

Pieter Rombouts

List of Publications by Year in descending order

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1,133
citations

430874

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89
docs citations

89
times ranked

625
citing authors

#	ARTICLE	IF	CITATIONS
1	A Closed-Loop Digitally Controlled MEMS Gyroscope With Unconstrained Sigma-Delta Force-Feedback. IEEE Sensors Journal, 2009, 9, 297-305.	4.7	109
2	A 13.5-b 1.2-V micropower extended counting A/D converter. IEEE Journal of Solid-State Circuits, 2001, 36, 176-183.	5.4	86
3	Highly linear VCO for use in VCO-ADCs. Electronics Letters, 2016, 52, 268-270.	1.0	57
4	A Pulse Frequency Modulation Interpretation of VCOs Enabling VCO-ADC Architectures With Extended Noise Shaping. IEEE Transactions on Circuits and Systems I: Regular Papers, 2018, 65, 444-457.	5.4	51
5	A Mostly Digital VCO-Based CT-SDM With Third-Order Noise Shaping. IEEE Journal of Solid-State Circuits, 2017, 52, 2141-2153.	5.4	50
6	Multirate Cascaded Discrete-Time Low-Pass $\Sigma\Delta$ Modulator for GSM/Bluetooth/UMTS. IEEE Journal of Solid-State Circuits, 2010, 45, 1198-1208.	5.4	43
7	Time-Encoding Analog-to-Digital Converters: Bridging the Analog Gap to Advanced Digital CMOS-Part 1: Basic Principles. IEEE Solid-State Circuits Magazine, 2020, 12, 47-55.	0.4	41
8	A Double-Sampling Extended-Counting ADC. IEEE Journal of Solid-State Circuits, 2004, 39, 411-418.	5.4	40
9	Web-Based Trainer for Electrical Circuit Analysis. IEEE Transactions on Education, 2009, 52, 185-189.	2.4	38
10	Controlled behaviour of STF in CT modulators. Electronics Letters, 2005, 41, 896.	1.0	37
11	An Unconstrained Architecture for Systematic Design of Higher Order $\Sigma\Delta$ Force-Feedback Loops. IEEE Transactions on Circuits and Systems I: Regular Papers, 2008, 55, 1601-1614.	5.4	30
12	Calibration of DAC Mismatch Errors in $\Sigma\Delta$ ADCs Based on a Sine-Wave Measurement. IEEE Transactions on Circuits and Systems II: Express Briefs, 2013, 60, 567-571.	3.0	30
13	An approach to tackle quantization noise folding in double-sampling $\Sigma\Delta$ modulation A/D converters. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2003, 50, 157-163.	2.2	25
14	In-line monitoring of compaction properties on a rotary tablet press during tablet manufacturing of hot-melt extruded amorphous solid dispersions. International Journal of Pharmaceutics, 2017, 517, 348-358.	5.2	24
15	A 250-khz 94-db double-sampling $\Sigma\Delta$ modulation a/d converter with a modified noise transfer function. IEEE Journal of Solid-State Circuits, 2003, 38, 1657-1662.	5.4	23
16	Downstream processing from hot-melt extrusion towards tablets: A quality by design approach. International Journal of Pharmaceutics, 2017, 531, 235-245.	5.2	20
17	The Analog Behavior of Pseudo Digital Ring Oscillators Used in VCO ADCs. IEEE Transactions on Circuits and Systems I: Regular Papers, 2021, 68, 2827-2840.	5.4	20
18	A 5-MHz 11-Bit Self-Oscillating $\Sigma\Delta$ Modulator With a Delay-Based Phase Shifter in 0.025 mm ² . IEEE Journal of Solid-State Circuits, 2011, 46, 1919-1927.	5.4	19

#	ARTICLE	IF	CITATIONS
19	Mismatch Insensitive Double-Sampling Quadrature Bandpass $\Sigma\Delta$ Modulation. IEEE Transactions on Circuits and Systems I: Regular Papers, 2007, 54, 2599-2607.	5.4	18
20	A 25 Gb/s All-Digital Clock and Data Recovery Circuit for Burst-Mode Applications in PONs. Journal of Lightwave Technology, 2018, 36, 1503-1509.	4.6	17
21	Design of double-sampling $\Sigma\Delta$ modulation A/D converters with bilinear integrators. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2005, 52, 715-722.	0.1	16
22	Enhanced circuit for linear ring VCO-based ADCs. Electronics Letters, 2019, 55, 583-585.	1.0	16
23	A study of dynamic element-matching techniques for 3-level unit elements. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2000, 47, 1177-1187.	2.2	15
24	Time-Encoding Analog-to-Digital Converters: Bridging the Analog Gap to Advanced Digital CMOS? Part 2: Architectures and Circuits. IEEE Solid-State Circuits Magazine, 2020, 12, 18-27.	0.4	15
25	Quadrature Mismatch Shaping for Digital-to-Analog Converters. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2006, 53, 2529-2538.	0.1	14
26	A 1.8-pJ/b, 12.5-Gb/s Wide Range All-Digital Clock and Data Recovery Circuit. IEEE Journal of Solid-State Circuits, 2018, 53, 470-483.	5.4	14
27	Why and How VCO-based ADCs can improve instrumentation applications. , 2018, , .		14
28	Linearity improvement for the switched-capacitor DAC. Electronics Letters, 1996, 32, 293.	1.0	13
29	The Nyquist Criterion: A Useful Tool for the Robust Design of Continuous-Time $\Sigma\Delta$ Modulators. IEEE Transactions on Circuits and Systems II: Express Briefs, 2010, 57, 416-420.	3.0	13
30	Validation of Symbolic Expressions in Circuit Analysis E-Learning. IEEE Transactions on Education, 2011, 54, 564-568.	2.4	13
31	True high-order VCO-based ADC. Electronics Letters, 2015, 51, 23-25.	1.0	13
32	A digital error-averaging technique for pipelined A/D conversion. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 1998, 45, 1321-1323.	2.2	11
33	A Rigorous Approach to the Robust Design of Continuous-Time $\Sigma\Delta$ Modulators. IEEE Transactions on Circuits and Systems I: Regular Papers, 2011, 58, 2829-2837.	5.4	11
34	Systematic Design of Double-Sampling $\Sigma\Delta$ A/D Converters With a Modified Noise Transfer Function. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2004, 51, 675-679.	2.2	10
35	Influence of Jitter on Limit Cycles in Bang-Bang Clock and Data Recovery Circuits. IEEE Transactions on Circuits and Systems I: Regular Papers, 2015, 62, 1463-1471.	5.4	10
36	An On-Line Calibration Technique for Mismatch Errors in High-Speed DACs. IEEE Transactions on Circuits and Systems I: Regular Papers, 2008, 55, 1873-1883.	5.4	8

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37	Analyzing the Effect of Clock Jitter on Self-Oscillating Sigma Delta Modulators. IEEE Transactions on Circuits and Systems I: Regular Papers, 2016, 63, 200-210.	5.4	8
38	Passive Loop Filter Assistance for CTSDMs. IEEE Transactions on Circuits and Systems II: Express Briefs, 2017, 64, 1157-1161.	3.0	8
39	A versatile Nyquist-rate A/D converter with 16-bit performance for sensor readout applications. The Integration VLSI Journal, 2005, 39, 48-61.	2.1	7
40	Improved design method for continuous-time quadrature bandpass ADCs. Electronics Letters, 2005, 41, 461.	1.0	7
41	Simple quadrature oscillator for BIST. Electronics Letters, 2010, 46, 271.	1.0	7
42	Folded-cascode amplifier with efficient feedforward gain-boosting. Electronics Letters, 2010, 46, 1425.	1.0	7
43	Continuous time modulation with PWM pre-coding and binary gm blocks. Electronics Letters, 2012, 48, 1187.	1.0	7
44	Method for electric field and potential calculations in Hall plates. Electronics Letters, 2013, 49, 33-34.	1.0	7
45	The Truth About 2-Level Transition Elimination in Bang-Bang PAM-4 CDRs. IEEE Transactions on Circuits and Systems I: Regular Papers, 2021, 68, 469-482.	5.4	7
46	A 40MHz 12bit 84.2dB-SFDR continuous-time delta-sigma modulator in 90nm CMOS. , 2011, , .		6
47	A very compact 1MS/s Nyquist-rate A/D-converter with 12 effective bits. , 2012, , .		6
48	Analytical Expressions for the Distortion of Asynchronous Sigma-Delta Modulators. IEEE Transactions on Circuits and Systems II: Express Briefs, 2013, 60, 472-476.	3.0	6
49	Inverse Alexander phase detector. Electronics Letters, 2016, 52, 1908-1910.	1.0	6
50	A Describing Function Study of Saturated Quantization and Its Application to the Stability Analysis of Multi-Bit Sigma Delta Modulators. IEEE Transactions on Circuits and Systems I: Regular Papers, 2013, 60, 1740-1752.	5.4	5
51	A Low-Noise Instrumentation Amplifier With Built-in Anti-Aliasing for Hall Sensors. IEEE Sensors Journal, 2021, 21, 18932-18944.	4.7	5
52	Methodology for Readout and Ring Oscillator Optimization Toward Energy-Efficient VCO-Based ADCs. IEEE Transactions on Circuits and Systems I: Regular Papers, 2022, 69, 985-998.	5.4	5
53	Nyquist criterion based design of continuous time \hat{L}^p modulators. , 0, , .		4
54	Quadrature mismatch shaping with a complex, tree structured DAC. , 0, , .		4

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55	Design of a low-voltage op-amp-less ASDM to linearise VCO-ADC. Electronics Letters, 2016, 52, 911-913.	1.0	4
56	Synthesis of Sigma Delta Modulators Employing Continuous Time Delays. , 0, , .		3
57	£Δ ADC Design Considerations for an UMTS Receiver. , 2006, , .		3
58	A 8mW 72dB Î-modulator ADC with 2.4MHz BW in 130nm CMOS. Analog Integrated Circuits and Signal Processing, 2012, 72, 541-548.	1.4	3
59	A selectable-bandwidth 3.5 mW, 0.03mm ² self-oscillating Sigma Delta modulator with 71 dB dynamic range at 5MHz and 65 dB at 10MHz bandwidth. Analog Integrated Circuits and Signal Processing, 2012, 72, 55-63.	1.4	3
60	Low-Pass Filtering SC-DAC for Reduced Jitter and Slewing Requirements on CTSDMs. IEEE Transactions on Circuits and Systems I: Regular Papers, 2019, 66, 1369-1381.	5.4	3
61	Digital bilinear feedback for low-power double-sampling sigma-delta modulators. Electronics Letters, 2015, 51, 27-29.	1.0	2
62	Automatic detection of oesophageal intubation based on ventilation pressure waveforms shows high sensitivity and specificity in patients with pulmonary disease. Resuscitation, 2016, 105, 36-40.	3.0	2
63	Toward "digital" analogue-to-digital converters. Electronics Letters, 2019, 55, 568-569.	1.0	2
64	Addressing static and dynamic errors in bandpass unit element multibit DAC's. , 0, , .		1
65	Systematic design of double-sampling Î ADC's with modified NTF. , 0, , .		1
66	STF behaviour in a CT Î modulator. , 2005, , .		1
67	Nyquist-criterion based design of a CT Î-ADC with a reduced number of comparators. , 2006, , .		1
68	Quadrature Mismatch Shaping with a Complex, Data Directed Swapper. , 2006, , .		1
69	A Simple On-Chip Repetitive Sampling Setup for the Quantification of Substrate Noise. IEEE Journal of Solid-State Circuits, 2006, 41, 1062-1072.	5.4	1
70	Design and implementation of a band-pass sigma delta modulator with distributed resonators. Analog Integrated Circuits and Signal Processing, 2009, 58, 243-253.	1.4	1
71	A dual-mass capacitive-readout accelerometer operated near pull-in. , 2010, , .		1
72	Comments on "Performance Analysis of a Hybrid Incremental and Cyclic A/D Conversion Principle. IEEE Transactions on Circuits and Systems I: Regular Papers, 2010, 57, 1395-1395.	5.4	1

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73	Experimental results on PWM linearization of a VCO-ADC with 3rd order noise shaping. , 2018, , .		1
74	Optimal NTF zero placement in MASH VCO-ADCs with higher order noise shaping. , 2018, , .		1
75	Efficient Offline Outer/Inner DAC Mismatch Calibration in Wideband $\Sigma\Delta$ ADCs. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 4259-4269.	5.4	1
76	Corrections to "A comment on 'interstage gain proration technique for digital-domain multi-step adc calibration". IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 1999, 46, 1449-1449.	2.2	0
77	Corrections to "A comment on 'interstage gain proration technique for digital-domain multi-step adc calibration". IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 1999, 46, 1-1.	2.2	0
78	Improved DAC driving scheme for OFDM applications. Electronics Letters, 2010, 46, 1103.	1.0	0
79	A one-path subsampling quadrature receiver based on a $\Sigma\Delta$ modulator with distributed resonators. Analog Integrated Circuits and Signal Processing, 2011, 68, 233-243.	1.4	0
80	A virtually floating dual-mass accelerometer. Sensors and Actuators A: Physical, 2013, 194, 140-148.	4.1	0
81	A 40MHz-BW 12-bit continuous-time $\Sigma\Delta$ modulator with digital calibration and 84.2dB-SFDR in 90nm CMOS. Analog Integrated Circuits and Signal Processing, 2015, 84, 137-148.	1.4	0
82	A combined hall and stress sensor for highly accurate magnetic field sensing free from the piezo-Hall effect. , 2015, , .		0
83	A 25 Gb/s All-Digital Clock and Data Recovery Circuit for Burst Mode Applications in PONs. , 2017, , .		0
84	VCO-ADCs with a Quadrature Band-Pass Noise-Transfer-Function. , 2019, , .		0
85	A Current-Mode Floating-Bridge Technique for Closed-Loop $\Sigma\Delta$ Readout of Wheatstone Bridge Sensors. , 2019, , .		0
86	Condition monitoring of laminated composite sliding bearings using embedded capacitors. Smart Materials and Structures, 2012, 21, 105022.	3.5	0