

$^{50}\text{Cr}(\alpha, \alpha' \gamma)$ 1977Ev03

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen and Balraj Singh		NDS 157, 1 (2019)	15-Apr-2019

1977Ev03: $E_{\alpha}=23.5, 27.2$ MeV beams from the Munich MP tandem. Enriched target. Measured E_{γ} , I_{γ} and $\gamma\gamma$ -coin, $\theta=\pm 90^{\circ}$, with Ge(Li) detectors.

Others:

1976GiZW (meeting abstract): $E=19$ MeV. Measured $\alpha\gamma$ -coin.

1973Sa10: $E=12.2, 13.2, 14.2$ MeV. Measured E_{γ} , $\gamma\gamma$ -coin. Three γ rays (783, 1098 and 1283) in a cascade observed.

 ^{50}Cr Levels

E(level)	J^{π}
0.0	0^{+}
783.3	2
1881.3	3
3164.1	4
3826.0	7
4745.3	6
6341.8	8

 $\gamma(^{50}\text{Cr})$

E_{γ}^{\dagger}	I_{γ}^{\ddagger}	$E_i(\text{level})$	E_f	J_f^{π}
661.9	6	3826.0	3164.1	
783.3	2	783.3	0.0	0^{+}
1098.1	2	1881.3	783.3	
1282.7	2	3164.1	1881.3	
1581.2	5	4745.3	3164.1	
1596.5	5	6341.8	4745.3	

\dagger From 1977Ev03.

\ddagger Average of 23.5-MeV and 27.2-MeV data from 1977Ev03, except for 1597 γ , where no data for 23.5 MeV are available.

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Level Scheme

Intensities: Relative I_γ

Legend

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

