

$^{244}\text{Pu}(^{47}\text{Ti}, ^{47}\text{Ti}'\gamma)$  2016Ho13

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	C. D. Nesaraja	NDS 146, 387 (2017)	31-Aug-2017

**2016Ho13** (see also [2012TaZO](#) and [2011ChZZ](#)): A  $^{47}\text{Ti}$  beam from ATLAS accelerator at Argonne National Laboratory with an energy of 305 MeV was incident on a  $^{244}\text{Pu}$  target.  $\gamma\gamma$ -coin data were measured in the beam-off periods using the Gammasphere array.

 $^{244}\text{Pu}$  Levels

E(level) <sup>†</sup>	J <sup>π</sup> <sup>‡</sup>	T <sub>1/2</sub>	Comments
0.0	0 <sup>+</sup>		
44.2 4	2 <sup>+</sup>		
149.9 6	4 <sup>+</sup>		
313.0 5	6 <sup>+</sup>		
530.2 7	8 <sup>+</sup>		
1201.5 8	7 <sup>-</sup>		
1211.2 5	8 <sup>-</sup>	1.75 s 12	T <sub>1/2</sub> : From decay curve ( <a href="#">2016Ho13</a> ). J <sup>π</sup> : From systematics with a similar excitation energy and decay pattern of previously observed 2-quasineutron 8 <sup>-</sup> isomer in heavier N=150 isotones $^{246}\text{Cm}$ , $^{250}\text{Fm}$ , and $^{252}\text{No}$ ( <a href="#">2016Ho13</a> , <a href="#">2011ChZZ</a> ).

<sup>†</sup> From Adopted Levels.

<sup>‡</sup> From Adopted Levels except as noted.

 $\gamma(^{244}\text{Pu})$ 

E <sub>γ</sub> <sup>†</sup>	E <sub>i</sub> (level)	J <sub>i</sub> <sup>π</sup>	E <sub>f</sub>	J <sub>f</sub> <sup>π</sup>	Comments
(9.7 <sup>‡</sup> )	1211.2	8 <sup>-</sup>	1201.5	7 <sup>-</sup>	E <sub>γ</sub> : Fig.2 in <a href="#">2016Ho13</a> indicated the unobserved gamma in parenthesis as 10 keV.
(44.2 <sup>‡</sup> 4)	44.2	2 <sup>+</sup>	0.0	0 <sup>+</sup>	
(105.7 <sup>‡</sup> 6)	149.9	4 <sup>+</sup>	44.2	2 <sup>+</sup>	
163	313.0	6 <sup>+</sup>	149.9	4 <sup>+</sup>	
217	530.2	8 <sup>+</sup>	313.0	6 <sup>+</sup>	
671	1201.5	7 <sup>-</sup>	530.2	8 <sup>+</sup>	
681	1211.2	8 <sup>-</sup>	530.2	8 <sup>+</sup>	

<sup>†</sup> From [2016Ho13](#) except as noted. No uncertainties were provided in [2016Ho13](#). An email reply on 28 August, 2016 to the evaluator from third author (P. Chowdhury) in [2016Ho13](#) estimates uncertainties between 0.5 and 1 keV.

<sup>‡</sup> Gamma has not been observed. Its energy is from level energy difference.

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Legend

Level Scheme-----►  $\gamma$  Decay (Uncertain)