

Correction to "On the Origin of the Enhanced Supercapacitor Performance of Nitrogen-Doped Graphene"

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These errata, however, do not affect the overall conclusions of the original article.

1. In our analysis, μ was mistakenly calculated as $-e\phi_{\rm G}$ instead of $e\phi_{\rm G}$. As a result, the x-values for $C_{\rm Q}(\phi)$ (and subsequently $C_{\rm T}$) in the TOC, Figure 4, and Figure 8 should be flipped and are corrected below.

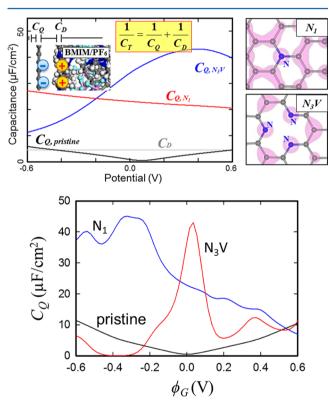


Figure 4. Comparison of the calculated quantum capacitance (C_Q) of pristine, N_1 , and N_3V graphene as a function of the local electrode potential (ϕ_G).

- 2. Accordingly, the discussion about Figure 4 on page 5612 should read: "In the case of N₁ graphene, $C_{\rm Q}$ gradually increases as $\phi_{\rm G}$ decreases and peaks at 45 $\mu{\rm F/cm^2}$ at $\phi_{\rm G}=-0.3$ V. As $\phi_{\rm G}$ increases above 0 V, $C_{\rm Q}$ tapers toward 0 $\mu{\rm F/cm^2}$ at 0.85 V. In the N₃V graphene case, $C_{\rm Q}$ sharply decreases to around 5–10 $\mu{\rm F/cm^2}$ when $\phi_{\rm G}>0.2$ V and 0 $\mu{\rm F/cm^2}$ when $\phi_{\rm G}=-0.4$ V."
- 3. The isosurface value in the caption of Figure 3 has the wrong units. It should read ± 0.0005 e/bohr³, which is equal to ± 0.0034 e/Å³.

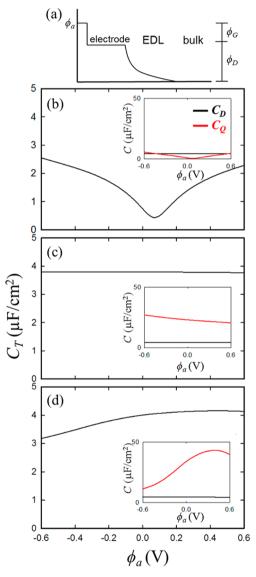


Figure 8. (a) Schematic of the idealized potential profile at the graphene/IL interface and the total interfacial capacitance for (b) pristine, (c) N_1 , and (d) N_3V graphene systems as a function of applied potential (ϕ_a) .