²³²Th(²²Ne,¹³N),¹⁵⁴Sm(¹⁶O,¹³N)

	History		
Туре	Author	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, C. G. Sheu and J. E. Purcell	NDS 198,1 (2024)	1-Aug-2024

1977Ar06: ²³²Th(²²Ne,¹³N): The transfer reaction products resulting from E(²²Ne)=172 MeV bombardment of a 2.5 mg/cm² metallic ²³²Th foil were measured at Dubna. The reaction products were momentum analyzed in a magnetic spectrometer, positioned at either θ =12° or 40°, and then focused on a Δ E-E Si detector telescope, which provided particle identification. ¹³N was identified.

2022Ro09: ¹⁵⁴Sm(¹⁶O,¹³N) E=85 MeV; measured reaction products using a Δ E-E telescope at the Bhabha Atomic Research Centre in Mumbai. Obtained differential cross sections for $\theta_{c.m.} \approx 55^{\circ}$ to 75°. Discussed multi-nucleon transfer reaction mechanism.

¹³N Levels

E(level)

0

 $^{13}_{7}N_{6}$