Andries J Scholten

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8072615/publications.pdf

Version: 2024-02-01

42	496	1051969 10	889612 19
papers	citations	h-index	g-index

44	44	44	443
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Improved Compact Modeling of SiGe HBT Linearity With MEXTRAM. IEEE Transactions on Electron Devices, 2021, 68, 2597-2603.	1.6	2
2	A Compact Statistical Model for the Low-Frequency Noise in Halo-Implanted MOSFETs: Large RTN Induced by Halo Implants. IEEE Transactions on Electron Devices, 2019, 66, 3521-3526.	1.6	4
3	PSPHV: A Surface-Potential-Based Model for LDMOS Transistors. IEEE Transactions on Electron Devices, 2019, 66, 5246-5253.	1.6	8
4	Improved Modeling of LDMOS with Non-Uniform Lateral Channel Doping. , 2019, , .		4
5	Foreword Special Issue on Compact Modeling for Circuit Design. IEEE Transactions on Electron Devices, 2019, 66, 7-11.	1.6	0
6	(Invited) Physics and Compact Modeling of SiGe HBT Linearity Using Mextram. ECS Transactions, 2018, 86, 145-154.	0.3	3
7	New physical insight for analog application in PSP bulk compact model. , 2018, , .		4
8	SiGe HBT PA Design for 5G (28 GHz and Beyond) - Modeling and Design Challenges. , 2018, , .		4
9	A Compact Model for the Statistics of the Low-Frequency Noise of MOSFETs With Laterally Uniform Doping. IEEE Transactions on Electron Devices, 2017, 64, 3331-3336.	1.6	6
10	A variability-based analysis technique revealing physical mechanisms of MOSFET low-frequency noise. , 2017, , .		0
11	Autocorrelation Analysis as a Technique to Study Physical Mechanisms of MOSFET Low-Frequency Noise. IEEE Transactions on Electron Devices, 2017, 64, 2919-2926.	1.6	8
12	A Physics-Based Statistical RTN Model for the Low Frequency Noise in MOSFETs. IEEE Transactions on Electron Devices, 2016, 63, 3683-3692.	1.6	29
13	Reliability Simulation Models for Hot Carrier Degradation. , 2015, , 477-517.		4
14	Best Practices for Compact Modeling in Verilog-A. IEEE Journal of the Electron Devices Society, 2015, 3, 383-396.	1.2	68
15	A physics-based RTN variability model for MOSFETs. , 2014, , .		16
16	Identifying failure mechanisms in LDMOS transistors by analytical stability analysis. , 2014, , .		2
17	RF-Noise Modeling in Advanced CMOS Technologies. IEEE Transactions on Electron Devices, 2014, 61, 245-254.	1.6	40
18	Comparison of electrical techniques for temperature evaluation in power MOS transistors. , 2013, , .		6

#	Article	IF	Citations
19	The safe operating volume as a general measure for the operating limits of LDMOS transistors. , 2013, , .		2
20	Threshold behavior of the drift region: The missing piece in LDMOS modeling. , 2013, , .		9
21	Temperature and geometry dependence of the electrothermal instability of bipolar transistors. , 2012, , .		4
22	Fast noise prediction for process optimization using only standard DC and S-parameter measurements. , 2012, , .		2
23	The Relation Between Degradation Under DC and RF Stress Conditions. IEEE Transactions on Electron Devices, 2011, 58, 2721-2728.	1.6	32
24	Simultaneous extraction of threshold voltage and mobility degradation from on-the-fly NBTI measurements. , 2011, , .		3
25	Experimental Demonstration and Modeling of Excess RF Noise in Sub-100-nm CMOS Technologies. IEEE Electron Device Letters, 2010, 31, 884-886.	2.2	11
26	Surface-Potential-Based Compact Model of Bulk MOSFET. , 2010, , 3-40.		16
27	The JUNCAP2 Model for Junction Diodes. , 2010, , 299-326.		5
28	Benchmark Tests for MOSFET Compact Models. , 2010, , 75-104.		6
29	Surface-potential-based MOSFET models with introduction to PSP (invited). , 2009, , .		14
30	Benchmark Tests for MOSFET Compact Models With Application to the PSP Model. IEEE Transactions on Electron Devices, 2009, 56, 243-251.	1.6	35
31	PSP-SOI: An advanced surface potential based compact model of partially depleted SOI MOSFETs for circuit simulations. Solid-State Electronics, 2009, 53, 18-29.	0.8	20
32	Impact of interface states on MOS transistor mismatch. , 2009, , .		17
33	The New CMC Standard Compact MOS Model PSP: Advantages for RF Applications. IEEE Journal of Solid-State Circuits, 2009, 44, 1415-1424.	3.5	23
34	Compact Modeling of Junction Current in Dynamically Depleted SOI MOSFETs. IEEE Transactions on Electron Devices, 2008, 55, 3295-3298.	1.6	10
35	A PSP-Based Small-Signal MOSFET Model for Both Quasi-Static and Nonquasi-Static Operations. IEEE Transactions on Electron Devices, 2008, 55, 1424-1432.	1.6	10
36	Benchmarking the PSP Compact Model for MOS Transistors. , 2007, , .		15

#	Article	IF	Citations
37	A Compact Model for Valence-Band Electron Tunneling Current in Partially Depleted SOI MOSFETs. IEEE Transactions on Electron Devices, 2007, 54, 316-322.	1.6	13
38	Implementation of plug-and-play ESD protection in 5.5GHz 90nm RF CMOS LNAsâ€"Concepts, constraints and solutions. Microelectronics Reliability, 2006, 46, 702-712.	0.9	1
39	Modeling and characterization of noise in 90-nm RF CMOS technology. AIP Conference Proceedings, 2005, , .	0.3	4
40	ESD protection for a 5.5 GHz LNA in 90 nm RF CMOS — Implementation concepts, constraints and solutions. , 2004, , .		12
41	Compact modeling of noise for RF CMOS circuit simulation. , 2003, , .		2
42	SPECTROSCOPIC STUDY OF CHLOROPHYLL a IN ORGANIC SOLVENTS AND POLYMERIZED ANHYDROUS POLYVINYL MATRIX. Photochemistry and Photobiology, 1993, 58, 600-606.	1.3	19