

# University Of Johannesburg Applicatio

Thank you utterly much for downloading **university of johannesburg applicatio**. Maybe you have knowledge that, people have seen numerous times for their favorite books subsequent to this university of johannesburg applicatio, but end happening in harmful downloads.

Rather than enjoying a good ebook in imitation of a cup of coffee in the afternoon, otherwise they juggled bearing in mind some harmful virus inside their computer. **university of johannesburg applicatio** is welcoming in our digital library an online entry to it is set as public appropriately you can download it instantly. Our digital library saves in compound countries, allowing you to acquire the most less latency era to download any of our books when this one. Merely said, the university of johannesburg applicatio is universally compatible gone any devices to read.

[Advances in Nanotechnology Research and Application: 2012 Edition](#) 2012-12-26 Advances in Nanotechnology Research and Application / 2012 Edition is a ScholarlyEditions™ eBook that delivers timely, authoritative, and comprehensive information about Nanotechnology. The editors have built Advances in Nanotechnology Research and Application / 2012 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about Nanotechnology in this eBook to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Advances in Nanotechnology Research and Application / 2012 Edition has been produced by the world's leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at <http://www.ScholarlyEditions.com/>.

**Functionally Graded Materials** Rasheedat Modupe Mahamood 2017-02-14 This book presents the concept of functionally graded materials as well as their use and different fabrication processes. The authors describe the use of additive manufacturing technology for the production of very complex parts directly from the three dimension computer aided design of the part by adding material layer after layer. A case study is also presented in the book on the experimental analysis of functionally graded material using laser metal deposition process.

**Modified Nanomaterials for Environmental Applications** Onoyivwe Monday Ama 2021-11-16 This book focuses on the electrochemical and nanostructural properties of new photoanode/electrolyte combinations used in the development of novel surface-modified nanomaterials for environmental applications. As water treatment is rapidly becoming a global challenge due to the increasing complexity and number of the various pollutants present, the book explores fundamental issues relating to environmental applications of nanomaterials. It addresses relevant topics ranging from electrochemical synthesis and characterization, to applications of photoanodes in corrosion prevention and biosensors for wastewater treatment. Featuring up-to-date experimental results on nanomaterials for detection of pharmaceuticals and heavy metals in wastewater, this contributed volume is useful to electrochemical researchers, materials scientists, and chemical and civil engineers interested in advanced photoelectrochemical research for environmental applications.

*Computational and Data Grids: Principles, Applications and Design* Preve, Nikolaos 2011-09-30 "This book provide relevant theoretical frameworks covering the latest empirical research findings in the area of grid computing, with a critical perspective bridging the gap between academia and the latest achievements of the computer industry"--Provided by publisher.

**Non-Isolated DC-DC Converters for Renewable Energy Applications** Frede Blaabjerg 2021-04-23 Photovoltaic (PV) energy generation is an excellent example of large-scale electric power generation through various parallel arrangements of small voltage-generating solar cells or modules. However, PV generation systems require power electronic converters system to satisfy the need for real-time applications or to balance the demand for power from electric. Therefore, a DC-DC power converter is a vital constituent in the intermediate conversion stage of PV power. This book presents a comprehensive review of various non-isolated DC-DC power converters. Non-isolated DC-DC converters for renewable energy system (RES) application presented in this book 1st edition through a detailed original investigation, obtained numerical/experimental results, and guided the scope to design new families of converters: DC-DC multistage power converter topologies, Multistage "X-Y converter family", Nx IMBC (Nx Interleaved Multilevel Boost Converter), Cockcroft Walton (CW) Voltage Multiplier-Based Multistage/Multilevel Power Converter (CW-VM-MPC) converter topologies, and Z-source and quasi Z-source. Above solutions are discussed to show how they can achieve the maximum voltage conversion gain ratio by adapting the passive/active component within the circuits. For assessment, we have recommended novel power converters through their functionality and designs, tested and verified by numerical software. Further, the hardware prototype implementation is carried out through a flexible digital processor. Both numerical and experimental results always shown as expected close agreement with primary theoretical hypotheses. This book offers guidelines and recommendation for future development with the DC-DC converters for RES applications based on cost-effective, and reliable solutions.

**Nanostructured Metal-Oxide Electrode Materials for Water Purification** Onoyivwe Monday Ama 2020-04-07 This book reports on the development of nanostructured metal-oxide-based electrode materials for use in water purification. The removal of organic pollutants and heavy metals from wastewater is a growing environmental and societal priority. This book thus focuses primarily on new techniques to modify the nanostructural properties of various solvent-electrolyte combinations to address these issues. Water treatment is becoming more and more challenging due to the ever increasing complexity of the pollutants present, requiring alternative and complementary approaches toward the removal of toxic chemicals, heavy metals and micro-organisms, to name a few. This contributed volume cuts across the fields of electrochemistry, water science, materials science, and nanotechnology, while presenting up-to-date experimental results on the properties and synthesis of metal-oxide electrode materials, as well as their application to areas such as biosensing and photochemical removal of organic wastewater pollutants. Featuring an introductory chapter on electrochemical cells, this book is well positioned to acquaint interdisciplinary researchers to the field, while providing topical coverage of the latest techniques and methodology. It is ideal for students and research professionals in water science, materials science, and chemical and civil engineering.

*Concept and Application of Transdisciplinarity in Intellectual Discourse and Research* Hester du Plessis 2014-02-01 In the past four decades, transdisciplinarity has gained conceptual and practical traction for its transformative value in accounting for the complex challenges besetting humankind, including social relations and natural ecosystems. The need to develop frameworks for joint problem-solving involving diverse stakeholders is unquestionable. Besides generating inclusivity, which embraces academia, civil society, and policymakers in the public and private sectors, transdisciplinarity allows for the

Downloaded from [avenza-dev.avenza.com](https://avenza-dev.avenza.com)  
on December 10, 2022 by guest

appreciation of phenomena from a multiplicity of angles and affords societies creative ways of seeking solutions to challenges that may appear intractable. This book puts forward alternatives within this arena and attempts to directly respond to the multilayered challenges of diffuse disciplines, interlinked socioeconomic problems, impacts of globalization, technological advancements, environmental concerns, food security, and more.

Foamability of Thermoplastic Polymeric Materials Suprakas Sinha Ray 2021-09-24 Foamability of Thermoplastic Polymeric Materials presents a cutting-edge approach to thermoplastic polymeric foams, drawing on the latest research and guiding the reader through the fundamental science, foamability, structure-property-processing relationship, multi-phase polymeric materials, degradation characteristics of biodegradable foams and advanced applications. Sections provide detailed information on foam manufacturing technologies and the fundamental science behind foaming, present insights on the factors affecting foamability, cover ways of enhancing the foamability of various polymeric materials, with special focus on multi-phase systems, discuss the degradation of biodegradable foams and special morphology development for scaffolds, packaging, acoustic and super-insulation applications, as well as cell seeding studies in scaffolds. Each application has specific requirements in terms of desired properties. This in-depth coverage and analysis helps those looking to move forward with microcellular processing and polymer foaming. This is an ideal resource for researchers, advanced students and professionals interested in the microcellular processing of polymeric materials in the areas of polymer foaming, polymer processing, plastics engineering and materials science. Offers in-depth coverage of factors affecting foamability and methods for enhancing the foamability of polymeric materials Explores innovative applications in a range of areas, including scaffolds, acoustic applications, packaging and super-insulation Provides a comprehensive, critical overview of the state-of-the-art, possible future research directions, and opportunities for industrial application

**Intelligent Systems: Concepts, Methodologies, Tools, and Applications** Management Association, Information Resources 2018-06-04 Ongoing advancements in modern technology have led to significant developments in intelligent systems. With the numerous applications available, it becomes imperative to conduct research and make further progress in this field. Intelligent Systems: Concepts, Methodologies, Tools, and Applications contains a compendium of the latest academic material on the latest breakthroughs and recent progress in intelligent systems. Including innovative studies on information retrieval, artificial intelligence, and software engineering, this multi-volume book is an ideal source for researchers, professionals, academics, upper-level students, and practitioners interested in emerging perspectives in the field of intelligent systems.

**Smart Computing Applications in Crowdfunding** Bo Xing 2018-12-07 The book focuses on smart computing for crowdfunding usage, looking at the crowdfunding landscape, e.g., reward-, donation-, equity-, P2P-based and the crowdfunding ecosystem, e.g., regulator, asker, backer, investor, and operator. The increased complexity of fund raising scenario, driven by the broad economic environment as well as the need for using alternative funding sources, has sparked research in smart computing techniques. Covering a wide range of detailed topics, the authors of this book offer an outstanding overview of the current state of the art; providing deep insights into smart computing methods, tools, and their applications in crowdfunding; exploring the importance of smart analysis, prediction, and decision-making within the fintech industry. This book is intended to be an authoritative and valuable resource for professional practitioners and researchers alike, as well as finance engineering, and computer science students who are interested in crowdfunding and other emerging fintech topics.

**Internet of Things, Infrastructures and Mobile Applications** Michael E. Auer 2020-09-10 This book gathers papers on interactive and collaborative mobile learning environments, assessment, evaluation and research methods in mobile learning, mobile learning models, theory and pedagogy, open and distance mobile learning, life-long and informal learning using mobile devices, wearables and the Internet of Things, game-based learning, dynamic learning experiences, mobile systems and services for opening up education, mobile healthcare and training, case studies on mobile learning, and 5G network infrastructure. Today, interactive mobile technologies have become the core of many—if not all—fields of society. Not only do the younger generation of students expect a mobile working and learning environment, but also the new ideas, technologies and solutions introduced on a nearly daily basis also boost this trend. Discussing and assessing key trends in the mobile field were the primary aims of the 13th International Conference on Interactive Mobile Communication Technologies and Learning (IMCL2019), which was held in Thessaloniki, Greece, from 31 October to 01 November 2019. Since being founded in 2006, the conference has been devoted to new approaches in interactive mobile technologies, with a focus on learning. The IMCL conferences have since become a central forum of the exchange of new research results and relevant trends, as well as best practices. The book's intended readership includes policymakers, academics, educators, researchers in pedagogy and learning theory, schoolteachers, further education lecturers, practitioners in the learning industry, etc.

**Nanotechnology-Based Industrial Applications of Ionic Liquids** Inamuddin 2020-09-03 Numerous solvents used in chemical processes have poisonous and unsafe properties that pose significant ecological concerns ranging from atmospheric emissions to the contamination of water effluents. To combat these ecological threats, over the course of the past two decades, the field of green chemistry has grown to develop more natural reaction processes and techniques involving the use of nonconventional solvents to diminish waste solvent production and thus decrease negative impact on the environment. Ionic liquids in particular are more environmentally friendly substitutes to conventional solvents, and as such, have seen more widespread use in the past decade. They have been used in such processes as extraction, separation, purification of organic, inorganic, and bioinorganic compounds, reaction media in biochemical and chemical catalysis, green organic and drug synthesis, among other industrial applications. Thus, in proving themselves a suitable greener media for economic viability in chemical processes, ionic liquids are leading to more sustainable development. This edition explores the application of ionic liquids as a green solvent. It contains a state-of-the-art overview on ionic liquids as green solvents for chemical processes and techniques, as well as some of their useful industrial applications.

**Research Methods: Concepts, Methodologies, Tools, and Applications** Management Association, Information Resources 2015-01-31 Across a variety of disciplines, data and statistics form the backbone of knowledge. To ensure the reliability and validity of data, appropriate measures must be taken in conducting studies and reporting findings. *Research Methods: Concepts, Methodologies, Tools, and Applications* compiles chapters on key considerations in the management, development, and distribution of data. With its focus on both fundamental concepts and advanced topics, this multi-volume reference work will be a valuable addition to researchers, scholars, and students of science, mathematics, and engineering.

*Surface Engineering Techniques and Applications: Research Advancements* Santo, Loredana 2014-02-28 Surface engineering includes many facets of materials science that help regulate the function, quality, and safety of products such as automotive, textile, and electronic materials. New technologies are developing to help enhance the surface performance. *Surface Engineering Techniques and Applications: Research Advancements* provides recent developments in surface engineering

Downloaded from [avenza-dev.avenza.com](https://www.avenza-dev.avenza.com)  
on December 10, 2022 by guest

techniques and applications. It details scientific and technological results while also giving insight to current research, economic impact, and environmental concerns so that academics, practitioners, and professionals in the field, as well as students studying these areas, can deepen their understanding of new surface processes.

*Alkenes—Advances in Research and Application: 2013 Edition* 2013-06-21 *Alkenes—Advances in Research and Application: 2013 Edition* is a ScholarlyBrief™ that delivers timely, authoritative, comprehensive, and specialized information about ZZZAdditional Research in a concise format. The editors have built *Alkenes—Advances in Research and Application: 2013 Edition* on the vast information databases of ScholarlyNews.™ You can expect the information about ZZZAdditional Research in this book to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of *Alkenes—Advances in Research and Application: 2013 Edition* has been produced by the world's leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at <http://www.ScholarlyEditions.com/>.

*Organophosphorus Compounds—Advances in Research and Application: 2013 Edition* 2013-06-21 *Organophosphorus Compounds—Advances in Research and Application: 2013 Edition* is a ScholarlyEditions™ book that delivers timely, authoritative, and comprehensive information about Phosphonic Acids. The editors have built *Organophosphorus Compounds—Advances in Research and Application: 2013 Edition* on the vast information databases of ScholarlyNews.™ You can expect the information about Phosphonic Acids in this book to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of *Organophosphorus Compounds—Advances in Research and Application: 2013 Edition* has been produced by the world's leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at <http://www.ScholarlyEditions.com/>.

*Applications of Nanomaterials* Sabu Thomas 2018-06-29 *Applications of Nanomaterials: Advances and Key Technologies* discusses the latest advancements in the synthesis of various types of nanomaterials. The book's main objective is to provide a comprehensive review regarding the latest advances in synthesis protocols that includes up-to-date data records on the synthesis of all kinds of inorganic nanostructures using various physical and chemical methods. The synthesis of all important nanomaterials, such as carbon nanostructures, Core-shell Quantum dots, Metal and metal oxide nanostructures, Nanoferrites, polymer nanostructures, nanofibers, and smart nanomaterials are discussed, making this a one-stop reference resource on research accomplishments in this area. Leading researchers from industry, academia, government and private research institutions across the globe have contributed to the book. Academics, researchers, scientists, engineers and students working in the field of polymer nanocomposites will benefit from its solutions for material problems. Provides an up-to-date data record on the synthesis of all kinds of organic and inorganic nanostructures using various physical and chemical methods Presents the latest advances in synthesis protocols Includes the latest techniques used in the physical and chemical characterization of nanomaterials Covers the characterization of all the important materials groups, such as carbon nanostructures, core-shell quantum dots, metal and metal oxide nanostructures, nanoferrites, polymer nanostructures and

nanofibers

*Zeolite Chemistry and Applications* Benoit Louis 2020-04-20

**Issues in Ethics Research and Application: 2011 Edition** 2012-01-09 Issues in Ethics Research and Application / 2011 Edition is a ScholarlyEditions™ eBook that delivers timely, authoritative, and comprehensive information about Ethics Research and Application. The editors have built Issues in Ethics Research and Application: 2011 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about Ethics Research and Application in this eBook to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Issues in Ethics Research and Application: 2011 Edition has been produced by the world's leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at <http://www.ScholarlyEditions.com/>.

**Sustainable Education and Development** Joseph N. Mojekwu 2021-04-16 This book presents papers from the 9th Applied Research Conference in Africa (ARCA), showcasing the latest research on sustainable education and development. The conference is focused on applied research discussion and its dissemination, developing understanding about the role of research and researchers in the development of the continent. ARCA gathers papers which explain how key education is to transforming lives, eradicating poverty and driving sustainable development in Africa. Presenting high quality research about developing economies, construction, education and sustainability, this proceedings will be of interest to academics, postgraduate students, and industry professionals.

*Handbook of Research on Advancements in the Processing, Characterization, and Application of Lightweight Materials* Kumar, Kaushik 2021-11-19 In the automotive industry, the need to reduce vehicle weight has given rise to extensive research efforts to develop aluminum and magnesium alloys for structural car body parts. In aerospace, the move toward composite airframe structures urged an increased use of formable titanium alloys. In steel research, there are ongoing efforts to design novel damage-controlled forming processes for a new generation of efficient and reliable lightweight steel components. All these materials, and more, constitute today's research mission for lightweight structures. They provide a fertile materials science research field aiming to achieve a better understanding of the interplay between industrial processing, microstructure development, and the resulting material properties. The Handbook of Research on Advancements in the Processing, Characterization, and Application of Lightweight Materials provides the recent advancements in the lightweight materials processing, manufacturing, and characterization. This book identifies the need for modern tools and techniques for designing lightweight materials and addresses multidisciplinary approaches for applying their use. Covering topics such as numerical optimization, fatigue characterization, and process evaluation, this text is an essential resource for materials engineers, manufacturers, practitioners, engineers, academicians, chief research officers, researchers, students, and vice presidents of research in government, industry, and academia.

**Ternary Quantum Dots** Samuel Oluwatobi Oluwafemi 2021-07-02 Ternary Quantum Dots: Synthesis, Properties, and Applications reviews the latest advances in ternary (I-III-VI) chalcopyrite quantum dots (QDs), along with their synthesis, properties and applications. Sections address the fundamental key concepts of ternary quantum dots, progress in synthesis strategies (i.e., organic and aqueous synthesis),

Downloaded from [avenza-dev.avenza.com](https://www.avenza-dev.avenza.com)  
on December 10, 2022 by guest

and characterization methods (i.e., transmission electron microscopy, dynamic light scattering, etc.). Properties of ternary quantum dots are comprehensively reviewed, including optical, chemical and physical properties. The factors and mechanisms of the cytotoxicity of ternary quantum dot-based nanomaterials are also described. Since ternary chalcopyrite quantum dots are less toxic and more environmentally benign than conventional binary II-VI chalcogenide quantum dots, they are being investigated to replace conventional quantum dots in a range of applications. Thus, this book reviews QDs in various applications, such as solar cells, photocatalytic, sensors and bio-applications. Reviews fundamental concepts of ternary quantum dots and quantum dot-nanocomposites including the most relevant synthesis strategies, key properties, and characterization techniques Delves into the cytotoxicity of quantum dots looking at the factors and mechanisms that influence cytotoxicity including demonstration of cytotoxicity assays for in vitro and in vivo tests Touches on the many applications of ternary quantum dots including biomedical applications, applications in solar cells, sensing applications, and photocatalytic applications

Impact of Mobile Payment Applications and Transfers on Business Opati, Thaisaiyi Zephania 2019-12-20 Consumers continue to rely heavily on their phones to complete such tasks as transferring funds between banks or accounts, depositing or withdrawing funds, paying bills, and purchasing items. Mobile money users are oftentimes more financially resilient and can protect themselves better against economic and other shocks. Moreover, mobile money can increase the velocity of money in circulation because it reduces the transactions and time costs of making retail payments. As such, understanding the impact of mobile payments is imperative for businesses and the economy. Impact of Mobile Payment Applications and Transfers on Business is a pivotal reference source that provides vital research on mobile money transfer and its impact in social, corporate, and micro- and macro-policies concerning the aggregate economy and individual households as a whole within an economy. It covers the impact, innovations, business-to-business transformations, regulatory framework, challenges, and ethical issues surrounding mobile money transfers around the world. This book is ideally designed for economists, financial analysts, business managers, leaders, scholars, practitioners, researchers, and students in fields that include management, finance, economics, commerce, and leadership.

Ketone Bodies—Advances in Research and Application: 2012 Edition 2012-12-26 Ketone Bodies—Advances in Research and Application: 2012 Edition is a ScholarlyEditions™ eBook that delivers timely, authoritative, and comprehensive information about Ketone Bodies. The editors have built Ketone Bodies—Advances in Research and Application: 2012 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about Ketone Bodies in this eBook to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Ketone Bodies—Advances in Research and Application: 2012 Edition has been produced by the world's leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at <http://www.ScholarlyEditions.com/>.

**Millimeter-Wave Antennas: Configurations and Applications** Jaco du Preez 2016-06-20 This book comprehensively reviews the state of the art in millimeter-wave antennas, traces important recent developments and provides information on a wide range of antenna configurations and applications. While fundamental theoretical aspects are discussed whenever necessary, the book primarily focuses on design principles and concepts, manufacture, measurement techniques, and practical results. Each of the various antenna types scalable to millimeter-wave dimensions is considered individually, with

coverage of leaky-wave and surface-wave antennas, printed antennas, integrated antennas, and reflector and lens systems. The final two chapters address the subject from a systems perspective, providing an overview of supporting circuitry and examining in detail diverse millimeter-wave applications, including high-speed wireless communications, radio astronomy, and radar. The vast amount of information now available on millimeter-wave systems can be daunting for researchers and designers entering the field. This book offers readers essential guidance, helping them to gain a thorough understanding based on the most recent research findings and serving as a sound basis for informed decision-making.

Application of Nanotechnology in Mining Processes Elvis Fosso-Kankeu 2022-01-31 b"Application of Nanotechnology in Mining Processes Nanotechnology has revolutionized processes in many industries but its application in the mining industry has not been widely discussed. This unique book provides an overview of the successful implementation of nanotechnology in some of the key environmental and beneficiation mining processes. This book explores extensively the potential of nanotechnology to revolutionize the mining industry which has been relying for a very long on processes with limited efficiencies. The nine specialized chapters focus on applying nanoflotation to improve mineral processing, effective extraction of metals from leachates or pregnant solutions using nanoscale supramolecular hosts, and development of nano-adsorbents or nano-based strategies for the remediation or valorization of AMD. The application of nanotechnology in mining has so far received little attention from the industry and researchers and this groundbreaking book features critical issues so far under-reported in the literature: Application of nanotechnology in mineral processing for the enhancement of froth flotation Development of smart nanomaterials and application for the treatment of acid mine drainage Recovery of values from pregnant solutions using nanoadsorbents Valorization of AMD through formation of multipurpose nanoproducts. Audience Industrial interest will be from mining plant operators, environmental managers, water treatment plants managers, and operators. Researchers in nanotechnology, environmental science, mining, and metallurgy engineering will find the book valuable, as will government entities such as regulatory bodies officers and environmentalists.

**Advances in Silicic Acid Research and Application: 2012 Edition** 2012-12-26 Advances in Silicic Acid Research and Application / 2012 Edition is a ScholarlyBrief™ that delivers timely, authoritative, comprehensive, and specialized information about Silicic Acid in a concise format. The editors have built Advances in Silicic Acid Research and Application / 2012 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about Silicic Acid in this eBook to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Advances in Silicic Acid Research and Application / 2012 Edition has been produced by the world's leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at <http://www.ScholarlyEditions.com/>.

*Productivity Improvement in Manufacturing SMEs* Thomas Thinandavha Munyai 2017-12-12 This book focuses on the application of workstudy in productivity of manufacturing SMEs locally and abroad and also explores various industrial problems which face manufacturing SMEs in developing and underdeveloped countries in the rest of the world. Low productivity is currently a serious challenge facing manufacturing SMEs, where these SMEs are operating below expected production output levels which makes it difficult for them to compete in the global market. SMEs are the engine drivers of economic growth, one of which is manufacturing. The challenge is that government from various

countries in developing and underdeveloped countries, mandated agencies in their respective areas, to ensure that there is economic progress for these SMEs, but productivity remains low in the manufacturing SMEs. When SMEs do not perform well, productivity of manufacturing SMEs declines and unemployment increases. Thus, an increase in unemployment results in a drop of GDP in the country and can become a global and economic crisis. This book describes a process which enables the reader to use effective knowledge that addresses problems facing the productivity of manufacturing SMEs such as work study tools and case studies and provides solutions and applications to improve the running of the manufacturing SMEs in growing their productivity.

The Concept and Application of Transdisciplinarity in Intellectual Discourse and Research MISTRA  
MISTRA 2011-06-09 Mapungubwe Institute for Strategic Reflection (MISTRA) was publicly launched as a think tank in March 2011 and took up the task of following a transdisciplinary approach to the research generated within the organisation. The projects initiated by MISTRA integrate various streams of knowledge and expertise when examining complex issues such as nation formation, economic growth, social equity, adaptable science and technology, and other strategic topics related to South Africa's development as a democracy. Serving in part as an intellectual movement and in part as a research institution, activities are structured around diverse topics that require the opening up of intellectual space for strategic research and reflection specific, but not exclusive, to the African continent. A project was launched: The concept and application of transdisciplinarity in intellectual discourse and research. The intent of the study was two fold: in the first place the need for better theoretical understanding of a transdisciplinarity approach was identified as a necessity; and in the second place MISTRA intended to apply transdisciplinarity towards the opening up of an African approach - guided in part by the Afrikology principles of the late Professor Dani Nabudere. By orientation Transdisciplinarity is an approach that recognises a united and borderless intellectual terrain. It is an attempt to formulate an integrative process of knowledge production and distribution in reaction to the twentieth century narrow discipline focus and hyper-specialisation. It responds to the multi-layered challenges of diffused disciplines, interlinked socio economic problems, the impact of globalisation, the de-territorialised nation state, technological advancements, environmental concerns, agriculture and food security and health. And it recognises that, in history, some of the most revolutionary breakthroughs in science and technology in fact happened on the margins of narrow disciplines.

**Phenols—Advances in Research and Application: 2013 Edition** 2013-06-21 Phenols—Advances in Research and Application: 2013 Edition is a ScholarlyEditions™ book that delivers timely, authoritative, and comprehensive information about Phenolphthaleins. The editors have built Phenols—Advances in Research and Application: 2013 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about Phenolphthaleins in this book to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Phenols—Advances in Research and Application: 2013 Edition has been produced by the world's leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at <http://www.ScholarlyEditions.com/>.

**Knowledge Management Innovations for Interdisciplinary Education: Organizational Applications** Buckley, Sheryl 2012-08-31 "This book is a detailed resource on knowledge management and innovations that has been written and edited to provide flexibility and in-depth knowledge management innovations, strategies, and practices"--Provided by publisher.

**Biomedical Engineering: Concepts, Methodologies, Tools, and Applications** Management Association, Information Resources 2017-07-13 Technological tools and computational techniques have enhanced the healthcare industry. These advancements have led to significant progress and novel opportunities for biomedical engineering. *Biomedical Engineering: Concepts, Methodologies, Tools, and Applications* is an authoritative reference source for emerging scholarly research on trends, techniques, and future directions in the field of biomedical engineering technologies. Highlighting a comprehensive range of topics such as nanotechnology, biomaterials, and robotics, this multi-volume book is ideally designed for medical practitioners, professionals, students, engineers, and researchers interested in the latest developments in biomedical technology.

**Handbook of Research on Emerging Theories, Models, and Applications of Financial Econometrics** Burcu Adıgüzel Mercangöz 2021-02-17 This handbook presents emerging research exploring the theoretical and practical aspects of econometric techniques for the financial sector and their applications in economics. By doing so, it offers invaluable tools for predicting and weighing the risks of multiple investments by incorporating data analysis. Throughout the book the authors address a broad range of topics such as predictive analysis, monetary policy, economic growth, systemic risk and investment behavior. This book is a must-read for researchers, scholars and practitioners in the field of economics who are interested in a better understanding of current research on the application of econometric methods to financial sector data.

Beyond Bitcoin Simon Dingle 2022-01-06 After over a decade of Bitcoin, which has now moved beyond lore and hype into an increasingly robust star in the firmament of global assets, a new and more important question has arisen. What happens beyond Bitcoin? The answer is decentralised finance - 'DeFi'. Tech and finance experts Steven Boykey Sidley and Simon Dingle argue that DeFi - which enables all manner of financial transactions to take place directly, person to person, without the involvement of financial institutions - will redesign the cogs and wheels in the engines of trust, and make the remarkable rise of Bitcoin look quaint by comparison. It will disrupt and displace fine and respectable companies, if not entire industries. Sidley and Dingle explain how DeFi works, introduce the organisations and individuals that comprise the new industry, and identify the likely winners and losers in the coming revolution.

Nanomaterials for Solar Cell Applications Sabu Thomas 2019-06-12 *Nanomaterials for Solar Cell Applications* provides a review of recent developments in the field of nanomaterials based solar cells. It begins with a discussion of the fundamentals of nanomaterials for solar cells, including a discussion of lifecycle assessments and characterization techniques. Next, it reviews various types of solar cells, i.e., Thin film, Metal-oxide, Nanowire, Nanorod and Nanoporous materials, and more. Other topics covered include a review of quantum dot sensitized and perovskite and polymer nanocomposites-based solar cells. This book is an ideal resource for those working in this evolving field of nanomaterials and renewable energy. Provides a well-organized approach to the use of nanomaterials for solar cell applications Discusses the synthesis, characterization and applications of traditional and new material Includes coverage of emerging nanomaterials, such as graphene, graphene-derivatives and perovskites

*Advanced Surface Coating Techniques for Modern Industrial Applications* Roy, Supriyo 2020-09-18 In engineering, there are often situations in which the material of the main component is unable to sustain long life or protect itself from adverse operating environments. Moreover, in some cases, different material properties such as anti-friction and wear, anti-corrosive, thermal resistive, super hydrophobic, etc. are required as per the operating conditions. If those bulk components are made of such materials and possess those properties, the cost will be very high. In such cases, a practical solution is surface

coating, which serves as a protective barrier to the bulk material from the adverse environment. In the last decade, with enormous effort, researchers and scientists have developed suitable materials to overcome those unfavorable operating conditions, and they have used advanced deposition techniques to enhance the adhesion and surface texturing of the coatings. *Advanced Surface Coating Techniques for Modern Industrial Applications* is a highly sought reference source that compiles the recent research trends in these new and emerging surface coating materials, deposition techniques, properties of coated materials, and their applications in various engineering and industrial fields. The book particularly focuses on 1) coating materials including anti-corrosive materials and nanomaterials, 2) coating methods including thermal spray and electroless disposition, and 3) applications such as surface engineering and thin film application. The book is ideal for engineers, scientists, researchers, academicians, and students working in fields like material science, mechanical engineering, tribology, chemical and corrosion science, bio-medical engineering, biomaterials, and aerospace engineering.

**Voltammetry** Gugu Hlengiwe Mhlongo 2019-06-12 Voltammetry is a very important electrochemical technique that is used to study electrode surface reactions. It helps scientists to understand the behavior of electrochemically active species and the performance of the material being investigated. Voltammetry is commonly used in different fields ranging from energy, sensing, and corrosion applications. It is mainly performed to acquire qualitative information about electrochemical reactions. The interpretation of voltammetric results differs from application to application. In this text, the fundamentals and theories of voltammetry are covered. This book aims at providing interpretations of voltammetric techniques as they are applied in different fields. The various types of voltammetry are covered, and the significance of each type is explained. The topic covered in this book include interpretation of voltammetry in energy, corrosion and sensing applications.

Terahertz Antenna Technology for Imaging and Sensing Applications Isha Malhotra 2021-05-11 This book covers terahertz antenna technology for imaging and sensing, along with its various applications. The authors discuss the use of terahertz frequency and photoconductive antenna technology for imaging applications, such as biological and bio-medical applications, non-destructive inspection of fabrics and plastics, analysis of hydration levels or detecting the presence of metallic components in samples, and detecting a variety of materials with unique spectral fingerprints in the terahertz frequency range, such as different types of explosives or several compounds used in the fabrication of medicines. Provides a comprehensive review of terahertz source and detector for imaging and sensing; Discusses photoconductive antenna technology for imaging and sensing; Presents modalities for improving the photoconductive dipole antenna performance for imaging and sensing; Explores applications in tomographic imaging, art conservation and the pharmaceutical and aerospace industries.

Geographic Information Systems: Concepts, Methodologies, Tools, and Applications Management Association, Information Resources 2012-09-30 Developments in technologies have evolved in a much wider use of technology throughout science, government, and business; resulting in the expansion of geographic information systems. GIS is the academic study and practice of presenting geographical data through a system designed to capture, store, analyze, and manage geographic information. *Geographic Information Systems: Concepts, Methodologies, Tools, and Applications* is a collection of knowledge on the latest advancements and research of geographic information systems. This book aims to be useful for academics and practitioners involved in geographical data.

*Examining the Impact of Deep Learning and IoT on Multi-Industry Applications* Raut, Roshani 2021-01-29 Deep learning, as a recent AI technique, has proven itself efficient in solving many real-

world problems. Deep learning algorithms are efficient, high performing, and an effective standard for solving these problems. In addition, with IoT, deep learning is in many emerging and developing domains of computer technology. Deep learning algorithms have brought a revolution in computer vision applications by introducing an efficient solution to several image processing-related problems that have long remained unresolved or moderately solved. Various significant IoT technologies in various industries, such as education, health, transportation, and security, combine IoT with deep learning for complex problem solving and the supported interaction between human beings and their surroundings. Examining the Impact of Deep Learning and IoT on Multi-Industry Applications provides insights on how deep learning, together with IoT, impacts various sectors such as healthcare, agriculture, cyber security, and social media analysis applications. The chapters present solutions to various real-world problems using these methods from various researchers' points of view. While highlighting topics such as medical diagnosis, power consumption, livestock management, security, and social media analysis, this book is ideal for IT specialists, technologists, security analysts, medical practitioners, imaging specialists, diagnosticians, academicians, researchers, industrial experts, scientists, and undergraduate and postgraduate students who are working in the field of computer engineering, electronics, and electrical engineering.