Bahareh Behkam

List of Publications by Year
in descending order

71 papers	1,649 citations	393982 19 h-index	315357 38 g-index
74 all docs	74 docs citations	74 times ranked	1587 citing authors

#	Article	IF	Citations
1	Robust and Repeatable Biofabrication of Bacteriaâ€Mediated Drug Delivery Systems: Effect of Conjugation Chemistry, Assembly Process Parameters, and Nanoparticle Size. Advanced Intelligent Systems, 2022, 4, 2100135.	3.3	6
2	Quantitative biophysical metrics for rapid evaluation of ovarian cancer metastatic potential. Molecular Biology of the Cell, 2022, 33, mbcE21080419.	0.9	4
3	A computational framework for investigating bacteria transport in microvasculature. Computer Methods in Biomechanics and Biomedical Engineering, 2022, , 1-12.	0.9	1
4	Improved pentamethine cyanine nanosensors for optoacoustic imaging of pancreatic cancer. Scientific Reports, 2021, 11, 4366.	1.6	9
5	Outer Membrane Structural Defects in Salmonella enterica Serovar Typhimurium Affect Neutrophil Chemokinesis but Not Chemotaxis. MSphere, 2021, 6, .	1.3	1
6	Active Targeting Significantly Outperforms Nanoparticle Size in Facilitating Tumor-Specific Uptake in Orthotopic Pancreatic Cancer. ACS Applied Materials & Interfaces, 2021, 13, 49614-49630.	4.0	21
7	Imaging Inflammation and Infection in the Gastrointestinal Tract. International Journal of Molecular Sciences, 2020, 21, 243.	1.8	17
8	Data-driven statistical modeling of the emergent behavior of biohybrid microrobots. APL Bioengineering, 2020, 4, 016104.	3.3	5
9	Cancer Cells Sense Fibers by Coiling on them in a Curvature-Dependent Manner. IScience, 2019, 19, 905-915.	1.9	26
10	Integrating nanofibers with biochemical gradients to investigate physiologically-relevant fibroblast chemotaxis. Lab on A Chip, 2019, 19, 3641-3651.	3.1	6
11	Crosshatch nanofiber networks of tunable interfiber spacing induce plasticity in cell migration and cytoskeletal response. FASEB Journal, 2019, 33, 10618-10632.	0.2	40
12	Hybrid centralized/decentralized control of a network of bacteria-based bio-hybrid microrobots. Journal of Micro-Bio Robotics, 2019, 15, 1-12.	2.1	6
13	Statistical Modeling of a Distributed Network of Bacteria-propelled Microrobots (BacteriaBots). , 2019, , .		0
14	Bromide ion-functionalized nanoprobes for sensitive and reliable pH measurement by surface-enhanced Raman spectroscopy. Analyst, The, 2019, 144, 7326-7335.	1.7	12
15	Nanoscale Bacteriaâ€Enabled Autonomous Drug Delivery System (NanoBEADS) Enhances Intratumoral Transport of Nanomedicine. Advanced Science, 2019, 6, 1801309.	5.6	104
16	Design of Nanofiber Coatings for Mitigation of Microbial Adhesion: Modeling and Application to Medical Catheters. ACS Applied Materials & Interfaces, 2018, 10, 15477-15486.	4.0	8
17	Quantitative Investigation of the Role of Intra-/Intercellular Dynamics in Bacterial Quorum Sensing. ACS Synthetic Biology, 2018, 7, 1030-1042.	1.9	14
18	Hybrid Centralized/Decentralized Control of Bacteria-Based Bio-Hybrid Microrobots. , 2018, , .		2

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19	Construction of Bacteria-Based Cargo Carriers for Targeted Cancer Therapy. Methods in Molecular Biology, 2018, 1831, 25-35.	0.4	4
20	NANOSCALE BACTERIA-ENABLED AUTONOMOUS DELIVERY SYSTEMS (NanoBEADS) FOR CANCER THERAPY. , 2018, , 87-109.		0
21	Effect of electrode sub-micron surface feature size on current generation of Shewanella oneidensis in microbial fuel cells. Journal of Power Sources, 2017, 347, 270-276.	4.0	17
22	Optimizing the restored chemotactic behavior of anticancer agent Salmonella enterica serovar Typhimurium VNP20009. Journal of Biotechnology, 2017, 251, 76-83.	1.9	20
23	Candida Albicans Yeast Seek to Adhere in Energetically Optimal Locations. Biophysical Journal, 2017, 112, 310a.	0.2	0
24	Aligned fibers direct collective cell migration to engineer closing and nonclosing wound gaps. Molecular Biology of the Cell, 2017, 28, 2579-2588.	0.9	40
25	Cancer Protrusions on a Tightrope: Nanofiber Curvature Contrast Quantitates Single Protrusion Dynamics. ACS Nano, 2017, 11, 12037-12048.	7.3	34
26	Computational Model of Human Capillary Hydrodynamics. , 2016, , .		0
27	Spun-wrapped aligned nanofiber (SWAN) lithography for fabrication of micro/nano-structures on 3D objects. Nanoscale, 2016, 8, 12780-12786.	2.8	7
28	Bacterial chemotaxis-enabled autonomous sorting of nanoparticles of comparable sizes. Lab on A Chip, 2016, 16, 1254-1260.	3.1	26
29	3D Insulatorâ€based dielectrophoresis using DCâ€biased, AC electric fields for selective bacterial trapping. Electrophoresis, 2015, 36, 277-283.	1.3	28
30	Biomanufacturing and self-propulsion dynamics of nanoscale bacteria-enabled autonomous delivery systems. Applied Physics Letters, 2014, 105, .	1.5	27
31	Toward Development of an Autonomous Network of Bacteria-Based Delivery Systems (BacteriaBots): Spatiotemporally High-Throughput Characterization of Bacterial Quorum-Sensing Response. Analytical Chemistry, 2014, 86, 11489-11493.	3.2	11
32	Antimicrobial Surfaces Using Covalently Bound Polyallylamine. Biomacromolecules, 2014, 15, 169-176.	2.6	50
33	Aligned and suspended fiber force probes for drug testing at single cell resolution. Biofabrication, 2014, 6, 045006.	3.7	7
34	Directed transport of bacteria-based drug delivery vehicles: bacterial chemotaxis dominates particle shape. Biomedical Microdevices, 2014, 16, 717-725.	1.4	58
35	Off-chip passivated-electrode, insulator-based dielectrophoresis (OÏ€DEP). Analytical and Bioanalytical Chemistry, 2013, 405, 6657-6666.	1.9	28
36	Embedded passivated-electrode insulator-based dielectrophoresis (EÏ€DEP). Analytical and Bioanalytical Chemistry, 2013, 405, 9825-9833.	1.9	9

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37	Towards quorum sensing based distributed control for networks of mobile sensors. , 2013, , .		1
38	A PEG-DA microfluidic device for chemotaxis studies. Journal of Micromechanics and Microengineering, 2013, 23, 085014.	1.5	24
39	Cell-Fiber Interactions on Aligned and Suspended Nanofiber Scaffolds. Journal of Biomaterials and Tissue Engineering, 2013, 3, 355-368.	0.0	21
40	Enhanced directionality of bio-hybrid mobile microrobots using non-spherical body geometries. , 2012, 2012, 6580-2.		0
41	Bacterial chemotaxis enabled autonomous sorting of micro-particles. , 2012, 2012, 2823-6.		0
42	Selective E. coli trapping with 3D insulator-based dielectrophoresis using DC-biased, AC electric fields. , 2012, 2012, 6285-8.		1
43	Effect of Body Geometry on the Motile Behavior of Bacteriabots. , 2012, , .		0
44	Bioinspired Anti-Biofilm Surfaces Based on Topographical Cues. , 2012, , .		0
45	Effect of Anode Surface Roughness on Power Generation in Microbial Fuel Cells. , 2012, , .		1
46	Effect of body shape on the motile behavior of bacteria-powered swimming microrobots (BacteriaBots). Biomedical Microdevices, 2012, 14, 999-1007.	1.4	51
47	Controlling bacterial adhesion to surfaces using topographical cues: a study of the interaction of Pseudomonas aeruginosa with nanofiber-textured surfaces. Soft Matter, 2012, 8, 10254.	1.2	60
48	Off-chip electrode insulator based dielectrophoresis. , 2012, , .		1
49	Autonomous Sorting of Micro-Particles Using Bacterial Chemotaxis. , 2012, , .		1
50	Stochastic dynamics of bacteria propelled spherical micro-robots. , 2011, , .		0
51	Modeling of stochastic motion of bacteria propelled spherical microbeads. Journal of Applied Physics, 2011, 109, 114702.	1.1	40
52	Computational and experimental study of chemotaxis of an ensemble of bacteria attached to a microbead. Physical Review E, 2011, 84, 061908.	0.8	40
53	Stiffness and temporal optimization in periodic movements: An optimal control approach. , 2011, , .		1
54	Stochastic dynamics of bacteria propelled spherical micro-robots. , 2011, , .		0

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55	Toward a minimally invasive bladder pressure monitoring system: Model bladder for in vitro testing. , 2010, , .		5
56	A stochastic model for chemotactic motion of micro-beads propelled by attached bacteria. , 2010, , .		2
57	Characterization of bacterial actuation of micro-objects. , 2009, , .		12
58	Bacterial propulsion of chemically patterned micro-cylinders. , 2008, , .		5
59	Effect of quantity and configuration of attached bacteria on bacterial propulsion of microbeads. Applied Physics Letters, 2008, 93, .	1.5	140
60	Design and Numerical Modeling of an On-Board Chemical Release Module for Motion Control of Bacteria-Propelled Swimming Micro-Robots. , 2008, , .		0
61	Bacterial flagella assisted propulsion of patterned latex particles: Effect of particle size. , 2007, , .		0
62	Bacteria Integrated Swimming Microrobots. , 2007, , 154-163.		9
63	Bacterial flagella-based propulsion and on/off motion control of microscale objects. Applied Physics Letters, 2007, 90, 023902.	1.5	300
64	Design Methodology for Biomimetic Propulsion of Miniature Swimming Robots. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2006, 128, 36-43.	0.9	180
65	Towards Hybrid Swimming Microrobots: Bacteria Assisted Propulsion of Polystyrene Beads. , 2006, 2006, 2421-4.		12
66	Towards Hybrid Swimming Microrobots: Bacteria Assisted Propulsion of Polystyrene Beads. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
67	Thermal property measurement of thin aluminum oxide layers for giant magnetoresistive (GMR) head applications. International Journal of Heat and Mass Transfer, 2005, 48, 2023-2031.	2.5	18
68	E. Coli Inspired Propulsion for Swimming Microrobots. , 2004, , 1037.		14
69	Thermal Property Measurement of Thin Aluminum Oxide Layers for Giant Magnetoresistive (GMR) Head Applications. , 2003, , .		1
70	Thermal conductivity model for thin silicon-on-insulator layers at high temperatures. , 2002, , .		20
71	Modeling and Testing of a Biomimetic Flagellar Propulsion Method for Microscale Biomedical Swimming Robots. , 0, , .		38