
 Erratum

Erratum: Hydrogen atom as a four-dimensional oscillator
[Phys. Rev. A 22, 333 (1980)]

Augustine C. Chen

These corrections for Ψ_{300} and Ψ_{310} in Eq. (9) should be noted.

Ψ_{300} : The coefficient should read $[288(3\pi)^{1/2}a^{3/2}]^{-1}$, and these terms should be included in the parentheses,

$$2(\Phi_{32\ 200} + \Phi_{32\ 020} + \Phi_{32\ 002} + \Phi_{30\ 220} + \Phi_{30\ 202} + \Phi_{30\ 022}).$$

Ψ_{310} : The coefficient should read $\sqrt{2}(576\pi^{1/2}a^{3/2})^{-1}$. The sign of $\Phi_{30\ 004}$ should be positive. Furthermore, if we multiply the equation $(H - E)\Psi = 0$ by $4r/a_0$, a_0 being an arbitrary length parameter, we obtain $\omega = 2p_c/(Mn\hbar a_0)$ and then set $y_i = (M\omega a_0/\hbar)^{1/2} s_i$. The results remain unchanged.