Giorgio Ferrari

List of Publications by Year
in descending order

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209 papers	3,124 citations	201674 27 h-index	197818 49 g-index
212 all docs	212 docs citations	212 times ranked	2961 citing authors

#	Article	IF	Citations
1	Unscrambling lightâ€”automatically undoing strong mixing between modes. Light: Science and Applications, 2017, 6, e17110-e17110.	16.6	149
2	Transimpedance Amplifier for High Sensitivity Current Measurements on Nanodevices. IEEE Journal of Solid-State Circuits, 2009, 44, 1609-1616.	5.4	138
3	Dielectric-constant measurement of thin insulating films at low frequency by nanoscale capacitance microscopy. Applied Physics Letters, 2007, 91, .	3.3	127
4	Non-Invasive On-Chip Light Observation by Contactless Waveguide Conductivity Monitoring. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 292-301.	2.9	122
5	Spectrum analyzer with noise reduction by cross-correlation technique on two channels. Review of Scientific Instruments, 1999, 70, 2520-2525.	1.3	106
6	Quantitative Nanoscale Dielectric Microscopy of Single-Layer Supported Biomembranes. Nano Letters, 2009, 9, 1604-1608.	9.1	104
7	Non-invasive monitoring and control in silicon photonics using CMOS integrated electronics. Optica, 2014, 1, 129.	9.3	100
8	Andersonâ€“Mott transition in arrays of a few dopant atoms in a silicon transistor. Nature Nanotechnology, 2012, 7, 443-447.	31.5	99
9	Nanoscale capacitance imaging with attofarad resolution using ac current sensing atomic force microscopy. Nanotechnology, 2006, 17, 4581-4587.	2.6	76
10	Spectroscopic performance of the DePMOS detector/amplifier device with respect to different filtering techniques and operating conditions. IEEE Transactions on Nuclear Science, 2006, 53, 401-408.	2.0	66
11	Doped overoxidized polypyrrole microelectrodes as sensors for the detection of dopamine released from cell populations. Analyst, The, 2013, 138, 3651.	3.5	64
12	Multichannel 65 zF rms Resolution CMOS Monolithic Capacitive Sensor for Counting Single Micrometer-Sized Airborne Particles on Chip. IEEE Journal of Solid-State Circuits, 2016, 51, 2545-2553.	5.4	59
13	A reconfigurable cryogenic platform for the classical control of quantum processors. Review of Scientific Instruments, 2017, 88, 045103.	1.3	58
14	Multichannel Bipotentiostat Integrated With a Microfluidic Platform for Electrochemical Real-Time Monitoring of Cell Cultures. IEEE Transactions on Biomedical Circuits and Systems, 2012, 6, 498-507.	4.0	50
15	Capacitive detection of micrometric airborne particulate matter for solid-state personal air quality monitors. Sensors and Actuators A: Physical, 2014, 219, 80-87.	4.1	49
16	High-Value Tunable Pseudo-Resistors Design. IEEE Journal of Solid-State Circuits, 2020, 55, 2094-2105.	5.4	49
17	Wide bandwidth transimpedance amplifier for extremely high sensitivity continuous measurements. Review of Scientific Instruments, 2007, 78, 094703.	1.3	48
18	Emerging miniaturized technologies for airborne particulate matter pervasive monitoring. Measurement: Journal of the International Measurement Confederation, 2017, 101, 250-256.	5.0	48

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19	Ultra-low-noise CMOS current preamplifier from DC to 1â€…MHz. Electronics Letters, 2009, 45, 1278.	1.0	47
20	ZeptoFarad capacitance detection with a miniaturized CMOS current front-end for nanoscale sensors. Sensors and Actuators A: Physical, 2011, 172, 117-123.	4.1	45
21	Automated Routing and Control of Silicon Photonic Switch Fabrics. IEEE Journal of Selected Topics in Quantum Electronics, 2016, 22, 169-176.	2.9	45
22	Integrated platform for detecting pathogenic DNA via magnetic tunneling junction-based biosensors. Sensors and Actuators B: Chemical, 2017, 242, 280-287.	7.8	45
23	Miniaturized Impedance Flow Cytometer: Design Rules and Integrated Readout. IEEE Transactions on Biomedical Circuits and Systems, 2017, 11, 1438-1449.	4.0	45
24	Advances in the production, immobilization, and electrical characterization of olfactory receptors for olfactory nanobiosensor development. Sensors and Actuators B: Chemical, 2006, 116, 66-71.	7.8	42
25	Real-Time Data Fusion and MEMS Sensors Fault Detection in an Aircraft Emergency Attitude Unit Based on Kalman Filtering. IEEE Sensors Journal, 2012, 12, 2984-2992.	4.7	38
26	High sensitivity noise measurement with a correlation spectrum analyzer. IEEE Transactions on Instrumentation and Measurement, 2000, 49, 820-822.	4.7	33
27	A Current-Sensitive Front-End Amplifier for Nano-Biosensors with a 2MHz BW. , 2007, , .		32
28	Impedimetric Toxicity Assay in Microfluidics Using Free and Liposome-Encapsulated Anticancer Drugs. Analytical Chemistry, 2015, 87, 2204-2212.	6.5	32
29	Polarization-transparent silicon photonic add-drop multiplexer with wideband hitless tuneability. Nature Communications, 2021, 12, 4324.	12.8	28
30	Correlation spectrum analyzer for direct measurement of device current noise. Review of Scientific Instruments, 2002, 73, 2717-2723.	1.3	27
31	High-speed detection of DNA translocation in nanopipettes. Nanoscale, 2016, 8, 7604-7611.	5.6	27
32	Linear transconductor with rail-to-rail input swing for very large time constant applications. Electronics Letters, 2006, 42, 1069.	1.0	26
33	Separating arbitrary free-space beams with an integrated photonic processor. Light: Science and Applications, 2022, 11, .	16.6	26
34	Charge dynamics of a single donor coupled to a few-electron quantum dot in silicon. Applied Physics Letters, 2012, 100, .	3.3	25
35	Accuracy and resolution limits in quartz and silicon substrates with microelectrodes for electrochemical biosensors. Sensors and Actuators B: Chemical, 2012, 174, 168-175.	7.8	25
36	CMOS Impedance Analyzer for Nanosamples Investigation Operating up to 150 MHz With Sub-aF Resolution. IEEE Journal of Solid-State Circuits, 2014, 49, 2748-2757.	5.4	25

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37	High-Detectivity Perovskite Light Detectors Printed in Air from Benign Solvents. CheM, 2019, 5, 868-880.	11.7	25
38	Note: Differential configurations for the mitigation of slow fluctuations limiting the resolution of digital lock-in amplifiers. Review of Scientific Instruments, 2016, 87, 026102.	1.3	24
39	CMOS fully compatible microwave detector based on MOSFET operating in resistive regime. IEEE Microwave and Wireless Components Letters, 2005, 15, 445-447.	3.2	23
40	Microwave irradiation effects on random telegraph signal in a MOSFET. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 370, 491-493.	2.1	22
41	Automatic Tuning of Silicon Photonics Microring Filter Array for Hitless Reconfigurable Addâ€“Drop. Journal of Lightwave Technology, 2019, 37, 3939-3947.	4.6	22
42	Tracking of conduction phenomena and degradation in organic light emitting diodes by current noise measurements. Applied Physics Letters, 2001, 78, 3262-3264.	3.3	21
43	Impedance-Sensing CMOS Chip for Noninvasive Light Detection in Integrated Photonics. IEEE Transactions on Circuits and Systems II: Express Briefs, 2016, 63, 929-933.	3.0	20
44	Switched ratiometric lock-in amplifier enabling sub-ppm measurements in a wide frequency range. Review of Scientific Instruments, 2017, 88, 104704.	1.3	20
45	A compact multifunctional microfluidic platform for exploring cellular dynamics in real-time using electrochemical detection. RSC Advances, 2014, 4, 63761-63771.	3.6	19
46	High-bandwidth detection of short DNA in nanopipettes. Faraday Discussions, 2016, 193, 459-470.	3.2	19
47	Current noise spectra in CdTe semiconductor diodes. Journal of Applied Physics, 2000, 87, 7583-7585.	2.5	18
48	Effect of the triplet state on the random telegraph signal in Sin-MOSFETs. Physical Review B, 2006, 74, .	3.2	18
49	Nanobiosensors based on individual olfactory receptors. Analog Integrated Circuits and Signal Processing, 2008, 57, 197-203.	1.4	18
50	Modular, Lightweight, Wireless Potentiostat-on-a-Disc for Electrochemical Detection in Centrifugal Microfluidics. Analytical Chemistry, 2019, 91, 11620-11628.	6.5	18
51	Shot Noise in Linear Macroscopic Resistors. Physical Review Letters, 2004, 92, 226601.	7.8	17
52	Giant random telegraph signal generated by single charge trapping in submicron n-metal-oxide-semiconductor field-effect transistors. Journal of Applied Physics, 2008, 103, 123707.	2.5	17
53	Attofarad resolution potentiostat for electrochemical measurements on nanoscale biomolecular interfacial systems. Review of Scientific Instruments, 2009, 80, 124701.	1.3	17
54	Single-Molecule Studies of Unlabeled Full-Length p53 Protein Binding to DNA. Journal of Physical Chemistry B, 2016, 120, 2106-2114.	2.6	17

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55	Design and characterization of a current sensing platform for silicon-based nanopores with integrated tunneling nanoelectrodes. Analog Integrated Circuits and Signal Processing, 2013, 77, 333-343.	1.4	16
56	An instrument-on-chip for impedance measurements on nanobiosensors with attoFarad resoution. , 2009, , .		15
57	Fiber-to-Waveguide Alignment Assisted by a Transparent Integrated Light Monitor. IEEE Photonics Technology Letters, 2015, 27, 510-513.	2.5	15
58	On-Chip Magnetic Platform for Single-Particle Manipulation with Integrated Electrical Feedback. Small, 2016, 12, 921-929.	10.0	15
59	Design Guidelines for Contactless Integrated Photonic Probes in Dense Photonic Circuits. Journal of Lightwave Technology, 2017, 35, 3042-3049.	4.6	15
60	Electric Single-Molecule Hybridization Detector for Short DNA Fragments. Analytical Chemistry, 2018, 90, 14063-14071.	6.5	15
61	WDM-Based Silicon Photonic Multi-Socket Interconnect Architecture With Automated Wavelength and Thermal Drift Compensation. Journal of Lightwave Technology, 2020, 38, 6000-6006.	4.6	15
62	Coherent self-control of free-space optical beams with integrated silicon photonic meshes. Photonics Research, 2021, 9, 2196.	7.0	15
63	Current noise spectroscopy on mLPPP based organic light emitting diodes. Organic Electronics, 2002, 3, 33-42.	2.6	13
64	Ditheringâ€based realâ€time control of cascaded silicon photonic devices by means of nonâ€invasive detectors. IET Optoelectronics, 2021, 15, 111-120.	3.3	13
65	Nanoscale electrical properties of cluster-assembled palladium oxide thin films. Physical Review B, 2009, 79, .	3.2	12
66	Measuring the temperature of a mesoscopic electron system by means of single electron statistics. Applied Physics Letters, 2010, 96, 113109.	3.3	12
67	Femtoampere integrated current preamplifier for low noise and wide bandwidth electrochemistry with nanoelectrodes. Electrochimica Acta, 2013, 112, 950-956.	5.2	12
68	Suppression of Low-Frequency Electronic Noise in Polymer Nanowire Field-Effect Transistors. Nano Letters, 2015, 15, 7245-7252.	9.1	12
69	4-Channel All-Optical MIMO Demultiplexing on a Silicon Chip. , 2016, , .		12
70	Broadband stimulated Raman imaging based on multi-channel lock-in detection for spectral histopathology. APL Photonics, 2022, 7, .	5.7	12
71	Modular Printed Circuit Boards for Broadband Characterization of Nanoelectronic Quantum Devices. IEEE Transactions on Instrumentation and Measurement, 2016, 65, 1827-1835.	4.7	11
72	dc modulation in field-effect transistors operating under microwave irradiation for quantum readout. Journal of Applied Physics, 2005, 98, 044505.	2.5	10

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73	Effect of microwave irradiation on the emission and capture dynamics in silicon metal oxide semiconductor field effect transistors. Journal of Applied Physics, 2008, 103, 104502.	2.5	10
74	Compact FPGA-based elaboration platform for wide-bandwidth electrochemical measurements. , 2012, , .		10
75	Stabilization and mode locking of terahertz quantum cascade lasers. IEEE Journal of Selected Topics in Quantum Electronics, 2013, 19, 8501011-8501011.	2.9	10
76	Integrated low-noise current amplifier for glass-based nanopore sensing. , 2014, , .		10
77	ContactLess Integrated Photonic Probe for light monitoring in indium phosphideâ€based devices. IET Optoelectronics, 2015, 9, 146-150.	3.3	10
78	Wavelength Locking of Silicon Photonics Multiplexer for DML-Based WDM Transmitter. Journal of Lightwave Technology, 2017, 35, 607-614.	4.6	10
79	Four-Channel Differential Lock-in Amplifiers With Autobalancing Network for Stimulated Raman Spectroscopy. IEEE Journal of Solid-State Circuits, 2021, 56, 1859-1870.	5.4	10
80	28.7 CMOS monolithic airborne-particulate-matter detector based on 32 capacitive sensors with a resolution of 65zF rms. , 2016, , .		9
81	A Smart Sensing Node for Pervasive Water Quality Monitoring with Anti-Fouling Self-Diagnostics. , 2018, , .		9
82	Room Temperature Resonant Photocurrent in an Erbium Low-Doped Silicon Transistor at Telecom Wavelength. Nanomaterials, 2019, 9, 416.	4.1	9
83	Differential Impedance Sensing platform for high selectivity antibody detection down to few counts: A case study on Dengue Virus. Biosensors and Bioelectronics, 2022, 202, 113996.	10.1	9
84	Handheld bio-impedance measurement system based on an instrument-on-chip. , 2011, , .		8
85	Quantum transport in deterministically implanted single-donors in Si FETs. , 2011, , .		8
86	A 12-channel dual-lock-in platform for magneto-resistive DNA detection with ppm resolution. , 2014, , .		8
87	Smart pipe: A miniaturized sensor platform for real-time monitoring of drinking water quality. , 2017, , .		8
88	16-Channel modular platform for automatic control and reconfiguration of complex photonic circuits. , 2017, , .		8
89	Electrical and magnetic properties of hemozoin nanocrystals. Applied Physics Letters, 2018, 113, .	3.3	8
90	Transimpedance amplifier for very high sensitivity current detection over 5MHz bandwidth. , 2008, , .		7

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91	Fault detection and isolation enhancement of an aircraft attitude and heading reference system based on MEMS inertial sensors. Procedia Chemistry, 2009, 1, 509-512.	0.7	7
92	Low-noise single-chip potentiostat for nano-bio-electrochemistry over a 1MHz bandwidth. , 2009, , .		7
93	Quantitative Label-Free Cell Proliferation Tracking with a Versatile Electrochemical Impedance Detection Platform. Journal of Physics: Conference Series, 2012, 407, 012029.	0.4	7
94	Light-induced dipole moment modulation in diarylethenes: a fundamental study. Physical Chemistry Chemical Physics, 2016, 18, 31154-31159.	2.8	7
95	Wide Dynamic Range Multichannel Lock-In Amplifier for Contactless Optical Sensors With Sub-pS Resolution. IEEE Solid-State Circuits Letters, 2020, 3, 246-249.	2.0	7
96	On-Chip Selective Capture and Detection of Magnetic Fingerprints of Malaria. Sensors, 2020, 20, 4972.	3.8	7
97	On the origin of shot noise in CdTe detectors. Applied Physics Letters, 2003, 83, 2450-2452.	3.3	6
98	Spectroscopic performances of depmos detector/amplifier device with respect to different filtering techniques and operating conditions. , 0, , .		6
99	Very high sensitivity CMOS circuit to track fast biological current signals. , 2006, , .		6
100	Low frequency noise and technology induced mechanical stress in MOSFETs. Microelectronics Reliability, 2007, 47, 1218-1221.	1.7	6
101	A General Purpose Lock-In Amplifier Enabling Sub-ppm Resolution. Procedia Engineering, 2016, 168, 1651-1654.	1.2	6
102	CryoCMOS hardware technology a classical infrastructure for a scalable quantum computer. , 2016, , .		6
103	Multi-channel lock-in based differential front-end for broadband Raman spectroscopy. The Integration VLSI Journal, 2019, 67, 44-49.	2.1	6
104	Monitoring cell endocytosis of liposomes by real-time electrical impedance spectroscopy. Analytical and Bioanalytical Chemistry, 2020, 412, 6371-6380.	3.7	6
105	A Labâ€Onâ€chip Tool for Rapid, Quantitative, and Stageâ€selective Diagnosis of Malaria. Advanced Science, 2021, 8, 2004101.	11.2	6
106	Single-Chip CMOS Capacitive Sensor for Ubiquitous Dust Detection and Granulometry with Sub-micrometric Resolution. Lecture Notes in Electrical Engineering, 2018, , 8-18.	0.4	6
107	17.4 CMOS impedance analyzer for nanosamples investigation operating up to 150MHz with Sub-aF resolution. , 2014, , .		5
108	FPGA-based lock-in amplifier with sub-ppm resolution working up to 6 MHz. , 2016, , .		5

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109	Tunable single hole regime of a silicon field effect transistor in standard CMOS technology. Applied Physics Express, 2016, 9, 014001.	2.4	5
110	Towards a magnetoresistive platform for neural signal recording. AIP Advances, 2017, 7, .	1.3	5
111	A Laser Diode-Based Wireless Optogenetic Headstage. , 2018, , .		4
112	Cryogenic characterization and modeling of a CMOS floating-gate device for quantum control hardware. Solid-State Electronics, 2022, 189, 108190.	1.4	4
113	Electrical conductance of silicon photonic waveguides. Optics Letters, 2021, 46, 17.	3.3	4
114	High-sensitivity transparent photoconductors in voltage-controlled silicon waveguides. Optics Letters, 2022, 47, 1327.	3.3	4
115	Modeling of STI-induced stress phenomena in CMOS 90nm Flash technology. , 0, , .		3
116	Low Frequency Noise sensitivity to technology induced mechanical stress in MOSFETs. AIP Conference Proceedings, 2005, , .	0.4	3
117	Modelization of Thermal Fluctuations in G Protein-Coupled Receptors. AIP Conference Proceedings, 2005, , .	0.4	3
118	Random Telegraph Signal In Si n-MOSFETs: A Way Towards Single Spin Resonance Detection. AIP Conference Proceedings, 2005, , .	0.4	3
119	Microwave power detector based on a single MOSFET in standard technology. , 2005, , .		3
120	Compact potentiostat for cellular electrochemical imaging with 54 parallel channels. , 2012, , .		3
121	Noise-assisted transmission of spikes in Maedaâ€“Makino artificial neuron arrays. International Journal of Parallel, Emergent and Distributed Systems, 2017, 32, 278-286.	1.0	3
122	Lock-In Amplifier Architectures for Sub-ppm Resolution Measurements. Smart Sensors, Measurement and Instrumentation, 2017, , 191-217.	0.6	3
123	Tunneling-based CMOS Floating Gate Synapse for Low Power Spike Timing Dependent Plasticity. , 2020, , .		3
124	1/f Noise Characteristics of Waveguide-Integrated PbTe MIR Detectors and Impact on Limit of Detection. Journal of Lightwave Technology, 2021, 39, 7326-7333.	4.6	3
125	Positionâ€Controlled Functionalization of Vacancies in Silicon by Singleâ€Ion Implanted Germanium Atoms. Advanced Functional Materials, 2021, 31, 2011175.	14.9	3
126	Low-Noise Current Measurements on Quantum Devices Operating at Cryogenic Temperature. , 2013, , .		3

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127	Wavelength Locking Platform for DML-based Multichannel Transmitter on a Silicon Chip. , 2016, , .		3
128	Onâ€chip magnetophoretic capture in a model of malariaâ€infected red blood cells. Biotechnology and Bioengineering, 2022, 119, 1129-1141.	3.3	3
129	Experimental analysis of current noise spectra in CdTe detectors. , 1999, , .		2
130	Material and device characterization using a correlation spectrum analyzer. Materials Science in Semiconductor Processing, 2001, 4, 133-136.	4.0	2
131	Novel Transimpedance amplifier for Noise Measurements on Bio-Electronic devices. AIP Conference Proceedings, 2005, , .	0.4	2
132	High Magnetic Field Dependence of Capture/Emission Fluctuations of a Single Defect in Silicon MOSFETs. AIP Conference Proceedings, 2005, , .	0.4	2
133	Nanoscale electronic noise measurements. AIP Conference Proceedings, 2005, , .	0.4	2
134	Development of an artificial nose integrating NEMS and biological olfactory receptors. , 0, , .		2
135	A smart embedded control unit for electro-hydraulic aircraft actuators. , 2010, , .		2
136	Handheld 2-channel impedimetric cell counting system with embedded real-time processing. , 2011, , .		2
137	Quantum transport property in FETs with deterministically implanted single-arsenic ions using single-ion implantation. , 2012, , .		2
138	CMOS current amplifier for AFM impedance sensing on chip with ZeptoFarad resolution. , 2013, , .		2
139	Towards the impedimetric tracking of single magnetically trailed microparticles. , 2014, , .		2
140	Parallelizable Microfluidic Resistive On-Line Detector of Micrometric Aggregates of Biopharmaceutical Antibodies. Procedia Engineering, 2016, 168, 1438-1441.	1.2	2
141	Lock-In Based Differential Front-End For Raman Spectroscopy Applications. , 2018, , .		2
142	High-Speed and Low-Noise Multichannel System for Broadband Coherent Raman Imaging. , 2020, , .		2
143	Impedance Spectroscopy for Biosensing: Circuits and Applications. , 2015, , 1-24.		2
144	ContactLess Integrated Photonic Probe: Concept, Technology and Applications. , 2016, , .		2

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145	Non-invasive light sensor with enhanced sensitivity for photonic integrated circuits. , 2022, , .		2
146	On the nonâ€blocking conditions of selfâ€routeing multistage interconnection networks. International Journal of Communication Systems, 1993, 6, 109-113.	0.2	1
147	Conduction and degradation analysis of organic LEDs by current noise monitoring. , 2002, , .		1
148	High sensitivity potentiostat system for sub-micron bio-sensors impedance measurements. , 2008, , .		1
149	Low-noise dual-channel current amplifier for DNA sensing with solid-state nanopores. , 2012, , .		1
150	Non-invasive monitoring of silicon microring resonators through contactless integrated photonics probes. , 2014, , .		1
151	Fiber to silicon waveguide automated coupling driven by a transparent on-chip light monitor. , 2014, , .		1
152	Impedance-based Transparent Monitoring of Light for Local Control of Integrated Photonic Circuits. Procedia Engineering, 2014, 87, 1545-1548.	1.2	1
153	Wavelength locking of a silicon microring resonator assisted by ContactLess Integrated Photonic Probe. , 2014, , .		1
154	32-Channel low-noise lock-in ASIC for non-invasive light detection in silicon photonics. , 2015, , .		1
155	High sensitivity noise measurements: Circuits, techniques and applications. , 2015, , .		1
156	Feedback-controlled tuning, switching, and locking of photonic integrated circuits. , 2015, , .		1
157	Noninvasive monitoring and control in silicon photonics. , 2017, , .		1
158	On-Chip Magnetophoretic Concentration of Malaria-Infected Red Blood Cells and Hemozoin Nanocrystals. , 2018, , .		1
159	Resonant noise-canceling current front-end for high-resolution impedance sensing. , 2018, , .		1
160	Floating-gate transistor at cryogenic temperature: Characterization and modelling of tunnelling and hot electrons injection. , 2020, , .		1
161	Role of Noise in Spontaneous Activity of Networks of Neurons on Patterned Silicon Emulated by Noiseâ€“activated CMOS Neural Nanoelectronic Circuits. Nano Express, 2021, 2, 020025.	2.4	1
162	Chapter 5. Electrochemical applications of nanopore systems. SPR Electrochemistry, 0, , 155-186.	0.7	1

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163	Observation of single phonon-mediated quantum transport in a silicon single-electron CMOS single-atom transistor by RMS noise analysis. Applied Physics Express, 2020, 13, 125001.	2.4	1
164	Impedance-based real-time monitoring of neural stem cell differentiation. Journal of Electrical Bioimpedance, 2021, 12, 34-49.	0.9	1
165	Automated Thermal Drift Compensation in WDM-based Silicon Photonic Multi-Socket Interconnect Systems. , 2020, , .		1
166	Control of programmable photonic integrated meshes for free-space optics applications. , 2020, , .		1
167	Probing Electrical Transport Properties at the Nanoscale by Current-Sensing Atomic Force Microscopy. , 2008, , 421-450.		1
168	Digital count of antibodies through differential impedance for high-resolution immunosensing. , 2021, , .		1
169	Self-Configuring Silicon-Photonic Receiver for Multimode Free Space Channels. , 2021, , .		1
170	Self-Stabilized Silicon Mach-Zehnder Interferometers by Integrated CMOS Controller. , 2021, , .		1
171	Organic photodetectors: a possible technology for on-fiber receivers. , 2003, , .		0
172	Noise selection in multielectrode devices by using a correlation spectrum analyzer. Review of Scientific Instruments, 2004, 75, 5367-5369.	1.3	0
173	Microwave Induced Effects on the Random Telegraph Signal in a MOSFET. AIP Conference Proceedings, 2005, , .	0.4	0
174	Correlation Spectrum Analyzer: Pringiples and Limits in Noise Measurements. , 2004, , 211-218.		0
175	Correlation technique to reach ultimate resolution in noise measurements. , 2007, 6600, 520.		0
176	AC and DC electrical imaging of biosamples at the nanoscale by Atomic Force Microscopy. Journal of Physics: Conference Series, 2007, 61, 185-189.	0.4	0
177	Instrumentation with attoFarad resolution for electrochemical impedance measurements on molecular biosensors. , 2009, , .		0
178	ZeptoFarad resolution CMOS read-out circuit for nanosensors. Procedia Engineering, 2010, 5, 1123-1126.	1.2	0
179	Biosensors and Molecular Imaging. IEEE Pulse, 2011, 2, 35-40.	0.3	0
180	Wavelength tuning, locking and swapping of a silicon photonics microring resonator by transparent light monitor. , 2014, , .		0

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181	Closed loop microfluidic platform based on domain wall magnetic conduits: a novel tool for biology and medicine. Materials Research Society Symposia Proceedings, 2014, 1686, 1.	0.1	0
182	Non-Invasive Integrated Light Probe. , 2014, , .		0
183	Feedback and control in integrated optics enabled by contactLess integrated photonic probe. Proceedings of SPIE, 2015, , .	0.8	0
184	Low-noise instrument for non-invasive monitoring of photonic integrated circuits. , 2015, , .		0
185	The role of micro-scale current sensing in biomedicine: A unifying view and design guidelines. , 2015, 2015, 3201-4.		0
186	Compact dedicated instrument for non-invasive light monitoring in photonic circuits. , 2015, , .		0
187	Multi-point electronic sense & control system for scalable contactless integrated photonic probes. , 2015, , .		0
188	Multipoint Platform for Control and Routing of Complex Silicon Photonic Circuits with Non-Invasive Probes. , 2016, , .		0
189	4Ã—10 Gbit/s L-band WDM transmitter with automatic control of silicon photonic channel multiplexer and carver. , 2016, , .		0
190	Probing DNA Translocations in Nanopipettes using High-Speed Detection Electronics. Biophysical Journal, 2016, 110, 655a.	0.5	0
191	Highly Sensitive Magnetic Array-based Platform for Neuronal Signal Recording. Procedia Technology, 2017, 27, 292-294.	1.1	0
192	Automated tuning, control and stabilization of photonic integrated circuits. Proceedings of SPIE, 2017, , .	0.8	0
193	Electroluminescence of Er:O-doped nano pn diode in silicon-on-insulator and its current-voltage characteristics at room temperature. , 2020, , .		0
194	Electronics-photonics co-design for robust control of optical devices in dense integrated photonic circuits. , 2021, , .		0
195	Lowâ€leakage zeroâ€static power consumption analogue CMOS switch. Electronics Letters, 2021, 57, 502-504.	1.0	0
196	Establishing free-space optical communication channels through a reconfigurable silicon mesh. , 2021, , .		0
197	Automated Fiber-to-Waveguide Coupling Assisted by a Non-Invasive Integrated Light Monitor. , 2014, , .		0
198	Feedback Control of Silicon Microrings by Non-Invasive Photonic Probe. , 2014, , .		0

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199	Light-Path Tracking and Circuit Reconfiguration of Silicon Photonic Circuits Assisted by Non-Invasive Optical Probes. , 2015, , .		0
200	4-Channel Silicon Photonic Mode Demultiplexing. , 2016, , .		0
201	Resonant Photocurrent at 1550 nm in an Erbium Low-Doped Silicon Transistor at Room Temperature. , 2019, , .		0
202	Transimpedance Amplifiers for Extremely High Sensitivity Impedance Measurements on Nanodevices. , 2009, , 193-207.		0
203	Multimode Free Space Optical Link Enabled by SiP Integrated Meshes. , 2021, , .		0
204	Impedance Spectroscopy for Biosensing: Circuits and Applications. , 2022, , 87-110.		0
205	A Squarewave-Based Multi-Frequency Impedance Analyzer Based on the Heterodyne Architecture. , 2021, , .		0
206	Control of SiP Waveguide-Embedded Electronic Devices by Substrate/Gate Potential Tuning. , 2021, , .		0
207	Temperature and Wavelength Drift Tolerant WDM Transmission and Routing in On-chip Silicon Photonic Interconnects. Optics Express, 0, , .	3.4	0
208	Differential Impedance Biosensing platform for early diagnosis of viral infections. , 2022, , .		0
209	CMOS driving circuit operating down to 77 K for single-photon emitting diode. , 2022, , .		0