

²²⁰Ra

²²⁰Ra was first observed by Meinke et al. and the results were published in the 1949 paper “Three additional collateral alpha-decay chains” ([1949Me54](#)). 100-120 MeV helium ions irradiated a thorium target at Berkeley. The target was dissolved and the first element in the series was separated, then measured with an alpha-particle pulse analyzer. “Immediately after 120-Mev helium ion bombardment of thorium the uranium fraction contains another series of five alpha-emitters, which is apparently a collateral branch of the 4n family: ${}_{92}\text{U}^{228} \xrightarrow{\alpha} {}_{90}\text{Th}^{224} \xrightarrow{\alpha} {}_{88}\text{Ra}^{220} \xrightarrow{\alpha} {}_{86}\text{Em}^{216} \dots$ ”

Adapted from reference ([2013Fr09](#))

[1949Me54](#) W. W. Meinke, A. Ghiorso, and G. T. Seaborg, Phys. Rev. **75**, 314 (1949).

[2013Fr09](#) C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 497 (2013).

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