

Springer Life & Earth Sciences Winter Special

October 1, 2011 – February 29, 2012

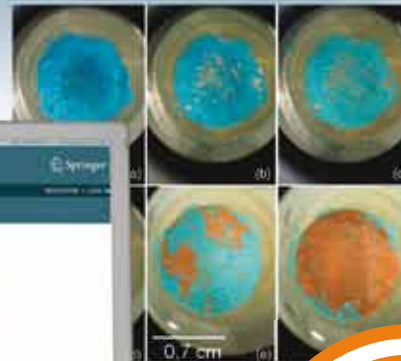
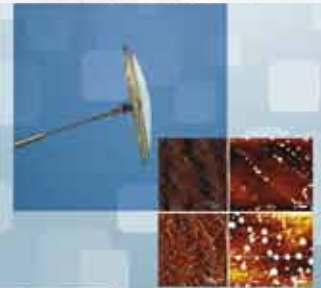


**50%
OFF**

Springer Images

A comprehensive collection of scientific and medical images

- ▶ Rapidly growing collection of over 1.6 million images
- ▶ Based on high-quality, trusted sources
- ▶ User-friendly search features and a one-click export function



J. H. Andersen, D. J. Conley (Eds)

Eutrophication in Coastal Ecosystems

Towards better understanding and management strategies

Highlighting its definitions and causes, this review synthesizes the most recent scientific results in relation to specific eutrophication issues. Other topics discussed include nutrient loads, cycling and limitation, reference conditions and trend reversal.

2009. 264 p. (Developments in Hydrobiology, Volume 207) Hardcover
ISBN 978-90-481-3384-0
▶ € 149,95 | £135,00
▶ *€ (D) 160,45 | € (A) 164,95 | sFr 215,50

Sale Price

▶ € 76,95 | £69,99
▶ *€ (D) 82,34 | € (A) 84,65 | sFr 102,50



9 789048 133840

D. Barceló, IQAB-CSIC, Barcelona, Spain (Ed.)

Fuel Oxygenates

With contributions by numerous experts

The state of the art on fuel oxygenates, and in particular of MTBE in groundwater, is presented. Historically, oxygenates like MTBE were developed in the 1970s as octane enhancers to replace toxic additives like lead, which were phased out of gasoline. The presence of oxygenates in gasoline promotes cleaner fuel combustion within the engine, boosts fuel octane values and reduces vehicle emissions. Another relevant oxygenate is ethyl-tertiary-butyl ether (ETBE), which has increasingly replaced MTBE. Ethanol is by far the most commonly used alcohol oxygenate and bio-ethanol in particular is being increasingly used as a replacement for other fuel oxygenates.

2007. XVI, 411 p. 51 illus. (The Handbook of Environmental Chemistry / Water Pollution, Part 5 / 5R) Hardcover
ISBN 978-3-540-72640-1
▶ € 194,95 | £175,50
▶ *€ (D) 208,60 | € (A) 214,45 | sFr 279,50

Sale Price

▶ € 99,95 | £90,00
▶ *€ (D) 106,95 | € (A) 109,95 | sFr 133,50



9 783540 726401

P. Blondel, University of Bath, UK

The Handbook of Sidescan Sonar

This exhaustive new edition offers the fundamentals of sidescan sonar imagery and bathymetry and explains the tricky science of interpreting them. It also covers all recent advances in the field regarding both technology and knowledge of marine structures.

2009. XXVIII, 316 p. 235 illus. (Springer Praxis Books / Geophysical Sciences) Hardcover
ISBN 978-3-540-42641-7
▶ € 149,95 | £135,00
▶ *€ (D) 160,45 | € (A) 164,95 | sFr 215,50

Sale Price

▶ € 76,95 | £69,99
▶ *€ (D) 82,34 | € (A) 84,65 | sFr 102,50



9 783540 426417

H.-J. Bolle, München, Germany; M. Eckardt, D. Koslowsky, Freie Universität Berlin, Germany; F. Maselli, CNR, Istituto di Biometeorologia, Firenze, Italy; J. Melia Miralles, Universitat de Valencia, Spain; M. Menenti, CNR, Istituto Per I Sistemi Agricoli E Forestali, S. Sebastiano al Vesuvio, Italy; F.-S. Olesen, Forschungszentrum Karlsruhe, Germany; L. Petkov, EL Oegstgeest, The Netherlands; S. I. Rasool, Paris, France; A. Griend, Zeist, The Netherlands (Eds)

Mediterranean Land-surface Processes Assessed from Space

The book describes the steps which lead from the raw signals measured in space to firstly calibrated an comparable long term data sets and in a second step to information for user communities.

2006. XXVIII, 760 p. 442 illus. (Regional Climate Studies) Hardcover
ISBN 978-3-540-40151-3
▶ € 209,00 | £188,00
▶ *€ (D) 223,63 | € (A) 229,90 | sFr 300,00

Sale Price

▶ € 104,95 | £94,50
▶ *€ (D) 112,30 | € (A) 115,45 | sFr 140,00



9 783540 401513

H. G. Brauch, Free University of Berlin, Germany; N. C. Behera, Nelson Mandela Centre for Peace and Conflict Resolution, New Delhi, India; P. Kameri-Mbote, University of Nairobi, Kenya; J. Grin, University of Amsterdam, The Netherlands; Ú. Oswald Spring, National University of Mexico, Cuernavaca, Mexico; B. Chourou, University of Tunis-Carthage, Hammam-Chatt, Tunisia; C. Mesjasz, Cracow University of Economics, Poland; H. Krummenacher, swisspeace, Bern, Switzerland (Eds)

Facing Global Environmental Change

Environmental, Human, Energy, Food, Health and Water Security Concepts

2009. XLVIII, 1588 p. 249 illus. With 27 Boxes. (Hexagon Series on Human and Environmental Security and Peace, Volume 4) Hardcover
ISBN 978-3-540-68487-9
▶ € 279,00 | £251,00
▶ *€ (D) 298,53 | € (A) 306,90 | sFr 400,50

Sale Price

▶ € 139,95 | £126,00
▶ *€ (D) 149,75 | € (A) 153,94 | sFr 186,50



9 783540 684879

H. G. Brauch, Mosbach, Germany; P. H. Liotta, US Naval War College, Rhode Island, USA; A. Marquina, University of Madrid, Spain; P. F. Rogers, University of Bradford, UK; M. E.-S. Selim, Cairo University, Giza, Egypt (Eds)

Security and Environment in the Mediterranean

Conceptualising Security and Environmental Conflicts

Foreword by: L. Robertson, A. Moussa, Preface by: K. Jaber, C. Tickell, J. Dean, E. Yassin

2003. XXVI, 1136 p. 177 illus. (Hexagon Series on Human and Environmental Security and Peace, Volume 1) Hardcover
ISBN 978-3-540-40107-0
▶ € 209,00 | £188,00
▶ *€ (D) 223,63 | € (A) 229,90 | sFr 300,00

Sale Price

▶ € 104,95 | £94,50
▶ *€ (D) 112,30 | € (A) 115,45 | sFr 140,00



9 783540 401070

K. Buczkó, J. Korponai, J. Padišák, S. W. Starratt (Eds)

Palaeolimnological Proxies as Tools of Environmental Reconstruction in Fresh Water

This volume details new palaeolimnological findings from eastern and central Europe. It reviews the late Quaternary records from the Carpathian region and presents new results on the history of a crater lake, glacial lakes in the Tatra Mountains and Lake Bled.

2009. 327 p. (Developments in Hydrobiology, Volume 208) Hardcover
ISBN 978-90-481-3386-4
▶ € 149,95 | £135,00
▶ *€ (D) 160,45 | € (A) 164,95 | sFr 215,50

Sale Price

▶ € 76,95 | £69,99
▶ *€ (D) 82,34 | € (A) 84,65 | sFr 102,50



9 789048 133864

W. Chesworth, University of Guelph, ON, Canada (Ed.)

Encyclopedia of Soil Science

This Encyclopedia provides a comprehensive, alphabetical treatment of basic soil science in a single volume. Entries cover the salient aspects of soil physics, chemistry, biology, fertility, technology, genesis, morphology, classification and geomorphology.

2008. XXVI, 902 p. 510 illus., 50 in color. (Encyclopedia of Earth Sciences Series)
ISBN 978-1-4020-3994-2
▶ € 399,00 | £359,00
▶ *€ (D) 426,93 | € (A) 438,90 | sFr 572,50

Sale Price

▶ € 199,95 | £180,00
▶ *€ (D) 213,95 | € (A) 219,94 | sFr 266,50



9 781402 039942

W.-H. Chiang, Integrated Environmental Services Ltd., Lake Forest, CA, USA

3D-Groundwater Modeling with PMWIN

A Simulation System for Modeling Groundwater Flow and Transport Processes

Processing Modflow is one of the most complete three-dimensional groundwater and transport simulation systems in the world. The text and the companion full-version software (PMWIN) offer a totally integrated simulation system. PMWIN comes with a professional graphical user-interface, supported models and programs and several other useful modeling tools. The graphical user-interface allow one to create and simulate models with ease and fun.

2nd ed. 2005. XXVI, 398 p. 242 illus. With CD-ROM. Hardcover
ISBN 978-3-540-27590-9
▶ € 279,00 | £251,00
▶ *€ (D) 298,53 | € (A) 306,90 | sFr 400,50

Sale Price

▶ € 139,95 | £126,00
▶ *€ (D) 149,75 | € (A) 153,94 | sFr 186,50



9 783540 275909

W. F. Davidson, NATO/CCMS National Representative, Director (National Facilities) National Research Council, Ottawa, ON, Canada; K. Lee, A. Cogswell, Centre for Offshore Oil and Gas Environmental Research, Fisheries and Oceans Canada, Dartmouth, NS, Canada (Eds)

Oil Spill Response: A Global Perspective

Proceedings of the NATO CCMS Workshop on Oil Spill Response Dartmouth, Nova Scotia, Canada October 11-13, 2006

International experts in the field of oil spill response, including representatives from 26 NATO countries, participated in a workshop in Canada to discuss their experience in the development and application of current and emerging technologies for oil spill response in the marine environment.

2008. XX, 368 p. With CD-ROM. (NATO Science for Peace and Security Series C: Environmental Security) Hardcover
ISBN 978-1-4020-8563-5
▶ € 184,95 | £166,50
▶ *€ (D) 197,90 | € (A) 203,45 | sFr 265,50

Sale Price

▶ € 89,95 | £81,00
▶ *€ (D) 96,25 | € (A) 98,95 | sFr 120,00



9 781402 085635

K.-J. Evert, Stuttgart, Germany (Ed.)

Encyclopedic Dictionary of Landscape and Urban Planning

Multilingual Reference Book in English, Spanish, French and German

The revised and expanded edition of this one-of-a-kind dictionary offers a multilingual, practice-oriented resource for a worldwide readership of professionals working in landscape architecture and planning, landscape design and conservation.

1st English ed. 2010. 1519 p. (In 2 volumes, not available separately)
ISBN 978-3-540-76455-7
▶ € 399,00 | £315,50
▶ *€ (D) 426,93 | € (A) 438,90 | sFr 572,50

Sale Price

▶ € 199,95 | £180,00
▶ *€ (D) 213,95 | € (A) 219,94 | sFr 266,50



9 783540 764557

A. Foubert, J.-P. Henriët, Ghent University, Ghent, Belgium

Nature and Significance of the Recent Carbonate Mound Record

The Mound Challenger Code

This book details the nature and internal structure of a whole carbonate mound body and discusses the significance of the recent carbonate mound record. It highlights that recent carbonate mounds form an important category within deep-water carbonate systems.

2009. XX, 298 p. 155 illus., 44 in color. (Lecture Notes in Earth Sciences, Volume 126) Hardcover
ISBN 978-3-642-00289-2
▶ € 149,95 | £135,00
▶ *€ (D) 160,45 | € (A) 164,95 | sFr 215,50

Sale Price

▶ € 76,95 | £69,99
▶ *€ (D) 82,34 | € (A) 84,65 | sFr 102,50



9 783642 002892

E. S. Husebye, University of Bergen, Norway (Ed.)

Earthquake Monitoring and Seismic Hazard Mitigation in Balkan Countries

Proceedings of the NATO Advanced Research Workshop on Earthquake Monitoring and Seismic Hazard Mitigation in Balkan Countries, Borovetz, Bulgaria, 11-18 September 2005

Seismology is rated the Queen of Earth Sciences due to its ability to provide detailed structural information bearing on the Earth interior and on-going dynamic processes. This is due to the advanced theoretical foundation of seismology and the extensive cooperation among seismologists on recording and disseminating of data worldwide.

2008. XVIII, 289 p. With CD-ROM. (NATO Science Series: IV: Earth and Environmental Sciences, Volume 81) Hardcover
ISBN 978-1-4020-6813-3
▶ € 159,95 | £144,00
▶ *€ (D) 171,15 | € (A) 175,95 | sFr 229,50

Sale Price

▶ € 79,95 | £72,00
▶ *€ (D) 85,55 | € (A) 87,95 | sFr 106,50



9 781402 068133

Y. J. Kim, Gwangju Institute of Science and Technology, Gwangju, Korea; U. Platt, University of Heidelberg, Germany; M. B. Gu, Korea University, Seoul, Korea; H. Iwahashi, National Institute of Advanced Industrial Science and Technology, Tsukuba, Japan (Eds)

Atmospheric and Biological Environmental Monitoring

This book presents select papers from the 7th International Symposium on Advanced Environmental Monitoring. It addresses numerous monitoring topics as well as real world problems such as supporting economic development amid changing environmental conditions.

2009. XIX, 311 p. 185 illus., 110 in color. Hardcover
ISBN 978-1-4020-9673-0
▶ € 149,95 | £135,00
▶ *€ (D) 160,45 | € (A) 164,95 | sFr 215,50

Sale Price

▶ € 76,95 | £69,99
▶ *€ (D) 82,34 | € (A) 84,65 | sFr 102,50



9 781402 096730

P. Knoepfel, IDHEAP, Chavannes, Switzerland

Environmental Policy Analyses

Learning from the Past for the Future - 25 Years of Research

With contributions by numerous experts

There is no doubt that environmental policies have developed enormously from the beginning of the eighties up until now. These policies have served as a test ground for many policy concepts, which have been implemented in other areas since the beginning of the nineties: in evaluation, monitoring, implementation improvement schemes, contracting or redistribution. They opened up the way for new insights into the field of multilevel governance, new administrative arrangements and – more recently – the rediscovery of property and use rights as well as global and individual quota-regimes.

2007. XII, 506 p. 41 illus. (Environmental Science and Engineering / Environmental Science) Hardcover
ISBN 978-3-540-73148-1
▶ € 184,95 | £166,50
▶ *€ (D) 197,90 | € (A) 203,45 | sFr 265,50

Sale Price

▶ € 89,95 | £81,00
▶ *€ (D) 96,25 | € (A) 98,95 | sFr 120,00



9 783540 731481

O. Lacombe, Université Pierre et Marie Curie, Paris; J. Lavé, Université J. Fourier, St-Martin-d'Hères; F. M. Roure, Institut Français du Pétrole, Rueil-Malmaison, France; J. Verges, Institut Ciències de la Terra, Barcelona (Eds)

Thrust Belts and Foreland Basins

From Fold Kinematics to Hydrocarbon Systems

What is the important geologic information recorded in Thrust Belts and Foreland Basins (TBFBS) on the evolution of orogens? How do they transcript the coupled influence of deep and surficial geological processes? Is it still worth looking for hydrocarbons in foothills areas?

2007. XXIV, 492 p. 290 illus. in color. (Frontiers in Earth Sciences) Hardcover
ISBN 978-3-540-69425-0
▶ € 184,95 | £166,50
▶ *€ (D) 197,90 | € (A) 203,45 | sFr 265,50

Sale Price

▶ € 89,95 | £81,00
▶ *€ (D) 96,25 | € (A) 98,95 | sFr 120,00



9 783540 694250

N. H. Landman, American Museum of Natural History, New York, NY, USA; R. A. Davis, College of Mount St. Joseph, Cincinnati, OH, USA; R. H. Mapes, Ohio University, Athens, OH, USA (Eds)

Cephalopods Present and Past: New Insights and Fresh Perspectives

This book brings together an international group of scientists focusing on present-day and fossil cephalopods, ranging broadly from Paleozoic ammonoids to today's octopods. It has three general sections dealing with: systematics and evolution; descriptions of hard- and soft part morphology; and ecology, biogeography, and taphonomy.

2007. XVIII, 482 p. 194 illus. Hardcover
ISBN 978-1-4020-6461-6
▶ € 184,95 | £166,50
▶ *€ (D) 197,90 | € (A) 203,45 | sFr 265,50

Sale Price

▶ € 89,95 | £81,00
▶ *€ (D) 96,25 | € (A) 98,95 | sFr 120,00



9 781402 064616

P. Laznicka, West Lakes, SA, Australia

Giant Metallic Deposits

Future Sources of Industrial Metals

From an author whose international academic and industrial experience spans some 40 years comes this unique book offering material for comparative research in metallogeny, practical tips for metals explorers, and even inspiration for commodity investors.

2nd ed. 2010. XIV, 950 p. 18 illus. in color. Hardcover
ISBN 978-3-642-12404-4
▶ € 199,95 | £180,00
▶ *€ (D) 213,95 | € (A) 219,94 | sFr 287,00

Sale Price

▶ € 99,95 | £90,00
▶ *€ (D) 106,95 | € (A) 109,95 | sFr 133,50



9 783642 124044

A. Le Pichon, E. Blanc, CEA/DASE, France;
A. Hauchecorne, Aeronomy Service/IPSL, UVSQ and
CNRS, France (Eds)

Infrasound Monitoring for Atmospheric Studies

Containing new results from the global operational infrasound network, this volume reviews the most important areas of infrasound. Readers will benefit from the comprehensive content of infrasound related topics and contributions by recognized experts.

2009. XIX, 735 p. 382 illus., 238 in color. Hardcover
ISBN 978-1-4020-9507-8

▶ € 199,95 | £180,00

▶ *€ (D) 213,95 | € (A) 219,95 | sFr 287,00

Sale Price

▶ € 99,95 | £90,00

▶ *€ (D) 106,95 | € (A) 109,95 | sFr 133,50



9 781402 095078

C. v. Leeuwen, European Commission, Ispra, Italy;
T. Vermeire, National Institute of Public Health and
the Environment, Bilthoven, The Netherlands (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, 688 p. Hardcover

ISBN 978-1-4020-6101-1

▶ € 164,95 | £148,50

▶ *€ (D) 176,50 | € (A) 181,45 | sFr 236,50

Sale Price

▶ € 79,95 | £72,00

▶ *€ (D) 85,55 | € (A) 87,95 | sFr 106,50



9 781402 061011

J. Marx Gómez, M. Sonnenschein, M. Müller,
H. Welsch, Carl von Ossietzky Universität Oldenburg,
Germany; C. Rautenstrauch, Otto-von-Guericke
Universität Magdeburg, Germany (Eds)

Information Technologies in Environmental Engineering

ITEE 2007 - Third International ICSC
Symposium

The increasing environmental problems demand interdisciplinary approaches where engineers, natural scientists, economists and computer scientists work together.

2007. XVIII, 598 p. 181 illus. (Environmental Science
and Engineering / Environmental Engineering)
Hardcover

ISBN 978-3-540-71334-0

▶ € 169,95 | £134,50

▶ *€ (D) 181,85 | € (A) 186,95 | sFr 244,00

Sale Price

▶ € 86,95 | £78,50

▶ *€ (D) 93,04 | € (A) 95,65 | sFr 116,00



9 783540 713340

C. Lee, T. Schaaf, UNESCO, Paris, France (Eds)

The Future of Drylands

International Scientific Conference on
Desertification and Drylands Research, Tunis,
Tunisia, 19-21 June 2006

Drylands have been cradles to some of the world's greatest civilizations, and contemporary dryland communities feature rich and unique cultures.

Dryland ecosystems support a surprising amount of biodiversity. Desertification, however, is a significant land degradation problem in the arid, semi-arid and dry sub-humid regions of the world.

Deterioration of soil and plant cover has adversely affected 70% of the world's drylands as a result of extended droughts as well as mismanagement of range and cultivated lands. The situation is likely to worsen with high population growth rates and accompanying land-use conflicts.

2008. XVI, 856 p. 250 illus., 200 in color. Hardcover
ISBN 978-1-4020-6969-7

▶ € 199,95 | £180,00

▶ *€ (D) 213,95 | € (A) 219,95 | sFr 287,00

Sale Price

▶ € 99,95 | £90,00

▶ *€ (D) 106,95 | € (A) 109,95 | sFr 133,50



9 781402 069697

V. Lykousis, D. Sakellariou, Institute of
Oceanography, Athens, Greece; J. Locat, Laval
University, Quebec, QC, Canada (Eds)

Submarine Mass Movements and Their Consequences

3rd International Symposium

This book provides a world-wide perspective of submarine mass movements and their consequences. This has been made possible by assembling excellent contributions from active researchers, groups, or institutions, thus providing full coverage of the many scientific and engineering aspects of this type of marine and coastal geo-hazard.

2007. XII, 424 p. With DVD. (Advances in Natural
and Technological Hazards Research, Volume 27)

Hardcover

ISBN 978-1-4020-6511-8

▶ € 194,95 | £175,50

▶ *€ (D) 208,60 | € (A) 214,45 | sFr 280,00

Sale Price

▶ € 99,95 | £90,00

▶ *€ (D) 106,95 | € (A) 109,95 | sFr 133,50



9 781402 065118

W. Renema, Nationaal Natuurhistorisch Museum
Naturalis, Leiden, The Netherlands (Ed.)

Biogeography, Time and Place: Distributions, Barriers and Islands

Biogeography considers the distribution of biological units over a wide range of scales. The units range from genotypes, populations and species to families and higher taxa. Processes can be local, such as the isolation on islands due to sea-level fluctuations, or large-scale tectonic processes that separates continents and creates oceans. In all processes time is an important factor and by combining data on recent patterns with paleontological data the understanding of the distribution of extant taxa can be improved.

2007. XII, 416 p. 122 illus. (Topics in Geobiology,
Volume 29) Hardcover
ISBN 978-1-4020-6373-2

▶ € 169,95 | £153,00

▶ *€ (D) 181,85 | € (A) 186,95 | sFr 244,00

Sale Price

▶ € 86,95 | £78,50

▶ *€ (D) 93,04 | € (A) 95,65 | sFr 116,00



9 781402 063732

R. J. Schotting, Utrecht University, The Netherlands;
H. C. van Duijn, Eindhoven University of Technology,
The Netherlands; A. Verruijt, Formerly of Delft
University of Technology, The Netherlands (Eds)

Soil Mechanics and Transport in Porous Media

Selected Works of G. de Josselin de Jong

This book contains an overview of the most relevant scientific contributions of Gerard de Josselin de Jong to the development of both Soil Mechanics and Transport in Porous Media. The volume comprises a selection of papers by de Josselin de Jong as they were published in the international scientific literature. In addition, some unpublished, but highly relevant work has been included. Most of the papers by de Josselin de Jong are concerned with issues related to soil mechanics.

2006. XI, 364 p. (Theory and Applications of Transport in Porous Media, Volume 19) Hardcover
ISBN 978-1-4020-3536-4

▶ € 149,95 | £135.00

▶ *€ (D) 160,45 | € (A) 164,95 | sFr 215,50

Sale Price

▶ € 76,95 | £69.99

▶ *€ (D) 82,34 | € (A) 84,65 | sFr 102,50



9 781402 035364

K. L. Seip, Oslo University College, Norway;
F. Wenstøp, BI Norwegian School of Management,
Oslo, Norway

A Primer on Environmental Decision-Making

An Integrative Quantitative Approach

This book integrates decision-making and environmental science. For ecologists it will bridge the gap to economics. For practitioners in environmental economics and management it will be a major reference book. It contains many expressions and basic equations.

2006. X, 496 p. Hardcover

ISBN 978-1-4020-4073-3

▶ € 159,95 | £144.00

▶ *€ (D) 171,15 | € (A) 175,95 | sFr 229,50

Sale Price

▶ € 79,95 | £72.00

▶ *€ (D) 85,55 | € (A) 87,95 | sFr 106,50



9 781402 040733

E. A. Sharkov, Space Research Institute, Moscow,
Russia

Breaking Ocean Waves

Geometry, Structure and Remote Sensing

This book represents the most comprehensive description of the physical properties including geometry, structure, spatio-temporal evolution and remotely sensed reflectance and emissivity in visible, IR and microwave ranges of one of the most important elements of disturbed sea surface - sea waves breaking.

2007. XV, 278 p. (Springer Praxis Books / Geophysical Sciences) Hardcover

ISBN 978-3-540-29827-4

▶ € 159,95 | £144.00

▶ *€ (D) 171,15 | € (A) 175,95 | sFr 229,50

Sale Price

▶ € 79,95 | £72.00

▶ *€ (D) 85,55 | € (A) 87,95 | sFr 106,50



9 783540 298274

M. G. Sideris, University of Calgary, AB, Canada (Ed.)

Observing our Changing Earth

Proceedings of the 2007 IAG General Assembly, Perugia, Italy, July 2 - 13, 2007

This volume contains a selection of 99 papers from the International Association of Geodesy (IAG) quadrennial General Assembly, held in Perugia, Italy, from July 2 to 13, 2007, in conjunction with the XXIV General Assembly of the International Union of Geodesy and Geophysics (IUGG). There were 225 oral and 474 poster presentations made at the five IAG Symposia, which covered the following research themes: Reference Frames, Gravity Field, Earth Rotation and Geodynamics, Positioning and Applications, The Global Geodetic Observing System (GGOS).

2009. XVI, 864 p. 589 illus. (International Association of Geodesy Symposia, Volume 133) Hardcover

ISBN 978-3-540-85425-8

▶ € 169,95 | £153.00

▶ *€ (D) 181,85 | € (A) 186,95 | sFr 244,00

Sale Price

▶ € 86,95 | £78.50

▶ *€ (D) 93,04 | € (A) 95,65 | sFr 116,00



9 783540 854258

A. Stokes, INRA, Montpellier, France; I. Spanos, NAGREF, Forest Research Institute, Thessaloniki, Greece; J. E. Norris, Nottingham Trent University, Nottingham, UK; E. Cammeraat, University of Amsterdam, The Netherlands (Eds)

Eco- and Ground Bio-Engineering: The Use of Vegetation to Improve Slope Stability

Proceedings of the First International Conference on Eco-Engineering 13-17 September 2004

Proceedings of the First International Conference on Eco-Engineering 13-17 September 2004

2007. IX, 438 p. (Developments in Plant and Soil Sciences, Volume 103) Hardcover

ISBN 978-1-4020-5592-8

▶ € 194,95 | £175.50

▶ *€ (D) 208,60 | € (A) 214,45 | sFr 302,50

Sale Price

▶ € 99,95 | £90.00

▶ *€ (D) 106,95 | € (A) 109,95 | sFr 133,50



9 781402 055928

S. Suh, University of Minnesota, St. Paul, MN, USA (Ed.)

Handbook of Input-Output Economics in Industrial Ecology

Industrial Ecology (IE) is an emerging multidisciplinary field. University departments and higher education programs are being formed on the subject following the lead of Yale University, The Norwegian University of Science and Technology (NTNU), Leiden University, University of Michigan at Ann Arbor, Carnegie Mellon University, University of California at Berkeley, Institute for Superior Technology in Lisbon, Eidgenössische Technische Hochschule (ETH) Zürich, and The University of Tokyo. IE deals with stocks and flows in interconnected networks of industry and the environment, which relies on a basic framework for analysis.

2nd Printing. 2009. XXXVI, 884 p. (Eco-Efficiency in Industry and Science, Volume 23) Hardcover

ISBN 978-1-4020-4083-2

▶ € 199,95 | £180.00

▶ *€ (D) 213,95 | € (A) 219,95 | sFr 287,00

Sale Price

▶ € 99,95 | £90.00

▶ *€ (D) 106,95 | € (A) 109,95 | sFr 133,50



9 781402 040832

T. Tschardtke, C. Leuschner, University of Göttingen, Germany; M. Zeller, University of Hohenheim, Stuttgart, Germany; E. Guhardja, Institut Pertanian Bogor, Bogor, Indonesia; A. Bidin, Universitas Tadulako, Palu, Indonesia (Eds)

Stability of Tropical Rainforest Margins

Linking Ecological, Economic and Social Constraints of Land Use and Conservation

Tropical rainforests disappear at an alarming rate causing unprecedented losses in biodiversity and ecosystem services.

2007. XVI, 515 p. 89 illus., 1 in color. (Environmental Science and Engineering / Environmental Science) Hardcover

ISBN 978-3-540-30289-6

► € 169,95 | £134,50

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

Sale Price

► € 86,95 | £78,50

► *€ (D) 93,04 | € (A) 95,65 | sFr 116,00



9 783540 302896

A. R. Turton, J. H. Hattingh, G. A. Maree, D. J. Roux, CSIR, Pretoria, South Africa; M. Claassen, CSIR, Pretoria, South Africa; W. F. Strydom, CSIR, Pretoria, South Africa (Eds)

Governance as a Dialogue: Government-Society-Science in Transition

The Global Water Partnership notes that the crisis in the water sector is a crisis of governance. The same is true for environmental management. Water management is an integral part of ecosystem governance and is closely linked to the sustainable development discourse. This book unpacks the core elements of governance, with a specific focus on water and analyses the linkages between key variables in an effort to increase our understanding of what makes governance good.

2007. XLIV, 354 p. 45 illus. (Water Resources Development and Management) Hardcover ISBN 978-3-540-46265-1

► € 169,95 | £153,00

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

Sale Price

► € 86,95 | £78,50

► *€ (D) 93,04 | € (A) 95,65 | sFr 116,00



9 783540 462651

F. Wang, Kyoto University, Kyoto, Japan; T. Li, Chang'an University, Xi'an, China (Eds)

Landslide Disaster Mitigation in Three Gorges Reservoir, China

This heavily-illustrated book on research results on landslide disaster mitigation in Three Gorges Reservoir consists of three parts: Regional properties of landslides in this area; case studies for typical landslides; new methodologies applied in this area.

2009. XLIII, 563 p. 725 illus., 322 in color. (Environmental Science and Engineering) Hardcover ISBN 978-3-642-00131-4

► € 164,95 | £148,50

► *€ (D) 176,50 | € (A) 181,45 | sFr 237,00

Sale Price

► € 79,95 | £72,00

► *€ (D) 85,55 | € (A) 87,95 | sFr 106,50



9 783642 001314

M.-k. Woo, McMaster University, Hamilton, ON, Canada (Ed.)

Cold Region Atmospheric and Hydrologic Studies. The Mackenzie GEWEX Experience

Volume 1: Atmospheric Dynamics

This book presents decade-long advances in atmospheric research in the Mackenzie River Basin in northern Canada, which encompasses environments representative of most cold areas on Earth. Collaborative efforts by a team of about 100 scientists and engineers have yielded knowledge entirely transferable to other high latitude regions in America, Europe and Asia.

2008. XXIV, 470 p. 136 illus., 12 in color. Hardcover ISBN 978-3-540-73935-7

► € 149,95 | £135,00

► *€ (D) 160,45 | € (A) 164,95 | sFr 215,00

Sale Price

► € 76,95 | £69,99

► *€ (D) 82,34 | € (A) 84,65 | sFr 102,50



9 783540 739357

M.-k. Woo, McMaster University, Hamilton, ON, Canada (Ed.)

Cold Region Atmospheric and Hydrologic Studies. The Mackenzie GEWEX Experience

Volume 2: Hydrologic Processes

This book presents decade-long advances in atmospheric research in the Mackenzie River Basin in northern Canada, which encompasses environments representative of most cold areas on Earth. Collaborative efforts by a team of about 100 scientists and engineers have yielded knowledge entirely transferable to other high latitude regions in America, Europe and Asia.

2008. XXII, 508 p. 162 illus., 5 in color. Hardcover ISBN 978-3-540-74927-1

► € 149,95 | £135,00

► *€ (D) 160,45 | € (A) 164,95 | sFr 215,00

Sale Price

► € 76,95 | £69,99

► *€ (D) 82,34 | € (A) 84,65 | sFr 102,50



9 783540 749271

V. Yanko-Hombach, Avalon Institute for Applied Science, Winnipeg, WB, Canada; A. S. Gilbert, Fordham University, Bronx, NY, USA; N. Panin, National Institute of Marine Geology and Geology, Bucharest, Rumania; P. M. Dolukhanov, University of Newcastle upon Tyne, UK (Eds)

The Black Sea Flood Question: Changes in Coastline, Climate and Human Settlement

Stimulated by „Noah's Flood Hypothesis“ proposed by W. Ryan and W. Pitman in which a catastrophic inundation of the Pontic basin was linked to the biblical story, leading experts in Black Sea research (including oceanography, marine geology, paleoclimate, paleoenvironment, archaeology, and linguistic spread) provide overviews of their data and interpretations obtained through empirical scientific approaches.

2007. XXVIII, 971 p. 246 illus. Hardcover ISBN 978-1-4020-4774-9

► € 229,00 | £206,00

► *€ (D) 245,03 | € (A) 251,90 | sFr 328,50

Sale Price

► € 114,95 | £103,50

► *€ (D) 123,00 | € (A) 126,45 | sFr 153,50



9 781402 047749

C. Zerefos, G. Contopoulos, G. Skalkas, Academy of Athens, Greece (Eds)

Twenty Years of Ozone Decline

Proceedings of the Symposium for the 20th Anniversary of the Montreal Protocol

This book includes articles presented by leading scientists in the ozone field at the Symposium for the 20th Anniversary of the Montreal Protocol, jointly organized by the United Nations Environment Programme (UNEP), the International Ozone Commission (IO3C), the Academy of Athens and the Mariolopoulos-Kanaginis Foundation, held in Athens in September 2007. His Excellency Ban Ki-moon, the Secretary-General of the United Nations, recently stated: "The success of the Montreal Protocol shows us that there are global instruments that can help curb the impact of human activities on the global environment."

2009. XII, 472 p. Hardcover
ISBN 978-90-481-2468-8

► € 149,95 | £135,00
► *€ (D) 160,45 | € (A) 164,95 | sFr 215,50

Sale Price

► € 76,95 | £69,99
► *€ (D) 82,34 | € (A) 84,65 | sFr 102,50



9 789048 124688

A. N. Kosarev, Lomonosov Moscow State University, Moscow, Russia (Ed.)

The Black Sea Environment

With contributions by numerous experts

This book presents a systematic description of the knowledge accumulated on the physical oceanography, marine chemistry and pollution, marine biology and geology, meteorology and hydrology of the Black Sea. It presents the principal characteristic features of the environmental conditions of the sea and their changes in the second half of the 20th century. At present, the principal problems of the Black Sea are related to the estimation of the intensity of the chemical pollution of the sea and its impact upon the biota. Special attention is given to the socioeconomic, legal, and political issues in the Black Sea region.

2008. XIV, 457 p. 109 illus. (The Handbook of Environmental Chemistry / Water Pollution, Part 5 / 5Q) Hardcover

ISBN 978-3-540-74291-3
► € 279,00 | £251,00
► *€ (D) 298,53 | € (A) 306,90 | sFr 400,00

Sale Price

► € 139,95 | £126,00
► *€ (D) 149,75 | € (A) 153,94 | sFr 186,50



9 783540 742913

A. Aguilera, Universidad de Sevilla, Spain;
R. Rothstein, Columbia University, New York, NY, USA (Eds)

Molecular Genetics of Recombination

Genetic recombination is an important process involved in shaping the genetic make up of progeny. Increasingly, it has become evident that recombination is a DNA repair pathway crucial during DNA replication in vegetatively growing cells. It plays a critical role in preserving the integrity of the genome by mediating the repair of DNA damage, which can occur during normal cellular metabolism as a result of oxidative stress, transcription, replication fork stalling or breakdown, or after the exposure to DNA damaging agents.

2007. XXIV, 524 p. 70 illus., 30 in color. (Topics in Current Genetics, Volume 17) Hardcover
ISBN 978-3-540-71020-2

► € 319,00 | £287,00
► *€ (D) 341,33 | € (A) 350,90 | sFr 457,50

Sale Price

► € 159,95 | £144,00
► *€ (D) 171,15 | € (A) 175,94 | sFr 213,00



9 783540 710202

J. F. Allen, Queen Mary University of London, UK;
E. Gantt, University of Maryland, College Park, MD, USA;
J. Golbeck, Pennsylvania State University, University Park, PA, USA;
B. Osmond, Australian National University, Canberra, ACT, Australia (Eds)

Photosynthesis. Energy from the Sun

14th International Congress on Photosynthesis

This proceedings collects 350 contributions from participants in the 14th International Congress on Photosynthesis. Its two volumes provide a glimpse of the future, from the molecule to the biosphere, by the most active researchers in this area of research.

2008. XXXVIII, 1640 p. (In 2 volumes, not available separately) Hardcover
ISBN 978-1-4020-6707-5

► € 599,00 | £539,00
► *€ (D) 640,93 | € (A) 658,90 | sFr 859,00

Sale Price

► € 309,00 | £278,50
► *€ (D) 330,63 | € (A) 339,90 | sFr 411,50



9 781402 067075

M. Barbieri, University of Ferrara, Italy (Ed.)

The Codes of Life

The Rules of Macroevolution

Building on a range of disciplines – from biology and anthropology to philosophy and linguistics – this book draws on the expertise of leading names in the study of organic, mental and cultural codes brought together by the emerging discipline of biosemiotics. The book's 18 chapters present a range of experimental evidence which suggests that the genetic code was only the first in a long series of organic codes, and that it has been the appearance of new codes – organic, mental and cultural – that paved the way for the major transitions in the history of life.

2008. XX, 440 p. 8 illus. in color. (Biosemiotics, Volume 1) Hardcover
ISBN 978-1-4020-6339-8

► € 159,95 | £144,00
► *€ (D) 171,15 | € (A) 175,95 | sFr 229,50

Sale Price

► € 79,95 | £72,00
► *€ (D) 85,55 | € (A) 87,95 | sFr 106,50



9 781402 063398

A. Bationo, B. Waswa, J. Kihara, J. Kimetu, TSBF Institute of CIAT, Nairobi, Kenya (Eds)

Advances in Integrated Soil Fertility Management in sub-Saharan Africa: Challenges and Opportunities

Food insecurity is a central concern and a fundamental challenge for human welfare and economic growth in Africa. Low agricultural production, results in low incomes, poor nutrition, vulnerability to risks and lack of empowerment. Land degradation and soil fertility depletion are considered the major threats to food security and natural resource conservation in sub-Saharan Africa (SSA). Investments in technology, policy and institutional reforms are needed to increase agricultural productivity to ensure food security and sustained national economies.

2007. XIV, 1094 p. Hardcover
ISBN 978-1-4020-5759-5

► € 229,00 | £206,00
► *€ (D) 245,03 | € (A) 251,90 | sFr 328,50

Sale Price

► € 114,95 | £103,50
► *€ (D) 123,00 | € (A) 126,45 | sFr 153,50



9 781402 057595

B. Berg, University of Helsinki, Finland;
C. McClaugherty, Mount Union College, Alliance,
OH, USA

Plant Litter

Decomposition, Humus Formation, Carbon Sequestration

This fully revised and updated 2nd edition of *Plant Litter* focuses on decomposition processes in natural terrestrial systems such as boreal and temperate forests. The availability of several long-term studies from these forest types allows a more in-depth approach to the later stages of decomposition as well as to humus formation. It further briefly explores how processes are modified due to anthropogenic influences. Earlier findings are re-evaluated in light of recent research and with relevance to current areas of investigation.

2nd ed. 2008. XIV, 338 p. 91 illus. Hardcover
ISBN 978-3-540-74922-6

► € 169,95 | £153,00
► *€ (D) 181,85 | € (A) 186,95 | sFr 244,00

Sale Price

► € 86,95 | £78,50
► *€ (D) 93,04 | € (A) 95,65 | sFr 116,00



9 783540 749226

T. M. Bert, Florida Fish and Wildlife Research
Institute, St Petersburg, USA (Ed.)

Ecological and Genetic Implications of Aquaculture Activities

Aquaculture is a rapidly growing industry and aquaculture practices can directly interact with and depend upon the surrounding environment. Therefore, the effects of all types of aquaculture on living natural resources and ecosystems are of significant and increasing national and international interest.

2007. XII, 548 p. (Reviews: Methods and Technologies in Fish Biology and Fisheries, Volume 6) Hardcover
ISBN 978-1-4020-0884-9

► € 149,95 | £135,00
► *€ (D) 160,45 | € (A) 164,95 | sFr 215,00

Sale Price

► € 76,95 | £69,99
► *€ (D) 82,34 | € (A) 84,65 | sFr 102,50



9 781402 008849

R. Bock, Max-Planck-Institut, Potsdam-Golm,
Germany (Ed.)

Cell and Molecular Biology of Plastids

The past two decades have witnessed an enormous progress in our understanding of plastid (chloroplast) biology. Basic principles of plastid biogenesis, genome structure and function, gene expression and its regulation as well as plastid-nuclear interaction and communication pathways have been elucidated. In addition, the possibility to directly alter the genetic information of the plastid by transformation has facilitated the study of virtually all aspects of plastid biology in vivo and, moreover, has paved the way to diverse applications of transgenic plastids in biotechnology.

2007. XX, 524 p. 51 illus., 11 in color. (Topics in Current Genetics, Volume 19) Hardcover
ISBN 978-3-540-75375-9

► € 259,00 | £233,00
► *€ (D) 277,13 | € (A) 284,90 | sFr 371,50

Sale Price

► € 129,95 | £117,00
► *€ (D) 139,05 | € (A) 142,94 | sFr 173,00



9 783540 753759

E. Bonucci, Università La Sapienza, Rome, Italy

Biological Calcification

Normal and Pathological Processes in the Early Stages

The topics falling under the heading biological calcification are exceedingly numerous and varied. They include systems as different as vertebrate skeletons and mollusks, in vitro cultures and unicellular organisms, ectopic calcification and urinary stones. Furthermore, the results are scattered through a huge number of scientific publications. Although calcification is probably one of the most widespread biological processes, the mechanisms which lead to calcification of biological systems are still unexplained. For the first time, this book offers a critical review of the calcification process, of the organic and inorganic phases of mineralized tissues, focusing on the earliest phases.

2007. XXII, 592 p. 48 illus. Hardcover
ISBN 978-3-540-36012-4

► € 219,00 | £197,00
► *€ (D) 234,33 | € (A) 240,90 | sFr 340,00

Sale Price

► € 109,95 | £99,00
► *€ (D) 117,65 | € (A) 120,95 | sFr 146,50



9 783540 360124

I. Bos, University of Wageningen, The Netherlands;
P. Caligari, University of Talca, Chile

Selection Methods in Plant Breeding

Written for plant breeders, researchers and post-graduate students, this book provides a comprehensive review of the methods and underlying theoretical foundations used for selection in plant breeding programmes. The authors review basic elements of population and quantitative genetic theory, and consider in a unique way the tackling of the problems presented by soil heterogeneity and intergenotypic competition when selecting quantitative characters. The efficacy of different methods with regard to developing new varieties of crops are discussed for different modes of reproduction. This work provides a sound basis for informed decision making within the process of a selection programme.

2nd ed. 2008. XII, 461 p. Hardcover
ISBN 978-1-4020-6369-5

► € 199,95 | £180,00
► *€ (D) 213,95 | € (A) 219,95 | sFr 287,00

Sale Price

► € 99,95 | £90,00
► *€ (D) 106,95 | € (A) 109,95 | sFr 133,50



9 781402 063695

J. I. Boullata, University of Pennsylvania,
Philadelphia, PA, USA; V. T. Armenti, Thomas
Jefferson University, 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

► € 149,95 | £135,00
► *€ (D) 160,45 | € (A) 164,95 | sFr 215,00

Sale Price

► € 76,95 | £69,99
► *€ (D) 82,34 | € (A) 84,65 | sFr 102,50



9 781603 273633

The Mycota

A Comprehensive Treatise on Fungi as Experimental Systems for Basic and Applied Research

Series editor: K. Esser

Volume 6

A. A. Brakhage, P. F. Zipfel, Friedrich Schiller Universität, Jena, Germany (Eds)

Human and Animal Relationships

The rising number of fungal infections has prompted the need to understand every aspect of pathogenic fungi, which are capable of infecting humans, animals and insects. This exhaustive book meets that crucial need.

2nd ed. 2008. XXII, 296 p. 64 illus., 25 in color.

Hardcover

ISBN 978-3-540-79306-9

► € 159,95 | £144,00

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

Sale Price

► € 79,95 | £72,00

► *€ (D) 85,55 | € (A) 87,95 | sFr 106,50



9 783540 793069

H. Buck, Buck Semillas S.A., La Dulce, Argentina;
J. Nisi, National Institute for Agricultural Technology and Animal Husbandry, Marcos Juarez, Argentina;
N. Salomón, National Southern University, Buenos Aires, Argentina (Eds)

Wheat Production in Stressed Environments

Proceedings of the 7th International Wheat Conference, 27 November - 2 December 2005, Mar del Plata, Argentina

The book comprises the proceedings of the 7th International Wheat Conference, held in Mar del Plata, Argentina, at the end of 2005. Leading scientists from all over the world, specialized in different areas that contribute to the better understanding of wheat production and use, reviewed the present achievements and discussed the future challenges for the wheat crop.

2007. XXI, 795 p. (Developments in Plant Breeding, Volume 12) Hardcover

ISBN 978-1-4020-5496-9

► € 249,00 | £224,00

► *€ (D) 266,43 | € (A) 273,90 | sFr 386,50

Sale Price

► € 124,95 | £112,50

► *€ (D) 133,70 | € (A) 137,45 | sFr 166,50



9 781402 054969

J. v. Byern, I. Grunwald (Eds)

Biological Adhesive Systems

From Nature to Technical and Medical Application

Biological adhesives are heavily researched for their potential replication. This book first describes and compares chemical-related bonding systems of plants and animals and then provides an overview of the practical implementation of biological glues.

2010. XI, 305 p. 156 illus., 85 in color. Hardcover

ISBN 978-3-7091-0141-4

► € 149,95 | £135,00

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

Sale Price

► € 76,95 | £69,99

► *€ (D) 82,34 | € (A) 84,65 | sFr 102,50



9 783709 101414

L. M. Coluccio, Boston Biomedical Research Institute, Watertown, MA, USA (Ed.)

Myosins

A Superfamily of Molecular Motors

This highly authoritative volume highlights the remarkable superfamily of molecular motors called myosins, which are involved in such diverse cellular functions as muscle contraction, intracellular transport, cell migration and cell division. In a timely compilation of chapters written by leading research groups that have made key discoveries in the field, the current understanding of the molecular mechanisms and biological functions of these intriguing proteins is explored.

2008. XXX, 475 p. (Proteins and Cell Regulation, Volume 7) Hardcover

ISBN 978-1-4020-6516-3

► € 169,95 | £153,00

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

Sale Price

► € 86,95 | £78,50

► *€ (D) 93,04 | € (A) 95,65 | sFr 116,00



9 781402 065163

W. H. Conner, Clemson University, Georgetown, SC, USA; T. W. Doyle, K. W. Krauss, US Geological Survey, Lafayette, LA, USA (Eds)

Ecology of Tidal Freshwater Forested Wetlands of the Southeastern United States

This book draws together the latest findings from investigators focusing on the hydrological processes, community organization, and stress physiology of freshwater, tidally influenced land-margin forests of the southeastern United States. It describes the land use history that led to the restricted distribution of these wetlands, and provides descriptions of the hydrology, soils, biogeochemistry, and physiological ecology of these systems, highlighting the similarities shared among tidal freshwater forested wetlands.

2007. XIV, 505 p. Hardcover

ISBN 978-1-4020-5094-7

► € 189,95 | £171,00

► *€ (D) 203,25 | € (A) 208,95 | sFr 272,50

Sale Price

► € 99,95 | £90,00

► *€ (D) 106,95 | € (A) 109,95 | sFr 133,50



9 781402 050947

R. S. Dhillon, Punjab Agricultural University, Ludhiana, India

Hydroboration and Organic Synthesis

9-Borabicyclo [3.3.1] nonane (9-BBN)

9-Borabicyclo [3.3.1]nonane, a commercially available reagent, is the most versatile hydroborating reagent to synthesize organoboranes (B-R-9-BBN). The reagent exhibits remarkable regio-, chemo-, and stereoselectivity during hydroboration reactions. The organoboranes can be converted to C-H, C-O, C-N, C-S, C-halogen, C-metal and above all C-C bonds. In addition, the suitable substituted / unsaturated R of B-R-9-BBN can be utilized to produce dienes, enynes, allenes etc. with defined stereochemistry. 9-BBN's derivatives have been elegantly used for the asymmetric reduction of ketone moiety.

2007. XIV, 586 p. Hardcover

ISBN 978-3-540-49075-3

► € 219,00 | £197,00

► *€ (D) 234,33 | € (A) 240,90 | sFr 340,00

Sale Price

► € 109,95 | £99,00

► *€ (D) 117,65 | € (A) 120,95 | sFr 146,50



9 783540 490753

P. Dion, Université Laval, Quebec, QC, Canada;
C. S. Nautiyal, National Botanical Research Institute,
Lucknow, India (Eds)

Microbiology of Extreme Soils

Foreword by: J. Rummel

This volume provides a comprehensive coverage of the principal extreme soil ecosystems of natural and anthropogenic origin. Extreme soils oppose chemical or physical limits to colonization by most soil organisms and present the microbiologist with exciting opportunities. Described here are fascinating environments, such as permafrost, saline, arid and geothermal soils, peatlands, sub-surface geomaterial rich in sulfidic ore, Martian soils, hydrocarbon-contaminated hot desert and Antarctic soils, as well as fire-impacted, heavy-metal and radionuclide contaminated soils.

2008. XVIII, 370 p. 47 illus., 10 in color. (Soil Biology, Volume 13) Hardcover
ISBN 978-3-540-74230-2

▶ € 194,95 | £175,50

▶ *€ (D) 208,60 | € (A) 214,45 | sFr 280,00

Sale Price

▶ € 99,95 | £90,00

▶ *€ (D) 106,95 | € (A) 109,95 | sFr 133,50



9 783540 742302

S. Ebashi, National Institute of Physiological Sciences, Okazaki, Japan; I. Ohtsuki, The Jikei University of School of Medicine, Tokyo, Japan (Eds)

Regulatory Mechanisms of Striated Muscle Contraction

This volume covers the entire spectrum of research on troponin and related muscle proteins, including pathophysiological and clinical aspects. Many color figures illustrate the three-dimensional structures of the proteins involved in the muscle functions.

2007. XIII, 407 p. 100 illus. (Advances in Experimental Medicine and Biology, Volume 592) Hardcover
ISBN 978-4-431-38451-9

▶ € 174,95 | £157,50

▶ *€ (D) 187,20 | € (A) 192,45 | sFr 251,00

Sale Price

▶ € 89,95 | £81,00

▶ *€ (D) 96,25 | € (A) 98,95 | sFr 120,00



9 784431 384519

R. Egel, Institute of Molecular Biology and Physiology, Copenhagen, Denmark; D.-H. Lankenau, Ladenburg, Germany (Eds)

Recombination and Meiosis

Crossing-Over and Disjunction

Once per life cycle, mitotic nuclear divisions are replaced by meiosis I and II – reducing chromosome number from the diploid level to a haploid genome, reshuffling the homologous chromosomes by their centromeres, and recombining chromosome arms by crossing-over. In animals, including humans, all this happens during the germ cell formation of eggs and sperm. Due to the reign of meiosis, no child is a true genetic copy of either parent. Central to mainstream meiosis, the mechanisms of reciprocal exchange at crossover/chiasma sites stand out as a controlled program of biologically significant molecular changes.

2008. XVI, 365 p. 38 illus., 9 in color. (Genome Dynamics and Stability, Volume 2) Hardcover
ISBN 978-3-540-75371-1

▶ € 199,95 | £180,00

▶ *€ (D) 213,95 | € (A) 219,95 | sFr 287,00

Sale Price

▶ € 99,95 | £90,00

▶ *€ (D) 106,95 | € (A) 109,95 | sFr 133,50



9 783540 753711

Topics in Heterocyclic Chemistry

S. V. Ley, G. Mehta, R. Noyori, K. Nicolaou, A. Padwa, L. E. Overman, Editorial board: D. Enders, Series editor: B. U. Maes, S. Polanc, J. Cossy

Volume 8

S. Eguchi, Nagoya University, Nagoya, Japan (Ed.)

Bioactive Heterocycles II

With contributions by numerous experts

2007. XII, 309 p. 249 illus. With online files/ update. Hardcover
ISBN 978-3-540-72591-6

▶ € 229,00 | £206,00

▶ *€ (D) 245,03 | € (A) 251,90 | sFr 328,50

Sale Price

▶ € 114,95 | £103,50

▶ *€ (D) 123,00 | € (A) 126,45 | sFr 153,50



9 783540 725916

E. Eich, Freie Universität Berlin, Germany

Solanaceae and Convolvulaceae: Secondary Metabolites

Biosynthesis, Chemotaxonomy, Biological and Economic Significance (A Handbook)

This comprehensive and interdisciplinary handbook provides a bird's-eye view of two centuries of research on secondary metabolites of the two large Solanales families, Solanaceae and Convolvulaceae. Arranged according to their biosynthetic principles, the occurrence and chemical structures of almost all known individual secondary metabolites are covered, which are found in hundreds of wild as well as cultivated solanaceous and convolvulaceous species.

2008. XIV, 638 p. 190 illus., 83 in color. Hardcover
ISBN 978-3-540-74540-2

▶ € 249,00 | £224,00

▶ *€ (D) 266,43 | € (A) 273,90 | sFr 357,50

Sale Price

▶ € 124,95 | £112,50

▶ *€ (D) 133,70 | € (A) 137,45 | sFr 166,50



9 783540 745402

W. El-Sharoud, Mansoura University, Mansoura, Egypt (Ed.)

Bacterial Physiology

A Molecular Approach

This new text presents recent discoveries and theories in bacterial physiology. The value of this recent knowledge extends to biotechnology and drug-discovery disciplines where understanding cell behavior and structure is essential.

2008. XVI, 372 p. 51 illus., 8 in color. Hardcover
ISBN 978-3-540-74920-2

▶ € 259,00 | £233,00

▶ *€ (D) 277,13 | € (A) 284,90 | sFr 371,50

Sale Price

▶ € 129,95 | £117,00

▶ *€ (D) 139,05 | € (A) 142,94 | sFr 173,00



9 783540 749202

Progress in Botany

Genetics - Physiology - Systematics - Ecology

U. Lüttge, Series editor: W. Beyschlag, B. Büdel, D. Francis, J. Cushman

Volume 68

K. Esser, Ruhr University Bochum, Germany; U. Lüttge, TU, Darmstadt, Germany; W. Beyschlag, University of Bielefeld, Germany; J. Murata, University of Tokyo, Japan (Eds)

Progress in Botany 68

With one volume each year, this series keeps scientists and advanced students informed of the latest developments and results in all areas of the plant sciences. The present volume includes reviews on genetics, cell biology, physiology, comparative morphology, systematics, ecology, and vegetation science.

2007. XVIII, 405 p. 48 illus. Hardcover
ISBN 978-3-540-36830-4

▶ € 219,00 | £197,00

▶ *€ (D) 234,33 | € (A) 240,90 | sFr 340,00

Sale Price

▶ € 109,95 | £99,00

▶ *€ (D) 117,65 | € (A) 120,95 | sFr 146,50



9 783540 368304

S. Falkow, Stanford University Medical School, Stanford, CA, USA; E. Rosenberg, Tel Aviv University, Ramat-Aviv, Israel; K.-H. Schleifer, Technische Universität München, Germany; E. Stackebrandt, DSMZ, Braunschweig, Germany (Eds)

The Prokaryotes**Vol. 3: Archaea. Bacteria: Firmicutes, Actinomycetes**

Editor-in-chief: M. Dworkin, University of Minnesota, Minneapolis, MN, USA

The Third Edition of The Prokaryotes, acclaimed as a classic in its field, offers new and updated articles by worldwide experts on taxa of relevance to medicine, ecology and industry. Now includes colour illustration throughout, and a searchable online edition.

3rd ed. 2006. LIV, 1146 p.

ISBN 978-0-387-25493-7

▶ € 570,00 | £438,50

▶ *€ (D) 609,90 | € (A) 627,00 | sFr 934,00

Sale Price

▶ € 289,00 | £260,50

▶ *€ (D) 309,23 | € (A) 317,90 | sFr 385,00



9 780387 254937

S. Falkow, Stanford University Medical School, Stanford, CA, USA; E. Rosenberg, Tel Aviv University, Ramat-Aviv, Israel; K.-H. Schleifer, Technische Universität München, Germany; E. Stackebrandt, DSMZ - German Collection of Microorganisms and Cell Cultures GmbH, Braunschweig, Germany (Eds)

The Prokaryotes**Vol. 4: Bacteria: Firmicutes, Cyanobacteria**

Editor-in-chief: M. Dworkin, University of Minnesota, Minneapolis, MN, USA

The Third Edition of The Prokaryotes, acclaimed as a classic in its field, offers new and updated articles by worldwide experts on taxa of relevance to medicine, ecology and industry. Now includes colour illustration throughout, and a searchable online edition.

3rd ed. 2006. LIII, 1140 p.

ISBN 978-0-387-25494-4

▶ € 570,00 | £438,50

▶ *€ (D) 609,90 | € (A) 627,00 | sFr 934,00

Sale Price

▶ € 289,00 | £260,50

▶ *€ (D) 309,23 | € (A) 317,90 | sFr 385,00



9 780387 254944

S. Falkow, Stanford University, Stanford, CA, USA; E. Rosenberg, University of Tel Aviv, Israel; K.-H. Schleifer, Technische Universität München, Germany; E. Stackebrandt, DSMZ, Braunschweig, Germany (Eds)

The Prokaryotes**Vol. 5: Proteobacteria: Alpha and Beta Subclasses**

Editor-in-chief: M. Dworkin, University of Minnesota, Minneapolis, MN, USA

The Third Edition of The Prokaryotes, acclaimed as a classic in its field, offers new and updated articles by worldwide experts on taxa of relevance to medicine, ecology and industry. Now includes colour illustration throughout, and a searchable online edition.

3rd ed. 2006. LIV, 919 p.

ISBN 978-0-387-25495-1

▶ € 570,00 | £438,50

▶ *€ (D) 609,90 | € (A) 627,00 | sFr 934,00

Sale Price

▶ € 289,00 | £260,50

▶ *€ (D) 309,23 | € (A) 317,90 | sFr 385,00



9 780387 254951

S. Falkow, Stanford University Medical School, Stanford, CA, USA; E. Rosenberg, Tel Aviv University, Ramat-Aviv, Israel; K.-H. Schleifer, Technische Universität München, Germany; E. Stackebrandt, DSMZ, Braunschweig, Germany (Eds)

The Prokaryotes**Vol. 6: Proteobacteria: Gamma Subclass**

Editor-in-chief: M. Dworkin, University of Minnesota, Minneapolis, MN, USA

The Third Edition of The Prokaryotes, acclaimed as a classic in its field, offers new and updated articles by worldwide experts on taxa of relevance to medicine, ecology and industry. Now includes colour illustration throughout, and a searchable online edition.

3rd ed. 2006. LIV, 1194 p.

ISBN 978-0-387-25496-8

▶ € 570,00 | £438,50

▶ *€ (D) 609,90 | € (A) 627,00 | sFr 934,00

Sale Price

▶ € 289,00 | £260,50

▶ *€ (D) 309,23 | € (A) 317,90 | sFr 385,00



9 780387 254968

S. Falkow, Stanford University Medical School, Stanford, CA, USA; E. Rosenberg, Tel Aviv University, Ramat-Aviv, Israel; K.-H. Schleifer, Technische Universität München, Germany; E. Stackebrandt, DSMZ, Braunschweig, Germany (Eds)

The Prokaryotes**Vol. 7: Proteobacteria: Delta and Epsilon Subclasses. Deeply Rooting Bacteria**

Editor-in-chief: M. Dworkin, University of Minnesota, Minneapolis, MN, USA

The Third Edition of The Prokaryotes, acclaimed as a classic in its field, offers new and updated articles by worldwide experts on taxa of relevance to medicine, ecology and industry. Now includes colour illustration throughout, and a searchable online edition.

3rd ed. 2006. LIV, 1074 p.

ISBN 978-0-387-25497-5

▶ € 570,00 | £438,50

▶ *€ (D) 609,90 | € (A) 627,00 | sFr 934,00

Sale Price

▶ € 289,00 | £260,50

▶ *€ (D) 309,23 | € (A) 317,90 | sFr 385,00



9 780387 254975

Advances in Biochemical Engineering Biotechnology

S. Belkin, A.-P. Zeng, W. Zhou, J.-J. Zhong (Eds),
Series editor: T. Scheper, I. Endo, S.-O. Enfors,
B. Mattiasson, Editorial board: K. Schügerl,
G. N. Stephanopoulos, G. T. Tsao, Ministry of
Education, W.-S. Hu, J. Nielsen, R. Ulber
Volume 107

A. Fiechter, ETH-Hönggerberg, Zürich, Switzerland;
C. Sautter, Swiss Federal Institute of Technology
Zurich, Switzerland (Eds)

Green Gene Technology

Research in an Area of Social Conflict
With contributions by numerous experts

2007. XVI, 287 p. 19 illus. Hardcover

ISBN 978-3-540-71321-0

► € 249,00 | £224,00

► *€ (D) 266,43 | € (A) 273,90 | sFr 357,00

Sale Price

► € 124,95 | £112,50

► *€ (D) 133,70 | € (A) 137,45 | sFr 166,50



9 783540 713210

K. A. Galvin, Colorado State University, Fort Collins,
CO, USA; R. S. Reid, International Livestock Research
Institute, Nairobi, Kenya; R. H. Behnke, Jr., Macaulay
Land Use Research Institute, Aberdeen, UK;
N. T. Hobbs, Colorado State University, Fort Collins,
CO, USA (Eds)

Fragmentation in Semi-Arid and Arid Landscapes

Consequences for Human and Natural
Systems

The global significance of the world's rangelands is
large, with these arid and semi-arid systems ma-
king up almost 25% of the earth's landscapes – and
supporting the livelihoods of more than 20 million
people. These ecosystems are also home to several
of the planet's remaining megafauna, as well as
other important species.

2008. XVIII, 411 p. 4 illus. in color. Hardcover

ISBN 978-1-4020-4905-7

► € 179,95 | £162,00

► *€ (D) 192,55 | € (A) 197,95 | sFr 258,00

Sale Price

► € 89,95 | £81,00

► *€ (D) 96,25 | € (A) 98,95 | sFr 120,00



9 781402 049057

F. Ganachaud, Ecole Nationale Supérieure de Chimie
de Montpellier, France; S. Boileau, Institut de Chimie
et des Matériaux Paris-Est (ICMPE), Thiais, France;
B. Boury, Université Montpellier II, Montpellier,
France (Eds)

Silicon Based Polymers

Advances in Synthesis and Supramolecular
Organization

Silicon Based Polymers presents highlights in
advanced research and technological innovations
using macromolecular organosilicon compounds
and systems, as presented in the 2007 ISPO con-
gress. Silicon-containing materials and polymers
are used all over the world and in a variety of
industries, domestic products and high technology
applications.

2008. XVI, 285 p. 70 illus. Hardcover

ISBN 978-1-4020-8527-7

► € 164,95 | £148,50

► *€ (D) 176,50 | € (A) 181,45 | sFr 236,50

Sale Price

► € 79,95 | £72,00

► *€ (D) 85,55 | € (A) 87,95 | sFr 106,50



9 781402 085277

J. H. Golbeck, The Pennsylvania State University, PA,
USA (Ed.)

Photosystem I

The Light-Driven Plastocyanin: Ferredoxin
Oxidoreductase

This book summarizes the advances made in
the last decade in the biophysics, biochemistry,
and molecular biology of the light-driven
plastocyanin:ferredoxin oxidoreductase known as
Photosystem I. This reaction center participates
along with Photosystem II in harvesting solar
energy to supply photosynthetic organisms with
stored chemical energy in the form of ATP and
stored reducing power in the form of NADPH
for processes such as metabolism, growth, and
reproduction.

2006. XLVIII, 716 p. 16 illus. in color. (Advances
in Photosynthesis and Respiration, Volume 24)

Hardcover

ISBN 978-1-4020-4255-3

► € 279,00 | £251,00

► *€ (D) 298,53 | € (A) 306,90 | sFr 400,00

Sale Price

► € 139,95 | £126,00

► *€ (D) 149,75 | € (A) 153,94 | sFr 186,50



9 781402 042553

D. L. Hawksworth, Universidad de Madrid, Spain;
A. T. Bull, University of Kent, UK (Eds)

Plant Conservation and Biodiversity

This book brings together a selection of original
studies submitted to Biodiversity and Conserva-
tion addressing aspects of the conservation and
biodiversity of plants. Plants are, along with ter-
restrial vertebrates, the best known organisms on
Earth, and so work on them can be a model
for that on less known organism groups. Further,
plants are crucial to ecosystem processes, and pro-
vide habitats and food for myriads of dependent
organisms. At the same time, plants are exploited
for food and fuel by humans, and forests continue
to be felled for the timber trade or to provide more
grazing for cattle.

2007. VIII, 424 p. (Topics in Biodiversity and
Conservation, Volume 6) Hardcover

ISBN 978-1-4020-6443-2

► € 149,95 | £135,00

► *€ (D) 160,45 | € (A) 164,95 | sFr 215,00

Sale Price

► € 76,95 | £69,99

► *€ (D) 82,34 | € (A) 84,65 | sFr 102,50



9 781402 064432

S. Hayat, A. Ahmad, Aligarh Muslim University, India
(Eds)

SALICYLIC ACID - A Plant Hormone

Phytohormones are very much involved in di-
recting plant growth, in a coordinated fashion in
association with metabolism that provides energy
and the building blocks to develop the form that
we recognize as plant. Out of the recognized
hormones, attention has largely been focused on
Auxins, Gibberellins, Cytokinins, Abscisic acid,
Ethylene and more recently to Brassinosteroids.
However, this book provides information about
a natural chemical, Salicylic Acid, that could be
raised to the status of the above phytohormo-
nes because it has significant impact on various
aspects of plant life.

2007. XV, 401 p. Hardcover

ISBN 978-1-4020-5183-8

► € 149,95 | £135,00

► *€ (D) 160,45 | € (A) 164,95 | sFr 215,00

Sale Price

► € 76,95 | £69,99

► *€ (D) 82,34 | € (A) 84,65 | sFr 102,50



9 781402 051838

W. Henke, Johannes-Gutenberg-Universität Mainz, Germany; I. Tattersall, American Museum of Natural History, New York, NY, USA (Eds)

Handbook of Paleoanthropology

Vol I: Principles, Methods and Approaches Vol II: Primate Evolution and Human Origins Vol III: Phylogeny of Hominids
In collaboration with: T. Hardt

Palaeoanthropology combines geology, palaeoecology, primatology, evolutionary biology and other fields in the study of *Homo sapiens*. This 3-volume handbook brings together contributions by leading specialists that reflect the broad spectrum of modern palaeoanthropology, presenting an indispensable resource for professionals and students alike.

2007. LXXVI, 2173 p. 264 illus. (In 3 volumes, not available separately)
ISBN 978-3-540-32474-4
▶ € 799,00 | £ 632,00
▶ *€ (D) 854,93 | € (A) 878,90 | sFr 1145,50

Sale Price

▶ € 409,00 | £ 368,50
▶ *€ (D) 437,63 | € (A) 449,90 | sFr 544,50



9 783540 324744

Y. Hirabayashi, Brain Science Institute, Saitama, Japan; Y. Igarashi, Hokkaido University, Sapporo, Japan; A. J. Merrill, Georgia Institute of Technology, Atlanta, GA, USA (Eds)

Sphingolipid Biology

Sphingolipids are fundamental to the structures of cell membranes, lipoproteins, and the stratum corneum of the skin. Many complex sphingolipids as well as simpler sphingoid bases and derivatives are highly bioactive as extra- and intracellular regulators of growth, differentiation, migration, survival, senescence, and numerous cellular responses to stress. This book provides many examples of exciting new developments in sphingolipid biology/sphingolipidology that are changing our understanding of how multicellular organisms grow, develop, function, age, and die.

2006. XXV, 531 p. 50 illus. Hardcover
ISBN 978-4-431-34198-7
▶ € 239,00 | £ 215,00
▶ *€ (D) 255,73 | € (A) 262,90 | sFr 343,00

Sale Price

▶ € 119,95 | £ 108,00
▶ *€ (D) 128,35 | € (A) 131,95 | sFr 160,00



9 784431 341987

W. Horst, M. Schenk, University of Hannover, Germany; A. Bürkert, University of Kassel, Witzenhausen, Germany; N. Claassen, H. Flessa, University of Göttingen, Germany; W. Frommer, University of Tübingen, Germany; H. E. Goldbach, University of Bonn, Germany; H.-W. Olf, Pflanzenernährung und Umweltforschung, Hydro Agri, Dülmen, Germany; V. Römheld, University of Hohenheim, Stuttgart, Germany; B. Sattelmacher, University of Kiel, Germany; U. Schmidhalter, TU München, Freising-Weihenstephan, Germany; S. Schubert, University of Gießen, Germany; N. von Wirén, University of Tübingen, Germany; L. Wittenmayer, University of Halle-Wittenberg, Germany (Eds)

Plant Nutrition

Food Security and Sustainability of Agro-Ecosystems through Basic and Applied Research

2001. 1084 p. (Developments in Plant and Soil Sciences, Volume 92) Hardcover
ISBN 978-0-7923-7105-2
▶ € 369,00 | £ 292,00
▶ *€ (D) 394,83 | € (A) 405,90 | sFr 529,00

Sale Price

▶ € 184,95 | £ 166,50
▶ *€ (D) 197,90 | € (A) 203,44 | sFr 246,50



9 780792 371052

I. Ishaaya, Agricultural Research Organization, Bet Dagan, Israel; R. Nauen, Bayer CropScience AG, Monheim, Germany; A. R. Horowitz, Agricultural Research Organization, Negev, Israel (Eds)

Insecticides Design Using Advanced Technologies

In the past, insecticide development has been guided mostly by chemo-rational and bio-rational design based on understanding of the physiology and ecology of insects and crops. A limitation in each new class of compounds is the evolution of resistance in populations of key pests, which ultimately leads to control failures. This phenomenon and the desire to produce more selective and biorational compounds serve as the driving force to develop advanced technologies for insecticide design.

2007. XIV, 314 p. 62 illus., 9 in color. Hardcover
ISBN 978-3-540-46904-9
▶ € 184,95 | £ 166,50
▶ *€ (D) 197,90 | € (A) 203,45 | sFr 265,50

Sale Price

▶ € 89,95 | £ 81,00
▶ *€ (D) 96,25 | € (A) 98,95 | sFr 120,00



9 783540 469049

S. Jain, University of Helsinki, Finland; H. Häggman, University of Oulu, Finland (Eds)

Protocols for Micropropagation of Woody Trees and Fruits

Micropropagation has become a reliable and routine approach for large-scale rapid plant multiplication, which is based on plant cell, tissue and organ culture on well defined tissue culture media under aseptic conditions. A lot of research efforts are being made to develop and refine micropropagation methods and culture media for large-scale plant multiplication of several number of plant species. However, many forest and fruit tree species still remain recalcitrant to in vitro culture and require highly specific culture conditions for plant growth and development.

2007. X, 562 p. Hardcover
ISBN 978-1-4020-6351-0
▶ € 209,00 | £ 188,00
▶ *€ (D) 223,63 | € (A) 229,90 | sFr 300,00

Sale Price

▶ € 104,95 | £ 94,50
▶ *€ (D) 112,30 | € (A) 115,45 | sFr 140,00



9 781402 063510

M. A. Jenks, P. M. Hasegawa, Purdue University, West Lafayette, IN, USA; S. M. Jain, University of Helsinki, Finland (Eds)

Advances in Molecular Breeding Toward Drought and Salt Tolerant Crops

Plant stress caused by drought and salinity are among the major constraints on crop production and food security worldwide. Breeding programs to improve crop yield in dry and saline environments have progressed slowly due to our limited understanding of the underlying physiological, biochemical, developmental, and genetic mechanisms that determine plant responses to these forms of stress, as well as to technical difficulties in combining favourable alleles to create the improved high yielding genotypes needed for these environments.

1st ed. 2007. 2nd printing 2007. XVI, 817 p. Hardcover
ISBN 978-1-4020-5577-5
▶ € 209,00 | £ 188,00
▶ *€ (D) 223,63 | € (A) 229,90 | sFr 300,00

Sale Price

▶ € 104,95 | £ 94,50
▶ *€ (D) 112,30 | € (A) 115,45 | sFr 140,00



9 781402 055775

J. W. Kadereit, Johannes-Gutenberg-Universität Mainz, Germany; C. Jeffrey, St. Petersburg, Russia (Eds)

Flowering Plants. Eudicots

Asterales

This volume contains a complete systematic treatment of the flowering plant order Asterales, comprising 12 families with approx. 1,720 genera and about 26,300 species. The order includes Compositae as the largest family of flowering plants. Based on traditional studies, several of the constituent families have long been recognized as being closely interrelated. The inclusion in the order of Alseuosmiaceae, Argophyllaceae, Carpodectaceae, Phellinaceae and Rousseeaceae is the result mainly of new advances in molecular systematics.

2007. XII, 635 p. 131 illus. (The Families and Genera of Vascular Plants, Volume 8) Hardcover
ISBN 978-3-540-31050-1

▶ € 329,00 | £296,00
▶ *€ (D) 352,03 | € (A) 361,90 | sFr 472,00

Sale Price

▶ € 164,95 | £148,50
▶ *€ (D) 176,50 | € (A) 181,44 | sFr 220,00



9 783540 310501

Topics in Heterocyclic Chemistry

S. V. Ley, G. Mehta, R. Noyori, K. Nicolaou, A. Padwa, L. E. Overman, Editorial board: D. Enders, Series editor: B. U. Maes, S. Polanc, J. Cossy

Volume 9

M. T. Khan, University of Tromsø, Norway (Ed.)

Bioactive Heterocycles III

With contributions by numerous experts

2007. XVI, 287 p. 248 illus., 5 in color. With online files/update. Hardcover
ISBN 978-3-540-73401-7

▶ € 189,95 | £171,00
▶ *€ (D) 203,25 | € (A) 208,95 | sFr 272,50

Sale Price

▶ € 99,95 | £90,00
▶ *€ (D) 106,95 | € (A) 109,95 | sFr 133,50



9 783540 734017

Topics in Heterocyclic Chemistry

S. V. Ley, G. Mehta, R. Noyori, K. Nicolaou, A. Padwa, L. E. Overman, Editorial board: D. Enders, Series editor: B. U. Maes, S. Polanc, J. Cossy

Volume 10

M. T. Khan, University of Tromsø, Norway (Ed.)

Bioactive Heterocycles IV

With contributions by numerous experts

2007. XVI, 317 p. 138 illus., 1 in color. With online files/update. Hardcover
ISBN 978-3-540-73403-1

▶ € 209,00 | £188,00
▶ *€ (D) 223,63 | € (A) 229,90 | sFr 300,00

Sale Price

▶ € 104,95 | £94,50
▶ *€ (D) 112,30 | € (A) 115,45 | sFr 140,00



9 783540 734031

Topics in Heterocyclic Chemistry

S. V. Ley, G. Mehta, R. Noyori, K. Nicolaou, A. Padwa, L. E. Overman, Editorial board: D. Enders, Series editor: B. U. Maes, S. Polanc, J. Cossy

Volume 11

M. T. Khan, University of Tromsø, Norway (Ed.)

Bioactive Heterocycles V

With contributions by numerous experts

2007. XVI, 335 p. 107 illus. With online files/update. Hardcover
ISBN 978-3-540-73405-5

▶ € 219,00 | £197,00
▶ *€ (D) 234,33 | € (A) 240,90 | sFr 314,00

Sale Price

▶ € 109,95 | £99,00
▶ *€ (D) 117,65 | € (A) 120,95 | sFr 146,50



9 783540 734055

M. S. Khan, A. Zaidi, J. Musarrat (Eds)

Microbes for Legume Improvement

This volume covers concepts of microbial technology for the improvement of legumes grown in different agro-ecosystems. It gives a broad view of legume disease management using microbes and offers strategies for the management of cultivated legumes.

2010. XIX, 535 p. 22 illus., 13 in color. Hardcover
ISBN 978-3-211-99752-9

▶ € 169,95 | £153,00
▶ *€ (D) 181,85 | € (A) 186,94 | sFr 244,00

Sale Price

▶ € 86,95 | £78,50
▶ *€ (D) 93,04 | € (A) 95,65 | sFr 116,00



9 783211 997529

C. Kole, The Pennsylvania State University, University Park, PA, USA (Ed.)

Forest Trees

Genome Mapping and Molecular Breeding in Plants presents the current status of the elucidation and improvement of plant genomes of economic interest. The focus is on genetic and physical mapping, positioning, cloning, monitoring of desirable genes by molecular breeding and the most recent advances in genomics. The series comprises seven volumes: Cereals and Millets; Oilseeds; Pulses, Sugar and Tuber Crops; Fruits and Nuts; Vegetables; Technical Crops; and Forest Trees. Forest trees cover one third of the global land surface, constitute many ecosystems and play a pivotal role in the world economy.

2007. XXIV, 232 p. 18 illus., 4 in color. (Genome Mapping and Molecular Breeding in Plants, Volume 7) Hardcover
ISBN 978-3-540-34540-4

▶ € 219,00 | £197,00
▶ *€ (D) 234,33 | € (A) 240,90 | sFr 314,00

Sale Price

▶ € 109,95 | £99,00
▶ *€ (D) 117,65 | € (A) 120,95 | sFr 146,50



9 783540 345404

C. Kole, The Pennsylvania State University, University Park, PA, USA (Ed.)

Fruits and Nuts

Genome Mapping and Molecular Breeding in Plants presents the current status of the elucidation and improvement of plant genomes of economic interest. The focus is on genetic and physical mapping, positioning, cloning, monitoring of desirable genes by molecular breeding and the most recent advances in genomics. The series comprises seven volumes: Cereals and Millets; Oilseeds; Pulses, Sugar and Tuber Crops; Fruits and Nuts; Vegetables; Technical Crops; and Forest Trees. Fruits and nuts form the largest group among crop plants. Several constraints such as long life cycle, heterozygosity and large plant size caused comparatively slow research progress in the past.

2007. XXVI, 370 p. 51 illus., 2 in color. (Genome Mapping and Molecular Breeding in Plants, Volume 4) Hardcover

ISBN 978-3-540-34531-2

▶ € 194,95 | £175,50

▶ *€ (D) 208,60 | € (A) 214,45 | sFr 302,50

Sale Price

▶ € 99,95 | £90,00

▶ *€ (D) 106,95 | € (A) 109,95 | sFr 133,50



9 783540 345312

B. Kollmeier, G. Klump, V. Hohmann, U. Langemann, M. Mauermann, S. Uppenkamp, J. Verhey, Carl-von-Ossietzky Universität, Oldenburg, Germany (Eds)

Hearing - From Sensory Processing to Perception

Hearing – From Sensory Processing to Perception presents the papers of the latest “International Symposium on Hearing”, a meeting held every three years focusing on psychoacoustics and the research of the physiological mechanisms underlying auditory perception. The proceedings provide an up-to-date report on the status of the field of research into hearing and auditory functions.

2007. XIV, 566 p. 224 illus. Hardcover

ISBN 978-3-540-73008-8

▶ € 229,00 | £206,00

▶ *€ (D) 245,03 | € (A) 251,90 | sFr 328,50

Sale Price

▶ € 114,95 | £103,50

▶ *€ (D) 123,00 | € (A) 126,45 | sFr 153,50



9 783540 730088

Topics in Current Chemistry

Series editor: K. N. Houk, J.-M. Lehn, S. V. Ley, J. Thiem, H. Yamamoto, P. Vogel, C. A. Hunter, M. Venturi, H. Wong, M. J. Krische, M. Olivucci, C.-H. Wong

Volume 279

M. J. Krische, University of Texas at Austin, TX, USA (Ed.)

Metal Catalyzed Reductive C-C Bond Formation

A Departure from Preformed Organometallic Reagents

With contributions by numerous experts

2007. XII, 264 p. 300 illus. Hardcover

ISBN 978-3-540-72878-8

▶ € 219,00 | £197,00

▶ *€ (D) 234,33 | € (A) 240,90 | sFr 340,00

Sale Price

▶ € 109,95 | £99,00

▶ *€ (D) 117,65 | € (A) 120,95 | sFr 146,50



9 783540 728788

The Mycota

A Comprehensive Treatise on Fungi as Experimental Systems for Basic and Applied Research

Series editor: K. Esser

Volume 4

C. P. Kubicek, I. S. Druzhinina, Technical University, Vienna, Austria (Eds)

Environmental and Microbial Relationships

After the publication of Volume IV in 1997, the introduction of molecular methods into ecology led to significant new findings. Emphasizing these advances, the chapters for the second edition have been completely updated and revised.

2nd ed. 2007. XXIV, 350 p. 55 illus., 1 in color. Hardcover

ISBN 978-3-540-71839-0

▶ € 219,00 | £197,00

▶ *€ (D) 234,33 | € (A) 240,90 | sFr 314,50

Sale Price

▶ € 109,95 | £99,00

▶ *€ (D) 117,65 | € (A) 120,95 | sFr 146,50



9 783540 718390

Advances in Biochemical Engineering Biotechnology

S. Belkin, A.-P. Zeng, W. Zhou, J.-J. Zhong (Eds), Series editor: T. Scheper, I. Endo, S.-O. Enfors, B. Mattiasson, Editorial board: K. Schügerl, G. N. Stephanopoulos, G. T. Tsao, Ministry of Education, W.-S. Hu, J. Nielsen, R. Ulber

Volume 106

A. Kumar, Indian Institute of Technology, Kanpur, India; I. Y. Galaev, B. Mattiasson, Lund University, Sweden (Eds)

Cell Separation

Fundamentals, Analytical and Preparative Methods

With contributions by numerous experts

2007. XIV, 203 p. 78 illus., 3 in color. Hardcover

ISBN 978-3-540-75262-2

▶ € 169,95 | £153,00

▶ *€ (D) 181,85 | € (A) 186,95 | sFr 244,00

Sale Price

▶ € 86,95 | £78,50

▶ *€ (D) 93,04 | € (A) 95,65 | sFr 116,00



9 783540 752622

B. Kumar, Kerala Agricultural University, India; P. Nair, University of Florida, Gainesville, FL, USA (Eds)

Tropical Homegardens

A Time-Tested Example of Sustainable Agroforestry

‘Homegardens’ are integrated tree – crop – animal production systems, often in small parcels of land surrounding homesteads, and primarily found in tropical environments. These agroforestry systems, developed and nurtured by farmers through generations of innovation and experiment, are often cited as the epitome of sustainability, yet have been long neglected by the scientific community.

2006. XIII, 377 p. (Advances in Agroforestry, Volume 3) Hardcover

ISBN 978-1-4020-4947-7

▶ € 179,95 | £162,00

▶ *€ (D) 192,55 | € (A) 197,95 | sFr 258,00

Sale Price

▶ € 89,95 | £81,00

▶ *€ (D) 96,25 | € (A) 98,95 | sFr 120,00



9 781402 049477

M. Kutz, Myer Kutz Associates, Inc., New York, NY, USA

Handbook of Farm, Dairy and Food Machinery

The Handbook of Farm, Dairy, and Food Machinery, is a comprehensive reference for engineers who design and build farm machinery, processing equipment, shipping containers and packaging, as well as storage equipment. This book is written by twenty-two of the leading engineers in the world and gives both a broad and technically detailed look at these critical parts of any farm-to-fork operation. The first three chapters are an excellent overview of food engineering, regulations, and safety, including the new USDA regulations for certified organic processing. The second section of the book covers farm machinery design for tillage, planting, cultivation, and harvesting; grain harvesting and storage; and milking machinery design.

2007. XXIX, 732 p. Hardcover

ISBN 978-1-4020-5913-1

▶ € 379,00 | £341,00

▶ *€ (D) 405,53 | € (A) 416,90 | sFr 588,50

Sale Price

▶ € 189,95 | £171,00

▶ *€ (D) 203,25 | € (A) 208,94 | sFr 253,00



9 781402 059131

L. A. Lacey, USDA-ARS, Wapato, WA, USA; H. K. Kaya, University of California, Davis, CA, USA (Eds)

Field Manual of Techniques in Invertebrate Pathology

Application and Evaluation of Pathogens for Control of Insects and other Invertebrate Pests

This field manual is designed to provide background and instruction on a broad spectrum of techniques and their use in the evaluation of entomopathogens in the field. The second edition provides updated information and includes two additional chapters and 12 new contributors. The intended audience includes researchers, graduate students, practitioners of integrated pest management (IPM), regulators and those conducting environmental impact studies of entomopathogens.

2nd ed. 2007. XVIII, 870 p. Hardcover

ISBN 978-1-4020-5931-5

▶ € 229,00 | £206,00

▶ *€ (D) 245,03 | € (A) 251,90 | sFr 328,50

Sale Price

▶ € 114,95 | £103,50

▶ *€ (D) 123,00 | € (A) 126,45 | sFr 153,50



9 781402 059315

S. Leonhardt, RWTH Aachen University, Aachen, Germany; T. Falck, Philips Research Europe, Aachen, Germany; P. Mähönen, RWTH Aachen University, Aachen, Germany (Eds)

4th International Workshop on Wearable and Implantable Body Sensor Networks (BSN 2007)

March 26-28, 2007 RWTH Aachen University, Germany

The International Workshop on Wearable and Implantable Body Sensor Networks (BSN 2007) was held from 26th to 28th March, 2007 at the University Hospital Aachen, Germany. BSN 2007 is the fourth in the series of successful workshops launched three years ago at Imperial College in London.

2007. IX, 300 p. (IFMBE Proceedings, Volume 13)

Softcover

ISBN 978-3-540-70993-0

▶ € 154,95 | £139,50

▶ *€ (D) 165,80 | € (A) 170,45 | sFr 222,50

Sale Price

▶ € 79,95 | £72,00

▶ *€ (D) 85,55 | € (A) 87,95 | sFr 106,50



9 783540 709930

G. Loebenstein, Agricultural Research Organization, Bet Dagan, Israel; G. Thottappilly, Sahridaya College of Engineering and Technology, Kerala, India (Eds)

Agricultural Research Management

Agricultural research is one of the most widespread forms of organized research in the world, in both developed and developing countries. Management of agricultural research involves many decisions that have scientific, social and political consequences. Every country has established agricultural research priorities based on many complex factors that must be considered when decisions are made on the choice of research problems to be investigated. Resources must be divided among projects that often compete for the limited funding available that supports the total research enterprise.

2007. XX, 388 p. Hardcover

ISBN 978-1-4020-6056-4

▶ € 174,95 | £157,50

▶ *€ (D) 187,20 | € (A) 192,45 | sFr 251,00

Sale Price

▶ € 89,95 | £81,00

▶ *€ (D) 96,25 | € (A) 98,95 | sFr 120,00



9 781402 060564

Progress in Botany

Genetics - Physiology - Systematics - Ecology

U. Lüttge, Series editor: W. Beyschlag, B. Büdel, D. Francis, J. Cushman

Volume 69

U. Lüttge, Technical University Darmstadt, Germany; W. Beyschlag, University of Bielefeld, Germany; J. Murata, University of Tokyo, Japan (Eds)

Progress in Botany 69

With one volume each year, this series keeps scientists and advanced students informed of the latest developments and results in all areas of the plant sciences. The present volume includes reviews on genetics, cell biology, physiology, comparative morphology, systematics, ecology, and vegetation science.

2008. XII, 480 p. 33 illus. Hardcover

ISBN 978-3-540-72953-2

▶ € 239,00 | £215,00

▶ *€ (D) 255,73 | € (A) 262,90 | sFr 343,00

Sale Price

▶ € 119,95 | £108,00

▶ *€ (D) 128,35 | € (A) 131,95 | sFr 160,00



9 783540 729532

A. Macieira-Coelho, INSERM, Versailles, France (Ed.)

Asymmetric Cell Division

Cell biologists have recently become aware that the asymmetry of cell division is an important regulatory phenomenon in the fate of a cell. During development, cell diversity originates through asymmetry; in the adult organism asymmetric divisions regulate the stem cell reservoir and are a source of the drift that contributes to the aging of organisms with renewable cell compartments. Because of the concept of semi-conservative DNA synthesis, it was thought that the distribution of DNA between daughter cells was symmetric. The analysis of the phenomenon in cells during mitosis, however, revealed the asymmetry in the distribution of the genetic material that creates the drift contributing to aging of mammals.

2007. XII, 248 p. 44 illus., 8 in color. (Progress in Molecular and Subcellular Biology, Volume 45) Hardcover

ISBN 978-3-540-69160-0

▶ € 154,95 | £139,50

▶ *€ (D) 165,80 | € (A) 170,45 | sFr 240,50

Sale Price

▶ € 79,95 | £72,00

▶ *€ (D) 85,55 | € (A) 87,95 | sFr 106,50



9 783540 691600

S. Mancuso, University of Florence, Italy; S. Shabala, University of Tasmania, Hobart, TAS, Australia (Eds)

Rhythms in Plants

Phenomenology, Mechanisms, and Adaptive Significance

Rhythmic behaviour is quintessential to life itself. Advances in plant molecular biology, micro/nanotechnology and applied mathematics provide new tools for understanding how environmental signals and internal clocks regulate rhythmic gene expression and development, and how these signals are translated into physiological responses at various levels of structural organisation. This book reviews recent progress in assessing underlying mechanisms controlling plant circadian and ultradian oscillations, and their physiological implications for growth, development, and adaptive responses to the environment.

2007. XX, 362 p. 84 illus., 3 in color. Hardcover
ISBN 978-3-540-68069-7

► € 214,00 | £192,50

► *€ (D) 228,98 | € (A) 235,40 | sFr 307,00

Sale Price

► € 109,95 | £99,00

► *€ (D) 117,65 | € (A) 120,95 | sFr 146,50



9 783540 680697

R. Margesin, F. Schinner, University of Innsbruck, Austria; J.-C. Marx, C. Gerday, University of Liège, Belgium (Eds)

Psychrophiles: From Biodiversity to Biotechnology

The majority of the Earth's biosphere is cold and exposed to temperatures below 5°C throughout the year. Having evolved special mechanisms to overcome the life-endangering influence of low temperatures, psychrophiles, i.e. cold-adapted microorganisms, have successfully colonized these environments. Cold adaptation includes a complex range of structural and functional adaptations at the level of all cellular constituents, and these adaptations render cold-adapted organisms particularly useful for biotechnological applications.

2008. XVI, 462 p. 72 illus., 6 in color. Hardcover
ISBN 978-3-540-74334-7

► € 219,00 | £197,00

► *€ (D) 234,33 | € (A) 240,90 | sFr 314,00

Sale Price

► € 109,95 | £99,00

► *€ (D) 117,65 | € (A) 120,95 | sFr 146,50



9 783540 743347

P. Marschner, The University of Adelaide, SA, Australia; Z. Rengel, The University of Western Australia, Crawley, WA, Australia (Eds)

Nutrient Cycling in Terrestrial Ecosystems

Nutrient Cycling in Terrestrial Ecosystems presents a comprehensive overview of nutrient cycling processes and their importance for plant growth and ecosystem sustainability. The first part of the book presents the fundamentals of nutrient cycling. Topics included are cycling of carbon, nitrogen, phosphorus, sulphur and micronutrients. Particular attention is paid to the role of root exudates and rhizosphere microorganisms in facilitating nutrient cycling. The second part discusses nutrient cycling at an ecosystem scale, covering cropping systems, pastures, natural grasslands, arid lands, tundras and forests.

2007. XX, 397 p. 55 illus. (Soil Biology, Volume 10)
Hardcover

ISBN 978-3-540-68026-0

► € 184,95 | £166,50

► *€ (D) 197,90 | € (A) 203,45 | sFr 265,50

Sale Price

► € 89,95 | £81,00

► *€ (D) 96,25 | € (A) 98,95 | sFr 120,00



9 783540 680260

W. F. Martin, Heinrich-Heine Universität, Düsseldorf, Germany; M. Müller, The Rockefeller University, New York, NY, USA (Eds)

Origin of Mitochondria and Hydrogenosomes

The evolutionary origins of hydrogenosomes have been the subject of considerable debate. From early days it was apparent that hydrogenosomes had evolved on multiple occasions in different eukaryotes, but from which progenitor organelle or endosymbiont was unresolved. Work from many different laboratories has contributed towards formulating the current hypothesis that hydrogenosomes and mitosomes, their even more reduced cousins, share common ancestry with mitochondria.

2007. XVIII, 306 p. 38 illus., 7 in color. Hardcover
ISBN 978-3-540-38501-1

► € 154,95 | £139,50

► *€ (D) 165,80 | € (A) 170,45 | sFr 240,50

Sale Price

► € 79,95 | £72,00

► *€ (D) 85,55 | € (A) 87,95 | sFr 106,50



9 783540 385011

B. Martinac, University of Queensland, Brisbane, QLD, Australia (Ed.)

Sensing with Ion Channels

All living cells are able to detect and translate environmental stimuli into biologically meaningful signals. Sensations of touch, hearing, sight, taste, smell or pain are essential to the survival of all living organisms. The importance of sensory input for the existence of life thus justifies the effort made to understand its molecular origins. Sensing with Ion Channels focuses on ion channels as key molecules enabling biological systems to sense and process the physical and chemical stimuli that act upon cells in their living environment. Its aim is to serve as a reference to ion channel specialists and as a source of new information to non specialists who want to learn about the structural and functional diversity of ion channels and their role in sensory physiology.

2008. XXIV, 304 p. 46 illus., 6 in color. (Springer Series in Biophysics, Volume 11) Hardcover

ISBN 978-3-540-72683-8

► € 159,95 | £144,00

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

Sale Price

► € 79,95 | £72,00

► *€ (D) 85,55 | € (A) 87,95 | sFr 106,50



9 783540 726838

G. S. Masson, CNRS - Université de la Méditerranée, Marseille, France; U. J. Ilg, University of Tübingen, Germany (Eds)

Dynamics of Visual Motion Processing

Neuronal, Behavioral, and Computational Approaches

Motion processing is an essential piece of the complex brain machinery. This book presents the most recent approaches that have changed our view of biological motion processing. It is the first book on biological motion to provide a DVD as support material.

2010. XX, 349 p. 92 illus., 25 in color. With DVD.
Hardcover

ISBN 978-1-4419-0780-6

► € 149,95 | £135,00

► *€ (D) 160,45 | € (A) 164,95 | sFr 215,00

Sale Price

► € 76,95 | £69,99

► *€ (D) 82,34 | € (A) 84,65 | sFr 102,50



9 781441 907806

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

Clinical Pharmacology: Current Topics and Case Studies

ZZZ

2010. XXIV, 430 p. 40 illus. Hardcover

ISBN 978-3-7091-0143-8

► € 149,95 | £135.00

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

Sale Price

► € 76,95 | £69.99

► *€ (D) 82,34 | € (A) 84,65 | sFr 102,50



9 783709 101438

J. L. Nielsen, US Geological Survey, Anchorage, AL, USA; H. Arrizabalaga, AZTI tecnalia, Pasaia, Spain; N. Fragoso, University of New Hampshire, Durham, USA; A. Hobday, CSIRO, Hobart, Tasmania; M. Lutcavage, University of New Hampshire, Durham, USA; J. Sibert, University of Hawaii, Honolulu, USA (Eds)

Tagging and Tracking of Marine Animals with Electronic Devices

The papers in this volume cover exciting developments in new tagging applications in marine animals. This includes new analyses of geolocation techniques using remote tags and new documentation of animal behaviour in marine habitats.

2009. 400 p. (Reviews: Methods and Technologies in Fish Biology and Fisheries, Volume 9) Hardcover
ISBN 978-1-4020-9639-6

► € 149,95 | £135.00

► *€ (D) 160,45 | € (A) 164,95 | sFr 215,00

Sale Price

► € 76,95 | £69.99

► *€ (D) 82,34 | € (A) 84,65 | sFr 102,50



9 781402 096396

D. H. Nies, University of Halle/Saale, Germany; S. Silver, University of Illinois, Chicago, IL, USA (Eds)

Molecular Microbiology of Heavy Metals

All forms of life depend on a variety of heavy metal ions. Nearly one-third of all gene products require a metal ion for proper folding or function. However, even metals generally regarded as non-poisonous are toxic at higher concentrations, including the essential ones. Thus, sensitive regulation of metal uptake, storage, allocation and detoxification is needed to maintain cellular homeostasis of heavy metal ions.

2007. VIII, 460 p. 60 illus., 9 in color. (Microbiology Monographs, Volume 6) Hardcover

ISBN 978-3-540-69770-1

► € 189,95 | £171.00

► *€ (D) 203,25 | € (A) 208,95 | sFr 272,50

Sale Price

► € 99,95 | £90.00

► *€ (D) 106,95 | € (A) 109,95 | sFr 133,50



9 783540 697701

G. Obe, Teltow, Germany; Vijayalaxmi, The University of Texas, San Antonio, TX, USA (Eds)

Chromosomal Alterations

Methods, Results and Importance in Human Health

Cytogenetics is a very important research tool in basic and applied research. The uses of cytogenetics in human-population monitoring, in biological dosimetry in radiation accidents and in astronauts and as a predictive measure of cancer are topics discussed in this book. The book will help the reader to better understand cytogenetics and the intricacies of the methodology. The different methods of fluorescence in situ hybridization are discussed and the results achieved are presented.

2007. XXIV, 515 p. 99 illus., 11 in color. Hardcover
ISBN 978-3-540-71413-2

► € 229,00 | £206.00

► *€ (D) 245,03 | € (A) 251,90 | sFr 355,50

Sale Price

► € 114,95 | £103.50

► *€ (D) 123,00 | € (A) 126,45 | sFr 153,50



9 783540 714132

N. Pallikarakis, University of Patras, Greece; P. D. Bamidis, Aristotle University of Thessaloniki, Greece (Eds)

XII Mediterranean Conference on Medical and Biological Engineering and Computing 2010

MEDICON 2010, 27-30 May 2010, Chalkidiki, Greece

The MEDICON conferences are international events of high scientific standards with long lasting tradition held every third year in one of the Mediterranean countries under the auspices of the International Federation for Medical and Biological Engineering.

2010. 1000 p. 943 illus. (IFMBE Proceedings, Volume 29) Softcover

ISBN 978-3-642-13038-0

► € 299,00 | £269.50

► *€ (D) 319,93 | € (A) 328,90 | sFr 429,00

Sale Price

► € 149,95 | £135.00

► *€ (D) 160,45 | € (A) 164,94 | sFr 200,00



9 783642 130380

W. W. Parson, University of Washington, Seattle, WA, USA

Modern Optical Spectroscopy

With Exercises and Examples from Biophysics and Biochemistry

This text offers clear explanations of the theory of optical spectroscopic phenomena and shows how these ideas are used in modern molecular and cellular biophysics and biochemistry. This student edition now contains an exercise section.

2007. XII, 530 p. 205 illus. Hardcover
ISBN 978-3-540-37535-7

► € 184,95 | £166.50

► *€ (D) 197,90 | € (A) 203,45 | sFr 265,50

Sale Price

► € 89,95 | £81.00

► *€ (D) 96,25 | € (A) 98,95 | sFr 120,00



9 783540 375357

W. Paulus (Ed.)

Directory of Microbicides for the Protection of Materials

A Handbook

This two-part book combines the insights of world experts on Microbicides with detailed a detailed inventory of Microbicide Data. The combination of the two parts in one book is unique, and has produced the most authoritative information in the field.

2005. XX, 787 p.

ISBN 978-1-4020-2817-5

▶ € 299,00 | £236,50

▶ *€ (D) 319,93 | € (A) 328,90 | sFr 505,50

Sale Price

▶ € 149,95 | £135,00

▶ *€ (D) 160,45 | € (A) 164,94 | sFr 200,00



9 781402 028175

M. Pavelka, University of Vienna, Austria; J. Roth, Yonsei University

Functional Ultrastructure

Atlas of Tissue Biology and Pathology

Along with a detailed insight into the complex structure and organization of cells and tissues, this second edition of the atlas also highlights specific cellular and tissue functions, as well as providing the dynamics of diverse intracellular processes.

2nd ed. 2010. XVIII, 365 p. 172 illus., 2 in color.

Hardcover

ISBN 978-3-211-99389-7

▶ approx. € 179,95 | £162,00

▶ approx. *€ (D) 192,55 | € (A) 197,95 | sFr 258,00

Sale Price

▶ approx. € 89,95 | £81,00

▶ approx. *€ (D) 96,25 | € (A) 98,95 | sFr 120,00



9 783211 993897

Topics in Current Chemistry

Series editor: K. N. Houk, J.-M. Lehn, S. V. Ley, J. Thiem, H. Yamamoto, P. Vogel, C. A. Hunter, M. Venturi, H. Wong, M. J. Krische, M. Olivucci, C.-H. Wong

Volume 272

T. Peters, University of Lübeck, Germany (Ed.)

Bioactive Conformation I

With contributions by numerous experts

2007. XII, 309 p. 138 illus., 31 in color. Hardcover

ISBN 978-3-540-49077-7

▶ € 239,00 | £215,00

▶ *€ (D) 255,73 | € (A) 262,90 | sFr 371,00

Sale Price

▶ € 119,95 | £108,00

▶ *€ (D) 128,35 | € (A) 131,95 | sFr 160,00



9 783540 490777

E. C. Pua, Monash University Malaysia, Selangor, Malaysia; M. R. Davey, University of Nottingham, Loughborough, UK (Eds)

Transgenic Crops V

Genetic engineering is a powerful tool for crop improvement. The status of crop biotechnology before 2001 was reviewed in Transgenic Crops I-III, but recent advances in plant cell and molecular biology have prompted the need for new volumes. Following Transgenic Crops IV (2007) dealing with cereals, vegetables, root crops, herbs and spices, this volume, Transgenic Crops V, is devoted to fruit, trees and beverage crops. Fruit crops targeted include banana, citrus, mango, papaya, pineapple, watermelon, avocado, grape, melon, apple, Prunus spp., strawberry, and kiwifruit, while trees include walnut, rubber, eucalyptus, tropical tree legumes, Casuarina glauca and conifers.

2007. XXIV, 563 p. 11 illus. (Biotechnology in Agriculture and Forestry, Volume 60) Hardcover

ISBN 978-3-540-49160-6

▶ € 269,00 | £242,00

▶ *€ (D) 287,83 | € (A) 295,90 | sFr 386,00

Sale Price

▶ € 134,95 | £121,50

▶ *€ (D) 144,40 | € (A) 148,44 | sFr 180,00



9 783540 491606

E. C. Pua, Monash University Malaysia, Selangor, Malaysia; M. R. Davey, University of Nottingham, Loughborough, UK (Eds)

Transgenic Crops VI

Genetic engineering is a powerful tool for crop improvement. The status of crop biotechnology before 2001 was reviewed in Transgenic Crops I-III, but recent advances in plant cell and molecular biology have prompted the need for new volumes. Following Transgenic Crops IV (2007) on cereals, vegetables, root crops, herbs, and spices, and Transgenic Crops V (2007) on fruits, trees, and beverage crops, this volume, Transgenic Crops VI, contains the following sections: Oils and Fibers, Medicinal Crops, Ornamental Crops, Forages and Grains, Regulatory and Intellectual Property of Genetically Manipulated Plants.

2007. XVIII, 442 p. 51 illus. (Biotechnology in Agriculture and Forestry, Volume 61) Hardcover

ISBN 978-3-540-71710-2

▶ € 219,00 | £197,00

▶ *€ (D) 234,33 | € (A) 240,90 | sFr 314,00

Sale Price

▶ € 109,95 | £99,00

▶ *€ (D) 117,65 | € (A) 120,95 | sFr 146,50



9 783540 717102

A. Querol, CSIC, Burjassot, Spain; G. H. Fleet, The University of New South Wales, Sydney, NSW, Australia (Eds)

Yeasts in Food and Beverages

Yeasts play a key role in the production of many foods and beverages. This role now extends beyond their widely recognized contributions to the production of alcoholic beverages and bread to include the production of many food ingredients and additives, novel uses as probiotic and biocontrol agents, their significant role as spoilage organisms, and their potential impact on food safety. Drawing upon the expertise of leading yeast researchers, this book provides a comprehensive account of the ecology, physiology, biochemistry, molecular biology, and genomics of the diverse range of yeast species associated with the production of foods and beverages.

2006. VIII, 453 p. 52 illus., 2 in color. (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

▶ € 149,95 | £135,00

▶ *€ (D) 160,45 | € (A) 164,94 | sFr 200,00



9 783540 283881

G. S. Saharan, N. Mehta, CCS Haryana Agricultural University, Hisar, India

Sclerotinia Diseases of Crop Plants: Biology, Ecology and Disease Management

Sclerotinia pathogens infect more than 500 species of plants worldwide, including field and fruit crops, trees and shrubs. This vividly-illustrated and exhaustive text is the first ever compilation on all aspects of these ubiquitous pathogens.

2008. LXII, 486 p. Hardcover
ISBN 978-1-4020-8407-2

▶ € 199,95 | £180,00
▶ *€ (D) 213,95 | € (A) 219,95 | sFr 287,00

Sale Price

▶ € 99,95 | £90,00
▶ *€ (D) 106,95 | € (A) 109,95 | sFr 133,50



9 781402 084072

Topics in Current Chemistry

Series editor: K. N. Houk, J.-M. Lehn, S. V. Ley, J. Thiem, H. Yamamoto, P. Vogel, C. A. Hunter, M. Venturi, H. Wong, M. J. Krische, M. Olivucci, C.-H. Wong

Volume 269

K. Sakai, Toray Fine Chemicals, Nagoya, Japan;
N. Hirayama, Tokai University, Kanagawa, Japan;
R. Tamura, University of Kyoto, Japan (Eds)

Novel Optical Resolution Technologies

With contributions by numerous experts

2007. XIV, 313 p. 216 illus., 8 in color. Hardcover
ISBN 978-3-540-46317-7

▶ € 239,00 | £215,00
▶ *€ (D) 255,73 | € (A) 262,90 | sFr 371,00

Sale Price

▶ € 119,95 | £108,00
▶ *€ (D) 128,35 | € (A) 131,95 | sFr 160,00



9 783540 463177

J. Šamaj, Rheinische Friedrich-Wilhelms-Universität, Bonn, Germany; J. J. Thelen, University of Missouri, Columbia, MO, USA (Eds)

Plant Proteomics

Proteomics is the large-scale functional analysis of proteins extracted from intact organisms, tissues, individual cells, or cell compartments, at defined timepoints during development or under specific conditions. Plant Proteomics highlights the rapid progress in this field in plants, with emphasis on recent work in model plant species, subcellular organelles, and specific aspects of the plant life cycle such as signalling, reproduction and stress physiology.

2007. XXX, 370 p. 38 illus., 7 in color. Hardcover
ISBN 978-3-540-72616-6

▶ € 164,95 | £148,50
▶ *€ (D) 176,50 | € (A) 181,45 | sFr 236,50

Sale Price

▶ € 79,95 | £72,00
▶ *€ (D) 85,55 | € (A) 87,95 | sFr 106,50



9 783540 726166

H. G. Schabel, University of Wisconsin, Steven's Point, WI, USA

Forest Entomology in East Africa

Forest Insects of Tanzania

East African forests, among the world's most biologically rich and diverse, are subject to multiple pressures, including insects. As the first work to focus exclusively on East African forest insects, this monograph distils 135 years of scientific and historical literature extending from before the colonial era to the present into an authoritative survey of this region's major pests of trees and wood, as well as their antagonists. This comprehensive treatise also addresses insects of social and economic importance, such as endemics, edible and collectible insects, wild bees and silk producers.

2006. LX, 328 p. Hardcover
ISBN 978-1-4020-4654-4

▶ € 169,95 | £153,00
▶ *€ (D) 181,85 | € (A) 186,95 | sFr 244,00

Sale Price

▶ € 86,95 | £78,50
▶ *€ (D) 93,04 | € (A) 95,65 | sFr 116,00



9 781402 046544

Advances in Biochemical Engineering Biotechnology

S. Belkin, A.-P. Zeng, W. Zhou, J.-J. Zhong (Eds),
Series editor: T. Scheper, I. Endo, S.-O. Enfors,
B. Mattiasson, Editorial board: K. Schügerl,
G. N. Stephanopoulos, G. T. Tsao, Ministry of
Education, W.-S. Hu, J. Nielsen, R. Ulber
Volume 99

D. V. Schaffer, University of California at Berkeley, CA, USA; W. Zhou, Protein Design Labs, Inc., Fremont, USA (Eds)

Gene Therapy and Gene Delivery Systems

2005. X, 285 p. Hardcover
ISBN 978-3-540-28404-8

▶ € 209,00 | £188,00
▶ *€ (D) 223,63 | € (A) 229,90 | sFr 300,00

Sale Price

▶ € 104,95 | £94,50
▶ *€ (D) 112,30 | € (A) 115,45 | sFr 140,00



9 783540 284048

U. Schiewer, University of Rostock, Germany (Ed.)

Ecology of Baltic Coastal Waters

This volume provides the first comprehensive overview of the enormous ecological diversity of Baltic coastal ecosystems. A short introduction into the Baltic Sea as a reference ecosystem is followed by detailed descriptions of the characteristics of coastal ecosystems. Ecological case studies from the following four regions illustrate the different reactions of these ecosystems to natural and anthropogenic influences: Southern Baltic coast: Fjörden, Boddens, Lagoons and nearshore zones, Eastern Baltic coast: Gulf of Gdansk, Gulf of Riga, Northeastern Baltic coast: Neva Estuary and Gulf of Finland, Western Baltic coast: Stockholm Archipelago, Askö area and Himmerfjärden, Odense Fjord and Kerteminde Fjord/Kertinge Nor.

2008. XIX, 428 p. 102 illus., 2 in color. (Ecological Studies, Volume 197) Hardcover
ISBN 978-3-540-73523-6

▶ € 159,95 | £144,00
▶ *€ (D) 171,15 | € (A) 175,95 | sFr 229,50

Sale Price

▶ € 79,95 | £72,00
▶ *€ (D) 85,55 | € (A) 87,95 | sFr 106,50



9 783540 735236

L. H. Schmidt, Forest & Landscape, Hoersholm, Denmark

Tropical Forest Seed

The book aims at dealing with all practical issues in connection with practical tree seed procurement and supply in tropical countries, with necessary background information and documentation of applied methods. It starts with seed collection and follows the processes of the standard fates of seeds, from extraction, cleaning, drying, testing and storing to distribution and sowing in the field or in the nursery. The text covers simple hands-on methods and more advanced methods, and emphasises the balance between using available technology, equipment and other facilities, and a sound view of what is needed.

2007. XVIII, 410 p. 143 illus. (Tropical Forestry) Hardcover

ISBN 978-3-540-49028-9

► € 159,95 | £144,00

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

Sale Price

► € 79,95 | £72,00

► *€ (D) 85,55 | € (A) 87,95 | sFr 106,50



9 783540 490289

S. Seino, Kobe University, Kobe, Japan; G. I. Bell, The University of Chicago University, IL, USA (Eds)

Pancreatic Beta Cell in Health and Disease

The beta cells of the pancreatic islets of Langerhans are the only cells in the body that produce and secrete insulin. This metabolic hormone plays a central role in the maintenance of glucose homeostasis. This book provides a comprehensive review of the beta cell in health and disease. The book's primary aim is to encourage investigators to become actively involved in diabetes research and the search for new approaches to prevent and treat diabetes.

2008. XV, 200 p. Hardcover

ISBN 978-4-431-75451-0

► € 149,95 | £135,00

► *€ (D) 160,45 | € (A) 164,95 | sFr 215,00

Sale Price

► € 76,95 | £69,99

► *€ (D) 82,34 | € (A) 84,65 | sFr 102,50



9 784431 754510

S. Shirahata, K. Ikura, M. Nagao, A. Ichikawa, K. Teruya (Eds)

Animal Cell Technology: Basic & Applied Aspects

Proceedings of the 19th Annual Meeting of the Japanese Association for Animal Cell Technology (JAACT), Kyoto, Japan, September 25-28, 2006

Animal cell technology is a growing discipline of cell biology which aims not only to understand structures, functions and behaviors of differentiated animal cells, but also to ascertain their abilities to be used for industrial and medical purposes.

2009. XV, 357 p. (Animal Cell Technology: Basic & Applied Aspects, Volume 15) Hardcover

ISBN 978-1-4020-9645-7

► € 194,95 | £175,50

► *€ (D) 208,60 | € (A) 214,45 | sFr 280,00

Sale Price

► € 99,95 | £90,00

► *€ (D) 106,95 | € (A) 109,95 | sFr 133,50



9 781402 096457

M. G. Tjoelker, Texas A&M University, College Station, USA; A. Boratynski, W. Bugala, Polish Academy of Sciences, Kórnik, Poland (Eds)

Biology and Ecology of Norway Spruce

Norway spruce (*Picea abies* L.) is an important tree species with a remarkable natural range throughout Europe and Asia, ranging from the Balkan Peninsula to Siberia in the north and from the French Alps in the west to the Sea of Okhotsk in the east. Wherever it occurs, it is a key component of both natural and managed forests. Norway spruce is the most economically valuable conifer in Europe, producing high-quality timber and wood products. Written by 25 authorities, this book presents a concise and comprehensive review of the biology, ecology, and management of Norway spruce.

2007. VI, 469 p. (Forestry Sciences, Volume 78) Hardcover

ISBN 978-1-4020-4840-1

► € 174,95 | £157,50

► *€ (D) 187,20 | € (A) 192,45 | sFr 271,50

Sale Price

► € 89,95 | £81,00

► *€ (D) 96,25 | € (A) 98,95 | sFr 120,00



9 781402 048401

Advances in Biochemical Engineering Biotechnology

S. Belkin, A.-P. Zeng, W. Zhou, J.-J. Zhong (Eds), Series editor: T. Scheper, I. Endo, S.-O. Enfors, B. Mattiasson, Editorial board: K. Schügerl, G. N. Stephanopoulos, G. T. Tsao, Ministry of Education, W.-S. Hu, J. Nielsen, R. Ulber
Volume 105

R. Ulber, Technische Universität Kaiserslautern, Germany; D. Sell, DECHEMA, Frankfurt, Germany (Eds)

White Biotechnology

With contributions by numerous experts

2007. XII, 301 p. 110 illus. Hardcover

ISBN 978-3-540-45695-7

► € 259,00 | £233,00

► *€ (D) 277,13 | € (A) 284,90 | sFr 371,50

Sale Price

► € 129,95 | £117,00

► *€ (D) 139,05 | € (A) 142,94 | sFr 173,00



9 783540 456957

E. Ulvestad, Haukeland University Hospital, Bergen, Norway

Defending Life

The Nature of Host-Parasite Relations

Defending Life discusses the relationship between hosts and parasites. A major contention of the book is that the immune system depends ontologically on the ecosystem in which it is embedded; it would not have the features it has if it was not related in one way or other to parasitic agents and to the host's own cells and tissues. To sustain the argument, life is investigated at all layers – from molecules up through cells, organisms and ecosystems. Together with the inverse course, which goes from ecological contingencies down to gene-expression profiles, the approach facilitates an advanced understanding of immunocompetence as well as its converse, immunoincompetence.

2007. XIX, 241 p. Hardcover

ISBN 978-1-4020-5675-8

► € 164,95 | £148,50

► *€ (D) 176,50 | € (A) 181,45 | sFr 236,50

Sale Price

► € 79,95 | £72,00

► *€ (D) 85,55 | € (A) 87,95 | sFr 106,50



9 781402 056758

E. A. Vaganov, Russian Academy of Sciences, Siberian Branch, Krasnoyarsk, Russia; M. K. Hughes, University of Arizona, Tucson, AZ, USA; A. V. Shashkin, Russian Academy of Sciences, Siberian Branch, Krasnoyarsk, Russia

Growth Dynamics of Conifer Tree Rings

Images of Past and Future Environments

Each tree ring contains an image of the time when the ring formed, projected onto the ring's size, structure, and composition. Tree rings thus are natural archives of past environments, and contain records of past climate. While dendrochronologists have investigated the impact of climate on tree-ring growth by empirical-statistical methods, this volume presents a process-based model complementing previous approaches.

2006. XIV, 354 p. 178 illus. (Ecological Studies, Volume 183) Hardcover
ISBN 978-3-540-26086-8
▶ € 169,95 | £153,00
▶ * € (D) 181,85 | € (A) 186,95 | sFr 244,00

Sale Price

▶ € 86,95 | £78.50
▶ * € (D) 93,04 | € (A) 95,65 | sFr 116,00



9 783540 260868

A. Varma, Amity University Uttar Pradesh, Noida, India; R. Oelmüller, Friedrich-Schiller-University Jena, Germany (Eds)

Advanced Techniques in Soil Microbiology

„Advanced Techniques in Soil Microbiology“ presents a wide range of biotechnological methods for application in soil microbiology analysis. These include all essential methods involving molecular biology, immunology, microbiology, and structural biology, such as transcriptome analysis, RNAi technology, molecular matchmaking, RAPD, T-RFLP and FT/MS. The techniques and procedures have been selected with the aim of offering practical guides for immediate use in the laboratory.

2007. XXVIII, 427 p. 94 illus., 2 in color. (Soil Biology, Volume 11) Hardcover
ISBN 978-3-540-70864-3
▶ € 174,95 | £157,50
▶ * € (D) 187,20 | € (A) 192,45 | sFr 251,00

Sale Price

▶ € 89,95 | £81.00
▶ * € (D) 96,25 | € (A) 98,95 | sFr 120,00



9 783540 708643

R. K. Varshney, ICRISAT, Patancheru, India; R. Tuberosa, University of Bologna, Italy (Eds)

Genomics-Assisted Crop Improvement

Vol 2: Genomics Applications in Crops

Genomics research has great potential to revolutionize the discipline of plant breeding. This two-volume set provides a critical assessment of genomics tools and approaches for crop breeding. Volume 1, entitled „Genomics Approaches and Platforms“, illustrates state-of-the-art genomics approaches and platforms presently available for crop improvement. Volume 2, entitled „Genomics Applications in Crops“, compiles crop-specific studies that summarize both the achievements and limitations of genomics research for crop improvement.

2007. XX, 509 p. Hardcover
ISBN 978-1-4020-6296-4

▶ € 189,95 | £171,00
▶ * € (D) 203,25 | € (A) 208,95 | sFr 272,50

Sale Price

▶ € 99,95 | £90.00
▶ * € (D) 106,95 | € (A) 109,95 | sFr 133,50



9 781402 062964

J.-P. Verbelen, K. Vissenberg, University of Antwerp, Belgium (Eds)

The Expanding Cell

After division, plant cells are able to increase their volume enormously by cell expansion, making the expanding cell a crucial player in the production of biomass. The study of plant cell expansion involves many different disciplines and technical approaches, and this book is the first attempt to bring this diversity together to present a multi-faceted view of the most up-to-date knowledge. Included are data ranging from biophysical measurements and chemical analysis to molecular biological approaches and microscopy.

2007. X, 297 p. 49 illus., 5 in color. (Plant Cell Monographs, Volume 5) Hardcover
ISBN 978-3-540-39114-2
▶ € 149,95 | £135,00
▶ * € (D) 160,45 | € (A) 164,95 | sFr 233,00

Sale Price

▶ € 76,95 | £69.99
▶ * € (D) 82,34 | € (A) 84,65 | sFr 102,50



9 783540 391142

D. P. Verma, Ohio State University, Columbus, OH, USA; Z. Hong, University of Idaho, Moscow, ID, USA (Eds)

Cell Division Control in Plants

The molecular mechanisms controlling cell cycle progression are highly conserved in eukaryotes. In addition to the basic protein machinery involved in cell cycle regulation, higher plants have also evolved unique molecular mechanisms that allow integration of environmental, physiological, and developmental signals into networks to control proper cell division and expansion. Rapid and exciting research progress in these fields has been achieved from experimental observations on plants over the past decade. The scope of this volume is focused on the molecular basis of all aspects of cell division and cytokinesis in plants.

2008. X, 417 p. 60 illus., 18 in color. (Plant Cell Monographs, Volume 9) Hardcover
ISBN 978-3-540-73486-4

▶ € 174,95 | £157,50
▶ * € (D) 187,20 | € (A) 192,45 | sFr 251,00

Sale Price

▶ € 89,95 | £81.00
▶ * € (D) 96,25 | € (A) 98,95 | sFr 120,00



9 783540 734864

H. Vogel, Aalen, Germany (Ed.)

Drug Discovery and Evaluation: Pharmacological Assays

Offering both cutting-edge and classic pharmacological methods, this new edition to a successful reference offers an updated selection of the most frequently used assays for reliably detecting the pharmacological effects of potential drugs.

3rd completely rev., updated and enlarged ed. 2008. LVIII, 2071 p. 5 illus. (In 2 volumes, not available separately)

ISBN 978-3-540-71420-0
▶ € 599,00 | £539,00
▶ * € (D) 640,93 | € (A) 658,90 | sFr 859,00

Sale Price

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



9 783540 714200

M. Vreysen, A. Robinson, J. Hendrichs, Joint FAO/IAEA Programme of Nuclear Techniques in Food and Agriculture, Vienna, Austria (Eds)

Area-Wide Control of Insect Pests

From Research to Field Implementation

„If major advances are to be made in coping with most of the major arthropod pest problems, then the tactics and strategies for managing such insects, ticks and mites must change. They must change from the current, limited scale, reactive, broad-spectrum measures to preventive measures that are target-pest specific and rigidly applied on an area-wide basis.“ E.F. Knipling on the occasion of receiving the World Food Prize on 12 October 1992.

2007. XVI, 792 p. 31 illus. in color. Hardcover
ISBN 978-1-4020-6058-8

► € 209,00 | £188,00

► *€ (D) 223,63 | € (A) 229,90 | sFr 300,00

Sale Price

► € 104,95 | £94,50

► *€ (D) 112,30 | € (A) 115,45 | sFr 140,00



9 781402 060588

X. Wang, The Ohio State University, Columbus, OH, USA; B. Valent (Eds)

Advances in Genetics, Genomics and Control of Rice Blast Disease

Rice blast, caused by the fungal pathogen *Magnaporthe oryzae*, is one of the most destructive rice diseases worldwide and destroys enough rice to feed more than 60 million people annually. Due to high variability of the fungal population in the field, frequent loss of resistance of newly-released rice cultivars is a major restraint in sustainable rice production. In the last few years, significant progress has been made in understanding the defense mechanism of rice and pathogenicity of the fungus. The rice blast system has become a model pathosystem for understanding the molecular basis of plant-fungal interactions due to the availability of both genomes of rice and *M.*

2009. XXXII, 464 p. Hardcover
ISBN 978-1-4020-9499-6

► € 164,95 | £148,50

► *€ (D) 176,50 | € (A) 181,45 | sFr 236,50

Sale Price

► € 79,95 | £72,00

► *€ (D) 85,55 | € (A) 87,95 | sFr 106,50



9 781402 094996

M. Weidenbörner, Bonn, Germany

Mycotoxins in Feedstuffs

This book gives an overview of mycotoxins in feedstuff and ingredients. It lists the degree of contamination, concentration and country of origin/detection for each case of mycotoxin contamination.

2007. XII, 308 p. Hardcover
ISBN 978-0-387-46411-4

► € 184,95 | £166,00

► *€ (D) 197,90 | € (A) 203,45 | sFr 286,50

Sale Price

► € 89,95 | £81,00

► *€ (D) 96,25 | € (A) 98,95 | sFr 120,00



9 780387 464114

F. E. Wielgolaski, University of Oslo, Blindern, Norway (Ed.)

Plant Ecology, Herbivory, and Human Impact in Nordic Mountain Birch Forests

Editorial board: S. Karlsson, S. Neuvonen, D. Thannheiser

The successful long-term sustainable management of forests is dependent on our knowledge of their history, present state, and responses to changing environmental conditions. In this light, the text evaluates the Nordic mountain birch ecosystem with examples from different sites in the Nordic countries and Scotland. The authors analyse vegetation and soils, and investigate the influence of climate change, insect pests, grazing pressure by sheep and reindeer, construction of roads and other consequences of increasing tourism.

2005. XXIV, 365 p. 67 illus. With CD-ROM. (Ecological Studies, Volume 180) Hardcover
ISBN 978-3-540-22909-4

► € 184,95 | £166,50

► *€ (D) 197,90 | € (A) 203,45 | sFr 265,50

Sale Price

► € 89,95 | £81,00

► *€ (D) 96,25 | € (A) 98,95 | sFr 120,00



9 783540 229094

R. Willis, University of Melbourne, Parkville, VIC, Australia

The History of Allelopathy

This book firstly addresses the question of what is allelopathy, as allelopathy is one of these unfortunate terms in ecology that has no unified definition. The book then examines the major episodes in the history of allelopathy: the writings from classical Greece and Rome; mediaeval Arabic, Indian and Chinese work; the advent of printing and promulgation of information in the 16th and 17th centuries; the 18th century and the theory of root excretion; the 19th century and the influence of A.P. de Candolle; the early 20th century and the work of Pickering and the USDA Bureau of Soils; and the years leading to the current era. The work draws extensively on original sources, and consequently many of the assertions published in relation to the background of allelopathy, are shown to be incorrect, or at best very inadequate.

2007. XIV, 316 p. Hardcover
ISBN 978-1-4020-4092-4

► € 154,95 | £139,50

► *€ (D) 165,80 | € (A) 170,45 | sFr 222,50

Sale Price

► € 79,95 | £72,00

► *€ (D) 85,55 | € (A) 87,95 | sFr 106,50



9 781402 040924

Topics in Current Chemistry

Series editor: K. N. Houk, J.-M. Lehn, S. V. Ley, J. Thiem, H. Yamamoto, P. Vogel, C. A. Hunter, M. Venturi, H. Wong, M. J. Krische, M. Olivucci, C.-H. Wong

Volume 267

V. Wittmann, University of Konstanz, Germany (Ed.)

Glycopeptides and Glycoproteins

Synthesis, Structure, and Application
With contributions by numerous experts

2007. XII, 265 p. 86 illus., 16 in color. Hardcover
ISBN 978-3-540-36760-4

► € 219,00 | £197,00

► *€ (D) 234,33 | € (A) 240,90 | sFr 340,00

Sale Price

► € 109,95 | £99,00

► *€ (D) 117,65 | € (A) 120,95 | sFr 146,50



9 783540 367604

G. A. Wobeser, University of Saskatchewan, Saskatoon, SK, Canada

Disease in Wild Animals

Investigation and Management

Wildlife diseases have become increasingly important recently due to their effect upon human health, veterinary medicine, wildlife, and conservation biology. Gary Wobeser's successful book from 1994 has been completely updated and enlarged in a new second edition. An in-depth overview of the available techniques for the investigation and management of disease in free-ranging animals is provided. The subjects are illustrated with examples drawn from around the world, with emphasis on the special requirements involved in working with wild animals. Techniques are assessed critically with regard to their efficacy and effectiveness.

2nd ed. 2007. X, 394 p. 17 illus. Hardcover

ISBN 978-3-540-48974-0

► € 189,95 | £171,00

► *€ (D) 203,25 | € (A) 208,95 | sFr 272,50

Sale Price

► € 99,95 | £90,00

► *€ (D) 106,95 | € (A) 109,95 | sFr 133,50



9 783540 489740

J. Wu, Kagawa University, Japan; K. Ito, Tokyo Institute of Technology, Yokohama, Japan; S. Tobimatsu, Kyushu University, Japan; T. Nishida, H. Fukuyama, Kyoto University, Japan (Eds)

Complex Medical Engineering

In the twenty-first century, applications in medicine and engineering must acquire greater safety and flexibility if they are to yield better products at higher efficiency. To this end, complex science and technology must be integrated in medicine and engineering. Complex medical engineering (CME) is a new field that merges medical science and technology, and includes biomedical robotics and biomechanics, complex virtual technology in medicine, information and communication technology in medicine, complex technology in rehabilitation, cognitive neuroscience and technology, and complex bioinformatics.

2007. XII, 619 p. 274 illus., 7 in color. Hardcover

ISBN 978-4-431-30961-1

► € 149,95 | £135,00

► *€ (D) 160,45 | € (A) 164,95 | sFr 215,00

Sale Price

► € 76,95 | £69,99

► *€ (D) 82,34 | € (A) 84,65 | sFr 102,50



9 784431 309611

S. S. Yadav, Indian Agricultural Research Institute, New Delhi, India; D. McNeil, University of Tasmania, TAS, Australia; P. C. Stevenson, Natural Resource Institute, Kent, UK (Eds)

Lentil

An Ancient Crop for Modern Times

The lentil is one of the first foods to have been cultivated and has maintained excellent socio-economic value for over 8,000 years. The ancient crop is now a crop for modern times in both developing and developed countries today. The international market in recent years has increased significantly and this crop is gaining an important place in cropping systems under different ecologies. It is grown in over 35 countries, has a broad range of uses around the world, and the different seed and plant types adapted to an increasingly wide range of ecologies makes this comprehensive volume even more important today.

2007. XXIV, 462 p. Hardcover

ISBN 978-1-4020-6312-1

► € 184,95 | £166,50

► *€ (D) 197,90 | € (A) 203,45 | sFr 265,50

Sale Price

► € 89,95 | £81,00

► *€ (D) 96,25 | € (A) 98,95 | sFr 120,00



9 781402 063121

J. Yon-Kahn, Université de Paris-Sud, Orsay, France; G. Hervé, Université de Pierre et Marie Curie, Paris, France

Molecular and Cellular Enzymology

This reference is designed for the experienced and novice enzymologist alike. It offers practical aspects and elementary explanations, and it uses two typographies: the main text offers basic knowledge, and a smaller font provides more specialized information.

2010. XLIV, 783 p. 370 illus., 36 in color. Hardcover

ISBN 978-3-642-01227-3

► € 239,00 | £215,00

► *€ (D) 255,73 | € (A) 262,90 | sFr 343,00

Sale Price

► € 119,95 | £108,00

► *€ (D) 128,35 | € (A) 131,95 | sFr 160,00



9 783642 012273

G. Zboray, Eötvös Loránd University, Budapest, Hungary; Z. Kovács, Berzsenyi Dániel College, Szombathely, Hungary; G. Kriska, K. Molnár, Z. Pálfi, Eötvös Loránd University, Budapest, Hungary

Atlas of Comparative Sectional Anatomy of 6 invertebrates and 5 vertebrates

This atlas contains 189 coloured images taken from transversal, horizontal and sagittal sections of eleven organisms widely used in university teaching. Six invertebrate and five vertebrate species – from the nematode worm (*Ascaris suum*) to mammals (*Rattus norvegicus*) – are shown in detailed images. Images show photographs taken from original preparations and 3D photos on the enclosed CD.

2010. 296 p. 390 illus., 180 in color. Hardcover

ISBN 978-3-211-99762-8

► € 239,95 | £216,00

► *€ (D) 256,75 | € (A) 263,94 | sFr 344,00

Sale Price

► € 119,95 | £108,00

► *€ (D) 128,35 | € (A) 131,95 | sFr 160,00



9 783211 997628

M. Zourob, GDG ENVIRONNEMENT LTÉE (Ed.)

Recognition Receptors in Biosensors

This book presents a significant and up-to-date review of the various recognition receptors, their immobilization, and an overview of the used surface characterization techniques. It includes more than 150 illustrations that help explain the ideas presented.

2010. XIV, 849 p. Hardcover

ISBN 978-1-4419-0918-3

► € 159,95 | £144,00

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

Sale Price

► € 79,95 | £72,00

► *€ (D) 85,55 | € (A) 87,95 | sFr 106,50



9 781441 909183

P. Zugenmaier, Technische Universität Clausthal,
Clausthal-Zellerfeld, Germany

Crystalline Cellulose and Derivatives

Characterization and Structures

This book constitutes a valuable, concise and up-to-date guide for the materials and life science community interested in cellulose and related materials. Reliable crystal structures of all cellulose polymorphs and cellulose derivatives determined are critically reviewed and discussed. Models are represented in graphs together with a collection of geometrical data as well as the atomic coordinates for further use.

2008. X, 286 p. 146 illus. (Springer Series in Wood Science) Hardcover

ISBN 978-3-540-73933-3

▶ ~~€ 179,95 | £162,00~~

▶ * € (D) 192,55 | € (A) 197,95 | sFr 258,00

Sale Price

▶ € 89,95 | £81,00

▶ * € (D) 96,25 | € (A) 98,95 | sFr 120,00



9 783540 739333

Advances in Biochemical Engineering Biotechnology

S. Belkin, A.-P. Zeng, W. Zhou, J.-J. Zhong (Eds),

Series editor: T. Scheper, I. Endo, S.-O. Enfors,

B. Mattiasson, Editorial board: K. Schügerl,

G. N. Stephanopoulos, G. T. Tsao, Ministry of
Education, W.-S. Hu, J. Nielsen, R. Ulber

Volume 109

F. Lisdat, Wildau University of Applied Sciences,
Wildau, Germany (Ed.)

Biosensing for the 21st Century

With contributions by numerous experts

2008. XVI, 504 p. 97 illus., 28 in color. Hardcover

ISBN 978-3-540-75200-4

▶ ~~€ 439,00 | £395,00~~

▶ * € (D) 469,73 | € (A) 482,90 | sFr 629,50

Sale Price

▶ € 229,00 | £206,50

▶ * € (D) 245,03 | € (A) 251,90 | sFr 305,00



9 783540 752004

