

$$= \frac{-2R \pm 2.582R}{2}$$

And, finally

$$r(+)=\frac{-2R+2.582R}{2}=0.291R$$
$$r(-)=\frac{-2R-2.582R}{2}=-2.291R$$

Of course, only the $r(+)$ root is possible, and, therefore, $r = 0.291R$.

Thus, for a host atom of radius R , the size of an interstitial site for FCC is approximately 1.4 times that for BCC.