

Olimpo Anaya-Lara

List of Publications by Year in descending order

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Version: 2024-02-01

103
papers

3,123
citations

236612

25
h-index

168136

53
g-index

109
all docs

109
docs citations

109
times ranked

2776
citing authors

#	ARTICLE	IF	CITATIONS
1	A new adaptive instantaneous average current sharing technique for circulating current minimization among parallel converters in a LV DC-microgrid. International Journal of Electrical Power and Energy Systems, 2022, 136, 107562.	3.3	3
2	A field trial of off-grid SHS Interconnection in Rwanda's Northern Province. Energy for Sustainable Development, 2022, 66, 69-78.	2.0	2
3	Wind generator protection with ESSs considering grid connected and island mode operations. International Journal of Electrical Power and Energy Systems, 2021, 126, 106594.	3.3	3
4	Sizing and Coordination Strategies of Battery Energy Storage System Co-Located with Wind Farm: The UK Perspective. Energies, 2021, 14, 1439.	1.6	9
5	Wind farm control –Part I: A review on control system concepts and structures. IET Renewable Power Generation, 2021, 15, 2085-2108.	1.7	40
6	Coordinating Control of an Offshore LVDC Microgrid Based Renewable Energy Resources for Voltage Regulation and Circulating Current Minimization. Energies, 2021, 14, 3384.	1.6	5
7	Turbine layout optimisation for large-scale offshore wind farms – A grid-based method. IET Renewable Power Generation, 2021, 15, 3806-3822.	1.7	2
8	Control-based fault current limiter for modular multilevel voltage-source converters. International Journal of Electrical Power and Energy Systems, 2020, 118, 105750.	3.3	17
9	Short-Circuit Analytical Model for Modular Multilevel Converters Considering DC Cable Capacitance. IEEE Access, 2020, 8, 202774-202784.	2.6	1
10	Transient Stability Analysis of Battery with Fuel Cell Driven to Electric Powertrain. , 2020, , .		1
11	Assessment of Multi-Use Offshore Platforms: Structure Classification and Design Challenges. Sustainability, 2020, 12, 1860.	1.6	19
12	Enhanced harmonic state estimation in unbalanced three-phase electrical grids based on the Kalman filter and physical scale-down implementation. International Journal of Electrical Power and Energy Systems, 2020, 123, 106243.	3.3	10
13	Novel Control Approach for a Hybrid Grid-Forming HVDC Offshore Transmission System. Energies, 2020, 13, 1681.	1.6	6
14	Dynamic Wind Power Plant Control for System Integration Using the Generator Response Following Concept. Energies, 2020, 13, 1804.	1.6	7
15	Distance protection algorithm for multiterminal HVDC systems using the Hilbert –Huang transform. IET Generation, Transmission and Distribution, 2020, 14, 3022-3032.	1.4	17
16	Transient Stability Analysis of Offshore Wind With O&G Platforms and an Energy Storage System. , 2020, , .		2
17	Comparison of electrical collection topologies for multi-rotor wind turbines. Wind Energy Science, 2020, 5, 1237-1252.	1.2	4
18	Power System Stability of Offshore Wind with an Energy Storage to Electrify O&G Platform. , 2020, , .		4

#	ARTICLE	IF	CITATIONS
19	Bottom-Up Electrification Introducing New Smart Grids Architecture"Concept Based on Feasibility Studies Conducted in Rwanda. <i>Energies</i> , 2019, 12, 2439.	1.6	15
20	Frequency support from photovoltaic power plants using offline maximum power point tracking and variable droop control. <i>IET Renewable Power Generation</i> , 2019, 13, 2278-2286.	1.7	23
21	THD Reduction in Distributed Renewables Energy Access through Wind Energy Conversion System Integration under Wind Speed Conditions in Tamaulipas, Mexico. <i>Energies</i> , 2019, 12, 3550.	1.6	4
22	Modeling, Analysis of Current Trajectories of a Nine Phase Induction Machine for Regenerative Capabilities. , 2019, , .		0
23	Integration of Offshore Wind with O&G Platforms with an Energy Storage System. , 2019, , .		8
24	Power Losses in Electrical Topologies for a Multi-Rotor Wind Turbine System. <i>Journal of Physics: Conference Series</i> , 2019, 1356, 012032.	0.3	1
25	Provision of ancillary services by renewable hybrid generation in low frequency AC systems to the grid. <i>International Journal of Electrical Power and Energy Systems</i> , 2019, 105, 775-784.	3.3	8
26	Hybrid Renewable Energy Systems Sizing for Offshore Multi-Purpose Platforms. , 2019, , .		3
27	Assessing the Impact of DFIG Synthetic Inertia Provision on Power System Small-Signal Stability. <i>Energies</i> , 2019, 12, 3440.	1.6	4
28	Frequency support using doubly fed induction and reluctance wind turbine generators. <i>International Journal of Electrical Power and Energy Systems</i> , 2018, 101, 403-414.	3.3	31
29	A state-space model and control of a full-range PMSG wind turbine for real-time simulations. <i>Electrical Engineering</i> , 2018, 100, 2177-2191.	1.2	8
30	A review on frequency support provision by wind power plants: Current and future challenges. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 81, 2071-2087.	8.2	131
31	A Methodology for Transient State Estimation Based on Numerical Derivatives, Optimal Monitoring, and Filtered Measurements. <i>IEEE Transactions on Power Delivery</i> , 2018, 33, 1527-1535.	2.9	10
32	Enhancing frequency stability by integrating non-conventional power sources through multi-terminal HVDC grid. <i>International Journal of Electrical Power and Energy Systems</i> , 2018, 95, 128-136.	3.3	22
33	DSPWM multilevel technique of 27-levels based on FPGA for the cascaded DC/AC power converter operation. <i>International Transactions on Electrical Energy Systems</i> , 2018, 28, e2479.	1.2	11
34	Mathematical Modelling of Reduced Order Induction Machines for VFT Applications. , 2018, , .		0
35	A Simulation-Based Evaluation of the Benefits and Barriers to Interconnected Solar Home Systems in East Africa. , 2018, , .		6
36	THD Reduction in Wind Energy System Using Type-4 Wind Turbine/PMSG Applying the Active Front-End Converter Parallel Operation. <i>Energies</i> , 2018, 11, 2458.	1.6	14

#	ARTICLE	IF	CITATIONS
37	Techno-Economic Analysis of Energy Storage System for Wind Farms: The UK Perspective. , 2018, , .		1
38	Time-Domain Voltage Sag State Estimation Based on the Unscented Kalman Filter for Power Systems with Nonlinear Components. Energies, 2018, 11, 1411.	1.6	9
39	Novel concept of renewables association with synchronous generation for enhancing the provision of ancillary services. Applied Energy, 2018, 229, 1035-1047.	5.1	22
40	Enhancing PV modules efficiency and power output using multi-concept cooling technique. Energy Reports, 2018, 4, 357-369.	2.5	144
41	Voltage control ancillary services for low voltage distributed generation. International Journal of Smart Grid and Clean Energy, 2018, 7, 98-108.	0.4	1
42	Fast Selective Harmonic Mitigation in Multifunctional Inverters Using Internal Model Controllers and Synchronous Reference Frames. IEEE Transactions on Industrial Electronics, 2017, 64, 6338-6349.	5.2	31
43	Time-domain harmonic state estimation of nonlinear load power systems with under-determined condition based on the extended Kalman filter. International Transactions on Electrical Energy Systems, 2017, 27, e2242.	1.2	5
44	Noise mitigation in voltage and current waveforms in harmonic distortion estimation. , 2017, , .		1
45	Generator response following as a primary frequency response control strategy for VSC-HVDC connected offshore wind farms. Energy Procedia, 2017, 137, 108-118.	1.8	6
46	Using smart power management control to maximize energy utilization and reliability within a microgrid of interconnected solar home systems. , 2017, , .		5
47	Distribution voltage control utilising the reactive power capabilities of wind generators. Journal of Engineering, 2017, 2017, 2350-2355.	0.6	0
48	Time domain harmonic state estimation in unbalanced power networks based on optimal number of meters and the principle of half-wave symmetry. IET Generation, Transmission and Distribution, 2017, 11, 3871-3880.	1.4	17
49	Estimation of frequency support market indices using Monte Carlo simulation for wind power generation. , 2017, , .		2
50	Impact of domestic frequency responsive demand on the Shetland Islands network frequency stability. CIREN - Open Access Proceedings Journal, 2017, 2017, 1800-1803.	0.1	0
51	Maximising wind generation through optimised operation of on-load tap changing transformers in active distribution networks. Journal of Engineering, 2017, 2017, 2339-2344.	0.6	0
52	Investigation on Fault-ride through Methods for VSC-HVDC Connected Offshore Wind Farms. Energy Procedia, 2016, 94, 29-36.	1.8	10
53	Reactive power compensation through active back to back converter in type-4 wind turbine. , 2016, , .		6
54	Harmonic and transient state assessment in the time-domain. , 2016, , .		0

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55	Reactive power control of DFIG wind turbines for power oscillation damping under a wide range of operating conditions. IET Generation, Transmission and Distribution, 2016, 10, 3777-3785.	1.4	49
56	Fulfilment of Grid Code Obligations by Large Offshore Wind Farms Clusters Connected via HVDC Corridors. Energy Procedia, 2016, 94, 20-28.	1.8	4
57	Optioneering analysis for connecting Dogger Bank offshore wind farms to the GB electricity network. Renewable Energy, 2016, 91, 120-129.	4.3	22
58	Integrated Modelling Platform for Dynamic Performance Assessment of Floating Wind Turbines. Energy Procedia, 2015, 80, 376-391.	1.8	0
59	DC Voltage Control for Fault Management in HVDC System. Energy Procedia, 2015, 80, 237-244.	1.8	7
60	Shutdown of an offshore wind power plant without using a brake to meet the required ramp rate in various storm-driven conditions. Energy, 2015, 82, 1011-1020.	4.5	0
61	Impacts of High Penetration of DFIG Wind Turbines on Rotor Angle Stability of Power Systems. IEEE Transactions on Sustainable Energy, 2015, 6, 759-766.	5.9	196
62	Dynamic Series Compensation for the Reinforcement of Network Connections with High Wind Penetration. Energy Procedia, 2014, 53, 86-94.	1.8	2
63	Power oscillation damping capabilities of doubly fed wind generators. , 2014, , .		5
64	Wind Power Integration: Connection and System Operational Aspects. , 2014, , .		51
65	A methodology for the efficient computer representation of dynamic power systems: Application to wind parks. Wind Energy, 2013, 16, 109-121.	1.9	1
66	North Sea Offshore Modelling Schemes with VSC-HVDC Technology: Control and Dynamic Performance Assessment. Energy Procedia, 2013, 35, 91-101.	1.8	2
67	Harmonics and power loss reduction in multi-technology offshore wind farms using simplex method. , 2013, , .		1
68	Review of harmonics in offshore wind farms. , 2013, , .		3
69	Coordinated Control for Wind Turbine and VSC-HVDC Transmission to Enhance FRT Capability. Energy Procedia, 2013, 35, 69-80.	1.8	7
70	Multi-task control for VSC-HVDC power and frequency control. International Journal of Electrical Power and Energy Systems, 2013, 53, 684-690.	3.3	26
71	Analytical efficiency evaluation of two and three level VSC-HVDC transmission links. International Journal of Electrical Power and Energy Systems, 2013, 44, 1-6.	3.3	34
72	Effective Assessment of Electric Power Losses in Three-Core XLPE Cables. IEEE Transactions on Power Systems, 2013, 28, 4488-4495.	4.6	10

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73	Fault Ride-Through Improvement of DFIG-WT by Integrating a Two-Degrees-of-Freedom Internal Model Control. IEEE Transactions on Industrial Electronics, 2013, 60, 1133-1145.	5.2	75
74	Cost and losses associated with offshore wind farm collection networks which centralise the turbine power electronic converters. IET Renewable Power Generation, 2013, 7, 390-400.	1.7	28
75	Individual Pitch Control of Horizontal Axis Wind Turbines. Journal of Offshore Mechanics and Arctic Engineering, 2012, 134, .	0.6	7
76	Small-Signal Stability Analysis of Multi-Terminal VSC-Based DC Transmission Systems. IEEE Transactions on Power Systems, 2012, 27, 1818-1830.	4.6	236
77	Adaptive Zone Identification for Voltage Level Control in Distribution Networks With DG. IEEE Transactions on Smart Grid, 2012, 3, 1594-1602.	6.2	43
78	Gain Scheduled and Robust H ∞ Control above Rated Wind Speed for Wind Turbines. Energy Procedia, 2012, 24, 186-193.	1.8	4
79	DGIS: Interactive simulator for distributed generation systems. Computer Applications in Engineering Education, 2012, 20, 594-603.	2.2	2
80	Study of the impact of wind generation on voltage stability in transmission networks. , 2011, , .		7
81	Connection scheme for north sea offshore wind integration to UK and Norway: Power balancing and transient stability analysis. , 2011, , .		7
82	Decentralised Control Design for Load Mitigation in Horizontal Axis Wind Turbines (HAWTS). , 2011, , .		1
83	Modular multilevel inverter: pulse width modulation and capacitor balancing technique. IET Power Electronics, 2010, 3, 702.	1.5	201
84	An interactive visual enviroment based on advanced numerical and computer techniques for power systems applications. , 2009, , .		1
85	Capacity estimation of a minihydro plant based on time series forecasting. Renewable Energy, 2009, 34, 1204-1209.	4.3	21
86	Influence of Tower Shadow and Wind Turbulence on the Performance of Power System Stabilizers for DFIG-Based Wind Farms. IEEE Transactions on Energy Conversion, 2008, 23, 519-528.	3.7	43
87	Optimal DFIG crowbar resistor design under different controllers during grid faults. , 2008, , .		18
88	Flexible control of converter-interfaced microgeneration. , 2008, , .		1
89	Power factor control for inverter-interfaced microgeneration. , 2008, , .		7
90	A study on stability enhancement of distributed generators. , 2008, , .		1

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91	Fast steady-state solution of the induction machine following disturbance conditions. , 2008, , .		3
92	Provision of a synchronising power characteristic on DFIG-based wind farms. IET Generation, Transmission and Distribution, 2007, 1, 162.	1.4	20
93	Modelling and control of synchronous generators for wide-range variable-speed wind turbines. Wind Energy, 2007, 10, 231-246.	1.9	40
94	Influence of rotor structural dynamics representations on the electrical transient performance of FSIG and DFIG wind turbines. Wind Energy, 2007, 10, 293-301.	1.9	72
95	Reducing unnecessary disconnection of renewable generation from the power system. IET Renewable Power Generation, 2007, 1, 41.	1.7	30
96	Electrical collector system options for large offshore wind farms. IET Renewable Power Generation, 2007, 1, 107.	1.7	114
97	A Power System Stabilizer for DFIG-Based Wind Generation. IEEE Transactions on Power Systems, 2006, 21, 763-772.	4.6	241
98	Influence of Windfarms on Power System Dynamic and Transient Stability. Wind Engineering, 2006, 30, 107-127.	1.1	49
99	Aggregated Wind Turbine Models for Power System Dynamic Studies. Wind Engineering, 2006, 30, 171-185.	1.1	36
100	Rotor flux magnitude and angle control strategy for doubly fed induction generators. Wind Energy, 2006, 9, 479-495.	1.9	33
101	Performance of Doubly Fed Induction Generator (DFIG) during Network Faults. Wind Engineering, 2005, 29, 49-66.	1.1	13
102	Control of DFIG-Based Wind Generation for Power Network Support. IEEE Transactions on Power Systems, 2005, 20, 1958-1966.	4.6	352
103	Modeling and analysis of custom power systems by PSCAD/EMTDC. IEEE Transactions on Power Delivery, 2002, 17, 266-272.	2.9	226