Oxford Chemistry Primers Paperback

Mechanisms of Organic Reactions
Carbohydrate Chemistry
Quantum Mechanics
Magnetochemistry
Inorganic Materials Chemistry
Foundations of Inorganic Chemistry
Computational Chemistry
Foundations of Spectroscopy
NMR Spectroscopy in Inorganic Chemistry
The F Elements
X-ray Crystallography
Statistical Thermodynamics
Mass Spectrometry
Introduction to Molecular Symmetry
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Chemical Bonding
The Toolkit
Chemistry of the First Row Transition Metals

Alicyclic Chemistry
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Foundations of Organic Chemistry
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Polymers
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D-block Chemistry
SURFACES. Edition en anglais

ELAINA LEONIDAS

Mechanisms of Organic Reactions Academic Press
This book is an account for students of how the three-dimensional shapes of molecules influence their chemical and physical properties. It begins with the structures of molecules and then describes how such structures can be changed.
Carbohydrate Chemistry Oxford University Press, USA
Electrochemistry
Quantum Mechanics Oxford University Press, USA
The transition metals titanium, vanadium, chromium, manganese, iron, cobalt, nickel and copper are essential for many life-processes, are at the heart of important industrial processes, and are used in everyday life. Their properties are dependent on the electronic structure of the metals. The connection between this and the chemical behaviour of these metals is described in this book.
Magnetochemistry Oxford University Press on Demand
Magnetochemistry is the study of the magnetic properties of materials which is of central importance in the study of transition-metal complexes, providing information on the chemical bonding in these molecules. This book provides an introductory survey of properties of chemical compounds.
Inorganic Materials Chemistry Oxford University Press on Demand
'I congratulate the authors for encompassing the four main branches of spectroscopy favoured by organic chemists in just 75 pages... At £6.99, this might become the compulsory text for my

spectroscopic modules. If it does, all my carefully crafted hand-outs, all my well-honed problems and examples may have to go in the bin. Buy it!' Alan Dronsfield in Education in Chemistry, Sep. 2001This Primer covers the foundations of spectroscopy at a level suitable for first year chemistry undergraduates. Mass spectrometry and X-ray diffraction, along with traditional spectroscopic techniques : i.r., n.m.r., and u.v. -visible spectroscopy are covered. The essential physical principles of each method are introduced, many examples of spectral analysis are provided, and some problems; further reading and practice is strongly encouraged.

Foundations of Inorganic Chemistry Oxford University Press, USA

A knowledge of spectroscopic methods is required to interpret the shape and structure of compounds - this informative book concentrates on their application to inorganic compounds. The emphasis is placed on obtaining and interpreting the data rather than concentrating on the theory. To this end, examples are given in the text and worked through to show the processes involved in assigning spectra and obtaining information from them. This essential text for all undergraduate chemists will also benefit postgraduate students researching in the field of inorganic chemistry.

Computational Chemistry OUP Oxford

The authors discuss the chemistry of the lanthanides and actinides, collectively known as the f elements, emphasise the aspects that are unique to them and examine their most important applications in a wide range of modern technologies.

Foundations of Spectroscopy Oxford University Press, USA

This text explains the methodology and basic ideas of radical chemistry at third year undergraduate level, and shows how these ideas have on the one hand been developed into powerful tools in the workshops of synthetic organic chemists, and on the other have given new insights into biological chemistry and disease.

NMR Spectroscopy in Inorganic Chemistry Oxford University Press on Demand

The renowned Oxford Chemistry Primers series, which provides focused introductions to a range of important topics in chemistry, has been refreshed and updated to suit the needs of today's students, lecturers, and postgraduate researchers. The rigorous, yet accessible, treatment of each subject area is ideal for those wanting a primer in a given topic to prepare them for more advanced study or research. The learning features provided, including questions at the end of every chapter and online multiple-choice questions, encourage active learning and promote understanding. Furthermore, frequent diagrams, margin notes, and glossary definitions all help to enhance a student's understanding of these essential areas of chemistry. Chemical Bonding gives a clear and succinct explanation of this fundamental topic, which underlies the structure and reactivity of all molecules, and therefore the subject of chemistry itself. Little prior knowledge or mathematical ability is assumed, making this the perfect text to introduce students to the subject.

The F Elements Oxford University Press on Demand

The renowned Oxford Chemistry Primers series, which provides focused introductions to a range of important topics in chemistry, has been refreshed and updated to suit the needs of today's

students, lecturers, and postgraduate researchers. The rigorous, yet accessible, treatment of each subject area is ideal for those wanting a primer in a given topic to prepare them for more advanced study or research. d-Block Chemistryprovides a succinct introduction to the field of transition metal chemistry, assuming little prior knowledge, and giving students a clear conceptual overview of the wide variety of d-block metal complexes.

X-ray Crystallography Oxford University Press, USA

The fascinating subject of photochemistry is the explained in a basic and comprehensive manner in this primer. Aimed at an undergraduate audience, the text describes the new chemistry that follows the absorption of light and explains how light has this extraordinary influence on chemical behaviour.

Statistical Thermodynamics Oxford University Press, USA

The renowned Oxford Chemistry Primers series, which provides focused introductions to a range of important topics in chemistry, has been refreshed and updated to suit the needs of today's students, lecturers, and postgraduate researchers. The rigorous, yet accessible, treatment of each subjectarea is ideal for those wanting a primer in a given topic to prepare them for more advanced study or research. Moreover, cutting-edge examples and applications throughout the texts show the relevance of the chemistry being described to current research and industry.This new edition of NMR Spectroscopy in Inorganic Chemistry has been extensively updated to include worked examples, problems, self-test questions, and interactive online questions encouraging active learning and promoting a deeper understanding. With a concise and accessible introduction topredicting NMR spectra and expanded sections on quadrupolar nuclei, this excellent introductory text will help students get to grips with the basics before building on that understanding through diagrammatic content to explain the more challenging concepts.Examples are included from many different areas of inorganic chemistry which are then closely related to the theory described. By giving a simple overview of the relevant theory and avoiding the "pattern recognition" approach frequently used, it demystifies NMR.

Mass Spectrometry Oxford University Press on Demand

Advanced school students and beginning undergraduates will find this book a readable and stimulating summary of the fundamentals of organic chemistry. The first three chapters introduce some basic physical chemistry, and lay the groundwork for the mechanistic organic chemistry covered later in the book. The importance of bonding and mechanism are stressed throughout, and students are encouraged to apply their chemical knowledge in new and unfamiliar situations in order to develop and sustain their interest. A wide range of examples including natural products and pharmaceuticals is included, with the final chapter exploring some new developments and providing an introduction to current research.

Introduction to Molecular Symmetry W. W. Norton & Company

The authors, who have more than two decades of combined experience teaching an atoms-first course, have gone beyond reorganizing the topics. They emphasize the particulate nature of matter

throughout the book in the text, art, and problems, while placing the chemistry in a biological, environmental, or geological context. The authors use a consistent problem-solving model and provide students with ample opportunities to practice.

Photochemistry Oxford University Press, USA

Plastics are used in every aspect of modern life. This Primer gives a simple introduction to these important materials, and includes practical industrial aspects as well as basic science. Exciting new developments are also described.

Thermodynamics of Chemical Processes OCP Oxford University Press, USA

The renowned Oxford Chemistry Primers series, which provides focused introductions to a range of important topics in chemistry, has been refreshed and updated to suit the needs of today's students, lecturers, and postgraduate researchers. The rigorous, yet accessible, treatment of each subjectarea is ideal for those wanting a primer in a given topic to prepare them for more advanced study or research.The learning features provided, including end of book problems and online multiple-choice questions, encourage active learning and promote understanding. Furthermore, frequent diagrams and margin notes help to enhance a student's understanding of these essential areas of chemistry.Statistical Thermodynamics gives a concise and accessible account of this fundamental topic by emphasizing the underlying physical chemistry, and using this to introduce the mathematics in an approachable way. The material is presented in short, self-contained sections making it flexible to teachand learn from, and concludes with the application of the theory to real systems.Online Resource Centre: The Online Resource Centre to accompany Statistical Thermodynamics features: For registered adopters of the text: * Figures from the book available to download For students: * Worked solutions to the questions and problems at the end of the book.* Multiple-choice questions for self-directed learning

An Atoms-Focused Approach Oxford University Press, USA

Matter ceases to obey all the classical laws of nature at the atomic and molecular level. To be able to grasp the behaviour of chemicals at this level it is necessary to understand quantum mechanics. This guide introduces students to the basic theory.

Organic Stereochemistry OUP Oxford

Electron Paramagnetic Resonance (EPR) applications remain very significant in modern analytical science and this volume compiles critical coverage of developments in the recent literature by a handpicked group of researchers at the cutting-edge of the field. The topics covered in this volume describe contrasting types of EPR application, including light induced hyperpolarization and disordered proteins to spin labels and nanomaterials. Providing a snap shot of the area, this book is a useful addition to any library supporting this research.

Periodicity and the S- and P- Block Elements Oxford University Press on Demand

The renowned Oxford Chemistry Primers series, which provides focused introductions to a range of important topics in chemistry, has been refreshed and updated to suit the needs of today's students, lecturers, and postgraduate researchers. The rigorous, yet accessible,

treatment of each subjectarea is ideal for those wanting a primer in a given topic to prepare them for more advanced study or research. Moreover, cutting-edge examples and applications throughout the texts show the relevance of the chemistry being described to current research and industry.The learning features provided, including questions at the end of every chapter and online multiple-choice questions, encourage active learning and promote understanding. Furthermore, frequent diagrams, margin notes, further reading, and glossary definitions all help to enhance a student'sunderstanding of these essential areas of chemistry.This brand new addition to the series provides the most concise, clear, and accessible first introduction to the basic principles of mass spectrometry.Online resourcesThe online resources that accompany Mass Spectrometry include:For students:- Multiple-choice questions for self-directed learningFor registered adopters of the text:- Figures from the book available to download

Radical Chemistry Oxford University Press on Demand

Another winning primer! This new addition to the popular series provides a basic introduction to equilibrium electrochemistry, focusing on electrode potentials and their applications. It builds on a knowledge of elementary thermodynamics giving the student an appreciation of the origin of electrode potentials and shows how these are used to deduce a wealth of chemically important information and data such as equilibrium constants, the free energy, enthalpy and entropy changes of chemical reactions, activity coefficients, the selective sensing of ions. It is mathematically simple, the emphasis throughout is on understanding the foundations of the subject and how it may be used to study problems of chemical interest.