

Nanophotonics journal releases new sustainability special issue from leading authors

Thermal photonics for combating climate change

BERLIN, GERMANY, March 12, 2024 /EINPresswire.com/ -- Nanophotonics special issue Thermal Photonics for Sustainability addresses the scientific and technological developments that can positively impact the climate and environmental changes we are facing today. The issue highlights the latest developments in thermal photonics and sustainability applications through reviews, perspectives, and research papers.

A specially commissioned group of leading authors, selected by guest editors Shanhui Fan at Stanford University, Aaswath Raman at UCLA, Wei Li at the GPL Photonics Laboratory, Chinese Academy of Sciences, Tianji Liu at the University of Chinese Academy of Sciences, and Jia Zhu at Nanjing University provide an extensive overview of this vital field of study. They introduce the latest developments in thermal photonics, covering scalable radiative cooling materials and structures, self-adaptive and dynamic thermal emission control, directional and broadband thermal emission, and full-Stokes polarization tuning and near-field thermophotovoltaic devices.

Read a comprehensive overview of nanophotonics-based radiative cooling, explore the recent development of switchable radiative cooling strategy and examine the problems and challenges when promoting radiative cooling from the laboratory to practice.

The issue scrutinizes the functionalities and industrial scalability of emergent engineered photonic materials and dynamic thermal regulation for self-adaptivity for thermal management capable of withstanding the complicated and changeable temperature environment of the climate emergency.

"As a scientific journal we are part of the community and as such have a responsibility to publish in line with our values and address issues of importance," said Dennis Couwenberg, Managing Editor, Nanophotonics. "It's exciting to release our first 'green' issue. With this special issue we are initiating our new strategy to emphasise the important of science and technology for our sustainable future."

Thermal Photonics for Sustainability, now available from De Gruyter at:

https://www.degruyter.com/journal/key/nanoph/13/5/html

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This press release can be viewed online at: https://www.einpresswire.com/article/695283888

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