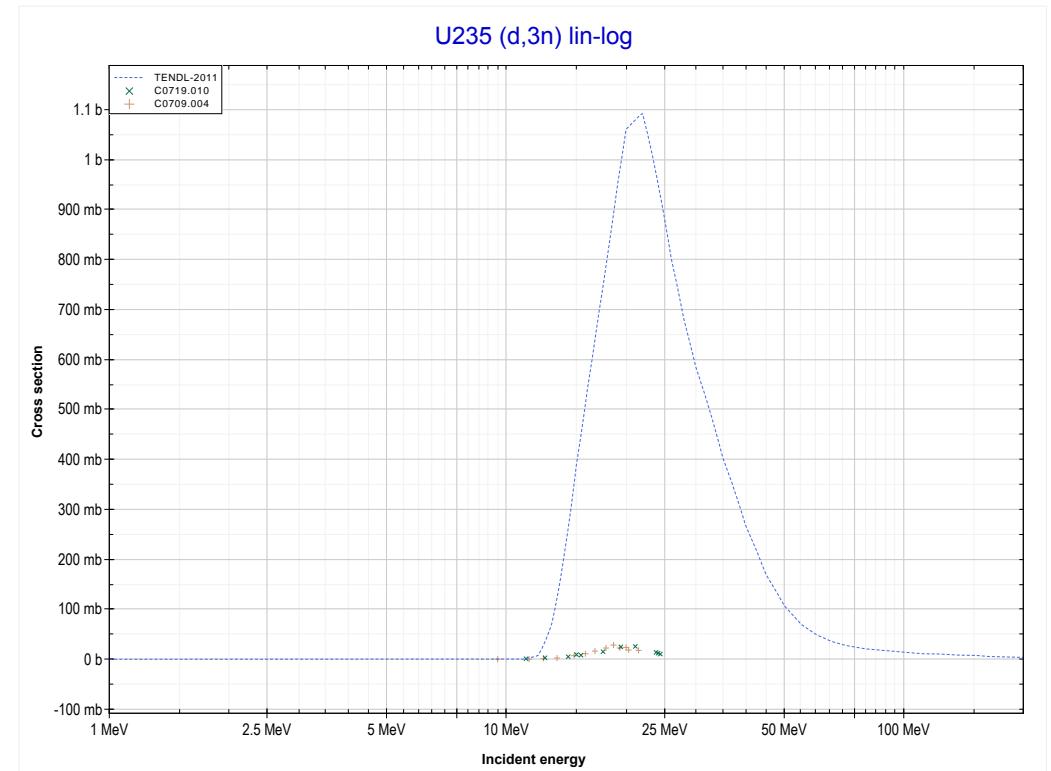
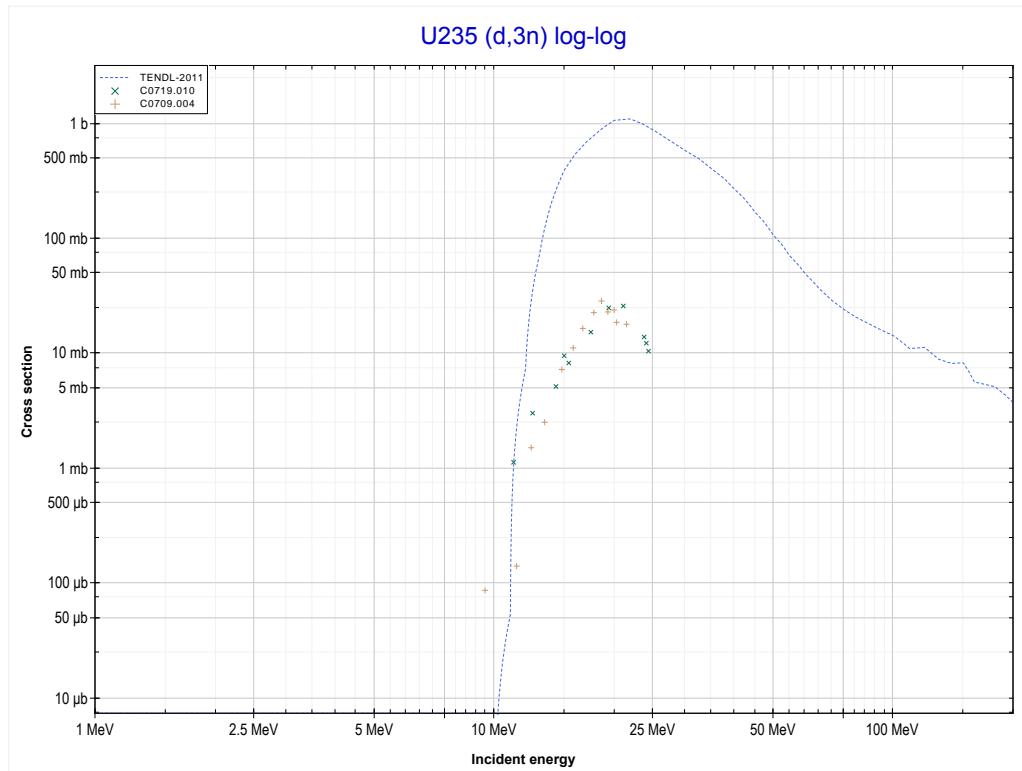
Reaction	Q-Value
U235(d,n)Np236	2604.90 keV

<< 92-U-234	92-U-235 MT16 (d,2n) or MT5 (Np235 production)	92-U-236 >>
<< MT4 (d,n)		MT17 (d,3n) >>



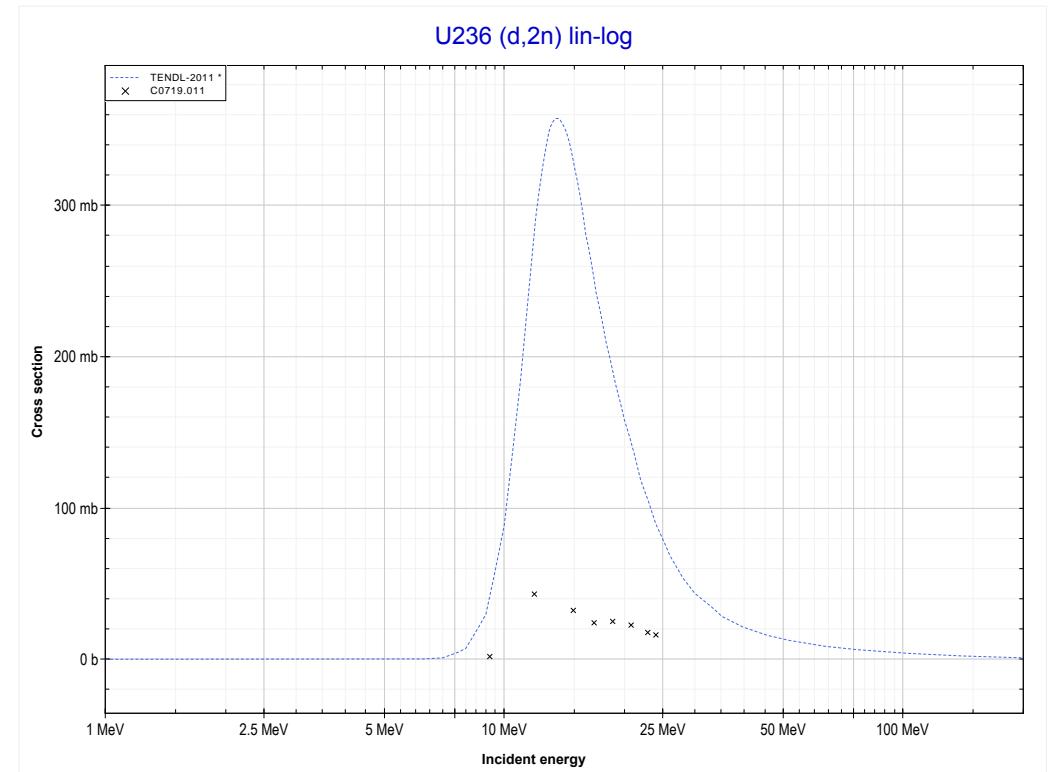
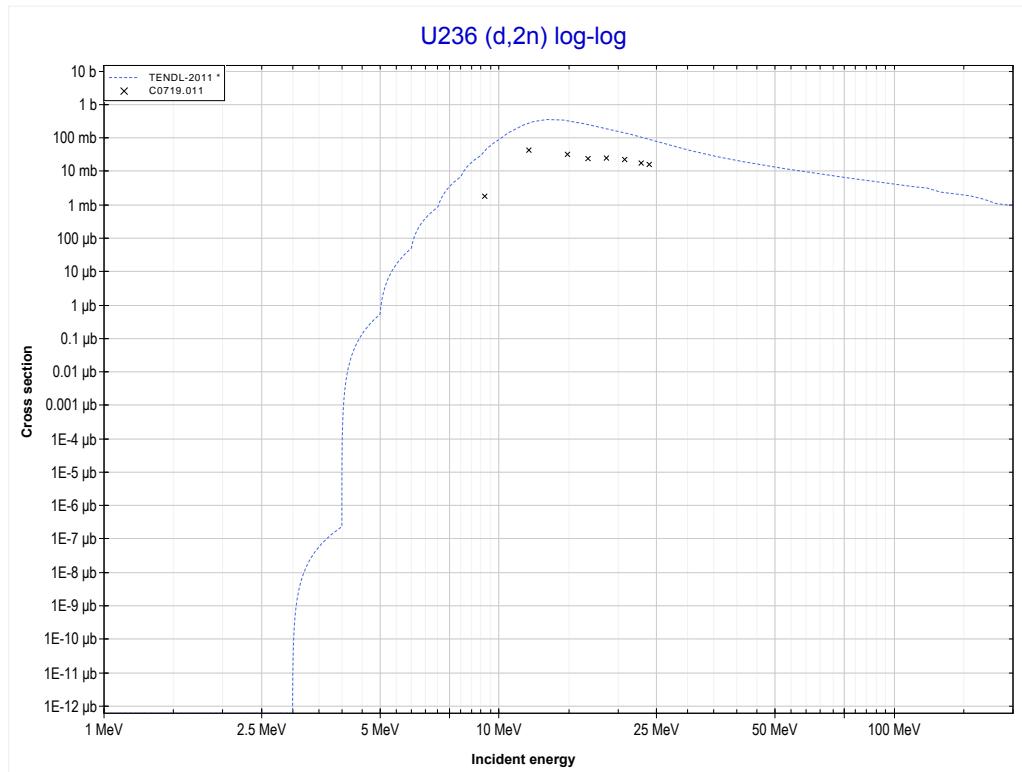
Reaction	Q-Value
U235(d,2n)Np235	-3131.11 keV

<< 92-U-234	92-U-235 MT17 (d,3n) or MT5 (Np234 production)	92-U-236 >>
<< MT16 (d,2n) >>		MT16 (d,2n) >>



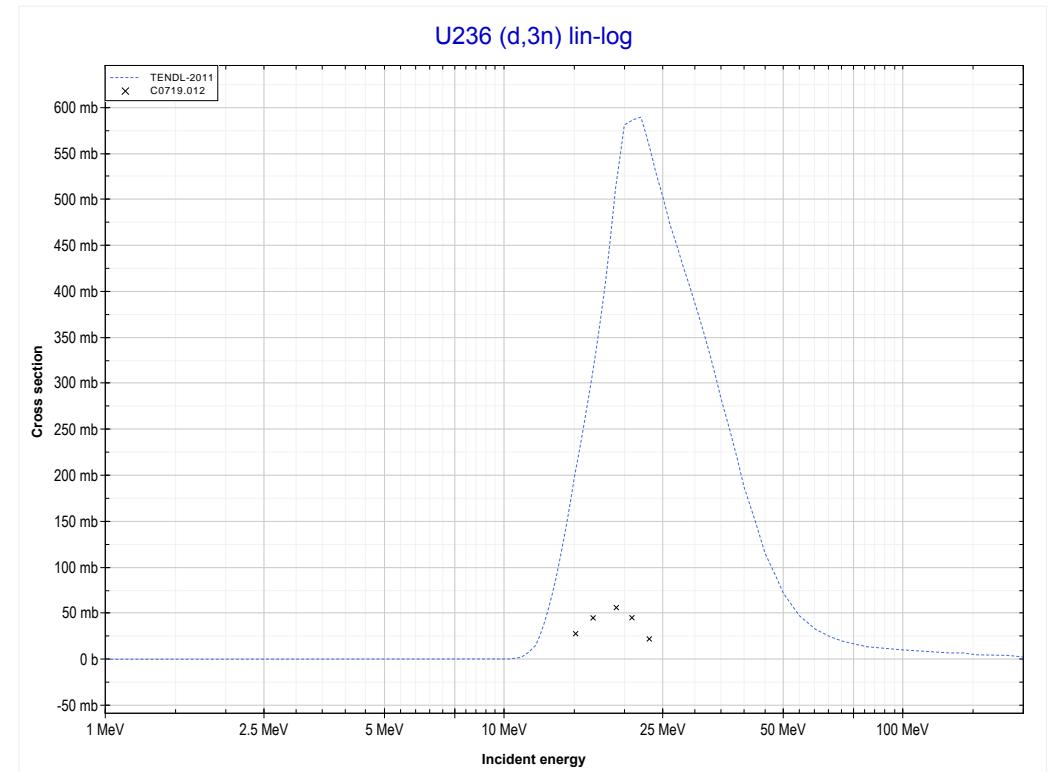
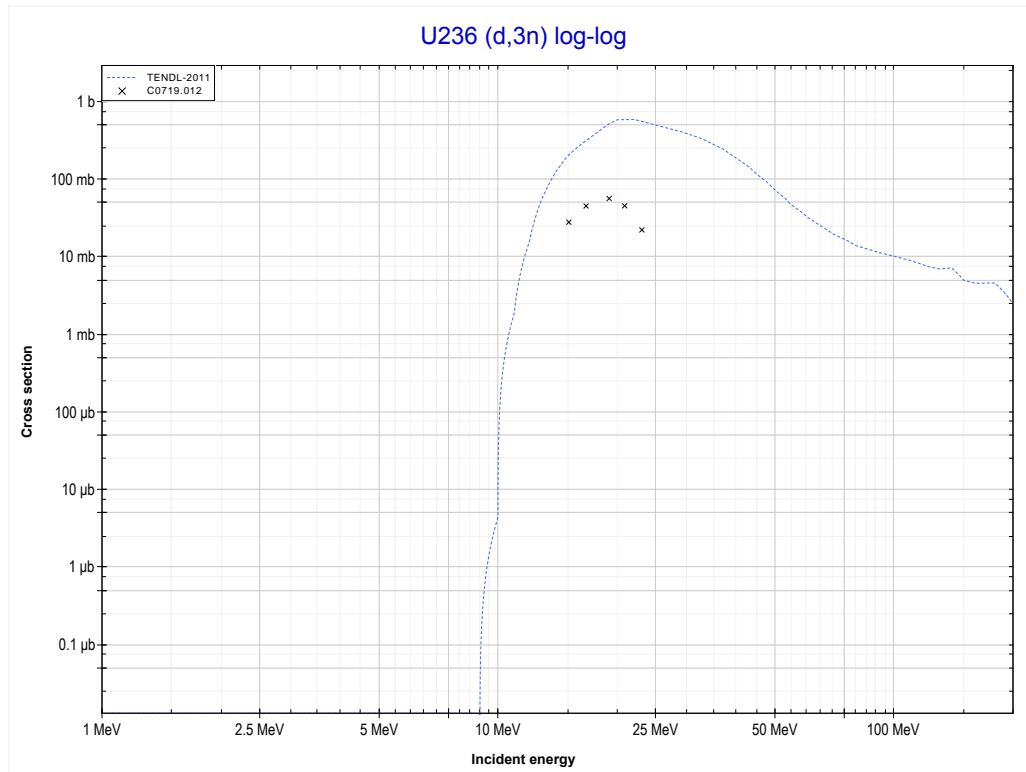
Reaction	Q-Value
U235(d,3n)Np234	-10113.73 keV

<< 92-U-235	92-U-236	92-U-238 >>
<< MT17 (d,3n)	MT16 (d,2n) or MT5 (Np236 production)	MT17 (d,3n) >>



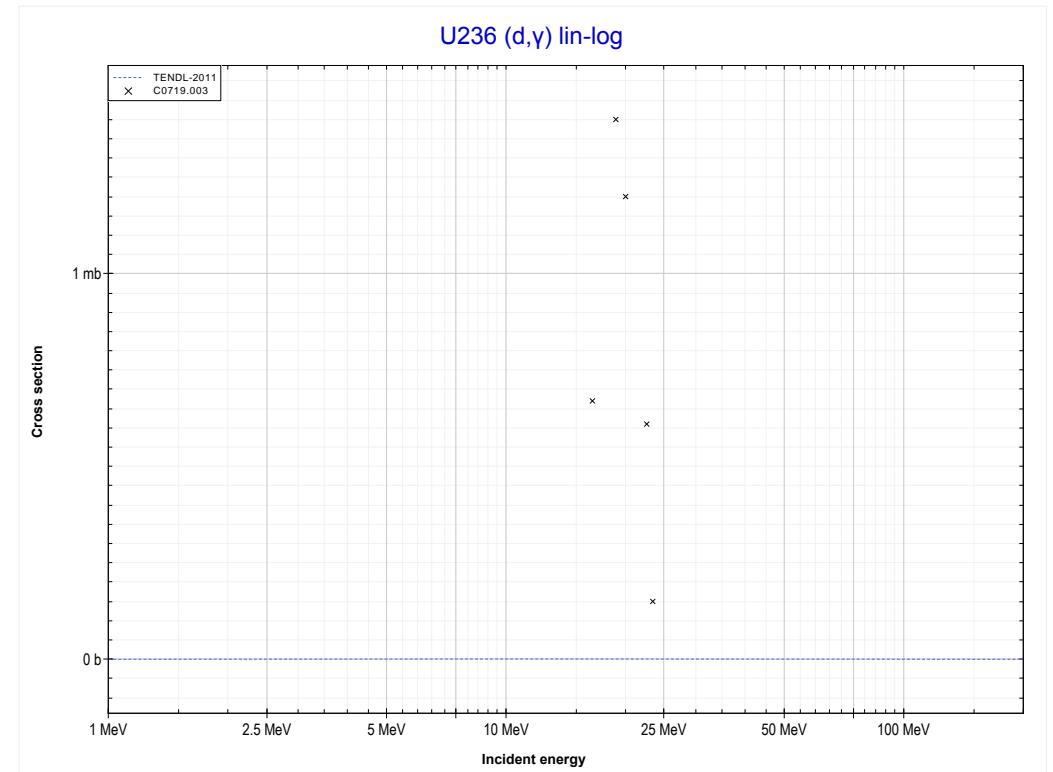
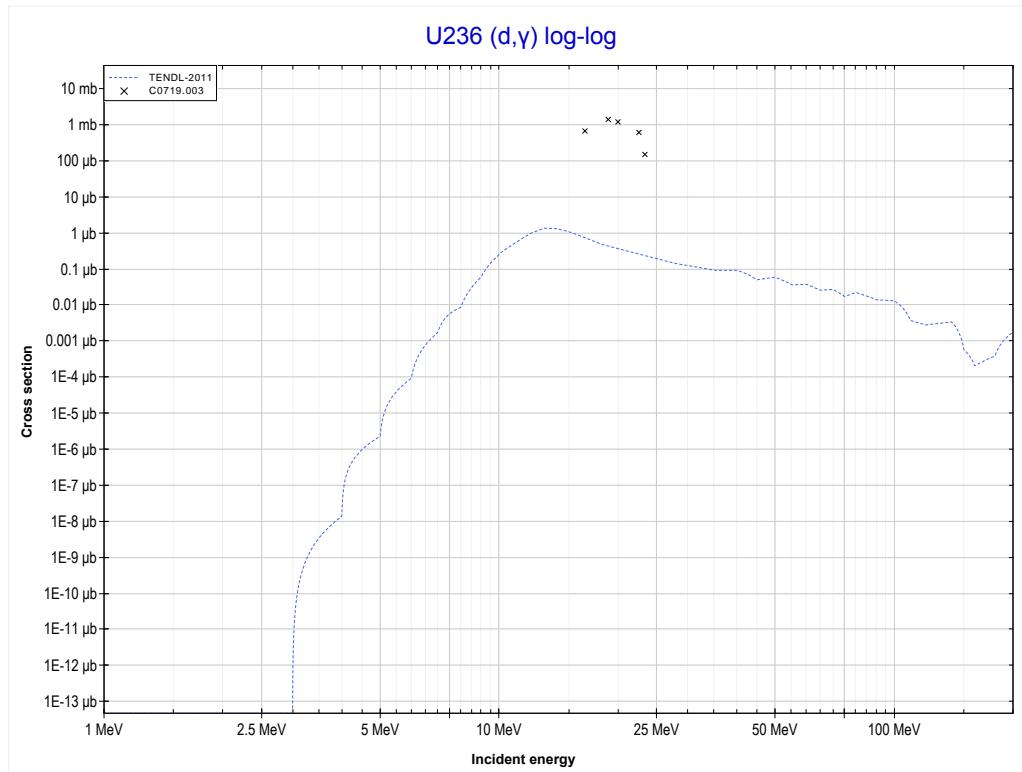
Reaction	Q-Value
$^{236}\text{U}(d,2n)\text{Np236}$	-3940.61 keV

<< 92-U-235	92-U-236	94-Pu-239 >>
<< MT16 (d,2n)	MT17 (d,3n) or MT5 (Np235 production)	MT102 (d,y) >>



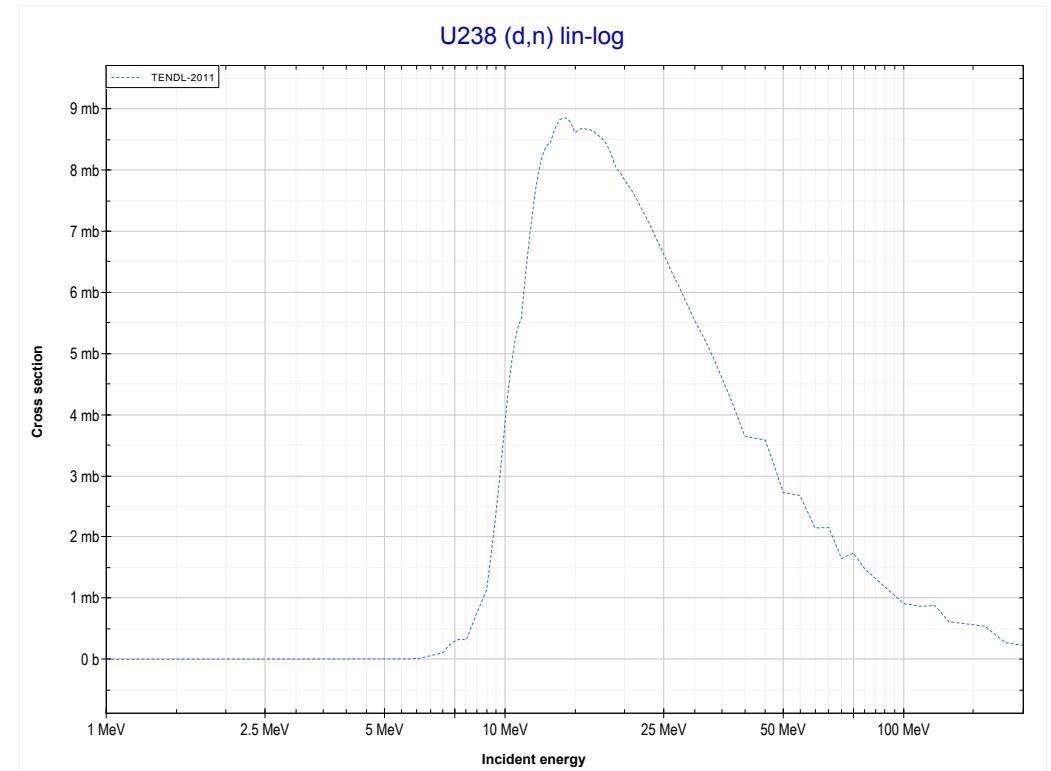
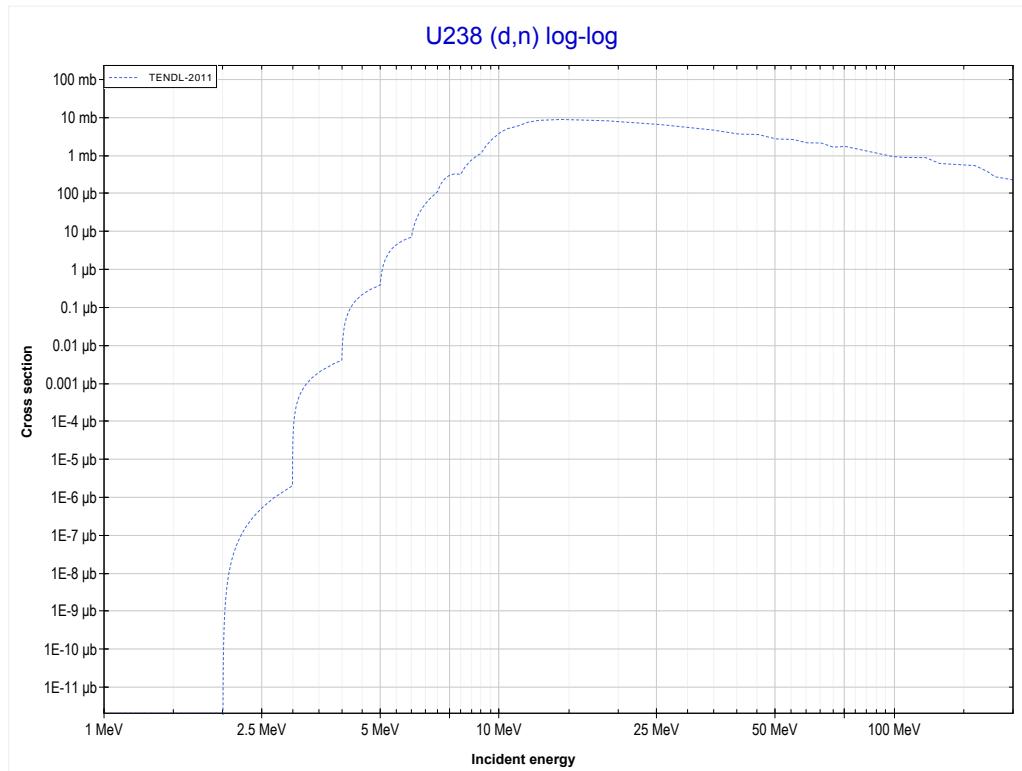
Reaction	Q-Value
$^{236}\text{U}(d,3n)^{235}\text{Np}$	-9676.63 keV

<< 92-U-234	92-U-236 MT102 (d, γ) or MT5 (Np238 production)	92-U-238 >>
<< MT17 (d,3n)		MT4 (d,n) >>



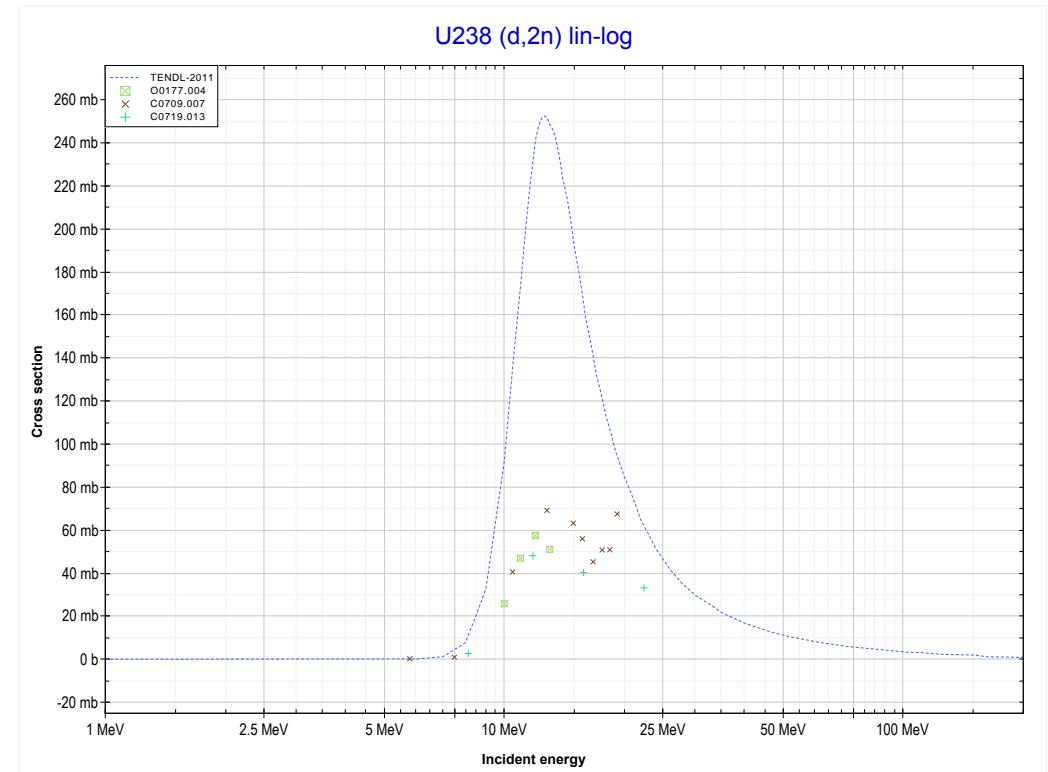
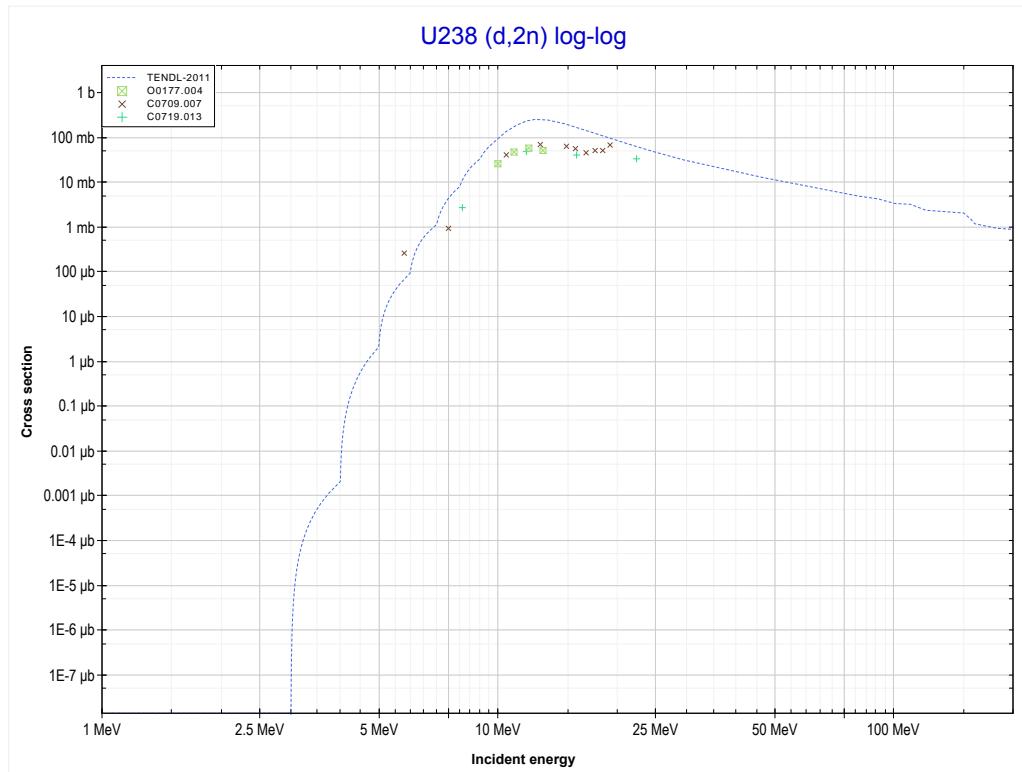
Reaction	Q-Value
U236(d, γ)Np238	8125.72 keV

<< 92-U-235	92-U-238 MT4 (d,n) or MT5 (Np239 production)	94-Pu-239 >>
<< MT102 (d, γ)		MT16 (d,2n) >>



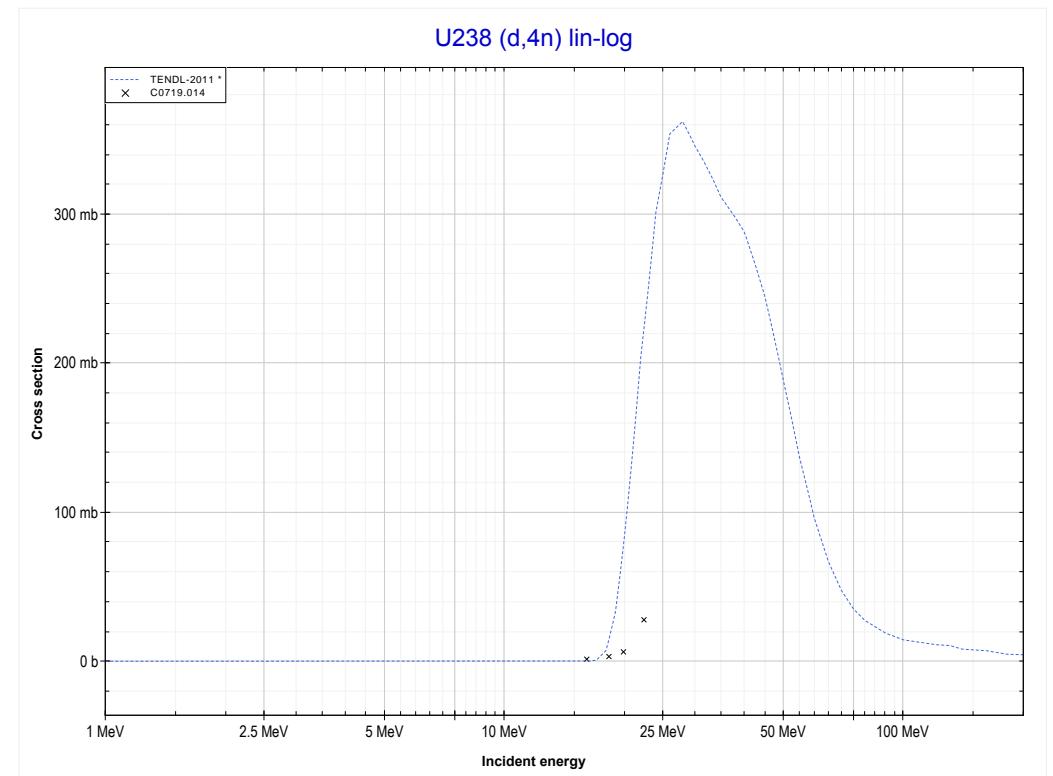
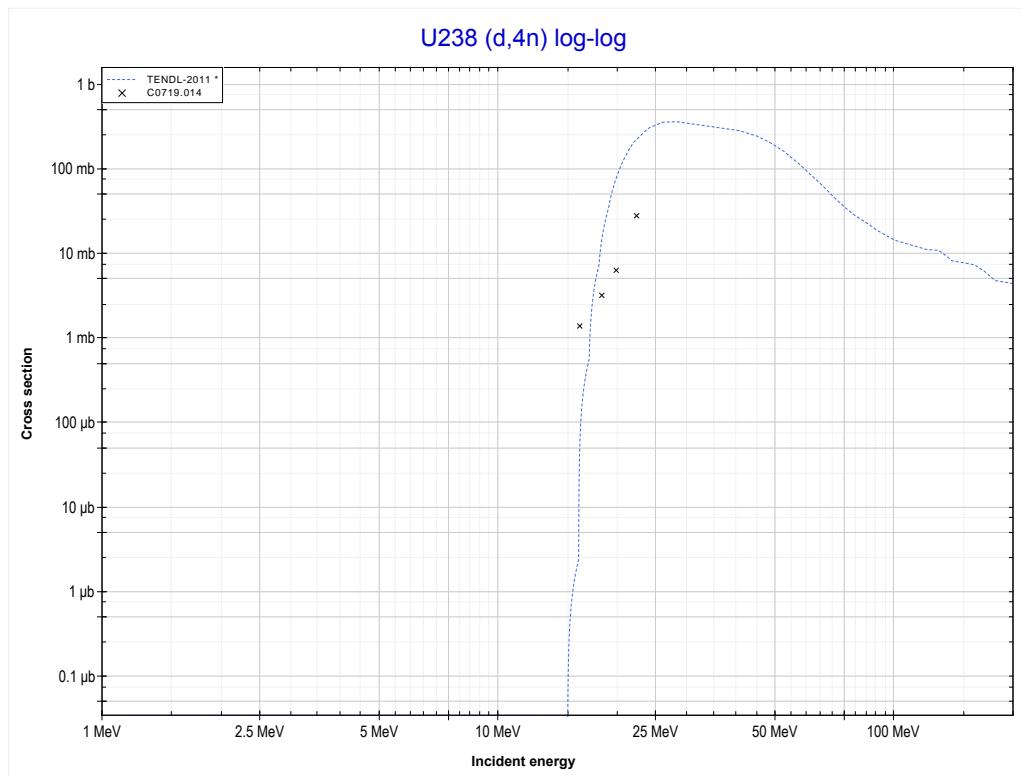
Reaction	Q-Value
U238(d,n)Np239	3060.90 keV

<< 92-U-236	92-U-238 MT16 (d,2n) or MT5 (Np238 production)	94-Pu-239 >>
<< MT4 (d,n)		MT37 (d,4n) >>

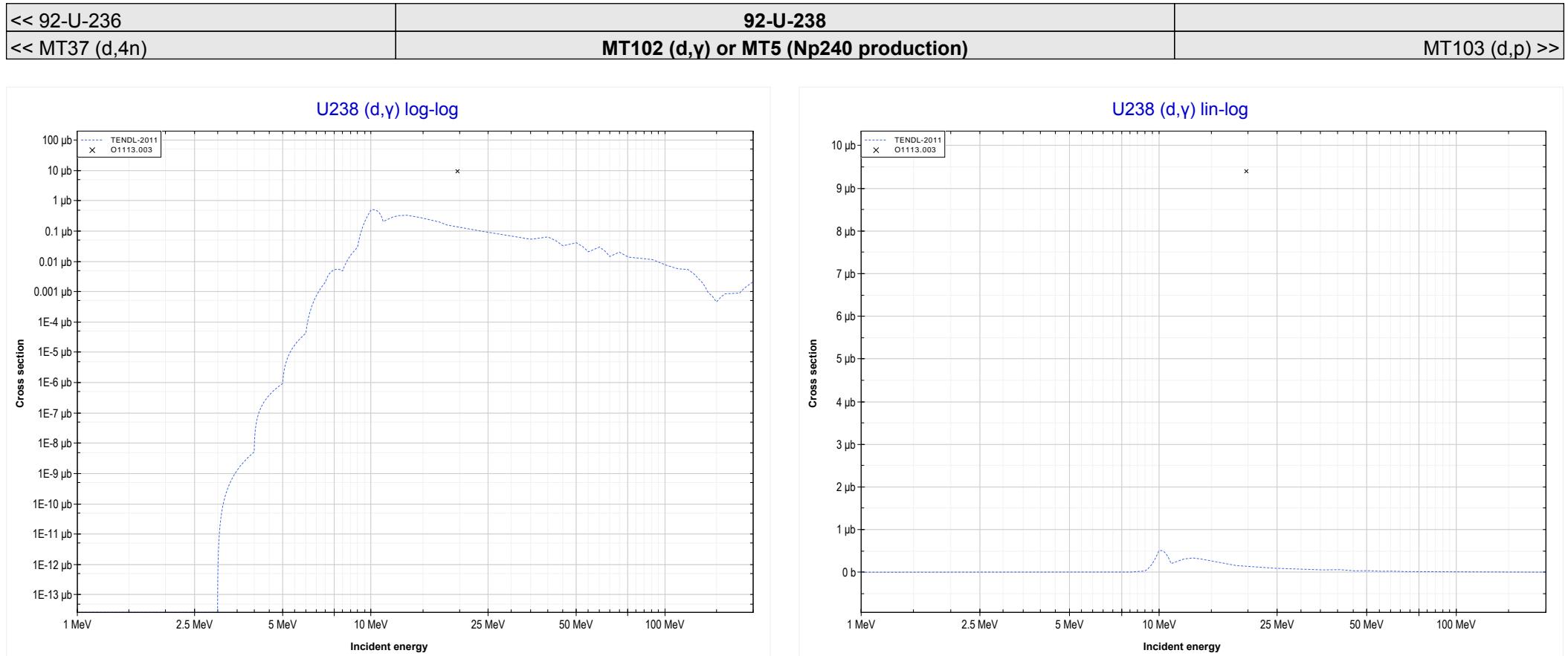


Reaction	Q-Value
U238(d,2n)Np238	-3154.31 keV

<< 90-Th-232	92-U-238	
<< MT16 (d,2n)	MT37 (d,4n) or MT5 (Np236 production)	MT102 (d,y) >>

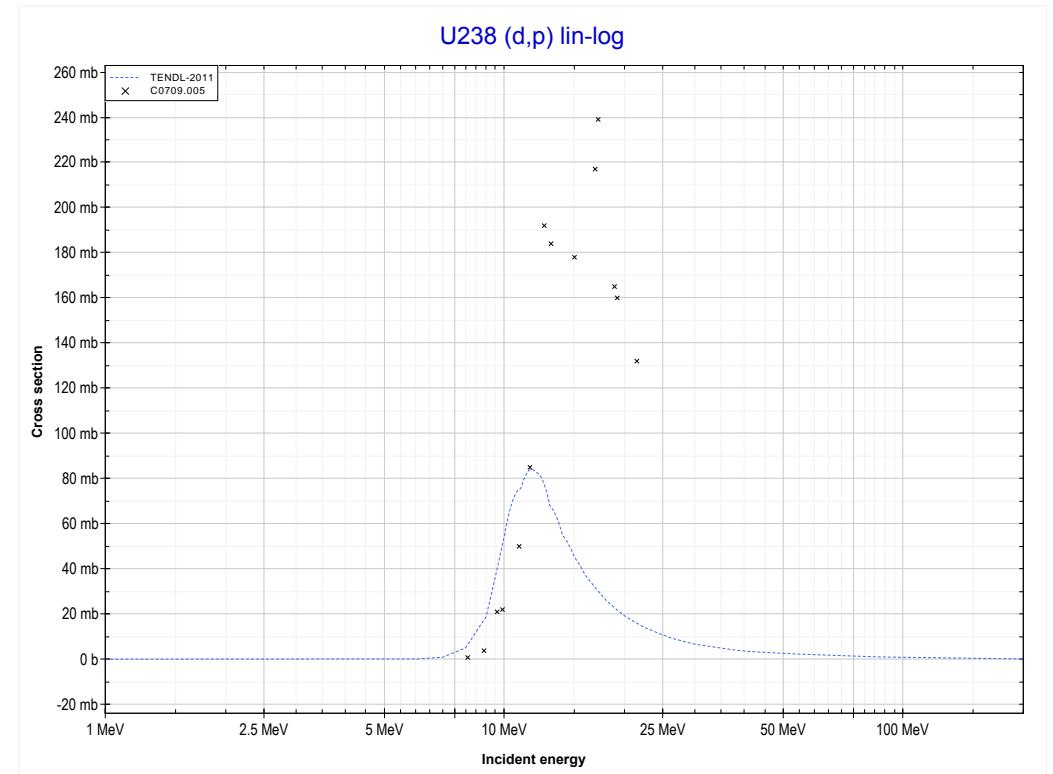
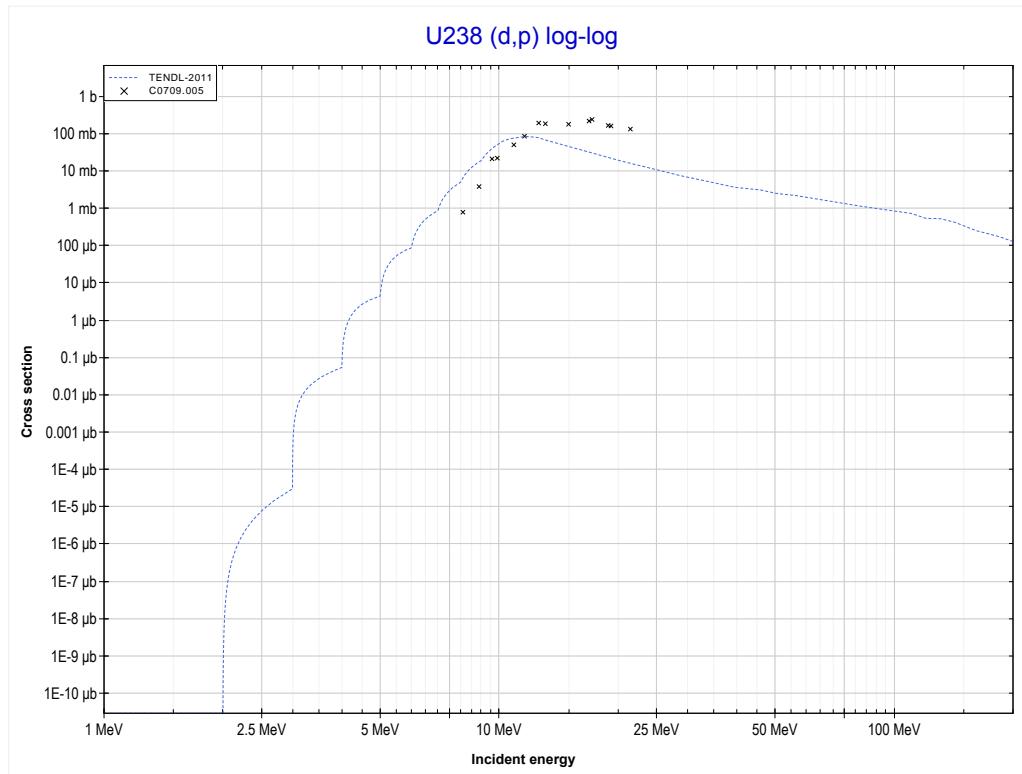


Reaction	Q-Value
U238(d,4n)Np236	-15220.65 keV



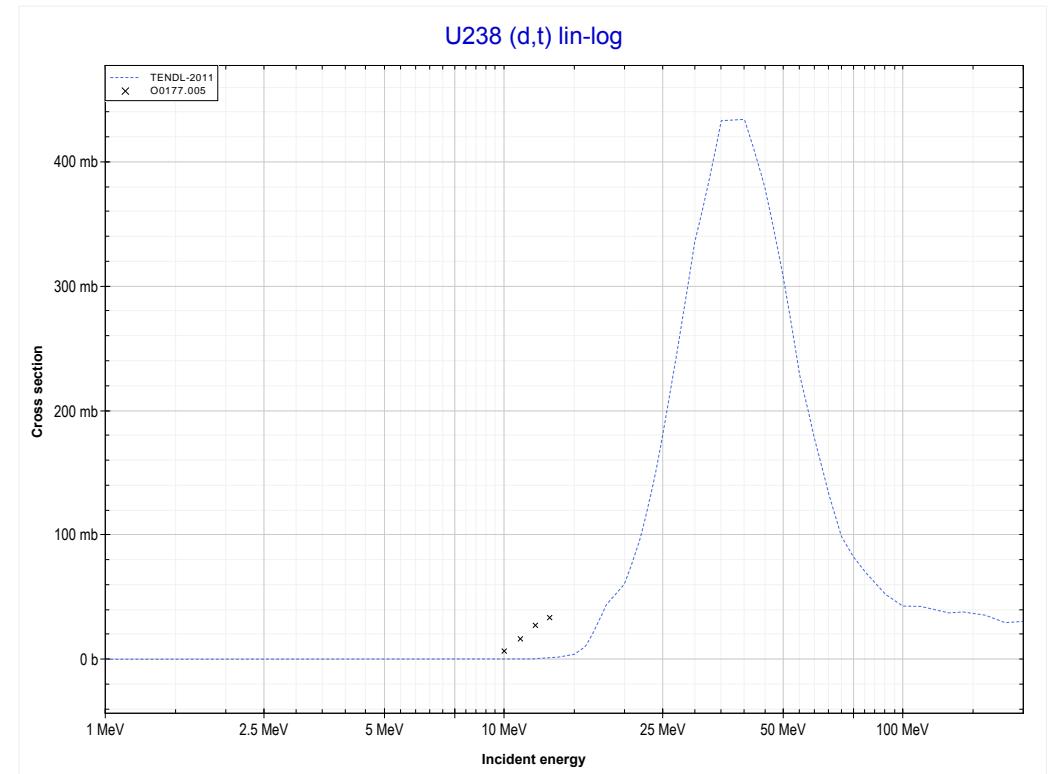
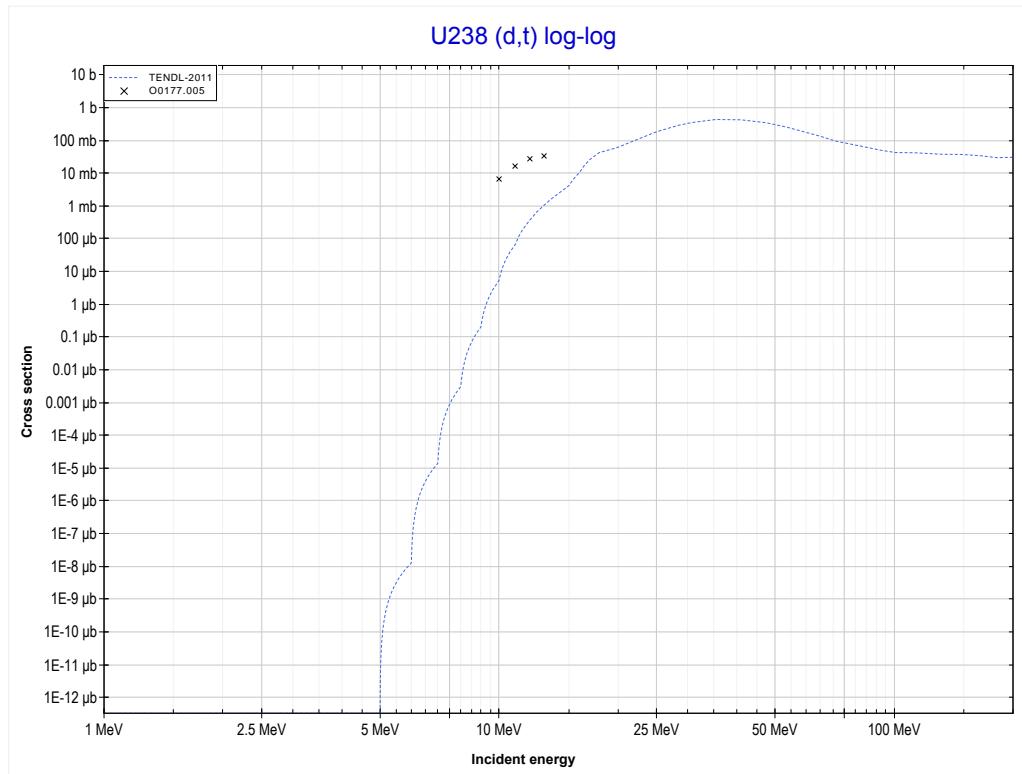
Reaction	Q-Value
U238(d, γ)Np240	8129.62 keV

<< 90-Th-232	92-U-238	
<< MT102 (d, γ)	MT103 (d,p) or MT5 (U239 production)	MT105 (d,t) >>



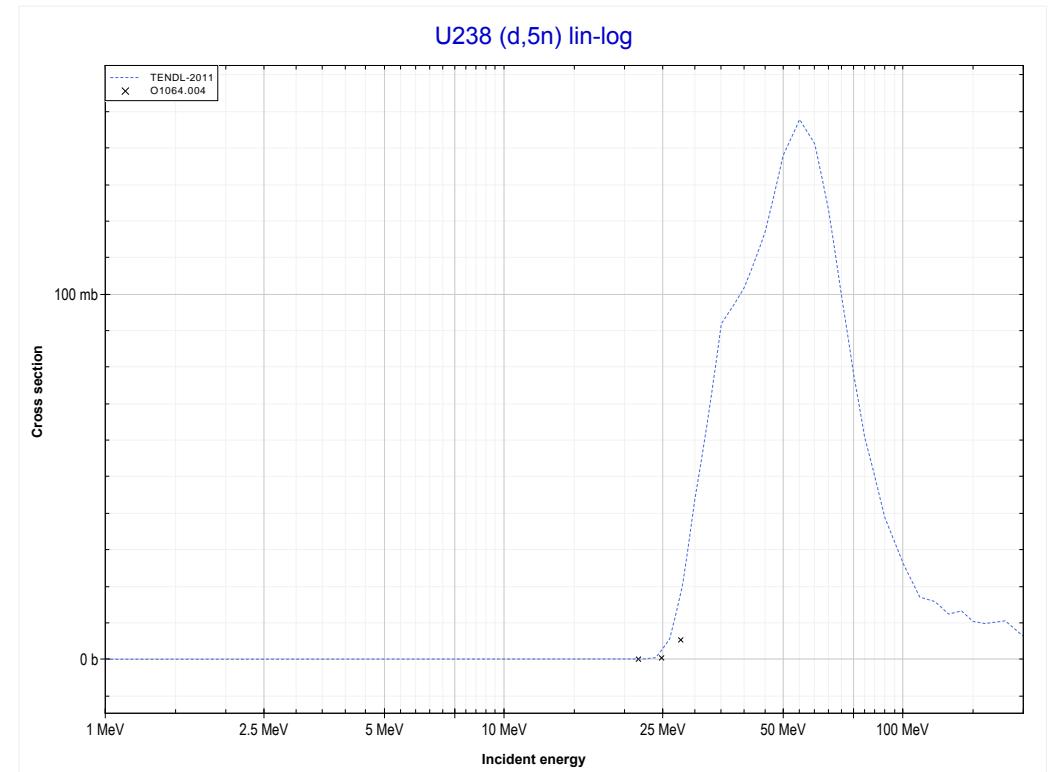
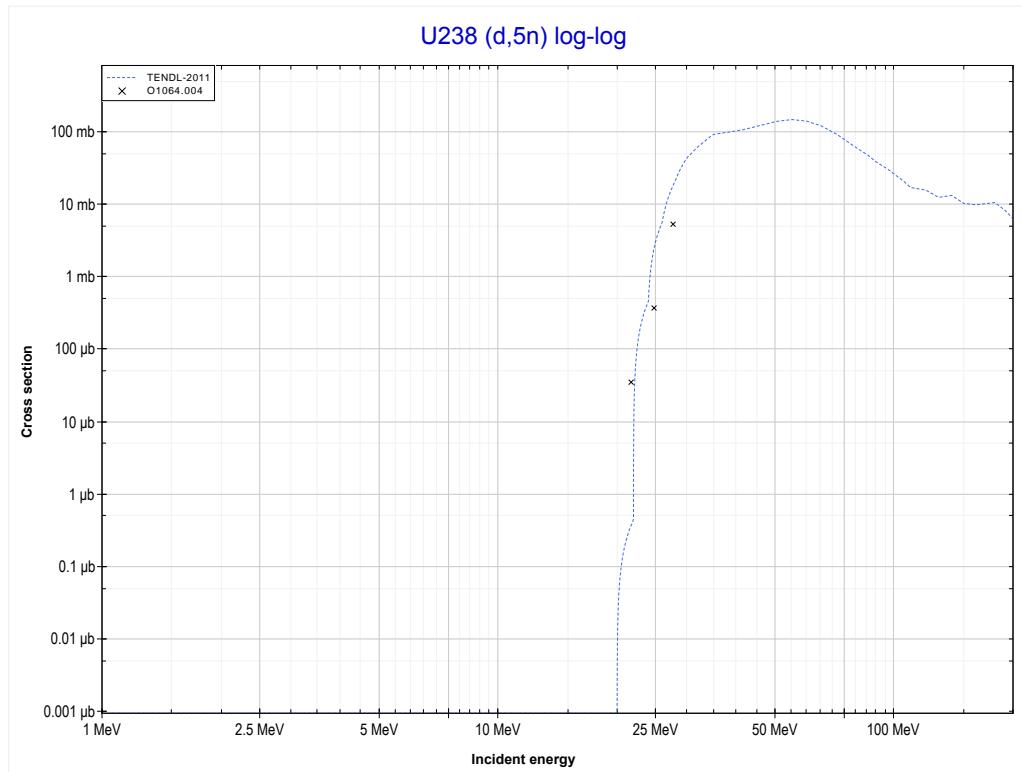
Reaction	Q-Value
U238(d,p)U239	2581.75 keV

<< 79-Au-197	92-U-238	
<< MT103 (d,p)	MT105 (d,t) or MT5 (U237 production)	MT152 (d,5n) >>



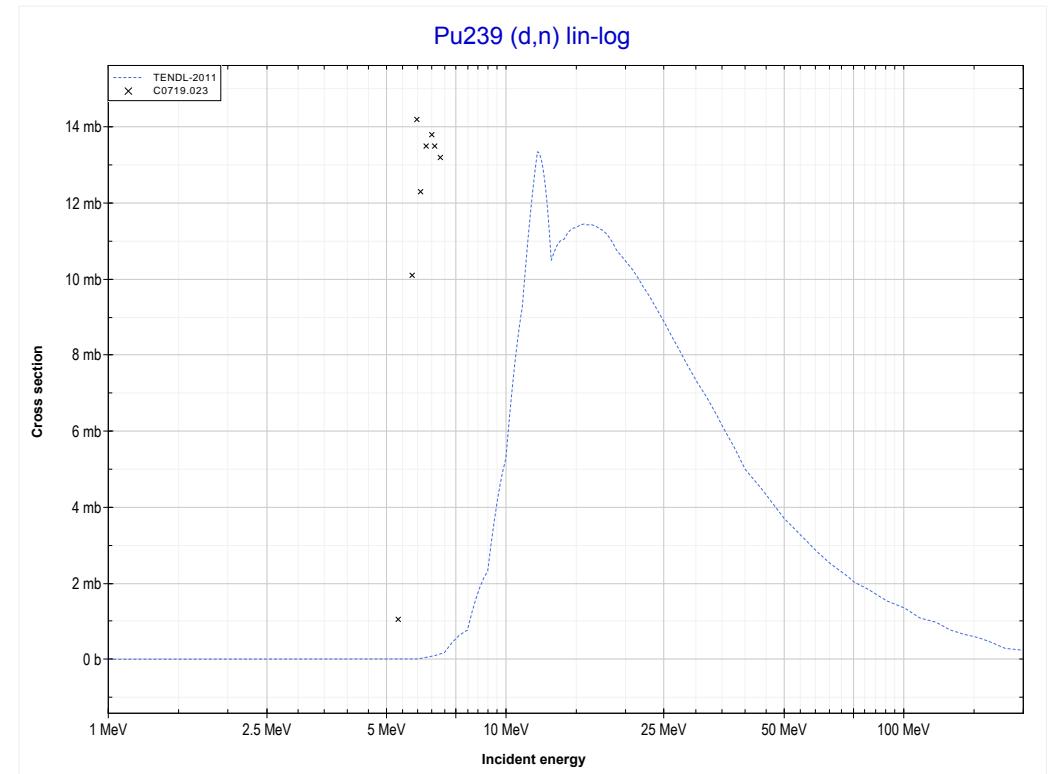
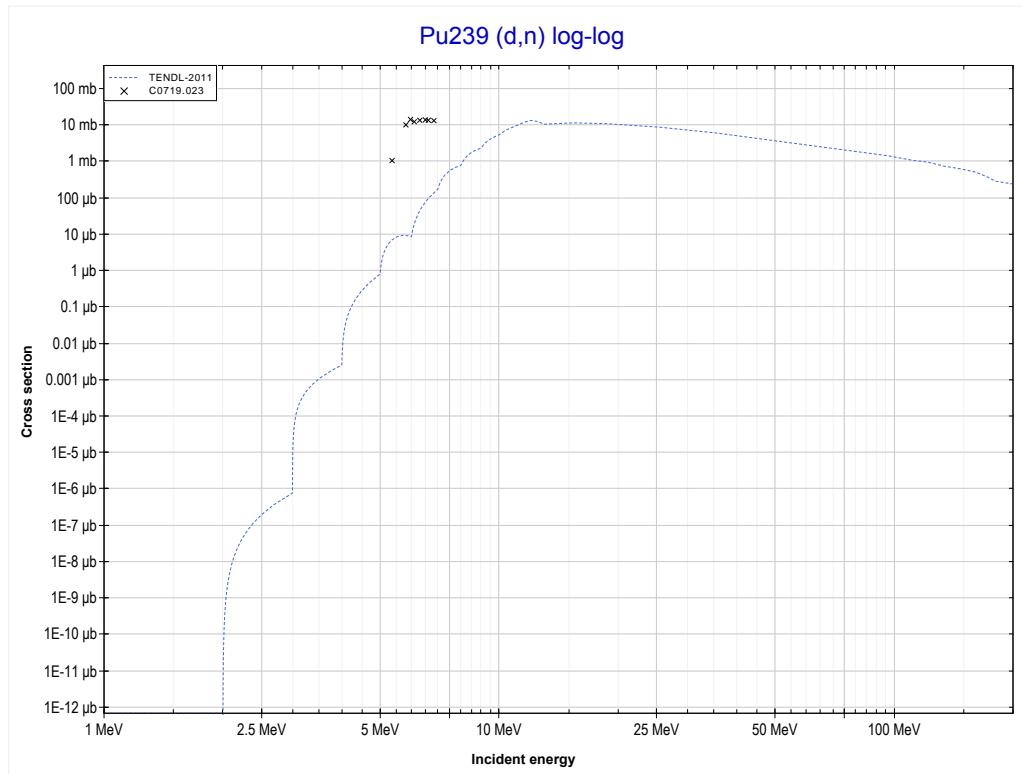
Reaction	Q-Value
U238(d,t)U237	102.92 keV
U238(d,n+d)U237	-6154.32 keV
U238(d,2n+p)U237	-8378.88 keV

<< 83-Bi-209	92-U-238	
<< MT105 (d,t)	MT152 (d,5n) or MT5 (Np235 production)	MT4 (d,n) >>



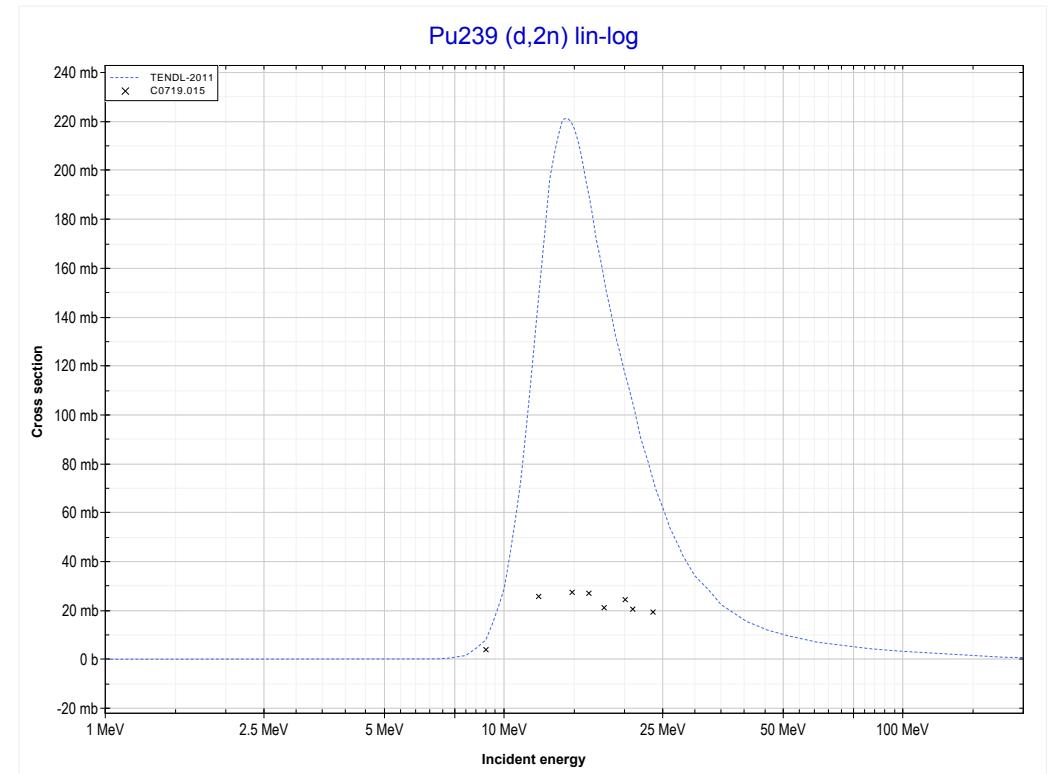
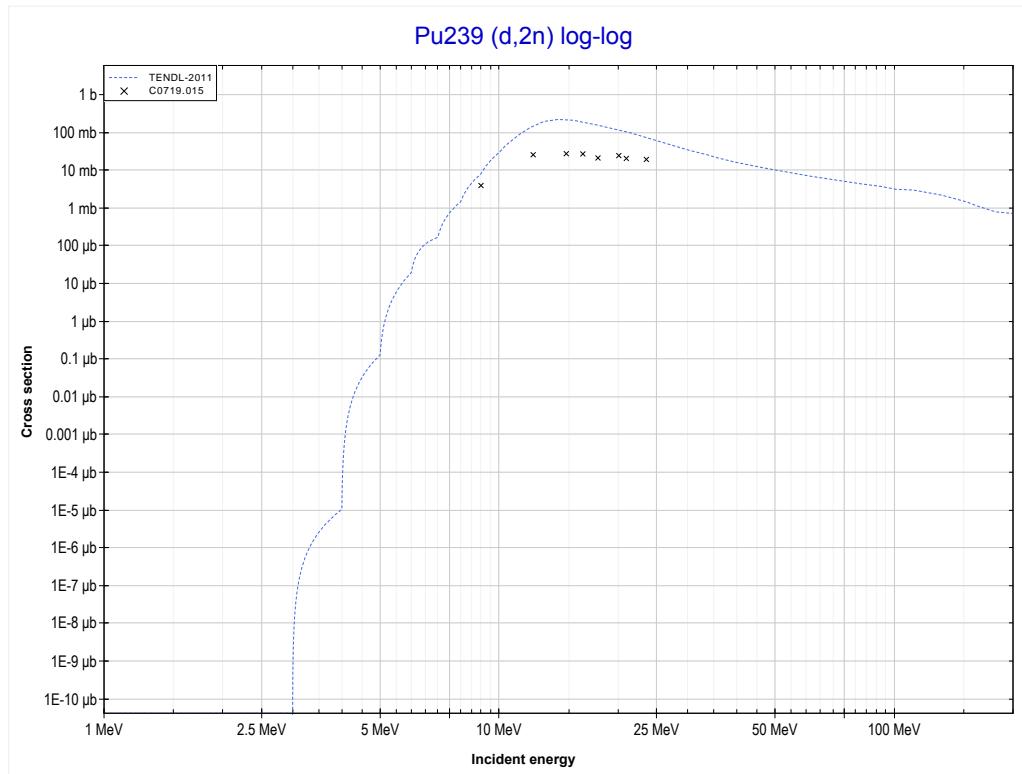
Reaction	Q-Value
U238(d,5n)Np235	-20956.66 keV

<< 92-U-238	94-Pu-239 MT4 (d,n) or MT5 (Am240 production)	MT16 (d,2n) >>
<< MT152 (d,5n)		



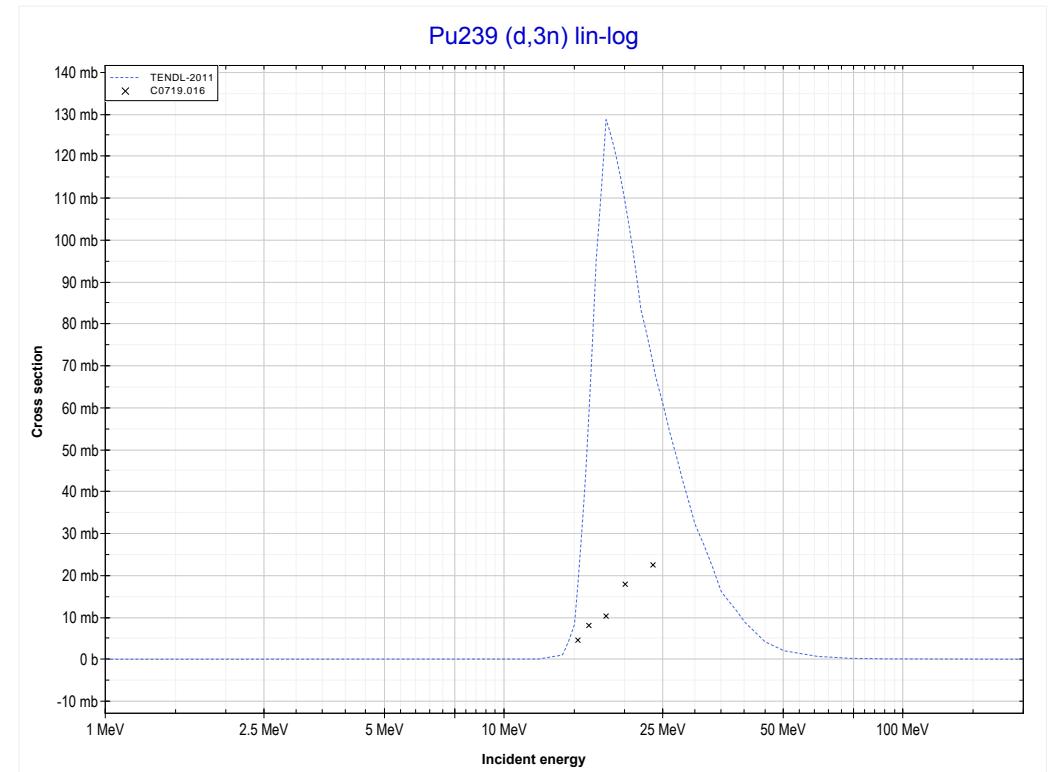
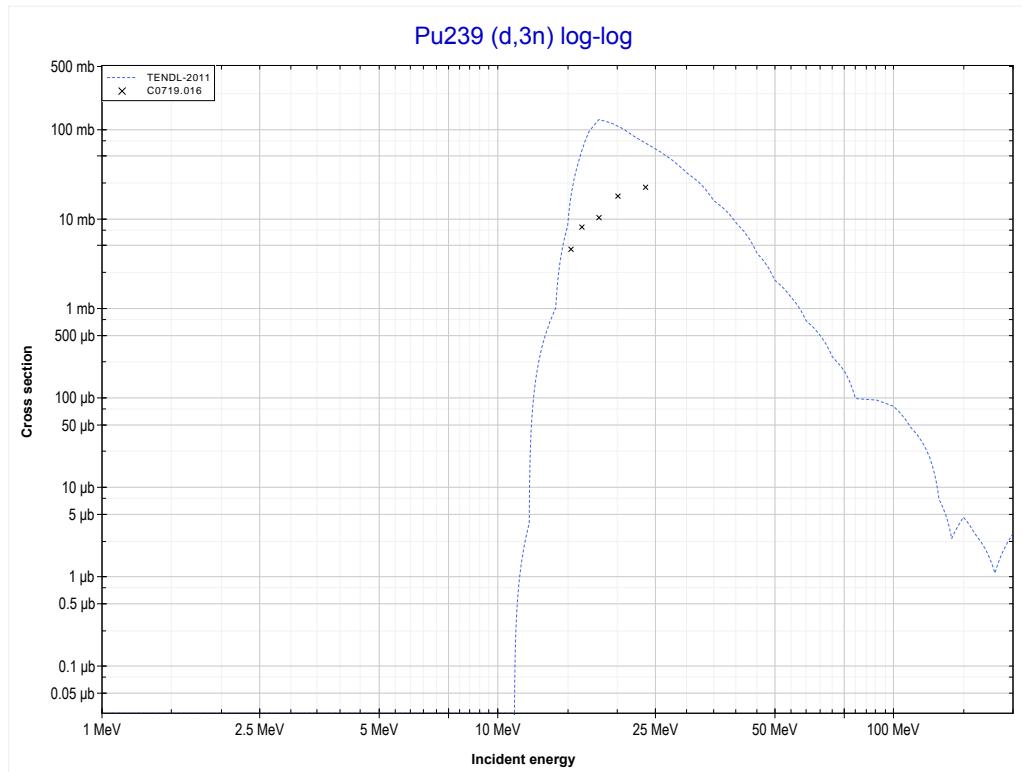
Reaction	Q-Value
Pu239(d,n)Am240	2142.30 keV

<< 92-U-238	94-Pu-239	
<< MT4 (d,n)	MT16 (d,2n) or MT5 (Am239 production)	MT17 (d,3n) >>

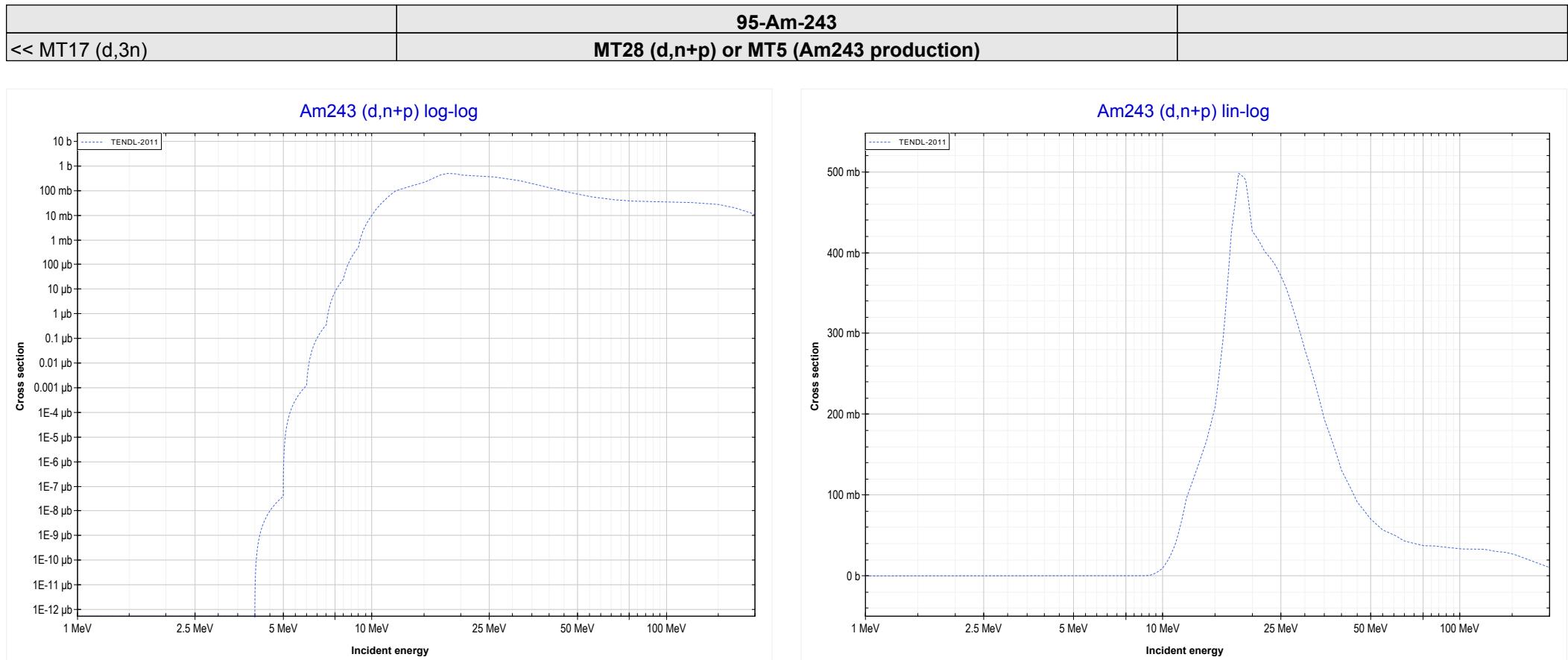


Reaction	Q-Value
$\text{Pu}^{239}(\text{d},2\text{n})\text{Am}^{239}$	-3809.01 keV

<< 92-U-236	94-Pu-239	
<< MT16 (d,2n)	MT17 (d,3n) or MT5 (Am238 production)	MT28 (d,n+p) >>



Reaction	Q-Value
$\text{Pu}^{239}(\text{d},\text{3n})\text{Am}^{238}$	-10908.33 keV



Reaction	Q-Value
Am243(d,d)Am243	0.00 keV
Am243(d,n+p)Am243	-2224.57 keV