U Kei Cheang

List of Publications by Year
in descending order

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47	869	623734	477307
papers	citations	14 h-index	29 g-index

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

#	Article	IF	Citations
1	Minimal geometric requirements for micropropulsion via magnetic rotation. Physical Review E, 2014, 90, 033007.	2.1	89
2	Multiple-robot drug delivery strategy through coordinated teams of microswimmers. Applied Physics Letters, 2014, 105, .	3.3	84
3	Fabrication and magnetic control of bacteria-inspired robotic microswimmers. Applied Physics Letters, 2010, 97, .	3.3	74
4	Artificial magnetotactic motion control of Tetrahymena pyriformis using ferromagnetic nanoparticles: A tool for fabrication of microbiorobots. Applied Physics Letters, 2010, 97, .	3.3	64
5	Bacteria-inspired nanorobots with flagellar polymorphic transformations and bundling. Scientific Reports, 2017, 7, 14098.	3.3	56
6	Self-assembly of robotic micro- and nanoswimmers using magnetic nanoparticles. Journal of Nanoparticle Research, 2015, 17, 1.	1.9	55
7	Feedback control of an achiral robotic microswimmer. Journal of Bionic Engineering, 2017, 14, 245-259.	5.0	48
8	Versatile microrobotics using simple modular subunits. Scientific Reports, 2016, 6, 30472.	3.3	41
9	Micro manipulation using magnetic microrobots. Journal of Bionic Engineering, 2016, 13, 515-524.	5.0	29
10	Fabrication and magnetic control of alginate-based rolling microrobots. AIP Advances, 2016, 6, .	1.3	28
11	Fabrication and control of simple low Reynolds number microswimmers. Applied Physics Letters, 2016, 109, .	3.3	22
12	Magnetic tri-bead microrobot assisted near-infrared triggered combined photothermal and chemotherapy of cancer cells. Scientific Reports, 2021, 11, 7907.	3.3	19
13	Motion planning of particle based microrobots for static obstacle avoidance. Journal of Micro-Bio Robotics, 2018, 14, 41-49.	2.1	18
14	Biosensing-by-Learning Direct Targeting Strategy for Enhanced Tumor Sensitization. IEEE Transactions on Nanobioscience, 2019, 18, 498-509.	3.3	18
15	Biotemplated flagellar nanoswimmers. APL Materials, 2017, 5, .	5.1	15
16	Development of flagella bio-templated nanomaterials for electronics. Nano Convergence, 2014, 1, 10.	12.1	14
17	Magnetic bio-hybrid micro actuators. Nanoscale, 2022, 14, 4364-4379.	5.6	14
18	Harnessing bacterial power in microscale actuation. , 2009, , .		13

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19	Immunomodulation and delivery of macrophages using nano-smooth drug-loaded magnetic microrobots for dual targeting cancer therapy. IScience, 2022, 25, 104507.	4.1	13
20	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.	3.7	12
21	High-performance and selective adsorption of ZIF-8/MIL-100 hybrids towards organic pollutants. Nanoscale Advances, 2022, 4, 1431-1444.	4.6	12
22	Âμ-PIV Measurements of Flows Generated by Photolithography-Fabricated Achiral Microswimmers. Micromachines, 2019, 10, 865.	2.9	11
23	Nanorobots-Assisted Natural Computation for Multifocal Tumor Sensitization and Targeting. IEEE Transactions on Nanobioscience, 2021, 20, 154-165.	3.3	11
24	Towards Model-Based Control of Achiral Microswimmers. , 2014, , .		10
25	Development of 2D MOF-Based Microrobots under Annealing Treatment and Their Biomedical Application. Industrial & Engineering Chemistry Research, 2021, 60, 9465-9474.	3.7	10
26	Autonomous dynamic obstacle avoidance for bacteria-powered microrobots (BPMs) with modified vector field histogram. PLoS ONE, 2017, 12, e0185744.	2.5	10
27	Propulsion of magnetically actuated achiral planar microswimmers in Newtonian and non-Newtonian fluids. Scientific Reports, 2021, 11, 21190.	3.3	10
28	Micro-PIV measurements of flows induced by rotating microparticles near a boundary. Microfluidics and Nanofluidics, 2016, 20, 1.	2.2	9
29	On-Surface Locomotion of Particle Based Microrobots Using Magnetically Induced Oscillation. Micromachines, 2017, 8, 46.	2.9	9
30	Microrobots Based In Vivo Evolutionary Computation in Two-Dimensional Microchannel Network. IEEE Nanotechnology Magazine, 2020, 19, 71-75.	2.0	8
31	Effect of solvation on the synthesis of MOF-based microrobots and their targeted-therapy applications. Materials Advances, 2021, 2, 3871-3880.	5.4	8
32	Hydrodynamics of a self-actuated bacterial carpet using microscale particle image velocimetry. Biomicrofluidics, 2015, 9, 024121.	2.4	7
33	Feedback control of three-bead achiral robotic microswimmers. , 2015, , .		6
34	Galvanotactic Control of Self-Powered Microstructures. , 2008, , .		4
35	Obstacle avoidance method for microbiorobots using electric field control. , 2014, , .		4
36	Propulsion kinematics of achiral microswimmers in viscous fluids. Applied Physics Letters, 2021, 118, .	3.3	4

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37	A comparison of vision-based tracking schemes for control of microbiorobots. Journal of Micromechanics and Microengineering, 2010, 20, 065006.	2.6	3
38	Bio-inspired Self-regulated In-vivo Computation for Smart Cancer Detection. , 2020, , .		2
39	Stop-Flow Lithography for the Continuous Production of Degradable Hydrogel Achiral Crescent Microswimmers. Micromachines, 2022, 13, 798.	2.9	2
40	Fabrication of Artificial Bacteria for Targeted Drug Delivery. , 2013, , 217-238.		1
41	Dynamic obstacle avoidance for bacteria-powered microrobots. , 2015, , .		1
42	10.1063/1.3497275.1. , 2010, , .		1
43	Magnetic Control of Biologically Inspired Robotic Microswimmers. , 2011, , .		0
44	Control of three bead achiral robotic microswimmers. , 2017, , 115-131.		0
45	Model Predictive Control Strategy for Navigating Nanoswimmers in Blood Vessels Using Taxicab Geometry. , 2019, , .		0
46	Experimental verification of guidance and search strategy of nanobots under magnetic field control in grid network. , 2019, , .		0
47	Microorganism-Powered and -Inspired Micro/Nanorobots. , 2021, , 1-10.		0