Dr. A. Shunmugalatha, M.E., Ph.D.

Professor/EEE & Dean (Academics) Velammal College of Engineering and Technology, Madurai asl@vcet.ac.in

Educational Qualification:

S.No.	Degree	Year	Subject	University/Institution	% of marks
1.	Ph.D.	2009	Electrical	Anna university	N/A
2.	M.E.	1999	PSE	Madurai Kamaraj University	75.75
					(First Class with
					Distinction)
3.	B.E.	1990	EEE	Madurai Kamaraj University	73.0625
					(First Class)

Experience in Years:

S.No.	Positions	Name of the Institute	Years
1.	Professor & Dean (Academics)	Velammal College of Engineering & Technology	1 year 01 month
2.	Professor & Head	Velammal College of Engineering & Technology	12 years 03 months
3.	Professor	K.L.N.College of Engineering	1 year 9 months
4.	Associate Professor	K.L.N.College of Engineering	4 months
5.	Assistant Professor	K.L.N.College of Engineering	4 year 4 months
6.	Senior Lecturer	K.L.N.College of Engineering	2 year 4 months
7.	Lecturer	K.L.N.College of Engineering	4 year 9 months
8.	Lecturer	Dr.M.G.R.Engineering College	10 months
9.	Lecturer	Seethaiammal Polytechnic	1 year 3 months

Interested Research Areas:

- Power System Stability
- Power Electronics and Drives
- Renewable Energy Systems
- Smart Grid
- Energy Management and auditing
- Soft Computing Techniques

Ph.D. Guidance:Recognized **Supervisor (No. 1930221)** under Anna University, Chennai.

S.No.	Scholar Name	Affiliation	Category	Status
1	P.Booma Devi	Anna University,Chennai	PT	Completed
2	G. Emily manoranjitham	Anna University,Chennai	PT	Completed
3	S.Mareesan	Anna University,Chennai	PT	Completed
4	P.VijayRajan	Anna University,Chennai	PT	Completed
5	R.J.Venkatesh	Anna University,Chennai	PT	Completed
6	R.Kanimozli	Anna University,Chennai	PT	Completed
7	P.Malathy	Anna University,Chennai	PT	Completed
8	A.Radhika	Anna University,Chennai	PT	Completed
9	V.A.Preethi	Anna University,Chennai	PT	Completed
10	A. Rama Krishnan	Anna University,Chennai	PT	Synopsis Submitted
11	K.Padmanaban	Anna University,Chennai	PT	Thesis Submitted
12	M.D.Udaya Kumar	Anna University,Chennai	PT	Confirmation received

13	Vigneshwar A S	Anna University,Chennai	PT	Confirmation received
14	A.Madhan	Anna University,Chennai	PT	Confirmation received
15	Umayal Muthu V	Anna University, Chennai	PT	Confirmation received
16	Siddharthan S. T	Anna University,Chennai	PT	Confirmation received
17	Saranya R	Anna University,Chennai	PT	Confirmation received
18	Devaki M	Anna University,Chennai	PT	Confirmation received

Scholarships and Awards received:

S.No.	Name of Award	Awarding Agency	Year
1.	Energy Manager	Bureau of Energy	2019
		Efficiency	
2.	Member IEEE	IEEE	#92595911
3.	Member in Institute of Engineer (India)	Institute of Engineer	F-117960-4
		(India)	
4.	Membership in Indian Society for Technical	Indian Society for	LM 32025
	Education	Technical Education	
5.	Received Best project Award for the Project work	Velammal College of	2015
	titled "Rucksack solar power plant	Engineering and	
		Technology	
6.	Received Best project Award in UG Project work	Thiagarajar College of	1990
	titled "DC injection braking for Induction motor"	Engineering	

Funded Research Projects:

S.No.	Academic Year	Project Title with PI/Co-PI	Funding agency	Duration	Sanctioned Amount	Status of Project
1.	2020- 2021	SPICES Dr.A.Shunmugalatha Dr.S.Senthilrani Ms.J.Rajeswari	AICTE	1 year	Rs. 1 Lakh	Completed
2.	2019- 2020	Modernization and Removal of Obsolescence (MODROB) Dr.A.Shunmugalatha Dr.S.Dhanalakshmi Dr.A.Radhika	AICTE	2 Years	Rs.8 Lakhs	Report Submitted
3.	2019- 2020	Entrepreneurship Awareness Camp(EAC), Entrepreneurship Development Programme (EDP) Dr.A.Shunmugalatha Dr.R.NarmathaBanu Mrs.B.Kiruthiga	DST	2019- 2020	Rs.2.6 lakhs	Completed
4.	2019- 2020	FDTP-Transmission and Distribution Dr.A.Shunmugalatha Dr.S.Senthilrani Ms.J.Rajeswari	Anna University, Chennai	2019- 2020	Rs.30,000	Completed
5.	2018-19	Popularization of Science Energy awareness Campaign: A big shift towards Energy Management Dr.A.Shunmugalatha Dr.S.Senthilrani Ms.J.Rajeswari	TNSCST Chennai & NCSTC, New Delhi	July 2019	Rs.20,000	Completed
6.	2018-19	Start-up NIDHI project, Innovation and Entrepreneurship Development Centre Dr.A.Shunmugalatha Dr.R.NarmathaBanu Mrs.B.Kiruthiga	DST	1 year	Rs. 2 Lakhs	Completed
7.	2018-19	Entrepreneurship Development Programme (EDC), Entrepreneurship Awareness Camp (EAC), Technology based Entrepreneurship Development Programme (TEDP) Dr.A.Shunmugalatha Dr.R.NarmathaBanu Mrs.B.Kiruthiga	DST	1 year	Rs. 9.1 Lakhs	Completed
8.	2017- 2018	National Seminar Dr.A.Shunmugalatha Dr.S.Senthilrani Ms.J.Rajeswari	IE(I)	August 2019	Rs.0.2	Completed
9.	2017- 2018	ICPES'17-2 nd International Conference on Power and Energy System Dr. A. Shunmugalatha Dr.S.Dhanalakshmi Dr.A.Radhika	IE(I)	1 year	0.2	Completed

10	2017- 2018	ICPES'17-3 rd Conference on Power and Energy System Dr. A. Shunmugalatha Dr.S.Dhanalakshmi Dr.A.Radhika	AICTE	6 Months	5	Completed
11	2017- 2018	Entrepreneurship Development Programme(EDP), Entrepreneurship Awareness Camp(EAC), Technology based Entrepreneurship Development Programme(TEDP) Dr. A. Shunmugalatha Dr.R.NarmathaBanu Mrs.B.Kiruthiga	NSTEDB- DST	1 year	7	Completed
12	2016-17	Entrepreneurship Development Programme(EDP), Entrepreneurship Awareness Camp(EAC), Technology based Entrepreneurship Development Programme(TEDP) Dr. A. Shunmugalatha Dr.R.NarmathaBanu Mrs.B.Kiruthiga	NSTEDB- DST	1 Year	9.6	Completed
13	2015- 2016	Entrepreneurship Awareness Camp(EAC), Dr. A. Shunmugalatha Dr.R.NarmathaBanu Mrs.B.Kiruthiga	NSTEDB- DST	1 Year	0.6	Completed
	2015- 2016	Innovation and Entrepreneurship Development Center (IEDC) Dr.A.Shunmugalatha, Dr.R.Narmathabanu& Ms.B.Kriuthiga		5 Years (2016- 2020)	45.3	Completed
15	2013- 2014	Custom Power Devices for Power Quality Management Dr.N.Karpagam Dr.S.Dhanalakshmi	AICTE	3 Years (2013- 2016)	8.75	Completed
16	2011- 2012	Current source Inverter fed Brush less DC motor Drive with Buck converter Dr.A. Shunmugalatha	DRDO	3 Years (2011- 2014)	14.98	Completed

Book publication details:

S.No.	Title	Author'sName	Publisher	Year of Publication
1.	Test and Testability	Dr.A.Shunmugalatha	Technical	April 2022
			Publications	
2.	Electric Circuit	Dr.A.Shunmugalatha	Charulatha	March 2022
	Analysis		Publications	
3.	Biomedical	Dr.A.Shunmugalatha	Akinik	November 2021
	Instrumentation		Publications	
4.	Smart Grid	Dr.A.Shunmugalatha	Technical	March 2021
			Publications	
5.	Measurements &	Dr.A.Shunmugalatha		March 2021
	Instrumentation		Publications	
6.	Renewable Energy	Dr.A.Shunmugalatha	Technical	October 2020
	Systems		Publications	
7.	Electric Energy	Dr.A.Shunmugalatha	Shanlux	First Edition – Feb 2019
	Generation		Publications,	
	Utilization &		Madurai	
	Conservation			
8.	Design of Electrical	Dr.A.Shunmugalatha	Sri Krishna	First Edition – May 2007
	Apparatus	_	Publications,	Second Edition – August
			Chennai	2008
				Third Edition June 2009
				Fourth Edition June 2017

Patent rights received:

Publications Details:

1. Patent Journal Publication Details:

S.No.	PatentTitle	PatentNo.	AwardDate	Status
1	IoT based automated railtrack	378952-001	09.02.2023	Published
	inspection trolley			
2.	A Novel Photovoltaic	Reference:	-	Published
	Power Harvesting System	201841037668A		19.10.2018
	Using a Transformerless			
	H6 Single-Phase Inverter			
	with Improved Grid			
	Current Quality			

2. International Journal Publication Details:

S.No.	Title	Name of Journal	Volume	0	Year
1.	The Palm Tree Optimization: Algorithm and Applications	Journal of Intelligent & Fuzzy Systems: Applications in Engineering and Technology	Vol. 45, No. 1	1385	2023
2.	An Improved Tuning of PID Controller for PV Battery-Powered Brushless DC Motor Speed Regulation Using Hybrid Horse Herd Particle Swarm Optimization	International Journal of Photoenergy	Volume 2023	23 pages	2023
3.	Real-Time Installation of a Smart Energy Meters Using the Long- Range Network	Journal of Electrical Engineering & Technology	19 July 2023		2023
4.	Optimal control method for power system reactive power management considering real time uncertainties	Optimal Control Applications and Methods	43 (1)		2022
5.	Design and Implementation of a New Fast and Efficient MPPT Controller under Different Solar Irradiance Conditions	International Journal of Photoenergy	vol. 2022	15 pages	2022
6.	Fibonacci based Fuzzy Controller for Grid Connected solar Photovoltaic System	Solid State Technologies	Vol 64 Issue 2	2164- 2175	2021
7.	Improving Control flexibility of Electric Spring using Intelligent Neuro Controller	Solid State Technologies	Vol 63 Issue 5	-	2020
8.	Pseudo Continuous Conduction Mode Operated Converter of Brushless Dc motor Drives	Solid State Technologies	Vol63. No.1	117-127	2020
9.	Boat Surveillance and classification of fish using Neural Network	International Research Journal of Engineering & Technology (IRJET)	Vol 07 Issue 04	-	April 2020
10.	Mitigation of Power Quality Issues using PV-UPQC and MTG-UPQC in a Distribution System	Journal of Electrical Engineering	Vol 20 No 04	1-9	June 2020
11.	Estimation of loadability limit with N-1 and N-2 outages using evolutionary computation techniques	Journal of ambient intelligence and Humanized computing	-	-	May 2020
12.	IoT based Fire Extinguishing System with Visual Surveillance	International Research Journal of Engineering and Technology	Vol 6 Issue 3	2774- 2778	2019

13.	Maxmization of net profit by optimal placement and sizing of	International Research Journal of Engineering	Vol 5 Issue 11	1185- 1191	2018
	DG in distribution system	and Technology			
14.	Power Flow Monitoring in Smart	International Journal of	Vol 119	1829-	2018
	Grid using Smart Energy Meter	Pure and Applied Mathematics	Issue 2	1838	
15.	Systematic vehicle trace with relay control and pulse surveillance	International journal of advanced research	Vol 5 Issue 3	187-196	2017
16.	Performance analysis of PCCM operated PFC converter for BLDC motor drives	International journal of printing, packaging and allied sciences	4	1190- 1201	2016
17.	Unified control of DC-DC buck converter using dynamic adaptive controller for battery operated devices	RevistaFacultad de Ingenieria, Universidad de antiioquia	Vol 81	35-46	2016
18.	A Novel Photo Voltaic Power harvesting system using Transformerless H6 Single Phase Inverter with improved grid current quality	Journal of Power Electronics	Vol 36 Issue 6	654-665	2016
19.	Photovoltaic systems with Passive lossless Cuk Converter using Hybrid Sliding Mode Control	Journal of Circuits Systems and Computers	Vol 25 Issue 5	1650036	2016
20.	Maximum Peak Power Tracking of Photovoltaic Systems using Adaptive Sliding Mode controller	International Journal of Applied Engineering Research	Vol 10	3073- 3079	2015
21.	Reactive Power Cost Estimation in Wind Farms using Hybridized Iterative Optimal Power Flow Estimation and a novel Load Tracing	Journal of Computational and Theoretical Nanoscience	Vol 12 Issue 12	5253- 5264	2015
	Optimum Cost Allocation for Reactive Power Planniing in Wind Farms Using Modified Artificial Immune System	International Journal of Applied Engineering Research,	Vol 10 Issue 11	29609 to 29620	2015

4. International Conference Presentation Details:

- 1. Dr.A.Shunmugalatha, "Optimum allocation of Generation for Maximum Load ability Limit of Power System using Multi Agent based Particle Swarm Optimization", International Power Engineering Conference (IPEC 07), Singapore, December 2007, Vol. 8,140.
- 2. Dr.A.Shunmugalatha, "Short term Hydro Thermal Scheduling using Particle Swarm Optimization", International Conference on Energy Engineering (ICEE 09), Pondicherry, 07 -09 January 2009.

- 3. Dr.A.Shunmugalatha, P.Booma Devi, "Sensitivity approach for Reactive power pricing", International Conference RVS College of Engg. & Tech., Coimbatore, 12-14 July, 2012.
- 4. Dr.A.Shunmugalatha, K.Kanimozhi, "Pulse Width Modulation based Sliding Mode Controller for Boost Converter", PSNA College of Engineering & Technology, Dindigul, 06 08 Febraury, 2013.
- 5. Dr.A.Shunmugalatha, P.Malathy, "Optimal Enhancement of Stability under Contingency Condition with FACTS Devices", IIT, Rourkela, 02 05, October, 2013.
- 6. Dr.A.Shunmugalatha, G.Emily Manoranjitham, "A Novel Unified Power Flow Controller Model for Enhancing Power Flow", IIT, Rourkela, 03 05, October, 2013
- 7. Dr.A.Shunmugalatha, "Power Flow Enhancement and loss reduction using a novel impedance UPFC model", Velammal College of Engg. & Tech, Madurai, 19 21 December, 2013.
- 8. Dr.A.Shunmugalatha, "Self-adaptive fire fly algorithm for reducing net VSI in power system", Velammal College of Engg. & Tech, Madurai, 19 21 December, 2013.
- 9. Dr.A.Shunmugalatha, "Enhancement of Voltage stability by optimal allocation of TCSC and SVC using hybrid PSO", Velammal College of Engg. & Tech, Madurai, 19 21 December, 2013.
- 10. Dr.A.Shunmugalatha, "Mitigation of voltage flicker and harmonics by SVC based Fuzzy PID controller", Velammal College of Engg. & Tech, Madurai, 19 21 December, 2013.
- 11. Dr.A.Shunmugalatha, "Dynamic response of PWM based boost converter using adaptive sliding Mode control", Velammal College of Engg. & Tech, Madurai, 19 21 December, 2013.
- 12. Dr.A.Shunmugalatha, "Simulation and analysis of carrier based PWM techniques for multilevel inverter", Velammal College of Engg. & Tech, Madurai, 19 21 December, 2013.
- 13. Dr.A.Shunmugalatha, "Optimization of PID controller parameters for a BLDC motor using GA", Velammal College of Engg. & Tech, Madurai, 19 21 December, 2013.
- 14. Dr.A.Shunmugalatha, "Modified interleaved Buck Boost H6 Inverter using renewable energy with unipolar & bipolar PWM techniques", Velammal College of Engg. & Tech, Madurai, 19 21 December, 2013.
- 15. Dr.A.Shunmugalatha, "Fuzzy based sensorless control of BLDC motor", Velammal College of Engg. & Tech, Madurai, 19 21 December, 2013.
- 16. Dr.A.Shunmugalatha, "Development of Fresnel power house proto type with Thermal Energy storage-Concentrated Solar Power", Velammal College of Engg. & Tech, Madurai, 19 21 December, 2013.

- 17. Dr.A.Shunmugalatha, "Reactive power compensation in wind farms using FACTS Devices", Velammal College of Engg. & Tech, Madurai, 19 21 December, 2013.
- 18. Dr.A.Shunmugalatha, "Pulse Width Modulation based Sliding Mode Controller for Boost Converter", in Proceedings IEEE International Conference on Power, Energy and Control (ICPEC'13), PSNA college of Engineering and Technology ,Dindigul, pp.341-345, 2013
- 19. Dr.A.Shunmugalatha, "Generation of electricity using Renewable energy sources", IEI, 08 09 March, 2014.
- 20. Dr.A.Shunmugalatha, "A novel UPFC model for Enhancing power flow" IIT, Rourkela, 02 05 October, 2013.
- 21. Dr.A.Shunmugalatha, "Grid stabilization and power quality enhancement using voltage source converter based high voltage direct current and model predictive control", International conference on Recent Advances in Engineering, Science & Technology ICON'15, Noorul Islam University, 17th April, 2015.
- 22. Dr.A.Shunmugalatha, "Fuzzy logic controller based active filtering technique for power quality enhancement to distribution network", International conference on Recent Advances in Engineering, Science & Technology ICON'15, Noorul islam University, 17th April, 2015.
- 23. Dr.A.Shunmugalatha, K.Kanimozhi, "Optimal Choice of DC-DC Converter for Enhancement of Power Tracking Efficiency in Photovoltaic System (Optimal Choice of DC-DC Converter for PV System", 2015 IEEE International Conference on Computational Intelligence and Computing Research 2015 IEEE ICCIC, Vickram College of Engineering, Madurai, 10-12 December, 2015.
- 24. Dr.A.Shunmugalatha, K.Kanimozhi, "Enhancement of maximum loadability during N-1 and N-2 contingencies with multi type FACTS devices and its optimization using MDE algorithm", 2016 IEEE International Conference IIT Varanasi, 9-11 December, 2015.
- 25. Dr.A.Shunmugalatha, "Implementation of speed control of BLDC motor with artificial neural network controller", International Conference on Power and Energy Systems ICPES 2017, Velammal College of Engineering and Technology, Madurai, 21,22 April, 2017.
- 26. Dr.A.Shunmugalatha, "Energy Consumption Analyzer and Solar Panel Monitoring Using Mobile Application", International Conference on Power and Energy Systems ICPES 2017, Velammal College of Engineering and Technology, Madurai, 21,22 April, 2017.
- 27. Dr.A.Shunmugalatha, "Partial Shading Detection and DMPPT of PV Arrays Using Voltage Equalisation", International Conference on Power and Energy Systems ICPES 2017, Velammal College of Engineering and Technology, Madurai, 21,22 April, 2017.
- 28. Dr.A.Shunmugalatha, "An Adjustable-Speed control for BMPL motor drive by using Direct Paralleled Converters", International Conference on Power and Energy

- Systems ICPES 2017, Velammal College of Engineering and Technology, Madurai, 21,22 December, 2017.
- 29. Dr.A.Shunmugalatha, "Design and Implementation Of Cascaded Multilevel Inverter Using Multicarrier Technique", International Conference on Power and Energy Systems ICPES 2017, Velammal College of Engineering and Technology, Madurai, 21,22 December, 2017.
- 30. Dr.A.Shunmugalatha, "Power Factor Improvement of Canonical Switching Cell Converter using Voltage follower Technique for VSI Fed BLDC Motor", International Conference on Power and Energy Systems ICPES 2017, Velammal College of Engineering and Technology, Madurai, 21,22 December, 2017.

5. National Conference Presentation Details:

- 1. Dr.A.Shunmugalatha, "Multiagent based Particle Swarm Optimization to Power Loss Minimization", National Power Engineering Conference, Thiagarajar College of Engineering, Madurai, Dec. 2005, Vol. 1, 135 139.
- 2. Dr.A.Shunmugalatha, "Hybrid Particle Swarm Optimization to Optimal reactive Power Dispatch", National power Engineering Conference, Thiagarajar College of Engineering, Madurai, Dec. 2005, Vol. 1, 130 134.
- 3. Dr.A.Shunmugalatha, "Application of Hybrid Multiagent based Particle Swarm Optimization to Optimal reactive Power Dispatch", National Power System Conference, Indian Institute of Technology, Roorkee, Dec. 2006, Vol. 14.
- 4. Dr.A.Shunmugalatha, "Maximum Loadability limit of Power System using Hybrid Particle Swarm Optimization ETPS 07", K.L.N. College of Engineering, Pottapalayam, Feb. 2007, Vol. 1, 93 97.
- 5. Dr.A.Shunmugalatha, "Maximum Loadability Limit of Power System using Multi Agent based Particle Swarm Optimization", National Conference on Power Systems, Ujjain Engineering College, Ujjain, Apr. 2007, Vol. 1, 94 99.
- 6. Dr.A.Shunmugalatha, "Optimum Allocation of Generation for Maximum Loadability Limit of Power System using Hybrid Particle Swarm Optimization" NPEC, TCE, Madurai, India, Jun. 2007, Vol. 2, 305 312.
- 7. Dr.A.Shunmugalatha, "Optimum Cost of Generation using Hybrid Particle Swarm Optimization", 2nd National Conference on Power Electronics & Power Systems, MEPPCON '08 Mepco Schlenk Engineering College, Sivakasi India, March 2008, Vol. 2, pp.11-15.
- 8. Dr.A.Shunmugalatha, "Optimum Cost of Generation using Evolutionary Programming", Recent Trends in Applicable Mathematics for Engineering & Technology at K.L.N.C.E, April 2009, Vol.1, pp.78 84.
- 9. Dr.A.Shunmugalatha, "Optimum Cost of generation for power system using hybrid multiagent based particle swaram optimization", Pondicherry Engineering College,

- 10. Dr.A.Shunmugalatha, B.Baghyadevi, "A Combination of Passive Shunt Filters And Static Var Compensator For Harmonic Reduction", Kamaraj College of Engineering and Technology, 05th March, 2014.
- 11. Dr.A.Shunmugalatha, G.Sangeetha, "Fuzzy PI Controller Based Static Var Compensator For Voltage Flicker Mitigation", Kamaraj College of Engineering and Technology, 05th March, 2014.
- 12. Dr.A.Shunmugalatha, A.Radhika, R.Durga, R.Abinaya, S.Syed Ali Fathima, "Optimization and Control Strategy for Standalone Hybrid Renewable Energy System", Sai Ram Engineering College, 13th March, 2014.
- 13. Dr.A.Shunmugalatha, S.Vignesh, "Active Filtering Approach for Power Quality Enhancement of Distribution Networks", National Conference-(NPEC 2015) at Thiagarajar College of Engineering, Madurai, 13 14 March, 2015.
- 14. Dr.A.Shunmugalatha, A.Radhika, M.Devaki, "Voltage Profile Improvement Using Unified Power Quality Conditioner (UPQC) with rooftop PVs", National Conference-(NPEC 2015) at Thiagarajar College of Engineering, Madurai, 13 14 March, 2015.
- 15. Dr.A.Shunmugalatha, A.Madhan, "Damping Oscillation in large power system using Voltage Source Converter based High Voltage Direct Current and Modal Predictive Control", National Conference-(NPEC 2015) at Thiagarajar College of Engineering, Madurai, 13 14 March, 2015.
- 16. Dr.A.Shunmugalatha, "Wireless Underwater Mobile Robot based on Zigbee", National Conference on Emerging Electrical Systems and Control (NCEESC 2016) at Sethu Institute of Technology, Kariapatti on 15th April, 2016.
- 17. Dr.A.Shunmugalatha, A.Radhika, A.Annaphorani, K.Pitchammal, P.Srividhya, "Implementation of Energy Efficient and Secured Vehicles with Emission Constraints", National Conference on Recent Trends in SMAC on 7th April, 2016.

• Reviewer for Journal:

Electric Power Components and Systems (Taylor & Francis)

International Journal of Electrical Power and Energy Systems (IJES)

Ains Shams Engineering Journal

International Journal of Electrical Power and Energy Systems (IJEPES)

• Reviewer for Books:

Basic Electrical & Electronics Engineering - Charulatha Publication Digital Logic Circuits, Circuit Theory, Circuit Analysis- Charulatha Publication

Electric Power Distribution, Tata-Mcgraw Hill Publications

Delivered guest lectures on various topics in and around Anna University

affiliated institutions.

- Acted as **Chair person and chief guest** for National and International conferences.
- Certified Energy Manager by BEE, India

6. Google Scholar report:





shunmugalatha A



Professor /EEE & Dean(Academics) Verified email at vcet.ac.in Voltage stability analysis

TITLE	CITED BY	YEAR
Optimum cost of generation for maximum loadability limit of power system using hybrid particle swarm optimization A Shunmugalatha, SMR Slochanal International Journal of Electrical Power & Energy Systems 30 (8), 486-490	38	2008
Application of hybrid multiagent-based particle swarm optimization to optimal reactive power dispatch A Shunmugalatha, SMR Slochanal Electric Power Components and Systems 36 (8), 788-800	19	2008
Maximum loadability limit of a power system using multiagent-based hybrid particle swarm optimization A Shunmugalatha, SM Raja Slochanal	19	2008

A Shunmugalatha, SM Raja Slochanal Electric Power Components and Systems 36 (6), 575-586

Development of modified carrier based PWM scheme for single phase H-bridge inverter fed isolated wind–PV systems P Vijayarajan, A Shunmugalatha, HH Sait Solar Energy 126, 208-219	13	2016
A novel photovoltaic power harvesting system using a transformerless H6 single-phase inverter with improved grid current quality A Radhika, A Shunmugalatha Journal of Power Electronics 16 (2), 654-665	10	2016
Loadability analysis during single contingency with FACTS devices using Differential Evolution P Malathy, A Shunmugalatha 2016 IEEE 6th International Conference on Power Systems (ICPS), 1-6	8	2016
Pulse Width Modulation based sliding mode controller for boost converter K Kanimozhi, A Shunmugalatha 2013 International Conference on Power, Energy and Control (ICPEC), 341-345	7	2013
Application of swarm based intelligent computing algorithms for dynamic evaluation of maximum loadability of transmission network P Malathy, A Shunmugalatha Journal of computational science 21, 201-222	6	2017
A new hybrid multilevel inverter topology for medium and high voltage applications P Vijayarajan, A Shunmugalatha, MAJ Sathik Appl. Math. Inf. Sci 11 (1), 497-508	5	2017
Enhancement of Maximum Loadability during N-1 and N-2 contingencies with multi type FACTS devices and its optimization using MDE algorithm P Malathy, A Shunmugalatha 2016 IEEE Uttar Pradesh Section International Conference on Electrical	5	2016
Unified control of DC-DC buck converter using dynamic adaptive controller for battery operated devices K Kannabiran, S Alagarsamy Revista Facultad de Ingeniería Universidad de Antioquia, 35-46	4	2016
Photovoltaic systems with passive lossless cuk converter using hybrid sliding mode control K Kanimozhi, A Shunmugalatha Journal of Circuits, Systems and Computers 25 (05), 1650036	4	2016
Application of differential evolution for maximizing the loadability limit of transmission system during contingency P Malathy, A Shunmugalatha, T Marimuthu Proceedings of Fifth International Conference on Soft Computing for Problem	4	2016
Enhancement of transmission system loadability during contingency by optimal allocation of FACTS devices using particle swarm optimization P Malathy, A Shunmugalatha, P Thaineesh Intelligent Computing and Applications: Proceedings of the International	4	2015
Optimum allocation of generation for maximum loadability limit of power system using multiagent based particle swarm optimization (MAPSO) A Shunmugalatha, SMR Slochanal 2007 International Power Engineering Conference (IPEC 2007), 1349-1354	4	2007
Multi-objective optimal power flow by placement of unified power flow controller using firefly algorithm GE Manoranjitham, A Shunmugalatha Journal of computational and theoretical nanoscience 14 (12), 6038-6043	3	2017
Optimal choice of DC-DC converter for enhancement of power tracking efficiency in photovoltaic system: Optimal choice of DC-DC converter for PV system K Kanimozhi, A Shunmugalatha 2015 IEEE International Conference on Computational Intelligence and	3	2015

Reducing Power Losses in Power System by Using Self Adaptive Firefly Algorithm BS Babu, A Shunmugalatha Swarm, Evolutionary, and Memetic Computing: 4th International Conference	3	2013
Enhancement of dc microgrid to overcome the sparsity of electricity in pastoral spot using renewable energy source A Radhika, A Shunmugalatha, API Ronisha 2016 International Conference on Computing Technologies and Intelligent Data	2	2016
Design and Implementation of a New Fast and Efficient MPPT Controller under Different Solar Irradiance Conditions K Padmanaban, A Shunmugalatha, MS Kamalesh International Journal of Photoenergy 2022	1	2022
Estimation of loadability limit with N-1 and N-2 outages using evolutionary computation techniques P Malathy, A Shunmugalatha Journal of Ambient Intelligence and Humanized Computing 12, 5771-5782	1	2021
Fibonacci based fuzzy controller for grid connected solar photovoltaic system K Padmanaban, A Shunmugalatha Solid State Technology 64 (2), 2164-2175	1	2021
Reactive power cost estimation in wind farms using hybridized iterative optimal power flow estimation and a novel load tracing PB Devi, A Shunmugalatha Journal of Computational and Theoretical Nanoscience 12 (12), 5253-5264	1	2015
Development of Fresnel powerhouse prototype with thermal energy storage concentrated solar power P Kumar, A Shunmugalatha International Journal For Technological Research In Engineering 5 (1), 2347-4718	1	2014
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