Antoine Riaud

List of Publications by Year
in descending order

40 papers	894 citations	430874 18 h-index	454955 30 g-index
42 all docs	42 docs citations	42 times ranked	883 citing authors

#	Article	IF	Citations
1	Optimization of the synthesis conditions of gold nanoparticleâ€“polydimethylsiloxane composites for ultrasound generation. Materials Advances, 2022, 3, 2850-2857.	5.4	1
2	On the Dynamic Stability of Gold Electrodes Exposed to Alternative Voltages in Microfluidic Systems. Journal of the Electrochemical Society, 2022, 169, 031504.	2.9	2
3	Contactless generation and trapping of hydrodynamic knots in sessile droplets by acoustic screw dislocations. Physics of Fluids, 2022, 34, .	4.0	2
4	10.1063/5.0093025.1. , 2022, , .		0
5	10.1063/5.0093025.3. , 2022, , .		0
6	10.1063/5.0093025.4. , 2022, , .		0
7	10.1063/5.0093025.2. , 2022, , .		0
8	Passâ€Transistor Logic Circuits Based on Waferâ€Scale 2D Semiconductors. Advanced Materials, 2022, 34, .	21.0	20
9	Two-dimensional manipulation of droplets on a single-sided continuous optoelectrowetting digital microfluidic chip. Sensors and Actuators B: Chemical, 2022, 368, 132231.	7.8	5
10	Development of Broadband High-Frequency Piezoelectric Micromachined Ultrasonic Transducer Array. Sensors, 2021, 21, 1823.	3.8	20
11	Acoustic Radiation Force on Small Spheres Due to Transient Acoustic Fields. Physical Review Applied, 2021, 15, .	3.8	21
12	Anisotropic spreading of droplets on striped electrodes. , 2021, , .		0
13	Observation of contact angle hysteresis due to inhomogeneous electric fields. Communications Physics, 2021, 4, .	5.3	7
14	Wafer-scale functional circuits based on two dimensional semiconductors with fabrication optimized by machine learning. Nature Communications, 2021, 12, 5953.	12.8	42
15	An asymmetric electrode for directional droplet motion on digital microfluidic platforms. Sensors and Actuators B: Chemical, 2020, 324, 128763.	7.8	9
16	Charge transport and quantum confinement in MoS₂ dual-gated transistors. Journal of Semiconductors, 2020, 41, 072904.	3.7	7
17	2D large-scale EWOD devices with honeycomb electrodes for multiplexed multidirectional driving of micro-droplets. AIP Advances, 2020, 10, 055227.	1.3	3
18	On-demand contact line pinning during droplet evaporation. Sensors and Actuators B: Chemical, 2020, 312, 127983.	7.8	14

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19	Mechanical Characterization of Cells and Microspheres Sorted by Acoustophoresis with In-Line Resistive Pulse Sensing. Physical Review Applied, 2020, 13, .	3.8	11
20	Smearing Observation of Picoliter Droplets Pinning on Bio-Inspired Negative Lotus Leaf Replicas. IEEE Nanotechnology Magazine, 2020, 19, 102-106.	2.0	8
21	MoS2 dual-gate transistors with electrostatically doped contacts. Nano Research, 2019, 12, 2515-2519.	10.4	21
22	Tunable and Reversible Gelatinâ€Based Bonding for Microfluidic Cell Culture. Advanced Engineering Materials, 2019, 21, 1900145.	3.5	12
23	Folding a focalized acoustical vortex on a flat holographic transducer: Miniaturized selective acoustical tweezers. Science Advances, 2019, 5, eaav1967.	10.3	135
24	Gelatin-Coated Microfluidic Channels for 3D Microtissue Formation: On-Chip Production and Characterization. Micromachines, 2019, 10, 265.	2.9	7
25	Anti-lotus leaf effect: smearing millions of picoliter droplets on bio-inspired artificial lotus leaf. , 2019, , .		2
26	Numerical Study of Surfactant Dynamics during Emulsification in a T-Junction Microchannel. Langmuir, 2018, 34, 4980-4990.	3.5	33
27	Beyond the on/off chip trade-off: A reversibly sealed microfluidic platform for 3D tumor microtissue analysis. Sensors and Actuators B: Chemical, 2018, 274, 393-401.	7.8	22
28	Selective Manipulation of Microscopic Particles with Precursor Swirling Rayleigh Waves. Physical Review Applied, 2017, 7, .	3.8	76
29	On the influence of viscosity and caustics on acoustic streaming in sessile droplets: anÂexperimental and a numerical study with aÂcost-effective method. Journal of Fluid Mechanics, 2017, 821, 384-420.	3.4	51
30	SAW Synthesis With IDTs Array and the Inverse Filter: Toward a Versatile SAW Toolbox for Microfluidics and Biological Applications. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 1601-1607.	3.0	24
31	Anisotropic Swirling Surface Acoustic Waves from Inverse Filtering for On-Chip Generation of Acoustic Vortices. Physical Review Applied, 2015, 4, .	3.8	61
32	Taming the degeneration of Bessel beams at an anisotropic-isotropic interface: Toward three-dimensional control of confined vortical waves. Physical Review E, 2015, 92, 063201.	2.1	21
33	Pressure drop-based determination of dynamic interfacial tension of droplet generation process in T-junction microchannel. Microfluidics and Nanofluidics, 2015, 18, 503-512.	2.2	46
34	Simulation of liquid mixing inside micro-droplets by a lattice Boltzmann method. Chemical Engineering Science, 2015, 131, 118-128.	3.8	47
35	Cyclones and attractive streaming generated by acoustical vortices. Physical Review E, 2014, 90, 013008.	2.1	25
36	Beckmann Rearrangement of Cyclohexanone Oxime to Îµ-Caprolactam in a Modified Catalytic System of Trifluoroacetic Acid. Catalysis Letters, 2014, 144, 151-157.	2.6	26

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37	Lattice-Boltzmann method for the simulation of multiphase mass transfer and reaction of dilute species. Physical Review E, 2014, 89, 053308.	2.1	33
38	Experimental study of liquid/liquid second-dispersion process in constrictive microchannels. Chemical Engineering Journal, 2014, 254, 443-451.	12.7	49
39	A combined Lattice-Boltzmann method for the simulation of two-phase flows in microchannel. Chemical Engineering Science, 2013, 99, 238-249.	3.8	17
40	A facile pressure drop measurement system and its applications to gasâ€“liquid microflows. Microfluidics and Nanofluidics, 2013, 15, 715-724.	2.2	14