

## <sup>285</sup>Nh

In the 2010 paper “Synthesis of a new element with atomic number  $Z = 117$ ”, Oganessian et al. reported the first observation of <sup>285</sup>Nh (2010Og01). A <sup>249</sup>Bk target was bombarded with 252 MeV and 247 MeV <sup>48</sup>Ca beam from the Dubna U400 cyclotron to form <sup>293</sup>117 and <sup>294</sup>117 in (4n) and (3n) evaporation reactions, respectively. <sup>285</sup>Nh was populated by subsequent  $\alpha$ -decays. The residues were separated with a gas-filled recoil separator and implanted in a semiconductor detector array. Alpha particle decay and spontaneous fission events were recorded in this array and in eight detectors arranged in a box configuration around the implantation detector. “The decay properties of the neighboring isotopes <sup>293</sup>117 and <sup>294</sup>117, their daughters <sup>289</sup>115 and <sup>290</sup>115, as well as granddaughters <sup>285</sup>113 and <sup>286</sup>113, do not display substantial differences.” Five decay chains involving <sup>285</sup>Nh were observed.

Adapted from reference (2013Th02)

- 2010Og01 Yu. Ts. Oganessian, F. Sh. Abdullin, P. D. Bailey, D. E. Benker *et al.*, Phys. Rev. Lett. **104**, 142502 (2010).  
2013Th02 M. Thoennessen, At. Data Nucl. Data Tables **99**, 312 (2013).

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