

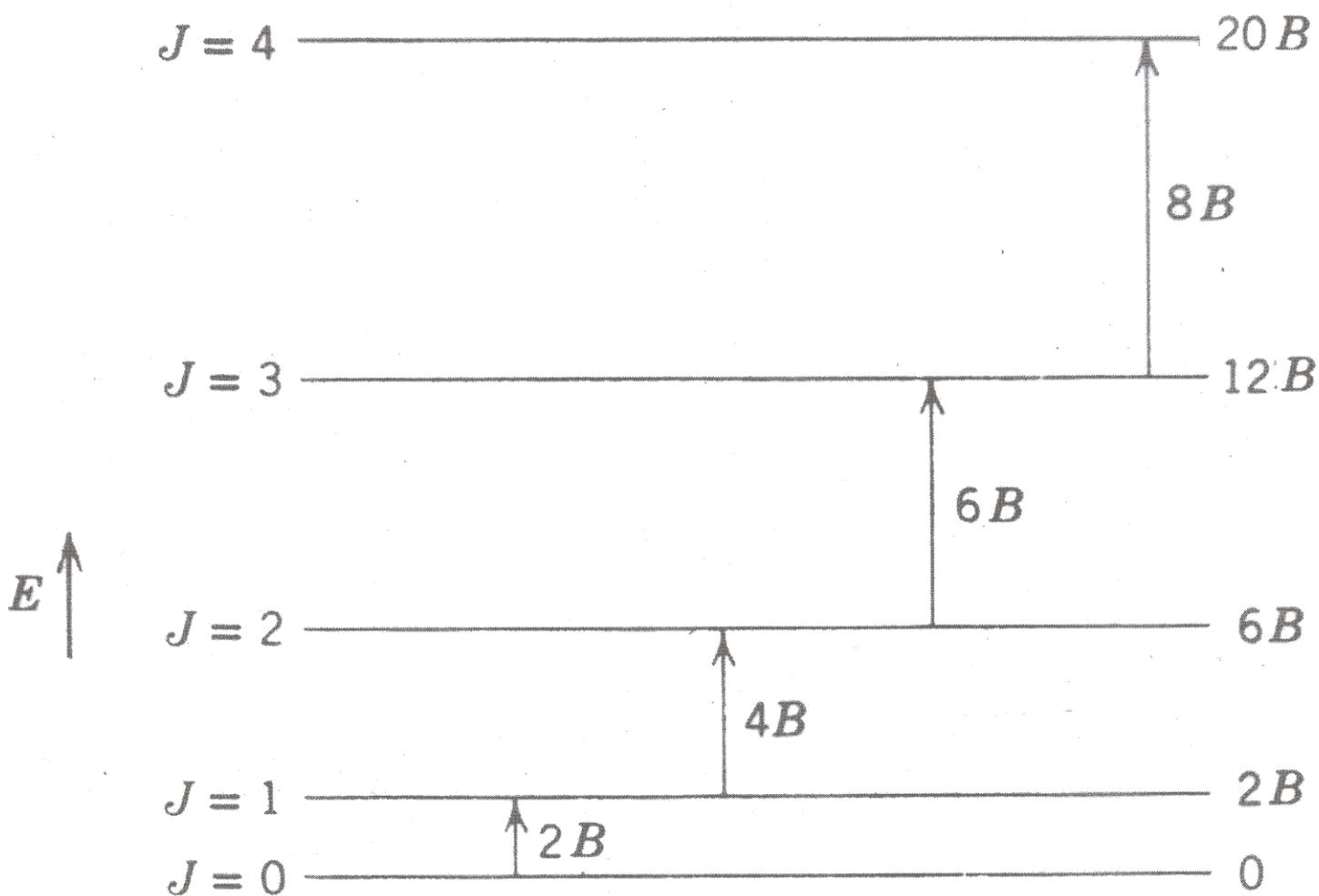
QM Results for a Linear Rotor

$$F = BJ(J+1)$$

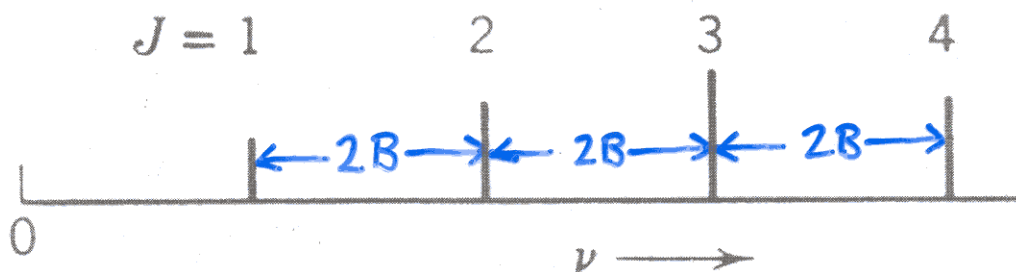
$$\Delta F = 2BJ$$

Quantum number

Energy



$$\Delta\Delta F = 2B \quad \text{and} \quad B = \frac{\hbar^2}{4\pi c I}$$



(from Robert A. Alberty, Physical Chemistry.)