

$^{82}\text{Se}(\text{p},\text{d})$ **1979Ba61**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia	NDS 199,271 (2025)		1-Sep-2024

No significant change compared to the previous evaluation by C.M. Baglin ([2008Ba34](#)).

E=33 MeV, 97% ^{82}Se target, surface-barrier detector telescopes, FWHM \approx 40 keV, $\theta(\text{lab})=15^\circ$ to $\approx 65^\circ$.

 ^{81}Se Levels

E(level) [†]	L [‡]	S [‡]	E(level) [†]	L [‡]	S [‡]	E(level) [†]	L [‡]	S [‡]
0	1	0.57	1417	1	0.97	2531	4	0.15
100	(4)	0.08	1628	1	0.02	2603	1	0.13
294	4	2.42	1753	2	0.07	2656	3	0.20
470	(1)	0.26	1812	4	0.46	2763	(2+3)	0.012,0.03
491	(3)	0.75	2056	1	0.07	2893	(3+4)	0.1,0.06
624	3	1.02	2150	1	0.32	2985	(3+4)	0.09,0.07
782	4	0.06	2199	2	0.02	3087	(2)	0.07
1056	2	0.09	2282	1	0.04	3150	(1+3)	0.02,0.03
1109	2	0.02	2325	(2+4)	0.03,0.05	3257		
1310	2	0.02	2475			3349	1	0.11

[†] $\Delta E=10$ keV for strong states, 25 keV for weaker states at high excitation ([1979Ba61](#)). Evaluator assumes $\Delta E=25$ keV when E from this reaction is utilized in Adopted Levels.

[‡] From ratio of $\sigma(\theta)$ to $\sigma(\text{DWBA})$, assuming normalization factor of 2.29. $f_{5/2}$, $g_{9/2}$ orbitals assumed for L=3, 4 transfer, respectively.