Fei Jiang

List of Publications by Year
in descending order

41 papers	696 citations	623734 14 h-index	580821 25 g-index
48 all docs	48 docs citations	48 times ranked	563 citing authors

#	Article	IF	Citations
1	Influence of pore space heterogeneity on mineral dissolution and permeability evolution investigated using lattice Boltzmann method. Chemical Engineering Science, 2022, 247, 117048.	3.8	15
2	Numerical approach to pipe flow of fresh concrete based on MPS method. Cement and Concrete Research, 2022, 152, 106679.	11.0	11
3	Postoperative Prediction of Pulmonary Resection Based on MCA Model byÂIntegrating the Temporal Responses and Biomechanical Functions. , 2022, , 201-206.		0
4	Elastic Wave Velocity Changes Due to the Fracture Aperture and Density, and Direct Correlation With Permeability: An Energetic Approach to Mated Rock Fractures. Journal of Geophysical Research: Solid Earth, 2022, 127, .	3.4	9
5	A coupled LBM-DEM method for simulating the multiphase fluid-solid interaction problem. Journal of Computational Physics, 2022, 454, 110963.	3.8	27
6	Relative Permeability Variation Depending on Viscosity Ratio and Capillary Number. Water Resources Research, 2022, 58, .	4.2	6
7	A GPU-accelerated fluidâ€"structure-interaction solver developed by coupling finite element and lattice Boltzmann methods. Computer Physics Communications, 2021, 259, 107661.	7.5	17
8	Investigation of viscous coupling effects in three-phase flow by lattice Boltzmann direct simulation and machine learning technique. Advances in Water Resources, 2021, 147, 103797.	3.8	13
9	Tensile mechanical analysis of anisotropy and velocity dependence of the spinal cord white matter: a biomechanical study. Neural Regeneration Research, 2021, 16, 2557.	3.0	1
10	Computational Fluid Dynamics Analysis of Blood Flow Changes during the Growth of Saccular Abdominal Aortic Aneurysm. The Journal of Japanese College of Angiology, 2021, 61, 3-10.	0.0	0
11	Relating Hydraulicâ€"Electricalâ€"Elastic Properties of Natural Rock Fractures at Elevated Stress and Associated Transient Changes of Fracture Flow. Rock Mechanics and Rock Engineering, 2021, 54, 2145-2164.	5.4	17
12	The applicability of SPH and MPS methods to numerical flow simulation of fresh cementitious materials. Construction and Building Materials, 2021, 274, 121736.	7.2	11
13	Tensile Test of Human Lumbar Ligamentum Flavum: Age-Related Changes of Stiffness. Applied Sciences (Switzerland), 2021, 11, 3337.	2.5	11
14	Prediction of three-phase relative permeabilities of Berea sandstone using lattice Boltzmann method. Physics of Fluids, 2021, 33, .	4.0	12
15	Lattice Boltzmann simulation of three-phase flows with moving contact lines on curved surfaces. Physical Review E, 2021, 104, 015310.	2.1	16
16	Analysis of individual differences in pelvic and spine alignment in seated posture and impact on the seatbelt kinematics using human body model. PLoS ONE, 2021, 16, e0254120.	2.5	0
17	Scale-independent relationship between permeability and resistivity in mated fractures with natural rough surfaces. Geothermics, 2021, 94, 102065.	3.4	21
18	Biomechanical Analysis of the Spine in Diffuse Idiopathic Skeletal Hyperostosis: Finite Element Analysis. Applied Sciences (Switzerland), 2021, 11, 8944.	2.5	3

#	Article	IF	Citations
19	Elucidation of pore connection mechanism during ductile fracture of sintered pure iron by applying persistent homology to 4D images of pores: Role of open pore. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 828, 142112.	5.6	5
20	Digital rock physics revealing the relationships between permeability, resistivity and elastic wave velocity of rock fractures. , 2021, , .		0
21	Pore-Scale Modeling of Two-Phase Flows with Soluble Surfactants in Porous Media. Energy & Fuels, 2021, 35, 19374-19388.	5.1	7
22	Modeling of three-phase displacement in three-dimensional irregular geometries using a lattice Boltzmann method. Physics of Fluids, 2021, 33, .	4.0	14
23	Simulation of Fluidâ€"Structure Interaction Problems with Thin Elastic Plate via the Coupling of Finite Element and Lattice Boltzmann Methods. International Journal of Computational Methods, 2020, 17, 2050013.	1.3	3
24	A voxel imageâ€based pulmonary airflow simulation method with an automatic detection algorithm for airway outlets. International Journal for Numerical Methods in Biomedical Engineering, 2020, 36, e3305.	2.1	5
25	Compression analysis of the gray and white matter of the spinal cord. Neural Regeneration Research, 2020, 15, 1344.	3.0	6
26	Finite Element Method Analysis of Compression Fractures on Whole-Spine Models Including the Rib Cage. Computational and Mathematical Methods in Medicine, 2019, 2019, 1-10.	1.3	15
27	Four-dimensional observation of ductile fracture in sintered iron using synchrotron X-ray laminography. Powder Metallurgy, 2019, 62, 146-154.	1.7	4
28	Evolution of hydraulic and elastic properties of reservoir rocks due to mineral precipitation in CO_2 geological storage. Computers and Geosciences, 2019, 126, 84-95.	4.2	20
29	Anomalous Dispersion in Pore-Scale Simulations of Two-Phase Flow. Transport in Porous Media, 2019, 126, 337-353.	2.6	7
30	Mathematical Modeling of Rock Pore Geometry and Mineralization: Applications of Persistent Homology and Random Walk. Mathematics for Industry, 2018, , 95-109.	0.4	3
31	Pore Geometry Characterization by Persistent Homology Theory. Water Resources Research, 2018, 54, 4150-4163.	4.2	26
32	Effect of intercostal muscle contraction on rib motion in humans studied by finite element analysis. Journal of Applied Physiology, 2018, 125, 1165-1170.	2.5	7
33	Influence of Slip Flow at Fluid-solid Interface upon Permeability of Natural Rock. Energy Procedia, 2017, 114, 3572-3577.	1.8	2
34	Impact of the kinetic boundary condition on porous media flow in the lattice Boltzmann formulation. Physical Review E, 2017, 96, 013303.	2.1	10
35	Estimation of threeâ€phase relative permeability by simulating fluid dynamics directly on rockâ€microstructure images. Water Resources Research, 2017, 53, 11-32.	4.2	54
36	Numerical investigations on the effect of initial state CO_2 topology on capillary trapping efficiency. International Journal of Greenhouse Gas Control, 2016, 49, 179-191.	4.6	23

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37	Characterization of immiscible fluid displacement processes with various capillary numbers and viscosity ratios in 3D natural sandstone. Advances in Water Resources, 2016, 95, 3-15.	3.8	145
38	Analysis of the accuracy and pressure oscillation of the lattice Boltzmann method for fluid–solid interactions. Computers and Fluids, 2016, 129, 33-52.	2.5	13
39	Impact of interfacial tension on residual CO_2 clusters in porous sandstone. Water Resources Research, 2015, 51, 1710-1722.	4.2	38
40	Changes in pore geometry and relative permeability caused by carbonate precipitation in porous media. Physical Review E, 2014, 90, 053306.	2.1	48
41	Elucidating the Role of Interfacial Tension for Hydrological Properties of Two-Phase Flow in Natural Sandstone by an Improved Lattice Boltzmann Method. Transport in Porous Media, 2014, 104, 205-229.	2.6	51