

# Sandro Carrara

## List of Publications by Year in descending order

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Version: 2024-02-01

69  
papers

1,535  
citations

394286

19  
h-index

345118

36  
g-index

69  
all docs

69  
docs citations

69  
times ranked

1661  
citing authors

#	ARTICLE	IF	CITATIONS
1	Energy Harvesting and Remote Powering for Implantable Biosensors. <i>IEEE Sensors Journal</i> , 2011, 11, 1573-1586.	2.4	137
2	Memristive-biosensors: A new detection method by using nanofabricated memristors. <i>Sensors and Actuators B: Chemical</i> , 2012, 171-172, 449-457.	4.0	110
3	Miniaturised Wireless Power Transfer Systems for Neurostimulation: A Review. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2020, 14, 1160-1178.	2.7	91
4	Label-Free Ultrasensitive Memristive Aptasensor. <i>Nano Letters</i> , 2016, 16, 4472-4476.	4.5	87
5	Multi-panel drugs detection in human serum for personalized therapy. <i>Biosensors and Bioelectronics</i> , 2011, 26, 3914-3919.	5.3	86
6	Nanowire Sensors in Cancer. <i>Trends in Biotechnology</i> , 2019, 37, 86-99.	4.9	80
7	Highly-stable Li <sup>+</sup> ion-selective electrodes based on noble metal nanostructured layers as solid-contacts. <i>Analytica Chimica Acta</i> , 2018, 1027, 22-32.	2.6	64
8	Gold and silver bio/nano-hybrids-based electrochemical immunosensor for ultrasensitive detection of carcinoembryonic antigen. <i>Biosensors and Bioelectronics</i> , 2019, 141, 111439.	5.3	61
9	Fast synthesis of platinum nanopetals and nanospheres for highly-sensitive non-enzymatic detection of glucose and selective sensing of ions. <i>Scientific Reports</i> , 2015, 5, 15277.	1.6	60
10	Wearable multifunctional sweat-sensing system for efficient healthcare monitoring. <i>Sensors and Actuators B: Chemical</i> , 2021, 328, 129017.	4.0	48
11	New Insight on Bio-sensing by Nano-fabricated Memristors. <i>BioNanoScience</i> , 2011, 1, 1-3.	1.5	47
12	Do Carbon Nanotubes contribute to Electrochemical Biosensing?. <i>Electrochimica Acta</i> , 2014, 128, 102-112.	2.6	43
13	Humidity Sensors for High Energy Physics Applications: A Review. <i>IEEE Sensors Journal</i> , 2020, 20, 10335-10344.	2.4	38
14	Memristor-based devices for sensing. , 2014, , .		25
15	Electrochemical determination of nicotine in smokers's™ sweat. <i>Microchemical Journal</i> , 2020, 158, 105155.	2.3	25
16	Cleaning strategy for carbon-based electrodes: Long-term propofol monitoring in human serum. <i>Sensors and Actuators B: Chemical</i> , 2018, 269, 304-313.	4.0	24
17	An IoT Solution for Online Monitoring of Anesthetics in Human Serum Based on an Integrated Fluidic Bioelectronic System. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2018, 12, 1056-1064.	2.7	24
18	The memristive effect as a novelty in drug monitoring. <i>Nanoscale</i> , 2017, 9, 9676-9684.	2.8	24

#	ARTICLE	IF	CITATIONS
19	Memristive devices fabricated with silicon nanowire schottky barrier transistors. , 2010, , .		23
20	The Birth of a New Field: Memristive Sensors. A Review. IEEE Sensors Journal, 2021, 21, 12370-12378.	2.4	22
21	Body Dust: Well Beyond Wearable and Implantable Sensors. IEEE Sensors Journal, 2021, 21, 12398-12406.	2.4	21
22	Computational Study on the Electrical Behavior of Silicon Nanowire Memristive Biosensors. IEEE Sensors Journal, 2015, 15, 6208-6217.	2.4	19
23	Smart e-Patch for drugs monitoring in schizophrenia. , 2016, , .		18
24	Raspberry Pi Based System for Portable and Simultaneous Monitoring of Anesthetics and Therapeutic Compounds. , 2017, , .		18
25	Long-term Monitoring of Propofol and Fouling Effect on Pencil Graphite Electrodes. Electroanalysis, 2018, 30, 1363-1369.	1.5	18
26	A Robust Capacitive Digital Read-Out Circuit for a Scalable Tactile Skin. IEEE Sensors Journal, 2017, 17, 2682-2695.	2.4	17
27	Optimized Sampling Rate for Voltammetry-Based Electrochemical Sensing in Wearable and IoT Applications. , 2019, 3, 1-4.		16
28	Electrochemical nanostructured biosensors: carbon nanotubes versus conductive and semi-conductive nanoparticles. Chemical Papers, 2015, 69, .	1.0	15
29	A Flexible Front-End for Wearable Electrochemical Sensing. , 2018, , .		15
30	Wearable and Battery-Free Health-Monitoring Devices With Optical Power Transfer. IEEE Sensors Journal, 2021, 21, 9402-9412.	2.4	14
31	IoT for Telemedicine Practices enabled by an Android, Application with Cloud System Integration. , 2018, , .		13
32	Performance of Carbon Nano-Scale Allotropes in Detecting Midazolam and Paracetamol in Undiluted Human Serum. IEEE Sensors Journal, 2018, 18, 5073-5081.	2.4	13
33	Simultaneous monitoring of anesthetics and therapeutic compounds with a portable multichannel potentiostat. , 2016, , .		12
34	Continuous monitoring of propofol in human serum with fouling compensation by support vector classifier. Biosensors and Bioelectronics, 2021, 171, 112666.	5.3	12
35	All-Solid-State Ion-Selective Electrodes: A Tutorial for Correct Practice. IEEE Sensors Journal, 2021, 21, 22143-22154.	2.4	12
36	Biomedical electrochemical sensors for resource-limited countries. Current Opinion in Electrochemistry, 2017, 3, 51-56.	2.5	11

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37	Multichannel Front-End for Electrochemical Sensing of Metabolites, Drugs, and Electrolytes. IEEE Sensors Journal, 2020, 20, 3636-3645.	2.4	11
38	A Wearable Electrochemical Sensing System for Non-Invasive Monitoring of Lithium Drug in Bipolar Disorder. IEEE Sensors Journal, 2021, 21, 9649-9656.	2.4	11
39	Bio/CMOS Interfaces and Co-Design. , 2013, , .		11
40	An implantable bio-micro-system for drug monitoring. , 2013, , .		10
41	Wireless Monitoring of Endogenous and Exogenous Biomolecules on an Android Interface. IEEE Sensors Journal, 2016, 16, 3163-3170.	2.4	10
42	Fast Procedures for the Electrodeposition of Platinum Nanostructures on Miniaturized Electrodes for Improved Ion Sensing. Sensors, 2019, 19, 2260.	2.1	10
43	A current-mode potentiostat for multi-target detection tested with different lactate biosensors. , 2012, , .		9
44	Quasi-Digital Biosensor-Interface for a Portable Pen to Monitor Anaesthetics Delivery. , 2019, , .		9
45	Wireless monitoring in intensive care units by a 3D-printed system with embedded electronic. , 2015, , .		8
46	Flexible sweat sensors for non-invasive optimization of lithium dose in psychiatric disorders. , 2019, , .		7
47	Radiation Tolerance of Capacitive Humidity Sensor for High-Energy Physics Applications. , 2019, 3, 1-4.		7
48	Multi-Target Electrolyte Sensing Front-End for Wearable Physical Monitoring. , 2019, , .		6
49	Bismuth-Nanocomposites Modified SPCEs for Non-Enzymatic Electrochemical Sensors. IEEE Sensors Journal, 2021, 21, 11155-11162.	2.4	6
50	Electrodes for Paracetamol Sensing Modified with Bismuth Oxide and Oxynitrate Heterostructures: An Experimental and Computational Study. Chemosensors, 2021, 9, 361.	1.8	6
51	Architecture and procedures for pH and temperature monitoring in medical applications. , 2017, , .		5
52	Pencil Graphite Needle-Shaped Biosensor for Anaesthetic Monitoring in Human Serum. , 2020, , .		5
53	Biosensors for Biomolecular Computing: a Review and Future Perspectives. BioNanoScience, 2020, 10, 554-563.	1.5	4
54	New Approach for Making Standard the Development of Biosensing Devices by a Modular Multi-Purpose Design. IEEE Transactions on Nanobioscience, 2020, 19, 339-346.	2.2	4

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55	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.	2.7	4
56	Multi-Ion-Sensing Emulator and Multivariate Calibration Optimization by Machine Learning Models. IEEE Access, 2021, 9, 46821-46836.	2.6	4
57	Coupling Effects of Crosstalk and Parasitic Loss on Capacitive Micromachined Ultrasonic Transducers. IEEE Sensors Journal, 2022, 22, 3281-3297.	2.4	4
58	CMOS body dust " Towards drinkable diagnostics. , 2017, , .		3
59	Multi-Panel, On-Single-Chip Memristive Biosensing. IEEE Sensors Journal, 2019, 19, 5769-5774.	2.4	3
60	New Measurement Method in Drug Sensing by Direct Total-Charge Detection in Voltammetry. , 2020, , .		3
61	Emulator Design and Generation of Synthetic Dataset in Multi-Ion Sensing. , 2020, , .		2
62	A 20 Mbps, 433 MHz RF ASK Transmitter to Inductively Power a Distributed Network of Miniaturised Neural Implants. , 2021, , .		2
63	20 Years of IEEE Sensors Journal. IEEE Sensors Journal, 2021, 21, 12344-12351.	2.4	2
64	Equivalent Circuit Analysis of CMUTs-based Device for Measurement in Liquid Samples. , 2021, , .		2
65	Battery-Free. Sticker-Like, Device for Health Monitoring, Operated by Optical Power Transfer. , 2018, , .		1
66	Live Demonstration: Quasi-Digital Portable Pen to Monitor Anaesthetics Delivery. , 2019, , .		1
67	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.	2.7	1
68	From 0.18µm to 28nm CMOS Down-scaling for Data Links in Body Dust Applications. , 2021, , .		1
69	Nanostructured Bismuth Electrodes for Non-Enzymatic Paracetamol Sensing: Development, Testing, and Computational Approach. Chemistry Proceedings, 2021, 5, .	0.1	0