

$^{113}\text{In}(\text{p,d})$ 1978EmZT

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	S. Lalkovski, F. G. Kondev		NDS 124, 157 (2015)	1-Aug-2014

1978EmZT: Beam: $E(\text{p})=27.3$ MeV; Target: $140 \mu\text{g}/\text{cm}^2$ enriched to 96.4% in ^{113}In and evaporated on $40 \mu\text{g}/\text{cm}^2$ carbon foil;
 Detectors: Colorado ΔE spectrometer, FWHM=12 keV; Measured: $\sigma(E,\theta)$; Deduced: level scheme, L, S from DWUCK4.
 $J^\pi(^{113}\text{In})=9/2^+$.

 ^{112}In Levels

E(level) [†]	L [‡]	C ² S [#]	Comments
0.0	4	0.03, 0.05	configuration: $(\pi 1g_{9/2})^{-1} \otimes (\nu 1g_{7/2})^{-1}$.
157	0	0.39	Unresolved doublet with $J^\pi=4^+, 5^+$ (1978EmZT). configuration: $(\pi 1g_{9/2})^{-1} \otimes (\nu 3s_{1/2})^{-1}$.
206	2+4		C ² S: 0.03 (L=2), 0.10 or 0.15 (L=4).
356	2	0.54, 0.63	
456	2+4		C ² S: 0.06 (L=2), 0.20 or 0.28 (L=4).
563	2	0.11, 0.13	
595	2(+4)		C ² S: 0.295 or 0.366 (L=2), 0.407 or 0.581 (L=4).
622	4	0.27, 0.39	
672	4	0.48, 0.65	
794	2(+4)	0.04, 0.06	
832	2+4		C ² S: 0.39 or 0.49 (L=2), 0.47 or 0.69 (L=4).
886	2	0.31, 0.40	
923	0+2		C ² S: 0.016 (L=0), 0.07 or 0.09 (L=2).
1003	2	0.14, 0.18	
1142	2(+0)		C ² S: 0.015 (L=0), 0.42 or 0.52 (L=2).
1213	2(+0)		E(level): possible doublet. C ² S: 0.012 (L=0), 0.76 or 0.95 (L=2).
1249	0+2		C ² S: 0.031 (L=0), 0.26 or 0.32 (L=2).
1340			
1374			
1401			
1438			
1531			
1554			
1593			
1676			
1738			
1783			

[†] From **1978EmZT**.

[‡] From **1978EmZT**, based on DWUCK4 analysis of the $d\sigma/d\Omega$ distributions.

[#] Given for two possible values: $J=L+1/2$ and $J=L-1/2$. $C^2S=(1/N)(2J+1)\sigma_{\text{exp}}/\sigma_{\text{DWBA}}$, $N=2.29$.