

# [ PARCIAL 2 ]

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$$\theta = 28.4^\circ$$

ley de Bragg

$$\lambda = 0.3 \text{ nm}$$

$$2d \sin \theta = n \lambda \quad ; \quad n=1$$

$$d = ?$$

$$d = \frac{\lambda}{2 \sin \theta} = 3.15 \text{ \AA}$$

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$$L = 10^{-14} \text{ m}$$

$$\boxed{1 \text{ \AA} = 10^{-10} \text{ m}} \\ = 0.1 \text{ nm}$$

Dada la ec. 3.18 tenemos que

$$E_n = \frac{n^2 h^2}{8mL^2}, \quad n=1, 2, \dots$$

$$\frac{h^2}{8mL^2} = 3.2766 \times 10^{-13} \text{ J} = 2.045 \text{ MeV.}$$

$$E_n = n^2 (2.045 \text{ MeV})$$

Mínimo.  $\rightarrow n=1$

$$E_1 = 2.045 \text{ MeV.}$$





