

# Filipe Miguel Faria da Silva

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3659818/publications.pdf>

Version: 2024-02-01

117  
papers

842  
citations

623734

14  
h-index

677142

22  
g-index

119  
all docs

119  
docs citations

119  
times ranked

661  
citing authors

#	ARTICLE	IF	CITATIONS
1	Adaptive Tuning of Frequency Thresholds Using Voltage Drop Data in Decentralized Load Shedding. IEEE Transactions on Power Systems, 2015, 30, 2055-2062.	6.5	57
2	Analysis and design of notch filter-based PLLs for grid-connected applications. Electric Power Systems Research, 2017, 147, 62-69.	3.6	41
3	Conductor Temperature Estimation and Prediction at Thermal Transient State in Dynamic Line Rating Application. IEEE Transactions on Power Delivery, 2018, 33, 2236-2245.	4.3	39
4	Electromagnetic Transients in Power Cables. Power Systems, 2013, , .	0.5	33
5	A performance comparison between extended Kalman Filter and unscented Kalman Filter in power system dynamic state estimation. , 2016, , .		33
6	Decentralized Coordination of Load Shedding and Plant Protection Considering High Share of RESs. IEEE Transactions on Power Systems, 2016, 31, 3607-3615.	6.5	30
7	100% Sustainable Electricity in the Faroe Islands: Expansion Planning Through Economic Optimization. IEEE Open Access Journal of Power and Energy, 2021, 8, 23-34.	3.4	26
8	Electric stress computations for designing a novel unibody composite cross-arm using finite element method. IEEE Transactions on Dielectrics and Electrical Insulation, 2017, 24, 3567-3577.	2.9	22
9	Synchronous Generator Loss of Field Protection: A Real-Time Realistic Framework and Assessment of Some Recently Proposed Methods. IEEE Transactions on Power Delivery, 2019, 34, 971-979.	4.3	20
10	An initial topology of multi-terminal HVDC transmission system in Europe: A case study of the North-Sea region. , 2016, , .		19
11	A Current-Based Differential Technique to Detect Loss of Field in Synchronous Generators. IEEE Transactions on Power Delivery, 2020, 35, 514-522.	4.3	19
12	Power system stability using decentralized under frequency and voltage load shedding. , 2014, , .		18
13	High voltage AC underground cable systems for power transmission “ A review of the Danish experience, part 1. Electric Power Systems Research, 2016, 140, 984-994.	3.6	17
14	Double-layer stochastic model predictive voltage control in active distribution networks with high penetration of renewables. Applied Energy, 2021, 302, 117530.	10.1	16
15	Power system unbalance due to railway electrification: Review of challenges and outlook of the Danish case. , 2016, , .		15
16	An approach to dynamic line rating state estimation at thermal steady state using direct and indirect measurements. Electric Power Systems Research, 2018, 163, 599-611.	3.6	15
17	Optimal operational scheduling and reconfiguration coordination in smart grids for extreme weather condition. IET Generation, Transmission and Distribution, 2019, 13, 3455-3463.	2.5	15
18	Offshore Wind Farm Black Start Service Integration: Review and Outlook of Ongoing Research. Energies, 2020, 13, 6286.	3.1	15

#	ARTICLE	IF	CITATIONS
19	Harmonic stability assessment for multi-paralleled, grid-connected inverters. , 2014, , .		14
20	Investigation on Shielding Failure of a Novel 400-kV Double-Circuit Composite Tower. IEEE Transactions on Power Delivery, 2018, 33, 752-760.	4.3	14
21	On the Application of Modal Transient Analysis for Online Fault Localization in HVDC Cable Bundles. IEEE Transactions on Power Delivery, 2020, 35, 1365-1378.	4.3	14
22	Methods to Minimize Zero-Missing Phenomenon. IEEE Transactions on Power Delivery, 2010, 25, 2923-2930.	4.3	13
23	High Voltage AC underground cable systems for power transmission – A review of the Danish experience: Part 2. Electric Power Systems Research, 2016, 140, 995-1004.	3.6	13
24	Variation of UPFC controllable parameters during power swing and their impacts on distance relay. IET Generation, Transmission and Distribution, 2017, 11, 1735-1744.	2.5	13
25	A Harmonic Based Pilot Protection Scheme for VSC-MTDC Grids with PWM Converters. Energies, 2019, 12, 1010.	3.1	12
26	A droop line tracking control for multi-terminal VSC-HVDC transmission system. Electric Power Systems Research, 2020, 179, 106055.	3.6	11
27	Use of a pre-insertion resistor to minimize zero-missing phenomenon and switching overvoltages. , 2009, , .		9
28	Active power deficit estimation in presence of Renewable Energy Sources. , 2015, , .		9
29	Impact of high level penetration of wind turbines on power system transient stability. , 2015, , .		9
30	Steady state modelling of three-core wire armoured submarine cables: Power losses and ampacity estimation based on FEM and IEC. , 2016, , .		9
31	Harmonic modelling, propagation and mitigation for large wind power plants connected via long HVAC cables: Review and outlook of current research. , 2016, , .		9
32	An improved current controller to ensure the robust performance of grid-connected converters under weak grid Conditions. , 2016, , .		9
33	Distance protection of multiple-circuit shared tower transmission lines with different voltages – Part II: fault loop impedance. IET Generation, Transmission and Distribution, 2017, 11, 2626-2632.	2.5	9
34	A review of the protection algorithms for multi-terminal VCD-HVDC grids. , 2018, , .		9
35	Decentralized power system emergency control in the presence of high wind power penetration. , 2015, , .		8
36	Power Flow Analysis of HVAC and HVDC Transmission Systems for Offshore Wind Parks. International Journal of Emerging Electric Power Systems, 2009, 10, .	0.8	7

#	ARTICLE	IF	CITATIONS
37	A categorization of converter station controllers within multi-terminal DC transmission systems. , 2016, , .		7
38	Modeling of HVDC in Dynamic State Estimation using Unscented Kalman Filter method. , 2016, , .		7
39	Power Swing Detection in UPFC-Compensated Line by Phase Angle of Current. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2017, 7, 459-468.	3.6	7
40	Distance protection of multipleâ€circuit shared tower transmission lines with different voltages â€œ Part I: fault current magnitude. IET Generation, Transmission and Distribution, 2017, 11, 2618-2625.	2.5	7
41	Performance of power swing blocking methods in UPFC-compensated line. International Transactions on Electrical Energy Systems, 2017, 27, e2382.	1.9	7
42	Integrated model of transmission tower surge impedance and multilayer grounding system based on full-wave approach. Electric Power Systems Research, 2021, 198, 107355.	3.6	7
43	Back-to-back energization of a 60kV cable network - inrush currents phenomenon. , 2010, , .		6
44	Determination of minimum air clearances for a 420kV novel unibody composite cross-arm. , 2015, , .		6
45	Dynamic line rating â€œ Technologies and challenges of PMU on overhead lines: A survey. , 2016, , .		6
46	Protection of Multi-Terminal VSC-HVDC Grids Based on the Response of the First Carrier Frequency Harmonic Current. , 2018, , .		6
47	Transient overvoltage analysis in the medium voltage substations based on full-wave modeling of two-layer grounding system. Electric Power Systems Research, 2022, 211, 108139.	3.6	6
48	Coordination of voltage and frequency feedback in load-frequency control capability of wind turbine. , 2014, , .		5
49	Performance Assessment of Some Practical Loss of Excitation Detection Schemes Employing a Realistic Model. Energies, 2020, 13, 5928.	3.1	5
50	Estimation of the Required Modeling Depth for the Simulation of Cable Switching in a Cable-Based Network. IEEE Transactions on Power Delivery, 2012, 27, 1902-1908.	4.3	4
51	Malfunction operation of LVRT capability of Wind Turbines under islanding conditions. , 2015, , .		4
52	MVAC submarine cable, impedance measurements and analysis. , 2017, , .		4
53	A Novel Approach to Detect Faults Occurring During Power Swings by Abrupt Change of Impedance Trajectory. Electric Power Components and Systems, 2017, 45, 1638-1652.	1.8	4
54	An analysis of delay-based and integrator-based sequence detectors for grid-connected converters. , 2017, , .		4

#	ARTICLE	IF	CITATIONS
55	Optimal Decision Making in Electrical Systems Using an Asset Risk Management Framework. <i>Energies</i> , 2021, 14, 4987.	3.1	4
56	Simplified formulae for the estimation of the positive-sequence resistance and reactance of three-phase cables for different frequencies. , 2015, , .		3
57	Improved LVRT grid code under Islanding condition. , 2015, , .		3
58	Computationally efficient transient stability modeling of multi-terminal VSC-HVDC. , 2016, , .		3
59	Addressing single and multiple bad data in the modern PMU-based power system state estimation. , 2017, , .		3
60	Synchronous Generator Loss of Field Protection by Using Rotor Angle Variations. , 2018, , .		3
61	Loss of Field Protection of Synchronous Generator in a Realistic Framework Using RTDS. , 2018, , .		3
62	Methodology to assess phasor measurement unit in the estimation of dynamic line rating. <i>IET Generation, Transmission and Distribution</i> , 2018, 12, 3820-3828.	2.5	3
63	A DC Power-Based Scheme to Detect Loss of Field in Synchronous Generators. , 2019, , .		3
64	Electrical Design of a 400 kV Composite Tower. <i>Lecture Notes in Electrical Engineering</i> , 2020, , .	0.4	3
65	Load capability estimation of dry-type transformers used in PV-systems by employing field measurements. <i>Electrical Engineering</i> , 2021, 103, 1055-1065.	2.0	3
66	STATCOM Impacts on Synchronous Generator LOE Protection: A Realistic Study Based on IEEE Standard C37. 102. <i>IEEE Transactions on Industry Applications</i> , 2021, 57, 1255-1264.	4.9	3
67	Electric Field Computation and Optimization for A 400 kV Y-shaped Composite Cross-arm. , 2021, , .		3
68	Backflashover Performance Evaluation of the Partially Grounded Scheme of Overhead Lines With Fully Composite Pylons. <i>IEEE Transactions on Power Delivery</i> , 2022, 37, 823-832.	4.3	3
69	Analysis and validation of mathematical morphology filters for single-ended fault localization in VSC-HVDC links. <i>Electrical Engineering</i> , 2021, 103, 1583-1596.	2.0	3
70	A pilot protection scheme for VSC-MTDC grids based on polarity comparison using a combined morphological technique. <i>Electrical Engineering</i> , 2022, 104, 1395-1411.	2.0	3
71	Overview of Composite-Based Transmission Pylons. <i>Lecture Notes in Electrical Engineering</i> , 2020, , 1-13.	0.4	3
72	Propagation of harmonics in electrical grids: a review of selected issues. <i>Electrical Engineering</i> , 2022, 104, 2819-2826.	2.0	3

#	ARTICLE	IF	CITATIONS
73	Simplified frequency-dependent formulae for series-impedance matrices of single-core HVAC cables. , 2015, , .		2
74	Comparison between conventional anc post-processing PMU-based state estimation to deal with bad data. , 2017, , .		2
75	MVAC submarine cable, magnetic fields measurements and analysis. , 2017, , .		2
76	Markov Model of Renewable Resources for Reliability Assessment of Distribution Systems. , 2018, , .		2
77	Investigation of DC-DC Boost Converter for Reliability of Operational Planning. , 2018, , .		2
78	Online Synchrophasor-Based Dynamic State Estimation Using Real-Time Digital Simulator. , 2018, , .		2
79	Application of shunt busbar capacitor installations for protection of VSC-MTDC grids. , 2018, , .		2
80	Synchronous Generator LOF Protection Using a Detailed Model Based on IEEE Standard C37.102-2006. , 2019, , .		2
81	Online Fault Location in Monopolar LCC-HVDC links With Metallic Return Using Modal Transient Data. , 2019, , .		2
82	Fiber Reinforced Plastic (FRP) Composite Selection for the Composite Cross-Arm Core. Lecture Notes in Electrical Engineering, 2020, , 15-65.	0.4	2
83	Frequency dependence of multilayer soil electrical parameters: effects on the input impedance of grounding systems. , 2021, , .		2
84	Comparison of Backflashover performance between a novel composite pylon and metallic towers. Electric Power Systems Research, 2021, 196, 107263.	3.6	2
85	Modal online differential fault detection and localisation scheme for VSC-MTDC cable transmission. IET Generation, Transmission and Distribution, 2020, 14, 4475-4487.	2.5	2
86	Lightning surges in hybrid cable-overhead lines: Part I – voltage estimation for shielding failure. Electrical Engineering, 2022, 104, 3281-3294.	2.0	2
87	Analysis of Harmonic Propagation in Power Systems Using Standing Waves. , 2022, , .		2
88	Energization of long HVAC cables in parallel – Analysis and estimation formulas. Electric Power Systems Research, 2013, 96, 150-156.	3.6	1
89	Comparison of Bergeron and frequency-dependent cable models for the simulation of electromagnetic transients. , 2016, , .		1
90	An Adaptive Algorithm for Fault Identification in Transmission Lines by Short-Time Fourier Transform Function. , 2018, , .		1

#	ARTICLE	IF	CITATIONS
91	Calculation of Voltage Unbalance in Transmission Systems Due to AC Railway Operation: A Simplified Methodology Using Network Admittance Matrix. , 2018, , .		1
92	Electromagnetic Interference Issues of a Wireless Power Transmission Converter. , 2018, , .		1
93	Distance protection of multipleâ€circuit shared tower transmission lines with different voltages and underground cable sections. Journal of Engineering, 2018, 2018, 961-966.	1.1	1
94	Deploying correct fault loop in distance protection of multipleâ€circuit shared tower transmission lines with different voltages. Journal of Engineering, 2018, 2018, 1087-1090.	1.1	1
95	Performance Evaluation of Some Industrial Loss of Field Protection Schemes Using a Realistic Model in The RTDS. , 2019, , .		1
96	Optimal Shunt Busbar Capacitor Placement for Selective Protection of Large-Scale VSC-MTDC Grids. Electric Power Systems Research, 2021, 199, 107458.	3.6	1
97	Travelling Waves. Power Systems, 2013, , 47-101.	0.5	1
98	Directional derivativeâ€based method for quasiâ€stationary voltage support analysis of singleâ€infeed VSCâ€HVDC units. High Voltage, 2020, 5, 511-522.	4.7	1
99	A study of harmonic spatial propagation along AC power lines of meshed power systems. IET Circuits, Devices and Systems, 2022, 16, 337-349.	1.4	1
100	Analysis of Harmonic Spatial Distribution Along AC Power Lines of Meshed Power Systems. , 2020, , .		1
101	Frequency Dependence of Multilayer Soil Electrical Parameters: Effects on Ground Potential Rise. , 2021, , .		1
102	Kalman filter application to symmetrical fault detection during power swing. , 2016, , .		0
103	On-site measurements for voltage unbalance studies associated with the AC railway operation: Objectives, methodology and monitoring results. , 2017, , .		0
104	Transfer Matrix-Based Differential Protection of Transmission Lines. , 2018, , .		0
105	Enabling the Existing Point-to-Point VSC-HVDC Control for Multi-Terminal Operation. , 2019, , .		0
106	External Partial Discharge Analysis in Design Process of Electrical Space Components. , 2019, , .		0
107	Lightning Shielding Failure Investigation by High Voltage Experiments. Lecture Notes in Electrical Engineering, 2020, , 181-204.	0.4	0
108	Lightning Shielding Performance of Fully Composite Pylon. Lecture Notes in Electrical Engineering, 2020, , 157-179.	0.4	0

#	ARTICLE	IF	CITATIONS
109	MPC-based Double-Stage Voltage Control of Distribution Networks with High Penetration of Distributed Generation. , 2020, , .		0
110	Simple Switching Transients. Power Systems, 2013, , 25-46.	0.5	0
111	System Modelling and Harmonics. Power Systems, 2013, , 193-228.	0.5	0
112	Components Description. Power Systems, 2013, , 1-23.	0.5	0
113	Electrical Design of Fully Composite Pylon. Lecture Notes in Electrical Engineering, 2020, , 83-117.	0.4	0
114	Electric Field Verification by High Voltage Experiments on the Composite Cross-Arm. Lecture Notes in Electrical Engineering, 2020, , 119-155.	0.4	0
115	Environmental Effects of Fully Composite Pylon. Lecture Notes in Electrical Engineering, 2020, , 205-232.	0.4	0
116	Air Clearances of Fully Composite Pylon. Lecture Notes in Electrical Engineering, 2020, , 67-81.	0.4	0
117	Lightning surges in hybrid cable-overhead lines: Part II – voltage estimation for strikes to shield wire. Electrical Engineering, 0, , 1.	2.0	0