

**Dr. G. RAMYA M.E., Ph.D.,**  
**Assistant Professor,**  
**Dept of ECE, Faculty of Engineering & Technology,**  
**SRM Institute of Science & Technology,**  
**Ramapuram Campus, Chennai.**  
[ramyag@srmist.edu.in](mailto:ramyag@srmist.edu.in)



**Dr.G. Ramya** obtained her Bachelor of Engineering (B.E.) from Veltech Engineering College, Chennai and Master of Engineering (M.E) from DMI College of Engineering, Chennai in the year 2009 and 2011 respectively. She obtained her Doctor of Philosophy (Ph. D) from Faculty of Engineering & Technology, SRM Institute of Science & Technology, Chennai, in the year of 2020. She has 12 years of teaching experience and currently working as an Assistant Professor in the Department of ECE, Faculty of Engineering & Technology, SRM Institute of Science & Technology, Chennai, India. She has Published 5 SCIE, 19 Scopus Indexed Journal Articles and 7 Patents. Two research scholars are pursuing Ph.D. degree under her supervision.

#### **AREAS OF RESEARCH:**

Power quality, FACTS, Soft computing, Power System Analysis, and Analysis of Inverter.

#### **JOURNAL PUBLICATIONS:**

1. Lalitha, L., Ramya, G. and Shunmugathammal, M., 2023. AI based Safety Helmet for Mining workers using IoT Technology and ARM Cortex-M. *IEEE Sensors Journal*. (SCI)
2. Suresh, P., Shobana, S., Ramya, G. and Belsam Jeba Ananth, M.S., 2023. Hybrid optimization enabled multi-aggregator-based charge scheduling of electric vehicle in internet of electric vehicles. *Concurrency and Computation: Practice and Experience*, 35(9), p.e7654. (SCI)
3. Ramya, G., Suresh, P., Ram, J.M., Kumar, A.S. and Sathish, S., 2021, December. Power Quality Improvement Using Luo Converter-Coupled Multilevel Inverter-Based Unified Power Flow Controller for Optimized Time Response. In *International Conference on Futuristic Communication and Network Technologies* (pp. 95-111). Singapore: Springer Nature Singapore. (SCOPUS)
4. Pandian, S., Vedi, A., Manasea Selvin, B.J.A. and Ganesan, R., 2023. Fractional-Sea Lion Optimization Based Routing and Charge Scheduling in Internet of Electric Vehicles. *Cybernetics and Systems*, pp.1-26. (SCI)

5. Shobana, S., Praghash, K., Ramya, G., Rajakumar, B.R. and Binu, D., 2022. Integrating renewable energy in electric V2G: Improved optimization assisting dispatch model. *International Journal of Energy Research*, 46(6), pp.7917-7934. (SCI)
6. **Ramya, G.**, Kabilan, S. and Ramkaran, R., 2022, December. Skin Disease Detection based on Machine Learning Techniques. In 2022 11th International Conference on System Modeling & Advancement in Research Trends (SMART) (pp. 1249-1252). IEEE. (SCOPUS)
7. Shunmugathammal, M., **Ramya, G.**, Krishnan, N., Sornalakshmi, M. and Daniya, T., 2022, December. Li-Fi Technology based Automatic Vehicle Speed Controller. In 2022 11th International Conference on System Modeling & Advancement in Research Trends (SMART) (pp. 1084-1087). IEEE. (SCOPUS)
8. **Ramya, G.**, Suresh, P., Jayashree, J., Charles, A.A. and Daniya, T., 2022, May. Review and Analysis of Techniques to Mitigate SubSynchronous Resonance using FACTS Devices. In 2022 International Virtual Conference on Power Engineering Computing and Control: Developments in Electric Vehicles and Energy Sector for Sustainable Future (PECCON) (pp. 1-4). IEEE. (SCOPUS)
9. Ratnaiah, G. and **Ramya, G.**, 2022, May. Comparative Analysis of Asymmetric Cascaded H Bridge Multilevel Inverter with Control Topologies. In 2022 International Virtual Conference on Power Engineering Computing and Control: Developments in Electric Vehicles and Energy Sector for Sustainable Future (PECCON) (pp. 1-6). IEEE. (SCOPUS)
10. **Ramya, G.**, Suresh, P., Manimaran, B. (2022). Power Quality Enhancement in Transmission System Using Proposed Switched Capacitor Multilevel Inverter-Based Static Synchronous Compensator. In: Mallick, P.K., Bhoi, A.K., González-Briones, A., Pattnaik, P.K. (eds) *Electronic Systems and Intelligent Computing. Lecture Notes in Electrical Engineering*, vol 860. Springer, Singapore. (SCOPUS)
11. R. Arthi, **G. Ramya**, P. Suresh, K. Murugesan, T. Ramya." Power Quality Improvement Using PV Coupled Non-Isolated Quasi Z Source Inverter". *Wseas Transactions On Power Systems*, Volume 17, pp 62-67; (SCOPUS)
12. Ramya, T., **Ramya, G.**, Raju, K., Ravi, J. and Verma, D., 2022. An Efficient AES Algorithm for Cryptography Using VLSI. *ECS Transactions*, 107(1), p.5605. (SCOPUS)
13. Vinil, M., **Ramya, G.** and Moovendan, M., 2022. Reactive Power Injection to Grid Using Transformer-Less MOSFET Based Single Phase Inverter Using PV to Achieve High Efficiency. *ECS Transactions*, 107(1), p.5305. (SCOPUS)
14. **Ramya, G.**, Vinil, M. and Moovendan, M., 2022. Energy Improvement in Distribution Network Using Sliding Mode Controller Based SVC System. *ECS Transactions*, 107(1), p.5155. (SCOPUS)
15. **Ramya, G.**, P. Suresh, R. Arthi, and K. Murugesan. "Renewable Energy Enhanced Smart Energy Management System Using Internet of Things." *ECS Transactions* 107, no. 1 (2022): 5335. (SCOPUS)
16. Ahilan, T., P. Suresh, S. Elam Cheren, And **G. Ramya**. "Power Quality Enhancement Using Interline Dynamic Voltage Restorer in Renewable Energy System." In

Proceedings of International Conference on Power Electronics and Renewable Energy Systems, Pp.507-516. Springer, Singapore, 2022. (SCOPUS)

17. Vignesh Babu, A., Ajay Daniel, J., Ganesh, V.N., Balaji, S. and **Ramya, G.**, 2022. Enhanced Hybrid Touch Screen Display for Industrial Applications. In Proceedings of International Conference on Power Electronics and Renewable Energy Systems (pp. 517-526). Springer, Singapore. (SCOPUS)
18. Charles, A. Antony, G. Ramya, **P. Suresh**, and B. Manimaran. "Contingency Analysis in Multiline Distributed System Using Dynamic Voltage Restorer." In IOP Conference Series: Materials Science and Engineering, Vol. 994, No. 1, P. 012018. IOP Publishing, 2020. (SCOPUS)
19. **Ramya, G.**, V. Ganapathy, and P. Suresh. "Comprehensive Analysis of Interleaved Boost Converter with Simplified H- Bridge Multilevel Inverter Based Static Synchronous Compensator System." Electric Power Systems Research 176(2019): 105936. (SCI)
20. **Ramya, G.**, P.Sathyanathan, A.G.Karthikeyan, R.Selvamanikandan, P.Suresh.(2019), "Three Phase Five Level T- Type Multi Level Inverter Using Hybrid Sources", International Journal of Innovative Technology and Exploring Engineering, Vol 8, No.11, Pp.2663-2668. (SCOPUS)
21. Karthikeyan, A. G., K. Premkumar, P. Suresh, **G. Ramya**, And A. Johnson Antony. "Multi Input And Multi Output Zeta Converter for Hybrid Renewable Energy Storage Systems." Int. J. Innov. Technol.Explor. Eng 9, No. 2 (2019):4114-4119. (SCOPUS)
22. **Ramya, G.**, V. Ganapathy, and P. Suresh. "Power Quality Improvement Using Multi-Level Inverter Based DVR and DSTATCOM Using Neuro-Fuzzy Controller." International Journal of Power Electronics and Drive Systems 8, No. 1 (2017): 316. (SCOPUS)
23. **Ramya, G.**, and V. Ganapathy. " A Novel Two Level Inductor Boost Converter for Multilevel Inverter based STATCOM " International Journal of Control Theory And Application 9, No. 2 (2016): 759-769. (SCOPUS)
24. **Ramya, G.**, and V. Ganapathy. "Comparison of five level and sevenlevel inverter based static compensator system." Indonesian Journal of Electrical Engineering and Computer Science 3, no. 3 (2016): 706- 713. (SCOPUS)

#### Patents:

S.No	Patent Title	Ref No	Status
1	Internet of Things & Cloud-Computing based illness identification & analysis system for health sector by using Fuzzy-neural method – 31.12.2021	202111058745	Published
2	Thermal Imaging for snake detection- Living Things detection using Thermal Imaging in Agricultural Field. - 07.02022.	202141061531	Published
3	IoT based smart Farming Surveillance System using Thing speak. – 21.10.2022	202241057706	Published

4	Automatic Recharging Tractor Battery Technology	202241006770	Published
5	Intelligent Wheelchair Controlled by Multifunctional parameters using ESP32	202241075083	Published
6	Optimal Scheduling of Electric Car Charging and Discharging at a Parking Station with a Solar System and an Energy Storage Unit	202341026273	Published
7	Introduction to Smart Mirror Using Raspberry Pi 4	202341027315	Published

## NPTEL CERTIFICATION

S.No.	Course Name	Year	Performance
1	Introduction to Internet of Things	Jan - Apr 2019	Elite +Gold
2	Introduction to Smart Grid	Jul - Sep 2019	Elite
3	Electric Vehicles Part- I	Feb-March 2020	93% (COVID-19 )
4	Introduction to Industry 4.0 and Industrial Internet of Things	Jul - Oct 2021	Elite
5	Big Data Computing	Jul - Oct 2021	Elite
6	NBA Accreditation and Teaching and learning in Engineering (NATE)	Jan - Apr 2022	Elite + Silver
7	Computer Networks and Internet Protocols	Jan - Apr 2022	Elite
8	Cloud Computing	Jul - Oct 2022	<b>Elite + Silver (Top 5%)</b>

## Books/Book Chapters Published:

1. **Biometric System, Scientific Publications, 2022.**
2. **Wind Power Generation and Wind Turbine Design Principles, Scientific Publications, 2023.**

## Google Scholar:

<https://scholar.google.com/citations?user=MM-y-UIAAAAJ&hl=en&oi=sra>

## SCOPUS

<https://www.scopus.com/authid/detail.uri?authorId=57268470900>