

Erratum: Photovoltaic Hall effect in graphene [Phys. Rev. B 79, 081406(R) (2009)]

Takashi Oka and Hideo Aoki
 (Received 16 March 2009; published 6 April 2009)

DOI: [10.1103/PhysRevB.79.169901](https://doi.org/10.1103/PhysRevB.79.169901) PACS number(s): 73.43.-f, 72.40.+w, 78.67.-n, 85.60.-q, 99.10.Cd

In Eq. (8) of our paper a factor τ_z is spurious. Thus, the particular statement “Due to the factor τ_z , the contribution from K and K' points in graphene will cancel with each other” in the absence of bias voltage between electrodes is incorrect. This can also be confirmed by directly obtaining the Berry curvature in the honeycomb lattice irradiated by light, where it has the same sign between K and K' points as shown in Fig. 1 here. However, the rest of the paper (including all the figures) is correct, since we have calculated the transport going back to the honeycomb lattice, and the main conclusion of the paper on the photovoltaic Hall effect is not altered in any way.

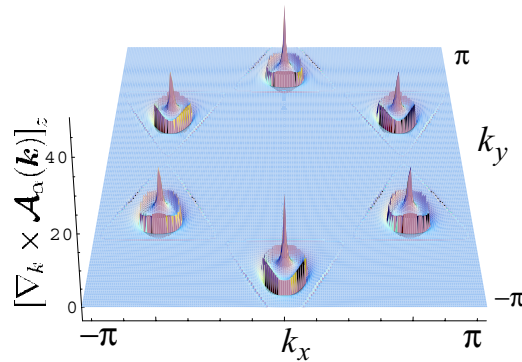


FIG. 1. (Color online) The photoinduced Berry curvature $[\nabla_k \times \mathcal{A}_\alpha(k)]_z$ in the honeycomb lattice for the upper band for $F=0.1w$, $\Omega = 1.0w$.