

# Sandro Carrara

## List of Publications by Year in descending order

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69  
papers

1,535  
citations

394421

19  
h-index

345221

36  
g-index

69  
all docs

69  
docs citations

69  
times ranked

1661  
citing authors

#	ARTICLE	IF	CITATIONS
1	Coupling Effects of Crosstalk and Parasitic Loss on Capacitive Micromachined Ultrasonic Transducers. IEEE Sensors Journal, 2022, 22, 3281-3297.	4.7	4
2	A Wearable Electrochemical Sensing System for Non-Invasive Monitoring of Lithium Drug in Bipolar Disorder. IEEE Sensors Journal, 2021, 21, 9649-9656.	4.7	11
3	Continuous monitoring of propofol in human serum with fouling compensation by support vector classifier. Biosensors and Bioelectronics, 2021, 171, 112666.	10.1	12
4	Wearable multifunctional sweat-sensing system for efficient healthcare monitoring. Sensors and Actuators B: Chemical, 2021, 328, 129017.	7.8	48
5	Body Dust: Well Beyond Wearable and Implantable Sensors. IEEE Sensors Journal, 2021, 21, 12398-12406.	4.7	21
6	All-Solid-State Ion-Selective Electrodes: A Tutorial for Correct Practice. IEEE Sensors Journal, 2021, 21, 22143-22154.	4.7	12
7	Wearable and Battery-Free Health-Monitoring Devices With Optical Power Transfer. IEEE Sensors Journal, 2021, 21, 9402-9412.	4.7	14
8	Smart Portable Pen for Continuous Monitoring of Anaesthetics in Human Serum With Machine Learning. IEEE Transactions on Biomedical Circuits and Systems, 2021, 15, 294-302.	4.0	4
9	Bismuth-Nanocomposites Modified SPCEs for Non-Enzymatic Electrochemical Sensors. IEEE Sensors Journal, 2021, 21, 11155-11162.	4.7	6
10	The Birth of a New Field: Memristive Sensors. A Review. IEEE Sensors Journal, 2021, 21, 12370-12378.	4.7	22
11	A 20 Mbps, 433 MHz RF ASK Transmitter to Inductively Power a Distributed Network of Miniaturised Neural Implants. , 2021, , .		2
12	20 Years of IEEE Sensors Journal. IEEE Sensors Journal, 2021, 21, 12344-12351.	4.7	2
13	Equivalent Circuit Analysis of CMUTs-based Device for Measurement in Liquid Samples. , 2021, , .		2
14	Multi-Ion-Sensing Emulator and Multivariate Calibration Optimization by Machine Learning Models. IEEE Access, 2021, 9, 46821-46836.	4.2	4
15	Real-Time Multi-Ion-Monitoring Front-End With Interference Compensation by Multi-Output Support Vector Regressor. IEEE Transactions on Biomedical Circuits and Systems, 2021, 15, 1093-1106.	4.0	1
16	Nanostructured Bismuth Electrodes for Non-Enzymatic Paracetamol Sensing: Development, Testing, and Computational Approach. Chemistry Proceedings, 2021, 5, .	0.1	0
17	From 0.18Åµm to 28nm CMOS Down-scaling for Data Links in Body Dust Applications. , 2021, , .		1
18	Electrodes for Paracetamol Sensing Modified with Bismuth Oxide and Oxynitrate Heterostructures: An Experimental and Computational Study. Chemosensors, 2021, 9, 361.	3.6	6

#	ARTICLE	IF	CITATIONS
19	Multichannel Front-End for Electrochemical Sensing of Metabolites, Drugs, and Electrolytes. IEEE Sensors Journal, 2020, 20, 3636-3645.	4.7	11
20	New Measurement Method in Drug Sensing by Direct Total-Charge Detection in Voltammetry. , 2020, , .		3
21	Miniaturised Wireless Power Transfer Systems for Neurostimulation: A Review. IEEE Transactions on Biomedical Circuits and Systems, 2020, 14, 1160-1178.	4.0	91
22	Emulator Design and Generation of Synthetic Dataset in Multi-Ion Sensing. , 2020, , .		2
23	Humidity Sensors for High Energy Physics Applications: A Review. IEEE Sensors Journal, 2020, 20, 10335-10344.	4.7	38
24	Biosensors for Biomolecular Computing: a Review and Future Perspectives. BioNanoScience, 2020, 10, 554-563.	3.5	4
25	New Approach for Making Standard the Development of Biosensing Devices by a Modular Multi-Purpose Design. IEEE Transactions on Nanobioscience, 2020, 19, 339-346.	3.3	4
26	Electrochemical determination of nicotine in smokersâ€™ sweat. Microchemical Journal, 2020, 158, 105155.	4.5	25
27	Pencil Graphite Needle-Shaped Biosensor for Anaesthetic Monitoring in Human Serum. , 2020, , .		5
28	Nanowire Sensors in Cancer. Trends in Biotechnology, 2019, 37, 86-99.	9.3	80
29	Multi-Target Electrolyte Sensing Front-End for Wearable Physical Monitoring. , 2019, , .		6
30	Quasi-Digital Biosensor-Interface for a Portable Pen to Monitor Anaesthetics Delivery. , 2019, , .		9
31	Fast Procedures for the Electrodeposition of Platinum Nanostructures on Miniaturized Electrodes for Improved Ion Sensing. Sensors, 2019, 19, 2260.	3.8	10
32	Gold and silver bio/nano-hybrids-based electrochemical immunosensor for ultrasensitive detection of carcinoembryonic antigen. Biosensors and Bioelectronics, 2019, 141, 111439.	10.1	61
33	Optimized Sampling Rate for Voltammetry-Based Electrochemical Sensing in Wearable and IoT Applications. , 2019, 3, 1-4.		16
34	Multi-Panel, On-Single-Chip Memristive Biosensing. IEEE Sensors Journal, 2019, 19, 5769-5774.	4.7	3
35	Flexible sweat sensors for non-invasive optimization of lithium dose in psychiatric disorders. , 2019, , .		7
36	Radiation Tolerance of Capacitive Humidity Sensor for High-Energy Physics Applications. , 2019, 3, 1-4.		7

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37	Live Demonstration: Quasi-Digital Portable Pen to Monitor Anaesthetics Delivery. , 2019, , .		1
38	Long-term Monitoring of Propofol and Fouling Effect on Pencil Graphite Electrodes. Electroanalysis, 2018, 30, 1363-1369.	2.9	18
39	IoT for Telemedicine Practices enabled by an Androidâ„¢ Application with Cloud System Integration. , 2018, , .		13
40	A Flexible Front-End for Wearable Electrochemical Sensing. , 2018, , .		15
41	Battery-Free. Sticker-Like, Device for Health Monitoring, Operated by Optical Power Transfer. , 2018, , .		1
42	Performance of Carbon Nano-Scale Allotropes in Detecting Midazolam and Paracetamol in Undiluted Human Serum. IEEE Sensors Journal, 2018, 18, 5073-5081.	4.7	13
43	Cleaning strategy for carbon-based electrodes: Long-term propofol monitoring in human serum. Sensors and Actuators B: Chemical, 2018, 269, 304-313.	7.8	24
44	Highly-stable Li <sup>+</sup> ion-selective electrodes based on noble metal nanostructured layers as solid-contacts. Analytica Chimica Acta, 2018, 1027, 22-32.	5.4	64
45	An IoT Solution for Online Monitoring of Anesthetics in Human Serum Based on an Integrated Fluidic Bioelectronic System. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 1056-1064.	4.0	24
46	Biomedical electrochemical sensors for resource-limited countries. Current Opinion in Electrochemistry, 2017, 3, 51-56.	4.8	11
47	A Robust Capacitive Digital Read-Out Circuit for a Scalable Tactile Skin. IEEE Sensors Journal, 2017, 17, 2682-2695.	4.7	17
48	Architecture and procedures for pH and temperature monitoring in medical applications. , 2017, , .		5
49	CMOS body dust â€” Towards drinkable diagnostics. , 2017, , .		3
50	Raspberry Pi Based System for Portable and Simultaneous Monitoring of Anesthetics and Therapeutic Compounds. , 2017, , .		18
51	The memristive effect as a novelty in drug monitoring. Nanoscale, 2017, 9, 9676-9684.	5.6	24
52	Smart e-Patch for drugs monitoring in schizophrenia. , 2016, , .		18
53	Simultaneous monitoring of anesthetics and therapeutic compounds with a portable multichannel potentiostat. , 2016, , .		12
54	Label-Free Ultrasensitive Memristive Aptasensor. Nano Letters, 2016, 16, 4472-4476.	9.1	87

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55	Wireless Monitoring of Endogenous and Exogenous Biomolecules on an Android Interface. IEEE Sensors Journal, 2016, 16, 3163-3170.	4.7	10
56	Fast synthesis of platinum nanopetals and nanospheres for highly-sensitive non-enzymatic detection of glucose and selective sensing of ions. Scientific Reports, 2015, 5, 15277.	3.3	60
57	Electrochemical nanostructured biosensors: carbon nanotubes versus conductive and semi-conductive nanoparticles. Chemical Papers, 2015, 69, .	2.2	15
58	Wireless monitoring in intensive care units by a 3D-printed system with embedded electronic. , 2015, , .		8
59	Computational Study on the Electrical Behavior of Silicon Nanowire Memristive Biosensors. IEEE Sensors Journal, 2015, 15, 6208-6217.	4.7	19
60	Memristor-based devices for sensing. , 2014, , .		25
61	Do Carbon Nanotubes contribute to Electrochemical Biosensing?. Electrochimica Acta, 2014, 128, 102-112.	5.2	43
62	An implantable bio-micro-system for drug monitoring. , 2013, , .		10
63	Bio/CMOS Interfaces and Co-Design. , 2013, , .		11
64	Memristive-biosensors: A new detection method by using nanofabricated memristors. Sensors and Actuators B: Chemical, 2012, 171-172, 449-457.	7.8	110
65	A current-mode potentiostat for multi-target detection tested with different lactate biosensors. , 2012, , .		9
66	Energy Harvesting and Remote Powering for Implantable Biosensors. IEEE Sensors Journal, 2011, 11, 1573-1586.	4.7	137
67	Multi-panel drugs detection in human serum for personalized therapy. Biosensors and Bioelectronics, 2011, 26, 3914-3919.	10.1	86
68	New Insight on Bio-sensing by Nano-fabricated Memristors. BioNanoScience, 2011, 1, 1-3.	3.5	47
69	Memristive devices fabricated with silicon nanowire schottky barrier transistors. , 2010, , .		23