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Isovector Quadrupole Resonance observed in the ^{60}Ni(^{13}C,^{13}N)^{60}Co reaction at E/A = 100 MeV TAKASHI ICHIHARA, RIKEN, MASAYASU ISHIHARA, RIKEN, HAJIME OHNUMA, Chiba Institute of Technology, TAKASHI NIIZEKI, Tokyo Kasei University, YOSHITERU SATOU, Tokyo Institute of Technology, HIROYUKI OKAMURA, Cyclotron Radio-Isotope Center, Tohoku University, SHIGERU KUBONO, CNS, University of Tokyo, MASAHIKO TANAKA, High Energy Accelerator Research Organization (KEK), YOSHIHIDE FUCHI, High Energy Accelerator Research Organization (KEK) — The charge-exchange reaction ^{60}Ni(^{13}C,^{13}N)^{60}Co at E/A = 100 MeV has been studied to locate isovector (ΔT = 1) non-spin-flip (ΔS = 0) giant resonances. Besides the giant dipole resonance at E_x = 8.7 MeV, another resonance has been observed at E_x = 20 MeV with a width of 9 MeV. DWBA analysis on the angular distribution clearly indicated the L = 2 multipolarity, attributing the E_x = 20 MeV state to the giant isovector quadrupole resonance. The present analysis further indicates that the observed peak exhausts approximately 50 % strength of the isovector L=2 classical energy-weighted sum rule. The same (^{13}C,^{13}N) reactions at E/A = 100 MeV for other target nuclie will be also presented and discussed. A part of this result can be found at the reference of T. Ichihara *et al.*, Phys. Rev. Lett. **89**, 142501 (2002).

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