

Coulomb excitation 2008Sp01

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

Beam= ^{36}S , target=natural C: 0.19 mg/cm² on 3.03 mg/cm² Gd deposited on 1.0 mg/cm² Ta backed by 2.0 mg/cm² Cu.
 Measured g factors by transient field technique in Coulomb excitation in inverse kinematic reaction. E(^{36}S)=70 MeV beam provided by Cologne accelerator. Transient field calibrated using ^{48}Ti . Measured E γ , I γ using four NaI(Tl) scintillators and a Ge detector. Half-lives measured using Doppler- Shift-Attenuation Method (DSAM). Comparison of measured g factors with shell-model calculations.

 ^{36}S Levels

E(level)	J $^{\pi}$	T _{1/2} [†]	Comments
0	0 ⁺		
3290	2 ⁺	83 fs 7	g=+1.3 5 (2008Sp01)
3346	0 ⁺		
4192	3 ⁻	0.62 ps 7	g=+0.8 5 (2008Sp01)
4523	1 ⁺		
4574	2 ⁺		

[†] From DSAM (2008Sp01).

 $\gamma(^{36}\text{S})$

E γ	E _i (level)	J _i $^{\pi}$	E _f	J _f $^{\pi}$
902	4192	3 ⁻	3290	2 ⁺
1232	4523	1 ⁺	3290	2 ⁺
1284	4574	2 ⁺	3290	2 ⁺
3290	3290	2 ⁺	0	0 ⁺
4523	4523	1 ⁺	0	0 ⁺

Coulomb excitation 2008Sp01Level Scheme