^{52}Cr(n,γ) E=thermal 1980Ko01,1972Ko15,2004Be01

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Huo Junde	NDS 110,2689 (2009)	31-Mar-2007

1972Ko15: measured γ from enriched targets, CP(γ) on polarized beam.
1980Ko01: reanalyzed data of 1972Ko15.
2004Be01: Cold neutron, measured γ from natural chromium targets, HPGe-BGO compton-suppressed spectrometer.
See also: 1973Sp06, 1972Lo26, 1971Br19, 1970Or05, 1969Ra10, 1965Ba12, 1965Ru04, 1997Ve03.
Other: 1980Is02.

^{53}Cr Levels

E(level)[†]	J$^\pi$[‡]
0.0	3/2$^-$
564.04 *4*	1/2$^-$
2320.79 *14*	3/2$^-$
2656.7 *10*	5/2$^-$,7/2$^-$[#]
2670.02 *21*	1/2$^-$
2708.1 *4*	3/2$^-$[#]
3616.90 *11*	1/2$^-$
7939.23 *7*	3/2$^-$

[†] From a least-squares fit to primary and secondary γ-ray data.
[‡] From CP(γ), unless indicated otherwise, assuming that γ from capturing state is dipole.
[#] Adopted values, except as noted.

γ(^{53}Cr)

E$_\gamma$[†]	I$_\gamma$[‡]	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$	Comments
564.03 *4*	8.17 *3*	564.04	1/2$^-$	0.0	3/2$^-$	E$_\gamma$: from 1973Sp06.
2120 *20*	2.4[#]	2670.02	1/2$^-$	564.04	1/2$^-$	E$_\gamma$: from 1965Ru04.
2320.9 *2*	9.65 *4*	2320.79	3/2$^-$	0.0	3/2$^-$	E$_\gamma$: from 1972Lo26.
2656.6		2656.7	5/2$^-$,7/2$^-$	0.0	3/2$^-$	
2670.8 *7*	2.00 *1*	2670.02	1/2$^-$	0.0	3/2$^-$	
2710.3 *7*		2708.1	3/2$^-$	0.0	3/2$^-$	
3616.6 *3*	1.88 *1*	3616.90	1/2$^-$	0.0	3/2$^-$	
4322.13 *9*	2.09 *1*	7939.23	3/2$^-$	3616.90	1/2$^-$	
5231.6 *4*	0.4[#] *1*	7939.23	3/2$^-$	2708.1	3/2$^-$	
5269.0 *2*	3.32 *3*	7939.23	3/2$^-$	2670.02	1/2$^-$	
5618.23 *17*	9.46 *7*	7939.23	3/2$^-$	2320.79	3/2$^-$	
7374.58 *9*	5.55 *5*	7939.23	3/2$^-$	564.04	1/2$^-$	
7938.58 *10*	29.3 *3*	7939.23	3/2$^-$	0.0	3/2$^-$	

[†] From 1980Ko01, except as noted.
[‡] From 2004Be01, except as noted.
[#] From 1980Ko01.

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Level Scheme

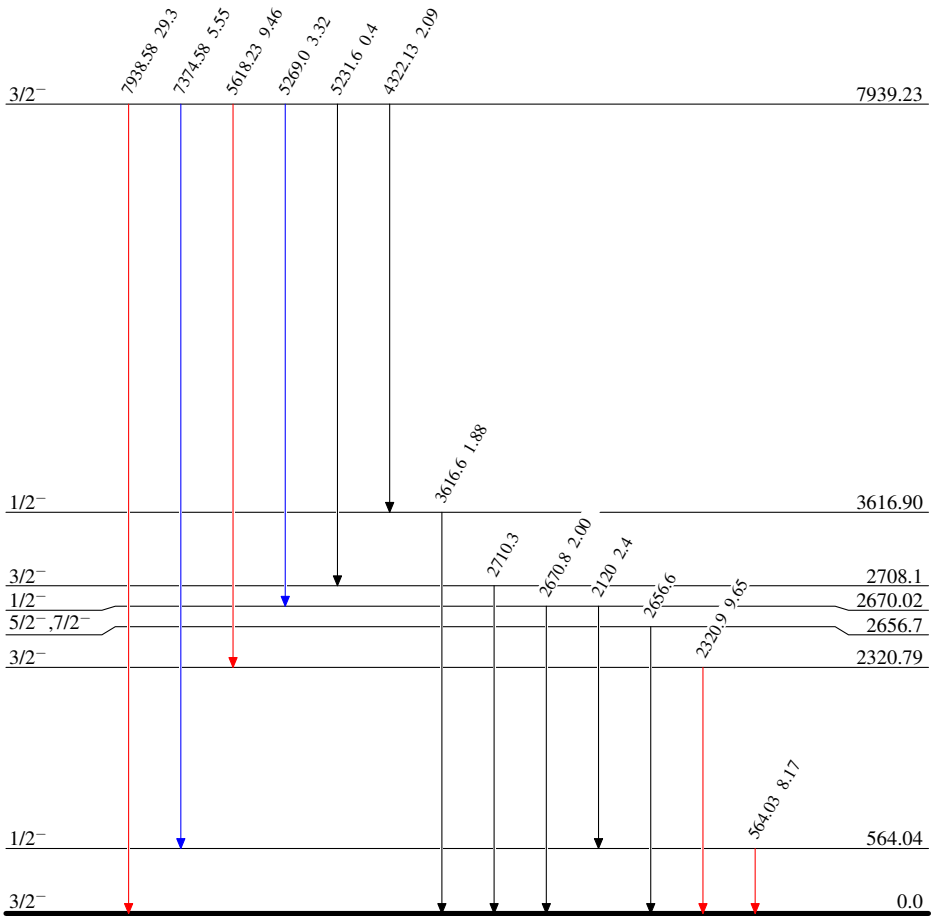
Intensities: Relative I_γ

Legend

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

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

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



$^{53}_{24}Cr_{29}$