^{198}Pt(^{136}Xe,Xγ) 2004Va03

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Yu. Khazov and A. Rodionov, F. G. Kondev	NDS 112, 855 (2011)	31-Oct-2010

2004Va03,2006WhZZ: ^{133}I IT decay ($T_{1/2}$=0.78 μs) [from ^{198}Pt(^{136}Xe,Xγ), E=850 MeV]; measured prompt and delayed Eγ, Iγ, $\gamma\gamma$-coin.; deduced isomer $T_{1/2}$. GAMMASPHERE detector array consisting of 103 Compton-suppressed Ge detectors, 70 of which were electrically segmented into two D-shaped halves to improve the Doppler correction.

^{133}I Levels

E(level)†	J$^\pi$‡	$T_{1/2}$	Comments
0	$7/2^+$	20.83 h *8*	$T_{1/2}$: from 'Adopted Levels'.
913.0 *10*	$11/2^+$		
1561.0 *15*	$(15/2^+)$		
1729.7 *17*	$(15/2^-)$		
2436.3 *17*	$(19/2^+)$	0.78 μs *16*	E(level): Assumed that the isomer decays directly by 875γ, but possibility of a low-energy γ transition preceding 875γ is not ruled out. $T_{1/2}$: from (beam like recoil fragments)γ(t)-coin (2004Va03); 913γ and pair of 648γ-875γ used as gates.

† From a least-squares fit to Eγ.
‡ From Adopted Levels.

γ(^{133}I)

E$_\gamma$†	I$_\gamma$‡	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$
169	≈8	1729.7	$(15/2^-)$	1561.0	$(15/2^+)$
648	56 *8*	1561.0	$(15/2^+)$	913.0	$11/2^+$
707	≈8	2436.3	$(19/2^+)$	1729.7	$(15/2^-)$
875	51 *8*	2436.3	$(19/2^+)$	1561.0	$(15/2^+)$
913	59 *8*	913.0	$11/2^+$	0	$7/2^+$

† From 2006WhZZ; uncertainties are not given, ΔEγ=1 keV are assumed.
‡ Estimated by the evaluators from 2006WhZZ.

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Level Scheme

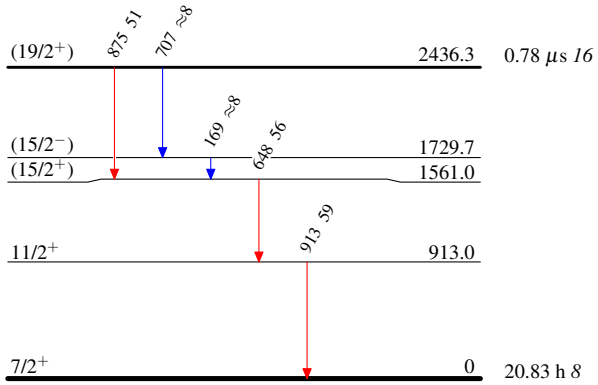
Intensities: Relative I_γ

Legend

$I_\gamma < 2\% \times I_\gamma^{max}$

$I_\gamma < 10\% \times I_\gamma^{max}$

$I_\gamma > 10\% \times I_\gamma^{max}$



$^{133}_{53}I_{80}$