



Special Issue Reprint

Graphene-Polymer Composites II

www.mdpi.com/books/reprint/4090

Edited by Artur Pinto Fernão D. Magalhães

ISBN 978-3-0365-1678-3 (Hardback) ISBN 978-3-0365-1677-6 (PDF)



Graphene-polymer nanocomposites continue to gain interest in diverse scientific and technological fields. Graphene-based nanomaterials present the advantages of other carbon nanofillers, like electrical and thermal conductivity, while having significantly lower production costs when compared to materials such as carbon nanotubes, for instance. In addition, in the oxidized forms of graphene, the large specific area combined with a large quantity of functionalizable chemical groups available for physical or chemical interaction with polymers, allow for good dispersion and tunable binding with the surrounding matrix. Other features are noteworthy in graphene-based nanomaterials, like their generally good biocompatibility and the ability to absorb near-infrared radiation, allowing for the use in biomedical applications, such as drug delivery and photothermal therapy.

This Special Issue provides an encompassing view on the state of the art of graphenepolymer composites, showing how current research is dealing with new and exciting challenges. The published papers cover topics ranging from novel production methods and insights on mechanisms of mechanical reinforcement of composites, to applications as diverse as automotive and aeronautics, cancer treatment, anticorrosive coatings, thermally conductive fabrics and foams, and oil-adsorbent aerogels.



Order Your Print Copy You can order print copies at www.mdpi.com/books/reprint/4090

MDPINBOOKS Publishing Open Access Books & Series

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.



ᆔ

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

