Marcio Medeiros

List of Publications by Year
in descending order

98 papers	1,628 citations	516710 16 h-index	395702 33 g-index
100 all docs	100 docs citations	100 times ranked	777 citing authors

#	Article	IF	Citations
1	An MOS transistor model for analog circuit design. IEEE Journal of Solid-State Circuits, 1998, 33, 1510-1519.	5.4	263
2	Series-parallel association of FET's for high gain and high frequency applications. IEEE Journal of Solid-State Circuits, 1994, 29, 1094-1101.	5.4	195
3	A 2-nW 1.1-V self-biased current reference in CMOS technology. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2005, 52, 61-65.	2.2	151
4	Harmonic distortion caused by capacitors implemented with MOSFET gates. IEEE Journal of Solid-State Circuits, 1992, 27, 1470-1475.	5.4	62
5	An explicit physical model for the long-channel MOS transistor including small-signal parameters. Solid-State Electronics, 1995, 38, 1945-1952.	1.4	61
6	Analysis and Design of the Classical CMOS Schmitt Trigger in Subthreshold Operation. IEEE Transactions on Circuits and Systems I: Regular Papers, 2017, 64, 869-878.	5.4	46
7	A compact model of MOSFET mismatch for circuit design. IEEE Journal of Solid-State Circuits, 2005, 40, 1649-1657.	5.4	43
8	On the Minimum Supply Voltage for MOSFET Oscillators. IEEE Transactions on Circuits and Systems I: Regular Papers, 2014, 61, 347-357.	5.4	39
9	Analysis of the Rectifier Circuit Valid Down to Its Low-Voltage Limit. IEEE Transactions on Circuits and Systems I: Regular Papers, 2012, 59, 106-112.	5.4	36
10	MOSFET threshold voltage: Definition, extraction, and some applications. Microelectronics Journal, 2012, 43, 329-336.	2.0	32
11	Digitally programmable switched-current FIR filter for low-voltage applications. IEEE Journal of Solid-State Circuits, 2000, 35, 637-641.	5.4	29
12	Maximizing the Power Conversion Efficiency of Ultra-Low-Voltage CMOS Multi-Stage Rectifiers. IEEE Transactions on Circuits and Systems I: Regular Papers, 2015, 62, 967-975.	5.4	29
13	The Advanced Compact MOSFET (ACM) Model for Circuit Analysis and Design. , 2007, , .		27
14	Ultra-Low-Voltage Operation of CMOS Analog Circuits: Amplifiers, Oscillators, and Rectifiers. IEEE Transactions on Circuits and Systems II: Express Briefs, 2012, 59, 932-936.	3.0	27
15	A 7.5-mV-Input Boost Converter for Thermal Energy Harvesting With 11-mV Self-Startup. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 1379-1383.	3.0	25
16	Resizing rules for MOS analog-design reuse. IEEE Design and Test of Computers, 2002, 19, 50-58.	1.0	23
17	Ultra-low voltage CMOS logic circuits. , 2014, , .		19
18	Derivation of the unified charge control model and parameter extraction procedure. Solid-State Electronics, 1999, 43, 481-485.	1.4	18

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19	Direct determination of threshold condition in DG-MOSFETs from the g/I curve. Solid-State Electronics, 2011, 56, 89-94.	1.4	18
20	A very-low-cost dosimeter based on the off-the-shelf CD4007 MOSFET array for inÂvivo radiotherapy applications. Radiation Measurements, 2015, 75, 53-63.	1.4	16
21	Digitally programmable V-I converter for application in MOSFET-C filters. Electronics Letters, 1995, 31, 1526-1527.	1.0	15
22	Temperature performance of sub-1V ultra-low power current sources. , 2008, , .		15
23	A high-swing MOS cascode bias circuit. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2000, 47, 1325-1328.	2.2	13
24	MOSFET mismatch modeling: a new approach. IEEE Design and Test of Computers, 2006, 23, 20-29.	1.0	13
25	New CMOS OTA for fully integrated continuous-time circuit applications. Electronics Letters, 1989, 25, 1674.	1.0	12
26	Sound design of low power nested transconductance-capacitance compensation amplifiers. Electronics Letters, 1999, 35, 956.	1.0	11
27	10 mV. , 2014, , .		11
28	An energy harvesting chip designed to extract maximum power from a TEG. , 2016, , .		11
29	Operation of the Classical CMOS Schmitt Trigger As an Ultra-Low-Voltage Amplifier. IEEE Transactions on Circuits and Systems II: Express Briefs, 2018, 65, 1239-1243.	3.0	11
30	Design of very low voltage CMOS rectifier circuits. , 2010, , .		10
31	Sizing of MOS transistors for amplifier design. , 0, , .		9
32	Characterization of MOS transistor current mismatch. , 2004, , .		9
33	CMOS multiplier based on the relationship between drain current and inversion charge. IET Circuits, Devices and Systems, 2009, 3, 239-247.	1.4	9
34	Analysis and design of ultra-low-voltage inductive ring oscillators for energy-harvesting applications. , 2013, , .		9
35	Compatibility of switched capacitor filters with VLSI processes. IEE Proceedings, Part G: Circuits, Devices and Systems, 1992, 139, 413.	0.2	9
36	Linearity of switched capacitor filters employing nonlinear capacitors. , 0, , .		8

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37	MOSFET threshold extraction from voltage-only measurements. Electronics Letters, 1994, 30, 1458-1459.	1.0	8
38	Advanced compact model for short-channel MOS transistors. , 0, , .		8
39	0.7 V supply self-biased nanoWatt MOS-only threshold voltage monitor. , 2015, , .		8
40	Analysis and design of the Dickson charge pump for sub-50 mV energy harvesting. Microelectronics Journal, 2019, 90, 253-259.	2.0	8
41	Low power and low voltage VT extractor circuit and MOSFET radiation dosimeter. , 2012, , .		7
42	A 150nW 32 kHz mobility-compensated relaxation oscillator with +/â^'30ppm/Â°C temperature stability. , 2016, , .		7
43	ISFETs: theory, modeling and chip for characterization. , 2019, , .		7
44	An Accurate Zero-Current-Switching Circuit for Ultra-Low-Voltage Boost Converters. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 1773-1777.	3.0	7
45	Tunable CMOS Pseudo-Resistors for Resistances of Hundreds of GÎ©. IEEE Transactions on Circuits and Systems I: Regular Papers, 2022, 69, 657-667.	5.4	7
46	A simplified methodology for the extraction of the ACM MOST model parameters. , 0, , .		6
47	An M-2M digital-to-analog converter design methodology based on a physical mismatch model. , 2008, , .		6
48	Fully-integrated 86 mV–1V step-up converter for energy harvesting applications. , 2014, , .		6
49	CMOS analog multiplier with high rejection of power supply ripple. , 2018, , .		6
50	Analysis and Design of the Three-Inverter Schmitt Trigger for Supply Voltages Down to 50 mV. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 2302-2306.	3.0	6
51	Resizing rules for the reuse of MOS analog designs. , 0, , .		5
52	A single-piece charge-based model for the output conductance of MOS transistors. , 0, , .		4
53	A low-voltage CMOS class-AB operational amplifier. , 0, , .		4
54	A simple modeling of the early voltage of MOSFETs in weak and moderate inversion. , 2008, , .		4

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55	The compact all-region MOSFET model: theory and applications. , 2018, , .		4
56	A Test Chip for Characterization of the Series Association of MOSFETs. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2019, 27, 1967-1971.	3.1	4
57	Inadequacy of the classical formulation of the CMOS Schmitt trigger. International Journal of Circuit Theory and Applications, 2021, 49, 1261-1273.	2.0	4
58	Switched-MOSFET technique for programmable filters operating at low-voltage supply. , 0, , .		4
59	Bridging the Gap between Design and Simulation of Low-Voltage CMOS Circuits. Journal of Low Power Electronics and Applications, 2022, 12, 34.	2.0	4
60	Explicit formula for harmonic distortion in SC filters with weakly nonlinear capacitors. IET Circuits, Devices and Systems, 1994, 141, 505.	0.6	3
61	Low-voltage class AB operational amplifier. , 0, , .		3
62	A switched-MOSFET filter for application in hearing aid devices. , 0, , .		3
63	Well-driven floating gate transistors. Electronics Letters, 2002, 38, 530.	1.0	3
64	Fully integrated inductive ring oscillators operating at VDD below 2kT/q. Analog Integrated Circuits and Signal Processing, 2015, 82, 5-15.	1.4	3
65	Analysis and design of a fully-integrated Colpitts oscillator operating at ultra-low-voltages. Analog Integrated Circuits and Signal Processing, 2015, 85, 27-36.	1.4	3
66	A CMOS Test Chip With Simple Post-Processing Steps for Dry Characterization of ISFET Arrays. IEEE Sensors Journal, 2021, 21, 4755-4763.	4.7	3
67	Nonlinearities of capacitors realized by MOSFET gates. , 0, , .		2
68	A switched-MOSFET programmable low-voltage filter. , 0, , .		2
69	MOSVIEW: a graphical tool for MOS analog design. , 0, , .		2
70	Fundamentals of next generation compact MOSFET models. , 2005, , .		2
71	Inverter-Based Switched Current Circuit for Very Low-Voltage and Low-Power Applications. , 0, , .		2
72	Transconductance-based CMOS analog multiplier. , 2008, , .		2

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73	Design-oriented model for nonlinearities in MOSFETs. , 2008, , .		2
74	Teaching low voltage electronics: The case of the rectifier circuit. , 2011, , .		2
75	A MOSFET dosimeter built on an off-the-shelf component for in vivo radiotherapy applications. , 2014, , .		2
76	Design of a fully integrated colpitts oscillator operating at V<inf>DD</inf> below 4kT/q. , 2014, , .		2
77	Short startup, batteryless, selfâ€starting thermal energy harvesting chip working in full clock cycle. IET Circuits, Devices and Systems, 2017, 11, 521-528.	1.4	2
78	Design and testing of a CMOS Self-Biased Current Source. , 2019, , .		2
79	A new formulation of the early effect in epitaxial bipolar transistors. Solid-State Electronics, 1984, 27, 519-525.	1.4	1
80	A compact charge-based MOSFET model for circuit simulation. , 0, , .		1
81	Optimum design of MOS amplifiers. , 0, , .		1
82	Scaling rules allow the reuse of MOS analog design. , 0, , .		1
83	Fundamentals of Next Generation Compact MOSFET Models. , 2005, , .		1
84	A test chip for automatic MOSFET mismatch characterization. , 2006, , .		1
85	Fundamentals, Computer Implementation and Applications of the Advanced Compact MOSFET (ACM) Model. ECS Transactions, 2007, 9, 333-342.	0.5	1
86	A low-cost microcontrolled dosimeter based on CD4007 devices for in vivo radiotherapy applications. , 2016, , .		1
87	Efficient, 50ÂmV startup, with transient settling time <5Âms, energy harvesting system for thermoelectric generator. Electronics Letters, 2016, 52, 646-648.	1.0	1
88	Validation of 19-items wearing-off (WOQ-19) questionnaire to Portuguese. Arquivos De Neuro-Psiquiatria, 2020, 78, 624-628.	0.8	1
89	Bridging the gap between design and simulation of low voltage CMOS circuits. , 2021, , .		1
90	A new formulation of the early effect in lateral PNP transistors. Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics, 1985, 129, 327-331.	0.9	0

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91	On the implementation of switched capacitor circuits in gate arrays. , 0, , .		0
92	Advanced compact model for the charges and capacitances of short-channel MOS transistors. , 0, , .		0
93	Addition to "Digitally programmable switched-current FIR filter for low-voltage applications". IEEE Journal of Solid-State Circuits, 2001, 36, 160-160.	5.4	0
94	MOSFET model with a small set of parameters for electronic engineering education. , 0, , .		0
95	Comments on "Inversion charge modeling". IEEE Transactions on Electron Devices, 2002, 49, 1842-1843.	3.0	0
96	Switched inverter Â¿ A new technique for sample data low-voltage and low-power applications. , 2007, , .		0
97	Overview of MOSFET models and parameter extraction for design. , 0, , 452-482.		0
98	Design of a low power CMOS class-D amplifier for hearing aids. , 2010, , .		0