

$^{235}\text{U}(\text{n},\text{F}\gamma)$ 2012Mu08

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 187,1 (2023)	12-Oct-2022

2012Mu08: E=thermal neutrons from the Canada India Research Utility Services (CIRUS) reactor facility, Bhabha Atomic Research Center (BARC), Mumbai. Target $\approx 5.1 \text{ gm/cm}^3 \text{ UAl}_3$ (17% enriched ^{235}U). Gamma rays were detected by two clover HPGe detectors equipped with anti-Compton shields, in coincidence mode. Measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin. Deduced levels, J, π , isotopic yield, angular momentum distribution.

 ^{141}Ba Levels

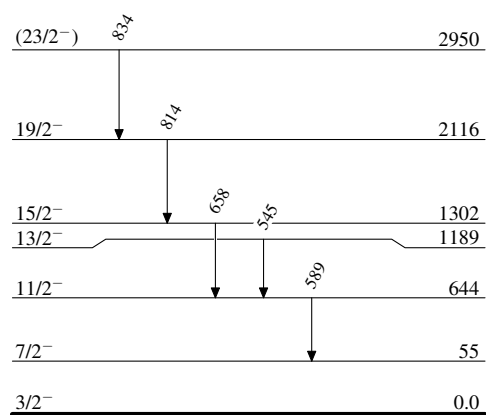
E(level)	J^π [†]	Comments
0.0	$3/2^-$	
48	$5/2^-$	
55 [‡]	$7/2^-$	
644 [‡]	$11/2^-$	
1189	$13/2^-$	
1302 [‡]	$15/2^-$	
2116 [‡]	$19/2^-$	
2950 [‡]	$(23/2^-)$	J^π : from 2002Lu08.

[†] From 2002Ur04, unless noted otherwise. Except for the g.s. value all the other assignments are tentative in the Adopted Levels, Gammas dataset.

[‡] Band(A): simplex $s=+i$, $\alpha=-1/2$, g.s. band.

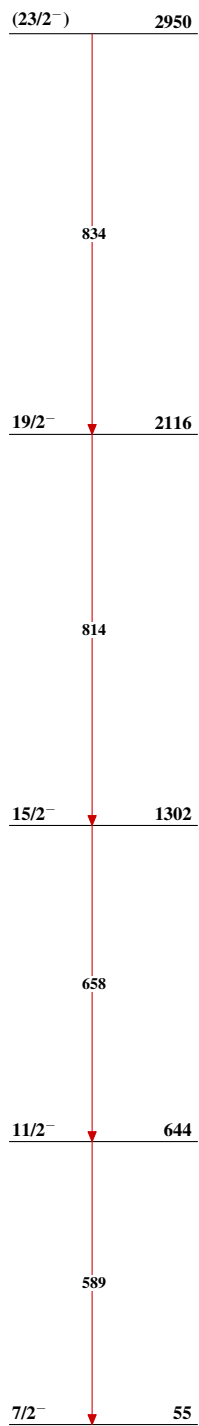
 $\gamma(^{141}\text{Ba})$

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
545	1189	$13/2^-$	644	$11/2^-$
589	644	$11/2^-$	55	$7/2^-$
658	1302	$15/2^-$	644	$11/2^-$
814	2116	$19/2^-$	1302	$15/2^-$
834	2950	$(23/2^-)$	2116	$19/2^-$

$^{235}\text{U}(\text{n},\text{F}\gamma)$ 2012Mu08Level Scheme $^{141}_{56}\text{Ba}_{85}$

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Band(A): Simplex s=+i,
 $\alpha=-1/2$, g.s. band

 $^{141}_{56}\text{Ba}_{85}$