

Abstract Submitted
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Gamma-Ray Output Spectra from ^{239}Pu Fission¹ JOHN ULLMANN, MARIAN JANDEL, TODD BREDEWEG, AARON COUTURE, ROBERT HAIGHT, JOHN O'DONNELL, DAVID VIEIRA, Los Alamos National Laboratory, CHING-YEN WU, ANDRII CHYZH, JULIE GOSTIC, ROGER HENDERSON, ELAINE KWAN, Lawrence Livermore National Laboratory — A new measurement of the gamma-ray energy spectrum and multiplicity following neutron-induced fission of ^{239}Pu has been made using DANCE, a highly-segmented, nearly 4π BaF_2 array at the Los Alamos Neutron Science Center. The ^{239}Pu target consisted of an approximately 2 mg/cm^2 deposit mounted in a small parallel-plate avalanche chamber inserted into the DANCE in order to tag fission events. The gamma-ray spectra were measured for several strong neutron resonances below 100 eV. The measured spectra were corrected for detector response by using simple parameterizations of the actual fission gamma-ray emission coupled with a GEANT model of the DANCE array.

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