

# Sebastian Magierowski

## List of Publications by Year in descending order

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65  
papers

1,157  
citations

840119

11  
h-index

395343

33  
g-index

65  
all docs

65  
docs citations

65  
times ranked

1264  
citing authors

#	ARTICLE	IF	CITATIONS
1	Vehicle Routing Problems for Drone Delivery. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2017, 47, 70-85.	5.9	697
2	Blind Synchronization in Diffusion-Based Molecular Communication Channels. IEEE Communications Letters, 2013, 17, 2156-2159.	2.5	85
3	Microbiological Sensing Technologies: A Review. Bioengineering, 2018, 5, 20.	1.6	37
4	A 4-GHz Active Scatterer in 130-nm CMOS for Phase Sweep Amplify-and-Forward. IEEE Transactions on Circuits and Systems I: Regular Papers, 2012, 59, 529-540.	3.5	34
5	Joint Fading and Shadowing Model for Large Office Indoor WLAN Environments. IEEE Transactions on Antennas and Propagation, 2014, 62, 2209-2222.	3.1	28
6	100 GHz Parametric CMOS Frequency Doubler. IEEE Microwave and Wireless Components Letters, 2010, 20, 690-692.	2.0	17
7	RF CMOS Parametric Downconverters. IEEE Transactions on Microwave Theory and Techniques, 2010, 58, 518-528.	2.9	16
8	Nanopore-CMOS Interfaces for DNA Sequencing. Biosensors, 2016, 6, 42.	2.3	16
9	Modelling the reception process in diffusion-based molecular communication channels. , 2013, , .		15
10	FPGA-Accelerated 3rd Generation DNA Sequencing. IEEE Transactions on Biomedical Circuits and Systems, 2020, 14, 65-74.	2.7	14
11	Coherent parametric RF downconversion in CMOS. , 2010, , .		12
12	A Multidisciplinary Approach to High Throughput Nuclear Magnetic Resonance Spectroscopy. Sensors, 2016, 16, 850.	2.1	12
13	Subharmonically Pumped RF CMOS Paramps. IEEE Transactions on Electron Devices, 2008, 55, 601-608.	1.6	11
14	A 12.5-Gb/s On-Chip Oscilloscope to Measure Eye Diagrams and Jitter Histograms of High-Speed Signals. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2014, 22, 1127-1137.	2.1	11
15	A High-Efficiency Discrete Current Mode Output Stage Potentiostat Instrumentation for Self-Powered Electrochemical Devices. IEEE Transactions on Instrumentation and Measurement, 2018, 67, 2247-2255.	2.4	11
16	Wide Input Dynamic Range Fully Integrated Capacitive Sensor for Life Science Applications. IEEE Transactions on Biomedical Circuits and Systems, 2021, 15, 339-350.	2.7	11
17	A Direct 100 GHz Parametric CMOS Tripler. IEEE Microwave and Wireless Components Letters, 2013, 23, 557-559.	2.0	10
18	Fading Statistics for the Joint Fading and Two Path Shadowing Channel. IEEE Wireless Communications Letters, 2014, 3, 301-304.	3.2	10

#	ARTICLE	IF	CITATIONS
19	Minimizing the Net Present Cost of Deploying and Operating Wireless Sensor Networks. IEEE Transactions on Network and Service Management, 2015, 12, 511-525.	3.2	9
20	35.5 GHz Parametric CMOS Upconverter. IEEE Microwave and Wireless Components Letters, 2012, 22, 477-479.	2.0	8
21	Parametric CMOS upconverters and downconverters. International Journal of Circuit Theory and Applications, 2014, 42, 1209-1227.	1.3	8
22	A New Whole Genome Culture-Independent Diagnostic Test (WG-CIDT) for Rapid Detection of Salmonella in Lettuce. Frontiers in Microbiology, 2020, 11, 602.	1.5	8
23	Calibration-Free CMOS Capacitive Sensor for Life Science Applications. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-12.	2.4	8
24	Toward spirometry-on-chip: design, implementation and experimental results. Microsystem Technologies, 2017, 23, 4591-4598.	1.2	7
25	Self-Powered Soil Moisture Monitoring Sensor Using a Picoampere Quiescent Current Wake-Up Circuit. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 6613-6620.	2.4	7
26	A Scalable Discrete-Time Integrated CMOS Readout Array for Nanopore Based DNA Sequencing. IEEE Access, 2021, 9, 155543-155554.	2.6	6
27	Towards scalable capacitive cantilever arrays for emerging biomedical applications. Sensors and Actuators A: Physical, 2017, 260, 90-98.	2.0	4
28	FPGA-based DNA Basecalling Hardware Acceleration. , 2018, , .		4
29	UV-Vis Spectrophotometric Analysis of DNA Retrieval for DNA Storage Applications. Actuators, 2021, 10, 246.	1.2	4
30	Design Issues for Sensor Network RF Receivers. , 2007, , .		3
31	Cooperative Phase Sweep Amplify-and-Forward Transmission. , 2008, , .		3
32	Active nuclear magnetic resonance probe: A new multidisciplinary approach toward highly sensitive biomolecular spectroscopy. , 2015, , .		3
33	A CMOS differential receiver dedicated to nuclear magnetic resonance applications. Analog Integrated Circuits and Signal Processing, 2017, 91, 97-109.	0.9	3
34	Gain-configurable lower sideband parametric downconverter. , 2017, , .		3
35	Novel Field-Effect Transistor Sensor for DNA Storage Monitoring. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-11.	2.4	3
36	Oral Cells-On-Chip: Design, Modeling and Experimental Results. Bioengineering, 2022, 9, 218.	1.6	3

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37	Parametric THz frequency multiplication using CMOS technology. , 2010, , .		2
38	A 0.13-Åµm CMOS wireless reflector for phase sweep cooperative diversity. , 2010, , .		2
39	Recent Advances of Computerized Graphical Methods for the Detection and Progress Assessment of Visual Distortion Caused by Macular Disorders. Vision (Switzerland), 2019, 3, 25.	0.5	2
40	IEEE 802.11b SDMA Performance in Realistic Environments. IEEE Vehicular Technology Conference, 2007, , .	0.2	1
41	Evaluating Wireless Network Effects for SLAM Robot Map Making. , 2010, , .		1
42	Implementation of an all-analog active reflector. , 2010, , .		1
43	Internal Readout System for Molecular Recorders. IEEE Transactions on Molecular, Biological, and Multi-Scale Communications, 2015, 1, 26-36.	1.4	1
44	Hardware Accelerated DNA Sequencing. , 2018, , .		1
45	NGRID: A novel platform for detection and progress assessment of visual distortion caused by macular disorders. Computers in Biology and Medicine, 2019, 111, 103340.	3.9	1
46	Linearity Analysis of CMOS Parametric Upconverters. IEEE Access, 2020, 8, 190906-190921.	2.6	1
47	Design and Modeling of a New MEMS Capacitive Microcantilever Sensor for Gas Flow Monitoring Conception et modélisation d'un nouveau capteur MEMS capacitif à microcantilevers pour la surveillance du débit de gaz. Canadian Journal of Electrical and Computer Engineering, 2021, , 1-13.	1.5	1
48	A New Capacitive MEMS Flow Sensor for Industrial Gas Transport Monitoring Applications. , 2020, , .		1
49	A Novel Calibration-Free Fully Integrated CMOS Capacitive Sensor for Life Science Applications. , 2021, , .		1
50	RF Hardware Modeling of a Direct Conversion Receiver Using SDMA. , 2006, , .		0
51	Development of the Forward Link Physical Layer in a Multiuser SDMA/CDMA Low-Power Transceiver. , 2006, , .		0
52	Antenna Array Designs for OFDM WLAN Indoor Transmission. Wireless Personal Communications, 2011, 56, 779-789.	1.8	0
53	CMOS for high-speed nanopore DNA basecalling. , 2016, , .		0
54	Embedded CMOS bioinformatics for nanopore sequencers. , 2017, , .		0

#	ARTICLE	IF	CITATIONS
55	Average Error Rates and Achievable Capacity in Large Office Indoor Wireless Environments. IEEE Transactions on Communications, 2017, 65, 4955-4965.	4.9	0
56	GPU base calling for DNA strand sequencing. , 2017, , .		0
57	On Combined Rate and Power Adaptation for Indoor Wireless Environments. , 2018, , .		0
58	A Novel Fully Differential NMR Transciever. , 2018, , .		0
59	A High-Speed Embedded Event Detector for Mobile DNA Sequencing. , 2018, , .		0
60	Label-Free Impedometric Antibioqram Test. , 2019, , .		0
61	A 65-nm CMOS Low-Power Front-End for 3rd Generation DNA Sequencing. , 2019, , .		0
62	Toward Versatile CMOS Capacitive Sensors for Cellular Monitoring. , 2020, , .		0
63	CMOS Capacitive DNA Nano-Mass Measurement for DNA Storage Application. , 2021, , .		0
64	Hardware acceleration of the novel two dimensional Burrowsâ€Wheeler Aligner algorithm with maximal exact matches seed extension kernel. IET Circuits, Devices and Systems, 2021, 15, 94-103.	0.9	0
65	CMOS Capacitive Dry DNA Storage Monitoring: Design, Implementation and Experimental Results. IEEE Sensors Journal, 2022, 22, 5521-5530.	2.4	0