

Francisco M Gonzalez Longatt

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5821277/publications.pdf>

Version: 2024-02-01

143
papers

2,415
citations

394286

19
h-index

302012

39
g-index

146
all docs

146
docs citations

146
times ranked

1925
citing authors

#	ARTICLE	IF	CITATIONS
1	Load prioritization technique to guarantee the continuous electric supply for essential loads in rural microgrids. International Journal of Electrical Power and Energy Systems, 2022, 134, 107398.	3.3	20
2	Parametric sensitivity analysis of rotor angle stability indicators: Simulation case. Energy Reports, 2022, 8, 727-735.	2.5	3
3	Locational Marginal Price Forecasting Using SVR-Based Multi-Output Regression in Electricity Markets. Energies, 2022, 15, 293.	1.6	8
4	Cost Functions for Generation Dispatching in Microgrids for Non-Interconnected Zones in Colombia. Energies, 2022, 15, 2418.	1.6	3
5	A Type-2 Fuzzy Controller to Enable the EFR Service from a Battery Energy Storage System. Energies, 2022, 15, 2389.	1.6	2
6	Measurement of the Speed of Induction Motors Based on Vibration with a Smartphone. Applied Sciences (Switzerland), 2022, 12, 3371.	1.3	2
7	Design and Implementation of Low-Cost Phasor Measurement Unit: PhasorsCatcher. Energies, 2022, 15, 3172.	1.6	5
8	Comparative Performance of Inverted-Based Generation using Synchroverter during Transient Stability Conditions. , 2022, , .		0
9	Power System Oscillations with Different Prevalence of Grid-Following and Grid-Forming Converters. Energies, 2022, 15, 4273.	1.6	15
10	Impact of the Photovoltaic Integration on the Hydrothermal Dispatch on Power Systems. Energy Systems in Electrical Engineering, 2021, , 397-434.	0.5	3
11	Optimal Microgrid "Interactive Reactive Power Management for Day-Ahead Operation. Energies, 2021, 14, 1275.	1.6	17
12	On the perspective of grid architecture model with high TSO-DSO interaction. IET Energy Systems Integration, 2021, 3, 1-12.	1.1	17
13	Evaluation of a LoRa Mesh Network for Smart Metering in Rural Locations. Electronics (Switzerland), 2021, 10, 751.	1.8	10
14	Optimal Reactive Power Control of Smart Inverters: Vestfold and Telemark Regional Network. , 2021, , .		10
15	A Bayesian Model to Forecast the Time Series Kinetic Energy Data for a Power System. Energies, 2021, 14, 3299.	1.6	15
16	Impact of Spanish Offshore Wind Generation in the Iberian Electricity Market: Potential Savings and Policy Implications. Energies, 2021, 14, 4481.	1.6	7
17	Comparative Performance of Multi-Period ACOPF and Multi-Period DCOPF under High Integration of Wind Power. Energies, 2021, 14, 4540.	1.6	9
18	A Coordinated Control of Offshore Wind Power and BESS to Provide Power System Flexibility. Energies, 2021, 14, 4650.	1.6	6

#	ARTICLE	IF	CITATIONS
19	Frequency Stability Issues and Research Opportunities in Converter Dominated Power System. Energies, 2021, 14, 4184.	1.6	26
20	Parametric Sensitivity Analysis of Rotor Angle Stability Indicators. Energies, 2021, 14, 5023.	1.6	10
21	Assessment of Daily Cost of Reactive Power Procurement by Smart Inverters. Energies, 2021, 14, 4834.	1.6	7
22	Investigation of Inertia Response and Rate of Change of Frequency in Low Rotational Inertial Scenario of Synchronous Dominated System. Electronics (Switzerland), 2021, 10, 2288.	1.8	10
23	Data-Driven Trajectory Prediction of Grid Power Frequency Based on Neural Models. Electronics (Switzerland), 2021, 10, 151.	1.8	14
24	Single Value Decomposition to Estimate Critical Clearing Time of a Power System Using Measurements. IEEE Access, 2021, 9, 125999-126010.	2.6	2
25	Power Converters Dominated Power Systems. Power Systems, 2021, , 1-35.	0.3	8
26	On Short Circuit of Grid-Forming Converters Controllers: A glance of the Dynamic Behaviour. , 2021, , .		6
27	Frequency Support provided by Inverted Based-Generation using Grid-Forming Controllers: A Comparison during Islanded Operation. , 2021, , .		3
28	Methodology of Adaptive Instantaneous Overcurrent Protection Setting. Electronics (Switzerland), 2021, 10, 2754.	1.8	2
29	Setting and Testing of the Out-of-Step Protection at Mongolian Transmission System. Energies, 2021, 14, 8170.	1.6	3
30	Innovative primary frequency control in low-inertia power systems based on wide-area RoCoF sharing. IET Energy Systems Integration, 2020, 2, 151-160.	1.1	36
31	Optimal Under-Frequency Load Shedding Setting at Altai-Uliastai Regional Power System, Mongolia. Energies, 2020, 13, 5390.	1.6	14
32	FAPF Controller for Frequency Support in Low-Inertia Power Systems. IEEE Open Access Journal of Power and Energy, 2020, 7, 276-286.	2.5	13
33	Optimal Frequency Support of Variable-Speed Hydropower Plants at Telemark and Vestfold, Norway: Future Scenarios of Nordic Power System. Energies, 2020, 13, 3377.	1.6	16
34	Online Dynamic Assessment of System Stability using Unscented Kalman Filter. , 2020, , .		4
35	Nadir Frequency Estimation in Low-Inertia Power Systems. , 2020, , .		16
36	Transient Stability Performance of Power Systems with High Share of Wind Generators Equipped with Power-Angle Modulation Controllers or Fast Local Voltage Controllers. Energies, 2020, 13, 4205.	1.6	12

#	ARTICLE	IF	CITATIONS
37	Two-Level Optimisation and Control Strategy for Unbalanced Active Distribution Systems Management. IEEE Access, 2020, 8, 197992-198009.	2.6	20
38	Grid Code-Dependent Frequency Control Optimization in Multi-Terminal DC Networks. Energies, 2020, 13, 6485.	1.6	4
39	Power-Angle Modulation Controller to Support Transient Stability of Power Systems Dominated by Power Electronic Interfaced Wind Generation. Energies, 2020, 13, 3178.	1.6	4
40	Analysis of the Converter Synchronizing Method for the Contribution of Battery Energy Storage Systems to Inertia Emulation. Energies, 2020, 13, 1478.	1.6	19
41	Design of Load Frequency Control for a Microgrid Using D-partition Method. International Journal of Emerging Electric Power Systems, 2020, 21, .	0.6	13
42	Status of Micro/Mini-Grid Systems in a Himalayan Nation: A Comprehensive Review. IEEE Access, 2020, 8, 120983-120998.	2.6	21
43	Optimised TSO-DSO interaction in unbalanced networks through frequency-responsive EV clusters in virtual power plants. IET Generation, Transmission and Distribution, 2020, 14, 4908-4917.	1.4	18
44	Multi-Objective optimal provision of fast frequency response from EV clusters. IET Generation, Transmission and Distribution, 2020, 14, 5580-5587.	1.4	8
45	Deep Reinforcement Learning-Based Controller for SOC Management of Multi-Electrical Energy Storage System. IEEE Transactions on Smart Grid, 2020, 11, 5039-5050.	6.2	48
46	Probabilistic Power Flow Analysis. , 2020, , 179-208.		0
47	TSO-DSO Performance Considering Volt-Var Control at Smart-Inverters: Case of Vestfold and Telemark in Norway. , 2020, , .		8
48	Multi-Core Platform of Admittance Matrix Formation of Power Systems: Computational Time Assessment. , 2020, , .		1
49	Non-synchronous Generation Impact on Frequency Response - A case from Albania. , 2020, , .		1
50	Robust PI controller design for frequency stabilisation in a hybrid microgrid system considering parameter uncertainties and communication time delay. IET Generation, Transmission and Distribution, 2019, 13, 3048-3056.	1.4	17
51	Interleaved high gain DC-DC converter for integrating solar PV source to DC bus. Solar Energy, 2019, 188, 924-934.	2.9	41
52	Transmission system-friendly microgrids: an option to provide ancillary services. , 2019, , 291-321.		6
53	On the topology for a smart direct current microgrid for a cluster of zero-net energy buildings. , 2019, , 455-481.		4
54	A Transmission System Friendly Micro-grid: Optimising Active Power Losses. , 2019, , .		13

#	ARTICLE	IF	CITATIONS
55	Generic Model of PEM Fuel Cells and Performance Analysis in Frequency Containment Period in Systems with Decreased Inertia. , 2019, , .		6
56	Optimization of Frequency Controller Parameters of a BESS by considering Rate of Change Constraints. , 2019, , .		7
57	Reliability Assessment in Transmission Considering Intermittent Energy Resources. , 2019, , .		9
58	Security Assessment of System Frequency Response. , 2019, , .		3
59	On the Optimization of Damping Enhancement in a Power System with a Hybrid HVDC Link. , 2019, , .		6
60	Dynamic Data-Driven SoC Control of BESS for Provision of Fast Frequency Response Services. , 2019, , .		4
61	Coherency Groups Analysis based on Self Organizing Maps. , 2019, , .		6
62	Analysis of PV Systems and Charging Stations Integration into the Public Lighting Infrastructure. , 2019, , .		3
63	Reactive Power Control of Grid Interactive Battery Energy Storage System for WADC. , 2019, , .		2
64	A network control system for hydro plants to counteract the non-synchronous generation integration. International Journal of Electrical Power and Energy Systems, 2019, 105, 404-419.	3.3	22
65	Controller to enable the enhanced frequency response services from a multi-€electrical energy storage system. IET Generation, Transmission and Distribution, 2019, 13, 258-265.	1.4	34
66	Synthetic inertia control based on fuzzy adaptive differential evolution. International Journal of Electrical Power and Energy Systems, 2019, 105, 803-813.	3.3	56
67	Coherency Estimation in Power Systems: A Koopman Operator Approach. Springer Optimization and Its Applications, 2019, , 201-225.	0.6	5
68	Introduction to Smart Grid Functionalities. Green Energy and Technology, 2018, , 1-18.	0.4	4
69	Peer-to-Peer (P2P) MATLAB®PowerFactory Communication: Optimal Placement and Setting of Power System Stabilizer. Green Energy and Technology, 2018, , 301-318.	0.4	2
70	Probabilistic Load-Flow Using Analysis Using DPL Scripting Language. Green Energy and Technology, 2018, , 93-124.	0.4	3
71	Impact of non-synchronous generation on transmission oscillations paths. , 2018, , .		4
72	High-gain-high-power (HGHP) DC-DC converter for DC microgrid applications: Design and testing. International Transactions on Electrical Energy Systems, 2018, 28, e2487.	1.2	17

#	ARTICLE	IF	CITATIONS
73	Multi-Objective Optimization for Enhancing System Coordination Restoration by Placement of Fault Current Limiters on an Active Distribution System with System Reliability Considerations. , 2018, , .		2
74	Design and Implementation of a Low-Cost Phasor Measurement Unit: A Comprehensive Review. , 2018, , .		20
75	Effects of Fast Acting Power Controller of BESS in the System Frequency Response of a Multi-Machine System: Probabilistic Approach. , 2018, , .		6
76	Effects of Fast Acting Power Controller of BESS in the System Frequency Response of a Multi-Machine System: Probabilistic Approach. , 2018, , .		1
77	Stochastic Unit Commitment in Microgrids based on Model Predictive Control. , 2018, , .		4
78	Preventive Security-Constrained DCOPF Formulation Using Power Transmission Distribution Factors and Line Outage Distribution Factors. Energies, 2018, 11, 1497.	1.6	20
79	DC microgrid in residential buildings. , 2018, , 367-388.		12
80	Steady-state assessments of PMSGs in wind generating units. International Journal of Electrical Power and Energy Systems, 2017, 90, 87-93.	3.3	34
81	A novel approach to frequency support in a wind integrated power system. Renewable Energy, 2017, 108, 194-206.	4.3	30
82	Stochastic security-constrained generation expansion planning methodology based on a generalized line outage distribution factors. , 2017, , .		6
83	Inertial frequency response provided by battery energy storage systems: Probabilistic assessment. , 2017, , .		5
84	Implementation of primary frequency regulation on fully rated wind turbine generators. , 2017, , .		5
85	Distributed synthetic inertia control in power systems. , 2017, , .		17
86	Evaluation of the synthetic inertia control using active damping method. , 2017, , .		7
87	Intelligent Energy Management System for PV-Battery-based Microgrids in Future DC Homes. International Journal of Emerging Electric Power Systems, 2016, 17, 339-350.	0.6	14
88	Enabling inertial response in utility-scale battery energy storage system. , 2016, , .		18
89	Simulation platform for autonomous smart multi-terminal DC micro-grid. , 2016, , .		3
90	Investigation on grid-scale BESS providing inertial response support. , 2016, , .		30

#	ARTICLE	IF	CITATIONS
91	Impact of inertia emulation control of grid-scale BESS on power system frequency response. , 2016, , .		17
92	Optimal structure of a Smart DC micro-grid for a cluster of zero net energy buildings. , 2016, , .		3
93	Evaluation of inertial response controllers for full-rated power converter wind turbine (Type 4). , 2016, , .		28
94	Impact of emulated inertia from wind power on under-frequency protection schemes of future power systems. Journal of Modern Power Systems and Clean Energy, 2016, 4, 211-218.	3.3	31
95	Performance assessment of evolutionary algorithms in power system optimization problems. , 2015, , .		1
96	Protection and energy management of zero net electric energy clusters of buildings. , 2015, , .		1
97	Smart multi-terminal DC $\frac{1}{4}$ -grids for autonomous zero-net energy buildings: Implicit concepts. , 2015, , .		8
98	Application of Swarm Mean-Variance Mapping Optimization on location and tuning damping controllers. , 2015, , .		4
99	Wind Resource Potential in Los Taques-Venezuela. IEEE Latin America Transactions, 2015, 13, 1429-1437.	1.2	6
100	Online estimation of Equivalent Model for cluster of induction generators: A MVMO-based approach. , 2015, , .		2
101	Dynamic analysis of wind power integration into the Northern Interconnected Power System of Chile. , 2015, , .		0
102	Activation schemes of synthetic inertia controller on full converter wind turbine (type 4). , 2015, , .		21
103	Optimal power flow in Multi-terminal HVDC networks for DC-System Operator: Constant current operation. , 2015, , .		4
104	Activation schemes of synthetic inertia controller for full converter wind turbine generators. , 2015, , .		12
105	Smart DC Grid for Autonomous Zero Net Electric Energy of Cluster of Buildings. IFAC-PapersOnLine, 2015, 48, 108-113.	0.5	7
106	Spatial interpolation and orographic correction to estimate wind energy resource in Venezuela. Renewable and Sustainable Energy Reviews, 2015, 48, 1-16.	8.2	26
107	Flexible Automatic Generation Control system for embedded HVDC links. , 2015, , .		6
108	Optimal power flow in MTDC systems based on a DC-independent system operator objective. , 2015, , .		6

#	ARTICLE	IF	CITATIONS
109	Closure to Discussion on "Two-Step Spectral Clustering Controlled Islanding Algorithm" IEEE Transactions on Power Systems, 2014, 29, 413-414.	4.6	3
110	A review and recent developments in the optimal wind-turbine micro-siting problem. Renewable and Sustainable Energy Reviews, 2014, 30, 133-144.	8.2	166
111	Wind-resource atlas of Venezuela based on on-site anemometry observation. Renewable and Sustainable Energy Reviews, 2014, 39, 898-911.	8.2	20
112	Implementation of Simplified Models of Local Controller for Multi-terminal HVDC Systems in DlgSILENT PowerFactory. Power Systems, 2014, , 447-472.	0.3	5
113	Assessing the Renewable Energy Sources Integration Through a Series of Technical Performance Indices Using DlgSILENT PowerFactory DPL. Power Systems, 2014, , 135-156.	0.3	0
114	Optimal offshore wind farms' collector design based on the multiple travelling salesman problem and genetic algorithm. , 2013, , .		7
115	Two-Step Spectral Clustering Controlled Islanding Algorithm. IEEE Transactions on Power Systems, 2013, 28, 75-84.	4.6	239
116	Effects of DC Voltage control strategy on voltage response on multi-terminal HVDC following loss of a converter station. , 2013, , .		11
117	Effects of the Synthetic Inertia from wind power on the total system inertia after a frequency disturbance. , 2013, , .		59
118	Impact of DC control strategies on dynamic behaviour of multi-terminal voltage-source converter-based HVDC after sudden disconnection of a converter station. , 2013, , .		3
119	Systemic impact caused by the integration of La Guajira wind farm. , 2013, , .		3
120	Evaluation of reactive power compensations for the phase I of Paraguayan wind based on system voltages. , 2013, , .		5
121	Two-step spectral clustering controlled islanding algorithm. , 2013, , .		3
122	Indices to Assess the Integration of Renewable Energy Resources on Transmission Systems. Conference Papers in Energy, 2013, 2013, 1-8.	0.5	5
123	Evaluation of power flow variability on the Paraguayan transmission system due to integration of the first venezuelan wind farm. , 2012, , .		5
124	Impact of synthetic inertia from wind power on the protection/control schemes of future power systems: simulation study. , 2012, , .		30
125	Effects of the synthetic inertia from wind power on the total system inertia after a frequency disturbance. , 2012, , .		20
126	Identification of Gaussian mixture model using Mean Variance Mapping Optimization: Venezuelan case. , 2012, , .		12

#	ARTICLE	IF	CITATIONS
127	Mean Variance Mapping Optimization for the identification of Gaussian Mixture Model: Test case. , 2012, , .		8
128	Effects of the synthetic inertia from wind power on the total system inertia: simulation study. , 2012, , .		49
129	Probabilistic assessment of operational risk considering different wind turbine technologies. , 2012, , .		3
130	Effects of dc voltage control strategies of voltage response on multi-terminal HVDC following a disturbance. , 2012, , .		14
131	Solution of ac/dc power flow on a multiterminal HVDC system: Illustrative case supergrid phase I. , 2012, , .		21
132	Estimation of generator inertia available during a disturbance. , 2012, , .		79
133	Wake effect in wind farm performance: Steady-state and dynamic behavior. Renewable Energy, 2012, 39, 329-338.	4.3	242
134	Optimal Electric Network Design for a Large Offshore Wind Farm Based on a Modified Genetic Algorithm Approach. IEEE Systems Journal, 2012, 6, 164-172.	2.9	122
135	Procedure for estimation of equivalent model parameters for a wind farm using post-disturbance on-line measurement data. , 2011, , .		7
136	Unscented Kalman Filter for frequency and amplitude estimation. , 2011, , .		13
137	A simplified model for dynamic behavior of permanent magnet synchronous generator for direct drive wind turbines. , 2011, , .		24
138	Phasor estimation considering DC component using UKF. , 2011, , .		4
139	Estimation of load model parameters from instantaneous voltage and current. , 2011, , .		3
140	Induction generator model parameter estimation using improved particle swarm optimization and on-line response to a change in frequency. , 2011, , .		5
141	Effect of the shaft stiffness on the inertial response of the fixed speed wind turbines and its contribution to the system inertia. , 2011, , .		5
142	Modeling and simulation of PEM fuel cell with bond graph and 20sim. , 2008, , .		7
143	Modeling of faults in operational amplifier circuits using bond graph. , 2008, , .		1