

## Special Issue

# Advances in Perovskite Solar Cells Research

### Message from the Guest Editors

The world desperately needs green energy sources. Perovskite solar cells are efficient and cheap to produce, making them attractive for researchers and many start-up companies. However, due to the doubly lower ionicity of halide perovskites compared with that of their oxide cousins, the stability of the former is poor. Material degradation processes under exposure to light, moisture, temperature, and device operation conditions such as current and voltage must be controlled to obtain long-lived and stable devices. To date, our knowledge of degradation mechanisms includes an evolution of defects, grain boundary, surfaces, and interfaces with charge transporting layers. Nevertheless, more work is required in this field to achieve the goal. Further intensive and comprehensive studies on perovskite materials and device properties under harsh conditions are crucial for future development. For more information, please click on the Special Issue website at: [https://www.mdpi.com/journal/materials/special\\_issues/S33M6B74V3](https://www.mdpi.com/journal/materials/special_issues/S33M6B74V3)

### Guest Editors

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### Deadline for manuscript submissions

closed (20 December 2023)



## Materials

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## About the Journal

### 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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