

Drazen Dujic

List of Publications by Year in descending order

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Version: 2024-02-01

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docs citations

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1841
citing authors

#	ARTICLE	IF	CITATIONS
1	Condition Health Monitoring of Modular Multilevel Converter Submodule Capacitors. IEEE Transactions on Power Electronics, 2022, 37, 3544-3554.	7.9	10
2	High-Frequency Operation of Series-Connected IGBTs for Resonant Converters. IEEE Transactions on Power Electronics, 2022, 37, 5664-5674.	7.9	6
3	IGBT Gate Unit for Zero-Voltage-Switching Resonant DC Transformer Applications. IEEE Transactions on Industrial Electronics, 2022, 69, 13799-13807.	7.9	2
4	Design and Characterization of PCB Spiral Coils for Inductive Power Transfer in Medium-Voltage Applications. IEEE Transactions on Power Electronics, 2022, 37, 6168-6180.	7.9	7
5	Direct Current Transformer Impact on the DC Power Distribution Networks. IEEE Transactions on Smart Grid, 2022, 13, 2547-2556.	9.0	3
6	Resonant IGBT Soft-Switching: Zero-Voltage Switching or Zero-Current Switching?. IEEE Transactions on Power Electronics, 2022, 37, 10775-10783.	7.9	4
7	Detection of Broken Rotor Bars in a Cage Induction Machine Using DC Injection Braking. IEEE Access, 2022, 10, 49585-49598.	4.2	3
8	Robust and Cost-Effective Synchronization Scheme for a Multicell Grid Emulator. IEEE Transactions on Industrial Electronics, 2021, 68, 1851-1859.	7.9	8
9	Impact of Synchronous Generator Deexcitation Dynamics on the Protection in Marine DC Power Distribution Networks. IEEE Transactions on Transportation Electrification, 2021, 7, 267-275.	7.8	12
10	Scalable Solid-State Bus-Tie Switch for Flexible Shipboard Power Systems. IEEE Transactions on Power Electronics, 2021, 36, 239-247.	7.9	10
11	Equal Loss Distribution in Duty-Cycle Controlled H-Bridge LLC Resonant Converters. IEEE Transactions on Power Electronics, 2021, 36, 4937-4941.	7.9	5
12	Hardware-in-the-Loop Characterization of Source-Affected Output Characteristics of Cascaded H -Bridge Converter. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 3083-3094.	5.4	3
13	Smooth Power Direction Transition of a Bidirectional LLC Resonant Converter for DC Transformer Applications. IEEE Transactions on Power Electronics, 2021, 36, 6265-6275.	7.9	17
14	Thermally-Compensated Magnetic Core Loss Model for Time-Domain Simulations of Electrical Circuits. IEEE Transactions on Power Electronics, 2021, 36, 8193-8205.	7.9	4
15	Solid-State Technologies for Flexible and Efficient Marine DC Microgrids. IEEE Transactions on Smart Grid, 2021, 12, 2860-2868.	9.0	11
16	Comprehensive Comparison of Modular Multilevel Converter Internal Energy Balancing Methods. IEEE Transactions on Power Electronics, 2021, 36, 8962-8977.	7.9	17
17	Current Limiting in Overload Conditions of an LLC -Converter-Based DC Transformer. IEEE Transactions on Power Electronics, 2021, 36, 10660-10672.	7.9	7
18	Solid-State Technology for Shipboard DC Power Distribution Networks. IEEE Transactions on Industrial Electronics, 2021, 68, 12100-12108.	7.9	2

#	ARTICLE	IF	CITATIONS
19	Virtual Capacitor Concept for Computationally Efficient and Flexible Real-Time MMC Model. IEEE Access, 2021, 9, 144211-144226.	4.2	2
20	Hybrid Modular Multilevel Converter Design and Control for Variable Speed Pumped Hydro Storage Plants. IEEE Access, 2021, 9, 140050-140065.	4.2	3
21	Hardware-in-the-Loop Modeling of an Actively Fed MVDC Railway Systems of the Future. IEEE Access, 2021, 9, 151493-151506.	4.2	7
22	Distributed Real-Time Model of the M3C for HIL Systems Using Small-Scale Simulators. IEEE Open Journal of Power Electronics, 2021, 2, 603-613.	5.7	4
23	IGCT Low-Current Switchingâ€”TCAD and Experimental Characterization. IEEE Transactions on Industrial Electronics, 2020, 67, 6302-6311.	7.9	7
24	Extending Protection Selectivity in DC Shipboard Power Systems by Means of Additional Bus Capacitance. IEEE Transactions on Industrial Electronics, 2020, 67, 3673-3683.	7.9	27
25	Stability Analysis of Multi-Port MVDC Distribution Networks for All-Electric Ships. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 1164-1177.	5.4	18
26	Design Optimization of Two-Quadrant High-Current Low-Voltage Power Supply. IEEE Transactions on Power Electronics, 2020, 35, 11602-11611.	7.9	7
27	Solid-State Bus-Tie Switch for Shipboard Power Distribution Networks. IEEE Transactions on Transportation Electrification, 2020, 6, 1253-1264.	7.8	14
28	Protection Coordination for Reliable Marine DC Power Distribution Networks. IEEE Access, 2020, 8, 222813-222823.	4.2	10
29	Comprehensive Spectral Analysis of PWM Waveforms With Compensated DC-Link Oscillations. IEEE Transactions on Power Electronics, 2020, 35, 12898-12908.	7.9	4
30	On Power Scalability of Modular Multilevel Converters: Increasing Current Ratings Through Branch Paralleling. IEEE Power Electronics Magazine, 2020, 7, 53-63.	0.7	19
31	FEM-Based Statistical Data-Driven Modeling Approach for MFT Design Optimization. IEEE Transactions on Power Electronics, 2020, 35, 10863-10872.	7.9	10
32	100 kW, 10 kHz Medium-Frequency Transformer Design Optimization and Experimental Verification. IEEE Transactions on Power Electronics, 2019, 34, 1696-1708.	7.9	186
33	Leakage Flux Modeling of Medium-Voltage Phase-Shift Transformers for System-Level Simulations. IEEE Transactions on Power Electronics, 2019, 34, 2635-2654.	7.9	16
34	Modular Multilevel Converter Control Methods Performance Benchmark for Medium Voltage Applications. IEEE Transactions on Power Electronics, 2019, 34, 4967-4980.	7.9	11
35	Modeling Frequency-Dependent Core Loss of Ferrite Materials Using Permeanceâ€”Capacitance Analogy for System-Level Circuit Simulations. IEEE Transactions on Power Electronics, 2019, 34, 3658-3676.	7.9	13
36	Input-Admittance Passivity Compliance for Grid-Connected Converters With an LCL Filter. IEEE Transactions on Industrial Electronics, 2019, 66, 1089-1097.	7.9	31

#	ARTICLE	IF	CITATIONS
37	Multivariable High-Frequency Input-Admittance of Grid-Connected Converters: Modeling, Validation, and Implications on Stability. IEEE Transactions on Industrial Electronics, 2019, 66, 6505-6515.	7.9	23
38	Sensitivity Analysis of Medium-Frequency Transformer Designs for Solid-State Transformers. IEEE Transactions on Power Electronics, 2019, 34, 8356-8367.	7.9	64
39	Modeling Frequency Independent Hysteresis Effects of Ferrite Core Materials Using Permeance-Capacitance Analogy for System-Level Circuit Simulations. IEEE Transactions on Power Electronics, 2018, 33, 10055-10070.	7.9	19
40	Leakage Flux Modeling of Multiwinding Transformers for System-Level Simulations. IEEE Transactions on Power Electronics, 2018, 33, 2471-2483.	7.9	13
41	Stable and Passive High-Power Dual Active Bridge Converters Interfacing MVDC Grids. IEEE Transactions on Industrial Electronics, 2018, 65, 9561-9570.	7.9	28
42	Dynamic Assessment of Source-Load Interactions in Marine MVDC Distribution. IEEE Transactions on Industrial Electronics, 2017, 64, 4372-4381.	7.9	57
43	Virtual Submodule Concept for Fast Semi-Numerical Modular Multilevel Converter Loss Estimation. IEEE Transactions on Industrial Electronics, 2017, 64, 5286-5294.	7.9	18
44	Isolated DC/DC Structure Based on Modular Multilevel Converter. IEEE Transactions on Power Electronics, 2015, 30, 89-98.	7.9	283
45	Characterization of 6.5 kV IGBTs for High-Power Medium-Frequency Soft-Switched Applications. IEEE Transactions on Power Electronics, 2014, 29, 906-919.	7.9	65
46	Power Electronic Traction Transformer-Medium Voltage Prototype. IEEE Transactions on Industrial Electronics, 2014, 61, 3257-3268.	7.9	356
47	Power Electronic Traction Transformer: Efficiency Improvements Under Light-Load Conditions. IEEE Transactions on Power Electronics, 2014, 29, 3971-3981.	7.9	88
48	Modular medium voltage drive for demanding applications. , 2014, , .		5
49	Characterization of a 6.5kV IGBT for medium-voltage high-power resonant DC-DC converter. , 2013, , .		11
50	Power Electronic Traction Transformer-Low Voltage Prototype. IEEE Transactions on Power Electronics, 2013, 28, 5522-5534.	7.9	236
51	Power electronic transformer (PET) converter: Design of a 1.2MW demonstrator for traction applications. , 2012, , .		39
52	Advanced EMI input filtering for an industrial power supply with a resonant stage. , 2012, , .		0
53	Power electronic traction transformer technology. , 2012, , .		104
54	Modular DC/DC converter: Comparison of modulation methods. , 2012, , .		24

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55	Power Electronic Transformer Technology for Traction Applications – An Overview. Electronics, 2012, 16, .	0.3	19
56	A versatile DC/DC converter based on modular multilevel converter for energy collection and distribution. , 2011, , .		51
57	Multidimensional Two-Level Multiphase Space Vector PWM Algorithm and Its Comparison With Multifrequency Space Vector PWM Method. IEEE Transactions on Industrial Electronics, 2011, 58, 465-475.	7.9	55
58	Switching Ripple Characteristics of Space Vector PWM Schemes for Five-Phase Two-Level Voltage Source Inverters – Part 2: Current Ripple. IEEE Transactions on Industrial Electronics, 2011, 58, 2799-2808.	7.9	62
59	Switching Ripple Characteristics of Space Vector PWM Schemes for Five-Phase Two-Level Voltage Source Inverters – Part 1: Flux Harmonic Distortion Factors. IEEE Transactions on Industrial Electronics, 2011, 58, 2789-2798.	7.9	73
60	Harmonic distortion factor of space vector PWM for a five-phase inverter. , 2010, , .		2
61	A four-motor drive supplied from a triple three-phase voltage source inverter. , 2010, , .		5
62	Current ripple in inverter-fed five-phase drives with space-vector PWM. , 2010, , .		2
63	Dc bus utilisation in multiphase VSI supplied drives with a composite stator phase number. , 2010, , .		16
64	Analysis of Output Current-Ripple RMS in Multiphase Drives Using Polygon Approach. IEEE Transactions on Power Electronics, 2010, 25, 1838-1849.	7.9	58
65	DC-bus utilisation in series-connected multi-phase machines supplied from a VSI with a composite phase number. , 2010, , .		3
66	Harmonic losses of multi-phase PWM inverter-fed drives. , 2009, , .		3
67	A Modified Sector Based Space Vector PWM Technique for Five-Phase Drives. IEEJ Transactions on Electrical and Electronic Engineering, 2009, 4, 453-464.	1.4	5
68	A Synchronous Current Control Scheme for Multiphase Induction Motor Drives. IEEE Transactions on Energy Conversion, 2009, 24, 860-868.	5.2	128
69	The Impact of inverter dead time on performance of n-motor drives supplied from (2n+1)-leg VSI. , 2009, , .		3
70	Analysis of Output Current Ripple rms in Multiphase Drives Using Space Vector Approach. IEEE Transactions on Power Electronics, 2009, 24, 1926-1938.	7.9	104
71	A General PWM Method for a $(2n + 1)$ -Leg Inverter Supplying n Three-Phase Machines. IEEE Transactions on Industrial Electronics, 2009, 56, 4107-4118.	7.9	59
72	Five-leg inverter PWM technique for reduced switch count two-motor constant power applications. IET Electric Power Applications, 2008, 2, 275-287.	1.8	123

#	ARTICLE	IF	CITATIONS
73	An improved PWM method for a five-leg inverter supplying two three-phase motors. , 2008, , .		22
74	A performance comparison of PWM techniques for five-leg VSIs supplying two-motor drives. , 2008, , .		35
75	A Space Vector PWM Scheme for Multifrequency Output Voltage Generation With Multiphase Voltage-Source Inverters. IEEE Transactions on Industrial Electronics, 2008, 55, 1943-1955.	7.9	106
76	General Modulation Strategy for Seven-Phase Inverters With Independent Control of Multiple Voltage Space Vectors. IEEE Transactions on Industrial Electronics, 2008, 55, 1921-1932.	7.9	69
77	Analytical Determination of DC-Bus Utilization Limits in Multiphase VSI Supplied AC Drives. IEEE Transactions on Energy Conversion, 2008, 23, 433-443.	5.2	106
78	Current control issues in rotor flux oriented multiphase induction motor drives. , 2008, , .		1
79	A two-motor centre-driven winder drive with a reduced switch count. , 2008, , .		10
80	A PWM method for seven-leg inverters supplying three three-phase motors. Power Electronics Specialist Conference (PESC), IEEE, 2008, , .	0.0	4
81	Experimental performance evaluation of a five-phase parallel-connected two-motor drive. , 2008, , .		8
82	A Novel Five-leg Inverter PWM Technique for Two-Motor Centre-Driven Winders. , 2007, , .		6
83	A Five-Phase Two-Motor Centre-Driven Winder with Series-Connected Motors. , 2007, , .		2
84	Space Vector PWM for Nine-Phase VSI with Sinusoidal Output Voltage Generation: Analysis and Implementation. , 2007, , .		16
85	A two-motor centre-driven winder drive fed by a five-leg voltage source inverter. , 2007, , .		14
86	Continuous Carrier-Based vs. Space Vector PWM for Five-Phase VSI. , 2007, , .		28
87	Continuous PWM Techniques for Sinusoidal Voltage Generation with Seven-Phase Voltage Source Inverters. , 2007, , .		32