

- 29 Monochromatic light of wavelength 440 nm is incident on a metal surface causing electrons to be emitted. No electrons are emitted from the surface when the wavelength of the incident light is greater than 550 nm.

What is the minimum de Broglie wavelength of an emitted electron?

- A  $3.6 \times 10^{-10}$  m
- B  $7.2 \times 10^{-10}$  m
- C  $8.1 \times 10^{-10}$  m
- D  $1.6 \times 10^{-9}$  m