



Science Sale

Half-price until March 31, 2015

Buy now!

Order Now! | Science Sale



Science Sale

November 1, 2014 - March 31, 2015

Great savings on great books in Applied Sciences!

Buy now!

Table of Contents

Biomedicine
Chemistry/Food Science
Earth Sciences
Education
Engineering & Energy24
Environment
Geography39
Life Sciences
Materials Science
Philosophy50
Physics & Astronomy5
Social Sciences

Save 50% on most titles! Quantities are limited so place your order now!

For more information please visit springer.com/sciencesale

R. A. Adan, Rudolf Magnus Institute of Neuroscience, Utrecht, Netherlands; W. H. Kaye, University of California, San Diego Dept. Psychiatry, La Jolla, CA, USA (Eds)

Behavioral Neurobiology of Eating Disorders

This book describes the current state of understanding of the neurobiology of eating disorders, providing the latest insights and ideas. Because of the critical need to advance treatment, the book also includes chapters from pioneers in this field.

2011. XIV, 322 p. (Current Topics in Behavioral Neurosciences, Volume 6) Hardcover ISBN 978-3-642-15130-9

- ► £ 199,99 | £180.00
- ► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



A. Aghamohammadi, N. Rezaei, Tehran University of Medical Sciences Research Center for Immunodeficiencies, Tehran, Iran (Eds)

Clinical Cases in Primary Immunodeficiency Diseases

A Problem-Solving Approach

Focused on features of patients with PIDs and on further investigation and management, this book uses 90 real-life cases of immunideficiency, along with some 300 related questions. Includes clinical diagnosis, lab findings, molecular mechanisms and therapy.

2013. XIX, 377 p. 31 illus., 19 illus. in color. Hardcover ISBN 978-3-642-31784-2

- ► € 149,95 | £135.00
- ► * € (D) 160,45 | € (A) 164,94 | sFr 200,00

Sale Price

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



Diabetes is a complex disease and is also one of the most common. This book serves as a guide for diabetic patients to take care of their health.

S. I. Ahmad, Nottingham Trent University,

An Old Disease, a New Insight

2013. XXXIII, 485 p. (Advances in Experimental Medicine and Biology, Volume 771) Hardcover ISBN 978-1-4614-5440-3

€ 179,95 | £159.50

Nottingham, UK (Ed)

Diabetes

► * € (D) 192,55 | € (A) 197,94 | sFr 236,00

Sale Price

- ► € 90,00 | £81.00
- ► * € (D) 96,30 | € (A) 99,00 | sFr 120,00



B. B. Aggarwal, University of Texas M.D. Anderson Cancer Center, Houston, TX, USA; Y.-J. Surh, Seoul National University College of Pharmacy, Seoul, Korea, Republic of (South Korea); S. Shishodia, University of Texas MD Anderson Cancer Center, Houston, TX, USA (Eds)

The Molecular Targets and Therapeutic Uses of Curcumin in Health and Disease

Curcumin is derived from the root of the plant Curcuma longa (also called turmeric) and its medicinal uses have been described for over 5000 years.

2007. XXI, 489 p. 77 illus. (Advances in Experimental Medicine and Biology, Volume 595) Hardcover ISBN 978-0-387-46400-8

- ► € 239,00 | £213.00
- ► * € (D) 255,73 | € (A) 262,90 | sFr 315,00

Sale Price

- ► € 119,50 | £108.00
- * € (D) 127,87 | € (A) 131,45 | sFr 159,50



A. Ahmad, Wayne State University, Detroit, MI, USA (Fd)

Breast Cancer Metastasis and Drug Resistance

Progress and Prospects

This volume covers recent progress in breast cancer research. It explores breast cancer, the factors that make it lethal and current research progress, including stem cells, microRNAs, epigenetics, genomics and some novel signaling pathways.

2013. XI, 413 p. 59 illus., 45 illus. in color. Hardcover ISBN 978-1-4614-5646-9

- € 149,95 | £135.00
- ► *€ (D) 160,45 | € (A) 164,94 | sFr 200,00

Sale Price

- ► € 75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



P. Augustijns, Katholieke Universiteit Leuven Lab. Pharmacotechnology &, Leuven, Belgium; M. Brewster, Beerse, Belgium (Eds)

Solvent Systems and Their Selection in Pharmaceutics and Biopharmaceutics

Solvent systems are integral to drug development and pharmaceutical technology. This single topic encompasses numerous allied subjects running the gamut from recrystallization solvents to biorelevant media. The goal of this contribution to the AAPS Biotechnology: Pharmaceutical Aspects series is to generate both a practical handbook as well as a reference allowing the reader to make effective decisions concerning the use of solvents and solvent systems. To this end, the monograph was created by inviting recognized experts from a number of fields to author relevant sections.

2007. IX, 459 p. (Biotechnology: Pharmaceutical Aspects, VI) Hardcover ISBN 978-0-387-69149-7

- ► £ 239,00 | £213.00
- ► * € (D) 255,73 | € (A) 262,90 | sFr 315,00

- ► € 119,50 | £108.00
- ► * € (D) 127,87 | € (A) 131,45 | sFr 159,50



T. Balla, National Institutes of Health, Bethesda, MD, USA; M. Wymann, University of Basel, Basel, Switzerland; J. D. York, Duke University Medical Center, Durham, NC, USA (Eds)

Phosphoinositides II: The Diverse Biological Functions

Phosphoinositides play a major role in cellular signaling and membrane organization. During the last three decades we have learned that enzymes turning over phosphoinositides control vital physiological processes and are involved in the initiation and progression of cancer, inflammation, neurodegenerative, cardiovascular, metabolic disease and more. In two volumes, this book elucidates the crucial mechanisms that control the dynamics of phosphoinositide conversion.

2012. XVI, 460 p. (Subcellular Biochemistry, Volume 59) Hardcover

ISBN 978-94-007-3014-4

- ► £ 199,99 | £180.00
- ► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



D. Barh, Institute of Integrative Omics and Applied Biotechnology (IIOAB), Purba Medinipur, India; D. Dhawan, B.V. Patel Pharmaceutical Education and Research Development Centre, Ahmedabad University, Ahmedabad, India; N. K. Ganguly, Translational Health Science and Technology Institute (Department of Biotechnology Institute, Government of India), Office @ National Institute of Immunology, New Delhi, India (Eds)

Omics for Personalized Medicine

This book details how the pharmacogenomics and omics technologies are transforming the medicine and the health care sector for the better. It covers all aspects of pharmacogenomics and its disease-specific applications.

2013. XVIII, 832 p. 103 illus., 68 illus. in color. Hardcover

ISBN 978-81-322-1183-9

- ► £ 199,99 | £180.00
- ► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- * € (D) 107,00 | € (A) 110,00 | sFr 133,50



S. S. Batsanov, Russian Academy of Sciences Institute of Struct. Macrokinetics, Chernogolovka, Moscow Region, Russia; A. S. Batsanov, Durham University, Durham, UK

Introduction to Structural Chemistry

A concise description of models and quantitative parameters in structural chemistry and their interrelations, with 280 tables and >3000 references giving the most up-to-date experimental data on energy characteristics of atoms, molecules and crystals (ionisation potentials, electron affinities, bond energies, heats of phase transitions, band and lattice energies), optical properties (refractive index, polarisability), spectroscopic characteristics and geometrical parameters (bond distances and angles, coordination numbers) of substances in gaseous, liquid and solid states, in glasses and melts, for various thermodynamic conditions.

2012. X, 542 p. 75 illus., 10 illus. in color. Hardcover ISBN 978-94-007-4770-8

- ► € 149,95 | £135.00
- ► * € (D) 160,45 | € (A) 164,94 | sFr 200,00

Sale Price

- ► €75,00 | £67.99
- ► *€ (D) 80,25 | € (A) 82,50 | sFr 100,00



P. Brodt, McGill University Health Centre Royal Victoria Hospital, Montreal, QC, Canada (Ed)

Liver Metastasis: Biology and Clinical Management

Despite recent advances in surgery, and more aggressive resection, liver metastases still prove fatal in a high proportion of cases. This volume aims to enhance our understanding of the biology of hepatic cancer metastasis, in particular its early stages.

2011. XIV, 446 p. (Cancer Metastasis - Biology and Treatment, Volume 16) Hardcover ISBN 978-94-007-0291-2

- ► € 199,99 | £180.00
- ► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



J. F. Carpenter, M. C. Manning (Eds)

Rational Design of Stable Protein Formulations

Theory and Practice

Recombinant proteins and polypeptides continue to be the most important class of biotechnology-derived agents in today's pharmaceutical industry. Over the past few years, our fundamental understanding of how proteins degrade and how stabilizing agents work has made it possible to approach formulation of protein pharmaceuticals from a much more rational point of view. This book describes the current level of understanding of protein instability and the strategies for stabilizing proteins under a variety of stressful conditions.

2002. XVII, 206 p. (Pharmaceutical Biotechnology, Volume 13) Hardcover ISBN 978-0-306-46741-7

- ► € 219,00 | £193.00
- ► * € (D) 234,33 | € (A) 240,90 | sFr 285,00

Sale Price

- ► € 109,50 | £99.00
- ► * € (D) 117,17 | € (A) 120,45 | sFr 146,00



M. M. de Villiers, University of Wisconsin, Madison School of Pharmacy, Madison, WI, USA; P. Aramwit, Chulalongkorn University Fac. Pharmaceutical Sciences, Bangkok, Thailand; G. S. Kwon, University of Wisconsin, Madison School of Pharmacy, Madison,

Nanotechnology in Drug Delivery

This book explores various fundamental aspects of nanotechnology-based drug delivery systems. It also covers the applications of these systems for the delivery of small molecules, proteins, peptides, oligonucleotides and genes.

2009. (Biotechnology: Pharmaceutical Aspects, X) Hardcover

ISBN 978-0-387-77667-5

- ► £ 199,99 | £179.50
- ► * € (D) 213,99 | € (A) 219,99 | sFr 265,50

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



R. R. Dietert, Cornell University College of Veterinary Medicine, Ithaca, NY, USA; R. W. Luebke, US Environmental Protection Agency, Research Triangle Park, NC, USA (Eds)

Immunotoxicity, Immune Dysfunction, and Chronic Disease

This book approaches the environment-immunedisease triad from the standpoint of the disease. Its coverage of immune dysfunction-based chronic diseases and conditions describes environmental risk factors, immune dysfunctions and overall health consequences.

2012. XVI, 452 p. (Molecular and Integrative Toxicology) Hardcover ISBN 978-1-61779-811-5

- ► € 184,99 | £166.50
- ► * € (D) 197,94 | € (A) 203,49 | sFr 246,00

Sale Price

- ► € 92,50 | £83.50
- ► * € (D) 98,98 | € (A) 101,75 | sFr 123,50



V. A. Erdmann, Free University Berlin Institute of Chemistry/Biochemistry, Berlin, Germany; J. Barciszewski, PAN Poznan Inst. Bioorganic Chemistry, Poznan, Poland (Eds)

From Nucleic Acids Sequences to Molecular Medicine

Written by leading experts in the field, this book covers hot topics such as small interference RNAs for gene silencing in molecular biology and medicine. Includes numerous illustrations.

2012. X, 654 p. (RNA Technologies) Hardcover ISBN 978-3-642-27425-1

- ► £ 199,99 | £180.00
- ► *€ (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- ► *€ (D) 107,00 | € (A) 110,00 | sFr 133,50



P. Gresele, University of Perugia, Perugia, Italy; G. V. Born, The William Harvey Research Institute, London, UK; C. Patrono, Università Cattolica del S. Cuore Istituto di Farmacologia, Roma, Italy; C. P. Page, Sackler Inst. Pulmonary Pharmacology King's College London, London, UK (Eds)

Antiplatelet Agents

The first comprehensive handbook entirely dedicated to all the aspects of antiplatelet therapy, this work surveys pathophysiology, pharmacology and therapy. Coverage incorporates recent achievements, and includes current and novel antiplatelet agents and more.

2012. XII, 616 p. 62 illus., 47 illus. in color. (Handbook of Experimental Pharmacology, Volume 210) Hardcover

ISBN 978-3-642-29422-8

- ► € 309,00 | £278.50
- ► * € (D) 330,63 | € (A) 339,90 | sFr 411,50

Sale Price

- ► € 154,50 | £139.50
- ► * € (D) 165,32 | € (A) 169,95 | sFr 206,00



H. J. ten Donkelaar, Radboud University Nijmegen Medical Center, Nijmegen, Netherlands

Clinical Neuroanatomy

Brain Circuitry and Its Disorders

Knowledge of how parts of the brain interconnect to form functional systems is a prerequisite for the proper understanding of data from all fields in the neurosciences. This volume uses clinical case studies and discusses all the main neurofunctional systems.

2011. XXIV, 834 p. 615 illus., 266 illus. in color. Hardcover

ISBN 978-3-642-19133-6

- **► € 499,00 | £449.50**
- ► * € (D) 533,93 | € (A) 548,90 | sFr 715,50

Sale Price

- ► € 249,50 | £225.00
- ► * € (D) 266,97 | € (A) 274,45 | sFr 332,50



M. A. Geyer, University of California San Diego Dept. Psychiatry, La Jolla, CA, USA; G. Gross, Abbott GmbH & Co. KG Institut für Pharmakologie, Universität, Ludwigshafen, Germany (Eds)

Novel Antischizophrenia Treatments

This volume tries to put current therapy - achievements, shortcomings, remaining medical needs - and emerging new targets into the context of increasing knowledge regarding the genetic and neurodevelopmental contributions to the pathophysiology of schizophrenia. Some of the chapters also deal with respective experimental and clinical methodology, biomarkers, and translational aspects of drug development.

2012. X, 455 p. 20 illus., 15 illus. in color. (Handbook of Experimental Pharmacology, Volume 213) Hardcover

ISBN 978-3-642-25757-5

- ► € 339,00 | £305.50
- ► * € (D) 362,73 | € (A) 372,90 | sFr 451,50

Sale Price

- ► € 169,50 | £153.00
- * € (D) 181,37 | € (A) 186,45 | sFr 226,00



G. Gross, Abbott GmbH & Co. KG Institut für Pharmakologie, Universität, Ludwigshafen, Germany; M. A. Geyer, University of California San Diego Dept. Psychiatry, La Jolla, CA, USA (Eds)

Current Antipsychotics

Six decades after the serendipitous discovery of chlorpromazine as an antipsychotic and four decades after the launch of clozapine, the first atypical or second generation antipsychotic, psychopharmacology has arrived at an important crossroad. It is clear that pharmacological research and pharmaceutical development must now focus on complementary or even alternative mechanisms of action to address unmet medical needs, i.e. poorly treated domains of schizophrenia, improved acceptance by patients, better adherence to medication, safety in psychoses in demented patients, and avoiding cardiac and metabolic adverse effects.

2012. X, 416 p. 19 illus., 9 illus. in color. (Handbook of Experimental Pharmacology, Volume 212) Hardcover ISBN 978-3-642-25760-5

- ► € 309,00 | £278.50
- ► * € (D) 330,63 | € (A) 339,90 | sFr 411,50

- ► € 154,50 | £139.50
- ► * € (D) 165,32 | € (A) 169,95 | sFr 206,00



S. Grün, RIKEN Brain Science Institute Computational Neuroscience Group, Saitama, Japan; S. Rotter, Universität Freiburg Bernstein-Zentrum für Computational Neur, Freiburg, Germany (Eds)

Analysis of Parallel Spike Trains

This is the first book to collect the relevant basic knowledge on analysis of parallel spike trains in a single source. Coverage includes the first steps of stochastic point processes (SPPs) as an appropriate mathematical framework to describe spike trains.

2010. XX, 444 p. (Springer Series in Computational Neuroscience, Volume 7) Hardcover ISBN 978-1-4419-5674-3

- ► € 239,00 | £213.00
- ► * € (D) 255,73 | € (A) 262,90 | sFr 315,00

Sale Price

- ► € 119,50 | £108.00
- ► * € (D) 127,87 | € (A) 131,45 | sFr 159,50



E. Gulbins, University of Duisburg-Essen, Essen, Germany; I. Petrache, Indiana University School of Medicine Division of Pulmonary, Allergy, Critical, Indianapolis, IN, USA (Eds)

Sphingolipids: Basic Science and Drug Development

This book examines the physiological and pathophysiological role of sphingolipids and their derivative ceramide, and their function in cell signalling, tumor metastasis, cardiovascular disease and neuropsychiatric disorders. Explores treatment options.

2013. VIII, 259 p. 90 illus., 30 illus. in color. (Handbook of Experimental Pharmacology, Volume 215) Hardcover

ISBN 978-3-7091-1367-7

- ► £ 269,00 | £242.50
- ► * € (D) 287,83 | € (A) 295,90 | sFr 358,50

Sale Price

- ► € 134,50 | £121.50
- ► * € (D) 143,92 | € (A) 147,95 | sFr 179,50



M. Hayat, Room 213, Library building, Union, NJ, USA (Ed)

Tumors of the Central Nervous System, Volume 2

Gliomas: Glioblastoma (Part 2)

This wide-ranging survey of the field examines a plethora of relevant material, covering issues as diverse as the advantages and limitations of biomarkers in gliomagenesis to the diagnostic applications of imaging methodologies such as PET and SPECT.

2011. XXII, 458 p. (Tumors of the Central Nervous System, Volume 2) Hardcover ISBN 978-94-007-0617-0

- € 199,99 | £180.00
- ► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- * € (D) 107,00 | € (A) 110,00 | sFr 133,50



E. Gulbins, University of Duisburg-Essen, Essen, Germany; I. Petrache, Indiana University School of Medicine Division of Pulmonary, Allergy, Critical, Indianapolis, IN, USA (Eds)

Sphingolipids in Disease

This book provides insight into the physiological and pathophysiological role of sphingolipids and in particular its derivative ceramide. It examines the function of Sphingolipids in cell signaling with regard to diseases.

2013. VIII, 478 p. 38 illus., 33 illus. in color. (Handbook of Experimental Pharmacology, Volume 216) Hardcover

ISBN 978-3-7091-1510-7

- ► € 339,00 | £305.50
- ► * € (D) 362,73 | € (A) 372,90 | sFr 451,50

Sale Price

- ► € 169,50 | £153.00
- * € (D) 181,37 | € (A) 186,45 | sFr 226,00



C. A. Guzmán, Gesellschaft für Biotechnologische Forschung (GBF), Braunschweig, Germany; G. Z. Feuerstein, Wyeth Research, Collegeville, PA, USA (Eds)

Pharmaceutical Biotechnology

This book is a unique compilation of reviews addressing frontiers in biologicals from diverse perspectives, including basic research, biotechnology, protein delivery, pharmaceuticals and vaccinology. It covers a wide array of topics.

2009. (Advances in Experimental Medicine and Biology, Volume 655) Hardcover ISBN 978-1-4419-1131-5

- ► € 219,00 | £193.00
- ► * € (D) 234,33 | € (A) 240,90 | sFr 285,00

Sale Price

- ► € 109,50 | £99.00
- ► * € (D) 117,17 | € (A) 120,45 | sFr 146,00



M. A. Hayat, Kean University Dept. Biological Sciences, Union, NJ, USA (Ed)

Tumors of the Central Nervous System, Volume 1

Gliomas: Glioblastoma (Part 1)

This book presents recent developments in diagnostic and therapeutic aspects of Gliomas (Glioblastoma) in the brain. It examines the importance of personalized medicine and clinical validation for targeted therapy.

2011. XXII, 434 p. (Tumors of the Central Nervous System, Volume 1) Hardcover ISBN 978-94-007-0343-8

- ► € 199,99 | £180.00
- ► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



M. Hayat, Department of Biological Sciences, UNION, NJ, USA (Ed)

Tumors of the Central Nervous system, Volume 3

Brain Tumors (Part 1)

In this book, the classification of brain tumors is updated using magnetic resonance spectroscopy technology. The role of cellular immortality in brain tumors is reviewed. Genetic profiling and treatment (including neurosurgery) of brain cancers are explained.

2011. XXII, 382 p. (Tumors of the Central Nervous System, Volume 3) Hardcover ISBN 978-94-007-1398-7

- € 199,99 | £180.00
- ► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



K. Huynh-Ba, Pharmalytik Consulting Services, Newark, DE, USA (Ed)

Pharmaceutical Stability Testing to Support Global Markets

This book contains the proceedings of the AAPS Stability Workshop. This workshop provides an understanding of the regulatory perspective of stability testing and globally positions the stability program for the 21st century.

2010. (Biotechnology: Pharmaceutical Aspects, XII) Hardcover

ISBN 978-1-4419-0888-9

- ► € 189,99 | £173.00
- ► * € (D) 203,29 | € (A) 208,99 | sFr 255,50

Sale Price

- ▶ € 95,00 | £85.50
- ► *€ (D) 101,65 | € (A) 104,50 | sFr 126,50



Cerebrovascular Research, Cleveland, OH, USA (Ed)

The Cell Cycle in the Central

The Cell Cycle in the Central Nervous System

D. Janigro, Cleveland Clinic Foundation Div.

Cell Cycle in the Central Nervous System overviews the changes in cell cycle as they relate to prenatal and post natal brain development, progression to neurological disease or tumor formation. Topics covered range from the cell cycle during the prenatal development of the mammalian central nervous system to future directions in postnatal neurogenesis through gene transfer, electrical stimulation, and stem cell introduction. Additional chapters examine the postnatal development of neurons and glia, the regulation of cell cycle in glia, and how that regulation may fail in pretumor conditions or following a nonneoplastic CNS response to injury.

2006. (Contemporary Neuroscience) Hardcover ISBN 978-1-58829-529-3

- € 269,00 | £239.50
- ► * € (D) 287,83 | € (A) 295,90 | sFr 354,50

Sale Price

- ► € 134,50 | £121.50
- * € (D) 143,92 | € (A) 147,95 | sFr 179,50



K. Huynh-Ba, Pharmalytik Consulting Services, Newark, DE, USA (Ed)

Handbook of Stability Testing in Pharmaceutical Development

Regulations, Methodologies, and Best Practices

This handbook is the first to cover all aspects of stability testing in pharmaceutical development. Written by a group of international experts, the book presents a scientific understanding of regulations and balances methodologies and best practices.

2009. XVII, 389p. 72 illus.. Hardcover ISBN 978-0-387-85626-1

- ► € 154,99 | £139.50
- ► * € (D) 165,84 | € (A) 170,49 | sFr 206,50

Sale Price

- ► €77,50 | £69.99
- ► * € (D) 82,93 | € (A) 85,25 | sFr 103,50



K. K. Jain, Jain PharmaBiotech, Basel, Switzerland

The Handbook of Biomarkers

This handbook describes many different types of biomarkers and their discovery. It also presents the background information needed for the evaluation of biomarkers as well as the essential procedures for their validation and use in clinical trials.

2010. XX, 488p. 22 illus., 11 illus. in color. Hardcover ISBN 978-1-60761-684-9

- € 169,99 | £153.00
- ► *€ (D) 181,89 | € (A) 186,99 | sFr 226,00

Sale Price

- ► €85,00 | £76.50
- ► * € (D) 90,95 | € (A) 93,50 | sFr 113,50



H.-G. Joost, German Institute of Human Nutrition, Nuthetal, Germany (Ed)

Appetite Control

The volume 'Appetite Control' provides a comprehensive description of the mechanisms controlling food intake, and thereby energy balance, in the mammalian organism. During the last decade, research in this area has produced a remarkable wealth of information and has characterized the function of numerous peptides, transmitters, and receptors in appetite control. Dysfunction of these circuits leads to obesity, a growing health concern. However, the plethora of mechanistic information is in marked contrasts to an almost complete lack of anti-obesity drugs that meet the safety standards required for the chronic therapy of morbid obesity. Consequently, ongoing research aims to identify additional targets and agents for a pharmacological intervention.

2012. X, 474 p. (Handbook of Experimental Pharmacology, Volume 209) Hardcover ISBN 978-3-642-24715-6

- € 339,00 | £305.50
- ► *€ (D) 362,73 | € (A) 372,90 | sFr 451,50

- ► € 169,50 | £153.00
- ► * € (D) 181,37 | € (A) 186,45 | sFr 226,00



H. H. Kimko, Janssen Research & Development, LLC Department of Advanced Modeling & Simula, Raritan, NJ, USA; C. C. Peck, University of California, San Francisco Dept. Biopharmaceutical Sciences, San Francisco, CA, USA (Eds)

Clinical Trial Simulations

Applications and Trends

Clinical Trial Simulations presents an up-to-date overview of CTS, and expands upon the utility of CTS for informing decisions during drug development and regulatory review. Case studies illustrate the current theraputic techniques used today.

2011. XVI, 540 p. (AAPS Advances in the Pharmaceutical Sciences Series, Volume 1) Hardcover ISBN 978-1-4419-7414-3

- ► € 219,00 | £193.00
- ► * € (D) 234,33 | € (A) 240,90 | sFr 285,00

Sale Price

- ► € 109,50 | £99.00
- ► * € (D) 117,17 | € (A) 120,45 | sFr 146,00



R. E. Kontermann, Universität Stuttgart Inst. Zellbiologie und Immunologie, Stuttgart, Germany; S. Dübel, TU Braunschweig Inst. Biochemie und Biotechnologie, Braunschweig, Germany (Eds)

Antibody Engineering Volume 2

This book is a toolbox of well-established basics and many exciting new techniques in antibody engineering, reflecting the latest hands-on work of key laboratories in this fast-moving field. The new edition is expanded to nearly double the number of protocols.

2nd ed. 2010. 600p. 122 illus., 22 illus. in color. Hardcover

ISBN 978-3-642-01146-7

- ► € 199,99 | £180.00
- ► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- ► *€ (D) 107,00 | € (A) 110,00 | sFr 133,50



A. K. Kulshreshtha, O. N. Singh, G. M. Wall, Alcon Research Ltd., Forth Worth, TX, USA (Eds)

Pharmaceutical Suspensions

From Formulation Development to Manufacturing

Pharmaceutical Suspensions describes the fundamentals and theoretical concepts of disperse systems. Readers will find a discussion of the development of pharmaceutical suspensions, in addition to nano-suspensions, an emerging area within the field.

2010. Hardcover

ISBN 978-1-4419-1086-8

- ► € 159,99 | £146.50
- ► *€ (D) 171,19 | € (A) 175,99 | sFr 216,00

Sale Price

- ► €80,00 | £72.00
- ► * € (D) 85,60 | € (A) 88,00 | sFr 106,50



R. E. Kontermann, Universität Stuttgart Inst. Zellbiologie und Immunologie, Stuttgart, Germany; S. Dübel, TU Braunschweig Inst. Biochemie und Biotechnologie, Braunschweig, Germany (Eds)

Antibody Engineering Volume 1

This book is a toolbox of well-established basics and many exciting new techniques in antibody engineering, reflecting the latest hands-on work of key laboratories in this fast-moving field. The new edition is expanded to nearly double the number of protocols.

2nd ed. 2010. 800p. 220 illus., 20 illus. in color. Hardcover

ISBN 978-3-642-01143-6

- ► € 239,00 | £215.50
- ► * € (D) 255,73 | € (A) 262,90 | sFr 318,50

Sale Price

- ► € 119,50 | £108.00
- * € (D) 127,87 | € (A) 131,45 | sFr 159,50



M. R. Kreutz, Leibniz Institute for Neurobiology, Magdeburg, Germany; C. Sala, CR6 CNR-IN Consiglio Nazionale delle Ric, Milano, Italy (Eds)

Synaptic Plasticity

Dynamics, Development and Disease

This book introduces current concepts of molecular mechanisms in synaptic plasticity, and offers a comprehensive overview of cutting-edge technology used to investigate the molecular dynamics of the synapses. Coverage includes clinical and applied aspects.

2012. X, 622 p. (Advances in Experimental Medicine and Biology, Volume 970) Hardcover ISBN 978-3-7091-0931-1

- ► £ 199,99 | £180.00
- ► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



T. K. Kundu, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, India (Ed)

Epigenetics: Development and Disease

Epigenetics fine-tunes the life processes dictated by DNA sequences, but also kick-starts pathophysiological processes including diabetes, AIDS and cancer. This volume tracks the latest research on epigenetics, including work on new-generation therapeutics.

2013. XXVI, 689 p. 70 illus., 56 illus. in color. (Subcellular Biochemistry, Volume 61) Hardcover ISBN 978-94-007-4524-7

- ► € 249,00 | £224.50
- ► * € (D) 266,43 | € (A) 273,90 | sFr 331,50

- ► € 124,50 | £112.50
- ► * € (D) 133,22 | € (A) 136,95 | sFr 166,00



A. Fagot-Largeault, Collège de France Chaire de Philosophie des Sciences, Paris CX 05, France; S. Rahman, Université Lille III UFR de Philosophie, Villeneuve d'Ascq, France; J. M. Torres, Universidad Nacional de Cuyo Facultad de Filosofía y Letras, Mendoza, Argentina (Eds)

The Influence of Genetics on Contemporary Thinking

1. INTRODUCTION Definedasthebranchofbiologydealingwithheredityandthemechanicsofgene transmission from one generation to the next, genetics first made its appearance on the scientific scene at the beginning of the 20th century when H. de Vries, C. Correns and E. von Tschermak rediscovered the extraordinary experimental work of Mendel.

2007. LVI, 216 p. (Logic, Epistemology, and the Unity of Science, Volume 6) Hardcover ISBN 978-1-4020-5663-5

- ► € 219,00 | £197.50
- ► * € (D) 234,33 | € (A) 240,90 | sFr 292,00

Sale Price

- ► € 109,50 | £99.00
- ► * € (D) 117,17 | € (A) 120,45 | sFr 146,00



R. Martin, Universitätsklinikum Hamburg-Eppendorf Institut für Neuroimmunologie und, Hamburg, Germany; A. Lutterotti, Innsbruck Medical University, Innsbruck, Austria (Eds)

Molecular Basis of Multiple Sclerosis

The Immune System

Despite major efforts by the scientific community, our understanding of the pathogenesis or the mechanisms of injury of multiple sclerosis is still limited. This book investigates the molecular basis of multiple sclerosis and summarizes recent advances.

2010. VIII, 308 p. (Results and Problems in Cell Differentiation, Volume 51) Hardcover ISBN 978-3-642-14152-2

- ► £ 229,00 | £206.50
- ► * € (D) 245,03 | € (A) 251,90 | sFr 305,00

Sale Price

- ► € 114,50 | £103.50
- * € (D) 122,52 | € (A) 125,95 | sFr 152,50



A. Mozayani, Harris County Institute of Forensic Scie, Houston, TX, USA; L. Raymon, Homestead, FL, USA (Fds)

Handbook of Drug Interactions

A Clinical and Forensic Guide

Adverse drug reactions and interactions remain a major healthcare issue. This fully updated and revised new edition of the indispensible guide to drug interactions includes fresh research on pharmacogenomics as well as an expanded section on illicit drugs.

2nd ed. 2012. XI, 828p. 60 illus., 18 illus. in color. Hardcover

ISBN 978-1-61779-221-2

- € 169,95 | £153.00
- ► * € (D) 181,85 | € (A) 186,94 | sFr 244,00

Sale Price

- ► €85,00 | £76.50
- * € (D) 90,95 | € (A) 93,50 | sFr 113,50



R. Lever, University of London School of Pharmacy, London, UK; B. Mulloy, National Institute for Biological Standards and Control, Potters Bar, Herts., UK; C. P. Page, Sackler Inst. Pulmonary Pharmacology King's College London, London, UK (Eds)

Heparin - A Century of Progress

Heparins remain amongst the most commonly used drugs in clinical practice. Almost 100 years have passed since the initial discovery of this complex substance and, during this time, understanding of the nature and uses of heparin and related molecules has grown dramatically. The aim of this volume is to summarise the developments that have led to the current status of both heparins as drugs and the field of heparin research, with a focus on the particularly rapid progress that has been made over the past three decades.

2012. XIV, 462 p. (Handbook of Experimental Pharmacology, Volume 207) Hardcover ISBN 978-3-642-23055-4

- € 309,00 | £278.50
- ► * € (D) 330,63 | € (A) 339,90 | sFr 411,50

Sale Price

- ► € 154,50 | £139.50
- ► * € (D) 165,32 | € (A) 169,95 | sFr 206,00



S. Morand, B. Krasnov, R. Poulin (Eds)

Micromammals and Macroparasites

From Evolutionary Ecology to Management

Small mammals are among the most ubiquitous and important components of terrestrial ecosystems. They have coevolved, and now coexist, with a diverse array of parasites, such that not only are all aspects of their biology influenced by parasitism but they also play key roles in the transmission and maintenance of parasitic diseases. This book provides a comprehensive survey of the diversity and biology of metazoan parasites affecting small mammals, of their impact on host individuals and populations, and of the management implications of these parasites for conservation biology and human welfare.

2006. XV, 647 p. 79 illus. Hardcover ISBN 978-4-431-36024-7

- ► € 279,00 | £251.00
- ► * € (D) 298,53 | € (A) 306,90 | sFr 400,50

Sale Price

- ► € 139,50 | £126.00
- * € (D) 149,27 | € (A) 153,45 | sFr 186,00



A. Mozayani, Harris County Institute of Forensic Scie, Houston, TX, USA; **C. Noziglia,** Aiken, SC, USA (Eds)

The Forensic Laboratory Handbook Procedures and Practice

With the scope of forensic science expanding apace, this new edition of the classic handbook on the subject is indispensable. It includes more than a dozen new chapters from real-life practitioners and covers all the key topics as well as many fresh issues.

2nd ed. 2011. XII, 600p. 180 illus., 110 illus. in color. Hardcover

ISBN 978-1-60761-871-3

- € 209,00 | £186.50
- ► * € (D) 223,63 | € (A) 229,90 | sFr 275,50

- ► € 104,50 | £94.50
- * € (D) 111,82 | € (A) 114,95 | sFr 139,50



M. M. Mueller, Villingen-Schwenningen, Germany; N. E. Fusenig, Heidelberg, Germany (Eds)

Tumor-Associated Fibroblasts and their Matrix

This is the first comprehensive compilation of expert reviews on tumor stroma and its role in tumor biology important for basic and clinical cancer researchers. It contains contributions from experts in this important field in cancer research and therapy.

2011. XVI, 456 p. (The Tumor Microenvironment, Volume 4) Hardcover ISBN 978-94-007-0658-3

- ► £ 199,99 | £180.00
- ► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



K. D. Murrell, Foodborne Parasitic Zoonoses Campaign, Rockville, MD, USA; B. Fried, Lafayette College, Easton, PA, USA (Eds)

Food-Borne Parasitic Zoonoses

Fish and Plant-Borne Parasites

Humans suffer from numerous parasitic foodborne zoonoses, many of which are caused by helminths. The helminth zoonoses of concern in this book are normally limited to diseases of animals which have now become transmissible to humans. In the past these diseases were limited to populations living in low- and middle-income countries, but the geographical limits and populations at risk are expanding and changing because of growing international markets , improved transportation systems, and demographic changes (such as population movements).

2007. (World Class Parasites, Volume 11) Hardcover ISBN 978-0-387-71357-1

- € 239,00 | £213.00
- ► * € (D) 255,73 | € (A) 262,90 | sFr 315,00

Sale Price

- ► € 119,50 | £108.00
- ► *€ (D) 127,87 | € (A) 131,45 | sFr 159,50



A. Petronis, Centre for Addiction and Mental Health, Toronto, ON, Canada; J. Mill, King's College London, London, UK (Eds)

Brain, Behavior and Epigenetics

Epigenetics, once believed stable after development, has been found to occur in fully differentiated, post-mitotic central nervous system cells in response to environmental signals. This book explores the role of epigenetic risk factors in complex diseases.

2011. XVI, 320 p. (Epigenetics and Human Health) Hardcover

ISBN 978-3-642-17425-4

- ► € 199,99 | £180.00
- ► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- * € (D) 107,00 | € (A) 110,00 | sFr 133,50



M. Müller, Medical University Vienna Allgemeines Krankenhaus, Vienna, Austria (Ed)

Microdialysis in Drug Development

Microdialysis is vital to drug development, with in vivo target-site concentrations a key determinant of a drug's effectiveness. This volume covers all current microdialysis technology, as well as general and disease-specific aspects of the techniques.

2013. XI, 338 p. 55 illus., 29 illus. in color. (AAPS Advances in the Pharmaceutical Sciences Series, Volume 4) Hardcover

ISBN 978-1-4614-4814-3

- ► € 149,95 | £135.00
- ► * € (D) 160,45 | € (A) 164,94 | sFr 200,00

Sale Price

- ► €75,00 | £67.99
- ▶ * € (D) 80,25 | € (A) 82,50 | sFr 100,00



B. Nickerson, Pfizer Inc. Pfizer Global Research & Development, Groton, CT, USA (Ed)

Sample Preparation of Pharmaceutical Dosage Forms

Challenges and Strategies for Sample Preparation and Extraction

This book is a resource for analysts in developing and troubleshooting sample preparation methods, which are critical activities in providing accurate data throughout the lifecycle of a drug product. Multiple examples and case studies are presented.

2011. XIV, 397p. 88 illus., 31 illus. in color. Hardcover ISBN 978-1-4419-9630-5

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

Sale Price

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



V. Regitz-Zagrosek, Charité - Universitätsmedizin Berlin Institute of Gender in Medicine (GiM), Berlin, Germany (Ed)

Sex and Gender Differences in Pharmacology

A trailblazing assessment of sex and gender differences in reactions to drug therapy, this volume reflects the topic's growing recognition. Analyses by international experts on both pharmacokinetics and drug development are informed by an extensive data set.

2012. IX, 600 p. 37 illus., 22 illus. in color. (Handbook of Experimental Pharmacology, Volume 214) Hardcover

ISBN 978-3-642-30725-6

- ► € 339,00 | £305.50
- ► * € (D) 362,73 | € (A) 372,90 | sFr 451,50

- ► € 169,50 | £153.00
- * € (D) 181,37 | € (A) 186,45 | sFr 226,00



R. R. Resende, Universidade Federal de Minas Gerais, Belo Horizonte, Brazil; H. Ulrich, Universidade de São Paulo Inst. Química, São Paulo, Brazil (Eds)

Trends in Stem Cell Proliferation and Cancer Research

This book details the molecular mechanisms of cancer diseases, stem cell proliferation and transformation into cancer cells beyond the physiological processes that occur in normal stem cell biology.

2013. XVIII, 661 p. 77 illus., 58 illus. in color. Hardcover

ISBN 978-94-007-6210-7

- ► £ 199,99 | £180.00
- ► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



R. Russell, University of Texas, Austin, TX, USA (Ed)

Biophysics of RNA Folding

This volume, written by experts in the field, discusses the current understanding of the biophysical principles that govern RNA folding, with featured RNAs including the ribosomal RNAs, viral RNAs, and self-splicing introns.

2013. VI, 236 p. 71 illus., 55 illus. in color. (Biophysics for the Life Sciences, Volume 3) Hardcover ISBN 978-1-4614-4953-9

- ► £ 149,95 | £135.00
- ► *€ (D) 160,45 | € (A) 164,94 | sFr 200,00

Sale Price

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



J. P. Seiler

Good Laboratory Practice

the Why and the How

After more than twenty years of use Good Laboratory Practice, or GLP, has attained a secure place in the world of testing chemicals and other "test items" with regard to their safety for humans and the environment. Gone are the days when the GLP regulations were hotly debated amongst scientists in academia and industry and were accused of stifling flexibility in, imaginative approaches to, and science-based conduct of, all kinds of studies concerned with toxic effects and other parameters important for the evaluation and assessment of products submitted for registration and permission to market.

2nd ed. 2005. XII, 424 p. 38 illus. Hardcover ISBN 978-3-540-25348-8

- € 229,00 | £206.50
- ► * € (D) 245,03 | € (A) 251,90 | sFr 305,00

Sale Price

- ► € 114,50 | £103.50
- ► * € (D) 122,52 | € (A) 125,95 | sFr 152,50



K. A. Roubelakis-Angelakis, University of Crete Dept. Biology, Iraklion, Crete, Greece (Ed)

Grapevine Molecular Physiology & Biotechnology

Publication of the grapevine genome sequence in 2007 opened new doors in grapevine research. This edition contains ten chapters describing new aspects of grapevine molecular physiology and biotechnology and eleven chapters that have been updated and revised.

2nd ed. 2009. XXXVI, 610 p. Hardcover ISBN 978-90-481-2304-9

- ► € 219,00 | £197.50
- ► * € (D) 234,33 | € (A) 240,90 | sFr 292,00

Sale Price

- ► € 109,50 | £99.00
- ► * € (D) 117,17 | € (A) 120,45 | sFr 146,00



N. W. Schultheiss, RM 109, Boston, MA, USA; A. A. Prinz, Emory University Dept. Biology, Atlanta, GA, USA; R. J. Butera, Georgia Institute of Technology School of Electrical &, Atlanta, GA, USA (Eds)

Phase Response Curves in Neuroscience

Theory, Experiment, and Analysis

Inspired by response to a workshop at the 2008 OCNS meeting, this book tracks advances in the application of phase response (PR) analysis to the study of electrically excitable cells, focusing on applications of PR analysis in the computational neurosciences.

2012. XIV, 518 p. (Springer Series in Computational Neuroscience, Volume 6) Hardcover ISBN 978-1-4614-0738-6

- ► € 209,00 | £186.50
- ► * € (D) 223,63 | € (A) 229,90 | sFr 275,50

Sale Price

- ► € 104,50 | £94.50
- ► *€ (D) 111,82 | € (A) 114,95 | sFr 139,50



R. Sen, Indian Institute of Technology Kharagpur Dept. Biotechnology, Kharagpur, India (Ed)

Biosurfactants

This book highlights progress in research on biosurfactants, offering critical reviews and analysis of novel screening methods, metabolic pathway engineering, and innovative process development and application strategies, including commercial prospects.

2010. XXVIII, 331 p. (Advances in Experimental Medicine and Biology, Volume 672) Hardcover ISBN 978-1-4419-5978-2

- € 239,00 | £213.00
- ► * € (D) 255,73 | € (A) 262,90 | sFr 315,00

- ► € 119,50 | £108.00
- ► *€ (D) 127,87 | € (A) 131,45 | sFr 159,50



S. J. Shire, Genentech Inc., San Francisco, CA, USA; W. Gombotz, Omeros Corporation, Seattle, WA, USA; K. Bechtold-Peters, Boehringer Ingelheim Pharma KG, Biberach, Germany; J. Andya, Genentech, Inc., South San Francisco, CA, USA (Eds)

Current Trends in Monoclonal Antibody Development and Manufacturing

This volume provides an understanding of the development, manufacturing techniques, and requirements of monoclonal antibodies. Covering one of the fastest growing areas of drug development, readers will find an informative text that describes the parameters for a successful regulatory submission.

2010. XIV, 354 p. (Biotechnology: Pharmaceutical Aspects, XI) Hardcover ISBN 978-0-387-76642-3

- ► € 229,00 | £199.50
- ► * € (D) 245,03 | € (A) 251,90 | sFr 295,00

Sale Price

- ► € 114,50 | £103.50
- ► * € (D) 122,52 | € (A) 125,95 | sFr 152,50



M. Singh, Novartis Vaccines Research, Cambridge, MA, USA (Ed)

Novel Immune Potentiators and Delivery Technologies for Next Generation Vaccines

This book outlines the critical steps that need to be considered for successful development of various types of nanoparticulate delivery systems for vaccine antigens. Coverage includes clinical evaluations with these novel vaccine technologies.

2013. X, 369 p. 59 illus., 39 illus. in color. Hardcover ISBN 978-1-4614-5379-6

- ► € 249,00 | £224.50
- ► *€ (D) 266,43 | € (A) 273,90 | sFr 331,50

Sale Price

- ► € 124,50 | £112.50
- ► * € (D) 133,22 | € (A) 136,95 | sFr 166,00



R. K. Srivastava, S. Shankar, University of Kansas Medical Center, Kansas City, KS, USA (Eds)

Stem Cells and Human Diseases

The main objective of this book is to provide a comprehensive review on stem cells and their role in tissue regeneration, homeostasis and therapy. In addition, the role of cancer stem cells in cancer initiation, progression and drug resistance are discussed. The cell signaling pathways and microRNA regulating stem cell self-renewal, tissue homeostasis and drug resistance are also mentioned. Overall, these reviews will provide a new understanding of the influence of stem cells in tissue regeneration, disease regulation, therapy and drug resistance in several human diseases.

2012. X, 630 p. Softcover ISBN 978-94-017-8471-9

- ► £ 199,95 | £180.00
- ► * € (D) 213,95 | € (A) 219,94 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



J. Siepmann, Phalempin, France; R. A. Siegel, University of Minnesota, Minneapolis, MN, USA; M. J. Rathbone, Griffith University, Southport, QLD, Australia (Eds)

Fundamentals and Applications of Controlled Release Drug Delivery

Pitched at a level comprehensible to those new to the field, this authoritative text covers the scientific and technological fundamentals of drug delivery as well as clinical applications and the developmental potential in controlled release drug delivery.

2012. XIV, 594 p. (Advances in Delivery Science and Technology) Hardcover ISBN 978-1-4614-0880-2

- ► € 209,00 | £186.50
- ► * € (D) 223,63 | € (A) 229,90 | sFr 275,50

Sale Price

- ► € 104,50 | £94.50
- ► * € (D) 111,82 | € (A) 114,95 | sFr 139,50



H. D. Smyth, University of Texas, Austin, USA; A. J. Hickey, University of North Carolina Eshelman School of Pharmacy, Chapel Hill, NC, USA (Eds)

Controlled Pulmonary Drug Delivery

The pace of new research and level of innovation repeatedly introduced into the field of drug delivery to the lung is surprising given its state of maturity since the introduction of the pressurized metered dose inhaler over a half a century ago. It is clear that our understanding of pulmonary drug delivery has now evolved to the point that inhalation aerosols can be controlled both spatially and temporally to optimize their biological effects. These abilities include controlling lung deposition, by adopting formulation strategies or device technologies, and controlling drug uptake and release through sophisticated particle technologies.

2011. XIV, 558 p. (Advances in Delivery Science and Technology) Hardcover ISBN 978-1-4419-9744-9

- ► € 209,00 | £186.50
- ► * € (D) 223,63 | € (A) 229,90 | sFr 275,50

Sale Price

- ► € 104,50 | £94.50
- ► * € (D) 111,82 | € (A) 114,95 | sFr 139,50



M. M. Stark, Sydney, NSW, Australia (Ed)

Clinical Forensic Medicine

A Physician's Guide

This third edition of the definitive text on clinical forensic medicine has been extensively revised to reflect the subject's growing recognition as a specialist discipline, and features fresh international perspectives as well as a new chapter on the TASER.

3rd ed. 2011. XVIII, 473p. 36 illus., 12 illus. in color. Hardcover

ISBN 978-1-61779-257-1

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

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



M. E. Symonds, University Hospital Queen's Medical Centre, Nottingham, UK (Ed)

Adipose Tissue Biology

Adipose Tissue Biology provides comprehensive insight into current perspectives and challenges in the field. Both scientists and clinicians discuss topics like adipocyte precursors, differentiation and growth, brown and white adipose tissue, and more.

2012. VI, 414 p. Hardcover ISBN 978-1-4614-0964-9

► € 149.95 | £135.00

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

Sale Price

- ► €75,00 | £67.99
- * € (D) 80,25 | € (A) 82,50 | sFr 100,00



B. A. Teicher, National Cancer Institute, Rockville, MD, USA (Ed)

Tumor Models in Cancer Research

Since the first edition of this book there has been great progress in the development of genetically engineered mouse (GEM) models of cancer. This revised and updated edition comprehensively describes the state-of-the-art in animal tumor model research.

2nd ed. 2011. XIV, 693p. (Cancer Drug Discovery and Development) Hardcover ISBN 978-1-60761-967-3

► £ 249,00 | £219.50

► * € (D) 266,43 | € (A) 273,90 | sFr 324,50

Sale Price

- ► € 124,50 | £112.50
- ► * € (D) 133,22 | € (A) 136,95 | sFr 166,00



D. J. Tindall, Mayo Clinic College of Medicine, Rochester, MN, USA (Ed)

Prostate Cancer

Biochemistry, Molecular Biology and Genetics

This book reviews biochemistry, molecular biology and genetic changes in prostate cells that are the driving forces in the initiation and progression of cancer. Surveys cell interactions, including stem cells, reactive Stromal cells and membrane lipid rafts.

2013. XII, 522 p. (Protein Reviews, Volume 16) Hardcover

ISBN 978-1-4614-6827-1

► € 169.99 | £153.00

► * € (D) 181,89 | € (A) 186,99 | sFr 226,50

Sale Price

- ▶ €85,00 | £76.50
- * € (D) 90,95 | € (A) 93,50 | sFr 113,50



Y.-W. Tang, Memorial Sloan-Kettering Cancer Center Department of Laboratory Medicine, New York, NY, USA; C. W. Stratton, Vanderbilt University Medical Center Vanderbilt Clinic, Nashville, TN, USA (Eds)

Advanced Techniques in Diagnostic Microbiology

This newly updated edition of the well informed guide covers the more advanced and less cumbersome methods of analysis that embattled hospital microbiology labs must adopt to replace the slow and cumbersome culture-based assays of pathogenic microorganisms.

2nd ed. 2013. X, 957 p. 132 illus., 79 illus. in color. Hardcover

ISBN 978-1-4614-3969-1

- ► € 199,95 | £180.00
- ► * € (D) 213,95 | € (A) 219,94 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50

9 781461 439691

M. K. Thakur, Banaras Hindu University, Varanasi, India; S. I. Rattan, Aarhus University, Aarhus-C, Denmark (Eds)

Brain Aging and Therapeutic Interventions

This book details the current status of research on brain aging. It contains knowledge about molecular alterations and the targets for interventions as well as identifies cognitive impairment and therapeutic interventions.

2013. XII, 296 p. 36 illus., 16 illus. in color. Hardcover ISBN 978-94-007-5236-8

- ► € 149,95 | £135.00
- ► * € (D) 160,45 | € (A) 164,94 | sFr 200,00

Sale Price

- ▶ €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



Y.-K. Tu, D. C. Greenwood, Division of Biostatistics Leeds Institute of Genetics, Leeds, UK (Eds)

Modern Methods for Epidemiology

Discussing cutting-edge statistical methods for epidemiology and biomedical research that cannot be found in most textbooks, such as latent growth curve models, this volume reflects the fact that recent years have seen a huge rise in desk-top computing power.

2012. XII, 316 p. Hardcover ISBN 978-94-007-3023-6

- ► £ 149,95 | £135.00
- ► * € (D) 160,45 | € (A) 164,94 | sFr 200,00

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



X. W. Wang, National Institute of Health Lab. Human Carcinogenesis, Bethesda, MD, USA; J. W. Grisham, S. S. Thorgeirsson, National Institute of Health Lab. Experimental Carcinogenesis, Bethesda, MD, USA (Eds)

Molecular Genetics of Liver Neoplasia

Primary liver cancer is the third most deadly and fifth most common cancer worldwide. This book offers an exciting overview of the advances in the genetics and biology of liver cancer, diagnosis, treatment and prevention.

2011. XIV, 399 p. (Cancer Genetics) Hardcover ISBN 978-1-4419-6081-8

- ► £219,00 | £193.00
- ► * € (D) 234,33 | € (A) 240,90 | sFr 285,00

Sale Price

- ► € 109,50 | £99.00
- * € (D) 117,17 | € (A) 120,45 | sFr 146,00



W. D. Wick, Seattle, WA, USA; O. O. Yang, UCLA Medical Center Geffen School of Medicine, Los Angeles, CA, USA

War in the Body

The Evolutionary Arms Race Between HIV and the Human Immune System and the Implications for Vaccines

This book surveys the wide evolutionary variations of HIV and the different, sometimes opposing theories which try to explain them. It compares ways that drugs and the immune system affect the virus's evolution, and the implications for vaccine development.

2013. XIX, 298 p. 51 illus., 4 illus. in color. Hardcover ISBN 978-1-4614-7293-3

- ► € 249,00 | £224.50
- ► * € (D) 266,43 | € (A) 273,90 | sFr 331,50

Sale Price

- ► € 124,50 | £112.50
- ► * € (D) 133,22 | € (A) 136,95 | sFr 166,00



C. G. Wilson, Strathclyde Institute of Pharmacy The John Arbuthnott Building, Glasgow, UK; P. J. Crowley, Devon, PA, USA (Eds)

Controlled Release in Oral Drug Delivery

There are many ways in which controlled release optimizes drug performance. This volume includes contributions from academics and R & D technicians alike, which cover every facet of the subject, from physiology of the gastrointestinal tract to polymer science.

2011. XIV, 414 p. (Advances in Delivery Science and Technology) Hardcover ISBN 978-1-4614-1003-4

- ► * € (D) 223,63 | € (A) 229,90 | sFr 275,50

Sale Price

- ► € 104,50 | £94.50
- ► * € (D) 111,82 | € (A) 114,95 | sFr 139,50



X. Wang, Jiangnan University, Wuxi, China, People's Republic; J. Chen, Jiangnan University School of Biotechnology, Wuxi, China, People's Republic; P. Quinn, King's College London, London, UK (Eds)

Reprogramming Microbial Metabolic Pathways

Metabolic engineering has been developed over the past 20 years to become an important tool for the rational engineering of industrial microorganisms. This book has a particular interest in the methods and applications of metabolic engineering to improve the production and yield of a variety of different metabolites. The overall goal is to achieve a better understanding of the metabolism in different microorganisms, and provide a rational basis to reprogram microorganisms for improved biochemical production.

2012. XIV, 441 p. 84 illus., 24 illus. in color. (Subcellular Biochemistry, Volume 64) Hardcover ISBN 978-94-007-5054-8

- ► € 189,95 | £171.00
- ► * € (D) 203,25 | € (A) 208,94 | sFr 253,00

Sale Price

- ► € 95,00 | £85.50
- * € (D) 101,65 | € (A) 104,50 | sFr 126,50

9 789400 750548

R. O. Williams III, University of Texas at Austin, Austin, USA; A. B. Watts, University of Texas College of Pharmacy, Austin, TX, USA; D. A. Miller, Hoffmann-La Roche, Inc., Nutley, USA (Eds)

Formulating Poorly Water Soluble Drugs

This book highlights recent advancements on technologies to improve the dissolution and bio-availability of poorly water soluble drugs. It details the most current knowledge, practical methods, and regulatory considerations.

2012. XII, 648 p. (AAPS Advances in the Pharmaceutical Sciences Series, Volume 3) Softcover ISBN 978-1-4899-8592-7

- ► € 199,95 | £180.00
- ► * € (D) 213,95 | € (A) 219,94 | sFr 266,50

Sale Price

- ► €100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



P. Wooding, G. Burton, University of Cambridge Dept. Physiology, Cambridge, UK

Comparative Placentation

Structures, Functions and Evolution

This book features a unique collection of the best Light and Electron micrographs [all with full authorisation to use] from the last 35 years which illustrate the structural range in each vertebrate taxon. These are reinforced by a series of line diagrams.

2008. Hardcover ISBN 978-3-540-78796-9

- ► £ 219,00 | £197.50
- ► * € (D) 234,33 | € (A) 240,90 | sFr 292,00

- ► € 109,50 | £99.00
- ► * € (D) 117,17 | € (A) 120,45 | sFr 146,00



J. C. Wright, Los Altos, USA; D. J. Burgess, Storrs, CT, USA (Eds)

Long Acting Injections and Implants

This book surveys the field of long acting injections and implants, which improve therapy, enhance patient compliance, and enhance dosing convenience. Topics include the historical development of drugs and diseases, and clinical applications for long acting injections and implants.

2012. XVI, 560 p. (Advances in Delivery Science and Technology) Hardcover ISBN 978-1-4614-0553-5

- ► € 209,00 | £186.50
- ► * € (D) 223,63 | € (A) 229,90 | sFr 275,50

Sale Price

- ► € 104,50 | £94.50
- * € (D) 111,82 | € (A) 114,95 | sFr 139,50



J. M. Aguilera, Pontificia Universidad Católica de Chile Dept. de Ingeniería Química y Bioproceso, Santiago, Chile; P. J. Lillford, University of York Department of Biology, Heslington, York, UK (Eds)

Food Materials Science

Principles and Practice

Food Materials Science provides the science behind structuring processes for foods and applications in food product design. The first in its field, the book is an invaluable reference. The creation of added value from raw food materials is a legitimate aspiration of the modern food industry. Adding value to foods requires knowledge of what the consumer wants and creating products that satisfy the demand. Quality, convenience and safety are the major drivers of the modern food industry.

2008. (Food Engineering Series) Hardcover ISBN 978-0-387-71946-7

- ► £ 199,99 | £179.50
- ► * € (D) 213,99 | € (A) 219,99 | sFr 265,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



Topics in Organometallic Chemistry

A. Fürstner, F. Glorius, P. H. Dixneuf, Series editors: M. Beller, L. A. Oro, T. Ikariya, Q.-L. Zhou, J. M. Brown, L. J. Gooßen, J. Dupont, S. Nolan, J. Okuda

Volume 42

M. Beller, Universität Rostock Leibniz-Institut für, Rostock, Germany; H.-U. Blaser, St. Gallen, Switzerland (Eds)

Organometallics as Catalysts in the Fine Chemical Industry

2012. XI, 154 p. 43 illus., 2 illus. in color. Hardcover ISBN 978-3-642-32832-9

- ► € 189,95 | £171.00
- ► * € (D) 203,25 | € (A) 208,94 | sFr 253,00

Sale Price

- ▶ €95,00 | £85.50
- ► * € (D) 101,65 | € (A) 104,50 | sFr 126,50



T. Yamamura, National Center of Neurology and Psychia, Tokyo, Japan; **B. Gran**, University of Nottingham, Nottingham, UK (Eds)

Multiple Sclerosis Immunology

A Foundation for Current and Future Treatments

This book looks at multiple sclerosis immunology as the basis for the present and—even more—the future of treatments for this complex autoimmune condition.

2013. XVII, 461 p. 46 illus., 38 illus. in color. Hardcover ISBN 978-1-4614-7952-9

- ► £ 149,99 | £135.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 200,00

Sale Price

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



Topics in Current Chemistry

M. J. Krische, J.-M. Lehn, J. Thiem, K. N. Houk, C. A. Hunter, M. Venturi, M. Olivucci, H. N. Wong, C.-H. Wong, Series editors: H. Bayley, R. Luque, K. Ishihara, J. S. Siegel, G. Hughes

Volume 319

M. Albrecht, Institut für Organische Chemie, Aachen, Germany; F. E. Hahn, WWU Münster Inst. für Anorg. und Analyt. Chemie, Münster, Germany (Eds)

Chemistry of Nanocontainers

Molecular Cages and Capsules with Functionalized Inner Surfaces, by Stefan Kubik. Drug Delivery by Water-Soluble Organ metallic Cages, by Bruno Therrien. Reversibly Expanded Encapsulation Complexes, by Dariush Ajami und Julius Rebek. Container Molecules Based on Imine Type Ligands, by A. Carina Schulze und Iris M. Oppel.

2012. XI, 173p. 117 illus., 87 illus. in color. Hardcover ISBN 978-3-642-28058-0

- ► € 219,00 | £197.50
- ► *€ (D) 234,33 | € (A) 240,90 | sFr 292,00

Sale Price

- ► € 109,50 | £99.00
- ► *€ (D) 117,17 | € (A) 120,45 | sFr 146,00



R. G. Berger, Universität Hannover FB Chemie, Hannover, Germany (Ed)

Flavours and Fragrances

Chemistry, Bioprocessing and Sustainability

Our ancestors lived in intimacy with nature and knew well that their survival depended on a safe and fertile environment. The first definition of the modern term "sustainability" is usually ascribed to forest chief captain H. C. von Carlowitz, who in 1713 in his Sylvicultura Oeconomica formulated principles for a sensible economy of wood.

2007. XVI, 648 p. Hardcover ISBN 978-3-540-49338-9

- € 159,99 | £144.00
- ► * € (D) 171,19 | € (A) 175,99 | sFr 213,00

- ► €80,00 | £72.00
- * € (D) 85,60 | € (A) 88,00 | sFr 106,50



Topics in Current Chemistry

M. J. Krische, J.-M. Lehn, J. Thiem, K. N. Houk, C. A. Hunter, M. Venturi, M. Olivucci, H. N. Wong, C.-H. Wong, Series editors: H. Bayley, R. Luque, K. Ishihara, J. S. Siegel, G. Hughes

Volume 316

M. Billeter, V. Orekhov, Göteborg University, Göteborg, Sweden (Eds)

Novel Sampling Approaches in Higher Dimensional NMR

Concepts in Projection-Reconstruction, by Ray Freeman and Ēriks Kupče.- Automated Projection Spectroscopy and Its Applications, by Sebastian Hiller and Gerhard Wider.

2012. XVI, 152 p. Hardcover ISBN 978-3-642-27159-5

► € 219,00 | £197.50

► * € (D) 234,33 | € (A) 240,90 | sFr 292,00

Sale Price

- ► € 109,50 | £99.00
- ► * € (D) 117,17 | € (A) 120,45 | sFr 146,00



C. Boyadjiev, Bulgarian Academy of Sciences (BAS) Inst. Chemical Engineering (IChE), Sofia, Bulgaria

Theoretical Chemical Engineering

Modeling and Simulation

This book presents theoretical methods of chemical engineering for modeling and simulation of industrial processes. It uses mechanics of continuous media approach for modeling the simple processes as hydrodynamic processes, mass and heat transfer processes.

2010. XXIX, 600p. 100 illus.. Hardcover ISBN 978-3-642-10777-1

- ► £ 199,99 | £180.00
- ► *€ (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



C. Comninellis, Ecole Polytech. Fed. Lausanne Dept. Chemical Engineering, Lausanne, Switzerland; G. Chen, Hong Kong University of Science and Technology, Kowloon, Hong Kong SAR (Eds)

Electrochemistry for the Environment

This book covers a wide array of electrochemistry applications to environmental problems. It includes emerging technologies such as electrophotooxidation and electro disinfection, and it also analyzes electrochemical technologies in sludge and soil treatment.

2010. XII, 563 p. Hardcover ISBN 978-0-387-36922-8

- € 169,99 | £153.00
- ► * € (D) 181,89 | € (A) 186,99 | sFr 226,00

Sale Price

- ► €85,00 | £76.50
- ► * € (D) 90,95 | € (A) 93,50 | sFr 113,50



J. I. Boullata, University of Pennsylvania School of Nursing, Philadelphia, PA, USA; V. T. Armenti, Temple University Hospital Dept. Surgery, Philadelphia, PA, USA (Eds)

Handbook of Drug-Nutrient Interactions

This work provides a scientific look behind many drug-nutrient interactions, examines their relevance, offers recommendations, and suggests research questions to be explored. The text has been extensively revised and updated from the first edition.

2nd ed. 2010. XXVIII, 824 p. 11 illus. (Nutrition and Health) Hardcover

ISBN 978-1-60327-363-3

- ► € 199,99 | £179.50
- ► * € (D) 213,99 | € (A) 219,99 | sFr 265,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



J.-L. Burgot, Université Rennes I Fac. Pharmacie, Rennes CX, France

Ionic Equilibria in Analytical Chemistry

This book examines the chemical and physical principles of different operations of chemical analysis in aqueous solutions. It explains how various analytical methods help calculate the different species that result from equilibria in aqueous solutions.

2012. XXIV, 772 p. Hardcover ISBN 978-1-4419-8381-7

- ► € 169,95 | £153.00
- ► *€ (D) 181,85 | € (A) 186,94 | sFr 226,50

Sale Price

- ► €85,00 | £76.50
- ► *€ (D) 90,95 | € (A) 93,50 | sFr 113,50



Advances in Polymer Science

U. Wiesner, B. Voit, T. E. Long, Series editors: A. Abe, A.-C. Albertsson, G. W. Coates, M. Möller, L. Leibler, E. M. Terentjev, S. Kobayashi, K.-S. Lee, M. J. Vicent, J. Genzer, B. Z. Tang, X. Zhang, O. Okay, V. Percec

Volume 250

W. H. de Jeu, RWTH Aachen University DWI, Aachen, Germany (Ed)

Liquid Crystal Elastomers: Materials and Applications

Preparation of Liquid Crystalline Elastomers.-Applications of Liquid Crystalline Elastomers.-Liquid Crystal Elastomers and Light.- Electro-Opto-Mechanical Effects in Swollen Nematic Elastomers.- The Isotropic-to-Nematic Conversion in Liquid Crystalline Elastomers.- Order and Disorder in Liquid-Crystalline Elastomers.

2012. VII, 239 p. 115 illus., 11 illus. in color. Hardcover ISBN 978-3-642-31581-7

- ► € 189,95 | £171.00
- ► * € (D) 203,25 | € (A) 208,94 | sFr 253,00

- ► € 95,00 | £85.50
- ► * € (D) 101,65 | € (A) 104,50 | sFr 126,50



J. H. de Winde, Beyerinck Laboratory DSM Life Sciences, Delft, Netherlands (Ed)

Functional Genetics of Industrial Yeasts

In recent years, new yeast species have proven their value and novel biotechnological applications have emerged. This book compiles the multi-faceted genetic repertoire of several yeasts relevant to modern biotechnology, and describes their utilization in research and application in the light of their genetic make-up and physiological characteristics. Moreover, the book presents a thorough overview of a wide array of methodologies from classical genetics to modern genomics technologies that have been and are being used in functional analysis of yeasts.

2003. XIV, 368 p. (Topics in Current Genetics, Volume 2) Hardcover

ISBN 978-3-540-02489-7

- ► € 321,00 | £289.00
- ► * € (D) 343,47 | € (A) 353,10 | sFr 427,50

Sale Price

- ► € 160,50 | £144.50
- ► * € (D) 171,74 | € (A) 176,55 | sFr 214,00



Topics in Current Chemistry

M. J. Krische, J.-M. Lehn, J. Thiem, K. N. Houk, C. A. Hunter, M. Venturi, M. Olivucci, H. N. Wong, C.-H. Wong, Series editors: H. Bayley, R. Luque, K. Ishihara, J. S. Siegel, G. Hughes

Volume 321

M. Drescher, University of Konstanz, Konstanz, Germany; G. Jeschke, ETH Zurich, Zurich, Switzerland (Eds)

EPR Spectroscopy

Applications in Chemistry and Biology

EPR Spectroscopy in Catalysis, by Sabine Van Doorslaer and Damien M.Murphy; Radicals in Flavoproteins, by Erik Schleicher und Stefan Weber; EPR Spectroscopy in Polymer Science, by Dariush Hinderberger.

2012. XIV, 238 p. Hardcover ISBN 978-3-642-28346-8

- ► € 219,00 | £197.50
- ► * € (D) 234,33 | € (A) 240,90 | sFr 292,00

Sale Price

- ► € 109,50 | £99.00
- ► * € (D) 117,17 | € (A) 120,45 | sFr 146,00



Topics in Current Chemistry

M. J. Krische, J.-M. Lehn, J. Thiem, K. N. Houk, C. A. Hunter, M. Venturi, M. Olivucci, H. N. Wong, C.-H. Wong, Series editors: H. Bayley, R. Luque, K. Ishihara, J. S. Siegel, G. Hughes

Volume 323

L. Fabbrizzi, University of Pavia, Pavia, Italy (Ed)

Beauty in Chemistry

Artistry in the Creation of New Molecules

The Beauty of Chemistry in the Words of Writers and in the Hands of Scientists, by Margherita Venturi, Enrico Marchi und Vincenzo Balzani Living in a Cage Is a Restricted Privilege, by Luigi Fabbrizzi Inner and Outer Beauty, by Kenneth N. Raymond und Casey J. Brown The Mechanical Bond: A Work of Art, by Carson J. Bruns.

2012. XI, 169p. 138 illus., 59 illus. in color. Hardcover ISBN 978-3-642-28340-6

- ► € 219,00 | £197.50
- ► *€ (D) 234,33 | € (A) 240,90 | sFr 292,00

Sale Price

- ► € 109,50 | £99.00
- ► *€ (D) 117,17 | € (A) 120,45 | sFr 146,00



M. Fleischer, Siemens AG Corporate Technology, München, Germany; M. Lehmann, Innovative Sensor Technology (IST) AG, Wattwil, Switzerland (Eds)

Solid State Gas Sensors - Industrial Application

Gas sensor products are very often the key to innovations in the fields of comfort, security, health, environment, and energy savings. This compendium focuses on what the research community labels as solid state gas sensors, where a gas directly changes the electrical properties of a solid, serving as the primary signal for the transducer. It starts with a visionary approach to how life in future buildings can benefit from the power of gas sensors. The requirements for various applications, such as for example the automotive industry, are then discussed in several chapters.

2012. XII, 272 p. (Springer Series on Chemical Sensors and Biosensors, Volume 11) Hardcover ISBN 978-3-642-28092-4

- € 239,00 | £215.50
- ► *€ (D) 255,73 | € (A) 262,90 | sFr 318,50

Sale Price

- ► € 119,50 | £108.00
- ► * € (D) 127,87 | € (A) 131,45 | sFr 159,50



W. Fritzsche, Institute of Photonic Technology (IPHT), Jena, Germany; J. Popp, Universität Jena, Jena, Germany (Eds)

Optical Nano- and Microsystems for Bioanalytics

This book describes the state of the art in the field of bioanalytical nano- and microsystems with optical functionality. In 12 chapters distinguished scientists and leaders in their respective fields show how various optical technologies have been miniaturized and integrated over the last few decades in order to be combined with nano- and microsystems for applications in the life sciences. The main detection and characterization technologies are introduced, and examples of the superiority of these integrated approaches compared to traditional ones are provided.

2012. XII, 332 p. (Springer Series on Chemical Sensors and Biosensors, Volume 10) Hardcover ISBN 978-3-642-25497-0

- ► £ 299,00 | £269.50
- ► * € (D) 319,93 | € (A) 328,90 | sFr 398,50

Sale Price

- ► € 149,50 | £135.00
- ► * € (D) 159,97 | € (A) 164,45 | sFr 199,50



Y. D. Gamburg, Russian Academy of Sciences A.N. Frumkin Inst., Moskva, Russia; G. Zangari, University of Virginia Dept. Materials Science & Engineering, Charlottesville, VI, USA

Theory and Practice of Metal Electrodeposition

This book offers new insight into theoretical and practical aspects of metal electrodeposition, covering selection and use of metal coatings, deposition of metals and alloys, individual peculiarities, properties and structure of coatings, controls and more

2011. XVII, 378 p. 113 illus., 1 illus. in color. Hardcover ISBN 978-1-4419-9668-8

- € 154,99 | £139.50
- ► * € (D) 165,84 | € (A) 170,49 | sFr 206,50

- ► €77,50 | £69.99
- ► * € (D) 82,93 | € (A) 85,25 | sFr 103,50



C. Gatti, CNR-ISTM Istit. di Scienze e Tecn. Molec. del CNR, Milano, Italy; P. Macchi, University of Bern, Bern, Switzerland (Eds)

Modern Charge-Density Analysis

Focusing on developments from the past 10-15 years, this volume presents an objective overview of the research in charge density analysis. The most promising methodologies are included, in addition to powerful interpretative tools and a survey of important areas of research.

2012. XXIII, 783p. 229 illus., 181 illus. in color. Hardcover

ISBN 978-90-481-3835-7

- ► £ 199,95 | £180.00
- ► * € (D) 213,95 | € (A) 219,94 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- * € (D) 107,00 | € (A) 110,00 | sFr 133,50



R. Gordon, Gulf Specimen Marine Laboratory, Panacea, FL, USA; **J. Seckbach**, The Hebrew Univ. of Jerusalem, Jerusalem, Israel (Eds)

The Science of Algal Fuels

Phycology, Geology, Biophotonics, Genomics and Nanotechnology

This volume, The Science of Algal Fuels (volume 25 of COLE), contains 26 chapters dealing with biofuels contributed by experts from numerous countries and covers several aspects of algal products, one being "oilgae from algae," mainly oils and fuels for engines. Among the prominent algal groups that participate in this process are the diatoms and green algae (Chlorophyceae). Their metabolism and breeding play an important role in biomass and extraction of crude oil and algal fuel.

2012. XXXIII, 506 p. 168 illus., 114 illus. in color. (Cellular Origin, Life in Extreme Habitats and Astrobiology, Volume 25) Hardcover ISBN 978-94-007-5109-5

- ► € 149,95 | £135.00
- ► * € (D) 160,45 | € (A) 164,94 | sFr 200,00

Sale Price

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



Advances in Polymer Science

U. Wiesner, B. Voit, T. E. Long, Series editors: A. Abe, A.-C. Albertsson, G. W. Coates, M. Möller, L. Leibler, E. M. Terentjev, S. Kobayashi, K.-S. Lee, M. J. Vicent, J. Genzer, B. Z. Tang, X. Zhang, O. Okay, V. Percec

Volume 248

M. Hakkarainen, Royal Institute of Technology (KTH), Stockholm, Sweden (Ed)

Mass Spectrometry of Polymers – New Techniques

Emerging Mass Spectrometric Tools for Analysis of Polymers and Polymer Additives, by Nina Aminlashgari and Minna Hakkarainen. Analysis of Polymer Additives and Impurities by Liquid Chromatography/Mass Spectrometry and Capillary Electrophoresis/Mass Spectrometry, by Wolfgang Buchberger and Martin Stiftinger.

2012. XII, 212 p. Hardcover ISBN 978-3-642-28040-5

- ► € 199,99 | £180.00
- ► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



A. C. Hoffmann, University of Bergen Dept. Physics, Bergen, Norway; L. E. Stein, Process Engineering Consultant Mechanical Separations, Houston, TX, USA

Gas Cyclones and Swirl Tubes

Principles, Design, and Operation

This book has been conceived to provide guidance on the theory and design of cyclone systems. For those new to the topic, a cyclone is, in its most basic form, a stationarymechanicaldevice that utilizes centrifugalforceto separate solid or liquid particles from a carrier gas. Gas enters near the top via a tangentialorvanedinlet, which gives riseto anaxially descending spiral of gas and a centrifugal force field that causes the incoming particles to concentrate along, and spiral down, the inner walls of the separator.

2nd ed. 2008. Hardcover ISBN 978-3-540-74694-2

- ► € 194,99 | £175.50
- ► * € (D) 208,64 | € (A) 214,49 | sFr 260,00

Sale Price

- ► € 97,50 | £88.00
- ► *€ (D) 104,33 | € (A) 107,25 | sFr 130,00



A. R. Ivanov, Harvard School of Public Health, Harvard, Boston, MA, USA; A. V. Lazarev, Pressure BioSciences, Inc., South Easton, MA, USA (Eds)

Sample Preparation in Biological Mass Spectrometry

The aim of this book is to provide the researcher with important sample preparation strategies in a wide variety of analyte molecules, specimens, methods, and biological applications requiring mass spectrometric analysis as a detection endpoint.

2011. XXIX, 1089p. 253 illus., 104 illus. in color. Hardcover

ISBN 978-94-007-0758-0

- € 169,95 | £153.00
- ► * € (D) 181,85 | € (A) 186,94 | sFr 244,00

Sale Price

- ► €85,00 | £76.50
- ► * € (D) 90,95 | € (A) 93,50 | sFr 113,50



K. K. Jain, Jain PharmaBiotech, Basel, Switzerland

The Handbook of Nanomedicine

In its updated and reorganized second edition, this handbook captures the latest advances in nanomedicine applied to researching the pathomechanism of disease, refining molecular diagnostics, and aiding in the discovery, development, and delivery of drugs.

2nd ed. 2012. XXXIV, 538 p. Hardcover ISBN 978-1-61779-982-2

- ► € 129,95 | £117.00
- ► * € (D) 139,05 | € (A) 142,94 | sFr 173,00

- ► € 65,00 | £58.99
- ► * € (D) 69,55 | € (A) 71,50 | sFr 87,00



Advances in Polymer Science

U. Wiesner, B. Voit, T. E. Long, Series editors: A. Abe, A.-C. Albertsson, G. W. Coates, M. Möller, L. Leibler, E. M. Terentjev, S. Kobayashi, K.-S. Lee, M. J. Vicent, J. Genzer, B. Z. Tang, X. Zhang, O. Okay, V. Percec

Volume 246

R. Jayakumar, S. Nair, Amrita Center for Nanosciences and Molecular Medicine, Cochin, India (Eds)

Biomedical Applications of Polymeric Nanofibers

Multiscale Fibrous Scaffolds in Regenerative Medicine, by Sowmya Srinivasan, R. Jayakumar, K. P. Chennazhi, Erica J. Levorson, Antonios G. Mikos and Shantikumar V. Nair; Stem Cells and Nanostructures for Advanced Tissue Regeneration, by Molamma P. Prabhakaran.

2012. XII, 288 p. Hardcover ISBN 978-3-642-27147-2

- ► € 239,00 | £215.50
- ► * € (D) 255,73 | € (A) 262,90 | sFr 318,50

Sale Price

- ► € 119,50 | £108.00
- ► * € (D) 127,87 | € (A) 131,45 | sFr 159,50



S. Kalia, Bahra University Dept. of Chemistry, Himachal Pradesh, India; B. S. Kaith, Dr B.R. Ambedkar National Institute of Technology Jalandhar (NITJ), Jalandhar, India; I. Kaur, Himachal Pradesh University Department of Chemistry, Shimla. India (Eds)

Cellulose Fibers: Bio- and Nano-Polymer Composites

Green Chemistry and Technology

The current era of green science and technology has made the field of bio- and nano-polymer composite materials for advanced structural and medical applications a rapidly emerging area of research. This volume covers all the essential issues and topics.

2011. XIX, 750p. Hardcover ISBN 978-3-642-17369-1

- ► € 279,00 | £251.50
- ► * € (D) 298,53 | € (A) 306,90 | sFr 371,50

Sale Price

- ► € 139,50 | £126.00
- * € (D) 149,27 | € (A) 153,45 | sFr 186,00



Topics in Current Chemistry

M. J. Krische, J.-M. Lehn, J. Thiem, K. N. Houk, C. A. Hunter, M. Venturi, M. Olivucci, H. N. Wong, C.-H. Wong, Series editors: H. Bayley, R. Luque, K. Ishihara, J. S. Siegel, G. Hughes

Volume 290

B. Kirchner, Universität Leipzig Wilhelm-Oswald Institut für, Leipzig, Germany (Ed)

Ionic Liquids

"Ionic liquids will never find application in industry", "I don't understand this fad for ionic liquids" and "there is no widespread interest in these systems" are just three of quotes from the reports of referees for research proposals that I have received over the years. I wonder what these people think today.

2010. XV, 345p. 150 illus., 36 illus. in color. Hardcover ISBN 978-3-642-01779-7

- ► € 379,00 | £341.50
- ► * € (D) 405,53 | € (A) 416,90 | sFr 505,00

Sale Price

- ► € 189,50 | £171.00
- * € (D) 202,77 | € (A) 208,45 | sFr 252,50



E. G. Lewars, Trent University Dept. Chemistry, Peterborough, ON, Canada

Computational Chemistry

Introduction to the Theory and Applications of Molecular and Quantum Mechanics

This is the first textbook on Computational Chemistry to genuinely cover the basics. This corrected second edition contains new material which includes solvent effects, the treatment of singlet diradicals, and the fundamentals of computational chemistry.

2nd ed. 2011. XVI, 664 p. Hardcover ISBN 978-90-481-3860-9

- € 159,95 | £144.00
- ► * € (D) 171,15 | € (A) 175,95 | sFr 229,50

Sale Price

- ▶ €80,00 | £72.00
- ► * € (D) 85,60 | € (A) 88,00 | sFr 106,50



Advances in Polymer Science

U. Wiesner, B. Voit, T. E. Long, Series editors: A. Abe, A.-C. Albertsson, G. W. Coates, M. Möller, L. Leibler, E. M. Terentjev, S. Kobayashi, K.-S. Lee, M. J. Vicent, J. Genzer, B. Z. Tang, X. Zhang, O. Okay, V. Percec

Volume 247

S. Kunugi, Kyoto Institute of Technology Dept. of Polymer Science and Engineering, Kyoto, Japan; **T. Yamaoka**, National Cerebral and Cardiovascular Cen Department of Biomedical Engineering, Osaka, Japan (Eds)

Polymers in Nanomedicine

2012. XII, 284 p. Hardcover ISBN 978-3-642-27855-6

- ► € 239,00 | £215.50
- ► * € (D) 255,73 | € (A) 262,90 | sFr 318,50

Sale Price

- ► € 119,50 | £108.00
- ► * € (D) 127,87 | € (A) 131,45 | sFr 159,50



E. G. Lewars, Trent University Dept. Chemistry, Peterborough, ON, Canada

Computational Chemistry

Introduction to the Theory and Applications of Molecular and Quantum Mechanics

This is the first textbook on Computational Chemistry to genuinely cover the basics. This corrected second edition contains new material which includes solvent effects, the treatment of singlet diradicals, and the fundamentals of computational chemistry.

2nd ed. 2011. XVI, 664 p. Softcover ISBN 978-90-481-3861-6

- € 69,95 | £62.99
- *€ (D) 74,85 | € (A) 76,95 | sFr 93,50

- ► €80,00 | £72.00
- ► * € (D) 85,60 | € (A) 88,00 | sFr 106,50



A. Lund, The Emeritus Academy Linköping University, Linköping, Sweden; **M. Shiotani,** Higashi-Hiroshima, Japan (Eds)

EPR of Free Radicals in Solids II

Trends in Methods and Applications

EPR of Free Radicals in Solids: Trends in Methods and Applications, 2nd ed. presents a critical two volume review of the methods and applications of EPR (ESR) for the study of free radical processes in solids. Emphasis is on the progress made in the developments in EPR technology, in the application of sophisticated matrix isolation techniques and in the advancement in quantitative EPR that have occurred since the 1st edition was published.

2nd ed. 2012. XIV, 387 p. 162 illus. (Progress in Theoretical Chemistry and Physics, Volume 25) Hardcover

ISBN 978-94-007-4886-6

- ► € 249,00 | £224.50
- ► * € (D) 266,43 | € (A) 273,90 | sFr 331,50

Sale Price

- ► € 124,50 | £112.50
- ► * € (D) 133,22 | € (A) 136,95 | sFr 166,00



J. E. Mark, University of Cincinnati Dept. Chemistry, Cincinnati, OH, USA (Ed)

Physical Properties of Polymers Handbook

This handbook offers concise information on the properties of polymeric materials, particularly those most relevant to physical chemistry and chemical physics. Each chapter has been extensively updated and revised. In addition, a dozen new chapters have been added.

2nd ed. 2007. XX, 1076 p. 400 illus. Hardcover ISBN 978-0-387-31235-4

- ► € 379,00 | £333.00
- ► *€ (D) 405,53 | € (A) 416,90 | sFr 492,50

Sale Price

- ► € 189,50 | £171.00
- ► * € (D) 202,77 | € (A) 208,45 | sFr 252,50



Topics in Current Chemistry

M. J. Krische, J.-M. Lehn, J. Thiem, K. N. Houk, C. A. Hunter, M. Venturi, M. Olivucci, H. N. Wong, C.-H. Wong, Series editors: H. Bayley, R. Luque, K. Ishihara, J. S. Siegel, G. Hughes

Volume 312

R. M. Metzger, The University of Alabama, Tuscaloosa, USA (Ed)

Unimolecular and Supramolecular Electronics I

Chemistry and Physics Meet at Metal-Molecule Interfaces

Charge Transport in Organic Semiconductors, by Heinz Bässler and Anna Köhler. Frontiers of Organic Conductors and Superconductors, by Gunzi Saito and Yukihiro Yoshida.

2012. XII, 308 p. Hardcover ISBN 978-3-642-27283-7

- ► € 289,00 | £260.50
- ► * € (D) 309,23 | € (A) 317,90 | sFr 385,00

Sale Price

- ► € 144,50 | £130.50
- ► * € (D) 154,62 | € (A) 158,95 | sFr 192,50



H. L. Makin, Queen Mary University of London Barts & the London School of, London, UK; D. Gower, Orpington, Kent, UK (Eds)

Steroid Analysis

Written by a team of distinguished experts from around the world, this comprehensively updated second edition concentrates on the analysis of steroids in biological fluids. It includes a completely new chapter on pharmaceutical aspects of steroid analysis.

2nd ed. 2010. XXII, 1224p. Hardcover ISBN 978-1-4020-9774-4

- ► € 249,00 | £224.50
- ► * € (D) 266,43 | € (A) 273,90 | sFr 331,50

Sale Price

- ► € 124,50 | £112.50
- ► * € (D) 133,22 | € (A) 136,95 | sFr 166,00



Topics in Current Chemistry

M. J. Krische, J.-M. Lehn, J. Thiem, K. N. Houk, C. A. Hunter, M. Venturi, M. Olivucci, H. N. Wong, C.-H. Wong, Series editors: H. Bayley, R. Luque, K. Ishihara, J. S. Siegel, G. Hughes

Volume 314

N. Matsuo, Dainihon Jochugiku Co. Ltd., Osaka, Japan; T. Mori, Sumitomo Chemical Co.Ltd., Takarazuka-city, Japan (Eds)

Pyrethroids

From Chrysanthemum to Modern Industrial Insecticide

2012. XII, 224 p. Hardcover ISBN 978-3-642-27345-2

- ► € 219,00 | £197.50
- ► * € (D) 234,33 | € (A) 240,90 | sFr 292,00

Sale Price

- ► € 109,50 | £99.00
- ► * € (D) 117,17 | € (A) 120,45 | sFr 146,00



Topics in Current Chemistry

M. J. Krische, J.-M. Lehn, J. Thiem, K. N. Houk, C. A. Hunter, M. Venturi, M. Olivucci, H. N. Wong, C.-H. Wong, Series editors: H. Bayley, R. Luque, K. Ishihara, J. S. Siegel, G. Hughes

Volume 313

R. M. Metzger, The University of Alabama, Tuscaloosa, USA (Ed)

Unimolecular and Supramolecular Electronics II

Chemistry and Physics Meet at Metal-Molecule Interfaces

2012. XII, 272 p. Hardcover ISBN 978-3-642-27397-1

- € 269,00 | £242.50
- ► * € (D) 287,83 | € (A) 295,90 | sFr 358,50

- ► € 134,50 | £121.50
- ► * € (D) 143,92 | € (A) 147,95 | sFr 179,50



Structure and Bonding

G. Parkin, Series editors: D. M. Mingos, D. M. Mingos, K. R. Poeppelmeier, X. Duan, L. H. Gade, F. A. Armstrong, Editorial board: M. Takano

Volume 142

D. M. Mingos, St. Edmund Hall, Oxford, UK; P. Day, The Royal Institution of Great Britain, London, UK; J. P. Dahl, Technical University of Denmark, Copenhagen, Denmark (Eds)

Molecular Electronic Structures of Transition Metal Complexes I

Carl Johan Ballhausen (1926–2010).- Electronic Structures of Oxo-Metal Ions.- Early Days in Kemisk Laboratorium IV and Later Studies.- Transition Metal Corrole Coordination Chemistry.

2012. XVI, 216 p. Hardcover ISBN 978-3-642-27369-8

► € 219,00 | £197.50

► * € (D) 234,33 | € (A) 240,90 | sFr 292,00

Sale Price

- ► € 109,50 | £99.00
- ► * € (D) 117,17 | € (A) 120,45 | sFr 146,00



M. J. Owen, P. R. Dvornic, Michigan Molecular Institute, Midland, M, Midland, MI, USA (Eds)

Silicone Surface Science

This book explores the properties and behavior of silicone surfaces, including polydimethylsiloxane, spread monolayers, self-assembled monolayers, hydrophobicity and super-hydrophobicity, surfactants, fluorosilicones, surface treatments and more.

2012. XVI, 388 p. (Advances in Silicon Science, Volume 4) Hardcover

ISBN 978-94-007-3875-1

- ► € 149,99 | £135.00
- ► *€ (D) 160,49 | € (A) 164,99 | sFr 200,00

Sale Price

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



K. G. Ramawat, M.L. Sukhadia University Botany Department, Udaipur, India (Ed)

Herbal Drugs: Ethnomedicine to Modern Medicine

This reference work covers for the first time the herbal drugs used in ethnomedicine and validated on a modern scientific basis. In depth information prepared by experts traces the evolution of herbal drugs within civilization and their use.

2009. XXII, 402 p. Hardcover ISBN 978-3-540-79115-7

- ► € 239,00 | £215.50
- ► * € (D) 255,73 | € (A) 262,90 | sFr 318,50

Sale Price

- ► €119,50 | £108.00
- * € (D) 127,87 | € (A) 131,45 | sFr 159,50



S. Orszulik, Nanotecture Ltd., Southampton, UK (Ed)

Environmental Technology in the Oil Industry

This significantly updated edition looks at each stage in the life cycle of petroleum products, from exploration to end use, examining the environmental pressures on the Oil Industry and its response.

2nd ed. 2008. XII, 408 p. Hardcover ISBN 978-1-4020-5471-6

- ► € 169,99 | £153.00
- ► * € (D) 181,89 | € (A) 186,99 | sFr 226,50

Sale Price

- ► €85,00 | £76.50
- ► * € (D) 90,95 | € (A) 93,50 | sFr 113,50



J. Polaina, A. P. MacCabe (Eds)

Industrial Enzymes

Structure, Function and Applications

Man's use of enzymes dates back to the earliest times of civilization. Important human activities such as the production of certain types of foods and beverages, and the tanning of hides and skins to produce leather for garments, serendipitously took advantage of enzyme activities. Important advances in our understanding of the nature of enzymes and their action were made in the late 19th and early 20th centuries, seeding the explosive expansion from the 1950s and 60s onward to the present billion dollar enzyme industry.

2007. XII, 642 p. Hardcover ISBN 978-1-4020-5376-4

- € 199,99 | £180.00
- ► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



N. J. Russell, University London Wye College, Ashford, Kent, UK; **G. W. Gould**, Bedford, UK (Eds)

Food Preservatives

For centuries man has treated food to prolong its edible life, and nowadays both traditional and modern preservatives are used widely to ensure the satisfactory maintenance of quality and safety of foods. There continues to be increased public concern about the use of food additives, including preservatives, resulting from a perception that some of them may have deleterious effects on health. However, as eating habits have changed with an emphasis on what has been popularly termed a 'healthy diet', there is at the same time a concern that reduction in preservative usage could lead to loss of safety and protection from food poisoning.

2nd ed. 2003. XVI, 380 p. Hardcover ISBN 978-0-306-47736-2

- € 199,99 | £179.50
- ► * € (D) 213,99 | € (A) 219,99 | sFr 265,50

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



G. D. Saravacos, A. E. Kostaropoulos, Agricultural University of Athens Dept. Food Science & Technology, Athens, Greece

Handbook of Food Processing Equipment

Recent publications in food engineering concern mainly food process engineering, which is related to chemical engineering, and deals primarily with unit operations and unit processes, as applied to the wide variety of food processing operations. Relatively less attention is paid to the design and operation of food processing equipment, which is necessary to carry out all of the food processes in the food plant. Significant technical advances on processing equipment have been made by the manufacturers, as evidenced by the efficient modem food processing plants.

2002. XXIV, 698 p. (Food Engineering Series) Hardcover

ISBN 978-0-306-47276-3

- ► € 209,00 | £188.50
- ► * € (D) 223,63 | € (A) 229,90 | sFr 278,50

Sale Price

- ► € 104,50 | £94.50
- * € (D) 111,82 | € (A) 114,95 | sFr 139,50



T. Satyanarayana, University of Delhi Fac. Inter-Disciplinary &, New Delhi, India; **G. Kunze**, Institut für Pflanzengenetik und Kulturpflanzenforschung (IPK), Gatersleben, Germany (Eds)

Yeast Biotechnology: Diversity and Applications

This book is aimed at bringing together the scattered information on the diversity of yeasts in normal and extreme environments. The biotechnological applications of yeasts are covered and updated in great detail by the experts.

2009. XXI, 744 p. Hardcover ISBN 978-1-4020-8291-7

- ► € 289,00 | £260.50
- ► * € (D) 309,23 | € (A) 317,90 | sFr 385,00

Sale Price

- ► € 144,50 | £130.50
- ► * € (D) 154,62 | € (A) 158,95 | sFr 192,50



M. Srivastava, Dayalbagh Educational Institute, Agra, India (Ed)

High-Performance Thin-Layer Chromatography (HPTLC)

This book highlights the HPTLC system as a versatile modern analytical technique with reference to its excellent automation, optimization, multidimensional applications. It describes various applications of HPTLC separation.

2011. XX, 360p. 136 illus.. Hardcover ISBN 978-3-642-14024-2

- ► € 149,99 | £135.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 200,00

Sale Price

- ► €75,00 | £67.99
- ► *€ (D) 80,25 | € (A) 82,50 | sFr 100,00



A. Tuantranont, National Electronics and Computer Techno, Pathumthani, Thailand (Ed)

Applications of Nanomaterials in Sensors and Diagnostics

Recent progress in the synthesis of nanomaterials and our fundamental understanding of their properties has led to significant advances in nanomaterial-based gas, chemical and biological sensors. Leading experts around the world highlight the latest findings on a wide range of nanomaterials including nanoparticles, quantum dots, carbon nanotubes, molecularly imprinted nanostructures or plastibodies, nanometals, DNA-based structures, smart nanomaterials, nanoprobes, magnetic nanomaterials, organic molecules like phthalocyanines and porphyrins, and the most amazing novel nanomaterial, called graphene.

2013. X, 285 p. 100 illus., 80 illus. in color. (Springer Series on Chemical Sensors and Biosensors, Volume 14) Hardcover

ISBN 978-3-642-36024-4

- ► £ 229,00 | £206.50
- ► * € (D) 245,03 | € (A) 251,90 | sFr 305,00

Sale Price

- ► € 114,50 | £103.50
- ► * € (D) 122,52 | € (A) 125,95 | sFr 152,50



M. Waser, Johannes Kepler University, Linz, Austria

Asymmetric Organocatalysis in Natural Product Syntheses

This book provides an illustrative overview of successful and widely used applications of organocatalysis in the field of natural product synthesis. The main focus is on organocatalytic key-steps for each (multi-step) synthesis described.

2012. XI, 197 p. 215 illus., 133 illus. in color. (Progress in the Chemistry of Organic Natural Products, Volume 96) Hardcover

ISBN 978-3-7091-1162-8

- ► € 189,95 | £171.00
- ► * € (D) 203,25 | € (A) 208,94 | sFr 253,00

Sale Price

- ▶ € 95,00 | £85.50
- ► * € (D) 101,65 | € (A) 104,50 | sFr 126,50



Topics in Current Chemistry

M. J. Krische, J.-M. Lehn, J. Thiem, K. N. Houk, C. A. Hunter, M. Venturi, M. Olivucci, H. N. Wong, C.-H. Wong, Series editors: H. Bayley, R. Luque, K. Ishihara, J. S. Siegel, G. Hughes

Volume 318

C. Tschierske, Martin-Luther-University Halle-Wittenber, Halle/Saale, Germany (Ed)

Liquid Crystals

Materials Design and Self-assembly

2012. XII, 412 p. Hardcover ISBN 978-3-642-27590-6

- ► € 349,00 | £314.50
- ► * € (D) 373,43 | € (A) 383,90 | sFr 465,00

- ► € 174,50 | £157.50
- ► * € (D) 186,72 | € (A) 191,95 | sFr 232,50

E. Ortega-Rivas, Autonomous University of Chihuahua Food & Chemical Engineering Program, Werribee, VIC, Australia; P. Juliano, H. Yan, Washington State University Dept. Biological Systems Engineering, Pullman, WA, USA

Food Powders

Physical Properties, Processing, and Functionality

Food Powders is the first book that addresses key aspects of food powder technology. It is a comprehensive review on the characterization of ingredients, semi-processed and finished products when they are in a powdered form. It includes the description of different industrial unit operations such as drying, grinding, mixing, agglomeration, and encapsulation that supply food powders of different composition and microstructure.

2005. XVI, 372 p. (Food Engineering Series) Hardcover

ISBN 978-0-306-47806-2

- ► € 199.99 | £179.50
- ► * € (D) 213,99 | € (A) 219,99 | sFr 265,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



J. Götze, R. Möckel, TU Bergakademie Freiberg Institute of Mineralogy, Freiberg, Germany (Eds)

Quartz: Deposits, Mineralogy and Analytics

This, the first truly comprehensive survey of the field, has contributions from leaders in the field and covers every angle from deposits via mineralogical properties to industrial applications of SiO2. It also features sophisticated analytical methodologies.

2012. XVI, 360 p. (Springer Geology) Hardcover ISBN 978-3-642-22160-6

- € 149,99 | £135.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 200,00

Sale Price

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



R. Kirsch, Landesamt für Natur und Umwelt Abt. Geologie/Boden, Flintbek, Germany (Ed)

Groundwater Geophysics

A Tool for Hydrogeology

Edited by Reinhard Kirsch, this book demonstrates the use of geophysics for the detection and delineation of groundwater resources. As well as being an excellent reference, it could also be used as a textbook. An addition to the bookshelf of any geophysicist.

2nd ed. 2009. Hardcover ISBN 978-3-540-88404-0

- ► £ 149,99 | £135.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 200,00

Sale Price

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



A. Fichtner, Utrecht University, Utrecht, Netherlands

Full Seismic Waveform Modelling and Inversion

This book develops and describes state of the art methodologies covering all aspects of full waveform tomography. It provides a variety of case studies on all scales from local to global based on a large number of examples involving real data.

2011. XX, 343 p. (Advances in Geophysical and Environmental Mechanics and Mathematics) Hardcover

ISBN 978-3-642-15806-3

- ► € 149,99 | £135.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 200,00

Sale Price

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



T. Hantschel, A. I. Kauerauf, Integrated Exploration Systems GmbH, Aachen, Germany

Fundamentals of Basin and Petroleum Systems Modeling

The first comprehensive presentation of methods and algorithms used in basin modeling, this text provides geoscientists and geophysicists with an in-depth view of the underlying theory and includes advanced topics such as probabilistic risk assessment methods.

2009. XVI, 476 p. Hardcover ISBN 978-3-540-72317-2

- ► € 129,95 | £117.00
- ► *€ (D) 139,05 | € (A) 142,95 | sFr 186,50

Sale Price

- ► €65,00 | £58.99
- ► *€ (D) 69,55 | € (A) 71,50 | sFr 87,00



K. Y. Kondratyev, L. S. Ivlev, V. F. Krapivin, Russian Academy of Sciences Inst. Radioengineering and, Fryazino, Russia; C. A. Varostos

Atmospheric Aerosol Properties

Formation, Processes and Impacts

This book provides the first comprehensive analysis of how aerosols form in the atmosphere through in situ processes as well as via transport from the surface (dust storms, seas spray, biogenic emissions, forest fires etc.). Such an analysis has been followed by the consideration of both observation data (various field observational experiments) and numerical modeling results to assess climate impacts of aerosols bearing in mind that these impacts are the most significant uncertainty in studying natural and anthropogenic causes of climate change.

2006. XXXV, 572 p. (Springer Praxis Books / Environmental Sciences) Hardcover ISBN 978-3-540-26263-3

- **€ 259,00 | £233.50**
- ► * € (D) 277,13 | € (A) 284,90 | sFr 345,00

- ► € 129,50 | £117.00
- ► * € (D) 138,57 | € (A) 142,45 | sFr 172,50



J. A. Ortigao, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil; A. Sayao, Pontifícia Universidade Católica do Rio de Janeiro (PUC-Rio), Rio de Janeiro, Brazil (Eds)

Handbook of Slope Stabilisation

This book is aimed at the practising engineer and engineering geologist working in tropical environments, where lands lides are mainly triggered by rain fall. This book is based on a similar work published in 1999 in Portuguese, which became the Rio de Janeiro Slope Manual. This book is an engineering guide for the design of slopes and stabilisation works in rocks and residual soils. It evolves from the cumulative experience gathered by several engineers and geologists who faced severe slope problems.

2004. XX, 483 p. Hardcover ISBN 978-3-540-41646-3

- ► £219,00 | £197.50
- ► * € (D) 234,33 | € (A) 240,90 | sFr 292,00

Sale Price

- ► € 109,50 | £99.00
- ► * € (D) 117,17 | € (A) 120,45 | sFr 146,00



S. Singh, R. D. Tripathi, National Botanical Research Inst. (NBRI) Environmental Science Division, Lucknow, India (Eds)

Environmental Bioremediation Technologies

Environmental contamination from both natural and anthropogenic sources is, today, a major environmental concern due to pervasiveness and persistence of many toxicants. It is considered as an inevitable evil of our progress and modernization. To decontaminate the soils, sediments and waters, polluted by anthropogenic activities, the scientists and technologists have evolved different technologies over the years. Although we have to pay high cost for physical and chemical environmental technologies, but they are not eco-friendly and safe.

2007. XX, 518 p. 58 illus., 1 in color. Hardcover ISBN 978-3-540-34790-3

- ► € 209,00 | £188.50
- ► * € (D) 223,63 | € (A) 229,90 | sFr 278,50

Sale Price

- ► € 104,50 | £94.50
- ► * € (D) 111,82 | € (A) 114,95 | sFr 139,50



R. A. Trouw, Universidade Federal do Rio de Janeiro Depto. Geologia, Rio de Janeiro, Brazil; C. W. Passchier, Universität Mainz Institut für Geowissenschaften, Mainz, Germany; D. Siersma, Utrecht, Netherlands

Atlas of Mylonites - and related microstructures

Mylonites can have many different mineralogical compositions and are defined on their textural appearance. This atlas provides high definition images of a large number of different mylonites allowing students and geologists to correctly classify them.

2009. VIII, 322p. 486 illus., 472 illus. in color. Hardcover

ISBN 978-3-642-03607-1

- € 149,99 | £135.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 200,00

Sale Price

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



M. Pansu, Centre IRD UMR DGPC, Montpellier CX 5, France; **J. Gautheyrou**, St. Maur des Fossés, France

Handbook of Soil Analysis

Mineralogical, Organic and Inorganic Methods

This new book by Marc Pansu and Jacques Gautheyrou provides a synopsis of the analytical procedures for the physicochemical analysis of soils. It is written to conform to analytical standards and quality control. It focuses on mineralogical, organic and inorganic analyses, but also describes physical methods when these are a precondition for analysis. It will help a range of different users to choose the most appropriate method for the type of material and the particular problems they have to face.

2006. XIX, 993 p. 183 illus. Hardcover ISBN 978-3-540-31210-9

- ► € 319,00 | £287.50
- ► * € (D) 341,33 | € (A) 350,90 | sFr 425,00

Sale Price

- ► € 159,50 | £144.00
- ► * € (D) 170,67 | € (A) 175,45 | sFr 212,50



I. Svoboda

Magnetic Techniques for the Treatment of Materials

In the years following the publication of Magnetic Methods for the Treatment of Minerals by Elsevier in 1987, many changes have taken place in magnetic technology. While fundamental and thorough, the above treatise reflected preferences and philosophy of research and the development and application of magnetic methods as they were practiced in the second half of the last century. Although demand for metals and minerals has not diminished, the dominant drivers of the early 21st century differ significantly from those of the late 20th.

Softcover reprint of the original 1st ed. 2004. XII, 642 p. Softcover

ISBN 978-90-481-6577-3

- ► € 199,95 | £158.00
- ► * € (D) 213,95 | € (A) 219,95 | sFr 332,00

Sale Price

- ► € 100,00 | £90.00
- ► *€ (D) 107,00 | € (A) 110,00 | sFr 133,50



T. Waltham, Nottingham Trent University Dept. Civil Engineering, Nottingham, UK; **F. G. Bell, M. Culshaw,** British Geological Survey Kingsley Dunham Center, Keyworth, Notts., UK

Sinkholes and Subsidence

Karst and Cavernous Rocks in Engineering and Construction

"Sinkholes and Subsidence" provides a twentyfirst century account of how the various subsidence features in carbonate and evaporite rocks cause problems in development and construction in our living environment. The authors explain the processes by which different types of sinkholes develop and mature in karst terrains.

2005. XXXII, 384 p. (Springer Praxis Books / Geophysical Sciences) Hardcover ISBN 978-3-540-20725-2

- € 199,95 | £180.00
- ► * € (D) 213,95 | € (A) 219,95 | sFr 266,50

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



M.-k. Woo, Scarborough, ON, Canada

Permafrost Hydrology

This wide-ranging treatment of physical hydrology in permafrost areas systematically elucidates the role of seasonally and perennially frozen ground on the distribution, storage and flow of water and is a useful book in an age of development in these areas.

2012. XII, 564 p. Hardcover ISBN 978-3-642-23461-3

- ► € 249.00 | £224.50
- ► * € (D) 266,43 | € (A) 273,90 | sFr 331,50

Sale Price

- ► € 124,50 | £112.50
- * € (D) 133,22 | € (A) 136,95 | sFr 166,00



R. Nola, G. Irzik

Philosophy, Science, Education and Culture

Currents such as epistemological and social constructivism, postmodernism, and certain forms of multiculturalism that had become fashionable within science education circles in the last decades lost sight of critical inquiry as the core aim of education. In this book we develop an account of education that places critical inquiry at the core of education in general and science education in particular. Since science constitutes the paradigm example of critical inquiry, we explain the nature of science, paying particular attention to scientific methodology and scientific modeling and at the same time showing their relevance in the science classroom.

2005. XIII, 488 p. (Contemporary Trends and Issues in Science Education, Volume 28) Hardcover ISBN 978-1-4020-3769-6

- € 286,00 | £257.50
- ► *€ (D) 306,02 | € (A) 314,60 | sFr 381,00

Sale Price

- ► € 143,00 | £129.00
- * € (D) 153,01 | € (A) 157,30 | sFr 190,50



M. Ainslie, TNO Defence, Security & Safety, s-Gravenhage, Netherlands

Principles of Sonar Performance Modelling

This book provides a complete and modern treatment of sonar performance modeling. It demonstrates how sonar systems and methodology are used for a variety of sensing, communications and deterrence systems and by a number of industries and end-users.

2010. XXVIII, 707 p. (Springer Praxis Books / Geophysical Sciences) Hardcover ISBN 978-3-540-87661-8

- ► £219,00 | £197.50
- ► * € (D) 234,33 | € (A) 240,90 | sFr 292,00

Sale Price

- ► € 109,50 | £99.00
- ► * € (D) 117,17 | € (A) 120,45 | sFr 146,00



L. Flick, Corvallis, OR, USA; N. Lederman, Illinois Institute of Technology Dept. Mathematics & Science Education, Chicago, IL, USA (Eds)

Scientific Inquiry and Nature of Science

Implications for Teaching, Learning, and Teacher Education

This book synthesizes the most current literature and research on scientific inquiry and nature of science in K-12 instruction. It is unique in its presentation of the distinctions and overlaps of inquiry and nature of science as instructional outcomes. The text would be appropriate for individuals preparing to become science teachers as well as experienced teachers.

2004. XVIII, 456 p. (Contemporary Trends and Issues in Science Education, Volume 25) Hardcover ISBN 978-1-4020-2671-3

- ► € 275,00 | £247.50
- ► * € (D) 294,25 | € (A) 302,50 | sFr 366,50

Sale Price

- ► € 137,50 | £124.00
- ► * € (D) 147,13 | € (A) 151,25 | sFr 183,50

9 781402 026713

M. C. Shelley, Iowa State University Dept. Political Science, Ames, IA, USA; L. D. Yore, Saanichton, BC, Canada; B. B. Hand, University of Iowa Dept. Teaching & Learning, Iowa City, IA, USA (Eds)

Quality Research in Literacy and Science Education

International Perspectives and Gold Standards

This interdisciplinary text analyzes modern applications of research methods in education, focusing on science and literacy. It demonstrates how the results of research can be applied to produce better teachers and better-educated students.

2009. XXIX, 666 p. Hardcover ISBN 978-1-4020-8426-3

- ► € 199,99 | £180.00
- ► *€ (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► €100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



R. Bader, Universität Hamburg Musikwissenschaftliches Institut, Hamburg, Germany

Nonlinearities and Synchronization in Musical Acoustics and Music Psychology

This book surveys research on nonlinearities in musical systems, discusses tools for analyzing sounds in the Fourier and the phase space domains, and introduces the Finite-Element and Finite-Difference methods for physical modeling of musical instruments.

2013. XXXII, 458 p. 178 illus. (Current Research in Systematic Musicology, Volume 2) Hardcover ISBN 978-3-642-36097-8

- ► £ 169,99 | £153.00
- ► * € (D) 181,89 | € (A) 186,99 | sFr 226,50

- ► €85,00 | £76.50
- ► * € (D) 90,95 | € (A) 93,50 | sFr 113,50



C. Baskar, Myongji University, Yongin, Korea, Republic of (South Korea); S. Baskar, Uttarakhand Technical University, Dehradun, India; R. S. Dhillon, Punjab Agricultural University, Ludhiana, India (Eds)

Biomass Conversion

The Interface of Biotechnology, Chemistry and Materials Science

Given that humans must give up fossil fuels—the ecological equivalent of a self-destructive addiction—alternatives are urgently needed. This book covers state-of-the-art methods of biomass conversion that may go some way to plugging the energy gap.

2012. XXVIII, 468 p. Hardcover ISBN 978-3-642-28417-5

- ► € 169,95 | £153.00
- ► *€ (D) 181,85 | € (A) 186,94 | sFr 226,50

Sale Price

- ► €85,00 | £76.50
- * € (D) 90,95 | € (A) 93,50 | sFr 113,50



J. Bhasker, eSilicon Corporation, Allentown, PA, USA; S. Sun, eSilicon Corporation, New Providence, NJ, USA

Static Timing Analysis for Nanometer Designs

A Practical Approach

This reference on static timing analysis for semiconductors proceeds from simple to complex and covers such topics as cell timing and power modeling, delay calculation and crosstalk. Each topic includes theoretical background and detailed examples.

2009. XX, 572p. 225 illus.. Hardcover ISBN 978-0-387-93819-6

- ► € 169,95 | £153.00
- ► * € (D) 181,85 | € (A) 186,95 | sFr 244,00

Sale Price

- ► €85,00 | £76.50
- ► * € (D) 90,95 | € (A) 93,50 | sFr 113,50



M. L. Bucalem, Universidade de São Paulo Depto. Engenharia Mecatrônica e de, São Paulo, Brazil; K.-J. Bathe, Massachusetts Institute of Technology, Cambridge, MA, USA

The Mechanics of Solids and Structures - Hierarchical Modeling and the Finite Element Solution

Computational procedures have been increasingly applied in engineering and the physical sciences. Written by and for physicists, mathematicians and engineers, this book places emphasis on the modeling, analysis and solution of problems in engineering.

2011. XIV, 598 p. (Computational Fluid and Solid Mechanics) Hardcover ISBN 978-3-540-26331-9

- ► € 199,99 | £180.00
- ► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



J. Bergeron, Ottawa, ON, Canada

Writing Testbenches using SystemVerilog

If you survey hardware design groups, you will learn that between 60% and 80% of their effort is dedicated to verification. This may seem unusually large, but I include in "verification" all debugging and correctness checking activities, not just writing and running testbenches. Every time a hardware designer pulls up a waveform viewer, he or she performs a verification task. With today's ASIC and FPGA sizes and geometries, getting a design to fit and run at speed is no longer the main challenge. It is to get the right design, working as intended, at the right time. Unlike synthesizable coding, there is no particular coding style nor language required for verification.

2006. XXVI, 412 p. Hardcover ISBN 978-0-387-29221-2

- ► € 149,99 | £133.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 196,50

Sale Price

- ► €75,00 | £67.99
- * € (D) 80,25 | € (A) 82,50 | sFr 100,00

9 780387 292212

W. R. Blischke, Sherman Oaks, CA, USA; M. R. Karim, Rajshahi University Dept. Statistics, Rajshahi, Bangladesh; D. N. Murthy, The University of Queensland, Brisbane, QLD, Australia

Warranty Data Collection and Analysis

Warranty data is collected during the processing of claims under warranty. Properly analyzing this data, we can better estimate product reliability and the costs of warranty. This book unifies the range of literature on warranty data collection and analysis.

2011. XXIV, 592 p. (Springer Series in Reliability Engineering) Hardcover ISBN 978-0-85729-646-7

- ► € 199,99 | £180.00
- ► *€ (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- * € (D) 107,00 | € (A) 110,00 | sFr 133,50



A. A. Bui, R. K. Taira, University of California, Los Angeles Medical Imaging Informatics Group, Los Angeles, CA, USA (Eds)

Medical Imaging Informatics

Medical Imaging Informatics provides an overview of this growing discipline. This volume explores the technologies and algorithms that comprise this field, as well as the application of medical imaging informatics to subsequently improve healthcare research.

2010. XXII, 446p. 100 illus., 50 illus. in color. Hardcover

ISBN 978-1-4419-0384-6

- € 149,99 | £133.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 196,50

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



F. Cardarelli, Materials & Electrochemical Research (MER) Corporation, Tucson, AZ, USA

Encyclopaedia of Scientific Units, Weights and Measures

Their SI Equivalences and Origins

Transl, English: M. Shields

Mankind has a fascination with measurement. Down the centuries we have produced a plethora of incompatible and duplicatory systems for measuring everything from the width of an Egyptian pyramid to the concentration of radioactivity near a nuclear reactor and the value of the fine structure constant. With the introduction first of the metric system and of its successor the Système International d'Unités (SI), the scientific community has established a standard method of measurement based on only seven core units.

1st ed. 2003. 3rd printing 2004. XLVIII, 848 p. Hardcover

ISBN 978-1-85233-682-0

- ► £ 199,99 | £180.00
- ► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- * € (D) 107,00 | € (A) 110,00 | sFr 133,50



F. Cardarelli, Materials & Electrochemical Research (MER) Corporation, Tucson, AZ, USA

Encyclopaedia of Scientific Units, Weights and Measures

Their SI Equivalences and Origins

Transl. English: M. Shields

Mankind has a fascination with measurement. Down the centuries we have produced a plethora of incompatible and duplicatory systems for measuring everything from the width of an Egyptian pyramid to the concentration of radioactivity near a nuclear reactor and the value of the fine structure constant.

Softcover reprint of the original 1st ed. 2003. XLVIII, 848 p. In 2 volumes, not available separately. Softcover

ISBN 978-1-4471-1122-1

- ► € 169,95 | £153.00
- * € (D) 181,85 | € (A) 186,95 | sFr 244,00

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



O. Castillo, P. Melin, Chula Vista, CA, USA; J. Kacprzyk, Polish Academy of Sciences Systems Research Institute, Warszawa, Poland (Eds)

Recent Advances on Hybrid Intelligent Systems

This book examines hybrid intelligent systems using soft computing techniques for intelligent control and robotics, pattern and time series recognition, and optimization of complex problems. Covers applications in natural language processing and more.

2013. XII, 570 p. 278 illus. (Studies in Computational Intelligence, Volume 451) Hardcover ISBN 978-3-642-33020-9

- € 169,95 | £153.00
- ► *€ (D) 181,85 | € (A) 186,94 | sFr 226,50

Sale Price

- ▶ €85,00 | £76.50
- ► * € (D) 90,95 | € (A) 93,50 | sFr 113,50



D. Chapelle, INRIA Domaine de Voluceau-Rocquencourt, Le Chesnay CX, France; K.-J. Bathe, Massachusetts Institute of Technology, Cambridge, MA. USA

The Finite Element Analysis of Shells - Fundamentals

Focusing on the fundamentals of shell theories, their mathematical bases and finite element discretizations, this updated and authoritative edition includes major new additions on areas including 3-D shell models, dynamic analyses and triangular elements.

2nd ed. 2011. XV, 410 p. (Computational Fluid and Solid Mechanics) Hardcover

- ISBN 978-3-642-16407-1 ► 149,99 | £135.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 200,00

Sale Price

- ▶ €75,00 | £67.99
- * € (D) 80,25 | € (A) 82,50 | sFr 100,00



A. Chakrabortty, North Carolina State University, Raleigh, NC, USA; **M. D. Ilić**, Carnegie Mellon University, Pittsburgh, PA, USA (Eds)

Control and Optimization Methods for Electric Smart Grids

In this book, leading experts in power, control and communication systems discuss the most promising recent research in smart grid modeling, control and optimization. The book goes on to the foundation for future advances in this critical field of study.

2012. XVI, 372 p. (Power Electronics and Power Systems, Volume 3) Hardcover ISBN 978-1-4614-1604-3

- ► £ 154,99 | £139.50
- ► * € (D) 165,84 | € (A) 170,49 | sFr 206,50

Sale Price

- ► €77,50 | £69.99
- ► * € (D) 82,93 | € (A) 85,25 | sFr 103,50



R. Chiong, Swinburne University of Technology, Kuching, Sarawak, Malaysia (Ed)

Nature-Inspired Algorithms for Optimisation

Nature-inspired algorithms have become popular because many real-world optimization problems have become increasingly large, complex and dynamic. This book covers the latest algorithms and important studies for tackling various kinds of optimization problems.

2009. XVIII, 516 p. (Studies in Computational Intelligence, Volume 193) Hardcover ISBN 978-3-642-00266-3

- ► € 259,00 | £233.50
- ► * € (D) 277,13 | € (A) 284,90 | sFr 345,00

- ► € 129,50 | £117.00
- * € (D) 138,57 | € (A) 142,45 | sFr 172,50



R. Cierniak, Technical University of Częstochowa, Częstochowa, Poland

X-Ray Computed Tomography in Biomedical Engineering

This valuable study gives a detailed overview of various aspects of computed tomography. It discusses X-ray CT tomography from a historical point of view, and offers readers practical information on a computer simulation environment.

2011. XII, 319 p. Hardcover ISBN 978-0-85729-026-7

- ► € 149,99 | £135.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 200,00

Sale Price

- ► ₹75,00 | £67.99
- * € (D) 80,25 | € (A) 82,50 | sFr 100,00



J.-P. Colinge, University College Tyndall National Institute, Cork, Ireland (Ed)

FinFETs and Other Multi-Gate Transistors

FinFETs and Other Multi-Gate Transistors provides a comprehensive description of the physics, technology and circuit applications of multigate field-effect transistors (FETs). It explains the physics and properties of these devices, how they are fabricated and how circuit designers can use them to improve the performances of integrated circuits. The International Technology Roadmap for Semiconductors (ITRS) recognizes the importance of these devices and places them in the "Advanced non-classical CMOS devices" category. Of all the existing multigate devices, the FinFET is the most widely known.

2008. XV, 340 p. (Integrated Circuits and Systems) Hardcover

ISBN 978-0-387-71751-7

€ 154,99 | £139.50

► * € (D) 165,84 | € (A) 170,49 | sFr 206,50

Sale Price

- ► €77,50 | £69.99
- * € (D) 82,93 | € (A) 85,25 | sFr 103,50



H. Czichos, Beuth Hochschule für Technik, Berlin, Germany (Ed)

Handbook of Technical Diagnostics

Fundamentals and Application to Structures and Systems

This work reviews the detrimental influences on structures and systems that demand long-term tuning by today's engineers. It describes practical and applicable techniques for the detection and analytical evaluation of defects, faults and failures.

2013. IX, 566 p. 463 illus., 353 illus. in color. Hardcover

ISBN 978-3-642-25849-7

- ► € 249,00 | £224.50
- ► * € (D) 266,43 | € (A) 273,90 | sFr 331,50

Sale Price

- ► € 124,50 | £112.50
- * € (D) 133,22 | € (A) 136,95 | sFr 166,00



N. Cioffi, Università degli Studi die Bari, Bari, Italy; M. Rai, SGB Amravati University Dept. Biotechnology, Amravati, India (Eds)

Nano-Antimicrobials

Progress and Prospects

Here is a comprehensive overview of nanoscience-based drug development against microbial diseases. It presensts a biological synthesis using microbes, an option that is both eco-friendly and economically viable.

2012. XVI, 556 p. Hardcover ISBN 978-3-642-24427-8

- ► € 189,95 | £171.00
- ► * € (D) 203,25 | € (A) 208,94 | sFr 253,00

Sale Price

- ▶ € 95,00 | £85.50
- * € (D) 101,65 | € (A) 104,50 | sFr 126,50



T. J. Cui, Southeast University Dept. Radio Engineering, Nanjing, China, People's Republic; D. Smith, R. Liu, Duke University Dept. Electrical & Computer Engineering, Durham, NC, USA (Eds)

Metamaterials

Theory, Design, and Applications

This book goes beyond left-handed materials or negative index materials and focuses on recent research activity. It includes an introduction to optical transformation theory and coverage of a new rapid design method for inhomogeneous metamaterials.

2010. XXIV, 368p. Hardcover ISBN 978-1-4419-0572-7

- ► € 149,99 | £133.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 196,50

Sale Price

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



G. Dagnelie, Johns Hopkins University School of Medic, Baltimore, MD, USA (Ed)

Visual Prosthetics

Physiology, Bioengineering, Rehabilitation

Visual Prosthetics provides an in-depth analysis of the principles of operation, current state, anticipated developments, and functional aspects of visual prosthetics restoring sight to visually impaired individuals. This volume uniquely describes the human visual system in health and disease in a pedagogical and didactic manner, fitting to professionals and researchers with a bioengineering background. Readers will find a balanced overview of electrical, molecular chemical and synthetic chromophore stimulation, in addition to the biophysics and psychological aspects of vision restoration. Unlike competitive texts, this introduction also includes the need and methods for functional evaluation and rehabilitation.

2011. XVIII, 453 p. Hardcover ISBN 978-1-4419-0753-0

- ► € 154,99 | £139.50
- ► * € (D) 165,84 | € (A) 170,49 | sFr 206,50

- ► €77,50 | £69.99
- ► * € (D) 82,93 | € (A) 85,25 | sFr 103,50



G. F. de Souza, University of São Paulo, São Paulo, Brazil (Ed)

Thermal Power Plant Performance Analysis

This book presents reliability-based tools used to define performance of complex systems and introduces the basic concepts of reliability, maintainability and risk analysis aiming at their application as tools for power plant performance improvement.

2012. VIII, 288 p. (Springer Series in Reliability Engineering) Hardcover ISBN 978-1-4471-2308-8

- ► € 149,99 | £135.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 200,00

Sale Price

- ► €75,00 | £67.99
- * € (D) 80,25 | € (A) 82,50 | sFr 100,00



G. Dougherty, California State Univ., Channel Islands, Camarillo, CA, USA (Ed)

Medical Image Processing

Techniques and Applications

This book examines the conceptual framework of image analysis and the effective use of image processing tools, using applications in many fields to demonstrate and consolidate specific and general concepts, and to build intuition, insight and understanding.

2011. XVI, 380 p. (Biological and Medical Physics, Biomedical Engineering) Hardcover ISBN 978-1-4419-9769-2

- ► £ 129,99 | £119.50
- ► * € (D) 139,09 | € (A) 142,99 | sFr 177,00

Sale Price

- ► €65,00 | £58.99
- ► *€ (D) 69,55 | € (A) 71,50 | sFr 87,00



M. Farzaneh, Université du Québec à Chicoutimi, Chicoutimi, QC, Canada (Ed)

Atmospheric Icing of Power Networks

This is a comprehensive book that documents the fundamentals of atmospheric icing and surveys the state of the art in eight chapters, each written by a team of experienced and internationally renowned experts. The treatment is detailed and richly illustrated.

2008. Hardcover

ISBN 978-1-4020-8530-7

- € 194,99 | £175.50
- ► * € (D) 208,64 | € (A) 214,49 | sFr 260,00

Sale Price

- ► € 97,50 | £88.00
- ► * € (D) 104,33 | € (A) 107,25 | sFr 130,00



J.-P. Deschamps, University Rovira i Virgili, Tarragona, Spain; G. D. Sutter, Universidad Autonoma de Madrid, Madrid, Spain; E. Cantó, University Rovira i Virgili, Tarragona, Spain

Guide to FPGA Implementation of Arithmetic Functions

This book reviews the development of Field Programmable Gate Arrays, complex systems made up of processors executing programs, memories, buses, input-output interfaces, and other peripherals of different types. Includes many examples of FPGA implementations.

2012. XVI, 472 p. (Lecture Notes in Electrical Engineering, Volume 149) Hardcover ISBN 978-94-007-2986-5

- ► € 169,95 | £153.00
- ► * € (D) 181,85 | € (A) 186,94 | sFr 226,50

Sale Price

- ► €85,00 | £76.50
- * € (D) 90,95 | € (A) 93,50 | sFr 113,50



T. Echekki, North Carlolina State University Dept. Mechanical & Aerospace Engineering, Raleigh, NC, USA; E. Mastorakos, University of Cambridge, Cambridge, UK (Eds)

Turbulent Combustion Modeling

Advances, New Trends and Perspectives

As the rise in computing power enables ever more detailed simulations, this volume features the work of prominent experts who review current approaches to modeling turbulent combustion. It includes algorithms, theoretical methods, and application examples.

2011. XXII, 490 p. (Fluid Mechanics and Its Applications, Volume 95) Hardcover ISBN 978-94-007-0411-4

- ► € 169,99 | £153.00
- ► *€ (D) 181,89 | € (A) 186,99 | sFr 226,50

Sale Price

- ► €85,00 | £76.50
- ► * € (D) 90,95 | € (A) 93,50 | sFr 113,50



R. Featherstone, University of Edinburgh, Scotland

Rigid Body Dynamics Algorithms

2008. IX, 207 p. Hardcover ISBN 978-0-387-74314-1

- € 149,99 | £133.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 196,50

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



G. Ferreira, Circe / Centre of Research for Energy Resources and Consumption, Zaragoza, Spain (Ed)

Alternative Energies

Updates on Progress

This book examines the key pillars of alternative energy, including biomass, hydrogen, solar and geothermal. It features life cycle assessment and thermoeconomic analysis as tools for evaluating and optimising environmental and cost subjects.

2013. VI, 287 p. 90 illus., 53 illus. in color. (Advanced Structured Materials, Volume 34) Hardcover ISBN 978-3-642-40679-9

- ► € 169,99 | £153.00
- ► * € (D) 181,89 | € (A) 186,99 | sFr 226,50

Sale Price

- ► €85,00 | £76.50
- ▶ * € (D) 90,95 | € (A) 93,50 | sFr 113,50



P. Fratzl, MPI für Kolloid- und Grenzflächenforschung, Potsdam, Germany (Ed)

Collagen

Structure and Mechanics

Collagen: Structure and Mechanics provides a cohesive introduction to this biological macromolecule and its many applications in biomaterials and tissue engineering. Graduate students and postdoctoral researchers in the fields of materials, (bio-)engineering, physics, chemistry and biology will gain an understanding of the structure and mechanical behavior of type I collagen and collagen-based tissues in vertebrates, across all length scales from the molecular (nano) to the organ (macro) level. Written in a clear and didactic manner, this volume includes current knowledge on the hierarchical structure, mechanical properties, in addition to a review of deformation and strengthening mechanisms.

2008. Hardcover ISBN 978-0-387-73905-2 ► 149,99 | £133.00

► * € (D) 160,49 | € (A) 164,99 | sFr 196,50

Sale Price

- ► €75,00 | £67.99
- ► *€ (D) 80,25 | € (A) 82,50 | sFr 100,00



A. Gefen, Tel Aviv University Fac. Engineering, Ramat Aviv, Israel (Ed)

Cellular and Biomolecular Mechanics and Mechanobiology

This book shows new insights on how cells produce and respond to mechanical loads. It details the frontier of knowledge in cellular and biomolecular mechanics and the biological implications in health and disease.

2011. X, 562 p. (Studies in Mechanobiology, Tissue Engineering and Biomaterials, Volume 4) Hardcover ISBN 978-3-642-14217-8

- € 169,99 | £153.00
- ► * € (D) 181,89 | € (A) 186,99 | sFr 226,50

Sale Price

- ► €85,00 | £76.50
- * € (D) 90,95 | € (A) 93,50 | sFr 113,50



A. C. Fischer-Cripps, Fischer-Cripps Laboratories Pty Ltd., Killarney Heights, NSW, Australia

Nanoindentation

Updated and revised, this new edition presents major advances in the theoretical understanding of nanoindentation, in an authoritative, introductory way. The book describes nanoindentation as a quantitative test method for mechanical properties of small volumes of materials.

3rd ed. 2011. XXII, 282 p. (Mechanical Engineering Series) Hardcover

ISBN 978-1-4419-9871-2

- ► € 154,99 | £139.50
- ► * € (D) 165,84 | € (A) 170,49 | sFr 206,50

Sale Price

- ► €77,50 | £69.99
- ► *€ (D) 82,93 | € (A) 85,25 | sFr 103,50



W. Gao, Tohoku University School of Engineering, Sendai, Japan

Precision Nanometrology

Sensors and Measuring Systems for Nanomanufacturing

This book describes the latest optical sensors used to measure angle and displacement in precision nanometrology, and presents scanning-type measuring systems for use in surface forms and stage motions. Coverage includes algorithms and experimental data.

2010. XIII, 354 p. (Springer Series in Advanced Manufacturing) Hardcover ISBN 978-1-84996-253-7

- ► € 194,99 | £175.50
- ► * € (D) 208,64 | € (A) 214,49 | sFr 260,00

Sale Price

- ► € 97,50 | £88.00
- ► *€ (D) 104,33 | € (A) 107,25 | sFr 130,00



B. E. Gelfand, N.N. Semenov Institute of Chemical Physics RAS, Moscow, Russia; M. V. Silnikov, Special Materials Corp., Saint Petersburg, Russia; S. P. Medvedev, N.N. Semenov Institute of Chemical Physics RAS, Moscow, Russia; S. V. Khomik, N.N. Semenov Institute of Chemcial Physics RAS, Moscow,

Thermo-Gas Dynamics of Hydrogen Combustion and Explosion

Covering a range of hydrogen combustion and explosion processes, this work collects many experimental results, providing valuable information on the thermo-gas-dynamical parameters of combustion processes in a range of scientific and industrial applications.

2012. XXII, 326 p. (Shock Wave and High Pressure Phenomena) Hardcover ISBN 978-3-642-25351-5

- ► € 149,99 | £135.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 200,00

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



A. Ghasemi, TEC Telecom Engineering Co., Atlanta, USA; A. Abedi, University of Maine, Orono, USA; F. Ghasemi, Atlanta, USA

Propagation Engineering in Radio Links Design

With all the ITU regulations and recommendations on propagation issues, this volume deals with the basic principles, covers major systems such as mobile, satellite and navigational links, and provides details of the recent developments in propagation modeling.

2013. XVIII, 549 p. 274 illus. Hardcover ISBN 978-1-4614-5313-0

- ► € 169,99 | £153.00
- ► * € (D) 181,89 | € (A) 186,99 | sFr 226,50

Sale Price

- ► €85,00 | £76.50
- ▶ * € (D) 90,95 | € (A) 93,50 | sFr 113,50



F. Gorunescu, University of Craiova Dept. Mathematics & Informatics, Craiova, Romania

Data Mining

Concepts, Models and Techniques

Offering a self-contained introduction to data mining, this book presents the concepts, models and techniques for data mining in a well organized style. Both theoretical concepts and, especially, practical techniques of this exciting field are provided.

2011. XII, 360 p. (Intelligent Systems Reference Library, Volume 12) Hardcover ISBN 978-3-642-19720-8

- ► £ 169,99 | £153.00
- ► *€ (D) 181,89 | € (A) 186,99 | sFr 226,50

Sale Price

- ► €85,00 | £76.50
- ► * € (D) 90,95 | € (A) 93,50 | sFr 113,50



N. A. Hastings, Queensland University of Technology Centre for Integrated Engineering Asset, Brisbane, QLD, Australia

Physical Asset Management

This book covers all stages of the asset management process, including: initial business appraisal, identification of fixed asset needs, financial evaluation, logistic support analysis, maintenance, outsourcing, cost-benefit analysis, disposal and renewal.

2010. XXIX, 372 p. Hardcover ISBN 978-1-84882-750-9

- ► £ 169,95 | £149.95
- ► * € (D) 181,85 | € (A) 186,95 | sFr 244,00

Sale Price

- ► €85,00 | £76.50
- ► * € (D) 90,95 | € (A) 93,50 | sFr 113,50



S. Gopalakrishnan, Indian Institute of Science Dept. Aerospace Engineering, Bangalore, India; **M. Ruzzene**, **S. Hanagud**, Georgia Institute of Technology School of Aerospace Engineering, Atlanta, GA, USA

Computational Techniques for Structural Health Monitoring

This one-volume, in-depth introduction to the computational methodologies available for rapid detection of flaws in structures covers techniques, algorithms and results in a way that facilitates their direct application, and includes a number of case studies.

2011. XVI, 500 p. (Springer Series in Reliability Engineering) Hardcover ISBN 978-0-85729-283-4

- ► £ 149,99 | £135.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 200,00

Sale Price

- ► €75,00 | £67.99
- ▶ * € (D) 80,25 | € (A) 82,50 | sFr 100,00

7 780857 292834

M. Grigoriu, Cornell University, Ithaca, NY, USA

Stochastic Systems

Uncertainty Quantification and Propagation

This book offers accurate, efficient methods for solving stochastic equations, with a focus on formulating equations that apply to problems in engineering and applied sciences. Numerous examples illustrate essential theoretical concepts, models and methods.

2012. XII, 532 p. (Springer Series in Reliability Engineering) Hardcover ISBN 978-1-4471-2326-2

- ► € 219,00 | £197.50
- ► *€ (D) 234,33 | € (A) 240,90 | sFr 292,00

Sale Price

- ► € 109,50 | £99.00
- ► * € (D) 117,17 | € (A) 120,45 | sFr 146,00



B. He, University of Minnesota Deptarment of Biomedical Engineering, Minneapolis, MN, USA (Ed)

Neural Engineering

Neural Engineering, 2nd Edition, contains reviews and discussions of contemporary and relevant topics by leading investigators in the field. It is intended to serve as a textbook at the graduate and advanced undergraduate level in a bioengineering curriculum.

2nd ed. 2013. X, 800 p. 308 illus., 168 illus. in color. Hardcover

ISBN 978-1-4614-5226-3

- ► £ 199,95 | £180.00
- ► * € (D) 213,95 | € (A) 219,94 | sFr 266,50

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



R. B. Hetnarski, Rochester Institute of Technology, NY, FL, USA; M. R. Eslami, Amirkabir University of Technology Department of Mechanical Engineering, Tehran, Iran

Thermal Stresses -- Advanced Theory and Applications

This text on Thermal Stresses covers linear and non-linear problems and offers a chapter on Creep Analysis due to Thermal Stresses. It also contains numerous applications, solved problems in the text, and problems at the end of each chapter.

2009. XXXII, 560 p. (Solid Mechanics and Its Applications, Volume 158) Hardcover ISBN 978-1-4020-9246-6

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

Sale Price

- € 75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



N. Jalili, Northeastern University Dept. Mechanical & Industrial, Boston, MA, USA

Piezoelectric-Based Vibration Control

From Macro to Micro/Nano Scale Systems

"Piezoelectric-Based Vibration-control Systems: Applications in Micro/Nano Sensors and Actuators" discusses recent developments in smart structures and emerging areas in micro and nanotechnology. There is specific emphasis on piezoelectric systems.

2010, XV, 517 p. Hardcover ISBN 978-1-4419-0069-2

- € 149,99 | £133.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 196,50

- € 75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



A. McIntosh (Eds) **Handbook of Brain Connectivity**

V. K. Jirsa, Florida Atlantic University Center

for Complex Systems &, Boca Raton, FL, USA;

Our contemporary understanding of brain function is deeply rooted in the ideas of the nonlinear dynamics of distributed networks. Cognition and motor coordination seem to arise from the interactions of local neuronal networks, which themselves are connected in large scales across the entire brain. The spatial architectures between various scales inevitably influence the dynamics of the brain and thereby its function. But how can we integrate brain connectivity amongst these structural and functional domains? Our Handbook provides an account of the current knowledge on the measurement, analysis and theory of the anatomical and functional connectivity of the brain.

2007. X, 528 p. (Understanding Complex Systems) Hardcover

ISBN 978-3-540-71462-0

- € 199,99 | £180.00
- ► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



S. Hiermaier, Freiburg, Germany

Structures Under Crash and **Impact**

Continuum Mechanics, Discretization and **Experimental Characterization**

Structures Under Crash and Impact: Continuum Mechanics, Discretization and Experimental Characterization examines the testing and modeling of materials and structures under dynamic loading conditions. Readers will find an in-depth analysis of the current mathematical modeling and simulation tools available for a variety of materials, in addition to both the benefits and limitations they pose in industrial design. The models discussed are also available in commercial codes such as LS-DYNA and AUTODYN.

2008. XII, 410 p. Hardcover ISBN 978-0-387-73862-8

- ► € 129,99 | £119.50
- ► * € (D) 139,09 | € (A) 142,99 | sFr 177,00

Sale Price

- € 65,00 | £58.99
- * € (D) 69,55 | € (A) 71,50 | sFr 87,00



J. Janicka, Technische Universität Darmstadt, Darmstadt, Germany; A. SADIKI, Darmstadt University of Technology Institute of Energy and Power Plant Tech, Darmstadt, Germany; M. Schäfer, C. Heeger, Technische Universität Darmstadt, Darmstadt, Germany (Eds)

Flow and Combustion in **Advanced Gas Turbine Combustors**

This book reports on combustion research activities focused on the Collaborative Research Center "Flow and Combustion in Future Gas Turbine Combustion Chambers," demonstrates completely integrated modeling and numerical simulation.

2013. XI, 492 p. 234 illus., 87 illus. in color. (Fluid Mechanics and Its Applications, Volume 102) Hardcover

ISBN 978-94-007-5319-8

- € 169,95 | £153.00
- *€ (D) 181,85 | € (A) 186,94 | sFr 226,50

Sale Price

- € 85,00 | £76.50
- *€ (D) 90,95 | € (A) 93,50 | sFr 113,50



Y. Joshi, P. Kumar, Georgia Institute of Technology George W. Woodruff School of, Atlanta, GA, USA (Eds)

Energy Efficient Thermal Management of Data Centers

Examining energy flow in today's data centers, this book gives particular focus to the state-of-theart thermal management approaches now being implemented across the globe. Future trends in computing hardware and their possible impacts are also examined.

2012. XIV, 626 p. Hardcover ISBN 978-1-4419-7123-4

- € 169,95 | £153.00
- ► * € (D) 181,85 | € (A) 186,94 | sFr 226,50

- € 85,00 | £76.50
- ► * € (D) 90,95 | € (A) 93,50 | sFr 113,50



O. Inderwildi, S. D. King, Oxford, UK (Eds)

Energy, Transport, & the Environment

Addressing the Sustainable Mobility Paradigm

Sustainable mobility is a highly complex problem as it is affected by the interactions between socio-economic, environmental, technological and political issues. Energy, Transport, & the Environment: Addressing the Sustainable Mobility Paradigm brings together leading figures from business, academia and governments to address the challenges and opportunities involved in working towards sustainable mobility.

2012. VIII, 713 p. 195 illus., 36 illus. in color. Hardcover

ISBN 978-1-4471-2716-1

► £ 199,95 | £180.00

► * € (D) 213,95 | € (A) 219,94 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



F. Kiessling, Baiersdorf, Germany; P. Nefzger, Hemmingen, Germany; J. F. Nolasco, Belo Horizonte, Brazil; U. Kaintzyk, Siemens AG CT MM1 Innovative Electronics, Erlangen, Germany

Overhead Power Lines

Planning, Design, Construction

Overhead Power Lines presents not only the scientific and engineering basis for the electric and mechanical design, but also comprehensively describes all aspects of most recent technology, including the selection and design of components such as conductors, insulators, fittings, supports and foundations. The chapters on line survey, construction and maintenance address updated requirements and solutions.

2003. XXVIII, 759 p. (Power Systems) Hardcover ISBN 978-3-540-00297-0

- € 332,00 | £299.00
- ► * € (D) 355,24 | € (A) 365,20 | sFr 442,00

Sale Price

- ► € 166,00 | £149.50
- * € (D) 177,62 | € (A) 182,60 | sFr 221,00



W. Kowalski, Pennsylvania State University Pennsylvania Environmental Center, University Park, PA. USA

Ultraviolet Germicidal Irradiation Handbook

UVGI for Air and Surface Disinfection

This reference covers technical information on ultraviolet germicidal irradiation and its application to air and surface disinfection and the control of pathogens and allergens. Its main focus is airborne microbes and surface contamination applications.

2009. I, 501p. 444 illus., 222 illus. in color. Hardcover ISBN 978-3-642-01998-2

- € 149,99 | £135.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 200,00

Sale Price

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



A. Karagiannidis, Aristotle University Thessaloniki, Thessaloniki, Greece (Ed)

Waste to Energy

Opportunities and Challenges for Developing and Transition Economies

This book addresses the problems of integrating waste-to-energy (WTE) in developing countries and countries in transition, where waste management infrastructure and awareness can be lacking, and where scepticism is among a unique and complex set of barriers.

2012. VIII, 372 p. (Green Energy and Technology) Hardcover

ISBN 978-1-4471-2305-7

- ► € 149,99 | £135.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 200,00

Sale Price

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



G. Klinzing, University of Pittsburgh, Pittsburgh, PA, USA; **F. Rizk**, Neuhofen, Germany; **R. Marcus**, Rivonia, South Africa; **L. Leung**, Commonwealth Scientific and Industrial Research Organization, Glen Osmond, SA, Australia

Pneumatic Conveying of Solids

A theoretical and practical approach

Pneumatic conveying is one of the most popular methods of handling bulk powdered and granular materials in mining, chemical and agricultural industries. This 3rd edition of this successful book covers both theoretical and practical aspects of the subject.

3rd ed. 2010. X, 435p. (Particle Technology Series, Volume 8) Hardcover

ISBN 978-90-481-3608-7 ► 149,99 | £135.00

► * € (D) 160,49 | € (A) 164,99 | sFr 200,00

Sale Price

- ► €75,00 | £67.99
- ► *€ (D) 80,25 | € (A) 82,50 | sFr 100,00



R. Kramme, Titisee-Neustadt, Germany; K.-P. Hoffmann, Fraunhofer-Institut für Biomedizinische Technik (IBMT), St.Ingbert, Germany; R. Pozos, San Diego State University College of Sciences, San Diego, CA, USA (Eds)

Springer Handbook of Medical Technology

This reference offers a broad introduction to the world of medical technology, fully considering today's progress and further development in all relevant fields. The handbook distinguishes itself by way of simplification and condensation of complex facts.

2011. XLVI, 1500 p. Hardcover ISBN 978-3-540-74657-7

- ► € 249,00 | £224.50
- ► * € (D) 266,43 | € (A) 273,90 | sFr 357,00

- ► € 124,50 | £112.50
- * € (D) 133,22 | € (A) 136,95 | sFr 166,00



K. H. Kroemer, H. J. Kroemer, Blacksburg, VA, VA, USA; K. E. Kroemer-Elbert, Westfield, NJ, USA

Engineering Physiology

Bases of Human Factors Engineering/ Ergonomics

This book discusses the architecture, functioning, and biomechanics of the human body, its bones, joints, muscles, tendons, and ligaments. The text is up-to-date, solid and avoids jargon. This is an established book, already in its 4th edition.

2010. XXIII, 350p. 118 illus.. Hardcover ISBN 978-3-642-12882-0

- ► £ 149,99 | £135.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 200,00

Sale Price

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



R. Manzini, A. Regattieri, Università Bologna Dipto. Ingegneria Costruzione, Bologna, Italy; H. Pham, Rutgers University, Piscataway, NJ, USA; E. Ferrari, Università Bologna Dipto. Ingegneria Costruzione, Bologna, Italy

Maintenance for Industrial Systems

Companies are being forced to process and manage increasingly differentiated products with shorter life cycles, low volumes and reduced customer delivery times. This book introduces an original and integrated idea of maintenance: maintenance for productivity.

2010. XVIII, 479 p. (Springer Series in Reliability Engineering) Hardcover ISBN 978-1-84882-574-1

- ► £ 229,00 | £206.50
- ► * € (D) 245,03 | € (A) 251,90 | sFr 305,00

Sale Price

- ► € 114,50 | £103.50
- ► * € (D) 122,52 | € (A) 125,95 | sFr 152,50



K. Mollenhauer, Berlin, Germany; H. Tschöke, Ottovon-Guericke-Universität Abt. IMKO, Magdeburg, Germany (Eds)

Handbook of Diesel Engines With contributions by numerous experts

Transl. English: K. G. Johnson, Magdeburg, Germany

The diesel engine still remains the most economic internal combustion engine for vehicles and mobile and stationary machines. This reference on them covers energy efficiency, the fuel-injection process, conventional and alternative fuels, and much more.

2010. XII, 636p. Hardcover ISBN 978-3-540-89082-9

- ► € 239.00 | £215.50
- ➤ * € (D) 255,73 | € (A) 262,90 | sFr 318,50

Sale Price

- ► € 119,50 | £108.00
- * € (D) 127,87 | € (A) 131,45 | sFr 159,50



J. Lutz, TU Chemnitz Fak. Elektrotechnik und, Chemnitz, Germany; H. Schlangenotto, Neu-Isenburg, Germany; U. Scheuermann, Semikron Elektronik GmbH & Co. KG, Nürnberg, Germany; R. De Doncker, RWTH Aachen University Inst. Power Electronics & Electr. Drives, Aachen, Germany

Semiconductor Power Devices

Physics, Characteristics, Reliability

The book starts with basic semiconductor physics, followed by some aspects of production technology. It explains power diodes, thyristors, MOSFETs and IGBTs as well as discusses standard packaging technologies, materials and reliability investigations.

2011. X, 608p. 250 illus.. Hardcover ISBN 978-3-642-11124-2

- ► € 169,95 | £153.00
- ► * € (D) 181,85 | € (A) 186,94 | sFr 244,00

Salo Drico

- ► €85,00 | £76.50
- * € (D) 90,95 | € (A) 93,50 | sFr 113,50

9 783642 111242

F. Milano, Unviersidad de Castilla-La Mancha Escuela Técnica Superior de Ingenieros, Ciudad Real, Spain

Power System Modelling and Scripting

This book presents a systematic methodology for the computer modeling of electric power systems. It features support of theoretical concepts with a complete, open-source software package that is available via the authors' webpage.

2010. XLVI, 558 p. (Power Systems) Hardcover ISBN 978-3-642-13668-9

- ► € 194,95 | £175.50
- ► * € (D) 208,60 | € (A) 214,45 | sFr 260,00

Sale Price

- ► € 97,50 | £88.00
- * € (D) 104,33 | € (A) 107,25 | sFr 130,00



S. Murakami, Nagoya University, Nagoya, Japan

Continuum Damage Mechanics

A Continuum Mechanics Approach to the Analysis of Damage and Fracture

This book describes the current state of the art in damage mechanics, applying theory to typical damage and fracture problems encountered in various fields of current engineering. Shows the possibilities of this promising branch of mechanics.

2012. XXX, 402 p. (Solid Mechanics and Its Applications, Volume 185) Hardcover ISBN 978-94-007-2665-9

- ► € 149,99 | £135.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 200,00

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



S. Muyeen, The Petroleum Institute, Abu Dhabi, Utd. Arab.Emir. (Ed)

Wind Energy Conversion Systems

Technology and Trends

This exploration of the technical progress of wind energy conversion systems also examines potential future trends and includes recently developed systems such as those for multi-converter operation of variable-speed wind generators and lightning protection.

2012. XXVI, 526 p. (Green Energy and Technology) Hardcover

ISBN 978-1-4471-2200-5

- ► £ 199,99 | £180.00
- ► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



A. Peña-Ayala, WOLNM, Leyes Reforma, Mexico (Ed)

Intelligent and Adaptive Educational-Learning Systems

Achievements and Trends

A host of cutting-edge educational applications for computers and software are covered here by leading experts, from data mining of learning models to dynamic storyboarding and the effects on education and business of AI applications in the classroom.

2013. XII, 524 p. 175 illus. (Smart Innovation, Systems and Technologies, Volume 17) Hardcover ISBN 978-3-642-30170-4

- ► £ 169,95 | £153.00
- ► * € (D) 181,85 | € (A) 186,94 | sFr 226,50

Sale Price

- ► €85,00 | £76.50
- ► * € (D) 90,95 | € (A) 93,50 | sFr 113,50



J. Pokluda, P. Šandera, Brno University of Technology Fac. Mechanical Engineering, Brno, Czech Republic

Micromechanisms of Fracture and Fatigue

In a Multi-scale Context

This book provides deep insight into basic micromechanisms of fracture behavior of materials as well as a number of engineering applications. It is the result of 20 years research in fatigue and fracture and discusses the state of the art for each.

2010. XIII, 293 p. (Engineering Materials and Processes) Hardcover ISBN 978-1-84996-265-0

- ► € 199,99 | £180.00
- ► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



Y. Payan, Joseph Fourier University, La Tronche cedex. France (Ed)

Soft Tissue Biomechanical Modeling for Computer Assisted Surgery

This volume focuses on the biomechanical modeling of deformable soft tissues in the context of Computer Assisted Surgery (CAS). Discussion includes biomechanical models, estimation of in vivo mechanical behavior, real-time numerical simulations and more.

2012. X, 398 p. (Studies in Mechanobiology, Tissue Engineering and Biomaterials, Volume 11) Hardcover ISBN 978-3-642-29013-8

- ► £ 149,99 | £135.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 200,00

Sale Price

- ► €75,00 | £67.99
- ▶ * € (D) 80,25 | € (A) 82,50 | sFr 100,00



A. Phadke, J. Thorp, Virginia Tech Bradley Dept. Electrical &, Blacksburg, VI, USA

Synchronized Phasor Measurements and Their Applications

This book provides an account of the field of synchronized Phasor Measurement technology, its beginning, its technology and its principal applications. It covers wide Area Measurements (WAM) and their applications. The measurements are done using GPS systems and eventually will replace the existing technology. The authors created the field about twenty years ago and most of the installations planned or now in existence around the world are based on their work.

2008. (Power Electronics and Power Systems) Hardcover

ISBN 978-0-387-76535-8

- € 149,99 | £133.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 196,50

Sale Price

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



K. Ramesh, The Johns Hopkins University Department of Mechanical Engineering, Baltimore, MD, USA

Nanomaterials

Mechanics and Mechanisms

This text covers the key mechanics issues and mechanisms associated with nanomaterials. In it, analyses are paired with appropriate engineering applications. Current design and modeling approaches are also discussed.

2009. XXXVII, 316p. 124 illus.. Hardcover ISBN 978-0-387-09782-4

- ► £ 129,95 | £117.00
- ► * € (D) 139,05 | € (A) 142,95 | sFr 186,50

- ► €65,00 | £58.99
- ► * € (D) 69,55 | € (A) 71,50 | sFr 87,00



J. Rosen, University of California, Santa Cruz, CA, USA; B. Hannaford, University of Washington, Seattle, WA, USA; R. M. Satava, University of Washington Medical Center, Seattle, WA, USA (Eds)

Surgical Robotics

Systems Applications and Visions

Surgical robotics plays an important role in surgical procedures. Written from a systems-oriented perspective, this volume discusses various applications from surgical disciplines that include orthopedics, urology, cardiac surgery and neurosurgery.

2011. XXII, 819p. 365 illus.. Hardcover ISBN 978-1-4419-1125-4

- ► € 199,95 | £180.00
- ► * € (D) 213,95 | € (A) 219,94 | sFr 287,00

- € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



C. Sherman, J. Butler, Image Acoustics, Inc., Cohasset, MA, USA

Transducers and Arrays for Underwater Sound

The most comprehensive book on electroacoustic transducers and arrays for underwater sound Includes transducer modeling techniques and transducer designs that are currently in use Includes discussion and analysis of array interaction and nonlinear effects in transducers Contains extensive data in figures and tables needed in transducer and array design Written at a level that will be useful to students as well as to practicing engineers and scientists

1st ed. 2007. Corr. 3rd printing 2013. XIX, 610 p. 159 illus. (The Underwater Acoustics Series) Hardcover ISBN 978-0-387-32940-6

- € 159,99 | £146.50
- ► * € (D) 171,19 | € (A) 175,99 | sFr 216,00

Sale Price

- € 80,00 | £72.00
- ► * € (D) 85,60 | € (A) 88,00 | sFr 106,50



H. Seifi, Tarbiat Modarres University School of Engineering, Tehran, Iran; M. S. Sepasian, Tehran,

Electric Power System Planning

Issues, Algorithms and Solutions

Power System Planning addresses the long-term power system planning issues for professionals as well as senior level and postgraduate students. Readers will find numerous examples, problems and back-up materials that illustrate the concepts discussed.

2011. XIV, 374 p. (Power Systems) Hardcover ISBN 978-3-642-17988-4

- € 149,99 | £135.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 200,00

Sale Price

- € 75,00 | £67.99
- * € (D) 80,25 | € (A) 82,50 | sFr 100,00



R. F. Stapelberg, Queensland University of Technology, Brisbane, QLD, Australia

Handbook of Reliability, **Availability, Maintainability** and Safety in Engineering **Design**

The "Handbook of Reliability, Availability, Maintainability and Safety in Engineering Design" studies the combination of various methods of designing for reliability, availability, maintainability and safety, as well as the latest techniques in probability and possibility modeling, mathematical algorithmic modeling, evolutionary algorithmic modeling, symbolic logic modeling, artificial intelligence modeling, and object-oriented computer modeling.

2009. Hardcover ISBN 978-1-84800-174-9

€ 259,00 | £233.50

► *€ (D) 277,13 | € (A) 284,90 | sFr 345,00

Sale Price

- ► € 129,50 | £117.00
- ► * € (D) 138,57 | € (A) 142,45 | sFr 172,50



P. Stavroulakis, Technical University of Crete, Chania, Crete, Greece (Fd)

Biological Effects of Electromagnetic Fields

Mechanisms, Modeling, Biological Effects, Therapeutic Effects, International Standards, **Exposure Criteria**

Any book under this title which creates both anticipation and anxiety must be the work of a lot of people, present any new findings with objectivity and cover the subject as exhaustively as possible. As such, it must cover the possible reproducible mechanisms of action/reaction EMF-Biological Organism, the appropriate models that allow quantitative measurements, the basic biological reproducible effects and possible therapeutic effects along with their prevalent metrics and international exposure criteria. This is exactly the main objective of this book.

2003. XV, 793 p. Hardcover ISBN 978-3-540-42989-0

- ► € 229.00 | £206.00
- ► * € (D) 245,03 | € (A) 251,90 | sFr 328,50

- € 114,50 | £103.50
- ► * € (D) 122,52 | € (A) 125,95 | sFr 152,50



S. Svenson, Drug Delivery Solutions LLC, Arlington, MA, USA; R. K. Prud'homme, Princeton University, Princeton, USA (Eds)

Multifunctional Nanoparticles for Drug Delivery Applications

Imaging, Targeting, and Delivery

This book presents the medical challenges that can be reduced or even overcome by recent advances in nanoscale drug delivery. Each chapter highlights recent progress in the design and engineering of select multifunctional nanoparticles.

2012. X, 374 p. (Nanostructure Science and Technology) Hardcover ISBN 978-1-4614-2304-1

- € 159,99 | £146.50
- ► * € (D) 171,19 | € (A) 175,99 | sFr 216,00

- € 80,00 | £72.00
- * € (D) 85,60 | € (A) 88,00 | sFr 106,50



K. P. Valavanis, University of South Florida Dept. Computer Science &, Tampa, FL, USA (Ed)

Advances in Unmanned Aerial Vehicles

State of the Art and the Road to Autonomy

Unmanned Aerial Vehicles (UAVs) have seen unprecedented levels of growth in military and civilian application domains. Fixed-wing aircraft, heavier or lighter than air, rotary-wing (rotorcraft, helicopters), vertical take-off and landing (VTOL) unmanned vehicles are being increasingly used in military and civilian domains for surveillance, reconnaissance, mapping, cartography, border patrol, inspection, homeland security, search and rescue, fire detection, agricultural imaging, traffic monitoring, to name just a few application domains

2007. XXIV, 543 p. (Intelligent Systems, Control and Automation: Science and Engineering, Volume 33) Hardcover

ISBN 978-1-4020-6113-4

- ► £ 159,99 | £144.00
- ► * € (D) 171,19 | € (A) 175,99 | sFr 213,00

Sale Price

- ► €80,00 | £72.00
- * € (D) 85,60 | € (A) 88,00 | sFr 106,50



R. Vilanova, Universitat Autònoma de Barcelona Dept of Telecommunic. & Systems Engin., Barcelona, Spain; A. Visioli, Università Brescia Facoltà di Ingegneria, Brescia, Italy (Eds)

PID Control in the Third Millennium

Lessons Learned and New Approaches

This book reviews PID controller theory, design and realization, covering new approaches to controller tuning; configurations for more efficient control and such non-standard approaches as fractional-order, event-based, nonlinear and predictive control.

2012. XIV, 602 p. (Advances in Industrial Control)

ISBN 978-1-4471-2424-5

- ► € 169,95 | £153.00
- ► * € (D) 181,85 | € (A) 186,94 | sFr 226,50

Sale Price

- ► €85,00 | £76.50
- ► * € (D) 90,95 | € (A) 93,50 | sFr 113,50



L. Wang, RMIT University Computer Engineering, Melbourne, VIC, Australia

Model Predictive Control System Design and Implementation Using MATLAB®

This book proposes methods for the design and implementation of MPC systems using basis functions that confer a number of advantages. As well as presenting the theory, the author covers industrial applications and explains the subject of quadratic programming.

2009. XXX, 378 p. (Advances in Industrial Control) Hardcover

ISBN 978-1-84882-330-3

- € 149,95 | £135.00
- ► *€ (D) 160,45 | € (A) 164,95 | sFr 200,00

Sale Price

- ► €75,00 | £67.99
- * € (D) 80,25 | € (A) 82,50 | sFr 100,00



K. C. Wilson, Queens University Dept. Civil Engineering, Kingston, ON, Canada; G. R. Addie, GIW Industries Inc., Grovetown, GA, USA; A. Sellgren, Lulea University of Technology Div. Water Resources Engineering, Lulea, Sweden; R. Clift, University of Surrey Center for Environmental Strategy, Guildford, Surrey, UK

Slurry Transport Using Centrifugal Pumps

1,1 Applications of Slurry Transport Vast tonnages are pumped every year in the form of solid-liquid mixtures, known as slurries. The application which involves the largest quantities is the dredging industry, continually maintaining navigation in harbours and rivers, altering coastlines and winning material for landfill and construction purposes.

3rd ed. 2006. Corr. 2nd printing 2008. X, 432 p. Hardcover

ISBN 978-0-387-23262-1

- ► € 154,99 | £139.50
- ► * € (D) 165,84 | € (A) 170,49 | sFr 206,50

Sale Price

- ► €77,50 | £69.99
- * € (D) 82,93 | € (A) 85,25 | sFr 103,50



L. Wang, University of Toledo, Toledo, USA (Ed)

Modeling and Control of Sustainable Power Systems

Towards Smarter and Greener Electric Grids

Written by world-renowned experts, this book offers representative applications of current and emerging smart grid technologies and operating strategies, and explains in detail a variety of innovative modeling and control methods.

2012. X, 370p. 256 illus., 148 illus. in color. (Green Energy and Technology) Hardcover ISBN 978-3-642-22903-9

- ► € 149,99 | £135.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 200,00

Sale Price

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



D. Wood, University of Calgary, Calgary, AB, Canada

Small Wind Turbines

Analysis, Design, and Application

Providing software and techniques on analysis, design and installation, this volume illustrates how to build small wind turbines. While serving as a reference for student projects and detailed design studies, the text also provides important background material for engineers.

2011. XX, 272 p. With online files/update. (Green Energy and Technology) Hardcover ISBN 978-1-84996-174-5

- € 149,99 | £135.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 200,00

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



J. Xiong, Oakland, CA, USA

New Software Engineering Paradigm Based on Complexity Science

An Introduction to NSE

This book describes a revolution in software engineering - the Nonlinear Software Engineering paradigm, which complies with the essential principles of complexity science and can help double productivity, halve costs and reduce defects in software products.

2011. XXXV, 746p. 488 illus.. With online files/ update. Hardcover ISBN 978-1-4419-7325-2

- ► € 154,99 | £139.50
- ► * € (D) 165,84 | € (A) 170,49 | sFr 206,50

Sale Price

- ► €77,50 | £69.99
- ▶ * € (D) 82,93 | € (A) 85,25 | sFr 103,50



M. I. Younis, State University of New York, Binghamton Dept. Mechanical Engineering, Binghamton, NY, USA

MEMS Linear and Nonlinear Statics and Dynamics

This book presents the necessary analytical and computational tools for MEMS designers to model and simulate most known MEMS devices, structures, and phenomena. In also provides analysis and treatment for the most common static and dynamic phenomena in MEMS.

2011. XVI, 456 p. (Microsystems, Volume 20) Hardcover

ISBN 978-1-4419-6019-1

- ► € 154,99 | £139.50
- ► *€ (D) 165,84 | € (A) 170,49 | sFr 206,50

Sale Price

- ► € 77,50 | £69.99
- ► *€ (D) 82,93 | € (A) 85,25 | sFr 103,50



K.-D. Kreuer, Max-Planck-Institut für Festkörperforschung, Stuttgart, Germany (Ed)

Fuel Cells

Selected Entries from the Encyclopedia of Sustainability Science and Technology

These selected, peer-reviewed Springer encyclopedia entries focus on the fuel cell technology that could supersede fossil fuels. The book includes expert material on solid oxide, molten carbonate, phosphoric acid, and polymer electrolyte membrane variants.

2013. VI, 801 p. 332 illus., 174 illus. in color. Hardcover

ISBN 978-1-4614-5784-8

- € 199,95 | £180.00
- ► * € (D) 213,95 | € (A) 219,94 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



R. Yin, Central Iron & Steel Research Institute (CISRI), Beijing, China, People's Republic

Metallurgical Process Engineering

This book describes the concepts of the operating dynamics of the whole steel manufacturing process, not only some procedures, but also the relationship with different procedures. It emphasizes the orderly operation of the steel plant manufacturing process.

2011. 400p. 130 illus.. Hardcover ISBN 978-3-642-13955-0

- ► € 199,95 | £180.00
- ► * € (D) 213,95 | € (A) 219,94 | sFr 287,00

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



K.W. Böer, University of Delaware, Naples, USA

Handbook of the Physics of Thin-Film Solar Cells

This book covers the basics of semiconductor physics in the design and analysis of thin film solar cell materials, from material science to space charge effects in semiconductors and pnjunctions. Includes tools for analyzing voltage and high-field effects.

2013. XL, 882 p. 451 illus. Hardcover ISBN 978-3-642-36747-2

- ► € 399,00 | £359.50
- ► * € (D) 426,93 | € (A) 438,90 | sFr 531,50

Sale Price

- ► € 199,50 | £180.00
- ► * € (D) 213,47 | € (A) 219,45 | sFr 266,00



T. A. Reddy, Arizona State University, Tempe, AZ, USA

Applied Data Analysis and Modeling for Energy Engineers and Scientists

Focusing on the analysis and modeling of thermal systems in engineering, this volume covers the mathematics, data interpretation and decision analysis required for researchers and engineers to scrutinize their methodologies and arrive at robust conclusions.

2011. XXI, 430 p. 313 illus. Hardcover ISBN 978-1-4419-9612-1

- ► € 169,95 | £153.00
- ► * € (D) 181,85 | € (A) 186,94 | sFr 244,00

- ► €85,00 | £76.50
- ► * € (D) 90,95 | € (A) 93,50 | sFr 113,50



D. Barcelo, Barcelona, Spain (Ed)

Emerging Organic Contaminants and Human Health

This volume provides an overview of the occurrence and fate of emerging contaminants, discusses advanced chemical analysis methods, toxicological and ecotoxicological effects as well as human exposure. One focus is on pharmaceuticals, in particular antibiotics, and the problems associated with their increased use in hospitals. Other covered emerging contaminants occurring e.g. in food, water, air or soil include brominated flame retardants, polar pesticides, phthalates, phosphate esters, perfluorinated compounds, personal care products, musk fragrances, disinfection byproducts, illicit drugs, and nanomaterials.

2012. XIV, 466 p. (The Handbook of Environmental Chemistry, Volume 20) Hardcover ISBN 978-3-642-28131-0

- ► € 249,00 | £224.50
- ► * € (D) 266,43 | € (A) 273,90 | sFr 331,50

Sale Price

- ► € 124,50 | £112.50
- ► * € (D) 133,22 | € (A) 136,95 | sFr 166,00



A. Cipollina, G. Micale, L. Rizzuti, Università Palermo Dipto. Ingegneria Chimica dei, Palermo, Italy (Eds)

Seawater Desalination

Conventional and Renewable Energy Processes

A growing proportion of the world's population is dependent on seawater desalination. This book presents an overview of conventional and non-conventional technologies, with a particular focus on the coupling of renewable energies with desalination processes.

2009. I, 306p. 270 illus., 135 illus. in color. (Green Energy and Technology) Hardcover ISBN 978-3-642-01149-8

- ► € 149,59 | £135.00
- ► * € (D) 160,06 | € (A) 164,55 | sFr 199,50

Sale Price

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



J. de Gruijter, D. J. Brus, Alterra B. V. Research Institute of the Green Area, Wageningen, Netherlands; M. F. Bierkens, Utrecht University, Utrecht, Netherlands; M. Knotters, Alterra, Wageningen, Netherlands

Sampling for Natural Resource Monitoring

This practical handbook presents the statistical knowledge and methodology of sampling and data analysis useful for spatial inventory and monitoring of natural resources. The authors have omitted all theory not essential for applications or for basic understanding. This presentation is broader than standard statistical texts, as the authors focus on practical methods for employing and embedding statistical methodology in real-life spatial inventory and monitoring projects. The book functions as a design guide for efficient sampling schemes and monitoring systems.

2006. XIII, 332 p. 91 illus. Hardcover ISBN 978-3-540-22486-0

- ► £ 199,99 | £180.00
- ► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



P. Golinska, M. Fertsch, Poznan University of Technology, Poznan, Poland; J. Marx Gómez, Universität Oldenburg, Oldenburg, Germany (Eds)

Information Technologies in Environmental Engineering

New Trends and Challenges

This enlightening book offers a collection of papers presented at the 5th International Symposium on Environmental Engineering, held in July 2011, in Poznan, Poland. Recent success stories in ecoinformatics, promising ideas and new challenges are discussed.

2011. XII, 808 p. (Environmental Science and Engineering / Environmental Engineering) Hardcover ISBN 978-3-642-19535-8

- ► € 279,00 | £251.50
- ► *€ (D) 298,53 | € (A) 306,90 | sFr 371,50

Sale Price

- ► € 139,50 | £126.00
- ► * € (D) 149,27 | € (A) 153,45 | sFr 186,00



J. Guinée (Ed)

Handbook on Life Cycle Assessment

Operational Guide to the ISO Standards

Environmental policy aims at the transition to sustainable production and consumption. This is taking place in different ways and at different levels. In cases where businesses are continuously active to improve the environmental performance of their products and activities, the availability of knowledge on environmental impacts is indispensable. The integrated assessment of all environmental impacts from cradle to grave is the basis for many decisions relating to achieving improved products and services. The assessment tool most widely used for this is the environmental Life Cycle Assessment, or LCA.

2002. XII, 692 p. (Eco-Efficiency in Industry and Science, Volume 7) Hardcover ISBN 978-1-4020-0228-1

- ► € 459,00 | £413.50
- ► * € (D) 491,13 | € (A) 504,90 | sFr 611,50

Sale Price

- ► € 229,50 | £207.00
- ► * € (D) 245,57 | € (A) 252,45 | sFr 306,00



J. Guinée (Ed)

Handbook on Life Cycle Assessment

Operational Guide to the ISO Standards

Environmental policy aims at the transition to sustainable production and consumption. This is taking place in different ways and at different levels. In cases where businesses are continuously active to improve the environmental performance of their products and activities, the availability of knowledge on environmental impacts is indispensable. The integrated assessment of all environmental impacts from cradle to grave is the basis for many decisions relating to achieving improved products and services. The assessment tool most widely used for this is the environmental Life Cycle Assessment, or LCA.

2002. XII, 692 p. (Eco-Efficiency in Industry and Science, Volume 7) Softcover ISBN 978-1-4020-0557-2

- ► € 249,00 | £224.50
- ► * € (D) 266,43 | € (A) 273,90 | sFr 331,50

- ► € 124,50 | £112.50
- ► * € (D) 133,22 | € (A) 136,95 | sFr 166,00



T. P. Knepper, University of Applied Sciences Fresenius, Idstein, Germany; F. T. Lange, DVGW Water Technology Center, Karlsruhe, Germany (Eds)

Polyfluorinated Chemicals and Transformation Products

Due to their unparalleled effectiveness and efficiency, polyfluorinated chemicals (PFC) have become essential in numerous technical applications. However, many PFCs brought to market show limited biodegradability, and their environmental persistence combined with toxic and bioaccumulative potential have become a matter of concern in some instances. This volume highlights the synthesis of PFCs, focusing on substances with improved application and environmental properties, which are a challenge for synthetic chemists.

2012. XIV, 174 p. (The Handbook of Environmental Chemistry, Volume 17) Hardcover ISBN 978-3-642-21871-2

- ► £ 199,99 | £180.00
- ► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



C. v. Leeuwen, T. Vermeire (Eds)

Risk Assessment of Chemicals: An Introduction

At last – a second edition of this hugely important text that reflects the progress and experience gained in the last decade and aims at providing background and training material for a new generation of risk assessors.

2nd ed. 2007. XXXII, 686 p. Hardcover ISBN 978-1-4020-6101-1

- ► € 164,95 | £148.50
- ► *€ (D) 176,50 | € (A) 181,45 | sFr 236,50

Sale Price

- ► €82,50 | £74.50
- ► * € (D) 88,28 | € (A) 90,75 | sFr 110,00



P. N. Mascia, Ceres, Inc., Thousand Oaks, CA, USA; J. Scheffran, University of Hamburg ZMAW, Hamburg, Germany; J. M. Widholm, University of Illinois Department of Crop Sciences, Urbana, IL, USA (Eds)

Plant Biotechnology for Sustainable Production of Energy and Co-products

The successful use of plant biomass for the sustainable production of energy and co-products such as chemicals is crucial to mankind's future. This volume examines the uses of plant biomass and ways to improve the productivity and composition of plant species.

2010. XVIII, 458 p. (Biotechnology in Agriculture and Forestry, Volume 66) Hardcover ISBN 978-3-642-13439-5

- ► € 229,00 | £206.50
- ► * € (D) 245,03 | € (A) 251,90 | sFr 305,00

Sale Price

- ► € 114,50 | £103.50
- ► * € (D) 122,52 | € (A) 125,95 | sFr 152,50



W. K.-M. Lau, NASA-Goddard Space Flight Center Climate and Radiation Branch, Greenbelt, MD, USA; D. E. Waliser, California Institute of Technology Jet Propulsion Lab., Pasadena, CA, USA

Intraseasonal Variability in the Atmosphere-Ocean Climate System

This updated second edition features multi-author, comprehensive and authoritative reviews of intraseasonal variability. It has a balance of observation, theory and modeling and is a single-source reference for those interested in this key phenomenon.

2nd ed. 2012. XXXIV, 614 p. (Springer Praxis Books / Environmental Sciences) Hardcover ISBN 978-3-642-13913-0

- ► € 199,99 | £180.00
- ► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



A. Malik, Aligarh Muslim University, Aligarh, India; E. Grohmann, Department of Infectious Diseases University Hospital Freiburg, Freiburg, Germany (Eds)

Environmental Protection Strategies for Sustainable Development

The environment of our planet is degrading at an alarming rate. This book aims to prevent and reduce environmental pollution. It offers a unique treatment of the subject, linking various protection strategies for sustainable development.

2012. XIV, 606 p. (Strategies for Sustainability) Hardcover

ISBN 978-94-007-1590-5

- ► £ 199,99 | £180.00
- ► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



A. Singh, O. P. Ward, University of Waterloo Dept. Biology, Waterloo, ON, Canada (Eds)

Applied Bioremediation and Phytoremediation

The huge expansion of the chemical and petroleum industries in the twentieth century has resulted in the production of a vast array of chem ical compounds and materials that have transformed our lives. The associated large-scale manufacturing, processing and handling activi ties have caused a serious deterioration in environmental quality and created threats to human health. These negative impacts have led to responses and regulations requiring remedial action in support of envi ronmental sustainability. of biotechnological methods through bioremediation, Application has gained prominence as an option for soil remediation methods.

2004. XIX, 281 p. (Soil Biology, Volume 1) Hardcover ISBN 978-3-540-21020-7

- ► £ 207,00 | £186.50
- ► * € (D) 221,49 | € (A) 227,70 | sFr 276,00

- ► € 103,50 | £93.50
- ► * € (D) 110,75 | € (A) 113,85 | sFr 138,00



B. Anderson, H. Friedman, University of South

Florida College of Medicine, Tampa, FL, USA;

Sperimentale, Pisa, Italy (Eds)

Bioterrorism

Microorganisms and

M. Bendinelli, Università Pisa Dipto. Patologia

The threat of bioterrorism has become a major

challenge for the twenty first century. However,

the potentials of infectious agents as bioweapons

have been recognized for centuries. Throughout

history there have been attempts to initiate infec-

tious disease outbreaks and epidemics during

warfare. In the last decade the attention of the

biomedical community, as well as governments

on the threat of bioterrorism, especially the use

of biological and/or chemical weapons against

2006. XX, 240 p. 14 illus. (Infectious Agents and

and the United Nations, has increasingly focused

C. v. Leeuwen, T. Vermeire (Eds)

Risk Assessment of Chemicals: An Introduction

At last – a second edition of this hugely important text that reflects the progress and experience gained in the last decade and aims at providing background and training material for a new generation of risk assessors.

2nd ed. 2007. XXXII, 686 p. Softcover ISBN 978-90-481-7536-9

- € 59,95 | £53.99
- ► * € (D) 64,15 | € (A) 65,95 | sFr 86,00

Sale Price

- € 82,50 | £74.50
- ► * € (D) 88,28 | € (A) 90,75 | sFr 110,00



C. C. Konijnendijk, Woodscape Consult, Dragoer, Denmark; K. Nilsson, Danish Forest & Landscape Research Institute, Hoersholm, Denmark; T. B. Randrup, Danish Forest & Landscape Res. Inst. Danish Centre for Forest,, Hoersholm, Denmark; J. Schipperijn, Skov & Landskab Danish Centre for Forest,, Frederiksberg C, Denmark (Eds)

Urban Forests and Trees

A Reference Book

This publication is the result of more than six years of hard work by a dedicated group of European urban forest and tree experts. The editors are indebted to the national experts of COST Action E12 'Urban Forests and Trees' and to the others who have contributed to the various chapters in this publication. Ultimately, 59 authors from 21 European countries feature in this book.

2005. XX, 520 p. Hardcover ISBN 978-3-540-25126-2

€ 229,00 | £206.50

► *€ (D) 245,03 | € (A) 251,90 | sFr 305,00

Sale Price

- € 114,50 | £103.50
- * € (D) 122,52 | € (A) 125,95 | sFr 152,50



€ 219,00 | £193.00 ► * € (D) 234,33 | € (A) 240,90 | sFr 285,00 Sale Price

Pathogenesis) Hardcover

ISBN 978-0-387-28156-8

military and civilian populations.

- € 109,50 | £99.00
- * € (D) 117,17 | € (A) 120,45 | sFr 146,00



J. Vymazal, L. Kröpfelová, ENKI o.p.s., Trebon, Czech Republic

Wastewater Treatment in Constructed Wetlands with Horizontal Sub-Surface Flow

This book provides an extensive, worldwide overview of wastewater treatment via constructed wetlands with horizontal sub-surface flow (HF CWs). Special attention is paid to assessing the use of this treatment technology in individual countries.

2008. (Environmental Pollution, 14) Hardcover ISBN 978-1-4020-8579-6

- € 259,00 | £233.50
- ► * € (D) 277,13 | € (A) 284,90 | sFr 345,00

Sale Price

- € 129,50 | £117.00
- ► * € (D) 138,57 | € (A) 142,45 | sFr 172,50



W. Kresse, FH Neubrandenburg FB Bauingenieurund Vermessungswesen, Neubrandenburg, Germany; D. M. Danko, GIS Standards Env. Systems Research Inst., Inc., Vienna, VI, USA (Eds)

Springer Handbook of **Geographic Information**

This handbook includes separate sections on Basics and Applications, offering the reader a comprehensive view on Geographic Information. For ideal thematic separation the Basics are split into the sections Computer Science and Geoinformatics.

2012. XXX, 1100p. 600 illus. in color. Hardcover ISBN 978-3-540-72678-4

- € 249,00 | £224.50
- ► * € (D) 266,43 | € (A) 273,90 | sFr 357,00

Sale Price

- € 124,50 | £112.50
- ► * € (D) 133,22 | € (A) 136,95 | sFr 166,00



K. Appasani, Gene Expression Systems, Inc.,

Waltham, MA, USA; R. K. Appasani, Student Science,

Middletown, CT, USA (Eds) Stem Cells & Regenerative Medicine

From Molecular Embryology to Tissue **Engineering**

A thorough introduction to stem-cell biology, this reference is devoted to the basic developmental, cellular and molecular biological aspects of stem cells. In addition, it covers other key relevant topics such as nuclear reprogramming induced pluripotency.

2011. XXVII, 629 p. 65 illus., 31 illus. in color. (Stem Cell Biology and Regenerative Medicine) Hardcover ISBN 978-1-60761-859-1

- € 249,00 | £219.50
- ► * € (D) 266,43 | € (A) 273,90 | sFr 324,50

- € 124,50 | £112.50
- * € (D) 133,22 | € (A) 136,95 | sFr 166,00



H. S. Bernstein, UCSF, Cardiovascular Research Institute Eli and Edythe Broad Center of Regenerat, San Francisco, USA (Ed)

Tissue Engineering in Regenerative Medicine

This volume provides a state-of-the-art report on tissue engineering toward the goals of tissue and organ restoration and regeneration. It uses examples from different organ systems to illustrate progress with growth factors to assist in tissue remodeling.

2011. XIV, 426 p. (Stem Cell Biology and Regenerative Medicine) Hardcover

ISBN 978-1-61779-321-9

► € 209,00 | £186.50

► * € (D) 223,63 | € (A) 229,90 | sFr 275,50

Sale Price

► € 104,50 | £94.50

► * € (D) 111,82 | € (A) 114,95 | sFr 139,50



E. Buxbaum, Ross University School of Medicine, Roseau, Dominica

Biophysical Chemistry of Proteins

An Introduction to Laboratory Methods

This comprehensive and clearly structured text begins with an overview of analytical techniques and moves on to discuss the full range of relevant issues, from purification of proteins and their modification to enzyme kinetics and laboratory quality control.

2011. XVI, 510p. 168 illus., 116 illus. in color. Hardcover

ISBN 978-1-4419-7250-7

► € 149,95 | £139.50

► * € (D) 160,45 | € (A) 164,94 | sFr 240,50

Sale Price

► €75,00 | £67.99

► *€ (D) 80,25 | € (A) 82,50 | sFr 100,00



L. G. Chase, Cellular Dynamics International, Inc., Madison, WI, USA; M. C. Vemuri, Life Technologies, Frederick, MD, USA (Eds)

Mesenchymal Stem Cell Therapy

This book collects the latest research mesenchymal stem cells (MSCs), which appear to hold great promise in the quest to develop regenerative cell-based therapy. Conveys a clear understanding of current progress in translation of MSCs from bench to bedside.

2013. XII, 453 p. 32 illus., 20 illus. in color. (Stem Cell Biology and Regenerative Medicine) Hardcover ISBN 978-1-62703-199-8

€ 149,95 | £135.00

► * € (D) 160,45 | € (A) 164,94 | sFr 200,00

Sale Price

► € 75,00 | £67.99

► *€ (D) 80,25 | € (A) 82,50 | sFr 100,00



M. Breitenbach, University of Salzburg, Salzburg, Austria; S. M. Jazwinski, Tulane University Health Sciences Center, New Orleans, LA, USA; P. Laun, University of Salzburg, Salzburg, Austria (Eds)

Aging Research in Yeast

Collecting current research on yeast aging, this book covers mitochondrial theories of aging, emphasizing oxidative stress and retrograde responses; autophagy and mitophagy; the relationship of apoptosis to aging processes; replication stress and more.

2012. XII, 368 p. (Subcellular Biochemistry, Volume 57) Hardcover

ISBN 978-94-007-2560-7

► € 199,99 | £180.00

► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

► € 100,00 | £90.00

► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



C. Chalfant, Virginia Commonwealth University, Richmond, USA; M. Del Poeta, Medical University of South Carolina, Charleston, SC, USA (Eds)

Sphingolipids as Signaling and Regulatory Molecules

This book examines the latest discoveries in sphingolipid biology and how the alteration of their metabolism leads to altered signaling events and to the development of pathobiological disorders, such as cancer, cardiovascular diseases, asthma and diabetes.

2010. XXVI, 287p. 47 illus., 2 illus. in color. (Advances in Experimental Medicine and Biology, Volume 688) Hardcover

ISBN 978-1-4419-6740-4

► € 239,00 | £213.00

► *€ (D) 255,73 | € (A) 262,90 | sFr 315,00

Sale Price

► € 119,50 | £108.00

► * € (D) 127,87 | € (A) 131,45 | sFr 159,50



M. K. Danquah, Chicago State University Pharmaceutical Sciences, Chicago, IL, USA; R. I. Mahato, University of Tennessee Health Science Center, Memphis, TN, USA (Eds)

Emerging Trends in Cell and Gene Therapy

This book details current trends and state-of-theart in cell and gene based therapies. Examples from various organs and diseases illustrate the potential benefit obtained when both therapeutic approaches are combined with delivery strategies.

2013. XVII, 705 p. 107 illus., 85 illus. in color. Hardcover

ISBN 978-1-62703-416-6

► € 169,99 | £153.00

► * € (D) 181,89 | € (A) 186,99 | sFr 226,50

Sale Price

► €85,00 | £76.50

► * € (D) 90,95 | € (A) 93,50 | sFr 113,50



W. de Souza, Universidade Federal do Rio de Janeiro Inst. Biofisica Carlos Chagas Filho, Rio de Janeiro, Brazil (Ed)

Structures and Organelles in Pathogenic Protists

Parasitic protozoa, including agents of human and veterinary disease, have special cytoplasmic structures and organelles. This work examines cytoskeletal structures such as the trichomonads' mastigont system and sub-pellicular microtubules in trypanosomatids.

2010. XII, 324 p. (Microbiology Monographs, Volume 17) Hardcover

ISBN 978-3-642-12862-2

- ► £ 229,00 | £206.50
- ► * € (D) 245,03 | € (A) 251,90 | sFr 305,00

Sale Price

- ► € 114,50 | £103.50
- ▶ * € (D) 122,52 | € (A) 125,95 | sFr 152,50



R. Dilson J.E, McGill University, Montreal, QC, Canada (Ed)

Muscle Biophysics

From Molecules to Cells

The field of muscle biophysics has changed dramatically over the past years. New studies are reshaping the way we think muscles contract. This book is unique for its updated and comprehensive coverage of techniques in both cell and molecular biophysiology.

2010. XIV, 354 p. (Advances in Experimental Medicine and Biology, Volume 682) Hardcover ISBN 978-1-4419-6365-9

- ► £ 249,00 | £219.50
- ► *€ (D) 266,43 | € (A) 273,90 | sFr 324,50

Sale Price

- ► € 124,50 | £112.50
- ► * € (D) 133,22 | € (A) 136,95 | sFr 166,00



D. Favareau, National University of Singapore University Scholar Programme, Singapore, Singapore

Essential Readings in Biosemiotics

Anthology and Commentary

The first of its kind, Donald Favareau's "Essential Readings in Biosemiotics" constitutes a valuable resource to both bioscientists and to semioticians interested in the emerging new discipline of Biosemiotics, and can function as a primary textbook for students in biosemiotics.

2010. XVII, 880p. (Biosemiotics, Volume 3) Hardcover ISBN 978-1-4020-9649-5

- € 279,00 | £251.50
- ► * € (D) 298,53 | € (A) 306,90 | sFr 371,50

Sale Price

- ► € 139,50 | £126.00
- ► * € (D) 149,27 | € (A) 153,45 | sFr 186,00



T. Decker, M. Müller, University of Vienna, Vienna, Austria (Eds)

Jak-Stat Signaling : From Basics to Disease

This, the first comprehensive treatment of the subject in years, offers detailed insights into the latest basic and clinical developments in the field. It explains JAK-STAT signaling under physiological conditions and discusses treatment of aberrant pathways.

2012. XIV, 450 p. Hardcover ISBN 978-3-7091-0890-1

- ► € 149,95 | £135.00
- ► * € (D) 160,45 | € (A) 164,94 | sFr 200,00

Sale Price

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



P. J. Fairchild, Oxford, UK (Ed)

The Immunological Barriers to Regenerative Medicine

This book analyzes immunological issues facing regenerative medicine, showing how allograft rejection applies to cell replacement therapy, addressing issues of immunogenicity and exploring novel approaches to the induction of immunological tolerance.

2013. XIII, 334 p. 34 illus., 26 illus. in color. (Stem Cell Biology and Regenerative Medicine) Hardcover ISBN 978-1-4614-5479-3

- ► € 149,95 | £135.00
- ► * € (D) 160,45 | € (A) 164,94 | sFr 200,00

Sale Price

- ► ₹75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



P. Hematti, University of Wisconsin Madison School of Medicine and Public He, Madison, USA; A. Keating, University of Toronto Princess Margaret Hospital, Toronto, ON, Canada (Eds)

Mesenchymal Stromal Cells

Biology and Clinical Applications

In this book, leading authorities actively involved in this field provide state-of-the-art knowledge of the basic biology, translational requirements and latest clinical experience with Mesenchymal Stromal Cell (MSC) biology.

2013. XXVI, 695 p. 61 illus., 40 illus. in color. (Stem Cell Biology and Regenerative Medicine) Hardcover ISBN 978-1-4614-5710-7

- ► € 179,95 | £162.00
- ► * € (D) 192,55 | € (A) 197,94 | sFr 240,00

- ▶ €90,00 | £81.00
- ► * € (D) 96,30 | € (A) 99,00 | sFr 120,00



S. Horvath, University of California, Los Angeles, Los Angeles, CA, USA

Weighted Network Analysis

Applications in Genomics and Systems Biology

This book offers current methods, software and applications involved in weighted networks, reviewing data mining methods and analysis strategies and showing how to use them in practice. The self-contained presentation requires minimal knowledge of statistics.

2011. XXIII, 421p. 54 illus., 46 illus. in color. Hardcover ISBN 978-1-4419-8818-8

- ► € 184,99 | £166.50
- ► * € (D) 197,94 | € (A) 203,49 | sFr 246,00

Sale Price

- ▶ € 92,50 | £83.50
- * € (D) 98,98 | € (A) 101,75 | sFr 123,50



T. Jue, University of California, Davis Dept. Biochemistry & Molecular Medicine, Davis, CA, USA (Ed)

Biomedical Applications of Biophysics

The first two chapters in this book establish the mathematical methods and theoretical framework underpinning the topics in the rest of the book. Subsequent chapters then discuss the concepts and biological application of each topic it covers.

2010. XII, 236p. 36 illus. in color. (Handbook of Modern Biophysics, Volume 3) Hardcover ISBN 978-1-60327-232-2

- ► € 219,00 | £193.00
- ► * € (D) 234,33 | € (A) 240,90 | sFr 285,00

Sale Price

- ► € 109,50 | £99.00
- ► * € (D) 117,17 | € (A) 120,45 | sFr 146,00



A. Markoš, F. Grygar, L. Hajnal, K. Kleisner, Z. Kratochvíl, Z. Neubauer, Charles University Fac. Sciences, Praha 2, Czech Republic

Life as Its Own Designer

Darwin's Origin and Western Thought

Darwin's theory of natural selection still ignites debate between evolutionists and creationists, but this seminal work in the field of Biosemiotics offers a new angle, one that focuses on the life of living beings, treating them as co-creators of their world.

2009. XII, 250p. (Biosemiotics, Volume 4) Hardcover ISBN 978-1-4020-9969-4

- € 219,00 | £197.50
- ► * € (D) 234,33 | € (A) 240,90 | sFr 292,00

Sale Price

- ► € 109,50 | £99.00
- ► * € (D) 117,17 | € (A) 120,45 | sFr 146,00



D. Johnson, University of Pittsburgh Division of Hematology/Oncology, Pittsburgh, PA, USA (Ed)

Cell Death Signaling in Cancer Biology and Treatment

Discussing both preclinical and clinical approaches to targeted attacks on tumor cells, this is a key contribution to the fight against cancer, sharing cutting-edge research on the molecular and biological processes regulating cell death in malignant tumors.

2013. XVI, 405 p. 40 illus., 31 illus. in color. (Cell Death in Biology and Diseases) Hardcover ISBN 978-1-4614-5846-3

- ► € 149,95 | £135.00
- ► * € (D) 160,45 | € (A) 164,94 | sFr 200,00

Sale Price

- ► €75,00 | £67.99
- * € (D) 80,25 | € (A) 82,50 | sFr 100,00



J. M. Lord, M. R. Hartley, University of Warwick Dept. Biological Sciences, Coventry, UK (Eds)

Toxic Plant Proteins

Focusing on the structure, function, and potential applications, this volume explores the underlying possibilities of toxic plant proteins. Written by experts in the field, Toxic Plant Proteins in is a valuable reference work.

2010. X, 270p. 41 illus., 12 illus. in color. (Plant Cell Monographs, Volume 18) Hardcover ISBN 978-3-642-12175-3

- ► € 219,00 | £197.50
- ► * € (D) 234,33 | € (A) 240,90 | sFr 292,00

Sale Price

- ► € 109,50 | £99.00
- ► * € (D) 117,17 | € (A) 120,45 | sFr 146,00



H. Mehlhorn, Heinrich Heine University Department of Zoomorphology, Düsseldorf, Germany (Ed)

Nature Helps...

How Plants and Other Organisms Contribute to Solve Health Problems

Nature Helps... explores how extracts derived from bacteria, marine organisms, plants and animals may help to treat infectious diseases. A broad spectrum of promising applications are described, including the use of organisms to aid diagnostics.

2011. XIII, 375 p. (Parasitology Research Monographs, Volume 1) Hardcover ISBN 978-3-642-19381-1

- ► £ 199,99 | £180.00
- ► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



E. Meshorer, The Hebrew University of Jerusalem, Jerusalem, Israel; K. Plath, UCLA School of Medicine, Los Angeles, USA (Eds)

The Cell Biology of Stem Cells

The Cell Biology of Stem Cells discusses multiple aspects of stem cell biology, ranging from the basic molecular characteristics to the in vivo stem cell trafficking of adult stem cells. The cell biology of stem cells is discussed, in addition to the questions that still remain.

2010. XXII, 226p. 52 illus., 6 illus. in color. (Advances in Experimental Medicine and Biology, Volume 695) Hardcover

ISBN 978-1-4419-7036-7

- ► € 219,00 | £193.00
- ► * € (D) 234,33 | € (A) 240,90 | sFr 285,00

Sale Price

- ► € 109,50 | £99.00
- * € (D) 117,17 | € (A) 120,45 | sFr 146,00



M. Numan, T. R. Insel

The Neurobiology of Parental Behavior

In addition to filling a need within the field of parental behavior, this book contributes importantly to the growing area of emotional and motivational neuroscience. A major part of neuroscience research at the whole organism level has been focused on cognitive neuroscience, with an emphasis on the neurobiology of learning and memory, but there has been a recent upsurge in research which is attempting to define the neural basis of basic motivational and emotional systems which regulate such behaviors as food intake, aggression, reproduction, reward-seeking behaviors, and anxiety-related behaviors. In this book the emphasis is on the research findings obtained from rodents, sheep and primates.

2003. IX, 418 p. (Hormones, Brain, and Behavior, 1) Hardcover

ISBN 978-0-387-00498-3

- ► £ 229,00 | £199.50
- ► * € (D) 245,03 | € (A) 251,90 | sFr 295,00

Sale Price

- ► € 114,50 | £103.50
- ► *€ (D) 122,52 | € (A) 125,95 | sFr 152,50



A. Querol, CSIC Instituto de Agroquímica y, Burjasot, Spain; G. H. Fleet, University of New South Wales School of Chemical Sciences, Sydney, NSW, Australia (Fds)

Yeasts in Food and Beverages

As a group of microorganisms, yeasts have an enormous impact on food and beverage production. Scientific and technological understanding of their roles in this production began to emerge in the mid-1800s, starting with the pioneering studies of Pasteur in France and Hansen in Denmark on the microbiology of beer and wine fermentations

2006. VIII, 453 p. (The Yeast Handbook) Hardcover ISBN 978-3-540-28388-1

- € 299,00 | £269.00
- ► * € (D) 319,93 | € (A) 328,90 | sFr 429,00

Sale Price

- ► € 149,50 | £135.00
- * € (D) 159,97 | € (A) 164,45 | sFr 199,50



K. E. Nelson, J. Craig Venter Institute (JCVI), Rockville, MD, USA (Ed)

Metagenomics of the Human Body

This book details results from the human genome project and presents the crossover to the human metagenome/microbiome. It brings a new perspective by combining information gained from the human genome with that derived from parallel metagenomic studies.

2011. XVII, 351 p. Hardcover ISBN 978-1-4419-7088-6

- ► € 184,99 | £166.50
- ► * € (D) 197,94 | € (A) 203,49 | sFr 246,00

Sale Price

- ▶ € 92,50 | £83.50
- ► * € (D) 98,98 | € (A) 101,75 | sFr 123,50



R. L. Price, University of South Carolina School of Medicine, Columbia, SC, USA; W. G. Jerome, Vanderbilt University Medical Center, Nashville, TN, USA (Eds)

Basic Confocal Microscopy

A result of the demand for training in what is a relatively young field, this book covers all the basics needed to design, implement, and interpret the results of biological experiments based on confocal microscopy, as well as resources for continued learning.

2011. XI, 302p. 139 illus., 103 illus. in color. Hardcover ISBN 978-0-387-78174-7

- € 159,99 | £146.50
- ► * € (D) 171,19 | € (A) 175,99 | sFr 216,00

Sale Price

- ► €80,00 | £72.00
- ► * € (D) 85,60 | € (A) 88,00 | sFr 106,50



M. Rojas, Emory University Dept. Medicine, Atlanta, GA, USA (Ed)

Stem Cells in the Respiratory System

Here are the most relevant ideas on the use of local, endogenous, and exogenous progenitor/ stem cells to prevent and treat lung injury, from mesenchymal stem cells in lung repair to the effect of physical activity on mobilization of stem and progenitor cells.

2010. X, 170 p. (Stem Cell Biology and Regenerative Medicine) Hardcover ISBN 978-1-60761-774-7

- ► € 219,00 | £193.00
- ► * € (D) 234,33 | € (A) 240,90 | sFr 285,00

- ► € 109,50 | £99.00
- ► * € (D) 117,17 | € (A) 120,45 | sFr 146,00



H. Schatten, University of Missouri-Columbia Dept. Veterinary Pathobiology, Columbia, MO, USA (Ed)

Cell and Molecular Biology of Breast Cancer

Highlighting recent advances in our understanding of breast cancer, this book is intended for a wide audience as a reference book. Included are reviews of genetics, epigenetics, various aspects of cell and molecular biology, and several other areas of breast cancer that are aimed at determining new intervention sites for treatments and cures of the disease. The chapters are written by internationally recognized experts and include reviews of key topics in breast cancer research. Each chapter highlights the new aspects of specific research topics and the various impacts of designing new strategies as well as identifies new targets for therapeutic intervention.

2013. VIII, 383 p. 55 illus., 51 illus. in color. Hardcover ISBN 978-1-62703-633-7

- ► € 149,99 | £135.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 200,00

Sale Price

- ► € 75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



A. Sigel, H. Sigel, Universität Basel Inorganic Chemistry, Basel, Switzerland; R. K. Sigel, Universität Zürich Organisch-Chemisches Institut, Zürich, Switzerland (Eds)

Interplay between Metal Ions and Nucleic Acids

Interplay between Metal Ions and Nucleic Acids provides in an authoritative and timely manner in 12 stimulating chapters, written by 24 internationally recognized experts from 8 nations, and supported by nearly 1500 references, about 20 tables, and 125 illustrations, many in color, a most up-to-date view on metal ion-nucleic acid interactions; the characterization of which is covered in solution and in the solid state.

2012. XXXIV, 354 p. (Metal lons in Life Sciences, Volume 10) Hardcover ISBN 978-94-007-2171-5

- ► £ 169,99 | £153.00
- ► * € (D) 181,89 | € (A) 186,99 | sFr 226,50

Sale Price

- ► €85,00 | £76.50
- ► * € (D) 90,95 | € (A) 93,50 | sFr 113,50



A. G. Volkov, Oakwood University, Huntsville, AL, USA (Fd)

Plant Electrophysiology

Methods and Cell Electrophysiology

This book, written by the leading scientists in the field of plant electrophysiology, provides a comprehensive and up-to-date overview of single-cell electrophysiology and current methods in plant electrophysiology.

2012. XII, 364 p. Hardcover ISBN 978-3-642-29118-0

- € 149,95 | £135.00
- ► * € (D) 160,45 | € (A) 164,94 | sFr 200,00

Sale Price

- ► ₹75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



J. Seckbach, The Hebrew Univ. of Jerusalem, Jerusalem, Israel; P. Kociolek, University of Colorado Museum of Natural, Boulder, CO, USA (Eds)

The Diatom World

This volume presents up-to-date information on diatom classification, biology and ecology, in addition to genomics and applied uses. The text discusses the tree of life of diatoms, their classifications, the habitats and ecological spectra the group exploits, and the beauty of their form.

2011. XXII, 534 p. (Cellular Origin, Life in Extreme Habitats and Astrobiology, Volume 19) Hardcover ISBN 978-94-007-1326-0

- ► £ 199,99 | £180.00
- ► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- * € (D) 107,00 | € (A) 110,00 | sFr 133,50



A. K. Srivastava, National Research Centre for Citrus, Nagpur, India (Ed)

Advances in Citrus Nutrition

This is a solitary attempt to streamline all the possible information related to citrus nutrition, with emphasis on diagnosis and management of nutrient constraints, employing a variety of state-of-art techniques evolved globally over the years . While doing so care has been taken to include peripheral disciplines so that the discussion becomes more lively and authoritative. An entire array of exclusive subjects has been nicely portrayed with the help of latest data and photographs.

2012. XIV, 478 p. Hardcover ISBN 978-94-007-4170-6

- € 169,95 | £153.00
- ► * € (D) 181,85 | € (A) 186,94 | sFr 226,50

Sale Price

- ► €85,00 | £76.50
- ► *€ (D) 90,95 | € (A) 93,50 | sFr 113,50



A. G. Volkov, Oakwood University, Huntsville, AL, USA (Ed)

Plant Electrophysiology

Signaling and Responses

This book, written by the leading scientists in the field of plant electrophysiology, provides a comprehensive and up-to-date overview of single-cell electrophysiology and current methods in plant electrophysiology.

2012. XIV, 378 p. Hardcover ISBN 978-3-642-29109-8

- € 149,95 | £135.00
- ► * € (D) 160,45 | € (A) 164,94 | sFr 200,00

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



J. Vollmann, Universität für Bodenkultur Wien Inst. Pflanzenbau und Pflanzenzüchtung, Wien, Austria; I. Rajcan, University of Guelph Dept. Plant Agriculture, Guelph, ON, Canada (Eds)

Oil Crops

This volume on oil crop breeding presents information on the latest in applied plant breeding using the current advances in the field. The book is comprised primarily of specific issues and techniques pertaining to individual crops.

2010. XII, 450p. (Handbook of Plant Breeding, Volume 4) Hardcover ISBN 978-0-387-77593-7

- ► € 239,00 | £213.00
- ► * € (D) 255,73 | € (A) 262,90 | sFr 315,00

Sale Price

- ► € 119,50 | £108.00
- ► * € (D) 127,87 | € (A) 131,45 | sFr 159,50



J. M. Walker, Hatfield, Herts., UK (Ed)

The Protein Protocols Handbook

The third edition of The Protein Protocols Handbook introduces 57 critically important new chapters, and significantly updates the previous edition's tried-and-trusted methods. The book offers over 200 key, readily reproducible protocols that ensure results.

3rd ed. 2009. XVI, 1440p. 610 illus.. (Springer Protocols Handbooks) Softcover ISBN 978-1-60327-474-6

- € 129,99 | £119.50
- ► *€ (D) 139,09 | € (A) 142,99 | sFr 177,00

Sale Price

- ► €65,00 | £58.99
- ► *€ (D) 69,55 | € (A) 71,50 | sFr 87,00



R. Wong, Branan Medical Corporation, Irvine, CA, USA; **H. Tse**, Wayne State University School of Medicine, Detroit, MI, USA (Eds)

Lateral Flow Immunoassay

Lateral flow immunoassay has undergone tremendous growth in the diagnostic industry in the last few years. This is the most up-to-date book to cover utilization, development, production, and application of the device.

2009. XII, 223p. 28 illus.. Hardcover ISBN 978-1-58829-908-6

- ► € 149.99 | £133.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 196,50

Sale Price

- ► €75,00 | £67.99
- * € (D) 80,25 | € (A) 82,50 | sFr 100,00



J. M. Walker, Hatfield, Herts., UK (Ed)

The Protein Protocols Handbook

The third edition of The Protein Protocols Handbook introduces 57 critically important new chapters, and significantly updates the previous edition's tried-and-trusted methods. The book offers over 200 key, readily reproducible protocols that ensure results.

3rd ed. 2009. XVI, 1440p. 610 illus.. (Springer Protocols Handbooks) Hardcover ISBN 978-1-58829-880-5

- ► € 149,95 | £135.00
- ► * € (D) 160,45 | € (A) 164,95 | sFr 200,00

Sale Price

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



G. Witzany, Telos - Philosophische Praxis, Bürmoos, Austria (Ed)

Viruses: Essential Agents of Life

This book collects and analyzes information and data encompassing a decade of rapid progress in discovery and understanding of the important roles of viruses, both in the evolution of all life and as symbionts of host organisms.

2012. XVI, 427 p. 62 illus., 31 illus. in color. Hardcover ISBN 978-94-007-4898-9

- ► £ 149,95 | £135.00
- ► * € (D) 160,45 | € (A) 164,94 | sFr 200,00

Sale Price

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



The Ceramic Society of Japan, The Ceramic Society of Japan, Tokyo, Japan

Advanced Ceramic Technologies & Products

Advanced Ceramic Technologies & Products describes the development, materials, and manufacturing processes for various ceramic products. The text focuses on the products themselves, and tries to clarify how ceramics have contributed to our lives

2012. XV, 585 p. 533 illus., 397 illus. in color. Hardcover

ISBN 978-4-431-53913-1

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

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



Multilayered Low Temperature Cofired Ceramics (LTCC) Technology

In recent years, Low Temperature Cofired Ceramics (LTCC) have become an attractive technology for electronic components and substrates that are compact, light, and offer high-speed and functionality for portable electronic devices such as cellular phones, personal digital assistants (PDA) and personal computers used for wireless voice and data communication in rapidly expanding mobile network systems. LTCC are especially suitable for the high frequency circuits required for high-speed data communications.

2005. XXXI, 229 p. Hardcover ISBN 978-0-387-23130-3

► € 149,99 | £133.00

► * € (D) 160,49 | € (A) 164,99 | sFr 196,50

Sale Price

► € 75.00 | £67.99

▶ * € (D) 80,25 | € (A) 82,50 | sFr 100,00



M. A. Aegerter, Résidence Vert-Pré, Bottens, Switzerland; N. Leventis, Missouri University of Science & Technology, Rolla, MO, USA; M. M. Koebel, Empa, Dübendorf, Switzerland (Eds)

Aerogels Handbook

This book summarizes the state of development and processing of inorganic, organic and composite aerogels, including important characterization techniques, an overview of aerogel materials, processing, physical and chemical properties, and latest uses.

2011. XXXI, 932p. (Advances in Sol-Gel Derived Materials and Technologies) Hardcover ISBN 978-1-4419-7477-8

► € 299,00 | £266.50

► * € (D) 319,93 | € (A) 328,90 | sFr 393,50

Sale Price

► € 149,50 | £135.00

* € (D) 159,97 | € (A) 164,45 | sFr 199,50



M. A. Aegerter, Résidence Vert-Pré, Bottens, Switzerland; M. Mennig, Universität des Saarlandes Leibniz-Inst. für Neue Materialien gGmbH, Saarbrücken, Germany (Eds)

Sol-Gel Technologies for Glass Producers and Users

Sol-Gel Techniques for Glass Producers and Users provides technological information, descriptions and characterizations of prototypes, or products already on the market, and illustrates advantages and disadvantages of the sol-gel process in comparison to other methods. The first chapter entitled "Wet Chemical Technology" gives a summary of the basic principles of the sol-gel chemistry. The most promising applications are related to coatings. Chapter 2 describes the various "Wet Chemical Coating Technologies" from glass cleaning to many deposition and post-coating treatment techniques.

2004. XX, 493 p. Hardcover ISBN 978-1-4020-7938-2

► £229,00 | £199.50

► *€ (D) 245,03 | € (A) 251,90 | sFr 295,00

Sale Price

► € 114,50 | £103.50

► *€ (D) 122,52 | € (A) 125,95 | sFr 152,50



N. P. Bansal, NASA Glenn Research Center, Cleveland, OH. USA (Ed)

Handbook of Ceramic Composites

Ceramic matrix composites (CMCs) are at the forefront of advanced materials technology because of their light weight, high strength and toughness, high temperature capabilities, and graceful failure under loading. During the last 25 years, tremendous progress has been made in the development and advancement of CMCs under various research programs funded by the U.S. Government agencies: National Aeronautics and Space Administration (NASA), Department of Defense (DoD), and Department of Energy (DOE). Ceramic composites are considered as enabling technology for advanced aeropropulsion, space propulsion, space power, aerospace vehicles, and space structures.

2005. X, 554 p. Hardcover ISBN 978-1-4020-8133-0

► € 349,00 | £306.50

► * € (D) 373,43 | € (A) 383,90 | sFr 453,00

Sale Price

► € 174,50 | £157.50

► * € (D) 186,72 | € (A) 191,95 | sFr 232,50



K. M. Becker, J. J. Whyte (Eds)

Clinical Evaluation of Medical Devices

Principles and Case Studies

The original edition of this text, Clinical Evaluation of Medical Devices: Principles and Case Studies, provided the first overview of key principles and approaches to medical device clinical trials, illustrated with a series of detailed, real-world case studies. The book is designed as a resource for clinical professionals and regulatory specialists working in the field of new medical device development and marketing. Since the first edition of this text was published in 1997, the rapid pace of innovation in health care technologies continues to yield exciting and important new products. The regulatory landscape has also evolved, reflecting some of the changes and needs within the medical device industry.

2nd ed. 2006. 360p. 53 illus.. Hardcover ISBN 978-1-58829-422-7

► € 154,99 | £139.50

► * € (D) 165,84 | € (A) 170,49 | sFr 206,50

Sale Price

► €77,50 | £69.99

► * € (D) 82,93 | € (A) 85,25 | sFr 103,50



B. Bhushan, Ohio State University Nanoprobe Lab. for Bio- & Nanotechnology, Columbus, OH, USA (Ed)

Scanning Probe Microscopy in Nanoscience and Nanotechnology

This book presents the physical and technical foundation of the state-of-the-art in applied scanning probe techniques. It constitutes a comprehensive overview of SPM applications. The chapters are written by leading researchers and application scientists.

2010. XXX, 956p. 300 illus.. (NanoScience and Technology) Hardcover ISBN 978-3-642-03534-0

€ 239,00 | £215.50

► * € (D) 255,73 | € (A) 262,90 | sFr 318,50

Sale Price

► € 119,50 | £108.00

► * € (D) 127,87 | € (A) 131,45 | sFr 159,50



B. Bhushan, Ohio State University Nanoprobe Lab. for Bio- & Nanotechnology, Columbus, OH, USA (Ed)

Scanning Probe Microscopy in Nanoscience and Nanotechnology 2

This book presents the physical and technical foundation of the state of the art in applied scanning probe techniques. It constitutes a timely and comprehensive overview of SPM applications. The chapters in this volume relate to scanning probe microscopy techniques, characterization of various materials and structures and typical industrial applications, including topographic and dynamical surface studies of thin-film semiconductors, polymers, paper, ceramics, and magnetic and biological materials.

2011. XXVI, 710p. 200 illus.. (NanoScience and Technology) Hardcover ISBN 978-3-642-10496-1

- ► £ 199,99 | £180.00
- ► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



P. Boisseau, CEA LETI-MINATEC, Grenoble CX 9, France; M. Lahmani, Université d'Evry Dépt. Sciences des Matériaux, Evry CX, France (Eds)

Nanoscience

Nanobiotechnology and Nanobiology

Nanobiotechnology is a rapidly developing field of research. This book covers major developments in nanobiophysics, nanobiology, and nanomethods in medicine. It presents the basics, fundamental results and latest achievements of nanobiotechnological research.

2009. XXXVIII, 1202 p. 631 illus. Hardcover ISBN 978-3-540-88632-7

- ► € 239,00 | £215.50
- ► * € (D) 255,73 | € (A) 262,90 | sFr 318,50

Sale Price

- ► €119,50 | £108.00
- ▶ * € (D) 127,87 | € (A) 131,45 | sFr 159,50



V. Bucur, INRA Ctr. de Recherches Forestières de Nancy, Champenoux, France

Nondestructive Characterization and Imaging of Wood

This book on the Nondestructive Characterization and Imaging of Wood by Professor Voichita Bucur is truly the most outstanding reference on the subject ever written. Since the origins of mankind, wood has played a key role in the history of humans and other living creatures, ranging from provision of life from trees giving air, heat, light, and food to nourish their bodies to structures to protect them from the elements. Wood has also played a key role in one of the world's primary religions.

2003. XIV, 354 p. (Springer Series in Wood Science) Hardcover

ISBN 978-3-540-43840-3

- € 275,00 | £247.50
- ► * € (D) 294,25 | € (A) 302,50 | sFr 366,50

Sale Price

- ► € 137,50 | £124.00
- ► * € (D) 147,13 | € (A) 151,25 | sFr 183,50



D. D. Chung, State University of New York, Buffalo Dept. Mechanical & Aerospace Engineering, Buffalo, NY, USA

Composite Materials

Science and Applications

The first edition of "Composite Materials" introduced a new way of looking at composite materials. This second edition expands the book's scope to emphasize application-driven and processoriented materials development. The approach is vibrant yet functional.

2nd ed. 2010. Approx. 370 p. 210 illus.. (Engineering Materials and Processes) Hardcover ISBN 978-1-84882-830-8

- € 169,99 | £153.00
- ► * € (D) 181,89 | € (A) 186,99 | sFr 226,50

Sale Price

- ► €85,00 | £76.50
- * € (D) 90,95 | € (A) 93,50 | sFr 113,50



K. K. Chawla, University of Alabama at Birmingham, Birmingham, AL, USA

Ceramic Matrix Composites

Second Edition

After an introductory chapter, the processing, microstructure, and properties of various ceramic materials, reinforcements, and their composites are described. A separate chapter is devoted to processing of ceramic reinforcements, with a special emphasis on fibers. Processing of ceramic matrix composites is the next chapter, which includes novel techniques such as sol-gel processing and ceramics from polymeric precursors. The next four chapters cover the subjects of interface region in ceramic composites, mechanical and physical properties, and the role of thermal stresses and the important subject of toughness enhancement. Laminated composites made of ceramics are described in a separate chapter.

2nd ed. 2002. XVII, 441 p. Hardcover ISBN 978-1-4020-7262-8

- ► € 199,99 | £179.50
- ► *€ (D) 213,99 | € (A) 219,99 | sFr 265,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



E. R. Dobrovinskaya, Rubicon Technology, Franklin Park, IL, USA; L. A. Lytvynov, Scientific Technological Complex Institute for Single Crystals, Kharkov, Ukraine; V. Pishchik, Gavish, Ltd. Omer Industrial Park, Omer, Israel

Sapphire

Material, Manufacturing, Applications

Complete with encyclopedic coverage of sapphire's growth and fabrication and numerous practical applications, this book also covers many unusual physical and chemical properties of sapphire, as well as the main trends in the evolution of growth methods.

2009. (Micro- and Opto-Electronic Materials, Structures, and Systems) Hardcover ISBN 978-0-387-85694-0

- € 184,99 | £166.50
- ► * € (D) 197,94 | € (A) 203,49 | sFr 246,00

- ► € 92,50 | £83.50
- * € (D) 98,98 | € (A) 101,75 | sFr 123,50



M. Durand-Charre, Meylan, France

Microstructure of Steels and Cast Irons

The book comprises three parts. Part 1 gives a historical description of the development of ironworking techniques since the earliest times. Part 2 is the core of the book and deals with the metallurgical basis of microstructures, with four main themes: phase diagrams, solidification processes, diffusion, and solid state phase transformations. Part 3 begins by an introduction to steel design principles. It then goes on to consider the different categories of steels, placing emphasis on their specific microstructural features. Finally, a comprehensive reference list includes several hundred pertinent articles and books. The book is the work of a single author, thus ensuring uniformity and concision.

2004. XII, 406 p. (Engineering Materials and Processes) Hardcover ISBN 978-3-540-20963-8

- ► £ 199,95 | £180.00
- ► * € (D) 213,95 | € (A) 219,95 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



J. Keddie, University of Surrey School of Electronics &, Guildford, Surrey, UK; A. F. Routh, University of Cambridge Dept. Chemistry, Cambridge, UK

Fundamentals of Latex Film Formation

Processes and Properties

This book first reviews and then compares the main experimental techniques used in the study and analysis of latex film formation. Each of the three main stages of film formation is considered separately, introducing relevant theoretical descriptions.

2010. XVIII, 308 p. (Springer Laboratory) Hardcover ISBN 978-90-481-2844-0

- ► £ 149,99 | £135.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 200,00

Sale Price

- ► €75,00 | £67.99
- ▶ * € (D) 80,25 | € (A) 82,50 | sFr 100,00



C. S. Kumar, Center for Advanced Microstructures and, Baton Rouge, LA, USA (Ed)

Raman Spectroscopy for Nanomaterials Characterization

This handbook gives a comprehensive overview about Raman spectroscopy for the characterization of nanomaterials. It is the first volume of a 40-volume series on nanoscience and nanotechnology, edited by the renowned scientist Challa S.S.R. Kumar.

2012. XII, 646p. 313 illus.. Hardcover ISBN 978-3-642-20619-1

- € 249,00 | £224.50
- ► * € (D) 266,43 | € (A) 273,90 | sFr 331,50

Sale Price

- ► € 124,50 | £112.50
- *€ (D) 133,22 | € (A) 136,95 | sFr 166,00



P. Menezes, M. Nosonovsky, University of Wisconsin, Milwaukee, WI, USA; S. P. Ingole, Texas A&M University, Galveston, TX, USA; S. V. Kailas, Indian Institute of Science, Bangalore, India; M. R. Lovell, University of Wisconsin, Milwaukee, WI, USA (Eds)

Tribology for Scientists and Engineers

From Basics to Advanced Concepts

This book offers up-to-date information on how tribology is approached in various related areas of experimental and computational research. The book serves as a comprehensive overview for both advanced students and engineers entering the field

2013. XI, 948 p. 526 illus., 223 illus. in color. Hardcover

ISBN 978-1-4614-1944-0

► £ 199,99 | £180.00

► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



G. Lütjering, TU Hamburg-Harburg Studiendekanat Maschinenbau, Hamburg, Germany; J. C. Williams, Ohio State University Dept. Materials Science &, Columbus. OH. USA

Titanium

When the authors were asked to prepare a Second Edition of the book Titanium the first question was timing. It was agreed that the new edition should be ready for the 11th World Conference of Titanium (Ti-2007) in Kyoto. This is four years after the First Edition was presented at the Ti-2003 conference in Hamburg. Further, the authors decided to keep the structure and content of the First Edition completely unchanged with the exception of correcting a few obvious mistakes. The Preface to the First Edition decribes the motivation and intent of the book. These also remain unchanged for the Second Edition.

2nd ed. 2007. XII, 442 p. (Engineering Materials and Processes) Hardcover ISBN 978-3-540-71397-5

- ► € 179,99 | £162.00
- ► *€ (D) 192,59 | € (A) 197,99 | sFr 240,00

Sale Price

- ► € 90,00 | £81.00
- ► * € (D) 96,30 | € (A) 99,00 | sFr 120,00



L. Merhari, Limoges, France (Ed)

Hybrid Nanocomposites for Nanotechnology

Electronic, Optical, Magnetic and Biomedical Applications

This book covers the latest advances in polymerinorganic nanocomposites, with particular focus on high-added-value applications in fields including electronics, optics, magnetism and biotechnology. The unique focus of this book is on electronic, optical, magnetic and biomedical applications of hybrid nanocomposites.

2009. XII, 847 p. Hardcover ISBN 978-0-387-72398-3

- ► € 249,00 | £219.50
- ► * € (D) 266,43 | € (A) 273,90 | sFr 324,50

- ► € 124,50 | £112.50
- ► * € (D) 133,22 | € (A) 136,95 | sFr 166,00



W. Mönch, Universität Duisburg-Essen FB 10 Lab. Festkörperphysik, Duisburg, Germany

Electronic Properties of Semiconductor Interfaces

Using the continuum of interface-induced gap states (IFIGS) as a unifying theme, Mönch explains the band-structure lineup at all types of semiconductor interfaces. These intrinsic IFIGS are the wave-function tails of electron states, which overlap a semiconductor band-gap exactly at the interface, so they originate from the quantum-mechanical tunnel effect. He shows that a more chemical view relates the IFIGS to the partial ionic character of the covalent interface-bonds and that the charge transfer across the interface may be modeled by generalizing Pauling's electronegativity concept.

2004. XI, 264 p. (Springer Series in Surface Sciences, Volume 43) Hardcover ISBN 978-3-540-20215-8

- ► € 199,95 | £180.00
- ► * € (D) 213,95 | € (A) 219,95 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- * € (D) 107,00 | € (A) 110,00 | sFr 133,50



T. Schneller, R. Waser, RWTH Aachen University, Aachen, Germany; M. Kosec, Jožef Stefan Institute, Ljubljana, Slovenia; D. Payne, University of Illinois at Urbana-Champai, Urbana, IL, USA (Eds)

Chemical Solution Deposition of Functional Oxide Thin Films

Chemical Solution Deposition (CSD) is a highly-flexible and inexpensive technique for the fabrication of functional oxide thin films. Featuring nearly 400 illustrations, this text covers all aspects of the technique.

2013. XVII, 796 p. 390 illus., 133 illus. in color. Hardcover

ISBN 978-3-211-99310-1

- € 199,95 | £180.00
- ► * € (D) 213,95 | € (A) 219,95 | sFr 287,00

Sale Price

- ► € 100,00 | £90.00
- ► *€ (D) 107,00 | € (A) 110,00 | sFr 133,50



R. Winkler, Univ. Erlangen-Nürnberg Inst. Technische Physik III, Erlangen, Germany

Spin-orbit Coupling Effects in Two-Dimensional Electron and Hole Systems

The first part provides a general introduction to the electronic structure of quasi-two-dimensional systems with a particular focus on group-theoretical methods. The main part of the monograph is devoted to spin-orbit coupling phenomena at zero and nonzero magnetic fields. Throughout the book, the main focus is on a thorough discussion of the physical ideas and a detailed interpretation of the results. Accurate numerical calculations are complemented by simple and transparent analytical models that capture the important physics.

2003. XII, 228 p. (Springer Tracts in Modern Physics, Volume 191) Hardcover ISBN 978-3-540-01187-3

- ► € 252,00 | £227.00
- ► * € (D) 269,64 | € (A) 277,20 | sFr 335,50

Sale Price

- ► € 126,00 | £113.50
- ► * € (D) 134,82 | € (A) 138,60 | sFr 168,00



M. Oliver (Ed)

Chemical-Mechanical Planarization of Semiconductor Materials

This book contains a comprehensive review of CMP (Chemical-Mechanical Planarization) technology, one of the most exciting areas in the field of semiconductor technology. It contains detailed discussions of all aspects of the technology, for both dielectrics and metals. The state of polishing models and their relation to experimental results are covered. Polishing tools and consumables are also covered. The leading edge issues of damascene and new dielectrics as well as slurryless technology are discussed.

2004. XI, 428 p. (Springer Series in Materials Science, Volume 69) Hardcover ISBN 978-3-540-43181-7

- ► £ 252,00 | £227.00
- ► * € (D) 269,64 | € (A) 277,20 | sFr 335,50

Sale Price

- ► € 126,00 | £113.50
- ► * € (D) 134,82 | € (A) 138,60 | sFr 168,00



W. G. van Sark, Copernicus Institute, Utrecht, Netherlands; L. Korte, Helmholtz-Zentrum Berlin für Materialien und Energie, Berlin, Germany; F. Roca, ENEA Centro Ricerche Portici Dipto. Tecnologie per l'Energia, Fonti, Portici, Italy (Eds)

Physics and Technology of Amorphous-Crystalline Heterostructure Silicon Solar Cells

Written for all experts in this field, this book presents an overview of the state-of-the-art in physics and technology of amorphous-crystalline heterostructure silicon solar cells.

2011. XXII, 582 p. (Engineering Materials) Hardcover ISBN 978-3-642-22274-0

- ► £ 199,99 | £180.00
- ► * € (D) 213,99 | € (A) 219,99 | sFr 266,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



S. Bella, Scuola Normale Superiore di Pisa, Pisa, Italy

The Science of the Individual: Leibniz's Ontology of Individual Substance

In his well-known Discourse on Metaphysics, Leibniz puts individual substance at the basis of metaphysical building. In so doing, he connects himself to a venerable tradition. His theory of individual concept, however, breaks with another idea of the same tradition, that no account of the individual as such can be given. Contrary to what has been commonly accepted, Leibniz's intuitions are not the mere result of the transcription of subject-predicate logic, nor of the uncritical persistence of some old metaphysical assumptions.

2005. XII, 415 p. (Topoi Library, Volume 6) Hardcover ISBN 978-1-4020-3259-2

- ► € 207,00 | £186.50
- ► * € (D) 221,49 | € (A) 227,70 | sFr 276,00

- ► € 103,50 | £93.50
- ► * € (D) 110,75 | € (A) 113,85 | sFr 138,00



C. Ierna, Catholic University of Leuven, Leuven, Belgium; H. Jacobs, Loyola University Chicago Philosophy Department, Chicago, IL, USA; F. Mattens, Katholieke Universiteit Leuven Husserl-Archief te Leuven, Leuven, Belgium (Eds)

Philosophy, Phenomenology, Sciences

Essays in Commemoration of Edmund Husserl

This broad anthology addresses major topics in phenomenology and philosophy: Topics inlcude investigations in anthropology, ethics and theology, to highly specialized research and complex relations among pure phenomenology, phenomenological psychology and cognitive science.

2010. XIV, 738 p. (Phaenomenologica, Volume 200) Hardcover

ISBN 978-94-007-0070-3

- ► € 279.00 | £251.50
- ► * € (D) 298,53 | € (A) 306,90 | sFr 371,50

Sale Price

- ► € 139,50 | £126.00
- ► * € (D) 149,27 | € (A) 153,45 | sFr 186,00



S. Rahman, Université Lille III UFR de Philosophie, Villeneuve d'Ascq, France; J. Symons, University of Texas at El Paso Department of Philosophy, El Paso, TX, USA; D. M. Gabbay, King's College London Dept. Computer Science, London, UK; J. P. van Bendegem, Brussels University Ctr. Logic & Philosophy of Science, Bruxelles, Belgium (Eds)

Logic, Epistemology, and the Unity of Science

This is the first volume in a series aimed at considering the scientific enterprise in light of recent developments in logic and philosophy. This work explores new ways of achieving the integration of science in all its diversity.

1st ed. 2004. 2nd printing 2009. X, 626 p. (Logic, Epistemology, and the Unity of Science, Volume 1) Softcover

ISBN 978-90-481-2486-2

- ► €89,99 | £81.00
- ► * € (D) 96,29 | € (A) 98,99 | sFr 120,00

Sale Price

- ► € 129,50 | £117.00
- ► * € (D) 138,57 | € (A) 142,45 | sFr 172,50



Advances in Polymer Science

U. Wiesner, B. Voit, T. E. Long, Series editors: A. Abe, A.-C. Albertsson, G. W. Coates, M. Möller, L. Leibler, E. M. Terentjev, S. Kobayashi, K.-S. Lee, M. J. Vicent, J. Genzer, B. Z. Tang, X. Zhang, O. Okay, V. Percec

Volume 251

A. Abe, Yokohama, Japan; H.-H. Kausch, Cully, Switzerland; M. Möller, RWTH Aachen DWI, Aachen, Germany; H. Pasch, University of Stellenbosch Department of Chemistry and Polymer Scie, Stellenbosch, South Africa (Eds)

Polymer Composites – Polyolefin Fractionation – Polymeric Peptidomimetics – Collagens

2013. V, 209 p. 79 illus., 13 illus. in color. Hardcover ISBN 978-3-642-34329-2

- € 189,95 | £171.00
- ► * € (D) 203,25 | € (A) 208,94 | sFr 253,00

Sale Price

- ▶ € 95,00 | £85.50
- * € (D) 101,65 | € (A) 104,50 | sFr 126,50



S. Rahman, Université Lille III UFR de Philosophie, Villeneuve d'Ascq, France; J. Symons, University of Texas at El Paso Department of Philosophy, El Paso, TX, USA; D. M. Gabbay, King's College London Dept. Computer Science, London, UK; J. P. van Bendegem, Brussels University Ctr. Logic & Philosophy of Science, Bruxelles, Belgium (Eds)

Logic, Epistemology, and the Unity of Science

This is the first volume in a series aimed at considering the scientific enterprise in light of recent developments in logic and philosophy. This work explores new ways of achieving the integration of science in all its diversity.

2004. X, 626 p. (Logic, Epistemology, and the Unity of Science, Volume 1) Hardcover ISBN 978-1-4020-2807-6

- ► € 259,00 | £233.50
- ► * € (D) 277,13 | € (A) 284,90 | sFr 345,00

Sale Price

- ► € 129,50 | £117.00
- * € (D) 138,57 | € (A) 142,45 | sFr 172,50

9 781402 028076

D. Schmicking, Universität Mainz FB Philosophie und Philologie, Mainz, Germany; **S. Gallagher,** University of Central Florida Dept of Philosophy & Cognitive Sciences, Orlando, FL, USA (Eds)

Handbook of Phenomenology and Cognitive Science

The idea that phenomenology, in the European tradition, has something to offer the cognitive sciences is a recent development. Here, leading researchers address topics that lie at the intersection between phenomenological studies and the cognitive sciences.

2010. IX, 688p. 2 illus., 1 illus. in color. Hardcover ISBN 978-90-481-2645-3

- € 289,00 | £260.50
- ► * € (D) 309,23 | € (A) 317,90 | sFr 385,00

Sale Price

- ► € 144,50 | £130.50
- ► * € (D) 154,62 | € (A) 158,95 | sFr 192,50



H.-E. Albrecht, Rostock, Germany; N. Damaschke, TU Darmstadt FB 16 Maschinenbau, Darmstadt, Germany; M. Borys, Physikalisch-Technische Bundesanstalt Fachlabor 1.41, Braunschweig, Germany; C. Tropea, TU Darmstadt FB 16 Maschinenbau, Darmstadt, Germany

Laser Doppler and Phase Doppler Measurement Techniques

Providing the first comprehensive treatment, this book covers all aspects of the laser Doppler and phase Doppler measurement techniques, including light scattering from small particles, fundamental optics, system design, signal and data processing, tracer particle generation, and applications in single and two-phase flows.

2003. XIII, 738 p. (Experimental Fluid Mechanics) Hardcover

ISBN 978-3-540-67838-0

- ► € 279,00 | £251.50
- ► * € (D) 298,53 | € (A) 306,90 | sFr 371,50

- ► € 139,50 | £126.00
- ► *€ (D) 149,27 | € (A) 153,45 | sFr 186,00



D. W. Bäuerle, Universität Linz Inst. Angewandte Physik, Linz, Austria

Laser Processing and Chemistry

Here is an overview of the fundamentals and applications of laser-matter interactions, in particular with regard to laser material processing. It examines laser-induced physical and chemical processes at gas-solid, liquid-solid and solid-solid interfaces.

4th ed. 2011. XXII, 851p. 337 illus., 19 illus. in color. Hardcover

ISBN 978-3-642-17612-8

- ► € 159,95 | £144.00
- ► * € (D) 171,15 | € (A) 175,94 | sFr 229,50

Salo Drice

- ► €80,00 | £72.00
- * € (D) 85,60 | € (A) 88,00 | sFr 106,50



T. M. Deserno, RWTH Aachen Inst. Medizinische Informatik, Aachen, Germany (Ed)

Biomedical Image Processing

This book provides a brief but complete overview on medical image processing and analysis highlighting recent advances that have been made in academics. Color figures are used extensively to illustrate the methods.

2011. XXXVII, 595 p. (Biological and Medical Physics, Biomedical Engineering) Hardcover ISBN 978-3-642-15815-5

- ► € 169,99 | £153.00
- ► *€ (D) 181,89 | € (A) 186,99 | sFr 226,50

Sale Price

- ► €85,00 | £76.50
- ► * € (D) 90,95 | € (A) 93,50 | sFr 113,50



An Exercise Book

This exercise book is written for students of physics concentrating on Classical Mechanics,

1000 Solved Problems in

Electricity and Electromagnetism. Each of its 13 chapters includes a brief but thorough summary and essential formulas, plus typical problems and detailed solutions.

2011. XIV, 802p. 250 illus.. Hardcover ISBN 978-3-642-11942-2

A. A. Kamal, Murphy, TX, USA

Classical Physics

- € 139,95 | £126.00
- ► * € (D) 149,75 | € (A) 153,94 | sFr 201,00

Sale Price

- ► €70,00 | £63.99
- * € (D) 74,90 | € (A) 77,00 | sFr 93,50



A. Das, Simon Fraser University, Burnaby, BC, Canada; **A. DeBenedictis,** Simon Fraser University, Burnaby, Canada

The General Theory of Relativity

A Mathematical Exposition

Providing a number of precise solutions not covered in many of the standard textbooks, this volume presents and proves, through rigorous and lucid notation, a number of elegant theorems which have important consequences in general relativity theory.

2012. XXVI, 678 p. Hardcover ISBN 978-1-4614-3657-7

- ► £ 139,95 | £126.00
- ► * € (D) 149,75 | € (A) 153,94 | sFr 186,50

Sale Price

- ► €70,00 | £63.99
- ► * € (D) 74,90 | € (A) 77,00 | sFr 93,50



P. Hinterdorfer, Universität Linz Institut für Biophysik, Linz, Austria; A. van Oijen, Harvard University Harvard Medical School, Boston, MA, USA

Handbook of Single-Molecule Biophysics

During the last decade, a number of novel biophysical methods have been developed that allow the manipulation and study of individual biomolecules. This book introduces these techniques and presents an extensive discussion of new insights obtained from them.

2009. XXI, 626 p. Hardcover ISBN 978-0-387-76496-2

- € 229,00 | £199.50
- ► *€ (D) 245,03 | € (A) 251,90 | sFr 295,00

Sale Price

- ► € 114,50 | £103.50
- ► * € (D) 122,52 | € (A) 125,95 | sFr 152,50



A. A. Kamal, Murphy, TX, USA

1000 Solved Problems in Modern Physics

Based on the material covered in US and UK undergraduate physics courses, this volume provides a variety of physics problems useful for assignments or exams. A brief summary introduces the formulas in each chapter, and solutions are provided at the end.

2010. XVI, 700p. 200 illus., 100 illus. in color. Hardcover

ISBN 978-3-642-04332-1

- ► € 139,95 | £126.00
- ► * € (D) 149,75 | € (A) 153,95 | sFr 201,00

- ► €70,00 | £63.99
- * € (D) 74,90 | € (A) 77,00 | sFr 93,50



K. Kneipp, Harvard University Harvard Medical School, Boston, MA, USA; M. Moskovits, University of California, Santa Barbara College of Letters & Science, Santa Barbara, CA, USA; H. Kneipp, Harvard University Harvard Medical School, Boston, MA, USA (Fds)

Surface-Enhanced Raman Scattering

Physics and Applications

Almost 30 years after the first reports on surfaceenhanced Raman signals, the phenomenon of surface-enhanced Raman scattering (SERS) is now well established. Yet, explaining the enhancement of a spectroscopic signal by fouteen orders of magnitude continues to attract the attention of physicists and chemists alike.

2006. XVII 464 p. 221 illus., 3 in color. Also available online. (Topics in Applied Physics, Volume 103) Hardcover

ISBN 978-3-540-33566-5

- ► £ 240,00 | £216.00
- ► * € (D) 256,80 | € (A) 264,00 | sFr 319,50

Sale Price

- ► € 120,00 | £108.00
- ► * € (D) 128,40 | € (A) 132,00 | sFr 160,00



P. O. Krehl, Ernst-Mach-Institut, Freiburg, Germany

History of Shock Waves, Explosions and Impact

A Chronological and Biographical Reference

This unique and encyclopedic reference work charts the evolution of the physics of shock waves and detonations from the earliest investigations into percussion and impact phenomena right up to the most recent groundbreaking research in the field.

2009. Hardcover ISBN 978-3-540-20678-1

► € 509,00 | £458.50

► * € (D) 544,63 | € (A) 559,90 | sFr 678,00

Sale Price

- ► € 254,50 | £229.50
- ► * € (D) 272,32 | € (A) 279,95 | sFr 339,00



A. Lebed, University of Arizona Department of Physics, Tucson, AZ, USA (Ed)

The Physics of Organic Superconductors and Conductors

This bang up-to-date volume contains the distilled wisdom of some of the world's leading minds on the subject. Inside, there is a treasure trove of general (tutorial) and topical reviews, written by leading researchers in the area of organic superconductors and conductors. The papers hail from all over the world, as far afield as the USA and Australia. They cover contemporary topics such as unconventional superconductivity, non-Fermiliquid properties, and the quantum Hall effect.

2008. XXIV, 754 p. (Springer Series in Materials Science, Volume 110) Hardcover ISBN 978-3-540-76667-4

- ► £ 239,00 | £215.50
- ► * € (D) 255,73 | € (A) 262,90 | sFr 318,50

Sale Price

- ► € 119,50 | £108.00
- ► * € (D) 127,87 | € (A) 131,45 | sFr 159,50



W. Koechner, Round Hill, VI, USA

Solid-State Laser Engineering

A revised and updated book dealing principally with the design and development of lasers. It is the only book available dealing exclusively with solid-state lasers. Emphasis is placed on engineering and practical considerations.

6th, rev. and updated ed. 2006. XVI, 750 p. (Springer Series in Optical Sciences, Volume 1) Hardcover ISBN 978-0-387-29094-2

- ► £ 189,99 | £173.00
- ► * € (D) 203,29 | € (A) 208,99 | sFr 255,50

Sale Price

- ▶ € 95,00 | £85.50
- * € (D) 101,65 | € (A) 104,50 | sFr 126,50



C. Lacroix, CNRS Laboratoire Louis Néel, Grenoble CX, France; P. Mendels, Université Paris-Sud XI CNRS, Orsay CX, France; F. Mila, Ecole Polytechnique Fédérale de Lausanne Inst. Physique Théorique, Lausanne, Switzerland (Eds)

Introduction to Frustrated Magnetism

Materials, Experiments, Theory

The field of highly frustrated magnetism has developed considerably and expanded over the last 15 years. Issuing from canonical geometric frustration of interactions, it now extends over other aspects with many degrees of freedom such as magneto-elastic couplings, orbital degrees of freedom, dilution effects, and electron doping. Its is thus shown here that the concept of frustration impacts on many other fields in physics than magnetism.

2011. XXVI, 682 p. (Springer Series in Solid-State Sciences, Volume 164) Hardcover ISBN 978-3-642-10588-3

- ► € 169,99 | £153.00
- ► * € (D) 181,89 | € (A) 186,99 | sFr 226,50

Sale Price

- ► €85,00 | £76.50
- ► *€ (D) 90,95 | € (A) 93,50 | sFr 113,50



U. Linz, Forschungszentrum Jülich, Jülich, Germany (Ed)

Ion Beam Therapy

Fundamentals, Technology, Clinical Applications

This book provides a detailed, up-to-date account of the basics, the technology, and the clinical use of ion beams for radiation therapy. Theoretical background, technical components, and patient treatment schemes are delineated by the leading experts.

2012. XXXV, 729p. 234 illus., 185 illus. in color. (Biological and Medical Physics, Biomedical Engineering) Hardcover ISBN 978-3-642-21413-4

- € 149,99 | £135.00
- ► * € (D) 160,49 | € (A) 164,99 | sFr 200,00

- ► €75,00 | £67.99
- ► * € (D) 80,25 | € (A) 82,50 | sFr 100,00



G. Liu, Argonne National Laboratory Chemistry Division, Argonne, IL, USA; **B. Jacquier,** Université Lyon 1, Villeurbanne CX, France (Eds)

Spectroscopic Properties of Rare Earths in Optical Materials

Aimed at researchers and graduate students, this book provides up-to-date information about the electronic interactions that impact the optical properties of rare earth ions in solids. Its goal is to establish a connection between fundamental principles and the materials properties of rare-earth activated luminescent and laser optical materials. The theoretical survey and introduction to spectroscopic properties covers electronic energy level structure, intensities of optical transitions, ion-phonon interactions, line broadening, and energy transfer and up-conversion.

2005. VI, 550 p. (Springer Series in Materials Science, Volume 83) Hardcover

ISBN 978-3-540-23886-7

€ 259,00 | £233.50

► * € (D) 277,13 | € (A) 284,90 | sFr 345,00

Sale Price

- ► € 129,50 | £117.00
- * € (D) 138,57 | € (A) 142,45 | sFr 172,50



A. V. Narlikar, Inter University Consortium for DAE Facilities, Indore, India (Ed)

Frontiers in Magnetic Materials

Frontiers in Magnetic Materials focuses on the current achievements and state-of-the-art advancements in magnetic materials. Several lines of development- High-Tc Superconductivity, Nanotechnology and refined experimental techniques among them – raised knowledge and interest in magnetic materials remarkably. The book comprises 24 chapters on the most relevant topics written by renowned international experts in the field. It is of central interest to researchers and specialists in Physics and Materials Science, both in academic and industrial research, as well as advanced students.

2005. XXIV, 799 p. 491 illus. Hardcover ISBN 978-3-540-24512-4

► € 289,00 | £260.50

► * € (D) 309,23 | € (A) 317,90 | sFr 385,00

Sale Price

- ► € 144,50 | £130.50
- *€ (D) 154,62 | € (A) 158,95 | sFr 192,50



J. Ohtsubo, Shizuoka University Faculty of Engineering, Hamamatsu, Shizuika, Japan

Semiconductor Lasers

Stability, Instability and Chaos

The extended 3rd edition of this book covers such innovations as chaos synchronization between two lasers used for optical secure communication, fast physical number generation using chaotic semiconductor lasers and development and application of chaos chips.

3rd ed. 2013. XX, 570 p. 277 illus., 44 illus. in color. (Springer Series in Optical Sciences, Volume 111) Hardcover

ISBN 978-3-642-30146-9

- € 169,95 | £153.00
- ► * € (D) 181,85 | € (A) 186,94 | sFr 226,50

Sale Price

- ► €85,00 | £76.50
- ► * € (D) 90,95 | € (A) 93,50 | sFr 113,50



S. Logothetidis, Aristotle University of Thessaloniki, Thessaloniki, Greece (Ed)

Nanomedicine and Nanobiotechnology

This book presents laboratory, scientific and clinical aspects of nanomaterials used for medical applications in regenerative medicine, dentistry and pharmacy. Examines compatibility assessment, and offers advanced nondestructive nanoprecision techniques.

2012. XII, 140 p. (NanoScience and Technology) Hardcover

ISBN 978-3-642-24180-2

- ► £129,99 | £117.00
- ► * € (D) 139,09 | € (A) 142,99 | sFr 173,50

Sale Price

- ► €65,00 | £58.99
- ▶ * € (D) 69,55 | € (A) 71,50 | sFr 87,00



R. Noll, Fraunhofer-Institut für Lasertechnik (ILT), Aachen. Germany

Laser-Induced Breakdown Spectroscopy

Fundamentals and Applications

This comprehensive overview presents the fundamentals, process parameters, instrumental components and applications of laser-induced breakdown spectroscopy (LIBS).

2012. XII, 544 p. Hardcover ISBN 978-3-642-20667-2

- ► € 169,95 | £153.00
- ► * € (D) 181,85 | € (A) 186,94 | sFr 244,00

Sale Price

- ► €85,00 | £76.50
- ► * € (D) 90,95 | € (A) 93,50 | sFr 113,50



R. Osellame, G. Cerullo, R. Ramponi, Politecnico di Milano, Milano, Italy (Eds)

Femtosecond Laser Micromachining

Photonic and Microfluidic Devices in Transparent Materials

This book describes state-of-the-art micromachining of transparent materials which, due to the nonlinear absorption mechanism of ultrashort pulses, allows unique three-dimensional capabilities and is exploitable for fabrication of complex microsystems.

2012. XVIII, 486 p. (Topics in Applied Physics, Volume 123) Hardcover

ISBN 978-3-642-23365-4

- ► € 179,99 | £162.00
- ► * € (D) 192,59 | € (A) 197,99 | sFr 240,00

- ► € 90,00 | £81.00
- ► * € (D) 96,30 | € (A) 99,00 | sFr 120,00



I. Parinov, Southern Federal University Vorovich Mechanics and, Rostov-on-Don, Russia

Microstructure and Properties of High-Temperature **Superconductors**

Reviewing the latest research, this book covers optimized preparation techniques and superconducting compositions. Places special focus on the Bi-Sr-Ca-Cu-O and Y-Ba-Cu-O families, which offer promising applications. Includes many illustrations and references.

2nd ed. 2012. XXI, 779 p. 379 illus, Hardcover ISBN 978-3-642-34440-4

- € 169,95 | £153.00
- ► * € (D) 181,85 | € (A) 186,94 | sFr 226,50

- € 85,00 | £76.50
- * € (D) 90,95 | € (A) 93,50 | sFr 113,50



P. Schaaf, TU Ilmenau Institut für Werkstofftechnik und, Ilmenau, Germany (Ed)

Laser Processing of Materials

Fundamentals, Applications and Developments

Laser materials processing has made tremendous progress and is now at the forefront of industrial and medical applications. This text examines recent advances in smart and nanoscale materials going well beyond the traditional cutting and welding applications.

2010. XIV, 234 p. (Springer Series in Materials Science, Volume 139) Hardcover ISBN 978-3-642-13280-3

- € 229,00 | £206.50
- ► * € (D) 245,03 | € (A) 251,90 | sFr 305,00

Sale Price

- € 114,50 | £103.50
- *€ (D) 122,52 | € (A) 125,95 | sFr 152,50



J. Sólyom, Eötvös Loránd University, Budapest,

Fundamentals of the Physics of Solids

Volume 1: Structure and Dynamics

Translated by: A. Piróth

This ground-breaking new book is the first of a three-volume series written by the same author that plugs a real gap in the literature. It delivers a comprehensive account of the fundamentals of the physics of solids and is thus unique in the field.

2007. Hardcover ISBN 978-3-540-72599-2 € 149,95 | £135.00

► * € (D) 160,45 | € (A) 164,95 | sFr 215,00

Sale Price

- €75,00 | £67.99
- * € (D) 80,25 | € (A) 82,50 | sFr 100,00



F.-A. Popp, L. Beloussov, Moscow State University Faculty of Biology, Moscow, Russia (Eds)

Integrative Biophysics

Biophotonics

Most of the specialists working in this interdisciplinary field of physics, biology, biophysics and medicine are associated with "The International Institute of Biophysics" (IIB), in Neuss, Germany, where basic research and possibilities for applications are coordinated. The growth in this field is indicated by the increase in financial support, interest from the scientific community and frequency of publications. Audience: The scientists of IIB have presented the most essential background and applications of biophotonics in these lecture notes in biophysics, based on the summer school lectures by this group. This book is devoted to questions of elementary biophysics, as well as current developments and applications.

2003. VI, 503 p. Hardcover ISBN 978-1-4020-1139-9

- € 219,00 | £197.00
- ► * € (D) 234,33 | € (A) 240,90 | sFr 314,00

Sale Price

- € 109,50 | £99.00
- ► * € (D) 117,17 | € (A) 120,45 | sFr 146,00

U. Schumann, Deutsches Zentrum fuer Luft- und Raumfahrt, Oberpfaffenhofen, Germany (Ed)

Atmospheric Physics

Background - Methods - Trends

In honor of the 50th anniversary of the Institute of Atmospheric Physics of the German Aerospace Center, this book presents outstanding results of the Institute. It covers the entire area of atmospheric science, from fluid dynamics to atmosphere acoustics.

2012. XXXIX, 877 p. 378 illus., 86 illus. in color. (Research Topics in Aerospace) Hardcover ISBN 978-3-642-30182-7

- ► € 199,95 | £180.00
- ► *€ (D) 213,95 | € (A) 219,94 | sFr 266,50

Sale Price

- € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



J. Sólyom, Eötvös Loránd University, Budapest,

Fundamentals of the Physics of Solids

Volume 3 - Normal, Broken-Symmetry, and **Correlated Systems**

This book, the third of a three-volume series, delivers a comprehensive and self-contained account of the fundamentals of the physics of solids. It also explains the essential features of various experimental techniques.

2011. XXV, 747 p. Hardcover ISBN 978-3-642-04517-2

- ► € 159,99 | £144.00
- ► * € (D) 171,19 | € (A) 175,99 | sFr 213,00

- € 80,00 | £72.00
- * € (D) 85,60 | € (A) 88,00 | sFr 106,50



J. Sólyom, Eötvös Loránd University, Budapest, Hungary

Fundamentals of the Physics of Solids

Volume II: Electronic Properties

Translated by: A. Piróth, Bordeaux, France

The second of a three-volume series that aims to deliver a comprehensive account of the vast field of solid-state physics, this book goes far beyond most classic texts in the presentation of the properties of solids and experimentally observed phenomena.

2009. Hardcover ISBN 978-3-540-85315-2

- ► € 129,95 | £117.00
- ► * € (D) 139,05 | € (A) 142,95 | sFr 186,50

Sale Price

- ► €65,00 | £58.99
- ► * € (D) 69,55 | € (A) 71,50 | sFr 87,00



T. M. Tritt, Clemson University, Clemson, SC, USA (Ed)

Thermal Conductivity

Theory, Properties, and Applications

It has been almost thirty years since the publication of a book that is entirely dedicated to the theory, description, characterization and measurement of the thermal conductivity of solids. The recent discovery of new materials which possess more complex crystal structures and thus more complicated phonon scattering mechanisms have brought innovative challenges to the theory and experimental understanding of these new materials. With the development of new and novel solid materials and new measurement techniques, this book will serve as a current and extensive resource to the next generation researchers in the field of thermal conductivity.

2004. XXI, 290 p. (Physics of Solids and Liquids) Hardcover

ISBN 978-0-306-48327-1

► € 199,99 | £179.50

► * € (D) 213,99 | € (A) 219,99 | sFr 265,50

Sale Price

- ► € 100,00 | £90.00
- ► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



D. Vij, Kurukshetra University, Kurukshetra, India (Ed)

Handbook of Applied Solid State Spectroscopy

This comprehensive book brings together information about spectroscopic techniques. Emphasis has been laid on the fundamentals, methods and procedures, applications and new developments in the field. Each chapter presents an overview of a particular technique.

2006. XIX, 741 p. 347 illus. Hardcover ISBN 978-0-387-32497-5

- ► € 339,00 | £299.50
- ► * € (D) 362,73 | € (A) 372,90 | sFr 443,00

Sale Price

- ► € 169,50 | £153.00
- * € (D) 181,37 | € (A) 186,45 | sFr 226,00



I. T. Sorokina, K. L. Vodopyanov (Eds)

Solid-State Mid-Infrared Laser Sources

The book describes the most advanced techniques for generating coherent light in the mid-infrared region of the spectrum. These techniques represent diverse areas of photonics and include heterojunction semiconductor lasers, quantum cascade lasers, tunable crystalline lasers, fiber lasers, Raman lasers, and optical parametric laser sources. Offering authoritative reviews by internationally recognized experts, the book provides a wealth of information on the essential principles and methods of the generation of coherent mid-infrared light and on some of its applications.

2003. XVI, 557 p. (Topics in Applied Physics, Volume 89) Hardcover

ISBN 978-3-540-00621-3

► € 263,00 | £237.00 ► *€ (D) 281,41 | € (A) 289,30 | sFr 350,50

Sale Price

- ► € 131,50 | £118.50
- * € (D) 140,71 | € (A) 144,65 | sFr 175,50



O. Ueda, Kanazawa Institute of Technology, Tokyo, Japan; S. J. Pearton, University of Florida, Gainesville, FL, USA (Eds)

Materials and Reliability Handbook for Semiconductor Optical and Electron Devices

This book covers reliability procedures for lasers and high speed electronics used in cell phones, satellites, data transmission systems and displays. Addresses reliability engineering, materials, reliability testing and electronic characterization.

2013. XV, 616 p. 410 illus., 131 illus. in color. Hardcover

ISBN 978-1-4614-4336-0

- € 169,95 | £153.00
- ► * € (D) 181,85 | € (A) 186,94 | sFr 226,50

Sale Price

- ► €85,00 | £76.50
- ► * € (D) 90,95 | € (A) 93,50 | sFr 113,50



S. Volz, Laboratoire d'Energétique Moléculaire et Macroscopique, Châtenay Malabry, France (Ed)

Microscale and Nanoscale Heat Transfer

In collaboration with: **R. Carminati, P. Chantrenne, S. Dilhaire, S. Gomez,** IIMAS UNAM Apdo. Postal 20-726, Mexico, Mexico; **N. Trannoy, G. Tessier**

The book constitutes a particularly complete and original collection of ideas, models, numerical methods and experimental tools which will prove invaluable in the study of microscale and nanoscale heat transfer. It should be of interest to research scientists and thermal engineers who wish to carry out theoretical research or metrology in this field, but also to physicists concerned with the problems of heat transfer, or teachers requiring a solid foundation for an undergraduate university course in this area.

2007. XVI, 370, 144 illus. Also available online. (Topics in Applied Physics, Volume 107) Hardcover ISBN 978-3-540-36056-8

- ► € 240,00 | £216.00
- ► * € (D) 256,80 | € (A) 264,00 | sFr 319,50

- ► € 120,00 | £108.00
- ► * € (D) 128,40 | € (A) 132,00 | sFr 160,00



A. D. Yablon

Optical Fiber Fusion Splicing

This book is an up-to-date treatment of optical fiber fusion splicing incorporating all the recent innovations in the field. It provides a toolbox of general strategies and specific techniques that the reader can apply when optimizing fusion splices between novel fibers. It specifically addresses considerations important for fusion splicing of contemporary specialty fibers including dispersion compensating fiber, erbium-doped gain fiber, polarization maintaining fiber, and microstructured fiber. Finally, it discusses the future of optical fiber fusion splicing including silica and non-silica based optical fibers as well as the trend toward increasing automation. Whilst serving as a self-contained reference work, abundant citations from the technical literature will enable readers to readily locate primary sources.

2005. XIV, 308 p. (Springer Series in Optical Sciences, Volume 103) Hardcover

ISBN 978-3-540-23104-2

€ 194,95 | £175.50

► * € (D) 208,60 | € (A) 214,45 | sFr 260,00

Sale Price

▶ € 97,50 | £88.00

* € (D) 104,33 | € (A) 107,25 | sFr 130,00



H. Zabel, Ruhr-Universität Bochum, Bochum, Germany; M. Farle, University Duisburg-Essen, Duisburg, Germany (Eds)

Magnetic Nanostructures

Spin Dynamics and Spin Transport

This book covers the most important and most up-to-date aspects of magnetic heterostructures, including spin torque effects, spin injection, spin transport, spin fluctuations, proximity effects and electrical control of spin valves.

2013. XV, 268 p. 142 illus. (Springer Tracts in Modern Physics, Volume 246) Hardcover ISBN 978-3-642-32041-5

► € 149,95 | £135.00

► * € (D) 160,45 | € (A) 164,94 | sFr 200,00

Sale Price

► € 75,00 | £67.99

* € (D) 80,25 | € (A) 82,50 | sFr 100,00



J. Valsiner, Clark University Dept. Psychology, Worcester, MA, USA; P. C. Molenaar, Pennsylvania State University Dept. Human Development &, University Park, PA, USA; M. C. Lyra, Universidade Federal de Pernambuco Centro de Filosofia e Ciências Humanas, Recife, Brazil; N. Chaudhary, University of Delhi Lady Irwin College, New Delhi, India (Eds)

Dynamic Process Methodology in the Social and Developmental Sciences

All psychological and social processes are dynamic. This handbook emphasizes that reality as it details methodologies of the dynamics of single systems in all relevant social sciences. It includes a new methodology based on individual performance profiles.

2009. Hardcover ISBN 978-0-387-95921-4

► £ 199,99 | £179.50

► * € (D) 213,99 | € (A) 219,99 | sFr 265,50

Sale Price

► € 100,00 | £90.00

► * € (D) 107,00 | € (A) 110,00 | sFr 133,50



H. Gruber, K. Bödeker (Eds)

Creativity, Psychology and the History of Science

Creativity, Psychology, and the History of Science offers for the first time a comprehensive overview of the oeuvre of Howard E. Gruber, who is noted for his contributions both to the psychology of creativity and to the history of science. The present book includes papers from a wide range of topics. In the contributions to creativity research, Gruber proposes his key ideas for studying creative work. Gruber focuses on how the thinking, motivation and affect of extraordinarily creative individuals evolve and how they interact over long periods of time.

2005. VIII, 548 p. (Boston Studies in the Philosophy and History of Science, Volume 245) Hardcover ISBN 978-1-4020-3491-6

► € 259,00 | £233.50

► *€ (D) 277,13 | € (A) 284,90 | sFr 345,00

Salo Prico

► € 129,50 | £117.00

* € (D) 138,57 | € (A) 142,45 | sFr 172,50



Please send me:	copies	ISBN	€ /£/sFr
	copies	ISBN	€ / £ / sFr
	copies	ISBN	€ /£/sFr
How to order:	copies	ISBN	€ /£/sFr
Visit springer.com/sciencesale for more information about	copies	ISBN	€ /£/sFr
	copies	ISBN	€ /£/sFr
E-mail orders-HD-individuals@ springer.com orders-HD-booksellers@	copies	ISBN	€ /£/sFr
	copies	ISBN	€ /£/sFr
springer.com Contact your local bookseller	copies	ISBN	€ /£/sFr
Call	copies	ISBN	€ / £ / sFr
Center)	copies	ISBN	€ /£/sFr
	copies	ISBN	€ / £ / sFr
* The € (D) for Germany includes 7% VAT for books, the € (A) for Austria includes 10% VAT for books.	copies	ISBN	€ /£/sFr
	copies	ISBN	€ / £ / sFr
	copies	ISBN	€ /£/sFr
	copies	ISBN	€ /£/sFr
	copies	ISBN	€ / £ / sFr
Please bill me Please charge my credit card: Number	Eurocard/Access/Mastercard	○ Visa/Barclaycard/Bank/Ar	nericard American Express
Available from		Name	
		Dept.	
		Institution	
		Street City / 7/D Code	
		City / ZIP-Code Country	
		Email	
		Date X	Signature X

Please note: The books in this catalogue are, per chapter, arranged alphabetically by the author's last name. Some stocks may be limited and are subject to availability. Prices are subject to change without notice. All prices are exclusive of carriage charges. All errors and omissions excepted.

Heidelberg New York

Dordrecht

London

Tokyo

Vienna

Basel

Berlin

Hong Kong

Milan

New Delhi

Paris