

C T Miller

List of Publications by Year in descending order

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159
papers

8,003
citations

41258

49
h-index

56606

83
g-index

163
all docs

163
docs citations

163
times ranked

4336
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | An evaluation of lattice Boltzmann schemes for porous medium flow simulation. <i>Computers and Fluids</i> , 2006, 35, 898-909. | 1.3 | 617 |
| 2 | Dissolution of Trapped Nonaqueous Phase Liquids: Mass Transfer Characteristics. <i>Water Resources Research</i> , 1990, 26, 2783-2796. | 1.7 | 483 |
| 3 | Lattice-Boltzmann simulation of two-phase flow in porous media. <i>Water Resources Research</i> , 2004, 40, . | 1.7 | 329 |
| 4 | Pore-morphology-based simulation of drainage in totally wetting porous media. <i>Advances in Water Resources</i> , 2001, 24, 243-255. | 1.7 | 289 |
| 5 | Multiphase flow and transport modeling in heterogeneous porous media: challenges and approaches. <i>Advances in Water Resources</i> , 1998, 21, 77-120. | 1.7 | 263 |
| 6 | Pore-scale investigation of viscous coupling effects for two-phase flow in porous media. <i>Physical Review E</i> , 2005, 72, 026705. | 0.8 | 177 |
| 7 | Modelling the fate of oxidisable organic contaminants in groundwater. <i>Advances in Water Resources</i> , 2002, 25, 945-983. | 1.7 | 157 |
| 8 | Accurate and economical solution of the pressure-head form of Richards' equation by the method of lines. <i>Advances in Water Resources</i> , 1997, 20, 1-14. | 1.7 | 137 |
| 9 | Thermodynamically constrained averaging theory approach for modeling flow and transport phenomena in porous medium systems: 1. Motivation and overview. <i>Advances in Water Resources</i> , 2005, 28, 161-180. | 1.7 | 131 |
| 10 | The influence of mass transfer characteristics and porous media heterogeneity on nonaqueous phase dissolution. <i>Water Resources Research</i> , 1996, 32, 1551-1567. | 1.7 | 124 |
| 11 | A multiphase model for three-dimensional tumor growth. <i>New Journal of Physics</i> , 2013, 15, 015005. | 1.2 | 124 |
| 12 | Pore-scale modeling of saturated permeabilities in random sphere packings. <i>Physical Review E</i> , 2001, 64, 066702. | 0.8 | 121 |
| 13 | Cosolvent-Enhanced Remediation of Residual Dense Nonaqueous Phase Liquids: Experimental Investigation. <i>Environmental Science & Technology</i> , 1995, 29, 1966-1976. | 4.6 | 120 |
| 14 | Robust solution of Richards' equation for nonuniform porous media. <i>Water Resources Research</i> , 1998, 34, 2599-2610. | 1.7 | 116 |
| 15 | The influence of porous medium characteristics and measurement scale on pore-scale distributions of residual nonaqueous-phase liquids. <i>Journal of Contaminant Hydrology</i> , 1992, 11, 189-213. | 1.6 | 115 |
| 16 | Heterogeneous sorption processes in subsurface systems. 1. Model formulations and applications.. <i>Environmental Science & Technology</i> , 1994, 28, 2094-2104. | 4.6 | 110 |
| 17 | A comparison of two physics-based numerical models for simulating surface water-groundwater interactions. <i>Advances in Water Resources</i> , 2010, 33, 456-467. | 1.7 | 108 |
| 18 | Computation of the interfacial area for two-fluid porous medium systems. <i>Journal of Contaminant Hydrology</i> , 2002, 56, 25-48. | 1.6 | 106 |

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|----|---|-----|-----------|
| 19 | Optimal design for problems involving flow and transport phenomena in saturated subsurface systems. <i>Advances in Water Resources</i> , 2002, 25, 1233-1256. | 1.7 | 106 |
| 20 | Use of a reactive surface-diffusion model to describe apparent sorption-desorption hysteresis and abiotic degradation of lindane in a subsurface material. <i>Environmental Science & Technology</i> , 1992, 26, 1417-1427. | 4.6 | 102 |
| 21 | Pore-Scale Modeling of Nonwetting-Phase Residual in Porous Media. <i>Water Resources Research</i> , 1995, 31, 455-473. | 1.7 | 98 |
| 22 | A high-performance lattice Boltzmann implementation to model flow in porous media. <i>Computer Physics Communications</i> , 2004, 158, 89-105. | 3.0 | 97 |
| 23 | Dissolution Fingering During the Solubilization of Nonaqueous Phase Liquids in Saturated Porous Media: 2. Experimental Observations. <i>Water Resources Research</i> , 1996, 32, 1929-1942. | 1.7 | 90 |
| 24 | Simulation of correlated and uncorrelated packing of random size spheres. <i>Physical Review E</i> , 1996, 53, 1516-1524. | 0.8 | 90 |
| 25 | Geometric state function for two-fluid flow in porous media. <i>Physical Review Fluids</i> , 2018, 3, . | 1.0 | 87 |
| 26 | Convergence of iterative split-operator approaches for approximating nonlinear reactive transport problems. <i>Advances in Water Resources</i> , 2003, 26, 247-261. | 1.7 | 86 |
| 27 | A spatially and temporally adaptive solution of Richards's equation. <i>Advances in Water Resources</i> , 2006, 29, 525-545. | 1.7 | 82 |
| 28 | Comparison of derivative-free optimization methods for groundwater supply and hydraulic capture community problems. <i>Advances in Water Resources</i> , 2008, 31, 743-757. | 1.7 | 81 |
| 29 | Modeling the sorption of hydrophobic contaminants by aquifer materials. <i>Water Research</i> , 1988, 22, 457-464. | 5.3 | 77 |
| 30 | Dissolution Fingering During the Solubilization of Nonaqueous Phase Liquids in Saturated Porous Media: 1. Model Predictions. <i>Water Resources Research</i> , 1996, 32, 1919-1928. | 1.7 | 73 |
| 31 | Numerical simulation of water resources problems: Models, methods, and trends. <i>Advances in Water Resources</i> , 2013, 51, 405-437. | 1.7 | 73 |
| 32 | Averaging theory for description of environmental problems: What have we learned?. <i>Advances in Water Resources</i> , 2013, 51, 123-138. | 1.7 | 72 |
| 33 | Physicochemical Transport Processes Affecting the Removal of Residual DNAPL by Nonionic Surfactant Solutions. <i>Environmental Science & Technology</i> , 1996, 30, 1852-1860. | 4.6 | 68 |
| 34 | Temporal discretisation errors in non-iterative split-operator approaches to solving chemical reaction/groundwater transport models. <i>Journal of Contaminant Hydrology</i> , 1996, 22, 1-17. | 1.6 | 66 |
| 35 | Recovery of Phenanthrene-Degrading Bacteria after Simulated in Situ Persulfate Oxidation in Contaminated Soil. <i>Environmental Science & Technology</i> , 2011, 45, 719-725. | 4.6 | 66 |
| 36 | A novel heterogeneous algorithm to simulate multiphase flow in porous media on multicore CPU/GPU systems. <i>Computer Physics Communications</i> , 2014, 185, 1865-1874. | 3.0 | 63 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | An experimental investigation of pore-scale distributions of nonaqueous phase liquids at residual saturation. <i>Transport in Porous Media</i> , 1993, 10, 57-80. | 1.2 | 62 |
| 38 | Thermodynamically constrained averaging theory approach for modeling flow and transport phenomena in porous medium systems: 2. Foundation. <i>Advances in Water Resources</i> , 2005, 28, 181-202. | 1.7 | 62 |
| 39 | Two-dimensional modeling of aquifer remediation influenced by sorption nonequilibrium and hydraulic conductivity heterogeneity. <i>Water Resources Research</i> , 1994, 30, 1457-1470. | 1.7 | 61 |
| 40 | Evaluation of Thermal Effects on the Dissolution of a Nonaqueous Phase Liquid in Porous Media. <i>Environmental Science & Technology</i> , 1997, 31, 1615-1622. | 4.6 | 61 |
| 41 | Thermodynamically constrained averaging theory approach for modeling flow and transport phenomena in porous medium systems: 6. Two-fluid-phase flow. <i>Advances in Water Resources</i> , 2009, 32, 779-795. | 1.7 | 59 |
| 42 | Heterogeneous Sorption Processes in Subsurface Systems. 2. Diffusion Modeling Approaches. <i>Environmental Science & Technology</i> , 1995, 29, 1766-1772. | 4.6 | 58 |
| 43 | Quantitative analysis of experiments on bacterial chemotaxis to naphthalene. <i>Biotechnology and Bioengineering</i> , 2002, 78, 626-634. | 1.7 | 55 |
| 44 | Higher order time integration methods for two-phase flow. <i>Advances in Water Resources</i> , 2002, 25, 159-177. | 1.7 | 55 |
| 45 | Development of split-operator, Petrov-Galerkin Methods to simulate transport and diffusion problems. <i>Water Resources Research</i> , 1993, 29, 2227-2240. | 1.7 | 53 |
| 46 | Remediation of DNAPL-Contaminated Subsurface Systems Using Density-Motivated Mobilization. <i>Environmental Science & Technology</i> , 2000, 34, 719-724. | 4.6 | 53 |
| 47 | Mixed finite element methods and higher order temporal approximations for variably saturated groundwater flow. <i>Advances in Water Resources</i> , 2003, 26, 373-394. | 1.7 | 53 |
| 48 | Dense non-aqueous phase liquids at former manufactured gas plants: Challenges to modeling and remediation. <i>Journal of Contaminant Hydrology</i> , 2009, 105, 81-98. | 1.6 | 53 |
| 49 | Thermodynamically constrained averaging theory approach for modeling flow and transport phenomena in porous medium systems: 5. Single-fluid-phase transport. <i>Advances in Water Resources</i> , 2009, 32, 681-711. | 1.7 | 53 |
| 50 | Examination of Darcy's Law for Flow in Porous Media with Variable Porosity. <i>Environmental Science & Technology</i> , 2004, 38, 5895-5901. | 4.6 | 50 |
| 51 | Computational Bayesian maximum entropy solution of a stochastic advection-reaction equation in the light of site-specific information. <i>Water Resources Research</i> , 2002, 38, 54-1-54-17. | 1.7 | 48 |
| 52 | Alternative split-operator approach for solving chemical reaction/groundwater transport models. <i>Advances in Water Resources</i> , 1996, 19, 261-275. | 1.7 | 47 |
| 53 | An evaluation of temporally adaptive transformation approaches for solving Richards' equation. <i>Advances in Water Resources</i> , 1999, 22, 831-840. | 1.7 | 46 |
| 54 | On the dynamics and kinematics of two-fluid-phase flow in porous media. <i>Water Resources Research</i> , 2015, 51, 5365-5381. | 1.7 | 46 |

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|----|--|-----|-----------|
| 55 | Analysis of split operator methods for nonlinear and multispecies groundwater chemical transport models. <i>Mathematics and Computers in Simulation</i> , 1997, 43, 331-341. | 2.4 | 45 |
| 56 | Calibration of a Pore-Network Model by a Pore-Morphological Analysis. <i>Transport in Porous Media</i> , 2003, 51, 267-285. | 1.2 | 44 |
| 57 | Influence of phase connectivity on the relationship among capillary pressure, fluid saturation, and interfacial area in two-fluid-phase porous medium systems. <i>Physical Review E</i> , 2016, 94, 033102. | 0.8 | 44 |
| 58 | Thermodynamically constrained averaging theory approach for modeling flow and transport phenomena in porous medium systems: 3. Single-fluid-phase flow. <i>Advances in Water Resources</i> , 2006, 29, 1745-1765. | 1.7 | 42 |
| 59 | TCAT analysis of capillary pressure in non-equilibrium, two-fluid-phase, porous medium systems. <i>Advances in Water Resources</i> , 2011, 34, 770-778. | 1.7 | 42 |
| 60 | Modeling the sorption of hydrophobic contaminants by aquifer materials—II. Column reactor systems. <i>Water Research</i> , 1988, 22, 465-474. | 5.3 | 41 |
| 61 | Investigation of the residual—funicular nonwetting-phase-saturation relation. <i>Advances in Water Resources</i> , 2000, 24, 157-177. | 1.7 | 40 |
| 62 | Modeling Organic Contaminant Partitioning in Ground-Water Systems. <i>Ground Water</i> , 1984, 22, 584-592. | 0.7 | 39 |
| 63 | Transformation approaches for simulating flow in variably saturated porous media. <i>Water Resources Research</i> , 2000, 36, 923-934. | 1.7 | 39 |
| 64 | Efficient steady-state solution techniques for variably saturated groundwater flow. <i>Advances in Water Resources</i> , 2003, 26, 833-849. | 1.7 | 36 |
| 65 | An Aggregation-Based Domain Decomposition Preconditioner for Groundwater Flow. <i>SIAM Journal of Scientific Computing</i> , 2001, 23, 430-441. | 1.3 | 35 |
| 66 | Local discontinuous Galerkin approximations to Richards's equation. <i>Advances in Water Resources</i> , 2007, 30, 555-575. | 1.7 | 35 |
| 67 | Thermodynamically constrained averaging theory approach for modeling flow and transport phenomena in porous medium systems: 4. Species transport fundamentals. <i>Advances in Water Resources</i> , 2008, 31, 577-597. | 1.7 | 35 |
| 68 | Stochastic Diagrammatic Analysis of Groundwater Flow in Heterogeneous Porous Media. <i>Water Resources Research</i> , 1995, 31, 1687-1703. | 1.7 | 33 |
| 69 | Complete Dissolution of Trichloroethylene in Saturated Porous Media. <i>Environmental Science & Technology</i> , 1998, 32, 2417-2424. | 4.6 | 33 |
| 70 | Thermodynamically constrained averaging theory approach for modeling flow and transport phenomena in porous medium systems: 9. Transition region models. <i>Advances in Water Resources</i> , 2012, 42, 71-90. | 1.7 | 33 |
| 71 | Hydrogeological Research: Just Getting Started. <i>Ground Water</i> , 2002, 40, 224-231. | 0.7 | 32 |
| 72 | Bacterial Regrowth Model for Water Distribution Systems Incorporating Alternating Split-Operator Solution Technique. <i>Journal of Environmental Engineering, ASCE</i> , 2004, 130, 932-941. | 0.7 | 31 |

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|----|---|-----|-----------|
| 73 | An analysis of polynomial chaos approximations for modeling single-fluid-phase flow in porous medium systems. <i>Journal of Computational Physics</i> , 2007, 226, 2175-2205. | 1.9 | 31 |
| 74 | Remediation of DNAPL Pools Using Dense Brine Barrier Strategies. <i>Environmental Science & Technology</i> , 2001, 35, 3031-3039. | 4.6 | 30 |
| 75 | Adaptive local discontinuous Galerkin approximation to Richards's equation. <i>Advances in Water Resources</i> , 2007, 30, 1883-1901. | 1.7 | 30 |
| 76 | A comparison of high-resolution, finite-volume, adaptive stencil schemes for simulating advective dispersive transport. <i>Advances in Water Resources</i> , 2000, 24, 29-48. | 1.7 | 29 |
| 77 | Mixed finite element methods and higher-order temporal approximations. <i>Advances in Water Resources</i> , 2002, 25, 85-101. | 1.7 | 29 |
| 78 | A BME solution of the inverse problem for saturated groundwater flow. <i>Stochastic Environmental Research and Risk Assessment</i> , 2003, 17, 354-369. | 1.9 | 28 |
| 79 | A generalization of averaging theorems for porous medium analysis. <i>Advances in Water Resources</i> , 2013, 62, 227-237. | 1.7 | 27 |
| 80 | Development of a correlation for aqueous-vapor phase mass transfer in porous media. <i>Journal of Contaminant Hydrology</i> , 1995, 18, 85-106. | 1.6 | 26 |
| 81 | Surfactant-Enhanced Dissolution of Phenanthrene into Water for Laminar Flow Conditions. <i>Environmental Science & Technology</i> , 1996, 30, 2967-2974. | 4.6 | 26 |
| 82 | Comparison of fully coupled approaches for approximating nonlinear transport and reaction problems. <i>Advances in Water Resources</i> , 2003, 26, 353-372. | 1.7 | 26 |
| 83 | Efficient, Near-Complete Removal of DNAPL from Three-Dimensional, Heterogeneous Porous Media Using a Novel Combination of Treatment Technologies. <i>Environmental Science & Technology</i> , 2004, 38, 5149-5156. | 4.6 | 26 |
| 84 | Factors Affecting Bank Formation during Surfactant-Enhanced Mobilization of Residual NAPL. <i>Environmental Science & Technology</i> , 1999, 33, 2440-2446. | 4.6 | 25 |
| 85 | Modeling NAPL dissolution fingering with upscaled mass transfer rate coefficients. <i>Advances in Water Resources</i> , 2003, 26, 1097-1111. | 1.7 | 25 |
| 86 | The influence of wettability on NAPL dissolution fingering. <i>Advances in Water Resources</i> , 2008, 31, 1687-1696. | 1.7 | 25 |
| 87 | Organic Chemical Movement over and through Soil. <i>SSSA Special Publication Series</i> , 0, , 305-334. | 0.2 | 25 |
| 88 | Tracking interface and common curve dynamics for two-fluid flow in porous media. <i>Journal of Fluid Mechanics</i> , 2016, 796, 211-232. | 1.4 | 25 |
| 89 | Mass transfer rate limitation effects on partitioning tracer tests. <i>Journal of Contaminant Hydrology</i> , 2000, 45, 79-97. | 1.6 | 24 |
| 90 | Thermodynamically constrained averaging theory approach for modeling flow and transport phenomena in porous medium systems: 8. Interface and common curve dynamics. <i>Advances in Water Resources</i> , 2010, 33, 1427-1443. | 1.7 | 24 |

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| 91 | Influence of porous media heterogeneity on nonaqueous phase liquid dissolution fingering and upscaled mass transfer. <i>Water Resources Research</i> , 2012, 48, . | 1.7 | 24 |
| 92 | Nonhysteretic Capillary Pressure in Two-Fluid Porous Medium Systems: Definition, Evaluation, Validation, and Dynamics. <i>Water Resources Research</i> , 2019, 55, 6825-6849. | 1.7 | 24 |
| 93 | Evolving interface between clean and nonaqueous phase liquid (NAPL)-contaminated regions in two-dimensional porous media. <i>Water Resources Research</i> , 2002, 38, 29-1-29-14. | 1.7 | 23 |
| 94 | Modeling the removal of dissolved organic carbon by ion exchange in a completely mixed flow reactor. <i>Water Research</i> , 2008, 42, 1897-1906. | 5.3 | 23 |
| 95 | Stochastic perturbation analysis of groundwater flow. Spatially variable soils, semi-infinite domains and large fluctuations. <i>Stochastic Hydrology & Hydraulics</i> , 1993, 7, 213-239. | 0.5 | 22 |
| 96 | A quadratic Petrov-Galerkin Solution for kinematic wave overland flow. <i>Water Resources Research</i> , 1993, 29, 2615-2627. | 1.7 | 22 |
| 97 | C++ implementations of numerical methods for solving differential-algebraic equations. <i>ACM Transactions on Mathematical Software</i> , 1999, 25, 377-403. | 1.6 | 22 |
| 98 | Solution of a Well-Field Design Problem with Implicit Filtering. <i>Optimization and Engineering</i> , 2004, 5, 207-234. | 1.3 | 22 |
| 99 | Pore-scale simulation of entrapped non-aqueous phase liquid dissolution. <i>Advances in Water Resources</i> , 2007, 30, 623-640. | 1.7 | 21 |
| 100 | Thermodynamically constrained averaging theory approach for modeling flow and transport phenomena in porous medium systems: 7. Single-phase megascale flow models. <i>Advances in Water Resources</i> , 2009, 32, 1121-1142. | 1.7 | 20 |
| 101 | Approximation of interfacial properties in multiphase porous medium systems. <i>Advances in Water Resources</i> , 2007, 30, 354-365. | 1.7 | 19 |
| 102 | Modeling two-fluid-phase flow and species transport in porous media. <i>Journal of Hydrology</i> , 2015, 521, 565-581. | 2.3 | 19 |
| 103 | Adaptive split-operator methods for modeling transport phenomena in porous medium systems. <i>Advances in Water Resources</i> , 2011, 34, 1268-1282. | 1.7 | 18 |
| 104 | 10.1029/90WR01694. <i>Water Resources Research</i> , 2010, , . | 1.7 | 18 |
| 105 | The averaging of gravity currents in porous media. <i>Physics of Fluids</i> , 2003, 15, 2810. | 1.6 | 18 |
| 106 | Modeling long-term solute transport in drained unsaturated zones. <i>Water Resources Research</i> , 1992, 28, 2799-2809. | 1.7 | 16 |
| 107 | Termination of Newton/Chord Iterations and the Method of Lines. <i>SIAM Journal of Scientific Computing</i> , 1998, 19, 280-290. | 1.3 | 16 |
| 108 | The Boundary Integral Equation Method (BIEM) Local Exhaust Hood Flow Fields. <i>AIHA Journal</i> , 1989, 50, 281-288. | 0.4 | 15 |

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|-----|---|-----|-----------|
| 109 | An ELLAM approximation for advective dispersive transport with nonlinear sorption. <i>Advances in Water Resources</i> , 2006, 29, 657-675. | 1.7 | 15 |
| 110 | Consistent thermodynamic formulations for multiscale hydrologic systems: Fluid pressures. <i>Water Resources Research</i> , 2007, 43, . | 1.7 | 15 |
| 111 | Description of non-Darcy flows in porous medium systems. <i>Physical Review E</i> , 2013, 87, . | 0.8 | 15 |
| 112 | Experimental Investigation on the Resonance of a Liquid Column in a Capillary Tube. <i>Journal of Colloid and Interface Science</i> , 1999, 219, 62-68. | 5.0 | 14 |
| 113 | Hydrogeological Research, Education, and Practice: A Path to Future Contributions. <i>Journal of Hydrologic Engineering - ASCE</i> , 2008, 13, 7-12. | 0.8 | 13 |
| 114 | Beyond Anisotropy: Examining Non-Darcy Flow in Asymmetric Porous Media. <i>Transport in Porous Media</i> , 2010, 84, 535-548. | 1.2 | 13 |
| 115 | Type 2 Diabetes Self-management Among Spanish-Speaking Hispanic Immigrants. <i>Journal of Immigrant and Minority Health</i> , 2016, 18, 1392-1403. | 0.8 | 13 |
| 116 | Solution of a Groundwater Control Problem with Implicit Filtering. <i>Optimization and Engineering</i> , 2002, 3, 189-199. | 1.3 | 12 |
| 117 | Advances in Modeling Completely Mixed Flow Reactors for Ion Exchange. <i>Journal of Environmental Engineering, ASCE</i> , 2010, 136, 1128-1138. | 0.7 | 12 |
| 118 | Mobilization of Manufactured Gas Plant Tar with Alkaline Flushing Solutions. <i>Environmental Science & Technology</i> , 2012, 46, 426-433. | 4.6 | 12 |
| 119 | Rapid Solution of the Nonlinear Step-Drawdown Equation. <i>Ground Water</i> , 1983, 21, 584-588. | 0.7 | 11 |
| 120 | The development of stochastic space transformation and diagrammatic perturbation techniques in subsurface hydrology. <i>Stochastic Hydrology & Hydraulics</i> , 1993, 7, 14-32. | 0.5 | 11 |
| 121 | Thermodynamically Constrained Averaging Theory Approach for Heat Transport in Single-Fluid-Phase Porous Medium Systems. <i>Journal of Heat Transfer</i> , 2009, 131, . | 1.2 | 11 |
| 122 | Molecular methods for assessing the morphology, topology, and performance of polyamide membranes. <i>Journal of Membrane Science</i> , 2022, 644, 120110. | 4.1 | 11 |
| 123 | A comparison of physicochemical methods for the remediation of porous medium systems contaminated with tar. <i>Journal of Contaminant Hydrology</i> , 2014, 167, 44-60. | 1.6 | 10 |
| 124 | Petascale Application of a Coupled CPU-GPU Algorithm for Simulation and Analysis of Multiphase Flow Solutions in Porous Medium Systems. , 2014, , . | | 10 |
| 125 | DISCRETE VORTEX METHODS FOR THE SIMULATION OF BOUNDARY LAYER SEPARATION EFFECTS ON WORKER EXPOSURE. <i>Annals of Occupational Hygiene</i> , 1991, 35, 35-50. | 1.9 | 9 |
| 126 | An adaptive lattice Boltzmann scheme for modeling two fluid phase flow in porous medium systems. <i>Water Resources Research</i> , 2016, 52, 2601-2617. | 1.7 | 9 |

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| 127 | A Priori Parameter Estimation for the Thermodynamically Constrained Averaging Theory: Species Transport in a Saturated Porous Medium. <i>Transport in Porous Media</i> , 2018, 122, 611-632. | 1.2 | 9 |
| 128 | Modeling Nondilute Species Transport Using the Thermodynamically Constrained Averaging Theory. <i>Water Resources Research</i> , 2018, 54, 6656-6682. | 1.7 | 9 |
| 129 | COMPARISON OF MODELS FOR FLOW THROUGH FLANGED AND PLAIN CIRCULAR HOODS. <i>Annals of Occupational Hygiene</i> , 1988, , . | 1.9 | 8 |
| 130 | Comment on "A Distributed Reactivity Model for Sorption by Soils and Sediments. 4. Intraparticle Heterogeneity and Phase-Distribution Relationships under Nonequilibrium Conditions". <i>Environmental Science & Technology</i> , 1996, 30, 3128-3129. | 4.6 | 8 |
| 131 | EVALUATION OF PATH-LENGTH ESTIMATORS FOR CHARACTERIZING MULTIPHASE SYSTEMS USING POLYENERGETIC X-RAY ABSORPTIOMETRY. <i>Soil Science</i> , 2002, 167, 703-719. | 0.9 | 8 |
| 132 | Versatile Two-Level Schwarz Preconditioners for Multiphase Flow. <i>Computational Geosciences</i> , 2003, 7, 91-114. | 1.2 | 8 |
| 133 | Cosolvent flushing for the remediation of PAHs from former manufactured gas plants. <i>Journal of Contaminant Hydrology</i> , 2011, 126, 72-84. | 1.6 | 8 |
| 134 | A Pedagogical Approach to the Thermodynamically Constrained Averaging Theory. <i>Transport in Porous Media</i> , 2017, 119, 585-609. | 1.2 | 8 |
| 135 | Effects of model resolution on optimal design of subsurface flow and transport problems. <i>Advances in Water Resources</i> , 2012, 38, 27-37. | 1.7 | 7 |
| 136 | Response to comment on "Averaging theory for description of environmental problems: What have we learned?". <i>Advances in Water Resources</i> , 2013, 52, 331-333. | 1.7 | 7 |
| 137 | Characterization of the Pore Structure of Porous Media Using non-Newtonian Fluids. <i>Water Resources Research</i> , 2019, 55, 7182-7195. | 1.7 | 7 |
| 138 | Modelling sediment transport in three-phase surface water systems. <i>Journal of Hydraulic Research/De Recherches Hydrauliques</i> , 2019, 57, 439-463. | 0.7 | 7 |
| 139 | Implicit Filtering and Optimal Design Problems. , 1995, , 159-176. | | 7 |
| 140 | A sharp-interface interpretation of a continuous density model for homogenization of gravity-driven flow in porous media. <i>Physica D: Nonlinear Phenomena</i> , 2010, 239, 1855-1866. | 1.3 | 6 |
| 141 | A continuum mechanical framework for modeling tumor growth and treatment in two- and three-phase systems. <i>Archive of Applied Mechanics</i> , 2022, 92, 461-489. | 1.2 | 6 |
| 142 | Mathematical description of the uptake of hydrocarbons in jet fuel into the stratum corneum of human volunteers. <i>Toxicology Letters</i> , 2008, 178, 146-151. | 0.4 | 5 |
| 143 | Dense, viscous brine behavior in heterogeneous porous medium systems. <i>Journal of Contaminant Hydrology</i> , 2010, 115, 46-63. | 1.6 | 5 |
| 144 | Two-phase flow modeling of the influence of wave shapes and bed slope on nearshore hydrodynamics. <i>Journal of Coastal Research</i> , 2013, 65, 159-164. | 0.1 | 5 |

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|-----|--|-----|-----------|
| 145 | On the consistency of scale among experiments, theory, and simulation. Hydrology and Earth System Sciences, 2017, 21, 1063-1076. | 1.9 | 5 |
| 146 | Thermodynamically Constrained Averaging Theory: Principles, Model Hierarchies, and Deviation Kinetic Energy Extensions. Entropy, 2018, 20, 253. | 1.1 | 5 |
| 147 | TEMPORAL DISTRIBUTION OF 14C IN SOIL WATER FROM FIELD LYSIMETERS TREATED WITH 14C-METOLACHLOR. Soil Science, 1998, 163, 872-882. | 0.9 | 5 |
| 148 | Evaluation of a Carbon Adsorption Method for Sampling Gasoline Vapors in the Subsurface. Ground Water Monitoring and Remediation, 1988, 8, 85-92. | 0.6 | 4 |
| 149 | Effectiveness of Source-Zone Remediation of DNAPL-Contaminated Subsurface Systems. Journal of Environmental Engineering, ASCE, 2010, 136, 452-465. | 0.7 | 4 |
| 150 | Toward a New Generation of Two-Fluid Flow Models Based on the Thermodynamically-Constrained Averaging Theory. Water (Switzerland), 2019, 11, 2260. | 1.2 | 4 |
| 151 | Generalized Newtonian fluid flow in porous media. Physical Review Fluids, 2021, 6, . | 1.0 | 4 |
| 152 | Comment on "Dynamics of wetting fronts in porous media". Physical Review E, 2000, 61, 2150-2151. | 0.8 | 3 |
| 153 | Compositional and pH Effects on the Interfacial Tension Between Complex Tar Mixtures and Aqueous Solutions. Environmental Science & Technology, 2012, 46, 10214-10221. | 4.6 | 3 |
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| 155 | An evaluation of solution algorithms and numerical approximation methods for modeling an ion exchange process. Journal of Computational Physics, 2010, 229, 4996-5010. | 1.9 | 2 |
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