Denis JosÃ© Schiozer

List of Publications by Year
in descending order

84 papers	**1,057** citations	471509 **17** h-index	526287 **27** g-index
84 all docs	**84** docs citations	**84** times ranked	**418** citing authors

#	Article	IF	Citations
1	Evaluation of unsupervised machine learning frameworks to select representative geological realizations for uncertainty quantification. Journal of Petroleum Science and Engineering, 2022, 209, 109822.	4.2	10
2	Data assimilation for uncertainty reduction using different fidelity numerical models. Journal of Petroleum Science and Engineering, 2022, 209, 109851.	4.2	5
3	Fast diagnosis of reservoir simulation models based on 4D seismic similarity indicators. Journal of Petroleum Science and Engineering, 2022, 210, 110083.	4.2	1
4	Construction of Single-Porosity and Single-Permeability Models as Low-Fidelity Alternative to Represent Fractured Carbonate Reservoirs Subject to WAG-CO2 Injection Under Uncertainty. , 2022, , .		0
5	Impact of model and data resolutions in 4D seismic data assimilation applied to an offshore reservoir in Brazil. Journal of Petroleum Science and Engineering, 2022, 216, 110830.	4.2	2
6	Application of risk-informed closed-loop field development workflow to elucidate the evolution of uncertainties. Journal of Petroleum Science and Engineering, 2021, 197, 107960.	4.2	3
7	Stepwise uncertainty reduction in time-lapse seismic interpretation using multi-attribute analysis. Petroleum Geoscience, 2021, 27, .	1.5	8
8	Subspace Ensemble Randomized Maximum Likelihood with Local Analysis for Time-Lapse-Seismic-Data Assimilation. SPE Journal, 2021, 26, 1011-1031.	3.1	4
9	Scenario reduction methodologies under uncertainties for reservoir development purposes: distance-based clustering and metaheuristic algorithm. Journal of Petroleum Exploration and Production, 2021, 11, 3079-3102.	2.4	7
10	A three-way convolutional network to compare 4D seismic data and reservoir simulation models in different domains. Journal of Petroleum Science and Engineering, 2021, 208, 109260.	4.2	0
11	Selection of Representative Scenarios Using Multiple Simulation Outputs for Robust Well Placement Optimization in Greenfields. , 2021, , .		4
12	Methodology for data assimilation in reservoir and production system to improve short- and medium-term forecast. Journal of Petroleum Science and Engineering, 2021, 207, 109083.	4.2	2
13	Leveraging Phylogenetic Trees to Assess Variability of Reservoir Models. , 2020, , .		0
14	Efficient Selection of Reservoir Model Outputs within an Emulation-Based Bayesian History-Matching Uncertainty Analysis. SPE Journal, 2020, 25, 2119-2142.	3.1	4
15	Bottom-Up Analysis to Unravel Potential Problems and Emphasize the Impact of Individual Steps in Closed-Loop Field Development. , 2020, , .		1
16	Reducing uncertainties of reservoir properties in an automatized process coupled with geological modeling considering scalar and spatial uncertain attributes. Journal of Petroleum Science and Engineering, 2020, 189, 106993.	4.2	5
17	Developing a workflow to select representative reservoir models combining distance-based clustering and data assimilation for decision making process. Journal of Petroleum Science and Engineering, 2020, 190, 107078.	4.2	17
18	Using an Integrated Multidimensional Scaling and Clustering Method to Reduce the Number of Scenarios Based on Flow-Unit Models Under Geological Uncertainties. Journal of Energy Resources Technology, Transactions of the ASME, 2020, 142, .	2.3	8

#	Article	IF	Citations
19	A novel localization scheme for scalar uncertainties in ensemble-based data assimilation methods. Journal of Petroleum Exploration and Production, 2019, 9, 2497-2510.	2.4	7
20	Integration of geostatistical realizations in data assimilation and reduction of uncertainty process using genetic algorithm combined with multi-start simulated annealing. Oil and Gas Science and Technology, 2019, 74, 73.	1.4	5
21	Development of a special connection fracture model for reservoir simulation of fractured reservoirs. Journal of Petroleum Science and Engineering, 2019, 183, 106390.	4.2	11
22	Evaluation of an uncertainty reduction methodology based on Iterative Sensitivity Analysis (ISA) applied to naturally fractured reservoirs. Oil and Gas Science and Technology, 2019, 74, 40.	1.4	3
23	A new parameterization method for data assimilation and uncertainty assessment for complex carbonate reservoir models based on cumulative distribution function. Journal of Petroleum Science and Engineering, 2019, 183, 106400.	4.2	5
24	A Proper Data Comparison for Seismic History Matching Processes. , 2019, , .		2
25	Model-based decision analysis applied to petroleum field development and management. Oil and Gas Science and Technology, 2019, 74, 46.	1.4	57
26	Systematic Uncertainty Reduction for Petroleum Reservoirs Combining Reservoir Simulation and Bayesian Emulation Techniques. , 2019, , .		3
27	Quantitative integration of 3D and 4D seismic impedance into reservoir simulation model updating in the Norne Field. Geophysical Prospecting, 2019, 67, 167-187.	1.9	9
28	Developing a workflow to represent fractured carbonate reservoirs for simulation models under uncertainties based on flow unit concept. Oil and Gas Science and Technology, 2019, 74, 15.	1.4	17
29	Fast-Track Qualitative Interpretation of Seismic Data in a Permanent Reservoir Monitoring PRM Setting for a Brazilian Field. , 2019, , .		4
30	Influence of polymer properties on selection of production strategy for a heavy oil field. Journal of Petroleum Science and Engineering, 2018, 163, 110-118.	4.2	8
31	Scaling Up Highly Permeable Thin Layers Into Flow Simulation. SPE Reservoir Evaluation and Engineering, 2018, 21, 503-520.	1.8	1
32	Analysis of time-lapse seismic and production data for reservoir model classification and assessment. Journal of Geophysics and Engineering, 2018, 15, 1561-1587.	1.4	15
33	Probabilistic seismic history matching using binary images. Journal of Geophysics and Engineering, 2018, 15, 261-274.	1.4	19
34	A new approach with multiple realizations for image perturbation using co-simulation and probability perturbation method. Oil and Gas Science and Technology, 2018, 73, 68.	1.4	6
35	A new methodology to reduce uncertainty of global attributes in naturally fractured reservoirs. Oil and Gas Science and Technology, 2018, 73, 41.	1.4	8
36	Flow Simulation Using Local Grid Refinements to Model Laminated Reservoirs. Oil and Gas Science and Technology, 2018, 73, 5.	1.4	6

#	Article	IF	Citations
37	Qualitative time-lapse seismic interpretation of Norne Field to assess challenges of 4D seismic attributes. The Leading Edge, 2018, 37, 754-762.	0.7	12
38	Applying a localization technique to Kalman Gain and assessing the influence on the variability of models in history matching. Journal of Petroleum Science and Engineering, 2018, 169, 110-125.	4.2	22
39	Using simulation and production data to resolve ambiguity in interpreting 4D seismic inverted impedance in the Norne Field. Petroleum Geoscience, 2018, 24, 335-347.	1.5	13
40	A new methodology for history matching combining iterative discrete Latin Hypercube with multi-start simulated annealing. Journal of Petroleum Science and Engineering, 2018, 169, 560-577.	4.2	11
41	Investigation of production forecast biases of simulation models in a benchmark case. Oil and Gas Science and Technology, 2018, 73, 23.	1.4	6
42	Methodology to Assimilate Multi-Objective Data Probabilistically Applied to an Offshore Field in the Campos Basin, Brazil. , 2018, , .		0
43	Semiquantitative 4D seismic interpretation integrated with reservoir simulation: Application to the Norne field. Interpretation, 2018, 6, T601-T611.	1.1	3
44	Influence of Additional Objective Functions on Uncertainty Reduction and History Matching. , 2018, , .		3
45	Field-Development Process Revealing Uncertainty-Assessment Pitfalls. SPE Reservoir Evaluation and Engineering, 2017, 20, 765-778.	1.8	20
46	Reducing uncertainty in reservoir parameters combining history matching and conditioned geostatistical realizations. Journal of Petroleum Science and Engineering, 2017, 156, 75-90.	4.2	11
47	History matching by integrating regional multi-property image perturbation methods with a multivariate sensitivity analysis. Journal of Petroleum Science and Engineering, 2017, 153, 111-122.	4.2	13
48	Methodology to estimate the value of flexibility under endogenous and exogenous uncertainties. Journal of Petroleum Science and Engineering, 2017, 151, 235-247.	4.2	6
49	Integration of Highly Permeable Thin Layers Into Flow Simulation. , 2017, , .		0
50	Development of complex layered and fractured reservoir models for reservoir simulation. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2017, 39, 219-233.	1.6	6
51	Risk quantification combining geostatistical realizations and discretized Latin Hypercube. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2017, 39, 575-587.	1.6	49
52	Methodology to Systematically Reduce Uncertainty Assimilating Quantitatively 4D Seismic and Well Data in a Probabilistic and Multi-Objective History Matching. , 2017, , .		3
53	Qualitative time-lapse seismic interpretation: Seismic amplitude or impedance? A case study in the Norne benchmark case. , 2017, , .		1
54	Principal component analysis for reservoir uncertainty reduction. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2016, 38, 1345-1355.	1.6	11

#	Article	IF	Citations
55	Probabilistic history matching using discrete Latin Hypercube sampling and nonparametric density estimation. Journal of Petroleum Science and Engineering, 2016, 147, 98-115.	4.2	67
56	The impact of time-dependent matrix-fracture fluid transfer in upscaling match procedures. Journal of Petroleum Science and Engineering, 2016, 146, 752-763.	4.2	9
57	Simultaneous History-Matching Approach by Use of Reservoir-Characterization and Reservoir-Simulation Studies. SPE Reservoir Evaluation and Engineering, 2016, 19, 694-712.	1.8	48
58	Multi-Scale Integration of 4D Seismic and Simulation Data to Improve Saturation Estimations. , 2016, , .		6
59	Impacts of polymer properties on field indicators of reservoir development projects. Journal of Petroleum Science and Engineering, 2016, 147, 346-355.	4.2	18
60	Production strategy optimization based on iterative discrete Latin hypercube. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2016, 38, 2473-2480.	1.6	22
61	Field Development Process Revealing Uncertainty Assessment Pitfalls. , 2016, , .		8
62	A new optimization framework using genetic algorithm and artificial neural network to reduce uncertainties in petroleum reservoir models. Engineering Optimization, 2015, 47, 72-86.	2.6	13
63	A new framework for geostatistics-based history matching using genetic algorithm with adaptive bounds. Journal of Petroleum Science and Engineering, 2015, 127, 387-397.	4.2	12
64	A methodology to evaluate and reduce reservoir uncertainties using multivariate distribution. Journal of Petroleum Science and Engineering, 2015, 128, 1-14.	4.2	22
65	Integrated Model Based Decision Analysis in Twelve Steps Applied to Petroleum Fields Development and Management. , 2015, , .		41
66	Integration of multiscale carbonate reservoir heterogeneities in reservoir simulation. Journal of Petroleum Science and Engineering, 2015, 131, 34-50.	4.2	20
67	A methodology to calibrate water saturation estimated from 4D seismic data. Journal of Geophysics and Engineering, 2014, 11, 055001.	1.4	5
68	A method for reduction of uncertainties in reservoir model using observed data: application to a complex case. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2014, 36, 901-918.	1.6	5
69	Upscaling approach for meso-scale heterogeneities in naturally fractured carbonate reservoirs. Journal of Petroleum Science and Engineering, 2014, 115, 90-101.	4.2	10
70	Application of artificial neural networks in a history matching process. Journal of Petroleum Science and Engineering, 2014, 123, 30-45.	4.2	54
71	Bayesian history matching using artificial neural network and Markov Chain Monte Carlo. Journal of Petroleum Science and Engineering, 2014, 123, 62-71.	4.2	51
72	A New Approach to Perform a Probabilistic and Multi-Objective History Matching. , 2014, , .		18

#	Article	IF	Citations
73	A new procedure to reduce uncertainties in reservoir models using statistical inference and observed data. Journal of Petroleum Science and Engineering, 2013, 110, 7-21.	4.2	13
74	A methodology to constrain pressure and saturation estimation from 4D seismic using multiple simulation models and observed data. Journal of Petroleum Science and Engineering, 2013, 105, 51-61.	4.2	8
75	Local History Matching Using 4D Seismic Data and Multiple Models Combination. , 2013, , .		3
76	Pressure and saturation estimation from P and S impedances: a theoretical study. Journal of Geophysics and Engineering, 2012, 9, 447-460.	1.4	15
77	Influence of the objective function in the history matching process. Journal of Petroleum Science and Engineering, 2011, 78, 32-41.	4.2	10
78	A new methodology to reduce uncertainties in reservoir simulation models using observed data and sampling techniques. Journal of Petroleum Science and Engineering, 2010, 72, 110-119.	4.2	31
79	Production Optimization Under Uncertainty. , 2009, , .		4
80	A framework to integrate history matching and geostatistical modeling using genetic algorithm and direct search methods. Journal of Petroleum Science and Engineering, 2008, 63, 34-42.	4.2	33
81	Study of Sweep Efficiency of Water Injection under Fracturing-Conditions Process. , 2007, , .		3
82	Decision-Making Process in Development of Offshore Petroleum Fields. , 2007, , .		13
83	A Methodology To Quantify the Impact of Uncertainties in the History Matching Process and in the Production Forecast. , 2005, , .		5
84	A new upscaling technique based on Dykstra–Parsons coefficient: evaluation with streamline reservoir simulation. Journal of Petroleum Science and Engineering, 2003, 40, 27-36.	4.2	33