

$^{76}\text{Ge}(\alpha, p)$ 1980Ro09

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 135, 193 (2016)	31-May-2016

E=26 MeV.

Split-pole magnetic spectrometer and solid-state position sensitive detectors. FWHM=12 keV. Angular distributions from 5° to 45° in steps of 8° (lab angles). DWBA analysis.

Data analyzed by assuming that two neutrons couple to J=0, so that triton transfer behaves like a simple proton transfer.

 ^{79}As Levels

Cross sections at 13° (lab system) are given by 1980Ro09.

E(level) [†]	J ^π [‡]	L	S [#]	E(level) [†]	J ^π [‡]	L	S [#]	E(level) [†]	J ^π [‡]	L	S [#]
0	3/2 ⁻	1	2.2	881 @ 4				1806 8	(9/2) ⁺	4	1.3
109 @ 3				1016 @ 5				1872 @ 8			
233 3	(5/2) ⁻	3	3	1045 @ 5	(1/2) ⁻	(1)	0.18	1891 8	(1/2) ⁻	1	0.4
499 3	(1/2) ⁻	1	1.2	1140 @ 6				1942 @ 8			
607 @ 4				1405 @ 6				1964 8	(9/2) ⁺	4	1.2
633 @ 4				1437 @ 6							
777 4	(9/2) ⁺	4	3.6	1702 @ 8							

[†] Energy spectra calibrated by using well known level energies in the ^{67}Ga , ^{69}Ga and ^{71}Ga nuclides.

[‡] From deduced L-transfer. The following active proton shells were considered: p_{3/2}, f_{5/2}, p_{1/2}, g_{9/2}. The f_{7/2} shell was assumed filled. For L=1 transfer the authors claim to distinguish between p_{3/2} and p_{1/2} on the basis of shapes of $\sigma(\theta)$ distributions.

[#] Spectroscopic strengths relative to that for ^{71}Ga g.s..

@ Weakly populated levels.