ConcepciÃ³n Aldea

List of Publications by Year
in descending order

104 papers	546 citations	840585 11 h-index	794469 19 g-index
106 all docs	106 docs citations	106 times ranked	395 citing authors

#	Article	IF	Citations
1	Chaos-Based Bitwise Dynamical Pseudorandom Number Generator On FPGA. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 291-293.	2.4	76
2	Variable frequency sinusoidal oscillators based on CCII/sup +/. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 1999, 46, 1386-1390.	0.1	52
3	Grounded resistor controlled sinusoidal oscillator using CFOAs. Electronics Letters, 1997, 33, 346.	0.5	38
4	Four-layer chemical fibre optic plasmon-based sensor. Sensors and Actuators B: Chemical, 1992, 7, 771-774.	4.0	24
5	Cost-Effective 1.25-Gb/s CMOS Receiver for 50-m Large-Core SI-POF Links. IEEE Photonics Technology Letters, 2012, 24, 485-487.	1.3	15
6	CMOS transimpedance amplifier with controllable gain for RF overlay. , 2016, , .		15
7	Continuousâ€time filter featuring Q and frequency onâ€chip automatic tuning. International Journal of Circuit Theory and Applications, 2009, 37, 221-242.	1.3	13
8	Radio over Fiber: An Alternative Broadband Network Technology for IoT. Electronics (Switzerland), 2020, 9, 1785.	1.8	13
9	Reliable CMOS adaptive equalizer for short-haul optical networks. Microelectronics Reliability, 2014, 54, 110-118.	0.9	12
10	A Highly Linear Low-Noise Transimpedance Amplifier for Indoor Fiber-Wireless Remote Antenna Units. Electronics (Switzerland), 2019, 8, 437.	1.8	12
11	Industrial process sensor based on surface plasmon resonance (SPR) 1. Distillation process monitoring. Sensors and Actuators A: Physical, 1993, 37-38, 221-225.	2.0	11
12	Lowâ€voltage lowâ€power CMOS receiver frontâ€end for gigabit shortâ€reach optical communications. International Journal of Circuit Theory and Applications, 2013, 41, 1175-1187.	1.3	11
13	New Multilevel Bang-Bang Phase Detector. IEEE Transactions on Instrumentation and Measurement, 2013, 62, 3384-3386.	2.4	11
14	A Low-Power CMOS Receiver for 1.25 Gb/s Over 1- mm SI-POF Links. IEEE Transactions on Industrial Electronics, 2014, 61, 4246-4254.	5.2	11
15	A physics based model for accumulation MOS capacitors. Solid-State Electronics, 2004, 48, 773-779.	0.8	9
16	Digitally programmable CMOS transconductor for very high frequency. Microelectronics Reliability, 2004, 44, 869-875.	0.9	9
17	A 1.7-GHz wide-band CMOS LC-VCO with 7-Bit coarse control. , 2015, , .		9
18	A 1-V 1.25-Gbps CMOS analog front-end for short reach optical links. , 2013, , .		8

#	Article	IF	Citations
19	Continuous-Time Linear Equalizer for Multigigabit Transmission Through SI-POF in Factory Area Networks. IEEE Transactions on Industrial Electronics, 2015, 62, 6530-6532.	5.2	8
20	A 40–200 MHz programmable 4th-order G<inf>m</inf>-C filter with auto-tuning system. Solid-State Circuits Conference, 2008 ESSCIRC 2008 34th European, 2007, , .	0.0	7
21	A CMOS continuous-time equalizer for short-reach optical communications. , 2011, , .		7
22	High-resolution wide-band LC-VCO for reliable operation in phase-locked loops. Microelectronics Reliability, 2016, 63, 251-255.	0.9	7
23	Multi-Rate Adaptive Equalizer for Transmission Over Up to 50-m SI-POF. IEEE Photonics Technology Letters, 2017, 29, 587-590.	1.3	7
24	Programmable Low-Power Low-Noise Capacitance to Voltage Converter for MEMS Accelerometers. Sensors, 2017, 17, 67.	2.1	7
25	A technique for high frequency low distortion measurements. , 0, , .		6
26	Video-frequency current-voltage mode integrator. Electronics Letters, 1999, 35, 773.	0.5	6
27	A Design Strategy for VHF Filters with Digital Programmability. , 0, , .		6
28	Digitally Programmable Analogue Circuits for Sensor Conditioning Systems. Sensors, 2009, 9, 3652-3665.	2.1	6
29	1â€V continuousâ€time equalizers for multiâ€gigabit shortâ€haul optical fiber communications. International Journal of Circuit Theory and Applications, 2014, 42, 146-164.	1.3	6
30	A 1 Gbps Chaos-Based Stream Cipher Implemented in 0.18 Î¼m CMOS Technology. Electronics (Switzerland), 2019, 8, 623.	1.8	6
31	Low-Voltage Differentiator for VHF Filtering. Analog Integrated Circuits and Signal Processing, 2002, 33, 107-116.	0.9	5
32	A 62 dB dynamic range sixth-order band pass filter with 100-175 MHz tuning range. , 0, , .		5
33	CMOS filter with wide digitally programmable VHF range. Electronics Letters, 2007, 43, 21.	0.5	5
34	A fully-differential adaptive equalizer using the spectrum-balancing technique. , 2013, , .		5
35	A 2.5-Gb/s multi-rate continuous-time adaptive equalizer for short reach optical links. , 2015, , .		5
36	Using the Wiimote to Learn MEMS in a Physics Degree Program. IEEE Transactions on Education, 2016, 59, 169-174.	2.0	5

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37	A New Technique For Improving the Security of Chaos Based Cryptosystems. , 2018, , .		5
38	Using hyperdata in a laboratory of electronics QR codes applied to experimental learning. , 2018, , .		5
39	A 0.18 Âm CMOS 3rd-Order Digitally Programmable Gm-C Filter for VHF Applications. IEICE Transactions on Information and Systems, 2005, E88-D, 1509-1510.	0.4	5
40	A 2.5 Gb/s low-voltage CMOS fully-differential adaptive equalizer. , 2013, , .		4
41	Single-Chip Receiver for 1.25 Gb/s Over 50-m SI-POF. IEEE Photonics Technology Letters, 2015, 27, 1220-1223.	1.3	4
42	Transimpedance amplifier with programmable gain and bandwidth for capacitive MEMS accelerometers. , 2017, , .		4
43	Model-based teaching of physics in higher education: a review of educational strategies and cognitive improvements. Journal of Applied Research in Higher Education, 2020, 13, 33-47.	1.1	4
44	Modeling of accumulation MOS capacitors for high performance analog circuits. , 0, , .		3
45	Low-voltage CMOS variable preamplifier for fiber-based gigabit ethernet. , 2007, , .		3
46	Highly-linear transimpedance amplifier for remote antenna units. , 2018, , .		3
47	Low-EVM CMOS Transimpedance Amplifier for Intermediate Frequency over Fiber. , 2018, , .		3
48	CMOS pseudo-differential transconductor for VHF applications. Electronics Letters, 1999, 35, 1540.	0.5	2
49	Pseudo-differential integrator for UHF applications in digital CMOS technologies. , 0, , .		2
50	Fast-Settling Envelope Detectors. , 2006, , .		2
51	0.18Î¼m CMOS inductorless AGC amplifier with 50dB input dynamic range for 10GBase-LX4 ethernet. , 2009, , .		2
52	A 1-V CMOS receiver front-end for high-speed SI-POF links. , 2012, , .		2
53	Multi-gigabit analog equalizers for plastic opticalfibers. Microelectronics Journal, 2013, 44, 870-879.	1.1	2
54	Bang-bang phase detector model revisited. , 2013, , .		2

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55	CMOS receiver with equalizer and CDR for short-reach optical communications. , 2013, , .		2
56	Fully-differential transimpedance amplifier for reliable wireless communications. Microelectronics Reliability, 2018, 83, 25-28.	0.9	2
57	A New Lightweight CSPRNG Implemented in a 0.18Î¼m CMOS Technology. , 2019, , .		2
58	A low-voltage high-frequency integrator for CMOS continuous-time current-mode filters. , 0, , .		1
59	Low voltage LC -ladder Gm-C low-pass filters with 42-215 MHz tunable range. , 0, , .		1
60	Digital self-tuning technique for continuous-time filters. , 2005, , .		1
61	Digital Auto-Tuning System for Analog Filters. , 2006, , .		1
62	Design of a High-performance Envelope Detector. , 2006, , .		1
63	VHF Filtering with Digital Programmability and Accumulation MOS-C. Midwest Symposium on Circuits and Systems, 2006, , .	1.0	1
64	A hybrid fine/coarse auto-tuning scheme for digitally programmable VHF G<inf>m</inf>-C filters. Midwest Symposium on Circuits and Systems, 2007, , .	1.0	1
65	Continuous-Time Analog Filtering: Design Strategies and Programmability in CMOS Technologies for VHF Applications. , 2010, , .		1
66	A CMOS equalizer for short-reach optical communications. , 2011, , .		1
67	A 1-V CMOS front-end for high-speed 1-mm SI-POF links. , 2012, , .		1
68	Design considerations for loop filters in continuous-time adaptive equalizers. , 2014, , .		1
69	A 1-V CMOS double loop continuous-time adaptive equalizer for short-haul optical networks. , 2014, , .		1
70	Applets for Physical Electronics learning. , 2014, , .		1
71	A phaseâ€space model to describe bangâ€bang phase detectors. International Journal of Circuit Theory and Applications, 2015, 43, 829-839.	1.3	1
72	1-V continuous-time linear equalizer for up to 2 Gb/s over 50-m SI-POF. , 2015, , .		1

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73	Design of a CMOS multiâ€rate adaptive continuousâ€time equalizer based on power spectrum estimation. International Journal of Circuit Theory and Applications, 2017, 45, 2226-2242.	1.3	1
74	Programmable differential capacitance-to-voltage converter for MEMS accelerometers. Proceedings of SPIE, 2017, , .	0.8	1
75	A methodology to design continuousâ€time adaptive equalizers. International Journal of Circuit Theory and Applications, 2017, 45, 1203-1217.	1.3	1
76	ICT-Based Didactic Strategies to Build Knowledge Models in Electronics in Higher Education. , 2019, , .		1
77	High-Sensitivity Large-Area Photodiode Read-Out Using a Divide-and-Conquer Technique. Sensors, 2020, 20, 6316.	2.1	1
78	Noise Reduction Technique using Multiple Photodiodes in Optical Receivers for POF Communications. , 2021, , .		1
79	IntervenciÃ³n en el aula basada en recursos educativos de libre acceso. , 2019, , .		1
80	Approach to the realization of state variable based oscillators. , 0, , .		0
81	Optimized design for the high-swing cascode mirror. , 0, , .		0
82	Continuous time low-pass filter for video frequency applications. , 0, , .		0
83	A 200 MHz MOST-only resonator. , 0, , .		0
84	Continuous-Time 4th Order Butterworth Low-Pass Filter for Video Frequency Applications. Analog Integrated Circuits and Signal Processing, 2001, 28, 35-42.	0.9	0
85	Low voltage VHF biquad section. Electronics Letters, 2002, 38, 1177.	0.5	0
86	Tuning System for CMOS HF Analog Filters. , 0, , .		0
87	Design Techniques for VHF Filtering in Digital CMOS Technologies. , 0, , .		0
88	Continuous-time filter featuring Q and frequency on-chip automatic tuning. , 2007, , .		0
89	A tunable mixed-mode interface circuit for sensor conditioning. , 2008, , .		0
90	Development of remote laboratory experiences in Microelectronics and Intelligent Instrumentation. , 2009, , .		0

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91	A 1.25 Gb/s fully integrated optical receiver for SI-POF applications. , 2013, , .		0
92	A double loop continuous-time adaptive equalizer. , 2014, , .		0
93	Wikisensors: A wiki from students for students. , 2014, , .		0
94	MEMS: From the classroom to the Wii. , 2014, , .		0
95	A new equalizer for 2 Gb/s short-reach SI-POF links. , 2015, , .		0
96	A CMOS merged CDR and continuous-time adaptive equalizer. Proceedings of SPIE, 2015, , .	0.8	0
97	Quick response codes as a complement for the teaching of Electronics in laboratory activities. International Journal of Electrical Engineering and Education, 2020, , 002072092091643.	0.4	0
98	Enhanced eBooks in the teaching/learning process of electronics. , 0, , .		0
99	ElectrÃ³nica enREDada: An experience with a webinar program. , 0, , .		0
100	Uso de Hiperdatos en un Laboratorio de ElectrÃ³nica (CÃ³digos QR) - [Use of Hyperdata in a Laboratory of Electronics (QR Codes)]. , 2017, , .		0
101	WOMEN IN STEM BY EULES: A PROJECT TO PROMOTE SCIENTIFIC VOCATIONS IN GIRLS. , 2018, , .		0
102	Projects to encourage female students in STEM areas. , 0, , .		0
103	USING TWITTER TO PROMOTE THE TEACHING-LEARNING OF SCIENTIFIC DISCIPLINES. , 2019, , .		0
104	OPEN EDUCATIONAL RESOURCES TO IMPLEMENT AN ONLINE TUTORING. , 2019, , .		0