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Transition Strengths in ^{70}As ROBERT ELDER, ROBERT HARING-KAYE, Ohio Wesleyan University, SYLVIA MORROW, Houghton College, SAM TABOR, V. TRIPATHI, P. BENDER, Florida State University, N. MEDINA, P. ALLEGRO, University of Sao Paulo, J. DORING, Bundesamt fur Strahlenschultz, KAMALI JONES, LE KHAHN, Ohio Wesleyan University — High-spin states in ^{70}As were produced at Florida State University through the ^{55}Mn(^{18}O,3n) reaction at 50 MeV. Prompt γ-γ coincidences were measured with a Compton-suppressed Ge array consisting of 3 Clover and 7 single-crystal detectors. An enhanced level scheme was developed from the coincidence relations and relative intensity measurements. Spin assignments were based on directional correlation of oriented nuclei ratios. Lifetimes were determined using the Doppler-shift attenuation method. Transition quadrupole moments inferred from the lifetimes will be compared with those predicted from cranked Woods-Saxon calculations, which indicate near-prolate collective structures competing with single-particle excitations in the lowest positive- and negative-parity bands.

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