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## Advances in Perovskite Solar Cells Research

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Deadline for manuscript  
submissions:

**closed (20 December 2023)**

### 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.

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## Message from the Editor-in-Chief

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