^{34}Ne

In the 2002 article "New neutron-rich isotopes, ^{34}Ne, ^{37}Na and ^{43}Si, produced by fragmentation of a 64A MeV ^{48}Ca beam" Notani et al. described the first observation of ^{34}Ne (2002No11). The RIKEN ring cyclotron accelerated a ^{48}Ca 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 ^{40}Mg Bρ setting, while [part (b)] is for the ^{43}Si setting. The integrated beam intensities for the two settings are 6.9×10^{16} and 1.7×10^{15} particles, respectively. The numbers of events observed for three new isotopes, ^{34}Ne, ^{37}Na and ^{43}Si, were 2, 3 and 4, respectively." Lukyanov et al. reported the discovery of ^{34}Ne independently less than two months later (2002Lu09).

Adapted from reference (2012Th01)

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