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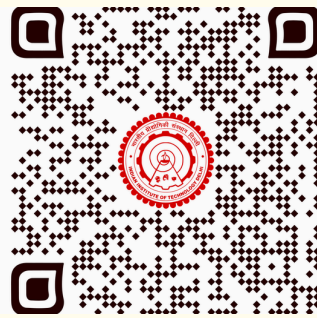
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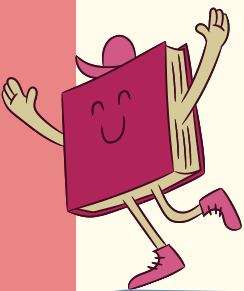
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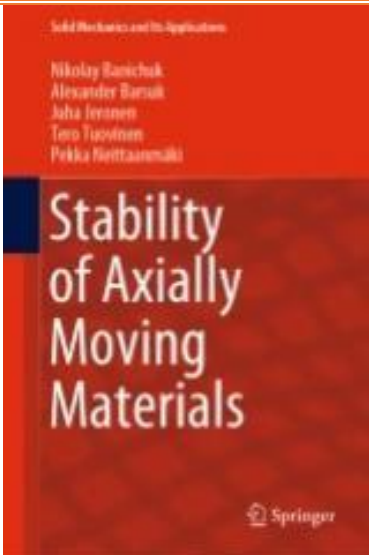
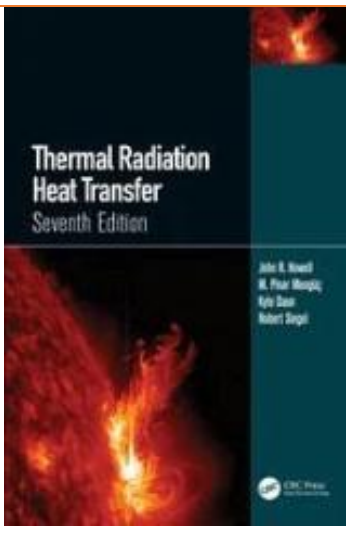
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Applied Mechanics

1		<p>Fundamentals of continuum mechanic by Zishun Liu, New Jersey: World Scientific, 2024. xi, 373 p., Includes index (p. 371-373)</p> <p>ISBN: 9789811283789</p> <p>Subject Terms: Quantinum mechanics; Finite element method; Vectors and tensors; Continuum kinematics; Shape memory polymers</p> <p>531 LIU-F</p> <p>Barcode: 179821; CL</p> <p>Click here for more details</p>
2		<p>Guide to fluid mechanics translated by Yan Zhang, Cambridge: Cambridge University Press, 2023. ix, 305 p.,</p> <p>ISBN: 9781108712781</p> <p>Subject Terms: Mathematics; Engineering; Fluid Dynamics; Solid Mechanics; Thermal-Fluids Engineering</p> <p>532 WAN-G</p> <p>Barcode: 179837; CL</p> <p>Click here for more details</p>
3		<p>Introduction to continuum mechanics for engineers: with solved problems by Nik Abdullah Nik Mohamed, Singapore: Springer, 2023. xvi, 188 p., Includes bibliography and index (p. 185-188)</p> <p>ISBN: 9789819908103</p> <p>Subject Terms: Kinematics; Solid mechanics; Continuum mechanics; Tensor; Energy</p> <p>531 MOH-I</p> <p>Barcode: 179842; CL</p> <p>Click here for more details</p>

4		<p>Lecture notes on the theory of plates and shells: classical and modern developments by David J. Steigmann, Mircea Birsan and Milad Shirani, Cham: Springer, 2023. ix, 252 p., Solid mechanics and its applications.</p> <p>ISBN: 9783031256769</p> <p>Subject Terms: Linearly elastic shells; Thin plates and shells; Nonlinear shell models; Linear shell theory; Derivation of plate and shell equations</p> <p>624.073/.074 STE-L</p> <p>Barcode: 179835; CL</p> <p>Click here for more details</p>
5		<p>Mechanics of solid deformable body by Michael Zhuravkov, Yongtao Lyu and Eduard Starovoitov, Singapore: Springer, 2023. xv, 308 p.,</p> <p>ISBN: 9789811984129</p> <p>Subject Terms: Theory of elasticity; Mathematical models of solids; Stress-strain state of solids; Fundamental solutions; Dynamic problems of solid mechanics</p> <p>531 ZHU-M</p> <p>Barcode: 179836; CL</p> <p>Click here for more details</p>
6		<p>Non-linear electromechanics by D. Skubov and K. S. Khodzhaev, Berlin: Springer, 2008. xiv, 397 p., Foundations of engineering mechanics. Includes references and index (p. 383-397)</p> <p>ISBN: 9783540251392</p> <p>Subject Terms: Electric machinery; Electromechanical systems; Mechanical oscillations; Physical layer security; Nonlinear magnetoelasticity</p> <p>681.527.2 SKU-N</p> <p>Barcode: 179790; CL</p> <p>Click here for more details</p>

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7		<p>Stability of axially moving materials by Nikolay Banichuk...(et al.), Cham: Springer, 2020. xi, 642 p., Solid mechanics and its applications. Includes index (p. 637-644)</p> <p>ISBN: 9783030238025</p> <p>Subject Terms: Axial loads; Computer mathematics; Machinery - Stability; Electromagnetic field; Manufacturing machines-tools processes</p> <p>624.074.432 - STA</p> <p>Barcode: 179791; CL</p> <p>Click here for more details</p>
8		<p>Thermal radiation heat transfer by John R. Howell... (et al.), 7th ed., Boca Raton: CRC Press, 2021. xxxiv, 1005 p., Includes index (p. 997-1005)</p> <p>ISBN: 9780367347079</p> <p>Subject Terms: Thermodynamics; Scattering; Radiative energy; Dynamical system; Plate Geometry</p> <p>536.2 -THE</p> <p>Barcode: 179801; AM</p> <p>Click here for more details</p>
9		<p>Vibro-acoustics: fundamentals and applications by Dhanesh N. Manik, Boca Raton: CRC Press, 2017. xvii, 468 p., Includes bibliography and index (p. 453-468)</p> <p>ISBN: 9780367736309</p> <p>Subject Terms: Machine design; Mechanics; Noise control; Damping (Mechanics); Design</p> <p>534.8 MAN-V</p> <p>Barcode: 179859; AM</p> <p>Click here for more details</p>

Applied Research in Electronics

10



Security and privacy schemes for dense 6G wireless communication networks edited by Agbotiname Lucky Imoize...(et. al.), Stevenage: Institution of Engineering and Technology, 2023. xvii, 514 p., Includes index(p.497-514)

ISBN: 9781839536632

Subject Terms: Data privacy; Telecommunication security; Mobile radio systems; ANCOVA; Cloud computing

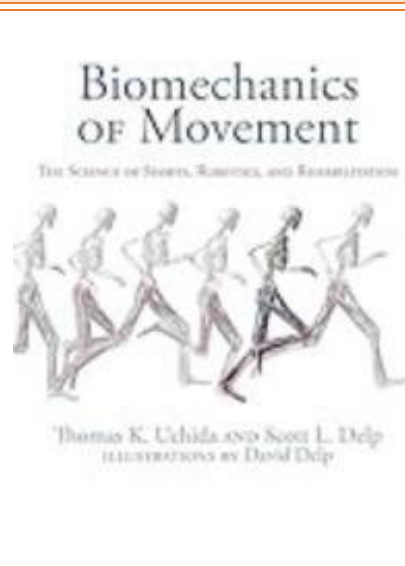
621.391 -SEC

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Biomedical Engineering

11



Biomechanics of movement: the science of sports, robotics, and rehabilitation by Thomas K. Uchida and Scott L. Delp, Cambridge: MIT Press, 2020. xix, 374 p., Includes references and index (p. 353-374)

ISBN: 9780262044202

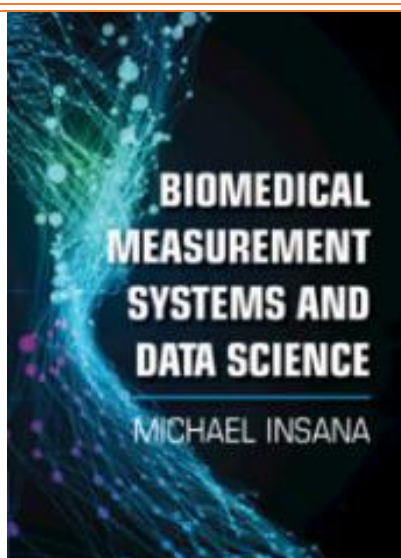
Subject Terms: Human mechanics; Muscle biology and force; Muscle architecture and dynamics; Musculoskeletal geometry; Quantifying movement

577.3:007 UCH-B

Barcode: 179823-179824; CL; CBME

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12



Biomedical measurement systems and data science by Michael Insana, Cambridge: Cambridge University Press, 2021. x, 391 p., Includes bibliography and index (p. 381-391)

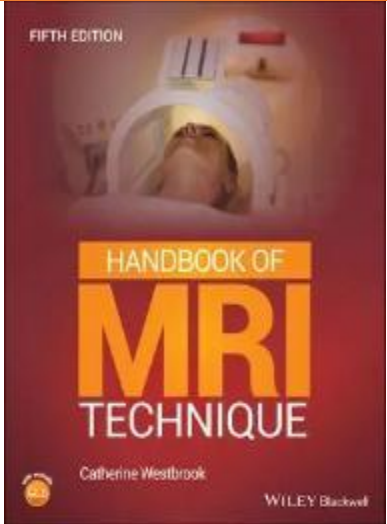
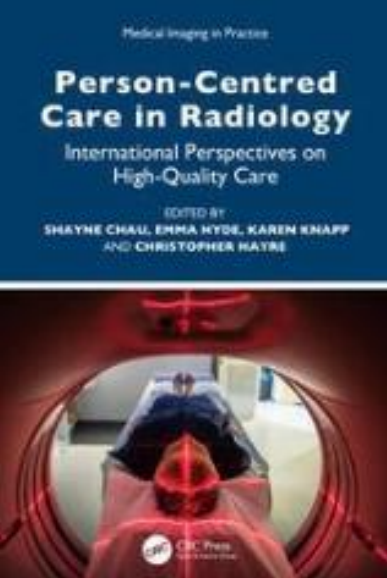
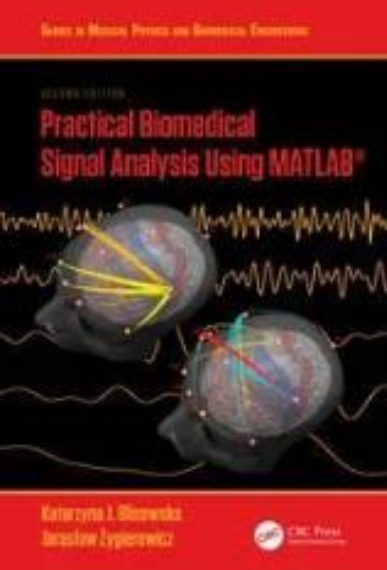
ISBN: 9781107179066

Subject Terms: Biomedical engineering - Data processing; Equipment and Supplies; Human physiology - Measurement; Multimodal communication; Medicine - Data processing

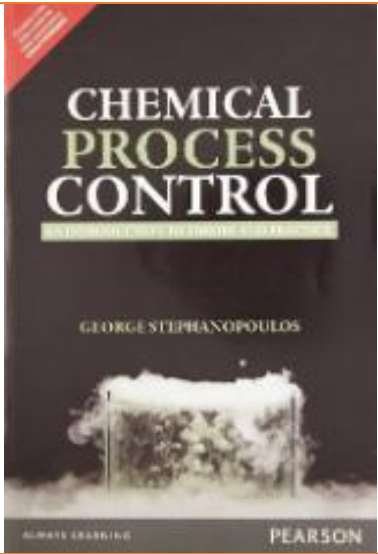
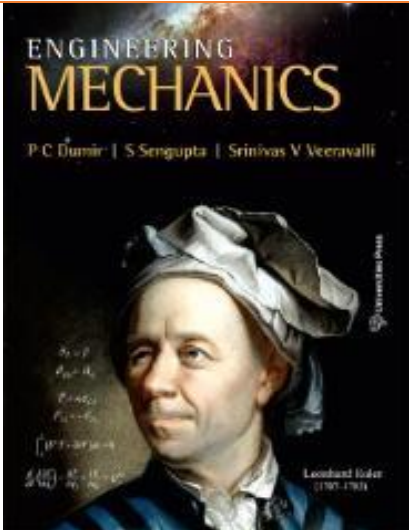
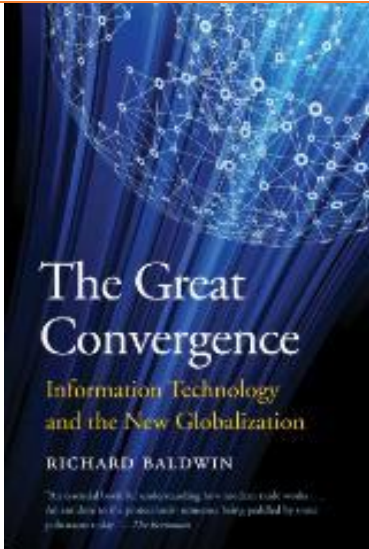
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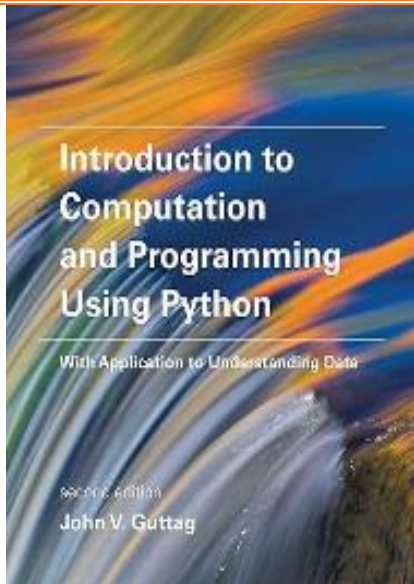
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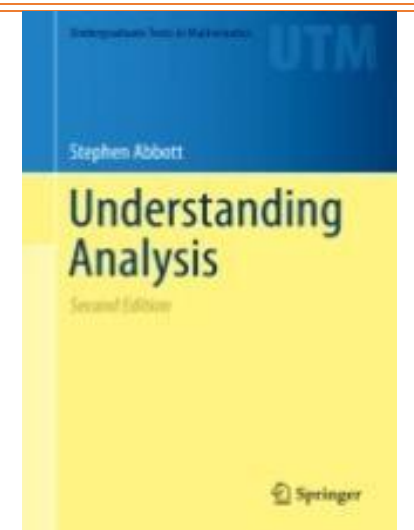
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13		<p>Handbook of MRI technique, by Catherine Westbrook, 5th ed. Hoboken: Wiley, 2022. xv, 394 p., Includes Index (p. 376-394)</p> <p>ISBN: 9781119759331</p> <p>Subject Terms: MRI; Respiratory compensation techniques; MRI technique; Magnetic resonance imaging;</p> <p>RL-HB 616-07:537.635 WES-H</p> <p>Barcode: 179825; CL</p> <p>Click here for more details</p>
14		<p>Person-centred care in radiology: international perspectives on high-quality care edited by Shayne Chau...(et al.), Boca Raton: CRC Press, 2024. xix, 437 p., Medical imaging in practice. Includes index (p. 430-437)</p> <p>ISBN: 9781032304649</p> <p>Subject Terms: Radiography; Nuclear medicine; Ultrasound; Fluoroscopy and angiography; Biomedical imaging</p> <p>615.849 -PER</p> <p>Barcode: 179817; CL</p> <p>Click here for more details</p>
15		<p>Practical biomedical signal analysis using MATLAB by Katarzyna J. Blinowska and Jarosław Żygierewicz, 2nd ed. Boca Raton: CRC Press, 2022. xvi, 352 p., Series in medical physics and biomedical engineering. Includes bibliography and index (p. 289-353)</p> <p>ISBN: 9781032105529</p> <p>Subject Terms: Biological science disciplines; Biomedical engineering; Biophysics; Computing methodologies; Electrophysiology</p> <p>616-073:004.43M</p> <p>Barcode: 179818; CL</p> <p>Click here for more details</p>

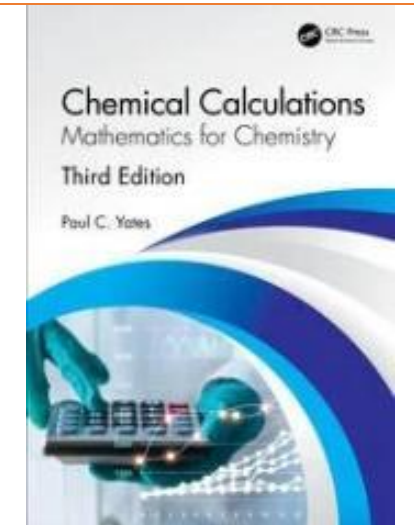
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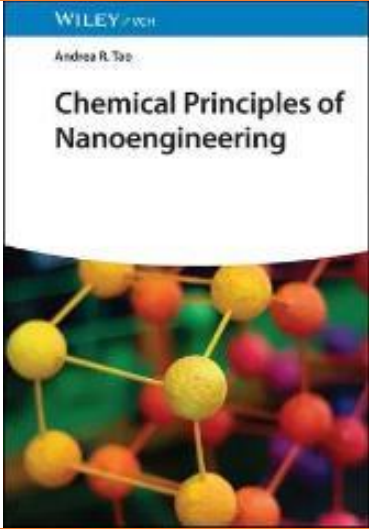
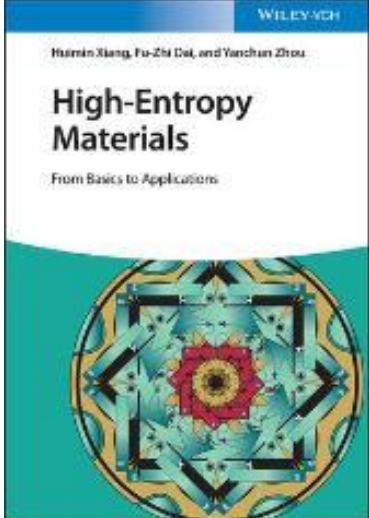

16		<p>Chemical process control: an introduction to theory and practice by George Stephanopoulos, Noida: Pearson Education, 2015. xxi, 696 p., Includes index (p. 685-696)</p> <p>ISBN: 9789332549463</p> <p>Subject Terms: Dynamic behavior; Linearization of nonlinear systems; Laplace transforms; Stability analysis; Digital computer control loops</p> <p>66.02 STE-C</p> <p>Barcode: 179804-179806; TB</p> <p>Click here for more details</p>
17		<p>Engineering mechanics by P C Dumir, S Sengupta and Srinivas V Veeravalli, Hyderabad: Universities Press, 2020. x, 830 p.,</p> <p>ISBN: 9789389211573</p> <p>Subject Terms: Axioms and force systems; Statics; Dynamics of rigid body; Computation problems; Motion</p> <p>531:62 DUM-E</p> <p>Barcode: BB76725-BB76734; BB</p> <p>Click here for more details</p>
18		<p>Great convergence: information technology and the new globalization / by Richard Baldwin, Cambridge: Harvard University Press, 2019. 329 p., Includes index (p. 313-329)</p> <p>ISBN: 9780674237841</p> <p>Subject Terms: Development policy; Economic aspects; Income distribution; Economic geography; Technological innovations; GDP- Gross domestic product</p> <p>681.3:005.44 BAL-G</p> <p>Barcode: 179802-179803; CL; TB</p> <p>Click here for more details</p>

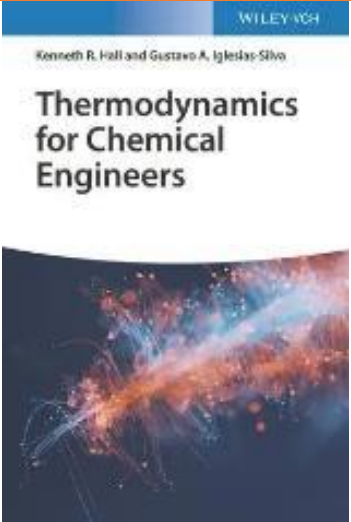
19		<p>Introduction to computation and programming using Python: with application to understanding data by John V. Guttag, 2nd ed. New Delhi: PHI Learning, 2019. xvii, 447 p., Includes index (p. 435-447)</p> <p>ISBN: 9788120352926</p> <p>Subject Terms: Computer programming; Algorithms; Python - Computer program language; Radiative transfer; Data structure</p> <p>004.42P GUT-I</p> <p>Barcode: BB76720-BB76724; BB</p> <p>Click here for more details</p>
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20		<p>Understanding analysis by Stephen Abbott, 2nd ed. New York: Springer, 2015. xii, 312 p., Undergraduate texts in mathematics. Includes bibliography and index (p. 305-312)</p> <p>ISBN: 9781493927111</p> <p>Subject Terms: Calculus; Gamma function; Intermediate value theorem; Derivatives; Riemann integral</p> <p>517.9 ABB-U</p> <p>Barcode: 179754-179760; BB76735-BB76744; CL; TB; BB</p> <p>Click here for more details</p>
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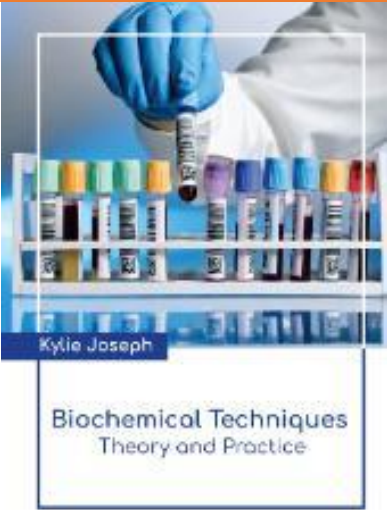
Chemical Engineering

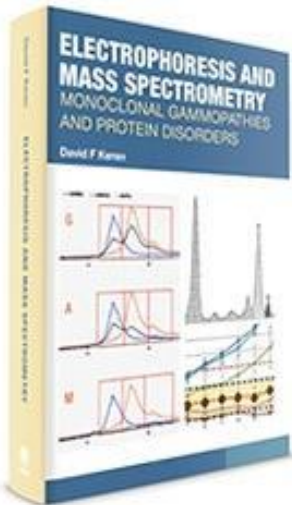
21		<p>Chemical calculations: mathematics for chemistry by Paul C. Yates, 3rd ed. Boca Raton: CRC Press, 2023. xvii, 370 p., Includes bibliography and index (p. 361 370)</p> <p>ISBN: 9780367488673</p> <p>Subject Terms: Thermodynamics; Kinetics; Structural chemistry; Quantum mechanics; Spectroscopy</p> <p>51:54 YAT-C</p> <p>Barcode: 179838; CL</p> <p>Click here for more details</p>
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22		<p>Chemical principles of nanoengineering by Andrea R. Tao, Germany: Wiley, 2024. viii, 240 p., Includes bibliography and index (p. 235-240)</p> <p>ISBN: 9783527339556</p> <p>Subject Terms: Nanoengineering; Intermolecular forces; Molecular bonds; Atomic Orbitals; Nanocarbon</p> <p>66:620.3 TAO-C</p> <p>Barcode: 179839; CL</p> <p>Click here for more details</p>
23		<p>High-entropy materials: from basics to applications by Huimin Xiang, Fu-Zhi Dai, Yanchun Zhou, Germany: Wiley, 2023. x, 261 p., Includes bibliography and index (p. 254-261)</p> <p>ISBN: 9783527350353</p> <p>Subject Terms: High entropy alloys; Ceramics; TBC coating; EBC coating; Nuclear energy</p> <p>544.322:620.1 XIA-H</p> <p>Barcode: 179840; CL</p> <p>Click here for more details</p>
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25		<p>Thermodynamics for chemical engineers by Kenneth Richard Hall and Gustavo A. Iglesias-Silva, Weinheim: Wiley - VCH, 2022. xi, 465 p., Includes appendices and index (p. 449-465)</p> <p>ISBN: 9783527350308</p> <p>Subject Terms: Energy; Equilibrium; Chemical reaction equilibria; Chemical reactions; Chemical engineering</p> <p>536.7:66 HAL-T</p> <p>Barcode: 179841; CL</p> <p>Click here for more details</p>
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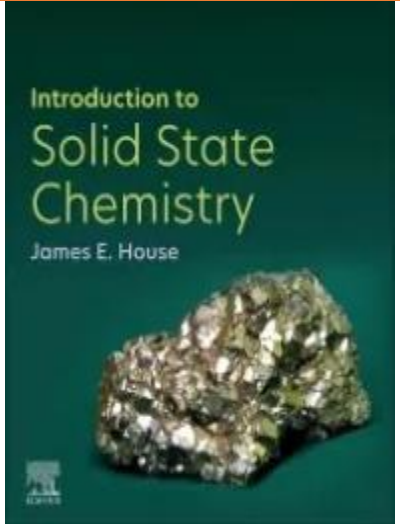
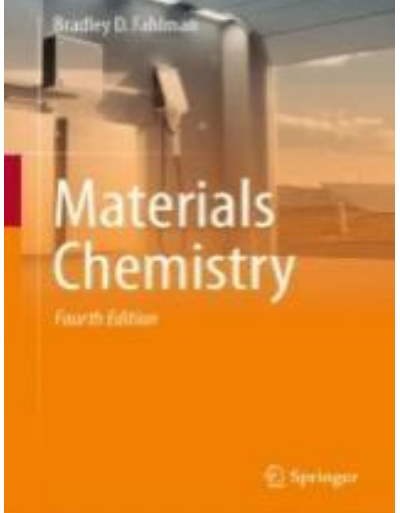
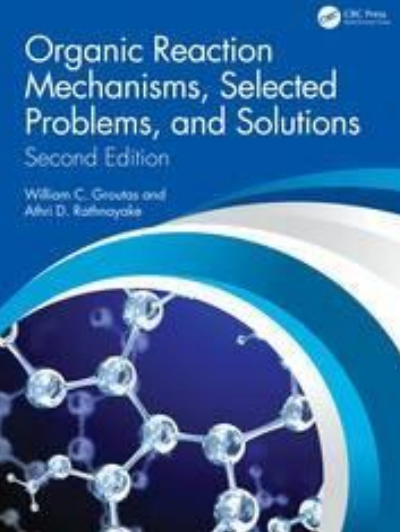
26		<p>Biochemical techniques: theory and practice by Kylie Joseph, New York: Murphy & Moore, 2022. viii, 236 p., Includes index (p. 235-236)</p> <p>ISBN: 9781639870745</p> <p>Subject Terms: Biochemistry techniques; Chromatographic techniques; Electrophoretic technique; Chemical reactions; Spectroscopy</p> <p>577 JOS-B</p> <p>Barcode: 179855; CL</p> <p>Click here for more details</p>
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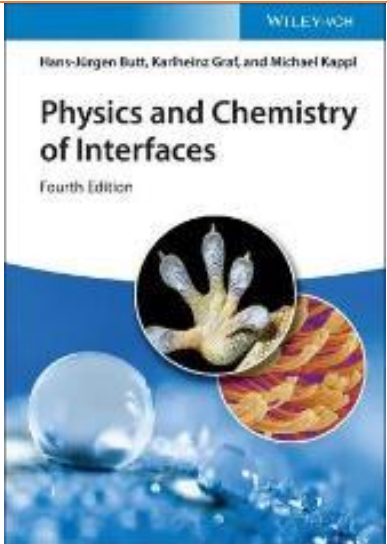
27		<p>Electrophoresis and mass spectrometry: monoclonal gammopathies and protein disorders by David F Keren, Canada: ASCP Press, 2024. xi, 340 p., Includes index (p. 334-340)</p> <p>ISBN: 9780891896821</p> <p>Subject Terms: Protein structure; Electrophoresis; Spectrometry; Pattern interpretation; Gammopathies</p> <p>616-07:543.51 KER-E</p> <p>Barcode: 179828; CL</p> <p>Click here for more details</p>
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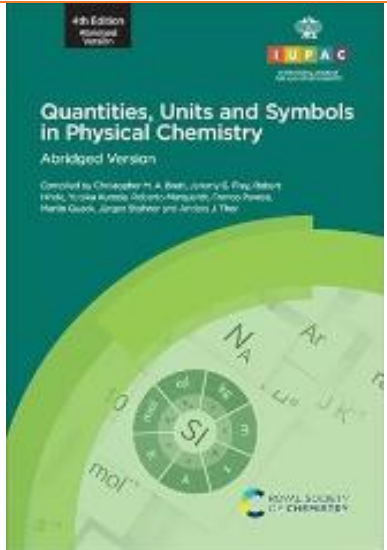
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29		<p>Essentials of biochemistry by Gusravo Cobb, New York: Syrawood Publishing House, 2019. vi, 256 p., Includes index (p. 255-256)</p> <p>ISBN: 9781682868294</p> <p>Subject Terms: Biochemistry; Chemistry; Biology; Chemical components; Biochemical products</p> <p>577 COB-E</p> <p>Barcode: 179856; CL</p> <p>Click here for more details</p>
30		<p>Hazardous materials chemistry by Armando S. Bevelacqua and Laurie A. Norman, 3rd ed. Burlington: Jones and Bartlett, 2019. vii, 346 p., Include index (p. 341-346)</p> <p>ISBN: 9781284041996</p> <p>Subject Terms: Chemical nomenclature; Properties and toxicology; Reaction basics; Chemical nomenclature; Substituted hydrocarbon compounds</p> <p>54:614.8 BEV-H</p> <p>Barcode: 179829; CL</p> <p>Click here for more details</p>

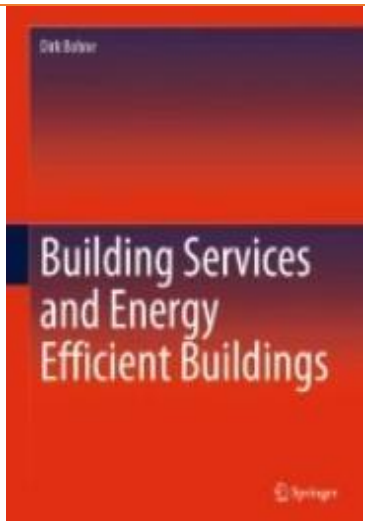
31		<p>Inorganic chemistry: principles and properties by Rabindranath Mukherjee, Singapore: World Scientific, 2024. xvii, 371 p., Includes Index (p. 369-371)</p> <p>ISBN: 9789811281761</p> <p>Subject Terms: Molecular symmetry; Organometallic catalysis; Redox reactions; Medical informatics; Hybridization</p> <p>546 MUK - I</p> <p>Barcode: 179779; CL</p> <p>Click here for more details</p>
32		<p>Inorganic chemistry: reactions and mechanisms edited by Bernard Wilde, New York: Willford Press, 2017. vii, 229 p., Includes index (p. 228-229)</p> <p>ISBN: 9781682853696</p> <p>Subject Terms: Chemistry; Chemical reaction; Reaction mechanisms; Physical inorganic chemistry; Chemical properties</p> <p>546 -INO</p> <p>Barcode: 179857; CL</p> <p>Click here for more details</p>
33		<p>Introduction to interfaces and colloids: the bridge to nanoscience by John C. Berg, 2nd ed. Singapore: World Scientific, 2024. xxi, 862 p., Includes index (p. 851-862)</p> <p>ISBN: 9789811286407</p> <p>Subject Terms: Interfaces - Physical sciences; Nanoscience; Nanotechnology; Fluid interfaces; Surface tension of liquids</p> <p>544.7:620.3 BER-I</p> <p>Barcode: 179822; CL</p> <p>Click here for more details</p>

34		<p>Introduction to solid state chemistry by James E. House, Amsterdam: Elsevier, 2024. x, 337p., Includes index (p. 329-337)</p> <p>ISBN: 9780443134265</p> <p>Subject Terms: Solid state chemistry; Ionic crystals; Thermochemistry; Metals; Kinetics</p> <p>54-16 HOU-I</p> <p>Barcode: 179808; CL</p> <p>Click here for more details</p>
35		<p>Materials chemistry by Bradley D. Fahlman, 4th ed. Switzerland: Springer, 2023. ix, 902 p., Includes index (p. 885-902)</p> <p>ISBN: 9783031187834</p> <p>Subject Terms: Porous crystalline materials; Soft lithographic patterning; Dendritic polymers; Heteronuclear coupling; Metal-organic frameworks</p> <p>54.01 FAH-M</p> <p>Barcode: 179799; CL</p> <p>Click here for more details</p>
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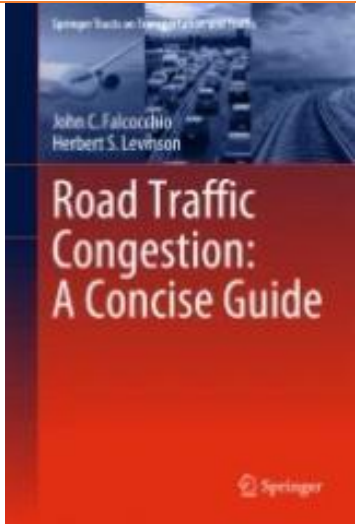
37		<p>Physics and chemistry of interfaces by Hans-Jürgen Butt, Karlheinz Graf and Michael Kappl, 4th ed. Weinheim: Wiley, 2023. xiv, 458 p., Includes bibliography and index (P. 411-458)</p> <p>ISBN: 9783527414055</p> <p>Subject Terms: Surface chemistry; Thermodynamics of interface; Surface forces; Rotary components; Surface modification</p> <p>544.72 BUT-P</p> <p>Barcode: 179797; CL</p> <p>Click here for more details</p>
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38		<p>Quantities, units and symbols in physical chemistry by Christopher M. A. Brett (et al.), 4th ed. London: RSC Publishing, 2023. x, 109 p., Includes References and Index (p. 69-107)</p> <p>ISBN: 9781839161506</p> <p>Subject Terms: Quantity calculus; Physical and theoretical Terminology; Electromagnetic radiation; Molecular orbital theory; Uncertainty</p> <p>544.08(021) - QUA</p> <p>Barcode: 179780; CL</p> <p>Click here for more details</p>
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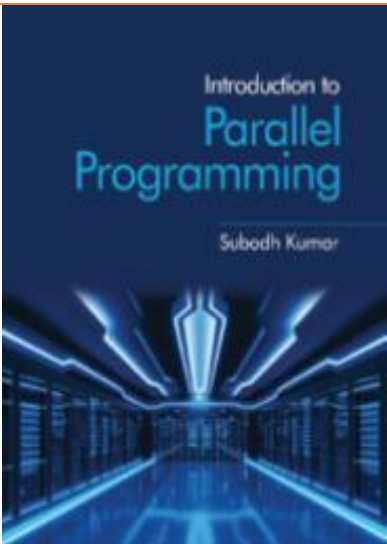
Civil Engineering

39		<p>Building services and energy efficient buildings by Dirk Bohne, Revised edition. Germany: Springerx, 2023. x, 636 p., Includes bibliography (p. 634-636)</p> <p>ISBN: 9783658412722</p> <p>Subject Terms: Sewage technology; Electrical engineering; Room air technology; Sanitary room; Water technology</p> <p>691 BOH-B</p> <p>Barcode: 179849; CL</p> <p>Click here for more details</p>
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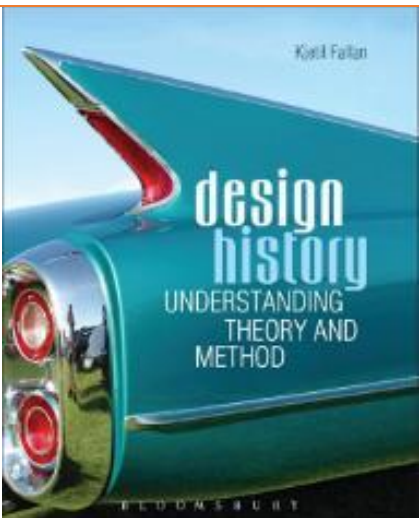
40		<p>High performance concrete optimal composition design by Leonid Dvorkin... (et al.), Boca Raton: CRC Press, 2023. xi, 200 p., Includes bibliography and index (p. 190-200)</p> <p>ISBN: 9781032413860</p> <p>Subject Terms: Building and construction; Concrete and cement; Mining engineering; Civil engineering; Geotechnical engineering</p> <p>666.97 -HIG</p> <p>Barcode: 179850; CL</p> <p>Click here for more details</p>
41		<p>Introduction to advanced fluid dynamics and fluvial processes by B. S. Mazumder and T. I. Eldho, Boca Raton: CRC Press, 2024. xx, 639 p., Includes bibliography and index (p. 593-639)</p> <p>ISBN: 9780367428983</p> <p>Subject Terms: Fluid dynamics; Viscosity; Fluid kinematics; Turbulent flow; Sediment transport phenomena</p> <p>532.5:556.536 MAZ-I</p> <p>Barcode: 179816; CL</p> <p>Click here for more details</p>
42		<p>New advances in building information modeling and engineering management edited by Maria de las Nieves Gonzalez Garcia, Fernanda Rodrigues, Joao Santos Baptista, Switzerland: Springer, 2023. viii, 231 p., Digital innovations in architecture, engineering and construction (DIAEC).</p> <p>ISBN: 9783031302466</p> <p>Subject Terms: Building information modeling; Historic BIM; BIM; Cultural heritage; Built heritage management</p> <p>691:72.01 -NEW</p> <p>Barcode: 179851; CL</p> <p>Click here for more details</p>

43		<p>Road traffic congestion: a concise guide by John C. Falcocchio and Herbert S. Levinson, Cham: Springer, 2015. xxiv, 401 p., Springer Tracts on Transportation and Traffic.</p> <p>ISBN: 9783319151649</p> <p>Subject Terms: Transportation technology; Travel patterns; Traffic congestion; Mobility; Vehicles</p> <p>656.11 FAL-R</p> <p>Barcode: 179813; CL</p> <p>Click here for more details</p>
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Computer Science and Engineering

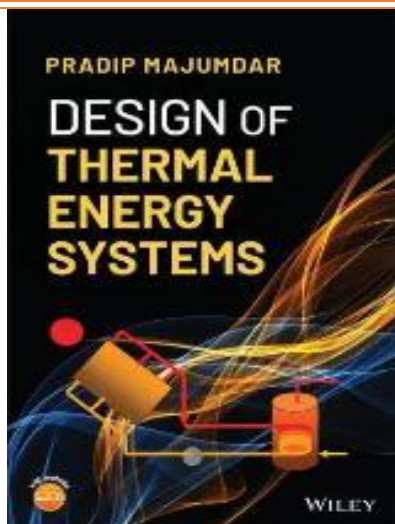
44		<p>Introduction to parallel programming by Subodh Kumar, New York: Cambridge University Press, 2022. xi, 282 p., Includes bibliography and index (p.268-282)</p> <p>ISBN: 9781009069533</p> <p>Subject Terms: Parallel computer architecture; Parallel performance analysis; Parallel program design; Middleware; Parallel algorithms</p> <p>004.42 SUB-I</p> <p>Barcode: 179763-179767; TB; CSE</p> <p>Click here for more details</p>
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Design

45		<p>Design history : understanding theory and method / by Kjetil Fallan, London: Bloomsbury Academic, 2014. xix, 207 p, Includes bibliography and index (p. 183-207)</p> <p>ISBN: 9781847885371</p> <p>Subject Terms: Art history; Industrial design; Historiography; Epistemology; Modernity</p> <p>74(09) FAL-D</p> <p>Barcode: 179814; CL</p> <p>Click here for more details</p>
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Energy Science and Engineering

46



Design of thermal energy systems by Pradip Majumdar, Hoboken: Wiley, 2021. xxii, 676 p.,
Includes Index (p. 663-676)

ISBN: 9781118956939

Subject Terms: Thermodynamics analysis; Fluid flow systems; Solar thermal system; Optical fiber; Fins and heat sinks

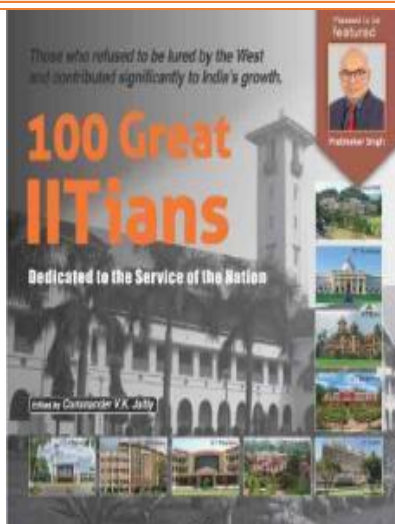
620.91 MAJ-D

Barcode: 179796; CL

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Gratis

47



100 great IITians: dedicated to the service of the nation edited by V. K. Jaitly, New Delhi: Excel India, 2024. xxiii, 404 p.,

ISBN: 9789391355944

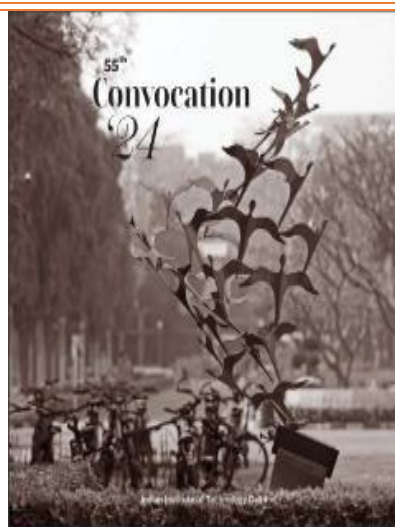
Subject Terms: Nation building; Global IITians; Country growth; Cosmos; Educational Institute

061.1IIT-057.8 -GRE

Barcode: G24042; CL

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48



55th convocation 24 by Indian Institute of Technology Delhi, New Delhi: Indian Institute of Technology Delhi, 2024. 95 p.,


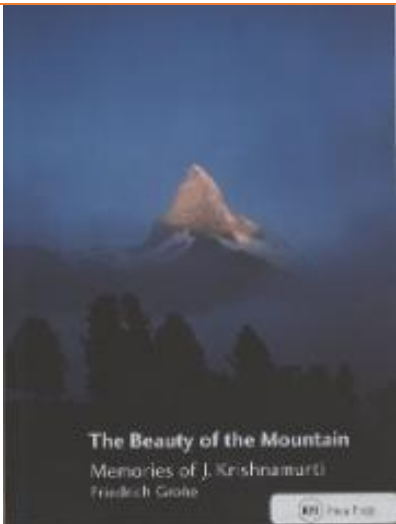
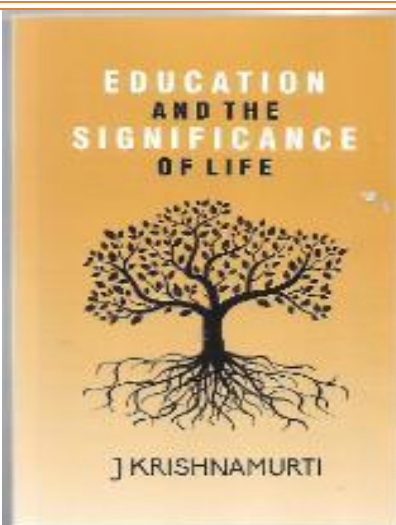
ISBN: 9789350728963

Subject Terms: Convocation; Convocation IITD; Director's report; Staff awards; Board of governors

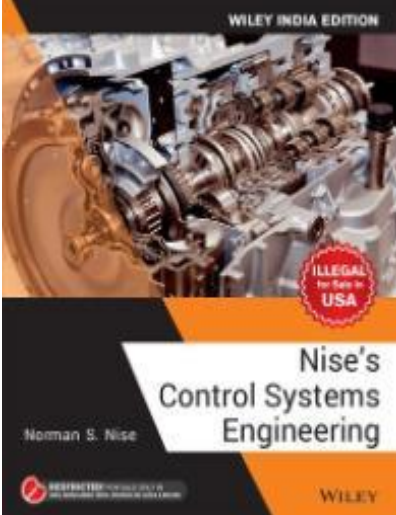
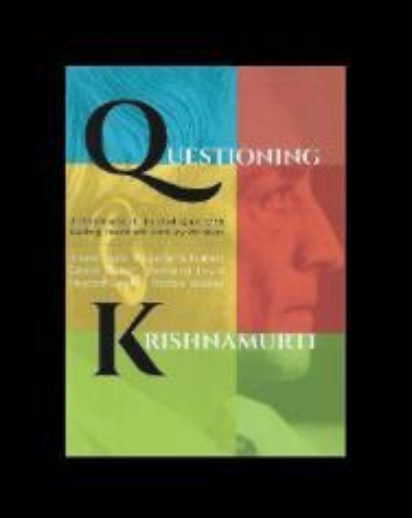
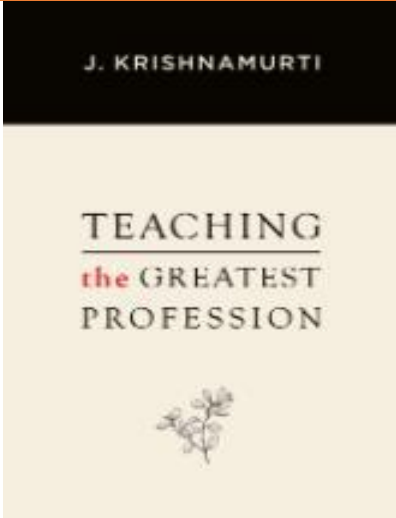
378.014.621 IITD -CON

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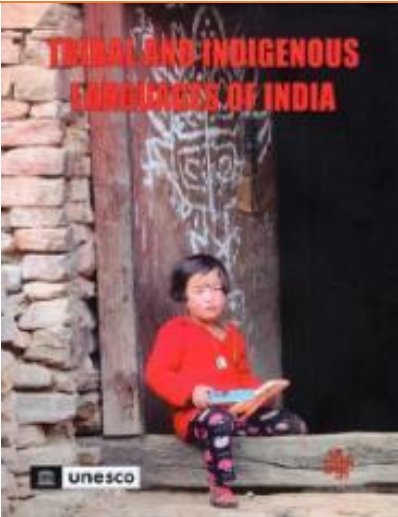
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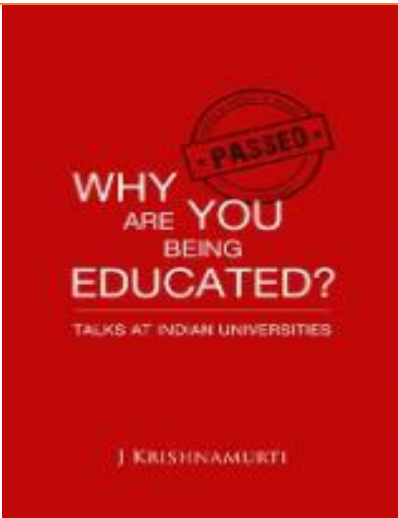
49		<p>Antardwand (अंतरद्वन्द) by Nivedita Bandil, New Delhi: Print Media, 2023. 111 p.,</p> <p>ISBN: 9789359803623</p> <p>Subject Terms: Hindi literature; Self-help; Stories; Z-transform; Fiction</p>
		H 821.214.21-1 BAN-A
		Barcode: G24035; CL
		Click here for more details
50		<p>Beauty of the mountain: memories of J. Krishnamurti by Friedrich Grohe, Hampshire: Krishnamurti foundation trust, 2014. xvi, 108 p.,</p> <p>ISBN: 9781937902254</p> <p>Subject Terms: Teaching; Future; Understanding; Creation; Psychology</p>
		101.9 KRI GRO-B
		Barcode: G24038; CL
		Click here for more details
51		<p>Education and the significance of life by J. Krishnamurti, California: Krishnamurti foundation, 1953. iv, 155 p.,</p> <p>ISBN: 9788187326434</p> <p>Subject Terms: World peace; Marriage; Intelligence; Observation; Art</p>
		37:572 KRI-E
		Barcode: G24037; CL
		Click here for more details

52		<p>Ending of time: where philosophy and physics meet by J Krishnamurti and David Bohm, Hampshire: Krishnamurti foundation trust, 2024. 482 p., ISBN: 9788187326168</p> <p>Subject Terms: Philosophy; Theosophical society; Humanity; Intellect; Intellectual development</p> <p>101:53 KRI-E</p> <p>Barcode: G24041; CL</p> <p>Click here for more details</p>
53		<p>Fail-safe hiring by Raghunath Ramaswamy, Chennai: Raghunath Ramaswamy, 2020. 252 p., Includes appendix, glossary and bibliography (p. 173-252)</p> <p>ISBN: 9789350728970</p> <p>Subject Terms: Recruitment; LinkedIn; Job boards; Recruiting fundamentals; Human resource</p> <p>005.96 RAM-F</p> <p>Barcode: G24045; CL</p> <p>Click here for more details</p>
54		<p>Lilavati's daughters: the women scientists of India edited by Rohini Godbole and Ram Ramaswamy, Bangalore: Indian Academy of Science, 2008. xvii, 384 p., ISBN: 9788184650051</p> <p>Subject Terms: Women scientists India - Biography; Autobiographical essays; Short biographies; Kinematics; Journey of success</p> <p>82-312.6:5-005.2 -LIL</p> <p>Barcode: G24032; CL</p> <p>Click here for more details</p>

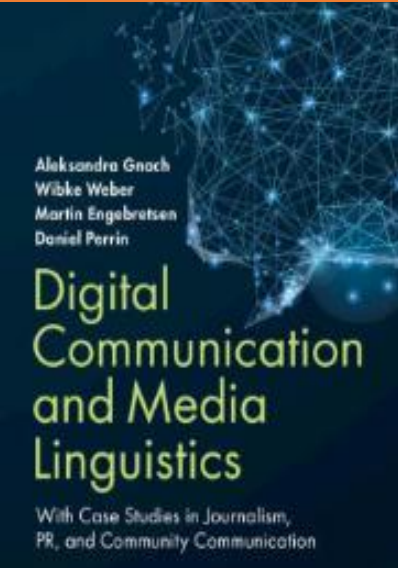
55		<p>Nise's control systems engineering by Norman S. Nise, New Delhi: Wiley, 2015. xvi, 919 p., Includes bibliography and Index (p. 895-919)</p> <p>ISBN: 9788126571833</p> <p>Subject Terms: Control systems; Circuit analogs; Closed loop frequencies; Minor languages; Root locus</p> <p>621-50 NIS-N</p> <p>Barcode: G24034; CL</p> <p>Click here for more details</p>
56		<p>Questioning Krishnamurti by J. Krishnamurti, Hampshire: Krishnamurti foundation trust, 2023. xii, 254 p.,</p> <p>ISBN: 9788187326212</p> <p>Subject Terms: Meditation; Secret; Budha teachings; Intellectual; Self help</p> <p>101.9KRI -QUE</p> <p>Barcode: G24039; CL</p> <p>Click here for more details</p>
57		<p>Teaching: the greatest profession by J. Krishnamurti, Hampshire: Krishnamurti Foundation, 2015. viii, 218 p.,</p> <p>ISBN: 9788197057618</p> <p>Subject Terms: Self-interest; Education; School education; Novel; Psychology</p> <p>377 KRI-T</p> <p>Barcode: G24036; CL</p> <p>Click here for more details</p>


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58		<p>Tribal and indigenous languages of India by Ramesh C. Gaur, Sumit Dey and Kumari Mamta, New Delhi: Indira Gandhi National Centre for Arts and Unesco, 2022. xiv, 214 p.,</p> <p>ISBN: 9789391045500</p> <p>Subject Terms: Linguistic; Lesser-Known languages; Tribal languages; Woman ecologist in India; Classified languages</p> <p>811:321.111(540) GAU-T</p> <p>Barcode: G24033; CL</p> <p>Click here for more details</p>
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59		<p>Why are you being educated?: talks at Indian universities by J. Krishnamurti, Chennai: Krishnamurti foundation, 2002. ix, 104 p.,</p> <p>ISBN: 9788187326397</p> <p>Subject Terms: Transformation; Education; Mind and nature; Psychology; Future</p> <p>37.01 KRI-W</p> <p>Barcode: G24040; CL</p> <p>Click here for more details</p>
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Humanities & Social Sciences

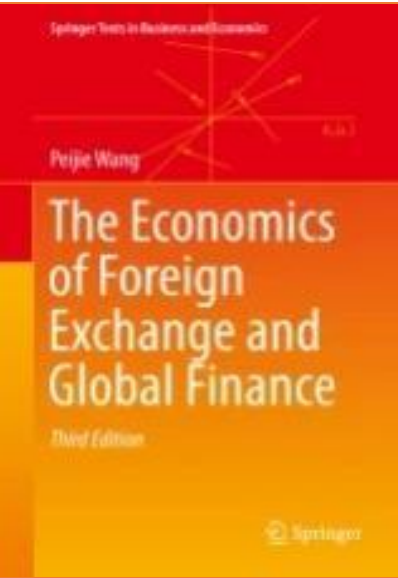
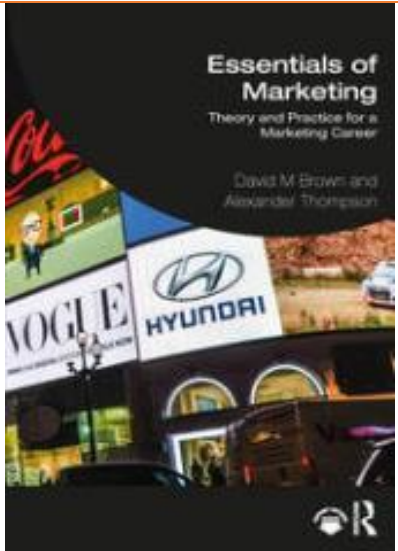

60		<p>Digital communication and media linguistics: with case studies in journalism, PR, and community communication by Aleksandra Gnach... (et al.), Cambridge: Cambridge University Press, 2023. x, 308 p., Includes reference and index (p. 279-308)</p> <p>ISBN: 9781108748278</p> <p>Subject Terms: Digital media; Mass media and language; Language arts and disciplines; Ewald's optical extinction theorem; Ethnographies of social networks</p> <p>316.774:070 -DIG</p> <p>Barcode: 179777; CL</p> <p>Click here for more details</p>
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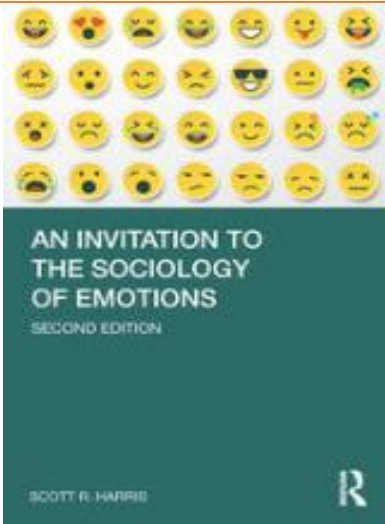
61	 <p>understanding quantitative and qualitative research in psychology a practical guide to methods, statistics, and analysis</p> <p>VICTORIA BOURNE ALANA I. JAMES KEVIN WILSON-SMITH</p>	<p>Understanding quantitative and qualitative research in psychology: a practical guide to methods, statistics and analysis by Victoria Bourne, Alana I. James and Kevin Wilson-Smith, Oxford: Oxford University Press, 2021. xxxv, 668 p., Includes bibliography and index (p. 645-668)</p> <p>ISBN: 9780198823049</p> <p>Subject Terms: Correlations; Logistic regression; Grounded theory; Solid-solid contact effects; Psychological research</p> <p>159.9:303.8 BOU-U</p> <p>Barcode: 179786-179788; CL; TB</p> <p>Click here for more details</p>
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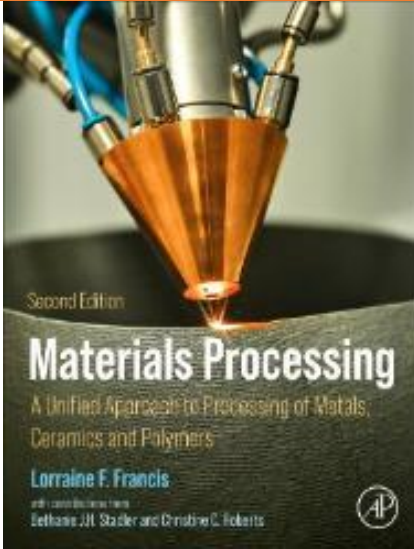
62	 <p>Fundamentals of Turbulence and its Modeling Sawan S. Sinha</p>	<p>Fundamentals of turbulence and its modeling by Sawan S. Sinha, New Delhi: Ane Publishers & Distributors, 2025. v, 205 p., Includes bibliography and index (p. 201-205)</p> <p>ISBN: 9788197240362</p> <p>Subject Terms: Turbulence; Modeling; Kinetic energy; Space engineering; Tensors</p> <p>52-466 SIN-F</p> <p>Barcode: 179815; CL</p> <p>Click here for more details</p>
63	 <p>Introduction to Parallel Programming Subodh Kumar</p>	<p>Introduction to parallel programming by Subodh Kumar, New York: Cambridge University Press, 2022. xi, 282 p., Includes bibliography and index (p.268-282)</p> <p>ISBN: 9781009069533</p> <p>Subject Terms: Parallel computer architecture; Parallel performance analysis; Parallel program design; Middleware; Parallel algorithms</p> <p>004.42 SUB-I</p> <p>Barcode: 179762; CL</p> <p>Click here for more details</p>

Management Studies

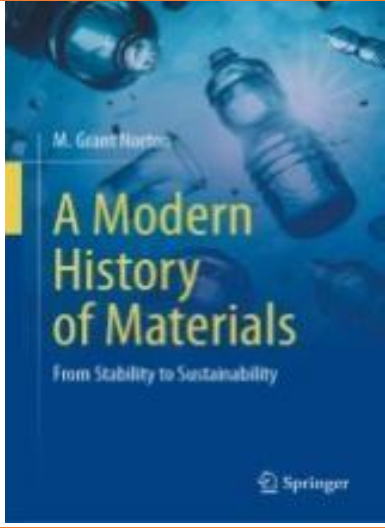
64		<p>Economics of foreign exchange and global finance by Peijie Wang, 3rd ed. Berlin: Springer, 2020. xv, 487 p., Springer texts in business and economics. Includes index (p. 479-487)</p> <p>ISBN: 9783662592694</p> <p>Subject Terms: International finance; Foreign exchange; International monetary economics; Foreign direct investment; International investment positions</p>
		339.5 WAN-E
		Barcode: 179833-179834; CL; DMS
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65		<p>Essentials of marketing: theory and practice for a marketing career by David M Brown and Alexander Thompson, Abingdon: Routledge, 2023. vii, 449 p., Includes index (p. 443-449)</p> <p>ISBN: 9780367773427</p> <p>Subject Terms: Marketing; Marketing communications; Marketing management; Management control; Service marketing</p>
		658.8 BRO-E
		Barcode: 179784; CL
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66		<p>Human resource champions the next agenda for adding value and delivering results by Dave Ulrich, Boston: Harvard Business Review Press, 1996. xi, 281 p., Includes index (p. 273-281)</p> <p>ISBN: 9780875847191</p> <p>Subject Terms: Administración de personal; Business and economics; Cambio organizacional; Competition Organizational change; Human resource management</p>
		331.101.262 ULR-H
		Barcode: 179761; DMS
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67		<p>Invitation to the sociology of emotions by Scott R. Harris, 2nd ed. New York: Routledge, 2024. x, 127 p., Includes bibliography (p. 123-127)</p> <p>ISBN: 9781032474151</p> <p>Subject Terms: Emotion management; Emotional labor; Identifying emotions; Stain types; Biological emotions</p> <p>316:159.942 HAR-I</p> <p>Barcode: 179773-179774; CL; DMS</p> <p>Click here for more details</p>
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Materials Science & Engineering

68		<p>Materials processing: a unified approach to processing of metals, ceramics and polymers by Lorraine F. Francis, 2nd ed. London: Elsevier, 2024. xvii, 647 p., Includes index (p. 633-647)</p> <p>ISBN: 9780128239087</p> <p>Subject Terms: Melt processes; Solid processes; Powder processes; Dispersion and solution processes; Vapor processes</p> <p>620.1 FRA-M</p> <p>Barcode: 179807; CL</p> <p>Click here for more details</p>
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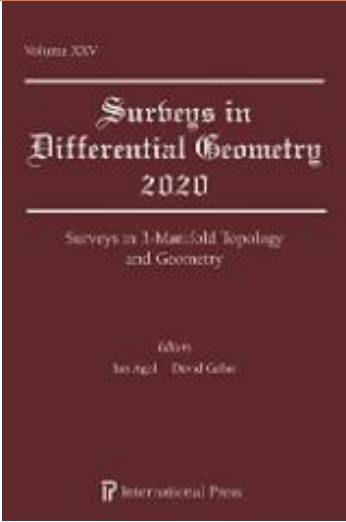
69		<p>Modern history of materials: from stability to sustainability by M. Grant Norton, Cham: Springer, 2023. xii, 216 p., Includes index (p. 211-216)</p> <p>ISBN: 9783031239892</p> <p>Subject Terms: History of science; Materials science; Nanotechnology; Quantum physics; Semiconductors</p> <p>620.1 NOR-M</p> <p>Barcode: 179845; CL</p> <p>Click here for more details</p>
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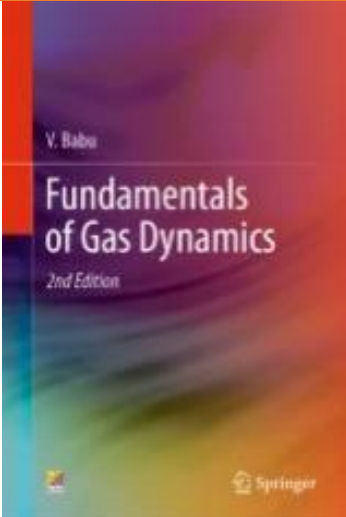
70		<p>P. P. Ewald and his dynamical theory of x-ray diffraction: a memorial volume for Paul P. Ewald, 23 January 1888 - 22 August 1985 edited by D. W. J., Cruickshank, H. J. Juretschke, and N. Kato, Oxford: Oxford University Press, 1992. vii, 161 p., IUCr monographs on crystallography. Includes bibliography and index (p. 149-161)</p> <p>ISBN: 9780198553793</p> <p>Subject Terms: Ewald Peter Paul 1888-1985; X-ray crystallography; X-rays Diffraction; Quantum systems; Crystal optics</p> <p>535.4 -PPE</p> <p>Barcode: 179776; CL</p> <p>Click here for more details</p>
71		<p>Phases of matter and their transitions: concepts and principles for chemists, physicists, engineers, and materials scientists by Gijsbertus de With, Weinheim: Wiley, 2024. xxxi, 672 p., Includes Index (p. 659-972)</p> <p>ISBN: 9783527350315</p> <p>Subject Terms: Matter and energy; Hamilton's equations; Quantum mechanics; Chemical thermodynamics; Macroscopic thermodynamics</p> <p>544.03 WIT-P</p> <p>Barcode: 179781; CL</p> <p>Click here for more details</p>
72		<p>Practical approach to scientific molding by Gary F. Schiller, 2nd ed. Germany: Hanser Publications, 2018. xiv, 190 p., Includes Bibliography and index (p. 187-191)</p> <p>ISBN: 9781569906866</p> <p>Subject Terms: Injection molding process; Injection; Clamping; Human machine interface;</p> <p>678.027.7 SCH-P</p> <p>Barcode: 179830; CL</p> <p>Click here for more details</p>

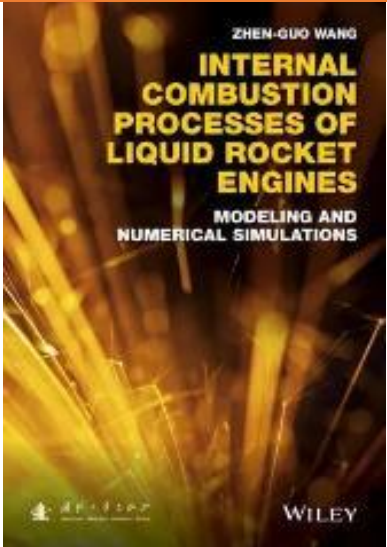
Mathematics

73		<p>Advances and trends in optimization with engineering applications editor Tamas Terlaky, Miguel F. Anjos and Shabbir Ahmed, Philadelphia: SIAM, 2017. xxxiv, 696 p., MOS-SIAM series on optimization. Includes bibliography and index (p. 541-696)</p> <p>ISBN: 9781611974676</p> <p>Subject Terms: Derivative-free methodologies; Deterministic global optimization; Engineering mathematics; Mathematical optimization; Robust and stochastic optimization</p> <p>519.863:62 -ADV</p> <p>Barcode: 179831; CL</p> <p>Click here for more details</p>
74		<p>Introduction to methods for nonlinear optimization by Luigi Grippo and Marco Sciandrone, Switzerland: Springer, 2023. xv,723p., UNITEX - La Matematica Per il 3+2. Includes bibliography and index (p. 709-723)</p> <p>ISBN: 9783031267895</p> <p>Subject Terms: Optimization; Nonlinear programming; Operations research; Computational methods; Nonlinear equations</p> <p>519.853 GRI-I</p> <p>Barcode: 179858; CL</p> <p>Click here for more details</p>
75		<p>Mathematical principles of topological and geometric data analysis by Parvaneh Joharinas and Jürgen Jost, Cham: Springer, 2023. ix, 281 p., Mathematics of data. Includes bibliography and index (p. 271-281)</p> <p>ISBN: 9783031334399</p> <p>Subject Terms: Application of mathematics; Topology; Machine learning; Computer science; Geometry</p> <p>51-7:004.6 JOH-M</p> <p>Barcode: 179846; CL</p> <p>Click here for more details</p>

76		<p>Surveys in differential geometry 2020: Surveys in 3-manifold topology and geometry edited by Ian Agol and David Gabai, Boston: International Press, 2022. ix, 353 p., Surveys in differential geometry.</p> <p>ISBN: 9781571464194</p> <p>Subject Terms: Differential geometry; Manifold topology; Mathematics; Heegard theory; Geometric group theory</p> <p>514.7 -SUR</p> <p>Barcode: 179832; CL</p> <p>Click here for more details</p>
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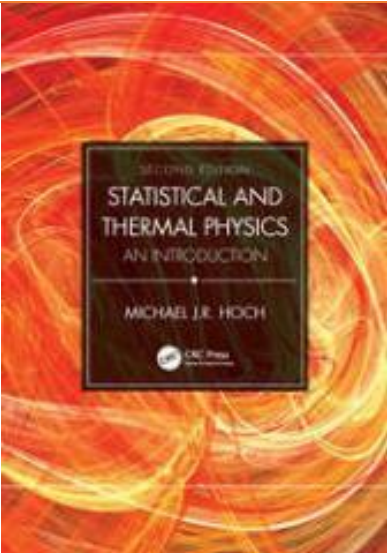
Mechanical Engineering

77		<p>Fundamentals of gas dynamics by V. Babu, 2nd ed. Cham: Springer, 2021. xiii, 195 p., Includes an index (p. 193-195)</p> <p>ISBN: 9783030608187</p> <p>Subject Terms: Engineering thermodynamics; Astronautics; Gas dynamics; Mathematical optimization; Heat and mass transfer</p> <p>533.7 BAB-F</p> <p>Barcode: 179792; CL</p> <p>Click here for more details</p>
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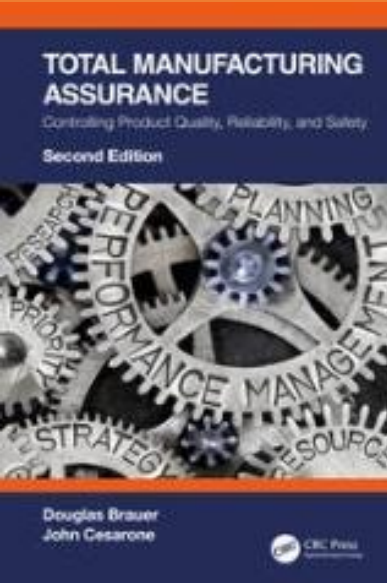
78		<p>Internal combustion processes of liquid rocket engines: modeling and numerical simulations by Zhen-Guo Wang, Singapore: Wiley, 2016. ix, 382 p., Includes index (p.377-382)</p> <p>ISBN: 9781118890028</p> <p>Subject Terms: Simulations of combustion; Liquid propellant; Centrifugal injector; subjects 4; Droplet evaporation model</p> <p>621.453 WAN-I</p> <p>Barcode: 179768; CL</p> <p>Click here for more details</p>
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79		<p>Mechanics of flow-induced vibration: physical modeling and control strategies by Rajeev Jaiman, Guojun Li and Amir Chizfahm, Singapore: Springer, 2023. xx, 1021 p., Includes bibliography (p. 989-1021)</p> <p>ISBN: 9789811985805</p> <p>Subject Terms: Single-phase fluid-structure; Turbulence effects; Temporal coupling; Retail marketing; Neural calculus</p> <p>532.595 JAI-M</p> <p>Barcode: 179785; CL</p> <p>Click here for more details</p>
80		<p>Non-equilibrium thermodynamics by Andrea Di Vita, Cham: Springer, 2022. xxi, 220 p., Lecture notes in physics. Includes index (p. 219-220)</p> <p>ISBN: 9783031122200</p> <p>Subject Terms: Nonequilibrium thermodynamics - Statistical methods; Entropy balance in fluids; Variational Principles; Engine technology; Oscillating relaxed states</p> <p>536:544.64 VIT-N</p> <p>Barcode: 179793; CL</p> <p>Click here for more details</p>
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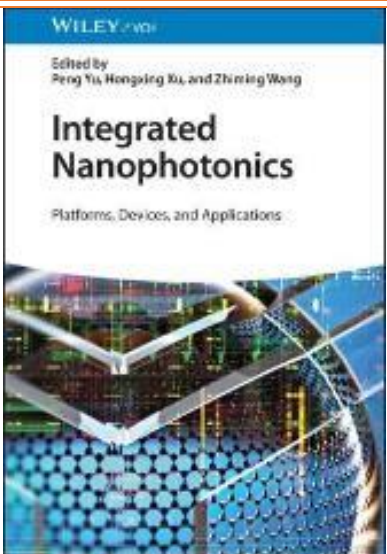
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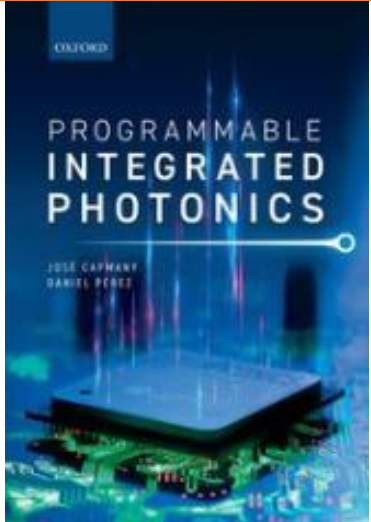
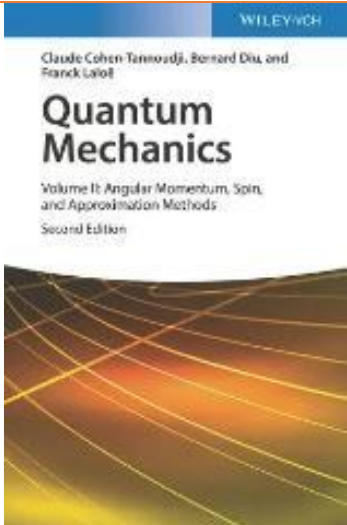
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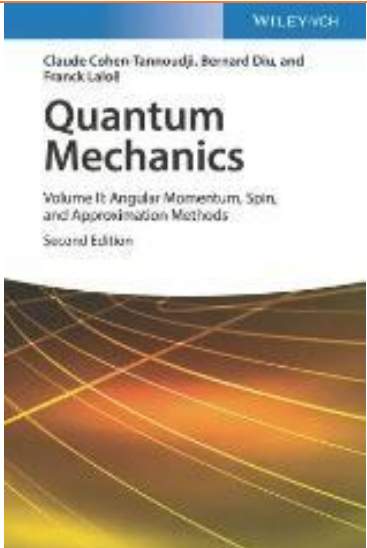
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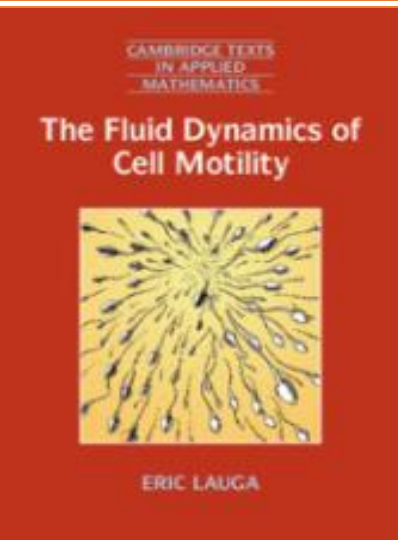
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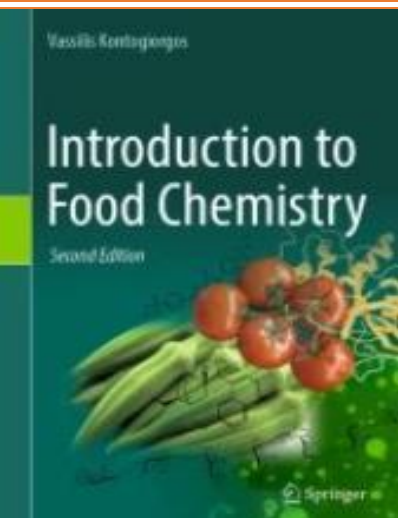
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Physics

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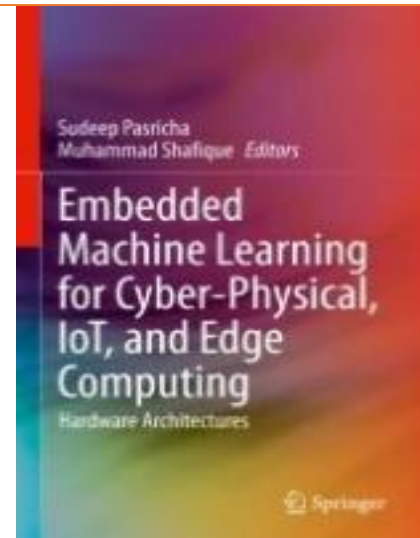
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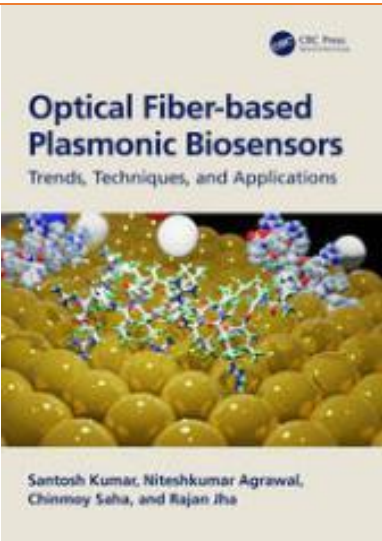
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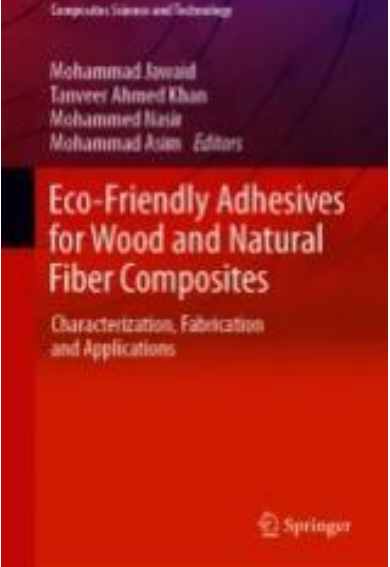
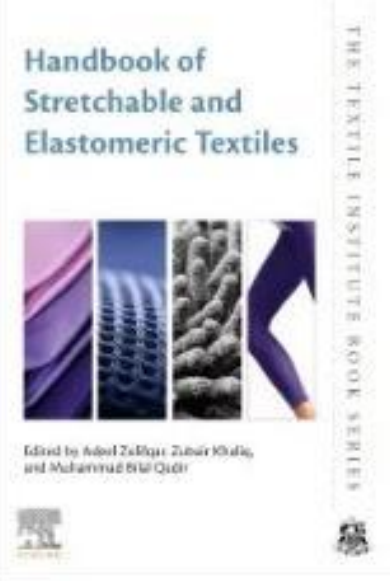
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Department	: Centre for Atmospheric Sciences, IITD
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Department	: IIT Delhi and University of Queensland
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Supervisor	: Pant, K. K. (Prof.) - CHE (Guide); Blaskovich, Mark (Prof.) - University of Queensland (Guide); Ziora, Zyta - University of Queensland (Guide); Kaushal, Priyanka (Prof.) - CRDT (Guide)
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Department	: IIT Delhi and University of Queensland
Year	: 2024
Supervisor	: Pant, Kamal Kishor (Prof.) - CHE (Guide); Blaskovich, Mark (Prof.) - University of Queensland (Guide); Ziora, Zyta - University of Queensland (Guide)
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Department	: Department of Electrical Engineering, IITD
Year	: 2024
Supervisor	: Sarkar, Mukul (Prof.) - EE (Guide)
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Researcher : Mandal, Akash Kumar

Department : Department of Electrical Engineering, IITD

Year : 2024

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

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Subject terms : Wireless communication; Modern grid monitoring; CIN modeling; Real time monitoring; Markov model

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Title : Studies on hybrid 3D carbonaceous nanofillers based multifunctional thermoplastic polyurethane composites

Researcher : Mandal, Subhash

Department : Department of Textile and Fibre Engineering, IITD

Year : 2024

Supervisor : Roy, Debmalya (Scientist) - DRDO, Kanpur (Guide); Joshi, Mangala (Prof.) - TFE (Guide)

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Subject terms : Carbon nanotubes; Polyurethane; Nanocomposite; X-ray diffraction; Electromagnetic spectrum

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Title : Multispectral quantitative phase and polarization microscope imaging for biomedical applications

Researcher : Mann, Priyanka

Department : Department of Physics, IITD

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Supervisor : Mehta, Dalip Singh (Prof.) - PH (Guide)

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Subject terms : Imaging techniques; Polarization microscopy; Image processing; Tissue birefringence; Interferometry

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Supervisor : Narang, Ankur (VP) - Hike Private Limited, New Delhi (Guide); Lall, Brejesh (Prof.) - EE (Guide)
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Researcher : Pakhale, Gaurav Kalidas
Department : Department of Civil Engineering, IITD
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Researcher : Parvathi G.S.
Department : Department of Civil Engineering, IITD
Year : 2024
Supervisor : Ramana, G.V. (Prof.) - CE (Guide)
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Subject terms : Monoblock shear behaviour; Geofoam grade; Poisson ratio; Flexural behaviour; Strain field maps
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Title	: Structured perturbation analysis of polynomial and rational eigenvalue problems
Researcher	: Prajapati, Anshul
Department	: Department of Mathematics, IITD
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Supervisor	: Sharma, Punit (Assoc. Prof.) - MA (Guide)
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Subject terms	: Matrix polynomial; Rayleigh quotients; MATLAB programming tools; T-even/ T-odd structures; Palindromic structure
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Researcher	: Praneeth, Suri Rama Naga
Department	: Department of Electrical Engineering, IITD
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Supervisor	: Singh, Bhim (Prof.) - EE (Guide)
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Title	: New soil erosion severity map for India using geospatial modeling and machine learning
Researcher	: Raj, Ravi
Department	: Department of Civil Engineering, IITD
Year	: 2024
Supervisor	: Saharia, Manabendra (Asst. Prof.) - CE (Guide); Chakma, Sumedha (Assoc. Prof.) - CE (Guide)
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Subject terms	: Rainfall erosivity; Soil erodibility; Fournier index; Clay Ratio; Geographic information system
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Title : Performance analysis of III-nitride HEMT devices with novel structures using DC and RF characterizations and simulations

Researcher : Raychaudhuri, Jagori

Department : Department of Physics, IITD

Year : 2024

Supervisor : Ghosh, Santanu (Prof.) - PH (Guide); Mishra, Meena (Director) - Solid State Physics Laboratory, DRDO (Guide)

Physical description : xxi,186 p.

Subject terms : HEMT fabrication; Thin barrier heterostructures; Electrical characterization; Capacitance-voltage measurements; TCAD simulations

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Title : Syntax of negation and polarity in Wagdi

Researcher : Sharma, Vyom

Department : Department of Humanities and Social Sciences, IITD

Year : 2024

Supervisor : Sanyal, Paroma (Assoc. Prof.) - HSS (Guide)

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Subject terms : Study of language; Polarity markers in Wagdi; Wagdi - Bhil language; Western Indo Aryan language; Wagdi - Southern Rajasthan language

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Title : Metallylenes and metallylene cations as efficient catalysts for cytosilylation and hydroboration reactions

Researcher : Singh, Vivek Kumar

Department : Department of Chemistry, IITD

Year : 2024

Supervisor : Nagendran, S. (Prof.) - CHY (Guide)

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Subject terms : N-heterocyclic; Oxidation reaction; Cyano-silylation of carbonyl; Drying of solvents; Chemoselectivity experiments

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Title : Development of functionally graded biomaterial with tailorable degradation rate and mechanical properties

Researcher : Tripathi, Gaurav

Department : Department of Mechanical Engineering, IITD

Year : 2024

Supervisor : Pandey, Pulak Mohan (Prof.) - ME (Guide)

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Subject terms : Fabrication procedure; Biodegradable material; Microwave sintering; Surface morphology; Buckingham's theorem

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Title : Small dimensional hull codes over finite fields and finite non-chain rings

Researcher : Agrawal, Astha

Department : Department of Mathematics, IITD

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Supervisor : Sharma, R. K. (Prof.) - MA (Guide)

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Subject terms : Galois codes; Algebraic coding; Matrix product codes; Additive complementary dual codes; Linear codes

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Title : Adhesive bonding of composite materials for armor applications

Researcher : Ahmed, Aisha

Department : Department of Mechanical Engineering, IITD

Year : 2024

Supervisor : Bhatnagar, Naresh (Prof.) - ME (Guide)

Physical description : xviii, 158 p.

Subject terms : Ballistic threat standards; Boron carbide tiles; Interfacial lap shear; IFSS test; Plasma treatment

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Title : Development of position sensorless switched reluctance motor drives for solar water pumping

Researcher : Yalavarthi, Amarnath

Department	: Department of Electrical Engineering, IITD
Year	: 2024
Supervisor	: Singh, Bhim (Prof.) - EE (Guide)
Physical description	: xxix, 286 p.
Subject terms	: Water pumping systems; Sliding mode observer; Design for solar water pumping; Switched reluctance motor; Sensor less SRM drive
Barcode	: TH7729
Call No.	: TH 621.311 YAL-D
Title	: Fabrication of efficient, stable and scalable perovskite solar cells
Researcher	: Amit Kumar
Department	: Department of Energy Science and Engineering, IITD
Year	: 2024
Supervisor	: Karak, Supravat (Assoc. Prof.) - ESE (Guide)
Physical description	: xiv, 191p.
Subject terms	: Photovoltaic technology; Solar cell measurement; Optoelectronic characterization; Characterization techniques; Structural stability analysis
Barcode	: TH7730
Call No.	: TH 621.383.51 AMI-F
Title	: Lifecycle assessment (LCA) of crop residue - biochar system for energy security and carbon sequestration
Researcher	: Anand, Abhijeet
Department	: Center for Rural Development and Technology, IITD
Year	: 2024
Supervisor	: Kaushal, Priyanka (Prof.) - CRDT (Guide); Vivek Kumar (Prof.) - CRDT (Guide)
Physical description	: lvii, 285 p.
Subject terms	: Agriculture production in India; Pyrolysis; Carbon sequestration; Lignocellulosic analysis; Sensitivity analysis
Barcode	: TH7731
Call No.	: TH 631.57 ANA-L
Title	: Design and optimizations towards smart grid connected green future communication networks
Researcher	: Balakrishnan, Ashutosh

Department : Department of Electrical Engineering, IITD
Year : 2024
Supervisor : De, Swades (Prof.) - EE (Guide); Wang, Li-Chun (Prof.) - NYMCTU, Taiwan (Guide)
Physical description : xxiv, 189 p.
Subject terms : Inflexibility of traditional power grid; Network operation strategies; Optimal CAPEX; Markov modeling; Energy network modelling
Barcode : TH7732
Call No. : TH 621.3.011.7 BAL-D

Title : Strategic aspects of technological innovation performance of Indian acquiring firms in cross-border acquisitions
Researcher : Bansal, Jayant Kumar
Department : Department of Management Studies, IITD
Year : 2024
Supervisor : Chaudhry, Harish (Prof.) - MS (Guide); Kashiramka Smita (Prof.) - MS (Guide)
Physical description : xv, 219 p.
Subject terms : Technological innovation performance; Ethical considerations; Conceptual model; m-TISM; MICMAC analysis
Barcode : TH7733
Call No. : TH 658.7 BAN-S

Title : Role of Rab11 in Leishmania trafficking in macrophages
Researcher : Basak, Rituparna
Department : Kusuma School of Biological Science, IITD
Year : 2024
Supervisor : Mukhopadhyay, Amitabh (Prof.) - SBS (Guide)
Physical description : xv, 133 p,
Subject terms : Leishmania life cycle; EGF endocytosis; Culture of mammalian cells; Immunofluorescence; Transferrin endocytosis
Barcode : TH7734
Call No. : TH 576.3:61 BAS-R

Title : Exploration into the social cognition of children with specific learning disorder
Researcher : Bhutani, Saniya
Department : Department of Humanities and Social Sciences, IITD

Year	: 2024
Supervisor	: Singh, Kamlesh (Prof.) - HSS (Guide)
Physical description	: xix, 204 p.
Subject terms	: Social cognition in psychology; Social cognition in clinical conditions; Indian tools for assessing SC; Evolution of SLD; Neurocognition
Barcode	: TH7735
Call No.	: TH 616.89-053.2 BHU-E
Title	: Lanthanide ion doped sodium - potassium bismuth fluoride nanostructures for photonics and biomedical applications
Researcher	: Bungla, Manisha
Department	: Department of Chemistry, IITD
Year	: 2024
Supervisor	: Ganguli, Ashok K. (Prof.) - CHY (Guide); Prasad, Paras N. (Prof.) - CHY (Guide); Chowdhury Primit K.(Prof.) - CHY (Guide)
Physical description	: xviii,136 p.
Subject terms	: Lanthanides and their luminescence; Scintillators; Characterization techniques; Structural and morphological investigations; Preparation of thin film
Barcode	: TH7736
Call No.	: TH 543.4 BUN-L
Title	: Development and experimental study of a superfinishing process using a pneumatically configurable flexible tool
Researcher	: Chawla, Onkar
Department	: Department of Mechanical Engineering
Year	: 2024
Supervisor	: Jha, Sunil (Prof.) - ME (Guide)
Physical description	: xxvi,136 p.
Subject terms	: Flexible finishing techniques; Polishing tool design; Effect of process parameters; Mathematical modelling; Effect of polishing parameters
Barcode	: TH7737
Call No.	: TH 621.542 CHA-D
Title	: Graphene quantum dots from styrofoam waste for multidimensional applications
Researcher	: Dheeraj Kumar
Department	: Department of Textile & Fibre Engineering, IITD

Year	: 2024
Supervisor	: Srivastava, Rajiv K. (Prof.) - TFE (Guide)
Physical description	: xxxv, 249 p.
Subject terms	: Plastic pollution; Styrofoam waste upcycling; Carbon nanomaterials from plastic waste; Cyclic structure from polystyrene; Transmission electron microscopy
Barcode	: TH7738
Call No.	: TH 502.175-036.5 DHE-G
Title	: Blast resistant design of structures using advanced materials and system
Researcher	: Gaur, Lekhani
Department	: School of Interdisciplinary Research, IITD
Year	: 2024
Supervisor	: Darpe, Ashish K. (Prof.) - ME (Guide); Chakraborty, Tanushree (Prof.) - CE (Guide)
Physical description	: xxiii, 233 p.
Subject terms	: Blast load; Fiber reinforced concrete slabs; Computation of TNT equivalence; Slump cone test; Blast analysis of structure
Barcode	: TH7739
Call No.	: TH 624.04:699.81 GAU-B
Title	: Management and planning of long-term geriatric care in India: an exploratory study
Researcher	: Gulati, Sunil Kumar
Department	: Department of Management Studies, IITD
Year	: 2024
Supervisor	: Dubey, Amlendu K. (Prof.) - MS (Guide); Jain, Sudhir K. (Prof.) - MS (Guide)
Physical description	: xvii, 450 p.
Subject terms	: Ageing population; Problems of elderly; Elderly care in Japan; Disability free life expectancy; Management of elderly care globally
Barcode	: TH7740
Call No.	: TH 613.98:005.51(540) GUL-M
Title	: Study of conjugate heat transfer in microchannel heat sink using nanofluid as convection working fluid
Researcher	: Gupta, Sandeep

Department : Department of Mechanical Engineering, IITD

Year : 2024

Supervisor : Subbarao P. M. V. (Prof.) - ME (Guide)

Physical description : xvii, 173 p.

Subject terms : Classification of thermal management techniques; Microchannel heat sink; Axial temperature management system; Maximum capacity of a heat sink; Thermo- Hydraulic performance

Barcode : TH7741

Call No. : TH 536.2:532.52 GUP-S

Title : Understanding neural correlates of object recognition

Researcher : Gupta, Shefali

Department : Department of Electrical Engineering, IITD

Year : 2024

Supervisor : Gandhi, Tapan Kumar (Prof.) - EE (Guide); Sinha, Pawan (Prof.) - Massachusetts Institute of Technology, Cambridge (Guide)

Physical description : xxvii, 193 p.

Subject terms : Neural underpinning of object perception; Behavioral experiment protocol; Functional connectivity using PLV; MST graph analysis; N170 amplitude comparison

Barcode : TH7742

Call No. : TH 612.82 GUP-U

Title : Electrical and electromechanical studies of complex oxide materials at morphotropic phase boundary

Researcher : Hitesh Kumar

Department : Department of Physics, IITD

Year : 2024

Supervisor : Chatterjee, Ratnamala (Prof.) - PH (Guide)

Physical description : xxiv, 119 p.

Subject terms : Properties of complex oxide; Ferroelectricity; Applications of shape memory oxides; Topographical studies of thin films; Polarization measurements

Barcode : TH7743

Call No. : TH 539.63:666.655 HIT-E

Title : Efficient layerwise multi-physics spectral element model for guided waves in smart strips with delaminations

Researcher	: Jain, Mayank
Department	: Department of Applied Mechanics, IITD
Year	: 2024
Supervisor	: Pradyumna S. (Prof.) - AM (Guide); Kapuria, Santosh (Prof.) - AM (Guide)
Physical description	: xxviii, 235 p.
Subject terms	: Wave propagation analysis; Hamilton's principle; Refined third-order shear deformable theory; Spectral elements; Analysis of smart strips featuring delamination
Barcode	: TH7744
Call No.	: TH 532.59 JAI-A
Title	: Fate and removal of recalcitrant pharmaceuticals in biological nitrogen removal system
Researcher	: James, Susan N
Department	: Department of Civil Engineering, IITD
Year	: 2024
Supervisor	: V., Arya (Asst. Prof.) - CE (Guide)
Physical description	: xxi, 207 p.
Subject terms	: Biological nitrogen removal process; Wastewater treatment plants; Wastewater recycling; Pollutant; Nitrogen removal
Barcode	: TH7745
Call No.	: TH 628.168 JAM-F
Title	: Plant-based TiO ₂ -RGO nanocomposite for the removal of emerging contaminants
Researcher	: Joseph, Angel
Department	: Department of Civil Engineering, IITD
Year	: 2024
Supervisor	: V., Arya (Asst. Prof.) - CE (Guide)
Physical description	: xxvi, 250 p.
Subject terms	: Green synthesis of photocatalysts; Immobilized techniques; Plant extract preparation; Effect of ionic strength, NOM and hard water; Characterization of virgin and aged PES-MPSF
Barcode	: TH7746
Call No.	: TH 616-022.1:549.514.6 JOS-P

Title	: Development, design and analysis of switching capacitor based buck-boost converters
Researcher	: Khubchandani, Vasudha
Department	: Department of Electrical Engineering, IITD
Year	: 2024
Supervisor	: Veerachary, Mummadi (Prof.) - EE (Guide)
Physical description	: xv, 135 p.
Subject terms	: Converter topologies; Switching-capacitor cell; SCBBC type-2 topology; Buck-boost converter type-1; Controller design of ESCBBC
Barcode	: TH7747
Call No.	: TH 621.3.064 KHU-D
Title	: Profiling the secondary metabolites from chlorella minutissima and development of millet-based functional food
Researcher	: Koushalya S.
Department	: Centre for Rural Development and Technology, IITD
Year	: 2024
Supervisor	: Malik, Anushree (Prof.) - CRDT (Guide); Hariprasad P. (Assoc. Prof.) - CRDT (Guide)
Physical description	: xviii, 249 p.
Subject terms	: Microalgae; Biomass production; Alkaloids; AG inhibitors; Antioxidants
Barcode	: TH7748
Call No.	: TH 577.121:633.17 KOU-P
Title	: Units in group rings
Researcher	: Malik, Sandeep
Department	: Department of Mathematics, IITD
Year	: 2024
Supervisor	: Sharma, R. K. (Prof.) - MA (Guide)
Physical description	: x, 80 p.
Subject terms	: Integral group rings; Dihedral groups; Coefficients; Isomorphic groups; Wedderburn decomposition
Barcode	: TH7749
Call No.	: TH 512.55 MAL-U
Title	: Twisted derivations in group rings and algebraic number fields with coding theory applications

Researcher	: Manju, Praveen
Department	: Department of Mathematics, IITD
Year	: 2024
Supervisor	: Sharma, Rajendra Kumar (Prof.) - MA (Guide)
Physical description	: xviii, 269 p.
Subject terms	: Derivations; Twisted leibnitz; Endomorphisms; Linear expressions; Algebraic number theory
Barcode	: TH7750
Call No.	: TH 511.23:519.711 MAN-T
Title	: Design and control of grid-interactive EV charging architecture under multiple grid non-idealities
Researcher	: Mishra, Debasish
Department	: Department of Electrical Engineering, IITD
Year	: 2024
Supervisor	: Panigrahi, B. K. (Prof.) - EE (Guide); Singh, Bhim (Prof.) - EE (Guide)
Physical description	: xxx, 293 p.
Subject terms	: EV charging infrastructure; Charging topologies; MATLAB modelling; Power conversion; Charging dynamics
Barcode	: TH7751
Call No.	: TH 621.311.1 MIS-D
Title	: Development of adsorption based treatment technology for the removal of antibiotic resistance genes from wastewater
Researcher	: Pant, Abhilasha
Department	: School of Interdisciplinary Research, IITD
Year	: 2024
Supervisor	: Ahammad, Shaikh Ziauddin (Prof.) - BEB (Guide); Ali, S. Wazed (Assoc. Prof.) - TFE (Guide)
Physical description	: xiv, 157 p.
Subject terms	: Antibiotic resistance genes; Pyrolyzed bark; Chitosan nanoparticle; Chitosan; Chlorination
Barcode	: TH7752
Call No.	: TH 628.1/.3 PAN-D
Title	: Data-driven process fault detection using machine learning techniques
Researcher	: Rani, Jyoti

Department	: Department of Chemical Engineering, IITD
Year	: 2024
Supervisor	: Kodamana, Hariprasad (Assoc. Prof.) - CHE (Guide)
Physical description	: xx, 155 p.
Subject terms	: Process monitoring; Generative models; Deep learning; Simulation studies; Fault detection
Barcode	: TH7753
Call No.	: TH 004.85 RAN-D
Title	: Modeling and energy optimization of multicore processor-cache systems with emerging technologies
Researcher	: Ravipati, Divya Praneetha
Department	: Department of Computer Science and Engineering, IITD
Year	: 2024
Supervisor	: Panda, Preeti Ranjan (Prof.) - CSE (Guide)
Physical description	: xxii, 177 p.
Subject terms	: Information Technology; Cryogenic computing; Information and computer technologies; Hierarchical model; Processors
Barcode	: TH7754
Call No.	: TH 004.31 RAV-M
Title	: Computations of phase change flows on curved surfaces using multi-directional interface capturing methods
Researcher	: Rohit Kumar
Department	: Department of Mechanical Engineering, IITD
Year	: 2024
Supervisor	: Premachandran, B. (Prof.) - ME (Guide)
Physical description	: xxx, 353 p.
Subject terms	: Volume of fluid; CLSVOF; 2D unstructured mesh; Static liquid drop; Nusselt number calculation
Barcode	: TH7755
Call No.	: TH 681.5.017:66.040 ROH-C
Title	: Studies on optimal placement of multiple inertial sensors for improving sensing accuracy
Researcher	: Sahu, Nitesh
Department	: Center for Applied Research in Electronics, IITD

Year	: 2024
Supervisor	: Arun Kumar (Prof.) - CARE (Guide); Bahl, Rajendar (Prof.) - CARE (Guide)
Physical description	: xiv, 150 p.
Subject terms	: Aviation; Inertial navigation systems; Aerospace; Orthogonal accelerometers; Gyroscopes
Barcode	: TH7756
Call No.	: TH 681.586 SAH-S
Title	: Hardware-assisted secure execution of programs on untrusted systems
Researcher	: Sandeep Kumar
Department	: Amarnath and Shashi Khosla School of Information Technology, IITD
Year	: 2024
Supervisor	: Sarangi, Smruti Ranjan (Prof.) - CSE (Guide)
Physical description	: xxxii, 291 p.
Subject terms	: Securing a single application; End to end security; Taxonomy; Intel SGX; Adaptive GCL renewal
Barcode	: TH7757
Call No.	: TH 004.056:004.3 SAN-H
Title	: Conversion of DI-Aromatics to Mono-Aromatics over Y-Zeolite at FCC conditions
Researcher	: Satheesh V K
Department	: Department of Chemical Engineering, IITD
Year	: 2024
Supervisor	: Pant, Kamal K. (Prof.) - CE (Guide); Bhatia, Divesh (Assoc. Prof.) - CE (Guide)
Physical description	: xxi,160 p.
Subject terms	: Fluid catalytic cracking; Hydrogen transfer reaction; Kinetic modelling; X-ray fluorescence; Micro reactor unit
Barcode	: TH7758
Call No.	: TH 542.9:669.04 SAT-C
Title	: Nitrogen dioxide exposure assessment and child respiratory health in India
Researcher	: Singh, Neha
Department	: IIT Delhi and University of Queensland
Year	: 2024

Supervisor	: Dey, Sagnik (Prof.) - CAS (Guide)
Physical description	: xxxiv, 212 p.
Subject terms	: Air pollution; Ozone monitoring instrument; Global human settlement layer; Central pollution control board; Environmental epidemiology
Barcode	: TH7759
Call No.	: TH 612.223(540) SIN-N
Title	: Development of carrageenan based bioactive hydrogel membranes as wound dressing
Researcher	: Singh, Pratibha
Department	: Department of Textile and Fiber Engineering, IITD
Year	: 2024
Supervisor	: Gupta, Bhuvanesh (Prof.) - TFE (Guide); Mukhopadhyay, Samrat (Prof.) - TFE (Guide); Gupta, Amlan (Prof.) - SMIMS, Gangtok (Guide)
Physical description	: xxvi, 211 p.
Subject terms	: Robust mechanical attributes; Polyethylene glycol; Scanning electron microscopy; Physicochemical analysis; Gauze bandages
Barcode	: TH7760
Call No.	: TH 677.193:544.773.432 SIN-D
Title	: Investigation of dry air intrusion over the Arabian sea and its implications for Indian summer monsoon
Researcher	: Singh, Rahul
Department	: Centre for Atmospheric Sciences, IITD
Year	: 2024
Supervisor	: Sukumaran, Sandeep (Assoc. Prof.) - CAS (Guide)
Physical description	: xxv, 138 p.
Subject terms	: CMIP6; IMD data; EOF analysis; ERA interim; Role of ENSO
Barcode	: TH7761
Call No.	: TH 551.553.21(540) SIN-I
Title	: Photoinduced regio-/stereoselective C-C/C-X bond formation
Researcher	: Singh, Shashank
Department	: Department of Chemistry, IITD
Year	: 2024
Supervisor	: Singh, Ravi P. (Prof.) - CHY (Guide)

Physical description : xxv, 361 p.
Subject terms : Photochemistry; Alkylation; Trifluoromethylation; Nucleophilic; NHPI esters
Barcode : TH7762
Call No. : TH 544.14 SIN-P

Title : Study of heat waves over India
Researcher : Thanigachalam, Arulalan
Department : Centre for Atmospheric Sciences IITD
Year : 2024
Supervisor : Achutarao, Krishna (Prof.) - CAS (Guide); Mitra, Ashis Kumar (Prof.) - NCMRWF, MoES (Guide)

Physical description : xxvi, 180 p.
Subject terms : Intensified tropical cyclones; Extreme rainfall; Meteorological department; Risk based attribution; Healthcare strategies
Barcode : TH7763
Call No. : TH 504.7(540) THA-S

Title : Modelling and performance analysis of V-bar splash fills in wet cooling towers
Researcher : Tiwari, Ankur Kumar
Department : Department of Mechanical Engineering, IITD
Year : 2024
Supervisor : Jain, Sanjeev (Prof.) - ME (Guide); Agrawal, Krishnakant (Asst. Prof.) - ME (Guide); Karmakar, Sujay (General Manager) - NTPCLV, Madhya Pradesh (Guide)

Physical description : xxii, 133 p.
Subject terms : Discrete phase model; Eulerian wall film model; Meshing strategy; Nozzle simulation; Computational geometry
Barcode : TH7764
Call No. : TH 66.045.53 TIW-M

Title : Model based approaches in continuous downstream purification of biotherapeutics
Researcher : Tiwari, Anamika
Department : Department of Chemical Engineering, IITD
Year : 2024
Supervisor : Rathore, Anurag S. (Prof.) - CHE (Guide)

Physical description	: xv, 131 p.
Subject terms	: Process analytical technology; Diffusion; Chromatography; Empirical modeling; Monoclonal antibody
Barcode	: TH7765
Call No.	: TH 602.44 TIW-M
Title	: Experimental and theoretical investigations into CO2 capture by task-specific dual functionalized ionic liquid aqueous blends
Researcher	: Tiwari, Surya Chandra
Department	: Department of Chemical Engineering, IITD
Year	: 2024
Supervisor	: Upadhyayula, Sreedevi (Prof.) - CHE (Guide); Pant, Kamal Kishore (Prof.) - CHE (Guide)
Physical description	: xxi, 210 p.
Subject terms	: Absorbent properties; Corrosion; Thermodynamic; Geometry optimization; Kinetics
Barcode	: TH7766
Call No.	: TH 54-145.2:614.71 TIW-E
Title	: Semi classical analysis of partial differential equations in lattices
Researcher	: Tushir, Abhilash
Department	: Department of Mathematics, IITD
Year	: 2024
Supervisor	: Dasgupta, Aparajita (Assoc. Prof.) - MA (Guide); Ruzhansky, Michael (Prof.) - QMU, London (Guide)
Physical description	: xiv, 181p.
Subject terms	: Differential equations; Laplacian operator; wave equation; Spectrum and fourier equation; Schrodinger operator
Barcode	: TH7767
Call No.	: TH 512.56:517.9 TUS-S
Title	: Construction of additive and galois LCD codes over finite fields
Researcher	: Verma, Gyanendra Kumar
Department	: Department of Mathematics , IITD
Year	: 2024
Supervisor	: Sharma, R. K. (Prof.) - MA (Guide)
Physical description	: xvi, 90 p.

Subject terms	: Self orthogonal codes; Polynomials; Hermitian ACD codes; Quantum codes; Euclidean
Barcode	: TH7768
Call No.	: TH 512.624:519.852 VER-C
Title	: Computational modelling of cancer stem cell with hypoxia and their therapeutic response
Researcher	: Verma, Neelam Kumari
Department	: Department of Mechanical Engineering, IITD
Year	: 2024
Supervisor	: Dasgupta, Debabrata (Asst. Prof.) - ME (Guide)
Physical description	: xxxii, 213 p.
Subject terms	: Tumor growth; Hypoxia and hypoxia inducible factor; Urokinase plasminogen activator; Mathematical model; EMT
Barcode	: TH7769
Call No.	: TH 616-006.6:519.6 VER-C
Title	: Internal dielectric transduced microelectromechanical actuators and resonators
Researcher	: Verma, Satish Kumar
Department	: Department of Electrical Engineering, IITD
Year	: 2024
Supervisor	: Mitra, Bhaskar (Asst. Prof.) - EE (Guide)
Physical description	: xix,114 p.
Subject terms	: Actuators; Resonators; Ultrasonic transducers; Electrostatic; BVD model
Barcode	: TH7770
Call No.	: TH 681.587.7 VER-I
Title	: Assessing the role of transport mechanisms and model parameters on contaminant plume dynamics and health risk metrics for the subsurface environment
Researcher	: Abhay
Department	: Department of civil engineering, IITD
Year	: 2024
Supervisor	: Chakma, Sumedha (Assoc. Prof.) - CE (Guide)
Physical description	: xxxiii, 411 p.

Subject terms	: Low permeability porous media; Exposure frequency; Ingestion rate; Global sensitivity analysis; Ecological risk assessment
Barcode	: TH7771
Call No.	: TH 504.5 ABH-A
Title	: Constituting risk: pesticides, regulatory science and farmers in western Uttar Pradesh
Researcher	: Abhigya
Department	: Department of Humanities and Social Sciences, IITD
Year	: 2024
Supervisor	: Thayyil, Naveen (Assoc. Prof.) - HSS (Guide); Richa Kumar (Assoc. Prof.) - HSS (Guide)
Physical description	: xiv, 225 p.
Subject terms	: Risk management; Pesticides; Pesticide scape; Food safety; Holistic agriculture
Barcode	: TH7772
Call No.	: TH 632.95(540.27) ABH-C
Title	: Effect of gamma irradiation on the structural, morphological, and memristive properties of CVD grown WS2 and ReS2
Researcher	: Aggarwal, Pallavi
Department	: Department pf Physics, IITD
Year	: 2024
Supervisor	: Singh, Rajender (Prof.) - PH (Guide); Mehta, B. R. (Prof.) - PH (Guide); Chang, Edward Yi (Prof.) - NYCU, Taiwan (Guide)
Physical description	: xxxiv, 219 p.
Subject terms	: Advent of 2D materials; Device fabrication; Gamma irradiation; Raman spectra analysis; AFM analysis
Barcode	: TH7773
Call No.	: TH 620.179.152.5 AGG-E
Title	: Haptics: a case for edge AI based convergence of communication, compute and control
Researcher	: Ahmed, Muneeb
Department	: Bharti School of Telecommunication Technology and management, IITD
Year	: 2024
Supervisor	: Kherani, Arzad Alam (Assoc. Prof.) - IIT, Bhilai (Guide); Lall, Brejesh (Prof.) - EE (Guide)

Physical description	: xxi, 159 p.
Subject terms	: Probabilistic approach; Computing paradigms; Bilateral teleoperation; Encoder; non-verbal communication
Barcode	: TH7774
Call No.	: TH 004.7 AHM-H
Title	: Lagrangian particle tracking based simulation of anomalous hydrodynamic transport through shallow water lakes with crowding: implication for conservation strategies
Researcher	: Bairwa, Arvind Kumar
Department	: Department of Civil Engineering, IITD
Year	: 2024
Supervisor	: Khosa, Rakesh (Prof.) - CE (Guide); R. Maheswaran (Prof.) - CE (Guide)
Physical description	: xx, 98 p.
Subject terms	: Lagrangian particle tracking; Finite-time Lyapunov exponent; Travel time distribution; Anomalous transport; Continuous time random walk model
Barcode	: TH7775
Call No.	: TH 626:532.511 BAI-L
Title	: Deep learning models for detecting gallbladder cancer from ultrasound
Researcher	: Basu, Soumen
Department	: Department of Computer Science and Engineering, IITD
Year	: 2024
Supervisor	: Arora, Chetan (Prof.) - CSE (Guide)
Physical description	: xviii, 168 p.
Subject terms	: Sonography; Handheld transducer; Dataset statistics; Medical imaging; Datasets
Barcode	: TH7776
Call No.	: TH 004.85:616-006.6 BAS-D
Title	: Exploring the use of rice straw derived biochar as an anode material for lithium-ion battery and an adsorbent for wastewater treatment
Researcher	: Bhatia, Drishti
Department	: Department of Chemical Engineering, IITD
Year	: 2024
Supervisor	: Saroha, Anil K. (Prof.) - CHE (Guide)

Physical description	: xxiii, 217 p.
Subject terms	: Stubble burning; Industrial effluent; Thermodynamics; Cell assembly; Arsenic
Barcode	: TH7777
Call No.	: TH 543.631/.645:633.18 BHA-E
Title	: Antecedents of organizational ambidexterity and its impact on innovation performance: a study on Indian MSMEs
Researcher	: Chakma, Rubina
Department	: Department of Management Studies, IITD
Year	: 2024
Supervisor	: Dhir, Sanjay (Assoc. Prof.) - MS (Guide)
Physical description	: xx, 186 p.
Subject terms	: Knowledge management; Knowledge organisation; Density visualization; Micro small and medium enterprises; Ambidexterity
Barcode	: TH7778
Call No.	: TH 658.1 CHA-A
Title	: Real-time modelling and protection of microgrid
Researcher	: Chandrakar, Ruchi
Department	: Department of Electrical Engineering, IITD
Year	: 2024
Supervisor	: Panigrahi, Bijaya Ketan (Prof.) - EE (Guide)
Physical description	: xx, 164 p.
Subject terms	: Grid forming inverters; Deep learning; Fault detection; Comparative assessment; Detection factor
Barcode	: TH7779
Call No.	: TH 621.311.1 CHA-R
Title	: Spatio-spectral super-resolution of hyperspectral images
Researcher	: Dar, Sadia Hussain
Department	: Bharti School of Telecommunication Technology and Management, IITD
Year	: 2024
Supervisor	: Lall, Brejesh (Prof.) - EE (Guide); Panigrahi, B.K. (Prof.) - EE (Guide); Anees, Sanya (Asst. Prof.) - NSUT, Delhi (Guide)
Physical description	: 239 p.

Subject terms	: Hyperspectral resolution; Mixture network; Cave datasets; Deep learning; Observing system
Barcode	: TH7780
Call No.	: TH 004.932 DAR-S
Title	: Circuits and systems for smart IoT platforms
Researcher	: Das, Payali
Department	: Department of Electrical Engineering, IITD
Year	: 2024
Supervisor	: Chatterjee, Shouri (Prof.) - EE (Guide); De, Swades (Prof.) - EE (Guide)
Physical description	: xviii, 96 p.
Subject terms	: Sensing network; Sensors; Energy; Internet of things; Networking
Barcode	: TH7781
Call No.	: TH 621.38:004.7 DAS-C
Title	: Optimization framework for transitioning to electric bus system
Researcher	: Gairola, Pranav
Department	: Department of Civil Engineering, IITD
Year	: 2024
Supervisor	: Nezamuddin (Assoc. Prof.) - CE (Guide)
Physical description	: xx, 179 p.
Subject terms	: Electric mobility; Electric vehicles; Electric battery buses; Electrification; Queueing theory
Barcode	: TH7782
Call No.	: TH 62-83 GAI-O
Title	: Social network analysis to study network connectedness principles in multi-domain applications
Researcher	: Garg, Sangita
Department	: Department of Electrical Engineering, IITD
Year	: 2024
Supervisor	: Gandhi, Tapan K. (Prof.) - EE (Guide); Panigrahi, B.K. (Prof.) - EE (Guide)
Physical description	: xxvi, 186 p.
Subject terms	: Networking; Interaction pattern; Social Networking; Social applications; Correlation
Barcode	: TH7783
Call No.	: TH 004:316.77 GAR-S

Title : Development of novel nano and nano-porous materials based therapeutic strategy for effective management of hemostasis

Researcher : Jha, Chandan Bhogendra

Department : Department of Chemistry, IITD

Year : 2024

Supervisor : Manna, Kuntal (Assoc. Prof.) - CHY (Guide); Mathur, Rashi (Prof.) - DRDO, New Delhi (Guide)

Physical description : xxiv, 133 p.

Subject terms : Platelet plug formation; L-glutamic acid; Tranexamic acid; Vascular spasm; Coagulation

Barcode : TH7784

Call No. : TH 616.15 JHA-D

Title : Investigation on mechanical & impact properties of Kevlar/Polypropylene composites made with commingled towpregs

Researcher : Jogur, Ganesh

Department : Department of Textile and Fibre Engineering, IITD

Year : 2024

Supervisor : Alagirusamy, Ramasamy (Prof.) - TFE (Guide); Das, Apurba (Prof.) - TFE (Guide)

Physical description : xxii, 169 p.

Subject terms : Thermoplastic composites; Coating; Textile composites; Micro-structural analysis; Nozzle geometry

Barcode : TH7785

Call No. : TH 677.494.742 JOG-I

Title : Vision-based control for robotic systems: constraint satisfaction and related problems

Researcher : Kishore, Chimmula

Department : Department of Electrical Engineering, IITD

Year : 2024

Supervisor : Kar, Indra Narayan (Prof.) - EE (Guide)

Physical description : xv, 186 p.

Subject terms : Robotics; Rigid motion dynamics; Barrier Lyapunov functions; Notions of stability; Motion model

Barcode : TH7786

Call No. : TH 004.8 KIS-V

Title : Study on the modelling of active heat baths with applications to active brownian heat engines

Researcher : Majumdar, Rita

Department : Department of Physics, IITD

Year : 2024

Supervisor : Marathe, Rahul (Assoc. Prof.) - PH (Guide)

Physical description : xix, 140 p.

Subject terms : Thermodynamics; Stochastic thermodynamics; Gaussian kicks; Temperature calculation; Heat engine

Barcode : TH7787

Call No. : TH 530.162:621.1 MAJ-S

Title : Explorations in long-lived nuclear spin order, cross-polarization in quadrupolar solids, and spherical tensor analysis of FID

Researcher : Manjeet

Department : Department of Chemistry, IITD

Year : 2024

Supervisor : Kurur, Narayanan D. (Prof.) - CHY (Guide)

Physical description : xiii, 96 p.

Subject terms : Simulations; Induction decay; Spectroscopy; Cross-polarization; Tensors

Barcode : TH7788

Call No. : TH 544.652:539.144.4 MAN-E

Title : Integrated green technologies for metal recovery from electronic waste: focus on deep eutectic solvents (DES) leaching

Researcher : Mishra, Snigdha

Department : Department of Chemical Engineering, IITD

Year : 2024

Supervisor : Pant, K. K. (Prof.) - CHE (Guide); Singh, Vikram (Prof.) - CHE (Guide)

Physical description : xviii, 213 p.

Subject terms : Electronic waste; Metals; Pyrolysis; Rheometer; Waste printed circuit boards

Barcode : TH7789

Call No. : TH 66.061:502.12 MIS-I

Title : Exploiting the latent space of deep generative models for better generation, representation learning, and generative transfer

Researcher : Mondal, Arnab Kumar

Department : Amar Nath and Shashi Khosla School of Information Technology, IITD

Year : 2024

Supervisor : P.,Prathosh A. (Asst. Prof.) - IISc, Bengaluru (Guide); Singla, Parag (Prof.) - CSE (Guide)

Physical description : xxvii, 239 p.

Subject terms : Generative models; Regularised autoencoders; Diffusion models; Latent dimensionality; Information technology

Barcode : TH7790

Call No. : TH 004.8 MON-E

Title : Leveraging emotions and sentiments in textual data for contextual understanding in application specific natural language processing

Researcher : Oberoi, Amit

Department : Bharti School of Telecommunication Technology and Management, IITD

Year : 2024

Supervisor : Lall, Brejesh (Prof.) - BSTTM (Guide)

Physical description : xv, 84 p.

Subject terms : Natural language processing; Emotion detection; Sentiment analysis; Transformers; Emotional mobility

Barcode : TH7791

Call No. : TH 004:81'322.2 OBE-L

Title : Exploring medicinal plants and their secondary metabolites as an inhibitor of α -glucosidase targeting type-2 diabetes mellitus

Researcher : Ojha, Monu Dinesh

Department : Centre for Rural Development & Technology, IITD

Year : 2024

Supervisor : P., Hariprasad (Assoc. Prof.) - CRDT (Guide)

Physical description : xxiii, 150 p.

Subject terms : Combinatorial approach; Pharmacological actions; Hyperglycemic situations; Oligosaccharides; Withania coagulans

Barcode : TH7792

Call No. : TH 633.88:616.39 OJH-E

Title	: Application-aware dynamic thermal management in 3D DRAM
Researcher	: Pandey, Shailja
Department	: Department of Computer Science and Engineering, IITD
Year	: 2024
Supervisor	: Panda, Preeti Ranjan (Prof.) - CSE (Guide)
Physical description	: xxii, 170 p.
Subject terms	: Thermal management; System architecture; Random access memory; Computer memory; Hardware
Barcode	: TH7793
Call No.	: TH 004.332.33 PAN-A
Title	: Molecular events responsible for switching of cell shape with respect to cell cycle in rhodococcus erythropolis PR4
Researcher	: Parwin, Shabnam
Department	: Department of Biochemical Engineering and Biotechnology, IITD
Year	: 2024
Supervisor	: Srivastava, Preeti (Prof.) - BEB (Guide)
Physical description	: xxx, 355 p.
Subject terms	: Cytoskeleton; Morphogenesis; Molecular cloning; Cell migration; Actinomycetes
Barcode	: TH7794
Call No.	: TH 60:576.3 PAR-M
Title	: Seismic design of wide-flange braces and end connections of steel concentric braced frames
Researcher	: Patra, Pratik
Department	: Department of Civil Engineering, IITD
Year	: 2024
Supervisor	: Sahoo, Dipti Ranjan (Prof.) - CE (Guide); Jain, A. K. (Prof.) - CE (Guide)
Physical description	: xxxviii, 373 p.
Subject terms	: Seismic performance; CFE simulation; Post buckling strengths; IPB Systems; OOPB braced frames
Barcode	: TH7795
Call No.	: TH 624.042.7 PAT-S
Title	: Development of a green process for the recovery of metals from waste electronics and conversion of e-waste plastic into oil (chemicals)

Researcher : Preetam, Amrita
Department : Center for Rural Development and Technology, IITD
Year : 2024
Supervisor : Naik, Satya Narayan (Emeritus Prof.) - CRDT (Guide); Pant, Kamal Kishor (Prof.) - CHE (Guide); Vivek Kumar (Prof.) - CRDT (Guide)
Physical description : xvi, 276 p.
Subject terms : Pyrolysis technique; Glasification; Electronic waste; Electron paramagnetic resonance; Environment protection
Barcode : TH7796
Call No. : TH 502.12:628.4 PRE-D

Title : Development of multifunctional additives for engine oil/fuels and ziegler natta catalysts for polypropylene synthesis
Researcher : Raizada, Sameeksha
Department : Department of Chemistry, IITD
Year : 2024
Supervisor : Shankar, Ravi (Prof.) - CHY (Guide); Kapur, G. S. (Former ED) - Indian Oil R&D Centre (Guide)
Physical description : xv, 131 p.
Subject terms : Eleostearic acid; Pictorial representation; Buchi reactor; Petrochemical industry; Lubricity
Barcode : TH7797
Call No. : TH 662.7:547.313.3 RAI-D

Title : Emulsion templated porous scaffolds for sustainable valorization of polypropylene waste
Researcher : Rani, Sweety
Department : Department of Textile and Fibre Engineering, IITD
Year : 2024
Supervisor : Srivastava, Rajiv K. (Prof.) - TFE (Guide)
Physical description : xxxvi, 227 p.
Subject terms : Polymer; Calixarene; Fabrication; Oil contamination management; Ion detection
Barcode : TH7798
Call No. : TH 978.742.3:005.936.5 SWE-E

Title : Non-standard finite element methods for variational inequalities
Researcher : Ritesh

Department : Department of Mathematics, IITD

Year : 2024

Supervisor : Porwal, Kamana (Assoc. Prof.) - MA (Guide)

Physical description : xviii,135 p.

Subject terms : Finite elements; Error analysis; Triangulation; Corrector function; Discrete problems

Barcode : TH7799

Call No. : TH 517.9 RIT-N

Title : Performance and stability of commercial banks: evidence from brics

Researcher : Sain, Anjali

Department : Department of Management Studies, IITD

Year : 2024

Supervisor : Kashiramka, Smita (Prof.) - MS (Guide)

Physical description : xxiv, 207 p.

Subject terms : Bank performance; Correlation metrics; Financial stability; Bank management; Sample banks

Barcode : TH7800

Call No. : TH 336.71 SAI-P

Title : Theoretical insights to symmetry-induced spin splittings and textures in (non)- magnetic materials

Researcher : Sajjan

Department : Department of Physics, IITD

Year : 2024

Supervisor : Bhattacharya, Saswata (Assoc. Prof.) - PH (Guide)

Physical description : xxii, 178 p.

Subject terms : Spintronics; Spin texture; Spin orbit coupling; Spin splitting mechanisms; antiferromagnetic materials

Barcode : TH7801

Call No. : TH 539.183.4 SAJ-T

Title : Catalytic 4e-/4H+ reduction of oxygen by non-heme iron complexes: exploring the effect of secondary coordination sphere

Researcher : Santra, Aakash

Department : Department of Chemistry, IITD

Year : 2024

Supervisor	: Paria, Sayantan (Assoc. Prof.) - CHY (Guide)
Physical description	: 352 p.
Subject terms	: Electrocatalysts; Oxygen reduction; Metalloenzymes; Alkaline earth; Oxygen reduction reaction
Barcode	: TH7802
Call No.	: TH 544.653.2/.3 SAN-C
Title	: Synthesis and applications of non-viral gene vectors
Researcher	: Sharma, Manoj Kumar
Department	: IIT Delhi and University of Queensland
Year	: 2024
Supervisor	: Ganguli, Ashok Kumar (Prof.) - CHY (Guide); Yu, Chengzhong (Prof.) - University of Queensland (Guide)
Physical description	: xvii, 116 p.
Subject terms	: Nanoparticles; Gene delivery; Cell structure; Drug delivery; Nanocarriers
Barcode	: TH7803
Call No.	: TH 602.643 SHA-S
Title	: Development of sensitive and selective field effect transistor based biosensors
Researcher	: Sharma, Sumit
Department	: Centre for Applied Research in Electronics, IITD
Year	: 2024
Supervisor	: Das, Samaresh (Prof.) - CARE (Guide); Mishra, Prashant (Prof.) -BEB (Guide)
Physical description	: xix, 139 p.
Subject terms	: Metal oxide-based; FET biosensors; Saliva as biofluid; Ammonia detection; Hybrid FET fabrication
Barcode	: TH7804
Call No.	: TH 53.082.9 SHA-D
Title	: Novel techniques for transfer in structured models for reasoning, planning and reinforcement learning
Researcher	: Sharma, Vishal
Department	: Department of Computer Science & Engineering, IITD
Year	: 2024
Supervisor	: Singla, Parag (Prof.) - CSE (Guide)

Physical description	: xxiv, 153 p.
Subject terms	: Machine learning; Markov logic network; Learning generalized policy; SYMNET line of work; ORLA agent
Barcode	: TH7805
Call No.	: TH 004.85 SHA-N
Title	: Developing a revenue model for bioinformatics R&D in India using management approach
Researcher	: Shekhar, Shashank
Department	: School of Interdisciplinary Research, IITD
Year	: 2024
Supervisor	: Dhir, Sanjay (Assoc. Prof.) - MS (Guide); Gomes, James (Prof.) - SBS (Guide); Jayaram, B. (Prof.) - CHY (Guide)
Physical description	: xix, 355 p.
Subject terms	: Bioinformatics; Entrepreneurship; Revenue model; Management; Commercialization
Barcode	: TH7806
Call No.	: TH 575.112:658.155.4 SHE-D
Title	: Numerical simulations of flow past a multi-element airfoil system and resulting noise radiation
Researcher	: Singh, Deepak Kumar
Department	: Department of Applied Mechanics, IITD
Year	: 2024
Supervisor	: Sharma, Arjun (Asst. Prof.) - AM (Guide)
Physical description	: xxvi, 112p.
Subject terms	: Aerodynamics; Simulation; Turbulence model; Lift characteristics; Active flow control
Barcode	: TH7807
Call No.	: TH 533.69 SIN-N
Title	: Optimizing heterogeneous photocatalyst design for CO2 reduction to fuels
Researcher	: Singh, Shreya
Department	: Department of Chemical Engineering, IITD
Year	: 2024
Supervisor	: Pant, K.K. (Prof.) - CHE (Guide); Verma, Anil (Prof.) - CHE (Guide); Biswas, Pratim (Prof.) - University of Miami, Florida (Guide)

Physical description : xvii, 231 p.

Subject terms : Catalyst; Kinetic parameters; Spectroscopy; Photodeposition experiment; Fossil fuels

Barcode : TH7808

Call No. : TH 544.526.5:662.7 SIN-O

Title : Development of catalytic systems for C(sp²)-H bond functionalization of (hetero) aromatics

Researcher : Singh, Swati

Department : Department of Chemistry, IITD

Year : 2024

Supervisor : Roy, Sudipta Raha (Assoc. Prof.) - CHY (Guide)

Physical description : xxv, 285 p.

Subject terms : C-H Functionalization; Chemical bonds; Photochemical amination; Crystallographic data; Radical-mediated

Barcode : TH7809

Call No. : TH 547.52 SWA-D

Title : Study of weyl transform and its multiplier theory: scalar and vector analogue

Researcher : Singhal, Ritika

Department : Department of Mathematics, IITD

Year : 2024

Supervisor : N. Shravan Kumar (Assoc. Prof.) - MA (Guide)

Physical description : xii, 110 p.

Subject terms : Integers; Weyl multipliers; Vector measures; Paley inequality; Abelian groups

Barcode : TH7810

Call No. : TH 514.764.32 SIN-S

Title : Control strategies for energy-efficient operation of air-conditioned buildings

Researcher : Sudalai, Vinayak

Department : Department of Mechanical Engineering, IITD

Year : 2024

Supervisor : Ravi, M.R. (Prof.) - ME (Guide); Godara, B. (Prof.) - ME (Guide)

Physical description : xxiv, 241 p.

Subject terms	: Smart sensing technology; Sensor detection; Air conditioners; Internet of things; Control knowledge
Barcode	: TH7811
Call No.	: TH 628.8 SUD-C
Title	: Efficient numerical schemes for finite deformation plasticity: kinematic hardening, multi-invariants dependence and phase field coupling
Researcher	: Sumit Kumar
Department	: Department of Applied Mechanics, IITD
Year	: 2024
Supervisor	: Patel, B.P. (Prof.) - AM (Guide)
Physical description	: xxii, 195 p.
Subject terms	: Plasticity; Kinematic hardening; Complex geometries; Viscoplasticity; Tensors
Barcode	: TH7812
Call No.	: TH 539.214 SUM-E
Title	: Modelling ambient PM2.5 exposure at hyperlocal scale for Delhi and setting exposure reduction target to minimize health burden
Researcher	: Tiwari, Shashi
Department	: Centre for Atmospheric Sciences, IITD
Year	: 2024
Supervisor	: Dey, Sagnik (Prof.) - CAS (Guide)
Physical description	: xxiv, 202 p.
Subject terms	: Air quality; Environment; Particulate matter; Air pollution; Pollution prevention
Barcode	: TH7813
Call No.	: TH 614.71(540.23) TIW-M
Title	: Control of small hydro-PV- wind based hybrid microgrids with synchronization
Researcher	: Tyagi, Shalvi
Department	: Department of Electrical Engineering, IITD
Year	: 2024
Supervisor	: Singh, Bhim (Prof.) - EE (Guide)
Physical description	: xlix, 373 p.
Subject terms	: Power generation; Microgrid; Voltage frequency; Harmonics; Grid connected mode

Barcode : TH7814

Call No. : TH 621.3.032.24 TYA-C

Title : Finite element investigation of lower extremity response in blast loading; and a proposed design of a leg surrogate

Researcher : Vikram, Aman

Department : Department of Mechanical Engineering, IITD

Year : 2024

Supervisor : Chawla, Anoop (Prof.) - ME (Guide); Mukharjee, Sudipto (Prof.) - ME (Guide)

Physical description : xv, 94 p.

Subject terms : CORA ratings; MM-ALE formulation; Blast injuries; THUMS LE model; Metatarsals and phalanges

Barcode : TH7815

Call No. : TH 517:616-001 VIK-F

Title : Entropy stable schemes for conservative and non-conservative hyperbolic systems

Researcher : Yadav, Anshu

Department : Department of Mathematics, IITD

Year : 2024

Supervisor : Harish Kumar (Assoc. Prof.) - MA (Guide)

Physical description : xxii, 201 p.

Subject terms : Computational methods; Thermodynamic equilibrium; Galerkin entropy; Gas dynamics; Plasma flows

Barcode : TH7816

Call No. : TH 536.75 YAD-E

Title : Tumult in paradise: resistance, freedom and community in Kashmir

Researcher : Amin, Nazia

Department : Department of Humanities and Social Sciences, IITD

Year : 2024

Supervisor : Sawhney, Simona (Prof.) - HSS (Guide)

Physical description : xi, 251 p.

Subject terms : Displacement; Home; Ambivalence; Despair; Violence

Barcode : TH7817

Call No. : TH 32:316.32(540.11) AMI-T

Title : Multi-objective paradigm for integrated river basin management: a case study of Idamalayar and Idukki reservoir in Periyar river basin (Kerala, India)

Researcher : Anil Kumar

Department : Department of Civil Engineering, IITD

Year : 2024

Supervisor : Khosa, Rakesh (Prof.) - CE (Guide); Gosain, A.K. (Prof.) - CE (Guide)

Physical description : xvii, 157 p.

Subject terms : Remote sensing; Hydro-electric projects; Flood reduction; Water resources; Rain water

Barcode : TH7818

Call No. : TH 627.215.3 ANI-M

Title : Integrated hydrologic modelling using geospatial technology for assessing impacts of climate change and land use change on water resources in Koyna river basin

Researcher : Babanrao, Landage Amarsinh

Department : Department of Civil Engineering, IITD

Year : 2024

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

Physical description : xviii, 229 p.

Subject terms : Hydrological modelling; Greenhouse gases; Resources management; Land use; Remote sensing

Barcode : TH7819

Call No. : TH 626:551.58 BAB-I

Title : Design, development and biomechanical evaluation of composite materials for biomedical applications

Researcher : Balakumaran V.

Department : Centre for Biomedical Engineering, IITD

Year : 2024

Supervisor : Kalyanasundaram, Dinesh (Assoc. Prof.) - CBME (Guide)

Physical description : xxiii, 215 p.

Subject terms : Thermoplastic composites; Polymers; Dispersion; Microparticles; Carbon fibers

Barcode : TH7820

Call No. : TH 57.089 BAL-D

Title : Modeling and operation of local electricity markets for future power distribution networks

Researcher : Bevin K. C.

Department : Department of Energy Science and Engineering, IITD

Year : 2024

Supervisor : Verma, Ashu (Prof.) - ESE (Guide)

Physical description : xxiv, 211 p.

Subject terms : Electricity; Feed in tariff; Step voltage regulator; Cryptography; Local electricity market

Barcode : TH7821

Call No. : TH 621.316 BEV-M

Title : Advancing energy system modeling and cybersecurity through holistic AI development

Researcher : Bhattacharjee, Arnab

Department : IIT Delhi and University of Queensland

Year : 2024

Supervisor : Verma, Ashu (Prof.) - ESE (Guide); Mishra, Sukumar (Prof.) - EE (Guide); Saha, Tapan Kumar (Prof.) - University of Queensland, Australia (Guide)

Physical description : xxvii, 185 p.

Subject terms : Machine learning; Cybersecurity; Data generation; Battery modelling; Multi-task learning

Barcode : TH7822

Call No. : TH 004.8 BHA-A

Title : Urban signature and topographical influences on monsoon weather over the National Capital Region (NCR) Delhi

Researcher : Chalakkal, Jerin B.

Department : Centre for Atmospheric Sciences, IITD

Year : 2024

Supervisor : Mohan, Manju (Prof.) - CAS (Guide)

Physical description : xxvi, 252 p.

Subject terms : Urbanization; Climate warming; Natural topography; Urbanization effects; Climatology

Barcode : TH7823

Call No. : TH 551.585.3(540.23) CHA-U

Title	: Study of convection over Bay of Bengal using cloud resolving and large eddy simulation
Researcher	: Dogra, Gaurav
Department	: School of Interdisciplinary Research, IITD
Year	: 2024
Supervisor	: Dewan, Anupam (Prof.) - AM (Guide); Sahany, Sandeep (Prof.) - Centre for Climate Research, Singapore (Guide)
Physical description	: xxi, 118 p.
Subject terms	: Computational equations; Earth atmosphere; Energy cycles; Solar radiation; Turbulent atmosphere
Barcode	: TH7824
Call No.	: TH 551.576 DOG-S
Title	: Initial excitation based adaptive observer for uncertain system
Researcher	: Katiyar, Atul
Department	: Department of Electrical Engineering, IITD
Year	: 2024
Supervisor	: Bhasin, Shubhendu (Prof.) - EE (Guide)
Physical description	: xiii, 142 p.
Subject terms	: Dynamical system; Persistence excitation; Robust adaptive observer; Adaptive observer design; Multiple switching
Barcode	: TH7825
Call No.	: TH 62-503.57 KAT-I
Title	: Detection of electroactive species derived from transition metal chalcogenides during electrocatalysis
Researcher	: Kundu, Avinava
Department	: Department of Chemistry, IITD
Year	: 2024
Supervisor	: Chakraborty, Biswarup (Prof.) - CHY (Guide)
Physical description	: 341 p.
Subject terms	: Transition metal chalcogenides; Artificial photosynthesis; Catalytic analysis; Covellite nanoplates; Synthesis
Barcode	: TH7826
Call No.	: TH 544.47:544.6 KUN-D
Title	: New woman: gender and modernity in selected works of fiction from north India, 1930-1960

Researcher : Hukku, Sevali
Department : Department of Humanities and Social Sciences, IITD
Year : 2024
Supervisor : Sawhney, Simona (Prof.) - HSS (Guide)
Physical description : vi, 195 p.
Subject terms : Woman studies; Veiled bodies; Anglo-Indian character; Social freedom; Motherhood
Barcode : TH7827
Call No. : TH 82-31-055.2"1930/1960" HUK-N

Title : Seismic performance of structural steel reinforced concrete transfer columns in building frames
Researcher : Jain, Abhishek
Department : Department of Civil Engineering, IITD
Year : 2024
Supervisor : Sahoo, Dipti Ranjan (Prof.) - CE (Guide); Jain, A. K. (Retd. Prof.) - CE (Guide)
Physical description : xxviii, 231 p.
Subject terms : SRC-RC columns; Research motivation; Servo-hydraulic actuator; Backbone curves; Energy dissipation
Barcode : TH7828
Call No. : TH 624.04 JAI-S

Title : Surface engineering of metal oxides interactions and defect sites for enhanced methanol synthesis from CO, CO₂, and CO- rich syngas in a slurry reactor: a rational catalytic development approach
Researcher : Pandey, Vaibhav
Department : Department of Chemical Engineering, IITD
Year : 2024
Supervisor : Pant, Kamal K. (Prof.) - CHE (Guide); Upadhyayula, Sreedevi (Prof.) - CHE (Guide)
Physical description : xvi, 208 p.
Subject terms : Synthesis; Slurry technology; Density functional theory; Heterogeneous catalysts; Solvent
Barcode : TH7829
Call No. : TH 544.7:661.721 PAN-S

Title	: Efficient localization algorithms with a focus on robustness, hybridization and optimal sensor placement
Researcher	: Panwar, Kuntal
Department	: Centre for Applied Research in Electronics, IITD
Year	: 2024
Supervisor	: Babu, Prabhu (Assoc. Prof.) - CARE (Guide)
Physical description	: xxii, 265 p.
Subject terms	: Sensor; Hybrid localization; Mathematical preliminaries; Optimal placement strategies; Majorization minimization architecture
Barcode	: TH7830
Call No.	: TH 004.021 PAN-E
Title	: Effects of diachronic sound change on the synchronic grammar: the case study of sylheti
Researcher	: Prasad, Ankita
Department	: Department of Humanities and Social Sciences, IITD
Year	: 2024
Supervisor	: Sanyal, Paroma (Assoc.Prof.) - HSS (Guide)
Physical description	: xvii, 332 p.
Subject terms	: Languages; Phonology; Asymmetries; Speech; Linguistic typology
Barcode	: TH7831
Call No.	: TH 81'344/'36=1/=2 PRA-E
Title	: Numerical and experimental investigations on formability for lightweighting of an automotive fuel tank
Researcher	: Ravinder Kumar
Department	: Department of Mechanical Engineering, IITD
Year	: 2024
Supervisor	: Ravi Kumar (Prof.) - ME (Guide)
Physical description	: xxiv, 171 p.
Subject terms	: Deep drawing; Hydroforming; FE simulation; Microstructure; Coefficients
Barcode	: TH7832
Call No.	: TH 621.43 RAV-N
Title	: Rational design of highly efficient visible-light-driven photocatalysts for CO2 conversion to fuels

Researcher	: Sahu, Aloka Kumar
Department	: IIT Delhi and University of Queensland
Year	: 2024
Supervisor	: Upadhyayula, Sreedevi (Prof.) - CHE (Guide); Roufford, Thomas E (Prof.) - University of Queensland (Guide)
Physical description	: xxv, 155 p.
Subject terms	: Photogenerated charges; Semiconductors; Microcrystals; Light harvesting; Fabrication
Barcode	: TH7833
Call No.	: TH 544.526.5:66.07 SAH-R
Title	: Investigations on grid interactive microgrids with DFIG based wind-solar PV generation
Researcher	: Sambasivaiah, Puchalapalli
Department	: Department of Electrical Engineering, IITD
Year	: 2024
Supervisor	: Singh, Bhim (Prof.) - EE (Guide)
Physical description	: xxvii, 205 p.
Subject terms	: Wind turbine; Power compensation; Power generation; Energy storage; Wind speeds
Barcode	: TH7834
Call No.	: TH 621.311.243 SAM-I
Title	: Development of flexible aerogel-embedded blanket as fire-retardant, thermal and acoustic insulation for aerospace applications
Researcher	: Sharma, Jaya
Department	: Department of Textile and Fibre Engineering, IITD
Year	: 2024
Supervisor	: Sheikh, Javed N. (Assoc. Prof.) - TFE (Guide); Behera, B.K. (Prof.) - TFE (Guide)
Physical description	: xxxix, 236 p.
Subject terms	: Insulation; Sensor technology; Aerogels; Covalent bonds; Catalysts
Barcode	: TH7835
Call No.	: TH 629.7.01 SHA-D
Title	: Forms of enchantment: a theory and case study of the aesthetic experience of poetry
Researcher	: Sharma, Sumita

Department	: Department of Humanities and Social Science, IITD
Year	: 2024
Supervisor	: Angelie, Multani (Prof.) - HSS (Guide)
Physical description	: ix, 263 p.
Subject terms	: Science fiction poetry; Linguistic intuitions; Literary studies; Corpus stylistic; Close reading
Barcode	: TH7836
Call No.	: TH 82-1 SHA-F
Title	: Statistical and propagation studies of optical fields having tunable coherence-polarization features
Researcher	: Singh, Hemant Kumar
Department	: Department of Physics, IITD
Year	: 2024
Supervisor	: Kanseri, Bhaskar (Assoc. Prof.) - PHY (Guide)
Physical description	: xv, 130 p.
Subject terms	: Optical field; Coherence polarization; Electromagnetic beam; Stokes scintillations; Optical turbulence
Barcode	: TH7837
Call No.	: TH 537.871.5 SIN-S
Title	: Design and characterization of textile based triboelectric nanogenerators for monitoring applications
Researcher	: Somkuwar, Viraj Uttamrao
Department	: Department of Textile and Fibre Engineering, IITD
Year	: 2024
Supervisor	: Bipin Kumar (Assoc. Prof.) - TFE (Guide)
Physical description	: xxxiv, 189 p.
Subject terms	: Triboelectricity; Textile based triboelectric nanogenerators; Washability and durability; Electrical measurements; Surface morphology
Barcode	: TH7838
Call No.	: TH 677:537.221 SOM-D
Title	: Optimal scheduling in active distribution system under uncertain conditions
Researcher	: Suryakiran, B.V.

Department : IIT Delhi and University of Queensland
Year : 2024
Supervisor : Verma, Ashu (Prof.) - ESE (Guide); Mishra, Sukumar (Prof.) - EE (Guide); Saha, Tapan Kumar (Prof.) - University of Queensland (Guide)
Physical description : xxv, 161 p.
Subject terms : Optimal power flow; Linear optimization; Electric vehicles; Electric vehicles; Distribution system
Barcode : TH7839
Call No. : TH 621.313 SUR-O

Title : Determinants of mini-grid technology diffusion in rural areas
Researcher : Vermani, Sidhartha
Department : School of Public Policy, IITD
Year : 2024
Supervisor : Sagar, Ambuj D. (Prof.) - SPP (Guide)
Physical description : 252 p.
Subject terms : Rural electrification; Technological diffusion; Solar energy; Electricity; Electric distribution
Barcode : TH7840
Call No. : TH 621.3.032.24 VER-D

Title : Metal oxide and chalcogenides based materials for enhanced photoelectrochemical water splitting response
Researcher : Yadav, Jyoti
Department : Department of Physics, IITD
Year : 2024
Supervisor : Singh, J. P. (Prof.) - PH (Guide)
Physical description : xxvi, 171 p.
Subject terms : Global energy perspective; Sustainable energy sources; Photoelectrochemical performance; Atomic layer deposition; Sputtering
Barcode : TH7841
Call No. : TH 544.6:662.769.2 YAD-M

Title : Climate change impact analysis on upper blue Nile basin hydro climatology, crop yield, hydropower, and operation policy of reservoir system
Researcher : Abdella, Elias Jemal

Department	: Department of Civil Engineering, IITD
Year	: 2024
Supervisor	: Gosain, A. K. (Prof.) - CE (Guide); Khosa, Rakesh (Prof.) - CE (Guide)
Physical description	: xx, 160 p.
Subject terms	: Physiography; Geology; Aquacrop; Climate model; Linear programming
Barcode	: TH7842
Call No.	: TH 627.81:551.58(282.263.1) ABD-C
Title	: Development of sustainable biomaterials for biomethane and carbon dioxide adsorption
Researcher	: Adlak, Komalkant
Department	: Centre for Rural Development and Technology, IITD
Year	: 2024
Supervisor	: Vijay, Virendra Kumar (Prof.) - CRDT (Guide); Pant, Kamal Kishore (Prof.) - CHE (Guide)
Physical description	: xvii, 146 p.
Subject terms	: Biomass; Biochar; Diffraction; Thermodynamics; Biogas
Barcode	: TH7843
Call No.	: TH 577.11 ADL-D
Title	: Low-frequency oscillation monitoring: extraction, characterization, estimation and source localization
Researcher	: Arup Anshuman
Department	: Department of Electrical Engineering, IITD
Year	: 2024
Supervisor	: Panigrahi, Bijaya Ketan (Prof.) - EE (Guide); Jena, Manas Kumar (Prof.) - EE, IIT Palakkad (Guide)
Physical description	: xxii, 134 p.
Subject terms	: Instantaneous Energy; Modal extraction; Modal estimation; Dynamic coherency and source oscillation; Eigensystem realization algorithm
Barcode	: TH7844
Call No.	: TH 621.3.018:004 ARU-L
Title	: Flow and energy transport characteristics of micro-encapsulated phase change material (m-PCM) slurry in a double-pipe heat exchanger
Researcher	: Ashagre, Tewodros Belay
Department	: Department of Energy Science and Engineering, IITD

Year	: 2024
Supervisor	: Rakshit, Dibakar (Prof.) - ESE (Guide)
Physical description	: xxi, 173 p.
Subject terms	: Heat transfer fluids; Phase change material; Microencapsulated PCM slurry; Waste heat recovery; Thermal efficiency
Barcode	: TH7845
Call No.	: TH 66.021.4 ASH-F
Title	: Behaviour of bamcrete wall panels at elevated temperature
Researcher	: Bala, Anu
Department	: Department of Civil Engineering, IITD
Year	: 2024
Supervisor	: Gupta, Supratic (Asst. Prof.) - CE (Guide); Matsagar, Vasant (Prof.) - CE (Guide) Dash, Ashish K. (Prof.) - NIT, Andhra Pradesh (Guide)
Physical description	: xxx, 217 p.
Subject terms	: Constructions; Bamcrete panels; Glass wool fibers; Thermal conductivity; Recron fibers
Barcode	: TH7846
Call No.	: TH 624.137.4 BAL-B
Title	: Development of fault diagnosis strategies for electric vehicle motor
Researcher	: Choudhary, Anurag
Department	: School of Interdisciplinary Research
Year	: 2024
Supervisor	: Fatima, S. (Assoc.Prof.) - CART (Guide); Panigrahi, B.K. (Prof.) - EE (Guide)
Physical description	: xxviii, 238 p.
Subject terms	: Bearing faults; Vibration monitoring; Electric motor vehicles; Machine fault simulator; Transportation
Barcode	: TH7847
Call No.	: TH 621.313.13:621.039.586 CHO-D
Title	: DeepXML framework for extreme multi-label learning
Researcher	: Dahiya, Kunal
Department	: Amar Nath and Shashi Khosla School of Information Technology, IITD
Year	: 2024

Supervisor	: Agrawal, Sumeet (Assoc. Prof.) - EE (Guide); Varma, Manik (Scientist) - Microsoft Research India, Bengaluru (Guide)
Physical description	: xxx, 156 p.
Subject terms	: Extreme classification; Siamese networks; Deep encoder; Negative mining; Time complexity calculations
Barcode	: TH7848
Call No.	: TH 004.85 DAH-D
Title	: Thermoelectric properties of oxides and other novel compounds
Researcher	: Dubey, Divya Prakash
Department	: Department of Physics, IITD
Year	: 2024
Supervisor	: Chatterjee, Ratnamala (Prof.) - PH (Guide)
Physical description	: xviii, 161 p.
Subject terms	: X-ray photoelectron spectroscopy; Conductivity analysis; Electrical resistivity; Magnetic effect; Thermal transport
Barcode	: TH7849
Call No.	: TH 537.32:546-3 DUB-T
Title	: Instabilities in inhomogeneous/nanoparticle-laden thin liquid films under different force fields
Researcher	: Manga, Ramya Durga
Department	: Department of Chemical Engineering, IITD
Year	: 2024
Supervisor	: Sarkar, Jayati (Prof.) - CHE (Guide)
Physical description	: xxviii, 120 p.
Subject terms	: Nano-scale patterns; Thin liquid films; Electric forces; Thin film dewetting; Intermolecular force
Barcode	: TH7850
Call No.	: TH 66.06:531.211 MAN-I
Title	: Entrepreneurship & venture capital in India: linking scaleups, venture capital, and pensions
Researcher	: Gupta, Puneet
Department	: Bharti School of Telecommunication Technology and Management, IITD
Year	: 2024
Supervisor	: Sharma , Seema (Prof.) - MS (Guide); Sagar, Mahim (Prof.) - MS (Guide)

Physical description	: 261 p.
Subject terms	: Entrepreneurship; Capital; Startups; Investment; Pension funds
Barcode	: TH7851
Call No.	: TH 658.153(540) GUP-E
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Title	: Emulsion templated crosslinked fibrous membranes via near-gel resin electrospinning
Researcher	: Gurave, Pramod Manikant
Department	: Department of Textile and Fibre Engineering, IITD
Year	: 2024
Supervisor	: Srivastava, Rajiv K. (Prof.) - TFE (Guide)
Physical description	: xxv, 216 p.
Subject terms	: Atomic force microscopy; Fibre manufacturing techniques; Optical microscopy; Nanocomposite membrane; Pickering emulsion synthesis
Barcode	: TH7852
Call No.	: TH 677.021.125.2 GUR-E
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Title	: Exploring prussian blue analogues for enhanced bifunctional oxygen electrocatalysis
Researcher	: Jain, Priya
Department	: Department of Chemistry, IITD
Year	: 2024
Supervisor	: Ingole, Pravin P. (Prof.) - CHY (Guide)
Physical description	: xxvi, 233 p.
Subject terms	: Polymers; Carbon nanostructures; Electrocatalysts; Analogues; Spectroscopy
Barcode	: TH7853
Call No.	: TH 544.47:54-38 JAI-E
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Title	: Comprehensive landslide analysis using geospatial data: examining conditioning factors, scaling relationships, and susceptibility mapping utilizing cloud computing and machine learning
Researcher	: Jain, Saloni
Department	: Department of Civil Engineering, IITD
Year	: 2024
Supervisor	: Khosa, Rakesh (Prof.) - CE (Guide); Gosain, A. K. (Prof.) - CE (Guide)

Physical description	: xvii, 228 p.
Subject terms	: Landslide scaling; Tectonic seismicity; Spectral reflectance curve; Event duration curves; Space time clustering
Barcode	: TH7854
Call No.	: TH 551.435.62:004.85 JAI-C
Title	: Development of an advanced treatment system for the effective removal of emerging contaminants from wastewater
Researcher	: Joshi, Deepchandra
Department	: Department of Biochemical Engineering and Biotechnology, IITD
Year	: 2024
Supervisor	: Sreekrishnan, T. R. (Prof.) - BEB (Guide)
Physical description	: xvi, 171 p.
Subject terms	: Endocrine disrupting compounds; Membrane filtration; Plasma jet; Pharmaceutical degradation; Electrode corrosion
Barcode	: TH7855
Call No.	: TH 628.1/.3 JOS-D
Title	: Desire, Devotion and the Divine: Interpretation of the role of language in Assamese Vaishnavism
Researcher	: Kalita, Nandini
Department	: Department of Humanities and Social Sciences, IITD
Year	: 2024
Supervisor	: Wakankar, Milind (Assoc. Prof.) - HSS (Guide)
Physical description	: iv, 193 p.
Subject terms	: Regionalism; Bhatima; Brajavali; Rasa and Bhava; Viraha Bhakti
Barcode	: TH7856
Call No.	: TH 2-1=214.13 KAL-D
Title	: Mimicking cytochrome P450 compound II: spectroscopic characterization and proton-coupled electron transfer reactivity studies of high-valent iron-hydroxo complexes
Researcher	: Keshari, Kritika
Department	: Department of Chemistry, IITD
Year	: 2024
Supervisor	: Paria, Sayantan (Assoc. Prof.) - CHY (Guide)

Physical description	: xxii,222 p.
Subject terms	: Spectroscopic; Iron-hydroxo; Dioxygen; Kinetic; Cytochrome
Barcode	: TH7857
Call No.	: TH 543.42:661.872 KES-M
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Title	: Exploring the potential of plant secondary metabolites for their antibiotic potentiating activity against multi-drug resistant bacteria
Researcher	: Kongkham, Bhani
Department	: Centre for Rural Development & Technology, IITD
Year	: 2024
Supervisor	: Hariprasad P. (Assoc. Prof.) - CRDT (Guide)
Physical description	: xix, 279 p.
Subject terms	: Bacteria culture; Antibiotics; Inhibitory plant; Encapsulation; Hydrogen bonds
Barcode	: TH7858
Call No.	: TH 633.88 KON-E
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Title	: Data - driven methods for activity schedule modeling
Researcher	: Koushik, Anil NP
Department	: Department of Civil Engineering, IITD
Year	: 2024
Supervisor	: M. Manoj (Assoc. Prof.) - CE (Guide); Nezamuddin (Assoc. Prof.) - CE (Guide)
Physical description	: xxii, 201 p.
Subject terms	: Activity schedule modeling; Machine learning; Artificial neural networks; Spatial transferability; Explainable AI
Barcode	: TH7859
Call No.	: TH 658.5:004.8 KOU-D
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Title	: Explainable metric learning for small- sized medical datasets
Researcher	: Madan, Shipra
Department	: Department of Electrical Engineering, IITD
Year	: 2024
Supervisor	: Chaudhury, Santanu (Prof.) - EE (Guide); Gandhi, Tapan Kumar (Prof.) - EE (Guide)
Physical description	: xviii, 147 p.

Subject terms	: Metric learning; Deep learning; COVID-19 detection; ROC curve; Deep neural nets
Barcode	: TH7860
Call No.	: TH 57.087.1 MAD-E
Title	: Tailoring of structural and optical properties of silicon nitride thin films for photovoltaic and plasmonic applications
Researcher	: Malik, Pariksha
Department	: Department of Physics, IITD
Year	: 2024
Supervisor	: Srivastava, Pankaj (Prof.) - PH (Guide); Ghosh, Santanu (Prof.) - PH (Guide)
Physical description	: xxxii, 207 p.
Subject terms	: Anti-reflection; Spectroscopy; Nanoparticles; Electromagnetic field; Plasma structure
Barcode	: TH7861
Call No.	: TH 661.687:539.216 MAL-T
Title	: Performance evaluation of underwater optical wireless communication system
Researcher	: Matta, Gunjan
Department	: Centre for Applied Research in Electronics, IITD
Year	: 2024
Supervisor	: Agarwal, Monika (Prof.) - CARE (Guide); Bahl, Rajendar (Prof.) - CARE (Guide)
Physical description	: xii, 125 p.
Subject terms	: Radio-frequency; Acoustic communication; Gaussian noise; Communications; Wireless communications
Barcode	: TH7862
Call No.	: TH 654.91 MAT-P
Title	: Investigation of structure-property correlation in intermetallic compounds
Researcher	: Mishra, Prabuddha Kant
Department	: Department of Chemistry, IITD
Year	: 2024
Supervisor	: Ganguli, Ashok K. (Prof.) - CHY (Guide); Chowdhury, Prमित K. (Prof.) - CHY (Guide)

Physical description	: xxiii, 199 p.
Subject terms	: Magnetism; Diffraction; Noncentrosymmetric; Spin momentum; Antiferromagnetic
Barcode	: TH7863
Call No.	: TH 54-19 MIS-I
Title	: Control of solar PV-BES-wind based standalone and grid connected AC microgrids with synchronization
Researcher	: Modi, Gaurav
Department	: Department of Electrical Engineering, IITD
Year	: 2024
Supervisor	: Singh, Bhim (Prof.) - EE (Guide)
Physical description	: xl, 334 p.
Subject terms	: Solar photovoltaic system; MATLAB; Generators; Real time analysis; Computational algorithms
Barcode	: TH7864
Call No.	: TH 621.311/.383 MOD-C
Title	: Syntactic priming in SOV languages: a case study in Bengali
Researcher	: Odud, Md Wasim
Department	: Department of Humanities and Social Sciences, IITD
Year	: 2024
Supervisor	: Husain, Samar (Assoc. Prof.) - HSS (Guide)
Physical description	: xiii, 127 p.
Subject terms	: Structural priming; Residual activation theory; Transitive structure; Implicit learning; Linearization
Barcode	: TH7865
Call No.	: TH 811.214.32 ODU-S
Title	: Development of nanoprobe and 3D in vitro models for disease-specific biomarker detection
Researcher	: Rainu, Simran Kaur
Department	: Centre for Biomedical Engineering, IITD
Year	: 2024
Supervisor	: Singh, Neetu (Prof.) - CBME (Guide)
Physical description	: xxiv, 203 p.

Subject terms	: Cardiovascular diseases; Cell matrix interactions; Matrix metalloproteinases; Fluorescent nanoprobe; Polymeric nanoparticles
Barcode	: TH7866
Call No.	: TH 616-079 RAI-D
Title	: Essays agricultural markets in Uttarakhand
Researcher	: Sah, Taniya
Department	: Department of Humanities and Social Sciences, IITD
Year	: 2024
Supervisor	: Paul, Sourabh Bikas (Assoc. Prof.) - HSS (Guide); Agrawal, Ankush (Assoc. Prof.) - HSS (Guide)
Physical description	: xiv, 114 p.
Subject terms	: Geographically challenged; Difficult topography; Post harvest marketing costs; Dominant marketing channel; Distribution of production
Barcode	: TH7867
Call No.	: TH 631:339.13(540) SAH-E
Title	: Probing contrasting functions of viral proteins: as assemblies for drug delivery and stimulators for host protein aggregation
Researcher	: Saini, Akanksha
Department	: Kusuma School of Biological Sciences, IITD
Year	: 2024
Supervisor	: Kundu, Bishwajit (Prof.) - SBS (Guide); Banerjee, Manidipa (Prof.) - SBS (Guide)
Physical description	: xxi, 87 p.
Subject terms	: Therapeutics; Nanocontainers; Immunodeficiency; Vaccine; Neurodegenerative disorders
Barcode	: TH7868
Call No.	: TH 578.22:615 SAI-P
Title	: Production and characterisation of medical grade biopolymers
Researcher	: Singh, Navodit Kumar
Department	: Department of Biochemical Engineering and Biotechnology, IITD
Year	: 2024
Supervisor	: Srivastava, A.K. (Prof.) - BEB (Guide); Sreekrishnan, T.R. (Prof.) - BEB (Guide)
Physical description	: xxix, 197 p.

Subject terms	: Biomass; Microbes; Nanoparticles; Gas velocity; Spectroscopy
Barcode	: TH7869
Call No.	: TH 577.11 SIN-P
Title	: Development of high-resolution imaging methods for myosin motor study
Researcher	: Sneha Kumari
Department	: Department of Biochemical Engineering and Biotechnology, IITD
Year	: 2024
Supervisor	: Elangovan, RaviKrishnan (Prof.) - BEB (Guide)
Physical description	: xxvii, 133 p.
Subject terms	: Chemo mechanical cycle; Microscopy; Polymerization; Quantum dot; Motility assay
Barcode	: TH7870
Call No.	: TH 547.962.4:543.4 SNE-D
Title	: Aggregation and stability analysis of therapeutic monoclonal antibodies: role of image processing, stress conditions, in-vitro models and novel stabilizers
Researcher	: Sreenivasan, Shravan
Department	: Department of Chemical Engineering, IITD
Year	: 2024
Supervisor	: Rathore, Anurag S. (Prof.) - CHE (Guide)
Physical description	: xxvi, 215 p.
Subject terms	: Algorithm; Interfacial agitation; Spectroscopy; Image processing; Light scattering
Barcode	: TH7871
Call No.	: TH 615.014.4 SRE-A
Title	: Assessment of 3D printing of heat desiccated milk semi-solids (KHOA)
Researcher	: Sukirti
Department	: Centre for Rural Development and Technology, IITD
Year	: 2024
Supervisor	: Sahu, Jatindra K (Prof.) - CRDT (Guide); Naik, S. N. (Prof.) - CRDT (Guide); Prakash, Sangeeta (Assoc. Prof.) - University of Queensland (Guide)
Physical description	: xxv, 248 p.

Subject terms	: 3D printing; Food structure; Heat desiccated milk; Emulsion gels; Vitamin D3
Barcode	: TH7872
Call No.	: TH 637.1 SUK-A
Title	: Strategies for trans fatty acid reduction and rapid detection in fried/baked foods
Researcher	: Tanya
Department	: Centre for Rural Development and Technology, IITD
Year	: 2024
Supervisor	: Sahu, Jatindra Kumar (Prof.) - CRDT (Guide); Khare, Sunil Kumar (Prof.) - CHY (Guide); Siddhanta, Soumik (Prof.) - CHY (Guide)
Physical description	: xvi, 142 p.
Subject terms	: Food industry; Phytochemicals; Antioxidants; Spectroscopy; Crystallization
Barcode	: TH7873
Call No.	: TH 664.6:543.635.3 TAN-S
Title	: Development of valorized products from floral waste using integrated approach and their potential applications
Researcher	: Titikshya, Sushree
Department	: Centre for Rural Development and Technology, IITD
Year	: 2024
Supervisor	: Vivek Kumar (Prof.) - CRDT (Guide); Naik, Satya Narayan (Prof.) - CRDT (Guide)
Physical description	: xxxi, 322 p.
Subject terms	: Biogas production; Freeze drying; Physicochemical; Microwave assisted; Organic waste
Barcode	: TH7874
Call No.	: TH 628.4.042 TIT-D
Title	: SERS based biosensing application and enantioselective discrimination using glancing angle deposited nanostructures
Researcher	: Yadav, Sarjana
Department	: Department of Physics, IITD
Year	: 2024
Supervisor	: Singh, J. P. (Prof.) - PH (Guide)
Physical description	: xxxiii, 185 p.

Subject terms	: Spectroscopy; Simulation methodology; Electron microscopy; Spectrometer; Human immunodeficiency virus
Barcode	: TH7875
Call No.	: TH 53.082.9:548.732 YAD-S
Title	: Multi-hazard stochastic response control of structures using smart base isolation systems
Researcher	: Zelleke, Daniel Habtamu
Department	: Department of Civil Engineering, IITD
Year	: 2024
Supervisor	: Matsagar, Vasant A. (Prof.) - CE (Guide)
Physical description	: lviii, 400 p.
Subject terms	: Smart base isolation; Base isolation systems; Multi-hazard; Energy based predictive; Earthquake
Barcode	: TH7876
Call No.	: TH 699.84 ZEL-M
Title	: Studies on distribution and fractionation of heavy metals in Yamuna river sediments
Researcher	: Jaiswal, Maneesh
Department	: Department of Civil Engineering, IITD
Year	: 2024
Supervisor	: Nema, A. K. (Prof.) - CE (Guide); Hussain, Jakir (Research Officer) - Central Water Commission, Delhi (Guide)
Physical description	: xxxiii, 389 p.
Subject terms	: Water quality issues; Precipitation; Industrialization; Municipal wastewater; Physico-chemical water
Barcode	: TH7877
Call No.	: TH 627.157 JAI-S
Title	: Embracing large-sample hydrology and machine learning for prediction of floods
Researcher	: Kuntla, Sai Kiran
Department	: Department of Civil Engineering, IITD
Year	: 2024
Supervisor	: Saharia, Manabendra (Asst. Prof.) - CE (Guide)
Physical description	: xxx, 209 p.
Subject terms	: Climatology; Meteorology; Lithology; Geomorphology; Landcover

Barcode : TH7878

Call No. : TH 626:004.8 KUN-E

Title : Distributed control for synchronization in descriptor multi-agent systems

Researcher : Patel, Meera

Department : Department of Electrical Engineering, IITD

Year : 2024

Supervisor : Datta, Subashish (Assoc. Prof.) - EE (Guide)

Physical description : xx, 137 p.

Subject terms : Descriptor multi-agent system; Impulse elimination; Robust control approach; Constant reference tracking; Observer based controller

Barcode : TH7879

Call No. : TH 512.643 PAT-D

Title : Developing innovation strategy for large global information technology firms in an environment of the rapid evolution of digital technologies

Researcher : Singh, Rajbir

Department : Department of Management Studies, IITD

Year : 2024

Supervisor : Ilavarasan, P. Vigneswara (Prof.) - MS (Guide)

Physical description : xii, 172 p.

Subject terms : Decision framework; Innovation management; Discontinuous change; Innovation cycle; Digital technologies

Barcode : TH7880

Call No. : TH 658.11:004 SIN-D