Coulomb excitation 1999Ib01

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen[#]	NDS 126, 1 (2015)	31-Mar-2015

^{197}Au(^{43}S,^{43}S′) E=42.0 MeV/nucleon. γ-rays detected with an array of 38 cylindrical NaI(Tl) detectors in coin with scattered ^{43}S ions. Comparisons with particle-rotor and particle-vibrator calculations.

^{43}S Levels

E(level)	Comments
0	
≈940	B(E2)↑=0.0175 *69* E(level): probably a multiplet. B(E2) applies to the sum of unresolved levels. Experimental B(E2) is consistent with calculated B(E2) for a multiplet of states generated near 1 MeV in either the particle-rotation (prolate and oblate) or the particle-vibration calculations, assuming J^{π}(g.s.)=7/2$^-$.

γ(^{43}S)

E_γ	E_i(level)	E_f	Comments
≈940	≈940	0	E_γ: probably a multiplet.

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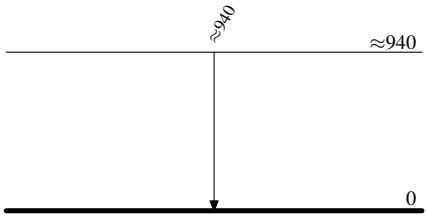
Level Scheme



$^{43}_{16}S_{27}$