29 High energy electrons are incident on a target element to form an X-ray spectrum.

Which of the following statements is false?

A The continuous X-ray spectrum is formed by the high energy incident electrons repeatedly colliding with different atoms, each time causing photons of different wavelengths to be emitted.

B The characteristic X-ray spectrum formed can be used to identify the element of the target.

C The minimum wavelength of the continuous X-ray spectrum formed depends on the element used as the target.

D The characteristic X-ray spectrum is formed when electrons in the higher energy shells make transitions to the vacancies created by the inner shell electrons that are ejected by the high energy incident electrons.