

²⁷S

²⁷S was first reported in 1986 by Langevin et al. in “Mapping of the proton drip-line up to $Z = 20$: Observation of the $T_z = -5/2$ series ²³Si, ²⁷S, ³¹Ar, and ³⁵Ca” (1986La17). A 77.4 MeV/u ⁴⁰Ca beam was fragmented on a nickel target at GANIL and the projectile-like fragments were separated by the zero degree doubly achromatic LISE spectrometer. The isotopes were identified by measuring energy loss and time-of-flight. “The bidimensional plot (see [the figure]) of $\sqrt{\Delta}/t.o.f.$ (i.e. Z) versus t.o.f (i.e. A/Z) was inspected on-line to calibrate the particle identification... [The figure] shows the same bidimensional representation after 14 hours of integration time. The T_z series ²³Si, ²⁷S, ³¹Ar, and ³⁵Ca clearly becomes visible.”

Adapted from reference (2012Th10)

1986La17 M. Langevin, A. C. Mueller, D. Guillemaud-Mueller, M. G. Saint-Laurent *et al.*, Nucl. Phys. A **455**, 149 (1986).

2012Th10 M. Thoennessen, At. Data Nucl. Data Tables **98**, 933 (2012).

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