^{54}Fe(α,t) 1970Ro22

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

E=44 MeV, particle identifier with two ΔE-E semiconductor telescopes, 80-120 keV (FWHM); measured σ(ET,θ); DWBA analyses.
See also 1968Br24 and 1967Ar05.

^{55}Co Levels

E(level)	J^π‡	L‡	C^2S'	Comments
0.0	$7/2^-$	3	1.70	
2190 *80*	$(3/2^-)$	1	0.85	
2610 *80*	$(3/2^-)$	1	0.76	
2990 *80*	$(3/2^-)$	(1)	1.29	
3340 *80*	$5/2^-$	3	2.41	
3650 *80*	$(1/2^-)$	1	0.67	
3870 *80*	$(1/2^-)$	1	0.38	
4200 *80*	$5/2^-$	3	0.84	
4370 *80*		(1)	(0.64)	
4570 *80*		(4)	(0.12)	
4740† *80*	(3/2)	1	0.88	
4950 *80*	(1/2)			E(level): not resolved from 5150 level.
5150† *80*	$(1/2^-)$	1	0.80	
5320 *80*	$(5/2^-)$	(3)	0.80	
5490 *80*	$(7/2^-)$	(1,3)	(0.64)	C^2S': value is for L=1.
5720† *80*	$5/2^-$	3	1.77	
6010 *80*	$9/2^+$	4	(1.50)	
6340 *80*	$(7/2^-)$	(3,1)	(0.72)	C^2S': value is for L=3.
6560 *80*		1	(0.81)	
6800 *80*		(2,4)		
7050 *80*		(2,4)		
8500 *80*				E(level): observed only by 1968Br24.

† Probable isobaric analog of ^{55}Fe level.
‡ $\sigma(\theta)$ are structureless and L assignments appear to result mainly from qualitative fits to slopes of $\sigma(\theta)$; so L assignments may be uncertain, especially for higher L values. For J^π assignment, based on σ(E(t),θ) measurements, DWBA analyses, and C^2S extractions for L transfer.