Edson H Watanabe

List of Publications by Year in descending order

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52 papers 2,259 citations

430754 18 h-index 434063 31 g-index

52 all docs 52 docs citations

52 times ranked 1510 citing authors

#	Article	IF	Citations
1	Rotor Voltage Dynamics in the Doubly Fed Induction Generator During Grid Faults. IEEE Transactions on Power Electronics, 2010, 25, 118-130.	5.4	323
2	New concepts of instantaneous active and reactive powers in electrical systems with generic loads. IEEE Transactions on Power Delivery, 1993, 8, 697-703.	2.9	284
3	An universal active power line conditioner. IEEE Transactions on Power Delivery, 1998, 13, 545-551.	2.9	246
4	New control algorithms for series and shunt three-phase four-wire active power filters. IEEE Transactions on Power Delivery, 1995, 10, 1649-1656.	2.9	241
5	Simplified Modeling of a DFIG for Transient Studies in Wind Power Applications. IEEE Transactions on Industrial Electronics, 2011, 58, 9-20.	5 . 2	161
6	An efficient controller for an adjustable speed induction motor drive. IEEE Transactions on Industrial Electronics, 1994, 41, 533-539.	5,2	156
7	Comparisons Between the <i>pq</i> and <i>pqr</i> Theories in Three-Phase Four-Wire Systems. IEEE Transactions on Power Electronics, 2009, 24, 924-933.	5.4	106
8	Nonlinear Model Predictive Control for the Energy Management of Fuel Cell Hybrid Electric Vehicles in Real Time. IEEE Transactions on Industrial Electronics, 2021, 68, 3213-3223.	5.2	85
9	Improved Superconducting Magnetic Energy Storage (SMES) Controller for High-Power Utility Applications. IEEE Transactions on Energy Conversion, 2011, 26, 444-456.	3.7	68
10	A Control-Oriented Model of a PEM Fuel Cell Stack Based on NARX and NOE Neural Networks. IEEE Transactions on Industrial Electronics, 2015, 62, 5155-5163.	5.2	57
11	SSR and Power Oscillation Damping Using Gate-Controlled Series Capacitors (GCSC). IEEE Transactions on Power Delivery, 2007, 22, 1806-1812.	2.9	51
12	Control Strategy for Frequency Control in Autonomous Microgrids. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2015, 3, 1046-1055.	3.7	50
13	GTO controlled series capacitors: multi-module and multi-pulse arrangements. IEEE Transactions on Power Delivery, 2000, 15, 725-731.	2.9	43
14	Wave-to-Wire Model and Energy Storage Analysis of an Ocean Wave Energy Hyperbaric Converter. IEEE Journal of Oceanic Engineering, 2014, 39, 386-397.	2.1	43
15	Static synchronous compensator with superconducting magnetic energy storage for high power utility applications. Energy Conversion and Management, 2007, 48, 2316-2331.	4.4	26
16	Going the Distance. IEEE Industrial Electronics Magazine, 2011, 5, 36-48.	2.3	26
17	A Computational Approach to Optimal Damping Controller Design for a GCSC. IEEE Transactions on Power Delivery, 2008, 23, 1673-1681.	2.9	25
18	Series connection of power switches for very high-power applications and zero-voltage switching. IEEE Transactions on Power Electronics, 2000, 15, 44-50.	5.4	22

#	Article	IF	Citations
19	Selective Active Filter With Optimum Remote Harmonic Distortion Control. IEEE Transactions on Power Delivery, 2004, 19, 1990-1997.	2.9	20
20	Comparing the indirect field-oriented control with a scalar method. IEEE Transactions on Industrial Electronics, 1994, 41, 201-207.	5.2	18
21	Experimental and theoretical development of a PEM electrolyzer model applied to energy storage systems. , 2009, , .		18
22	Analysis of integrated STATCOM-SMES based on three-phase three-level multi-pulse voltage source inverter for high power utility applications. Journal of the Franklin Institute, 2011, 348, 2350-2377.	1.9	18
23	Modelling and simulation of wave energy hyperbaric converter (WEHC) for applications in distributed generation. International Journal of Hydrogen Energy, 2012, 37, 14945-14950.	3.8	17
24	Brazilian Science and Research Integrity: Where are We? What Next?. Anais Da Academia Brasileira De Ciencias, 2015, 87, 1259-1269.	0.3	15
25	Steady-State Characteristics of a Current-Source Inverter/Double-Wound Synchronous Machine System for AC Power Supply. IEEE Transactions on Industry Applications, 1980, IA-16, 262-270.	3.3	14
26	Control of DFIG-WT under unbalanced grid voltage conditions. , 2009, , .		12
27	Dynamic Control of a Current-Source Inverter/ Double-Wound Synchronous Machine System for AC Power Supply. IEEE Transactions on Industry Applications, 1981, IA-17, 314-320.	3.3	9
28	POD-PWM applied to circulating current control in HVDC-MMC based system. , 2015, , .		9
29	Analytical model of three-phase four-wire VSC operating as grid forming power converter under unbalanced load conditions. , 2017, , .		9
30	Compensation of power factor in rectifier systems utilized in oil drilling rigs. IEEE Transactions on Industry Applications, 1988, 24, 301-307.	3.3	8
31	An adaptive digital controller applied to HVDC transmission. IEEE Transactions on Power Delivery, 1993, 8, 1851-1859.	2.9	7
32	Neural Generalized Predictive Control for Tracking Maximum Efficiency and Maximum Power Points of PEM Fuel Cell Stacks. , 2018, , .		7
33	Control-strategy design for frequency control in autonomous smart microgrids. , 2014, , .		6
34	Non-characteristic harmonics and DC side capacitor calculation in VSC connected to a distribution system with unbalanced voltage. , 2015 , , .		6
35	Electric Energy and Environment: Some Technological Challenges in Brazil., 2001,, 10-40.		6
36	Grid-Forming MMC: A Comparison Between Single- and Dual-Loop Control Approaches. , 2021, , .		6

#	Article	IF	Citations
37	MMC Applied to Pumped Hydro Storage using a Differentiable Approximation of a Square Wave as Common-Mode Voltage during Low-Frequency Operation. , 2020, , .		5
38	Power systems analog simulation enhancement using a new programmable electronic model. IEEE Transactions on Power Systems, 1989, 4, 286-292.	4.6	4
39	Eliminating Gibbs Phenomenon From Switching Functions for Power Electronics Circuit Analysis. IEEE Transactions on Power Delivery, 2009, 24, 970-971.	2.9	4
40	Analysis of the time-varying behavior of a PEM fuel cell stack and dynamical modeling by recurrent neural networks. , 2013 , , .		4
41	Modeling and analysis of a sea wave energy converter. , 2015, , .		4
42	Model Predictive Control of Grid-Connected Voltage-Source Converters Operating as STATCOM with Unbalanced Loads. , $2019, , .$		4
43	Control strategy for the rotor side converter of a DFIG-WT under balanced voltage sag. , 2009, , .		3
44	A recurrent neural approach for modeling non-reproducible behavior of PEM fuel cell stacks. , 2013, , .		3
45	Prediction of PEMFC stack efficiency using recurrent neural networks. , 2017, , .		3
46	Stability analysis of grid-connected voltage-source converters with unbalanced loads. , 2017, , .		3
47	Synthesis of controlled reactances using VSC converters. , 2009, , .		1
48	Novel control algorithm for a unified power quality conditioner connected to a radial grid., 2015,,.		1
49	Hierarchical control and emulation of a wave energy hyperbaric converter. IET Renewable Power Generation, 2021, 15, 3269-3281.	1.7	1
50	Perceptions of plagiarism among PhDs across the sciences, engineering, humanities, and arts: Results from a national survey in Brazil. Accountability in Research, 2023, 30, 407-438.	1.6	1
51	Synchronous generator power oscillations damped by using TCSC or SSSC working as a variable reactance. , $2011, \ldots$		0
52	Comparison and considerations in the implementation of dual loop synchronous and stationary controllers for microgrids applications. , 2013, , .		0