

Xiaodong Luo

List of Publications by Year in descending order

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Version: 2024-02-01

69
papers

1,384
citations

331670

21
h-index

361022

35
g-index

70
all docs

70
docs citations

70
times ranked

867
citing authors

#	ARTICLE	IF	CITATIONS
1	Characterizing pseudoperiodic time series through the complex network approach. <i>Physica D: Nonlinear Phenomena</i> , 2008, 237, 2856-2865.	2.8	183
2	Iterative Ensemble Smoother as an Approximate Solution to a Regularized Minimum-Average-Cost Problem: Theory and Applications. <i>SPE Journal</i> , 2015, 20, 962-982.	3.1	98
3	Particle Kalman Filtering: A Nonlinear Bayesian Framework for Ensemble Kalman Filters. <i>Monthly Weather Review</i> , 2012, 140, 528-542.	1.4	88
4	Ensemble Kalman filter with the unscented transform. <i>Physica D: Nonlinear Phenomena</i> , 2009, 238, 549-562.	2.8	58
5	An Ensemble 4D-Seismic History-Matching Framework With Sparse Representation Based On Wavelet Multiresolution Analysis. <i>SPE Journal</i> , 2017, 22, 985-1010.	3.1	55
6	Mitigating Observation Perturbation Sampling Errors in the Stochastic EnKF. <i>Monthly Weather Review</i> , 2015, 143, 2918-2936.	1.4	52
7	Correlation-Based Adaptive Localization With Applications to Ensemble-Based 4D-Seismic History Matching. <i>SPE Journal</i> , 2018, 23, 396-427.	3.1	52
8	Detecting chaos in pseudoperiodic time series without embedding. <i>Physical Review E</i> , 2006, 73, 016216.	2.1	50
9	ON A DYNAMICAL SYSTEM WITH MULTIPLE CHAOTIC ATTRACTORS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2007, 17, 3235-3251.	1.7	45
10	Robust Ensemble Filtering and Its Relation to Covariance Inflation in the Ensemble Kalman Filter. <i>Monthly Weather Review</i> , 2011, 139, 3938-3953.	1.4	44
11	Efficient big data assimilation through sparse representation: A 3D benchmark case study in petroleum engineering. <i>PLoS ONE</i> , 2018, 13, e0198586.	2.5	37
12	History Matching the Full Norne Field Model Using Seismic and Production Data. <i>SPE Journal</i> , 2019, 24, 1452-1467.	3.1	35
13	Automatic and adaptive localization for ensemble-based history matching. <i>Journal of Petroleum Science and Engineering</i> , 2020, 184, 106559.	4.2	33
14	Detecting temporal and spatial correlations in pseudoperiodic time series. <i>Physical Review E</i> , 2007, 75, 016218.	2.1	32
15	Estimating observation error covariance matrix of seismic data from a perspective of image denoising. <i>Computational Geosciences</i> , 2017, 21, 205-222.	2.4	31
16	Simultaneous assimilation of production and seismic data: application to the Norne field. <i>Computational Geosciences</i> , 2020, 24, 907-920.	2.4	30
17	Surrogate test to distinguish between chaotic and pseudoperiodic time series. <i>Physical Review E</i> , 2005, 71, 026230.	2.1	29
18	Scaled unscented transform Gaussian sum filter: Theory and application. <i>Physica D: Nonlinear Phenomena</i> , 2010, 239, 684-701.	2.8	27

#	ARTICLE	IF	CITATIONS
19	Data Assimilation within the Advanced Circulation (ADCIRC) Modeling Framework for Hurricane Storm Surge Forecasting. <i>Monthly Weather Review</i> , 2012, 140, 2215-2231.	1.4	26
20	Correlation-Based Adaptive Localization for Ensemble-Based History Matching: Applied To the Norne Field Case Study. <i>SPE Reservoir Evaluation and Engineering</i> , 2019, 22, 1084-1109.	1.8	24
21	Ensemble-based kernel learning for a class of data assimilation problems with imperfect forward simulators. <i>PLoS ONE</i> , 2019, 14, e0219247.	2.5	22
22	Assessing a robust ensemble-based Kalman filter for efficient ecosystem data assimilation of the Cretan Sea. <i>Journal of Marine Systems</i> , 2013, 125, 90-100.	2.1	20
23	4D seismic history matching: Assessing the use of a dictionary learning based sparse representation method. <i>Journal of Petroleum Science and Engineering</i> , 2020, 195, 107763.	4.2	20
24	Improving Short-Range Ensemble Kalman Storm Surge Forecasting Using Robust Adaptive Inflation. <i>Monthly Weather Review</i> , 2013, 141, 2705-2720.	1.4	19
25	Covariance Inflation in the Ensemble Kalman Filter: A Residual Nudging Perspective and Some Implications. <i>Monthly Weather Review</i> , 2013, 141, 3360-3368.	1.4	19
26	A Comparison of Ensemble Kalman Filters for Storm Surge Assimilation. <i>Monthly Weather Review</i> , 2014, 142, 2899-2914.	1.4	19
27	A decision support system for multi-target geosteering. <i>Journal of Petroleum Science and Engineering</i> , 2019, 183, 106381.	4.2	18
28	Novel iterative ensemble smoothers derived from a class of generalized cost functions. <i>Computational Geosciences</i> , 2021, 25, 1159-1189.	2.4	16
29	Ensemble Kalman Filtering with Residual Nudging: An Extension to State Estimation Problems with Nonlinear Observation Operators. <i>Monthly Weather Review</i> , 2014, 142, 3696-3712.	1.4	14
30	Ensemble Kalman Filtering with a Divided State-Space Strategy for Coupled Data Assimilation Problems*. <i>Monthly Weather Review</i> , 2014, 142, 4542-4558.	1.4	13
31	Efficient particle filtering through residual nudging. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2014, 140, 557-572.	2.7	13
32	Handling Big Models and Big Data Sets in History-Matching Problems through an Adaptive Local Analysis Scheme. <i>SPE Journal</i> , 2021, 26, 973-992.	3.1	13
33	Ensemble Kalman filtering with residual nudging. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , 2022, 64, 17130.	1.7	12
34	Accounting for model errors of rock physics models in 4D seismic history matching problems: A perspective of machine learning. <i>Journal of Petroleum Science and Engineering</i> , 2021, 196, 107961.	4.2	11
35	An Ensemble 4D Seismic History Matching Framework with Wavelet Multiresolution Analysis - A 3D Benchmark Case Study. , 2016, , .		11
36	Reducing colored noise for chaotic time series in the local phase space. <i>Physical Review E</i> , 2007, 76, 026211.	2.1	9

#	ARTICLE	IF	CITATIONS
37	An Adjoint-Based Adaptive Ensemble Kalman Filter. <i>Monthly Weather Review</i> , 2013, 141, 3343-3359.	1.4	9
38	Toward an enhanced Bayesian estimation framework for multiphase flow soft-sensing. <i>Inverse Problems</i> , 2014, 30, 114012.	2.0	9
39	Testing for nonlinearity in time series without the Fourier transform. <i>Physical Review E</i> , 2005, 72, 055201.	2.1	7
40	Optimal phase-space projection for noise reduction. <i>Physical Review E</i> , 2005, 72, 046710.	2.1	7
41	On a nonlinear Kalman filter with simplified divided difference approximation. <i>Physica D: Nonlinear Phenomena</i> , 2012, 241, 671-680.	2.8	7
42	Estimation of Production Rates by Use of Transient Well-Flow Modeling and the Auxiliary Particle Filter: Full-Scale Applications. <i>SPE Production and Operations</i> , 2016, 31, 163-175.	0.6	7
43	Data Driven Adaptive Localization With Applications To Ensemble-Based 4D Seismic History Matching. , 2017, , .		7
44	Time-lapse CSEM reservoir monitoring of the Norne field with vertical dipoles. , 2016, , .		6
45	An Ensemble 4D Seismic History Matching Framework with Sparse Representation Based on Wavelet Multiresolution Analysis. , 2016, , .		5
46	Ensemble based 4D seismic history matching using a sparse representation of AVA data. , 2016, , .		5
47	History Matching Of Real Production And Seismic Data In The Norne Field. , 2018, , .		5
48	An Interactive Decision Support System for Geosteering Operations. , 2018, , .		4
49	Data assimilation with multiple types of observation boreholes via the ensemble Kalman filter embedded within stochastic moment equations. <i>Hydrology and Earth System Sciences</i> , 2021, 25, 1689-1709.	4.9	4
50	Towards Automatic And Adaptive Localization For Ensemble-Based History Matching. , 2018, , .		4
51	Reply to "Comment on "Ensemble Kalman filter with the unscented transform"™. <i>Physica D: Nonlinear Phenomena</i> , 2010, 239, 1662-1664.	2.8	3
52	Sparse Representation of 4D Seismic Signal Based on Dictionary Learning. , 2019, , .		3
53	Data assimilation with soft constraints (DASC) through a generalized iterative ensemble smoother. <i>Computational Geosciences</i> , 2022, 26, 571-594.	2.4	3
54	Improving pseudo-optimal Kalman-gain localization using the random shuffle method. <i>Journal of Petroleum Science and Engineering</i> , 2022, 215, 110589.	4.2	3

#	ARTICLE	IF	CITATIONS
55	Data assimilation using Bayesian filters and B-spline geological models. Journal of Physics: Conference Series, 2011, 290, 012004.	0.4	2
56	Estimation of Pressure-Saturation and Porosity Fields from Seismic AVA Data Using an Ensemble Based Method. , 2017, , .		2
57	Estimation of pressure-saturation and porosity fields from seismic acoustic impedance data using an ensemble-based method. , 2017, , .		1
58	Correlation-Based Adaptive Localization for Ensemble-Based History Matching: Applied to the Norne Field Case Study. , 2018, , .		1
59	Editorial: Data Science Applications to Inverse and Optimization Problems in Earth Science. Frontiers in Applied Mathematics and Statistics, 2021, 7, .	1.3	1
60	Petrophysical Parameters Inversion From Seismic Data Using An Ensemble-Based Method - A Case Study From A Compacting Reservoir. , 2018, , .		1
61	Particle Kalman Filtering: A Nonlinear Framework for Ensemble Kalman Filters. , 2010, , .		0
62	On Ensemble Nonlinear Kalman Filtering with Symmetric Analysis Ensembles. , 2010, , .		0
63	Accounting for Model Errors of Rock Physics Models in 4D Seismic History Matching Problems: A Perspective of Machine Learning. , 2020, , .		0
64	Estimating Observation Error Covariance Matrix of Seismic Data from a Perspective of Image Processing. , 2016, , .		0
65	History Matching Using an Iterative Ensemble Smoother with Correlation-Based Adaptive Localization - A Real Field Case S. , 2018, , .		0
66	Uncertainty quantification in non-linear seismic inversion: A comparison of three different methods.. , 2019, , .		0
67	Decoupling of changes in pressure-saturation and porosity fields from time-lapse seismic data using an ensemble based method for a compacting chalk reservoir. , 2020, , .		0
68	Novel Ensemble Data Assimilation Algorithms Derived from A Class of Generalized Cost Functions. , 2020, , .		0
69	Joint History Matching of Production, Tracer, and 4D Seismic Data in a 3D Field-Scale Case Study. , 2022, , .		0