U Kei Cheang

List of Publications by Year
in descending order

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47	869	623188	476904
papers	citations	14	29
		h-index	g-index

47	47	47	702
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	High-performance and selective adsorption of ZIF-8/MIL-100 hybrids towards organic pollutants. Nanoscale Advances, 2022, 4, 1431-1444.	2.2	12
2	Magnetic bio-hybrid micro actuators. Nanoscale, 2022, 14, 4364-4379.	2.8	14
3	Stop-Flow Lithography for the Continuous Production of Degradable Hydrogel Achiral Crescent Microswimmers. Micromachines, 2022, 13, 798.	1.4	2
4	Immunomodulation and delivery of macrophages using nano-smooth drug-loaded magnetic microrobots for dual targeting cancer therapy. IScience, 2022, 25, 104507.	1.9	13
5	Nanorobots-Assisted Natural Computation for Multifocal Tumor Sensitization and Targeting. IEEE Transactions on Nanobioscience, 2021, 20, 154-165.	2.2	11
6	Microorganism-Powered and -Inspired Micro/Nanorobots. , 2021, , 1-10.		0
7	Magnetic tri-bead microrobot assisted near-infrared triggered combined photothermal and chemotherapy of cancer cells. Scientific Reports, 2021, 11, 7907.	1.6	19
8	Propulsion kinematics of achiral microswimmers in viscous fluids. Applied Physics Letters, 2021, 118, .	1.5	4
9	Development of 2D MOF-Based Microrobots under Annealing Treatment and Their Biomedical Application. Industrial & Engineering Chemistry Research, 2021, 60, 9465-9474.	1.8	10
10	Effect of solvation on the synthesis of MOF-based microrobots and their targeted-therapy applications. Materials Advances, 2021, 2, 3871-3880.	2.6	8
11	Propulsion of magnetically actuated achiral planar microswimmers in Newtonian and non-Newtonian fluids. Scientific Reports, 2021, 11, 21190.	1.6	10
12	Microrobots Based In Vivo Evolutionary Computation in Two-Dimensional Microchannel Network. IEEE Nanotechnology Magazine, 2020, 19, 71-75.	1.1	8
13	Bio-inspired Self-regulated In-vivo Computation for Smart Cancer Detection. , 2020, , .		2
14	Mechanistic and Experimental Study of the Formation of MoS₂/HKUST-1 Coreâ€“Shell Composites on MoS₂ Quantum Dots with an Enhanced CO₂ Adsorption Capacity. Industrial & Engineering Chemistry Research, 2020, 59, 5808-5817.	1.8	12
15	Biosensing-by-Learning Direct Targeting Strategy for Enhanced Tumor Sensitization. IEEE Transactions on Nanobioscience, 2019, 18, 498-509.	2.2	18
16	Model Predictive Control Strategy for Navigating Nanoswimmers in Blood Vessels Using Taxicab Geometry. , 2019, , .		0
17	Experimental verification of guidance and search strategy of nanobots under magnetic field control in grid network. , 2019, , .		0
18	Âμ-PIV Measurements of Flows Generated by Photolithography-Fabricated Achiral Microswimmers. Micromachines, 2019, 10, 865.	1.4	11

#	Article	IF	Citations
19	Motion planning of particle based microrobots for static obstacle avoidance. Journal of Micro-Bio Robotics, 2018, 14, 41-49.	2.1	18
20	Feedback control of an achiral robotic microswimmer. Journal of Bionic Engineering, 2017, 14, 245-259.	2.7	48
21	Control of three bead achiral robotic microswimmers. , 2017, , 115-131.		0
22	Bacteria-inspired nanorobots with flagellar polymorphic transformations and bundling. Scientific Reports, 2017, 7, 14098.	1.6	56
23	Biotemplated flagellar nanoswimmers. APL Materials, 2017, 5, .	2.2	15
24	On-Surface Locomotion of Particle Based Microrobots Using Magnetically Induced Oscillation. Micromachines, 2017, 8, 46.	1.4	9
25	Autonomous dynamic obstacle avoidance for bacteria-powered microrobots (BPMs) with modified vector field histogram. PLoS ONE, 2017, 12, e0185744.	1.1	10
26	Fabrication and magnetic control of alginate-based rolling microrobots. AIP Advances, 2016, 6, .	0.6	28
27	Fabrication and control of simple low Reynolds number microswimmers. Applied Physics Letters, 2016, 109, .	1.5	22
28	Micro-PIV measurements of flows induced by rotating microparticles near a boundary. Microfluidics and Nanofluidics, 2016, 20, 1.	1.0	9
29	Micro manipulation using magnetic microrobots. Journal of Bionic Engineering, 2016, 13, 515-524.	2.7	29
30	Versatile microrobotics using simple modular subunits. Scientific Reports, 2016, 6, 30472.	1.6	41
31	Hydrodynamics of a self-actuated bacterial carpet using microscale particle image velocimetry. Biomicrofluidics, 2015, 9, 024121.	1.2	7
32	Dynamic obstacle avoidance for bacteria-powered microrobots. , 2015, , .		1
33	Feedback control of three-bead achiral robotic microswimmers. , 2015, , .		6
34	Self-assembly of robotic micro- and nanoswimmers using magnetic nanoparticles. Journal of Nanoparticle Research, 2015, 17, 1.	0.8	55
35	Minimal geometric requirements for micropropulsion via magnetic rotation. Physical Review E, 2014, 90, 033007.	0.8	89
36	Multiple-robot drug delivery strategy through coordinated teams of microswimmers. Applied Physics Letters, 2014, 105, .	1.5	84

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37	Obstacle avoidance method for microbiorobots using electric field control. , 2014, , .		4
38	Development of flagella bio-templated nanomaterials for electronics. Nano Convergence, 2014, 1, 10.	6.3	14
39	Towards Model-Based Control of Achiral Microswimmers. , 2014, , .		10
40	Fabrication of Artificial Bacteria for Targeted Drug Delivery. , 2013, , 217-238.		1
41	Magnetic Control of Biologically Inspired Robotic Microswimmers. , 2011, , .		0
42	Artificial magnetotactic motion control of Tetrahymena pyriformis using ferromagnetic nanoparticles: A tool for fabrication of microbiorobots. Applied Physics Letters, 2010, 97, .	1.5	64
43	Fabrication and magnetic control of bacteria-inspired robotic microswimmers. Applied Physics Letters, 2010, 97, .	1.5	74
44	A comparison of vision-based tracking schemes for control of microbiorobots. Journal of Micromechanics and Microengineering, 2010, 20, 065006.	1.5	3
45	10.1063/1.3497275.1. , 2010, , .		1
46	Harnessing bacterial power in microscale actuation. , 2009, , .		13
47	Galvanotactic Control of Self-Powered Microstructures. , 2008, , .		4