

$^{76}\text{Se}(^3\text{He},\alpha)$  2007ScZX,2008Sc03

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Alexandru Negret, Balraj Singh		NDS 114, 841 (2013)	30-Jun-2013

E=26 MeV beam provided by Yale tandem accelerator. Enriched target. Particles detected with Enge spectrograph and gas-filled focal plane detector backed by a scintillator. Measured cross sections. FWHM=70 keV. Spectroscopic factors deduced from analysis of cross section data by DWBA calculations using PTOLEMY code. Uncertainty in cross sections: statistical uncertainty of 1% for strong peaks; systematic uncertainties of 5% in absolute values and 3% in relative values.

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Cross-section data

Level	$d\sigma/d\Omega$ (2007ScZX) (mb/sr)
0	0.232
132	6.55
287	1.10
427	1.69
583	0.164
664	0.87
748	0.29
859	0.35
931	0.55
993	0.39
1047	0.51
1182	0.153
1369	0.119
1457	0.28
1655	0.33
1774	0.52
1907	0.37

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 $^{75}\text{Se}$  Levels

<u>E(level)<sup>†</sup></u>	<u>J<sup>π‡</sup></u>	<u>L</u>	<u>C<sup>2</sup>S</u>	<u>E(level)<sup>†</sup></u>	<u>J<sup>π‡</sup></u>	<u>L</u>	<u>C<sup>2</sup>S</u>	<u>E(level)<sup>†</sup></u>	<u>L</u>	<u>C<sup>2</sup>S</u>
0	7/2 <sup>+</sup>			859				1655	(3) <sup>@</sup>	
132	9/2 <sup>+</sup>	4	5.96	931				1774	(3) <sup>@</sup>	
287				993				1907		
427	5/2 <sup>-</sup>	3	2.08	1047		(3) <sup>@</sup>		x <sup>#</sup>	3	0.296
583				1182		(3) <sup>@</sup>		y <sup>#</sup>	4	0.104
664	5/2 <sup>-</sup>	3	1.05	1369		(4) <sup>@</sup>				
748	7/2 <sup>-</sup>			1457	(5/2 <sup>-</sup> )	3	0.33			

<sup>†</sup> Rounded values from Adopted Levels.

<sup>‡</sup> From Adopted Levels.

# Analog states.

@ Uncertain assignment.