^{109}Sn

The first observation of ^{109}Sn was reported in the 1965 article "Decay Scheme For Sn^{109}" by Khulelidze et al. (1965Kh04). ^{109}Cd was produced by bombarding an enriched ^{106}Cd target with 21 MeV α-particles at a cyclotron in Dubna, Russia. γ-rays and β-particles were recorded with a β spectrometer and a scintillation spectrometer following chemical separation of the tin activity. "Two lines with $E_e = 625$ and 648 KeV appear in the conversion electron spectrum. These lines fell off in intensity with a period of 19$\pm$2 min." Khulelidze et al. did not consider their observation a discovery referring to previous conference abstracts (1955Pe60, 1956Pe39).

Adapted from reference (2011Am01)

1955Pe60 M. D. Petroff, S. W. Mead, and W. O. Doggett, Phys. Rev. **98**, 279 (1955).

1956Pe39 M. D. Petroff, Bull. Am. Phys. Soc. 1, No. 8, 389, M3 (1956).

1965Kh04 D. E. Khulelidze, V. L. Chikhladze, and V. G. Onufriev, Bull. Acad. Sci. USSR, Phys. Ser. **29**, 732 (1966).

2011Am01 S. Amos, J. L. Gross, and M. Thoennessen, At. Data Nucl. Data Tables **97**, 383 (2011).

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