

Coulomb excitation [1980La01,2001Pi12](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	D. Abriola(a), A. A. Sonzogni		NDS 109, 2501 (2008)	1-Apr-2008

[1980La01](#): ($^{16}\text{O}, ^{16}\text{O}'\gamma$): E=36 MeV to 44.8 MeV, measured γ , $\sigma(E)$ FWHM=100-130 keV; (α, α'): E=8.5 MeV to 9.5 MeV, measured $\sigma(E)$ FWHM $\approx$ 30 keV. Deduced B(E2) from coupled-channel calculations.

[2001Pi12](#): C($^{96}\text{Ru}, ^{96}\text{Ru}'\gamma$), E=280 MeV, measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin.

Other measurements: [1978Fa08](#), [1977Ma41](#).

 ^{96}Ru Levels

E(level)	J^π	$T_{1/2}^\dagger$	$\beta_2^\ddagger$	Comments
0.0	0^+			
832.5	2^+	2.94 ps 6	0.163	Q=-0.13 9; B(E2) $\uparrow$ =0.240 5 B(E2) weighted average of 0.237 6 (2002K107 , $T_{1/2}$ measurement), 0.202 23 (2000Kh02 , $T_{1/2}$ measurement), 0.236 7 (1980La01), 0.266 26 (1980La01), 0.260 10 (1978Fa08), 0.268 32 (1968Mc08) and 0.254 41 (1958St32). Q from 1980La01 . $T_{1/2}$: from B(E2) value.
1516.9	4^+	6.9 ps 9	0.117	B(E2) $\uparrow$ =0.104 7 B(E2) weighted average of 0.098 13 (1980La01) and 0.106 8 (2001Pi12), for 2^+ to 4^+ transition.
1931.0	2^+	0.39 ps 6	0.150	B(E2) $\uparrow$ =0.091 13 B(E2) for 2^+ to 2^+ transition (1980La01).
2284.2	2^+	15 fs 5		B(E2) $\uparrow$ =0.0207 36 $T_{1/2}$: from B(E2) and adopted 2283.9 gamma branching ratio.

† From B(E2).

‡ Values are β_2 for 0^+ to 2^+ , 2^+ to 4^+ , and 2^+ to 2^+ transitions, respectively, from coupled-channel calculations ([1980La01](#)).

 $\gamma(^{96}\text{Ru})$

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
684.4	1516.9	4^+	832.5	2^+
832.5	832.5	2^+	0.0	0^+
1098.5	1931.0	2^+	832.5	2^+

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Level Scheme

