

⁵¹Sc

Erskine et al. reported the first measurement of ⁵¹Sc in the 1966 paper “Energy Levels in Sc⁴⁹ from Ca⁴⁸(He³,d)Sc⁴⁹ and Other Reactions Proceeding from Ca⁴⁸” (1966Er02). Alpha-particles from the Argonne tandem Van de Graaff accelerator bombarded evaporated ⁴⁸Ca targets on a carbon backing. Ground-state Q-values and excited states were measured using the Argonne broad-range magnetic spectrograph. “The isotope Sc⁵¹ is observed here for the first time in the study of the Ca⁴⁸(α ,p)Sc⁵¹ reaction. A ground-state Q-value of -5.860 ± 0.020 MeV was measured”. The first decay measurement of ⁵¹Sc was submitted only five months later (1966Bi09).

Adapted from reference (2011Me01)

- 1966Bi09 A. M. Bizzeti-Sona, R. Messlinger, and H. Morinaga, *Z. Naturforsch.* **21**, 906 (1966).
1966Er02 J. R. Erskine, A. Marinov, and J. P. Schiffer, *Phys. Rev.* **142**, 633 (1966).
2011Me01 D. Meierfrankenfeld, A. Bury, and M. Thoennessen, *At. Data Nucl. Data Tables* **97**, 134 (2011).

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)”