

Abstract Submitted
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Structure of ^{19}O from $^9\text{Be} + ^{14}\text{C}^1$ R. DUNGAN, S.L. TABOR, J. VONMOSS, S. MORROW, B. ABROMEIT, K. KRAVVARIS, J.J. PARKER IV, P.L. TAI, VANDANA TRIPATHI, A. VOLYA, Florida State University — The $^9\text{Be}(^{14}\text{C}, \alpha\gamma)$ reaction at $E_{Lab}=30$ and 35 MeV was used to study excited states of ^{19}O . The Florida State University (FSU) γ detector array was used to detect γ radiation in coincidence with charged particles detected and identified with a silicon ΔE -E particle telescope. From α - γ - γ coincidences five new states of ^{19}O have been identified and an additional three new γ transitions among known states have been observed. An additional previously unobserved state has been marked tentative from α - γ coincidences. These results are compared to shell model calculations using the USDA, WBP, and PSDU interactions.

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Rutger Dungan
Florida State University

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