



キラルナノマテリアル： 調製、特性および応用

Chiral Nanomaterials: Preparation, Properties and Applications

Edited by Zhiyong Tang

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本書の内容

Thorough and up-to-date, this book presents recent developments in this exciting research field.

To begin with, the text covers the fabrication of chiral nanomaterials via various synthesis methods, including electron beam lithography, ion beam etching, chemical synthesis and biological DNA directed assembly.

This is followed by the relevant theory and reaction mechanisms, with a discussion of the characterization of chiral nanomaterials according to the optical properties of metal nanoparticles, semiconductor nanocrystals, and nanoclusters.

The whole is rounded off by a summary of applications in the field of catalysis, sensors, and biomedicine.

With its comprehensive yet concise coverage of the whole spectrum of research, this is invaluable reading for senior researchers and entrants to the field of nanoscience and materials science.

目次

AN INTRODUCTION TO CHIRAL NANOMATERIALS

- Historical Introduction to Chiral Materials
- Brief Overview of Chirality at the Nanoscale
- Development of Chiral Nanomaterials
- Conclusion

THEORY AND MECHANISM

- Introduction
- Chiral Molecules and Semiconductor Nanocrystal Systems
- Chiral Molecules and Metal Nanoparticle Systems
- Chiral Assemblies

OPTICALLY ACTIVE METAL NANOPARTICLES

- Introduction
- Preparation of Chiral Metal Nanoparticles
- Optical Activity of Metal Nanoparticles
- Self-Assembly of Chiral Metal Nanoparticles

CHIRAL SEMICONDUCTOR NANOCRYSTALS

- Introduction
- Chiral Quantum Dots Preparation and Synthesis

**Optical Activity of Chiral Semiconductor Nanocrystals
Magnetic Circular Dichroism of Chiral Quantum Dots**

CHIRAL NANOCLUSTERS

Introduction

Classification of Chiral Nanoclusters

Synthesis of Chiral Clusters

Chirality and Separation of Gold Clusters

CHIRAL MESOPOROUS SILICA MATERIALS

Introduction

Synthesis and Formation Mechanisms

Synthetic Controls

Supramolecular Chiral Imprinting

DNA-BASED CHIRAL NANOSTRUCTURES

Introduction

Original Chirality of DNA

DNA Fabricated Plasmonic Nanostructures

Designed Nanostructures by Origami Technology

FABRICATED PLASMONIC NANOMATERIALS

Introduction

Theoretical Basics of Dipole-Dipole Coupling

Coupling of Split-Ring Resonators

Three-Dimensional Chiral Nanomaterials

APPLICATIONS IN CATALYSIS

Introduction

Catalytic Properties of Chiral Metal Nanoparticles

Reaction Mechanisms

Perspectives

APPLICATIONS IN BIOMEDICINE

Introduction

Biodetection through Chiral Nanoparticles

From Fabricated Plasmonic Nanomaterials to Biosensors

Bio-Security of Chiral Quantum Dots

編著者

Prof. Zhiyong Tang obtained his PhD degree in 1999 from the Chinese Academy of Sciences. After this, he went to the Swiss Federal Institute of Technology Zurich, Switzerland, and to the University of Michigan, USA, for his postdoctoral research. In November of 2006, he joined the National Center for Nanoscience and Technology (NCNST) in China and took up a full professor position. His current research interests focus on fabrication and application of chiral inorganic nanoparticles as well as nanoparticle superstructures.

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