Andreu Adan Llobera

List of Publications by Year in Descending Order

115 papers	2,039 citations	24 h-index	39 g-index
132 ext. papers	2,283 ext. citations	5.3 avg, IF	4.52 L-index

#	Paper	IF	Citations
115	Optofluidic systems enabling detection in real samples: A review.. *Analytica Chimica Acta*, **2022**, 1192, 339307	6.6	2
114	Microfluidic-controlled optical router for lab on a chip. *Lab on A Chip*, **2019**, 19, 2081-2088	7.2	12
113	Ultrasensitive Photonic Microsystem Enabling Sub-micrometric Monitoring of Arterial Oscillations for Advanced Cardiovascular Studies. *Frontiers in Physiology*, **2019**, 10, 940	4.6	
112	Recent trends in capillary electrophoresis for complex samples analysis: A review. *Electrophoresis*, **2018**, 39, 111-125	3.6	41
111	A simple and fast Double-Flow microfluidic device based liquid-phase microextraction (DF-μLPME) for the determination of parabens in water samples. *Talanta*, **2017**, 165, 496-501	6.2	26
110	Broadcasting photonic lab on a chip concept through a low cost manufacturing approach. *Talanta*, **2017**, 170, 180-184	6.2	9
109	Self-validating lab-on-a-chip for monitoring enzyme-catalyzed biological reactions. *Sensors and Actuators B: Chemical*, **2016**, 237, 16-23	8.5	13
108	Continuous Sensing Photonic Lab-on-a-Chip Platform Based on Cross-Linked Enzyme Crystals. *Analytical Chemistry*, **2016**, 88, 11919-11923	7.8	7
107	Photonic Lab-on-a-Chip for Rapid Cytokine Detection. *ACS Sensors*, **2016**, 1, 979-986	9.2	18
106	Integrated Photonic Nanofences: Combining Subwavelength Waveguides with an Enhanced Evanescent Field for Sensing Applications. *ACS Nano*, **2016**, 10, 778-85	16.7	28
105	Plug and measure - a chip-to-world interface for photonic lab-on-a-chip applications. *Lab on A Chip*, **2016**, 16, 3220-6	7.2	3
104	Modular Optofluidic Systems (MOPS) **2016**,		1
103	Photonic Lab-on-a-Chip: Integration of Optical Spectroscopy in Microfluidic Systems. *Analytical Chemistry*, **2016**, 88, 6630-7	7.8	44
102	An effective microfluidic based liquid-phase microextraction device (μPME) for extraction of non-steroidal anti-inflammatory drugs from biological and environmental samples. *Analytica Chimica Acta*, **2016**, 946, 56-63	6.6	47
101	Photonic lab-on-chip (PhLOC) for enzyme-catalyzed reactions in continuous flow. *Microfluidics and Nanofluidics*, **2015**, 18, 1277-1286	2.8	11
100	A multiple path photonic lab on a chip for parallel protein concentration measurements. *Lab on A Chip*, **2015**, 15, 1133-9	7.2	14
99	Biofunctionalized all-polymer photonic lab on a chip with integrated solid-state light emitter. *Light: Science and Applications*, **2015**, 4, e271-e271	16.7	24

98	McCLEC, a robust and stable enzymatic based microreactor platform. *Lab on A Chip*, **2015**, 15, 4083-9	7.2	4
97	Characterization of oxygen transfer in vertical microbubble columns for aerobic biotechnological processes. *Biotechnology and Bioengineering*, **2014**, 111, 1809-19	4.9	18
96	Optofluidic router based on tunable liquid-liquid mirrors. *Lab on A Chip*, **2014**, 14, 737-43	7.2	23
95	PDMS-based, magnetically actuated variable optical attenuators obtained by soft lithography and inkjet printing technologies. *Sensors and Actuators A: Physical*, **2014**, 215, 30-35	3.9	11
94	Hybrid Electronic Tongues Applied to the Quality Control of Wines. *Journal of Sensors*, **2014**, 2014, 1-10	2	9
93	Polymeric variable optical attenuators based on magnetic sensitive stimuli materials. *Journal of Micromechanics and Microengineering*, **2014**, 24, 125008	2	4
92	Hybrid electronic tongues based on microsensors applied to wine quality control **2014**,		1
91	DC Electroluminescence Efficiency of Silicon Rich Silicon Oxide Light Emitting Capacitors. *Journal of Lightwave Technology*, **2013**, 31, 2913-2918	4	8
90	PDMS based photonic lab-on-a-chip for the selective optical detection of heavy metal ions. *Analyst, The*, **2013**, 138, 839-44	5	21
89	Classification and characterization of different white grape juices by using a hybrid electronic tongue. *Journal of Agricultural and Food Chemistry*, **2013**, 61, 9325-32	5.7	22
88	Analysis of the structural integrity of SU-8-based optofluidic systems for small-molecule crystallization studies. *Analytical Chemistry*, **2013**, 85, 9678-85	7.8	14
87	Magnetically-actuated variable optical attenuators using ferrofluid-doped elastomer implemented by combination of soft lithography and inkjet printing technologies **2013**,		1
86	Monolithically integrated biophotonic lab-on-a-chip for cell culture and simultaneous pH monitoring. *Lab on A Chip*, **2013**, 13, 4239-47	7.2	22
85	Influence by Layer Structure on the Output EL of CMOS Compatible Silicon-Based Light Emitters. *IEEE Transactions on Electron Devices*, **2013**, 60, 1971-1974	2.9	6
84	Biomimetic Architectures for the Impedimetric Discrimination of Influenza Virus Phenotypes. *Advanced Functional Materials*, **2013**, 23, 254-262	15.6	23
83	The effect of absorption and coherent interference in the photoluminescence and electroluminescence spectra of SRO/SRN MIS capacitors. *Optics Express*, **2013**, 21, 10111-20	3.3	3
82	Light spectral filtering based on spatial adiabatic passage. *Light: Science and Applications*, **2013**, 2, e90-e96	16.7	33
81	A polymeric micro-optical system for the spatial monitoring in two-phase microfluidics. *Microfluidics and Nanofluidics*, **2012**, 12, 165-174	2.8	17

80	Cell-based microfluidic device for screening anti-proliferative activity of drugs in vascular smooth muscle cells. *Biomedical Microdevices*, **2012**, 14, 1129-40	3.7	16
79	One-step patterning of hybrid xerogel materials for the fabrication of disposable solid-state light emitters. *ACS Applied Materials & Interfaces*, **2012**, 4, 5029-37	9.5	9
78	Dual photonic-electrochemical lab on a chip for online simultaneous absorbance and amperometric measurements. *Analytical Chemistry*, **2012**, 84, 3546-53	7.8	20
77	UV-patternable polymers with selective spectral response. *Microelectronic Engineering*, **2012**, 98, 234-237	2.5	0
76	Conductivity of SU-8 Thin Films through Atomic Force Microscopy Nano-Patterning. *Advanced Functional Materials*, **2012**, 22, 1482-1488	15.6	14
75	Development and integration of xerogel polymeric absorbance micro-filters into lab-on-chip systems. *Optics Express*, **2012**, 20, 23700-19	3.3	7
74	Vertical microbubble column-A photonic lab-on-chip for cultivation and online analysis of yeast cell cultures. *Biomicrofluidics*, **2012**, 6, 34106	3.2	18
73	Influence of Silicon Binding Energy on Photoluminescence of Si-Implanted Silicon Dioxide. *ECS Transactions*, **2012**, 49, 307-314	1	2
72	Adiabatic Passage of Light in CMOS-Compatible Silicon Oxide Integrated Rib Waveguides. *IEEE Photonics Technology Letters*, **2012**, 24, 536-538	2.2	26
71	Integration of Carbon Nanotubes into Electrostatically Actuated all-Polymer PEDOT: PSS/PMMA MEMS. *Procedia Engineering*, **2011**, 25, 1665-1668		3
70	Fluorophore-doped xerogel antiresonant reflecting optical waveguides. *Optics Express*, **2011**, 19, 5026-39	3.3	3
69	Microlenses with defined contour shapes. *Optics Express*, **2011**, 19, 18665-70	3.3	23
68	Selective functionalisation of PDMS-based photonic lab on a chip for biosensing. *Analyst, The*, **2011**, 136, 3496-502	5	27
67	Opto-thermal actuation in double layer polymer microcantilevers **2011**,		1
66	Poly(dimethylsiloxane) photonic microbioreactors based on segmented waveguides for local absorbance measurement. *Electrophoresis*, **2011**, 32, 431-9	3.6	9
65	Oxide nanocrystal based nanocomposites for fabricating photoplastic AFM probes. *Nanoscale*, **2011**, 3, 4632-9	7.7	7
64	Cell analysis using a multiple internal reflection photonic lab-on-a-chip. *Nature Protocols*, **2011**, 6, 1642-55	8.8	34
63	UV laser-induced high resolution cleaving of Si wafers for micro□nano devices and polymeric waveguide characterization. *Applied Surface Science*, **2011**, 257, 5424-5428	6.7	2

62	Hybrid electronic tongue for the characterization and quantification of grape variety in red wines. *Sensors and Actuators B: Chemical*, **2011**, 156, 695-702	8.5	28
61	Microelectromechanical resonators based on an all polymer/carbon nanotube composite structural material. *Applied Physics Letters*, **2011**, 99, 044104	3.4	11
60	Disposable parallel poly(dimethylsiloxane) microbioreactor with integrated readout grid for germination screening of Aspergillus ochraceus. *Biomicrofluidics*, **2011**, 5, 14104	3.2	14
59	Application of an e-tongue to the analysis of monovarietal and blends of white wines. *Sensors*, **2011**, 11, 4840-57	3.8	29
58	A polymeric micro-optical interface for flow monitoring in biomicrofluidics. *Biomicrofluidics*, **2010**, 4,	3.2	13
57	Hybrid electronic tongue based on optical and electrochemical microsensors for quality control of wine. *Analyst, The*, **2010**, 135, 1718-25	5	48
56	Cell screening using disposable photonic lab on a chip systems. *Analytical Chemistry*, **2010**, 82, 4246-51	7.8	23
55	Algae–silica systems as functional hybrid materials. *Journal of Materials Chemistry*, **2010**, 20, 9362-9369		20
54	Monolithic PDMS passband filters for fluorescence detection. *Lab on A Chip*, **2010**, 10, 1987-92	7.2	31
53	Mechanically tuneable microoptical structure based on PDMS. *Sensors and Actuators A: Physical*, **2010**, 162, 260-266	3.9	6
52	Cantilever-based poly(dimethylsiloxane) Microoptoelectromechanical Systems **2009**,		1
51	Stress and aging minimization in photoplastic AFM probes. *Microelectronic Engineering*, **2009**, 86, 1226-1229	2.5	18
50	Mechanically tuneable microoptical structure based on PDMS. *Procedia Chemistry*, **2009**, 1, 560-563		4
49	Magnetic Nanocrystals Modified Epoxy Photoresist for Microfabrication of AFM probes. *Procedia Chemistry*, **2009**, 1, 580-584		2
48	Hollow waveguide-based full-field absorbance biosensor. *Sensors and Actuators B: Chemical*, **2009**, 139, 143-149	8.5	7
47	Single and Multiple Internal Reflection poly(dimethylsiloxane) absorbance-based biosensors. *Sensors and Actuators B: Chemical*, **2009**, 139, 166-173	8.5	10
46	Poly(Dimethylsiloxane) Waveguide Cantilevers for Optomechanical Sensing. *IEEE Photonics Technology Letters*, **2009**, 21, 79-81	2.2	17
45	Full-field photonic biosensors based on tunable bio-doped sol-gel glasses. *Lab on A Chip*, **2008**, 8, 1185-90	7.2	26

44	Enhancement of the response of poly(dimethylsiloxane) hollow prisms through air mirrors for absorbance-based sensing. *Talanta*, **2008**, 75, 473-9	6.2	28
43	3-D modulable PDMS-based microlens system. *Optics Express*, **2008**, 16, 4918-29	3.3	13
42	Optical biosensor based on hollow integrated waveguides. *Analytical Chemistry*, **2008**, 80, 3498-501	7.8	17
41	Patterning High-Aspect-Ratio Sol□Gel Structures by Microtransfer Molding. *Chemistry of Materials*, **2008**, 20, 2662-2668	9.6	19
40	Hollow waveguides ray-tracing analysis **2008**,		1
39	Silane nanopatterns via gas-phase soft lithography. *Small*, **2008**, 4, 1076-9	11	12
38	Polymer microoptoelectromechanical systems: Accelerometers and variable optical attenuators. *Sensors and Actuators A: Physical*, **2008**, 145-146, 147-153	3.9	18
37	Silicon-based rectangular hollow integrated waveguides. *Optics Communications*, **2008**, 281, 1568-1575	2	5
36	Novel methods to pattern polymers for microfluidics. *Microelectronic Engineering*, **2008**, 85, 972-975	2.5	4
35	SU-8 Optical Accelerometers. *Journal of Microelectromechanical Systems*, **2007**, 16, 111-121	2.5	44
34	Electron beam lithography at 10 keV using an epoxy based high resolution negative resist. *Microelectronic Engineering*, **2007**, 84, 1096-1099	2.5	10
33	Voltammetric sizing and shaping of a cylinder. *Journal of Electroanalytical Chemistry*, **2007**, 611, 201-207	4.1	3
32	Improved properties of epoxy nanocomposites for specific applications in the field of MEMS/NEMS. *Microelectronic Engineering*, **2007**, 84, 1075-1079	2.5	18
31	Multiple internal reflection poly(dimethylsiloxane) systems for optical sensing. *Lab on A Chip*, **2007**, 7, 1560-6	7.2	75
30	Characterization of optical accelerometers based on UV-sensitive polymers. *IEEE Sensors Journal*, **2006**, 6, 412-419	4	3
29	Polymeric MOEMS Variable Optical Attenuator. *IEEE Photonics Technology Letters*, **2006**, 18, 2425-2427	2.2	11
28	Development of 3D out-of-plane SU-8 microlenses using modified micromolding in capillaries (MIMIC) technology **2006**, 6185, 326		
27	Optimization of poly(dimethylsiloxane) hollow prisms for optical sensing. *Lab on A Chip*, **2005**, 5, 506-11	7.2	30

26	Integrated polymer optical accelerometer. *IEEE Photonics Technology Letters*, **2005**, 17, 1262-1264	2.2	19
25	Polymer microlenses with modified micromolding in capillaries (MIMIC) technology. *IEEE Photonics Technology Letters*, **2005**, 17, 2628-2630	2.2	12
24	Absorbance-Based Integrated Optical Sensors **2005**, 1-44		2
23	Absorbance-Based Integrated Optical Sensors **2005**, 1-44		
22	Optical properties of silicon rich silicon oxides obtained by PECVD. *Microelectronics Journal*, **2004**, 35, 65-67	1.8	4
21	Fabrication of gas amplification microstructures with SU8 photosensitive epoxy. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2004**, 525, 49-52	1.2	6
20	Technological aspects on the fabrication of silicon-based optical accelerometer with ARROW structures. *Sensors and Actuators A: Physical*, **2004**, 110, 395-400	3.9	7
19	BESOI-based integrated optical silicon accelerometer. *Journal of Microelectromechanical Systems*, **2004**, 13, 355-364	2.5	32
18	Characterization and passivation effects of an optical accelerometer based on antiresonant waveguides. *IEEE Photonics Technology Letters*, **2004**, 16, 233-235	2.2	9
17	Simple estimation of transition losses in bends of wide optical waveguides by a ray tracing method. *IEEE Photonics Technology Letters*, **2004**, 16, 825-827	2.2	9
16	Poly(dimethylsiloxane) hollow Abbe prism with microlenses for detection based on absorption and refractive index shift. *Lab on A Chip*, **2004**, 4, 24-7	7.2	69
15	Large-core single-mode waveguides with cross-sectional antiresonant confinement. *Journal of Lightwave Technology*, **2004**, 22, 1560-1565	4	4
14	Integrated optical silicon IC compatible nanodevices for biosensing applications **2003**,		3
13	Integrated Mach-Zehnder interferometer based on ARROW structures for biosensor applications. *Sensors and Actuators B: Chemical*, **2003**, 92, 151-158	8.5	99
12	An integrated optical interferometric nanodevice based on silicon technology for biosensor applications. *Nanotechnology*, **2003**, 14, 907-912	3.4	218
11	Chalcogenide glass-based rib ARROW waveguide. *Journal of Non-Crystalline Solids*, **2003**, 326-327, 455-459	3.9	21
10	Effect of hydrogen-related impurities on the thermal behavior of mechanical stress in silicon oxides suitable for integrated optics. *Journal of Applied Physics*, **2003**, 93, 5125-5130	2.5	18
9	Improved integrated waveguide absorbance optodes for ion-selective sensing. *Analytical Chemistry*, **2002**, 74, 3354-61	7.8	24

8	Effect of wall tilt on the optical properties of integrated directional couplers. *Optics Letters*, **2002**, 27, 601-3	3	4
7	Optimized silicon antiresonant reflecting optical waveguides for sensing applications. *Journal of Lightwave Technology*, **2001**, 19, 75-83	4	28
6	Evolution of the mechanical stress on PECVD silicon oxide films under thermal processing. *Journal of Materials Science Letters*, **2000**, 19, 1399-1401		4
5	Mechanical properties of PECVD silicon oxide films suitable for integrated optics applications **2000**,		1
4	Characterization of antiresonant reflecting optical waveguide devices by scanning near-field optical microscopy. *Journal of the Optical Society of America A: Optics and Image Science, and Vision*, **2000**, 17, 2243-8	1.8	1
3	Design and analysis of silicon antiresonant reflecting optical waveguides for evanescent field sensor. *Journal of Lightwave Technology*, **2000**, 18, 966-972	4	48
2	Analysis of optochemical absorbance sensors based on bidimensional planar ARROW microoptics. *Sensors and Actuators B: Chemical*, **1999**, 60, 191-199	8.5	13
1	Surface quad beam polymer optical accelerometer		3