

$^{31}\text{P}(\text{n,p})$  1999Se01

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen and Balraj Singh		NDS 184, 29 (2022)	24-Jun-2022

**1999Se01:** E=198 MeV neutron beam at TRIUMF. Protons momentum was analyzed in SASP Quadrupole-Dipole-Dipole magnetic spectrometer. Drift chambers, segmented and monoliths scintillators for measuring the differential cross section at angles  $0^\circ-30^\circ$ . Extracted Gamow-Teller strength distribution and analyzed it with a multipole decomposition. Authors give measured double differential cross sections for up to 27.0 MeV excitation energy in steps of 1 MeV, and  $0-1^\circ$  angular-bin.

All data are from [1999Se01](#).

 $^{31}\text{Si}$  Levels

E(level)	Comments
0	B(GT)<0.10. $d^2\sigma/d\Omega dE=0.36$ mb/sr MeV.
750	B(GT)=0.26 6. $d^2\sigma/d\Omega dE=1.35$ mb/sr MeV for 1 MeV excitation energy.
2320	B(GT)=0.18 3. $d^2\sigma/d\Omega dE=0.88$ mb/sr MeV for 2 MeV excitation energy.
5000	E(level): authors clearly state the 5 MeV peak they see is several unresolved states. B(GT)=0.88 13. $d^2\sigma/d\Omega dE=2.06$ mb/sr MeV for 5 MeV excitation energy.