

GBU Research Publications from December 2025 to February, 2026

S. No	Title of the Article	Author	Journals Name	Volume	Issue	Year	DOI
1	Microelectronics: Simulations, Modeling and Applications	Raj B.; Guha K.; Rahi S.B.; Kandpal J.	Microelectronics: Simulations, Modeling and Applications			2026	10.1002/9781394336487
2	Nanocatalytic Strategies in Healthcare: Transforming Diagnostics and Therapeutics	Tripathy D.B.; Pradhan S.; Agarwal P.; Gupta A.; Yadav A.; Sinha A.; Chahar M.	Topics in Catalysis	69	04-Jul	2026	10.1007/s11244-025-02109-9
3	Nature-Inspired MYC Inhibitor Disrupts MYC-Driven Glycolysis and Restricts Ovarian Tumor Growth	Singh M.; Yadav A.; Singh U.; Gupta R.; Cavarzerani E.; Canzonieri V.; Negi D.; Dagar A.; Sathyamoorthy B.; Rizzolio F.; Kumar S.; Baliyan A.; Rani R.; Kumar V.	ChemMedChem	21	1	2026	10.1002/cmdc.202500554
4	Segmental body BIA device development for fracture detection	Brajesh K.; Aldobali M.; Pal K.; Khan M.	Scientific Reports	15	1	2025	10.1038/s41598-025-28403-w
5	Endophytic nanotechnology as a dual-action approach against agricultural and clinical fungal pathogens	Sharma A.; Sharma E.	Archives of Microbiology	208	2	2026	10.1007/s00203-025-04653-0
6	Impact of drain and source engineering on dual metal InAs-GaSb VTFETs with high-K gate stack design	Saravanan M.; Parthasarathy E.; Rahi S.B.; Natarajan R.	Scientific Reports	15	1	2025	10.1038/s41598-025-28448-x
7	ROLE OF P300 EVENTRELATED POTENTIAL (ERP) IN NEUROPSYCHIATRIC CONDITIONS	Manocha L.; Varshney A.; Singh A.P.	The Routledge International Handbook of Neurocognitive Rehabilitation: Practices, Innovations, and Future Directions			2026	10.4324/9781003646662-6

8	Advanced predictive modelling of urban expansion and land surface temperature dynamics using multi-scale machine learning approaches	Bindajam A.A.; Mallick J.; Hang H.T.; Singh C.K.	Advances in Space Research	77	2	2026	10.1016/j.asr.2025.10.080
9	Gelatin-Based Nanocomposite Films: A Sustainable Green Alternative for Membrane Technology	Bhardwaj N.; Maitra J.	Polymer Engineering and Science	65	12	2025	10.1002/pen.70140
10	Integrating ensemble machine learning and SAR-based geospatial modelling for inclusive and equitable urban flood resilience	Mallick J.; Hang H.T.; Das A.; Poddar S.; Singh C.K.	Sustainable Cities and Society	137		2026	10.1016/j.scs.2026.107158
11	Isolation of Multi Stress Tolerant Yeast for Ethanol Production at Elevated Temperature	Pal U.; Saifi R.; Pal S.; Vij S.	Journal of Scientific and Industrial Research	84	10	2025	10.56042/jsir.v84i10.4499
12	2D MXenes: high-performance supercapacitors for future energy systems	Tripathy D.B.; Pradhan S.; Agarwal P.; Goyal D.	Sustainable Energy and Fuels	10	2	2026	10.1039/d5se01308a
13	(2024); Gu S.; Du G.; Su Y.; Zhang Y.; Zhang Y.; Li L.	porous PEDOT/MXene scaffold toward high-performance supercapacitors	Architectural design and optimization of internal structures in 3D printed electrodes for superior supercapacitor performance	J. Colloid Interface Sci.	677		12
14	VIC	Research Center	Kazakh National Medical University	Almaty	Kazakhstan; School of Architecture	Australia; Atchabar Scientific Research Institute	NSW
15	Cleveland	es; Angappan S.	United States; Anh N.H.	Department of General Medicine	Thai Binh University of Medicine and Pharmacy in Vietnam	OH	Jodhpur

16	Reno-protection by <i>Didymocarpus pedicellata</i> against oxalate-induced damage: mechanistic insights into mitigation of oxidative stress induced signaling pathways in renal cell line and rat model	Singh A.; Kumari K.; Tandon S.; Kaur T.; Tandon C.	Urolithiasis	53	1	2025	10.1007/s00240-025-01794-1
17	Smokeless tobacco mediated alterations on the prevalence of oral pathogens and interactions of tobacco-specific nitrosamines (TSNAs) with host proteins	Sajid M.; Joshi L.; Shakya S.; Bharadwaj M.	Journal of Oral and Maxillofacial Surgery, Medicine, and Pathology	38	1	2026	10.1016/j.ajoms.2025.07.010
18	A comparative analysis and implementation of CoAP and MQTT protocol for IoT communication	Kashyap M.; Sharma V.	Life Cycle Reliability and Safety Engineering	14	4	2025	10.1007/s41872-025-00324-7
19	Uncovering functional divergence and cellular clusters with specific gene signatures in HNSCC clonal spheroids	Pandey J.; Malik M.Z.; Shyanti R.K.; Parashar P.; Kujur P.K.; Mishra D.; Tailor D.; Lee J.M.; Kataria T.; Gupta D.; Verma H.; Yadav A.; Kateriya S.; Malhotra S.V.; Tandon V.; Chaturvedi R.; Singh R.P.	Cell Communication and Signaling	23	1	2025	10.1186/s12964-025-02360-3
20	Comprehensive investigation of the THz response of undoped and 0.03 wt% Fe-doped LiNbO ₃ single crystals using THz-time domain spectroscopy and Lorentz DHO model	Kumar L.; Singh G.; Bhatt R.; Soharab M.; Bhaumik I.; Roy Chowdhury D.; Singh M.; Gautam C.; Jewariya M.	Materials Science in Semiconductor Processing	201		2026	10.1016/j.mssp.2025.110072
21	Selection pressure on translational efficiency driven codon usage bias in drought responsive genes of <i>Oryza sativa</i>	Bargoti T.; Nain D.P.; Nain V.; Singh D.	Journal of Plant Biochemistry and Biotechnology	34	4	2025	10.1007/s13562-025-00990-9

22	Estimation of PM2.5 concentrations using satellite-derived aerosol metrics over an Indian summer monsoon region	Singh A.; Srivastava A.K.; Singh S.; Singh V.; Pathak V.; Anand R.; Singh N.; Choudhary A.	Physics and Chemistry of the Earth	142		2026	10.1016/j.pce.2025.104264
23	Design and evaluation of novel 1-(5-Isoquinolinesulfonyl) piperazine derivatives as potential Mycobacterium tuberculosis IMPDH Inhibitors: A comprehensive molecular modelling study	Nyijime T.A.; Shallangwa G.A.; Uzairu A.; Umar A.B.; Ibrahim M.T.; Chandra A.; Singh N.	Scientific African	30		2025	10.1016/j.sci.2025.e03043
24	M2SM: multi modal signature matching network utilizing spatio-temporal features extracted from online signature	Pandey A.; Singh P.D.; Vinayak A.B.; Nigam A.; Acharya D.; Singh P.; Bhardwaj A.; Diwakar M.	International Journal on Document Analysis and Recognition	28	4	2025	10.1007/s10032-025-00521-1
25	Valorizing Waste: The Role of Biorefineries and Bioproducts in the Circular Economy	Pandey K.; Kumar S.; Singh P.; Singhal B.; Verma S.	Valorizing Waste: The Role of Biorefineries and Bioproducts in the Circular Economy			2026	10.2174/97988988118911250101_2
26	Tracing potential sources of hazardous contaminants, Fluoride, Nitrate, and Uranium, using an extended PCA-PMF statistical approach for the Semi-Arid Eastern Plains of Rajasthan, India	Garg V.; Kumar R.; Singh C.K.; Kumar A.	Cleaner Water	4		2025	10.1016/j.clwat.2025.100131
27	Unveiling therapeutic potential: In Silico discovery of prognostic markers and potential inhibitors for TGFβR1 in pancreatic cancer	Singh S.; Gupta H.; Sinha S.; Kaushik A.C.; Kapoor S.; Awasthi A.K.; Qamar I.; Sahi S.	Computational Biology and Chemistry	120		2026	10.1016/j.compbiolchem.2025.108646
28	In silico meta-analyses for putative biomarkers associated with Renal Cancer	Bhardwaj A.; Ashra H.	Research Journal of Biotechnology	21	2	2026	10.25303/212rjbt2860292

29	Impact of urban density on human well-being and sustainable development in Delhi, India	Avtar R.; Ahmad S.; Rahman M.M.; Alsulamy S.; Meraj G.; Sethi M.; Singh C.K.; Kharrazi A.	Scientific Reports	15	1	2025	10.1038/s41598-025-16033-1
30	Diagnostic Study of Monsoon-Linked Rainfall Events: Unraveling the Role of Monsoon Low Pressure Systems across the Indian Subcontinent	Lohan N.; Pattanaik D.R.; Kumar S.; Giri R.K.	Earth Systems and Environment	9	4	2025	10.1007/s41748-025-00706-y
31	Impact of Processing on Millets: A Pathway To Improved Nutrition and Functionality	Singh H.; Chaturvedi S.; Sandhu K.S.; Toor B.S.; Sharma V.	Current Nutrition Reports	14	1	2025	10.1007/s13668-025-00715-3
32	Modelling and Optimization of Silica Extraction from Perlite Using RSM, ANN, and NSGA-II Techniques	Goyal D.; Sharma M.; Singh D.; Pal R.; Malpani S.K.	Silicon	17	18	2025	10.1007/s12633-025-03520-3
33	Expanded Electrochemical Stability Window (≈ 3.0 V) of Ni-Doped FeS ₂ /WS ₂ Hybrid Nanocomposite-Based Supercapacitor Electrode Using Water-In-Salt Electrolyte	Kumar R.; Maity G.; Keshari A.K.	Energy Technology	14	2	2026	10.1002/ente.202502656
34	SAFED: secure and adaptive framework for edge-based data aggregation in IoT applications	Naaz Z.; Joshi G.; Sharma V.	Discover Internet of Things	5	1	2025	10.1007/s43926-025-00143-3
35	Smart farming development integrating IoT-based solutions	Indu	Transforming Agriculture with Emerging Technologies for a Sustainable Future			2026	10.1201/9781003494782-8
36	EW YOLO: Edge Computing IoT and YOLOv11 Setup for E-Waste	Rai S.; Chawla R.; Vashishath M.; Fortino G.	Applied Sciences (Switzerland)	16	4	2026	10.3390/app16042152

37	Numerical modeling of a dual-coated photonic crystal fiber SPR sensor for wide-range RI detection	Kumar S.; Kumar D.; Rahi S.B.	Engineering Research Express	8	4	2026	10.1088/2631-8695/ae4456
38	An Open-Access Framework for Optimizing Plasmonic Nanoparticle-Based Sensors in Biomedical Applications	Singh A.; Shishodia M.S.	Journal of Electronic Materials	55	1	2026	10.1007/s11664-025-12498-y
39	Immobilization of Heteropolyacids on Zeolite Surface for Catalytic Conversion of Glucose to 5-Hydroxymethyl Furfural (5-HMF)	Gupta S.; Jain R.; Malpani S.K.; Yadav A.; Goyal D.; Bharti S.; Shukla S.K.; Ulucan-Karnak F.	Topics in Catalysis	69	04-Jul	2026	10.1007/s11244-024-02017-4
40	Influence of yttria doping on the structural properties of nano-crystalline yttria stabilized zirconia	Gothwal P.; Singh F.; Chauhan V.; Joshi B.	Applied Physics A: Materials Science and Processing	132	2	2026	10.1007/s00339-025-09275-3
41	Controlling Stemness in 2D and 3D Models of Triple-Negative Breast Cancer Using a Ruthenium(II) Arene Complex	Kumar V.; Yadav A.; Pal Singh Chauhan N.; Malpani P.; Agnihotri N.; Sharma A.K.; Kumar V.	ChemistrySelect	11	1	2026	10.1002/slct.202504410
42	Bridging Ancient Buddhist Wisdom and Modern Psychology: A Critical Review of Mindfulness-Based Interventions	Meshram Manish & Nirvani Meshram	International Journal of Innovative Research in Technology	12	7	2025	
43	Mindfulness and Emotional Intelligence: Combined Effects on Mental Health and Resilience,	Meshram Manish	Journal of Emerging Trends and Novel Research			2025	

44	Mindfulness Meditation and the Human Brain: A Review of Contemporary Neuroscientific Perspectives in International Journal of Recent Development in Engineering and Technology	Meshram Manish		15	2	2026	
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