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Table of Contents

Department/Centres/School/Unit


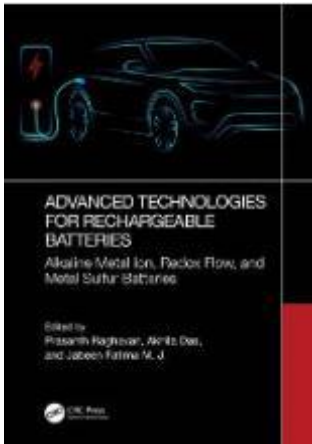
Page No.

Applied Mechanics.....	2
Atmospheric Sciences	4
Automotive Research & Tribology.....	4
Biochemical Engineering & Biotechnology	5
Biomedical Engineering	6
Central Library*	7
Chemistry.....	9
Civil Engineering.....	10
Computer Science & Engineering	11
Computer Service Centre.....	13
Design	14
Electrical Engineering.....	16
Energy Science & Engineering	17
Gratis.....	19
Hindi Cell	20
Humanities & Social Sciences	21
Management Studies.....	23
Materials Science & Engineering	24
National Resource Centre for Value Education in Engineering	25
Optics & Photonics.....	27
Physics.....	28
School of Artificial Intelligence	30
School of Biological Sciences	31
School of Public Policy	31
Textile & Fibre Engineering.....	32
THESES COLLECTIONS	34

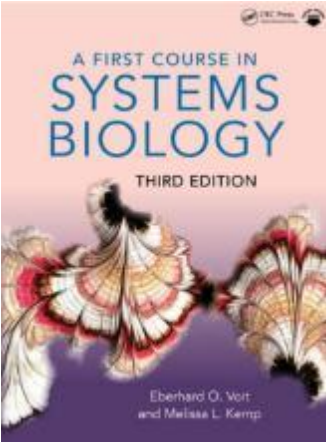
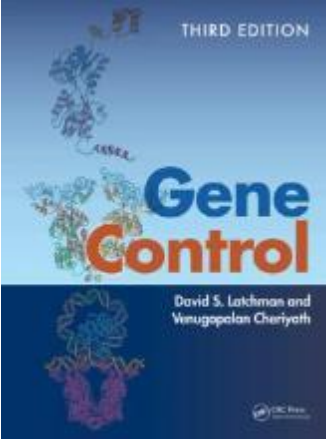
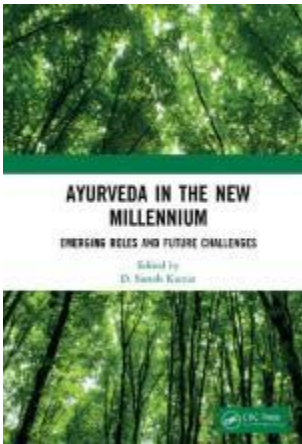
Applied Mechanics


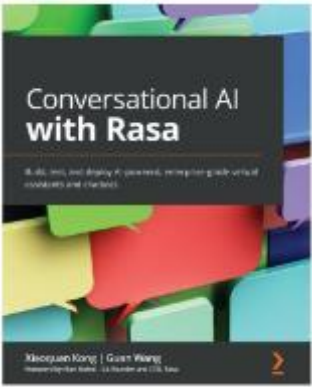
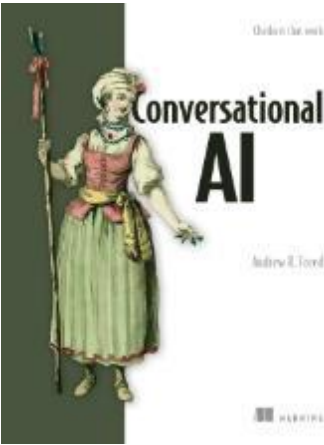
1		<p>Fractional thermoelasticity by Yuriy Povstenko, 2nd ed. Cham: Springer, 2024. xvii, 447 p., - Solid mechanics and its applications.</p> <p>Includes index (p. 445-447)</p> <p>ISBN: 9783031645860</p> <p>Subject Terms: Fractional calculus; Integral transforms; Fractional nonlocal elasticity; Non-fourier heat conduction; Thermoelasticity</p> <p>620.181.4 POV-F</p> <p>Barcode: 180846; CL</p> <p>Click here for more details.</p>
2		<p>Fracture mechanics: an introduction by Emmanuel E. Gdoutos, 3rd ed..Cham: Springer, 2020. xix, 477 p.</p> <p>-Solid mechanics and its application.</p> <p>Includes index (p. 475-477)</p> <p>ISBN: 9783030351007</p> <p>Subject Terms: Experimental mechanics; Solid mechanics; Nanoindentation; Damage mechanics; Composite material</p> <p>620.17 GDO-F</p> <p>Barcode: 180847; CL</p> <p>Click here for more details.</p>
3		<p>Introduction to PDEs and waves for the atmosphere and ocean by Andrew Mjada, .New York: American Mathematical Society, 2003. ix, 235 p., - Courant lecture notes in mathematics.</p> <p>Includes bibliography (p. 233-234)</p> <p>ISBN: 9780821829547</p> <p>Subject Terms: Energy principle; Atmosphere-mathematical models; Quasi-geostrophic equations; Stratified flow; Interpretation of group theory</p> <p>517.9:551.501.5 MAJ-I</p> <p>Barcode: 180785; CL</p> <p>Click here for more details.</p>
		<p>Back to Content</p>

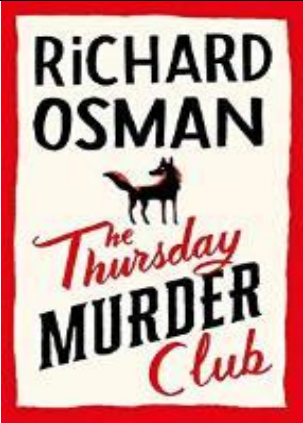
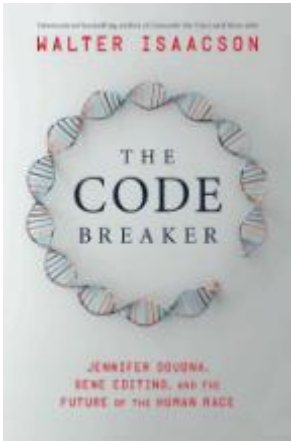

4		<p>Multiscale modeling in solid mechanics: computational approaches edited by Ugo Galvanetto and M. H. Ferri Aliabadi, .London: Imperial College Press, 2010. xiii, 334 p., - Computational and experimental methods in structures.</p> <p>Includes index (P. 333-334)</p> <p>ISBN: 9781848163072</p> <p>Subject Terms: Computer simulation; Computational solid mechanics; Finite element analysis; Mechanics of materials; Advanced structural analysis techniques</p> <p>519.6:531 -MUL</p> <p>Barcode: 180866; CL</p> <p>Click here for more details.</p>
5		<p>Piezoelectric vibration energy harvesting: modeling and experiments Sajid, Rafique, .Cham: Springer, 2018. xviii, 172 p.</p> <p>Includes index (p. 171-172)</p> <p>ISBN: 9783319694405</p> <p>Subject Terms: Electric power production; Electronic devices and materials; Energy technology and engineering; Optical and electronic materials; Electromechanical</p> <p>537.226.86 RAF-P</p> <p>Barcode: 180878; CL</p> <p>Click here for more details.</p>
6		<p>Reinforcement learning: an introduction by Richard S. Sutton and Andrew G. Barto, 2nd ed..Cambridge: MIT Press, 2018. xxii, 526 p.</p> <p>Includes index (p.519-526).</p> <p>ISBN: 9780262039246</p> <p>Subject Terms: Multi armed bandits; Markov decision processes; Dynamic programming; Monte Carlo methods; Temporal difference learning</p> <p>004.85 SUT-R</p> <p>Barcode: 180854; AM</p> <p>Click here for more details.</p>
		<p>Back to Content</p>

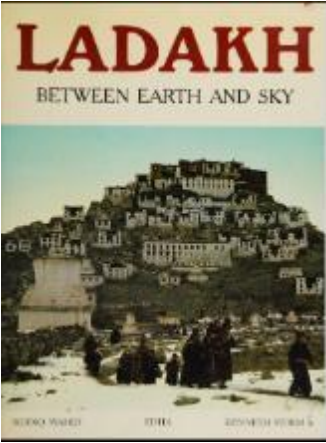
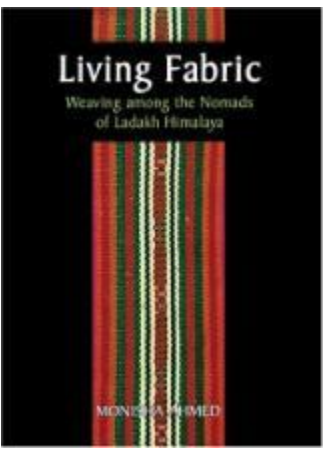
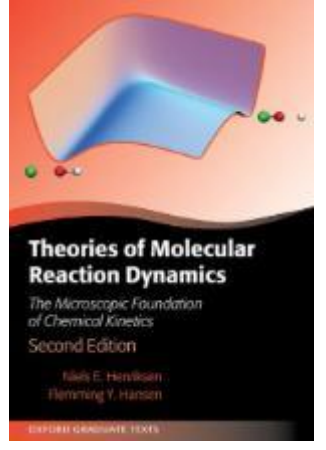
7		<p>Ship sensors: conventional, unmanned and autonomous by R. Glenn Wright, .New York: Routledge, 2024. xxi, 244 p.</p> <p>Includes index (p. 236-244)</p> <p>ISBN: 9781032456218</p> <p>Subject Terms: Maritime sensor systems; Cybersecurity and ship sensors; Autonomous maritime systems; Ship navigation and surveillance systems; Marine robotics and instrumentation</p> <p>629.5:681.586 WRI-S</p> <p>Barcode: 180865; CL</p> <p>Click here for more details.</p>
<h2 style="text-align: center;">Atmospheric Sciences</h2>		
8		<p>Atmospheric oscillations: sources of subseasonal-to-seasonal variability and predictability edited by Bin Guan, .Amsterdam: Elsevier, 2025. xix, 461 p.</p> <p>Includes index (p. 449-461)</p> <p>ISBN: 9780443156380</p> <p>Subject Terms: Atmospheric tides; Beyond earth; Zonal jet streams; Annular modes; Stratosphere</p> <p>551.501 -ATM</p> <p>Barcode: 180780; CL</p> <p>Click here for more details.</p>
<h2 style="text-align: center;">Automotive Research & Tribology</h2>		
9		<p>Advanced technologies for rechargeable batteries edited by Prasanth Raghavan, Akhila Das and Jabeen Fatima M. J., .Boca Raton: CRC Press, 2024. xxiv, 339 p. xxi, 374 p.</p> <p>Includes index vol. I (p. 337-339), vol. II (p. 373-374)</p> <p>ISBN: 9781032315348; 9781032315362</p> <p>Subject Terms: Storage batteries; Material Science; Nuclear batteries; Lithium hybrid batteries; Advancements in sodium air batteries</p> <p>621.354 -ADV</p> <p>Barcode: 180863-180864; CL</p> <p>Click here for more details.</p> <p style="text-align: right;">Back to Content</p>

10		<p>Analysis and design of power converter topologies for application in future more electric aircraft by Amit Kumar Singh, .Singapore: Springer, 2018. xxxiv,188 p., - Springer theses.</p> <p>ISBN: 9789811082122</p> <p>Subject Terms: Power electronics in aerospace; Electric power conversion; Electric aircraft; Power converter topologies; Advanced aircraft electrical systems</p> <p>629.7.01:621.314.5 SIN-A</p> <p>Barcode: 180859; CL</p> <p>Click here for more details.</p>
11		<p>High temperature electronics design for aero engine controls and health monitoring by Lucian Stoica, Steve Riches and Colin Johnston, .Gistrup: River publishers, 2016. xxiii, 136 p., - River publishers series in circuits and systems.</p> <p>Includes index (p. 129)</p> <p>ISBN: 9788793379251</p> <p>Subject Terms: Aerospace electronic systems; Materials at high temperatures; Aeronautical engineering; Thermal management; Reliability engineering</p> <p>629.7.062 STO-H</p> <p>Barcode: 180860; CL</p> <p>Click here for more details.</p>
<h2 style="text-align: center;">Biochemical Engineering & Biotechnology</h2>		
12		<p>Cell signaling: principles and mechanisms by Wendell A. Lim and Bruce J. Mayer, 2nd ed..Boca Raton: CRC Press, 2025. xxi, 441 p.</p> <p>Includes index (p. 427-441)</p> <p>ISBN: 9780367279370</p> <p>Subject Terms: Protein interactions; Cell interaction; Signaling enzymes cascades; Post-translational modification; Subcellular localization</p> <p>576.3 LIM-C</p> <p>Barcode: 180868; CL</p> <p>Click here for more details.</p>
		Back to Content

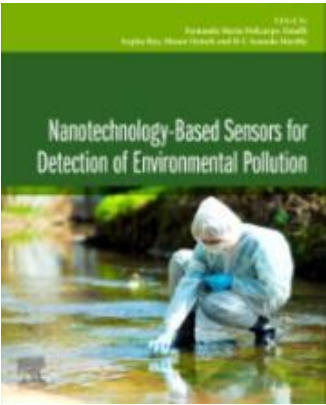

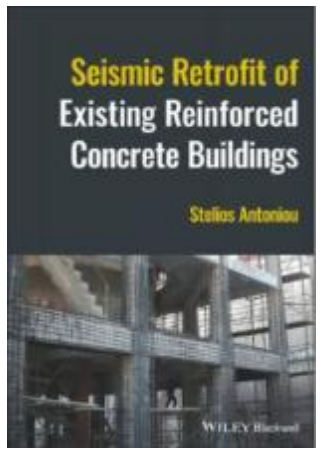
13		<p>First course in systems biology by Eberhard O. Voit and Melissa L. Kemp, 3rd ed..Boca Raton: CRC Press, 2025. xiii, 518 p.</p> <p>Includes index (p. 509-518)</p> <p>ISBN: 9781032515434</p> <p>Subject Terms: Biological systems; Optimal models; Gene systems; Protein systems; Metabolic systems</p> <p>577.2 VOI-F</p> <p>Barcode: 180869-180870; TB; BEB</p> <p>Click here for more details.</p>
14		<p>Gene Control by David S. Latchman and Venugopalan Cheriyaath, 3rd ed..Boca Raton: CRC Press, 2025. xx, 557 p.</p> <p>Includes index (p. 545-557)</p> <p>ISBN: 9781032465463</p> <p>Subject Terms: Gene control; Cell biology; Bacteria; Medical genetics; Nucleosome</p> <p>575 LAT-G</p> <p>Barcode: 180871; CL</p> <p>Click here for more details.</p>
<h2 style="text-align: center;">Biomedical Engineering</h2>		
15		<p>Ayurveda in the new millennium: emerging roles and future challenges edited by D. Suresh Kumar, .Boca Raton: CRC Press, 2021. xvi, 284 p.</p> <p>Includes index (273 -284 p.)</p> <p>ISBN: 9780367279547</p> <p>Subject Terms: Health and fitness; Alternative medicine; Herbal medications; Botany and plant science; Environment and agriculture</p> <p>615.89 -AYU</p> <p>Barcode: 180874; CL</p> <p>Click here for more details.</p>
Back to Content		

16		<p>Modern mechanobiology: convergence of biomechanics, development, and genomics edited by Juhyun Lee... (et al.), .Singapore: Jenny Stanford Publishing, 2021. x, 249 p.</p> <p>Includes index (p. 239-249)</p> <p>ISBN: 9789814800587</p> <p>Subject Terms: Biomechanical Phenomena; Biomedical engineering; Genomics; Molecular biology; Personalized medicine</p> <p>577.3 -MOD</p> <p>Barcode: 180875; CL</p> <p>Click here for more details.</p>
<h2 style="text-align: center;">Central Library*</h2>		
17		<p>Conversational AI with Rasa: build, test, and deploy AI-powered, enterprise-grade virtual assistants and chatbots by Xiaoquan Kong and Guan Wang, .Birmingham: Packt Publishing, 2021. xvii, 245 p.</p> <p>Includes index (p. 355-245)</p> <p>ISBN: 9781801077057</p> <p>Subject Terms: Contextual understanding; Natural language processing; Dialogue management; Dialogue flow; Machine learning</p> <p>681.3 KON-C</p> <p>Barcode: 180825; CL</p> <p>Click here for more details.</p>
18		<p>Conversational AI: chatbots that work by Andrew R. Freed, .New York: Manning Publications, 2021. xxii, 291 p.</p> <p>Includes index (p. 285-291)</p> <p>ISBN: 9781617298837</p> <p>Subject Terms: Designing effective process; Building a successful AI assistant; Training and testing your assistant; Testing your dialogue flows; Training for voice assistants</p> <p>681.3 FRE-C</p> <p>Barcode: 180781; CL</p> <p>Click here for more details.</p>
<p style="text-align: right;">Back to Content</p>		

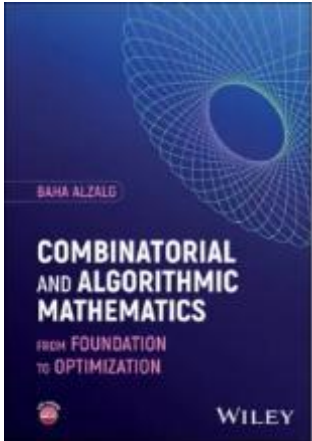
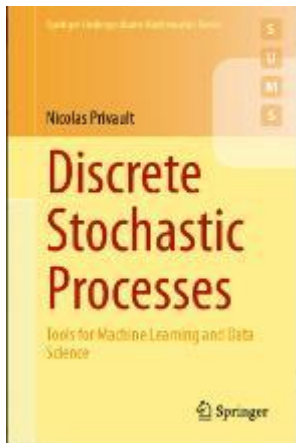
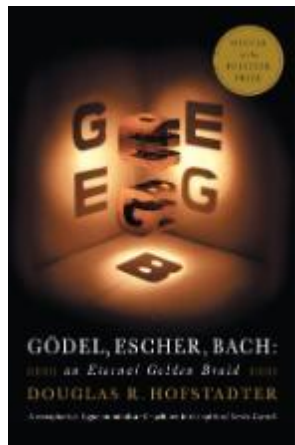
19		<p>Thursday murder club By Richard Osman, .Dublin: Penguin Random House, 2021. 389 p.</p> <p>ISBN: 9780241988268</p> <p>Subject Terms: Investigation; Clubs fiction; Detective; Mystery fiction; Crime</p> <p>82-312.4 OSM-T</p> <p>Barcode: 180795; CL</p> <p>Click here for more details.</p>
20		<p>Code breaker: Jennifer Doudna, gene editing and the future of the human race by Walter Isaacson, .London: Simon and Schuster, 2021. xix, 536 p.</p> <p>Includes index (p. 517-533)</p> <p>ISBN: 9781398518605</p> <p>Subject Terms: DNA-analysis; Gene editing; Biotechnology-history; Genentech; Science and civilization</p> <p>575.827 ISA-C</p> <p>Barcode: 180810; CL</p> <p>Click here for more details.</p>
21		<p>Crack in creation: the new power to control evolution By Jennifer Doudna and Samuel Sternberg, .London: Vintage, 2018. xxii, 281 p.</p> <p>Includes index (p. 270-281)</p> <p>ISBN: 9781784702762</p> <p>Subject Terms: Gene editing; Biotechnology-social aspects; Genetic engineering; Molecular biology; CRISPR-Cas systems</p> <p>575.827 DOU-C</p> <p>Barcode: 180815; CL</p> <p>Click here for more details.</p>
		Back to Content

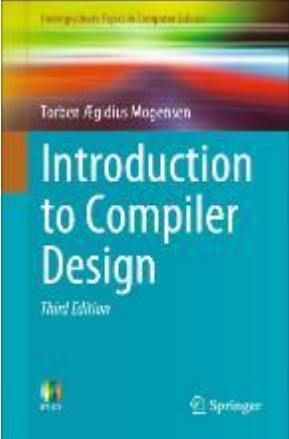
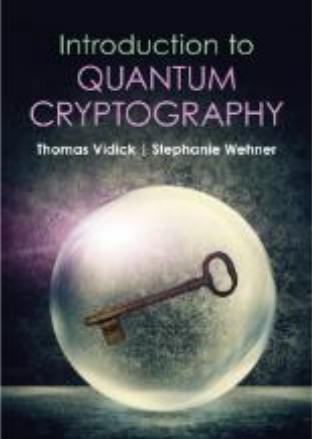
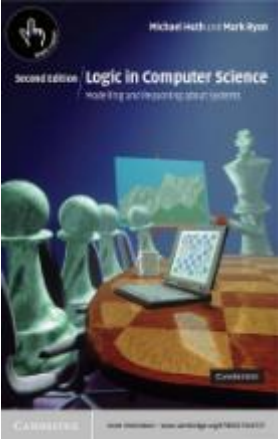
22		<p>Ladakh: between Earth and sky by Siddiq Wahid and photographs by Kenneth R. Storm, .New York: W. W. Norton & Company, 1981. 104 p.</p> <p>Includes bibliography</p> <p>ISBN: 2880011019</p> <p>Subject Terms: Ladakh-Description and travel; Social life; Adventure sports; Cultural heritage; Tourist activities</p> <p>338.48(235.243) WAH-L</p> <p>Barcode: 180824; CL</p> <p>Click here for more details.</p>
23		<p>Living fabric: weaving among the nomads of Ladakh Himalaya by Monisha Ahmed, .Trumbull: Weatherhill, 2002. ix, 192 p.</p> <p>Includes bibliography and index (p. 185-192)</p> <p>ISBN: 9780834805217</p> <p>Subject Terms: History of weaving and textiles; Shearing sheep wool; backstrap loom; Cloth of the female loom; Textile fabrics</p> <p>677.024(292.536) AHM-L</p> <p>Barcode: 180790; CL</p> <p>Click here for more details.</p>
<h2 style="text-align: center;">Chemistry</h2>		
24		<p>Theories of molecular reaction dynamics: the microscopic foundation of chemical kinetics by Niels Engholm Henriksen and Flemming Yssing Hansen, 2nd ed..Oxford: Oxford University Press, 2019. xiii, 443 p., - Oxford graduate texts.</p> <p>Includes index (p. 441-443)</p> <p>ISBN: 9780198961574</p> <p>Subject Terms: Gas-phase dynamic; Potential energy surfaces; Biomolecular reactions; Quantum mechanics; Statistical mechanics</p> <p>544.4 HEN-T</p> <p>Barcode: 180841; CL</p> <p>Click here for more details.</p>
		<p style="text-align: right;">Back to Content</p>

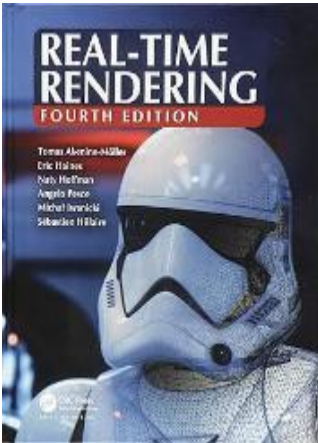
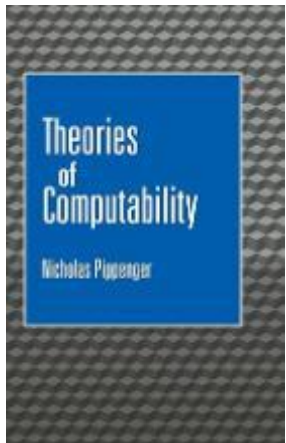
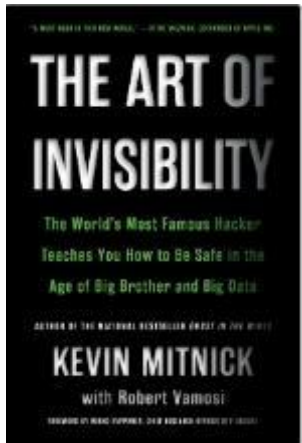
Civil Engineering

25		<p>Nanotechnology-based sensors for detection of environmental pollution edited by Fernanda Maria Policarpo Tonelli... (et al.), .Amsterdam: Elsevier, 2024. xxix, 607 p.</p> <p>Includes index (p. 573-607)</p> <p>ISBN: 9780443141188</p> <p>Subject Terms: Chemical detectors - materials; Environmental monitoring; Inorganic metals and pollution; Green carbon-based nanomaterials; Nanomaterials for sensor fabrication</p> <p>502.175:620.3 -NAN</p> <p>Barcode: 180829; CL</p> <p>Click here for more details.</p>
26		<p>Seismic retrofit of existing buildings: a guide for practising engineers by Matthew Fox, Weng Yuen Kam and Damian Grant, .Leeds: Emerald Publishing, 2024. xv, 292 p.</p> <p>Includes index (p. 279-292)</p> <p>ISBN: 9781835498354</p> <p>Subject Terms: Buildings reinforced concrete buildings; Global seismic retrofit techniques; Structural steel building; Timber building; Non structural components</p> <p>550.34:69 FOX-S</p> <p>Barcode: 180830; CL</p> <p>Click here for more details.</p>
27		<p>Seismic retrofit of existing reinforced concrete buildings by Stelios Antoniou, .Hoboken: John Wiley, 2023. xix, 515 p.</p> <p>Includes index (p. 509-515)</p> <p>ISBN: 9781119987321</p> <p>Subject Terms: Structural configuration; Fiber reinforcement; Equipment and crew; Damping devices; Convergence criteria</p> <p>550.34:691.32 ANT-S</p> <p>Barcode: 180839; CL</p> <p>Click here for more details.</p>
		<p>Back to Content</p>

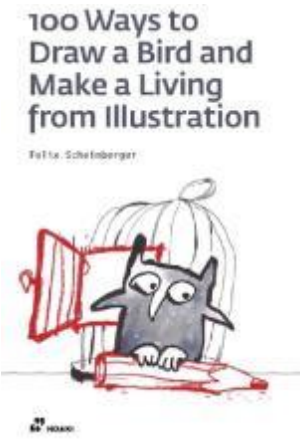
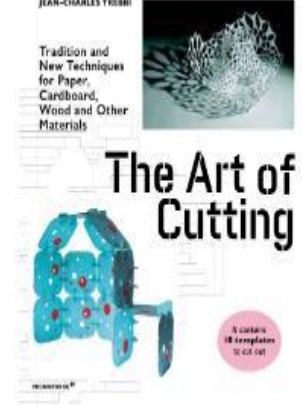

Computer Science & Engineering




28		<p>Combinatorial and algorithmic mathematics: from foundation to optimization by Baha Alzalg, Hoboken: Wiley, 2022. xxi, 506 p.</p> <p>Includes bibliography and index (p.489-506)</p> <p>ISBN: 9781394235940</p> <p>Subject Terms: Algorithm design; Analyse combinatoire; Mathematical optimization; Operations Research; Network flows</p> <p>519.165 ALZ-C</p> <p>Barcode: 180851; CL</p> <p>Click here for more details.</p>
29		<p>Discrete stochastic processes: tools for machine learning and data science by Nicolas Privault, Cham: Springer, 2024. xii, 288 p., - Springer undergraduate mathematics series.</p> <p>Includes references and index (p. 279-288)</p> <p>ISBN: 9783031658198</p> <p>Subject Terms: Markov chains; Random walks; Search engines; Hidden Markov models; Markov decision processes</p> <p>519.21 PRI-D</p> <p>Barcode: 180852; CL</p> <p>Click here for more details.</p>
30		<p>Gödel, Escher, Bach: an eternal golden braid by Douglas R. Hofstadter, New York: Basic Books, 1999. xxi, 777 p.</p> <p>Includes bibliography and index (p. 746-777)</p> <p>ISBN: 9780465026562</p> <p>Subject Terms: Metaphysics; Philosophy and theory of mathematics; Symmetry; Self-reference; Artificial intelligence</p> <p>510.21:004.85 HOF-G</p> <p>Barcode: 180808-180809; CL; CSE</p> <p>Click here for more details.</p>
		Back to Content

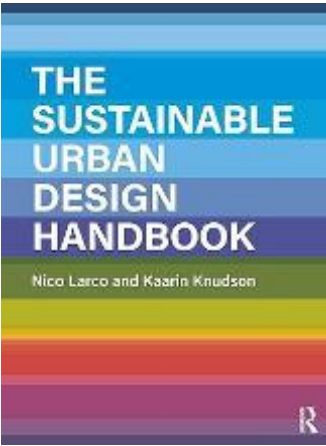
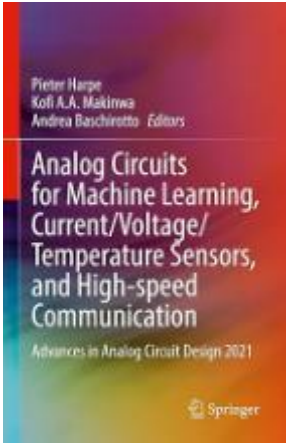
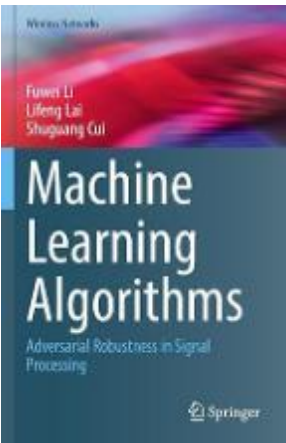
31		<p>Introduction to compiler design by Torben Aegidius Mogensen, 3rd ed..Cham: Springer, 2024. xxii, 287 p., - Undergraduate topics in computer science.</p> <p>Includes index (p. 283-287)</p> <p>ISBN: 9783031464591</p> <p>Subject Terms: Lexical analysis; Syntax analysis; Interpretation; Type checking; Intermediate code generation</p> <p>681.326 MOG-I</p> <p>Barcode: 180853; CL</p> <p>Click here for more details.</p>
32		<p>Introduction to quantum cryptography by Thomas Vidick and Stephanie Wehner, .Cambridge: Cambridge University Press, 2024. ix, 327 p.</p> <p>Includes index (p. 327)</p> <p>ISBN: 9781316515655</p> <p>Subject Terms: Quantum cryptography - Mathematics; Quantum computing - Security measures; Security from physical assumptions; Delegated computation; Privacy amplification</p> <p>530.145:004.056.55 VID-I</p> <p>Barcode: 180796; CSE</p> <p>Click here for more details.</p>
33		<p>Logic in computer science: modelling and reasoning about systems by Michael Huth and Mark Ryan, 2nd ed.Cambridge: Cambridge University Press, 2018. xiv, 427 p.</p> <p>Includes bibliography and index (p. 414-427)</p> <p>ISBN: 9780521543101</p> <p>Subject Terms: Propositional logic; Predicate logic; Semantics of CTL; Micromodels of software; Binary decision</p> <p>004:510.6 HUT-L</p> <p>Barcode: 180797; CSE</p> <p>Click here for more details.</p>
		<p>Back to Content</p>

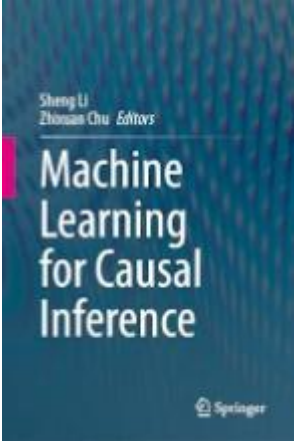


34		<p>Real-time rendering by Tomas Akenine-Moller... (et al.), .Boca Raton: CRC Press, 2018. xiii, 1178 p.</p> <p>Includes bibliography and index (p. 1051-1178)</p> <p>ISBN: 9781138627000</p> <p>Subject Terms: Graphics rendering pipeline; Texturing; Physically based shading; Global illumination; Polygonal techniques</p>
		681.3:744 -REA
		Barcode: 180801-180802; CL; CSE
		Click here for more details.
35		<p>Theories of computability by Nicholas Pippenger, .Cambridge: Cambridge University Press, 2010. ix, 251 p.</p> <p>Includes reference and index (p. 234-251)</p> <p>ISBN: 9780521153430</p> <p>Subject Terms: Automates; Machine theory; Computable functions; Boolean functions; Turing reducibility</p>
		681.3 PIP-T
		Barcode: 180803-180804; CL; CSE
		Click here for more details.
Computer Service Centre		
36		<p>Art of invisibility: the world's most famous hacker teaches you how to be safe in the age of big brother and big data by Kevin Mitnick and Robert Vamosi, .New York: Back Bay Books, 2017. x, 308 p.</p> <p>Includes index (p. 299-308)</p> <p>ISBN: 9780316380522</p> <p>Subject Terms: Privacy protection; Data protection; Physical security; Cryptography; Cybersecurity</p>
		681.3 MIT-A
		Barcode: 180850; CL
		Click here for more details.
		Back to Content

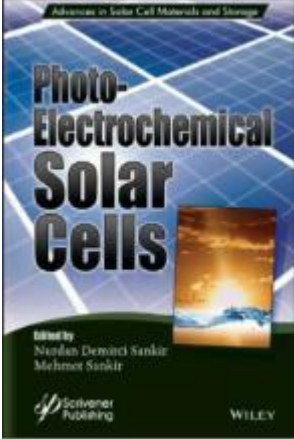
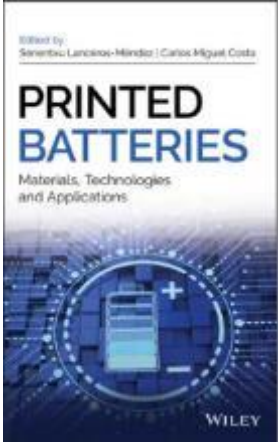
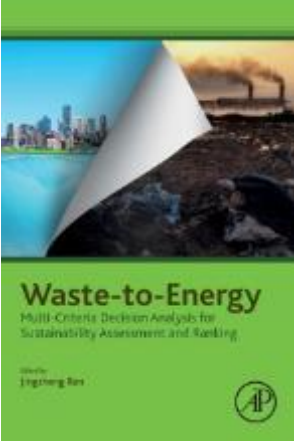
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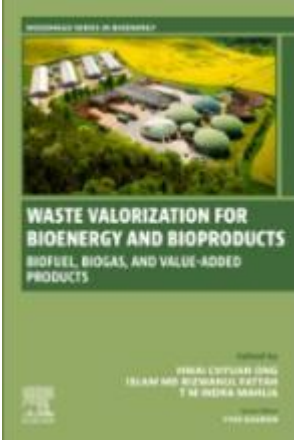
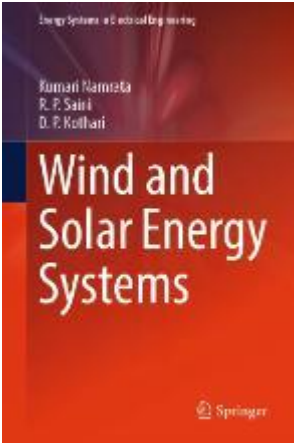
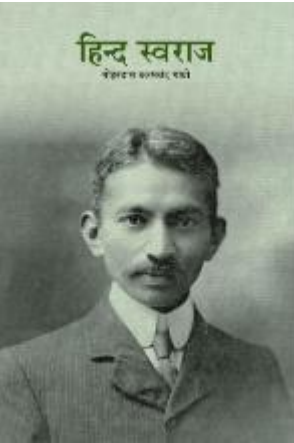
37		<p>100 ways to draw a bird and make a living from illustration by Felix Scheinberger, .Barcelona: Hoaki, 2020. 222 p.</p> <p>ISBN: 9788417656188</p> <p>Subject Terms: Dominant colors; Acrylic paint; Photoshop; Business sense; Portfolios</p> <p>741.02 SCH-W</p> <p>Barcode: 180833; CL</p> <p>Click here for more details.</p>
38		<p>Art of cutting: tradition and new techniques for paper, cardboard, wood and other materials by Jean-Charles Trebbi, .Barcelona: Promo Press, 2015. 159 p.</p> <p>Includes bibliography (p. 159)</p> <p>ISBN: 9788417412159</p> <p>Subject Terms: Cutting and gastronomy; Paper cut-outs; Recycled metal; Puzzle furniture; Interiors and architecture</p> <p>745.54 TRE-A</p> <p>Barcode: 180831; CL</p> <p>Click here for more details.</p>
39		<p>Art of folding: new trends, techniques and materials by Jean-Charles Trebbi, Chloe Genevoux and Guillaume Bounoure, .Barcelona: Promo Press, 2017. 175 p.</p> <p>Includes bibliography (p. 174)</p> <p>ISBN: 9788417412326</p> <p>Subject Terms: Decor and scenery; Fashion; Furniture and lighting; Architecture; Innovation</p> <p>745.54 TRE-A</p> <p>Barcode: 180832; CL</p> <p>Click here for more details.</p>
		<p style="text-align: right;">Back to Content</p>



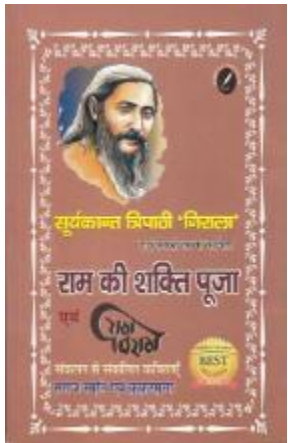
40		<p>New product design: Contemporary furniture, lamps and decorative objects edited by Wang Shaoqiang, Barcelona: Hoaki, 2023. 254 p.</p> <p>ISBN: 9788419220233</p> <p>Subject Terms: Industrial design; Product development; Design thinking; Technological innovations; Engineering design</p> <p>684.4 -NEW</p> <p>Barcode: 180834; CL</p> <p>Click here for more details.</p>
41		<p>New structural packaging by Josep M. Garrofe, Barcelona: Promo Press, 2020. 401 p.</p> <p>Includes index</p> <p>ISBN: 9788417412494</p> <p>Subject Terms: Packing design; Innovative packaging; Product packaging; Design optimization; Creative packaging</p> <p>621.79 GAR-N</p> <p>Barcode: 180835; CL</p> <p>Click here for more details.</p>
42		<p>Printing design for graphic designers: an inspirational guide to special production techniques and finishes edited by Design 360° Magazine, .Barcelona: Hoaki Books, 2023. 303 p.</p> <p>Includes index (p. 294-301)</p> <p>ISBN: 9788419220219</p> <p>Subject Terms: Screen printing; Perforation; Embossing and debossing; Saddle stitching; Accordion binding</p> <p>766:655.1 -PRI</p> <p>Barcode: 180836; CL</p> <p>Click here for more details.</p>
		<p>Back to Content</p>

43		<p>Sustainable urban design handbook by Nico Larco and Kaarin Knudson, .New York: Routledge, 2024. xxv, 438 p.</p> <p>Includes Index (p. 433-438)</p> <p>ISBN: 9781138945692</p> <p>Subject Terms: City planning - Handbooks, manuals, etc.; Compact development - Handbooks, manuals, etc.; Municipal engineering - Handbooks, manuals, etc.; Sustainable urban development - Handbooks, manuals, etc.; Robust transit development - Handbooks, manuals, etc.</p> <p>RL-HB 711.4:502.131.1 LAR-S</p> <p>Barcode: 180793; CL</p> <p>Click here for more details.</p>
<h2 style="text-align: center; background-color: #d9e1f2; padding: 5px;">Electrical Engineering</h2>		
44		<p>Analog circuits for machine learning, current/voltage/temperature sensors, and high-speed communication: advances in analog circuit design 2021 edited by Pieter Harpe, Kofi A. A. Makinwa and Andrea Baschiroto, .Cham: Springer, 2022. xii, 350 p.</p> <p>Includes index (p. 341-350)</p> <p>ISBN: 9783030917401</p> <p>Subject Terms: Analog integrated circuits; Deep neural networks; Linear integrated circuits; Machine learning; Resistor-based temperature sensors</p> <p>CD 621.382:004.85 -ANA</p> <p>Barcode: 180800; CL</p> <p>Click here for more details.</p>
45		<p>Machine learning algorithms: adversarial robustness in signal processing by Fuwei Li, Lifeng Lai and Shuguang Cui, .Cham: Springer, 2022. ix, 104 p. Wireless networks.</p> <p>Includes reference (p. 101-104)</p> <p>ISBN: 9783031163746</p> <p>Subject Terms: Artificial intelligence; Linear regression; Neural networks; Computer algorithms; Big data</p> <p>681.3 LI-M</p> <p>Barcode: 180798; CL</p> <p>Click here for more details.</p>
		Back to Content

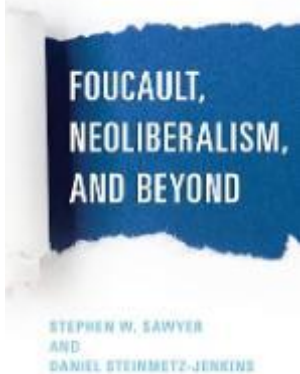


46		<p>Machine learning for causal inference edited by Sheng Li and Zhixuan Chu, .Cham: Springer, 2023. xvi, 298 p.</p> <p>ISBN: 9783031350504</p> <p>Subject Terms: Binary treatments; Identification of casual quantities; Causal inference on graphs; Meta-learning methods; Causal explainable AI</p> <p>519.2:004.85 -MAC</p> <p>Barcode: 180799; CL</p> <p>Click here for more details.</p>
<h2 style="text-align: center; background-color: #d9e1f2; padding: 5px;">Energy Science & Engineering</h2>		
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48		<p>Big data application in power systems edited by Reza Arghandeh and Yuxun Zhou, 2nd ed..Amsterdam: Elsevier, 2024. xix, 428 p.</p> <p>Includes index (p. 419-428)</p> <p>ISBN: 9780443215247</p> <p>Subject Terms: Smart grids; Data management; Energy analytics; Machine learning; Data processing</p> <p>621.311:004.6 -BIG</p> <p>Barcode: 180837; CL</p> <p>Click here for more details.</p>
		<p style="text-align: right;">Back to Content</p>


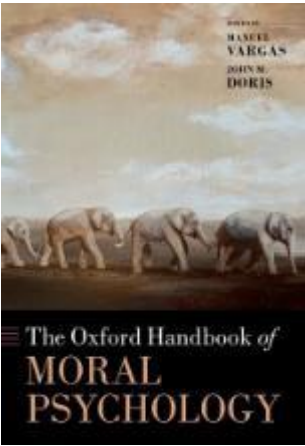
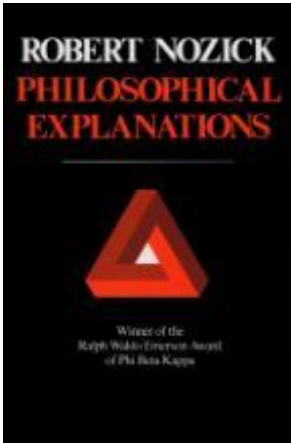
49		<p>Photo-electrochemical solar cells edited by Nurdan Demirci Sankir and Mehmet Sankir, .Beverly: Scrivener Publishing, 2019. xiv, 464 p., - Advance in solar cell materials and storage.</p> <p>Includes index (p. 459-464)</p> <p>ISBN: 9781119459934</p> <p>Subject Terms: Energy; Photoelectric cells; Photoelctrochemical energy; Photovoltaic cells; Solar energy</p> <p>621.383.51 -PHO</p> <p>Barcode: 180881; CL</p> <p>Click here for more details.</p>
50		<p>Printed batteries: materials, technologies and applications edited by Senentxu Lanceros-Méndez and Carlos Miguel Costa, .Hoboken: John Wiley, 2018. xiii, 244 p.</p> <p>Includes index (p. 235-244)</p> <p>ISBN: 9781119287421</p> <p>Subject Terms: Battery materials; Flexible electronics; Energy storage technologies; Printed electronics; Battery manufacturing</p> <p>621.355 -PRI</p> <p>Barcode: 180873; CL</p> <p>Click here for more details.</p>
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		<p>Back to Content</p>


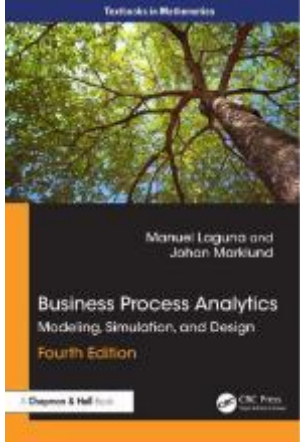
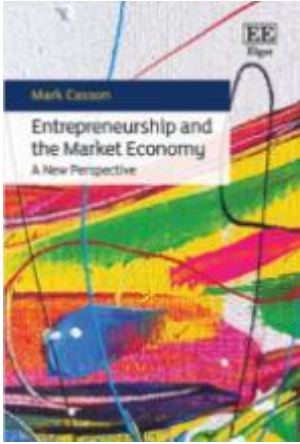
52		<p>Waste valorization for bioenergy and bioproducts: biofuels, biogas, and value-added products edited by Hwai Chyuan Ong, Islam Md Rizwanul Fattah and T. M. Indra Mahlia, .Cambridge: Elsevier, 2024. xviii, 568 p., - Woodhead series in bioenergy.</p> <p>Includes index (p. 549-568)</p> <p>ISBN: 9780443191718</p> <p>Subject Terms: Waste management; Environmental biotechnology; Biomass conversion; Waste materials; Sustainable development</p> <p>628.4:620.925 -WAS</p> <p>Barcode: 180828; CL</p> <p>Click here for more details.</p>
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<div>Gratis</div>		
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		<p>Back to Content</p>


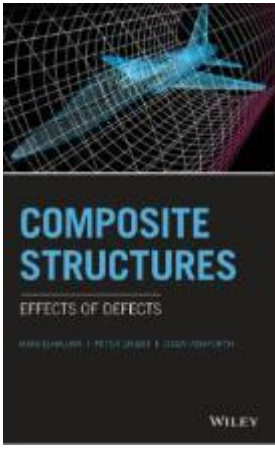
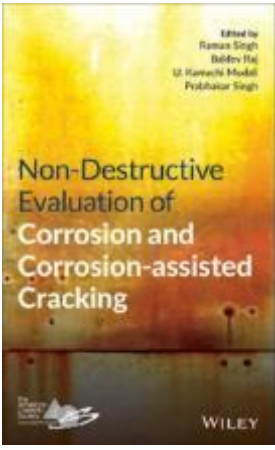
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Hindi Cell		
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		Back to Content

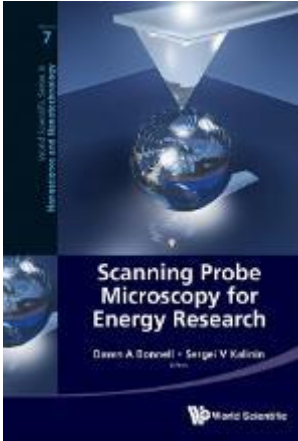

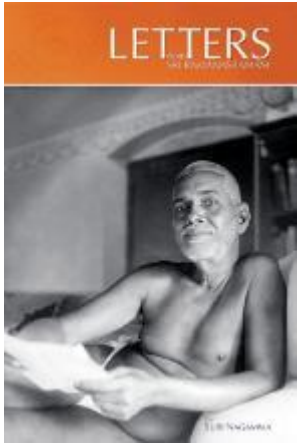
Humanities & Social Sciences

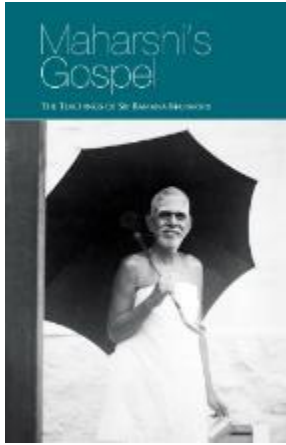

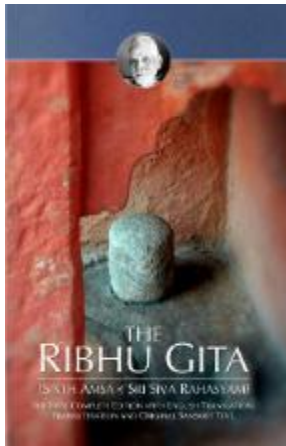
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		Barcode: 180794; CL
		Click here for more details.
59		<p>Handbook of speech production edited by Melissa A. Redford, Hoboken: John Wiley, 2019. xi, 601 p. Blackwell handbook in linguistics.</p> <p>Includes index (p. 578-601)</p> <p>ISBN: 9781119029144</p> <p>Subject Terms: Speech mechanism- Handbooks, manual, etc.; Speech motor control - Handbooks, manuals, etc.; Sequencing and planning- Handbooks, manuals, etc.; Fluency and disfluency - Handbooks, manuals, etc.; Language factors - Handbooks, manuals, etc.</p>
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		Barcode: 180876; REF
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		303.022(036) BAR-I
		Barcode: 180849; CL
		Click here for more details.
		Back to Content

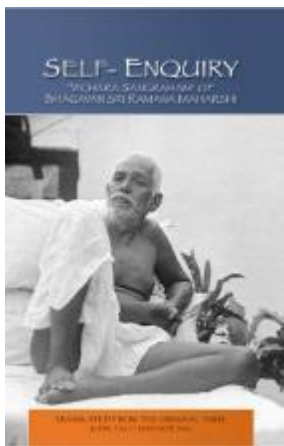
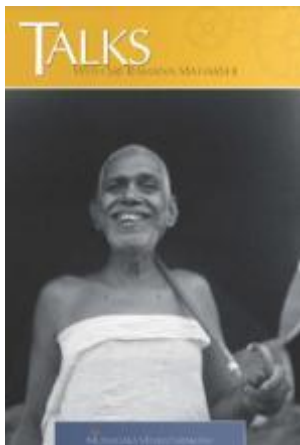
61		<p>Mindware: an introduction to the philosophy of cognitive science by Andy Clark, 2nd ed. New York: Oxford University Press, 2014. xvi, 319 p.</p> <p>Includes index and references (p. 277-319)</p> <p>ISBN: 9780199828159</p> <p>Subject Terms: Artificial intelligence; Cognitive science; Philosophie; Neuroscience; Epistemology</p> <p>159.937 CLA-M</p> <p>Barcode: 180783-180784; CL; HSS</p> <p>Click here for more details.</p>
62		<p>Oxford handbook of moral psychology edited by Manuel Vargas and John M. Doris, .Oxford: Oxford University Press, 2022. xiii, 1097 p.</p> <p>Includes index (p. 1021-1097)</p> <p>ISBN: 9780198871712</p> <p>Subject Terms: Judgement internalism - Handbooks, manuals, etc.; Forgiveness and moral repair - Handbooks, manuals, etc.; Negligence - Handbooks, manuals, etc.; Limits of neuroscience for ethics - Handbooks, manuals, etc.; Morality and possibility - Handbooks, manuals</p> <p>RL-HB 17:159.9 -OXF</p> <p>Barcode: 180813; CL</p> <p>Click here for more details.</p>
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		<p>Back to Content</p>

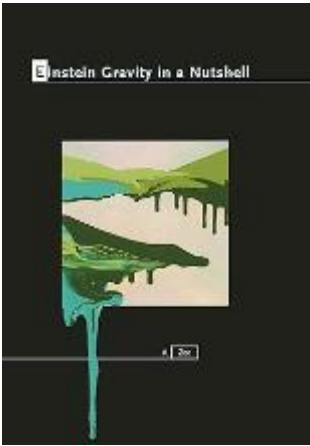
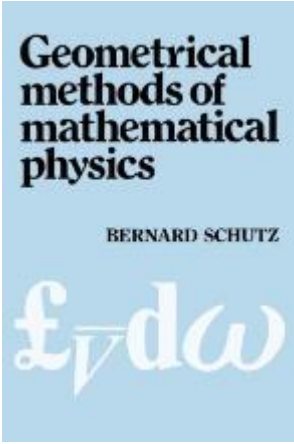
64		<p>Thinking like a Mall: environmental philosophy after the end of nature by Steven Vogel, .Cambridge: MIT Press, 2016. x, 283 p.</p> <p>Includes bibliography and index (p. 265-283)</p> <p>ISBN: 9780262529716</p> <p>Subject Terms: Environmental sciences - Philosophy; Philosophy of nature; Social construction of nature; Nature of artifacts; Human-nature relationship</p> <p>502.12 VOG-T</p> <p>Barcode: 180773; CL</p> <p>Click here for more details.</p>
<h2 style="text-align: center;">Management Studies</h2>		
65		<p>Business process analytics: modeling, simulation and design by Manuel Laguna and Johan Marklund, 4th ed.Boca Raton: CRC Press, 2025. xviii, 619 p. Textbook in mathematics.</p> <p>Includes index (p 605-619)</p> <p>ISBN: 9781032595429</p> <p>Subject Terms: Data analytics; Six sigma; Management; Business process analytics; Performance optimization</p> <p>658:005.52 LAG-B</p> <p>Barcode: 180877; CL</p> <p>Click here for more details.</p>
66		<p>Entrepreneurship and the market economy: a new perspective by Mark Casson, .Cheltenham: Edward Elgar Publishing, 2024. viii, 324 p.</p> <p>Includes index (p. 307-324)</p> <p>ISBN: 9781035341535</p> <p>Subject Terms: Capitalism; Economic growth; Distribution of income; Entrepreneurial strategy; Distribution of income</p> <p>658.1:336.76 CAS-E</p> <p>Barcode: 180857; CL</p> <p>Click here for more details.</p>
<p style="text-align: right;">Back to Content</p>		

67		<p>International trade, economic crisis and the sustainable development goals edited by Tonmoy Chatterjee, .Leeds: Emerald Publishing, 2024. xxiv, 345 p.</p> <p>Includes index (p. 336-345)</p> <p>ISBN: 9781837535873</p> <p>Subject Terms: Business and economics; International trade; Economic crisis; Global economy; Trade policy</p> <p>339.5:502.131.1 -INT</p> <p>Barcode: 180858; CL</p> <p>Click here for more details.</p>
<h2 style="text-align: center;">Materials Science & Engineering</h2>		
68		<p>Composite structures: effects of defects by Rani Elhajjar, Peter Grant and Cindy Ashforth, .Hoboken: John Wiley, 2019. xii, 222 p.</p> <p>Includes index (p. 215-222)</p> <p>ISBN: 9781118997703</p> <p>Subject Terms: Composite construction; Composite material; Product design; Strain measurement; Material manufacturing</p> <p>624.016 ELH-C</p> <p>Barcode: 180882; CL</p> <p>Click here for more details.</p>
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		Back to Content

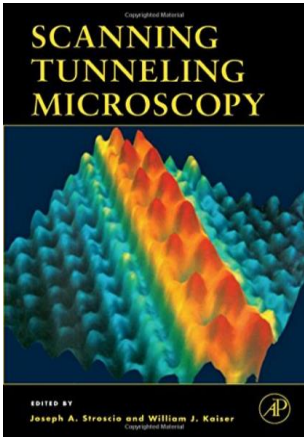
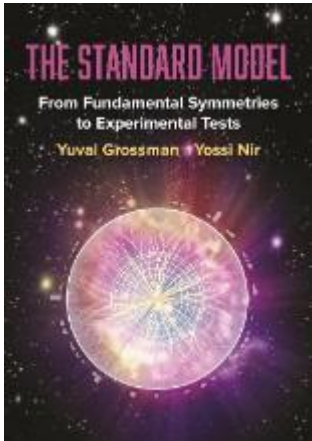
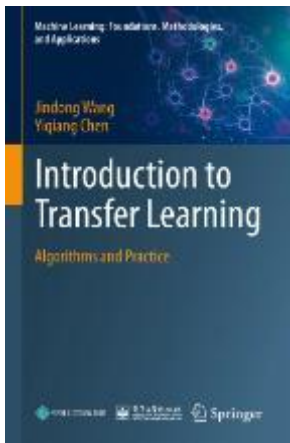
70		<p>Scanning probe microscopy for energy research edited by Dawn A Bonnell and Sergei V Kalinin, .Singapore: World Scientific Publishing, 2013. xvi, 602 p., - World scientific series in nanoscience and nanotechnology.</p> <p>Include index (p. 591-602)</p> <p>ISBN: 9789814434706</p> <p>Subject Terms: Nanoscience; Nanotechnology; Photovoltaics; Solar cells; Energy science</p> <p>528.8.042 -SCA</p> <p>Barcode: 180867; CL</p> <p>Click here for more details.</p>
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		<p>Back to Content</p>

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		<p>Back to Content</p>

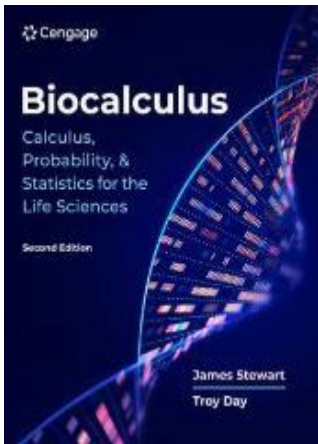
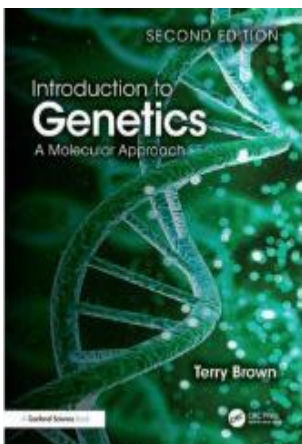
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		Back to Content

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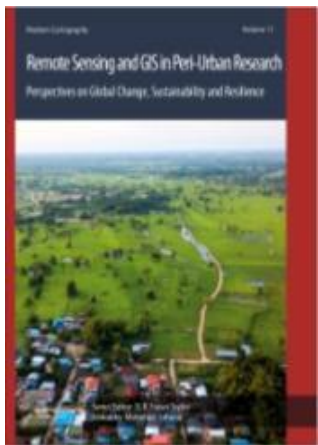
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		<p>Back to Content</p>

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		Back to Content


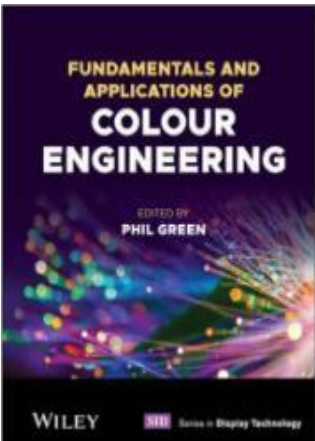
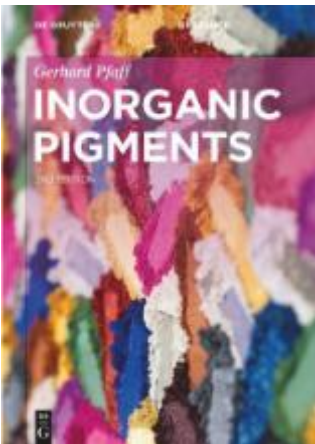
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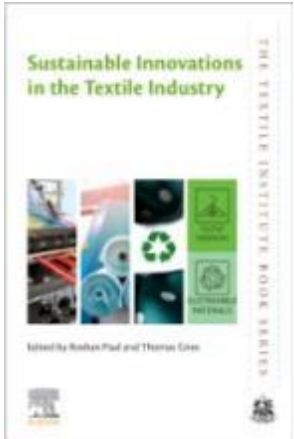
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		<p>Back to Content</p>

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		<p>Back to Content</p>

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		<p>Back to Content</p>

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Barcode	:	TH8100
Call No.	:	TH 004.076.4:004.254 BAG-E
Title	:	Performance assessment of geocell reinforced road pavement by Sayanti Banarjee
Researcher	:	Banarjee, Sayanti
Department	:	Department of Civil Engineering, IITD
Year	:	2025
Supervisor	:	Manna, Bappaditya (Prof.) - CE (Guide); Shahu, J. T. (Prof.) - CE (Guide)
Physical description	:	xxxvi, 280 p.
Subject terms	:	Lime treatment; Geocell configuration; Loading condition; Expansive subgrade; Resilient modulus
Barcode	:	TH8101
Call No.	:	TH 625.8 BAN-P
Title	:	Design, development, and scale-up of an economical and efficient vanadium redox flow battery by Nishant Beriwal
Researcher	:	Beriwal, Nishant
Department	:	Department of Chemical Engineering, IITD

Year	:	2025
Supervisor	:	Verma, Anil (Prof.) - CHE (Guide)
Physical description	:	xxix, 213 p.
Subject terms	:	Electrolyte extraction; Flow battery; Multi-cell stack; Spent vanadium catalyst; Shunt current
Barcode	:	TH8102
Call No.	:	TH 621.352.1:546.881 BER-D
Title	:	Design of adsorption system based on the utilization of low cost adsorbent for the removal of toxic heavy metals from industrial effluent by Nekita Boraah
Researcher	:	Boraah, Nekita
Department	:	Department of Civil Engineering, IITD
Year	:	2025
Supervisor	:	Chakma, Sumedha (Prof.) - CE (Guide); Kaushal, Priyanka (Prof.) - CRDT (Guide)
Physical description	:	xxv, 231 p.
Subject terms	:	Water pollution; Heavy metal contamination; Biochar; Membrane filtration; Feedstock analysis
Barcode	:	TH8103
Call No.	:	TH 628.54 BOR-D
Title	:	Development of efficient and cost-effective membrane for vanadium redox flow battery by Utsav Dalal
Researcher	:	Dalal, Utsav
Department	:	Department of Chemical Engineering, IITD
Year	:	2025
Supervisor	:	Verma, Anil (Prof.) - CHE (Guide)
Physical description	:	xxv, 203 p.
Subject terms	:	Capacity retention; Membrane synthesis; PE separator; Self discharge; Vanadium ion permeability
Barcode	:	TH8104
Call No.	:	TH 621.352:546.88 DAL-D
Title	:	Results on abstract module categories and eilenberg-moore categories by Divya
Researcher	:	Divya
Department	:	Department of Mathematics, IITD
Year	:	2025
Supervisor	:	Kour, Surjeet (Assoc. Prof.) - MA (Guide)
Physical description	:	xiv, 171 p.
Subject terms	:	Grothendieck theorems; Vanishing and non-vanishing theorems; Quasi-coherent sheaves; Mathematical equations; Differential torsion theory

Barcode	:	TH8105
Call No.	:	TH 512.5 DIV-R
Title	:	Factors affecting the awareness of cybercrimes, cybercrime investigation, and digital forensics among law enforcement agencies by Nisheeth Dixit
Researcher	:	Dixit, Nisheeth
Department	:	Bharti School of Telecommunication Technology and Management, IITD
Year	:	2025
Supervisor	:	Sagar, Mahim (Prof.) - MS (Guide); Gupta, Gaurav (Additional Director) - MeitY, India (Guide)
Physical description	:	xviii, 370 p.
Subject terms	:	Grounded theory; New age cybercrimes; Digital forensic analysis; Digital India act; Evidence management
Barcode	:	TH8106
Call No.	:	TH 343.21:004.056.53 DIX-F
Title	:	Modelling of slip and fall risk of worn footwear by Shubham Gupta
Researcher	:	Gupta, Shubham
Department	:	Centre for Biomedical Engineering, IITD
Year	:	2025
Supervisor	:	Chanda, Arnab (Assoc. Prof.) - CBME (Guide)
Physical description	:	x, 158 p.
Subject terms	:	Lower limb issues; Shoe-floor friction; Slip testing; Traction performance; Biofidelic testing
Barcode	:	TH8107
Call No.	:	TH 614.821 GUP-M
Title	:	Improving performance of edge tracing and tracking of a linearly-moving object using mesh and torus connected parallel processors by Sonal Gupta
Researcher	:	Gupta, Sonal
Department	:	Department of Electrical Engineering, IITD
Year	:	2025
Supervisor	:	Kar, Subrat (Prof.) - EE (Guide)
Physical description	:	xiii, 92 p.
Subject terms	:	Interaction networks; Twisted torus; Parallel processing; Edge detection; Image processing
Barcode	:	TH8108
Call No.	:	TH 621.3.052:004.932 GUP-I
Title	:	Single-state isolated current-fed bi-directional converter for on-board EV charging by Manish Kumar

Researcher	:	Manish Kumar
Department	:	Department of Electrical Engineering, IITD
Year	:	2025
Supervisor	:	Pramanick, Sumit (Assoc. Prof.) - EE (Guide); Panigrahi, B. K. (Prof.) - EE (Guide)
Physical description	:	xvi, 113 p.
Subject terms	:	Electrical vehicle charging; Converter topologies; Electric vehicles; Universal input charger; Active current commutation
Barcode	:	TH8109
Call No.	:	TH 621.314.5 MAN-S
Title	:	Novel deep learning architectures for enhanced covid-19 detection by Narendra Kumar Mishra
Researcher	:	Mishra, Narendra Kumar
Department	:	Department of Electrical Engineering, IITD
Year	:	2025
Supervisor	:	Joshi, Shiv Dutt (Prof.) - EE (Guide); Singh, Pushpendra (Assoc. Prof.) - JNU (Guide)
Physical description	:	xvi, 184 p.
Subject terms	:	CXR dataset; Medical image analytics; Deep neural networks; COLA window; Future scope
Barcode	:	TH8110
Call No.	:	TH 004.891.3:616.9 MIS-N
Title	:	Development of multi-fault diagnosis strategies for rotating machines by Rismaya Kumar Mishra
Researcher	:	Mishra, Rismaya Kumar
Department	:	Centre for Automotive Research and Tribology, IITD
Year	:	2025
Supervisor	:	Fatima, S. (Assoc. Prof.) - CART (Guide); Mohanty, A. R. (Prof.) - ME, IIT Kharagpur (Guide)
Physical description	:	xxiv, 209 p.
Subject terms	:	Predictive maintenance; Signal processing approach; Signal decomposition methods; Vibration analysis; Multi-class SVM classification
Barcode	:	TH8111
Call No.	:	TH 621.314.24 MIS-D
Title	:	Surface modification assisted diffusion bonding of pure copper, AA6082 and wire ARC additively manufactured components by Dipin Kumar R.
Researcher	:	Dipin Kumar R.
Department	:	Department of Mechanical Engineering, IITD
Year	:	2025

Supervisor	:	Aravindan, Sivanandam (Prof.) - ME (Guide)
Physical description	:	xxi, 174 p.
Subject terms	:	Diffusion bonding; Solid state diffusion; Tenacious oxide layer; Low-cost friction stir process; Wire manufactured
Barcode	:	TH8112
Call No.	:	TH 669-151.86 DIP-S
Title	:	Utility of deep learning in breast cancer imaging in India by Krithika Rangarajan
Researcher	:	Rangarajan, Krithika
Department	:	School of Information Technology, IITD
Year	:	2025
Supervisor	:	Arora, Chetan (Prof.) - CSE (Guide); Banerjee, Subhashis (Prof.) - CSE (Guide)
Physical description	:	xiv, 119 p.
Subject terms	:	Mammography; Oncology; Deep learning neural network; Rapid reporting tool; Convolutional neural network
Barcode	:	TH8113
Call No.	:	TH 618.19-006:004.85 RAN-U
Title	:	Modelling user experience of mobile applications - select studies by Shagun Sarraf
Researcher	:	Sarraf, Shagun
Department	:	Bharti school of Telecommunications Technology and Management, IITD
Year	:	2025
Supervisor	:	Kar, Arpan Kumar (Prof.) - BSTTM (Guide)
Physical description	:	xv, 143 p.
Subject terms	:	Chatbots; Over-the-top platforms; Matrimonial applications; User engagement; Mobile based applications
Barcode	:	TH8114
Call No.	:	TH 621.395.721.5:366.648 SAR-M
Title	:	Performance evaluation of regular and finintegrated offshore pipelines subjected to transverse pipe displacement in soft clayey seabed by Debtanu Seth
Researcher	:	Seth, Debtanu
Department	:	Department of Civil Engineering, IITD
Year	:	2025
Supervisor	:	Manna, Bappaditya (Prof.) - CE (Guide); Shahu, J. T. (Prof.) - CE (Guide)
Physical description	:	xlvi, 297 p.
Subject terms	:	Buried offshore pipelines; Global buckling of pipelines; Fin-integrated pipe section (FP); Thermal buckling; Load-displacement behaviour
Barcode	:	TH8115
Call No.	:	TH 532.542 SET-P

Title	:	Investigation of triboelectric effect in polymer dielectric and inorganic semiconductor through engineered interface for energy harvesting applications by Shailendra Kumar
Researcher	:	Shailendra Kumar
Department	:	Department of Materials Science and Engineering, IITD
Year	:	2025
Supervisor	:	Goswami, Ankur (Prof.) - MSE (Guide)
Physical description	:	xxvii, 181 p.
Subject terms	:	Triboelectric nanogenerator; Polyacrylonitrile; MAX phase; Polydimethylsiloxane; Tactile sensing
Barcode	:	TH8116
Call No.	:	TH 537.221:621.03 KUM-I
Title	:	Development of theranostic systems for neurodegenerative disorders by Shivani
Researcher	:	Shivani
Department	:	Department of Chemistry, IITD
Year	:	2025
Supervisor	:	Deep, Shashank (Prof.) - CHY (Guide); Datta, Anupama (Scientist) - INMAS, DRDO (Guide)
Physical description	:	xi, 317 p.
Subject terms	:	Neurodegenerative disorders; Molecular targets; Nuclear imaging; MRI contrast agents; Traumatic brain injury
Barcode	:	TH8117
Call No.	:	TH 661.8-003.99 SHI-D
Title	:	Identification of potential inhibitors of HSP70-HSP90 organizing protein (HOP), a multifaceted co-chaperone involved in multiple diseases by Gagandeep Singh
Researcher	:	Singh, Gagandeep
Department	:	Kusuma school of Biological Sciences, IITD
Year	:	2025
Supervisor	:	Chaudhuri, Tapan K. (Prof.) - SBS (Guide)
Physical description	:	xviii, 102 p.
Subject terms	:	Protein folding; Cellular stress; Molecular dynamics; Homology modelling; Diseases identification
Barcode	:	TH8118
Call No.	:	TH 577.112.85:616-006 SIN-I
Title	:	Strategies to stabilize the sodium metal anode for highly reversible and stable room-temperature sodium -sulfur batteries by Chhail Bihari Soni

Researcher	:	Soni, Chhail Bihari
Department	:	Department of Energy Science and Engineering, IITD
Year	:	2025
Supervisor	:	Vipin Kumar (Prof.) - ESE (Guide)
Physical description	:	xxxvi, 195 p.
Subject terms	:	Dendrite growth; Gas evolution; Volume change; Accumulation of inactive sodium; Electrical isolation
Barcode	:	TH8119
Call No.	:	TH 621.355 SON-S
Title	:	Spin-orbit-torque-driven switching in perpendicular-magnetic-anisotropy-based devices for the non-volatile memory and neuromorphic synapse applications by Ram Singh Yadav
Researcher	:	Yadav, Ram Singh
Department	:	Department of Physics, IITD
Year	:	2025
Supervisor	:	Muduli, P. K. (Prof.) - PH (Guide); Bhowmik, Debanjan (Assoc. Prof.) - EE (Guide)
Physical description	:	xxviii, 129 p.
Subject terms	:	Magnetic computing; Spintronics-based non-volatile memory; Switching current densities; Magnetization dynamics; Thin film deposition
Barcode	:	TH8120
Call No.	:	TH 539.22:004.076.4 YAD-S
Title	:	PPLN-waveguide based entangled-photon sources for multi-user QKD over metropolitan-scale fiber-optic networks by Vikas Kumar Yadav
Researcher	:	Yadav, Vikash Kumar
Department	:	Department of Physics, IITD
Year	:	2025
Supervisor	:	Ghosh, Joyee (Assoc. Prof.) - PH (Guide); Venkataraman, Vivek (Assoc. Prof.) - EE (Guide)
Physical description	:	179 p.
Subject terms	:	Spectral brightness; Polarization entanglement; Two-photon interference; CHSH-Bell's inequality; Quantum state tomography
Barcode	:	TH8121
Call No.	:	TH 535.14:621.391 YAD-P
Title	:	Growth and optimization of doped hydrogenated amorphous and nanocrystalline silicon layers for silicon heterojunction solar cells fabrication by Shrestha Bhattacharya
Researcher	:	Bhattacharya, Shrestha
Department	:	Department of Energy Sciences and Engineering, IITD

Year	:	2025
Supervisor	:	Komarala, Vamsi Krishna (Prof.) - ESE (Guide)
Physical description	:	xix, 149 p.
Subject terms	:	Renewable energy; Photovoltaic industry demands; Transparent conductive oxide; Plasma chemical; Thermal evaporation system
Barcode	:	TH8122
Call No.	:	TH 661.68:621.383.51 BHA-G
Title	:	Studies on β -lactamase from bacillus tropicus EMB20 for alleviation of antibiotic pollution and antimicrobial resistance by Huma Fatima
Researcher	:	Fatima, Huma
Department	:	Department of Chemistry, IITD
Year	:	2025
Supervisor	:	Khare, S. K. (Prof.) - CHY (Guide); Srivastava, Preeti (Prof.) - BEB (Guide)
Physical description	:	xxxiii, 259 p.
Subject terms	:	Detection of antibiotics; Microbial remediation of antibiotics; Immobilized enzyme; Genomic DNA isolation; Scanning electron microscopy
Barcode	:	TH8123
Call No.	:	TH 577.18 FAT-S
Title	:	Application of model-based and model-free control techniques for process control by Nikita Gupta
Researcher	:	Gupta, Nikita
Department	:	Department of Chemical Engineering, IITD
Year	:	2025
Supervisor	:	Kodamana, Hariprasad (Assoc. Prof) - CHE (Guide)
Physical description	:	xv, 151 p.
Subject terms	:	Model predictive control; Explicit MPC; Reinforcement learning; Deep deterministic policy; Proximal policy
Barcode	:	TH8124
Call No.	:	TH 66.012 GUP-A
Title	:	Role of Communication in effective program implementation: a study on food supplementation programs in India by Anita Makhijani
Researcher	:	Makhijani, Anita
Department	:	Department of Management Studies, IITD
Year	:	2025
Supervisor	:	Chaudhry, Harish (Prof.) - MS (Guide)
Physical description	:	xx, 244 p.
Subject terms	:	Integrated child development; Anganwadi services scheme; Food supplementation programs; Public health programs; National program for mid-

	:	day meal
Barcode	:	TH8125
Call No.	:	TH 005.8:613.2 MAK-R
Title	:	Design and investigation of thermal compression system by Pramod S.
Researcher	:	Pramod S.
Department	:	Department of Textile and Fibre Engineering, IITD
Year	:	2025
Supervisor	:	Das, Apurba (Prof.) - TFE (Guide); Alagirusamy, R. (Prof.) - TFE (Guide); Bipin Kumar (Assoc. Prof.) - TFE (Guide)
Physical description	:	xvii, 167 p.
Subject terms	:	Flexible electronics; Cyclic thermal stability of yarn; Fabrication of printed heater; Electrothermal characterization; Laplace's law
Barcode	:	TH8126
Call No.	:	TH 621.78 PRA-D
Title	:	Understanding on the estimation of fossil fuel derived CO ₂ over Indian region using radiocarbon measurements by Rajveer Sharma
Researcher	:	Sharma, Rajveer
Department	:	Centre for Atmospheric Sciences, IITD
Year	:	2025
Supervisor	:	Kunchala, Ravi Kumar (Assoc. Prof.) - CAS (Guide); Chopra, Sundeep (Scientist) - IUAC, Delhi (Guide)
Physical description	:	xvii, 150 p.
Subject terms	:	Greenhouse gases; Environmental monitoring; Climate change mitigation; Atmospheric modeling; Air quality
Barcode	:	TH8127
Call No.	:	TH 662.6:546.26 SHA-U
Title	:	Influence of carbonation on moisture transport properties of concrete treated with waterproofing chemicals by Lav Singh
Researcher	:	Singh, Lav
Department	:	Department of Civil Engineering, IITD
Year	:	2025
Supervisor	:	Bishnoi, Shashank (Prof.) - CE (Guide)
Physical description	:	xviii, 229 p.
Subject terms	:	Construction materials; Durability of concrete; Protective coatings; Building materials; Blend design
Barcode	:	TH8128
Call No.	:	TH 693.542.4 SIN-I

Title	:	Improving brain activity mapping through enhanced EEG source localization by Anchal Yadav
Researcher	:	Yadav, Anchal
Department	:	Center for Applied Research In Electronics, IITD
Year	:	2025
Supervisor	:	Aggarwal, Monika (Prof.) - CARE (Guide); Joshi, S. D. (Prof.) - EE (Guide)
Physical description	:	xvii, 107 p.
Subject terms	:	Second-order statistics; Covariance; Decomposition method; Graph signal processing; Sparse parameters
Barcode	:	TH8129
Call No.	:	TH 612.821.1 YAD-I
Title	:	Investigation of electrocatalytic properties of laccase and their mimics by Bipasa Dey
Researcher	:	Dey, Bipasa
Department	:	Department of Chemistry, IITD
Year	:	2025
Supervisor	:	Dutta, Tanmay (Assoc. Prof.) - CHY (Guide)
Physical description	:	xv, 109 p.
Subject terms	:	Bio electrocatalysis; Biofuel cell and biosensor; Laccase substrate; Chemical and plasmid; Mediator system
Barcode	:	TH8130
Call No.	:	TH 577.15 DEY-I
Title	:	Designing optimized sparse arrays for enhanced degree of freedom in direction of arrival estimation by Kretika Goel
Researcher	:	Goel, Kretika
Department	:	Department of Sensors, Instrumentation, and Cyber Physical System Engineering, IITD
Year	:	2025
Supervisor	:	Agrawal, Monika (Prof.) - CARE (Guide); Kar, Subrat (Prof.) - EE and BSTTM (Guide)
Physical description	:	xv, 137 p.
Subject terms	:	Rectangular coprime planar array; Linear spars fractal array; Communication in antenna arrays; Joint communication; Planar sparse fractal array
Barcode	:	TH8131
Call No.	:	TH 681.586 GOE-D
Title	:	Compressive sensing based Raman spectral imaging for explosive detection by Sudhabrata Majumder
Researcher	:	Majumder, Sudhabrata
Department	:	Center for Sensors, Instrument and Cyber-Physical Systems Engineering, IITD

Year	:	2025
Supervisor	:	Dubey, Satish Kumar (Assoc. Prof.) - SeNSE (Guide); Gupta, Sakshi (Scientist) - IRDE Dehradun (Guide)
Physical description	:	xx, 166 p.
Subject terms	:	Explosive detection technique; Sampling theorem; Sensing matrix; Acquisition techniques; Generation of coded masks
Barcode	:	TH8132
Call No.	:	TH 623.454.84 MAJ-C
Title	:	Advancing energy infrastructure modeling and cyber security: an AI perspective by Sakshi Sharma
Researcher	:	Sharma, Sakshi
Department	:	Centre for Automotive Research and Tribology, IITD
Year	:	2025
Supervisor	:	Panigrahi, Bijaya Ketan (Prof.) - EE (Guide)
Physical description	:	xxvi, 184 p.
Subject terms	:	Renewable energy resources; Advanced grid technology; Grid management; Strengthening microgrid security; Integrated dataset creation
Barcode	:	TH8133
Call No.	:	TH 620.91:004.8 SHA-A
Title	:	Development, implementation, and validation of hybrid testing methods for structures subjected to fire and earthquake loadings by Saurabh Sharma
Researcher	:	Sharma, Saurabh
Department	:	Department of Civil Engineering, IITD
Year	:	2025
Supervisor	:	Sahoo, Dipti Ranjan (Prof.) - CE (Guide)
Physical description	:	xxxii, 301 p.
Subject terms	:	Traditional seismic; Hybrid simulation; Hybrid fire simulation framework; Hydraulic control system; Slow hybrid simulation
Barcode	:	TH8134
Call No.	:	TH 699.81 SHA-D

[Back to Content](#)