

$^{54}\text{Fe}(\text{Li},\text{He}) \quad 1982\text{Ke12,1992Ka38}$ 

Type	Author	History		Literature Cutoff Date
Full Evaluation	Huo Junde	Citation		
		NDS 109, 787 (2008)		30-Apr-2007

**1982Ke12:** E=48 MeV, enriched targets(97%),  $100-\mu\text{g}/\text{cm}^2$  into  $10-\mu\text{g}$  carbon backings. A heavy-ion gas counter used in the light-ion mode provided mass and Z identification of the reaction products after their momentum analysis by the Enge spectrograph (energy resolution: 55 keV); measured  $\sigma(\theta)$ ; DWBA analysis.

**1992Ka38:** E=50 MeV, measured  $\sigma(\theta)$  and analyzing powers, an array of position-sensitive semiconductor detector telescopes; CCBA analysis.

All data are from [1982Ke12](#), except as noted.

 $^{55}\text{Co}$  Levels

E(level) <sup>†</sup>	J <sup>π</sup> #	C <sup>2</sup> S	E(level) <sup>†</sup>	J <sup>π</sup> #	C <sup>2</sup> S	E(level) <sup>†</sup>	J <sup>π</sup> #	C <sup>2</sup> S	E(level) <sup>†</sup>	J <sup>π</sup> #
0.0	7/2 <sup>-</sup>	0.21	3323	1/2 <sup>-</sup>	0.17	5170	1/2 <sup>-</sup>	0.08	$8.49 \times 10^3$ <sup>‡</sup>	9/2 <sup>+</sup>
2165	3/2 <sup>-</sup>	0.22	3641	3/2 <sup>-</sup>	0.03	5765	5/2 <sup>-</sup>	0.15	$8.81 \times 10^3$ <sup>‡</sup>	
2565	3/2 <sup>-</sup>	0.11	4164	1/2 <sup>-</sup>	0.13	6080	9/2 <sup>+</sup>	0.21		
2939	1/2 <sup>-</sup>	0.083	4177	5/2 <sup>-</sup>	0.13	6918	5/2 <sup>-</sup>	0.04		
3302	5/2 <sup>-</sup>	0.32	4724	3/2 <sup>-</sup>	0.11	$7.13 \times 10^3$ <sup>‡</sup>				

<sup>†</sup> No uncertainty is available.

<sup>‡</sup> From [1992Ka38](#).

# Based on  $\sigma(\theta)$  forward angle J-dependence DWBA analysis. Also quoted [1978LeZA](#) ( $J^\pi$ ) and [1977Fo06](#) (L).