## Santanu Kumar Mishra

## List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/4588436/santanu-kumar-mishra-publications-by-year.pdf

Version: 2024-04-20

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

| 97          | 1,327 citations | 18      | 33      |
|-------------|-----------------|---------|---------|
| papers      |                 | h-index | g-index |
| 139         | 1,889           | 5.5     | 5.29    |
| ext. papers | ext. citations  | avg, IF | L-index |

| #  | Paper   | IF                   | Citations    |
|----|---|----------------------|--------------|
| 97 | Novel Single-Phase Cuk-derived Bridgeless PFC Converter for On-Board EV Charger with Reduced Number of Components. <i>IEEE Transactions on Industry Applications</i> , <b>2022</b> , 1-1                      | 4.3                  | 1            |
| 96 | A Mathematical Design Approach to Volumetric Optimization of EMI Filter and Modeling of CM Noise Sources in a Three-Phase PFC. <i>IEEE Transactions on Power Electronics</i> , <b>2022</b> , 37, 462-472      | 7.2                  | 5            |
| 95 | Synthesis of PWM Converters from Conversion Ratios using Flux- or Charge-Balance Equations. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2022</b> , 1-1                      | 5.6                  |              |
| 94 | Analysis and Design of a Zero-Current Switching Non-Isolated High Gain Inverter. <i>IEEE Open Journal of Power Electronics</i> , <b>2021</b> , 1-1  | 2.5                  | 1            |
| 93 | PWM Control of n-Phase Interleaved Active Front- End Boost Stage-Based Impedance Source Inverter. <i>IEEE Transactions on Power Electronics</i> , <b>2021</b> , 1-1   | 7.2                  | 1            |
| 92 | Synthesis of an Optimum Converter Topology for A Specified Voltage Conversion Ratio. <i>IEEE Transactions on Industry Applications</i> , <b>2021</b> , 57, 3923-3934  | 4.3                  | 3            |
| 91 | Synthesizing a Family of Converters for a Specified Conversion Ratio Using Flux Balance Principle. <i>IEEE Transactions on Industrial Electronics</i> , <b>2021</b> , 68, 3854-3864                           | 8.9                  | 9            |
| 90 | PWM Control of a High Gain n-Phase Interleaved Current Fed Topology. <i>IEEE Transactions on Industrial Electronics</i> , <b>2021</b> , 1-1   | 8.9                  | 1            |
| 89 | High Bandwidth Inductor Current Estimator for digitally controlled DC-DC Converters for Light Load Applications. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2021</b> , 1-1 | 5.6                  | 2            |
| 88 | A Single-Input Multiple-Output Unity Power Factor Rectifier. <i>IEEE Transactions on Power Electronics</i> , <b>2021</b> , 36, 10127-10141  | 7.2                  | 1            |
| 87 | Synthesis of DCDC Converters From Voltage Conversion Ratio and Prescribed Requirements. <i>IEEE Transactions on Power Electronics</i> , <b>2021</b> , 36, 13889-13902   | 7.2                  | 8            |
| 86 | A Voltage-Fed Soft-Switched Push <b>P</b> ull Topology With Phase-Shifted Power Transfer Using Coupled LC Snubber. <i>IEEE Transactions on Power Electronics</i> , <b>2021</b> , 36, 13903-13916              | 7.2                  | 1            |
| 85 | Inverse Problem of Converter Synthesis: Formulation, Complexities, and Solution. <i>Lecture Notes in Electrical Engineering</i> , <b>2021</b> , 157-168   | 0.2                  |              |
| 84 | Fixed-Frequency Current-fed LCL Series Resonant Soft-Switching Converter with Capacitive Doubler. <i>IEEE Transactions on Industry Applications</i> , <b>2021</b> , 1-1                                       | 4.3                  |              |
| 83 | DC-DC Converter Synthesis: An Inverse Problem. <i>IEEE Transactions on Power Electronics</i> , <b>2020</b> , 35, 1263   | 33 <del>7</del> 1263 | 3 <b>8</b> 9 |
| 82 | Grid Integration of Small-Scale Photovoltaic Systems in Secondary Distribution Network Review. <i>IEEE Transactions on Industry Applications</i> , <b>2020</b> , 56, 3178-3195                                | 4.3                  | 43           |
| 81 | Powering Milliwatts to Megawatts. <i>IEEE Consumer Electronics Magazine</i> , <b>2020</b> , 9, 70-75  | 3.2                  | О            |

| 80 | Synthesizing a Comprehensive Set of Converter Topologies for a Specified Voltage Gain 2020,   |     | 2  |
|----|---|-----|----|
| 79 | Interleaved Current-Fed Switched Inverter. IEEE Transactions on Power Electronics, 2020, 35, 7015-7030  | 7.2 | 3  |
| 78 | Dual-output unity power factor rectifier power block. IET Power Electronics, 2020, 13, 2160-2163  | 2.2 |    |
| 77 | . IEEE Journal of Emerging and Selected Topics in Power Electronics, <b>2020</b> , 8, 1668-1685   | 5.6 | 1  |
| 76 | Toward the Vision of All-Electric Vehicles in a Decade [Energy and Security]. <i>IEEE Consumer Electronics Magazine</i> , <b>2019</b> , 8, 103-107  | 3.2 | 18 |
| 75 | A Theory to Synthesize Nonisolated DCDC Converters Using Flux Balance Principle. <i>IEEE Transactions on Power Electronics</i> , <b>2019</b> , 34, 10910-10924  | 7.2 | 12 |
| 74 | An Inductor Current Estimator for Digitally Controlled Synchronous Buck Converter. <i>IEEE Transactions on Power Electronics</i> , <b>2019</b> , 34, 4883-4894  | 7.2 | 5  |
| 73 | Power Frequency Harmonic Reduction and its Redistribution for Improved Filter Design in Current-Fed Switched Inverter. <i>IEEE Transactions on Industrial Electronics</i> , <b>2019</b> , 66, 4319-4333 | 8.9 | 13 |
| 72 | Analysis, Design, and Implementation of an Elastomer Generator Based Energy Harvesting Scheme. <i>IEEE Transactions on Industrial Electronics</i> , <b>2019</b> , 66, 3507-3517                         | 8.9 | 12 |
| 71 | Design and Analysis of Interleaved Current Fed Switched Inverter <b>2019</b> ,  |     | 1  |
| 70 | Analysis and Design of a Single-Phase Bridgeless Cuk-based PFC Converter as On-Board Charger with Reduced Number of Components and Losses <b>2019</b> ,   |     | 2  |
| 69 | Design & Development of On-Board DC Fast Chargers for E-Rickshaw <b>2019</b> ,  |     | 3  |
| 68 | Synthesizing a Family of Converters for a Specified Conversion Ratio Using Flux Balance Principle <b>2019</b> ,   |     | 2  |
| 67 | Gain Enhancement of Switched Boost Inverter Using a Novel PWM Scheme <b>2019</b> ,  |     | 1  |
| 66 | . IEEE Transactions on Industry Applications, <b>2019</b> , 55, 928-942   | 4.3 | 12 |
| 65 | Switched-Boost Action Based Multiport Converter. <i>IEEE Transactions on Industry Applications</i> , <b>2019</b> , 55, 964-975  | 4.3 | 23 |
| 64 | Power Supplies for Consumer Electronic Devices. <i>IEEE Potentials</i> , <b>2019</b> , 38, 8-13   | 1   | 7  |
| 63 | An Electrical Model of a Dielectric Elastomer Generator. <i>IEEE Transactions on Power Electronics</i> , <b>2018</b> , 33, 2792-2797  | 7.2 | 15 |

| 62 | Improving Grid Power Availability in Rural Telecom Exchanges. <i>IEEE Transactions on Industry Applications</i> , <b>2018</b> , 54, 636-646  | 4.3                 | 6               |
|----|--|---------------------|-----------------|
| 61 | Zero Current Switching of CFSI using Auxiliary Circuit 2018,   |                     | 1               |
| 60 | 2018,  |                     | 1               |
| 59 | Grid Integration of Small-Scale Photovoltaic Systems-A Review 2018,  |                     | 4               |
| 58 | A novel bidirectional current estimator for digital controlled DC-DC converters 2018,  |                     | 2               |
| 57 | Switched-boost action: a phenomenon for achieving time-division-multiplexed multi-port power transfer for nanogrid applications. <i>Sadhana - Academy Proceedings in Engineering Sciences</i> , <b>2017</b> , 42, 12 | 2 <del>7</del> -12: | 38 <sup>3</sup> |
| 56 | An energy harvesting scheme for dielectric elastomer generators 2017,  |                     | 4               |
| 55 | Solar PV based DC power supply for rural homes with analog, multiplier-less MPPT controller <b>2017</b> ,  |                     | 4               |
| 54 | A modified PWM scheme to reduce switching stress in a current-fed switched inverter 2017,  |                     | 3               |
| 53 | A novel current estimation technique for digital controlled switching converters operating in CCM and DCM <b>2017</b> ,  |                     | 4               |
| 52 | Dual output PFC rectifier with simultaneous boost and buck output 2017,  |                     | 1               |
| 51 | A Passive Filter Building Block for Input or Output Current Ripple Cancellation in a Power Converter. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2016</b> , 4, 564-575            | 5.6                 | 25              |
| 50 | Power transfer using portable surfaces in capacitively coupled power transfer technology. <i>IET Power Electronics</i> , <b>2016</b> , 9, 997-1008   | 2.2                 | 19              |
| 49 | Current sensorless Power Factor correction circuit using FPGA <b>2016</b> ,  |                     | 3               |
| 48 | Synthesis of buck converter based current sources <b>2016</b> ,  |                     | 2               |
| 47 | . IEEE Transactions on Power Electronics, <b>2016</b> , 31, 7534-7543  | 7.2                 | 31              |
| 46 | Constant-frequency shoot-through sine pulse-width-modulation scheme for three-phase single-inputBybrid-output converter. <i>IET Power Electronics</i> , <b>2016</b> , 9, 1819-1827                                   | 2.2                 | 8               |
| 45 | High-Quality Sine Wave Generation Using a Differential Boost Inverter at Higher Operating Frequency. <i>IEEE Transactions on Industry Applications</i> , <b>2015</b> , 51, 373-384                                   | 4.3                 | 33              |

## (2013-2015)

| 44 | Boost-Amplifier-Based Power-Hardware-in-the-Loop Simulator. <i>IEEE Transactions on Industrial Electronics</i> , <b>2015</b> , 62, 7479-7488        | 8.9 | 17  |
|----|---|-----|-----|
| 43 | Integrated Dual-Output Converter. IEEE Transactions on Industrial Electronics, 2015, 62, 371-382  | 8.9 | 78  |
| 42 | Boost-based amplifier for power-hardware-in-the-loop simulations of utility-tied DG 2015,   |     | 1   |
| 41 | Three winding coupled inductor based high boost inverter with increased gain control 2015,  |     | 1   |
| 40 | A universal-phase rectifier architecture for rural telecom exchanges in developing countries 2015,  |     | 1   |
| 39 | Coupled inductor based high gain current-fed DC-DC bridge converters 2015,  |     | 2   |
| 38 | Integrated hybrid output converter as power router for renewable-based nanogrids 2015,  |     | 5   |
| 37 | . IEEE Transactions on Industrial Electronics, <b>2014</b> , 61, 4680-4690  | 8.9 | 114 |
| 36 | Advances in nanogrid technology and its integration into rural electrification in India 2014,   |     | 21  |
| 35 | Boost-Derived Hybrid Converter With Simultaneous DC and AC Outputs. <i>IEEE Transactions on Industry Applications</i> , <b>2014</b> , 50, 1082-1093 | 4.3 | 76  |
| 34 | Coupled inductor based Current-Fed Switched Inverter for low voltage renewable interface 2014,  |     | 6   |
| 33 | Improved trans-current-fed switched inverter <b>2014</b> ,  |     | 2   |
| 32 | Input current ripple cancellation of current-fed switched inverter 2014,  |     | 6   |
| 31 | Boost-based power amplifier for power-hardware-in-the-loop simulations 2014,  |     | 1   |
| 30 | 2014,   |     | 5   |
| 29 | A multi-port DC-DC converter topology with simultaneous buck and boost outputs <b>2013</b> ,  |     | 2   |
| 28 | Analysis and PWM Control of Switched Boost Inverter. <i>IEEE Transactions on Industrial Electronics</i> , <b>2013</b> , 60, 5593-5602               | 8.9 | 144 |
| 27 | A Multi-Input Single-Control (MISC) battery charger for DC nanogrids 2013,  |     | 2   |

| 26 | Synchronous-Reference-Frame-Based Control of Switched Boost Inverter for Standalone DC Nanogrid Applications. <i>IEEE Transactions on Power Electronics</i> , <b>2013</b> , 28, 1219-1233 | 7.2 | 110 |
|----|---|-----|-----|
| 25 | A utility interfaced half-bridge based capacitively coupled power transfer circuit with automatic frequency control <b>2013</b> ,   |     | 9   |
| 24 | Pulse width modulation of three-phase switched boost inverter 2013,   |     | 6   |
| 23 | Synthetic-Ripple-Based Digital Hysteretic Modulator for Point-of-Load Converters. <i>IEEE Transactions on Industrial Electronics</i> , <b>2013</b> , 60, 4996-5007                        | 8.9 | 12  |
| 22 | A Magnetically Coupled Feedback-Clamped Optimal Bidirectional Battery Charger. <i>IEEE Transactions on Industrial Electronics</i> , <b>2013</b> , 60, 422-432                             | 8.9 | 38  |
| 21 | Current-Fed Switched Inverter based hybrid topology for DC Nanogrid application 2013,   |     | 22  |
| 20 | Current-Fed DC/DC topology based inverter <b>2013</b> ,   |     | 6   |
| 19 | A multi-port converter topology with simultaneous isolated and non-isolated outputs <b>2013</b> ,   |     | 6   |
| 18 | A Wide Bandwidth Electronic Load. <i>IEEE Transactions on Industrial Electronics</i> , <b>2012</b> , 59, 733-739  | 8.9 | 17  |
| 17 | Implementation and control of Switched Boost Inverer for DC nanogrid applications 2012,   |     | 7   |
| 16 | Inverse Watkins II ohnson Topology-Based Inverter. <i>IEEE Transactions on Power Electronics</i> , <b>2012</b> , 27, 1066-1070  | 7.2 | 74  |
| 15 | DSP based PWM control of Switched Boost Inverter for DC nanogrid applications 2012,   |     | 11  |
| 14 | Implementation and control of a bidirectional high-gain transformer-less standalone inverter 2012,  |     | 7   |
| 13 | A novel average current-mode controller based optimal battery charger for automotive applications <b>2012</b> ,   |     | 2   |
| 12 | A digital optimal battery charger with the inbuilt fault detection property 2012,   |     | 3   |
| 11 | Switched-boost inverter based on Inverse Watkins-Johnson topology <b>2011</b> ,   |     | 12  |
| 10 | A PWM control strategy for switched boost inverter <b>2011</b> ,  |     | 19  |
| 9  | Design Considerations for a Low-Voltage High-Current Redundant Parallel Voltage Regulator Module System. <i>IEEE Transactions on Industrial Electronics</i> , <b>2011</b> , 58, 1330-1338 | 8.9 | 12  |

## LIST OF PUBLICATIONS

| 8 | Dynamic Linearizing Modulator for Large-signal Linearization of a Boost Converter. <i>IEEE Transactions on Power Electronics</i> , <b>2011</b> , 26, 3046-3054   | 7.2   | 10 |
|---|--|-------|----|
| 7 | A switched-boost topology for renewable power application <b>2010</b> ,  |       | 9  |
| 6 | Dynamic response optimization of the synthetic ripple modulator for a point-of-load converter with adaptive voltage positioning <b>2009</b> ,  |       | 1  |
| 5 | Dynamic Characterization of the Synthetic Ripple Modulator in a Tightly Regulated Distributed Power Application. <i>IEEE Transactions on Industrial Electronics</i> , <b>2009</b> , 56, 1164-1173                  | 8.9   | 21 |
| 4 | Design-Oriented Analysis of Modern Active Droop-Controlled Power Supplies. <i>IEEE Transactions on Industrial Electronics</i> , <b>2009</b> , 56, 3704-3708  | 8.9   | 19 |
| 3 | Design of a Redundant Paralleled Voltage Regulator Module System with Improved Efficiency and Dynamic Response. <i>Conference Record - IAS Annual Meeting (IEEE Industry Applications Society)</i> , <b>2006</b> , |       | 4  |
| 2 | Synthetic-ripple modulator for synchronous buck converter. <i>IEEE Power Electronics Letters</i> , <b>2005</b> , 3, 148  | 8-151 | 17 |
| 1 | Pulsewidth modulator with carriers derived from converter waveforms. <i>Electronics Letters</i> , <b>2005</b> , 41, 152  | 1.1   | 6  |