

Special Issue on the 30th Anniversary of City University of Hong Kong

Submission deadline: 31 December 2023

Illustrations: This special issue congratulates City University of Hong Kong (CityU) on the 30th anniversary of its inauguration as a university on 10 October 1994, highlighting recent excellence in research into all aspects of optics and photonics, including basic, applied and engineering research and applications in sensing, imaging, energy saving, life science, biomedicine and healthcare.

Note: The authors should state that their manuscript is submitted to this special issue and identify the authors of CityU in the cover letter.

Introduction of CityU: Located in the heart of Hong Kong, Asia's world city, CityU was inaugurated as a fully accredited university in 1994. CityU is one of eight government-funded degree-granting tertiary institutions in Hong Kong. Its goals are to pursue world-class academic excellence, promote research innovation and creativity, and nurture tomorrow's global leaders.

CityU has a well-earned reputation as an innovative hub for research and professional education, addressing global issues and empowering positive changes. According to QS World University Rankings for 2024, CityU is ranked 70th. In 2023, CityU is ranked 6th in the World's Most International Universities Ranking published by Times Higher Education (THE).

CityU is one of two universities worldwide that has achieved the fastest upward trajectory in global rankings. It has 10 colleges and schools in Business, Engineering, Liberal Arts and Social Sciences, Science, Veterinary Medicine and Life Sciences, Creative Media, Data Science, Energy and Environment, Law, and Graduate Studies, together with 28 academic units with distinguished faculty recruited from all over the world. It has established an excellent international academic collaboration network and developed global connections with over 450 prestigious institutions from more than 40 countries/jurisdictions.

Guest Editors:



Professor Freddy Boey President and University Distinguished Professor, City University of Hong Kong

Professor Freddy Boey Yin Chiang, an accomplished leader in higher education and an outstanding scholar, was installed on 18 May 2023 as the 5th President of CityU. He was previously Deputy President (Innovation & Enterprise) at the National University of Singapore from January 2018 to December 2022, and Provost (January 2011 – December 2017) and Chair of the School of Materials Science and Engineering (January 2004 – December 2010) at the Nanyang Technological University.

He was conferred Singapore's highest Scientific Award, the President's Science & Technology Medal for lifetime achievement, and the prestigious Imperial College London Faculty of Medicine Fellow award, both in 2013, for his biomedical research achievements. His research team also won the 2014 Singapore President's Technology Award for using nanostructures with a novel drug delivery approach to combat blindness from glaucoma. As Provost, he built Singapore's second Undergraduate Medical School, partnering with Imperial College London, for which he received the 2016 Singapore National Day Public Administration Gold Medal. He has also been conferred an Honorary Doctorate from Loughborough University, and Honorary Professorships from the University of Indonesia, Nanjing University of Posts and Telecommunications and Nanjing Tech University.



Professor Sir John Pendry Chair in Theoretical Solid State Physics, Imperial College London Senior Fellow, Institute of Advanced Study, City University of Hong Kong

Professor Sir John Pendry received his Ph.D. in Solid State Theory from the University of Cambridge in 1969. He began his career in the Cavendish Laboratory, Cambridge, and later worked at Bell Laboratories and the Daresbury Laboratory. Since 1981, he has been the Chair in Theoretical Solid-State Physics at Imperial College London where he served as Head of the Physics Department (1998-2001), and subsequently Principal of the Faculty of Physical Sciences (2001-2002). Sir John is a condensed matter theorist known for his research into negative refractive indices and creation of the first practical "Invisibility Cloak". He has also worked extensively on electronic and structural properties of surfaces, developing the theory of low energy diffraction and electronic surface states and transport in disordered systems.

Elected a Fellow of the Royal Society in 1984, Sir John has also been named Fellow or Foreign Member in several professional organizations including the Optical Society of America, the American Academy of Arts and Sciences, US National Academy of Sciences, the Norwegian Academy of Science and Letters and the American Physical Society. He has received numerous honors and awards recognizing his contributions, culminating in his knighthood for services to science in 2004, and the Royal Medal of the Royal Society in 2006. He was also awarded the UNESCO-Niels Bohr Gold Medal in 2009, the Isaac Newton Medal in 2013, the Kavli Prize in 2014, the Dan David Prize and Ugo Fano Gold Medal in 2016.



Professor Yuri Kivshar
Distinguished Professor, Australian National University
Visiting Fellow, Institute of Advanced Study, City University of Hong Kong

Professor Yuri Kivshar received his PhD degree in 1984 in Kharkov (Ukraine). From 1989 to 1993 he worked at several research centers in USA and Europe, and in 1993 he moved to Australia where he established the Nonlinear Physics Center at the Research School of Physics, Australian National University. Professor Kivshar is a world leader in nonlinear physics and meta-photonics being one of "Most Cited Scientists in Physics" publishing many high-impact papers in Physical Review Letters and Nature-family journals. His main contributions to nonlinear photonics include many pioneering results on nonlinear localized modes in optical systems, optical solitons and vortices, the study of nonlinear effects in plasmonics and metamaterials, and the recent foundations of Mie-tronics.

Yuri Kivshar has been Fellow of the Australian Academy of Science since 2002, and also Fellow of Optica (former OSA), APS, SPIE, and IOP. He has received many awards for his research including Lyle Medal (Australia), Lebedev Medal (Russia), The State Prize in Science and Technology (Ukraine), Harrie Massey Medal (UK), Humboldt Research Award (Germany), SPIE Mozi Award (USA), and more recently 2022 Max Born Award (Optica).



Professor Dangyuan Lei Professor of Materials Science and Engineering, City University of Hong Kong Provost's Visiting Professor of Physics, Imperial College London

Professor Dangyuan Lei received his PhD degree in Physics from Imperial College London in 2011. He is Professor of Materials Science and Engineering at the City University of Hong Kong and Provost's Visiting Professor of Physics at Imperial College London. His research interest centers on plasmonics nanophotonics and low-dimensional quantum materials, with particular interest in the nanoscale cavity-matter interaction and applications in miniaturized photonic and optoelectronic devices for on-chip optical sensing and imaging, quantum information processing and encryption as well as energy harvesting, conversion, storage and saving. He has co-authored 210 publications, received 11100 citations and an h-index of 60 (Google Scholar as of September 2023), and given 6 keynote speeches and >100 invited talks.

Dangyuan Lei has received many important awards and honors, including two Gold Medals of Inventions Geneva, the representative of Hong Kong for the APEC Science Prize for Innovation, Research & Education, NSFC Excellent Young Scientists Fund (Hong Kong & Macau), Shanxi Science and Technology Award, CityU Outstanding Research Award for Junior Faculty, Rising Star Lectureship in Materials Science from the Hong Kong Institute of Advanced Study, RSC Journal of Materials Chemistry A & C Emerging Investigators, Wiley EcoMat Young Investigator, Nano Research Young Innovators Award, Distinguished Visitor Award from Scottish University Physics Alliance, Key Technology Partner Visiting Fellow from University of Technology Sydney, and the International Exchange award from Royal Society. He is an elected member of the Hong Kong Young Academy of Sciences, an Optica Senior Member, a member of SPIE and IOP, and a National Science and Technology Expert of MOST.