Coulomb excitation 1977Sc36

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	John Cameron, Jun Chen and Balraj Singh, Ninel Nica	NDS 113, 365 (2012)	15-Jan-2012

1977Sc36: E=53, 54, 57 MeV ^{37}Cl beam produced from a single MP Tandem Van de Graaff tandem accelerator at the three-state facility of Brookhaven National Laboratory. Targets of natural Mg and Al. A 55 cm^3 coaxial Ge(Li) detector. Measured Eγ, I$\gamma(\theta)$. Deduced levels, mixing ratios, transition strengths, $T_{1/2}$ for the level of 1726 keV using the Doppler Shift Attenuation Method (DSAM).

1967Af03: E=36.8 MeV ^{12}C ions on NH_4Cl target. NaI(Tl) detector. Measured Eγ. Deduced levels, transition strengths.

^{37}Cl Levels

E(level)	J^π†	$T_{1/2}$
0	$3/2^+$	
1726	$1/2^+$	0.12 ps *2*

† From Adopted Levels.

$\gamma(^{37}Cl)$

E_γ	E_i(level)	J_i^π	E_f	J_f^π	Mult.	δ	Comments
1726	1726	$1/2^+$	0	$3/2^+$	M1+E2	0.25 *2*	B(E2)↑=8.4×10^{-4} *5* (1977Sc36). δ: from lifetime and B(E2) (1977Sc36).

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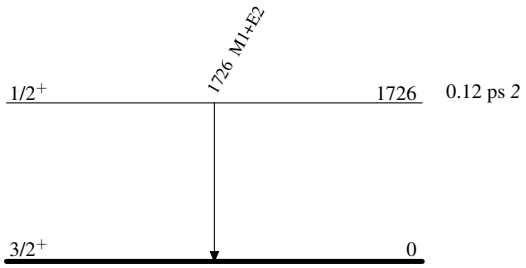
Level Scheme



$^{37}_{17}Cl_{20}$