Enric Cabruja

List of Publications by Year
in descending order

73 papers	3,143 citations	430874 18 h-index	197818 49 g-index
73 all docs	73 docs citations	73 times ranked	5791 citing authors

#	Article	IF	Citations
1	The ATLAS Experiment at the CERN Large Hadron Collider. Journal of Instrumentation, 2008, 3, S08003-S08003.	1.2	1,752
2	Review of CMOS image sensors. Microelectronics Journal, 2006, 37, 433-451.	2.0	445
3	Early determination of cystic fibrosis by electrochemical chloride quantification in sweat. Biosensors and Bioelectronics, 2009, 24, 1788-1791.	10.1	92
4	Carbon nanotube/polysulfone composite screen-printed electrochemical enzyme biosensors. Analyst, The, 2007, 132, 142-147.	3.5	78
5	Laser stripe peak detector for 3D scanners. A FIR filter approach. , 2004, , .		71
6	Charged particle tracking with the Timepix ASIC. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 661, 31-49.	1.6	50
7	Piezoresistive accelerometers for MCM package. Journal of Microelectromechanical Systems, 2002, 11, 794-801.	2.5	41
8	Peripheral nerve regeneration through microelectrode arrays based on silicon technology. Restorative Neurology and Neuroscience, 1996, 9, 151-160.	0.7	39
9	3D double sided detector fabrication at IMB-CNM. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 699, 27-30.	1.6	37
10	High density of electrodeposited Sn/Ag bumps for flip chip connection. Microelectronic Engineering, 2006, 83, 399-403.	2.4	33
11	Ultra-Low Power Sensor Devices for Monitoring Physical Activity and Respiratory Frequency in Farmed Fish. Frontiers in Physiology, 2019, 10, 667.	2.8	32
12	Characterisation of electroplated Sn/Ag solder bumps. Microelectronics Journal, 2006, 37, 308-316.	2.0	28
13	3D Printed porous polyamide macrocapsule combined with alginate microcapsules for safer cell-based therapies. Scientific Reports, 2018, 8, 8512.	3.3	25
14	pH-ISFET with NMOS technology. Electroanalysis, 1991, 3, 355-360.	2.9	23
15	Bonding techniques for hybrid active pixel sensors (HAPS). Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 574, 392-400.	1.6	20
16	Measurement of mobility and lifetime of electrons and holes in a Schottky CdTe diode. Journal of Instrumentation, 2014, 9, C12032-C12032.	1.2	20
17	Flip-chip packaging of piezoresistive pressure sensors. Sensors and Actuators A: Physical, 2006, 132, 415-419.	4.1	19
18	Accurate contact resistivity extraction on Kelvin structures with upper and lower resistive layers. IEEE Transactions on Electron Devices, 2000, 47, 1431-1439.	3.0	18

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19	Energy and coincidence time resolution measurements of CdTe detectors for PET. Journal of Instrumentation, 2013, 8, C02015-C02015.	1.2	18
20	Simulation of the Expected Performance of a Seamless Scanner for Brain PET Based on Highly Pixelated CdTe Detectors. IEEE Transactions on Medical Imaging, 2014, 33, 332-339.	8.9	18
21	Cross-Section Preparation for Solder Joints and MEMS Device Using Argon Ion Beam Milling. IEEE Transactions on Electronics Packaging Manufacturing, 2009, 32, 265-271.	1.4	17
22	Bump bonding of pixel systems. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 473, 95-101.	1.6	16
23	Fabrication and simulation of novel ultra-thin 3D silicon detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 604, 115-118.	1.6	15
24	From operculum and body tail movements to different coupling of physical activity and respiratory frequency in farmed gilthead sea bream and European sea bass. Insights on aquaculture biosensing. Computers and Electronics in Agriculture, 2020, 175, 105531.	7.7	14
25	Stress in low pressure chemical vapour deposition polycrystalline silicon thin films deposited below 0.1 Torr. Sensors and Actuators A: Physical, 1993, 37-38, 723-726.	4.1	13
26	Feasibility of a flip-chip approach to integrate an IR filter and an IR detector in a future gas detection cell. Microsystem Technologies, 2004, 10, 382-386.	2.0	13
27	Characterization of thermal conductivity in thin film multilayered membranes. Thin Solid Films, 2005, 484, 328-333.	1.8	13
28	Flow-through pH-ISFET as detector in automated determinations. Electroanalysis, 1991, 3, 349-354.	2.9	12
29	New technology for easy and fully IC-compatible fabrication of backside-contacted ISFETs. Sensors and Actuators B: Chemical, 1995, 24, 228-231.	7.8	12
30	Influence of the degradation on the surface states and electrical characteristics of EOS structures. Surface Science, 1991, 251-252, 364-368.	1.9	11
31	Piezoresistive accelerometers for MCM-package - Part II:The packaging. Journal of Microelectromechanical Systems, 2005, 14, 806-811.	2.5	11
32	Use of accelerometer technology for individual tracking of activity patterns, metabolic rates and welfare in farmed gilthead sea bream (Sparus aurata) facing a wide range of stressors. Aquaculture, 2021, 539, 736609.	3.5	11
33	Simulation of pseudo-clinical conditions and image quality evaluation of PET scanner based on pixelated CdTe detector. , 2011, , .		10
34	Special bump bonding technique for silicon pixel detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 576, 150-153.	1.6	9
35	Thin-Film Bulk Acoustic Wave Resonator Floating Above CMOS Substrate. IEEE Electron Device Letters, 2008, 29, 28-30.	3.9	9
36	Modeling, simulation, and evaluation of a compton camera based on a pixelated solid-state detector. , 2011, , .		9

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37	Deep trenches in silicon using photoresist as a mask. Sensors and Actuators A: Physical, 1993, 37-38, 766-771.	4.1	8
38	Perforated silicon dices with integrated nerve guidance channels for interfacing peripheral nerves. , 1995, , .		8
39	Test structures for MCM-D technology characterization. IEEE Transactions on Semiconductor Manufacturing, 1999, 12, 184-192.	1.7	8
40	A study of metalâ€oxideâ€semiconductor capacitors fabricated on SF6and SF6+Cl2reactiveâ€ionâ€etched Si. Journal of Applied Physics, 1992, 71, 2710-2716.	2.5	7
41	Characterization of CdTe detector for use in PET. , 2011, , .		7
42	Smart temperature sensor for on-line monitoring in automotive applications. , 0, , .		5
43	A MCM module for modern power window control in automotive applications. , 0, , .		5
44	Research and development of a gamma-ray imaging spectrometer in the MeV range in Barcelona. , 2010, , .		4
45	Pixel CdTe semiconductor module to implement a sub-MeV imaging detector for astrophysics. Journal of Instrumentation, 2017, 12, C03048-C03048.	1.2	4
46	Reliability evaluation of a silicon-on-silicon MCM-D package. Microelectronics Reliability, 2001, 41, 887-899.	1.7	3
47	Adapting MCM-D technology to a piezoresistive accelerometer packaging. Journal of Micromechanics and Microengineering, 2003, 13, S41-S44.	2.6	3
48	Magnetic micro-transformers realized with a flip-chip process. Journal of Micromechanics and Microengineering, 2004, 14, S55-S58.	2.6	3
49	Effect of Combined Oxygenation and Gettering on Minority Carrier Lifetime in High-Resistivity FZ Silicon. Journal of the Electrochemical Society, 2004, 151, G652.	2.9	3
50	Development and performance of a gamma-ray imaging detector. Proceedings of SPIE, 2012, , .	0.8	3
51	Latch-up characterization using novel test structures and instruments. IEEE Transactions on Semiconductor Manufacturing, 1991, 4, 199-205.	1.7	2
52	Characterization of the Electrical Damage due to Polysilicon RIE â€‰(â€‰â€‰SFâ€‰6â€‰+â€‰Cl2â€‰â€‰â€‰Plasmaâ€‰)â€ the Electrochemical Society, 1992, 139, 193-195.	2.9	2
53	Thermal conductivity determination of micromachined membranes. , 0, , .		2
54	Electromagnetic harvester device for scavenging ambient mechanical energy with slow, variable, and randomness nature. , 2011, , .		2

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55	Characterization of a module with pixelated CdTe detectors for possible PET, PEM and compton camera applications. Journal of Instrumentation, 2014, 9, C05046-C05046.	1.2	2
56	Hard-X and gamma-ray imaging detector for astrophysics based on pixelated CdTe semiconductors. Journal of Instrumentation, 2016, 11, C01011-C01011.	1.2	2
57	Positive photoresist stripping by plasma barrel. Vacuum, 1989, 39, 757-759.	3.5	1
58	Highly doped silicon microtubular electrodes for neural recording. , 0, , .		1
59	Test structures for MCM-D technology characterization. , 0, , .		1
60	Extensive electrical and thermal characterization of an MCM-D technology. IEEE Transactions on Components and Packaging Technologies, 2002, 25, 112-119.	1.3	1
61	PSK to ASK converter for RF digital communications. , 0, , .		1
62	Ultra radiation hard silicon detectors for future experiments: 3D and p-type technologies. Nuclear Physics, Section B, Proceedings Supplements, 2007, 172, 17-19.	0.4	1
63	Flow of PECVD Oxide Films Doped with POCl3. Journal of the Electrochemical Society, 1991, 138, 181-183.	2.9	0
64	Electrical characterization of MOS structures fabricated on SF6 and SF6 + C2ClF5 reactive ion etched silicon. Nuclear Instruments & Methods in Physics Research B, 1993, 80-81, 1362-1366.	1.4	0
65	A compact MCM implementation of an embedded system for automotive applications. , 0, , .		0
66	Feasibility of a flip chip approach to integrate an IR filter and an IR detector in a future gas detection cell. , 0, , .		0
67	Test structure assembly for bump bond yield measurement on high density flip chip technologies. Microelectronics Reliability, 2006, 46, 1095-1100.	1.7	0
68	Infrared-transparent microstrip detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 598, 84-85.	1.6	0
69	Integrated design of a smart analog sun sensor with CMOS technology. , 2012, , .		0
70	A 10kfps 32×32 integrated test platform for electrical characterization of imagers. , 2014, , .		0
71	Development of a pixelated CdTe detector module for a hard-x and gamma-ray imaging spectrometer application. , 2016, , .		0
72	SU-8 processing improvement and simulating studies for a Micromegas detector fabrication. Journal of Instrumentation, 2021, 16, P08022.	1.2	0

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73	Regenerative-type neural interface. Lecture Notes in Computer Science, 1995, , 114-120.	1.3	0