^{231}Ra

The discovery of ^{231}Ra was reported in the 1985 paper "The new neutron-rich nuclei ^{231}Fr and ^{231}Ra" by Hill et al. (1985Hi02). Francium was produced by spallation of ^{238}U with 600 MeV protons from the CERN synchrocyclotron. Beta-particles and γ-rays were measured with a plastic scintillator and two Ge(Li) detectors, respectively, following mass separation with the on-line separator ISOLDE II. ^{231}Ra was observed as a decay product of ^{231}Fr: "Ac KX-rays have been observed with a half-life of 98(6) s. Th KX-rays and eight γ-rays from the decay of the daugther product ^{231}Ac could be shown to grow in with this half-life. Additionally, six γ-lines have been assigned from MSA to the decay of ^{231}Ra. A. half-life of 103(3) s has been obtained for the decay of ^{231}Ra as a weighted average."

The assignment was changed (2016Th03) from the original compilation (2013Fr09) which incorrectly credited an earlier paper by Ahmad (1983Ah03) with the discovery of ^{231}Ra.

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