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# Low-Dimensional Materials for Optoelectronic and Photovoltaic Fundamentals and Applications

Guest Editor:

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Deadline for manuscript submissions:

20 December 2025

### **Message from the Guest Editor**

Dear Colleagues,

For this Special Issue, we invite the submission of original research articles and reviews on fundamental and applied research focused on low-dimensional materials for optoelectronics and photovoltaics, including, but not limited to, the following:

- Semiconductor and heterostructure optoelectronics and photovoltaics;
- Mesoscopic phenomena in nanostructures;
- Plasmonic and phononic systems;
- Energy conversion and energy-harvesting processes;
- Nonlinear optoelectronic processes;
- Optoelectronics of 2D materials and their heterostructures;
- Carrier dynamics in organic materials and interfaces;
- Ultra-fast optical phenomena at low dimensions;
- Optoelectronics of nanowires and quantum dots;
- Flexible optoelectronics and photovoltaics.













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#### **Editor-in-Chief**

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## **Message from the Editor-in-Chief**

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