

# Hui Zhao

## List of Publications by Year in Descending Order

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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.

39  
papers

739  
citations

17  
h-index

26  
g-index

39  
ext. papers

871  
ext. citations

4.3  
avg, IF

4.69  
L-index

#	Paper	IF	Citations
39	Finite element approximations to a fourth-order modified Poisson-Fermi equation for electrostatic correlations in concentrated electrolytes. <i>Computers and Mathematics With Applications</i> , <b>2022</b> , 117, 229-244	2.7	4
38	AC Insulator-Based Dielectrophoretic Focusing of Particles and Cells in an "Infinite" Microchannel. <i>Analytical Chemistry</i> , <b>2021</b> , 93, 5947-5953	7.8	4
37	Silk fibroin supraparticles created by the evaporation of colloidal Ouzo droplets. <i>AIP Advances</i> , <b>2021</b> , 11, 085125	1.5	2
36	Interplay of induced charge electroosmosis and electrothermal flow in insulator-based dielectrophoresis. <i>Physical Review Fluids</i> , <b>2021</b> , 6,	2.8	2
35	Multiplexed colorimetric detection of SARS-CoV-2 and other pathogens in wastewater on a 3D printed integrated microfluidic chip. <i>Sensors and Actuators B: Chemical</i> , <b>2021</b> , 344, 130242	8.5	15
34	Dynamic Aqueous Multiphase Reaction System for One-Pot CRISPR-Cas12a-Based Ultrasensitive and Quantitative Molecular Diagnosis. <i>Analytical Chemistry</i> , <b>2020</b> , 92, 8561-8568	7.8	47
33	Fabrication of Hard-Soft Microfluidic Devices Using Hybrid 3D Printing. <i>Micromachines</i> , <b>2020</b> , 11,	3.3	10
32	Silica-coated metallic nanoparticle-based hierarchical super-hydrophobic surfaces fabricated by spin-coating and inverse nanotransfer printing. <i>Applied Physics Letters</i> , <b>2019</b> , 114, 233702	3.4	6
31	The effects of electrostatic correlations on the ionic current rectification in conical nanopores. <i>Electrophoresis</i> , <b>2019</b> , 40, 2655-2661	3.6	3
30	High-Efficiency Omnidirectional Broadband Light-Management Coating Using the Hierarchical Ordered-Disordered Nanostructures with Ultra-Mechanochemical Resistance. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 12978-12985	9.5	9
29	Nanopatterned silk fibroin films with high transparency and high haze for optical applications.. <i>RSC Advances</i> , <b>2019</b> , 9, 40792-40799	3.7	10
28	On the Impact of Electrostatic Correlations on the Double-Layer Polarization of a Spherical Particle in an Alternating Current Field. <i>Langmuir</i> , <b>2018</b> , 34, 5592-5599	4	5
27	Influence of concentration polarization on DNA translocation through a nanopore. <i>Physical Review E</i> , <b>2016</b> , 93, 052409	2.4	3
26	Enhancement of Sensitivity of the Solution-Phase Localized Surface Plasmon by a Nanostructured Substrate. <i>MRS Advances</i> , <b>2016</b> , 1, 2059-2064	0.7	2
25	Inducing Propulsion of Colloidal Dimers by Breaking the Symmetry in Electrohydrodynamic Flow. <i>Physical Review Letters</i> , <b>2015</b> , 115, 208302	7.4	53
24	The influence of particle size and residual charge on electrostatic interactions between charged colloidal particles at an oil-water interface. <i>Soft Matter</i> , <b>2014</b> , 10, 4555-60	3.6	21
23	Bulk synthesis of metal-organic hybrid dimers and their propulsion under electric fields. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 4560-9	9.5	30

22	Direct Writing of Metallic Nanoparticle Concentric Multi-Ring Structures by Template-Directed Convective Self-Assembly Processes. <i>Advanced Optical Materials</i> , <b>2014</b> , 2, 632-635	8.1	8
21	Dynamics of electrical double layer formation in room-temperature ionic liquids under constant-current charging conditions. <i>Journal of Physics Condensed Matter</i> , <b>2014</b> , 26, 284109	1.8	22
20	Colloidal structures of asymmetric dimers via orientation-dependent interactions. <i>Soft Matter</i> , <b>2014</b> , 10, 8349-57	3.6	24
19	The Influence of Dielectric Decrement on Electrokinetics. <i>Journal of Fluid Mechanics</i> , <b>2013</b> , 724, 69-94	3.7	14
18	Influence of nonelectrostatic ion-ion interactions on double-layer capacitance. <i>Physical Review E</i> , <b>2012</b> , 86, 051502	2.4	17
17	Polarization of a diffuse soft particle subjected to an alternating current field. <i>Langmuir</i> , <b>2012</b> , 28, 11164-72	4.7	11
16	Diffuse-charge dynamics of ionic liquids in electrochemical systems. <i>Physical Review E</i> , <b>2011</b> , 84, 051504	2.4	36
15	Double-layer polarization of a non-conducting particle in an alternating current field with applications to dielectrophoresis. <i>Electrophoresis</i> , <b>2011</b> , 32, 2232-44	3.6	34
14	Role of hydrodynamic behavior of DNA molecules in dielectrophoretic polarization under the action of an electric field. <i>Physical Review E</i> , <b>2011</b> , 84, 021910	2.4	10
13	Streaming potential generated by a pressure-driven flow over superhydrophobic stripes. <i>Physics of Fluids</i> , <b>2011</b> , 23, 022003	4.4	28
12	On the effect of hydrodynamic slip on the polarization of a nonconducting spherical particle in an alternating electric field. <i>Physics of Fluids</i> , <b>2010</b> , 22, 072004	4.4	16
11	On the Influence of Ion Excluded Volume (Steric) Effects on the Double-Layer Polarization of a Nonconducting Spherical Particle in an AC Field. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 8389-8397	3.8	15
10	Polarization of nanorods submerged in an electrolyte solution and subjected to an ac electrical field. <i>Langmuir</i> , <b>2010</b> , 26, 5412-20	4	19
9	Electro-osmotic flow over a charged superhydrophobic surface. <i>Physical Review E</i> , <b>2010</b> , 81, 066314	2.4	23
8	The polarization of a nanoparticle surrounded by a thick electric double layer. <i>Journal of Colloid and Interface Science</i> , <b>2009</b> , 333, 663-71	9.3	32
7	Effect of double-layer polarization on the forces that act on a nanosized cylindrical particle in an ac electrical field. <i>Langmuir</i> , <b>2008</b> , 24, 6050-9	4	16
6	On the effect of induced electro-osmosis on a cylindrical particle next to a surface. <i>Langmuir</i> , <b>2007</b> , 23, 4053-63	4	67
5	Effect of secondary flows on Taylor-Aris dispersion. <i>Analytical Chemistry</i> , <b>2007</b> , 79, 7792-8	7.8	21

- 4 Confinement and manipulation of actin filaments by electric fields. *Biophysical Journal*, **2007**, 93, L42-4 2.9 33
- 3 Suppression of Rayleigh-Bénard convection with proportional-derivative controller. *Physics of Fluids*, **2007**, 19, 017102 4.4 9
- 2 Microfluidic chaotic stirrer utilizing induced-charge electro-osmosis. *Physical Review E*, **2007**, 75, 066217 2.4 55
- 1 Limitations of linear control of thermal convection in a porous medium. *Physics of Fluids*, **2006**, 18, 074109 4.4 7