

Erratum: Chiral tunneling through a time-periodic potential in monolayer graphene [Phys. Rev. B 78, 165420 (2008)]

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(Received 5 February 2009; published 26 February 2009)

 DOI: [10.1103/PhysRevB.79.089903](https://doi.org/10.1103/PhysRevB.79.089903)

PACS number(s): 72.80.Rj, 99.10.Cd

In our recent paper we have noticed the following error. The prefactor $\frac{\cos \phi_n}{\cos \phi_0}$ should not appear on the right-hand side of Eq. (12); the corrected Eq. (12) should read

$$T_n = |t_n|^2. \quad (12)$$

Similarly, the same factor should not be present in an unnumbered equation appearing before Eq. (14) as well as in Eq. (14). The corrected equations should read

$$T_n = |t_n|^2 = T_{s0} T_{sn} \left(2 \frac{J_n(\alpha)}{J_0(\alpha)} \right)^2 \frac{\sin^2[(k_2^n - k_2^0)a/2]}{\cos^2 \phi_n} (\cos^2[(k_2^n + k_2^0)a/2] \cos^2[(\phi_n - \phi_0)/2] + \sin^2[(k_2^n + k_2^0)a/2] \cos^2[(\phi_n + \phi_0)/2])$$

$$T_n = T_{s0} T_{sn} \left(2 \frac{J_n(\alpha)}{J_0(\alpha)} \right)^2 \frac{\sin^2[(k_2^n - k_2^0)a/2]}{\cos^2 \phi_n} (\sin \phi_0 \sin \phi_1 \cos^2[(k_2^0 + k_2^1)a/2] + \cos^2[(\phi_0 + \phi_1)/2]). \quad (14)$$

The numerical calculations and the obtained results presented in our published paper are not affected because this factor is equal to 1 for the central band since $\frac{\cos \phi_n}{\cos \phi_0} = 1$ for $n=0$. For the sidebands at normal incidence, $\phi_0=0$, this factor is again 1 since in this case $\phi_n=0$ for all n . For other cases discussed in our paper, Figs. 1(b) and 3(b), the prefactor is close to 1 (between 0.9 and 1.05) except for results displayed in Fig. 2(b) for angles close to 90° where its value deviates from unity considerably. However, even results presented in Fig. 2(b) are not affected because transmission probabilities for angles close to 90° , where the aforementioned factor deviates from unity, are vanishingly small. Hence the results displayed in the figures are not affected and the conclusions arrived at remain unchanged.