Benzhong Zhao

List of Publications by Year
in descending order

20	1,193	516215 16	752256 20
papers	citations	h-index	g-index

20	20	20	1188
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Wettability control on multiphase flow in patterned microfluidics. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 10251-10256.	3.3	416
2	Comprehensive comparison of pore-scale models for multiphase flow in porous media. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 13799-13806.	3.3	162
3	Signatures of fluidâ€“fluid displacement in porous media: wettability, patterns and pressures. Journal of Fluid Mechanics, 2019, 875, .	1.4	72
4	Pore geometry control of apparent wetting in porous media. Scientific Reports, 2018, 8, 15729.	1.6	63
5	Quasistatic fluid-fluid displacement in porous media: Invasion-percolation through a wetting transition. Physical Review Fluids, 2018, 3, .	1.0	54
6	Forced Wetting Transition and Bubble Pinch-Off in a Capillary Tube. Physical Review Letters, 2018, 120, 084501.	2.9	52
7	Temperature-dependent gas accumulation in polymer electrolyte membrane electrolyzer porous transport layers. Journal of Power Sources, 2020, 446, 227312.	4.0	49
8	Wettability and Lenormand's diagram. Journal of Fluid Mechanics, 2021, 923, .	1.4	47
9	Bubble Formation in the Electrolyte Triggers Voltage Instability in CO2 Electrolyzers. IScience, 2020, 23, 101094.	1.9	43
10	Hydrophilic microporous layer coatings for polymer electrolyte membrane fuel cells operating without anode humidification. Journal of Power Sources, 2018, 402, 468-482.	4.0	42
11	Critical Current Density as a Performance Indicator for Gas-Evolving Electrochemical Devices. Cell Reports Physical Science, 2020, 1, 100147.	2.8	38
12	The effect of cathode nitrogen purging on cell performance and in operando neutron imaging of a polymer electrolyte membrane electrolyzer. Electrochimica Acta, 2018, 279, 91-98.	2.6	30
13	Capillary pinning and blunting of immiscible gravity currents in porous media. Water Resources Research, 2014, 50, 7067-7081.	1.7	26
14	Compressible-Gas Invasion into Liquid-Saturated Porous Media: Application to Polymer-Electrolyte-Membrane Electrolyzers. Physical Review Applied, 2019, 11, .	1.5	26
15	Interface pinning of immiscible gravity-exchange flows in porous media. Physical Review E, 2013, 87, 023015.	0.8	20
16	Residual trapping, solubility trapping and capillary pinning complement each other to limit CO2 migration in deep saline aquifers. Energy Procedia, 2014, 63, 3833-3839.	1.8	20
17	Generalizable Permeability Prediction of Digital Porous Media via a Novel Multiâ€Scale 3D Convolutional Neural Network. Water Resources Research, 2022, 58, .	1.7	16
18	Superhydrophilic porous transport layer enhances efficiency of polymer electrolyte membrane electrolyzers. Cell Reports Physical Science, 2021, 2, 100580.	2.8	12

#	Article	IF	Citations
19	Avalanches in strong imbibition. Communications Physics, 2022, 5, .	2.0	3
20	Transient Gas Saturation in Porous Transport Layers of Polymer Electrolyte Membrane Electrolyzers. ECS Transactions, 2019, 92, 821-832.	0.3	2