

Special Issue

Advancements and Trends in Perovskite Photovoltaics

Message from the Guest Editors

Perovskite solar cells are notably inexpensive and relatively simple to manufacture, having already achieved a power conversion efficiency exceeding 26%, compared to conventional silicon solar cells. This high efficiency allows perovskite solar cells to produce more electricity from the same amount of sunlight. Moreover, perovskite-based tandem solar cells have surpassed a power conversion efficiency of 34% and have shown significant potential for further improvement. By combining two different types of solar cell with distinct absorption properties, tandem solar cells can capture a broader range of the solar spectrum, potentially resulting in even higher efficiency. This advancement could enhance the competitiveness of solar energy against traditional fossil fuels and contribute to a more sustainable and energy-efficient future.

Guest Editors

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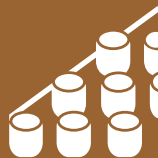
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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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