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 $^{58}\text{Ni}(\gamma, n), (e, e' n)$  res [1993Ra18](#)

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

[1973RoYN](#) (random phase approximation) noted that the  $T=1/2$  states of 12.4-MeV,  $3/2^-$ ; 13.16-MeV,  $5/2^-$ ; and 13.48-MeV,  $1/2^-$ , were the principal states in  $^{57}\text{Ni}$  fed by the 16.4-MeV GDR in  $^{58}\text{Ni}$  and the 17.6-MeV,  $7/2^-$ ,  $T=3/2$  state was the principal state fed by the 19.4-MeV GDR in  $^{58}\text{Ni}$ .

[1981Br04](#) obtained  $\sigma(\gamma, n; \text{bremsstrahlung})/\sigma(e, e' n; E=38.5 \text{ MeV})=56$ ,  $\sigma(\gamma, n; \text{bremsstrahlung})/\sigma(e, e' n; E=77.5 \text{ MeV})=48$ ; stacked foils.

[1984Ve11](#) measured the photoneutron spectra for  $E_\gamma \approx 15-27 \text{ MeV}$  and observed states at 0.95 and 2.29 MeV  $1/3$  being fed from the  $^{58}\text{Ni}$  19.4-MeV GDR.

[1993Ra18](#):  $E_\gamma = 17.9 \text{ MeV}$ , measured energy spectrum of neutrons, compared relative probability of level occupancy with those derived from spectroscopic factors. Other: [1981KiZS](#).

All data are from [1993Ra18](#).

 $^{57}\text{Ni}$  Levels

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<u>E(level)</u>	<u>L</u>	<u>C<sup>2</sup>S</u>
0.0	1	1.02
768	3	0.87
1113	1	0.19
2578	3	2.8