

^{114}Zr

^{114}Zr was discovered by Sumikama et al. in the 2021 paper entitled “Observation of new neutron-rich isotopes in the vicinity of ^{110}Zr ” (2021Su01). The isotopes were produced by in-flight fission from a 345 MeV/nucleon ^{238}U at the RIKEN Radioactive Isotope Beam Factory (RIBF) and separated and identified with the large-acceptance two-stage fragment separator BigRIPS and the ZeroDegree spectrometer. “Ten candidates for previously unreported neutron-rich isotopes were produced, namely, events corresponding to fully stripped ions of $^{99,101}\text{Br}$, ^{102}Kr , $^{105,106}\text{Rb}$, ^{108}Sr , $^{110,111}\text{Y}$, ^{114}Zr , and ^{117}Nb . The A/Q values of new-isotope events were consistent with those extrapolated from other isotopes.”

Adapted from reference (2023Th03)

2021Su01 T. Sumikama, N. Fukuda, N. Inabe, D. Kameda *et al.*, Phys. Rev. C **103**, 014614 (2021).

2023Th03 M. Thoennessen, Int. J. Mod. Phys. E **32**, 2330001 (2023).

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