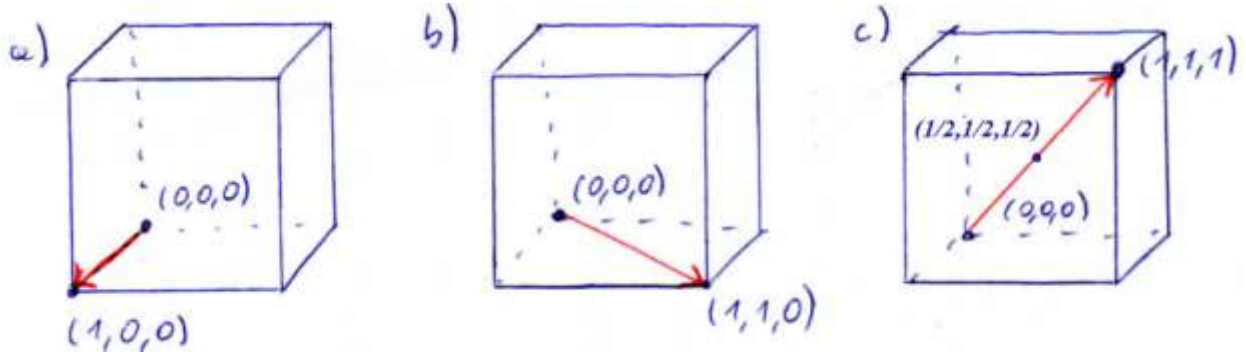




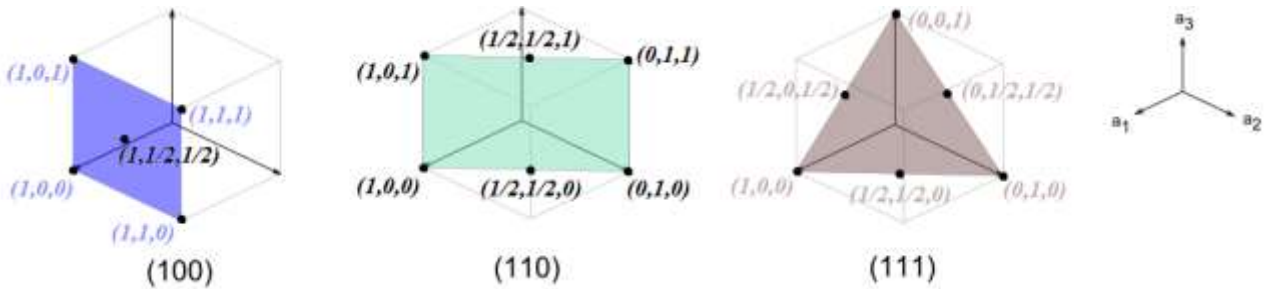
GABARITO LISTA DE EXERCÍCIOS – Estrutura dos Materiais

- 1 – Teórica. 4 –  $FEA_{cfc} = 0,74$   
 2 – Teórica. 5 – Teórica.  
 3 – Teórica. .  
 5 –  $\rho_{exp.} = 10,22 \text{ g/cm}^3$   
 6 – Estrutura Cristalina Nb = CCC.  
 7 – Contração de 3,53 % .  
 8 –



9 –  $A = [\bar{1} \ 0 \ 1]$  -  $B = [1 \ \bar{2} \ 2]$  -  $C = [4 \ \bar{3} \ \bar{4}]$  -  $D = [2 \ 2 \ 1]$ .

10 –



11 – a)  $(0 \ \bar{1} \ \bar{4})$  b)  $(5 \ 12 \ 0)$  c)  $(0 \ \bar{1} \ 3)$  d)  $(2 \ 2 \ 3)$

12 – a)  $d_{linear} = 3,65 \cdot 10^7 \text{ átomos/cm}$  b)  $d_{linear} = 1,43 \cdot 10^7 \text{ átomos/cm}$

13 –  $d_{planar} = 1,202 \cdot 10^{13} \text{ átomos/mm}^2$

14 –  $d_{(100)} = 1,617 \cdot 10^{15} / \text{cm}^2$  ;  $d_{(110)} = 1,144 \cdot 10^{15} / \text{cm}^2$  ;  $d_{(111)} = 1,867 \cdot 10^{15} / \text{cm}^2$

Não calcular o FEA!

Portanto, plano (111) é o mais compacto.