



metals



Special Issue Reprint

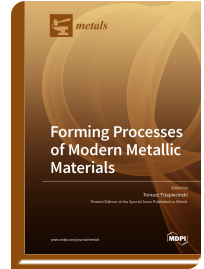
Forming Processes of Modern Metallic Materials

www.mdpi.com/books/reprint/2919

Edited by
Tomasz Trzepieciniski

ISBN 978-3-03943-156-4 (Hardback)

ISBN 978-3-03943-157-1 (PDF)



The plastic forming of metallic materials is the most efficient and an important manufacturing technology in today's industry. Lightweight materials, such as titanium alloys, aluminum alloys, and ultra-high-strength steels, are used extensively in the automotive, aerospace, transportation, and construction industries, leading to increased demand for advanced innovative forming technologies. Today, numeric simulations are highly focused and provide a better understanding of the innovative forming processes. Computational methods and numerical analysis coupled with the modelling of the structural evolution allow us to reduce time costs and eliminate experimental tests. The subjects of research articles published in this nook are multidisciplinary, including friction and lubrication in sheet metal forming, hot strip rolling and tandem strip rolling, application of numeric methods to simulate metal forming processes, development of new creep performance materials, the single point incremental forming process, and the fatigue fracture characteristics of Alclad 7075-T6 aluminum alloy sheets joined by refill friction stir spot welding. Review articles summarize the approaches on the innovative numerical algorithms, experimental methods, and theoretical contributions that have recently been proposed for sheet metal forming by researchers and business research centers.



Order Your Print Copy
You can order print copies at
www.mdpi.com/books/reprint/2919

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.