

Special Issue

The Future of Perovskite Solar Cells

Message from the Guest Editors

The leap forward in the power conversion efficiency (PCE) enabled by lead (Pb) halide perovskites is unprecedented, with PCEs emerging from 3.8% in its first study to a recent certified value of 25.5% in single-junction perovskite solar cells. However, before bringing PSCs to an industrial scale-up process and using this material in other optoelectronic applications, some critical issues are needed to be carefully addressed, such as Pb and solvent toxicities and, most importantly, improving the intrinsic material and device stability. This Special Issue in *micromachines* will focus on the research and review articles based on the most recent advances in the field. In particular, we welcome the work based on the development of new perovskite compositions, interfacial engineering, molecular passivation, novel charge transporting materials, and innovative fabrication techniques aimed at enhancing performance and stability. Special consideration will be given to the work-based on lead-free perovskite solar cells.

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