

$^{198}\text{Pt}(^{136}\text{Xe}, X\gamma)$ 2004Va03,2004Re11

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 113, 1871 (2012)	15-Jun-2012

2004Va03,2004Re11: E(^{136}Xe)=850 MeV. 1-2 ns pulses separated by 178 ns; >92% enriched ^{198}Pt target; GAMMASPHERE detector array (103 Compton-suppressed HPGe detectors without BGO heavy-metal collimators, with 70 of the HPGe detectors electrically segmented into two D-shaped halves to improve the Doppler correction); Chico gas-filled parallel-plate avalanche chamber; detected beam-like and target-like fragments from deep inelastic collisions in coincidence with γ -rays from product nuclei; measured $E\gamma$, $I\gamma$, $\gamma\gamma$ coin, recoil- γ - $\gamma(t)$. Observed E=2172 isomer.

The authors give No level scheme, but the transitions shown in fig. 5 of 2004Va03 and 2004Re11 are already known from the literature.

 ^{192}Pt Levels

E(level) [†]	J π [‡]	T _{1/2}	Comments
0.0 [#]	0 ⁺		
317 [#]	2 ⁺		
785 [#]	4 ⁺		
1370 [#]	6 ⁺		
1385	(5) ⁻		
1520	(7) ⁻		
1966	(8) ⁻		
2174	(10) ⁻	235 ns 47	T _{1/2} : (target-like recoil fragments)- $\gamma(t)$ (2004Va03,2004Re11); 317 γ -468 γ pair used as double γ -ray gate.

[†] From $E\gamma$.

[‡] From Adopted Levels.

[#] Band(A): K π =0⁺ g.s. Band.

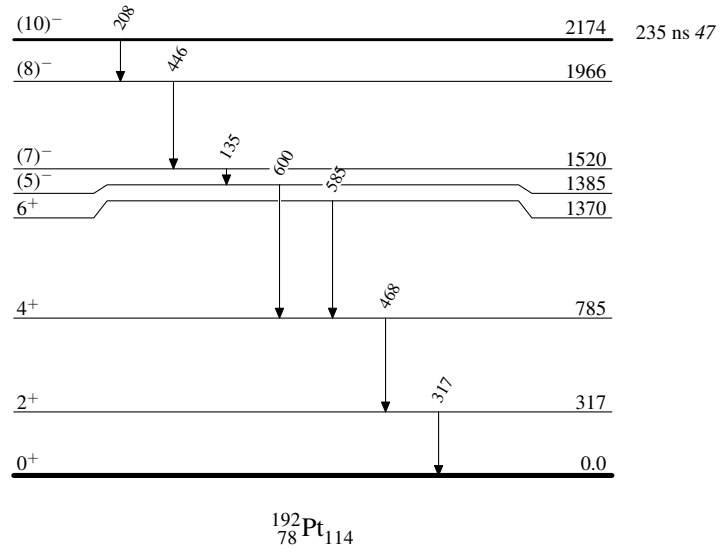
 $\gamma(^{192}\text{Pt})$

E γ [†]	E _i (level)	J π _i	E _f	J π _f	Comments
135	1520	(7) ⁻	1385	(5) ⁻	
208	2174	(10) ⁻	1966	(8) ⁻	
317	317	2 ⁺	0.0	0 ⁺	
446	1966	(8) ⁻	1520	(7) ⁻	
468	785	4 ⁺	317	2 ⁺	
585	1370	6 ⁺	785	4 ⁺	E γ : expected value is 581; possibly, E γ =585 In fig. 5 is a typographical error.
600	1385	(5) ⁻	785	4 ⁺	

[†] From fig. 5 of 2004Re11 and 2004Va03; uncertainty unstated by authors.

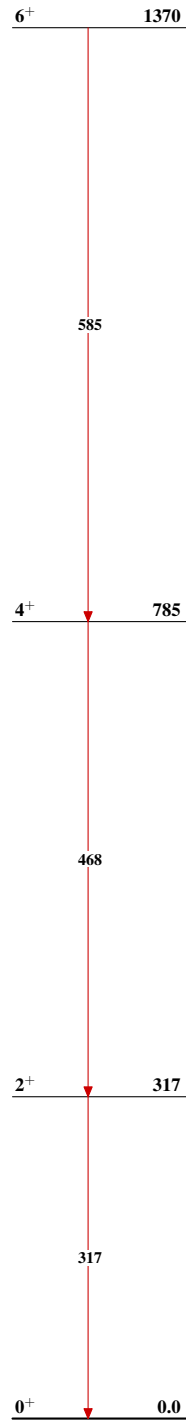
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Level Scheme



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Band(A): $K^\pi=0^+$ g.s.
Band

 $^{192}_{78}\text{Pt}_{114}$