

# Paolo Mattavelli

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

299  
papers

10,527  
citations

54  
h-index

93  
g-index

320  
ext. papers

13,641  
ext. citations

5.8  
avg. IF

6.66  
L-index

#	Paper	IF	Citations
299	Multi-Sampled Grid-Connected VSCs: A Path Towards Inherent Admittance Passivity. <i>IEEE Transactions on Power Electronics</i> , <b>2022</b> , 1-1	7.2	4
298	A Distributed Current Sharing Strategy for Islanded AC Microgrids Based on Low-Bandwidth Communication. <i>Electric Power Systems Research</i> , <b>2022</b> , 206, 107777	3.5	2
297	An enhanced current sharing strategy for islanded ac microgrids based on adaptive virtual impedance regulation. <i>International Journal of Electrical Power and Energy Systems</i> , <b>2022</b> , 134, 107402	5.1	5
296	Feedback Noise Propagation in Multisampled DCDC Power Electronic Converters. <i>IEEE Transactions on Power Electronics</i> , <b>2022</b> , 37, 150-161	7.2	8
295	Accurate High Frequency Modelling of the Input Admittance of PWM Grid-Connected VSCs. <i>IEEE Transactions on Power Electronics</i> , <b>2022</b> , 1-1	7.2	2
294	A Per-Phase Power Controller allowing Smooth Transitions to Islanded Operation <b>2021</b> ,		1
293	A Decentralized Impedance Reshaping Strategy for Balanced, Unbalanced and Harmonic Power Sharing in Islanded Resistive Microgrids. <i>IEEE Transactions on Sustainable Energy</i> , <b>2021</b> , 1-1	8.2	1
292	A Per-Phase Power Controller for Smooth Transitions to Islanded Operation. <i>IEEE Open Journal of Power Electronics</i> , <b>2021</b> , 2, 636-646	2.5	2
291	An Iterative Virtual Impedance Regulation Strategy in Islanded Microgrids for Enhanced Balanced, Unbalanced and Harmonic Current Sharing. <i>IEEE Transactions on Sustainable Energy</i> , <b>2021</b> , 1-1	8.2	2
290	Modelling and analysis of equivalent SISO d-q impedance of grid-connected converters. <i>Mathematics and Computers in Simulation</i> , <b>2021</b> , 184, 5-20	3.3	1
289	PRBS-based loop gain identification and output impedance shaping in DC microgrid power converters. <i>Mathematics and Computers in Simulation</i> , <b>2021</b> , 183, 129-141	3.3	2
288	Digital Average-Ripple-Based Control Techniques for Switching Converters With Fast Transient Performance. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2021</b> , 9, 89-101	5.6	3
287	A Family of Soft-Switching DCDC Converters With Two Degrees of Freedom. <i>IEEE Transactions on Industrial Electronics</i> , <b>2021</b> , 68, 9398-9409	8.9	1
286	An interharmonic dual switching frequency modulation strategy for impedance network inverters. <i>International Journal of Circuit Theory and Applications</i> , <b>2021</b> , 49, 1726-1742	2	
285	Enhanced Level-Shifted Modulation for a Three-Phase Five-level Modified Modular Multilevel Converter (MMC). <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2021</b> , 1-1	5.6	1
284	Particle Swarm Design Optimization of IPT Systems for Different Electric Vehicles. <i>IEEE Journal of Emerging and Selected Topics in Industrial Electronics</i> , <b>2021</b> , 1-1	2.6	
283	On-Line Controller Tuning for DC Microgrid Power Converters with the Ability to Track Maximum Allowable Bandwidth. <i>IEEE Transactions on Industrial Electronics</i> , <b>2021</b> , 1-1	8.9	1

282	Investigation of Nonlinearities Introduced by Multi-sampled Pulse-Width Modulators. <i>IEEE Transactions on Power Electronics</i> , <b>2021</b> , 1-1	7.2	5
281	An Oversampled Hysteresis Modulation for Shaping the Output Impedance of Droop-Controlled Boost Converters in DC Microgrids <b>2021</b> ,		1
280	A Loop Gain-Based Technique for Online Bus Impedance Estimation and Damping in DC Microgrids. <i>IEEE Transactions on Power Electronics</i> , <b>2021</b> , 36, 9648-9658	7.2	5
279	A Jitter Amplification Phenomenon in Multisampled Digital Control of Power Converters. <i>IEEE Transactions on Power Electronics</i> , <b>2021</b> , 36, 8685-8695	7.2	6
278	Three-Phase Modular Multilevel Converter With Optimized Capacitor Sizing for Low-Voltage Applications. <i>IEEE Transactions on Power Electronics</i> , <b>2021</b> , 36, 13930-13943	7.2	2
277	A Decentralized Current Sharing Strategy for Islanded Resistive Microgrids Based on Iterative Virtual Impedance Regulation. <i>IEEE Transactions on Industrial Informatics</i> , <b>2021</b> , 1-1	11.9	1
276	A Low Complexity Algorithm for Efficiency Optimization of Dual Active Bridge Converters. <i>IEEE Open Journal of Power Electronics</i> , <b>2021</b> , 2, 18-32	2.5	3
275	Performance improvement of pulse width-amplitude modulation-based quasi-Z-source inverters: Analysis and implementation. <i>International Journal of Circuit Theory and Applications</i> , <b>2020</b> , 48, 1786-1799		2
274	Harmonics mitigation and non-ideal voltage compensation utilising active power filter based on predictive current control. <i>IET Power Electronics</i> , <b>2020</b> , 13, 2782-2793	2.2	7
273	Resistive-Capacitive Output Impedance Shaping for Droop-Controlled Converters in DC Microgrids With Reduced Output Capacitance. <i>IEEE Transactions on Power Electronics</i> , <b>2020</b> , 35, 6501-6511	7.2	5
272	Simultaneous Identification of Multiple Control Loops in DC Microgrid Power Converters. <i>IEEE Transactions on Industrial Electronics</i> , <b>2020</b> , 67, 10641-10651	8.9	5
271	Implementation and Experimental Evaluation of an Efficiency-Improved Modulation Technique for IBCI DC-DC Converters <b>2020</b> ,		3
270	Real-Time Validation of Power Flow Control Method for Enhanced Operation of Microgrids. <i>Energies</i> , <b>2020</b> , 13, 5959	3.1	5
269	Model Predictive Control of Grid Forming Converters with Enhanced Power Quality. <i>Applied Sciences (Switzerland)</i> , <b>2020</b> , 10, 6390	2.6	2
268	Output Capacitance Minimization for Converters in DC Microgrids via Multi-Objective Tuning of Droop-Based Controllers. <i>IEEE Access</i> , <b>2020</b> , 8, 222700-222710	3.5	4
267	Suppression of Second-Order Harmonic Current for Droop-Controlled Distributed Energy Resource Converters in DC Microgrids. <i>IEEE Transactions on Industrial Electronics</i> , <b>2020</b> , 67, 358-368	8.9	18
266	Sensorless Stabilization Technique for Peak Current Mode Controlled Three-Level Flying-Capacitor Converters. <i>IEEE Transactions on Power Electronics</i> , <b>2020</b> , 35, 3208-3220	7.2	8
265	A selective harmonic compensation and power control approach exploiting distributed electronic converters in microgrids. <i>International Journal of Electrical Power and Energy Systems</i> , <b>2020</b> , 115, 105452 <sup>5.1</sup>		9

264	Using High-Bandwidth Voltage Amplifier to Emulate Grid-Following Inverter for AC Microgrid Dynamics Studies. <i>Energies</i> , <b>2019</b> , 12, 379	3.1	3
263	Single-Phase Quasi-Z-Source Inverters: Switching Loss Reduction Using a Quasi-Sinusoidal Modulation Strategy <b>2019</b> ,		4
262	Guest Editorial Joint Special Section on Power Conversion & Control in Photovoltaic Power Plants. <i>IEEE Transactions on Energy Conversion</i> , <b>2019</b> , 34, 159-160	5.4	1
261	Analysis of an Online Stability Monitoring Approach for DC Microgrid Power Converters. <i>IEEE Transactions on Power Electronics</i> , <b>2019</b> , 34, 4794-4806	7.2	8
260	Power-Based Droop Control in DC Microgrids Enabling Seamless Disconnection From Upstream Grids. <i>IEEE Transactions on Power Electronics</i> , <b>2019</b> , 34, 2039-2051	7.2	26
259	Design Criteria and Modulation Strategies for Complete ZVS Operation of the Bidirectional Interleaved Boost Converter with Coupled Inductors <b>2019</b> ,		3
258	Three-Phase Modular Multilevel Converter (MMC) for Low-voltage Applications: Improved Modulation Technique Toward Less Capacitance Requirement <b>2019</b> ,		2
257	Analysis of transforming dq impedances of different converters to a common reference frame in complex converter networks. <i>CES Transactions on Electrical Machines and Systems</i> , <b>2019</b> , 3, 342-350	2.3	1
256	Auto-Tuning of DC Microgrid Power Converters Based on a Constant Frequency Injection <b>2019</b> ,		2
255	Hysteresis Droop Controller with One Sample Delay for DC-DC Converters in DC Microgrids <b>2019</b> ,		4
254	Stability Properties of the 3-Level Flying Capacitor Buck Converter Under Peak or Valley Current Programmed Control. <i>IEEE Transactions on Power Electronics</i> , <b>2019</b> , 34, 8031-8044	7.2	7
253	Digital Constant On-Time V2 Control With Hybrid Capacitor Current Ramp Compensation. <i>IEEE Transactions on Power Electronics</i> , <b>2018</b> , 33, 8818-8826	7.2	10
252	Modulation Schemes of the Three-Phase Impedance Source Inverters Part II: Comparative Assessment. <i>IEEE Transactions on Industrial Electronics</i> , <b>2018</b> , 65, 6321-6332	8.9	27
251	Modulation Schemes of the Three-Phase Impedance Source Inverters Part I: Classification and Review. <i>IEEE Transactions on Industrial Electronics</i> , <b>2018</b> , 65, 6309-6320	8.9	37
250	An improved discontinuous space vector modulation scheme for the three-phase impedance source inverters <b>2018</b> ,		1
249	Analysis of Current Control Interaction of Multiple Parallel Grid-Connected Inverters. <i>IEEE Transactions on Sustainable Energy</i> , <b>2018</b> , 9, 1740-1749	8.2	20
248	Performance Evaluation of the Single-Phase Split-Source Inverter Using an Alternative DCAC Configuration. <i>IEEE Transactions on Industrial Electronics</i> , <b>2018</b> , 65, 363-373	8.9	43
247	Coupled-Inductor-Based DC Current Measurement Technique for Transformerless Grid-Tied Inverters. <i>IEEE Transactions on Power Electronics</i> , <b>2018</b> , 33, 18-23	7.2	22

246	Universal Compensation Ramp Auto-Tuning Technique for Current Mode Controls of Switching Converters. <i>IEEE Transactions on Power Electronics</i> , <b>2018</b> , 33, 970-974	7.2	5
245	<b>2018</b> ,		8
244	Bidirectional DC-DC Converter Topologies for Low-Voltage Battery Interface: Comparative Assessment <b>2018</b> ,		1
243	Analysis and Design of the Quasi-Z-Source Inverter for Wide Range of Operation <b>2018</b> ,		7
242	Stability Properties of the 3-Level Flying Capacitor Buck Converter Under Peak or Valley Current-Programmed-Control <b>2018</b> ,		4
241	. <i>IEEE Industrial Electronics Magazine</i> , <b>2018</b> , 12, 19-31	6.2	6
240	Message from editors. <i>CES Transactions on Electrical Machines and Systems</i> , <b>2018</b> , 2, 253-254	2.3	
239	Decoupled Control Scheme of Grid-Connected Split-Source Inverters. <i>IEEE Transactions on Industrial Electronics</i> , <b>2017</b> , 64, 6202-6211	8.9	29
238	. <i>IEEE Transactions on Industry Applications</i> , <b>2017</b> , 53, 3831-3839	4.3	13
237	Three-Phase Three-Level Flying Capacitors Split-Source Inverters: Analysis and Modulation. <i>IEEE Transactions on Industrial Electronics</i> , <b>2017</b> , 64, 4571-4580	8.9	48
236	On-line stability monitoring for power converters in DC microgrids <b>2017</b> ,		6
235	Power-based droop control in DC microgrids enabling seamless disconnection from AC grids <b>2017</b> ,		7
234	Power sharing analysis of power-based droop control for DC microgrids considering cable impedances <b>2017</b> ,		2
233	Power-based droop control suppressing the effect of bus voltage harmonics for DC microgrids <b>2017</b> ,		2
232	Experimental Validation for Impedance-Based Small-Signal Stability Analysis of Single-Phase Interconnected Power Systems With Grid-Feeding Inverters. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2016</b> , 4, 103-115	5.6	47
231	Impedance-Based Analysis of Grid-Synchronization Stability for Three-Phase Paralleled Converters. <i>IEEE Transactions on Power Electronics</i> , <b>2016</b> , 31, 26-38	7.2	260
230	Three-level operation of the split-source inverter using the flying capacitors topology <b>2016</b> ,		4
229	. <i>IEEE Transactions on Power Electronics</i> , <b>2016</b> , 31, 675-687	7.2	507

228	Analysis of Power Processing Architectures for Thermoelectric Energy Harvesting. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2016</b> , 4, 1036-1049	5.6	6
227	Analysis of $\Delta P$ - $\Delta Q$ Area of Uncontrolled Islanding in Low-Voltage Grids With PV Generators. <i>IEEE Transactions on Industry Applications</i> , <b>2016</b> , 52, 2387-2396	4.3	18
226	Three-Phase Split-Source Inverter (SSI): Analysis and Modulation. <i>IEEE Transactions on Power Electronics</i> , <b>2016</b> , 31, 7451-7461	7.2	73
225	Development of an SiC Multichip Phase-Leg Module for High-Temperature and High-Frequency Applications. <i>Journal of Microelectronics and Electronic Packaging</i> , <b>2016</b> , 13, 39-50	0.9	3
224	Re-Investigation of Generalized Integrator Based Filters From a First-Order-System Perspective. <i>IEEE Access</i> , <b>2016</b> , 4, 7131-7144	3.5	49
223	Impedance synthesis by inverter control for active loads in anti-islanding testbenches <b>2016</b> ,		1
222	Grid sensitivity considerations on multiple parallel inverters systems <b>2016</b> ,		2
221	Decoupled control scheme of the grid-connected split-source inverter for renewable energy sources <b>2016</b> ,		2
220	Analysis of the three-level diode-clamped split-source inverter <b>2016</b> ,		16
219	Vanadium Redox Flow Batteries: Potentials and Challenges of an Emerging Storage Technology. <i>IEEE Industrial Electronics Magazine</i> , <b>2016</b> , 10, 20-31	6.2	37
218	Dual Active Bridge-Based Battery Charger for Plug-in Hybrid Electric Vehicle With Charging Current Containing Low Frequency Ripple. <i>IEEE Transactions on Power Electronics</i> , <b>2015</b> , 30, 7299-7307	7.2	187
217	Digital Control in Power Electronics, 2nd Edition. <i>Synthesis Lectures on Power Electronics</i> , <b>2015</b> , 5, 1-229	4	16
216	D-Q impedance specification for balanced three-phase AC distributed power system <b>2015</b> ,		9
215	Small-Signal Stability Analysis of Three-Phase AC Systems in the Presence of Constant Power Loads Based on Measured d-q Frame Impedances. <i>IEEE Transactions on Power Electronics</i> , <b>2015</b> , 30, 5952-5963	7.2	216
214	EMI filter design of DC-fed motor-drives using behavioral EMI models <b>2015</b> ,		6
213	Small-Signal Analysis and Optimal Design of Constant Frequency $V^2$ Control. <i>IEEE Transactions on Power Electronics</i> , <b>2015</b> , 30, 1724-1733	7.2	25
212	Analysis of Phase-Locked Loop Low-Frequency Stability in Three-Phase Grid-Connected Power Converters Considering Impedance Interactions. <i>IEEE Transactions on Industrial Electronics</i> , <b>2015</b> , 62, 310-321	8.9	300
211	Impact of non-simultaneous P/f and Q/V grid code requirements on PV inverters on unintentional islanding operation in distribution network <b>2015</b> ,		5

210	GaN-based high frequency totem-pole bridgeless PFC design with digital implementation <b>2015,</b>		34
209	Wide-bandwidth Identification of small-signal dq impedances of ac power systems via single-phase series voltage injection <b>2015,</b>		11
208	Small Signal Analysis of V2 Control Using Equivalent Circuit Model of Current Mode Controls. <i>IEEE Transactions on Power Electronics</i> , <b>2015</b> , 1-1	7.2	12
207	Experimental verification of impedance-based small-signal stability analysis for single-phase interconnected power systems <b>2015,</b>		2
206	<b>2015,</b>		78
205	Improving High-Frequency Performance of an Input Common Mode EMI Filter Using an Impedance-Mismatching Filter. <i>IEEE Transactions on Power Electronics</i> , <b>2014</b> , 29, 5111-5115	7.2	36
204	Improving Microgrid Performance by Cooperative Control of Distributed Energy Sources. <i>IEEE Transactions on Industry Applications</i> , <b>2014</b> , 50, 3921-3930	4.3	28
203	Design and Implementation of Integrated Common Mode Capacitors for SiC-JFET Inverters. <i>IEEE Transactions on Power Electronics</i> , <b>2014</b> , 29, 3625-3636	7.2	28
202	. <i>IEEE Transactions on Power Electronics</i> , <b>2014</b> , 29, 2307-2320	7.2	161
201	Modeling and Design of Islanding Detection Using Phase-Locked Loops in Three-Phase Grid-Interface Power Converters. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2014</b> , 2, 1032-1040	5.6	25
200	Adaptive ripple-based constant on-time control with internal ramp compensations for buck converters <b>2014,</b>		9
199	Design considerations for GaN HEMT multichip halfbridge module for high-frequency power converters <b>2014,</b>		16
198	Analysis of load-induced unintentional islanding in Low Voltage grids with PV generators <b>2014,</b>		7
197	<b>2014,</b>		22
196	Multi-level single-phase shunt current injection converter used in small-signal dq impedance identification <b>2014,</b>		5
195	Small-signal impedance identification of three-phase diode rectifier with multi-tone injection <b>2014,</b>		7
194	Impedance-based analysis of active frequency drift islanding detection method for grid-tied inverter system <b>2014,</b>		2
193	Impedance-based analysis of grid-synchronization stability for three-phase paralleled converters <b>2014,</b>		11

192	EMI Behavioral Models of DC-Fed Three-Phase Motor Drive Systems. <i>IEEE Transactions on Power Electronics</i> , <b>2014</b> , 29, 4633-4645	7.2	42
191	Modeling the output impedance negative incremental resistance behavior of grid-tied inverters <b>2014</b> ,		11
190	Optimal Trajectory Control of LLC Resonant Converters for LED PWM Dimming. <i>IEEE Transactions on Power Electronics</i> , <b>2014</b> , 29, 979-987	7.2	88
189	Bi-directional PHEV battery charger based on normally-off GaN-on-Si multi-chip module <b>2014</b> ,		18
188	An FPGA-Based Gain-Scheduled Controller for Resonant Converters Applied to Induction Cooktops. <i>IEEE Transactions on Power Electronics</i> , <b>2014</b> , 29, 2143-2152	7.2	37
187	Filters With Linear-Phase Properties for Repetitive Feedback. <i>IEEE Transactions on Industrial Electronics</i> , <b>2014</b> , 61, 405-413	8.9	32
186	Digital Hybrid Ripple-Based Constant On-Time Control for Voltage Regulator Modules. <i>IEEE Transactions on Power Electronics</i> , <b>2014</b> , 29, 3132-3144	7.2	20
185	Exploration of a switching loop snubber for parasitic ringing suppression <b>2014</b> ,		4
184	Modular interleaved single-phase series voltage injection converter used in small-signal dq impedance identification <b>2014</b> ,		11
183	Small-Signal Analysis and Optimal Design of External Ramp for Constant On-Time $V^{\text{bf } 2}$ Control With Multilayer Ceramic Caps. <i>IEEE Transactions on Power Electronics</i> , <b>2014</b> , 29, 4450-4460	7.2	40
182	Efficiency optimized AC charging waveform for GaN bidirectional PHEV Battery Charger <b>2014</b> ,		2
181	Load Characterization and Revenue Metering Under Non-Sinusoidal and Asymmetrical Operation. <i>IEEE Transactions on Instrumentation and Measurement</i> , <b>2014</b> , 63, 422-431	5.2	10
180	Modeling the output impedance of three-phase uninterruptible power supply in D-Q frame <b>2014</b> ,		8
179	A controller for the smooth transition from grid-connected to autonomous operation mode <b>2014</b> ,		21
178	Analysis of <b>D-Q</b> area of uncontrolled islanding in low voltage grids with PV generators <b>2014</b> ,		2
177	$I^{\text{2}}$ Average Current Mode Control for Switching Converters. <i>IEEE Transactions on Power Electronics</i> , <b>2014</b> , 29, 2027-2036	7.2	32
176	Digital Controller Development Methodology Based on Real-Time Simulations with LabVIEW FPGA Hardware-Software Toolset. <i>Electronics</i> , <b>2014</b> , 17,	2	4
175	A High-Temperature SiC Three-Phase AC - DC Converter Design for > 100/spl deg/C Ambient Temperature. <i>IEEE Transactions on Power Electronics</i> , <b>2013</b> , 28, 555-572	7.2	85

174	Grid-Interface Bidirectional Converter for Residential DC Distribution SystemsPart One: High-Density Two-Stage Topology. <i>IEEE Transactions on Power Electronics</i> , <b>2013</b> , 28, 1655-1666	7.2	156
173	FPGA implementation of a gain-scheduled controller for transient optimization of resonant converters applied to induction heating <b>2013</b> ,		4
172	Dual active bridge based battery charger for plug-in hybrid electric vehicle with charging current containing low frequency ripple <b>2013</b> ,		23
171	EMI filter design and optimization for both AC and DC side in a DC-fed motor drive system <b>2013</b> ,		17
170	Grid-synchronization modeling and its stability analysis for multi-paralleled three-phase inverter systems <b>2013</b> ,		31
169	Optimal trajectory control for series resonant converters applied to domestic induction heating <b>2013</b> ,		2
168	Impact and compensation of dead time on common mode voltage elimination modulation for neutral-point-clamped three-phase inverters <b>2013</b> ,		10
167	High-temperature characterization and comparison of 1.2 kV SiC power MOSFETs <b>2013</b> ,		43
166	Improved common-mode voltage elimination modulation with dead-time compensation for three-level neutral-point-clamped three-phase inverters <b>2013</b> ,		7
165	A 1200 V, 60 A SiC MOSFET multi-chip phase-leg module for high-temperature, high-frequency applications <b>2013</b> ,		9
164	Design of a Hybrid Busbar Filter Combining a Transmission-Line Busbar Filter and a One-Turn Inductor for DC-Fed Three-Phase Motor Drive Systems. <i>IEEE Transactions on Power Electronics</i> , <b>2013</b> , 28, 5588-5602	7.2	19
163	Influence of High-Frequency Near-Field Coupling Between Magnetic Components on EMI Filter Design. <i>IEEE Transactions on Power Electronics</i> , <b>2013</b> , 28, 4568-4579	7.2	26
162	External ramp autotuning for current mode control of switching converters <b>2013</b> ,		7
161	Comparison of Small Signal Characteristics in Current Mode Control Schemes for Point-of-Load Buck Converter Applications. <i>IEEE Transactions on Power Electronics</i> , <b>2013</b> , 28, 3405-3414	7.2	54
160	Simplified Optimal Trajectory Control (SOTC) for LLC Resonant Converters. <i>IEEE Transactions on Power Electronics</i> , <b>2013</b> , 28, 2415-2426	7.2	89
159	Digital Enhanced V2-Type Constant On-Time Control Using Inductor Current Ramp Estimation for a Buck Converter With Low-ESR Capacitors. <i>IEEE Transactions on Power Electronics</i> , <b>2013</b> , 28, 1241-1252	7.2	40
158	Optimal Trajectory Control of Burst Mode for LLC Resonant Converter. <i>IEEE Transactions on Power Electronics</i> , <b>2013</b> , 28, 457-466	7.2	132
157	Unterminated Small-Signal Behavioral Model of DCDC Converters. <i>IEEE Transactions on Power Electronics</i> , <b>2013</b> , 28, 1870-1879	7.2	35

156	Pulsewidth Locked Loop (PWLL) for Automatic Resonant Frequency Tracking in LLC DCDC Transformer (LLC -DCX). <i>IEEE Transactions on Power Electronics</i> , <b>2013</b> , 28, 1862-1869	7.2	76
155	Small signal analysis of V2 control using current mode equivalent circuit model <b>2013</b> ,		4
154	Grid-Interface Bidirectional Converter for Residential DC Distribution SystemsPart 2: AC and DC Interface Design With Passive Components Minimization. <i>IEEE Transactions on Power Electronics</i> , <b>2013</b> , 28, 1667-1679	7.2	66
153	Design of Home Appliances for a DC-Based Nanogrid System: An Induction Range Study Case. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2013</b> , 1, 315-326	5.6	55
152	Design of household appliances for a Dc-based nanogrid system: An induction heating cooktop study case <b>2013</b> ,		4
151	Improving microgrid performance by cooperative control of distributed energy sources <b>2013</b> ,		5
150	Influence of phase-locked loop on input admittance of three-phase voltage-source converters <b>2013</b> ,		63
149	Input impedance of voltage source converter with stationary frame linear current regulators and phase-locked loop <b>2013</b> ,		11
148	Analysis of Phase Locked Loop (PLL) influence on DQ impedance measurement in three-phase AC systems <b>2013</b> ,		12
147	A frequency-domain study on the effect of DC-link decoupling capacitors <b>2013</b> ,		36
146	. <i>IEEE Transactions on Industry Applications</i> , <b>2013</b> , 49, 1548-1555	4.3	36
145	I2 average current mode control for switching converters <b>2013</b> ,		1
144	Analysis and Design of Average Current Mode Control Using a Describing-Function-Based Equivalent Circuit Model. <i>IEEE Transactions on Power Electronics</i> , <b>2013</b> , 28, 4732-4741	7.2	50
143	High-Temperature Characterization and Comparison of 1.2 kV SiC Power Semiconductor Devices. <i>Journal of Microelectronics and Electronic Packaging</i> , <b>2013</b> , 10, 138-143	0.9	2
142	Three-phase AC system impedance measurement unit (IMU) using chirp signal injection <b>2013</b> ,		38
141	Analysis of nonlinear sideband effects in small-signal input dq admittance of twelve-pulse diode rectifiers <b>2013</b> ,		1
140	Impact of interleaving on EMI noise reduction of paralleled three phase voltage source converters <b>2013</b> ,		8
139	A generalized method to analyze the small-signal stability for a multi-inverter islanded grid with droop controllers <b>2013</b> ,		6

138	Influence of high-frequency near-field coupling between magnetic components on EMI filter design <b>2013,</b>		5
137	Design and implementation of three-phase AC impedance measurement unit (IMU) with series and shunt injection <b>2013,</b>		16
136	Nonlinear sideband effects in small-signal input dq admittance of six-pulse diode rectifiers <b>2013,</b>		2
135	Small-signal analysis and design of constant frequency V2 peak control <b>2013,</b>		5
134	Development of a 1200 V, 120 A SiC MOSFET module for high-temperature and high-frequency applications <b>2013,</b>		20
133	. <i>IEEE Transactions on Aerospace and Electronic Systems</i> , <b>2012</b> , 48, 1319-1328	3.7	17
132	Distribution Loss Minimization by Token Ring Control of Power Electronic Interfaces in Residential Microgrids. <i>IEEE Transactions on Industrial Electronics</i> , <b>2012</b> , 59, 3817-3826	8.9	61
131	A new approach to the wide bandwidth of piezoelectric transducers for vibration energy harvesting <b>2012,</b>		1
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129	Analysis of EMI Terminal Modeling of Switched Power Converters. <i>IEEE Transactions on Power Electronics</i> , <b>2012</b> , 27, 3924-3933	7.2	58
128	Li-Ion Battery-Supercapacitor Hybrid Storage System for a Long Lifetime, Photovoltaic-Based Wireless Sensor Network. <i>IEEE Transactions on Power Electronics</i> , <b>2012</b> , 27, 3944-3952	7.2	155
127	Unified Three-Terminal Switch Model for Current Mode Controls. <i>IEEE Transactions on Power Electronics</i> , <b>2012</b> , 27, 4060-4070	7.2	55
126	A testbed for experimental validation of a low-voltage DC nanogrid for buildings <b>2012,</b>		27
125	Minimum loss control of low-voltage residential microgrids <b>2012,</b>		8
124	Common-mode EMI noise reduction for grid-interface converter in low-voltage DC distribution system <b>2012,</b>		18
123	R-based MPPT method for smart converter PV system <b>2012,</b>		3
122	Dynamic performance comparison of current mode control schemes for Point-of-Load Buck converter application <b>2012,</b>		6
121	Experimental verification of the Generalized Nyquist stability criterion for balanced three-phase ac systems in the presence of constant power loads <b>2012,</b>		49

120	Modeling Verification, Validation, and Uncertainty Quantification (VV&UQ) procedure for a two-level three-phase boost rectifier <b>2012,</b>		1
119	A novel anti-islanding detection algorithm for three-phase distributed generation systems <b>2012,</b>		6
118	Analysis of multi-phase hybrid ripple-based adaptive on-time control for voltage regulator modules <b>2012,</b>		17
117	An adaptive dead-time control scheme for high-switching-frequency dual-active-bridge converter <b>2012,</b>		31
116	A Universal Adaptive Driving Scheme for Synchronous Rectification in LLC Resonant Converters. <i>IEEE Transactions on Power Electronics</i> , <b>2012</b> , 27, 3775-3781	7.2	82
115	Anti-islanding protection in three-phase converters using grid synchronization small-signal stability <b>2012,</b>		9
114	Size and weight dependence of the single stage input EMI filter on switching frequency for low voltage bus aircraft applications <b>2012,</b>		7
113	Filter design oriented EMI prediction model for DC-fed motor drive system using double fourier integral transformation method <b>2012,</b>		4
112	High power density EMI filter design with consideration of self-parasitic <b>2012,</b>		10
111	EMI filter design considering in-circuit impedance mismatching <b>2012,</b>		5
110	Application of Conservative Power Theory to load and line characterization and revenue metering <b>2012,</b>		14
109	Small-signal Laplace-domain model for digital predictive current mode controls <b>2012,</b>		5
108	Design of output passive EMI filter in DC-fed motor drive <b>2012,</b>		9
107	Frequency behavior and its stability of grid-interface converter in distributed generation systems <b>2012,</b>		48
106	Impact of interleaving on input passive components of paralleled DC-DC converters for high power PV applications <b>2012,</b>		2
105	A hybrid strategy with Simplified Optimal Trajectory Control for LLC resonant converters <b>2012,</b>		11
104	A Variable Multi-Rate Plug-in Repetitive Controller for single-phase inverters operating in the islanding mode <b>2012,</b>		1
103	A transformer assisted zero-voltage soft-switching three-level active neutral-point-clamped converter <b>2012,</b>		1

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101	On discussion of switching frequency impacts on DC-fed motor drive EMI filter design <b>2012,</b>			7
100	Distributed cooperative control of low-voltage residential microgrids <b>2012,</b>			2
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97	EMI noise attenuation prediction with mask impedance in motor drive system <b>2012,</b>			3
96	CM noise containment in a DC-fed motor drive system using DM filter <b>2012,</b>			7
95	Analysis and design of average current mode control using describing function-based equivalent circuit model <b>2012,</b>			4
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90	Digital hybrid ripple-based constant on-time control for voltage regulator modules <b>2011,</b>			11
89	Non-linear, hybrid terminal behavioral modeling of a dc-based nanogrid system <b>2011,</b>			18
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85	Three-level Active Neutral-Point-Clamped Zero-Current-Transition Converter for Sustainable Energy Systems. <i>IEEE Transactions on Power Electronics</i> , <b>2011</b> , 26, 3680-3693	7.2		48

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83	A high-performance single-phase Phase-Locked-Loop with fast line-voltage amplitude tracking <b>2011,</b>		9
82	Evaluation of the switching characteristics of a gallium-nitride transistor <b>2011,</b>		82
81	A small signal model for average current mode control based on describing function approach <b>2011</b>		8
80	Un-terminated, low-frequency terminal behavioral model of dc-dc converters <b>2011,</b>		14
79	Un-terminated, low-frequency terminal-behavioral d-q model of three-phase converters <b>2011,</b>		11
78	LLC resonant converter burst mode control with constant burst time and optimal switching pattern <b>2011,</b>		17
77	Integrated common mode capacitors for SiC JFET inverters <b>2011,</b>		8
76	Variable sampling frequency in iterative learning current Control for Shunt Active Filter in aircraft power systems <b>2011,</b>		2
75	Small-signal model analysis and design of constant-on-time V2 control for low-ESR caps with external ramp compensation <b>2011,</b>		8
74	EMI modeling of half-bridge inverter using a generalized terminal model <b>2011,</b>		13
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70	Improving Power Quality and Distribution Efficiency in Micro-Grids by Plug & Play Control of Switching Power Interfaces. <i>IEEJ Transactions on Industry Applications</i> , <b>2011</b> , 131, 1364-1372	0.2	2
69	Analysis of power extraction from irregular waves by all-electric power take off <b>2010,</b>		15
68	Plug & play operation of distributed energy resources in micro-grids <b>2010,</b>		10
67	. <i>IEEE Transactions on Power Electronics</i> , <b>2010</b> , 25, 2170-2178	7.2	8

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65	Implementation of reactive and resistive load matching for optimal energy harvesting from piezoelectric generators <b>2010</b> ,		14
64	Analysis of Parallel Operation of Uninterruptible Power Supplies Loaded Through Long Wiring Cables. <i>IEEE Transactions on Power Electronics</i> , <b>2010</b> , 25, 1046-1054	7.2	49
63	Digital enhanced V2-type constant on-time control using inductor current ramp estimator for a buck converter with small ESR capacitors <b>2010</b> ,		8
62	Two-dimensional MPPT for photovoltaic energy harvesting systems <b>2010</b> ,		4
61	Improving power quality and distribution efficiency in micro-grids by cooperative control of Switching Power Interfaces <b>2010</b> ,		12
60	Accountability and revenue metering in smart micro-grids <b>2010</b> ,		7
59	Conservative Power Theory, sequence components and accountability in smart grids <b>2010</b> ,		31
58	Surround control of distributed energy resources in micro-grids <b>2010</b> ,		11
57	Digital implementation of driving scheme for synchronous rectification in LLC resonant converter <b>2010</b> ,		28
56	Characterization and performance comparison of digital V2-type constant on-time control for buck converters <b>2010</b> ,		7
55	A 90nm 4Mb embedded phase-change memory with 1.2V 12ns read access time and 1MB/s write throughput <b>2010</b> ,		12
54	Digital Time-Optimal Phase Shedding in Multiphase Buck Converters. <i>IEEE Transactions on Power Electronics</i> , <b>2010</b> , 25, 2242-2247	7.2	48
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