RNA and DNA Editing
Methods and Protocols

The recent expansion in diversity of RNA and DNA editing types has stimulated the development of many unique genetic, molecular, biochemical, and computational approaches to biological issues. In RNA and DNA Editing: Methods and Protocols, leading experts in the field introduce methods developed over the last few years to study editing substrates, mechanisms of specificity, and functions of RNA and DNA editing enzymes and complexes. Sections of the book are dedicated to state-of-the-art techniques which enable investigation of uracil insertion/deletion RNA editing in mitochondrion of Trypanosoma brucei, adenosine to inosine RNA editing, cytidine to uracil RNA and DNA editing, as well as tRNA editing and RNA modifications.

Features
► Features cutting-edge methodologies focused on the study of this diverse field of study
► Includes unique genetic, molecular, biochemical, and computational approaches ► Contains expert tips and implementation advice

From the contents

Fields of interest
Human Genetics; Enzymology

Target groups
Professional/practitioner

Type of publication
Contributed volume

Due Summer 2011

p53

This volume, p53, was developed primarily as a resource for access to key ideas in the field that have developed over the years including how transgenics have been used to study p53, how clinical genetics have identified and studied mutations in p53 found in human cancers, how p53 can be regulated by post-translational modifications, and how key drug targets have been defined, namely MDM2, which has provided fundamental approaches for defining how p53 can be activated with potentially therapeutic effect. The key concepts in the chapters included provide a perspective on key paradigms in the p53 field.

Features
► Discusses TP53 Mutations in Human Cancers
► Chapter on Regulation and Function of the Original p53-Inducible p21 Gene ► Presents key ideas in the field

Contents

Fields of interest
Cancer Research

Target groups
Research

Type of publication
Contributed volume

Due Summer 2011

Epigenetic Contributions in Autoimmune Disease

This volume focuses on the relevance of epigenetic mechanisms in autoimmune disease. It provides new directions for future research in autoimmune disease.

Features
► Overview of some of the key concepts in epigenetics, chromatin and the interaction with transcription factors ► Shows the specific influence of environmental factors to influence or trigger the autoimmune response ► Discusses the possibilities of using epigenetics-based therapies in the context of autoimmune diseases ► Presents the application of novel methods to characterize the epigenetic profile

Contents
AN INTRODUCTION TO EPIGENETICS.- CHROMATIN MECHANISMS REGULATING GENE EXPRESSION IN HEALTH AND DISEASE.- EPIGENETIC CONTROL OF LYMPHOCYTE DIFERENTIATION.- EPIGENETIC CONTROL IN IMMUNE FUNCTION.- DNA METHYLATION AND B-CELL AUTORACTIVITY.- ENVIRONMENTAL AGENTS AND AUTOIMMUNE DISEASES.- EPIGENETIC DYSREGULATION OF EPSTEIN-BARR VIRUS LATENCY AND DEVELOPMENT OF AUTOIMMUNE DISEASE.- DOES GENOMIC IMPRINTING PLAY A ROLE IN AUTOIMMUNITY?.- A NEW EPIGENETIC CHALLENGE: SYSTEMIC LUPUS ERYTHEMATOSUS.- EPIGENETIC DERMALIGATION IN RHEUMATOID ARTHRITIS.- PROSPECTS FOR EPIGENETIC COMPOUNDS IN THE TREATMENT OF AUTOIMMUNE DISEASE.- PROFILING EPIGENETIC ALTERATIONS IN DISEASE.

Fields of interest
Biomedicine general; Gene Function

Target groups
Research

Type of publication
Contributed volume

Due Summer 2011
G. Banfalvi, University of Debrecen, Hungary (Ed.)

**Cellular Effects of Heavy Metals**

The term “heavy metals” is used as a group name of toxic metals and metalloids (semi-metals) causing contaminations and ecotoxicity. In strict chemical sense the density of heavy metals is higher than 5 g/cm³. From biological point of view as microelements they can be divided into two major groups. a. For their physiological function organisms and cells require essential microelements such as iron, chromium (III), cobalt, copper, manganese, molybdenum, zinc. b. The other group of heavy metals is toxic to the health or environment. Of highest concern are the emissions of As, Cd, Co, Cu, Hg, Mn, Ni, Pb, Sn, Tl. The toxicity of heavy metals is well known at organizational level, while less attention has been paid to their cellular effects. This book describes the toxicity of heavy metals on microorganisms, yeast, plant and animal cells. Other chapters of the book deal with their genotoxic, mutagenic and carcinogenic effects.

**Features**
- Describes the biological importance of heavy metals
- Shows how heavy metals enter cells
- What happens inside the cells upon heavy metal uptake
- What chemical reactions are induced by heavy metals
- What metabolic pathways are hampered by these metals

**From the contents**


**Fields of interest**
Biomedicine general; Cell Biology; Oxidative Stress

**Target groups**
Professional/practitioner

**Type of publication**
Contributed volume

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P. Bonate, GlaxoSmithKline, Research Triangle Park, NC, USA; D. R. Howard, Novartis, East Hanover, NJ, USA (Eds.)

**Pharmacokinetics in Drug Development**

**Advances and Applications, Volume 3**

The topics chosen for this volume were selected because they are some of the current development or technological issues facing drug development project teams. They regard the practical considerations for assessment of selected special development populations. For example, they include characterization of drug disposition in pregnant subjects, for measuring arrhythmic potential, for analysis tumor growth modeling, and for disease progression modeling. Practical considerations for metabolite safety testing, transporter assessments, Phase 0 testing, and development and execution of drug interaction programs reflect current regulatory topics meant to address enhancement of both safety assessment and early decision-making during new candidate selection. Important technologies like whole body autoradiography, digital imaging and dried blood spot sample collection methods are introduced, as both have begun to take a more visible role in pharmacokinetic departments throughout the industry.

**Features**
- Provides practical guidance on the application of pharmacokinetics as a drug development science
- Includes characterization of drug disposition in pregnant subjects, for measuring arrhythmic potential, for analysis tumor growth modeling, and for disease progression modeling
- Introduces important technologies

**Fields of interest**
Pharmaceutical Sciences/Technology; Biotechnology; Pharmacy

**Target groups**
Research

**Type of publication**
Contributed volume

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J. J. Chambers, University of Massachusetts, Amherst, MA, USA; R. H. Kramer, University of California, Berkeley, CA, USA (Eds.)

**Photosensitive Molecules for Controlling Biological Function**

The development of new photochemical tools, some synthesized by chemists and some provided by nature, is rapidly changing the way neurobiological research is performed in the modern laboratory. In Photosensitive Molecules for Controlling Biological Function, expert researchers in the field examine the most cutting-edge tools currently available. Divided into three sections, this detailed compendium features techniques involving natural photosensitive proteins, caged neurotransmitters, and small molecule photoswitches that bestow light sensitivity on ion channels and receptors. Written for the Neuromethods series, this volume features the type of meticulous description and implementation advice that is crucial for getting optimal results in the lab.

**Features**
- Captures the most current methods in precise and non-invasive exploration of neural function via light
- Features extensive sections on natural photosensitive proteins, caged neurotransmitters, and small molecule photoswitches
- Includes expert implementation advice crucial for getting optimal results in the lab

**Fields of interest**
Neurosciences; Neurobiology; Neurochemistry

**Target groups**
Professional/practitioner

**Type of publication**
Contributed volume
Molecular Basis of Health and Disease

The book describes how the balance between pro- and anti-inflammatory molecules is related to health and disease. It is suggested that many diseases are initiated and their progress is influenced by inflammatory molecules and a decrease in the production and/or action of anti-inflammatory molecules and this imbalance between pro- and anti-inflammatory molecules seems to have been initiated in the perinatal period. This implies that strategies to prevent and manage various adult diseases should start in the perinatal period. An alteration in the metabolism of essential fatty acids and their anti-inflammatory molecules such as lipoxins, resolvins, protectins, maresins and nitrolypids seems to play a major role in the pathobiology of several adult diseases. Based on these concepts, novel therapeutic approaches in the management of insulin resistance, obesity, type 2 diabetes mellitus, metabolic syndrome, cancer, lupus, rheumatoid arthritis and other autoimmune diseases are presented.

Features
► Perinatal origins of adult diseases
► Adult diseases as low-grade systemic inflammatory conditions
► Inflammation as the basis of obesity, insulin resistance, metabolic syndrome and cancer imbalance in the pro- and anti-inflammatory molecules as the basis of adult diseases
► Altered metabolism of essential fatty acids and eicosanoids in the pathobiology of adult diseases

Fields of interest
Biomedicine general; Human Physiology; Molecular Medicine

Target groups
Professional/practitioner

Type of publication
Monograph

Molecular Determinants of Radiation Response

Molecular Determinants of Radiation Response includes chapters by expert authors who detail the present understanding of key DNA damage response pathways and proteins. The chapters include comprehensive discussions on where and how specific alterations in function of these pathways and proteins result in substantive modifications of cellular response to DNA injury. Given the importance of therapies that induce DNA injury in the management of human disease, this book is timely and relevant for basic and translational researchers, as well as clinicians alike.

Features
► Includes chapters by expert authors who detail the present understanding of key DNA damage response pathways and proteins
► Presents comprehensive discussions on where and how specific alterations in function of these pathways and proteins result in substantive modifications of cellular response to DNA injury
► A timely and relevant text for basic and translational researchers

From the contents

Fields of interest
Cancer Research; Pharmacology/Toxicology

Target groups
Research

Type of publication
Contributed volume

Due February 2011

2011. XX, 1460 p. Hardcover
► approx. € 169,95 | £153.00
► approx. * € (D) 181,45 | € (A) 186,94 | sFr 244,00
ISBN 978-94-007-0494-7

Due March 2011

► approx. € 122,45 | £111.50
► approx. * € (D) 131,02 | € (A) 134,70 | sFr 203,50
ISBN 978-1-4419-8043-4

Multi Modality State-of-the-Art Medical Image Segmentation and Registration Methodologies

Volume 1

With the advances in image guided surgery for cancer treatment, the role of image segmentation and registration has become very critical. The central engine of any image guided surgery product is its ability to quantify the organ or segment the organ whether it is a magnetic resonance imaging (MRI) and computed tomography (CT), X-ray, PET, SPECT, Ultrasound, and Molecular imaging modality. Sophisticated segmentation algorithms can help the physicians delineate better the anatomical structures present in the input images, enhance the accuracy of medical diagnosis and facilitate the best treatment planning system designs. The focus of this book is towards the state of the art techniques in the area of image segmentation and registration.

Features
► 3D Deformable models for medical image segmentation
► Covers skin, lung, brain and retinal cancers Ultrasound and MRI image registration
► Advanced techniques in brain segmentation and registration

Fields of interest
Biomedicine general; Biomedical Engineering; Image Processing and Computer Vision

Target groups
Professional/practitioner

Type of publication
Contributed volume

Due March 2011

2011. 650 p. 250 illus., 125 in color. Hardcover
► approx. € 179,95 | £159.50
► approx. * € (D) 192,55 | € (A) 197,94 | sFr 254,00
**Multi Modality State-of-the-Art Medical Image Segmentation and Registration Methodologies**

**Volume II**

With the advances in image guided surgery for cancer treatment, the role of image segmentation and registration has become very critical. The central engine of any image guided surgery product is its ability to quantify the organ or segment the organ whether it is a magnetic resonance imaging (MRI) and computed tomography (CT), X-ray, PET, SPECT, Ultrasound, and Molecular imaging modality. Sophisticated segmentation algorithms can help the physicians delineate better the anatomical structures present in the input images, enhance the accuracy of medical diagnosis and facilitate the best treatment planning system designs. The focus of this book is towards the state of the art techniques in the area of image segmentation and registration.

**Features**
- Combining Registration and Segmentation Techniques
- Segmentation Application to Prosthesis Design and Brain
- Role of Segmentation in Autistic and Normal Brains
- Ocular Thermo graphic Sequence Analysis
- 3D Ultrasound Image Segmentation

**Fields of interest**
Biomedicine general; Imaging / Radiology; Image Processing and Computer Vision

**Target groups**
Research

**Type of publication**
Contributed volume

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**Due March 2011**

2011. 650 p. 250 Illus., 125 in color. Hardcover

- approx. € 179,95 | £159.50
- approx. * € (D) 192,55 | € (A) 197,94 | sFr 254,00

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**Due February 2011**


- € 149,95 | £135.00
- * € (D) 160,45 | € (A) 164,94 | sFr 215,00

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**Due April 2011**


- approx. € 104,95 | £93.00
- approx. * € (D) 112,30 | € (A) 115,45 | sFr 148,00

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**Z. Kahán, T. Tot, Uppsala University, Sweden (Eds.)**

**Breast Cancer, a Heterogeneous Disease Entity**

**The Very Early Stages**

The volume raises attention to the need of a completely new approach to breast cancer based on the knowledge collected on early breast cancer in the past two decades. The chapters are contributed by experts of all the fields participating in the clinical research and care of breast cancer. The practical importance of such a book is underlined by the increasing number of breast cancer cases, and also the increasing proportion of early stage-cases. The ultimate goal of the book is to point to the heterogeneous nature of the disease which is more striking and has more importance in care at the very early stages than at the more advanced stages. The book recommends the utilization of all the information provided by multimodality imaging and special pathological methods, a new classification system and therapeutic guidelines since early breast cancers should not be treated based on experience obtained with palpable tumors. No similar book has been yet released to the market.

**Features**
- Proposes a new approach (paradigm shift)
- Multidisciplinary basis
- Healthcare importance and practicability
- Similar book is absent on the market
- Relatively wide readership

**Fields of interest**
Cancer Research; Human Physiology; Pharmacology/Toxicology

**Target groups**
Professional/practitioner

**Type of publication**
Contributed volume

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**R. P. Rij, University Nijmegen, The Netherlands (Ed.)**

**Antiviral RNAi**

**Concepts, Methods, and Applications**

Viruses and RNAi share an intricate relationship at many levels. RNAi is an important antiviral defense mechanism in plants and invertebrates, microRNAs – of viral or cellular origin – affect many aspects of virus biology, and replication of many, if not all, mammalian viruses can be suppressed by RNAi. Antiviral RNAi: Concepts, Methods, and Applications provides a collection of protocols for the analysis of viral small RNAs and natural antiviral RNAi responses as well as for the development and optimization of RNAi-based antiviral drugs. As RNAi is a central regulatory mechanism in the cell, the methods in this volume can also be applied out of the context of a virus infection.

**Features**
- Includes cutting-edge methods and protocols
- Provides step-by-step detail essential for reproducible results
- Contains key notes and implementation advice from the experts

**From the contents**
Defense and counter-defense in the RNAi-based antiviral immune system in insects - RNAi and cellular miRNAs in infections by mammalian viruses - Viral miRNAs - Progress in RNAi-based antiviral therapeutics - Chemical modification of small interfering RNA - Viral small RNA cloning and sequencing - Visitor, an informatic pipeline for analysis of viral siRNA sequencing datasets - Computational prediction of viral miRNAs - Detection of Viral microRNAs by Northern Blot Analysis - Detection of viral microRNA with S1 Nuclease Protection assay - Characterization of RISC associated adenoviral small RNAs - Identification of Viral Suppressors of RNAi by a Reporter Assay in Drosophila S2 Cell Culture - Dicer assay in Drosophila S2 cell extract - Slicer activity in Drosophila melanogaster S2 extract - Gel Mobility Shift Assays for RNA-binding viral RNAi suppressors.

**Fields of interest**
Human Genetics; Virology

**Target groups**
Professional/practitioner

**Type of publication**
Contributed volume
Drug Design and Discovery: Methods and Protocols

Research in the pharmaceutical sciences and medicinal chemistry has taken an important new direction in the past two decades with a focus on large molecules, especially peptides and proteins, as well as DNA therapeutics. In Drug Design and Discovery: Methods and Protocols, leading experts provide an in-depth view of key protocols that are commonly used in drug discovery laboratories. Covering both classic and cutting-edge techniques, this volume explores computational docking, quantitative structure-activity relationship (Q SAR), peptide synthesis, labeling of peptides and proteins with fluorescent labels, DNA-microarray, zebrafish model for drug screening, and other analytical screening and biological assays that are routinely used during the drug discovery process.

Features
- Explores computational, spectroscopic, analytical, purification, and molecular biology methods, as well as cellular assays
- Provides an in-depth view of protocols used most commonly in drug discovery laboratories
- Features expert tips and vital implementation advice

From the contents

Fields of interest
Pharmacology/Toxicology; Laboratory Medicine

Target groups
Professional/practitioner

Type of publication
Contributed volume

Due March 2011

2011. 379 p. 11 illus., 6 in color. (Methods in Molecular Biology, Volume 716) Hardcover

> € 94,95 | £85.50

**Approx. € (D) 104,45 | € (A) 108,50 | sFr 157,50**


Due April 2011


> approx. € 309,00 | £281.00

**Approx. € (D) 330,63 | € (A) 339,90 | sFr 443,00**

ISBN 978-1-4419-8058-8

Invertebrate Immunity

It can be seen that the insects are the still attracting most research and researchers. However, an increasing interest is emerging to study new invertebrate groups, especially those where the genome is known. Even though Drosophila has been and still is an excellent model for immune studies, it is now clear that there are great differences between immune responses in Drosophila and that of several other invertebrates, which indeed calls for more research on other invertebrates.

Features
- Describes diversity between different invertebrate animal groups
- Shows that the prophenoloxidase activating system and the induction of the Toll pathway in an insect share the same proteolytic cascade
- Displays a growing interest in invertebrate immunity, which is the study of the link between physiology and immunity

Contents

Fields of interest
Biomedicine general; Immunology

Target groups
Research

Type of publication
Contributed volume

Due February 2011


> € 149,95 | £135.00

**Approx. € (D) 160,45 | € (A) 164,94 | sFr 215,00**


Contents

Field of interest
Pharmacology/Toxicology; Human Physiology; Cell Biology

Target groups
Research

Type of publication
Contributed volume

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Features
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- Shows that the prophenoloxidase activating system and the induction of the Toll pathway in an insect share the same proteolytic cascade
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Contents

Fields of interest
Biomedicine general; Immunology

Target groups
Research

Type of publication
Contributed volume

Due February 2011


> € 149,95 | £135.00

**Approx. € (D) 160,45 | € (A) 164,94 | sFr 215,00**

Histamine in Inflammation

The year 2010 marks the centennial for the identification of histamine and the first glimpse of its many physiological functions. From these initial findings a rich tapestry of research has uncovered roles for histamine in almost every physiological process with new findings emerging every year. These diverse roles of histamine have made fertile ground for the discovery of novel therapeutic modalities. The term "antihistamine" has entered the common lexicon. This book is an attempt to give a snapshot in time as to the current understanding of the role of histamine in just one important therapeutic area—inflammation.

Features
- Provides an overview of the pharmacology of the four histamine receptors and describes how histamine is synthesized and the insights derived from mice where this synthesis is disrupted
- Discusses the important role of histamine in neurotransmission and for the treatment of various neurological disorders
- Explains the future of antihistamine research and the potential for novel antihistamines targeting the newest members of the histamine receptor family—the H3 and H4 receptors

Contents
One Hundred Years of Histamine Research.- Molecular Pharmacology of the Four Histamine Receptors.- Histamine Synthesis and Lessons Learned from Histidine Decarboxylase Deficient Mice.- Histamine in Allergic Rhinoconjunctivitis.- The Role of Histamine in Ocular Allergy.- The Role of Histamine in Asthma.- Antihistamines in the Treatment of Urticaria.- Histamine and Antihistamines in Atopic Dermatitis.- Histamine, Immune Cells and Autoimmunity.- Histamine in Neurotransmission and Brain Diseases.- Histamine in Normal and Malignant Cell Proliferation.- The Future Antihistamines: Histamine H3 and H4 Receptor Ligands.

Fields of interest
Biomedicine general; Human Physiology

Target groups
Research

Type of publication
Contributed volume

Due April 2011

2011, XVIII, 144 p. 24 illus. (Advances in Experimental Medicine and Biology, Volume 709) Hardcover
- € 139.95 | £126.00
- *€ (D) 149.95 | £ (A) 153.94 | sFr 201,00 ISBN 978-1-4419-8055-7

Encyclopedia of Traditional Chinese Medicines – Molecular Structures, Pharmacological Activities, Natural Sources and Applications

Vol. 1: Isolated Compounds A–C

This set of six volumes provides a systematic and standardized description of 23,033 chemical components isolated from 6,926 medicinal plants, collected from 5,535 books/articles published in Chinese and international journals. A chemical structure with stereo-chemistry bonds is provided for each chemical component, in addition to conventional information, such as Chinese and English names, physical and chemical properties. It includes a name list of medicinal plants from which the chemical component was isolated. Furthermore, abundant pharmacological data for nearly 8,000 chemical components are presented, including experimental method, experimental animal, cell type, quantitative data, as well as control compound data. The seven indexes allow for complete cross-indexing.

Features
- For the first time, a collection of more than 20,000 chemical components of medicinal plants for studying TCM is provided
- Has a systematic and integrated approach
- With seven indexes the information in the book can be retrieved in multiple ways

Contents
Introduction.- How to Use This Book.- Abbreviations and Symbols.- Cancer Cell Codes in Pharmacological Models.- Isolated Compounds A–C (Entries 1-4594).

Fields of interest
Pharmaceutical Sciences/Technology; Pharmacology/Toxicology; Biochemistry, general

Target groups
Research

Type of publication
Encyclopedia

Due January 2011

2011. 594 p. Hardcover
- € 249.00 | £224.50
- *€ (D) 266.43 | £ (A) 273.90 | sFr 357,00 ISBN 978-3-642-16734-8
Also available as a set
ISBN 978-3-642-17733-0
Encyclopedia of Traditional Chinese Medicines – Molecular Structures, Pharmacological Activities, Natural Sources and Applications

Vol. 2: Isolated Compounds D-G

This set of six volumes provides a systematic and standardized description of 23,033 chemical components isolated from 6,926 medicinal plants, collected from 5,535 books/articles published in Chinese and international journals. A chemical structure with stereo-chemistry bonds is provided for each chemical component, in addition to conventional information, such as Chinese and English names, physical and chemical properties. It includes a name list of medicinal plants from which the chemical component was isolated. Furthermore, abundant pharmacological data for nearly 8,000 chemical components are presented, including experimental method, experimental animal, cell type, quantitative data, as well as control compound data. The seven indexes allow for complete cross-indexing.

Contents
Isolated Compounds D—G (Entries 4595-9185).

Features
► For the first time, a collection of more than 20,000 chemical components of medicinal plants for studying TCM is provided
► Has a systematic and integrated approach
► With seven indexes the information in the book can be retrieved in multiple ways

Contents
Isolated Compounds H—M (Entries 9186-15227).

Features
► For the first time, a collection of more than 20,000 chemical components of medicinal plants for studying TCM is provided
► Has a systematic and integrated approach
► With seven indexes the information in the book can be retrieved in multiple ways

Encyclopedia of Traditional Chinese Medicines – Molecular Structures, Pharmacological Activities, Natural Sources and Applications

Vol. 3: Isolated Compounds H-M

This set of six volumes provides a systematic and standardized description of 23,033 chemical components isolated from 6,926 medicinal plants, collected from 5,535 books/articles published in Chinese and international journals. A chemical structure with stereo-chemistry bonds is provided for each chemical component, in addition to conventional information, such as Chinese and English names, physical and chemical properties. It includes a name list of medicinal plants from which the chemical component was isolated. Furthermore, abundant pharmacological data for nearly 8,000 chemical components are presented, including experimental method, experimental animal, cell type, quantitative data, as well as control compound data. The seven indexes allow for complete cross-indexing.

Contents
Isolated Compounds N—S (Entries 15228-20574).

Features
► For the first time, a collection of more than 20,000 chemical components of medicinal plants for studying TCM is provided
► Has a systematic and integrated approach
► With seven indexes the information in the book can be retrieved in multiple ways

Encyclopedia of Traditional Chinese Medicines – Molecular Structures, Pharmacological Activities, Natural Sources and Applications

Vol. 4: Isolated Compounds N-S

This set of six volumes provides a systematic and standardized description of 23,033 chemical components isolated from 6,926 medicinal plants, collected from 5,535 books/articles published in Chinese and international journals. A chemical structure with stereo-chemistry bonds is provided for each chemical component, in addition to conventional information, such as Chinese and English names, physical and chemical properties. It includes a name list of medicinal plants from which the chemical component was isolated. Furthermore, abundant pharmacological data for nearly 8,000 chemical components are presented, including experimental method, experimental animal, cell type, quantitative data, as well as control compound data. The seven indexes allow for complete cross-indexing.
Encyclopedia of Traditional Chinese Medicines – Molecular Structures, Pharmacological Activities, Natural Sources and Applications

Vol. 5: Isolated Compounds T-Z, References, TCM Plants and Congeners

This set of six volumes provides a systematic and standardized description of 23,033 chemical components isolated from 6,926 medicinal plants, collected from 5,535 books/articles published in Chinese and international journals. A chemical structure with stereo-chemistry bonds is provided for each chemical component, in addition to conventional information, such as Chinese and English names, physical and chemical properties. It includes a name list of medicinal plants from which the chemical component was isolated. Furthermore, abundant pharmacological data for nearly 8,000 chemical components are presented, including experimental method, experimental animal, cell type, quantitative data, as well as control compound data. The seven indexes allow for complete cross-indexing.

Features
- For the first time, a collection of more than 20,000 chemical components of medicinal plants for studying TCM is provided
- Has a systematic and integrated approach
- With seven indexes the information in the book can be retrieved in multiple ways

Contents
Isolated Compounds T—Z (Entries 20575-23033).- References for Isolated Compounds.- TCM Original Plants and Congeners (Entries T0001-T6926).- Key References.

Fields of interest
Pharmaceutical Sciences/Technology; Pharmacology/Toxicology; Biochemistry, general

Target groups
Research

Type of publication
Encyclopaedia

Due January 2011

2011. XVI, 587 p. Hardcover

► € 249.00 | £224.50
► * (D) 266,43 | € (A) 273,90 | sFr 357.00
ISBN 978-3-642-16740-9

Also available as a set
ISBN 978-3-642-17733-0

Encyclopedia of Traditional Chinese Medicines – Molecular Structures, Pharmacological Activities, Natural Sources and Applications

Vol. 6: Indexes

This set of six volumes provides a systematic and standardized description of 23,033 chemical components isolated from 6,926 medicinal plants, collected from 5,535 books/articles published in Chinese and international journals. A chemical structure with stereo-chemistry bonds is provided for each chemical component, in addition to conventional information, such as Chinese and English names, physical and chemical properties. It includes a name list of medicinal plants from which the chemical component was isolated. Furthermore, abundant pharmacological data for nearly 8,000 chemical components are presented, including experimental method, experimental animal, cell type, quantitative data, as well as control compound data. The seven indexes allow for complete cross-indexing.

Features
- For the first time, a collection of more than 20,000 chemical components of medicinal plants for studying TCM is provided
- Has a systematic and integrated approach
- With seven indexes the information in the book can be retrieved in multiple ways

Contents
Indexes.- Compound Pharmacological Activity Index.- Compound Molecular Formula Index.- Compound Side Name Index.- TCM Plant English Name Index.- TCM Plant PINYIN and Chinese Name Index.- TCM Plant Effects Index.- TCM Plant Indications Index.

Fields of interest
Pharmaceutical Sciences/Technology; Pharmacology/Toxicology; Biochemistry, general

Target groups
Research

Type of publication
Encyclopaedia

Due January 2011

2011. XVI, 752 p. Hardcover

► € 249.00 | £224.50
► * (D) 266,43 | € (A) 273,90 | sFr 357.00
ISBN 978-3-642-16743-0

Also available as a set
ISBN 978-3-642-17733-0