

**Coulomb excitation 1999Ib01**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen and Balraj Singh		ENSDF	31-May-2015

**Additional information 1.**

**1999Ib01:** E=45.1 MeV/nucleon secondary  $^{37}\text{Si}$  beam was produced by fragmentation of E=70 MeV/nucleon primary  $^{48}\text{Ca}$  beam provided by the K1200 cyclotron at the National Superconducting Cyclotron Laboratory (NSCL) at Michigan State University on a 285 mg/cm<sup>2</sup>  $^9\text{Be}$  target. Fragments were separated and identified by the A1200 fragment separator. The secondary target was a 532 mg/cm<sup>2</sup>  $^{197}\text{Au}$ . Scattered particles were detected in a fast/slow plastic phoswich detector and  $\gamma$  rays were detected with an array of 38 cylindrical NaI(Tl) detectors. Measured  $E_\gamma$ ,  $I_\gamma$ . Deduced levels, J,  $\pi$ , B(E2).

 $^{37}\text{Si}$  Levels

E(level)	$J^\pi$ <sup>†</sup>	$T_{1/2}$	Comments
0	(5/2 <sup>-</sup> )		
1437 27	(1/2 <sup>-</sup> )	1.4 ps +30-9	B(E2) $\uparrow$ =0.0101 45 (1999Ib01) $T_{1/2}$ : from measured B(E2) by 1999Ib01 with adopted $E_\gamma$ and $\gamma$ -ray branching ratios.

<sup>†</sup> From Adopted Levels.

 $\gamma(^{37}\text{Si})$ 

$E_\gamma$	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$	Mult.
1437 27	1437	(1/2 <sup>-</sup> )	0	(5/2 <sup>-</sup> )	[E2]

**Coulomb excitation 1999Ib01**Level Scheme