

(HL,xn γ) [1997Fo06](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Huang Xiaolong, Zhou Chunmei		NDS 104, 283 (2005)	1-Jan-2002

Er(^{36}S ,xn γ) E=164 MeV, Measured E γ , I γ by ten Compton-suppressed Δ E detectors at the target position.

 ^{197}Po Levels

E(level) [†]	J π [‡]	T _{1/2} [†]	Comments
204 [#]	(13/2 ⁺)	32 s 2	Additional information 1.
687.5 [#] 10	(17/2 ⁺)		
1146.9 [#] 15	(21/2 ⁺)		
1686.2 [#] 18	(25/2 ⁺)		

[†] From Adopted Levels.

[‡] From systematics of the odd-mass polonium isotopes.

[#] Band(A): regular quadrupole band.

 $\gamma(^{197}\text{Po})$

E γ [†]	E _i (level)	J π _i	E _f	J π _f	Mult.	α [‡]	Comments
^x 308.2							
^x 320							
^x 416.3							
^x 436							
459.4	1146.9	(21/2 ⁺)	687.5	(17/2 ⁺)	[E2]	0.0399	$\alpha(\text{K})=0.0266$ 8; $\alpha(\text{L})=0.0099$ 3; $\alpha(\text{M})=0.00251$ 8; $\alpha(\text{N}+..)=0.00084$ 3
483.5	687.5	(17/2 ⁺)	204	(13/2 ⁺)	[E2]	0.0352	$\alpha(\text{K})=0.0239$ 8; $\alpha(\text{L})=0.0084$ 3; $\alpha(\text{M})=0.00212$ 7; $\alpha(\text{N}+..)=0.00071$ 2
539.3	1686.2	(25/2 ⁺)	1146.9	(21/2 ⁺)	[E2]	0.0272	$\alpha(\text{K})=0.0192$ 6; $\alpha(\text{L})=0.00602$ 18

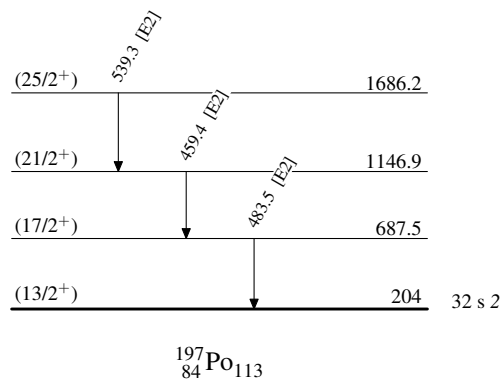
[†] Δ E not given.

[‡] Total theoretical internal conversion coefficients, calculated using the BrIcc code ([2008Ki07](#)) with Frozen orbital approximation based on γ -ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

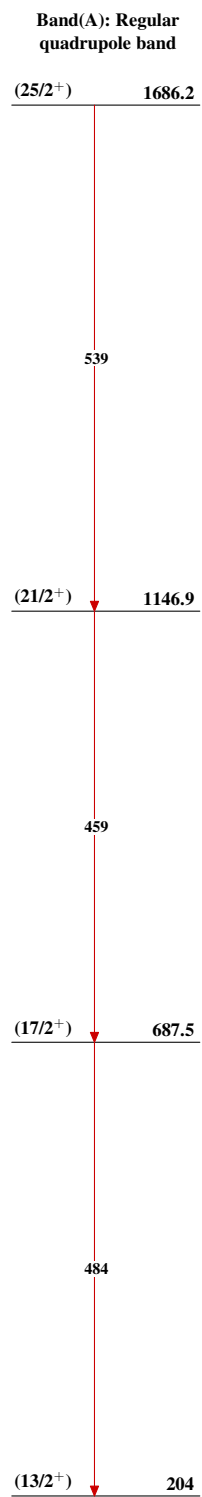
^x γ ray not placed in level scheme.

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Level Scheme



(HI,xn γ) 1997Fo06


 $^{197}_{84}\text{Po}_{113}$