



nanomaterials



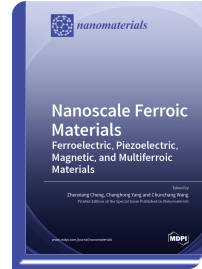
Special Issue Reprint

Nanoscale Ferroic Materials—Ferroelectric, Piezoelectric, Magnetic, and Multiferroic Materials

www.mdpi.com/books/reprint/6439

Edited by
Zhenxiang Cheng
Changhong Yang
Chunchang Wang

ISBN 978-3-0365-5943-8 (Hardback)
ISBN 978-3-0365-5944-5 (PDF)



Ferroic materials, including ferroelectric, piezoelectric, magnetic, and multiferroic materials, are receiving great scientific attention due to their rich physical properties. They have shown their great advantages in diverse fields of application, such as information storage, sensor/actuator/transducers, energy harvesters/storage, and even environmental pollution control. At present, ferroic nanostructures have been widely acknowledged to advance and improve currently existing electronic devices as well as to develop future ones.

This Special Issue covers the characterization of crystal and microstructure, the design and tailoring of ferro/piezo/dielectric, magnetic, and multiferroic properties, and the presentation of related applications. These papers present various kinds of nanomaterials, such as ferroelectric/piezoelectric thin films, dielectric storage thin film, dielectric gate layer, and magnonic metamaterials. These nanomaterials are expected to have applications in ferroelectric non-volatile memory, ferroelectric tunneling junction memory, energy-storage pulsed-power capacitors, metal oxide semiconductor field-effect-transistor devices, humidity sensors, environmental pollutant remediation, and spin-wave devices. The purpose of this Special Issue is to communicate the recent developments in research on nanoscale ferroic materials.



Order Your Print Copy
You can order print copies at
www.mdpi.com/books/reprint/6439

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.