

# Alessandro Costabeber

## List of Publications by Year in descending order

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77  
papers

1,765  
citations

331670

21  
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315739

38  
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77  
docs citations

77  
times ranked

1759  
citing authors

#	ARTICLE	IF	CITATIONS
1	Comparative Stability Analysis of Droop Control Approaches in Voltage-Source-Converter-Based DC Microgrids. IEEE Transactions on Power Electronics, 2017, 32, 2395-2415.	7.9	165
2	Control Design and Voltage Stability Analysis of a Droop-Controlled Electrical Power System for More Electric Aircraft. IEEE Transactions on Industrial Electronics, 2017, 64, 9271-9281.	7.9	127
3	Energy-Efficient Autonomous Solar Water-Pumping System for Permanent-Magnet Synchronous Motors. IEEE Transactions on Industrial Electronics, 2017, 64, 43-51.	7.9	119
4	High Step-Up Ratio Flyback Converter With Active Clamp and Voltage Multiplier. IEEE Transactions on Power Electronics, 2011, 26, 3205-3214.	7.9	106
5	Parameter-Independent Time-Optimal Digital Control for Point-of-Load Converters. IEEE Transactions on Power Electronics, 2009, 24, 2235-2248.	7.9	88
6	Distribution Loss Minimization by Token Ring Control of Power Electronic Interfaces in Residential Microgrids. IEEE Transactions on Industrial Electronics, 2012, 59, 3817-3826.	7.9	74
7	A Fast Diagnosis Method for Both IGBT Faults and Current Sensor Faults in Grid-Tied Three-Phase Inverters With Two Current Sensors. IEEE Transactions on Power Electronics, 2020, 35, 5267-5278.	7.9	60
8	Stability Assessment of Power-Converter-Based AC systems by LTP Theory: Eigenvalue Analysis and Harmonic Impedance Estimation. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2017, 5, 1513-1525.	5.4	55
9	Multi-task control strategy for grid-tied inverters based on conservative power theory. IET Renewable Power Generation, 2015, 9, 154-165.	3.1	48
10	Experimental Evaluation of a CPT-Based Four-Leg Active Power Compensator for Distributed Generation. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2017, 5, 747-759.	5.4	48
11	Distributed Control Strategy Based on a Consensus Algorithm and on the Conservative Power Theory for Imbalance and Harmonic Sharing in 4-Wire Microgrids. IEEE Transactions on Smart Grid, 2020, 11, 1604-1619.	9.0	46
12	Convergence Analysis and Tuning of a Sliding-Mode Ripple-Correlation MPPT. IEEE Transactions on Energy Conversion, 2015, 30, 696-706.	5.2	41
13	Current-Fed Isolated DC/DC Converter for Future Aerospace Microgrids. IEEE Transactions on Industry Applications, 2019, 55, 2823-2832.	4.9	41
14	Improving Microgrid Performance by Cooperative Control of Distributed Energy Sources. IEEE Transactions on Industry Applications, 2014, 50, 3921-3930.	4.9	38
15	Stability Boundary Analysis in Single-Phase Grid-Connected Inverters With PLL by LTP Theory. IEEE Transactions on Power Electronics, 2018, 33, 4023-4036.	7.9	37
16	A Control Algorithm Based on the Conservative Power Theory for Cooperative Sharing of Imbalances in Four-Wire Systems. IEEE Transactions on Power Electronics, 2019, 34, 5325-5339.	7.9	31
17	Harmonic reduction methods for electrical generation: a review. IET Generation, Transmission and Distribution, 2018, 12, 3107-3113.	2.5	30
18	Experimental Validation of Harmonic Impedance Measurement and LTP Nyquist Criterion for Stability Analysis in Power Converter Networks. IEEE Transactions on Power Electronics, 2019, 34, 7972-7982.	7.9	26

#	ARTICLE	IF	CITATIONS
19	Evaluation of isolated DC/DC converter topologies for future HVDC aerospace microgrids. , 2017, , .		25
20	Application of Conservative Power Theory to cooperative control of distributed compensators in smart grids. , 2010, , .		24
21	Digital Autotuning of DC-DC Converters Based on a Model Reference Impulse Response. IEEE Transactions on Power Electronics, 2011, 26, 2915-2924.	7.9	24
22	Phase-Shift Modulation for a Current-Fed Isolated DC-DC Converter in More Electric Aircrafts. IEEE Transactions on Power Electronics, 2019, 34, 8528-8543.	7.9	24
23	Enhanced Power Sharing Transient With Droop Controllers for Multithree-Phase Synchronous Electrical Machines. IEEE Transactions on Industrial Electronics, 2019, 66, 5600-5610.	7.9	24
24	Improving power quality and distribution efficiency in micro-grids by cooperative control of Switching Power Interfaces. , 2010, , .		22
25	Control and Experimental Validation of the Series Bridge Modular Multilevel Converter for HVDC Applications. IEEE Transactions on Power Electronics, 2020, 35, 2389-2401.	7.9	21
26	Failure Modes and Reliability Oriented System Design for Aerospace Power Electronic Converters. IEEE Open Journal of the Industrial Electronics Society, 2021, 2, 53-64.	6.8	21
27	Flexible active compensation based on load conformity factors applied to non-sinusoidal and asymmetrical voltage conditions. IET Power Electronics, 2016, 9, 356-364.	2.1	20
28	A Three-Phase Modular Isolated Matrix Converter. IEEE Transactions on Power Electronics, 2019, 34, 11760-11773.	7.9	19
29	A Push-Pull Series Connected Modular Multilevel Converter for HVdc Applications. IEEE Transactions on Power Electronics, 2022, 37, 3111-3129.	7.9	19
30	A Leakage-Inductance-Tolerant Commutation Strategy for Isolated AC/AC Converters. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2019, 7, 467-479.	5.4	17
31	Plug & play operation of distributed energy resources in micro-grids. , 2010, , .		16
32	The Series Bridge Converter (SBC): A hybrid modular multilevel converter for HVDC applications. , 2016, , .		16
33	Arm-Balancing Control and Experimental Validation of a Grid-Connected MMC With Pulsed DC Load. IEEE Transactions on Industrial Electronics, 2017, 64, 9180-9190.	7.9	16
34	Distribution loss minimization by token ring control of power electronic interfaces in residential micro-grids. , 2010, , .		15
35	Load Characterization and Revenue Metering Under Non-Sinusoidal and Asymmetrical Operation. IEEE Transactions on Instrumentation and Measurement, 2014, 63, 422-431.	4.7	15
36	Soft-starting procedure for dual active bridge converter. , 2015, , .		15

#	ARTICLE	IF	CITATIONS
37	Selective compensation of reactive, unbalance, and distortion power in smart grids by synergistic control of distributed switching power interfaces. , 2013, , .		13
38	Stability analysis of single-phase grid-feeding inverters with PLL using Harmonic Linearisation and Linear Time Periodic (LTP) theory. , 2016, , .		13
39	Learning Position Controls for Hybrid Step Motors: From Current-Fed to Full-Order Models. IEEE Transactions on Industrial Electronics, 2018, 65, 6120-6130.	7.9	13
40	Small-Signal Modelling and Stability Assessment of Phase-Locked Loops in Weak Grids. Energies, 2019, 12, 1227.	3.1	13
41	Distance measurement over PLC for dynamic grid mapping of smart micro grids. , 2011, , .		12
42	Surround control of distributed energy resources in micro-grids. , 2010, , .		11
43	A linear dynamic model for microgrid voltages in presence of distributed generation. , 2011, , .		11
44	Stability Assessment of High-Bandwidth DC Voltage Controllers in Single-Phase Active Front Ends: LTI Versus LTP Models. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2018, 6, 2147-2158.	5.4	11
45	Advanced Modulations for a Current-Fed Isolated DC-DC Converter With Wide-Voltage-Operating Ranges. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2019, 7, 2540-2552.	5.4	10
46	Series Chain-Link Modular Multilevel AC-DC Converter (SCC) for HVDC Applications. IEEE Transactions on Power Electronics, 2020, 35, 5714-5728.	7.9	10
47	A generalized method to analyze the small-signal stability for a multi-inverter islanded grid with droop controllers. , 2013, , .		9
48	A generalised harmonic linearisation method for power converters input/output impedance calculation. , 2016, , .		9
49	Advanced modulation for the Active-Bridge-Active-Clamp (ABAC) converter. , 2017, , .		9
50	Model Predictive Control for Isolated DC/DC Power Converters with Transformer Peak Current Shaving. , 2018, , .		8
51	Improving microgrid performance by cooperative control of distributed energy sources. , 2013, , .		6
52	A Venturini based modulation technique for a new isolated AC/AC power converter. , 2016, , .		6
53	Parameters mismatch analysis for the Active-Bridge-Active-Clamp (ABAC) converter. , 2017, , .		6
54	Modular Multilevel Converter Based Topology for High-Speed, Low-Voltage Electric Drives. IEEE Transactions on Industry Applications, 2020, 56, 5202-5211.	4.9	6

#	ARTICLE	IF	CITATIONS
55	Power quality improvement by pre-computed modulated field current for synchronous generators. , 2017, , .		5
56	A multilevel chain-link topology for low voltage, variable frequency applications. , 2019, , .		5
57	Distributed control of smart microgrids by dynamic grid mapping. , 2011, , .		4
58	Improving magnetic gear overload torque with cage rotor bars. , 2017, , .		4
59	Reliability Analysis of aircraft starter generator drive converter. , 2019, , .		4
60	A Unidirectional Insulated AC-DC Converter Based on the Hexverter and Multipulse-Rectifier. IEEE Transactions on Power Electronics, 2020, 35, 2363-2371.	7.9	4
61	Convergence analysis and tuning of ripple correlation based MPPT: A sliding mode approach. , 2013, , .		3
62	Modular Multilevel Converter Grid Interface for Klystron Modulators: An Augmented Modulation Scheme for Arm Balancing. IEEE Transactions on Plasma Science, 2018, 46, 3325-3333.	1.3	3
63	Analytical Model for Reluctance and Cage Rotor Bar Magnetic Gear. IEEE Transactions on Industry Applications, 2020, 56, 2752-2761.	4.9	3
64	A Multiport Power Electronics Converter for Hybrid Traction Applications. IEEE Access, 2021, 9, 99181-99192.	4.2	3
65	Distributed cooperative control of low-voltage residential microgrids. , 2012, , .		2
66	Control of a grid connected modular multilevel converter under pulsed DC load. , 2015, , .		2
67	Control of a modular multilevel converter with pulsed DC load. , 2016, , .		2
68	Differential buck single phase grid connected AC-DC converter with active power decoupling using a flipping capacitor. , 2017, , .		2
69	Response to Discussion of "A Modular Speed-Drooped System for High Reliability Integrated Modular Motor Drives" IEEE Transactions on Industry Applications, 2018, 54, 4994-4995.	4.9	2
70	Systematic Model Reduction for a Single-Phase Active-Front-End. , 2019, , .		2
71	Improving Power Quality and Distribution Efficiency in Micro-Grids by Plug & Play Control of Switching Power Interfaces. IEEE Transactions on Industry Applications, 2011, 131, 1364-1372.	0.2	2
72	A Series Chain-Link Modular Multilevel DC-DC Converter For High Voltage and High Power Applications. , 2020, , .		2

#	ARTICLE	IF	CITATIONS
73	A Unidirectional Flying Chain-link Modular Multilevel Rectifier (FCL-MMR) with Reduced Energy Storage for Offshore Wind Integration. , 2018, , .		1
74	Single Stage Dual Active Bridge AC-DC Converter with Active Power Decoupling. , 2018, , .		1
75	Optimum control of distributed energy resources in residential micro-grids. , 2011, , .		0
76	Pad <sup>2</sup> -based-Repetitive Learning Current-Control for Voltage Source Inverters. , 2018, , .		0
77	A Hybrid Chain-Link Push-Pull Series Connected (H-CL-P2SC) M2C with DC Fault Blocking Capability. , 2020, , .		0