## **Special Issue**

# Machine Learning and Photonics Cooperation: Principles, Algorithms, and Systems

### Message from the Guest Editor

This Special Issue will focus on the fundamental theory, frameworks, techniques, and applications of machine learning/deep learning combined with photonics, with the aim of sharing and discussing recent advances and future trends. The topics of interest include but are not limited to the following: Typical systems and applications

- Biomedical imaging
- Objection recognition/detection
- Machine learning applications
- Optical communication systems

# Photonic neuromorphic computing and neural networks

- High-performance computing
- Optics for neuromorphic and reservoir computing
- Optical convolutional neural network
- Programmable photonics
- Optical unitary conversion

### **Optical components**

- Semiconductor lasers and fiber-based lasers devices
- Programmable multi-purpose photonic integrated circuits
- Fibers
- Optical amplifiers

#### **Guest Editor**

Prof. Dr. Niangiang Li

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### Deadline for manuscript submissions

closed (31 August 2022)



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### Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guestedited by leading experts in selected topics of interest.

#### Editor-in-Chief

Prof. Dr. Flavio Canavero

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