^{109}Ag(p,2nγ) 1992Ku01

History

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

E(p)= 12.7 MeV, enriched target 99%.

Measured γ, γγ, γ(θ), two Compton suppressed Ge detectors, excitation functions between 12.3 and 17.4 MeV. Five angles between 90° and 158°.

Others: 1964Sa13, 1965Ej01, 1966Ej02, 1966Ej03; measured ce(K), K/L+M ratio, and Iγ(180°)/Iγ(90°).

Measured γ, pγ coin, ce electron spectrometer.

^{108}Cd Levels

E(level)	Jπ	$T_{1/2}$	E(level)	Jπ	E(level)	Jπ
0	0^+	stable	1721.0 *3*	0^+	2201.9 *3*	3^-
632.9 *3*	2^+		1913.3 *3*	0^+	2239.2 *3*	4^+
1508.3 *3*	4^+		2145.6 *3*	3^+	2365.7 *3*	2^+
1601.7 *3*	2^+		2162.5 *3*	2^+	2374.7 *3*	(0^+)
					2486.0 *3*	2^+

γ(^{108}Cd)

E_γ	I_γ[‡]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[†]	δ	Comments
311.3 *3*	4 *1*	1913.3	0^+	1601.7	2^+	E2		
544.2 *3*	6.0	2145.6	3^+	1601.7	2^+	M1+E2	−1.22 *12*	Mult.: δ from (n,n′γ) and Adopted Levels, Gammas.
600.2 *3*	3.0	2201.9	3^-	1601.7	2^+			
632.9 *3*	1000	632.9	2^+	0	0^+	E2		
637.3 *3*	4 *1*	2145.6	3^+	1508.3	4^+			
637.5 *3*	3.1	2239.2	4^+	1601.7	2^+			
730.9 *3*	27	2239.2	4^+	1508.3	4^+	M1+E2	−0.43 *2*	Mult.: δ from (n,n′γ) and Adopted Levels, Gammas.
772.7 *3*	1.0	2374.7	(0^+)	1601.7	2^+	(E2)[#]		
875.4 *3*	343	1508.3	4^+	632.9	2^+	E2		
884.5 *3*	2.7	2486.0	2^+	1601.7	2^+			
969.1 *3*	68	1601.7	2^+	632.9	2^+	M1,E2		
1088.1 *3*	15	1721.0	0^+	632.9	2^+	E2		
1280.6 *3*	5 *1*	1913.3	0^+	632.9	2^+	E2		
1512.7 *3*	48	2145.6	3^+	632.9	2^+	M1+E2	−1.84 *3*	Mult.: δ from (n,n′γ) and Adopted Levels, Gammas.
1529.6 *1*	30	2162.5	2^+	632.9	2^+	M1+E2	+0.13 *2*	Mult.: δ from (n,n′γ) and Adopted Levels, Gammas.
1569.0 *3*	62	2201.9	3^-	632.9	2^+	E1		
1601.7 *3*	62	1601.7	2^+	0	0^+	E2		
1606.3 *3*	23	2239.2	4^+	632.9	2^+	E2		
1732.8 *3*	17	2365.7	2^+	632.9	2^+	M1+E2	−0.151 *14*	Mult.: δ from (n,n′γ) and Adopted Levels, Gammas.
1741.8 *3*	5.4	2374.7	(0^+)	632.9	2^+	(E2)		
1853.2 *3*	15	2486.0	2^+	632.9	2^+	E2+M1	−0.61 *3*	Mult.: δ from (n,n′γ) and Adopted Levels, Gammas.
2162.5 *3*	1.7	2162.5	2^+	0	0^+	E2		
2365.7 *3*	2.7	2365.7	2^+	0	0^+	E2		
2486.0 *3*		2486.0	2^+	0	0^+			

[†] From γ(θ) determined here, and α(K)exp from authors′ decay and (p,p′γ) works.

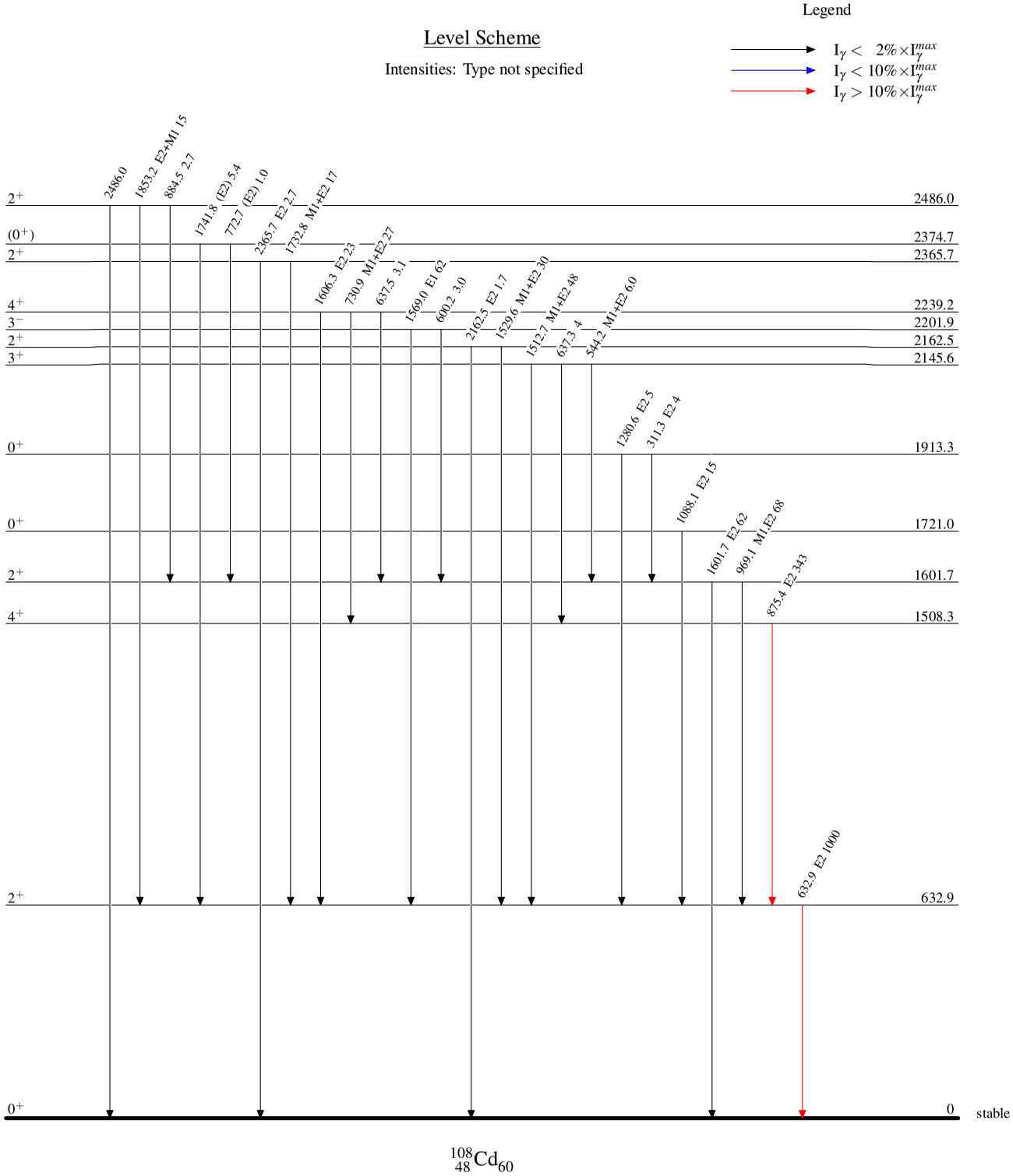
[‡] Intensity error typically 15%.

[#] From α(K)exp only.

^{109}Ag(p,2nγ) 1992Ku01

Level Scheme

Intensities: Type not specified



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