^{42}S

In 1979, ^{42}S was discovered by Auger et al. in "Observation of new nuclides ^{37}Si, ^{40}P, ^{41}S, ^{42}S produced in deeply inelastic reactions induced by ^{40}Ar on ^{238}U" (1979Au03). A 263 MeV ^{40}Ar beam from the Orsay ALICE facility bombarded a UF_4 target and reaction products were measured with a triple silicon solid state counter telescope. "Four new neutron-rich nuclides, ^{37}Si, ^{40}P, $^{41-42}$S have been observed as a result of deep inelastic collisions. The nuclide identification combined two independent time of flight measurements as well as two ($\Delta E \times E$) informations and was quite unambiguous."

Adapted from reference (2012Th10)

1979Au03 P. Auger, T. H. Chiang, J. Galin, B. Gatty *et al.*, Z. Phys. A **289**, 255 (1979).

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Please cite this abstract as: "FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:10.11578/frib/2279152"