



## New Insights into Perovskite Materials: From Fundamental Science to Applications

Guest Editors:

**Dr. Tengpeng Li**

State Key Laboratory of Dynamic Measurement Technology, North University of China, Taiyuan 030051, China

**Dr. Shiqi Li**

College of Electronic Information and Optical Engineering, Taiyuan University of Technology, Taiyuan 030002, China

**Dr. Silei Wang**

Department of Opto-Electronics Science Technology, Tianjin University, Tianjin 300072, China

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### Message from the Guest Editors

Dear Colleagues,

ABX<sub>3</sub>-based perovskites have potential applications in photovoltaics and optoelectronics due to their unique photoelectric properties, such as high absorption coefficients, long carrier diffusion lengths, unusually high defect tolerance, and adjustable band gaps. Perovskites can be divided into organic and inorganic metal halides according to their chemical compositions and have great application potential in various fields such as solar cells, light-emitting diodes, detectors, and laser devices. Although perovskites have been extensively studied, addressing long-term stability issues and further developing photoelectric conversion efficiency will be important to the challenge of achieving large-scale commercial production. The purpose of this Special Issue is to collect the latest research progress and results of perovskites, ranging from the basic theory, synthesis methods, and structural design, to their extensive applications, as well as the possibility of the widespread use of perovskites in future applications. We invite scientists from different disciplines to contribute their work to this cause.





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## Editor-in-Chief

### Prof. Dr. Alessandra Toncelli

Department of Physics, University  
of Pisa, 56126 Pisa, Italy

## Message from the Editor-in-Chief

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*Crystals* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
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