

Luis M Redondo

List of Publications by Year in descending order

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109
papers

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430874

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109
all docs

109
docs citations

109
times ranked

728
citing authors

#	ARTICLE	IF	CITATIONS
1	Repetitive High-Voltage Solid-State Marx Modulator Design for Various Load Conditions. IEEE Transactions on Plasma Science, 2009, 37, 1632-1637.	1.3	101
2	Generalized solid-state marx modulator topology. IEEE Transactions on Dielectrics and Electrical Insulation, 2009, 16, 1037-1042.	2.9	95
3	Marx-Type Solid-State Bipolar Modulator Topologies: Performance Comparison. IEEE Transactions on Plasma Science, 2012, 40, 2603-2610.	1.3	68
4	Control of predators in industrial scale microalgae cultures with Pulsed Electric Fields. Bioelectrochemistry, 2015, 103, 60-64.	4.6	56
5	A DC Voltage-Multiplier Circuit Working as a High-Voltage Pulse Generator. IEEE Transactions on Plasma Science, 2010, 38, 2725-2729.	1.3	53
6	Solid-State Generation of High-Frequency Burst of Bipolar Pulses for Medical Applications. IEEE Transactions on Plasma Science, 2019, 47, 4091-4095.	1.3	53
7	Flyback Versus Forward Switching Power Supply Topologies For Unipolar Pulsed-Power Applications. IEEE Transactions on Plasma Science, 2009, 37, 171-178.	1.3	45
8	Multilevel High-Voltage Pulse Generation Based on a New Modular Solid-State Switch. IEEE Transactions on Plasma Science, 2014, 42, 2956-2961.	1.3	43
9	New solid-state Marx topology for bipolar repetitive high-voltage pulses. Power Electronics Specialist Conference (PESC), IEEE, 2008, , .	0.0	39
10	Seven-Level Unipolar/Bipolar Pulsed Power Generator. IEEE Transactions on Plasma Science, 2016, 44, 2060-2064.	1.3	35
11	Marx Generator Prototype for Kicker Magnets Based on SiC MOSFETs. IEEE Transactions on Plasma Science, 2018, 46, 3334-3339.	1.3	31
12	All Silicon Marx-bank Topology for High-voltage, High-frequency Rectangular Pulses. , 2005, , .		30
13	A new method to build a high-voltage pulse supply using only semiconductor switches for plasma-immersion ion implantation. Surface and Coatings Technology, 2001, 136, 51-54.	4.8	28
14	Review on Solid-State-Based Marx Generators. IEEE Transactions on Plasma Science, 2021, 49, 3625-3643.	1.3	28
15	Rise time reduction in high-voltage pulse transformers using auxiliary windings. IEEE Transactions on Power Electronics, 2002, 17, 196-206.	7.9	27
16	Pulse Shape Improvement in Core-Type High-Voltage Pulse Transformers With Auxiliary Windings. IEEE Transactions on Magnetics, 2007, 43, 1973-1982.	2.1	27
17	Isolated unilateral temporalis muscle hypertrophy. International Journal of Oral and Maxillofacial Surgery, 1998, 27, 92-93.	1.5	24
18	Comparison Between Monopolar and Bipolar Microsecond Range Pulsed Electric Fields in Enhancement of Apple Juice Extraction. IEEE Transactions on Plasma Science, 2012, 40, 2348-2354.	1.3	23

#	ARTICLE	IF	CITATIONS
19	Magnetization and magneto resistance in Fe-ion-implanted Cu and Ag thin films. Journal of Magnetism and Magnetic Materials, 1997, 173, 230-240.	2.3	21
20	Cell Membrane Permeabilization Studies of <i>Chlorella</i> sp. by Pulsed Electric Fields. IEEE Transactions on Plasma Science, 2015, 43, 3483-3488.	1.3	20
21	Effect of particulate porous hydroxyapatite on osteoinduction of demineralized bone autografts in experimental reconstruction of the rat mandible. International Journal of Oral and Maxillofacial Surgery, 1995, 24, 445-448.	1.5	18
22	Solid state marx modulator with blumlein stack for bipolar pulse generation. IEEE Transactions on Dielectrics and Electrical Insulation, 2011, 18, 1199-1204.	2.9	18
23	New technique for uniform voltage sharing in series stacked semiconductors. IEEE Transactions on Dielectrics and Electrical Insulation, 2011, 18, 1130-1136.	2.9	16
24	Repair of experimental mandibular defects in rats with autogenous, demineralised, frozen and fresh bone. British Journal of Oral and Maxillofacial Surgery, 1997, 35, 166-169.	0.8	15
25	Analysis of a modular generator for high-voltage, high-frequency pulsed applications, using low voltage semiconductors (<1kV) and series connected step-up (1:10) transformers. Review of Scientific Instruments, 2007, 78, 034702.	1.3	14
26	Peculiarities of Neurostimulation by Intense Nanosecond Pulsed Electric Fields: How to Avoid Firing in Peripheral Nerve Fibers. International Journal of Molecular Sciences, 2021, 22, 7051.	4.1	14
27	New Repetitive Bipolar Solid-State Marx Type Modulator. , 2008, , .		13
28	Solid-State Bipolar Marx Modulator Modeling. IEEE Transactions on Plasma Science, 2014, 42, 3048-3056.	1.3	12
29	Four Channel 6.5 kV, 65 A, 100 ns – 100 μ s Generator with Advanced Control of Pulse and Burst Protocols for Biomedical and Biotechnological Applications. Applied Sciences (Switzerland), 2021, 11, 11782.	2.5	12
30	Giant magnetoresistance behavior of granular Fe and Co implanted Ag thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1998, 16, 1812-1816.	2.1	11
31	Bipolar solid state arbitrary-waveform Marx generator for capacitive loads. , 2011, , .		11
32	Dual Resonant Voltage Droop Compensation for Bipolar Solid-State Marx Generator Topologies. IEEE Transactions on Plasma Science, 2019, 47, 1017-1023.	1.3	11
33	Solid-state Marx Generator Design with an Energy Recovery Reset Circuit for Output Transformer Association. , 2007, , .		10
34	Lattice site location and annealing behavior of W implanted TiO ₂ . Nuclear Instruments & Methods in Physics Research B, 1998, 136-138, 442-446.	1.4	8
35	Cephalic tetanus following minor facial abrasions: Report of a case. Journal of Oral and Maxillofacial Surgery, 2001, 59, 800-801.	1.2	8
36	GMR in high fluence ion implanted granular thin films. Journal of Magnetism and Magnetic Materials, 1999, 196-197, 13-17.	2.3	7

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37	Progress on high-voltage pulse generators, using low voltage semiconductors (<1 kV), designed for plasma immersion ion implantation (PIII). Surface and Coatings Technology, 2002, 156, 61-65.	4.8	7
38	Solid State Pulsed Power Electronics. , 2011, , 669-707.		7
39	Solid-state Marx generator for the compact linear collider breakdown studies. , 2016, , .		7
40	Voltage droop compensation based on resonant circuit for generalized high voltage solid-state Marx modulator. , 2016, , .		7
41	PWM Voltage Droop Compensation for Bipolar Solid-State Marx Generator Topologies. IEEE Transactions on Plasma Science, 2017, 45, 975-980.	1.3	7
42	Marx Multilevel Bipolar Modulator Dynamic Models for Load Transient Analysis. IEEE Transactions on Plasma Science, 2017, 45, 2611-2617.	1.3	7
43	Rise-Time Improvement in Bipolar Pulse Solid-State Marx Modulators. IEEE Transactions on Plasma Science, 2017, 45, 2656-2660.	1.3	7
44	Solid-state Marx based two-switch voltage modulator for the On-Line Isotope Mass Separator accelerator at the European Organization for Nuclear Research. Review of Scientific Instruments, 2010, 81, 074703.	1.3	6
45	Comparison between two solid-state transformerless modulators for capacitive type load applications. , 2010, , .		6
46	Modular High-Current Generator for Electromagnetic Forming With Energy Recovery. IEEE Transactions on Plasma Science, 2014, 42, 3043-3047.	1.3	6
47	A New Modular Marx Derived Multilevel Converter. International Federation for Information Processing, 2011, , 573-580.	0.4	6
48	Analysis of the elements sputtered during the lanthanum implantation in stainless steels. Nuclear Instruments & Methods in Physics Research B, 1998, 139, 344-349.	1.4	5
49	A low-cost, accurate and non-intercepting continuous method for beam current measurements in a high-current ion implanter. Nuclear Instruments & Methods in Physics Research B, 2007, 265, 576-580.	1.4	5
50	Solid-State Bipolar Marx Generator with Voltage Droop Compensation. International Federation for Information Processing, 2012, , 411-418.	0.4	5
51	Integrated Toolset for WSN Application Planning, Development, Commissioning and Maintenance: The WSN-DPCM ARTEMIS-JU Project. Sensors, 2016, 16, 804.	3.8	5
52	Ozone Generation with a Flexible Solid-State Marx Generator. , 2018, , .		5
53	Pulsed Electric Fields for Valorization of Platelets with No Therapeutic Value towards a High Biomedical Potential Productâ€™A Proof of Concept. Applied Sciences (Switzerland), 2022, 12, 5773.	2.5	5
54	High flux 56Fe+ and 57Fe+ implantations for GMR applications. Nuclear Instruments & Methods in Physics Research B, 1998, 139, 350-354.	1.4	4

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55	Low-voltage semiconductor topology for kV pulse generation using a leakage flux corrected step-up transformer. , 0, , .		4
56	Evaluation of V2V and V2I mesh prototypes based on a wireless sensor network. , 2011, , .		4
57	FPGA controller for power converters with integrated oscilloscope and graphical user interface. , 2011, , .		4
58	Pulsed electric fields applied to the control of predators in production scale microalgae cultures. , 2013, , .		4
59	Characterization of a single electrode focusing lens for ion beam deceleration. Instrumentation Science and Technology, 2017, 45, 12-21.	1.8	4
60	Solid-State Pulsed Power Modulators and Capacitor Charging Applications. , 2018, , 593-640.		4
61	Solid-state Marx type modulator for Plasma Based Ion Implantation applications. , 2011, , .		3
62	New four-switches bipolar solid-state Marx generator. , 2013, , .		3
63	Multifunctional Controller Architecture for Solid-State Marx Modulator Based on FPGA. IEEE Transactions on Plasma Science, 2014, 42, 2991-2997.	1.3	3
64	Design strategies for a SiC Marx generator for a kicker magnet. , 2017, , .		3
65	Application of pulsed electric fields for the valorization of platelets with no therapeutic value for transfusion medicine. Technology, 2019, 07, 40-45.	1.4	3
66	Grid Integration of Offshore Wind Farms Using Modular Marx Multilevel Converters. International Federation for Information Processing, 2012, , 311-320.	0.4	3
67	Modular pulsed generator for kV and kHz applications based on forward converters association. , 2007, , .		2
68	Isolated Autonomous Capacitive Power Supplies to Trigger Floating Semiconductors in a Marx Generator. , 2007, , .		2
69	Characterization of nanostructured HfO2 films using Perturbed Angular Correlation (PAC) technique. Hyperfine Interactions, 2010, 198, 41-45.	0.5	2
70	Modeling of a solid-state Marx generator with parasitic capacitances for optimization studies. , 2011, , .		2
71	Pulsed electric field pre-treatment for apple juice extraction: Evaluation of monopolar and bipolar pulses effects. , 2012, , .		2
72	Modeling of a Solid-State Bipolar Blumlein Generator for \$n\$ Stages. IEEE Transactions on Plasma Science, 2012, 40, 2611-2617.	1.3	2

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73	Modelling of n-Stage Blumlein Stacked Lines for Bipolar Pulse Generation. International Federation for Information Processing, 2012, , 395-402.	0.4	2
74	Basic Concepts of High-Voltage Pulse Generation. , 2017, , 859-879.		2
75	Development of a solid-state Marx Generator for Thyatron modulator replacement. , 2019, , .		2
76	Pulsed Power Technology. , 2017, , 41-107.		2
77	Ion implantation of microcrystalline silicon for low process temperature top gate thin film transistors. Thin Solid Films, 1999, 337, 203-207.	1.8	1
78	Repetitive solid state pulse modulator based on a dc voltage multiplier. , 2009, , .		1
79	Characterization of nanostructured HfO ₂ films using RBS and PAC. Nuclear Instruments & Methods in Physics Research B, 2012, 273, 195-198.	1.4	1
80	New solid-state modulator for magnetic forming with energy recovering. , 2013, , .		1
81	Resonant converter topology for the new ISOLDE/CERN modulator. , 2014, , .		1
82	25 kV bipolar solid-state Marx generator for industrial food applications. , 2015, , .		1
83	Optimized solid-state bipolar Marx modulator with resonant type droop compensation. , 2017, , .		1
84	Increasing the voltage droop compensation range in generalized bipolar solid-state Marx modulator. , 2017, , .		1
85	Fault Tolerance Capability and Semiconductor's Hold-Off Voltage of Solid-State Bipolar Marx Modulators. IEEE Transactions on Plasma Science, 2017, 45, 2661-2666.	1.3	1
86	Valorization of platelets with no therapeutic value with Pulsed Electric Fields*. , 2019, , .		1
87	Testing of a Bipolar Solid-State Marx Generator for Berlin BESSY II Injection Kicker System. IEEE Transactions on Plasma Science, 2021, 49, 1936-1940.	1.3	1
88	Basic Concepts of High-Voltage Pulse Generation. , 2017, , 1-21.		1
89	Giant Magnetoresistance in Iron and Cobalt Implanted Silver Thin Films. Materials Research Society Symposia Proceedings, 1997, 504, 203.	0.1	0
90	Repetitive all solid-state pulse Marx type generator with energy recovery clamp circuit for inductive loads. , 2007, , .		0

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91	High precision ¹⁸⁰ Hf ion implantation using a high-current ion implanter. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 3661-3666.	1.4	0
92	Solid state bipolar Marx modulator for nonthermal plasma applications. , 2009, , .		0
93	Nanostructured Zr/Hf/Zr multilayer studied by perturbed angular correlations technique. Hyperfine Interactions, 2010, 198, 35-39.	0.5	0
94	Solid-state Marx technique for uniform voltage distribution in series stacked semiconductor switches. , 2010, , .		0
95	Magnetic forming and cutting of thin Al sheets. , 2011, , .		0
96	Mass spectrometry improvement on an high current ion implanter. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 3222-3225.	1.4	0
97	Optimization Of A Mass Spectrometry Process. , 2011, , .		0
98	Special Issue on Pulsed Power Science and Technology. IEEE Transactions on Plasma Science, 2012, 40, 2299-2299.	1.3	0
99	New solid-state modulator for magnetic forming with energy recovery. , 2013, , .		0
100	New semiconductor based blumlein modulator for non-thermal plasma discharges in water. , 2014, , .		0
101	Guest Editorial Special Issue on Selected Papers From EAPPC 2014. IEEE Transactions on Plasma Science, 2015, 43, 3358-3358.	1.3	0
102	Modeling Marx generators for maximum pulse repetition rate estimation. , 2017, , .		0
103	Resonant Converter Topology With Losses Compensation for the ISOLDE/CERN Modulator. IEEE Transactions on Plasma Science, 2017, 45, 3265-3270.	1.3	0
104	Particle Accelerator Focus Automation. Measurement Science Review, 2017, 17, 208-212.	1.0	0
105	Solid-State Bipolar Marx Modulators and Generation of Complementary Pulses Recovering the Energy of the Magnetizing Inductances. , 2019, , .		0
106	Computer Control of a 3 MV Van de Graaff Accelerator. Metrology and Measurement Systems, 2010, 17, 415-425.	1.4	0
107	Solid-State Bipolar Marx Converter with Output Transformer and Energy Recovery. International Federation for Information Processing, 2012, , 403-410.	0.4	0
108	Advantages of Pulsed Electric Field Use for Treatment of Algae. , 2016, , 1-14.		0

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109	Advantages of Pulsed Electric Field Use for Treatment of Algae. , 2017, , 2355-2368.		0