

## <sup>154</sup>Gd

<sup>154</sup>Gd was discovered by Dempster as described in the 1938 paper “The isotopic constitution of gadolinium, dysprosium, erbium and ytterbium” ([1938De01](#)). Gadolinium oxide reduced with neodymium metal was used for the analysis in the Chicago mass spectrograph. “A new isotope at mass 154 was observed on four photographs with exposures of ten to seventy minutes, and an isotope at 152 on two plates with seventy minutes exposure.” Previously Aston had attributed a faint line at 154 to samarium contaminants ([1933As02](#)).

Adapted from reference ([2013Ma01](#))

- [1933As02](#) F. W. Aston, *Nature* **132**, 930 (1933).  
[1938De01](#) A. J. Dempster, *Phys. Rev.* **53**, 727 (1938).  
[2013Ma01](#) E. May and M. Thoennessen, *At. Data Nucl. Data Tables* **99**, 1 (2013).

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