

Magnetic Nano- and Microwires: Design, Synthesis, Properties and Applications (Woodhead Publishing Series in Electronic and Optical Materials)

From Woodhead Publishing

Download now

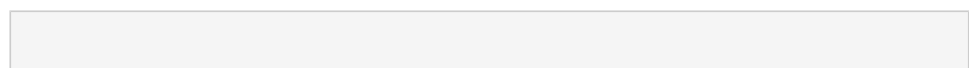
Read Online →

Magnetic Nano- and Microwires: Design, Synthesis, Properties and Applications (Woodhead Publishing Series in Electronic and Optical Materials) From Woodhead Publishing

Magnetic nanowires and microwires are key tools in the development of enhanced devices for information technology (memory and data processing) and sensing. Offering the combined characteristics of high density, high speed, and non-volatility, they facilitate reliable control of the motion of magnetic domain walls; a key requirement for the development of novel classes of logic and storage devices.

Part One introduces the design and synthesis of magnetic nanowires and microwires, reviewing the growth and processing of nanowires and nanowire heterostructures using such methods as sol-gel and electrodeposition combinations, focused-electron/ion-beam-induced deposition, chemical vapour transport, quenching and drawing and magnetic interactions. Magnetic and transport properties, alongside domain walls, in nano- and microwires are then explored in Part Two, before Part Three goes on to explore a wide range of applications for magnetic nano- and microwire devices, including memory, microwave and electrochemical applications, in addition to thermal spin polarization and configuration, magnetocaloric effects and Bloch point dynamics.

- Detailed coverage of multiple key techniques for the growth and processing of nanowires and microwires
- Reviews the principles and difficulties involved in applying magnetic nano- and microwires to a wide range of applications
- Combines the expertise of specialists from around the globe to give a broad overview of current and future trends



 [Download Magnetic Nano- and Microwires: Design, Synthesis, ...pdf](#)

 [Read Online Magnetic Nano- and Microwires: Design, Synthesis ...pdf](#)

Magnetic Nano- and Microwires: Design, Synthesis, Properties and Applications (Woodhead Publishing Series in Electronic and Optical Materials)

From Woodhead Publishing

Magnetic Nano- and Microwires: Design, Synthesis, Properties and Applications (Woodhead Publishing Series in Electronic and Optical Materials) From Woodhead Publishing

Magnetic nanowires and microwires are key tools in the development of enhanced devices for information technology (memory and data processing) and sensing. Offering the combined characteristics of high density, high speed, and non-volatility, they facilitate reliable control of the motion of magnetic domain walls; a key requirement for the development of novel classes of logic and storage devices.

Part One introduces the design and synthesis of magnetic nanowires and microwires, reviewing the growth and processing of nanowires and nanowire heterostructures using such methods as sol-gel and electrodeposition combinations, focused-electron/ion-beam-induced deposition, chemical vapour transport, quenching and drawing and magnetic interactions. Magnetic and transport properties, alongside domain walls, in nano- and microwires are then explored in Part Two, before Part Three goes on to explore a wide range of applications for magnetic nano- and microwire devices, including memory, microwave and electrochemical applications, in addition to thermal spin polarization and configuration, magnetocaloric effects and Bloch point dynamics.

- Detailed coverage of multiple key techniques for the growth and processing of nanowires and microwires
- Reviews the principles and difficulties involved in applying magnetic nano- and microwires to a wide range of applications
- Combines the expertise of specialists from around the globe to give a broad overview of current and future trends

Magnetic Nano- and Microwires: Design, Synthesis, Properties and Applications (Woodhead Publishing Series in Electronic and Optical Materials) From Woodhead Publishing Bibliography

- Published on: 2015-05-27
- Released on: 2015-05-27
- Format: Kindle eBook

 [Download Magnetic Nano- and Microwires: Design, Synthesis, ...pdf](#)

 [Read Online Magnetic Nano- and Microwires: Design, Synthesis ...pdf](#)

Download and Read Free Online Magnetic Nano- and Microwires: Design, Synthesis, Properties and Applications (Woodhead Publishing Series in Electronic and Optical Materials) From Woodhead Publishing

Editorial Review

From the Back Cover

Magnetic nanowires and microwires are key tools in the development of enhanced devices for information technology (memory and data processing) and sensing. Offering the combined characteristics of high density, high speed, and non-volatility, they facilitate reliable control of the motion of magnetic domain walls; a key requirement for the development of novel classes of logic and storage devices.

Part One introduces the design and synthesis of magnetic nanowires and microwires, reviewing the growth and processing of nanowires and nanowire heterostructures using such methods as sol-gel and electrodeposition combinations, focused-electron/ion-beam-induced deposition, chemical vapour transport, quenching and drawing and magnetic interactions. Magnetic and transport properties, alongside domain walls, in nano- and microwires are then explored in Part Two, before Part Three goes on to explore a wide range of applications for magnetic nano- and microwire devices, including memory, microwave and electrochemical applications, in addition to thermal spin polarization and configuration, magnetocalorific effects and Bloch point dynamics.

Users Review

From reader reviews:

Carol Reck:

Have you spare time to get a day? What do you do when you have far more or little spare time? Sure, you can choose the suitable activity for spend your time. Any person spent their very own spare time to take a stroll, shopping, or went to often the Mall. How about open or maybe read a book eligible Magnetic Nano- and Microwires: Design, Synthesis, Properties and Applications (Woodhead Publishing Series in Electronic and Optical Materials)? Maybe it is to get best activity for you. You recognize beside you can spend your time with your favorite's book, you can wiser than before. Do you agree with the opinion or you have some other opinion?

Ronald Dotson:

Hey guys, do you wishes to finds a new book to study? May be the book with the concept Magnetic Nano- and Microwires: Design, Synthesis, Properties and Applications (Woodhead Publishing Series in Electronic and Optical Materials) suitable to you? Typically the book was written by renowned writer in this era. The particular book untitled Magnetic Nano- and Microwires: Design, Synthesis, Properties and Applications (Woodhead Publishing Series in Electronic and Optical Materials)is the one of several books which everyone read now. This book was inspired many people in the world. When you read this e-book you will enter the new way of measuring that you ever know just before. The author explained their plan in the simple way, so all of people can easily to know the core of this guide. This book will give you a lots of information about this world now. So that you can see the represented of the world within this book.

Olivia Dickert:

Often the book *Magnetic Nano- and Microwires: Design, Synthesis, Properties and Applications* (Woodhead Publishing Series in Electronic and Optical Materials) will bring someone to the new experience of reading any book. The author style to elucidate the idea is very unique. In case you try to find new book you just read, this book very appropriate to you. The book *Magnetic Nano- and Microwires: Design, Synthesis, Properties and Applications* (Woodhead Publishing Series in Electronic and Optical Materials) is much recommended to you to read. You can also get the e-book from official web site, so you can easier to read the book.

Rex Vogler:

Many people spending their period by playing outside having friends, fun activity along with family or just watching TV the entire day. You can have new activity to invest your whole day by examining a book. Ugh, you think reading a book will surely hard because you have to bring the book everywhere? It all right you can have the e-book, taking everywhere you want in your Cell phone. Like *Magnetic Nano- and Microwires: Design, Synthesis, Properties and Applications* (Woodhead Publishing Series in Electronic and Optical Materials) which is obtaining the e-book version. So , try out this book? Let's view.

Download and Read Online *Magnetic Nano- and Microwires: Design, Synthesis, Properties and Applications* (Woodhead Publishing Series in Electronic and Optical Materials) From Woodhead Publishing #BMZE1Y3RP6I

Read Magnetic Nano- and Microwires: Design, Synthesis, Properties and Applications (Woodhead Publishing Series in Electronic and Optical Materials) From Woodhead Publishing for online ebook

Magnetic Nano- and Microwires: Design, Synthesis, Properties and Applications (Woodhead Publishing Series in Electronic and Optical Materials) From Woodhead Publishing Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Magnetic Nano- and Microwires: Design, Synthesis, Properties and Applications (Woodhead Publishing Series in Electronic and Optical Materials) From Woodhead Publishing books to read online.

Online Magnetic Nano- and Microwires: Design, Synthesis, Properties and Applications (Woodhead Publishing Series in Electronic and Optical Materials) From Woodhead Publishing ebook PDF download

Magnetic Nano- and Microwires: Design, Synthesis, Properties and Applications (Woodhead Publishing Series in Electronic and Optical Materials) From Woodhead Publishing Doc

Magnetic Nano- and Microwires: Design, Synthesis, Properties and Applications (Woodhead Publishing Series in Electronic and Optical Materials) From Woodhead Publishing Mobipocket

Magnetic Nano- and Microwires: Design, Synthesis, Properties and Applications (Woodhead Publishing Series in Electronic and Optical Materials) From Woodhead Publishing EPub

BMZE1Y3RP6I: Magnetic Nano- and Microwires: Design, Synthesis, Properties and Applications (Woodhead Publishing Series in Electronic and Optical Materials) From Woodhead Publishing