Paolo Mattavelli

List of Publications by Citations

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	. *IEEE Transactions on Power Electronics*, **2016**, 31, 675-687	7.2	507
298	Comparison of current control techniques for active filter applications. *IEEE Transactions on Industrial Electronics*, **1998**, 45, 722-729	8.9	357
297	Analysis of Phase-Locked Loop Low-Frequency Stability in Three-Phase Grid-Connected Power Converters Considering Impedance Interactions. *IEEE Transactions on Industrial Electronics*, **2015**, 62, 310-321	8.9	300
296	A closed-loop selective harmonic compensation for active filters. *IEEE Transactions on Industry Applications*, **2001**, 37, 81-89	4.3	286
295	Impedance-Based Analysis of Grid-Synchronization Stability for Three-Phase Paralleled Converters. *IEEE Transactions on Power Electronics*, **2016**, 31, 26-38	7.2	260
294	An improved deadbeat control for UPS using disturbance observers. *IEEE Transactions on Industrial Electronics*, **2005**, 52, 206-212	8.9	233
293	Repetitive-based control for selective harmonic compensation in active power filters. *IEEE Transactions on Industrial Electronics*, **2004**, 51, 1018-1024	8.9	232
292	Small-Signal Stability Analysis of Three-Phase AC Systems in the Presence of Constant Power Loads Based on Measured d-q Frame Impedances. *IEEE Transactions on Power Electronics*, **2015**, 30, 5952-5963	7.2	216
291	Digital Control in Power Electronics. *Synthesis Lectures on Power Electronics*, **2006**, 1, 1-158	4	202
290	Dual Active Bridge-Based Battery Charger for Plug-in Hybrid Electric Vehicle With Charging Current Containing Low Frequency Ripple. *IEEE Transactions on Power Electronics*, **2015**, 30, 7299-7307	7.2	187
289	Torque-ripple reduction in PM synchronous motor drives using repetitive current control. *IEEE Transactions on Power Electronics*, **2005**, 20, 1423-1431	7.2	179
288	Repetitive-Based Controller for a UPS Inverter to Compensate Unbalance and Harmonic Distortion. *IEEE Transactions on Industrial Electronics*, **2007**, 54, 504-510	8.9	176
287	. *IEEE Transactions on Power Electronics*, **2014**, 29, 2307-2320	7.2	161
286	Synchronous-frame harmonic control for high-performance AC power supplies. *IEEE Transactions on Industry Applications*, **2001**, 37, 864-872	4.3	161
285	Grid-Interface Bidirectional Converter for Residential DC Distribution Systems—Part One: High-Density Two-Stage Topology. *IEEE Transactions on Power Electronics*, **2013**, 28, 1655-1666	7.2	156
284	Li-Ion Battery-Supercapacitor Hybrid Storage System for a Long Lifetime, Photovoltaic-Based Wireless Sensor Network. *IEEE Transactions on Power Electronics*, **2012**, 27, 3944-3952	7.2	155
283	General-purpose fuzzy controller for DC-DC converters. *IEEE Transactions on Power Electronics*, **1997**, 12, 79-86	7.2	152

282	Conservative Power Theory, a Framework to Approach Control and Accountability Issues in Smart Microgrids. *IEEE Transactions on Power Electronics*, **2011**, 26, 664-673	7.2	143
281	Simple digital control improving dynamic performance of power factor preregulators. *IEEE Transactions on Power Electronics*, **1998**, 13, 814-823	7.2	143
280	Optimal Trajectory Control of Burst Mode for LLC Resonant Converter. *IEEE Transactions on Power Electronics*, **2013**, 28, 457-466	7.2	132
279	. *IEEE Transactions on Industry Applications*, **2000**, 36, 1174-1180	4.3	122
278	Small-signal analysis of DC-DC converters with sliding mode control. *IEEE Transactions on Power Electronics*, **1997**, 12, 96-102	7.2	117
277	An Adaptive Control for UPS to Compensate Unbalance and Harmonic Distortion Using a Combined Capacitor/Load Current Sensing. *IEEE Transactions on Industrial Electronics*, **2007**, 54, 839-847	8.9	104
276	Leakage Current Reduction in a Single-Phase Bidirectional ACDC Full-Bridge Inverter. *IEEE Transactions on Power Electronics*, **2012**, 27, 4281-4291	7.2	100
275	Effect of Control Strategies and Power Take-Off Efficiency on the Power Capture From Sea Waves. *IEEE Transactions on Energy Conversion*, **2011**, 26, 1088-1098	5.4	98
274	Uninterruptible power supply multiloop control employing digital predictive voltage and current regulators. *IEEE Transactions on Industry Applications*, **2001**, 37, 1846-1854	4.3	98
273	. *IEEE Transactions on Industrial Electronics*, **2008**, 55, 1501-1508	8.9	96
272	. *IEEE Transactions on Industrial Electronics*, **2008**, 55, 3476-3483	8.9	95
271	Improved constant-frequency hysteresis current control of VSI inverters with simple feedforward bandwidth prediction. *IEEE Transactions on Industry Applications*, **1997**, 33, 1194-1202	4.3	92
270	Simplified Optimal Trajectory Control (SOTC) for LLC Resonant Converters. *IEEE Transactions on Power Electronics*, **2013**, 28, 2415-2426	7.2	89
269	Autotuning of Digitally Controlled DCDC Converters Based on Relay Feedback. *IEEE Transactions on Power Electronics*, **2007**, 22, 199-207	7.2	89
268	Optimal Trajectory Control of LLC Resonant Converters for LED PWM Dimming. *IEEE Transactions on Power Electronics*, **2014**, 29, 979-987	7.2	88
267	A High-Temperature SiC Three-Phase AC - DC Converter Design for > 100/spl deg/C Ambient Temperature. *IEEE Transactions on Power Electronics*, **2013**, 28, 555-572	7.2	85
266	A Universal Adaptive Driving Scheme for Synchronous Rectification in LLC Resonant Converters. *IEEE Transactions on Power Electronics*, **2012**, 27, 3775-3781	7.2	82
265	Evaluation of the switching characteristics of a gallium-nitride transistor **2011**,		82

264	An adaptive controller in stationary reference frame for D-statcom in unbalanced operation. *IEEE Transactions on Industrial Electronics*, **2004**, 51, 401-409	8.9	82
263	Predictive digital control of power factor preregulators with input voltage estimation using disturbance observers. *IEEE Transactions on Power Electronics*, **2005**, 20, 140-147	7.2	81
262	High Step-Up Ratio Flyback Converter With Active Clamp and Voltage Multiplier. *IEEE Transactions on Power Electronics*, **2011**, 26, 3205-3214	7.2	78
261	**2015**,		78
260	Phasor dynamics of thyristor-controlled series capacitor systems. *IEEE Transactions on Power Systems*, **1997**, 12, 1259-1267	7	77
259	Pulsewidth Locked Loop (PWLL) for Automatic Resonant Frequency Tracking in LLC DCDC Transformer (LLC -DCX). *IEEE Transactions on Power Electronics*, **2013**, 28, 1862-1869	7.2	76
258	High-performance hysteresis modulation technique for active filters. *IEEE Transactions on Power Electronics*, **1997**, 12, 876-884	7.2	76
257	Three-Phase Split-Source Inverter (SSI): Analysis and Modulation. *IEEE Transactions on Power Electronics*, **2016**, 31, 7451-7461	7.2	73
256	Parameter-Independent Time-Optimal Digital Control for Point-of-Load Converters. *IEEE Transactions on Power Electronics*, **2009**, 24, 2235-2248	7.2	68
255	Grid-Interface Bidirectional Converter for Residential DC Distribution SystemsPart 2: AC and DC Interface Design With Passive Components Minimization. *IEEE Transactions on Power Electronics*, **2013**, 28, 1667-1679	7.2	66
254	Modeling of Multisampled Pulse Width Modulators for Digitally Controlled DCDC Converters. *IEEE Transactions on Power Electronics*, **2008**, 23, 1839-1847	7.2	66
253	Influence of phase-locked loop on input admittance of three-phase voltage-source converters **2013** ,		63
252	Analysis of Control-Delay Reduction for the Improvement of UPS Voltage-Loop Bandwidth. *IEEE Transactions on Industrial Electronics*, **2008**, 55, 2903-2911	8.9	63
251	Distribution Loss Minimization by Token Ring Control of Power Electronic Interfaces in Residential Microgrids. *IEEE Transactions on Industrial Electronics*, **2012**, 59, 3817-3826	8.9	61
250	Current sharing in three-phase LLC interleaved resonant converter **2009**,		60
249	SSR analysis with dynamic phasor model of thyristor-controlled series capacitor. *IEEE Transactions on Power Systems*, **1999**, 14, 200-208	7	60
248	Analysis of EMI Terminal Modeling of Switched Power Converters. *IEEE Transactions on Power Electronics*, **2012**, 27, 3924-3933	7.2	58
247	Unified Three-Terminal Switch Model for Current Mode Controls. *IEEE Transactions on Power Electronics*, **2012**, 27, 4060-4070	7.2	55

246	Design of Home Appliances for a DC-Based Nanogrid System: An Induction Range Study Case. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2013**, 1, 315-326	5.6	55
245	Comparison of Small Signal Characteristics in Current Mode Control Schemes for Point-of-Load Buck Converter Applications. *IEEE Transactions on Power Electronics*, **2013**, 28, 3405-3414	7.2	54
244	Digital Hysteretic Voltage-Mode Control for DCDC Converters Based on Asynchronous Sampling. *IEEE Transactions on Power Electronics*, **2009**, 24, 201-211	7.2	54
243	Fully digital hysteresis modulation with switching-time prediction. *IEEE Transactions on Industry Applications*, **2006**, 42, 763-769	4.3	54
242	. *IEEE Transactions on Industry Applications*, **2008**, 44, 1785-1794	4.3	53
241	Power Line Communication in Digitally Controlled DCDC Converters Using Switching Frequency Modulation. *IEEE Transactions on Industrial Electronics*, **2008**, 55, 1509-1518	8.9	52
240	Analysis and Design of Average Current Mode Control Using a Describing-Function-Based Equivalent Circuit Model. *IEEE Transactions on Power Electronics*, **2013**, 28, 4732-4741	7.2	50
239	Digital Deadbeat Control Tuning for dc-dc Converters Using Error Correlation. *IEEE Transactions on Power Electronics*, **2007**, 22, 1566-1570	7.2	50
238	A Negative Feedback Repetitive Control Scheme for Harmonic Compensation. *IEEE Transactions on Industrial Electronics*, **2006**, 53, 1383-1386	8.9	50
237	Experimental verification of the Generalized Nyquist stability criterion for balanced three-phase ac systems in the presence of constant power loads **2012**,		49
236	Analysis of Parallel Operation of Uninterruptible Power Supplies Loaded Through Long Wiring Cables. *IEEE Transactions on Power Electronics*, **2010**, 25, 1046-1054	7.2	49
235	Re-Investigation of Generalized Integrator Based Filters From a First-Order-System Perspective. *IEEE Access*, **2016**, 4, 7131-7144	3.5	49
234	Three-Phase Three-Level Flying Capacitors Split-Source Inverters: Analysis and Modulation. *IEEE Transactions on Industrial Electronics*, **2017**, 64, 4571-4580	8.9	48
233	Frequency behavior and its stability of grid-interface converter in distributed generation systems **2012**,		48
232	Three-level Active Neutral-Point-Clamped Zero-Current-Transition Converter for Sustainable Energy Systems. *IEEE Transactions on Power Electronics*, **2011**, 26, 3680-3693	7.2	48
231	Digital Time-Optimal Phase Shedding in Multiphase Buck Converters. *IEEE Transactions on Power Electronics*, **2010**, 25, 2242-2247	7.2	48
230	Design and fully digital control of parallel active filters for thyristor rectifiers to comply with IEC-1000-3-2 standards. *IEEE Transactions on Industry Applications*, **1998**, 34, 508-517	4.3	48
229	. *IEEE Transactions on Power Electronics*, **2008**, 23, 1956-1963	7.2	48

228	Experimental Validation for Impedance-Based Small-Signal Stability Analysis of Single-Phase Interconnected Power Systems With Grid-Feeding Inverters. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2016**, 4, 103-115	5.6	47
227	Performance Evaluation of the Single-Phase Split-Source Inverter Using an Alternative DC–AC Configuration. *IEEE Transactions on Industrial Electronics*, **2018**, 65, 363-373	8.9	43
226	High-temperature characterization and comparison of 1.2 kV SiC power MOSFETs **2013**,		43
225	EMI Behavioral Models of DC-Fed Three-Phase Motor Drive Systems. *IEEE Transactions on Power Electronics*, **2014**, 29, 4633-4645	7.2	42
224	Digital Enhanced V2-Type Constant On-Time Control Using Inductor Current Ramp Estimation for a Buck Converter With Low-ESR Capacitors. *IEEE Transactions on Power Electronics*, **2013**, 28, 1241-1252	7.2	40
223	Small-Signal Analysis and Optimal Design of External Ramp for Constant On-Time V $^{bf 2}$ Control With Multilayer Ceramic Caps. *IEEE Transactions on Power Electronics*, **2014**, 29, 4450-4460	7.2	40
222	Three-phase AC system impedance measurement unit (IMU) using chirp signal injection **2013**,		38
221	Dissipativity-based adaptive and robust control of UPS in unbalanced operation. *IEEE Transactions on Power Electronics*, **2003**, 18, 1056-1062	7.2	38
220	Modulation Schemes of the Three-Phase Impedance Source Inverter—Part I: Classification and Review. *IEEE Transactions on Industrial Electronics*, **2018**, 65, 6309-6320	8.9	37
219	An FPGA-Based Gain-Scheduled Controller for Resonant Converters Applied to Induction Cooktops. *IEEE Transactions on Power Electronics*, **2014**, 29, 2143-2152	7.2	37
218	Vanadium Redox Flow Batteries: Potentials and Challenges of an Emerging Storage Technology. *IEEE Industrial Electronics Magazine*, **2016**, 10, 20-31	6.2	37
217	Improving High-Frequency Performance of an Input Common Mode EMI Filter Using an Impedance-Mismatching Filter. *IEEE Transactions on Power Electronics*, **2014**, 29, 5111-5115	7.2	36
216	A frequency-domain study on the effect of DC-link decoupling capacitors **2013**,		36
215	. *IEEE Transactions on Industry Applications*, **2013**, 49, 1548-1555	4.3	36
214	Unterminated Small-Signal Behavioral Model of DC–DC Converters. *IEEE Transactions on Power Electronics*, **2013**, 28, 1870-1879	7.2	35
213	GaN-based high frequency totem-pole bridgeless PFC design with digital implementation **2015**,		34
212	Reactive power and imbalance compensation using STATCOM with dissipativity-based control. *IEEE Transactions on Control Systems Technology*, **2001**, 9, 718-727	4.8	33
211	Filters With Linear-Phase Properties for Repetitive Feedback. *IEEE Transactions on Industrial Electronics*, **2014**, 61, 405-413	8.9	32

210	I^{2} Average Current Mode Control for Switching Converters. *IEEE Transactions on Power Electronics*, **2014**, 29, 2027-2036	7.2	32
209	Grid-synchronization modeling and its stability analysis for multi-paralleled three-phase inverter systems **2013**,		31
208	An adaptive dead-time control scheme for high-switching-frequency dual-active-bridge converter **2012**,		31
207	Conservative Power Theory, sequence components and accountability in smart grids **2010**,		31
206	Decoupled Control Scheme of Grid-Connected Split-Source Inverters. *IEEE Transactions on Industrial Electronics*, **2017**, 64, 6202-6211	8.9	29
205	Improving Microgrid Performance by Cooperative Control of Distributed Energy Sources. *IEEE Transactions on Industry Applications*, **2014**, 50, 3921-3930	4.3	28
204	Design and Implementation of Integrated Common Mode Capacitors for SiC-JFET Inverters. *IEEE Transactions on Power Electronics*, **2014**, 29, 3625-3636	7.2	28
203	Accountability in Smart Microgrids Based on Conservative Power Theory. *IEEE Transactions on Instrumentation and Measurement*, **2011**, 60, 3058-3069	5.2	28
202	Digital implementation of driving scheme for synchronous rectification in LLC resonant converter **2010**,		28
201	Digital Control of Single-Phase Power Factor Preregulators Based on Current and Voltage Sensing at Switch Terminals. *IEEE Transactions on Power Electronics*, **2006**, 21, 1356-1363	7.2	28
200	Modulation Schemes of the Three-Phase Impedance Source Inverters—Part II: Comparative Assessment. *IEEE Transactions on Industrial Electronics*, **2018**, 65, 6321-6332	8.9	27
199	A testbed for experimental validation of a low-voltage DC nanogrid for buildings **2012**,		27
198	Power-Based Droop Control in DC Microgrids Enabling Seamless Disconnection From Upstream Grids. *IEEE Transactions on Power Electronics*, **2019**, 34, 2039-2051	7.2	26
197	Influence of High-Frequency Near-Field Coupling Between Magnetic Components on EMI Filter Design. *IEEE Transactions on Power Electronics*, **2013**, 28, 4568-4579	7.2	26
196	Small-Signal Analysis and Optimal Design of Constant Frequency V^{2} Control. *IEEE Transactions on Power Electronics*, **2015**, 30, 1724-1733	7.2	25
195	Modeling and Design of Islanding Detection Using Phase-Locked Loops in Three-Phase Grid-Interface Power Converters. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2014**, 2, 1032-1040	5.6	25
194	Dual active bridge based battery charger for plug-in hybrid electric vehicle with charging current containing low frequency ripple **2013**,		23
193	Coupled-Inductor-Based DC Current Measurement Technique for Transformerless Grid-Tied Inverters. *IEEE Transactions on Power Electronics*, **2018**, 33, 18-23	7.2	22

192	**2014**,		22
191	Synchronous–Asynchronous Digital Voltage-Mode Control for DC–DC Converters. *IEEE Transactions on Power Electronics*, **2007**, 22, 1261-1268	7.2	22
190	A controller for the smooth transition from grid-connected to autonomous operation mode **2014**,		21
189	A 4 Mb LV MOS-Selected Embedded Phase Change Memory in 90 nm Standard CMOS Technology. *IEEE Journal of Solid-State Circuits*, **2011**, 46, 52-63	5.5	21
188	Analysis of Current Control Interaction of Multiple Parallel Grid-Connected Inverters. *IEEE Transactions on Sustainable Energy*, **2018**, 9, 1740-1749	8.2	20
187	Digital Hybrid Ripple-Based Constant On-Time Control for Voltage Regulator Modules. *IEEE Transactions on Power Electronics*, **2014**, 29, 3132-3144	7.2	20
186	Development of a 1200 V, 120 A SiC MOSFET module for high-temperature and high-frequency applications **2013**,		20
185	LLC converters with automatic resonant frequency tracking based on synchronous rectifier (SR) gate driving signals **2011**,		20
184	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. *IEEE Transactions on Power Electronics*, **2013**, 28, 5588-5602	7.2	19
183	Effects of Parasitic Components in High-FrequencyResonant Drivers for SynchronousRectification MOSFETs. *IEEE Transactions on Power Electronics*, **2008**, 23, 2082-2092	7.2	19
182	Dissipativity-based adaptive and robust control of UPS. *IEEE Transactions on Industrial Electronics*, **2001**, 48, 334-343	8.9	19
181	Analysis of $Delta P -Delta Q$ Area of Uncontrolled Islanding in Low-Voltage Grids With PV Generators. *IEEE Transactions on Industry Applications*, **2016**, 52, 2387-2396	4.3	18
180	Bi-directional PHEV battery charger based on normally-off GaN-on-Si multi-chip module **2014**,		18
179	Common-mode EMI noise reduction for grid-interface converter in low-voltage DC distribution system **2012**,		18
178	Non-linear, hybrid terminal behavioral modeling of a dc-based nanogrid system **2011**,		18
177	Suppression of Second-Order Harmonic Current for Droop-Controlled Distributed Energy Resource Converters in DC Microgrids. *IEEE Transactions on Industrial Electronics*, **2020**, 67, 358-368	8.9	18
176	. *IEEE Transactions on Aerospace and Electronic Systems*, **2012**, 48, 1319-1328	3.7	17
175	EMI filter design and optimization for both AC and DC side in a DC-fed motor drive system **2013**,		17

174	Analysis of multi-phase hybrid ripple-based adaptive on-time control for voltage regulator modules **2012**,		17
173	LLC resonant converter burst mode control with constant burst time and optimal switching pattern **2011**,		17
172	Digital Control in Power Electronics, 2nd Edition. *Synthesis Lectures on Power Electronics*, **2015**, 5, 1-229	4	16
171	Design considerations for GaN HEMT multichip halfbridge module for high-frequency power converters **2014**,		16
170	Design and implementation of three-phase AC impedance measurement unit (IMU) with series and shunt injection **2013**,		16
169	Cooperative Operation of Active Power Filters by Instantaneous Complex Power Control **2007**,		16
168	. *IEEE Transactions on Industry Applications*, **1995**, 31, 273-279	4.3	16
167	Analysis of the three-level diode-clamped split-source inverter **2016**,		16
166	Analysis of power extraction from irregular waves by all-electric power take off **2010**,		15
165	A Mixed-Signal Synchronous/Asynchronous Control for High-Frequency DC-DC Boost Converters. *IEEE Transactions on Industrial Electronics*, **2008**, 55, 2053-2060	8.9	15
164	Synergistic control and cooperative operation of distributed harmonic and reactive compensators. *Power Electronics Specialist Conference (PESC), IEEE*, **2008**,		15
163	Application of Conservative Power Theory to load and line characterization and revenue metering **2012**,		14
162	Implementation of reactive and resistive load matching for optimal energy harvesting from piezoelectric generators **2010**,		14
161	Un-terminated, low-frequency terminal behavioral model of dc-dc converters **2011**,		14
160	. *IEEE Transactions on Industry Applications*, **2017**, 53, 3831-3839	4.3	13
159	EMI modeling of half-bridge inverter using a generalized terminal model **2011**,		13
158	Mixed-Signal Voltage-Mode Control for DCDC Converters With Inherent Analog Derivative Action. *IEEE Transactions on Power Electronics*, **2008**, 23, 1485-1493	7.2	13
157	Self-Programmable PID Compensator for Digitally Controlled SMPS **2006**,		13

156	Small Signal Analysis of V2 Control Using Equivalent Circuit Model of Current Mode Controls. *IEEE Transactions on Power Electronics*, **2015**, 1-1	7.2	12
155	Analysis of Phase Locked Loop (PLL) influence on DQ impedance measurement in three-phase AC systems **2013**,		12
154	Improving power quality and distribution efficiency in micro-grids by cooperative control of Switching Power Interfaces **2010**,		12
153	A 90nm 4Mb embedded phase-change memory with 1.2V 12ns read access time and 1MB/s write throughput **2010**,		12
152	Passive filter topology study of single-phase ac-dc converters for DC nanogrid applications **2011**,		12
151	Elimination of Sampling-Induced Dead Bands in Multiple-Sampled Pulsewidth Modulators for DCDC Converters. *IEEE Transactions on Power Electronics*, **2009**, 24, 2661-2665	7.2	12
150	Impedance-based analysis of grid-synchronization stability for three-phase paralleled converters **2014**,		11
149	Modeling the output impedance negative incremental resistance behavior of grid-tied inverters **2014**,		11
148	Wide-bandwidth Identification of small-signal dq impedances of ac power systems via single-phase series voltage injection **2015**,		11
147	Modular interleaved single-phase series voltage injection converter used in small-signal dq impedance identification **2014**,		11
146	A hybrid strategy with Simplified Optimal Trajectory Control for LLC resonant converters **2012**,		11
145	Input impedance of voltage source converter with stationary frame linear current regulators and phase-locked loop **2013**,		11
144	Digital hybrid ripple-based constant on-time control for voltage regulator modules **2011**,		11
143	Distribution loss minimization by token ring control of power electronic interfaces in residential micro-grids **2010**,		11
142	Surround control of distributed energy resources in micro-grids **2010**,		11
141	Un-terminated, low-frequency terminal-behavioral d-q model of three-phase converters **2011**,		11
140	Digital Autotuning of DCDC Converters Based on a Model Reference Impulse Response. *IEEE Transactions on Power Electronics*, **2011**, 26, 2915-2924	7.2	11
139	Digital Constant On-Time V2 Control With Hybrid Capacitor Current Ramp Compensation. *IEEE Transactions on Power Electronics*, **2018**, 33, 8818-8826	7.2	10

138	Impact and compensation of dead time on common mode voltage elimination modulation for neutral-point-clamped three-phase inverters **2013**,		10
137	Load Characterization and Revenue Metering Under Non-Sinusoidal and Asymmetrical Operation. *IEEE Transactions on Instrumentation and Measurement*, **2014**, 63, 422-431	5.2	10
136	High power density EMI filter design with consideration of self-parasitic **2012**,		10
135	Plug & play operation of distributed energy resources in micro-grids **2010**,		10
134	D-Q impedance specification for balanced three-phase AC distributed power system **2015**,		9
133	Adaptive ripple-based constant on-time control with internal ramp compensations for buck converters **2014**,		9
132	A 1200 V, 60 A SiC MOSFET multi-chip phase-leg module for high-temperature, high-frequency applications **2013**,		9
131	Anti-islanding protection in three-phase converters using grid synchronization small-signal stability **2012**,		9
130	Design of output passive EMI filter in DC-fed motor drive **2012**,		9
129	A high-performance single-phase Phase-Locked-Loop with fast line-voltage amplitude tracking **2011**,		9
128	Cooperative control of electronic power processors in micro-grids **2009**,		9
127	A selective harmonic compensation and power control approach exploiting distributed electronic converters in microgrids. *International Journal of Electrical Power and Energy Systems*, **2020**, 115, 105452	5.1	9
126	Analysis of an Online Stability Monitoring Approach for DC Microgrid Power Converters. *IEEE Transactions on Power Electronics*, **2019**, 34, 4794-4806	7.2	8
125	Modeling the output impedance of three-phase uninterruptible power supply in D-Q frame **2014**,		8
124	Minimum loss control of low-voltage residential microgrids **2012**,		8
123	**2012**,		8
122	Impact of interleaving on EMI noise reduction of paralleled three phase voltage source converters **2013**,		8
121	. *IEEE Transactions on Power Electronics*, **2010**, 25, 2170-2178	7.2	8

120	Digital enhanced V2-type constant on-time control using inductor current ramp estimator for a buck converter with small ESR capacitors **2010**,		8
119	A small signal model for average current mode control based on describing function approach **2011** ,		8
118	Integrated common mode capacitors for SiC JFET inverters **2011**,		8
117	Small-signal model analysis and design of constant-on-time V2 control for low-ESR caps with external ramp compensation **2011**,		8
116	Sensorless Stabilization Technique for Peak Current Mode Controlled Three-Level Flying-Capacitor Converters. *IEEE Transactions on Power Electronics*, **2020**, 35, 3208-3220	7.2	8
115	**2018**,		8
114	Feedback Noise Propagation in Multisampled DCDC Power Electronic Converters. *IEEE Transactions on Power Electronics*, **2022**, 37, 150-161	7.2	8
113	Analysis of load-induced unintentional islanding in Low Voltage grids with PV generators **2014**,		7
112	Small-signal impedance identification of three-phase diode rectifier with multi-tone injection **2014**,		7
111	Improved common-mode voltage elimination modulation with dead-time compensation for three-level neutral-point-clamped three-phase inverters **2013**,		7
110	External ramp autotuning for current mode control of switching converters **2013**,		7
109	Power-based droop control in DC microgrids enabling seamless disconnection from AC grids **2017**,		7
108	Size and weight dependence of the single stage input EMI filter on switching frequency for low voltage bus aircraft applications **2012**,		7
107	On discussion of switching frequency impacts on DC-fed motor drive EMI filter design **2012**,		7
106	Accountability and revenue metering in smart micro-grids **2010**,		7
105	Characterization and performance comparison of digital V2-type constant on-time control for buck converters **2010**,		7
104	CM noise containment in a DC-fed motor drive system using DM filter **2012**,		7
103	Harmonics mitigation and non-ideal voltage compensation utilising active power filter based on predictive current control. *IET Power Electronics*, **2020**, 13, 2782-2793	2.2	7

102	Stability Properties of the 3-Level Flying Capacitor Buck Converter Under Peak or Valley Current Programmed Control. *IEEE Transactions on Power Electronics*, **2019**, 34, 8031-8044	7.2	7
101	Analysis and Design of the Quasi-Z-Source Inverter for Wide Range of Operation **2018**,		7
100	EMI filter design of DC-fed motor-drives using behavioral EMI models **2015**,		6
99	Analysis of Power Processing Architectures for Thermoelectric Energy Harvesting. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2016**, 4, 1036-1049	5.6	6
98	On-line stability monitoring for power converters in DC microgrids **2017**,		6
97	Dynamic performance comparison of current mode control schemes for Point-of-Load Buck converter application **2012**,		6
96	A novel anti-islanding detection algorithm for three-phase distributed generation systems **2012**,		6
95	A generalized method to analyze the small-signal stability for a multi-inverter islanded grid with droop controllers **2013**,		6
94	. *IEEE Industrial Electronics Magazine*, **2018**, 12, 19-31	6.2	6
93	A Jitter Amplification Phenomenon in Multisampled Digital Control of Power Converters. *IEEE Transactions on Power Electronics*, **2021**, 36, 8685-8695	7.2	6
92	Multi-level single-phase shunt current injection converter used in small-signal dq impedance identification **2014**,		5
91	Impact of non-simultaneous P/f and Q/V grid code requirements on PV inverters on unintentional islanding operation in distribution network **2015**,		5
90	EMI filter design considering in-circuit impedance mismatching **2012**,		5
89	Small-signal Laplace-domain model for digital predictive current mode controls **2012**,		5
88	Improving microgrid performance by cooperative control of distributed energy sources **2013**,		5
87	Influence of high-frequency near-field coupling between magnetic components on EMI filter design **2013**,		5
86	Small-signal analysis and design of constant frequency V2 peak control **2013**,		5
85	Resistive–Capacitive Output Impedance Shaping for Droop-Controlled Converters in DC Microgrids With Reduced Output Capacitance. *IEEE Transactions on Power Electronics*, **2020**, 35, 6501-6511	7.2	5

84	Simultaneous Identification of Multiple Control Loops in DC Microgrid Power Converters. *IEEE Transactions on Industrial Electronics*, **2020**, 67, 10641-10651	8.9	5
83	Real-Time Validation of Power Flow Control Method for Enhanced Operation of Microgrids. *Energies*, **2020**, 13, 5959	3.1	5
82	Investigation of Nonlinearities Introduced by Multi-sampled Pulse-Width Modulators. *IEEE Transactions on Power Electronics*, **2021**, 1-1	7.2	5
81	Universal Compensation Ramp Auto-Tuning Technique for Current Mode Controls of Switching Converters. *IEEE Transactions on Power Electronics*, **2018**, 33, 970-974	7.2	5
80	A Loop Gain-Based Technique for Online Bus Impedance Estimation and Damping in DC Microgrids. *IEEE Transactions on Power Electronics*, **2021**, 36, 9648-9658	7.2	5
79	An enhanced current sharing strategy for islanded ac microgrids based on adaptive virtual impedance regulation. *International Journal of Electrical Power and Energy Systems*, **2022**, 134, 107402	5.1	5
78	Single-Phase Quasi-Z-Source Inverters: Switching Loss Reduction Using a Quasi-Sinusoidal Modulation Strategy **2019**,		4
77	Three-level operation of the split-source inverter using the flying capacitors topology **2016**,		4
76	FPGA implementation of a gain-scheduled controller for transient optimization of resonant converters applied to induction heating **2013**,		4
75	Small signal analysis of V2 control using current mode equivalent circuit model **2013**,		4
74	Exploration of a switching loop snubber for parasitic ringing suppression **2014**,		4
73	Filter design oriented EMI prediction model for DC-fed motor drive system using double fourier integral transformation method **2012**,		4
72	Design of household appliances for a Dc-based nanogrid system: An induction heating cooktop study case **2013**,		4
71	Distributed control of smart microgrids by dynamic grid mapping **2011**,		4
70	Two-dimensional MPPT for photovoltaic energy harvesting systems **2010**,		4
69	Electromagnetic Susceptibility Analysis on a Digital Pulse Width Modulator for SMPSs. *IEEE Transactions on Electromagnetic Compatibility*, **2009**, 51, 1034-1043	2	4
68	Digital gain-scheduled control of a high frequency parallel resonant DC-DC converter **2012**,		4
67	Analysis and design of average current mode control using describing function-based equivalent circuit model **2012**,		4

66	Multi-Sampled Grid-Connected VSCs: A Path Towards Inherent Admittance Passivity. *IEEE Transactions on Power Electronics*, **2022**, 1-1	7.2	4
65	Digital Controller Development Methodology Based on Real-Time Simulations with LabVIEW FPGAc Hardware-Software Toolset. *Electronics*, **2014**, 17,	2	4
64	Output Capacitance Minimization for Converters in DC Microgrids via Multi-Objective Tuning of Droop-Based Controllers. *IEEE Access*, **2020**, 8, 222700-222710	3.5	4
63	Hysteresis Droop Controller with One Sample Delay for DC-DC Converters in DC Microgrids **2019**,		4
62	Stability Properties of the 3-Level Flying Capacitor Buck Converter Under Peak or Valley Current-Programmed-Control **2018**,		4
61	Using High-Bandwidth Voltage Amplifier to Emulate Grid-Following Inverter for AC Microgrid Dynamics Studies. *Energies*, **2019**, 12, 379	3.1	3
60	Design Criteria and Modulation Strategies for Complete ZVS Operation of the Bidirectional Interleaved Boost Converter with Coupled Inductors **2019**,		3
59	R-based MPPT method for smart converter PV system **2012**,		3
58	**2011**,		3
57	Low-frequency leakage current reduction using active control of single-phase PWM rectifier **2011**,		3
56	EMI noise attenuation prediction with mask impedance in motor drive system **2012**,		3
55	Development of an SiC Multichip Phase-Leg Module for High-Temperature and High-Frequency Applications. *Journal of Microelectronics and Electronic Packaging*, **2016**, 13, 39-50	0.9	3
54	Implementation and Experimental Evaluation of an Efficiency-Improved Modulation Technique for IBCI DC-DC Converters **2020**,		3
53	Digital Average-Ripple-Based Control Techniques for Switching Converters With Fast Transient Performance. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2021**, 9, 89-101	5.6	3
52	A Low Complexity Algorithm for Efficiency Optimization of Dual Active Bridge Converters. *IEEE Open Journal of Power Electronics*, **2021**, 2, 18-32	2.5	3
51	Performance improvement of pulse width-amplitude modulation-based quasi-Z-source inverters: Analysis and implementation. *International Journal of Circuit Theory and Applications*, **2020**, 48, 1786-1799	2	2
50	Impedance-based analysis of active frequency drift islanding detection method for grid-tied inverter system **2014**,		2
49	Optimal trajectory control for series resonant converters applied to domestic induction heating **2013**,		2

48	Power sharing analysis of power-based droop control for DC microgrids considering cable impedances **2017**,		2
47	Power-based droop control suppressing the effect of bus voltage harmonics for DC microgrids **2017**,		2
46	Experimental verification of impedance-based small-signal stability analysis for single-phase interconnected power systems **2015**,		2
45	Efficiency optimized AC charging waveform for GaN bidirectional PHEV Battery Charger **2014**,		2
44	Analysis of P-Q area of uncontrolled islanding in low voltage grids with PV generators **2014**,		2
43	Impact of interleaving on input passive components of paralleled DC-DC converters for high power PV applications **2012**,		2
42	Distributed cooperative control of low-voltage residential microgrids **2012**,		2
41	High-Temperature Characterization and Comparison of 1.2 kV SiC Power Semiconductor Devices. *Journal of Microelectronics and Electronic Packaging*, **2013**, 10, 138-143	0.9	2
40	Nonlinear sideband effects in small-signal input dq admittance of six-pulse diode rectifiers **2013**,		2
39	Variable sampling frequency in iterative learning current Control for Shunt Active Filter in aircraft power systems **2011**,		2
38	A Distributed Current Sharing Strategy for Islanded AC Microgrids Based on Low-Bandwidth Communication. *Electric Power Systems Research*, **2022**, 206, 107777	3.5	2
37	A Per-Phase Power Controller for Smooth Transitions to Islanded Operation. *IEEE Open Journal of Power Electronics*, **2021**, 2, 636-646	2.5	2
36	An Iterative Virtual Impedance Regulation Strategy in Islanded Microgrids for Enhanced Balanced, Unbalanced and Harmonic Current Sharing. *IEEE Transactions on Sustainable Energy*, **2021**, 1-1	8.2	2
35	Improving Power Quality and Distribution Efficiency in Micro-Grids by Plug & Play Control of Switching Power Interfaces. *IEEJ Transactions on Industry Applications*, **2011**, 131, 1364-1372	0.2	2
34	Model Predictive Control of Grid Forming Converters with Enhanced Power Quality. *Applied Sciences (Switzerland)*, **2020**, 10, 6390	2.6	2
33	Grid sensitivity considerations on multiple parallel inverters systems **2016**,		2
32	Decoupled control scheme of the grid-connected split-source inverter for renewable energy sources **2016**,		2
31	Three-Phase Modular Multilevel Converter (MMC) for Low-voltage Applications: Improved Modulation Technique Toward Less Capacitance Requirement **2019**,		2

30	Auto-Tuning of DC Microgrid Power Converters Based on a Constant Frequency Injection **2019**,		2
29	PRBS-based loop gain identification and output impedance shaping in DC microgrid power converters. *Mathematics and Computers in Simulation*, **2021**, 183, 129-141	3.3	2
28	Three-Phase Modular Multilevel Converter With Optimized Capacitor Sizing for Low-Voltage Applications. *IEEE Transactions on Power Electronics*, **2021**, 36, 13930-13943	7.2	2
27	Accurate High Frequency Modelling of the Input Admittance of PWM Grid-Connected VSCs. *IEEE Transactions on Power Electronics*, **2022**, 1-1	7.2	2
26	Guest Editorial Joint Special Section on Power Conversion & Control in Photovoltaic Power Plants. *IEEE Transactions on Energy Conversion*, **2019**, 34, 159-160	5.4	1
25	An improved discontinuous space vector modulation scheme for the three-phase impedance source inverters **2018**,		1
24	A new approach to the wide bandwidth of piezoelectric transducers for vibration energy harvesting **2012**,		1
23	Modeling Verification, Validation, and Uncertainty Quantification (VV&UQ) procedure for a two-level three-phase boost rectifier **2012**,		1
22	A Variable Multi-Rate Plug-in Repetitive Controller for single-phase inverters operating in the islanding mode **2012**,		1
21	A transformer assisted zero-voltage soft-switching three-level active neutral-point-clamped converter **2012**,		1
20	I2 average current mode control for switching converters **2013**,		1
19	Analysis of nonlinear sideband effects in small-signal input dq admittance of twelve-pulse diode rectifiers **2013**,		1
18	**2008**,		1
17	Third-order passive load identification under non-sinusoidal conditions. *European Transactions on Electrical Power*, **2002**, 12, 93-100		1
16	A Per-Phase Power Controller allowing Smooth Transitions to Islanded Operation **2021**,		1
15	A Decentralized Impedance Reshaping Strategy for Balanced, Unbalanced and Harmonic Power Sharing in Islanded Resistive Microgrids. *IEEE Transactions on Sustainable Energy*, **2021**, 1-1	8.2	1
14	Modelling and analysis of equivalent SISO d-q impedance of grid-connected converters. *Mathematics and Computers in Simulation*, **2021**, 184, 5-20	3.3	1
13	Impedance synthesis by inverter control for active loads in anti-islanding testbenches **2016**,		1

12	Analysis of transforming dq impedances of different converters to a common reference frame in complex converter networks. *CES Transactions on Electrical Machines and Systems*, **2019**, 3, 342-350	2.3	1
11	A Family of Soft-Switching DCDC Converters With Two Degrees of Freedom. *IEEE Transactions on Industrial Electronics*, **2021**, 68, 9398-9409	8.9	1
10	Enhanced Level-Shifted Modulation for a Three-Phase Five-level Modified Modular Multilevel Converter (MMC). *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2021**, 1-1	5.6	1
9	On-Line Controller Tuning for DC Microgrid Power Converters with the Ability to Track Maximum Allowable Bandwidth. *IEEE Transactions on Industrial Electronics*, **2021**, 1-1	8.9	1
8	Bidirectional DC-DC Converter Topologies for Low-Voltage Battery Interface: Comparative Assessment **2018**,		1
7	An Oversampled Hysteresis Modulation for Shaping the Output Impedance of Droop-Controlled Boost Converters in DC Microgrids **2021**,		1
6	A Decentralized Current Sharing Strategy for Islanded Resistive Microgrids Based on Iterative Virtual Impedance Regulation. *IEEE Transactions on Industrial Informatics*, **2021**, 1-1	11.9	1
5	Human exposure during operation of GMAW-P welding machines. *COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering*, **2012**, 31, 1144-1153	0.7	0
4	Correction to "uninterruptible power supply multiloop control employing digital predictive voltage and current regulators". *IEEE Transactions on Industry Applications*, **2002**, 38, 167-167	4.3	
3	An interharmonic dual switching frequency modulation strategy for impedance network inverters. *International Journal of Circuit Theory and Applications*, **2021**, 49, 1726-1742	2	
2	Particle Swarm Design Optimization of IPT Systems for Different Electric Vehicles. *IEEE Journal of Emerging and Selected Topics in Industrial Electronics*, **2021**, 1-1	2.6	
1	Message from editors. *CES Transactions on Electrical Machines and Systems*, **2018**, 2, 253-254	2.3	