

Abstract Submitted
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Lifetimes in the A=109 isobaric chain¹ M.K. SMITH, B. BUCHER, A. APRAHAMIAN, Univ. of Notre Dame, H. MACH, Univ. of Notre Dame, Uppsala Univ, G. SIMPSON, LPSC, Grenoble, J. RISSANEN, J. AYSTO, T. ERONEN, D. GHITA, P. KARVONEN, A. JOKINEN, I.D. MOORE, H. PENTTILA, M. REPONEN, C. WEBER, A. SAASTAMOINEN, Univ. of Jyvaskyla, W. KURCEWICZ, Univ. of Warsaw, I.M. FRAILE, B. OLAIZOLA, Universidad Complutense Madrid, E. RUCHOWSKA, Soltan Institute for Nuclear Studies, Warsaw — Nuclear structure is known to evolve rapidly within the neutron-rich region around $50 < N < 82$, $A \sim 110$. A reliable characterization of this evolution, and especially the onset of deformation, is important for both structure and for nuclear astrophysics. However, the structure of nuclei within this region remains an open question. This work focuses on gamma spectroscopy and lifetime measurements, specifically for the A=109 chain of nuclei including ^{109}Tc , ^{109}Rh and ^{109}Pd , as well as the A=105, 107 and 111 β -decay chains. We present the results from a fast-timing lifetime experiment performed at the Univ. of Jyväskylä IGISOL facility for the A=109 chain.

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