

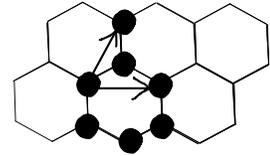
小测

- 1.与固体物理关系最密切的是电磁力
- 2.蜂窝格子不是布拉维格子
- 3.找出晶体结构中的布拉维格子
- 4.找出布拉维格子的初基矢量
- 5.计算W.S.晶胞的面积

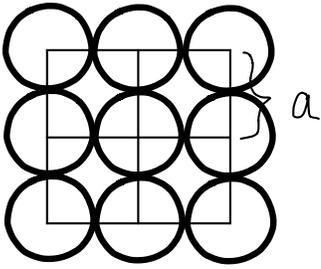
蜂窝格子的晶胞与布拉维格子有关，晶胞包含的点数等于基元数目。

元胞 (primitive cell)：只包含一个点的布拉维格子

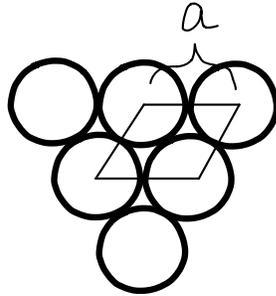
惯用晶胞 (conventional cell)：带有基元的布拉维格子，即晶体结构，包含多个点



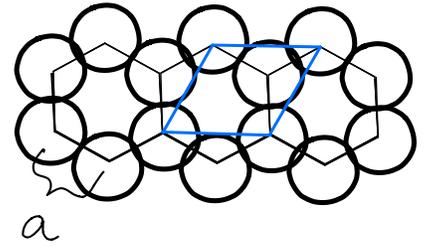
填充率 (packing fraction) 二维： $f = S_{\text{circle}} / S_{\text{unitcell}}$



$$f = \frac{\pi}{4}$$

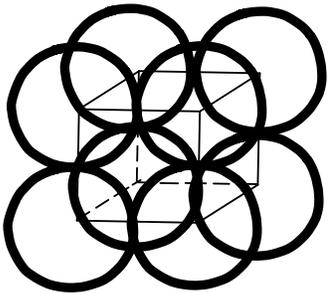


$$f = \frac{\sqrt{3}\pi}{6}$$

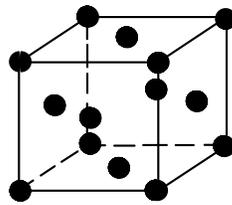


$$f = \frac{\sqrt{3}\pi}{9}$$

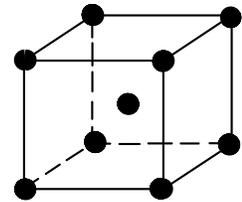
三维： $f = V_{\text{ball}} / V_{\text{unitcell}}$



$$f = \frac{\pi}{6}$$



$$f = \frac{\sqrt{2}}{6}\pi$$



$$f = \frac{\sqrt{3}}{8}\pi$$