Supporting Material

Boron Doped Reduced Graphene Oxide with Tunable Bandgap and Enhanced Surface Plasmon Resonance

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1- Electrical conductivity Measurement

The electrical conductivity of GO and B-rGO samples measured at room temperature using Hall-effect measurement (HMS-3000 Series) is shown in Table 1. The electrical conductivity of GO increases with the reduction of oxygen-related functional groups and an increase in sp^2 domains. The electrical conductivity of GO was found to be further improved with boron doping, and this might be dependent on the doping concertation of incorporated atoms [1]. The increment in p-type electrical conductivity corresponds to the increase in boron contents in the B-rGO samples. These results are found to be in agreement with previous studies [2,3].

Table S1. The electrical conductivity of GO and B-rGO.

S/No	Material	Conductivity (S/cm)
1	GO	0.127
2	B-rGO1	0.725
3	B-rGO2	0.767
4	B-rGO3	0.816

References

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