

Jean Christophe Baret

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

77
papers

8,344
citations

39
h-index

87
g-index

87
ext. papers

9,558
ext. citations

7.9
avg, IF

6.17
L-index

#	Paper	IF	Citations
77	Directed Evolution in Drops: Molecular Aspects and Applications. <i>ACS Synthetic Biology</i> , 2021 , 10, 2772-2783	27.83	0
76	Variable inter and intraspecies alkaline phosphatase activity within single cells of revived dinoflagellates. <i>ISME Journal</i> , 2021 , 15, 2057-2069	11.9	2
75	Fast and Ample Light Controlled Actuation of Monodisperse All-DNA Microgels. <i>Advanced Functional Materials</i> , 2021 , 31, 2010396	15.6	3
74	From collections of independent, mindless robots to flexible, mobile, and directional superstructures. <i>Science Robotics</i> , 2021 , 6,	18.6	10
73	Confining <i>Trypanosoma brucei</i> in emulsion droplets reveals population variabilities in division rates and improves in vitro cultivation. <i>Scientific Reports</i> , 2021 , 11, 18192	4.9	
72	A new-to-nature carboxylation module to improve natural and synthetic CO ₂ fixation. <i>Nature Catalysis</i> , 2021 , 4, 105-115	36.5	24
71	Light-powered CO fixation in a chloroplast mimic with natural and synthetic parts. <i>Science</i> , 2020 , 368, 649-654	33.3	102
70	High-Throughput Synthesis and Screening of Functional Coacervates Using Microfluidics. <i>ChemSystemsChem</i> , 2020 , 2, e2000022	3.1	14
69	Bacterial Expression Systems for Enzymatic Activity in Droplet-Based Microfluidics. <i>Analytical Chemistry</i> , 2020 , 92, 4908-4916	7.8	15
68	High-Throughput Triggered Merging of Surfactant-Stabilized Droplet Pairs Using Traveling Surface Acoustic Waves. <i>Analytical Chemistry</i> , 2019 , 91, 13978-13985	7.8	7
67	Rational design of a high-throughput droplet sorter. <i>Lab on A Chip</i> , 2019 , 19, 2220-2232	7.2	15
66	Rapid Stabilization of Droplets by Particles in Microfluidics: Role of Droplet Formation. <i>ChemSystemsChem</i> , 2019 , 1, 16-24	3.1	6
65	Microfluidic technology for plankton research. <i>Current Opinion in Biotechnology</i> , 2019 , 55, 134-150	11.4	8
64	High-Content Screening of Plankton Alkaline Phosphatase Activity in Microfluidics. <i>Analytical Chemistry</i> , 2018 , 90, 4174-4181	7.8	14
63	Preparation of Swellable Hydrogel-Containing Colloidosomes from Aqueous Two-Phase Pickering Emulsion Droplets. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 7780-7784	16.4	32
62	From Compartmentalization of Bacteria within Inorganic Macrocellular Beads to the Assembly of Microbial Consortia. <i>Advanced Biology</i> , 2018 , 2, 1700233	3.5	5
61	Boundaries Control Collective Dynamics of Inertial Self-Propelled Robots. <i>Physical Review Letters</i> , 2018 , 120, 188002	7.4	52

60	Sequential bottom-up assembly of mechanically stabilized synthetic cells by microfluidics. <i>Nature Materials</i> , 2018 , 17, 89-96	27	211
59	MaxSynBio: Avenues Towards Creating Cells from the Bottom Up. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 13382-13392	16.4	155
58	Out-of-equilibrium microcompartments for the bottom-up integration of metabolic functions. <i>Nature Communications</i> , 2018 , 9, 2391	17.4	41
57	High-throughput multiplexed fluorescence-activated droplet sorting. <i>Microsystems and Nanoengineering</i> , 2018 , 4, 33	7.7	30
56	MaxSynBio: Wege zur Synthese einer Zelle aus nicht lebenden Komponenten. <i>Angewandte Chemie</i> , 2018 , 130, 13566-13577	3.6	25
55	High throughput single cell counting in droplet-based microfluidics. <i>Scientific Reports</i> , 2017 , 7, 1366	4.9	27
54	Microfluidic angle of repose test for Pickering emulsions. <i>Journal Physics D: Applied Physics</i> , 2017 , 50, 39LT04	3	3
53	Catanionic Coacervate Droplets as a Surfactant-Based Membrane-Free Protocell Model. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 13689-13693	16.4	45
52	Controlling molecular transport in minimal emulsions. <i>Nature Communications</i> , 2016 , 7, 10392	17.4	134
51	Vesicles-on-a-chip: A universal microfluidic platform for the assembly of liposomes and polymersomes. <i>European Physical Journal E</i> , 2016 , 39, 59	1.5	53
50	AC electrified jets in a flow-focusing device: Jet length scaling. <i>Biomicrofluidics</i> , 2016 , 10, 043504	3.2	15
49	Surfactant adsorption kinetics in microfluidics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 11465-11470	11.5	34
48	Stabilisers for water-in-fluorinated-oil dispersions: Key properties for microfluidic applications. <i>Current Opinion in Colloid and Interface Science</i> , 2015 , 20, 183-191	7.6	47
47	Monitoring reactive microencapsulation dynamics using microfluidics. <i>Soft Matter</i> , 2015 , 11, 2916-23	3.6	15
46	Breakup length of AC electrified jets in a microfluidic flow-focusing junction. <i>Microfluidics and Nanofluidics</i> , 2015 , 19, 787-794	2.8	27
45	Parallelized ultra-high throughput microfluidic emulsifier for multiplex kinetic assays. <i>Biomicrofluidics</i> , 2015 , 9, 034101	3.2	42
44	In Situ Encapsulation Kinetics Monitored by Microfluidics. <i>Procedia IUTAM</i> , 2015 , 16, 115-122		3
43	Polyurea microcapsules in microfluidics: surfactant control of soft membranes. <i>Langmuir</i> , 2015 , 31, 11273-34		33

42	The microfluidic jukebox. <i>Scientific Reports</i> , 2014 , 4, 4787	4.9	39
41	Enhanced chemical synthesis at soft interfaces: a universal reaction-adsorption mechanism in microcompartments. <i>Physical Review Letters</i> , 2014 , 112, 028301	7.4	151
40	CotA laccase: high-throughput manipulation and analysis of recombinant enzyme libraries expressed in <i>E. coli</i> using droplet-based microfluidics. <i>Analyst, The</i> , 2014 , 139, 3314-23	5	56
39	The microfluidic puzzle: chip-oriented rapid prototyping. <i>Lab on A Chip</i> , 2014 , 14, 1669-72	7.2	13
38	Microfluidic Dynamic Interfacial Tensiometry (DIT). <i>Soft Matter</i> , 2014 , 10, 3066-76	3.6	84
37	Microfluidic flow-focusing in ac electric fields. <i>Lab on A Chip</i> , 2014 , 14, 1099-106	7.2	83
36	Wetting Heterogeneities in Porous Media Control Flow Dissipation. <i>Physical Review Applied</i> , 2014 , 2,	4.3	45
35	Enhanced imine synthesis in water: from surfactant-mediated catalysis to host-guest mechanisms. <i>Chemical Communications</i> , 2013 , 49, 11332-4	5.8	13
34	Micro-optical lens array for fluorescence detection in droplet-based microfluidics. <i>Lab on A Chip</i> , 2013 , 13, 1472-5	7.2	54
33	Microfluidic Approaches for the Study of Emulsions: Transport of Solutes. <i>Materials Research Society Symposia Proceedings</i> , 2013 , 1530, 1		1
32	Ultra-high throughput detection of single cell -galactosidase activity in droplets using micro-optical lens array. <i>Applied Physics Letters</i> , 2013 , 103, 203704	3.4	25
31	High-resolution dose-response screening using droplet-based microfluidics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 378-83	11.5	222
30	Dynamics of molecular transport by surfactants in emulsions. <i>Soft Matter</i> , 2012 , 8, 10618	3.6	115
29	A completely in vitro ultrahigh-throughput droplet-based microfluidic screening system for protein engineering and directed evolution. <i>Lab on A Chip</i> , 2012 , 12, 882-91	7.2	180
28	Surfactants in droplet-based microfluidics. <i>Lab on A Chip</i> , 2012 , 12, 422-33	7.2	377
27	Quantitative and sensitive detection of rare mutations using droplet-based microfluidics. <i>Lab on A Chip</i> , 2011 , 11, 2156-66	7.2	389
26	Ultrahigh-throughput screening in drop-based microfluidics for directed evolution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 4004-9	11.5	817
25	Correction for Agresti et al., Ultrahigh-throughput screening in drop-based microfluidics for directed evolution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 6550-6550	11.5	25

24	High-throughput screening of enzymes by retroviral display using droplet-based microfluidics. <i>Chemistry and Biology</i> , 2010 , 17, 229-35		74
23	Quantitative cell-based reporter gene assays using droplet-based microfluidics. <i>Chemistry and Biology</i> , 2010 , 17, 528-36		86
22	Droplet-based microfluidic systems for high-throughput single DNA molecule isothermal amplification and analysis. <i>Analytical Chemistry</i> , 2009 , 81, 4813-21	7.8	213
21	Multi-step microfluidic droplet processing: kinetic analysis of an in vitro translated enzyme. <i>Lab on A Chip</i> , 2009 , 9, 2902-8	7.2	164
20	Kinetic aspects of emulsion stabilization by surfactants: a microfluidic analysis. <i>Langmuir</i> , 2009 , 25, 6088-93	7.2	154
19	A fast and efficient microfluidic system for highly selective one-to-one droplet fusion. <i>Lab on A Chip</i> , 2009 , 9, 2665-72	7.2	123
18	Fluorescence-activated droplet sorting (FADS): efficient microfluidic cell sorting based on enzymatic activity. <i>Lab on A Chip</i> , 2009 , 9, 1850-8	7.2	648
17	Microfluidic production of droplet pairs. <i>Langmuir</i> , 2008 , 24, 12073-6	4	50
16	Droplet-based microreactors for the synthesis of magnetic iron oxide nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 6817-20	16.4	232
15	Tropfenbasierte Mikroreaktoren für die Synthese von magnetischen Eisenoxid-Nanopartikeln. <i>Angewandte Chemie</i> , 2008 , 120, 6923-6926	3.6	16
14	Droplet-based microfluidic platforms for the encapsulation and screening of Mammalian cells and multicellular organisms. <i>Chemistry and Biology</i> , 2008 , 15, 427-37		555
13	Self-excited drop oscillations in electrowetting. <i>Langmuir</i> , 2007 , 23, 5173-9	4	27
12	Miniaturizing chemistry and biology in microdroplets. <i>Chemical Communications</i> , 2007 , 1773-88	5.8	155
11	Transport dynamics in open microfluidic grooves. <i>Langmuir</i> , 2007 , 23, 5200-4	4	51
10	Switching liquid morphologies on linear grooves. <i>Langmuir</i> , 2007 , 23, 12997-3006	4	55
9	Microfluidic mixing through electrowetting-induced droplet oscillations. <i>Applied Physics Letters</i> , 2006 , 88, 204106	3.4	143
8	Electrical discharge in capillary breakup: controlling the charge of a droplet. <i>Physical Review Letters</i> , 2006 , 96, 016106	7.4	32
7	Wettability control of droplet deposition and detachment. <i>Physical Review Letters</i> , 2006 , 96, 146106	7.4	18

6	Electroactuation of fluid using topographical wetting transitions. <i>Langmuir</i> , 2005 , 21, 12218-21	4	37
5	Electrowetting: from basics to applications. <i>Journal of Physics Condensed Matter</i> , 2005 , 17, R705-R774	1.8	1322
4	Finite conductivity effects and apparent contact angle saturation in AC electrowetting. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 899, 1		7
3	Gravity-driven flows of viscous liquids over two-dimensional topographies. <i>Journal of Fluid Mechanics</i> , 2003 , 487, 147-166	3-7	75
2	Extremal model for amorphous media plasticity. <i>Physical Review Letters</i> , 2002 , 89, 195506	7-4	120
1	On-chip liquid cooling with integrated pump technology		2