Mok, Philip K T

List of Publications by Year
in descending order

134	5,557	109321	88630
papers	citations	35 h-index	70 g-index

134	134	134	2361
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Monolithic Current-Mode CMOS DCâ€“DC Converter With On-Chip Current-Sensing Technique. IEEE Journal of Solid-State Circuits, 2004, 39, 3-14.	5.4	440
2	A capacitor-free cmos low-dropout regulator with damping-factor-control frequency compensation. IEEE Journal of Solid-State Circuits, 2003, 38, 1691-1702.	5.4	396
3	A sub-1-V 15-ppm/Â°C CMOS bandgap voltage reference without requiring low threshold voltage device. IEEE Journal of Solid-State Circuits, 2002, 37, 526-530.	5.4	323
4	Single-inductor multiple-output switching converters with time-multiplexing control in discontinuous conduction mode. IEEE Journal of Solid-State Circuits, 2003, 38, 89-100.	5.4	300
5	Three-stage large capacitive load amplifier with damping-factor-control frequency compensation. IEEE Journal of Solid-State Circuits, 2000, 35, 221-230.	5.4	256
6	A 2-V 23-Î¼A 5.3-ppm/Â°C curvature-compensated CMOS bandgap voltage reference. IEEE Journal of Solid-State Circuits, 2003, 38, 561-564.	5.4	189
7	Active-feedback frequency-compensation technique for low-power multistage amplifiers. IEEE Journal of Solid-State Circuits, 2003, 38, 511-520.	5.4	189
8	A Low-Dropout Regulator for SoC With Q-Reduction. IEEE Journal of Solid-State Circuits, 2007, 42, 658-664.	5.4	186
9	A High Slew-Rate Push–Pull Output Amplifier for Low-Quiescent Current Low-Dropout Regulators With Transient-Response Improvement. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2007, 54, 755-759.	2.2	181
10	A novel ultrathin elevated channel low-temperature poly-Si TFT. IEEE Electron Device Letters, 1999, 20, 569-571.	3.9	175
11	A CMOS voltage reference based on weighted Î”V/sub GS/ for CMOS low-dropout linear regulators. IEEE Journal of Solid-State Circuits, 2003, 38, 146-150.	5.4	166
12	Development of Single-Transistor-Control LDO Based on Flipped Voltage Follower for SoC. IEEE Transactions on Circuits and Systems I: Regular Papers, 2008, 55, 1392-1401.	5.4	156
13	A Capacitor-Less CMOS Active Feedback Low-Dropout Regulator With Slew-Rate Enhancement for Portable On-Chip Application. IEEE Transactions on Circuits and Systems II: Express Briefs, 2010, 57, 80-84.	3.0	127
14	A 0.15 V Input Energy Harvesting Charge Pump With Dynamic Body Biasing and Adaptive Dead-Time for Efficiency Improvement. IEEE Journal of Solid-State Circuits, 2015, 50, 414-425.	5.4	120
15	A 1-V integrated current-mode boost converter in standard 3.3/5-V CMOS technologies. IEEE Journal of Solid-State Circuits, 2005, 40, 2265-2274.	5.4	113
16	Design of Transformer-Based Boost Converter for High Internal Resistance Energy Harvesting Sources With 21 mV Self-Startup Voltage and 74% Power Efficiency. IEEE Journal of Solid-State Circuits, 2014, 49, 2694-2704.	5.4	97
17	A Two-Phase Switching Hybrid Supply Modulator for RF Power Amplifiers With 9% Efficiency Improvement. IEEE Journal of Solid-State Circuits, 2010, 45, 2543-2556.	5.4	87
18	Area- and Power-Efficient Monolithic Buck Converters With Pseudo-Type III Compensation. IEEE Journal of Solid-State Circuits, 2010, 45, 1446-1455.	5.4	79

#	Article	IF	Citations
19	A 100 MHz 82.4% Efficiency Package-Bondwire Based Four-Phase Fully-Integrated Buck Converter With Flying Capacitor for Area Reduction. IEEE Journal of Solid-State Circuits, 2013, 48, 2977-2988.	5.4	78
20	Ultra-thin elevated channel poly-Si TFT technology for fully-integrated AMLCD system on glass. IEEE Transactions on Electron Devices, 2000, 47, 569-575.	3.0	76
21	A Constant Frequency Output-Ripple-Voltage-Based Buck Converter Without Using Large ESR Capacitor. IEEE Transactions on Circuits and Systems II: Express Briefs, 2008, 55, 748-752.	3.0	73
22	A 0.9-V Input Discontinuous-Conduction-Mode Boost Converter With CMOS-Control Rectifier. IEEE Journal of Solid-State Circuits, 2008, 43, 2036-2046.	5.4	72
23	An 84.7% Efficiency 100-MHz Package Bondwire-Based Fully Integrated Buck Converter With Precise DCM Operation and Enhanced Light-Load Efficiency. IEEE Journal of Solid-State Circuits, 2013, 48, 2595-2607.	5.4	72
24	Analysis and Design of a Thermoelectric Energy Harvesting System With Reconfigurable Array of Thermoelectric Generators for IoT Applications. IEEE Transactions on Circuits and Systems I: Regular Papers, 2017, 64, 2346-2358.	5.4	69
25	A dual-path bandwidth extension amplifier topology with dual-loop parallel compensation. IEEE Journal of Solid-State Circuits, 2003, 38, 1739-1744.	5.4	68
26	Analysis and Design Considerations of Integrated 3-Level Buck Converters. IEEE Transactions on Circuits and Systems I: Regular Papers, 2016, 63, 671-682.	5.4	66
27	A Wide-Load-Range Constant-Charge-Auto-Hopping Control Single-Inductor-Dual-Output Boost Regulator With Minimized Cross-Regulation. IEEE Journal of Solid-State Circuits, 2011, 46, 2350-2362.	5.4	64
28	20.5 A 2-/3-phase fully integrated switched-capacitor DC-DC converter in bulk CMOS for energy-efficient digital circuits with 14% efficiency improvement. , 2015, , .		63
29	A Nanosecond-Transient Fine-Grained Digital LDO With Multi-Step Switching Scheme and Asynchronous Adaptive Pipeline Control. IEEE Journal of Solid-State Circuits, 2017, 52, 2463-2474.	5.4	63
30	Wide-Loading-Range Fully Integrated LDR With a Power-Supply Ripple Injection Filter. IEEE Transactions on Circuits and Systems II: Express Briefs, 2012, 59, 356-360.	3.0	61
31	Switching noise and shoot-through current reduction techniques for switched-capacitor voltage doubler. IEEE Journal of Solid-State Circuits, 2005, 40, 1136-1146.	5.4	59
32	A Fast Fixed-Frequency Adaptive-On-Time Boost Converter With Light Load Efficiency Enhancement and Predictable Noise Spectrum. IEEE Journal of Solid-State Circuits, 2013, 48, 2442-2456.	5.4	56
33	A High-Frequency Three-Level Buck Converter With Real-Time Calibration and Wide Output Range for Fast-DVS. IEEE Journal of Solid-State Circuits, 2018, 53, 582-595.	5.4	54
34	An SC Voltage Doubler with Pseudo-Continuous Output Regulation Using a Three-Stage Switchable Opamp. IEEE Journal of Solid-State Circuits, 2007, 42, 1216-1229.	5.4	50
35	An Auto-Selectable-Frequency Pulse-Width Modulator for Buck Converters with Improved Light-Load Efficiency. , 2008, , .		49
36	A Monolithic Buck Converter With Near-Optimum Reference Tracking Response Using Adaptive-Output-Feedback. IEEE Journal of Solid-State Circuits, 2007, 42, 2441-2450.	5.4	41

#	Article	IF	Citations
37	Design and Implementation of Fully Integrated Digitally Controlled Current-Mode Buck Converter. IEEE Transactions on Circuits and Systems I: Regular Papers, 2011, 58, 1980-1991.	5.4	38
38	A 500mA analog-assisted digital-LDO-based on-chip distributed power delivery grid with cooperative regulation and IR-drop reduction in 65nm CMOS. , 2018, , .		29
39	Design of PWM Ramp Signal in Voltage-Mode CCM Random Switching Frequency Buck Converter for Conductive EMI Reduction. IEEE Transactions on Circuits and Systems I: Regular Papers, 2013, 60, 505-515.	5.4	26
40	A new lateral trench-gate conductivity modulated power transistor. IEEE Transactions on Electron Devices, 1999, 46, 1788-1793.	3.0	22
41	Power Loss and Switching Noise Reduction Techniques for Single-Inductor Multiple-Output Regulator. IEEE Transactions on Circuits and Systems I: Regular Papers, 2013, 60, 2788-2798.	5.4	21
42	Fast-transient asynchronous digital LDO with load regulation enhancement by soft multi-step switching and adaptive timing techniques in 65-nm CMOS. , 2015, , .		21
43	An AC Input Switching-Converter-Free LED Driver With Low-Frequency-Flicker Reduction. IEEE Journal of Solid-State Circuits, 2017, 52, 1424-1434.	5.4	21
44	5.11 A 65nm inverter-based low-dropout regulator with rail-to-rail regulation and over â˜'20dB PSR at 0.2V lowest supply voltage. , 2017, , .		20
45	Predicting Subharmonic Oscillation of Voltage-Mode Switching Converters Using a Circuit-Oriented Geometrical Approach. IEEE Transactions on Circuits and Systems I: Regular Papers, 2017, 64, 717-730.	5.4	20
46	A novel high-voltage high-speed MESFET using a standard GaAs digital IC process. IEEE Transactions on Electron Devices, 1994, 41, 246-250.	3.0	17
47	On-Chip Digital Inductor Current Sensor for Monolithic Digitally Controlled DC-DC Converter. IEEE Transactions on Circuits and Systems I: Regular Papers, 2013, 60, 1232-1240.	5.4	17
48	An 82.4% efficiency package-bondwire-based four-phase fully integrated buck converter with flying capacitor for area reduction. , 2013, , .		17
49	A Multi-Loop-Controlled AC-Coupling Supply Modulator With a Mode-Switching CMOS PA in an EER System With Envelope Shaping. IEEE Journal of Solid-State Circuits, 2019, 54, 1553-1563.	5.4	17
50	An 18-nA Ultra-Low-Current Resistor-Less Bandgap Reference for 2.8 Vâ€“4.5 V High Voltage Supply Li-Ion-Battery-Based LSIs. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 2382-2386.	3.0	17
51	23.1 A 0.15V-input energy-harvesting charge pump with switching body biasing and adaptive dead-time for efficiency improvement. , 2014, , .		16
52	A 10-MHz Hysteretic-Controlled Buck Converter With Single On/Off Reference Tracking Using Turning-Point Prediction for DVFS Application. IEEE Transactions on Circuits and Systems I: Regular Papers, 2019, 66, 4502-4515.	5.4	16
53	Temperature-compensated CMOS ring oscillator for power-management circuits. Electronics Letters, 2007, 43, 786.	1.0	15
54	A wide-load-range single-inductor-dual-output boost regulator with minimized cross-regulation by constant-charge-auto-hopping (CCAH) control. , 2009, , .		15

#	Article	IF	Citations
55	A Monolithic Digital Ripple-Based Adaptive-Off-Time DC-DC Converter With a Digital Inductor Current Sensor. IEEE Journal of Solid-State Circuits, 2014, 49, 1837-1847.	5.4	15
56	A 14-nA, Highly Efficient Triple-Output Thermoelectric Energy Harvesting System Based on a Reconfigurable TEG Array. IEEE Journal of Solid-State Circuits, 2019, 54, 1720-1732.	5.4	15
57	A Multiphase Switched-Capacitor Converter for Fully Integrated AMLED Microdisplay System. IEEE Transactions on Power Electronics, 2020, 35, 6001-6011.	7.9	15
58	A Fast-Transient 500-mA Digitally Assisted Analog LDO With 30-Î¼V/mA Load Regulation and 0.0073-ps FoM in 65-nm CMOS. IEEE Journal of Solid-State Circuits, 2021, 56, 511-520.	5.4	15
59	A High-Efficiency Dual-Polarity Thermoelectric Energy-Harvesting Interface Circuit With Cold Startup and Fast-Searching ZCD. IEEE Journal of Solid-State Circuits, 2022, 57, 1899-1912.	5.4	14
60	An Auto-Zero-Voltage-Switching Quasi-Resonant LED Driver With GaN FETs and Fully Integrated LED Shunt Protectors. IEEE Journal of Solid-State Circuits, 2018, 53, 913-923.	5.4	13
61	An area- and power-efficient monolithic Buck converter with fast transient response. , 2009, , .		12
62	A Distributed Power Delivery Grid Based on Analog-Assisted Digital LDOs With Cooperative Regulation and IR-Drop Reduction. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 2859-2871.	5.4	12
63	A power IC technology with excellent cross-talk isolation. IEEE Electron Device Letters, 1996, 17, 467-469.	3.9	11
64	A Delay-Line-Based Voltage-to-Duty-Cycle Controller for High-Frequency PWM Switching Converters. IEEE Transactions on Circuits and Systems II: Express Briefs, 2015, 62, 751-755.	3.0	11
65	A 16â€“28-W 92.8%-Efficiency Monolithic Quasi-Resonant LED Driver With Constant-Duty-Ratio Frequency Regulator. IEEE Transactions on Circuits and Systems II: Express Briefs, 2015, 62, 1199-1203.	3.0	11
66	DTMOS-Based Pulse Transformer Boost Converter With Complementary Charge Pump for Multisource Energy Harvesting. IEEE Transactions on Circuits and Systems II: Express Briefs, 2016, 63, 508-512.	3.0	11
67	High-isolation bonding pad design for silicon RFIC up to 20 GHz. IEEE Electron Device Letters, 2003, 24, 601-603.	3.9	10
68	A Stacked Capacitor Multi-Microwatts Source Energy Harvesting Scheme With 86 mV Minimum Input Voltage and <formula formulatype="inline"> <tex Notation="TeX">${pm}3$</tex></formula> V Bipolar Output Voltage. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2014, 4, 313-323.	3.6	10
69	Dynamic performance analysis of 3-level integrated buck converters. , 2015, , .		10
70	An AC Input Inductor-Less LED Driver for Efficient Lighting and Visible Light Communication. IEEE Journal of Solid-State Circuits, 2018, 53, 2343-2355.	5.4	10
71	Subtraction-Mode Switched-Capacitor Converters With Parasitic Loss Reduction. IEEE Transactions on Power Electronics, 2020, 35, 1200-1204.	7.9	10
72	A GaN Driver for a Bi-Directional Buck/Boost Converter With Three-Level V_{GS} Protection and Optimal-Point Tracking Dead-Time Control. IEEE Transactions on Circuits and Systems I: Regular Papers, 2022, 69, 2212-2224.	5.4	10

#	Article	IF	Citations
73	Ramp signal generation in Voltage mode CCM Random switching Frequency Buck converter for conductive EMI reduction. , 2010, , .		9
74	Soft-start circuit with duty ratio controlled voltage clamping and adaptive sizing technique for integrated DC-DC converters. , 2010, , .		9
75	A low-voltage high-efficiency voltage doubler for thermoelectric energy harvesting. , 2013, , .		9
76	A low substrate loss, monolithically integrated power inductor for compact LED drivers. , 2015, , .		9
77	A 0.3-V Ultralow-Supply-Voltage Boost Converter for Thermoelectric Energy Harvesting With Time-Domain-Based MPPT. IEEE Solid-State Circuits Letters, 2021, 4, 100-103.	2.0	9
78	Process-independent analogue data driver for polysilicon TFT AMLCD. International Journal of Electronics, 2004, 91, 199-210.	1.4	8
79	A Single-Controller-Four-Output Analog-Assisted Digital LDO with Adaptive-Time-Multiplexing Control in 65-nm CMOS. , 2019, , .		8
80	An 8-nW Resistor-Less Bandgap Reference Based on a Single-Branch Floating PTAT Voltage. IEEE Solid-State Circuits Letters, 2020, 3, 74-77.	2.0	8
81	Circuit Techniques for High Efficiency Fully-Integrated Switched-Capacitor Converters. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 556-561.	3.0	8
82	A Dual-Frequency Thermal Energy Harvesting Interface With Real-Time-Calculation ZCD. IEEE Journal of Solid-State Circuits, 2021, 56, 2736-2747.	5.4	8
83	A Hybrid LED Driver With Improved Efficiency. IEEE Journal of Solid-State Circuits, 2020, 55, 2129-2139.	5.4	8
84	Analysis of Switching-Loss-Reduction Methods for MHz-Switching Buck Converters. , 2007, , .		7
85	A Chip-Area Efficient Voltage Regulator for VLSI Systems. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2010, 18, 1757-1762.	3.1	7
86	A chip-area efficient capacitor-less CMOS LDO with active feedback and damping zero compensation. , 2010, , .		7
87	Comparative Studies of Common Fix-Frequency Controls for Reference Tracking and Enhancement by End-Point Prediction. IEEE Transactions on Circuits and Systems I: Regular Papers, 2010, 57, 3023-3034.	5.4	7
88	Phase-Change Memory RESET Model Based on Detailed Cell Cooling Profile. IEEE Transactions on Electron Devices, 2011, 58, 3635-3638.	3.0	7
89	A piezoelectric energy harvesting interface circuit using one-shot pulse transformer boost converter based on water bucket fountain strategy. , 2014, , .		7
90	Through silicon underfill dispensing for 3D die/interposer stacking. , 2014, , .		7

#	Article	IF	Citations
91	A comparative analysis on binary and multiple-unary weighted power stage design for digital LDO. , 2016, , .		7
92	An enhanced compact waffle MOSFET with low drain capacitance from a standard submicron CMOS technology. Solid-State Electronics, 2003, 47, 785-789.	1.4	6
93	Design of Fast-Response On-Chip Current Sensor for Current-Mode Controlled Buck Converters with MHz Switching Frequency. , 2007, , .		6
94	Fully integrated digital controller IC for buck converter with a differential-sensing ADC. , 2008, , .		6
95	A package bondwire based 80% efficiency 80MHz fully-integrated buck converter with precise DCM operation and enhanced light-load efficiency. , 2012, , .		6
96	Cost-effective and eco-friendly LED system-on-a-chip (SoC). , 2013, , .		6
97	A bipolar output voltage pulse transformer boost converter with charge pump assisted shunt regulator for thermoelectric energy harvesting. , 2014, , .		6
98	A 25 MHz Fast Transient Adaptive-On/Off-Time Controlled Three-Level Buck Converter. IEEE Transactions on Circuits and Systems I: Regular Papers, 2022, 69, 2601-2613.	5.4	6
99	Single-inductor-multiple-output DC-DC converter design. , 2013, , .		5
100	An Energy Harvesting System with Reconfigurable Piezoelectric Energy Harvester Array for IoT Applications. , 2020, , .		5
101	Comparative Studies of Common Control Schemes for Reference Tracking and Application of End-point Prediction. , 2007, , .		4
102	Design optimization of an output capacitor-less low dropout regulator with compensation capcitance reduction and slew-rate enhancement technique. , 2011, , .		4
103	Design of coupled inductor-based boost converter for ultra low power thermoelectric energy harvesting using pulse transformer with 75mV start-up voltage. , 2013, , .		4
104	Analysis and design of three-state controlled transition mode for a buck-boost converter with efficiency and stability enhancement. , 2013, , .		4
105	Design consideration of recent advanced low-voltage CMOS boost converter for energy harvesting. , 2015, , .		4
106	A power inductor integration technology using a silicon interposer for DC-DC converter applications. , 2018, , .		4
107	On-chip digital inductor current sensor for monolithic digitally controlled DC-DC Converters. , 2012, , .		3
108	High-side NMOS power switch and bootstrap driver for high-frequency fully-integrated converters with enhanced efficiency. , 2013, , .		3

#	Article	IF	Citations
109	Analysis of a reconfigurable TEG array for high efficiency thermoelectric energy harvesting. , 2016, , .		3
110	A more accurate steady state analysis of zero-voltage switching quasi-resonant converters. , 2016, , .		3
111	Low-Flicker Lighting From High-Voltage LEDs Driven by a Single Converter-Free Driver. IEEE Photonics Technology Letters, 2017, 29, 1675-1678.	2.5	3
112	Transfer Function Analysis of the Power Supply Rejection Ratio of Capacitor-Less LDOs. , 2019, , .		3
113	A Customized AC Hybrid LED Driver With Flicker Reduction for High Nominal Range Applications. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 1635-1639.	3.0	3
114	A self-aligned trenched cathode lateral insulated gate bipolar transistor with high latch-up resistance. IEEE Transactions on Electron Devices, 1995, 42, 2236-2239.	3.0	2
115	A monolithic digitally controlled ripple-based DC-DC converter with digital inductor current sensor. , 2013, , .		2
116	Methods for measuring loop-gain function of high-frequency DC-DC converters. , 2016, , .		2
117	A Dual-Frequency Dual-Input-Dual-Output Interface for Thermoelectric Energy Harvesting and Recycling With 82.9% Efficiency. , 2019, , .		2
118	Design Techniques for High-Efficiency Envelope-Tracking Supply Modulator for 5th Generation Communication. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 2586-2591.	3.0	2
119	Transfer Function Analysis of the Power Supply Rejection Ratio of Low-Dropout Regulators and the Feed-Forward Ripple Cancellation Scheme. IEEE Transactions on Circuits and Systems I: Regular Papers, 2022, 69, 3061-3073.	5.4	2
120	RESET modeling of PCM using thermal budget approach. , 2010, , .		1
121	A monolithic 2nd-order boundary controller for buck converter with fast transient response. , 2010, , .		1
122	Design considerations of recent advanced monolitic current-mode DC-DC converters. , 2011, , .		1
123	A single on/off reference tracking buck converter using turning point prediction for DVFS application. , 2016, , .		1
124	A bipolar output voltage pulse transformer boost converter with charge pump assisted shunt regulator for thermoelectric energy harvesting. Analog Integrated Circuits and Signal Processing, 2016, 88, 319-331.	1.4	1
125	The impact of the distributed RC effect on high frequency noise modeling of bipolar transistor. Solid-State Electronics, 2004, 48, 297-308.	1.4	0
126	Design of Area-Efficient, Low-Quiescent-Current LDOs for Chip-Level Power Management. , 2007, , .		0

#	Article	IF	Citations
127	Audio susceptibility aware ramp signal design on feedforward voltage-mode CCM buck converter. , 2010, , .		0
128	Geometry based resistance model for phase change memory. , 2012, , .		0
129	A dual mode thermoelectric energy harvesting circuit using transformer-based boost converter, charge pump and time-domain digital control. , 2014, , .		0
130	Digital controllers for switching power converters. , 0, , 323-391.		0
131	Undershoot suppression technique for fully integrated pulseâ€width modulated switching converters. Electronics Letters, 2015, 51, 96-97.	1.0	0
132	A dual-output SC converter with dynamic power allocation for multicore application processors. , 2018, , .		0
133	Energy Harvesting. , 2017, , 317-341.		0
134	Loop Analysis and Stability Considerations of Hybrid PA Supply Modulators. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 4143-4147.	3.0	0