

- 25** Monochromatic light of wavelength 250 nm is incident on a clean potassium surface and a clean zinc surface. The work function of potassium is 2.24 eV, and the work function of zinc is 4.33 eV. What is the ratio of

$$\frac{\text{maximum velocity of electrons emitted from potassium surface}}{\text{maximum velocity of electrons emitted from zinc surface}}$$

for the electrons emitted from these surfaces?

A 0.50

B 1.9

C 2.1

D 4.3