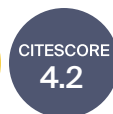




crystals



Special Issue Reprint

Additive Manufacturing (AM) for Advanced Materials and Structures

www.mdpi.com/books/reprint/6584

Edited by

Hao Yi

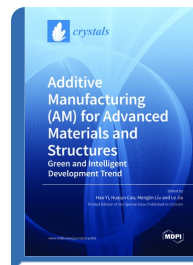
Huajun Cao

Menglin Liu

Le Jia

ISBN 978-3-0365-6335-0 (Hardback)

ISBN 978-3-0365-6334-3 (PDF)



Additive manufacturing (AM), as an advanced manufacturing technology, has overturned the traditional concept of subtractive manufacturing. It has revolutionized advanced integrated structural design, high-performance material preparation, and the manufacturing of complex components. AM technology is changing the way products are developed, produced, and commercialized, leading to disruptive changes in the economy and society. AM technology has received extensive attention and research from the research community since its inception, and it is leading manufacturing technology and continues to be used with great effectiveness in the aerospace industry, automotive industry, medical plant applications, and many other fields. However, the development of additive manufacturing still faces demanding technical challenges; for example, due to insufficient process planning and inadequate process control, many defects are often observed in the products of AM processes, reducing production efficiency and deteriorating product quality. To promote AM technology toward high efficiency, high precision, high performance, and low cost in a green and intelligent direction, many advanced design and manufacturing technologies are in urgent need of further breakthroughs, such as numerical and analytical models for structural design, experimental methods, performance prediction, and process optimization.



Order Your Print Copy

You can order print copies at

www.mdpi.com/books/reprint/6584

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.