

Guoyi Xu

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/303139/publications.pdf>

Version: 2024-02-01

128
papers

8,728
citations

87843

38
h-index

45285

90
g-index

128
all docs

128
docs citations

128
times ranked

5040
citing authors

#	ARTICLE	IF	CITATIONS
1	Modeling and analysis approaches for small-signal stability assessment of power-electronic-dominated systems. Wiley Interdisciplinary Reviews: Energy and Environment, 2023, 12, .	1.9	2
2	Harmonic Voltage Control in Distributed Generation Systems Using Optimal Switching Vector Strategy. IEEE Systems Journal, 2022, 16, 1861-1872.	2.9	3
3	DC Fault Study of a Point-to-Point HVDC System Integrating Offshore Wind Farm Using High-Temperature Superconductor DC Cables. IEEE Transactions on Energy Conversion, 2022, 37, 377-388.	3.7	9
4	Impedance Modelling and Stability Analysis of Diode-Rectifier based HVDC Connected Offshore Wind Farms. IEEE Transactions on Power Delivery, 2022, 37, 591-602.	2.9	15
5	Real-Time Reactive Power Regulation Capacity Assessment of DFIG Wind Farms. , 2022, , .		2
6	MMC Impedance Modeling and Interaction of Converters in Close Proximity. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 7223-7236.	3.7	9
7	Energy-Based Virtual Damping Control of FB-MMCs for HVDC Grid. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 7320-7328.	3.7	1
8	A Less-Intrusive Approach to Stabilize VSC Transmission Against Highly Variable Grid Strength. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 7199-7211.	3.7	3
9	Enhanced Control of Offshore Wind Farms Connected to MTDC Network Using Partially Selective DC Fault Protection. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 2926-2935.	3.7	13
10	An Integrated Control and Protection Scheme Based on FBSM-MMC Active Current Limiting Strategy for DC Distribution Network. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 2632-2642.	3.7	15
11	A Unidirectional Hybrid HVDC Transmission System Based on Diode Rectifier and Full-Bridge MMC. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 6974-6984.	3.7	20
12	A Diode-MMC AC/DC Hub for Connecting Offshore Wind Farm and Offshore Production Platform. Energies, 2021, 14, 3759.	1.6	3
13	Microgrid design using folded P-f droop and new grid interface unit to minimize the need for communication. International Journal of Electrical Power and Energy Systems, 2021, 130, 106949.	3.3	2
14	Credible Reactive Power Regulation Capacity Assessment of DFIG Wind Farms. , 2021, , .		2
15	PN admittance characterisation of grid supporting VSC controllers with negative sequence regulation and inertia emulation. , 2021, , .		0
16	Control of Offshore MMC During Asymmetric Offshore AC Faults for Wind Power Transmission. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 1074-1083.	3.7	34
17	Coordinated Control of Parallel DR-HVDC and MMC-HVDC Systems for Offshore Wind Energy Transmission. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 2572-2582.	3.7	52
18	A Novel Method to Determine Droop Coefficients of DC Voltage Control for VSC-MTDC System. IEEE Transactions on Power Delivery, 2020, 35, 2196-2211.	2.9	41

#	ARTICLE	IF	CITATIONS
19	A Hybrid Modular Multilevel Converter With Reduced Full-Bridge Submodules. IEEE Transactions on Power Delivery, 2020, 35, 1876-1885.	2.9	13
20	Hybrid AC/DC hub for integrating onshore wind power and interconnecting onshore and offshore DC networks. IET Renewable Power Generation, 2020, 14, 1738-1745.	1.7	6
21	A Coordinated Frequency Regulation Method for Offshore Wind Farms Integrated by VSC-HVDC. , 2020, , .		1
22	A Wind Farm Frequency Control Method Based on the Frequency Regulation Ability of Wind Turbine Generators. , 2020, , .		2
23	Review of Local Network Impedance Estimation Techniques. IEEE Access, 2020, 8, 213647-213661.	2.6	20
24	Analysis and Control of Offshore Wind Farms Connected With Diode Rectifier-Based HVDC System. IEEE Transactions on Power Delivery, 2020, 35, 2049-2059.	2.9	20
25	Control of VSCâ€”HVDC connected wind farms for system frequency support. International Transactions on Electrical Energy Systems, 2020, 30, e12352.	1.2	4
26	Generalised dqâ€”dynamic phasor modelling of a STATCOM connected to a grid for stability analysis. IET Power Electronics, 2020, 13, 720-731.	1.5	3
27	Techno-Economic Assessment of Energy Storage Technologies for Inertia Response and Frequency Support from Wind Farms. Energies, 2020, 13, 3421.	1.6	21
28	An Improved Transient Traveling-Wave Based Direction Criterion for Multi-Terminal HVDC Grid. IEEE Transactions on Power Delivery, 2020, 35, 2517-2529.	2.9	35
29	Simulation-based Optimisation of LCC-HVDC Controller Parameters using Surrogate Model Solvers. , 2019, , .		0
30	Study on high voltage ride through control strategy of PMSCâ€”based wind turbine generation system with SCESU. Journal of Engineering, 2019, 2019, 4257-4260.	0.6	11
31	Energy Efficient Three-Phase Utility Interactive Residential Microgrid With Mode Transfer Capabilities at Weak Grid Conditions. IEEE Transactions on Industry Applications, 2019, 55, 7082-7091.	3.3	13
32	Parallel operation of diodeâ€”rectifier based HVDC link and HVAC link for offshore wind power transmission. Journal of Engineering, 2019, 2019, 4713-4717.	0.6	10
33	Hierarchical control of offshore wind farm connected by parallel diodeâ€”rectifierâ€”based HVDC and HVAC links. IET Renewable Power Generation, 2019, 13, 1493-1502.	1.7	15
34	Protection and postâ€”fault recovery of large HVDC networks using partitioning and fastâ€”acting DC breakers at strategic locations. Journal of Engineering, 2019, 2019, 2736-2742.	0.6	3
35	Frequency regulation participation of offshore wind farm integrated by diodeâ€”rectifier HVDC system. Journal of Engineering, 2019, 2019, 977-981.	0.6	9
36	Hybrid converter topologies for dc transmission systems. IET Power Electronics, 2019, 12, 607-619.	1.5	8

#	ARTICLE	IF	CITATIONS
37	Flexible Virtual Synchronous Generator Control for Distributed Generator with Adaptive Inertia. <i>Electric Power Components and Systems</i> , 2019, 47, 128-140.	1.0	16
38	Interoperability assessment of MMC and DRU connected offshore windfarms in meshed multi-terminal dc grids. , 2019, , .		0
39	A Novel VSG-Based Accurate Voltage Control and Reactive Power Sharing Method for Islanded Microgrids. <i>Sustainability</i> , 2019, 11, 6666.	1.6	6
40	Parameter Value Selection of Wind Turbines Frequency Controller. , 2019, , .		0
41	Offshore AC Fault Protection of Diode Rectifier Unit-Based HVdc System for Wind Energy Transmission. <i>IEEE Transactions on Industrial Electronics</i> , 2019, 66, 5289-5299.	5.2	45
42	Detailed quantitative comparison of half-bridge modular multilevel converter modelling methods. <i>Journal of Engineering</i> , 2019, 2019, 1292-1298.	0.6	13
43	Leaky-Least-Logarithmic-Absolute-Difference-Based Control Algorithm and Learning-Based InC MPPT Technique for Grid-Integrated PV System. <i>IEEE Transactions on Industrial Electronics</i> , 2019, 66, 9003-9012.	5.2	77
44	A Transient Voltage-Based DC Fault Line Protection Scheme for MMC-Based DC Grid Embedding DC Breakers. <i>IEEE Transactions on Power Delivery</i> , 2019, 34, 334-345.	2.9	181
45	Current Error Based Compensations for VSC Current Control in Weak Grids for Wind Farm Applications. <i>IEEE Transactions on Sustainable Energy</i> , 2019, 10, 26-35.	5.9	33
46	Adjustable Inertial Response From the Converter With Adaptive Droop Control in DC Grids. <i>IEEE Transactions on Smart Grid</i> , 2019, 10, 3198-3209.	6.2	54
47	Impact of DC protection strategy of large HVDC network on frequency response of the connected AC system. <i>Journal of Engineering</i> , 2019, 2019, 4031-4035.	0.6	4
48	A Reliable Microgrid With Seamless Transition Between Grid Connected and Islanded Mode for Residential Community With Enhanced Power Quality. <i>IEEE Transactions on Industry Applications</i> , 2018, 54, 5246-5255.	3.3	151
49	A Nearest Level PWM Method for the MMC in DC Distribution Grids. <i>IEEE Transactions on Power Electronics</i> , 2018, 33, 9209-9218.	5.4	80
50	Review of DC fault protection for HVDC grids. <i>Wiley Interdisciplinary Reviews: Energy and Environment</i> , 2018, 7, e278.	1.9	15
51	Enhanced Independent Pole Control of Hybrid MMC-HVdc System. <i>IEEE Transactions on Power Delivery</i> , 2018, 33, 861-872.	2.9	73
52	Distributed PLL-Based Control of Offshore Wind Turbines Connected With Diode-Rectifier-Based HVDC Systems. <i>IEEE Transactions on Power Delivery</i> , 2018, 33, 1328-1336.	2.9	81
53	An Alternative Current-Error Based Control for VSC Integration to Weak Grid. , 2018, , .		4
54	Active Control of DC Fault Currents in DC Solid-State Transformers during Ride-Through Operation of Multi-Terminal HVDC Systems. , 2018, , .		0

#	ARTICLE	IF	CITATIONS
55	DC Fault Protection of Diode Rectifier Unit Based HVDC System Connecting Offshore Wind Farms. , 2018, , .		13
56	Enhanced AC voltage and frequency control of offshore MMC station for wind farm connection. IET Renewable Power Generation, 2018, 12, 1771-1777.	1.7	24
57	Enhanced Flat-Topped Modulation for MMC Control in HVDC Transmission Systems. IEEE Transactions on Power Delivery, 2017, 32, 152-161.	2.9	38
58	Active distribution power system with multi-terminal DC links. IET Renewable Power Generation, 2017, 11, 27-34.	1.7	8
59	Improved Two-Level Voltage Source Converter for High-Voltage Direct Current Transmission Systems. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2017, 5, 1670-1686.	3.7	12
60	DC Fault Detection and Location in Meshed Multiterminal HVDC Systems Based on DC Reactor Voltage Change Rate. IEEE Transactions on Power Delivery, 2017, 32, 1516-1526.	2.9	278
61	Improved use of WT kinetic energy for system frequency support. IET Renewable Power Generation, 2017, 11, 1094-1100.	1.7	22
62	Frequency control capability of wind turbine under different operation status. Journal of Engineering, 2017, 2017, 1533-1538.	0.6	1
63	DC STATCOM in multi-terminal DC distribution power system. Journal of Engineering, 2017, 2017, 2077-2082.	0.6	2
64	Stability norms control using the virtual impedance concept for power frequency applications. , 2017, , .		0
65	Multi-tasking dc-dc and dc-ac converters for dc voltage tapping and power control in highly meshed multi-terminal HVDC networks. IET Power Electronics, 2017, 10, 2217-2228.	1.5	13
66	Enhanced AC voltage and frequency control on offshore MMC station for wind farm. Journal of Engineering, 2017, 2017, 1264-1268.	0.6	14
67	Accelerated switching function model of hybrid MMCs for HVDC system simulation. IET Power Electronics, 2017, 10, 2199-2207.	1.5	20
68	Frequency support using multi-terminal HVDC systems based on DC voltage manipulation. IET Renewable Power Generation, 2016, 10, 1393-1401.	1.7	16
69	Submodule configuration of HVDC-DC autotransformer considering DC fault. IET Power Electronics, 2016, 9, 2776-2785.	1.5	8
70	Combined deload and kinetic energy control of variable speed wind turbines for frequency support. , 2016, , .		1
71	Protection of large partitioned MTDC Networks Using DC-DC converters and circuit breakers. Protection and Control of Modern Power Systems, 2016, 1, .	4.3	38
72	Adaptive DC Stabilizer with Reduced DC fault Current for Active Distribution Power System Application. IEEE Transactions on Power Systems, 2016, , 1-1.	4.6	17

#	ARTICLE	IF	CITATIONS
73	Transient analysis of an interline dynamic voltage restorer using dynamic phasor representation. , 2016, , .		3
74	Hybrid modular multilevel converter based multi-terminal DC/DC converter with minimised full-bridge submodules ratio considering DC fault isolation. IET Renewable Power Generation, 2016, 10, 1587-1596.	1.7	14
75	Studies of coordinated zone protection strategy for DC grid. , 2016, , .		1
76	DC fault protection strategy considering DC network partition. , 2016, , .		18
77	Active Control of DC Fault Currents in DC Solid-State Transformers During Ride-Through Operation of Multi-Terminal HVDC Systems. IEEE Transactions on Energy Conversion, 2016, 31, 1336-1346.	3.7	46
78	Analysis and Control of Modular Multilevel Converters under Asymmetric Arm Impedance Conditions. IEEE Transactions on Industrial Electronics, 2016, 63, 71-81.	5.2	47
79	Continuous Operation of Radial Multiterminal HVDC Systems Under DC Fault. IEEE Transactions on Power Delivery, 2016, 31, 351-361.	2.9	138
80	Analysis of voltage source converter-based high-voltage direct current under DC line-to-earth fault. IET Power Electronics, 2015, 8, 428-438.	1.5	41
81	A Hybrid Modular Multilevel Converter With Novel Three-Level Cells for DC Fault Blocking Capability. IEEE Transactions on Power Delivery, 2015, 30, 2017-2026.	2.9	99
82	Control of PMSG-Based Wind Turbines for System Inertial Response and Power Oscillation Damping. IEEE Transactions on Sustainable Energy, 2015, 6, 565-574.	5.9	284
83	Precharging and DC Fault Ride-Through of Hybrid MMC-Based HVDC Systems. IEEE Transactions on Power Delivery, 2015, 30, 1298-1306.	2.9	153
84	Design and Operation of a Hybrid Modular Multilevel Converter. IEEE Transactions on Power Electronics, 2015, 30, 1137-1146.	5.4	368
85	An improved modular multilevel converter with DC fault blocking capability. , 2014, , .		36
86	DC microgrid dynamic performance assessment and enhancement based on virtual impedance method. , 2014, , .		2
87	Improvement of the Hilbert Method via ESPRIT for Detecting Rotor Fault in Induction Motors at Low Slip. IEEE Transactions on Energy Conversion, 2013, 28, 225-233.	3.7	127
88	Wind turbines output power smoothing using embedded energy storage systems. Journal of Modern Power Systems and Clean Energy, 2013, 1, 49-57.	3.3	15
89	Sliding-mode control of a wind turbine-driven double-fed induction generator under non-ideal grid voltages. IET Renewable Power Generation, 2013, 7, 370-379.	1.7	84
90	Power oscillation damping using wind turbines with energy storage systems. IET Renewable Power Generation, 2013, 7, 449-457.	1.7	41

#	ARTICLE	IF	CITATIONS
91	Autonomous DC Voltage Control of a DC Microgrid With Multiple Slack Terminals. IEEE Transactions on Power Systems, 2012, 27, 1897-1905.	4.6	251
92	Coordinated DC Voltage Control of Wind Turbine With Embedded Energy Storage System. IEEE Transactions on Energy Conversion, 2012, 27, 1036-1045.	3.7	39
93	An ESPRIT-SAA-Based Detection Method for Broken Rotor Bar Fault in Induction Motors. IEEE Transactions on Energy Conversion, 2012, 27, 654-660.	3.7	41
94	DC network stability and dynamic analysis using virtual impedance method. , 2012, , .		16
95	Reduced Switching-Frequency Modulation and Circulating Current Suppression for Modular Multilevel Converters. IEEE Transactions on Power Delivery, 2011, 26, 2009-2017.	2.9	1,202
96	Wind turbines with energy storage for power smoothing and FRT enhancement. , 2011, , .		11
97	Control and Operation of a DC Microgrid With Variable Generation and Energy Storage. IEEE Transactions on Power Delivery, 2011, 26, 2513-2522.	2.9	510
98	High performance predictive current control of bi-directional DC-DC converters for DC micro grid application. , 2011, , .		6
99	Model-Based Predictive Direct Power Control of Doubly Fed Induction Generators. IEEE Transactions on Power Electronics, 2010, 25, 341-351.	5.4	201
100	Coordinated Control of DFIG and FSIG-Based Wind Farms Under Unbalanced Grid Conditions. IEEE Transactions on Power Delivery, 2010, 25, 367-377.	2.9	82
101	Contribution of VSC-HVDC connected wind farms to grid frequency regulation and power damping. , 2010, , .		12
102	Proportional integral plus multi-frequency resonant current controller for grid-connected voltage source converter under imbalanced and distorted supply voltage conditions. Journal of Zhejiang University: Science A, 2009, 10, 1532-1540.	1.3	24
103	Improved Direct Power Control of Grid-Connected DC/AC Converters. IEEE Transactions on Power Electronics, 2009, 24, 1280-1292.	5.4	177
104	Improved rotor current control of wind turbine driven doubly fed induction generators during network unbalance. , 2009, , .		3
105	Behaviour and protection of doubly-fed induction generators during network faults. , 2009, , .		16
106	DC grid management of a multi-terminal HVDC transmission system for large offshore wind farms. , 2009, , .		39
107	Predictive Current Control of Doubly Fed Induction Generators. IEEE Transactions on Industrial Electronics, 2009, 56, 4143-4153.	5.2	93
108	Dynamic modeling and direct power control of wind turbine driven DFIG under unbalanced network voltage conditions. Journal of Zhejiang University: Science A, 2008, 9, 1731-1740.	1.3	20

#	ARTICLE	IF	CITATIONS
109	Coordinated Control of DFIG's Rotor and Grid Side Converters During Network Unbalance. IEEE Transactions on Power Electronics, 2008, 23, 1041-1049.	5.4	306
110	Control of an LCC HVDC system for connecting large offshore wind farms with special consideration of grid fault. , 2008, , .		37
111	Multi-terminal DC transmission systems for connecting large offshore wind farms. , 2008, , .		104
112	Enhanced Control and Operation of DFIG-Based Wind Farms During Network Unbalance. IEEE Transactions on Energy Conversion, 2008, 23, 1073-1081.	3.7	191
113	Control of DFIG-based wind farms for network unbalance compensation. Power Electronics Specialist Conference (PESC), IEEE, 2008, , .	0.0	7
114	Improved direct power control of three-phase PWM converters. , 2008, , .		1
115	Improved operation of DFIG and FSIG-based wind farms during network unbalance. , 2008, , .		2
116	Direct Power Control of DFIG With Constant Switching Frequency and Improved Transient Performance. IEEE Transactions on Energy Conversion, 2007, 22, 110-118.	3.7	350
117	Direct Power Control of Grid Connected Voltage Source Converters. IEEE Power Engineering Society General Meeting, 2007, , .	0.0	28
118	Grid Integration of Large DFIG-Based Wind Farms Using VSC Transmission. IEEE Transactions on Power Systems, 2007, 22, 976-984.	4.6	344
119	Control of DFIG-Based Wind Generation Systems under Unbalanced Network Supply. , 2007, , .		25
120	Improved Direct Power Control of Doubly-Fed Induction Generator Based Wind Energy System. , 2007, , .		4
121	Coordinated control and operation of DFIG and FSIG based Wind Farms. , 2007, , .		15
122	VSC Transmission System Using Flying Capacitor Multilevel Converters and Hybrid PWM Control. IEEE Transactions on Power Delivery, 2007, 22, 693-702.	2.9	72
123	Comparison of Using SVC and STATCOM for Wind Farm Integration. , 2006, , .		43
124	Power Electronics Options for Large Wind Farm Integration: VSC-Based HVDC Transmission. , 2006, , .		15
125	Grid connection of large offshore wind farms using HVDC. Wind Energy, 2006, 9, 371-382.	1.9	140
126	Direct Active and Reactive Power Control of DFIG for Wind Energy Generation. IEEE Transactions on Energy Conversion, 2006, 21, 750-758.	3.7	604

#	ARTICLE	IF	CITATIONS
127	VSC Transmission Operating Under Unbalanced AC Conditions”Analysis and Control Design. IEEE Transactions on Power Delivery, 2005, 20, 427-434.	2.9	188
128	HVDC transmission for large offshore wind farms. Power Engineering Journal, 2002, 16, 135-141.	0.2	214