Sandra Pieraccini

List of Publications by Year
in descending order

45	1,052	471509	414414
papers	citations	17	32
		h-index	g-index

45	45	45	518
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The virtual element method for discrete fracture network simulations. Computer Methods in Applied Mechanics and Engineering, 2014, 280, 135-156.	6.6	163
2	Implicità€"Explicit Schemes for BGK Kinetic Equations. Journal of Scientific Computing, 2007, 32, 1-28.	2.3	143
3	A hybrid mortar virtual element method for discrete fracture network simulations. Journal of Computational Physics, 2016, 306, 148-166.	3.8	91
4	Order preserving SUPG stabilization for the virtual element formulation of advectionà€"diffusion problems. Computer Methods in Applied Mechanics and Engineering, 2016, 311, 18-40.	6.6	83
5	A PDE-Constrained Optimization Formulation for Discrete Fracture Network Flows. SIAM Journal of Scientific Computing, 2013, 35, B487-B510.	2.8	78
6	An optimization approach for large scale simulations of discrete fracture network flows. Journal of Computational Physics, 2014, 256, 838-853.	3.8	63
7	On Simulations of Discrete Fracture Network Flows with an Optimization-Based Extended Finite Element Method. SIAM Journal of Scientific Computing, 2013, 35, A908-A935.	2.8	57
8	A Parallel Solver for Large Scale DFN Flow Simulations. SIAM Journal of Scientific Computing, 2015, 37, C285-C306.	2.8	54
9	Towards effective flow simulations in realistic discrete fracture networks. Journal of Computational Physics, 2016, 310, 181-201.	3.8	31
10	Uncertainty Quantification in Discrete Fracture Network Models: Stochastic Geometry. Water Resources Research, 2018, 54, 1338-1352.	4.2	26
11	Uncertainty quantification in Discrete Fracture Network models: Stochastic fracture transmissivity. Computers and Mathematics With Applications, 2015, 70, 603-623.	2.7	25
12	Flow simulations in porous media with immersed intersecting fractures. Journal of Computational Physics, 2017, 345, 768-791.	3.8	22
13	Non-stationary transport phenomena in networks of fractures: Effective simulations and stochastic analysis. Computer Methods in Applied Mechanics and Engineering, 2017, 315, 1098-1112.	6.6	20
14	Constrained Dogleg methods for nonlinear systems with simple bounds. Computational Optimization and Applications, 2012, 53, 771-794.	1.6	19
15	Simulation of the Steady-State Flow in Discrete Fracture Networks with Non-Conforming Meshes and Extended Finite Elements. Rock Mechanics and Rock Engineering, 2014, 47, 2171-2182.	5.4	19
16	Unsteady advection-diffusion simulations in complex Discrete Fracture Networks with an optimization approach. Journal of Hydrology, 2018, 566, 332-345.	5.4	18
17	Microscopically implicità€"macroscopically explicit schemes for the BGK equation. Journal of Computational Physics, 2012, 231, 299-327.	3.8	17
18	Advanced computation of steady-state fluid flow in Discrete Fracture-Matrix models: FEMà€"BEM and VEMà€"VEM fracture-block coupling. GEM - International Journal on Geomathematics, 2018, 9, 377-399.	1.6	14

#	Article	IF	Citations
19	Global Newton-type methods and semismooth reformulations for NCP. Applied Numerical Mathematics, 2003, 44, 367-384.	2.1	10
20	Multilevel Monte Carlo Predictions of First Passage Times in Three‐Dimensional Discrete Fracture Networks: A Graph‐Based Approach. Water Resources Research, 2020, 56, e2019WR026493.	4.2	10
21	Iterative coupling algorithms for large multidomain problems with the boundary element method. International Journal for Numerical Methods in Engineering, 2019, 117, 1-14.	2.8	9
22	Uncertainty quantification of discontinuous outputs via a non-intrusive bifidelity strategy. Journal of Computational Physics, 2019, 398, 108885.	3.8	9
23	On affine-scaling inexact dogleg methods for bound-constrained nonlinear systems. Optimization Methods and Software, 2015, 30, 276-300.	2.4	8
24	Uncertainty quantification analysis in discrete fracture network flow simulations. GEM - International Journal on Geomathematics, 2020, 11, 1.	1.6	8
25	Multi-Objective Optimisation of an Aerostatic Pad: Design of Position, Number and Diameter of the Supply Holes. Journal of Mechanics, 2020, 36, 347-360.	1.4	7
26	Coupling traffic models on networks and urban dispersion models for simulating sustainable mobility strategies. Computers and Mathematics With Applications, 2012, 64, 1975-1991.	2.7	6
27	The Virtual Element Method for large scale Discrete Fracture Network simulations: fracture-independent mesh generation. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 19-22.	0.2	5
28	A Three-field Based Optimization Formulation for Flow Simulations in Networks of Fractures on Nonconforming Meshes. SIAM Journal of Scientific Computing, 2021, 43, B381-B404.	2.8	5
29	Machine learning for flux regression in discrete fracture networks. GEM - International Journal on Geomathematics, 2021, 12, 1.	1.6	5
30	Graph-Informed Neural Networks for Regressions on Graph-Structured Data. Mathematics, 2022, 10, 786.	2.2	5
31	Convergence Analysis of an Inexact Infeasible Interior Point Method for Semidefinite Programming. Computational Optimization and Applications, 2004, 29, 289-313.	1.6	4
32	An Infeasible Interior-Point Method with Nonmonotonic Complementarity Gaps. Optimization Methods and Software, 2002, 17, 561-586.	2.4	3
33	On a PDE-Constrained Optimization Approach for Flow Simulations in Fractured Media. SEMA SIMAI Springer Series, 2016, , 27-45.	0.7	3
34	Discontinuous boundary elements for steady-state fluid flow problems in discrete fracture networks. Advances in Water Resources, 2022, 161, 104125.	3.8	3
35	Hybrid Newton-Type Method for a Class of Semismooth Equations. Journal of Optimization Theory and Applications, 2002, 112, 381-402.	1.5	2
36	THE VIRTUAL ELEMENT METHOD FOR DISCRETE FRACTURE NETWORK FLOW AND TRANSPORT SIMULATIONS. , 2016, , .		2

#	Article	IF	Citations
37	Layer-wise relevance propagation for backbone identification in discrete fracture networks. Journal of Computational Science, 2021, 55, 101458.	2.9	2
38	Implicit residual smoothing in a parallel 2d explicit euler solver. International Journal of Computer Mathematics, 1999, 72, 313-324.	1.8	1
39	Velocity Discretization in Numerical Schemes for BGK Equations. , 2008, , 857-864.		1
40	NUMERICAL SIMULATION OF MODELS FOR REACTING POLYTROPIC GASES. , 2006, , .		1
41	Numerical solution of KKT systems in PDE-constrained optimization problems via the affine scaling trust-region approachâ€. International Journal of Computer Mathematics, 2009, 86, 2122-2142.	1.8	0
42	Photon transport in a time-dependent interstellar cloud. Mathematical Methods in the Applied Sciences, 2010, 33, 1245-1256.	2.3	0
43	The Virtual Element Method for the Transport of Passive Scalars in Discrete Fracture Networks. Lecture Notes in Computational Science and Engineering, 2019, , 501-508.	0.3	0
44	New Strategies for the Simulationof the Flow in Three Dimensional Poro-Fractured Media. Lecture Notes in Computational Science and Engineering, 2019, , 715-723.	0.3	0
45	NUMERICAL SIMULATIONS OF A REACTING GAS MIXTURE AT THE HYDRODYNAMIC SCALE. , 2004, , .		0