

³⁰Al

Robinson and Johnson discovered ³⁰Al in 1961 in “New isotope, Al³⁰” (1961Ro12). Silicon targets were irradiated with fast neutrons produced by bombarding lithium with 8.8 MeV deuterons from the Purdue 37-in cyclotron. ³⁰Al was formed in the (n,p) charge exchange reaction and identified by measuring γ - and β -rays in a NaI(Tl) crystal and a plastic phosphor detector, respectively. “A radioisotope with a (3.27 ± 0.20) -sec half-life is produced by bombarding silicon with (Li^7 -d) neutrons. This activity is that of the previously unobserved isotope Al³⁰ and is produced by the reaction $\text{Si}^{30}(\text{n,p})\text{Al}^{30}$.”

Adapted from reference (2012Th10)

1961Ro12 E. L. Robinson and O. E. Johnson, Phys. Rev. **123**, 1349 (1961).
2012Th10 M. Thoennessen, At. Data Nucl. Data Tables **98**, 933 (2012).

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