

${}^{20}\text{Ne}({}^3\text{He},3\text{n})$  1979Mo02,1981Ay01

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

1979Mo02,1980MoZM,1981Ay01: Decay of the  ${}^{20}\text{Mg}$  nucleus was studied by producing  ${}^{20}\text{Mg}$  nuclei using the the  ${}^{20}\text{Ne}({}^3\text{He},3\text{n})$  reaction. Decay from  ${}^{20}\text{Mg}$  to  ${}^{20}\text{Na}^*(6570)$ , followed by proton decay to  ${}^{19}\text{Ne}^*(0, 238)$  was observed and used to determine the mass excess of the first T=2 member of the A=20 multiplet in  ${}^{20}\text{Na}$ . The corresponding  $\beta^+$  delayed proton groups were found to have energies of  $E_p=4.16$  MeV 5 and 3.95 MeV 6. Coefficients of the IMME were analyzed.

The decay half-life  $T_{1/2}=95$  ms  $+80-50$  was deduced.

 ${}^{20}\text{Mg}$  Levels

E(level)	$T_{1/2}$
0	95 ms $+80-50$