



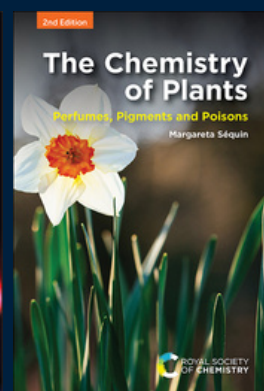
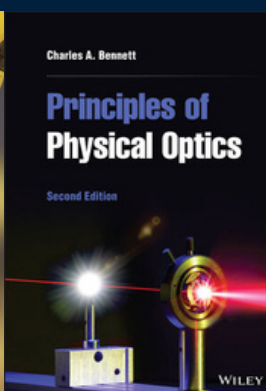
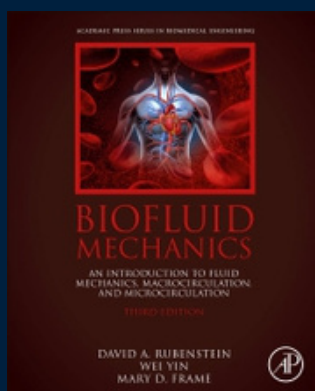
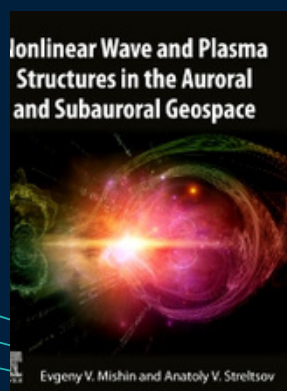
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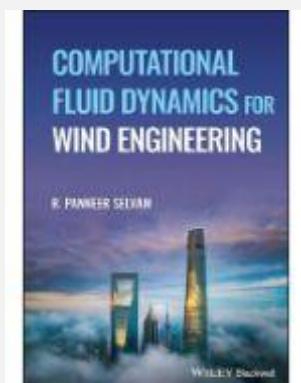
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1



Computational fluid dynamics for wind engineering by R. Panneer Selvam, Hoboken: Wiley, 2022. xiii, 225 p.

ISBN: 9781119845058

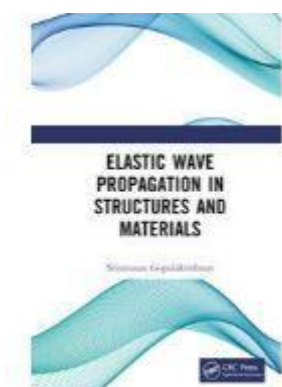
Subject Terms: Wind pressure, Fluid mechanics, Wind loads, Wind suction, Turbulent flow

624.042.41:532.5 SEL-C

178185; CL

[Click here for more details.](#)

2



Elastic wave propagation in structures and materials by Srinivasan Gopalakrishnan, Boca Raton: CRC Press, 2023. xvii, 411 p.

ISBN: 9780367637576

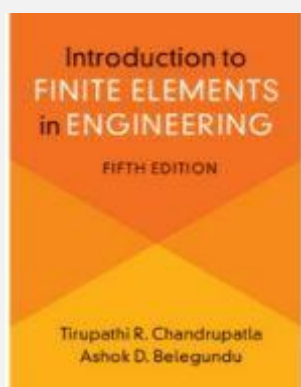
Subject Terms: Wave propagation problems, Fourier transforms Wavenumber group speed, Wave equation, Wave propagation terminologies, Viscoelastic waveguides

537.876 GOP-E

178199; CL

[Click here for more details.](#)

3



Introduction to finite elements in engineering by Tirupathi Chandrupatla and Ashok D. Belegundu, 5th ed. Cambridge: Cambridge University Press, 2022. xxiii, 494 p.

ISBN: 9781108841412

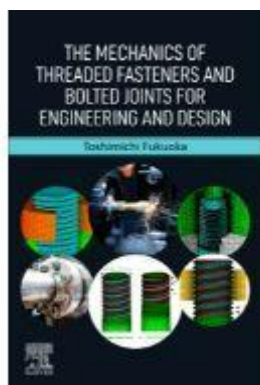
Subject Terms: Galerkin approaches, Gaussian elimination, Elasticity Trusses Elements in bending Structural vibration, Heat conduction

62:517.949 CHA-I

178259; CL

[Click here for more details.](#)

4



Mechanics of threaded fasteners and bolted joints for engineering and design by Toshimichi Fukuoka Includes, Amsterdam: Elsevier, 2023. xvii, 364 p.

ISBN: 9780323953573

Subject Terms: Thread standards, Threaded fasteners, Mechanics of tightening process, Fatigue strengths, Bolted joints Thermal load, Pipe flange connections

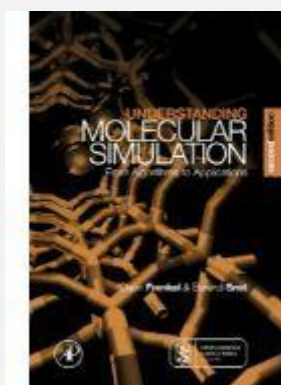
621.882 FUK-M

178224; CL

[Click here for more details.](#)

Biochemical Engineering & Biotechnology

5



Understanding molecular simulation from algorithms to applications by Daan Franke and Berend Smit, 2nd ed. San Diego: Academic Press, 2002. xxii, 638 p.

ISBN: 9780122673511

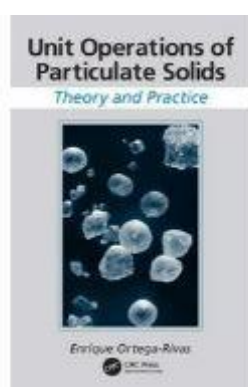
Subject Terms: Intermolecular forces - Computer simulation, Molecules - Mathematical models, Statistical mechanics, Molecular dynamics simulations, Monte Carlo simulation

539.6:681.3 FRE-U

178205; BEB

[Click here for more details.](#)

6



Unit operations of particulate solids theory and practice by Enrique Ortega-Rivas, Boca Raton: CRC Press, 2017. xvii, 474 p.

ISBN: 9781138075993

Subject Terms: Particle technology, Bulk solids, Powders, Fluidization, Solid mixtures, Solid fluid systems

66-492 ORT-U

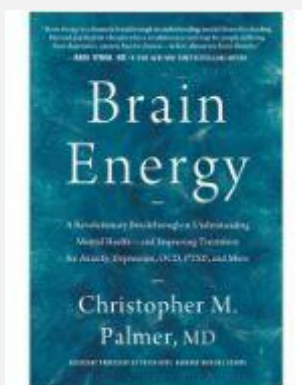
178220-178221; CL; BEB

[Click here for more details.](#)

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Central Library

7



Brain energy: a revolutionary breakthrough in understanding mental health and improving treatment for anxiety, depression, OCD, PTSD, and more by Christopher M. Palmer, Dallas: BenBella Books, 2022. 340 p.

ISBN: 9781637741580

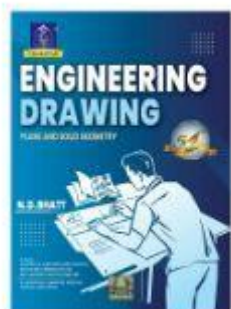
Subject Terms: Mental disorders, Metabolic disorders, Mitochondria, Mental health, Neurotransmitters

616.89 PAL-B

178260; CL

[Click here for more details.](#)

8



Engineering drawing plane and solid geometry by N. D. Bhatt, V. M. Panchal and Promod R. Ingle, Anand: Charotar Publication, 2023. xvi, 704 p.

ISBN: 9789385039706

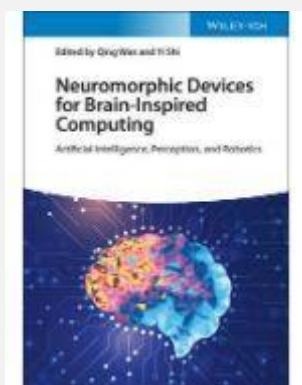
Subject Terms: Drawing instrument, Geometrical construction, Sheet layout, Orthographic projection, Screwed fastening

744 BHA-E

178213-178215; CL; TB

[Click here for more details.](#)

9



Neuromorphic devices for brain-inspired computing artificial intelligence, perception, and robotics edited by Qing Wan and Yi Shi, Weinheim: Wiley-VCH, 2022. xii, 244p.

ISBN: 9783527349791

Subject Terms: Memristive devices, Neuronal devices Memristive neurons, Neuromorphic memristors, Neuromorphic computing

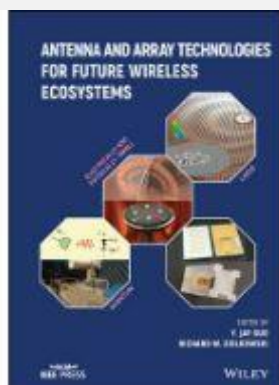
621.38:681.3 -NEU

178161; CL

[Click here for more details.](#)

Centre for Applied Research in Electronics

10



Antenna and array technologies for future wireless ecosystems edited by Yingjie Jay Guo and Richard W. Ziolkowski, Hoboken: Wiley, 2022. xxv, 454 p.

ISBN: 9781119813880

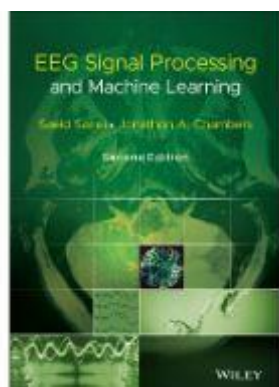
Subject Terms: Metasurface antennas, Scanning antennas for 5G, Advanced communications, IoT wireless networks, Photodiodes, Hybrid antenna arrays

621.396.67 -ANT

178255; CL

[Click here for more details.](#)

11



EEG signal processing and machine learning by Saeid Sanei and Jonathon A. Chambers, 2nd ed. Hoboken: John Wiley, 2022. xxxiv, 714 p.

ISBN: 9781119386940

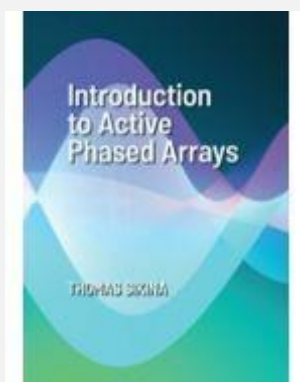
Subject Terms: Signal processing, Electroencephalography, Machine learning, Neurodegenerative diseases, Epileptic seizure prediction

616.831-073:681.3 SAN-E

178226; CL

[Click here for more details.](#)

12



Introduction to active phased arrays by Thomas Sikina, Norwood: Artech House, 2023. viii, 623 p.

ISBN: 9781630818661

Subject Terms: Phased arrays, Array far field radiation, Lattice theory, Array fundamentals, Far field synthesis, Stochastic aperture errors

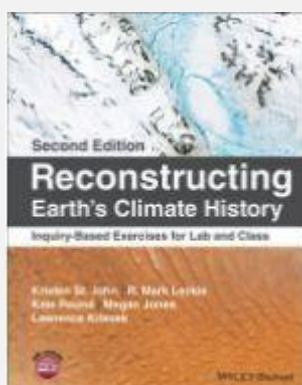
621.396.67 SIK-I

178264; CL

[Click here for more details.](#)

Centre for Atmospheric Sciences

13



Reconstructing earth's climate history inquiry-based exercises for lab and class by Kristen St. John... (et al.), 2nd ed.Hoboken: Wiley, 2021. xvii, 542 p.

ISBN: 9781119544111

Subject Terms: Climatic changes – History, Climatic changes – Observations, Geology, Paleoclimatology, Climate cycles

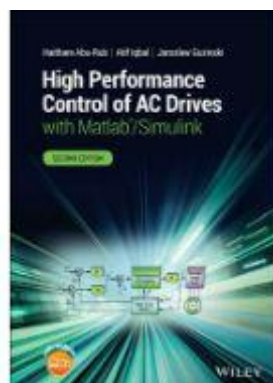
551.58/.79 -REC

178191-178192; CL; CAS

[Click here for more details.](#)

Centre for Automotive Research and Tribology

14



High performance control of AC drives with MATLAB/Simulink by Haitham Abu-Rub, Atif Iqbal and Jaroslaw Guzinski, 2nd ed.Hoboken: Wiley, 2021. xxi, 597p.

ISBN: 9781119590781

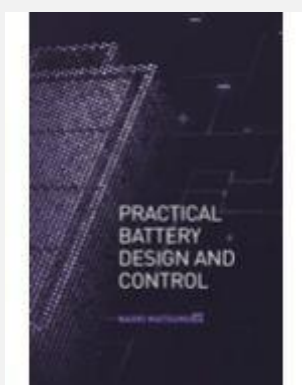
Subject Terms: Electric motors, Alternating current - Automatic control, Power electronic DC-AC converter, Medium voltage drives, Motor drive system

621.313:681.3.06M ABU-H

178193; CL

[Click here for more details.](#)

15



Practical battery design and control by Naoki Matsumura, Boston: Artech House, 2023. xix, 279 p.

ISBN: 9781630819750

Subject Terms: Electric batteries, Battery industry - Technological innovations, Battery impedance, Battery charging, Fuel cell, Battery algorithms

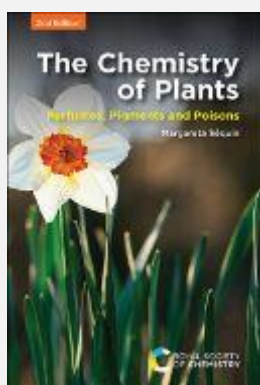
621.355 MAT-P

178209; CL

[Click here for more details.](#)

Centre for Rural Development & Technology

16



Chemistry of plants perfumes, pigments and poisons, 2nd ed. London: Royal Society of Chemistry, 2021. xxiv, 208 p.

ISBN: 9781788019019

Subject Terms: Botanical chemistry, Plant molecular biology, Plant ecology, Plant molecular biology, Molecular building blocks

581:547 SEQ-C

178174-178175; CL; CRDT

[Click here for more details.](#)

17



Food processing technology principles and practice by P. J. Fellows, 5th ed. Amsterdam: Woodhead Publishing, 2022. xxiii, 780 p. - Woodhead Publishing series in food science, technology and nutrition.

ISBN: 9780323857376

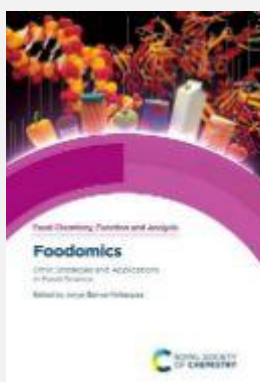
Subject Terms: Food industry and trade, Food processing machinery, Food components, Food biotechnology, Pasteurisation, Extrusion cooking

664 FEL-F

178184; CL

[Click here for more details.](#)

18



Foodomics omic strategies and applications in food science edited by Jorge Barros-Velázquez, London: RSC Publishing, 2021. xvii, 495 p. - Food chemistry, function and analysis.

ISBN: 9781788018845

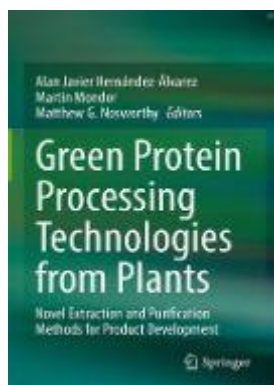
Subject Terms: Aliments analyse, Aliments sécurité mesures, Food analysis, Food safety measures, Food science

664 -FOO

178258; CL

[Click here for more details.](#)

19



Green protein processing technologies from plants novel extraction and purification methods for product development edited by Alan Javier Hernandez-Álvarez, Martin Mondor and Matthew G. Nosworthy, Cham: Springer, 2023. xv, 354 p.

ISBN: 9783031169670

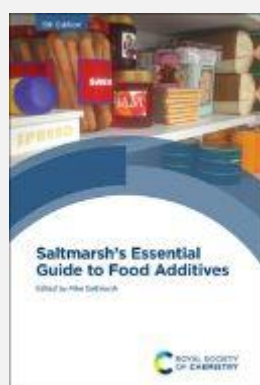
Subject Terms: Biotechnology, Food science, Botany, Plant products, Protein biochemistry

614.778:664.38 -GRE

178179; CL

[Click here for more details.](#)

20



Saltmarsh's essential guide to food additives edited by Mike Saltmarsh, 5th ed. London: RSC Publishing, 2021. xxi, 304 p.

ISBN: 9781839161032

Subject Terms: European union countries, Food additives, Food additives - Law and legislation, Public health, Safety of food

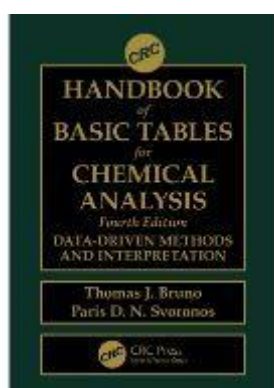
664.1/.8:061.1EU -SAL

178180; CL

[Click here for more details.](#)

Chemistry

21



CRC handbook of basic tables for chemical analysis by Thomas J. Bruno and Svoronos Paris D.N. data-driven methods and interpretation, 4th ed. Boca Raton: CRC Press, 2020. xxxi, 899 p.

ISBN: 9781138089044

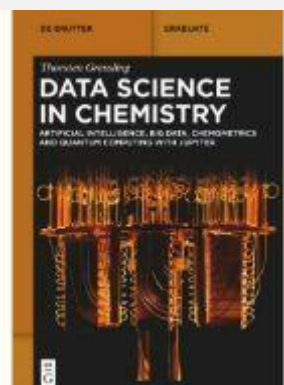
Subject Terms: Analytical chemistry - Handbook, manuals, etc., Industrial chemistry - Handbook, manuals, etc., Environmental chemistry - Handbook, manuals, etc., Chemical engineering - Handbook, manuals, etc., Chemical processing and Design - Handbook, manuals, etc.

RL-HB 543(021) BRU-C

178211; CL

[Click here for more details.](#)

22



Data science in chemistry artificial intelligence, big data, chemometrics and quantum computing with Jupyter by Thorsten Gressling, Berlin: De Gruyter, 2021. xviii, 522 p. - De Gruyter graduate.

ISBN: 9783110629392

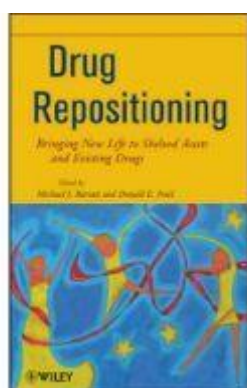
Subject Terms: Cheminformatics, Chemistry - Data processing, Kunstliche Intelligenz, Massendaten, Theoretische Chemie

54:681.3 GRE-D

178190; CL

[Click here for more details.](#)

23



Drug repositioning bringing new life to shelved assets and existing drugs edited by Michael J. Barratt and Donald E. Frail, Hoboken: Wiley, 2012. xx, 477p.

ISBN: 9780470878279

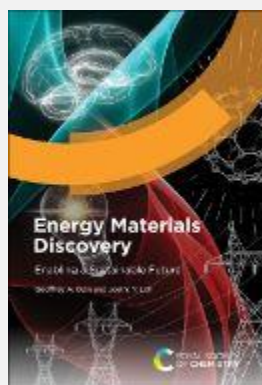
Subject Terms: Drug development, Pharmaceutical industry, Pharmaceutical industry - Economic aspects, Drugs - Economic aspects, Medical – Pharmacology

338.45:615.32 -DRU

178198; CL

[Click here for more details.](#)

24



Energy materials discovery enabling a sustainable future by Geoffrey A. Ozin and Joel Y. Y. Loh, London: RSC Publishing, 2022. xix, 443 p.

ISBN: 9781839163166

Subject Terms: Renewable energy sources – Materials, Energy conversion materials, Solar energy conversion, Energy storage materials, Electricity energy, Human - machine interface

620.9 OZI-E

178176-178177; CL

[Click here for more details.](#)

25



Fundamental laboratory approaches for biochemistry and biotechnology by Jeremy Alexander, Wilmington: Kaufman Press, 2022. xii, 279 p.

ISBN: 9781666888089

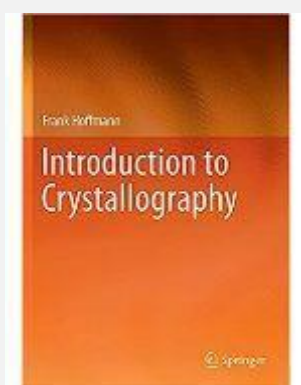
Subject Terms: Liquid chromatography, Genetic information in DNA, Polymerase chain reaction (PCR), Plant tissue culture, Nucleic acids, Enzymes biotechnology

577.1/.2:60 ALE-F

178210; CL

[Click here for more details.](#)

26



Introduction to crystallography by Frank Hoffmann, Cham: Springer, 2020. x, 309 p.

ISBN: 9783030351120

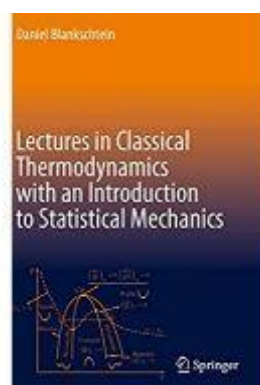
Subject Terms: Materials science, Mineralogy, Chemistry – Inorganic, Crystal structures, Heterogeneous catalysts

548.0 HOF-I

178276; CL

[Click here for more details.](#)

27



Lectures in classical thermodynamics with an introduction to statistical mechanics by Daniel Blankschtein, Cham: Springer, 2020. xxiv, 766 p.

ISBN: 9783030492007

Subject Terms: Mixing functions, Excess functions fugacity, Fugacity coefficient, Activity coefficient, Gibbs phase rule

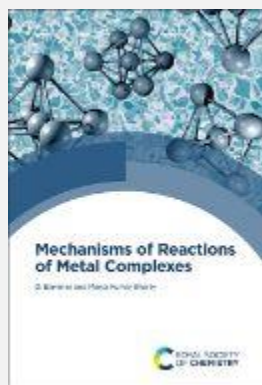
536.7:531.01 BLA-L

178270; CL

[Click here for more details.](#)

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28



Mechanisms of reactions of metal complexes in solution by Debabrata Banerjee and M. K. Bharty, London: Royal Society of Chemistry, 2023. xi, 527 p.

ISBN: 9781839161865

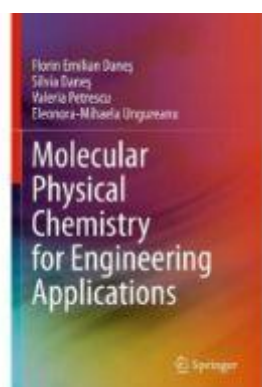
Subject Terms: Reaction mechanisms – Chemistry, Chemical analysis, Ligand replacement reactions, Octahedral complexes, Electron transfer reactions

546.3 BAN-M

178195; CL

[Click here for more details.](#)

29



Molecular physical chemistry for engineering applications by Florin Emilian Daneş... (et al.), Cham: Springer, 2021. xxix, 383 p.

ISBN: 9783030638986

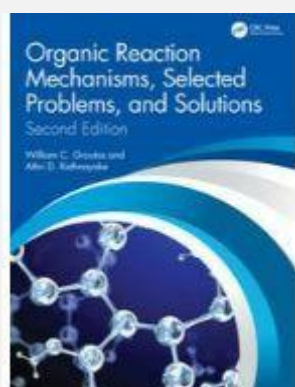
Subject Terms: Quantum physics, Statistical physics, Thermodynamic probability, Molecular models in thermodynamic, Transport phenomenology

544.1 -MOL

178212; CL

[Click here for more details.](#)

30



Organic reaction mechanisms, selected problems, and solutions by William C. Groutas and Athri D. Rathnayake, 2nd ed. Boca Raton: CRC Press, 2023. 499 P.

ISBN: 9781032488257

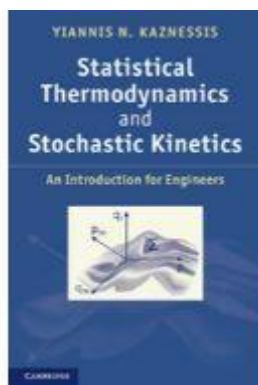
Subject Terms: Lewis structures, Nucleophilic substitution reactions, Lewis base reactions, Carbocation chemistry, Chemical reactivity

547:544.43 GRO-O

178277; CL

[Click here for more details.](#)

31



Statistical thermodynamics and stochastic kinetics an introduction for engineers by Yiannis N. Kaznessis, Cambridge: Cambridge University Press, 2012. xii, 314 p.

ISBN: 9780521765619

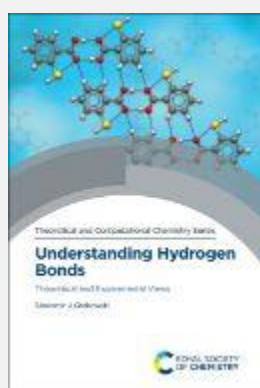
Subject Terms: Elements of probability, Combinatorial theory Ensemble theory, Canonical ensemble, Molecules, Polymers - Brownian dynamics, Stochastic processes

536.75 KAZ-S

178275; CL

[Click here for more details.](#)

32



Understanding hydrogen bonds: theoretical and experimental views by Sławomir J. Grabowski, London: RSC Publishing, 2021. xiv, 471 p. - Theoretical and computational chemistry series.

ISBN: 9781788014793

Subject Terms: Liaisons hydrogène, Crystal structures, Lithium bond, Strong hydrogen bonds, Intramolecular hydrogen bonds

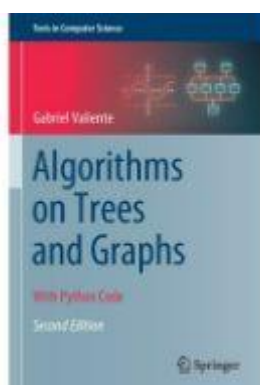
544.142.4 GRA-U

178194; CL

[Click here for more details.](#)

Computer Science and Engineering

33



Algorithms on trees and graphs with python code by Gabriel Valiente, 2nd ed. Cham: Springer, 2021. xv, 386 p. - Texts in computer science.

ISBN: 9783030818876

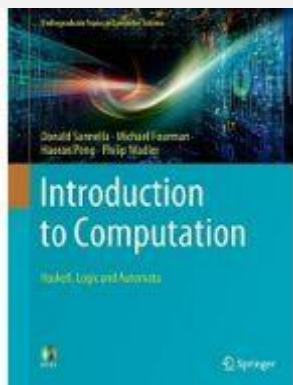
Subject Terms: Algorithmic techniques, Tree isomorphism, Algorithms on graphs, Graph isomorphism, Independent set

681.3.06P:519.17 VAL-A

178204; CL

[Click here for more details.](#)

34



Introduction to computation haskell, logic and automata by Donald Sannella... (et al.), Cham: Springer, 2021. xvi, 366 p. - Undergraduate topics in computer science.

ISBN: 9783030769079

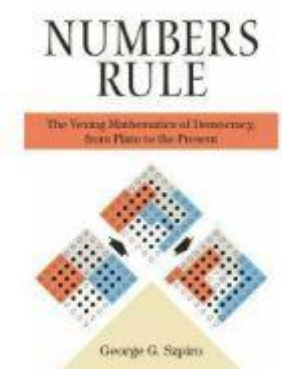
Subject Terms: Computer science – Mathematics, Computer logic, Algorithms, Data representation, Logical connectives

681.3 -INT

178202-178203; CL; TB

[Click here for more details.](#)

35



Numbers rule: the vexing mathematics of democracy, from Plato to the present by George Szpiro, New Jersey: Princeton University Press, 2020. xi, 226 p.

ISBN: 9780691209081

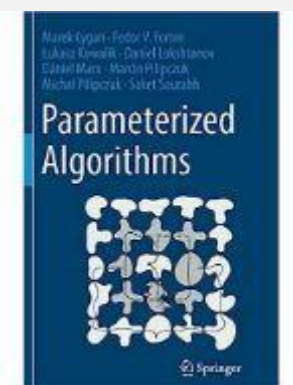
Subject Terms: Cardinals Political science, Constitutional law, Economics – Mathematical, Voting - Mathematical models, Elections - Mathematical models

510 SZP-N

178206-178207; CL; CSE

[Click here for more details.](#)

36



Parameterized algorithms by Marek Cygan... (et al.), Cham: Springer, 2015. xvii, 613p.

ISBN: 9783319357027

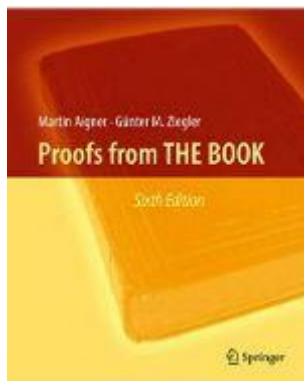
Subject Terms: Parameter estimation, Computer algorithms, Computer science – Mathematics, Algorithm analysis, Advanced algorithmic techniques

681.3:510.5 -PAR

178162-178163; CL; CSE

[Click here for more details.](#)

37



Proofs from the book by Martin Aigner and Günter M. Ziegler, 6th ed. Berlin: Springer, 2018. viii, 326p.

ISBN: 9783662572641

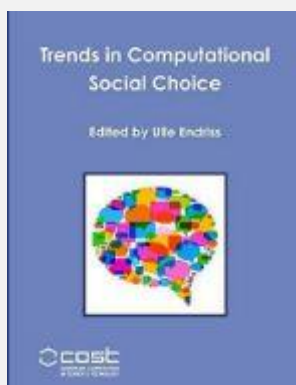
Subject Terms: Mathematics, Combinatorics, Algebra, Number theory, Analysis, Graph theory

511/519 AIG-P

178216-178217; CL; CSE

[Click here for more details.](#)

38



Trends in computational social choice edited by Ulle Endriss, s.l.: AI Access, 2017. xx, 402 p.

ISBN: 9781326912093

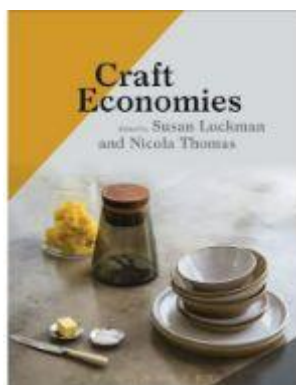
Subject Terms: Social choice theory, Voting rule verification, Iterative voting, Fair division, Computational techniques

330:681.3 -TRE

178218; CL

[Click here for more details.](#)

39



Craft economies edited by Susan Luckman and Nicola Thomas, London: Bloomsbury, 2023. xiv, 234 p.

ISBN: 9781350353404

Subject Terms: Creative economy, Craft education – Trends, Handicraft - Economic aspects, Handicraft industries Craft - Technology and innovation

745/749:338 -CRA

178245; CL

[Click here for more details.](#)

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Design

40



Craft is political edited by D Wood, London: Bloomsbury, 2023. ix, 269 p.

ISBN: 9781350359949

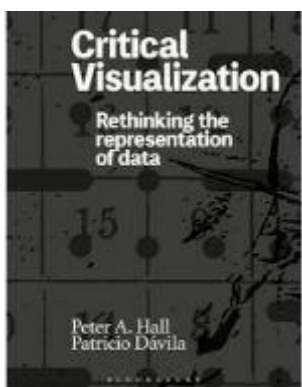
Subject Terms: Handicraft - Political aspects, Decorative arts - Political aspects, Handicraft industries - Social aspects, Indigenous craft, Chilean arpilleras

745/749 -CRA

178246; CL

[Click here for more details.](#)

41



Critical visualization: rethinking the representation of data by Peter A. Hall and Patricio Davila, London: Bloomsbury, 2023. 256 p.

ISBN: 9781350077249

Subject Terms: Humanistic approaches, Disruptive histories, Making data, Comic critique, Aesthetics and representation, Critical cartography

76:001.103 HAL-C

178247; CL

[Click here for more details.](#)

42



Design and science edited by Leslie Atzmon, London: Bloomsbury, 2023. xviii, 342 p.

ISBN: 9781350061927

Subject Terms: Visual metaphor, Agile artifacts, Diagramming artscience, Biomimicry, Biodesign, Data manifestation

74:5/6 -DES

178248; CL

[Click here for more details.](#)

43



Design and the social imagination by Matthew DelSesto, London: Bloomsbury, 2022. xvi, 222 p. - Designing in dark times.

ISBN: 9781350242944

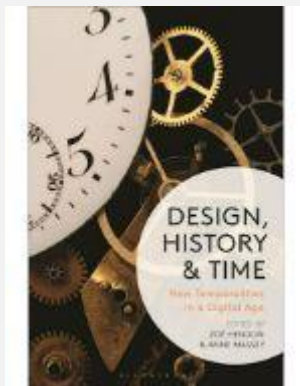
Subject Terms: Social imagination, Design - Social aspects, Social change, Ecological thinking, Global migration

745:304.3 DEL-D

178249; CL

[Click here for more details.](#)

44



Design, history and time new temporalities in a digital age edited by Zoe Hendon and Ann Massey, London: Bloomsbury Publishing, 2023. xv, 196 p.

ISBN: 9781350359918

Subject Terms: Theory of architecture, History of art and design styles- from c 1900, Design – General, Design - History and criticism, Architecture – Criticism

7.03 -DES

178188; CL

[Click here for more details.](#)

45



Designing cultures of care edited by Laurene Vaughan, London: Bloomsbury publishing, 2023. xvii, 243 p.

ISBN: 9781350353534

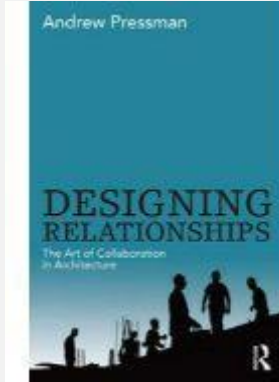
Subject Terms: Health facilities - Design and construction, Design - Social aspects, Art and society, City planning - Social aspects, Design - Research

72.012 -DES

178189; CL

[Click here for more details.](#)

46



Designing relationships: the art of collaboration in architecture by Andrew Pressman, London: Routledge, 2014. xviii, 97 p.

ISBN: 9780415506281

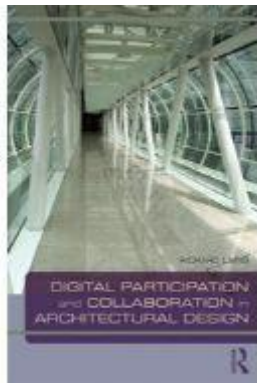
Subject Terms: Collaboration models, Traditional collaboration in practice, Firm culture, Design thinking, Morphosis' phare tower

72.012 PRE-D

178267; CL

[Click here for more details.](#)

47



Digital participation and collaboration in architectural design by Richard Laing, London: Routledge, 2019. xiii, 146 p.

ISBN: 9781138062665

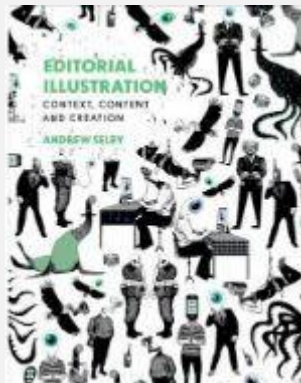
Subject Terms: Digital technologies - Architectural design, Architectural design, Digital visualisation, Greenspace Smart cities

72.012:681.3 LAI-D

178266; CL

[Click here for more details.](#)

48



Editorial illustration context, content and creation by Andrew Selby, London: Bloomsbury, 2023. xi, 206 p.

ISBN: 9781350096868

Subject Terms: Graphic arts, Illustration - Communication tool, Graphic arts – Technique, Typology, Visual language

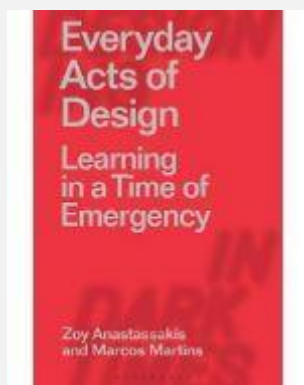
76 SEL-E

178250; CL

[Click here for more details.](#)

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49



Everyday acts of design: learning in a time of emergency by Zoy Anastassakis and Marcos Martins, London: Bloomsbury, 2022. xxiv, 245 p. - Designing in dark times.

ISBN: 9781350162396

Subject Terms: Design - Study & teaching – Brazil, Design – curriculum, Design schools, Design research, ESDI (Escola Superior de Desenho Industrial)

74:377(81) ANA-E

178251; CL

[Click here for more details.](#)

50



Fundamentals of product design by Richard Morris, 2nd ed. London: Bloomsbury, 2023. viii, 184 p. - Fundamentals.

ISBN: 9781350398856

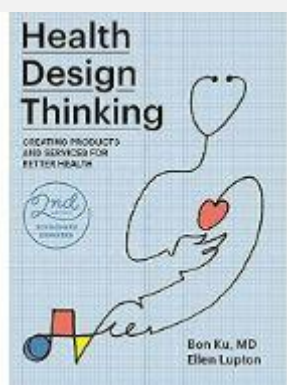
Subject Terms: Product research, Product concepts, Product development, Production, Product launch

74:658.62 MOR-F

178252; CL

[Click here for more details.](#)

51



Health design thinking creating products and services for better health by Bon Ku and Ellen Lupton, 2nd ed. Cambridge: MIT Press, 2022. 254 p.

ISBN: 9780262543606

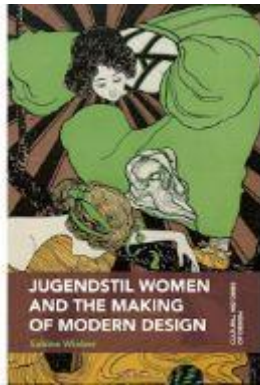
Subject Terms: Health facilities - Design and construction, Health planning, User centered system design, Biomedical engineering, Medical care, Human engineering

74:61 KU-H

178269; CL

[Click here for more details.](#)

52



Jugendstil women and the making of modern design by Sabine Wieber, London: Bloomsbury, 2022. xiii, 227 p. - Cultural histories of design.

ISBN: 9781350088528

Subject Terms: Art Nouveau, Women artist - Germany – History, Modern design, Art Nouveau - Germany

7.035.93-055.2 WIE-J

178253; CL

[Click here for more details.](#)

53



Soviet critical design: senezh studio and the communist surround by Tom Cubbin, London: Bloomsbury, 2023. xv, 226 p. - Cultural histories of design.

ISBN: 9781350353480

Subject Terms: Architectural design - Russia (Federation), Art - Russia & former, Soviet Union, Artistic Projecteering, Technical aesthetics, Design - history & criticism

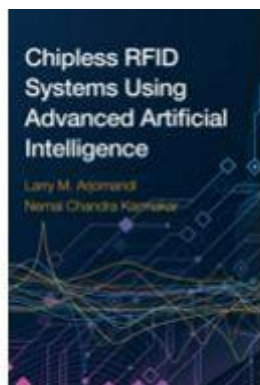
74(47+57) CUB-S

178254; CL

[Click here for more details.](#)

Electrical Engineering

54



Chipless RFID systems using advanced artificial intelligence by Larry M. Arjomandi and Nemaï Chandra Karmakar, Boston: Artech House, 2023. xii, 223 p.

ISBN: 9781630819484

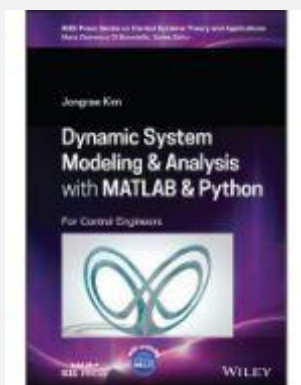
Subject Terms: Chipless tag design, RFID tags, Digital control board, Tag decoding, Deep learning

621.396:681.3 ARJ-C

178265; CL

[Click here for more details.](#)

55



Dynamic system modelling and analysis with MATLAB and Python for control engineers by Jongrae Kim, Hoboken: Wiley, 2023. xix, 310 p. - IEEE Press series on control systems theory and applications.

ISBN: 9781119801627

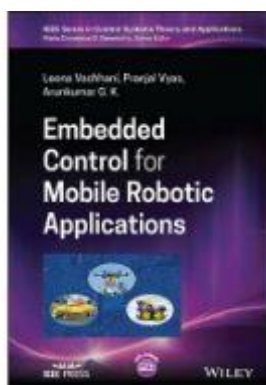
Subject Terms: Kinematics and sensors, Gyroscope sensor model, Attitude estimation algorithm, Noise propagation, Robustness analysis

621-52:681.3 KIM-D

178232; CL

[Click here for more details.](#)

56



Embedded control for mobile robotic applications by Leena Vachhani, Pranjal Vyas and Arunkumar G. K., Hoboken: Wiley, 2022. xxi, 150 p. - IEEE Press series on control systems theory and applications.

ISBN: 9781119812388

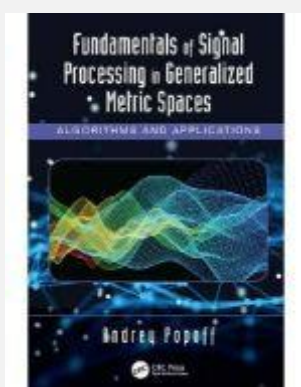
Subject Terms: Embedded technology, Microprocessor, Discrete-time controller design, Computations using CORDIC1, Generic FPGA architecture design

621-52 VAC-E

178233; CL

[Click here for more details.](#)

57



Fundamentals of signal processing in generalized metric spaces algorithms and applications by Andrey Popoff, Boca Raton: CRC Press, 2022. xxxiv, 414 p.

ISBN: 9781032231259

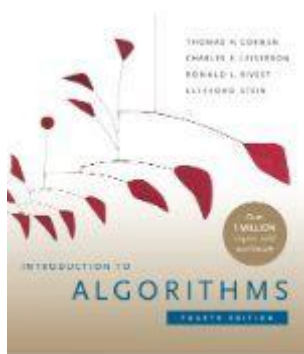
Subject Terms: L-groups, Signal parameters, Signal filtering algorithms, Spectral estimation, Lattice ordered groups

621.391 POP-F

178261; CL

[Click here for more details.](#)

58



Introduction to algorithms by Thomas H. Cormen...(et al.), 4th ed. Cambridge: MIT Press, 2022. xx, 1290 p.

ISBN: 9780262046305

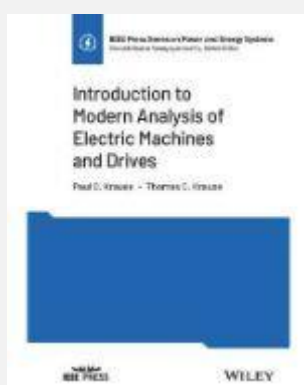
Subject Terms: Computer programming, Computer algorithms, Algorithms, Data structures - Computer science, Accounting method

681.3:510.5 COR-I

178279; CL

[Click here for more details.](#)

59



Introduction to modern analysis of electric machines and drives by, Paul C. Krause and Thomas C. Krause, Hoboken: Wiley, 2023. xvi, 249 p. - IEEE Press series on power and energy systems.

ISBN: 9781119908159

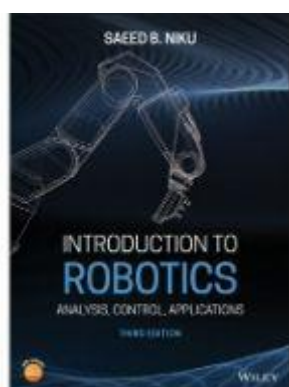
Subject Terms: Electric driving, Electric machinery, Reactive power, Winding configurations, Symmetrical machines

621.313 KRA-A

178256; CL

[Click here for more details.](#)

60



Introduction to robotics analysis, control, applications, 3rd ed. Hoboken: Wiley, 2020. xix, 507 p.

ISBN: 9781119527626

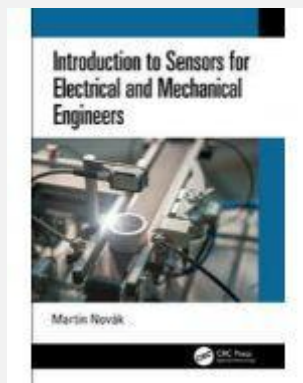
Subject Terms: Kinematics of serial robots, Robots, Parallel robots, Differential motions, Force analysis, Trajectory planning, Motion control systems, Actuators, Sensors, Image processing, Fuzzy logic control

681.3-52 NIK-I

178234; CL

[Click here for more details.](#)

61



Introduction to sensors for electrical and mechanical engineers by Martin Novák, Boca Raton: CRC press, 2021. xiii, 314 p.

ISBN: 9780367534011

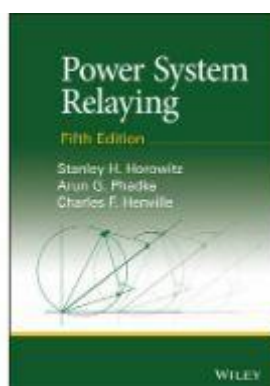
Subject Terms: Detectors, Electrical engineering, Engineering instruments, Mechatronics, Mechanical engineers

681.586:621 NOV-I

178271; CL

[Click here for more details.](#)

62



Power system relaying by Stanley H. Horowitz, Arun G. Phadke and Charles F. Henville, 5th ed. Hoboken: Wiley, 2023. xxiv, 498 p.

ISBN: 9781119838432

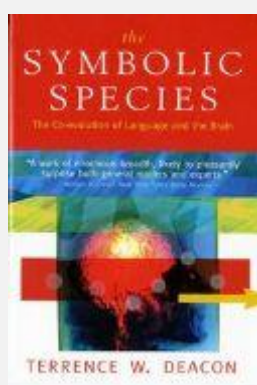
Subject Terms: Protective relaying, Relay operating principles, Rotating machinery protection, Power systems, Electric circuit protection

621.316.925 HOR-P

178235;

[Click here for more details.](#)

63



Symbolic species: the co-evolution of language and the brain by Terrence W. Deacon, New York: W. W. Norton & Company, 1998. 527 p.

ISBN: 9780393317541

Subject Terms: Neurolinguistics Brain – Evolution, Psycholinguistics, Language – Philosophy, Animal communication, Language - Physiological aspects

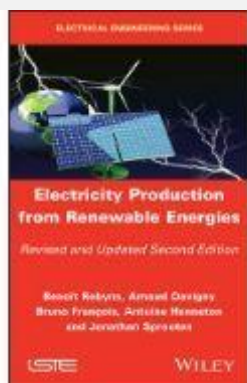
159.922 DEA-S

178280; CL

[Click here for more details.](#)

Energy Science and Engineering

64



Electricity production from renewable energies by Benoit Robyns... (et al.), 2nd ed. Hoboken: Wiley, 2021. xv, 352 p. - Electrical engineering series.

ISBN: 9781786306616

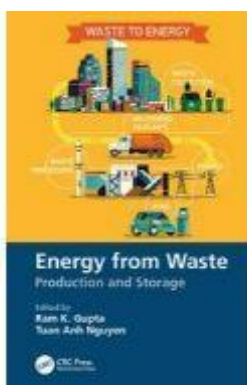
Subject Terms: Renewable energy sources, Geothermal resources, Electric power distribution, Energy development, Ocean energy resources, Science Mathematics

621.311.24 -ELE

178178; CL

[Click here for more details.](#)

65



Energy from waste production and storage edited By Ram K. Gupta and Tuan Anh Nguyen, Boca Raton: CRC Press, 2022. xx, 478 p.

ISBN: 9781032013596

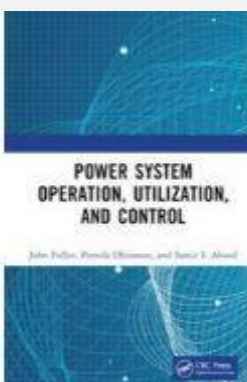
Subject Terms: Municipal waste for energy Energy production Solid waste Energy from waste plastics Bioenergy Biodiesel production Hydrogen production Polymeric wastes

628.4:662.6/.9 -ENE

178278; CL

[Click here for more details.](#)

66



Power system operation, utilization, and control by John Fuller, Pamela Obiomon and Samir I. Abood, Boca Raton: CRC Press, 2023. xvii, 326 p.

ISBN: 9781032277455

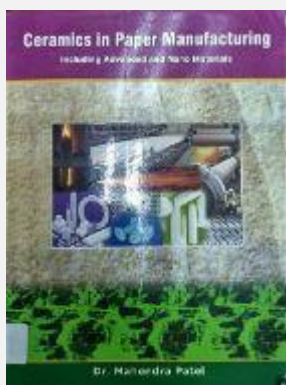
Subject Terms: Electric power systems Synchronous machines Load frequency control Load forecasting MATLAB

621.311 FUL-P

178225; CL

[Click here for more details.](#)

67



Ceramics in paper manufacturing including advanced and nano materials by Mahendra Patel, Odisha: Industypaper, 2013. 410 p.

ISBN: 9788192354248

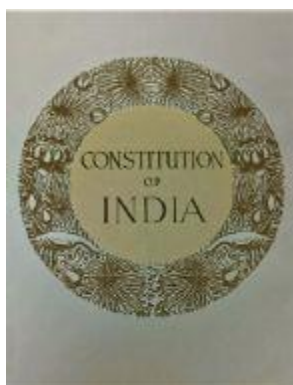
Subject Terms: Ceramics, Industrial applications, Papermaking, Chemistry, Silcon cabide, Ceramic coating, Chemical resistant bricks, Bleaching

676.02 PAT-C

G23967; CL

[Click here for more details.](#)

68



Constitution of India by Govt. of India, New Delhi: Govt. of India, 2018. 230 p.

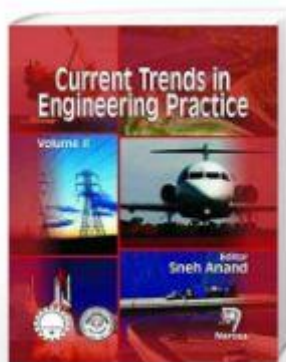
Subject Terms: Citizenship, Fundamental rights, Union Minister Articles

342.4(540) GOV-C

G23997; CL

[Click here for more details.](#)

69



Current trends in engineering practice edited by Sneh Anand, New Delhi: Narosa Publishing House, 2010. ix, 717 p.

ISBN: 9788184870190

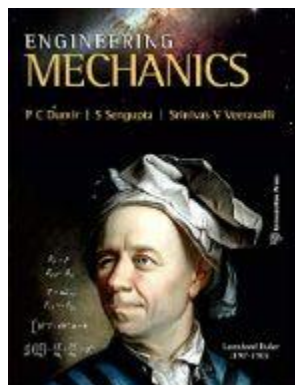
Subject Terms: Civil engineering, Mechanical engineering, Chemical engineering, Biotechnology, Electrical engineering, Aerospace engineering

62 -CUR

G23968; CL

[Click here for more details.](#)

70



Engineering mechanics by P C Dumir, S Sengupta and Srinivas V Veeravalli, Hyderabad: Universities Press, 2020. x, 830p.

ISBN: 9789389211573

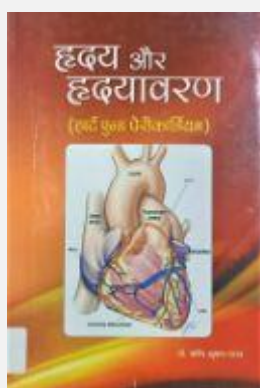
Subject Terms: Statics, Dynamics of a rigid body, Kinematics, Variational mechanics, Axioms and force systems

531:62 DUM-E

G23969; CL

[Click here for more details.](#)

71



Hriday aur hridayavarana (हृदय और हृदयावरण) heart and pericardium (हार्ट ऐन्ड पेरिकार्डियम) by Phani Bhushan Das, Lucknow: Parvam Prakashan, n.d.. 255 p.

ISBN: 9788192605944

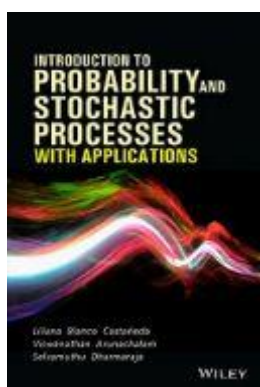
Subject Terms: Hindi Literature - Heart diseases, Congenial heart disease, Rubella infection, Rheumatic fever, Heart attack

H 616.1 DAS-H

G23974; CL

[Click here for more details.](#)

72



Introduction to probability and stochastic processes with applications by Liliana Blanco Castaneda, Viswanathan Arunachalam and Selvamuthu Dharmaraja, New Delhi: Wiley India, 2016. xxiii, 589p.

ISBN: 9788126559145

Subject Terms: Random variables, Discrete distributions, Continuous distributions, Stochastic processes, Queueing models, Stochastic calculus, Mathematical finance

519.2 CAS-I

G23970; CL

[Click here for more details.](#)

73



Kamtanath ki shreshth kahaniyan (कामतानाथ की श्रेष्ठ कहानियाँ) by Kamtanath, New Delhi: Prakashan Sansthan, 2012. 360 p.

ISBN: 9788177143430

Subject Terms: Hindi Literature - Short stories, Story - Saari raat, Story – makaan, Story – Diwarein, Story - Khalnayak

H 821.214.21-32 KAM-K

G23980; CL

[Click here for more details.](#)

74



Kashmiri ki pratinidhi kahaniyan (कश्मीरी की प्रतिनिधि कहानियाँ) Translated by Gauri Shankar Raina, New Delhi: Sahitya Akademi, 2017. 183 p.

ISBN: 9788126050758

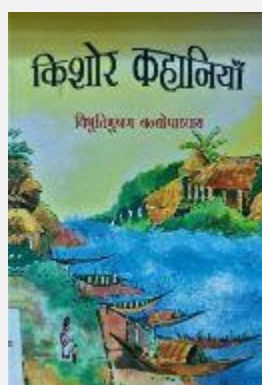
Subject Terms: Short stories - Kashmiri authors, Hindi fiction, Kashmiri language - Hindi language, Story - Jawabi card, Story – Chaaya

H 821.214.21-32 -KAS

G23977; CL

[Click here for more details.](#)

75



Kishore Kahaniyan (किशोर कहानियाँ) by Bibhutibhushan Bandyopadhyay; translated by Amar Goswami, New Delhi: Sahitya Akademi, 2000. 156 p.

ISBN: 9788126007479

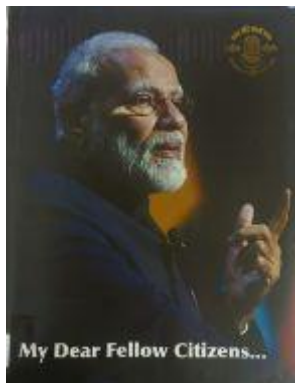
Subject Terms: Hindi Literature - Short stories, Hindi fiction, Story – medal, Story – bhoot, Story – chawal

H 821.214.21-32 BAN-K

G23975; CL

[Click here for more details.](#)

76



Mann ki baat 100 my dear fellow citizens edited by Anupama Bhatnagar... (et. al.), New Delhi: India. Ministry of Information and Broadcasting, 2023. xi, 233 p.

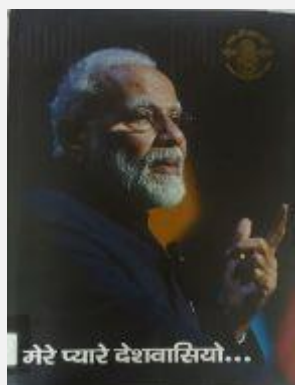
Subject Terms: Modi, Narendra - Prime Minister, Prime Minister radio interaction, Radio broadcasting, Prime minister address, Mann ki baat - Radio programme

82-5:364.65 -MAN

G23998; CL

[Click here for more details.](#)

77



Mann ki baat 100 my dear fellow citizens edited by Anupama Bhatnagar... (et. al.), New Delhi: , 2023. xi, 233 p.

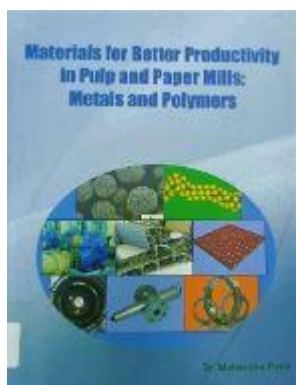
Subject Terms: Modi, Narendra - Prime Minister, Prime Minister radio interaction, Radio broadcasting, Prime minister address, Mann ki baat - Radio programme

82-5:364.65 -MAN

G23999; CL

[Click here for more details.](#)

78



Materials for better productivity in pulp and paper mills metals and polymers by Mahendra Patel, Orissa: Industypaper, 2015. viii, 616 p.

ISBN: 9788192354255

Subject Terms: Pulp mills, Paper manufacturing, Metal coating, Polymers - Plastic materials, Raw materials processing, Rubber based materials

676 PAT-M

G23965; CL

[Click here for more details.](#)

79



Micro and nano technology in paper manufacturing by Mahendra Patel, Orissa: Industypaper, 2009. vi, 526 p.

Subject Terms: Microstructure of cellulose, Fibre microstructure, Agro residues, Pulping

676.02 PAT-M

G23963; CL

[Click here for more details.](#)

80



Minerals in paper manufacturing by Mahendra Patel, Orissa: Industypaper, 2007. v, 350 p.

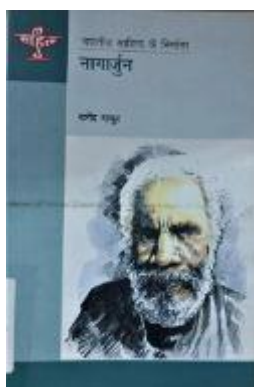
Subject Terms: Paper industry, Economics, Mineral fillers, Minerals as coating pigments, Recycling and recovery of minerals

676.02 PAT-M

G23964; CL

[Click here for more details.](#)

81



Nagarajun (नागार्जुन) by Khagendra Thakur, New Delhi: Sahitya Akademi, 2017. 104 p. - Bhartiya sahitya ke nirmata.

ISBN: 9789386771575

Subject Terms: Hindi Literature – Biography, Criticism – Interpretation, Nagarjuna - 1911-1998, Hindi writer – Nagarjuna, Hindi Literature – monograph

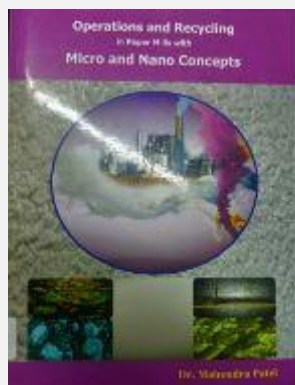
H 929NAG THA-N

G23978; CL

[Click here for more details.](#)

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82



Operations and recycling in paper mills with micro and nano concepts by Mahendra Patel, Odisha: Industry paper, 2012. 492 p.

ISBN:

Subject Terms: Abrasion, Zero-effluent discharge, Fouling, Scaling, Corrosion

676.08:620.3 PAT-O

G23966; CL

[Click here for more details.](#)

83



Phanishwarnath Renu (फणीश्वरनाथ रेणु) by Surendra Choudhary, New Delhi: Sahitya Akademi, 1987. 104 p. - Bhartiya sahitya ke nirmata.

ISBN: 9788126026326

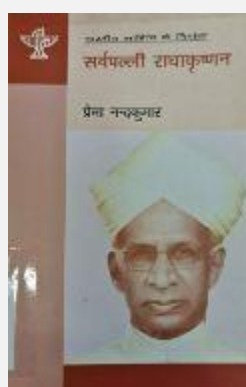
Subject Terms: Hindi Literature – Biography, Phanishwarnath Renu - Hindi Literature writer, Hindi Literature – monograph, Renu – works, Literary criticism

H 929REN CHO-P

G23979; CL

[Click here for more details.](#)

84



Sarvepalli Radhakrishnan (सर्वपल्ली राधाकृष्णन) by Prema Nandkumar, New Delhi: Sahitya Akademi, 2015. 100 p. - Bhartiya sahitya ke nirmata.

ISBN: 9788126004355

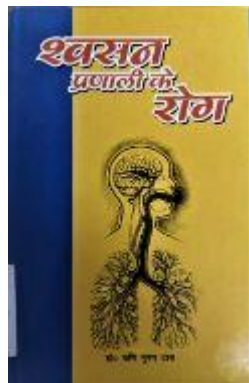
Subject Terms: Hindi Literature – Biography, Philosophers Biography – Indian, Philosopher, Biography - Indian President, Radhakrishnan S. 1888-1975

H 929RAD NAN-S

G23976; CL

[Click here for more details.](#)

85



Swashan pranali ke rog (श्वसन प्रणाली के रोग) by Phani Bhusan Das,
Lucknow: Parwam Prakashan, 2015. 188 p.

ISBN: 9788192605951

Subject Terms: Hindi Literature, Respiratory disorders,
Pneumonia, Asthma, Pneumothorax

H 616.24-008.4 DAS-S

G23973; CL

[Click here for more details.](#)

Management Studies

86



Mastering civility: a manifesto for the workplace by Christine
Porath, New York: Grand Central Publishing, 2016. viii, 230p.

ISBN: 9781455568987

Subject Terms: Organizational behavior, Workplace courtesy,
Employee morale, Interpersonal relations, Work environment

005.32 POR-M

178219; CL

[Click here for more details.](#)

87



Pedigree: how elite students get elite jobs by Lauren A. Rivera,
New Jersey: Princeton University Press, 2015. xiii, 379 p.

ISBN: 9780691169279

Subject Terms: United States Elite - Social sciences, College
graduates – Employment, Economics - Sociological aspects,
Social mobility, Social classes, Employee selection, Entry level
employment

331.5(73) RIV-P

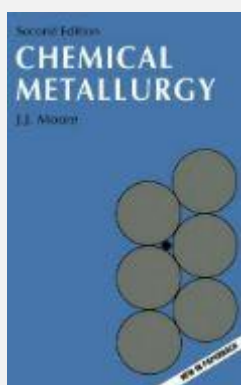
178197; CL

[Click here for more details.](#)

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Materials Science & Engineering

88



Chemical metallurgy by J.J. Moore, 2nd ed. Oxford: Butterworth-Heinemann, 1993. xix, 435 p.

ISBN: 9780750616461

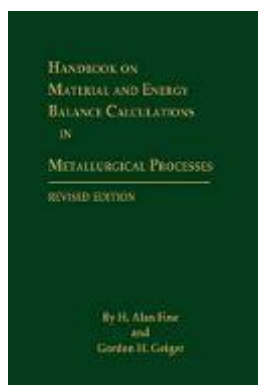
Subject Terms: Atomic structure Chemical bonds Thermochemistry Reaction kinetics Slag chemistry Metal extraction process

669.2/.8 MOO-C

178222; CL

[Click here for more details.](#)

89



Handbook on material and energy balance calculations in metallurgical processes by H. Alan Fine and Gordon H. Geiger, Revised ed. Warrendale: TMS Publication, 1993. xii, 572 p.

ISBN: 9780873392242

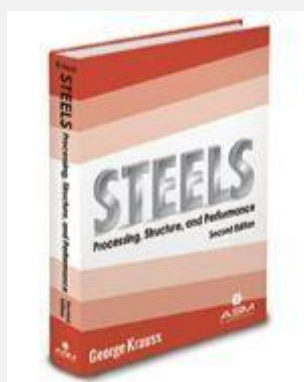
Subject Terms: Electrical units - Handbooks, manuals, etc, Fluid flow measurement - Handbooks, manuals, etc, Material balances - Handbooks, manuals, etc, Thermochemistry - Handbooks, manuals, etc, Energy balance - Handbooks, manuals, etc

669.05:66.012 FIN-H

178223; CL

[Click here for more details.](#)

90



Steels processing, structure, and performance by George Krauss, 2nd ed. Materials Park, Ohio: ASM International, 2016. xxiv, 682 p.

ISBN: 9781627080835

Subject Terms: Material Science, Metallurgy, Construction industry - Quality control, Phases and structures – Pearlite, Ferritic microstructures

669.14 KRA-S

178257; CL

[Click here for more details.](#)

Mathematics

91



Algebraic number theory by Jürgen Neukirch; translated by Norbert Schappacher, Berlin: Springer, 1999. xvii, 571p. - Series of comprehensive studies in mathematics.

ISBN: 9783540653998

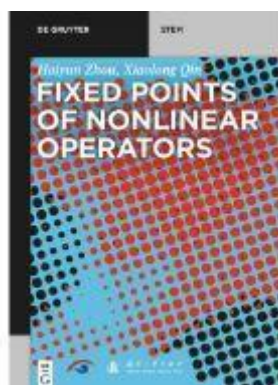
Subject Terms: Algebraic integers, Riemann-Roch theory, Abstract class field theory, Zeta functions, L-series

511.2 NEU-A

178243-178244; CL; MA

[Click here for more details.](#)

92



Fixed points of nonlinear operators by Haiyun Zhou and Xiaolong Qin, Berlin: De Gruyter, 2020. x, 367 p. - De Gruyter STEM.

ISBN: 9783110663976

Subject Terms: Fixed point theory, Nonlinear functional analysis, Metric spaces, Topological spaces, Nonexpansive mapping

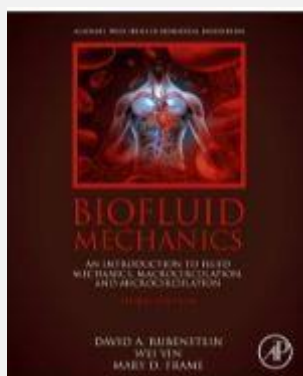
517.988.5 ZHO-F

178268; CL

[Click here for more details.](#)

Mechanical Engineering

93



Biofluid mechanics: an introduction to fluid mechanics, macrocirculation, and microcirculation by David A. Rubenstein, Wei Yin and Mary D. Frame, 3rd ed. London: Elsevier, 2022. xiii, 618 p. - Academic Press series in biomedical engineering.

ISBN: 9780128180341

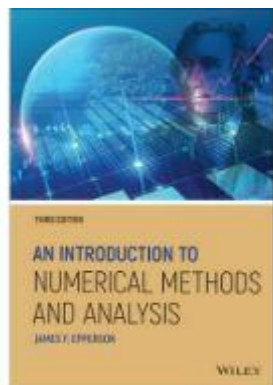
Subject Terms: Body fluids – physiology, Biological control systems, Body fluid flow, Blood circulation, Biofluid, Mechanics

612.1 RUB-B

178164; ME

[Click here for more details.](#)

94



Introduction to numerical methods and analysis by James F. Epperson, 3rd ed. Hoboken: Wiley, 2021. xiv, 650 p.

ISBN: 9781119604693

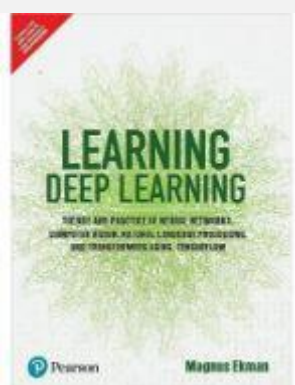
Subject Terms: Calculus – Tools, Nested multiplication, Root finding, Interpolation, Numerical integration, Euler's method

519.6 EPP-I

178230; CL

[Click here for more details.](#)

95



Learning deep learning: theory and practice of neural networks, computer vision, natural language processing, and transformers using tensorflow by Magnus Ekman, Noida: Pearson, 2022. lv, 554 p.

ISBN: 9789356063976

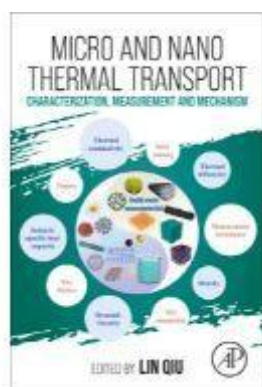
Subject Terms: Gradient based learning, Computer vision, Sigmoid neurons, Rosenblatt perceptron, Backpropagation, Word embeddings

681.3 EKM-L

178227-178228; CL; ME

[Click here for more details.](#)

96



Micro and nano thermal transport characterization measurement and mechanism edited by Lin Qiu and Yanhui Feng, London: Elsevier, 2022. xi, 343 p.

ISBN: 9780128235393

Subject Terms: Nanostructured materials - Thermal properties, Nanostructured materials – Toxicology, Thermal transport mechanism, Nanofilm, Nanofluid and nanopowders

620.3:536.24 -MIC

178167; CL

[Click here for more details.](#)

97



Thermal design heat sinks, thermoelectrics, heat pipes, compact heat exchangers, and solar cells by Hosung Lee, 2nd ed. Hoboken: Wiley, 2022. xxiii, 900p.

ISBN: 9781119685975

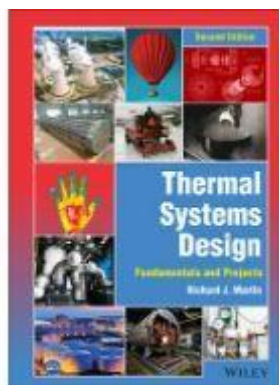
Subject Terms: Thomson effect, Heat exchangers, Thermoelectric materials, Thermoelectric design, Solar cells

621.4/.6 LEE-T

178231; CL

[Click here for more details.](#)

98



Thermal systems design fundamentals and projects by Richard J. Martin, 2nd ed. Hoboken: Wiley, 2022. xix, 533 p.

ISBN: 9781119803478

Subject Terms: Thermodynamics, Fluid mechanics, Heat transfer, Combustion, Burners, Boilers and power cycles, Combustion turbines, Refrigeration, Thermal protection

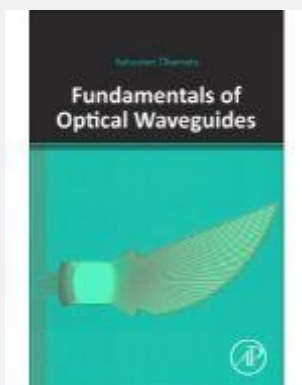
621.4/.6 MAR-T

178229; CL

[Click here for more details.](#)

Optics and Photonics

99



Fundamentals of optical waveguides by Katsunari Okamoto, 3rd ed. London: Elsevier, 2022. xx, 713 p.

ISBN: 9780128156018

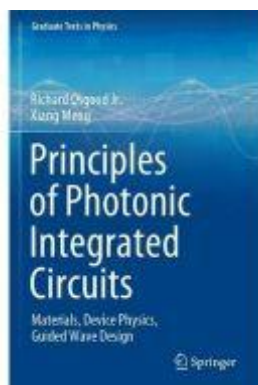
Subject Terms: Staircase concatenation method, Rectangular waveguides, Optical fibers, Coupled mode theory, Beam propagation method

535.12 OKA-F

178169-178170; CL; OPC

[Click here for more details.](#)

100



Principles of photonic integrated circuits materials, device physics, guided wave design by Richard Osgood Jr. and Xiang Meng, Cham: Springer, 2021. xiii, 369 p. - Graduate texts in physics.

ISBN: 9783030651954

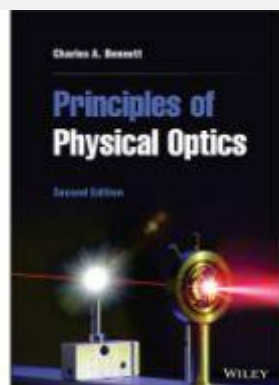
Subject Terms: Photonics Integrated circuits - Design and construction, Integrated circuits – Materials, Optical couplers, Quantum optics, Thin films

621.3.049.77:535.14 OSG-P

178208; CL

[Click here for more details.](#)

101



Principles of physical optics by Charles A. Bennett, 2nd ed. Hoboken: Wiley, 2022. xvi, 568 p.

ISBN: 9781119801795

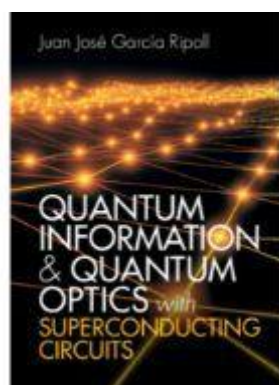
Subject Terms: Spherical, Waves Electromagnetic, Waves, Geometric optics, Diffraction, Polarization, Reflection and refraction Lasers

535 BEN-P

178171; CL

[Click here for more details.](#)

102



Quantum information and quantum optics with superconducting circuits by Juan José García Ripoll, New York: Cambridge University Press, 2022. xiv, 302 p.

ISBN: 9781107172913

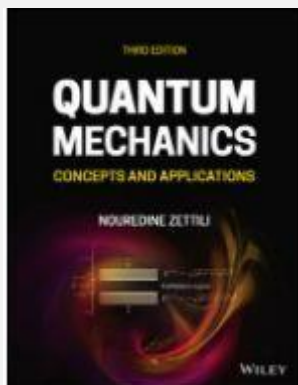
Subject Terms: Quantum theory, Superconducting qubits, Quantum optics, Circuit element, Microwave photons

535.14 GAR-Q

178182-178183; CL; OPC

[Click here for more details.](#)

103



Quantum mechanics: concepts and applications by Nouredine Zettili, 3rd ed. Hoboken: Wiley, 2022. xx, 1001p.

ISBN: 9781118307892

Subject Terms: Quantum theory, Quantum physics, Quantum mechanics, Scattering theory, Delta function

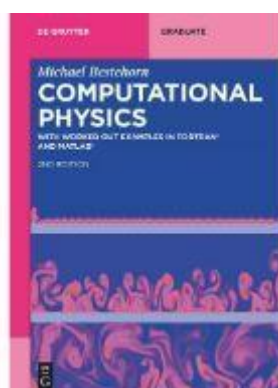
530.145 ZET-Q

178172; CL

[Click here for more details.](#)

Physics

104



Computational physics with worked out examples in FORTRAN® and MATLAB® by Michael Besthorn, 2nd ed. Berlin: De Gruyter, 2023. xi, 396 p. - De Gruyter Graduate.

ISBN: 9783110782363

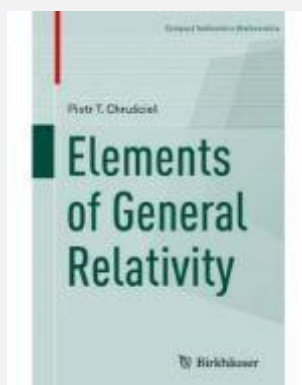
Subject Terms: Dynamical systems, Monte Carlo methods, Nonlinear maps, Hamilton systems, Ordinary differential equations

53:517 BES-C

178240; CL

[Click here for more details.](#)

105



Elements of general relativity by Piotr T. Chruściel, Cham: Springer, 2019. ix, 283 p. - Compact textbooks in mathematics.

ISBN: 9783030284152

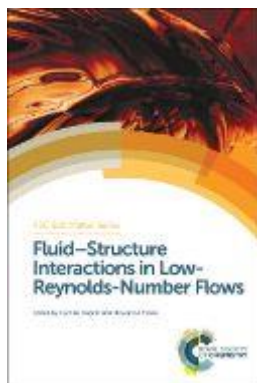
Subject Terms: Black holes, Cosmology, Weak gravitational fields, Tensor calculus, Riemannian geometry, Einstein equations

530.12 CHR-E

178262; CL

[Click here for more details.](#)

106



Fluid-structure interactions in low-reynolds-number flows edited by Camille Duprat and Howard A. Stone, Cambridge: RSC Publishing, 2016. xix, 477 p. - Soft matter series.

ISBN: 9781849738132

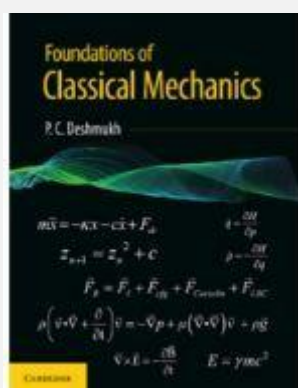
Subject Terms: Elasticity of rods, Viscous flows, Coupling elastic boundaries, Complex liquids, Blood flow, Elastic fibers, Elastocapillarity

532.5 -FLU

178272-178273; CL; PH

[Click here for more details.](#)

107



Foundations of classical mechanics by P. C. Deshmukh, Cambridge: Cambridge University Press, 2019. xxx, 560p.

ISBN: 9781108727754

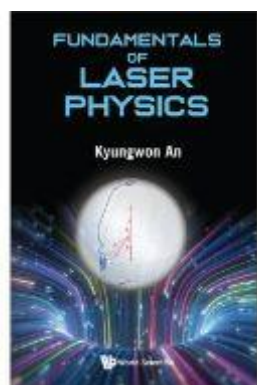
Subject Terms: Pseudo-forces, Newtonian mechanics, Fluid mechanics, Electrodynamics, Resonances

531 DES-F

178237-178239; TB

[Click here for more details.](#)

108



Fundamentals of laser physics by Kyungwon An, Singapore: World Scientific, 2023. xv, 305 p.

ISBN: 9789811265273

Subject Terms: Einstein theory, Spectral line broadening, Lamb-dep spectroscopy, Optical bloch equation, Quantum theory of laser

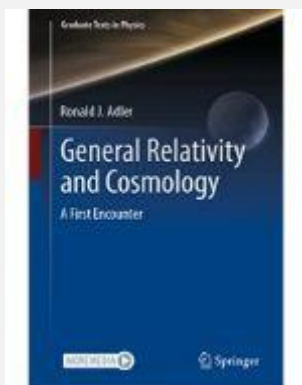
52-626 AN-F

178181; CL

[Click here for more details.](#)

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109



General relativity and cosmology a first encounter by Ronald J. Adler, Cham: Springer, 2022. xiv, 313 p. - Graduate texts in physics.

ISBN: 9783030615734

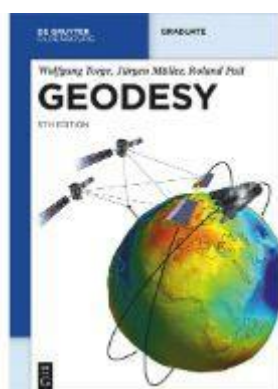
Subject Terms: Gravitational wave physics, Black holes, Spacetime, Riemann spaces, Tensor relativity

530.12:524.8 ADL-G

178263; CL

[Click here for more details.](#)

110



Geodesy by Wolfgang Torge, Jürgen Müller and Roland Pail, 5th ed. Berlin: De Gruyter, 2023. xiii, 506 p. - De Gruyter graduate.

ISBN: 9783110723298

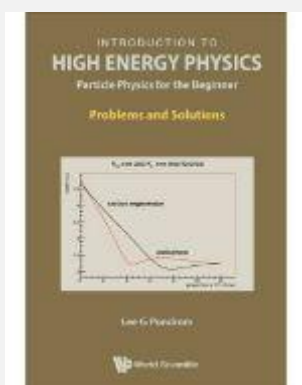
Subject Terms: Geophysics, Gravity field of the earth, Geodetic earth model, Measurement methods, Gravimetric network

528 TOR-G

178186; CL

[Click here for more details.](#)

111



Introduction to high energy physics particle physics for the beginner: problems and solutions by Lee G Pondrom, Singapore: World Scientific, 2023. vii, 181 p.

ISBN: 9789811270321

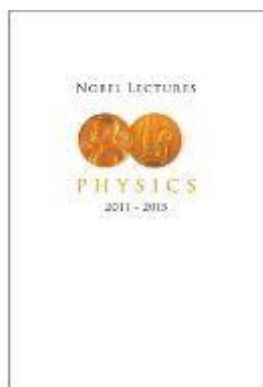
Subject Terms: Quantum electrodynamics, Electroweak phenomenology, Special relativity, Weak interaction, Electroweak, Electroweak theory

539.12 PON-I

178187; CL

[Click here for more details.](#)

112



Nobel lectures in Physics (2011-2015) edited by Lars Bergstrom, Singapore: World Scientific, 2022. xiv, 407 p. - Nobel lectures, including presentation speeches and laureates' biographies.

ISBN: 9789811246807

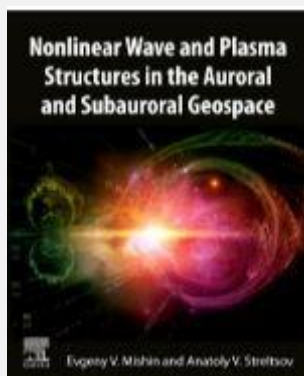
Subject Terms: Saul Perlmutter, Serge Haroche, Francois Englert, Isamu Akasaki, Takaaki Kajita, Nobel prize winners – biography

53 -NOB

178241; CL

[Click here for more details.](#)

113



Nonlinear wave and plasma structures in the auroral and subauroral geospace by Evgeny V. Mishin and Anatoly V. Streltsov, Amsterdam: Elsevier, 2022. ix, 621 p.

ISBN: 9780128207604

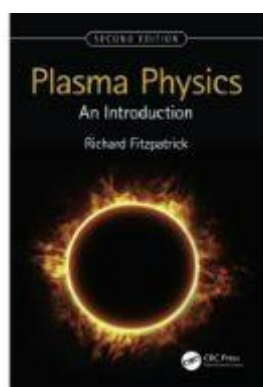
Subject Terms: Polar regions - Auroral zones, Plasma waves, Auroral geospace, Natural and artificial aurora, Subauroral geospace

52:533.9 MIS-N

178168; CL

[Click here for more details.](#)

114



Plasma physics: an introduction an introduction by Richard Fitzpatrick, 2nd ed. Boca Raton: CRC Press, 2023. xiii, 291 p.

ISBN: 9781032202518

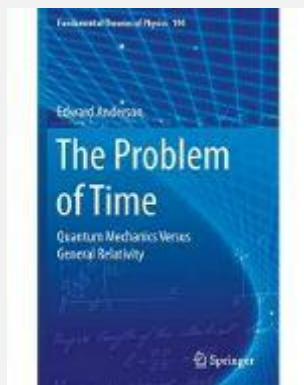
Subject Terms: Astrophysics, Nuclear engineering, Low temperatures, Nuclear energy, Space sciences, Atoms

533.9 FIT-P

178274; CL

[Click here for more details.](#)

115



Problem of time quantum mechanics versus general relativity by Edward Anderson, Cham: Springer, 2017. xxxvii, 920 p. - Fundamental theories of physics.

ISBN: 9783319588469

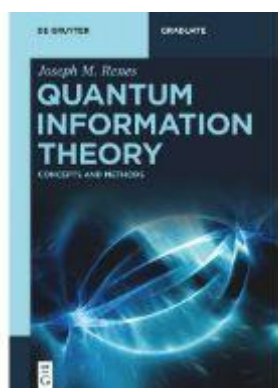
Subject Terms: Quantum gravity, Space and time, Mathematical physics, Physics, Cosmology, Gravitation

530.1 AND-P

178242; CL

[Click here for more details.](#)

116



Quantum information theory concepts and methods by Joseph M. Renes, Berlin: De Gruyter, 2022. xvii. 315, - De Gruyter graduate.

ISBN: 9783110570243

Subject Terms: Quantum computing, Quantum probability theory, Purification, Entropy, Information reconciliation

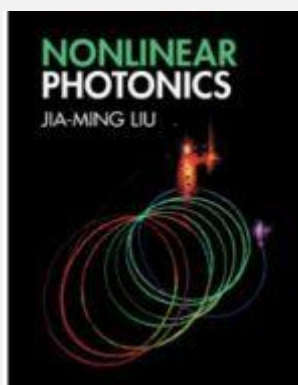
530.145:621.391 REN-Q

178196; CL

[Click here for more details.](#)

Sensors Instrumentation & Cyber-physical System Engineering

117



Nonlinear photonics by Jia-Ming Liu, Cambridge: Cambridge University Press, 2022. xvii, 588 p.

ISBN: 9781316512524

Subject Terms: Nonlinear optics, Optical nonlinearity, Phase matching, Electro optics, Stimulated, Raman scattering, Laser pulses

535.14 LIU-N

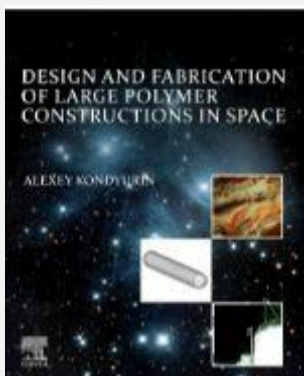
178236; CL

[Click here for more details.](#)

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Textile & Fibre Engineering

118



Design and fabrication of large polymer constructions in space by Alexey Kondyurin, Amsterdam: Elsevier, 2023. xii, 618,

ISBN: 9780128168035

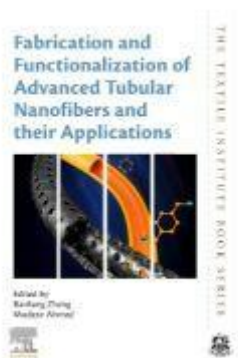
Subject Terms: Polymers, Chemical engineering, Composite materials, Expandable space structures, Space environment

678.86:52 KON-D

178165; CL

[Click here for more details.](#)

119



Fabrication and functionalization of advanced tubular nanofibers and their applications edited by Baoliang Zhang and Mudasir Ahmad, Cambridge: Elsevier, 2023. xii, 348 p. - Textile institute book series.

ISBN: 9780323990394

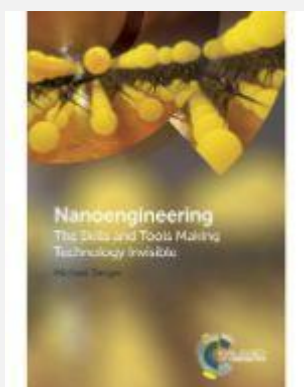
Subject Terms: Optical wave guides, Hypercrosslinked polymers, Carbon tubular nanofibers, Magnetic nanofibers, Tissue regeneration

546.26:620.3 -FAB

178166; CL

[Click here for more details.](#)

120



Nanoengineering the skills and tools making technology invisible by Michael Berger, London: Royal Society of Chemistry, 2020. xvi, 430 p.

ISBN: 9781788018678

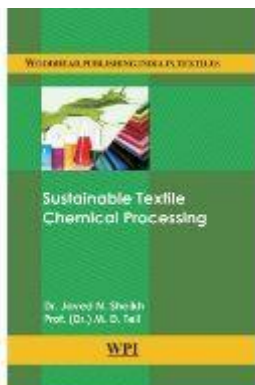
Subject Terms: Graphene, Metamaterials, Nanobiotechnology, Nanomedicine, Characterization, Energy harvesting

620.3 BER-N

178173; CL

[Click here for more details.](#)

121



Sustainable textile chemical processing edited by Javed N. Sheikh and M.D. Teli, New Delhi: Woodhead Publishing, 2022. viii, 493 p. - Woodhead publishing India in textiles.

ISBN: 9788195404858

Subject Terms: Textile industry, Natural dyes, Textile chemical processing, Microbial colourants, Textile dyeing

677:66.02 -SUS

178200; TT

[Click here for more details.](#)

122



Textile printing by N.N. Mahapatra, New Delhi: Woodhead Publishing India, 2022. ix, 192 p.

ISBN: 9788195761845

Subject Terms: Direct printing, Roller printing, Printing process, Discharge style of printing, Digital textile printing

677.027.5 MAH-T

178201; CL

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Theses Collection

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Department	Department of Biochemical Engineering and Biotechnology, IITD
Year	2023
Supervisor	Mishra, Saroj (Prof.) BEB Elangovan, Ravikrishnan (Prof.) - BEB
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Department	Department of Applied Mechanics, IITD
Year	2023
Supervisor	Singha, Maloy K (Prof.) - AM Tiwari, Vikrant (Assoc. Prof.) - AM
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Subject terms	Lightweight materials Thermo- mechanical behaviour Material modelling Ballistic impact Pulse shaping technique Fracture initiation strain
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Researcher	by Vivek Suresh Dalvi
Department	Centre for Rural Development and and Technology, IITD
Year	2023
Supervisor	Malik, Anushree (Prof.) - CRDT Chawla, Pushap (Technology consultant)
Physical description	xvi, 172 p.

Subject terms	Microalgal domination Microalgal bacterial Environmental parameters Recirculation photobioreactor Wastewater analysis Biomass harvesting
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Title	Towards improved estimates of global cloud fraction by addressing uncertainties involved in satellite cloud remote sensing
Researcher	by Soumi Dutta
Department	Centre for Atmospheric Sciences, IITD
Year	2023
Supervisor	Dey, Sagnik (Prof.) - CAS Girolamo, Larry Di (Prof.) - Univ. of Illinois, USA
Physical description	xx, 140 p.
Subject terms	Cloud fraction Multi angle imaging spectro radiometer Climate models Finite spatial resolution Global cloud climatology
Barcode	TH7242
Call No.	TH 551.576:528.8 DUT-T
Title	Physical and numerical modeling of rainfall triggered shallow landslides in central highlands, Ethiopia
Researcher	by Biruk Gissila Giday
Department	Department of Civil Engineering, IITD
Year	2023
Supervisor	Ramana, G. V. (Prof.) - CE Ayothiraman, R. (Prof.) - CE Ramaiah, B. Janaki (Asst. Prof.) - CE, IIT Tirupati
Physical description	xxiii, 216 p.
Subject terms	Slope stability analysis Transient infiltration analysis Landslide hazard zonation Field observation and mapping Geological characteristics
Barcode	TH7243
Call No.	TH 624.131.537(630) GID-P
Title	Building diatom biorefinery
Researcher	by Rahul Jain
Department	Centre For Rural Development and Technology, IITD
Year	2023

Supervisor	Malik, Anushree (Prof.) - CRDT Satyakam, Rajiv - NTPC Energy, Greater Noida
Physical description	166 p.
Subject terms	Bioremediation Biofilm photo-biological process Wastewater collection and characterization Fabrication and testing Thermal treatment Hydrothermal liquefaction
Barcode	TH7244
Call No.	TH 628.16:662.7 JAI-B
Title	Synthesis of dendrimers and organically modified mesoporous silica via thiol-ene reaction as additives in polyolefins
Researcher	by Aanchal Jaisingh
Department	Department of Materials Science and Engineering, IITD
Year	2023
Supervisor	Nebhani, Leena (Assoc. Prof.) - MSE
Physical description	xxviii, 222p.
Subject terms	Hyperbranched polymers Design and synthesis Mesoporous silica particles Synthesis and organic modification Thermogravimetric analysis
Barcode	TH7245
Call No.	TH 678.742 JAI-S
Title	Investigating the impact of nano-emulsions and nanoparticles on microalgae
Researcher	by Harshita Nigam
Department	Centre for Rural Development and Technology, IITD
Year	2023
Supervisor	Malik, Anushree (Prof.) - CRDT Singh, Vikram (Asst. Prof.) - CHE
Physical description	xix, 239 p.
Subject terms	Microalgal biomass Cell viability assessment Field emission scanning electron microscopy Microscopic analysis Transmission electron microscopy
Barcode	TH7246
Call No.	TH 582.26/.27:620.3 NIG-I

Title	Experimental and numerical investigations on mechanical response of aluminum AA2014-T6 under extreme loading and temperature conditions
Researcher	by Anoop Kumar Pandouria
Department	Department of Applied Mechanics, IITD
Year	2023
Supervisor	Tiwari, Vikrant (Assoc. Prof.) - AP
Physical description	xxx,149 p.
Subject terms	Fracture behavior Dynamic compression Strain rate and temperature Tensile and compressive behavior Static dynamic fracture Temperature measurement
Barcode	TH7247
Call No.	TH 620.17:669.71 PAN-E
Title	Jamming in free space optical systems
Researcher	by Pratiti Paul
Department	Department of Electrical Engineering, IITD
Year	2023
Supervisor	Bhatnagar, Manav (Prof.) - EE
Physical description	xv, 158 p.
Subject terms	FSO communication systems Coding loss analysis Game theoretic formulation Asynchronous jamming effect Optical channel model
Barcode	TH7248
Call No.	TH 621.391 PAU-J
Title	Investigation of high-temperature latent heat storage integrated with supercritical CO ₂ brayton cycle
Researcher	by Alok Kumar Roy
Department	IIT Delhi and University of Queensland
Year	2023
Supervisor	Gurgenci, Hal (Emer. Prof.) - SMME, Univ. of Queensland, Australia Rakshit, Dibakar (Assoc. Prof.) - ESE K. Ravi Kumar (Assoc Prof.) - ESE
Physical description	vii, 240 p.
Subject terms	Renewable energy resources Phase change material High temperature Heat storage Silicon

Barcode	TH7249
Call No.	TH 620.9:662.995 RAY-I
Title	Studies on direction finding and motion state estimation of maneuvering aerial vehicle from its acoustic emission
Researcher	by Sunil Kumar Sinha
Department	Centre for Applied Research in Electronics, IITD
Year	2023
Supervisor	Bahl, Rajendar (Prof.) - CARE Arun Kumar (Prof.) - CARE
Physical description	xviii, 170 p.
Subject terms	Radar systems Ground based Sensors Sensitivity analysis Radio controlled aerial vehicle Maneuvering aerial vehicle Time-frequency analysis
Barcode	TH7250
Call No.	TH 629.73:681.586.4 SIN-S
Title	Analytical and numerical studies of laser wakefield acceleration in bubble in regime
Researcher	by Sonu Kumar
Department	Department of Physics, IITD
Year	2023
Supervisor	Mailk, Hitendra K. (Prof.) - PH Singh, Dhananjay K. (Asst. Prof.) - PH, BBMK Univ. Dhanbad
Physical description	xx, 90 p.
Subject terms	Electron density Radiation pressure Electromagnetic energy Electrons self-injection Laser pulse profile Ultrashort trapezoidal temporal pulse
Barcode	TH7251
Call No.	TH 533.9 SON-A
Title	Co-channel coexistence of secondary OFDM networks over active DTV bands
Researcher	by Anshul Thakur
Department	Department of Electrical Engineering, IITD
Year	2023
Supervisor	De, Swades (Prof.) EE

Physical description	xvi, 111 p.
Subject terms	5G technologies DTV networks Telecom networks Internet of things DTV networks LISP transmission scheme
Barcode	TH7252
Call No.	TH 621.391 THA-C
Title	Project management issues in mega construction projects
Researcher	by Om Prakash Tripathi
Department	Department of Civil Engineering, IITD
Year	2023
Supervisor	Jain, A. K. (Prof.) - CE Jha, Kumar Neeraj (Prof.) - CE
Physical description	xxv, 294 p.
Subject terms	Contract management Project management Comparative analysis Environmental performance Project delays Sustainable construction Green building Safety performance
Barcode	TH7253
Call No.	TH 69:658 TRI-P
Title	Stereoselective 1,4- and 1,6- addition to quinone methides
Researcher	by Amjad Ali
Department	Department of Chemistry, IITD
Year	2023
Supervisor	Singh, Ravi P. (Prof.) - CHY
Physical description	xx, 426 p.
Subject terms	Stereoselective reactions Brook rearrangement Chiral base-catalyzed cascade reaction Vinylogous Dialkylphosphite
Barcode	TH7254
Call No.	TH 544.12 ALI-S
Title	Dynamic flexibility studies in power systems
Researcher	by Debargha Brahma
Department	Department of Electrical Engineering, IITD
Year	2023
Supervisor	
Physical description	xix, 121 p.

Subject terms	Power system dynamics Inertia distribution Power system flexibility Eigenvalue sensitivity Network sensitivity
Barcode	TH7255
Call No.	TH 621.311 BRA-D
Title	Nano-biopesticides development using cow dung and cow urine against oligonychus coffeae nietner
Researcher	by Mansi Mishra
Department	Centre for Rural Development and Technology, IITD
Year	2023
Supervisor	Dashora, Kavya (Prof.) - CRDT Roy, Somnath (Sr. Scientist) - Tocklai Tea Research Institute, Assam
Physical description	xxvi, 201p.
Subject terms	Red spider mite Tea production Tea plants - Pest Pesticide treatment Biological synthesis - Iron oxide nanoparticle Biological synthesis - Zinc oxide nanoparticle
Barcode	TH7256
Call No.	TH 632.9 MIS-N
Title	Assessing the IT investment-performance paradigm in the commercial banking sector
Researcher	by Navendu Prakash
Department	Department of Management Studies, IITD
Year	2023
Supervisor	Singh, Shveta (Prof.) - MS Sharma, Seema (Prof.) - MS
Physical description	xxviii, 414p.
Subject terms	
Barcode	TH7257
Call No.	TH 336.7:681.3 PRA-A
Title	Light-induced organic transformations using homogeneous photocatalysis
Researcher	by Ritu
Department	Department of Chemistry, IITD
Year	2023
Supervisor	Jain, Nidhi (Prof.) - CHY

Physical description	xxvi, 434 p.
Subject terms	Photochemical processes Energy transfer Photocatalyst Hydrogen atom transfer Organophotoredox catalyst
Barcode	TH7258
Call No.	TH 544.526.5 RIT-L
Title	Physical layer security in energy harvesting cooperative networks
Researcher	by Kirti Kant Sharma
Department	Bharti School of Telecommunication Technology and Management, IITD
Year	2023
Supervisor	Bose, Ranjan (Prof.) - EE
Physical description	xiv,115 p.
Subject terms	Telecommunication networks Cooperative relaying Wireless communications RF energy harvesting Cooperative jamming
Barcode	TH7259
Call No.	TH 621.391:681.3-7 SHA-P
Title	Closed loop control analysis, speed sensorless operation and novel LC filter design criteria for VSI fed IM drive with output LC filter
Researcher	by Navneet Vaishnav
Department	Department of Electrical Engineering, IITD
Year	2023
Supervisor	Jain, Amit Kumar (Prof.) - EE
Physical description	xix, 137 p.
Subject terms	IM+LC filter system Rotor flux orientation PI Controllers Stator current controllers Stability region
Barcode	TH7260
Call No.	TH 621.313.333:621.372.52 VAI-C
Title	Nanofiber membrane-based water treatment systems for desalination and heavy metals removal
Researcher	by Pooja Yadav
Department	Centre for Rural Development and Technology, IITD
Year	2023
Supervisor	Vivek Kumar (Prof.) - CRDT

Physical description	xx, 150 p.
Subject terms	Global water scenario Water sources contamination Membrane distillation Electrospon nanofibrous membranes Heavy metal decontamination
Barcode	TH7261
Call No.	TH 628.16 YAD-N
Title	Studies on microbial L-asparaginases and amidases and their application in food industry
Researcher	by Shahenvaz Alam
Department	Department of Chemistry, IITD
Year	2023
Supervisor	Khare, S.K. (Prof.) - CHY
Physical description	xxix, 234 p.
Subject terms	Acrylamide formation Mitigation strategies Food products Chemosensor electroanalyses Fluorescence spectroscopy
Barcode	TH7262
Call No.	TH 664:577.15 ALA-S
Title	Deep leaf phenotyping
Researcher	by Swati Bhugra
Department	Department of Electrical Engineering, IITD
Year	2023
Supervisor	Chaudhury, Santanu (Prof.) - EE Lall, Brajesh (Prof.) - EE
Physical description	viii, 124 p.
Subject terms	Field phenotyping Cell level - stomata phenotyping Organ level - leaf phenotyping Plant level - three dimensional phenotyping Leaf level analysis
Barcode	TH7263
Call No.	TH 581.45:575.21 BHU-D
Title	Designing for the other
Researcher	by Abhishek Dahiya
Department	Department of Design, IITD
Year	2023
Supervisor	Jyoti Kumar (Assoc. Prof.) - DE

Physical description	xii, 276 p.
Subject terms	User research methods User centered design Digital product design Design empathy Neurophysiological studies
Barcode	TH7264
Call No.	TH 7.012 DAH-D
Title	Investigations of the magnetic anisotropy, exchange bias and ferromagnetic resonance in Co, Ni ₈₁ Fe ₁₉ and Co/Ir ₂₂ Mn ₇₈ thin films
Researcher	by Ekta
Department	Department of Physics, IITD
Year	2023
Supervisor	Chaudhary, Sujeet (Prof.) - PH
Physical description	xviii, 127 p.
Subject terms	Tunnel magnetoresistance Antiferromagnetic layer Magnetic tunnel junctions DC magnetron sputtering Magnetic anisotropy
Barcode	TH7265
Call No.	TH 537.6/.8 EKT-I
Title	Microemulsion based synthesis of ternary/quaternary lanthanum oxide-based nanomaterials and to study their electrochemical, magnetic, and related properties
Researcher	by Kirandeep
Department	Department of Chemistry, IITD
Year	2023
Supervisor	Ganguli, Ashok K.(Prof.) - CHY
Physical description	xxvii, 192 p.
Subject terms	Nanostructured La ₂ NiO ₄ Ruddlesden-Popper structure Orthorhombic crystal system Powder X-ray diffraction Linear sweep voltammetry
Barcode	TH7266
Call No.	TH 546.654:620.3 KIR-M
Title	Non-volatile memory-centric computing advances
Researcher	by Vivek Kamalkant Parmar
Department	Department of Electrical Engineering, IITD

Year	2023
Supervisor	Suri, Manan (Assoc. Prof.) - EE
Physical description	xxii, 150 p.
Subject terms	Artificial intelligence Non volatile inference accelerator Neural network simulation NVM-IMC primitives NVIA power analysis
Barcode	TH7267
Call No.	TH 621.377.6 PAR-N
Title	Self-organization and synthetic gauge field for ultra-cold bosons from- atom interaction inside a cavity
Researcher	by Poornima Shakya
Department	Department of Physics, IITD
Year	2023
Supervisor	Ghosh, Sankalpa (Prof.) - PH
Physical description	xxvi, 140 p.
Subject terms	Boss-hubbard model Holeystein - Primakoff approach Dicke Hamiltonian Bose-Hubbard model Artificial gauge fields
Barcode	TH7268
Call No.	TH 531.718 SHA-S
Title	Molecular characterization of a biosurfactant from Franconibacter sp. and its application in oil recovery
Researcher	by Jyoti Sharma
Department	Department of Biochemical Engineering and Biotechnology, IITD
Year	2023
Supervisor	Srivastava, Preeti (Prof.) - BEB Sunder, D. (Prof.) - BEB
Physical description	xxviii, 258 p.
Subject terms	Lipopeptides and lipoproteins Polymeric biosurfactants Thin layer chromatography RNA isolation Polymerase chain reaction
Barcode	TH7269
Call No.	TH 661.185:622.276 SHA-M
Title	Studies on catalytic decomposition of hydrogen iodide in sulphur iodine cycle for hydrogen production
Researcher	by Soni
Department	Department of Chemical Engineering, IITD

Year	2023
Supervisor	Bhaskarwar, Ashok N. (Prof.) - CHE
Physical description	xiv, 143 p.
Subject terms	Hydrogen iodide Metal-doped xerogel catalysts X-ray photoelectron spectroscopy (XPS) Iodine removal Noble metal based catalysts X-ray diffraction (XRD)
Barcode	TH7270
Call No.	TH 661.96 SON-S
Title	Synthesis of quasi two-dimensional transition metal dichalcogenides (2D TMDs) for efficient photo-electrochemical and photodetector applications
Researcher	by Priyanka Yadav
Department	Department of Chemistry, IITD
Year	2023
Supervisor	Ganguli, Ashok K. (Prof.) CHY
Physical description	xxiv, 158 p.
Subject terms	Optoelectronic devices Characterization techniques Photovoltaic effect Power X-ray diffraction Atomic force microscopy Linear sweep voltammetry
Barcode	TH7271
Call No.	TH 546.30:621.383.4 YAD-S
Title	Lignocellulosic biomass valorisation using deep eutectic solvents for sustainable biorefineries
Researcher	by Vallari R. Chourasia
Department	IIT Delhi and University of Queensland
Year	2023
Supervisor	Pant, K. K. (Prof.) - CHE Henry, Robert (Prof.) - University of Queensland, Australia
Physical description	xxi, 243 p.
Subject terms	Biorefinery DES pre- treatment Enzymatic saccharification Thermogravimetric analysis Greenhouse gases
Barcode	TH7272
Call No.	TH 620.9:662.6 CHO-L

Title	Theoretical insights of defects in modulating functional properties of various advanced energy materials
Researcher	by Deepika Gill
Department	Department of Physics, IITD
Year	2023
Supervisor	Bhattacharya, Saswata (Prof.) - PH
Physical description	xix, 172 p.
Subject terms	New energy materials Energy demands Hume - Rothery rules Density functional theory Molecular dynamics Ruddlesden popper phases Wannier-Mott approach
Barcode	TH7273
Call No.	TH 620.91 GIL-T
Title	Fabrication and investigations on the sputtered CoFeB based heterostructures comprising of transition metal dichalcogenides and heavy metals
Researcher	by Nanhe Kumar Gupta
Department	Department of Physics, IITD
Year	2023
Supervisor	Chaudhary, Sujeet (Prof.) - PH
Physical description	xxix, 175 p.
Subject terms	Spintronics Ferromagnetic resonance Spintronics based memory devices Microscopy Magnetization
Barcode	TH7274
Call No.	TH 537.6/.8:621.377 GUP-F
Title	Understanding information propagation in social media
Researcher	by Nimish Joseph
Department	Department of Management Studies, IITD
Year	2023
Supervisor	Kar, Arpan Kumar (Prof.) - MS Ilavarasan, P. Vigneswara (Prof.) - MS
Physical description	xvi, 158 p.
Subject terms	Social media platform Information propagation Social media analytics Group theories and social media Hashtags information convergence

Barcode	TH7275
Call No.	TH 316.774 JOS-U

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