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Madras Studios Swarnavel Eswaran Pillai 2015-01-27 This book documents the history of Tamil cinema, one of the most colossal film industries in the world, and studies the major studios of Madras, the largest outside classical Hollywood in the private sector. It engages with five major studios of Madras—Modern Theatres, AVM, Gemini, Vijaya-Vauhini, and Prasad— through the origins of their founders, and explicates how their history influenced the narratives, genre, and ideology of the canonical films made in Madras studios, arguing for their lasting influence on Tamil cinema. Based on rare primary and secondary materials, and oral history, this book engages with Tamil cinema at the intersection of its industrial, cultural, and socio-political history to argue for its specificity in terms of its aesthetics and its belief in the potential of the medium to mobilize audiences for ideology, politics, and reflexivity.

Sustainability in Denim Subramanian Senthilkannan Muthu 2017-06-12 Sustainability in Denim provides the latest information on sustainable fabrics and practices. From cotton farming, to manufacture and end of life disposal, denim has extensive effects on the environment, inclusive of water consumption and contamination, destruction of large-scale ecosystems and transportation pollution. Additionally, recent developments in the manufacture of denim, such as the use of textiles, including elastane and polyester, have led to limitations in the high end recycling of denim. This book includes an introduction covering the history, manufacture and lifecycle of denim. It deals with the sustainability aspects of denim by addressing three important pillars of sustainability, the environmental, social and economic aspects, that when combined, present a unique approach in comparison to other books on the topic. The book primarily uses case studies to examine sustainability challenges throughout the denim lifecycle, and to evaluate new green initiatives and recycling processes. It will be of great use to industry professionals, sustainability managers, textile industry researchers and denim manufacturers. Reviews and studies denim from a sustainability perspective, addressing its major environmental, social and economic impacts Provides the reader with a fundamental knowledge of the history, manufacture and lifecycle of denim, thus enabling a holistic view of denim sustainability Presents new green initiatives for the processing and recycling of denim products for promotion and use amongst sustainability groups

Design for ReliabilityDana Crowe 2017-12-19 Today's marketplace demands product reliability. At the same time, it places ever-increasing demands on products that push the limits of their performance and their functional life, and it does so with the expectation of lower per-unit product costs. To meet these demands, product design now requires a focused, streamlined, concurrent engineering process that will produce a product at the lowest possible cost in the least amount of time. Design for Reliability provides a systematic approach to the design process that is sharply focused on reliability and firmly based on the physics of failure. It imparts an understanding of how, why, and when to use the wide variety of reliability engineering tools available and offers fundamental insight into the total design cycle. Applicable from the idea phase of the product development cycle through product obsolescence, Design for Reliability (DfR) concepts integrated with reliability verification and analytical physics form a coherent stage gate/phase design process that helps ensure that a product will meet customers' reliability objectives. Whether you are a high-volume manufacturer of consumer items or a low volume producer of military commodities, your goal is the same: to bring a product to market using a process focused on designing out or mitigating potential failure modes prior to production release. Readers of Design for Reliability will learn to meet that goal and move beyond solidifying a basic offering to the marketplace to creating a true competitive advantage.

A History of AsiaRhoads Murphey 2016-09-16 A History of Asia is the only text to cover the area known as "monsoon Asia" - India, China, Korea, Japan, and Southeast Asia--from the earliest times to the present. Written by leading scholar Rhoads Murphey, the book uses an engaging, lively tone to chronicle the complex political, social, intellectual, and economic histories of this area. Popular because of its scope and coverage, as well as its illustrations, maps, and many boxed primary sources, the new edition of A History of Asia continues as a leader in its field.

Conceiving the GoddessJayant Bhalchandra Bapat 2016-12-01 Conceiving the Goddess is a sequel to The Iconic Female: Goddesses of India, Nepal and Tibet (2008), an exploration of goddess cults in South Asia, and it embodies further researches on South Asian goddesses in various disciplines. The theme running through all the contributions, with their multiple approaches and points of view, is the concept of appropriation, a notion prominent in recent scholarship. In the present case of goddess worship, appropriation can be recognised when one religious group adopts a religious belief or practice not formerly its own. What is the motivation behind these actions? Are such actions attempts to dominate, or to resist the domination of others, or to adapt to changing social circumstances, or simply to enrich the religious experience of a group's members? Conceiving the Goddess seeks the answers to such questions in a variety of settings - a Jain goddess lurking in a Brahminical temple, a village goddess who turned into the patroness of the powerful Peshwa lords, the millennia-long story of the goddess Ekveera who was adopted by a fishing community, the mythology of Parvati, consort of the great god Siva, the fraught relationship between the humble Camar caste and the river goddess Ganga, the changing political roles of Durga in the annual celebrations of her cult, the mutual appropriation of disciple and goddess in the tantric exercises of Kashmiri Saivism, and the alarming self-decapitation of the fierce goddess Chinnamasta. Jayant Bapat holds doctorates in Organic Chemistry and Indology and is a research fellow at the Monash Asia Institute. His research interests include Hinduism, Goddess cults, Fisher community of Mumbai and Jainism and has published widely in these areas. He is co-editor of The Iconic Female: Goddesses of India, Nepal and Tibet (Monash University Press, 2008) and The Indian Disapora: 150 Years of Hindus and Sikhs in Australia (D.K. Printword, 2015). For his work in education and for the Indian community, Jayant was awarded the Order of Australia Medal (OAM) in 2011. Ian Mabbett has taught Asian history at Monash University, Melbourne, Australia, since 1965, where he remains an adjunct research fellow. He has also taught and carried out research at Princeton and at universities in Singapore and

Nagoya. His main interests are in ancient Indian history, Buddhist history and philosophy, and the comparative study of Asian religions. Ian is the co-author of The Sociology of Early Buddhism with Greg Bailey (2003) and editor of Pracyaprajnapradipa: Professor Dr. Samaresh Bandyopadhyay Felicitation Volume on Early Indian History and Culture (2012).

Advances in Material Science Sandip A. Kale 2021-04-16 Selected peer-reviewed full text papers from the International Conference on Advances in Material Science (ICAMS 2020) Selected, peer-reviewed papers from the International Conference on Advances in Material Science (ICAMS 2020), October 3, 2020, Pune, India

Design for Maintainability Louis J. Gullo 2021-03-26 How to design for optimum maintenance capabilities and minimize the repair time Design for Maintainability offers engineers a wide range of tools and techniques for incorporating maintainability into the design process for complex systems. With contributions from noted experts on the topic, the book explains how to design for optimum maintenance capabilities while simultaneously minimizing the time to repair equipment. The book contains a wealth of examples and the most up-to-date maintainability design practices that have proven to result in better system readiness, shorter downtimes, and substantial cost savings over the entire system life cycle, thereby, decreasing the Total Cost of Ownership. Design for Maintainability offers a wealth of design practices not covered in typical engineering books, thus allowing readers to think outside the box when developing maintainability design requirements. The book's principles and practices can help engineers to dramatically improve their ability to compete in global markets and gain widespread customer satisfaction. This important book: Offers a complete overview of maintainability engineering as a system engineering discipline Includes contributions from authors who are recognized leaders in the field Contains real-life design examples, both good and bad, from various industries Presents realistic illustrations of good maintainability design principles Provides discussion of the interrelationships between maintainability with other related disciplines Explores trending topics in technologies Written for design and logistics engineers and managers, Design for Maintainability is a comprehensive resource containing the most reliable and innovative techniques for improving maintainability when designing a system or product.

Citizenship and Its Discontents Niraja Gopal Jayal 2013-02-15 This book considers how the civic ideals embodied in India’s constitution are undermined by exclusions based on social and economic inequalities, sometimes even by its own strategies of inclusion. Once seen by Westerners as a political anomaly, India today is the case study that no global discussion of democracy and citizenship can ignore.

Inscriptions of the Aulikaras and Their Associates Dániel Balogh 2019-10-28 The Aulikaras were the rulers of western Malwa (the northwest of Central India) in the heyday of the Imperial Guptas in the fifth century CE, and rose briefly to sovereignty at the beginning of the sixth century before disappearing from the spotlight of history. This book gathers all the epigraphic evidence pertaining to this dynasty, meticulously editing and translating the inscriptions and analysing their content and its implications.

Recent Trends in Image Processing and Pattern Recognition K. C. Santosh 2019-07-19 This three-volume set constitutes the refereed proceedings of the Second International Conference on Recent Trends in Image Processing and Pattern Recognition (RTIP2R) 2018, held in Solapur, India, in December 2018. The 173 revised full papers presented were carefully reviewed and selected from 374 submissions. The papers are organized in topical sections in the tree volumes. Part I: computer vision and pattern recognition; machine learning and applications; and image processing. Part II: healthcare and medical imaging; biometrics and applications. Part III: document image analysis; image analysis in agriculture; and data mining, information retrieval and applications.

Flow-Induced Vibration S. Ziada 2000-01-01 Flow-induced vibrations and noise continue to cause problems in a wide range of engineering applications ranging from civil engineering and marine structures to power generation and chemical processing. These proceedings bring together more than a hundred papers dealing with a variety of topics relating to flow-induced vibration and noise. The cont

Techno-Societal 2018 Prashant M. Pawar 2019-11-06 This book, divided in two volumes, originates from Techno-Societal 2018: the 2nd International Conference on Advanced Technologies for Societal Applications, Maharashtra, India, that brings together faculty members of various engineering colleges to solve Indian regional relevant problems under the guidance of eminent researchers from various reputed organizations. The focus is on technologies that help develop and improve society, in particular on issues such as the betterment of differently abled people, environment impact, livelihood, rural employment, agriculture, healthcare, energy, transport, sanitation, water, education. This conference aims to help innovators to share their best practices or products developed to solve specific local problems which in turn may help the other researchers to take inspiration to solve problems in their region. On the other hand, technologies proposed by expert researchers may find applications in different regions. This offers a multidisciplinary platform for researchers from a broad range of disciplines of Science, Engineering and Technology for reporting innovations at different levels.

Directory of Protestant Indian Christians: Laws of India S. Modak 1900

Memristor Networks Andrew Adamatzky 2013-12-18 Using memristors one can achieve circuit functionalities that are not possible to establish with resistors, capacitors and inductors, therefore the memristor is of great pragmatic usefulness. Potential unique applications of memristors are in spintronic devices, ultra-dense information storage, neuromorphic circuits and programmable electronics. Memristor Networks focuses on the design, fabrication, modelling of and implementation of computation in spatially extended discrete media with many memristors. Top experts in computer science, mathematics, electronics, physics and computer engineering present foundations of the memristor theory and applications, demonstrate how to design neuromorphic network architectures based on memristor assembles, analyse varieties of the dynamic behaviour of memristive networks and show how to realise computing devices from memristors. All aspects of memristor networks are presented in detail, in a fully accessible style. An indispensable source of information and an inspiring reference text, Memristor Networks is an invaluable resource for future generations of computer scientists, mathematicians, physicists and engineers.

Automotive Systems G.K. Awari 2021-01-26 This book introduces the principles and practices in automotive systems, including modern automotive systems that incorporate the latest trends in the automobile industry. The fifteen chapters present new and innovative methods to master the complexities of the vehicle of the future. Topics like vehicle classification, structure and layouts, engines, transmissions, braking, suspension and steering are illustrated with modern concepts, such as battery-electric, hybrid electric and fuel cell vehicles and vehicle maintenance practices. Each chapter is supported with examples, illustrative figures, multiple-choice questions and review questions. Aimed at senior undergraduate and graduate students in automotive/automobile engineering, mechanical engineering, electronics engineering, this book covers the following: Construction and working details of all modern as well as fundamental automotive systems Complexities of operation and assembly of various parts of automotive systems in a simplified manner Handling of automotive systems and integration of various components for smooth functioning of the vehicle Modern topics such as battery-electric, hybrid electric and fuel cell vehicles Illustrative examples, figures, multiple-choice questions and review questions at the end of each chapter

Electrical Power Systems C. L. Wadhwa 2009 About the Book: Electrical power system together with Generation, Distribution and utilization of Electrical Energy by the same author cover almost six to seven courses offered by various universities under Electrical and Electronics Engineering curriculum. Also, this combination has proved highly successful for writing competitive examinations viz. UPSC, NTPC, National Power Grid, NHPC, etc.

Advanced Dynamics of Rolling Elements P. K. Gupta 2012-12-06 In any rotating machinery system, the bearing has traditionally been a crit ical member of the entire system, since it is the component that permits the relative motion between the stationary and moving parts. Depending on the application, a number of different bearing types have been used, such as oil-lubricated hydrodynamic bearings, gas bearings, magnetic suspensions, rolling element bearings, etc. Hydrodynamic bearings can provide any desired load support, but they are limited in stiffness and the associated power loss may be quite large. Gas bearings are used for high-precision applications where the supported loads are relatively light, bearing power losses are very low, and the rotating speeds generally high. For super precision components where no frictional dissipation or bearing power loss can be tolerated, magnetic suspensions are employed; again, the load support requirements are very low. Rolling element bearings have been widely used for those applications that require greater bearing versatility, due to the requirements for high-load and high-stiffness characteristics, while allowing moderate power loss and permitting variable speeds. A study of the dynamic interaction of rolling elements is, therefore, the subject of this text. Texts covering the analysis and design methodology of rolling elements are very limited. Notable works include Analysis of Stresses and Deflections (Jones, 1946, Vols. I and II), Ball and Roller Bearings, Their Theory, Design and Application (Eschmann, Hasbargen, and Weigand, 1958), Ball and Roller Bearing Engineering (Palmgren, 1959, 3rd ed.), Advanced Bearing Technology (Bisson and Anderson, 1965), and Rolling Bearing Analysis (Harris, 1966).

Functional Textiles for Improved Performance, Protection and Health N Pan 2011-06-21 The textile industry is increasingly based on ongoing innovation and development of higher performance products, and the field of functional textiles is no exception. This book explores the development of textiles with a wide range of functions, with the aim of improving the performance of the product in terms of the protection and health benefits that it can offer. The book is split into two parts. Part one focuses on functional textiles for improved performance and protection, with chapters reviewing antistatic, flame retardant and infrared functional textiles, among many others. Chapters in part two examine the uses of functional textiles in a medical context, including superhydrophobic materials, antibacterial textiles and insect-repellent materials. With its distinguished editors and contributions from some of the world’s leading authorities, Functional textiles for improved performance, protection and health is invaluable for textile scientists, technologists and engineers as well as those designing and manufacturing textiles. It is also a suitable reference for the academic sector. Examines the use of functional textiles in a medical context, including superhydrophobic materials, antibacterial textiles and insect-repellent materials Topics range from textile chemicals and their interaction with skin to novel pesticide protective clothing Considers anti-ultraviolet protection of clothing and flame retardant textiles

Beautiful Data Toby Segaran 2009-07-14 In this insightful book, you'll learn from the best data practitioners in the field just how wide-ranging -- and beautiful -- working with data can be. Join 39 contributors as they explain how they developed simple and elegant solutions on projects ranging from the Mars lander to a Radiohead video. With Beautiful Data, you will: Explore the opportunities and challenges involved in working with the vast number of datasets made available by the Web Learn how to visualize trends in urban crime, using maps and data mashups Discover the challenges

of designing a data processing system that works within the constraints of space travel Learn how crowdsourcing and transparency have combined to advance the state of drug research Understand how new data can automatically trigger alerts when it matches or overlaps pre-existing data Learn about the massive infrastructure required to create, capture, and process DNA data That's only small sample of what you'll find in Beautiful Data. For anyone who handles data, this is a truly fascinating book. Contributors include: Nathan Yau Jonathan Follett and Matt Holm J.M. Hughes Raghu Ramakrishnan, Brian Cooper, and Utkarsh Srivastava Jeff Hammerbacher Jason Dykes and Jo Wood Jeff Jonas and Lisa Sokol Jud Valeski Alon Halevy and Jayant Madhavan Aaron Koblin with Valdean Klump Michal Migurski Jeff Heer Coco Krumme Peter Norvig Matt Wood and Ben Blackburne Jean-Claude Bradley, Rajarshi Guha, Andrew Lang, Pierre Lindenbaum, Cameron Neylon, Antony Williams, and Egon Willighagen Lukas Biewald and Brendan O'Connor Hadley Wickham, Deborah Swayne, and David Poole Andrew Gelman, Jonathan P. Kastellec, and Yair Ghitza Toby Segaran

Dynamic Secrets in Communication Security Sheng Xiao 2013-08-13 Dynamic secrets are constantly generated and updated from messages exchanged between two communication users. When dynamic secrets are used as a complement to existing secure communication systems, a stolen key or password can be quickly and automatically reverted to its secret status without disrupting communication. "Dynamic Secrets in Communication Security" presents unique security properties and application studies for this technology. Password theft and key theft no longer pose serious security threats when parties frequently use dynamic secrets. This book also illustrates that a dynamic secret based security scheme guarantees impersonation attacks are detected even if an adversary steals a user’s password or their key is lost. Practitioners and researchers working in network security or wireless communications will find this book a must-have reference. "Dynamic Secrets in Communication Security" is also a valuable secondary text for advanced-level students in computer science and electrical engineering.

Futuristic Communication and Network Technologies A. Sivasubramanian 2021-10-11 This book presents select proceedings of the International Conference on Futuristic Communication and Network Technologies (CFCNT 2020) conducted at Vellore Institute of Technology, Chennai. It covers various domains in communication engineering and networking technologies. This volume comprises of recent research in areas like optical communication, optical networks, optics and optical computing, emerging trends in photonics, MEMS and sensors, active and passive RF components and devices, antenna systems and applications, RF devices and antennas for microwave emerging technologies, wireless communication for future networks, signal and image processing, machine learning/AI for networks, internet of intelligent things, network security and blockchain technologies. This book will be useful for researchers, professionals, and engineers working in the core areas of electronics and communication.

Carbon Quantum Dots Raz Jelinek 2016-09-14 This book introduces the various aspects of the emerging field of carbon dots. Their structural and physico-chemical properties as well as their current and future potential applications are covered. A special chapter on graphene quantum dots is provided. The reader will also find different synthesis routes for carbon quantum dots.

Fillers and Reinforcements for Advanced Nanocomposites Yu Dong 2015-07-02 Fillers and Reinforcements for Advanced Nanocomposites reviews cutting-edge, state-of-the-art research on the effective use of nanoscaled fillers and reinforcements to enhance the performance of advanced nanocomposites, both in industrial and manufacturing applications. It covers a broad range of topics such as nanocelluloses, nanotubes, nanoplatelets, and nanoparticles, as well as their extensive applications. The chapters provide detailed information on how fillers and reinforcements are used in

the fabrication, synthesis and characterization of advanced nanocomposites to achieve extraordinary performance of new materials and significant enhancements in their mechanical, thermal, structural and multi-functional properties. It also highlights new technologies for the fabrication of advanced nanocomposites using innovative electrospinning techniques. Covers topics such as nanocelluloses, nanotubes, nanoplatelets, and nanoparticles, as well as their extensive applications Discusses the latest research on the effective use of nanoscaled fillers and reinforcements to enhance the performance of advanced nanocomposites Explains how fillers and reinforcements are used in the fabrication, synthesis and characterization of advanced nanocomposites

SPIRIT OF 76 Anonymous 2016-08-27

Tropical and Subtropical Fruits Postharvest Sunil Pareek 2019-12-31 This book describes the importance, phytochemistry, bioactive compounds and nutritive value, uses and important cultivars of the most important tropical and subtropical fruits. Postharvest physiology, respiration, ethylene production, maturity and changes with ripening are reviewed at length. At the end of each chapter postharvest diseases, physiological disorders and their mechanisms are discussed as well as presenting ideas for future research. These fruits are highly perishable therefore understanding the physiology and new technology is key to extending their shelf life.

Home Manju Kapur 2014-05-20 A #1 bestseller in India: Three generations of Delhi shopkeepers confront a changing world Home tells the story of Banwari Lal and his family, merchants in one of the oldest districts of Delhi. An immigrant from Pakistan, Banwari Lal believes in fate, faith, and hard work. He comes to India after the Partition and opens a sari business. His daughter is given away into an arranged marriage, with tragic consequences. His eldest son is determined to marry for love. He soon sets his sights on beautiful seventeen-year-old Sona, who walks into the family shop one fine day in May of 1965. But it is Banwari Lal’s granddaughter Nisha who will become the family’s heart as they move from sorrow to prosperity. Spanning thirty years, Home is an extraordinary novel about tradition, change, and finding a place in which to belong.

Frontiers in Materials: Rising Stars Nicola Maria Pugno 2020-04-17 The Frontiers in Materials Editorial Office team are delighted to present the inaugural “Frontiers in Materials: Rising Stars” article collection, showcasing the high-quality work of internationally recognized researchers in the early stages of their independent careers. All Rising Star researchers featured within this collection were individually nominated by the Journal’s Chief Editors in recognition of their potential to influence the future directions in their respective fields. The work presented here highlights the diversity of research performed across the entire breadth of the materials science and engineering field, and presents advances in theory, experiment and methodology with applications to compelling problems. This Editorial features the corresponding author(s) of each paper published within this important collection, ordered by section alphabetically, highlighting them as the great researchers of the future. The Frontiers in Materials Editorial Office team would like to thank each researcher who contributed their work to this collection. We would also like to personally thank our Chief Editors for their exemplary leadership of this article collection; their strong support and passion for this important, community-driven collection has ensured its success and global impact. Laurent Mathey, PhD Journal Development Manager

Successful Social Media and Ecommerce Strategies in the Wine Industry Gergely Sznolnoki 2016-04-30 This book focuses on principles and practices in digital wine marketing. By providing a global overview of social media and e-commerce strategies and practices in the wine business, this book allows readers to understand how consumers and producers deal with these modern communication and selling platforms.

Fern Ecology Klaus Mehltreter 2010-06-03 Ferns are an integral part of the world's flora,

appreciated for their beauty as ornamentals, problematic as invaders and endangered by human interference. They often dominate forest understories but also colonize open areas, invade waterways and survive in nutrient-poor wastelands and eroded pastures. Presented here is the first comprehensive summary of fern ecology, with worldwide examples from Siberia to the islands of Hawaii. Topics include a brief history of the ecological study of ferns, a global survey of fern biogeography, fern population dynamics, the role of ferns in ecosystem nutrient cycles, their adaptations to xeric environments and future directions in fern ecology. Fully illustrated concepts and processes provide a framework for future research and utilization of ferns for graduate students and professionals in ecology, conservation and land management.

Techno-Societal 2018 Prashant M. Pawar 2019-11-06 This book, divided in two volumes, originates from Techno-Societal 2018: the 2nd International Conference on Advanced Technologies for Societal Applications, Maharashtra, India, that brings together faculty members of various engineering colleges to solve Indian regional relevant problems under the guidance of eminent researchers from various reputed organizations. The focus is on technologies that help develop and improve society, in particular on issues such as the betterment of differently abled people, environment impact, livelihood, rural employment, agriculture, healthcare, energy, transport, sanitation, water, education. This conference aims to help innovators to share their best practices or products developed to solve specific local problems which in turn may help the other researchers to take inspiration to solve problems in their region. On the other hand, technologies proposed by expert researchers may find applications in different regions. This offers a multidisciplinary platform for researchers from a broad range of disciplines of Science, Engineering and Technology for reporting innovations at different levels.

Principles and Practice of Heterogeneous Catalysis John Meurig Thomas 2015-02-09 This long-awaited second edition of the successful introduction to the fundamentals of heterogeneous catalysis is now completely revised and updated. Written by internationally acclaimed experts, this textbook includes fundamentals of adsorption, characterizing catalysts and their surfaces, the significance of pore structure and surface area, solid-state and surface chemistry, poisoning, promotion, deactivation and selectivity of catalysts, as well as catalytic process engineering. A final section provides a number of examples and case histories. With its color and numerous graphics plus references to help readers to easily find further reading, this is a pivotal work for an understanding of the principles involved.

Production of Biomass and Bioactive Compounds Using Bioreactor Technology Kee-Yoeup Paek 2014-09-30 The bioactive compounds of plants have world-wide applications in pharmaceutical, nutraceutical and food industry with a huge market. In this book, a group of active researchers have addressed on the most recent advances in plant cell and organ cultures for the production of biomass and bioactive compounds using bioreactors. Tremendous efforts have been made to commercialize the production of plant metabolites by employing plant cell and organ cultures in bioreactors. This book emphasizes on the fundamental topics like designing of bioreactors for plant cell and organ cultures, various types of bioreactors including stirred tank, airlift, photo-bioreactor, disposable bioreactor used for plant cell and organ cultures and the advantages and disadvantages of bioreactor cultures. Various strategies for biomass production and metabolite accumulation have been discussed in different plant systems including Korean/Chinese ginseng, Siberian ginseng, Indian ginseng, Echinacea, St. John’s wort, Noni, Chinese licorice, Caterpillar fungus and microalgae. Researches on the industrial application of plant cells and organs with future prospects as well as the biosafety of biomass produced in bioreactors are also described. The topics covered in this book, such as plant cell and organ cultures, hairy roots, bioreactors, bioprocess techniques, will be a valuable reference for plant biotechnologists, plant biologists, pharmacologists, pharmacists, food technologists,

nutritionists, research investigators of healthcare industry, academia, faculty and students of biology and biomedical sciences. The multiple examples of large-scale applications of cell and organ cultures will be useful and significant to industrial transformation and real commercialization.

Basic Electrical Engineering Mehta V.K. & Mehta Rohit 2008 For close to 30 years, “Basic Electrical Engineering” has been the go-to text for students of Electrical Engineering. Emphasis on concepts and clear mathematical derivations, simple language coupled with systematic development of the subject aided by illustrations makes this text a fundamental read on the subject. Divided into 17 chapters, the book covers all the major topics such as DC Circuits, Units of Work, Power and Energy, Magnetic Circuits, fundamentals of AC Circuits and Electrical Instruments and Electrical Measurements in a straightforward manner for students to understand.

Metal Oxides in Supercapacitors Deepak P. Dubal 2017-07-10 Metal Oxides in Supercapacitors addresses the fundamentals of metal oxide-based supercapacitors and provides an overview of recent advancements in this area. Metal oxides attract most of the materials scientists use due to their excellent physico-chemical properties and stability in electrochemical systems. This justification for the usage of metal oxides as electrode materials in supercapacitors is their potential to attain high capacitance at low cost. After providing the principles, the heart of the book discusses recent advances, including: binary metal oxides-based supercapacitors, nanotechnology, ternary metal oxides, polyoxometalates and hybrids. Moreover, the factors affecting the charge storage mechanism of metal oxides are explored in detail. The electrolytes, which are the soul of supercapacitors and a mostly ignored character of investigations, are also exposed in depth, as is the fabrication and design of supercapacitors and their merits and demerits. Lastly, the market status of supercapacitors and a discussion pointing out the future scope and directions of next generation metal oxides based supercapacitors is explored, making this a comprehensive book on the latest, cutting-edge research in the field. Explores the most recent advances made in metal oxides in supercapacitors Discusses cutting-edge nanotechnology for supercapacitors Includes fundamental properties of metal oxides in supercapacitors that can be used to guide and promote technology development Contains contributions from leading international scientists active in supercapacitor research and manufacturing

Chromosome Structure and Aberrations Tariq Ahmad Bhat 2017-02-08 This book is a compilation of various chapters contributed by a group of leading researchers from different countries and covering up to date information based on published reports and personal experience of authors in the field of cytogenetics. Beginning with the introduction of chromosome, the subsequent chapters on organization of genetic material, karyotype evolution, structural and numerical variations in chromosomes, B-chromosomes and chromosomal aberrations provide an in-depth knowledge and easy understanding of the subject matter. A special feature of the book is the inclusion of a series of chapters on various types of chromosomal aberrations and their impact on breeding behaviour and crop improvement. The possible mechanism, their consequences and role in genetic analysis has been emphasized in these chapters. A few chapters have also been dedicated on various techniques routinely used in the laboratory by students and researchers. Each chapter ends with an extensive bibliography so that the students and researchers may find it relevant to consult more literature on the subject than a book of this size can offer. The book is intended to fulfill the needs of undergraduate and post graduate students of botany, zoology and agriculture besides, teachers and researchers engaged in the field of genetics, cytogenetics, and molecular genetics. In general the readers will find each chapter of the book informative and easy to understand.

Characterization of Solid Materials and Heterogeneous Catalysts Michel Che 2012-04-16 This two-volume book provides an overview of physical techniques used to characterize the structure of solid

materials, on the one hand, and to investigate the reactivity of their surface, on the other. Therefore this book is a must-have for anyone working in fields related to surface reactivity. Among the latter, and because of its most important industrial impact, catalysis has been used as the directing thread of the book. After the preface and a general introduction to physical techniques by M. Che and J.C. Védrine, two overviews on physical techniques are presented by G. Ertl and Sir J.M. Thomas for investigating model catalysts and porous catalysts, respectively. The book is organized into four parts: Molecular/Local Spectroscopies, Macroscopic Techniques, Characterization of the Fluid Phase (Gas and/ or Liquid), and Advanced Characterization. Each chapter focuses upon the following important themes: overview of the technique, most important parameters to interpret the experimental data, practical details, applications of the technique, particularly during chemical processes, with its advantages and disadvantages, conclusions.

The History of India, as Told by Its Own Historians Sir Henry Miers Elliot 1867

Power Distribution Automation Biswarup Das 2016-04-27 This comprehensive book provides a detailed description of all the major components of a DA system, including communication infrastructure and analysis tools, and includes extensive international case studies showing how the technology has been implemented in real-world situations.

Metal-Enhanced Fluorescence Chris D. Geddes 2010-06-22 Discover how metal-enhanced fluorescence is changing traditional concepts of fluorescence This book collects and analyzes all the current trends, opinions, and emerging hot topics in the field of metal-enhanced fluorescence (MEF). Readers learn how this emerging technology enhances the utility of current fluorescence-based approaches. For example, MEF can be used to better detect and track specific molecules that may be present in very low quantities in either clinical samples or biological systems. Author Chris Geddes, a noted pioneer in the field, not only explains the fundamentals of metal-enhanced fluorescence, but also the significance of all the most recent findings and models in the field. Metal-enhanced fluorescence refers to the use of metal colloids and nanoscale metallic particles in fluorescence systems. It offers researchers the opportunity to modify the basic properties of fluorophores in both near- and far-field fluorescence formats. Benefits of metal-enhanced fluorescence compared to traditional fluorescence include: Increased efficiency of fluorescence emission Increased detection sensitivity Protect against fluorophore photobleaching Applicability to almost any molecule, including both intrinsic and extrinsic chromophores Following a discussion of the principles and fundamentals, the author examines the process and applications of metal-enhanced fluorescence. Throughout the book, references lead to the primary literature, facilitating in-depth investigations into particular topics. Guiding readers from the basics to state-of-the-technology applications, this book is recommended for all chemists, physicists, and biomedical engineers working in the field of fluorescence.

Information and Communication Technology for Sustainable Development Milan Tuba 2019-06-26 The book proposes new technologies and discusses future solutions for ICT design infrastructures, and includes high-quality submissions presented at the Third International Conference on ICT for Sustainable Development (ICT4SD 2018), held in Goa, India on 30–31 August 2018. The conference stimulated cutting-edge research discussions among pioneering researchers, scientists, industrial engineers, and students from all around the world. Bringing together experts from different countries, the book focuses on innovative issues at an international level.