



micromachines



Special Issue Reprint

Infrared Nanophotonics

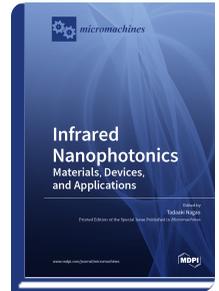
Edited By:

Tadaaki Nagao

mdpi.com/books/pdfview/book/3610

ISBN 978-3-0365-0174-1 (Hbk)

ISBN 978-3-0365-0175-8 (PDF)



Infrared light radiates from almost all the matter on earth, and its strategic use will be an important issue for the enhancement of human life and the sustainable development of modern industry. Since its frequency is in the same region as phonons or molecular vibrations of materials, measuring its emission or absorption spectra helps us in characterizing and identifying materials in a non-destructive manner. Meanwhile, if we can spectroscopically design infrared emission by tuning chemical composition or artificially controlling nano- to mesoscale structures, this will have a great impact on industrial applications, such as thermophotovoltaics, energy-saving drying furnaces, spectroscopic infrared light sources, and various types of infrared sensors. In this Special Issue, we encourage submissions from researchers who are working on infrared nanophotonics based on MEMS/NEMS, and nanomaterials science, ranging from materials synthesis, to device fabrications, electromagnetic simulations, and thermal managements. Important topics of growing interest are wavelength-selective infrared emitters and detectors, where we can see rapid development in the fields of nano-plasmonics and metamaterials, and we invite such topics for inclusion in this Special Issue. We also encourage submissions on nano-materials science such as on graphene-based infrared detectors/emitters, and nanostructured narrow-band gap semiconductors.



Order Your Print Copy

Print copies (170x244mm, Pbk) can be ordered at:

www.mdpi.com/books/pdfview/book/3610

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), the Verzeichnis lieferbarer Bücher (VLB).



Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.