

# Sebastian Magierowski

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/637886/publications.pdf>

Version: 2024-02-01

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  | Novel Field-Effect Transistor Sensor for DNA Storage Monitoring. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-11.                                                                                                                                                        | 2.4 | 3         |
| 2  | CMOS Capacitive Dry DNA Storage Monitoring: Design, Implementation and Experimental Results. IEEE Sensors Journal, 2022, 22, 5521-5530.                                                                                                                                                       | 2.4 | 0         |
| 3  | Oral Cells-On-Chip: Design, Modeling and Experimental Results. Bioengineering, 2022, 9, 218.                                                                                                                                                                                                  | 1.6 | 3         |
| 4  | Design and Modeling of a New MEMS Capacitive Microcantilever Sensor for Gas Flow Monitoring<br>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         |
| 5  | Calibration-Free CMOS Capacitive Sensor for Life Science Applications. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-12.                                                                                                                                                  | 2.4 | 8         |
| 6  | 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        |
| 7  | UV-Vis Spectrophotometric Analysis of DNA Retrieval for DNA Storage Applications. Actuators, 2021, 10, 246.                                                                                                                                                                                   | 1.2 | 4         |
| 8  | CMOS Capacitive DNA Nano-Mass Measurement for DNA Storage Application. , 2021, , .                                                                                                                                                                                                            |     | 0         |
| 9  | Hardware acceleration of the novel two dimensional Burrows-Wheeler Aligner algorithm with maximal exact matches seed extension kernel. IET Circuits, Devices and Systems, 2021, 15, 94-103.                                                                                                   | 0.9 | 0         |
| 10 | A Scalable Discrete-Time Integrated CMOS Readout Array for Nanopore Based DNA Sequencing. IEEE Access, 2021, 9, 155543-155554.                                                                                                                                                                | 2.6 | 6         |
| 11 | A Novel Calibration-Free Fully Integrated CMOS Capacitive Sensor for Life Science Applications. , 2021, , .                                                                                                                                                                                   |     | 1         |
| 12 | Linearity Analysis of CMOS Parametric Upconverters. IEEE Access, 2020, 8, 190906-190921.                                                                                                                                                                                                      | 2.6 | 1         |
| 13 | 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         |
| 14 | FPGA-Accelerated 3rd Generation DNA Sequencing. IEEE Transactions on Biomedical Circuits and Systems, 2020, 14, 65-74.                                                                                                                                                                        | 2.7 | 14        |
| 15 | 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         |
| 16 | Toward Versatile CMOS Capacitive Sensors for Cellular Monitoring. , 2020, , .                                                                                                                                                                                                                 |     | 0         |
| 17 | A New Capacitive MEMS Flow Sensor for Industrial Gas Transport Monitoring Applications. , 2020, , .                                                                                                                                                                                           |     | 1         |
| 18 | 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         |

| #  | ARTICLE                                                                                                                                                                                                        | IF  | CITATIONS |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | Recent Advances of Computerized Graphical Methods for the Detection and Progress Assessment of Visual Distortion Caused by Macular Disorders. <i>Vision (Switzerland)</i> , 2019, 3, 25.                       | 0.5 | 2         |
| 20 | Label-Free Impedometric Antibioqram Test. , 2019, , .                                                                                                                                                          |     | 0         |
| 21 | A 65-nm CMOS Low-Power Front-End for 3rd Generation DNA Sequencing. , 2019, , .                                                                                                                                |     | 0         |
| 22 | A High-Efficiency Discrete Current Mode Output Stage Potentiostat Instrumentation for Self-Powered Electrochemical Devices. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2018, 67, 2247-2255. | 2.4 | 11        |
| 23 | Hardware Accelerated DNA Sequencing. , 2018, , .                                                                                                                                                               |     | 1         |
| 24 | FPGA-based DNA Basecalling Hardware Acceleration. , 2018, , .                                                                                                                                                  |     | 4         |
| 25 | On Combined Rate and Power Adaptation for Indoor Wireless Environments. , 2018, , .                                                                                                                            |     | 0         |
| 26 | A Novel Fully Differential NMR Transciever. , 2018, , .                                                                                                                                                        |     | 0         |
| 27 | A High-Speed Embedded Event Detector for Mobile DNA Sequencing. , 2018, , .                                                                                                                                    |     | 0         |
| 28 | Microbiological Sensing Technologies: A Review. <i>Bioengineering</i> , 2018, 5, 20.                                                                                                                           | 1.6 | 37        |
| 29 | Towards scalable capacitive cantilever arrays for emerging biomedical applications. <i>Sensors and Actuators A: Physical</i> , 2017, 260, 90-98.                                                               | 2.0 | 4         |
| 30 | Embedded CMOS bioinformatics for nanopore sequencers. , 2017, , .                                                                                                                                              |     | 0         |
| 31 | A CMOS differential receiver dedicated to nuclear magnetic resonance applications. <i>Analog Integrated Circuits and Signal Processing</i> , 2017, 91, 97-109.                                                 | 0.9 | 3         |
| 32 | Average Error Rates and Achievable Capacity in Large Office Indoor Wireless Environments. <i>IEEE Transactions on Communications</i> , 2017, 65, 4955-4965.                                                    | 4.9 | 0         |
| 33 | Vehicle Routing Problems for Drone Delivery. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2017, 47, 70-85.                                                                             | 5.9 | 697       |
| 34 | Toward spirometry-on-chip: design, implementation and experimental results. <i>Microsystem Technologies</i> , 2017, 23, 4591-4598.                                                                             | 1.2 | 7         |
| 35 | GPU base calling for DNA strand sequencing. , 2017, , .                                                                                                                                                        |     | 0         |
| 36 | Gain-configurable lower sideband parametric downconverter. , 2017, , .                                                                                                                                         |     | 3         |

| #  | ARTICLE                                                                                                                                                                                      | IF  | CITATIONS |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | Nanopore-CMOS Interfaces for DNA Sequencing. Biosensors, 2016, 6, 42.                                                                                                                        | 2.3 | 16        |
| 38 | A Multidisciplinary Approach to High Throughput Nuclear Magnetic Resonance Spectroscopy. Sensors, 2016, 16, 850.                                                                             | 2.1 | 12        |
| 39 | CMOS for high-speed nanopore DNA basecalling. , 2016, , .                                                                                                                                    |     | 0         |
| 40 | Internal Readout System for Molecular Recorders. IEEE Transactions on Molecular, Biological, and Multi-Scale Communications, 2015, 1, 26-36.                                                 | 1.4 | 1         |
| 41 | Active nuclear magnetic resonance probe: A new multidisciplinary approach toward highly sensitive biomolecular spectroscopy. , 2015, , .                                                     |     | 3         |
| 42 | 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         |
| 43 | Parametric CMOS upconverters and downconverters. International Journal of Circuit Theory and Applications, 2014, 42, 1209-1227.                                                              | 1.3 | 8         |
| 44 | 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        |
| 45 | Joint Fading and Shadowing Model for Large Office Indoor WLAN Environments. IEEE Transactions on Antennas and Propagation, 2014, 62, 2209-2222.                                              | 3.1 | 28        |
| 46 | Fading Statistics for the Joint Fading and Two Path Shadowing Channel. IEEE Wireless Communications Letters, 2014, 3, 301-304.                                                               | 3.2 | 10        |
| 47 | Modelling the reception process in diffusion-based molecular communication channels. , 2013, , .                                                                                             |     | 15        |
| 48 | A Direct 100 GHz Parametric CMOS Tripler. IEEE Microwave and Wireless Components Letters, 2013, 23, 557-559.                                                                                 | 2.0 | 10        |
| 49 | Blind Synchronization in Diffusion-Based Molecular Communication Channels. IEEE Communications Letters, 2013, 17, 2156-2159.                                                                 | 2.5 | 85        |
| 50 | 35.5 GHz Parametric CMOS Upconverter. IEEE Microwave and Wireless Components Letters, 2012, 22, 477-479.                                                                                     | 2.0 | 8         |
| 51 | 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        |
| 52 | Antenna Array Designs for OFDM WLAN Indoor Transmission. Wireless Personal Communications, 2011, 56, 779-789.                                                                                | 1.8 | 0         |
| 53 | RF CMOS Parametric Downconverters. IEEE Transactions on Microwave Theory and Techniques, 2010, 58, 518-528.                                                                                  | 2.9 | 16        |
| 54 | Coherent parametric RF downconversion in CMOS. , 2010, , .                                                                                                                                   |     | 12        |

| #  | ARTICLE                                                                                                       | IF  | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------|-----|-----------|
| 55 | Evaluating Wireless Network Effects for SLAM Robot Map Making. , 2010, , .                                    |     | 1         |
| 56 | Parametric THz frequency multiplication using CMOS technology. , 2010, , .                                    |     | 2         |
| 57 | Implementation of an all-analog active reflector. , 2010, , .                                                 |     | 1         |
| 58 | 100 GHz Parametric CMOS Frequency Doubler. IEEE Microwave and Wireless Components Letters, 2010, 20, 690-692. | 2.0 | 17        |
| 59 | A 0.13-Åµm CMOS wireless reflector for phase sweep cooperative diversity. , 2010, , .                         |     | 2         |
| 60 | Subharmonically Pumped RF CMOS Paramps. IEEE Transactions on Electron Devices, 2008, 55, 601-608.             | 1.6 | 11        |
| 61 | Cooperative Phase Sweep Amplify-and-Forward Transmission. , 2008, , .                                         |     | 3         |
| 62 | Design Issues for Sensor Network RF Receivers. , 2007, , .                                                    |     | 3         |
| 63 | IEEE 802.11b SDMA Performance in Realistic Environments. IEEE Vehicular Technology Conference, 2007, , .      | 0.2 | 1         |
| 64 | RF Hardware Modeling of a Direct Conversion Receiver Using SDMA. , 2006, , .                                  |     | 0         |
| 65 | Development of the Forward Link Physical Layer in a Multiuser SDMA/CDMA Low-Power Transceiver. , 2006, , .    |     | 0         |