

① $E = hf$, $c = f\lambda$

② $E = hf \left(\frac{1}{n_i^2} - \frac{1}{n_f^2} \right) = hf$

Oct 31-8:35 AM


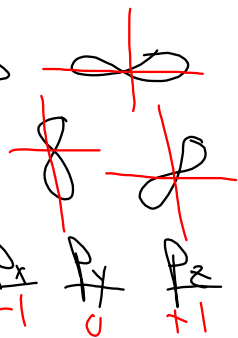
③ $\frac{f}{l} = \frac{h}{mv}$

$\frac{v}{l} = \frac{h}{m\lambda}$

$m = \text{Kg}$
 $f = \text{M}$
 $c = \text{M/sec}$

Oct 31-9:04 AM

(12)

n	PEC	<u>SIZE</u>	\sim	
l	Sublevel	<u>SHAPE</u>	P	
m	orbital	-1 0 $+1$	P_x P_y P_z	-1 0 $+1$
s	spin	$+\frac{1}{2}$ $-\frac{1}{2}$		

$\frac{s|p|d|f}{0|1|2|3}$
 l Sublevel $\text{Max}(n-1)$
 $(-l \text{ to } +l)$ orbital orientation in space
 $3d$
 -2 -1 0 $+1$ $+2$

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