HÃ©ctor M KlÃ-e

List of Publications by Year
in descending order

34 papers	731 citations	840776 11 h-index	888059 17 g-index
35 all docs	35 docs citations	35 times ranked	483 citing authors

#	Article	IF	Citations
1	On optimization algorithms for the reservoir oil well placement problem. Computational Geosciences, 2006, 10, 303-319.	2.4	229
2	Title is missing!. Annals of Software Engineering, 1997, 1, 215-249.	0.5	71
3	Algebraic Multigrid Methods (AMG) for the Efficient Solution of Fully Implicit Formulations in Reservoir Simulation. , 2007, , .		51
4	Stochastic collocation and mixed finite elements for flow in porous media. Computer Methods in Applied Mechanics and Engineering, 2008, 197, 3547-3559.	6.6	45
5	An Autonomic Reservoir Framework for the Stochastic Optimization of Well Placement. Cluster Computing, 2005, 8, 255-269.	5.0	38
6	Exploiting Capabilities of Many Core Platforms in Reservoir Simulation. , 2011, , .		33
7	Towards a rigorously justified algebraic preconditioner for high-contrast diffusion problems. Computing and Visualization in Science, 2008, 11, 319-331.	1.2	29
8	Application of Grid-enabled technologies for solving optimization problems in data-driven reservoir studies. Future Generation Computer Systems, 2005, 21, 19-26.	7.5	25
9	Reduced-order modeling for thermal recovery processes. Computational Geosciences, 2014, 18, 401-415.	2.4	20
10	Solving Sparse Linear Systems on NVIDIA Tesla GPUs. Lecture Notes in Computer Science, 2009, , 864-873.	1.3	19
11	Physics-Based and Data-Driven Surrogates for Production Forecasting. , 2015, , .		19
12	Unlocking Fast Reservoir Predictions via Non-Intrusive Reduced Order Models. , 2013, , .		17
13	A neural stochastic multiscale optimization framework for sensor-based parameter estimation. Integrated Computer-Aided Engineering, 2007, 14, 213-223.	4.6	14
14	Towards Dynamic Data-Driven Management of the Ruby Gulch Waste Repository. Lecture Notes in Computer Science, 2006, , 384-392.	1.3	14
15	A family of physics-based preconditioners for solving elliptic equations on highly heterogeneous media. Applied Numerical Mathematics, 2009, 59, 1159-1186.	2.1	13
16	Development of Low-Order Controllers for High-Order Reservoir Models and Smart Wells. , 2006, , .		12
17	Deflation AMG Solvers for Highly Ill-Conditioned Reservoir Simulation Problems. , 2007, , .		12
18	Towards Dynamic Data-Driven Optimization of Oil Well Placement. Lecture Notes in Computer Science, 2005, , 656-663.	1.3	10

#	Article	IF	Citations
19	Data-Driven Prediction of Unconventional Shale-Reservoir Dynamics. SPE Journal, 2020, 25, 2564-2581.	3.1	9
20	Middle East Steamflood Field Optimization Demonstration Project. , 2019, , .		8
21	Assessing Multiple Resolution Scales in History Matching With Metamodels. , 2007, , .		7
22	Leveraging US Unconventional Data Analytics Learnings in Vaca Muerta Shale Formation.. , 2019, , .		6
23	Transfer Learning for Scalable Optimization of Unconventional Field Operations. , 2020, , .		5
24	Data-Driven Discovery of Unconventional Shale Reservoir Dynamics. , 2019, , .		4
25	Improving Field Development Decisions in the Vaca Muerta Shale Formation by Efficient Integration of Data, AI, and Physics. , 2019, , .		4
26	A Neural Stochastic Optimization Framework for Oil Parameter Estimation. Lecture Notes in Computer Science, 2006, , 147-154.	1.3	4
27	Data Connectivity Inference and Physics-AI Models For Field Optimization. , 2020, , .		2
28	A Parallel Stochastic Framework for Reservoir Characterization and History Matching. Journal of Applied Mathematics, 2011, 2011, 1-19.	0.9	1
29	Automated Lease Operating Statements for Cost Optimization and Reserve Evaluation Using Artificial Intelligence. , 2020, , .		1
30	Dynamic Data-Driven Systems Approach for Simulation Based Optimizations. Lecture Notes in Computer Science, 2007, , 1213-1221.	1.3	1
31	Multiscale deflation solvers for flow in porous media. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 1020301-1020302.	0.2	0
32	Multiscale deflation solvers for flow in porous media. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 1020305-1020306.	0.2	0
33	Dynamic Decision and Data-Driven Strategies for the Optimal Management of Subsurface Geo-Systems. Journal of Algorithms and Computational Technology, 2011, 5, 645-665.	0.7	0
34	Estimation of elastic constants from ellipsoidal velocities in orthorhombic media. , 1998, , .		0