

²⁰Al

Xu et al. discovered ²⁰Al in the 2025 paper “Isospin Symmetry Breaking Disclosed in the Decay of Three-Proton Emitter ²⁰Al” ([2025Xu03](#)). A 591 AMeV ²⁴Mg beam from the SIS-FRS facility was used to produce a 450 AMeV ²⁰Mg secondary beam which impinged on a 2 g/cm² ⁹Be target located at the middle focal plane of the FRS. ²⁰Al produced in a charge-exchange reaction decayed in-flight and was identified by the ¹⁷Ne + 3p fragments measured by an array of double-sided silicon microstrip detectors. “The 3p-decay energy of the ²⁰Al ground state has been determined to be 1.93^{+0.12}_{-0.10} MeV through a detailed study of angular correlations of its decay products, ¹⁷Ne + p + p + p”.

[2025Xu03](#) X. D. Xu, I. Mukha, J. G. Li, S. M. Wang *et al.*, Phys. Rev. Lett. **135**, 022502 (2025).

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