# updated 10<sup>th</sup> APRIL 2023

### LIST OF PUBLICATIONS

	ВООК	PATENT	CONFERENCES/	TECHNICAL	OTHER	
JOURNALS	CHAPTERS	GRANTED	SYMPOSIA	REPORTS	PUBLICATIONS	TOTAL
64	13	01	157	32	06	<mark>273</mark>

#### **JOURNALS:**

- 1. M-Ramez Halloum, Subba Reddy B and G. Nithin Reddy, "Failure Analysis of Field-Aged Polymeric Outdoor Insulators and Electric Stress Control Using Nonlinear Field Grading Composites for Better Performance, Journal: Electrical Engineering, Springer Nature (provisionally accepted)
- 2. M-Ramez Halloum and Subba Reddy B, "Interpretation of Fracture of a Failed in-service 400 kV Composite Insulator and probable Remedy Using Nonlinear Resistive Field Grading Materials", Journal: CIGRE-India Journal: (accepted) to be published in July 2023.
- M-Ramez Halloum; Subba Reddy B. and G. Nithin Reddy, "Stress Control for Polymeric Outdoor Insulators Using Nonlinear Resistive Field Grading Materials Operating Under Different Conditions, IEEE Transactions on Dielectrics & Electrical Insulation. <a href="https://ieeexplore.ieee.org/document/9750932">https://ieeexplore.ieee.org/document/9750932</a>, VOL. 29, NO. 3, JUNE 2022, pp 1175-1182
- 4. Atmanandmaya, Umanand Loganathan, Subba Reddy B, "Sustainable Solution to Mitigate Carbon Emission for the Cumulative Electrical and Thermal Energy Demand in Silk Reeling Process in Southern India" ICAE2022, in Energy Proceedings ISSN 2004-2965 2022, 6 pages, Nov 2022
- 5. Sounak Nandi and Subba Reddy B, "Chaotic Analysis as a Tool for Sensing Long-Term Degradation of High Voltage Fibre Reinforced Plastic Core used in Composite Insulators", Paper TPWRD-00438-2021, IEEE Transactions on Power Delivery, DOI: 10.1109/TPWRD.2022.3144503, Jan 2022
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- 9. Atmanandmaya, Umanand Loganathan, Subba Reddy B, "Development of Hybrid Source Thermal Desalination System using Thermoelectric module as a powerful heat pump", Energy Proceedings, Vol. 22, 2021, ISSN 2004-2965, 6 pages, 2021
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- 11. Sounak Nandi and Subba Reddy B, "Transient Electric Field Analysis for Polluted Composite Insulators under HVDC Stress", IEEE Transactions on Power Delivery, Vol. 36, No. 2, APRIL 2021, pp-607-617, DOI: 10.1109/TPWRD.2020.2987143
- 12. Gautam A. Raiker, Subba Reddy B., L. Umanand, Shubham Agrawal, Anchal S. Thakur, Ashwin K., John P. Barton, Murray Thomson, "Energy Disaggregation using Energy Demand Model and IoT based Control" IEEE Transactions on Industry Applications, online: 10.1109/TIA.2020.3047016, VOL. 57, NO. 2, MARCH/APRIL 2021

- 13. Shakthi Prasad D and Subba Reddy B, "Image Saturation as a Tool to Understand the Corona Induced Degradation of Polymeric Insulators", IEEE Transactions on Dielectrics & Electrical Insulation Vol. 27, No. 6; December 2020, pp 1837-1844.
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- 17. Sounak Nandi, Subba Reddy B and Dinesh Sharma, "Understanding Performance of Transmission and Distribution Insulators at very Low Temperature Conditions", Manuscript: ELEN-D-19-00860, Journal: Electrical Engineering, (Archiv für Elektrotechnik) Springer, Vol.102, pages 2255–2268 (2020) published June 2020, (https://doi.org/10.1007/s00202-020-01019-1)
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- **33.** Subba Reddy B and Arup Kumar Goswami, "Voltage Sag due to Pollution Induced Flashover across Ceramic Insulator Strings" International Journal of Emerging Electric Power Systems, DE GRUYTER, Vol. 18, Issue 6, pp.1-6, 2017, published online 24.11.2017. DOI: <a href="https://doi.org/10.1515/ijeeps-2016-0160">https://doi.org/10.1515/ijeeps-2016-0160</a>
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# **BOOK CHAPTERS**

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- Shubam Agrawal, Umanand L., Subba Reddy B. (2021) Bidirectional Current-Fed Converter for High Gain DC–DC and DC–AC Applications. Editors: Mohapatro S., Kimball J. (eds) Proceedings of Symposium on Power Electronic and Renewable Energy Systems Control. Lecture Notes in Electrical Engineering, Springer, Singapore. <a href="https://doi.org/10.1007/978-981-16-1978-6\_9">https://doi.org/10.1007/978-981-16-1978-6\_9</a>, Vol. 616, chapter:9, pp 101-111, July 2021
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- Shubham Agrawal, L. Umanand, Subba Reddy B, Atmanand Maya, "Heating and Cooling of Thermoelectric Module using Modified Johnson Converter "Paper ID 106, Vol.2, Editors: Saad Mekhilef, Rabindra Nath Shaw, and Pierluigi Siano, Proc of ICEEE-Vol-2, "Lecture Notes in Electrical Engineering", Springer Publication Series, Vol-893, 2022.
- Gautam Raiker, Subba Reddy B, L Umanand, "Bond Graph Modelling and Simulation of Active Heating /Cooling using Thermoelectric Energy Conversion Systems", Paper ID 113, Vol 2, Editors: Saad Mekhilef, Rabindra Nath Shaw, and Pierluigi Siano, Proc of ICEEE-Vol-1, "Lecture Notes in Electrical Engineering", Springer Publication Series, Vol-893, 2022
- 11. Anchal Thakur, Loganathan Umanand, Subba Reddy B, "Design of 1kVA Shunt Compensator test bench", Paper ID 124, Vol.1, Editors: Saad Mekhilef, Rabindra Nath Shaw, and Pierluigi Siano, Proc of ICEEE-Vol-1, "Lecture Notes in Electrical Engineering", Springer Publication Series, Vol-893, 2022
- 12. G Nithin Reddy, Subba Reddy B, M Ramez Halloum, Jangamreddy Rajasekhar Reddy, Febin Francis, Kiran Kumar Reddy B, "Performance Evaluation of Field Aged Polymer Insulators", Paper ID 135, Vol.1, Editors: Saad Mekhilef, Rabindra Nath Shaw, and Pierluigi Siano, Proc of ICEEE-Vol-1, "Lecture Notes in Electrical Engineering", Springer Publication Series, Vol-893, 2022, pp-237-247
- 13. Subba Reddy B, Febin Francis, Umanand L, "Smart Energy Management for a Campus Network ", Paper ID 179, Vol.2, Editors: Saad Mekhilef, Rabindra Nath Shaw, and Pierluigi Siano, Proc of ICEEE, "Lecture Notes in Electrical Engineering", Springer Publication Series, Vol-893, 2022,

## **CONFERENCES / Seminars/Symposia/etc**

- Ashwin K., Nakul Narayanan K., L. Umanand, Subba Reddy B, "A Novel Switched Capacitor DC-AC Converter with Hysteresis Control" paper ID: 590 accepted for oral presentation, at IEEE 2<sup>nd</sup> International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME 2023) will take place in the TENERIFE-CANARY ISLANDS, SPAIN, on 19-20 July 2023
- 2. G Nithin Reddy, Shubham Agrawal & Subba Reddy B, "A Complex Waveform Generator for Surge Arrester Evaluation used in HVDC Converter Stations", Paper No: 289. presented at IEEE IAS Global Conference on Renewable Energy and Hydrogen Technologies (GlobConHT), held at The Maldives National University, Male City (Maldives) during 11th 12th March 2023.
- 3. Atmanandamaya, Umanand L & Subba Reddy B, "Derivation and Analysis of Dynamic Model of Peltier Module using Small Signal Approach for Heat Pump Application", paper No: 318. Paper presented at the IEEE IAS Global Conference on Renewable Energy and Hydrogen Technologies (GlobConHT), held at The Maldives National University, Male City (Maldives) during 11th 12th March 2023.
- 4. Shubham Agrawal, Insha Andrabi, Subba Reddy B and L. Umanand" A Gate Driver Circuit with Variable Gate to Source/Emitter Voltage Applicable on Si-MOSFETs, SiC MOSFETs and IGBTs" paper presented at IEEE Industrial Electronics Society Annual On-Line Conference (ONCON)! ONCON-2022 held during December 9-11, 2022. Paper Ref: ONCON22-000080.
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- 11. G Nithin Reddy, M-Ramez Halloum and Subba Reddy B, "Electro-Thermal Aging Studies on Polymer Housed ZnO Surge Arresters subjected to Voltage Polarity Reversals", paper presented at the 2022 IEEE Joint Conference on Electrostatics, June 12 June 15,2022, Charlotte, NC, USA. (Received best paper presentation award- 3<sup>rd</sup> Prize)
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- 18. Ashwin K, Nakul Narayanan, L. Umanand and Subba Reddy B, "A Novel Switched Capacitor DC-DC Converter Topology for High Voltage and High Gain Application", Paper ID: 92 presented at the 2022 IEEE International conference on Power Electronics, Smart Grid and Renewable Energy (PESGRE2022), during Jan 2-5, 2022
- 19. Shubham Agrawal, Atmanandmaya, L. Umanand and Subba Reddy B, Toshali Mohapatra and Abhishek, "A Novel DC-DC Converter with Extended Range of Gain for Buck-Boost Applications", Paper ID: 124, presented at the 2022 IEEE International conference on Power Electronics, Smart Grid and Renewable Energy (PESGRE2022), during Jan 2-5, 2022.
- 20. Sounak Nandi & Subba Reddy B, "Estimation of Space Charge Accumulation in the bulk of Silicone Rubber Insulator Used in Outdoor Insulators under DC Field", Paper ID 75, presented at the 2021 IEEE 5th International Conference on Condition Assessment Techniques in Electrical Systems, (IEEE CATCON 2021) National Institute of Technology Calicut, India, during 3rd to 5th December 2021
- 21. Pranjal Gupta, Nithin Reddy G & Subba Reddy B, "Multi-stress Aging Studies on Polymeric Surge Arresters for HVDC Transmission", Paper ID 48, presented at the 2021 IEEE 5th International Conference on Condition Assessment Techniques in Electrical Systems, (IEEE CATCON 2021) National Institute of Technology Calicut, India, 3rd to 5th December 2021
- 22. Nithin Reddy G & Subba Reddy B, "A Review on the Condition Monitoring of HVDC Polymeric housed Surge Arresters", Paper ID 111, presented at the 2021 IEEE 5th International Conference on Condition Assessment Techniques in Electrical Systems, (IEEE CATCON 2021) National Institute of Technology Calicut, India, 3rd to 5th December 2021
- 23. M-RAMEZ HALLOUM, Subba Reddy B & Youssef Razouk, "Optimization of Electric Field Distribution for 33kV Polymeric Insulator Using Non-linear Field Grading Composites", Paper ID 112, presented at the 2021 IEEE 5th International Conference on Condition Assessment Techniques in Electrical Systems, (IEEE CATCON 2021) National Institute of Technology Calicut, India, 3rd to 5th December 2021
- 24. M-Ramez Halloum and Subba Reddy B., "Performance Evaluation of 33 kV Polymeric Outdoor Insulators Equipped with Non-Linear Field Grading Composites", paper ID: 112, presented at the International Conference on Applied Energy 2021 (ICAE-2021) Nov. 29 Dec. 2, 2021, Bangkok, Thailand
- 25. Gautam A. Raiker, Subba Reddy B, L. Umanand, "Energy Disaggregation with Reserve Power Estimation and Non-Intrusive Load Monitoring in Direct Coupled Solar Photovoltaic Systems", Paper ID: 354, presented at the International Conference on Applied Energy 2021 (ICAE-2021) Nov. 29 Dec. 2, 2021, in Bangkok, Thailand
- 26. Atmanandmaya, Umanand Loganathan, Subba Reddy B, "Development of Hybrid Source Thermal Desalination System using Thermoelectric module as a powerful heat pump", Paper ID: 532, presented at the International Conference on Applied Energy 2021 (ICAE-2021) Nov. 29 Dec. 2, 2021, Bangkok, Thailand
- 27. Shubham Agrawal, L. Umanand and Subba Reddy B, "Enhancement of Power Rating for a Bidirectional DC Circuit Breaker using Modular Commutation Circuits," IECON 2021 47th Annual Conference of the IEEE Industrial Electronics Society, pp. 1-6, doi: 10.1109/IECON48115.2021.9589284, Oct 13-16, 2021
- 28. Deep Prakash, Gautam A. Raiker, Shubham Agarwal and Subba Reddy B, "Solar PV Charge Controller with Battery Management System Using Voltage Reference Control", presented at the IEEE INTERNATIONAL CONFERENCE ON COMPUTING, POWER, AND COMMUNICATION TECHNOLOGIES (IEEE-IAS GUCON 2021), to be held during 24-26<sup>th</sup> Sept, 2021, Kaulalampur, Malaysia. Paper No: 878 (Received best paper award).

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- 30. Subba Reddy B, Umanand L & T V Prabhakar, "Energy Internet Based Next Generation Smart Grid", presented at Joint online workshop: Theme 2, IISc-Univ of Wollongong, Australia, March 29, 2021.
- 31. Sanchita Banerjee, Prosenjit Ghosh, Chirantan Pramanik, Subba Reddy B, "Fractionation of stable oxygen and clumped isotope during acid digestion of calcite in the presence of an external DC electric field", Poster No: PP046-0006, AGU Fall Meeting, 16<sup>th</sup> Dec 2020.
- 32. Manoj Negi and Subba Reddy B, "Experimental Study on the Failure of FRP Rods used in Composite Insulators", paper No. 59 presented at the Symposium on Power Electronic and Renewable Energy Systems Control-2020 (PERESC 2020) Indian Institute of Technology, Bhubaneswar, 04-05 Dec 2020
- 33. Subba Reddy B and Praveen Ramamurthy and S Saravanan, "Investigations on the Aging of Traction Conductors using Morphological and Textural Analysis", Paper No. 60, presented at the Symposium on Power Electronic and Renewable Energy Systems Control-2020 (PERESC 2020), Indian Institute of Technology, Bhubaneswar, 04-05 Dec 2020.
- 34. Subba Reddy B and Praveen Ramamurthy and S Saravanan, "Deterioration of Overhead Rail Traction Conductors due to Corrosion A laboratory study", Paper No.61, presented at the Symposium on Power Electronic and Renewable Energy Systems Control-2020 (PERESC 2020), Indian Institute of Technology, Bhubaneswar, 04-05 Dec 2020.
- 35. Shubham Agrawal, L Umanand and Subba Reddy B, "Bidirectional Current Fed Converter for High Gain DC-DC and DC-AC Applications", Paper No. 88, presented at the Symposium on Power Electronic and Renewable Energy Systems Control-2020 (PERESC 2020), Indian Institute of Technology, Bhubaneswar, 04-05 Dec 2020.
- 36. Anchal Singh Thakur, Loganathan Umanand and Subba Reddy B, "Multi-mode operation of Converter for Power Quality Improvement", Paper No. 109, presented at the Symposium on Power Electronic and Renewable Energy Systems Control-2020 (PERESC 2020), Indian Institute of Technology, Bhubaneswar, 04-05 Dec 2020.
- 37. Wei He, Gautam Raiker, Atmanandmaya, Subba Reddy B, Umanand L and Jihong Wang, "Preliminary Analysis of Photovoltaic-Powered Electrodialysis for In-Home Water Desalination in Rural India", Conf Proc Paper No: 169, pp 156-161, Ist IEEE Bangalore-Humanitarian Technology Conference (B-HTC 2020), October 8-10, 2020.
- 38. Ashutosh Kumar, Alok Ranjan Verma and Subba Reddy B, "Leakage Current Analysis on Outdoor Composite Insulators", paper No.: 465, presented at 2020 IEEE International Conference on Computing, Power and Communication Technologies (GUCON), October 2-4, 2020, New Delhi, India (978-1-7281-5070-3/20/\$31.00 ©2020 IEEE) pp. 682-686.
- 39. Subba Reddy B, Umanand L, Andrew Urquhart & Murray Thompson, "Compensating for current unbalance in microgrids using sequence compensators", UK-India Joint Virtual clean energy center online conference, Sept 2020.
- 40. Subba Reddy B, Umanand L, Murray Thompson & John Barton, "Grid frequency control provided by flexible demand and Energy storage", UK-India Joint Virtual clean energy center Conf, Sept 2020.
- 41. Subba Reddy B and Gaurav Mitra, "Estimation of Magnetic Fields near to High Temperature Low Sag Conductors", Paper No: 450, presented at International Conference on Electronics, Computing and Communication Technologies, IEEE-CONECCT 2020, IEEE Bangalore Section, JULY 2-4, 2020.

- 42. Shreyas Shroff and Subba Reddy B, "Multistress Ageing Studies on Polymeric Housed Surge Arresters", Paper No: 494, presented at International Conference on Electronics, Computing and Communication Technologies, IEEE-CONECCT 2020, IEEE Bangalore Section, JULY 2-4, 2020.
- 43. Shubham Agrawal, Atmanandmaya, Subba Reddy B and L Umanand, "Integration of Photovoltaic Panels with DC Grid Using High Gain DC DC Converter", Paper No: 495, presented at International Conference on Electronics, Computing and Communication Technologies, IEEE-CONECCT 2020 organized by IEEE Bangalore Section, JULY 2-4, 2020.
- 44. Gautam Raiker, L Umanand and Subba Reddy B, "Bond Graph Approach for Modelling Solar PV-Thermal and Thermoelectric Devices", Paper No: 646, presented at International Conference on Electronics, Computing and Communication Technologies, IEEE-CONECCT 2020 organized by IEEE Bangalore Section, JULY 2-4, 2020.
- 45. Ashwin K, Umanand L and Subba Reddy B, "Simulation and Analysis of Virtual Oscillator Control for Parallel Connected Single phase Inverters", Paper No: 438, presented at International Conference on Electronics, Computing and Communication Technologies, IEEE-CONECCT 2020 organized by IEEE Bangalore Section, JULY 2-4, 2020.
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- 47. Gautam A. Raiker, Subba Reddy B, L. Umanand, Shubham Agrawal, Anchal S. Thakur, Ashwin K., John P. Barton, Murray Thomson, "Internet of Things based Demand Side Energy Management System using Non-Intrusive Load Monitoring", presented at IEEE International conference on Power Electronics, Smart Grid and Renewable Energy (PESGRE 2020) Cochin, India from 2-4 Jan 2020.
- 48. Subba Reddy B, "Conditioning Monitoring of Composite Transmission Insulators Application of digital techniques", 2<sup>nd</sup> Annual technical conference on 4<sup>th</sup> Industrial Revolution in Power Sector held at Dubai, during 19<sup>th</sup> & 20<sup>th</sup> Sept 2019. (Invited keynote speaker)
- 49. Subba Reddy B, Umanand L & Gautam Raiker, "Smart Energy Management for Microgrids", UK India Joint Virtual Clean Energy Centre (JVCEC) Conference, 12-14 Sept 2019, MNIT-Jaipur, India
- 50. Sounak Nandi and Subba Reddy B, "Simulation of Electrostatic field Distribution across HVDC Composite Insulators", Paper ID: 473, presented at 21st International Symposium on High Voltage Engineering, ISH-2019, held at Budapest-Hungary, during 26<sup>th</sup> 30<sup>th</sup> Aug 2019.
- 51. Sounak Nandi and Subba Reddy B "Multistress Accelerated Ageing studies on Polymer Insulators used for HVDC Transmission", Paper ID: 219, presented at 21st International Symposium on High Voltage Engineering, ISH-2019, held at Budapest-Hungary, during 26<sup>th</sup> 30<sup>th</sup> Aug 2019
- 52. Subba Reddy B and Sounak Nandi, "Accelerated Aging Studies on Polymeric Insulators used for EHV and UHV Transmission", Invited presentation 10<sup>th</sup> International Conference on Insulating Materials & Systems (INSULEC-2019) 21–22, August 2019, Organized by IEEMA at Mumbai.
- 53. Subba Reddy B and Gaurav Mitra, "Performance Analysis on High Temperature Low Sag (HTLS) and Conductors used for Rail Traction", 20<sup>th</sup> International Scientific Conference on Electric Power Engineering organized by Technical University of Ostrava, Czech Republic, 15<sup>th</sup> 17<sup>th</sup> May 2019.
- 54. Manoj Negi and Subba Reddy B, "Corona Induced Degradation Studies on Fibre Reinforced Plastic (FRP) Rod used for High Voltage Composite Insulators", 20<sup>th</sup> International Scientific Conference on Electric Power Engineering, Technical University of Ostrava, Czech Republic, 15<sup>th</sup> 17<sup>th</sup> May 2019.

- 55. Subba Reddy B and Umanand L, "Development of Energy Monitoring System for a Typical Micro-grid", presented at MIT Applied Energy International Symposium organized by Journal of Applied Energy and Massachusetts Institute of Technology, Cambridge USA during 22<sup>nd</sup> to 24<sup>th</sup> May 2019.
- 56. Gautam A. Raiker, B. Subba Reddy and L. Umanand, "Development of Peltier Cooling and Thermoelectric generation-based Storage system", presented at MIT Applied Energy Intl Symposium organized by Journal of Applied Energy and Massachusetts Institute of Technology, Cambridge USA during 22<sup>nd</sup> to 24<sup>th</sup> May 2019.
- 57. G. A. Raiker, L. Umanand, B. Subba Reddy, "Modelling of Photovoltaic based Peltier Air-Conditioners for Remote Shelter Bases", presented at 5th International Conference on Polygeneration (ICP 2019) May 15–17, 2019, I2CNER, Kyushu University, Fukuoka, Japan
- 58. Rohith, L. Umanand and Subba Reddy B, "Pole Changing Wide Speed Range Induction Motor Drive for Electric Vehicles", presented at IEEE Power Electronics, Drives and Energy Systems Conference (PEDES), 18-21 Dec-2018 at Indian Institute of Technology Madras in Chennai, India Paper ID 1031
- 59. Gautam A Raiker, L. Umanand and Subba Reddy B, "Perturb and Observe with Momentum Term applied to Current Referenced Boost Converter for PV Interface", presented at IEEE Intl Conf on Power Electronics, Drives and Energy Systems (PEDES-2018), IIT Madras, India, 18<sup>th</sup> to 21<sup>st</sup> Dec 2018, Paper ID: 80 (Student received Prof Subhasis student travel award)
- 60. Rohith, L Umanand and Subba Reddy B, "Pole Changing Wide Speed Range Induction Motor Drive for Electric Vehicles", Joint Intl Symposium on Energy Science (Kyoto Univ Japan & ICER-IISc), 3<sup>rd</sup>-5<sup>th</sup> Dec 2018 at IISc, Bangalore, India
- 61. Subba Reddy B and Sounak Nandi, "Development of HMI based Multi-stresses Aging Facility for Polymeric Insulators", presented at 13<sup>th</sup> IEEE International conference on Industrial and Information systems (ICIIS-2018), Indian Institute of Technology, Ropar-India, 1<sup>st</sup> & 2<sup>nd</sup> Dec 2018.
- 62. Alok Ranjan Verma, Subba Reddy B and Suparno Bandyopadhyay", Tracking and Erosion Resistance of Artificially Aged Silicone Rubber Samples", 13<sup>th</sup> IEEE Intl conference on Industrial and Information systems (ICIIS-2018), Indian Institute of Technology, Ropar-India, 1<sup>st</sup> & 2<sup>nd</sup> Dec 2018.
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- 64. Gautam A. Raiker, Subba Reddy B, Umanand L, Aman Yadav and Mujeefa M. Shaikh, "Approach to Non-Intrusive Load Monitoring using Factorial Hidden Markov Model", 13<sup>th</sup> IEEE International conference on Industrial and Information systems (ICIIS-2018), Indian Institute of Technology, Ropar-India, 1<sup>st</sup> & 2<sup>nd</sup> Dec 2018. (Received Best paper presentation award)
- 65. Rohith, L. Umanand and Subba Reddy B, "Pole Changing Wide Speed Range Induction Motor Drive for Electric Vehicles", presented at IEEE Power Electronics, Drives and Energy Systems Conference (PEDES), Indian Institute of Technology Madras, India, Paper ID 1031, 18 -21 Dec-2018.
- 66. Gautam A Raiker, L. Umanand and Subba Reddy B, "Perturb and Observe with Momentum Term applied to Current Referenced Boost Converter for PV Interface", IEEE Intl Conf on Power Electronics, Drives & Energy Systems (PEDES-2018), IIT Madras, India, 18-21 Dec 2018, Paper ID: 80
- 67. "Smart Grids and Domestic Demand Modeling", Subba Reddy B, Umanand L, IISc, and John Barton, Murray Thompson, Loughborough University, UK, Joint presentation at the Joint Virtual Clean Energy Centre (JVCEC) Conference, 18-20 September 2018 Loughborough University, UK

- 68. "Smart Energy Management System and data sharing at IISc (India) and Warwick (UK)", Subba Reddy. B, Umanand L, IISc, and Jihong Wang, Oleh Kiselychnyk, Mark Dooner, Warwick University, UK, Joint presentation at the Joint Virtual Clean Energy Centre (JVCEC) Conference, 18-20 Sept 2018 Loughborough University, UK
- 69. Subba Reddy B, L. Umanand, Satish Naik B and Rohith, "Development of a Two Phase Five-Level Converter for Three phase Isolated Grid-Tied Systems", presented at the Joint Virtual Clean Energy Centre (JVCEC) Conference, Loughborough University, UK, 18-20 September 2018.
- 70. Subba Reddy B, L. Umanand and Gautam Raikar, "Energy Management for IISc Microgrid", presented at the Joint Virtual Clean Energy Centre (JVCEC) Conference, Loughborough University, UK, 18-20 September 2018
- 71. Subba Reddy B and L Umanand, "Scalable Solar PV grid interactive systems", presented at the Indo-UK (UKICERI)Project Meeting cum Industry Conclave 2018, IIT Kharagpur, 12<sup>th</sup>& 13<sup>th</sup> July 2018
- 72. Satish Naik B, Ravi Prakash Reddy, Umanand L, Subba Reddy B and Gopakumar K, "A Novel Least Component Count Single DC-link Fed Generalized Multilevel Inverter Configuration for Three-phase High Power Isolated Grid Connected Systems", presented at 2018 IEEE Energy Conversion Congress and Exposition held in Portland, OR, Sept 23-27, 2018, Paper ID: 18073.
- 73. Alok R Verma and Subba Reddy B, "Degradation Studies on Polymeric Insulator Used for High Voltage Transmission", EECS Research Students Symposium-2018, Paper No: 29, Indian Institute of Science, Bangalore, April 12 13, 2018
- 74. Subba Reddy B and Umanand L, "Energy Monitoring and Control for distribution network using Smart Metering", presented at the 2018 IEEE International conference of High Voltage Engg (ICHVE 2018) held in Athens, Greece, 10<sup>th</sup> -13<sup>th</sup> Sept 2018. Paper code: 71401-14613670-6966.
- 75. Dinesh Sharma and Subba Reddy B, "Studies on High Voltage Composite Insulators under very low temperatures", presented at the 2018 IEEE International conference of High Voltage Engg (ICHVE 2018) held in Athens, Greece, 10<sup>th</sup> -13<sup>th</sup> Sept 2018. Paper code: 71401-14613653-1501
- 76. Alok R Verma and Subba Reddy B, "Leakage current analysis on the Polymeric Insulators subjected to rotating wheel and dip test", presented at the 2018 IEEE International conference of High Voltage Engg (ICHVE 2018) held in Athens, Greece, 10<sup>th</sup> -13<sup>th</sup> Sept 2018. Paper code: 71401-14613352-5563
- 77. Shakthi Prasad and Subba Reddy B, "Understanding Digital Imaging of Corona Discharges", presented at the 2018 IEEE International conference of High Voltage Engg (ICHVE 2018) held in Athens, Greece, 10<sup>th</sup> -13<sup>th</sup> Sept 2018, Paper code: 71401-14601446-7938
- 78. Alok R Verma and Subba Reddy B, "Aging of Composite Insulators under AC & DC Voltage using Rotating Wheel and Dip Test Method", paper No: HVE015, presented at 2<sup>nd</sup> National power Engg Research Scholars conference, 24<sup>th</sup> & 25<sup>th</sup> Feb 2018, IIT Madras, India.
- 79. Dinesh Sharma and Subba Reddy B, "Performance of Overhead Composite Insulators under very low Temperatures" paper No: HVE006, presented at the 2<sup>nd</sup> National power Engg Research Scholars conference, 24<sup>th</sup>& 25<sup>th</sup> Feb 2018, IIT Madras, India.
- 80. Subba Reddy B & L Umanand, "Scalable solar PV grid interactive system", presented at Indo-UK (UKICERI) symposia, IIT Bombay, 16<sup>th</sup> Dec 2017 (also chaired a session).
- 81. Alok Ranjan Verma, and Subba Reddy B, "Influence of Scintillations on the Surface Degradation of Polymeric Insulators", presented at IEEE International Conference on Industrial and Information Systems, session 05, track A, Srilanka, 15<sup>th</sup>-16<sup>th</sup> Dec 2017 (Student received travel fellowship award)

- 82. Subba Reddy B, "Insulators for UHVAC and DC transmission", 3<sup>rd</sup> IEEE Intl. conf on Condition Assessment techniques in Electrical Systems (CATCON-2017), 16<sup>th</sup> to 18<sup>th</sup> NOV 2017, at IIT Ropar, Punjab, India, Session XIV, IL11 (Invited talk).
- 83. Alok Ranjan Verma and Subba Reddy B, "Multistress Aging Studies on HTV Silicone Rubber Insulators" paper presented at 3<sup>rd</sup> IEEE Intl. conf on Condition Assessment techniques in Electrical Systems (CATCON-2017), 16<sup>th</sup> to 18<sup>th</sup> NOV 2017, at IIT Ropar, Punjab, conf. proc. pp, 151-155.
- 84. Alok Ranjan Verma and Subba Reddy B, "Tracking and Erosion Resistance of Liquid Silicone Rubber under Normal and Acidic Environment", paper No:197, 4th IEEE Uttar Pradesh Section Intl Conference on Electrical, Computer and electronics, 26-28 Oct- 2017, GLA University Mathura (India) Page(s):223–227, 2017 (Received best paper award)
- 85. Subba Reddy B, "Condition Assessment of Insulators used for EHV/UHV transmission", 9<sup>th</sup> IEEE PES Asia-Pacific Power & Energy Engineering conference 2017, 8-10 Oct 2017, Bangalore. (Invited talk)
- 86. Rahul Chakraborty and Subba Reddy B, "Thermal Aging Studies on High Temperature Vulcanized Silicone Rubber Insulators", EECS Research Students Symposium, Indian Institute of Science, Bangalore, 7<sup>th</sup> & 8<sup>th</sup>April, 2017. (Received best MSc.Engg poster presentation award)
- 87. Subba Reddy B and Maitreyee M, "Corona Studies on Polymeric Insulator Samples used in High Voltage Transmission", paper presented at IEEE WIECON 2016 conference. Paper ID: 2204, 19<sup>th</sup> to 21<sup>st</sup> Dec 2016, at Pune-India.
- 88. Subba Reddy B, "Technical and Economic challenges for adopting Ultra High Voltage Transmission Systems", 5<sup>th</sup> National Seminar on Competitive Economics of Indian Thermal Power Generation" Conf: West Bengal Power Development Corpn Ltd, Kolkata, India, 25<sup>th</sup> Sept 2016 (invited paper)
- 89. Satish Naik B, Shan S, Umanand L and Subba Reddy B, "A Wide Duty Cycle Range Wide Band High Frequency Isolated Gate Driver for Power Converters", paper No: 1570300536, IEEE Industrial Electronics & Applications Conference, IEACon 2016, Kota-Kinabalu, Malaysia, 20-22 Nov-2016.
- 90. Shakthi Prasad D, Subba Reddy B, Maitreyee M and Anusha Betta B, "Corona treated polymeric insulating samples subjected to mechanical and electrical stresses", 18<sup>th</sup> ICED 2016, IIT Madras, 8<sup>th</sup> to 10<sup>th</sup> Dec 2016, Session 2-1, paper ID: ACED-028, 9<sup>th</sup> Dec 2016.
- 91. Subba Reddy B, "Recent advances in UHV AC and DC Power transmission", 4<sup>th</sup> National conference on Power & Energy systems (NPES16) held at Kalasalingam university campus, TN, during 01-02 April 2016 (invited paper)
- 92. Shakthi Prasad D and Subba Reddy B, "Analysis of Corona Discharges Using High Dynamic Range Imaging Technique", 2016 Intl. SPE conference, held at University of Poitiers, France, held during 29<sup>th</sup> to 31<sup>st</sup> Aug 2016.
- 93. Alok Ranjan Verma and Subba Reddy B, "Studies on Full Scale Polymer Insulators Subjected to Corona under different Environmental Conditions", 2016 Intl. SPE conference, University of Poitiers, France, 29<sup>th</sup> to 31<sup>st</sup> Aug 2016.
- 94. Rahul Chakraborty and Subba Reddy B, "Investigation on the Pollution Performance of HTV Silicone Rubber Insulators", Intl. SPE conference, University of Poitiers, France, 29-31 Aug 2016.
- 95. Rahul Chakraborty and Subba Reddy B, "Performance of Silicone Rubber Insulators under Thermal and Electrical Stress", IEEE 2016 Electrostatics Joint Conference, Purdue University, Indiana, USA, 14<sup>th</sup> to 16<sup>th</sup> June 2016., Session E, paper E4, (Received best paper/cash award: 2<sup>nd</sup> prize)

- 96. Shakthi Prasad D and Subba Reddy B, "Study on Corona Activity using Image Processing Approach", IEEE 2016 Electrostatics Joint Conference, Purdue University, Indiana, USA, 14<sup>th</sup> to 16<sup>th</sup> June 2016, Session R paper R3, (Received best paper & cash award: 3<sup>rd</sup> prize).
- 97. Alok Ranjan Verma and Subba Reddy B, "Tracking and Erosion Resistance of Silicon Rubber Samples Subjected to Environmental Conditions", IEEE 2016 Electrostatics Joint Conference, Purdue University, Indiana, USA, 14<sup>th</sup> to 16<sup>th</sup> June 2016. Session E, paper E3, (Received best paper & cash award: 3<sup>rd</sup> prize)
- 98. M Krishna Paramathma, D Devaraj & Subba Reddy B, "Artificial Neural Network based Static Security assessment Module using PMU Measurements for Smart Grid Application", IEEE Intl Conf on Emerging Trends in Engineering, Technology & Science, Tanjur, India, 24-26 Feb 2016.
- 99. Subba Reddy B, "Protection of digital telecom equipments and avionic modules against lightning surges", 2<sup>nd</sup> National Conference on Power Electronics, KLE College of Engg & Tech, Belgaum, Karnataka, India, 29<sup>th</sup>-30<sup>th</sup> Jan 2016. (Invited talk, 29<sup>th</sup> Jan16)
- 100. Subba Reddy B, "Recent Advances in EHV & UHV Power Transmission", National level training program on "Recent advances in High Voltage Engg", at College of Engg, Trivandrum, Kerala (4<sup>th</sup> to 8<sup>th</sup> Jan 2016). (Invited talk, 4<sup>th</sup> Jan 2016)
- 101. Subba Reddy B and Diptendu Chatterjee, "Analysis of High Temperature Low Sag Conductors used for High Voltage Transmission", 5<sup>th</sup> Intl Conference on Advances in Energy Research, Indian Institute of Technology Bombay, 15<sup>th</sup> 17<sup>th</sup> Dec 2015, Paper No:105, pp 488-492.
- 102. Satish Naik B, Umanand L, and Subba Reddy B, "A Novel Grid Tied Multilevel Inverter for Photovoltaic Systems", 5<sup>th</sup> International Conf on Advances in Energy Research, Indian Institute of Technology Bombay, 15<sup>th</sup> 17<sup>th</sup> Dec 2015. Conf. proc: Paper No: 352, pp-1423-1428.
- 103. Subba Reddy B and Rajalingam M, "Recurrence Plot Analysis for Evaluation of polymeric Insulators", 2<sup>nd</sup>IEEE Intl. Conf. on Condition Assessment Techniques in Electrical Systems (IEEE Catcon-2015), CPRI, Bangalore, Paper No: 68, pp. 217-221, 10<sup>th</sup> 12<sup>th</sup> Dec-2015.
- 104. Shakthi Prasad D, Subba Reddy B, Alok R Verma, Desik Rengarajan & Veeresh Patil, "Influence of Corona Intensity on the Hydropobhicity Recovery of Polymeric Insulating Samples", 2<sup>nd</sup> IEEE Intl. Conf. on Condition Assessment Techniques in Electrical Systems (IEEE Catcon-2015), CPRI, Bangalore, 10<sup>th</sup> 12<sup>th</sup> Dec 2015, Paper No: 22,. pp. 61-65,
- 105. Shakthi Prasad D and Subba Reddy B, "Understanding Corona Induced Degradation on Polymeric Insulators using Image Processing Technique", Indo-Swedish colloquium on Electro-technology, IIT Madras, 2-4 Dec 2015
- 106.Alok Ranjan Verma and Subba Reddy B, "Degradation Studies on Outdoor Composite Insulators subjected to Different Environmental Conditions", Indo-Swedish Colloquium on Electro-Technology, held at IIT Madras, during 2-4 Dec 2015.
- 107.Subba Reddy B, Shakthi Prasad D & Alok Ranjan Verma, "Tracking and Erosion Studies on Polymer Insulators used for HVAC and DC Transmission" 3<sup>nd</sup> ISNPEDADM–2015 held at Reunion Island (Indian Ocean) 26<sup>th</sup>–29<sup>th</sup> Oct 2015.
- 108.Subba Reddy B, "Recent Advances in UHV Power Transmission and Distribution Systems", Ist International Conference on Power, Circuit and Information Technologies (ICPCIT-2015), RajaRajeswari College of Engg, Bangalore, Springer, 27<sup>th</sup>–28<sup>th</sup> April 2015 (Invited PAPER)
- 109.Subba Reddy B and Shakthi Prasad D, "Corona Ageing Studies on Polymer Insulators used for High Voltage AC & DC Transmission", 9<sup>th</sup> International conference on electrical & electronics insulating materials & systems, INSULEC-2015, (INVITED PAPER) 22<sup>nd</sup> 23<sup>rd</sup> Jan 2015, Mumbai. (organized by IEEMA, Mumbai)

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