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Modern Physical Organic Chemistry - Eric V. Anslyn 2006
In additionto covering thoroughly the core areas of physical organic chemistry -structure and mechanism - this book will escort the practitioner of organic chemistry into a field that has been thoroughlyupdated.
Principles of Modern Chemistry - David W. Oxtoby 2011-05-31
Long considered the standard for honors and high-level mainstream general chemistry courses, PRINCIPLES OF MODERN CHEMISTRY, 7e continues to set the standard as the most modern, rigorous, and chemically and mathematically accurate text on the market. Thoroughly revised throughout to strengthen its sound atoms first approach, this authoritative text now features new and updated content, and more mathematically accurate and artistic atomic and molecular orbital art. In addition, the text is now more student friendly without compromising its rigor. End-of-chapter study aids now focus on only the most important key objectives, equations and concepts, making it easier for students to locate chapter content, while new applications to a wide range of disciplines, such as biology, chemical engineering, biochemistry, and medicine deepen students' understanding of the relevance of chemistry beyond the classroom. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.
Introduction to Modern Chemistry - Edward Florian Neuzil 1968

Modern Electrochemistry 2B - John O'M. Bockris 1998
This long awaited and thoroughly updated version of the classic text (Plenum Press, 1970) explains the subject of electrochemistry in clear, straightforward language for undergraduates and mature scientists who want to understand solutions. Like its predecessor, the new text presents the electrochemistry of solutions at the molecular level. The Second Edition takes full advantage of the advances in microscopy, computing power, and industrial applications in the quarter century since the publication of the First Edition. Such new techniques include scanning-tunneling microscopy, which enables us to see atoms on electrodes; and new computers capable of molecular dynamics calculations that are used in arriving at experimental values. Chapter 10 starts with a detailed description of what happens when light strikes semi-conductor electrodes and splits water, thus providing in hydrogen a clean fuel. There have of course been revolutionary advances here since the First Edition was written. The book also discusses electrochemical methods that may provide the most economical path to many new syntheses - for example, the synthesis of the textile, nylon. The broad area of the breakdown of material in moist air, and its electrochemistry is taken up in the substantial Chapter 12. Another exciting topic covered is the evolution of energy conversion and storage which lie at the cutting edge of clean automobile development. Chapter 14 presents from a fresh perspective a discussion of electrochemical mechanisms in Biology, and Chapter 15 shows how new electrochemical approaches may potentially alleviate many environmental problems.
Modern Carbonyl Chemistry - Junzo Otera 2008-11-21
The carbonyl group is undoubtedly one of the most important functional groups in organic chemistry, both in its role as reactive center for synthesis or derivatisation and as crucial feature for special structural or physiological properties. Vast and profound progress has been made in all aspects modern carbonyl chemistry. These achievements are, however, rather dispersed in the literature and it is often not easy for the researcher obtain a comprehensive overview of a relevant topic. Modern Carbonyl Chemistry overcomes this inconvenience by collating the information for appropriate themes. In this work internationally renowned experts and leaders in the field have surveyed recent aspects and modern features in carbonyl chemistry, such as cascade-reactions, one-pot-syntheses, recognition, or site differentiation.
Pharmaceutical Chemistry - Jill Barber 2013-07-25
This volume provides a wide-ranging overview of organic chemistry as applied to the study and practice of pharmacy. Drugs are simply chemicals, so to fully understand their manufacture, formulation, and the way they work in our bodies, an understanding of organic compounds and their reactions is essential --
The Chautauquan - 1889

Modern Acetylene Chemistry - Peter J. Stang 2008-09-26
This comprehensive handbook presents the full potential of modern acetylene chemistry, from organic synthesis through materials science to bioorganic chemistry. K. Houk, H. Hopf, P. Stang, K. M. Nicholas, N. Schore, M. Regitz, K. C. Nicolaou, R. Gleiter, L. Scott, R. Grubbs, H. Iwamura, J. Moore, and F. Diederich - internationally renowned authors introduce the reader, in a didactically skilful manner, to the state-of-the-art in alkyne chemistry. Emphasis is placed on presenting carefully selected and instructive examples as well as essential references to the original literature. Special benefits: Each chapter is rounded off by useful experimental procedures.
Modern Inorganic Synthetic Chemistry - Ruren Xu 2017-02-11
Modern Inorganic Synthetic Chemistry, Second Edition captures, in five distinct sections, the latest advancements in inorganic synthetic chemistry, providing materials chemists, chemical engineers, and materials scientists with a valuable reference source to help them advance their research efforts and achieve breakthroughs. Section one includes six chapters centering on synthetic chemistry under specific conditions, such as high-temperature, low-temperature and cryogenic, hydrothermal and solvothermal, high-pressure, photochemical and fusion conditions. Section two focuses on the synthesis and related chemistry problems of highly distinct categories of inorganic compounds, including superheavy elements, coordination compounds and coordination polymers, cluster compounds, organometallic compounds, inorganic polymers, and nonstoichiometric compounds. Section three elaborates on the synthetic chemistry of five important classes of inorganic functional materials, namely, ordered porous materials, carbon materials, advanced ceramic materials, host-guest materials, and hierarchically structured materials. Section four consists of four chapters where the synthesis of functional inorganic aggregates is discussed, giving special attention to the growth of single crystals, assembly of nanomaterials, and preparation of amorphous materials and membranes. The new edition’s biggest highlight is Section five where the frontier in inorganic synthetic chemistry is reviewed by focusing on biomimetic synthesis and rationally designed synthesis. Focuses on the chemistry of inorganic synthesis, assembly, and organization of wide-ranging inorganic systems Covers all major methodologies of inorganic synthesis Provides state-of-the-art synthetic methods Includes real examples in the organization of complex inorganic functional materials Contains more than 4000 references that are all highly reflective of the latest advancement in inorganic synthetic chemistry Presents a comprehensive coverage of the key issues involved in modern inorganic synthetic chemistry as written by experts in the field

Laboratory Experiments to Accompany "Modern Chemistry," - Fredus Nelson Peters 1902

Modern Cyclophane Chemistry - Rolf Gleiter 2006-03-06
Here, the editors Rolf Gleiter and Henning Hopf present an excellent overview of all the important aspects and latest results in cyclophane chemistry. Clearly structured and covering the entire range, the book introduces readers to the most recent research in the field. Twenty chapters, written by well-known scientists, cover in particular: - synthesis of carbo- and heterocyclic cyclophanes and metallocenophanes, - structural and spectroscopic properties of cyclophanes, - current and future applications in synthesis and material science, - novel reactions of cyclophanes, - use of cyclophanes as building blocks in supramolecular chemistry for this fascinating class of compounds. Thus, this is not only an extremely valuable source of information for synthetic organic chemists, but also a ready reference for scientists working in related fields of arene chemistry, stereoselective synthesis, material science, and bioorganic chemistry.
Modern Fluoroorganic Chemistry - Peer Kirsch 2006-03-06
In this handbook, Peer Kirsch clearly shows that this exciting field is no longer an exotic area of research. Aimed primarily at synthetic chemists wanting to gain a deeper understanding of the fascinating implications of including the highly unusual element fluorine in organic compounds, the main part of the book presents a wide range of synthetic methodologies and the experimental procedures selected undeniably show that this can be done with standard laboratory equipment. To round off, the author looks at fluorous chemistry and the applications of organofluorine compounds in liquid crystals, polymers and more besides. This long-awaited book represents an indispensable source of high quality information for everyone working in the field.
Sustainable Solutions for Modern Economies - Rainer Hofer 2009-11-20
Limited supplies of fossil fuels and concerns about global warming have created a strong desire to solve the resource issue in the age "beyond petroleum". This reference book, from the "Green Chemistry Series", contains the essential areas of green chemistry and sustainability in modern economies. It is the first book to outline the contribution of chemistry, and of renewable chemical or biological resources, to the sustainability concept and to the potential resolution of the world's energy problems. It describes the current status of technical research, and industrial application, as well as the potential of biomass as a renewable resource for energy generation in power stations, as alternative fuels, and for various uses in chemistry. It outlines the historical routes of the sustainability concept and specifies sustainability in metrics, facts and figures. The book is written by European experts from academia, industry and investment banking who are world leaders in research and technology regarding sustainability, alternative energies and renewable resources. The sustainability aspects covered include: * consumer behaviour and demands, lifestyles and mega trends, and their impact on innovation in the industry * consumer industry requirements and their impact on suppliers * emerging paradigm changes in raw material demand, availability, sourcing, and logistics * the contribution of the industry to restore the life support systems of the Earth * socially responsible banking and investment * sustainability metrics The book highlights the potential of the different forms of renewable raw materials including: * natural fats and oils * plant-based biologically active ingredients * industrial starch * sucrose * natural rubber * wood * natural fibres It also covers the actual status of biomass usage for green energy generation, green transportation, green chemistry and sustainable nutrition and consumer goods, and it depicts the potentials of green solvents and white biotechnology for modern synthesis and manufacturing technologies. The book is aimed at technical and marketing people in industry, universities and institutions as well as readers in administrations and NGOs. The book will also be of value to the worldwide public interested in sustainability issues and strategies as well as others interested in the practical means that are being used to reduce the environmental impact of chemical processes and products, to further eco-efficiency, and to advance the utilization of renewable resources.
Holt McDougal Modern Chemistry - Mickey Sarquis 2012

Chemistry Grades 9-12 - Hm Staff 2010-04-13

Principles of Modern Chemistry - David W. Oxtoby 2016-01-01
Long considered the standard for honors and high-level mainstream general chemistry courses, PRINCIPLES OF MODERN CHEMISTRY continues to set the standard as the most modern, rigorous, and chemically and mathematically accurate text on the market. This authoritative text features an "atoms first" approach and thoroughly revised chapters on Quantum Mechanics and Molecular Structure (Chapter 6), Electrochemistry (Chapter 17), and Molecular Spectroscopy and Photochemistry (Chapter 20). In addition, the text utilizes mathematically accurate and artistic atomic and molecular orbital art, and is student friendly without compromising its rigor. End-of-chapter study aids focus on only the most important key objectives, equations and concepts, making it easier for students to locate chapter content, while applications to a wide range of disciplines, such as biology, chemical engineering, biochemistry, and medicine deepen students' understanding of the relevance of chemistry beyond the classroom.
Green Chemistry and Technologies - Long Zhang 2018-09-24
The book gives a systematic introduction to green chemistry principles and technologies in inorganic and organic chemistry, polymer sciences and pharmaceutical industry. It also discusses the use of biomass and marine resources for synthesis as well as renewable energy utilization and the concepts and evaluation of recycling economy and eco-industrial parks.
Modern Polyesters - John Scheirs 2005-09-01
Provides an overview of the family of polyester polymers which comprise an important group of plastics that span the range of commodity polymers to engineering resins. It describes the preparation, properties and applications of polyesters. Readers will also find details on polyester-based elastomers, biodegradable aliphatic polyester, liquid crystal polyesters and unsaturated polyesters for glass-reinforced composites. Presents an overview of the most recent developments. Explores synthesis, catalysts, processes, properties and applications. Looks at emerging polyester materials as well as existing ones. Written by foremost experts from both academia and industry, ensuring that both fundamentals and practical applications are covered.
True Magick - Amber K 2006
Newly revised and expanded to include 100 additional exercises, this instructional guide traces the history and lore of magick, covers several forms of magick, including shamanism, Voudun, and Qabala, and explains the basics, such as casting spells safely and ethically. Original.
Modern Chemistry - Holt Rinehart & Winston 2001

High-resolution NMR Techniques in Organic Chemistry - T. Claridge 1999-12-24
From the initial observation of proton magnetic resonance in water and in paraffin, the discipline of nuclear magnetic resonance has seen unparalleled growth as an analytical method. Modern NMR spectroscopy is a highly developed, yet still evolving, subject which finds application in chemistry, biology, medicine, materials science and geology. In this book, emphasis is on the more recently developed methods of solution-state NMR applicable to chemical research, which are chosen for their wide applicability and robustness. These have, in many cases, already become established techniques in NMR laboratories, in both academic and industrial establishments. A considerable amount of information and guidance is given on the implementation and execution of the techniques described in this book.
Modern NMR Techniques for Chemistry Research - A.E. Derome 2013-10-22
Presents an introduction to modern NMR methods at a level suited to organic and inorganic chemists engaged in the solution of structural and mechanistic problems. The book assumes familiarity only with the simple use of proton and carbon spectra as sources of structural information and describes the advantages of pulse and Fourier transform spectroscopy which form the basis of all modern NMR experiments. Discussion of key experiments is illustrated by numerous examples of the solutions to real problems. The emphasis throughout is on the practical side of NMR and the book will be of great use to chemists engaged in both academic and industrial research who wish to realise the full possibilities of the new wave NMR.
Chemical Modification of Biological Polymers - Roger L. Lundblad 2016-04-19
Examining the chemical modification of biological polymers and the emerging applications of this technology, Chemical Modification of Biological Polymers reflects the change in emphasis in this subsection

of biotechnology from the study of protein structure and function toward applications in therapeutics and diagnostics. Highlights The basic organic chemistry of the modification proteins, nucleic acids, oligosaccharides, polysaccharides, and their applications New analytical technologies used to characterize the chemical modification of biological polymers Identification of in vivo, non-enzymatic chemical modification of biological polymers Specific chemical modifications to generate biopharmaceutical products This book covers the basics on the organic chemistry underlying the chemical modification of biopolymers, including updates on the use of various chemical reagents. It describes the current status of chemical modification of biological polymers and emerging applications of this technology in biotechnology. These technologies are important for the manufacture of conjugate proteins used in drug delivery, for the preparation of nucleic acid microarrays, and for the preparation of hydrogels and other materials used in tissue engineering.

Elementary Modern Chemistry - Wilhelm Ostwald 1909

Late Medieval and Early Modern Corpuscular Matter Theories - Christoph Herbert Lüthy 2001-01-01

This book on medieval and early modern corpuscular matter theories presents the research results of nineteen scholars, who show that his modern model of matter has some of its roots in physical, medical, mathematical, alchemical, and theological conceptions developed in the Middle Ages.

Serious Glance At Chemistry, A: Basic Notions Explained - De Lima Toledo Evelyn Jeniffer 2010-10-15

This book primarily focuses on what is generally taught in the first two years of an undergraduate university chemistry program. Yet, it is suitable not just for students, but professionals in fields where a basic background in chemistry is required as well.Topics in electronic structure of atoms and molecules, biochemistry, chemical reactions, energy production and even modern topics such as quantum chemistry and molecular orbital theory are covered comprehensively, while eschewing the more complex mathematics and technicalities. The authors, thus, place much emphasis on learning concepts in this highly accessible work. At the same time, they have taken care to highlight the pivotal role chemistry has to play in the ongoing challenge of climate change. As the world continues to search for alternative fuel and energy sources, this book discusses the relative merits of the latest trends in alternative energy production, and allows readers to draw their own conclusions on their viability.Clearly, this is a remarkable textbook, unique in its clear presentation of both basic and modern concepts in chemistry. Any reader with a basic understanding of high-school chemistry will find their understanding of the subject deepened, and their perspective broadened./a

Modern Chemistry - Raymond E. Davis 2009

Modern Chemistry - Raymond E. Davis 1999

2000-2005 State Textbook Adoption - Rowan/Salisbury.

Microreactors - Wolfgang Ehrfeld 2000-06-15

Tiny devices with huge potential! New concepts of chemical synthesis have led to an increasing demand for miniaturization and more complex systems. Microreaction technology is a hot topic as it opens completely new possibilities for chemical engineering, combinatorial chemistry, and biotechnology. Small, inexpensive, independent, and versatile devices ensure many reactions achieve maximum selectivity, minimum waste, minimum investment, a better control of the process, safe manufacture and production on demand - to create a more efficient process. This book outlines the fabrication techniques of microfluidic components, unit operations of micro-chemical engineering and current world-wide activities. Requirements with respect to needs of the chemical industry have been included. Chemists, chemical engineers, biotechnologists, process engineers, microsystem technologists in the chemical and pharmaceutical industry and academia, as well as manufacturers of analytical instruments, will find this book a state-of- the-art review of this extremely interesting and rapidly developing field.

Translating Science - David C. Wright 2021-12-28

This fascinating, richly-illustrated account of the translation of Western science - particularly chemistry - into late nineteenth-century China provides new insights both into the lives of the Chinese and foreign translators and into the processes and influences of science translation.

General Chemistry - Ralph H. Petrucci 2010

Aromaticity - Israel Fernandez 2021-05-16

Evaluating the aromaticity of a molecular system and the influence of this concept on its properties is a crucial step in the development of novel aromatic systems. Modern computational methods can provide researchers with a high level of insight into such aromaticity, but identifying the most appropriate method for assessing a specific system can prove difficult. Aromaticity: Modern Computational Methods and Applications reviews the latest state-of-the-art computational methods in this field and discusses their applicability for evaluating the aromaticity of a system. In addition to covering aromaticity for typical organic molecules, this volume also explores systems possessing transition metals in their structures, macrocycles and even transition structures. The influence of the aromaticity on the properties of these species (including the structure, magnetic properties and reactivity) is highlighted, along with potential applications in fields including materials science and medicinal chemistry. Finally, the controversial and fuzzy nature of aromaticity as a concept is discussed, providing the basis for an updated and more comprehensive definition of this concept. Drawing on the knowledge of an international team of experts, Aromaticity: Modern Computational Methods and Applications is a unique guide for anyone researching, studying or applying principles of aromaticity in their work, from computational and organic chemists to pharmaceutical and materials scientists. Reviews a range of computational methods to assess the aromatic nature of different compounds, helping readers select the most useful tool for the system they are studying Presents a complete guide to the key concepts and fundamental principles of aromaticity Provides guidance on identifying which variables should be modified to tune the properties of an aromatic system for different potential applications

The History of Chemistry - John Hudson 2012-12-06

This book is written as a result of a personal conviction of the value of incorporating historical material into the teaching of chemistry, both at school and undergraduate level. Indeed, it is highly desirable that an undergraduate course in chemistry incorporates a separate module on the history of chemistry. This book is therefore aimed at teachers and students of chemistry, and it will also appeal to practising chemists. While the last 25 years has seen the appearance of a large number of specialist scholarly publications on the history of chemistry, there has been little written in the way of an introductory overview of the subject. This book fills that gap. It incorporates some of the results of recent research, and the text is illustrated throughout. Clearly, a book of this length has to be highly selective in its coverage, but it describes the themes and personalities which in the author's opinion have been of greatest importance in the development of the subject. The famous American historian of science, Henry Guerlac, wrote: 'It is the central business of the historian of science to reconstruct the story of the acquisition of this knowledge and the refinement of its method or methods, and-perhaps above all-to study science as a human activity and learn how it arose, how it developed and expanded, and how it has influenced or been influenced by man's material, intellectual, and even spiritual aspirations' (Guerlac, 1977). This book attempts to describe the development of chemistry in these terms.

Igniting The Chemical Ring Of Fire: Historical Evolution Of The Chemical Communities Of The Pacific Rim - Rasmussen Seth C 2018-01-18

From the rise of chemical technology in antiquity to the present day, Igniting the Chemical Ring of Fire tracks the development of professional chemistry communities in the countries of the Pacific Rim. Critical in this process was the development of local education and training in chemistry. The doctorate in chemistry is generally regarded as coming into existence in early 19th century Germany, with the model spreading globally as time passed. In early years it was common for international chemistry scholars to train at the ranking German or English universities before returning to their home countries to seed a local version of the doctorate. However, little has been formally written about this process outside of Europe. Representing a first in the field for countries of the Pacific Rim, this book documents the detailed history of chemical communities in ten countries from a team of internationally renowned historians. Providing insights into how and when these countries initiated local chemistry PhD programs and became independent chemical entities, Igniting the Chemical Ring of Fire shows that there is no single path to

development. Contents: PrefaceAbout the EditorIntroduction: The Pacific Rim — From Early Chemical Technology to Independent Local Chemical Communities (Seth C Rasmussen)Australia: Vehicles for the Discussion of Chemistry in Early 19th Century Sydney (Tony T Baker)Australian Chemists Crossing the Pacific to the Promised Land (Ian D Rae)Canada: Chemistry in Canada: 1720–2017 (Thomas Tidwell)China: History of the Modern Chemistry Doctoral Program in Mainland China (Vera V Mainz)Japan: International Relations of the Japanese Chemical Community (Yoshiyuki Kikuchi)Gen-itsu Kita and the Kyoto School's Formation (Yasu Furukawa)Korea: A Short Story of Chemistry in South Korea (Choon H Do)A History of the Korean Chemical Society (Gary Patterson)New Zealand: The Development of Chemistry in New Zealand (Brian Halton)Russia: High Creativity, Historical Invisibility: The Growth of Chemistry in Russia (David E Lewis)Taiwan: Development of the Natural Products Chemistry by Tetsuo Nozoe in Taiwan (Masanori Kaji)United States: Impact of the 1862 Morrill Land-Grant College Act on Chemistry Education in the United States (Roger Egolf)The Professionalization of American Chemistry: How the German PhD Model Crossed the Atlantic (Ned D Heindel, Jeffrey L Sturchio, and James J Bohning)Vietnam: History of Vietnamese Chemistry from Decolonization to the 21st Century (Pham Thi Ngoc Mai, Nguyen Thi Anh Huong, Pham Tien Duc, Hoang Quoc Anh, and Ta Thi Thao)Index Readership: Scientists, students and chemical historians alike will enjoy discovering these untold stories that travel from Canada to Australia, China to Japan and more. Keywords: Pacific Rim;Seth Rasmussen;Ring of Fire;Chemical Communities;Organic ChemistryReview:0

From Classical to Modern Chemistry - Peter J. T. Morris 2002

Most chemists today have either taken part in, or been affected by, the chemical revolution that has taken place over the course of the last century. Developments in instrumentation have changed not just what chemists do, but also how they think about chemistry. New and exciting areas of previously inaccessible research have been opened up as a direct result of this revolution.This is the first book to examine this instrumental revolution and goes on to assess the impact on chemical practice in areas ranging from organic chemistry and biochemistry to environmental analysis and process control, thus demonstrating how fundamental and extensive are the changes that have occurred.With contributions from internationally recognised specialists, this lavishly illustrated book provides a focal point for any historian of chemistry or chemist with an interest in this fascinating topic.This book is published in association with the Science Museum, London, UK and the Chemical Heritage Foundation, Philadelphia.

Modern Organonickel Chemistry - Yoshinao Tamaru 2006-03-06

Organonickel chemistry plays an increasingly important role in organic chemistry, and interest in this topic is now just as keen as in organopalladium chemistry. While there are numerous, very successful books on the latter, a book specializing in organonickel chemistry is long overdue. Edited by one of the leading experts in the field, this volume covers the many discoveries made over the past 30 years, and previously scattered throughout the literature. Active researchers working at the forefront of organonickel chemistry provide a comprehensive review of the topic, including cross-coupling reactions, asymmetric synthesis and heterogeneous catalysis reaction types. A must-have for both organometallic chemists and synthetic organic chemists.

Holt Chemistry - Salvatore Tocci 1996-01-01

Modern Organocopper Chemistry - Norbert Krause 2002

Organocopper compounds are now an integral part of every modern synthesis laboratory, allowing important stages of synthesis to be carried out in an elegant fashion. Yet a certain amount of experience is needed if they are to be used effectively. Non-experts in the field often have difficulty in choosing the most suitable reagent for a particular substrate and the prerequisites for the reaction. This manual, edited by Norbert Krause, answers such questions, since it contains all the useful tips and tricks on organocopper compounds - information gained from personal experience by the international team of authors. This allows those working in laboratories in both academia and industry to determine the optimal reagent for their needs using the substrates available for reaction and the desired products. The result is a more effective use of these synthesis tools in everyday laboratory practice.

Modern Aspects of Electrochemistry 42 - Constantinos G. Vayenas 2008-03-08

This volume analyzes and summarizes recent developments in several key interfacial electrochemical systems in the areas of fuel cell electrocatatalysis, electrosynthesis and electrodeposition. The six Chapters are written by internationally recognized experts in these areas and address both fundamental and practical aspects of several existing or emerging key electrochemical technologies. The Chapter by R. Adzic, N. Marinkovic and M. Vukmirovic provides a lucid and authoritative treatment of the electrochemistry and electrocatalysis of Ruthenium, a key element for the devel- ment of efficient electrodes for polymer electrolyte (PEM) fuel cells. Starting from fundamental surface science studies and interfacial considerations, this up-to-date review by some of the pioneers in this field, provides a deep insight in the complex catalytic-electrocatalytic phenomena occurring at the interfaces of PEM fuel cell electrodes and a comprehensive treatment of recent developments in this extremely important field. Several recent breakthroughs in the design of solid oxide fuel cell (SOFC) anodes and cathodes are described in the Chapter of H. Uchida and M. Watanabe. The authors, who have pioneered several of these developments, provide a lucid presentation d- cribing how careful fundamental investigations of interfacial electrocatalytic anode and cathode phenomena lead to novel electrode compositions and microstructures and to significant practical advances of SOFC anode and cathode stability and enhanced electrocatalysis.

The Development of Modern Chemistry - Aaron J. Ihde 1984-01-01

From ancient Greek theory to the explosive discoveries of the 20th century, this authoritative history shows how major chemists, their discoveries, and political, economic, and social developments transformed chemistry into a modern science. 209 illustrations. 14 tables. Bibliographies. Indices. Appendices.