

$^{80}\text{Se}(d,d')$, (pol d,d) 1965Li10,1987Nu03

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 105, 223 (2005)	22-Jun-2005

1965Li10 (also 1962Jo05,1961Co07): (d,d') E=15 MeV. The authors propose J^π 's using Blair phase rule for data recorded at 35° and 47°. FWHM=40 keV.

1987Nu03, 1981Nu01, 1980Nu01, 1980Bu02, 1977Nu02: (pol d,d) E=12 MeV. Measured $\sigma(\theta)$, deduced optical-model parameters, coupled-channel calculations and two-step processes.

1981ShZZ: (pol d,d) E=12 MeV. Measured $\sigma(\theta)$, coupled-channel analysis.

1980No04, 1978Oh02: (pol d,d) E=12.5, 12 MeV. Theoretical analysis.

 ^{80}Se Levels

E(level) [†]	J^π [‡]	$\sigma(35^\circ)$ (mb/sr) (1965Li10)	E(level) [†]	J^π [‡]	$\sigma(35^\circ)$ (mb/sr) (1965Li10)
0			2500	(-) [@]	0.40
660	(+) ^{&}	5.22	2720	(-) ^{&}	1.38
1440	(-) [#]	0.93	2820	(+) [@]	0.11
1480	(+) ^{&}	0.15	3030		0.23
1690	(+) ^{&}	0.40	3300	(+) [@]	0.20
1860		0.04	3370	(-) [@]	0.28
1960	(-) [#]	0.17	3780	(-) [@]	0.22
2150		0.10	4180	(-) [@]	0.17
2320	(+) [@]	0.24			

[†] From 1965Li10.

[‡] Parity is from Blair phase rule (1965Li10) applied to measured ratio $\sigma(35^\circ)/\sigma(47^\circ)$. Positive parity assigned for ratio of 0.9-1.7 and negative parity for ratio of 2.0-3.3. This method breaks down for two-phonon levels as is the case for 1440 level.

Parity assignment disagrees with that in 'Adopted Levels'.

@ Parity assignment cannot be confirmed from other reactions.

& Parity assignment agrees with that in 'Adopted Levels'.