

$^{133}\text{Cs}(\gamma, \gamma')$ **1997Be43**

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

1997Be43: $^{133}\text{Cs}(\gamma, \gamma')$, $E \leq 4.1$ MeV bremsstrahlung; measured $E\gamma$, $I\gamma$; deduced levels, $g\Gamma_0$, dipole strength distributions.
Nuclear resonance fluorescence technique.

 ^{133}Cs Levels

E(level)	J^π	$I_s \text{ eV} \times b^{\ddagger}$	$g\Gamma_0 \text{ meV}^{\#}$	Comments
0.0 [†]	7/2 ⁺ [†]			
80.9974 [†] 13	5/2 ⁺ [†]			
160.6129 [†] 21	5/2 ⁺ [†]			
2156		1.11 18	1.34 22	$E\gamma=2156.9$ 17 is observed in $^{133}\text{Cs}(n, n'\gamma)$.
2321		0.60 13	0.84 19	
2415		1.79 23	2.7 4	
2438		0.96 17	1.5 3	
2462		0.70 14	1.10 22	
2645		2.81 22	5.1 4	
2672		1.27 16	2.4 3	
2722		0.82 18	2.4 5	$R_{\text{exp}}=0.60$ 21. Branching to 160.6, 5/2 ⁺ .
2744		1.77 26	3.5 5	
2759		0.65 14	3.1 4	$R_{\text{exp}}=1.63$ 24. Branching to 160.6, 5/2 ⁺ .
2815		0.48 13	1.0 3	
2858		0.57 14	2.8 5	$R_{\text{exp}}=1.6$ 4. Branching to 160.6, 5/2 ⁺ .
2873		1.22 16	2.6 3	
2909		1.39 21	4.9 6	$R_{\text{exp}}=0.66$ 18. Branching to 81.0, 5/2 ⁺ .
2944		0.90 13	2.3 3	
3039		0.40 10	0.97 24	
3296		0.62 21	1.8 6	
3322		0.47 12	1.4 4	
3422		0.56 20	1.7 6	
3517		0.42 15	1.4 5	
3526		1.03 17	3.3 5	
3672		0.91 19	3.2 7	

[†] From Adopted Levels.

[‡] Integrated elastic resonance scattering intensity.

[#] Γ_0 and Γ_f are the decay widths of photoexcited state with spin J to the g.s. and to final lower-lying state, correspondingly.
 $g=(2J+1)/(2J_0+1)$ is statistical factor. $R_{\text{exp}}=(\Gamma_f/\Gamma_0) \times (E_{\gamma J_0}^3/E_{\gamma J_f}^3)$ branching ratio.