

Geza Joos

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8588668/publications.pdf>

Version: 2024-02-01

118
papers

4,554
citations

109311

35
h-index

128286

60
g-index

118
all docs

118
docs citations

118
times ranked

4111
citing authors

#	ARTICLE	IF	CITATIONS
1	An Online Data-Driven Method to Locate Forced Oscillation Sources From Power Plants Based on Sparse Identification of Nonlinear Dynamics (SINDy). IEEE Transactions on Power Systems, 2023, 38, 2085-2099.	6.5	6
2	An Online Data-Driven Method for Microgrid Secondary Voltage and Frequency Control With Ensemble Koopman Modeling. IEEE Transactions on Smart Grid, 2023, 14, 68-81.	9.0	6
3	Design of Hybrid-Storage-Based Virtual Synchronous Machine With Energy Recovery Control Considering Energy Consumed in Inertial and Damping Support. IEEE Transactions on Power Electronics, 2022, 37, 2648-2666.	7.9	18
4	A Protection System for Inverter Interfaced Microgrids. IEEE Transactions on Power Delivery, 2022, 37, 2314-2325.	4.3	7
5	Integrating learning and explicit model predictive control for unit commitment in microgrids. Applied Energy, 2022, 306, 118026.	10.1	7
6	Integrated Battery Chargers. Advances in Mechatronics and Mechanical Engineering, 2022, , 68-95.	1.0	0
7	Adaptive Coordination for Power and SoC Limiting Control of Energy Storage in an Islanded AC Microgrid With Impact Load. IEEE Transactions on Power Delivery, 2020, 35, 580-591.	4.3	30
8	Design and Real-Time Implementation of a Centralized Microgrid Control System With Rule-Based Dispatch and Seamless Transition Function. IEEE Transactions on Industry Applications, 2020, 56, 3168-3177.	4.9	44
9	Spatio-Temporal Flexibility Management in Low-Carbon Power Systems. IEEE Transactions on Sustainable Energy, 2020, 11, 2593-2605.	8.8	20
10	A Rule Based EMS for Fast Charging Station with CHIL Implementation. , 2020, , .		6
11	A Modular Generic Microgrid Controller Adaptive to Different Compositions. , 2020, , .		4
12	Identification of low-frequency oscillation mode and improved damping design for virtual synchronous machines in microgrid. IET Generation, Transmission and Distribution, 2019, 13, 2993-3001.	2.5	12
13	Model Predictive Control Based Approach for Microgrid Energy Management. , 2019, , .		13
14	Virtual Synchronous Machine Control for Low-Inertia Power System Considering Energy Storage Limitation. , 2019, , .		6
15	Islanding of a Microgrid Using a Distributed Multi-agent Control System. , 2019, , .		5
16	Improved VSG Control for Type-IV Wind Turbine Generator Considering Operation Limitations. , 2019, , .		7
17	A Transformerless Hybrid Modular Multilevel DC-DC Converter With DC Fault Ride-Through Capability. IEEE Transactions on Industrial Electronics, 2019, 66, 2217-2226.	7.9	23
18	Torque Cancellation of Integrated Battery Charger Based on Six-Phase Permanent Magnet Synchronous Motor Drives for Electric Vehicles. IEEE Transactions on Transportation Electrification, 2018, 4, 344-354.	7.8	39

#	ARTICLE	IF	CITATIONS
19	An Approach to Constructing Analytical Energy Function for Synchronous Generator Models With Subtransient Dynamics. IEEE Transactions on Power Systems, 2018, 33, 5958-5967.	6.5	8
20	Microgrid Economic Dispatch With Energy Storage Systems. IEEE Transactions on Smart Grid, 2018, 9, 3039-3047.	9.0	51
21	Fallback Control for Isochronous Energy Storage Systems in Autonomous Microgrids Under Denial-of-Service Cyber-Attacks. IEEE Transactions on Smart Grid, 2018, 9, 4702-4711.	9.0	88
22	Islanding Detection of Hybrid Distributed Generation Under Reduced Non-Detection Zone. IEEE Transactions on Smart Grid, 2018, 9, 5027-5037.	9.0	76
23	Multicarrier-Based PWM Strategies With Complete Voltage Balance Control for NNPC Inverters. IEEE Transactions on Industrial Electronics, 2018, 65, 2863-2872.	7.9	34
24	Flexibility Envelopes for Distribution Networks. , 2018, , .		1
25	Synchrophasor-Based State Estimation for Voltage Stability Monitoring in Power Systems. , 2018, , .		2
26	Synchrophasor-Based State Estimation for Microgrid Protection. , 2018, , .		3
27	Implementation and CHIL Testing of a Microgrid Control System. , 2018, , .		15
28	Centralized Dynamic State Estimation Using a Federation of Extended Kalman Filters With Intermittent PMU Data From Generator Terminals. IEEE Transactions on Power Systems, 2018, 33, 6109-6119.	6.5	43
29	Subfundamental Cycle Switching Frequency Variation for Switching Losses Reduction of a Two-Level Inverter Traction Drive. IEEE Transactions on Transportation Electrification, 2017, 3, 646-655.	7.8	9
30	Subfundamental Cycle Switching Frequency Variation Based on Output Current Ripple Analysis of a Three-Level Inverter. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2017, 5, 1797-1806.	5.4	17
31	Real-time hardware-in-the-loop simulation for islanding detection schemes in hybrid distributed generation systems. IET Generation, Transmission and Distribution, 2017, 11, 3050-3056.	2.5	12
32	Economic dispatch in microgrids using compromise solution method. , 2017, , .		3
33	Control of microgrids with distributed energy storage operating in Islanded mode. , 2017, , .		4
34	A transformer-less modular multilevel DC-DC converter with DC fault blocking capability. , 2017, , .		14
35	Torque elimination for integrated battery charger based on two permanent magnet synchronous motor drives for electric vehicles. IET Electric Power Applications, 2017, 11, 1627-1635.	1.8	21
36	An energy management approach for electric vehicle fast charging station. , 2017, , .		8

#	ARTICLE	IF	CITATIONS
37	Islanding protection of multiple distributed resources under adverse islanding conditions. IET Generation, Transmission and Distribution, 2016, 10, 1901-1912.	2.5	12
38	Real-time implementation & evaluation of grid-connected microgrid energy management systems. , 2016, , .		20
39	A Voltage Level Based Model Predictive Control of Modular Multilevel Converter. IEEE Transactions on Industrial Electronics, 2016, , 1-1.	7.9	55
40	Design and implementation of combined frequency/oscillation damping controller for type 4 wind turbines. , 2016, , .		3
41	A multiport modular multilevel DC-DC converter. , 2016, , .		7
42	Dynamic performance of Computational-Efficient Models for Multi-Terminal MMC-HVDC systems. , 2016, , .		3
43	A Dual Three-Level T-NPC Inverter for High-Power Traction Applications. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2016, 4, 668-678.	5.4	80
44	Multiobjective Optimization Dispatch for Microgrids With a High Penetration of Renewable Generation. IEEE Transactions on Sustainable Energy, 2015, 6, 1306-1314.	8.8	105
45	Thermal management during stalled rotor by conduction loss redistribution. , 2015, , .		4
46	Reduced switching random PWM technique for two-level inverters. , 2015, , .		15
47	Model-based tuning approach for multi-band power system stabilisers PSS4B using an improved modal performance index. IET Generation, Transmission and Distribution, 2015, 9, 2135-2143.	2.5	40
48	A discrete random PWM technique for acoustic noise reduction in electric traction drives. , 2015, , .		11
49	A validation methodology for real time model of modular multilevel converter. , 2015, , .		1
50	Computationally efficient method for simulating Multi-Terminal MMC-HVDC. , 2015, , .		0
51	Three Phase High Power Integrated Battery Charger for Plugin Electric Vehicles. , 2015, , .		17
52	A predictive nearest level control of modular multilevel converter. , 2015, , .		8
53	Coordinated design of active and reactive power modulation auxiliary loops of wind turbine generators for oscillation damping in power systems. , 2015, , .		7
54	Interleaved PWM control for neutral point balancing in dual 3-level traction drives. , 2014, , .		4

#	ARTICLE	IF	CITATIONS
55	Commissioning tests of 100kWh battery energy storage system for a distribution test line. , 2014, , .		4
56	Coexistence Analysis of H2H and M2M Traffic in FiWi Smart Grid Communications Infrastructures Based on Multi-Tier Business Models. IEEE Transactions on Communications, 2014, 62, 3931-3942.	7.8	19
57	A Short-Term Energy Storage System for Voltage Quality Improvement in Distributed Wind Power. IEEE Transactions on Energy Conversion, 2014, 29, 997-1007.	5.2	38
58	Variable-speed IGBT gate driver with loss/overshoot balancing for switching loss reduction. , 2014, , .		4
59	Wide Frequency Range Adaptive Phasor and Frequency PMU Algorithms. IEEE Transactions on Smart Grid, 2014, 5, 569-579.	9.0	169
60	Flux-weakening loop design for EV drive with permanent magnet synchronous motor. , 2014, , .		1
61	Integrated battery charger for delta connected machines in plug-in hybrid electric vehicles. , 2014, , .		7
62	Optimal Integration of Disparate C37.118 PMUs in Wide-Area PSS With Electromagnetic Transients. IEEE Transactions on Power Systems, 2013, 28, 4760-4770.	6.5	35
63	Impact of Distributed Wind Generators Reactive Power Behavior on Flicker Severity. IEEE Transactions on Energy Conversion, 2013, 28, 425-433.	5.2	37
64	Modular multilevel inverter: A study for automotive applications. , 2013, , .		8
65	Dispatch techniques for Canadian remote communities with renewable sources. , 2013, , .		6
66	A Modular multilevel converter-based power electronic transformer. , 2013, , .		16
67	Compliance Analysis of PMU Algorithms and Devices for Wide-Area Stabilizing Control of Large Power Systems. IEEE Transactions on Power Systems, 2013, 28, 1766-1778.	6.5	96
68	Photovoltaic inverter characterization testing on a physical distribution system. , 2012, , .		10
69	Synchronous Distributed Generation Islanding Protection Using Intelligent Relays. IEEE Transactions on Smart Grid, 2012, 3, 1695-1703.	9.0	50
70	Differential energy based microgrid protection against fault conditions. , 2012, , .		41
71	Coordinated active/reactive power control for flicker mitigation in distributed wind power. , 2012, , .		5
72	Evaluation of the costs and benefits of Microgrids with consideration of services beyond energy supply. , 2012, , .		41

#	ARTICLE	IF	CITATIONS
73	On the Accuracy Versus Transparency Trade-Off of Data-Mining Models for Fast-Response PMU-Based Catastrophe Predictors. IEEE Transactions on Smart Grid, 2012, 3, 152-161.	9.0	137
74	Assessment of inertial potential of variable-speed wind turbines. , 2011, , .		5
75	Short-term frequency support utilizing inertial response of DFIG wind turbines. , 2011, , .		56
76	Robust Detection and Analysis of Power System Oscillations Using the Teager-Kaiser Energy Operator. IEEE Transactions on Power Systems, 2011, 26, 323-333.	6.5	105
77	Adaptive Phasor and Frequency-Tracking Schemes for Wide-Area Protection and Control. IEEE Transactions on Power Delivery, 2011, 26, 744-753.	4.3	148
78	Comparison of inertial response implementations in DFIG-based wind turbines. , 2011, , .		3
79	Load sharing of autonomous distribution-level microgrids. , 2011, , .		16
80	Catastrophe Predictors From Ensemble Decision-Tree Learning of Wide-Area Severity Indices. IEEE Transactions on Smart Grid, 2010, 1, 144-158.	9.0	154
81	Analysis of Energy Storage sizing and technologies. , 2010, , .		37
82	Selective Harmonic Elimination in Multimodule Three-Phase Current-Source Converters. IEEE Transactions on Power Electronics, 2010, 25, 44-53.	7.9	51
83	Real-Time Simulation of a Wind Turbine Generator Coupled With a Battery Supercapacitor Energy Storage System. IEEE Transactions on Industrial Electronics, 2010, 57, 1137-1145.	7.9	353
84	The Autonomous Stress Indicator for Remotely Monitoring Power System State and Watching for Potential Instability. Algorithms, 2009, 2, 183-199.	2.1	0
85	A Fast and Accurate Synchronization Technique for Extraction of Symmetrical Components. IEEE Transactions on Power Electronics, 2009, 24, 674-684.	7.9	212
86	Design of an H _∞ controller for energy storage in a wind-diesel system. , 2009, , .		0
87	Fuzzy Partitioning of a Real Power System for Dynamic Vulnerability Assessment. IEEE Transactions on Power Systems, 2009, 24, 1356-1365.	6.5	122
88	Full Utilization of the Inverter in Split-Phase Drives by Means of a Dual Three-Phase Space Vector Classification Algorithm. IEEE Transactions on Industrial Electronics, 2009, 56, 120-129.	7.9	92
89	A Real-Time Extraction of Harmonic and Reactive Current in a Nonlinear Load for Grid-Connected Converters. IEEE Transactions on Industrial Electronics, 2009, 56, 2185-2189.	7.9	61
90	A Real-Time Three-Phase Selective-Harmonic-Extraction Approach for Grid-Connected Converters. IEEE Transactions on Industrial Electronics, 2009, 56, 4097-4106.	7.9	42

#	ARTICLE	IF	CITATIONS
91	A Knowledge-Based Approach for Control of Two-Level Energy Storage for Wind Energy Systems. IEEE Transactions on Energy Conversion, 2009, 24, 539-547.	5.2	124
92	A Stochastic Optimization Approach to Rating of Energy Storage Systems in Wind-Diesel Isolated Grids. IEEE Transactions on Power Systems, 2009, 24, 418-426.	6.5	186
93	Models for Quantifying the Economic Benefits of Distributed Generation. IEEE Transactions on Power Systems, 2008, 23, 327-335.	6.5	148
94	Multifunctional Grid-Connected Multimodule Power Converters Capable of Operating in Single-Pulse and PWM Switching Modes. IEEE Transactions on Power Electronics, 2008, 23, 1228-1238.	7.9	7
95	A Secondary Voltage Control Strategy for Transmission Level Interconnection of Wind Generation. IEEE Transactions on Power Electronics, 2008, 23, 1178-1190.	7.9	115
96	Direct Power Control of Active Filters With Averaged Switching Frequency Regulation. IEEE Transactions on Power Electronics, 2008, 23, 2729-2737.	7.9	88
97	A Nonlinear Adaptive Synchronization Technique for Grid-Connected Distributed Energy Sources. IEEE Transactions on Power Electronics, 2008, 23, 2181-2186.	7.9	158
98	Sizing and power management strategies for battery storage integration into wind-diesel systems. , 2008, , .		12
99	Integrating renewable energy sources and storage into isolated diesel generator supplied electric power systems. , 2008, , .		13
100	An adaptive notch filtering approach for harmonic and reactive current extraction in active power filters. , 2008, , .		11
101	A real-time selective harmonic extraction approach based on adaptive notch filtering. , 2008, , .		14
102	A single-phase adaptive synchronization tool for grid-connected converters. , 2008, , .		13
103	A real-time sequence components decomposition for transient analysis in grid-connected distributed generation systems. , 2008, , .		6
104	Modular current source AC-Drive: A simple control scheme. Power Electronics Specialist Conference (PESC), IEEE, 2008, , .	0.0	6
105	Hybrid control of three-phase current source rectifiers. Power Electronics Specialist Conference (PESC), IEEE, 2008, , .	0.0	0
106	Automatic Segmentation of Large Power Systems Into Fuzzy Coherent Areas for Dynamic Vulnerability Assessment. IEEE Transactions on Power Systems, 2007, 22, 1974-1985.	6.5	99
107	Severity Index for Estimating the Impact of Wind Generation on System Vulnerability. IEEE Power Engineering Society General Meeting, 2007, , .	0.0	3
108	Comparison of Energy Storage System Technologies and Configurations in a Wind Farm. , 2007, , .		81

#	ARTICLE	IF	CITATIONS
109	A Parallel Bidirectional DC/DC Converter Topology for Energy Storage Systems in Wind Applications. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2007, , .	0.0	18
110	Areas of Vulnerability in an Environment of Uncertainty. , 2007, , .		0
111	Data Mining Approach to Threshold Settings of Islanding Relays in Distributed Generation. IEEE Transactions on Power Systems, 2007, 22, 1112-1119.	6.5	57
112	Performance Comparison of Aggregated and Distributed Energy Storage Systems in a Wind Farm For Wind Power Fluctuation Suppression. IEEE Power Engineering Society General Meeting, 2007, , .	0.0	13
113	Generalized Estimation of Average Displaced Emissions by Wind Generation. IEEE Transactions on Power Systems, 2007, 22, 1035-1043.	6.5	38
114	Customer-Owned Back-Up Generators for Energy Management by Distribution Utilities. IEEE Transactions on Power Systems, 2007, 22, 1044-1050.	6.5	20
115	Attenuation of Wind Power Fluctuations in Wind Turbine Generators using a DC Bus Capacitor Based Filtering Control Scheme. Conference Record - IAS Annual Meeting (IEEE Industry Applications) Tj ETQq1 1 0.784314ogBT /Overlock 10		
116	The Process of System Collapse Based on Areas of Vulnerability. , 2006, , .		13
117	Power Electronic Converter Control Techniques for Improved Low Voltage Ride Through Performance in WTCs. , 0, , .		34
118	Control and Performance of Wind Turbine Generators based on Permanent Magnet Synchronous Machines Feeding a Diode Rectifier. , 0, , .		23