^{256}Cf

Hoffman et al. reported the discovery of ^{256}Cf in the 1980 paper "12.3-min ^{256}Cf and 43-min ^{258}Md and systematics of the spontaneous fission properties of heavy nuclides" (1980Ho04). A ^{254}Cf target was bombarded with a 16 MeV triton beam from the Los Alamos Van de Graaff accelerator forming ^{256}Cf in the reaction ^{254}Cf(t,p). Recoil products were collected on carbon foils and then moved in front of three pairs of Si(Au) surface-barrier detectors to measure fragments from spontaneous fission. "A total of 766 binary coincidence events was recorded in on-line scalers associated with the three detector pairs. A least-mean-squares fit to this counting data is consistent with the presence of two components, one with a half-life of 12.3±1.2 min, and one long-lived species that we attribute to ^{254}Cf."

Adapted from reference (2013Fr02)

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