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Large Area Solar Cells, LEDs and Photodetectors Based on Organometal Halide Perovskite

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Message from the Guest Editor

Organometal halide perovskites have attracted widespread interest in the research community thanks to their tunable optoelectronic properties. These semiconductors have found applications in solar cells, LEDs, and light detectors for visible light, as well as x-rays. In this SI, we aim to collect experimental and review papers on the scaling up of fabrication and on the large area characterization of perovskite-based devices. Particular focus will be given to the industrialization of the deposition of the perovskite layer itself, from ink formulation to fabrication via industrially viable techniques such as slot die, spray coating, ink-jet printing, blade coating, and thermal evaporation. Other relevant topics are the characterization and mapping of large-area samples that can be instrumental for inline metering during production and the patterning of the perovskite layer via laser patterning, digital printing, lithography or through novel methods. We welcome all papers that provide advancements towards the industrialization and automation of the production of perovskite-based devices by developing new deposition processes or new ink formulation that are industrially compatible.









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Message from the Editor-in-Chief

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