Special Issue

Vertical-Cavity Surface-Emitting Laser Technology: Innovations and Future Trends

Message from the Guest Editor

Vertical-Cavity Surface-Emitting Laser (VCSEL) technology has emerged as a crucial component in modern optoelectronics, driving innovations across various applications from data communication to sensing and imaging systems. This Special Issue aims to focus on the latest advancements and future trends in VCSEL technology, encompassing the development of novel materials, innovative design approaches, and enhanced fabrication techniques. Additionally, we also aim to explore the integration of VCSELs in photonic neural networks, underscoring their potential in nextgeneration computing and artificial intelligence applications. We set out to gather cutting-edge research that highlights the potential of VCSELs to revolutionize industries through improved performance, efficiency, and versatility. We seek contributions that explore theoretical studies, experimental investigations, and practical implementations, providing a comprehensive overview of the current state and future directions of VCSEL technology.

Guest Editor

Dr. Yu Huang

School of Optoelectronic Science and Engineering & Collaborative Innovation Center of Suzhou Nano Science and Technology, Soochow University, Suzhou 215006, China

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Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. Nelson Tansu School of Electrical and Electronic Engineering (EEE), The University of Adelaide, Adelaide, SA 5005, Australia

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