Coulomb excitation 2004Yu07

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Yang Dong, Huo Junde	NDS 128, 185 (2015)	10-Jul-2015

^{197}Au(^{52}Fe,^{52}Fe′γ) at E(^{52}Fe)=65.2 MeV/nucleon.

^{52}Fe produced by impinging the primary beam of ^{58}Ni at 140 MeV/nucleon on a 376 mg/cm2 ^{9}Be target, and selecting in the large-acceptance a 1900 fragment separator. A ^{197}Au (257.7 mg/cm2) target used for Coulomb excitation.

Measured Eγ, γ(scattered ^{52}Fe) coin, cross section with segmented germanium array of 18 detectors, the intrinsic energy resolution of the detectors is approximately 2.5-2.8 keV at 1332 keV, a total of 13 segmented HPGe detectors were mounted in the array for the present experiment, six detectors in the ring at 37° to the beam direction, and seven in the 90° ring.

See also 2004Mu09 and 2005Ga15.

^{52}Fe Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0	0^+		
849.1 *5*	2^+	7.8 ps *10*	B(E2)↑=0.082 *10* $T_{1/2}$: from B(E2).

γ(^{52}Fe)

E$_\gamma$	E$_i$(level)	J_i^π	E$_f$	J_f^π
849.1 *5*	849.1	2^+	0.0	0^+

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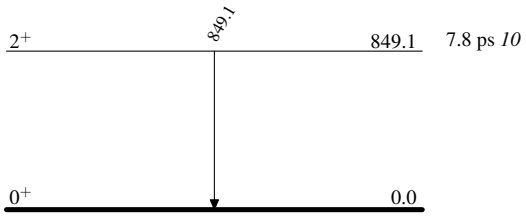
Level Scheme



$^{52}_{26}Fe_{26}$