^{232}Th(n,5nγ) 2008KeZX

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Khalifeh Abusaleem	NDS 116, 163 (2014)	31-Dec-2012

E_n= white. Measured Eγ and dσ/dΩ. HPGe detectors to measure Eγ and TOF technique to determine E_n.
^{7}Li(p,nx) at E_p= 32, 36.5, 38, 40 and 44 MeV to produce the neutron beam.

^{228}Th Levels

The authors see transitions from the known 4^+,6^+ and 8^+ members of the $K^\pi=0^+$ g.s. band.

E(level)†	J$^\pi$†	Comments
57.8	2^+	Additional information 1.
186.8 *10*	4^+	
378.1 *15*	6^+	
622.4 *18*	8^+	

† From Adopted Levels.

γ(^{228}Th)

Authors give only Eγ. They give the values of 129.065, 191.349, and 244.3 for the measured γ-rays. In figure 3 of 2008KeZX these are rounded to the first digit which is more appropriate. The evaluator adopts the values from the figure. Multipolarity of γ-rays in the ground-state band are assumed E2.

Eγ	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$	Mult.
129.0	186.8	4^+	57.8	2^+	[E2]
191.3	378.1	6^+	186.8	4^+	[E2]
244.3	622.4	8^+	378.1	6^+	[E2]

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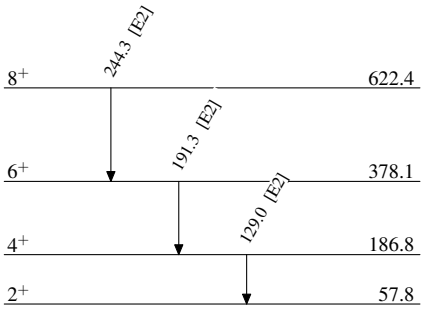
Level Scheme



$^{228}_{90}Th_{138}$