

<sup>75</sup>As(d,p) 1975Le06

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=12 MeV.

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

1975Le06: Enge split-pole magnetic spectrograph and emulsion plates used. FWHM=15 keV.  $\sigma(\theta)$  data obtained from 7.5° to 67.5° in steps of 7.5° (lab). Uncertainty on  $\sigma$  values given as 20%. DWBA calculations.

Other: 1976Mo32. E=11 MeV. Levels reported up to 1800 keV only. Broad-range magnetic spectrograph and emulsion plates used. FWHM=20 keV.  $\sigma(\theta)$  data obtained from 30° to 90° (lab) at four angles.

Cross section data: 1983Va33 (E=4-12 MeV).

<sup>76</sup>As Levels

E(level)	L <sup>‡</sup>	S <sup>†</sup>	Comments
0	2	0.01	L=4 (1976Mo32).
45 5	1+3	0.15,0.28	L=1 (1976Mo32).
87 5	1+3	0.19,0.34	L=1 (1976Mo32).
121 5	1+3	0.05,0.13	
165 5	4	0.55	
210 5	2+4	0.15,0.86	
264 5	3	0.19	
285 5	4	0.81	
309 5	1+3	0.11,0.18	
330? 5			
363 5	3+4	0.38,0.44	E(level),L: doublet. 1976Mo32 report only a single level with L=3.
402 5	1+3	0.11,0.21	L=1 (1976Mo32).
434 5	2	0.07	
446 5	1+3	0.05,0.20	L=2 (1976Mo32).
468 5	2	0.07	
485 5	4	1.18	
500 5	0+2	0.005,0.025	
516 5	1+3	0.02,0.26	E(level),L: 1976Mo32 report only a single level near 500 keV with L=(2+4).
550? 5			
611 5	(1)+(4)	0.02,0.20	E(level): doublet.
639 5	0+2	0.007,0.03	L=(3) (1976Mo32).
667? 5			
687 5	(2)	0.04	
717 5	1+3	0.02,0.03	
744 5	1+3	0.04,0.16	
777 5	1+3	0.05,0.22	
795 5	1+3	0.03,0.15	
865 5	1+3	0.05,0.21	
908 5	1	0.06	
928 5	1+3	0.08,0.35	
944? 5			
969? 5			
986 5	1+3	0.03,0.13	
1030 5	1+3	0.07,0.28	
1063 10			
1096 10	1+3	0.08,0.17	
1107 10			
1128 10			
1155 10	0+2	0.01,0.05	
1190 10			
1212 10			
1230 10			
1262 10			

Continued on next page (footnotes at end of table)

$^{75}\text{As}(\text{d,p})$  1975Le06 (continued) $^{76}\text{As}$  Levels (continued)

E(level)	$L^{\ddagger}$	$S'^{\dagger}$	Comments
1319 <i>IO</i>			
1354? <i>IO</i>			
1399 <i>IO</i>	0+2	0.02,0.04	
1419? <i>IO</i>			
1450 <i>IO</i>	0+2	0.01,0.23	L=(1+3) (1976Mo32).
1478 <i>IO</i>	0+2	0.02,0.04	
1519 <i>IO</i>			
1553 <i>IO</i>	0+2	0.02,0.05	L=(3) (1976Mo32).
1573 <i>IO</i>			
1604 <i>IO</i>			
1632 <i>IO</i>			
1657 <i>IO</i>	0+2	0.03,0.07	
1695 <i>IO</i>			
1717 <i>IO</i>	0	0.06	
1733? <i>IO</i>			
1752 <i>IO</i>			
1766? <i>IO</i>			
1782 <i>IO</i>			
1821 <i>IO</i>			
1830? <i>IO</i>			
1849? <i>IO</i>			
1872 <i>IO</i>	0	0.05	
1885 <i>IO</i>	0	0.04	
1928 <i>IO</i>			
1960? <i>IO</i>			
1988 <i>IO</i>			
2004 <i>IO</i>			
2032 <i>IO</i>			
2067 <i>IO</i>			
2114 <i>IO</i>			
2136 <i>IO</i>			
2147 <i>IO</i>			
2206 <i>IO</i>			
2239 <i>IO</i>			
2272 <i>IO</i>			
2306 <i>IO</i>			
2338 <i>IO</i>			
2366 <i>IO</i>			
2392 <i>IO</i>			
2419 <i>IO</i>			
2446? <i>IO</i>			
2485? <i>IO</i>			
2505 <i>IO</i>			

$\dagger$  For mixed L-transfers, the first value is for lower L-transfer and the second for higher L-transfer.

$\ddagger$  Values from 1976Mo32 are given under comments. Values disagree with results from 1975Le06 in several cases.