

$^{106}\text{Cd}(^{12}\text{C},2n\gamma)$ 1981Gi13

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 111, 717 (2010)	1-Dec-2009

$E(^{12}\text{C})=48-61$ MeV, max. Production yield: 52 MeV, enriched target: 64%.

Measured: $\gamma(\theta)$, $\gamma\text{-}\gamma(\theta)$, $\gamma(\theta)$, Ge(Li) detectors.

Level scheme based on $\gamma\gamma$ coincidence has been constructed by 1981Gi13.

 ^{116}Xe Levels

E(level)	J^π †	Comments
0	0^+	
393.5 2	2^+	
917.8 2	4^+	
1532.9 3	6^+	
2210.4 6	(8^+)	
2961.4? 6	(10^+)	E(level): not confirmed by 1998Se08.
3744?	(12^+)	

† From 1981Gi13 $\gamma(\theta)$ and syst, g.s. band members.

 $\gamma(^{116}\text{Xe})$

E_γ	I_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult.	Comments
393.5 2	100	393.5	2^+	0	0^+	E2	Mult.: from $A_2=0.11$ 3, $A_4=-0.04$ 4, Q assumed to be E2.
524.3 2	95 8	917.8	4^+	393.5	2^+	E2	Mult.: from $A_2=0.30$ 4, $A_4=-0.16$ 8, Q assumed to be E2.
615.1 3	91 15	1532.9	6^+	917.8	4^+	E2	Mult.: from $A_2=0.31$ 6, $A_4=0.02$ 8, Q assumed to be E2.
677.5 6	77 10	2210.4	(8^+)	1532.9	6^+		
751.0 6	43 10	2961.4?	(10^+)	2210.4	(8^+)		
783	≈ 30	3744?	(12^+)	2961.4?	(10^+)		

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Level Scheme

Intensities: Relative I_γ

Legend

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

