

$^{115}\text{In}(^{34}\text{S},\text{X}\gamma)$ 2006Kr07

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

E=140 MeV. Measured $E\gamma$, $I\gamma$, $\gamma\gamma$, $\gamma\gamma(\theta)$ (DCO), $\gamma\gamma(\text{lin pol})$ using array of eight Compton-suppressed ‘Clover’ detectors placed at 80° and 140° relative to the beam direction. Shell-model calculations.

 ^{36}S Levels

Detailed shell-model configurations are given by 2006Kr07 for each level.

E(level) [†]	J^π
0	0^+
3291.0 5	2^+
4193.4 7	3^-
5020.7 9	4^-
5206.2 9	5^-
5781.1 10	

[†] From $E\gamma$'s, assuming $\Delta(E\gamma)=0.5$ keV for each γ ray.

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

$\Delta(\text{IPDCO})$ =polarization asymmetry.

E_γ	I_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult.	Comments
185.5	54 6	5206.2	5^-	5020.7	4^-	D	DCO=1.29 12 ($\Delta J=1$, dipole gate). Mult.: 2006Kr07 assign M1.
760.4	14.0 25	5781.1		5020.7	4^-	D	
827.3	61 6	5020.7	4^-	4193.4	3^-	M1	DCO=1.08 10 ($\Delta J=1$, dipole gate), $\Delta(\text{IPDCO})=-0.16$ 17.
902.4	100	4193.4	3^-	3291.0	2^+	E1	DCO=1.04 12 ($\Delta J=1$, dipole gate), $\Delta(\text{IPDCO})=+0.06$ 8.
1012.8	14.4 27	5206.2	5^-	4193.4	3^-	Q	DCO=0.94 9 ($\Delta J=2$ gate). Mult.: 2006Kr07 assign E2.
3290.8	>100	3291.0	2^+	0	0^+	E2	DCO=1.93 18 ($\Delta J=1$, dipole gate), $\Delta(\text{IPDCO})=+0.11$ 13.

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Level Scheme

Intensities: Relative I_γ

Legend

- \longrightarrow $I_\gamma < 2\% \times I_\gamma^{\max}$
- \longrightarrow $I_\gamma < 10\% \times I_\gamma^{\max}$
- \longrightarrow $I_\gamma > 10\% \times I_\gamma^{\max}$

