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

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Zoltan Elekes and Janos Timar		NDS 129, 191 (2015)	28-Feb-2015

2012Mu08: E=thermal neutrons from the Canada India Research Utility Services (CIRUS) reactor facility, Bhabha Atomic Research Center (BARC), Mumbai. Target ≈ 5.1 gm/cm³ UAl₃ (17% enriched ^{235}U). Gamma rays were detected by two clover HPGe detectors equipped with anti-Compton shields, in coincidence mode. Measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coincidence. Deduced levels, J, π , isotopic yield, angular momentum distribution.

 ^{128}Te Levels

<u>E(level)</u>	<u>Jπ</u>
0 [†]	0 ⁺
743 [†]	2 ⁺
1497 [†]	4 ⁺
1811 [†]	6 ⁺

[†] Band(A): g.s. band.

 $\gamma(^{128}\text{Te})$

<u>Eγ</u>	<u>Iγ[†]</u>	<u>E_i(level)</u>	<u>Jπ_i</u>	<u>E_f</u>	<u>Jπ_f</u>
314	63 3	1811	6 ⁺	1497	4 ⁺
743	>100	743	2 ⁺	0	0 ⁺
754	100 5	1497	4 ⁺	743	2 ⁺

[†] **2012Mu08** mention uncertainties of 5% to 25% depending on the γ ray intensity. Compilers assign 5% for γ rays with $I\gamma \geq 50$, 15% for $I\gamma = 20-50$ and 25% for $I\gamma < 20$.

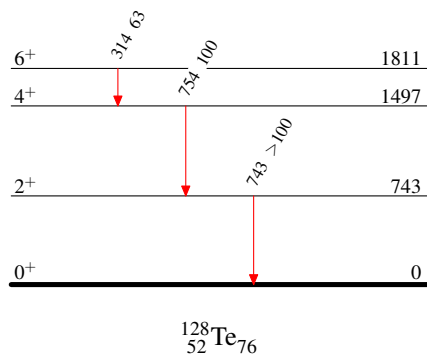
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Level Scheme

Intensities: Relative I_γ

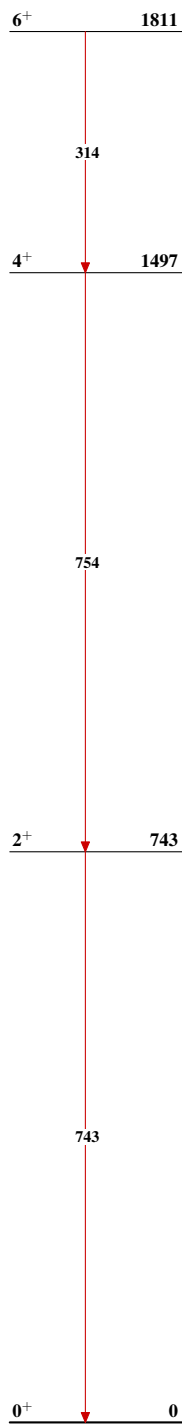
Legend

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



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$^{128}_{52}\text{Te}_{76}$