
 ${}^{48}\text{Ca}(\text{pol p,p}')\text{:GDR,GQR}$ [1991Ba26,1990Ba14](#)

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	Jun Chen	NDS 179, 1 (2022)	30-Nov-2021

[1991Ba26,1990Ba14](#): E=318 MeV proton beam from the Los Alamos Meson Physics Facility (LAMPF). Measured $\sigma(\theta)$, analyzing power, and spin-flip probability for excitation energy between 6 MeV and 40 MeV, $3^\circ \leq \theta \leq 9^\circ$ using a high-resolution spectrometer with focal-plane polarimeters. Deduced giant, spin resonance strength distributions.

Giant dipole resonance ($\Delta L=1, \Delta S=0, \Delta T=1$): well-defined at 20 MeV.

Giant quadrupole resonance: broad distribution, roughly centered around 15 MeV.

Spin dipole resonance: broad distribution, roughly centered around 25 MeV.

Spin quadrupole resonance: appears to be peaking at about 40 MeV.

See [1991Ba26](#) for the summed strengths of these resonances.