Physics Spa Singapore Examinations And Assessment Board

Personalized Pathway-Activated Systems Imaging in Oncology
Condensed Matter Field Theory
Oncology Massage
World Congress on Medical Physics and Biomedical Engineering 2018
Chemistry Matters
Teaching Science In Culturally Relevant Ways: Ideas From Singapore Teachers
Singapore in Global History
New Phenomena And New States Of Matter In The Universe: From Quarks To Cosmos
British Medical Journal
Reliability Engineering
Assessment in Singapore: Perspectives for classroom practice
Physics Briefs
FRCR Physics MCQs in Clinical Radiology
Catalog of Copyright Entries. Third Series
Khan's The Physics of Radiation Therapy
Longman Guide to SPA
Five Standards for Safe Childbearing
Integrated Science Physics
Acoustical Imaging
Computed Tomography for Technologists
Bibliography in Integrated Science Teaching
Equilibrium Statistical Physics
Introduction to Frustrated Magnetism
Rhythms of the Brain
Image Processing '92 (Icip '92) - Proceedings Of The 2nd Singapore International Conference
Analogue Gravity Phenomenology
Energy
GCE `O' Level Physics Matters
The Essential Physics of Medical Imaging,
Psychology in Singapore
Reexamining the Scientific Basis for the Linear No-threshold Model of Low-dose Radiation
World Congress on Medical Physics and Biomedical Engineering September 7 - 12, 2009 Munich, Germany
Multiple Representations in Physics Education
Proceedings of GeoShanghai 2018 International Conference: Multi-physics Processes in Soil Mechanics and Advances in Geotechnical Testing

Cambridge IGCSE® Physics Practical Workbook
Inquiry into the Singapore Science Classroom
Index Medicus
Scientific and Technical Aerospace Reports
A Passion for Teaching
Cumulated Index Medicus

LI DUNCAN

Personalized Pathway-Activated Systems Imaging in Oncology John Wiley & Sons
This book concentrates on the 'heart' of teaching; teachers' moral purposes, the nature of care, emotional commitment and motivation - celebrating and acknowledging the best teaching and the best teachers.
Condensed Matter Field Theory Amsterdam University Press
This primer is aimed at elevating graduate students of condensed matter theory to a level where they can engage in independent research. Topics covered include second quantisation, path and functional field integration, mean-field theory and collective phenomena.
Oncology Massage Care Publications
This textbook concentrates on modern topics in statistical physics with an emphasis on strongly interacting condensed matter systems. The book is self-contained and is suitable for beginning graduate students in physics and materials science or undergraduates who have taken an introductory course in statistical mechanics. Phase transitions and critical phenomena are discussed in detail including mean field and Landau theories and the renormalization group approach. The theories are applied to a number of interesting systems such as magnets, liquid crystals, polymers, membranes, interacting Bose and Fermi fluids; disordered systems, percolation and spin of equilibrium concepts are also discussed. Computer simulations of condensed matter systems by Monte Carlo-based and molecular dynamics methods are treated.
World Congress on Medical Physics and Biomedical Engineering 2018 Springer Science & Business Media
Get a firm handle on the engineering reliability process with this insightful and complete resource The newly and thoroughly revised 3rd Edition of Reliability Engineering delivers a comprehensive and insightful analysis of this crucial field. Accomplished author, professor, and engineer, Elsayed. A. Elsayed includes new examples and end-of-chapter problems to illustrate concepts, new chapters on resilience and the physics of failure, revised chapters on reliability and hazard functions, and more case studies illustrating the approaches and methodologies described within. The book combines analyses of system reliability estimation for time independent and time dependent models with the construction of the likelihood function and its use in estimating the parameters of failure time distribution. It concludes by addressing the physics of failures, mechanical reliability, and system resilience, along with an explanation of how to ensure reliability objectives by providing preventive and scheduled maintenance

and warranty policies. This new edition of Reliability Engineering covers a wide range of topics, including: Reliability and hazard functions, like the Weibull Model, the Exponential Model, the Gamma Model, and the Log-Logistic Model, among others System reliability evaluations, including parallel-series, series-parallel, and mixed parallel systems The concepts of time- and failure-dependent reliability within both repairable and non-repairable systems Parametric reliability models, including types of censoring, and the Exponential, Weibull, Lognormal, Gamma, Extreme Value, Half-Logistic, and Rayleigh Distributions Perfect for first-year graduate students in industrial and systems engineering, Reliability Engineering, 3rd Edition also belongs on the bookshelves of practicing professionals in research laboratories and defense industries. The book offers a practical and approachable treatment of a complex area, combining the most crucial foundational knowledge with necessary and advanced topics.

Chemistry Matters Springer

Present Your Research to the World! The World Congress 2009 on Medical Physics and Biomedical Engineering – the triennial scientific meeting of the IUPESM - is the world’s leading forum for presenting the results of current scientific work in health-related physics and technologies to an international audience. With more than 2,800 presentations it will be the biggest conference in the fields of Medical Physics and Biomedical Engineering in 2009! Medical physics, biomedical engineering and bioengineering have been driving forces of innovation and progress in medicine and healthcare over the past two decades. As new key technologies arise with significant potential to open new options in diagnostics and therapeutics, it is a multidisciplinary task to evaluate their benefit for medicine and healthcare with respect to the quality of performance and therapeutic output. Covering key aspects such as information and communication technologies, micro- and nanosystems, optics and biotechnology, the congress will serve as an inter- and multidisciplinary platform that brings together people from basic research, R&D, industry and medical application to discuss these issues. As a major event for science, medicine and technology the congress provides a comprehensive overview and in–depth, first-hand information on new developments, advanced technologies and current and future applications. With this Final Program we would like to give you an overview of the dimension of the congress and invite you to join us in Munich! Olaf Dössel Congress President Wolfgang C.

Teaching Science In Culturally Relevant Ways: Ideas From Singapore Teachers Springer

This important overview explores the connections between Singapore's past with historical developments worldwide until present day. The contributors analyse Singapore as a city-state seeking to provide an interdisciplinary perspective to the study of the global dimensions contributing to Singapore's growth. The book's global perspective demonstrates that many of the discussions of Singapore as a city-state have relevance and implications beyond Singapore to include Southeast Asia and the world. This vital volume should not be missed by economists, as well as those interested in imperial histor.

Singapore in Global History Cambridge University Press

In Oncology Massage - an integrative approach to cancer care the authors have created a textbook which will provide both experienced and inexperienced therapists with a resource to expand their knowledge and understanding of working with people with cancer. Cancer occurrence and survivorship are now so common that every massage therapist will at some time work with clients who have been through cancer treatment. The short and long-term effects of biomedical cancer treatment require massage therapy adaptations to pressure, site, position and duration to provide safe and effective treatments. Informed massage therapists can support the body to promote overall wellness as well as identify the underlying secondary effects of cancer treatment that contribute to physical dysfunction. Oncology Massage: An Integrative Approach to Cancer Care provides massage therapists with essential information for: Treatment planning based on the physiology of cancer and cancer treatments Critical, thoughtful treatment decision making Consideration of the psychosocial effects of cancer Enhancing therapist self-awareness and building a therapeutic relationship. The information is presented in a clear and simple format with plentiful use of illustrations and information boxes which allows it to be used both as a learning tool for those new to the field of oncology massage and as a resource for quick referral when working with new patients. The techniques of massage therapy change very little; it is the knowledge and understanding of their use that distinguishes a massage therapist. Oncology Massage is unusual in that it includes contributions not only from a range of experienced practitioners but also from people with cancer who have received massage during and after cancer treatment. This feedback from clients provides an invaluable addition to the understanding of how massage can be used as a safe and effective part of cancer care.

New Phenomena And New States Of Matter In The Universe: From Quarks To Cosmos Cambridge University Press

This volume contains papers on Image Compression, Implementations, Feature Detection, 3-D Vision, Document Processing, Multi-Resolution Processing, Medical Imaging, Image Analysis Modelling, Neural Networks, Object Recognition, Remote Sensing, Dynamic Vision, Application, System & Architecture, Image Restoration/Enhancement and Image Segmentation.

British Medical Journal LWW

Analogue Gravity Phenomenology is a collection of contributions that cover a vast range of areas in physics, ranging from surface wave propagation in fluids to nonlinear optics. The underlying common aspect of all these topics, and hence the main focus and perspective from which they are explained here, is the attempt to develop analogue models for gravitational systems. The original and main motivation of the field is the verification and study of Hawking radiation from a horizon: the enabling feature is the possibility to generate horizons in the laboratory with a wide range of physical systems that involve a flow of one kind or another. The years around 2010 and onwards witnessed a sudden surge of experimental activity in this expanding field of research. However, building an expertise in analogue gravity requires the researcher to be equipped with a rather broad

range of knowledge and interests. The aim of this book is to bring the reader up to date with the latest developments and provide the basic background required in order to appreciate the goals, difficulties, and success stories in the field of analogue gravity. Each chapter of the book treats a different topic explained in detail by the major experts for each specific discipline. The first chapters give an overview of black hole spacetimes and Hawking radiation before moving on to describe the large variety of analogue spacetimes that have been proposed and are currently under investigation. This introductory part is then followed by an in-depth description of what are currently the three most promising analogue spacetime settings, namely surface waves in flowing fluids, acoustic oscillations in Bose-Einstein condensates and electromagnetic waves in nonlinear optics. Both theory and experimental endeavours are explained in detail. The final chapters refer to other aspects of analogue gravity beyond the study of Hawking radiation, such as Lorentz invariance violations and Brownian motion in curved spacetimes, before concluding with a return to the origins of the field and a description of the available observational evidence for horizons in astrophysical black holes.

Reliability Engineering World Scientific This classic full-color text helps the entire radiation therapy team--radiation oncologists, medical physicists, dosimetrists, and radiation therapistsdevelop a thorough understanding of 3D conformal radiotherapy (3D-CRT), stereotactic radiosurgery (SRS), high dose-rate remote afterloaders (HDR), intensity modulated radiation therapy (IMRT), image-guided radiation therapy (IGRT), Volumetric Modulated Arc Therapy (VMAT), and proton beam therapy, as well as the physical concepts underlying treatment planning, treatment delivery, and dosimetry.

Assessment in Singapore: Perspectives for classroom practice World Scientific This volume is important because despite various external representations, such as analogies, metaphors, and visualizations being commonly used by physics teachers, educators and researchers, the notion of using the pedagogical functions of multiple representations to support teaching and learning is still a gap in physics education. The research presented in the three sections of the book is introduced by descriptions of various psychological theories that are applied in different ways for designing physics teaching and learning in classroom settings. The following chapters of the book illustrate teaching and learning with respect to applying specific physics multiple representations in different levels of the education system and in different physics topics using analogies and models, different modes, and in reasoning and representational competence. When multiple representations are used in physics for teaching, the expectation is that they should be successful. To ensure this is the case, the implementation of representations should consider design principles for using multiple representations. Investigations regarding their effect on classroom communication as well as on the learning results in all levels of schooling and for different topics of physics are reported. The book is intended for physics educators and their students at universities and for physics teachers in schools to apply multiple representations in physics in a productive way.

Physics Briefs Lippincott Williams & Wilkins

This book offers an insight into the research and practices of science teaching and learning in the Singapore classroom, with particular attention paid to how they map on to science as inquiry. It provides a spectrum of Singapore's science educational practices through all levels of its education system, detailing both successes and shortcomings. The book features a collection of research and discourse by science educators in Singapore, organized around four themes that are essential components of approaching science as inquiry: teachers' ideas and their practices, opportunities and constraints from a systemic level, students' competencies and readiness to learn through inquiry and the need for greater awareness of the role of informal learning avenues in science education. In addition, the discourse within each theme is enriched by commentary from a leading international academic, which helps to consolidate ideas as well as position the issues within a wider theoretical and international context. Overall, the papers set out important contexts for readers to understand the current state of science education in Singapore. They also highlight strengths and gaps in practices of science as inquiry as well as provide suggestions about how the system can be improved. These research findings are therefore helpful as they provide honest and evidence-based feedback as well as tangible and doable ideas that policy makers, teachers, students and school administrators can adopt, adapt and enhance.

FRCR Physics MCQs in Clinical Radiology Springer

This comprehensive volume covers radiopharmaceuticals developed for pathway-directed systems in imaging and theranostic applications. We now are at the cutting edge of providing personalized treatment with increased use in oncology of these new radiopharmaceuticals. Trends in high-resolution instrumentation development, quality assurance systems and regulatory compliance for radiopharmaceuticals, clinical evaluation of radiopharmaceuticals, and benefits and pitfalls of the current clinical FDG PET are discussed. Radiopharmaceuticals are used for diagnosis of diseases of the central nervous and cardiovascular systems and for staging, restaging, and treatment planning for cancers. Nuclear biomarkers allow precise measurement of molecular pathways on a whole-body image upon administration of functional radiolabeled agents, and nuclear imaging agents have potential use in patient selection, pharmacokinetic, dosage-finding, and proof-of-concept studies. Nuclear imaging agents and hybrid instrumentation also provide sensitive and specific answers for differential responsiveness in therapeutic outcome. This book serves as a reference for moving the discovery and development of radiopharmaceuticals from the workbench to clinical applications. It thus benefits not only clinicians but also translational research scientists—molecular biologists, chemists, imaging scientists, pharmaceutical developers, physicists, and support staff.

Catalog of Copyright Entries. Third Series Copyright Office, Library of Congress

Vols. for 1963- include as pt. 2 of the Jan. issue: Medical subject headings.

Khan's The Physics of Radiation Therapy Psychology Press

This book offers a collection of specimen multiple choice questions (MCQs) for the first FRCR examination in clinical radiology that is for the physics module. It includes questions arranged in nine sets of 40 MCQs following the examination format. Additionally, chapters cover explanation to some of the answers for better understanding of the topics. The book covers updated syllabus of Royal College of Radiology (RCR), UK on scientific basis of medical imaging, including topics in molecular imaging. Each chapter with a practice set comprises of questions arranged in the order of the syllabus of the examination, starting from the basis of medical imaging and radiation physics to the principles of specific modalities and safety issues. This book offers assistance to candidates preparing for the first FRCR examination, clinical radiology trainees, and radiology and nuclear medicine postgraduate students.

Longman Guide to SPA Springer Science & Business Media

This book (vol. 2) presents the proceedings of the IUPESM World Congress on Biomedical Engineering and Medical Physics, a triennially organized joint meeting of medical physicists, biomedical engineers and adjoining health care professionals. Besides the purely scientific and technological topics, the 2018 Congress will also focus on other aspects of professional involvement in health care, such as education and training, accreditation and certification, health technology assessment and patient safety. The IUPESM meeting is an important forum for medical physicists and biomedical engineers in medicine and healthcare learn and share knowledge, and discuss the latest research outcomes and technological advancements as well as new ideas in both medical physics and biomedical engineering field.

Five Standards for Safe Childbearing World Scientific

Studies of mechanisms in the brain that allow complicated things to happen in a coordinated fashion have produced some of the most spectacular discoveries in neuroscience. This book provides eloquent support for the idea that spontaneous neuron activity, far from being mere noise, is actually the source of our cognitive abilities. It takes a fresh look at the coevolution of structure and function in the mammalian brain, illustrating how self-emerged oscillatory timing is the brain's fundamental organizer of neuronal information. The small-world-like connectivity of the cerebral cortex allows for global computation on multiple spatial and temporal scales. The perpetual interactions among the multiple network oscillators keep cortical systems in a highly sensitive "metastable" state and provide energy-efficient synchronizing mechanisms via weak links. In a sequence of "cycles," György Buzsáki guides the reader from the physics of oscillations through neuronal assembly organization to complex cognitive processing and memory storage. His clear, fluid writing-accessible to any reader with some scientific knowledge-is supplemented by extensive footnotes and references that make it just as gratifying and instructive a read for the specialist. The coherent view of a single author who has been at the forefront of research in this exciting field, this volume is essential reading for anyone interested in our rapidly evolving understanding of the brain.

Integrated Science Physics Springer

This book is the second volume of the proceedings of the 4th GeoShanghai

International Conference that was held on May 27 - 30, 2018. This conference showcased the recent advances and technology in geotechnical engineering, geoenvironmental engineering and transportation engineering. This volume, entitled “Multi-physics Processes in Soil Mechanics and Advances in Geotechnical Testing”, covers a wide range of topics in soil mechanics, focusing on the behaviours of partially saturated soils, combined effects of multi-physics processes in geological materials and systems, and emerging methods and techniques in geotechnical in-situ testing and monitoring. This book may benefit researchers and scientists from the academic fields of soil and rock mechanics, geotechnical engineering, geoenvironmental engineering, transportation engineering, geology, mining and energy, as well as practical engineers from the industry. Each of the papers included in this book received at least two positive peer reviews. The editors would like to express their sincerest appreciation to all of the anonymous reviewers all over the world, for their diligent work.

Acoustical Imaging Pearson Education South Asia

This edition of our successful series to support the Cambridge IGCSE Physics syllabus (0625) is fully updated for the revised syllabus for first examination from 2016. Written by an experienced teacher who is passionate about practical skills, the Cambridge IGCSE® Physics Practical Workbook makes it easier to incorporate practical work into lessons. This Workbook provides interesting and varied practical investigations for students to carry out safely, with guided exercises designed to develop the essential skills of handling data, planning investigations, analysis and evaluation. Exam-style questions for each topic offer novel scenarios for students to apply their knowledge and understanding, and to help them to prepare for their IGCSE Physics paper 5 or paper 6 examinations.

Computed Tomography for Technologists Springer

Acoustical imaging has become an indispensable tool in a variety of fields. Since its introduction, the applications have grown and cover a variety of techniques, producing significant results in fields as disparate as medicine and seismology. Cutting-edge trends continue to be discussed worldwide. This book contains the proceedings of the 27th International Symposium on Acoustical Imaging (AI27), which took place in Saarbrücken, Germany, from March 24th to March 27th 2003. The Symposium belongs to a conference series in existence since 1968. AI27 comprised sessions on: Medical Imaging, Non-Destructive Testing, Seismic Imaging, Physics and Mathematics of Acoustical Imaging, Acoustic Microscopy. During two well-attended workshops the applications of quantitative acoustical imaging in biology and medical applications, and in near-field imaging of materials, were discussed. Based on its cross-disciplinary aspects, the authors of the papers of AI27 present experiments, theory and construction of new instruments.