



*symmetry*



*Special Issue Reprint*

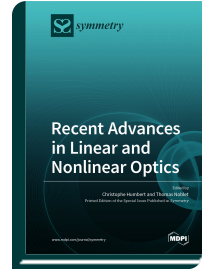
## Recent Advances in Linear and Nonlinear Optics

[www.mdpi.com/books/reprint/5529](http://www.mdpi.com/books/reprint/5529)

Edited by

Christophe Humbert

Thomas Noblet



ISBN 978-3-0365-4117-4 (Hardback)

ISBN 978-3-0365-4118-1 (PDF)

Sight is the dominant sense of mankind to apprehend the world at the earth scale and beyond the frontiers of the infinite, from the nanometer to the incommensurable. Primarily based on sunlight and natural and artificial light sources, optics has been the major companion of spectroscopy since scientific observation began. The invention of the laser in the early sixties has boosted optical spectroscopy through the intrinsic or specific symmetry electronic properties of materials at the multiscale (birefringence, nonlinear and photonic crystals), revealed by the ability to monitor light polarization inside or on the surface of designed objects. This Special Issue of *Symmetry* features articles and reviews that are of tremendous interest to scientists who study linear and nonlinear optics, all oriented around the common axis of symmetry. Contributions transverse the entire breadth of this field, including those concerning polarization and anisotropy within colloids of chromophores and metal/semiconducting nanoparticles probed by UV-visible and fluorescence spectroscopies; microscopic structures of liquid–liquid, liquid–gas, and liquid–solid interfaces; surface- and symmetry-specific optical techniques and simulations, including second-harmonic and sum-frequency generations, and surface-enhanced and coherent anti-Stokes Raman spectroscopies; orientation and chirality of bio-molecular interfaces; symmetry breaking in photochemistry; symmetric multipolar molecules; reversible electronic energy transfer within supramolecular systems; plasmonics; and light polarization effects in materials.



Order Your Print Copy

You can order print copies at

[www.mdpi.com/books/reprint/5529](http://www.mdpi.com/books/reprint/5529)

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), and 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.