

# Ka Nang Alex Leung

## List of Publications by Year in descending order

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133  
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172386  
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133  
docs citations

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times ranked

1469  
citing authors

#	ARTICLE	IF	CITATIONS
1	A capacitor-free cmos low-dropout regulator with damping-factor-control frequency compensation. IEEE Journal of Solid-State Circuits, 2003, 38, 1691-1702.	3.5	396
2	A sub-1-V 15-ppm/°C CMOS bandgap voltage reference without requiring low threshold voltage device. IEEE Journal of Solid-State Circuits, 2002, 37, 526-530.	3.5	323
3	A 6- $\mu$ W Chip-Area-Efficient Output-Capacitorless LDO in 90-nm CMOS Technology. IEEE Journal of Solid-State Circuits, 2010, 45, 1896-1905.	3.5	275
4	Analysis of multistage amplifier-frequency compensation. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2001, 48, 1041-1056.	0.1	267
5	Three-stage large capacitive load amplifier with damping-factor-control frequency compensation. IEEE Journal of Solid-State Circuits, 2000, 35, 221-230.	3.5	256
6	An Output-Capacitorless Low-Dropout Regulator With Direct Voltage-Spike Detection. IEEE Journal of Solid-State Circuits, 2010, 45, 458-466.	3.5	240
7	A 2-V 23- $\mu$ A 5.3-ppm/°C curvature-compensated CMOS bandgap voltage reference. IEEE Journal of Solid-State Circuits, 2003, 38, 561-564.	3.5	189
8	A Low-Dropout Regulator for SoC With $Q$ -Reduction. IEEE Journal of Solid-State Circuits, 2007, 42, 658-664.	3.5	186
9	A CMOS voltage reference based on weighted $\beta V_{GS}$ for CMOS low-dropout linear regulators. IEEE Journal of Solid-State Circuits, 2003, 38, 146-150.	3.5	166
10	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.	3.5	156
11	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.	3.5	113
12	An integrated CMOS current-sensing circuit for low-voltage current-mode buck regulator. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2005, 52, 394-397.	2.3	106
13	Nested Miller compensation in low-power CMOS design. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2001, 48, 388-394.	2.3	96
14	Design of low-power analog drivers based on slew-rate enhancement circuits for CMOS low-dropout regulators. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2005, 52, 563-567.	2.3	85
15	A Low-Power Fast-Transient 90-nm Low-Dropout Regulator With Multiple Small-Gain Stages. IEEE Journal of Solid-State Circuits, 2010, , .	3.5	79
16	A CMOS Low-Dropout Regulator With a Momentarily Current-Boosting Voltage Buffer. IEEE Transactions on Circuits and Systems I: Regular Papers, 2010, 57, 2312-2319.	3.5	78
17	A voltage-mode PWM buck regulator with end-point prediction. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2006, 53, 294-298.	2.3	72
18	A dual-path bandwidth extension amplifier topology with dual-loop parallel compensation. IEEE Journal of Solid-State Circuits, 2003, 38, 1739-1744.	3.5	68

#	ARTICLE	IF	CITATIONS
19	A 200-ps-Response-Time Output-Capacitorless Low-Dropout Regulator With Unity-Gain Bandwidth >100 MHz in 130-nm CMOS. IEEE Transactions on Power Electronics, 2018, 33, 3232-3246.	5.4	68
20	Dynamic Bias-Current Boosting Technique for Ultralow-Power Low-Dropout Regulator in Biomedical Applications. IEEE Transactions on Circuits and Systems II: Express Briefs, 2011, 58, 174-178.	2.2	67
21	Design considerations of recent advanced low-voltage low-temperature-coefficient CMOS bandgap voltage reference. , 0, , .		58
22	A CMOS Low-Dropout Regulator With Dominant-Pole Substitution. IEEE Transactions on Power Electronics, 2016, 31, 6362-6371.	5.4	58
23	A Low-Power CMOS Front-End for Photoplethysmographic Signal Acquisition With Robust DC Photocurrent Rejection. IEEE Transactions on Biomedical Circuits and Systems, 2008, 2, 280-288.	2.7	57
24	A Fast-Response Pseudo-PWM Buck Converter With PLL-Based Hysteresis Control. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2012, 20, 1167-1174.	2.1	42
25	A Single-Inductor Multiple-Output Auto-Buck-Boost DC-DC Converter With Autophase Allocation. IEEE Transactions on Power Electronics, 2016, 31, 2296-2313.	5.4	40
26	A Fast-Transient Low-Dropout Regulator With Load-Tracking Impedance Adjustment and Loop-Gain Boosting Technique. IEEE Transactions on Circuits and Systems II: Express Briefs, 2010, 57, 757-761.	2.2	39
27	A $\frac{1}{2}$ Hybrid OTA Driving 15 nF Capacitive Load With 1.46 MHz GBW. IEEE Journal of Solid-State Circuits, 2015, 50, 2750-2757.	3.5	39
28	A Fully Integrated Low-Dropout Regulator With Differentiator-Based Active Zero Compensation. IEEE Transactions on Circuits and Systems I: Regular Papers, 2018, 65, 3578-3591.	3.5	37
29	A Single-Inductor Multiple-Output Auto-Buck-Boost DC-DC Converter With Tail-Current Control. IEEE Transactions on Power Electronics, 2016, 31, 7857-7875.	5.4	32
30	A Signal- and Transient-Current Boosting Amplifier for Large Capacitive Load Applications. IEEE Transactions on Circuits and Systems I: Regular Papers, 2014, 61, 2777-2785.	3.5	31
31	A Single-Inductor Multiple-Output Buck/Boost DC-DC Converter With Duty-Cycle and Control-Current Predictor. IEEE Transactions on Power Electronics, 2020, 35, 12022-12039.	5.4	27
32	A Low-Power Continuously-Calibrated Clock Recovery Circuit for UHF RFID EPC Class-1 Generation-2 Transponders. IEEE Journal of Solid-State Circuits, 2010, 45, 587-599.	3.5	24
33	A Fully Differential Band-Selective Low-Noise Amplifier for MB-OFDM UWB Receivers. IEEE Transactions on Circuits and Systems II: Express Briefs, 2008, 55, 653-657.	2.2	22
34	Digital-Control Single-Inductor Triple-Output DC-DC Converter With Pre-Sub-Period Inductor-Current Control. IEEE Transactions on Power Electronics, 2012, 27, 2028-2042.	5.4	20
35	A 25mA CMOS LDO with $\approx 85$ dB PSRR at 2.5MHz. , 2013, , .		19
36	A low-voltage CMOS low-dropout regulator with enhanced loop response. , 0, , .		17

#	ARTICLE	IF	CITATIONS
37	A novel frequency compensation technique for low-voltage low-dropout regulator. , 0, , .		16
38	A transientâ€ improved lowâ€ dropout regulator with nested flipped voltage follower structure. International Journal of Circuit Theory and Applications, 2013, 41, 1016-1026.	1.3	16
39	Temperature-compensated CMOS ring oscillator for power-management circuits. Electronics Letters, 2007, 43, 786.	0.5	15
40	A 0.5-Hz High-Pass Cutoff Dual-Loop Transimpedance Amplifier for Wearable NIR Sensing Device. IEEE Transactions on Circuits and Systems II: Express Briefs, 2010, 57, 531-535.	2.2	15
41	Right-half-plane zero removal technique for low-voltage low-power nested Miller compensation CMOS amplifier. , 0, , .		14
42	Design of a 1.5-V high-order curvature-compensated CMOS bandgap reference. , 0, , .		14
43	Design of passive UHF RFID tag in 130nm CMOS technology. , 2008, , .		14
44	A fast-transient LDO based on buffered flipped voltage follower. , 2010, , .		14
45	A CMOS voltage regulator for passive RFID tag ICs. International Journal of Circuit Theory and Applications, 2012, 40, 329-340.	1.3	14
46	An Area-Efficient 96.5%-Peak-Efficiency Cross-Coupled Voltage Doubler With Minimum Supply of 0.8 V. IEEE Transactions on Circuits and Systems II: Express Briefs, 2014, 61, 656-660.	2.2	14
47	A Two-Stage Large-Capacitive-Load Amplifier With Multiple Cross-Coupled Small-Gain Stages. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2016, 24, 2580-2592.	2.1	14
48	25â€...mA LDO with â~63â€...dB PSRR at 30â€...MHz for WiMAX. Electronics Letters, 2010, 46, 1080.	0.5	13
49	A 5.4-mW 180-cm Transmission Distance 2.5-Mb/s Advanced Techniques-Based Novel Intrabody Communication Receiver Analog Front End. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2015, 23, 2829-2841.	2.1	13
50	Analysis of low-dropout regulator topologies for low-voltage regulation. , 0, , .		12
51	A 90nm RFID tag's baseband processor with novel PIE decoder and uplink clock generator. , 2010, , .		11
52	A 1.2V buck converter with a novel on-chip low-voltage current-sensing scheme. , 0, , .		10
53	Enhanced activeâ€ feedback frequency compensation with onâ€ chipâ€ capacitor reduction feature for amplifiers with large capacitive load. International Journal of Circuit Theory and Applications, 2017, 45, 2119-2133.	1.3	10
54	Bandwidth and Slew Rate Enhanced OTA With Sustainable Dynamic Bias. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 635-639.	2.2	10

#	ARTICLE	IF	CITATIONS
55	A 2-V 23-1/4A 5.3-ppm/°C 4th-order curvature-compensated CMOS bandgap reference. , 0, , .		9
56	Low power injection locked oscillators for MICS standard. , 2009, , .		9
57	An Adaptive Current-Boosting Voltage Buffer for Low-Power Low Dropout Regulators. , 2007, , .		8
58	Sub-mW \$LC\$ Dual-Input Injection-Locked Oscillator for Autonomous WBSNs. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2013, 21, 546-553.	2.1	8
59	Digitallyâ€assisted constantâ€onâ€time dynamicâ€biasing technique for bandwidth and slewâ€rate enhancement in ultraâ€lowâ€power lowâ€dropout regulator. International Journal of Circuit Theory and Applications, 2016, 44, 504-513.	1.3	8
60	Integrated ramp generator with auto-set hysteretic comparator for PWM voltage regulators. Electronics Letters, 2007, 43, 1384.	0.5	7
61	A Chip-Area Efficient Voltage Regulator for VLSI Systems. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2010, 18, 1757-1762.	2.1	7
62	Power-on-reset circuit with power-off auto-discharging path for passive RFID tag ICs. , 2010, , .		7
63	Powerâ€areaâ€efficient transientâ€improved capacitorâ€free FVfâ€LDO with digital detecting technique. Electronics Letters, 2015, 51, 94-96.	0.5	7
64	A 3.3-MHz fast-response load-dependent-on/off-time buck-boost DC-DC converter with low-noise hybrid full-wave current sensor. Microelectronics Journal, 2018, 74, 1-12.	1.1	7
65	A Low-power signal processing front-end and decoder for UHF passive RFID transponders. , 2009, , .		6
66	A 0.4 V low power baseband processor for UHF passive RFID tags. , 2010, , .		6
67	Improved activeâ€diode circuit used in voltage doubler. International Journal of Circuit Theory and Applications, 2012, 40, 165-173.	1.3	6
68	Gain and slew rate enhancement for amplifiers through current starving and feeding. , 2015, , .		6
69	Lowâ€dropout regulator with dual crossâ€coupled current mirrors. International Journal of Circuit Theory and Applications, 2019, 47, 1869-1876.	1.3	6
70	Optimum nested Miller compensation for low-voltage low-power CMOS amplifier design. , 0, , .		5
71	Robust and low complexity packet detector design for MB-OFDM UWB. , 2009, , .		5
72	A fixed-frequency auto-buck-boost SIMO DC-DC converter with duty-cycle redistribution and duty-predicted current control. , 2015, , .		5

#	ARTICLE	IF	CITATIONS
73	Analysis on an alternative structure of damping-factor-control frequency compensation. , 0, , .		4
74	A fold-back current-limit circuit with load-insensitive quiescent current for CMOS low dropout regulator. , 2009, , .		4
75	Development of energy-efficient fast-transient CMOS low-dropout regulators for SoC applications. , 2011, , .		4
76	Design considerations of STCB OTA in CMOS 65nm with large capacitive loads. , 2015, , .		4
77	Fast-response full-wave inductor current sensor for 10MHz buck converter. Electronics Letters, 2018, 54, 379-381.	0.5	4
78	An Output-Capacitorless Low-Dropout Regulator with High Slew Rate and Unity-Gain Bandwidth. , 2020, , .		4
79	A 40nm CMOS Hysteretic Buck DC-DC Converter With Digital-Controlled Power-Driving-Tracked-Duration Current Pump. IEEE Access, 2020, 8, 177374-177384.	2.6	4
80	Low-Voltage Analog Circuit Techniques Using Bias-Current Re-Utilization, Self-Biasing and Signal Superposition. , 0, , .		3
81	Design of a Low-Voltage CMOS Charge Pump. , 2008, , .		3
82	A gain-optimising regulated charge pump. International Journal of Electronics, 2011, 98, 197-205.	0.9	3
83	A class-E power amplifier for wireless biomedical systems. Analog Integrated Circuits and Signal Processing, 2013, 75, 525-529.	0.9	3
84	Analysis of CMOS low-dropout regulator &#x2014; Power-supply rejection ratio. , 2014, , .		3
85	A Double Gain-Boosted Amplifier with Widened Output Swing Based on Signal-and Transient-Current Boosting Technique in CMOS 130-nm Technology. , 2018, , .		3
86	Single-inductor multiple-output DC-DC converter with duty-cycle-constrained comparator control. Electronics Letters, 2019, 55, 617-619.	0.5	3
87	A flipped-voltage-follower-based low-dropout regulator with signal- and transient-current boosting. Analog Integrated Circuits and Signal Processing, 2020, 105, 471-476.	0.9	3
88	A NIR CMOS preamplifier with DC photocurrent rejection for pulsed light source. , 2006, , .		2
89	A low power CMOS front-end for photoplethysmographic signal acquisition with robust DC Photocurrent Rejection. , 2007, , .		2
90	Compensation-Capacitor Free Pseudo Three-Stage Amplifier with Large Capacitive Loads. , 2008, , .		2

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91	A slew-rate enhancement technique based on current comparator and capacitive-coupled push-pull output stage for CMOS amplifiers. , 2008, , .		2
92	High slew-rate voltage follower based on double-sided dynamic biasing. Electronics Letters, 2010, 46, 824.	0.5	2
93	Slew-rate enhancement circuit of CMOS current-mirror amplifier by edge-detecting technique. , 2010, , .		2
94	A 124-dB double-gain-boosted cascode amplifier with 92% rail-to-rail output swing. , 2014, , .		2
95	A full-load hybrid compensated ldo with output capacitance range of 0 to 1 $\mu$ F. , 2017, , .		2
96	A dual-power-path charge pump for solar energy harvesting. International Journal of Circuit Theory and Applications, 2021, 49, 3894-3907.	1.3	2
97	An Analog-Assisted Digital LDO With Dynamic-Biasing Asynchronous Comparator. IEEE Access, 2022, 10, 56996-57002.	2.6	2
98	Two-stage Miller-compensated amplifier with embedded negative current buffer. , 2008, , .		1
99	Design and challenges of passive UHF RFID tag in 90nm CMOS technology. , 2008, , .		1
100	A sub-1 $\mu$ s improved-transient CMOS low-dropout regulator without minimal ESR requirement. , 2009, , .		1
101	A single-inductor dual-output pseudo-DCM/CCM buck and boost converter with adaptive DC current compensation. , 2009, , .		1
102	Optimization of output voltage and stage number of UHF RFID power rectifier. , 2010, , .		1
103	A low-power MICS fractional-N frequency synthesizer for implantable biomedical systems. , 2012, , .		1
104	A fully integrated CMOS direct-conversion transmitter front-end for WiMAX. International Journal of Electronics, 2012, 99, 255-266.	0.9	1
105	Load regulation cancellation based on adaptive body bias for STC-LDOs. , 2014, , .		1
106	A CMOS voltage buffer with slew-rate enhancement. International Journal of Electronics, 2014, 101, 820-830.	0.9	1
107	A robust cross-regulation-suppressed single-inductor multiple-output dc-dc converter with duty-regulated comparator control. , 2015, , .		1
108	Limit cycle oscillation reduction in high efficiency wireless power receiver. Electronics Letters, 2017, 53, 1152-1154.	0.5	1

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109	Adaptiveâ€biased senseâ€FETâ€based inductorâ€current sensor for 10â€MHz buck converter. International Journal of Circuit Theory and Applications, 2020, 48, 953-964.	1.3	1
110	Optimization of Charge Pump Based on Piecewise Modeling of Output-Voltage Ripple. Energies, 2021, 14, 4809.	1.6	1
111	A Hybrid Low-Dropout Regulator With Load Regulation Correction. IEEE Access, 2022, 10, 25106-25113.	2.6	1
112	Design challenges of voltage multiplier in a 0.35-â€m 2-poly 4-metal CMOS technology for RFID passive tags. , 2007, , .		0
113	A single-inductor dual-output pseudo-DCM/CCM buck and boost converter in 90nm CMOS technology. , 2008, , .		0
114	A 3-GHz fully-integrated CMOS Class-AB power amplifier. , 2009, , .		0
115	A passive RFID tag IC development platform. , 2009, , .		0
116	Analysis of the behaviours of phase and amplitude mismatch compensators to achieve 82.5 dB image rejection ratio. International Journal of Electronics, 2010, 97, 553-568.	0.9	0
117	A 116-dB CMOS op amp with repetitive gain boosting and subthreshold operation. , 2013, , .		0
118	A digital-control sensorless current-mode boost converter with non-zero error bin compensation and seamless mode transition. , 2015, , .		0
119	A Miller-compensated amplifier with Gm-boosting. , 2015, , .		0
120	Cross-coupled Gm-boosting technique for two-stage miller-compensated amplifier. , 2016, , .		0
121	A reconfigurable UHF CMOS voltage multiplier. , 2016, , .		0
122	A regulated voltage multiplier for passive RFID Tag. , 2016, , .		0
123	A Shared-MSB delay-line-based ADC with simultaneous quantization for digital control single-inductor-multiple-output DC-DC converter. , 2016, , .		0
124	A fast-response buck-boost DC-DC converter with constructed full-wave current sensor. , 2016, , .		0
125	Design considerations of signal-current enhancer OTA in CMOS 65-nm with large capacitive loads. , 2017, , .		0
126	Power supply circuits for energy harvesting applications. , 2017, , .		0



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127	A 0.7-V 3.37-MHz-GBW OTA Driving 15 nF With Triple Gm-Boosting Cells. , 2019, , .		0
128	Fast-Response Half-Wave Inductor Current Sensor for 30-MHz Buck Converter. , 2019, , .		0
129	A Multi-stage Cross-Coupled Amplifier. , 2019, , .		0
130	RF Module Design of Passive UHF RFID Tag Implemented in CMOS 90-nm Technology. Journal of Low Power Electronics, 2010, 6, 141-149.	0.6	0
131	A 1.9 $\mu$ W Transient-Enhanced Low-Dropout Regulator with Voltage-Spike Suppression. Journal of Low Power Electronics, 2010, 6, 126-132.	0.6	0
132	23 $\mu$ W 8.9â€ effective number of bit 1.1â€MS/s successive approximation register analogâ€toâ€digital converter with an energyâ€efficient digitalâ€toâ€analog converter switching scheme. Journal of Engineering, 2014, 2014, 420-425.	0.6	0
133	Full-Wave Sense-FET-Based Inductor-Current Sensor With Wide Dynamic Range for Buck Converters. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 2041-2045.	2.2	0