

Coulomb excitation 2009Va01,2007Va20

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	ENSDF	31-Aug-2014

2009Va01, 2007Va20: E=2.79 MeV/nucleon ^{80}Zn beam produced at Radioactive Ion Beam facility REX-ISOLDE (CERN).

Target= ^{108}Pd . The Zn beams were produced using protons at E=1.4 GeV impinging UC_x target. The mass-separated Zn beam was accumulated and bunched in a Penning Trap. Measured E_γ using MINIBALL array of 24 HPGe detectors. Charged particle spectra were measured with a double-sided silicon strip detector. Comparisons with collective model predictions and large-scale shell-model calculations. Experimental results analyzed using GOSIA2 code.

 ^{80}Zn Levels

E(level)	J^π	$T_{1/2}$	Comments
0	0^+		
1492 1	2^+	0.52 ps 11	B(E2) \uparrow =0.072 15 (2009Va01) Additional information 1. $T_{1/2}$: from 2009Va01, deduced from B(E2) \downarrow =0.0144 29.

 $\gamma(^{80}\text{Zn})$

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Comments
1492 1	1492	2^+	0	0^+	B(E2) \downarrow =0.0144 29 (2009Va01). This value is about the same as corresponding B(E2) \uparrow listed in 2007Va20. Other B(E2) \downarrow values measured by 2009Va01: 0.0150 32, 0.0151 37, 0.0138 43. 2009Va01 adopt the value with the lowest relative uncertainty. The evaluator obtains weighted averaged B(E2) \downarrow =0.0146 17.

Coulomb excitation 2009Va01,2007Va20Level Scheme