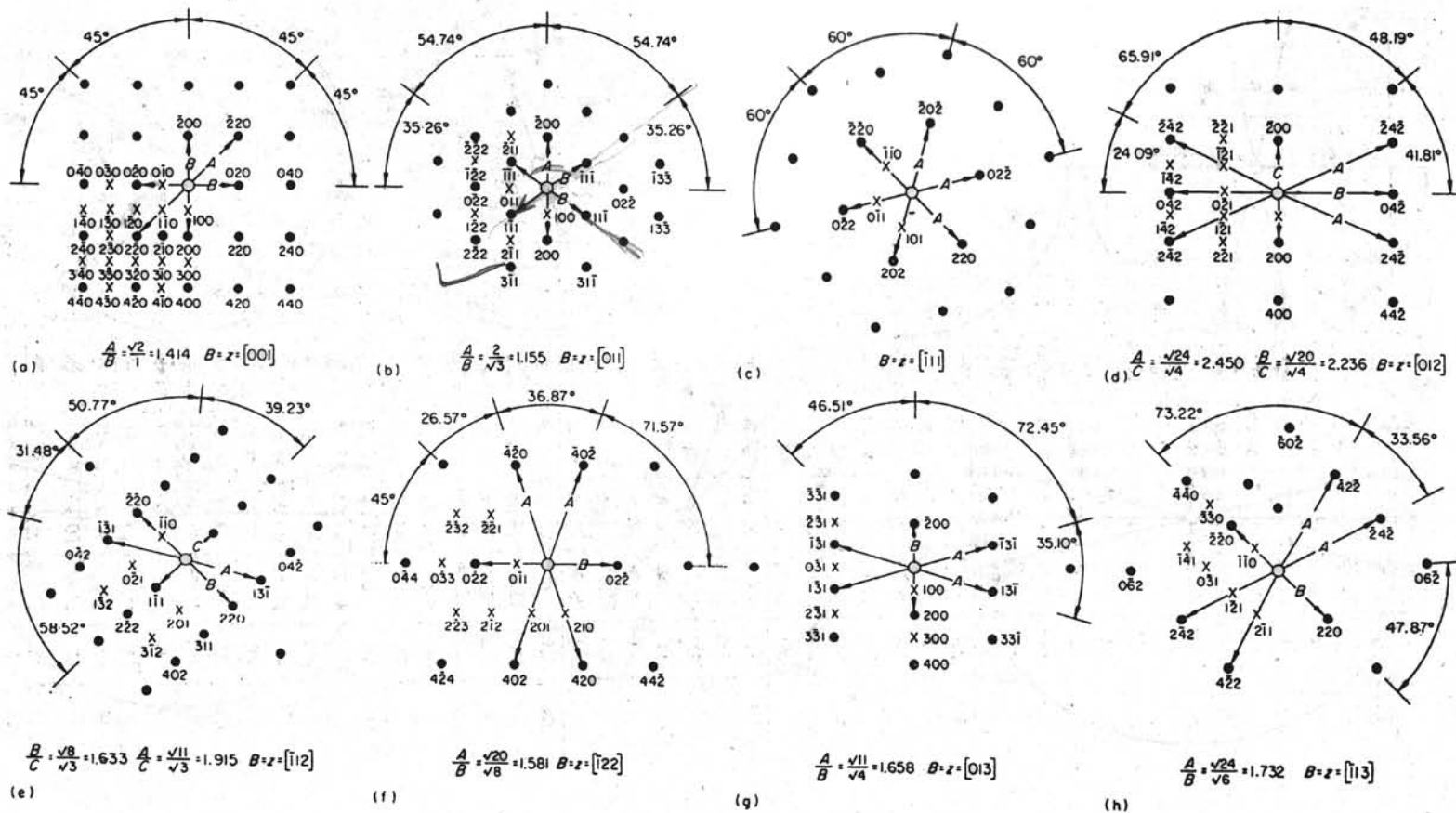
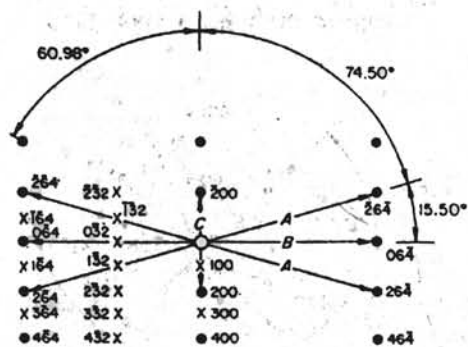


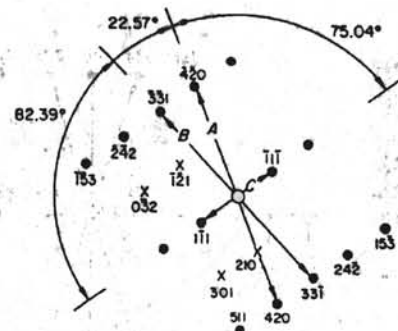
附录 11 常见晶体标准电子衍射花样

(一)面心立方

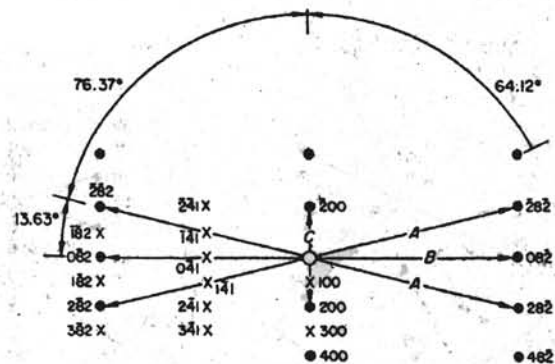




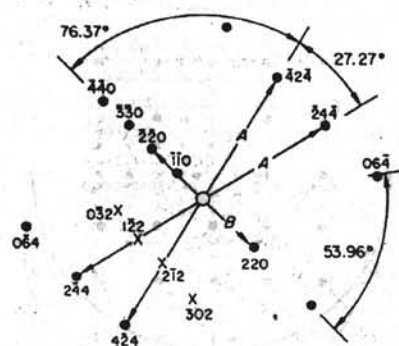
(i) $\frac{A}{C} = \frac{\sqrt{36}}{\sqrt{4}} = 3.242$ $\frac{B}{C} = \frac{\sqrt{32}}{\sqrt{4}} = 3.606$ $B \cdot Z = [023]$



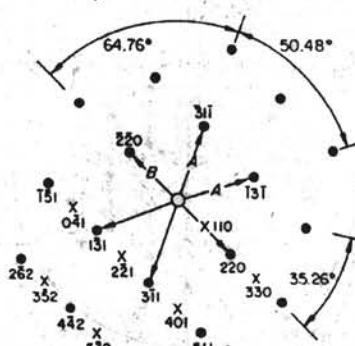
(j) $\frac{A}{C} = \frac{\sqrt{20}}{\sqrt{3}} = 2.582$ $\frac{B}{C} = \frac{\sqrt{19}}{\sqrt{3}} = 2.517$ $B \cdot Z = [123]$



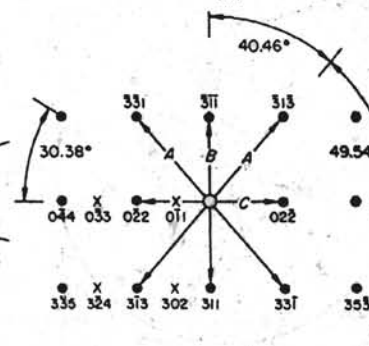
(k) $\frac{A}{C} = \frac{\sqrt{72}}{\sqrt{4}} = 4.243$ $\frac{B}{C} = \frac{\sqrt{68}}{\sqrt{4}} = 4.123$ $B \cdot Z = [014]$



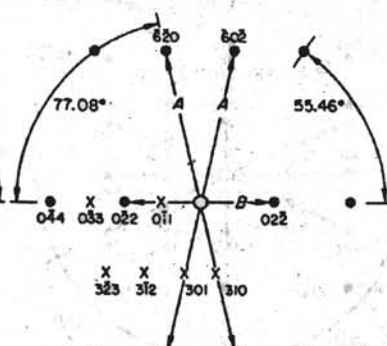
(l) $\frac{A}{B} = \frac{\sqrt{36}}{\sqrt{8}} = 2.121$ $B \cdot Z = [223]$



(m) $\frac{A}{B} = \frac{\sqrt{11}}{\sqrt{8}} = 1.173$ $B \cdot Z = [114]$

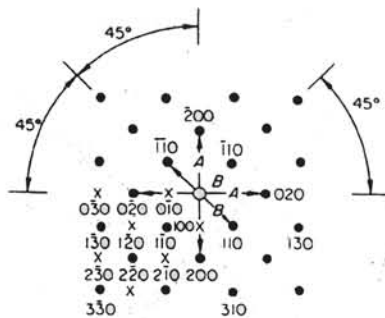


(n) $\frac{A}{B} = \frac{\sqrt{19}}{\sqrt{8}} = 1.541$ $\frac{B}{C} = \frac{\sqrt{11}}{\sqrt{8}} = 1.173$ $B \cdot Z = [233]$

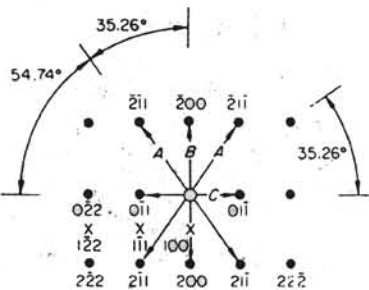


(o) $\frac{A}{B} = \frac{\sqrt{40}}{\sqrt{8}} = 2.236$ $B \cdot Z = [133]$

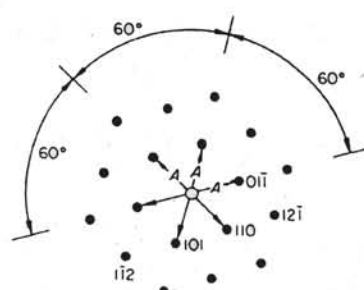
(二)体心立方



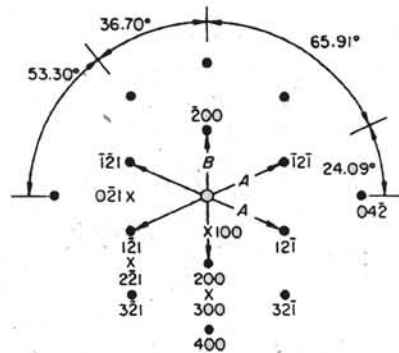
(a) $\frac{A}{B} = \frac{\sqrt{4}}{\sqrt{2}} = 1.414 \quad B:z = [001]$



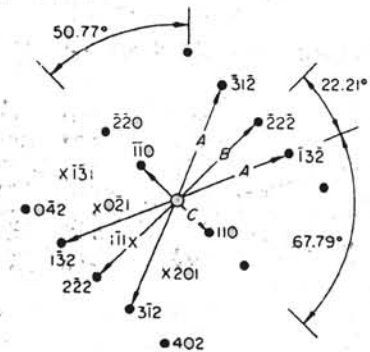
(b) $\frac{A}{C} = \frac{\sqrt{6}}{\sqrt{2}} = 1.732$ $\frac{B}{C} = \frac{\sqrt{4}}{\sqrt{2}} = 1.414$ $B = z: [011]$



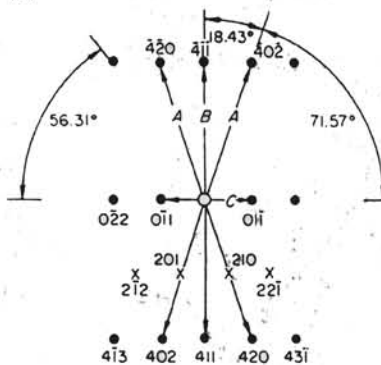
$$B: I = [\bar{1}11]$$



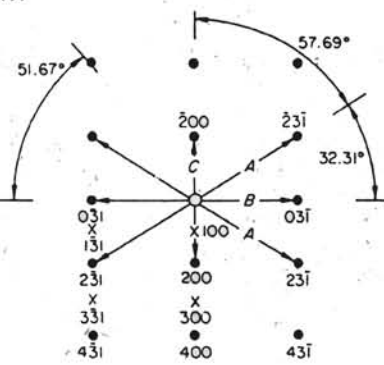
(d) $\frac{A}{B} = \frac{\sqrt{6}}{\sqrt{4}} = 1.225 \quad \theta \cdot z = [012]$



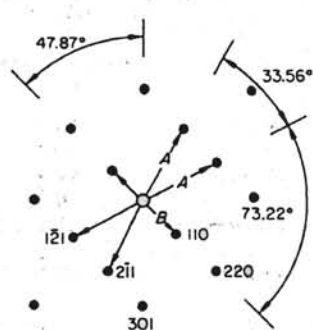
(e) $\frac{A}{C} = \frac{\sqrt{14}}{\sqrt{2}} = 2.646$ $\frac{B}{C} = \frac{\sqrt{12}}{\sqrt{2}} = 2.450$ $\theta = r = [112]$



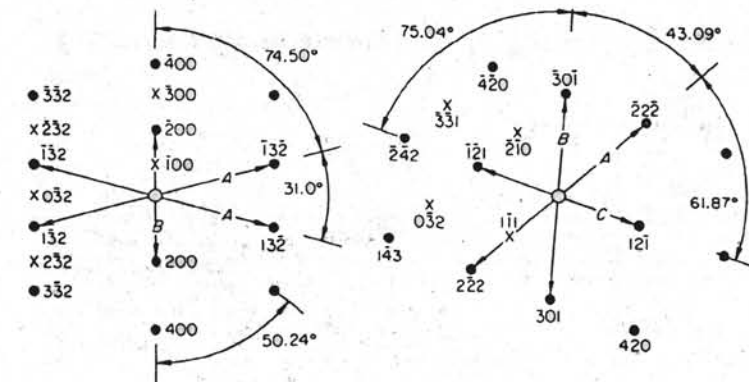
$$(f) \quad \frac{A}{C} = \frac{\sqrt{20}}{\sqrt{2}} = 3.162 \quad \frac{B}{C} = \frac{\sqrt{18}}{\sqrt{2}} = 3.00 \quad B:z = [122]$$



$$\frac{A}{C} = \frac{\sqrt{14}}{\sqrt{4}} = 1.871 \quad \frac{B}{C} = \frac{\sqrt{10}}{\sqrt{4}} = 1.581 \quad B:Z = [013]$$

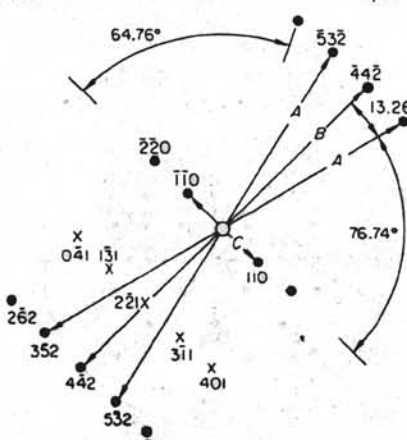


(h) $\frac{A}{B} = \frac{\sqrt{6}}{\sqrt{2}} = 1.732$ $B = z = [1 \mid 3]$

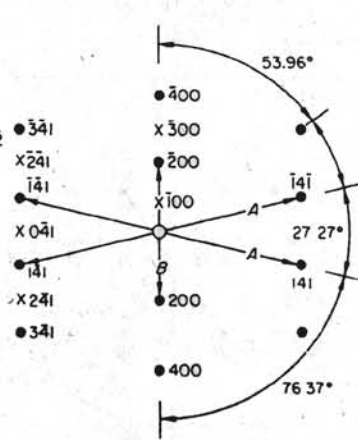


(i) $\frac{A}{B} = \frac{\sqrt{14}}{\sqrt{4}} = 1.871$ $B = z = [023]$

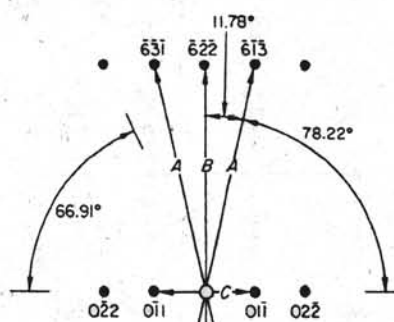
(j) $\frac{A}{C} = \frac{\sqrt{12}}{\sqrt{6}} = 1.414$ $\frac{B}{C} = \frac{\sqrt{10}}{\sqrt{6}} = 1.291$ $B = z = [\bar{1}23]$



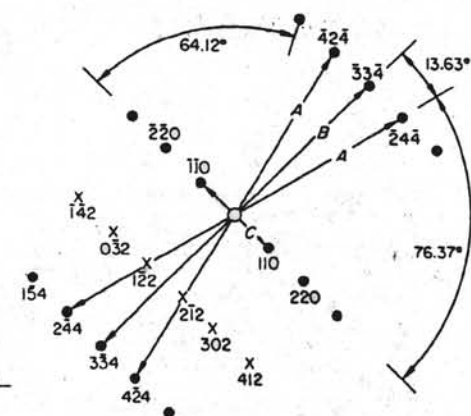
(m) $\frac{A}{C} = \frac{\sqrt{38}}{\sqrt{2}} = 4.359$ $\frac{B}{C} = \frac{\sqrt{36}}{\sqrt{2}} = 4.243$ $B = z = [\bar{1}14]$



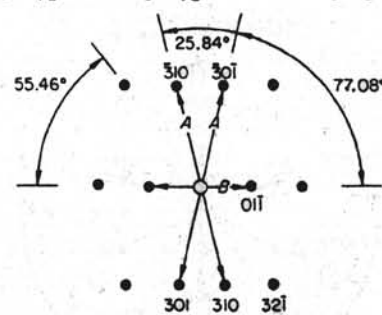
(n) $\frac{A}{B} = \frac{\sqrt{18}}{\sqrt{4}} = 2.121$ $B = z = [014]$



$\frac{A}{C} = \frac{\sqrt{46}}{\sqrt{2}} = 4.796$ $\frac{B}{C} = \frac{\sqrt{44}}{\sqrt{2}} = 4.690$
 $B = z = [\bar{2}33]$



(l) $\frac{A}{C} = \frac{\sqrt{36}}{\sqrt{2}} = 4.243$ $\frac{B}{C} = \frac{\sqrt{34}}{\sqrt{2}} = 4.123$ $B = z = [\bar{2}23]$

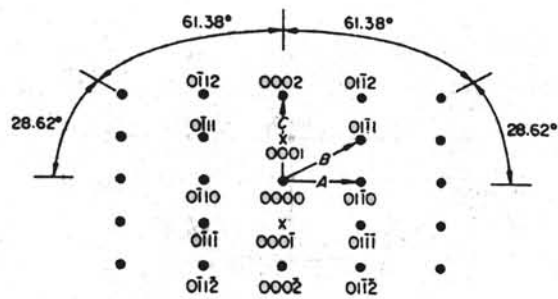


$\frac{A}{B} = \frac{\sqrt{10}}{\sqrt{2}} = 2.236$ $B = z = [\bar{1}33]$

(k)

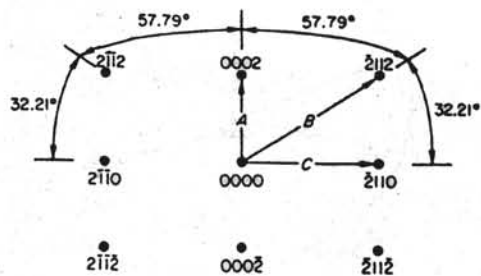
(o)

(三)密排六方



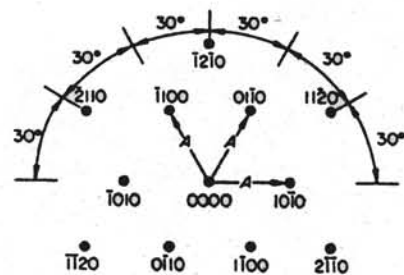
$$\frac{L}{A} = 1.09 \quad \frac{B}{A} = 1.139 \quad \theta = \varphi = [2\pi i 0]$$

(a) foil plane (2 $\bar{1}$ 10)



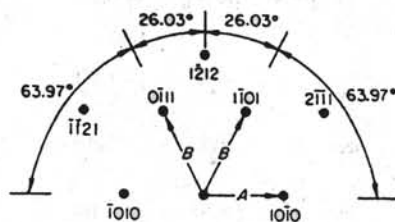
$$\frac{C}{A}=1.587 \quad \frac{B}{A}=1.876 \quad B \cdot z = [01\bar{1}0]$$

(b) foil plane (O110)



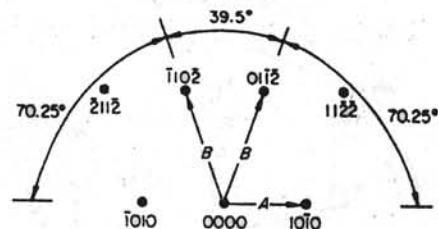
$$B = F = [0001]$$

(c) foil plane (0001)



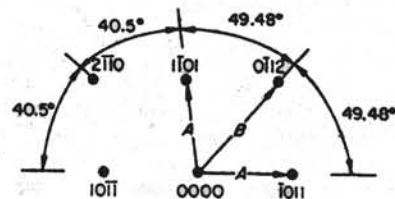
$$\frac{B}{A} = 1.139 \quad \theta = \epsilon = [1213]$$

(d)



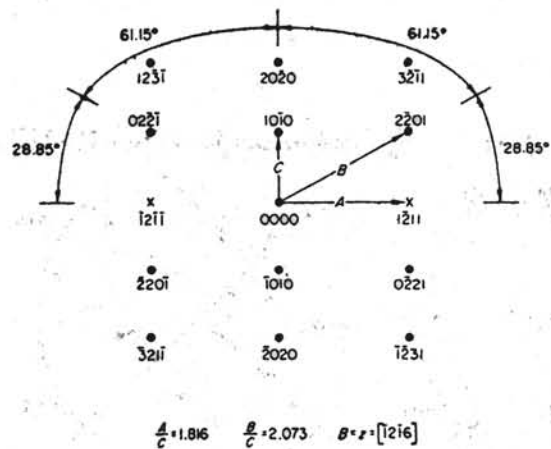
$$\frac{B}{A} = 1.480 \quad B = I = [2423]$$

(e)

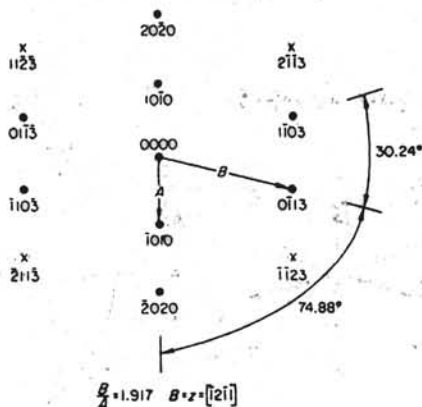


$$\frac{B}{A} = 1.299 \quad B_{\text{max}} = [0.171]$$

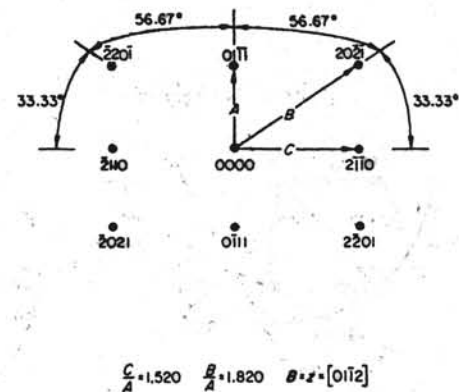
(f)



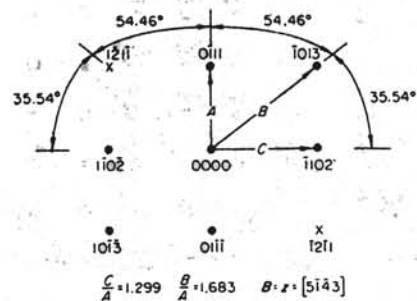
(g)



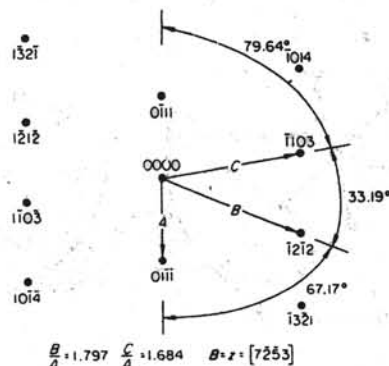
(h)



(i)



(j)



(k)

(四) 金刚石立方

