Rajendra Prasad Kandula

List of Publications by Year
in descending order

44	573	840776 11	888059 17
papers	citations	h-index	g-index

45	45	45	189
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Soft-Switching Solid-State Transformer With Reduced Conduction Loss. IEEE Transactions on Power Electronics, 2021, 36, 5236-5249.	7.9	61
2	SiC-Based 5-kV Universal Modular Soft-Switching Solid-State Transformer (M-S4T) for Medium-Voltage DC Microgrids and Distribution Grids. IEEE Transactions on Power Electronics, 2021, 36, 11326-11343.	7.9	49
3	Solid-State Transformer and Hybrid Transformer With Integrated Energy Storage in Active Distribution Grids: Technical and Economic Comparison, Dispatch, and Control. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 3771-3787.	5.4	40
4	Power Router for Meshed Systems Based on a Fractionally Rated Back-to-Back Converter. IEEE Transactions on Power Electronics, 2014, 29, 5172-5180.	7.9	37
5	Modular Universal Converter for MVDC Applications. , 2018, , .		34
6	Current-Source Solid-State DC Transformer Integrating LVDC Microgrid, Energy Storage, and Renewable Energy Into MVDC Grid. IEEE Transactions on Power Electronics, 2022, 37, 1044-1058.	7.9	29
7	7.2 kV Three-Port Single-Phase Single-Stage Modular Soft-Switching Solid-State Transformer with Active Power Decoupling and Reduced DC-Link. , 2020, , .		24
8	Stacked Low-Inertia Converter or Solid-State Transformer: Modeling and Model Predictive Priority-Shifting Control for Voltage Balance. IEEE Transactions on Power Electronics, 2021, 36, 8934-8952.	7.9	23
9	Characterization of 3.3-kV Reverse-Blocking SiC Modules for Use in Current-Source Zero-Voltage-Switching Converters. IEEE Transactions on Power Electronics, 2021, 36, 876-887.	7.9	19
10	Single-stage soft-switching solid-state transformer for bidirectional motor drives. , 2017, , .		17
11	Impact of Transformer Leakage Inductance on the Soft-Switching Solid-State Transformer. , 2018, , .		17
12	Robust Predictive Control for Modular Solid-State Transformer With Reduced DC Link and Parameter Mismatch. IEEE Transactions on Power Electronics, 2021, 36, 14295-14311.	7.9	17
13	7.2 kV Three-Port SiC Single-Stage Current-Source Solid-State Transformer With 90 kV Lightning Protection. IEEE Transactions on Power Electronics, 2022, 37, 12080-12094.	7.9	16
14	Validation of the Plug-and-Play AC/AC Power Electronics Building Block (AC-PEBB) for Medium-Voltage Grid Control Applications. IEEE Transactions on Industry Applications, 2014, 50, 3549-3557.	4.9	15
15	Soft-switching isolated tri-port converter for integration of PV, storage and single-phase AC grid. , 2017, , .		15
16	Fast Dynamic Control of Stacked Low Inertia Converters. , 2018, , .		15
17	New Single-Stage Soft-Switching Solid-State Transformer with Reduced Conduction Loss and Minimal Auxiliary Switch. , 2020, , .		14
18	New Modulation and Impact of Transformer Leakage Inductance on Current-Source Solid-State Transformer. IEEE Transactions on Power Electronics, 2022, 37, 562-576.	7.9	13

#	Article	IF	Citations
19	Insulation Coordination Design for Grid-Connected Solid-State Transformers. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 3746-3758.	5.4	9
20	A Tri-Port Current-Source Soft-Switching Medium-Voltage String Inverter for Large-Scale Solar-Plus-Storage Farms. IEEE Transactions on Power Electronics, 2022, 37, 13808-13823.	7.9	9
21	Lightning Impulse Protection for Grid-connected Solid-state Transformers. , 2020, , .		7
22	Multiport Power Management Method with Partial Power Processing in a MV Solid-State Transformer for PV, Storage, and Fast-Charging EV Integration. , 2020, , .		7
23	Predictive Direct DC-Link Control for Active Power Decoupling of A Single-Phase Reduced DC-Link MV Solid-State Transformer. , 2020, , .		7
24	Predictive Direct DC-Link Control for 7.2 kV Three-Port Low-Inertia Solid-State Transformer With Active Power Decoupling. IEEE Transactions on Power Electronics, 2022, 37, 11673-11685.	7.9	7
25	Improving Energy Efficiency and Productivity at Industrial Plants Using Dynamic Voltage Management. IEEE Transactions on Industry Applications, 2020, 56, 1250-1257.	4.9	6
26	Feed-Forward Compensation for Model Predictive Control in Tri-port Current-Source Medium-Voltage String Inverters for PV-Plus-Storage Farms. , 2021, , .		6
27	Lyapunov Energy Function based Control of a Soft Switching Solid State Transformer for Three-phase Standalone Application. , 2020, , .		6
28	Comparative Investigation of System-Level Optimized Power Conversion System Architectures to Reduce LCOE for Large-Scale PV-Plus-Storage Farms. , 2021, , .		6
29	Laminated Permanent Magnets Enable Compact Magnetic Components in Current-Source Converters. IEEE Transactions on Power Electronics, 2022, 37, 12391-12405.	7.9	6
30	Negative Virtual Inductance based Active Damping and Direct Power Control of a Soft Switching Solid State Transformer for PV Application. , 2022, , .		6
31	Control of Soft Switching Solid State Transformer based on Lyapunov Energy Function for Three-phase AC-AC Power Conversion. , 2021, , .		4
32	DC-Link Current Minimization Control for Current Source Converter-Based Solid-State Transformer. IEEE Transactions on Power Electronics, 2022, 37, 11865-11875.	7.9	4
33	Soft-Switching Characterization of 3.3 kV Reverse-blocking SiC Devices. , 2018, , .		3
34	Real-Time Modeling and HIL Simulation of Stacked Low-Inertia Converters with Soft-Switching and Fast Dynamic Control. , 2019, , .		3
35	Suppression of Device Voltage Stress from Ground Leakage Current for Soft-Switching Solid-State Transformer. , 2021, , .		3
36	Oversampling Multi-Variable Control for Soft-Switching Solid-State Transformer. , 2021, , .		3

#	Article	IF	Citations
37	Stable operation of multiple power routers. , 2013, , .		2
38	Dynamic DC-Link Current Minimization Control to Improve Current-Source Solid-State Transformer Efficiency. , 2020, , .		2
39	Design of Control Architecture for Stacked Low-Inertia Converters with Fast Dynamic Control. , 2020, , .		2
40	Autonomous Fail-Normal Switch for Hybrid Transformers. , 2021, , .		2
41	Accurate voltage-to-frequency sensor with galvanic isolation and bandwidth of 375kHz. , 2020, , .		1
42	Laminated Permanent Magnets Enable Compact Magnetic Components in Current Source Converters. , 2021, , .		1
43	A Charging Strategy for Electric Vehicle Fast Charging Station to Mitigate Distribution Transformer Aging and Reduce Operation Cost. , 2021, , .		0
44	Distributed Control of Aggregated Smart Buildings for Frequency Regulation. , 2021, , .		0