



## Quantum Optoelectronics

Guest Editor:

**Dr. Xixiang Zhu**

School of Electronic and  
Information Engineering, Beijing  
Jiaotong University, Beijing  
100044, China

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### Message from the Guest Editor

Quantum optoelectronics is an emerging field that aims to harness the power of quantum mechanics to develop new technologies for information processing, sensing, and communication. It employs the principles of quantum optics and solid-state physics to control and manipulate light and matter at the quantum level. This field has attracted a significant amount of attention in recent years due to its potential for improving the performance of classical devices and enabling new applications that were not possible before. This Special Issue on quantum optoelectronics aims to showcase the latest advances in this field, including theoretical and experimental research on quantum communication, quantum sensing, quantum computing, and quantum optics. The papers in this Special Issue cover a broad range of topics, from the fundamentals of quantum mechanics to the practical aspects of implementing quantum-optical devices.

