

# Special Issue

## Primary Exploration and Applications of Deep Machine Learning in Photonics

### Message from the Guest Editors

With the further development of computer science, machine learning approaches and their applications have spread across most scientific research fields. Meanwhile, an obvious increase in the potential of combining machine learning and photonics has appeared. With different applications paying attention to different wavelengths, this Special Issue mainly provides an opportunity to showcase the machine learning techniques in photonics and their related applications. Of course, if it involves application research findings with machine learning in related topics on photonics, we also welcome this opportunity to engage in joint communication and exploration, striving to find new research breakthroughs from joint discussions in various fields. This Special Issue is dedicated to theoretical or experimental advances bringing together the fields of photonics and machine learning. It is focused on recent advances in frontier technologies, technology trends, and to leverage machine learning in this application. We strongly encourage the submission of papers focusing on the keywords below. However, works on related topics will also be considered.

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### Guest Editors

Dr. Naixing Feng

School of Electronic and Information Engineering, Anhui University, Hefei, China

Prof. Dr. Zhixiang Huang

School of Electronic and Information Engineering, Anhui University, Hefei, China

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### Deadline for manuscript submissions

closed (30 September 2024)



## Photonics

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CiteScore 3.5



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*Photonics*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[photonics@mdpi.com](mailto:photonics@mdpi.com)

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## About the Journal

### Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Photonics* (ISSN 2304-6732). *Photonics* is an online open access journal covering both the fundamental and applications of optics and photonics. *Photonics* strives to provide an avenue to allow authors to disseminate their scientific findings—both theoretical/ simulations and experimental works—in highly accessible peer-reviewed journal publications. The manuscript in *Photonics* will be handled with quick turnaround production processing time. We welcome authors to submit their manuscripts for publications in *Photonics*. Our goal in *Photonics* is to enable fast dissemination of high impact works to the scientific community.

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### 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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