

2021 Publications

- 1, Sree Rama Murthy Kandala (B.Tech), Bhavana Siddineni (B.Tech), Aashritha Kondaveeti (B.Tech), Vijay Kashyap Kompella (B.Tech), Hemanth Boddupalli (B.Tech), and V M Manikandan, An Efficient Drowsiness Detection Scheme using Video Analysis., International Journal of Computing and Digital Systems, 2021, 10.12785/ijcds/110146
- 2, Shaiju Panchikkil, V. M. Manikandan, A Machine Learning based Reversible Data Hiding Scheme in Encrypted Images using Fibonacci Transform, International Conference on Innovative Trends In Information Technology-2022 organized by IIIT Kottayam, Kerala, India. (Accepted for Publication-Paper will be published in IEEE Xplore), 2021, 10.7494/csci.2021.22.2.3843
- 3, Md Anwarul Kaium Patwary, Saurabh Garg, Sudheer Kumar Battula, Byeong Ho Kang, Scalable Real-time Dynamic Graph Partitioner, IEEE Transactions on Services Computing, 2021, 10.1109/TSC.2021.3137932
- 4, Gopa Nandikes, Shaik Gouse Peera, Lakhveer Singh, Perovskite-Based Nanocomposite Electrocatalysts: An alternative to Platinum ORR Catalyst in Microbial Fuel Cell Cathodes, Energies, 2021, 10.3390/en15010272
- 5, Liping Yao, Hailiang Liao, Mahesh Kumar Ravva, Yanjun Guo, Jiayao Duan, Yazhou Wang, Yaping Yu, Zhengke Li, Iain McCulloch, Wan Yue, A Novel Class of Rigid-rod Perylene Diimides and Isoindigo Semiconducting Polymers, Polymer Chemistry, 2021, 10.1039/d0py00623h
- 6, Alicia María Manjón-Sanz, T. Wesley Surta, Pranab Mandal, Alex J. Corkett, Hongjun Niu, Eiji Nishibori, Masaki Takata, John Bleddyn Claridge, Matthew J. Rosseinsky, Complex Structural Disorder in a Polar Orthorhombic Perovskite Observed through the Maximum Entropy Method/Rietveld Technique, Chemistry of Materials, 2021, 10.1021/acs.chemmater.1c01979
- 7, Sudha Vani Yamani, N Usha Rani, Ramesh Vadd, Design and Performance Benchmarking of Hybrid Tunnel FET/STT-MTJ based Logic In-Memory Designs for Energy Efficiency, IEEE Transactions on Magnetics, 2021, 10.1109/TMAG.2022.3141873
- 8, Mahesh S.Jadhav, Disna Sahane, Amit Verma, Sheela Singh, ENHANCED MAGNETIZATION WITH INCREASED CHROMIUM CONCENTRATION IN FeCoCrNi₂Al HIGH-ENTROPY ALLOY, ADVANCED POWDER TECHNOLOGY, 2021, 10.1016/j.ap.2020.12.019
- 9, Jil Joy, Mahesh Jadhav, Disna Sahane, Deepak Davis, Sheela Singh, Effect of minute element addition on the oxidation resistance of FeCoCrNiAl and FeCoCrNi₂Al high entropy alloy, Materials Science and Technology, 2021, 10.1080/02670836.2019.1639888
- 10, B. Lokeshgupta, S. Sivasubramani, Dynamic Economic and Emission Dispatch with Renewable Energy Integration Under Uncertainties and Demand Side Management, Electrical Engineering, 2021, 10.1007/s00202-021-01476-2
- 11, Keerthana Balamurugan, Raghavender Medishetti, Jyothi Kotha, Parameshwar Behera, Kanika Chandra, Vijay Aditya Mavuduru, Manjunath B. Joshi, Ramesh Samineni, Madhumohan R.Katika, Writoban

2021 Publications

BasuBall, Manjunatha Thondamal, Anil Challa, Kiranam Chatti, Kishore V.L.Parsa, PHLPP1 promotes lipid accumulation in foam cells, zebrafish larvae and *C. elegans* through AMPK/ChREBP dependent lipid uptake and fatty acid synthesis pathways, *iScience*, 2021, 10.1016/j.isci.2020.101099

12, Durga MadhabMahapatra, Puranjan Mishra, Sveta Thakur, LakhveerSingh, Leveraging artificial intelligence in bioelectrochemical systems, *Trends in Biotechnology Journal*, 2021, 10.1016/j.tibtech.2021.11.005

13, Rahul Singh, Syed Akhil, V. G. Vasavi Dutt, Study of Shell Thickness Dependent Charge Transfer Dynamics in Green Emitting Core/Shell Giant Quantum Dots, *Inorganic Chemistry*, 2021, 10.1021/acs.inorgchem.1c03185

14, Vivek Kumar Verma Bibhas, Chandra Sumit Kumar, An Enquiry Through the Lens of Extended Value-Belief-Norm Theory to Predict Consumer's Green Hotel Visit Intention, *International Journal of Management Practice*, 2021, 10.1016/j.jbusres.2018.11.021

15, Ayman A. Althuwayb, Divya Chaturvedi, Substrate Integrated Waveguide Based Cavity-Backed Bowtie-Slot Antenna-Triplexer, *Applied Physics A*, 2021, 10.1002/mmce.22965

16, Paula C. J. Reis, Shoji D. Thottathil, Yves T. Prairie, The role of methanotrophy in the microbial carbon metabolism of temperate lakes, *Nature Communications*, 2021, 10.1038/s41467-021-27718-2

17, Deepak S. Gavali, Yoshiyuki Kawazoe, Ranjit Thapa, First-principles identification of interface effect on Li storage capacity of C₃N/Graphene multilayer heterostructure, *Journal of Colloid and Interface Science*, 2021, 10.1016/j.jcis.2021.12.052

18, Priyanka Singh, Kilari Jyothsna Devi, Hiren Kumar Thakkar, José Santamaría, Blind and Secured Adaptive Digital Image Watermarking Approach for High Imperceptibility and Robustness, *Entropy*, 2021, 10.3390/e23121650

19, Hiren Kumar Thakkar, Ankit Desai, Subrata Ghosh, Priyanka Singh, and Gajendra Sharma, Clairvoyant: AdaBoostWithCost: A Cost-sensitive Classification for Customer Churn Prediction, *Computational Intelligence and Neuroscience*, 2021, 10.1155/2022/9028580

20, Andrew Kim, Jatis Kumar Dash, Pawan Kumar, Rajkumar Patel, Carbon-based quantum dots for photovoltaic devices, *ACS Applied Electronic Materials*, 2021, 10.1021/acsaelm.1c00783

21, Joseph, S. D., Sasikala, S., & Kumar, A. V., Framework to Navigate the Virtual Classroom Space, *Basic Communication and Assessment Prerequisites for the New Normal of Education*, 2021, <http://doi:10.4018/978-1-7998-8247-3.ch013>

22, , Efficient Algorithm for Finding the Influential Nodes using Local Relative Change of Average Shortest Path, *Journal Physica A: Statistical Mechanics and its Applications*, 2021, 10.1016/j.physa.2021.126708

23, Anjaiah Sheelam, Sakthipriya Balu, Adil Muneeb, Raju Kalaivanan, Bayikadi Khasim Saheb, Dhenadhayalan Namasivayam, Erakulan E S, Arif Imamdare, Ranjit Thapa, Ming-Hsi Chiang, Song-Jeng

2021 Publications

Huang, and Raman Sankar, Improved Oxygen Redox Activity by High-valent Fe and Co³⁺ Sites in Perovskite LaNi_{1-x}Fe_{0.5x}Co_{0.5x}O₃, ACS Applied Energy Materials, 2021, 10.1021/acsaem.1c02871

24, Sauvik Chatterjee, Surajit Das, Piyali Bhanja, Erakulan E. S., Ranjit Thapa, Santu Ruidas, Sayantan Chongdar, Suman Ray and Asim Bhaumik, Ag nanoparticles immobilized over highly porous crystalline organosilica for epoxidation of styrene using CO₂ as oxidant, Journal of CO₂ Utilization, 2021, 10.1016/j.jcou.2021.101843

25, Nilanjon Naskar, Manfred Wagner, Hans Joachim Räder, Haoyuan Qi, Ute Kaiser, Tanja Weil, Sabyasachi Chakraborty, Molecular Insights of Carbon Nanodot Formation and Their Two-Photon Emission Properties, Advanced Photonics Research, 2021, <https://doi.org/10.26434/chemrxiv.14184890.v1>

26, Renuka Chowdary Bheemana, Aditya Japa, Siva Sankar Yellampalli, Ramesh Vaddi, Negative Capacitance FETs for Energy Efficient and Hardware Secure Logic Designs, Microelectronics Journal, 2021, 10.1016/j.mejo.2021.105320

27, Sarath C. Gowd, Seeram Ramakrishna, Karthik Rajendran, An untapped and under-tapped resource for nutrient recovery towards attaining a sustainable circular economy, Chemosphere, 2021, 10.1016/j.chemosphere.2021.132753

28, Pratik V. Shinde, Anjana Tripathi, Ranjit Thapa, Chandra Sekhar Rout, Nanoribbons of 2D inorganic materials: A review on emerging trends, recent developments and future perspectives, Coordination Chemistry Reviews, 2021, 10.1016/j.ccr.2021.214335

29, Lokenath Kundu, LINEAR FRACTIONAL GROUP AS GALOIS GROUP, Journal of Topology and Analysis, 2021, 10.1142/S1793525321500722

30, Puranjan Mishra, Junsang Lee, Deepak Kumar, Ricardo O. Lauro, Nazua Costa, Deepak Pathania, Smita Kumar, Jinwoo Lee, Lakhveer Singh, Engineered Nanoenzymes with Multifunctional Properties for Next-Generation Biological and Environmental Applications, Advanced Functional Materials, 2021, 10.1002/adfm.202108650

31, Mahima Chandel, Kamaljit Kaur, Bandana Kumari Sahu, Sandeep Sharma, Rajapandiyam Panneerselvam, Vijayakumar Shanmugam, Promise of nano-carbon to the next generation sustainable agriculture, Carbon, 2021, 10.1016/j.carbon.2021.11.060

32, Zahari Mohamada, Amir Abdul Razak, Santhana Krishn, Lakhveer Singh, A. W. Zularisama, Mohd Nasrullah, Treatment of palm oil mill effluent using electrocoagulation powered by direct photovoltaic solar system, Chemical Engineering Research and Design Journal, 2021, 10.1016/j.cherd.2021.11.019

33, MeghaMourya, Mohd. Jahir Khan, Ankesh Ahirwar, Benoit Schoefs, Justine Marchand, Anshuman Rai, Sunita Varjani, Karthik Rajendran, J. Rajesh Banu, Vandana Vinayak, Latest trends and developments in microalgae as potential source for biofuels: The case of diatoms, Fuel, 2021, 10.1016/j.fuel.2021.122738

34, Kshira Sagar Sahoo, Demand-Supply Based Economic Model for Resource Provisioning in Industrial IoT Traffic, IEEE Internet of Things Journal, 2021, 10.1109/JIOT.2021.3122255

2021 Publications

35, Divya S. Parimi, Yamini Gupta, Sreekar Marpu, Chandra S.Bhatta, Tharun K. Bollu, Anil K. Suresh, Nanomagnet-facilitated pharmaco-compatibility for cancer diagnostics: Underlying risks and the emergence of ultrasmall nanomagnets, Journal of Pharmaceutical Analysis, 2021, 10.1016/j.jpha.2021.11.002

36, Puranjan Mishra, Lakhveer Singh, Smita S. Kumar, Metal– Organic Framework Based Single-Atom Catalysts for Electrochemical CO₂ Sequestration, ACS Publications , 2021, 10.1021/bk-2021-1393.ch012

37, Narendra K. Bodaballa, Soumyajyoti Biswas, Subhadeep Roy, Correlation between avalanches and emitted energies during fracture with variable stress release range, Frontiers in Physics, 2021, arXiv:2108.06516v1

38, Puranjan Mishra,Putla Sudarsanam,Durga Madhab Mahapatra,Ahmed Elmekawy,Deepak Pant & Lakhveer Singh, Progressions in cathodic catalysts for oxygen reduction and hydrogen evolution in bioelectrochemical systems: Molybdenum as the next-generation catalyst, Catalysis Reviews, 2021, 10.1080/01614940.2021.2003085

39, Mulagala Sandhya, Mahesh Kumar Morampudi, Rushali Grandhe, Richa Kumari, Chandanreddy Banda, Nagamani Gonthina, Detection of Diabetic Retinopathy (DR) severity from fundus photographs: An Ensemble Approach using weighted average, Arabian Journal for Science and Engineering, 2021, 10.1007/s13369-021-06381-1

40, Adjei Mensah Collins, Deepshikha Devi Bhagooli, An IoT Based Waste Collection Alert System, IEEE ICONAT 2022 (Accepted), 2021, DOI: 10.1109/ICOEI.2019.8862518

41, Gayathri C, V. Udaya Sankar, Y. Sivasankar, Image based Road distress detection, IEEE International Conference on Smart Generation Computing, Communication and Networking (SMARTGEN), 2021, DOI: 10.1109/EIT.2012.6220706

42, Sai Likhita Vunnava, Sri Chandana Yendluri, IoT based Novel Hydration System for Smart Agriculture Applications, 2021 10th IEEE International Conference on Communication Systems and Network Technologies (CSNT), 2021, DOI: 10.1109/CSNT51715.2021.9509597

43, Shubha Brata Nath, Subhrendu Chattopadhyay, Raja Karmakar, Sourav Kanti Addya, Sandip Chakraborty, and Soumya K Ghosh., Containerized deployment of micro-services in fog devices: A reinforcement learning-based approach, The Journal of Supercomputing (JSUP), 2021, 10.1007/s11227-021-04135-2

44, Koduru Hajarathaiiah, Murali Krishna Enduri, Satish Anamalamudi, Finding Influential Nodes in Complex Networks Using Nearest Neighbourhood Trust Value, 10th International Conference on Complex Networks and their Applications (COMPLEX NETWORKS 2021) being held in hybrid mode in Madrid, the capital of Spain, Nov 30- Dec 2 2021 (Accepted and published in Springer-Verlag on the Studies in Computational Intelligence Series), 2021, 10.1007/978-3-030-93413-2_22

2021 Publications

- 45, Mohd Jahir Khan, Nikhil Singh, Sudhanshu Mishra, Ankes Ahirwara, Felix Bast, Sunita Varjanic, Benoit Schoefs, Justine Marchand, Karthik Rajendran, J. Rajesh Banu, Ganesh Dattatraya, Sarataleg Rijuta, Ganesh Sarataleh, Vandana Vinayak, Impact of light on microalgal photosynthetic microbial fuel cells and removal of pollutants by nano-adsorbent biopolymers: Updates, challenges and innovations, *Chemosphere*, 2021, 10.1016/j.chemosphere.2021.132589
- 46, Sudhakar Tummala; Venkata Sainath Gupta Thadikemalla; Barbara A.K. Kreilkamp; Erik B. Dam; Niels K. Focke, Fully Automated Quality Control of Rigid and Affine Registrations of T1w and T2w MRI in Big Data using Machine Learning, *Computers in Biology and Medicine*, 2021, 10.1016/j.combiomed.2021.104997
- 47, Srabani Basu, Bending the Genders: Portrayal of the Third Gender in Popular Bengali Cinema, *Review of International Geographical Education*, 2021, 10.48047/rigeo.11.07.38
- 48, Tarkeshwar Mahto, Rakesh Kumar, Hasmat Malik, Irfan Ahmad Khan, Sattam Al and Fahad R. Albogamy, Design and Implementation of Frequency Controller for Wind Energy-Based Hybrid Power System Using Quasi-Optimizational Harmonic Search Algorithm, *Energies*, 2021, 10.3390/en14206459
- 49, Ayyagari Lakshmana Rao, Nikhil Kulshrestha, Gopalarathinam Ramakrishnan, Prakash Chandra Bahuguna, The ignored tool. corporate governance rating”: An overview of the corporate world in the emerging market, *Journal of Governance and Regulation*, 2021, 10.22495/jgrv11i1art4
- 50, Shaiju Panchikkila, V.M. Manikandana, Yu-Dong Zhang, A Convolutional Neural Network Model based Reversible Data Hiding Scheme in Encrypted Images with Block-wise Arnold Transform, *Optik*, 2021, 10.1016/j.ijleo.2021.168137
- 51, Smita S. Kumar, Pooja Ghosh, Lakhveer Singh, Metal–Organic Frameworks for Environmental Sensing, *ACS*, 2021, 10.1021/bk-2021-1394
- 52, Anusha Nalajala, T. Raguathan, Rathnamma Gopisetty, Vignesh Garrapally, Rank-Based Prefetching and Multi-level Caching Algorithms to Improve the Efficiency of Read Operations in Distributed File Systems, *Big Data Analytics*, 2021, 10.1007/978-3-030-93620-4_17
- 53, Sinthika S, Pushpa Selvi M, Nimma Elizabeth R, Deepak S. Gavali, Ranjit Thapa, Understanding the role of lithium bonds in doped graphene nanoribbons as cathode hosts for Li-S batteries: A first-principles study, *International Journal of Energy Research*, 2021, 10.1002/er.7438
- 54, Nitul Dutta, Hiren Kumar Deva Sarma, A scalable mobility management scheme for PMIPv6 with multiple Control and Data Plane, *Wireless Personal Communications*, 2021, 10.1007/s11277-021-09254-w
- 55, Samadhan Kapse, Bennet Benny, Pranab Mandal, Ranjit Thapa, Design Principle of MoS₂/C Heterostructure to Enhance the Quantum Capacitance for Supercapacitor Application, *Journal of Energy Storage*, 2021, 10.1016/j.est.2021.103476

2021 Publications

56, Priyanka Singha, Rahul Kottath, An Ensemble Approach to Meta-heuristic Algorithms: Comparative Analysis and its Applications, Computers & Industrial Engineering, 2021, 10.1016/j.cie.2021.107739

57, Pratik V. Shinde, Deepak S. Gavali, Ranjit Thapa, Manoj Kumar Singh and Chandra Sekhar Rout, Ternary VS₂/ZnS/CdS hybrids as efficient electrocatalyst for hydrogen evolution reaction: Experimental and theoretical insights, AIP Advances, 2021, 10.1063/5.0068407

58, Erakulan E.S., Ranjit Thapa, Origin of pure and C doped borophene stability and its activity for OER, Applied Surface Science, 2021, 10.1016/j.apsusc.2021.151613

59, Surfarazhussain S. Halkarni, Arunkumar Sridharan and S.V. Prabhu, Experimental and numerical investigations on the local wall heat transfer coefficient in a narrow packed bed with spheres, International Journal of Ambient Energy, 2021, 10.1080/01430750.2021.1994463

60, Sumalatha Saleti, Incremental mining of high utility sequential patterns using MapReduce paradigm, Cluster computing, 2021, 10.1007/s10586-021-03448-4

61, Sateeshkrishna Dhuli; Said Kouachi; Anamika Chhabra; Yatindra Nath Singh, Network Robustness Analysis for IoT Networks using Regular Graphs, IEEE Internet of Things, 2021, 10.1109/JIOT.2021.3116256

62, Pooja Ghosh, Smita S. Kumar and Lakhveer Singh, Metal–Organic Frameworks for Carbon Capture and Energy, ACS, 2021, 10.1021/bk-2021-1393

63, Daniel Skomedal Breland, Aveen Dayal, Ajit Jha, Phaneendra K Yalavarthy, Om Jee Pandey and Linga Reddy Cenkeramadd, Robust Hand Gestures Recognition using a Deep CNN and Thermal Images, IEEE Sensors Journal, 2021, 10.1109/JSEN.2021.3119977

64, Ashwini Nawadea, Kunchanapalli Ramyaa, Sabyasachi Chakraborty, Priyanka Bamola, Himani Sharma, Mohit Sharma, Krishnendu Chakraborty, Seeram Ramakrishna, Sajal Biringg, Terence KinShun Wong, Avishek Kumar, Sabyasachi Mukhopadhyaya, Goutam Kumar Dalapati, Copper based Transparent Solar Heat Rejecting Film on Glass through in-situ Nanocrystal Engineering of Sputtered TiO₂, Ceramic International, 2021, 10.1016/j.ceramint.2021.10.030

65, Soumyajyoti Biswas and Bikas K. Chakrabarti, Social inequality analysis of fiber bundle model statistics and prediction of materials failure, Physical Review E, 2021, 10.1103/PhysRevE.104.044308

66, Sarath C.Gowd, Deepak Kumar, Karthik Rajendran, A case study on integrated systems analysis for biomethane use, Biomass, Biofuels, Biochemicals : Green-Economy: Systems Analysis for Sustainability, 2021, 10.1016/B978-0-12-819242-9.00015-4

67, , Fish scales repurposed for spectroscopy, Chemical and Engineering News, 2021, <https://cen.acs.org/materials/biomaterials/Fish-scales-repurposed-spectroscopy/99/i36#>

68, Manish Kumar Pandey and Prashant Tiwari, On the first sign change of Fourier coefficients of cusp forms at sum of two squares, Research in Number Theory, 2021, 10.1007/s40993-021-00291-9

2021 Publications

- 69, Rahul Singh, Syed Akhil, V. G. Vasavi Dutt, Nimai Mishra, Shell Thickness Dependent Photostability Studies of Green-Emitting.Giant" Quantum Dots, Nanoscale Advances, 2021, 10.1039/D1NA00663K
- 70, K. M. Saradesh, K. R. Ravi & G. S. Vinodkumar , age hardenability of 22 carat gold alloyed with titanium, Gold bulletin, 2021, 10.1007/s13404-021-00301-9
- 71, Gayathri C, V. Udaya Sankar, Y. Sivasankar, A Reference Based Approach to Detect Short Faults in PCB, International Conference on Intelligent computing in Data Science - ICDS 2021,, 2021, 10.1109/ICDS53782.2021.9626719
- 72, Arnab Mitra, On Type-D Fuzzy Cellular Automata-based MapReduce model in Industry 4.0, Industrial Transformation: Implementation and Essential Components and Processes of Digital Systems", CRC Press, Taylor & Francis., 2021, 10.17632/wkktw7mgk.1
- 73, Sumalatha Saleti, Radha Krishna P (B.Tech), Jaswanth Reddy D (B.Tech),, Mining spatio-temporal sequential patterns using MapReduceApproach, 3rd International Conference on Soft Computing and its Engineering Applications (icSoftComp2021), organized by Charusat, Gujarat, India. Accepted for publication in Communications in Computer and Information Science series (CCIS)., 2021, 10.1016/j.eswa.2019.112967
- 74, Rohit Chivukula, T.Jaya Lakshmi, Lohith Ranganatha Reddy (B.Tech), Kalavathi Alla, A study of Cyber Security Issues and Challenges, IEEE Bombay Section Signature Conference, 2021, 2021, 10.1109/IBSSC53889.2021.9673270
- 75, Shaik himani (Btech), Mugada Hemanth Kumar (Btech), Murali Krishna Enduri, Shaik shakila Begum (Btech), Gundla Rageswari(Btech), Satish Anamalamudi, An Empirical Study on Impact of News Articles, 13th International Conference on Computational Intelligence and Communication Networks" (CICN 2021) LIMA PERU, 2021, 10.1109/CICN51697.2021.9574670
- 76, Priyanka Singh and K Jyothsna Devi, Blind, Secured and Robust Watermarking for 3-D Polygon Mesh using Vertex Curvature, International Journal of Advanced Computer Science and Applications , 2021, <http://dx.doi.org/10.14569/IJACSA.2021.01208102>
- 77, Rajendra Prasad Nayak, Srinivas Sethi, Sourav Kumar Bhoi, Kshira Sagar Sahoo, Nz Jhanjhi, Thamer A. Tabbakh, Zahrah A. Almusaylim, TBDDoS-SA-MD: Trust-Based DDoS Misbehave Detection Approach in Software-defined Vehicular Network (SDVN), Computers, Materials and Continua, 2021, 10.32604/cmc.2021.018930
- 78, T. V. Ramesh Reddy, Sanjay Kumar Mehta, Aravindhavel Ananthavel, Saleem Ali & D. Narayana Rao , Evolution of the Planetary Boundary Layer and its simulation over a tropical coastal station Kattankulathur (12.83 N; 80.04 E), Theoretical and Applied Climatology, 2021, 10.1007/s00704-021-03770-2
- 79, Santu Ruidas, Bishnupad Mohanty, Dr. Piyali Bhanja ,E. S. Erakulan, Prof. Dr. Ranjit Thapa, Dr. Prasenjit Das,Avik Chowdhury, Prof. Dr. Sanjay K. Mandal, Dr. Bikash Kumar Jena, Prof. Dr. Asim Bhaumik, Metal-

2021 Publications

Free Triazine based Covalent Organic Framework for Efficient H₂ Evolution via Electrochemical Water-Splitting, *ChemSusChem*, 2021, 10.1002/cssc.202101663

80, Kunchanapalli Ramya and Sabyasachi Mukhopadhyay, Effect of external mechanical force on the molecule–electrodes electronic coupling in (bio)molecular junctions, *Journal of Materials Science: Materials in Electronics*, 2021, 10.1007/s10854-021-06277-8

81, Changlei Xia, Abhijeet Pathy, Balasubramanian Paramasivan, Prabakaran Ganeshan, Kondusamy Dhamodharan, Ankita Juneja, Deepak Kumar, Kathirvel Brindhadevi, Sang-Hyoun Kim, Karthik Rajendran, Comparative study of pyrolysis and hydrothermal liquefaction of microalgal species: Analysis of product yields with reaction temperature, *Fuel*, 2021, 10.1016/j.fuel.2021.121932

82, Marzieh Omid, Mehrdad Mashkour, Jayanta Kumar Biswas, Vijay Kumar Garlapati, Lakhveer Singh, Mostafa Rahimnejad & Deepak Pant , From electricity to products-Recent updates on microbial electrosynthesis (MES), *Topics in Catalysis*, 2021, 10.1007/s11244-021-01503-3

83, Ghanshyam Pandey and Seema Kumari , Understanding agricultural growth and performance of Bihar in India, *SN Business and Economics*, 2021, 10.1007/s43546-021-00150-w

84, Om Jee Pandey, Tankala Yuvaraj, Joseph K. Paul, Ha H. Nguyen, Karthikay Gundepudi, Mahendra K. Shukla, Improving Energy Efficiency and QoS of LPWANs for IoT Using Q-Learning Based Data Routing, *IEEE Transactions on Cognitive Communications and Networking*, 2021, 10.1109/TCCN.2021.3114147

85, Soumyajyoti Biswas, Amit Kr Mandal, Optimization strategies of human mobility during the COVID-19 pandemic: A review, *Mathematical Bioscience and Engineering*, 2021, 10.3934/mbe.2021395

86, Tata Lakshmi Durga Likhitha, Mothukuri Noushika, Vadlamudi Sai Deepika, V. M. Manikandan, A Detailed Review on CBIR and Its Importance in Current Era, *International Conference on Data Science and Its Applications*, 2021, 10.1109/ICoDSA53588.2021.9617481

87, Harshad Dhane, V. M. Manikkandan, A New Framework for Secure Biometric Data Transmission using Block-wise Reversible Data Hiding Through Encryption, *International Conference On Intelligent Computing in Data Sciences ICDS2021*, 2021, 10.1109/ICDS53782.2021.9626742

88, Abdur Rashid Sangi, Mohammed S Alkathiri, Satish Anamalamudi, Mohammed A. Alqarni, Muhammad Hammad Memon, Wanan Yang,, Spectrum Handoff Aware AODV Routing Protocol for Cognitive Radio Vehicular Ad Hoc Networks, *Complexity Journal*, 2021, 10.1155/2021/6981719

89, Prasenjit Maity, Sandeep Saxena, Shashank Srivastava, Kshira Sagar Sahoo, Ashok Kumar Pradhan, Neeraj Kumar, An Effective Probabilistic Technique for DDoS Detection in OpenFlow Controller, *IEEE System Journal*, 2021, 10.1109/JSYST.2021.3110948

90, Deepak Rai, H. Thakkar, S. S. Rajput, J. Santamaría, Chintan Bhatt, Francisco Roca, A Comprehensive Review on Seismocardiogram: Current Advancements on Acquisition, Annotation, and Applications, *Mathematics*, 2021, 10.3390/math9182243

2021 Publications

- 91, Chinmaya Kumar Swain and Aryabartta Sahu, Reliability Ensured Efficient Scheduling With Replication in Cloud Environment, IEEE System Journal, 2021, 10.1109/JSYST.2021.3112098
- 92, Rohit Chivukula, T. Jaya Lakshmi, Sanku Satya Uday, Satti Thanuja Pavani, Classifying Clinically Actionable Genetic Mutations using KNN and SVM, Indonesian Journal of Electrical Engineering and Computer Science, 2021, 10.11591/ijeecs.v24.i3.pp1672-1679
- 93, Chinmaya Kumar Swain and Aryabartta Sahu , Interference Aware Workload Scheduling for Latency Sensitive Task in Cloud Environment, Computing, 2021, 10.1007/s00607-021-01014-9
- 94, Sriramulu Bojjagani, P. V. Venkateswara Rao, Dinesh Reddy Vemula, B Ramachandra Reddy and T. Jaya Lakshmi , A Secure IoT-based Micro-payment Protocol for Wearable Devices, Peer-to-Peer Networking Applications, 2021, 10.1007/s12083-021-01242-y
- 95, Yuvaraj Tankala, Joseph K Paul and Manikandan V M, A Content-based Image Retrieval Scheme with Object Detection and Quantized Color Histogram, International Journal of Computational Science and Engineering, 2021, 10.1007/s11042-020-10173-4
- 96, Syed Akhil, V. G. Vasavi Dutt, Rahul Singh and Nimai Mishra, Surface-State-Mediated Interfacial Hole Transfer Dynamics Between CsPbBr₃ Perovskite Nanocrystals and Phenothiazine Redox Couple, The Journal of Physical Chemistry-C, 2021, 10.1021/acs.jpcc.1c07129
- 97, Murugaiyan. V., Ali, J., Frei.M., Zeibig.F., Pandey. A., Wairich. A., Wu. L.B, Murugaiyan. J., and Li. Z., Identification of promising genotypes through systematic evaluation for arsenic tolerance and exclusion in rice, Frontiers in Plant Science, 2021, 10.3389/fpls.2021.753063
- 98, , Sustainable transparent biotemplate from fish scale waste for ultra-low volume high-sensitive UV-Vis spectroscopy, Green Chemistry, 2021, 10.1039/d1gc02569d
- 99, Imran Uddin, Divya S. Parimi, Tarun K. Bollu, Chandra S. Bhatt, Anil K. Suresh, Silver nanoparticles as potent multi-drug resistant in-corporants in biomedicine, Emerging modalities in mitigation of antimicrobial resistance, 2021, 10.1007/978-3-030-84126-3_21
- 100, Akash Varshney, Jamal Ahmad Khan, Irfan Ahmad, Imran Uddin, Room temperature chemical synthesis of Bi₂O₃ nanoparticles, Micro & Nano Letters, 2021, 10.1049/mna2.12077
- 101, Atirah Tauseef, Ahmad Khalilullah, Hisam Uddin, Imran Uddin, Role of MgO nanoparticles in the suppression of Meloidogyne incognita, infecting cowpea and improvement in plant growth and physiology, Experimental Parasitology, 2021, 10.1016/j.exppara.2020.108045
- 102, Atirah Tauseef, Hisamuddin, Jhalak Gupta, Abdur Rehman, Imran Uddin, Differential response of cowpea towards the CuO nanoparticles under Meloidogyne incognita stress, South African Journal of Botany, 2021, 10.1016/j.sajb.2021.02.017

2021 Publications

- 103, Abu Baker, Iram Wahid, Mohammad Hassan Baig, Saqer S. Alotaibi, Mohammad Khalid, Imran Uddin, Jae-June Dong, Mohd Sajid Khan, Silk cocoon derived protein bioinspired GNPs as a formidable anticancer agent, *Journal of Biomedical Nanotechnology*, 2021, 10.1166/jbn.2021.3053
- 104, Imran Uddin, Onsite visual detection of heavy metal contaminants using impregnated strip, *Journal of Photochemistry Photobiology A: Chem*, 2021, 10.1016/j.jphotochem.2021.113512
- 105, Manjula R; Tejodbhav Koduru; Raja Datta, Protecting Source Location Privacy in IoT Enabled Wireless Sensor Networks: the case of Multiple Assets, *IEEE Internet of Things Journal*, 2021, 10.1109/JIOT.2021.3126171
- 106, Bhaskara S Egala, Ashok K Pradhan, Venkataramana Badarla, Saraju P Mohanty, iBlock: Intelligent Decentralized Blockchain-based Pandemic Detection and Assisting System, *Journal of Signal Processing Systems*, 2021, 10.1007/s11265-021-01704-9
- 107, Shubham Gupta, Balu L. Parne, Narendra S. Chaudhari, Sandeep Saxena, SEAI: Secrecy and Efficiency Aware Inter-gNB Handover Authentication and Key Agreement Protocol in 5G Communication Network, *Wireless Pers Commun*, 2021, 10.1007/s11277-021-09036-4
- 108, Anvesh Reddy, Hanesh Koganti, Sai Krishna, Suhas Reddy, Soumyajyoti Biswas, Machine learning predictions of COVID-19 second wave end-times in Indian States, *Indian Journal of Physics*, 2021, 10.1007/s12648-021-02195-x
- 109, Mahesh Kumar Ravva Ravinder Pawar Shyam Vinod Kumar Panneer Venkata Surya Kumar Choutipalli Venkatesan Subramanian, Effect of Both Structural and Electronic Confinements on Interaction, Chemical Reactivity and Properties, *Chemical Reactivity and Properties. In Chemical Reactivity in Confined Systems (eds P.K. Chattaraj and D. Chakraborty).*, 2021, 10.1002/9781119683353.ch15
- 110, Hrudaya Kumar Tripathy, Sushruta Mishra, Hiren Kumar Thakkar, Deepak Rai, CARE: A Collision-Aware Mobile Robot Navigation in Grid Environment using Improved Breadth First Search, *Computers and Electrical Engineering*, 2021, 10.1016/j.compeleceng.2021.107327
- 111, Alluri Harika (Btech), Syed Humayra(Btech), Murali Krishna Enduri, Satish Anamalamudi, Application of Steganography Imaging by AES and Random Bit, 13th International Conference on Computational Intelligence and Communication Networks" (CICN 2021), LIMA PERU (Accepted), 2021, 10.1109/CICN51697.2021.9574676
- 112, R. K. Behera, Kshira Sagar Sahoo, D. Naik, S. K. Rath, and B. Sahoo., Structural Mining for Link Prediction Using Various Machine Learning Algorithms, *International Journal of Social Ecology and Sustainable Development, IGI Global (Q2 Journal) (IJSESD) 12, no. 3 (2021): 66-78.*, 2021, 10.4018/IJSESD.2021070105
- 113, Nithya, S., M. Sangeetha, KN Apinaya Prethi, Kshira Sagar Sahoo, Sanjaya Kumar Panda, and Amir H. Gandomi, SDCF: A Software-Defined Cyber Foraging Framework for Cloudlet Environment, *IEEE Transactions on Network and Service Management (TNSM)*, 2021, 10.1109/TNSM.2021.3070942

2021 Publications

114, Rahul Gupta; Syed Sameer; Harsha Muppavarapu; Murali Krishna Enduri; Satish Anamalamudi, Sentiment Analysis on Zomato Reviews, IEEE International Conference on Computational Intelligence and Communication Networks, 2021, 10.1109/CICN51697.2021.9574641

115, Nitesh Bharti; Shahab Nadeem Hashmi; V. M. Manikandan, An Approach for Audio/Text Summary Generation from Webinars/Online Meetings, IEEE International Conference on Computational Intelligence and Communication Networks, 2021, 10.1109/CICN51697.2021.9574684

116, Shaik Gouse Peera, Chao Liu ,Akhila Kumar Sahu, Manickam Selvaraj, M. C. Rao, Tae Gwan Lee, Ravindranadh Koutavarapu, Jaesool Shim, Lakhveer Singh, Recent Advances on MXene's based Electrocatalysts towards Oxygen Reduction Reaction: A Focused Review, Advanced Materials Interfaces, 2021, 10.1002/admi.202100975

117, Priyanka Bamola, MohitSharma, CharuDwivedi, BhartiSingh, SeeramRamakrishna, Goutam KumarDalapatie, HimaniSharma, Interfacial interaction of plasmonic nanoparticles (Ag, Au) decorated floweret TiO₂ nanorod hybrids for enhanced visible light driven photocatalytic activity, Materials Science & Engineering B , 2021, 10.1016/j.mseb.2021.115403

118, Sai Dheeraj Gummadi; Yeswanth Vootla; Anirban Ghosh; Peddisetty Naga Kartheek; Anjan Krishna Kandimalla, Transfer Learning Based Detection of Pneumonia from Chest X - Ray Images, International Conference on Computational Intelligence and Communication Networks, 2021, 10.1109/CICN51697.2021.9574689

119, Swikriti Khadke, Pragya Gupta, Shanmukh Rachakunta, Chandreswar Mahata, Suma Dawn, Mohit Sharma, Deepak Verma, Aniruddha Pradhan, Ambati Mounika Sai Krishna, Seeram Ramakrishna, Sabyasachi Chakraborty, Gopalan Saianand, Prashant Sonar, Sajal Biring, Jatindra Kumar Dash and Goutam Kumar Dalapati, Efficient Plastic Recycling and Remold Circular Economy using the Technology of Trust – Blockchain, Sustainability, 2021, 10.3390/su13169142

120, Lakshmi Kuruguntla, Vineela Chandra Dodda, Karthikeyan Elumalai, Study of parameters in dictionary learning method for seismic denoising, IEEE Transactions on Geoscience and Remote Sensing journal, 2021, 10.1109/TGRS.2021.3107541

121, Madasamy Hari Balakrishnan, Madasamy Kanagaraj, Velayudham Sankar, Mahesh Kumar Ravva and Subramaniyan Mannathan , Synthesis of Ortho-Arylated and Alkenylated Benzamides by Palladium-Catalyzed Denitrogenative Cross-Coupling Reactions of 1,2,3-Benzotriazin-4(3H)-Ones with Organoboronic Acids, New Journal of Chemistry, 2021, 10.1039/D1NJ03706D

122, K. M. Saradesh, K. R. Ravi, G. S. Vinodkumar, The age hardenability of 22Karat gold (Au-5.8wt.%Cu-2.5wt.%Ag) alloyed with Titanium, Gold bulletin, 2021, 10.1007/s13404-021-00301-9

123, Hai-Long Wang, En-Ming You, Rajapandiyam Panneerselvam, Song-Yuan Ding & Zhong-Qun Tian , Advances of surface-enhanced Raman and IR spectroscopies: from nano/microstructures to macro-optical design, Light: Science & Applications, 2021, 10.1038/s41377-021-00599-2

2021 Publications

- 124, Phiralang Marbaniang, Samadhan Kapse, Sagar Ingavale, Ranjit Thapa and Bhalchandra Kakade, Nitrogen doping derived bridging of Graphene and Carbon Nanotube composite for oxygen electroreduction, International Journal of Energy Research, 2021, 10.1002/er.7179
- 125, Priyanka, Sumit Kumar and Akhilesh Tiwari, Managing employees' turnover: findings from AHP model, International Journal of Economics & Business Research, 2021, 10.1504/IJEER.2021.116330
- 126, Ajay Kumar, Manisha Chandel, Arush Sharma, Manita Thakur, Amit Kumar, Deepak Pathania, Lakhveer Singh, Robust visible light active PANI/LaFeO₃/CoFe₂O₄ ternary heterojunction for the photo-degradation and mineralization of pharmaceutical effluent: Clozapine, Journal of Environmental Chemical Engineering, 2021, 10.1016/j.jece.2021.106159
- 127, V. G. Vasavi Dutt, Syed Akhil and Nimai Mishra, Enhancement of Photoluminescence and Stability of CsPbX₃ (X= Cl, Br, and I) Perovskite Nanocrystals with Phthalimide Passivation, Nanoscale, 2021, 10.1039/d1nr03916d
- 128, Pavan Mohan N, Meteorological Drought Assessment in India using Machine Learning Techniques, International Journal of Science and Research, 2021, 10.21275/SR21709204919
- 129, Hrudaya Kumar Tripathy, Sushruta Mishra, Hiren Kumar Thakkar, Deepak Rai, CARE: A Collision-Aware Mobile Robot Navigation in Grid Environment using Improved Breadth First Search, Computers and Electrical Engineering, 2021, 10.1016/j.compeleceng.2021.107327
- 130, V.G. Vasavi Dutt, Syed Akhil, Nimai Mishra, Cesium Lead Bromide Perovskite Nanocrystals as a Simple and Portable Spectrochemical Probe for Rapid Detection of Chlorides, ChemistrySelect, 2021, 10.1002/slct.202102268
- 131, Amjad Ali Pasha, Meshal Nuwaym Al-Harbi, Surfarazhussain S. Halkarni, Nazrul Islam, D. SivaKrishna Reddy, S. Nadaraja Pillai, Ufaith Qadiri, CFD study of convective heat transfer of water flow thro micro pipe with mixed constant wall temp and heat flux wall boundary conditions, CFD Letters, 2021, 10.37934/cfdl.13.7.1326
- 132, B. C. S. Mohanty, S. Mishra, S. K. Mishra, Analysis of Machine Learning Technologies for the Detection of Diabetic Retinopathy, Analysis of Machine Learning Technologies for the Detection of Diabetic Retinopathy, 2021, 10.1002/9781119792611.ch24
- 133, Bijay A, C. C. Sobin, Jahfar A, Building Market Intelligence Systems for Agricultural Commodities: A Case Study based on Cardamom, 2nd IEEE International Conference on Secure Cyber Computing and Communications (ICSCCC-2021), 2021, 10.1109/ICSCCC51823.2021.9478105
- 134, Neena A, C. C. Sobin, Jahfar, A Sustainability Impactness of Smart-Agri Architecture on Environment, The Fourth International Workshop on Smart Living with IoT, Cloud, and Edge Computing, SLICE-2021, in conjunction with the flagship conference IEEE 18th International Conference on Mobile Ad-Hoc and Smart Systems (MASS - 2021), 4-7 October 2021, USA, 2021, 10.1109/MASS52906.2021.00081

2021 Publications

- 135, Debanjan Konar, Siddhartha Bhattacharyya, Sourav De, Aparajita Das and Jan Platos, Early Prediction of Coronavirus Epidemic Outbreak using Stacked Long Short-Term Memory Networks, Book: Intelligent Modelling, Prediction, and Diagnosis from Epidemiological Data: COVID-19 and Beyond, CRC Press November 23, 2021, 2021, 10.1201/9781003158684-5
- 136, Radha Guha, Designing a Chat-bot for College Information using Information Retrieval and Automatic Text Summarization Techniques., Journal of Current Chinese Computer Science (Jan 2021), Vol 1, Issue 1, Bentham Science Publisher., 2021, 10.2174/2665997201999201022191540
- 137, Radha Guha, Improving an Artificial Intelligent Recommendation Engine by Deep Learning Techniques., 6th International Conference for Convergence in Technology (I2CT) 2021 Pune, Maharashtra, 2021, <https://ieeexplore.ieee.org/document/9417936>
- 138, Radha Guha, A Report on Automatic Face Recognition: Traditional to Modern Deep Learning Techniques, 6th International Conference for Convergence in Technology (I2CT) 2021 Pune, Maharashtra, 2021, <https://ieeexplore.ieee.org/document/9418068>
- 139, Radha Guha, Efficient renewable energy integration: a pertinent problem and advanced time series data analytics solution, Book: "Machine Learning for Sustainable Development", edited by De Gruyter, Germany., 2021, 10.1515/9783110702514/html
- 140, Priyanka Singh, K Jyothsna Devi, Blind, Secured and Robust Watermarking for 3 - D Polygon Mesh Using Vertex Curvature, International Journal of Advanced Computer Science and Applications, 2021, 10.14569/IJACSA.2021.01208102
- 141, Padma Teja Adusumalli, Vyshnavi Garipelly and Priyanka Singh, Travel Recommendation System Using Content and Collaborative Filtering - A Hybrid Approach, 12th INTERNATIONAL CONFERENCE ON COMPUTING, COMMUNICATION, AND NETWORKING TECHNOLOGIES (ICCCNT) 2021 by IIT Kharagpur., 2021, 10.1109/ICCCNT51525.2021.9579907
- 142, Kilari Jyothsna Devi, Priyanka Singh, Manyea Zakaria Gafaru and Ramesh Kumar Yadav, Reversible and Secured Image Watermarking Technique for IoMT Healthcare, 12th INTERNATIONAL CONFERENCE ON COMPUTING, COMMUNICATION, AND NETWORKING TECHNOLOGIES (ICCCNT) 2021 by IIT Kharagpur., 2021, 10.1109/ICCCNT51525.2021.9580071
- 143, Priyanka Singh and Rahul Kottath, Application of Mutation Operators on Grey Wolf Optimizer, 12th INTERNATIONAL CONFERENCE ON COMPUTING, COMMUNICATION, AND NETWORKING TECHNOLOGIES (ICCCNT) 2021 by IIT Kharagpur., 2021, 10.1109/ICCCNT51525.2021.9579731
- 144, Jagruth K., V. M. Manikandan, Ravi Kant Kumar, Water Body Identification from the Satellite Images using Color Component Analysis with Morphological Operations, 12th INTERNATIONAL CONFERENCE ON COMPUTING, COMMUNICATION, AND NETWORKING TECHNOLOGIES (ICCCNT) 2021 by IIT Kharagpur., 2021, 10.1109/ICCCNT51525.2021.9579839

2021 Publications

145, Nikhila Korivi, V. M. Manikandan, A New Reversible Data hiding Scheme in Encrypted Images using Predefined Pixel Mapping, 12th INTERNATIONAL CONFERENCE ON COMPUTING, COMMUNICATION, AND NETWORKING TECHNOLOGIES(ICCCNT) 2021 by IIT Kharagpur., 2021, 10.1109/CICT51604.2020.9312058

146, Yelisetty Srivarsha, V. M. Manikandan, A Novel Content-based Image Retrieval Scheme based on Textual Information, 12th INTERNATIONAL CONFERENCE ON COMPUTING, COMMUNICATION, AND NETWORKING TECHNOLOGIES(ICCCNT) 2021 by IIT Kharagpur., 2021, 10.1007/s11042-020-10173-4

147, Nikhila K, Peteti S, Neena A, Jafar A & Dr. Sobin C C, Analyzing Market Dynamics of Agricultural Commodities: A Case Study based on Cotton, 12th INTERNATIONAL CONFERENCE ON COMPUTING, COMMUNICATION, AND NETWORKING TECHNOLOGIES(ICCCNT) 2021 by IIT Kharagpur., 2021, 10.1109/ICSCCC51823.2021.9478105

148, Somarouthu Srikanth, Thavva Sampath Kumar, Satish Anamalamudi and Murali Krishna Enduri, Decentralized Cloud Storage using Unutilized Storage in PC, International Conference on Computing, Communication and Networking Technologies, 12th INTERNATIONAL CONFERENCE ON COMPUTING, COMMUNICATION, AND NETWORKING TECHNOLOGIES(ICCCNT) 2021 by IIT Kharagpur., 2021, DOI: 10.1109/ICCCNT51525.2021.9579738

149, Bhargavi Siddineni, Rayapati Nanditha, Tammina Jayanth Satyanarayana and Venkata Sai Rama Krishna Sighakolli, Design of an IoT based Surveillance System using Blynk, IFTTT, and Telegram, 12th INTERNATIONAL CONFERENCE ON COMPUTING, COMMUNICATION, AND NETWORKING TECHNOLOGIES(ICCCNT) 2021 by IIT Kharagpur., 2021, DOI: 10.1109/ICCCNT51525.2021.9579790

150, Venkata Sai Rama Krishna Sighakolli, Bhargavi Siddineni, Tammina Jayanth Satyanarayana and Rayapati Nanditha, Emergency Locket for Women using Blynk and IFTTT based on the Internet of Things, 12th INTERNATIONAL CONFERENCE ON COMPUTING, COMMUNICATION, AND NETWORKING TECHNOLOGIES(ICCCNT) 2021 by IIT Kharagpur., 2021, DOI: 10.1109/ICCCNT51525.2021.9579551

151, Ayesha Sameer Sheikh, Keerthi Annem, Sateeshkrishna Dhuli, Guntakala Likhita, Venkata Naga Jahnvi B. S. and Atik Fouzul, A Novel Security System for IoT Applications, 12th INTERNATIONAL CONFERENCE ON COMPUTING, COMMUNICATION, AND NETWORKING TECHNOLOGIES(ICCCNT) 2021 by IIT Kharagpur., 2021, DOI:10.1109/ICCCNT51525.2021.9579502

152, Manasa Ch, Rahul Chandra K, Sateeshkrishna Dhuli and Murali Krishna Enduri, A Secure Matrix Inversion Protocol for IoT Applications in Smart Home Systems, 12th INTERNATIONAL CONFERENCE ON COMPUTING, COMMUNICATION, AND NETWORKING TECHNOLOGIES(ICCCNT) 2021 by IIT Kharagpur., 2021, DOI: 10.1109/ICCCNT51525.2021.9580058

153, Aditya Vmvs, Tanishq Ch.T.S., Chaitanya Badri Sai V, Sateeshkrishna Dhuli and Atik Fouzul, IoT Based Water Level Monitoring System for Dams, 12th INTERNATIONAL CONFERENCE ON COMPUTING, COMMUNICATION, AND NETWORKING TECHNOLOGIES(ICCCNT) 2021 by IIT Kharagpur., 2021, 10.1109/CICN51697.2021.9574685

2021 Publications

154, Akshay kumar Gajula, Jaswanth Singamsetty, Vineela Chandra Dodda and Lakshmi Kuruguntla, Prediction of crop and yield in agriculture using machine learning technique, 12th INTERNATIONAL CONFERENCE ON COMPUTING, COMMUNICATION, AND NETWORKING TECHNOLOGIES(ICCCNT) 2021 by IIT Kharagpur., 2021, DOI: 10.1109/ICCCNT51525.2021.9579843

155, G Kaniska Reddy, Bh. Akanksha Sahitya and Anirban Ghosh, Size Analysis of Brain Tumor from MRI Images Using MATLAB, 12th INTERNATIONAL CONFERENCE ON COMPUTING, COMMUNICATION, AND NETWORKING TECHNOLOGIES(ICCCNT) 2021 by IIT Kharagpur., 2021, DOI: 10.1109/ICCCNT51525.2021.9579668

156, Sai Dheeraj Gummadi and Anirban Ghosh, A transfer Learning Based Approach for Detecting COVID-19 with Radiography Images, 12th INTERNATIONAL CONFERENCE ON COMPUTING, COMMUNICATION, AND NETWORKING TECHNOLOGIES(ICCCNT) 2021 by IIT Kharagpur., 2021, DOI: 10.1109/ICCCNT51525.2021.9579538

157, Shaik Rajak; Sunil Chinnadurai, Is massive MIMO good with practical power constraints?, 12th INTERNATIONAL CONFERENCE ON COMPUTING, COMMUNICATION, AND NETWORKING TECHNOLOGIES(ICCCNT) 2021 by IIT Kharagpur., 2021, DOI: 10.1109/ICCCNT51525.2021.9580119

158, Avinash yandapalli, Ramanand Sagar and Sunil Chinnadurai, Voice Automation Agricultural Systems using IOT, 12th INTERNATIONAL CONFERENCE ON COMPUTING, COMMUNICATION, AND NETWORKING TECHNOLOGIES(ICCCNT) 2021 by IIT Kharagpur., 2021, DOI: 10.1109/ICCCNT51525.2021.9579842

159, Rishitha Haridasu; Nafisa Nikhath Shaik; Sunil Chinnadurai, Bluetooth Based Vehicle to Vehicle Communication to Avoid Crash Collisions and Accidents, 12th INTERNATIONAL CONFERENCE ON COMPUTING, COMMUNICATION, AND NETWORKING TECHNOLOGIES(ICCCNT) 2021 by IIT Kharagpur., 2021, DOI: 10.1109/ICCCNT51525.2021.9579849

160, P Partha Koundinya; Sai Krishna Reddy Y; V Mani Deepak; K Rutwesh; Anuj Deshpande, Test Set Generation for Multiple Faults in Boolean Systems using SAT Solver, 12th INTERNATIONAL CONFERENCE ON COMPUTING, COMMUNICATION, AND NETWORKING TECHNOLOGIES(ICCCNT) 2021 by IIT Kharagpur., 2021, DOI: 10.1109/ICCCNT51525.2021.9579930

161, Pavan Sai Satish Pokala; Sai Krishna Saripudi; Praharsha Maringanti; Anuj Deshpande, Indoor Ball Tracking and Striking System using UAV, 12th INTERNATIONAL CONFERENCE ON COMPUTING, COMMUNICATION, AND NETWORKING TECHNOLOGIES(ICCCNT) 2021 by IIT Kharagpur., 2021, DOI: 10.1109/ICCCNT51525.2021.9579819

162, Sameeksha Konakalla; Lakshmi Vyshnavi Kunchala; Siva Sankar Yellampalli, Smart Agriculture with IoT & filtering technology, 12th INTERNATIONAL CONFERENCE ON COMPUTING, COMMUNICATION, AND NETWORKING TECHNOLOGIES(ICCCNT) 2021 by IIT Kharagpur., 2021, DOI: 10.1109/ICCCNT51525.2021.9579730

163, Senapati, R, LTE-advanced cell capacity estimation model and algorithm for voice service, J Ambient Intell Human Comput, 2021, 10.1007/s12652-021-03373-9

2021 Publications

- 164, Mohd Jahir Khan, Harish, Ankesh Ahirwar, Benoit Schoefs, Arivalagan Pugazhendhi, Sunita Varjani, Karthik Rajendran, Shashi Kant Bhatia, Ganesh Dattatraya Saratale, Rijuta Ganesh Saratale, Vandana Vinayak,, Insights into diatom microalgal farming for treatment of wastewater and pretreatment of algal cells by ultrasonication for value creation, *Environmental Research*, 2021, 10.1016/j.envres.2021.111550
- 165, A. Guchhait, G. Dalapati, P. Sonar, Saianand Gopalan, Firdaus Bin Suhaimi, T. Das, V. G. V. Dutt, N. Mishra, C. Mahata, Avishek Kumar, S. Ramakrishna , p-i-n Structured Semitransparent Perovskite Solar Cells with Solution-Processed Electron Transport Layer, *Journal of Electronic Materials* , 2021, 10.1007/s11664-021-09104-2
- 166, Joseph, S., Ravva, M.K., Davis, B.A., Thomas, S. and Kalarikkal, N., Theoretical Study on Understanding the Effects of Core Structure and Energy Level Tuning on Efficiency of Nonfullerene Acceptors in Organic Solar Cells, *Advanced Theory and Simulations*, 2021, 10.1002/adts.202100019
- 167, Syed Akhil, V.G.Vasavi Dutt and Nimai Mishra , Bromopropane as a Novel Bromine Precursor for the Completely Amine Free Colloidal Synthesis of Ultra-Stable and Highly Luminescent Green-Emitting Cesium Lead Bromide (CsPbBr₃) Perovskite Nanocrystals, *Nanoscale* , 2021, 10.1039/D1NR03560F
- 168, Goutam Kumar Dalapati, Himani Sharma, Asim Guchhait, Nilanjan Chakraborty, Priyanka Bamola, Qian Liu, Gopalan Saianand, Ambati Mounika Sai Krishna, Sabyasachi Mukhopadhyay, Avishek Dey, Terence Kin Shun Wong, Siarhei Zhuk, Siddhartha Ghosh, Sabyasachi Chakraborty, Chandreswar Mahata, Sajal Biring, Avishek Kumar, Camila Silva Ribeiro, Seeram Ramakrishna, Amit K. Chakraborty, Satheesh Krishnamurthy, Prashant Sonar and Mohit Sharma, Tin Oxide for Optoelectronics, Photovoltaic and Energy Storage Devices - A Review, *Journal of Materials Chemistry A*, 2021, 10.1039/D1TA01291F
- 169, David J. Lusher, Satya P. Jammy, Neil D. Sandham,, OpenSBLI-Automatic code generation for heterogeneous computer architectures applied to CFD, *Computer physics communication*, 2021, 10.1016/j.cpc.2021.108063.
- 170, Arti Taneja, Amit Ujlayan, Rajiv Janardhanan, Pancreatic Cancer Detection by an Integrated Level Set-Based Deep Learning Model, *Big Data and Artificial Intelligence for Healthcare Applications*, 2021, 10.1201/9781003093770-8
- 171, Susan, S. and S. Yellampalli. , Design of High Speed PLL using LC VCO in 180nm CMOS Technology, *IEEE 2nd International conference on Emerging Technologies*, 2021, 10.1109/INCET51464.2021.9456374
- 172, Kumaran P & Ashoka Rajan R, Privacy-Preserving in Fingerprint Templates Security Using Combinatorial Logic Circuits, *International Conference on Soft Computing for Security Applications (ICSCS 2021)*, Salem, India, Springer (Advances in Intelligent Systems and Computing), (10-11 June 2021), ISSN: 2194-5357, 2021, 10.1109/ICOEI51242.2021.9452865
- 173, Kumaran P & Ashoka Rajan R, A Novel Tree Based Shuffling Technique for Fingerprint Template Security, *5th International Conference on Trends in Electronics and Informatics (ICOEI 2021)*, Tirunelveli, India (3-5 June 2021), ISBN: 978-1-6654-1571-2/21, 2021, 10.1109/ICOEI51242.2021.9452865

2021 Publications

174, Bhoi A, Nayak RP, Bhoi SK, Sethi S, Panda SK, Sahoo KS, Nayyar A., IoT-IIRS: Internet of Things based intelligent-irrigation recommendation system using machine learning approach for efficient water usage, PeerJ computer Science, 2021, 10.7717/peerj-cs.578

175, Singh, S., Bala, M.M., Kumar, N. and Janor, H, Application of DEA-Based Malmquist Productivity Index on Health Care System Efficiency of ASEAN Countries, Int J Health Plann Mgmt, 2021, <https://doi.org/10.1002/hpm.3169>

176, Chitraichamy Veluchamy, Radhakrishnan Loganath, Dayanand Sharma, Sarath C. Gowd, Karthik Rajendran, Vempalli Sudharsan Varma, Recovery of value-added materials from wastewater, Current Developments in Biotechnology and Bioengineering, 2021, 10.1016/B978-0-12-821009-3.00014-2

177, Kandala Sree Rama Murthy, and V. M. Manikandan, Reversible Data Hiding using Block-wise Histogram Shifting and Run-length Encoding , International Journal of Advanced Computer Science and Applications, 2021, 10.14569/IJACSA.2021.0120511

178, Bhadra, Sampa Rania; Pradhan, Ashok Kumar; Biswas, Utpal, Multi-hop traffic grooming routing and wavelength assignment using split light trail in WDM all optical mesh networks, Journal of High Speed Networks, 2021, 10.3233/JHS-210658

179, Sharon Santhosh; Malvika Sathish; Shriya Iyer; Sujith Kalluri; Asha Anish Madhavan, One-pot synthesis of MoS₂ nanoflowers for thermal energy storage applications, Materials Letters, 2021, 10.1016/j.matlet.2021.130343

180, L N Patro; K Ramakrushna Achary; Y. Bhaskara Rao, Structural and Transport Properties of Mechanochemically Synthesized La_{0.9}Ba_{0.1}F_{2.9} and La_{0.9}Ba_{0.05}Ca_{0.05}F_{2.9}, Materials Letters, 2021, 10.1016/j.matlet.2021.130337

181, Yao, L., Zhu, D., Liao, H., Haseena, S., Ravva, M.K., Cong, S., Lan, L., Wang, Y., Li, Z., Jiang, L. and Yue, W., Correction: Fused ambipolar aza-isoidindigos with NIR absorption, Org. Chem. Front., 2021, 10.1039/D1QO90017J

182, Avishek Dey, Gauthaman Chandrabose, Paheli Ghosh, Lois A. Odampthey, Adam H.Clark, Vimalnath Selvaraj, Ramachandran Vasant Kumar, Nicholas St. J. Braithwaite, Siarhei Zhuk, Goutam Kumar Dalapati, Seeram Ramakrishna, Satheesh Krishnamurthy, Atmospheric pressure plasma engineered superhydrophilic CuO surfaces with enhanced catalytic activities, Applied Surface Science, 2021, 10.1016/j.apsusc.2020.148571

183, S. Anamalamudi, M. S. Alkathairi, E. Al Solami and A. R. Sangi, Cooperative Caching Scheme for Machine-to-Machine Information-Centric IoT Networks, IEEE Canadian journal of Electrical and Computer Engineering, 2021, 10.1109/ICJECE.2020.3046844

184, Patnala Vanitha, Nijil Lal, Anju Rani, Salla Gangi Reddy, R. P. Singh, Correlations in Scattered Perfect Optical Vortices, Journal of Optics, 2021, 10.1088/2040-8986/ac094f

2021 Publications

185, mran Pancha, Kazuhiro Takaya, Kan Tanaka and Sousuke Imamura, The Unicellular Red Alga Cyanidioschyzon merolae, an Excellent Model Organism for Elucidating Fundamental Molecular Mechanisms and Their Applications in Biofuel Production, *Plants*, 2021, 10.3390/plants10061218

186, Sandeep K.Malyan, Smita S.Kumar, Ram Kishor Fagodiya, Pooja Ghosh, Amit Kumar, Rajesh Singh, Lakhveer Singh, Biochar for Environmental Sustainability in the Energy-Water-Agroecosystem Nexus, *Renewable and Sustainable Energy Reviews*, 2021, 10.1016/j.rser.2021.111379

187, Samir Gokarn, Aparna Choudhary, Modeling the key factors influencing the reduction of food loss and waste in fresh produce supply chains, *Journal of Environmental Management*, 2021, 10.1016/j.jenvman.2021.113063

188, Sushruta Mishra, Hiren Kumar Thakkar, Pradeep Kumar Mallick, Prayag Tiwari, Atif Alamri, A sustainable IoHT based computationally intelligent healthcare monitoring system for lung cancer risk detection, *Sustainable Cities and Society*, 2021, 10.1016/j.scs.2021.103079

189, L N Patro, Y. Bhaskara Rao, , Influence of Synthesis Methodology and Excess Na on the Ionic Transport Properties of Natrium Super Ionic Conductor, Na₃Zr₂Si₂PO₁₂, *Materials Letters*, 2021, 10.1016/j.matlet.2021.130267

190, Siddiqui, Muhammad Faisal, Zahid Ullah, Lakhveer Singh, Farhana Maqbool, Sadia Qayyum, Ihsan Ullah, Ziaur Rahman, and Fazal Adnan, Role of bioelectrochemical systems for bioremediation of wastewaters and bioenergy production, *Bioremediation, Nutrients, and Other Valuable Product Recovery: Using Bioelectrochemical Systems*, 2021, DOI:10.1016/B978-0-12-821841-9.00010-4

191, Malyan, Sandeep K., Smita S. Kumar, Lakhveer Singh, Rajesh Singh, Dipak Ashok Jadhav, and Vivek Kumar, Bioelectrochemical systems for removal and recovery of heavy metals, *Bioremediation, Nutrients, and Other Valuable Product Recovery: Using Bioelectrochemical Systems*, 2021, DOI:10.1016/B978-0-12-821729-0.00005-1

192, Thapa, Bhim Sen, Sang-Eun Oh, Shaik Gouse Peera, and Lakhveer Singh, Applications of bioelectroactive fuel cells in wastewater treatment, metal removal and recovery, *Bioremediation, Nutrients, and Other Valuable Product Recovery: Using Bioelectrochemical Systems*, 2021, DOI:10.1016/B978-0-12-821729-0.00002-6

193, Thapa, Bhim Sen, Sang-Eun Oh, Shaik Gouse Peera, and Lakhveer Singh, Fundamentals of bioelectroactive fuel cells, *Bioremediation, Nutrients, and Other Valuable Product Recovery: Using Bioelectrochemical Systems*, 2021, DOI:10.1016/B978-0-12-821729-0.00001-4

194, Pratap S.Birthal, Jaweriah Hazrana, Digvijay S.Negi, Ghanshyam Pandey, Benefits of Irrigation against heat stress in Agriculture: Evidence from wheat crop in India, *Agricultural Water Management*, 2021, 10.1016/j.agwat.2021.106950

195, Prakash Jadav, Failure Criteria for Composite Blades with Wavy Edge in Aerospace Applications, *Advances in Materials and Mechanical Engineering*, 2021, 10.1007/978-981-16-0673-1_9

2021 Publications

- 196, Amit Chakraborty, Stefano Moretti, Claire H. Shepherd-Themistocleous & Harri Waltari, Extraction of neutrino Yukawa parameters from displaced vertices of sneutrinos, *Journal of High Energy Physics*, 2021, 10.1007/JHEP06(2021)027
- 197, H. K. Thakkar, P. K. Sahoo and B. Veeravalli, RENDA: Resource and Network Aware Data Placement Algorithm for Periodic Workloads in Cloud, *IEEE Transactions on Parallel and Distributed Systems*, 2021, 10.1109/TPDS.2021.3080582
- 198, Sajjan Kumar, Sai Risvanth Katragadda, Ashu Abdul, , V. Dinesh Reddy, Extended GCN for 3D Object Classification in Point Clouds , *International Journal of Advanced Computer Science and Applications*, 2021, 10.14569/IJACSA.2021.0120597
- 199, V. Dinesh Reddy, P.Ravi, Ashu Abdul, Mahesh Kumar Morampudi, Techniques for solving Shortest Vector Problem, *International Journal of Advanced Computer Science and Applications*, 2021, 10.14569/IJACSA.2021.0120598
- 200, Mahesh Kumar Morampudi, Munaga V N K Prasad, Surya Narayana Raju Undi, SviaB: Secure and verifiable multi-instance iris remote authentication using blockchain, *IET Biometrics*, 2021, DOI:10.1049/bme2.12042
- 201, A. Tabbakha, J. K. Rout, Kshira Sagar Sahoo, NZ Jhanjhi., Bankruptcy Prediction using Robust Machine Learning Model, *Turkish Journal of Computer and Mathematics Education* , 2021, doi.org/10.17762/turcomat.v12i10.4957
- 202, Shraddha Tripathi, Om Jee Pandey, Rajesh M. Hegde, Optimal Data Transfer in UAV-Assisted Edge-Networks Using 3D Beamforming, 2021 Twenty Seventh National Conference, 2021, 10.1109/NCC52529.2021.9530188
- 203, Om Jee Pandey, Naga Srinivasa Rao, and Rajesh M. Hegde, Optimal Link Scheduling for Low Latency Data Transfer over Small World WSNs, 2021 Twenty Seventh National Conference, 2021, 10.1109/NCC52529.2021.9530124
- 204, Bhaskara Rao, K. Kamala Bharathi and L. N. Patro, Review on the Synthesis and Doping Strategies in Enhancing the Na Ion Conductivity of Na₃Zr₂Si₂PO₁₂ (NASICON) Based Solid Electrolytes, *Solid State Ionics*, 2021, 10.1016/j.ssi.2021.115671
- 205, Kethavath Prem Kumar, Thirumalaisamy Rangunathan and Devara Vasumathi, Virtual Machine Consolidation using Enhanced Crow Search Optimization Algorithm in Cloud Computing Environment, *ICDCOT-2021 Springer Conference*, 2021, 10.34218/IJARET.11.12.2020.145
- 206, Amritanjali Tiwari, Amit Gautam, Saddam Sk, Deepak S. Gavali, Ranjit Thapa, and Ujjwal Pal, Controlled Loading of MoS₂ on Hierarchical Porous TiO₂ for Enhanced Photocatalytic Hydrogen Evolution, *Journal of Physical Chemistry C*, 2021, 10.1021/acs.jpcc.1c01922
- 207, , Systematic Survey of Mobile Payments, Protocols, and Security Infrastructure, *Journal of Ambient Intelligence and Humanized Computing*, 2021, 10.1007/s12652-021-03316-4

2021 Publications

- 208, Sapan Das, S. A. Edalatpanah, Jatindra Kumar Dash, A novel lexicographical-based method for trapezoidal neutrosophic linear programming problem: trapezoidal neutrosophic linear programming problem, *Neutrosophic Sets and Systems*, *Neutrosophic Sets and Systems*, 2021,
- 209, H. Bhuyan, P. P. Das, J. K. Dash and J. Killi, An Automated method for identification of key frames in Bharatanatyam Dance Videos, *IEEE Access*, 2021, 10.1109/ACCESS.2021.3079397
- 210, Aravindhavel A. Sanjay Kumar Mehta, Saleem Ali, Ramesh Reddy, Vanmathi Annamalai, and D. Narayana Rao, Micro pulse lidar measurements in coincidence with CALIPSO overpasses: Comparison of tropospheric aerosols over Kattankulathur (12.82oN, 80.04oE)., *Atmospheric Pollution Research*, 2021, 10.1016/j.apr.2021.101082
- 211, Ananthvel Aravindhavel; Sanjay Kumar Mehta, T. V. Ramesh Reddy; Saleem Ali; D. Narayana Rao, Vertical distributions and columnar properties of the aerosols during different seasons over Kattankulathur (12.82oN, 80.04oE): A semi-urban tropical coastal station., *Atmospheric Environment*, 2021, 10.1016/j.atmosenv.2021.118457
- 212, Saswata Adhikari, V.P. Anoop and S. Parui, Existence of an extremal of Sobolev inequality associated with Dunkl gradient and of Stein-Weiss inequality for D-Riesz potential, *Complex Analysis and Operator Theory*, 2021, 10.1007/s11785-020-01068-1
- 213, Murmu, S., Paul, S., Kapse, S., Thapa, R., Chattopadhyay, S., Abharana, N., Jha, S.N., Dibyendu, B. and Ghorai, U.K., Unveiling the Genesis of the High Catalytic Activity in Nickel Phthalocyanine for Electrochemical Ammonia Synthesis, *Journal of Materials Chemistry A*, 2021, 10.1039/D1TA00766A
- 214, Koshy George, Generative Adversarial Networks for Histopathology Staining, *Generative Adversarial Networks for Image-to-Image Transition*, edited by A. Nayyar, A Solanki and M Naved, 2021, 10.1016/B978-0-12-823519-5.00010-5
- 215, Kumar, S.S., Ghosh, P., Kataria, N., Kumar, D., Thakur, S., Pathania, D., Kumar, V., Nasrullah, M. and Singh, L., The Role of Conductive Nanoparticles in Anaerobic Digestion: Mechanism, Current Status and Future Perspectives, *Chemosphere*, 2021, 10.1016/j.chemosphere.2021.130601
- 216, Satya patil, Design, analysis and performance of electric scooter, *International Journal of Research in Engineering and Technology*, 2021, ----
- 217, Mathiyazhagan S and Sirisha Maganti, Analytical and numerical prediction Of hydrodynamic characteristics of microchannel , *Lecture notes of mech engg*, 2021, ----
- 218, Sudhir Raj, Adaptive control of pvtol usig h infinity based integral sliding mode control, *IEEE explore*, 2021, 10.1109/CONIT51480.2021.9498538
- 219, Jadhav, P, Passive morphing in aerospace composites, key engineering material, 2021, 10.4028/www.scientific.net/KEM.889.53

2021 Publications

- 220, Jadhav, P. and Gruha, L.Y., Failure criteria for wavy edge in aerospace composites, Lecture notes in mechanical engineering, 2021, 10.1007/978-981-16-0673-1_9
- 221, Jadhav, prakash and gruhlakshmi, Design and optimization of hybrid interface joint in fan blade of aircraft engine, Material science and engineering, 2021, <https://doi.org/10.1088/1757-899X/1126/1/012036>
- 222, Neel Gandhi ., Garlapati Nagababu and Vistapalli Janardhan, Modeling and kinematic analysis of robotic manipulator for street cleaning, lectute note in mech engg, 2021, 10.1007/978-981-16-1769-0_55
- 223, Nizami, T.K., Chakravarty, A. and Mahanta, C., Time bound online uncertainty estimation based adaptive control design for DC–DC buck converters with experimental validation, IFAC Journal of Systems and Control, 2021, <https://doi.org/10.1016/j.ifacsc.2020.100127>
- 224, Udumula, R.R., Single Input LC Series Resonant Converter Based High Brightness Light Emitting Diode Driver with ZVS, Journal of Power Technologies, 2021, 10.22541/au.161608161.12896809/v1
- 225, Sharma, S.K., Tewari, S.V., Waghmare, N., Raju, S.J., Rao, K.D. and Sharma, A., Compact Inertial Electrostatic Confinement D-D Fusion Neutron Generator, Elsevier-Annals of Nuclear Energy, 2021, 10.1016/j.anucene.2021.108358
- 226, Babu, D.L. and Sreenivasulu, T., 4-channel DWDM demultiplexer on Silicon Photonic crystal slab, IAS journal SADHANA, 2021, 10.1007/s12046-020-01531-x
- 227, Sophiya Susan S., Yellampalli, S.S., Design of 6.7 GHz ~7. 518 GHz Cross Coupled LCVCO in 180nm CMOS Technology, International Conference on Computing Methodologies and Communication, 2021, 10.1109/ICCMC51019.2021.9418027
- 228, Partha Koundinya, Mani Deepak, Jethin Sai, Optimised logarithmic multiplier design with predefined iterations, International Journal of Engineering Research and Technology, 2021,
- 229, Manjula R, B Narasamme, G Shruthi, K Nagarathna, and Girish Kumar, Artificial Olfaction for Detection and Classification of Gases using e–Nose and Machine Learning for Industrial Application, Machine Intelligence and Data Analytics for Sustainable Future Smart Cities" to be published by Springer.STUDIES IN COMPUTATIONAL INTELLIGENCE", 2021, 10.1007/978-3-030-72065-0
- 230, Bhadra, S.R., Pradhan, A.K. and Biswas, U., Assignment of dynamic light trail in WDM optical mesh networks, Journal of optics, 2021, 10.1007/s12596-021-00689-9
- 231, D. R. Denslin Brabin, Sriramulu Bojjagani, D.R.Denslin Braja, A Visible Watermarking Scheme for JPEG Images based on modification of Frequency Coefficients, Automatic Control and Computer Sciences, 2021, <https://doi.org/10.3103/S0146411621050023>
- 232, Parasa, N.A., Namgiri, J.V., Mohanty, S.N. and Dash, J.K., Introduction to Unsupervised Learning in Bioinformatics, Data Analytics in Bioinformatics: A Machine Learning Perspective, (35–50) © 2021 Scrivener Publishing LLC., 2021, <https://doi.org/10.1002/9781119785620.ch2>

2021 Publications

- 233, Manikandan, V.M., A Reversible Data Hiding Scheme through Encryption using Rotated Stream Cipher, Computer Science, 2021, 10.7494/csci.2021.22.2.3843
- 234, Manikandan, V.M., A Novel Reversible Data Hiding in Encrypted Images by Controlled Swapping of Adjacent Pixels, 7th International Conference on Mathematics and Computing, IEST, India., 2021,
- 235, Tripathi, D., Edla, D.R., Bablani, A., Shukla, A.K. and Reddy, B.R., Experimental analysis of machine learning methods for credit score classification, Progress in Artificial Intelligence, 2021, 10.1007/s13748-021-00238-2
- 236, Tripathi, D., Ramachandra Reddy, B., Padmanabha Reddy, Y.C.A., Shukla, A.K., Kumar, R.K. and Sharma, N.K., BAT algorithm based feature selection: Application in credit scoring, Journal of Intelligent & Fuzzy Systems, 2021, 10.3233/JIFS-189876
- 237, Olivia, Parahroop, Sobin. CC, Prediction of Sickle Cell Disease Using Machine Learning Techniques, International Journal of Engineering Research and Technology (IJERT), 2021,
- 238, M. Tiwary, P. Mishra, S. M. Jain, and Kshira Sagar Sahoo, AutoDBaaS: Autonomous Database as a Service for managing backing services, EDBT/ICDT 2021,Industrial Track, Nicosia, Cyprus, 2021, <http://dx.doi.org/10.5441/002/edbt.2021.70>
- 239, Anasuya Sahoo and Rajiv Senapati, A Novel Approach for Distributed Frequent Pattern Mining Algorithm using Load-Matrix, IEEE's International Conference on Intelligent Technologies (CONIT), 2021, 10.1109/CONIT51480.2021.9498411
- 240, Jena, S., Sahu, L.K., Mishra, S.K. and Sahoo, B., VM Consolidation based on Overload Detection and VM Selection Policy, 11th IEEE International Conference on Cloud Computing, Data Science & Engineering (Confluence), 2021., 2021, 10.1109/Confluence51648.2021.9377039
- 241, Chouhan Rath, Amit Mandal and Anirban Sarkar, An Event-B based Device description model in IoT with the support of Multimodal system, 8th International Doctoral Symposium on Applied Computation and Security Systems (ACSS-2021), 2021, 10.1007/978-981-16-4287-6_1
- 242, Guha, R, Improving the Performance of an Artificial Intelligence Recommendation Engine with Deep Learning Neural Nets., 6th International Conference for Convergence of Technology (I2CT).Pune, India, April 2021, 2021, 10.1109/I2CT51068.2021.9417936
- 243, V Dinesh Reddy, GSVRK Rao, GR Gangadharan, Forecasting Energy Consumption Using Deep Echo State Networks Optimized with Genetic Algorithm, Artificial Intelligence, Machine Learning, and Data Science Technologies: Future Impact and Well-Being for Society 5.0, CRC Press, Tylor and Francis., 2021,
- 244, Murthy A.N, Extraction of Sand from Waste dumps of Mining -A new approach to address the Environmental Issue of Goa, The Asian Review of Civil Engineering, 2021,
- 245, Murthy A.N, Experimental Study on Water Percolating Concrete, International Journal of Engineering and Advanced Technology (IJEAT), 2021, 10.35940/ijeat.D2427.0410421

2021 Publications

246, Kulshrestha, A., Pancha, I., Mishra, S. and Kumar, A., Deep eutectic solvents and Ionic liquid assisted hydrolysis of microalgal biomass: A promising approach towards sustainable biofuel production, *Journal of Molecular Liquids*, 2021, <https://doi.org/10.1016/j.molliq.2021.116264>

247, Gopisetty, R., Ragunathan, T. and Bindu, C.S., Improving Performance of a Distributed File System using Hierarchical Collaborative Global Caching Algorithm with Rank-Based Replacement Technique, *International Journal of Communication Networks and Distributed Systems*, 2021, <https://doi.org/10.1504/IJCND.2021.114445>

248, Karra, C., Venkatachalam, P., Duru, K.K., Maram, P.S., Madhavan, A.A. and Kalluri, S., Application-driven Industrial-scale Manufacturing of Li/Na-ion Battery Cathodes, *Journal of The Electrochemical Society*, 2021, <https://orcid.org/0000-0002-5179-1610>

249, Ashu and his group, Strategic AI-driven intelligence modelling for identification and mitigation of cyberattack on Banking Systems, *International Journal of Engineering Research and Technology*, 2021,

250, Chaithanya , Estimating Degree Of Emotional Polarity Of Textual Sentence Using Sentimental Analysis, *International Journal of Advanced Research in Engineering and Technology*, 2021,

251, Thapa, R., *Advanced Catalyst, Catalysis Today*, 2021,

252, Jebaslinhepzybai, B.T., Partheeban, T., Gavali, D.S., Thapa, R. and Sasidharan, M., One-pot solvothermal synthesis of Co₂P nanoparticles: an efficient HER and OER electrocatalysts, *International Journal of Hydrogen Energy*, 2021, [10.1016/j.ijhydene.2021.04.022](https://doi.org/10.1016/j.ijhydene.2021.04.022)

253, Samal, R., Bhat, M., Kapse, S., Thapa, R., Late, D.J. and Rout, C.S., Enhanced energy storage performance and theoretical studies of 3D cuboidal Manganese diselenides embedded multiwalled carbon nanotubes composite, *Journal of Colloid & Interface Science*, 2021, [10.1016/j.jcis.2021.04.024](https://doi.org/10.1016/j.jcis.2021.04.024)

254, Venkata Sai Rama Krishna Sighakolli, Madhusudan Veerla, Bhargavi Siddineni, IoT Based Smart Emergency Locket to Ensure Protection for Women, *International journal of engineering research and technology*, 2021,

255, Parshal Chitrakar, Implementation of consensus with TCP/IP, *International journal of engineering research and technology*, 2021,

256, Ghosh, A., Saini, H., Sarkar, A., Guha, P., Samantara, A.K., Thapa, R., Mandal, S., Mandal, A., Behera, J.N., Ray, S.K. and Goswami, D.K., Nitrogen Vacancy and Hydrogen Substitution Mediated Tunable Optoelectronic Properties of g-C₃N₄ 2D Layered Structures: Applications towards Blue LED to Broad-band Photodetection, *Applied Surface Science*, 2021, [10.1016/j.apsusc.2021.149773](https://doi.org/10.1016/j.apsusc.2021.149773)

257, Han, K., Wu, L., Cao, Y., Wang, H., Ye, C., Huang, K., Motapothula, M., Xing, H., Li, X., Qi, D.C. and Li, X., Enhanced Metal–Insulator Transition in Freestanding VO₂ Down to 5 nm Thickness, *ACS Applied Materials and Interfaces* , 2021, [10.1021/acsami.1c01581](https://doi.org/10.1021/acsami.1c01581)

2021 Publications

- 258, Rohit Chivukula, T.Jaya Lakshmi, Saleti Sumalatha and Lohith Ranganadha Reddy, Ontology based Food Recommendation System, 5th International Conference on ICT for Intelligent Systems, 2021,
- 259, S.Sumalatha, T.Jayalakshmi, and T.Ragunathan, Distributed mining of high utility time interval sequential patterns with multiple minimum utility thresholds, 34th International Conference on Industrial, Engineering & other Applications of Applied Intelligent Systems, 2021, 10.1007/978-3-030-79457-6_8
- 260, Jahnavi P., Makkena A., and Maheshwari K., Human identify in a video sequence using an advanced learning approach, International Journal of Advanced Research In Engineering and Technology , 2021, 10.34218/IJARET.12.3.2021.078
- 261, Sindhura, S.P. and Abdul, A., VIRTUES AND SHORTCOMINGS OF ARTIFICIAL INTELLIGENCE IN GRAPHIC DESIGN ARENA, , 2021, 10.34218/IJARET.12.3.2021.076
- 262, Rohit Chivukula, Mohan Vamsi Sajja, T. Jaya Lakshmi and Muddana Harini, Empirical Study on Microsoft Malware Classification, International Journal of Advanced Computer Science and Applications, 2021, 10.14569/IJACSA.2021.0120361
- 263, Yamani, S.V., Rani, N.U. and Vaddi, R., An Energy-Efficient Hybrid Tunnel FET based STT-MRAM Memory Cell Design at Low VDD, Int. Journal of Electronics, 2021, 10.1080/00207217.2021.1914191
- 264, Raghuram, A. S. S., Basha, B. M., & Raviteja, K. V. N. S, Variability Characterization of SWCC for Clay & Silt and its Application to Infinite Slope Reliability, Journal of Materials in Civil Engineering, 2021, 10.1061/(ASCE)MT.1943-5533.0003809
- 265, Gupta J.P., Singh A., Kumar R. K. , A Computer-Based Disease Prediction and Medicine Recommendation System Using Machine Learning Approach, International Journal of Advanced Research in Engineering and Technology, 2021, 10.34218/IJARET.12.3.2021.062
- 266, Vemula M., Tadiboyina V., Sharma N. , An Experimental Study of Heart Disease Prediction Using Different Supervised Machine Learning Algorithms, International Journal of Engineering Research and Technology, 2021,
- 267, Ega J., Krishna D. S. S., Manikandan V M, A Review on Digital Image Forgery Detection, International Journal of Engineering Research and Technology, 2021,
- 268, Basu S., Das S. , A Torelli type theorem for nodal curves, International Journal of Mathematics, 2021, 10.1142/S0129167X21500415
- 269, Singh, L., Miller, A. G., Wang, L., & Liu, H., Scaling-up Up-flow Microbial Electrolysis Cells with a Compact Electrode Configuration for Continuous Hydrogen Production, Bioresource Technology, 2021, 10.1016/j.biortech.2021.125030
- 270, Varma M., Sumalatha S., Reddy A. , Distributed Mining of High Utility Sequential Patterns with Negative Item Values, International Journal of Advanced Computer Science and Applications, 2021, 10.14569/IJACSA.2021.0120370

2021 Publications

- 271, Harsha S., Anamalamudi S., Enduri M. K. , Automated Detection of COVID-19 using Deep Learning, International Journal of Advanced Trends in Computer Science and Engineering, 2021, 10.30534/ijatcse/2021/511022021
- 272, Hajarathaiiah K., Anamalamudi S., Enduri M. K. and Pamulapati K. P. , PERFORMANCE COMPARISON OF CACHE BASED ROUTING IN INFORMATION CENTRIC IoT NETWORKS, International Journal of Advanced Trends in Computer Science and Engineering, 2021, 10.30534/ijatcse/2021/231022021
- 273, Krishna P., Kamraan S. F., Priyanka, STOCK MARKET PREDICTION USING SENTIMENTAL ANALYSIS - A VADER APPROACH, International Journal of Advanced Research in Engineering and Technology, 2021, 10.34218/IJARET.12.3.2021.031
- 274, Paul J. K., Yuvaraj T., Manikandan V. M. , A MULTIPURPOSE ARTIFICIAL INTELLIGENCE BASED ATTENTIVENESS MONITORING SYSTEM, International Journal of Advanced Research in Engineering and Technology, 2021, 10.34218/IJARET.12.2.2021.068
- 275, Hajarathaiiah K., Anamalamudi S., Enduri M. K. , A Survey on Recent Methods of Finding Influential Nodes in Complex Networks, International Journal of Advanced Trends in Computer Science and Engineering, 2021, 10.30534/ijatcse/2021/501022021
- 276, Madhu G., Govardhan A., Srinivas B. S., Sahoo K. S., Jhanjhi N. Z., VardhanK. S., Rohit B., Imperative Dynamic Routing Between Capsules Network for Malaria Classification, Computers, Materials & Continua, 2021, 10.32604/cmc.2021.016114
- 277, Yadlapalli H., Ravi S. and Manikandan V. M., A NOVEL ONLINE EXAMINATION MANAGEMENT FRAMEWORK WITH DOCUMENT WATERMARKING, International Journal of Management, 2021, 10.34218/IJM.12.3.2021.057
- 278, Mahto, T., Kumar, R., Malik, H., Hussain, S. M., & Ustun, T. S., Fractional Order Fuzzy Based Virtual Inertia Controller Design for Frequency Stability in Isolated Hybrid Power Systems, Energies, 2021, 10.3390/en14061634
- 279, Jani, H., Linghu, J., Hooda, S. et al., Reversible hydrogen control of antiferromagnetic anisotropy in α -Fe₂O₃, Nature Communications, 2021, 10.1038/s41467-021-21807-y
- 280, Pedireddy, S., Jimenez-Sandoval, R., Ravva, M.K., Nayak, C., Anjum, D.H., Jha, S.N., Katuri, K.P. and Saikaly, P.E., Harnessing the Extracellular Electron Transfer Capability of Geobacter sulfurreducens for Ambient Synthesis of Stable Bifunctional Single-Atom Electrocatalyst for Water Splitting, Advanced Functional Materials, 2021, 10.1002/adfm.202010916
- 281, Gumber M., Sharma A., Joseph S.D., Embarrassment in the Context of Negative Emotions and Its Effects on Information Processing, Emotion and Information Processing, 2021, 10.1007/978-3-030-48849-9_8

2021 Publications

- 282, Pathania, D., Sharma, A., Kumar, S., Srivastava, A. K., Kumar, A., & Singh, L., Bio-synthesized Cu-ZnO hetero-nanostructure for catalytic degradation of organophosphate chlorpyrifos under solar illumination, *Chemosphere*, 2021, 10.1016/j.chemosphere.2021.130315
- 283, Negi, C., Kandwal, P., Rawat, J., Sharma, M., Sharma, H., Dalapati, G. and Dwivedi, C., Carbon-doped Titanium Dioxide Nanoparticles for Visible Light Driven Photocatalytic Activity, *Applied Surface Science*, 2021, 10.1016/j.apsusc.2021.149553
- 284, A Adilakshmi, R. Alapati, A. Venkateswarlu and R. V. Gudapati, THE INTERNET OF THINGS AND AGRICULTURE: AN ENRICHING AND EMPOWERING COMBINATION, *International Journal of Advanced Research in Engineering and Technology*, 2021, 10.34218/IJARET.12.3.2021.010
- 285, Roy, S. and Biswas, S., Size distribution of emitted energies in local load sharing fiber bundles, *Frontiers in Physics*, 2021, 10.3389/fphy.2021.643602
- 286, Akhil, S., Dutt, V.V. and Mishra, N., Modification for Impro"Surfaceving Photoredox Activity of CsPbBr₃ Nanocrystals, *Nanoscale Advances*, 2021, 10.1039/D1NA00091H
- 287, Pathak, P., Singh, V.K. and Chabhadiya, K., Exhausted LNCM-Cathode Batteries using Oxalic and Sulfuric Acid Lixiviants, *Journal of Metals*, 2021, 10.1007/s11837-021-04631-z
- 288, Thottathil, S.D. and Prairie, Y.T., Coupling of stable carbon isotopic signature of methane and ebullitive fluxes in northern temperate lakes, *Science of the Total Environment*, 2021, 10.1016/j.scitotenv.2021.146117
- 289, Paramita Banerjee, G.P. Das, Ranjit Thapa, Computationally Exploring the Role of S-dopant and S-linker in Activating the Catalytic Efficiency of Graphene Quantum Dot for ORR,, *Catalysis Today*, 2021, 10.1016/j.cattod.2021.03.001
- 290, Pathak, P, Preface, *Handbook of Environmental Chemistry*, 2021,
- 291, Pujara, Y., Govani, J., Chabhadiya, K., Patel, H., Vaishnav, K. and Pathak, P., Waste-to-energy: Suitable approaches for developing countries, *Handbook of Environmental Chemistry*, 2021, 10.1007/698_2020_611
- 292, Manna, R. and Verma, R.B., A THREE SOLUTIONS THEOREM FOR PUCCI'S EXTREMAL OPERATOR AND ITS APPLICATION, *Topological Methods in Nonlinear Analysis*, 2021, 10.12775/TMNA.yyyy.0
- 293, Manna, R. and Verma, R.B., Borderline gradient estimates at the boundary in Carnot groups, *Proceedings of the Royal Society of Edinburgh Section A: Mathematics*, 2021, 10.1017/prm.2020.86
- 294, Awasthi, M.K., Sarsaiya, S., Wainaina, S., Rajendran, K., Awasthi, S.K., Liu, T., Duan, Y., Jain, A., Sindhu, R., Binod, P. and Pandey, A., Techno-economics and life-cycle assessment of biological and thermochemical treatment of bio-waste, *Renewable and Sustainable Energy Reviews*, 2021, 10.1016/j.rser.2021.110837

2021 Publications

295, Alfonso-Cardero, A., Pagés-Díaz, J., Contino, F., Rajendran, K. and Lorenzo-LLanes, J., Process simulation and techno-economic assessment of vinasse-to- biogas in Cuba: deterministic and uncertainty analysis, *Chemical Engineering Research and Design*, 2021, 10.1016/j.cherd.2021.02.031

296, Chabhadiya, K., Srivastava, R.R. and Pathak, P., Two-step leaching process and kinetics for an eco-friendly recycling of critical metals from spent Li-ion batteries, *Journal of Environmental Chemical Engineering*, 2021, 10.1016/j.jece.2021.105232

297, Uttam Ghorai, Sourav Paul, Biswajit Ghorai, Ashadul Adalder, Samadhan Kapse, Ranjit Thapa, Abharana Nagendra and Amal Gain, Scalable Production of Cobalt Phthalocyanine Nanotubes: Efficient and Robust Hollow Electrocatalyst for Ammonia Synthesis at Room Temperature, *ACS Nano*, 2021, 10.1021/acsnano.0c10596

298, Pandey, G. and Kumari, S., Dynamics of agricultural growth and diversification in Eastern India, *Journal of Agribusiness in Developing and Emerging Economies*, 2021, 10.1108/JADEE-06-2020-0131

299, Egala, B.S., Pradhan, A.K., Badarla, V.R. and Mohanty, S.P., Fortified-Chain: A Blockchain Based Framework for Security and Privacy Assured Internet of Medical Things with Effective Access Control, *IEEE Internet of Things*, 2021, 10.1109/JIOT.2021.3058946

300, Talluri, L.S.R.K., Thirumalaisamy, R., Kota, R., Sadi, R.P.R., KC, U., Naha, R.K. and Mahanti, A., Providing Consistent State to Distributed Storage System, *Computers*, 2021, 10.3390/computers10020023

301, Akhil, S., Dutt, V.V. and Mishra, N., Amine Free Synthesis of Colloidal Cesium Lead Halide Perovskite Nanocrystals, *ChemNanoMat*, 2021, 10.1002/cnma.202100002

302, Birthal, P.S. and Pandey, G., Structural Transformation and Sources of Growth in South Asian Agriculture, *Transforming Agriculture in South Asia: The Role of Value Chains*, 2021, 10.4324/9781003024996-5

303, Paul, J.K., Yuvaraj, T. and Gundepudi, K., Demonstrating Low-Cost Unmanned Aerial Vehicle for Anti-Poaching, *IEEE Xplore*, 2021, 10.1109/INDICON49873.2020.9342131

304, Pathak, P., Renewable energy as a sustainable alternative: A way forward, *Springer*, 2021, 10.1007/698_2020_634

305, Mahto, T., Malik, H., Mukherjee, V., Alotaibi, M.A. and Almutairi, A., Renewable generation based hybrid power system control using fractional order-fuzzy controller, *Energy Reports*, 2021, 10.1016/j.egy.2021.01.022

306, Brinda, K.N., Małeck, J.G., Yhobu, Z., Nagaraju, D.H., Budagumpi, S., Erakulan, E.S. and Thapa, R., Novel Carbene Anchored Molecular Catalysts for Hydrogen Evolution Reactions, *The Journal of Physical Chemistry C*, 2021, 10.1021/acs.jpcc.0c06701

307, Yao, L., Zhu, D., Liao, H., Haseena, S., Ravva, M.K., Cong, S., Lan, L., Wang, Y., Li, Z., Jiang, L. and Yue, W., Fused Ambipolar Aza-isoidindigos with NIR absorption, *Org. Chem. Front.*, 2021, 10.1039/D0QO01495H

2021 Publications

308, Verma, M. K., Shakya, S., Kumar, P., Madhavi, J., Murugaiyan, J., and Rao, M. V. R., Trends in packaging material for food products: historical background, current scenario, and future prospects, *Journal of Food Science and Technology*, 2021, 10.1007/s13197-021-04964-2

309, Venkateswarlu, D.A., Adilakshmi, D.A. and Alapati, R., SUSTAINABLE DEVELOPMENT VS ENVIRONMENT PROTECTION- ACHIEVING A FINE BALANCE: A CASE STUDY OF ANDHRA PRADESH, *International Journal of Advanced Research Engineering and Technology*, 2021,

310, Bandaru, S., Mahata, C., Chakraborty, S., Ghosh, S., Algadi, H., Ramakrishna, S. and Dalapati, G.K., Nanostructured CuO on Silicon using Chemical Bath Deposition process and Sputter Seed Layer, *Journal of Electronic Materials*, 2021, 10.1007/s11664-021-08772-4

311, Borah, M., Sikdar, A., Kapse, S., Majumdar, A., Dutta, P., Karim, G.M., Deb, S., Thapa, R. and Maiti, U.N., Stable and boosted oxygen evolution efficiency of mixed metal oxide and borate planner heterostructure over heteroatom (N) doped electrochemically exfoliated graphite foam, *Catalysis Today*, 2021, 10.1016/j.cattod.2021.01.007

312, Reddy A. V., Kamesh A.V.S, Mediating role of trust on the relationship between servant leadership and team commitment among the employees of IT-sector in south India, *Organizational Psychology*, 2021,

313, Kondusamy, D., Kaushal, M., Ahlawat, S. and Rajendran, K., The role of techno-economic implications and governmental policies in accelerating the promotion of biomethane technologies, *Emerging Technologies and Biological Systems for Biogas Upgrading*, 2021, 10.1016/B978-0-12-822808-1.00016-7

314, Lakshmanan, A., Gavali, D.S., Thapa, R. and Sarkar, D., Synthesis of CTAB Functionalized Large-Scale Nanofibers Air Filter Media for Efficient PM2.5 Capture Capacity with Low Airflow Resistance, *ACS Applied Polymer Materials*, 2021, 10.1021/acsapm.0c01203

315, Mishra, P., ab Wahid, Z., Singh, L., Zaid, R.M., Tabassum, S., Sakinah, M. and Jiang, X, Synergistic effect of ultrasonic and microwave pre-treatment on improved biohydrogen generation from palm oil mill effluent, *Biomass Conversion and Biorefinery journal*, 2021, 10.1007/s13399-021-01285-4

316, Singh, L., Mahapatra, D.M. and Thakur, S., Bioremediation, Nutrients, and Other Valuable Product Recovery; Using Bioelectrochemical Systems, , 2021,

317, Singh, L., Mahapatra, D.M., Delivering Low-Carbon Biofuels with Bioproduct Recovery; An Integrated Approach to Commercializing Bioelectrochemical Systems, , 2021,

318, Duru, K.K., Karra, C., Venkatachalam, P., Betha, S.A., Madhavan, A.A. and Kalluri, S., Critical Insights into Fast Charging Techniques for Lithium-ion Batteries in Electric Vehicles', *IEEE Transactions on Device and Materials Reliability*, 2021, 10.1109/TDMR.2021.3051840