Jean Christophe Baret

List of Publications by Year
in descending order

79 papers	10,416 citations	61857 43 h-index	60497 81 g-index
87 all docs	87 docs citations	87 times ranked	9779 citing authors

#	Article	IF	Citations
1	Frontiers in single cell analysis: multimodal technologies and their clinical perspectives. Lab on A Chip, 2022, 22, 2403-2422.	3.1	13
2	Variable inter and intraspecies alkaline phosphatase activity within single cells of revived dinoflagellates. ISME Journal, 2021, 15, 2057-2069.	4.4	7
3	Fast and Ample Light Controlled Actuation of Monodisperse Allâ€ÐNA Microgels. Advanced Functional Materials, 2021, 31, 2010396.	7.8	11
4	From collections of independent, mindless robots to flexible, mobile, and directional superstructures. Science Robotics, 2021, 6, .	9.9	32
5	Confining Trypanosoma brucei in emulsion droplets reveals population variabilities in division rates and improves in vitro cultivation. Scientific Reports, 2021, 11, 18192.	1.6	2
6	A new-to-nature carboxylation module to improve natural and synthetic CO2 fixation. Nature Catalysis, 2021, 4, 105-115.	16.1	83
7	Directed Evolution in Drops: Molecular Aspects and Applications. ACS Synthetic Biology, 2021, 10, 2772-2783.	1.9	5
8	Bacterial Expression Systems for Enzymatic Activity in Droplet-Based Microfluidics. Analytical Chemistry, 2020, 92, 4908-4916.	3.2	23
9	Light-powered CO ₂ fixation in a chloroplast mimic with natural and synthetic parts. Science, 2020, 368, 649-654.	6.0	231
10	Highâ€Throughput Synthesis and Screening of Functional Coacervates Using Microfluidics. ChemSystemsChem, 2020, 2, e2000022.	1.1	32
11	Rapid Stabilization of Droplets by Particles in Microfluidics: Role of Droplet Formation. ChemSystemsChem, 2019, 1, 16-24.	1.1	10
12	High-Throughput Triggered Merging of Surfactant-Stabilized Droplet Pairs Using Traveling Surface Acoustic Waves. Analytical Chemistry, 2019, 91, 13978-13985.	3.2	14
13	Rational design of a high-throughput droplet sorter. Lab on A Chip, 2019, 19, 2220-2232.	3.1	24
14	Microfluidic technology for plankton research. Current Opinion in Biotechnology, 2019, 55, 134-150.	3.3	14
15	High-Content Screening of Plankton Alkaline Phosphatase Activity in Microfluidics. Analytical Chemistry, 2018, 90, 4174-4181.	3.2	21
16	Preparation of Swellable Hydrogelâ€Containing Colloidosomes from Aqueous Twoâ€Phase Pickering Emulsion Droplets. Angewandte Chemie - International Edition, 2018, 57, 7780-7784.	7.2	51
17	From Compartmentalization of Bacteria within Inorganic Macrocellular Beads to the Assembly of Microbial Consortia. Advanced Biology, 2018, 2, 1700233.	3.0	9
18	Boundaries Control Collective Dynamics of Inertial Self-Propelled Robots. Physical Review Letters, 2018, 120, 188002.	2.9	96

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19	Sequential bottom-up assembly of mechanically stabilized synthetic cells by microfluidics. Nature Materials, 2018, 17, 89-96.	13.3	314
20	High-throughput multiplexed fluorescence-activated droplet sorting. Microsystems and Nanoengineering, 2018, 4, 33.	3.4	48
21	MaxSynBio: Wege zur Synthese einer Zelle aus nicht lebenden Komponenten. Angewandte Chemie, 2018, 130, 13566-13577.	1.6	27
22	MaxSynBio: Avenues Towards Creating Cells from the Bottom Up. Angewandte Chemie - International Edition, 2018, 57, 13382-13392.	7.2	234
23	Out-of-equilibrium microcompartments for the bottom-up integration of metabolic functions. Nature Communications, 2018, 9, 2391.	5.8	55
24	High throughput single cell counting in droplet-based microfluidics. Scientific Reports, 2017, 7, 1366.	1.6	45
25	Microfluidic angle of repose test for Pickering emulsions. Journal Physics D: Applied Physics, 2017, 50, 39LT04.	1.3	4
26	Catanionic Coacervate Droplets as a Surfactantâ€Based Membraneâ€Free Protocell Model. Angewandte Chemie - International Edition, 2017, 56, 13689-13693.	7.2	65
27	AC electrified jets in a flow-focusing device: Jet length scaling. Biomicrofluidics, 2016, 10, 043504.	1.2	20
28	Droplet-Based Microfluidics for Measuring Enzymatic Activities: Application to L-Asparaginase used in Antileukemic Therapy. Biophysical Journal, 2016, 110, 548a-549a.	0.2	0
29	Surfactant adsorption kinetics in microfluidics. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 11465-11470.	3.3	44
30	Controlling molecular transport in minimal emulsions. Nature Communications, 2016, 7, 10392.	5.8	182
31	Vesicles-on-a-chip: A universal microfluidic platform for the assembly of liposomes and polymersomes. European Physical Journal E, 2016, 39, 59.	0.7	71
32	In Situ Encapsulation Kinetics Monitored by Microfluidics. Procedia IUTAM, 2015, 16, 115-122.	1.2	3
33	Polyurea Microcapsules in Microfluidics: Surfactant Control of Soft Membranes. Langmuir, 2015, 31, 1127-1134.	1.6	43
34	Stabilisers for water-in-fluorinated-oil dispersions: Key properties for microfluidic applications. Current Opinion in Colloid and Interface Science, 2015, 20, 183-191.	3.4	61
35	Monitoring reactive microencapsulation dynamics using microfluidics. Soft Matter, 2015, 11, 2916-2923.	1.2	19
36	Breakup length of AC electrified jets in a microfluidic flow-focusing junction. Microfluidics and Nanofluidics, 2015, 19, 787-794.	1.0	29

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37	Parallelized ultra-high throughput microfluidic emulsifier for multiplex kinetic assays. Biomicrofluidics, 2015, 9, 034101.	1.2	46
38	Enhanced Chemical Synthesis at Soft Interfaces: A Universal Reaction-Adsorption Mechanism in Microcompartments. Physical Review Letters, 2014, 112, 028301.	2.9	206
39	CotA laccase: high-throughput manipulation and analysis of recombinant enzyme libraries expressed in E. coli using droplet-based microfluidics. Analyst, The, 2014, 139, 3314-3323.	1.7	64
40	The microfluidic puzzle: chip-oriented rapid prototyping. Lab on A Chip, 2014, 14, 1669-1672.	3.1	14
41	Microfluidic Dynamic Interfacial Tensiometry (Î¼DIT). Soft Matter, 2014, 10, 3066.	1.2	102
42	Microfluidic flow-focusing in ac electric fields. Lab on A Chip, 2014, 14, 1099.	3.1	96
43	Wetting Heterogeneities in Porous Media Control Flow Dissipation. Physical Review Applied, 2014, 2, .	1.5	56
44	The Microfluidic Jukebox. Scientific Reports, 2014, 4, 4787.	1.6	41
45	Enhanced imine synthesis in water: from surfactant-mediated catalysis to hostâ€“guest mechanisms. Chemical Communications, 2013, 49, 11332.	2.2	22
46	Micro-optical lens array for fluorescence detection in droplet-based microfluidics. Lab on A Chip, 2013, 13, 1472.	3.1	62
47	Novel Electrical Control in Droplet Microfluidics Using an AC Electric Field. , 2013, , .		1
48	Microfluidic Approaches for the Study of Emulsions: Transport of Solutes. Materials Research Society Symposia Proceedings, 2013, 1530, 1.	0.1	1
49	Ultra-high throughput detection of single cell Î²-galactosidase activity in droplets using micro-optical lens array. Applied Physics Letters, 2013, 103, 203704.	1.5	28
50	High-resolution doseâ€“response screening using droplet-based microfluidics. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 378-383.	3.3	267
51	Dynamics of molecular transport by surfactants in emulsions. Soft Matter, 2012, 8, 10618.	1.2	133
52	A completely in vitro ultrahigh-throughput droplet-based microfluidic screening system for protein engineering and directed evolution. Lab on A Chip, 2012, 12, 882.	3.1	221
53	Surfactants in droplet-based microfluidics. Lab on A Chip, 2012, 12, 422-433.	3.1	485
54	Quantitative and sensitive detection of rare mutations using droplet-based microfluidics. Lab on A Chip, 2011, 11, 2156.	3.1	461

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55	High-Throughput Screening of Enzymes by Retroviral Display Using Droplet-Based Microfluidics. Chemistry and Biology, 2010, 17, 229-235.	6.2	84
56	Quantitative Cell-Based Reporter Gene Assays Using Droplet-Based Microfluidics. Chemistry and Biology, 2010, 17, 528-536.	6.2	91
57	Ultrahigh-throughput screening in drop-based microfluidics for directed evolution. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 4004-4009.	3.3	959
58	Correction for Agresti et al., Ultrahigh-throughput screening in drop-based microfluidics for directed evolution. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 6550-6550.	3.3	27
59	Droplet-Based Microfluidic Systems for High-Throughput Single DNA Molecule Isothermal Amplification and Analysis. Analytical Chemistry, 2009, 81, 4813-4821.	3.2	235
60	Multi-step microfluidic droplet processing: kinetic analysis of an in vitro translated enzyme. Lab on A Chip, 2009, 9, 2902.	3.1	182
61	Kinetic Aspects of Emulsion Stabilization by Surfactants: A Microfluidic Analysis. Langmuir, 2009, 25, 6088-6093.	1.6	168
62	A fast and efficient microfluidic system for highly selective one-to-one droplet fusion. Lab on A Chip, 2009, 9, 2665.	3.1	134
63	Fluorescence-activated droplet sorting (FADS): efficient microfluidic cell sorting based on enzymatic activity. Lab on A Chip, 2009, 9, 1850.	3.1	784
64	Dropletâ€Based Microreactors for the Synthesis of Magnetic Iron Oxide Nanoparticles. Angewandte Chemie - International Edition, 2008, 47, 6817-6820.	7.2	271
65	Droplet-Based Microfluidic Platforms for the Encapsulation and Screening of Mammalian Cells and Multicellular Organisms. Chemistry and Biology, 2008, 15, 427-437.	6.2	620
66	Microfluidic Production of Droplet Pairs. Langmuir, 2008, 24, 12073-12076.	1.6	56
67	Self-Excited Drop Oscillations in Electrowetting. Langmuir, 2007, 23, 5173-5179.	1.6	33
68	Miniaturizing chemistry and biology in microdroplets. Chemical Communications, 2007, , 1773.	2.2	165
69	Transport Dynamics in Open Microfluidic Grooves. Langmuir, 2007, 23, 5200-5204.	1.6	57
70	Switching Liquid Morphologies on Linear Grooves. Langmuir, 2007, 23, 12997-13006.	1.6	60
71	Microfluidic mixing through electrowetting-induced droplet oscillations. Applied Physics Letters, 2006, 88, 204106.	1.5	192
72	Electrical Discharge in Capillary Breakup: Controlling the Charge of a Droplet. Physical Review Letters, 2006, 96, 016106.	2.9	38

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73	Wettability Control of Droplet Deposition and Detachment. Physical Review Letters, 2006, 96, 146106.	2.9	22
74	Finite conductivity effects and apparent contact angle saturation in AC electrowetting. Materials Research Society Symposia Proceedings, 2005, 899, 1.	0.1	10
75	Electroactuation of Fluid Using Topographical Wetting Transitions. Langmuir, 2005, 21, 12218-12221.	1.6	41
76	Electrowetting: from basics to applications. Journal of Physics Condensed Matter, 2005, 17, R705-R774.	0.7	1,650
77	Gravity-driven flows of viscous liquids over two-dimensional topographies. Journal of Fluid Mechanics, 2003, 487, 147-166.	1.4	79
78	Extremal Model for Amorphous Media Plasticity. Physical Review Letters, 2002, 89, 195506.	2.9	131
79	On-chip liquid cooling with integrated pump technology. , 0, , .		3