

Journal Publications – 2021

- Senthilkumar Vagheesan, Jayaprakash Govindarajulu, Comparative Regression and Neural Network Modeling of Roughness and Kerf Width in CO₂ Laser Cutting of Aluminium, Teh. Vjesn. - Tech. Gaz. 28 (2021). <https://doi.org/10.17559/TV-20190130153849>.
- N. Arappali, G.B. Rajendran, MANET security routing protocols based on a machine learning technique (Raspberry PIs), J. Ambient Intell. Humaniz. Comput. 12 (2021) 6317–6331. <https://doi.org/10.1007/s12652-020-02211-8>.
- R.G. Babu, J. Bino, S.K. Kumar, K. Elangovan, G. Manikandan, Using Internet of Things (IoT) for Smart Home Automation and Metering System, 2021. <https://doi.org/10.1201/9781003032328-6>.
- R.G. Babu, C. Chellaswamy, T.S. Geetha, Adaptive differential evolution optimization-based noise-level measurement for high-speed railways, Transp. Res. Rec. 2675 (2021) 60–74. <https://doi.org/10.1177/0361198120983008>.
- R.G. Babu, D.A.J. Rajan, S. Maurya, P. Jayachandran, Performance Analysis for Provisioning and Energy Efficiency Distributed in Cloud Computing, 2021. <https://doi.org/10.1201/9781003032328-5>.
- R.G. Babu, S. Yuvaraj, A. VedanthSrivatson, T. Ramachandran, G. Vikram, N. Niffarudeen, Machine learning using big data link stability based node observation for IoT security, Adv. Parallel Comput. 39 (2021) 892–898. <https://doi.org/10.3233/APC210299>.
- G.N. Balaji, S. V Suryanarayana, J. Sengathir, Enhanced boykov’s graph cuts based segmentation for cervical cancer detection, EAI Endorsed Trans. Pervasive Heal. Technol. 7 (2021). <https://doi.org/10.4108/eai.7-7-2021.170284>.
- D. Balraj, J.G. Kadwin, M. Marudai, Existence of best proximity points satisfying two constraint inequalities, Asian-European J. Math. (2021). <https://doi.org/10.1142/S1793557122501042>.
- S.S. Bulla, R.F. Bhajantri, C. Chavan, K. Sakthipandi, Synthesis and characterization of polythiophene/zinc oxide nanocomposites for chemiresistor organic vapor-sensing

- application, *J. Polym. Res.* 28 (2021) 251. <https://doi.org/10.1007/s10965-021-02618-7>.
- C. Chavan, R.F. Bhajantri, S.S. Bulla, K. Sakthipandi, Indigenously designed and fabricated mechanical milling set-up to synthesis nanoparticles: A cost-effective method, *Indian J. Pure Appl. Phys.* 59 (2021) 603–611. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85115977169&partnerID=40&md5=00b88e4146159e059cc532a670de5603>.
 - C. Chavan, R.F. Bhajantri, S.S. Bulla, S. Kathiresan, others, Designed and fabricated a low-cost E-Spun experimental tool for polymer processing, *Indian J. Eng. Mater. Sci.* 28 (2021) 343–349. <http://op.niscpr.res.in/index.php/IJEMS/article/view/42598>
 - C. Chellaswamy, R. Ganesh Babu, A. Vanathi, A framework for building energy management system with residence mounted photovoltaic, *Build. Simul.* 14 (2021) 1031–1046. <https://doi.org/10.1007/s12273-020-0735-x>.
 - V. Dhivya, S. Mahalaxmi, K. Rajkumar, V.V. Premkumar, B. Saravanakarthekeyan, R. Karpagam, R. Priyatharshini, K. Sakthipandi, V. Saikumari, N. Vijay, G. Rajkumar, Effects of strontium-containing fluorophosphate glasses for enhancing bioactivity and enamel remineralization, *Mater. Charact.* 181 (2021) 111496. <https://doi.org/10.1016/j.matchar.2021.111496>.
 - A. Ferin Fathima, R. Jothi Mani, M. Mohamed Roshan, K. Sakthipandi, Enhancing structural and optical properties of ZnO nanoparticles induced by the double co-doping of iron and cobalt, *Mater. Today Proc.* 49 (2021) 2598–2601. <https://doi.org/10.1016/j.matpr.2021.06.433>.
 - R. Ganesh Babu, A. Karunakaran, G. Manikandan, S. Kalimuthu Kumar, R. Selvameena, IoT in Smart Automation and Robotics with Streaming Analytical Challenges, *Adv. Sci. Technol. Innov.* (2021) 103–118. https://doi.org/10.1007/978-3-030-66222-6_7.
 - R. Ganesh Babu, V. Vijey Nathan, J. Bino, C. Amali, S. Ganesh, IoT Security Enhancement with Automated Identification Device using IOT SENTINEL, in: *Proc. Conflu. 2021 11th Int. Conf. Cloud Comput. Data Sci. Eng.*, 2021: pp. 518–523. <https://doi.org/10.1109/Confluence51648.2021.9377165>.

- S. Ganesh, P. Elangovan, J.S. Richard Jimreeves, J. Subramaniyan, Modified emperor penguin optimizer for optimal allocation of energy storage system and phasor measurement units, in: Mater. Today Proc., 2021: pp. 7871–7875. <https://doi.org/10.1016/j.matpr.2020.12.504>.
- S. Ganesh, G. Ram Prakash, J.A. Michline Rupa, Optimal placement of green power generation in the radial distribution system using harmony search algorithm, Adv. Intell. Syst. Comput. 1167 (2021) 245–252. https://doi.org/10.1007/978-981-15-5285-4_23.
- K.S. Gowthaman, S. Palaniyappan, L.H.T. Raj, A.T.S. Subramanian, Temperature detection and control in multiple DC motors, in: Mater. Today Proc., 2021: pp. 2202–2206. <https://doi.org/10.1016/j.matpr.2020.10.114>.
- R.S. Keerthi, D. Dhabliya, P. Elangovan, K. Borodin, J. Parmar, S.K. Patel, Tunable high-gain and multiband microstrip antenna based on liquid/copper split-ring resonator superstrates for C/X band communication, Phys. B Condens. Matter. 618 (2021). <https://doi.org/10.1016/j.physb.2021.413203>.
- S. Kiruthiga, S. Mythili, R. Mukesh, M. Vijay, D. Venkata Ratnam, Analysis of TEC values predicted by OKSM amongst low, mid and high latitude GPS stations during X 9.3 solar flare, Astrophys. Space Sci. 366 (2021) 80. <https://doi.org/10.1007/s10509-021-03986-8>.
- S. Kiruthiga, S. Mythili, R. Mukesh, V. Karthikeyan, M. Vijay, Prediction of GPS TEC during the X9.3 Solar Flare for DGAR low latitude station by using OKSM, in: J. Phys. Conf. Ser., 2021. <https://doi.org/10.1088/1742-6596/1979/1/012060>.
- R. Krishnan, R.G. Babu, K. Lalitha, R. Atla, Vanaja, Swetha, Design of Compact Dual Band-Stop Frequency Selective Surface for Shielding Application, in: 2021 Int. Conf. Comput. Commun. Informatics, ICCCI 2021, 2021. <https://doi.org/10.1109/ICCCI50826.2021.9402533>.
- K.S. Kumar, A.S.R. Mani, S. Sundaresan, T.A. Kumar, Y.H. Robinson, Blockchain-based energy-efficient smart green city in IoT environments, 2021. <https://doi.org/10.1016/B978-0-12-824446-3.00007-7>.

- S.K. Kumar, S. Sundaresan, R. Nishanth, A.T. Kumar, Optimization and deep learning-based content retrieval, indexing, and metric learning approach for medical images, 2021. <https://doi.org/10.1002/9781119785750.ch4>.
- M. Mangalam, C.S.A. Selvan, C. Sankar, Corrigendum to “Synthesis, stereochemical, structural and biological studies of some N'-(2r,4c-diaryl-3-azabicyclo [3.3.1]nonan-9-ylidene)pyrazine-2-carbohydrazide” Journal of Molecular Structure 1129 (2017) 305-312 (Journal of Molecular Structure (2017) 1129 (305–312), (S0022286016309607), (10.1016/j.molstruc.2016.09.033)), J. Mol. Struct. 1230 (2021). <https://doi.org/10.1016/j.molstruc.2020.129651>.
- S. Markkandan, C. Malarvizhi, L. Raja, J. Kalloor, J. Karthi, R. Atla, Highly compact sized circular microstrip patch antenna with partial ground for biomedical applications, in: Mater. Today Proc., 2021: pp. 318–320. <https://doi.org/10.1016/j.matpr.2021.04.480>.
- S. Markkandan, A. Sharma, S.P. Singh, V. Solanki, S. Sethuramalingam, S.P. Singh, SVM-based compliance discrepancies detection using remote sensing for organic farms, Arab. J. Geosci. 14 (2021). <https://doi.org/10.1007/s12517-021-07700-4>.
- A. Ponchitra, K. Balasubramanian, R. Jothi Mani, K. Sakthipandi, Structural, mechanical, thermal, optical and antifungal properties of pure and nickel doped ninhydrin non liner single crystals, Indian J. Eng. Mater. Sci. 28 (2021) 82–88. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85118526305&partnerID=40&md5=74fb31242b5d6f1695508562a059420a>.
- A. Ponchitra, K. Balasubramanian, K. Sakthipandi, Enhanced mechanical, thermal, photoluminescence, NLO and antifungal activities of magnesium doped ninhydrin crystals, Indian J. Pure Appl. Phys. 59 (2021) 349–355. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85104608469&partnerID=40&md5=b7e20230a7998c66457349c33dfe7fce>.
- Y.H. Robinson, R.G. Babu, K.L. Narayanan, R. Krishnan, R.S. Krishnan, M. Paramaivaoan, Enhanced location identification technique for Wireless Sensor Networks, in: Proc. 5th Int. Conf. Trends Electron. Informatics, ICOEI 2021, 2021: pp. 716–720. <https://doi.org/10.1109/ICOEI51242.2021.9452861>.

- S. Santhanam, P.T. Selvan, New Approach of Efficiency Improvement in 10 dB Doherty Power Amplifier for 4G LTE and 5G Wireless Applications, Appl. Comput. Electromagn. Soc. J. 36 (2021) 379–385. <https://doi.org/10.47037/2020.ACES.J.360403>.
- C. Subba Rao, T.S. Geetha, C. Chellaswamy, S. Arul, Optimized convolutional neural network-based multigas detection using fiber optic sensor, Opt. Eng. 60 (2021). <https://doi.org/10.1117/1.OE.60.12.127108>.
- A.T.S. Subramanian, P. Meenalochini, S.S.B. Sathiya, G.R. Prakash, A review on selection of soft magnetic materials for industrial drives, in: Mater. Today Proc., 2021: pp. 1591–1596. <https://doi.org/10.1016/j.matpr.2020.08.389>.
- S. Sundaresan, K.S. Kumar, T.A. Kumar, V. Ashok, E.G. Julie, Blockchain architecture for intelligent water management system in smart cities, 2021. <https://doi.org/10.1016/B978-0-12-824446-3.00006-5>.
- S. Sundaresan, K.S. Kumar, R. Nishanth, Y.H. Robinson, A.J. Kumar, Artificial intelligence and machine learning approaches for smart transportation in smart cities using blockchain architecture, 2021. <https://doi.org/10.1016/B978-0-12-824446-3.00009-0>.
- S. Vijayalakshmi, L.H.T. Raj, S. Palaniyappan, A. Rajkumar, A review on multilevel H-Bridge cascaded inductor less hybrid inverter for Electric vehicles with PWM control, in: Mater. Today Proc., 2021: pp. 1644–1650. <https://doi.org/10.1016/j.matpr.2020.08.477>.