Raul Urteaga

List of Publications by Year
in descending order

44 papers	691 citations	567281 15 h-index	580821 25 g-index
44 all docs	44 docs citations	44 times ranked	716 citing authors

#	Article	IF	Citations
1	Rational design of capillary-driven flows for paper-based microfluidics. Lab on A Chip, 2015, 15, 2173-2180.	6.0	137
2	Capillary Filling in Nanostructured Porous Silicon. Langmuir, 2011, 27, 2067-2072.	3.5	50
3	High-Frequency Digital Lock-In Amplifier Using Random Sampling. IEEE Transactions on Instrumentation and Measurement, 2008, 57, 616-621.	4.7	48
4	Optimization of porous silicon multilayer as antireflection coatings for solar cells. Solar Energy Materials and Solar Cells, 2011, 95, 3069-3073.	6.2	37
5	Precise capillary flow for paper-based viscometry. Microfluidics and Nanofluidics, 2016, 20, 1.	2.2	35
6	Inverse Problem of Capillary Filling. Physical Review Letters, 2014, 112, 134502.	7.8	32
7	Innovative design for optical porous silicon gas sensor. Sensors and Actuators B: Chemical, 2010, 149, 189-193.	7.8	31
8	Optofluidic Characterization of Nanoporous Membranes. Langmuir, 2013, 29, 2784-2789.	3.5	26
9	Asymmetric capillary filling of non-Newtonian power law fluids. Microfluidics and Nanofluidics, 2014, 17, 1079-1084.	2.2	22
10	Transverse solute dispersion in microfluidic paper-based analytical devices (Î¼PADs). Analyst, The, 2018, 143, 2259-2266.	3.5	21
11	Trapping an Intensely Bright, Stable Sonoluminescing Bubble. Physical Review Letters, 2008, 100, 074302.	7.8	18
12	Negative differential resistance in porous silicon devices at room temperature. Superlattices and Microstructures, 2015, 79, 45-53.	3.1	17
13	Interferometric Technique To Determine the Dynamics of Polymeric Fluids under Strong Confinement. Macromolecules, 2018, 51, 8721-8728.	4.8	17
14	Numerical and experimental study of dissociation in an air-water single-bubble sonoluminescence system. Physical Review E, 2005, 72, 046305.	2.1	16
15	Positional stability as the light emission limit in sonoluminescence with sulfuric acid. Physical Review E, 2007, 76, 056317.	2.1	15
16	Design keys for paper-based concentration gradient generators. Journal of Chromatography A, 2018, 1561, 83-91.	3.7	14
17	Precursor Film Spreading during Liquid Imbibition in Nanoporous Photonic Crystals. Physical Review Letters, 2020, 125, 234502.	7.8	13
18	Nondestructive high-throughput screening of nanopore geometry in porous membranes by imbibition. Applied Physics Letters, 2019, 115, .	3.3	11

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19	Spontaneous water adsorption-desorption oscillations in mesoporous thin films. Journal of Colloid and Interface Science, 2019, 537, 407-413.	9.4	11
20	Transmittance correlation of porous silicon multilayers used as a chemical sensor platform. Sensors and Actuators B: Chemical, 2015, 213, 164-170.	7.8	10
21	Implementation of a high-frequency digital lock-in amplifier. , 0, , .		9
22	Real-time study of protein adsorption kinetics in porous silicon. Colloids and Surfaces B: Biointerfaces, 2013, 111, 354-359.	5.0	9
23	Optical performance of hybrid porous siliconâ€"porous alumina multilayers. Journal of Applied Physics, 2018, 123, 183101.	2.5	9
24	Software PLL Based on Random Sampling. IEEE Transactions on Instrumentation and Measurement, 2010, 59, 2621-2629.	4.7	8
25	Experimental study of transient paths to the extinction in sonoluminescence. Journal of the Acoustical Society of America, 2008, 124, 1490-1496.	1.1	7
26	Dynamics of sonoluminescing bubbles within a liquid hammer device. Physical Review E, 2009, 79, 016306.	2.1	7
27	Analytical study of the acoustic field in a spherical resonator for single bubble sonoluminescence. Journal of the Acoustical Society of America, 2010, 127, 186-197.	1.1	7
28	Structural properties of porous silicon/SnO2:F heterostructures. Thin Solid Films, 2012, 520, 4254-4258.	1.8	7
29	A novel water hammer device designed to produce controlled bubble collapses. Experimental Thermal and Fluid Science, 2018, 92, 46-55.	2.7	7
30	Fano resonance in heavily doped porous silicon. Journal of Raman Spectroscopy, 2011, 42, 1405-1407.	2.5	5
31	Current-voltage characteristics in macroporous silicon/SiOx/SnO2:F heterojunctions. Nanoscale Research Letters, 2012, 7, 419.	5.7	5
32	Optical coherence tomography measurement of capillary filling in porous silicon. Journal of Applied Physics, 2020, 128, .	2.5	5
33	Enhanced photoconductivity and fine response tuning in nanostructured porous silicon microcavities. Journal of Physics: Conference Series, 2009, 167, 012005.	0.4	4
34	Precise electroosmotic flow measurements on paper substrates. Electrophoresis, 2021, 42, 975-982.	2.4	4
35	Nanoporous Anodic Alumina for Optofluidic Applications. Springer Series in Materials Science, 2015, , 249-269.	0.6	4
36	Validity of Capillary Imbibition Models in Paper-Based Microfluidic Applications. Transport in Porous Media, 2022, 141, 359-378.	2.6	4

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37	Design and optimization of an opto-acoustic sensor based on porous silicon phoxonic crystals. Sensors and Actuators A: Physical, 2021, 331, 112915.	4.1	3
38	Switchable Electric Field Induced Diode Effect in Nanostructured Porous Silicon. IEEE Electron Device Letters, 2013, 34, 590-592.	3.9	2
39	Time-temperature indicator based on the variation of the optical response of photonic crystals upon polymer infiltration. Sensors and Actuators A: Physical, 2022, 341, 113571.	4.1	2
40	Efficient approach for optical and morphological characterization of hybrid perovskite films based on reflectance and transmittance measurements. Journal Physics D: Applied Physics, 2022, 55, 115303.	2.8	1
41	Digital holographic microscopy implementation for capillary filling measurements in nanoporous materials. Applied Optics, 2022, 61, 2506.	1.8	1
42	Dynamics of the tuning process between singers. European Physical Journal B, 2004, 41, 569-573.	1.5	0
43	Optical Losses in Hybrid Microcavity Based in Porous Semiconductors and its Application as Optic Chemical Sensor. Journal of Nano Research, 2019, 56, 158-167.	0.8	0
44	Normal incidence birefringence in nanoporous alumina. Optical Materials, 2021, 122, 111652.	3.6	0