Martin M Hanczyc

List of Publications by Year
in descending order

57	2,711	293460 24	232693 48
papers	citations	h-index	g-index

58	58	58	2601
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A camphene-camphor-polymer composite material for the production of superhydrophobic absorbent microporous foams. Scientific Reports, 2022, 12, 243.	1.6	4
2	A Perfect Plastic Material for Studies on Self-Propelled Motion on the Water Surface. Molecules, 2021, 26, 3116.	1.7	5
3	Autoselective transport of mammalian cells with a chemotactic droplet. Scientific Reports, 2020, 10, 5525.	1.6	5
4	Engineering Life: A Review of Synthetic Biology. Artificial Life, 2020, 26, 260-273.	1.0	21
5	Stochastic Mechanisms of Information Flow in Phosphate Economy ofÂEscherichia coli. Lecture Notes in Computer Science, 2020, , 131-145.	1.0	0
6	Quantifying dynamic mechanisms of auto-regulation in Escherichia coli with synthetic promoter in response to varying external phosphate levels. Scientific Reports, 2019, 9, 2076.	1.6	12
7	A Comprehensive Study of Custom-Made Ceramic Separators for Microbial Fuel Cells: Towards â€œLivingâ€•Bricks. Energies, 2019, 12, 4071.	1.6	23
8	A hybrid camphorâ€“camphene wax material for studies on self-propelled motion. Physical Chemistry Chemical Physics, 2019, 21, 24852-24856.	1.3	18
9	Regenerated silk fibroin membranes as separators for transparent microbial fuel cells. Bioelectrochemistry, 2019, 126, 146-155.	2.4	25
10	Using Imaging Flow Cytometry to Quantify and Optimize Giant Vesicle Production by Water-in-oil Emulsion Transfer Methods. Langmuir, 2019, 35, 2375-2382.	1.6	24
11	Multi-Armed Droplets as Shape-Changing Protocells. Artificial Life, 2018, 24, 71-79.	1.0	8
12	Living architecture: workshop report from the European Conference on Artificial Life, Lyon, France, 4 September 2017. Adaptive Behavior, 2018, 26, 85-88.	1.1	1
13	Easy and Fast Preparation of Large and Giant Vesicles from Highly Confined Thin Lipid Films Deposited at the Airâ€“Water Interface. BioNanoScience, 2018, 8, 207-217.	1.5	0
14	Emergence of Polygonal Shapes in Oil Droplets and Living Cells: The Potential Role of Tensegrity in the Origin of Life. , 2018, , 427-490.		11
15	Vesicle Self-Assembly of Monoalkyl Amphiphiles under the Effects of High Ionic Strength, Extreme pH, and High Temperature Environments. Langmuir, 2018, 34, 15560-15568.	1.6	30
16	Better red than dead: On the influence of Oil Red O dye on complexity of evolution of a camphor-paraffin droplet on the water surface. , 2018, , .		2
17	Transport of Live Cells Under Sterile Conditions Using a Chemotactic Droplet. Scientific Reports, 2018, 8, 8408.	1.6	16
18	Droplets As Liquid Robots. Artificial Life, 2017, 23, 528-549.	1.0	50

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19	Primordial membranes: more than simple container boundaries. Current Opinion in Chemical Biology, 2017, 40, 78-86.	2.8	36
20	Chemotaxis and Chemokinesis of Living and Non-living Objects. Emergence, Complexity and Computation, 2017, , 245-260.	0.2	5
21	A dynamic model of the phosphate response system with synthetic promoters in Escherichia coli. , 2017, , .		2
22	The origin of life and the potential role of soaps. Lipid Technology, 2016, 28, 88-92.	0.3	5
23	Optimal control of a laser source to generate a minimum time trajectory of a droplet in a liquid layer. , 2016, , .		1
24	Evaporation-Induced Pattern Formation of Decanol Droplets. Langmuir, 2016, 32, 4800-4805.	1.6	11
25	Specific and Reversible DNA-Directed Self-Assembly of Modular Vesicle-Droplet Hybrid Materials. Langmuir, 2016, 32, 3561-3566.	1.6	10
26	Uniform droplet splitting and detection using Lab-on-Chip flow cytometry on a microfluidic PDMS device. Sensors and Actuators B: Chemical, 2016, 229, 7-13.	4.0	37
27	Creating and Maintaining Chemical Artificial Life by Robotic Symbiosis. Artificial Life, 2015, 21, 47-54.	1.0	12
28	Droplets: Unconventional Protocell Model with Life-Like Dynamics and Room to Grow. Life, 2014, 4, 1038-1049.	1.1	32
29	Dynamics of Chemotactic Droplets in Salt Concentration Gradients. Langmuir, 2014, 30, 11937-11944.	1.6	116
30	Defined DNA-Mediated Assemblies of Gene-Expressing Giant Unilamellar Vesicles. Langmuir, 2013, 29, 15309-15319.	1.6	42
31	An Oil Droplet Divisionâ€“Fusion Cycle. ChemPlusChem, 2013, 78, 52-54.	1.3	47
32	Navigating the Chemical Space of HCN Polymerization and Hydrolysis: Guiding Graph Grammars by Mass Spectrometry Data. Entropy, 2013, 15, 4066-4083.	1.1	38
33	BÃ¼tschli Dynamic Droplet System. Artificial Life, 2013, 19, 331-346.	1.0	9
34	Specific and reversible DNA-directed self-assembly of oil-in-water emulsion droplets. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 20320-20325.	3.3	63
35	Hierarchical Unilamellar Vesicles of Controlled Compositional Heterogeneity. PLoS ONE, 2012, 7, e50156.	1.1	27
36	Programmed Vesicle Fusion Triggers Gene Expression. Langmuir, 2011, 27, 13082-13090.	1.6	62

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37	Stable Vesicles Composed of Monocarboxylic or Dicarboxylic Fatty Acids and Trimethylammonium Amphiphiles. Langmuir, 2011, 27, 14078-14090.	1.6	42
38	Machine Learning Optimization of Evolvable Artificial Cells. Procedia Computer Science, 2011, 7, 187-189.	1.2	3
39	Models of Minimal Physical Intelligence. Procedia Computer Science, 2011, 7, 275-277.	1.2	5
40	Structure and the Synthesis of Life. Architectural Design, 2011, 81, 26-33.	0.1	8
41	Coping with complexity: Machine learning optimization of cellâ€free protein synthesis. Biotechnology and Bioengineering, 2011, 108, 2218-2228.	1.7	65
42	Metabolism and motility in prebiotic structures. Philosophical Transactions of the Royal Society B: Biological Sciences, 2011, 366, 2885-2893.	1.8	53
43	Machine learning for drug design, molecular machines and evolvable artificial cells. , 2011, , .		1
44	Mode Switching and Collective Behavior in Chemical Oil Droplets. Entropy, 2011, 13, 709-719.	1.1	29
45	2P250 Detection of association and fusion of giant vesicles using fluorescence-activated cell sorter(The 48th Annual Meeting of the Biophysical Society of Japan). Seibutsu Butsuri, 2010, 50, S126-S127.	0.0	0
46	Automated Discovery of Novel Drug Formulations Using Predictive Iterated High Throughput Experimentation. PLoS ONE, 2010, 5, e8546.	1.1	28
47	Chemical Basis for Minimal Cognition. Artificial Life, 2010, 16, 233-243.	1.0	45
48	Detection of Association and Fusion of Giant Vesicles Using a Fluorescence-Activated Cell Sorter. Langmuir, 2010, 26, 15098-15103.	1.6	54
49	Protocells as smart agents for architectural design. Technoetic Arts, 2009, 7, 117-120.	0.0	6
50	The search for a first cell under the maximalism design principle. Technoetic Arts, 2009, 7, 153-164.	0.0	6
51	Self-Propelled Oil Droplets Consuming â€œFuelâ€•Surfactant. Journal of the American Chemical Society, 2009, 131, 5012-5013.	6.6	229
52	Fatty Acid Chemistry at the Oilâˆ'Water Interface:â€‰ Self-Propelled Oil Droplets. Journal of the American Chemical Society, 2007, 129, 9386-9391.	6.6	271
53	Mineral Surface Directed Membrane Assembly. Origins of Life and Evolution of Biospheres, 2007, 37, 67-82.	0.8	106
54	Self-maintained Movements of Droplets with Convection Flow. , 2007, , 179-188.		4

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55	Evolutionary Design of a DDPD Model of Ligation. Lecture Notes in Computer Science, 2006, , 201-212.	1.0	6
56	Replicating vesicles as models of primitive cell growth and division. Current Opinion in Chemical Biology, 2004, 8, 660-664.	2.8	199
57	Experimental Models of Primitive Cellular Compartments: Encapsulation, Growth, and Division. Science, 2003, 302, 618-622.	6.0	741