^{208}Pb(^{36}S,Xγ) 2011Wa13

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	C. D. Nesaraja, E. A. Mccutchan	NDS 133, 1 (2016)	30-Sep-2015

E(^{36}S)=215 MeV. Projectile-like fragments selected with the magnetic spectrometer PRISMA placed 56° to the beam axis. Measured Eγ, Iγ, fragment-γ coincidence using the CLARA array consisting of 22 Compton-suppressed HPGe clover detectors. The ordering of the 449γ and 638γ is based on comparison to Coulomb excitation results and the assumption that Yrast states are predominately populated in deep-inelastic processes. The absence of a strong 638γ in Coulomb excitation indicates that this transition does not correspond to an E2 transition directly connected to the ground state.

^{41}S Levels

E(level)[†]	J$^{\pi}$[‡]
0.0	(5/2$^-$)
449 *2*	(7/2$^-$)
1087? *3*	(11/2$^-$)

[†] From Eγ.
[‡] Based on comparision to shell model calculations and the assumption that Yrast states are preferentially populated in deep-inelastic reactions.

γ(^{41}S)

Eγ	E$_i$(level)	J$_i^{\pi}$	E$_f$	J$_f^{\pi}$
449 *2*	449	(7/2$^-$)	0.0	(5/2$^-$)
638[†] *2*	1087?	(11/2$^-$)	449	(7/2$^-$)

[†] Placement of transition in the level scheme is uncertain.

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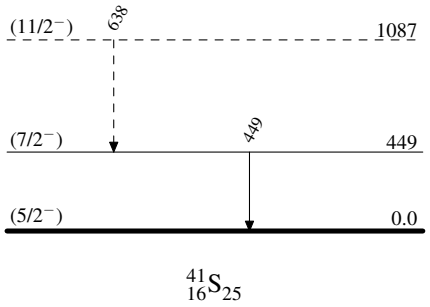
Level Scheme



$^{41}_{16}S_{25}$