

Alexis Kwasinski

List of Publications by Year in descending order

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98
papers

3,411
citations

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docs citations

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times ranked

2783
citing authors

#	ARTICLE	IF	CITATIONS
1	Increasing Physical Resiliency of Wireless Networks through Virtual Energy Transfer. , 2022, , .		1
2	Enhancing Distribution Grid Flexibility using Active Power Distribution Node Converter Interfaces. , 2021, , .		0
3	Energy management for microgrids using a reinforcement learning algorithm. , 2021, , .		2
4	Refueling Delay Models in Heterogenous Road Networks for Wireless Communications Base Station Gensets Operating in Extreme Conditions. , 2021, , .		1
5	Modeling of Cyber-Physical Intra-Dependencies in Electric Power Grids and Their Effect on Resilience. , 2020, , .		4
6	Analysis of a Microgrid Availability and Resilience with Distributed Energy Storage Embedded in Active Power Distribution Nodes. , 2020, , .		2
7	Generalised resilience models for power systems and dependent infrastructure during extreme events. IET Smart Grid, 2020, 3, 194-206.	1.5	7
8	Active Power Nodes for Increased Energy Resources Availability in Distribution Networks. , 2020, , .		1
9	Hurricane Maria Effects on Puerto Rico Electric Power Infrastructure. IEEE Power and Energy Technology Systems Journal, 2019, 6, 85-94.	3.5	103
10	Modeling of Distributed Generators Resilience Considering Lifeline Dependencies During Extreme Events. Risk Analysis, 2019, 39, 1997-2011.	1.5	6
11	Energy Management for Microgrids Using a Hierarchical Game-Machine Learning Algorithm. , 2019, , .		3
12	Cell Sites Refueling and Restoration Delays Modeling during Extreme Events. , 2018, , .		2
13	Comparison of Communication Networks Power Resilience during Man-Made and Natural Disasters. , 2018, , .		2
14	Effects of Notable Natural Disasters of 2017 on Information and Communication Networks Infrastructure. , 2018, , .		5
15	Effects of Hurricane Maria on Renewable Energy Systems in Puerto Rico. , 2018, , .		13
16	Adaptive mixed strategy load management in dc microgrids for wireless communications systems. , 2017, , .		3
17	Multi-node power supply resiliency of communication networks during extreme events. , 2017, , .		4
18	A Longitudinal Study of Tohoku Telecommunication Network Three Years after the Great East Japan Earthquake and Tsunami. , 2017, , .		2

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19	Quantitative Model and Metrics of Electrical Grids™ Resilience Evaluated at a Power Distribution Level. <i>Energies</i> , 2016, 9, 93.	1.6	106
20	The role of multimedia source codecs in green cellular networks. , 2016, , .		2
21	Tradeoff between Quality-of-Service and resiliency: A mathematical framework applied to LTE networks. , 2016, , .		3
22	Coordinated Energy Management in Resilient Microgrids for Wireless Communication Networks. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , 2016, 4, 1158-1173.	3.7	19
23	Realistic assessment of building power supply resilience for information and communications technologies systems. , 2016, , .		4
24	Power flow controller for state of charge equalization of embedded storage among different distributed nodes in a communication power system. , 2016, , .		0
25	Modeling of communication systems dependency on electric power during nuclear attacks. , 2016, , .		7
26	Mixed strategy load management strategy for wireless communication network micro grid. , 2016, , .		4
27	Technical cross-fertilization between terrestrial microgrids and ship power systems. <i>Journal of Modern Power Systems and Clean Energy</i> , 2016, 4, 161-179.	3.3	60
28	Comparison of Power and Telecommunications Dependencies and Interdependencies in the 2011 Tohoku and 2010 Maule Earthquakes. <i>Journal of Infrastructure Systems</i> , 2016, 22, .	1.0	28
29	Microgrids for base stations: Renewable energy prediction and battery bank management for effective state of charge control. , 2015, , .		7
30	Numerical evaluation of communication networks resilience with a focus on power supply performance during natural disasters. , 2015, , .		13
31	Integrating cross-layer LTE resources and energy management for increased powering of base stations from renewable energy. , 2015, , .		7
32	Increasing sustainability and resiliency of cellular network infrastructure by harvesting renewable energy. , 2015, 53, 110-116.		32
33	Energy storage sizing for effective primary and secondary control of low-inertia microgrids. , 2015, , .		7
34	Stability characterization of inverter based microgrids considering configuration changes. , 2015, , .		2
35	A Storage Integrated Modular Power Electronic Interface for Higher Power Distribution Availability. <i>IEEE Transactions on Power Electronics</i> , 2015, 30, 2645-2659.	5.4	15
36	Role of energy storage in a microgrid for increased use of photovoltaic systems in wireless communication networks. , 2014, , .		13

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37	Maximum power point tracking for multiple photovoltaic modules using root-finding methods. , 2014, , .		3
38	Decentralized control of a vehicular microgrid with constant power loads. , 2014, , .		11
39	Resource allocation in self-sustainable green wireless networks with combinatorial auction. , 2014, , .		0
40	Field technical surveys: An essential tool for improving critical infrastructure and lifeline systems resiliency to disasters. , 2014, , .		12
41	Traffic management for sustainable LTE networks. , 2014, , .		10
42	Telecommunication Systemsâ€™ Performance: Christchurch Earthquakes. Earthquake Spectra, 2014, 30, 231-252.	1.6	17
43	Operational aspects and power architecture design for a microgrid to increase the use of renewable energy in wireless communication networks. , 2014, , .		14
44	Performance of Electric Power Systems in the 2010â€“2011 Christchurch, New Zealand, Earthquake Sequence. Earthquake Spectra, 2014, 30, 205-230.	1.6	64
45	Consumer-data approach to assess the effect of residential grid-tied photovoltaic systems and electric vehicles on distribution transformers. , 2014, , .		7
46	Decentralized Hierarchical Control of Active Power Distribution Nodes. IEEE Transactions on Energy Conversion, 2014, 29, 934-943.	3.7	25
47	Distribution interface for microgrid operation and expansion with local energy management. , 2014, , .		8
48	Architecture for green mobile network powered from renewable energy in microgrid configuration. , 2013, , .		17
49	Investigation of multiple-input converters bi-directional power flow characteristics. , 2013, , .		3
50	Development of a Markov-Chain-Based Energy Storage Model for Power Supply Availability Assessment of Photovoltaic Generation Plants. IEEE Transactions on Sustainable Energy, 2013, 4, 491-500.	5.9	115
51	Characterization of power system outages caused by hurricanes through localized intensity indices. , 2013, , .		25
52	Digital constant on-time controlled Multiple-input buck and buck-boost converters. , 2013, , .		0
53	Analysis of Soft-Switching Isolated Time-Sharing Multiple-Input Converters for DC Distribution Systems. IEEE Transactions on Power Electronics, 2013, 28, 1783-1794.	5.4	31
54	Effects of high penetration levels of residential photovoltaic generation: Observations from field data. , 2012, , .		9

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55	Availability Evaluation of Micro-Grids for Resistant Power Supply During Natural Disasters. IEEE Transactions on Smart Grid, 2012, 3, 2007-2018.	6.2	144
56	A DC Arc Model for Series Faults in Low Voltage Microgrids. IEEE Transactions on Smart Grid, 2012, 3, 2063-2070.	6.2	147
57	Controller analysis for active distribution nodes in advanced dc power systems. , 2012, , .		9
58	Dynamic Modeling and Operation Strategy for a Microgrid With Wind and Photovoltaic Resources. IEEE Transactions on Smart Grid, 2012, 3, 1867-1876.	6.2	197
59	A Modified-Time-Sharing Switching Technique for Multiple-Input DC-DC Converters. IEEE Transactions on Power Electronics, 2012, 27, 4492-4502.	5.4	62
60	Microgrids availability evaluation using a Markov chain energy storage model: a comparison study in system architectures. , 2012, , .		8
61	Examination of power supply options for communication sites operating in grid-islanded environments. , 2012, , .		5
62	Multiple-input soft-switching converters in renewable energy applications. , 2012, , .		3
63	Analysis of a soft-switching technique for isolated time-sharing multiple-input converters. , 2012, , .		7
64	Technological assessment of distributed generation systems operation during extreme events. , 2012, , .		5
65	Spatial and Temporal Model of Electric Vehicle Charging Demand. IEEE Transactions on Smart Grid, 2012, 3, 394-403.	6.2	351
66	Effects of notable natural disasters from 2005 to 2011 on telecommunications infrastructure: Lessons from on-site damage assessments. , 2011, , .		35
67	Local energy storage as a decoupling mechanism for interdependent infrastructures. , 2011, , .		17
68	Design considerations of a multiple-input isolated single ended primary inductor converter (SEPIC) for distributed generation sources. , 2011, , .		15
69	Realization and comparison of a new push-pull direct-connected multiple-input converter family for distributed generation applications. , 2011, , .		8
70	A multiple-input current-source converter for a stand-alone hybrid power system. , 2011, , .		4
71	A multiple-input SEPIC with a bi-directional input for modular distributed generation and energy storage integration. , 2011, , .		8
72	Design considerations for energy storage power electronics interfaces for high penetration of renewable energy sources. , 2011, , .		13

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73	Dynamic Behavior and Stabilization of DC Microgrids With Instantaneous Constant-Power Loads. IEEE Transactions on Power Electronics, 2011, 26, 822-834.	5.4	521
74	Active anti-islanding method based on harmonic content detection from overmodulating inverters. , 2011, , .		4
75	A switching strategy for multiple-input DC-DC converters. , 2011, , .		1
76	Quantitative Evaluation of DC Microgrids Availability: Effects of System Architecture and Converter Topology Design Choices. IEEE Transactions on Power Electronics, 2011, 26, 835-851.	5.4	246
77	8.6.2 Local Energy Storage as a Decoupling Mechanism for Interdependent Infrastructures. Incose International Symposium, 2011, 21, 1065-1071.	0.2	0
78	Analysis of boundary control for boost and buck-boost converters in distributed power architectures with constant-power loads. , 2011, , .		18
79	Dynamic behavior of single-phase full-wave uncontrolled rectifiers with instantaneous constant-power loads. , 2011, , .		4
80	Analysis of Boundary Control for Buck Converters With Instantaneous Constant-Power Loads. IEEE Transactions on Power Electronics, 2010, 25, 2018-2032.	5.4	113
81	High-Power Pulse Generator With Flexible Output Pattern. IEEE Transactions on Power Electronics, 2010, 25, 1675-1684.	5.4	58
82	Effects of instantaneous constant-power loads on DC micro-grids for sustainable power systems. , 2010, , .		9
83	Analysis of vulnerabilities of telecommunication systems to natural disasters. , 2010, , .		12
84	Towards a “Power-Net”: Impact of smart grids development for ICT networks during critical events. , 2010, , .		4
85	Implication of smart-grids development for communication systems in normal operation and during disasters. , 2010, , .		7
86	Telecommunications Power Plant Damage Assessment for Hurricane Katrinaâ€™ Site Survey and Follow-Up Results. IEEE Systems Journal, 2009, 3, 277-287.	2.9	111
87	Boundary control of buck converters with constant-power loads. , 2009, , .		5
88	Telecommunications outside plant power infrastructure: Past performance and technological alternatives for improved resilience to hurricanes. , 2009, , .		14
89	Analysis of the effects of duty cycle constraints in multiple-input converters for photovoltaic applications. , 2009, , .		11
90	Multiple-input DC-DC converter topologies comparison. , 2008, , .		32

#	ARTICLE	IF	CITATIONS
91	Analysis of electric power architectures to improve availability and efficiency of air conditioning systems. , 2008, , .		15
92	Analysis of a flexible and rugged photovoltaic-based power system. , 2008, , .		5
93	Stabilization of constant power loads in Dc-Dc converters using passivity-based control. , 2007, , .		52
94	Telecom power planning for natural and man-made disasters. , 2007, , .		31
95	Multiple-input dc-dc converters to enhance local availability in grids using distributed generation resources. IEEE Applied Power Electronics Conference and Exposition, 2007, , .	0.0	42
96	Telecommunications Power Plant Damage Assessment Caused by Hurricane Katrina - Site Survey and Follow-Up Results. , 2006, , .		17
97	Optimal Configuration Analysis of a Microgrid-Based Telecom Power System. , 2006, , .		38
98	A Microgrid-based Telecom Power System using Modular Multiple-Input DC-DC Converters. , 2005, , .		68