

## <sup>127</sup>La

“Lanthanum isotopes in a possible new region of nuclear deformation“ was published in 1963 by Preiss et al. from Yale University documenting the observation of <sup>127</sup>La ([1963Pr02](#)). Indium foils were irradiated with either 66.4 MeV and 168 MeV <sup>16</sup>O beams and <sup>127</sup>La was produced in the fusion evaporation reactions <sup>113–115</sup>In(<sup>16</sup>O,xn). Decay curves were recorded following chemical separation. “Assignment of La<sup>127</sup> was made on the basis of the Ba<sup>127</sup> daughter decay and further confirmed using the Cs<sup>127</sup> granddaughter.” The measured half-life of 3.8(5) min corresponds to an isomeric state. The ground state with a half-life of 5.0(5) min was first observed ten years later ([1973Le09](#)).

Adapted from reference ([2012Ma48](#))

- [1963Pr02](#) I. L. Preiss, P. M. Strudler, and R. Wolfgang, Phys. Rev. **129**, 1284 (1963).  
[1973Le09](#) J. R. Leigh, K. Nakai, K. H. Maier, F. Puhlhofer *et al.*, Nucl. Phys. A **213**, 1 (1973).  
[2012Ma48](#) E. May and M. Thoennessen, At. Data Nucl. Data Tables **98**, 960 (2012).

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