Pere Ll Miribel-CatalÃ

List of Publications by Year
in descending order

73 papers	629 citations	858243 12 h-index	759306 22 g-index
77 all docs	77 docs citations	77 times ranked	951 citing authors

#	Article	IF	Citations
1	Self-Powered Point-of-Care Device for Galvanic Cell-Based Sample Concentration Measurement. Sensors, 2021, 21, 2665.	2.1	4
2	Ubiquitous Self-Powered Architecture for Fuel Cell-Based Point-of-Care Applications. IEEE Transactions on Industrial Electronics, 2021, 68, 11447-11457.	5.2	6
3	An integrated detection method for flow viscosity measurements in microdevices. IEEE Transactions on Biomedical Engineering, 2020, 68, 1-1.	2.5	4
4	Autonomous self-powered potentiostat architecture for biomedical wearable applications.. , 2020, , .		2
5	Self-Powered Portable Electronic Reader for Point-of-Care Amperometric Measurements. Sensors, 2019, 19, 3715.	2.1	6
6	Competitive USB-Powered Hand-Held Potentiostat for POC Applications: An HRP Detection Case. Sensors, 2019, 19, 5388.	2.1	9
7	Energy-Aware Adaptative Supercapacitor Storage System for Multi-Harvesting Solutions. , 2018, , .		3
8	â€˜Plug-and-Powerâ€™ Point-of-Care diagnostics: A novel approach for self-powered electronic reader-based portable analytical devices. Biosensors and Bioelectronics, 2018, 118, 88-96.	5.3	25
9	Introduction to Electrochemical Point-of-Care Devices. Bioanalysis, 2017, , 1-26.	0.1	0
10	Electrochemical Biosensors. Bioanalysis, 2017, , 27-66.	0.1	0
11	Electrochemical DC Techniques. Glucose Monitoring and Multi-parametric Detection. Bioanalysis, 2017, , 113-136.	0.1	0
12	Impedance Analysis AC Techniques. Cellular Quantification. Bioanalysis, 2017, , 137-166.	0.1	0
13	Project-Based Engineering Learning for BME: Electrochemical Instrumentation. Bioanalysis, 2017, , 167-223.	0.1	0
14	Ultra-Low-Power Harvesting Body-Centred Electronics for Future Health Monitoring Devices. , 2017, , 497-534.		0
15	Combined Dielectrophoresis and Impedance Systems for Bacteria Analysis in Microfluidic On-Chip Platforms. Sensors, 2016, 16, 1514.	2.1	38
16	A low-power electronic instrumentation for multi-parametric diabetes mellitus analysis. , 2016, , .		1
17	An adaptative self-powered energy harvester strain sensing device based of mechanical vibrations for structural health monitoring applications. , 2016, , .		3
18	A portable point-of-care device for multi-parametric diabetes mellitus analysis. , 2015, , .		3

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19	Combined dielectrophoretic and impedance system for onâ€chip controlled bacteria concentration: Application to Escherichia coli. Electrophoresis, 2015, 36, 1130-1141.	1.3	21
20	Bioimpedance Technique for Point-of-Care Devices Relying on Disposable Label-Free Sensors â€“ An Anemia Detection Case. , 2015, , .		3
21	Piezoelectric harvester-based self-powered adaptive circuit with wireless data transmission capability for structural health monitoring. , 2015, , .		4
22	Piezoelectric Harvester-based structural health monitoring that uses a self-powered adaptive circuit. , 2015, , .		5
23	Dielectrophoretic concentrator enhancement based on dielectric poles for continuously flowing samples. Electrophoresis, 2015, 36, 1405-1413.	1.3	5
24	Toward an Anemia Early Detection Device Based on 50-Î¼L Whole Blood Sample. IEEE Transactions on Biomedical Engineering, 2015, 62, 708-716.	2.5	16
25	Cooperative Energy Harvesting-Adaptive MAC Protocol for WBANs. Sensors, 2015, 15, 12635-12650.	2.1	56
26	An Instantaneous Low-Cost Point-of-Care Anemia Detection Device. Sensors, 2015, 15, 4564-4577.	2.1	22
27	Small-volume multiparametric electrochemical detection at low cost polymeric devices featuring nanoelectrodes. Proceedings of SPIE, 2015, , .	0.8	3
28	Design of a Customized Multipurpose Nano-Enabled Implantable System for In-Vivo Theranostics. Sensors, 2014, 14, 19275-19306.	2.1	14
29	Towards a portable point-of-use blood analysis with EIS technique device. , 2014, , .		2
30	A Proof-of-Concept of a Multi-harvesting Power Source in a Low-Voltage CMOS Technology. , 2012, , .		0
31	Market challenges facing academic research in commercializing nano-enabled implantable devices for in-vivo biomedical analysis. Technovation, 2012, 32, 193-204.	4.2	49
32	Fuel cell-powered microfluidic platform for lab-on-a-chip applications: Integration into an autonomous amperometric sensing device. Lab on A Chip, 2012, 12, 4232.	3.1	20
33	Combined impedance and dielectrophoresis portable device for point-of-care analysis. , 2011, , .		0
34	A Multiharvested Self-Powered System in a Low-Voltage Low-Power Technology. IEEE Transactions on Industrial Electronics, 2011, 58, 4250-4263.	5.2	83
35	Challenges facing academic research in commercializing event-detector implantable devices for an in-vivo biomedical subcutaneous device for biomedical analysis. Proceedings of SPIE, 2011, , .	0.8	0
36	Miniaturized SiP supply board based on TPVD charge pump ICs for high-voltage biomedical applications. , 2011, , .		1

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37	Discrete to full custom ASIC solutions for bioelectronic applications. , 2011, , .		0
38	Energy Harvesting (Multi Harvesting Power Chip). , 2011, , 37-91.		1
39	Low-Voltage ÂµPower CMOS Subcutaneous Biomedical Implantable Device for True/False Applications. , 2011, , .		0
40	An experience of a multidisciplinary activity in a Biomedical Engineering Master Degree. , 2010, , .		0
41	Design of a miniaturized electrochemical instrument for in-situ O 2 monitoring. , 2009, , .		2
42	Charge pump design for high-voltage biasing applications in piezoelectric-based miniaturized robots. Analog Integrated Circuits and Signal Processing, 2009, 59, 169-184.	0.9	3
43	A 60 µW low-power low-voltage power management unit for a self-powered system based on low-cost piezoelectric powering generators. , 2009, , .		5
44	CMOS front-end architecture for In-Vivo biomedical implantable devices. , 2009, , .		10
45	Ripple reduction on skipping-based regulated two-phase voltage doubler charge pump. Electronics Letters, 2009, 45, 1050.	0.5	2
46	Low-ripple skipping-based regulation system for a two-phase voltage doubler charge pump. , 2009, , .		2
47	A low power CMOS biopotentiostat in a low-voltage 0.13 µm digital technology. , 2009, , .		3
48	Low-power conditioning circuit IC powered by piezoelectric energy harvesting. , 2008, , .		2
49	Power-Conditioning Circuitry for a Self-Powered System Based on Micro PZT Generators in a 0.13-$muhbox{m}$ Low-Voltage Low-Power Technology. IEEE Transactions on Industrial Electronics, 2008, 55, 3249-3257.	5.2	62
50	Accurate design of high-voltage multistage voltage doublers based on compact mathematical model. Electronics Letters, 2007, 43, 797.	0.5	3
51	Novel Autonomous Low Power VLSI System Powered by Ambient Mechanical Vibrations and Solar Cells for Portable Applications in a 0.13Â¿ Technology. , 2007, , .		8
52	Power conditioning circuitry for a self-powered mobile system based on an array of micro PZT generators in a 0.13μm technology. , 2007, , .		3
53	SiP power management unit with embedded temperature sensor powered by piezoelectric vibration energy harvesting. , 2007, , .		1
54	Low-voltage low-power reference circuits for an autonomous robot: I-SWARM. , 2007, , .		1

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55	Accurate design of Two-Phase Voltage Doublers based on a compact mathematical model. Midwest Symposium on Circuits and Systems, 2007, , .	1.0	1
56	Pulse Skipping Switching mode: a case study of Efficiency Improvement on a switched-capacitor DC-DC step-up converter IC. , 2006, , .		8
57	Low-Power High-Voltage Non-overlapping Clock Generators for Switched-Capacitor step-up DC-DC Converters. , 2006, , .		6
58	Efficient Power Conditioning Circuit for Self-Powered Microsystems (SPMS) based on a Low-Voltage Low-Power 0.13m Technology. , 2006, , .		3
59	<title>An efficient 2-stage fractional charge pump based on frequency regulation</title>. , 2005, 5837, 166.		0
60	Design of a step-up 400 mW@ 40 V charge-pump for microrobotics applications in a 100 V-0.7 /spl mu/m intelligent interface technology. , 2004, , .		0
61	Electronic circuitry development in a micropyrotechnic system for micropropulsion applications. , 2003, 5116, 260.		4
62	Smart drug delivery injector microsystem based on pyrotechnical actuation. , 2003, , .		2
63	Manipulation tools for biological applications using microrobots with nano-range accuracy. , 2003, 5119, 236.		0
64	Smart Power Integrated Circuit for a Piezoelectric Miniature Robot. Analog Integrated Circuits and Signal Processing, 2002, 33, 191-200.	0.9	12
65	Smart-power integrated circuits to drive piezoelectric actuators for a cm3microrobot system. , 2001, , .		3
66	MOSFET-based temperature sensor for standard BCD smart power technology. Microelectronics Journal, 2001, 32, 869-873.	1.1	3
67	High-voltage smart power integrated circuits to drive piezoceramic actuators for microrobotic applications. IET Circuits, Devices and Systems, 2001, 148, 343.	0.6	15
68	An integrated digital PFM DC-DC boost converter for a power management application: a RGB backlight LED system driver. , 0, , .		13
69	An Electron Mobility Independent Pulse Skipping Regulator for a Programmable CMOS Charge Pump. , 0, , .		8
70	Reduced Dimensions Autonomous AFM System for working in Microbiorobotics. , 0, , .		3
71	Integrated Electronics for a 1cm3 Robot for Micro and Nanomanipulation Applications: MiCRoN. , 0, , .		2
72	Portable Bio-Devices: Design of electrochemical instruments from miniaturized to implantable devices. , 0, , .		5

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73	Bioelectronics for Amperometric Biosensors. , 0, , .		13