



Springer

1st
edition1st ed. 2016, XI, 446 p. 245
illus., 109 illus. in color.**Printed book**

Hardcover

Printed book

Hardcover

ISBN 978-3-319-26104-1

\$ 159,99

Available

Discount group

Professional Books (2)

Product category

Monograph

Series

Springer Series in Materials Science

Other renditions

Softcover

ISBN 978-3-319-79895-0

Physics : Magnetism, Magnetic Materials

Zhukov, Arcady (Ed.)

Novel Functional Magnetic Materials

Fundamentals and Applications

- Presents the state-of-the-art in novel functional magnetic materials
- Features expert chapters from international experts
- Covers shape memory materials, magnetocaloric materials, magnetic microwires, and hard magnets
- Represents essential reading for advanced graduate students through practicing scientists and industry researchers

This book presents current research on advanced magnetic materials and multifunctional composites. Recent advances in technology and engineering have resulted from the development of advanced magnetic materials with improved functional magnetic and magneto-transport properties. Certain industrial sectors, such as magnetic sensors, microelectronics, and security, demand cost-effective materials with reduced dimensionality and desirable magnetic properties such as enhanced magnetic softness, giant magnetic field sensitivity, and large magnetocaloric effect. Expert chapters present the most up-to-date information on the fabrication process, processing, tailoring of properties, and applications of different families of modern functional materials for advanced smart applications. Topics covered include novel magnetic materials and applications; amorphous and nanocrystalline magnetic materials and applications; hard magnetic materials; magnetic shape memory alloys; and magnetic oxides. The book's highly interdisciplinary and forward-looking approach will benefit the scientific community, particularly researchers and advanced graduate students working in the field of advanced magnetic materials, composites, and high-performance sensor and microwave devices.

Order online at springer.com/booksellers

Springer Nature Customer Service Center LLC

233 Spring Street

New York, NY 10013

USA

T: +1-800-SPRINGER NATURE

(777-4643) or 212-460-1500

customerservice@springernature.com

ISBN 978-3-319-26104-1 / BIC: PHK / SPRINGER NATURE: SCP25129

Prices and other details are subject to change without notice. All errors and omissions excepted. Americas: Tax will be added where applicable. Canadian residents please add PST, QST or GST. Please add \$5.00 for shipping one book and \$ 1.00 for each additional book. Outside the US and Canada add \$ 10.00 for first book, \$5.00 for each additional book. If an order cannot be fulfilled within 90 days, payment will be refunded upon request. Prices are payable in US currency or its equivalent.

Part of **SPRINGER NATURE**