^{78}Se(t,p) 1986Bu16

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

E=17 MeV. Measured $\sigma(\theta)$, FWHM=20 keV, DWBA calculations. See also 1986Fo01 from the same group.

^{80}Se Levels

Differential cross sections at angles where values are maximum are given under comments.

E(level)	L‡	ε (enhancement factor)†	Comments
0.0	0	2.88	dσ/dΩ=2297 mb/sr *115*. Other: 2200 mb/sr *110* (1986Fo01).
676 *11*	2@	1.22	dσ/dΩ=27 mb/sr *3*.
1461 *9*	2@	0.53	dσ/dΩ=15 mb/sr *2*.
1479#			dσ/dΩ<17 mb/sr.
1881 *11*	0	0.74	dσ/dΩ=50 mb/sr *5*.
1965 *14*	2@	0.17	dσ/dΩ=4.7 mb/sr *13*.
2150?# *19*			
2350 *5*	(2)@	0.23	dσ/dΩ=8.6 mb/sr *18*.
2510 *11*	1	2.37	dσ/dΩ=75 mb/sr *6*.
2719 *6*	3	0.62	dσ/dΩ=54 mb/sr *4*.
3036 *10*	(2+6)	0.48	dσ/dΩ=6.0 mb/sr *15* for a possible doublet. ε: 0.14 for L=2 component and 0.34 for L=6.
3160 *9*	0	0.51	dσ/dΩ=28 mb/sr *3*.
3280?# *30*			
3350 *12*	(3)	0.10	dσ/dΩ=15 mb/sr *2*. L: L=3 fits better than L=2.
3391 *9*	(2)	0.52	dσ/dΩ=18 mb/sr *2*.
3484?# *30*			
3635 *5*	0	5.85	dσ/dΩ=308 mb/sr *15*.
3760 *10*	(3)	0.01	dσ/dΩ=22 mb/sr *3*.
3874 *5*	(1)	4.39	dσ/dΩ=111 mb/sr *7*.
3976 *8*	(1)	2.72	dσ/dΩ=73 mb/sr *5*.
4063 *16*	(2)	0.71	dσ/dΩ=10 mb/sr *2*.
4129 *8*	0	3.08	dσ/dΩ=66 mb/sr *5*. Obscured by an impurity at forward angles.
4176 *5*	2	2.79	dσ/dΩ=73 mb/sr *5*.
4247 *7*	2	1.65	dσ/dΩ=34 mb/sr *3*.
4315 *14*	(2)	1.94	dσ/dΩ=44 mb/sr *4*.
4343 *13*	2	1.82	dσ/dΩ=47 mb/sr *4*.
4464 *5*	(1)	3.38	dσ/dΩ=80 mb/sr *6*.
4712 *30*			
5180 *30*			

† $\sigma(\theta)$(exp)=230(ε)(σ(θ))(DWBA), where ε=enhancement factor, a measure of relative transition strength.

‡ From comparison with DWBA calculations. The following configurations were considered by 1986Bu16 for the two-neutron transfer: $(1g_{9/2},1g_{9/2})$ for L=0,2,4,6; $(2p_{1/2},3s_{1/2})$ for L=1 and $(2p_{1/2},2d_{5/2})$ for L=3.

Very weakly populated state.

@ Fit with L=2 not in good agreement with DWBA calculations.