A6.2 物理常數 PHYSICAL CONTANTS

阿伏伽德羅常數	Avogadro's number	N	= 6.023 x 10^{23}/mol (一克原子或分子物質所含的原子或分子的數)
H 原子基態能量平均波動函數半徑	Average radius of wave function of H atom in ground state		= 0.529 x 10^{-10}m = 0.529 A
玻爾磁子	Bohr magneton	β	= 9.27 x 10^{-24} A m²
波耳茲曼常數	Boltzmann's constant	k	= 1.380 x 10^{-23} J/K
電子伏特	Electron volt	eV	= 1.602 x 10^{-19} J
電子裝量	Electron charge	e	= 1.602 x 10^{-19} C
電子靜止質量	Electronic rest mass	m_e	= 9.109 x 10^{-31} kg
電子裝量質量比率	Electronic charge to mass ratio	e/m_e	= 1.759 x 10^{-11} C/kg
T 能量	Energy for T = 290K	kT	= 4 x 10^{-21} J
H 原子基態能量	Energy of ground state H atom (Rydberg energy)		= 13.60 eV
法拉第常數	Faraday constant	F	= 9.65 x 10^{7} C/mol
太空透磁率	Permeability of free space	μ_o	= 4π x 10^{-7} H/m
太空電容率	Permittivity of free space		= (1/36π) x 10^{-9} F/m
版其常數	Planck's constant	h	= 6.626 x 10^{-34} Js
質子質量	Proton mass	m	= 1.672 x 10^{-27} kg
質子電子質量比率	Proton to electron mass ratio	m_p/m_e	= 1,836.1
標準重力加速	Standard gravitational acceleration	g	= 9.807 m/s^2 = 32.17 ft/s^2
斯忒芬-玻爾茨曼常數	Stefan-Boltzmann constant	σ	= 5.67 x 10^{-8} J/m^2 s K^4
宇宙重力常數	Universal constant of gravitation	G	= 6.67 x 10^{-11} N m² /kg² = 3.32 x 10^{-11} lbf ft²/lb²
宇宙氣體常數	Universal gas constant	R	= 8.314 J/mol K
光速	Velocity of light in vacuo	c	= 2.9979 x 10^{8} m/s
N.T.P.一克分子理想氣容量	Volume of 1 mole of idea gas at N.T.P.		= 22.421