

$^{127}\text{I}(\mu^-, \nu 2n\gamma)$ **2007Me09**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	J. Katakura	NDS 112, 495 (2011)	1-Jan-2010

2007Me09: measured E_γ , I_γ .

1971Ba10: measured E_γ , I_γ .

XUNDL data set compiled by S. Geraedts and B. Singh (McMaster), May 3, 2007, is consulted.

The μ^- beam obtained from decay of π^- beam at 90 MeV/c. Measured γ -ray yields using two HPGe detectors at TRIUMF facility. (**2007Me09**).

 ^{125}Te Levels

E(level)	J^π [‡]	Percent yield per muon capture	Comments
0.0	1/2 ⁺		
35.49 [†]	3/2 ⁺		Additional information 1.
144.78 [†]	11/2 ⁻		Additional information 2.
321.1 10	9/2 ⁻	1.6 30	Percent yield per muon capture: Known cascading=1.4(5)%.
443.6 7	3/2 ⁺	2.9 9	
463.4 7	5/2 ⁺	3.3 5	
525.2 10	7/2 ⁻	2.0 5	
636.1 10	7/2 ⁺	1.6 10	
642.2 10	7/2 ⁺	1.5 8	
671.4 10	5/2 ⁺	1.1 4	
786.6 15	7/2 ⁻	1.1 5	

[†] Rounded-off value from Adopted Levels.

[‡] From Adopted Levels.

 $\gamma(^{125}\text{Te})$

E_γ	I_γ [†]	$E_i(\text{level})$	J_i^π	E_f	J_f^π
176.31	3 3	321.1	9/2 ⁻	144.78	11/2 ⁻
380.45	1.6 4	525.2	7/2 ⁻	144.78	11/2 ⁻
408.07	0.8 3	443.6	3/2 ⁺	35.49	3/2 ⁺
427.87	2.4 4	463.4	5/2 ⁺	35.49	3/2 ⁺
443.56	2.1 8	443.6	3/2 ⁺	0.0	1/2 ⁺
463.37	0.9 3	463.4	5/2 ⁺	0.0	1/2 ⁺
465.55	1.0 5	786.6	7/2 ⁻	321.1	9/2 ⁻
600.60	1.6 10	636.1	7/2 ⁺	35.49	3/2 ⁺
606.71	1.3 8	642.2	7/2 ⁺	35.49	3/2 ⁺
635.95	0.9 4	671.4	5/2 ⁺	35.49	3/2 ⁺

[†] γ -ray yield per 100 μ captures, not corrected for cascading.

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Level Scheme

Intensities: Percent γ -ray yield/muon capture

Legend

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

