

Special Issue

Black Phosphorus: Application in Materials Science

Message from the Guest Editor

Black phosphorus (BP), also known as phosphorene, has attracted recent scientific attention owing to its unique structure and properties. As a direct-bandgap layered 2D semiconductor, BP has intriguing physical properties, such as high charge carrier mobility, large on-off ratio, significant anisotropy, and layer-dependent bandgap. Therefore, it has shown great application potential in field-effect transistors, photoelectric devices, lithium-ion batteries, photo-therapy, photovoltaics, sensing, and catalysis. Furthermore, the biodegradability and biocompatibility of BP bode well for biomedical applications. In this Special Issue, articles are invited to provide a recent insight into the synthesis, properties and applications of black phosphorus.

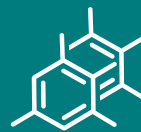
Guest Editor

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Deadline for manuscript submissions

closed (30 November 2018)



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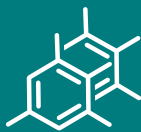


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