Exercise 3.2 Photoelectric Effect

1. Which features of the photoelectric effect can't be explained by classical physics? How does Einstein's photon hypothesis resolve these issues?

2. What is the stopping potential in the photoelectric effect experiment? What property of the ejected electrons does the stopping potential measure?

3. The threshold wavelength for lanthanum (La) is 376 nm. What is the maximum kinetic energy of electrons ejected from the metal when lanthanum is illuminated with light of wavelength 200. nm?