

$^{54}\text{Fe}(^{16}\text{O}, ^{15}\text{N})$ 1974Be58

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

E=104 MeV, enriched targets, thin carbon backings; multiwire position sensitive proportional counter, energy-loss magnetic spectrometer; measured $\sigma(E(^{15}\text{N}),\theta)$; DWBA analyses, compared heavy-ion with light-ion analyses.

 ^{55}Co Levels

<u>E(level)</u>	<u>$J^{\pi\ddagger}$</u>	<u>L</u>	<u>C^2S'</u>	<u>E(level)</u>	<u>$J^{\pi\ddagger}$</u>	<u>L</u>	<u>C^2S'</u>	<u>E(level)</u>	<u>$J^{\pi\ddagger}$</u>	<u>L</u>	<u>C^2S'</u>
0.0	$7/2^-$	3	2.80	3220 50	$(5/2^-)$	3	4.98	5610 [†] 50	$5/2^-$	3	2.52
2130 50	$3/2^-$	1	1.76	3650 50	$3/2^-$	1	0.48	6000 50	$9/2^+$	4	4.00
2500 50	$3/2^-$	1	0.88	4140 50	$(5/2^-)$	3	1.98	8440 [†] 50	$9/2^+$	4	1.90
2900 50	$1/2^-$	1	1.12	4700 [†] 50	$3/2^-$	1	0.56	8960 50	$9/2^+$	4	0.40

[†] Probable isobaric analog of ^{55}Fe .

[‡] From J dependence of cross section. As for discussion of J and Q dependent effects, see also 1973Po07. Evaluator notes that DWBA fits to angular distributions tend to be poor, particularly at high excitation energies.