

⁶⁵Cu(d,γ) 1972BI16

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli		NDS 111, 1093 (2010)	3-Mar-2009

E(d)=6.5 MeV, pulsed beam; measured E_γ, delayed γ's, prompt and delayed γγ coincidences, γ(θ,H,t), T_{1/2}; NaI's, Ge(Li)'s.

⁶⁶Cu Levels

E(level) [†]	J ^π [‡]	T _{1/2}	Comments
0.0	1 ⁺		
185.8 7	2 ⁺		
237.7 10			
275.0 8	3 ⁺		
385.6 7	(1 ⁺)		
465.1 6	2 ⁺		
590.9 9	4 ⁺		
729.7 10	3 ⁺		
822.7 6	2 ⁺		
1008.5 8			
1017.3 7	3 ⁺		
1053.0 7	1 ⁺		
1154.2 14	(6) ⁻	600 ns 20	g=+0.1733 5 T _{1/2} : from measurement of delayed-γγ coincidences. g: From measurement of γ(θ,H,t), uncorrected for Knight shift and diamagnetic shielding.
1212.5 8	1 ⁺ ,2 ⁺		
1247.2 13	4 ⁻		
1343.9 12	1 ⁺		
1432.2 9	1 ⁺		
1550.0 11	1 ⁺ ,2 ⁺ ,3 ⁺		
1822.0 9	1 ⁺		

[†] From least-squares fit to E_γ data. An uncertainty on each E_γ of 1 keV (given as an approximate upper limit by 1972BI16) has been used by the evaluators in the calculation.

[‡] From Adopted Levels.

γ(⁶⁶Cu)

E _γ [†]	E _i (level)	J _i ^π	E _f	J _f ^π	Mult.	E _γ [†]	E _i (level)	J _i ^π	E _f	J _f ^π
89.14	275.0	3 ⁺	185.8	2 ⁺		622.7	1008.5		385.6	(1 ⁺)
185.91	185.8	2 ⁺	0.0	1 ⁺		769	1822.0	1 ⁺	1053.0	1 ⁺
194.34	1017.3	3 ⁺	822.7	2 ⁺		822.6 [#]	822.7	2 ⁺	0.0	1 ⁺
237.66	237.7		0.0	1 ⁺		822.6 [#]	1008.5		185.8	2 ⁺
315.69	590.9	4 ⁺	275.0	3 ⁺		832	1017.3	3 ⁺	185.8	2 ⁺
357.5	822.7	2 ⁺	465.1	2 ⁺		878.7	1343.9	1 ⁺	465.1	2 ⁺
385.61	385.6	(1 ⁺)	0.0	1 ⁺		937.4	1212.5	1 ⁺ ,2 ⁺	275.0	3 ⁺
426.3	1017.3	3 ⁺	590.9	4 ⁺		959	1550.0	1 ⁺ ,2 ⁺ ,3 ⁺	590.9	4 ⁺
437.1	822.7	2 ⁺	385.6	(1 ⁺)		966.7	1432.2	1 ⁺	465.1	2 ⁺
454.68	729.7	3 ⁺	275.0	3 ⁺		972.16	1247.2	4 ⁻	275.0	3 ⁺
465.00	465.1	2 ⁺	0.0	1 ⁺		999.3	1822.0	1 ⁺	822.7	2 ⁺
543.8 [#]	1008.5		465.1	2 ⁺		1047	1432.2	1 ⁺	385.6	(1 ⁺)
543.83 [#]	729.7	3 ⁺	185.8	2 ⁺		1053.0	1053.0	1 ⁺	0.0	1 ⁺
552.0	1017.3	3 ⁺	465.1	2 ⁺		1212.6	1212.5	1 ⁺ ,2 ⁺	0.0	1 ⁺
563.34	1154.2	(6) ⁻	590.9	4 ⁺	[M2] [‡]	1275	1550.0	1 ⁺ ,2 ⁺ ,3 ⁺	275.0	3 ⁺
587.9	1053.0	1 ⁺	465.1	2 ⁺						

Continued on next page (footnotes at end of table)

 ${}^{65}\text{Cu}(\text{d},\text{p}\gamma)$ **1972BI16 (continued)** $\gamma({}^{66}\text{Cu})$ (continued)

† $\Delta E_{\gamma}=0.1-1.0$ keV.

‡ from Adopted Levels.

Multiply placed.

$^{65}\text{Cu}(\text{d},\text{p}\gamma)$ 1972B116

Legend

Level Scheme

● Coincidence

