Mor Mordechai Peretz

List of Publications by Year
in descending order

105	1,204	430442	454577
papers	citations	18 h-index	30 g-index

105	105	105	858
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Transient Suppression Scheme for Mitigation of High-Performance VRM Intricate Load Profiles. , 2022, , .		2
2	Analysis and Design of Post-Regulation Stages for Resonant Capacitively-Coupled Wireless Power Systems. , 2022, , .		4
3	Digital Zero-Current Switching Lock-In Controller IC for Optimized Operation of Resonant SCC. IEEE Transactions on Power Electronics, 2021, 36, 5985-5996.	5.4	11
4	Digital Multiphase PWM Integrated Module Generated from a Single Synchronization Source. , 2021, , .		2
5	Advanced Control Features of Hybrid Current-Programmed Digital Controller in Multiphase VRM Applications. , 2021, , .		4
6	High Current Pulsed Power Supply for Multi-Stage Induction-Based Acceleration System. , 2021, , .		1
7	Adaptive Self-Tuned Controller IC for Resonant-Based Wireless Power Transfer Transmitters. IEEE Transactions on Power Electronics, 2021, 36, 12413-12431.	5.4	9
8	Digital Multiphase PWM Integrated Module Generated from a Single Synchronization Source. IEEE Transactions on Power Electronics, 2021, , 1-1.	5.4	3
9	Low-Voltage Sub-Nanosecond Pulsed Current Driver IC for High-Speed LIDAR Applications. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 3001-3013.	3.7	8
10	Multi-Loop Control for Power Transfer Regulation in Capacitive Wireless Systems by Means of Variable Matching Networks. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 2095-2110.	3.7	28
11	Digital Lock-In Controller IC for Optimized Operation of Resonant SCC. , 2020, , .		1
12	High-Performance Compact Electromagnetic Coilgun Propulsion System with Low-Voltage Modular Rapid Capacitor Charger. , 2020, , .		4
13	Optimal Self-Tuning Control for Data-Centersâ€™ 48V-12V ZCS-STC. , 2020, , .		2
14	Digital Controller for High-Performance Multiphase VRM with Current Balancing and Near-Ideal Transient Response. , 2020, , .		14
15	Adaptive Self-Tuned Mixed-Signal Controller IC for Resonant Wireless Power Transfer. , 2020, , .		2
16	Soft-Switching in Capacitive-Coupled Wireless Power Transfer with LCLC Compensation Networks. , 2020, , .		2
17	Digital CPM Controller for a Non-Inverting Buckâ€“Boost Converter With Unified Hardware for Steady-State and Optimized Transient Conditions. IEEE Transactions on Power Electronics, 2020, 35, 8794-8804.	5.4	12
18	Modeling and Control of Magnetic Actuation Systems Based on Sensorless Displacement Information. IEEE Transactions on Industrial Electronics, 2019, 66, 4849-4859.	5.2	14

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19	Zero Current Switching Resonant Converter Based Parallel Balancing of Serially Connected Batteries String. IEEE Transactions on Industry Applications, 2019, 55, 7452-7460.	3.3	18
20	Single-Variable Accurate Load Estimation for Optimized Transient Mitigation in Boost-Type Converters. , 2019, , .		2
21	A Family of Switched-Resonant Converters With Wide Conversion Ratio and Controlled Sourcing Features for Volume-Sensitive Applications. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2019, 7, 910-921.	3.7	7
22	Signal and Pattern Generation for Muscle Manipulation in Medical Applications. , 2019, , .		0
23	Plug-and-Play Optimal Transient Mitigation Control Circuitry for High-Power High-Performance VRM. , 2019, , .		3
24	Multilevel High-Voltage Modular Rapid Capacitor Charger. , 2019, , .		2
25	Behavioral Modeling of Resonant Power Transfer Systems with Capacitive Coupling: Two-Port Network Approach. , 2019, , .		2
26	Regulated Power Transfer Using Self-Tuned Networks for Capacitive Wireless Systems. , 2019, , .		1
27	Unified Current-Programmed Digital Controller for Non-Inverting Buck-Boost Converter with Optimal Steady-State and Transient Conditions. , 2019, , .		2
28	A Network-Based Approach for Modeling Resonant Capacitive Wireless Power Transfer Systems. CPSS Transactions on Power Electronics and Applications, 2019, 4, 19-29.	2.9	22
29	Analysis and behavioural modelling of matching networks for resonantâ€operating capacitive wireless power transfer. IET Power Electronics, 2019, 12, 2615-2625.	1.5	10
30	Closed-Loop Design and Transient-Mode Control for a Series-Capacitor Buck Converter. IEEE Transactions on Power Electronics, 2019, 34, 1823-1837.	5.4	21
31	Soft-Switching and Efficient Power Transfer in Capacitive Wireless Systems with LCLC Compensation Networks. , 2019, , .		2
32	Optimal Design of a Voltage Regulator Based on Gyrator Switched-Resonator Converter IC. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2018, 6, 549-562.	3.7	17
33	Analysis and Control of Direct Voltage Regulated Active DC-Link Capacitance Reduction Circuit. IEEE Transactions on Power Electronics, 2018, 33, 6318-6332.	5.4	30
34	Active DC Link Capacitance Reduction in Grid-Connected Power Conversion Systems by Direct Voltage Regulation. IEEE Access, 2018, 6, 18163-18173.	2.6	17
35	Fully Integrated Digital Average Current-Mode Control Voltage Regulator Module IC. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2018, 6, 485-499.	3.7	21
36	Low voltage sub-nanosecond pulsed current driver IC for high-resolution LIDAR applications. , 2018, , .		10

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37	Fast Response of Deviation-Constrained Hybrid Controllers for Indirect Energy Transfer Converters. IEEE Transactions on Power Electronics, 2018, 33, 2615-2629.	5.4	10
38	Combined Multilevel and Two-Phase Interleaved LLC Converter With Enhanced Power Processing Characteristics and Natural Current Sharing. IEEE Transactions on Power Electronics, 2018, 33, 5613-5620.	5.4	40
39	A Novel Capacitor Sizing Method for Active DC Link Capacitance Reduction Circuit. , 2018, , .		1
40	Enabling Criteria and Circuits for Low-Power High-Density Off-Grid Converters. , 2018, , .		0
41	Modeling and Analysis of Capacitive Wireless Power Transfer Systems: A Network Approach. , 2018, , .		2
42	Enhanced Performance Fully-Synthesizable <tex>$sumDelta$</tex> ADC for Efficient Digital Voltage-Mode Control. , 2018, , .		2
43	Merged PWM-resonant converter for direct panel to grid-level conversion in localized PV energy harvesting. , 2018, , .		1
44	Improving Loading and Unloading Transient Response of a Voltage Regulator Module Using a Load-Side Auxiliary Gyrator Circuit. IEEE Transactions on Power Electronics, 2017, 32, 1996-2007.	5.4	18
45	A Generic and Unified Global-Gyrator Model of Switched-Resonator Converters. IEEE Transactions on Power Electronics, 2017, 32, 8945-8952.	5.4	7
46	Single-stage switched-resonator converter topology with wide conversion ratio for volume-sensitive applications. , 2017, , .		4
47	Parallel balancing converter for serially connected batteries string. , 2017, , .		2
48	Fully-integrated digital average current-mode control 12V-to-1.xV voltage regulator module IC. , 2017, , .		2
49	Cell-level hybrid architectures for active balancing of serially-connected batteries. , 2017, , .		4
50	Two-phase LLC converter using a flying capacitor for high output current applications. , 2017, , .		1
51	Non-isolated parallel balancing converter for serially connected batteries string. , 2017, , .		1
52	Low-Frequency DC-Link Ripple Elimination in Power Converters With Reduced Capacitance by Multiresonant Direct Voltage Regulation. IEEE Transactions on Industrial Electronics, 2017, 64, 2015-2023.	5.2	53
53	High-Efficiency Nonisolated Converter With Very High Step-Down Conversion Ratio. IEEE Transactions on Power Electronics, 2017, 32, 3683-3690.	5.4	92
54	Hardware efficient digital auto-tuning average current-mode controller. , 2017, , .		5

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55	Digital self-tuning controller for ZCS resonant converters operating in the 10MHz-range. , 2017, , .		3
56	Vertical power MOS transistor as a thermoelectric quasi-nanowire device. Journal of Applied Physics, 2016, 120, 244903.	1.1	1
57	Optimal design of a voltage regulator based resonant switched-capacitor converter IC. , 2016, , .		8
58	Plug-and-play electronic capacitor for VRM applications. , 2016, , .		6
59	Envelope tracking power supply for volume-sensitive low-power applications based on a resonant switched-capacitor converter. , 2016, , .		10
60	Closed-loop design and time-optimal control for a series-capacitor buck converter. , 2016, , .		10
61	ZCS resonant converter based parallel balancing of serially connected batteries string. , 2016, , .		7
62	Biomechanical Energy Harvesting System With Optimal Cost-of-Harvesting Tracking Algorithm. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2016, 4, 293-302.	3.7	19
63	Stability Analysis of Boundary and Hybrid Controllers for Indirect Energy Transfer Converters. IEEE Transactions on Power Electronics, 2016, 31, 3360-3371.	5.4	12
64	Magneto-electro-mechanical modeling of magnetic actuation systems. , 2015, , .		5
65	Modeling and Analysis of Resonant Switched-Capacitor Converters With Free-Wheeling ZCS. IEEE Transactions on Power Electronics, 2015, 30, 4952-4959.	5.4	21
66	Improving loading and unloading transient response of a voltage regulator module using a load-side auxiliary gyrator circuit. , 2015, , .		5
67	Resonant Switched-Capacitor Voltage Regulator With Ideal Transient Response. IEEE Transactions on Power Electronics, 2015, 30, 4943-4951.	5.4	22
68	Hardware-Efficient Programmable-Deviation Controller for Indirect Energy Transfer DCâ€“DC Converters. IEEE Transactions on Power Electronics, 2015, 30, 3376-3388.	5.4	24
69	Optimal design of a classâ€£ resonant driver. IET Power Electronics, 2015, 8, 1552-1557.	1.5	8
70	Minimum-time within a deviation-constrained hybrid controller for boost converters. , 2015, , .		7
71	Multiple Conversion Ratio Resonant Switched-Capacitor Converter With Active Zero Current Detection. IEEE Transactions on Power Electronics, 2015, 30, 2073-2083.	5.4	29
72	A High-Efficiency Resonant Switched Capacitor Converter With Continuous Conversion Ratio. IEEE Transactions on Power Electronics, 2015, 30, 1373-1382.	5.4	80

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73	Full IC design of a PWM controller with integrated high-resolution ADC and DPWM peripherals using digital backend tools. , 2014, , .		3
74	Digitally controlled switch-mode power driver for active magnetic bearings. , 2014, , .		3
75	Study of magnetic actuation systems. , 2014, , .		2
76	Combined current sensor and non-invasive displacement measurement for magnetic actuators. , 2014, , .		0
77	Design and IC implementation of a fully digital power management delay-line ADC. , 2014, , .		3
78	Modeling and analysis of resonant switched capacitor converters with free-wheeling ZCS. , 2014, , .		0
79	Full FPGA-based design of a PWM/CPM controller with integrated high-resolution fast ADC and DPWM peripherals. , 2014, , .		12
80	Enhanced Differential Power Processor for PV Systems: Resonant Switched-Capacitor Gyrator Converter With Local MPPT. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2014, 2, 883-892.	3.7	72
81	Digital control of PV systems: Dynamic-gain MPPT algorithm and effects of resolution. , 2014, , .		0
82	Digital control of resonant converters: enhancing frequency resolution by dithering. International Journal of Electronics, 2014, 101, 1724-1736.	0.9	1
83	Biomechanical energy harvesting system with optimal cost-of-harvesting tracking algorithm. , 2014, , .		8
84	Enhanced differential power processor for PV systems: Resonant switched-capacitor gyrator converter with local MPPT. , 2014, , .		13
85	Resonant switched-capacitor voltage regulator with ideal transient response. , 2014, , .		9
86	A high efficiency resonant switched capacitor converter with continuous conversion ratio. , 2013, , .		13
87	Optimal design of a class-E resonant driver. , 2013, , .		0
88	Multiple conversion ratio resonant switched-capacitor converter with active zero current detection. , 2013, , .		8
89	Low-volume power supply for vehicular fuel injection systems. , 2012, , .		0
90	Resonant Binary and Fibonacci Switched-capacitor bidirectional DC-DC converter. , 2012, , .		6

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91	Time-Domain Design of Digital Compensators for PWM DC-DC Converters. IEEE Transactions on Power Electronics, 2012, 27, 284-293.	5.4	57
92	Digital Control of Resonant Converters: Resolution Effects on Limit Cycles. IEEE Transactions on Power Electronics, 2010, 25, 1652-1661.	5.4	47
93	Digital Control of Resonant Converters: Frequency Limit Cycles Conditions. , 2009, , .		5
94	Digital Control of Resonant Converters: Enhancing Frequency Resolution by Dithering. , 2009, , .		16
95	A heuristic digital control method for optimal capacitor charging. , 2009, , .		5
96	Revisiting the closed loop response of PWM converters controlled by voltage feedback. IEEE Applied Power Electronics Conference and Exposition, 2008, , .	0.0	7
97	EFFECT OF THE RIPPLE CURRENT ON POWER FACTOR OF CRM BOOST APFC. Journal of Circuits, Systems and Computers, 2008, 17, 389-398.	1.0	1
98	Time domain design of digital compensators for PWM DC-DC converters. IEEE Applied Power Electronics Conference and Exposition, 2007, , .	0.0	3
99	Time Domain Identification of PWM Converters for Digital Controllers Design. , 2007, , .		16
100	Self-Oscillating Constant-Current Fluorescent Lamp Driver: Theory and Application. , 2007, , .		2
101	Cold Cathode Fluorescent Lamps Driven by Piezoelectric Transformers: Stability Conditions and Thermal Effect. IEEE Transactions on Power Electronics, 2007, 22, 761-768.	5.4	20
102	Self-Oscillating Constant-Current Fluorescent Lamp Driver. , 2006, , .		3
103	A self-adjusting sinusoidal power source suitable for driving capacitive loads. IEEE Transactions on Power Electronics, 2006, 21, 890-898.	5.4	32
104	Investigation of Time Domain Design of Digital Controllers for PWM Converters. , 2006, , .		5
105	Thermal Effects on the Stability of Piezoelectric Transformers Based Ballasts for Cold Cathode Fluorescent Lamps. , 0, , .		0