

$^{52}\text{Cr}(\alpha, \alpha')$ 1970Br07, 1966Me07, 1978Ro12

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Yang Dong, Huo Junde		NDS 128, 185 (2015)	10-Jul-2015

1970Br07: E=44 MeV, measured $\sigma(E\alpha', \theta)$, rectangular solid-state detectors were used. They were lithium-drifted E-detectors with or without surface-barrier ΔE multi-detectors, between 80 and 400 keV FWHM, DWBA analysis.

1966Me07: E=50 MeV, measured $\sigma(\theta)$, α -particle detected in a unit consisting of four Si(Li) counters fixed at 2° intervals.

1978Ro12: E=15, 18, 19 MeV, measured $\sigma(\theta)$, two solid-state detector telescopes mounted in a 38 cm vertical scattering chamber DWBA analysis.

1990Ba23: E=25 MeV, FWHM: 150-250 keV, measured $\sigma(\theta)$, silicon surface-barriers detectors placed at five equi-spaced positions on each of the two moveable arms of scattering chamber.

1966Pe16: E=42 MeV, FWHM: 105 keV or 60 keV, measured $\sigma(\theta)$. Also quoted in **1996Oa01**.

Others: **1965Ta06**, **1980PiZS**, **1983Co02**, **1983Pe10**.

All data are from **1970Br07**, except as noted.

 ^{52}Cr Levels

E(level)	L#	β_{LR} (fm) [@]	Comments
0.0			
1.434×10^3 [†]	2	0.62	$\beta_{2R}=0.731$ (1978Ro12).
2.37×10^3 [†]	4	0.17	
2.65×10^3 [†]			
2.77×10^3	4	0.15	E(level): from 1990Ba23 .
2.96×10^3 [‡]			
3.16×10^3 [‡]	(2,6)	0.16	1966Me07 and 1996Oa01 report L=2 for E=3160.
3.45×10^3 [†]	4		
3.78×10^3 [†]	2	0.33	
4.01×10^3 [†]	4		
4.56×10^3	3	0.38	
4.73×10^3 [†]	4		
5.07×10^3 [†]	4		
5.45×10^3	4	0.17	
5.64×10^3 [†]			
5.91×10^3			
6.16×10^3 [†]	3		
6.54×10^3 [†]	3	0.12	
6.76×10^3 [†]			
7.10×10^3 [†]	3	0.21	
7.9×10^3	(3)		

[†] From **1966Me07**.

[‡] From **1966Pe16**.

From DWBA analysis.

@ From DWBA analysis of **1970Br07**.