

**MONTHLY EDITION
(JULY 2024)**

2024 CURRENT AWARENESS BULLETIN

**(List of Research papers /Articles published by
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| 1. | <u>A Comparative Study of Machine Learning Models for Network Traffic Classification in the IoT Landscape</u> | Thakur, D.,
Sah, S.,
Ailsinghani, P.,
Ranga, V. | Proceedings of the 3rd International Conference on Applied Artificial Intelligence and Computing, ICAAIC 2024, pp. 670-676. |
| 2. | <u>A Comparison of Transfer Learning Inspired CNN Architectures for 2D Image Workout Recognition</u> | Rehman, A.,
Kumar, S.,
Verma, L. | 2024 IEEE 9th International Conference for Convergence in Technology, I2CT 2024. |
| 3. | <u>A critical systematic review on spectral-based soil nutrient prediction using machine learning</u> | Jain, S.,
Sethia, D.,
Tiwari, K.C. | Environmental Monitoring and Assessment, 196(8), art. no. 699. |
| 4. | <u>A multi-criteria approach to test and evaluate the efficiency of two composting systems under two different climates</u> | Al-Sari',
M.I., Haritash,
A.K. | Journal of the Air and Waste Management Association. |
| 5. | <u>A Novel Enhancement Mode GaN HEMT with MIS and p-GaN structure</u> | Garg, T.,
Kale, S. | 2024 IEEE 9th International Conference for Convergence in Technology, I2CT 2024. |



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| 6. | <u>A novel investigation on single-loop pulsating heat pipe filling with hybrid nanofluids: numerical and experimental</u> | Yadav, P.S.,
Sharma, J.,
Hussain, M.,
(...), Goyal, K.,
Ahmed, S.F. | Heat and Mass
Transfer/Waerme- und
Stoffuebertragung. |
| 7. | <u>A review on photoluminescence phosphors for biomedical, temperature sensing, photovoltaic cell, anti-counterfeiting and white LED applications</u> | Kaur, S.,
Kaur, H.,
Rao, A.S.,
Prakash, G.V. | Physica B: Condensed
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416224. |
| 8. | <u>A systematic review on brain tumor detection using deep learning</u> | Jain, S.,
Sachdeva, B. | AIP Conference
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art. no. 020027. |
| 9. | <u>An experimental study of game theory with various word embeddings for automatic extractive text summarization</u> | Jain, M.,
Jindal, R.,
Jain, A. | Multimedia Tools and
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| 10. | <u>Analysis of PCE-based Superplasticiser for the Different Types of Cement using Marsh Cone Test</u> | Kumar, R.,
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Dev, N. | Evergreen, 11(2), pp.
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| 11. | <u>Analysis of structural, morphological and nano-mechanical properties of vacuum evaporated nanoscale CdTe and ZnS films</u> | Gaur, S.K.,
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Mishra, R.S. | Optical Materials, 154,
art. no. 115764. |
| 12. | <u>Analyzing the synergistic effects of hard ceramic TiB₂ and rare earth oxide La₂O₃ on mechanical behaviour, wear resistance, and residual stress of AA6061-T6 hybrid composite fabricated via ultrasonic-assisted stir casting</u> | Singh, V.,
Murtaza, Q.,
Niranjan, M.S. | Materials Chemistry and Physics, 325, art. no. 129727. |
| 13. | <u>Analyzing Yoga Pose Recognition: A Comparison of MediaPipe and YOLO Keypoint Detection with Ensemble Techniques</u> | Debalaxmi, D.,
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Ranga, V. | Proceedings of the 3rd International Conference on Applied Artificial Intelligence and Computing, ICAAIC 2024, pp. 1011-1017. |
| 14. | <u>ARG-Net: Adversarial Robust Generalized Network to Defend Against Word-Level Textual Adversarial Attacks</u> | Bajaj, A.,
Vishwakarma, D.K. | 2024 IEEE 9th International Conference for Convergence in Technology, I2CT 2024. |
| 15. | <u>As₃₈ Se₆₂ based segmented clad-graded index photonic crystal fiber for supercontinuum generation covering 3–9.5 μm with moderate peak power</u> | Khamaru, A.,
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| 17. | <u>Can financial markets help attain carbon goals? Evidence from systematic literature review, bibliometric analysis and topic modelling</u> | Dawar, G.,
Nagariya, R.,
Bhatia, S., (...),
Agrawal, M.,
Dhaundiya, P. | Sustainability Accounting, Management and Policy Journal. |
| 18. | <u>Carboxymethyl Guar Gum-Based Bioactive and Biodegradable Film for Food Packaging</u> | Tanvi Singh,
Tanwar, M.,
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| 19. | <u>Cladding of Mild Steel Plates Using CMT Process</u> | Mishra, V.,
Yuvaraj, N., Vipin | Lecture Notes in Mechanical Engineering, pp. 163-172. |
| 20. | <u>Clay-polymer nanocomposites for effective water treatment: opportunities, challenges, and future prospects</u> | Anjum, A.,
Gupta, D.,
Singh, B.,
(...), Kashif, M., Jain, S. | Environmental Monitoring and Assessment, 196(7), art. no. 666. |



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| 21. | <u>DeConFCluster: Deep Convolutional Transform Learning based multiview clustering fusion framework</u> | Gupta, P.,
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| 22. | <u>Design and analysis of optimal AGC regulator for multi-area power systems with TCPS and energy storage unit in deregulated environment</u> | Mishra, R.N.,
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| 23. | <u>Determination of Coupling Coefficient in Large Optical Cavity. Distributed Feedback Laser Structure with Metal Surface Grating</u> | Patwal, M.,
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Physics, 306, pp. 197-204. |
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| 24. | <u>Digital twin application in women's health: Cervical cancer diagnosis with CervixNet</u> | Sharma, V.,
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101264. |
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| 25. | <u>DoSLex: automatic generation of all domain semantically rich sentiment lexicon</u> | Jain, M.,
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| 26. | <u>Dynamic Resource-Aware Federated Framework for Secure and Sustainable Learning in Data Sensitive Applications</u> | Narula, M.,
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| 27. | <u>Efficient hashing technique for malicious profile detection at hypervisor environment</u> | Kumar, A.N.S.,
Yadav, R.K.,
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| 28. | <u>Energy and Exergy Analyses of Vortex Tube Coupled Vapour Compression Refrigeration Cycle</u> | Khera, R.,
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Arora, B.B. | Lecture Notes in Mechanical Engineering, pp. 151-161. |
| 29. | <u>Enhancement in sugar extraction from Pistia stratiotes through statistical optimization of alkaline pre-treatment and enzymatic hydrolysis</u> | Mann, S.,
Sharma, J.G.,
Kataria, R. | International Biodeterioration and Biodegradation, 193, art. no. 105852. |
| 30. | <u>Evaluating exhaust emissions from heterogeneous car fleet through real-time field-generated dataset</u> | Pandey, A.,
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31.	<u>'Explainable AI' Disease Detection with Reasoning</u>	Kumar, M., Ramrakhiyani, K., Garg, H.	Proceedings of the 3rd International Conference on Applied Artificial Intelligence and Computing, ICAAIC 2024, pp. 222-227.
32.	<u>Exploring Biomedical Named Entity Recognition via SciSpaCy and BioBERT Models (Open Access)</u>	Jolly, A., Pandey, V., Singh, I., Sharma, N.	Open Biomedical Engineering Journal, 18(Special Issue 1), art. no. e18741207289680.
33.	<u>Fine Tuning Large Language Model for Secure Code Generation (Open Access)</u>	Li, J., Sangalay, A., Cheng, C., Tian, Y., Yang, J.	Proceedings - 2024 IEEE/ACM 1st International Conference on AI Foundation Models and Software Engineering, FORGE 2024, pp. 86-90.
34.	<u>Finite element analysis of multilayered spherical quantum dots: Effects of layer dimensions, alloy composition, and relaxation time on the linear and nonlinear optical properties</u>	Fakkahi, A., Dahiya, S., Jaouane, M., (...), Azmi, H., Zeiri, N.	Physica B: Condensed Matter, 690, art. no. 416215.
35.	<u>FLOW THROUGH STEAM TURBINE CASCADE FOR ROUGHNESS ANALYSIS</u>	Manjunath, K., Sikarwar, A.S., Ansari, N.A.	Journal of Mechanics of Continua and Mathematical Sciences, 19(7), pp. 112-125.



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| 37. | <u>Impact of depositional direction and current on microstructure and mechanical properties of the bimetallic wall of ER5356/ER4043 fabricated by cold metal transfer based wire arc additive manufacturing</u> | Kesarwani, S.,
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| 38. | <u>Integration of deep learning and plant biosecurity toward sustainable agriculture: A SWOT analysis</u> | Sharma, A.,
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| 39. | <u>In-Vivo GIT Distribution Study On 99mTc-Functionalized Bioactive Glass Through an Oral Route for Biomedical Applications</u> | Kaur, M.,
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| 40. | <u>Low-power, high-speed comparator design at 45-nm CMOS for efficient deep learning acceleration</u> <u>Open Access</u> | Jindal, E.,
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| 42. | <u>Multi-wavelength and broadband plasmonic switching with V-shaped plasmonic nanostructures on a VO₂ coated plasmonic substrate</u> | Dalal, K.,
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| 43. | <u>Natural polymers-humic acid and lignin based hydrogels: In agriculture, environment and energy storage</u> | Manu, Kumar, D.,
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| 44. | <u>Noise and sensitivity analysis of the dielectric modulated reconfigurable SiNW-SBT for biosensor applications</u>
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Kale, S. | Micro and Nanostructures,
193, art. no. 207923. |
| 45. | <u>Novel polyelectrolyte-glycol ether ternary phase-separating draw solutions for desalination using forward osmosis</u> | Ruzvidzo, K.H.,
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| 46. | <u>Numerical Investigation of Behaviour of Geosynthetic Encased Stone Column in Soft Clay Bed</u> | Srijan, Gupta, A.K. | Lecture Notes in Civil Engineering, 478 LNCE, pp. 153-160. |
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| 47. | <u>Optical and radiation shielding properties of Europium doped Alkaline-Earth Boro Tellurite glasses</u> | Pravallika, C., Swapna, K., Mahamuda, S., Venkateswarlu, M., Rao, A.S. | Optical Materials, 154, art. no. 115669. |
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| 48. | <u>Photonic Spin Hall Effect based AQI sensor: Effect of concentration of PM_{2.5}</u> | Seema, Rao, A.S. | IEEE Sensors Journal. |
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| 49. | <u>Photonic Spin Hall Effect based AQI sensor: Effect of concentration of PM_{2.5}</u> | Ahlawat, L., Kishor, K., Baitha, M.N., Sinha, R.K. | IEEE Sensors Journal. |
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| 50. | <u>Physics-based analytical model for trap assisted biosensing in dual cavity negative capacitance junctionless accumulation mode FET</u> | Yadav, S., Rewari, S., Pandey, R. | Microelectronics Journal, 143, art. no. 106032. |



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| 52. | <u>Plasma-assisted carbon nanotube for solar cell application</u> | Singh, S.K.,
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| 53. | <u>Prediction of Compressive Strength of Alccofine-Based Geopolymer Concrete</u> | Diksha, Dev, N.,
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| 54. | <u>Predictive design of KSnI3-based perovskite solar cells using SCAPS and machine learning model</u> | Kundara, R.,
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| 55. | <u>Pressure-dependent bandgap characteristics in photonic crystals with sensing applications</u> | Sherawat, V.,
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| 57. | <u>Quantifying biased technical progress in China: Heterogeneous human capital and labor force dynamics</u> | Cui, X.,
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| 58. | <u>Quantum Computational and Spectroscopic Investigation of 3-aminosalicylic Acid</u> | Husain, S.,
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| 59. | <u>Quantum Resistant Blockchain-based Architecture for Secure Medical Data Sharing</u> | Jain, K., Singh,
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| 60. | <u>Recycled Coarse Aggregates in Concrete: A Comprehensive Study of Mechanical and Microstructural Properties</u> | Panghal, H.,
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| 62. | <u>Role of Machine Learning in Detection and Classification of Leukemia: A Comparative Analysis</u> | Garg, R.,
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| 63. | <u>Sarcasm detection: Acknowledging misleading content in social media using optimised Wilson's technique and Gumbel Mechanism</u> | Pokhriyal, H.,
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| 64. | <u>Shallowfake and deepfake image manipulation localization using noise and RGB-based dual branch method</u> | Dagar, D.,
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| 67. | <u>Unravelling the interaction between Influenza virus and the nuclear pore complex: insights into viral replication and host immune response</u> | Khanna, M.,
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| 68. | <u>Visual Sentiment Recognition via Popular Deep Models on the Memotion Dataset</u> | Verma, B.,
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| 69. | <u>Workplace gratitude studies: Review and future agenda using bibliometric analysis</u> | Garg, N.,
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