

Answer on Question #52329 – Chemistry – Physical Chemistry

Copper crystallizes in a fcc lattice with a unit cell length of 362pm what thatha radius of the copper atom in pm..

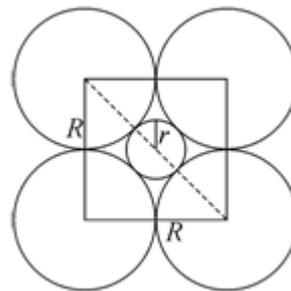
1)157

2)181

3)108

4)128

Answer:



$$4R = a\sqrt{2} \Rightarrow R = \frac{a\sqrt{2}}{4}$$

$$R = \frac{362 \times \sqrt{2}}{4} = \mathbf{128 \text{ pm}}$$