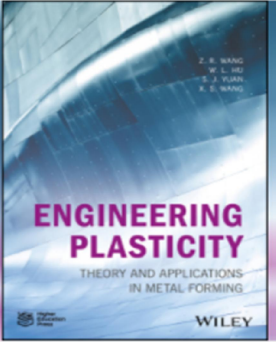

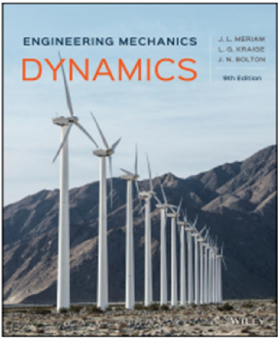
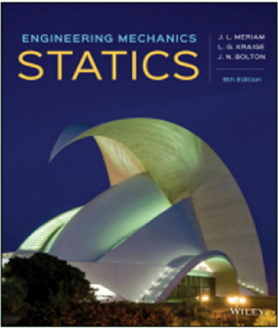


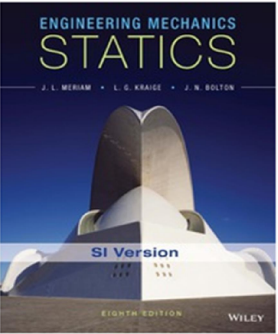
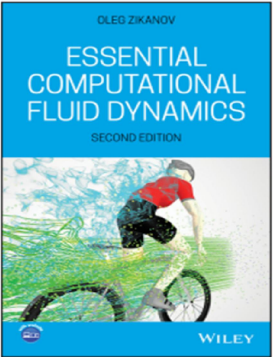
DAFTAR BUKU ELEKTRONIK (E-BOOK) WILEY E-TEXT

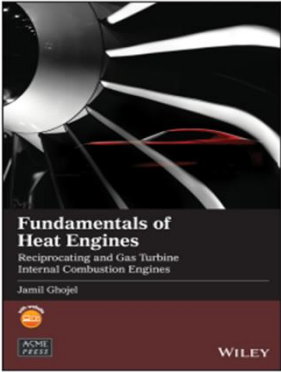
UNTUK: FAKUTAS TEKNIK MESIN DAN DIRGANTARA

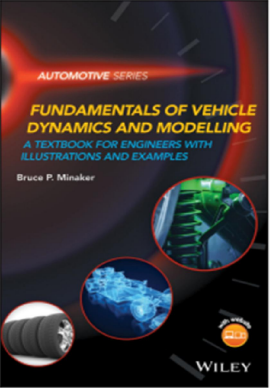
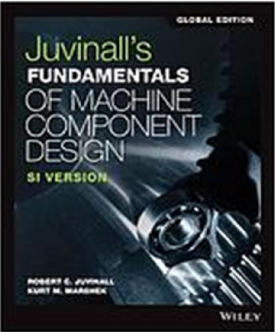
PUBLISHER: WILEY

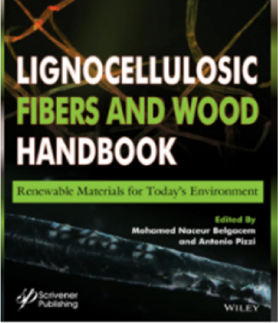
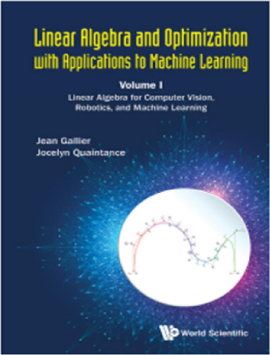
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
1	Engineering Plasticity: Theory and Applications in Metal Forming 	Wang	Wiley	2018	–	–	9781119237327	–	An All-In-One Guide To The Theory And Applications Of Plasticity In Metal Forming, Featuring Examples From The Automobile And Aerospace Industries Provides A Solid Grounding In Plasticity Fundamentals And Material Properties Features Models, Theorems And Analysis Of Processes And Relationships Related To Plasticity, Supported By Extensive Experimental Data Offers A Detailed Discussion Of Recent Advances And Applications In Metal Forming	https://bookshelf.vitalsource.com/#/books/9781119237327
2	3D and 4D Printing in Biomedical Applications: Process Engineering and Additive Manufacturing 	Maniruzzaman	Wiley	2019	–	xviii, 472 hlm. : ilus.	9783527813698	9783527344437 3527344438	A Professional Guide To 3D And 4D Printing Technology In The Biomedical And Pharmaceutical Fields 3D And 4D Printing In Biomedical Applications Offers An Authoritative Guide To 3D And 4D Printing Technology In The Biomedical And Pharmaceutical Arenas. With Contributions From An International Panel Of Academic Scholars And Industry Experts, This Book Contains An Overview Of The Topic And The Most Current Research And Innovations In Pharmaceutical And Biomedical Applications. This Important Volume Explores The Process Optimization, Innovation Process, Engineering, And Platform Technology Behind Printed Medicine. In Addition, Information On Biomedical Developments Include Topics Such As On Shape Memory Polymers, 4D Bio-Fabrications And Bone Printing. The Book Covers A Wealth Of Relevant Topics Including Information On The Potential Of 3D Printing For Pharmaceutical Drug Delivery, Examines A New Fabrication Process, Bio-Scaffolding, And Reviews The Most Current Trends And Challenges In Biofabrication For 3D And 4D Bioprinting. This Vital Resource: -Offers A Comprehensive Guide To 3D And 4D Printing Technology In The Biomedical And Pharmaceutical Fields -Includes Information On The First 3D Printing Platform To Get FDA Approval For A Pharmaceutical Product -Contains A Review Of The Current 3D Printed Pharmaceutical Products -Presents Recent Advances Of Novel Materials For 3D/4D Printing And Biomedical Applications Written For Pharmaceutical Chemists, Medicinal Chemists, Biotechnologists, Pharma Engineers, 3D And 4D Printing	https://bookshelf.vitalsource.com/#/books/9783527813698

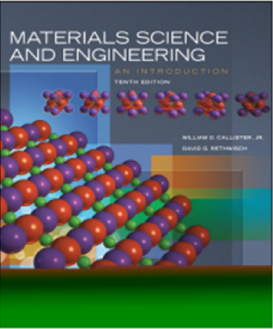
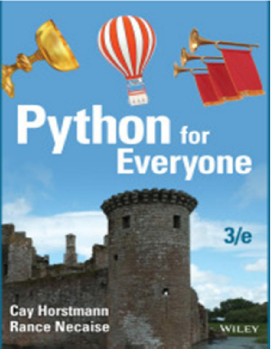
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
3	Engineering Mechanics: Dynamics, 9th Edition 	Meriam		2018	9th ed.	–	9781119390985	9781119391081, 1119391083	<p><i>Engineering Mechanics: Dynamics</i> provides a solid foundation of mechanics principles and helps students develop their problem-solving skills with an extensive variety of engaging problems related to engineering design. More than 50% of the homework problems are new, and there are also a number of new sample problems. To help students build necessary visualization and problem-solving skills, this product strongly emphasizes drawing free-body diagrams, the most important skill needed to solve mechanics problems.</p>	https://bookshelf.vitalsource.com/#/books/9781119390985
4	Engineering Mechanics: Statics, 9th Edition 	Meriam		2018	9th ed.	1 online resource.	9781119392620	9781119392743, 1119392748	<p><i>Engineering Mechanics: Statics</i> provides students with a solid foundation of mechanics principles. This product helps students develop their problem-solving skills with an extensive variety of engaging problems related to engineering design. To help students build necessary visualization and problem-solving skills, a strong emphasis is placed on drawing free-body diagrams, the most important skill needed to solve mechanics problems.</p>	https://bookshelf.vitalsource.com/#/books/9781119392620

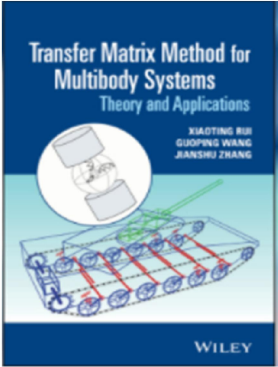

No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
5	Engineering Mechanics: Statics, SI Version, 8th Edition 	Meriam		2016	8th ed.	–	9781119047285	9781119044673, 1119044677	Text has been thoroughly revised to maximize rigor, clarity, readability and approachability Key Concepts throughout the book are especially marked and highlighted. Chapter Reviews at the end of each chapter are highlighted and provide itemized summaries of all key material. Approximately 50 percent of the homework problems are new to this eighth edition. All new problems have been independently solved in order to ensure a high degree of accuracy. Sample Problems have been integrated throughout, including problems with computer-oriented solutions. Answers to all problems listed in a special section at the very end of the book. New photographs reinforce students understanding of how the concepts relate to the real world	https://bookshelf.vitalsource.com/#/books/9781119047285
6	Essential Computational Fluid Dynamics, 2nd Edition 	Zikanov	Wiley	2019	2nd ed.	XXI, 356 hlm.	9781119474814	781119474623, 1119474620	<p>Provides a clear, concise, and self-contained introduction to Computational Fluid Dynamics (CFD). This comprehensively updated new edition covers the fundamental concepts and main methods of modern Computational Fluid Dynamics (CFD). With expert guidance and a wealth of useful techniques, the book offers a clear, concise, and accessible account of the essentials needed to perform and interpret a CFD analysis. The new edition adds a plethora of new information on such topics as the techniques of interpolation, finite volume discretization on unstructured grids, projection methods, and RANS turbulence modeling. The book has been thoroughly edited to improve clarity and to reflect the recent changes in the practice of CFD. It also features a large number of new end-of-chapter problems. All the attractive features that have contributed to the success of the first edition are retained by this version. The book remains an indispensable guide, which:</p> <p>Introduces CFD to students and working professionals in the areas of practical applications, such as mechanical, civil, chemical, biomedical, or environmental engineering</p> <p>Focuses on the needs of someone who wants to apply existing CFD software and understand how it works, rather than develop new codes</p> <p>Covers all the essential topics, from the basics of discretization to turbulence modeling and uncertainty analysis</p> <p>Discusses complex issues using simple worked examples and reinforces learning with problems</p> <p>Is accompanied by a website hosting lecture presentations and a solution manual.</p> <p>Essential Computational Fluid Dynamics, Second Edition is an ideal textbook for senior undergraduate and graduate students taking their first course on CFD. It is also a useful reference for engineers and scientists working with CFD applications.</p>	https://bookshelf.vitalsource.com/#/books/9781119474814

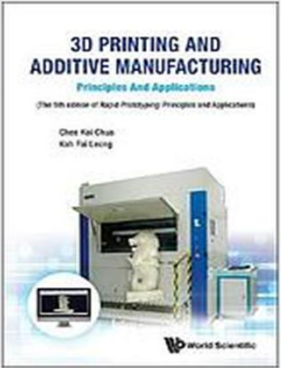
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
7	<p>Fundamentals of Heat Engines: Reciprocating and Gas Turbine Internal Combustion Engines</p> 	Ghojel	Wiley	2020	1st ed.	–	9781119548799	9781119548768, 1119548764	<p>Summarizes the analysis and design of today’s gas heat engine cycles. This book offers readers comprehensive coverage of heat engine cycles. From ideal (theoretical) cycles to practical cycles and real cycles, it gradually increases in degree of complexity so that newcomers can learn and advance at a logical pace, and so instructors can tailor their courses toward each class level. To facilitate the transition from one type of cycle to another, it offers readers additional material covering fundamental engineering science principles in mechanics, fluid mechanics, thermodynamics, and thermochemistry. Fundamentals of Heat Engines: Reciprocating and Gas Turbine Internal-Combustion Engines begins with a review of some fundamental principles of engineering science, before covering a wide range of topics on thermochemistry. It next discusses theoretical aspects of the reciprocating piston engine, starting with simple air-standard cycles, followed by theoretical cycles of forced induction engines, and ending with more realistic cycles that can be used to predict engine performance as a first approximation. Lastly, the book looks at gas turbines and covers cycles with gradually increasing complexity to end with realistic engine design-point and off-design calculations methods. Covers two main heat engines in one single reference</p> <p>Teaches heat engine fundamentals as well as advanced topics</p> <p>Includes comprehensive thermodynamic and thermochemistry data</p> <p>Offers customizable content to suit beginner or advanced undergraduate courses and entry-level postgraduate studies in automotive, mechanical, and aerospace degrees</p> <p>Provides representative problems at the end of most chapters, along with a detailed example of piston-engine design-point calculations</p> <p>Features case studies of design-point calculations of gas turbine engines in two chapters</p> <p>Fundamentals of Heat Engines can be adopted for mechanical, aerospace, and automotive engineering courses at different levels and will also benefit engineering professionals in those fields and beyond.</p>	<p>https://bookshelf.vitalsource.com/#/books/9781119548799</p>

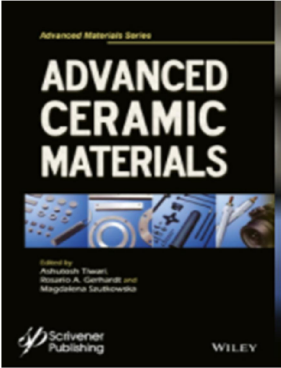
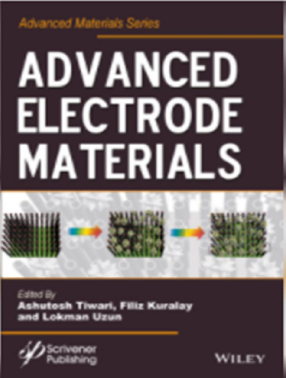
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
8	Fundamentals of Vehicle Dynamics and Modelling: A Textbook for Engineers With Illustrations and Examples 	Minaker	Wiley	2019	1st ed.	–	9781118980088	9781118980095, 1118980093	<p>An introduction to vehicle dynamics and the fundamentals of mathematical modeling. Fundamentals of Vehicle Dynamics and Modeling is a student-focused textbook providing an introduction to vehicle dynamics, and covers the fundamentals of vehicle model development. It illustrates the process for construction of a mathematical model through the application of the equations of motion. The text describes techniques for solution of the model, and demonstrates how to conduct an analysis and interpret the results. A significant portion of the book is devoted to the classical linear dynamic models, and provides a foundation for understanding and predicting vehicle behaviour as a consequence of the design parameters. Modeling the pneumatic tire is also covered, along with methods for solving the suspension kinematics problem, and prediction of acceleration and braking performance. The book introduces the concept of multibody dynamics as applied to vehicles and provides insight into how large and high fidelity models can be constructed. It includes the development of a method suitable for computer implementation, which can automatically generate and solve the linear equations of motion for large complex models. Key features:</p> <ul style="list-style-type: none">• Accompanied by a website hosting MATLAB® code.• Supported by the Global Education Delivery channels. <p>Fundamentals of Vehicle Dynamics and Modeling is an ideal textbook for senior undergraduate and graduate courses on vehicle dynamics.</p>	https://bookshelf.vitalsource.com/#/books/9781118980088
9	Juvinall's Fundamentals of Machine Component Design, SI Version, 6th Edition, Global Edition 	Juvinall	Wiley	2017	6th ed.	xxiii, 789 hlm. : illus.; 26 cm	9781119414544	9781119382904 1119382904	<p>Valued As A Standard In The Course, Juvinall And Marshek's Fundamentals Of Machine Component Design Continues To Focus On The Fundamentals Of Component Design - Free Body Diagrams, Force Flow Concepts, Failure Theories, And Fatigue Design, With Applications To Fasteners, Springs, Bearings, Gears, Clutches, And Brakes. Problem-Solving Skills Are Developed By The Implementation Of A Proven Methodology Which Provides A Structure For Accurately Formulating Problems And Clearly Presenting Solutions. This Edition Includes Additional Coverage Of Composites, The Material Selection Process, And Wear/Wear Theory, Along With New And Updated Examples And Homework Problems.</p>	https://bookshelf.vitalsource.com/#/books/9781119414544


No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
10	Lignocellulosic Fibers and Wood Handbook: Renewable Materials for Today's Environment 	Belgacem	Wiley	2016		1240 hlm.	9781118773550	9781118773727 1118773721 9781118773529 1118773527	This Book Will Focus On Lignocellulosic Fibres As A Raw Material For Several Applications. It Will Start With Wood Chemistry And Morphology. Then, Some Fibre Isolation Processes Will Be Given, Before Moving To Composites, Panel And Paper Manufacturing, Characterization And Aging.	https://bookshelf.vitalsource.com/#/books/9781118773550
11	Linear Algebra And Optimization With Applications To Machine Learning - Volume I: Linear Algebra For Computer Vision, Robotics, And Machine Learning 	Gallier Jean H & Quaintance Jocelyn	Wiley	2020		824 hlm.	9789811206412	9789811206399, 9811206392	This book provides the mathematical fundamentals of linear algebra to practicers in computer vision, machine learning, robotics, applied mathematics, and electrical engineering. By only assuming a knowledge of calculus, the authors develop, in a rigorous yet down to earth manner, the mathematical theory behind concepts such as: vectors spaces, bases, linear maps, duality, Hermitian spaces, the spectral theorems, SVD, and the primary decomposition theorem. At all times, pertinent real-world applications are provided. This book includes the mathematical explanations for the tools used which we believe that is adequate for computer scientists, engineers and mathematicians who really want to do serious research and make significant contributions in their respective fields.	https://bookshelf.vitalsource.com/#/books/9789811206412

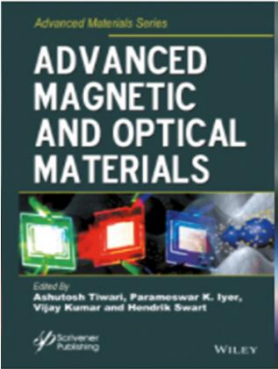
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
12	Materials Science and Engineering: An Introduction, 10th Edition 	Callister	Wiley	2018	10th ed.	—	9781119405498	9781119278566, 1119278562	<i>Materials Science and Engineering: An Introduction</i> promotes student understanding of the three primary types of materials (metals, ceramics, and polymers) and composites, as well as the relationships that exist between the structural elements of materials and their properties.	https://bookshelf.vitalsource.com/#/books/9781119405498
13	Python For Everyone, 3rd Edition 	Cay S. Horstmann, Rance D. Necaise	Wiley	2018	3rd ed.	—	9781119498537	9781119498872, 1119498872	Python for Everyone, 3e is an introduction to programming designed to serve a wide range of student interests and abilities, focused on the essentials, and on effective learning. It is suitable for a first course in programming for computer scientists, engineers, and students in other disciplines. The interactive eText requires no prior programming experience and only a modest amount of high school algebra. Objects are used where appropriate in early chapters and students start designing and implementing their own classes in Chapter 9. Practice makes perfect, so each section contains numerous exercises that ask students to carry out progressively more complex tasks: trace code and understand its effects, produce program snippets from prepared parts, and complete simple programs. All eText sections include activities to help students practice programming and build confidence. The interactive practice and review is complemented by open-ended review exercises, programming exercises, and projects. For the first time, instructors can monitor student progress in VitalSource SCORECenter and export grades to their learning management system.	https://bookshelf.vitalsource.com/#/books/9781119498537

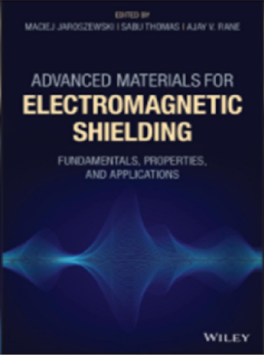
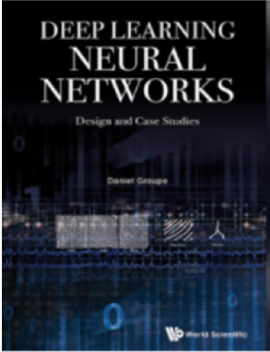
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
14	Transfer Matrix Method for Multibody Systems: Theory and Applications 	Rui	Wiley	2018	–	765 hlm.	9781118724835	–	<p>TRANSFER MATRIX METHOD FOR MULTIBODY SYSTEMS: THEORY AND APPLICATIONS</p> <p>Xiaoting Rui, Guoping Wang And Jianshu Zhang - Nanjing University Of Science And Technology, China</p> <p>Featuring A New Method Of Multibody System Dynamics, This Book Introduces The Transfer Matrix Method Systematically For The First Time. First Developed By The Lead Author And His Research Team, This Method Has Found Numerous Engineering And Technological Applications. Readers Are First Introduced To Fundamental Concepts Like The Body Dynamics Equation, Augmented Operator And Augmented Eigenvector Before Going In Depth Into Precision Analysis And Computations Of Eigenvalue Problems As Well As Dynamic Responses. The Book Also Covers A Combination Of Mixed Methods And Practical Applications In Multiple Rocket Launch Systems, Self-Propelled Artillery As Well As Launch Dynamics Of On-Ship Weaponry.</p> <ul style="list-style-type: none"> Comprehensively Introduces A New Method Of Analyzing Multibody Dynamics For Engineers Provides A Logical Development Of The Transfer Matrix Method As Applied To The Dynamics Of Multibody Systems That Consist Of Interconnected Bodies Features Varied Applications In Weaponry, Aeronautics, Astronautics, Vehicles And Robotics <p>Written By An Internationally Renowned Author And Research Team With Many Years' Experience In Multibody Systems Transfer Matrix Method Of Multibody System And Its Applications Is An Advanced Level Text For Researchers And Engineers In Mechanical System Dynamics. It Is A Comprehensive Reference For Advanced Students And Researchers In The Related Fields Of Aerospace, Vehicle, Robotics And Weaponry Engineering.</p>	https://bookshelf.vitalsource.com/#/books/978118724835
15	Unmanned Aircraft Systems 	Blockley		2015		–	9781118866467	–	<p>Covering The Design, Development, Operation And Mission Profiles Of Unmanned Aircraft Systems, This Single, Comprehensive Volume Forms A Complete, Stand-Alone Reference On The Topic. The Volume Integrates With The Online Wiley Encyclopedia Of Aerospace Engineering, Providing Many New And Updated Articles For Existing Subscribers To That Work.</p>	https://bookshelf.vitalsource.com/#/books/978118866467

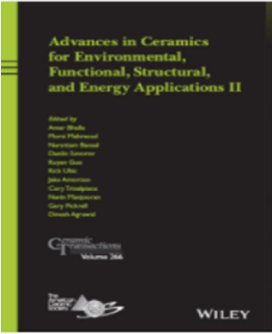
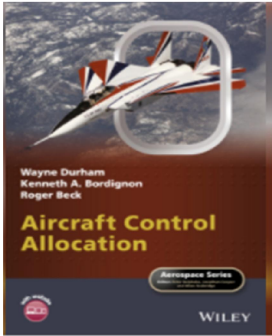
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
16	3D Printing And Additive Manufacturing: Principles And Applications - Fifth Edition Of Rapid Prototyping 	Chua Chee Kai & Leong Kah Fai	Wiley	2016	5th ed.	XXX, 426 hlm. : illus. ; 23 cm.	9789813149281	9789813146754, 9813146753	Additive Manufacturing (AM) Technologies Are Developing Impressively And Are Expected To Bring About The Next Revolution. AM Is Gradually Replacing Traditional Manufacturing Methods In Some Applications Because Of Its Unique Properties Of Customisability And Versatility. This Book Provides A Very Comprehensive And Updated Text About Different Types Of AM Technologies, Their Respective Advantages, Shortcomings And Potential Applications.3D Printing And Additive Manufacturing: Principles And Applications Is A Comprehensive Textbook That Takes Readers Inside The World Of Additive Manufacturing. This Book Introduces The Different Types Of AM Technologies, Categorised By Liquid, Solid And Powder-Based AM Systems, The Common Standards, The Trends In The Field And Many More.Easy To Understand, This Book Is A Good Introduction To Anyone Interested In Obtaining A Better Understanding Of AM. For People Working In The Industry, This Book Will Provide Information On New Methods And Practices, As Well As Recent Research And Development In The Field. For Professional Readers, This Book Provides A Comprehensive Guide To Distinguish Between The Different Technologies, And Will Help Them Make Better Decisions Regarding Which Technology They Should Use. For The General Public, This Book Sheds Some Light On The Fast-Moving AM Field.In This Edition, New AM Standards (E.G. Standard Of Terminology And Classification Of AM Systems) And Format Standards Will Be Included, Furthermore, The Listing Of New Machines And Systems, Materials, And Software; As Well As New Case Studies And Applications In Industries That Have Recently Adopted AM (Such As The Marine And Offshore Industry) Have Also Been Incorporated.	https://bookshelf.vitalsource.com/#/books/9789813149281

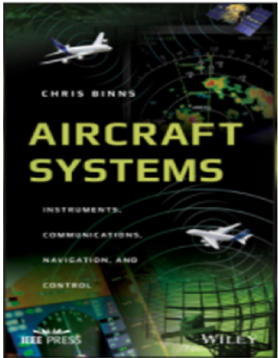
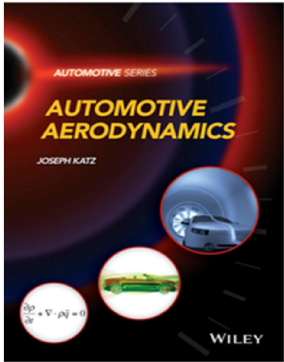
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
17	Advanced Ceramic Materials 	Tiwari	Wiley	2016	–	445hlm.	9781119242727	–	Ceramic Materials Are Inorganic And Non-Metallic Porcelains, Tiles, Enamels, Cements, Glasses And Refractory Bricks. Today, "Ceramics" Has Gained A Wider Meaning As A New Generation Of Materials Influence On Our Lives; Electronics, Computers, Communications, Aerospace And Other Industries Rely On A Number Of Their Uses. In General, Advanced Ceramic Materials Include Electro-Ceramics, Optoelectronic-Ceramics, Superconductive Ceramics And The More Recent Development Of Piezoelectric And Dielectric Ceramics. They Can Be Considered For Their Features Including Mechanical Properties, Decorative Textures, Environmental Uses, Energy Applications, As Well As Their Usage In Bio-Ceramics, Composites, Functionally Graded Materials, Intelligent Ceramics And So On. Advanced Ceramic Materials Brings Together A Group Of Subject Matter Experts Who Describe Innovative Methodologies And Strategies Adopted In The Research And Development Of The Advanced Ceramic Materials. The Book Is Written For Readers From Diverse Backgrounds Across Chemistry, Physics, Materials Science And Engineering, Medical Science, Pharmacy, Environmental Technology, Biotechnology, And Biomedical Engineering. It Offers A Comprehensive View Of Cutting-Edge Research On Ceramic Materials And Technologies. Divided Into 3 Parts Concerning Design, Composites And Functionality, The Topics Discussed Include: Chemical Strategies Of Epitaxial Oxide Ceramics Nanomaterials Biphasic, Triphasic And Multiphasic Calcium Orthophosphates Microwave Assisted Processing Of Advanced Ceramic Composites Continuous Fiber Reinforced Ceramic Matrix Composites Yyttria And Magnesia Doped Alumina Ceramic Oxidation Induced Crack Healing SWCNTs Vs MWCNTs Reinforcement Agents Organic And Inorganic Wastes In Clay Brick Production Functional Tantalum Oxides Application Of Silver Tin Research On Hydroxyapatite	https://bookshelf.vitalsource.com/#/books/978119242727
18	Advanced Electrode Materials 	Tiwari		2017	–	–	9781119242840	–	This Book Covers The Recent Advances In Electrode Materials And Their Novel Applications At The Cross-Section Of Advanced Materials. The Book Is Divided Into Two Sections: State-Of-The-Art Electrode Materials; And Engineering Of Applied Electrode Materials. The Chapters Deal With Electrocatalysis For Energy Conversion In View Of Bionanotechnology; Surfactant-Free Materials And Polyoxometalates Through The Concepts Of Biosensors To Renewable Energy Applications; Mesoporous Carbon, Diamond, Conducting Polymers And Tungsten Oxide/Conducting Polymer-Based Electrodes And Hybrid Systems. Numerous Approaches Are Reviewed For Lithium Batteries, Fuel Cells, The Design And Construction Of Anode For Microbial Fuel Cells Including Phosphate Polyanion Electrodes, Electrocatalytic Materials, Fuel Cell Reactions, Conducting Polymer Based Hybrid Nanocomposites And Advanced Nanomaterials.	https://bookshelf.vitalsource.com/#/books/978119242840

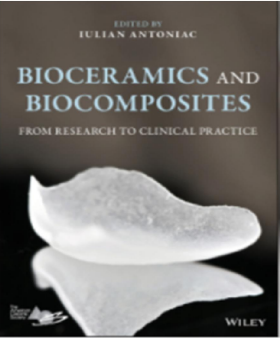

No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
19	Advanced Engineering Materials and Modeling 	Tiwari	Wiley	2016	1st ed.	–	9781119242543	–	The Engineering Of Materials With Advanced Features Is Driving The Research Towards The Design Of Innovative Materials With High Performances. New Materials Often Deliver The Best Solution For Structural Applications, Precisely Contributing Towards The Finest Combination Of Mechanical Properties And Low Weight. The Mimicking Of Nature's Principles Lead To A New Class Of Structural Materials Including Biomimetic Composites, Natural Hierarchical Materials And Smart Materials. Meanwhile, Computational Modeling Approaches Are The Valuable Tools Complementary To Experimental Techniques And Provide Significant Information At The Microscopic Level And Explain The Properties Of Materials And Their Very Existence. The Modeling Also Provides Useful Insights To Possible Strategies To Design And Fabricate Materials With Novel And Improved Properties. The Book Brings Together These Two Fascinating Areas And Offers A Comprehensive View Of Cutting-Edge Research On Materials Interfaces And Technologies The Engineering Materials. The Topics Covered In This Book Are Divided Into 2 Parts: Engineering Of Materials, Characterizations & Applications And Computational Modeling Of Materials. The Chapters Include The Following: Mechanical And Resistance Behavior Of Structural Glass Beams Nanocrystalline Metal Carbides - Microstructure Characterization SMA-Reinforced Laminated Glass Panel Sustainable Sugarcane Bagasse Cellulose For Papermaking Electrospun Scaffolds For Cardiac Tissue Engineering Bio-Inspired Composites Density Functional Theory For Studying Extended Systems First Principles Based Approaches For Modeling Materials Computer Aided Materials Design Computational Materials For Stochastic Electromagnets Computational Methods For Thermal Analysis Of Heterogeneous Materials Modelling Of Resistive Bilayer Structures Modeling Tunneling Of Superluminal Photons Through Brain Microtubules Computer Aided Surgical Workflow Modeling Displaced Multiwavelets And Splitting Algorithms	https://bookshelf.vitalsource.com/#/books/9781119242543

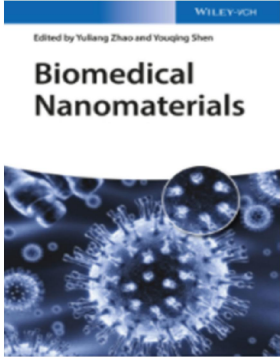
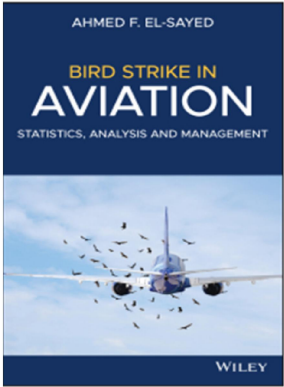
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
20	Advanced Magnetic and Optical Materials 	Tiwari	Wiley	2017	–	–	9781119241959	–	Advanced Magnetic And OpticalMaterials Offers Detailed Up-To-Date Chapters On The Functional Optical And Magnetic Materials, Engineering Of Quantum Structures, High-Tech Magnets, Characterization And New Applications. It Brings Together Innovative Methodologies And Strategies Adopted In The Research And Development Of The Subject And All The Contributors Are Established Specialists In The Research Area. The 14 Chapters Are Organized In Two Parts: Part 1: Magnetic Materials Magnetic Heterostructures And Superconducting Order Magnetic Antiresonance In Nanocomposites Magnetic Bioactive Glass-Ceramics For Bone Healing And Hyperthermic Treatment Of Solid Tumors Magnetic Iron Oxide Nanoparticles Magnetic Nanomaterial-Based Anticancer Therapy Theoretical Study Of Strained Carbon-Based Nanobelts: Structural, Energetical, Electronic, And Magnetic Properties Room Temperature Molecular Magnets – Modeling And Applications Part 2: Optical Materials Advances And Future Of White LED Phosphors For Solid-State Lighting Design Of Luminescent Materials With “Turn-On/Off” Response For Anions And Cations Recent Advancements In Luminescent Materials And Their Potential Applications Strongly Confined Quantum Dots: Emission Limiting, Photonic Doping, And Magneto-Optical Effects Microstructure Characterization Of Some Quantum Dots Synthesized By Mechanical Alloying Advances In Functional Luminescent Materials And Phosphors Development In Organic Light Emitting Materials And Their Potential Applications	https://bookshelf.vitalsource.com/#/books/978119241959

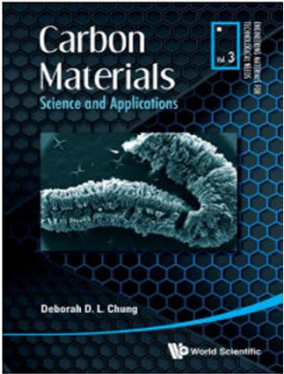
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
21	Advanced Materials for Electromagnetic Shielding: Fundamentals, Properties, and Applications 	Jaroszewski		2018	–	–	97811119128632	–	A Comprehensive Review Of The Field Of Materials That Shield People And Sensitive Electronic Devices From Electromagnetic Fields Advanced Materials For Electromagnetic Shielding Offers A Thorough Review Of The Most Recent Advances In The Processing And Characterization Of The Electromagnetic Shielding Materials. In This Groundbreaking Book, The Authors—Noted Experts In The Field—Discuss The Fundamentals Of Shielding Theory As Well As The Practice Of Electromagnetic Field Measuring Techniques And Systems. They Also Explore Applications Of Shielding Materials Used As Absorbers Of Electromagnetic Radiation, Or As Magnetic Shields And Explore Coverage Of New Advanced Materials For EMI Shielding In Aerospace Applications. In Addition, The Text Contains Methods Of Preparation And Applicability Of Metal Foams. This Comprehensive Text Examines The Influence Of Technology On The Micro-And Macrostructure Of Polymers Enabling Their Use In Screening Technology, Technologies Of Shielding Materials Based On Textiles, And Analyses Of Its Effectiveness In Screening. The Book Also Details The Method Of Producing Nanowires And Their Applications In EM Shielding. This Important Resource: Explores The Burgeoning Market Of Electromagnetic Shielding Materials As We Create, Depend Upon, And Are Exposed To More Electronic Devices Than Ever Addresses The Most Comprehensive Issues Relating To Electromagnetic Fields Contains Information On The Manufacturing, Characterization Methods, And Properties Of Materials Used To Protect Against Them Discusses The Important Characterization Techniques Compared With One Another, Thus Allowing Scientists To Select The Best Approach To A Problem Written For Materials Scientists, Electrical And Electronics Engineers, Physicists, And Industrial Researchers, Advanced Materials For Electromagnetic Shielding Explores All Aspects In The Area Of Electromagnetic Shielding Materials And Examines The Current State-Of-The-Art And New Challenges In This Rapidly Growing Area.	https://bookshelf.vitalsource.com/#/books/9781119128632
22	Deep Learning Neural Networks: Design And Case Studies 	Graupe Daniel	Wiley	2016	–	xvi, 263 hlm. : ilus. ; 25 cm	9789813146440	9789813146440, 9813146443	Deep Learning Neural Networks Is The Fastest Growing Field In Machine Learning. It Serves As A Powerful Computational Tool For Solving Prediction, Decision, Diagnosis, Detection And Decision Problems Based On A Well-Defined Computational Architecture. It Has Been Successfully Applied To A Broad Field Of Applications Ranging From Computer Security, Speech Recognition, Image And Video Recognition To Industrial Fault Detection, Medical Diagnostics And Finance.This Comprehensive Textbook Is The First In The New Emerging Field. Numerous Case Studies Are Succinctly Demonstrated In The Text. It Is Intended For Use As A One-Semester Graduate-Level University Text And As A Textbook For Research And Development Establishments In Industry, Medicine And Financial Research.	https://bookshelf.vitalsource.com/#/books/9789813146440

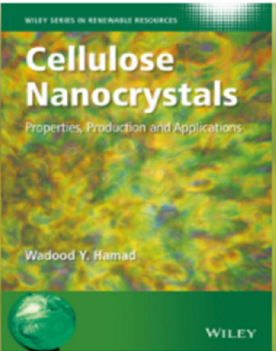

No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
23	Advances in Ceramics for Environmental, Functional, Structural, and Energy Applications II, Volume 266 	Bhalla	Wiley	2020	–	x, 255 hlm.: ilus.	9781119631484	–	<p>This Proceedings Contains A Collection Of 22 Papers Presented At The 2018 Materials Science And Technology Meeting (MS&T'18) Held In Columbus, Ohio, October 14-18, 2018. Symposia Topics Included In This Volume Are: • Advances In Dielectric Materials And Electronic Devices • Innovative Processing And Synthesis Of Ceramics, Glasses And Composites • International Symposium On Ceramic Matrix Composites • Materials For Nuclear Applications And Extreme Environments • Nanotechnology For Energy, Environment, Electronics, Healthcare And Industry • Processing And Performance Of Materials Using Microwaves, Electric And Magnetic Fields, Ultrasound, Lasers, And Mechanical Work – Rustum Roy Symposium • Additive Manufacturing Of Composites And Complex Materials • Eco-Friendly And Sustainable Ceramics</p>	https://bookshelf.vitalsource.com/#/books/9781119631484
24	Aircraft Control Allocation 	Durham	Wiley	2017	–	320 hlm.	9781118827796	–	<p>Aircraft Control Allocation Wayne Durham, Virginia Polytechnic Institute And State University, USA Kenneth A. Bordignon, Embry-Riddle Aeronautical University, USA Roger Beck, Dynamic Concepts, Inc., USA An Authoritative Work On Aircraft Control Allocation By Its Pioneers Aircraft Control Allocation Addresses The Problem Of Allocating Supposed Redundant Flight Controls. It Provides Introductory Material On Flight Dynamics And Control To Provide The Context, And Then Describes In Detail The Geometry Of The Problem. The Book Includes A Large Section On Solution Methods, Including 'Banks' Method', A Previously Unpublished Procedure. Generalized Inverses Are Also Discussed At Length. There Is An Introductory Section On Linear Programming Solutions, As Well As An Extensive And Comprehensive Appendix Dedicated To Linear Programming Formulations And Solutions. Discrete-Time, Or Frame-Wise Allocation, Is Presented, Including Rate-Limiting, Nonlinear Data, And Preferred Solutions. Key Features: Written By Pioneers In The Field Of Control Allocation. Comprehensive Explanation And Discussion Of The Major Control Allocation Solution Methods. Extensive Treatment Of Linear Programming Solutions To Control Allocation. A Companion Web Site Contains The Code Of A MATLAB/Simulink Flight Simulation With Modules That Incorporate All Of The Major Solution Methods. Includes Examples Based On Actual Aircraft. The Book Is A Vital Reference For Researchers And Practitioners Working In Aircraft Control, As Well As Graduate Students In Aerospace Engineering.</p>	https://bookshelf.vitalsource.com/#/books/9781118827796

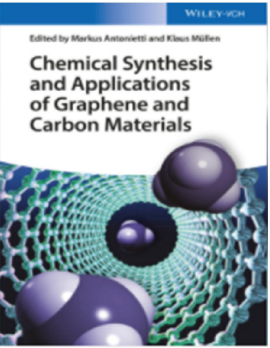

No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
25	Aircraft Systems: Instruments, Communications, Navigation, and Control 	Binns	Wiley	2017	1st ed.	XV, 496 hlm. : ilus.; 24 cm.	9781119259541	9781119259541, 1119259541	<p>An Authoritative Guide To The Various Systems Related To Navigation, Control, And Other Instrumentation Used In A Typical Aircraft - Aircraft Systems Offers An Examination Of The Most Recent Developments In Aviation As It Relates To Instruments, Radio Navigation, And Communication. Written By A Noted Authority In The Field, The Text Includes In-Depth Descriptions Of Traditional Systems, Reviews The Latest Developments, As Well As Gives Information On The Technologies That Are Likely To Emerge In The Future. The Author Presents Material On Essential Topics Including Instruments, Radio Propagation, Communication, Radio Navigation, Inertial Navigation, And Puts Special Emphasis On Systems Based On MEMS. This Vital Resource Also Provides Chapters On Solid State Gyroscopes, Magnetic Compass, Propagation Modes Of Radio Waves, And Format Of GPS Signals. Aircraft Systems Is An Accessible Text That Includes An Investigation Of Primary And Secondary Radar, The Structure Of Global Navigation Satellite Systems, And More. This Important Text: Contains A Description Of The Historical Development Of The Latest Technological Developments In Aircraft Instruments, Communications And Navigation</p> <p>Gives Several “Interesting Diversion” Topics Throughout The Chapters That Link The Topics Discussed To Other Developments In Aerospace</p> <p>Provides Examples Of Instruments And Navigation Systems In Actual Use In Cockpit</p> <p>Photographs Obtained During The Authors Work As A Flight Instructor Includes Numerous Worked Examples Of Relevant Calculations Throughout The Text And A Set Of Problems At The End Of Each Chapter</p> <p>Written For Upper Undergraduates In Aerospace Engineering And Pilots In Training, Aircraft Systems Offers An Essential Guide To Both The Traditional And Most Current Developments In Aviation As It Relates To Instruments, Radio Navigation, And Communication.</p>	https://bookshelf.vitalsource.com/#/books/9781119259541
26	Automotive Aerodynamics 	Katz	Wiley	2016	1st ed.	xvi, 592 hlm. : ilus. ; 25 cm.	9781119185727	9781119185727, 1119185726	<p>The automobile is an icon of modern technology because it includes most aspects of modern engineering, and it offers an exciting approach to engineering education. Of course there are many existing books on introductory fluid/aero dynamics but the majority of these are too long, focussed on aerospace and don’t adequately cover the basics. Therefore, there is room and a need for a concise, introductory textbook in this area. Automotive Aerodynamics fulfils this need and is an introductory textbook intended as a first course in the complex field of aero/fluid mechanics for engineering students. It introduces basic concepts and fluid properties, and covers fluid dynamic equations. Examples of automotive aerodynamics are included and the principles of computational fluid dynamics are introduced. This text also includes topics such as aeroacoustics and heat transfer which are important to engineering students and are closely related to the main topic of aero/fluid mechanics. This textbook contains complex mathematics, which not only serve as the foundation for future studies but also provide a road map for the present text. As the chapters evolve, focus is placed on more applicable examples, which can be solved in class using elementary algebra. The approach taken is designed to make the mathematics more approachable and easier to understand.</p>	https://bookshelf.vitalsource.com/#/books/9781119185727

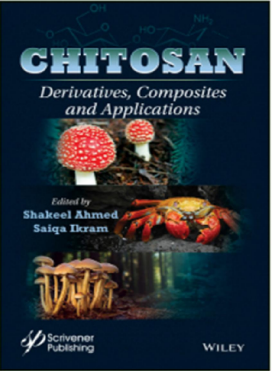
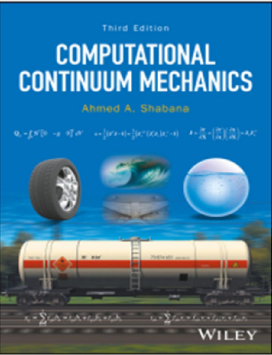
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
27	Bioceramics and Biocomposites: From Research to Clinical Practice 	Antoniac	Wiley	2019	–	394 hlm.	9781119049340	–	<p>Provides Comprehensive Coverage Of The Research Into And Clinical Uses Of Bioceramics And Biocomposites Developments Related To Bioceramics And Biocomposites Appear To Be One The Most Dynamic Areas In The Field Of Biomaterials, With Multiple Applications In Tissue Engineering And Medical Devices. This Book Covers The Basic Science And Engineering Of Bioceramics And Biocomposites For Applications In Dentistry And Orthopedics, As Well As The State-Of-The-Art Aspects Of Biofabrication Techniques, Tissue Engineering, Remodeling, And Regeneration Of Bone Tissue. It Also Provides Insight Into The Use Of Bionanomaterials To Create New Functionalities When Interfaced With Biological Molecules Or Structures. Featuring Contributions From Leading Experts In The Field, Bioceramics And Biocomposites: From Research To Use In Clinical Practice Offers Complete Coverage Of Everything From Extending The Concept Of Hemopoietic And Stromal Niches, To The Evolution Of Bioceramic-Based Scaffolds. It Looks At Perspectives On And Trends In Bioceramics In Endodontics, And Discusses The Influence Of Newer Biomaterials Use On The Structuring Of The Clinician's Attitude In Dental Practice Or In Orthopedic Surgery. The Book Also Covers Such Topics As Biofabrication Techniques For Bioceramics And Biocomposites; Glass Ceramics: Calcium Phosphate Coatings; Brain Drug Delivery Bone Substitutes; And Much More. Presents The Biggest Trends In Bioceramics And Biocomposites Relating To Medical Devices And Tissue Engineering Products Systematically Presents New Information About Bioceramics And Biocomposites, Developing Diagnostics And Improving Treatments And Their Influence On The Clinicians' Approaches Describes How To Use These Biomaterials To Create New Functionalities When Interfaced With Biological Molecules Or Structures Offers A Range Of Applications In Clinical Practice, Including Bone Tissue Engineering, Remodeling, And Regeneration Delineates Essential Requirements For Resorbable Bioceramics Discusses Clinical Results Obtained In Dental And Orthopedic Applications Bioceramics And Biocomposites: From Research To Use In Clinical Practice Is An Excellent Resource For Biomaterials Scientists And Engineers, Bioengineers, Materials Scientists, And Engineers. It Will Also Benefit Mechanical Engineers And Biochemists Who Work With Biomaterials Scientists.</p>	https://bookshelf.vitalsource.com/#/books/9781119049340
28	Biomedical Applications of Polymeric Materials and Composites 	Francis	Wiley	2016	–	xxi, 389 hlm.: ilus.	9783527338368	–	<p>With Its Content Taken From Only The Very Latest Results, This Is An Extensive Summary Of The Various Polymeric Materials Used For Biomedical Applications. Following An Introduction Listing Various Functional Polymers, Including Conductive, Biocompatible And Conjugated Polymers, The Book Goes On To Discuss Different Synthetic Polymers That Can Be Used, For Example, As Hydrogels, Biochemical Sensors, Functional Surfaces, And Natural Degradable Materials. Throughout, The Focus Is On Applications, With Worked Examples For Training Purposes As Well As Case Studies Included. The Whole Is Rounded Off With A Look At Future Trends.</p>	https://bookshelf.vitalsource.com/#/books/9783527338368

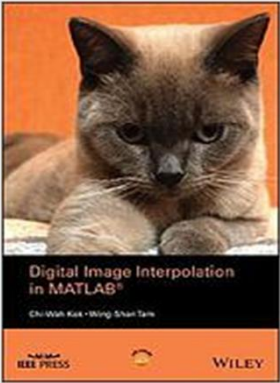
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
29	Biomedical Nanomaterials 	Zhao	Wiley	2016		XXI, [1], 476 hlm. : ilus. berwarna. ; 25 cm.	9783527337989		The Book Discusses In A Detailed Manner Various Nanomaterials Used For Biomedical Applications, Including Clinical Applications, Diagnosis And Tissue Engineering. After The Presentation Of An Overview Of Biomedical Nanomaterials, Including Their Classification And Applications, The First Part Of The Book Is Devoted To Biomedical Nanomaterials For Therapy Applications. For Example, Polymer Micelles, Dendrimers, Polymer-Drug Conjugates As Well As Antibody-Drug Conjugates Are Discussed With Respect To Their Cancer Drug Delivery Properties. The Next Parts Discuss Biomedical Nanomaterials That Are Used For Imaging, Diagnosis And Sensors, As Well As For Tissue Engineering. In The Final Section, The Safety Of Biomedical Nanomaterials Is Elaborated.	https://bookshelf.vitalsource.com/#/books/9783527337989
30	Bird Strike in Aviation: Statistics, Analysis and Management 	El-Sayed	Wiley	2019	1st ed.	—	9781119529736	9781119529736, 1119529735	<p>Groundbreaking Handbook Offers Detailed Research and Valuable Methodology to Address Dangerous and Costly Aviation Hazard - Though annual damages from bird and bat collisions with aircraft have been estimated at \$400 million in the United States and up to \$1.2 billion in commercial aviation worldwide and despite numerous conferences and councils dedicated to the issue, very little has been published on this expensive and sometimes-lethal flying risk. Bird Strike in Aviation seeks to fill this gap, providing a comprehensive guide to preventing and minimizing damage caused by bird strike on aircraft. Based on a thorough and comprehensive examination of the subject, Dr. El-Sayed offers different approaches to reducing bird strikes, including detailed coverage of the three categories necessary for such reduction, namely, awareness/education, bird management (active and passive control), and aircraft design. In addition, the text discusses the importance of cooperation between airplanes, airports and air traffic authorities as well as testing methods necessary for certification of both aircraft frame and engine. Other notable features include: Statistics and analyses for bird strikes with both civil and military helicopters as well as military fixed wing aircrafts, including annual costs, critical flight altitudes, critical parts of aircraft, distance from air base and specifics of date and timing</p> <p>Thorough review and analysis all fatal bird strike accidents and most non-fatal accidents since 1905, the first book to provide such a reference</p> <p>The use of numerical methods in analyzing historic data (ex. probability functions, finite element methods for analyzing impact on aircraft structure, experimental measurement technique for displacement, vibration, component distortion, etc.)</p> <p>Instruction on identification of bird species (using visual, microscopic, and DNA evidence) and details of bird migration to aid air traffic control in avoiding scenarios likely to result in collision</p> <p>With its wealth of statistical data, innovative research, and practical suggestions, Bird Strike in Aviation will prove a vital resource for researchers, engineers and graduate students in aerospace engineering/manufacturing or ornithology, as well as for military and civilian pilots and flight crew or professionals in aviation authorities and air traffic control.</p>	https://bookshelf.vitalsource.com/#/books/9781119529736

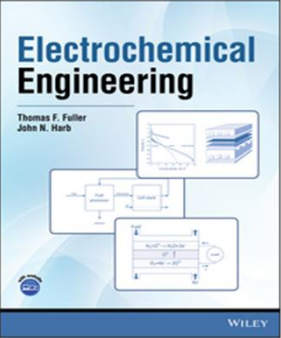
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
31	Carbon Materials: Science And Applications 	Chung Deborah D L	Wiley	2019	–	xiii, 367 hlm. : Ilus.	9789813221901	9789813221901, 9813221909	The field of carbon materials is huge and often difficult to comprehend, but this book is easy to read and methodically covers the subject, including presenting materials properties and performance data with clear illustrations and graphs. References include relevant older and up-to-date sources of information. The book is tutorial style in nature and is an excellent resource for senior undergraduates, graduate students, researchers, and anyone who wants to learn more about carbon and incorporate carbon materials into new applications.' MRS BulletinElemental carbon materials take numerous forms including graphite, carbon fiber, carbon nanotube, graphene, carbon black, activated carbon, fullerene and diamond. These forms differ greatly in the structure, properties, fabrication method, and applications. The applications of these carbon forms include electronic, electromagnetic, electrochemical, environmental and biomedical applications. Carbon materials are a subject of intense research, with strong relevance to both science and technology.This book provides a tutorial-style and up-to-date coverage of the carbon forms. In addition to an introductory chapter on carbon materials, the book includes chapters on graphite, graphene, carbon black, activated carbon, carbon fibers, and carbon nanofibers/nanotubes. For example, the chapter on graphite covers various materials in the graphite family, including polycrystalline graphite, pyrolytic graphite, turbostratic carbon, intercalated graphite, graphite oxide, exfoliated graphite and flexible graphite, in addition to their electronic and mechanical properties.This book is suitable for use as a textbook for undergraduate and graduate students in science and engineering, and as a reference book for professionals. It is dedicated to the memory of the author's PhD thesis advisor, Professor M S Dresselhaus (1930-2017) of Massachusetts Institute of Technology.	https://bookshelf.vitalsource.com/#/books/9789813221901

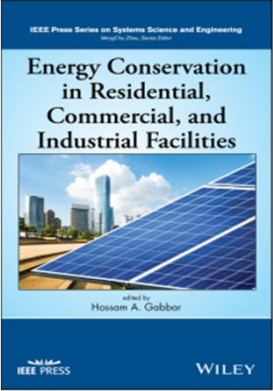
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
32	Cellulose Nanocrystals: Properties, Production and Applications 	Hamad	Wiley	2017	–	1 volume ; 23 cm.	9781119968160	–	<p>Research Into Cellulose Nanocrystals Is Currently In An Exponential Growth Phase, With Research Into Potential Applications Now Strengthened By Recent Advances In Nanomanufacturing. The Possibility Of Routine Commercial Production Of These Advanced Materials Is Now Becoming A Reality. Cellulose Nanocrystals: Properties, Production And Applications Provides An In-Depth Overview Of The Materials Science, Chemistry And Physics Of Cellulose Nanocrystals, And The Technical Development Of Advanced Materials Based On Cellulose Nanocrystals For Industrial And Medical Applications. Topics Covered Include: • A Comprehensive Treatment Of The Structure, Morphology And Synthesis Of Cellulose Nanocrystals. • The Science And Engineering Of Producing Cellulose Nanocrystals And The Challenges Involved In Nanomanufacturing On A Large Industrial Scale. • Surface/Interface Modifications Of Cellulose Nanocrystals For The Development Of Novel Biomaterials With Attractive Structural And Functional Properties. • The Scientific Bases For Developing Cellulose-Based Nanomaterials With Advanced Functionalities For Industrial/Medical Applications And Consumer Products. • Discussions On The (I) Reinforcing Potential Of Cellulose Nanocrystals In Polymer Nanocomposites, (Ii) Utilization Of These Nanocrystals As Efficient Templates For Developing Tunable Photonic Materials, As Well As (Iii) Applications In Sustainable Electronics And Biomedicine. Cellulose Nanocrystals: Properties, Production And Applications Will Appeal To Audiences In The Physical, Chemical And Biological Sciences As Well As Engineering Disciplines. It Will Be Of Critical Interest To Industrialists Seeking To Develop Sustainable New Materials For The Advanced Industrial Economies Of The 21st Century, Ranging From Adaptive “Smart” Packaging Materials, To New Chiral, Mesoporous Materials For Optoelectronics And Photonics , To High-Performance Nanocomposites For Structural Applications.</p>	https://bookshelf.vitalsource.com/#/books/9781119968160
33	Ceramic Membranes: New Opportunities and Practical Applications 	Gitis	Wiley	2016	1st ed.	XI, [1], 395 hlm. : iusl. ; 25 cm.	9783527334933	9783527334933, 3527334939	<p>This textbook gives a clear and coherent overview of ceramic membranes, from preparation methods all the way to applications and economics. The authors, who are known for their clear writing style, combine their expertise in environmental engineering and porous materials to cover a wide range of examples, with over 1000 references. Chapters 1, 2 and 3 give a detailed introduction to membrane synthesis, transport mechanisms, and characterisation. Building on this, Chapter 4 outlines the state-of-the-art in ceramic membrane applications, including fuel cells, water purification, gas separation, and the making of cheeses, fruit juice, wine and beer. The final chapter deals with the economics of ceramic membrane processes, using industrial case studies to examine market barriers and opportunities. Ceramics are known throughout history, but now, after thousands of years, they’re making a comeback. Indeed, they may hold the key for addressing three of today’s biggest challenges: clean energy, drinking water and air pollution. This book is a must-have for anyone who wants to enter the ceramic membranes field, or keep up-to-date with the latest developments and applications.</p>	https://bookshelf.vitalsource.com/#/books/9783527334933

No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
34	Chemical Synthesis and Applications of Graphene and Carbon Materials 	Antonietti	Wiley	2013	–	272 hlm.	9783527332083	–	<p>This Ready Reference And Handbook Is Unique In Its Focus On Synthesis And The Application Of Graphene And Other Carbon Materials With An Emphasis On Chemistry Aspects. To This Extent, It Deals With Top-Down And Bottom-Up Approaches Across The Different Length Scales For Graphene From Polycyclic Aromatic Hydrocarbons To Graphene Nanoribbons And Graphene Sheets, As Well As Carbon Materials From Quantum Dots, Nanostructured Particles, And Fibers, Right Up To Tubes, Bulk Structures, And Much More Besides. In So Doing, It Presents The Best Synthetic Methods: Pyrolysis, Chemical Vapor Deposition, Templating And Surface-Mediated Synthesis, Self-Assembly, Surface-Grafting And Modification. Edited By Two Excellent, Experienced And Highly Renowned Editors, Both Of Whom Are Directors Of Max Planck Institutes.</p>	https://bookshelf.vitalsource.com/#/books/9783527332083
35	Chitin and Chitosan: Properties and Applications 	Van Den Broek	Wiley	2020	–	510 hlm. : illus.	9781119450436	9781119450436 1119450438	<p>Offers A Comprehensive Guide To The Isolation, Properties And Applications Of Chitin And Chitosan Chitin And Chitosan: Properties And Applications Presents A Comprehensive Review Of The Isolation, Properties And Applications Of Chitin And Chitosan. These Promising Biomaterials Have The Potential To Be Broadly Applied And There Is A Growing Market For These Biopolymers In Areas Such As Medical And Pharmaceutical, Packaging, Agricultural, Textile, Cosmetics, Nanoparticles And More. The Authors – Noted Experts In The Field – Explore The Isolation, Characterization And The Physical And Chemical Properties Of Chitin And Chitosan. They Also Examine Their Properties Such As Hydrogels, Immunomodulation And Biotechnology, Antimicrobial Activity And Chemical Enzymatic Modifications. The Book Offers An Analysis Of The Myriad Medical And Pharmaceutical Applications As Well As A Review Of Applications In Other Areas. In Addition, The Authors Discuss Regulations, Markets And Perspectives For The Use Of Chitin And Chitosan. This Important Book: Offers A Thorough Review Of The Isolation, Properties And Applications Of Chitin And Chitosan. Contains Information On The Wide-Ranging Applications And Growing Market Demand For Chitin And Chitosan Includes A Discussion Of Current Regulations And The Outlook For The Future Written For Researchers In Academia And Industry Who Are Working In The Fields Of Chitin And Chitosan, Chitin And Chitosan: Properties And Applications Offers A Review Of These Promising Biomaterials That Have Great Potential Due To Their Material Properties And Biological Functionalities.</p>	https://bookshelf.vitalsource.com/#/books/9781119450436

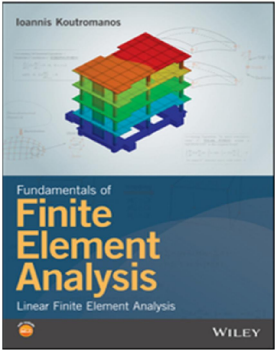
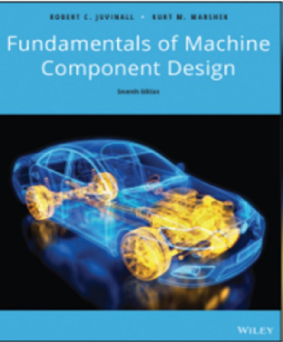
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
36	Chitosan: Derivatives, Composites and Applications 	Ahmed	Wiley	2017	1st ed.	xviii, 494 hlm. ; 24 cm	9781119363507	9781119363507, 1119363500	<p>This book delves deeply in to the preparation, characterization and multiple applications of chitin and chitosan. The 17 chapters written by leading experts is an excellent reference source and state-of-the-art review for researchers and scientists using chitosan or biopolymers in their respective areas. • Production and derivatives of chitosan</p> <ul style="list-style-type: none"> • Chitosan in the textile and food industries • Chitosan in biomedical applications • Chitosan in agriculture and water treatment <p>The book is practical as readers will be able to see descriptions of chitosan production methods as well as techniques that can be used to estimate and modify their physical and chemical properties. It provides a full description not only of the traditional and recent developments in the applications of chitosan in the fields of biotechnology, environmental studies, food, medicine, water treatments, drug delivery, but it includes all of the therapeutically usages as well.</p>	https://bookshelf.vitalsource.com/#/books/9781119363507
37	Computational Continuum Mechanics, 3rd Edition 	Shabana	Wiley	2018	3 rd ed.	368 hlm.	9781119293217	9781119293217, 1119293219	<p>An updated and expanded edition of the popular guide to basic continuum mechanics and computational techniques - This updated third edition of the popular reference covers state-of-the-art computational techniques for basic continuum mechanics modeling of both small and large deformations. Approaches to developing complex models are described in detail, and numerous examples are presented demonstrating how computational algorithms can be developed using basic continuum mechanics approaches. The integration of geometry and analysis for the study of the motion and behaviors of materials under varying conditions is an increasingly popular approach in continuum mechanics, and absolute nodal coordinate formulation (ANCF) is rapidly emerging as the best way to achieve that integration. At the same time, simulation software is undergoing significant changes which will lead to the seamless fusion of CAD, finite element, and multibody system computer codes in one computational environment. Computational Continuum Mechanics, Third Edition is the only book to provide in-depth coverage of the formulations required to achieve this integration. Provides detailed coverage of the absolute nodal coordinate formulation (ANCF), a popular new approach to the integration of geometry and analysis</p> <p>Provides detailed coverage of the floating frame of reference (FFR) formulation, a popular well-established approach for solving small deformation problems</p> <p>Supplies numerous examples of how complex models have been developed to solve an array of real-world problems</p> <p>Covers modeling of both small and large deformations in detail</p> <p>Demonstrates how to develop computational algorithms using basic continuum mechanics approaches Computational Continuum Mechanics, Third Edition is designed to function equally well as a text for advanced undergraduates and first-year graduate students and as a working reference for researchers, practicing engineers, and scientists working in computational mechanics, bio-mechanics, computational biology, multibody system dynamics, and other fields of science and engineering using the general continuum mechanics theory.</p>	https://bookshelf.vitalsource.com/#/books/9781119293217

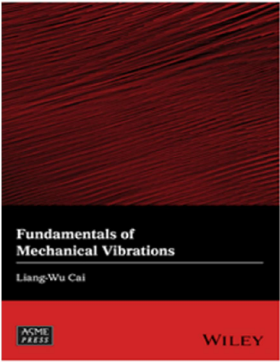
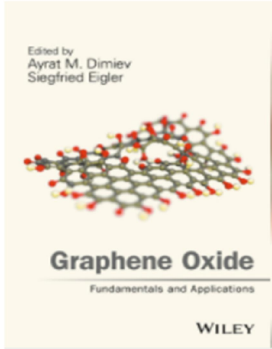
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
38	Digital Image Interpolation in Matlab 	Kok	Wiley	2019	–	xxv, 304 hlm.: ilus. Berwarna	9781119119616	–	<p>This Book Provides A Comprehensive Study In Digital Image Interpolation With Theoretical, Analytical And Matlab® Implementation. It Includes All Historically And Practically Important Interpolation Algorithms, Accompanied With Matlab® Source Code On A Website, Which Will Assist Readers To Learn And Understand The Implementation Details Of Each Presented Interpolation Algorithm. Furthermore, Sections In Fundamental Signal Processing Theories And Image Quality Models Are Also Included. The Authors Intend For The Book To Help Readers Develop A Thorough Consideration Of The Design Of Image Interpolation Algorithms And Applications For Their Future Research In The Field Of Digital Image Processing. Introduces A Wide Range Of Traditional And Advanced Image Interpolation Methods Concisely And Provides Thorough Treatment Of Theoretical Foundations Discusses In Detail The Assumptions And Limitations Of Presented Algorithms Investigates A Variety Of Interpolation And Implementation Methods Including Transform Domain, Edge-Directed, Wavelet And Scale-Space, And Fractal Based Methods Features Simulation Results For Comparative Analysis, Summaries And Computational And Analytical Exercises At The End Of Each Chapter Digital Image Interpolation In Matlab® Is An Excellent Guide For Researchers And Engineers Working In Digital Imaging And Digital Video Technologies. Graduate Students Studying Digital Image Processing Will Also Benefit From This Practical Reference Text.</p>	https://bookshelf.vitalsource.com/#/books/978119119616


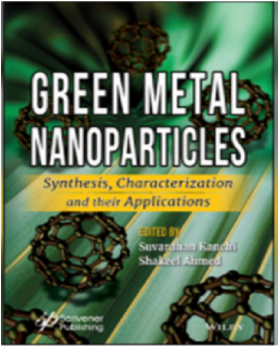
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
39	Electrochemical Engineering 	Fuller	Wiley	2016	1st ed.	448 hlm. 221 x 281 mm 1262 g.	9781119004257	9781119004257, 111900425X	<p>A Comprehensive Reference for Electrochemical Engineering Theory and Application - From chemical and electronics manufacturing, to hybrid vehicles, energy storage, and beyond, electrochemical engineering touches many industries--any many lives--every day. As energy conservation becomes of central importance, so too does the science that helps us reduce consumption, reduce waste, and lessen our impact on the planet. Electrochemical Engineering provides a reference for scientists and engineers working with electrochemical processes, and a rigorous, thorough text for graduate students and upper-division undergraduates. Merging theoretical concepts with widespread application, this book is designed to provide critical knowledge in a real-world context. Beginning with the fundamental principles underpinning the field, the discussion moves into industrial and manufacturing processes that blend central ideas to provide an advanced understanding while explaining observable results. Fully-worked illustrations simplify complex processes, and end-of chapter questions help reinforce essential knowledge. With in-depth coverage of both the practical and theoretical, this book is both a thorough introduction to and a useful reference for the field. Rigorous in depth, yet grounded in relevance, Electrochemical Engineering: Introduces basic principles from the standpoint of practical application</p> <p>Explores the kinetics of electrochemical reactions with discussion on thermodynamics, reaction fundamentals, and transport</p> <p>Covers battery and fuel cell characteristics, mechanisms, and system design</p> <p>Delves into the design and mechanics of hybrid and electric vehicles, including regenerative braking, start-stop hybrids, and fuel cell systems</p> <p>Examines electrodeposition, redox-flow batteries, electrolysis, regenerative fuel cells, semiconductors, and other applications of electrochemical engineering principles</p> <p>Overlapping chemical engineering, chemistry, material science, mechanical engineering, and electrical engineering, electrochemical engineering covers a diverse array of phenomena explained by some of the important scientific discoveries of our time. Electrochemical Engineering provides the critical understanding required to work effectively with these processes as they become increasingly central to global sustainability.</p>	https://bookshelf.vitalsource.com/#/books/9781119004257

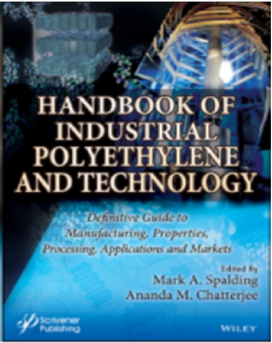

No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
40	Energy Conservation in Residential, Commercial, and Industrial Facilities 	Gabbar	Wiley	2018	1st ed.	xxiii, 317 hlm. : ilus.	9781119422068	9781119422068, 111942206X	<p>An authoritative and comprehensive guide to managing energy conservation in infrastructures - nergy Conservation in Residential, Commercial, and Industrial Facilities offers an essential guide to the business models and engineering design frameworks for the implementation of energy conservation in infrastructures. The presented models of both physical and technological systems can be applied to a wide range of structures such as homes, hotels, public facilities, industrial facilities, transportation, and water/energy supply systems. The authors--noted experts in the field--explore the key performance indicators that are used to evaluate energy conservation strategies and the energy supply scenarios as part of the design and operation of energy systems in infrastructures. The text is based on a systems approach that demonstrates the effective management of building energy knowledge and supports the simulation, evaluation, and optimization of several building energy conservation scenarios. In addition, the authors explore new methods of developing energy semantic network (ESN) superstructures, energy conservation optimization techniques, and risk-based life cycle assessments. This important text: Defines the most effective ways to model the infrastructure of physical and technological systems</p> <p>Includes information on the most widely used techniques in the validation and calibration of building energy simulation</p> <p>Offers a discussion of the sources, quantification, and reduction of uncertainty</p> <p>Presents a number of efficient energy conservation strategies in infrastructure systems, including HVAC, lighting, appliances, transportation, and industrial facilities</p> <p>Describes illustrative case studies to demonstrate the proposed energy conservation framework, practices, methods, engineering designs, control, and technologies Written for students studying energy conservation as well as engineers designing the next generation of buildings, Energy Conservation in Residential, Commercial, and Industrial Facilities offers a wide-ranging guide to the effective management of energy conservation in infrastructures.</p>	https://bookshelf.vitalsource.com/#/books/9781119422068

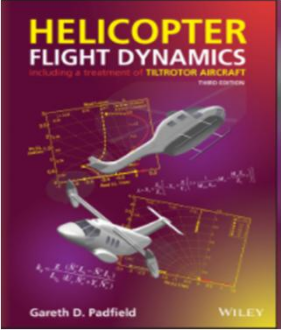
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
41	Flexible Carbon-based Electronics	Samori	Wiley	2018	–	337 hlm.	9783527341917	–	<p>This Third Volume In The Advanced Nanocarbon Materials Series Covers The Topic Of Flexible Electronics Both From A Materials And An Applications Perspective. Comprehensive In Its Scope, The Monograph Examines Organic, Inorganic And Composite Materials With A Section Devoted To Carbon-Based Materials With A Special Focus On The Generation And Properties Of 2D Materials. It Also Presents Carbon Modifications And Derivatives, Such As Carbon Nanotubes, Graphene Oxide And Diamonds. In Terms Of The Topical Applications Covered These Include, But Are Not Limited To, Flexible Displays, Organic Electronics, Transistors, Integrated Circuits, Semiconductors And Solar Cells. These Offer Perspectives For Today’S Energy And Healthcare Challenges, Such As Electrochemical Energy Storage And Wearable Devices. Finally, A Section On Fundamental Properties And Characterization Approaches Of Flexible Electronics Rounds Off The Book. Each Contribution Points Out The Importance Of The Structure-Function Relationship For The Target-Oriented Fabrication Of Electronic Devices, Enabling The Design Of Complex Components.</p>	https://bookshelf.vitalsource.com/#/books/9783527341917
42	Flexible Energy Conversion and Storage Devices	Zhi	Wiley	2018	–	520 hlm. 17 cm	9783527342532	–	<p>Provides In-Depth Knowledge Of Flexible Energy Conversion And Storage Devices- Covering Aspects From Materials To Technologies Written By Leading Experts On Various Critical Issues In This Emerging Field, This Book Reviews The Recent Progresses On Flexible Energy Conversion And Storage Devices, Such As Batteries, Supercapacitors, Solar Cells, And Fuel Cells. It Introduces Not Only The Basic Principles And Strategies To Make A Device Flexible, But Also The Applicable Materials And Technologies, Such As Polymers, Carbon Materials, Nanotechnologies And Textile Technologies. It Also Discusses The Perspectives For Different Devices. Flexible Energy Conversion And Storage Devices Contains Chapters, Which Are All Written By Top Researchers Who Have Been Actively Working In The Field To Deliver Recent Advances In Areas From Materials Syntheses, Through Fundamental Principles, To Device Applications. It Covers Flexible All-Solid State Supercapacitors; Fiber/Yarn Based Flexible Supercapacitors; Flexible Lithium And Sodium Ion Batteries; Flexible Diversified And Zinc Ion Batteries; Flexible Mg, Alkaline, Silver-Zinc, And Lithium Sulfur Batteries; Flexible Fuel Cells; Flexible Nanodielectric Materials With High Permittivity For Power Energy Storage; Flexible Dye Sensitized Solar Cells; Flexible Perovskite Solar Cells; Flexible Organic Solar Cells; Flexible Quantum Dot-Sensitized Solar Cells; Flexible Triboelectric Nanogenerators; Flexible Thermoelectric Devices; And Flexible Electrodes For Water-Splitting. -Covers The Timely And Innovative Field Of Flexible Devices Which Are Regarded As The Next Generation Of Electronic Devices -Provides A Highly Application-Oriented Approach That Covers Various Flexible Devices Used For Energy Conversion And Storage -Fosters An Understanding Of The Scientific Basis Of Flexible Energy Devices, And Extends This Knowledge To The Development, Construction, And Application Of Functional Energy Systems -Stimulates And Advances The Research And Development Of This Intriguing Field Flexible Energy Conversion And Storage Devices Is An Excellent Book For Scientists, Electrochemists, Solid State Chemists, Solid State Physicists, Polymer Chemists, And Electronics Engineers.</p>	https://bookshelf.vitalsource.com/#/books/9783527342532

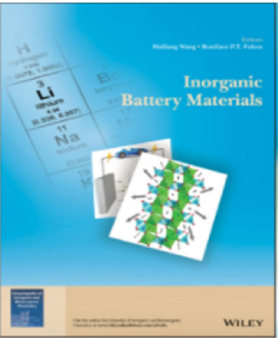
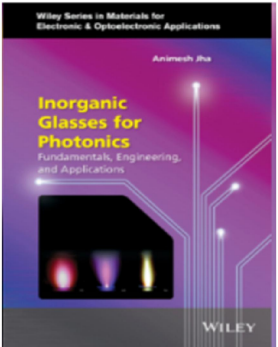
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
43	Fundamentals of Finite Element Analysis: Linear Finite Element Analysis 	Koutromanos	Wiley	2017	1st ed.	XVIII, 710 hlm. : illus. ; 25 cm.	9781119260080	9781119260080, 1119260086	<p>An introductory textbook covering the fundamentals of linear finite element analysis (FEA) - This book constitutes the first volume in a two-volume set that introduces readers to the theoretical foundations and the implementation of the finite element method (FEM). The first volume focuses on the use of the method for linear problems. A general procedure is presented for the finite element analysis (FEA) of a physical problem, where the goal is to specify the values of a field function. First, the strong form of the problem (governing differential equations and boundary conditions) is formulated. Subsequently, a weak form of the governing equations is established. Finally, a finite element approximation is introduced, transforming the weak form into a system of equations where the only unknowns are nodal values of the field function. The procedure is applied to one-dimensional elasticity and heat conduction, multi-dimensional steady-state scalar field problems (heat conduction, chemical diffusion, flow in porous media), multi-dimensional elasticity and structural mechanics (beams/shells), as well as time-dependent (dynamic) scalar field problems, elastodynamics and structural dynamics. Important concepts for finite element computations, such as isoparametric elements for multi-dimensional analysis and Gaussian quadrature for numerical evaluation of integrals, are presented and explained. Practical aspects of FEA and advanced topics, such as reduced integration procedures, mixed finite elements and verification and validation of the FEM are also discussed. Provides detailed derivations of finite element equations for a variety of problems. Incorporates quantitative examples on one-dimensional and multi-dimensional FEA. Provides an overview of multi-dimensional linear elasticity (definition of stress and strain tensors, coordinate transformation rules, stress-strain relation and material symmetry) before presenting the pertinent FEA procedures. Discusses practical and advanced aspects of FEA, such as treatment of constraints, locking, reduced integration, hourglass control, and multi-field (mixed) formulations. Includes chapters on transient (step-by-step) solution schemes for time-dependent scalar field problems and elastodynamics/structural dynamics. Contains a chapter dedicated to verification and validation for the FEM and another chapter dedicated to solution of linear systems of equations and to introductory notions of parallel computing. Includes appendices with a review of matrix algebra and overview of matrix analysis of discrete systems. Accompanied by a website hosting an open-source finite element program for linear elasticity and heat conduction, together with a user tutorial. Fundamentals of Finite Element Analysis: Linear Finite Element Analysis is an ideal text for undergraduate and graduate students in civil, aerospace and mechanical engineering, finite element software vendors, as well as practicing engineers and anybody with an interest in linear finite element analysis.</p>	https://bookshelf.vitalsource.com/#/books/9781119260080
44	Fundamentals of Machine Component Design, 7th Edition 	Juvinall	Wiley	2020	7th ed.	—	9781119723608	1119723604 9781119723608	<p>Fundamentals Of Machine Component Design Presents A Thorough Introduction To The Concepts And Methods Essential To Mechanical Engineering Design, Analysis, And Application. In-Depth Coverage Of Major Topics, Including Free Body Diagrams, Force Flow Concepts, Failure Theories, And Fatigue Design, Are Coupled With Specific Applications To Bearings, Springs, Brakes, Clutches, Fasteners, And More For A Real-World Functional Body Of Knowledge. Critical Thinking And Problem-Solving Skills Are Strengthened Through A Graphical Procedural Framework, Enabling The Effective Identification Of Problems And Clear Presentation Of Solutions. Solidly Focused On Practical Applications Of Fundamental Theory, This Text Helps Students Develop The Ability To Conceptualize Designs, Interpret Test Results, And Facilitate Improvement. Clear Presentation Reinforces Central Ideas With Multiple Case Studies, In-Class Exercises, Homework Problems, Computer Software Data Sets, And Access To Supplemental Internet Resources, While Appendices Provide Extensive Reference Material On Processing Methods, Joinability, Failure Modes, And Material Properties To Aid Student Comprehension And Encourage Self-Study.</p>	https://bookshelf.vitalsource.com/#/books/9781119723608

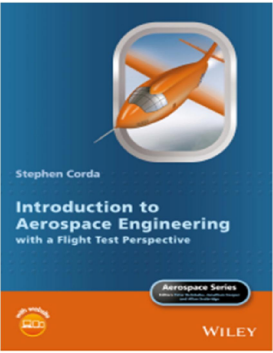
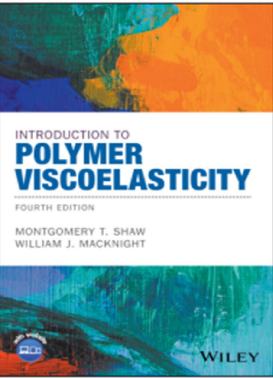
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
45	Fundamentals of Mechanical Vibrations 	Cai	Wiley	2016	1st ed.	–	9781119050124	9781119050124, 111905012X	This introductory book covers the most fundamental aspects of linear vibration analysis for mechanical engineering students and engineers. Consisting of five major topics, each has its own chapter and is aligned with five major objectives of the book. It starts from a concise, rigorous and yet accessible introduction to Lagrangian dynamics as a tool for obtaining the governing equation(s) for a system, the starting point of vibration analysis. The second topic introduces mathematical tools for vibration analyses for single degree-of-freedom systems. In the process, every example includes a section <i>Exploring the Solution with MATLAB. This is intended to develop student's affinity to symbolic calculations, and to encourage curiosity-driven explorations. The third topic introduces the lumped-parameter modeling to convert simple engineering structures into models of equivalent masses and springs. The fourth topic introduces mathematical tools for general multiple degrees of freedom systems, with many examples suitable for hand calculation, and a few computer-aided examples that bridges the lumped-parameter models and continuous systems. The last topic introduces the finite element method as a jumping point for students to understand the theory and the use of commercial software for vibration analysis of real-world structures.</i>	https://bookshelf.vitalsource.com/#/books/9781119050124
46	Graphene Oxide: Fundamentals and Applications 	Dimiev	Wiley	2016	–	xix, 439 hlm.	9781119069409	–	Due To Its Unique Properties, Graphene Oxide Has Become One Of The Most Studied Materials Of The Last Decade And A Great Variety Of Applications Have Been Reported In Areas Such As Sensors, Catalysis And Biomedical Applications. This Comprehensive Volume Systematically Describes The Fundamental Aspects And Applications Of Graphene Oxide. The Book Is Designed As An Introduction To The Topic, So Each Chapter Begins With A Discussion On Fundamental Concepts, Then Proceeds To Review And Summarize Recent Advances In The Field. Divided Into Two Parts, The First Part Covers Fundamental Aspects Of Graphene Oxide And Includes Chapters On Formation And Chemical Structure, Characterization Methods, Reduction Methods, Rheology And Optical Properties Of Graphene Oxide Solutions. Part Two Covers Numerous Graphene Oxide Applications Including Field Effect Transistors, Transparent Conductive Films, Sensors, Energy Harvesting And Storage, Membranes, Composite Materials, Catalysis And Biomedical Applications. In Each Case The Differences And Advantages Of Graphene Oxide Over Its Non-Oxidised Counterpart Are Discussed. The Book Concludes With A Chapter On The Challenges Of Industrial-Scale Graphene Oxide Production. Graphene Oxide: Fundamentals And Applications Is A Valuable Reference For Academic Researchers, And Industry Scientists Interested In Graphene Oxide, Graphene And Other Carbon Materials.	https://bookshelf.vitalsource.com/#/books/9781119069409

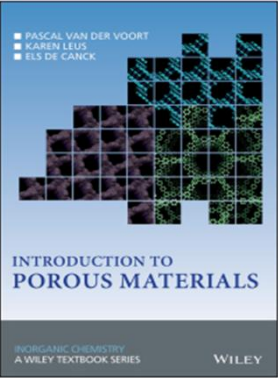
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
47	Green Aviation 	Blockley	Wiley	2016	–	1 v. , X, -514 hlm. : illus. ; 28 cm	9781118866351	–	Green Aviation Is The First Authoritative Overview Of Both Engineering And Operational Measures To Mitigate The Environmental Impact Of Aviation. It Addresses The Current Status Of Measures To Reduce The Environmental Impact Of Air Travel. The Chapters Cover Such Items As: Engineering And Technology-Related Subjects (Aerodynamics, Engines, Fuels, Structures, Etc.), Operations (Air Traffic Management And Infrastructure) Policy And Regulatory Aspects Regarding Atmospheric And Noise Pollution. With Contributions From Leading Experts, This Volume Is Intended To Be A Valuable Addition, And Useful Resource, For Aerospace Manufacturers And Suppliers, Governmental And Industrial Aerospace Research Establishments, Airline And Aviation Industries, University Engineering And Science Departments, And Industry Analysts, Consultants, And Researchers.	https://bookshelf.vitalsource.com/#/books/978118866351
48	Green Metal Nanoparticles: Synthesis, Characterization and their Applications 	Kanchi	Wiley	2019	–	–	9781119418238	–	The Use Of Biological Sources Such As Microbes And Plants Can Help In Synthesizing Nanoparticles In A Reliable And Eco-Friendly Way. The Synthesis Of Nanoparticles By These Natural Sources Is Characterized By Processes That Take Place Near To Ambient Temperature And Pressures And Also Near Neutral PH. This Edited Volume Authored By Subject Specialists, Provides All The Latest Research And Builds A Database Of Bioreduction Agents To Various Metal Nanoparticles Using Different Precursor Systems. The Book Also Highlights The Different Strategies Such As Simplicity, Cost-Effectiveness, Environment-Friendly And Easily Scalable, And Includes Parameters For Controlling The Size And Shape Of The Materials Developed From The Various Greener Methods. In Order To Exploit The Utmost Potential Metal Nanoparticles Synthesis From The Different Sources Such As Agricultural Waste, Flora And Fauna, Food Waste, Microbes And Biopolymer Systems, It Is Also Crucial To Recognize The Biochemical And Molecular Mechanisms Of Production Of Nanoparticles And Their Characterization.	https://bookshelf.vitalsource.com/#/books/978119418238


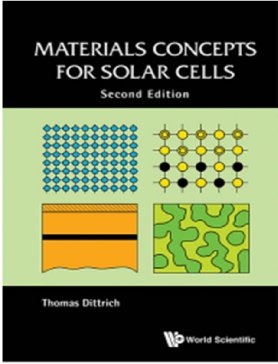
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
49	Handbook of Industrial Polyethylene and Technology: Definitive Guide to Manufacturing, Properties, Processing, Applications and Markets Set 	Spalding	Wiley	2018	–	2 vol. xxvi, 1352 hlm. : Ilus., diagram	9781119159766	–	<p>This Handbook Provides An Exhaustive Description Of Polyethylene. The 50+ Chapters Are Written By Some Of The Most Experienced And Prominent Authors In The Field, Providing A Truly Unique View Of Polyethylene. The Book Starts With A Historical Discussion On How Low Density Polyethylene Was Discovered And How It Provided Unique Opportunities In The Early Days. New Catalysts Are Presented And Show How They Created An Expansion In Available Products Including Linear Low Density Polyethylene, High Density Polyethylene, Copolymers, And Polyethylene Produced From Metallocene Catalysts. With These Different Catalysts Systems A Wide Range Of Structures Are Possible With An Equally Wide Range Of Physical Properties. Numerous Types Of Additives Are Presented That Include Additives For The Protection Of The Resin From The Environment And Processing, Fillers, Processing Aids, Anti-Fogging Agents, Pigments, And Flame Retardants. Common Processing Methods Including Extrusion, Blown Film, Cast Film, Injection Molding, And Thermoforming Are Presented Along With Some Of The More Specialized Processing Techniques Such As Rotational Molding, Fiber Processing, Pipe Extrusion, Reactive Extrusion, Wire And Cable, And Foaming Processes. The Business Of Polyethylene Including Markets, World Capacity, And Future Prospects Are Detailed. This Handbook Provides The Most Current And Complete Technology Assessments And Business Practices For Polyethylene Resins.</p>	https://bookshelf.vitalsource.com/#/books/978119159766
50	Handbook of Nanocellulose and Cellulose Nanocomposites, 2 Volume Set 	Kargarzadeh	Wiley	2016	–	896 hlm.	9783527338665	–	<p>An Up-To-Date And Comprehensive Overview Summarizing Recent Achievements, The State Of The Art, And Trends In Research Into Nanocellulose And Cellulose Nanocomposites. Following An Introduction, This Ready References Discusses The Characterization As Well Surface Modification Of Cellulose Nanocomposites Before Going Into Details Of The Manufacturing And The Self-Assembly Of Such Compounds. After A Description Of Various Alternatives, Including Thermoplastic, Thermosetting, Rubber, And Fully Green Cellulose Nanocomposites, The Book Continues With Their Mechanic And Thermal Properties, As Well As Crystallization And Rheology Behavior. A Summary Of Spectroscopic And Water Sorption Properties Precedes A Look At Environmental Health And Safety Of These Nanocomposites. With Its Coverage Of A Wide Variety Of Materials, Important Characterization Tools And Resulting Applications, This Is An Essential Reference For Beginners As Well As Experienced Researchers.</p>	https://bookshelf.vitalsource.com/#/books/9783527338665

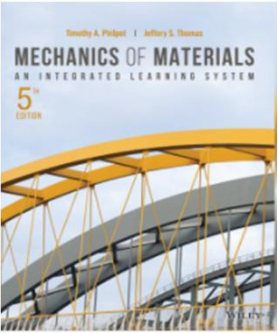
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
51	Helicopter Flight Dynamics: Including a Treatment of Tiltrotor Aircraft, 3rd Edition 	Padfield	Wiley	2019	3rd ed.	xlii, 810 hlm.	9781119401056	9781119401056 1119401054	The Book The Behaviour Of Helicopters And Tiltrotor Aircraft Is So Complex That Understanding The Physical Mechanisms At Work In Trim, Stability And Response, And Thus The Prediction Of Flying Qualities, Requires A Framework Of Analytical And Numerical Modelling And Simulation. Good Flying Qualities Are Vital For Ensuring That Mission Performance Is Achievable With Safety And, In The First And Second Editions Of Helicopter Flight Dynamics, A Comprehensive Treatment Of Design Criteria Was Presented, Relating To Both Normal And Degraded Flying Qualities. Fully Embracing The Consequences Of Degraded Flying Qualities During The Design Phase Will Contribute Positively To Safety. In This Third Edition, Two New Chapters Are Included. Chapter 9 Takes The Reader On A Journey From The Origins Of The Story Of Flying Qualities, Tracing Key Contributions To The Developing Maturity And To The Current Position. Chapter 10 Provides A Comprehensive Treatment Of The Flight Dynamics Of Tiltrotor Aircraft; Informed By Research Activities And The Limited Data On Operational Aircraft. Many Of The Unique Behavioural Characteristics Of Tiltrotors Are Revealed For The First Time In This Book. The Accurate Prediction And Assessment Of Flying Qualities Draws On The Modelling And Simulation Discipline On The One Hand And Testing Practice On The Other. Checking Predictions In Flight Requires Clearly Defined Mission Tasks, Derived From Realistic Performance Requirements. High Fidelity Simulations Also Form The Basis For The Design Of Stability And Control Augmentation Systems, Essential For Conferring Level 1 Flying Qualities. The Integrated Description Of Flight Dynamic Modelling, Simulation And Flying Qualities Of Rotorcraft Forms The Subject Of This Book, Which Will Be Of Interest To Engineers Practising And Honing Their Skills In Research Laboratories, Academia And Manufacturing Industries, Test Pilots And Flight Test Engineers, And As A Reference For Graduate And Postgraduate Students In Aerospace Engineering.	https://bookshelf.vitalsource.com/#/books/9781119401056

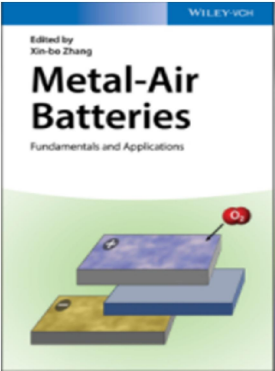
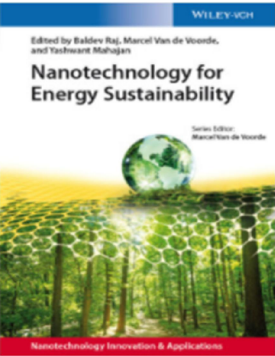
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
52	Inorganic Battery Materials 	Wang	Wiley	2020	–	423 hlm.	9781119431992	9781119432029 1119432022	<p>Chemistry Determines How A Battery Works. Understanding The Chemistry Of A Battery Technology And Its Materials Will Reveal Its Potential As Well As The Obstacles That Hamper The Potential From Being Realized. In The Context Of Renewable Energy Utilization And Transportation Electrification, Battery Technologies And Their Related Research Have Been Under More Extensive And Intensive Development Than Ever. Focusing On Inorganic Chemistry Of Battery Materials Associated With Both Current And Future Battery Technologies, This Book Will Be A Unique Reference In The Field. In A Single Volume, This Book Is Designed To Inform The Reader Of The Basic Chemistry And Recent Advances Of Battery Materials And Of The Challenges And Opportunities Associated With Their Present And Emerging Technological Uses. The Book Contains Chapters On Fundamental Features Of Battery Materials, Including Discussions On Material Synthesis, Structural Characterizations, And Electrochemical Reactions, Making It Accessible To Students And Others Who Have Limited Familiarity With Their Chemistry. Both Mature And Emerging Battery Technologies Are Discussed, And New Applications Are Highlighted, Pointing Out Potential Growth Areas That Can Serve As Inspirations For Future Research. All Articles From This EIBC Book Will Be Published Online As Part Of The Encyclopedia Of Inorganic And Bioinorganic Chemistry:</p> <p>Http://Onlinelibrary.Wiley.Com/Book/10.1002/9781119951438 Chemistry Determines How A Battery Works. Understanding The Chemistry Of A Battery Technology And Its Materials Will Reveal Its Potential As Well As The Obstacles That Hamper The Potential From Being Realized. In The Context Of Renewable Energy Utilization And Transportation Electrification, Battery Technologies And Their Related Research Have Been Under More Extensive And Intensive Development Than Ever. Focusing On Inorganic Chemistry Of Battery Materials Associated With Both Current And Future Battery Technologies, This Book Will Be A Unique Reference In The Field. In A Single Volume, This Book Is Designed To Inform The Reader Of The Basic Chemistry And Recent Advances Of Battery Materials And Of The Challenges And Opportunities Associated With Their Present And Emerging Technological Uses. The Book Contains Chapters On Fundamental Features Of Battery Materials, Including Discussions On Material Synthesis, Structural Characterizations, And Electrochemical Reactions, Making It Accessible To Students And Others Who Have Limited Familiarity With Their Chemistry. Both Mature And Emerging Battery Technologies Are Discussed, And New Applications Are Highlighted, Pointing Out Potential Growth Areas That Can Serve As Inspirations For Future Research. All Articles From This EIBC Book Will Be Published Online As Part Of The Encyclopedia Of Inorganic And Bioinorganic Chemistry: Www.Wileyonlinelibrary.Com/Ref/Eibc</p>	https://bookshelf.vitalsource.com/#/books/9781119431992
53	Inorganic Glasses for Photonics: Fundamentals, Engineering, and Applications 	Jha	Wiley	2011	–	–	9780470741702	–	<p>Advanced Textbook On Inorganic Glasses Suitable For Both Undergraduates And Researchers. Engaging Style To Facilitate Understanding Suitable For Senior Undergraduates, Postgraduates And Researchers Entering Material Science, Engineering, Physics, Chemistry, Optics And Photonics Fields Discusses New Techniques In Optics And Photonics Including Updates On Diagnostic Techniques Comprehensive And Logically Structured</p>	https://bookshelf.vitalsource.com/#/books/9780470741702

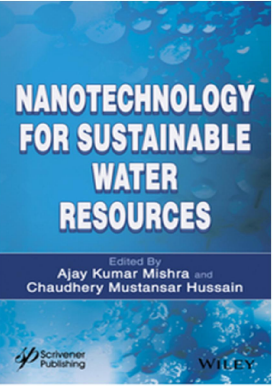
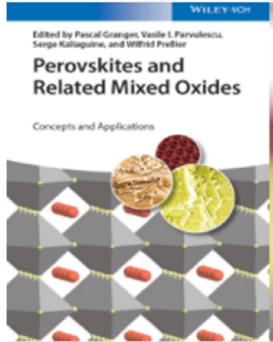
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
54	Introduction to Aerospace Engineering with a Flight Test Perspective 	Corda	Wiley	2017	1st ed.	XX, 903 hlm. : ilus. ; 26 cm.	9781118953365	9781118953365, 1118953363	Comprehensive textbook which introduces the fundamentals of aerospace engineering with a flight test perspective - Introduction to Aerospace Engineering with a Flight Test Perspective is an introductory level text in aerospace engineering with a unique flight test perspective. Flight test, where dreams of aircraft and space vehicles actually take to the sky, is the bottom line in the application of aerospace engineering theories and principles. Designing and flying the real machines are often the reasons that these theories and principles were developed. This book provides a solid foundation in many of the fundamentals of aerospace engineering, while illuminating many aspects of real-world flight. Fundamental aerospace engineering subjects that are covered include aerodynamics, propulsion, performance, and stability and control.	https://bookshelf.vitalsource.com/#/books/9781118953365
55	Introduction to Polymer Viscoelasticity, 4th Edition 	Shaw	Wiley	2018	4th ed.	349 hlm. : ilus. ; 26 cm	9781119181804	9781119181804, 1119181801	Completely revised and updated, the fourth edition of this classic text continues to offer the reader a thorough understanding of viscoelastic behavior, essential for the proper utilization of polymers. Explains principles, corresponding equations, and experimental methods with supporting real-life applications Adds coverage of measurement techniques (nano-indentation, atomic force microscopy (AFM), and diffusing wave spectroscopy (DWS)), biopolymer viscoelasticity, and the relationship between mechanical polymer properties and viscoelastic functions Has two new ections to address modern areas of viscoelastic measurement: large amplitude oscillatory shear (LAOS) and microrheology Includes problems in the text and an Instructor's Manual (including solutions) available for adopting professors Prior edition reviews: "The book is clear written and...[is] appropriate for students in introductory undergraduate courses and for others wanting introduction to the fundamentals of the subject." (CHOICE, December 2005); "This book is invariably well written, logically organized and easy to follow...I highly recommend this book to anyone studying polymer viscoelasticity." (Polymer News, December 2005)	https://bookshelf.vitalsource.com/#/books/9781119181804

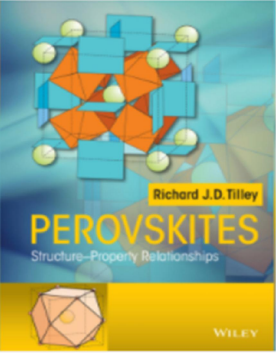
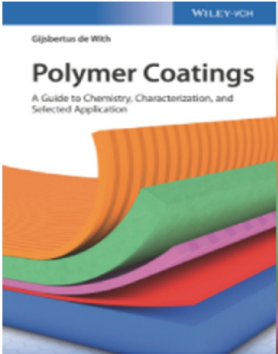
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
56	Introduction to Porous Materials 	Van Der Voort	Wiley	2019	1st ed.	1 vol., xv, 425 hlm. : illus., berwarna ; 26 cm.	9781119426608	9781119426608, 111942660X	<p>The first comprehensive textbook on the timely and rapidly developing topic of inorganic porous materials - This is the first textbook to completely cover a broad range of inorganic porous materials. It introduces the reader to the development of functional porous inorganic materials, from the synthetic zeolites in the 50's, to today's hybrid materials such as metal-organic frameworks (MOFs), covalent organic frameworks (COFs) and related networks. It also provides the necessary background to understand how porous materials are organized, characterized, and applied in adsorption, catalysis, and many other domains. Additionally, the book explains characterization and application from the materials scientist viewpoint, giving the reader a practical approach on the characterization and application of the respective materials. Introduction to Inorganic Porous Materials begins by describing the basic concepts of porosity and the different types of pores, surfaces, and amorphous versus crystalline materials, before introducing readers to nature's porous materials. It then goes on to cover everything from adsorption and catalysis to amorphous materials such as silica to inorganic carbons and Periodic Mesoporous Organosilicas (PMOs). It discusses the synthesis and applications of MOFs and the broad family of COFs. It concludes with a look at future prospects and emerging trends in the field. The only complete book of its kind to cover the wide variety of inorganic and hybrid porous materials</p> <p>A comprehensive reference and outstanding tool for any course on inorganic porous materials, heterogeneous catalysis, and adsorption</p> <p>Gives students and investigators the opportunity to learn about porous materials, how to characterize them, and understand how they can be applied in different fields</p> <p>Introduction to Inorganic Porous Materials is an excellent book for students and professionals of inorganic chemistry and materials science with an interest in porous materials, functional inorganic materials, heterogeneous catalysis and adsorption, and solid state characterization techniques.</p>	https://bookshelf.vitalsource.com/#/books/9781119426608

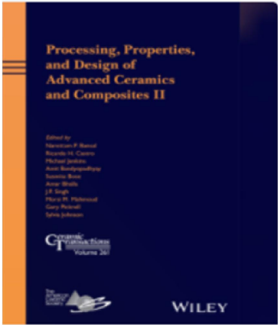
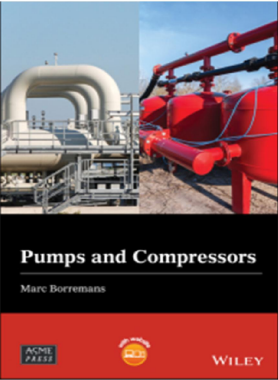
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
57	Lithium-Sulfur Batteries 	Wild	Wiley	2018	–	1 v., XIV, 335hlm. : illus. berwarna. ; 26 cm	9781119297864	9781119297864 1119297869	<p>A Guide To Lithium Sulfur Batteries That Explores Their Materials, Electrochemical Mechanisms And Modelling And Includes Recent Scientific Developments Lithium Sulfur Batteries (Li-S) Offers A Comprehensive Examination Of Li-S Batteries From The Viewpoint Of The Materials Used In Their Construction, The Underlying Electrochemical Mechanisms And How This Translates Into The Characteristics Of Li-S Batteries. The Authors – Noted Experts In The Field – Outline The Approaches And Techniques Required To Model Li-S Batteries. Lithium Sulfur Batteries Reviews The Application Of Li-S Batteries For Commercial Use And Explores Many Broader Issues Including The Development Of Battery Management Systems To Control The Unique Characteristics Of Li-S Batteries. The Authors Include Information On sulfur Cathodes, Electrolytes And Other Components Used In Making Li-S Batteries And Examine The Role Of Lithium Sulfide, The Shuttle Mechanism And Its Effects, And Degradation Mechanisms. The Book Contains A Review Of Battery Design And: Discusses Electrochemistry Of Li-S Batteries And The Analytical Techniques Used To Study Li-S Batteries Offers Information On The Application Of Li-S Batteries For Commercial Use Distills Years Of Research On Li-S Batteries Into One Comprehensive Volume Includes Contributions From Many Leading Scientists In The Field Of Li-S Batteries Explores The Potential Of Li-S Batteries To Power Larger Battery Applications Such As Automobiles, Aviation And Space Vehicles Written For Academic Researchers, Industrial Scientists And Engineers With An Interest In The Research, Development, Manufacture And Application Of Next Generation Battery Technologies, Lithium Sulfur Batteries Is An Essential Resource For Accessing Information On The Construction And Application Of Li-S Batteries.</p>	https://bookshelf.vitalsource.com/#/books/9781119297864
58	Materials Concepts For Solar Cells (Second Edition) 	Dittrich Thomas	Wiley	2018	2nd ed.	xxxi, 535 hlm. : illus. ; 24 cm	9781786344489	9781786344489, 1786344483	<p>A modern challenge is for solar cell materials to enable the highest solar energy conversion efficiencies, at costs as low as possible, and at an energy balance as sustainable as necessary in the future. This textbook explains the principles, concepts and materials used in solar cells. It combines basic knowledge about solar cells and the demanded criteria for the materials with a comprehensive introduction into each of the four classes of materials for solar cells, i.e. solar cells based on crystalline silicon, epitaxial layer systems of III-V semiconductors, thin-film absorbers on foreign substrates, and nano-composite absorbers. In this sense, it bridges a gap between basic literature on the physics of solar cells and books specialized on certain types of solar cells. The last five years had several breakthroughs in photovoltaics and in the research on solar cells and solar cell materials. We consider them in this second edition. For example, the high potential of crystalline silicon with charge-selective hetero-junctions and alkaline treatments of thin-film absorbers, based on chalcopyrite, enabled new records. Research activities were boosted by the class of hybrid organic-inorganic metal halide perovskites, a promising newcomer in the field. This is essential reading for students interested in solar cells and materials for solar cells. It encourages students to solve tasks at the end of each chapter. It has been well applied for postgraduate students with background in materials science, engineering, chemistry or physics.</p>	https://bookshelf.vitalsource.com/#/books/9781786344489

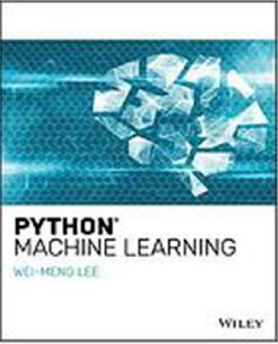
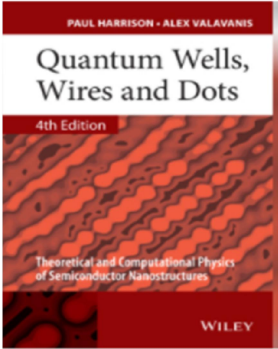
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
59	Mechanics of Materials: An Integrated Learning System, 5th Edition 	Philpot	Wiley	2019	5th ed.	–	9781119723042	–	<p>Mechanics Of Materials: An Integrated Learning System, 5th Edition Helps Engineering Students Visualize How Materials Move And Change Better Than Any Other Course Available. This Text Focuses On Helping Learners Develop Practical Skills, Encouraging Them To Recognize Fundamental Concepts Relevant To Specific Situations, Identify Equations Needed To Solve Problems, And Engage Critically With Literature In The Field. In This New Edition, Hundreds Of New Practice And Test Problems--Including Over 200 Problems With Video Solutions--Have Been Added To Enhance The Flexibility And Robustness Of The Course. With WileyPLUS, This Course Contains A Rich Selection Of Online Content And Interactive Materials, Including Animations, Tutorial Videos, And Worked Problems--Many Of Which Are New And Expanded In This 5th Edition. An Emphasis On Critical Thinking Forms The Foundation Of Mechanics Of Materials In This Revised Edition. From Basic Concepts Of Stress And Strain To More Advanced Topics Like Beam Deflections And Combined Loads, This Book Provides Students With Everything They Need To Embark On Successful Careers In Materials And Mechanical Engineering.</p> <p>Introduces Students To The Core Concepts Of Material Mechanics And Presents The Latest Methods And Current Problems In The Field Adds Hundreds Of New And Revised Problems, 200+ New Video Solutions, And Over 400 New EQAT Coded Algorithmic Problems Emphasizes Practical Skills And Critical Thinking, Encouraging Learners To Devise Effective Methods Of Solving Example Problems Contains Updates And Revisions To Reflect The Current State Of The Discipline And To Enhance The Breadth Of Course Content Includes Access To Interactive Animations, Demonstration Videos, And Step-By-Step Problem Solutions With WileyPLUS Online Environment With Added Flexibility And Opportunities For Course Customization, Mechanics Of Materials Provides Excellent Value For Instructors And Students Alike. Learners Will Stay Engaged And On Track, Gaining A Solid And Lasting Understanding Of The Subject Matter.</p>	https://bookshelf.vitalsource.com/#/books/9781119723042

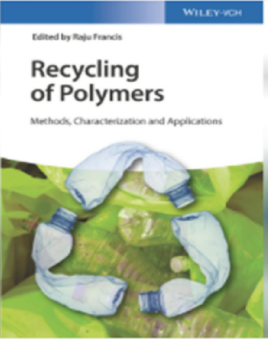
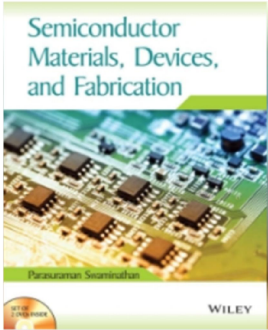
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
60	Metal-Air Batteries: Fundamentals and Applications 	Zhang	Wiley	2018	1st ed.	xiv, 417 hlm.: ilus.; 25 cm	9783527342792	9783527342792 3527342796	A Comprehensive Overview Of The Research Developments In The Burgeoning Field Of Metal-Air Batteries An Innovation In Battery Science And Technology Is Necessary To Build Better Power Sources For Our Modern Lifestyle Needs. One Of The Main Fields Being Explored For The Possible Breakthrough Is The Development Of Metal-Air Batteries. Metal-Air Batteries: Fundamentals And Applications Offers A Systematic Summary Of The Fundamentals Of The Technology And Explores The Most Recent Advances In The Applications Of Metal-Air Batteries. Comprehensive In Scope, The Text Explains The Basics In Electrochemical Batteries And Introduces Various Species Of Metal-Air Batteries. The Author-A Noted Expert In The Field-Explores The Development Of Metal-Air Batteries In The Order Of Li-Air Battery, Sodium-Air Battery, Zinc-Air Battery And Mg-O2 Battery, With The Focus On The Li-Air Battery. The Text Also Addresses Topics Such As Metallic Anode, Discharge Products, Parasitic Reactions, Electrocatalysts, Mediator, And X-Ray Diffraction Study In Li-Air Battery. Metal-Air Batteries Provides A Summary Of Future Perspectives In The Field Of The Metal-Air Batteries. This Important Resource: -Covers Various Species Of Metal-Air Batteries And Their Components As Well As System Designation -Contains Groundbreaking Content That Reviews Recent Advances In The Field Of Metal-Air Batteries -Focuses On The Battery Systems Which Have The Greatest Potential For Renewable Energy Storage Written For Electrochemists, Physical Chemists, Materials Scientists, Professionals In The Electrotechnical Industry, Engineers In Power Technology, Metal-Air Batteries Offers A Review Of The Fundamentals And The Most Recent Developments In The Area Of Metal-Air Batteries.	https://bookshelf.vitalsource.com/#/books/9783527342792
61	Nanotechnology for Energy Sustainability, 3 Volume Set 	Raj	Wiley	2017	—	—	9783527340149	—	In Three Handy Volumes, This Ready Reference Provides A Detailed Overview Of Nanotechnology As It Is Applied To Energy Sustainability. Clearly Structured, Following An Introduction, The First Part Of The Book Is Dedicated To Energy Production, Renewable Energy, Energy Storage, Energy Distribution, And Energy Conversion And Harvesting. The Second Part Then Goes On To Discuss Nano-Enabled Materials, Energy Conservation And Management, Technological And Intellectual Property-Related Issues And Markets And Environmental Remediation. The Text Concludes With A Look At And Recommendations For Future Technology Advances. An Essential Handbook For All Experts In The Field - From Academic Researchers And Engineers To Developers In Industry.	https://bookshelf.vitalsource.com/#/books/9783527340149

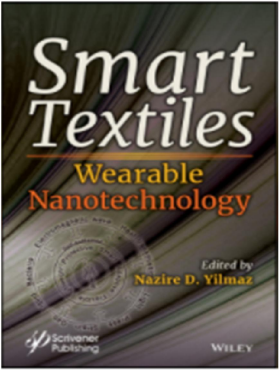
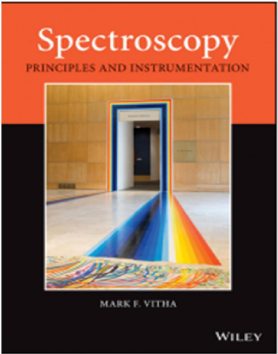
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
62	Nanotechnology for Sustainable Water Resources 	Mishra	Wiley	2018	1st ed.	xx, 563 hlm. : ilus. ; 24 cm.	9781119323594	9781119323594, 1119323592	In this book, we have summarized recent progresses due to novel nanomaterials for sustainable water resources. Book provides a summary of the state of the art knowledge to scientists, engineers and policy makers, about recent developments due to nanotechnology for sustainable water resources arena. The advances in sustainable water resources technologies in the context of modern society's interests will be considered preferably which allow to identify grand challenges and directions for future research. The book contributors have been selected from all over the world and the essential functions of the nanotechnologies have presented rather than their anticipated applications. Moreover, up to date knowledge on economy, toxicity and regulation related to nanotechnology are presented in detail. In the end, role of nanotechnology for green and sustainable future has also been briefly debated.	https://bookshelf.vitalsource.com/#/books/9781119323594
63	Perovskites and Related Mixed Oxides: Concepts and Applications 	Granger	Wiley	2016	–	–	9783527337637	9783527337637 3527337636	This Comprehensive Handbook And Ready Reference Details All The Main Achievements In The Field Of Perovskite-Based And Related Mixed-Oxide Materials. The Authors Discuss, In An Unbiased Manner, The Potentials As Well As The Challenges Related To Their Use, Thus Offering New Perspectives For Research And Development On Both An Academic And Industrial Level. The First Volume Begins By Summarizing The Different Synthesis Routes From Molten Salts At High Temperatures To Colloidal Crystal Template Methods, Before Going On To Focus On The Physical Properties Of The Resulting Materials And Their Related Applications In The Fields Of Electronics, Energy Harvesting, And Storage As Well As Electromechanics And Superconductivity. The Second Volume Is Dedicated To The Catalytic Applications Of Perovskites And Related Mixed Oxides, Including, But Not Limited To Total Oxidation Of Hydrocarbons, Dry Reforming Of Methane And Denitrogenation. The Concluding Section Deals With The Development Of Chemical Reactors And Novel Perovskite-Based Applications, Such As Fuel Cells And High-Performance Ceramic Membranes. Throughout, The Contributions Clearly Point Out The Intimate Links Between Structure, Properties And Applications Of These Materials, Making This An Invaluable Tool For Materials Scientists And For Catalytic And Physical Chemists.	https://bookshelf.vitalsource.com/#/books/9783527337637

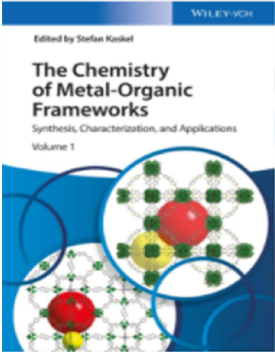

No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
64	Perovskites: Structure-Property Relationships 	Tilley	Wiley	2016	1st ed.	x, 315 hlam.: ilus.; 25 cm	9781118935668	9781118935668 1118935667 9781118935637 1118935632	Uniquely Describes Both The Crystallography And Properties Of Perovskite Related Materials. Practical Applications In Solar Cells, Microelectronics And Telecommunications Interdisciplinary Topic Drawing On Materials Science, Chemistry, Physics, And Geology Contains Problems And Answers To Enhance Knowledge Retention	https://bookshelf.vitalsource.com/#/books/9781118935668
65	Polymer Coatings: A Guide to Chemistry, Characterization, and Selected Applications 	De With	Wiley	2018	–	–	9783527342105	–	A Practical Guide To Polymer Coatings That Covers All Aspects From Materials To Applications Polymer Coatings Is A Practical Resource That Offers An Overview Of The Fundamentals To The Synthesis, Characterization, Deposition Methods, And Recent Developments Of Polymer Coatings. The Text Includes Information About The Different Polymers And Polymer Networks In Use, Resins For Solvent- And Water-Based Coatings, And A Variety Of Additives. It Presents Deposition Methods That Encompass Frequently Used Mechanical And Electrochemical Approaches, In Addition To The Physical-Chemical Aspects Of The Coating Process. The Author Covers The Available Characterization Methods Including Spectroscopic, Morphological, Thermal And Mechanical Techniques. The Comprehensive Text Also Reviews Developments In Selected Technology Areas Such As Electrically Conductive, Anti-Fouling, And Self-Replenishing Coatings. The Author Includes Insight Into The Present Status Of The Research Field, Describes Systems Currently Under Investigation, And Draws Our Attention To Yet To Be Explored Systems. This Important Text: • Offers A Thorough Overview Of Polymer Coatings And Their Applications • Covers Different Classes Of Materials, Deposition Methods, Coating Processes, And Ways Of Characterization • Contains A Text That Is Designed To Be Accessible And Helps To Apply The Acquired Knowledge Immediately • Includes Information On Selected Areas Of Research With Imminent Application Potential For Functional Coatings Written For Chemists In Industry, Materials Scientists, Polymer Chemists, And Physical Chemists, Polymer Coatings Offers A Text That Contains The Information Needed To Gain An Understanding Of The Charaterization And Applications Of Polymer Coatings.	https://bookshelf.vitalsource.com/#/books/9783527342105

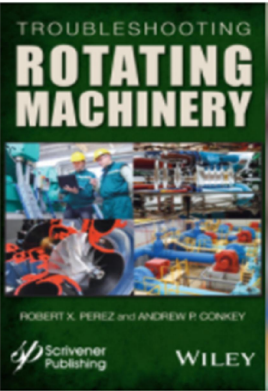
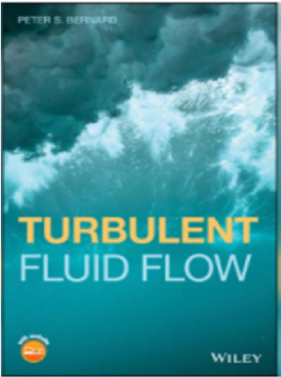
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
66	Processing, Properties, and Design of Advanced Ceramics and Composites II 	Bansai	Wiley	2017	–	xii, 422 hlm. ; 24 cm.	9781119423805	9781119423805 1119423805	Processing, Properties, And Design Of Advanced Ceramics And Composites II, Ceramic Transactions Volume 261 Narottam P. Bansal, Ricardo H. R. Castro, Michael Jenkins, Amit Bandyopadhyay, Susmita Bose, Amar Bhalla, J.P. Singh, Morsi M. Mahmoud, Gary Pickrell, And Sylvia Johnson; Editors This Proceedings Volume Contains A Collection Of 36 Papers (~350 Pages) From The Following Symposia Held During The 2016 Materials Science And Technology (MS&T'16) Meeting Held In Salt Lake City, UT, October 24-27, 2016: Advanced Materials For Harsh Environments Advances In Dielectric Materials And Electronic Devices Advances In Ceramic Matrix Composites Ceramic Optical Materials Controlled Synthesis, Processing, And Applications Of Structural And Functional Nanomaterials Innovative Processing And Synthesis Of Ceramics, Glasses And Composites International Standards For Properties And Performance Of Advanced Ceramics Multifunctional Oxides Rustum Roy Memorial Symposium On Processing And Performance Of Materials Using Microwaves, Electric, And Magnetic Fields Sintering And Related Powder Processing Science And Technology Surface Properties Of Biomaterials Thermal Protection Materials And Systems Zirconia Based Materials For Cutting Edge Technology	https://bookshelf.vitalsource.com/#/books/9781119423805
67	Pumps and Compressors 	Borremans	Wiley	2019	1st ed.	–	9781119534143	9781119534143, 1119534143	A practical guide to the majority of pumps and compressors used in engineering applications - Pumps and compressors are ubiquitous in industry, used in manufacturing, processing and chemical plant, HVAC installations, aerospace propulsion systems, medical applications, and everywhere else where there is a need to pump liquids, or circulate or compress gasses. This well-illustrated handbook covers the basic function, performance, and applications for the most widely used pump and compressor types available on the market today. It explains how each device operates and includes the governing mathematics needed to calculate device performance such as flow rates and compression. Additionally, real-world issues such as cavitation, and priming are covered. Pumps & Compressors is divided into two sections, each of which offers a notation of variables and an introduction. The Pumps section covers piston pumps, radial turbopumps, axial turbopumps, rotating pumps, hydraulic pumps, and pumps with driving flow. The Compressors section covers piston compressors, rotating compressors, turbo compressors, ejectors, vacuum pumps, and compressors for cooling purposes. A virtual encyclopedia of all pumps and compressors that describes the mechanics of all devices and the theory, mathematics, and formulas governing their function Allows the reader to develop the skills needed to confidently select the appropriate pump or compressor type and specification for their applications Pumps & Compressors is an excellent text for courses on pumps and compressors, as well as a valuable reference for professional engineers and laymen seeking knowledge on the topic.	https://bookshelf.vitalsource.com/#/books/9781119534143

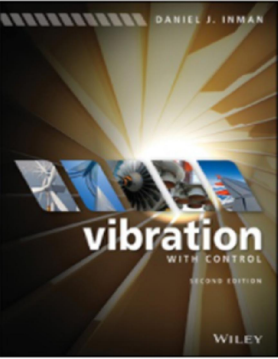
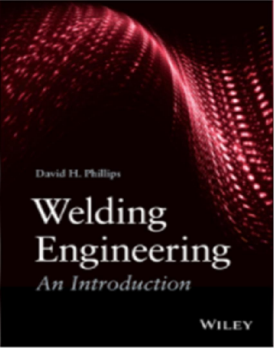
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
68	Python Machine Learning 	Lee	Wiley	2019	1st ed.	—	9781119545637	9781119545637, 1119545633	<p>Python makes machine learning easy for beginners and experienced developers - With computing power increasing exponentially and costs decreasing at the same time, there is no better time to learn machine learning using Python. Machine learning tasks that once required enormous processing power are now possible on desktop machines. However, machine learning is not for the faint of heart--it requires a good foundation in statistics, as well as programming knowledge. Python Machine Learning will help coders of all levels master one of the most in-demand programming skillsets in use today. Readers will get started by following fundamental topics such as an introduction to Machine Learning and Data Science. For each learning algorithm, readers will use a real-life scenario to show how Python is used to solve the problem at hand. • Python data science--manipulating data and data visualization</p> <ul style="list-style-type: none">• Data cleansing• Understanding Machine learning algorithms• Supervised learning algorithms• Unsupervised learning algorithms• Deploying machine learning models <p>Python Machine Learning is essential reading for students, developers, or anyone with a keen interest in taking their coding skills to the next level.</p>	https://bookshelf.vitalsource.com/#/books/9781119545637
69	Quantum Wells, Wires and Dots: Theoretical and Computational Physics of Semiconductor Nanostructures, 4th Edition 	Harrison	Wiley	2016	4th ed.	XXVI, 598 hlm. : illus. ; 26 cm.	9781118923368	9781118923368 1118923367 9781118923351 1118923359 9781118923344 1118923340	<p>Quantum Wells, Wires And Dots Provides All The Essential Information, Both Theoretical And Computational, To Develop An Understanding Of The Electronic, Optical And Transport Properties Of These Semiconductor Nanostructures. The Book Will Lead The Reader Through Comprehensive Explanations And Mathematical Derivations To The Point Where They Can Design Semiconductor Nanostructures With The Required Electronic And Optical Properties For Exploitation In These Technologies. This Fully Revised And Updated 4th Edition Features New Sections That Incorporate Modern Techniques And Extensive New Material Including: Properties Of Non-Parabolic Energy Bands Matrix Solutions Of The Poisson And Schrödinger Equations Critical Thickness Of Strained Materials Carrier Scattering By Interface Roughness, Alloy Disorder And Impurities Density Matrix Transport Modelling Thermal Modelling Written By Well-Known Authors In The Field Of Semiconductor Nanostructures And Quantum Optoelectronics, This User-Friendly Guide Is Presented In A Lucid Style With Easy To Follow Steps, Illustrative Examples And Questions And Computational Problems In Each Chapter To Help The Reader Build Solid Foundations Of Understanding To A Level Where They Can Initiate Their Own Theoretical Investigations. Suitable For Postgraduate Students Of Semiconductor And Condensed Matter Physics, The Book Is Essential To All Those Researching In Academic And Industrial Laboratories Worldwide. Instructors Can Contact The Authors Directly (P.Harrison@Shu.Ac.Uk / A.Valavanis@Leeds.Ac.Uk) For Solutions To The Problems.</p>	https://bookshelf.vitalsource.com/#/books/9781118923368

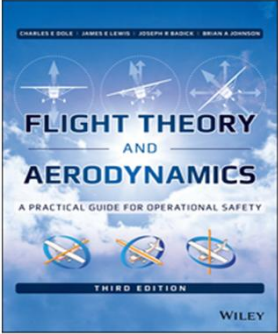
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
70	Recycling of Polymers: Methods, Characterization and Applications 	Francis	Wiley	2016	1st ed.	XVIII, 264 hlm.: illus.; 25 cm	9783527338481	9783527338481 3527338489	<p>This Timely Reference On The Topic Is The Only Book You Need For A Complete Overview Of Recyclable Polymers. Following An Introduction To Various Polymer Structures And Their Resulting Properties, The Main Part Of The Book Deals With Different Methods Of Recycling. It Discusses In Detail The Recycling Of Such Common Polymers As Polyethylene, Polypropylene And PET, As Well As Rubbers, Fibers, Engineering Polymers, Polymer Blends And Composites. The Whole Is Rounded Off With A Look At Future Technologies And The Toxicological Impact Of Recycled Polymers. An Indispensable Reference Source For Those Working In The Field, Whether In Academia Or Industry, And Whether Newcomers Or Advanced Readers.</p>	https://bookshelf.vitalsource.com/#/books/9783527338481
71	Semiconductor Materials, Devices, And Fabrication 	Parasuraman Swaminathan	Wiley	2017	–	–	9788126566594	–	N/A	https://bookshelf.vitalsource.com/#/books/9783527338481

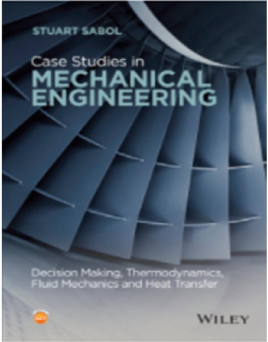
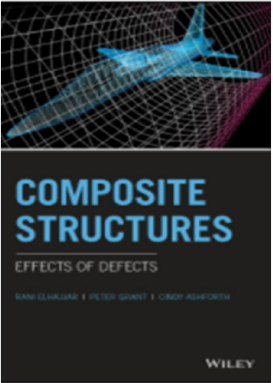
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
72	Smart Textiles: Wearable Nanotechnology 	Yilmaz	Wiley	2018	–	XV, 384 str. : ilustr. ; 24 cm.	9781119460220	9781119460220 1119460220	Smart Textiles: Wearable Nanotechnology Provides A Comprehensive Presentation Of Recent Advancements In The Area Of Smart Nanotextiles Giving Specific Importance To Materials And Production Processes. Different Materials, Production Routes, Performance Characteristics, Application Areas And Functionalization Mechanisms Are Covered. The Book Provides A Guideline To Students, Researchers, Academicians And Technologists Who Seek Novel Solutions In The Related Area By Including Groundbreaking Advancements In Different Aspects Of The Diverse Smart Nanotextiles Fields. This Ground-Breaking Book Is Expected To Spark An Inspiration To Allow Future Progress In Smart Nanotextiles Research. The Diversity Of The Topics, As Well As The Expert Subject-Matter Contributors From All Over The World Representing Various Disciplines, Ensure Comprehensiveness And A Broad Understanding Of Smart Nanotextiles.	https://bookshelf.vitalsource.com/#/books/9781119460220
73	Spectroscopy: Principles and Instrumentation 	Vitha	Wiley	2019	1st ed.	XIII, 322 hlm. : ilus. ; 27 cm.	9781119436645	9781119436645, 1119436648	<p>Provides students and practitioners with a comprehensive understanding of the theory of spectroscopy and the design and use of spectrophotometers - In this book, you will learn the fundamental principles underpinning molecular spectroscopy and the connections between those principles and the design of spectrophotometers. Spectroscopy, along with chromatography, mass spectrometry, and electrochemistry, is an important and widely-used analytical technique. Applications of spectroscopy include air quality monitoring, compound identification, and the analysis of paintings and culturally important artifacts. This book introduces students to the fundamentals of molecular spectroscopy - including UV-visible, infrared, fluorescence, and Raman spectroscopy - in an approachable and comprehensive way. It goes beyond the basics of the subject and provides a detailed look at the interplay between theory and practice, making it ideal for courses in quantitative analysis, instrumental analysis, and biochemistry, as well as courses focused solely on spectroscopy. It is also a valuable resource for practitioners working in laboratories who regularly perform spectroscopic analyses. spectroscopy: Principles and Instrumentation:</p> <p>Provides extensive coverage of principles, instrumentation, and applications of molecular spectroscopy Facilitates a modular approach to teaching and learning about chemical instrumentation Helps students visualize the effects that electromagnetic radiation in different regions of the spectrum has on matter Connects the fundamental theory of the effects of electromagnetic radiation on matter to the design and use of spectrophotometers Features numerous figures and diagrams to facilitate learning Includes several worked examples and companion exercises throughout each chapter so that readers can check their understanding Offers numerous problems at the end of each chapter to allow readers to apply what they have learned Includes case studies that illustrate how spectroscopy is used in practice, including analyzing works of art, studying the kinetics of enzymatic reactions, detecting explosives, and determining the DNA sequence of the human genome Complements Chromatography: Principles and Instrumentation</p> <p>The book is divided into five chapters that cover the Fundamentals of Spectroscopy, UV-visible Spectroscopy, Fluorescence/Luminescence Spectroscopy, Infrared Spectroscopy, and Raman Spectroscopy. Each chapter details the theory upon which the specific techniques are based, provides ways for readers to visualize the molecular-level effects of electromagnetic radiation on matter, describes the design and components of spectrophotometers, discusses applications of each type of spectroscopy, and includes case studies that illustrate specific applications of spectroscopy.Each chapter is divided into multiple sections using headings and subheadings, making it easy for readers to work through the book and to find specific information relevant to their interests. Numerous figures, exercises, worked examples, and end-of-chapter problems reinforce important concepts and facilitate learning. Spectroscopy: Principles and Instrumentation is an excellent text that prepares undergraduate students and practitioners to operate in modern laboratories.</p>	https://bookshelf.vitalsource.com/#/books/9781119436645

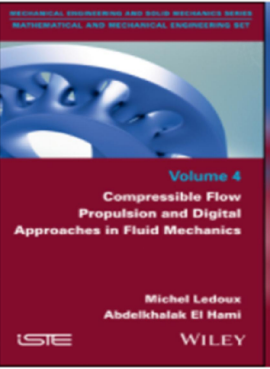
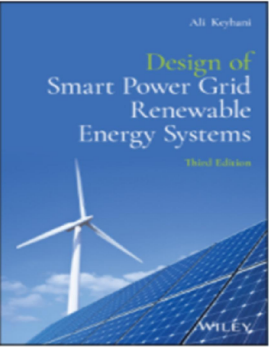
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
74	The Chemistry of Metal-Organic Frameworks: Synthesis, Characterization, and Applications, 2 Volume Set 	Kaskel	Wiley	2016	–	1070 hlm	9783527338740	–	Providing Vital Knowledge On The Design And Synthesis Of Specific Metal-Organic Framework (MOF) Classes As Well As Their Properties, This Ready Reference Summarizes The State Of The Art In Chemistry. Divided Into Four Parts, The First Begins With A Basic Introduction To Typical Cluster Units Or Coordination Geometries And Provides Examples Of Recent And Advanced MOF Structures And Applications Typical For The Respective Class. Part II Covers Recent Progress In Linker Chemistries, While Special MOF Classes And Morphology Design Are Described In Part III. The Fourth Part Deals With Advanced Characterization Techniques, Such As NMR, In Situ Studies, And Modelling. A Final Unique Feature Is The Inclusion Of Data Sheets Of Commercially Available MOFs In The Appendix, Enabling Experts And Newcomers To The Field To Select The Appropriate MOF For A Desired Application. A Must-Have Reference For Chemists, Materials Scientists, And Engineers In Academia And Industry Working In The Field Of Catalysis, Gas And Water Purification, Energy Storage, Separation, And Sensors.	https://bookshelf.vitalsource.com/#/books/9783527338740
75	Theory and Design for Mechanical Measurements, Enhanced eText, 7th Edition 	Figliola	Wiley	2019	7th ed.	590 hlm.	9781119723455	1119723450 9781119723455	Theory And Design For Mechanical Measurements - Merges Time-Tested Pedagogy With Current Technology To Deliver An Immersive, Accessible Resource For Both Students And Practicing Engineers. Emphasizing Statistics And Uncertainty Analysis With Topical Integration Throughout, This Book Establishes A Strong Foundation In Measurement Theory While Leveraging The E-Book Format To Increase Student Engagement With Interactive Problems, Electronic Data Sets, And More. This New Seventh Edition Has Been Updated With New Practice Problems, Electronically Accessible Solutions, And Dedicated Instructor Problems That Ease Course Planning And Assessment. Extensive Coverage Of Device Selection, Test Procedures, Measurement System Performance, And Result Reporting And Analysis Sets The Field For Generalized Understanding, While Practical Discussion Of Data Acquisition Hardware, Infrared Imaging, And Other Current Technologies Demonstrate Real-World Methods And Techniques. Designed To Align With A Variety Of Undergraduate Course Structures, This Unique Text Offers A Highly Flexible Pedagogical Framework While Remaining Rigorous Enough For Use In Graduate Studies, Independent Study, Or Professional Reference.	https://bookshelf.vitalsource.com/#/books/9781119723455

No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
76	Troubleshooting Rotating Machinery: Including Centrifugal Pumps and Compressors, Reciprocating Pumps and Compressors, Fans, Steam Turbines, Electric Motors, and More 	Perez	Wiley	2016	–	xv, 353 hlm. : ilus.	9781119294139	9781119294139 1119294134 9781119294443 1119294444	<p>Process Machines Are Critical To The Profitability Of Processes. Safe, Efficient And Reliable Machines Are Required To Maintain Dependable Manufacturing Processes That Can Create Saleable, On-Spec Product On Time, And At The Desired Production Rate. As The Wards Of Process Machinery, We Wish To Keep Our Equipment In Serviceable Condition. One Of The Most Challenging Aspects Of A Machinery Professional Or Operator’s Job Is Deciding Whether An Operating Machine Should Be Shut Down Due To A Perceived Problem Or Be Allowed To Keep Operating. If He Or She Wrongly Recommends A Repair Be Conducted, The Remaining Useful Machine Life Is Wasted, But If He Or She Is Right, They Can Save The Organization From Severe Consequences, Such As Product Releases, Fires, Costly Secondary Machine Damage, Etc. This Economic Balancing Act Is At The Heart Of All Machinery Assessments. Troubleshooting Is Part Science And Part Art. Simple Troubleshooting Tables Or Decision Trees Are Rarely Effective In Solving Complex, Real-World Machine Problems. For This Reason, The Authors Want To Offer A Novel Way To Attack Machinery Issues That Can Adversely Affect The Reliability And Efficiency Of Your Plant Processes. The Methodology Presented In This Book Is Not A Rigid “Cook Book” Approach But Rather A Flexible And Dynamic Process Aimed At Exploring Process Plant Machines Holistically, In Order Uncover The True Nature The Problem At Hand.</p>	https://bookshelf.vitalsource.com/#/books/9781119294139
77	Turbulent Fluid Flow 	Bernard	Wiley	2018	1st ed.	xv, 339 hlm. ; 25 cm	9781119106227	9781119106227, 1119106222	<p>A Guide To The Essential Information Needed To Model And Compute Turbulent Flows And Interpret Experiments And Numerical Simulations - Turbulent Fluid Flow Offers An Authoritative Resource To The Theories And Models Encountered In The Field Of Turbulent Flow. In This Book, The Author - A Noted Expert On The Subject - Creates A Complete Picture Of The Essential Information Needed For Engineers And Scientists To Carry Out Turbulent Flow Studies. This Important Guide Puts The Focus On The Essential Aspects Of The Subject - Including Modeling, Simulation And The Interpretation Of Experimental Data - That Fit Into The Basic Needs Of Engineers That Work With Turbulent Flows In Technological Design And Innovation. Turbulent Fluid Flow Offers The Basic Information That Underpins The Most Recent Models And Techniques That Are Currently Used To Solve Turbulent Flow Challenges. The Book Provides Careful Explanations, Many Supporting Figures And Detailed Mathematical Calculations That Enable The Reader To Derive A Clear Understanding Of Turbulent Fluid Flow. This Vital Resource:</p> <ul style="list-style-type: none"> • Offers A Clear Explanation To The Models And Techniques Currently Used To Solve Turbulent Flow Problems • Provides An Up-To-Date Account Of Recent Experimental And Numerical Studies Probing The Physics Of Canonical Turbulent Flows 	https://bookshelf.vitalsource.com/#/books/9781119106227

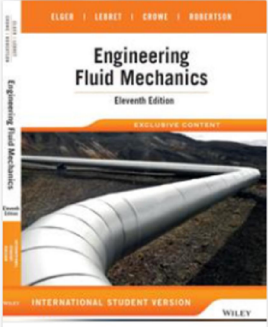
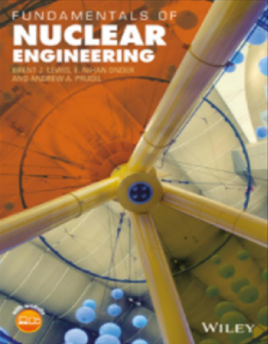
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
78	Vibration with Control, 2nd Edition 	Inman	Wiley	2017	2nd ed.	–	9781119108214	9781119108214, 1119108217	<p>An Advanced Look At Vibration Analysis With A Focus On Active Vibration Suppression - As Modern Devices, From Cell Phones To Airplanes, Become Lighter And More Flexible, Vibration Suppression And Analysis Becomes More Critical. Vibration With Control, 2nd Edition Includes Modelling, Analysis And Testing Methods. New Topics Include Metastructures And The Use Of Piezoelectric Materials, And Numerical Methods Are Also Discussed. All Material Is Placed On A Firm Mathematical Footing By Introducing Concepts From Linear Algebra (Matrix Theory) And Applied Functional Analysis When Required. Key Features: Combines Vibration Modelling And Analysis With Active Control To Provide Concepts For Effective Vibration Suppression.</p> <p>Introduces The Use Of Piezoelectric Materials For Vibration Sensing And Suppression. Provides A Unique Blend Of Practical And Theoretical Developments.</p> <p>Examines Nonlinear As Well As Linear Vibration Analysis.</p> <p>Provides Matlab Instructions For Solving Problems.</p> <p>Contains Examples And Problems.</p> <p>PowerPoint Presentation Materials And Digital Solutions Manual Available For Instructors.</p> <p>Vibration With Control, 2nd Edition Is An Ideal Reference And Textbook For Graduate Students In Mechanical, Aerospace And Structural Engineering, As Well As Researchers And Practitioners In The Field.</p>	https://bookshelf.vitalsource.com/#/books/9781119108214
79	Welding Engineering: An Introduction 	Phillips	Wiley	2014	–	XI, [3], 275 hlm. : illus. ; 25 cm.	9781118766446	9781118766446 111876644X	<p>Provides An Introduction To All Of The Important Topics In Welding Engineering. It Covers A Broad Range Of Subjects And Presents Each Topic In A Relatively Simple, Easy To Understand Manner, With Emphasis On The Fundamental Engineering Principles.</p> <ul style="list-style-type: none"> • Comprehensive Coverage Of All Welding Engineering Topics • Presented In A Simple, Easy To Understand Format • Emphasises Concepts And Fundamental Principles 	https://bookshelf.vitalsource.com/#/books/9781118766446

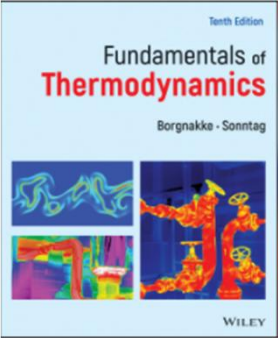
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
80	Flight Theory and Aerodynamics: A Practical Guide for Operational Safety, 3rd Edition 	Dole	Wiley	2017	3rd ed.	384 hlm.	9781119233411 1119233410 9781119233428 1119233429 9781523110155 1523110155	9781119233404, 1119233402	The Pilot's Guide To Aeronautics And The Complex Forces Of Flight - Flight Theory And Aerodynamics Is The Essential Pilot's Guide To The Physics Of Flight, Designed Specifically For Those With Limited Engineering Experience. From The Basics Of Forces And Vectors To Craft-Specific Applications, This Book Explains The Mechanics Behind The Pilot's Everyday Operational Tasks. The Discussion Focuses On The Concepts Themselves, Using Only Enough Algebra And Trigonometry To Illustrate Key Concepts Without Getting Bugged Down In Complex Calculations, And Then Delves Into The Specific Applications For Jets, Propeller Crafts, And Helicopters. This Updated Third Edition Includes New Chapters On Flight Environment, Aircraft Structures, And UAS-UAV Flight Theory, With Updated Craft Examples, Component Photos, And Diagrams Throughout. FAA-Aligned Questions And Regulatory References Help Reinforce Important Concepts, And Additional Worked Problems Provide Clarification On Complex Topics. Modern Flight Control Systems Are Becoming More Complex And More Varied Between Aircrafts, Making It Essential For Pilots To Understand The Aerodynamics Of Flight Before They Ever Step Into A Cockpit. This Book Provides Clear Explanations And Flight-Specific Examples Of The Physics Every Pilot Must Know. Review The Basic Physics Of Flight Understand The Applications To Specific Types Of Aircraft Learn Why Takeoff And Landing Entail Special Considerations Examine The Force Concepts Behind Stability And Control As A Pilot, Your Job Is To Balance The Effects Of Design, Weight, Load Factors, And Gravity During Flight Maneuvers, Stalls, High- Or Low-Speed Flight, Takeoff And Landing, And More. As Aircraft Grow More Complex And The Controls Become More Involved, An Intuitive Grasp Of The Physics Of Flight Is Your Most Valuable Tool For Operational Safety. Flight Theory And Aerodynamics Is The Essential Resource Every Pilot Needs For A Clear Understanding Of The Forces They Control.	https://bookshelf.vitalsource.com/#/books/9781119233404

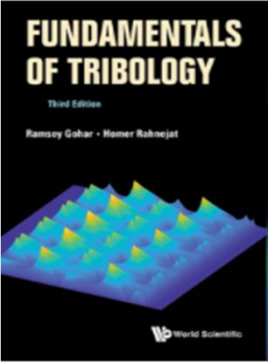
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
81	Case Studies in Mechanical Engineering: Decision Making, Thermodynamics, Fluid Mechanics and Heat Transfer 	Sabol	Wiley-Blackwell	2016	–	326 hlm.	9781119119760	–	<p>Using A Case Study Approach, This Reference Tests The Reader’s Ability To Apply Engineering Fundamentals To Real-World Examples And Receive Constructive Feedback Case Studies In Mechanical Engineering Provides Real Life Examples Of The Application Of Engineering Fundamentals. They Relate To Real Equipment, Real People And Real Decisions. They Influence Careers, Projects, Companies, And Governments. The Cases Serve As Supplements To Fundamental Courses In Thermodynamics, Fluid Mechanics, Heat Transfer, Instrumentation, Economics, And Statistics. The Author Explains Equipment And Concepts To Solve The Problems And Suggests Relevant Assignments To Augment The Cases. Graduate Engineers Seeking To Refresh Their Career, Or Acquire Continuing Education Will Find The Studies Challenging And Rewarding. Each Case Is Designed To Be Accomplished In One Week, Earning Up To 15 Hours Of Continuing Education Credit. Each Case Study Provides Methods To Present An Argument, Work With Clients, Recommend Action And Develop New Business. Key Features: Highlights The Economic Consequences Of Engineering Designs And Decisions. Encourages Problem Solving Skills. Application Of Fundamentals To Life Experiences. Ability To Practice With Real Life Examples. Case Studies In Mechanical Engineering Is A Valuable Reference For Mechanical Engineering Practitioners Working In Thermodynamics, Fluid Mechanics, Heat Transfer And Related Areas.</p>	https://bookshelf.vitalsource.com/#/books/978119119760
82	Composite Structures: Effects of Defects 	Elhajjar	Wiley-Blackwell	2019	–	–	9781118997727	–	<p>Presents The Latest Strategies In The Development And Use Of Composite Materials For Large Structures And The Effects Of Defects Practical Design And Validation Of Composites Structures: Effects Of Defects Offers An Important Guide To The Use Of Fiber-Reinforced Composites And How They Affect The Durability And Safety Of Engineering Structures Such As Aircraft, Ships, Bridges, Wind Turbines As Well As Sporting Equipment. The Text Draws On The Authors’ Direct Experience In Industry And Academia To Cover The Most Recent Strategies In The Development Of Composite Structures And Uniquely Integrates The Assessment Of The Effects Of Defects Introduced During Production. This Comprehensive Resource Builds On An Essential Introduction To The Characteristics Of Composites And The Most Common Types Of Defects Encountered In Production. The Authors Review The Recent Manufacturing Methods And Technologies Used For Inspecting Composite Structures And The Design Issues Related To An Analysis Of Their Failure And Strength Incorporating The Variability Of Processing. The Text Also Contains Information On The Latest Regulatory Requirements And The Relevant Standards Associated With The Testing And Design Within A Robust Design Philosophy And Approach. This Important Resource: Offers A Comprehensive Review Of The Most Current Regulatory Developments In The Use Of Composites For The Construction Of Complex Composite Structures Presents Information On The Basic Characteristics Of Composites Includes Testing Strategies For Determining The Impacts Of Production Defects Reviews The Most Current Manufacturing Methods And Inspection Technologies In The Field Contains Methods For Statistical Analysis And Processing Of Experimental Effects Of Defects Test Data Written For Professional Engineers In Mechanical Engineering, Automotive Engineering, Aerospace Engineering, Civil Engineering, And Energy Engineering As Well As Industry And Academic Researchers, Practical Design And Validation Of Composites Structures: Effects Of Defects Is The Hands-On Text That Covers The Essential Information Needed To Understand The Use Of Composites And How They Affect Complex Engineering Projects Using Composites.</p>	https://bookshelf.vitalsource.com/#/books/978118997727

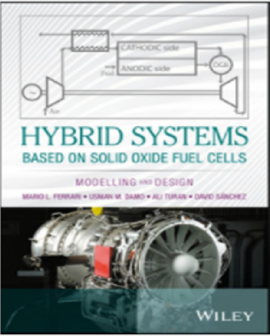
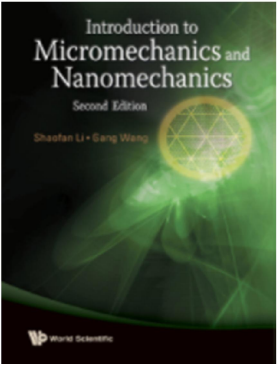
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
83	Compressible Flow Propulsion and Digital Approaches in Fluid Mechanics 	Ledoux	Wiley-Blackwell	2017	–	–	9781119368779	–	<p>This Book Aims To Provide An Efficient Methodology Of Solving A Fluid Mechanics Problem, Based On An Awareness Of The Physical. It Meets Different Objectives Of The Student, The Future Engineer Or Scientist: Simple Sizing Calculations Are Required To Master Today's Numerical Approach For Solving Complex Practical Problems.</p>	https://bookshelf.vitalsource.com/#/books/9781119368779
84	Design of Smart Power Grid Renewable Energy Systems, 3rd Edition 	Keyhani	Wiley-Blackwell	2019	3rd ed.	–	9781119573340	–	<p>The Updated Third Edition Provides A Systems Approach To Sustainable Green Energy Production And Contains Analytical Tools For The Design Of Renewable Microgrids - The Revised Third Edition Of Design Of Smart Power Grid Renewable Energy Systems Integrates Three Areas Of Electrical Engineering: Power Systems, Power Electronics, And Electric Energy Conversion Systems. The Book Also Addresses The Fundamental Design Of Wind And Photovoltaic (PV) Energy Microgrids As Part Of Smart-Bulk Power-Grid Systems. In Order To Demystify The Complexity Of The Integrated Approach, The Author First Presents The Basic Concepts, And Then Explores A Simulation Test Bed In MATLAB® In Order To Use These Concepts To Solve A Basic Problem In The Development Of Smart Grid Energy System. Each Chapter Offers A Problem Of Integration And Describes Why It Is Important. Then The Mathematical Model Of The Problem Is Formulated, And The Solution Steps Are Outlined. This Step Is Followed By Developing A MATLAB® Simulation Test Bed. This Important Book: Reviews The Basic Principles Underlying Power Systems Explores Topics Including: AC/DC Rectifiers, DC/AC Inverters, DC/DC Converters, And Pulse Width Modulation (PWM) Methods</p> <p>Describes The Fundamental Concepts In The Design And Operation Of Smart Grid Power Grids</p> <p>Supplementary Material Includes A Solutions Manual And PowerPoint Presentations For Instructors</p> <p>Written For Undergraduate And Graduate Students In Electric Power Systems Engineering, Researchers, And Industry Professionals, The Revised Third Edition Of Design Of Smart Power Grid Renewable Energy Systems Is A Guide To The Fundamental Concepts Of Power Grid Integration On Microgrids Of Green Energy Sources.</p>	https://bookshelf.vitalsource.com/#/books/9781119573340

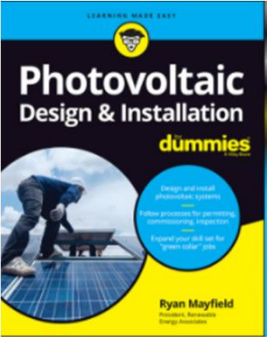
No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
85	Drying Phenomena: Theory and Applications	Dincer	Wiley-Blackwell	2013		—	9781118534915	—	Comprehensively Covers Conventional And Novel Drying Systems And Applications, While Keeping A Focus On The Fundamentals Of Drying Phenomena. Presents Detailed Thermodynamic And Heat/Mass Transfer Analyses In A Reader-Friendly And Easy-To-Follow Approach Includes Case Studies, Illustrative Examples And Problems Presents Experimental And Computational Approaches Includes Comprehensive Information Identifying The Roles Of Flow And Heat Transfer Mechanisms On The Drying Phenomena Considers Industrial Applications, Corresponding Criterion, Complications, Prospects, Etc. Discusses Novel Drying Technologies, The Corresponding Research Platforms And Potential Solutions	https://bookshelf.vitalsource.com/#/books/9781118534915
86	Electricity from Sunlight: Photovoltaic-Systems Integration and Sustainability, 2nd Edition	Fthenakis	Wiley-Blackwell	2015	2nd ed.	xxv, 327 hlm. : illus.	9781118963784	—	<p>Praised For Its Visual Appeal, Conversational Style And Clear Explanation Of Complex Ideas With Minimal Mathematics, <i>Electricity From Sunlight</i> Has Been Thoroughly Revised And Updated To Reflect Advances In The Global PV Market, Economics And Installed Capacity. Key Features Of The 2nd Edition Include: A Timely Update Of The Advances Of Photovoltaics (PV), With Major New Material On Grid-Connected Systems. More In-Depth Treatment Of PV Scientific Principles, Solar Cells, Modules, And Systems. Up-To-Date Coverage Of The PV Market Including Conversion Efficiencies And The Expansion Of Grid-Friendly Power Plants. End-Of-Chapter Questions To Support Instructors And Students Through Guided Self-Study.</p> <p>New Chapters On Manufacturing Processes And On Materials And Other Resources Availability.</p> <p>New Large-Scale PV Section Covering The Growth Of Global Capacity, Utility-Scale PV And Affordable Solutions For Intermittency.</p> <p>Systems Analysis Of New Applications Empowered By Low-Cost PV, Such As Energy Storage And Water Desalination. Significantly Expanded Economics And Environmental Section Explaining Leveled Cost Of Electricity Versus Upfront Costs, Energy Return On Investments, And Lifecycle Analysis.</p> <p>Electricity From Sunlight: Photovoltaics Systems Integration And Sustainability, Second Edition Is An Essential Primer For New Entrants To The PV Industry, Needing A Basic Appreciation Of Complete PV Systems, And To Students On Undergraduate And Graduate Courses On Renewable Energy And Photovoltaics. It Also Offers A Unique Treatise Of The Sustainability Of Emerging Transformative Technologies, Which Makes It Useful To Both System Analysts And Energy Policy Strategists.</p>	https://bookshelf.vitalsource.com/#/books/9781118963784

No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
87	Engineering Fluid Mechanics, 11th Edition International Student Version 	Elger	Wiley-Higher Education	2016	11th ed.	–	9781119249146	–	<p>Written By Dedicated Educators Who Are Also Real-Life Engineers With A Passion For The Discipline, Engineering Fluid Mechanics, 11th Edition, Carefully Guides Students From Fundamental Fluid Mechanics Concepts To Real-World Engineering Applications. The Eleventh Edition And Its Accompanying Resources Deliver A Powerful Learning Solution That Helps Students Develop A Strong Conceptual Understanding Of Fluid Flow Phenomena Through Clear Physical Descriptions, Relevant And Engaging Photographs, Illustrations, And A Variety Of Fully Worked Example Problems. Including A Wealth Of Problems-- Including Open-Ended Design Problems And Computer-Oriented Problems-- This Text Offers Ample Opportunities For Students To Apply Fluid Mechanics Principles As They Build Knowledge In A Logical Way And Enjoy The Journey Of Discovery.</p>	https://bookshelf.vitalsource.com/#/books/9781119249146
88	Fundamentals of Nuclear Engineering 	Lewis	Wiley-Blackwell	2016	1st ed.	xix, 960 hm. ; 27 cm	9781119271550	9781119271499, 1119271495	<p>Fundamental Of Nuclear Engineering Is Derived From Over 25 Years Of Teaching Undergraduate And Graduate Courses On Nuclear Engineering. The Material Has Been Extensively Class Tested And Provides The Most Comprehensive Textbook And Reference On The Fundamentals Of Nuclear Engineering. It Includes A Broad Range Of Important Areas In The Nuclear Engineering Field; Nuclear And Atomic Theory; Nuclear Reactor Physics, Design, Control/Dynamics, Safety And Thermal-Hydraulics; Nuclear Fuel Engineering; And Health Physics/Radiation Protection. It Also Includes The Latest Information That Is Missing In Traditional Texts, Such As Space Radiation. The Aim Of The Book Is To Provide A Source For Upper Level Undergraduate And Graduate Students Studying Nuclear Engineering.</p>	https://bookshelf.vitalsource.com/#/books/9781119271550

No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
89	Fundamentals of Thermodynamics, 10th Edition 	Borgnakke	Wiley-Higher Education	2019	10th ed.	—	9781119494966	9781119405963	<p>With Wiley's Enhanced E-Text, You Get All The Benefits Of A Downloadable, Reflowable EBook With Added Resources To Make Your Study Time More Effective, Including: The Ability To Show/Hide Solutions And Answers For Selected Student Practice Problems Study Guide Problems How-To Notes The Field's Leading Textbook For More Than Three Decades, Fundamentals Of Engineering Thermodynamics Offers A Comprehensive Introduction To Essential Principles And Applications In The Context Of Engineering. Now In Its Tenth Edition, This Book Retains Its Characteristic Rigor And Systematic Approach To Thermodynamics With Enhanced Pedagogical Features That Aid In Student Comprehension. Detailed Appendices Provide Instant Reference; Chapter Summaries Review Terminology, Equations, And Key Concepts; And Updated Data And Graphics Increase Student Engagement While Enhancing Understanding. Covering Classical Thermodynamics With A Focus On Practical Applications, This Book Provides A Basic Foundational Skillset Applicable Across A Variety Of Engineering Fields. Worked Examples Demonstrate The Appropriate Use Of New Formulas, While Clarifying The Proper Approach To Generalized Problems Of A Relevant Nature. Going Beyond The Usual Guidance In The Basics Of The Field, This Book Is Designed As Comprehensive Preparation For More Advanced Study In Students' Engineering Field Of Choice.</p>	https://bookshelf.vitalso.com/#/books/9781119494966

No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
90	Fundamentals Of Tribology (Third Edition) 	Rahnejat Homer Et Al	Wiley-World Scientific	2018	3rd ed.	—	9781786345196	9781786345172, 178634517X	Fundamentals Of Tribology Deals With The Fundamentals Of Lubrication, Friction And Wear, As Well As Mechanics Of Contacting Surfaces And Their Topography. It Begins By Introducing The Reader To The Importance Of Tribology In Everyday Life And Offers A Brief History Of The Subject. It Then Describes The Nature Of Rough Surfaces And The Mechanics Of Contacting Elastic Solids And Their Deformation Under Load And Friction In Their Relative Motion. The Book Goes On To Discuss The Importance Of Lubricant Rheology With Respect To Viscosity And Density. Then, The Principles Of Hydrodynamic Lubrication Are Covered With Derivations Of The Governing Reynolds And Energy Equations. Applications Of Hydrodynamic Lubrication In Various Forms Of Bearings — Journal Bearings, Thrust Bearings And Externally Pressurised Bearings — Are Outlined. The Important And Still Evolving Subject Of Elastohydrodynamic Lubrication Is Treated In Some Detail, Both At Its Fundamentals And Its Applications In Thin Shell Or Overlay Bearings, Cam-Followers And Internal Combustion Engine Pistons.The Fundamentals Of Biotribology Are Also Covered, Particularly Its Applications To Endo-Articular Mammalian Joints Such As Hip And Knee Joints And Their Arthroplasty. In Addition, There Is A Treatment Of The Rapidly Emerging Knowledge Of Tribological Phenomena In Lightly Loaded Vanishing Conjunctions (Nanotribology), In Natural Systems And Very Small Devices, Such As MEMS And High Density Data Storage Media. There Is Also A New Chapter On The Rapidly Emerging Subject Of Surface Texturing To Promote Retention Of Microreservoirs Of Lubricant, Acting As Microbearings And Improving Lubrication Of Otherwise Poorly Lubricated Conjunctions.This Book Targets The Undergraduate And Postgraduate Body As Well As Engineering Professionals In Industry, Where Often A Quick Solution Or Understanding Of Certain Tribological Fundamentals Is Sought. The Book Can Also Form An Initial Basis For Those Interested In Research Into Certain Aspects Of Tribology.	https://bookshelf.vitalsource.com/#/books/9781786345196

No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
91	Hybrid Systems Based on Solid Oxide Fuel Cells: Modelling and Design 	Turan	Wiley-Blackwell	2016	–	xv, 325 hlm. : ilus. ; 22 cm	9781119039075	9781119039051, 1119039053	<p>A Comprehensive Guide To The Modelling And Design Of Solid Oxide Fuel Cell Hybrid Power Plants - This Book Explores All Technical Aspects Of Solid Oxide Fuel Cell (SOFC) Hybrid Systems And Proposes Solutions To A Range Of Technical Problems That Can Arise From Component Integration. Following A General Introduction To The State-Of-The-Art In SOFC Hybrid Systems, The Authors Focus On Fuel Cell Technology, Including The Components Required To Operate With Standard Fuels. Micro-Gas Turbine (MGT) Technology For Hybrid Systems Is Discussed, With Special Attention Given To Issues Related To The Coupling Of SOFCs With MGTs. Throughout The Book Emphasis Is Placed On Dynamic Issues, Including Control Systems Used To Avoid Risk Conditions. With An Eye To Mitigating The High Costs And Risks Incurred With The Building And Use Of Prototype Hybrid Systems, The Authors Demonstrate A Proven, Economically Feasible Approach To Obtaining Important Experimental Results Using Simplified Plants That Simulate Both Generic And Detailed System-Level Behaviour Using Emulators. Computational Models And Experimental Plants Are Developed To Support The Analysis Of SOFC Hybrid Systems, Including Models Appropriate For Design, Development And Performance Analysis At Both Component And System Levels. Presents Models For A Range Of Size Units, Technology Variations, Unit Coupling Dynamics And Start-Up And Shutdown Behaviours</p> <p>Focuses On SOFCs Integration With MGTs In Light Of Key Constraints And Risk Avoidance Issues Under Steady-State Conditions And During Transient Operations. Identifies Interaction And Coupling Problems Within The GT/SOFC Environment, Including Exergy Analysis And Optimization</p> <p>Demonstrates An Economical Approach To Obtaining Important Experimental Results While Avoiding High-Cost Components And Risk Conditions</p> <p>Presents Analytical/Computational And Experimental Tools For The Efficient Design And Development Of Hardware And Software Systems. Hybrid Systems Based On Solid Oxide Fuel Cells: Modelling And Design Is A Valuable Resource For Researchers And Practicing Engineers Involved In Fuel Cell Fundamentals, Design And Development. It Is Also An Excellent Reference For Academic Researchers And Advanced-Level Students Exploring Fuel Cell Technology.</p>	https://bookshelf.vitalsource.com/#/books/9781119039075
92	Introduction To Micromechanics And Nanomechanics (2nd Edition) 	Li Shaofan Et Al	Wiley-World Scientific	2017	2nd ed.	xvii, 641 hlm.: ilus.	9789814436786	9789814436755, 9814436755	<p>This Book Presents A Systematic Treatise On Micromechanics And Nanomechanics, Which Encompasses Many Important Research And Development Areas Such As Composite Materials And Homogenizations, Mechanics Of Quantum Dots, Multiscale Analysis And Mechanics, Defect Mechanics Of Solids Including Fracture And Dislocation Mechanics, Etc.In This Second Edition, Some Previous Chapters Are Revised, And Some New Chapters Added — Crystal Plasticity, Multiscale Crystal Defect Dynamics, Quantum Force And Stress, Micromechanics Of Metamaterials, And Micromorphic Theory.The Book Serves Primarily As A Graduate Textbook And Intended As A Reference Book For The Next Generation Of Scientists And Engineers. It Also Has A Unique Pedagogical Style That Is Specially Suitable For Self-Study And Self-Learning For Many Researchers And Professionals Who Do Not Have Time Attending Classes And Lectures.</p>	https://bookshelf.vitalsource.com/#/books/9789814436786

No.	Judul	Pengarang	Penerbit	Tahun	Edisi	Kolasi	e-ISBN	p-ISBN	Anotasi	Link
93	Photovoltaic Design & Installation For Dummies 	Mayfield	Wiley-Professional Development	2010	–	xii, 384 hlm.: ilus.; 23,3 cm.	9781119544371	9781119544357 1119544351	Photovoltaic Design And Installation For Dummies (9781119544357) Was Previously Published As Photovoltaic Design And Installation For Dummies (9780470598931). While This Version Features A New Dummies Cover And Design, The Content Is The Same As The Prior Release And Should Not Be Considered A New Or Updated Product. The Fun And Easy Way To Get A Grip On Photovoltaic Design And Installation Designing And Installing Solar Panel Systems Is A Trend That Continues To Grow. With 'Green Collar' Jobs On The Rise And Homeowners Looking For Earth-Friendly Ways To Stretch Their Dollars And Lesson Their Carbon Imprint, Understanding Photovoltaic Design And Installation Is On The Rise. Photovoltaic Design & Installation For Dummies Gives You A Comprehensive Overview Of The History, Physics, Design, Installation, And Operation Of Home-Scale Solar-Panel Systems. You'll Also Get An Introduction To The Foundational Mathematic And Electrical Concepts You Need To Understand And Work With Photovoltaic Systems. Covers All Aspects Of Home-Scale Solar-Power Systems Viable Resource For Professionals, Students, And Technical Laymen Can Be Used To Study For The NABCEP Exam Whether You're A Building Professional Looking To Expand Your Business And Skills To Meet The Growing Demand For Solar Power Installation Or Are Seeking A Career In This Rapidly Expanding Field, Photovoltaic Design & Installation For Dummies Has You Covered!	https://bookshelf.vitalsource.com/#/books/9781119544371