^{232}Th(^{136}Xe,X) 1999Br17

History

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

E=833 MeV; measured Eγ, γ(θ), γγ. GAMMASPHERE array, 73 Compton-suppressed Ge detectors.

^{137}Cs Levels

E(level)‡	Jπ†	Comments
0.0#	7/2+	Configuration=$(\pi\ g_{7/2})^5$.
1184.6#	(11/2+)	Configuration=$(\pi\ g_{7/2})^5$.
1671.6#	(15/2+)	Configuration=$(\pi\ g_{7/2})^5$.
1893.9#	(17/2+)	Configuration=$((\pi\ g_{7/2})^4(\pi\ d_{5/2}))$.
2784.1#	(21/2+)	Configuration=$((\pi\ g_{7/2})^4(\pi\ d_{5/2}))$.
3465.2	(23/2+)	Configuration=$((\pi\ g_{7/2})^3(\pi\ d_{5/2})^2)$.
3496.1@	(23/2−)	Configuration=$((\pi\ g_{7/2})^4(\pi\ h_{11/2}))$.
4351.5		
4408.1@	(27/2−)	Configuration=$((\pi\ g_{7/2})^4(\pi\ h_{11/2}))$.
4776.5		
5022.8@	(29/2−)	Configuration=$((\pi\ g_{7/2})^3(\pi\ d_{5/2})(\pi\ h_{11/2}))$.
5494.0@	(31/2−)	Configuration=$((\pi\ g_{7/2})^3(\pi\ d_{5/2})(\pi\ h_{11/2}))$.

† From comparisons with Shell Model calculations, as given by authors.
‡ As given by authors.
# Band(A): g.s. positive parity band.
@ Band(B): Negative parity band.

γ(^{137}Cs)

E_γ	I_γ	E_i(level)	J_i^π	E_f	J_f^π
222.3 *1*	77 *4*	1893.9	(17/2+)	1671.6	(15/2+)
425.0 *2*	3.1 *3*	4776.5		4351.5	
471.2 *3*	2.5 *3*	5494.0	(31/2−)	5022.8	(29/2−)
487.0 *1*	100	1671.6	(15/2+)	1184.6	(11/2+)
614.7 *2*	6.7 *4*	5022.8	(29/2−)	4408.1	(27/2−)
681.1 *2*	8.3 *5*	3465.2	(23/2+)	2784.1	(21/2+)
712.2 *1*	25 *2*	3496.1	(23/2−)	2784.1	(21/2+)
890.2 *1*	52 *3*	2784.1	(21/2+)	1893.9	(17/2+)
911.9 *1*	14 *1*	4408.1	(27/2−)	3496.1	(23/2−)
1184.6 *1*	>100	1184.6	(11/2+)	0.0	7/2+
1567.4 *3*	5.5 *1*	4351.5		2784.1	(21/2+)

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Level Scheme

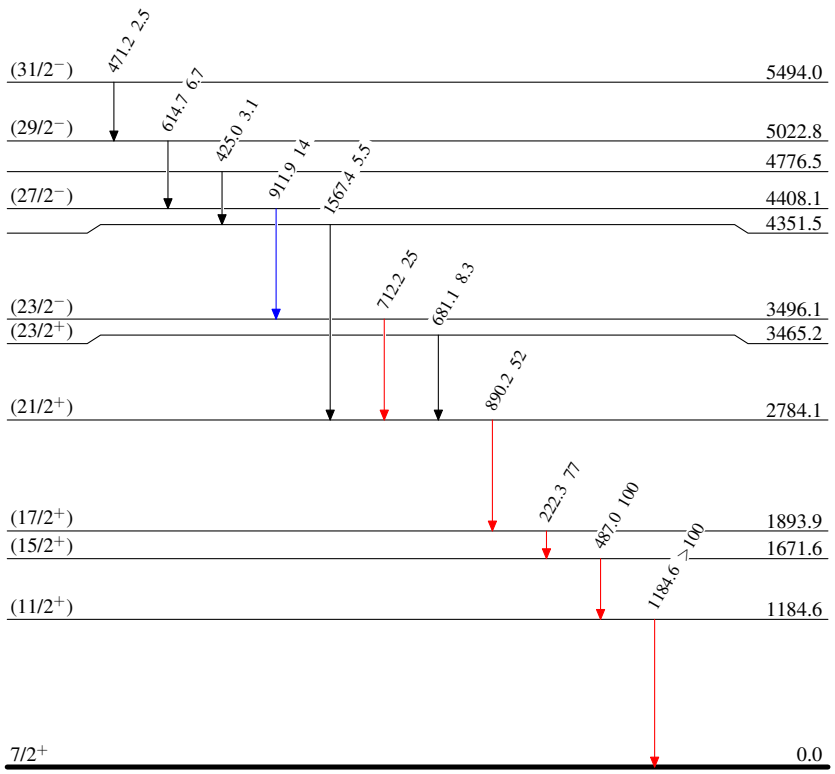
Intensities: Type not specified

Legend

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

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

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



$^{137}_{55}Cs_{82}$

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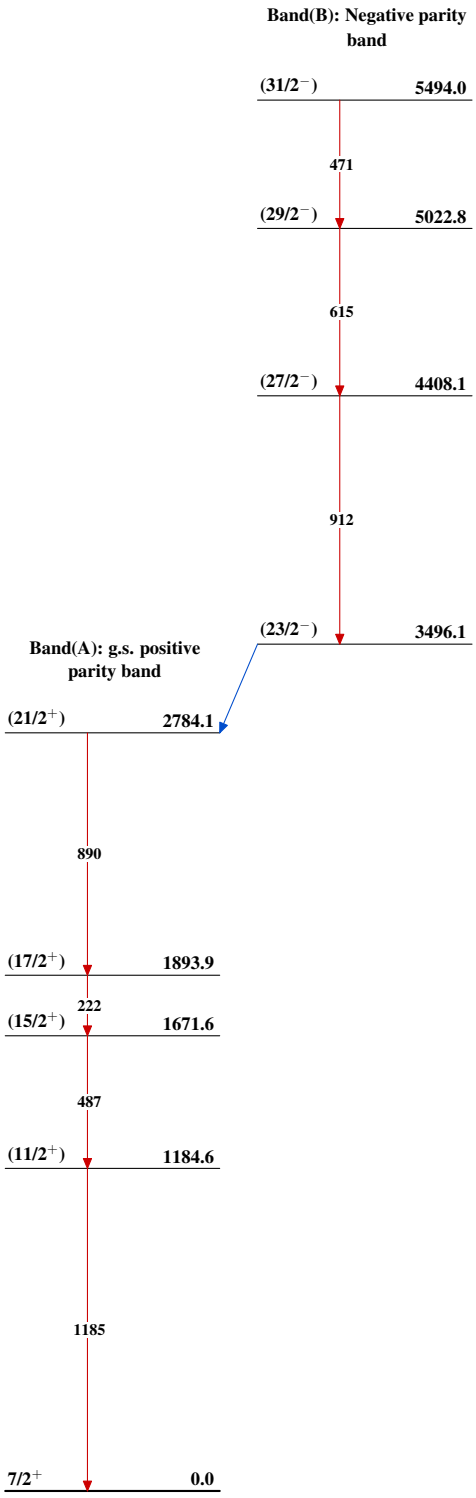

$^{137}_{55}Cs_{82}$