

- 30** Photoelectric emission occurs from a certain metal when light of wavelength less than or equal to λ is incident on the metal surface. When light of wavelength $\lambda/2$ is incident on the surface, the maximum kinetic energy of the emitted electrons is E_k .

What is the maximum kinetic energy of the emitted electrons when light of wavelength $\lambda/3$ falls on the surface?

- A** $\frac{1}{3}E_k$ **B** $\frac{2}{3}E_k$ **C** $2E_k$ **D** $3E_k$

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