



Silicon and Graphene Based Materials and Related Devices

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Deadline for manuscript
submissions:

closed (31 July 2022)

Message from the Guest Editors

Silicon-based solar cell devices and modules currently occupy a lion's share of the PV market, and it has been forecasted that this trend will continue in the foreseeable future. At the same time, graphene has emerged as a promising material for a wide range for energy applications, such as batteries and supercapacitors, which can be attributed to its extremely high surface area to volume ratio.

We invite researchers to contribute research articles and review articles. The topic includes, but is not restricted to,

- Passivation materials and passivated contacts for very high-efficiency silicon solar cells;
- Advanced material characterization of silicon PV materials and devices using XRD, SEM, EDS, EELS, TEM, HAADF-STEM, SIMS, RBS, etc.;
- Silicon PV modules: degradation, losses, and reliability study;
- Device simulations to help improve efficiency of silicon solar cells;
- Graphene-based materials for energy storage, such as batteries and supercapacitors;
- Graphene for various energy applications, such as solar panels, fuel cell catalysts, fuel rods for nuclear reactors, and so on.





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Message from the Editor-in-Chief

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