

$^{136}\text{Xe}(^{232}\text{Th}, ^{231}\text{Ac}\gamma)$ 1999Br17

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli	NDS 108,2173 (2007)		1-Oct-2006

E=833 MeV. Measured $E\gamma$, $I\gamma$, $\gamma\gamma$, $\gamma\gamma\gamma$ GAMMASPHERE array of 73 Compton-suppressed Ge detectors.

 ^{137}Cs Levels

E(level)	J^π [†]	Comments
0.0 [‡]	7/2 ⁺	
1184.61 [‡] 10	(11/2 ⁺)	
1671.61 [‡] 15	(15/2 ⁺)	
1893.91 [#] 18	(17/2 ⁺)	
2784.11 [#] 20	(21/2 ⁺)	
3465.2 3	(23/2 ⁺)	Configuration= $\pi g7/2^3 d5/2^2$.
3496.31 [@] 23	(23/2 ⁻)	
4351.5 4		
4408.22 [@] 25	(27/2 ⁻)	
4776.5 5		
5022.9 ^{&} 4	(29/2 ⁻)	
5494.1 ^{&} 5	(31/2 ⁻)	

[†] Based on correspondence with calculated spectrum based on shell model.

[‡] Band(A): $\pi g7/2^5$ multiplet.

[#] Band(B): $\pi g7/2^4 d5/2$ multiplet.

[@] Band(C): $\pi g7/2^4 h11/2$ multiplet.

[&] Band(D): $\pi g7/2^3 d5/2h11/2$ multiplet.

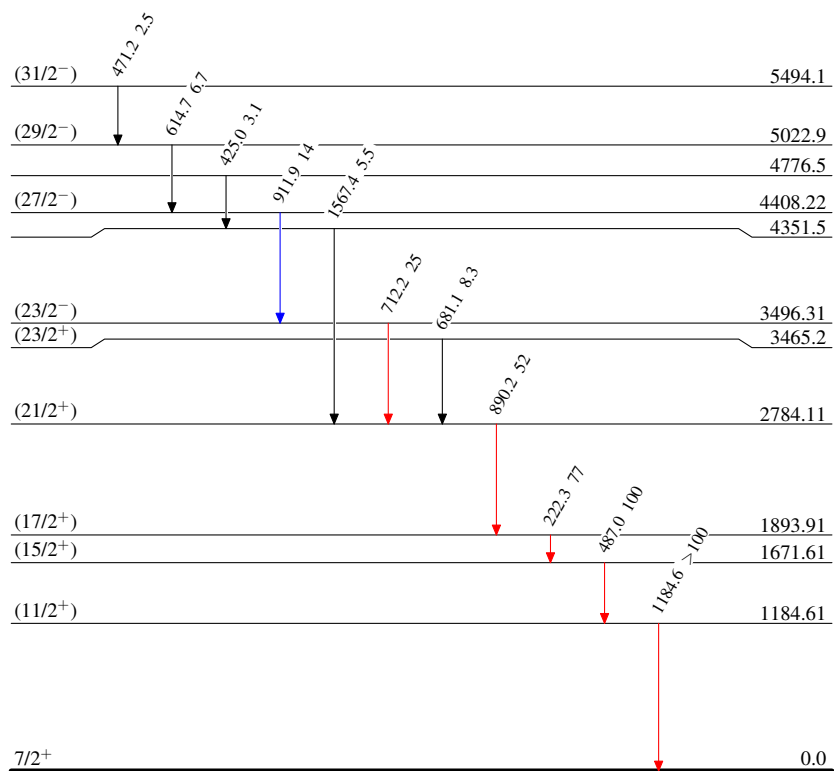
 $\gamma(^{137}\text{Cs})$

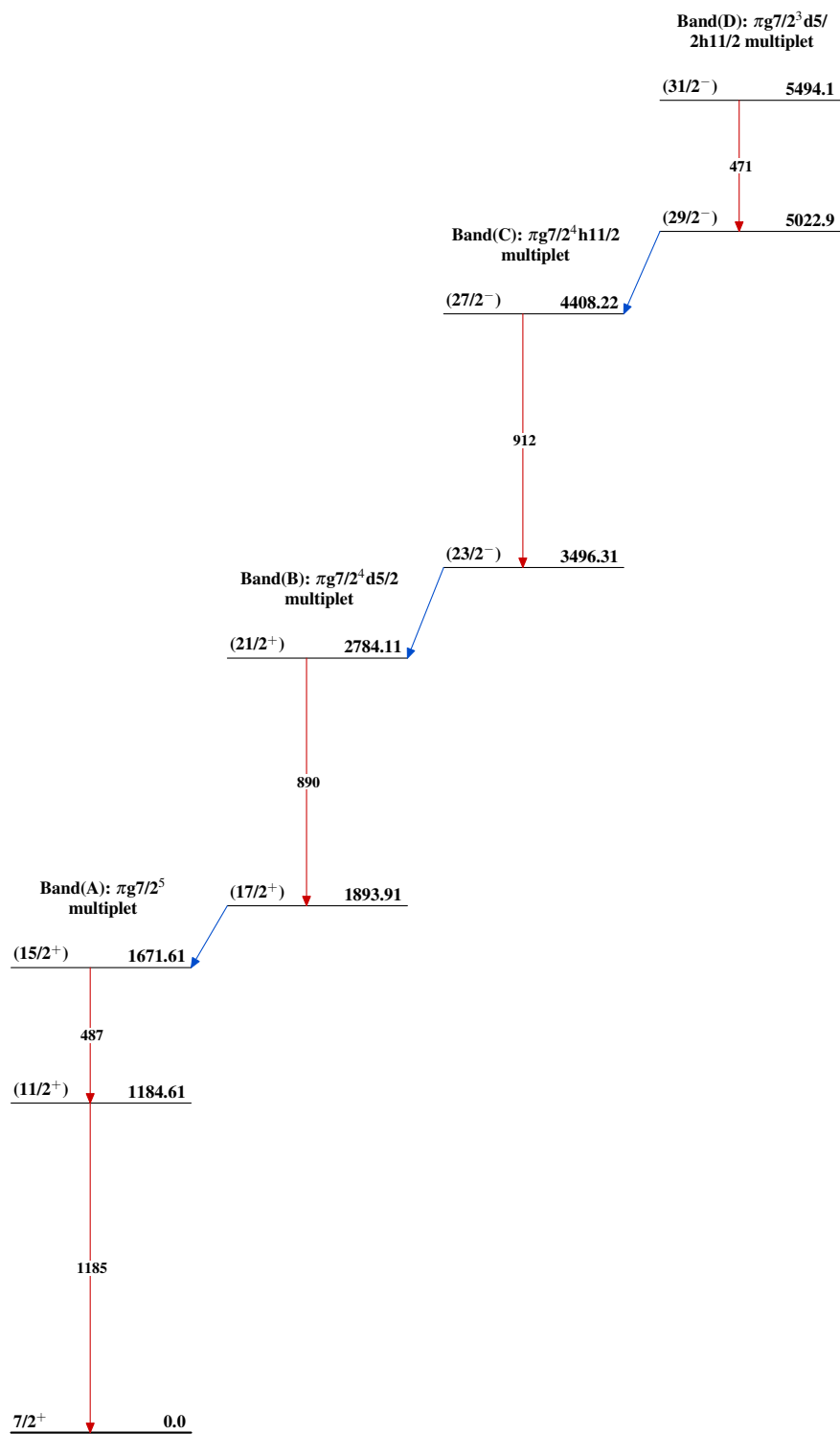
E_γ	I_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
222.3 1	77 4	1893.91	(17/2 ⁺)	1671.61	(15/2 ⁺)
425.0 2	3.1 3	4776.5		4351.5	
471.2 3	2.5 3	5494.1	(31/2 ⁻)	5022.9	(29/2 ⁻)
487.0 1	100	1671.61	(15/2 ⁺)	1184.61	(11/2 ⁺)
614.7 2	6.7 4	5022.9	(29/2 ⁻)	4408.22	(27/2 ⁻)
681.1 2	8.3 5	3465.2	(23/2 ⁺)	2784.11	(21/2 ⁺)
712.2 1	25 2	3496.31	(23/2 ⁻)	2784.11	(21/2 ⁺)
890.2 1	52 3	2784.11	(21/2 ⁺)	1893.91	(17/2 ⁺)
911.9 1	14 1	4408.22	(27/2 ⁻)	3496.31	(23/2 ⁻)
1184.6 1	>100	1184.61	(11/2 ⁺)	0.0	7/2 ⁺
1567.4 3	5.5 1	4351.5		2784.11	(21/2 ⁺)

$^{136}\text{Xe}(^{232}\text{Th}, ^{231}\text{Ac}\gamma)$ **1999Br17**Level SchemeIntensities: Relative I_γ

Legend

- $I_\gamma < 2\% \times I_\gamma^{\max}$
—→ $I_\gamma < 10\% \times I_\gamma^{\max}$
—→ $I_\gamma > 10\% \times I_\gamma^{\max}$

 $^{137}_{55}\text{Cs}_{82}$

$^{136}\text{Xe}(^{232}\text{Th}, ^{231}\text{Ac}\gamma)$ **1999Br17** $^{137}_{55}\text{Cs}_{82}$