

$\text{Ni}({}^{20}\text{Ne}, {}^{17}\text{Ne})$ 1964FI03

<u>Type</u>	<u>Author</u>	<u>History</u>	<u>Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	J. H. Kelley, G. C. Sheu		ENSDF	16-Jan-2018

[1963Ka36](#),[1964FI03](#): A beam of 140 MeV ${}^{20}\text{Ne}$ ions, from the JINR cyclotron, bombarded a 10 μm thick ${}^{\text{nat}}\text{Ni}$ target that was upstream of a rotating aluminum disk. The reaction products escaping from the target were implanted in the disk and transported to a counter telescope comprising a thin aluminum absorber, a gas proportional counter and two Si surface barrier detectors. An $E \approx 5$ MeV proton group was observed in the β -delayed particles emitted from reaction products. The activity was also produced in ${}^{20}\text{Ne}$ bombardment of tantalum, copper and aluminum target, indicating the activity results from a multi-nucleon transfer on ${}^{20}\text{Ne}$; ${}^{17}\text{Ne}$ or ${}^{20,21}\text{Mg}$ were most favored. Analysis of the decay curve indicated $T_{1/2} = 85$ ms 15.

 ${}^{17}\text{Ne}$ Levels

<u>E(level)</u>	<u>$T_{1/2}$</u>
0	85 ms 15