

Anis Younes

List of Publications by Year in descending order

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Version: 2024-02-01

80
papers

1,612
citations

257450

24
h-index

361022

35
g-index

82
all docs

82
docs citations

82
times ranked

952
citing authors

#	ARTICLE	IF	CITATIONS
1	Bayesian sparse polynomial chaos expansion for global sensitivity analysis. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2017, 318, 474-496.	6.6	89
2	Use of global sensitivity analysis and polynomial chaos expansion for interpretation of nonreactive transport experiments in laboratory-scale porous media. <i>Water Resources Research</i> , 2011, 47, .	4.2	72
3	Mixed finite elements for solving 2-D diffusion-type equations. <i>Reviews of Geophysics</i> , 2010, 48, .	23.0	55
4	From mixed finite elements to finite volumes for elliptic PDEs in two and three dimensions. <i>International Journal for Numerical Methods in Engineering</i> , 2004, 59, 365-388.	2.8	50
5	Solving density driven flow problems with efficient spatial discretizations and higher-order time integration methods. <i>Advances in Water Resources</i> , 2009, 32, 340-352.	3.8	49
6	An easy and efficient combination of the Mixed Finite Element Method and the Method of Lines for the resolution of Richards's Equation. <i>Environmental Modelling and Software</i> , 2009, 24, 1122-1126.	4.5	49
7	Uncertainty analysis for seawater intrusion in fractured coastal aquifers: Effects of fracture location, aperture, density and hydrodynamic parameters. <i>Journal of Hydrology</i> , 2019, 571, 159-177.	5.4	48
8	A new mass lumping scheme for the mixed hybrid finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2006, 67, 89-107.	2.8	47
9	A New Formulation of the Mixed Finite Element Method for Solving Elliptic and Parabolic PDE with Triangular Elements. <i>Journal of Computational Physics</i> , 1999, 149, 148-167.	3.8	43
10	Efficient approximations for the simulation of density driven flow in porous media. <i>Advances in Water Resources</i> , 2008, 31, 15-27.	3.8	43
11	The Henry semianalytical solution for saltwater intrusion with reduced dispersion. <i>Water Resources Research</i> , 2012, 48, .	4.2	43
12	An XFEM/CZM based inverse method for identification of composite failure parameters. <i>Computers and Structures</i> , 2015, 153, 91-97.	4.4	38
13	On modelling the multidimensional coupled fluid flow and heat or mass transport in porous media. <i>International Journal of Heat and Mass Transfer</i> , 2003, 46, 367-379.	4.8	37
14	The Henry problem: New semianalytical solution for velocity-dependent dispersion. <i>Water Resources Research</i> , 2016, 52, 7382-7407.	4.2	36
15	An advanced discrete fracture model for variably saturated flow in fractured porous media. <i>Advances in Water Resources</i> , 2020, 140, 103602.	3.8	36
16	A high-accurate solution for Darcy-Brinkman double-diffusive convection in saturated porous media. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2016, 69, 26-47.	0.9	35
17	Solving the advection-dispersion equation with discontinuous Galerkin and multipoint flux approximation methods on unstructured meshes. <i>International Journal for Numerical Methods in Fluids</i> , 2008, 58, 687-708.	1.6	34
18	A Reference Benchmark Solution for Free Convection in A Square Cavity Filled with A Heterogeneous Porous Medium. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2015, 67, 437-462.	0.9	33

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19	Analyzing natural convection in porous enclosure with polynomial chaos expansions: Effect of thermal dispersion, anisotropic permeability and heterogeneity. <i>International Journal of Heat and Mass Transfer</i> , 2017, 115, 205-224.	4.8	30
20	Efficiency of mixed hybrid finite element and multipoint flux approximation methods on quadrangular grids and highly anisotropic media. <i>International Journal for Numerical Methods in Engineering</i> , 2008, 76, 314-336.	2.8	29
21	An efficient numerical model for hydrodynamic parameterization in 2D fractured dual-porosity media. <i>Advances in Water Resources</i> , 2014, 63, 179-193.	3.8	29
22	Empirical versus time stepping with embedded error control for density-driven flow in porous media. <i>Water Resources Research</i> , 2010, 46, .	4.2	28
23	Hybrid and multi-point formulations of the lowest-order mixed methods for Darcy's flow on triangles. <i>International Journal for Numerical Methods in Fluids</i> , 2008, 58, 1041-1062.	1.6	27
24	Monotonicity of the cell-centred triangular MPFA method for saturated and unsaturated flow in heterogeneous porous media. <i>Journal of Hydrology</i> , 2013, 504, 132-141.	5.4	27
25	On equivalent hydraulic conductivity for oscillation-free solutions of Richard's equation. <i>Journal of Hydrology</i> , 2013, 505, 202-217.	5.4	25
26	An Efficient Lumped Mixed Hybrid Finite Element Formulation for Variably Saturated Groundwater Flow. <i>Vadose Zone Journal</i> , 2009, 8, 352-362.	2.2	24
27	A combination of Crouzeix-Raviart, Discontinuous Galerkin and MPFA methods for buoyancy-driven flows. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2014, 24, 735-759.	2.8	24
28	A 3D Semianalytical Solution for Density-Driven Flow in Porous Media. <i>Water Resources Research</i> , 2018, 54, 10,094.	4.2	24
29	On the finite volume reformulation of the mixed finite element method for elliptic and parabolic PDE on triangles. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2003, 192, 655-682.	6.6	22
30	A new benchmark semi-analytical solution for density-driven flow in porous media. <i>Advances in Water Resources</i> , 2014, 70, 24-35.	3.8	21
31	On the Efficiency of the Direct Substitution Approach for Reactive Transport Problems in Porous Media. <i>Water, Air, and Soil Pollution</i> , 2008, 193, 299-308.	2.4	20
32	Effects of tectonic structures, salt solution mining, and density-driven groundwater hydraulics on evaporite dissolution (Switzerland). <i>Hydrogeology Journal</i> , 2011, 19, 1323-1334.	2.1	20
33	A new benchmark reference solution for double-diffusive convection in a heterogeneous porous medium. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2016, 70, 373-392.	0.9	20
34	On the effects of subsurface parameters on evaporite dissolution (Switzerland). <i>Journal of Contaminant Hydrology</i> , 2014, 160, 42-52.	3.3	19
35	A new coupling algorithm for density-driven flow in porous media. <i>Geophysical Research Letters</i> , 2004, 31, n/a-n/a.	4.0	17
36	A Generalized Semi-Analytical Solution for the Dispersive Henry Problem: Effect of Stratification and Anisotropy on Seawater Intrusion. <i>Water (Switzerland)</i> , 2018, 10, 230.	2.7	17

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37	A semi-analytical solution for saltwater intrusion with a very narrow transition zone. <i>Hydrogeology Journal</i> , 2014, 22, 501-506.	2.1	16
38	Addressing factors fixing setting from given data: A comparison of different methods. <i>Environmental Modelling and Software</i> , 2017, 87, 29-38.	4.5	16
39	Convective-reactive transport of dissolved CO ₂ in fractured-geological formations. <i>International Journal of Greenhouse Gas Control</i> , 2021, 109, 103365.	4.6	16
40	A High-Accurate Fourier-Galerkin Solution for Buoyancy-Driven Flow in a Square Cavity. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2014, 65, 495-517.	0.9	15
41	A comparison of two Bayesian approaches for uncertainty quantification. <i>Environmental Modelling and Software</i> , 2016, 82, 21-30.	4.5	14
42	An accurate moving grid Eulerian Lagrangian localized adjoint method for solving the one-dimensional variable-coefficient ADE. <i>International Journal for Numerical Methods in Fluids</i> , 2004, 45, 157-178.	1.6	13
43	An XFEM model for cracked porous media: effects of fluid flow and heat transfer. <i>International Journal of Fracture</i> , 2014, 185, 155-169.	2.2	13
44	Inversion and uncertainty of highly parameterized models in a Bayesian framework by sampling the maximal conditional posterior distribution of parameters. <i>Advances in Water Resources</i> , 2015, 76, 1-10.	3.8	13
45	Effect of Pilot-Points Location on Model Calibration: Application to the Northern Karst Aquifer of Qatar. <i>Water (Switzerland)</i> , 2019, 11, 679.	2.7	13
46	Three-dimensional natural convection, entropy generation and mixing in heterogeneous porous medium. <i>Advances in Water Resources</i> , 2021, 155, 103992.	3.8	13
47	Modeling variable-density flow in saturated-unsaturated porous media: An advanced numerical model. <i>Advances in Water Resources</i> , 2022, 159, 104077.	3.8	13
48	A new efficient Bayesian parameter inference strategy: Application to flow and pesticide transport through unsaturated porous media. <i>Journal of Hydrology</i> , 2018, 563, 887-899.	5.4	12
49	An efficient geometric approach to solve the slope limiting problem with the Discontinuous Galerkin method on unstructured triangles. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2010, 26, 1824-1835.	2.1	11
50	Study of the Effect of Thermal Dispersion on Internal Natural Convection in Porous Media Using Fourier Series. <i>Transport in Porous Media</i> , 2020, 131, 537-568.	2.6	11
51	Extension of the Henry semi-analytical solution for saltwater intrusion in stratified domains. <i>Computational Geosciences</i> , 2015, 19, 1207-1217.	2.4	10
52	Simulation of Water and Salt Dynamics in the Soil Profile in the Semi-Arid Region of Tunisia—Evaluation of the Irrigation Method for a Tomato Crop. <i>Water (Switzerland)</i> , 2020, 12, 1594.	2.7	10
53	Hydraulic and transport parameter assessment using column infiltration experiments. <i>Hydrology and Earth System Sciences</i> , 2017, 21, 2263-2275.	4.9	9
54	Sensitivity and identifiability of hydraulic and geophysical parameters from streaming potential signals in unsaturated porous media. <i>Hydrology and Earth System Sciences</i> , 2018, 22, 3561-3574.	4.9	9

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55	Pollutant Dissipation at the Sediment-Water Interface: A Robust Discrete Continuum Numerical Model and Recirculating Laboratory Experiments. <i>Water Resources Research</i> , 2021, 57, e2020WR028932.	4.2	9
56	A new benchmark with high accurate solution for hot-cold fluids mixing. <i>Heat and Mass Transfer</i> , 2015, 51, 1321-1336.	2.1	8
57	Effect of distance-dependent dispersivity on density-driven flow in porous media. <i>Journal of Hydrology</i> , 2020, 589, 125204.	5.4	8
58	Modeling of Flow and Transport in Saturated and Unsaturated Porous Media. <i>Water (Switzerland)</i> , 2021, 13, 1088.	2.7	8
59	On the use of large time steps with ELLAM for transport with kinetic reactions over heterogeneous domains. <i>AIChE Journal</i> , 2009, 55, 1121-1126.	3.6	7
60	An Efficient Implementation of the Method of Lines for Multicomponent Reactive Transport Equations. <i>Water, Air, and Soil Pollution</i> , 2011, 215, 273-283.	2.4	7
61	Dimensionality reduction for efficient Bayesian estimation of groundwater flow in strongly heterogeneous aquifers. <i>Stochastic Environmental Research and Risk Assessment</i> , 2017, 31, 2313-2326.	4.0	7
62	Analytical solution and Bayesian inference for interference pumping tests in fractal dual-porosity media. <i>Computational Geosciences</i> , 2018, 22, 413-421.	2.4	7
63	A robust fully mixed finite element model for flow and transport in unsaturated fractured porous media. <i>Advances in Water Resources</i> , 2022, 166, 104259.	3.8	7
64	Direct and split operator approaches with ELLAM for reactive transport equations. <i>AIChE Journal</i> , 2007, 53, 2161-2169.	3.6	6
65	A Semi-Analytical Solution for the Reactive Henry Saltwater Intrusion Problem. <i>Water, Air, and Soil Pollution</i> , 2013, 224, 1.	2.4	6
66	Estimation of macrodispersion in 2D highly heterogeneous porous media using the Eulerian-Lagrangian localized adjoint method. <i>Water Resources Research</i> , 2013, 49, 43-53.	4.2	6
67	Semianalytical solutions for contaminant transport under variable velocity field in a coastal aquifer. <i>Journal of Hydrology</i> , 2018, 560, 434-450.	5.4	6
68	Benchmarking numerical codes for tracer transport with the aid of laboratory-scale experiments in 2D heterogeneous porous media. <i>Journal of Contaminant Hydrology</i> , 2018, 212, 55-64.	3.3	6
69	Bayesian Simultaneous Estimation of Unsaturated Flow and Solute Transport Parameters from a Laboratory Infiltration Experiment. <i>Water (Switzerland)</i> , 2019, 11, 1660.	2.7	4
70	A Fourier Series Solution for Transient Three-Dimensional Thermohaline Convection in Porous Enclosures. <i>Water Resources Research</i> , 2020, 56, e2020WR028111.	4.2	4
71	Modélisation du transport réactif en milieux poreux non saturés avec une méthode ELLAM en maillage variable. <i>Comptes Rendus - Geoscience</i> , 2004, 336, 547-552.	1.2	3
72	A Moving Grid Eulerian Lagrangian Localized Adjoint Method for Solving One-Dimensional Nonlinear Advection-Diffusion-Reaction Equations. <i>Transport in Porous Media</i> , 2005, 60, 241-250.	2.6	3

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73	Efficiency of the Eulerian-Lagrangian localized adjoint method for solving advection-dispersion equations on highly heterogeneous media. <i>International Journal for Numerical Methods in Fluids</i> , 2012, 69, 639-652.	1.6	3
74	A fully interior penalty discontinuous Galerkin method for variable density groundwater flow problems. <i>Computers and Fluids</i> , 2020, 213, 104744.	2.5	3
75	Computational issues of hybrid and multipoint mixed methods for groundwater flow in anisotropic media. <i>Computational Geosciences</i> , 2010, 14, 171-181.	2.4	2
76	Bayesian inversion of laboratory experiments of transport through limestone fractures. <i>Journal of Contaminant Hydrology</i> , 2022, 249, 104045.	3.3	2
77	A technique for improving the accuracy of quadrangular mixed finite elements for Darcy's flow on heterogeneous domains. <i>Computers and Fluids</i> , 2010, 39, 189-196.	2.5	1
78	Random Sampling from Joint Probability Distributions Defined in a Bayesian Framework. <i>SIAM Journal of Scientific Computing</i> , 2019, 41, A316-A338.	2.8	1
79	Use of Global Sensitivity and Data-Worth Analysis for an Efficient Estimation of Soil Hydraulic Properties. <i>Water (Switzerland)</i> , 2020, 12, 736.	2.7	1
80	Une r�solution par les elements finis mixtes � une inconnue par maille. <i>Comptes Rendus Mathematique</i> , 1999, 328, 623-626.	0.5	0