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Challenges towards Upscaling and Stabilization of Perovskite Solar Cells

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Message from the Guest Editors

Dear Colleagues,

Almost 10 years after their first use in the photovoltaic field, perovskite solar cells (PSCs) are now hybrid devices that, in addition to having reached silicon performance, can accelerate energy transition and boost the use of abundant elements for their manufacturing process. However, use of precious metals, scarcity of large-scale fabrication processes able to prepare modules with reproducible performances, and a worldwide accepted aging protocol still slow down the industrialization of this technology.

The aim of this Special Issue is to collect high-profile articles and reviews proposing novel strategies towards upscaling and stabilization of PSCs. Novel front- and back-electrode solutions, emerging solar cells' fabrication at large scale, integration of PV units with energy-storage technologies, replacement of costly metals, and significant long-term stability tests will be welcomed and diffused in the widespread Molecules scientific community.

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Guest Editors



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Special Issue



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Message from the Editor-in-Chief

As the premier open access journal dedicated to molecular chemistry, now in its 30th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts, and novel materials. Pushing the boundaries of the discipline, we invite papers on all major fields of molecular chemistry and multidisciplinary topics bridging chemistry with biology, physics, and materials science, as well as timely reviews and topical issues on cutting-edge fields in all of these areas.

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