Coulomb excitation

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	ENSDF	1-Jul-2008

1980Br01 (x,x′γ) x=^{32}s E=72− 80 MeV.
1976Es02 (x,x′) x=α E=8− 17 MeV, x=^{16}O E=40− 44 MeV.
1969Mi07 (x,x′γ) x=p E=2.7,3.0 MeV, x=α E=9-11 MeV, x=^{16}O E=49 MeV.
Others: 1958St32, 1965Ro09.

^{108}Cd Levels

E(level)	J$^\pi$[†]	$T_{1/2}$	Comments
0	0^+		
633.2 *3*	2^+	6.86 ps *7*	B(E2)↑=0.406 *4*; g=0.34 *9*; Q=−0.45 *8* $T_{1/2}$: from B(E2). B(E2)↑: from 1976Es02. Other: 0.442 *18* (1969Mi07) x=p. g: from 1980Br01, $\gamma(\theta)$, recoil through thin magnetized Fe layer on Cu backing. Dynamic field calibrated using g-factor= 0.285 *55* for 2^+ level in ^{110}Cd (1989Ra17). Q: from 1976Es02, reorientation effect. Value given is for constructive interference from excitation via the second 2^+ level. If the interference is destructive, Q=− 0.20 *8*.
1503 *5*	4^+	0.88 ps *11*	$T_{1/2}$: from B(E2)(870γ) with Eγ= 875.46 *5*. B(E2)(2^+ to 4^+)=0.223 *21* from 1969Mi07 x=α.
1603 *1*	2^+	0.46 ps *7*	B(E2)↑=0.028 *4* (1969Mi07) B(E2)↑: from 1969Mi07 (x=α). $T_{1/2}$: from B(E2)(1603γ) with Eγ=1601.2 *3*, Iγ=48.5% *9*.

[†] From Adopted Levels.

$\gamma(^{108}Cd)$

E$_\gamma$[†]	I$_\gamma$[‡]	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$	Mult.	δ	Comments
633.2 *3*	100	633.2	2^+	0	0^+			
870 *5*	100	1503	4^+	633.2	2^+			
970 *1*	100	1603	2^+	633.2	2^+	D+Q	−1.5 *+6−15*	δ: from $\alpha,\gamma(\theta)$ (1969Mi07).
1603 *1*	85 *7*	1603	2^+	0	0^+			

[†] From 1969Mi07.
[‡] Relative photon branching from each level (1969Mi07).

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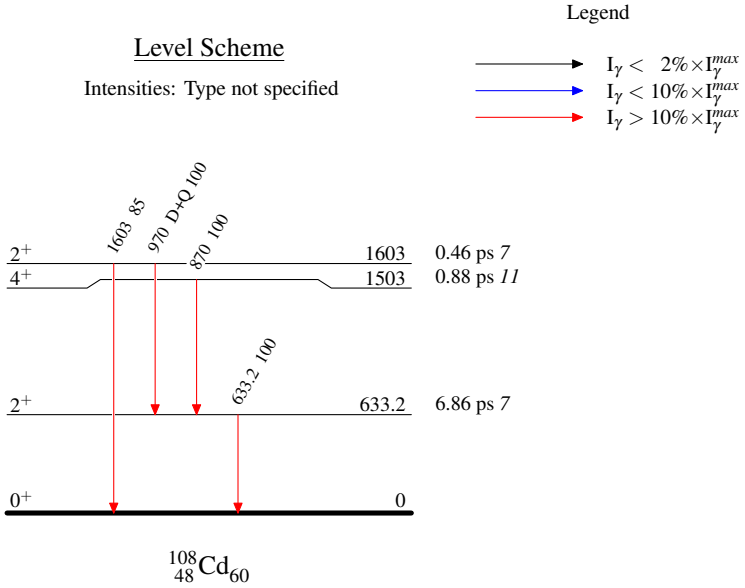
Level Scheme

Intensities: Type not specified



$^{108}_{48}Cd_{60}$