

# Ahmet Fatih Tabak

## List of Publications by Year in descending order

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51  
papers

1,285  
citations

687220

13  
h-index

839398

18  
g-index

55  
all docs

55  
docs citations

55  
times ranked

1313  
citing authors

#	ARTICLE	IF	CITATIONS
1	3D-Printed Biodegradable Microswimmer for Theranostic Cargo Delivery and Release. ACS Nano, 2019, 13, 3353-3362.	7.3	334
2	Soft erythrocyte-based bacterial microswimmers for cargo delivery. Science Robotics, 2018, 3, .	9.9	280
3	3D-Printed Microrobotic Transporters with Recapitulated Stem Cell Niche for Programmable and Active Cell Delivery. Advanced Functional Materials, 2019, 29, 1808992.	7.8	107
4	Mechanical Rubbing of Blood Clots Using Helical Robots Under Ultrasound Guidance. IEEE Robotics and Automation Letters, 2018, 3, 1112-1119.	3.3	66
5	Magnetic propulsion of robotic sperms at low-Reynolds number. Applied Physics Letters, 2016, 109, .	1.5	59
6	Rubbing Against Blood Clots Using Helical Robots: Modeling and In Vitro Experimental Validation. IEEE Robotics and Automation Letters, 2017, 2, 927-934.	3.3	59
7	Independent Actuation of Two-Tailed Microrobots. IEEE Robotics and Automation Letters, 2018, 3, 1703-1710.	3.3	43
8	Transducer Technologies for Biosensors and Their Wearable Applications. Biosensors, 2022, 12, 385.	2.3	38
9	Swimming Back and Forth Using Planar Flagellar Propulsion at Low Reynolds Numbers. Advanced Science, 2018, 5, 1700461.	5.6	33
10	Elevation and Azimuth Rotational Actuation of an Untethered Millirobot by MRI Gradient Coils. IEEE Transactions on Robotics, 2019, 35, 1323-1337.	7.3	29
11	Controllable switching between planar and helical flagellar swimming of a soft robotic sperm. PLoS ONE, 2018, 13, e0206456.	1.1	24
12	Improved Kinematic Models for Two-Link Helical Micro/Nanoswimmers. IEEE Transactions on Robotics, 2014, 30, 14-25.	7.3	22
13	Sperm-shaped magnetic microrobots: Fabrication using electrospinning, modeling, and characterization. , 2016, , .		18
14	Temperature Gradients Drive Bulk Flow Within Microchannel Lined by Fluid-Fluid Interfaces. Small, 2019, 15, e1900472.	5.2	17
15	Hydrodynamic Impedance of Bacteria and Bacteria-Inspired Micro-Swimmers: A New Strategy to Predict Power Consumption of Swimming Micro-Robots for Real-Time Applications. Advanced Theory and Simulations, 2018, 1, 1700013.	1.3	16
16	Computationally-validated surrogate models for optimal geometric design of bio-inspired swimming robots: Helical swimmers. Computers and Fluids, 2014, 99, 190-198.	1.3	14
17	Comparison on experimental and numerical results for helical swimmers inside channels. , 2011, , .		11
18	Simulation-based analysis of flow due to traveling-plane-wave deformations on elastic thin-film actuators in micropumps. Microfluidics and Nanofluidics, 2008, 4, 489-500.	1.0	10

#	ARTICLE	IF	CITATIONS
19	Near-surface effects on the controlled motion of magnetotactic bacteria. , 2017, , .		10
20	Bilateral control simulations for a pair of magnetically-coupled robotic arm and bacterium for in vivo applications. Journal of Micro-Bio Robotics, 2020, 16, 199-214.	2.1	10
21	Experiment-based kinematic validation of numeric modeling and simulated control of an untethered biomimetic microrobot in channel. , 2012, , .		9
22	Experiments on in-channel swimming of an untethered biomimetic robot with different helical tails. , 2012, , .		6
23	Validated Reduced Order Models for Simulating Trajectories of Bio-Inspired Artificial Micro-Swimmers. , 2010, , .		5
24	Bioinspired and Biomimetic Micro-Robotics for Therapeutic Applications. , 2019, , 457-523.		5
25	Numerical simulations and analysis of a micropump actuated by traveling plane waves. , 2007, , .		4
26	Resistive force theory based modeling and simulation of surface contact for swimming helical micro robots with channel flow. , 2014, , .		4
27	Positioning of drug carriers using permanent magnet-based robotic system in three-dimensional space. , 2017, , .		4
28	Swimming in low reynolds numbers using planar and helical flagellar waves. , 2017, , .		4
29	Hydrodynamic Impedance Correction for Reduced-Order Modeling of Spermatozoa-Like Soft Micro-Robots. Advanced Theory and Simulations, 2019, 2, 1800130.	1.3	4
30	Simulated Bilateral Motion Control of a Magneto-Tactic Bacterium via an Open Kinematic Chain. , 2020, , .		4
31	Experimental validation of a CFD-based resistive force coefficient set for rotating helical tails in cylindrical channels. , 2013, , .		3
32	Numerical Analysis of the 3D Flow Induced by Propagation of Plane-Wave Deformations on Thin Membranes Inside Microchannels. , 2007, , .		3
33	In-channel experiments on vertical swimming with bacteria-like robots. , 2013, , .		2
34	Targeting of cell mockups using sperm-shaped microrobots in vitro. , 2016, , .		2
35	Adaptive Motion Control of Modified E. Coli. , 2020, , .		2
36	Temassız Manyetik Mikro Manipülasyon için Bernoulli Denklemine Dayalı Robotik Model. European Journal of Science and Technology, 0, , .	0.5	2

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37	Non-Contact Micromanipulation Of A Single E. Coli Minicell. European Journal of Science and Technology, 0, , .	0.5	2
38	A Simulated Control Method for a Magnetically-Coupled Bacterium and Robotic Arm. , 2020, , .		2
39	Numerical Investigations on the Hydrodynamic Interaction between an E. Coli Minicell and a Micro Tweezers. , 2021, , .		2
40	Manipulation of Non-Magnetic Microbeads Using Soft Microrobotic Sperm. , 2018, , .		1
41	Tek MÅ±knatÅ±s aracÅ±ÄŸÄ±lÅ± ile bir Manyetotaktik Bakterinin Adaptif Manevra KontrolÅ¼ iÅ¼in BaÄŸmsÅ±z Eklemler Kontrol SimulasyonlarÅ±. European Journal of Science and Technology, 0, , .	0.5	1
42	Motion Control for Biohybrid Multiscale Robots. , 2020, , .		1
43	Simulation Studies for Motion Control of Multiple Biohybrid Microrobots in Human Synovial Fluid with Discontinuous Reference Signals. International Journal of Advances in Engineering and Pure Sciences, 0, , .	0.2	1
44	Simulation-Based Analysis of 3D Flow Inside a Micropump With Passive Valves. , 2007, , 849.		0
45	Numerical Analysis of a Planar Wave Propagation Based Micropropulsion System. , 2007, , 781.		0
46	Modeling and Simulations of the Motion of Bio-Inspired Micro Swimming Robots. , 2010, , .		0
47	Mathematical modeling to the motion control of magnetic nano/microrobotic tools performing in bodily fluids, especially blood/plasma. , 2022, , 83-112.		0
48	Orbital Characterization Study for the Hydrodynamic Micro Tweezers: Simulated Performance with a Passive Particle. , 2021, , .		0
49	Initial Study Towards the Integrated Design of Bone Scaffolds Based on Cell Diffusion, Growth Factor Release and Tissue Regeneration. , 2020, , .		0
50	Orbital Characterization Study for the Hydrodynamic Micro Tweezers: Simulated Performance with an Active Particle. , 2021, , .		0
51	Comparison on experimental and numerical results for helical swimmers inside channels. , 2011, , .		0