

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

| Type | Author | History Citation | Literature Cutoff Date |
|-----------------|---------|---------------------|------------------------|
| Full Evaluation | N. Nica | NDS 154, 1 (2018) | 20-Nov-2018 |

Dataset based on unevaluated XUNDL file compiled by E. Thiagalingam and B. Singh (McMaster) from 2012Mu08.

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_γ , I_γ , $\gamma\gamma$ -coin. Deduced levels, J, π , isotopic yield, angular momentum distribution.

 ^{140}Ba Levels

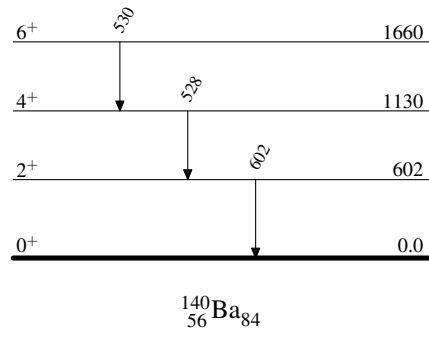
| E(level) | J^π [†] |
|-------------------|----------------------|
| 0.0 [‡] | 0 ⁺ |
| 602 [‡] | 2 ⁺ |
| 1130 [‡] | 4 ⁺ |
| 1660 [‡] | 6 ⁺ |

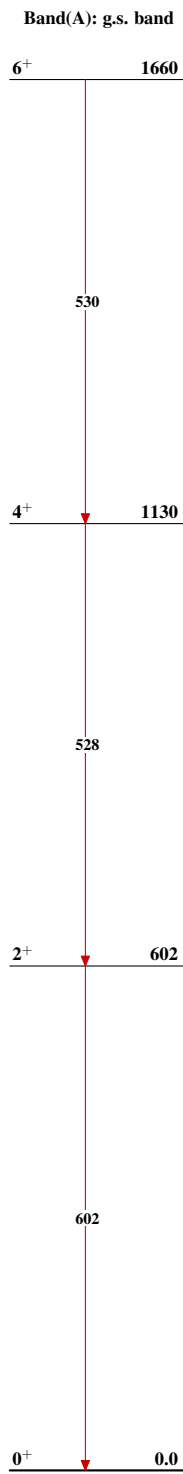
[†] From the Adopted Levels.

[‡] Band(A): g.s. band.

 $\gamma(^{140}\text{Ba})$

| E_γ | $E_i(\text{level})$ | J_i^π | E_f | J_f^π |
|------------|---------------------|----------------|-------|----------------|
| 528 | 1130 | 4 ⁺ | 602 | 2 ⁺ |
| 530 | 1660 | 6 ⁺ | 1130 | 4 ⁺ |
| 602 | 602 | 2 ⁺ | 0.0 | 0 ⁺ |

 $^{235}\text{U}(\text{n},\text{F}\gamma)$ 2012Mu08Level Scheme

$^{235}\text{U}(\text{n},\text{F}\gamma)$ 2012Mu08 $^{140}_{56}\text{Ba}_{84}$