Critical Issues Of High Speed Rail Development In China

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Issues in Telecommunications Research: 2011 Edition ScholarlyEditions
This Second Edition of Mechanical Design and Manufacturing of Electric Motors provides in-depth knowledge of design methods and developments of electric motors in the context of rapid increases in energy consumption, and emphasis on environmental protection, alongside new technology in 3D printing, robots, nanotechnology, and digital techniques, and the challenges these pose to the motor industry. From motor classification and design of motor components to model setup and material and bearing selections, this comprehensive text covers the fundamentals of practical design and design-related issues, modeling and simulation, engineering analysis, manufacturing processes, testing procedures, and performance characteristics of electric motors today. This Second Edition adds three brand new chapters on motor breaks, motor sensors, and power transmission and gearing systems. Using a practical approach, with a focus on innovative design and applications, the book contains a thorough discussion of major components and subsystems, such as rotors, shafts, stators, and frames, alongside various cooling techniques, including natural and forced air, direct- and indirect-liquid, phase change, and other newly-emerged innovative cooling methods. It also analyzes the calculation of motor power losses, motor vibration, and acoustic noise issues, and presents engineering analysis methods and case-study results. While suitable for motor engineers, designers, manufacturers, and end users, the book will also be of interest to maintenance personnel, undergraduate and graduate students, and academic researchers.

Design Guidance for High-speed to Low-speed Transition Zones for Rural Highways Elsevier
Critical Issues in Peace and Conflict Studies: Theory, Practice, and Pedagogy, edited by Thomas Maty-k, Jessica Senehi, and Sean Byrne, discusses critical issues in the emerging field of Peace and Conflict Studies, and suggests a framework for the future development of the field and the education of its practitioners and academics. Contributors to the book are recognized scholars and practitioners in their respective fields. The authors take an holistic approach to the study, analysis, and resolution of conflict at the micro, meso, macro, and mega levels.

Dynamics of Vehicles on Roads and Tracks Vol 2 BoD – Books on Demand
"This book provides original, in-depth, and innovative articles on telecommunications policy, management, and business applications"--Provided by publisher.

Evaluating High-Speed Rail IET
Over the years it has been frequently remarked that journalism is at a crossroads - indeed so often that it risks sounding somewhat cliched - yet there is every indication that its very forms, practices and institutions are being decisively transformed, with startling implications. Accordingly, the principal aim of this book is to help provide the basis for new dialogues to emerge regarding journalism today, as well as about where it may be heading tomorrow. Journalism: Critical Issues poses a series of important questions afresh, questions deserving of much greater attention than they have typically received to date. Each of the contributors seeks to challenge conventional ways of thinking about the 'critical issue' at stake in their respective chapter. In so doing, it is their intention to further our understanding, but also to encourage future explorations with the potential to revitalise journalism studies. In adopting this approach, it is hoped that the book will make for a lively, argumentative (in the best sense of the word) and engaging intervention.

Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations for Fiscal Year 1991: Council on Environmental Quality CRC Press
Issues in Telecommunications Research / 2011 Edition is a ScholarlyEditions™ eBook that delivers timely, authoritative, and comprehensive information about Telecommunications Research. The editors have built Issues in Telecommunications Research: 2011 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about Telecommunications Research 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 Telecommunications Research: 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/.

Metal Cutting IGI Global
This issue of Advances in Molecular Pathology will provide a comprehensive review of the most current practices, trends, and developments in the field of Molecular Pathology. Publishing on an annual basis, the volume will be divided into 7 sections: Genetics, Hematopathology, Infectious Disease, Pharmacogenomics, Informatics, Solid tumors, and Identity/HLA. Led by Dr. Gregory Tsongalis of Dartmouth University, a team of experienced pathologists from institutions across the country oversee annual topic and expert author selection. Offers the latest original research and theory for transfer into practice Applies evidence and theory drawn from cases across the globe Assesses major governmental maritime infrastructure initiatives and their relation to sustainability

Copper Electrodeposition for Nanofabrication of Electronics Devices Springer
This book discusses the scientific mechanism of copper electrodeposition and it's wide range of applications. The book will cover everything from the basic fundamentals to practical applications. In addition, the book will also cover important topics such as: • ULSI wiring material based upon copper nanowiring • Printed circuit boards • Stacked semiconductors • Through Silicon Via • Smooth copper foil for Lithium-Ion battery electrodes. This book is ideal for nanotechnologists, industry professionals, and practitioners.

Critical Issues in Policing McGraw-Hill Education (UK)
The Seventh Edition of Critical Issues in Policing includes many new and updated contributions that offer fresh perspectives and research on the most current trends in policing. The entire collection of 34 articles, carefully chosen for their broad application, sharpens readers' sense and understanding of the complexities of police work. Styles of policing, uses of technology, and roles played by citizens in determining a proper measure of performance in law enforcement are among the essential topics addressed. Comprehensive and fair, Critical Issues in Policing provides ready access to the brightest and best minds in the field of policing, encouraging readers to hold police accountable for specific goals, tasks, and objectives and to work in concert with citizens to promote secure communities.

Critical Issues Facing Small American Manufacturers Waveland Press
Metal cutting is an essential process throughout engineering design and manufacturing industries. To increase efficiency and reduce costs, it is necessary to improve understanding of the metal cutting process. This book presents a comprehensive treatment of the subject that focuses on the features of the behavior of tool and work materials that influence the efficiency of metal cutting operations. The fourth edition of this acclaimed book has been expanded and revised to include significant changes and additions to metal cutting theory, and to cover developments in tool materials and industrial practice. In particular, improvements in the understanding of the generation of heat and distribution of temperature in the cutting tool are described; a discussion of the structure, properties, and performance of newly developed ceramic tool materials and tool coatings is presented; new information of the machinability of alloys is given; and the introduction of calcium deoxidized steels and their improved machinability are assessed. Additionally, a material selection and design-based approach is expanded upon to improve industrial relevance. Metal Cutting provides invaluable

information for those engaged in machining, toolmaking, and related engineering activities, and it serves as a useful introduction to the subject for students of metallurgy and engineering. Presents a comprehensive treatment of the subject Includes information on significant changes and additions to metal cutting theory Offers industrial relevance through a materials selection and and design-based approach

NASA Authorizations CRC Press

Covers low-cost carrier growth in Japan, competition against full service hub carriers in the Middle East, aviation market liberalization in Central Asia, high-speed-rail and airline competition in China, air transport and tourism in Asia and Australia, airline performance and outsourcing, airports development, and airport-airline cooperation.

S. 839, the High-Speed Rail Development Act of 1993, and Current Initiatives in High-speed Ground Transportation Taylor & Francis

In recent years, III-V devices, integrated circuits, and superconducting integrated circuits have emerged as leading contenders for high-frequency and ultrahigh speed applications. GaAs MESFETs have been applied in microwave systems as low-noise and high-power amplifiers since the early 1970s, replacing silicon devices. The heterojunction high-electron-mobility transistor (HEMT), invented in 1980, has become a key component for satellite broadcasting receiver systems, serving as the ultra-low-noise device at 12 GHz. Furthermore, the heterojunction bipolar transistor (HBT) has been considered as having the highest switching speed and cutoff frequency in the semiconductor device field. Initially most of these devices were used for analog high-frequency applications, but there is also a strong need to develop high-speed III-V digital devices for computer, telecom munication, and instrumentation systems, to replace silicon high-speed devices, because of the switching-speed and power-dissipation limitations of silicon. The potential high speed and low power dissipation of digital integrated circuits using GaAs MESFET, HEMT, HBT, and superconducting Josephson junction devices has evoked tremendous competition in the race to develop such technology. A technology review shows that Japanese research institutes and companies have taken the lead in the development of these devices, and some integrated circuits have already been applied to supercomputers in Japan. The activities of Japanese research institutes and companies in the III-V and superconducting device fields have been superior for three reasons. First, bulk crystal growth, epitaxial growth, process, and design technology were developed at the same time.

Critical Issues in Alcohol and Drugs of Abuse Testing Brookings Institution Press

This book offers material for strategic thinking featuring contributions from key figures in Europe, the US and Asia. The focus of the book expands from economic to legal issues, bankruptcy and safety and security. The carefully selected papers offer a thorough and structured analysis of major current developments in the air transport industry. Fully up to date, topics covered include competitive strength, capacity utilisation and risk. The most likely future scenarios are more or less known. Only, the timeframe remains uncertain. The speed at which the various market players in the air transport chain will implement their strategies remains the key question. This depends on a whole range of exogenous and endogenous variables, as this book aspires to demonstrate. As both an overview of the current issues affecting the industry and as a cohesive set of strategic documents, therefore, this collection will prove invaluable for policy makers and researchers alike.

Synthesis of Pavement Issues Related to High-speed Corridors Transportation Research Board

The objective of this research project was to produce a synthesis of available information to support specific areas related to pavements for the safe, economical development of the Trans Texas Corridor (TTC). This synthesis is divided into nine sections, each of which deals with a specific topic or topics. These specific areas include (1) pavement design for heavy vehicles, (2) pavement design for light vehicles, (3) skid resistance issues on high-speed corridors, (4) issues related to traffic characterization, (5) smart pavements for high-speed corridors, (6) pavement material response to dynamic loads and performance prediction, (7) safety issues related to splash and spray, and (8) ride quality for high-speed corridors. Regarding these stated issues, this synthesis recommends state-of-the-art technology to the Texas Department of Transportation (TxDOT) for use during development of the TTC. It provides recommendations for future research to fill gaps in knowledge and to take emerging technology to the stage where it can be implemented during the design and construction of the TTC pavements. This is the first synthesis study to address issues related to the TTC. A secondary objective of this project was to determine if additional synthesis studies in other areas of transportation related to the TTC should be conducted and, if so, how the process might be improved. This synthesis recommends that future syntheses should be more focused on specific, maybe critical, issue(s); the researcher should be instructed to present only those findings that are really new, innovative, and potentially implementable. One element of the study should pursue non-transportation related technology that might be adapted to transportation issues.

Critical Issues in Air Transport Economics and Business John Wiley & Sons

This book collects a selection of papers presented at ELECTRIMACS 2021, the 14th international conference of the IMACS TC1 Committee, held in Nancy, France, on 16th-19th May 2022. The conference papers deal with modelling, simulation, analysis, control, power management, design optimization, identification and diagnostics in electrical power engineering. The main application fields include electric machines and electromagnetic devices, power electronics, transportation systems, smart grids, renewable energy systems, energy storage like batteries and supercapacitors, fuel cells, and wireless power transfer. The contributions included in Volume 1 will be particularly focused on electrical engineering simulation aspects and innovative applications.

Department of Transportation and Related Agencies Appropriations for 1991 Academic Press

This book is composed of different chapters which are related to the subject of injection molding and written by leading international academic experts in the field. It contains introduction on polymer PVT measurements and two main application areas of polymer PVT data in injection molding, optimization for injection molding process, Powder Injection Molding which comprises Ceramic Injection Molding and Metal Injection Molding, ans some special techniques or applications in injection molding. It provides some clear presentation of injection molding process and equipment to direct people in plastics manufacturing to solve problems and avoid costly errors. With useful, fundamental information for knowing and optimizing the injection molding operation, the readers could gain some working knowledge of the injection molding.

Some Critical Issues for Injection Molding Springer Nature

High-speed Rail (HSR) is a technological transportation advance that has raised the interest of policy makers and researchers worldwide. The study of High-speed Rail is a recent phenomenon but has received increasing attention due to the extension of this mode of transportation around the globe. Evaluating High-Speed Rail contains some of the most recent and cutting edge studies on HSR from different disciplines. The book is organized around a variety of key topics related to the evaluation of High Speed Rail projects and experiences. These topics include: the economic appraisal and evaluation of High-Speed Rail projects; the evaluation of indirect and direct effects of High-Speed Rail; its territorial, redistributive and environmental impacts; its contribution or limitation to urban growth; and the management of challenges created by the arrival of High-Speed Rail lines to core cities. It also covers the contribution of High-Speed Rail to tourism and its impact on intermodal competition, with especial consideration to air transportation. Chapters analyse the expected effects of introducing on-track competition and designing public-private contracts to develop new lines. This cutting-edge volume offers rigorous analysis from top researchers in the field with a clear intention to deliver policy implications and provide the latest analysis on the impact of High Speed Rail. This book is suitable for students and academics interested in transportation infrastructure, economic impacts of public investments, mobility, planning and urban affairs, as well as researchers and policy makers in the transportation and infrastructure sector.

Critical Issues in Peace and Conflict Studies S. 839, the High-Speed Rail Development Act of 1993, and Current Initiatives in High-speed Ground TransportationCritical Issues in Air Transport Economics and Business

This volume brings together some of the leading names in global aviation policy research to provide a unique and ground breaking synthesis of current debates on sustainable aviation.

ELECTRIMACS 2022 Springer Science & Business Media

This book contains extended and revised versions of the best papers presented at the 19th IFIP WG 10.5/IEEE International Conference on Very Large Scale Integration, VLSI-SoC 2011, held in Hong Kong, China, in October 2011. The 10 papers included in the book were carefully reviewed and selected from the 45 full papers and 16 special session papers presented at the conference. The papers cover a wide range of topics in VLSI technology and advanced research. They address the current trend toward increasing chip integration and technology process advancements bringing about stimulating new challenges both at the physical and system-design levels, as well as in the test of theses systems.

Proceedings of the Symposium on High Speed III-V Electronics for Wireless Applications and the Twenty-Fifth State-of-the-Art Program on Compound Semiconductors (SOTAPOCS XXV) Emerald Group Publishing

"TRBs National Cooperative Highway Research Program (NCHRP) Report 737: Design Guidance for High-Speed to Low-Speed Transitions Zones for Rural Highways presents guidance for designing the transition from a high-speed rural highway to a lower-speed section, typically approaching a small town. The report includes a methodology for assessing these highway sections and a catalog of potential treatments for addressing problems."--Publisher's description.

Handbook on High-Speed Rail and Quality of Life Springer Science & Business Media

In this thesis Christian Sohar describes his investigation into the gigacycle fatigue behavior of tool steels. In an interdisciplinary approach he uses knowledge and methods from a wide variety of disciplines including materials science, metallurgy, chemistry, physics and mechanical engineering. Christian gives a general introduction into steel tools and fatigue in materials. Later he extensively discusses the experimental techniques and results. Indeed it is the detail of the content in this thesis which makes it an invaluable resource for students entering the field and scientists working in related disciplines. Overall, the thesis helps us understand more about the mechanical behavior of metallic materials with complex microstructure and high hardness.