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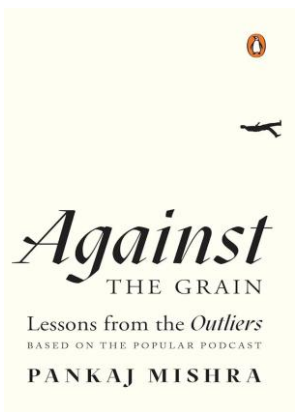
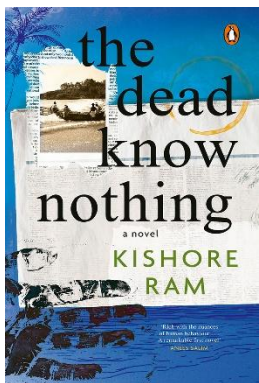
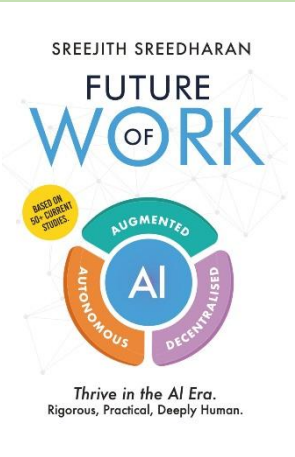
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Gratis

1		Against the grain: lessons from the outliers by Pankaj Mishra, Gurugram: Penguin Random House, 2024. vii, 295 p. ISBN: 9780143466543 Subject Terms: Wisdom; Visionary thinking; Vulnerability; Leadership 316.46:65 MIS-A Barcode: G24105; CL Click here for more details.
2		Dead know nothing: a novel by Kishore Ram, Gurugram: Penguin Random House, 2025. 147 p. ISBN: 9780143470632 Subject Terms: Novel; Mystery fiction; Suspense novel; Literature 82-31 KIS-D Barcode: G24106; CL Click here for more details.
3		Future of work: AI augmented, autonomous, decentralised by Sreejith Sreedharan, s. l.: Sreejith Sreedharan, 2025. xxxii, 225 p. ISBN: 9789334399691 Subject Terms: Artificial intelligence; Digital transformation; Machine learning; Platform economy 658.3:004.8 SRE-F Barcode: G24107; CL Click here for more details.
4		IIT Delhi transformed them, they transformed the world: an IIT Delhi alumni impact report, Jan 2026 by IIT Delhi, New Delhi: Rouge Communications, 2026. 217 p. Subject Terms: Engineering Institute; Higher Educational Institute; IIT alumni; National leadership 378.6:62(540.23) -IIT Barcode: G24104; CL Click here for more details.

Theses Collections

Title	:	Computational analysis of the mechanics of heart failure with preserved ejection fraction (HFpEF)
Researcher	:	Abraham, Jijo Derick
Department	:	IIT Delhi and University of Queensland
Year	:	2026
Supervisor	:	Ray, Bahni (Assoc. Prof.) - ME (Guide); Leonardi, Christopher - University of Queensland, Australia (Guide); Mitchell, Travis - University of Queensland, Australia (Guide)
Physical description	:	xxvi, 225 p.
Subject terms	:	Heart health; Finite element modelling; Ventricular remodelling; Myocardial stiffening; Exercise simulation
Barcode	:	TH8570
Call No.	:	TH 616.12-008.315 ABR-C

Title	:	Broadband transmit/receive front end functional blocks using gan technology
Researcher	:	Jindal, Ashish
Department	:	Department of Applied Research in Electronics, IITD
Year	:	2026
Supervisor	:	Rawat, Karun (Prof.) - IIT Roorkee (Guide); Basu, Ananjan (Prof.) - CARE (Guide); Koul, Shibhan K. (Prof.) - CARE (Guide)
Physical description	:	xvii, 166 p.
Subject terms	:	Gan technology; MMIC design flow; Circuit; Single chip front end; Ground shielding
Barcode	:	TH8571
Call No.	:	TH 621.39:004.85 JIN-B

Title	:	Unravelling the transcription activation mechanism of a virulence-associated small RNA MTS1338 and its function in Mycobacterium tuberculosis
Researcher	:	Krishan Kumar
Department	:	Department of Chemistry, IITD
Year	:	2026
Supervisor	:	Dutta, Tanmay (Prof.) - CHY (Guide)
Physical description	:	xviii, 101 p.
Subject terms	:	Dormancy regulatory factor; Cooperative binding; DNA protein interaction; Two-component system; Phagosome membrane lysis
Barcode	:	TH8572
Call No.	:	TH 579.873.2 KRI-U

Title	:	Determinants of disparity in ambient air pollution exposure and its associated health burden in India
Researcher	:	Sarkar, Debajit
Department	:	Department of Atmospheric Sciences, IITD
Year	:	2026
Supervisor	:	Dey, Sagnik (Prof.) - CAS (Guide)
Physical description	:	xxiii, 271 p.
Subject terms	:	Air pollution; Environmental health; Socio demographic information; Hyperparameter optimization; Gains model framework
Barcode	:	TH8573
Call No.	:	TH 502.3:614.71(540) SAR-D
Title	:	Nanomedicine and gene therapy to treat glioblastoma
Researcher	:	Singh, Ravi Raj
Department	:	IIT Delhi and University of Queensland
Year	:	2026
Supervisor	:	Kulshrestha, Ritu (Prof.) - BEB (Guide); Popat, Amirali - University of Queensland, Australia (Guide)
Physical description	:	xxvii, 209 p.
Subject terms	:	Polyethyleneimine; Mesoporous nanoparticles; Antisense oligonucleotides; Anti miR-21; Transfection
Barcode	:	TH8574
Call No.	:	TH 616.83:606 SIN-N
Title	:	Investigation of surfactant aggregation within ionic liquid, deep eutectic solvent, and fluoruous solvent-based media
Researcher	:	Anjali
Department	:	Department of Chemistry, IITD
Year	:	2026
Supervisor	:	Pandey, Siddharth (Prof.) - CHY (Guide)
Physical description	:	xlii, 312 p.
Subject terms	:	Solvent systems; Ionic liquids; Eutectic solvent; Surfactant; Ethanolamine
Barcode	:	TH8575
Call No.	:	TH 544.77:661.185 ANJ-I
Title	:	Numerical and experimental investigation of the particle filtration behaviour of a single fibre and fibrous air filters

Researcher	:	Bhardwaj, Utsav
Department	:	IIT Delhi and University of Queensland
Year	:	2026
Supervisor	:	Ray, Bahni (Assoc. Prof) - ME (Guide); Das, Dipayan (Prof.) - TFE (Guide); Das, Apurba (Prof.) - TFE (Guide); Leonardi, Christopher - University of Queensland, Australia (Guide); Mitchell, Travis - University of Queensland, Australia (Guide)
Physical description	:	xxix, 313 p.
Subject terms	:	Mechanism of air filters; Influx and efflux stages; Filtration performance; Upstream dust concentration; Quantification of parameters
Barcode	:	TH8576
Call No.	:	TH 66.067:628.511 BHA-N
Title	:	Poly(1,4,5-oxadithiepan-2-one)-based materials for targeted drug delivery and self-healing applications
Researcher	:	Chakraborty, Debojit
Department	:	Department of Material Science and Engineering, IITD
Year	:	2026
Supervisor	:	Jacob, Josemon (Prof.) - MSE (Guide)
Physical description	:	xxxvii, 202 p.
Subject terms	:	Covalent bonds; Smart polymers; polymerization; Polyzwitterionic blocks; Self healing polymers
Barcode	:	TH8577
Call No.	:	TH 615.32:620.1 CHA-P
Title	:	Fair and transparent algorithmic solutions in e-commerce and gig economies
Researcher	:	Gupta, Anjali
Department	:	Department of Computer Science and Engineering, IITD
Year	:	2026
Supervisor	:	Ranu, Sayan (Prof.) - CSE (Guide); Bagchi, Amitabha (Prof.) - CSE (Guide)
Physical description	:	x, 86 p.
Subject terms	:	Food delivery platforms; Wages; E-commerce; Social commerce; Gig economy
Barcode	:	TH8578
Call No.	:	TH 004.42:339 GUP-F
Title	:	Fine-tuning the microenvironment of the active site on a heterogeneous catalyst for selective chemical transformation

Researcher	:	Iyer, Jayendran
Department	:	IIT Delhi and University of Queensland
Year	:	2026
Supervisor	:	Haider, M. Ali (Prof.) - CHE (Guide); Bernhardt, Debra - University of Queensland, Australia (Guide)
Physical description	:	xix, 159 p.
Subject terms	:	Computational catalyst design; Confinement effect; Density functional theory; Molecular dynamics simulations; Machine learning potentials
Barcode	:	TH8579
Call No.	:	TH 544.47:547 IYE-F

Title	:	Wired for action: tailoring laccases for bioremediation and biosensing
Researcher	:	Lzaod, Stanzin
Department	:	Department of Chemistry, IITD
Year	:	2026
Supervisor	:	Dutta, Tanmay (Prof.) - CHY (Guide)
Physical description	:	xv, 189 p.
Subject terms	:	Oxidoreductases; Bioremediation; Laccase; Biotechnology; Biocatalysts
Barcode	:	TH8580
Call No.	:	TH 577.21:53.082.9 LZA-W

Title	:	Bioprinted silk for hypertrophy inhibition and cartilage regeneration
Researcher	:	Majumder, Nilotpal
Department	:	Department of Textile and Fibre Engineering, IITD
Year	:	2026
Supervisor	:	Ghosh, Sourabh (Prof.) - TFE (Guide)
Physical description	:	xxx, 243 p.
Subject terms	:	Osteoarthritis; Cartilage; Cell transplantation; Cellular senescence; Bioprinting
Barcode	:	TH8581
Call No.	:	TH 677.37:611.018.3 MAJ-B

Title	:	Molecular basis of asphaltene biotransformation by a microbial consortium
Researcher	:	Patil, Nidhi Nitin
Department	:	Department of Biochemical Engineering and Biotechnology, IITD
Year	:	2025

Supervisor	:	Srivastava, Preeti (Prof.) - BEB (Guide)
Physical description	:	xxiv, 264 p.
Subject terms	:	Growth kinetics; Genomic DNA isolation; DNA extraction; E.coli cells; Nuclear magnetic resonance
Barcode	:	TH8582
Call No.	:	TH 665.7:577.1 PAT-M
Title	:	Microbiome-based rhizosphere engineering for mitigation of salinity stress in tomato
Researcher	:	Pradhan, Salila
Department	:	Department of Biochemical Engineering and Biotechnology, IITD
Year	:	2026
Supervisor	:	Sharma, Shilpi (Prof.) - BEB (Guide)
Physical description	:	xxiv, 192 p.
Subject terms	:	Synthetic microbial community; Rhizosphere microbiome transplantation; Plant growth cycles; Biosynthetic gene clusters; Membrane stability index
Barcode	:	TH8583
Call No.	:	TH 631.46 PRA-M
Title	:	Strategies for enhanced production of virus like particles for therapeutic use
Researcher	:	Abhilasha Kumari Rani
Department	:	Department of Interdisciplinary Research, IITD
Year	:	2026
Supervisor	:	Rathore, Anurag S. (Prof.) - CHE (Guide); Banerjee, Manidipa (Prof.) - SBS (Guide)
Physical description	:	xx, 124 p.
Subject terms	:	Virus; Microbial strains; Micronutrients; Electron; Cell cultivation
Barcode	:	TH8584
Call No.	:	TH 578.8:615 ABH-S
Title	:	Studies on stretchable strain sensing materials for membrane structures
Researcher	:	Mandal, Amit Kumar
Department	:	Department of textile and fibre engineering, IITD
Year	:	2026
Supervisor	:	Das, Dipayan (Prof.) - TFE (Guide); Singha, Maloy K. (Prof.) - AM (Guide)
Physical description	:	xxi, 229 p.

Subject terms	:	Strain sensors; Finite element; Nanowires; Copper fillers; Fibre optic
Barcode	:	TH8585
Call No.	:	TH 620.172 MAN-S
Title	:	Computational studies using finite element analysis for mitigating head injuries during helmeted impacts
Researcher	:	Manish Kumar
Department	:	Transportation Research and Injury Prevention Centre, IITD
Year	:	2026
Supervisor	:	Mahajan, Puneet (Prof.) - AM (Guide); Sanghi, Sanjeev (Prof.) - AM (Guide)
Physical description	:	xv, 120 p.
Subject terms	:	Material modelling; Velocity; Finite element; CAD geometry; Helmet shell
Barcode	:	TH8586
Call No.	:	TH 614.891:519.6 MAN-C
Title	:	Turbulent dispersion of particles in the wake of a moving vehicle
Researcher	:	Manish Kumar
Department	:	Department of Applied Mechanics, IITD
Year	:	2026
Supervisor	:	Cholemari, Murali R. (Assoc. Prof.) - AM (Guide); Veeravalli, Srinivas V. (Prof.) - AM (Guide); Khare, Mukesh (Prof.) - CE (Guide)
Physical description	:	193 p.
Subject terms	:	Air pollution; Human health; Flow structure; Vehicle model; Wind tunnel
Barcode	:	TH8587
Call No.	:	TH 532.517.4:629 MAN-T
Title	:	Growth-induced instability and morphological changes in highly flexible slender structures
Researcher	:	Roushan Kumar
Department	:	Department of Applied Mechanics, IITD
Year	:	2026
Supervisor	:	Ajeet Kumar (Prof.) - AM (Guide)
Physical description	:	xiv, 138 p.
Subject terms	:	Kinematics; Finite element; Structural mechanics; Morphological evolution; Nonlinear stability
Barcode	:	TH8588

Call No.	:	TH 620.19:624.97 ROU-G
Title	:	Theoretical and experimental investigations on uncertainty analysis in gear design and adaptive lubrication for spur gear fault prediction using machine learning techniques
Researcher	:	Sidh, Kishan Nath
Department	:	Department of Mechanical Engineering, IITD
Year	:	2026
Supervisor	:	Hirani, Harish. (Prof.) - ME (Guide)
Physical description	:	xxvi, 227 p.
Subject terms	:	Modern machinery; Deep learning; Gear design; Machine learning; Nano particles
Barcode	:	TH8589
Call No.	:	TH 621.83:004.8 SID-T
Title	:	Response of metro tunnels to nearby basement excavation and building construction: insights from physical and numerical modelling
Researcher	:	Singh, Vinay Kumar
Department	:	Department of Civil Engineering, IITD
Year	:	2026
Supervisor	:	Ayothiraman R. (Prof.) - CE (Guide)
Physical description	:	xxx, 239 p.
Subject terms	:	Finite element; Urban tunnelling; Material modelling; Physical modelling; Tunnel
Barcode	:	TH8590
Call No.	:	TH 624.19:519.6 SIN-R
Title	:	Thermo-mechanics of asphalt mixes with crushed waste glass aggregates
Researcher	:	Aayush Kumar
Department	:	IIT Delhi and University of Queensland
Year	:	2026
Supervisor	:	Vangla, Prashanth (Assoc. Prof.) - CEE (Guide); Ramana, G. V. (Prof.) - CEE (Guide); Serati, Mehdi - University of Queensland, Australia (Guide); Wijk, Ian Van - FSG Geotechnics and foundation, Australia (Guide)
Physical description	:	xxvii, 196 p.
Subject terms	:	Thermo-mechanics; Thermal properties; Ultrasonic velocity; Crushed waste; Uniaxial
Barcode	:	TH8591

Call No.	:	TH 625:691.16 AAY-T
Title	:	Bioactive poly (ϵ -caprolactone) scaffolds from pickering emulsion templating
Researcher	:	Agrawal, Meenal
Department	:	Department of Textile and Fibre Engineering, IITD
Year	:	2026
Supervisor	:	Srivastava, Rajiv K. (Prof.) - TFE (Guide)
Physical description	:	xxiv, 190 p.
Subject terms	:	Fabrication; Nuclear magnetic; Microscopy; Biofilm formation; Thermal
Barcode	:	TH8592
Call No.	:	TH 615.46:55.77 AGR-B
Title	:	Uncertainty-aware flood modeling framework with ensemble hydroclimatic data and graph neural networks
Researcher	:	Anagha P
Department	:	Department of Civil and Environmental Engineering, IITD
Year	:	2026
Supervisor	:	Saharia, Manabendra (Assoc. Prof.) - CEE (Guide)
Physical description	:	xxvi, 145 p.
Subject terms	:	Hydrological model; Graph networks; Memory networks; Ensemble streamflow
Barcode	:	TH8593
Call No.	:	TH 556:004.032.26 ANA-U
Title	:	Pile response in jointed rocks under combined vertical and lateral loading
Researcher	:	Raj, R. Ashwinth
Department	:	Department of Civil and Environmental Engineering, IITD
Year	:	2026
Supervisor	:	Ayothiraman, R. (Prof.) - CEE (Guide)
Physical description	:	xxvii, 290 p.
Subject terms	:	Rock-socketed piles; Socket length; Sediment effects; Plaxis 3D; Numerical simulation
Barcode	:	TH8594
Call No.	:	TH 624.12 RAJ-P
Title	:	Form spectral to hypervisible: the cultural production of Muslim women in the Indian public sphere, 1992-2024

Researcher	:	Khan, Shyista Aamir
Department	:	Department of Humanities and Social Sciences, IITD
Year	:	2026
Supervisor	:	Khanna, Stuti (Prof.) - HSS (Guide)
Physical description	:	vi, 294 p.
Subject terms	:	Politics; Sovereignty; Freedom of speech; Empowerment; Marginality
Barcode	:	TH8595
Call No.	:	TH 316.7:28-055(540) KHA-F

Title	:	Development of a microfluidic device for biomarker quantification and enumeration of blood cells
Researcher	:	Khaware, Neha
Department	:	School of Interdisciplinary Research, IITD
Year	:	2026
Supervisor	:	Elangovan, Ravikrishnan (Prof.) - BEB (Guide); Perumal, Vivekanandan (Prof.) - SBS (Guide)
Physical description	:	xxix, 181 p.
Subject terms	:	Diagnostic protocol; Biomarkers; Neutrophils; Macrophages; Somatic cells
Barcode	:	TH8596
Call No.	:	TH 615.47:57.088 KHA-D

Title	:	Simulation modelling and data analytics for real-world network processes
Researcher	:	Muhammad Alfas St
Department	:	Department of Mechanical Engineering, IITD
Year	:	2026
Supervisor	:	Shriyam, Shaurya (Prof.) - ME (guide)
Physical description	:	xix, 211 p.
Subject terms	:	Network models; Pedestrian dynamics; Endemic models; Graph networks; Airport systems
Barcode	:	TH8597
Call No.	:	TH 004.94:519.876.3 MUH-S

Title	:	Development of an integrated gpr-bim framework for modeling underground spaces
Researcher	:	Paul, Anikesh
Department	:	Department of Civil and Environmental Engineering, IITD
Year	:	2026

Supervisor	:	Jayapal, Uma Maheswari - Liverpool John Moores University, United Kingdom (Guide); Ayothiraman, Ramanathan - Indian Institute of Technology, Tirupati (Guide)
Physical description	:	xx, 269 p.
Subject terms	:	Urbanization; Building information modeling; Geographic information system; Digital automation; GPR-BIM framework
Barcode	:	TH8598
Call No.	:	TH 624.13:004.92 PAU-D
Title	:	On applications of quickest change detection
Researcher	:	Baba, Saqib Abbas
Department	:	Department of Electrical Engineering, IITD
Year	:	2026
Supervisor	:	Chattopadhyay, Arpan (Asst. Prof.) - EE (Guide)
Physical description	:	xv 146 p.
Subject terms	:	Change detection; Wireless network; Remote state; UAV-based surveillance; System model
Barcode	:	TH8599
Call No.	:	TH 519.21:004.8 BAB-O
Title	:	Understanding the response of rossby wave breaking over the Indian subcontinent and its linkage to extreme weather events
Researcher	:	Thomas, Biyo
Department	:	Center for Atmospheric Sciences, IITD
Year	:	2026
Supervisor	:	Kunchala, Ravi Kumar (Assoc. Prof.) - CAS (Guide)
Physical description	:	xxii, 191 p.
Subject terms	:	Atmospheric waves; Thermodynamic heat; Subtropical region; Indian subcontinent; Weather forecasting
Barcode	:	TH8600
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