GBU Research Publications from March 2026 to May, 2026

S.No.	Title of the Article	Authors	Journals Name	Volume	Issue	Year	DOI
1	OTM: An Efficient Task Management and Offloading Scheme Using Proximity-Based Clustering, Fuzzy Logic, and Optimization in Edge-Cloud IoT Systems	Naaz Z.; Chauhan N.; Sharma V.	Journal of Grid Computing	24	1	2026	10.1007/s10723-025-09820-7
2	Fecal Contamination in Drinking Water: A review of detection techniques, pathogen dynamics, and sustainable remediation approaches	Gaur N.; Shankar S.; Chaudhary R.; Akhtar N.; Vyas A.	Environmental Monitoring and Assessment	198	4	2026	10.1007/s10661-026-15135-1
3	Federated Reinforced Trust Platform: A Next-Generation Trust Model for Secure and Resource-Efficient Wireless Sensor Networks	Kumar L.; Baghel A.S.; Singh R.B.	2026 3rd International Conference on Advancements and Key Challenges in Green Energy and Computing, AKGEC 2026			2026	10.1109/AKGEC68790.2026.11485849
4	Electrochemical performance of ZnO:MnO:VO ternary metal oxide nanocomposite for supercapacitor applications	Kumari R.; Sharma P.K.; Shukla V.K.; Kumar Y.	Journal of Materials Science: Materials in Electronics	37	12	2026	10.1007/s10854-026-17257-1
5	Optimal integration of Renewable based Distributed Generators via Hybrid GA-PSO approach	Gandotra R.; Pal K.	Iranian Journal of Electrical and Electronic Engineering	22	1	2026	10.22068/IJEEE.22.1.3492
6	Enhanced Near-Field Localization in Au@CdSe Nanoshells: Toward Next-Generation Sensing Devices	Juneja S.; Shishodia M.S.; Rajput P.; Singh A.; Kumar V.; Sharma K.K.	EPJ Web of Conferences	356		2026	10.1051/epjconf/202635602002
7	Need for a shift from passive dissent to active dissent: A study of voter apathy in India	Sharma R.; Pandey S.	Humanities and Social Sciences: A Multidisciplinary Approach			2026	10.1201/9781003771937-18
8	Evaluation of Mechanical Properties of Graphene-Reinforced PETG Filaments Fabricated by FDM: Influence of Reinforcement and Process Parameters	Shakya R.K.; Mangal D.; Maurya N.K.	Journal of Computers, Mechanical and Management	5	2	2026	10.57159/jcmm.5.2.25388
9	Innovative parallel grasshopper optimization algorithm for reliability optimization	Singh D.; Chand N.	MethodsX	16		2026	10.1016/j.mex.2025.103759
10	Integrative Approach to Fungal Infections and Bioprospecting for Drug Discovery: Volume 2	Sharma E.; Puria R.; Kumar K.	Integrative Approach to Fungal Infections and Bioprospecting for Drug Discovery: Volume 2	2		2026	10.1201/9781003752196
11	Deciphering the Role of Biofilm in Fungal Pathogenesis	Bandhu T.; Kumar P.M.C.; Bihaniya H.; Gatkal C.U.; Gangwar G.; Thakur A.	Integrative Approach to Fungal Infections and Bioprospecting for Drug Discovery: Volume 1			2026	10.1201/9781003633952-9

12	Unlocking Zero: An Architectâ€™s Guide to Net-Positive Built Environment	Agarwal A.M.; Panchal A. A.	Unlocking Zero: An Architectâ€™s Guide to Net-Positive Built Environment			2026	10.67509/uzaag237
13	Ï€H*-Closed Sets in Topological Spaces	Tomar N.K.; Rani S.; Subadra N.	Boletim da Sociedade Paranaense de Matematica	44	2 Special Issue on Recent Advances in Computational and Applied Mathematics	2026	10.5269/bspm.80446
14	Sentiment Analysis of Gaming Related Tweets Using a Hybrid Deep Learning Approach	Agnihotri A.; Singh R.B.	Lecture Notes in Networks and Systems	1690 LNNS		2026	10.1007/978-3-032-08859-8_17
15	Integrative Approach to Fungal Infections and Bioprospecting for Drug Discovery: Volume 1	Sharma E.; Puria R.; Kumar K.	Integrative Approach to Fungal Infections and Bioprospecting for Drug Discovery: Volume 1			2026	10.1201/9781003633952
16	Short-Term Solar Power Forecasting: A Novel Approach with Evolutionary Mating Algorithms and Deep Neural Network Hybrid Model	Singh R.; Singh O.; Arya Y.	2026 2nd International Conference on Cognitive Computing in Engineering, Communications, Sciences and Biomedical Health Informatics, IC3ECSBHI 2026			2026	10.1109/IC3ECSBHI67834.2026.11468914
17	Practical Optimization: Big M with Python and R	Bijin Sanny P.R.; Dubey A.; Pratyusha M.N.; Dey A.; Kumar R.	Driving Innovation by Dynamic Optimization: The Challenges of Reshaping Industry			2026	10.1002/9781394315727.ch8
18	AI-Driven Diagnostic Analysis: Innovations, Challenges, and Future Directions in Medical Imaging and Disease Detection	Jha S.; Singh N.; Ansari M. A.	2026 2nd International Conference on Cognitive Computing in Engineering, Communications, Sciences and Biomedical Health Informatics, IC3ECSBHI 2026			2026	10.1109/IC3ECSBHI67834.2026.11468898

19	Evaluating the feasibility of arsenic-safe drinking water options in the Western Bengal Basin, India; [è¯„ä¼°å°å¤¦åŸåŠ æ‹‰ç›†åœ°è¥¿é¨ç··å®‰å…¨é¥®ç”¨æ°´æ–¹æ¡ˆçš„å¯è¡Œæ€§]; [Ã‰valuation de la faisabilitÃ© des options dâ€™approvisionnement en eau potable sans arsenic dans le bassin occidental du Bengale, Inde]; [Avaliação da viabilidade de opÃ§Ãµes de Ã¡gua potÃ¡vel seguras para arsÃªnico na Bacia Ocidental de Bengala, Ãndia]; [Evaluación de la viabilidad de opciones de niveles de arsÃ©nico seguro en el agua potable en la cuenca de Bengala Occidental, India]	Bhowmik T.; Bose O.; Tripathy P.; Sarkar S.; Jha M.; Kumar K.; Singh C.K.; Bose N.; Ghosh A.; Agrahari S.; Sengupta P.; Bhattacharya A.; Bhattacharya P.; Mukherjee A.	Hydrogeology Journal			2026	10.1007/s10040-026-03045-y
20	EEG-Based Automated Epileptic Seizure Detection using AI: A Comprehensive Review	Jha S.; Singh N.; Ansari M. A.; Ansari F.; Mishra A.; Gupta P.	2026 2nd International Conference on Cognitive Computing in Engineering, Communications, Sciences and Biomedical Health Informatics, IC3ECSBHI 2026			2026	10.1109/IC3ECSBHI67834.2026.11469116
21	Fungal Infections: An Emerging Global Threat to Human Health, Current Trends, and Challenges	Singh G.; Chamola A.; Rathore J.S.; Ghosh C.	Integrative Approach to Fungal Infections and Bioprospecting for Drug Discovery: Volume 1			2026	10.1201/9781003633952-2
22	Corrigendum to â€œAdvanced predictive modelling of urban expansion and land surface temperature dynamics using multi-scale machine learning approachesâ€. [Adv. Space Res. 77(2) (2026) 1679â€“1702]	Bindajam A.A.; Mallick J.; Hang H.T.; Singh C.K.	Advances in Space Research	77	9	2026	10.1016/j.asr.2026.02.007
23	Leveraging R and Python for Advanced Graphical Optimization Solutions	Bijin Sanny P.R.; Dubey A.; Pratyusha M.N.; Dey A.; Kumar R.	Driving Innovation by Dynamic Optimization: The Challenges of Reshaping Industry			2026	10.1002/9781394315727.ch9
24	A herbal formulation inhibits growth and survival of lung cancer cells through DNA damage and apoptosis - in vitro and in vivo studies	Ali M.; Punia R.; Singh N.; Shamsi Y.; Singh R.P.	Journal of Ayurveda and Integrative Medicine	17	2	2026	10.1016/j.jaim.2025.101313

25	Mathematical Modelling of Thunderbolt Lightning for Analysis of its Voltage Characteristics	Verma B.S.; Singh N.	2026 2nd International Conference on Cognitive Computing in Engineering, Communications, Sciences and Biomedical Health Informatics, IC3ECSBHI 2026			2026	10.1109/IC3ECSBHI67834.2026.11469111
26	Design of IMC Based FLC for the Load Frequency Control in the Two-Area Power System Network	Rana A.S.; Singh O.; Vishwakarma C.B.	2026 2nd International Conference on Cognitive Computing in Engineering, Communications, Sciences and Biomedical Health Informatics, IC3ECSBHI 2026			2026	10.1109/IC3ECSBHI67834.2026.11469144
27	Comparative Analysis of Machine Learning Models in Groundwater Quality Assessment: A Systematic Review	Kumar A.; Singh P.K.; Kumar V.; Kumar R.P.; Patel R.; Kumari S.; Saw S.	Water Environment Research	98	5	2026	10.1002/wer.70401
28	STGT: Spatio-temporal graph transformer for robust deepfake detection using dynamic facial features	Pandey A.; Solanki A.	Signal, Image and Video Processing	20	3	2026	10.1007/s11760-026-05191-y
29	CRISPR/Cas system and AI tools for effective gene editing in vegetable crops: a systematic review	Kumar M.; Chaudhary V.; Chaudhary V.; Kumar R.; Sirohi U.; Singh R.; Singh D.; Teotia S.	Discover Applied Sciences	8	4	2026	10.1007/s42452-026-08305-w
30	C-SOMGOAM: A Self-Organizing Migrating Grasshopper Mutation Algorithm for solving constrained optimization1	Singh D.; Chand N.	Brazilian Journal of Biometrics	44	1	2026	10.28951/bjb.v44i1.925
31	Integrative Genomic and Structural Analysis Reveals Diversity and Stability of yefM-yoeBXn Toxin-Antitoxin Module in Xenorhabdus nematophila	Singh G.; Chaudhary M.; Gupta N.; Chaudhary S.; Nain V.; Rathore J.S.	Current Microbiology	83	5	2026	10.1007/s00284-026-04873-7
32	Anti-cancer and dual inhibitory potential of PI3K/AKT and Ras/MAPK/ERK signalling of a novel zinc (II) trinuclear complex with tetradentate schiff base ligand and azido ion in prostate adenocarcinoma: synthesis, in silico and in vitro evaluation	Wasai A.; Roy A.; Barua M.; Ghosh P.; Saxena A.; Boulaamane Y.; Goyal N.; Chandra A.; Koner S.N.; Saha S.; Saha B.; Pore S.K.; Rizzoli C.; Mandal S.	Journal of Molecular Structure	1360		2026	10.1016/j.molstruc.2026.145636
33	Finite Element Assessment of the Structural Response of a Building Subjected to Blast Loading	Bharti R.; Ram S.	2026 2nd International Conference on Cognitive Computing in Engineering, Communications, Sciences and Biomedical Health Informatics, IC3ECSBHI 2026			2026	10.1109/IC3ECSBHI67834.2026.11468906

34	Translating Generative AI into Clinical Healthcare: A Comprehensive Review of Methods, Performance, and Challenges	Jha S.; Singh N.; Ansari M. A.; Ansari F.; Krishna A.; Shukla S.K.	2026 2nd International Conference on Cognitive Computing in Engineering, Communications, Sciences and Biomedical Health Informatics, IC3ECSBHI 2026			2026	10.1109/IC3ECSBHI67834.2026.11468890
35	AI-Driven Discovery and Analysis of Natural Compounds in Oral Cancer: A Mini Review (2014-2024)	Bhati P.; Neetu; Singh S.; Goel V.; Khan A.A.; Ashraf M.T.	2026 2nd International Conference on Cognitive Computing in Engineering, Communications, Sciences and Biomedical Health Informatics, IC3ECSBHI 2026			2026	10.1109/IC3ECSBHI67834.2026.11468879
36	Translating the Art of Poetry: A Comparative Study of Advanced Translation Models	Tewari P.; Gupta K.; Baghel A.S.	Lecture Notes in Networks and Systems	1854 LNNS		2026	10.1007/978-3-032-18846-5_15
37	Numerical Simulation of Thunderstorm Events Using WRF-ARW Model over Uttar Pradesh, India during Pre-Monsoon	Kumar N.; Kumar S.; Routray A.; Panda S.K.; Kumari N.; Essic G.T.	2026 2nd International Conference on Cognitive Computing in Engineering, Communications, Sciences and Biomedical Health Informatics, IC3ECSBHI 2026			2026	10.1109/IC3ECSBHI67834.2026.11469024
38	Cinnamomum bark oils: Antifungal properties, mechanisms of action and health	Mishra R.; Sharma D.; Banerjee B.	Allelopathy Journal	67	1	2026	10.26651/allelo.j/2026-67-1-1567
39	Antimicrobial efficacy of Cinnamomum Species leaf and bark oils	Mishra R.; Sharma D.; Agarwal C.; Banerjee B.	Allelopathy Journal	67	1	2026	10.26651/allelo.j/2026-67-1-1565
40	Linear Optimization: Simplex Method in Python and R	Bijin Sanny P.R.; Dubey A.; Pratyusha M.N.; Dey A.; Kumar R.	Driving Innovation by Dynamic Optimization: The Challenges of Reshaping Industry			2026	10.1002/9781394315727.ch10
41	Heterocyclic Compounds in Pharmaceutical World: Synthesis and Their Biological Activities	Karnatak M.; Chak P.; Chaudhary D.; Kumar A.	Mini-Reviews in Medicinal Chemistry			2026	10.2174/0113895575438924260331114108
42	Metagenomic Perspectives on the Human Gut Ecosystem and Disease Associations	Kumar B.; Megur A.; Kaushik N.; Singh S.	Integrative Approach to Fungal Infections and Bioprospecting for Drug Discovery: Volume 1			2026	10.1201/9781003633952-10

43	Brain Tumour Detection Using the VGG-16 CNN on MRI Image	Usmani H.; Ansari M.A.; Yadav R.K.; Sachan S.; Kumar R.; Tripathi V.	2026 2nd International Conference on Cognitive Computing in Engineering, Communications, Sciences and Biomedical Health Informatics, IC3ECSBHI 2026			2026	10.1109/IC3ECSBHI67834.2026.11469108
44	Optimizing Assignment Solutions: Integrating R and Python for Enhanced Workforce Efficiency	Bijin Sanny P.R.; Dubey A.; Pratyusha M.N.; Dey A.; Kumar R.	Driving Innovation by Dynamic Optimization: The Challenges of Reshaping Industry			2026	10.1002/9781394315727.ch7
45	A hybrid SMOTE and Gaussian mixture model based optimized XGBoost framework for bipolar disorder detection	Kumar S.; Kumari D.; Panwar A.; Sagar S.; Herout L.; Namazi H.; Bhati N.S.	Scientific Reports	16	1	2026	10.1038/s41598-026-39104-3
46	PV array-integrated power quality conditioner with JLHCF robust sparse adaptive control algorithm for grid stability	Kumar R.; Singh O.; Kumar S.; Prasad T.	Electrical Engineering	108	5	2026	10.1007/s00202-026-03629-7
47	Computational design and evaluation of anilinoquinazoline derivatives as potential anti-tuberculosis agents: DFT, docking, ADMET, and molecular dynamics simulation	Nyijime T.A.; Shallangwa G.A.; Uzairu A.; Umar A. B.; Ibrahim M.T.; Chandra A.; Singh N.	Microbe (Netherlands)	10		2026	10.1016/j.microb.2026.100683
48	Effect of Recycled Concrete Aggregate (RCA) on Strength and Durability of Concrete	Verma M.; Nigam M.; Singh I.	2026 2nd International Conference on Cognitive Computing in Engineering, Communications, Sciences and Biomedical Health Informatics, IC3ECSBHI 2026			2026	10.1109/IC3ECSBHI67834.2026.11469119
49	AFIR: Adaptive Feature Importance Ranking for Accelerated SHAP Explanations in Deep Learning	Yadav T.; Baghel A.S.	2026 2nd International Conference on Cognitive Computing in Engineering, Communications, Sciences and Biomedical Health Informatics, IC3ECSBHI 2026			2026	10.1109/IC3ECSBHI67834.2026.11469132
50	Optimizing supercontinuum generation spanning mid-infrared region in a solid core Geâ,*f*â,*f*Asâ,â,,Se55 (GAS) photonics crystal fiber: design and simulation insights	Yusuf Y.G.; Rani P.; Dillu V.	Journal of Optics (India)			2026	10.1007/s12596-026-03129-8

51	In Silico Study of BRCA1 Mutations and PARP1 Inhibition by Olaparib in Breast Cancer	Singh S.; Ashraf M.T.; Ansari F.	2026 2nd International Conference on Cognitive Computing in Engineering, Communications, Sciences and Biomedical Health Informatics, IC3ECSBHI 2026			2026	10.1109/IC3ECSBHI67834.2026.11469010
52	Overview of Green Building Certification for an Existing Building	Thakre S.M.; Agarwal A.M.; Dhote K.K.	Unlocking Zero: An Architectâ€™s Guide to Net-Positive Built Environment			2026	10.67509/uzaag237-c7
53	Integrating Memristor-Based Median Filtering at the Sensor Front End for Biomedical Image Enhancement	Hindoliya L.K.; Das M.; Jyoti K.; Paul A.; Kumar M.; Yadav S.; Pachori R.B.; Mukherjee S.	IEEE Sensors Letters	10	3	2026	10.1109/LSENS.2026.3658617
54	Investigation of friction stir weld joints of copper sandwich aluminium alloy	Gupta M.K.; Rathore R.; Mahto J.N.; Gupta T.K.; Mangal D.; Gangil B.	Welding International			2026	10.1080/09507116.2026.2669550
55	Towards identification of novel inhibitors of EGFR mutants through in-silico approach	Khodlan P.; Chakraborty R.; Malik T.; Singh M.P.; Rajbhar P.; Kumar P.; Kumar R.; Mohan A.; Kumar A.	Cancer Treatment and Research Communications	47		2026	10.1016/j.ctarc.2026.101179
56	Exploring Gelatin Film an Eco-Friendly Biomaterial: Synthesis, Characterization, and Environmental Applications	Nikita Bhardwaj, Vijaya Majumdar, Jaya Maitra	STM Journals	13	1	2026	
57	Exploring Communication Practices in Indian Knowledge System	Vineet Kumar	Journal of Arts and Communication (JAC)	4	1	2025	
58	Microelectronics: Simulations, Modeling and Applications	Raj, Balwinder ; Guha, Koushik ; Rahi, Shiromani Balmukund ; Kandpal, Jyoti	Microelectronics: Simulations, Modeling and Applications			2026	10.1002/9781394336487
59	GRATIFICATION OF DIGITAL HEALTH INFORMATION SEEKING BEHAVIOR: A COMPREHENSIVE ANALYSIS OF DEMOGRAPHICS, SOCIAL MEDIA TRENDS, AND TRUST IN REMEDIES	Vineet Kumar, Dr Abhishek Lachyan, Bandana Pandey, Vaishali Billa	World Journal of Pharmaceutical Science and Research	4	4	2025	10.5281/zenodo.17011143
60	Charge Prediction in Indian Judiciary Using Bhartiya Nyaya Sanhita (BNS) Sections and Machine Learning	Shweta Maurya, Shiraz Khurana	IEEE			2026	10.1109/IC3ECSBHI67834