







Special Issue Reprint

# Nanoimprint Lithography Technology and Applications

www.mdpi.com/books/reprint/5815

Edited by Michael Mühlberger

ISBN 978-3-0365-4482-3 (Hardback) ISBN 978-3-0365-4481-6 (PDF)



Nanoimprint Lithography (NIL) has been an interesting and growing field in recent years since its beginnings in the mid-1990s. During that time, nanoimprinting has undergone significant changes and developments and nowadays is a technology used in R&D labs and industrial production processes around the world. One of the exciting things about nanoimprinting process is its remarkable versatility and the broad range of applications. This reprint includes ten articles, which represent a small glimpse of the challenges and possibilities of this technology. Six contributions deal with nanoimprint processes aiming at specific applications, while the other four papers focus on more general aspects of nanoimprint processes or present novel materials. Several different types of nanoimprint processes are used: plate-to-plate, roll-to-plate, and roll-to-roll. Plate-to-plate NIL here also includes the use of soft and flexible stamps.

The application fields in this reprint are broad and can be identified as plasmonics, superhydrophibicity, biomimetics, optics/datacom, and life sciences, showing the broad applicability of nanoimprinting. The sections on the nanoimprint process discuss filling and wetting aspects during nanoimprinting as well as materials for stamps and imprinting.





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

