Yi-Feng Chen

List of Publications by Year
in descending order

98	3,591	117453 34	155451 55
papers	citations	h-index	g-index

99	99	99	1901
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Experimental Observation of Two Distinct Finger Regimes During Miscible Displacement in Fracture. Transport in Porous Media, 2022, 144, 175-188.	1.2	3
2	Roles of energy dissipation and asymmetric wettability in spontaneous imbibition dynamics in a nanochannel. Journal of Colloid and Interface Science, 2022, 607, 1023-1035.	5.0	7
3	Morphological patterns and interface instability during withdrawal of liquid-particle mixtures. Journal of Colloid and Interface Science, 2022, 608, 1598-1607.	5.0	8
4	Transitions of Dissolution Patterns in Rough Fractures. Water Resources Research, 2022, 58, e2021WR030456.	1.7	16
5	Liquid Breakthrough Time in an Unsaturated Fracture Network. Water Resources Research, 2022, 58, .	1.7	3
6	Modeling unsaturated flow in fractured rocks with scaling relationships between hydraulic parameters. Journal of Rock Mechanics and Geotechnical Engineering, 2022, 14, 1697-1709.	3.7	11
7	The effect of permeability on Darcy-to-Forchheimer flow transition. Journal of Hydrology, 2022, 610, 127836.	2.3	6
8	Direct Prediction of Fluidâ€Fluid Displacement Efficiency in Ordered Porous Media Using the Pore Structure. Water Resources Research, 2022, 58, .	1.7	5
9	Semi-Analytical Solution for Consolidation of Ground with Partially Penetrating PVDs under the Free-Strain Condition. Journal of Engineering Mechanics - ASCE, 2021, 147, .	1.6	11
10	Role of Poreâ€Scale Disorder in Fluid Displacement: Experiments and Theoretical Model. Water Resources Research, 2021, 57, .	1.7	25
11	Variation in hydraulic conductivity of fractured rocks at a dam foundation during operation. Journal of Rock Mechanics and Geotechnical Engineering, 2021, 13, 351-367.	3.7	25
12	Film entrainment and microplastic particles retention during gas invasion in suspension-filled microchannels. Water Research, 2021, 194, 116919.	5.3	20
13	Evaluation of hydrogeological impact of tunnel engineering in a karst aquifer by coupled discrete-continuum numerical simulations. Journal of Hydrology, 2021, 597, 125765.	2.3	21
14	A generalized non-Darcian model for packer tests considering groundwater level and borehole inclination. Engineering Geology, 2021, 286, 106091.	2.9	4
15	Assessing the impact of tunnelling on karst groundwater balance by using lumped parameter models. Journal of Hydrology, 2021, 599, 126375.	2.3	10
16	Dissolution Hotspots in Fractures. Geophysical Research Letters, 2021, 48, e2021GL094118.	1.5	18
17	Control of non-Darcian flow by consolidation grouting in the surrounding rocks of a concrete-lined pressure tunnel. IOP Conference Series: Earth and Environmental Science, 2021, 861, 072081.	0.2	0
18	Modelling transient discharge into deep-buried tunnels in karst area based on a coupled discrete-continuum model. IOP Conference Series: Earth and Environmental Science, 2021, 861, 072079.	0.2	0

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19	Numerical analysis of groundwater flow behaviour at a dam site in Karst area during its reservoir impoundment. IOP Conference Series: Earth and Environmental Science, 2021, 861, 072091.	0.2	0
20	Comprehensive Evaluation of Hydrogeological Impact of Tunnel Construction in Karst Aquifers by 3D Numerical Simulations and Water Balance Models. IOP Conference Series: Earth and Environmental Science, 2021, 861, 032011.	0.2	0
21	Optimization design of a large-scale seepage control system at a high arch dam site. IOP Conference Series: Earth and Environmental Science, 2021, 861, 072093.	0.2	1
22	Scaling Relationships between van Genuchten Model Parameters and Hydraulic Conductivity. IOP Conference Series: Earth and Environmental Science, 2021, 861, 072076.	0.2	0
23	A threshold stresses-based permeability variation model for microcracked porous rocks. European Journal of Environmental and Civil Engineering, 2020, 24, 787-813.	1.0	3
24	Plane-strain consolidation theory with distributed drainage boundary. Acta Geotechnica, 2020, 15, 489-508.	2.9	34
25	Effect of Solidâ€“Liquid Interactions on Substrate Wettability and Dynamic Spreading of Nanodroplets: A Molecular Dynamics Study. Journal of Physical Chemistry C, 2020, 124, 23260-23269.	1.5	21
26	Transitions of Fluid Invasion Patterns in Porous Media. Geophysical Research Letters, 2020, 47, e2020GL089682.	1.5	39
27	Splitting Dynamics of Liquid Slugs at a Tâ€Junction. Water Resources Research, 2020, 56, e2020WR027730.	1.7	11
28	Non-Darcian flow effect on discharge into a tunnel in karst aquifers. International Journal of Rock Mechanics and Minings Sciences, 2020, 130, 104319.	2.6	33
29	Inverse modeling of saturated-unsaturated flow in site-scale fractured rocks using the continuum approach: A case study at Baihetan dam site, Southwest China. Journal of Hydrology, 2020, 584, 124693.	2.3	40
30	Acidicâ€“Basic Bifunctional Magnetic Mesoporous CoFe2O4@(CaOâ€“ZnO) for the Synthesis of Glycerol Carbonate. Catalysis Letters, 2020, 150, 2863-2872.	1.4	13
31	Gas migration and residual trapping in bimodal heterogeneous media during geological storage of CO2. Advances in Water Resources, 2020, 142, 103608.	1.7	16
32	Effect of aperture field anisotropy on two-phase flow in rough fractures. Advances in Water Resources, 2019, 132, 103390.	1.7	16
33	Disentangling the Simultaneous Effects of Inertial Losses and Fracture Dilation on Permeability of Pressurized Fractured Rocks. Geophysical Research Letters, 2019, 46, 8862-8871.	1.5	17
34	Phase diagram of quasi-static immiscible displacement in disordered porous media. Journal of Fluid Mechanics, 2019, 875, 448-475.	1.4	58
35	Roughness Control on Multiphase Flow in Rock Fractures. Geophysical Research Letters, 2019, 46, 12002-12011.	1.5	34
36	Partitioning Dynamics of Gravityâ€Driven Unsaturated Flow Through Simple Tâ€Shaped Fracture Intersections. Water Resources Research, 2019, 55, 7130-7142.	1.7	17

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37	Universal Relationship Between Viscous and Inertial Permeability of Geologic Porous Media. Geophysical Research Letters, 2019, 46, 1441-1448.	1.5	54
38	A Forchheimer's law-based analytical model for constant-rate tests with linear flow pattern. Advances in Water Resources, 2019, 128, 1-12.	1.7	8
39	Modeling Immiscible Twoâ€Phase Flow in Rough Fractures From Capillary to Viscous Fingering. Water Resources Research, 2019, 55, 2033-2056.	1.7	28
40	Mass Transfer Between Recirculation and Main Flow Zones: Is Physically Based Parameterization Possible?. Water Resources Research, 2019, 55, 345-362.	1.7	52
41	An Effective Approach for Separating Carbazole and Its Derivates from Coal-Tar-Derived Anthracene Oil Using Ionic Liquids. Energy & Fuels, 2019, 33, 513-522.	2.5	22
42	Experimental study on two-phase flow in rough fracture: Phase diagram and localized flow channel. International Journal of Heat and Mass Transfer, 2018, 122, 1298-1307.	2.5	69
43	Interpretation of high pressure pack tests for design of impervious barriers under high-head conditions. Engineering Geology, 2018, 234, 112-121.	2.9	23
44	Characteristics of shear-induced asperity degradation of rock fractures and implications for solute retardation. International Journal of Rock Mechanics and Minings Sciences, 2018, 105, 53-61.	2.6	65
45	Wettability and Flow Rate Impacts on Immiscible Displacement: A Theoretical Model. Geophysical Research Letters, 2018, 45, 3077-3086.	1.5	97
46	Hydraulic hysteresis effects on the coupled flowâ€“deformation processes in unsaturated soils: Numerical formulation and slope stability analysis. Applied Mathematical Modelling, 2018, 54, 221-245.	2.2	16
47	Statistical distribution of hydraulic conductivity of rocks in deep-incised valleys, Southwest China. Journal of Hydrology, 2018, 566, 216-226.	2.3	41
48	Energy Conversion Reveals Regime Transition of Imbibition in a Rough Fracture. Geophysical Research Letters, 2018, 45, 8993-9002.	1.5	36
49	Numerical investigation on immiscible displacement in 3D rough fracture: Comparison with experiments and the role of viscous and capillary forces. Advances in Water Resources, 2018, 118, 39-48.	1.7	21
50	Emergence of Nonlinear Laminar Flow in Fractures During Shear. Rock Mechanics and Rock Engineering, 2018, 51, 3635-3643.	2.6	48
51	A numerical formulation with unified unilateral boundary condition for unsaturated flow problems in porous media. Acta Geotechnica, 2017, 12, 277-291.	2.9	12
52	Interpretation of gas transient pulse tests on low-porosity rocks. Geophysical Journal International, 2017, 210, 1845-1857.	1.0	12
53	A numerical procedure for modeling the seepage field of water-sealed underground oil and gas storage caverns. Tunnelling and Underground Space Technology, 2017, 66, 56-63.	3.0	50
54	Visualizing and quantifying the crossover from capillary fingering to viscous fingering in a rough fracture. Water Resources Research, 2017, 53, 7756-7772.	1.7	108

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55	Towards an optimization design of seepage control: A case study in dam engineering. Science China Technological Sciences, 2017, 60, 1903-1916.	2.0	17
56	A generalized Forchheimer radial flow model for constant-rate tests. Advances in Water Resources, 2017, 107, 317-325.	1.7	11
57	Inverse modelling of groundwater flow around a large-scale underground cavern system considering the excavation-induced hydraulic conductivity variation. Computers and Geotechnics, 2017, 81, 346-359.	2.3	24
58	Experimental Characterization and Micromechanical Modelling of Anisotropic Slates. Rock Mechanics and Rock Engineering, 2016, 49, 3541-3557.	2.6	61
59	The Friction Factor in the Forchheimer Equation for Rock Fractures. Rock Mechanics and Rock Engineering, 2016, 49, 3055-3068.	2.6	61
60	A two-step homogenization-based permeability model for deformable fractured rocks with consideration of coupled damage and friction effects. International Journal of Rock Mechanics and Minings Sciences, 2016, 89, 212-226.	2.6	11
61	Influence of surface roughness on nonlinear flow behaviors in 3D self-affine rough fractures: Lattice Boltzmann simulations. Advances in Water Resources, 2016, 96, 373-388.	1.7	202
62	A generalized nonâ€Darcian radial flow model for constant rate test. Water Resources Research, 2016, 52, 9325-9343.	1.7	17
63	Characterization of transient groundwater flow through a high arch dam foundation during reservoir impounding. Journal of Rock Mechanics and Geotechnical Engineering, 2016, 8, 462-471.	3.7	19
64	A coupled twoâ€phase fluid flow and elastoplastic deformation model for unsaturated soils: theory, implementation, and application. International Journal for Numerical and Analytical Methods in Geomechanics, 2016, 40, 1023-1058.	1.7	17
65	Evaluation of Groundwater Leakage into a Drainage Tunnel in Jinping-I Arch Dam Foundation in Southwestern China: A Case Study. Rock Mechanics and Rock Engineering, 2016, 49, 961-979.	2.6	62
66	Coupled hydro-mechanical analysis of a dam foundation with thick fluvial deposits: a case study of the Danba Hydropower Project, Southwestern China. European Journal of Environmental and Civil Engineering, 2016, 20, 19-44.	1.0	19
67	Inverse modeling of leakage through a rockfill dam foundation during its construction stage using transient flow model, neural network and genetic algorithm. Engineering Geology, 2015, 187, 183-195.	2.9	58
68	A homogenization-based model for estimating effective thermal conductivity of unsaturated compacted bentonites. International Journal of Heat and Mass Transfer, 2015, 83, 731-740.	2.5	11
69	An effective thermal conductivity model for unsaturated compacted bentonites with consideration of bimodal shape of pore size distribution. Science China Technological Sciences, 2015, 58, 369-380.	2.0	6
70	Excavation-induced relaxation effects and hydraulic conductivity variations in the surrounding rocks of a large-scale underground powerhouse cavern system. Tunnelling and Underground Space Technology, 2015, 49, 253-267.	3.0	40
71	Estimating hydraulic conductivity of fractured rocks from highâ€pressure packer tests with an Izbash's lawâ€based empirical model. Water Resources Research, 2015, 51, 2096-2118.	1.7	109
72	Evaluation of Forchheimer equation coefficients for non-Darcy flow in deformable rough-walled fractures. Journal of Hydrology, 2015, 529, 993-1006.	2.3	238

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73	A relative permeability model for deformable soils and its impact on coupled unsaturated flow and elasto-plastic deformation processes. Science China Technological Sciences, 2015, 58, 1971-1982.	2.0	7
74	Non-Darcy's law-based analytical models for data interpretation of high-pressure packer tests in fractured rocks. Engineering Geology, 2015, 199, 91-106.	2.9	62
75	A homogenization-based model for the effective thermal conductivity of bentoniteâ€“sand-based buffer material. International Communications in Heat and Mass Transfer, 2015, 68, 43-49.	2.9	20
76	Nonlinear flow behavior at low Reynolds numbers through rough-walled fractures subjected to normal compressive loading. International Journal of Rock Mechanics and Minings Sciences, 2015, 80, 202-218.	2.6	184
77	Effect of seepage control on stability of a tailings dam during its staged construction with a stepwise-coupled hydro-mechanical model. International Journal of Mining, Reclamation and Environment, 2015, 29, 125-140.	1.2	12
78	A coupled stressâ€“strain and hydraulic hysteresis model for unsaturated soils: Thermodynamic analysis and model evaluation. Computers and Geotechnics, 2015, 63, 159-170.	2.3	17
79	Performance assessment and optimization of seepage control system: A numerical case study for Kala underground powerhouse. Computers and Geotechnics, 2014, 55, 306-315.	2.3	38
80	Reliability analysis of serviceability performance for an underground cavern using a non-intrusive stochastic method. Environmental Earth Sciences, 2014, 71, 1169-1182.	1.3	23
81	A constitutive model for unsaturated soils with consideration of inter-particle bonding. Computers and Geotechnics, 2014, 59, 127-144.	2.3	44
82	Estimating effective thermal conductivity of unsaturated bentonites with consideration of coupled thermo-hydro-mechanical effects. International Journal of Heat and Mass Transfer, 2014, 72, 656-667.	2.5	30
83	Experimental characterization and micromechanical modeling of damage-induced permeability variation in Beishan granite. International Journal of Rock Mechanics and Minings Sciences, 2014, 71, 64-76.	2.6	95
84	Hydraulic properties of partially saturated rock fractures subjected to mechanical loading. Engineering Geology, 2014, 179, 24-31.	2.9	37
85	Micromechanical Modeling of Anisotropic Damage-Induced Permeability Variation in Crystalline Rocks. Rock Mechanics and Rock Engineering, 2014, 47, 1775-1791.	2.6	30
86	Bivariate simulation using copula and its application to probabilistic pile settlement analysis. International Journal for Numerical and Analytical Methods in Geomechanics, 2013, 37, 597-617.	1.7	108
87	Kinetic Energy Dissipation and Convergence Criterion of Discontinuous Deformations Analysis (DDA) for Geotechnical Engineering. Rock Mechanics and Rock Engineering, 2013, 46, 1443-1460.	2.6	64
88	Impact of translation approach for modelling correlated non-normal variables on parallel system reliability. Structure and Infrastructure Engineering, 2013, 9, 969-982.	2.0	12
89	Micromechanical analysis of anisotropic damage and its influence on effective thermal conductivity in brittle rocks. International Journal of Rock Mechanics and Minings Sciences, 2012, 50, 102-116.	2.6	41
90	System reliability analysis of rock slope stability involving correlated failure modes. KSCE Journal of Civil Engineering, 2011, 15, 1349-1359.	0.9	34

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91	Modeling of coupled deformation, water flow and gas transport in soil slopes subjected to rain infiltration. Science China Technological Sciences, 2011, 54, 2561-2575.	2.0	56
92	A new parabolic variational inequality formulation of Signorini's condition for nonâ€steady seepage problems with complex seepage control systems. International Journal for Numerical and Analytical Methods in Geomechanics, 2011, 35, 1034-1058.	1.7	57
93	A new classification of seepage control mechanisms in geotechnical engineering. Journal of Rock Mechanics and Geotechnical Engineering, 2010, 2, 209-222.	3.7	33
94	Auto-tuning Dense Matrix Multiplication for GPGPU with Cache. , 2010, , .		10
95	Improving Performance of Matrix Multiplication and FFT on GPU. , 2009, , .		23
96	Modeling coupled THM processes of geological porous media with multiphase flow: Theory and validation against laboratory and field scale experiments. Computers and Geotechnics, 2009, 36, 1308-1329.	2.3	106
97	A numerical solution to seepage problems with complex drainage systems. Computers and Geotechnics, 2008, 35, 383-393.	2.3	89
98	Formulation of strain-dependent hydraulic conductivity for a fractured rock mass. International Journal of Rock Mechanics and Minings Sciences, 2007, 44, 981-996.	2.6	68