

$^{74}\text{Se}(d, ^3\text{He})$ 1983Ro08

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen		NDS 158, 1 (2019)	16-May-2019

1983Ro08: E=25.2 MeV. Measured $\sigma(\theta)$, $\theta=6^\circ-33^\circ$, FWHM=9-13 keV. DWBA calculations.

 ^{73}As Levels

E(level)	L [†]	C ² S [‡]	Comments
0.0	1	2.36	
67.8 20	3	2.0 [#]	
84.7 20	1	0.25 [@]	
255.8 30	1	0.40 [@]	
397 4	1	0.37	
430 4	4	0.90	
514 5	2	0.16	
581 5	1+3	0.027,0.2 [#]	E(level): Unresolved doublet.
658 6	1	0.11	
772 6	3,(4)	0.1,0.13 [#]	
861 7	3	0.38	
887 7	0	0.017	
994 ^{&}			C ² S: <0.02 for assumed L=1; but adopted $J^\pi=(7/2)^-$ implies L=3.
1081 7	1	0.16	
1217 8	1	0.23	
1351 8	3	0.14	
1592 8	1	0.03	
1614 6	3	1.04	
1981 7	1	0.08	
2135 10	1	0.08	

[†] From comparison with DWBA calculations.

[‡] Except where noted, the following spins have been assumed in deducing C²S: 3/2 for L=1; 5/2 for L=2; 7/2 for L=3; and 9/2 for L=4, implying active proton orbitals p_{3/2}, d_{5/2} and f_{7/2}. The quoted value should be multiplied by 1.2 for L=1, J=1/2; and by 1.7 for L=3, J=5/2.

[#] J=5/2 (or f_{5/2} proton orbital) assumed for L=3.

[@] For 1/2⁻ (or p_{1/2} proton orbital).

[&] Partly contributed by ⁷⁵As g.s. peak. Rounded-off energy from Adopted Levels.