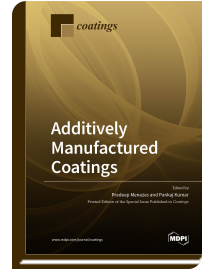


*Special Issue Reprint*

## **Additively Manufactured Coatings**

[www.mdpi.com/books/reprint/4604](http://www.mdpi.com/books/reprint/4604)

Edited by  
Pradeep Menezes  
Pankaj Kumar



ISBN 978-3-0365-2488-7 (Hardback)  
ISBN 978-3-0365-2489-4 (PDF)

Functional coatings are cost-effective means to protect substrates from wear, corrosion, erosion, tribocorrosion, high temperature and high pressure in extreme environmental conditions. These are primarily manufactured through metal/ceramic powder deposition in a subsequent layer by layer fashion on the substrate materials. In all cases, the functional coatings need to be reliable for the intended application. The emerging techniques in 3D printing/additive manufacturing can be utilized to develop high-performance functional coatings. These methods provide geometrical precision, flexibility in geometrical complexity, customization of the coating layers, and reduce the raw materials waste, keeping the manufacturing cost low while addressing many of the technical barriers of conventional coating methods. With the rapid development of cutting-edge value-added technologies in aerospace, nuclear, military, space, and energy industry, 3D printing/additive manufacturing techniques will be major advantages. Novel functional coatings and 3D printing/additive manufacturing techniques will be critical to value-added components in the future development of technologies. The book provide an overview of the recent development in coating manufacturing techniques and potential to use in high-end engineering applications.

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.