

⁷⁵As(³He,d) 1975Ar29

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

E=25 MeV.

Target $J^\pi(^{75}\text{As g.s.})=3/2^-$.

1975Ar29: split-pole spectrometer, FWHM \approx 20 keV. $\sigma(\theta)$ data from 5° to 41° (c.m.) in steps of 4°. DWBA calculations. Absolute σ accurate to \approx 20%.

⁷⁶Se Levels

E(level) [‡]	L	S [†]	Comments
0	1	1.04	
558	1+3	0.16,0.89	
1122	1	0.58	
1216	1+3	0.21,0.05	
1334	3	0.21	
1790	1+3	0.34,0.41	
2029	3	0.15	
2128	1+3	0.13,0.73	
2168	(1+3)	0.03,0.01	
2433	4	1.32	
2517	1+3	0.24,0.10	
2616	3	0.60	
2671	2+4	0.23,0.15	
2830	4(+0)	2.35	S: <0.04 for L=0.
2862	4+2	1.73,0.18	
2923	3	0.14	
2956	4(+2)	0.34	S: <0.02 for L=2.
3022	1+3	0.03,0.03	
3086	1+3	0.11,0.11	
3198	1+3	0.32,0.59	
3212	1+3	0.42,1.82	
3268	4+2	1.67,0.18	
3295	1+3	0.22,0.89	
3345	1+3	0.64,0.64	
3378	1+3	0.43,0.05	
3417	4	2.50	
3442	(1+3)	0.11,0.16	
3467	1+3	0.59,1.37	
3530	1+3	0.65,0.28	
3558	(1+3)	0.08,0.56	
3598	1+3	0.08,0.18	
3634	(1+3)	0.08,0.32	
3659	1+3	0.20,1.83	
3700	1+3	0.49,1.16	
3741	1+3	0.30,0.71	
3790	1(+3)	0.66	S: <0.16 for L=3.
3808	1+3	0.32,0.17	
3856	1+3	0.21,0.85	
3908	1+3	0.23,0.93	
3955	1+3	0.14,0.94	
3997	1+3	0.11,0.62	
4054	1+3	0.44,0.67	
4103	4+2(+0)	0.42,0.02	S: \leq 0.01 for L=0 component.
4137	1+3	0.29,0.43	
4184 [#]	@		
4218	1+3	0.26,0.62	

Continued on next page (footnotes at end of table)

$^{75}\text{As}(^3\text{He,d})$ **1975Ar29** (continued) ^{76}Se Levels (continued)

$E(\text{level})^{\ddagger}$	L	S^{\dagger}	$E(\text{level})^{\ddagger}$	L	S^{\dagger}	$E(\text{level})^{\ddagger}$	L	S^{\dagger}
4250 [#]	@		4567			4911	1+3	0.11,0.32
4301	4+2	0.24,0.13	4603	1+3	0.10,0.57	4938		
4343 [#]	@		4647	1+3	0.15,0.60	4974	1+3	0.14,0.81
4375 [#]	@		4677	2+4	0.65,0.12	5013	1+3	0.07,0.30
4400	1+3	0.07,0.30	4729	1+3	0.07,0.44	5043	2+4	0.23,0.12
4425	1+3	0.18,0.41	4755	1+3	0.06,0.43	5091	2+4	0.47,0.28
4459	1+3	0.08,0.35	4814	1+3	0.18,0.53	5510		
4475			4836	1+3	0.10,0.31	6005		
4527			4858	1+3	0.07,0.41			

[†] For mixed L($^3\text{He,d}$), two S-factors correspond to two L-values given.

[‡] Uncertainty is estimated as 10 keV (evaluators).

[#] L-values of (4+2) and (1+3) indicate a doublet.

@ Mixed L-transfer of (4+2) and (1+3).