

^{42}Sc

Morinaga identified ^{42}Sc correctly for the first time in the publication “New Radioactive Isotope Scandium-42” in 1955 ([1955Mo83](#)). At Purdue University a potassium target was bombarded with 18 MeV α particles. Decay curves of positrons and the annihilation radiation were measured with an anthracene and NaI crystal, respectively. “A strong activity with a half-life of 0.62 ± 0.05 sec (error limit) was found.” Previously, half-lives of 4.1(1) h ([1937Wa07](#)) and 13.5(3) d ([1940Wa01](#)) had incorrectly been assigned to ^{42}Sc . Also, a 3 hour half-life had been reported earlier but it was assigned only to either ^{42}Sc or ^{44}Sc ([1934Zy01](#)).

Adapted from reference ([2011Me01](#))

- [1934Zy01](#) M. Zyw, Nature **134**, 64 (1934).
- [1937Wa07](#) H. Walke, Phys. Rev. **52**, 400 (1937).
- [1940Wa01](#) H. Walke, Phys. Rev. **57**, 163 (1940).
- [1955Mo83](#) H. Morinaga, Phys. Rev. **100**, 431 (1955).
- [2011Me01](#) D. Meierfrankenfeld, A. Bury, and M. Thoennessen, At. Data Nucl. Data Tables **97**, 134 (2011).

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