

Lab-03

Bohr's Model

Name _____ Sec/Group _____ Date _____

TABLE-I

Emission Spectrum of Hydrogen

Line #	Measured Wavelength λ_{meas} (in nm)	Calculated Wavelength λ_{calc} (in nm)	Percent Difference $([\lambda_{\text{meas}} - \lambda_{\text{calc}}] / \lambda_{\text{calc}}) * 100$
1			
2			
3			
4			
5			
6			

(Note: you may not be able to see six spectral lines. All rows need not be filled.)

Lab-03

Bohr's Model

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TABLE-II

Emission Spectrum of Helium

Line #	Measured Wavelength λ_{meas} (in nm)	Calculated Wavelength λ_{calc} (in nm)	Percent Difference $([\lambda_{\text{meas}} - \lambda_{\text{calc}}] / \lambda_{\text{calc}}) * 100$
1			
2			
3			
4			
5			
6			

(Note: you may not be able to see six spectral lines. All rows need not be filled.
If you can not identify a line, you need not calculate 'Percent Difference' for that line)

Write a brief explanation why the agreement between the theoretical prediction of Bohr's model and the experimental observation is much better in the case of hydrogen than for helium.