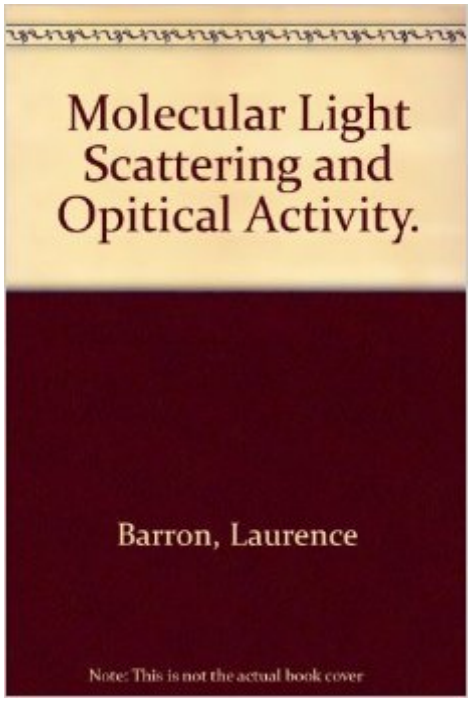
Molecular Light Scattering And Opitical Activity



Synopsis

Ranging from the physics of elementary particles to the structure of viruses, the subject matter of this book stresses the importance of optical activity and chirality in modern science and will be of interest to a wide range of scientists. Using classical and quantum methods with a strong emphasis on symmetry principles, the volume develops the theory of varied optical activity and related phenomena from the perspective of molecular scattering of polarized light. First Edition Hb (1983): 0-521-24602-4 --This text refers to the Printed Access Code edition.

Book Information

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Customer Reviews

The book of Barron is concerned with the theoretical foundations of molecular chirality, an important property associated to objects (in this case molecules) which exist as mirror images one of the other. In other words, molecules that have identical composition may exist as mirror images (enantiomers) whose 3D structures cannot be superimposed one onto the other. Such molecules are quite important in the field of medicinal/pharmaceutical chemistry where one enantiomer is a "good" medicine but the other one is a dangerous poison for the organism.Physical chemists have developed a variety of methods for the identification and characterization of chiral molecules, each based on different physical properties such as vibrational, optical, and magnetic excitations. Using quantum mechanical principles and symmetry arguments, the author has put together a unified theoretical treatment of optical activity. The book is highly recommended to those physical chemists and molecular physicists that are interested in this fascinating field of molecular science.

Molecular Light Scattering and Opitical Activity Molecular Light Scattering and Optical Activity Polymers and Neutron Scattering (Oxford Series on Neutron Scattering in Condensed Matter) Light Scattering, Size Exclusion Chromatography and Asymmetric Flow Field Flow Fractionation: Powerful Tools for the Characterization of Polymers, Proteins and Nanoparticles Neutron, X-rays and Light. Scattering Methods Applied to Soft Condensed Matter (North-Holland Delta Series) Absorption and Scattering of Light by Small Particles Biomedical Applications of Light Scattering (McGraw-Hill Biophotonics) Dynamic Light Scattering: Applications of Photon Correlation Spectroscopy Light Scattering by Small Particles (Dover Books on Physics) Minecraft Labyrinth : Math Activity Book and Coloring Book For Kids : Unique Labyrinths, Geometric Labyrinths and Math Labyrinths: (Unofficial ... (Unique Activity Book) (Volume 2) Ramadan and Fasting Activity Book (Discover Islam Sticker Activity Books) Amazing Minecraft Math: Cool Math Activity Book for Minecrafters (Minecraft Activity Books) (Volume 1) Occupation-Based Activity Analysis (Thomas, Occupation-Based Activity Analysis) Radiative Transfer in Scattering and Absorbing Atmospheres: Standard Computational Procedures (Studies in geophysical optics and remote sensing) Methods of X-ray and Neutron Scattering in Polymer Science (Topics in Polymer Science) Wave Propagation and Scattering in Random Media: 001 Cellular and Molecular Immunology (Cellular and Molecular Immunology, Abbas) Molecular Pathology of Nervous System Tumors: Biological Stratification and Targeted Therapies (Molecular Pathology Library) High Throughput Screening: Methods and Protocols (Methods in Molecular Biology) (Methods in Molecular Biology, 190) Organic Molecular Photochemistry (Molecular and Supramolecular Photochemistry)