^{50}Cr(n,n′γ) 1978Ka21

History

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

1978Ka21: E=0.84-3.97 MeV. Natural target. Measured γ and neutron spectra, σ.
Other: 1977Ko41: E=1.5-3.0 MeV; measured σ, TOF.
Data taken by evaluators from EXFOR10492.010 which includes information provided by G.P. Couchell (priv. comm., May 1977).

^{50}Cr Levels

E(level)	Jπ†	Comments
0	0^+	
783 *1*	2^+	
(1881)	4^+	E(level): excitation function of 783γ shows evidence of 1881 level being populated.
2921.0 *14*	2^+	

† From the Adopted Levels.

γ(^{50}Cr)

Eγ	σ(θ), mb/sr.†	Ei(level)	J_i^π	Ef	J_f^π	Comments
783 *1*	99 *12*	783	2^+	0	0^+	
(1098)		(1881)	4^+	783	2^+	Eγ: obscured by a strong background line.
2138 *1*	22 *7*	2921.0	2^+	783	2^+	σ(θ), mb/sr.: corrected for overlap with double-escape peak of ^{52}Cr 3162γ.
(2922)		2921.0	2^+	0	0^+	

† At E(n)=3.97 MeV (1978Ka21).

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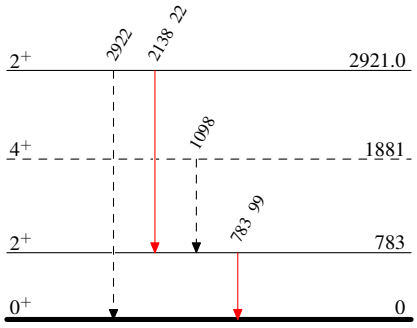
Level Scheme

Intensities: σ(θ=125°), mb/sr, At E(n)=3.97 MeV

Legend
- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$
- γ Decay (Uncertain)



$^{50}_{24}Cr_{26}$