

## <sup>258</sup>Rf

Ghiorso et al. discovered <sup>258</sup>Rf in 1969 in “Positive identification of two alpha-particle-emitting isotopes of element 104” (1969Gh01). <sup>12</sup>C and <sup>13</sup>C beams with energies of up to 10.4 MeV/u from the Berkeley heavy ion linear accelerator (Hilac) bombarded <sup>249</sup>Cf targets. <sup>258</sup>Rf was formed in both (<sup>12</sup>C,3n) and (<sup>13</sup>C,4n) fusion-evaporation reactions. Recoil products were swept by helium gas to a wheel, which rotated periodically. Alpha-decay and spontaneous fission was recorded with four Si-Au surface-barrier crystal detectors. “<sup>258</sup>104 is tentatively identified as an 11-msec spontaneous-fission activity.”

Adapted from reference (2013Th02)

1969Gh01 A. Ghiorso, M. Nurmia, J. Harris, K. Eskola, and P. Eskola, Phys. Rev. Lett. **22**, 1317 (1969).

2013Th02 M. Thoennessen, At. Data Nucl. Data Tables **99**, 312 (2013).

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