

$^{134}\text{Ba}(\gamma, \gamma')$ 1996Ma55

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	A. A. Sonzogni	NDS 103, 1 (2004)	31-Jul-2004

1996Ma55: Bremsstrahlung γ 's, $E(\gamma) < 4.1$ MeV, Ge detectors. Measured values of energy-integrated cross sections $I_{s,0}$, and ground state decay widths $\Gamma_{\gamma 0}$ are given as comments.

 ^{134}Ba Levels

E(level) [†]	$J^{\pi\ddagger}$	Comments
0.0	0^+	
605	2^+	
1168	2^+	
2311	(1)	$I_{s,0}=3.2$ eV.b 9, $\Gamma_{\gamma 0}=1.5$ meV 4.
2571	$1^{(+)}$	$I_{s,0}=5.2$ eV.b 11, $\Gamma_{\gamma 0}=5.3$ meV 8.
2806	(1)	$I_{s,0}=2.8$ eV.b 9, $\Gamma_{\gamma 0}=1.9$ meV 6.
2824	1^-	$I_{s,0}=22.2$ eV.b 25, $\Gamma_{\gamma 0}=18.0$ meV 23.
2939	1^+	$I_{s,0}=25.2$ eV.b 27, $\Gamma_{\gamma 0}=30$ meV 4.
3011	(1)	$I_{s,0}=3.5$ eV.b 9, $\Gamma_{\gamma 0}=2.7$ meV 7.
3027	(1^+)	$I_{s,0}=5.3$ eV.b 11, $\Gamma_{\gamma 0}=4.2$ meV 8. E(level): 1859 γ to 2^+ was not observed.
3246	(1^+)	$I_{s,0}=3.2$ eV.b 9, $\Gamma_{\gamma 0}=2.9$ meV 8.
3327	(1^+)	$I_{s,0}=5.2$ eV.b 11, $\Gamma_{\gamma 0}=10.7$ meV 21.
3343	(1)	$I_{s,0}=2.5$ eV.b 9, $\Gamma_{\gamma 0}=2.4$ meV 8.
3450	(1^+)	$I_{s,0}=5.5$ eV.b 12, $\Gamma_{\gamma 0}=5.6$ meV 12.
3560	1	$I_{s,0}=16.3$ eV.b 24, $\Gamma_{\gamma 0}=18.0$ meV 26.
3589	1	$I_{s,0}=21$ eV.b 3, $\Gamma_{\gamma 0}=24$ meV 3.
3617	(1)	$I_{s,0}=6.3$ eV.b 15, $\Gamma_{\gamma 0}=7.2$ meV 17.
3705	1	$I_{s,0}=12.7$ eV.b 23, $\Gamma_{\gamma 0}=15.1$ meV 27.
3783	(1)	$I_{s,0}=8.1$ eV.b 20, $\Gamma_{\gamma 0}=10.1$ meV 24.
3836	1	$I_{s,0}=15$ eV.b 3, $\Gamma_{\gamma 0}=20$ meV 4.
3980	(1)	$I_{s,0}=9$ eV.b 3, $\Gamma_{\gamma 0}=13$ meV 5.
3992	(1)	$I_{s,0}=11$ eV.b 4, $\Gamma_{\gamma 0}=15$ meV 5.

[†] As given by 1996Ma55.

[‡] As given by 1996Ma55, based on $I_{\gamma}(90^\circ)$ and $I_{\gamma}(127^\circ)$, polarization measured with Compton polarimeter.

 $\gamma(^{134}\text{Ba})$

E_{γ}	I_{γ}	$E_i(\text{level})$	J_i^{π}	E_f	J_f^{π}	Mult.	E_{γ}	$E_i(\text{level})$	J_i^{π}	E_f	J_f^{π}	Mult.
1771	33 7	2939	1^+	1168	2^+		3343	3343	(1)	0.0	0^+	
2311		2311	(1)	0.0	0^+		3450	3450	(1^+)	0.0	0^+	
2334	26 5	2939	1^+	605	2^+		3560	3560	1	0.0	0^+	D
2571		2571	$1^{(+)}$	0.0	0^+		3589	3589	1	0.0	0^+	D
2806		2806	(1)	0.0	0^+		3617	3617	(1)	0.0	0^+	
2824		2824	1^-	0.0	0^+	E1	3705	3705	1	0.0	0^+	D
2939	100	2939	1^+	0.0	0^+	M1	3783	3783	(1)	0.0	0^+	
3011		3011	(1)	0.0	0^+		3836	3836	1	0.0	0^+	D
3027		3027	(1^+)	0.0	0^+		3980	3980	(1)	0.0	0^+	
3246		3246	(1^+)	0.0	0^+		3992	3992	(1)	0.0	0^+	
3327		3327	(1^+)	0.0	0^+							

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Level Scheme

Intensities: Type not specified

Legend

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

