^{264}Sg

^{264}Sg was first observed by Gregorich et al. in "New isotope ^{264}Sg and decay properties of $^{262-264}$Sg" in 2006 (2006Gr24). The Berkeley 88-in. cyclotron was used to accelerate ^{30}Si beams to 5.2−6.0 MeV/nucleon and bombard $^{238}UF_4$ targets. ^{264}Sg was populated in the (4n) fusion-evaporation reaction and separated with the Berkeley Gas-filled Separator (BGS). A Si-strip detector array measured the implanted recoil products and the subsequent α-decay and spontaneous fission. "Five SF events assigned to new isotope ^{264}Sg, produced by the ^{238}U(^{30}Si,4n)^{264}Sg reaction, were observed at the lowest ^{30}Si energy." The measured half-life was 37^{+27}_{-11} ms. Less than a month later Nishio et al. independently reported the observation of three spontaneous fission events for ^{264}Sg (2006Ni10).

Adapted from reference (2013Th02)

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