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Correction

Correction to: High mobility monolayer MoS_2 transistors and its charge transport behaviour under E-beam irradiation

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According to the DFT calculations in a previous report (Ref. [27]: Nat. Commun. 2013, 4(1): 2642), the localization length ξ, which was consistent with the distribution of electron wave function, is equal to 6 Å. Consequently, the ξ value is corrected from 10 Å to 6 Å, and Figure 4c with the corrected value is modified as follows:

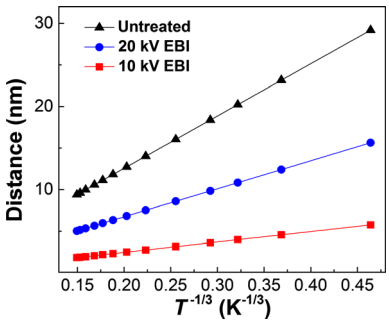

Fig. 4c The average hopping distance of electrons in monolayer MoS_2 under different irradiation parameters as a function of $T^{-1/3}$ (x-axis has been changed from T to $T^{-1/3}$).

The original article can be found online at https://doi.org/10.1007/s10853-020-4977-w.

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In the original article, the relationship between the mobility (μ) and hopping distance (D) in VRH model was described as Eq. (4): $\mu = k_B T/qPD^2$, an important equation which was referenced by: Zhang X (2019) Research on defect control of two-dimensional MoS_2 photoelectric performance. PhD Dissertation, University of Science and Technology Beijing. The hopping distance has a significant influence on the mobility, and the mechanism awaits further research in the near future.

The authors apologize for these errors which do not affect the conclusion of the original article.