^{112}Cd(p,p′γ)   1992Ku01

History

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

1992Ku01: Beam: E(p)=7-9 MeV; Target: 1-2 mg/cm^2 enriched to 96% in ^{112}Cd; Detectors: one 19% Ge, four Si(Li), magnetic lens; Measured: P-γ coinc., Iγ, Eγ; Deduced: ^{112}Cd level scheme, J^{π}, γ-ray Mult.; Also, from the same collaboration: 1990KuZD, 1990KuZY, 1990KuZZ.

^{112}Cd Levels

E(level)[†]	J^{π}[‡]	E(level)[†]	J^{π}[‡]	E(level)[†]	J^{π}[‡]	E(level)[†]	J^{π}[‡]
0.0	0$^+$	1312.39 20	2$^+$	1468.71 20	2$^+$	2005.1 3	3$^-$
617.42 19	2$^+$	1415.37 25	4$^+$	1870.48 23	4$^+$	2064.3 3	3$^+$
1224.0 3	0$^+$	1433.3 3	0$^+$	1870.71 25	0$^+$	2081.51 24	4$^+$

[†] From a least-squares fit to Eγ.
[‡] From the Adopted Levels.

$γ(^{112}$Cd)

E$_γ$[†]	I$_γ$[†]	E$_i$(level)	J$^{π}_i$	E$_f$	J$^{π}_f$	E$_γ$[†]	I$_γ$[†]	E$_i$(level)	J$^{π}_i$	E$_f$	J$^{π}_f$
121.0 3	2.5 4	1433.3	0$^+$	1312.39	2$^+$	692.7 3	11 2	2005.1	3$^-$	1312.39	2$^+$
211.0 3		2081.51	4$^+$	1870.48	4$^+$	694.8 3	24 4	1312.39	2$^+$	617.42	2$^+$
244.8 3	<0.4	1468.71	2$^+$	1224.0	0$^+$	751.8 3	1.6 2	2064.3	3$^+$	1312.39	2$^+$
401.9 3		1870.48	4$^+$	1468.71	2$^+$	769.3 3		2081.51	4$^+$	1312.39	2$^+$
402.0 3	<0.2	1870.71	0$^+$	1468.71	2$^+$	797.9 3	17 3	1415.37	4$^+$	617.42	2$^+$
455.1 3		1870.48	4$^+$	1415.37	4$^+$	815.8 3	4.1 6	1433.3	0$^+$	617.42	2$^+$
558.0 3		1870.48	4$^+$	1312.39	2$^+$	851.2 3	8.0 12	1468.71	2$^+$	617.42	2$^+$
558.0 3	<0.3	1870.71	0$^+$	1312.39	2$^+$	1253.0 3		1870.48	4$^+$	617.42	2$^+$
606.7 3	12 2	1224.0	0$^+$	617.42	2$^+$	1253.6 3	4.9 7	1870.71	0$^+$	617.42	2$^+$
612.8 3		2081.51	4$^+$	1468.71	2$^+$	1312.3 3	7.8 12	1312.39	2$^+$	0.0	0$^+$
617.4 3	1000	617.42	2$^+$	0.0	0$^+$	1387.7 3	18 3	2005.1	3$^-$	617.42	2$^+$
649.0 3		2064.3	3$^+$	1415.37	4$^+$	1446.8 3	1.3 2	2064.3	3$^+$	617.42	2$^+$
666.0 3	<0.7	2081.51	4$^+$	1415.37	4$^+$	1468.8 3	3.8 6	1468.71	2$^+$	0.0	0$^+$

[†] From 1992Ku01.

^{112}**Cd(p,p′γ)**   **1992Ku01**
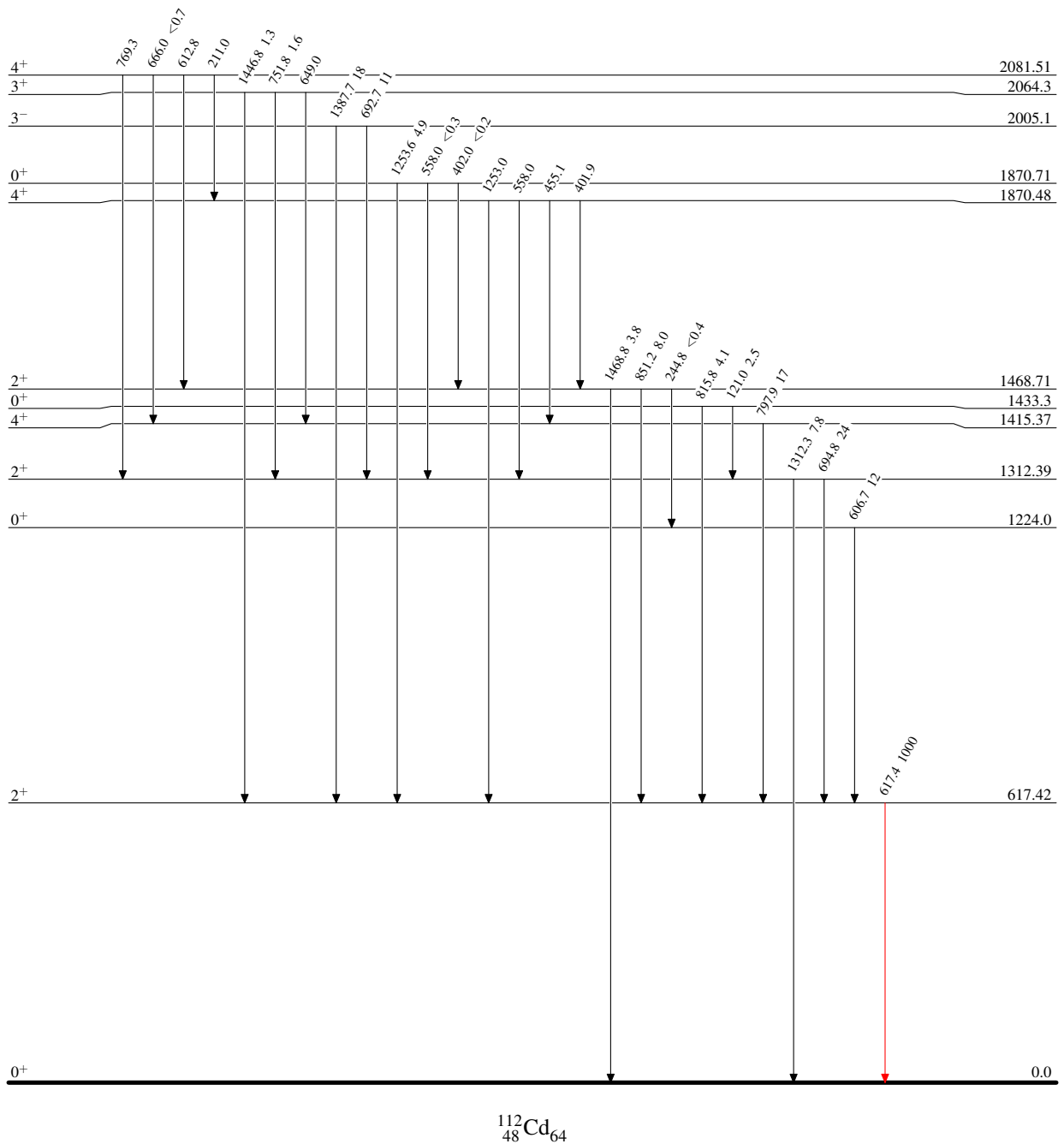
<u>Level Scheme</u>

Intensities: Type not specified

Legend

$I_\gamma < 2\% \times I_\gamma^{max}$
$I_\gamma < 10\% \times I_\gamma^{max}$
$I_\gamma > 10\% \times I_\gamma^{max}$

4$^+$	2081.51
3$^+$	2064.3
3$^-$	2005.1
0$^+$	1870.71
4$^+$	1870.48
2$^+$	1468.71
0$^+$	1433.3
4$^+$	1415.37
2$^+$	1312.39
0$^+$	1224.0
2$^+$	617.42
0$^+$	0.0

$^{112}_{48}$Cd$_{64}$