

Ahmed H Elsheikh

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/10182397/publications.pdf>

Version: 2024-02-01

44
papers

881
citations

430874

18
h-index

477307

29
g-index

44
all docs

44
docs citations

44
times ranked

817
citing authors

#	ARTICLE	IF	CITATIONS
1	Machine learning-based multiscale constitutive modelling: Development and application to dual-porosity mass transfer. <i>Advances in Water Resources</i> , 2022, 163, 104166.	3.8	3
2	Generating unrepresented proportions of geological facies using Generative Adversarial Networks. <i>Computers and Geosciences</i> , 2022, 162, 105085.	4.2	5
3	Probabilistic model-error assessment of deep learning proxies: an application to real-time inversion of borehole electromagnetic measurements. <i>Geophysical Journal International</i> , 2022, 230, 1800-1817.	2.4	7
4	Stochastic optimal well control in subsurface reservoirs using reinforcement learning. <i>Engineering Applications of Artificial Intelligence</i> , 2022, 114, 105106.	8.1	7
5	Flexible iterative ensemble smoother for calibration of perfect and imperfect models. <i>Computational Geosciences</i> , 2021, 25, 373-394.	2.4	5
6	Development of a Probabilistic Framework for Risk-Based Well Decommissioning Design. <i>SPE Journal</i> , 2021, 26, 1946-1963.	3.1	1
7	Probabilistic forecasting for geosteering in fluvial successions using a generative adversarial network. <i>First Break</i> , 2021, 39, 45-50.	0.4	4
8	Data-driven acceleration of multiscale methods for uncertainty quantification: application in transient multiphase flow in porous media. <i>GEM - International Journal on Geomathematics</i> , 2020, 11, 1.	1.6	2
9	Optimal Bayesian experimental design for subsurface flow problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2020, 370, 113208.	6.6	9
10	Robust Algorithms for History Matching of Imperfect Subsurface Models. <i>SPE Journal</i> , 2020, 25, 3300-3316.	3.1	4
11	Parametrization of Stochastic Inputs Using Generative Adversarial Networks With Application in Geology. <i>Frontiers in Water</i> , 2020, 2, .	2.3	24
12	Parametric generation of conditional geological realizations using generative neural networks. <i>Computational Geosciences</i> , 2019, 23, 925-952.	2.4	65
13	A Machine Learning Based Hybrid Multi-Fidelity Multi-Level Monte Carlo Method for Uncertainty Quantification. <i>Frontiers in Environmental Science</i> , 2019, 7, .	3.3	3
14	Regression-based sparse polynomial chaos for uncertainty quantification of subsurface flow models. <i>Journal of Computational Physics</i> , 2019, 399, 108909.	3.8	16
15	Quantification of prediction uncertainty using imperfect subsurface models with model error estimation. <i>Journal of Hydrology</i> , 2019, 576, 764-783.	5.4	15
16	Identifiability of Model Discrepancy Parameters in History Matching. , 2019, , .		0
17	Hydrogeophysical Parameter Estimation Using Iterative Ensemble Smoothing and Approximate Forward Solvers. <i>Frontiers in Environmental Science</i> , 2019, 7, .	3.3	6
18	Reduced-Order Modeling of Subsurface Multi-phase Flow Models Using Deep Residual Recurrent Neural Networks. <i>Transport in Porous Media</i> , 2019, 126, 713-741.	2.6	41

#	ARTICLE	IF	CITATIONS
19	Accounting for model error in Bayesian solutions to hydrogeophysical inverse problems using a local basis approach. <i>Advances in Water Resources</i> , 2018, 116, 195-207.	3.8	27
20	A machine learning approach for efficient uncertainty quantification using multiscale methods. <i>Journal of Computational Physics</i> , 2018, 354, 493-511.	3.8	64
21	Data-driven surrogates for rapid simulation and optimization of WAG injection in fractured carbonate reservoirs. <i>Petroleum Geoscience</i> , 2017, 23, 270-283.	1.5	29
22	Reservoir uncertainty tolerant, proactive control of intelligent wells. <i>Computational Geosciences</i> , 2016, 20, 655-676.	2.4	26
23	Proactive Optimization of Intelligent-Well Production Using Stochastic Gradient-Based Algorithms. <i>SPE Reservoir Evaluation and Engineering</i> , 2016, 19, 239-252.	1.8	18
24	Efficient Integration of Production and Seismic Data into Reservoir Models Exhibiting Complex Connectivity Using an Iterative Ensemble Smoother. , 2015, , .		4
25	Reservoir Modeling for Flow Simulation by Use of Surfaces, Adaptive Unstructured Meshes, and an Overlapping-Control-Volume Finite-Element Method. <i>SPE Reservoir Evaluation and Engineering</i> , 2015, 18, 115-132.	1.8	64
26	Iterative ensemble smoothers in the annealed importance sampling framework. <i>Advances in Water Resources</i> , 2015, 86, 231-239.	3.8	41
27	Accelerating Monte Carlo Markov chains with proxy and error models. <i>Computers and Geosciences</i> , 2015, 85, 38-48.	4.2	18
28	Surrogate accelerated sampling of reservoir models with complex structures using sparse polynomial chaos expansion. <i>Advances in Water Resources</i> , 2015, 86, 385-399.	3.8	40
29	Calibration of channelized subsurface flow models using nested sampling and soft probabilities. <i>Advances in Water Resources</i> , 2015, 75, 14-30.	3.8	13
30	A nested sampling particle filter for nonlinear data assimilation. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2014, 140, 1640-1653.	2.7	5
31	A reliable triangular mesh intersection algorithm and its application in geological modelling. <i>Engineering With Computers</i> , 2014, 30, 143-157.	6.1	16
32	A consistent octree hanging node elimination algorithm for hexahedral mesh generation. <i>Advances in Engineering Software</i> , 2014, 75, 86-100.	3.8	6
33	Robust optimisation of CO2 sequestration strategies under geological uncertainty using adaptive sparse grid surrogates. <i>Computational Geosciences</i> , 2014, 18, 763-778.	2.4	27
34	Efficient Bayesian inference of subsurface flow models using nested sampling and sparse polynomial chaos surrogates. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2014, 269, 515-537.	6.6	86
35	Hybrid nested sampling algorithm for Bayesian model selection applied to inverse subsurface flow problems. <i>Journal of Computational Physics</i> , 2014, 258, 319-337.	3.8	23
36	A Comparison Study Between an Adaptive Quadtree Grid and Uniform Grid Upscaling for Reservoir Simulation. <i>Transport in Porous Media</i> , 2013, 98, 377-400.	2.6	9

#	ARTICLE	IF	CITATIONS
37	Sparse calibration of subsurface flow models using nonlinear orthogonal matching pursuit and an iterative stochastic ensemble method. <i>Advances in Water Resources</i> , 2013, 56, 14-26.	3.8	25
38	An iterative stochastic ensemble method for parameter estimation of subsurface flow models. <i>Journal of Computational Physics</i> , 2013, 242, 696-714.	3.8	23
39	Boosting iterative stochastic ensemble method for nonlinear calibration of subsurface flow models. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2013, 259, 10-23.	6.6	8
40	Clustered iterative stochastic ensemble method for multi-modal calibration of subsurface flow models. <i>Journal of Hydrology</i> , 2013, 491, 40-55.	5.4	29
41	Comparison of ensemble filtering algorithms and null-space Monte Carlo for parameter estimation and uncertainty quantification using CO ₂ sequestration data. <i>Water Resources Research</i> , 2013, 49, 8108-8127.	4.2	26
42	Nested sampling algorithm for subsurface flow model selection, uncertainty quantification, and nonlinear calibration. <i>Water Resources Research</i> , 2013, 49, 8383-8399.	4.2	28
43	A posteriori error estimation based on numerical realization of the variational multiscale method. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2008, 197, 3637-3656.	6.6	9
44	Assessment of two a posteriori error estimators for elasticity problems. <i>Canadian Journal of Civil Engineering</i> , 2008, 35, 1239-1250.	1.3	0