

HIGH-SPIN STATES IN THE $T_z = -1/2$ NUCLEUS ^{55}Ni ¹

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High-spin states of the isospin $T_z = -1/2$ nucleus ^{55}Ni have been identified for the first time by means of the reaction $^{28}\text{Si}(^{36}\text{Ar}, 2\alpha n)$ at 143 MeV beam energy. The GAMMASPHERE array together with ancillary detectors was used to detect γ rays in coincidence with evaporated light particles. The level scheme of ^{55}Ni comprising four transitions is compared to its mirror partner ^{55}Co and shell-model calculations in the fp shell.

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