^{36}Si(p,p′γ) 2007Ca35

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Ninel Nica, John Cameron and Balraj Singh	NDS 113, 1 (2012)	31-Dec-2011

Primary beam of ^{48}Ca at 140 MeV/nucleon was provided by the Coupled Cyclotron Facility. ^{9}Be target used. ^{36}Si secondary beam isolated using A1900 fragment separator. Si particles directed onto the RIKEN LH_2 target. The γ-ray measuring array around the LH_2 target consisted of 16 SeGA detectors at angles of 37° and 90 °.
Deformation parameter deduced from measured excitation cross section.

^{36}Si Levels

E(level)	J^π	Comments
0	0^+	
1408	2^+	Feeding-corrected excitation cross-section=7.3 mb *25*. β_2(p,p′)=0.24 *4* (Vibrational), 0.23 *+3−4* (prolate), 0.28 *+4−5* (oblate). Sign of β_2 is not given.

γ(^{36}Si)

E_γ	E_i(level)	J_i^π	E_f	J_f^π
1408	1408	2^+	0	0^+

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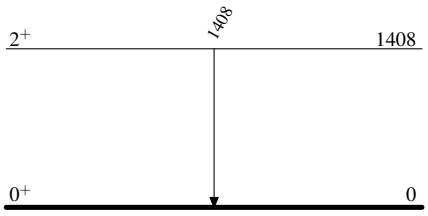
Level Scheme



$^{36}_{14}Si_{22}$