

Abstract Submitted
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The Level Structure of Neutron Rich ^{26}Na S. LEE, S.L. TABOR, C.R. HOFFMAN, D.B. CAMPBELL, J. PAVAN, K.W. KEMPER, M.A. RILEY, M. WIEDEKING, A. PIPIDIS, M.W. COOPER, C. CHANDLER, Florida State University, Tallahassee, FL 32306, USA — T=2 ^{26}Na was populated from the $^{14}\text{C}(^{14}\text{C},d)$ reaction at 22MeV at Florida State University. Charged particles were detected in a particle detector telescope consisting of three segmented silicon detectors. γ rays were measured using an array of Compton-suppressed HPGe detectors. The array consisted of three 2-fold segmented “clover” detectors and seven single Ge detectors. The data was analyzed from the d- γ and d- γ - γ coincidences with Gnuscope a software package for particle-gamma analysis. Several new excited states and new γ -ray transitions were found. Angular distributions were measured to assign spins and parities to the new levels. The new results were compared with USD shell model calculations and previous measurements.

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