

Abstract Submitted
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Photon Strength Functions for $^{156,157,159}\text{Gd}$ ¹ BAYARBADRAKH BARAMSAI, G.E. MITCHELL, A. CHYZH, D. DASHDORJ, C. WALKER, NC State University, T.A. BREDEWEG, A. COUTURE, R.C. HAIGHT, M. JANDEL, A.L. KEKSIS, J.M. O'DONNELL, R.S. RUNDBERG, J.M. WOUTERS, J.L. ULLMANN, D.J. VIEIRA, LANL, U. AGVAANLUVSAN, Stanford University, F. BECVAR, M. KRTICKA, Charles University, Prague, DANCE COLLABORATION — In recent years the low energy behavior of the Photon Strength Function (PSF) has attracted much attention. A completely consistent description of this behavior is not available. The neutron capture γ -ray spectra measured by the DANCE detector array located at the Los Alamos Neutron Science Center has been used for the study of the PSF below the neutron separation energy. The radiative decay of the compound nuclei $^{156,157,159}\text{Gd}$ has been measured. The spectra were simulated with the DICEBOX code. A variety of phenomenological models of the PSF were considered in the simulations. Comparison of the experimental and simulated spectra will be presented.

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