

$^{106}\text{Pd}(\alpha, \alpha')$  1992Ri02

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	D. De Frenne and A. Negret		NDS 109, 943 (2008)	1-May-2007

$E\alpha=30.5$  MeV. Measured  $\sigma(\theta)$ . Deduced:  $^{106}\text{Pd}$  levels optical model parameters. Coupled channel calculations, harmonic vibrational model. Deduced: deformation parameters, isoscalar transition rates. Enriched target. FWHM=70 keV.

 $^{106}\text{Pd}$  Levels

E(level) <sup>†</sup>	$J^\pi$ <sup>‡</sup>	Comments
0.0	0 <sup>+</sup>	
512	2 <sup>+</sup>	
1129	2 <sup>+</sup>	Member of an unresolved doublet with 1135 level. Angular distribution consistent with L=0+2.
1135	0 <sup>+</sup>	Member of an unresolved doublet with 1129 level. Angular distribution consistent with L=0+2.
1229	4 <sup>+</sup>	
2084	3 <sup>-</sup>	
2282	4 <sup>+</sup>	
2399	5 <sup>-</sup>	
2494	(3 <sup>-</sup> , 4 <sup>+</sup> )	$J^\pi$ : Adopted $J^\pi=1^-$ .
2646	4 <sup>+</sup>	
2758?	(3 <sup>-</sup> , 4 <sup>+</sup> )	$J^\pi=5^+$ in Adopted Levels. Unlikely that an unnatural parity level would be excited in $(\alpha, \alpha')$ .

<sup>†</sup> No uncertainties given by the authors.

<sup>‡</sup> From coupled-channel fits. In agreement with adopted values, unless noted otherwise.