

# Guohua Zhou

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7607006/publications.pdf>

Version: 2024-02-01

112  
papers

1,393  
citations

361413

20  
h-index

414414

32  
g-index

112  
all docs

112  
docs citations

112  
times ranked

976  
citing authors

#	ARTICLE	IF	CITATIONS
1	Constant-Frequency Peak-Ripple-Based Control of Buck Converter in CCM: Review, Unification, and Duality. IEEE Transactions on Industrial Electronics, 2014, 61, 1280-1291.	7.9	71
2	Dynamical Effects of Equivalent Series Resistance of Output Capacitor in Constant On-Time Controlled Buck Converter. IEEE Transactions on Industrial Electronics, 2013, 60, 1759-1768.	7.9	68
3	Unified Classification of Operation-State Regions for Switching Converters with Ramp Compensation. IEEE Transactions on Power Electronics, 2011, 26, 1968-1975.	7.9	58
4	A Nonisolated Symmetric Bipolar Output Four-Port Converter Interfacing PV-Battery System. IEEE Transactions on Power Electronics, 2020, 35, 11731-11744.	7.9	57
5	Synthesis and Analysis of Double-Input Single-Output DC/DC Converters. IEEE Transactions on Industrial Electronics, 2015, 62, 6284-6295.	7.9	56
6	Improved Digital Peak Voltage Predictive Control for Switching DC-DC Converters. IEEE Transactions on Industrial Electronics, 2009, 56, 3222-3229.	7.9	52
7	Digital Average Current Controlled Switching DC-DC Converters With Single-Edge Modulation. IEEE Transactions on Power Electronics, 2010, 25, 786-793.	7.9	48
8	Topology Synthesis of a Family of Integrated Three-Port Converters for Renewable Energy System Applications. IEEE Transactions on Industrial Electronics, 2021, 68, 5833-5846.	7.9	46
9	Variable Duty Cycle Control for Quadratic Boost PFC Converter. IEEE Transactions on Industrial Electronics, 2016, 63, 4222-4232.	7.9	44
10	A Global Maximum Power Point Tracking Algorithm for Photovoltaic Systems Under Partially Shaded Conditions Using Modified Maximum Power Trapezium Method. IEEE Transactions on Industrial Electronics, 2021, 68, 370-380.	7.9	43
11	Single-Stage Single-Switch Four-Output Resonant LED Driver With High Power Factor and Passive Current Balancing. IEEE Transactions on Power Electronics, 2017, 32, 4566-4576.	7.9	34
12	A new quadratic boost converter with high voltage step-up ratio and reduced voltage stress. , 2012, , .		31
13	Active control strategy based on vector-proportion integration controller for proton exchange membrane fuel cell grid-connected system. IET Renewable Power Generation, 2015, 9, 991-999.	3.1	31
14	Pulse-Train-Controlled CCM Buck Converter With Small ESR Output-Capacitor. IEEE Transactions on Industrial Electronics, 2013, 60, 5875-5881.	7.9	28
15	Soft-Switching High Gain Three-Port Converter Based on Coupled Inductor for Renewable Energy System Applications. IEEE Transactions on Industrial Electronics, 2022, 69, 1521-1536.	7.9	28
16	Asynchronous-Switching Map-Based Stability Effects of Circuit Parameters in Fixed Off-Time Controlled Buck Converter. IEEE Transactions on Power Electronics, 2016, 31, 6686-6697.	7.9	27
17	MULTISCROLL CHAOTIC ATTRACTORS FROM A MODIFIED COLPITTS OSCILLATOR MODEL. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2010, 20, 2203-2211.	1.7	26
18	Bifurcation analysis and operation region estimation of current-mode-controlled SIDO boost converter. IET Power Electronics, 2017, 10, 846-853.	2.1	24

#	ARTICLE	IF	CITATIONS
19	Unified Discrete-Mapping Model and Dynamical Behavior Analysis of Current-Mode Controlled Single-Inductor Dual-Output DC-DC Converter. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2019, 7, 366-380.	5.4	23
20	COMPLEX DYNAMICS AND FAST-SLOW SCALE INSTABILITY IN CURRENT-MODE CONTROLLED BUCK CONVERTER WITH CONSTANT CURRENT LOAD. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2013, 23, 1350062.	1.7	21
21	SYMMETRICAL DYNAMICS OF CURRENT-MODE CONTROLLED SWITCHING DC-DC CONVERTERS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2012, 22, 1250008.	1.7	20
22	Impedance-Based Stability Evaluation for Multibus DC Microgrid Without Constraints on Subsystems. IEEE Transactions on Power Electronics, 2022, 37, 932-943.	7.9	20
23	Digital Average Voltage/Digital Average Current Predictive Control for Switching DC-DC Converters. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2018, 6, 1819-1830.	5.4	19
24	Symmetrical Bipolar Output Isolated Four-Port Converters Based on Center-Tapped Winding for Bipolar DC Bus Applications. IEEE Transactions on Power Electronics, 2021, , 1-1.	7.9	19
25	Stability Analysis for Peak Current-Mode Controlled Buck LED Driver Based on Discrete-Time Modeling. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2018, 6, 1567-1580.	5.4	18
26	Small-Signal Modeling and Cross-Regulation Suppressing for Current-Mode Controlled Single-Inductor Dual-Output DC-DC Converters. IEEE Transactions on Industrial Electronics, 2021, 68, 5744-5755.	7.9	18
27	Two-Mode Active Balancing Circuit Based on Switched-Capacitor and Three-Resonant-State LC Units for Series-Connected Cell Strings. IEEE Transactions on Industrial Electronics, 2022, 69, 4845-4858.	7.9	18
28	Dynamic Freewheeling Control for SIDO Buck Converter With Fast Transient Performance, Minimized Cross-Regulation, and High Efficiency. IEEE Transactions on Industrial Electronics, 2023, 70, 1467-1477.	7.9	18
29	Elimination of Subharmonic Oscillation of Digital-Average-Current-Controlled Switching DC-DC Converters. IEEE Transactions on Industrial Electronics, 2010, 57, 2904-2907.	7.9	17
30	A Cross Regulation Analysis for Single-Inductor Dual-Output CCM Buck Converters. Journal of Power Electronics, 2016, 16, 1802-1812.	1.5	17
31	Flicker-free transformerless LED driving circuit based on quadratic buck PFC converter. Electronics Letters, 2014, 50, 1972-1974.	1.0	16
32	Small Signal Modeling and Design Analysis for Boost Converter With Valley $V^2$ Control. IEEE Transactions on Power Electronics, 2020, 35, 13475-13487.	7.9	16
33	Digital Peak Current Control for Switching DC-DC Converters With Asymmetrical Dual-Edge Modulation. IEEE Transactions on Circuits and Systems II: Express Briefs, 2009, 56, 815-819.	3.0	15
34	Critical output capacitor ESR for stability of $V^2$ controlled buck converter in CCM and DCM. Electronics Letters, 2014, 50, 884-886.	1.0	14
35	High Efficiency Half Bridge Class-D Audio Amplifier System With Front-End Symmetric Bipolar Outputs LLC Converter. IEEE Transactions on Industrial Electronics, 2021, 68, 1220-1230.	7.9	14
36	Symmetric Bipolar Output Full-Bridge Four-Port Converter With Phase-Shift Modulated Buck-Boost Voltage Balancer. IEEE Transactions on Industrial Electronics, 2022, 69, 8040-8054.	7.9	14

#	ARTICLE	IF	CITATIONS
37	Asymmetrical leading-triangle modulation technique for improved digital valley current controlled switching DC-DC converters. , 2010, , .		13
38	Discrete-Time Modeling and Symmetrical Dynamics of $V^2$ -Controlled Buck Converters With Trailing-Edge and Leading-Edge Modulations. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 3995-4008.	5.4	13
39	Can $V^2$ control be applied to boost converter?. Electronics Letters, 2014, 50, 627-629.	1.0	12
40	Single Sensor Based Global Maximum Power Point Tracking Algorithm of PV System With Partial Shading Condition. IEEE Transactions on Industrial Electronics, 2022, 69, 2669-2683.	7.9	12
41	Zero Leakage Current Single-Phase Quasi-Single-Stage Transformerless PV Inverter With Unipolar SPWM. IEEE Transactions on Power Electronics, 2022, 37, 13755-13766.	7.9	12
42	Zero-voltage zero-current switching DC/DC converter with high step-up and high efficiency. Electronics Letters, 2016, 52, 1250-1252.	1.0	11
43	Digital Valley $V^2$ Control for Boost Converter With Fast Load-Transient Performance. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 2089-2093.	3.0	11
44	Online Reactive Power Minimization and Soft Switching Algorithm for Triple-Phase-Shift Modulated Dual Active Bridge Converter. IEEE Transactions on Industrial Electronics, 2023, 70, 2543-2555.	7.9	11
45	Stability analysis of $V^2$ controlled buck converter operating in CCM and DCM. , 2010, , .		10
46	Comparison study on digital peak current, digital peak voltage, and digital peak voltage/peak current Controlled Buck Converter. , 2009, , .		8
47	Analysis of Pulse Train Controlled PCCM Boost Converter With Low Frequency Oscillation Suppression. IEEE Access, 2018, 6, 68795-68803.	4.2	8
48	Improved Small-Signal Model for Switching Converter With Ripple-Based Control. IEEE Transactions on Industrial Electronics, 2021, 68, 222-235.	7.9	8
49	Analysis, control, and modeling of the three-port converter without port voltage constraint for photovoltaic/battery system application. International Journal of Circuit Theory and Applications, 2021, 49, 2791-2811.	2.0	8
50	Small-signal modeling and analysis of improved digital peak current control of boost converter. , 2009, , .		7
51	Energy management and control strategy for DC microgrid based on DMPPT technique. IET Power Electronics, 2020, 13, 658-668.	2.1	7
52	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.	5.4	7
53	Investigation of Subharmonic Oscillation of Digital Control Switching DC-DC Converters. , 2007, , .		6
54	Comments on "Predictive Digital-Controlled Converter With Peak Current-Mode Control and Leading-Edge Modulation". IEEE Transactions on Industrial Electronics, 2012, 59, 4851-4852.	7.9	6

#	ARTICLE	IF	CITATIONS
55	Dynamical effects of composite output capacitors on current-mode controlled buck converter with constant current load. IET Power Electronics, 2017, 10, 490-498.	2.1	6
56	Stabilizing Effect of Load Converter in Cascaded System Considering Ripple Interaction. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 296-300.	3.0	6
57	Front-End Bidirectional Symmetric Bipolar Outputs <i>LLC</i> DC-Transformer (DCX) for a Half Bridge Class-D Audio Amplifier. IEEE Transactions on Industrial Electronics, 2021, 68, 10750-10760.	7.9	6
58	Elimination of sub-harmonic oscillation of digital average current control buck converter. , 2008, , .		5
59	Effects of modulations on the sub-harmonic oscillations of digital peak current and digital valley current controlled switching DC-DC converters. , 2009, , .		5
60	Analysis and comparison of voltage-mode and current-mode pulse train control buck converter. , 2009, , .		5
61	Unified Pulse-Width Modulation Scheme for Improved Digital-peak Voltage Control of Switching DC-DC Converters. International Journal of Circuit Theory and Applications, 2014, 42, 671-686.	2.0	5
62	Stability Control and Mode Shift of Ramp Compensation in V <sub>2</sub> Controlled Buck Converter. Chinese Journal of Electronics, 2015, 24, 295-299.	1.5	5
63	Improved constant on-time controlled buck converter with high output-regulation accuracy. Electronics Letters, 2015, 51, 359-360.	1.0	5
64	Small Signal Modeling and RHP Zero Analysis of Tri-state Boost Converter with Different Freewheeling Control Strategies. , 2018, , .		5
65	Peak inductor current and differential-mode voltage control of single-inductor dual-output buck converters in continuous conduction mode. , 2009, , .		4
66	Constant on-time digital peak voltage control for buck converter. , 2010, , .		4
67	Effect of loop gain of ripple cancellation converter on twice-line-frequency voltage ripple in PFC converter. Electronics Letters, 2017, 53, 873-875.	1.0	4
68	A Novel Dual-input Dual-output Converter and Dynamic Energy Management for PV/Battery Systems. , 2019, , .		4
69	Three-Port Forward Converters With Compact Structure and Extended Duty Cycle Range. IEEE Transactions on Industrial Electronics, 2023, 70, 566-581.	7.9	4
70	Algorithm to Overcome Time Delay in Digital Controller of Switching DC-DC Converters. , 2007, , .		3
71	Analysis and Comparison on Digital Peak Voltage Control with Different Modulation Methods. , 2007, , .		3
72	Transient performance comparison on digital peak current controlled switching dc-dc converters in DCM with different digital pulse-width modulations. , 2009, , .		3

#	ARTICLE	IF	CITATIONS
73	Transient performance improvement for digital control boost power factor correction converters. , 2009, , .		3
74	Small signal modeling of digital $V^{2}$ control for buck converter with pulse frequency modulation. , 2010, , .		3
75	Valley $V^{2}$ control technique for switching converters with fast transient response. , 2011, , .		3
76	Analysis of sensorless peak current mode controlled quadratic boost converter. , 2012, , .		3
77	Unified modelling and dynamical analysis of current-mode controlled single-inductor dual-output switching converter with ramp compensation. IET Power Electronics, 2018, 11, 1297-1305.	2.1	3
78	Analysis of Improved Digital Peak Voltage Control Buck Converter with Different DPWM Modulations. , 2007, , .		2
79	Analysis of Buck Converter with Improved Digital Peak Voltage Control Technique. , 2007, , .		2
80	Improved digital average current control of buck converter with dual-edge modulation. , 2008, , .		2
81	Analysis of digital average current control of buck converter with single-edge modulation. , 2008, , .		2
82	Analysis of bridgeless pseudo-boost PFC converter. , 2012, , .		2
83	Voltage-mode controlled switching converter with dual-edge constant off-time modulation. , 2014, , .		2
84	Quasi-constant-frequency variable off-time control technique for buck-type DC-DC converter. Electronics Letters, 2015, 51, 1447-1449.	1.0	2
85	Digital average voltage control for switching DC-DC converters. , 2016, , .		2
86	Capacitor current fixed off-time control for buck converter with fast response and output capacitor ESR independence. , 2016, , .		2
87	Voltage-mode variable frequency control for single-inductor dual-output buck converter with fast transient response. , 2017, , .		2
88	Unified discrete-map modelling and dynamical behaviour analysis of current mode controlled tri-state dc-dc converters. IET Power Electronics, 2019, 12, 51-60.	2.1	2
89	Adaptive on Time Controlled Double-Line- Frequency Ripple Suppressor With Fast Dynamic Response and High Efficiency. IEEE Access, 2020, 8, 179692-179701.	4.2	2
90	Improved Digital Average Voltage Control for Switching Converter With Capacitor Current Compensation. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 3197-3201.	3.0	2

#	ARTICLE	IF	CITATIONS
91	Modulated Model Predictive Control for Dynamic Stabilization of DC Microgrid. , 2020, , .		2
92	A Novel Battery Equalizer Based on Buck-Boost Converters for Series-connected batteries. , 2020, , .		2
93	Nonlinear Compensation in Digital Controller of Switching DC-DC Converters. , 2007, , .		1
94	Improved digital peak current control of switching dc-dc converters with single-edge and dual-edge pulse-width modulations. , 2009, , .		1
95	Multi Pulses Regulation &#x2014; A novel control technique for buck converter in discontinuous conduction mode. , 2009, , .		1
96	Inductive idling boost converter with low inductor current-ripple and improved dynamic response for power factor correction. , 2010, , .		1
97	High outputâ€regulation accuracy and fast transient response of dual constant onâ€time controlled switching converter. Electronics Letters, 2014, 50, 543-545.	1.0	1
98	Automatic Voltage Equalizer Based on Switched-Capacitor for Series-Connected Cells. , 2021, , .		1
99	Transient Performance Improvement of Digital Average Current Controlled Multiphase Interleaved Buck Converter. , 2022, , .		1
100	Algorithms to overcome time delay in digital peak current control. , 2008, , .		0
101	On the stability of $V^{2/C}$ controlled boost converter in continuous conduction mode. , 2009, , .		0
102	Peak inductor current and differential-mode voltage control of single-inductor multiple-output buck converters in CCM. , 2009, , .		0
103	A bipolar gain bridgeless set-up AC/DC converter with power factor correction. , 2012, , .		0
104	Nonlinear modulation for voltage-mode controlled switching converters with fast input transient performance. , 2016, , .		0
105	Fixed freewheeling-time control strategy for switching converter operating in pseudo-continuous conduction mode. , 2016, , .		0
106	The novel ripple-based I2 type control technique for buck converters with constant current output. , 2016, , .		0
107	Digital average voltage control for switching DC-DC converters with improved dual-edge modulation. , 2017, , .		0
108	Stability analysis and ramp compensation of $V^{2/}$ controlled buck converter in pseudo-continuous conduction mode. , 2017, , .		0

#	ARTICLE	IF	CITATIONS
109	Discrete-Time Modeling and Stability Analysis of Peak-Current-Mode Controlled Buck Converter with Constant Current Load. , 2018, , .		0
110	Stability Analysis of Digital Voltage Ripple-based Controlled Buck Converter with Dual-edge Constant On-time Modulation. , 2018, , .		0
111	Current Sharing Method of Charge Controlled Interleaved Buck Converter. , 2019, , .		0
112	A Voltage Balancing Circuit Based on LC Unit with Dual LC Resonant Tanks. , 2021, , .		0