Name of Faculty	Dr. THANIKANTI SUDHAKAR BABU	
Designation	Associate Professor	
Nature of Job/Appointment	Regular	
Date of Joining	27 - 01–2021	
E-mail	Sudhakarbabu_eee@cbit.ac.in	

Education Qualifications	**Name of the Degree**	**Class**
Ph. D	Doctor of Philosophy (Electrical)	Awarded
PG	M. Tech. (PED)	Distinction
UG	EEE.	First

Work Experience

Teaching	6.5Years (Includes research experience)
Research	5.5 Years
Industry	2 Years--
Others	--
Area of Specialization	Power Electronics, Renewable Energy Resources

Professional Memberships	• Senior Member, IEEE (Membership No: 94012203) • Member IET; (Membership No: 1100478761) • Member of IEEE power Electronics Society, Membership number: 94012203 • Member of The institute of research engineers and doctors (theIRED), Membership number: SM10100052558 • Member of International Association of Engineers (IAENG), Membership number: 159698
Responsibilities held at Institution Level	--
Responsibilities held at Department Level	--
Research Guidance	Ph.D. Pursuing: 0

Awards Received	1. Received Institution of Engineers India Young Engineer Award 2023 on 15 Dec 2023 at Shimla. 2. Received **Vice-Chancellors Research Excellence Award 2023** from the Osmania University on 03 Jan 2023 at Osmania University, Hyderabad. 3. Received **best research article** in the 1st International Conference on 'Advances in Power, Signal and Information Technology (APSIT) 2021' organized Siksha 'O' Anusandhan (Deemed to be University), Bhubaneswar, India during 08th - 10th October, 2021 4. **Listed among the top 2% of researchers in the world** - electrical & electronics engineering, power, and energy areas, Information provided by Elsevier BV, Stanford University. 5. Received **GOLD** award for the poster presentation on Implementation and design of an autonomous residential DC nano grid at the UNITEN POSTDOC HANGOUT DAY 2019, 30th Sept 2019, Universiti Tenaga Nasional, Malaysia. 6. Received award "**Young faculty in Engineering 2018**" towards exceptional academic records, initiatives and developments in the field of Electrical Engineering by Venus International Foundation, India. 7. Received a **best research paper award** for the article title "Charge controller techniques for solar PV system" in 1st International Conference on Power Engineering, Computing and Control, PECCON-2017, 2-4 March 2017, VIT University, Chennai Campus

8. Received **research award** consecutively for the years 2014, 2015, 2016 contribution towards research publications by VIT University.
9. Selected as **best associate** of project for the month of May 2013 in cognizant technology solutions
10. **Awarded certificated** of appreciation for outstanding contribution towards Hyderabad Innovator Fair organized by CTS national wide, October 2012
11. Received **best paper award** in a national level technical contest (SVITS QUEST 2008) for presenting paper titled "Fuzzy based economic load" organized by Sri Visveswaraya institute of technology and science in the year of 2008.
12. Received **bestpaper award** in a national level student seminar (INNOVITS 2K8) for presenting paper titled "Fuzzy based economic load dispatch of thermal power plant" organized by Vagdevi institute of technology and science, Andhra Pradesh.
13. Received 2nd prize for paper presentation in the national level technical symposium (Technosance 08) organized by Osmania University, Hyderabad.

Courses Handled at Under Graduate / Post Graduate Level.	Electric Circuits-I, Electric Circuits-II, Basic Electrical Engineering, Fundamentals of Electrical Engineering, Electrical Circuits-Lab, Renewable Energy Resources, Advanced Power semiconductor devices, Power Electronics.

No. of Papers Published	National Journals – 00	International Journals – **166 (SCI Indexed – 125; Scopus Indexed 10)**
	National Conference – 01	International Conference – 31

Projects Carried out	1. Received **INTERNATIONAL RESEARCH FUND (INTERES) 2022 by UNIVERSITI MALAYSIA PERLIS (UniMAP)** Malaysia for the project title "IoT based smart power quality analyzer" duration of 2 years worth of **7 Lakhs (8659 USD).** 2. Received funding for the consultancy project titled "**Enhancement of the performance of different renewable energy sources using modern techniques**" worth of **20 Lakhs** for the duration of 2 years from Najran University, Saudi Arabia. 3. Executive Member of FIST program 2016, sanctioned fund of **Rs. 115.0 Lakh (215580 USD**) by Department of Science and Technology, Reference number: SR/FST/ETI-420/2016.
Patents	Filed a patent under IP Australia, titled "A Process For Reducing Execution Time For Compression Techniques", Patent number: 2021100433, on 31 March 2021.
Technology Transfer	--
Invited Speaker	1. Delievered a Keynote Lecture in 2nd International Conference on Innovation in Electrical Power Engineering, Communication and Computing Technology " (from 24-09-2021 to 25-09-2021) organising by Siksha 'O' Anusnadhan (Deemed to be University), Bhubaneswar, Odisha, India. -4 2. Acted as a speaker for International Faculty Development programme on the title "Research Innovations and Emerging Advances in Electrical Engineering" organized by SRM Easwari Engineering College, Ramapuram, Chennai-600089 from 14.06.2021 to 19.06.2021. 3. Delivered a guest lecture (Two sessions) in one week AICTE sponsered short term training program (STTP) on "Simulation tools for Electrical Engineering and it's real time applications" organized by Kallam Harinath Reddy Institute of Technology, Guntur, Andhra Pradesh, India on 02-07-2021 4. Delivered key note address during one week faculty development program at P V P Siddhartha Institute of Technology, Vijayawada on 07th to 12th December 2020. 5. Acted as a speaker for the AICTE Sponsored One Week Short Term Training Program organized by SVCE, Tirupathi on October 2020. 6. Delivered a keynote speech during International Webinar organized by SRM Eswari Engineering College on September 2020. 7. Delivered a guest lecture as speaker for the one day National Workshop "Power Circuit Design Using PSIM Software- Hands on Training" organized by School of Electrical Engineering, VIT University, Vellore on 07 October 2017.
No. of Books/Chapter Published with details	**Thanikanti Sudhakar Babu**, Rajasekar Natarajan, "Modeling, analysis development of maximum power extraction techniques" LAP Lambert publications, 2017.
Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops/Other	**WS/ Seminars/ Conferences/ STTPS/ FDPs Organized**

Trainings (**Attended and/or Organized**).	- Organized an International webinar on EMI/EMC in Power Converters under IEEE PES student Branch of CBIT on 15 May 2021. - Organized a online seminar on " Advanced Power Converters for future Power Grids" under IEEE PES student Branch of CBIT on 10th March 2021. - Organized one day value added program on "Silicon carbide devices for high power applications" by V.Chandrasekar, Scientist E, Joint director power electronics division, CDAC Trivendrum on 28 October 2017. - Organized a one day national level workshop titled "Programming FPGA controller for solar PV applications based LabVIEW" in collaboration with Innovative invader technologies , National Instruments, Banglore at VIT University, Vellore on 27 October 2017. - Contributed as faculty organizer in the International conference on "Translational Medical and Imaging, ICTMI-2017" organized by School of Electrical Engineering, VIT University during 29 – 30 August 2017. - Contributed as faculty organizer in the International conference on " Innovations in Power and Advanced Computing Technologies (i-PACT)" organized by School of Electrical Engineering, VIT University during 21 – 22 April 2017. - Contributed as organizing committee member in conducting the "National level science contest for children" held at VIT University, Vellore on 21-22 January, 2017. **WS/ Seminars/ Conferences/ STTPS/ FDPs Attended** - Attended one day value added program on "Smart wide area monitoring protection using communication control" held on 25 March 2017 at VIT University, Vellore. - Participated in Three Day National Workshop with Hands on session in "Signal and Image Processing: Practice to Research" organized by School of Electrical Engineering, VIT University, Vellore, during 23 – 25, February 2017. - Attended Industrial Automated Training in Drive, Motion, Control and Robotics organized by Delta Electronics India from 03 February 2017 to 07 February 2017 at New Delhi.
Details of Journal Publications/ Conferences (**National and International**)	

International Journals form the year 2017

2023

[1]. Yuvaraj, T., T. D. Suresh, Ulagammai Meyyappan, Belqasem Aljafari, and Sudhakar Babu Thanikanti. "Optimizing the allocation of renewable DGs, DSTATCOM, and BESS to mitigate the impact of electric vehicle charging stations on radial distribution systems." Heliyon (2023). December 2023, **SCIE**

[2]. Yuvaraj, T., K. R. Devabalaji, Sudhakar Babu Thanikanti, Belqasem Aljafari, and Nnamdi Nwulu. "Minimizing the electric vehicle charging stations impact in the distribution networks by simultaneous allocation of DG and DSTATCOM with considering uncertainty in load." Energy Reports 10 (2023): 1796-1817. November 2023, **SCI**

[3]. Adhikary, Sarasij, Pabitra Kumar Biswas, Chiranjit Sain, Sudhakar Babu Thanikanti, and Nnamdi I. Nwulu. "Bidirectional converter based on G2V and V2G operation with time of usage-based tariff analysis and monitoring of charging parameters using IoT." Energy Reports 9 (2023): 5404-5419. Dec 2023 **SCI**

[4]. Pachauri, Rupendra Kumar, Mohit Kumar, Sudhakar Babu Thanikanti, Neeraj Kumar Shukla, Piyush Kuchhal, Ahmad Faiz Minai, and Akhilesh Sharma. "Study on Meta-heuristics techniques for shade dispersion to enhance GMPP of PV array systems under PSCs." Sustainable Energy Technologies and Assessments 58 (2023): 103353. August 2023, **SCIE**

[5]. Mallick, Pradyumna, Renu Sharma, Priya Ranjan Satpathy, Sudhakar Babu Thanikanti, and Nnamdi Nwulu. "A Dimension-Independent Array Relocation (DIAR) Approach for Partial Shading Losses Minimization in Asymmetrical Photovoltaic Arrays." IEEE Access (2023). 28 June 2023, **SCI**

[6]. Debnath, Sukanta, Upama Das, Pabitra Kumar Biswas, Belqasem Aljafari, and Sudhakar Babu Thanikanti. "Design and Control of Multicoil Active Magnetic Bearing System for High-Speed Application." Energies 16, no. 11 (2023): 4447. 31 May 2023, **SCIE**

[7]. Paramasivan, Muthukumar, K. Eswaramoorthy, R. A. T. H. I. N. A. M. Muniraj, Padmasuresh Lekshmi Kanthan, Thanikanti Sudhakar Babu, S. Jeevananthan, and Hassan Haes Alhelou. "An Alternative Level Enhanced Switching Angle Modulation Schemes for Cascaded H Bridge Multilevel inverters." IEEE Access (2023). June 2023, **SCI**

[8]. Yuvaraj, T., K. R. Devabalaji, Sudhakar Babu Thanikanti, Vijay Babu Pamshetti, and Nnamdi Nwulu. "Integration of Electric Vehicle Charging Stations and DSTATCOM in Practical Indian Distribution Systems using Bald Eagle Search Algorithm." IEEE Access (2023). June 2023, **SCI**

[9]. Mahafzah, Khaled A., Ali Q. Al-Shetwi, M. A. Hannan, Thanikanti Sudhakar Babu, and Nnamdi Nwulu. "A New Cuk-Based DC-DC Converter with Improved Efficiency and Lower Rated Voltage of Coupling Capacitor." Sustainability 15, no. 11 (2023): 8515. May 2023, **SCIE**

[10]. Das, Upama, Sukanta Debnath, Suraj Gupta, Pabitra Kumar Biswas, Thanikanti Sudhakar Babu, and Nnamdi I. Nwulu. "Active Magnetic Bearing System Using I-Type and U-Type Actuator." IEEE Access (2023). June 2023, **SCI**

[11]. Aljafari, Belqasem, S. Devakirubakaran, C. Bharatiraja, Praveen Kumar Balachandran, and Thanikanti Sudhakar Babu. "Power enhanced solar PV array configuration based on calcudoku puzzle pattern for partial shaded PV system." Heliyon 9, no. 5 (2023). May 2023, **SCIE**

[12]. Aljafari, Belqasem, Praveen Kumar Balachandran, Devakirubakaran Samithas, and Sudhakar Babu Thanikanti. "Solar photovoltaic converter controller using opposition-based reinforcement learning with butterfly optimization algorithm under partial shading conditions." Environmental Science and Pollution Research 30, no. 28 (2023): 72617-72640. May 2023, **SCI**

[13]. Naik, P. Lakshman, H. Jafari, T. Sudhakar Babu, A. Anil, S. Venkata Padmavathi, and D. Nazarpour. "Enhancement of Power Quality in Grid Integrated System using DC-link Voltage PI Controlled VSC based Statcom." Iranian Journal of Electrical and Electronic Engineering 19, no. 2 (2023): 2439-2439. June 2023, **SCIE**

[14]. Senthilkumar, S., V. Mohan, R. Deepa, M. Nuthal Srinivasan, T. Senthil Kumar, S. B. Thanikanti, and N. Prathap. "A Review on MPPT Algorithms for Solar PV Systems." International Journal of Research-GRANTHAALAYAH 11, no. 3 (2023): 25-64., SCOPUS

[15]. Fathy, Ahmed, Dalia Yousri, Thanikanti Sudhakar Babu, Hegazy Rezk, and Haitham S. Ramadan. "An enhanced reconfiguration approach for mitigating the shading effect on photovoltaic array using honey badger algorithm." Sustainable Energy Technologies and Assessments 57 (2023): 103179. June 2023, **SCIE**

[16]. Dhananjaya, M., B. Krishna Chaitanya, Thanikanti Sudhakar Babu, Devendra Potnuru, Belqasem Aljafari, Ramani Kannan, and Tarun Kumar Lohani. "Design of multi-input single output DC–DC converter with preserved output voltage under source-fault." IET Power Electronics (2023). April 2023, **SCIE**

[17]. Pydikalva, Padmavathi, Sudhakar Natarajan, Belqasem Aljafari, Karthik Balasubramanian, and Sudhakar Babu Thanikanti. "PV-Fed Micro-Inverter with Battery Storage for Single Phase Grid Applications." Electric Power Components and Systems 51, no. 11 (2023): 1051-1074., **SCI**

[18]. Jana, Suman, Pabitra Kumar Biswas, Thanikanti Sudhakar Babu, and Hassan Haes Alhelou. "An improved parametric method for selecting different types of tesla transformer primary coil to construct an artificial lightning simulator." IEEE Access (2023). **SCI**

[19]. Satpathy, Priya Ranjan, Belqasem Aljafari, Sudhakar Babu Thanikanti, and Siva Rama Krishna Madeti. "Electrical fault tolerance of photovoltaic array configurations: Experimental investigation, performance analysis, monitoring and detection." Renewable Energy (2023). **SCI**

[20]. Gupta, Suraj, Pabitra Kumar Biswas, Sukanta Debnath, Anumoy Ghosh, Thanikanti Sudhakar Babu, Hossam M. Zawbaa, and Salah Kamel. "Metaheuristic Optimization Techniques used in controlling of an Active Magnetic Bearing System for High-Speed Machining Application." IEEE Access (2023). **SCI**

[21]. Aljafari, Belqasem, Priya Ranjan Satpathy, Sudhakar Babu Thanikanti, and Hassan Haes Alhelou. "A zero switch and sensorless reconfiguration approach for sustainable operation of roof-top photovoltaic system during partial shading." IET Renewable Power Generation (2023). **SCIE**

[22]. Gupta, Suraj, Pabitra Kumar Biswas, Belqasem Aljafari, Sudhakar Babu Thanikanti, and Sajal K. Das. "Modelling, simulation and performance comparison of different membership functions based fuzzy logic control for an active magnetic bearing system." The Journal of Engineering 2023, no. 2 (2023): e12229. **SCIE**

[23]. Fathy, Ahmed, Dalia Yousri, Thanikanti Sudhakar Babu, and Hegazy Rezk. "Triple X Sudoku reconfiguration for alleviating shading effect on total-cross-tied PV array." Renewable Energy (2023). **SCI**

[24]. Thanikanti, Sudhakar Babu, Praveen Kumar, S. Devakirubakaran, Belqasem Aljafari, and Ilhami Colak. "A dynamic mismatch loss mitigation algorithm with dual input dual output converter for solar PV systems." Solar Energy Materials and Solar Cells 251 (2023): 112163. **SCI**

[25]. Belqasem Aljafari, Pandia Rajan Jeyaraj, Aravind Chellachi Kathiresan, Sudhakar Babu Thanikanti "Electric vehicle optimum charging-discharging scheduling with dynamic pricing employing multi agent deep neural network: Computers and Electrical Engineering 105 (2023) 108555, **SCIE**

[26]. Maximizing techno-economic-environmental benefits of renewable energy allocation with smart inverter in distribution system: a two-layer stochastic optimization framework B Aljafari, VB Pamshetti, SB Thanikanti International Journal of Green Energy, 1-18, **SCIE**

[27]. Aljafari, Belqasem, Rupendra Kumar Pachauri, Sudhakar Babu Thanikanti, and Bamidele Victor Ayodele. "Innovative Methodologies for Higher Global MPP of Photovoltaic Arrays under PSCs: Experimental Validation." Sustainability 15, no. 15 (2023): 11852. **SCIE**

[28]. Ali, Hossam Hassan, Mohamed Ebeed, Ahmed Fathy, Francisco Jurado, Thanikanti Sudhakar Babu, and Alaa A. Mahmoud. "A New Hybrid Multi-Population GTO-BWO Approach for Parameter Estimation of Photovoltaic Cells and Modules." Sustainability 15, no. 14 (2023): 11089. **SCIE**

[29]. Babu, NV Phanendra, P. Suresh Babu, Saptarshi Roy, T. Sudhakar Babu, and Anil Bharadwaj. "A Synchrophasor-Based Line Protection for Single Phase-Ground Faults." Journal of Electrical Engineering & Technology 18, no. 3 (2023): 1693-1704. **SCIE**

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[30]. Pamshetti, Vijay Babu, Shailendra Singh, A. K. Thakur, S. P. Singh, T. Sudhakar Babu, Nishant Patnaik, and G. Hari Krishna. "Cooperative Operational Planning Model for Distributed Energy Resources with Soft Open Point in Active Distribution Network." IEEE Transactions on Industry Applications (2022).

[31]. Saiprakash, Chidurala, Alivarani Mohapatra, Byamakesh Nayak, Thanikanti Sudhakar Babu, and Hassan Haes Alhelou. "A Novel Benzene Structured Array Configuration for Harnessing Maximum Power from PV Array under Partial Shading Condition with Reduced Number of Cross Ties." IEEE Access (2022).

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[35]. Aljafari, Belqasem, Priya Ranjan Satpathy, Siva Rama Krishna Madeti, Pradeep Vishnuram, and Sudhakar Babu Thanikanti. "Reliability Enhancement of Photovoltaic Systems under Partial Shading through a Two-Step Module Placement Approach." Energies 15, no. 20 (2022): 7766.

[36]. Yousri, Dalia, Ehab F. El-Saadany, Yomna Shaker, Thanikanti Sudhakar Babu, Ahmed F. Zobaa, and Dalia Allam. "Mitigating mismatch power loss of series–parallel and total-cross-tied array configurations using novel enhanced heterogeneous hunger games search optimizer." Energy Reports 8 (2022): 9805-9827. **SCIE**

[37]. Yousri, Dalia, Ahmed Ousama, Ahmed Fathy, Thanikanti Sudhakar Babu, and Dalia Allam. "Managing the exchange of energy between microgrid elements based on multi-objective enhanced marine predators algorithm." Alexandria Engineering Journal 61, no. 11 (2022): 8487-8505. **SCIE**

[38]. Aljafari, Belqasem, Priya Ranjan Satpathy, and Sudhakar Babu Thanikanti. "Partial shading mitigation in PV arrays through dragonfly algorithm based dynamic reconfiguration." Energy 257 (2022): 124795. **SCI**

[39]. Aljafari, Belqasem, Devakirubakaran Samithas, Praveen Kumar Balachandran, Sambandam Anandan, and Thanikanti Sudhakar Babu. "Performance Analysis of PLA Material Based Micro-Turbines for Low Wind Speed Applications." Polymers 14, no. 19 (2022): 4180. **SCIE**

[40]. Kathiresan, Aravind Chellachi, Pandia Rajan Jeyaraj, Brindhu Kumari Albert, Sudhakar Babu Thanikanti, Manoj Kumar Nallapaneni, and Hassan Haes Alhelou. "A versatile control of solar DVR for enhanced utilization and power quality improvement in a series-connected wind-solar farm." IET Renewable Power Generation (2022). **SCIE**

[41]. Verma, Monika, Mini Sreejeth, Madhusudan Singh, Thanikanti Sudhakar Babu, and Hassan Haes Alhelou. "Chaotic Mapping Based Advanced Aquila Optimizer With Single Stage Evolutionary Algorithm." IEEE Access 10 (2022): 89153-89169. **SCIE**

[42]. Vishnuram, Pradeep, Sudhanshu Kumar, Vivek Kumar Singh, Thanikanti Sudhakar Babu, Ramani Kannan, and Khairul Nisak Bt Md Hasan. "Phase Shift-Controlled Dual-Frequency Multi-Load Converter with Independent Power Control for Induction Cooking Applications." Sustainability 14, no. 16 (2022): 10278. **SCIE**

[43]. Ram, G. Dinesh, S. Praveen Kumar, T. Yuvaraj, Thanikanti Sudhakar Babu, and Karthik Balasubramanian. "Simulation and investigation of MEMS bilayer solar energy harvester for smart wireless sensor applications." Sustainable Energy Technologies and Assessments 52 (2022): 102102. **SCIE**

[44]. Uthra, R., D. Suchitra, Thanikanti Sudhakar Babu, and Belqasem Aljafari. "Fuzzy-Based EV Charging Station and DVR-Fed Voltage Compensation for a DFIG-Fed Wind Energy System during Grid Faults." International Transactions on Electrical Energy Systems 2022 (2022). **SCIE**

[45]. Suresh, Hassan NageshaRao, Siddaiah Rajanna, Sudhakar Babu Thanikanti, and Hassan Haes Alhelou. "Hybrid interconnection schemes for output power enhancement of solar photovoltaic array under partial shading conditions." IET Renewable Power Generation (2022). **SCIE**

[46]. Bhowmik, Pritam, Priya Ranjan Satpathy, Sudhakar Babu Thanikanti, and Narendranath Jana. "A novel virtual inertia emulation technique for the single phase electric vehicle charging topology." Computers and Electrical Engineering 101 (2022): 108114. **SCIE**

[47]. Gupta, Suraj, Pabitra Kumar Biswas, Thanikanti Sudhakar Babu, and Hassan Haes Alhelou. "Hunting Based Optimization Techniques Used in Controlling an Active Magnetic Bearing System." IEEE Access 10 (2022): 62702-62721. **SCIE**

[48]. Ayodele, Bamidele Victor, Siti Indati Mustapa, Ramesh Kanthasamy, Norsyahida Mohammad, Abdulaziz AlTurki, and Thanikanti Sudhakar Babu. "Performance analysis of support vector machine, Gaussian Process Regression, sequential quadratic programming algorithms in modeling hydrogen-rich syngas production from catalyzed co-gasification of biomass wastes from oil palm." International Journal of Hydrogen Energy (2022). **SCIE**

[49]. Gude, Srihari, Kartick Chandra Jana, Antonino Laudani, and Sudhakar Babu Thanikanti. "Parameter extraction of photovoltaic cell based on a multi-objective approach using nondominated sorting cuckoo search optimization." Solar Energy 239 (2022): 359-374. **SCIE**

[50]. Satpathy, Priya Ranjan, Belqasem Aljafari, and Sudhakar Babu Thanikanti. "Power losses mitigation through electrical reconfiguration in partial shading prone solar PV arrays." Optik 259 (2022): 168973. **SCI**

[51]. Fathy, Ahmed, Thanikanti Sudhakar Babu, Mohammad Ali Abdelkareem, Hegazy Rezk, and Dalia Yousri. "Recent approach based heterogeneous comprehensive learning Archimedes optimization algorithm for identifying the optimal parameters of different fuel cells." Energy 248 (2022): 123587. **SCI**

[52]. Gopinath, G. R., S. Muthuvel, M. Muthukannan, R. Sudhakarapandian, B. Praveen Kumar, Ch Santhan Kumar, and Sudhakar Babu Thanikanti. "Design, development, and performance testing of thermal energy storage based solar dryer system for seeded grapes." Sustainable Energy Technologies and Assessments 51 (2022): 101923. **SCIE**

[53]. Pongiannan, R. K., Murugaperumal Krishnamoorthy, Suresh Srinivasan, M. Chandrasekaran, C. Bharatiraja, Praveen Kumar, Santhan Kumar Cherukuri, Thanikanti Sudhakar Babu, and Hassan Haes Alhelou. "Cost-Effective Energy Conservation Techniques for Textile Spinning Mills." IEEE Access 10 (2022): 49839-49852. **SCIE**

[54]. Satpathy, Priya Ranjan, Pritam Bhowmik, Thanikanti Sudhakar Babu, Chiranjit Sain, Renu Sharma, and Hassan Haes Alhelou. "Performance and Reliability Improvement of Partially Shaded PV Arrays by One-Time Electrical Reconfiguration." IEEE Access 10 (2022): 46911-46935. **SCIE**

[55]. Nayak, Smrutiranjan, Sanjeeb Kumar Kar, Subhransu Sekhar Dash, Pradeep Vishnuram, Sudhakar Babu Thanikanti, and Benedetto Nastasi. "Enhanced Salp Swarm Algorithm for Multimodal Optimization and Fuzzy Based Grid Frequency Controller Design." Energies 15, no. 9 (2022): 3210. **SCIE**

[56]. Siddique, Marif Daula, Mohammed Aslam Husain, Mohammad Wasiq, Thanikanti Sudhakar Babu, and Saad Mekhilef. "A new seven-level ANPC inverter structure with semiconductor device reduction." International Journal of Circuit Theory and Applications (2022). **SCI**

[57]. Titus, Femin, Sudhakar Babu Thanikanti, Sanchari Deb, and Nallapaneni Manoj Kumar. "Charge Scheduling Optimization of Plug-In Electric Vehicle in a PV Powered Grid-Connected Charging Station Based on Day-Ahead Solar Energy Forecasting in Australia." Sustainability 14, no. 6 (2022): 3498. **SCIE**

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2021

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