

⁶⁴Fe

Guerreau et al. reported the discovery of ⁶⁴Fe in the 1980 paper “Seven New Neutron Rich Nuclides Observed in Deep Inelastic Collisions of 340 MeV ⁴⁰Ar on ²³⁸U” (1980Gu09). A 340 MeV ⁴⁰Ar beam accelerated by the Orsay ALICE accelerator facility bombarded a 1.2 mg/cm² thick UF₄ target supported by an aluminum foil. The isotopes were identified using two ΔE-E telescopes and two time-of-flight measurements. “The new nuclides ⁵⁴Ti, ⁵⁶V, ^{58–59}Cr, ⁶¹Mn, ^{63–64}Fe, have been produced through ⁴⁰Ar + ²³⁸U reactions.” At least twenty counts were recorded for these isotopes.

Adapted from reference (2010Sc18)

1980Gu09 D. Guerreau, J. Galin, B. Gatty, X. Tarrago *et al.*, *Z. Phys. A* **295**, 105 (1980).

2010Sc18 A. Schuh, A. Fritsch, M. Heim, A. Shore, and M. Thoennessen, *At. Data Nucl. Data Tables* **96**, 817 (2010).

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