^{40}Ca(^{12}C,^{12}N),(^{13}C,^{13}N) 1988Vo06,1993Be19

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jun Chen	NDS 140, 1 (2017)	30-Sep-2015

1988Vo06: (^{12}C,^{12}N) E=70 MeV/nucleon ^{12}C beam was produced at GANIL. Measured $\sigma(\theta)$ with the SPEC spectrometer (FWHM≈300 keV). Deduced spin-flip giant resonances.

1993Be19 (also 1989Be50): (^{13}C,^{13}N) E=50 MeV/nucleon ^{13}C beam was produced from the three-stage cyclotron at GANIL. Measured $\sigma(\theta)$ with the SPEC spectrometer (FWHM≈300 keV). Deduced energy of giant dipole resonance (GDR), and GDR analog state. Microscopic DWBA.

^{40}K Levels

E(level)	width	Comments
0[†]		
30[†]		
740[†]		
890[†]		
11×10^3 *4*		E(level): wide bump interpreted as spinflip giant-dipole resonance split into several states of J^π=0$^-$,1$^-$, and 2$^-$ (1988Vo06).
12.0×10^3 *3*	3.1 MeV *2*	E(level),width: from 1993Be19. Corresponding energy of GDR in ^{40}Ca=19.7 MeV *3*.

[†] GS+30 and 740+890 are unresolved structures in 1988Vo06.