Pedro Rodriguez

List of Publications by Year
in descending order

337 papers	22,929 citations	29994 54 h-index	18606 119 g-index
353 all docs	353 docs citations	353 times ranked	10587 citing authors

#	Article	IF	Citations
1	Control of Power Converters in AC Microgrids. IEEE Transactions on Power Electronics, 2012, 27, 4734-4749.	5.4	2,759
2	Decoupled Double Synchronous Reference Frame PLL for Power Converters Control. IEEE Transactions on Power Electronics, 2007, 22, 584-592.	5.4	1,039
3	Multiresonant Frequency-Locked Loop for Grid Synchronization of Power Converters Under Distorted Grid Conditions. IEEE Transactions on Industrial Electronics, 2011, 58, 127-138.	5.2	890
4	Evaluation of Current Controllers for Distributed Power Generation Systems. IEEE Transactions on Power Electronics, 2009, 24, 654-664.	5.4	787
5	A New High-Efficiency Single-Phase Transformerless PV Inverter Topology. IEEE Transactions on Industrial Electronics, 2011, 58, 184-191.	5.2	648
6	A Stationary Reference Frame Grid Synchronization System for Three-Phase Grid-Connected Power Converters Under Adverse Grid Conditions. IEEE Transactions on Power Electronics, 2012, 27, 99-112.	5.4	628
7	Flexible Active Power Control of Distributed Power Generation Systems During Grid Faults. IEEE Transactions on Industrial Electronics, 2007, 54, 2583-2592.	5.2	605
8	New Positive-sequence Voltage Detector for Grid Synchronization of Power Converters under Faulty Grid Conditions. , 0, , .		576
9	PV panel model based on datasheet values. , 2007, , .		543
10	Adaptive Droop Control Applied to Voltage-Source Inverters Operating in Grid-Connected and Islanded Modes. IEEE Transactions on Industrial Electronics, 2009, 56, 4088-4096.	5.2	504
11	Mode Adaptive Droop Control With Virtual Output Impedances for an Inverter-Based Flexible AC Microgrid. IEEE Transactions on Power Electronics, 2011, 26, 689-701.	5.4	458
12	Local Reactive Power Control Methods for Overvoltage Prevention of Distributed Solar Inverters in Low-Voltage Grids. IEEE Journal of Photovoltaics, 2011, 1, 174-182.	1.5	421
13	Grid-Filter Design for a Multimegawatt Medium-Voltage Voltage-Source Inverter. IEEE Transactions on Industrial Electronics, 2011, 58, 1205-1217.	5.2	352
14	Rotor Voltage Dynamics in the Doubly Fed Induction Generator During Grid Faults. IEEE Transactions on Power Electronics, 2010, 25, 118-130.	5.4	323
15	Advanced Grid Synchronization System for Power Converters under Unbalanced and Distorted Operating Conditions. , 2006, , .		297
16	An overview of the reliability prediction related aspects of high power IGBTs in wind power applications. Microelectronics Reliability, 2011, 51, 1903-1907.	0.9	294
17	Enhanced Decoupled Double Synchronous Reference Frame Current Controller for Unbalanced Grid-Voltage Conditions. IEEE Transactions on Power Electronics, 2012, 27, 3934-3943.	5.4	258
18	Evaluation of the Low-Frequency Neutral-Point Voltage Oscillations in the Three-Level Inverter. IEEE Transactions on Industrial Electronics, 2005, 52, 1582-1588.	5.2	254

#	Article	IF	Citations
19	Overview of recent grid codes for wind power integration. , 2010, , .		236
20	Multilevel Diode-Clamped Converter for Photovoltaic Generators With Independent Voltage Control of Each Solar Array. IEEE Transactions on Industrial Electronics, 2008, 55, 2713-2723.	5.2	234
21	A Generalized Voltage Droop Strategy for Control of Multiterminal DC Grids. IEEE Transactions on Industry Applications, 2015, 51, 607-618.	3.3	220
22	Fast-Processing Modulation Strategy for the Neutral-Point-Clamped Converter With Total Elimination of Low-Frequency Voltage Oscillations in the Neutral Point. IEEE Transactions on Industrial Electronics, 2007, 54, 2288-2294.	5.2	216
23	Inertia Emulation in AC/DC Interconnected Power Systems Using Derivative Technique Considering Frequency Measurement Effects. IEEE Transactions on Power Systems, 2017, 32, 3338-3351.	4.6	193
24	Grid Voltage Synchronization for Distributed Generation Systems Under Grid Fault Conditions. IEEE Transactions on Industry Applications, 2015, 51, 3414-3425.	3.3	170
25	Simplified Modeling of a DFIG for Transient Studies in Wind Power Applications. IEEE Transactions on Industrial Electronics, 2011, 58, 9-20.	5.2	161
26	Evaluation of Storage Energy Requirements for Constant Production in PV Power Plants. IEEE Transactions on Industrial Electronics, 2013, 60, 1225-1234.	5.2	159
27	Grid synchronization of power converters using multiple second order generalized integrators. , 2008, , .		158
28	Analysis of derivative control based virtual inertia in multiâ€area highâ€voltage direct current interconnected power systems. IET Generation, Transmission and Distribution, 2016, 10, 1458-1469.	1.4	156
29	DC Voltage Control and Power Sharing in Multiterminal DC Grids Based on Optimal DC Power Flow and Voltage-Droop Strategy. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2014, 2, 1171-1180.	3.7	155
30	Centralized Protection Strategy for Medium Voltage DC Microgrids. IEEE Transactions on Power Delivery, 2017, 32, 430-440.	2.9	145
31	Predictive Power Control for PV Plants With Energy Storage. IEEE Transactions on Sustainable Energy, 2013, 4, 482-490.	5.9	138
32	Reactive Power Control for Improving Wind Turbine System Behavior Under Grid Faults. IEEE Transactions on Power Electronics, 2009, 24, 1798-1801.	5.4	130
33	Synchronous Power Controller With Flexible Droop Characteristics for Renewable Power Generation Systems. IEEE Transactions on Sustainable Energy, 2016, 7, 1572-1582.	5.9	128
34	Active Filtering Function of Three-Phase PWM Boost Rectifier Under Different Line Voltage Conditions. IEEE Transactions on Industrial Electronics, 2005, 52, 410-419.	5.2	122
35	Impedanceâ€compensated grid synchronisation for extending the stability range of weak grids with voltage source converters. IET Generation, Transmission and Distribution, 2016, 10, 1315-1326.	1.4	119
36	Virtual Synchronous Power Strategy for Multiple HVDC Interconnections of Multi-Area AGC Power Systems. IEEE Transactions on Power Systems, 2017, 32, 1665-1677.	4.6	118

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37	Renewable Energy Operation and Conversion Schemes: A Summary of Discussions During the Seminar on Renewable Energy Systems. IEEE Industrial Electronics Magazine, 2010, 4, 38-51.	2.3	113
38	Protection of AC and DC distribution systems Embedding distributed energy resources: A comparative review and analysis. Renewable and Sustainable Energy Reviews, 2015, 51, 1578-1593.	8.2	110
39	Power system stability analysis under increasing penetration of photovoltaic power plants with synchronous power controllers. IET Renewable Power Generation, 2017, 11, 733-741.	1.7	110
40	Online grid impedance estimation for single-phase grid-connected systems using PQ variations. , 2007, , .		106
41	Power Capability Investigation Based on Electrothermal Models of Press-Pack IGBT Three-Level NPC and ANPC VSCs for Multimegawatt Wind Turbines. IEEE Transactions on Power Electronics, 2012, 27, 3195-3206.	5.4	106
42	Virtual-Flux-Based Voltage-Sensor-Less Power Control for Unbalanced Grid Conditions. IEEE Transactions on Power Electronics, 2012, 27, 4071-4087.	5.4	101
43	Intelligent Connection Agent for Three-Phase Grid-Connected Microgrids. IEEE Transactions on Power Electronics, 2011, 26, 2993-3005.	5.4	100
44	Voltage-Sensor-Less Synchronization to Unbalanced Grids by Frequency-Adaptive Virtual Flux Estimation. IEEE Transactions on Industrial Electronics, 2012, 59, 2910-2923.	5.2	99
45	Clustered PV inverters in LV networks: An overview of impacts and comparison of voltage control strategies. , 2009, , .		94
46	Negative Sequence Current Control in Wind Power Plants With VSC-HVDC Connection. IEEE Transactions on Sustainable Energy, 2012, 3, 535-544.	5.9	94
47	Control of Energy Storage System Integrating Electrochemical Batteries and Supercapacitors for Grid-Connected Applications. IEEE Transactions on Industry Applications, 2019, 55, 1853-1862.	3.3	93
48	Control of PV generation systems using the synchronous power controller. , 2013, , .		91
49	Sizing Study of Second Life Li-ion Batteries for Enhancing Renewable Energy Grid Integration. IEEE Transactions on Industry Applications, 2016, 52, 4999-5008.	3.3	91
50	Flexible Grid Connection and Islanding of SPC-Based PV Power Converters. IEEE Transactions on Industry Applications, 2018, 54, 2690-2702.	3.3	91
51	Multi-terminal DC grids: challenges and prospects. Journal of Modern Power Systems and Clean Energy, 2017, 5, 515-523.	3.3	87
52	Limits of the Neutral-Point Balance in Back-to-Back-Connected Three-Level Converters. IEEE Transactions on Power Electronics, 2004, 19, 722-731.	5.4	86
53	Application of Discontinuous PWMModulation in Active Power Filters. IEEE Transactions on Power Electronics, 2008, 23, 1692-1706.	5.4	85
54	Hierarchical Control of HV-MTDC Systems With Droop-Based Primary and OPF-Based Secondary. IEEE Transactions on Smart Grid, 2015, 6, 1502-1510.	6.2	85

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55	A New PWM Strategy for Grid-Connected Half-Bridge Active NPC Converters With Losses Distribution Balancing Mechanism. IEEE Transactions on Power Electronics, 2015, 30, 5331-5340.	5.4	84
56	Evaluation of the voltage support strategies for the low voltage grid connected PV generators. , 2010, , .		81
57	Control of grid-connected power converters based on a virtual admittance control loop. , 2013, , .		80
58	Double Synchronous Reference Frame PLL for Power Converters Control. , 2005, , .		77
59	Control Strategies for Distributed Power Generation Systems Operating on Faulty Grid. , 2006, , .		73
60	Daily Solar Energy Estimation for Minimizing Energy Storage Requirements in PV Power Plants. IEEE Transactions on Sustainable Energy, 2013, 4, 474-481.	5.9	72
61	Multiple second order generalized integrators for harmonic synchronization of power converters. , 2009, , .		68
62	Deterministic and Stochastic Study of Wind Farm Harmonic Currents. IEEE Transactions on Energy Conversion, 2010, 25, 1071-1080.	3.7	67
63	Flexible Control of Power Flow in Multiterminal DC Grids Using DC–DC Converter. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2016, 4, 1135-1144.	3.7	67
64	Reduction of Switching Losses in Active Power Filters With a New Generalized Discontinuous-PWM Strategy. IEEE Transactions on Industrial Electronics, 2008, 55, 467-471.	5.2	66
65	PLL Algorithm for Power Generation Systems Robust to Grid Voltage Faults. , 0, , .		63
66	Current Harmonics Cancellation in Three-Phase Four-Wire Systems by Using a Four-Branch Star Filtering Topology. IEEE Transactions on Power Electronics, 2009, 24, 1939-1950.	5.4	63
67	Line Impedance Estimation Using Active and Reactive Power Variations. , 2007, , .		62
68	Independent PQ Control for Distributed Power Generation Systems under Grid Faults. , 2006, , .		61
69	Frequency support characteristics of grid–interactive power converters based on the synchronous power controller. IET Renewable Power Generation, 2017, 11, 470-479.	1.7	60
70	Design and Analysis of a Slope Voltage Control for a DFIG Wind Power Plant. IEEE Transactions on Energy Conversion, 2012, 27, 11-20.	3.7	57
71	Overview of the energy storage systems for wind power integration enhancement. , 2010, , .		55
72	Harmonic Compensation Analysis in Offshore Wind Power Plants Using Hybrid Filters. IEEE Transactions on Industry Applications, 2014, 50, 2050-2060.	3.3	54

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73	Multi‐terminal medium voltage DC grids fault location and isolation. IET Generation, Transmission and Distribution, 2016, 10, 3517-3528.	1.4	54
74	Converter Structure-Based Power Loss and Static Thermal Modeling of The Press-Pack IGBT Three-Level ANPC VSC Applied to Multi-MW Wind Turbines. IEEE Transactions on Industry Applications, 2011, 47, 2505-2515.	3.3	53
75	Decentralized Primary Control of MTDC Networks With Energy Storage and Distributed Generation. IEEE Transactions on Industry Applications, 2014, 50, 4122-4131.	3.3	53
76	Adaptive Droop for Control of Multiterminal DC Bus Integrating Energy Storage. IEEE Transactions on Power Delivery, 2015, 30, 16-24.	2.9	49
77	Safe current injection strategies for a STATCOM under asymmetrical grid faults. , 2010, , .		48
78	Design considerations for primary control in multi-terminal VSC-HVDC grids. Electric Power Systems Research, 2015, 122, 33-41.	2.1	46
79	Equivalent Model of Large-Scale Synchronous Photovoltaic Power Plants. IEEE Transactions on Industry Applications, 2016, 52, 5029-5040.	3.3	46
80	Unified reference controller for flexible primary control and inertia sharing in multi‐terminal voltage source converter‐HVDC grids. IET Generation, Transmission and Distribution, 2017, 11, 750-758.	1.4	46
81	Multiterminal DC grids: Operating analogies to AC power systems. Renewable and Sustainable Energy Reviews, 2017, 70, 886-895.	8.2	45
82	Influence analysis of the effects of an inductive-resistive weak grid over L and LCL filter current hysteresis controllers. , 2007, , .		44
83	Photovoltaic module diagnostics by series resistance monitoring and temperature and rated power estimation. , 2008, , .		42
84	Multi‐terminal HVDC grids with inertia mimicry capability. IET Renewable Power Generation, 2016, 10, 752-760.	1.7	42
85	Multilevel-Clamped Multilevel Converters (MLC<formula formulatype="inline"> <tex) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 1055-1060.	5.4	41
86	Overview of FACTS devices for wind power plants directly connected to the transmission network. , 2010, , .		40
87	Impact of 100‐MW‐scale PV plants with synchronous power controllers on power system stability in northern Chile. IET Generation, Transmission and Distribution, 2017, 11, 2958-2964.	1.4	40
88	Frequency Support Properties of the Synchronous Power Control for Grid-Connected Converters. IEEE Transactions on Industry Applications, 2019, 55, 5178-5189.	3.3	37
89	A generalized compensation theory for active filters based on mathematical optimization in ABC frame. Electric Power Systems Research, 2012, 90, 1-10.	2.1	35
90	Control of D-STATCOM During Unbalanced Grid Faults Based on DC Voltage Oscillations and Peak Current Limitations. IEEE Transactions on Industry Applications, 2018, 54, 1680-1690.	3.3	35

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91	Linear and Nonlinear Control of Distributed Power Generation Systems. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2006, , .	0.0	33
92	Model predictive current control for high-power grid-connected converters with output LCL filter. , 2009, , .		33
93	Optimization of an experimental hybrid microgrid operation: Reliability and economic issues. , 2009, , .		33
94	A photovoltaic three-phase topology to reduce Common Mode Voltage. , 2010, , .		33
95	Comparison of two voltage control strategies for a wind power plant. , 2011, , .		33
96	Grid-Forming Power Converters Tuned Through Artificial Intelligence to Damp Subsynchronous Interactions in Electrical Grids. IEEE Access, 2020, 8, 93369-93379.	2.6	33
97	Effects of PLL and frequency measurements on LFC problem in multi-area HVDC interconnected systems. International Journal of Electrical Power and Energy Systems, 2016, 81, 140-152.	3.3	32
98	A generalized voltage droop strategy for control of multi-terminal DC grids. , 2013, , .		31
99	Modeling and sensitivity analyses of VSP based virtual inertia controller in HVDC links of interconnected power systems. Electric Power Systems Research, 2016, 141, 246-263.	2.1	31
100	Current control method for distributed generation power generation plants under grid fault conditions. , 2011, , .		30
101	Safe transient operation of microgrids based on master-slave configuration. , 2011, , .		30
102	Analysis and design of virtual synchronous machine based STATCOM controller. , 2014, , .		30
103	Second life battery energy storage system for residential demand response service. , 2015, , .		30
104	A protection strategy for fault detection and location for multi-terminal MVDC distribution systems with renewable energy systems. , 2014, , .		29
105	Adaptive droop control applied to distributed generation inverters connected to the grid. , 2008, , .		28
106	Electro-thermal modeling for junction temperature cycling-based lifetime prediction of a press-pack IGBT 3L-NPC-VSC applied to large wind turbines. , 2011, , .		28
107	Adaptive hysteresis band current control for transformerless single-phase PV inverters. , 2009, , .		27
108	A Comparative Analysis of Decision Trees, Support Vector Machines and Artificial Neural Networks for On-line Transient Stability Assessment. , 2018, , .		27

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109	Voltage-balancing strategies for diode-clamped multilevel converters. , 0, , .		25
110	Short circuit signatures from different wind turbine generator types. , 2011, , .		25
111	Control of power converters in distributed generation applications under grid fault conditions. , 2011, , .		25
112	Proposals for flexible operation of multi-terminal DC grids: Introducing flexible DC transmission system (FDCTS). , 2014, , .		25
113	Low voltage ride through strategies for SCIG wind turbines in distributed power generation systems. Power Electronics Specialist Conference (PESC), IEEE, 2008, , .	0.0	24
114	Enhanced local grid voltage support method for high penetration of distributed generators. , 2011, , .		24
115	Second life battery energy storage system for enhancing renewable energy grid integration. , 2015, , .		23
116	Design and Evaluation of a PLL-Based Position Controller for Sensorless Vector Control of Permanent-Magnet Synchronous Machines. , 2006, , .		22
117	Effect of VSC-HVDC on load frequency control in multi-area power system. , 2012, , .		22
118	Three-Phase Isolated Multimodular Converter in Renewable Energy Distribution Systems. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 854-865.	3.7	22
119	Evaluation of three-phase transformerless photovoltaic inverter topologies. , 2007, , .		21
120	New control strategy to allow the photovoltaic systems operation under grid faults. , 2009, , .		21
121	Optimal economic exploitation of hydrogen based grid-friendly zero energy buildings. Renewable Energy, 2011, 36, 197-205.	4.3	21
122	Evaluation and control design of virtual-synchronous-machine-based STATCOM for grids with high penetration of renewable energy. , 2014, , .		21
123	Intelligent control agent for transient to an island grid. , 2010, , .		20
124	Enhanced control strategy for MMC-based STATCOM for unbalanced load compensation. , 2014, , .		20
125	Synchronous Power Control of Grid-Connected Power Converters under Asymmetrical Grid Fault. Energies, 2017, 10, 950.	1.6	20
126	Grid support functionalities based on modular multilevel converters with synchronous power control. , 2016, , .		19

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127	A new current control for the STATCOM based on secondary order generalized integrators. Power Electronics Specialist Conference (PESC), IEEE, 2008, , .	0.0	18
128	Analysis and comparison of battery energy storage technologies for grid applications. , 2013, , .		18
129	Storage system requirements for grid supporting PV-power plants. , 2014, , .		18
130	A Model for Flexibility Analysis of RESS with Electric Energy Storage and Reserve. , 2018, , .		18
131	A Unified Power Flow Controller Using a Power Electronics Integrated Transformer. IEEE Transactions on Power Delivery, 2019, 34, 828-839.	2.9	18
132	Doubly-Fed Induction Generator Control Under Voltage Sags. , 2008, , .		17
133	Power delivery in multiterminal VSC-HVDC transmission system for offshore wind power applications. , 2010, , .		17
134	A novel approach for voltage control of multi-terminal DC grids with offshore wind farms. , 2013, , .		17
135	Grid Impedance Identification Based on Active Power Variations and Grid Voltage Control. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2007, , .	0.0	16
136	Comparison of power control strategies for DFIG wind turbines. , 2008, , .		16
137	Grid synchronization for advanced power processing and FACTS in wind power systems. , 2010, , .		16
138	A hybrid power flow controller for flexible operation of multi-terminal DC grids. , 2014, , .		16
139	Single-Phase Modeling Approach in Dynamic Harmonic Domain. IEEE Transactions on Power Systems, 2018, 33, 257-267.	4.6	16
140	Design of Controller for Virtual Synchronous Power Plant. IEEE Transactions on Industry Applications, 2021, 57, 4033-4041.	3.3	16
141	Partial shadowing detection based on equivalent thermal voltage monitoring for PV module diagnostics. , 2009, , .		15
142	Lithium ion batteries ageing analysis when used in a PV power plant. , 2012, , .		15
143	Comparison of different power loop controllers for synchronous power controlled grid-interactive converters. , 2015, , .		15
144	A communication-assisted protection scheme for direct-current distribution networks. Energy, 2016, 109, 578-591.	4.5	15

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145	Three-Phase Custom Power Active Transformer for Power Flow Control Applications. IEEE Transactions on Power Electronics, 2019, 34, 2206-2219.	5.4	15
146	Grid Impedance Identification Based on Active Power Variations and Grid Voltage Control. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2007, , .	0.0	14
147	Correction to "Decoupled Double Synchronous Reference Frame PLL for Power Converters Control" [Mar 07 584-592]. IEEE Transactions on Power Electronics, 2007, 22, 1078-1078.	5.4	14
148	Microgrid connection management based on an intelligent connection agent. , 2010, , .		14
149	Frequency-adaptive Virtual Flux estimation for grid synchronization under unbalanced conditions. , 2010, , .		14
150	Towards fully controllable multi-terminal DC grids using flexible DC transmission systems. , 2014, , .		14
151	Synchronous power control for PV solar inverters with power reserve capability. , 2017, , .		14
152	Grid-connected converters with virtual electromechanical characteristics: experimental verification. CSEE Journal of Power and Energy Systems, 2017, 3, 286-295.	1.7	14
153	Flexible HVDC transmission systems small signal modelling: A case study on CIGRE Test MT-HVDC grid. , 2017, , .		14
154	Fast-processing modulation strategy for the neutral-point-clamped converter with total elimination of the low-frequency voltage oscillations in the neutral point. , 2005, , .		13
155	Grid Synchronization of Wind Turbine Converters under Transient Grid Faults using a Double Synchronous Reference Frame PLL. , 2008, , .		13
156	Decoupled Double Synchronous Reference Frame current controller for unbalanced grid voltage conditions. , 2012, , .		13
157	Optimized LCL filter design methodology applied to MV grid-connected multimegawatt VSC. , 2012, , .		13
158	Optimized Control of Multi-Terminal DC Grids Using Particle Swarm Optimization. EPE Journal (European Power Electronics and Drives Journal), 2014, 24, 38-49.	0.7	13
159	Distributed FLISR algorithm for smart grid self-reconfiguration based on IEC61850. , 2014, , .		13
160	Grid voltage harmonic damping method for SPC based power converters with multiple virtual admittance control. , 2017, , .		13
161	Modelling and Simulation of Bifacial PV Production Using Monofacial Electrical Models. Energies, 2021, 14, 4224.	1.6	13
162	Control of DFIG-WT under unbalanced grid voltage conditions. , 2009, , .		12

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163	Control and operation of wind turbine converters during faults in an offshore wind power plant grid with VSC-HVDC connection. , 2011, , .		12
164	Overview of power processing structures for embedding Energy Storage in PV power converters. , 2011, , .		12
165	An active power synchronization control loop for grid-connected converters. , 2014, , .		12
166	Impacts of wind energy in-feed on power system small signal stability. , 2014, , .		12
167	A Comparative Study of Methods for Estimating Virtual Flux at the Point of Common Coupling in Grid-Connected Voltage Source Converters With LCL Filter. IEEE Transactions on Industry Applications, 2017, 53, 5795-5809.	3.3	12
168	Power System Compensation Using a Power-Electronics Integrated Transformer. IEEE Transactions on Power Delivery, 2018, 33, 1744-1754.	2.9	12
169	Custom Power Active Transformer for Flexible Operation of Power Systems. IEEE Transactions on Power Electronics, 2018, 33, 5773-5783.	5.4	12
170	Novel Analytical Method for Dynamic Design of Renewable SSG SPC Unit to Mitigate Low-Frequency Electromechanical Oscillations. IEEE Transactions on Power Electronics, 2020, 35, 7532-7544.	5.4	12
171	External Inertia Emulation Controller for Grid-Following Power Converter. IEEE Transactions on Industry Applications, 2021, 57, 6568-6576.	3.3	12
172	Efficient Space-Vector Modulation Algorithm for Multilevel Converters with Low Switching Frequencies in the Devices. , 0, , .		11
173	Complex-space recursive least squares power system identification. , 2007, , .		11
174	Enhanced power calculator for droop control in single-phase systems. , 2011, , .		11
175	Exploring the range of impedance conditioning by virtual inductance for grid connected voltage source converters. , 2012, , .		11
176	Comprehensive analogy between conventional AC grids and DC grids characteristics. , 2013, , .		11
177	Intelligent voltage control in a DC micro-grid containing PV generation and energy storage. , 2014, , .		11
178	Generalized voltage droop control with inertia mimicry capability - step towards automation of multi-terminal HVDC grids. , 2015, , .		11
179	A Novel Ensemble Approach for Solving the Transient Stability Classification Problem. , 2018, , .		11
180	A new electrostatic field measurement method: The coherent-notch field mill. Journal of Electrostatics, 2007, 65, 431-437.	1.0	10

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181	Active current control in wind power plants during grid faults. Wind Energy, 2010, 13, 737-749.	1.9	10
182	Parameterization of a synchronous generator to represent a doubly fed induction generator with chopper protection for fault studies. Wind Energy, 2011, 14, 107-118.	1.9	10
183	An overview of harmonic analysis and resonances of large wind power plant. , 2011, , .		10
184	Power management strategies and energy storage needs to increase the operability of photovoltaic plants. Journal of Renewable and Sustainable Energy, 2012, 4, .	0.8	10
185	Advanced structures for grid synchronization of power converters in distributed generation applications. , 2012, , .		10
186	Virtual prototyping of universal control architecture systems by means of processor in the loop technology. , 2007, , .		9
187	Design and coordination of a capacitor and onâ€load tap changer system for voltage control in a wind power plant of doubly fed induction generator windâ€‰turbines. Wind Energy, 2012, 15, 507-523.	1.9	9
188	Analysis of ferroresonance effects in distribution networks with distributed source units. , 2013, , .		9
189	An active power self-synchronizing controller for grid-connected converters emulating inertia. , 2014, , .		9
190	Performance analysis of conventional PSS and fuzzy controller for damping power system oscillations. , 2014, , .		9
191	Flexible grid connection and islanding of SPC-based PV power converters. , 2015, , .		9
192	Grid resonance attenuation in long lines by using renewable energy sources. , 2017, , .		9
193	Analysis on impacts of the shunt conductances in multi-terminal HVDC grids optimal power-flow. , 2017, , .		9
194	Centralized Synchronous Controller Based on Load Angle Regulation for Photovoltaic Power Plants. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 485-496.	3.7	9
195	The PWM strategies of grid-connected distributed generation active NPC inverters. , 2009, , .		8
196	Voltage quality improvement of microgrids under islanding mode. , 2010, , .		8
197	Study on harmonic resonances and damping in wind power plant. , 2012, , .		8
198	Harmonic resonance damping in Wind Power Plant. , 2012, , .		8

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199	A hierarchical control structure for multi-terminal VSC-based HVDC grids with GVD characteristics. , 2013, , .		8
200	Design of passive trap-LCL filters for two-level grid connected converters. , 2013, , .		8
201	Thermal and Efficiency Analysis of Five-Level Multilevel-Clamped Multilevel Converter Considering Grid Codes. IEEE Transactions on Industry Applications, 2014, 50, 415-423.	3.3	8
202	A Unified Current Loop Tuning Approach for Grid-Connected Photovoltaic Inverters. Energies, 2016, 9, 723.	1.6	8
203	Stability Analysis of a Grid-Connected VSC Controlled by SPC. , 2018, , .		8
204	Power Quality Services Provided by Virtually Synchronous FACTS. Energies, 2019, 12, 3292.	1.6	8
205	Enhancement of Carrier-Based Modulation Strategies for Multilevel Converters. , 2005, , .		7
206	Grid Monitoring for Distributed Power Generation Systems to Comply with Grid Codes. , 2006, , .		7
207	Control of a three-phase four-wire shunt-active power filter based on DC-bus energy regulation. , 2008, , .		7
208	A low-disturbance diagnostic function integrated in the PV arrays' MPPT algorithm. , 2011, , .		7
209	Identification and maximum power point tracking of photovoltaic generation by a local neuro-fuzzy model. , 2012, , .		7
210	Multilink DC transmission for offshore Wind Power integration. , 2012, , .		7
211	Adaptive Vector Control of Wave Energy Converters. IEEE Transactions on Industry Applications, 2017, 53, 2382-2391.	3.3	7
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