^{260}Rf

Somerville et al. identified ^{260}Rf in "Spontaneous fission of rutherfordium isotopes" in 1985 (1985So03). Oxygen and nitrogen beams from the Berkeley 88-in. cyclotron were used to form ^{260}Rf in the reactions ^{249}Bk(^{15}N,4n), ^{248}Cm(^{16}O,4n), and ^{249}Cf(^{18}O,α3n) at beam energies of 80, 92, and 96 MeV, respectively. Helium transported the recoils onto a long tape collector which passed one meter of stationary mica track detectors. "The following tentative assignments are based on several cross bombardments and comparisons between experimental and calculated production cross sections: ^{256}Rf(9$\pm$2 ms), ^{257}Rf(3.8$\pm$0.8 s, 14$\pm$9% SF), ^{258}Rf(13$\pm$3 ms), ^{259}Rf(3.4$\pm$1.7 s, 9$\pm$3% SF), ^{260}Rf(21$\pm$1 ms), and ^{262}Rf(47$\pm$5 ms)." Earlier reports of half-lives of 0.3 s (1964Fl08, 1964Fl04), 0.1 s (assigned to either ^{259}Rf or ^{260}Rf) (1970Og05), and 80 ms (1976Dr06, 1977Dr10) could not be confirmed. A $\sim$20 ms had been observed earlier, however, without a firm mass assignment (1981Ni01).

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