

## <sup>110</sup>Xe

Schardt et al. discovered <sup>110</sup>Xe in 1981 as reported in “Alpha decay of neutron-deficient isotopes with  $52 \leq Z \leq 55$ , including the new isotopes <sup>106</sup>Te( $T_{1/2}=60 \mu\text{s}$ ) and <sup>110</sup>Xe” (1981Sc17). A <sup>58</sup>Ni target was bombarded with a <sup>58</sup>Ni beam from the GSI UNILAC accelerator forming <sup>110</sup>Xe in the (2p4n) fusion-evaporation reaction. <sup>110</sup>Xe was separated with the GSI on-line mass separator and subsequent  $\alpha$  decays were measured with surface-barrier detector telescopes. “The high-energy  $\alpha$ -lines in the mass-110 spectrum at  $3737 \pm 30$  keV and  $4160 \pm 30$  keV are ascribed to the new isotopes <sup>110</sup>Xe and <sup>106</sup>Te, respectively, based on the mass assignment from the magnetic separation and on  $\alpha$ -energy systematics.” The half-life was not measured and only estimated to be about 0.2 s.

Adapted from reference (2013Ka01)

1981Sc17 D. Schardt, T. Batsch, R. Kirchner, O. Klepper *et al.*, Nucl. Phys. A **368**, 153 (1981).

2013Ka01 J. Kathawa, C. Fry, and M. Thoennessen, At. Data Nucl. Data Tables **99**, 22 (2013).

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