^{60}Ni(p,Xγ), ^{62}Ni(p,Xγ) 1982La13,1980Sa13

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	M. R. Bhat	NDS 85, 415 (1998)	24-Sep-1998

Includes ^{64}Ni(p,Xγ).

1980Sa13: E=100 and 136 MeV for ^{60}Ni and ^{64}Ni and 80, 100, 136, and 164 MeV for ^{62}Ni. See ^{62}Ni(p,Xγ) E=164 MeV?, above, for details. See also 1977Sa07.

1982La13: ^{60}Ni(p,Xγ) E= 400 MeV. Measured pγ-coincidences, $\sigma(\theta(p))$, and proton momentum spectrum; proportional counter, Ge(Li). Deduced σ_γ, dσ/dΩ(p,γ). No indication of knockout processes.

All data from 1980Sa13, except as noted. Level scheme added by evaluators based on adopted values.

^{57}Fe Levels

E(level)†	J$^\pi$†
0.0	1/2$^-$
14.41	3/2$^-$
136.47	5/2$^-$
366.76	3/2$^-$
706.43	5/2$^-$
1265.36	1/2$^-$

† From Adopted Levels.

γ(^{57}Fe)

E$_\gamma$	σ_γ, mb†	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$	Comments
122.0	35.8 *11*	136.47	5/2$^-$	14.41	3/2$^-$	
136.5	5.8 *9*	136.47	5/2$^-$	0.0	1/2$^-$	
352.3	5.1 *9*	366.76	3/2$^-$	14.41	3/2$^-$	
571.1	0.5 *9*	706.43	5/2$^-$	136.47	5/2$^-$	σ_γ, mb: 11.7 mb *4*, dσ/dΩ(p,γ)=1.6 mb/sr *3* for ^{60}Ni(p,Xγ) E=400 MeV.
898.4	0.6 *11*	1265.36	1/2$^-$	366.76	3/2$^-$	

† For 164-MeV protons on ^{62}Ni.

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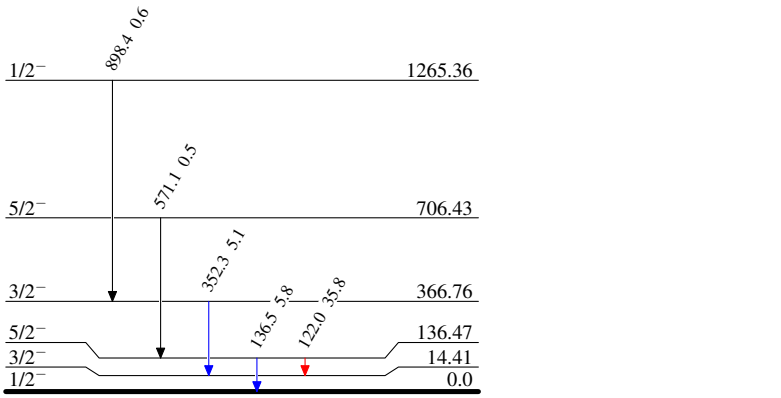
Level Scheme

Intensities: Type not specified



$^{57}_{26}Fe_{31}$