

## **<sup>133</sup>Pm**

The first identification of <sup>133</sup>Pm was reported in 1977 by Bogdanov et al. in “New neutron-deficient isotopes of barium and rare-earth elements” ([1977Bo02](#)). The Dubna U-300 Heavy Ion Cyclotron accelerated a <sup>32</sup>S beam which bombarded enriched targets of <sup>102</sup>Pd and <sup>106</sup>Cd. The isotopes were identified with the BEMS-2 isotope separator. “In the present paper, isotopes were mainly identified by measuring the  $\gamma$ -ray and X-ray spectra of the daughter nuclei formed as a result of measuring the  $\beta^+$  decay.”

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

[1977Bo02](#) D. D. Bogdanov, A. V. Demyanov, V. A. Karnaukhov, L. A. Petrov *et al.*, Nucl. Phys. A **275**, 229 (1977).

[2012Ma48](#) E. May and M. Thoennessen, At. Data Nucl. Data Tables **98**, 960 (2012).

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