

$^{54}\text{Fe}(\text{pol } d,d'),(d,d')$ 1968Ha31,1968Hi09

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Yang Dong, Huo Junde		NDS 121, 1 (2014)	20-Jun-2014

1968Ha31: E=7.50 5 MeV. Multi-gap spectrograph, FWHM=8 keV, measured $\sigma(\text{ED},\theta)$ from 22.5° to 157.5°.

1968Hi09: E=51.7 2 MeV. Si surface-barrier and NaI(Tl) $\Delta E/E$ telescopes, measured $\sigma(\text{ED},\theta)$, DWBA, deduced β_L , effective nucleon-nucleon interaction.

(pol d,d'): 1980Ha14: E=56 MeV; 1980Bu02: E=12 MeV; 1979Go06: E=10, 13 MeV; 1977St01: E=6 MeV; 1974Ba74: E=15 MeV; 1973Br18: E=12.3 MeV. Measured cross section $\sigma(\theta)$, vector-analyzing power $it1(\theta)$, tensor-analyzing power $T20(\theta)$, $T21(\theta)$, $T22(\theta)$, DWBA analyses.

Other measurement: 1974Ba78.

All data are from 68Ha31, except as noted.

 ^{54}Fe Levels

E(level)	Comments
0	
1410 4	$\beta_2=0.19$ (1968Hi09), $\beta_2=0.20$ (1968Ha31).
2537 6	
2550? 6	
2566 6	
2959 6	$\beta_2=0.14$ (1968Hi09).
3167 8	
3349 8	
4810 [†]	$\beta_3=0.12$ (1968Hi09).
6400 [†]	$\beta_3=0.12$ (1968Hi09).

[†] From 1968Hi09.