^{113}In(d,p) 2002SaZO

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 113, 515 (2012)	1-Jan-2012

2002SaZO: E=15 MeV. Measured E(p)(θ) at 17 angles between 5° and 88° using multigap magnetic spectrograph at Van de Graaff accelerator with FWHM=30 keV.
1974GlZO: (pol d,p) E=15 MeV. (FWHM=2.5 keV).
1967Hj03: E=15 MeV. Measured E(p)(θ).
J^π(^{113}In) target=9/2$^+$.

^{114}In Levels

E(level)	J^π	L	S	Comments
0	1$^{+\#}$	4‡	0.64	E(level): listed as 0.8 *7* in 2002SaZO. Configuration=$\pi g_{9/2}\otimes\nu g_{7/2}$.
190.25 *15*	5$^{+\#}$	0‡	0.43	Configuration=$\pi g_{9/2}\otimes\nu s_{1/2}$.
221.50 *21*	4$^{+\#}$	0+2	0.21+0.29	Configuration=$\pi g_{9/2}\otimes\nu s_{1/2}+\pi g_{9/2}\otimes\nu d_{3/2}$.
284.8 *12*	2$^{+\#}$	4	0.54	Configuration=$\pi g_{9/2}\otimes\nu g_{7/2}$.
497.0† *3*	5$^+$&8$^-$	2+5	0.76,0.54	E(level): unresolved doublet of 497.2, 5$^+$ and 501.9, 8$^-$ states. E=497.20 *8*, L=2, S=0.85; E=502.02 *25*, L=5, S=2.32 (1974GlZO). Configuration=$\pi g_{9/2}\otimes\nu d_{3/2}$ for 5$^+$ and $\pi g_{9/2}\otimes\nu h_{11/2}$ for 8$^-$. J^π: in Table 4 of 2002SaZO negative parity of 497.2 level is a misprint.
533.6† *10*	7$^-$	5	1.40	Configuration=$\pi g_{9/2}\otimes\nu h_{11/2}$. E=536.12 *11*, L=5, S=1.93 (1974GlZO).
573.0† *10*	6$^-$	5‡	1.29	Configuration=$\pi g_{9/2}\otimes\nu h_{11/2}$. E=574.50 *11*, L=5, S=2.23 (1974GlZO).
627.44† *20*	3$^{+\#}$	4	1.03	Configuration=$\pi g_{9/2}\otimes\nu g_{7/2}$.
640.4 *5*	9$^-$&7$^+$	5+2	1.37,0.20	E(level): unresolved doublet of 639.9, 9$^-$ and 641.7, 7$^+$ states. E=640.90 *9*, L=5, S=1.87; E=641.7, L=2, S=0.13 (1974GlZO). Configuration=$\pi g_{9/2}\otimes\nu h_{11/2}$ for 9$^-$ state and $\pi g_{9/2}\otimes\nu d_{5/2}$ for 7$^+$ state. J^π: in Table 4 of 2002SaZO negative parity of 641.7 level is a misprint.
692.3† *7*	8$^+$&5$^-$	4+5	0.42,1.75	E(level): unresolved doublet of 687.5, 8$^+$ and 696.4, 5$^-$ states. E=687.59 *15*, L=4, S=0.58; E=696.35 *13*, L=5, S=1.91 (1974GlZO). Configuration=$\pi g_{9/2}\otimes\nu g_{7/2}$ for 8$^+$ and $\pi g_{9/2}\otimes\nu h_{11/2}$ for 5$^-$. J^π: in Table 4 of 2002SaZO negative parity of 687.5 level is a misprint.
725.6† *8*	3$^+$&4$^{+\#}$	2+0	0.83,0.11	E(level): unresolved doublet of 725.1, 3$^+$ and 728.5, 4$^+$ states. E=725.28 *17*, L=2+0, S=0.83; E=728.55 *14*, L=2+0, S=0.83+0.11 (1974GlZO). Configuration=$\pi g_{9/2}\otimes\nu d_{3/2}$ for 3$^+$ and $\pi g_{9/2}\otimes\nu d_{3/2}+\pi g_{9/2}\otimes\nu s_{1/2}$ for 4$^+$.
777.8† *11*	4$^+$	4+2	0.83+0.16	E=775.66 *21*, L=4+2, S=0.75+0.14 (1974GlZO). Configuration=$\pi g_{9/2}\otimes\nu g_{7/2}+\pi g_{9/2}\otimes\nu d_{3/2}$.
830† *3*	2$^+$&4$^-$	2+5	0.30,1.41	E(level): unresolved doublet of 825, 2$^+$ and 835.7, 4$^-$ states. E=825.23 *14*, L=2, S=0.20; E=835.80 *17*, L=5, S=1.72 (1974GlZO). Configuration=$\pi g_{9/2}\otimes\nu d_{5/2}$ for 2$^+$ and $\pi g_{9/2}\otimes\nu h_{11/2}$ for 4$^-$. J^π: in Table 4 of 2002SaZO negative parity of 825 level is a misprint.
909.65† *15*	6$^{+\#}$	2‡	0.90	E(level),L,S: E=909.49 *5*, L=2, S=0.57 (1974GlZO). Configuration=$\pi g_{9/2}\otimes\nu d_{3/2}$.
1000.1 *6*	5$^{+\#}$	2	0.51	Configuration=$\pi g_{9/2}\otimes\nu d_{3/2}$.
1039.3 *7*	3$^-$&6$^{+\#}$	5+2	1.59,0.24	E(level): unresolved doublet of 1032, 3$^-$ and 1044.9, 6$^+$ states. Configuration=$\pi g_{9/2}\otimes\nu h_{11/2}$ for 3$^-$ and $\pi g_{9/2}\otimes\nu d_{5/2}$ for 6$^+$.
1138.52 *18*		2		
1217.9 *8*	10$^-$	5+0	0.83	Configuration=$\pi g_{9/2}\otimes\nu h_{11/2}$.
1256.4 *17*		2		
1295.4 *10*		2		

Continued on next page (footnotes at end of table)

^{113}In(d,p) 2002SaZO (continued)

^{114}In Levels (continued)

E(level)	L	E(level)	L	E(level)	L	E(level)	L
1341.4 *4*	2	1474.0 *9*	2	1556.9 *10*	2	1655.9 *21*	2
1401.5 *6*	2+0	1519.4 *20*	(2)	1619.0 *20*	(2)	1687.5 *16*	2

† Results of (pol d,p) from 1974GlZO (FWHM=2.5 keV), L-transfer and S values are given under comments.
‡ From 1967Hj03.
# In Table 4 of 2002SaZO negative parity is a misprint.