





Special Issue Reprint

Manufacturing, Characterisation and Properties of Advanced Nanocomposites

www.mdpi.com/books/reprint/750

Edited by Yu Dong Alokesh Pramanik Dongyan Liu Rehan Umer

ISBN 978-3-03897-188-7 (Softback) ISBN 978-3-03897-189-4 (PDF)



In recent years, advanced nanocomposites have attracted a great deal of attention from materials engineers and industrialists due to numerous advantages, including the use of a small amount of nanofillers to significantly enhance the material properties of resulting nanocomposites, widespread applications in a range of fields, such as automobiles, aerospace and aerocrafts, building structures, biomedical devices, etc., as well as easy processibility based on current manufacturing technologies, such as melt compounding, solution casting, in situ polymerisation and electrospinning.

Advanced nanocomposites reinforced with carbon nanotubes (CNTs), graphene oxides (GOs), nanoclays, nanocellulose, and nanofibres demonstrate excellent multifunctional properties, consisting of better mechanical, thermal, electrical, and barrier properties. The key issue is still the encountered challenge of homogeneous filler dispersion in morphological structures for tailored advanced nanocomposites. Hence, processing-structure-property nanocomposite relationship is crucial for their future development as innovative hybrid material systems.

This Special Issue will address above-mentioned points in relation to manufacturing, characterisation, and properties of advanced nanocomposites to offer an insight into this te family with the incorporation of nanofiller@rderaYoupartiolles.ppyind in order to eventually achieve the nanotechnologicare www.mdpi.com/books/reprint/750



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.

MDPI AG Grosspeteranlage 5 4052 Basel Switzerland Tel: +41 61 683 77 34 www.mdpi.com/books books@mdpi.com

