

$^{76}\text{Se}(\text{d,d}')(\text{pol d,d}')$ **1965Li10**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh, Jun Chen and Ameenah R. Farhan		NDS 194,3 (2024)	8-Jan-2024

1965Li10: (d,d'),E=15 MeV. $\sigma(35^\circ)/\sigma(47^\circ)$ ratio for parity assignment which in several cases disagree with assignment from other reactions.

(pol d,d'): **1987Nu03** (theoretical), **1981Nu01**, **1980Nu01**, **1980Bu02**, **1978Oh02**, **1977Nu02**, **1981ShZZ**. These studies discuss second-order process, two-step mechanism, optical model parameters, analyzing powers, isotopic dependence, and shell closure effects in (pol d,d') reaction.

 ^{76}Se Levels

E(level) [†]	S [‡] #	E(level) [†]	S [‡] #	E(level) [†]	S [‡] #	E(level) [†]	S [‡] #
0		1800	0.33	2450 ^{&}	1.47	3160	0.18
560 [@]	6.80	2050 ^{&}	0.33	2540 ^{&}	0.34	3300 ^{&}	0.29
1110 [@]	0.59	2130 ^{&}	0.13	2670	0.25	3540 [@]	0.22
1220 [@]	1.39	2210 ^{&}	0.15	2870 ^{&}	0.34		
1330 [@]	0.49	2290 ^{&}	0.14	2980	0.26		

[†] Uncertainty ≈ 10 keV, based on FWHM=40 keV.

[‡] $d\sigma/d\Omega$ $\mu\text{b/sr}$.

At 35° (lab) (**1965Li10**).

@ Positive parity from $\sigma(35^\circ)/\sigma(47^\circ)=0.9$ to 1.7 (**1965Li10**).

& Negative parity from $\sigma(35^\circ)/\sigma(47^\circ)=2.0$ to 3.3 (**1965Li10**).