Coulomb excitation 2001Pr08

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Ninel Nica, Balraj Singh	NDS 113, 1563 (2012)	28-May-2012

Beam=^{34}Al, target=^{197}Au.

2001Pr08: E=68.1 MeV/nucleon ^{34}Al beam produced from fragmentation of ^{48}Ca beam at 80 MeV/nucleon with a ^{9}Be target at NSCL facility. The fragments separated by A1200 separator and analyzed by time-of-flight and energy loss information. Measured (particle)γ coin using NaI(Tl) detector array.

This isotope is interpreted to lie near the "island of inversion".

^{34}Al Levels

E(level)	J^π	Comments
0	(4^-)	
657 *9*	(3^-)	B(E2)↑=0.0100 *39* (2001Pr08) J^π: calculated B(E2) values for lowest 2^-, 3^- an 4^- states give the best agreement for experimental value for 4^- to 4^- (2008Hi01), but 2001Pr08 obtained best agreement for 4^- to 3^-.

$\gamma(^{34}Al)$

E_γ	E_i(level)	J_i^π	E_f	J_f^π
657 *9*	657	(3^-)	0	(4^-)

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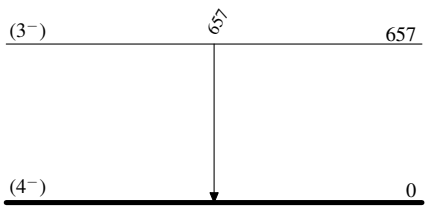
Level Scheme



$^{34}_{13}Al_{21}$