

$^{232}\text{Th}(^{56}\text{Fe},\text{X}\gamma) \text{ E=362 MeV} \quad \text{2000BuZY}$ 

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli		NDS 113, 2113 (2012)	1-May-2012

 $^{232}\text{Th}(^{86}\text{Kr},\text{X}), \text{E}=511 \text{ MeV}, ^{232}\text{Th}(^{136}\text{Xe},\text{X}), \text{E}=830 \text{ MeV}.$ 

Measured  $\text{E}\gamma$ ,  $\text{I}\gamma$ ,  $\gamma\gamma$  coin,  $\gamma\gamma(\text{t})$  coin, angular correlation coefficients. Detector: GAMMASPHERE, a  $\gamma$ -ray array of 73 Compton-suppressed hyperpure germanium detectors.

 $^{230}\text{Ra}$  Levels

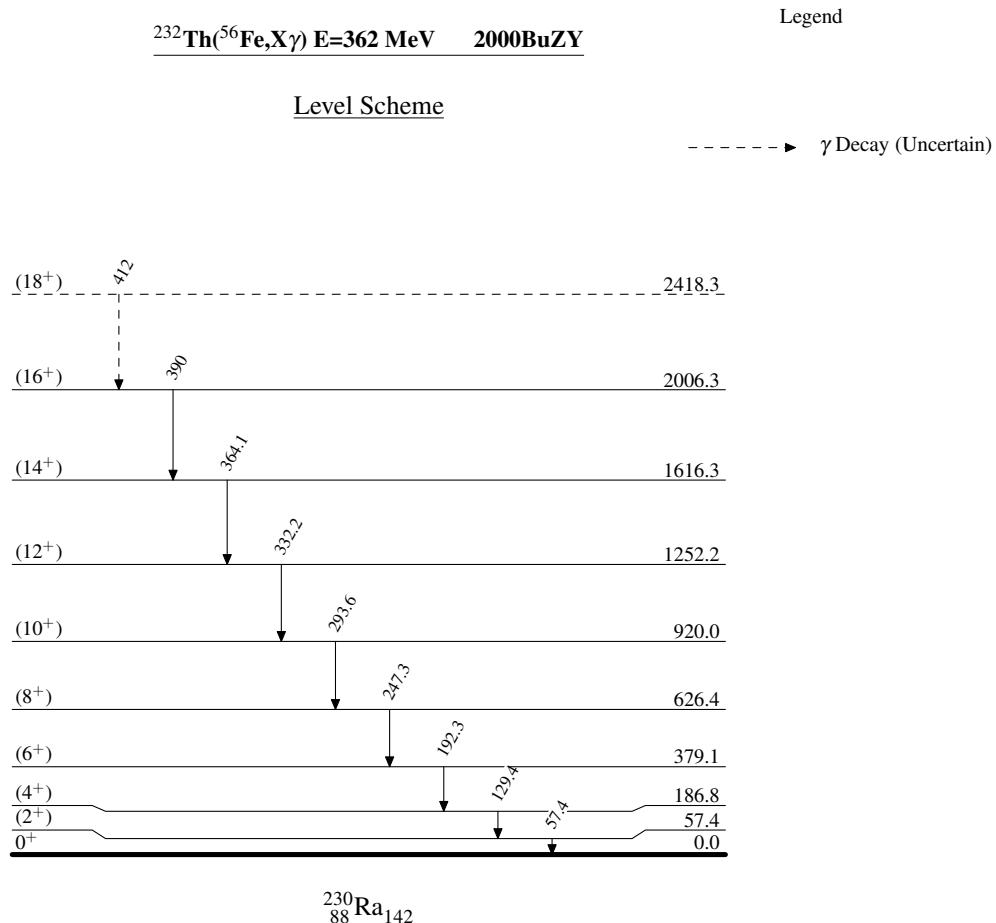
E(level)	J $^\pi$
0.0 <sup>†</sup>	0 $^+$
57.4 <sup>†</sup>	(2 $^+$ )
186.8 <sup>†</sup>	(4 $^+$ )
379.1 <sup>†</sup>	(6 $^+$ )
626.4 <sup>†</sup>	(8 $^+$ )
920.0 <sup>†</sup>	(10 $^+$ )
1252.2 <sup>†</sup>	(12 $^+$ )
1616.3 <sup>†</sup>	(14 $^+$ )
2006.3 <sup>†</sup>	(16 $^+$ )
2418.3? <sup>†</sup>	(18 $^+$ )

<sup>†</sup> Band(A):  $K^\pi=0^+$  g.s. rotational band.

 $\gamma(^{230}\text{Ra})$ 

E $_\gamma$	E $_i$ (level)	J $^\pi_i$	E $_f$	J $^\pi_f$
(57.4)	57.4	(2 $^+$ )	0.0	0 $^+$
129.4	186.8	(4 $^+$ )	57.4 (2 $^+$ )	
192.3	379.1	(6 $^+$ )	186.8 (4 $^+$ )	
247.3	626.4	(8 $^+$ )	379.1 (6 $^+$ )	
293.6	920.0	(10 $^+$ )	626.4 (8 $^+$ )	
332.2	1252.2	(12 $^+$ )	920.0 (10 $^+$ )	
364.1	1616.3	(14 $^+$ )	1252.2 (12 $^+$ )	
390	2006.3	(16 $^+$ )	1616.3 (14 $^+$ )	
412 <sup>†</sup>	2418.3?	(18 $^+$ )	2006.3 (16 $^+$ )	

<sup>†</sup> Placement of transition in the level scheme is uncertain.



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Band(A):  $\text{K}^\pi=0^+$  g.s.  
rotational band

