## $^{65}$ Cu(d, $\alpha$ ) 1967Hj01,1968Da01

History						
Type	Author	Citation	Literature Cutoff Date			
Full Evaluation	Jun Chen	NDS 196,17 (2024)	30-Sep-2023			

 $J^{\pi}(^{65}\text{Cu})=3/2^{-}$ .

1967Hj01: E=15 MeV deuteron beam was produced from the University of Pittsburgh cyclotron. Target was enriched <sup>65</sup>Cu. Reaction products were momentum-analyzed with a magnetic spectrograph (FWHM≈60 keV).

Measured  $\alpha$  spectra. Deduced levels.

1968Da01: E=12 MeV deuteron beam was produced from the University of Pittsburgh cyclotron. Reaction products were momentum-analyzed with a magnetic spectrograph (FWHM=12 keV). Measured  $\sigma(\theta)$ . Deduced levels.

## <sup>63</sup>Ni Levels

E(level) <sup>†</sup>	E(level) <sup>†</sup>	E(level) <sup>†</sup>	E(level) <sup>†</sup>
0.0	1460 15	2532? 25	3578 35
88 <sup>‡</sup> 15	1673 <i>15</i>	2724 25	3683 <i>35</i>
156 <sup>‡</sup> <i>15</i>	1790 <sup>‡</sup> <i>15</i>	2898 25	3780? <i>35</i>
523 <sup>‡</sup> 15	1910 <sup>‡</sup> <i>15</i>	3034 <i>30</i>	3938 <i>35</i>
710? 15	2030? 20	3150? <i>30</i>	4018 <i>40</i>
1008 <sup>‡</sup> <i>15</i>	2165 20	3222 30	
1259 15	2249 20	3358 30	
1360? <i>15</i>	2339 20	3460? <i>30</i>	

 $<sup>^{\</sup>dagger}$  From 1967Hj01, except noted otherwise.  $^{\ddagger}$  from 1968Da01.