



Advances in Perovskite Devices

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Message from the Guest Editors

Dear Colleagues,

Halide Perovskites (HPs) have recently drawn attention as some of the most promising materials due to their excellent optoelectronic properties and solution processability. This Special Issue of *Micromachines* will highlight recent advances on **devices based on halide/pseudohalide perovskites** (single, double, lead-in or free, any dimensional HPs) with a focus on synthesis, degradation phenomena, halides exchange, device engineering and development, characterization, and device modeling (simulation), and related review papers. We invite contributions to the developments of devices including LEDs, solar cells, lasers, detectors, X-ray imaging, photonic devices, and integrated devices.

Topics to be covered include, but are not limited to:

- Lead/lead-free halide/pseudohalide perovskites;
- HPs fundamental properties;
- Synthesis techniques of perovskites;
- Perovskite's thin films, LEDs, photovoltaics, lasers, photodetectors, X-ray imaging, photonic devices, flexible and integrated devices;
- Low/high temperature/pressure study of perovskites;
- Perovskite's dynamics and tunable photonic platforms;
- Device simulation.



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Message from the Editor-in-Chief

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