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Technology and Global Change Wind Turbine Technology Fundamentals of EEG Technology: Basic concepts and methods *Big Data Analysis for Green Computing* Fundamental Concepts in Heterogeneous Catalysis *Aerospace Predictive Maintenance* Digital Twin – Fundamental Concepts to Applications in Advanced Manufacturing *Basic Concepts of Information Technology (IT)* Fundamentals of Information Technology Key Concepts in Science and Technology Studies Fundamental Concepts of Educational Leadership *Core Concepts of Accounting Information Systems* ECDL Module 1 Fundamentals of EEG Technology: Clinical correlates Silicon VLSI Technology Computer Fundamentals and Information Technology Fundamental Concepts of Liquid-Propellant Rocket Engines Fundamental Concepts for Interactive Paper and Cross-Media Information Spaces Fundamentals of Information Technology Fundamentals of Biofuels Engineering and Technology The Fundamental Concepts of Physics in the Light of Modern Discovery *Research Handbook on Fundamental Concepts of Environmental Law* Technology Enhanced Learning Workflow Automation Being Fluent with Information Technology Value Added by Venture Capital Firms Big Data Fundamentals *Big Data Fundamentals* Wireless Technologies: Concepts, Methodologies, Tools and Applications Fundamental Concepts in Computer Science *Fundamentals of Information Technology* Introduction to Information Science Design of Anaerobic Processes for Treatment of Industrial and Muncipal Waste Cloud Computing Clinical Technologies: Concepts, Methodologies, Tools and Applications Concise Ict Fundamentals Volume One A Primer of GIS, Second Edition *Key Concepts in Energy Standards and Innovations in Information Technology and Communications* Electronics Technology Fundamentals

Key Concepts in Science and Technology Studies Jan 23 2022 Key Concepts in Science and Technology Studies is an introduction to the interdisciplinary field of science and technology studies through concepts that are also used in other areas, from design to organization studies...

Fundamentals of Biofuels Engineering and Technology Mar 13 2021 This book explores the use of biomass as an energy source and its application in energy conversion technologies. Focusing on the challenges of, and technologies related to, biomass conversion, the book is divided into three parts. The first part underlines the fundamental concepts that form the basis of biomass production, its feasibility valuation, and its potential utilization. This part does not consider only how biomass is generated, but also methods of assessment. The second part focuses on the clarification of central concepts of the biorefinery processes. After a preliminary introduction with industrial examples, common issues of biochemical reaction engineering applications are analysed in detail. The theory explained in this part demonstrates that the chemical kinetics are the core focus in modelling biological processes such as growth, decay, product formation and feedstock consumption. This part continues with the theory of biofuels production, including biogas, bioethanol, biodiesel and Fischer-Tropsch synthesis of hydrocarbons. The third part of this book gives detailed explanations of preliminary notions related to the theory of thermodynamics. This theory will assist the reader when taking into account the concepts treated in the previous two parts of the book. Several detailed derivations are given to give the reader a full understanding of the arguments at hand. This part also gives literature data on the main properties of some biomass feedstock. Fundamentals of Biofuels Engineering and Technology will be of interest not only to academics and researchers working in this field but also to graduate students and energy professionals seeking to expand their knowledge of this increasingly important area.

Introduction to Information Science Mar 01 2020 This landmark textbook takes a whole subject approach to Information Science as a discipline. Introduced by leading international scholars and offering a global perspective on the discipline, this is designed to be the standard text for students worldwide. The authors' expert narrative guides you through each of the essential building blocks of information science offering a concise introduction and expertly chosen further reading and resources. Critical topics covered include: foundations: - concepts, theories and historical perspectives - organising and retrieving information - information behaviour, domain analysis and digital literacies - technologies, digital libraries and information management - information research methods and informetrics - changing contexts: information society, publishing, e-science and digital humanities - the future of the discipline. Readership: Students of information science, information and knowledge management, librarianship, archives and records management worldwide. Students of other information-related disciplines such as museum studies, publishing, and information systems and practitioners in all of these disciplines.

Electronics Technology Fundamentals Jun 23 2019 With an emphasis on component and circuit operation, analysis, applications, and testing, this text thoroughly explores the foundation of DC circuits, AC circuits, discrete electronic devices and op-amps in a narrative that students can understand.

Big Data Analysis for Green Computing Jul 29 2022 This book focuses on big data in business intelligence, data management, machine learning, cloud computing, and smart cities. It also provides an interdisciplinary platform to present and discuss recent innovations, trends, and concerns in the fields of big data and analytics. Big Data Analysis for Green Computing: Concepts and Applications presents the latest technologies and covers the major challenges, issues, and advances of big data and data analytics in green computing. It explores basic as well as high-level concepts. It also includes the use of machine learning using big data and discusses advanced system implementation for smart cities. The book is intended for business and management educators, management researchers, doctoral scholars, university professors, policymakers, and higher academic research organizations.

Wind Turbine Technology Sep 30 2022 Wind Turbine Technology is recognized worldwide as the authoritative guide to state-of-the-art wind turbine engineering. If you are an energy planner, engineer, designer, utility project manager, wind power station developer, manufacturer of wind turbine equipment, teacher, or student, the book has all the latest information for you. This text and reference book is ideal for educational settings. Packed with application-oriented advice, detailed graphics, photographs, and numerical examples - this new edition describes past and present wind turbines and provides the reader with detailed mathematical models developed by leaders in the fields of aerodynamics, structural dynamics and fatigue, meteorology, acoustic and electromagnetic emissions, commercial wind power applications, and utility power systems.

Concise Ict Fundamentals Volume One Oct 27 2019 Knowing that this world is now moving toward a global village we are in information era where practically nothing can be done without the power of computers in most industries. A solid knowledge about fundamentals of computing has become indispensable in everyday life. This book has been prepared for you to uncover several confusing concepts that pose a big challenge to computer learners and users. I am coming from both educational and professional background with great experience to better alienate the hinges that serve as obstacles to high-tech solutions to everyone. It is the togetherness of a great practical experience, educational and teaching skills, technical know-how, and continuous customer value-added service and research that has always been the source of creation of this book and three other computer science books. The feedbacks so far received from few professors in information technology in Dallas, Texas, area strongly suggests the use of these books as a great fundamental and companion material for computer science students. In Ghana, the Education Service and Curriculum Research and Development Department (CRDD) has approved the Concise ICT Fundamentals textbook as the recommended supplementary material for the teaching and learning of ICT in senior high schools, technical schools, and colleges of education and for general usage. The organization of the core material in this book both provides support training unconditionally to everyone who wants to be computer literate and also extends its learning curve to high quality ICT systems engineering to individuals or companies already operational in the high-tech industry. This book provides a solid foundation for information technology. This book is essentially prepared for senior high school and first year college students. You don't want to miss this good news.

The Fundamental Concepts of Physics in the Light of Modern Discovery Feb 09 2021

Technology Enhanced Learning Dec 10 2020 Technology Enhanced Learning is an essential reference for both academic and professional researchers in the field of institutional and home education. Technology Enhanced Learning (TeL) has provided tools and infrastructure to education and training disciplines for over a decade. The papers presented in this volume cover research issues including pedagogical and evaluation theories, integrated learning environments, e-learning experiments, trials and overall results from actual TeL deployment. This state-of-the-art volume contains a compilation of select papers presented during the Technology Enhanced Learning (TeL) workshop co-located with the World Computer Congress, August 2004, in Toulouse, France.

Cloud Computing Dec 30 2019 Clouds are distributed technology platforms that leverage sophisticated technology innovations to provide highly scalable and resilient environments that can be remotely utilized by organizations in a multitude of powerful ways. To successfully build upon, integrate with, or even create a cloud environment requires an understanding of its common inner mechanics, architectural layers, and models, as well as an understanding of the business and economic factors that result from the adoption and real-world use of cloud-based services. In Cloud Computing: Concepts, Technology & Architecture, Thomas Erl, one of the world's top-selling IT authors, teams up with cloud computing experts and researchers to break down proven and mature cloud computing technologies and practices into a series of well-defined concepts, models, technology mechanisms, and technology architectures, all from an industry-centric and vendor-neutral point of view. In doing so, the book establishes concrete, academic coverage with a focus on structure, clarity, and well-defined building blocks for mainstream cloud computing platforms and solutions. Subsequent to technology-centric coverage, the book proceeds to establish business-centric models and metrics that allow

for the financial assessment of cloud-based IT resources and their comparison to those hosted on traditional IT enterprise premises. Also provided are templates and formulas for calculating SLA-related quality-of-service values and numerous explorations of the SaaS, PaaS, and IaaS delivery models. With more than 260 figures, 29 architectural models, and 20 mechanisms, this indispensable guide provides a comprehensive education of cloud computing essentials that will never leave your side.

Fundamentals of EEG Technology: Basic concepts and methods Aug 30 2022

Fundamentals of Information Technology Apr 13 2021 The third edition of Fundamentals of Information Technology is a 'must have' book not only for BCA and MBA students, but also for all those who want to strengthen their knowledge of computers. The additional chapter on MS Office is a comprehensive study on MS Word, MS Excel and other components of the package. This book is packed with expert advice from eminent IT professionals, in-depth analyses and practical examples. It presents a detailed functioning of hardware components besides covering the software concepts. A broad overview of Computer architecture, Data representation in the computer, Operating systems, Database management systems, Programming languages, etc., has also been included. An additional chapter on Mobile Computing and other state-of-the-art innovations in the IT world have been incorporated. Not only that, the latest Internet technologies have also been covered in detail.One should use this book to acquire computer literacy in terms of how data is represented in a computer, how hardware devices are integrated to get the desired results, how the computer can be networked for interchanging data and establishing communication.Each chapter is followed by a number of review questions.

Fundamental Concepts of Educational Leadership Dec 22 2021 Rev. ed. of: Fundamental concepts of educational leadership and management. 1st ed. c1995.

Core Concepts of Accounting Information Systems Nov 20 2021 Knowing how an accounting information systems gather and transform data into useful decision-making information is fundamental knowledge for accounting professionals. Mark Simkin, Jacob Rose, and Carolyn S. Norman's essential text, Core Concepts of Accounting Information Systems, 13th Edition helps students understand basic AIS concepts and provides instructors the flexibility to support how they want to teach the course.

ECDL Module 1 Oct 20 2021 The European Computer Driving Licence (ECDL) is a European-wide qualification that enables you to demonstrate your competence in computer skills. It covers a range of specific knowledge areas and skill sets, broken down into seven modules. Module 1: Basic Concepts of Information Technology covers the make-up of a PC and the basic concepts of information technology such as data storage and memory, and the uses of information networks within computing. It also looks at the application of computer software and the use of IT systems in everyday situations and covers some of the basic security and legal issues. This study guide takes you through all the knowledge areas and skills required to understand and pass Module 1 of the ECDL syllabus. Throughout each chapter we have used clear, jargon free, self-paced exercises that will provide you with an understanding of all the key elements which will prepare you for the ECDL Test.

Basic Concepts of Information Technology (IT) Mar 25 2022 The European Computer Driving Licence is a European qualification that enables individuals to demonstrate their competency in computer skills. This text covers the basics of operating a computer and some security issues.

Workflow Automation Nov 08 2020 This book describes basic concepts of workflow automation in the graphic industry. There are three main chapters: Scope of Workflows in the Printing Industry, Production Models, and Metadata Formats. The book does not describe the individual business and production steps for manufacturing a print product. Rather, it describes what kinds of data exchanges are required between management software and devices to make the automatic execution of processes possible. Primary audience is students studying graphic arts technology, practitioners at printing and manufacturing companies, and computer scientists who are interested in workflow-related matters. It is presupposed that the reader is familiar with the basic procedures in the printing industry as well with the fundamental concepts of IT technology.

Research Handbook on Fundamental Concepts of Environmental Law Jan 11 2021 The quality and the strength of an environmental legal system is a reflection of the conceptual foundations upon which it is constructed. The Research Handbook on Fundamental Concepts of Environmental Law illuminates key aspects of environmental governance through the lens of their underlying dimensions: for example, the form, structure and language of international, regional and national instruments; the function of norms, objectives and standards; and the relevance of economic analysis and of integrated policy formulation. The topical chapters in this timely Handbook include analyses of human rights, constitutional rights, property rights, sustainable development, environmental impact assessment and precaution. Perceptive contributions examine the emerging roles played by various concepts, values and objectives in environmental governance. The nature of these emerging concepts and their relationship with traditional rights and duties, which are typically reactive in nature, is of particular significance. The concepts examined go to the heart of environmental law: the capacity of a system of environmental governance to be judicially recognized and enforced.This insightful Handbook will be a valuable resource for all students and researchers in environmental law and governance. It will be essential reading for policymakers, legal drafters and anyone needing to understand the foundations of the modern environmental legal system.

Wireless Technologies: Concepts, Methodologies, Tools and Applications Jun 03 2020 Contains the latest research, case studies, theories, and methodologies within the field of wireless technologies.

Fundamental Concepts in Computer Science May 03 2020 This book presents fundamental contributions to computer science as written and recounted by those who made the contributions themselves. As such, it is a highly original approach to a OC living historyOCO of the field of computer science. The scope of the book is broad in that it covers all aspects of computer science, going from the theory of computation, the theory of programming, and the theory of computer system performance, all the way to computer hardware and to major numerical applications of computers.

Technology and Global Change Nov 01 2022 This is the first book to comprehensibly describe how technology has shaped society and the environment over the last 200 years. It will be useful for researchers, as a textbook for graduate students, for people engaged in long-term policy planning in industry and government, for environmental activists, and for the wider public interested in history, technology, or environmental issues.

Key Concepts in Energy Aug 25 2019 Organized around eight fundamental ideas, Key concepts in energy history explores the discoveries, technologies and new paradigms in the field of energy, and how they have changed the course of history. Complex technical concepts such as the "rebound effect", "technological hybridization", "marginal cost pricing" are explained in clear terms and a balanced and concise account of t energy sources in the XIX and XX century such as wood, coal, oil, hydroelectricity and nuclear energy is provided. Key concepts in energy considers the process of energy-substitutions and analyzes it as a process of complementary usages, hybridization and technological mixes. The ex-post view tends to focus on replacement from among alternative energy-technologies and is basically innovation-centric. This means that little attention has been given to factors such as the windows of opportunities created by governments, inventors and entrepreneurs. This book highlights how key energy concepts surfaced, tracing their evolution throughout history. It encompasses four economic concepts (rebound effect, energy intensity, marginal cost pricing and levelized cost accounting) and four technological-engineering concepts (primary/final energy, technological hybridization, last gasp and probable oil reserves). The main benefit from reading the book is a cross disciplinary overview of energy fundamentals in a short and focused reading.

Fundamentals of Information Technology Apr 01 2020 FUNDAMENTALS OF INFORMATION TECHNOLOGY comprehensively covers both the basic and advanced aspects of Information Technology. The book starts with a simple but comprehensive discussion of basic concepts of Information Technology as well as Computer Science. It explains the various common input/output devices along with a few advanced and rarely use ones in detail. The book also discusses a majority of the widely used application softwares with its area of application and includes review questions to reinforce and enhance learning. Basics to advanced topics of computer networks are presented in the computer networks section. The book is written in a reader-friendly style the book is primarily designed to meet the needs of the under-graduate students of several disciplines.

Design of Anaerobic Processes for Treatment of Industrial and Muncipal Waste Jan 29 2020 Principles, methods, and calculations for evaluating, designing and operating anaerobic systems

Fundamental Concepts in Heterogeneous Catalysis Jun 27 2022 This book is based on a graduate course and suitable as a primerfor any newcomer to the field, this book is a detailed introductionto the experimental and computational methods that are used tostudy how solid surfaces act as catalysts. Features include: First comprehensive description of modern theory ofheterogeneous catalysis Basis for understanding and designing experiments in the field Allows reader to understand catalyst design principles Introduction to important elements of energy transformationtechnology Test driven at Stanford University over several semesters

Being Fluent with Information Technology Oct 08 2020 Computers, communications, digital information, softwareâ€"the constituents of the information ageâ€"are everywhere. Being computer literate, that is technically competent in two or three of todayâ€™s software applications, is not enough anymore. Individuals who want to realize the potential value of information technology (IT) in their everyday lives need to be computer fluentâ€"able to use IT effectively today and to adapt to changes tomorrow. Being Fluent with Information Technology sets the standard for what everyone should know about IT in order to use it effectively now and in the future. It explores three kinds of knowledgeâ€"intellectual capabilities, foundational concepts, and skillsâ€"that are essential for fluency with IT. The book presents detailed descriptions and examples of current skills and timeless concepts and capabilities, which will be useful to individuals who use IT and to the instructors who teach them.

Fundamentals of Information Technology Feb 21 2022

Value Added by Venture Capital Firms Sep 06 2020

Fundamental Concepts for Interactive Paper and Cross-Media Information Spaces May 15 2021 While there have been dramatic increases in the use of digital technologies for information storage, processing and delivery over the last twenty years, the affordances of paper have ensured its

retention as a key information medium. In this book we review a wide variety of projects and technological developments for bridging the paper-digital divide. We present our information-centric approach for a tight integration of paper and digital information that is based on a general cross-media information platform. Different innovative augmented paper applications that have been developed based on our interactive paper platform and Anoto Digital Pen and Paper technology are introduced. For example, these applications include a mobile interactive paper-based tourist information system (EdFest) and a paper-digital presentation tool (PaperPoint). Challenges and solutions for new forms of interactive paper and cross-media publishing are discussed. The book is targeted at developers and researchers in information systems, hypermedia and human computer interaction, professionals from the printing and publishing industry as well as readers with a general interest in the future of paper.

Computer Fundamentals and Information Technology Jul 17 2021

Fundamentals of EEG Technology: Clinical correlates Sep 18 2021 (Symp. Seattle

Standards and Innovations in Information Technology and Communications Jul 25 2019 This book gives a thorough explanation of standardization, its processes, its life cycle, and its related organization on a national, regional and global level. The book provides readers with an insight in the interaction cycle between standardization organizations, government, industry, and consumers. The readers can gain a clear insight to standardization and innovation process, standards, and innovations life-cycle and the related organizations with all presented material in the field of information and communications technologies. The book introduces the reader to understand perpetual play of standards and innovation cycle, as the basis for the modern world.

Aerospace Predictive Maintenance May 27 2022 Aerospace Predictive Maintenance: Fundamental Concepts, written by longtime practitioner Charles E. Dibsdale based in the UK, considers PdM a subset of Condition Based Maintenance (CBM), and must obey the same underlying rules and pre-requisites that apply to it. Yet, PdM is new because it takes advantage of emerging digital technology in sensing, acquiring data, communicating the data, and processing it. This capability can autonomously analyse the data and send alerts and advice to decision makers, potentially reducing through-life cost and improving safety. Aerospace Predictive Maintenance: Fundamental Concepts provides a history of maintenance, and how performance, safety and the environment make direct demands on maintenance to deliver more for less in multiple industries. It also covers Integrated Vehicle Health Management (IVHM) that aims to provide a platformcentric framework for PdM in the mobility domain. The book discusses PdM maturity, offering a context of the transformation of data through information and knowledge. Understanding some of the precepts of knowledge management provides a really useful and powerful perspective on PdM as an information system. On the other hand, Aerospace Predictive Maintenance: Fundamental Concepts also discusses disadvantages of PdM and shows how these may be addressed. One of the fundamental changes PdM implies is a shift from deterministic black-and-white thinking to more nuanced decision making informed by probabilities and uncertainty. Other concerns such as data management, privacy and ownership are tackled as well. Aerospace Predictive Maintenance: Fundamental Concepts covers additional technologies, such as the Industrial Internet of Things (IIOT) that will result in proliferation of cheap, wireless, ultra-low-power sensors, and will transform PdM into a more economical option. The book brings in the future possibilities of nano technology, which can be used for new sensors, micro-robotics for inspections and self-healing/repairing of systems which can be intergrated with PdM.

Fundamental Concepts of Liquid-Propellant Rocket Engines Jun 15 2021 This book is intended for students and engineers who design and develop liquid-propellant rocket engines, offering them a guide to the theory and practice alike. It first presents the fundamental concepts (the generation of thrust, the gas flow through the combustion chamber and the nozzle, the liquid propellants used, and the combustion process) and then qualitatively and quantitatively describes the principal components involved (the combustion chamber, nozzle, feed systems, control systems, valves, propellant tanks, and interconnecting elements). The book includes extensive data on existing engines, typical values for design parameters, and worked-out examples of how the concepts discussed can be applied, helping readers integrate them in their own work. Detailed bibliographical references (including books, articles, and items from the "gray literature") are provided at the end of each chapter, together with information on valuable resources that can be found online. Given its scope, the book will be of particular interest to undergraduate and graduate students of aerospace engineering.

Digital Twin – Fundamental Concepts to Applications in Advanced Manufacturing Apr 25 2022 This book provides readers with a guide to the use of Digital Twin in manufacturing. It presents a collection of fundamental ideas about sensor electronics and data acquisition, signal and image processing techniques, seamless data communications, artificial intelligence and machine learning for decision making, and explains their necessity for the practical application of Digital Twin in Industry. Providing case studies relevant to the manufacturing processes, systems, and sub-systems, this book is beneficial for both academics and industry professionals within the field of Industry 4.0 and digital manufacturing.

Clinical Technologies: Concepts, Methodologies, Tools and Applications Nov 28 2019 "This multi-volume book delves into the many applications of information technology ranging from digitizing patient records to high-performance computing, to medical imaging and diagnostic technologies, and much more"--

Big Data Fundamentals Jul 05 2020 "This text should be required reading for everyone in contemporary business." --Peter Woodhull, CEO, Modus21 "The one book that clearly describes and links Big Data concepts to business utility." --Dr. Christopher Starr, PhD "Simply, this is the best Big Data book on the market!" --Sam Rostam, Cascadian IT Group "...one of the most contemporary approaches I've seen to Big Data fundamentals..." --Joshua M. Davis, PhD The Definitive Plain-English Guide to Big Data for Business and Technology Professionals Big Data Fundamentals provides a pragmatic, no-nonsense introduction to Big Data. Best-selling IT author Thomas Erl and his team clearly explain key Big Data concepts, theory and terminology, as well as fundamental technologies and techniques. All coverage is supported with case study examples and numerous simple diagrams. The authors begin by explaining how Big Data can propel an organization forward by solving a spectrum of previously intractable business problems. Next, they demystify key analysis techniques and technologies and show how a Big Data solution environment can be built and integrated to offer competitive advantages. Discovering Big Data's fundamental concepts and what makes it different from previous forms of data analysis and data science Understanding the business motivations and drivers behind Big Data adoption, from operational improvements through innovation Planning strategic, business-driven Big Data initiatives Addressing considerations such as data management, governance, and security Recognizing the 5 "V" characteristics of datasets in Big Data environments: volume, velocity, variety, veracity, and value Clarifying Big Data's relationships with OLTP, OLAP, ETL, data warehouses, and data marts Working with Big Data in structured, unstructured, semi-structured, and metadata formats Increasing value by integrating Big Data resources with corporate performance monitoring Understanding how Big Data leverages distributed and parallel processing Using NoSQL and other technologies to meet Big Data's distinct data processing requirements Leveraging statistical approaches of quantitative and qualitative analysis Applying computational analysis methods, including machine learning

Big Data Fundamentals Aug 06 2020 Big Data Science Fundamentals offers a comprehensive, easy-to-understand, and up-to-date understanding of Big Data for all business professionals and technologists. Leading enterprise technology author Thomas Erl introduces key Big Data concepts, theory, terminology, technologies, key analysis/analytics techniques, and more - all logically organized, presented in plain English, and supported by easy-to-understand diagrams and case study examples. Erl provides a uniquely valuable methodology for Big Data analysis, and introduces the underlying analysis techniques and enabling technological constructs that constitute a Big Data solution environment. He presents vendor-neutral guidance on implementing Big Data for competitive advantage; and for successfully integrating Big Data with existing enterprise systems. Coverage includes: Big Data's fundamental concepts and key business/technology drivers "5 V" characteristics of data in Big Data environments: volume, velocity, variety, veracity, and value Types of Big Data: structured, unstructured, semi-structured, and meta-data Big Data's relationships with OLTP, OLAP, ETL, data warehouses, and data marts Fundamental types of analysis, analytics, and machine learning Requirements and tools for visualizing big data Adoption and planning: business cases, privacy, security, provenance, performance, governance, and more Big Data technologies, including clusters, NoSQL, distributed and parallel data processing, Hadoop, cloud computing, and storage Big Data analysis and analytics across the full lifecycle And much more

Silicon VLSI Technology Aug 18 2021 Unique in approach, this book provides an integrated view of silicon technology--with an emphasis on modern computer simulation. It describes not only the manufacturing practice associated with the technologies used in silicon chip fabrication, but also the underlying scientific basis for those technologies. Modern CMOS Technology. Crystal Growth, Wafer Fabrication and Basic Properties of Silicon Wafers. Semiconductor Manufacturing--Clean Rooms, Wafer Cleaning and Gettering. Lithography. Thermal Oxidation and the Si/SiO_2 Interface. Dopant Diffusion. Ion Implantation. Thin Film Diffusion. Etching. Backend Technology. For anyone interested in Fabrication Processes.

A Primer of GIS, Second Edition Sep 26 2019 This accessible text prepares students to understand and work with geographic information systems (GIS), offering a detailed introduction to essential theories, concepts, and skills. The book is organized in four modular parts that can be used in any sequence in entry-level and more specialized courses. Basic cartographic principles are integrated with up-to-date discussions of GIS technologies and applications. Coverage includes everything from what geographic information is to its many uses and societal implications. Practical examples and exercises invite readers to explore the choices involved in producing reliable maps and other forms of geographic information. Illustrations include 170 figures (with 15 in color). The companion website provides links to Web resources for each chapter, plus downloadable PowerPoint slides of most of the figures. New to This Edition *Chapter on online mapping and Big Data. *New and updated discussions of remote sensing, vector and raster data models, location privacy, uses of geocoding, and other timely topics. *Chapter on the many uses of GIS, such as in market analyses, emergency responding, and tracking of epidemics. *Section overviews and an end-of-book glossary. Pedagogical Features *Modules and individual chapters can be used sequentially or in any order. *End-of-chapter review questions with answers,

exercises, and extended exercises for applying theories and concepts. *"In-Depth" sidebars offering a closer look at key concepts and applications. *End-of-chapter links to relevant Web resources.