

Coulomb excitation 2002Ke02

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Alan L. Nichols, Balraj Singh, Jagdish K. Tuli		NDS 113, 973 (2012)	15-Apr-2012

2002Ke02: target=C, beam= ${}^{62}\text{Zn}$ at 160 MeV produced in ${}^{12}\text{C}({}^{58}\text{Ni}, 2\alpha)$ at $E({}^{58}\text{Ni})=155$ MeV. Measured $E\gamma$, $\alpha\gamma$ coin., $\gamma(\theta, H, t)$, lifetimes by DSA following projectile Coulomb excitation in inverse kinematics. Deduced g factors. Comparisons with predictions of large-scale shell model calculations.

[Additional information 1.](#)

 ${}^{62}\text{Zn}$ Levels

E(level)	J^π	$T_{1/2}^\dagger$	Comments
0.0	0^+		
953.9	2^+	2.98 ps 21	$g=+0.37$ 10 (2002Ke02) g factor measured by 2002Ke02 using projectile Coulomb excitation in inverse kinematics and transient magnetic fields. Data reanalyzed in 2010Mo14 with the same result of +0.37 10.
1804.6	2^+		
2185.9	4^+	0.83 ps 7	
2384.9	3^+		

† From DSAM (2002Ke02).

 $\gamma({}^{62}\text{Zn})$

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
850.6	1804.6	2^+	953.9	2^+
953.9	953.9	2^+	0.0	0^+
1232.0	2185.9	4^+	953.9	2^+
1431.0	2384.9	3^+	953.9	2^+
1804.8	1804.6	2^+	0.0	0^+

Coulomb excitation 2002Ke02Level Scheme