

# Rajendra Prasad Kandula

## List of Publications by Year in descending order

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189  
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	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
3	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
4	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
5	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
6	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
7	Laminated Permanent Magnets Enable Compact Magnetic Components in Current-Source Converters. IEEE Transactions on Power Electronics, 2022, 37, 12391-12405.	7.9	6
8	Negative Virtual Inductance based Active Damping and Direct Power Control of a Soft Switching Solid State Transformer for \$PV\$ Application. , 2022, , .		6
9	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
10	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
11	Soft-Switching Solid-State Transformer With Reduced Conduction Loss. IEEE Transactions on Power Electronics, 2021, 36, 5236-5249.	7.9	61
12	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
13	Suppression of Device Voltage Stress from Ground Leakage Current for Soft-Switching Solid-State Transformer. , 2021, , .		3
14	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
15	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
16	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
17	Feed-Forward Compensation for Model Predictive Control in Tri-port Current-Source Medium-Voltage String Inverters for PV-Plus-Storage Farms. , 2021, , .		6
18	Control of Soft Switching Solid State Transformer based on Lyapunov Energy Function for Three-phase AC-AC Power Conversion. , 2021, , .		4

#	ARTICLE	IF	CITATIONS
19	A Charging Strategy for Electric Vehicle Fast Charging Station to Mitigate Distribution Transformer Aging and Reduce Operation Cost. , 2021, , .		0
20	Laminated Permanent Magnets Enable Compact Magnetic Components in Current Source Converters. , 2021, , .		1
21	Oversampling Multi-Variable Control for Soft-Switching Solid-State Transformer. , 2021, , .		3
22	Comparative Investigation of System-Level Optimized Power Conversion System Architectures to Reduce LCOE for Large-Scale PV-Plus-Storage Farms. , 2021, , .		6
23	Autonomous Fail-Normal Switch for Hybrid Transformers. , 2021, , .		2
24	Distributed Control of Aggregated Smart Buildings for Frequency Regulation. , 2021, , .		0
25	New Single-Stage Soft-Switching Solid-State Transformer with Reduced Conduction Loss and Minimal Auxiliary Switch. , 2020, , .		14
26	Lightning Impulse Protection for Grid-connected Solid-state Transformers. , 2020, , .		7
27	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
28	Improving Energy Efficiency and Productivity at Industrial Plants Using Dynamic Voltage Management. IEEE Transactions on Industry Applications, 2020, 56, 1250-1257.	4.9	6
29	Multiport Power Management Method with Partial Power Processing in a MV Solid-State Transformer for PV, Storage, and Fast-Charging EV Integration. , 2020, , .		7
30	Predictive Direct DC-Link Control for Active Power Decoupling of A Single-Phase Reduced DC-Link MV Solid-State Transformer. , 2020, , .		7
31	Lyapunov Energy Function based Control of a Soft Switching Solid State Transformer for Three-phase Standalone Application. , 2020, , .		6
32	Dynamic DC-Link Current Minimization Control to Improve Current-Source Solid-State Transformer Efficiency. , 2020, , .		2
33	Design of Control Architecture for Stacked Low-Inertia Converters with Fast Dynamic Control. , 2020, , .		2
34	Accurate voltage-to-frequency sensor with galvanic isolation and bandwidth of 375kHz. , 2020, , .		1
35	Real-Time Modeling and HIL Simulation of Stacked Low-Inertia Converters with Soft-Switching and Fast Dynamic Control. , 2019, , .		3
36	Fast Dynamic Control of Stacked Low Inertia Converters. , 2018, , .		15

#	ARTICLE	IF	CITATIONS
37	Modular Universal Converter for MVDC Applications. , 2018, , .		34
38	Soft-Switching Characterization of 3.3 kV Reverse-blocking SiC Devices. , 2018, , .		3
39	Impact of Transformer Leakage Inductance on the Soft-Switching Solid-State Transformer. , 2018, , .		17
40	Soft-switching isolated tri-port converter for integration of PV, storage and single-phase AC grid. , 2017, , .		15
41	Single-stage soft-switching solid-state transformer for bidirectional motor drives. , 2017, , .		17
42	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
43	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
44	Stable operation of multiple power routers. , 2013, , .		2