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Gamow-Teller decays near 78Ni¹ ROBERT GRZYWACZ, University of Tennessee, ORNL, MOHAMMAD ALSHUDIFAT, University of Tennessee, MIGUEL MADURGA, CERN, KRZYSZTOF RYKACZEWSKI, CARL GROSS, ORNL — Decays of neutron-rich nuclei close to 78Ni such as 82,83Zn and 82,83Ga produced in proton-induced fission of 238U were studied at the Holifield Radioactive Ion Beam Facility. New gamma-ray transitions were identified and level schemes, which include states at high excitation energies were constructed. The high energy levels were populated through allowed Gamow-Teller decays of the 78Ni components of the wave function, and were interpreted with new shell model calculations.

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