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High-Performance Semiconductor Optoelectronic Devices

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Message from the Guest Editors

Dear Colleagues,

Semiconductor optoelectronic devices have attracted extensive attention for their variety of applications including telecommunication, sensing, energy conservation, displays, and lightning. To meet the growing demand, high-performance devices have been developed through advancements in materials, sophisticated device architectures, and innovative fabrication techniques.

This Special Issue aims to present up-to-date high-performance semiconductor optoelectronic devices, such as (μ) LEDs, lasers, photodetectors, and solar cells. Topics include but are not limited to the following:

- Novel methods for synthesizing and fabricating optoelectronic materials;
- Advances in device architecture for enhanced performance;
- Techniques for characterizing and evaluating material properties and device performance;
- Low-dimensional semiconductor optoelectronic materials and devices:
- Semiconductor optoelectronic device physics, modeling, and simulation.



