

Abstract Submitted
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Transition Strengths in ^{67}Ga ¹ K.D. JONES, R.A. HARING-KAYE, R.M. ELDER, K.Q. LE, Ohio Wesleyan University, S.I. MORROW, Houghton College, S.L. TABOR, V. TRIPATHI, P.C. BENDER, Florida State University, P.R.P. ALLEGRO, N.H. MEDINA, J.R.B. OLIVEIRA, University of Sao Paulo, J. DORING, Bundesamt für Strahlenschutz — High-spin states in ^{67}Ga were studied using the $^{55}\text{Mn}(^{18}\text{O},\alpha 2n)$ reaction at 50 MeV performed at Florida State University. Prompt γ - γ coincidences were measured with a Compton-suppressed Ge array consisting of three Clover detectors and seven single-crystal detectors. The existing level scheme was verified based on the measured γ - γ coincidences. Lifetimes of 13 excited states were measured using the Doppler-shift attenuation method. Reduced electric quadrupole transition rates $B(E2)$ were calculated from the lifetimes and compared with the predictions of the Interacting Boson-Fermion Plus Broken Pair Model (IBFBPM) from previous work. The evolution of shape with spin was inferred from cranked Woods-Saxon calculations.

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