

## <sup>64</sup>Ga

“Gallium-64” by Cohen was the first report of <sup>64</sup>Ga in 1953 ([1953Co14](#)). Protons from the Oak Ridge 86-in. cyclotron bombarded enriched <sup>64</sup>Zn targets and <sup>64</sup>Ga was produced in the (p,n) charge exchange reaction. Gamma-ray spectra were measured with a NaI scintillation spectrometer following chemical separation. “A new isotope, 2.5-minute Ga<sup>64</sup>, was produced by the (p,n) reaction on Zn<sup>64</sup> and identified by measurement of the excitation function, by bombardment of separated isotopes, and by chemical separation.” Less than a month later, Crasemann independently reported a half-life of 2.6(1) min for <sup>64</sup>Ga ([1953Cr15](#)). An earlier 48(2) min half-life measurement ([1938Bu04](#)) had been refuted by Mukerji and Preiswerk ([1952Mu35](#)).

Adapted from reference ([2012Gr19](#))

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[1952Mu35](#) A. Mukerji and P. Preiswerk, Helv. Phys. Acta **25**, 387 (1952).  
[1953Co14](#) B. L. Cohen, Phys. Rev. **91**, 74 (1953).  
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[2012Gr19](#) J. L. Gross and M. Thoennessen, At. Data Nucl. Data Tables **98**, 983 (2012).

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