

Best Of S Bastien Bouillet

This comprehensive handbook and ready reference details all the main achievements in the field of perovskite-based and related mixed-oxide materials. The authors discuss, in an unbiased manner, the potentials as well as the challenges related to their use, thus offering new perspectives for research and development on both an academic and industrial level. The first volume begins by summarizing the different synthesis routes from molten salts at high temperatures to colloidal crystal template methods, before going on to focus on the physical properties of the resulting materials and their related applications in the fields of electronics, energy harvesting, and storage as well as electromechanics and superconductivity. The second volume is dedicated to the catalytic applications of perovskites and related mixed oxides, including, but not limited to total oxidation of hydrocarbons, dry reforming of methane and denitrogenation. The concluding section deals with the development of chemical reactors and novel perovskite-based applications, such as fuel cells and high-performance ceramic membranes. Throughout, the contributions clearly point out the intimate links between structure, properties and applications of these materials, making this an invaluable tool for materials scientists and for catalytic and physical chemists.

This book is a collection of selected and relevant research, concerning the developments within the Cell Death field of study. Each contribution comes as a separate chapter complete in itself but directly related to the books topics and objectives. The target audience comprises scholars and specialists in the field.

Of all the parasitic diseases, leishmaniasis is one of the most diverse, with a variety of manifestations, from relatively minor cutaneous lesions to deadly visceral infections. It is also widespread, causing human disease in the Americas, Asia, Europe and Africa. The environments in which this disease occurs range from desert to tropical jungle to urban habitats. Not surprisingly, the literature on this disease is written in a variety of languages including Portuguese, Arabic, English and French among others. This book provides a synopsis in English of much of the recent research on leishmaniasis, with a focus on the epidemiology, diagnosis and treatment of the disease as described by researchers around the world, but with a focus on the research from Brazil and the Middle East.

The Registers of the French Church, Threadneedle Street, London

Sciences de l'éducation

Genetic Basis for their Domestication and Conservation

Lake St. Louis

Recarbonizing global soils – A technical manual of recommended management practices

Dictionnaire universel d'histoire et de géographie

A comprehensive description and assessment of the use of marker-assisted selection for increasing the rate of genetic gain in crops, livestock, forestry and fish, including the related policy, FAO's tradition of dealing with issues of importance to agricultural and economic development in a multidisciplinary and cross-sectoral manner.

The aim of this book is to present, in depth, updated information on soil and microbial processes involved in mixed plantations of Eucalyptus and N2-fixing species, especially Acacia mangium, focusing on Forestry, Soils, Biology, Ecosystem Services and Sustainability. The potential of substituting chemical N fertilizer by a consortium of leguminous species that fix atmospheric nitrogen is an interesting solution for a more sustainable, economically and environmentally sound forest system. Among the main topics, we present reference topics on soil microbiology, as biological nitrogen fixation, the role of mycorrhiza in mixed plantations, bio-indicators of soil quality, and plantgrowth promoting bacteria with biotechnological potential. Here we discuss Ecosystem services and ecological benefits of these systems, the invasive potential of A.mangium, as well as the regulations and perspectives of land use policies for mixed forests and their role in the sustainability of the system.

(will follow)

The Splendid Century

Character Sketches of Romance, Fiction and the Drama

Mixed-Species Forests

The Registers of the Wallon Or Strangers' Church in Canterbury

Silver Catalysis in Organic Synthesis, 2 Volume Set

Role of Apoptosis in Infection

Forest soils are the foundation of the entire forest ecosystem and complex, long-term interactions between trees, soil animals, and the microbial community shape soils in was that are very distinct from agricultural soils. The composition, structure, and processes in forest soils at any given time reflect current conditions, as well as the legacies of decades (and even millennia) of interactions that shape each forest soil. Reciprocal interactions are fundamental; vegetation alters soil physical properties, which influence soil biology and chemistry, which in turn influence the growth and success of plants. These dynamic systems may be strongly influenced by intentional and unintentional management, ranging from fire to fertilization. Sustaining the long-term fertility of forest soils depends on insights about a diverse array of soil features and changes over space and time. Since the third edition of this successful book many new interests in forest soils and their management have arisen, including the role of forest soils in sequestering carbon, and how management influences rates of carbon accumulation. This edition also expands the consideration of how soils are sampled and characterized, and how tree species differ in their influence on soil development. Clearly structured throughout, the book opens with the origins of forest soil science and ends with the application of soil science principles to land management. This new edition provides: A completely revised and updated Fourth Edition of this classic textbook in the field A coherent overview of the major issues surrounding the ecology and management of forest soils Global in scope with coverage of soil types ranging from the tropical rainforest soils of Latin America to the boreal forest soils of Siberia New chapters on Management: Carbon sequestration; Evidence-based approaches and applications of geostatistics, GIS and taxonomies A clear overview of each topic, informative examples/case studies, and an overall context for helping readers think clearly about forest soils An introduction to the literature of forest soil science and to the philosophy of forest soil science research This coherent overview of the major issues surrounding the ecology and management of forest soils will be particularly useful to students taking courses in soil science, forestry, agronomy, ecology, natural resource management, environmental management and conservation, as well as professionals in forestry dealing with the productivity of forests and functioning of watersheds.

Mountains, Climate and Biodiversity: A comprehensive and up-to-date synthesis for students and researchers Mountains are topographically complex formations that play a fundamental role in regional and continental-scale climates. They are also cradles to all major river systems and home to unique, and often highly biodiverse and threatened, ecosystems. But how do all these processes tie together to form the patterns of diversity we see today? Written by leading researchers in the fields of geology, biology, climate, and geography, this book explores the relationship between mountain building and climate change, and how these processes shape biodiversity through time and space. In the first two sections, you will learn about the processes, theory, and methods connecting mountain building and biodiversity In the third section, you will read compelling examples from around the world exploring the links between mountains, climate and biodiversity Throughout the 31 peer-reviewed chapters, a non-technical style and synthetic illustrations make this book accessible to a wide audience A comprehensive glossary summarises the main concepts and terminology Readership: Mountains, Climate and Biodiversity is intended for students and researchers in geosciences, biology and geography. It is specifically compiled for those who are interested in historical biogeography, biodiversity and conservation.

This textbook offers a detailed overview of the current state of knowledge concerning the ecology and management of compositionally and structurally diverse forests. It provides answers to central questions such as: What are the scientific concepts used to assess the growth, dynamics and functioning of mixed-species forests, how generalizable are they, and what kind of experiments are necessary to develop them further? How do mixed-species stands compare with monocultures in relation to productivity, wood quality, and ecological stability in the face of stress and disturbances? How are the effects of species mixtures on ecosystem functioning influenced by the particular species composition, site conditions, and stand structure? How does any over- or underyielding at the forest-stand level emerge from the tree and organ level, and what are the main mechanisms behind mixing effects? How can our current scientific understanding of mixed-species forests be integrated into silvicultural concepts as well as practical forest management and planning? Do the ecological characteristics of mixed-species stands also translate into economic differences between mixtures and monocultures? In addition, the book addresses experimental designs and analytical approaches to study mixed-species forests and provides extensive empirical information, general concepts, models, and management approaches for mixed-species forests. As such, it offers a valuable resource for students, scientists and educators, as well as professional forest planners, managers, and consultants.

Trends in Epidemiology, Diagnosis and Treatment

Marker-assisted Selection

A History of the Occult

The Kinin System

The Memoirs of Fran ç ois Ren é

Biomedicine, Agriculture and Industry

A man of inventiveness, versatility and reformist ideas, Marshal Sébastien Le Preste de Vauban built a formidable ring of fortresses to protect France’s national frontiers. More than just a fortification designer, Vauban was also a gifted economist, author, and political strategist. This book tells the complete story of Vauban’s exceptional career, placing him within the framework of Louis XIV’s reign and revealing his lasting influences in France and other nations. With the aid of numerous detailed drawings, 17th century bastioned fortification, artillery, and seige warfare are described in detail. Vauban’s fortifications that are still standing today are particularly highlighted.

Forest tree improvement has mainly been implemented to enhance the productivity of artificial forests. However, given the drastically changing global environment, improvement of various traits related to environmental adaptability is more essential than ever. This book focuses on genetic information, including trait heritability and the physiological mechanisms thereof, which facilitate tree improvement. Nineteen papers are included, reporting genetic approaches to improving various species, including conifers, broad-leaf trees, and bamboo. All of the papers in this book provide cutting-edge genetic information on tree genetics and suggest research directions for future tree improvement.

Due to the resultant health consequences and considerable increase in prevalence, obesity has become a major worldwide health problem. "Obesity and Lipotoxicity" is a comprehensive review of the recent researches to provide a better understanding of the lipotoxicity-related mechanisms of obesity and the potential for the development of new treatment strategies. This book overviews the biochemical pathways leading to obesity-related metabolic disorders that occur subsequent to lipotoxicity. Chapters examine the deleterious effects of nutrient excess at molecular level including the cellular and molecular aspects of breast cancer, resistance to leptin, insulin, adiponectin, and interconnection between the circadian clock and metabolic pathways during high-fat feeding. "Lipotoxicity and Obesity" will be a useful resource for clinicians and basic science researchers, such as biochemists, toxicologists, immunologists, nutritionists, adult and pediatric endocrinologists, cardiologists, as well as students who are thought in this field.

Bulletin signalétique

Current Status and Future Perspectives in Crops, Livestock, Forestry and Fish

Catalyst Characterization

Agromining: Farming for Metals

Autophagy, Apoptosis and Necrosis

Monastic Foundation Legends in Medieval Southern France

Global climate change requires the development of programs that consider the active restoration of degraded forests and the use of native trees in afforestation to preserve the natural environment. International commitments like the UN REDD program, the Montr é al Process and the Convention on Biological Diversity call for the breeding of species rarely contemplated by large industrial companies. Low-intensity breeding is the most rational strategy for those species: simple but robust, and not dependent on continuously increasing funding, and therefore effective even with a relatively small budget. It commonly focuses on high genetic diversity rather than improving economic traits and adaptability rather than productivity. Controlled crosses with full pedigrees typical of high-intensity breeding are replaced by open pollination. This book presents state-of-the-art breeding strategies from the last two decades for several forest tree species of prime importance in the natural forests of Argentina. They are distributed in the three main forestry ecoregions of the country: the subtropical dry forest (Chaco), the subtropical rain forests (Yungas and Alto Paran á rainforests) and the temperate forests of Patagonia. The book also discusses the genetic patterns of the selected species defined using genetic markers together with the analysis of the variation in quantitative traits. Further, it examines the crucial features of their reproductive biology, such as the mating system and gene flow and describes the current breeding programs. Lastly, it presents the latest developments in genetic resources and their emerging applications, concluding with some reflections and perspectives related to the conditioning imposed by climate change.

to the Fundamental and Applied Catalysis Series Catalysis is important academically and industrially. It plays an essential role in the manufacture of a wide range of products, from gasoline and plastics to fertilizers and herbicides, which would otherwise be unobtainable or prohibitively expensive. There are few chemical-or oil-based material items in modern society that do not depend in some way on a catalytic stage in their manufacture. Apart from manufacturing processes, catalysis is finding other important and over-increasing uses; for example, successful applications of catalysis in the control ofpollution and its use in environmental control are certain to increas in the future. The commercial import an ce of catalysis and the diverse intellectual challenges of catalytic phenomena have stimulated study by a broad spectrum of scientists including chemists, physicists, chemical engineers, and material scientists. Increasing research activity over the years has brought deeper levels of understanding, and these have been associated with a continually growing amount of published material. As recentlyas sixty years ago, Rideal and Taylor could still treat the subject comprehensively in a single volume, but by the 19 50s Emmett required six volumes, and no conventional multivolume text could now cover the whole of catalysis in any depth.

Bradykinin is a type of plasma hormone that causes blood vessels to dilate, resulting in a drop in blood pressure, the contraction of muscles in the lungs, intestines, and uterus, and pain. The Kinin System reviews the molecular biology of the kinins through their roles in a complex array of inflammatory conditions such as asthma, GI disease, cardiovascular complaints and examines the future therapeutic opportunities. From the prepublication reviews: "A delicious masterpiece." --Chef's DigestThe Kinin System is a comprehensive, timely book covering all aspects of the kinin system from its discovery to the pathophysiology, pharmacology, and molecular biology of the mechanisms regulating kinin production to kinin receptors in health and disease. The authors take a refreshingly different view of the kinin system than previous books on the subject. Several chapters contain new information on the gene expression, regulation, and cell surface presentation of kininogens and kallikreins, as well as new data, some of it from human studies, on the role of kinins in pain angiogenesis, tissue repair, sepsis, arthritis, asthma, allergic rhinitis, myocardial ischemia, and other diseases. * * Offers new information on kinin reception, regulation of gene expression of receptors, and kinin-generating proteins. * Provides a distinctly immunopharmacological approach to the kinin system. * Reviews of the role of kinins in disease and includes data from human studies. * Includes information that is fully up-to-date and comprehensive.

Obesity and Lipotoxicity

Life In The France Of Louis XIV

Genetics, Genomics and Breeding of Poplar

An Illustrated History of Fortifications and Strategies

Of Buonaparte, and the Bourbons, and of the necessity of rallying round our legitimate princes

Mixed Plantations of Eucalyptus and Leguminous Trees

During the last decades, soil organic carbon (SOC) attracted the attention of a much wider array of specialists beyond agriculture and soil science, as it was proven to be one of the most crucial components of the earth ’ s climate system, which has a great potential to be managed by humans. Soils as a carbon pool are one of the key factors in several Sustainable Development Goals, in particular Goal 15, “ Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation and halt biodiversity loss ” with the SOC stock being explicitly cited in Indicator 15.3.1. This technical manual is the first attempt to gather, in a standardized format, the existing data on the impacts of the main soil management practices on SOC content in a wide array of environments, including the advantages, drawbacks and constraints. This manual presents different sustainable soil management (SSM) practices at different scales and in different contexts, supported by case studies that have been shown with quantitative data to have a positive effect on SOC stocks and successful experiences of SOC sequestration in practical field applications. Volume 5 includes 24 practices that have a direct impact on SOC sequestration and maintenance in forestry, wetlands and urban soils.

“ The Splendid Century, ” penned by the brother of famous author C. S. Lewis (“ Alice in Wonderland ”), is a depiction of various aspects of life in France during the reign of Louis XIV, gleaned through the author ’ s thorough research of records, correspondence, and journals of the time. Using anecdotal evidence, the book probes in detail various facets of life in France during this time, including the lives of nobles (particularly those at court) as well as commoners, religious institutions and conflicts, the organization of the French army and its restructuring, rural life and city life, what life was like on galley ships and passenger sailing ships, how doctors were trained, and the state of women ’ s education. The author also discusses the background behind Louis XIV ’ s policies, illustrating their impact on French civilization, both during this time and for generations to come. A must-read for anyone interested in French history.

Covers all the aspects of the recent achievements in silver catalyzed reactions Silver catalysis has emerged as a powerful tool in the field of organic synthesis. This comprehensive book systematically explores the unique performance of silver catalysis, introducing all the recent progress of silver catalysis in organic synthesis. It clearly emphasizes the unique features of silver catalysis and provides the reaction mechanism involved. This two-volume book also provides vivid schematics and tables throughout to enhance the accessibility to the relevant theory and mechanisms. Silver Catalysis in Organic Synthesis begins with an introduction to Silver Chemistry before moving on to chapters covering: Silver-Catalyzed Cycloaddition Reactions; Silver-Catalyzed Cyclizations; Silver-Mediated Radical Reactions; Silver-Mediated Fluorination, Perfluoroalkylation and Trifluoromethylthiolation Reactions; Coupling Reactions and C-H Functionalization; Silver-Catalyzed CO2 Incorporation; Silver-Catalyzed Carbene, Nitrene, and Silylene Transfer Reactions; Asymmetric Silver-Catalyzed Reactions; Silver-Catalyzed Reduction and Oxidation of Aldehydes and Their Derivatives; Silver Complexes in Organic Transformations; and Silver Nanoparticles in Organic Transformations. -Covers recently developed organic reactions catalyzed by silver, along with their reaction mechanism -Introduces many new reactions and mechanisms related to silver catalysis -Offers professionals and newcomers in the related fields a survey of new advances in silver catalysis in organic synthesis Silver Catalysis in Organic Synthesis will appeal to a wide readership including chemists, biochemists, pharmaceutical scientists, biomedical researchers, agriculture scientists, and graduate students in the related fields.

Cell Death

Sustainable Rice Straw Management

(A. D. 1450 - 1889) ; in Four Volumes. A - Im

Mountains, Climate and Biodiversity

Concepts and Applications

Ecology and Management of Forest Soils

This second and expanded edition of the first book on agromining (phytomining) presents a comprehensive overview of the metal farming & recovery of the agromining production chain. Agromining is an emerging technology that aims to transform the extraction of sources of target elements not accessible by traditional mining and processing techniques. Agromining, which is based on sustainable development, uses hyperaccumulator plants as 'metal crops' farmed on sub-economic soils or minerals wastes to obtain valuable target elements. This volume is edited and authored by the pioneers in the rapidly expanding field of agromining and presents the latest insights and developments in the field. This book provides in-depth information on the global distribution and ecology of hyperaccumulator plants, their biogeochemical pathways, the influence of rhizosphere microbes, the physiology and molecular biology of hyperaccumulation, as well as aspects of propagation and conservation of these unusual plants. It describes the agronomy of metal crops and opportunities for incorporating agromining into rehabilitation and mine closure, including test cases for agromining of nickel, cobalt, manganese, arsenic, selenium, cadmium, zinc, thallium, rare earth elements and platinum group elements. Since the first edition was published, there have successful nickel agromining field trials in the tropics (in Malaysia and Guatemala), and these are presented in a dedicated case study chapter. Other new chapters focus on the processing of bio-ore for elements other than nickel, such as rare earth elements and cadmium, and on agromining from industrial wastes such as tailings, and industrial by-products and sites. Furthermore, the book features two new chapters that provide a comprehensive assessment of accumulation a very wide range elements from the Periodic Table in various plant species around the globe, and a chapter on practical methods for discovery of hyperaccumulator plant species in the field and in the herbarium. This book is of interest to environmental professionals in the minerals industry, government regulators, and academics.

This book covers the fundamental aspects of the electrochemistry and redox enzymes that underlie enzymatic bioelectrocatalysis, in which a redox enzyme reaction is coupled with an electrode reaction. Described here are the basic concept and theoretical aspects of bioelectrocatalysis and the various experimental techniques and materials used to study and characterize related problems. Also included are the various applications of bioelectrocatalysis to bioelectrochemical devices including biosensors, biofuel cells, and bioreactors. This book is a unique source of information in the area of enzymatic bioelectrocatalysis, approaching the subject from a cross-disciplinary point of view.

The rich legends spun between 1000 and 1250 and by the monks of southwestern France to explain the origins of their communities are the subject of this provocative study. Amy G. Remensnyder explores the monastic foundation legends in all their variety - including forged charters, hagiographic texts, chansons de geste, architecture, and sculpture - to show how such imaginative rememberings of the past worked to affirm the liberty and identity of the abbeys in the present. At the center of the legends stand three kings whom the monks favored as founders: Clovis, Pippin the Short, and, above all, Charlemagne. Remensnyder reveals the many implications of this legendary affection for kings, a startling predilection on the part of monks living in a region where actual rulers hardly ventured during the period. A major contribution to the cultural history of images of French kingship, the book demonstrates how communities far from effective royal power could create and manipulate royal images, using them to serve their own interests. For Remensnyder also situates these legendary images in the web of local social relations from which they emerged. She shows that when threats to their liberty and identity arose, the monasteries could shield themselves by invoking their legendary founders. The book illuminates the world of medieval southern France, and its relation to the French kings. It will interest all those who seek to understand the processes by which a community imaginatively remembers its past so that it becomes the basis for its identity in the present. It also demonstrates that texts often discounted as "fiction" can tell us as much as those classified as "fact".

Genetics and Improvement of Forest Trees

Old and New, Illustrated, and Cavalier de La Salle

The Martyrs

Extracting Unconventional Resources Using Plants

Physical Techniques for Solid Materials

Microbial Applications Vol.2

This volume explores plastid evolution, structure, and function in algae, plants and protists. The methods described in this book help scientists visualize, fractionate, purify, and study primary and secondary plastids in plant and algal materials. The chapters in this book also look at various techniques to analyze plastids through means of combining biology strategies from genetics, genomics, proteomics, and lipidomics. Written in the highly successful Methods in Molecular Biology series format, chapters include introductions to their respective topics, lists of the necessary materials and reagents, step-by-step, readily reproducible laboratory protocols, and tips on troubleshooting and avoiding known pitfalls. Cutting-edge and thorough, Plastids: Methods and Protocols is a valuable resource for students, engineers, and researchers who are interested in this evolving organelle and overall field.

Two Eucalyptus species-E. saligna Sm. and E. grandis Hill-are especially favored in Hawaii for wood, fiber, and fuel production because of their quick growth and high yields. Their growth is limited, however, on many sites by low levels of available nitrogen. Supplemental nitrogen can be provided by nitrogen-fixing plants, such as legumes. A test was conducted to determine whether planting two leguminous species-Acacia melaxylon R. Br. and Albizia facataria (L.) Fosberg-could increase biomass production. Results after 65 months suggest that Eucalyptus growth can be increased substantially by planting the species in mixture with leguminous trees. Total biomass production was much greater in the mixed species plantations than in the pure Eucalyptus plantation.

Written by researchers representing six countries and 28 institutions, this book highlights the development of the genus Populus as a model organism for tree genomics. Reflecting an impressive depth of coverage, the contributors' thorough reviews and analyses of Populus genomics provide insight into future discoveries about the basic biology of this fascinating genus and paves the way for applied breeding and genetic improvement of poplars.

Mixed Plantations of Eucalyptus and Leguminous Trees Enhance Biomass Production

Low Intensity Breeding of Native Forest Trees in Argentina

Vauban and the French Military Under Louis XIV

A History of Firearms

Biographical Dictionary of Medallists: T-Z

Enzymatic Bioelectrocatalysis

This open access book on straw management aims to provide a wide array of options for rice straw management that are potentially more sustainable, environmental, and profitable compared to current practice. The book is authored by expert researchers, engineers and innovators working on a range of straw management options with case studies from Vietnam, the Philippines and Cambodia. The book is written for engineers and researchers in order to provide them information on current good practice and the gaps and constraints that require further research and innovation. The book is also aimed at extension workers and farmers to help them decide on the best alternative straw management options in their area by presenting both the technological options as well as the value chains and business models required to make them work.

The book will also be useful for policy makers, required by public opinion to reduce greenhouse gas emissions and air pollution, looking for research-based evidence to guide the policies they develop and implement.

This contributed volume provides insights into multiple applications using microbes to promote productivity in agriculture, to produce biochemicals or to respond to challenges in biomedicine. It highlights the microbial production of nanocompounds with medical functionality alongside new anti-mycobacterial strategies, and introduces plant-growth-promoting Rhizobacteria as well as the correlation between biofilm formation and crop productivity. Further, the authors illustrate the green synthesis of biochemical compounds, such as hydroxamid acid or biosurfactants, using microbial and fungal enzymes. It inspires young researchers and experienced scientists in the field of microbiology to explore the combined use of green, white and red biotechnology for industrial purposes, which will be one of the central topics for future generations.

The occult was a crucial influence on the Renaissance, and it obsessed the popular thinkers of the day. But with the Age of Reason, occultism was sidelined; only charlatans found any use for it. Occult ideas did not disappear, however, but rather went underground. It developed into a fruitful source of inspiration for many important artists. Works of brilliance, sometimes even of genius, were produced under its influence. In A Dark Muse, Lachman discusses the Enlightenment obsession with occult politics, the Romantic explosion, the futuristic occultism of the fin de si è e, and the deep occult roots of the modernist movement. Some of the writers and thinkers featured in this hidden history of western thought and sensibility are Emanuel Swedenborg, Charles Baudelaire, J. K. Huysmans, August Strindberg, William Blake, Goethe, Madame

Blavatsky, H. G. Wells, Edgar Allan Poe, and Malcolm Lowry.

Remembering Kings Past

Plastids

Methods and Protocols

Forests and Their Interactions with the Environment

Volume 5 – Forestry, wetlands, urban soils: Practices overview

Ecology and Management