

$^9\text{Be}(\text{HI},\text{xn}\gamma)$  2016Sh07

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. K. Tuli, E. Browne		NDS 157, 260 (2019)	1-Mar-2019

Based on compilation in XUNDL by B. Singh (McMaster), March 1, 2016.

**2016Sh07**: secondary radioactive ion beams (RIBs) of  $^{82}\text{Ge}$ ,  $^{83}\text{As}$  and other neutron-rich isotopes in the vicinity of  $^{78}\text{Ni}$  were produced in  $^9\text{Be}(^{238}\text{U},\text{X})$ ,  $E(^{238}\text{U})=345$  MeV/nucleon primary fragmentation reaction at RIBF-RIKEN facility.

The reaction products from the secondary reaction were analyzed by tof-B $\rho$ - $\Delta E$  method using the ZeroDegree spectrometer optimized for transmission of  $^{78}\text{Ni}$ . Measured  $E_\gamma$ ,  $I_\gamma$ , particle spectra, (particle) $\gamma$ - and  $\gamma\gamma$ -coin spectra, Doppler-shift corrected  $\gamma$  spectra using DALI2 array of 186 NaI(Tl) detectors covering angles of  $\approx 18^\circ$ – $148^\circ$  with respect to the beam direction. Coincidence timing window between the particles and  $\gamma$  detection was 10 ns.

 $^{82}\text{Zn}$  Levels

<u>E(level)<sup>†</sup></u>	<u>J<sup><math>\pi</math></sup></u>	Comments
0	0 <sup>+</sup>	
621 11	(2 <sup>+</sup> )	J <sup><math>\pi</math></sup> : as proposed by <b>2016Sh07</b> .

<sup>†</sup> From  $E_\gamma$  data.

 $\gamma(^{82}\text{Zn})$ 

<u><math>E_\gamma</math></u>	<u><math>E_i(\text{level})</math></u>	<u><math>J_i^{\pi_i}</math></u>	<u><math>E_f</math></u>	<u><math>J_f^{\pi_f}</math></u>
621 11	621	(2 <sup>+</sup> )	0	0 <sup>+</sup>

 $^9\text{Be}(\text{HI},\text{xn}\gamma)$  2016Sh07Level Scheme