List of Faculty Publications from EEE Department

For the Academic year 2022-23

International Journals:

1. Ramesh Puppala, **Dr. K. Chandra Sekhar** "Optimal Allocation of Capacitor Banks and DSTATCOMs in Radial Distribution System Considering Electric Vehicle Load Growth" International Journal of Intelligent Engineering and Systems, 2022, 15(6), pp. 45–53, ISSN: 2185-3118, DOI: 10.22266/ijies2022.1231.05. **(Scopus)**
2. Madduluri Chiranjivi, **Katragadda Swarnasri** "A novel optimization-based power quality enhancement using dynamic voltage restorer and distribution static compensator" Indonesian Journal of Electrical Engineering and Computer Science, 2022, 6(1), pp. 160–171 **(Scopus Indexed).**
3. K. Praveena, **Katragadda Swarnasri**, "Closed Loop PI Control of PVTied Grid System with Multi-Carrier PWMBased Modular 5-Level Converter" International Journal of Intelligent Systems And Applications In Engineering IJISAE, 2022, 10(3), 403–410 **(Scopus Indexed).**
4. K. Praveena, **Katragadda Swarnasri**, "ANFIS Control of PV Tied Grid System with MultiCarrier PWM-Based Modular 5-Level Converter", SSRG International Journal of Electrical and Electronics Engineering, IJEEE Volume 9 Issue 12, 145-155, December 2022 **(Scopus Indexed).**
5. Jasti Raja, **Katragadda Swarnasri, Ponnam Venkata K Babu** "Remote Substation Monitoring in a Distribution Power Grid" International Journal of Science, Engineering and Technology, Volume 10 Issue 5, September 2022. **(UGC-CARE)**
6. M.Chiranjivi, **Katragadda Swarnasri** "Certain Analytical Aspects of Power Systems in the Presence of FACTS CONTROLLERS - SVC AND TCSC", Shodh samhita: Journal of Fundamental & Comparative Research, ISSN: 2277-7067, Vol. VIII, No. 1: 2022, pp 72-86. **(UGC-CARE)**
7. Ooha.L, **Radha Rani. K, Kotaiah.N.C**, entitled 'Self-Adaptive Dragonfly Algorithm for Optimal Allocation of Multiple Energy Storage Systems with VAr Support for Islanded Microgrid Operation' in International Journal of Intelligent Engineering & Systems,Vol.15, No.6, (December) 2022, ISSN: 2185-3118, pp.142-151. DOI:10.22266/ijies2022.1231.15. **(Scopus Indexed).**
8. Anjani Parvathi.K, **Kotaiah.N.C, Radha Rani. K**, entitled 'Pelican Optimization Algorithm for Optimal Demand Response in Islanded Active Distribution Network Considering Controllable Loads' in International Journal of Intelligent Engineering & Systems, Vol.15, No.6, (December) 2022, ISSN: 2185-3118, pp.132-141. DOI:10.22266/ijies2022.1231.14. **(Scopus Indexed).**
9. S. Zhen, **K. Radha Rani,** entitled 'Intelligent-based ensemble deep learning model for security improvement in real-time wireless communication' in Optik-International Journal for Light and Electron Optics Vol.271 December (2022) 170123, ISSN:0030-4026. **(SCIE & SCOPUS) https://doi.org/10.1016/j.ijleo.2022.170123**
10. Varaprasad Janamala, **K. Radha Rani**, P. Sobha Rani, A.N. Venkateswarlu, Sai Ram Inkollu, entitled 'Optimal Switching Operations of Soft Open Points in Active Distribution Network for Handling Variable Penetration of Photovoltaic and Electric Vehicles Using Artificial Rabbits Optimization' in Process Integration and Optimization for sustainability, Vol.6, Issue.4, December 2022, ISSN: 2509-4246,

pp.1-19 **(Web of Science, Scopus, ESCI) https://doi.org/10.1007/s41660-022-00304-9**

11. Lakshminarayana Gadupudi **, Gudapati Sambasiva Rao ,** Rachakonda Venkata Lakshmi Narayana Divakar, et all, **"**Fuzzy-Based Fifteen-Level VSC for STATCOM Operations with Single DC-Link Voltage" Sustainability, 2023, 15, 6188, ISSN: 2071-1050, https://doi.org/10.3390/su15076188 **(SCIE)**

12. **N.C.Kotaiah, G.V.P. Anjaneyulu**, CH. Nagaraja Kumari, "An application of hunter-prey optimization for maximizing photovoltaic hosting capacity along with multi-objective optimization in radial distribution network", International Journal of Intelligent Engineering and Systems, Vol.15, Issue No.4, pp 575-584, June 2022. **(Scopus Indexed).**

13. **N.C.Kotaiah, M.Anitha**, Rajesh Patil, CH. Nagaraja Kumari, "White shark optimizer for multi-objective optimal allocation of photovoltaic distribution generation in electrical distribution networks considering different kinds of load models and penetration levels", International Journal of Intelligent Engineering and Systems, Vol.15, Issue No.4, pp. 458-467, June 2022. **(Scopus Indexed).**

14. P. Annapandi, R. Ramya, **N.C. Kotaiah**, P. Rajesh and Arun Subramanian, "Optimal energy management system for the design of off grid hybrid renewable energy systems: A hybrid technique", Journal ofIntelligent & Fuzzy Systems 44 (2023), ISSN: 1064-1246, pp. 2593-2614. DOI:10.3233/JIFS-221176 **(Scopus Indexed)**

15. A.V. Sravanthi, K. Rajani, **Dr.A.RamaKoteswaraRao**, "Global Maximum Power Tracking of PV System under Partial Shading", International Journal of Engineering, Science and Technology, Vol. 14, No. 3, pp. 10-20, August 2022. **(Scopus Indexed).**

16. P. Prasanthi, T. Srinag, N.R. Ram, T. Krishna, **N. Chaitanya**, "Energy-absorbing capacity of natural hybrid fiber-epoxy composites under impact loading", Journal of the Brazilian Society of Mechanical Sciences and Engineering, Vol 44(6), pp.236,June 2022. **(SCI, Scopus)**

17. **N. Chaitanya, et all,** "EEG signal processing by feature extraction and classification based on biomedical deep learning architecture with wireless communication" Optik, Vol.270, November 2022, ISSN:1618-1336, **(SCI, Scopus Indexed)** https://doi.org/10.1016/j.ijleo.2022.170037

18. **Ravindranath Tagore Yadlapalli**, Anuradha Kotapati, Rajani Kandipati, Chandra Sekhar Koritala, "A review on energy efficient technologies for electric vehicle applications", Journal of Energy Storage, Vol 50, pp.104212, June 2022. **(SCI, Scopus)**

19. **Yadlapalli Ravindranath**, Kotapati Anuradha. "ANALYSIS AND DESIGN OF DC-DC CONVERTER FOR ELECTRIC VEHICLE APPLICATIONS." Suranaree Journal of Science & Technology 29, no. 4, Jul/Aug2022, Vol. 29 Issue 4, p1-10. (2022). **(Scopus Indexed).**

20. Y. Ravindranath Tagore, K. Rajani, K. Anuradha, "Dynamic analysis of solar powered two-stage dc–dc converter with MPPT and voltage regulation" International Journal of Dynamics and Control (2022) 10:1745–1759, https://doi.org/10.1007/s40435-022-00930-8. **(Web of Science Indexed)**

21. M. Anitha, GVP. Anjaneyulu, Praveena Bai.D**, Y.Mallikharjuna Rao,** "Design of low voltage high output resistance current mirror" International Journal of experimental research and review, Vol. 30, April, 2023, DOI: https://doi.org/10.52756/ijerr.2023.v30.006. **(Scopus Indexed)**

22. **S**. Rao Borra, B. Manasa, **B. Vasantha Rao**, **M.Anitha**, S. Bolla, "Real and Accurate Speech Enhancement Model for Orthogonal-Daubechies based Multiresolution

Analysis", Journal of the Balkan Tribological Association, Vol.29, No.2, pp.161-167, 2023. **(SCOPUS Indexed)**

23. **Y.Suri Babu**, **Dr. K. Chandra Sekhar** "Investigation of common mode voltages of single stage boost inverter for five phase induction motor drive" International Journal of Power Electronics and Drive Systems (IJPEDS) Vol.13, No.3, September 2022, pp.1352-1364,ISSN:2088-8694,

DOI: 10.11591/ijpeds.v13.i3.pp1352-1364. **(Scopus)**

24. **Sarayu Vunnam**, M. VanithaSri, **RamaKoteswaraRao Alla,** "An Optimal Triple-Series Parallel-Ladder Topology for Maximum Power Harvesting under Partial Shading Conditions", International Journal of Renewable Energy Research (IJRER), Vol 13, No 2 (2023) DOI (PDF): https://doi.org/10.20508/ijrer.v13i2.13885.g8762 **(Scopus, Web of Science, EBSCO & ESCI Indexed).**
25. **Chegudi RangaRao**, R.Balamurugan, **RamaKoteswaraRao Alla**, "Synchronization Control Techniques for Shunt Active Power Filter: An Overview", Bulletin of Electrical Engineering and Informatics (BEEI). Vol 12, No 1, pp.1-9, February 2023. **(Scopus Indexed).** https://doi.org/10.11591/eei.v12i1.4300
26. **Chegudi RangaRao**, R.Balamurugan, **RamaKoteswaraRao Alla**, "Analysis of Three-Phase Shunt Active Filter under Wide Range of Load Conditions", International Journal of Renewable Energy Research (IJRER), Vol. 12, No 4, PP.1920-1931, December 2022. https://doi.org/10.20508/ijrer.v12i4.13393. g8615 **(Scopus and web of science, ESCI Indexed).**
27. **Chegudi RangaRao**, R.Balamurugan, **RamaKoteswaraRao Alla**, "Artificial Rabbits Optimization Based Optimal Allocation of Solar Photovoltaic Systems and Passive Power Filters in Radial Distribution Network for Power Quality Improvement", International Journal of Intelligent Engineering and Systems (IJIES), (Accepted on 10/10/2022). **(Scopus Indexed).**
28. Srinivasarao Thumati, Madhusudana Rao, Veera ReddyAduru, **Veera Vasantha Rao Battula,** Sravanthi Kantamaneni, "Hybrid Dandelion Optimizer-based Multi-Objective Photovoltaic Power Penetration Maximisation in Reconfigurable Distribution Networks", International Journal of Intelligent Engineering & Systems (IJIES), Vol.16, No.4, 2023, pp.105-114, DOI:10.22266/ijies2023.0831.09 **(Scopus Indexed)**
29. V. Sai geetha lakshmi , m. Devika rani , sravanthi kantamaneni , **puchanuthala sivakrishna** , dr. D. N. V. Satyanarayana , muthukumar paramasivan, "an optimized approach for the development of hierarchical energy integration with multiple energy resources and emphasizing the heuristic techniques", journal of theoretical and applied information technology 15th may 2023. Vol.101. No 9, issn:1817-3195, pp:3371-3379, http://www.jatit.org/volumes/vol101no9/13vol101no9.pdf, **(scopus indexed).**
30. **N.Dharani Kumar**, T.A. Ramesh Kumar, **RamaKoteswaraRao Alla**, "A Novel PV Array Configuration for Enhancing Maximum Power from PV Array", Clean Energy Journal, OXFORD Academic Publisher, Vol 6, No 6, 817–826, December 2022. **(Scopus, Web of Science, ESCI Indexed).**
31. **Narne, D. K., Kumar**, T. R., & **Alla, R. K. R.** (2022). Effect of partial shading on the performance of various 4× 4 PV array configurations. *ECTI Transactions on Electrical Engineering, Electronics, and Communications*, *20*(3), 427-437. **(Scopus Indexed)**
32. **Narne, D. K., Kumar**, T. R., & **Alla, R. R.** (2023). Traditional and hybrid solar photovoltaic array configurations for partial shading conditions: perspectives and

challenges. *Bulletin of Electrical Engineering and Informatics*, *12*(2), 642-649. **(Scopus Indexed)**

33. **Dharani Kumar Narne**, T.A. Ramesh Kumar, **RamaKoteswara Rao Alla**, "Evaluation of series-parallel-cross-tied PV array configuration performance with maximum power point tracking techniques under partial shading conditions", Clean Energy Journal, OXFORD Academic Publisher, Vol 7, No 3, 620-634, January 2023. **(Scopus, Web of Science, ESCI Indexed).** https://doi.org/10.1093/ce/zkad013
34. **Yamparala Sumanth**, L. Lakshminarasimman, and **G. Sambasiva Rao**, "Optimal design of FoPID controller for DFIG based wind energy conversion system using Grey-Wolf optimization algorithm." International Journal of Renewable Energy Research (IJRER) 12, no. 4 (2022): 2111-2120. **(Web of Science, Scopus)**
35. **Yamparala, Sumanth**, L. Lakshminarasimman, and **G. Sambasiva Rao**, "Improvement of LVRT Capability for DFIG based WECS by Optimal Design of FoPID Controller using SLnO+ GWO Algorithm." International Journal of Intelligent engineering & systems, vol.16,no.1,2023.**DOI: 10.22266/ijies2023.0228.18 (Scopus Indexed)**
36. Krishna Naragani, Mani Deepa Indupalli, **B. Sarath Chandra**, K.V.S. Durga Prasad,"Optimization and Evaluation of Antimicrobial Compounds produced by Streptomuces Rubrus VLK-24" International Journal of Pharmaceutical Sciences and Research, Vol.14(5), 2023, pp:2287-2295, E-ISSN:0975-8232.
37. **Veeranjaneyulu Gopu, M.S. Nagaraj, "**Power management algorithm for standalone operated renewable distribution generator with hybrid energy backup in microgrid" International Journal of Power Electronics and Drives Systems, Vol.14, No.2, pp.1249-1259, June 2023, ISSN:2722-256X, DOI: http://doi.org/10.11591/ijpeds.v14.i2.pp1249-1259. **(Scopus Indexed)**
38. P. Muthukumar, M.V.Ramesh, **Ponnam Venkata Kishore Babu**, P. Rohinikumar, S.V.Satyanarayana, "Optimal Integration of Multiple D-SVCs for Voltage Stability Enhancement in Radial Electrical Distribution System Using Adaptive Firefly Algorithm" International Journal of Intelligent Engineering & Systems, Vol.16, No.3, 2023, pp.378-387, DOI:10.22266/ijies2023.0630.30 **(Scopus Indexed)**
39. **P. V. Mahesh**, S. Meyyappan , **A. Ramakoteswara Rao**, "A new multivariate linear regression MPPT algorithm for solar PV system with boost converter", ECTI Transactions on Electrical Engineering, Electronics, and Communications, Vol.20, Issue 2, pp.269–281, June 2022. **(Scopus Indexed).**
40. **P.Venkata Mahesh**, S.Meyyappan, **RamaKoteswaraRao Alla**, "Maximum Power Point Tracking with Regression Machine Learning Algorithms for Solar PV Systems", International Journal of Renewable Energy Research (IJRER), Vol. 12, No.3, PP. 1327-1338, September 2022. **(Scopus, Web of Science, ESCI Indexed)**
41. **P.Venkata Mahesh**, S.Meyyappan, **RamaKoteswaraRao Alla**, "Maximum Power Point Tracking Using Decision Tree Machine Learning Algorithm for Photovoltaic Systems", Clean Energy Journal, OXFORD Academic Publisher. Vol 6, No 5, 762-775, October 2022. **(Scopus, Web of Science, ESCI Indexed).**
42. **P.Venkata Mahesh**, S.Meyyappan, **RamaKoteswaraRao Alla**, "Support Vector Regression Machine Learning based Maximum Power Point Tracking for Solar Photovoltaic Systems",International Journal of Electrical and Computer Engineering Systems, Vol 14, No 1, 100-108, 2023. **(Scopus, Web of Science, ESCI Indexed).**
43. **P.Tripura**, B. Gireesha, M. Subbarao, and VB Murali Krishna. "Design and control of Takagi-Sugeno-Kang fuzzy based inverter for power quality improvement in grid-tied PV systems." Measurement: Sensors (2022): 100638. 2022 Dec 14:100638. **(Scopus Indexed).**

44. Dungrothu Kalpana, Malligunta Kiran Kumar, **Pidikiti Tripura**, "A multi-functional converter based switched reluctance motor drive for electric vehicle", International Journal of Power Electronics and Drive Systems(IJPEDS)Vol. 13, No. 4, December2022, pp. 1975~1983 ISSN: 2088-8694, DOI: 10.11591/ijpeds.v13.i4.pp1975-1983**(Scopus)**
45. Krishna, VB Murali, Sarathbabu Duvvuri, Kishore Yadlapati, **Tripura Pidikiti**, and Peddeeti Sudheer. "Deployment and performance measurement of renewable energy based permanent magnet synchronous generator system." Measurement: Sensors 24 (2022): 100478. 2022 Dec 1;24:100478. **(Scopus Indexed).**

International Conferences:

1. **Dr. A.RamaKoteswaraRao**, Sai Teja Chattala, Kandipati Rajani "Solar PV System Performance Analysis Using Various MPPT Techniques ", 2nd International Conference on Recent Trends in Power Systems and Power Electronics-2K22 (NEC-ICPSPE-2K22), Narasaraopeta Engineering College, Narasaraopet, Andhra Pradesh, India, July 22nd -23rd 2022.
2. **N.Dharani Kumar**, T.A. Ramesh Kumar, **Dr. A.RamaKoteswaraRao**, "A Comprehensive Review of Solar PV Array Configurations", 2nd International Conference on Recent Trends in Power Systems and Power Electronics-2K22 (NEC-ICPSPE-2K22), Narasaraopeta Engineering College, Narasaraopet, Andhra Pradesh, India, July 22nd -23rd 2022.
3. **V.Sarayu**, M.VanithaSri, **Dr.A.RamaKoteswaraRao**, "Traditional and Advanced Materials for Solar PV Systems", 2nd International Conference on Recent Trends in Power Systems and Power Electronics-2K22 (NEC-ICPSPE-2K22), Narasaraopeta Engineering College, Narasaraopet, Andhra Pradesh, India, July 22nd -23rd 2022.
4. **P.Venkata Mahesh**, S.Meyyappan, **Dr.A.RamaKoteswaraRao**, "Machine Learning Algorithms for Solar PV Systems: An Overview", 2nd International Conference on Recent Trends in Power Systems and Power Electronics-2K22 (NEC-ICPSPE-2K22), Narasaraopeta Engineering College, Narasaraopet, Andhra Pradesh, India, July 22nd -23rd 2022.
5. **Ch.RangaRao**, R.Balamurugan, **Dr.A.RamaKoteswaraRao**, "An Overview of Various Control Strategies for Power Quality Improvement Using DSTATCOM", 2nd International Conference on Recent Trends in Power Systems and Power Electronics-2K22 (NEC-ICPSPE-2K22), Narasaraopeta Engineering College, Narasaraopet, Andhra Pradesh, India, July 22nd -23rd 2022.
6. **V.Sarayu**, M.VanithaSri, **Dr.A.RamaKoteswaraRao**, "An Overview on Role of Solar Photovoltaic Technologies for Environmental Protection", International Conference on Environmental Pollution and Control Technologies(EPACT-2022), Annamalai University, Annamalai Nagar, TamilNadu, India, August 26th -27th 2022.
7. CH.Naga sai kalyan, **Gudapati Sambasiva Rao**, "Super capacitor and TCSC based territorial control strategy for frequency

regulation of multi area interconnected power system" in IEEE NKCon-2022 Flagship International Conference of IEEE North Karnataka Subsection in association with IEEE Bangalore Section and IEEE ITS hosted by BLDEA's V. P. Dr. P.G. Halakatti College of Engineering and Technology, Vijayapur, Karnataka, India, during 20th and 21st November 2022.

8. Ch Naga sai Kalyan, B Nagi Reddy, Mohit Bajaj, Kiran Malligunta, and **Gudapati Sambasiva Rao**, " Perfomance Comparison of SSSC and TCSC Devices on Load Frequency control of interconnected Power System with Geothermal Power Plant Integration" in the 4th International Conference on Technology and Policy in Energy & Electric Power (ICT-PEP 2022) that was held in Jakarta International Expo, lndonesia, 18-20 October 2022.