Jaume Miret Tomas

List of Publications by Year
in descending order

94 papers	5,744 citations	101384 36 h-index	88477 70 g-index
95 all docs	95 docs citations	95 times ranked	3914 citing authors

#	Article	IF	Citations
1	Decentralized Control for Parallel Operation of Distributed Generation Inverters Using Resistive Output Impedance. IEEE Transactions on Industrial Electronics, 2007, 54, 994-1004.	5.2	917
2	Hierarchical Control of Intelligent Microgrids. IEEE Industrial Electronics Magazine, 2010, 4, 23-29.	2.3	370
3	Flexible Voltage Support Control for Three-Phase Distributed Generation Inverters Under Grid Fault. IEEE Transactions on Industrial Electronics, 2013, 60, 1429-1441.	5.2	280
4	Active and Reactive Power Strategies With Peak Current Limitation for Distributed Generation Inverters During Unbalanced Grid Faults. IEEE Transactions on Industrial Electronics, 2015, 62, 1515-1525.	5.2	240
5	Control Design Guidelines for Single-Phase Grid-Connected Photovoltaic Inverters With Damped Resonant Harmonic Compensators. IEEE Transactions on Industrial Electronics, 2009, 56, 4492-4501.	5.2	235
6	Virtual Impedance Loop for Droop-Controlled Single-Phase Parallel Inverters Using a Second-Order General-Integrator Scheme. IEEE Transactions on Power Electronics, 2010, 25, 2993-3002.	5.4	225
7	Control Scheme for Photovoltaic Three-Phase Inverters to Minimize Peak Currents During Unbalanced Grid-Voltage Sags. IEEE Transactions on Power Electronics, 2012, 27, 4262-4271.	5.4	210
8	An Adaptive Prefiltering Method to Improve the Speed/Accuracy Tradeoff of Voltage Sequence Detection Methods Under Adverse Grid Conditions. IEEE Transactions on Industrial Electronics, 2014, 61, 2139-2151.	5.2	203
9	Reactive Power Control for Distributed Generation Power Plants to Comply With Voltage Limits During Grid Faults. IEEE Transactions on Power Electronics, 2014, 29, 6224-6234.	5.4	164
10	Feedback Linearization of a Single-Phase Active Power Filter via Sliding Mode Control. IEEE Transactions on Power Electronics, 2008, 23, 116-125.	5.4	160
11	Selective Harmonic-Compensation Control for Single-Phase Active Power Filter With High Harmonic Rejection. IEEE Transactions on Industrial Electronics, 2009, 56, 3117-3127.	5.2	160
12	Reduction of Current Harmonic Distortion in Three-Phase Grid-Connected Photovoltaic Inverters via Resonant Current Control. IEEE Transactions on Industrial Electronics, 2013, 60, 1464-1472.	5.2	155
13	Linear Current Control Scheme With Series Resonant Harmonic Compensator for Single-Phase Grid-Connected Photovoltaic Inverters. IEEE Transactions on Industrial Electronics, 2008, 55, 2724-2733.	5.2	151
14	Control Scheme With Voltage Support Capability for Distributed Generation Inverters Under Voltage Sags. IEEE Transactions on Power Electronics, 2013, 28, 5252-5262.	5.4	140
15	Control Strategy to Maximize the Power Capability of PV Three-Phase Inverters During Voltage Sags. IEEE Transactions on Power Electronics, 2016, 31, 3314-3323.	5.4	134
16	Charging demand of Plug-in Electric Vehicles: Forecasting travel behavior based on a novel Rough Artificial Neural Network approach. Journal of Cleaner Production, 2019, 229, 1029-1044.	4.6	124
17	Voltage Support Control Strategies for Static Synchronous Compensators Under Unbalanced Voltage Sags. IEEE Transactions on Industrial Electronics, 2014, 61, 808-820.	5.2	120
18	Positive and Negative Sequence Control Strategies to Maximize the Voltage Support in Resistiveâ€“Inductive Grids During Grid Faults. IEEE Transactions on Power Electronics, 2018, 33, 5362-5373.	5.4	108

#	Article	IF	Citations
19	Control Strategy for Grid-Connected Three-Phase Inverters During Voltage Sags to Meet Grid Codes and to Maximize Power Delivery Capability. IEEE Transactions on Power Electronics, 2018, 33, 9360-9374.	5.4	84
20	Feedback Linearization Of Direct-Drive Synchronous Wind-Turbines Via a Sliding Mode Approach. IEEE Transactions on Power Electronics, 2008, 23, 1093-1103.	5.4	83
21	Secondary Switched Control With no Communications for Islanded Microgrids. IEEE Transactions on Industrial Electronics, 2017, 64, 8534-8545.	5.2	77
22	Receding-Horizon Model-Predictive Control for a Three-Phase VSI With an LCL Filter. IEEE Transactions on Industrial Electronics, 2019, 66, 6671-6680.	5.2	73
23	Model-Based Control for a Three-Phase Shunt Active Power Filter. IEEE Transactions on Industrial Electronics, 2016, 63, 3998-4007.	5.2	70
24	Model-Based Active Damping Control for Three-Phase Voltage Source Inverters With LCL Filter. IEEE Transactions on Power Electronics, 2017, 32, 5637-5650.	5.4	67
25	Variable Structure Control for Three-Phase LCL-Filtered Inverters Using a Reduced Converter Model. IEEE Transactions on Industrial Electronics, 2018, 65, 5-15.	5.2	67
26	Modeling and Sliding Mode Control for Three-Phase Active Power Filters Using the Vector Operation Technique. IEEE Transactions on Industrial Electronics, 2018, 65, 6828-6838.	5.2	57
27	Simple Low-Cost Hysteretic Controller for Single-Phase Synchronous Buck Converters. IEEE Transactions on Power Electronics, 2007, 22, 1232-1241.	5.4	56
28	Designing VRM Hysteretic Controllers for Optimal Transient Response. IEEE Transactions on Industrial Electronics, 2007, 54, 1726-1738.	5.2	54
29	Control Strategy for Distribution Generation Inverters to Maximize the Voltage Support in the Lowest Phase During Voltage Sags. IEEE Transactions on Industrial Electronics, 2018, 65, 2346-2355.	5.2	50
30	Voltage security in AC microgrids: a power flowâ€based approach considering droopâ€controlled inverters. IET Renewable Power Generation, 2015, 9, 954-960.	1.7	48
31	Modeling and Design of Voltage Support Control Schemes for Three-Phase Inverters Operating Under Unbalanced Grid Conditions. IEEE Transactions on Power Electronics, 2014, 29, 6139-6150.	5.4	45
32	Active Power Sharing and Frequency Regulation in Droop-Free Control for Islanded Microgrids Under Electrical and Communication Failures. IEEE Transactions on Industrial Electronics, 2020, 67, 6461-6472.	5.2	45
33	Sliding-mode control of quantum series-parallel resonant converters via input-output linearization. IEEE Transactions on Industrial Electronics, 2005, 52, 566-575.	5.2	43
34	Decentralized Control for Parallel Operation of Distributed Generation Inverters in Microgrids Using Resistive Output Impedance. Industrial Electronics Society (IECON), Annual Conference of IEEE, 2006, , .	0.0	43
35	Variable Structure Control in Natural Frame for Three-Phase Grid-Connected Inverters With LCL Filter. IEEE Transactions on Power Electronics, 2018, 33, 4512-4522.	5.4	43
36	Comparative study of reactive power control methods for photovoltaic inverters in lowâ€voltage grids. IET Renewable Power Generation, 2016, 10, 310-318.	1.7	42

#	Article	IF	Citations
37	Design of an Analog Quasi-Steady-State Nonlinear Current-Mode Controller for Single-Phase Active Power Filter. IEEE Transactions on Industrial Electronics, 2009, 56, 4872-4881.	5.2	36
38	Optimal Voltage-Support Control for Distributed Generation Inverters in RL Grid-Faulty Networks. IEEE Transactions on Industrial Electronics, 2020, 67, 8405-8415.	5.2	32
39	Evaluating the 2014 retroactive regulatory framework applied to the grid connected PV systems in Spain. Applied Energy, 2016, 170, 329-344.	5.1	27
40	Reactive current injection protocol for lowâ€power rating distributed generation sources under voltage sags. IET Power Electronics, 2015, 8, 879-886.	1.5	25
41	Sliding-Mode Inputâ€“Output Linearization Controller for the DC/DC ZVS CLL-T Resonant Converter. IEEE Transactions on Industrial Electronics, 2012, 59, 1554-1564.	5.2	24
42	Performance Evaluation of Secondary Control Policies with Respect to Digital Communications Properties in Inverter-based Islanded Microgrids. IEEE Transactions on Smart Grid, 2016, , 1-1.	6.2	24
43	Local Frequency Restoration for Droop-Controlled Parallel Inverters in Islanded Microgrids. IEEE Transactions on Energy Conversion, 2019, 34, 1232-1241.	3.7	22
44	Control Design for Multiphase Synchronous Buck Converters Based on Exact Constant Resistive Output Impedance. IEEE Transactions on Industrial Electronics, 2013, 60, 4920-4929.	5.2	20
45	Analysis of the Effect of Clock Drifts on Frequency Regulation and Power Sharing in Inverter-Based Islanded Microgrids. IEEE Transactions on Power Electronics, 2018, 33, 10363-10379.	5.4	20
46	Local Secondary Control for Inverter-Based Islanded Microgrids With Accurate Active Power Sharing Under High-Load Conditions. IEEE Transactions on Industrial Electronics, 2019, 66, 2529-2539.	5.2	19
47	A Flexible Experimental Laboratory for Distributed Generation Networks Based on Power Inverters. Energies, 2017, 10, 1589.	1.6	18
48	Simple Low-Cost Hysteretic Controller for Multiphase Synchronous Buck Converters. IEEE Transactions on Industrial Electronics, 2011, 58, 2355-2365.	5.2	17
49	PIâ€based controller for lowâ€power distributed inverters to maximise reactive current injection while avoiding over voltage during voltage sags. IET Power Electronics, 2019, 12, 83-91.	1.5	16
50	Positive-Sequence Voltage Control, Full Negative-Sequence Cancellation, and Current Limitation for Static Compensators. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 6613-6623.	3.7	16
51	Direct Rotor Current-Mode Control Improves the Transient Response of Doubly Fed Induction Generator-Based Wind Turbines. IEEE Transactions on Energy Conversion, 2010, 25, 722-731.	3.7	15
52	Active damping control for a three phase grid-connected inverter using sliding mode control. , 2013, , .		15
53	Collaborative Voltage Unbalance Compensation in Islanded AC Microgrids With Grid-Forming Inverters. IEEE Transactions on Power Electronics, 2022, 37, 10499-10513.	5.4	15
54	Dual-Loop Continuous Control Set Model Predictive Control for a Three-phase Unity Power Factor Rectifier. IEEE Transactions on Power Electronics, 2021, , 1-1.	5.4	13

#	Article	IF	Citations
55	Maximizing positive sequence voltage support in inductive-resistive grids for distributed generation inverters during voltage sags. , 2016, , .		13
56	Fast grid synchronization technique based on a multiple cascaded general integrator scheme for distributed generation inverters. , 2012, , .		12
57	Analysis of Consensus-Based Islanded Microgrids Subject to Unexpected Electrical and Communication Partitions. IEEE Transactions on Smart Grid, 2019, 10, 5125-5135.	6.2	12
58	Collaborative Voltage Unbalance Elimination in Grid-Connected AC Microgrids With Grid-Feeding Inverters. IEEE Transactions on Power Electronics, 2021, 36, 7189-7201.	5.4	12
59	Constrained Predictive Control Based on a Large-Signal Model for a Three-Phase Inverter Connected to a Microgrid. IEEE Transactions on Industrial Electronics, 2022, 69, 6497-6507.	5.2	12
60	Finite Control Set Model Predictive Control for a Three-Phase Shunt Active Power Filter with a Kalman Filter-Based Estimation. Energies, 2017, 10, 1553.	1.6	11
61	Evaluating the impact of the administrative procedure and the landscape policy on grid connected PV systems (GCPVS) on-floor in Spain in the period 2004â€“2008: To which extent a limiting factor?. Energy Policy, 2013, 63, 147-167.	4.2	10
62	Coordinated reactive power control for static synchronous compensators under unbalanced voltage sags. , 2012, , .		9
63	Robust and fast slidingâ€mode control for a DCâ€“DC currentâ€source parallelâ€resonant converter. IET Power Electronics, 2018, 11, 262-271.	1.5	9
64	Control of Power Converters in AC Microgrids. , 2019, , 139-170.		9
65	Reactive power control for voltage support during type C voltage-sags. , 2012, , .		8
66	Sliding-mode control for a three-phase shunt active power filter in natural frame. , 2015, , .		7
67	On the optimal reactive power control for grid-connected photovoltaic distributed generation systems. , 2015, , .		7
68	Decoupled Simultaneous Complex Power Sharing and Voltage Regulation in Islanded AC Microgrids. IEEE Transactions on Industrial Electronics, 2023, 70, 3888-3898.	5.2	7
69	Analysis, design and implementation of a residential inductive contactless energy transfer system with multiple mobile clamps. IET Power Electronics, 2017, 10, 875-883.	1.5	6
70	Voltage Support Experimental Analysis of a Low-Voltage Ride-Through Strategy Applied to Grid-Connected Distributed Inverters. Energies, 2018, 11, 1949.	1.6	6
71	Avoiding overvoltage problems in threeâ€phase distributedâ€generation systems during unbalanced voltage sags. IET Power Electronics, 2020, 13, 1537-1545.	1.5	6
72	Negativeâ€sequence voltage elimination for distributed generators in gridâ€feeding operation mode. IET Power Electronics, 2020, 13, 1764-1774.	1.5	6

#	Article	IF	Citations
73	Decoupled sliding mode control for three-phase LCL VSI operating at fixed switching frequency. , 2012, , .		5
74	Consensus for active power sharing and frequency restoration in islanded microgrids subject to drifting clocks. , 2017, , .		5
75	Analysis, design and implementation of a DC/DC boost resonantâ€inductor converter with slidingâ€mode control. IET Power Electronics, 2018, 11, 460-467.	1.5	5
76	Adaptive Slope Voltage Control for Distributed Generation Inverters With Improved Transient Performance. IEEE Transactions on Energy Conversion, 2019, 34, 1644-1654.	3.7	5
77	Enabling Grid-Feeding Converters With a Dissonant-Resonant Controller for Negative-Sequence Voltage Elimination. IEEE Transactions on Power Electronics, 2020, 35, 4342-4352.	5.4	5
78	Control strategies based On effective power factor for Distributed Generation power plants during unbalanced grid voltage. , 2013, , .		4
79	Reactive power control for loss minimization in low-voltage distributed generation systems. , 2016, , .		4
80	Experimental study of clock drift impact over droop-free distributed control for industrial microgrids. , 2017, , .		4
81	Control Scheme for Negative-Sequence Voltage Compensation and Current Sharing in Inverter-Based Grid-Connected Microgrids. IEEE Transactions on Power Electronics, 2022, 37, 6556-6567.	5.4	4
82	Distributed reactive power control methods to avoid voltage rise in grid-connected photovoltaic power generation systems. , 2013, , .		3
83	Power sharing control in islanded microgrid using event driven communication. , 2013, , .		3
84	Sliding mode control for three-phase unity power factor rectifier with vector operation. , 2015, , .		3
85	Performance analysis of frequency restoration for parallel voltage source inverters connected with a realistic communication channel. , 2015, , .		3
86	Active damping based on Ackermann's formula for a three-phase voltage source inverter with LCL filter. , 2015, , .		3
87	Optimal tuning of the control parameters of an inverterâ€based microgrid using the methodology of design of experiments. IET Power Electronics, 2020, 13, 3651-3660.	1.5	3
88	Reliability and Energy Costs Analysis of a Rural Hybrid Microgrid Using Measured Data and Battery Dynamics: A Case Study in the Coast of PerÃº. Energies, 2021, 14, 6396.	1.6	2
89	On the use of communication infrastructure in distributed power generation: A preliminary case study. , 2012, , .		1
90	Dynamic model of a grid-connected three-phase inverter with slope voltage control. , 2015, , .		1

#	Article	IF	Citations
91	Multi-objective optimized daily schedule for an efficient solar-based industrial microgrid. , 2016, , .		1
92	Control scheme for a multiple-output DC/DC current source parallel resonant converter. , 2017, , .		1
93	Mixing local and distributed reactive power control for balancing inverters' effort in grid-connected photovoltaic systems. , 2013, , .		0
94	Effects of clock deviations on the performance of microgrids based on virtual synchronous generators. IET Power Electronics, 2021, 14, 2337-2349.	1.5	0