





Special Issue Reprint

Micro-Nano Surface Functionalization of Materials and Thin Films for Optical Applications

www.mdpi.com/books/reprint/4089

Edited by Ramón Escobar-Galindo Elena Guillén Rodríguez

ISBN 978-3-0365-1658-5 (Hardback) ISBN 978-3-0365-1657-8 (PDF)



This book contains the articles collected for the Special Issue entitled "Micro-nano Surface Functionalization of Materials and Thin Films for Optical Applications" in the journal *Coatings* (ISSN 2079-6412). These selected articles provide a meaningful overview of recent advances and concepts beyond the state-of-the-art regarding surface functionalization of materials and deposition of thin films to be used in optical applications. The aim was to cover all relevant aspects of the topic (simulation, design, fabrication, characterization and applications) with a special emphasis on non-conventional methods for surface modification of materials, combinations of mature fabrication routes with emerging technologies (i.e., additive manufacturing) and large-area fabrication concepts to pave the way to an industrial utilization of the developed materials. This overview comprises the recent work of reputed scientists from Germany, Austria, Spain and India on:

- New developments on the scale-up deposition of transparent conductive materials by magnetron sputtering,
- Design of hierarchical surface structures at different scale lengths for nanoimprinting of optical nano- and micro-structures,
- Non-conventional preparation of rutile-type TiO2 films at room temperature for optical applications on heat-sensitive substrates,
- Design of spectrally selective solar absorber coatings based on computational simulation ry measurements.

 Order Your Print Copy

You can order print copies at www.mdpi.com/books/reprint/4089



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.

MDPI AG St. Alban-Anlage 66 4052 Basel Switzerland Tel: +41 61 683 77 34 www.mdpi.com/books books@mdpi.com

