

## <sup>65</sup>Ti

The discovery of <sup>65</sup>Ti was reported by Tarasov et al. in the 2025 article “Discovery of new isotopes in the fragmentation of <sup>82</sup>Se and insights into their production” (2025Ta21). A 228 MeV/u <sup>82</sup>Se beam from the FRIB (Facility for Rare Isotope Beams) linear accelerator at Michigan State University impinged on a 1.89 g/cm<sup>3</sup> thick rotating carbon target. Projectile fragments were separated with the Advanced Rare Isotope Separator ARIS and stopped in a telescope consisting of two silicon PIN diode and a thin plastic scintillator detector. The identification was achieved from the magnetic rigidity, time-of-flight, energy loss and total kinetic energy. “Over the course of the experiment, four new isotopes—<sup>63</sup>Sc (3 events), <sup>65</sup>Ti (2), <sup>66</sup>Ti (2), and <sup>68</sup>V (5)—were observed for the first time.”

2025Ta21 O. B. Tarasov, B. M. Sherrill, A. C. Dombos, K. Fukushima *et al.*, Phys. Rev. C **112**, 034604 (2025).

Please cite this abstract as: “FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:[10.11578/frib/2279152](https://doi.org/10.11578/frib/2279152)”