

$^{232}\text{Th}(^{136}\text{Xe}, ^{137}\text{Cs}\gamma)$ 1999Br17

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh, Jagdish K. Tuli, and Edgardo Browne		NDS 185, 560 (2022)	31-Aug-2022

1999Br17: $E(^{136}\text{Xe})=833$ MeV. Measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin using the Gammasphere array consisting of 73 Compton-suppressed Ge detectors at LBNL cyclotron facility. Deep inelastic scattering just above the Coulomb barrier.

 ^{231}Ac Levels

E(level) [†]	Comments
0+x [‡]	Additional information 1. E(level): x=74.70 in the Adopted Levels.
106+x [‡] 1	
269.3+x [‡] 14	
486.1+x [‡] 17	
750.9+x [‡] 20	
1057.9+x [‡] 22	
1401.7+x [‡] 25	
1775.7+x [‡] 26	
2180.7+x [‡] 28	
2606.7+x [‡] 30	
0+y? [#]	Additional information 2.
119.3+y? [#] 10	
297.9+y? [#] 14	
532.7+y? [#] 17	
818.5+y? [#] 20	
1148.9+y? [#] 22	
1517.7+y? [#] 25	
1918.9+y? [#] 26	
2346.9+y? [#] 28	
2794.9+y? [#] 30	

[†] From $E\gamma$ data, assuming 1 keV uncertainty for $E\gamma$ values.

[‡] Band(A): $K^\pi=1/2^+$ band.

[#] Band(B): Tentative band. Assignment to ^{231}Ac is uncertain. This band is not given in the Adopted Levels, Gammas dataset.

 $\gamma(^{231}\text{Ac})$

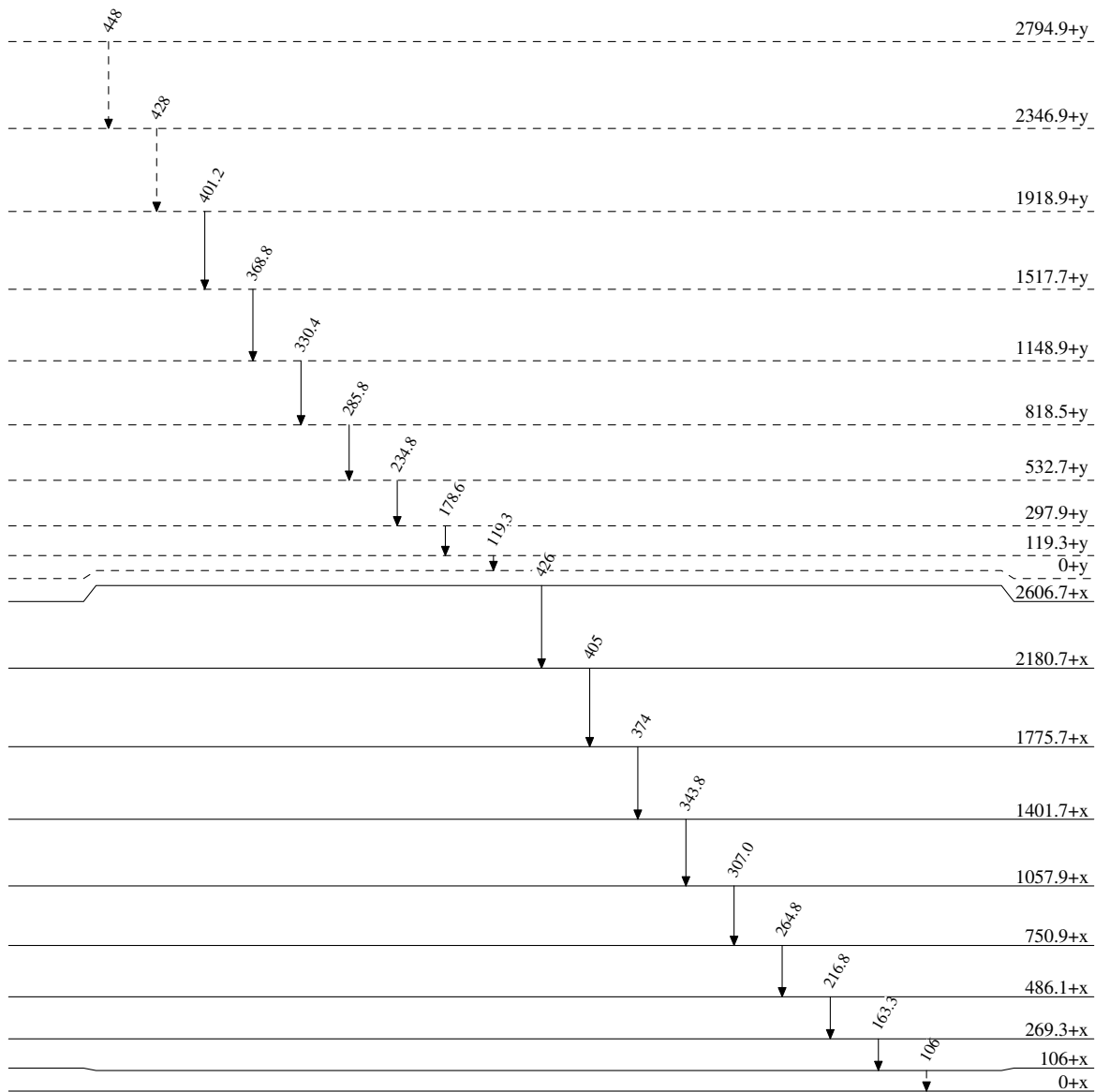
E_γ	$E_i(\text{level})$	E_f	E_γ	$E_i(\text{level})$	E_f	E_γ	$E_i(\text{level})$	E_f
106 [†]	106+x	0+x	264.8	750.9+x	486.1+x	374	1775.7+x	1401.7+x
119.3	119.3+y?	0+y?	285.8	818.5+y?	532.7+y?	401.2	1918.9+y?	1517.7+y?
163.3	269.3+x	106+x	307.0	1057.9+x	750.9+x	405	2180.7+x	1775.7+x
178.6	297.9+y?	119.3+y?	330.4	1148.9+y?	818.5+y?	426	2606.7+x	2180.7+x
216.8	486.1+x	269.3+x	343.8	1401.7+x	1057.9+x	428 [†]	2346.9+y?	1918.9+y?
234.8	532.7+y?	297.9+y?	368.8	1517.7+y?	1148.9+y?	448 [†]	2794.9+y?	2346.9+y?

[†] Placement of transition in the level scheme is uncertain.

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Legend

Level Scheme

 -----► γ Decay (Uncertain)

 $^{231}_{89}\text{Ac}_{142}$

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