

130 58Ce (Continued)

2313.0 4, (7 ⁻), 23 3 ps, [C] γ_{2053} 260.4 4 ($\dagger_{120} 4$) γ_{1955} 358.4 2 ($\dagger_{100} 10$) E2	
γ_{1898} 415.5 5 ($\dagger_{12} 3$) γ_{1324} 989.0 5 ($\dagger_{5.9} 13$)	
2333.2 5, [C] γ_{1324} 1009.2 4 ($\dagger_{100}$)	
2380.8 4, (6 ⁻), [C] γ_{1955} 426.2 5 ($\dagger_{15} 3$) γ_{1898} 483.3 5 ($\dagger_{13} 3$) γ_{1324} 1056.9 4 ($\dagger_{100} 20$) (E1)	
2453.6 4, (7 ⁻), 109 3 ns, [AC] γ_{2381} 72.8 ($\dagger_{\gamma_{\text{He}}} \approx 35$) γ_{2333} 120.5 ($\dagger_{\gamma_{\text{He}}} \approx 85$)	
γ_{2053} 401.0 5 ($\dagger_{11} 3$) γ_{1955} 499.0 5 ($\dagger_{37} 8$) γ_{1898} 556.1 3 ($\dagger_{100} 20$)	
γ_{1324} 1129.7 3 ($\dagger_{100} 20$)	
2560.9 6, (8 ⁺), [C] γ_{1898} 663.4 4 ($\dagger_{100}$)	
2623.8, [A] γ_{1672} 951.9	
2642.9 5, (8 ⁻), [C] γ_{2454} 189.3 3 ($\dagger_{100}$) M1+E2	
2644.2 4, (8 ⁻), [C] γ_{2381} 263.4 4 ($\dagger_{100} 20$) γ_{2313} 331.2 4 ($\dagger_{69} 14$) γ_{2053} 591.6 5 ($\dagger_{28} 6$)	
2760.6 4, (9 ⁻), 2.8 14 ps, [C] γ_{2644} 116.4 5 ($\dagger_{3.7} 7$) γ_{2313} 447.6 2 ($\dagger_{100} 10$) E2	
γ_{2053} 708.0 4 ($\dagger_{29} 6$)	
2808.6 4, 10 ⁺ , 0.62 14 ps, [C] γ_{2053} 756.0 2 ($\dagger_{100}$) E2	
2959.3 6, (9 ⁻), [C] γ_{2643} 316.3 4 ($\dagger_{100}$)	
3071.3 4, (10 ⁻), 5.2 10 ps, [C] γ_{2761} 310.7 4 ($\dagger_{21} 4$) γ_{2644} 427.1 3 ($\dagger_{100} 20$) E2	
3296.8 7, (10 ⁺), [C] γ_{2561} 735.9 4 ($\dagger_{100}$)	
3311.5 5, 12 ⁺ , 3.5 11 ps, [C] γ_{2809} 502.9 2 ($\dagger_{100}$) E2	
3317.6 6, (10 ⁻), [C] γ_{2959} 358.4 5 ($\dagger_{28} 6$) γ_{2643} 674.7 4 ($\dagger_{100} 20$)	
3319.5 5, (11 ⁻), <1.4 ps, [C] γ_{3071} 248.2 5 ($\dagger_{5.5} 11$) γ_{2761} 558.9 3 ($\dagger_{100} 20$) E2	
3681.0 5, (12 ⁻), <1.0 ps, [C] γ_{3320} 361.5 4 ($\dagger_{26} 6$) γ_{3071} 609.7 4 ($\dagger_{100} 20$) E2	
3700.6 6, (11 ⁻), [C] γ_{3318} 383.0 5 ($\dagger_{36} 9$) γ_{2959} 741.3 4 ($\dagger_{100} 20$)	
3860.1 5, 14 ⁺ , 0.8 2 ps, [C] γ_{3312} 548.6 2 ($\dagger_{100}$) E2	
3985.6 8, (12 ⁺), [C] γ_{3297} 688.8 4 ($\dagger_{100}$)	
4026.4 5, (13 ⁻), [C] γ_{3681} 345.4 5 ($\dagger_{7.7} 15$) γ_{3320} 706.9 3 ($\dagger_{100} 20$)	
4120.8 7, (12 ⁻), [C] γ_{3701} 420.3 5 ($\dagger_{11} 4$) γ_{3318} 803.3 4 ($\dagger_{100} 20$)	
4448.5 7, (14 ⁻), [C] γ_{3681} 767.5 4 ($\dagger_{100}$) E2	
4536.6 7, (13 ⁻), [C] γ_{4121} 415.5 5 ($\dagger_{32} 7$) γ_{3701} 835.8 4 ($\dagger_{100} 20$)	
4552.8 6, 16 ⁺ , 0.85 15 ps, [C] γ_{3860} 692.7 2 ($\dagger_{100}$) E2	
4755.7 10, (14 ⁺), [C] γ_{3986} 770.1 5 ($\dagger_{100}$)	

4862.1 6, (15 ⁻), [C] γ_{4026} 835.7 3 ($\dagger_{100}$) E2	
4974.0 7, (14 ⁻), [C] γ_{4537} 437.1 5 ($\dagger_{24} 5$) γ_{4121} 853.6 4 ($\dagger_{100} 20$)	
5305.9 7, (15 ⁻), [C] γ_{4974} 332.0 4 ($\dagger_{100} 20$) γ_{4537} 769.1 4 ($\dagger_{93} 20$)	
5343.2 8, (16 ⁻), [C] γ_{4449} 894.7 4 ($\dagger_{100}$)	
5383.8 6, 18 ⁺ , 0.70 14 ps, [C] γ_{4553} 831.0 2 ($\dagger_{100}$)	
5586.5 8, (16 ⁻), [C] γ_{5306} 280.5 4 ($\dagger_{100} 20$) γ_{4974} 612.5 4 ($\dagger_{87} 20$)	
5757.6 7, (17 ⁻), [C] γ_{4862} 895.5 4 ($\dagger_{100}$) E2	
5881.9 8, (17 ⁻), [C] γ_{5587} 295.5 4 ($\dagger_{100} 20$) γ_{5306} 576.0 5 ($\dagger_{13} 7$)	
5884.2 8, [C] γ_{4862} 1022.1 5 ($\dagger_{100}$)	
6212.6 8, (18 ⁻), [C] γ_{5882} 330.6 5 ($\dagger_{100} 20$) γ_{5587} 626.1 5 ($\dagger_{40} 10$)	
6319.7 9, (18 ⁻), [C] γ_{5343} 976.5 4 ($\dagger_{100}$)	
6341.3 7, 20 ⁺ , 0.24 6 ps, [C] γ_{5384} 957.4 3 ($\dagger_{100}$)	
6577.0 9, (19 ⁻), [C] γ_{6213} 364.4 5 ($\dagger_{100} 20$) γ_{5882} 695.0 5 ($\dagger_{44} 9$)	
6642.0 8, (19 ⁻), [C] γ_{5758} 884.4 4 ($\dagger_{100}$)	
6979.0 9, (20 ⁻), [C] γ_{6577} 402.0 5 ($\dagger_{100} 20$) γ_{6213} 766.4 5 ($\dagger_{57} 12$)	
7408.3 8, 22 ⁺ , 0.21 4 ps, [C] γ_{6341} 1067.0 4 ($\dagger_{100}$)	
7412, (21 ⁻), [C] γ_{6577} 835 ($\dagger_{100}$)	
7881, (22 ⁻), [C] γ_{6979} 902 ($\dagger_{100}$)	
8378, (23 ⁻), [C] γ_{7881} 497 γ_{7412} 966 ($\dagger_{100}$)	
8569.7 9, 24 ⁺ , [C] γ_{7408} 1161.4 5 ($\dagger_{100}$)	
8908, (24 ⁻), [C] γ_{7881} 1027 ($\dagger_{100}$)	
9461, (25 ⁻), [C] γ_{8908} 553 γ_{8378} 1083 ($\dagger_{100}$)	
9702.2 11 (?), [C] γ_{8570} 1132.5 5 ($\dagger_{100}$)	
9811.7, (26 ⁺), [C] γ_{8570} 1242 ($\dagger_{100}$)	
10044, (26 ⁻), [C] γ_{8908} 1136 ($\dagger_{100}$)	
10645, (27 ⁻), [C] γ_{9461} 1184 ($\dagger_{100}$)	
11271, (28 ⁻), [C] γ_{10044} 1227 ($\dagger_{100}$)	
12593, (30 ⁻), [C] γ_{11271} 1322 ($\dagger_{100}$)	

$\gamma(^{130}\text{La})$ from ^{130}Ce (25 m) EC+ β^+ decay:

107.9(u), **130.8 5**, **134.4(u)**, **162.2(u)**, **181.3(u)**, **209.1(u)**, **219.6(u)**, **307.3(u)**, **762.4** ($\dagger_{0.35}$), **851.5** ($\dagger_{0.80}$), **920.5** ($\dagger_{1.00}$), **997.7** ($\dagger_{1.00}$), **1072.6** ($\dagger_{1.00}$), **1148.3** ($\dagger_{0.75}$), **1229.4** ($\dagger_{0.65}$), **1318.6** ($\dagger_{0.50}$), **1412.4** ($\dagger_{0.40}$).

