

⁴³Si

In the 2002 article “New neutron-rich isotopes, ³⁴Ne, ³⁷Na and ⁴³Si, produced by fragmentation of a 64A MeV ⁴⁸Ca beam” Notani et al. described the first observation of ⁴³Si ([2002No11](#)). The RIKEN ring cyclotron accelerated a ⁴⁸Ca beam to 64 MeV/nucleon which was then fragmented on a tantalum target. The projectile fragments were analyzed with the RIPS spectrometer. “[Part (a) of the figure] shows a two-dimensional plot of A/Z versus Z, obtained from the data accumulated with the ⁴⁰Mg Bρ setting, while [part (b)] is for the ⁴³Si setting. The integrated beam intensities for the two settings are 6.9×10¹⁶ and 1.7×10¹⁵ particles, respectively. The numbers of events observed for three new isotopes, ³⁴Ne, ³⁷Na and ⁴³Si, were 2, 3 and 4, respectively.”

Adapted from reference ([2012Th10](#))

[2002No11](#) M. Notani, H. Sakurai, N. Aoi, Y. Yanagisawa *et al.*, Phys. Lett. B **542**, 49 (2002).

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

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