Anis Younes

List of Publications by Year
in descending order

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	Modeling variable-density flow in saturated-unsaturated porous media: An advanced numerical model. Advances in Water Resources, 2022, 159, 104077.	3.8	13
2	Bayesian inversion of laboratory experiments of transport through limestone fractures. Journal of Contaminant Hydrology, 2022, 249, 104045.	3.3	2
3	A robust fully mixed finite element model for flow and transport in unsaturated fractured porous media. Advances in Water Resources, 2022, 166, 104259.	3.8	7
4	Pollutant Dissipation at the Sediment–Water Interface: A Robust Discrete Continuum Numerical Model and Recirculating Laboratory Experiments. Water Resources Research, 2021, 57, e2020WR028932.	4.2	9
5	Modeling of Flow and Transport in Saturated and Unsaturated Porous Media. Water (Switzerland), 2021, 13, 1088.	2.7	8
6	Convective-reactive transport of dissolved CO_2 in fractured-geological formations. International Journal of Greenhouse Gas Control, 2021, 109, 103365.	4.6	16
7	Three-dimensional natural convection, entropy generation and mixing in heterogeneous porous medium. Advances in Water Resources, 2021, 155, 103992.	3.8	13
8	Study of the Effect of Thermal Dispersion on Internal Natural Convection in Porous Media Using Fourier Series. Transport in Porous Media, 2020, 131, 537-568.	2.6	11
9	A fully interior penalty discontinuous Galerkin method for variable density groundwater flow problems. Computers and Fluids, 2020, 213, 104744.	2.5	3
10	A Fourier Series Solution for Transient Three–Dimensional Thermohaline Convection in Porous Enclosures. Water Resources Research, 2020, 56, e2020WR028111.	4.2	4
11	Effect of distance-dependent dispersivity on density-driven flow in porous media. Journal of Hydrology, 2020, 589, 125204.	5.4	8
12	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. Water (Switzerland), 2020, 12, 1594.	2.7	10
13	Use of Global Sensitivity and Data-Worth Analysis for an Efficient Estimation of Soil Hydraulic Properties. Water (Switzerland), 2020, 12, 736.	2.7	1
14	An advanced discrete fracture model for variably saturated flow in fractured porous media. Advances in Water Resources, 2020, 140, 103602.	3.8	36
15	Bayesian Simultaneous Estimation of Unsaturated Flow and Solute Transport Parameters from a Laboratory Infiltration Experiment. Water (Switzerland), 2019, 11, 1660.	2.7	4
16	Uncertainty analysis for seawater intrusion in fractured coastal aquifers: Effects of fracture location, aperture, density and hydrodynamic parameters. Journal of Hydrology, 2019, 571, 159-177.	5.4	48
17	Effect of Pilot-Points Location on Model Calibration: Application to the Northern Karst Aquifer of Qatar. Water (Switzerland), 2019, 11, 679.	2.7	13
18	Random Sampling from Joint Probability Distributions Defined in a Bayesian Framework. SIAM Journal of Scientific Computing, 2019, 41, A316-A338.	2.8	1

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19	Semianalytical solutions for contaminant transport under variable velocity field in a coastal aquifer. Journal of Hydrology, 2018, 560, 434-450.	5.4	6
20	Benchmarking numerical codes for tracer transport with the aid of laboratory-scale experiments in 2D heterogeneous porous media. Journal of Contaminant Hydrology, 2018, 212, 55-64.	3.3	6
21	Analytical solution and Bayesian inference for interference pumping tests in fractal dual-porosity media. Computational Geosciences, 2018, 22, 413-421.	2.4	7
22	A 3â€Ð Semianalytical Solution for Densityâ€Driven Flow in Porous Media. Water Resources Research, 2018, 54, 10,094.	4.2	24
23	A new efficient Bayesian parameter inference strategy: Application to flow and pesticide transport through unsaturated porous media. Journal of Hydrology, 2018, 563, 887-899.	5.4	12
24	Sensitivity and identifiability of hydraulic and geophysical parameters from streaming potential signals in unsaturated porous media. Hydrology and Earth System Sciences, 2018, 22, 3561-3574.	4.9	9
25	A Generalized Semi-Analytical Solution for the Dispersive Henry Problem: Effect of Stratification and Anisotropy on Seawater Intrusion. Water (Switzerland), 2018, 10, 230.	2.7	17
26	Bayesian sparse polynomial chaos expansion for global sensitivity analysis. Computer Methods in Applied Mechanics and Engineering, 2017, 318, 474-496.	6.6	89
27	Analyzing natural convection in porous enclosure with polynomial chaos expansions: Effect of thermal dispersion, anisotropic permeability and heterogeneity. International Journal of Heat and Mass Transfer, 2017, 115, 205-224.	4.8	30
28	Dimensionality reduction for efficient Bayesian estimation of groundwater flow in strongly heterogeneous aquifers. Stochastic Environmental Research and Risk Assessment, 2017, 31, 2313-2326.	4.0	7
29	Addressing factors fixing setting from given data: A comparison of different methods. Environmental Modelling and Software, 2017, 87, 29-38.	4.5	16
30	Hydraulic and transport parameter assessment using column infiltration experiments. Hydrology and Earth System Sciences, 2017, 21, 2263-2275.	4.9	9
31	A comparison of two Bayesian approaches for uncertainty quantification. Environmental Modelling and Software, 2016, 82, 21-30.	4.5	14
32	A new benchmark reference solution for double-diffusive convection in a heterogeneous porous medium. Numerical Heat Transfer, Part B: Fundamentals, 2016, 70, 373-392.	0.9	20
33	The <scp>H</scp>enry problem: New semianalytical solution for velocityâ€dependent dispersion. Water Resources Research, 2016, 52, 7382-7407.	4.2	36
34	A high-accurate solution for Darcy-Brinkman double-diffusive convection in saturated porous media. Numerical Heat Transfer, Part B: Fundamentals, 2016, 69, 26-47.	0.9	35
35	Extension of the Henry semi-analytical solution for saltwater intrusion in stratified domains. Computational Geosciences, 2015, 19, 1207-1217.	2.4	10
36	Inversion and uncertainty of highly parameterized models in a Bayesian framework by sampling the maximal conditional posterior distribution of parameters. Advances in Water Resources, 2015, 76, 1-10.	3.8	13

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37	A new benchmark with high accurate solution for hot–cold fluids mixing. Heat and Mass Transfer, 2015, 51, 1321-1336.	2.1	8
38	A Reference Benchmark Solution for Free Convection in A Square Cavity Filled with A Heterogeneous Porous Medium. Numerical Heat Transfer, Part B: Fundamentals, 2015, 67, 437-462.	0.9	33
39	An XFEM/CZM based inverse method for identification of composite failure parameters. Computers and Structures, 2015, 153, 91-97.	4.4	38
40	A combination of Crouzeix-Raviart, Discontinuous Galerkin and MPFA methods for buoyancy-driven flows. International Journal of Numerical Methods for Heat and Fluid Flow, 2014, 24, 735-759.	2.8	24
41	A High-Accurate Fourier-Galerkin Solution for Buoyancy-Driven Flow in a Square Cavity. Numerical Heat Transfer, Part B: Fundamentals, 2014, 65, 495-517.	0.9	15
42	An XFEM model for cracked porous media: effects of fluid flow and heat transfer. International Journal of Fracture, 2014, 185, 155-169.	2.2	13
43	A semi-analytical solution for saltwater intrusion with a very narrow transition zone. Hydrogeology Journal, 2014, 22, 501-506.	2.1	16
44	A new benchmark semi-analytical solution for density-driven flow in porous media. Advances in Water Resources, 2014, 70, 24-35.	3.8	21
45	An efficient numerical model for hydrodynamic parameterization in 2D fractured dual-porosity media. Advances in Water Resources, 2014, 63, 179-193.	3.8	29
46	On the effects of subsurface parameters on evaporite dissolution (Switzerland). Journal of Contaminant Hydrology, 2014, 160, 42-52.	3.3	19
47	On equivalent hydraulic conductivity for oscillation–free solutions of Richard's equation. Journal of Hydrology, 2013, 505, 202-217.	5.4	25
48	A Semi-Analytical Solution for the Reactive Henry Saltwater Intrusion Problem. Water, Air, and Soil Pollution, 2013, 224, 1.	2.4	6
49	Monotonicity of the cell-centred triangular MPFA method for saturated and unsaturated flow in heterogeneous porous media. Journal of Hydrology, 2013, 504, 132-141.	5.4	27
50	Estimation of macrodispersion in 2–D highly heterogeneous porous media using the Eulerian–Lagrangian localized adjoint method. Water Resources Research, 2013, 49, 43-53.	4.2	6
51	The Henry semianalytical solution for saltwater intrusion with reduced dispersion. Water Resources Research, 2012, 48, .	4.2	43
52	Efficiency of the Eulerian–Lagrangian localized adjoint method for solving advection–dispersion equations on highly heterogeneous media. International Journal for Numerical Methods in Fluids, 2012, 69, 639-652.	1.6	3
53	Use of global sensitivity analysis and polynomial chaos expansion for interpretation of nonreactive transport experiments in laboratory–scale porous media. Water Resources Research, 2011, 47, .	4.2	72
54	An Efficient Implementation of the Method of Lines for Multicomponent Reactive Transport Equations. Water, Air, and Soil Pollution, 2011, 215, 273-283.	2.4	7

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55	Effects of tectonic structures, salt solution mining, and density-driven groundwater hydraulics on evaporite dissolution (Switzerland). Hydrogeology Journal, 2011, 19, 1323-1334.	2.1	20
56	Computational issues of hybrid and multipoint mixed methods for groundwater flow in anisotropic media. Computational Geosciences, 2010, 14, 171-181.	2.4	2
57	An efficient geometric approach to solve the slope limiting problem with the Discontinuous Galerkin method on unstructured triangles. International Journal for Numerical Methods in Biomedical Engineering, 2010, 26, 1824-1835.	2.1	11
58	A technique for improving the accuracy of quadrangular mixed finite elements for Darcy's flow on heterogeneous domains. Computers and Fluids, 2010, 39, 189-196.	2.5	1
59	Empirical versus time stepping with embedded error control for density-driven flow in porous media. Water Resources Research, 2010, 46, .	4.2	28
60	Mixed finite elements for solving 2-D diffusion-type equations. Reviews of Geophysics, 2010, 48, .	23.0	55
61	An Efficient Lumped Mixed Hybrid Finite Element Formulation for Variably Saturated Groundwater Flow. Vadose Zone Journal, 2009, 8, 352-362.	2.2	24
62	On the use of large time steps with ELLAM for transport with kinetic reactions over heterogeneous domains. AICHE Journal, 2009, 55, 1121-1126.	3.6	7
63	Solving density driven flow problems with efficient spatial discretizations and higher-order time integration methods. Advances in Water Resources, 2009, 32, 340-352.	3.8	49
64	An easy and efficient combination of the Mixed Finite Element Method and the Method of Lines for the resolution of Richards' Equation. Environmental Modelling and Software, 2009, 24, 1122-1126.	4.5	49
65	On the Efficiency of the Direct Substitution Approach for Reactive Transport Problems in Porous Media. Water, Air, and Soil Pollution, 2008, 193, 299-308.	2.4	20
66	Efficiency of mixed hybrid finite element and multipoint flux approximation methods on quadrangular grids and highly anisotropic media. International Journal for Numerical Methods in Engineering, 2008, 76, 314-336.	2.8	29
67	Solving the advection–dispersion equation with discontinuous Galerkin and multipoint flux approximation methods on unstructured meshes. International Journal for Numerical Methods in Fluids, 2008, 58, 687-708.	1.6	34
68	Hybrid and multi-point formulations of the lowest-order mixed methods for Darcy's flow on triangles. International Journal for Numerical Methods in Fluids, 2008, 58, 1041-1062.	1.6	27
69	Efficient approximations for the simulation of density driven flow in porous media. Advances in Water Resources, 2008, 31, 15-27.	3.8	43
70	Direct and split operator approaches with ELLAM for reactive transport equations. AICHE Journal, 2007, 53, 2161-2169.	3.6	6
71	A new mass lumping scheme for the mixed hybrid finite element method. International Journal for Numerical Methods in Engineering, 2006, 67, 89-107.	2.8	47
72	A Moving Grid Eulerian Lagrangian Localized Adjoint Method for Solving One-Dimensional Nonlinear Advection-Diffusion-Reaction Equations. Transport in Porous Media, 2005, 60, 241-250.	2.6	3

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73	An accurate moving grid Eulerian Lagrangian localized adjoint method for solving the one-dimensional variable-coefficient ADE. International Journal for Numerical Methods in Fluids, 2004, 45, 157-178.	1.6	13
74	From mixed finite elements to finite volumes for elliptic PDEs in two and three dimensions. International Journal for Numerical Methods in Engineering, 2004, 59, 365-388.	2.8	50
75	A new coupling algorithm for density-driven flow in porous media. Geophysical Research Letters, 2004, 31, n/a-n/a.	4.0	17
76	Modélisation du transport réactif en milieux poreux non saturés avec une méthode ELLAM en maillage variable. Comptes Rendus - Geoscience, 2004, 336, 547-552.	1.2	3
77	On the finite volume reformulation of the mixed finite element method for elliptic and parabolic PDE on triangles. Computer Methods in Applied Mechanics and Engineering, 2003, 192, 655-682.	6.6	22
78	On modelling the multidimensional coupled fluid flow and heat or mass transport in porous media. International Journal of Heat and Mass Transfer, 2003, 46, 367-379.	4.8	37
79	Une résolution par les elements finis mixtes à une inconnue par maille. Comptes Rendus Mathematique, 1999, 328, 623-626.	0.5	0
80	A New Formulation of the Mixed Finite Element Method for Solving Elliptic and Parabolic PDE with Triangular Elements. Journal of Computational Physics, 1999, 149, 148-167.	3.8	43