

S Majid Hassanizadeh

List of Publications by Year in descending order

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159
papers

8,100
citations

41258

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161
docs citations

161
times ranked

4933
citing authors

#	ARTICLE	IF	CITATIONS
1	Thermodynamic basis of capillary pressure in porous media. <i>Water Resources Research</i> , 1993, 29, 3389-3405.	1.7	582
2	Removal of Viruses by Soil Passage: Overview of Modeling, Processes, and Parameters. <i>Critical Reviews in Environmental Science and Technology</i> , 2000, 30, 49-127.	6.6	466
3	Dynamic Effect in the Capillary Pressure-Saturation Relationship and its Impacts on Unsaturated Flow. <i>Vadose Zone Journal</i> , 2002, 1, 38-57.	1.3	304
4	Analysis of Fundamentals of Two-Phase Flow in Porous Media Using Dynamic Pore-Network Models: A Review. <i>Critical Reviews in Environmental Science and Technology</i> , 2012, 42, 1895-1976.	6.6	285
5	High velocity flow in porous media. <i>Transport in Porous Media</i> , 1987, 2, 521.	1.2	248
6	Non-equilibrium effects in capillarity and interfacial area in two-phase flow: dynamic pore-network modelling. <i>Journal of Fluid Mechanics</i> , 2010, 655, 38-71.	1.4	226
7	Insights into the Relationships Among Capillary Pressure, Saturation, Interfacial Area and Relative Permeability Using Pore-Network Modeling. <i>Transport in Porous Media</i> , 2008, 74, 201-219.	1.2	210
8	Toward an improved description of the physics of two-phase flow. <i>Advances in Water Resources</i> , 1993, 16, 53-67.	1.7	209
9	Unsaturated Flow Theory Including Interfacial Phenomena. <i>Water Resources Research</i> , 1991, 27, 1855-1863.	1.7	184
10	Reservoir-on-a-Chip (ROC): A new paradigm in reservoir engineering. <i>Lab on A Chip</i> , 2011, 11, 3785.	3.1	170
11	A unifying framework for watershed thermodynamics: balance equations for mass, momentum, energy and entropy, and the second law of thermodynamics. <i>Advances in Water Resources</i> , 1998, 22, 367-398.	1.7	169
12	A Review of Micromodels and Their Use in Two-Phase Flow Studies. <i>Vadose Zone Journal</i> , 2012, 11, vzj2011.0072.	1.3	169
13	Derivation of basic equations of mass transport in porous media, Part 2. Generalized Darcy's and Fick's laws. <i>Advances in Water Resources</i> , 1986, 9, 207-222.	1.7	134
14	A New Method for Generating Pore-Network Models of Porous Media. <i>Transport in Porous Media</i> , 2010, 81, 391-407.	1.2	126
15	Conservation equations governing hillslope responses: Exploring the physical basis of water balance. <i>Water Resources Research</i> , 2000, 36, 1845-1863.	1.7	115
16	Paradoxes and Realities in Unsaturated Flow Theory. <i>Water Resources Research</i> , 1991, 27, 1847-1854.	1.7	114
17	Bundle-of-Tubes Model for Calculating Dynamic Effects in the Capillary-Pressure- Saturation Relationship. <i>Transport in Porous Media</i> , 2005, 58, 5-22.	1.2	113
18	Effect of fluids properties on non-equilibrium capillarity effects: Dynamic pore-network modeling. <i>International Journal of Multiphase Flow</i> , 2011, 37, 198-214.	1.6	106

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19	Network model investigation of interfacial area, capillary pressure and saturation relationships in granular porous media. <i>Water Resources Research</i> , 2010, 46, .	1.7	105
20	On the modeling of brine transport in porous media. <i>Water Resources Research</i> , 1988, 24, 321-330.	1.7	99
21	Title is missing!. <i>Transport in Porous Media</i> , 2001, 43, 487-510.	1.2	99
22	Two-site kinetic modeling of bacteriophages transport through columns of saturated dune sand. <i>Journal of Contaminant Hydrology</i> , 2002, 57, 259-279.	1.6	89
23	A non-linear theory of high-concentration-gradient dispersion in porous media. <i>Advances in Water Resources</i> , 1995, 18, 203-215.	1.7	86
24	Derivation of basic equations of mass transport in porous media, Part 1. Macroscopic balance laws. <i>Advances in Water Resources</i> , 1986, 9, 196-206.	1.7	80
25	Effective Stress in Unsaturated Soils: A Thermodynamic Approach Based on the Interfacial Energy and Hydromechanical Coupling. <i>Transport in Porous Media</i> , 2013, 96, 369-396.	1.2	78
26	Simulating drainage and imbibition experiments in a high porosity micromodel using an unstructured pore network model. <i>Water Resources Research</i> , 2009, 45, .	1.7	77
27	A model for two-phase flow in porous media including fluid-fluid interfacial area. <i>Water Resources Research</i> , 2008, 44, .	1.7	76
28	On the fabrication of PDMS micromodels by rapid prototyping, and their use in two-phase flow studies. <i>Water Resources Research</i> , 2013, 49, 2056-2067.	1.7	76
29	The Effect of Mixed Wettability on Pore-Scale Flow Regimes Based on a Flooding Experiment in Ketton Limestone. <i>Geophysical Research Letters</i> , 2019, 46, 3225-3234.	1.5	76
30	Micromodel study of two-phase flow under transient conditions: Quantifying effects of specific interfacial area. <i>Water Resources Research</i> , 2014, 50, 8125-8140.	1.7	74
31	Bacteriophages and clostridium spores as indicator organisms for removal of pathogens by passage through saturated dune sand. <i>Water Research</i> , 2003, 37, 2186-2194.	5.3	73
32	Virus Transport in Saturated and Unsaturated Sand Columns. <i>Vadose Zone Journal</i> , 2006, 5, 877-885.	1.3	73
33	A new formulation for pore-network modeling of two-phase flow. <i>Water Resources Research</i> , 2012, 48, .	1.7	73
34	Saturation-dependent solute dispersivity in porous media: Pore-scale processes. <i>Water Resources Research</i> , 2013, 49, 1943-1951.	1.7	71
35	Modeling Concentration Distribution and Deformation During Convection-Enhanced Drug Delivery into Brain Tissue. <i>Transport in Porous Media</i> , 2012, 92, 119-143.	1.2	70
36	Effects of heterogeneities on capillary pressure-saturation-relative permeability relationships. <i>Journal of Contaminant Hydrology</i> , 2002, 56, 175-192.	1.6	69

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37	Role of air-water interfaces on retention of viruses under unsaturated conditions. <i>Water Resources Research</i> , 2006, 42, .	1.7	67
38	Upscaling Transport of Adsorbing Solutes in Porous Media: Poreâ€Network Modeling. <i>Vadose Zone Journal</i> , 2010, 9, 624-636.	1.3	65
39	An Overview of Biodegradation of LNAPLs in Coastal (Semi)-arid Environment. <i>Water, Air, and Soil Pollution</i> , 2011, 220, 225-239.	1.1	63
40	Nonequilibrium capillarity effects in twoâ€phase flow through porous media at different scales. <i>Water Resources Research</i> , 2011, 47, .	1.7	62
41	Comparison of Two-Phase Darcyâ€™s Law with a Thermodynamically Consistent Approach. <i>Transport in Porous Media</i> , 2011, 88, 133-148.	1.2	62
42	A novel deep reactive ion etched (DRIE) glass micro-model for two-phase flow experiments. <i>Lab on A Chip</i> , 2012, 12, 3413.	3.1	61
43	Macro-Scale Dynamic Effects in Homogeneous and Heterogeneous Porous Media. <i>Transport in Porous Media</i> , 2005, 58, 121-145.	1.2	60
44	Study of Multi-phase Flow in Porous Media: Comparison of SPH Simulations with Micro-model Experiments. <i>Transport in Porous Media</i> , 2016, 114, 581-600.	1.2	59
45	Uniqueness of Specific Interfacial Areaâ€™Capillary Pressureâ€™Saturation Relationship Under Non-Equilibrium Conditions in Two-Phase Porous Media Flow. <i>Transport in Porous Media</i> , 2012, 94, 465-486.	1.2	56
46	Specific interfacial area: The missing state variable in twoâ€phase flow equations?. <i>Water Resources Research</i> , 2011, 47, .	1.7	55
47	Two-phase flow modeling for the cathode side of a polymer electrolyte fuel cell. <i>Journal of Power Sources</i> , 2012, 197, 136-144.	4.0	54
48	Occurrence and fate of methane leakage from cut and buried abandoned gas wells in the Netherlands. <i>Science of the Total Environment</i> , 2019, 659, 773-782.	3.9	53
49	Direct simulations of two-phase flow experiments of different geometry complexities using Volume-of-Fluid (VOF) method. <i>Chemical Engineering Science</i> , 2019, 195, 820-827.	1.9	52
50	Poreâ€scale network modeling of microbially induced calcium carbonate precipitation: Insight into scale dependence of biogeochemical reaction rates. <i>Water Resources Research</i> , 2016, 52, 8794-8810.	1.7	51
51	On the transient non-Fickian dispersion theory. <i>Transport in Porous Media</i> , 1996, 23, 107.	1.2	48
52	Systematic Study of Effects of pH and Ionic Strength on Attachment of Phage PRD1. <i>Ground Water</i> , 2011, 49, 12-19.	0.7	46
53	Capillary pressureâ€™saturation relationships for porous granular materials: Pore morphology method vs. pore unit assembly method. <i>Advances in Water Resources</i> , 2017, 107, 22-31.	1.7	46
54	Dimensional analysis of two-phase flow including a rate-dependent capillary pressureâ€™saturation relationship. <i>Advances in Water Resources</i> , 2008, 31, 1137-1150.	1.7	45

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55	Biodegradation of Toluene Under Seasonal and Diurnal Fluctuations of Soil-Water Temperature. <i>Water, Air, and Soil Pollution</i> , 2012, 223, 3579-3588.	1.1	43
56	Effective parameters for two-phase flow in a porous medium with periodic heterogeneities. <i>Journal of Contaminant Hydrology</i> , 2001, 49, 87-109.	1.6	42
57	The Effects of Swelling and Porosity Change on Capillarity: DEM Coupled with a Pore-Unit Assembly Method. <i>Transport in Porous Media</i> , 2016, 113, 207-226.	1.2	41
58	Modeling Kinetic Interphase Mass Transfer for Two-Phase Flow in Porous Media Including Fluid-Fluid Interfacial Area. <i>Transport in Porous Media</i> , 2009, 80, 329-344.	1.2	40
59	Dynamic Effect in the Capillary Pressure-Saturation Relationship and its Impacts on Unsaturated Flow. <i>Vadose Zone Journal</i> , 2002, 1, 38.	1.3	40
60	Non-equilibrium interphase heat and mass transfer during two-phase flow in porous media—Theoretical considerations and modeling. <i>Advances in Water Resources</i> , 2009, 32, 1756-1766.	1.7	39
61	Dynamic Effect in the Capillary Pressure-Saturation Relationship and its Impacts on Unsaturated Flow. <i>Vadose Zone Journal</i> , 2002, 1, 38-57.	1.3	38
62	Interpretation of macroscale variables in Darcy's law. <i>Water Resources Research</i> , 2007, 43, .	1.7	37
63	Determination of protection zones for Dutch groundwater wells against virus contamination - uncertainty and sensitivity analysis. <i>Journal of Water and Health</i> , 2006, 4, 297-312.	1.1	35
64	On the definition of macroscale pressure for multiphase flow in porous media. <i>Water Resources Research</i> , 2008, 44, .	1.7	35
65	Impact of an historic underground gas well blowout on the current methane chemistry in a shallow groundwater system. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 296-301.	3.3	35
66	Pore-Network Modeling of Solute Transport and Biofilm Growth in Porous Media. <i>Transport in Porous Media</i> , 2015, 110, 345-367.	1.2	34
67	Multiphase flow through multilayers of thin porous media: General balance equations and constitutive relationships for a solid-gas-liquid three-phase system. <i>International Journal of Heat and Mass Transfer</i> , 2014, 70, 693-708.	2.5	33
68	A Numerical Study of Micro-Heterogeneity Effects on Upscaled Properties of Two-Phase Flow in Porous Media. <i>Transport in Porous Media</i> , 2004, 56, 329-350.	1.2	32
69	Vulnerability of unconfined aquifers to virus contamination. <i>Water Research</i> , 2010, 44, 1170-1181.	5.3	32
70	Study of Hydraulic Properties of Uncoated Paper: Image Analysis and Pore-Scale Modeling. <i>Transport in Porous Media</i> , 2017, 120, 67-81.	1.2	32
71	Velocity distributions in trapped and mobilized non-wetting phase ganglia in porous media. <i>Scientific Reports</i> , 2018, 8, 13228.	1.6	32
72	Two-Phase Flow Experiments in a Geocentrifuge and the Significance of Dynamic Capillary Pressure Effect. <i>Journal of Porous Media</i> , 2005, 8, 247-257.	1.0	31

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73	Pore-Scale Modeling of Multiphase Flow and Transport: Achievements and Perspectives. <i>Transport in Porous Media</i> , 2012, 94, 461-464.	1.2	30
74	Upscaling of nanoparticle transport in porous media under unfavorable conditions: Pore scale to Darcy scale. <i>Journal of Contaminant Hydrology</i> , 2017, 200, 1-14.	1.6	30
75	Derivation of conditions describing transport across zones of reduced dynamics within multiphase systems. <i>Water Resources Research</i> , 1989, 25, 529-539.	1.7	29
76	Experimental Investigation of Hysteretic Dynamic Capillarity Effect in Unsaturated Flow. <i>Water Resources Research</i> , 2017, 53, 9078-9088.	1.7	29
77	Correlation equations for average deposition rate coefficients of nanoparticles in a cylindrical pore. <i>Water Resources Research</i> , 2015, 51, 8034-8059.	1.7	27
78	Internal flow patterns of a droplet pinned to the hydrophobic surfaces of a confined microchannel using micro-PIV and VOF simulations. <i>Chemical Engineering Journal</i> , 2019, 370, 444-454.	6.6	27
79	Impact of groundwater flow on methane gas migration and retention in unconsolidated aquifers. <i>Journal of Contaminant Hydrology</i> , 2020, 230, 103619.	1.6	27
80	UPSCALING TRANSPORT OF ADSORBING SOLUTES IN POROUS MEDIA. <i>Journal of Porous Media</i> , 2010, 13, 395-408.	1.0	27
81	Column experiments to study nonlinear removal of bacteriophages by passage through saturated dune sand. <i>Journal of Contaminant Hydrology</i> , 2002, 58, 243-259.	1.6	26
82	From Local Measurements to an Upscaled Capillary Pressure-Saturation Curve. <i>Transport in Porous Media</i> , 2011, 88, 271-291.	1.2	26
83	Pore-Scale Study of Flow Rate on Colloid Attachment and Remobilization in a Saturated Micromodel. <i>Journal of Environmental Quality</i> , 2015, 44, 1376-1383.	1.0	26
84	Effect of hydrophobicity on colloid transport during two-phase flow in a micromodel. <i>Water Resources Research</i> , 2014, 50, 7677-7691.	1.7	25
85	Imaging Spontaneous Imbibition in Full Darcy-Scale Samples at Pore-Scale Resolution by Fast X-Ray Tomography. <i>Water Resources Research</i> , 2019, 55, 7072-7085.	1.7	25
86	Evaluation of the kinetic oxidation of aqueous volatile organic compounds by permanganate. <i>Science of the Total Environment</i> , 2014, 485-486, 755-763.	3.9	24
87	Modeling Virus Adsorption in Batch and Column Experiments. <i>Quantitative Microbiology</i> , 2000, 2, 5-20.	0.5	22
88	Retention and remobilization of colloids during steady-state and transient two-phase flow. <i>Water Resources Research</i> , 2013, 49, 8005-8016.	1.7	22
89	Effect of dissolved calcium on the removal of bacteriophage PRD1 during soil passage: The role of double-layer interactions. <i>Journal of Contaminant Hydrology</i> , 2013, 144, 78-87.	1.6	22
90	Modeling the co-transport of viruses and colloids in unsaturated porous media. <i>Journal of Contaminant Hydrology</i> , 2015, 181, 82-101.	1.6	22

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91	Analysis of the Hysteretic Hydraulic Properties of Unsaturated Soil. <i>Vadose Zone Journal</i> , 2017, 16, 1-9.	1.3	21
92	Boundary and interface conditions in porous media. <i>Water Resources Research</i> , 1989, 25, 1705-1715.	1.7	19
93	Direct Simulation of Liquid Water Dynamics in the Gas Channel of a Polymer Electrolyte Fuel Cell. <i>Journal of the Electrochemical Society</i> , 2012, 159, B434-B443.	1.3	19
94	Modeling Virus Transport and Remobilization during Transient Partially Saturated Flow. <i>Vadose Zone Journal</i> , 2012, 11, vzj2011.0090.	1.3	19
95	Oxidation of volatile organic vapours in air by solid potassium permanganate. <i>Chemosphere</i> , 2013, 91, 1534-1538.	4.2	18
96	Oxidation of trichloroethylene, toluene, and ethanol vapors by a partially saturated permeable reactive barrier. <i>Journal of Contaminant Hydrology</i> , 2014, 164, 193-208.	1.6	18
97	What is the Correct Definition of Average Pressure?. <i>Transport in Porous Media</i> , 2010, 84, 153-175.	1.2	17
98	Pore-Network Modeling of Water and Vapor Transport in the Micro Porous Layer and Gas Diffusion Layer of a Polymer Electrolyte Fuel Cell. <i>Computation</i> , 2016, 4, 21.	1.0	17
99	Impact of water salinity differential on a crude oil droplet constrained in a capillary: Pore-scale mechanisms. <i>Fuel</i> , 2020, 274, 117798.	3.4	17
100	Continuum-Scale Modeling of Liquid Redistribution in a Stack of Thin Hydrophilic Fibrous Layers. <i>Transport in Porous Media</i> , 2018, 122, 203-219.	1.2	16
101	Study of colloids transport during two-phase flow using a novel polydimethylsiloxane micro-model. <i>Journal of Colloid and Interface Science</i> , 2013, 401, 141-147.	5.0	15
102	Bacteriophage PRD1 batch experiments to study attachment, detachment and inactivation processes. <i>Journal of Contaminant Hydrology</i> , 2013, 152, 12-17.	1.6	15
103	Virus-sized colloid transport in a single pore: Model development and sensitivity analysis. <i>Journal of Contaminant Hydrology</i> , 2014, 164, 163-180.	1.6	15
104	The role of interfacial tension in colloid retention and remobilization during two-phase flow in a polydimethylsiloxane micro-model. <i>Chemical Engineering Science</i> , 2017, 168, 437-443.	1.9	15
105	Manufacturing a Micro-model with Integrated Fibre Optic Pressure Sensors. <i>Transport in Porous Media</i> , 2018, 122, 221-234.	1.2	15
106	Bridging Effective Stress and Soil Water Retention Equations in Deforming Unsaturated Porous Media: A Thermodynamic Approach. <i>Transport in Porous Media</i> , 2017, 117, 349-365.	1.2	14
107	Evaluation of a horizontal permeable reactive barrier for preventing upward diffusion of volatile organic compounds through the unsaturated zone. <i>Journal of Environmental Management</i> , 2015, 163, 204-213.	3.8	13
108	Heat release at the wetting front during capillary filling of cellulosic micro-substrates. <i>Journal of Colloid and Interface Science</i> , 2017, 504, 751-757.	5.0	13

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109	Theoretical and experimental investigations on the role of transient effects in the water retention behaviour of unsaturated granular soils. <i>Geomechanics for Energy and the Environment</i> , 2018, 15, 54-64.	1.2	13
110	Dynamic Pore-Scale Model of Drainage in Granular Porous Media: The Pore-Unit Assembly Method. <i>Water Resources Research</i> , 2018, 54, 4193-4213.	1.7	13
111	Evaluation of LNAPL Behavior in Water Table Inter-Fluctuate Zone under Groundwater Drawdown Condition. <i>Water (Switzerland)</i> , 2020, 12, 2337.	1.2	13
112	Simultaneous thermal and optical imaging of two-phase flow in a micro-model. <i>Lab on A Chip</i> , 2014, 14, 2515.	3.1	12
113	Long-term inactivation of bacteriophage PRD1 as a function of temperature, pH, sodium and calcium concentration. <i>Water Research</i> , 2016, 103, 66-73.	5.3	11
114	Occurrence of temperature spikes at a wetting front during spontaneous imbibition. <i>Scientific Reports</i> , 2017, 7, 7268.	1.6	11
115	Macro-Scale Dynamic Effects in Homogeneous and Heterogeneous Porous Media. , 2005, , 121-145.		11
116	One-Dimensional Phenomenological Model for Liquid Water Flooding in Cathode Gas Channel of a Polymer Electrolyte Fuel Cell. <i>Journal of the Electrochemical Society</i> , 2012, 159, B737-B745.	1.3	10
117	Revisiting the horizontal redistribution of water in soils: Experiments and numerical modeling. <i>Water Resources Research</i> , 2017, 53, 7576-7589.	1.7	10
118	A Two-Phase SPH Model for Dynamic Contact Angles Including Fluid-Solid Interactions at the Contact Line. <i>Transport in Porous Media</i> , 2018, 122, 253-277.	1.2	10
119	Droplet Imbibition into Paper Coating Layer: Pore-Network Modeling Simulation. <i>Transport in Porous Media</i> , 2018, 125, 239-258.	1.2	10
120	Capillary pressure-saturation curves of thin hydrophilic fibrous layers: effects of overburden pressure, number of layers, and multiple imbibition-drainage cycles. <i>Textile Research Journal</i> , 2019, 89, 4906-4915.	1.1	10
121	The Complexity of Porous Media Flow Characterized in a Microfluidic Model Based on Confocal Laser Scanning Microscopy and Micro-PIV. <i>Transport in Porous Media</i> , 2021, 136, 343-367.	1.2	10
122	Modeling Uranium Transport in Koongarra, Australia: The Effect of a Moving Weathering Zone. <i>Mathematical Geosciences</i> , 2001, 33, 1-29.	0.9	9
123	Characterization of the Interface Between Coating and Fibrous Layers of Paper. <i>Transport in Porous Media</i> , 2019, 127, 143-155.	1.2	9
124	Effect of Initial Hydraulic Conditions on Capillary Rise in a Porous Medium: Pore-Network Modeling. <i>Vadose Zone Journal</i> , 2012, 11, vj2011.0128.	1.3	8
125	Modeling of Horizontal Water Redistribution in an Unsaturated Soil. <i>Vadose Zone Journal</i> , 2016, 15, 1-11.	1.3	8
126	Effect of Nanoscale Surface Textures on Multiphase Flow Dynamics in Capillaries. <i>Langmuir</i> , 2019, 35, 7322-7331.	1.6	8

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127	The effect of particle shape on porosity of swelling granular materials: Discrete element method and the multi-sphere approximation. Powder Technology, 2020, 360, 1295-1304.	2.1	8
128	Laboratory Experiments and Simulations on the Significance of Non-Equilibrium Effect in the Capillary Pressure-Saturation Relationship. , 2005, , 3-14.		7
129	Mechanics of Unsaturated Soils: from Equilibrium to Transient Conditions. , 2013, , .		7
130	Revealing how interfaces in stacked thin fibrous layers affect liquid ingress and transport properties by single-sided NMR. Journal of Magnetic Resonance, 2018, 294, 16-23.	1.2	7
131	Unsaturated flow in a packing of swelling particles; a grain-scale model. Advances in Water Resources, 2020, 142, 103642.	1.7	7
132	The dissolution and microbial degradation of mobile aromatic hydrocarbons from a Pintsch gas tar DNAPL source zone. Science of the Total Environment, 2020, 722, 137797.	3.9	7
133	Horizontal Redistribution of Two Fluid Phases in a Porous Medium: Experimental Investigations. Transport in Porous Media, 2014, 105, 503-515.	1.2	5
134	Principle of Effective Stress in Variably Saturated Porous Media. Vadose Zone Journal, 2014, 13, 1-4.	1.3	5
135	Megascale thermodynamics in the presence of a conservative field: The watershed case. Advances in Water Resources, 2016, 97, 73-86.	1.7	5
136	Continuum-scale modeling of water infiltration into a stack of two thin fibrous layers and their inter-layer space. Chemical Engineering Science, 2019, 207, 769-779.	1.9	5
137	Modeling Two-Phase Flow in Porous Media Including Fluid-Fluid Interfacial Area. , 2008, , .		4
138	Numerical studies on liquid water flooding in gas channels used in polymer electrolyte fuel cells. Chemical Engineering Science, 2012, 82, 223-231.	1.9	4
139	Dissolution kinetics of volatile organic compound vapors in water: An integrated experimental and computational study. Journal of Contaminant Hydrology, 2017, 196, 43-51.	1.6	4
140	Grain-Scale Modelling of Swelling Granular Materials Using the Discrete Element Method and the Multi-Sphere Approximation. , 2017, , .		4
141	Experimental and Numerical Studies of Saturation Overshoot during Infiltration into a Dry Soil. Vadose Zone Journal, 2019, 18, 1-13.	1.3	4
142	Modeling two-phase flow in a micro-model with local thermal non-equilibrium on the Darcy scale. International Journal of Heat and Mass Transfer, 2015, 88, 822-835.	2.5	3
143	Bias by the inappropriate use of the pseudo-first order approach to estimate second-order reaction rate constants: Reply to the commentary by Tratnyek (this issue). Science of the Total Environment, 2015, 502, 724-725.	3.9	3
144	Determination of the relationship among capillary pressure, saturation and interfacial area: a pore unit assembly approach. E3S Web of Conferences, 2016, 9, 02002.	0.2	3

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145	The Effect of Dynamic Capillarity in Modeling Saturation Overshoot during Infiltration. <i>Vadose Zone Journal</i> , 2019, 18, 1-14.	1.3	3
146	Spontaneous Imbibition and Drainage of Water in a Thin Porous Layer: Experiments and Modeling. <i>Transport in Porous Media</i> , 2021, 139, 381-396.	1.2	3
147	A quantitative study of salinity effect on water diffusion in n-alkane phases: From pore-scale experiments to molecular dynamic simulation. <i>Fuel</i> , 2022, 324, 124716.	3.4	3
148	Experimental Analysis of Mass Exchange Across a Heterogeneity Interface: Role of Counterâ€œCurrent Transport and Nonâ€œLinear Diffusion. <i>Water Resources Research</i> , 2022, 58, .	1.7	3
149	Reply [to â€œComment on â€œParadoxes and realities in unsaturated flow theoryâ€™ by W. G. Gray and S. M. Hassanizadehâ€œ]. <i>Water Resources Research</i> , 1994, 30, 1625-1626.	1.7	2
150	Comment on â€œmulticomponent, multiphase thermomechanics with interfacesâ€œby S. Achanta, J. H. Cushman and M. R. Okos, <i>Int. J. Engng Sci.</i> 32, 1717â€œ1738 (1994). <i>International Journal of Engineering Science</i> , 1996, 34, 531-534.	2.7	2
151	Perface on Upscaling Multiphase Flow in Porous Media: From Pore to Core and Beyond. <i>Transport in Porous Media</i> , 2005, 58, 1-3.	1.2	2
152	Solute Mass Exchange Between Water Phase and Biofilm for a Single Pore. <i>Transport in Porous Media</i> , 2015, 109, 255-278.	1.2	2
153	Bundle-of-Tubes Model for Calculating Dynamic Effects in the Capillary-Pressure-Saturation Relationship. , 2005, , 5-22.		2
154	A two-way coupled model for the co-transport of two different colloids in porous media. <i>Journal of Contaminant Hydrology</i> , 2022, 244, 103922.	1.6	2
155	Anaerobic degradation of benzene and other aromatic hydrocarbons in a tar-derived plume: Nitrate versus iron reducing conditions. <i>Journal of Contaminant Hydrology</i> , 2022, 248, 104006.	1.6	2
156	Dynamic effects in capillary pressure relationships for two-phase flow in porous media: insights from bundle-of-tubes models and their implications. <i>Developments in Water Science</i> , 2004, 55, 127-138.	0.1	1
157	Reply to the Comments on â€œBridging Effective Stress and Soil Water Retention Equations in Deforming Unsaturated Porous Media: A Thermodynamic Approachâ€œ”by Nasser Khalili and Arman Khoshghalb. <i>Transport in Porous Media</i> , 2018, 122, 521-526.	1.2	1
158	Dynamic Pore-Network Models Development. <i>Advances in Mechanics and Mathematics</i> , 2019, , 337-356.	0.2	1
159	Numerical Simulation and Homogenization of Two-Phase Flow in Heterogeneous Porous Media. , 2000, , 333-338.		0