

$^{90}\text{Zr}(^{20}\text{Ne}, ^{19}\text{Ne})$  [1990Fo04](#)

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	Coral M. Baglin	NDS 114, 1293 (2013)	1-Sep-2013

[1990Fo04](#): E=500, 600 MeV; 98.5%  $^{90}\text{Zr}$  target; magnetic spectrograph;  $\theta(\text{lab})=5.3^\circ, 7^\circ, 8^\circ$  for E=600 MeV,  $6.4^\circ$  for E=500 MeV;  $\Delta E/E \approx 3 \times 10^{-3}$ . DWBA calculations.

 $^{91}\text{Zr}$  Levels

<u>E(level)</u>	<u>Comments</u>
0	
$2.5 \times 10^3$ <i>10</i>	E(level): probable multiplet dominated by known $h_{11/2}$ (2170 and 4070) and $g_{7/2}$ (2201 and 3469) states ( <a href="#">1990Fo04</a> ).
$14 \times 10^3$ <i>1</i>	E(level): probably arises from $i_{13/2}$ orbital excitations, based on selectivity of this reaction for transfer to high spin orbitals ( <a href="#">1990Fo04</a> ). May be same structure as observed in $(\alpha, ^3\text{He})$ reaction. Not included in Adopted Levels.