^{27}Al(^{20}Ne,^{20}Mg) 1964Ma44

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, G. C. Sheu	ENSDF	20-June-2019

1964Ma44: Al, Ni and Cu targets were bombarded with E=80 to 200 MeV ^{20}Ne beams with the aim of producing ^{20}Na activity, via p-n exchange reactions. The decay radiations and associated lifetimes of the produced activities were measured and analyzed. In the case of ^{20}Ne of the ^{27}Al target, the apparent lifetimes the strongest ^{20}Na radiations was observed to be longer than expected; the author assumed that ^{20}Mg was being formed, which then decayed to ^{20}Na and caused the apparent increase in ^{20}Na lifetime. The lifetime $T_{1/2}$=620 ms *60* was deduced from the analysis. This compares very poorly with the present value of T≈90 ms.

A private communication with (1974Ro17) indicates the evidence for ^{20}Mg production was traced to a spurious instrumental effect.

^{20}Mg Levels

E(level)	$T_{1/2}$
0?	620 ms *60*