

$^{110}\text{Pd}(d,^3\text{He})$  1987Ka29

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	S. Kumar(a), J. Chen(b) and F. G. Kondev		NDS 137, 1 (2016)	31-May-2016

Target  $J^\pi(^{110}\text{Pd})=0^+$ .

1987Ka29: E(d)=50 MeV from KVI cyclotron at Groningen. Target:  $\approx 300 \mu\text{g}/\text{cm}^2$  with  $\approx 35 \mu\text{g}/\text{cm}^2$  carbon backing, 99% Enriched  $^{110}\text{Pd}$ . Detectors: Magnetic spectrometer (FWHM=30 keV). Measured:  $\sigma(\theta)$  (9 angles ranging from  $4^\circ$  to  $30^\circ$ ).  
Deduced: Levels,  $J^\pi$ , L, spectroscopic factors.

 $^{109}\text{Rh}$  Levels

E(level) <sup>†</sup>	L <sup>‡</sup>	C <sup>2</sup> S <sup>#</sup>	E(level) <sup>†</sup>	L <sup>‡</sup>	C <sup>2</sup> S <sup>#</sup>	E(level) <sup>†</sup>	L <sup>‡</sup>	C <sup>2</sup> S <sup>#</sup>
0	4	0.19	928	3	0.66	1522		
206	4	3.4	1017	2	0.13,0.097	1631	1	0.47
374	1	0.84	1097	4	1.8	1753	1	0.13,0.094
426	2	0.22	1162	(1,2)		1915		
570	1	0.56	1220	1	0.083	1953		
624	1+3		1280	(3,4)		2002		
743	1	1.1	1339	2	0.060	2037	1	0.26
856	3	2.0	1457	4	0.44	2091		

<sup>†</sup> From 1987Ka29,  $\Delta E=5-10$  keV.

<sup>‡</sup> From comparisons of experimental cross-section data with the DWBA predictions (1987Ka29).

<sup>#</sup> From 1987Ka29,  $S=(2j+1)/N \times (d\sigma/d\Omega)_{\text{exp}}/\sigma_{\text{DWBA}}$ , N is the normalization factor and j is the angular momentum of transferred particle.