

International Journal in IET - Institution of Engineering and Technology

1. P. Subbaraj and K. Manickavasagam, "Generation Control of Inter-connected Power Systems Using Computational Intelligence Techniques", **IET- Generation, Transmission and Distribution**, July 2007, Volume-1, Issue 4, p.557-563 DOI:10.1049/iet-gtd:20060222
2. Krishnan Manickavasagam; Naveen Kumar Thotakanama; Vineetha Puttaraj, "Intelligent energy management system for renewable energy driven ship", **IET Electrical Systems in Transportation**,1 March2019, Vol-9, No.1, pp 24-34, doi: 10.1049/iet-est.2018.5022,
3. Krishnan Manickavasagam; Swathi Prasad; Hariharan Ramasangu, "Assessment of Power System Security using Security Information Index" **IET- Generation, Transmission and Distribution**, Volume 13, Issue 14, 23 July 2019, p. 3040 – 3047, doi: 10.1049/iet-gtd.2018.5806
4. Suchitra Venkatesan, Krishnan Manickavasagam, Nikita Tengenkai, Nagendran Vijayalakshmi, "Health monitoring and prognosis of electric vehicle motor using intelligent-digital twin", in **IET Electric Power Applications**, vol. 13, no. 9, pp. 1328-1335, June 2019. DOI: [10.1049/iet-epa.2018.5732](https://doi.org/10.1049/iet-epa.2018.5732)

2021 Winners of the IET Premium (Best Paper) Awards

5. K. Manickavasagam, "Intelligent Energy Control Center for Distributed Generators Using Multi-Agent System", **IEEE Transaction on Power System**, Vol. 30, NO. 5, Sep 2015,pp 2442 – 2449
[DOI: 10.1109/TPWRS.2014.2368592](https://doi.org/10.1109/TPWRS.2014.2368592)
6. SenthilKumar. A, Krishnan Manickavasagam, "Transmission Line Dynamic Circuit Model for Effective Length of Ground Electrode Under Lightning Transients," in **IEEE Transactions on Electromagnetic Compatibility**, vol. 64, no. 2, pp. 543-550, 17-12-2021, doi: 10.1109/TEMC.2021.3124679.
[DOI: 10.1109/TEMC.2021.3124679](https://doi.org/10.1109/TEMC.2021.3124679)
7. Senthil Kumar.A, Krishnan Manickavasagam, " Computation of Effective Length of Enhancement for Vertical Electrode under Lightning Transients", in **IEEE Transactions on Electromagnetic Compatibility**,vol.64,no.6,2141-2148, June-2022,DOI: 10.1109/TEMC.2022.3182872
[DOI: 10.1109/TEMC.2022.3182872](https://doi.org/10.1109/TEMC.2022.3182872)
8. Senthil Kumar A, Krishnan Manickavasagam and P. K. Bhandiwad, "Impulse Efficient Optimum Impedance Grounding Electrode Configuration for Lightning Transients," in **IEEE Transactions on Electromagnetic Compatibility**, VOL. 65, NO. 6,pp 1990-1997, 23-Dec-2023,
[DOI: 10.1109/TEMC.2023.3300539](https://doi.org/10.1109/TEMC.2023.3300539)
9. P.Subbaraj and K.Manickavasagam, "Automatic Generation Control of Multi Area Power System Using Fuzzy Logic Controller". Formerly **European Transaction on Electric Power**, Presently **International Transactions on Electrical Energy Systems**, UK, April 2008, Volume 18, Issue 3, pp 266-280.
<https://doi.org/10.1002/etep.175> <https://onlinelibrary.wiley.com/doi/10.1002/etep.175>
10. K.T.Prajwal, Krishnan Manickavasagam and R. Suresh, "A Review on Vibration Energy Harvesting Technologies", **The European Physics Journal Special Topic**, 231, 1359–1371, 02-03-2022,
ISSN: 1951-6355, 1951-6401. <https://doi.org/10.1140/epjs/s11734-022-00490-0>
11. Prajwal K T, Krishnan Manickavasagam and S Malathi, "Analytical design and simulation studies of a conical energy harvester for enhanced power output", **Engineering Research Express**, Volume 6, Number 2,2024, IOP Publishing Ltd, DOI 10.1088/2631-8695/ad3f76

12. Karthikeyan, R., Manickavasagam, K., Tripathi, Shikha and Murthy, K.V.V. "Neuro-Fuzzy-Based Control for Parallel Cascade Control" **Chemical Product and Process Modelling**, vol. 8, no. 1, 08-June 2013, pp. 15-25 <https://doi.org/10.1515/cppm-2013-0002> ISSN: 1934-2659
13. K.T. Prajwal, Krishnan Manickavasagam " Modelling, Design and Parametric Analysis of a Levitation Based Energy Harvester" **Energy Harvesting and Systems (EHS)**, Vol. 10 (Issue 1), 21st June 2022, pp. 35-48. <https://doi.org/10.1515/ehs-2022-0034>
14. Sudha. B, Anusha Vadde and K. Manickavasagam, " Characterization of Temperature and Productive Torque for 160l Frame Squirrel Cage Induction Motor," **Journal of Engineering Research EMSME Special Issue**, Aug 2021, pp. 35-46, ISSN 2307-1877, DOI: <https://doi.org/10.36909/jer.EMSME.13853>
15. R. Karthikeyan, Tapio Pahikkala, Seppo Virtanen, Jounilsoaho, K. Manickavasagam and KVV. Murthy, "Fuzzy Logic Based Control for Parallel Cascade Control", **ICGST, Automatic Control and Systems Engineering Journal**, ACSE, Dec-2010, Issue 2, Vol 10, pp 39-48, ISSN 1687-4811, DOI: <https://doi.org/10.13140/RG.2.1.1624.2642> ISSN : 1687-4811 Impact factor 1.961
16. Sachin, S., Manickavasagam, K., Sriram, A.T, Effect of the Temperature Fluctuation on Torque Production by Assimilating Variable Core Loss Using Computational Approach for Electric Vehicles Motors, (2022) International Review of Electrical Engineering (IREE), 17 (6), pp. 609-617.doi:<https://doi.org/10.15866/iree.v17i6.22503>
17. S. Sachin, Krishnan Manickavasagam, A.T. Sriram, Effect of core losses on thermal analysis of 3Φ-Squirrel Cage Induction Motor using lumped parameter thermal model, **Materials Today: Proceedings**, Volume 80, Part 2, 2023, Pages 724-730, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2022.11.076>.
18. S. Sachin, K. Manickavasagam, and A. T. Sriram, "A Generalized Mathematical Model to Predict Core Loss of 15kw 3Φ-Squirrel Cage Induction Motor at Various Load for Industrial Applications", jmmf, vol. 71, no. 12A, pp. 312–325, Dec. 2023. <https://doi.org/10.18311/jmmf/2023/43608>
19. S. Sachin, K. Manickavasagam, and A. T. Sriram, "Comparative Analysis to Predict the Temperature Rise in 3Φ-Squirrel Cage Induction Motor using Lumped Parameter Thermal Model and Finite Element Method for Industrial Applications", jmmf, vol. 71, no. 12A, pp. 383–389, May 2024. <https://doi.org/10.18311/jmmf/2023/43609>
20. Prajwal K T, Krishnan Manickavasagam and S Malathi, "Analytical design and simulation studies of a conical energy harvester for enhanced power output", **Engineering Research Express**, Volume 6, Number 2, 24th April 2024, IOP Publishing Ltd, DOI 10.1088/2631-8695/ad3f76
21. Udaya Surian, V., Manickavasagam, K. & S, M. Distribution network reconfiguration during faults by path planning algorithm using minimum error current mapping technique. **Electrical Engineering**, 7th October 2024, <https://doi.org/10.1007/s00202-024-02707-y>
22. Swathi Nair, S., Manickavasagam, K. & Rao, S.N. Machine learning for computation of droop controller coefficients to improve the frequency nadir and ROCOF of a stand-alone microgrid. **International Journal of Information Technology**, August 2024. <https://doi.org/10.1007/s41870-024-02100-9>
23. UdayaSurian, V., Manickavasagam, K. & S, Malathi, "Path Planning for Autonomous Microgrid under Contingency using Optimal Search and Decision Tree", **Electrical Engineering** (25-Feb- 2025), DOI <https://doi.org/10.1007/s00202-025-03004-y>

24. K. Manickavasagam," Load Frequency Control of DFIG - Isolated and Grid Connected Mode", International Journal of Applied Power Engineering (IJAPE) Vol 1, No.1, April 2012, pp 29-36, ISSN: 2252-8792, DOI: <http://doi.org/10.11591/ijape.v1.i1.pp29-36>
25. K. Manickavasagam," Automatic Generation Control of Multi-Area Power System with Generating Rate Constraints Using Computational Intelligence Techniques", International Journal of Applied Power Engineering (IJAPE) Vol 3, No.1, April 2013, pp 27-38, ISSN: 2252-8792, DOI: <http://doi.org/10.11591/ijape.v2.i1.pp27-38>
26. K. Manickavasagam," Fuzzy logic controller based Single Buck Boost Converter for Solar PV cell", International Journal of Applied Power Engineering (IJAPE) Vol 3, No.1, April 2014, pp 1-8 ISSN: 2252-8792 DOI: <http://doi.org/10.11591/ijape.v3.i1.pp1-8>

International Conference Papers

1. P.Subbaraj and K.Manickavasagam, "An Application of Fuzzy Logic Controller to Automatic Generation Control Using Steady State Power Flow Analysis", Paper Presented in International conference, IEEEInternational Conference on Recent Applications of Computer in Electrical Engineering (RACE), March 24-25, 2007, held at Bikaner Engineering College, Bikaner, Rajasthan
2. P.Subbaraj and K.Manickavasagam, "Automatic Generation Control for Multi-Area Power System Using Two Fuzzy Logic Controller", Paper Presented in IEEE International Conference on Recent Applications of Computer in Electrical Engineering (RACE), March 24-25, 2007, held at Bikaner Engineering College, Bikaner, Rajasthan
3. P.Subbaraj and K.Manickavasagam "AGC of Multi Area Power System Using Hybrid neuro fuzzy controller", Presented in first International conference on Advances in Energy Conversion Technologies ICAECT-2010 held at Manipal Institute of Technology, Manipal, Karnataka, on 7-10 January 2010.
4. K.Manickavasagam, K.Ilango, K.S.Amith Kumar and K.S. Janardhan, " A Novel Approach of Autonomous Power Generation Scheme Using Self Excited Induction Generator", 1stInternational conference on Energy Engineering and Eco-Balance (ICEEE-2009) organized by Mulshi Institute of Technology and Research (MITR), Pune on 16-18, Feb 2009
5. K. Manickavasagam, M. Nithya, Priya K, Shruthi.J, Shruthi Krishnan, Smriti Misra and Manikandan.S "Control of Distributed generator and Smart Grid using Multi Agent system", ICEES-2010, International Conference on Electric Energy Systems, SSN College of Engineering, Chennai, on 3-5 Jan-2011
6. Nikita Tengenkai, Manickavasagam Krishnan and Sachin Sathyanarayana "Magnetostriction Analysis on Doubly Fed Induction Generator under normal and Low Voltage Ride through (LVRT) Condition" IEEE International conference on Technological Advancements in Power and Energy - TAP Energy 2017 organized by the Department of Electrical And Electronics Engineering, Amrita Vishwa Vidyapeetham, Amritapuri Campus during 21st to 23rd December 2017.
7. Shriti Das, Naveen Kumar Thotakanama and Dr. Krishnan Manickavasagam "Analysis and Design of Fuzzy Based PWM Controller for Solar Power Generation "IEEE International conference on Technological Advancements in Power and Energy - TAP Energy 2017 organized by the Department of Electrical And Electronics Engineering, Amrita Vishwa Vidyapeetham, Amritapuri Campus during 21st to 23rd December 2017

8. K. Manickavasagam K, Nikita T and Sachin S "Computational Analysis on Doubly Fed Induction Generator to determine Core Loss under normal and Low Voltage Ride Through (LVRT) Condition" IEEE International conference on Technological Advancements in Power and Energy - TAP Energy 2017 organized by the Department of Electrical And Electronics Engineering, Amrita Vishwa Vidyapeetham, Amritapuri Campus during 21st to 23rd December 2017.
9. Senthil Kumar A and K Manickavasagam "Mathematical Modelling of Dynamic Soil Resistivity under Transient conditions", IEEE International conference on Technological Advancements in Power and Energy- TAP Energy 2017 organized by the Department of Electrical And Electronics Engineering, Amrita Vishwa Vidyapeetham, Amritapuri Campus during 21st to 23rd December 2017.
10. Sudha. B, Anusha Vadde and K. Manickavasagam, "Thermal behavior on Productive Torque in Electric Vehicle Motor using Computational Methods," 2021 IEEE 6th International Conference on Computing, Communication and Automation (ICCCA), IEEE Section Hyderabad 17-12-2021, pp. 367-377 DOI:10.1109/ICCCA52192.2021.9666400
11. S. S. Hooli, A. Vadde, K. Manickavasagam and G. R. Kadambi, "Fuzzy Based Health Monitoring of Electric Vehicle Motor using Time Domain Analysis," 2021 International Conference on Sustainable Energy and Future Electric Transportation (SEFET), GokurajuRangaraju Institute of Engineering and Technology, Hyderabad, 23- Jan- 2021, pp. 1-6, DOI 10.1109/SeFet48154.2021.9375791.
12. J. B, V. Sailaja, K. Deepa and K. Manickavasagam, "Intermediate Administrative System for Load Side Management in Different Kinds of Load Present in a Cluster of Micro Grid," 2022 IEEE Delhi Section Conference (DELCON), 11-13-02-2022, pp. 1-5, DOI: 10.1109/DELCON54057.2022.9752829.
13. J. P. Yalawar, R. Suchita, A. Vadde, K. Manickavasagam and P. Bekwad, "Assessment of Efficiency for Refurbished 3 ϕ Squirrel Cage Induction Motor using No-load Field Data," 2022 22nd National Power Systems Conference (NPSC), 17-19 Dec 2022, IITD, New Delhi, India, 2022, pp. 183-188, doi: 10.1109/NPSC57038.2022.10069550.
14. S. S. Hooli, A. Vadde, G. R. Kadambi and K. Manickavasagam, "Stimulus of Magnetic Flux in the Surface Vicinity of Electric Motors on Human Health," 2023 International Conference on Power, Instrumentation, Energy and Control (PIECON), Aligarh, India, 2023, pp. 1-6, 10-12 February 2023, doi: 10.1109/PIECON56912.2023.10085829.
15. Naveen Kumar Thotakanama, Krishnan Manickavasagam and ManikandanShanmugam, "Power Control in Solar Battery Charging Station using Fuzzy Decision Support System for Electric Vehicles," 2023 IEEE IAS Global Conference on Emerging Technologies (GlobConET), London, United Kingdom, 2023, pp. 1-6, 19-21 May 2023, doi: 10.1109/GlobConET56651.2023.10149944.
16. S. Sachin, K. Manickavasagam and A. T. Sriram, "Investigation of Core Loss in Electric Vehicle Induction Motor Using Finite Element Analysis for Performance Enhancement," 2024 Third International Conference on Power, Control and Computing Technologies (ICPC2T), NIT, Raipur, India, pp. 37-42, DOI: 10.1109/ICPC2T60072.2024, 18-20 Jan. 2024
17. Prajwal KT, Manjula M, Tejkumar Makanur, Pradeep R, Varun Gowda S, K Manickavasagam "Design and Analysis of a Miniaturized Vortex Induced Wind Turbine" 2024, 1st International Conference on Advances in Modern Ages Technologies for Health and Engineering Science, AMATHE 2021, 16-17, May 2024, PES Institute of Technology and Management, Shivmoga, Karnataka

18. R. Suchita, J. P. Yalawar, A. Vadde, K. Manickavasagam and P. Bekwad, "Modified Form Based Efficiency Estimation of Three Phase Squirrel Cage Induction Motor," 2024 IEEE 4th International Conference on Sustainable Energy and Future Electric Transportation (SEFET), Hyderabad, India, 2024, pp. 1-6, doi: 10.1109/SEFET61574.2024.10718054. 31 July 2024 - 03 August 2024
19. S. Sachin, K. Manickavasagam and A. T. Sriram, "Investigation of Core Loss in Electric Vehicle Induction Motor Using Finite Element Analysis for Performance Enhancement," 2024 Third International Conference on Power, Control and Computing Technologies (ICPC2T), NIT, Raipur, India, pp. 37-42, DOI: 10.1109/ICPC2T60072.2024, 18-20 Jan. 2024
20. K. Manickavasagam, Sanjeet Kumar, AS Walkey, "Intelligent Energy Management using Multi-Agent Control of Autonomous Microgrid used in Ship", Annual International Congress on Renewable Energy, September 3-5, 2024 Oxford, United Kingdom
21. K. Manickavasagam, Sanjeet Kumar, AS Walkey, "Control of Autonomous Microgrid using Fuzzy Logic based Energy Management System", The 10th International Symposium on Hydrogen Energy, Renewable Energy and Materials, 17- 18th Oct 2024, Bangkok, Thailand
22. K. Manickavasagam and S. Mary Raja Sulochanal "Reactive Power and Voltage control in Distribution substation and feeders using fuzzy dynamic program", Applied Systems Engineering And Soft Computing (SESESCS)-2000, 4th and 5th March **2000**, National conference, held in Dayalbagh Educational Institute", Agra, India
23. K. Manickavasagam and M. Suprith "Testing of High Performance RF Modules in Wireless Communication Using Proposed Low cost ATE", National Conference on Nascent Technologies in the Engineering fields NCNTE (NCNTE)-2008, 29th Feb and **1st March-2008**, National conference, held in Fr. C. Rodrigues Institute of Technology, Vashi, Mumbai, India
24. P. Subbaraj and K. Manickavasagam "Automatic Generation Control of Three Area Power System Using Fuzzy Logic and ANN Controller", in the national conference, Recent Advances in Electrical Machines and Energy Systems (REMES-2008), held at Charotar Institute of Technology, Changa, Gujarat on 12th& 13th March 2008.
25. M.M. Babu Narayanan, O.Rajesh Kumar, K.Manickavasagam, Krithika Suresh Babu and Dhrishya Ravidas "Loss Optimization of Urban Power Distribution System Using PSS/ ADEPT Software", in the national conference,Recent Advances in Electrical Machines and Energy Systems (**REMES**)- **2008**, held at Charotar Institute of Technology, Changa, Gujarat on 12th& 13th March 2008.