

Abstract Submitted
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Photodisintegration of Lithium Isotopes R.E. PYWELL, University of Saskatchewan, W.A. WURTZ, U. of Saskatchewan, B. NORUM, S. KUCUCKER, U. of Virginia, B.D. SAWATZKY, Temple U./Jefferson Lab, H.R. WELLER, M.A. AHMED, S. STAVE, Duke U. — It is clear that new experimental data is needed to compare with recent Lorentz Integral Transform calculations of the photodisintegration cross sections of the lithium isotopes. We describe a recent measurement on these isotopes performed with the monochromatic, polarized photon beam at the High Intensity Gamma-Ray Source (HIGS) at Duke University in Durham, NC, USA. The Blowfish Neutron Detector Array, a segmented neutron detector array with good angular resolution that covers $1/4$ of 4π steradians, was used to detect photoneutrons. Clear separation of various reaction channels is possible which allows detector efficiencies to be accurately modeled using a GEANT4 simulation. Several methods for obtaining the incident photon flux are available so precision cross sections between 8 and 35 MeV can be obtained.

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