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Isoscalar Giant Resonances in Molybdenum Isotopes¹ KEVIN GARG, YILONG YANG, University of Notre Dame, HOWARD, UMESH MENEKSE SINGEYIT, Ankara University, HIDETOSHI AKIMUNE, Konan University, MASATOSHI ITOH, YOHEI MATSUDA, KOUHEI KARASUDANI, JUN OKAMOTO, YOKO ISHIBASHI, Tohoku University, TAKAHIRO KAWABATA, TATSUYA FURUNO, MOTOKI MURATA, AKANE SAKAUE, KENTO INABA, Kyoto University, SHINSUKE OTA, University of Tokyo, MUHSIN HARAKEH, University of Groningen, MAMORU FUJIWARA, SHOKEN NAKAMURA, ASAHI KOHDA, Osaka University — It is a well-established question in nuclear structure as to why the incompressibility of nuclear matter calculated from the E0 giant resonance strength distributions of open-shell nuclei, such as tin and cadmium isotopes, is lower than that determined using data on closed-shell nuclei such as ²⁰⁸Pb. To investigate this, giant resonance strength distributions have been extracted for the isotopic chain 94,96,97,98,100 Mo. Angular distributions for 100 MeV/u α particles were obtained using the spectrometer Grand Raiden. Multipole decompositions were carried out on the distributions to isolate the monopole, dipole, and quadrupole strength over the excitation energy range of the spectra. Results of the analysis and implications for the nuclear incompressibility will be discussed.

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