



## Special Issue Reprint

### Antibacterial Activity of Nanomaterials

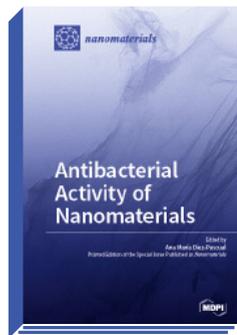
Edited by

Ana María Díez-Pascual

[mdpi.com/books/pdfview/book/706](http://mdpi.com/books/pdfview/book/706)

ISBN 978-3-03897-048-4 (Pbk)

ISBN 978-3-03897-049-1 (PDF)



Bacterial proliferation is a severe and increasing concern in everyday life, which accounts for important damage in a number of industries, from textile and marine transport to medicine and food packaging. Despite the huge efforts by academic and industry researchers, a universal solution for controlling bacterial colonization has not been established yet. In this regard, nanomaterials are more and more used to target bacteria as an alternative to antibiotics. Examples include the use of nanomaterials in antibacterial coatings for implantable devices and other materials to prevent infection and promote wound healing and in antibiotic delivery systems to treat diseases. By exploiting the excellent antibacterial properties of some materials at the nanoscale, namely ZnO, TiO<sub>2</sub>, Ag, Au, nanodiamond and graphene, effective strategies for the prevention of infections can be developed.

The main focus of this book is, therefore, to present selected examples of the most recent advances in the synthesis, characterization, and applications of nanomaterials with antibacterial activity. The book is addressed to scientists and industry researchers, as well as to master and degree students in chemistry, pharmacy, bioengineering, biology and materials science. The Editor would like to thank the staff of Nanomaterials Editorial Office for the constant help and support.



### Order Your Print Copy

Print copies (170 x 244 mm, Pbk) can be ordered at:

► [mdpi.com/books/library](http://mdpi.com/books/library)

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), 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.