

# Chuanhua Duan

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5006816/publications.pdf>

Version: 2024-02-01

38  
papers

2,290  
citations

430874

18  
h-index

501196

28  
g-index

38  
all docs

38  
docs citations

38  
times ranked

2951  
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental Study on Capillary Imbibition of Shale Oil in Nanochannels. <i>Energy &amp; Fuels</i> , 2022, 36, 5267-5275.	5.1	10
2	Edge-enhanced ultrafast water evaporation from graphene nanopores. <i>Cell Reports Physical Science</i> , 2022, 3, 100900.	5.6	3
3	Nanoparticle-blockage-enabled rapid and reversible nanopore gating with tunable memory. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	7.1	2
4	Anomalous mechanosensitive ion transport in nanoparticle-blocked nanopores. <i>Journal of Chemical Physics</i> , 2021, 154, 224702.	3.0	5
5	Exploring Anomalous Fluid Behavior at the Nanoscale: Direct Visualization and Quantification via Nanofluidic Devices. <i>Accounts of Chemical Research</i> , 2020, 53, 347-357.	15.6	43
6	Microstructural ordering of nanofibers in flow-directed assembly. <i>Science China Technological Sciences</i> , 2019, 62, 1545-1554.	4.0	4
7	Voltage-gated optics and plasmonics enabled by solid-state proton pumping. <i>Nature Communications</i> , 2019, 10, 5030.	12.8	51
8	Evaporation-assisted patterning beyond random assembly. <i>National Science Review</i> , 2019, 6, 1065-1066.	9.5	0
9	Ultrafast Diameter-Dependent Water Evaporation from Nanopores. <i>ACS Nano</i> , 2019, 13, 3363-3372.	14.6	70
10	Characterization and manipulation of single nanoparticles using a nanopore-based electrokinetic tweezer. <i>Nanoscale</i> , 2019, 11, 22924-22931.	5.6	11
11	Microfluidic detection of movements of <i>Escherichia coli</i> for rapid antibiotic susceptibility testing. <i>Lab on A Chip</i> , 2018, 18, 743-753.	6.0	32
12	Fast water transport in graphene nanofluidic channels. <i>Nature Nanotechnology</i> , 2018, 13, 238-245.	31.5	220
13	Theoretical investigation of enzymatic hydrolysis of polypeptides in nanofluidic channels. <i>Microfluidics and Nanofluidics</i> , 2017, 21, 1.	2.2	1
14	Exploring Ultimate Water Capillary Evaporation in Nanoscale Conduits. <i>Nano Letters</i> , 2017, 17, 4813-4819.	9.1	87
15	Geometry-Dependent Drying in Dead-End Nanochannels. <i>Langmuir</i> , 2017, 33, 8395-8403.	3.5	17
16	Structures and thermodynamics of water encapsulated by graphene. <i>Scientific Reports</i> , 2017, 7, 2646.	3.3	26
17	Accurate measurement of liquid transport through nanoscale conduits. <i>Scientific Reports</i> , 2016, 6, 24936.	3.3	31
18	Geometrical control of ionic current rectification in a configurable nanofluidic diode. <i>Biomicrofluidics</i> , 2016, 10, 054102.	2.4	9

#	ARTICLE	IF	CITATIONS
19	Single bubble dynamics on superheated superhydrophobic surfaces. <i>International Journal of Heat and Mass Transfer</i> , 2016, 99, 521-531.	4.8	25
20	Label-Free Electrical Detection of Enzymatic Reactions in Nanochannels. <i>ACS Nano</i> , 2016, 10, 7476-7484.	14.6	42
21	Ion transport in graphene nanofluidic channels. <i>Nanoscale</i> , 2016, 8, 19527-19535.	5.6	30
22	Bubble-Regulated Silicon Nanowire Synthesis on Micro-Structured Surfaces by Metal-Assisted Chemical Etching. <i>Langmuir</i> , 2015, 31, 12291-12299.	3.5	21
23	Evaporation-Induced Cavitation in Nanofluidic Channels: Dynamics and Origin. <i>NATO Science for Peace and Security Series C: Environmental Security</i> , 2014, , 131-139.	0.2	0
24	Enhanced Ion Transport in 2-nm Silica Nanochannels. <i>NATO Science for Peace and Security Series C: Environmental Security</i> , 2014, , 83-93.	0.2	0
25	Review article: Fabrication of nanofluidic devices. <i>Biomicrofluidics</i> , 2013, 7, 26501.	2.4	218
26	Evaporation-induced cavitation in nanofluidic channels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 3688-3693.	7.1	116
27	Mechanics of liquid-liquid interfaces and mixing enhancement in microscale flows. <i>Journal of Fluid Mechanics</i> , 2010, 652, 207-240.	3.4	8
28	Evaporation Induced Cavitation in Nanochannels. , 2010, , .		0
29	Power generation from concentration gradient by reverse electrodialysis in ion-selective nanochannels. <i>Microfluidics and Nanofluidics</i> , 2010, 9, 1215-1224.	2.2	317
30	Anomalous ion transport in 2-nm hydrophilic nanochannels. <i>Nature Nanotechnology</i> , 2010, 5, 848-852.	31.5	328
31	Power Generation From Concentration Gradient by Reverse Electrodialysis in Ion Selective Nanochannel. , 2009, , .		1
32	Detection of Non-Diffusion-Limited Enzymatic Surface Reaction in Nanofluidic Channels. , 2009, , .		0
33	Ion Transport in 2-NM Nanochannels. , 2009, , .		0
34	Transport of Ions and Molecules in Nanofluidic Devices. , 2008, , .		0
35	Rectification of Ionic Current in a Nanofluidic Diode. <i>Nano Letters</i> , 2007, 7, 547-551.	9.1	484
36	Diffusion-Limited Patterning of Molecules in Nanofluidic Channels. <i>Nano Letters</i> , 2006, 6, 1735-1740.	9.1	78

#	ARTICLE	IF	CITATIONS
37	Temperature Evaluation of Conventional, SOI, and DSOI Mosfets Using Non-Equilibrium Energy Model. Nanoscale and Microscale Thermophysical Engineering, 2006, 10, 249-261.	2.6	0
38	Nanofluidic Devices for Sensing and Flow Control. , 2006, , .		0