



metals



Special Issue Reprint

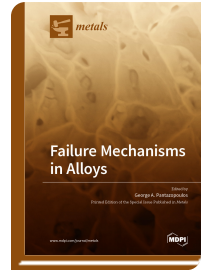
Failure Mechanisms in Alloys

www.mdpi.com/books/reprint/2118

Edited by
George Pantazopoulos

ISBN 978-3-03928-276-0 (Softback)

ISBN 978-3-03928-277-7 (PDF)



The era of lean production and excellence in manufacturing, advancing with sustainable development, demands the rational utilization of raw materials and energy resources, adopting cleaner and environmentally-friendly industrial processes. In view of the new industrial revolution, through digital transformation, the exploitation of smart and sophisticated materials systems, the need of minimizing scrap and increasing efficiency, reliability and lifetime and, on the other hand, the pursuit of fuel economy and limitation of carbon footprint, are necessary conditions for the imminent growth in a highly competitive economy. Failure analysis is an interdisciplinary scientific topic, reflecting the opinions and interpretations coming from a systematic evidence-gathering procedure, embracing various important sectors, imparting knowledge, and substantiating improvement practices. The deep understanding of material/component role (e.g., rotating shaft, extrusion die, gas pipeline) and properties will be of central importance for fitness for purpose in certain industrial processes and applications. Finally, it is hoped and strongly believed that the accumulation of additional knowledge in the field of failure mechanisms and the adoption of the principles, philosophy, and deep understanding of failure analysis process approach will strongly promote the learning concept, as a continuously evolving process leading to personal and social progress and prosperity.



Order Your Print Copy
You can order print copies at
www.mdpi.com/books/reprint/2118

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.