

# Teng Zhou

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

56  
papers

701  
citations

15  
h-index

24  
g-index

63  
ext. papers

1,011  
ext. citations

4.9  
avg, IF

4.49  
L-index

#	Paper	IF	Citations
56	High-performance silk-based hybrid membranes employed for osmotic energy conversion. <i>Nature Communications</i> , <b>2019</b> , 10, 3876	17.4	141
55	An Enhanced One-Layer Passive Microfluidic Mixer With an Optimized Lateral Structure With the Dean Effect. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , <b>2015</b> , 137,	2.1	37
54	Robust sulfonated poly (ether ether ketone) nanochannels for high-performance osmotic energy conversion. <i>National Science Review</i> , <b>2020</b> , 7, 1349-1359	10.8	35
53	An Enhanced Electroosmotic Micromixer with an Efficient Asymmetric Lateral Structure. <i>Micromachines</i> , <b>2016</b> , 7,	3.3	33
52	Design of microfluidic channel networks with specified output flow rates using the CFD-based optimization method. <i>Microfluidics and Nanofluidics</i> , <b>2017</b> , 21, 1	2.8	32
51	Corrosion resistance and interfacial morphologies of novel Fe-Cr-Mo-B cast steels in molten aluminum. <i>Corrosion Science</i> , <b>2017</b> , 125, 20-28	6.8	30
50	The Mechanism of Size-Based Particle Separation by Dielectrophoresis in the Viscoelastic Flows. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , <b>2018</b> , 140,	2.1	29
49	Dielectrophoretic choking phenomenon of a deformable particle in a converging-diverging microchannel. <i>Electrophoresis</i> , <b>2018</b> , 39, 590-596	3.6	27
48	Review Biosensing and Biomedical Applications of Graphene: A Review of Current Progress and Future Prospect. <i>Journal of the Electrochemical Society</i> , <b>2019</b> , 166, B505-B520	3.9	24
47	Hydrodynamic particle focusing design using fluid-particle interaction. <i>Biomicrofluidics</i> , <b>2013</b> , 7, 54104	3.2	22
46	A novel scalable microfluidic load sensor based on electrokinetic phenomena. <i>Microfluidics and Nanofluidics</i> , <b>2017</b> , 21, 1	2.8	21
45	Topology optimization of electrode patterns for electroosmotic micromixer. <i>International Journal of Heat and Mass Transfer</i> , <b>2018</b> , 126, 1299-1315	4.9	18
44	Biomimetic metal-organic nanoparticles prepared with a 3D-printed microfluidic device as a novel formulation for disulfiram-based therapy against breast cancer. <i>Applied Materials Today</i> , <b>2020</b> , 18,	6.6	17
43	AC dielectrophoretic deformable particle-particle interactions and their relative motions. <i>Electrophoresis</i> , <b>2020</b> , 41, 952-958	3.6	17
42	Formation of periodic layered structure between novel Fe-Cr-B cast steel and molten aluminum. <i>Scripta Materialia</i> , <b>2017</b> , 130, 288-291	5.6	16
41	Inversely designed micro-textures for robust Cassie-Baxter mode of super-hydrophobicity. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2018</b> , 341, 113-132	5.7	15
40	Euler force actuation mechanism for siphon valving in compact disk-like microfluidic chips. <i>Biomicrofluidics</i> , <b>2014</b> , 8, 024101	3.2	14

39	Deformability-Based Electrokinetic Particle Separation. <i>Micromachines</i> , <b>2016</b> , 7,	3.3	13
38	Dielectrophoretic choking phenomenon in a converging-diverging microchannel for Janus particles. <i>Electrophoresis</i> , <b>2019</b> , 40, 993-999	3.6	13
37	A Novel Electroosmotic Micromixer with Asymmetric Lateral Structures and DC Electrode Arrays. <i>Micromachines</i> , <b>2017</b> , 8, 105	3.3	11
36	On-demand control of microfluidic flow via capillary-tuned solenoid microvalve suction. <i>Lab on A Chip</i> , <b>2014</b> , 14, 4599-603	7.2	11
35	Light-Induced Heat Driving Active Ion Transport Based on 2D MXene Nanofluids for Enhancing Osmotic Energy Conversion. <i>CCS Chemistry</i> , <b>2021</b> , 3, 1325-1335	7.2	11
34	Mixing mechanism of a straight channel micromixer based on light-actuated oscillating electroosmosis in low-frequency sinusoidal AC electric field. <i>Microfluidics and Nanofluidics</i> , <b>2021</b> , 25, 1	2.8	10
33	An ultra-narrow photonic nanojet generated from a high refractive-index micro-flat-ended cylinder. <i>Applied Physics Express</i> , <b>2020</b> , 13, 042010	2.4	9
32	A novel passive micromixer with modified asymmetric lateral wall structures. <i>Asia-Pacific Journal of Chemical Engineering</i> , <b>2018</b> , 13, e2202	1.3	8
31	Influence of Cr on the interfacial boride reaction between Fe-Cr-B cast steel and molten aluminium. <i>Corrosion Science</i> , <b>2019</b> , 158, 108098	6.8	7
30	Optimal Control-Based Inverse Determination of Electrode Distribution for Electroosmotic Micromixer. <i>Micromachines</i> , <b>2017</b> , 8,	3.3	7
29	Synergy of light and acid-base reaction in energy conversion based on cellulose nanofiber intercalated titanium carbide composite nanofluidics. <i>Energy and Environmental Science</i> ,	35.4	7
28	Surface Charge Regulated Asymmetric Ion Transport in Nanoconfined Space. <i>Small</i> , <b>2021</b> , 17, e2101099	11	6
27	Engineered Sulfonated Polyether Sulfone Nanochannel Membranes for Salinity Gradient Power Generation. <i>ACS Applied Polymer Materials</i> , <b>2021</b> , 3, 485-493	4.3	6
26	Microstructure evolution and formation mechanism of graded cemented carbide with cubic-carbide-free layer prepared with TiN or Ti(C,N) free powder mixture. <i>International Journal of Refractory Metals and Hard Materials</i> , <b>2017</b> , 66, 198-203	4.1	5
25	Direct Numerical Simulation of Seawater Desalination Based on Ion Concentration Polarization. <i>Micromachines</i> , <b>2019</b> , 10,	3.3	5
24	Dielectrophoretic interactions of two rod-shaped deformable particles under DC electric field. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2020</b> , 607, 125493	5.1	5
23	A Microfluidic Chip-Based MRS Immunosensor for Biomarker Detection Enzyme-Mediated Nanoparticle Assembly. <i>Frontiers in Chemistry</i> , <b>2021</b> , 9, 688442	5	5
22	Fractional order modeling and recognition of nitrogen content level of rubber tree foliage. <i>Journal of Near Infrared Spectroscopy</i> , <b>2021</b> , 29, 42-52	1.5	5

21	Point-of-Care Testing for Multiple Cardiac Markers Based on a Snail-Shaped Microfluidic Chip. <i>Frontiers in Chemistry</i> , <b>2021</b> , 9, 741058	5	4
20	Numerical Investigation of DC Dielectrophoretic Deformable Particle-Particle Interactions and Assembly. <i>Micromachines</i> , <b>2018</b> , 9,	3.3	3
19	Ultrasound-Assisted Synthesis of a Novel Nano-Zigzag-Pattern Lead (II) Metal-Organic System: A New Precursor to Produce Nano-Sized PbO. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , <b>2017</b> , 27, 552-561	3.2	2
18	Effects of Cr and Zn on the interfacial microstructures of borides in Fe- $\alpha$ -B cast steels during hot-dipping in Al-N alloys. <i>International Journal of Materials Research</i> , <b>2019</b> , 110, 202-208	0.5	2
17	The Influence of Electric Field Intensity and Particle Length on the Electrokinetic Transport of Cylindrical Particles Passing through Nanopore. <i>Micromachines</i> , <b>2020</b> , 11,	3.3	2
16	A full-scale computational study on the electrodynamics of a rigid particle in an optically induced dielectrophoresis chip. <i>Modern Physics Letters B</i> , <b>2020</b> , 34, 2050233	1.6	2
15	Corrosion resistances of metallic materials in environments containing chloride ions: A review. <i>Transactions of Nonferrous Metals Society of China</i> , <b>2022</b> , 32, 377-410	3.3	2
14	Charge Properties and Electric Field Energy Density of Functional Group-Modified Nanoparticle Interacting with a Flat Substrate. <i>Micromachines</i> , <b>2020</b> , 11,	3.3	1
13	Continuous separation of microparticles based on optically induced dielectrophoresis. <i>Microfluidics and Nanofluidics</i> , <b>2022</b> , 26, 1	2.8	1
12	The synergistic effect of space and surface charge on nanoconfined ion transport and nanofluidic energy harvesting. <i>Nano Energy</i> , <b>2022</b> , 92, 106709	17.1	1
11	Brush Layer Charge Characteristics of a Biomimetic Polyelectrolyte-Modified Nanoparticle Surface. <i>Langmuir</i> , <b>2020</b> , 36, 15220-15229	4	1
10	Electrokinetic Translocation of a Deformable Nanoparticle through a Nanopore.. <i>ACS Applied Bio Materials</i> , <b>2020</b> , 3, 5160-5168	4.1	1
9	The polarization reverse of diode-like conical nanopore under pH gradient. <i>SN Applied Sciences</i> , <b>2020</b> , 2, 1	1.8	1
8	Combustion Characteristics of Small Laminar Flames in an Upward Decreasing Magnetic Field. <i>Energies</i> , <b>2021</b> , 14, 1969	3.1	1
7	Mixing Mechanism of Microfluidic Mixer with Staggered Virtual Electrode Based on Light-Actuated AC Electroosmosis. <i>Micromachines</i> , <b>2021</b> , 12,	3.3	1
6	A new droplet breakup phenomenon in electrokinetic flow through a microchannel constriction. <i>Electrophoresis</i> , <b>2020</b> , 41, 758-760	3.6	1
5	Advances in microfluidic electrochemical fuel cells in recent years. <i>Journal of Chemical Technology and Biotechnology</i> ,	3.5	0
4	Micromixer with Fine-Tuned Mathematical Spiral Structures. <i>ACS Omega</i> , <b>2021</b> , 6, 30779-30789	3.9	0

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| 3 | Multi-particle interaction in AC electric field driven by dielectrophoresis force. <i>Electrophoresis</i> , <b>2021</b> , 42, 2189-2196  | 3.6 | o |
| 2 | Droplet fusion by the interplay of electric potential and converging-diverging geometry in micro-channels. <i>Journal of Chemical Technology and Biotechnology</i> , <b>2021</b> , 96, 448-453 | 3.5 | o |
| 1 | Electrokinetic translocation of a deformable nanoparticle controlled by field effect in nanopores. <i>Electrophoresis</i> , <b>2021</b> , 42, 2197-2205  | 3.6 | o |