Erratum: Ionization of N_2 , O_2 , and linear carbon clusters in a strong laser pulse [Phys. Rev. A 69, 023410 (2004)]

A. Jaroń-Becker, A. Becker, and F. H. M. Faisal (Received 8 October 2005; published 9 December 2005)

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In Eq. (13) of our paper we have erroneously applied Eq. (11), which corresponds to the leading contribution to the ionization rate for *small* electron energies, to derive the interference condition at higher energies as well. At higher energies the full expression for the ionization rate must be used which replaces Eq. (11) by

$$\begin{split} W_{fi}^{(N)}(I,\hat{n}) &= 2\pi N_e C_{coul} \sum_{N=N_0}^{\infty} \int d\hat{\mathbf{k}}_N k_N (U_p - N\omega)^2 J_N^2 \bigg(\boldsymbol{\alpha}_0 \cdot \mathbf{k}_N, \frac{U_p}{2\omega} \bigg) |\tilde{\Phi}(\mathbf{k}_N)|^2 \\ &\times 4 \times \begin{cases} \cos^2 \{\mathbf{k}_N \cdot \mathbf{R}/2 + \arg[\tilde{\Phi}(\mathbf{k}_N)]\} & \text{for MO of gerade symmetry} \\ \sin^2 \{\mathbf{k}_N \cdot \mathbf{R}/2 + \arg[\tilde{\Phi}(\mathbf{k}_N)]\} & \text{for MO of ungerade symmetry,} \end{cases} \end{split}$$

with $\tilde{\Phi}(\mathbf{k}_N)$ the Fourier transform of the linear combination of all atomic orbitals (in a real representation) at the nucleus located at $-\mathbf{R}/2$.

According to the general ionization rate formula given above, the interference condition for the suppression of ionization (at both high and low energy domains) is

$$\frac{k_N^2}{2} = \frac{1}{2R^2(\hat{k}_N \cdot \hat{n})^2} \times \begin{cases} \{(2n+1)\pi - 2 \arg[\tilde{\Phi}(\mathbf{k}_N)]\}^2 & \text{for MO of gerade symmetry} \\ \{2n\pi - 2 \arg[\tilde{\Phi}(\mathbf{k}_N)]\}^2 & \text{for MO of ungerade symmetry}. \end{cases}$$
(1)

where n = 0, 1, 2,