Coulomb excitation 2006Pe13

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	G. Gürdal, E. A. Mccutchan	NDS 136, 1 (2016)	1-Jul-2016

2006Pe13: ^{208}Pb(^{70}Ni,^{70}Ni′γ) at v/c ≈ 0.28. ^{70}Ni beam produced in fragmentation of a ^{76}Ge beam on a ^{9}Be target, E(^{76}Ge)=60 MeV/nucleon, separated with the LISE3 spectrometer and identified through TOF and ΔE measurements. Measured Eγ, Iγ, Coulomb excitation cross section using four segmented EXOGAM clover HPGe detectors and particle-γ coincidences using two annular Si detectors mounted behind the target. B(E2) value deduced relative to B(E2)=0.268 *8* for the first 2^+ state of ^{76}Ge. Subset of results presented in 2008AzZZ.

^{70}Ni Levels

E(level)†	J$^\pi$†	$T_{1/2}$	Comments
0.0	0^+		
1259.6	2^+	1.04 ps *17*	B(E2)↑=0.086 *14* (2006Pe13) B(E2)↑: relative to B(E2)=0.268 *8* for the first 2^+ state of ^{76}Ge. $T_{1/2}$: deduced by evaluators from B(E2) and adopted γ-ray properties.

† From the Adopted Levels.

γ(^{70}Ni)

E$_\gamma$†	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$	Mult.	Comments
1259.6	1259.6	2^+	0.0	0^+	E2	Mult.: from Coulomb excitation from ground state.

† From the Adopted Levels.

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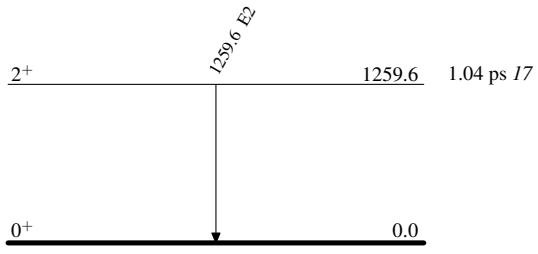
Level Scheme



$^{70}_{28}Ni_{42}$