

Ni( $\pi^+$ , $x\gamma$ ), ( $\pi^-$ , $X\gamma$ ), ( $K^-$ , $x\text{ ray}\gamma$ ) 1978Ja19,1973Ev02,1972Ba55

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Huo Junde, Huo Su, Yang Dong		NDS 112, 1513 (2011)	29-Oct-2009

Includes: Fe( $\mu^-$ , $xn\gamma$ ),  $^{59}\text{Co}(\mu^-,4n\gamma)$ , Ni( $\mu^-$ , $xn\gamma$ ), Cu( $K^-$ , $X\gamma$ ).

1978Ja19: Ni( $\pi^+$ , $X\gamma$ ), ( $\pi^-$ , $X\gamma$ ), E=100,160,220 MeV; measured prompt and  $\beta^-$  delayed  $\gamma$ -spectra.

1973Ev02: Fe( $\mu^-$ , $xn\gamma$ ), Ni( $\mu^-$ , $xn\gamma$ ), muon capture; measured  $E_\gamma$  and  $I_\gamma$ .

1972Ba55: Ni( $K^-$ , $X\gamma$ ), Cu( $K^-$ , $X\gamma$ ), separated 800 MeV/C K- beam was stopped in targets of Cu and Ni; measured  $E_\gamma$  and  $I_\gamma$  with Ge(Li).

1971Ba10:  $^{59}\text{Co}(\mu^-,4n\gamma)$ , muon capture; measured  $E_\gamma$  and  $I_\gamma$  with Ge(Li).

See also 1977Ro25.

 $^{56}\text{Fe}$  Levels

<u>E(level)<sup>†</sup></u>	<u>L<sup>‡</sup></u>
0	
847.4 3	2
2085.6 8	

<sup>†</sup> From  $E_\gamma$  by using least-squares fits, except as noted.

<sup>‡</sup> From  $\sigma(\theta)$  fits with DWBA (1978DyZW).

 $\gamma(^{56}\text{Fe})$ 

<u><math>E_\gamma</math><sup>†</sup></u>	<u><math>I_\gamma</math><sup>#</sup></u>	<u><math>E_i</math>(level)</u>	<u><math>E_f</math></u>
847.4 3	100	847.4	0
1238.2 7	28	2085.6	847.4
<sup>x</sup> 1327.7 <sup>‡</sup>			

<sup>†</sup> From 1971Ba10, except as noted.

<sup>‡</sup> From 1972Ba55.

<sup>#</sup> Relative photon intensities normalized to  $I_\gamma(847\gamma)=100$  (1971Ba10).

<sup>x</sup>  $\gamma$  ray not placed in level scheme.

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Legend

Level Scheme

Intensities: Type not specified

- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$

