

Special Issue Reprint

Advanced Thin Films and 2D Materials

www.mdpi.com/books/reprint/10949

Edited by
Sebastiano Vasi
Ulderico Wanderlingh

ISBN 978-3-7258-3887-5 (Hardback)
ISBN 978-3-7258-3888-2 (PDF)



The Special Issue, "Advanced Thin Films and 2D Materials: Mechanism, Fabrication, Characterization and Application," delves into the intricate world of cutting-edge materials science. This collection of research articles and reviews explores the latest advancements in thin films and two-dimensional (2D) materials, focusing on their mechanisms, fabrication techniques, methods of characterization, and wide-ranging applications. Thin films and 2D materials are pivotal in the development of innovative technologies due to their unique physical and chemical properties. This Special Issue highlights breakthroughs in understanding the fundamental mechanisms that govern the behavior of these materials, enabling precise control over their properties during fabrication. It also examines state-of-the-art fabrication methods and techniques that have revolutionized the production of high-quality thin films and 2D materials. Advanced characterization techniques, such as atomic force microscopy and X-rays, are discussed, providing insights into the structural and electronic properties of these materials. This Special Issue also showcases the diverse applications of thin films and 2D materials in fields such as electronics, photonics, energy storage, and sensing, illustrating their potential to drive technological innovation and address contemporary challenges.

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.