

Coulomb excitation 1969Mi07

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	G. Gürdal and F. G. Kondev	NDS 113, 1315 (2012)		1-Aug-2011

1969Mi07: $^{110}\text{Cd}(\text{p},\text{p}'\gamma)$, $E_{\text{p}}=2.7, 3.0$ MeV. γ -rays were detected using a 30 cm^3 Ge(Li) detector for B(E2) measurements. For angular distribution measurements: $^{110}\text{Cd}(\alpha,\alpha'\gamma)$, $E_{\alpha}=9\text{--}11$ MeV. Measured: E_{γ} , I_{γ} , $\gamma\gamma$ -coin., $\gamma(\theta)$ ($\gamma=0^{\circ}$ to 90°). Deduced: ^{110}Cd energy levels, B(E2) $\uparrow$, J.

Others: [1985Fe05](#), [1985Si01](#), [1980Br01](#), [1977Ma41](#), [1976Es02](#), [1972Be66](#), [1971Be36](#), [1971Ha08](#), [1970St17](#), [1965Mc05](#), [1961St02](#), [1956Te26](#).

 ^{110}Cd Levels

E(level) †	J $\pi^{\ddagger}$	Comments
0.0	0 $^{+}$	
657.7 3	2 $^{+}$	B(E2) $\uparrow$ =0.427 3 Q=-0.39 4 B(E2) $\uparrow$: Weighted average of 0.415 6 (1985Si01), 0.427 4 (1976Es02), 0.432 6 (1972Be66 and 1971Be36), 0.44 4 (1971Ha08), 0.467 19 (1969Mi07), 0.50 4 (1958St32), 0.41 6 (1956Te26) and 0.436 22 (relative to B(E2) $\uparrow$ (^{114}Cd) in 1970St17). Others: 0.459 (average of 0.474, 0.444, 0.460 and 0.456 in 1965Mc05), and 0.42 (1958Sh01). μ : 0.57 11 using dynamic field technique (1980Br01) and 0.62 14, using recoil gas into vacuum technique (1979LaZL). Q: Weighted average of -0.39 6 (1977Ma41), -0.36 8 (1976Es02) and -0.42 10 (1971Be36). Others: -0.55 8 (or -0.31 7 in 1971Ha08) and -0.24 9 (relative to ^{114}Cd in 1970St17).
1475.5 5	2 $^{+}$	B(E2) $\uparrow$ =0.021 3 B(E2) $\uparrow$: Weighted average of 0.021 3 (1969Mi07) and 0.023 7 (1961St02).
1543 9	4 $^{+}$	
2078.8 3	3 $^{-}$	B(E3) $\uparrow$ =0.111 11 B(E3) $\uparrow$: Weighted average of 0.10 2 (from 1965Mc05 , under assumption that only direct E3 excitation is involved) and 0.115 13 (1985Fe05).

† From least-squares fit to E_{γ} 's.

‡ From [1969Mi07](#).

 $\gamma(^{110}\text{Cd})$

$E_{\gamma}^{\dagger}$	$I_{\gamma}^{\dagger}$	$E_i(\text{level})$	J $\pi_i^{\dagger}$	E_f	J $\pi_f^{\dagger}$	Mult.	$\delta^{\dagger}$	Comments
657.7 3		657.7	2 $^{+}$	0.0	0 $^{+}$			
817.8 5	65	1475.5	2 $^{+}$	657.7	2 $^{+}$	M1+E2	-1.5 +9-4	
885 9		1543	4 $^{+}$	657.7	2 $^{+}$			E_{γ} : From 1965Mc05 .
1421.086 16		2078.8	3 $^{-}$	657.7	2 $^{+}$			E_{γ} : From adopted gammas. 1395 keV 14 in 1965Mc05 .
1475.5 6	35	1475.5	2 $^{+}$	0.0	0 $^{+}$			

† From [1969Mi07](#), unless otherwise stated.

Coulomb excitation 1969Mi07**Level Scheme**

Intensities: Type not specified

Legend

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

