



## Perovskite Nanomaterials for Energy-Related Applications

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### Message from the Guest Editor

Supplying energy to meet the growing demand is among the most critical scientific challenges nowadays. Developing renewable and clean sources of energy is therefore essential to move towards a sustainable world.

Perovskite solar cells have taken the world of photovoltaics with efficiency beyond 25% in just over a decade. Their remarkable optoelectronics properties coupled with ease of processing from solution at room temperature could enable mass production.

However, the exact physical properties behind material and device functioning, along with the nanoscale morphology of the film are not yet fully understood. Moreover, hybrid perovskite nanomaterials suffer from rapid degradation upon exposure to water, oxygen, and heat, a challenge to tackle to with established PV technologies.

This Special Issue is devoted to the applications of hybrid perovskite materials for photovoltaic devices and to the exploration of their optoelectronic characterization at the nanoscale. Particularly welcome will be original, in-depth studies on the stability of those cells and on the fundamental understanding on the structure-function relationship and mitigations strategy of degradation mechanisms.





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## Message from the Editor-in-Chief

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