

Emilio Sardini

List of Publications by Year in descending order

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96
papers

1,793
citations

257101

24
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301761

39
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98
all docs

98
docs citations

98
times ranked

2300
citing authors

#	ARTICLE	IF	CITATIONS
1	Self-Powered Wireless Sensor for Air Temperature and Velocity Measurements With Energy Harvesting Capability. IEEE Transactions on Instrumentation and Measurement, 2011, 60, 1838-1844.	2.4	113
2	Sensorized Glove for Measuring Hand Finger Flexion for Rehabilitation Purposes. IEEE Transactions on Instrumentation and Measurement, 2013, 62, 3308-3314.	2.4	98
3	Mechanical behavior of strain sensors based on PEDOT:PSS and silver nanoparticles inks deposited on polymer substrate by inkjet printing. Sensors and Actuators A: Physical, 2016, 243, 71-80.	2.0	91
4	Autonomous Wearable System for Vital Signs Measurement With Energy-Harvesting Module. IEEE Transactions on Instrumentation and Measurement, 2016, 65, 1423-1434.	2.4	84
5	An efficient electromagnetic power harvesting device for low-frequency applications. Sensors and Actuators A: Physical, 2011, 172, 475-482.	2.0	83
6	Wireless Wearable T-Shirt for Posture Monitoring During Rehabilitation Exercises. IEEE Transactions on Instrumentation and Measurement, 2015, 64, 439-448.	2.4	81
7	A new measurement method for capacitance transducers in a distance compensated telemetric sensor system. Measurement Science and Technology, 2005, 16, 1593-1599.	1.4	78
8	Kinetic and thermal energy harvesters for implantable medical devices and biomedical autonomous sensors. Measurement Science and Technology, 2014, 25, 012003.	1.4	77
9	An inductive telemetric measurement system for humidity sensing. Measurement Science and Technology, 2008, 19, 115204.	1.4	69
10	3D gelatin-chitosan hybrid hydrogels combined with human platelet lysate highly support human mesenchymal stem cell proliferation and osteogenic differentiation. Journal of Tissue Engineering, 2019, 10, 204173141984585.	2.3	59
11	Instrumented wearable belt for wireless health monitoring. Procedia Engineering, 2010, 5, 580-583.	1.2	46
12	Wireless Instrumented Crutches for Force and Movement Measurements for Gait Monitoring. IEEE Transactions on Instrumentation and Measurement, 2015, 64, 3369-3379.	2.4	42
13	Autonomous Sensor System With Power Harvesting for Telemetric Temperature Measurements of Pipes. IEEE Transactions on Instrumentation and Measurement, 2009, 58, 1471-1478.	2.4	41
14	Aerosol Jet Printed 3D Electrochemical Sensors for Protein Detection. Sensors, 2018, 18, 3719.	2.1	40
15	A Review on Biomaterials for 3D Conductive Scaffolds for Stimulating and Monitoring Cellular Activities. Applied Sciences (Switzerland), 2019, 9, 961.	1.3	40
16	Wearable object detection system for the blind. , 2012, , .		36
17	Printed Strain Gauge on 3D and Low-Melting Point Plastic Surface by Aerosol Jet Printing and Photonic Curing. Sensors, 2019, 19, 4220.	2.1	34
18	Printed Electrochemical Biosensors: Opportunities and Metrological Challenges. Biosensors, 2020, 10, 166.	2.3	34

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19	Passive and Self-Powered Autonomous Sensors for Remote Measurements. <i>Sensors</i> , 2009, 9, 943-960.	2.1	33
20	Numerical and experimental investigation on contactless resonant sensors. <i>Sensors and Actuators A: Physical</i> , 2010, 162, 329-335.	2.0	32
21	Design and test of an autonomous sensor for force measurements in human knee implants. <i>Sensors and Actuators A: Physical</i> , 2011, 166, 1-8.	2.0	32
22	Wireless Measurement Electronics for Passive Temperature Sensor. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2012, 61, 2354-2361.	2.4	32
23	Support-Material-Free Microfluidics on an Electrochemical Sensors Platform by Aerosol Jet Printing. <i>Sensors</i> , 2019, 19, 1842.	2.1	31
24	Future Sensors for Smart Objects by Printing Technologies in Industry 4.0 Scenario. <i>Energies</i> , 2020, 13, 5916.	1.6	31
25	A Wearable and Wirelessly Powered System for Multiple Finger Tracking. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2020, 69, 2542-2551.	2.4	27
26	Printed Smart Devices on Cellulose-Based Materials by means of Aerosol-Jet Printing and Photonic Curing. <i>Sensors</i> , 2020, 20, 841.	2.1	25
27	Wireless Point-of-Care Platform With Screen-Printed Sensors for Biomarkers Detection. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2017, 66, 2448-2455.	2.4	18
28	Electrochemical detection of different p53 conformations by using nanostructured surfaces. <i>Scientific Reports</i> , 2019, 9, 17347.	1.6	17
29	Impedance-Based Monitoring of Mesenchymal Stromal Cell Three-Dimensional Proliferation Using Aerosol Jet Printed Sensors: A Tissue Engineering Application. <i>Materials</i> , 2020, 13, 2231.	1.3	17
30	Contactless electromagnetic excitation of resonant sensors made of conductive miniaturized structures. <i>Sensors and Actuators A: Physical</i> , 2008, 148, 44-50.	2.0	16
31	Multi-parameters wireless shirt for physiological monitoring. , 2011, , .		16
32	Telemetric Technique for Wireless Strain Measurement From an Inkjet-Printed Resistive Sensor. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2017, 66, 583-591.	2.4	16
33	Smart vest for posture monitoring in rehabilitation exercises. , 2012, , .		15
34	Magnetically induced oscillations on a conductive cantilever for resonant microsensors. <i>Sensors and Actuators A: Physical</i> , 2007, 135, 197-202.	2.0	14
35	Electrical Characterization of PEDOT:PSS Strips Deposited by Inkjet Printing on Plastic Foil for Sensor Manufacturing. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2016, 65, 2137-2144.	2.4	14
36	Analysis of an electromechanical generator implanted in a human total knee prosthesis. , 2012, , .		13

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37	Multisensor System for Analyzing the Thigh Movement During Walking. IEEE Sensors Journal, 2017, 17, 4953-4961.	2.4	13
38	T-Shirt for Vital Parameter Monitoring. Lecture Notes in Electrical Engineering, 2014, , 201-205.	0.3	13
39	Electromagnetic Generators Employing Planar Inductors for Autonomous Sensor Applications. Procedia Chemistry, 2009, 1, 469-472.	0.7	12
40	Wireless Instrumented Crutches for Force and Tilt Monitoring in Lower Limb Rehabilitation. Procedia Engineering, 2014, 87, 348-351.	1.2	12
41	Potentiostats for Protein Biosensing: Design Considerations and Analysis on Measurement Characteristics. Journal of Sensors, 2019, 2019, 1-20.	0.6	12
42	Wireless instrumented cane for walking monitoring in Parkinson patients. , 2017, , .		11
43	Contactless Transmission of Measurement Information Between Sensor and Conditioning Electronics. IEEE Transactions on Instrumentation and Measurement, 2008, 57, 303-308.	2.4	10
44	Preliminary Study of Inkjet Printed Sensors for Monitoring Cell Cultures. Procedia Engineering, 2016, 168, 578-581.	1.2	10
45	Telemetric Technique for Passive Resistive Sensors Based on Impedance Real Part Measurement at Fixed Frequency. IEEE Transactions on Instrumentation and Measurement, 2018, 67, 2160-2168.	2.4	9
46	Temperature influence on Ti3C2Tx lines printed by aerosol jet printing. Sensors and Actuators A: Physical, 2021, 332, 113185.	2.0	9
47	Printed Multi-EMG Electrodes on the 3D Surface of an Orthosis for Rehabilitation: A Feasibility Study. IEEE Sensors Journal, 2021, 21, 14407-14417.	2.4	8
48	An Autonomous Sensor for Force Measurements in Human Knee Implants. Procedia Chemistry, 2009, 1, 718-721.	0.7	7
49	Power harvesting integrated in a knee implant for autonomous sensors implanted in human body. , 2015, , .		7
50	Low power wearable system for vital signs measurement in all day long applications. , 2015, , .		7
51	Design and fabrication of a flexible capacitive coplanar force sensor for biomedical applications. , 2018, , .		7
52	How to Assess the Measurement Performance of Mobile/Wearable Point-of-Care Testing Devices? A Systematic Review Addressing Sweat Analysis. Electronics (Switzerland), 2022, 11, 761.	1.8	6
53	Design of multichannel potentiostat for remote and longtime monitoring of glucose concentration during yeast fermentation. Review of Scientific Instruments, 2020, 91, 054104.	0.6	5
54	Preliminary Study of a Flexible Printed Multi-Sensing Platform for Electromyography and Lactate Measuring during Rehabilitation. , 2021, , .		5

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55	3D Electrochemical Sensor and Microstructuration Using Aerosol Jet Printing. <i>Sensors</i> , 2021, 21, 7820.	2.1	5
56	Aerosol Jet Printed and Photonic Cured Paper-Based Ammonia Sensor for Food Smart Packaging. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2022, 71, 1-10.	2.4	5
57	Resistive Sensors for Smart Objects: Analysis on Printing Techniques. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2022, 71, 1-15.	2.4	5
58	Nonlinear electromagnetic generators with polymeric materials for power harvesting from vibrations. <i>Procedia Engineering</i> , 2010, 5, 1168-1171.	1.2	4
59	Telemetric Model for Passive Resistive Sensors in Biomedical Applications. <i>Procedia Engineering</i> , 2014, 87, 444-447.	1.2	4
60	Sensor Analysis for a Modular Wearable Finger 3D Motion Tracking System. <i>Proceedings (mdpi)</i> , 2018, 2, 1051.	0.2	4
61	Application of a Modular Wearable System to Track Workers's™ Fingers Movement in Industrial Environments. , 2019, , .		4
62	Printed Sensors for Smart Objects in Industry 4.0. , 2021, , .		4
63	Wireless Measurement Technique for Telemetry Low-Value Resistive Sensors. <i>Procedia Engineering</i> , 2011, 25, 1261-1264.	1.2	3
64	Design considerations of an electromechanical generator implanted in human total knee prosthesis. <i>International Journal of Mechatronics and Manufacturing Systems</i> , 2013, 6, 270.	0.1	3
65	Screen-Printed Biosensors for the Early Detection of Biomarkers Related to Alzheimer Disease: Preliminary Results. <i>Procedia Engineering</i> , 2016, 168, 147-150.	1.2	3
66	Preliminary study of a low-cost point-of-care testing system using screen-printed biosensors: For early biomarkers detection related to Alzheimer Disease. , 2016, , .		3
67	Hand Robotic Rehabilitation: From Hospital to Home. <i>Mechanisms and Machine Science</i> , 2018, , 877-884.	0.3	3
68	Study Toward the Integration of a System for Bacterial Growth Monitoring in an Automated Specimen Processing Platform. <i>Lecture Notes in Electrical Engineering</i> , 2019, , 445-454.	0.3	3
69	INK-JET PRINTED STRETCHABLE SENSORS FOR CELL MONITORING UNDER MECHANICAL STIMULI: A FEASIBILITY STUDY. <i>Journal of Mechanics in Medicine and Biology</i> , 2019, 19, 1950049.	0.3	3
70	Novel Piezoelectric Sensor by Aerosol Jet Printing in Industry 4.0. , 2020, , .		3
71	Optimized power harvesting module for an autonomous sensor system implanted in a total knee prosthesis. , 2017, , .		2
72	Flexible monitoring system for automated detection of bacterial growth in a commercial specimen processing platform. , 2017, , .		2

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73	Design and implementation of a microsensor platform for protein detection realized via 3-D printing. , 2018, , .		2
74	A compact low-power wireless system for <i>in vivo</i> evaluation of heat and moisture exchanger performance. Measurement Science and Technology, 2019, 30, 025701.	1.4	2
75	PVDF Piezoelectric Sensors on 3D low-Melting Point Substrates: a Preliminary Study on Paper. , 2021, , .		2
76	Wearable Sensors for Human Movement Monitoring in Biomedical Applications: Case Studies. Biosystems and Biorobotics, 2015, , 111-123.	0.2	2
77	Inductive Telemetric Measurement Systems for Remote Sensing. , 0, , .		1
78	Novel telemetric technique for passive resistive sensors based on impedance phase angle measurement at constant frequency. , 2017, , .		1
79	A concept sensor-based system to be integrated in an existing automated platform monitoring bacterial growth. , 2017, , .		1
80	Spectrophotometer measurements to characterize conformational state of the proteins: p53 analysis. , 2018, , .		1
81	Study for the Integration of a Measuring System to an Automated Platform for Monitoring the Growth of Bacterial Cultures. , 2018, , .		1
82	Implantable autonomous device for wireless force measurement in total knee prosthesis. IEEE Instrumentation and Measurement Magazine, 2019, 22, 39-47.	1.2	1
83	A New Method for In Vivo Analysis of the Performances of a Heat and Moisture Exchanger (HME) in Mechanically Ventilated Patients. Pulmonary Medicine, 2019, 2019, 1-6.	0.5	1
84	Preliminary Study on Wearable System for Multiple Finger Tracking. Lecture Notes in Electrical Engineering, 2019, , 551-558.	0.3	1
85	Novel Wearable System for Surface EMG Using Compact Electronic Board and Printed Matrix of Electrodes. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2021, , 55-60.	0.2	1
86	Carbon on poly(μ -caprolactone) (PCL) Ink-jet Printed Sensor for Monitoring Cell Cultures of Myoblasts. IFMBE Proceedings, 2018, , 783-786.	0.2	1
87	Wearable Posture Monitoring Sensor. Lecture Notes in Electrical Engineering, 2014, , 255-259.	0.3	1
88	Validation of a modular and wearable system for tracking fingers movements. Acta IMEKO (2012), 2020, 9, 157.	0.4	1
89	A Computational Model For The Design Optimization Of Multi-Electrode Arrays By Aerosol-Jet Printing. Procedia CIRP, 2022, 110, 87-92.	1.0	1
90	Implantable Systems. , 2015, , 363-382.		0

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91	Preliminary Study on Wireless Passive Resistive Sensor Applied for Smart Objects. , 2021, , .		0
92	An Electromechanical Generator Implanted in Human Total Knee Prosthesis. Lecture Notes in Electrical Engineering, 2014, , 25-30.	0.3	0
93	Wireless Telemetric Technique for Resistive Sensors in Biomedical Applications. Lecture Notes in Electrical Engineering, 2015, , 365-370.	0.3	0
94	Preliminary Study of a Low-Cost Point-of-Care Testing System Using Screen-Printed Biosensors for Early Biomarkers Detection Related to Alzheimer Disease. Lecture Notes in Electrical Engineering, 2018, , 238-246.	0.3	0
95	Impedance Sensors Embedded in Culture Media for Early Detection of Bacteria Growth. Lecture Notes in Electrical Engineering, 2018, , 218-228.	0.3	0
96	Aerosol Jet Printed Sensors for Protein Detection: A Preliminary Study. Lecture Notes in Electrical Engineering, 2019, , 317-327.	0.3	0