

Pedro Gomes Barbosa

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Conexão de Veículos Elétricos à Rede de Energia Elétrica para Recarga de Baterias: Uma Visão Geral. <i>Eletrônica De Potência</i> , 2024, 19, 194-207.	0.1	0
2	Projeto e Implementação de um Controlador Digital Preditivo para Regular as Correntes de um Motor Bldc. <i>Eletrônica De Potência</i> , 2024, 20, 215-224.	0.1	0
3	Estratégias de Energização e Desenergização de um Compensador Estático Sincrono para Distribuição. <i>Eletrônica De Potência</i> , 2024, 23, 29-38.	0.1	0
4	Multivariable Optimal Control Applied to a Back-to-Back Power Converter. <i>IEEE Transactions on Industrial Electronics</i> , 2022, 69, 9406-9418.	5.2	7
5	Experimental evaluation of negative-sequence voltage compensation in distribution networks by a modular multilevel static synchronous compensator. <i>Electric Power Systems Research</i> , 2021, 194, 107020.	2.1	9
6	Series-DC connection of Offshore wind generating units - modeling, control and galvanic isolation.. <i>Electric Power Systems Research</i> , 2021, 195, 107149.	2.1	7
7	Voltage compensation in multi-grounded distribution network with a three-phase five-wire DSTATCOM. <i>Electric Power Systems Research</i> , 2021, 197, 107310.	2.1	6
8	Robust Control of a Variable-Speed BLDC Motor Drive. <i>IEEE Journal of Emerging and Selected Topics in Industrial Electronics</i> , 2021, 2, 32-41.	3.0	16
9	STATCOM and DSTATCOM with modular multilevel converters. , 2021, , 209-248.		0
10	A Smooth Pre-charging Strategy for an Offshore HVDC System Based on Modular Multilevel Converters. , 2021, , .		0
11	Underwater Wireless Power Transfer With High Tolerance to Misalignments. , 2021, , .		1
12	A control strategy for an offshore wind farm with the generating units connected in series with a VSC-HVDC transmission link. <i>Electric Power Systems Research</i> , 2020, 180, 106121.	2.1	9
13	Enhancing the Performance of Pre-Charging Strategy of a Modular Multilevel Static Synchronous Compensator. <i>Journal of Control, Automation and Electrical Systems</i> , 2020, 31, 1426-1436.	1.2	2
14	Systematic Design of a DLQR Applied to Grid-Forming Converters. <i>IEEE Journal of Emerging and Selected Topics in Industrial Electronics</i> , 2020, 1, 200-210.	3.0	10
15	Low-Frequency Underwater Wireless Power Transfer: Maximum Efficiency Tracking Strategy. <i>IEEE Latin America Transactions</i> , 2020, 18, 1200-1208.	1.2	15
16	Control algorithm for DSTATCOM to compensate consumer-generated negative and zero sequence voltage unbalance. <i>International Journal of Electrical Power and Energy Systems</i> , 2020, 120, 105957.	3.3	20
17	Simple and Effective Digital Control of a Variable-Speed Low Inductance BLDC Motor Drive. <i>IEEE Access</i> , 2020, 8, 13240-13250.	2.6	12
18	A Compensation Strategy Based on Consumer's Voltage Unbalance Assessment for a Distribution Static Synchronous Compensator. <i>IEEE Latin America Transactions</i> , 2020, 18, 156-164.	1.2	4

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19	Dispatchable distributed generation using a back-to-back converter for grid-forming improvements based on feed-forward action with load current prediction. IET Power Electronics, 2020, 13, 3686-3696.	1.5	3
20	A simple dead-time compensation strategy for grid-connected voltage-sourced converters semiconductor switches. Electric Power Systems Research, 2019, 174, 105853.	2.1	4
21	A flexible co-simulation framework for penetration studies of power electronics based renewable sources: A new algorithm for phasor extraction. International Journal of Electrical Power and Energy Systems, 2019, 113, 419-435.	3.3	10
22	A novel energizing strategy for a grid-connected modular multilevel converter operating as static synchronous compensator. International Journal of Electrical Power and Energy Systems, 2019, 109, 672-684.	3.3	16
23	Zero-sequence voltage compensation of a distribution network through a four-wire modular multilevel static synchronous compensator. International Journal of Electrical Power and Energy Systems, 2019, 109, 57-72.	3.3	25
24	Unified Robust Control Design for BTB-VSC Subject to Uncertainties in Grid Equivalent Circuit. , 2019, , .		1
25	Iterative Time-Frequency Harmonic Analysis: Problems and Solutions. , 2019, , .		0
26	Multivariable Control of a Grid Forming System Based on Back-To-Back Topology. , 2019, , .		2
27	A New Zero-Sequence Voltage Compensation Algorithm for A Dstatcom Based on Consumer Unbalance. , 2019, , .		0
28	Model Predictive Controller for Two-Phase Three-Wire Grid-Connected Converters. , 2019, , .		0
29	Design of Resonant Controllers for Compensation of Third Harmonic Ripple in the DC Capacitors Voltages of NPC Converters. , 2019, , .		0
30	Design Method to Reduce the DC Link Voltage of a Three-Wire Three-Phase Hybrid Active Power Filter. , 2019, , .		0
31	Performance of a Multi-Grounded Distribution Network with a Four-Wire Three-Phase Power Conditioner. , 2019, , .		0
32	Co-simulation of a Doubly Fed Induction Generator Connected to a Power Network: The use of DSOGI for Phasor Extraction. IEEE Latin America Transactions, 2019, 17, 1070-1079.	1.2	4
33	Voltage regulation of a remote bus of a distribution Network by static synchronous compensator. , 2019, , .		0
34	A Single-phase Distributed Generation System with Load Power Compensation Capability using Linear Quadratic Regulator. , 2018, , .		0
35	A Hybrid Simulation Tool for Distributed Generation Integration Studies. , 2018, , .		4
36	Modeling and digital simulation of a back-to-back converter to integrate a variable speed generator using the openmodelica platform. , 2018, , .		1

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37	Analysis and design of proportional-resonant controllers based on pole placement approach. , 2018, , .		2
38	State feedback control of a back-to-back converter for microgrids applications. , 2018, , .		1
39	Digital single voltage loop control of a VSI with LC output filter. Sustainable Energy, Grids and Networks, 2018, 16, 145-155.	2.3	14
40	Zero-sequence network voltage compensation by a three-phase four-wire grid-connected converter. , 2018, , .		0
41	MatLab-OpenDSS co-simulation environment: An alternative tool to investigate DSG connection. , 2018, , .		5
42	Comprehensive synchronous reference frame discrete-time modelling of a grid-connected PV for fast DC-side voltage control. Electric Power Systems Research, 2017, 150, 162-168.	2.1	6
43	Modelling and control of an interface power converter for the operation of small diesel gen-sets in grid-connected and stand-alone modes. Electric Power Systems Research, 2017, 150, 177-187.	2.1	12
44	Unipolar PWM predictive current mode control of a variable speed low inductance BLDC motor drive. IET Electric Power Applications, 2017, 11, 688-696.	1.1	33
45	DC capacitor energization and voltage regulation of a single-phase hybrid filter. , 2017, , .		1
46	Cascade DC-DC converter modeling developed to supercapacitor energy management system. , 2017, , .		2
47	Development of a small-signal model for a two-phase three-wire active power filter. , 2017, , .		2
48	Circulating currents suppression strategies for modular multilevel converter. , 2017, , .		8
49	Grid connected voltage-source converter pre-energization strategy. , 2017, , .		1
50	Analysis of AC dispatchable microgrid during grid-connected and isolated modes transitions. , 2017, , .		1
51	A novel optimized pulse pattern for modular multilevel converters in high power applications. , 2017, , .		0
52	A hybrid simulation tool for penetration studies of distributed generation in smartgrids. , 2017, , .		3
53	Sliding mode control of a grid-emulator converter applied to a phil. , 2017, , .		1
54	Analysis of an adaptive voltage control of DC microgrids using CHIL real time simulation. , 2017, , .		1

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55	Real-time "hardware-in-the-loop" simulation of components of an electric vehicle powertrain: Modeling and implementation. , 2016, , .		9
56	Improvement of PV grid-tied inverters operation under asymmetrical fault conditions. Solar Energy, 2016, 133, 363-371.	2.9	25
57	Contribution To The Study Of A Single-Phase And Single Stage Photovoltaic System. IEEE Latin America Transactions, 2015, 13, 1265-1271.	1.2	6
58	Sliding mode control of a shunt Active Power Filter with indirect current measurement. , 2015, , .		4
59	Adaptation of the instantaneous power theory for two-phase three-wire systems and its application in shunt active power filters. , 2015, , .		6
60	A comparison of two-phase three-wire shunt compensation strategies. , 2015, , .		1
61	A shunt active compensation strategy with zero neutral current in two-phase three-wire systems. , 2015, , .		3
62	Topology and control of a two-phase residential PV system with load compensation capability. , 2015, , .		3
63	Grid connected PV system with load power compensation capability using sliding mode control. , 2015, , .		4
64	Improvement of DC and AC side performance of renewable source inverters under fault conditions. , 2015, , .		1
65	Digital proportional multi-resonant current controller for improving grid-connected photovoltaic systems. Renewable Energy, 2015, 76, 662-669.	4.3	30
66	Multi-physical modeling: An integrated way of understanding the dynamics of electric grids. , 2014, , .		1
67	Grid connection considerations for the integration of PV and wind sources. , 2014, , .		6
68	Power system impedance measurement based on wavelet voltage imposed. , 2014, , .		5
69	Repetitive controller for improving grid-connected photovoltaic systems. IET Power Electronics, 2014, 7, 1466-1474.	1.5	51
70	Two-phase Three-wire Shunt Active Power Filter Control By Using The Single-phase P-q Theory. Eletr�nica De Pot�ncia, 2014, 19, 303-311.	0.1	8
71	Simultaneous active power filter and G2V (or V2G) operation of EV on-board power electronics. , 2013, , .		17
72	Analysis of non-linear adaptive voltage droop control method applied to a grid connected DC microgrid. , 2013, , .		8

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73	Integrated bidirectional single-phase vehicle-to-grid interface with active power filter capability. , 2013, , .		8
74	Two-phase, three-wire shunt active power filter using the single-phase P-Q theory. , 2013, , .		4
75	Design criterion for an interfacing converter with reactive power compensation capability applied to a DC lighting system. , 2013, , .		1
76	Analysis Of Mppt Techniques Applied To The Dcm Multiphase Boost Converter For The Mitigation Of Partial Shading In Pv Arrays. Eletr�nica De Pot�ncia, 2013, 18, 1138-1148.	0.1	1
77	Control And Harmonic Current Reduction Of A Photovoltaic System Connected To The Grid Without Passive Filters. Eletr�nica De Pot�ncia, 2013, 18, 1149-1160.	0.1	0
78	Allocation of power harmonic filters using Genetic Algorithm. , 2012, , .		2
79	Active power filter operation of an electric vehicle applied to single-phase networks. , 2012, , .		8
80	Analysis of voltage droop control method for dc microgrids with Simulink: Modelling and simulation. , 2012, , .		66
81	A study of shunt active power filter based on modular multilevel converter (MMC). , 2012, , .		30
82	Electronic ballast for HPS and HPMV lamps testing in dimming mode. Eletr�nica De Pot�ncia, 2012, 17, 632-640.	0.1	1
83	Flexible AC Transmission Systems. , 2011, , 851-877.		9
84	Comparative analysis of current and voltage-controlled photovoltaic Maximum Power Point tracking. , 2011, , .		8
85	A single-phase single-stage, high power factor grid-connected PV system, with maximum power point tracking. , 2010, , .		6
86	Modelagem do elo de corrente cont�nua no dom�nio da frequ�ncia em sistemas ass�ncronos desequilibrados. Controle and Automacao, 2009, 20, 573-588.	0.2	0
87	A study on single-phase delta UPS topological alternatives. , 2009, , .		1
88	Harmonic analysis of the power distribution Neutral-to-Earth Voltage (NEV) test case using four-wire three-phase harmonic current injection method. , 2009, , .		7
89	Frequency domain modeling of monopolar High Voltage Direct Current link using three-phase harmonic current injection method. , 2008, , .		2
90	C�lculo do fluxo de harm�nicos em sistemas de pot�ncia trif�sicos utilizando o m�todo de inje�o de correntes com solu�o iterativa. Controle and Automacao, 2008, 19, 178-198.	0.2	5

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91	Fault Current Limiter Based on Resonant Circuit Controlled by Power Semiconductor Devices. IEEE Latin America Transactions, 2007, 5, 311-320.	1.2	17
92	Flexible AC Transmission Systems. , 2007, , 797-822.		5
93	Boost current multilevel inverter and its application on single-phase grid-connected photovoltaic systems. IEEE Transactions on Power Electronics, 2006, 21, 1116-1124.	5.4	155
94	Shunt-series active power filter for rectifiers AC and DC sides. IET Electric Power Applications, 1998, 145, 577.	1.4	15
95	Control strategy for grid-connected DC-AC converters with load power factor correction. IET Generation, Transmission and Distribution, 1998, 145, 487.	1.1	107
96	Comparative Performance of Three Phasor-Extraction Algorithms for Co-simulation of Electrical Power Systems. Journal of Control, Automation and Electrical Systems, 0, , 1.	1.2	0
97	Flexible Operation of Grid-Connected Electric Vehicle Powertrain Converters: Power Conditioning and Consumed Energy Management in Household Networks. Journal of Control, Automation and Electrical Systems, 0, , .	1.2	0