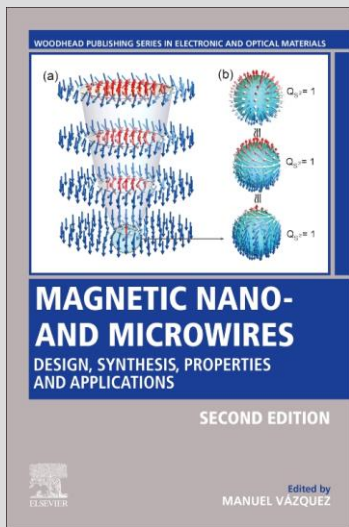




# Magnetic Nano- and Microwires

## Design, Synthesis, Properties and Applications

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**The most comprehensive reference available on magnetic nanowires and microwires**

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### KEY FEATURES

- Details the multiple key techniques for the growth, processing and characterization of nanowires and microwires
- Discusses magnetism and transport in nanowires, skyrmions and domain walls in nano and microwires and the latest innovations in magnetic imaging
- Reviews the principles and difficulties involved in applying magnetic nano- and microwires to a wide range of technologies, including biomedical and sensing applications

### DESCRIPTION

*Magnetic Nano-and Microwires: Design, Synthesis, Properties and Applications, Second Edition*, reviews the growth and processing of nanowires and nanowire heterostructures using such methods as electrodeposition and sol-gel, focused-electron/ion-beam-induced deposition, epitaxial growth by chemical vapor transport, and ultrafast solidification. Other sections cover engineering nanoporous anodic alumina, discuss magnetic and transport properties, domains, domain walls in nano-and microwires, and provide updates on skyrmions, domain walls, magnetism and transport, and the latest techniques to characterize and analyze these effects.

Final sections cover applications, both current and emerging, and new chapters on memory, sensor, thermoelectric and nanorobotics applications. This book will be an ideal resource for academics and industry professionals working in the disciplines of materials science, physics, chemistry, electrical and electronic engineering and nanoscience.



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# Table of Contents

## **Part I Design, Synthesis and Properties**

1. 3D porous Alumina, a controllable Platform to tailor Magnetic Nanowires
2. Electrochemical Methods Assisted with ALD for the Synthesis of Nanowires
3. Intermetallic Nanowires fabricated by Metallic Flux Nanonucleation Method
4. Fabrication and Magneto-Optical Characterization of 3D-printed Permalloy Nanowires
5. Growth of Nanowire Heterostructures and their Optoelectronic and Spintronic Applications
6. Cylindrical Magnetic Nanotubes: Synthesis, Magnetism and Applications
7. From Soft Chemistry to 2D and 3D Nanowire Arrays with Hard Magnetic Properties and Permanent Magnet Applications
8. Recent Trends in Magnetic Nano and Submicron Wires prepared by Quenching and Drawing Technique
9. Heusler-type Glass-Coated Microwires: Fabrication, Characterization and Properties

## **Part II Magnetization Mechanisms, Domains and Domain Walls**

10. Current induced Dynamics of Chiral Domain Walls in Magnetic Heterostructures
11. Joule Heating and its Role in Current-assisted Domain Wall Depinning in Nanostrips
12. Controlling Magnetism by Interface Engineering
13. Skyrmion Lines, Monopoles and Emergent Electromagnetism in Nanowires
14. Micromagnetic Modelling of Magnetic Domain Walls and Domains in Cylindrical Nanowires
15. Domain Wall Pinning in a circular Cross-section Wire with modulated Diameter
16. Magnetic Imaging of Individual Modulated Cylindrical Nanowires
17. Determining Magnetization Configurations and Reversal of Individual Magnetic Nanotubes
18. Helical Magnetic Structures in Amorphous Microwires: Magneto-optical Study and Micromagnetic Simulations
19. On-time characterization of the dynamics of a single domain wall in an amorphous microwire
20. Dynamical Behavior of Ferromagnetic Nanowire Arrays: From 1-D to 3-D
21. Spin Waves and Electromagnetic Waves in Magnetic Nanowires

## **Part III Sensing, Thermoelectric, Robotics, Biomedical and Microwave Applications**

22. Template-assisted Electrodeposited Magnetic Nanowires
23. Nanowire Transducers for Biomedical Applications
24. Thermopower Measurements in Magnetic Nanowires
25. Magnetostrictive FeGa Nanowires for Actuation and Sensing Applications
26. Magnetically and Chemically Propelled Nanowire-based Swimmers
27. 3D Magnetic Nanowire Networks
28. Sensoric Application of Glass-coated Magnetic Microwires
29. Orthogonal Fluxgates based on Magnetic Microwires
30. Magnetic Properties of Amorphous Microwires at Microwaves and Applications
31. Nano-carbon/magnetic Microwire Hybrid Fibers for tunable Microwave Functionalities