

Q1 JOURNALS

476. Lakshmi Sirisha Maganti, Mathiyazhagan Shanmugam, Improvement of uniformity of irradiance on truncated compound parabolic concentrator by introducing the homogenizer ratio, *Renewable Energy*, 2023, Just Accepted
475. Jatis Kumar Dash, Recent Development in Novel Lithium-Sulfur Nanofiber Separators: A Review of the Latest Fabrication and Performance Optimizations, *Membranes*, 2023, Just Accepted
474. Randhir Kumar, Distributed AI and Blockchain for 6G-assisted Terrestrial and Non-Terrestrial Networks: Challenge and Future Directions, *IEEE Network Magazine*, Just Accepted, 2023
473. Pardha Saradhi Maram, Praneash Venkatachalam, Critical Perspective on the Industry-centred Engineering of Single-Crystalline Ni-rich Cathodes, *ChemNanoMat*, Just Accepted, 2023
472. Syed Tajammul Ahmad, Reconfigurable Photonic Integrated Transmitter for Metro-Access Networks, *IEEE Journal of Optical Communication and Networks (JOCN)*, Just Accepted, 2023,
471. Soni Wadhwa, Jintu Alias, Kochi: provincialising postcolonial metro-cosmopolitan spatialities, *Cultural Geographies*, Just Accepted, 2023
470. L N Patro, K. Ramakrushna Achary, Y. Bhaskara Rao, Enhanced Ionic Conductivity of Na-excess $\text{Na}_3\text{Zr}_2\text{Si}_2\text{PO}_{12}$ Solid Electrolyte by Tuning its Elemental Composition and Sintering Temperature, *Journal of Materials Science*, 2023, Just Accepted
469. Anish Das, Sebastian Fehse, Matthias Polack, Rajapandiyan Panneerselvam, and Detlev Belder, Surface-Enhanced Raman Spectroscopic Probing in Digital Microfluidics through a Microspray Hole, *Analytical Chemistry*, 95, 2, 1262–1272, 2023, DOI:10.1021/acs.analchem.2c04053
468. Karthik Rajendran, Vigneswaran V.S, Enhancing heat transfer performance of automotive radiator with H_2O / activated carbon nanofluids, *Journal of molecular liquids*, 371, 2022, DOI:10.1016/j.molliq.2022.121153
467. Nilanjon Naskar, Weina Liu, Haoyuan Qi, Anne Stumper, Stephan Fischer, Thomas Diemant, R. Jürgen Behm, Ute Kaiser, Sven Rau, Tanja Weil, and Sabyasachi Chakraborty, A Carbon Nanodot Based Near-Infrared Photosensitizer with a Protein-Ruthenium Shell for Low-Power Photodynamic Applications, *ACS Appl. Mater. Interfaces*, 2022, Just Accepted DOI: 10.1021/acsami.2c08585
466. Goutam Pramanik, Soumabha Bag & Sabyasachi Chakraborty, Fluorescent nanodiamond for nanotheranostic applications, *Microchimica Acta*, 2022, Just Accepted, DOI: 10.1007/s00604-022-05545-6
465. Sumit Kumar, Gyan Prakesh, Bhumi Gupta, Giuseppe Cappiello, How e-WOM influences consumers' purchase intention towards private label brands on e-commerce platforms, *Journal - Technological Forecasting & Social Change*, 2022, 187, DOI: <https://doi.org/10.1016/j.techfore.2022.122199>
464. Murali Krishna Enduri, V. Sateeshkrishna Dhuli, Satish Anamalamudi, Koduru Hazarathaiiah, Generalization of Relative Change in a Centrality Measure to Identify Vital Nodes in Complex Networks, *IEEE Access*, 2022, 11, NA
463. Mahesh Kumar Ravva, Sheik Haseena, Theoretical studies on donor-acceptor based macrocycles for organic solar cell applications, *Scientific Reports*, 2022, 12, DOI: 10.1038/s41598-022-19348-5

462. Ranjit Thapa, Spandana Gonuguntla, Saddam Sk, Anjana Tripathi, Gopinath Jonnalagadda, Chandrani Nayak, D. Bhattacharyya, S. N. Jha, Annadanam V. Sesa Sainath, Vijayanand Perupogu, Ujjwal Pal, Anisotropic Phenanthroline based Ruthenium Polymer/Ti(MOF) triggers efficient H₂ generation, *Communication Chemistry*, 2022, 5, DOI: 10.1038/s42004-022-00763-8
461. Patro.LN., Y. Bhaskara Rao, K. Ramakrushna Achary, and Dr Lakshmi Narayana Patro, Enhanced Electrochemical Performance of Na₃V₂(PO₄)₃/C Cathode Material upon Doping with Mn/Fe for Na-ion Batteries, *ACS Omega*, 2022, 7, 48192-48201, DOI: 10.1021/acsomega.2c06261
460. Pranab Mandal, Ramakrishna Rao Akurati, Nitchal Kiran Jaladi, Srinivasa Rao Kurapati, Govinda Kopuseti, Mounika Choppadandi, Preparation, characterization and study of magnetic induction heating of Co-Cu nanoparticles, *Materials Today Communications*, 2022, 34, DOI: 10.1016/j.mtcomm.2022.104964
459. Mallikarjuna Rao M, Arun Nimmala, Anand P Pathak, M Ghanashyam Krishna, Venkata Sai Nageswara Rao Sunkaranam, Radiation Response of HfO_x-Based Resistive Random Access Memory (RRAM) Devices, *ACS Applied Electronic Materials*, 2022, 4, 5594-5601, DOI: 10.1021/acsaelm.2c01180
458. Elakkiya, Multi-Cohort whale optimization with search space tightening for engineering optimization problems, *Neural Computing and Applications*, 2022, Just Accepted, DOI: <https://doi.org/10.1007/s00521-022-08139-8>.
457. Jayaseelan Murugaiyan, Katia Iskandar, Dalal Hammoudi Halat , Said El Hage , Vindana Chibabhai , Saranya Adukkadukkam , Christine Roques , Laurent Molinier , Pascale Salameh, Maarten Van Dongen, Antibiotic Discovery and Resistance: The Chase and the Race, *Antibiotics*, 2022, 11, 1-38, DOI: 10.3390/antibiotics11020182
456. Sonali Monadal, Mathematical Analysis of Rayleigh waves at non-planar boundary between orthotropic and micropolar media, *International Journal of Geomechanics*, 2022, Just Accepted
455. Pankaj Pathak, Tejaswini MSSR, D.K. Gupta, Co-combustion of multilayered plastic waste blend with biomass: Thermokinetics and synergistic effect, *Fuel*, 2022, 337, DOI: <https://doi.org/10.1016/j.fuel.2022.127168>
454. Muhammad Muazu Bala, Shailender Singh, Dhruva Kumar Gautam, Stochastic frontier approach to efficiency analysis of health facilities in providing services for non-communicable diseases in eight LMICs, *International Health*, 2022, 0, 1-14, DOI: 10.1093/inthealth/iha080
453. Anjana Tripathi, Yoshiyuki Kawazoe, Ranjit Thapa, First-Principles identification of CO oxidation via LH mechanism over ER mechanism on metal-boron centered single-metal dual site catalyst, *Molecular Catalysis*, 2022, Just Accepted
452. Ashok Kumar Pradhan, Shubham Gupta, Kshirasagar Sahoo, Bhaskara Santosh Eagala, A Secure Blockchain Based Pandemic Mitigation Assisting System, *Sustainability*, 2022, Just Accepted
451. Anirban Ghosh, Satish Kumar Tiwari, Naga Srinivasarao Chilamkurty, Omjee Pandey, Energy and Throughput Management in Delay-Constrained Small-World UAV-IoT Network, *IEEE Internet of Things*, 2022, Just Accepted
450. Sumit Kumar, Consumers' purchase intention towards Private Label Brands on e-commerce platforms, *Technological Forecasting & Social Change*, 2022, Just Accepted

449. Satyam Verma, MODIS-Derived Fire Characteristics and Greenhouse Gas Emissions from Cropland Residue Burning in Central India, Sustainability, 2022, Just Accepted
448. KousikDas, PoulomeeCoomar,PalashDebnath,SwatiVerma,PreronaDas,AshisBiswas, Abhijit Mukherjee, Arsenic enriched groundwater discharge to a tropical ocean: Understanding controls and processes, Environmental Pollution, 2022, Just Accepted, DOI: 10.1016/j.envpol.2022.120838
447. Kamala Kumari Duru, Praneash Venkatachalam, Chanakya Karra, Asha Anish Madhavan, Sambasivam Sangaraju and Sujith Kalluri, Equivalent Circuit Model Parameters Estimation of Lithium-Ion Batteries Using Cuckoo Search Algorithm, The Electrochemical Society, 2022,Just Accepted, DOI:10.1149/1945-7111/aca6a5
446. Rajapandiyan, Jayasree K, Transition Metal-Based Electrocatalysts: Applications in Green Hydrogen Production & Storage, ACS Symposium Series, 2022, 58, 7874-7889, NA
445. Deblina Dutta,Rahul Rautela,Lohit Kumar Srinivas Gujjala,Debajyoti Kundu,Pooja Sharma, Mamta Tembhare,Sunil Kumar, A review on recovery processes of metals from E-waste: A green perspective, Science of the Total Environment, 2022, 859(2), DOI:10.1016/j.scitotenv. 2022.160391
444. YanfeiZhao,SheikHaseena,Mahesh KumarRavva,ShengjieZhang,XiangLi, JiandongJiang, YujunFu,Sahikalnal,QiWang,YazhouWang,WanYue,IainMcCulloch,DeyanHe, Side chain engineering enhances the high-temperature resilience and ambient stability of organic synaptic transistors for neuromorphic applications, Nano Energy, 2022, 104, DOI: 10.1016/j.nanoen.2022.107985
443. Suresh Saini, Deepak S. Gavali, Ramesh Bhawar, Ranjit Thapa, Rajendra S. Dhayal, and Shubhankar Kumar Bose, Facile synthesis of alkyl and aryl boronate esters enabled by carbon nanotubes supported copper catalyst, Catalysis Science & Technology, 2022, Just Accepted , DOI: 10.1039/D2CY01741E
442. Shwetha Kolathur Ramachandra, D.H.Nagaraju, Samadhan Kapse, Ranjit Thapa, Srinivasa Budagumpi, Zhoveta Yhobu, Synergetic Effect of Ru @ Octahedral Site of Fe₃O₄ and Charge Transfer from rGO to Ru/Fe₃O₄for Improved Hydrogen Evolution Reaction- Experimental and DFT Studies, Materials Letters, 2022, 331, DOI:10.1016/j.matlet.2022.133450
441. Saleti Sumalatha, jayalakshmi Tangirala, Mining High Utility Time Interval Sequences using MapReduce Approach: Multiple Utility Framework, IEEE Access journal, 2022, Just Accepted
440. Randhir Kumar, Deep Learning-based Blockchain for Secure Zero Touch Networks, IEEE Communications, 2022, Just Accepted
439. L N Patro, K. Ramakrushna Achary, Y. Bhaskara Rao, Dipak Bhosale, Fast ion transport in mechanochemically synthesized SnF₂ based solid electrolyte, NH₄Sn₂F₅ , Solid State Ionics, 2022, Just Accepted
438. Latika Patel,Shoji D. Thottathil,Rashmi Singh, Land use drivers of riverine methane dynamics in a tropical river basin, India, The Nature Indexed Journal, "Water Research, 2022, Just Accepted
437. Nimai Mishra, Rahul Singh ,Syed Akhil ,Manoj Palabathuni ,Subarna Biswas, Near-Unity Photoluminescence Quantum Yield of Green-Emitting Graded Alloy Core/Shell Quantum Dots by z-type Ligand Passivation for Display Applications, ACS Applied Nano Materials, 2022, Just Accepted
436. Lakshmi Sirisha Maganti, Multi-objective optimization of parallel microchannel heat sink with inlet/outlet U, I, Z type manifold configuration by RSM and NSGA-II, International Journal of Heat and Mass Transfer, 2022

435. Satyam Verma, Reliability of cross-regional applications of global fire danger models: a Peruvian case study, *Fire Ecology*, 2022, Just Accepted
434. Sabyasachi Mukhopadhyay, Effect of formamidinium (FA) ions on mixed 'A'-site based bromide perovskite (APbBr₃) thin films, *New Journal of Chemistry*, 2022, Just Accepted
433. Sheela Singh, Investigation on High Entropy Alloys as Interconnect Material for Intermediate Temperature Solid Oxide Fuel Cells, *Alloys and Compounds*, 2022, Just Accepted
432. Kshira Sagar Sahoo, Ranumayee Sing, Sourav Kumar Bhoi, Niranjan Panigrahi, Nz Jhanjhi, Mohammed A. AlZain, A Whale Optimization Algorithm Based Resource Allocation Scheme for Cloud-Fog Based IoT Applications, *Electronics*, 2022, 11(19), 3207, DOI:10.3390/electronics11193207
431. Nitul Dutta, A bargain game theory assisted interest packet forwarding strategy for information centric network, *Journal of Network and Computer Applications (JNCA)*, 2022, Just Accepted
430. Shweta Srivastava, Vertical characteristics of precipitating cloud systems during different phases of life cycle of cloud systems using satellite-based radar over tropical oceanic areas, *Journal of Applied and Natural Science*, 2022, Just Accepted
429. Sudhakar Tummala, Jungeun Kim, Seifedine Kadry, BreaST-Net: Multi-Class Classification of Breast Cancer from Histopathological Images Using Ensemble of Swin Transformers, *Mathematics*, 2022, 10(21), 4109, DOI: 10.3390/math10214109
428. Ramanjaneya Reddy, Tarkeshwar Mahto, B. Lokeshgupta, Maya Vijayan, Optimal PI Controller Based Hybrid Energy Storage System in DC Microgrid, *Sustainability Journal*, 2022, Just Accepted
427. Subhankar Ghatak, An Improved Tube Rearrangement Strategy for Choice-based Surveillance Video Synopsis Generation, *Digital Signal Processing*, 2022, Just Accepted
426. Esha Saha, Pradeep Rathore, Case mix-based resource allocation under uncertainty in hospitals: Physicians being the scarce resource, *Computers & Industrial Engineering*, 2022, 174, DOI: <https://doi.org/10.1016/j.cie.2022.108767>
425. T. Ragunathan, Anusha Nalajala, Efficient Prefetching and Client-side Caching Algorithms for Improving the Performance of Read Operations in Distributed File Systems, *IEEE Access journal*, 2022, Just Accepted
424. Anil K Suresh, Mannathan, M. Motapothula, Chandra S Bhatt, Divya S Parimi, Tharun K Bollu, Madhura, Noah Jacob, Ram Raju, Sustainable Bioengineering of Gold structured Wide-Area Supported Catalyst for Hand-Recyclable Ultra-Efficient Heterogeneous Catalysis, *ACS Applied Materials and Interface*, 2022, Just Accepted
423. Vimal Babu, Vijaya Prabhagar Murugesan, Rukma Ramachandran, The Role of Blockchain technology in the Process of Decision-making in Human Resource Management: A Review and Future Research Agenda, *Business Process Management Journal*, 2022, Just Accepted
422. Priyanka S, Jyothsna K Devi, Robust and Secured Watermarking using Ja-Fi Optimization for Digital Image Transmission in Social Media, *Applied Soft Computing Journal*, 2022, Just Accepted
421. Sonam Maurya, Sushil Tiwari, Monika Chowdary Mothukuri, Chandra Mallika Tangeda, Rohitha Naga Sri Nandigam, Durga Chandana Addagiri, A Review on Recent Developments in Cancer Detection using Machine Learning and Deep Learning Models, *Biomedical Signal Processing & Control*, 2022, Just Accepted

420. Jatis Kumar Dash, S. Md. Abzal, Kurapati Kalyan, Sailakshmi Janga, I. Uddin, Starch assisted synthesis of Bi₂S₃ nanoparticles for enhanced dielectric and antibacterial applications, *ACS Omega*, 2022, Just Accepted
419. P Pradhan, K Singh, PS Maram, and S Vaidyanathan, Oxide-Based Red Emitting Phosphors with High Color Purity and Their Versatile Applications: Synthesis, Structure, and Luminescence Properties, *ACS Applied Optical Materials*, 2022, Just Accepted, DOI:10.1021/acsaom.2c00022
418. Priyanka Singh, Influencer-Defaulter Mutation-Based Optimization Algorithms for Predicting Electricity Prices, *Utilities Policy*, 2022, Just Accepted
417. Spandana Gonuguntla, Saddam sk, Anjana Tripathi, Ranjit Thapa, Gopinath Jonnalagadda, Chandrani Nayak, Dibyendu Bhattacharyya, S. Jha, Annadanam Sessa Sainath, Vijayanand Perupogu, and Ujjwal Pal, Anisotropic phenanthroline-based ruthenium polymers grafted on a titanium metal-organic framework for efficient photocatalytic hydrogen evolution, *Communications Chemistry*, 2022, Just Accepted
416. Asim Ghosh, Bikas K. Chakrabarti, Dachepalli R. S. Ram, Manipushpak Mitra, Raju Maiti, Soumyajyoti Biswas, Suchismita Banerjee, Scaling Behavior of the Hirsch Index for Failure Avalanches, Percolation Clusters and Paper Citations, *Frontiers in Physics*, 2022, 13, DOI: 10.48550/arXiv.2109.14500
415. Pankaj Bhalla, Kamal Das, Dimitrie Culcer, and Amit Agarwal, Resonant Second-Harmonic Generation as a Probe of Quantum Geometry, *Physical Review Letters*, 2022, Just Accepted
414. Sabyasachi Mukhopadhyay, Kunchanapalli Ramya, Asymmetrical Electrical Performance across Different Planes of Solution-Grown MAPbBr₃ Crystals of mm Dimensions, *ACS Omega*, 2022, Just Accepted
413. Sandhya Saini, Debabrata Chakraborty, E. S. Erakulan, Ranjit Thapa, Rajaram Bal, Asim Bhaumik, and Suman L Jain, Visible Light Driven Metal-Organic Framework Mediated Activation and Utilization of CO₂ for the Thiocarboxylation of Olefins, *ACS Applied Materials & Interfaces*, 2022, Just Accepted
412. Palas Samanta, Sukhendu Dey, Debajyoti Kundu, Deblina Dutta, Rohit Jambulkar, Rahul Mishra, Apurba Ratan Ghosh, Sunil Kumar, An insight on sampling, identification, quantification and characteristics of microplastics in solid wastes, *Trends in Environmental Analytical Chemistry*, 2022, 36, DOI: 10.1016/j.teac.2022.e00181
411. Karthik Rajendran, A. Bose, R. O'Shea, R. Lin, A. Long, D. Wall, S. De, J. D. Murphy, Evaluation of a biomethane, food and biofertiliser polygeneration system in a circular economy system, *Renewable and Sustainable Energy Reviews*, 2022, 170, DOI: 10.1016/j.rser.2022.112960
410. Priyanka S, Chaos Follow The Leader Algorithm: Application to Data Classification, *Journal of Computational Science (Elsevier)*, 2022, Just Accepted
409. Priyanka S, Prannoy Tugiti, Marella Hima Manikanta, Bhavana Yedlapalli, Abhishree Pappusetty Color Image Retrieval Method using Low Dimensional Salient Visual Feature Descriptors for IoT Applications, *Computational Intelligence and Neuroscience Journal*, 2022, Just Accepted
408. Ranjit Thapa, Narad Barman, K. A. Sreeraj, K. Namsheer, Chandra Sekhar Rout CrSe₂/Ti₃C₂ MXene 2D/2D Hybrids as a Promising Candidate for Energy Storage Applications, *sustainable Energy & Fuels*, 2022, DOI: 10.1039/D2SE01122K

407. K. Sreeraj, Narad Barman, Suthara Radhakrishnan, Ranjit Thapa, Chandra Rout, Hierarchical Architecture of Metallic VTe₂/Ti₃C₂T_x MXene Heterostructure for Supercapacitor Applications, *Journal of Materials Chemistry A*, 2022, Just Accepted, DOI: 10.1039/D2TA05904E
406. Rajendra Prasad Nayak, Srinivas Sethi, Sourav Kumar Bhoi, Kshira Sagar Sahoo & Anand Nayyar, ML-MDS: Machine learning based misbehavior detection system for cognitive software-defined multimedia VANET (CSDMV) in Smart Cities, *Multimedia Tools and applications*, 2022, Just Accepted, DOI: 10.1007/s11042-022-13440-8
405. Randhir Kumar, A Blockchain-Orchestrated Deep Learning Approach for Secure Data Transmission in IoT-Enabled Healthcare System, *Parallel and Distributed Computing*, 2022, Just Accepted,
404. Nimai Mishra, Syed Akhil, Subarna Biswas, Manoj Palabathuni, Rahul Singh, Amine-Free Synthetic Route: An Emerging Approach to Making High-Quality Perovskite Nanocrystals for Futuristic Application, *The Journal of Physical Chemistry Letters*, 2022, 13, 9480–9493, DOI: 10.1021/acs.jpcclett.2c02403
403. Ramendra Sundar Dey, Ranjit Thapa, Ashmita Biswas, Samadhan Kapse, Oxygen functionalization-induced charging effect on boron active sites for high-yield electrochemical NH₃ production, *Nano-Micro Letters*, 2022, Just Accepted
402. Priyanka Singh, Influencer Buddy Optimization: Algorithm and its application to electricity load and price forecasting problem, *Energy journal*, 2022, Just Accepted
401. Archishman Bose, Richard O'Shea, Richen Lin, Aoife Long, Karthik Rajendran, David Wall, Sudipta De, Jerry D. Murphy, The marginal abatement cost of co-producing biomethane, food and biofertiliser in a circular economy system, *Renewable and Sustainable Energy Reviews*, 2022, 169, DOI: 10.1016/j.rser.2022.112946
400. Syed Akhil, Nimai Mishra, In situ synthesis of high quantum efficiency and stable bromide-based blue-emitting perovskite nanoplatelets, *The Royal Society of Chemistry*, 2022, Just Accepted
399. Sheik Haseena, M.V. Jyothirmayi, Mahesh Kumar Ravva, Rational design of fused-ring based non-fullerene acceptors for high performance organic solar cells, *Solar Energy*, 2022, 242, 201-211, DOI: 10.1016/j.solener.2022.07.011
398. Rajagopal Pothikumar, Chandrasekaran Sivaraj, Kayambu Giridharan, Mahesh Kumar Ravva, and Kayambu Namitharan, "Stereoselective Addition of Alkynes to Ketenimines: Copper/Amine Catalyzed Sulfonyl Azide–Alkyne Cycloaddition Reactions for the Synthesis of (Z)-1,3-Enynes, *Organic Letters*, 2022, 24, 4310-4315, DOI: 10.1021/acs.orglett.2c01180
397. Amit Kumar Mandal, Rudra Krishna Srija, Agostino Cortesi, A Lightweight Mutual and Transitive Authentication Mechanism for IoT Network, *Ad Hoc Networks*, Elsevier, 2022, Just Accepted, DOI: 10.1016/j.adhoc.2022.103003
396. Deepak Kachave, Aurobindo Behera, Subhankar Ghatak, Frequency Stability Analysis of Multi-renewable Source System with Cascaded PDN-FOPID Controller, *Sustainability*, 2022, Just Accepted
395. Santosh Kumar, Rishab Nagar, Saumya Bhatnagar, Ramesh Vaddi, Sachin Kumar Gupta, Mamoon Rashid, Ali Kashif Bashir, Tamim Alkhalifah, Chest X Ray and Cough Sample based Deep Learning Framework for Accurate Diagnosis of COVID-19, *Journal of Computers and Electrical Engg*, 2022, 103, DOI: 10.1016/j.compeleceng.2022.108391

394. Raghava R. Gundala, Nishad Nawaz, Harindranath R M, Kirubaharan Boobalan, Vijaya Kumar Gajenderan, Does Gender Moderate the Purchase Intention of Organic Foods? Theory of Reasoned Action, *Heliyon*, 2022, 8, DOI:10.1016/j.heliyon.2022.e10478
393. Divya Chaturvedi, Arvind Kumar, Ayman A. Althuway, A Dual-Band Dual-Polarized SIW Cavity-Backed Antenna-Duplexer for Off-body Communication, *AEJ - Alexandria Engineering Journal*, 2022, Just Accepted, DOI : 10.1016/j.aej.2022.09.021
392. Mani Preeyanghaa, E.S. Erakulan, Ranjit Thapa, Muthupandian, Ashokkumar, Bernaudshaw Neppolian, Scrutinizing the Role of Tunable Carbon Vacancies in g-C₃N₄ Nanosheets for Efficient Sonophotocatalytic Degradation of Tetracycline in Diverse Water Matrices: Experimental study and theoretical calculation, *Chemical Engineering Journal*, 2022, 452, DOI: 10.1016/j.cej.2022.139437
391. Shoji D. Thottathil, Paula C. J. Reis, T. Prairiem, Variability and controls of stable carbon isotopic fractionation during aerobic methane oxidation in temperate lakes, *Frontiers in Environmental Science*, 2022, Just Accepted, DOI : 10.3389/fenvs.2022.833688
390. Ranjit Thapa, Samadhan Kapse, Narad Barman, Identification of ORR Activity of Random Graphene-Based Systems Using the General Descriptor and Predictive Model Equation, *CARBON*, 2022, 201, 703-711, DOI: 10.1016/j.carbon.2022.09.059
389. Javid Ahmad Dar, Subashree Kothandaraman, Pramod Kumar Khare, Mohammed Latif Khan, Sacred groves of Central India: Diversity status, carbon storage, and conservation strategies, *Biotropica*, 2022, Just Accepted, DOI: 10.1111/btp.13157
388. Arghya Chakravarty, Chitrlekha Mahanta, Wei Wang, Indrani Kar, A switching free multiple model approach to adaptive FTC of non-Lipschitz nonlinear uncertain systems under persistent actuator failures, *IFAC Journal of Systems and Control*, 2022, 21, DOI: 10.1016/j.ifacsc.2022.100201
387. Sriramulu Bojjagani, Y. C. A. Padmanabha Reddy, Thati Anuradha, P. V. Venkateswara Rao, B. Ramachandra Reddy, Muhammad Khurram Khan, Secure Authentication and Key Management Protocol for Deployment of Internet of Vehicles (IoV) Concerning Intelligent Transport Systems, *IEEE Transactions on Intelligent Transport Systems*, 2022, 1-16, DOI: 10.1109/TITS.2022.3207593
386. Ahsan Ahmad Dar, Sibnath Deb, Manzoor Hassan Malik, Waheeda Khan, Ayesha Parveen Haroon, Amra Ahsan, Farhat Jahan, Bushra Sumaiya, Shaheen Yawar Bhat, Dhamodharan M, Mohamad Qasim, Prevalence of Adverse Childhood Experiences (ACEs) among young adults of Kashmir, *Child Abuse & Neglect*, 2022, 134, DOI: 10.1016/j.chiabu.2022.105876
385. Venkata Ramireddy, Cristian Almazan Agustin, Cheng-Kai Lin, Jung-Chieh Chen, A Modulated Dual-Voltage-Vector Model-Free Predictive Current Controller for Synchronous Reluctance Motor Drives with Online Duty Cycle Calculation, *IEEE Access*, 2022, 10, 97856 – 97867, DOI: 10.1109/ACCESS.2022.3206386
384. Syed Akhil, Manoj Palabathuni, Subarna Biswas, Rahul Singh, Nimai Mishra, Highly-Stable Amine-Free CsPbBr₃ Perovskite Nanocrystals for Perovskite-Based Display Applications, *ACS Applied Nano Materials*, 2022, 5, 13561–13572, DOI: 10.1021/acsanm.2c03257
383. Suchismita Banerjee, Soumyajyoti Biswas, Bikas K. Chakrabarti, Sai Krishna Challagundla, Asim Ghosh, Suhaas Reddy Guntaka, Hanesh Koganti, Anvesh Reddy Kondapalli, Raju Maiti, Manipushpak Mitra, Dachepalli R. S. Ram, Evolutionary Dynamics of Social Inequality and Coincidence of Gini and Kolkata indices under Unrestricted Competition, *International Journal of Modern Physics C*, 2022, Just Accepted, DOI: 10.48550/arXiv.2111.07516

382. Crescentia Yazhini, Jithin Rafi, Paromita Chakraborty, Samadhan Kapse, Ranjit Thapa, Neppolian, Inner Filter Effect on Amino-Functionalized Metal-Organic Framework for the Selective Detection of Tetracycline, *Journal of Cleaner Production*, 2022, 373, DOI: 10.1016/j.jclepro.2022.133929
381. Baswanth Oruganti, Jun Wang, and Bo Durbeej, Modulating the Photocyclization Reactivity of Diarylethenes through Changes in the Excited-State Aromaticity of the π -Linker, *Journal of Organic Chemistry*, 2022, 87, 11565-11571, DOI: 10.1021/acs.joc.2c01172
380. Kilari Jyothsna Devi, Priyanka Singh, Jatindra Kumar Dash, Hiren Kumar Thakkar, José Santamaría, Musalreddy Venkata Jayanth Krishna, Antonio Romero-Manchado, A New Robust and Secure 3-Level Digital Image Watermarking Based on G-BAT Hybrid Optimization, *Mathematics Journal*, 2022, 10(16), DOI: 10.3390/math10163015
379. Samadhan Kapse, Ranjit Thapa, K. Namsheer, Samadhan Kapse, Mridula Manoj, Ranjit Thapa, Chandra Sekhar Rout, *Sustainable Energy & Fuels*, 2022, 6, 4285-4298, DOI: 10.1039/D2SE00815G
378. Partha Bhattacharjee, Haleema Badar, "Interview with Ikroop Sandhu", *Journal of Graphic Novels and Comics*, 2022, Just Accepted, DOI: 10.1080/21504857.2022.2109705
377. Vanshree Parey, B. Moses Abraham, Neeraj K. Gaur, and Ranjit Thapa, First-Principles Study of Two-Dimensional B-Doped Carbon Nanostructures for Toxic Phosgene Gas Detection, *ACS Applied Nano Materials*, 2022, 5, 9, 12737–12745, DOI: 10.1021/acsanm.2c02623
376. Pradyut Kumar Sanki, Vemuru Purnaprasad, Syed Ali Hussain, Vasudeva Bevara, Design of an Efficient QCA based Median Filter with Energy Dissipation Analysis, *The Journal of Supercomputing*, 2022, Just Accepted, DOI: 10.1007/s11227-022-04780-1
375. Aditya Sharma, Samadhan Kapse, Ankur Verma, Sagar Bisoyi, Gopal K. Pradhan, Ranjit Thapa, Chandra Sekhar Rout, All-solid-state Supercapacitor Based on Advanced 2D Vanadium disulfide/Black Phosphorus Hybrids for Wearable Electronics, *ACS Applied Energy Materials*, 2022, 5, 8, 10315–10327, DOI: 10.1021/acsaem.2c02116
374. Samadhan Kapse, Shobhana Narasimhan, Ranjit Thapa, Descriptors and graphical construction for in silico design of efficient and selective single atom catalysts for eNRR, *Chemical Science*, 2022, 13, 10003-10010, DOI: 10.1039/D2SC02625B
373. Asim Ghosh, Soumyajyoti Biswas, Bikas K. Chakrabarti, Success of Social Inequality Measures in Predicting Critical or Failure Points in Some Models of Physical Systems, *Frontiers in Physics*, 2022, Just Accepted, DOI: "10.48550/arXiv.2207.04276
372. Anirban Ghosh, Naga Srinivasarao Chilamkurthy, OM JEE PANDEY, LINGA REDDY CENKERAMADDI, HONG-NING DA, Low-Power Wide-Area Networks: A Broad Overview of its Different Aspects, *IEEE Access journal*, 2022, 10, 81926 – 81959, DOI: 10.1109/ACCESS.2022.3196182
371. Poongavanam Ganesh Kumar, V.S. Vigneswaran, K. Balaji, S. Vinothkumar, Rajendran Prabakaran, D. Sakthivadivel, M. Meikandan, Sung Chul Kim, Augmented v-corrugated absorber plate using shot-blasting for solar air heater – Energy, Exergy, Economic, and Environmental (4E) analysis, *Environmental Protection journal*, 2022, 165, 514-531, DOI: 10.1016/j.psep.2022.07.036
370. Siddhant Dash, Ajay S. Kalamdhad, Systematic bibliographic research on eutrophication-based ecological modelling of aquatic ecosystems through the lens of science mapping, *Ecological Modelling*, 2022, 472, DOI: 10.1016/j.ecolmodel.2022.110080

369. M Karthikeyan, Durga Madhab Mahapatra, Abdul Syukor Abd Razak, Abdulaziz A.M. Abahussain, Baranitharan Ethiraj & Lakhveer Singh, Machine Learning Aided Synthesis and Screening of HER Catalyst: Present Developments and Prospects, *Catalysis Reviews*, 2022, Just Accepted, DOI: 10.1080/01614940.2022.2103980
368. Shaik Rajak, Poongundran Selvaprabhu, Sunil Chinnadurai, A.S.M. Sanwar Hosen, Aldosary Saad, Amr Tolba, Energy Efficient MIMO-NOMA aided IoT Network in B5G Communications, *Computer Networks*, 2022, 216, DOI: 10.1016/j.comnet.2022.109250
367. Priyanka s, Kirtirajsinh Zala, Hiren Kumar Thakkar, Ketan Kotecha, Madhu Shukla, PRMS: Design and Development of Patients' E-Healthcare Records Management System for Privacy Preservation in Third Party Cloud Platforms, *IEEE Access journal*, 2022, 10, 85777 – 85791, DOI: 10.1109/ACCESS.2022.3198094
366. Soumyajyoti Biswas, Diksha, Prediction of imminent failure using supervised learning in a fiber bundle model, *Physical Review E*, 2022, 106(2-2), DOI: 10.1103/PhysRevE.106.025003
365. Sudhindra Nath Panda, Uday Mandal, Anirban Dhar, Dipaka R. Sena, Spatiotemporal evaluation and assessment of shallow groundwater quality for irrigation of a tropical coastal groundwater basin, *Environmental Science and Pollution Research*, 2022, Just Accepted, DOI: 10.1007/s11356-022-22266-8
364. Ekta Srivastava, Bharadhwaj Sivakumaran, Satish S. Maheswarappa & Justin Paul, Nostalgia: A Review, Propositions, and Future Research Agenda, *Journal of Advertising*, 2022, Just Accepted, DOI: 10.1080/00913367.2022.2101036
363. Shoji D Thottathil, Paula C. J. Reis, and Yves T. Prairie, Magnitude and Drivers of Oxidic Methane Production in Small Temperate Lakes, *Environmental Science & Technology*, 2022, 56, 15, 11041–11050, DOI: 10.1021/acs.est.2c01730
362. Yuwen Zhou, Vinay Kumar, Sharareh Harirchi, V.S. Vigneswaran, Karthik Rajendran, Pooja Sharma, Yen Wah Tong, Parameswaran Binod, Raveendran Sindhu, MSurendra Sarsaiya, Deepanraj Balakrishnan, M.M ofijur, Zengqiang Zhang, Mohammad J. Taherzadeh, Mukesh Kumar Awasthi, Recovery of value-added products from biowaste: A review, *Bioresource Technology*, 2022, 360, DOI: 10.1016/j.biortech.2022.127565
361. Mukesh Kumar Awasthi, Sharareh Harirchi, Taner Sarb Vigneswaran VS, Karthik Rajendran, Ricardo Gómez-García, Coralie Hellwig, Parameswaran Binod, Raveendran Sindhu, Aravind Madhavan, A.N. Anoop Kumar, Vinod Kumar, Deepak Kumar, Zengqiang Zhang, Mohammad J. Taherzadeh, Myco-biorefinery approaches for food waste valorization: Present status and future prospects, *Bioresource Technology*, 2022, 360, DOI: 10.1016/j.biortech.2022.127592
360. Pankaj Pathak, Tejaswini MSSR, D.K. Gupta, Sustainable approach for valorization of solid wastes as a secondary resource through urban mining, *Journal of Environmental Management*, 2022, 319, DOI: 10.1016/j.jenvman.2022.115727
359. Imran Uddin, Abu Baker, Mohammad Khalid, Mohd Sajid Khan, Targeted non-AR mediated smart delivery of abiraterone to the prostate cancer, *PLoS ONE*, 2022, Just Accepted, DOI: 10.1371/journal.pone.0272396
358. Jatindra Kumar Das, Mandar Kale, Sudipta Mukhopadhyay, Efficient image retrieval system for textural images using fuzzy class membership, *Multimedia Tools and Applications*, 2022, Just Accepted, DOI: 10.1007/s11042-022-13529-0

357. Buela Pramodini, Divya Chaturvedi, and Goutam Rana, Design and Investigation of Dual-Band 2x2 Elements MIMO Antenna-Diplexer Based on Half-mode SIW, IEEE Access, 2022, 10, 79272-79280, DOI: 10.1109/ACCESS.2022.3193253
356. Venkatachalam, Praneash , Karra, Chanakya ,Duru, Kamala Kumari ,Maram, Pardha Saradhi ,Madhavan, Asha Anish ,Kalluri, Sujith, Challenges and Benchmarking in Scale-up of Ni-rich Cathodes for Sodium-ion Batteries, Journal of The Electrochemical Society, 2022, 169,7,DOI: 10.1149/1945-7111/ac8248
355. Manjesh kumar, Manas Das & Nan Yu, Surface roughness simulation during rotational - magnetorheological finishing of poppet vavle profiles, nanomanufacturing and metrology,2022, 5(2):1-15, DOI:10.1007/s41871-022-00144-8
354. Subba Reddy T, Harikiran J, Enduri MK, Hajarathaiah K, Almakdi S, Alshehri M, Naveed QN, Rahman MH, Hyperspectral Image Classification with Optimized Compressed Synergic Deep Convolution Neural Network with Aquila Optimization, Computational Intelligence and Neuroscience, 2022, Just Accepted, DOI: 10.1155/2022/6781740
353. Jaya Lakshmi Tangirala,Shakir Khan ,V. Saravanan, Gnanaprakasam C. N , Nabamita Deb,ashwan Adnan Othman, Privacy Protection of Healthcare Data over Social Networks Using Machine Learning Algorithms, Computational Intelligence and Neuroscience, 2022, Just Accepted, DOI: 10.1155/2022/9985933
352. Vinod Kumar, Gotam Singh Lalotra, Ravi Kant Kumar, Improving Performance of Classifiers for Diagnosis of Critical Diseases to Prevent COVID Risk, COMPUTERS & ELECTRICAL ENGINEERING, 2022, 102, DOI: 10.1016/j.compeleceng.2022.108236
351. Kshira Sagar Sahoo,Munesh Singh,Anand Nayyar, Sustainable IoT Solution for Freshwater Aquaculture Management, IEEE Sensors Journal, 2022, 22, 16563 – 16572, DOI: 10.1109/JSEN.2022.3188639
350. Rajesh Yelchuri, Jatindra Kumar Dash, Priyanka Singh, Arunanshu Mahapatro, Sibarama Panigrahi, Exploiting deep and hand-crafted features for texture image retrieval using class membership, Pattern Recognition Letters, 2022, 160,163-171,DOI: 10.1016/j.patrec.2022.06.017
349. Ranjit Thapa,M. V. Jyothirmai, Role of Intrinsic Defects in Enhancing the Photo Absorption Capability of CuZn2AlSe4, ACS Omega, 2022, 7, 35, 31098–31105, DOI: 10.1021/acsomega.2c03223
348. MeenuSrivastava,Mahesh S.Jadhav,ChethanaR.P.S,Chakradhar,SheelaSingh, Investigation of HVOF sprayed novel Al1.4Co2.1Cr0.7Ni2.45Si0.2Ti0.14 HEA coating as bond coat material in TBC System, Alloys and Compounds, 2022, 924, DOI: 10.1016/j.jallcom.2022.166388
347. Nimai Mishra ,Manoj Palabathuni,Syed Akhil,Rahul Singh, Charge Transfer in Photoexcited Cesium Lead Halide Perovskite Nanocrystals: Review of Materials and Applications, ACS Applied Nano Materials, 2022, 5, 8, 10097–10117, DOI: 10.1021/acsanm.2c01550
346. Debkumar Chakraborty, Sankar Ganesh Palani, M. M. Ghangrekar, N. Anand & Pankaj Pathak, Dual role of grass clippings as buffering agent and biomass during anaerobic co-digestion with food waste, Clean Technologies and Environmental Policy, 2022,Just Accepted, DOI: 10.1007/s10098-022-02355-5

345. Rahul Kottath and Priyanka Singh, A Meta-heuristic Learning Approach for Short-term Price Forecasting, In Soft Computing: Theories and Applications, 2022, 425, DOI: 10.1007/978-981-19-0707-4_15
344. Oriana Q.H.Zinani,KemalKeseroğlu,SupravatDey,AhmetAy4AbhyudaiSingh,Ertuğrul M.,Özbudak, Gene copy number and negative feedback differentially regulate transcriptional variability of segmentation clock genes, iScience, 2022, 25, DOI: 10.1016/j.isci.2022.104579
343. Pankaj Pathak ,Mohit Nigam, Puranjan Mishra, Pradeep Kumar, Sunil Rajoriya, Pankaj Pathak, Shraddha Rani Singh, Smita Kumar & Lakhveer Singh, Comprehensive technological assessment for different treatment methods of leather tannery wastewater, Environmental Science and Pollution Research, 2022, Just Accepted, DOI: 10.1007/s11356-022-21259-x
342. Ranjit Thapa,Lopamudra Giri, Bishnupad Mohanty, Bikash Kumar Jena, and Venkateswara Rao Pedireddi, The Hydrogen Bonded Organic Framework Structure: A Metal Free Electrocatalyst for Evolution of Hydrogen, ACS Omega, 2022, 7, 26, 22440–22446, DOI: 10.1021/acsomega.2c01585
341. Syed Akhil,Vasavi Dutt,Rahul Singh,Nimai Mishra, Post-synthesis Treatment with Lead Bromide for Obtaining Near Unity Photoluminescence Quantum Yield and Ultra-Stable Amine Free CsPbBr₃ Perovskite Nanocrystal, The Journal of Physical Chemistry C, 2022, 126, 26, 10742–10751, DOI: 10.1021/acs.jpcc.2c02379
340. Sunil Chinnadurai,Wei Song; Shaik Rajak; Shuping Dang; Ruijun Liu; Jun Li, Deep Learning Enabled IRS for 6G Intelligent Transportation Systems: A Comprehensive Study, IEEE Transactions on Intelligent Transportation Systems, 2022,1-18, DOI: 10.1109/TITS.2022.3184314
339. Dinesh Reddy Vemula, Mahesh Kumar Morampudi, Sonam Maurya, Ashu Abdul, Md. Muzakkir Hussain & Ilaiah Kavati, Enhanced Resource Provisioning and Migrating Virtual Machines in Heterogeneous Cloud Data Cente, Journal of Ambient Intelligence and Humanized Computing, 2022, Just Accepted, DOI: 10.1007/s12652-022-04197-x
338. G.S. Vinod Kumar,S.Sasikumara,K.Georgy,M.Mukherjee, Production, Stability, and Properties of In-situ Al-5ZrB₂ Composite Foams, Materials Science & Engineering A, 2022, 849, DOI: 10.1016/j.msea.2022.143501
337. G. V. P. Bhagath Singh,Karen Scrivener, Investigation of phase formation, microstructure and mechanical properties of LC3 based autoclaved aerated blocks, Construction and Building Materials, 2022, 344, DOI: 10.1016/j.conbuildmat.2022.128198
336. Jatindra Kumar Dash,Himadri Bhuyan, Jagadeesh Killi,Partha Pratim Das, Soumen Paul, Motion recognition in Bharatanatyam Dance, IEEE Access, 2022, 10, 67128 – 67139, DOI: 10.1109/ACCESS.2022.3184735
335. Sarath Sasi, Ratnasingham Shivaji, and S. Sundar,Mohan Mallick, Bifurcation, uniqueness, and multiplicity results for classes of reaction-diffusion equations arising in ecology with nonlinear boundary conditions, Communication in Pure and Applied Mathematics, 2022, 21(2),705-726, DOI: 10.3934/cpaa.2021195
334. Kirubaharan Boobalan and Margaret Susairaj,MargaretSusairaj, Organic Food Preferences: A Comparison of American and Indian Consumers, Food Quality and Preference, 2022, 101, DOI: 10.1016/j.foodqual.2022.104627

333. Pranabesh Das, Angelos Koutsianas, Nikos Tzanakis, Pallab Kanti Dey, Perfect powers in sum of three fifth powers, *Journal of Number Theory*, 2022, 236, 443-462, DOI:10.1016/j.jnt.2021.07.029
332. Iskandar K, Murugaiyan J, Hammoudi Halat D, Hage SE, Chibabhai V, Adukkadukkam S, Roques C, Molinier L, Salameh P, Van Dongen M, Antibiotic Discovery and Resistance: The Chase and the Race, *Antibiotics*, 2022, 11(2), 182, DOI: 10.3390/antibiotics11020182
331. Balamurugan K, Medishetti R, Kotha J, Behera P, Chandra K, Mavuduru VA, Joshi MB, Samineni R, Katika MR, Ball WB, Thondamal M, Challa A, Chatti K, Parsa KVL, PHLPP1 promotes neutral lipid accumulation through AMPK/ChREBP-dependent lipid uptake and fatty acid synthesis pathways, *iScience*, 2022, 25, DOI: 10.1016/j.isci.2022.103766
330. Shaik Rajak, Inbarasan Muniraj, Karthikeyan Elumalai, A. S. M. Sanwar Hosen, In-Ho Ra, and Sunil Chinnadurai, Energy Efficient Hybrid Relay - IRS aided wireless IoT network for 6G communications, *Electronics Journal*, 2022, 11(12), 1900, DOI: 10.3390/electronics11121900
329. Abinash Pujahari, Dilip Singh Sisodia, Item Feature Refinement using Matrix Factorization and Boosted Learning based User Profile Generation for Content-Based Recommender Systems, *Expert Systems with Applications*, 2022, 206, DOI: 10.1016/j.eswa.2022.117849
328. Yumin Duan, Ayon Tarafdar, Vinay Kumar, Prabakaran Ganeshan, Karthik Rajendran, Balendu Shekhar Giri, Ricardo Gómez García, Huike Li, Zengqiang Zhang, Raveendran, Sindhu, Parameswaran Binod, Ashok Pandey, Mohammad J. Taherzadeh, Surendra Sarsaiya, Archana Jain, Mukesh Kumar Awasthi, Sustainable biorefinery approaches towards circular economy for conversion of biowaste to value added materials and future perspectives, *Fuel*, 2022, 325, DOI:10.1016/j.fuel.2022.124846
327. Bharadwaj Sivakumaran, Harindranath R.M, Promotional Inputs and Selling: Evidence from India, *Journal of Business and Industrial Marketing*, 2022, Just Accepted, DOI: 10.1108/JBIM-01-2021-0040
326. Florence Mukamanzi; Manjula Raja; Tejodbhav Koduru; Raja Datta, Position-independent and Section-based Source Location Privacy Protection in WSN, *IEEE Transactions*, 2022, 1-10, DOI: 10.1109/TII.2022.3183804
325. Hari Balakrishnan, Ramaraju Korivi, Mannathan S, Kanagaraj Madasamy, Trifluoroacetic Acid-Mediated Denitrogenative Ortho-Hydroxylation of 1,2,3-Benzotriazin-4(3H)-ones: A Metal-Free Approach, *The Journal of Organic Chemistry*, 2022, 87, 13, 8752-8756, DOI: 10.1021/acs.joc.2c00354
324. Ranjit Thapa, Samadhan Kapse, Ashmita Biswas, Bikram Ghosh, Ramendra Sundar Dey, Lewis acid-dominated aqueous electrolyte acting as co-catalyst and overcoming N₂ activation issues on catalyst surface, *Proceedings of National Academy of Sciences (PNAS)*, 2022, 119 (33), DOI: 10.1073/pnas.2204638119
323. Ashwini Nawade, Kumar Babu Busi, Kunchanapalli Ramya, Goutam Kumar Dalapati, Sabyasachi Mukhopadhyay, and Sabyasachi Chakraborty, Improved Charge Transport across Bovine Serum Albumin – Au Nanoclusters Hybrid Molecular Junction, *ACS Omega*, 2022, 7, 24, 20906-20913, DOI: 10.1021/acsomega.2c01563
322. Ramanjaneya Reddy Udumula, C H. Naga Sai Kalyan, Srikanth Goud .B, Ch R. Reddy, Mohit Bajaj Naveen KUMAR Sharma Doon University, Elmazeg Elgamli, Mokhtar Shouran, Salah Kamel, Seagull Optimization Algorithm Based Fractional Order Fuzzy Controller for LFC of Multi Area Diverse Source System with Realistic Constraints, *Journal Frontiers in Energy Research*, 2022, Just Accepted, DOI: 10.3389/fenrg.2022.921426

321. PriyankaSingh,RahulKottath,Ghanshyam G.Tejani, Ameliorated Follow the Leader: Algorithm and Application to Truss Design Problem, Structures, 2022, 42, 181-204, DOI: 10.1016/j.istruc.2022.05.105
320. Ranjit Thapa,Subrata Karmakar,Deepak S. Gavali,Chetan D. Mistari,M. A. MoreDhrubananda Behera,Ariful Haque, Low-Temperature Spin-Canted Magnetism and Bipolaron Freezing Electrical Transition in Potential Electron Field Emitter NdNiO₃, ACS Applied Electronic Materials, 2022, 4, 6, 3134–3146, DOI: 10.1021/acsaelm.2c00569
319. Parvaiz Ahmad Lone,Javid Ahmad Dar,Subashree Kothandaraman,Mohammed Latif Khan, An invasive shrub Lantana camara L. alters the flora and soils in tropical dry deciduous forests of Central India, Biotropica, 2022, Just Accepted, DOI: 10.1111/btp.13112
318. Tousif Khan Nizami,Arghya Chakravarty,Chitralekha Mahanta,Atif Iqbal,Alireza Hosseinpour, Enhanced Dynamic Performance in DC-DC Converter-PMDC Motor Combination through an Intelligent Nonlinear Adaptive Control Scheme, IET Power Electronics, 2022, Just Accepted, DOI: 10.1049/pel2.12330
317. Sarath C.Gowd, Deepak Kumar, Richen Lin, Karthik Rajendran, Nutrient recovery from wastewater in India: A perspective from mass and energy balance for a sustainable circular economy, Bioresource Technology Reports, 2022, 18, DOI: 10.1016/j.biteb.2022.101079
316. V. G. Vasavi Dutt, Syed Akhil, Rahul Singh, Manoj Palabathuni, and Nimai Mishra, Year-Long Stability and Near Unity Photoluminescence Quantum Yield of CsPbBr₃ Perovskite Nanocrystals by Benzoic Acid Post-treatment, The Journal of Physical Chemistry C, 2022, 126, 22, 9502–9508, DOI: 10.1021/acs.jpcc.2c01467
315. John P Hays , Maria Jose Ruiz-Alvarez , Natalia Roson-Calero , Rohul Amin , Jayaseelan Murugaiyan , Maarten B M van Dongen, Perspectives on the ethics of antibiotic overuse and on the implementation of (new) antibiotics, Infectious Diseases and Therapy, 2022, 11,1315–1326, DOI: 10.1007/s40121-022-00656-2
314. Sudipta Chakrabarty,Ruhul Islam,Emil Pricop,Hiren Kumar Deva Sarma, An Approach to Discover Similar Musical Patterns, IEEE Access, 2022, 10, 47322 – 47339, DOI: 10.1109/ACCESS.2022.3169362
313. M.V.Jyothirmai, Mahesh Kumar Ravva, Changes in Structure and Stability of Lithium Polysulfides Encapsulated in Carbon Nanotubes: A DFT, Journal of Molecular Liquids, 2022, 359, DOI: 10.1016/j.molliq.2022.119287
312. Bhavvy M. B, Ramya Prabhu B., Anjana Tripathi, Sudesh Yadav, Neena S. John, Ranjit Thapa, Ali Altaee, Manav Saxena, and Akshaya K. Samal, A unique bridging facets assembly of gold nanorods for the detection of thiram through SERS, ACS Sustainable Chemistry & Engineering, 2022, 10(22), DOI: 10.1021/acssuschemeng.2c01089
311. SushilBhunias,AnirbanBose, Twisted conjugacy in linear algebraic groups II, Journal of Algebra, 2022, 603, 235-259, DOI: 10.1016/j.jalgebra.2022.03.031
310. Suratno Basu, Ananyo Dan and Inder Kaur, Generators of the Cohomology ring, after Newstead, Proc. Amer. Math. Soc, 2022, 150 , 2569-2577, DOI: 10.1090/proc/15888
309. Jit Mukherjee, Sourav Paul, Ashadul Adalder, Samadhan Kapse, Ranjit Thapa, Sumit Mandal, Biswajit Ghorai, Sougata Sarkar and Uttam Kumar Ghorai, Selective Electrocatalytic Co-reduction of

N2 and CO2 on Copper Phthalocyanine for Green Urea Production, *Advanced Functional Materials*, 2022, 32, DOI: 10.1002/adfm.202200882

308. Arvind Kumar; Divya Chaturvedi; S. Imaculate Rosaline, Design of Antenna-Multiplexer for Seamless On-Body Internet of Medical Things (IoMT) Connectivity, *IEEE Transactions on Circuits and Systems II: Express Briefs*, 2022, 69, 3395 – 3399, DOI: 10.1109/TCSII.2022.3170513

304. PiyaliChatterjee,Mounika Sai KrishnaAmbati,Amit K.Chakraborty,SabyasachiChakrabortty,Sajal Biring,SeeramRamakrishna, Terence Kin Shun Wong,Avishek Kumar,Raghavendra Lawaniya,Goutam Kumar Dalapati, Photovoltaic/Photo-Electrocatalysis Integration for Green Hydrogen: A review, *Energy Conversion & Management*, 2022, 261, DOI: 10.1016/j.enconman.2022.115648

306. Tharun K. Bollu, Divya S. Parimi, Chandra S. Bhattab and Anil K. Suresh, Fish-scale waste to portable bioactive discs: A sustainable platform for sensitive and reliable blood group analysis, *Analytical Methods*, 2022, 14, 1946-1955, DOI: 10.1039/D2AY00128D

305. Priyanka S,Sushruta Mishra ,Hiren Kumar Thakkar ,Priyanka Singh ,and Gajendra Sharma, A Decisive Metaheuristics Attribute Selector Enabled Combined Unsupervised-Supervised Model for Chronic Disease Risks Assessment, *Computational Intelligence and Neuroscience*, 2022, Just Accepted, DOI: 10.1155/2022/8749353

304. Xihui Kang,Richen Lin,Benteng Wu,Lianhua Li,Chen Deng,Karthik Rajendran,Yongming Sun,Richard O'Shea,Jerry D. Murphy, Towards green whiskey production: anaerobic digestion of distillery by-products and the effects of pretreatment, *Journal of Cleaner Production*, 2022, 357, DOI: 10.1016/j.jclepro.2022.131844

303. Javid Ahmad Dar, Evidence of co-limitation in global forest diversity gradients, *Nature Ecology & Evolution*, 2022, 6, 1423–1437, DOI: 10.1038/s41559-022-01831-x

302. Subhajit Sarkar, Ashmita Biswas, E S, Erakulan, Ranjit Thapa, Ramendra Sundar Dey, Strategic modulation of target-specific isolated Fe,Co single-atom active sites for oxygen electrocatalysis impacting high power Zn-air battery, *ACS Nano*, 2022, 16, 5, 7890–7903,DOI: 10.1021/acsnano.2c00547

301. Amit Chakraborty, Srinandan Dasmahapatra, Henry Day-Hall, Billy Ford, Shubhani Jain, Stefano Moretti, Emmanuel Olaiya, Claire Shepherd, Revisiting Jet Clustering Algorithms for New Higgs Boson Searches in the Hadronic Final States, *European Physical Journal C*, 2022, 82, 346, DOI: 10.1140/epjc/s10052-022-10314-z

300. Chandreswar Mahata, Mullapudi V.Jyothirmai, Mahesh KumarRavva, Sabyasachi Chakrabortty, Sungjun Kim, Sajal Biring, Seeram Ramakrishna, Goutam Kumar Dalapati, Electronic structure and origin of intrinsic defects in sputtered HfTiO2 alloy dielectric on GaAs surface, *Journal of Alloys and Compounds*, 2022, 910, DOI: 10.1016/j.jallcom.2022.164817

299. Agasthiyaraj Lakshmanan, Deepak S. Gavali, K.S. Venkataprasanna, Ranjit Thapa, Debabrata Sarkar, Low Basis Weight Polyacrylonitrile/Polyvinylpyrrolidone Blended Nanofiber Membranes for Efficient Particulate Matter Capture, *ACS Applied Polymer Materials*, 2022, 4, 5, 3971–3981, DOI: 10.1021/acsapm.2c00422

298. Prabhakaran and Karthink Rajendran, Dynamic Simulation and Optimization of Anaerobic Digestion Processes using MATLAB, *Bioresource Technology*, 2022, 351, DOI: 10.1016/j.biortech.2022.126970

297. Jasvinder Singh, Pulak Mohan Pandey, Tejinder Kaur, Neetu Singh, Effect of heparin drug loading on biodegradable polycaprolactone-iron pentacarbonyl powder blend stents fabricated by solvent cast 3D printing, *Rapid prototyping journal*, 2022, 28, 7, DOI: 10.1108/RPJ-02-2021-0043
296. Sutharsan Govindarajan, Adair Borges, Shweta Karambelkar, Joseph Bondy-Denomy, Distinct subcellular localization of a Type I CRISPR complex and the Cas3 nuclease in bacteria, *Journal of Bacteriology*, 2022, 204, 5, DOI: 10.1128/jb.00105-22
295. Santosh Kumar Sahu, Durga Prasad Mohapatra, Jitendra Kumar Rout, Kshira Sagar Sahoo, Quoc-Viet Pham, Nhu-Ngoc Dao, A LSTM-FCNN based multi-class intrusion detection using scalable framework, *Computers and Electrical Engineering*, 2022, 99, DOI: 10.1016/j.compeleceng.2022.107720
294. Lakshmi Kuruguntla, Vineela Chandra Dodda, Anup Kumar Mandpura, Karthikeyan Elumalai, Erratic noise attenuation using double sparse dictionary learning method, *IEEE Transaction on Geoscience and Remote Sensing*, 2022, 60, DOI: 10.1109/TGRS.2022.3164460
293. Lakhveer Singh, Rajesh Kumar, Ti3C2 MXene-As Electrocatalyst for Designing Robust Glucose Biosensors, *Advanced Materials Technologies*, 2022, Just Accepted, DOI: 10.1002/admt.202200151
292. Shwetha Kolathur Ramachandra, Doddahalli Hanumantharayudu Nagaraju, Shivanna Marappa, Samadhan Kapseb and Ranjit Thapa, Highly Efficient Catalysts of Ruthenium Clusters on Fe3O4/MWCNTs for Hydrogen Evolution Reaction, *New Journal of Chemistry*, 2022, 46, 7014-7023, DOI: 10.1039/D2NJ00887D
291. Deepak Pathania, Lakhveer Singh, Biorenewable Nanocomposite Materials for Desalination and Waste Water Remediation, *ACS Symposium Series*, 2022, 1411, DOI: 10.1021/bk-2022-1411
290. Abhinandan Patra, Samadhan Kapse, Ranjit Thapa, Dattatray Late, Chandra Sekhar Rout, Supercapacitor electrodes based on quasi-one-dimensional van der Waals TiS3 nanosheets: experimental findings and theoretical validation, *Applied Physics Letters*, 2022, 120, 103102, DOI: 10.1063/5.0080346
289. Kunal Tiwary, Sanjaya Kumar Patro, Amir H. Gandomi & Kshira Sagar Sahoo, Model updating using causal information: a case study in coupled slab, *Structural and Multidisciplinary Optimization*, 2022, 65, 62, DOI: 10.1007/s00158-021-03166-w
288. Denslin Brabin, Christo Ananth & Sriramulu Bojjagani, Blockchain-Based Security Framework for Sharing Digital Images using Reversible Data Hiding and Encryption, *Multimedia Tools and Applications*, 2022, Just Accepted, DOI: 10.1007/s11042-022-12617-5
287. Nitin Kumar Agarwal, Madan Kumar, Pooja Ghosh, Smita S. Kumar, Lakhveer Singh, Virendra Kumar Vijay, Vivek Kumar, Anaerobic digestion of sugarcane bagasse for biogas production and digestate valorization, *Chemosphere*, 2022, 295, DOI: 10.1016/j.chemosphere.2022.133893
286. V. G. Vasavi Dutt, Syed Akhil, Rahul Singh, Manoj Palabathuni, and Nimai Mishra, High-Quality CsPbX3 (X= Cl, Br, or I) Perovskite Nanocrystals Using Ascorbic Acid Post-Treatment: Implications for Light-Emitting Applications, *ACS Applied Nano Materials*, 2022, 5, 5, 5972–5982, DOI: 10.1021/acsanm.1c04312
285. M.S.S.R. Tejaswini, Pankaj Pathak, Seeram Ramkrishna, P. Sankar Ganesh, A comprehensive review on Integrative Approach for Sustainable Management of Plastic Waste and its associated Externalities, *Science of the Total Environment*, 2022, 825, DOI: 10.1016/j.scitotenv.2022.153973

284. Subrata Karmakar, Bidisha Mukherjee, Alka B. Garg, Deepak S. Gavali, Ranjit Thapa, Saheli Banerjee, Goutam Dev Mukherjee, Ariful Haque, and Dhruvananda Behera, Structural Metamorphosis and Bands Dislocation of Trirutile NiTa₂O₆ under Compression, *Journal of Physical Chemistry C*, 2022, 126, 8, 4106–4117, DOI: <https://doi.org/10.1021/acs.jpcc.1c10896>
283. Jayaseelan Murugaiyan, P. Anand Kumar, G. Srinivasa Rao, Katia Iskandar, Stephen Hawser, John P. Hays, Yara Mohsen, Saranya Adukkadukkam, Wireko Andrew Awuah, Ruiz Alvarez Maria Jose, Nanono Sylvia, Esther Patience Nansubuga, Bruno Tilocca, Paola Roncada, Natalia Roson-Calro, Javier Moreno-Morales, Rohul Amin, Ballamoole Krishna Kumar, Abishek Kumar, Abdul-Rahman Toufik, Maarten B. M. van Dongen, *Progress in Alternative Strategies to Combat Antimicrobial Resistance: Focus on Antibiotics*, *Antibiotics*, 2022, 11(2), 200, DOI: 10.3390/antibiotics11020200
282. Giuseppe Toscani, Parongama Sen and Soumyajyoti Biswas, Kinetic exchange models of societies and economies, *Philosophical Transactions A*, 2022, 380, DOI:10.1098/rsta.2021.0170
281. Amit Kumar Singh, Rajendra Pamula, Gautam Srivastava, An Adaptive Energy Aware DTN-based Communication Layer for Cyber-Physical Systems, *Sustainable Computing: Informatics and Systems*, 2022, 35, DOI: 10.1016/j.suscom.2022.100657
280. Kumar Babu Busi, Writoban Basu Ball, Sabyasachi Chakraborty, The Multifarious Applications of Copper Nanoclusters in Biosensing and Bioimaging and Their Translational Role in Early Disease Detection, *Nanomaterials*, 2022, 12(3), 301, DOI: 10.3390/nano12030301
279. Rajapandiyam Panneerselvam, Detlev Belder, Hemanth Noothalapati, Anish Das, Eva-Maria Hohn, and Hasan Sadat, Microfluidics and surface-enhanced Raman spectroscopy, a win-win combination, *Lab on a Chip*, 2022, 22, 665-682, DOI:10.1039/D1LC01097B
278. Shaiju Panchikkil, V. M. Manikandan & Yu-Dong Zhang, A Pseudo-random Pixel Mapping with Weighted Mesh Graph Approach for Reversible Data Hiding in Encrypted Image, *Multimedia Tools and Applications*, 2022, 81, 16279–16307, DOI: 10.1007/s11042-022-12350-z
277. Kshira Sagar Sahoo, Hrudaya Kumar Tripathy, Sushruta Mishra, Shubham Suman, Anand Nayyar, Smart COVID-shield: An IoT Driven Reliable and Automated Prototype for COVID-19 Symptoms Tracking, *Computing Journal*, 2022, 104, 1233–1254, DOI: 10.1007/s00607-021-01039-0
276. Nishant Kumar, Pratibha Garg & Shailender Singh, Pro Environmental Purchase Intention Towards Eco-friendly Apparel: Extension of the theory of planned behavior model, *Journal of Global Fashion Marketing*, 2022, 13, 2, DOI: 10.1080/20932685.2021.2016062
275. Shailender Singh, Muhammad Muazu Bala, Nishant Kumar, The Dynamics of Public and Private Health Expenditure on Health Outcome in Southeast Asia, *Health and Social Care in the Community*, 2022, 30, 5, DOI:10.1111/hsc.13698
274. Priyanka Singh, K. Jyothsna Devi, Hiren Kumar Thakkar, Ketan Kotecha, Region-based Hybrid Medical Image Watermarking Scheme for Robust and Secured Transmission in IoMT, *IEEE Access Journal*, 2022, 99, 1-1, DOI: 10.1109/ACCESS.2022.3143801
273. Nitul Dutta, An approach for FIB construction and Interest packet forwarding in information centric networks, *Future Generation Computer Systems*, 2022, 130, 269-278, DOI: 10.1016/j.future.2022.01.005
272. Sudheer Kumar Battula, Patwary M.A.K, Garg S, Kang B.H, Scalable Real-time Dynamic Graph Partitioner, *IEEE Transactions on Services Computing*, 2021, 1-1, DOI:10.1109/TSC.2021.3137932

271. Lakhveer Singh, Gopa Nandikes, Shaik Gouse Peera , Perovskite-Based Nanocomposite Electrocatalysts: An alternative to Platinum ORR Catalyst in Microbial Fuel Cell Cathodes, *Energies*, 2021, 15(1), 272, DOI: <https://doi.org/10.3390/en15010272>
270. Mahesh Kumar Ravva, Yaping Yu, Danlei Zhu, Xiuyuan Zhu, Jiayao Duan, Lang Jiang, Zhengke Lia and Wan Yue, A Novel Class of Rigid-rod Perylene Diimides and Isoindigo Semiconducting Polymers, *Polymer Chemistry*, 2021, 13, 536-544, DOI: <https://doi.org/10.1039/D1PY01362A>
269. Pranab Mandal, Alicia María Manjón-Sanz, T. Wesley Surta, Alex J. Corkett, Hongjun Niu, Eiji Nishibori, Masaki Takata, John Bleddyn Claridge, and Matthew J. Rosseinsky, Complex Structural Disorder in a Polar Orthorhombic Perovskite Observed through the Maximum Entropy Method/Rietveld Technique, *Chemistry of Materials*, 2021, 34, 1, 29–42, DOI: 10.1021/acs.Chemmater.1c01979
268. Sheela Singh, Hari Prasanth , Mahesh Jadhav, E. Meher Abhinav, Jaivardhan Sinha, ENHANCED MAGNETIZATION WITH INCREASED CHROMIUM CONCENTRATION IN FeCoCrNi₂Al HIGH-ENTROPY ALLOY, *Materials Science and Technology*, 2021, 38 ,12-18, DOI:10.1080/02670836.2021.2021499
267. Lakhveer Singh, Durga Madhab Mahapatra, Puranjan Mishra, Sveta Thakur, Leveraging artificial intelligence in bioelectrochemical systems, *Trends in Biotechnology Journal*, 2021, 40, 535-538, DOI: <https://doi.org/10.1016/j.tibtech.2021.11.005>
266. Nimai Mishra, 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, 61, 2, 1059–1066, DOI: <https://doi.org/10.1021/acs.inorgchem.1c03185>
265. Shoji D Thottathil, Paula C. J. Reis, Yves T. Prairie, The role of methanotrophy in the microbial carbon metabolism of temperate lakes, *Nature Communications*, 2021, 13, 43 , DOI: 10.1038/s41467-021-27718-2
264. Ranjit Thapa, Deepak S. Gavali, Yoshiyuki Kawazoe, First-principles identification of interface effect on Li storage capacity of C₃N/Graphene multilayer heterostructure, *Journal of Colloid and Interface Science*, 2021, 610, 80-88, DOI: <https://doi.org/10.1016/j.jcis.2021.12.052>
263. Priyanka S, Hiren Kumar Thakkar , Ankit Desai , Subrata Ghosh, Gajendra Sharma, AdaBoost With Cost: A Cost-sensitive Classification for Customer Churn Prediction, *Computational Intelligence and Neuroscience*, 2021, 1-11, DOI: 10.1155/2022/9028580
262. Jatis Kumar Dash, Andrew Kim, Pawan Kumar, and Rajkumar Patel, Carbon-based quantum dots for photovoltaic devices, *ACS Applied Electronic Materials*, 2021, 4, 1, 27–58 , DOI: 10.1021/acsaelm.1c00783
261. Ranjit Thapa, 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 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, 5, 1, 343–354, DOI: 10.1021/acsaem.1c02871
260. Ranjit Thapa, Sauvik Chatterjee, Surajit Das, Piyali Bhanja, Erakulan E. S, 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, 55, DOI: 10.1016/j.jcou.2021.101843

259. Karthik Rajendran, Sarath C. Gowda, Seeram Ramakrishna, An untapped and under-tapped resource for nutrient recovery towards attaining a sustainable circular economy, *Chemosphere*, 2021, 291, DOI: <https://doi.org/10.1016/j.chemosphere.2021.132753>
258. Ranjit Thapa, Pratik V. Shinde, Anjana Tripathi, Chandra Sekhar Rout, Nanoribbons of 2D inorganic materials: A review on emerging trends, recent developments and future perspectives, *Coordination Chemistry Reviews*, 2021, 453, DOI: [10.1016/j.ccr.2021.214335](https://doi.org/10.1016/j.ccr.2021.214335)
257. Lakhveer Singh, Puranjan Mishra, Junsang Lee, Deepak Kumar, Ricardo O. Louro, Nazua Costa, Deepak Pathania, Smita Kumar, Jinwoo Lee, Engineered Nanoenzymes with Multifunctional Properties for Next-Generation Biological and Environmental Applications, *Advanced Functional Materials*, 2021, 32, DOI: <https://doi.org/10.1002/adfm.202108650>
256. Soumyajyoti Biswas, Subhadeep Roy, Opinion dynamics: Public and private, *Philosophical Transactions of the Royal Society A*, 2021, 380, DOI: <https://doi.org/10.1098/rsta.2021.0169>
255. Raja Pandian, Mahima Chandel, Kamaljit Kaur, Bandana Kumari Sahu, Sandeep Sharma, Vijaya kumar Shanmugam, Promise of nano-carbon to the next generation sustainable agriculture, *Carbon*, 2021, 188, 461-481, DOI: <https://doi.org/10.1016/j.carbon.2021.11.060>
254. Lakhveer Singh, Zahari Mohamad, Amir AbdulRazak, Santhana Krishna, 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, 172, 578-582, DOI: <https://doi.org/10.1016/j.cherd.2021.11.019>
253. Karthik Rajendran, Megha Mourya, Mohd. Jahir Khan, Ankesh Ahirwar, Benoit Schoefs, Justine Marchand, Anshuman Rai, Sunita Varjani, Rajesh Banu, Vandana Vinayak, Latest trends and developments in microalgae as potential source for biofuels: The case of diatoms, *Fuel*, 2021, 314, DOI: <https://doi.org/10.1016/j.fuel.2021.122738>
252. Kshira Sagar Sahoo, Mayank Tiwary; Ashish Kr. Luhach; Anand Nayyar; Kim-Kwang Raymond Choo, Demand-Supply Based Economic Model for Resource Provisioning in Industrial IoT Traffic, *IEEE Internet of Things Journal*, 2021, 9, 10529-10538, DOI: [10.1109/JIOT.2021.3122255](https://doi.org/10.1109/JIOT.2021.3122255)
251. Anil K Suresh, Divya S. Parimia, Yamini Gupta, Sreekar Marpu, Chandra S. Bhatt, Tharun K. Bollu, Nanomagnet-facilitated pharmaco-compatibility for cancer diagnostics: Underlying risks and the emergence of ultrasmall nanomagnets, *Journal of Pharmaceutical Analysis*, 2021, 12, 365-379, DOI: <https://doi.org/10.1016/j.jpha.2021.11.002>
250. Soumyajyoti Biswas, Narendra K. Bodaballa, Subhadeep Roy, Correlation between avalanches and emitted energies during fracture with variable stress release range, *Frontiers in Physics*, 2021, Just Accepted, DOI: <https://doi.org/10.3389/fphy.2022.768853>
249. Lakhveer Singh, Puranjan Mishra, Putla Sudarsanam, Durga Madhab Mahapatra, Ahmed Elmekawy, Deepak Pant, Progressions in cathodic catalysts for oxygen reduction and hydrogen evolution in bioelectrochemical systems: Molybdenum as the next-generation catalyst, *Catalysis Reviews*, 2021, Just accepted, DOI: <https://doi.org/10.1080/01614940.2021.2003085>
248. Suresh, A.K, Divya S. Parimi, Yamini Gupta, Sreekar Marpu, Chandra S. Bhatt, Tharun K. Bollu, Nanomagnet properties facilitated pharmaco-compatibility for cancer diagnostics, underlying risks and the emergence of ultra-small nanomagnets, *J of Pharmaceutical Analysis*, 2021, 12, 365-379, DOI: <https://doi.org/10.1016/j.jpha.2021.11.002>

247. Suresh, A.K, Divya S. Parimi, Madhura H. U, Chandra S. Bhatt, Tharun K. Bollu, Noah Jacob, M. Motapothula, Derivation of sustainable transparent biotemplate from fish scale waste for ultra-low volume high-sensitive UV-Vis spectroscopy, *Green Chemistry*, 2021, 23, 8217-8225 DOI: <http://doi.org/10.1039/d1gc02569d>
246. Murugaiyan, J, Ansari S, Hays JP, Kemp A, Okechukwu R, Ekwanzala MD, Ruiz Alvarez MJ, Paul-Satyaseela M, Iwu CD, Balleste-Delpierre C, Septimus E, Mugisha L, Fadare J, Chaudhuri S, Chibabhai V, Wadanamby JMRWW, Daoud Z, Xiao Y, Parkunan T, Khalaf Y, M'Ikanatha NM, van Dongen MBM, The potential impact of the COVID-19 pandemic on global antimicrobial and biocide resistance: An AMR Insights' global perspective, *JAC-Antimicrobial Resistance*, 2021,3, DOI: 10.1093/jacmr/dl ab 038.
245. Govindarajan S, Szoke, T., Albocher, N., Nussbaum-Shochat, A. and Amster-Choder, O Tyrosine phosphorylation-dependent localization of TmaR that controls activity of a major bacterial sugar regulator by polar sequestration, *Proceedings of the National Academy of Sciences*, 2021, 118, DOI: <https://doi.org/10.1073/pnas.2016017118>
244. Karthik Rajendran, Mohd Jahir Khan, Nikhil Singh, Sudhanshu Mishra, Ankesh Ahirwar, Felix Bast, Sunita Varjani, Benoit Schoefs, Justine Marchand, J. Rajesh Banu, Ganesh Dattatraya Saratale, Rijuta Ganesh Saratale, 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, 288, DOI: <https://doi.org/10.1016/j.chemosphere.2021.132589>
243. 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, 139, DOI: <https://doi.org/10.1016/j.combiomed.2021.104997>
242. Ranjit Thapa, Sinthika S, Pushpa Selvi M, Nimma Elizabeth R, Deepak S. Gavali, 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, 46, 4405-4416, DOI: <https://doi.org/10.1002/er.7438>
241. Ranjit Thapa, Samadhan Kapse, Bennet Benny, Pranab Mandal, Design Principle of MoS₂/C Heterostructure to Enhance the Quantum Capacitance for Supercapacitor Application, *Journal of Energy Storage*, 2021, 44, DOI: <https://doi.org/10.1016/j.est.2021.103476>
240. Priyanka S, Rahul Kottath, An Ensemble Approach to Meta-heuristic Algorithms: Comparative Analysis and its Applications, *Computers & Industrial Engineering*, 2021, 162, DOI: <https://doi.org/10.1016/j.cie.2021.107739>
239. Ranjit Thapa, Erakulan E.S, Origin of pure and C doped borophene stability and its activity for OER, *Applied Surface Science*, 2021, 574,1, DOI: <https://doi.org/10.1016/j.apsusc.2021.151613>
238. Sateesh Krishna Dhuli, Said Kouachi; Anamika Chhabra; Yatindra Nath Singh, Network Robustness Analysis for IoT Networks using Regular Graphs, *IEEE Internet of Things*, 2021,9, 8809-8819, DOI: 10.1109/JIOT.2021.3116256
237. Om Jee Pandey, Daniel Skomedal Breland, Aveen Dayal, Ajit Jha, Phaneendra K. Yalavarthy, Linga Reddy Cenkeramaddi, Robust Hand Gestures Recognition using a Deep CNN and Thermal Images, *IEEE Sensors Journal*, 2021,21, 26602 – 26614, DOI: 10.1109/JSEN.2021.3119977

236. Goutam Kumar Dalapati, Sabyasachi Chakraborty, Sabyasachi Mukhopadhyay, Ashwini Nawade, Kunchanapalli Ramya, Priyanka Bamola, Himani Sharma, Mohit Sharma, Krishnendu Chakraborty, Seeram Ramakrishna, Sajal Biringgh Teren, Kin Shun Wongi, Avishek Kumar, Sabyasachi Mukhopadhyay, Goutam Kumar Dalapati, Copper based Transparent Solar Heat Rejecting Film on Glass through in-situ Nanocrystal Engineering of Sputtered TiO₂, *Ceramic International*, 2021, 48, 2482-2491 DOI: <https://doi.org/10.1016/j.ceramint.2021.10.030>
235. Soumyajyoti Biswas, Bikas K. Chakrabarti, Social inequality analysis of fiber bundle model statistics and prediction of materials failure, *Physical Review E*, 2021, 104, DOI: 10.48550/arXiv.2106.14294
234. Nimai Mishra, Rahul Singh, Syed Akhil, V. G. Vasavi Dutt, Shell Thickness Dependent Photostability Studies of Green-Emitting "Giant" Quantum Dots, *Nanoscale Advances*, 2021, 3, 6984-6991, DOI: <https://doi.org/10.1039/D1NA00663K>
233. Kshira Sagar Sahoo R. K. Naik, S. Sethi, S. K. Bhaoui, N. Jhanjhi, T.A. Tabbakh and Z. A. Almusaylim, TBDDoS-MD: Trust-Based DDoS Misbehavior Detection Approach in Software-defined Vehicular Network (SDVN), *Computers, Materials and Continua*, 2021, 69,3, DOI: 10.32604/cmc.2021.018930
232. Ranjit Thapa, Santu Ruidas, Bishnupad Mohanty, Piyali Bhanja, S. Erakulan, Prasenjit Das, Avik Chowdhury, Sanjay K. Mandal, Bikash Kumar Jena, Asim Bhaumik, Metal-Free Triazine based Covalent Organic Framework for Efficient H₂ Evolution via Electrochemical Water-Splitting, *ChemSusChem*, 2021, 14, 5057-5064, DOI: <https://doi.org/10.1002/cssc.202101663>
231. Karthik Rajendran, Changlei Xia, Abhijeet Pathy, Balasubramanian Paramasivan, Prabakaran Ganeshan, Kondusamy Dhamodharan, Ankita Juneja, Deepak Kumar, Kathirvel Brindhadevi, Sang-Hyoun Kim, Comparative study of pyrolysis and hydrothermal liquefaction of microalgal species: Analysis of product yields with reaction temperature, *Fuel*, 2021, 311, DOI: 10.1016/j.fuel.2021.121932
230. 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, 8, 365-379, DOI: 10.1109/TCCN.2021.3114147
229. Satish Anamalamudi, Abdur Rashid Sangi, Mohammed S Alkatheiri, Mohammed A. Alqarni, Muhammad Hammad Memon, Wan-an Yang, Spectrum Handoff Aware AODV Routing Protocol for Cognitive Radio Vehicular Ad Hoc Networks, *Complexity Journal*, 2021, 1-13, DOI: 10.1155/2021/6981719
228. Ashok Kumar Pradhan, Kshira Sagar Sahoo "Prasenjit Maity; Sandeep Saxena; Shashank Srivastava, Neeraj Kumar, An Effective Probabilistic Technique for DDoS Detection in OpenFlow Controller, *IEEE System Journal*, 2021, 16, 1345-1354, DOI: 10.1109/JSYST.2021.3110948
227. Hiren Kumar Thakkar, Deepak Rai, Shyam Singh Rajput, Jose Santamaria, Chintan Bhatt and Francisco Roca, A Comprehensive Review on Seismocardiogram: Current Advancements on Acquisition, Annotation, and Applications, *Mathematics*, 2021, Just Accepted, DOI: 10.3390/math9182243
226. Chinmaya Kumar Swain, Aryabartta Sahu, Reliability Ensured Efficient Scheduling With Replication in Cloud Environment, *IEEE System Journal*, 2021, 16, 2729-2740, DOI: 10.1109/JSYST.2021.3112098

225. Nimai Mishra, Syed Akhil, V. G. Vasavi Dutt, Rahul Singh, Surface-State-Mediated Interfacial Hole Transfer Dynamics Between CsPbBr₃ Perovskite Nanocrystals and Phenothiazine Redox Couple, *The Journal of Physical Chemistry-C*, 2021, 125, 40, 22133–22141, DOI:10.1021/acs.jpcc.1c07129
224. Jayaseelan Murugaiyan, Murugaiyan. V., Ali, J., Frei.M., Zeibig.F., Pandey. A., Wairich. A., Wu. L.B , and Li. Z, Identification of promising genotypes through systematic evaluation for arsenic tolerance and exclusion in rice, *Frontiers in Plant Science*, 2021, Just Accepted, DOI:10.3389 /fp ls.2021.753063
223. Mallikarjuna Rao Motapothula, Anil K Suresh,Divya S. Parimi, Chandra S. Bhatt, Tharun K. Bollu, Madhura H. U, Noah Jacob, Sustainable transparent biotemplate from fish scale waste for ultra-low volume high-sensitive UV-Vis spectroscopy, *Green Chemistry*, 2021, DOI: 10.1039/D1GC02569D
222. Imran Uddin, Akash Varshney, Jamal Ahmad Khan, Irfan Ahmad, Room temperature chemical synthesis of Bi₂O₃ nanoparticles, *Micro & Nano Letters*, 2021, 16, 209-514, DOI: <https://doi.org/10.1049/mna2.12077>
221. Imran Uddin, Onsite visual detection of heavy metal contaminants using impregnated strip, *Journal of Photochemistry Photobiology A: Chem*, 2021, 421, DOI: 10.1016/ j.jphoto chem.202 1.113512
220. Manjula Raja, Tejobdhav Koduru; Raja Datta, Protecting Source Location Privacy in IoT Enabled Wireless Sensor Networks : the case of Multiple Assets, *IEEE Internet of Things Journal*, 2021, 9,10807-10820, DOI:10.1109/JIOT.2021.3126171
219. Hiren Kumar Thakkar, Hrudaya Kumar Tripathy, Sushruta Mishra,Deepak Rai, CARE: A Collision-Aware Mobile Robot Navigation in Grid Environment using Improved Breadth First Search, *Computers and Electrical Engineering*, 2021, 94, DOI: <https://doi.org/10.1016/j.compeleceng.2021.107327>
218. Kshira Sagar Sahoo, Nithya, S., M. Sangeetha, KN Apinaya Prethi, 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, 17, 2423-2435, DOI: 10.1109/ TN SM.2020.3015657
217. Lakhveer Singh, Shaik Gouse Peera, Chao Liu, Akhila Kumar Sahu, Manickam Selvaraj, M. C. Rao, Tae Gwan Lee, Ravindranadh Koutavarapu, Jaesool Shim, Recent Advances on MXene's based Electrocatalysts towards Oxygen Reduction Reaction: A Focused Review, *Advanced Materials Interfaces*, 2021, 8, DOI: <https://doi.org/10.1002/admi.202100975>
216. Goutam Kumar Dalapati, Priyanka Bamola, Mohit Sharma, Charu Dwivedi, Bharti Singh, Seeram Ramakrishna, Himani Sharma, Interfacial interaction of plasmonic nanoparticles (Ag, Au) decorated floweret TiO₂ nanorod hybrids for enhanced visible light driven photocatalytic activity, *Materials Science & Engineering B*, 2021, 273, DOI: <https://doi.org/10.1016/j.mseb.2021.115403>
215. Goutam Kumar Dalapati, Jatindra Kumar Dash, Sabyasachi Chakraborty, Swikriti Khadke , Pragya Gupta , Shanmukh Rachakunta, Chandreswar Mahata , Suma Dawn , Mohit Sharma , Deepak Verma , Aniruddha Pradhan , Ambati Mounika Sai Krishna , Seeram Ramakrishna , Gopalan Saianand, Prashant Sonar, Sajal Biring, Efficient Plastic Recycling and Remold Circular Economy using the Technology of Trust – Blockchain, *Sustainability*, 2021, 13(16), 9142, DOI:10.3390/su13169142
214. Karthikeyan Elumalai, Lakshmi Kuruguntla, Vineela Chandra Dodda, Study of parameters in dictionary learning method for seismic denoising, *IEEE Transactions on Geoscience and Remote Sensing journal*, 2021, 60, DOI:10.1109/TGRS.2021.3107541

213. Mannathan S, Mahesh Kumar Ravva, Madasamy Hari Balakrishnan, Madasamy Kanagaraj, Vela yudham Sankar, 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, 45, 17190-17195, DOI : 10.1039/D1NJ03706D"
212. J P Raja Pandiyan, Hai-Long Wang, En-Ming You, Rajapandiyan Panneerselvam, Song-Yuan Ding & Zhong-Qun Tian, Advances of surface-enhanced Raman and IR spectroscopies: from nano/ micro structures to macro-optical design, *Light: Science & Applications*, 2021, 10, 161, DOI:10.1038/s41377-021-00599-2
211. Ranjit Thapa, Phiralang Marbaniang, Samadhan Kapse, Sagar Ingavale, Bhalchandra Kakade, Nitrogen doping derived bridging of Graphene and Carbon Nanotube composite for oxygen electroreduction, *International Journal of Energy Research*, 2021, 45, 21293-21306, DOI: <https://doi.org/10.1002/er.7179>
210. Lakhveer Singh, Ajay Kumar, Manisha Chandel, Arush Sharma, Manita Thakur, Amit Kumar, Deepak Pathania, 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, 9, DOI: <https://doi.org/10.1016/j.jece.2021.106159>
209. Nimai Mishra, V. G. Vasavi Dutt, Syed Akhila, Enhancement of Photoluminescence and Stability of CsPbX₃ (X= Cl, Br, and I) Perovskite Nanocrystals with Phthalimide Passivation, *Nanoscale*, 2021, 13, 14442-14449, DOI: <https://doi.org/10.1039/D1NR03916D>
208. Hiren Kumar Thakur, Hrudaya Kumar Tripathy, Sushruta Mishra, Deepak Rai, CARE: A Collision-Aware Mobile Robot Navigation in Grid Environment using Improved Breadth First Search, *Computers and Electrical Engineering*, 2021, 94, DOI: <https://doi.org/10.1016/j.compeleceng.2021.107327>
207. Rajiv Senapati, LTE-advanced cell capacity estimation model and algorithm for voice service, *J Ambient Intell Human Comput*, 2021, Just Accepted, DOI: 10.1007/s12652-021-03373-9
206. Karthik Rajendran, Mohd Jahir Khan, Harish, Ankesh Ahirwar, Benoit Schoefs, Arivalagan Pugazhendhi, Sunita Varjani, 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, 201, DOI: 10.1016/j.envres.2021.111550
205. Mahesh Kumar Ravva, Joseph, S., 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, 4, DOI:10.1002/adts.202100019
204. Nimai Mishra, Syed Akhil, V.G. Vasavi Dutt, 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, 13, 13142-13151, DOI: 10.1039/D1NR03560F
203. Siddhartha Ghosh, Sabyasachi Mukhopadhyay, Sabyasachi Chakraborty, Goutam Kumar Dalapati, Tin Oxide for Optoelectronics, Photovoltaic and Energy Storage Devices - A Review *Journal of Materials Chemistry A*, 2021, 9, 16621-16684, DOI: 10.1039/D1TA01291F

202. Satya Pramod Jammy, David J. Lusher, Neil D. Sandham, OpenSBLI-Automatic code generation for heterogeneous computer architectures applied to CFD, Computer physics communication, 2021, 267, DOI: 10.1016/j.cpc.2021.108063.
201. Kshira Sagar Sahoo, Bhoi A, Nayak RP, Bhoi SK, Sethi S, Panda SK, Nayyar A, IoT-IIRS: Internet of Things based intelligent-irrigation recommendation system using machine learning approach for efficient water usage, PeerJ, computer Science, 2021, 7, DOI: 10.7717/peerj-cs.578
200. Sujith Kalluri, Sharon Santhosh, Malvika Sathish, Shriya Iyer, Asha Anish Madhavan, One-pot synthesis of MoS₂ nanoflowers for thermal energy storage applications, Materials Letters, 2021, 302, DOI: 10.1016/j.matlet.2021.130343
199. Laxmi Narayana 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, 301, DOI: <https://doi.org/10.1016/j.matlet.2021.130337>
198. Mahesh Kumar Ravva, Yao, L., Zhu, D., Liao, H., Haseena, S., Cong, S., Lan, L., Wang, Y., Li, Z., Jiang, L. and Yue, W., Correction: Fused ambipolar aza-isoindigos with NIR absorption, Org. Chem. Front., 2021, 8, 1384-1385, DOI: 10.1039/D1QO90017J
197. Goutam Kumar Dalapati, A. Dey, G. Chandrabose, P. Ghosh, L. A. O. Dampthey, Adam H. Clark, V. Selvaraj, R V. Kumar, N. St. J. Braithwaite, S. Zhuk, S Ramakrishna, S. Krishnamurthy, Atmospheric pressure plasma engineered superhydrophilic CuO surfaces with enhanced catalytic activities Applied Surface Science, 2021, 564, DOI: <https://doi.org/10.1016/j.apsusc.2021.150413>
196. Gangi Reddy Salla, Patnala Vanitha, Nijil Lal, Anju Rani, R. P. Singh, Correlations in Scattered Perfect Optical Vortices, Journal of Optics, 2021, Just Accepted, DOI: 10.48550/arXiv.2002.01237
195. Imran Pancha, Takaya, K.; Tanaka, K.; Imamura, S., The Unicellular Red Alga Cyanidioschyzon merolae, an Excellent Model Organism for Elucidating Fundamental Molecular Mechanisms and Their Applications in Biofuel Production Plants, 2021, 10, DOI: 10.3390/plants10061218
194. Lakhveer Singh, Sandeep K. Malyan, Smita S. Kumar, Ram Kishor Fagodiya, Pooja Ghosh, Amit Kumar, Rajesh Singh, Biochar for Environmental Sustainability in the Energy-Water-Agroecosystem Nexus, Renewable and Sustainable Energy Reviews, 2021, 149, DOI: <https://doi.org/10.1016/j.rser.2021.111379>
193. Aparna Choudhary, 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, 294, DOI: 10.1016/j.jenvman.2021.113063
192. Sushruta Mishra, Hiren Kumar Thakkar, Pradeep Kumar Mallick, Prayag Tiwari, Atif Alamri, A sustainable IoT based computationally intelligent healthcare monitoring system for lung cancer risk detection, Sustainable Cities and Society, 2021, 72, DOI: <https://doi.org/10.1016/j.scs.2021.103079>
191. Laxmi Narayana Patro, Y. Bhaskara Rao, Influence of Synthesis Methodology and Excess Na on the Ionic Transport Properties of Sodium Super Ionic Conductor, Na₃Zr₂Si₂PO₁₂, Materials Letters, 2021, 301, DOI: <https://doi.org/10.1016/j.matlet.2021.130267>
190. Ghanshyam Pandey, Pratap S. BIRTHAL, Jaweriah Hazrana, Digvijay S. Negi, Benefits of Irrigation against heat stress in Agriculture: Evidence from wheat crop in India, Agricultural Water Management, 2021, 255, DOI: 10.1016/j.agwat.2021.106950

189. Hiren Kumar 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, 32, 2906-2920, DOI: 10.1109/TPDS.2021.3080582
188. Laxmi Narayana Patro, 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, 366-367, DOI: <https://doi.org/10.1016/j.ssi.2021.115671>
187. Ranjit Thapa, Amritanjali Tiwari, Amit Gautam, Saddam Sk, Deepak S. Gavali, and Ujjwal Pal, Controlled Loading of MoS₂ on Hierarchical Porous TiO₂ for Enhanced Photocatalytic Hydrogen Evolution, Journal of Physical Chemistry C, 2021, 125, 22, 11950-11962, DOI: <https://doi.org/10.1021/acs.jpcc.1c01922>
186. Sriramulu Bojjagani, V. N. Sastry, Chien-Ming Chen, Saru Kumari & Muhammad Khurram Khan, Systematic Survey of Mobile Payments, Protocols, and Security Infrastructure, Journal of Ambient Intelligence and Humanized Computing, 2021, Just Accepted, DOI: <https://doi.org/10.1007/s12652-021-03316-4>
185. Jatindra Kumar Dash, 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, 9, 72670-72680, DOI: 10.1109/ACCESS.2021.3079397
184. Narayana Rao D., Aravindhavel A. Sanjay Kumar Mehta, Saleem Ali, Ramesh Reddy, Vanmathi Annamalai, Micro pulse lidar measurements in coincidence with CALIPSO overpasses: Comparison of tropospheric aerosols over Kattankulathur (12.82oN, 80.04oE)., Atmospheric Pollution Research, 2021, 12, DOI: <https://doi.org/10.1016/j.apr.2021.101082>
183. Narayana Rao D., Ananthvel Aravindhavel; Sanjay Kumar Mehta, T. V. Ramesh Reddy; Saleem Ali; 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, 256, DOI: <https://doi.org/10.1016/j.atmosenv.2021.118457>
182. Ranjit Thapa, Murmu, S., Paul, S., Kapse, S., 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, 2021,9, 14477-14484, DOI: <https://doi.org/10.1039/D1TA00766A>
181. Lakhveer Singh Kumar, S.S., Ghosh, P., Kataria, N., Kumar, D., Thakur, S., Pathania, D., Kumar, V., Nasrullah, M, The Role of Conductive Nanoparticles in Anaerobic Digestion: Mechanism, Current Status and Future Perspectives, Chemosphere, 2021, 280, DOI: <https://doi.org/10.1016/j.chemosphere.2021.130601>
180. Somesh Vinayak Tewari, Sharma S.K., Waghmare N., Raju S.J., Rao, K.D , Archana sharma., Compact Inertial Electrostatic Confinement D-D Fusion Neutron Generator, Elsevier-Annals of Nuclear Energy, 2021, 159, DOI: <https://doi.org/10.1016/j.anucene.2021.108358>
179. Imran Pancha, Kulshrestha, A., 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, 335, DOI: <https://doi.org/10.1016/j.molliq.2021.116264>

178. Sujith Kalluri, Karra, C., Venkatachalam, P., Duru, K.K., Maram, P.S., Madhavan, A.A., Application-driven Industrial-scale Manufacturing of Li/Na-ion Battery Cathodes, *Journal of The Electrochemical Society*, 2021, 168, DOI: 10.1149/1945-7111/abfab6
177. Ranjit Thapa, Yoshiyuki Kawazoe, Umesh Waghmare, Kenta Hongo, Mahesh Kumar Rava, Bhalchandra Kakade, Mallikarjuna Rao Motapothula, *Advanced Catalyst, Catalysis Today*, 2021, Just Accepted, DOI: 10.1016/j.cattod.2021.04.007
176. Ranjit Thapa, Jebslinhepzybai, B.T., Partheeban, T., Gavali, D.S., and Sasidharan, M., One-pot solvothermal synthesis of Co₂P nanoparticles: an efficient HER and OER electrocatalysts, *International Journal of Hydrogen Energy*, 2021, 46, 21924-21938, DOI: <https://doi.org/10.1016/j.ijhydene.2021.04.022>
175. Ranjit Thapa, Samal R., Bhat M., Kapse S., 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, 598, 500-510, DOI: 10.1016/j.jcis.2021.04.024
174. Ranjit Thapa, Ghosh A., Saini H., Sarkar A., Guha P., Samantara, A.K., 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, 556, DOI: 10.1016/j.apsusc.2021.149773
173. Mallikarjuna Rao Motapothula, Han K., Wu L., Cao Y., Wang H., Ye C., Huang K., 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, 13, 14, 16688-16693, DOI: 10.1021/acsami.1c01581
172. Raviteja KVNS, Raghuram, A. S. S., Basha, B. M., Variability Characterization of SWCC for Clay & Silt and its Application to Infinite Slope Reliability, *Journal of Materials in Civil Engineering*, 2021, 33, DOI: 10.1061/(ASCE)MT.1943-5533.0003809
171. Suratno Basu., Das S., A Torelli type theorem for nodal curves, *International Journal of Mathematics*, 2021, 32, DOI: <https://doi.org/10.48550/arXiv.2106.08506>
170. Lakhveer Singh, 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, 331, DOI: <https://doi.org/10.1016/j.biortech.2021.125030>
169. Kshira Sagar Sahoo, Madhu G., Govardhan A., Srinivas B. S., Jhanjhi N. Z., VardhanK. S., Rohit B., Imperative Dynamic Routing Between Capsules Network for Malaria Classification, *Computers, Materials & Continua*, 2021, 68, 903-919, DOI: 10.32604/cmc.2021.016114
168. Siddhartha Ghosh, Jani, H., Linghu, J., Hooda, S. et al., Reversible hydrogen control of antiferromagnetic anisotropy in α -Fe₂O₃, *Nature Communications*, 2021,12, DOI: <https://doi.org/10.1038/s41467-021-21807-y>
167. Mahesh Kumar Ravva, Pedireddy, S., Jimenez-Sandoval, R., 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, 31, DOI: <https://doi.org/10.1002/adfm.202010916>

166. Lakhveer Singh, Pathania D., Sharma, A., Kumar S., Srivastava, A. K., Kumar, A., Bio-synthesized Cu-ZnO hetro-nanostructure for catalytic degradation of organophosphate chlorpyrifos under solar illumination, *Chemosphere*, 2021, 277, DOI: <https://doi.org/10.1016/j.chemosphere.2021.130315>
165. Goutam Kumar Dalapati 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, 554, DOI: <https://doi.org/10.1016/j.apsusc.2021.149553>
164. Soumyajyoti Biswas, Roy, S., Size distribution of emitted energies in local load sharing fiber bundles, *Frontiers in Physics*, 2021, 9, DOI: [10.3389/fphy.2021.643602](https://doi.org/10.3389/fphy.2021.643602)
163. Nimai Mishra, Akhil, S., Dutt, V.V., Modification for Impro"Surfaceving Photoredox Activity of CsPbBr₃ Nanocrystals, *Nanoscale Advances*, 2021, 3, 2547-2553, DOI: <https://doi.org/10.1039/D1N1A00091H>
162. Pankaj Pathak., Singh V.K. and Chabhadiya, K., Exhausted LNCM-Cathode Batteries using Oxalic and Sulfuric Acid Lixiviants, *Journal of Metals*, 2021, 73, 1386-1394, DOI: <https://doi.org/10.1007/s11837-021-04631-z>
161. Shoji D Thottathil 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, 777, DOI: <https://doi.org/10.1016/j.scitotenv.2021.146117>
160. Ranjit Thapa, Paramita Banerjee, G.P. Das, Computationally Exploring the Role of S-dopant and S-linker in Activating the Catalytic Efficiency of Graphene Quantum Dot for ORR, *Catalysis Today*, 2021, 370, 36-45, DOI: <https://doi.org/10.1016/j.cattod.2021.03.001>
159. Ram Baran Verma, Manna, R., Borderline gradient estimates at the boundary in Carnot groups, *Proceedings of the Royal Society of Edinburgh Section A: Mathematics*, 2021, 58, 161-179, DOI: [10.1017/prm.2020.86](https://doi.org/10.1017/prm.2020.86)
158. Karthik Rajendran, Awasthi M.K., Sarsaiya, S., Wainaina, S., 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, 144, DOI: <https://doi.org/10.1016/j.rser.2021.110837>
157. Karthik Rajendran, Alfonso-Cardero, A., Pagés-Díaz, J., Contino, F 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, 169, 33-45, DOI: <https://doi.org/10.1016/j.cherd.2021.02.031>
156. Pankaj Pathak, Chabhadiya, K., Srivastava, R.R., 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, 9, DOI: <https://doi.org/10.1016/j.jece.2021.105232>
155. Ranjit Thapa, Uttam Ghorai, Sourav Paul, Biswajit Ghorai, Ashadul Adalder, Samadhan Kapse, 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, 15, 5230-5239, DOI: <https://doi.org/10.1021/acsnano.0c10596>
154. Ashok Kumar Pradhan, Egala, B.S., 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, 8, 11717-11731, DOI: 10.1109/JIO T.2021.3 058946

153. Nimai Mishra, Akhil, S., Dutt, V.V. and Mishra, N., Amine Free Synthesis of Colloidal Cesium Lead Halide Perovskite Nanocrystals, ChemNanoMat, 2021, 7, 342-353, DOI: <https://doi.org/10.1002/cnma.202100002>

152. Tarkeshwar Mahto, 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, 7, 641-653, DOI: <https://doi.org/10.1016/j.egy.2021.01.022>

151. Ranjit Thapa, Brinda, K.N., Małeckı, J.G., Yhobu, Z., Nagaraju, D.H., Budagumpi, S., Erakulan, E.S., Novel Carbene Anchored Molecular Catalysts for Hydrogen Evolution Reactions, The Journal of Physical Chemistry C, 2021, 125, 3793-3803, DOI: <https://doi.org/10.1021/acs.jpcc.0c06701>

150. Mahesh Kumar Ravva, Yao, L., Zhu, D., Liao, H., Haseena, S., Cong, S., Lan, L., Wang, Y., Li, Z., Jiang, L. and Yue, W., Fused Ambipolar Aza-isoidindigos with NIR absorption, Org. Chem. Front., 2021, 8, 1170-1176, DOI: 10.1039/D0QO01495H

149. Ranjit Thapa, Borah, M., Sikdar, A., Kapse, S., Majumdar, A., Dutta, P., Karim, G.M., Deb, S., 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, 370, 83-92, DOI: <https://doi.org/10.1016/j.cattod.2021.01.007>

148. Rao C.D., Devi, Y.D., Devi, A., Gogoi, H., Dehingia, B., Doley, R., Buragihain, A.K., Singh, C.S., Borah, P.P., Ray, P., Varghese, G.M., Kumar, S., Namsa, N.D., Exploring rotavirus proteome to identify potential B- and T-cell epitope using computational immunoinformatics, Heliyon, 2020, 6, DOI: 10.1016/j.heliyon.2020.e05760.

147. Rao, C.D., Enteroviruses in gastrointestinal diseases., Reviews in Medical Virology., 2020, 31, 1-12, DOI: 10.1002/rmv.2148

146. Nimai Mishra, V. G. V. Dutt, S. Akhil, Surface Passivation Strategies for Improving Photoluminescence and Stability of Cesium Lead Halide Perovskite Nanocrystals, ChemNanoMat, 2020, 6, 1730-1742, DOI: 10.1002/cnma.202000495

145. Ajitha, S., Kasilingam, D., Prabhakaran, S.P.S., Dinesh Kumar, R., Rajagopal, V., Santhosh Kumar, T., Soundararaj, A., Exploring the Growth of COVID-19 Cases using Exponential Modelling Across 42 Countries and Predicting Signs of Early Containment using Machine Learning, Transboundary and Emerging Diseases, 2020, 68, 1001-1018, DOI: 10.1111/tbed.13764

144. Jayaseelan Murugaiyan Srivastava, A., Murugaiyan, J., Garcia, J.A.L., De Corte, D., Hoetzing, M., Eravci, M., Weise, C., Kumar, Y., Roesler, U., Hahn, M.W., Grossart, H.-P. Combined Methylome, Transcriptome and Proteome Analyses Document Rapid Acclimatization of a Bacterium to Environmental Changes, Frontiers in Microbiology, 2020, 11, DOI: 10.3389/fmicb.2020.544785

143. Karthik Rajendran, Bhatia S.K., Jagtap S.S., Bedekar A.A., Bhatia R.K., Pugazhendhi A., Rao C.V., Atabani A.E., Kumar G., Yang Y.-H., Renewable biohydrogen production from lignocellulosic biomass using fermentation and integration of systems with other energy generation technologies, Science of the Total Environment, 2020, 765, DOI: 10.1016/j.scitotenv.2020.144429

142. G S VinodKumar, Foaming Magnesium alloy and composite using MgCO₃ blowing agent, Metallurgical and Materials Transaction, 2020, 52, 931-943, DOI: 10.1007/s11663-021-02066-0

141. Ranjit Thapa, Samadhan Kapse, Shazia, Umesh V Waghmare, Energy Parameter and Electronic Descriptor for Carbon Based Catalyst Predicted using QM/ML, *Applied Catalysis B: Environmental*, 2020, 286, DOI: 10.1016/j.apcatb.2020.119866
140. Sheela Singh, Jadhav, M. Sahane, D. Verma, A, Thermal stability and thermal expansion behavior of FeCoCrNi₂Al high entropy alloy, *Advanced Powder Technology*, 2020, 32, 378-384, DOI: 10.1016/j.apt.2020.12.019
139. Karthik Rajendran, B. Ramesh Kumar, Mathimani. T, Sudhakar M.P., Nizami, A-S, Brindadevi, K. Pugazhendhi A., A state of the review on the cultivation of algae for energy and other valuable products: Application, challenges and opportunities, *Renewable and Sustainable Energy Reviews*, 2020, 138, DOI: 10.1016/j.rser.2020.110649
138. Ranjit Thapa, Tripathi A., Promoting reactivity of graphene based catalysts to achieve LH mechanism for CO oxidation, *Catalysis Today*, 2020, 370, 142-150, DOI: 10.1016/j.cattod.2020.12.019.
137. Ramesh Vaddi, Aditya Japa, Manoj Kumar Majumder, Subhendu K. Sahoo, B. K. Kaushik, Hardware Security exploiting post-CMOS Devices: Fundamental device characteristics, State-of-the-Art Countermeasures, Challenges and Roadmap, *IEEE Circuits and Systems Magazine*, 2020, 21, 4-30, DOI: 10.1109/MCAS.2021.3092532
136. Diwakar Tripathi, Venkatanaresbhabu Kuppilli and Damodar Reddy Edla, Evolutionary Extreme Learning Machine with Novel Activation Function for Credit Scoring, *Engineering Application of Artificial Intelligence*, 2020, 96, DOI: 10.1016/j.engappai.2020.103980
135. Mallikarjuna Rao Motapothula, Observation of interacting polaronic gas behavior in Ta-doped TiO₂ thin films via terahertz time-domain spectroscopy, *Applied Physics Letters*, 2020, 117, DOI: 10.1063/5.0022775
134. Shubh Lakshmi., Ganguly S, Coordinated Operational Optimization Approach for PV Inverters and BESSs to Minimize Energy Loss of Distribution Networks, *IEEE Systems*, 2020, 16, 1228-1238, DOI: 10.1109/JSYST.2020.3041787
133. Jatindra Kumar Dash, Mukhopadhyay, S. Gupta, RD. Khandelwal ,N., Content-based image retrieval system for HRCT lung images: Assisting radiologists in self-learning and diagnosis of Interstitial Lung Diseases, *Multimedia Tools and Applications*, 2020, 80, 22589-22618, DOI: 10.1007/s11042-020-10173-4
132. Mahesh Kumar Ravva, Liao, H. hen, M. Sun, J. Haseena, S. Ravva, M K. Xiao, C. Zhang, L. Wang, Y. Zhengke Lia, Yue W., Novel and Asymmetric S, N-Heterocycles with Fused Six-membered Rings for Organic Field Effect Transistors Application, *JMCC*, 2020, 8, 17083-17089, DOI: 10.1039/D0TC04370B
131. Lakhveer Singh, Das, M.T.Kumar, S. S. Ghosh, P. Shah, G. Maly, S. K. Bajar, S. Thakure, IS., Remediation strategies for mitigation of phthalate pollution: Challenges and future perspectives, *Journal of Hazardous Materials*, 2020, 409, DOI: 10.1016/j.jhazmat.2020.124496
130. Goutam Kumar Dalapati, Ranjit Thapa, Avishek Dey, Gauthaman Chandra bose, Lois A.O. Dampney, E.S. Erakulan, Siarhei Zhuk, , Seeram Ramakrishna, Nicholas St. J. Braithwaite, Amir Shirzadi, Satheesh Krishnamurthy, Cu₂O/CuO heterojunction catalysts through atmospheric pressure plasma induced defect passivation, *Applied Surface Science*, 2020, 541, DOI: 10.1016/j.apsusc.2020.148571

129. Ranjit Thapa, R, Shwetharani; Kapse, Samadhan ; D H, Nagaraju; Balakrishna, R. Geetha, Dendritic Ferroselite (FeSe₂) with 2D Carbon Based Nanosheets of rGO and g-C₃N₄ as Efficient Catalysts for Electrochemical Hydrogen Evolution, *ACS Applied Energy Materials*, 2020, 3, 12682-12691, DOI: 10.1021/acsaem.0c02619
128. Jayaseelan Murugaiyan, Pöppe J, Bote K, Ramesh A, Kurovka B, Kühl M, Johnston P, Roesler U, Makarova O, Selection for resistance to a glyphosate-containing herbicide in *Salmonella enterica* does not result in a sustained activation of the tolerance response or increased cross-tolerance and cross-resistance to clinically important antibiotics, *Applied and Environmental Microbiology*, 2020, 86, DOI: 10.1128/AEM.01204-20
127. Karthik Rajendran, Bulkan, G.; Ferreira, J.A., Taherzadeh, M.J., Techno-Economic Analysis of Bioethanol Plant By-Product Valorization: Exploring Market Opportunities with Protein-Rich Fungal Biomass Production, *Fermentation*, 2020, 6, DOI: 10.3390/fermentation6040099
126. Ranjit Thapa, Indrajit M. Patil, Samadhan Kapse, Haridas Parse, Gunther Andersson, Bhalchandra Kakade, 2D/3D Heterostructure of h-BN/reduced Graphite Oxide as a Remarkable Electrode Material for Supercapacitor, *Journal of Power Sources*, 2020, 479, DOI: 10.1016/j.jpowsour.2020.229092
125. Goutam Kumar Dalapati, Bamola, Priyanka Singh, Bharti Bhoumik Aranya, Sharma, Mohit; Dwivedi, Charu; Singh Mandeep; Sharma, Himani, Mixed-Phase TiO₂ Nanotube-Nanorod Hybrid Arrays for Memory Based Resistive Switching Devices, *ACS Applied Nano Materials*, 2020, 3, 10591-10604, DOI: 10.1021/acsanm.0c01648
124. Soumyajyoti Biswas, Y. Yamaguchi, S. Biswas, T. Hatano, L. Goehring, Failure processes of cemented granular materials, *Phys. Rev. E*, 2020, 102, DOI: 10.1103/PhysRevE.102.052903
123. Vadivel, A, Suman Avani, Shaila S G and A Vadivel, Interval Graph of Facial Regions with Common Intersection Salient Points for Identifying and Classifying Facial Expression, *Multimedia Tools and Applications*, 2020, 80, 3367-3390, DOI: 10.1007/s11042-020-09806-5
122. Sambit Kumar Mishra, S. Mishra, A. Alsayat, N. Z. Jhanjhi, M. Humayun, A. K. Luhach, K. S. Sahoo, Energy-Aware Task Allocation for Multi-Cloud Networks, *IEEE ACCESS*, 2020, 8, 178825-178834, DOI: 10.1109/ACCESS.2020.3026875
121. Nimai Mishra, Akhil, S., Dutt, V..G.V., Completely Amine-free Open Atmospheric Synthesis of High-Quality Cesium Lead Bromide (CsPbBr₃) Perovskite Nanocrystals, *Chemistry-A European Journal*, 2020, 26, 17195-17202, DOI: 10.1002/chem.202003891
120. Karthik Rajendran, Benteng Wu, Richen Lin, Richard O'Shea, Chen Deng, Jerry D. Murphy, Production of advanced fuels through integration of biological, thermo-chemical and power to gas technologies in a circular cascading bio-based system, *Renewable and Sustainable Energy Reviews*, 2020, 135, DOI: 10.1016/j.rser.2020.110371
119. Diwakar Tripathi, Damodar Reddy Edla, Venkatanareashbabu Kuppili, Ramesh Dharavath, Binary BAT algorithm and RBFN based hybrid credit scoring model, *Multimedia Tools and Applications*, 2020, 79, 31889-31912, DOI: 10.1007/s11042-020-09538-6
118. Ranjit Thapa, Deepak S Gavali, Synergetic effect of localized and delocalized π electron on Li storage properties of Si/C heterostructures, *Carbon*, 2020, 171, 257-264, DOI: 10.1016/j.carbon.2020.08.076

117. C Durga Rao, Enteroviruses in gastrointestinal diseases, *Reviews in Medical Virology*, 2020, 31, 1-12, DOI: 10.1002/rmv.2148
116. Karthik Rajendran, Sabarathinam Shanmugam, Anjana Hari, Deepak Kumar, Thangavel Mathimani, A.E. Atabani, Kathirvel Brindhadevi, Arivalagan Pugazhendhi, Recent developments and strategies in genome engineering and integrated fermentation approaches for biobutanol production from microalgae, *Fuel*, 2020, 285, DOI: 10.1016/j.fuel.2020.119052
115. Karthik Rajendran, Geetanjali Yadav, Sabarathinam Shanmugam, Ramachandran Sivaramakrishnan, Deepak Kumar, Thangavel Mathimani, Kathirvel Brindhadevi, Arivalagan Pugazhendhi, Mechanism and challenges behind algae as a wastewater treatment choice for bioenergy production and beyond, *Fuel*, 2020, 285, DOI: 10.1016/j.fuel.2020.119093
114. Mahesh Kumar Ravva, Nasrallah, I., Broch, K., Novak, J., Armitage, J., Schweicher, G., Sadhanala, A., Anthony, J. E., Bredas, J.-L., Siringhaus, A Novel Mitigation Mechanism for Photo-Induced Trapping in an Anthradithiophene Derivative Using Additives, *Adv. Electron. Mater.*, 2020, 6, DOI: 10.1002/aelm.202000250
113. Imran Pancha, Chokshi Kaumeel, Khanjan Trivedi, Rahul Kumar Maurya, Arup Ghosh, and Sandhya Mishra, Physiological responses of the green microalga *Acutodesmus dimorphus* to temperature induced oxidative stress conditions, *Physiologia Plantarum*, 2020, 170, 462-473, DOI: 10.1111/ppl.13193
112. Manikandan, V. M., V. Masilamani, A novel image scaling based reversible watermarking scheme for secure medical image transmission, *ISA Transactions*, 2020, 108, 269-281, DOI: 10.1016/j.isatra.2020.08.019
111. Mannathan S, Sankar, V., Kathiresan, M., Sivakumar, B., Zinc-Catalyzed N-Alkylation of Aromatic Amines with Alcohols: A Ligand Free Approach, *Advanced Synthesis & Catalysis*, 2020, 362, 4409-4414, DOI: 10.1002/adsc.202000499
110. Jatindra Kumar Dash, K Hemant Kumar Reddy, Ashish K Luhach, Buddhadeb Pradhan, Diptendu Sinha Roy, A Genetic Algorithm for Energy Efficient Fog Layer Resource Management in Context-Aware Smart Cities, *Sustainable Cities and Society*, 2020, 63, DOI: 10.1016/j.scs.2020.102428
109. Soumyajyoti Biswas, David F. Castellanos and Michael Zaiser, Prediction of creep failure time using machine learning, *Scientific Reports*, 2020, 10, DOI: 10.1038/s41598-020-72969-6
108. Mahesh Kumar Ravva, Luo, Yige, Liping Yao, Wen Gu, Chengyi Xiao, Hailiang Liao, Yanfei Wang, Effect of Halogenated Substituent on the Properties of Aza-Octacenes, *Organic Electronics*, 2020, 85, DOI: 10.1016/j.orgel.2020.105895
107. Goutam Kumar Dalapati, Siarhei Zhuk, Terence Kin Shun Wong, Miloš Petrović, Emmanuel Kymakis, Shreyash Sudhakar Hadke, Stener Lie, Lydia Helena Wong, Prashant Sonar, Avishek Dey, Satheesh Krishnamurthy, Solution Processed Pure Sulfide CZCTS Solar Cells with Efficiency 10.8% using Ultra-thin CuO Intermediate Layer, *Solar RRL*, 2020, 4, DOI: 10.1002/solr.202000293
106. Sheela Singh, Deepak Davis, R.P.S Chakradhar, and Meenu Srivastava, Tribo-Mechanical Properties of HVOF Sprayed NiMoAl-Cr 2 AlC Composite Coatings, *Journal of Thermal Spray Technology*, 2020, 29, 1763-1783, DOI: 10.1007/s11666-020-01069-8

105. Om Jee Pandey, Ved Gautam, Saket Jha, Mahendra K. Shukla, and Rajesh M. Hegde, Time Synchronized Node Localization Using Optimal H-Node Allocation in a Small World WSN, *IEEE Communications Letters*, 2020, 24, 2579-2583, DOI: 10.1109/LCOMM.2020.3008086
104. Soumyajyoti Biswas, Sudip Mukherjee and Parongama Sen, Long route to consensus: Two stage coarsening in binary choice voting model, *Phys. Rev. E*, 2020, 102, DOI: 10.1103/PhysRevE.102.012316
103. Laxmi Narayana Patro, Subash, Sruthy, Shintaro Yasui, Sou Yasuhara and K. Kamala Bharathi, Evaluation of Band Edge Parameters, Li Ion Dynamics and Excellent Electrochemical Properties of Li₄Ti₅O₁₂ Anode Thin Films, *Electrochimica Acta.*, 2020, 354, DOI: 10.1016/j.electacta.2020.136741
102. Soumyajyoti Biswas and Bikas K. Chakrabarti, Flory-like statistics of fracture in the fiber bundle model as obtained via Kolmogorov dispersion for turbulence: A conjecture, *Phys. Rev. E*, 2020, 102, DOI: 10.1103/PhysRevE.102.012113
101. Narayanswamy S, Hamid Ebrahimi Orimi, Sivakumar Narayanswamy, Christos Boutopoulos, Hybrid analytical/numerical modeling of nanosecond laser-induced micro-jets generated by liquid confining devices, *Journal of Fluids and Structures*, 2020, 98, DOI: 10.1016/j.jfluidstructs.2020.103079
100. Sheela Singh, Deepak Davis, M. Gobinath, Bharat B. Panigrahi, Yuvaraj Sivalingam, Tribological behavior of NiMoAl based self lubricating composites, *ACS Omega*, 2020, 5, 14669-14778, DOI: 10.1021/acsomega.0c01409
99. Ranjit Thapa, Puspendu Guha, Bishnupad Mohanty, R Kadam, P. Satyam, Bikash Kumar Jena, Defects Engineered MoO₂ Nanostructures as an Efficient Electrocatalyst for Oxygen Evolution Reaction, *ACS Applied Energy Materials*, 2020, 3, 5208-5218, DOI: 10.1021/acsaem.9b02551
98. Mahesh Kumar Ravva, Jyoti Chauhan, Ludovic Gremaud, and Subhabrata Sen, Blue LED Mediated Intramolecular C–H Functionalization and Cyclopropanation of Tryptamines: Synthesis of Azepino[4,5-b]indoles and Natural Product Inspired Polycyclic Indoles, *Organic Letters*, 2020, 22, 4537-4541, DOI: 10.1021/acs.orglett.0c01559
97. Pardha Saradhi Maram, Mayra D. Goncalves, Aleksandra Mielewczyk-Gryn, Lukasz Kryscio, Maria Gazda and Alexandra Navrotsky, Systematic Water Uptake Energetics of Yttrium-doped Barium Zirconate-A High Resolution Thermochemical Study, *J. Phys. Chem. C*, 2020, 124, 11308-11316, DOI: 10.1021/acs.jpcc.0c01049
96. Anirban Ghosh, Rahman, A.U., Chandra, A., Blumenstein, J., Mikulasek, T., Prokes A., Time Variance of a 60 GHz Vehicular Infrastructure - to - Infrastructure Channel, *Vehicular Communications*, 2020, 26, DOI: 10.1016/j.vehcom.2020.100288
95. Sambit Kumar Mishra, Kumar, M., Sharma, S.C., Goel, S., Mishra S. K ., Husain A., Autonomic cloud resource provisioning and scheduling using meta-heuristic algorithm, *Neural Comput & Applic*, 2020, 32, 18285-18303, DOI: 10.1007/s00521-020-04955-y
94. Imran Pancha, Chokshi, K., Tanaka, K., & Imamura, S., Microalgal Target of Rapamycin (TOR): A Central Regulatory Hub for Growth, Stress Response and Biomass Production, *Plant and Cell Physiology*, 2020, 61, 675-684, DOI: 10.1093/pcp/pcaa023

93. Siddhartha Ghosh, Juvaed, M. M., Sarkar, S., Gogoi, P. K., Ghosh, S., Annamalai, M., Lin, Y. C., ... & Jani, H., Direct Growth of Wafer-Scale, Transparent, p-Type Reduced-Graphene-Oxide-like Thin Films by Pulsed Laser Deposition, *ACS Nano*, 2020, 14, 3290-3298, DOI: 10.1021/acsnano.9b08916
92. Ranjit Thapa, Sarkar, S., Dheer, L., Vinod, C. P., Waghmare, U. V., & Peter, S. C., Stress Induced Electronic Structure Modulation of Mnincorporated, Ni₂P Leading to Enhanced Activity for Water-Splitting, *ACS Applied Energy Materials*, 2020, 3, 1271-1278, DOI: 10.1021/acsaem.9b02097
91. Gitanjali Sen, Rakesh Basant and Gitanjali Sen, Quota-Based Affirmative Action in Higher Education: Impact on Other Backward Classes in India, *The Journal of Development Studies*, 2020, 56, 336-360, DOI: 10.1080/00220388.2019.1573987
90. Ranjit Thapa, Subrata Karmakar, Chetan D. Mistari, Vanshree Parey, Mahendra More, Dhruvananda Behera, Microporous Network of NiMn₂O₄ as Potent Cathode Materials for Electric Field Emission, *Journal of Physics D: Applied Physics*, 2020, 53, DOI: 10.1088/1361-6463/ab523a
89. Jayaseelan Murugaiyan, Li, C., Murugaiyan, J., Thomas, C., Alter, T., Riedel, C., Isolate Specific Cold Response of *Yersinia enterocolitica* in Transcriptional, Proteomic, and Membrane Physiological Changes, *Frontiers in Microbiology*, 2020, 10, DOI: 10.3389/fmicb.2019.03037
88. Mannathan S, Hari Balakrishnan, M., Palladium/Copper-Catalyzed Denitrogenative Alkylidenation and ortho-Alkynylation Reaction of 1,2,3-Benzotriazin-4(3 H)-ones, *Organic Letters*, 2020, 22, 542-546, DOI: 10.1021/acs.orglett.9b04297
87. Narayanswamy, S, Hamid Ebrahimi Orimi, Sayadeh Sara Hosseini Kolkooh, Erika Hooker, Sivakumar Narayanswamy, Bruno Larrivée, Christos Boutopoulos, Drop-on-demand cell bioprinting via Laser Induced Side Transfer (LIST), *Scientific Reports*, 2020, 10, DOI: 10.1038/s41598-020-66565-x
86. Sabyasachi Chakraborty, Vegi, N.M., Chakraborty, S., Zegota, M.M., Kuan, S.L., Stumper, A., Rawat, V.P.S., Sieste, S., Buske, C., Rau, S., Weil, T., Feuring-Buske, M. Somatostatin, receptor mediated targeting of acute myeloid leukemia by photodynamic metal complexes for light induced apoptosis, *Scientific Reports*, 2020, 10, DOI: 10.1038/s41598-019-57172-6
85. Ranjit Thapa, Anjana Tripathi, Chavana Hareesh, S. Sinthika, Gunther Andersson, CO Oxidation on Pt based Binary and Ternary Alloy Nanocatalysts: Reaction Pathways and Electronic Descriptor, *Applied Surface Science*, 2020, 528, DOI: 10.1016/j.apsusc.2020.146964
84. Lakhveer Singh, Zaied, B. K., Rashid, M., Nasrullah, M., Zularisam, A. W., Pant, D., A comprehensive review on contaminants removal from pharmaceutical wastewater by electrocoagulation process, *Science of the Total Environment*, 2020, DOI: 10.1016/j.scitotenv.2020.138095
83. Lakhveer Singh, Wang, L., Chen, Y., Long, F., Singh, L., Trujillo, S., Xiao, X., Liu, H., Breaking the loop: Tackling homoacetogenesis by chloroform to halt hydrogen production-consumption loop in single chamber microbial electrolysis cells, *Chemical Engineering Journal*, 2020, 389, DOI: 10.1016/j.c ej.2020.124436
82. Sutharsan Govindarajan, Borges, A. L., Castro, B., Solvik, T., Escalante, V., & Bondy-Denomy, J., Bacterial alginate regulators and phage homologs repress CRISPR-Cas immunity, *Nature Microbiology*, 2020, 5, 679-687, DOI: 10.1038/s41564-020-0691-3

81. Sheela Singh, Davis, D., Singh, S., Srivastava, M., Influence of solid lubricants addition on the tribological properties of HVOF sprayed NiMoAl coating from 30 °C to 400 °C, *Materials Letters*, 2020, 266, DOI: 10.1016/j.matlet.2020.127494
80. Sayantan Mandal, Monotonicity of the system function of a SISO FRI system with neutrality and ordering property preserving fuzzy implications, *International Journal of Approximate Reasoning*, 2020, 120, 92-101, DOI: 10.1016/j.ijar.2020.02.001
79. Lakhveer Singh., Rana, S., Thakur, S., Pant, D., Bioelectrofuel Synthesis by Nanoenzymes: Novel Alternatives to Conventional Enzymes, *Trends in Biotechnology*, 2020, 38, 469-473, DOI: 10.1016/j.tibtech.2019.12.017
78. Satish Anamalamudi, Sangi, A.R., Alkathairi, M.S., Liu, J., Cognitive AODV routing protocol with novel channel-route failure detection, *Multimedia Tools and Applications*, 2020, 79, 8951-8968, DOI: 10.1007/s11042-019-7352-7
77. Sabyasachi Mukhopadhyay, Senthil Kumar Karuppanan, Cunlan Guo, Jerry A. Fereiro, Adam Bergren, Vineetha Mukundan, Xinkai Qiu, Olga E. Castañeda Ocampo, Xiaoping Chen, Ryan C. Chiechi, Richard McCreery, Israel Pecht, Mordechai Sheves, Rupali Reddy Pasula, Sierin Lim, Christian A. Nijhuis, Ayelet Vilan, David Cahen, Solid-state protein charge transport: cross-laboratory study shows preservation of transport mechanism, with electronic coupling dictating efficiency *iScience*, 2020, DOI: 10.1016/j.isci.2020.101099
76. Jayaseelan Murugaiyan, Böhringer M, Murugaiyan J, Eravci M, Weise C, Roesler U, Neubauer H, Sprague MD Treatment of *Yersinia similis* with the cationic lipid DOTAP enhances adhesion to and invasion into intestinal epithelial cells - A proof-of-principle study., *Biochem Biophys Res Commun*, 2020, 525, 378-383, DOI: 10.1016/j.bbrc.2020.02.081
75. Sujith Kalluri, Cha, H., Kim, J., Lee, H., Jang, H., Cho, J., Building High-Rate Nickel-Rich Cathodes by Self-Organization of Structurally Stable Macrovoid, *Advanced Science*, 2020, 7, DOI: 10.1002/advs.201902844
74. Ranjit Thapa, Erakulan, E. S., Kumar, E. M., Jena, P., B₂H₆ splitting on catalytic surfaces and role of BH₃ towards hydrogen spillover, *Journal of Power Sources*, 2020, 455, DOI: 10.1016/j.jpowsour.2020.227973
73. Sandeep Singh Sengar, Mukhopadhyay, S., Moving object detection using statistical background subtraction in wavelet compressed domain, *Multimedia Tools and Applications*, 2020, 79, 5919-5940, DOI: 10.1007/s11042-019-08506-z
72. Mallikarjuna Rao Motapothula, Huang, K., Wu, L., Wang, M., Swain, N., Motapothula, M., Luo, Y., Han, K., Chen, M., Ye, C., Yang, A.J., Xu, H., Qi, D.-C., N'Diaye, A.T., Panagopoulos, C., Primetzhofer, D., Shen, L., Sengupta, P., Ma, J., Feng, Z., Nan, C.-W., Renshaw Wang, X., Tailoring magnetic order via atomically stacking 3 d /5 d electrons to achieve high-performance spintronic devices, *Applied Physics Reviews*, 2020, 7, DOI: 10.1063/1.5124373
71. Lakhveer Singh, Zaied, B.K., Nasrullah, M., Siddique, M.N.I., Zularisam, A.W., Singh, L., Krishnan, S., Co-digestion of palm oil mill effluent for enhanced biogas production in a solar assisted bioreactor: Supplementation with ammonium bicarbonate, *Science of the Total Environment*, 2020, 706, DOI: 10.1016/j.scitotenv.2019.136095
70. Karthikeyan Elumalai, Kanithan, S., Vignesh, N. A, Kumaresan, N., An Intelligent Energy Efficient Cooperative MIMO-AF Multi-hop and Relay based Communications for Unmanned Aerial Vehicles

(UAVs) Networks, Computer Communications, 2020, 154, 254-261, DOI: 10.1016/j.comc -om.2020.01.029

69. G S VinodKumar, K.M. Saradesh, Metallurgical processes for hardening of 22Karat Gold for lightweight and high strength jewelry manufacturing, Journal of Materials Research & Technology, 2020, 9, 2009-2020, DOI: 10.1016/j.jmrt.2019.12.033

68. G S VinodKumar, S.Sasikumar, K.Georgy, M.Mukherjee, Foam stabilization by aluminum powder Materials Letters, 2020, 262, DOI: 10.1016/j.matlet.2019.127142

67. Karthik Rajendran, Toor M., Kumar, SS., Malyan, SK., Bishnoi, NR., Mathimani, T., Pugazhendhi, A., An overview on bioethanol production from lignocellulosic feedstocks, Chemosphere, 2020, 242, DOI: 10.1016/j.chemosphere.2019.125080

66. C Durga Rao, Kumar, D., Singh, A., Kumar, P., Uversky, V.N., Rao, C.D., Giri, R., Understanding the penetrance of intrinsic protein disorder in rotavirus proteome, International Journal of Biological Macromolecules, 2020, 144, 892-908, DOI: 10.1016/j.ijbiomac.2019.09.166

65. Sutharsan Govindarajan , A bacteriophage nucleus-like compartment shields DNA from CRISPR nucleases, Nature, 2020, 577, 244-248, DOI: 10.1038/s41586-019-1786-y

64. Swaminathan, S., Maricruz Rivera-Hernandez, Rebecca Thorsness, BA, Yoojin Lee, Rajnish Mehrotra, Benjamin D. Sommers, Amal N. Trivedi, TRENDS IN MORTALITY AMONG INCIDENT PATIENTS WITH END-STAGE RENAL DISEASE IN PUERTO RICO COMPARED TO THE US, 2006 – 2015, American Journal of Kidney Diseases, 2020, 75, DOI: 10.1053/j.ajkd.2019.08.006

63. Sateeshkrishna Dhuli, S. Kouachi, S. Dhuli and Y. N. Singh, Convergence Rate Analysis of Periodic Gossip Algorithms for One-Dimensional Lattice WSNs, IEEE Sensors Journal, 2020, 20, 13150-13160, DOI: 10.1109/JSEN.2020.3003623

62. Om Jee Pandey, Shukla, M. K., Nguyen, H. H., & Pandey, O. J., Secrecy Performance Analysis of Two-Way Relay Non-Orthogonal Multiple Access Systems, IEEE Access, 2020, 8, 39502-39512, DOI: 10.1109/ACCESS.2020.2975924

61. Mahesh Kumar Ravva, Yao, L.; Liao, H.; Ravva, M. K.; Guo, Y.; Duan, J.; Wang, Y.; Yu, Y.; Li, Z.; McCulloch, I.; Yue, W. Metal-Free Polymerization: Synthesis and Properties of Fused Benzo[1,2-b :4,5- b 'Bis[b]Benzothiophene (BBBT) Polymers, Polym. Chem, 2020, 11, 3695-3700, DOI: 10.1039/D0PY00623H

60. Goutam Kumar Dalapati., Wong, L. H., & Osterloh, F. E., Research presented at Symposium P of the 10th International Conference of Materials and Advanced Technology (ICMAT 2019), Journal of Materials Chemistry A, 2020, 8, 843-844, DOI: 10.1039/c9ta90275a

59. Karthikeyan Elumalai., Yadav, D. K., Manpura, A. K., & Patney, R. K., Stacking seismic data based on Ramanujan sums, IEEE Geoscience and Remote Sensing Letters, 2020, 17, 1633-1636, DOI: 10.1109/LGRS.2019.2951300

58. Ranjit Thapa, Saini, H., Venkata, J. M., Waghmare, U. V., Role of van der Waals interaction to enhance the photon absorption capability of MoS₂/2D heterostructure, Physical Chemistry Chemical Physics, 2020, 22, 2775-2782, DOI: 10.1039/c9cp05782j

57. Sivakumar Bitragunda, Sankar, V., Karthik, P., Neppolian, B., Metal-organic framework mediated expeditious synthesis of benzimidazole and benzothiazole derivatives through oxidative cyclization pathway, New Journal of Chemistry, 2020, 44, 1021-1027, DOI: 10.1039/c9nj04431k

56. Om Jee Pandey, Fault-Resilient Distributed Detection and Estimation over a SW-WSN Using LCMV Beamforming, *IEEE Transactions in Network and Service Management*, 2020, 17, 1758-1773, DOI: 10.1109/TN SM.2020.2988994
55. Suresh, A.K., C. S. Bhatt, N. Bharathkumar, S. Ramasamy, S. Marpu, Density-based Facile Fractionation of Mixture of Monodispersed Ag and Au Nanoparticles to Purity, *Soft mater*, 2019, 23, 4098-4101, DOI: <http://dx.doi.org/10.1021/cm201343k>
54. Jatis Kumar Dash, J.H. Kim, C.Hyun, H.Kim, K.Lhm and G.-H Lee, Thickness-insensitive properties of α -MoO₃ nanosheets by weak interlayer coupling, *Nano Letters*, 2019, 19, 8868-8876, DOI: 10.1021/acs.nanolett.9b03701
53. Mahesh Kumar Ravva, Dutta, P.K., Chauhan, J., Sen, S., Directing-group-assisted manganese-catalyzed cyclopropanation of indoles, *Organic Letters*, 2019, 21, 2025-2028, DOI: 10.1021/acs.orglett.9b00150
52. Mahesh Kumar Ravva, Dutta, P.K., Sen, S., Cobalt-Catalyzed, Hydroxyl-Assisted C-H Bond Functionalization: Access to Diversely Substituted Polycyclic Pyrans, *Journal of Organic Chemistry*, 2019, 84, 1176-1184, DOI: 10.1021/acs.joc.8b02446
51. Sandeep Singh Sengar, Motion segmentation based surveillance video compression using adaptive particle swarm optimization, *Neural Computing and Applications*, 2019, 32, 11443-11457, DOI: 10.1007/s00521-019-04635-6
50. Nimai Mishra, Vasavi D.V., Recent Progress on Metal Chalcogenide Semiconductor Tetrapod-Shaped Colloidal Nanocrystals and their Applications in Optoelectronics, *Chemistry of Materials*, 2019, 31, 9216-9242, DOI: 10.1021/acs.chemmater.8b05363
49. Soumyajyoti Biswas, Subhadeep Roy and Purusattam Ray, Failure time in heterogeneous systems, *Phys. Rev. Research*, 2019, 1, DOI: 10.1103/PhysRevResearch.1.033047
48. Ajitha, S., Sivakumar V., The moderating role of age and gender on the attitude towards new luxury fashion brands, *Journal of Fashion Marketing and Management: An International Journal*, 2019, 23, DOI: 10.1108/JFMM-05-2018-0074
47. Soumyajyoti Biswas, Zaiser M., Avalanche dynamics in hierarchical fiber bundles, *Phys. Rev. E*, 2019, 100, DOI: 10.1103/PhysRevE.100.022133
46. Mahesh Kumar Ravva, Subhabrata Sen, Jyoti Chauhan, Harnessing autooxidation of aldehydes: In situ iodoarene catalysed synthesis of substituted 1, 3, 4-oxadiazole, in presence of molecular oxygen, *Organic Letters*, 2019, 21, 6562-6565, DOI: 10.1021/acs.orglett.9b02542
45. Jayaseelan Murugaiyan, Deutschmann, Claudia; Sowa, Mandy; Roesler, Uwe; Roeber, Nadja; Conrad, Karsten; Laass, Martin W.; Bogdanos, Dimitrios; Sipeki, Nora; Papp, Maria; Roediger, Stefan; Roggenbuck, Dirk; Schierack, Peter, Identification of Chitinase-3-Like Protein 1 as a Novel Neutrophil Antigenic Target in Crohn's Disease, *JOURNAL OF CROHNS & COLITIS*, 2019, 13, 894-904, DOI: 10.1093/ecco-jcc/jjz012
44. Satya Pramod Jammy, Rabey, P.K., Jammy, S.P., Bruce, P.J.K., Sandham, N.D., Two-dimensional unsteadiness map of oblique shock wave/boundary layer interaction with sidewalls, *Journal of Fluid Mechanics*, 2019, 871, DOI: 10.1017/jfm.2019.404
43. Goutam Kumar Dalapati, Siarhei Zhuka, Terence Kin Shun Wong, Shreyash Sudhakar Hadke, Stener Lie, Asim Guchhait, Yu Gao, Lydia Helena Wong, Shuying Cheng, Xinghui Wang, Molybdenum

Incorporated Cu_{1.69}ZnSnS₄ Kesterite Photovoltaic Devices with Bilayer Microstructure and Tunable Optical-Electronic Properties, *Solar Energy*, 2019, 194, 777-787, DOI: 10.1016/j.solener.2019.11.021

42. Karthik Rajendran, Bose, A., Lin, R., O'Shea, R., Xia, A., & Murphy, J. D, How to optimise photosynthetic biogas upgrading: a perspective on system design and microalgae selection, *Biotechnology Advances*, 2019, 37, DOI: 10.1016/j.biotechadv.2019.107444

41. G S VinodKumar, Sean d'brass, K.R. Ravi, J. Nampoothiri, K.M. Saradesh, T. Rajasekaran, The effect of melt ultrasound treatment on the microstructure and age hardenability of Al-4wt.%Cu/TiC composite, *Metallurgical and Materials Transactions B*, 2019, 50, 2557-2565, DOI: 10.1007/s11663-019-01683-0

40. Ranjit Thapa, M. V. Jyothirmai, Himanshu Saini, Noejung Park, Screening of Suitable Cationic Dopants for Solar Absorber Material CZTS/Se: A first-principles study, *Scientific Reports*, 2019, 9, DOI: 10.1038/s41598-019-52410-3

39. Sheela Singh, Davis, Deepak, A. Farhaan Shah, Bharat B. Panigrahi, Effect of Cr₂AlC nanolamella addition on tribological properties of 5W-30 engine oil, *Applied Surface Science*, 2019, 493, 1098-1105, DOI: 10.1016/j.apsusc.2019.07.097

38. Karthik Rajendran, Dhamodharan, K., Varma, V.S., Veluchamy, C., Pugazhendhi, A., Emission of volatile organic compounds from composting: A review on assessment, treatment and perspectives, *Science of the Total Environment*, 2019, 695, DOI: 10.1016/j.scitotenv.2019.133725

37. Mahesh Kumar Ravva, Hailiang Liao, chengyi xiao, Liping Yao, Yaping Yu, Yinghe Yang, Weiming Zhang, Lei Zhang, Zhengke Li, Iain McCulloch, wan yue, Fused Pyrazine and Carbazole-Containing Azaacenes: Synthesis and Properties, *ChemPlusChem*, 2019, 84, 1257-1262, DOI: 10.1002/cplu.201900383

36. Karthik Rajendran, Awasthi, M.K., Sarsaiya, S., Wainaina, S., Rajendran, K., Kumar, S., Quan, W., Duan, Y., Awasthi, S.K., Chen, H., Pandey, A., Zhang, Z., Jain, A., Taherzadeh, M.J., A critical review of organic manure biorefinery models toward sustainable circular bioeconomy: Technological challenges, advancements, innovations, and future perspectives, *Renewable and Sustainable Energy Reviews*, 2019, 111, 115-131, DOI: 10.1016/j.rser.2019.05.017

35. Mahesh Kumar Ravva, Haseena, S., Kumar, R.M., Rajapandian, V., Subramanian, V., Interactions of thiol and alkoxy radical with coinage metal nanoclusters, *Applied Surface Science*, 2019, 487, 1409-1419, DOI: 10.1016/j.apsusc.2019.04.151

34. Satya Pramod Jamm, Mudalige, G.R., Reguly, I.Z., Jammy, S.P., Jacobs, C.T., Giles, M.B., Sandham, N.D., Large-scale performance of a DSL-based multi-block structured-mesh application for Direct Numerical Simulation, *Journal of Parallel and Distributed Computing*, 2019, 131, 130-146, DOI: 10.1016/j.jpdc.2019.04.019

33. Kasturirangan Gopalakrishnan, Notani, M.A., Arabzadeh, A., Ceylan, H., Kim, S., Effect of Carbon-Fiber Properties on Volumetrics and Ohmic Heating of Electrically Conductive Asphalt Concrete, *Journal of Materials in Civil Engineering*, 2019, 31, DOI: 10.1061/(ASCE)MT.1943-5533.0002868

32. Ranjit Thapa, Paramita Banerjee, A. Rajkamal, K.R.S. Chandrakumar, and G.P. Das, First-principles Identification of The Origin for Higher Activity of Surface Doped Carbon Nanohorn: Impact on Hydrogen Storage, *International Journal of Hydrogen Energy*, 2019, 44, 23196-23209, DOI: 10.1016/j.ijhydene.2019.07.013

31. Karthik Rajendran, McDonagh, S., Deane, P., Murphy, J.D., Are electrofuels a sustainable transport fuel? Analysis of the effect of controls on carbon, curtailment, and cost of hydrogen, *Applied Energy*, 2019, 247, 716-730, DOI: 10.1016/j.apenergy.2019.04.060
30. Fouzul Atik ., Bapat, R.B., Rajesh Kannan, M., Resistance matrices of graphs with matrix weights, *Linear Algebra and Its Applications*, 2019, 571, 41-57, DOI: 10.1016/j.laa.2019.02.011
29. Timoshin, S.A., Samsonyuk, O.N., Optimal control problems with states of bounded variation and hysteresis, *Journal of Global Optimization*, 2019, 74, 565-596, DOI: 10.1007/s10898-019-00752-7
28. Jayaseelan Murugaiyan, Bredtmann, C.M., Krücken, J., Balard, A., Hofer, H., Kuzmina, T.A., von Smsen-Himmelstjerna, G., Concurrent Proteomic Fingerprinting and Molecular Analysis of Cyathostomins, *Proteomics*, 2019, 19, DOI: 10.1002/pmic.201800290
27. Jatis Kumar Dash, Maiti, Paramita; Guha, Puspendu; Singh, Ranveer; Satyam, Parlapalli, V, Optical band gap, local work function and field emission properties of MBE grown beta-MoO₃ nanoribbons, *APPLIED SURFACE SCIENCE*, 2019, 476, 691-700, DOI: 10.1016/j.apsusc.2019.01.124
26. Tousif Khan N., Chakravarty, A., Mahanta, C., Erratum to “Analysis and Experimental Investigation into a Finite Time Current Observer Based Adaptive Backstepping Control of Buck Converters” (*Journal of the Franklin Institute* (2018) 355(12) (4996–5017), (S0016003218303387), (10.1016/j.jfranklin.2018.05.026)), *Journal of the Franklin Institute*, 2019, 356, DOI: 10.1016/j.jfranklin.2019.03.009
25. Nimai Mishra, Paternò, G.M., Barker, A.J., Dang, Z., Lanzani, G., Manna, L., Petrozza, A., Broadband Defects Emission and Enhanced Ligand Raman Scattering in OD Cs₃Bi₂I₉ Colloidal Nanocrystals, *Advanced Functional Materials*, 2019, 29, DOI: 10.1002/adfm.201805299
24. Panchagnula Jayaprakash Sharma, Reddy, S., Kumar, M., Parchuri, P.K., Kumar, S.S., Ito, K., Sharma, A., A new approach for attaining uniform properties in build direction in additive manufactured components through coupled thermal-hardness model, *Journal of Manufacturing Processes*, 2019, 40, 46-58, DOI: 10.1016/j.jmapro.2019.03.007
23. Ranjit Thapa, Anil K Suresh, Chandra Shekar Bhatt, Bharathkumar Nagaraj, Deepanjan Ghosh, Ramasamy Suresh, Sreekar Babu Marpu , Core-composite mediated separation of diverse nanoparticles to purity, *Soft Matter*, 2019, 15, DOI: 10.1039/c9sm01571j
22. Swaminathan, S., Joshi, R., Subramanian, C., Are there social returns to education in developing countries? Evidence from Indonesia, *Economic Development and Cultural Change*, 2019, 67, DOI: 10.1086/698165
21. Mahesh Kumar Ravva, Karuthedath, S., Gorenflot, J., Firdaus, Y., Sit, W.-Y., Eisner, F., Seitzkhan, A., Anthopoulos, T.D., Laquai, F., Charge and Triplet Exciton Generation in Neat PC₇₀BM Films and Hybrid CuSCN:PC₇₀BM Solar Cells, *Advanced Energy Materials*, 2019, 9, DOI: 10.1002/aenm.201802476
20. Subabrata Sen, Luthra, T., Nayak, A.K., Bose, S., Chakrabarti, S., Gupta, A., Sen, S. , Indole based antimalarial compounds targeting the melatonin pathway: Their design, synthesis and biological evaluation, *European Journal of Medicinal Chemistry*, 2019, 168, 11-27, DOI: 10.1016/j.ejmech.2019.02.019

19. Jatis Kumar Dash, Patel, R., Santhosh, M., Karpoornath, R., Jha, A., Kwak, J., Patel, M., Kim, J.H., Ile-Lys-Val-ala-Val (IKVAV) peptide for neuronal tissue engineering, *Polymers for Advanced Technologies*, 2019, 30, 4-12, DOI: 10.1002/pat.4442
18. Mannathan S, Madasamy, K., Kumaraguru, S., Sankar, V., Kathiresan, M., A Zn based metal organic framework as a heterogeneous catalyst for C-C bond formation reactions, *New Journal of Chemistry*, 2019, 43, 3793-3800, DOI: 10.1039/c8nj05953e
17. Mannathan S, Ibrahim, M., Madasamy, H.B., Manickam, S., Potassium tert-Butoxide Mediated Aerobic Hydroxylation of Arylboronic Acids to Phenols: An Application towards the Synthesis of (E)-Phenoxy Acrylates, *New Journal of Chemistry*, 2019, 43, 11065-11068, DOI: 10.1039/c9nj02121c
16. Mahesh Kumar Ravva, Wang, Y., Xu, Y., Ravva, M.K., Yu, Y., Xiao, M., Xue, X., Yang, X., Chen, Y., Li, Z., Yue, W., The synthesis and properties of a new class of π -expanded diketopyrrolopyrrole analogs and conjugated polymers, *Organic Chemistry Frontiers*, 2019, 6, 2974-2980, DOI: 10.1039/c9qo00645a
15. Mahesh Kumar Ravva, Yaping Yu, Ning Xue, Chengyi Xiao, Mahesh kumar Ravva, Yanjun Guo, Liyun Wu, Lei Zhang, Zhengke Li, Wan Yue, and Z-H Wang, Effect of Conjugated Length on the Properties of Fused Perylene Diimides with variable Isoindigos, *Journal of Materials Chemistry C*, 2019, 7, 12263-12269, DOI: 10.1039/c9tc04078a
14. Subabrata Sen, Dutta P.K., Sen S., (Benz)Imidazole-Directed Cobalt(III)-Catalyzed C-H Activation of Arenes: A Facile Strategy to Access Polyheteroarenes by Oxidative Annulation, *European Journal of Organic Chemistry*, 2018, 2018, 5512-5519, DOI: 10.1002/ejoc.201801056
13. Nimai Mishra, Almeida, G., Ashton, O.J., Goldoni, L., Maggioni, D., Petralanda, U., Akkerman, Q.A., Infante, I., Snaith, H.J., Manna, L., The Phosphine Oxide Route toward Lead Halide Perovskite Nanocrystals, *Journal of the American Chemical Society*, 2018, 140, 14878-14886, DOI: 10.1021/jacs.8b08978
12. Swaminathan, S., Sommers, B.D., Thorsness, R., Mehrotra, R., Lee, Y., Trivedi, A.N., Association of Medicaid Expansion with 1-Year Mortality among Patients with End-Stage Renal Disease *JAMA*, *Journal of the American Medical Association*, 2018, 320, 2242-2250, DOI: 10.1001/jama.2018.16504
11. Sabyasachi Mukhopadhyay, Bostick, C.D., Pecht, I., Sheves, M., Cahen, D., Lederman, D., Protein bioelectronics: A review of what we do and do not know, *Reports on Progress in Physics*, 2018, 81, DOI: 10.1088/1361-6633/aa85f2
10. Subabrata Sen, Chauhan, J., Dasgupta, M., Luthra, T., Awasthi, A., Tripathy, S., Banerjee, A., Paul, S., Nag, D., Chakrabarti, S., Chakrabarti, G., Sen, S., Design, synthesis and biological evaluation of a novel library of antimitotic C_{22} -aryl/arylimino tryptamine derivatives that are also potent inhibitors of indoleamine-2, 3-dioxygenase (IDO), *European Journal of Pharmaceutical Sciences*, 2018, 124, 249-265, DOI: 10.1016/j.ejps.2018.08.033
9. Mannathan S, Hari, B.M., Sathriyan, K., Nickel-Catalyzed Denitrogenative Cross-Coupling Reaction of 1,2,3-Benzotriazin-4(3 H)-ones with Organoboronic Acids: An Easy Access to Ortho-Arylated and Alkenylated Benzamides, *Organic Letters*, 2018, 20, 3815-3818, DOI: 10.1021/acs.orglett.8b01401
8. Jayaseelan Murugaiyan, Feßler, A.T., Schuenemann, R., Kadlec, K., Hensel, V., Brombach, J., Oechtering, G., Burgener, I.A., Schwarz, S., Methicillin-resistant *Staphylococcus aureus* (MRSA) and methicillin-resistant *Staphylococcus pseudintermedius* (MRSP) among employees and in the

environment of a small animal hospital, *Veterinary Microbiology*, 2018, 221, 153-158, DOI: 10.1016/j.vetmic.2018.06.001

7. Namitharan, K., Anil K Suresh, Mahesh Kumar Ravva Sujatha, C., Bhatt, C.S., Ravva, M.K., Copper-Catalyzed Ring-Expansion Cascade of Azirines with Alkynes: Synthesis of Multisubstituted Pyridines at Room Temperature, *Organic Letters*, 2018, 20, 3241-3244, DOI: 10.1021/acs.orglett.8b01090

6. Timoshin, S.A., Bang-bang control of a thermostat with nonconstant cooling power, *ESAIM - Control, Optimisation and Calculus of Variations*, 2018, 24, 709-719, DOI: 10.1051/cocv/2017064

5. Mahesh Kumar Ravva, Liao, H., Xiao, C., Wang, Y., Little, M., Jenart, M.V.C., Onwubiko, A., Li, Z., Wang, Z., Brédas, J.-L., McCulloch, I., Yue, W., Synthesis and properties of isoindigo and benzo[1,2-B:4,5-b']bis [b] benzothiophene oligomers, *Chemical Communications*, 2018, 54, 11152-11155, DOI: 10.1039/c8cc05608k

4. Jatis Kumar Dash, Patel, R., Park, J.T., Patel, M., Gowd, E.B., Karpoormath, R., Mishra, A., Kwak, J., Kim, J.H., Transition-metal-based layered double hydroxides tailored for energy conversion and storage, *Journal of Materials Chemistry A*, 2018, 6, 12-29, DOI: 10.1039/c7ta09370e

3. Timoshin, S.A., Aiki, T., Relaxation for a control problem in concrete carbonation modelling, *SIAM Journal on Control and Optimization*, 2017, 55, 3489-3502, DOI: 10.1137/17M1119251

2. Namitharan, K., Pothikumar, R., Sujatha, C., Transition-Metal-Free in Situ Generation of Terminal Alkenes: Synthesis of Multisubstituted Acrylamidines via Tandem sp³ C-H Olefination/sp² C-H Arylation Reactions, *ACS Catalysis*, 2017, 7, 7783-7787, DOI: 10.1021/acscatal.7b02819

1. Gangi Reddy Salla, Kumar, V., Miyamoto, Y., Singh, R.P. , Scattering of Poincare beams: Polarization speckles, *Optics Express*, 2017, 25, 19886-19893, DOI: 10.1364/OE.25.019886