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Nanostructured Energy Devices: Advances and Discoveries in Organic and Perovskite Solar Cells and Sensors

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Message from the Guest Editor

Nanostructured energy devices based on organic and perovskite materials show great potential for low-cost, lightweight, flexible photovoltaic power generation and sensing applications. These emerging energy materials possess a combination of excellent optoelectronic properties, multifunctionality, materials abundance, low-temperature solution processibility, scalable manufacturability, and environmental benignity, making them promising contributors to a more decarbonized energy future.

This special issue of *Materials* aims at covering the latest technical advances and scientific discoveries in organic and halide perovskite solar cells, sensors, and other optoelectronic applications. We encourage the submission of manuscripts involving experimental and theoretical investigations of nanostructured organic and perovskite thin films and optoelectronic devices. Of particular interest are nanostructured materials synthesis, nanoscale materials characterization, new designs of materials and devices, and new routes to optimize device performance.



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