Eduardo E Espinosa N

List of Publications by Year
in descending order

69	493	1163117	1058476
papers	citations	8	14
		h-index	g-index

69	69	69	394
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Design of a Discrete-Time Linear Control Strategy for a Multicell UPQC. IEEE Transactions on Industrial Electronics, 2012, 59, 3797-3807.	7.9	66
2	A New Modulation Method for a 13-Level Asymmetric Inverter Toward Minimum THD. IEEE Transactions on Industry Applications, 2014, 50, 1924-1933.	4.9	45
3	FCS-MPC Without Steady-State Error Applied to a Grid-Connected Cascaded H-Bridge Multilevel Inverter. IEEE Transactions on Power Electronics, 2021, 36, 11785-11799.	7.9	39
4	Predictive Controller for a Three-Phase/Single-Phase Voltage Source Converter Cell. IEEE Transactions on Industrial Informatics, 2014, 10, 1878-1889.	11.3	36
5	Model Predictive Control for Power Converters inÂa Distorted Three-Phase Power Supply. IEEE Transactions on Industrial Electronics, 2016, 63, 5838-5848.	7.9	35
6	Enhanced Predictive Control for a Wide Time-Variant Frequency Environment. IEEE Transactions on Industrial Electronics, 2016, 63, 5827-5837.	7.9	27
7	Analysis and Design of a Multicell Topology Based on Three-Phase/Single-Phase Current-Source Cells. IEEE Transactions on Power Electronics, 2016, 31, 6122-6133.	7.9	14
8	Static power converter synchronization and control under varying frequency conditions. , 2012, , .		13
9	A novel multi-level CSI based topology with inter-cell magnetic couplings for minimum DC storage components. , 2010, , .		12
10	A multiobjective ranking based finite states model predictive control scheme applied to a direct matrix converter. , 2010, , .		12
11	Multi-cell topology based on voltage-source converters with a reduced DC Capacitor by means of a predictive control scheme. , 2012, , .		12
12	Decoupled control of a Unified Power Quality Conditioner based on a current source topology for fast AC mains disturbance compensation. , 2010, , .		11
13	Analysis and design of a Cascaded H-Bridge topology based on current-source inverters. , 2013, , .		11
14	Concepts of decoupled control for a shunt active filter based on multilevel current source converters. , 2010, , .		9
15	Discrete Nonlinear Control based on a double dq Transform of a Multi-Cell UPQC. , 2011, , .		9
16	A novel modulation technique for asymmetric multi-cell inverters of 27-level without regeneration. , 2012, , .		9
17	Finite Control Set - Model Predictive Control applied to multicell rectifiers. , 2013, , .		9
18	Analysis and control strategy for a current-source based D-STATCOM towards minimum losses. International Journal of Electrical Power and Energy Systems, 2020, 116, 105532.	5.5	9

#	Article	IF	Citations
19	An Operating Condition-Based Scheme to Alternate Between Control Strategies for Improved Steady-State and Transient Behavior. IEEE Transactions on Industrial Informatics, 2015, 11, 1246-1254.	11.3	8
20	Unified Power Quality Conditioner based on current source converters for harmonic mitigation using a decoupled control strategy. , 2011, , .		7
21	Grid connected PV system with maximum power point estimation based on reference cells. , 2015, , .		7
22	Finite control set model predictive control with reduced switching frequency applied to multi-cell rectifiers. , 2015, , .		7
23	A new modulation technique for 15-level asymmetric inverter operating with minimum THD. , 2013, , .		6
24	An efficiency comparison between a 18 pulses diode rectifier and a multi-cell AFE rectifier operating with FCS &#x2014; MPC. , 2014, , .		6
25	Design of a discrete-time linear control scheme for a modular UPQC. , 2010, , .		5
26	Systematic design comparison of discrete-time linear controllers for a DSTATCOM. , 2010, , .		5
27	Refined control of an Unified Power Quality Conditioner under nonlinear and asymmetrical loads. , 2010, , .		4
28	Bidirectional power flow control of a single-phase current-source grid-tie battery energy storage system. , 2015, , .		4
29	An Efficiency Analysis of 27 Level Single-Phase Asymmetric Inverter without Regeneration. Energies, 2021, 14, 1459.	3.1	4
30	Selective Harmonic Elimination Technique for a 27-Level Asymmetric Multilevel Converter. Energies, 2022, 15, 3694.	3.1	4
31	Cascaded H-Bridge topologies comparison for multi-cell current-source inverters under different DC inductor size reduction methods. , 2014, , .		3
32	Operating region and control for power converters connected to a variable frequency and amplitude voltage grid supply. , 2015, , .		3
33	Embedded reconfiguration of panels to obtain the maximum power of a PV array. , 2016, , .		3
34	Study of Reactive Power Compensation Capabilities and LC Filter Design for a Multilevel Three-Phase Current-Source D-STATCOM. , 2018, , .		3
35	Multilevel Selective Harmonic Elimination for an Asymmetric Converter. , 2018, , .		3
36	Multicell AFE Rectifier Managed by Finite Control Setâ€"Model Predictive Control. IEEE Access, 2021, 9, 137782-137792.	4.2	3

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37	Feedback Quantizer and Non Linear Control Applied to Multi-Cell AFE Rectifier. , 2021, , .		3
38	Controller's parameters tuning in presence of time-delay measurements: an application to vision-based quad-rotor navigation. , 2012, , .		2
39	A novel hybrid finite control set model predictive control scheme with reduced switching. , 2013, , .		2
40	Resonant control for H-Bridge topologies based on single-phase Current-Source Inverters. , 2014, , .		2
41	Resonant control for multi-cell cascaded H-Bridge topologies based on current source inverters. , 2014, , .		2
42	Nonlinear control and model predictive control applied to a multi-cell AFE rectifier. , 2015, , .		2
43	FCS - MPC with reduced switching frequency applied to a multi - cell AFE rectifier with improved transient behavior. , 2016, , .		2
44	Predictive control for an asymmetric multilevel converter for PV energy injection. , 2017, , .		2
45	Reducing losses in the shoot-through state of a single-phase quasi-z-source inverter. , 2017, , .		2
46	Design and Calibration of Low Cost Sensor Node for Thermal Comfort Estimation. , 2021, , .		2
47	A multi-cell unified power quality conditioner that operates with asymmetrical DC links voltages for minimum THD. , 2009, , .		1
48	Operating region comparison of symmetric and asymmetric Multilevel Shunt Active Power Filters. , 2014, , .		1
49	Non-linear control and FCS â€" MPC applied to multi â€" Cell AFE rectifier with efficient behavior in steady state. , 2017, , .		1
50	Study of Reactive Power Compensation Capabilities and LC Filter Design for a Three-Phase Current-Source STATCOM. , 2018, , .		1
51	Study and Implementation of a Selective Detection of Harmonics using a PLL-Based Algorithm. , 2018, , .		1
52	Concepts of a Control Strategy for Multilevel CSC STATCOM toward Reduce its Losses using a Fixed Modulation Index. , 2019, , .		1
53	Finite Control Setâ€"Model Predictive Control with Non-Spread Spectrum and Reduced Switching Frequency Applied to Multi-Cell Rectifiers. Energies, 2021, 14, 6045.	3.1	1
54	A performance and efficiency comparison of an AFE rectifier with Finite Control Set â€" Model Preditive Cuontrol and Feedback Quantizer. , 2021, , .		1

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55	FCSâ€"MPC with Nonlinear Control Applied to a Multicell AFE Rectifier. Sensors, 2022, 22, 4100.	3.8	1
56	High power AC drives based on stacking of standard low power AC drives. Power Electronics Specialist Conference (PESC), IEEE, 2008, , .	0.0	0
57	Design of an asymmetric multilevel shunt active power filter. , 2015, , .		0
58	Extended-horizon finite-control-set predictive control of a multilevel inverter for grid-tie photovoltaic. , 2016, , .		0
59	Direct Model Predictive Control without Steady-State Error proposed for a Cascade H-Bridge Multilevel Inverter to operate in a Microgrid. , 2018, , .		0
60	FCS â€" MPC and Feedback Quantizer applied to a Multi-Cell AFE Rectifier. , 2019, , .		0
61	Predictive Control of a Single-Phase Trans-Z Source Converter. , 2019, , .		0
62	Finite Control Set â€" Model Predictive Control with Improved Harmonic Rejection applied to Multi-Cell AFE Rectifier. , 2020, , .		0
63	Modeling optical variables in combustion processes by Hammerstein-Wiener systems. , 2021, , .		0
64	Data analytics tools by alarms visualization and artificial intelligence applied in industrial monitoring. , 2021, , .		0
65	A Comparison Among Different Staggered Optimized Gating Patterns for Asymmetric Single-Phase Current Source Inverters. , 2021, , .		0
66	Boiler Monitoring based on Data Analytics Tools. , 2021, , .		0
67	Finite Control Setâ€"Model Predictive Control with Non-Spread Spectrum and Reduced Switching Frequency Applied to Multi-Cell Rectifiers â€. , 2021, , .		0
68	Study of the Open-Source Arduino DUE Board as Digital Control Platform for Three-Phase Power Converters. IEEE Access, 2022, 10, 7574-7587.	4.2	0
69	Cascaded H-Bridge Converter Based on Current-Source Inverter with DC Links Magnetically Coupled to Reduce the DC Inductors Value. Energies, 2022, 15, 324.	3.1	0