Parallel Exercises

An electron with a mass of 9.11x10-31 kg has a velocity of 4.3 106 in the innermost orbit of a hydrogen atom. What is the de Broglie Wavelength of the electron?

An electron wave making a standing wave in hydrogen atom has a wavelength of 8.33 x 10-11 m. If the mass of the electron is 9.11x10-31 kg. what is the velocity of the electron according to the de Broglie equation.

Using any reference , write the complete electron configurations for

a. Nitrogen

b. Phosphorus

c. Chlorine

Identify the number of protons, neutrons, and electrons n the following isotopes:

14N, 7Li, 35C, 48 Ca, 63Cu, 230 U

7 3 17 20 29 92

Identify the period and the family in the periodic table for the following elements:

xenon, potassium, chromium, argon, bromine, barium