

Johan Driesen

List of Publications by Year in descending order

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313
papers

13,770
citations

50276

46
h-index

29157

104
g-index

315
all docs

315
docs citations

315
times ranked

10406
citing authors

#	ARTICLE	IF	CITATIONS
1	The Impact of Charging Plug-In Hybrid Electric Vehicles on a Residential Distribution Grid. IEEE Transactions on Power Systems, 2010, 25, 371-380.	6.5	2,213
2	A Voltage and Frequency Droop Control Method for Parallel Inverters. IEEE Transactions on Power Electronics, 2007, 22, 1107-1115.	7.9	1,404
3	Distributed generation: definition, benefits and issues. Energy Policy, 2005, 33, 787-798.	8.8	1,227
4	Virtual synchronous generators. , 2008, , .		530
5	The impact of vehicle-to-grid on the distribution grid. Electric Power Systems Research, 2011, 81, 185-192.	3.6	348
6	Optimal ZVS Modulation of Single-Phase Single-Stage Bidirectional DAB AC-DC Converters. IEEE Transactions on Power Electronics, 2014, 29, 3954-3970.	7.9	340
7	Multiobjective Battery Storage to Improve PV Integration in Residential Distribution Grids. IEEE Transactions on Sustainable Energy, 2013, 4, 182-191.	8.8	313
8	Model-based generation of low distortion currents in grid-coupled PWM-inverters using an LCL output filter. IEEE Transactions on Power Electronics, 2006, 21, 1032-1040.	7.9	265
9	Coordinated charging of multiple plug-in hybrid electric vehicles in residential distribution grids. , 2009, , .		245
10	Design for distributed energy resources. IEEE Power and Energy Magazine, 2008, 6, 30-40.	1.6	227
11	Combined Central and Local Active and Reactive Power Control of PV Inverters. IEEE Transactions on Sustainable Energy, 2014, 5, 776-784.	8.8	212
12	Predictive Direct Torque Control for Flux and Torque Ripple Reduction. IEEE Transactions on Industrial Electronics, 2010, 57, 404-412.	7.9	190
13	Effect of soiling on photovoltaic modules. Solar Energy, 2013, 96, 283-291.	6.1	180
14	Assessing electrical bottlenecks at feeder level for residential net zero-energy buildings by integrated system simulation. Applied Energy, 2012, 96, 74-83.	10.1	171
15	Load Balancing With EV Chargers and PV Inverters in Unbalanced Distribution Grids. IEEE Transactions on Sustainable Energy, 2015, 6, 635-643.	8.8	165
16	Electric Vehicle Charging in an Office Building Microgrid With Distributed Energy Resources. IEEE Transactions on Sustainable Energy, 2014, 5, 1389-1396.	8.8	143
17	Multiobjective battery storage to improve PV integration in residential distribution grids. , 2013, , .		140
18	Impact of Electric Vehicle On-Board Single-Phase Charging Strategies on a Flemish Residential Grid. IEEE Transactions on Smart Grid, 2014, 5, 1815-1822.	9.0	115

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19	Control of Microgrids. IEEE Power Engineering Society General Meeting, 2007, , .	0.0	113
20	Optimal Control of Traction Motor Drives Under Electrothermal Constraints. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2014, 2, 249-263.	5.4	112
21	A voltage and frequency droop control method for parallel inverters. , 0, , .		107
22	Optimal Local Reactive Power Control by PV Inverters. IEEE Transactions on Sustainable Energy, 2016, 7, 1624-1633.	8.8	96
23	Harmonic and reactive power compensation as ancillary services in inverter-based distributed generation. IET Generation, Transmission and Distribution, 2007, 1, 432.	2.5	95
24	A critical review of power quality standards and definitions applied to DC microgrids. Applied Energy, 2018, 229, 281-288.	10.1	94
25	The Feasibility of Small-Scale Residential DC Distribution Systems. Industrial Electronics Society (IECON), Annual Conference of IEEE, 2006, , .	0.0	91
26	PMSM Drive Current and Voltage Limiting as a Constraint Optimal Control Problem. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2015, 3, 326-338.	5.4	90
27	A Probabilistic Formulation of Load Margins in Power Systems With Stochastic Generation. IEEE Transactions on Power Systems, 2009, 24, 951-958.	6.5	89
28	DSP Implementation of Power Measurements According to the IEEE Trial-Use Standard 1459. IEEE Transactions on Instrumentation and Measurement, 2004, 53, 1086-1092.	4.7	85
29	Multi-objective planning framework for stochastic and controllable distributed energy resources. IET Renewable Power Generation, 2009, 3, 227.	3.1	83
30	Assessment of Voltage Sag Indices Based on Scaling and Wavelet Coefficient Energy Analysis. IEEE Transactions on Power Delivery, 2013, 28, 336-346.	4.3	83
31	A Fast Voltage Clamp Circuit for the Accurate Measurement of the Dynamic ON-Resistance of Power Transistors. IEEE Transactions on Industrial Electronics, 2015, 62, 1241-1250.	7.9	80
32	Primary and Secondary Frequency Support by a Multi-Agent Demand Control System. IEEE Transactions on Power Systems, 2015, 30, 1394-1404.	6.5	78
33	An overview of large-scale stationary electricity storage plants in Europe: Current status and new developments. Renewable and Sustainable Energy Reviews, 2015, 52, 1212-1227.	16.4	75
34	Design and Operation of a Phase-Locked Loop with Kalman Estimator-Based Filter for Single-Phase Applications. Industrial Electronics Society (IECON), Annual Conference of IEEE, 2006, , .	0.0	74
35	Robust planning methodology for integration of stochastic generators in distribution grids. IET Renewable Power Generation, 2007, 1, 25.	3.1	69
36	Gigawatt-hour scale savings on a budget of zero: Deep reinforcement learning based optimal control of hot water systems. Energy, 2018, 144, 159-168.	8.8	69

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37	Power Processing Circuits for Piezoelectric Vibration-Based Energy Harvesters. IEEE Transactions on Industrial Electronics, 2010, 57, 4170-4177.	7.9	68
38	Multiagent Charging of Electric Vehicles Respecting Distribution Transformer Loading and Voltage Limits. IEEE Transactions on Smart Grid, 2014, 5, 2857-2867.	9.0	67
39	Apartment Building Electricity System Impact of Operational Electric Vehicle Charging Strategies. IEEE Transactions on Sustainable Energy, 2014, 5, 264-272.	8.8	67
40	Analytical Switching Loss Model for Superjunction MOSFET With Capacitive Nonlinearities and Displacement Currents for DC-DC Power Converters. IEEE Transactions on Power Electronics, 2016, 31, 2485-2495.	7.9	65
41	Reactive power support in residential LV distribution grids through electric vehicle charging. Sustainable Energy, Grids and Networks, 2015, 3, 24-35.	3.9	64
42	Protection Issues in Microgrids with Multiple Distributed Generation Units. , 2007, , .		62
43	Impact of wind power on sizing and allocation of reserve requirements. IET Renewable Power Generation, 2013, 7, 1-9.	3.1	59
44	Multi-agent reinforcement learning for modeling and control of thermostatically controlled loads. Applied Energy, 2019, 238, 1022-1035.	10.1	58
45	Reducing losses in distribution transformers. IEEE Transactions on Power Delivery, 2003, 18, 821-826.	4.3	57
46	Design Criteria for Electric Vehicle Fast Charge Infrastructure Based on Flemish Mobility Behavior. IEEE Transactions on Smart Grid, 2014, 5, 320-327.	9.0	57
47	The classification of coupled field problems. IEEE Transactions on Magnetics, 1999, 35, 1618-1621.	2.1	53
48	Switching control strategy for full ZVS soft-switching operation of a Dual Active Bridge AC/DC converter. , 2012, , .		53
49	Single-institution experience with inter-hospital extracorporeal membrane oxygenation transport: A descriptive study*. Pediatric Critical Care Medicine, 2009, 11, 1.	0.5	51
50	Gallium-Nitride Semiconductor Technology and Its Practical Design Challenges in Power Electronics Applications: An Overview. Energies, 2019, 12, 2663.	3.1	50
51	A 96% Efficient High-Frequency DC-DC Converter Using E-Mode GaN DHFETs on Si. IEEE Electron Device Letters, 2011, 32, 1370-1372.	3.9	49
52	Voltage Sensitivity Analysis of a Laboratory Distribution Grid With Incomplete Data. IEEE Transactions on Smart Grid, 2015, 6, 1271-1280.	9.0	49
53	Wavelet-based power quantification approaches. IEEE Transactions on Instrumentation and Measurement, 2003, 52, 1232-1238.	4.7	46
54	Towards data-driven energy communities: A review of open-source datasets, models and tools. Renewable and Sustainable Energy Reviews, 2021, 148, 111290.	16.4	45

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55	Stochastic analysis of the impact of plug-in hybrid electric vehicles on the distribution grid. , 2009, , .		44
56	Trading Energy Yield for Frequency Regulation: Optimal Control of Kinetic Energy in Wind Farms. IEEE Transactions on Power Systems, 2015, 30, 2469-2478.	6.5	42
57	Design and Application of a Field Mill as a High-Voltage DC Meter. IEEE Transactions on Instrumentation and Measurement, 2007, 56, 1459-1464.	4.7	41
58	Impact-analysis of the charging of plug-in hybrid vehicles on the production park in Belgium. , 2010, , .		40
59	The effect of dust deposition on photovoltaic modules. , 2012, , .		40
60	LV distribution network feeders in Belgium and power quality issues due to increasing PV penetration levels. , 2012, , .		39
61	Charge-based ZVS soft switching analysis of a single-stage dual active bridge AC-DC converter. , 2013, , .		39
62	Finite-element modeling of thermal contact resistances and insulation layers in electrical machines. IEEE Transactions on Industry Applications, 2001, 37, 15-20.	4.9	36
63	Layout and performance of the power electronic converter platform for the VSYNC project. , 2009, , .		35
64	Direct Power Control of Series Converter of Unified Power-Flow Controller With Three-Level Neutral Point Clamped Converter. IEEE Transactions on Power Delivery, 2012, 27, 1772-1782.	4.3	35
65	Dynamic DC-link voltage adaptation for thermal management of traction drives. , 2013, , .		35
66	MV and LV Residential Grid Impact of Combined Slow and Fast Charging of Electric Vehicles. Energies, 2015, 8, 1760-1783.	3.1	35
67	Fuse-Based Short-Circuit Protection of Converter Controlled Low-Voltage DC Grids. IEEE Transactions on Power Electronics, 2020, 35, 11694-11706.	7.9	35
68	Comparative evaluation of soft-switching, bidirectional, isolated AC/DC converter topologies. , 2012, , .		34
69	The development of power quality markets. , 0, , .		33
70	Grid Impact of Voltage Control and Reactive Power Support by Wind Turbines Equipped With Direct-Drive Synchronous Machines. IEEE Transactions on Sustainable Energy, 2012, 3, 890-898.	8.8	33
71	Spatial and temporal analysis of wind effects on PV modules: Consequences for electrical power evaluation. Solar Energy, 2017, 147, 292-299.	6.1	33
72	Comparative analysis of coordination strategies for electric vehicles. , 2011, , .		32

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73	Voltage droop charging of electric vehicles in a residential distribution feeder. , 2012, , .		30
74	A case study of coordinated electric vehicle charging for peak shaving on a low voltage grid. , 2012, , .		30
75	Revision of reserve requirements following wind power integration in island power systems. Renewable Energy, 2013, 50, 268-279.	8.9	30
76	Grid Impact Indicators for Active Building Simulations. IEEE Transactions on Sustainable Energy, 2015, 6, 43-50.	8.8	30
77	Reconfigurable emulator for photovoltaic modules under static partial shading conditions. Solar Energy, 2017, 141, 256-265.	6.1	30
78	Electricity load-shedding in Pakistan: Unintended consequences, opportunities and policy recommendations. Energy Policy, 2019, 128, 411-417.	8.8	30
79	Parameter Sensitivity and Measurement Uncertainty Propagation in Torque-Estimation Algorithms for Induction Machines. IEEE Transactions on Instrumentation and Measurement, 2008, 57, 2727-2732.	4.7	29
80	Switching control strategy to extend the ZVS operating range of a Dual Active Bridge AC/DC converter. , 2011, , .		29
81	Technical assessment of centralized and localized voltage control strategies in low voltage networks. Sustainable Energy, Grids and Networks, 2016, 8, 85-97.	3.9	29
82	Directional, High-Impedance Fault Detection in Isolated Neutral Distribution Grids. IEEE Transactions on Power Delivery, 2018, 33, 2474-2483.	4.3	29
83	State estimation in distribution grids. , 2008, , .		28
84	Spatial and temporal analysis of wind effects on PV module temperature and performance. Sustainable Energy Technologies and Assessments, 2015, 11, 36-41.	2.7	28
85	A high-efficiency, high-frequency boost converter using enhancement mode GaN DHFETs on silicon. , 2010, , .		27
86	Analysing time-varying power system harmonics using wavelet transform. , 0, , .		26
87	Standby Power Consumption in Belgium. , 2007, , .		26
88	Integration of energy storage in distribution grids. , 2010, , .		26
89	Dynamic operating reserve strategies for wind power integration. IET Renewable Power Generation, 2014, 8, 598-610.	3.1	26
90	Normalised efficiency of photovoltaic systems: Going beyond the performance ratio. Solar Energy, 2017, 157, 408-418.	6.1	26

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91	The registration of harmonic power by analog and digital power meters. IEEE Transactions on Instrumentation and Measurement, 1998, 47, 195-198.	4.7	25
92	Choosing the Correct Mitigation Method Against Voltage Dips and Interruptions: A Customer-Based Approach. IEEE Transactions on Power Delivery, 2007, 22, 331-339.	4.3	25
93	Power smoothing in large wind farms using optimal control of rotating kinetic energy reserves. Wind Energy, 2015, 18, 1777-1791.	4.2	25
94	Review on Building-Integrated Photovoltaics Electrical System Requirements and Module-Integrated Converter Recommendations. Energies, 2019, 12, 1532.	3.1	25
95	Conversion Efficiency of the Buck Three-Level DC-DC Converter in Unbalanced Bipolar DC Microgrids. IEEE Transactions on Power Electronics, 2020, 35, 9306-9319.	7.9	24
96	Methodologies for coupled transient electromagnetic-thermal finite-element modeling of electrical energy transducers. IEEE Transactions on Industry Applications, 2002, 38, 1244-1250.	4.9	23
97	Parameter identification of unknown radial grids for theft detection. , 2012, , .		23
98	Optimization control scheme utilizing small-scale distributed generators and OLTC distribution transformers. Sustainable Energy, Grids and Networks, 2016, 8, 74-84.	3.9	23
99	Power measurement using the wavelet transform of analytic signals. , 0, , .		22
100	Possible applications of plug-in hybrid electric ships. , 2009, , .		22
101	Reducing grid losses and voltage unbalance with PV inverters. , 2014, , .		22
102	Effect of the Electrical Energy Conversion on Optimal Cycles for Pumping Airborne Wind Energy. IEEE Transactions on Sustainable Energy, 2015, 6, 2-10.	8.8	22
103	Coupled thermo-magnetic simulation of a foil-winding transformer connected to a nonlinear load. IEEE Transactions on Magnetics, 2000, 36, 1381-1385.	2.1	21
104	Transmission line effects on motor feed cables: terminator design and analysis in the Laplace-domain. , 0, , .		21
105	Congenital combined deficiency of coagulation factors VII and XI different genetic mechanisms. Haemophilia, 2015, 21, 386-391.	2.1	21
106	Embedded BIPV module-level DC/DC converters: Classification of optimal ratings. Renewable Energy, 2020, 146, 880-889.	8.9	21
107	Experimental study to reduce the distribution-transformers stray losses using electromagnetic shields. Electric Power Systems Research, 2002, 63, 1-7.	3.6	20
108	Impact of current ripple on Li-ion battery ageing. , 2013, , .		20

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109	Ideas for Tomorrow: New Tools for Integrated Building and District Modeling. IEEE Power and Energy Magazine, 2013, 11, 75-81.	1.6	20
110	A Quantitative Method to Determine ICT Delay Requirements for Wide-Area Power System Damping Controllers. IEEE Transactions on Power Systems, 2015, 30, 2023-2030.	6.5	20
111	Micropower generation with microgasturbines: A challenge. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2007, 221, 489-500.	2.1	19
112	Opportunities for active DER management in deferral of distribution system reinforcements. , 2009, , .		19
113	Impact of wind turbines equipped with doubly-fed induction generators on distance relaying. , 2010, , .		19
114	Modeling and validation of a DC/DC power converter for building energy simulations: Application to BIPV systems. Applied Energy, 2019, 240, 646-665.	10.1	19
115	Iso efficiency contours as a concept to characterize variable speed drive efficiency. , 2010, , .		18
116	Grid impact indicators for active building simulation. , 2011, , .		18
117	Active participation of wind power in operating reserves. IET Renewable Power Generation, 2015, 9, 566-575.	3.1	18
118	Frequency support by wind power plants in isolated grids with varying generation mix. , 2012, , .		17
119	On the Numerical Accuracy of Electromagnetic Transient Simulation With Power Electronics. IEEE Transactions on Power Delivery, 2018, 33, 2492-2501.	4.3	17
120	Study on a cascaded DC-DC converter for use in building-integrated photovoltaics. , 2018, , .		17
121	Operation of the full-bridge three-level DC-DC converter in unbalanced bipolar DC microgrids. IET Power Electronics, 2019, 12, 2256-2265.	2.1	17
122	DSP and FPGA based platform for rapid prototyping of power electronic converters and its application to a sampled-data three-phase dual-band hysteresis current controller. , 0, , .		16
123	A Three-Phase Voltage and Frequency Droop Control Scheme for Parallel Inverters. , 2007, , .		16
124	Basic sensitivity analysis of conversion losses in a DC microgrid. , 2012, , .		16
125	Thermal management in traction applications as a constraint optimal control problem. , 2012, , .		16
126	Electrical system architectures for building-integrated photovoltaics: A comparative analysis using a modelling framework in Modelica. Applied Energy, 2020, 261, 114247.	10.1	16

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127	Electricity supply, irregularities, and the prospect for solar energy and energy sustainability in Sub-Saharan Africa. <i>Journal of Renewable and Sustainable Energy</i> , 2010, 2, .	2.0	15
128	Solar Energy Resource Assessment of the Geba Catchment, Northern Ethiopia. <i>Energy Procedia</i> , 2014, 57, 1266-1274.	1.8	15
129	A Robust Semantic Overlay Network for Microgrid Control Applications. <i>Lecture Notes in Computer Science</i> , 2008, , 101-123.	1.3	15
130	Time-frequency analysis in power measurement using complex wavelets. , 0, , .		14
131	Model-based generation of low distortion currents in grid-coupled PWM-inverters using an LCL output filter. , 0, , .		14
132	Power processing circuits for vibration-based energy harvesters. <i>Power Electronics Specialist Conference (PESC), IEEE</i> , 2008, , .	0.0	14
133	Three-Phase Observer-based Low Distortion Grid Current Controller Using an LCL Output Filter. , 0, , .		13
134	Comparison of RBFN based STATCOM, SSSC and UPFC Controllers for Transient Stability improvement. , 2006, , .		13
135	A Long-Term Multi-objective Planning Tool for Distributed Energy Resources. , 2006, , .		13
136	Transmission system operation concerns with high penetration level of distributed generation. , 2007, , .		13
137	Balanced and unbalanced inverter strategies in battery storage systems for low-voltage grid support. <i>IET Generation, Transmission and Distribution</i> , 2015, 9, 929-936.	2.5	13
138	Optimal Placement and Sizing of Active In-Line Voltage Regulators in Flemish LV Distribution Grids. <i>IEEE Transactions on Industry Applications</i> , 2016, 52, 4577-4584.	4.9	13
139	A Family of DC-DC Converters With High Step-Down Voltage Capability Based on the Valley-Fill Switched Capacitor Principle. <i>IEEE Transactions on Industrial Electronics</i> , 2021, 68, 5810-5820.	7.9	13
140	Development of a Flickermeter for Grid-Connected Wind Turbines Using a DSP-Based Prototyping System. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2006, 55, 550-556.	4.7	12
141	Assessment of imbalance settlement exemptions for offshore wind power generation in Belgium. <i>Energy Policy</i> , 2011, 39, 1486-1494.	8.8	12
142	Gain scheduling control of a bidirectional dc-dc converter with large dead-time. <i>IET Power Electronics</i> , 2014, 7, 480-488.	2.1	12
143	Locational Pricing to Mitigate Voltage Problems Caused by High PV Penetration. <i>Energies</i> , 2015, 8, 4607-4628.	3.1	12
144	A stepwise methodology for the design and evaluation of protection strategies in LVDC microgrids. <i>Applied Energy</i> , 2022, 310, 118420.	10.1	12

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145	Exponential parameters measurement using a modified Prony method. , 0, , .		11
146	Synchronization and efficiency analysis of a direct-drive multi-motor application. , 2012, , .		11
147	Optimal real-time pricing for unbalanced distribution grids with network constraints. , 2013, , .		11
148	Numerical observability analysis of distribution systems. , 2010, , .		10
149	Circuits and systems engineering education through interdisciplinary team-based design projects. , 2011, , .		10
150	Utilizing local energy storage for congestion management and investment deferral in distribution networks. , 2016, , .		10
151	Comparative Analysis of Reconfiguration Assisted Management of Battery Storage Systems. , 2019, , .		10
152	Finite element modelling of thermal contact resistances and insulation layers in electrical machines. , 0, , .		9
153	The computation of the effects of harmonic currents on transformers using a coupled electromagnetic-thermal FEM approach. , 0, , .		9
154	Computation algorithms for efficient coupled electromagnetic-thermal device simulation. IET Science, Measurement and Technology, 2002, 149, 67-72.	0.7	9
155	Implementation and comparison of power definitions using a DSP based prototyping system. , 0, , .		9
156	Using Distributed Generation to Support and Provide Ancillary Services for the Power System. , 2007, , .		9
157	Linking nanotechnology to gigawatts: Creating building blocks for smart PV modules. Progress in Photovoltaics: Research and Applications, 2011, 19, 772-780.	8.1	9
158	Phase switching and phase balancing to cope with a massive photovoltaic penetration. , 2013, , .		9
159	Coordinated voltage control scheme for Flemish LV distribution grids utilizing OLTC transformers and D-STATCOM's. , 2014, , .		9
160	LV distribution network voltage control mechanism: Analysis of large-scale field-test. Sustainable Energy, Grids and Networks, 2016, 6, 7-13.	3.9	9
161	Quasi-Two-Level Converter for overvoltage mitigation in medium voltage drives. , 2018, , .		9
162	Impact of photovoltaic technology and feeder voltage level on the efficiency of facade building-integrated photovoltaic systems. Applied Energy, 2020, 269, 115039.	10.1	9

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163	Adaptive relaxation algorithms for thermo-electromagnetic FEM problems. IEEE Transactions on Magnetics, 1999, 35, 1622-1625.	2.1	8
164	Practical method to determine additional load losses due to harmonic currents in transformers with wire and foil windings. , 0, , .		8
165	Evaluation of control algorithms for shunt active filters under unbalanced and nonsinusoidal conditions. , 0, , .		8
166	Design of inverse controller with cross-coupling suppression for UPFC series converter. , 2007, , .		8
167	Applying Markov chains for the determination of the capacity credit of wind power. , 2009, , .		8
168	Fault-tolerant topology of a grid-connected PV inverter coupled by a Scott transformer. , 2012, , .		8
169	A novel voltage clamp circuit for the measurement of transistor dynamic on-resistance. , 2012, , .		8
170	Fast robust gate-drivers with easily adjustable voltage ranges for driving normally-on wide-bandgap power transistors. , 2010, , .		7
171	Power electronics for electric vehicles: A student laboratory platform. , 2012, , .		7
172	LS-SVM-based on-load tap changer control for distribution networks with rooftop PV's. , 2013, , .		7
173	Optimal frequency support by dynamic demand. , 2013, , .		7
174	Modeling the dynamics of a DC distribution grid integrated of renewable energy sources. , 2014, , .		7
175	Analysis of three-level converters with voltage balancing capability in bipolar DC distribution networks. , 2017, , .		7
176	Bayesian inference based MPPT for dynamic irradiance conditions. Solar Energy, 2018, 174, 1153-1162.	6.1	7
177	A mission profile-based reliability analysis framework for photovoltaic DC-DC converters. Microelectronics Reliability, 2019, 100-101, 113383.	1.7	7
178	Methodological guidelines for the use of analytical and numerical models in a design process of an electromagnetic device. IEEE Transactions on Magnetics, 1998, 34, 3411-3414.	2.1	6
179	Drive DC bus voltage control during power interruptions using kinetic energy recovery. , 0, , .		6
180	Newton and quasi-Newton algorithms for non-linear electromagnetic-thermal coupled problems. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2002, 21, 116-125.	0.9	6

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181	The optimal selection of mitigation methods against voltage dips and interruptions: a customer-based approach. , 0, , .		6
182	Using dynamic simulation to study the penetration level of distributed energy resources. , 2005, , .		6
183	Energy Scavengers : Modeling and Behavior with Different Load Circuits. , 2007, , .		6
184	Active User Participation in Energy Markets Through Activation of Distributed Energy Resources. IEEE Power Engineering Society General Meeting, 2007, , .	0.0	6
185	Overview and Comparisons of Existing DG Interconnection Standards and Technical Guidelines. , 2007, , .		6
186	Balancing management mechanisms for intermittent power sources — A case study for wind power in Belgium. , 2009, , .		6
187	Effectiveness of TCSC controllers using remote input signals for transient stability enhancement. , 2011, , .		6
188	Optimal analytic LCL filter design for grid-connected voltage-source converter. , 2013, , .		6
189	Reliability Comparison of a DC-DC Converter Placed in Building-Integrated Photovoltaic Module Frames. , 2018, , .		6
190	Novel Step-Down DCâ€“DC Converters Based on the Inductorâ€“Diode and Inductorâ€“Capacitorâ€“Diode Structures in a Two-Stage Buck Converter. Energies, 2019, 12, 1131.	3.1	6
191	The Sensitivity of an Electro-Thermal Photovoltaic DCâ€“DC Converter Model to the Temperature Dependence of the Electrical Variables for Reliability Analyses. Energies, 2020, 13, 2865.	3.1	6
192	Coupled magneto-thermal simulation of thermally anisotropic electrical machines. , 0, , .		5
193	Performance of Real-Time Power Electronic Converter Control Algorithms Implemented on a Personal Computer. , 2006, , .		5
194	Design and Application of a Field Mill as a High-Voltage DC Meter. , 2006, , .		5
195	Profits of power-quality improvement by residential distributed generation. , 2007, , .		5
196	Prediction-based ripple reduction in Direct Torque Control of an induction machine. , 2008, , .		5
197	Asymmetric reserve power delivered by large wind power plants. , 2010, , .		5
198	Analysis of the optimal battery sizing for plug-in hybrid and battery electric vehicles on the power consumption and V2G availability. , 2011, , .		5

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199	Standardization of conductive AC charging infrastructure for electric vehicles. , 2013, , .		5
200	Electric and magnetic fields of two infinitely long parallel cylindrical conductors carrying a DC current. EPJ Applied Physics, 2013, 64, 24515.	0.7	5
201	Power electronics for potential distribution dc power evolution: A review. , 2016, , .		5
202	Experimental Comparison of the Efficiency, Power Density and Thermal Performance of Two BIPV Converter Prototypes. , 2018, , .		5
203	Challenges for Wireless Power Transfer in Building-Integrated Photovoltaics. , 2018, , .		5
204	Modified step-down series capacitor buck converter with insertion of a Valley-Fill structure. IET Power Electronics, 2019, 12, 3306-3314.	2.1	5
205	Practical Considerations for Designing Reliable DC/DC Converters, Applied to a BIPV Case. Energies, 2020, 13, 834.	3.1	5
206	Object oriented storage of material data for coupled problems. IEEE Transactions on Magnetics, 1998, 34, 3415-3418.	2.1	4
207	Electric and magnetic FEM modeling strategies for micro-inductors. IEEE Transactions on Magnetics, 1999, 35, 3577-3579.	2.1	4
208	The simulation of magnetic problems with combined fast and slow dynamics using a transient time-harmonic method. EPJ Applied Physics, 2001, 14, 165-169.	0.7	4
209	The influence on harmonic propagation of the resistive shunt harmonic impedance location along a distribution feeder and the influence of distributed capacitors. , 0, , .		4
210	A versatile power source for HID Lamps. , 0, , .		4
211	Parameter Sensitivity and Measurement Error Propagation in Torque Estimation Algorithms for Induction Machines. , 2006, , .		4
212	Stochastic, Computational and Convergence Aspects of Distribution Power Flow Algorithms. , 2007, , .		4
213	Design of an intra-module DC-DC converter for PV application: Design considerations and prototype. , 2014, , .		4
214	Variable speed genset with full rated power converter using readily available industrial products. , 2014, , .		4
215	Dynamic behavior of DC microgrids under load types and controlled-distributed energy resources. , 2015, , .		4
216	Current controller modeling for an interleaved boost with voltage multiplier cells for PV applications. , 2016, , .		4

#	ARTICLE	IF	CITATIONS
217	Predetermined static configurations of a partially shaded photovoltaic module. Progress in Photovoltaics: Research and Applications, 2017, 25, 149-160.	8.1	4
218	Protection of digitally controlled inverter units in rapid prototyping applications. , 0, , .		3
219	Real-Time Implementation and Comparison of Time-Varying Harmonic Measurement Methods. , 2006, , .		3
220	Spatial hyperspectral image classification by prior segmentation. , 2009, , .		3
221	Direct power control for Universal Power Flow Controller series converter. , 2010, , .		3
222	Transient stability enhancement by TCSC controllers using remote input signals. , 2010, , .		3
223	Electric vehicle impact assessment study based on data-logged vehicle and driver behavior. , 2011, , .		3
224	Event-driven simulation of power electronics in the complementarity systems framework. , 2012, , .		3
225	An Electromagnetic Circuit Simulator for Power Electronics. IEEE Transactions on Magnetics, 2012, 48, 799-802.	2.1	3
226	Multi-objective design of a close-coupled inductor for a three-phase interleaved 140kW DC-DC converter. , 2013, , .		3
227	Development of an open-source smart energy house for K-12 education. , 2013, , .		3
228	Voltage regulation strategies for flemish LV distribution grids utilizing single-phase PV inverters. , 2015, , .		3
229	Lumen: Educating youngsters about energy, using Minecraft. , 2016, , .		3
230	Comparative study of current redistributor's topologies for mitigating unbalanced currents in bipolar DC microgrids. , 2017, , .		3
231	Comparison of GaN Enhancement Mode Transistor Performance With Integrated and External Driver. , 2022, 2, 100004.		3
232	Simulation of large numbers of non-linear loads in distribution systems. , 0, , .		2
233	Development of a flickermeter for grid connected wind turbines using a DSP based prototyping system. , 0, , .		2
234	Measurement Techniques for Magnetic Characterization of Fe-Si Alloys. Conference Record - IEEE Instrumentation and Measurement Technology Conference, 2006, , .	0.0	2

#	ARTICLE	IF	CITATIONS
235	High Frequency Analysis of a Switching Mode Power Supply. , 0, , .		2
236	Wind power in the European Union: grid connection and regulatory issues. , 2006, , .		2
237	Power quality in transmission grids: Guaranteed standards for power plants in France and the United Kingdom. , 2008, , .		2
238	A Hybrid Electric Kart with Energy Flow Management as a Student Project. , 2008, , .		2
239	Comparison of three-level torque hysteresis controllers for direct torque control. , 2009, , .		2
240	Modelling earthing systems and cables with moment methods. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2009, 28, 989-1004.	0.9	2
241	Adaptive control scheme for a practical bidirectional DC-DC converter with a 80 kHz switching and a 10 kHz sampling frequency. , 2010, , .		2
242	Electrification of trucks and buses in an urban environment through continuous charging. , 2012, , .		2
243	Reducing power gradients in large-scale wind farms by optimal active power control. , 2013, , .		2
244	Component improvements in the electrification of passenger vehicles drivetrains. , 2013, , .		2
245	Constrained PV penetration level in LV distribution networks based on the voltage operational margin. , 2013, , .		2
246	Real-time control for services provided by battery energy storage systems in a residential low voltage grid with a large amount of PV. , 2013, , .		2
247	Implementation of a digital directional Fault Passage Indicator. , 2013, , .		2
248	Distributed residential load control of binary behaving loads. , 2013, , .		2
249	MatLVDC: A new open source Matlab toolbox to simulate DC networks including power electronic converters and distributed energy resources. , 2015, , .		2
250	Dynamic Thermal Modeling of Voltage Divider Capacitive Coupling. IEEE Transactions on Power Delivery, 2016, 31, 1015-1025.	4.3	2
251	Application of a 100A normally-on GaN-based device in a 2kW/400V input half-bridge non-isolated DC-DC configuration. , 2017, , .		2
252	Modelica Library for Building and Low-Voltage Electrical AC and DC Grid Modeling. , 2014, , .		2

#	ARTICLE	IF	CITATIONS
253	Case-study of an Educational Engineering Project: a Series Hybrid Electric Kart. J3eA, 2009, 8, 1026.	0.0	2
254	Design of a Bipolar DC Grid Fault Emulator. , 2020, , .		2
255	Higher order material spaces to represent non-linear material characteristics and source terms in FEM-computations. IEEE Transactions on Magnetics, 2001, 37, 3336-3339.	2.1	1
256	Methodologies for coupled transient electromagnetic-thermal finite element modeling of electrical energy transducers. , 0, , .		1
257	Power line communication front-ends based on ADSL technology. , 0, , .		1
258	Unbounded system model allows robust communication infrastructure for power quality measurement and control. , 2003, , .		1
259	Integrated solution for micro power generation. , 2005, , .		1
260	Dynamic UPS Drive Model for Low-Power Applications. Industrial Electronics Society (IECON), Annual Conference of IEEE, 2006, , .	0.0	1
261	Development of a Measuring Device for the Parasitic Inductance of the DC-link Backplane of an Inverter. Conference Record - IEEE Instrumentation and Measurement Technology Conference, 2006, , .	0.0	1
262	High Frequency Analysis of a Switching Mode Power Supply. , 2007, , .		1
263	The Application of Versatile Power Electronic Inverters in Lab-Scale Microgrids. IEEE Power Engineering Society General Meeting, 2007, , .	0.0	1
264	Benefits and Impact of Using Small Generators for Network Support. IEEE Power Engineering Society General Meeting, 2007, , .	0.0	1
265	Algebraic Multigrid for Implicit Rungeâ€Kutta Discretizations of the Eddy Current Problem. IEEE Transactions on Magnetics, 2007, 43, 1265-1268.	2.1	1
266	Influence of power control strategies on the voltage profile in an islanded microgrid. , 2010, , .		1
267	Financial implications of imbalance settlement exemptions for wind power generators. , 2010, , .		1
268	Damping controller design of TCSC based on wide-area monitoring and supplement torque components. , 2012, , .		1
269	Accurately modelling of parasitics in power electronics circuits using an easy RLC-extraction method. , 2012, , .		1
270	Fault-tolerant operation of power converters in PHEVs coupled by a Scott transformer. , 2012, , .		1

#	ARTICLE	IF	CITATIONS
271	Efficiency improvement of a high dynamic BLDC linear motor by multiphase control. , 2013, , .		1
272	Multi-objective optimization of a flash lamp drive. , 2013, , .		1
273	Smoothing turbulence-induced power fluctuations in large wind farms by optimal control of the rotating kinetic energy of the turbines. Journal of Physics: Conference Series, 2014, 524, 012187.	0.4	1
274	Evolution of Depressive Symptomatology and Caregiver Burden in Partners of LVAD Patients. Journal of Heart and Lung Transplantation, 2015, 34, S23-S24.	0.6	1
275	Transient analysis of low voltage DC grids with high penetration of DERs. , 2015, , .		1
276	Accurate second-order interpolation for power electronic circuit simulation. , 2017, , .		1
277	Power electronics as the enabling technology for sustainable energy in the smart city. , 2017, , .		1
278	Design and optimization of a grid connected residential PV-system with Battery Energy Storage System. , 2018, , .		1
279	Economic Study of Battery Profitability in Residential Solar Panel Systems: A Case Study of Belgium. , 2020, , .		1
280	AC Voltage Profile Analysis of Cables and Bus Bars for BIPV DC Feeders. , 2020, , .		1
281	An Overview of Power Conversion Techniques and Topologies for DC-DC Voltage Regulation. , 2020, , .		1
282	Melt pool deformation by magnetic pressure: analytical and experimental approach. Magnetohydrodynamics, 2015, 51, 105-120.	0.3	1
283	Validation of electromagnetic-thermal coupled modelling of levitation melting. , 2008, , .		1
284	Large-Scale Transfer Learning For Data-Driven Modelling Of Hot Water Systems. , 0, , .		1
285	Closure on "reducing losses in distribution transformers". IEEE Transactions on Power Delivery, 2003, 18, 1594-1596.	4.3	0
286	Discussion of "Reducing losses in distribution transformers. IEEE Transactions on Power Delivery, 2003, 18, 1593-1594.	4.3	0
287	Pigs stunning optimisation. , 0, , .		0
288	Design of shunt-connected dynamic voltage restorers. , 0, , .		0

#	ARTICLE	IF	CITATIONS
289	Wavelet based segmentation of multi-component images. , 2005, , .		0
290	Algebraic multigrid for implicit Runge-Kutta discretizations of the eddy current problem. , 0, , .		0
291	Embedded automation for energy applications and its interdependence with the info'structure. , 2006, , .		0
292	Effect of Embedded Induction Generators on Short-Circuit Detection. , 2006, , .		0
293	A variable frequency high-voltage power supply for hot-restrike modelling of HID lamps. , 2007, , .		0
294	Design, construction and control of a quasi-resonant SMPS working at 2 MHz.. , 2008, , .		0
295	Application of an electromagnetic modeling method for railway grounding systems subjected to lightning strikes. , 2008, , .		0
296	Reliability analysis of a torque estimation model. , 2008, , .		0
297	Power quality in transmission grids: Guaranteed standards for consumers in France, UK and the Netherlands. , 2008, , .		0
298	Layered control structure for high-frequency control in drive applications. , 2008, , .		0
299	Introducing smart grids in Flanders: The Linear project. , 2012, , .		0
300	Thermal effects due to environmental variables in photovoltaic cells. , 2012, , .		0
301	Developing engineering-oriented educational workshops within a student branch. , 2013, , .		0
302	A Profile-Based Identification of Standby and Useless Electricity Consumption in Buildings. , 2013, , .		0
303	Assessment of voltage sag indices based on scaling and wavelet coefficient energy analysis. , 2013, , .		0
304	Grid impact of voltage control and reactive power support by wind turbines equipped with direct-drive synchronous machines. , 2013, , .		0
305	Generic circuit partitioning method for efficient simulation of modular multilevel converter topologies. , 2014, , .		0
306	The Tianjin 2014 Symposium on Microgrids: A meeting of the minds for international microgrid experts.. IEEE Electrification Magazine, 2015, 3, 79-85.	1.8	0

#	ARTICLE	IF	CITATIONS
307	Anticoagulation for VAD Patients: Can We Implement an Algorithm for Home Management Safely?. Journal of Heart and Lung Transplantation, 2015, 34, S235.	0.6	0
308	Wide input range high step-up converter for PV application. , 2015, , .		0
309	Comparing an unbalance compensating converter with and without a neutral connection. , 2016, , .		0
310	Opportunities and Restrictions in Digitizing VAD Care. Journal of Heart and Lung Transplantation, 2016, 35, S348.	0.6	0
311	Interdependence and sensitivity of motor parameters in torque estimation algorithms. , 2007, , .		0
312	Grid and Fleet Impact Mapping of EV Charge Opportunities. Advances in Data Mining and Database Management Book Series, 2014, , 364-390.	0.5	0
313	Influence of Driver Integration on GaN Enhancement Mode Transistor Performance. , 2020, , .		0