Horst K Zimmermann

List of Publications by Citations

207 papers	1,565 citations	19 h-index	33 g-index
274 ext. papers	1,976 ext. citations	2 avg, IF	4.96 L-index

#	Paper	IF	Citations
207	Zero-bias 40Gbit/s germanium waveguide photodetector on silicon. *Optics Express*, **2012**, 20, 1096-101	3.3	280
206	A Comparator With Reduced Delay Time in 65-nm CMOS for Supply Voltages Down to 0.65 V. *IEEE Transactions on Circuits and Systems II: Express Briefs*, **2009**, 56, 810-814	3.5	66
205	Integrated Silicon Optoelectronics. *Springer Series in Photonics*, **2000**,		57
204	. *IEEE Photonics Technology Letters*, **2013**, 25, 1428-1431	2.2	41
203	A 16$, times $16 Pixel Distance Sensor With In-Pixel Circuitry That Tolerates 150 klx of Ambient Light. *IEEE Journal of Solid-State Circuits*, **2010**, 45, 1345-1353	5.5	39
202	Integrated Silicon Optoelectronics. *Springer Series in Optical Sciences*, **2010**,	0.5	38
201	1.25 Gbit/s Over 50 m Step-Index Plastic Optical Fiber Using a Fully Integrated Optical Receiver With an Integrated Equalizer. *Journal of Lightwave Technology*, **2012**, 30, 118-122	4	37
200	Design and Implementation of an Integrated Reconfigurable Silicon Photonics Switch Matrix in IRIS Project. *IEEE Journal of Selected Topics in Quantum Electronics*, **2016**, 22, 155-168	3.8	33
199	Low-power 10 Gb/s inductorless inverter based common-drain active feedback transimpedance amplifier in 40 nm CMOS. *Analog Integrated Circuits and Signal Processing*, **2013**, 76, 367-376	1.2	32
198	Avalanche Double Photodiode in 40-nm Standard CMOS Technology. *IEEE Journal of Quantum Electronics*, **2013**, 49, 350-356	2	27
197	Integrated fiber optical receiver reducing the gap to the quantum limit. *Scientific Reports*, **2017**, 7, 2652	4.9	26
196	Silicon carrier depletion modulator with 10 Gbit/s driver realized in high-performance photonic BiCMOS. *Laser and Photonics Reviews*, **2014**, 8, 180-187	8.3	25
195	Linear Mode Avalanche Photodiode With High Responsivity Integrated in High-Voltage CMOS. *IEEE Electron Device Letters*, **2014**, 35, 897-899	4.4	25
194	Dynamic Integrated MPP Tracker in 0.35 m CMOS. *IEEE Transactions on Power Electronics*, **2013**, 28, 2886-2894	7.2	24
193	Single-Photon Avalanche Photodiode Based Fiber Optic Receiver for Up to 200 Mb/s. *IEEE Journal of Selected Topics in Quantum Electronics*, **2018**, 24, 1-8	3.8	23
192	A 65nm CMOS comparator with modified latch to achieve 7GHz/1.3mW at 1.2V and 700MHz/47 W at 0.6V **2009**,		23
191	Silicon Optoelectronic Integrated Circuits. *Springer Series in Advanced Microelectronics*, **2004**,	1	22

190	. *IEEE Photonics Technology Letters*, **2015**, 27, 482-485	2.2	21
189	Optical Receiver Using Noise Cancelling With an Integrated Photodiode in 40 nm CMOS Technology. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2013**, 60, 1929-1936	3.9	20
188	. *IEEE Journal of Selected Topics in Quantum Electronics*, **2014**, 20, 391-400	3.8	19
187	Highly Sensitive Optical Receivers. *Springer Series in Advanced Microelectronics*, **2006**,	1	19
186	Integrated BiCMOS p-i-n Photodetectors With High Bandwidth and High Responsivity. *IEEE Journal of Selected Topics in Quantum Electronics*, **2006**, 12, 1469-1475	3.8	18
185	. *IEEE Journal of Solid-State Circuits*, **2016**, 51, 1663-1673	5.5	18
184	PWM-Driven Thermally Tunable Silicon Microring Resonators: Design, Fabrication, and Characterization. *Laser and Photonics Reviews*, **2019**, 13, 1800275	8.3	17
183	Pulse Shape Measurements by On-Chip Sense Amplifiers of Single Event Transients Propagating Through a 90 nm Bulk CMOS Inverter Chain. *IEEE Transactions on Nuclear Science*, **2012**, 59, 2778-2784	1.7	17
182	10Gbit/s 2mW inductorless transimpedance amplifier **2012**,		16
181	A design example of a 65 nm CMOS operational amplifier. *International Journal of Circuit Theory and Applications*, **2007**, 35, 343-354	2	16
180	0.35 □ m CMOS avalanche photodiode with high responsivity and responsivity-bandwidth product. *Optics Letters*, **2014**, 39, 586-9	3	15
179	A 0.18 □ m CMOS transimpedance amplifier with 26 dB dynamic range at 2.5 Gb/s. *Microelectronics Journal*, **2011**, 42, 1136-1142	1.8	14
178	10Gb/s inverter based cascode transimpedance amplifier in 40nm CMOS technology **2013**,		13
177	Real-Time 1.25-Gb/s Transmission Over 50-m SI-POF Using a Green Laser Diode. *IEEE Photonics Technology Letters*, **2012**, 24, 1331-1333	2.2	13
176	$400~mu $ m Diameter APD OEIC in $0.35~mu text{m}$ BiCMOS. *IEEE Photonics Technology Letters*, **2016**, 28, 2004-2007	2.2	13
175	Experimental Investigation of Single-Event Transient Waveforms Depending on Transistor Spacing and Charge Sharing in 65-nm CMOS. *IEEE Transactions on Nuclear Science*, **2017**, 64, 2136-2143	1.7	12
174	Extraneous-light resistant multipixel range sensor based on a low-power correlating pixel-circuit **2009**,		12
173	Integrated Pulsewidth Modulation Control for a Scalable Optical Switch Matrix. *IEEE Photonics Journal*, **2015**, 7, 1-7	1.8	11

172	Linear Mode Avalanche Photodiode With 1-GHz Bandwidth Fabricated in 0.35- $mu $ m CMOS. *IEEE Photonics Technology Letters*, **2014**, 26, 1511-1514	2.2	11
171	Low-Power BiCMOS Optical Receiver With Voltage-Controlled Transimpedance. *IEEE Journal of Solid-State Circuits*, **2007**, 42, 613-626	5.5	11
170	Integrated Reconfigurable Silicon Photonics Switch Matrix in IRIS Project: Technological Achievements and Experimental Results. *Journal of Lightwave Technology*, **2019**, 37, 345-355	4	11
169	A Fully Integrated SPAD-Based CMOS Data-Receiver With a Sensitivity of −34 dBm at 20 Mb/s. *IEEE Solid-State Circuits Letters*, **2018**, 1, 2-5	2	10
168	Automated alignment system for optical wireless communication systems using image recognition. *Optics Letters*, **2014**, 39, 4045-8	3	10
167	Optical Communication over Plastic Optical Fibers. *Springer Series in Optical Sciences*, **2013**,	0.5	10
166	2.5Gbit/s transimpedance amplifier using noise cancelling for optical receivers **2012**,		9
165	Supply Voltage Dependent On-Chip Single-Event Transient Pulse Shape Measurements in 90-nm Bulk CMOS Under Alpha Irradiation. *IEEE Transactions on Nuclear Science*, **2013**, 60, 2640-2646	1.7	9
164	Range finding sensor in 90nm CMOS with bridge correlator based background light suppression **2010**,		9
163	Optical wireless communication using a fully integrated 400 μm diameter APD receiver. *Journal of Engineering*, **2017**, 2017, 506-511	0.7	9
162	APD and SPAD Receivers : Invited Paper **2019**,		8
161	A 3D Photonic-Electronic Integrated Transponder Aggregator With $48times 16$ Heater Control Cells. *IEEE Photonics Technology Letters*, **2018**, 30, 681-684	2.2	8
160	8 Gbits/s inductorless transimpedance amplifier in 90 nm CMOS technology. *Analog Integrated Circuits and Signal Processing*, **2014**, 79, 27-36	1.2	8
159	Nonlinear Current Control for Power Electronic Converters: IC Design Aspects and Implementation. *IEEE Transactions on Power Electronics*, **2013**, 28, 4910-4916	7.2	8
158	Optical Receiver With Widely Tunable Sensitivity in BiCMOS Technology. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2008**, 55, 1223-1236	3.9	8
157	A 0.12□□ m CMOS Comparator Requiring 0.5V at 600MHz and 1.5V at 6GHz **2007**,		8
156	A 78.4 dB Photo-Sensitivity Dynamic Range, 285 T$Omega$Hz Transimpedance Bandwidth Product BiCMOS Optical Sensor for Optical Storage Systems. *IEEE Journal of Solid-State Circuits*, **2011**, 46, 1170-1182	5.5	7
155	OWC using a monolithically integrated 200 μm APD OEIC in 0.35 μm BiCMOS technology. *Optics Express*, **2016**, 24, 918-23	3.3	6

154	Optoelectronic Circuits in Nanometer CMOS Technology. *Springer Series in Advanced Microelectronics*, **2016**,	1	6
153	A Low-Power 4GHz Comparator in 120nm CMOS Technology with a Technique to tune Resolution **2006**,		6
152	Evidence of Pulse Quenching in AND and OR Gates by Experimental Probing of Full Single-Event Transient Waveforms. *IEEE Transactions on Nuclear Science*, **2018**, 65, 382-390	1.7	5
151	Temperature Dependence of Dark Count Rate and After Pulsing of a Single-Photon Avalanche Diode with an Integrated Active Quenching Circuit in 0.35 □ m CMOS. *Journal of Sensors*, **2018**, 2018, 1-7	2	5
150	Investigation of the distance error induced by cycle-to-cycle jitter in a correlating time-of-flight distance measurement system. *Optical Engineering*, **2014**, 53, 073104	1.1	5
149	An integrated optical receiver for 2.5Gbit/s using 4-PAM signaling **2010**,		5
148	High dynamic range background light suppression for a TOF distance measurement sensor in 180nm CMOS **2011**,		5
147	An 85dB dynamic range transimpedance amplifier in 40nm CMOS technology **2011**,		5
146	Efficient four-stage frequency compensation for low-voltage amplifiers **2008**,		5
145	Optical wireless APD receivers in 0.35 μm HV CMOS technology with large detection area. *Optics Express*, **2019**, 27, 11930-11945	3.3	5
144	Ultra-low power low-complexity 3□7.5 GHz IR-UWB transmitter with spectrum tunability. *IET Circuits, Devices and Systems*, **2020**, 14, 521-527	1.1	5
143	Statistical Study of Intrinsic Parasitics in an SPAD-Based Integrated Fiber Optical Receiver. *IEEE Transactions on Electron Devices*, **2019**, 66, 497-504	2.9	5
142	Modeling and Analysis of BER Performance in a SPAD-Based Integrated Fiber Optical Receiver. *IEEE Photonics Journal*, **2018**, 10, 1-11	1.8	5
141	Experimental Investigation of the Joint Influence of Reduced Supply Voltage and Charge Sharing on Single-Event Transient Waveforms in 65-nm Triple-Well CMOS. *IEEE Transactions on Nuclear Science*, **2018**, 65, 1908-1913	1.7	4
140	An infrastructure for accurate characterization of single-event transients in digital circuits. *Microprocessors and Microsystems*, **2013**, 37, 772-791	2.4	4
139	Monolithically integrated optical random pulse generator in high voltage CMOS technology **2015**,		4
138	Improvement of CMOS-Integrated Vertical APDs by Applying Lateral Well Modulation. *IEEE Photonics Technology Letters*, **2015**, 27, 1907-1910	2.2	4
137	Analog Filters in Nanometer CMOS. *Springer Series in Advanced Microelectronics*, **2014**,	1	4

136	Comparator-Controlled Rectification at Monolithic Buck Converters for Higher Input Voltages. *IEEE Transactions on Power Electronics*, **2012**, 27, 628-631	7.2	4
135	A maximum power-point tracker without digital signal processing in 0.35□ m CMOS for automotive applications **2012**,		4
134	An integrated low power buck converter with a comparator controlled low-side switch **2010**,		4
133	A 122 T□Hz transimpedance bandwidth product BiCMOS optical sensor front-end with a 54.7 dB voltage-controlled photo-sensitivity range. *Analog Integrated Circuits and Signal Processing*, **2009**, 61, 19-33	1.2	4
132	Blue-Enhanced PIN Finger Photodiodes in a 0.35-$mu{hbox {m}}$ SiGe BiCMOS Technology. *IEEE Photonics Technology Letters*, **2009**, 21, 1656-1658	2.2	4
131	Continuous-Time Common-Mode Feedback Circuit for Applications with Large Output Swing and High Output Impedance **2008**,		4
130	Performance of high-voltage CMOS single-photon avalanche diodes with and without well-modulation technique. *Optical Engineering*, **2020**, 59, 1	1.1	4
129	10 Gb/s Switchable Binary/PAM-4 Receiver and Ring Modulator Driver for 3-D Optoelectronic Integration. *IEEE Journal of Selected Topics in Quantum Electronics*, **2016**, 22, 344-352	3.8	4
128	Optical and Electrical Characterization and Modeling of Photon Detection Probability in CMOS Single-Photon Avalanche Diodes. *IEEE Sensors Journal*, **2021**, 21, 7572-7580	4	4
127	Visible light communication at 50 Mbit/s using a red LED and an SPAD receiver **2018**,		4
126	A DC-to-8.5 GHz 32 : 1 Analog Multiplexer for On-Chip Continuous-Time Probing of Single-Event Transients in a 65-nm CMOS. *IEEE Transactions on Circuits and Systems II: Express Briefs*, **2017**, 64, 377-381	3.5	3
125	Optoelectronic Circuits in Nanometer CMOS Technology. *Springer Series in Advanced Microelectronics*, **2016**, 217-240	1	3
124	Vertical triple-junction RGB optical sensor with signal processing based on the determination of the space-charge region borders. *Optics Letters*, **2014**, 39, 5042-5	3	3
123	Laser Diode Current Driver With $(1-t/T)^{-1}$ Time Dependence in 0.35- $mutext{m}$ BiCMOS Technology for Quantum Random Number Generators. *IEEE Transactions on Circuits and Systems II: Express Briefs*, **2017**, 64, 510-514	3.5	3
122	On Optimal Latin Hypercube Design for Yield Analysis of Analog Circuits **2015**,		3
121	Highly sensitive 2 Gb/s optoreceiver with CMOS compatible avalanche photodiode **2014**,		3
120	Avalanche photodiode with high responsivity in 0.35□□ m CMOS. *Optical Engineering*, **2014**, 53, 043105	1.1	3
119	pn photodiode in 0.35 - □ m high-voltage CMOS with 1.2-GHz bandwidth. *Optical Engineering*, **2014**, 53, 116114	1.1	3

118	Phototransistor noise model based on noise measurements on PNP PIN phototransistors. *Optical and Quantum Electronics*, **2014**, 46, 1269-1275	2.4	3
117	A background light resistant TOF range finder with integrated PIN photodiode in 0.35□ m CMOS **2013**,		3
116	FPGA based time-of-flight 3D camera characterization system **2013**,		3
115	TOF range finding sensor in 90nm CMOS capable of suppressing 180 klx ambient light **2010**,		3
114	Integrated phototransistors in a CMOS process for optoelectronic integrated circuits **2010**,		3
113	A 2□2 range-finding sensor array with pixel-inherent suppression of ambient light up to 120klx **2009**,		3
112	A 1GHz-GBW operational amplifier for DVB-H receivers in 65nm CMOS **2009**,		3
111	Basics of Optical Emission and Absorption. *Springer Series in Optical Sciences*, **2009**, 1-9	0.5	3
110	Rail-to-rail BiCMOS operational amplifier using input signal adapters with floating outputs. *Analog Integrated Circuits and Signal Processing*, **2010**, 63, 433-449	1.2	3
109	A clocked, regenerative comparator in 0.12□ m CMOS with tunable sensitivity. *Solid-State Circuits Conference, 2008 ESSCIRC 2008 34th European*, **2007**,		3
108	Distance Measurement Line Sensor with PIN Photodiodes **2006**,		3
107	A 3rd-Order 235MHz Low-Pass gmC-Filter in 120nm CMOS **2006**,		3
106	Optimized silicon CMOS reach-through avalanche photodiode with 2.3-GHz bandwidth. *Optical Engineering*, **2017**, 56, 1	1.1	3
105	Comparison of CMOS and BiCMOS optical receiver SoCs **2003**,		3
104	A Nonlinear Average-Current-Controlled Multiphase Boost Converter With Monolithically Integrated Control and Low-Side Power Switches in 0.35- $mu $ m HV CMOS for the Automotive Sector. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2015**, 3, 405-421	5.6	2
103	Area and Power Efficient 3□.8-GHz IR-UWB Transmitter With Spectrum Tunability. *IEEE Microwave and Wireless Components Letters*, **2020**, 30, 39-42	2.6	2
102	A 54.2-dB Current Gain Dynamic Range, 1.78-GHz Gain-Bandwidth Product CMOS VCCA2. *IEEE Transactions on Circuits and Systems II: Express Briefs*, **2019**, 66, 46-50	3.5	2
101	PIN-photodiode based active pixel in 0.35 □ m high-voltage CMOS for optical coherence tomography **2019**,		2

100	CMOS integrated MPP tracker with analog power measurement at the PV converter input. *Analog Integrated Circuits and Signal Processing*, **2014**, 79, 385-393	1.2	2
99	On fully differential and complementary single-stage self-biased CMOS differential amplifiers **2013**,		2
98	Correction of the temperature induced error of the illumination source in a time-of-flight distance measurement setup **2013**,		2
97	Optical wireless monolithically integrated receiver with large-area APD and dc current rejection **2017**,		2
96	Thick detection zone single-photon avalanche diode fabricated in 0.35 □ m complementary metal-oxide semiconductors. *Optical Engineering*, **2015**, 54, 050503	1.1	2
95	Optical wireless receiver circuit with integrated APD and high background-light immunity **2015**,		2
94	Monolithically integrated avalanche photodiode receiver in 0.35 □ m bipolar complementary metal oxide semiconductor. *Optical Engineering*, **2015**, 54, 110502	1.1	2
93	10 Gb/s 4-PAM Ring Modulator Driver **2015**,		2
92	BiCMOS-integrated photodiode exploiting drift enhancement. *Optical Engineering*, **2014**, 53, 087103	1.1	2
91	Analytical analysis of a p-n junction with arbitrary shaped doping profile **2012**,		2
90	Passive mixer with OPA filter for DVB-H front-end in 65nm digital CMOS technology. *Microelectronics Journal*, **2012**, 43, 975-979	1.8	2
89	Time-Of-Flight range finding sensor using an integrated PNP PIN Phototransistor in 180 nm CMOS **2012**,		2
88	Photovoltaic energy harvesting for hybrid/electric vehicles: Topology comparison and optimisation of a discrete power stage for European Efficiency **2012**,		2
87	Correction of a phase dependent error in a time-of-flight range sensor **2013**,		2
86	A BJT translinear loop based optoelectronic integrated circuit with variable transimpedance for optical storage systems. *Analog Integrated Circuits and Signal Processing*, **2011**, 66, 293-298	1.2	2
85	Sunlight-proof optical distance measurements with a dual-line lock-in time-of-flight sensor. *Analog Integrated Circuits and Signal Processing*, **2011**, 68, 59-68	1.2	2
84	A low-voltage complementary metal-oxide semiconductor adapter circuit suitable for input rail-to-rail operation. *International Journal of Electronics*, **2010**, 97, 1283-1309	1.2	2
83	Charging multiple batteries using the boost-flyback converter **2012**,		2

82	HELIOS: photonics electronics functional integration on CMOS **2010**,		2
81	Low-Voltage Low-Power Highly Linear Down-Sampling Mixer in 65nm Digital CMOS Technology **2008**,		2
80	Integrated optical receiver for lens-less free-space communication **2008**,		2
79	BiCMOS phototransistors **2008**,		2
78	Fast transimpedance switching burst-mode CMOS optical receiver. *International Journal of Circuit Theory and Applications*, **2007**, 35, 355-370	2	2
77	Time-of-flight based pixel architecture with integrated double-cathode photodetector **2007**,		2
76	Optical receivers with large-diameter photodiode **2006**, 6183, 315		2
75	Integrated photodiodes in standard BiCMOS technology **2003**, 4989, 103		2
74	Investigation of optical interconnect receivers in standard micron and submicron MOS technology. *Optical Engineering*, **2003**, 42, 773	1.1	2
73	High-performance receivers for optical interconnects in standard MOS technology **2001**,		2
72	Determination of the excess noise of avalanche photodiodes integrated in 0.35-□ m CMOS technologies. *Optical Engineering*, **2018**, 57, 1	1.1	2
71	Optoelectronic Devices in Silicon-on-Insulator. *Springer Series in Photonics*, **2000**, 129-138		2
70	Synchronous OEIC Integrating Receiver for Optically Reconfigurable Gate Arrays. *Sensors*, **2016**, 16,	3.8	2
69	45-channel monolithically integrated, high-temperature capable optical receiver with a total data rate of 140 Gbit / s. *Optical Engineering*, **2015**, 54, 067111	1.1	1
68	Optical receivers in 0.35 □ m BiCMOS for heterogeneous 3D integration **2016**,		1
67	Influence of On-Off Keying Duty Cycle on BER in Wireless Optical Communication Up to 75 Mbit/s Using an SPAD and a RC LED **2018**,		1
66	A 10 Gb/s 0.25 □ m SiGe modulator driver for photonic-integration. *Analog Integrated Circuits and Signal Processing*, **2014**, 79, 15-25	1.2	1
65	Corrections to □Optical Wireless Communication With Adaptive Focus and MEMS-Based Beam Steering□[Aug 1 2013 1428-1431]. *IEEE Photonics Technology Letters*, **2014**, 26, 2411-2411	2.2	1

64	Optoelectronic integrated circuit for indoor optical wireless communication with adjustable beam **2013**,		1
63	A new sampling technique for Monte Carlo-based statistical circuit analysis **2017**,		1
62	A monolithically integrated silicon modulator with a 10 Gb/s 5 Vpp or 5.6 Vpp driver in 0.25 □ m SiGe:C BiCMOS. *Frontiers in Physics*, **2014**, 2,	3.9	1
61	Current-Mode Filters. *Springer Series in Advanced Microelectronics*, **2014**, 67-117	1	1
60	Phototransistor based Time-of-Flight range finding sensor in an 180 nm CMOS process **2012**,		1
59	A fully complementary and fully differential self-biased asynchronous CMOS comparator **2012**,		1
58	A 10Gb/s inductorless push pull current mirror transimpedance amplifier **2012**,		1
57	A 40 nm LP CMOS self-biased continuous-time comparator with sub-100ps delay at 1.1V & 1.2mW **2013**,		1
56	CMOS chip with multi junction photo detector for sensing biomedical signals **2013**,		1
55	High-Gain Double-Bulk Mixer in 65 nm CMOS with 830 pW Power Consumption. *ETRI Journal*, **2010**, 32, 457-459	1.4	1
54	A mixer-filter combination of a direct conversion receiver for DVB-H applications in 65nm CMOS **2010**,		1
53	High-speed PNP PIN phototransistors in a 0.18 □□ m CMOS process **2011**,		1
52	A current-mode continuous-time filter for software defined radio solutions. *Analog Integrated Circuits and Signal Processing*, **2009**, 58, 27-33	1.2	1
51	40Gbit/s germanium waveguide photodetector on silicon **2012**,		1
50	A low-voltage low-power fully differential rail-to-rail input/output opamp in 65-nm CMOS **2008**,		1
49	A SiGe optical receiver with large-area photodiode **2007**,		1
48	Parallel optical interconnects with mixed-signal OEIC and fibre arrays for high-speed communication **2004**, 5453, 111		1
47	Complete low-cost 625Mbit/s optical fiber receiver in 0.6□□ m BiCMOS technology **2005**,		1

46	Monolithische Korrelationsempfänger für optische Abstandsmessung (Integrated Correlation Receivers for Runtime Based Optical Distance Measurement). *TM Technisches Messen*, **2005**, 72, 230-235	0.7	1
45	Cascoded Active Quencher for SPADs with Bipolar Differential Amplifier in 0.35m BiCMOS. *IEEE Photonics Journal*, **2022**, 1-1	1.8	1
44	Avalanche Transients of Thick 0.35 μm CMOS Single-Photon Avalanche Diodes. *Micromachines*, **2020**, 11,	3.3	1
43	Transimpedance Amplifiers. *Springer Series in Advanced Microelectronics*, **2016**, 105-161	1	1
42	High Slew-Rate Quadruple-Voltage Mixed-Quenching Active-Resetting Circuit for SPADs in 0.35-μm CMOS for Increasing PDP. *IEEE Solid-State Circuits Letters*, **2021**, 4, 18-21	2	1
41	Integrated Fast-Sensing Triple-Voltage SPAD Quenching/Resetting Circuit for Increasing PDP. *IEEE Photonics Technology Letters*, **2021**, 33, 139-142	2.2	1
40	Photon detection probability enhancement using an anti-reflection coating in CMOS-based SPADs. *Applied Optics*, **2021**, 60, 7815-7820	1.7	1
39	Double-Gilbert mixer with enhanced linearity in 65 nm low-power CMOS technology. *Analog Integrated Circuits and Signal Processing*, **2012**, 71, 313-317	1.2	0
38	Bit Error Performance of APD and SPAD Receivers in Optical Wireless Communication. *Electronics (Switzerland)*, **2021**, 10, 2731	2.6	0
37	Latch-Type Optical Receiver With Integrated pin Photodiodes. *IEEE Photonics Technology Letters*, **2017**, 29, 675-678	2.2	
36	Building reliable systems-on-chip in nanoscale technologies. *Elektrotechnik Und Informationstechnik*, **2015**, 132, 301-306	0.4	
35	Discrete Photodiodes. *Springer Series in Advanced Microelectronics*, **2016**, 59-65	1	
34	Laser and Modulator Drivers. *Springer Series in Advanced Microelectronics*, **2016**, 199-216	1	
33	Integrated Photodiodes in Nanometer CMOS Technologies. *Springer Series in Advanced Microelectronics*, **2016**, 67-104	1	
32	Equalizers. *Springer Series in Advanced Microelectronics*, **2016**, 163-182	1	
31	On frequency response and stability of an optical front-end with variable-gain current amplifier using a bipolar junction transistor translinear loop. *International Journal of Circuit Theory and Applications*, **2013**, 41, 792-817	2	
30	Gm-C Filters. *Springer Series in Advanced Microelectronics*, **2014**, 39-65	1	
29	Analog Filters. *Springer Series in Advanced Microelectronics*, **2014**, 3-11	1	

28	Operational Transconductance Amplifiers (OTAs). *Springer Series in Advanced Microelectronics*, **2014**, 27-38	1
27	A rail-to-rail input stage with constant signal behavior in 0.12 □ m CMOS. *Analog Integrated Circuits and Signal Processing*, **2009**, 58, 19-26	1.2
26	High-End Silicon Photodiode Integrated Circuits **2010**, 707-730	
25	. *IEEE Transactions on Circuits and Systems Part 2: Express Briefs*, **2006**, 53, 1308-1312	
24	2.5Gbit/s fiber receiver with integrated PIN photodiode in low-cost 0.6□ m BiCMOS **2005**, 5964, 596401	
23	PIN photodiode-based active pixel for a near-infrared imaging application in 0.35-□ m CMOS. *Optical Engineering*, **2020**, 59, 1	1.1
22	Transconductance Boosting Technique for Bandwidth Extension in Low-Voltage and Low-Noise Optical TIAs. *IEEE Transactions on Circuits and Systems II: Express Briefs*, **2021**, 1-1	3.5
21	Circuits for Electronic-Photonic Integration. *Springer Series in Advanced Microelectronics*, **2018**, 407-433	1
20	Basics and Theory. *Springer Series in Advanced Microelectronics*, **2018**, 1-24	1
19	Design of Integrated Optical Receiver Circuits. *Springer Series in Advanced Microelectronics*, **2018**, 121-167	1
18	SiGe Photodetectors. *Springer Series in Advanced Microelectronics*, **2018**, 115-120	1
17	Detectors in Thin Crystalline Silicon Films. *Springer Series in Advanced Microelectronics*, **2018**, 105-113	1
16	Fully integrated optical receiver using single-photon avalanche diodes in high-voltage CMOS. *Optical Engineering*, **2020**, 59, 1	1.1
15	Comparators in 65 nm CMOS. *Springer Series in Advanced Microelectronics*, **2015**, 215-237	1
14	Conclusion and Comparison. *Springer Series in Advanced Microelectronics*, **2015**, 239-245	1
13	Comparators in 120 nm CMOS. *Springer Series in Advanced Microelectronics*, **2015**, 151-214	1
12	Highly sensitive 10□Gb/s PAM-4 optical receiver circuit for three-dimensional optoelectronic integration. *Journal of Engineering*, **2016**, 2016, 363-366	0.7
11	Clocked Nanometer CMOS Comparators **2013**, 171-192	

List of Publications

10	Electronics-Based 3D Sensors **2013**, 39-68	
9	Operational Amplifier RC Low-Pass Filter. *Springer Series in Advanced Microelectronics*, **2014**, 119-153	1
8	CMOS Technology. *Springer Series in Advanced Microelectronics*, **2014**, 13-25	1
7	Why Optoelectronic Circuits in Nanometer CMOS?. *Springer Series in Advanced Microelectronics*, **2016**, 1-12	1
6	Synchronous OEIC Integrating Receiver for ORGA Applications. *Procedia Engineering*, **2016**, 168, 1291-1295	
5	Optical Communications Fundamentals. *Springer Series in Advanced Microelectronics*, **2016**, 13-35	1
4	1.3 V supply voltage, high bandwidth, 100 nA minimum amplitude BiCMOS voltage-controlled current source. *Analog Integrated Circuits and Signal Processing*, **2019**, 98, 209-219	1.2
3	A 40 □□ W□0 mW generated power, 280 □□.68 k□□oad resistance CMOS controllable constant-power source for thermally-based sensor applications. *Analog Integrated Circuits and Signal Processing*, **2021**, 106, 593-613	1.2
2	Integrated Silicon Photodetectors. *Springer Series in Advanced Microelectronics*, **2018**, 25-104	1
1	Examples of Optoelectronic Integrated Circuits. *Springer Series in Advanced Microelectronics*, **2018**, 169-405	1