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Feasibility of using ⁶Li as a probe in studying the iso-scalar giant monopole resonance (ISGMR) in unstable nuclei using inverse kinematics¹ J.T. MATTA, U. GARG, D. PATEL, G.P.A. BERG, M. COUDER, S. O'BRIEN, K. SAULT, UND, ND, IN-46556, USA, M. ITOH, CYRIC, Tohoku Univ., Sendai 980-8578, Japan, F. TAKAHASHI, H.P. YOSHIDA, Dept. of Phys., Tohoku Univ., Sendai 980-8578, M. YOSOI, RCNP, Osaka Univ., Osaka 567-0047, H. AKIMUNE, Dept. of Phys., Konan Univ., Kobe, 568-8501, Japan, M. UCHIDA, Dept of Phys., Tokyo Institute of Technology, Tokyo 152-8850, Japan, K. KAWASE, JAEA, Kyoto 619-0215, Japan, T. KAWABATA, CNS, Univ. of Tokyo, Tokyo 113-0033, Japan, X.F. CHEN, Wash. Univ. St. Louis, MI 63130, USA, D.T. KHOA, M.L. BUI, INST, VAEC, Hanoi, Vietnam — With the advent of RIB facilities, it would be very interesting to measure the ISGMR strength distributions in nuclei far from stability. However these experiments must be done in inverse kinematics and the most appropriate solid target for this is ${}^{6}Li$; it also meets the requirements for being a good ISGMR probe as it is light, has T=0, and can be made thin enough that recoils can escape to be detected. However, little is known about using 6 Li as a probe for the ISGMR. To that end, ISGMR measurements have been made using a ⁶Li probe at 60MeV/A at RCNP, Osaka University, Japan. Small-angle inelastic scattering data were obtained for ⁵⁸Ni, ⁹⁰Zr, and ¹¹⁶Sn. The results of the ISGMR strength extraction will be presented.

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