

## **Special Issue: Frontier in Optical Imaging and Display Research**

**Submission deadline: 31th Mar 2024**

### **Introduction to the Special Issue:**

The field of optical imaging and display research is a dynamic and rapidly developing area that spans multiple interdisciplinary fields and focus on the advancement of technologies and techniques for acquiring, processing, and presenting information. This field necessitates collaboration between experts in areas such as optics, photonics, materials science, electrical engineering, and computer science, among others. Recently, microscale metasurfaces with subwavelength structures have garnered considerable attention due to their ability to manipulate the phase, amplitude, and polarization of light, enabling the creation of ultra-thin lenses and more compact, lightweight, and versatile optical imaging systems. Additionally, display technology has rapidly progressed to meet the demands of the human visual system. As humans obtain the majority of external information through their eyes, display technology has evolved to offer higher resolution, improved color reproduction, larger brightness, and microscale pixel size, covering a wide range of applications such as outdoor signages, TVs, projectors, augmented reality, and virtual reality.

This special issue aims to highlight cutting-edge advances in the field of optical imaging and display research, including but not limited to the development of novel optical imaging techniques, the design and fabrication of advanced photonics materials, the manipulation of light fields for various applications, and the latest advancements in display technology. Contributions on related research areas, such as optical communication, sensing, and computation, are also welcome. Our goal is to provide an up-to-date overview of the latest research in the field and promote discussion, collaboration, and a deeper understanding of the fundamental principles underlying optical imaging and display research.

**Guest editors,**

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Professor Kwok received his BS degree in Electrical Engineering from Northwestern University in 1973, and received his MS and PhD degrees in Applied Physics from Harvard University in 1974 and 1978 respectively. From 1978 to 1980, he worked at the Lawrence Berkeley Laboratory. From 1980 to 1992, he was with the Department of Electrical and Computer Engineering, State University of New York at Buffalo, where he became a Full Professor since 1985. He joined HKUST in 1992. Professor Kwok is a Fellow of the National Academy of Inventors, a Fellow of the Hong Kong Academy of Engineering Sciences, a Fellow of the Asia Pacific Academy of Materials, a Fellow of the Optical Society of America, a Fellow of IEEE and a Fellow of Society for Information Display. He was given the Slotto-Owaki Award and the Rajchman Prize from SID in 2013 and 2019 respectively.

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Professor Wong was born in Beijing, China. He attended secondary schools in Hong Kong and completed his tertiary education in the US. From 1979 to 1984, he was at the Massachusetts Institute of Technology, where he obtained his BS and MS degrees, both in Electrical Engineering. From 1985 to 1988, he was at Stanford University, where he obtained

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Prof Xiaowei Sun was the principal investigator for 18 scientific research programs supported by Singapore government. He edited and co-edited 5 books and 3 books were published worldwide. His papers were published on world top journals like Nature Communications, Physical Review Letters, Nano Letters, Advanced Materials, Advanced Functional Materials, Applied Physics Letters, etc. From SCI database, his entire publications have been cited over 12000 times, other citations over 17000 times with an H index of 67. Prof. SUN Xiaowei had served as chair and co-chair for 35 international academic conferences, with over 50 times of invited reports and talks. Prof. SUN Xiaowei set up and is the chair of SID Singapore and Malaysia branch, chair of Energy Photonics, co-founder and vice chairman of Singapore-China Association for Advancement of Science and Technology and he is the editorial member of International Journal of Nanotechnology and other international journals.

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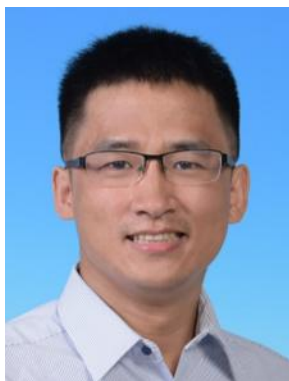
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