

**28** An electromagnetic radiation of constant frequency is incident on a metal surface.

Which statement explains why the photoelectric current from the metal surface is proportional to the intensity of the incident electromagnetic radiation?

- A** Radiation of greater intensity causes the metal surface to get warm and so emit more electrons.
- B** Radiation of greater intensity consists of more energetic photons.
- C** Radiation of greater intensity means more photons per second strike the metal surface.
- D** Radiation of greater intensity overcomes the metal's work function energy allowing more electrons to escape.

**29** An electron in an atom makes a transition from an energy level of energy  $E$  to a level of energy