^{54}Fe(α,α') 1977Pa17,1970Br07,1966Pe16

History

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

1970Br07: E=44 MeV. Cylindrical scattering chamber, solid state detectors FWHM=120 keV, measured σ(Eα',θ).
1966Pe16: E=42 MeV, measured σ(Eα',θ).
1977Pa17: E=29.3 and 38 MeV. Scattering, Si(Li), determined sign of β_L using Blair phase shift. See also 1971Go36.
All data are from 1970Br07, except as noted.

^{54}Fe Levels

E(level)	L	Comments
0		
1409	2	E(level): From 1977Pa17. β_LR(fm)=0.57, from average values of 1970Br07 and 1966Pe16.
2540†	4	β_LR(fm)=0.25, from average values of 1970Br07 and 1966Pe16.
2950	2	β_LR(fm)=0.40, from average values of 1970Br07 and 1966Pe16.
3160	2	β_LR(fm)=0.22, from average values of 1970Br07 and 1966Pe16.
3300	4	β_LR(fm)=0.14, from average values of 1970Br07 and 1966Pe16.
3810†	4	β_LR(fm)=0.26, from average values of 1970Br07 and 1966Pe16.
4050	4	β_LR(fm)=0.16, from average values of 1970Br07 and 1966Pe16.
4260	4	β_LR(fm)=0.23, from average values of 1970Br07 and 1966Pe16.
4580	2	β_LR(fm)=0.20, from average values of 1970Br07 and 1966Pe16.
4760	3	β_LR(fm)=0.28, from average values of 1970Br07 and 1966Pe16.
4950		L: odd.
6340	3	β_LR(fm)=0.39, from average values of 1970Br07 and 1966Pe16.
7250†		L: odd.
7570†	(2)	β_LR(fm)=0.14, from 1966Pe16.
8000†	3	β_LR(fm)=0.24, from 1966Pe16.

† From 1966Pe16.