Dongxiao Zhang

List of Publications by Year in Descending Order

270 papers	8,856 citations	49 h-index	82 g-index
300 ext. papers	10,221 ext. citations	4.7 avg, IF	6.84 L-index

#	Paper	IF	Citations
270	Predicting permeability from 3D rock images based on CNN with physical information. *Journal of Hydrology*, **2022**, 606, 127473	6	1
269	Combining transfer learning and constrained long short-term memory for power generation forecasting of newly-constructed photovoltaic plants. *Renewable Energy*, **2022**, 185, 1062-1077	8.1	2
268	Constructing sub-scale surrogate model for proppant settling in inclined fractures from simulation data with multi-fidelity neural network. *Journal of Petroleum Science and Engineering*, **2022**, 210, 110051	4.4	
267	Carbon Capture, Utilization & Storage: A General Overview **2022**, 61-107		0
266	Experimental study on multiphase flow in 3D-printed heterogeneous, filled vugs. *Journal of Petroleum Science and Engineering*, **2022**, 208, 109497	4.4	
265	Efficient well placement optimization based on theory-guided convolutional neural network. *Journal of Petroleum Science and Engineering*, **2022**, 208, 109545	4.4	2
264	Elastic Characterization of Shale at Microscale: A Comparison between Modulus Mapping, PeakForce Quantitative Nanomechanical Mapping, and Contact Resonance Method. *SPE Journal*, **2022**, 1-22	3.1	
263	A statistical thermodynamics-based equation of state and phase equilibrium calculation for confined hydrocarbons in shale reservoirs. *Journal of Natural Gas Science and Engineering*, **2022**, 102, 104579	4.6	0
262	An adaptive deep learning framework for day-ahead forecasting of photovoltaic power generation. *Sustainable Energy Technologies and Assessments*, **2022**, 52, 102326	4.7	1
261	Deep-learning of parametric partial differential equations from sparse and noisy data. *Physics of Fluids*, **2021**, 33, 037132	4.4	7
260	Development of 3-D Curved Fracture Swarms in Shale Rock Driven by Rapid Fluid Pressure Buildup: Insights From Numerical Modeling. *Geophysical Research Letters*, **2021**, 48, e2021GL092638	4.9	2
259	Deep learning based forecasting of photovoltaic power generation by incorporating domain knowledge. *Energy*, **2021**, 225, 120240	7.9	25
258	DL-PDE: Deep-Learning Based Data-Driven Discovery of Partial Differential Equations from Discrete and Noisy Data. *Communications in Computational Physics*, **2021**, 29, 698-728	2.4	3
257	Weak form theory-guided neural network (TgNN-wf) for deep learning of subsurface single- and two-phase flow. *Journal of Computational Physics*, **2021**, 436, 110318	4.1	7
256	Direct numerical simulation of proppant transport in hydraulic fractures with the immersed boundary method and multi-sphere modeling. *Applied Mathematical Modelling*, **2021**, 91, 590-613	4.5	5
255	Theory-guided deep-learning for electrical load forecasting (TgDLF) via ensemble long short-term memory. *Advances in Applied Energy*, **2021**, 1, 100004		15
254	Efficient uncertainty quantification for dynamic subsurface flow with surrogate by Theory-guided Neural Network. *Computer Methods in Applied Mechanics and Engineering*, **2021**, 373, 113492	5.7	17

253	Deep-Learning-Based Inverse Modeling Approaches: A Subsurface Flow Example. *Journal of Geophysical Research: Solid Earth*, **2021**, 126, e2020JB020549	3.6	11
252	Simulating particle settling in inclined narrow channels with the unresolved CFD-DEM method. *Physical Review Fluids*, **2021**, 6,	2.8	5
251	Estimation of Macrodispersivity in Bounded Formations by Circulant Embedding and Analysis of Variance. *Water Resources Research*, **2021**, 57, e2020WR029385	5.4	1
250	Solution of diffusivity equations with local sources/sinks and surrogate modeling using weak form Theory-guided Neural Network. *Advances in Water Resources*, **2021**, 153, 103941	4.7	3
249	Theory-guided full convolutional neural network: An efficient surrogate model for inverse problems in subsurface contaminant transport. *Advances in Water Resources*, **2021**, 157, 104051	4.7	2
248	Development and evaluation of a novel fracture diverting agent for high temperature reservoirs. *Journal of Natural Gas Science and Engineering*, **2021**, 93, 104074	4.6	3
247	Experimental investigation of water sensitivity effects on microscale mechanical behavior of shale. *International Journal of Rock Mechanics and Minings Sciences*, **2021**, 145, 104837	6	3
246	Lithology identification from well-log curves via neural networks with additional geologic constraint. *Geophysics*, **2021**, 86, IM85-IM100	3.1	7
245	Deep learning of dynamic subsurface flow via theory-guided generative adversarial network. *Journal of Hydrology*, **2021**, 601, 126626	6	3
244	Deep-learning based discovery of partial differential equations in integral form from sparse and noisy data. *Journal of Computational Physics*, **2021**, 445, 110592	4.1	1
243	Theory-guided hard constraint projection (HCP): A knowledge-based data-driven scientific machine learning method. *Journal of Computational Physics*, **2021**, 445, 110624	4.1	5
242	Theory-guided Auto-Encoder for surrogate construction and inverse modeling. *Computer Methods in Applied Mechanics and Engineering*, **2021**, 385, 114037	5.7	3
241	Fluid and heat flow in enhanced geothermal systems considering fracture geometrical and topological complexities: An extended embedded discrete fracture model. *Renewable Energy*, **2021** , 179, 163-178	8.1	4
240	Deep Learning of Two-Phase Flow in Porous Media via Theory-Guided Neural Networks. *SPE Journal* , **2021**, 1-19	3.1	0
239	Physics-constrained indirect supervised learning. *Theoretical and Applied Mechanics Letters*, **2020**, 10, 155-160	1.8	2
238	Experimental study on multiphase flow in fracture-vug medium using 3D printing technology and visualization techniques. *Journal of Petroleum Science and Engineering*, **2020**, 193, 107394	4.4	11
237	Contrasting phase field method and pairwise force smoothed particle hydrodynamics method in simulating multiphase flow through fracture-vug medium. *Journal of Natural Gas Science and Engineering*, **2020**, 81, 103424	4.6	2
236	Dynamic microscale crack propagation in shale. *Engineering Fracture Mechanics*, **2020**, 228, 106906	4.2	10

235	A novel targeted plugging and fracture-adaptable gel used as a diverting agent in fracturing. *Energy Science and Engineering*, **2020**, 8, 116-133	3.4	5
234	Three-Dimensional Hydrochemical Model for Dissolutional Growth of Fractures in Karst Aquifers. *Water Resources Research*, **2020**, 56, e2019WR025631	5.4	10
233	Physics-Constrained Deep Learning of Geomechanical Logs. *IEEE Transactions on Geoscience and Remote Sensing*, **2020**, 58, 5932-5943	8.1	17
232	Deep learning of subsurface flow via theory-guided neural network. *Journal of Hydrology*, **2020**, 584, 124700	6	62
231	Efficient analytical upscaling method for elliptic equations in three-dimensional heterogeneous anisotropic media. *Journal of Hydrology*, **2020**, 583, 124560	6	3
230	DLGA-PDE: Discovery of PDEs with incomplete candidate library via combination of deep learning and genetic algorithm. *Journal of Computational Physics*, **2020**, 418, 109584	4.1	15
229	Nanopore structure and nanomechanical properties of organic-rich terrestrial shale: An insight into technical issues for hydrocarbon production. *Nano Energy*, **2020**, 69, 104426	17.1	12
228	A radial differential pressure decay method with micro-plug samples for determining the apparent permeability of shale matrix. *Journal of Natural Gas Science and Engineering*, **2020**, 74, 103126	4.6	3
227	Comprehensive study and comparison of equilibrium and kinetic models in simulation of hydrate reaction in porous media. *Journal of Computational Physics*, **2020**, 404, 109094	4.1	6
226	A mechanistic model for permeability in deformable gas hydrate-bearing sediments. *Journal of Natural Gas Science and Engineering*, **2020**, 83, 103554	4.6	3
225	Well Log Generation via Ensemble Long Short-Term Memory (EnLSTM) Network. *Geophysical Research Letters*, **2020**, 47, e2020GL087685	4.9	10
224	Hydromechanical Modeling of Nonplanar Three-Dimensional Fracture Propagation Using an Iteratively Coupled Approach. *Journal of Geophysical Research: Solid Earth*, **2020**, 125, e2020JB020115	3.6	6
223	Influence of Geochemical Features on the Mechanical Properties of Organic Matter in Shale. *Journal of Geophysical Research: Solid Earth*, **2020**, 125, e2020JB019809	3.6	4
222	Efficient uncertainty quantification for permeability of three-dimensional porous media through image analysis and pore-scale simulations. *Physical Review E*, **2020**, 102, 023308	2.4	3
221	Laboratory characterisation of fracture compressibility for coal and shale gas reservoir rocks: A review. *International Journal of Coal Geology*, **2019**, 204, 1-17	5.5	64
220	A new analytical model for flow in acidized fractured-vuggy porous media. *Scientific Reports*, **2019**, 9, 8293	4.9	5
219	A review of phase behavior simulation of hydrocarbons in confined space: Implications for shale oil and shale gas. *Journal of Natural Gas Science and Engineering*, **2019**, 68, 102901	4.6	49
218	Identification of physical processes via combined data-driven and data-assimilation methods. *Journal of Computational Physics*, **2019**, 393, 337-350	4.1	16

217	An Integrated Approach for History Matching of Multiscale-Fracture Reservoirs. *SPE Journal*, **2019**, 24, 1508-1525	3.1	11
216	A modified BET equation to investigate supercritical methane adsorption mechanisms in shale. *Marine and Petroleum Geology*, **2019**, 105, 284-292	4.7	27
215	Analytical solution for upscaling hydraulic conductivity in anisotropic heterogeneous formations. *Advances in Water Resources*, **2019**, 128, 97-116	4.7	9
214	Coupled thermo-hydro-mechanical analysis of stimulation and production for fractured geothermal reservoirs. *Applied Energy*, **2019**, 247, 40-59	10.7	47
213	Efficient History Matching Using the Markov-Chain Monte Carlo Method by Means of the Transformed Adaptive Stochastic Collocation Method. *SPE Journal*, **2019**, 24, 1468-1489	3.1	10
212	Numerical simulation of proppant transport in propagating fractures with the multi-phase particle-in-cell method. *Fuel*, **2019**, 245, 316-335	7.1	22
211	Machine learning subsurface flow equations from data. *Computational Geosciences*, **2019**, 23, 895-910	2.7	15
210	How Effective Is Carbon Dioxide as an Alternative Fracturing Fluid?. *SPE Journal*, **2019**, 24, 857-876	3.1	26
209	Multiscale Approach for Mechanical Characterization of Organic-Rich Shale and Its Application. *International Journal of Geomechanics*, **2019**, 19, 04018180	3.1	24
208	Ensemble Neural Networks (ENN): A gradient-free stochastic method. *Neural Networks*, **2019**, 110, 170-185	7.5	20
207	Tuning Fractures With Dynamic Data. *Water Resources Research*, **2018**, 54, 680-707	5.4	11
206	A Fully Coupled Model for Hydraulic-Fracture Growth During Multiwell-Fracturing Treatments: Enhancing Fracture Complexity. *SPE Production and Operations*, **2018**, 33, 235-250	0.6	9
205	Long-term viability of carbon sequestration in deep-sea sediments. *Science Advances*, **2018**, 4, eaao6588	14.3	31
204	The effect of heterogeneity on hydraulic fracturing in shale. *Journal of Petroleum Science and Engineering*, **2018**, 162, 292-308	4.4	19
203	History Matching of Stimulated Reservoir Volume of Shale-Gas Reservoirs Using an Iterative Ensemble Smoother. *SPE Journal*, **2018**, 23, 346-366	3.1	10
202	Study of adsorption behavior in shale reservoirs under high pressure. *Journal of Natural Gas Science and Engineering*, **2018**, 49, 275-285	4.6	22
201	Synthetic well logs generation via Recurrent Neural Networks. *Petroleum Exploration and Development*, **2018**, 45, 629-639	4.5	71
200	Generalized prism grid: a pillar-based unstructured grid for simulation of reservoirs with complicated geological geometries. *Computational Geosciences*, **2018**, 22, 1561-1581	2.7	3

199	A Fully Coupled Model for Hydraulic Fracture Growth During Multi-Well Fracturing Treatments: Enhancing Fracture Complexity **2017**,		3
198	An adsorbed gas estimation model for shale gas reservoirs via statistical learning. *Applied Energy*, **2017**, 197, 327-341	10.7	40
197	Reservoir characterization and production optimization using the ensemble-based optimization method and multi-layer capacitance-resistive models. *Journal of Petroleum Science and Engineering*, **2017**, 156, 633-653	4.4	10
196	Nested sparse grid collocation method with delay and transformation for subsurface flow and transport problems. *Advances in Water Resources*, **2017**, 104, 158-173	4.7	6
195	A New Approach to the Modeling of Hydraulic-Fracturing Treatments in Naturally Fractured Reservoirs. *SPE Journal*, **2017**, 22, 1064-1081	3.1	32
194	Surrogate model based iterative ensemble smoother for subsurface flow data assimilation. *Advances in Water Resources*, **2017**, 100, 96-108	4.7	26
193	A two-stage adaptive stochastic collocation method on nested sparse grids for multiphase flow in randomly heterogeneous porous media. *Journal of Computational Physics*, **2017**, 330, 828-845	4.1	16
192	Where gas is produced from a shale formation: A simulation study. *Journal of Natural Gas Science and Engineering*, **2017**, 45, 860-870	4.6	3
191	Experimental investigation of the pore structure of triassic terrestrial shale in the Yanchang Formation, Ordos Basin, China. *Journal of Natural Gas Science and Engineering*, **2017**, 46, 436-450	4.6	13
190	Multiscale pore structure and its effect on gas transport in organic-rich shale. *Water Resources Research*, **2017**, 53, 5438-5450	5.4	58
189	Multiscale Approach to Mechanical Characterization of Shale **2017**,		1
188	A New Approach to the Modeling of Hydraulic Fracturing Treatments in Naturally Fractured Reservoirs **2016**,		3
187	A fully coupled thermo-hydro-mechanical, three-dimensional model for hydraulic stimulation treatments. *Journal of Natural Gas Science and Engineering*, **2016**, 34, 64-84	4.6	45
186	Assessing surface heat fluxes in atmospheric reanalyses with a decade of data from the NOAA Kuroshio Extension Observatory. *Journal of Geophysical Research: Oceans*, **2016**, 121, 6874-6890	3.3	8
185	Probabilistic collocation method for strongly nonlinear problems: 3. Transform by time. *Water Resources Research*, **2016**, 52, 2366-2375	5.4	15
184	Mooring observations of equatorial currents in the upper 1000 m of the western Pacific Ocean during 2014. *Journal of Geophysical Research: Oceans*, **2016**, 121, 3730-3740	3.3	21
183	Recovery mechanisms and key issues in shale gas development. *Chinese Science Bulletin*, **2016**, 61, 62-71	2.9	3
182	Impact of Adsorption on Gas Transport in Nanopores. *Scientific Reports*, **2016**, 6, 23629	4.9	43

181	Direct Oil Recovery from Saturated Carbon Nanotube Sponges. *ACS Applied Materials & Interfaces*, **2016**, 8, 12337-43	9.5	27
180	Numerical simulation of proppant transport in hydraulic fracture with the upscaling CFD-DEM method. *Journal of Natural Gas Science and Engineering*, **2016**, 33, 264-277	4.6	76
179	Semiannually alternating exchange of intermediate waters east of the Philippines. *Geophysical Research Letters*, **2016**, 43, 7059-7065	4.9	11
178	Data-worth analysis through probabilistic collocation-based Ensemble Kalman Filter. *Journal of Hydrology*, **2016**, 540, 488-503	6	26
177	Constrained probabilistic collocation method for uncertainty quantification of geophysical models. *Computational Geosciences*, **2015**, 19, 311-326	2.7	5
176	Benchmark problems for subsurface flow uncertainty quantification. *Journal of Hydrology*, **2015**, 531, 168-186	6	11
175	A multi-continuum multiple flow mechanism simulator for unconventional oil and gas recovery. *Journal of Natural Gas Science and Engineering*, **2015**, 26, 652-669	4.6	35
174	Quantitative dynamic analysis of gas desorption contribution to production in shale gas reservoirs. *Journal of Unconventional Oil and Gas Resources*, **2015**, 9, 18-30		30
173	Lattice Boltzmann Simulation of Particle Motion in Binary Immiscible Fluids. *Communications in Computational Physics*, **2015**, 18, 757-786	2.4	19
172	Assisted History Matching for Fractured Reservoirs by Use of Hough-Transform-Based Parameterization. *SPE Journal*, **2015**, 20, 942-961	3.1	17
171	Data Assimilation for Strongly Nonlinear Problems by Transformed Ensemble Kalman Filter. *SPE Journal*, **2015**, 20, 202-221	3.1	11
170	A Surrogate-based Adaptive Sampling Approach for History Matching and Uncertainty Quantification **2015**,		5
169	Efficient data-worth analysis for the selection of surveillance operation in a geologic CO2 sequestration system **2015**, 5, 513-529		2
168	Jointly updating the mean size and spatial distribution of facies in reservoir history matching. *Computational Geosciences*, **2015**, 19, 727-746	2.7	8
167	Environmental impacts of hydraulic fracturing in shale gas development in the United States. *Petroleum Exploration and Development*, **2015**, 42, 876-883	4.5	63
166	Water flooding performance prediction by multi-layer capacitance-resistive models combined with the ensemble Kalman filter. *Journal of Petroleum Science and Engineering*, **2015**, 127, 1-19	4.4	19
165	History matching of statistically anisotropic fields using the Karhunen-Loeve expansion-based global parameterization technique. *Computational Geosciences*, **2014**, 18, 265-282	2.7	12
164	An adaptive ANOVA-based PCKF for high-dimensional nonlinear inverse modeling. *Journal of Computational Physics*, **2014**, 258, 752-772	4.1	24

163	A multimodel data assimilation framework via the ensemble Kalman filter. *Water Resources Research*, **2014**, 50, 4197-4219	5.4	41
162	Multimodel Bayesian analysis of groundwater data worth. *Water Resources Research*, **2014**, 50, 8481-8496	5.4	32
161	Probabilistic collocation method for strongly nonlinear problems: 2. Transform by displacement. *Water Resources Research*, **2014**, 50, 8736-8759	5.4	17
160	Efficient and Accurate Global Sensitivity Analysis for Reservoir Simulations By Use of the Probabilistic Collocation Method. *SPE Journal*, **2014**, 19, 621-635	3.1	15
159	History Matching of Channelized Reservoirs With Vector-Based Level-Set Parameterization. *SPE Journal*, **2014**, 19, 514-529	3.1	19
158	Observed interannual variability of zonal currents in the equatorial Indian Ocean thermocline and their relation to Indian Ocean Dipole. *Geophysical Research Letters*, **2014**, 41, 7933-7941	4.9	17
157	Accelerating the iterative linear solver for reservoir simulation on multicore architectures **2014**,		1
156	A backward automatic differentiation framework for reservoir simulation. *Computational Geosciences*, **2014**, 18, 1009-1022	2.7	23
155	History matching of facies distribution with varying mean lengths or different principle correlation orientations. *Journal of Petroleum Science and Engineering*, **2014**, 124, 275-292	4.4	7
154	Mechanisms for Geological Carbon Sequestration. *Procedia IUTAM*, **2014**, 10, 319-327		60
153	Stochastic representation and dimension reduction for non-Gaussian random fields: review and reflection. *Stochastic Environmental Research and Risk Assessment*, **2013**, 27, 1621-1635	3.5	16
152	Atlantic Meridional Overturning Circulation (AMOC) in CMIP5 Models: RCP and Historical Simulations. *Journal of Climate*, **2013**, 26, 7187-7197	4.4	241
151	Assessing leakage detectability at geologic CO2 sequestration sites using the probabilistic collocation method. *Advances in Water Resources*, **2013**, 56, 49-60	4.7	62
150	Iodine in groundwater of the North China Plain: Spatial patterns and hydrogeochemical processes of enrichment. *Journal of Geochemical Exploration*, **2013**, 135, 40-53	3.8	36
149	A partitioned update scheme for state-parameter estimation of distributed hydrologic models based on the ensemble Kalman filter. *Water Resources Research*, **2013**, 49, 7350-7365	5.4	30
148	History matching of fracture distributions by ensemble Kalman filter combined with vector based level set parameterization. *Journal of Petroleum Science and Engineering*, **2013**, 108, 288-303	4.4	25
147	Comprehensive review of caprock-sealing mechanisms for geologic carbon sequestration. *Environmental Science & Technology*, **2013**, 47, 9-22	10.3	154
146	Probabilistic collocation method for strongly nonlinear problems: 1. Transform by location. *Water Resources Research*, **2013**, 49, 7911-7928	5.4	34

145	A Fully Coupled Multiphase Multicomponent Flow and Geomechanics Model for Enhanced Coalbed-Methane Recovery and CO2 Storage. *SPE Journal*, **2013**, 18, 448-467	3.1	17
144	Automatic Estimation of Fracture Properties in Multi-Stage Fractured Shale Gas Horizontal Wells for Reservoir Modeling **2012**,		4
143	A sparse grid based Bayesian method for contaminant source identification. *Advances in Water Resources*, **2012**, 37, 1-9	4.7	68
142	Tracking colloid transport in real pore structures: Comparisons with correlation equations and experimental observations. *Water Resources Research*, **2012**, 48,	5.4	9
141	Ensemble based co-optimization of carbon dioxide sequestration and enhanced oil recovery. *International Journal of Greenhouse Gas Control*, **2012**, 8, 22-33	4.2	28
140	Multiscale-finite-element-based ensemble Kalman filter for large-scale groundwater flow. *Journal of Hydrology*, **2012**, 468-469, 22-34	6	10
139	Physical Response of the Tropical–Subtropical North Atlantic Ocean to Decadal–Multidecadal Forcing by African Dust. *Journal of Climate*, **2012**, 25, 5817-5829	4.4	15
138	Multidecadal variability of the North Brazil Current and its connection to the Atlantic meridional overturning circulation. *Journal of Geophysical Research*, **2011**, 116,		36
137	Optimization of the Net Present Value of Carbon Dioxide Sequestration and Enhanced Oil Recovery **2011**,		18
136	A Comparative Study of the Probabilistic-Collocation and Experimental-Design Methods for Petroleum-Reservoir Uncertainty Quantification. *SPE Journal*, **2011**, 16, 429-439	3.1	43
135	Probabilistic Collocation Based Kalman Filter for Assisted History Matching **2011**,		1
134	A Probabilistic Collocation-Based Kalman Filter for History Matching. *SPE Journal*, **2011**, 16, 294-306	3.1	24
133	Effect of spatial heterogeneity on plume distribution and dilution during CO2 sequestration. *International Journal of Greenhouse Gas Control*, **2011**, 5, 281-293	4.2	14
132	New method for reservoir characterization and optimization using CRM–EnOpt approach. *Journal of Petroleum Science and Engineering*, **2011**, 77, 155-171	4.4	26
131	Lattice Boltzmann method on quadtree grids. *Physical Review E*, **2011**, 83, 026707	2.4	10
130	History Matching for Non-Gaussian Random Fields Using the Probabilistic Collocation Based Kalman Filter **2011**,		2
129	Influence of African dust on ocean–atmosphere variability in the tropical Atlantic. *Nature Geoscience*, **2011**, 4, 762-765	18.3	83
128	The NCEP GODAS Ocean Analysis of the Tropical Pacific Mixed Layer Heat Budget on Seasonal to Interannual Time Scales. *Journal of Climate*, **2010**, 23, 4901-4925	4.4	74

127	COUPLED FLUID FLOW AND GEOMECHANICS IN COALBED METHANE RECOVERY STUDY. *Modern Physics Letters B*, **2010**, 24, 1291-1294	1.6	2
126	A multi-scale investigation of interfacial transport, pore fluid flow, and fine particle deposition in a sediment bed. *Water Resources Research*, **2010**, 46,	5.4	29
125	A multiscale probabilistic collocation method for subsurface flow in heterogeneous media. *Water Resources Research*, **2010**, 46,	5.4	10
124	Pore-scale simulation of density-driven convection in fractured porous media during geological CO2 sequestration. *Water Resources Research*, **2010**, 46,	5.4	26
123	Role of low flow and backward flow zones on colloid transport in pore structures derived from real porous media. *Environmental Science & Technology*, **2010**, 44, 4936-42	10.3	27
122	Tracking colloid transport in porous media using discrete flow fields and sensitivity of simulated colloid deposition to space discretization. *Environmental Science & Technology*, **2010**, 44, 1274-80	10.3	14
121	Data Assimilation of Coupled Fluid Flow and Geomechanics Using the Ensemble Kalman Filter. *SPE Journal*, **2010**, 15, 382-394	3.1	18
120	Optimization of Carbon Dioxide Sequestration and Enhanced Oil Recovery in Oil Reservoir **2010**,		11
119	Ensemble Based Characterization and History Matching of Naturally Fractured Tight/Shale Gas Reservoirs **2010**,		10
118	Coupled fluid-flow and geomechanics for triple-porosity/dual-permeability modeling of coalbed methane recovery. *International Journal of Rock Mechanics and Minings Sciences*, **2010**, 47, 1242-1253	6	95
117	Data assimilation for distributed hydrological catchment modeling via ensemble Kalman filter. *Advances in Water Resources*, **2010**, 33, 678-690	4.7	132
116	A comparative study of numerical approaches to risk assessment of contaminant transport. *Stochastic Environmental Research and Risk Assessment*, **2010**, 24, 971-984	3.5	27
115	A stochastic collocation based Kalman filter for data assimilation. *Computational Geosciences*, **2010**, 14, 721-744	2.7	34
114	History matching of facies distribution with the EnKF and level set parameterization. *Journal of Computational Physics*, **2010**, 229, 8011-8030	4.1	74
113	Lattice Boltzmann simulation of the rise and dissolution of two-dimensional immiscible droplets. *Physics of Fluids*, **2009**, 21, 103301	4.4	14
112	Probabilistic collocation method for unconfined flow in heterogeneous media. *Journal of Hydrology* , **2009**, 365, 4-10	6	43
111	A stochastic approach to nonlinear unconfined flow subject to multiple random fields. *Stochastic Environmental Research and Risk Assessment*, **2009**, 23, 823-835	3.5	6
110	Observed freshening and warming of the western Pacific Warm Pool. *Climate Dynamics*, **2009**, 33, 565-589	4.2	177

109	Evaluating the uncertainty of Darcy velocity with sparse grid collocation method. *Science in China Series D: Earth Sciences*, **2009**, 52, 3270-3278		2
108	Multi-crack interaction in limestone subject to stress and flow of chemical solutions. *International Journal of Rock Mechanics and Minings Sciences*, **2009**, 46, 159-171	6	78
107	Data assimilation for nonlinear problems by ensemble Kalman filter with reparameterization. *Journal of Petroleum Science and Engineering*, **2009**, 66, 1-14	4.4	54
106	Lattice Boltzmann simulation of snow crystal growth in clouds. *Journal of Geophysical Research*, **2009**, 114,		14
105	Stochastic analysis of unsaturated flow with probabilistic collocation method. *Water Resources Research*, **2009**, 45,	5.4	53
104	Onset of convection over a transient base-state in anisotropic and layered porous media. *Journal of Fluid Mechanics*, **2009**, 641, 227-244	3.7	61
103	Efficient Ensemble-Based Closed-Loop Production Optimization. *SPE Journal*, **2009**, 14, 634-645	3.1	205
102	Efficient and Accurate Quantification of Uncertainty for Multiphase Flow With the Probabilistic Collocation Method. *SPE Journal*, **2009**, 14, 665-679	3.1	40
101	Stochastic Collocation Methods for Efficient and Accurate Quantification of Uncertainty in Multiphase Reservoir Simulations **2009**,		2
100	Non-modal growth of perturbations in density-driven convection in porous media. *Journal of Fluid Mechanics*, **2008**, 609, 285-303	3.7	95
99	Efficient Ensemble-Based Closed-Loop Production Optimization **2008**,		44
98	Modelling study on the impact of deep building foundations on the groundwater system. *Hydrological Processes*, **2008**, 22, 1857-1865	3.3	18
97	Stochastic collocation and mixed finite elements for flow in porous media. *Computer Methods in Applied Mechanics and Engineering*, **2008**, 197, 3547-3559	5.7	39
96	Investigation of flow and transport processes at the MADE site using ensemble Kalman filter. *Advances in Water Resources*, **2008**, 31, 975-986	4.7	83
95	Information Fusion using the Kalman Filter based on Karhunen-Lo□e Decomposition. *Studies in Computational Intelligence*, **2008**, 43-68	0.8	
94	Explicit analytical solutions for one-dimensional steady state flow in layered, heterogeneous unsaturated soils under random boundary conditions. *Water Resources Research*, **2007**, 43,	5.4	5
93	Stochastic uncertainty analysis for solute transport in randomly heterogeneous media using a Karhunen-Lo□e-based moment equation approach. *Water Resources Research*, **2007**, 43,	5.4	15
92	An improved lattice Boltzmann model for multicomponent reactive transport in porous media at the pore scale. *Water Resources Research*, **2007**, 43,	5.4	136

91	Probabilistic collocation method for flow in porous media: Comparisons with other stochastic methods. *Water Resources Research*, **2007**, 43,	5.4	159
90	Reply to comment of Nield. *Advances in Water Resources*, **2007**, 30, 698-699	4.7	2
89	Recent Changes in the Pacific Subtropical Cells Inferred from an Eddy-Resolving Ocean Circulation Model*. *Journal of Physical Oceanography*, **2007**, 37, 1340-1356	2.4	19
88	Dynamic Reservoir Data Assimilation With an Efficient, Dimension-Reduced Kalman Filter. *SPE Journal*, **2007**, 12, 108-117	3.1	36
87	Stochastic Simulations for Flow in Nonstationary Randomly Heterogeneous Porous Media Using a KL-Based Moment-Equation Approach. *Multiscale Modeling and Simulation*, **2007**, 6, 228-245	1.8	33
86	Convective stability analysis of the long-term storage of carbon dioxide in deep saline aquifers. *Advances in Water Resources*, **2006**, 29, 397-407	4.7	200
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