

Abstract Submitted
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Photo-fission Methods to detect Fissile Materials¹ MICAH S. JOHNSON, A. GLENN, E.P. HARTOUNI, S.A. SHEETS, R.A. SOLTZ, Lawrence Livermore National Laboratory, A. DANAGOULIAN, S.E. KORBLY, R.J. LEDOUX, Passport Systems Inc. — A mission objective of various national security agencies is to develop systems that can detect fissile material. There are a myriad of researchers at national laboratories, academic institutions, and industry who are investigating various methods to detect fissile materials. These methods are broken down into active or passive detection systems. Examples of active systems include neutron or photon sources to stimulate and/or scatter from materials. Our focus has been to use photons near the fission barrier of various actinides to excite fission modes and measure the correlated and uncorrelated neutrons. We will present and discuss results from recent measurements. We will present the overall results of our effort and discuss some of the open questions.

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