Yu Chen

List of Publications by Year
in descending order

14 papers	818 citations	759233 12 h-index	1058476 14 g-index
14 all docs	14 docs citations	14 times ranked	1170 citing authors

#	ARTICLE	IF	CITATIONS
1	Silicon-based microfilters for whole blood cell separation. Biomedical Microdevices, 2008, 10, 251-257.	2.8	235
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.	7.1	162
3	Continuous inertial microparticle and blood cell separation in straight channels with local microstructures. Lab on A Chip, 2016, 16, 532-542.	6.0	115
4	Momentum-exchange method in lattice Boltzmann simulations of particle-fluid interactions. Physical Review E, 2013, 88, 013303.	2.1	82
5	Lattice Boltzmann simulations of liquid CO2 displacing water in a 2D heterogeneous micromodel at reservoir pressure conditions. Journal of Contaminant Hydrology, 2018, 212, 14-27.	3.3	61
6	Inertial Effects During the Process of Supercritical CO_2 Displacing Brine in a Sandstone: Lattice Boltzmann Simulations Based on the Continuum–Surface–Force and Geometrical Wetting Models. Water Resources Research, 2019, 55, 11144-11165.	4.2	36
7	Modeling and scale-bridging using machine learning: nanoconfinement effects in porous media. Scientific Reports, 2020, 10, 13312.	3.3	24
8	Homogenization of Dissolution and Enhanced Precipitation Induced by Bubbles in Multiphase Flow Systems. Geophysical Research Letters, 2020, 47, e2020GL087163.	4.0	21
9	A physics-informed and hierarchically regularized data-driven model for predicting fluid flow through porous media. Journal of Computational Physics, 2021, 443, 110526.	3.8	21
10	Lattice Boltzmann Simulation of Particle Motion in Binary Immiscible Fluids. Communications in Computational Physics, 2015, 18, 757-786.	1.7	20
11	Lattice Boltzmann method on quadtree grids. Physical Review E, 2011, 83, 026707.	2.1	16
12	Bonding Strength Effects in Hydro-Mechanical Coupling Transport in Granular Porous Media by Pore-Scale Modeling. Computation, 2016, 4, 15.	2.0	12
13	3D particle transport in multichannel microfluidic networks with rough surfaces. Scientific Reports, 2020, 10, 13848.	3.3	8
14	Using Direct Numerical Simulation of Pore-Level Events to Improve Pore-Network Models for Prediction of Residual Trapping of CO2. Frontiers in Water, 2022, 3, .	2.3	5