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Vapor-Based Graphene Synthesis and Its Applications

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

Graphene synthesis using different vapor-based methods provides an opportunity to control the structure and properties of graphene by adjusting its deposition conditions. In such a case, graphene can be directly grown on catalytic metal foils and even on semiconducting and dielectric substrates, similar to the functional layers and electrodes of more mature semiconductor devices. Graphene grown via vapor-based methods is already considered a new transparent conductor in solar cells, a monolayer alternative to the Schottky contact metals in photodetectors and Schottky diodes, and an active layer within field effect transistors and different sensors.

The potential topics of this Special Issue include, but are not limited to, the following:

Graphene synthesis by chemical vapor deposition (CVD), plasma-enhanced chemical vapor deposition (PECVD), pulsed laser deposition, cathodic arc evaporation, and magnetron sputtering on catalytic metal substrates; etc.

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Editor-in-Chief

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Message from the Editor-in-Chief

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