

¹⁷Na

Brown et al. discovered the proton-unbound nuclide ¹⁷Na in 2017 as described in “Proton-decaying states in light nuclei and the first observation of ¹⁷Na” (2017Br07). A secondary ¹⁷Ne beam was produced at the Coupled Cyclotron Facility of the National Superconducting Cyclotron Laboratory at Michigan State University from a 150 MeV/nucleon primary ²⁰Ne beam and was fragmented on a beryllium target. Charged particles from the particle-unbound fragments were detected in the High Resolution Array (HiRA). ¹⁷Na could be produced in a charge-exchange reaction. “The decay-energy spectrum for ¹⁷Na → 3p + ¹⁴O is shown in the figure. There is a peak in the spectrum located at $E_T = 4.85(6)$ MeV that sits on top of a background.”

Adapted from reference (2018Th01)

2017Br07 K. W. Brown, R. J. Charity, J. M. Elson, W. Reviol *et al.*, Phys. Rev. C **95**, 044326 (2017).

2018Th01 M. Thoennessen, Int. J. Mod. Phys. E **27**, 1830002 (2018).

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