^{34}Mg

The first observation of ^{34}Mg was reported by Westfall et al. in "Production of neutron-rich nuclides by fragmentation of 212-MeV/amu ^{48}Ca" in 1979 (1979We10). ^{48}Ca ions (212 MeV/nucleon) from the Berkeley Bevalac were fragmented on a beryllium target. The fragments were selected by a zero degree spectrometer and identified in a telescope consisting of 12 Si(Li) detectors, 2 position-sensitive Si(Li) detectors, and a veto scintillator. "In this letter, we present the first experimental evidence for the particle stability of fourteen nuclides ^{22}N, ^{26}F, ^{33,34}Mg, ^{36,37}Al, ^{38,39}Si, ^{41,42}P, ^{43,44}S, and ^{44,45}Cl produced in the fragmentation of 212-MeV/amu ^{48}Ca."

Adapted from reference (2012Th10)

1979We10 G. D. Westfall, T. J. M. Symons, D. E. Greiner, H. H. Heckman *et al.*, Phys. Rev. Lett. **43**, 1859 (1979).

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