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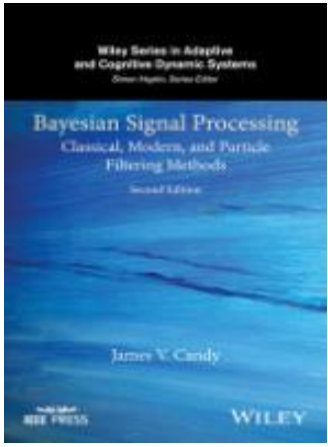
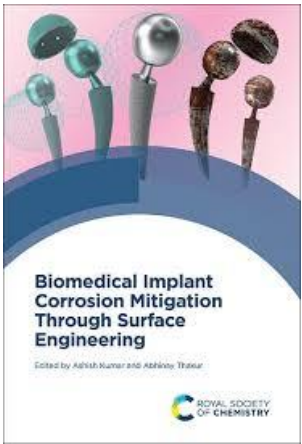
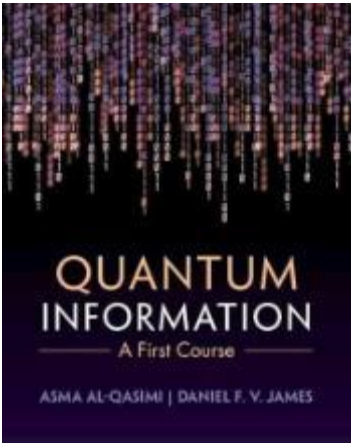
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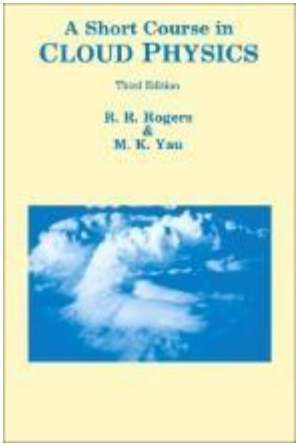
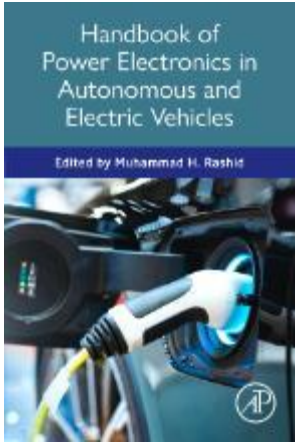
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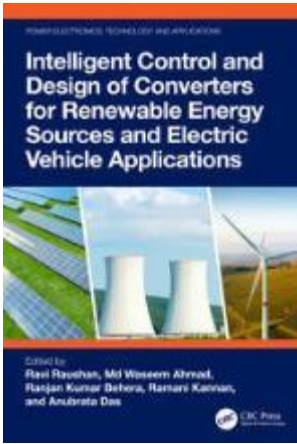
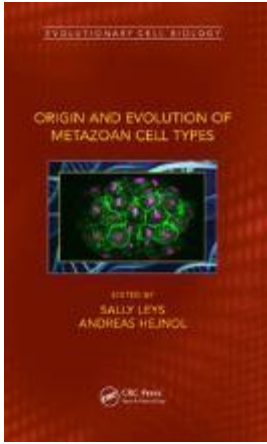
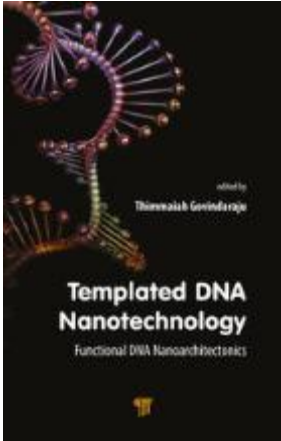
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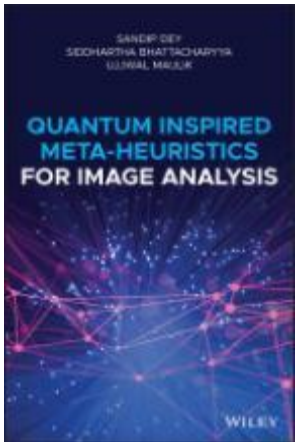
Applied Research in Electronics

1		Bayesian signal processing: classical, modern, and particle filtering methods by James V. Candy, 2nd ed. Hoboken: Wiley, 2016. xxxii, 601 p., - Adaptive and cognitive dynamic systems. Includes index (p. 585-601) ISBN: 9781119125457 Subject Terms: Markov chains; Gibbs sampling; Discrete system; Statistical linearization; Radionuclide detection 621.391:519.226 CAN-B Barcode: 182052; CARE Click here for more details.
2		Biomedical implant corrosion mitigation through surface engineering edited by Ashish Kumar and Abhinav Thakur, . London: Royal Society of Chemistry, 2025. xvi, 419 p., Includes index (p. 403-419) ISBN: 9781837673759 Subject Terms: Biocompatible metal; Surface engineering; Computational modeling; Corrosion control; Neural implants 616-77:532.6 -BIO Barcode: 182001; CL Click here for more details.
3		Quantum information: a first course by Asma Al-Qasimi and Daniel F. V. James,. Cambridge: Cambridge University Press, 2025. xiii, 301 p., Includes index (p. 298-301) ISBN: 9781009514729 Subject Terms: Quantum technologies; Distributed computing; Quantum physics; Metrology; Quantum algorithms 530.145:004 ALQ-Q Barcode: 182034; CL Click here for more details.

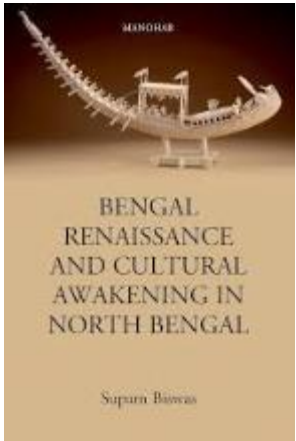
4		Short course in cloud physics by R. R. Rogers and M.K. Yau, 3rd ed. Oxford: Elsevier, 1989. xiv, 290 p., - International series in natural philosophy. Includes index (p. 285-290) ISBN: 9780750632157 Subject Terms: Thermodynamics; Atmospheric stability; Hydrostatic equilibrium; Brown model; Radar equation 551.576 ROG-S Barcode: 182084; CL Click here for more details.
Automotive Research and Tribology		
5		Cooperative intelligent transport systems: control and management Coordinated by Léo Mendiboure,. Hoboken: Wiley, 2024. xi, 346 p., - ISTE Consignment. Includes index (p. 345-346) ISBN: 9781789451801 Subject Terms: Network optimization; Communication and technology; Vehicular wireless communication; Security and privacy; Transportation systems 629:004.85 -COO Barcode: 182078; CL Click here for more details.
6		Handbook of power electronics in autonomous and electric vehicles edited by Muhammad H. Rashid,. London: Academic Press, 2024. x, 358 p., Includes index (p. 353-358) ISBN: 9780323995450 Subject Terms: Autonomous vehicle - Handbooks, manuals, etc.; Artificial intelligence - Handbooks, manuals, etc.; Power transfer - Handbooks, manuals, etc.; Marine vehicle - Handbooks, manuals, etc.; Radar architecture - Handbooks, manuals, etc. RL-HB 629.064.5 -HAN Barcode: 182054; CL Click here for more details.

7		Intelligent control and design of converters for renewable energy sources and electric vehicle applications edited by Ravi Raushan... (et. al.), Boca Raton: CRC Press, 2026. xi, 260 p., Includes index (p. 257-260) ISBN: 9781032849591 Subject Terms: Power converter; Vehicle charging; Machine learning; Renewable energy; Microinverters 621.314:620.91 -INT Barcode: 182048; CL Click here for more details.
Biochemical Engineering and Biotechnology		
8		Origin and evolution of metazoan cell types edited by Sally Leys and Andreas Hejnol,. Boca Raton: CRC Press, 2021. xviii, 168 p., - Evolutionary Cell Biology. Include index (p. 165-168) ISBN: 9781138032699 Subject Terms: Animal cell; Excretory organs; Epithelial cell; Homology; Cellular biology 576:575.8 -ORI Barcode: 182092; CL Click here for more details.
9		Templated DNA nanotechnology: functional DNA nanoarchitectonics edited by Thimmaiah Govindaraju, . Singapore: Pan Stanford Publishing, 2019. xvii, 426 p., Includes index (p. 409-426) ISBN: 9789814800211 Subject Terms: Multichromophore; Supramolecular; Nanotechnology; Oligonucleotides; Biomolecule detection 577.213.3:620.3 -TEM Barcode: 182093; CL Click here for more details.

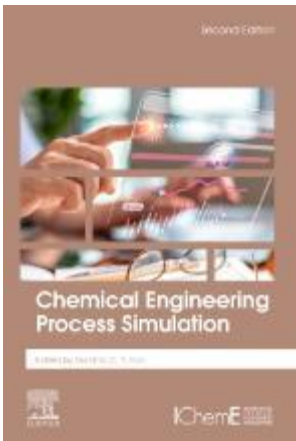
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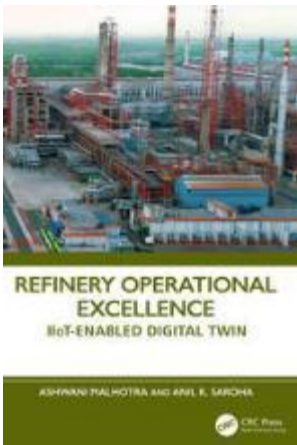
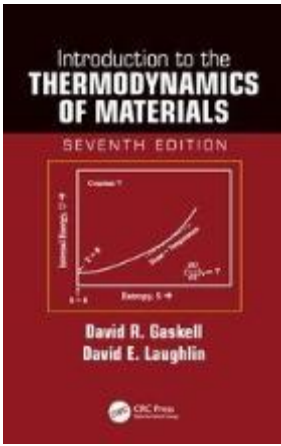
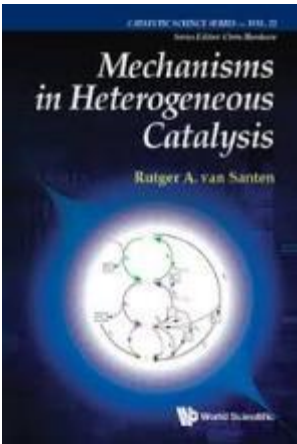
10		Quantum inspired meta-heuristics for image analysis by Sandip Dey, Siddhartha Bhattacharyya and Ujjwal Maulik, . Hoboken: Wiley, 2019. xvi, 358 p., Includes bibliography and index (p. 337-358) ISBN: 9781119488750 Subject Terms: Heuristic algorithms; Computational intelligence; Image segmentation; Metaheuristic; Quantum computing 530.145:004.932 DEY-Q Barcode: 182033; CL Click here for more details.
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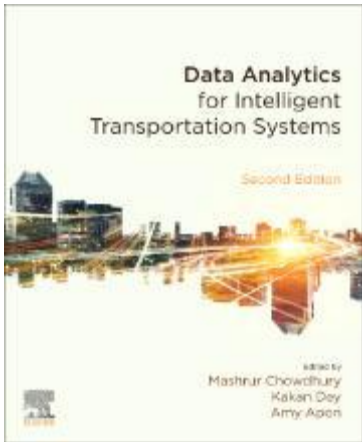
11		Bengal renaissance and cultural awakening in North Bengal by Supam Biswas, . New Delhi: Manohar Publishers & Distributors, 2026. 185 p., Includes bibliography & index (p. 169-185) ISBN: 9789360805289 Subject Terms: Brahmo samaj; Change in education; Social reform; Rationalism; Folk traditions 316.7:94(541.2) BIS-B Barcode: 182029; CL Click here for more details.
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Chemical Engineering

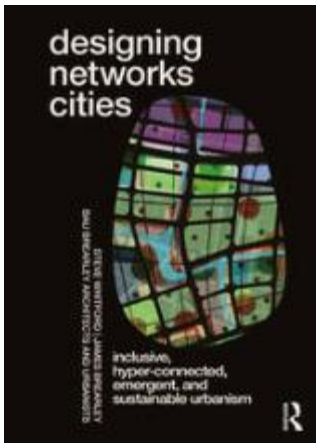
12		Chemical engineering process simulation edited by Dominic C. Y. Foo, 2nd ed. Oxford: Elsevier, 2023. xxiii, 471 p., Includes index (p. 469-471) ISBN: 9780323901680 Subject Terms: Recycle streams; Wastewater treatment Plant; Flexible design strategy; Distillation Processes; Natural gas dehydration process 66.0:004.94 -CHE Barcode: 182091; CL Click here for more details.

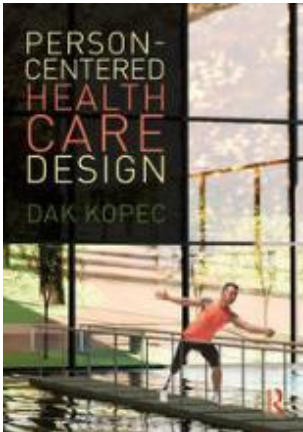
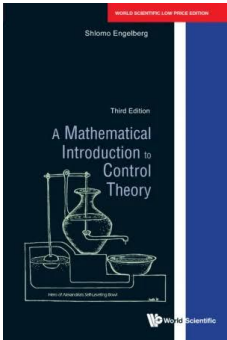
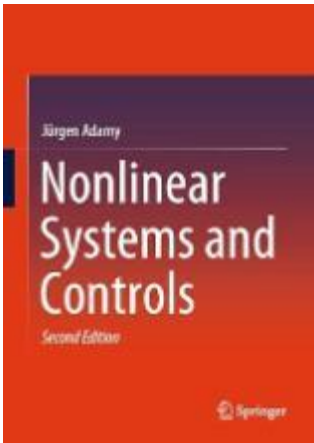
13		Refinery operational excellence IIoT-enabled digital twin by Ashwani Malhotra and Anil K. Saroha, . Boca Ration: CRC Press, 2026. xviii, 155 p., Includes index (p. 153-155) Author(s) with IITD affiliation: Ashwani Malhotra and Anil K. Saroha ISBN: 9781041223184 Subject Terms: Smart refinery; Fired heater; Heat exchanger; Sour water stripper; Process optimization 665.62:004.85 MAL-R Barcode: 182035; CL Click here for more details.
Chemistry		
14		Introduction to the thermodynamics of materials by David R. Gaskell and David E. Laughlin, 7td ed. Boca Raton: CRC Press, 2025. xviii, 676 p., Includes index (p. 663-676) ISBN: 9781032450995 Subject Terms: Materials science; Heat capacity; Phase equilibria; Electrochemistry; Behavior of gases 620.1:536.7 GAS-I Barcode: 182082-182083; CL-CHY Click here for more details.
15		Mechanisms in heterogeneous catalysis by Rutger A. van Santen,. London: World Scientific Publishing, 2024. xx, 696 p. - Catalytic science series. Includes index (p. 693-696) ISBN: 9781800614000 Subject Terms: Catalyst design; Zeolite catalysts; Hydrocarbon conversion; Catalyst characterization; Petrochemical processes 544.47:544.344 VAN-M Barcode: 182015; CHY Click here for more details.

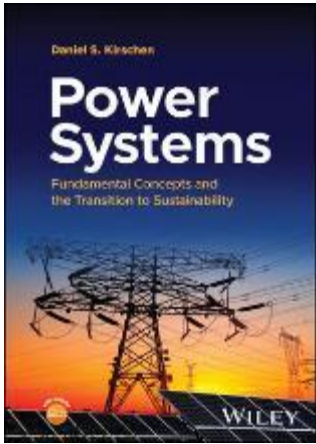
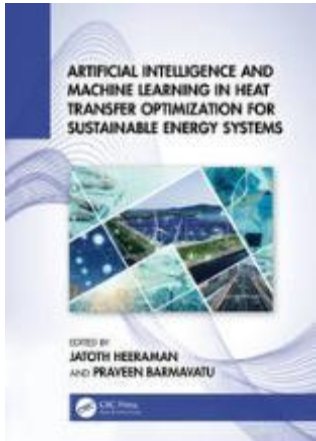
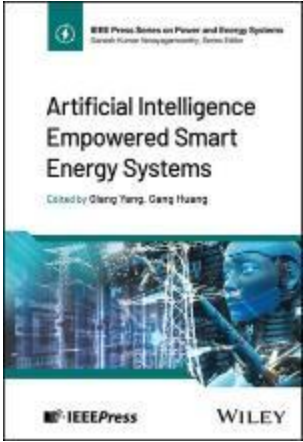
Civil and Environmental Engineering

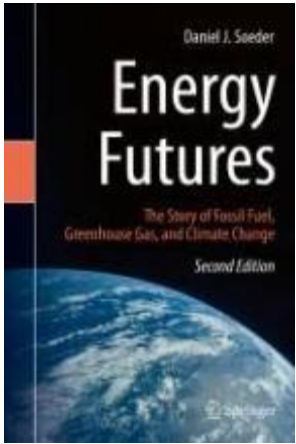
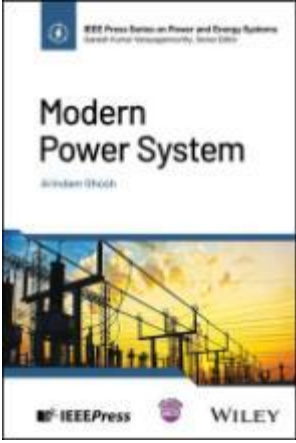
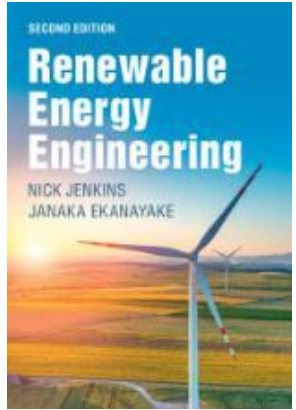
16		Data analytics for intelligent transportation systems edited by Mashrur Chowdhury, Kakan Dey and Amy Apon, 2nd ed. Amsterdam: Elsevier, 2024. xxiv, 447 p., Includes index (p. 429-447) ISBN: 9780443138782 Subject Terms: Data science; Data infrastructure; Data pipelines; Machine learning; Cryptography 629:004.6 -DAT Barcode: 182006; CL Click here for more details.
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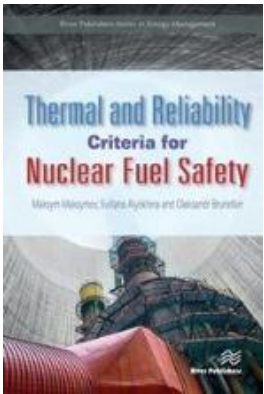
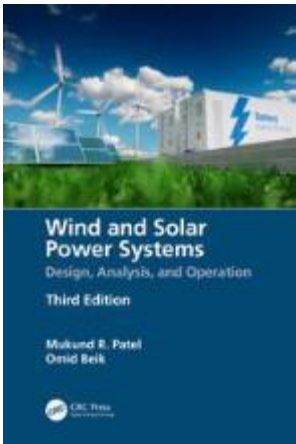
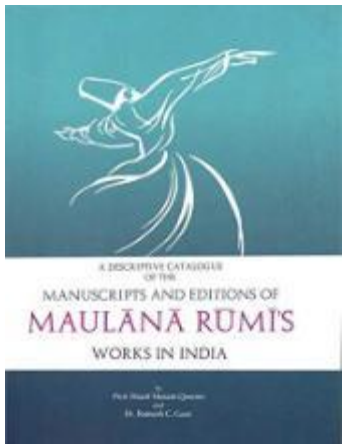
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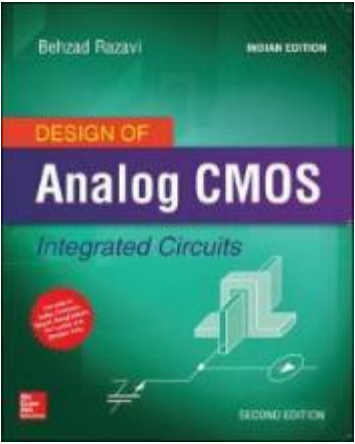
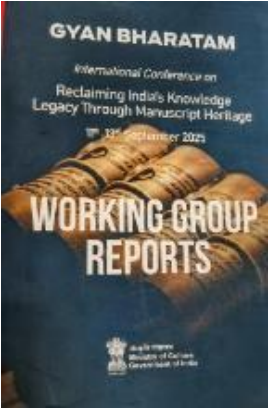
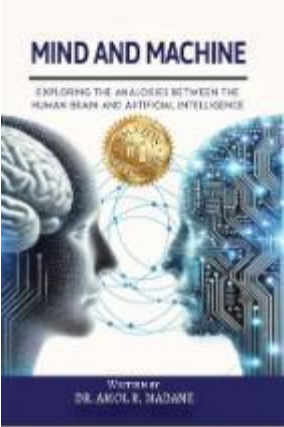
17		Contemporary museum architecture and design: theory and practice of place edited by Georgia Lindsay,. New York: Routledge, 2020. xv, 344 p., Includes index (p. 333-344) ISBN: 9780367075248 Subject Terms: Museum studies; Architectural design; Transformational architecture; Conservation; Sustainable design 727:069 -CON Barcode: 182036; CL Click here for more details.
18		Designing networks cities: inclusive, hyper-connected, emergent, and sustainable urbanism by Steve Whitford and James Brearley, New York: Routledge, 2024. viii, 334p. ISBN: 9781032546599 Subject Terms: Urban design; 3D modelling; City traffic planning; Juxtaposition; Planning and development 711.4:502.131.1 WHI-D Barcode: 182037; CL Click here for more details.

19		Person-centered health care design by Dak Kopec, . New york: Routledge, 2021. xxiv, 314 p. Includes index (p. 305-314) ISBN: 9780367194871 Subject Terms: Neurological disorders; Cognitive disabilities; Environmental psychology; Psychosis and neurosis; Sociocultural beliefs 725.1:614.21 KOP-P Barcode: 182038; CL Click here for more details.
Electrical Engineering		
20		Mathematical introduction to control theory by Shlomo Engelberg, 3rd ed. London: World Scientific Publishing, 2026. xxvi, 456 p., - Series in electrical and computer engineering. Includes bibliography and index (p. 447-456) ISBN: 9798886131772 Subject Terms: Transfer fuction; Matlab; Root locus; Agruement; Roots of polynomials 517.977 ENG-M Barcode: 182024; CL Click here for more details.
21		Nonlinear systems and controls by Jurgen Adamy, 2nd ed. Berlin: Springer, 2024. xvi, 750 p., Includes bibliography and index (p. 707-750) ISBN: 9783662686898 Subject Terms: Linearization; Controllability and flatness; Fuzzy control; Chemical reactor; Equilibrium points 681.511.4 ADA-N Barcode: 182025; CL Click here for more details.
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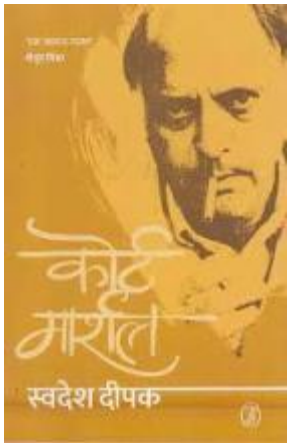
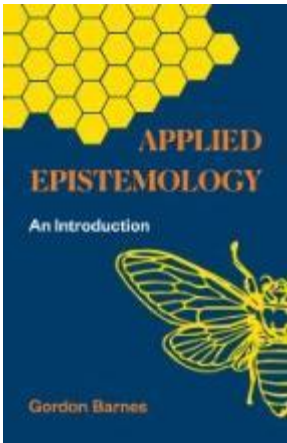
22		Power systems: fundamental concepts and the transition to sustainability by Daniel S. Kirschen, Hoboken: wiley, 2024. xix,316 p., Includes index (p. 307-316) ISBN: 9781394199501 Subject Terms: Wind Generation; Thermal Generation; Converter Operation; Three-Phase Transforme; Wind Turbine 621.311 KIR-P Barcode: 182007; CL Click here for more details.
Energy Science and Engineering		
23		Artificial intelligence and machine learning in heat transfer optimization for sustainable energy systems edited by Jatoth Heeraman and Praveen Barmavatu, . Boca Raton: CRC Press, 2026. xv, 356 p., Includes index (p. 355-356) ISBN: 9781041089698 Subject Terms: Clean Technologies; Deep Learning; Neural networks; Thermal management; Geothermal energy 620.9:004.85 -ART Barcode: 182051; CES Click here for more details.
24		Artificial intelligence empowered smart energy systems edited by Qiang Yang and Gang Huang,. Hoboken: Wiley, 2026. xxviii, 324 p., - IEEE press series on power and energy systems. Include index (p. 315-324) ISBN: 9781394253616 Subject Terms: Radial topology; Cybersecurity; Machine learning; Data Security; Carbon emission 621.311:004.85 -ART Barcode: 182021; CL Click here for more details.

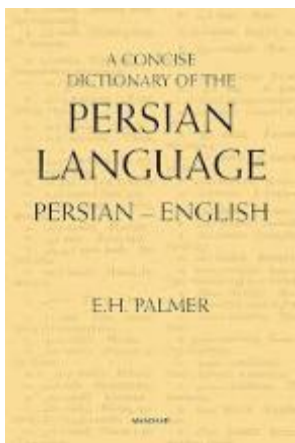
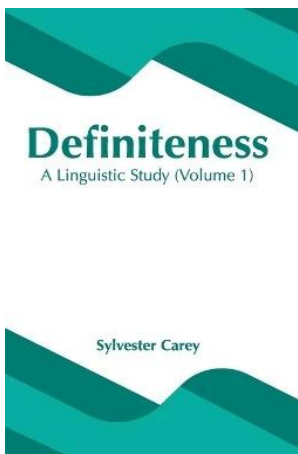
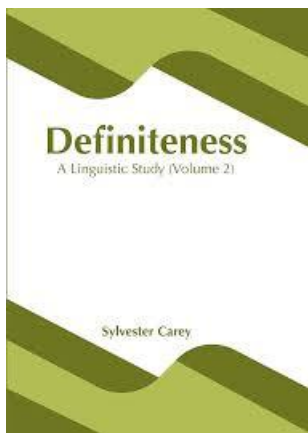
25		Energy futures: the story of fossil fuel, greenhouse gas, and climate change by Daniel J. Soeder, 2nd ed. Cham: Springer, 2025. xiv, 378 p., Includes index (p. 375-378) ISBN: 9783031836022 Subject Terms: Geoengineering; Zero carbon vehicle; Biofuel; Mitigation; Solar radiation management 620.9 SOE-E Barcode: 182026-182027; CL; ESE Click here for more details.
26		Modern power system by Arindam Ghosh, Hoboken: Wiley, 2026. xxv, 558 p., - IEEE press series on power and energy systems. Includes index (p. 553-558) ISBN: 9781394289912 Subject Terms: Phasor analysis; Voltage stability; Inverter operations; Tidal energy; Sensors system 621.311 GH0-M Barcode: 182016; CL Click here for more details.
27		Renewable energy engineering by Nick Jenkins and Janaka Ekanayake, 2nd ed.. Cambridge: Cambridge University Press, 2024. xx, 509 p., Includes index (p. 507-509) ISBN: 9781009295765 Subject Terms: Solar thermal systems; Heat transfer; Wind energy; Hydro power; Photovoltaic systems 620.91 JEN-R Barcode: 182017; CL Click here for more details.
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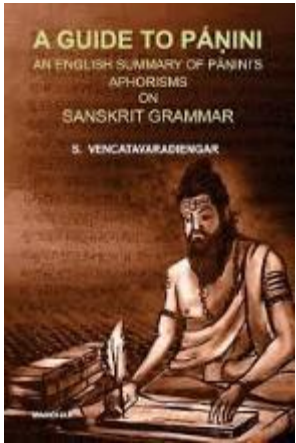
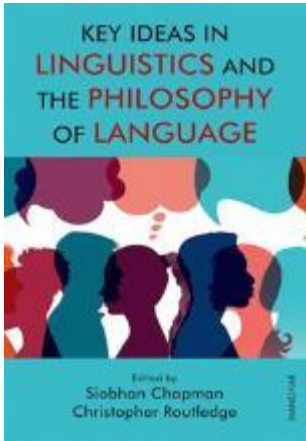
28		Thermal and reliability criteria for nuclear fuel safety by Maksym Maksymov, Svitlana Alyokhina and Oleksandr Brunetkin,. Gistrup: River Publishers, 2021. xxv, 260 p., - River publishers series in energy management. Includes index, (p. 257-258) ISBN: 9788770042659 Subject Terms: Physical safety; Fuel cladding; Thermal safety; Heat exchange modeling; Dry storage 621.039.58 MAK-T Barcode: 182018; CL Click here for more details.
29		Wind and solar power systems: design, analysis, and operation by Mukund R. Patel and Omid Beik, 3rd ed.. Boca Raton: CRC Press, 2025. xxi, 383 p. Includes index (p. 369-383) ISBN: 9780367476939 Subject Terms: Electrical generators; Offshore wind farms; Photovoltaic power systems.; Energy storage; Power electronics 621.311.243/.245 PAT-W Barcode: 182085; CES Click here for more details.
Gratis		
30		Descriptive catalogue of the manuscripts and editions of maulana Rumi's work in India by Sharif Husain Qasemi and Ramesh C. Gaur, . New Delhi: Indira Gandhi National Centre for the Arts Ministry of Culture, 2018. 192 p. Includes bibliography and index (p. 171-192) ISBN: 9789380935928 Subject Terms: Jalāl al-Dīn Rūmī, Maulana, 1207-1273.; Persian manuscript catalogues; Sufism; Poets - Persian; Persian literature 018:811.1/.2(540) QAS-D Barcode: G24119; CL Click here for more details.

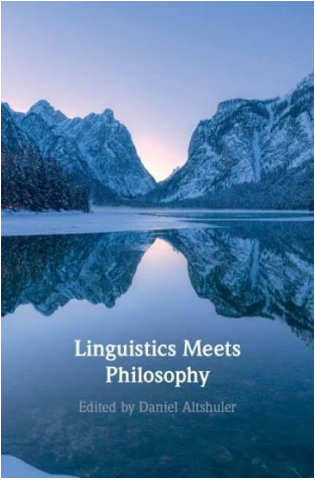
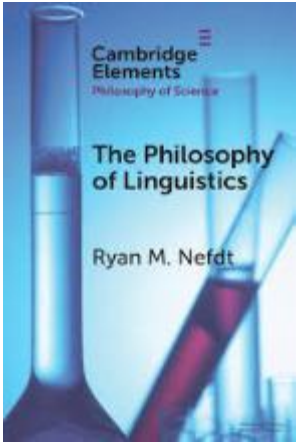
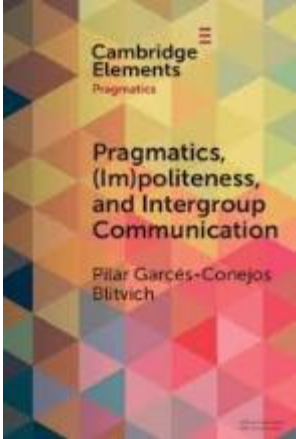
31		Design of analog CMOS integrated circuits by Behzad Razavi, 2nd ed. New York: McGraw Hill Education, 2018. xviii, 782 p. Includes index (p. 774-788) ISBN: 97893887067844 Subject Terms: Differential amplifier; Differential gain; Frequency response; Threshold voltage; Differential gain 621.382 RAZ-D Barcode: G24121; CL Click here for more details.
32		Gyan Bharatam: working group reports edited by Amita Prasad Sarbhi, Sachidanand Joshi and Ramesh C. Gaur, New Delhi: Ministry of Culture Government of India, 2025. 249 p. Subject Terms: Documentation; Metadata standards; Digital archiving; Manucriptology and palareography; Digitization tools 008:09(540) -GYA Barcode: G24120; CL Click here for more details.
33		Mind and machine: Exploring the analogies between the human brain and artificial intelligence Amol R. Madane, New Delhi: Adhyyan Books, 2024. vii, 180 p. ISBN: 9789358472875 Subject Terms: Artificial neurons; Neural networks; Brain connectivity; Neuroscience; Artificial general intelligence 159.95:004.85 MAD-M Barcode: G24118; CL Click here for more details.

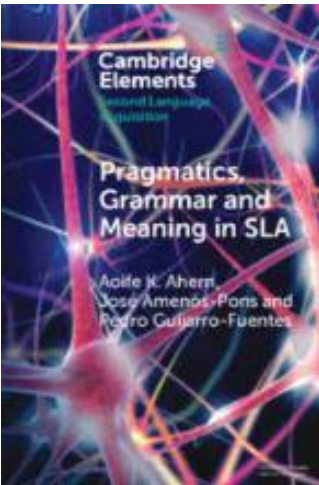
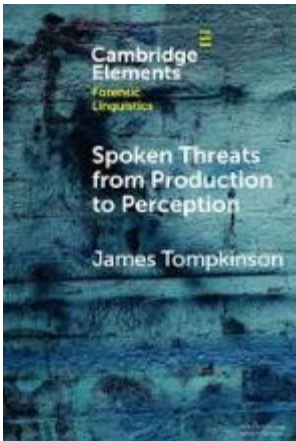
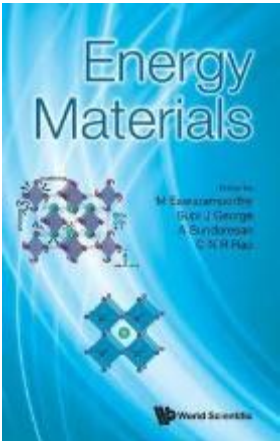
Hindi Cell

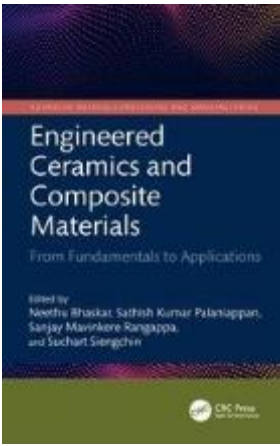
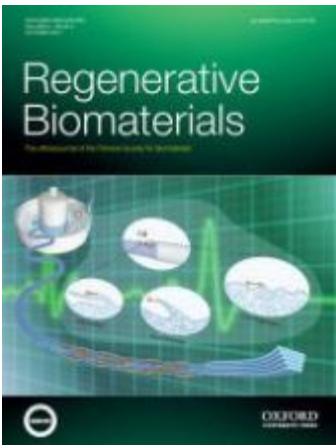
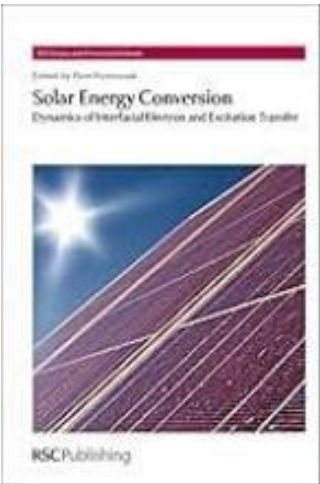
34		Aawara bheed ke khatare (आवारा भीड़ के खतरे) by Harishankar Parsai, 15th ed.. New Delhi: Rajkamal Prakashan, 2025. 155 p., ISBN: 9788126708635 Subject Terms: Insecurity; Fear; Violence; Loss of life; Property damage H 82-3 PAR-A Barcode: H437; CL Click here for more details.
35		Court martial (कोर्ट मार्शल) by Swadesh Deepak, . New Delhi: Vani prakashan, 2024. 104 p., ISBN: 9789355181305 Subject Terms: Military law; Disciplinary action; Charge sheet; Accused; Evidence H 82-2 SWA-C Barcode: H436; CL Click here for more details.
Humanities and Social Sciences		
36		Applied epistemology: an introduction by Gordon Barnes, Indiana: Hackett Publishing, 2025. xiv, 215 p., Includes index (p. 213-215) ISBN: 9781647922313 Subject Terms: Human understanding; Testimony; Critical thinking; Knowledge acquisition; Intellectual humility 165 BAR-A Barcode: 181999; CL Click here for more details.

37		Concise dictionary of the Persian language: Persian-English by E.H. Palmer, 3rd ed. New Delhi: Manohar Publishers and Distributors, 2021. 722 p., ISBN: 9789390729708 Subject Terms: Persian and english - Dictionaries; Language - Dictionaries; Johnson's Persian - Dictionaries; Nicolas's dialogues - Dictionaries; Persian-french vocabulary - Dictionaries RL-DC 811.1/.2'374 PAL-C Barcode: 182061; CL Click here for more details.
38		Definiteness: a linguistic study edited by Sylvester Carey, . New York: Murphy and Moore Publishing, 2022. 275 p., Includes index (p. 274-275) Vol. 1 ISBN: 9781639871520 Subject Terms: Cross-linguistic variation; Grammatical definiteness; Semantics; Definiteness across languages; Language typology 81'37 -DEF Barcode: 181993; CL Click here for more details.
39		Definiteness: a linguistic study edited by Sylvester Carey, New York: Murphy and Moore Publishing, 2022. 196 p., Includes index (p. 195-196) Vol. 2 ISBN: 9781639871537 Subject Terms: Anaphoricity in languages; Cross-linguistic variation; bare and institutional singulars; Semantics; Definiteness across languages 81'37 -DEF Barcode: 181994; CL Click here for more details.
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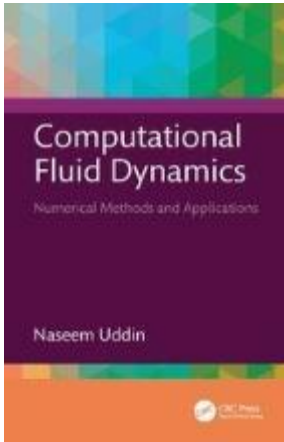
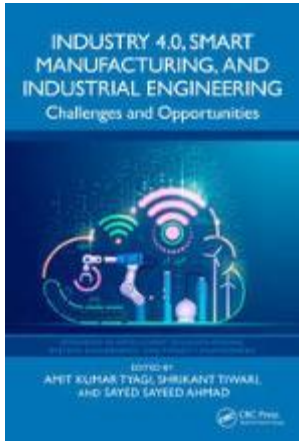
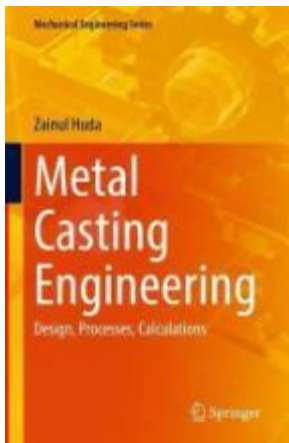
40		Essentials of economics by Paul Krugman and Robin Wells, 6th ed. New York: Macmillan Learning, 2023. v.p., Includes index ISBN: 9781319498573 Subject Terms: Supply and demand; Elasticity and Taxation; Microeconomics; Monetary policy; Unemployment and inflation 330.1 KRU-E Barcode: 182022; CL Click here for more details.
41		Guide to panini: an english summary of panini's aphorisms on Sanskrit Grammar by S. Vencatavaradiengar, . New Delhi: Manohar Publishers and Distributer, 2026. 1328 p., Includes index (p. 1235-1328) ISBN: 9789360800130 Subject Terms: Pronunciation; Nasal vowels; Grammatical principle; Homogeneous letters; Verbal affixes 811.21/22'36 VEN-G Barcode: 182060; CL Click here for more details.
42		Key ideas in linguistics and the philosophy of language edited by Siobhan Chapman and Christopher Routledge,. New Delhi: Manohar Publisher and Distributor, 2026. xi, 258 p., Includes index(p. 253-258) ISBN: 9789374516263 Subject Terms: Poststructuralism; Analytical philosophy; Phonology; Language games; Phoneme 81:1 -KEY Barcode: 182062; CL Click here for more details.

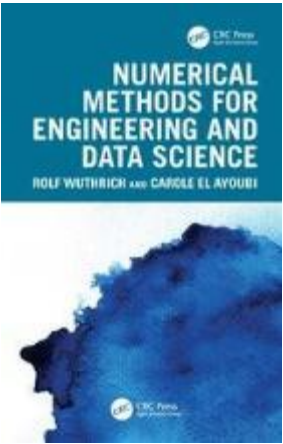
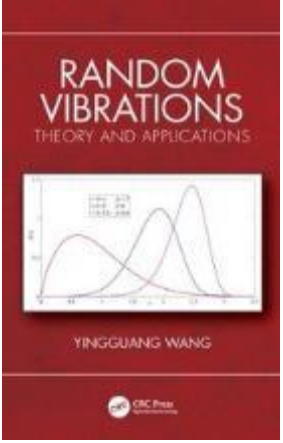
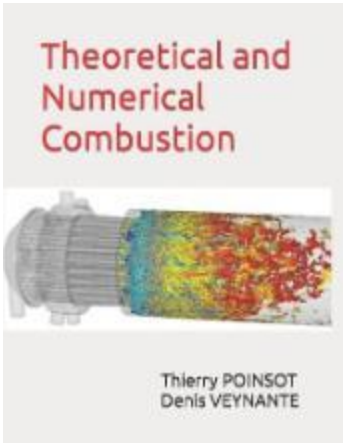
43		Linguistics meets philosophy edited by Daniel Altshuler,. Cambridge: Cambridge University Press, 2025. lvi, 551 p., Includes index (p. 534- 551) ISBN: 9781108720021 Subject Terms: Linguistic angle; Ontology; Typology of semantics; Vagueness and discourse; Narrative 81:101 -LIN Barcode: 182008; CL Click here for more details.
44		Philosophy of linguistics by Ryan M. Nefdt,. Cambridge: Cambridge University Press, 2025. 82 p., - Elements in the philosophy of science. Includes bibliography (p. 62-82) ISBN: 9781009491969 Subject Terms: Linguistic theory; Generative grammar; Large language models; Scientific modelling; Philosophy of science 81:1 NEF-P Barcode: 182009; CL Click here for more details.
45		Pragmatics, (Im)politeness, and intergroup communication: a multilayered, discursive analysis of cancel culture by Pilar Garcés-Conejos Blitvich, Cambridge: Cambridge University Press, 2024. 93 p., - Elements in pragmatics. Includes bibliography (p. 80-93) ISBN: 9781009184380 Subject Terms: Language and linguistics; Sociolinguistics; Discourse analysis; Semantics; Communication 81'27 BLI-P Barcode: 182010; CL Click here for more details.
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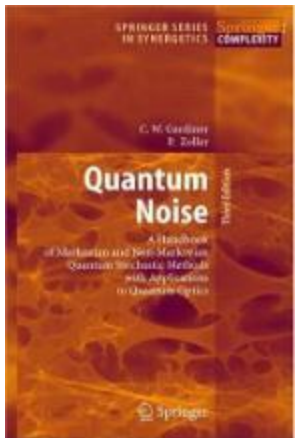
46		Pragmatics, grammar and meaning in SLA by Aoife K. Ahern, Jose Aménos-Pons and Pedro Guijarro-Fuentes, Cambridge: Cambridge University Press, 2024. 77 p., - Elements in second language acquisition. Includes bibliography (p. 59-77) ISBN: 9781009011822 Subject Terms: Second language learning; Linguistics; Semantics; Procedural meaning; Generative grammar 81'232 AHE-P Barcode: 182011; CL Click here for more details.
47		Spoken threats from production to perception by James Tompkinson, Cambridge: Cambridge University Press, 2024. 63 p., - Elements in forensic linguistics. Includes bibliography (p. 59-63) ISBN: 9781009293013 Subject Terms: Forensic linguistics; Language crimes; Threats; Language and law; Speech perception 81'34:340.6 TOM-S Barcode: 182012; CL Click here for more details.
Materials Science and Engineering		
48		Energy materials edited by M Eswaramoorthy... (et al.). Singapore: World Scientific Publishing, 2023. vii, 373 p., ISBN: 9789811270949 Subject Terms: Photovoltaics; Thermoelectric materials; Electrochemical; Nuclear energy; Supramolecular 620.1:620.9 -ENE Barcode: 182076; CL Click here for more details.
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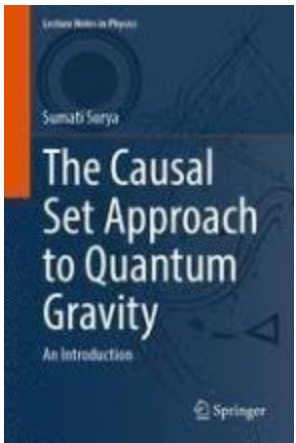
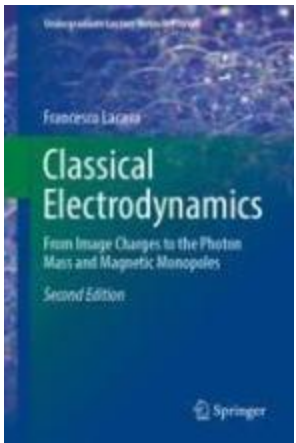
49		Engineered ceramics and composite materials: from fundamentals to applications edited by Neethu Bhaskar... (et al.), Boca Raton: CRC Press, 2026. xi, 276 p., - Advanced materials processing and manufacturing. Includes index (p. 255-276) ISBN: 9781032804583 Subject Terms: Material science; Ceramic and glasses; Physical science; Nanoceramics; Photocatalytic 666:620.1 -ENG Barcode: 182000; CL Click here for more details.
50		Regenerative biomaterials by Yvonne Reinwald,. Kalispell: Silver Dove Press, 2026. 164 p., Includes reference (p. 160-164) ISBN: 9789373912325 Subject Terms: Muscle tissue; Nanovesicles; Polysaccharide biopolymers; Graphitic carbon; Electrospinning 615.46:616-08 REI-R Barcode: 182077; CL Click here for more details.
51		Solar energy conversion: dynamics of interfacial electron and excitation transfer edited by Piotr Piotrowiak,. Cambridge: Royal Society of Chemistry, 2013. xvi, 379 p., - Energy and Environment Series. Includes index (p. 371-379) ISBN: 9781849733878 Subject Terms: Computational modeling; Photoelectrochemical; Semiconductor; Optical spectroscopy; Quantum mechanics 621.311.243 -SOL Barcode: 182088; CL Click here for more details.

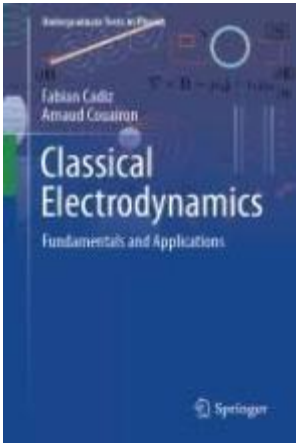
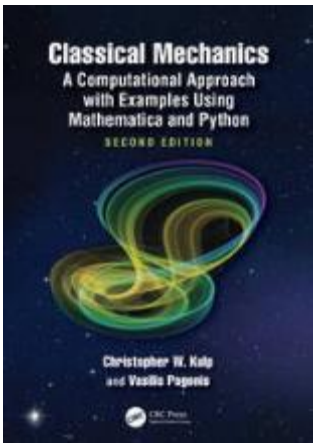
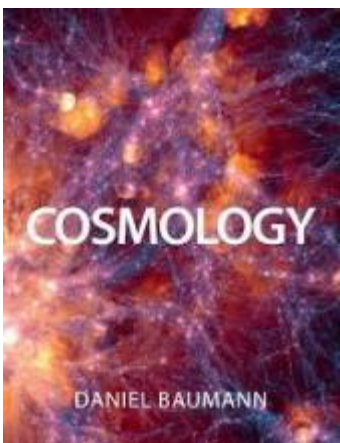
Mechanical Engineering

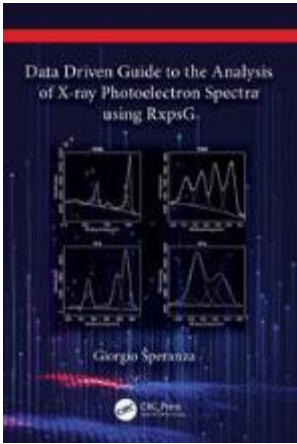
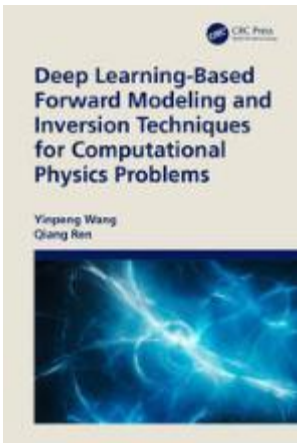
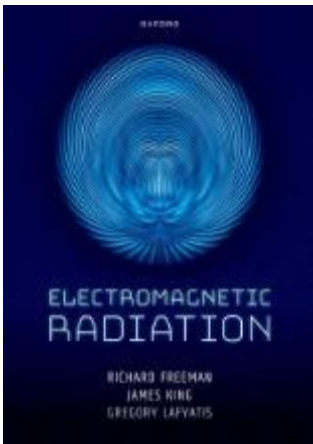
52		Computational fluid dynamics: numerical methods and applications by Naseem Uddin,. Boca Raton: CRC Press, 2026. xxv, 639 p., Includes index (p. 637-639) ISBN: 9781041121367 Subject Terms: Diffusion problem; Von neumann procedure; Leapfrog scheme; Fluid mechanics; Turbulence models 532.5:519.6 UDD-C Barcode: 181997; CL Click here for more details.
53		Industry 4.0, smart manufacturing, and industrial engineering: challenges and opportunities edited by Amit Kumar Tyagi, Shrikant Tiwari and Sayed Sayeed Ahmad,. Boca Raton: CRC Press, 2025. xxiv, 364 p., - Advances in intelligent decision-making, systems engineering, and project management. Includes index (p. 363-364) ISBN: 9781032754116 Subject Terms: Big data analytics; Machine learnig; Data visualization; Blockchain management; Robotics 658.5:004 -IND Barcode: 182043; CL Click here for more details.
54		Metal casting engineering: design, processes, calculations by Zainul Huda, Cham: Springer, 2025. xvii, 290 p. Mechanical engineering series. Includes index (p. 287-290) ISBN: 9783031846199 Subject Terms: Cold blast cupola; Metals and alloys; Casting processes; Machanical testing; Ultrasonic inspection 621.746 HUD-M Barcode: 181998; CL Click here for more details.

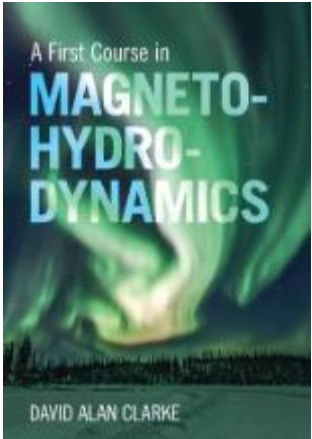
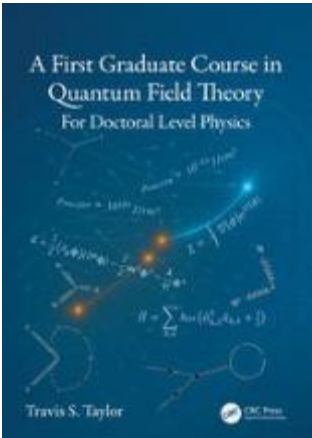
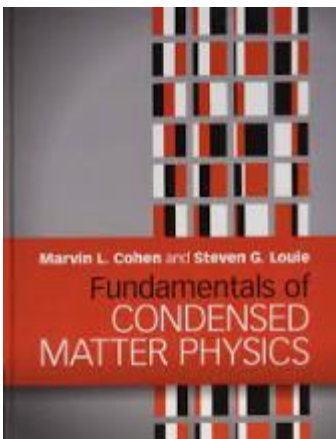
55		Numerical methods for engineering and data science by Rolf Wuthrich and Carole EL Ayoubi, . Boca Raton: CRC Press, 2025. xvii, 459 p., Includes index (p. 439-459) ISBN: 9781032200699 Subject Terms: Numerical analysis; Orthogonality; Numerical errors; Polynomial interpolation; Euler's algorithm 519.6:004.6 WUT-N Barcode: 182032; CL Click here for more details.
56		Random vibrations: theory and applications by Yingguang Wang, . Boca Raton: CRC Press, 2025. xv, 437 p., Includes bibliography and index (p. 429-437) ISBN: 9781032556390 Subject Terms: Binomial distribution; Spectral analysis; Autocorrelation function; Noise process; Houbolt method 534.01:519.2 WAN-R Barcode: 182042; CL Click here for more details.
57		Theoretical and numerical combustion by Thierry Ponsot and Denis Veynante, 3rd ed.. Paris: National centre for scientific research, 2022. xvi, 574 p., Includes bibliography and index (p. 527-574) ISBN: 9782746639904 Subject Terms: Thermochemistry; Laminar diffusion flames; Turbulent combustion; Large eddy simulation; Diffusion velocity 662.6:519.6 POI-T Barcode: 182075; CL Click here for more details.
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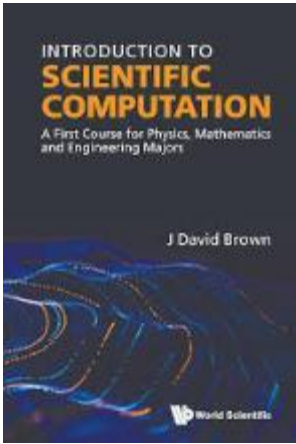
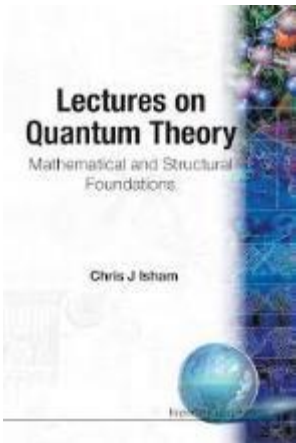
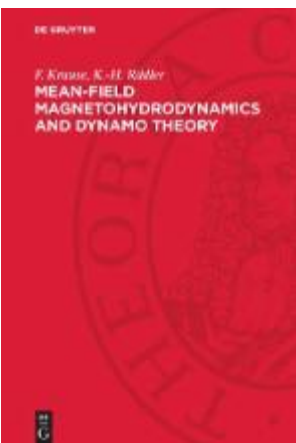
58		Thermodynamics: fundamentals and applications by Naseem Uddin,. Boca Raton: CRC Press, 2024. xxi, 515 p., Includes index (p. 513-515) ISBN: 9781032729398 Subject Terms: Exergy; Magnetic field; Gas power cycle; Pure substance; Bernoulli equation 536.7 UDD-T Barcode: 182074; CL Click here for more details.
Optics and Photonics		
59		Quantum noise: a handbook of markovian and non-markovian quantum stochastic methods with applications to quantum optics by C. W. Gardiner and P. Zoller, 3rd ed. New York: Springer, 2024. xxii, 449 p., - Springer series in synergetics. Includes bibliography and index (p. 429-449) ISBN: 9783540223016 Subject Terms: Complexity; Statistical physics; Stochastic processes; Quantum langevin equations; Photon counting 535.14 GAR-Q Barcode: 182053; CL Click here for more details.
Physics		
60		Advances in highly correlated systems edited by Parvathy Nancy...(et al.), Gistrup: River Publishers, 2025. xlv, 421 p., - River Publishers series in electronic materials, circuits and devices. Includes index (p. 419-421) ISBN: 9788770224116 Subject Terms: Dynamical mean field theory; Magnetoelectricity; Electrostatic; Quantum magnetism; 2D materials 539.2 -ADV Barcode: 182071; CL Click here for more details.

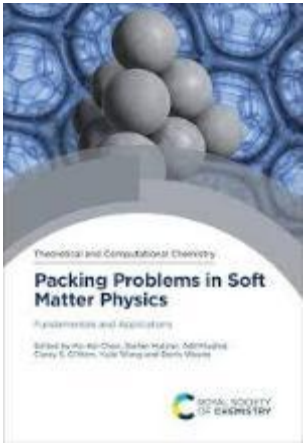
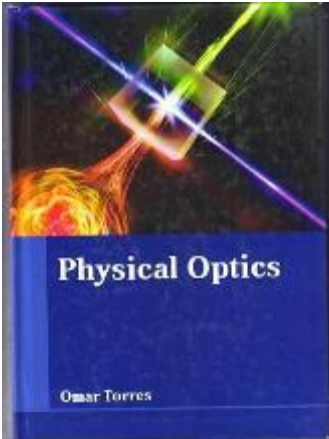
61		Advances in semiconductor physics, devices and quantum dots – nanotechnology and future challenges by Jean-Luc Autran, . Kalispell: Silver Dove Press, 2026. 155 p., - . Includes bibliography (p. 154-155) ISBN: 9789373910758 Subject Terms: Quantum dot lasers; Molecular dynamic simulation; Magnetic resonance imaging; Electrochemical sensing; Photocatalysts 621.382:530.145 AUT-A Barcode: 182079-182080; CL;PH Click here for more details.
62		Causal set approach to quantum gravity: an introduction by Sumati Surya,. Cham: Springer, 2025. xvi, 193 p., - Lecture notes in physics. Includes bibliography and index (p. 179-193) ISBN: 9783031844195 Subject Terms: Dynamics; Kinematics; Mathematical physics; Statistical geometry; Quantum scalar field 530.145:531.5 SUR-C Barcode: 181996; CL Click here for more details.
63		Classical electrodynamics: from image charges to the photon mass and magnetic monopoles by Francesco Lacava, 2nd ed.. Cham: Springer, 2022. xviii, 374 p. - Undergraduate lecture notes in physics. Includes index (p. 371-374) ISBN: 9783031050985 Subject Terms: Electromagnetic waves; Relativistic electrodynamics; Magnetic monopole; Relativistic covariance; Microwave technology 537.8 LAC-C Barcode: 182028; CL Click here for more details.
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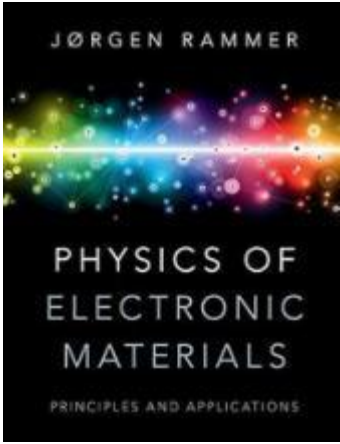
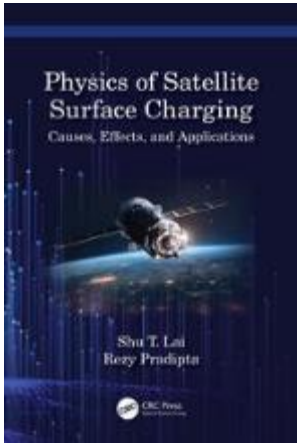
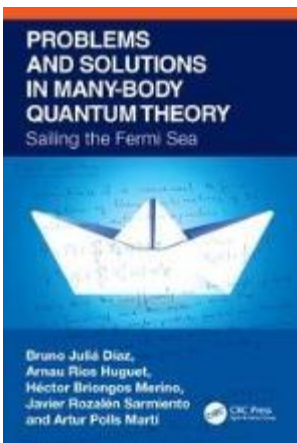
64		Classical electrodynamics: fundamentals and applications by Fabian Cadiz and Arnaud Couairon,. Cham: Springer, 2025. xxiv, 1168 p., - Undergraduate texts in physics. Includes index (p. 1165-1168) ISBN: 9783031867842 Subject Terms: Gauss's law; Electrostatic energy; Poisson's equation; Coulomb's theorem; Magnetic dipole 537.8 CAD-C Barcode: 182058; CL Click here for more details.
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66		Cosmology by Daniel Baumann, . Cambridge: Cambridge University Press, 2022. xix, 463 p., Includes bibliography and index (p. 447-463) ISBN: 9781108838078 Subject Terms: Dark energy; Cosmic microwave background; Thermal equilibrium; Cosmological inflation; General relativity 524.8 BAU-C Barcode: 182019; CL Click here for more details.

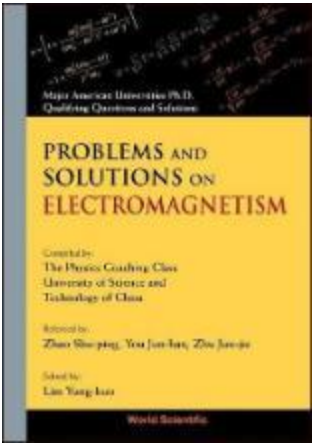
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69		Electromagnetic radiation by Richard Freeman, James King and Gregory Lafyatis, . Oxford: Oxford University Press, 2024. xii, 624 p., Include bibliography and index (p. 613-624) ISBN: 9780198899686 Subject Terms: Electrostatic; Energy density; Origin of radiation; Lorentz transformation; Relativistic electrodynamics 537.531 FRE-E Barcode: 182023; CL Click here for more details.

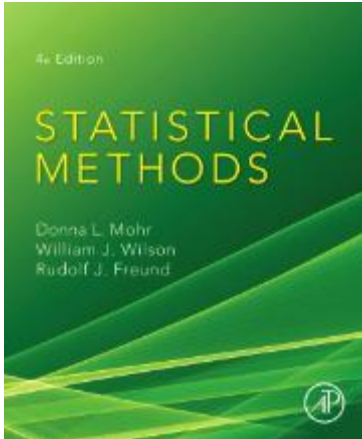
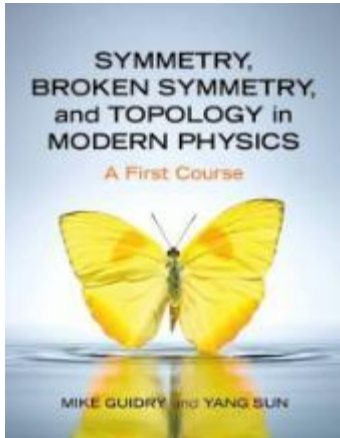
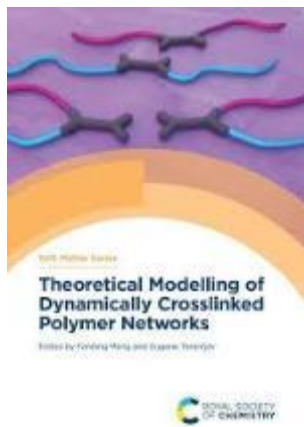
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71		First graduate course in quantum field theory: for doctoral level physics by Travis S. Taylor, . Boca Raton: CRC Press, 2026. xix, 394 p., Includes index (p. 391-394) ISBN: 9781041064350 Subject Terms: Spin momentum; Perturbation theory; Casimir effect; Lattice models; Feynman diagrams 530.145 TAY-F Barcode: 182070; CL Click here for more details.
72		Fundamentals of condensed matter physics by Marvin L. Cohen and Steven G. Louie, New York: Cambridge University Press, 2017. xiii, 446 p., Includes bibliography and index (p. 434-446) ISBN: 9780521513319 Subject Terms: Crystal structure; Electronic energy bands; Density functional theory; Magnetism; Superconductivity 538.9 COH-F Barcode: 182067-182068; CL; PH Click here for more details.

73		Introduction to scientific computation: a first course for physics, mathematics and engineering majors by J David Brown,. Singapore: World Scientific Publishing, 2025. xiii, 316 p., Includes index (p. 307-316) ISBN: 9789819816644 Subject Terms: Numerical differentiation; Symbolic computation; Python basics; Linear algebra; Fourier analysis 519.6 BRO-I Barcode: 182059; CL Click here for more details.
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75		Mean-field magnetohydrodynamics and dynamo theory by F. Krause and K.-H. Radler,. Berlin: De Gruyter, 1980. 271 p., Includes bibliography and index (p. 254-271) ISBN: 9783112729687 Subject Terms: Turbulence; Electromotive force; Cosmical objects; Earth's magnetic fields; Toroidal and poloidal 537.84 KRA-M Barcode: 182013; CL Click here for more details.
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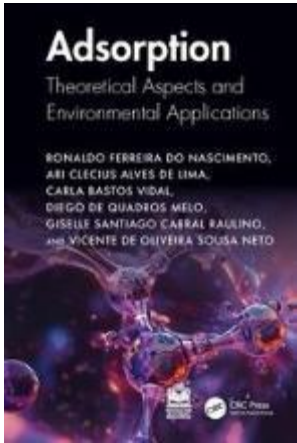
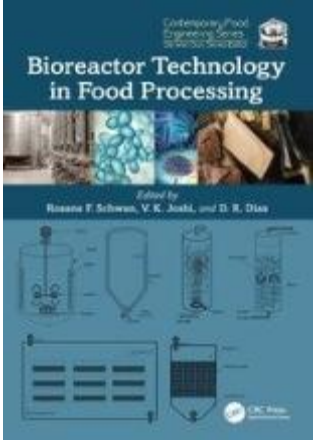
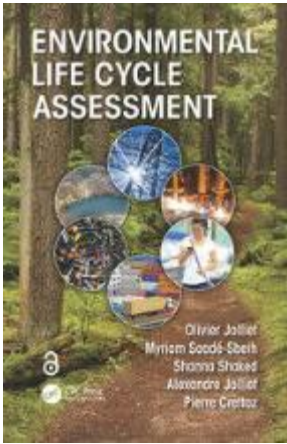
76		Mechanics: experimental physics - descriptively explained by Stefan Roth and Achim Stahl, Berlin: Springer, 2025. xvi, 668 p., ISBN: 9783662680780 Subject Terms: Newtonian mechanics; Oscillation waves; Work and energy; Friction; Fictitious forces 531/534 ROT-M Barcode: 181995; PH Click here for more details.
77		Packing problems in soft matter physics: fundamentals and applications edited by Ho-Kei Chan... (et al.), London: Royal Society of Chemistry, 2025. xx, 558 p., - Theoretical and computational chemistry series. Includes index (p. 542-558) ISBN: 9781837671465 Subject Terms: Symmetric packings; Deformable particles; Cylindrical confinement; Confined packings; Non spherical particles 538.9 -PAC Barcode: 182004; CL Click here for more details.
78		Physical optics by Omar Torres,. New York: Larsen and Keller, 2024. vi, 247 p., Includes index (p. 246-247) ISBN: 9798888363720 Subject Terms: Light waves; Light diffraction; Reflection; Gaussian beam; Fourier transform spectroscopy 535 TOR-P Barcode: 182090; CL Click here for more details.

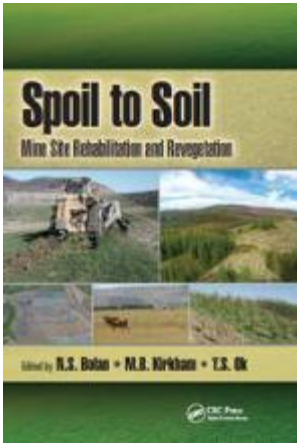
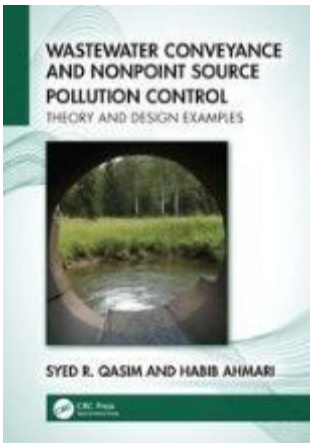
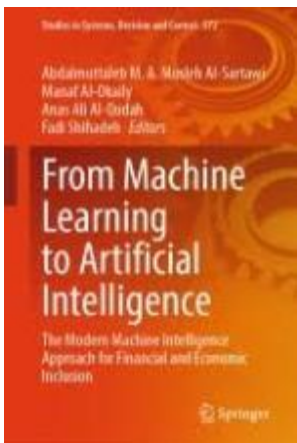
79		Physics of electronic materials: principles and applications by Jorgen Rammer,. Cambridge: Cambridge University Press, 2017. xii, 438 p., Includes bibliography and index (p. 436-438) ISBN: 9781107084940 Subject Terms: Semiconductors; Electronic materials; Electric circuit; Crystalline solid; Mesoscopic physics 621.382 RAM-P Barcode: 182065; CL Click here for more details.
80		Physics of satellite surface charging: causes, effects, and applications by Shu T. Lai and Rezy Pradipta, . Boca Raton: CRC Press, 2024. viii, 126 p., Includes index (p. 125-126) ISBN: 9781032199214 Subject Terms: Mitigation methods; Current balance; Surface conditions; Monopole-dipole model; Electron density 629.78 LAI-P Barcode: 182047; CL Click here for more details.
81		Problems and solutions in many-body quantum theory: sailing the fermi sea by Bruno Julia-Diaz... (et al.),. Boca Raton: CRC Press, 2025. xiii,163 p., Includes bibliography and index (p. 161-163) ISBN: 9781032013558 Subject Terms: Symmetries; Green's function; Dynamic structure function; Density matrices; Kinetic energy 530.145 -PRO Barcode: 182072-182073; CL;PH Click here for more details.
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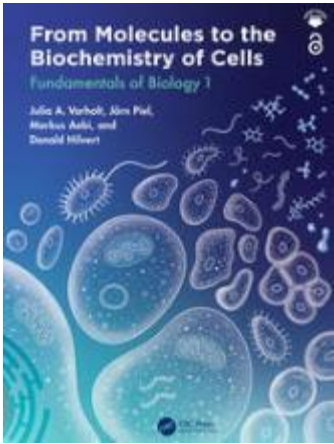
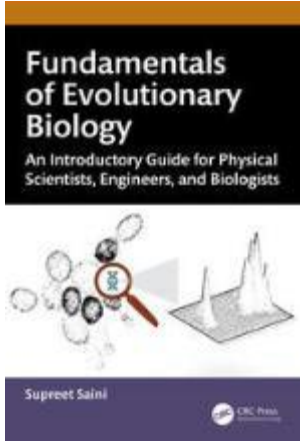
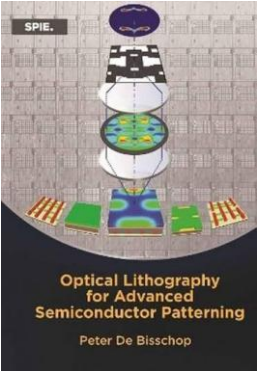
82		Problems and solutions on electromagnetism edited by Lim Yung-Kuo; compiled by the Physics Coaching Class University of Science and Technology of China,. Singapore: World Scientific Publishing, 2020. x, 665 p., - Major American universities Ph.D. qualifying questions and solution. Includes index (p. 659-665) ISBN: 9780000989017 Subject Terms: Electrostatics; Magnetostatic field; Circuit analysis; Lorentz transformation; electromagnetic radiation 537.8 -PRO Barcode: 182039; CL Click here for more details.
83		Python experiments in physics and astronomy by Padraig Houlahan,. Boca Raton: CRC Press, 2025. xvi, 197 p., Includes index (p. 196-197) ISBN: 9781032981895 Subject Terms: Aerodynamic; Spiral galaxies; Gravity field; Programming languages; Photometry 53:52P HOU-P Barcode: 182041; CL Click here for more details.
84		Soft matter in foods Edited by Graeme Gillies and Derick Rousseau,. London: Royal Society of Chemistry, 2025. xv, 467 p., - Soft matter series. Includes index (p. 455-467) ISBN: 9781837672837 Subject Terms: Molecular simulations; Fluid mechanics; Crystallization; Bubble nucleation; Pasteurisation 538.9:664 -SOF Barcode: 182002; CL Click here for more details.
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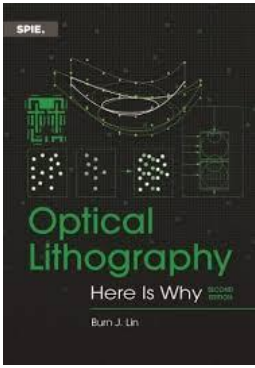
85		Statistical methods by Donna L. Mohr, William J. Wilson and Rudolf J. Freund, 4th ed. London: Elsevier, 2022. xxi, 754 p., Includes references and index (p. 741-754) ISBN: 9780128230435 Subject Terms: Standard deviation; Bivariate data; Polynomial model; Covariance matrices; Fisher's exact test 519.2 MOH-S Barcode: 182020; CL Click here for more details.
86		Symmetry, broken symmetry, and topology in modern physics: a first course by Mike Guidry and Yang Sun,. Cambridge: Cambridge University Press, 2022. xxxii, 632 p., Includes bibliography and index (p. 609-632) ISBN: 9781316518618 Subject Terms: Broken symmetry; Higgs mechanism; Quantum phase transitions; Geometrical phases; Grand unified theories 531.111.5 GUI-S Barcode: 182063-182064; CL; PH Click here for more details.
87		Theoretical modelling of dynamically crosslinked polymer networks edited by Fanlong Meng and Eugene Terentjev,. London: Royal Society of Chemistry, 2025. xii, 162 p., Soft matter series. Includes index (p. 158-162) ISBN: 9781837674510 Subject Terms: Vitrimers; Nonlinear viscoelasticity; Toy model; Molecular theory; Rubber elasticity 678.7:519.87 -THE Barcode: 182003; CL Click here for more details.

Rural Development and Technology

88		Adsorption: theoretical aspects and environmental applications by Ronaldo Ferreira... (et al.), Boca Raton: CRC Press, 2026. xv, 254 p., Includes index (p. 253-254) ISBN: 9781041102991 Subject Terms: Thomas model; Adsorption kinetics; Chemisorption; Experimental methodology; Physisorption 661.183 -ADS Barcode: 182044-182045; CL; CRDT Click here for more details.
89		Bioreactor technology in food processing edited by Rosane F. Schwan, V.K. Joshi and D. R. Dias., Boca Raton: CRC Press, 2025. xv, 631 p., - Contemporary food engineering series. Includes index (p. 623-631) ISBN: 9781032840390 Subject Terms: Microorganisms; Food fermentation; Microbial enzymes; Food bioreactor technology; Fructooligosaccharides 664:663.1 -BIO Barcode: 182014; CL Click here for more details.
90		Environmental life cycle assessment by Olivier Jolliet... (et al.), Boca Raton: CRC Press, 2016. xxix, 302 p. Includes bibliography and index (p. 283-302) ISBN: 9781439887660 Subject Terms: Emission and extraction; Japanese method; Life cycle; Mitigation of uncertainty; Quality control 502.2 -ENV Barcode: 182046; CL Click here for more details.

91		Spoil to soil: mine site rehabilitation and revegetation edited by N.S. Bolan, M.B. Kirkham and Y.S. Ok, Boca Raton: CRC Press, 2021. xix, 371 p. Includes index (p. 363-371) ISBN: 9781498767613 Subject Terms: Phytotechnologies; Coal mines; Biowaste; Mine drainage; Soil science 622:631.53 -SPO Barcode: 182049; CL Click here for more details.
92		Wastewater conveyance and nonpoint source pollution control: theory and design examples by Syed R. Qasim and Habib Ahmari, Boca Raton: CRC Press, 2026. xxxii, 749 p., Includes index (p. 743-749) ISBN: 9781041046721 Subject Terms: Applied hydraulics; Momentum equation; Turbulent flows; Sewerage system; Pumping stations 628.19 QAS-W Barcode: 182050; CL Click here for more details.
School of Artificial Intelligence		
93		From machine learning to artificial intelligence: the modern machine intelligence approach for financial and economic inclusion edited by Abdalmuttaleb M. A. Musleh Al-Sartawi...(et al.), Cham: Springer, 2025. xix, 973 p. xix, 975-1824 p., - Studies in systems, decision and control. Vol. 1 Vol. 2 ISBN: 9783031760105 Subject Terms: Automation; Machine elements; Financial inclusion; Economic impoverishment; Sustainable development 330.1:004.85 -FRO Barcode: 182056-182057; CL Click here for more details.
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94		From molecules to the biochemistry of cells: fundamentals of biology 1 by Julia A. Vorholt... (et al.), . Boca Raton: CRC Press, 2026. ix, 288 p. Includes index (p. 281-288) ISBN: 9781032518367 Subject Terms: Biopolymers; Enzyme catalysis; Energy metabolism; Biogeochemical cycles; Membranes 577 -FRO Barcode: 182055; 182069; CL; SBS Click here for more details.
95		Fundamentals of evolutionary biology: an introductory guide for physical scientists, engineers, and biologists by Supreet Saini, Boca Raton: CRC Press, 2026. xiii, 220 p. Includes index (p. 219-220) ISBN: 9781032984360 Subject Terms: Molecular biology; Clonal interference; Evolution experiments; Empirical fitness landscapes; Pleiotropy 575.8 SAI-F Barcode: 182094; CL Click here for more details.
Sensors Instrumentation and Cyber-physical System Engineering		
96		Optical lithography for advanced semiconductor patterning by Peter De Bisschop, Bellingham: SPIE Press, 2025. xxxiii, 1121 p. Includes index (p. 1103-1121) ISBN: 9781510680333 Subject Terms: Mask metrology; Patterning techniques; Dual damascene; CMOS memory; Diffraction spectrum 535.2:621.382 BIS-O Barcode: 182031; CL Click here for more details.

97		Optical lithography: here is why by Burn J. Lin, 2nd ed. Bellingham: SPIE Press, 2021. xvii, 560 p. Includes index (p. 557-560) ISBN: 9781510639959 Subject Terms: Fabrication; Zernike polynomials; Spherical wavelength; Electroplating; Excimer lasers 535.2 LIN-O Barcode: 182030; CL Click here for more details.
Textile and Fibre Engineering		
98		Sonochemistry for textile and fibre engineering edited by Shahid Ul Islam,. Cambridge: Elsevier, 2026. xiv, 265 p. Textile institute book series. Includes index (p. 261-265) ISBN: 9780443275364 Subject Terms: Acoustic cavitation; Enzymatic fabric; Antimicrobial; Ultrasonication; Oxide nanostructures 677:542 -SON Barcode: 182005; CL Click here for more details.
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Theses Collections

Title	: Antecedents and consequences to taboos perception around women's health and hygiene: an investigation
Researcher	: Bhatia, Nidhi
Department	: Department of Management Studies, IITD
Year	: 2026
Supervisor	: Parida, Biswajita (Prof.) - MS (Guide)
Physical description	: xviii, 248 p.
Subject terms	: Menstrual behaviour; Socio-cultural norms; Discriminant validity; Health facilities; Antecedent behavior
Barcode	: TH8760
Call No.	: TH 613.99 BHA-A
Title	: Social safety nets for urban India - employment guarantee program and public canteens in urban Rajasthan
Researcher	: Choragudi, Krishna Priya
Department	: Department of Humanities and Social Sciences, IITD
Year	: 2026
Supervisor	: Khera, Reetika (Prof.) - HSS (Guide)
Physical description	: xi, 144 p.
Subject terms	: Public employment; Food safety; Slum areas; Women's interest; Decentralisation
Barcode	: TH8761
Call No.	: TH 331.07(540.25) CHO-S
Title	: From roots to categories: deriving nouns, verbs, and adjectives in santali
Researcher	: Dash, Biswanath
Department	: Department of Humanities and Social Sciences, IITD
Year	: 2026
Supervisor	: Chandra, Pritha (Prof.) - HSS (Guide)
Physical description	: xv, 197 p.
Subject terms	: Prototype theory; Morphology; Munda language; Baker's system; Empirical goals
Barcode	: TH8762
Call No.	: TH 81'36=21 DAS-F

Title : Integrated framework of geospatial, multivariate statistics and fuzzy logic techniques for groundwater assessment: exploring potential, vulnerability, and human health risks

Researcher : Dobhal, Ashish

Department : Department of Civil and Environmental Engineering, IITD

Year : 2026

Supervisor : Keshari, Ashok K. (Prof.) - CEE (Guide)

Physical description : xxi, 258 p.

Subject terms : Groundwater quality assessment; Water quality index; Remote sensing; Environmental risk assessment; Geographic information System

Barcode : TH8763

Call No. : TH 556.3 DOB-I

Title : Constrained adaptive control of uncertain systems

Researcher : Ghosh, Poulomee

Department : Department of Electrical Engineering, IITD

Year : 2026

Supervisor : Bhasin, Shubhendu (Prof.) - EE (Guide)

Physical description : xxiii, 151 p.

Subject terms : Barrier lyapunov function; Control law design; Constant transformation; Self-triggered control; Euler-lagrange

Barcode : TH8764

Call No. : TH 681.5 GHOSH-C

Title : Shear thickening materials based on born modified mesoporous silica and its application in microcellular polyborosiloxane-thermoplastic polyurethane foams

Researcher : Islam, Ehteshamul

Department : Department of Materials Science and Engineering, IITD

Year : 2026

Supervisor : Nebhani, Leena (Prof.) - MSE (Guide)

Physical description : xxvix, 288 p.

Subject terms : Shear thickening fluids; Thermogravimetric analysis; Polyborosiloxane; Thermoplastic polyurethane; Graphene nanoplatelet

Barcode : TH8765

Call No. : TH 620.1:666.122.2 ISL-S

Title : Language, birth and death in Meister Eckhart: a literary-philosophical study in apophysis

Researcher : Jacob, Jose

Department : Department of Humanities and Social Sciences

Year : 2026

Supervisor : Wakankar, Milind (Prof.) - HSS (Guide)

Physical description : ix, 250 p.

Subject terms : Philosophy of language; Medieval Christian mysticism; Spiritual rebirth; Silence and speech; Hermeneutics

Barcode : TH8766

Call No. : TH 82.09:101 JAC-L

Title : Tuning Electronic properties of niobium diselenide via doping and heterostructure design for electrocatalytic applications

Researcher : Jha, Varsha

Department : Department of Chemistry, IITD

Year : 2026

Supervisor : Sapra, Sameer (Prof.) - CHY (Guide); Verma, Anil (Prof.) - CHE (Guide)

Physical description : xxi, 189 p.

Subject terms : Crystal structure; Hydrogen evolution reaction; Transition metal dichalcogenides; Oxygen evolution reaction; Energy conversion

Barcode : TH8767

Call No. : TH 544.473:537 JHA-T

Title : Development of flexible electrode for bioelectrochemical systems

Researcher : Kandpal, Rahul

Department : School of Interdisciplinary Research, IITD

Year : 2026

Supervisor : Ahammad, Shaikh Ziauddin (Prof.) - BEB (Guide); Ali, S. Wazed (Prof.) - TFE (Guide)

Physical description : xxxii, 385 p.

Subject terms : Flexible electrode; Biofilm enrichment; Wastewater treatment; Microbial fuel cells; Impedance spectroscopy

Barcode : TH8768

Call No. : TH 621.3.036.6 KAN-D

Title : Exploring the potential of spaceborne techniques for mapping of river hydraulics and discharge

Researcher : Adarsh, M S

Department : Department of Civil and Environmental Engineering, IITD

Year : 2026

Supervisor : C. T., Dhanya (Prof.) - CEE (Guide)

Physical description : xix, 173 p.

Subject terms : Remote sensing; River hydraulics; Satellite altimetry; River flow monitoring; Geographic information system

Barcode : TH8769

Call No. : TH 627.152.151 ADA-E

Title : Fabrication and optical studies of porous silicon-based photonic structures

Researcher : Shanu, Mohd

Department : Department of Physics, IITD

Year : 2026

Supervisor : Prakash, G. Vijaya (Prof.) - PH (Guide)

Physical description : xxvi, 185 p.

Subject terms : Photonic crystals; Optical Microcavity; Spectrofluorometer; Porphyrin molecules; Photoluminescence

Barcode : TH8770

Call No. : TH 535.14 SHA-F

Title : Role of land use and land cover change on meteorology and its effect on short-lived climate pollutants

Researcher : Nayak, Diljit Kumar

Department : Department of Civil and Environmental Engineering, IITD

Year : 2026

Supervisor : Kota, Shri Harsha (Prof.) - CEE (Guide); Habib, Gazala (Prof.) - CEE (Guide)

Physical description : xviii, 91 p.

Subject terms : Air quality modelling; Human health; Atmospheric chemistry; Radiative forcing; Environmental impact

Barcode : TH8771

Call No. : TH 502.3:613.15 NAY-R

Title : Cultural intersection: a study on the role of cows in select communities in India and south Sudan

Researcher : Porwal, Vikram Kapali

Department : Centre of Rural Development and Technology, IITD

Year : 2026

Supervisor : Vivek Kumar (Prof.) - CRDT (Guide); Naik, S.N. (Prof.) - CRDT (Guide)

Physical description : 189 p.

Subject terms : Cattle camp; Tribes and animals; Polygamy; Vicious cycle; Spiritual belief

Barcode : TH8772

Call No. : TH 39:636.2(540+624) POR-C

Title : Comprehension of 3D objects from 2D tactile diagrams

Researcher : Sharma, Anchal

Department : Department of Design, IITD

Year : 2026

Supervisor : Rao, P.V.M. (Prof.) - DE (Guide); Venkataraman, Srinivasan (Assoc. Prof.) - DE (Guide)

Physical description : xvi, 135 p.

Subject terms : Tactile graphics; Visual mediation; Dot pattern drawings; Thermoforming; Tactile stimuli

Barcode : TH8773

Call No. : TH 741:004.93 SHA-C

Title : Performance optimization of polarization-aware links for next generation wireless networks

Researcher : Sharma, Srishti

Department : Department of Electrical Engineering, IITD

Year : 2026

Supervisor : De, Swades (Prof.) - EE (Guide)

Physical description : xix, 161 p.

Subject terms : Signal design; Source polarization; Photon propagation; Beamforming; Non-coplanarity

Barcode : TH8774

Call No. : TH 621.39 SHA-P

Title : Bandgap and luminescence tuning in lead-free vacancy ordered halide double perovskites

Researcher : Shubham Kumar

Department : Department of Chemistry, IITD

Year : 2026

Supervisor : Sapra, Sameer (Prof.) - CHY (Guide)

Physical description : xxiv, 185 p.

Subject terms : Defect tolerance; Microcrystal synthesis; Raman spectroscopy; Bandgap engineering; Powder x-ray diffraction

Barcode : TH8775

Call No. : TH 620.1:542 SHU-B

Title : Structure-driven functional optimisation of Fibrous materials for fuel-cell electric vehicles: analytical and computational approaches

Researcher : Shukla, Siddharth

Department : Department of Textile and fibre Engineering, IITD

Year : 2026

Supervisor : Rawal, Amit (Prof.) - TFE (Guide)

Physical description : xxxiv, 307

Subject terms : Proton exchange membrane fuel cell; Gas diffusion layers; X-ray micro-computed tomography; Machine learning; Scanning electron microscopy

Barcode : TH8776

Call No. : TH 629.064.5 SHU-S

Title : Active noise control using deep learning methods

Researcher : Singh, Deepali

Department : Centre for Applied Research in Electronics, IITD

Year : 2026

Supervisor : Arun Kumar (Prof.) - CARE (Guide); Bahl, Rajendar (Prof.) - CARE (Guide)

Physical description : xxiii, 158 p.

Subject terms : Stacked autoencoder; Adaptive filtering; Transfer learning; Attention mechanism; Recurrent neural networks

Barcode : TH8777

Call No. : TH 534.83:004.85 SIN-A

Title	: Solar light-driven heterojunctions of Ti and Cu oxide-based photocathodes for reducing CO ₂ to Chemical fuels
Researcher	: Venkanna, Guguloth
Department	: Department of Chemical Engineering, IITD
Year	: 2026
Supervisor	: Pant, K. K (Prof.) - CHE (Guide); Verma, Anil (Prof.) - CHE (Guide)
Physical description	: xix, 232 p.
Subject terms	: Natural photosynthesis; Artificial photosynthesis; Semiconductor heterojunctions; Chronoamperometry; Electrochemical impedance spectroscopy
Barcode	: TH8778
Call No.	: TH 620.93:66 VEN-S

Title	: Unchanging core syntax: Gender in Heritage Tamil
Researcher	: Venkatesan, Madhusmitha
Department	: Department of Humanities and Social Sciences, IITD
Year	: 2026
Supervisor	: Chandra, Pritha (Prof.) - HSS (Guide); Alessandro, Roberta D' (Prof.) - Utrecht University, Netherlands (Guide)
Physical description	: xiii, 184 p.
Subject terms	: Heritage languages; Gender agreement; Gender assignment to nouns; Gender agreement - Tamil; Gender agreement - Hindi
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