

Roseanna M Neupauer

List of Publications by Year in descending order

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Version: 2024-02-01

82
papers

1,257
citations

394286

19
h-index

377752

34
g-index

83
all docs

83
docs citations

83
times ranked

793
citing authors

#	ARTICLE	IF	CITATIONS
1	Adjoint method for obtaining backward-in-time location and travel time probabilities of a conservative groundwater contaminant. <i>Water Resources Research</i> , 1999, 35, 3389-3398.	1.7	190
2	Adjoint-derived location and travel time probabilities for a multidimensional groundwater system. <i>Water Resources Research</i> , 2001, 37, 1657-1668.	1.7	132
3	Comparison of inverse methods for reconstructing the release history of a groundwater contamination source. <i>Water Resources Research</i> , 2000, 36, 2469-2475.	1.7	79
4	Backward probabilistic model of groundwater contamination in non-uniform and transient flow. <i>Advances in Water Resources</i> , 2002, 25, 733-746.	1.7	62
5	Plume spreading in groundwater by stretching and folding. <i>Water Resources Research</i> , 2012, 48, .	1.7	53
6	Backward fractional advection dispersion model for contaminant source prediction. <i>Water Resources Research</i> , 2016, 52, 2462-2473.	1.7	50
7	Backward probability model using multiple observations of contamination to identify groundwater contamination sources at the Massachusetts Military Reservation. <i>Water Resources Research</i> , 2005, 41, .	1.7	47
8	Engineered injection and extraction to enhance reaction for improved in situ remediation. <i>Water Resources Research</i> , 2013, 49, 3618-3625.	1.7	46
9	An iterative approach to multi-objective engineering design: Optimization of engineered injection and extraction for enhanced groundwater remediation. <i>Environmental Modelling and Software</i> , 2015, 69, 253-261.	1.9	44
10	Chaotic advection and reaction during engineered injection and extraction in heterogeneous porous media. <i>Water Resources Research</i> , 2014, 50, 1433-1447.	1.7	39
11	Numerical Implementation of a Backward Probabilistic Model of Ground Water Contamination. <i>Ground Water</i> , 2004, 42, 175-189.	0.7	35
12	A fully-anisotropic Morlet wavelet to identify dominant orientations in a porous medium. <i>Computers and Geosciences</i> , 2005, 31, 465-471.	2.0	34
13	Identifying sources of a conservative groundwater contaminant using backward probabilities conditioned on measured concentrations. <i>Water Resources Research</i> , 2006, 42, .	1.7	34
14	Backward location and travel time probabilities for a decaying contaminant in an aquifer. <i>Journal of Contaminant Hydrology</i> , 2003, 66, 39-58.	1.6	29
15	Simulating unsteady flow, anabranching, and hyporheic dynamics in a glacial meltwater stream using a coupled surface water routing and groundwater flow model. <i>Water Resources Research</i> , 2011, 47, .	1.7	28
16	Forward and backward location probabilities for sorbing solutes in groundwater. <i>Advances in Water Resources</i> , 2004, 27, 689-705.	1.7	25
17	Characterization of permeability anisotropy using wavelet analysis. <i>Water Resources Research</i> , 2006, 42, .	1.7	25
18	Effects of Streambed Conductance on Stream Depletion. <i>Water (Switzerland)</i> , 2015, 7, 271-287.	1.2	24

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19	Bounded fractional diffusion in geological media: Definition and agrangian approximation. <i>Water Resources Research</i> , 2016, 52, 8561-8577.	1.7	22
20	Backward Probabilistic Modeling to Identify Contaminant Sources in Water Distribution Systems. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2010, 136, 587-591.	1.3	18
21	Adjoint-Based Probabilistic Source Characterization in Water-Distribution Systems with Transient Flows and Imperfect Sensors. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2015, 141, .	1.3	15
22	Adjoint Sensitivity Analysis of Contaminant Concentrations in Water Distribution Systems. <i>Journal of Engineering Mechanics - ASCE</i> , 2011, 137, 31-39.	1.6	14
23	Adjoint modeling of stream depletion in groundwaterâ€‘surface water systems. <i>Water Resources Research</i> , 2013, 49, 4971-4984.	1.7	13
24	Contributions of Poreâ€‘Scale Mixing and Mechanical Dispersion to Reaction During Active Spreading by Radial Groundwater Flow. <i>Water Resources Research</i> , 2020, 56, e2019WR026276.	1.7	13
25	Classroom Activities to Illustrate Concepts of Darcyâ€™s Law and Hydraulic Conductivity. <i>Journal of Professional Issues in Engineering Education and Practice</i> , 2010, 136, 17-23.	0.9	12
26	Identify source location and release time for pollutants undergoing super-diffusion and decay: Parameter analysis and model evaluation. <i>Advances in Water Resources</i> , 2017, 107, 517-524.	1.7	12
27	Wavelet analysis of dominant scales of heterogeneous porous media. <i>Water Resources Research</i> , 2008, 44, .	1.7	11
28	Optimal design of active spreading systems to remediate sorbing groundwater contaminants in situ. <i>Journal of Contaminant Hydrology</i> , 2016, 190, 29-43.	1.6	11
29	Identification of Pollutant Source for Superâ€‘Diffusion in Aquifers and Rivers with Bounded Domains. <i>Water Resources Research</i> , 2018, 54, 7092-7108.	1.7	11
30	Wavelet Analysis and Filtering to Identify Dominant Orientations of Permeability Anisotropy. <i>Mathematical Geosciences</i> , 2009, 41, 643-659.	1.4	10
31	A MATLAB implementation of the minimum relative entropy method for linear inverse problems. <i>Computers and Geosciences</i> , 2001, 27, 757-762.	2.0	9
32	Capture zone delineation methodology based on the maximum concentration: Preventative groundwater well protection areas for heat exchange fluid mixtures. <i>Water Resources Research</i> , 2016, 52, 4043-4060.	1.7	9
33	Integrating Topics in an Introductory Hydrogeology Course through a Semester-long Hydraulic Containment Design Project. <i>Journal of Geoscience Education</i> , 2008, 56, 225-234.	0.8	8
34	Forward and backward temporal probability distributions of sorbing solutes in groundwater. <i>Water Resources Research</i> , 2009, 45, .	1.7	8
35	Adjoint Simulation of Stream Depletion Due to Aquifer Pumping. <i>Ground Water</i> , 2012, 50, 746-753.	0.7	7
36	Potential for realâ€‘time understanding of coupled hydrologic and biogeochemical processes in stream ecosystems: Future integration of telemetered data with process models for glacial meltwater streams. <i>Water Resources Research</i> , 2015, 51, 6725-6738.	1.7	7

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37	Conditioned backward probability modeling to identify sources of groundwater contaminants subject to sorption and decay. <i>Water Resources Research</i> , 2007, 43, .	1.7	6
38	Engineered Injection and Extraction for In Situ Remediation of Sorbing Solutes in Groundwater. <i>Journal of Environmental Engineering</i> , ASCE, 2015, 141, .	0.7	5
39	Frost Quakes: Crack Formation by Thermal Stress. <i>Journal of Geophysical Research F: Earth Surface</i> , 2020, 125, e2020JF005616.	1.0	5
40	Exaggerated Stream Depletion in Streams with Spatiotemporally Varying Streambed Conductance. <i>Journal of Hydrologic Engineering - ASCE</i> , 2021, 26, 04020066.	0.8	5
41	Methods for Laser-Induced Fluorescence Imaging of Solute Plumes at the Darcy Scale in Quasi-Two-Dimensional, Refractive Index-Matched Porous Media. <i>Transport in Porous Media</i> , 2021, 136, 879-898.	1.2	5
42	Adjoint Model for the Selection of Groundwater Well Locations to Minimize Stream Depletion. , 2010, , .		4
43	Reply to comment by D. R. Lester et al. on "Plume spreading in groundwater by stretching and folding". <i>Water Resources Research</i> , 2013, 49, 1192-1194.	1.7	4
44	Conditioned Backward Probability Modeling to Identify Contamination Sources in a Water Distribution System. , 2009, , .		3
45	Engineered Well Injection and Extraction to Enhance Mixing in Aquifers. , 2010, , .		3
46	Wavelet analysis of characteristic length scales and orientation of two-dimensional heterogeneous porous media. <i>Advances in Water Resources</i> , 2010, 33, 514-524.	1.7	3
47	Engineered Well Injection-Extraction Schemes to Enhance Reaction for Improved In Situ Remediation of Contaminated Groundwater. , 2012, , .		3
48	Wall Effect Mitigation Techniques for Experiments with Planar Walls. <i>Transport in Porous Media</i> , 2020, 132, 423-441.	1.2	3
49	Active Spreading: Hydraulics for Enhancing Groundwater Remediation. <i>Journal of Hydrologic Engineering - ASCE</i> , 2022, 27, .	0.8	3
50	Wavelet Analysis of Steady State Groundwater Flow in a Bounded Domain. , 2010, , .		2
51	Quantification of Stream Depletion Due to Aquifer Pumping Using Adjoint Methodology: A Case Study. , 2012, , .		2
52	Probabilistic Contaminant Source Identification in Water Distribution Systems with Incomplete Mixing at Pipe Junctions. , 2013, , .		2
53	Adjoint Modeling of Contaminant Fate and Transport in Riverbank Filtration Systems. , 2014, , .		2
54	Demonstration of Reversible Dispersion in a Darcy-Scale Push-Pull Laboratory Experiment. <i>Transport in Porous Media</i> , 0, , 1.	1.2	2

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55	Identification of Principal Directions of Anisotropy in Porous Media. , 2005, , 1.		1
56	Backward Probabilistic Modeling to Identify Contaminant Sources in a Water Distribution System. , 2008, , .		1
57	Groundwater Mixing Using Pulsed Dipole Injection/Extraction Wells. , 2009, , .		1
58	Adjoint-Based Probabilistic Characterization of Contaminant Sources in Water Distribution Systems under Transient Flow Conditions. , 2010, , .		1
59	Adjoint-Based Probabilistic Characterization of Contaminant Sources in Water Distribution Systems under Realistic Flow and Sampling Conditions. , 2011, , .		1
60	Contrasting Advective Spreading and Dispersive Mixing. , 2011, , .		1
61	Many-Objective Design of Engineered Injection and Extraction Sequences for In Situ Remediation of Contaminated Groundwater. , 2013, , .		1
62	Engineered Injection and Extraction for Remediation of Uranium-Contaminated Groundwater. , 2017, , .		1
63	Evaluating backward probability model under various hydrogeologic and hydrologic conditions. Journal of Contaminant Hydrology, 2021, 244, 103909.	1.6	1
64	Probabilistic Model for Identifying Groundwater Contamination Sources. , 2003, , 260.		0
65	Using Wavelet Analysis to Identify Dominant Scales of Subsurface Flow and Transport. , 2007, , 1.		0
66	Using Solute Age Distribution to Assess the Potential for Future Degradation of Groundwater Quality and to Prioritize Remediation Activities. , 2008, , .		0
67	Wavelet Analysis of Characteristic Length Scales of Permeability in Stationary and Non-Stationary Porous Media. , 2009, , .		0
68	Closure to "Classroom Activities to Illustrate Concepts of Darcy's Law and Hydraulic Conductivity" by Roseanna M. Neupauer and Norman D. Dennis. Journal of Professional Issues in Engineering Education and Practice, 2011, 137, 48-48.	0.9	0
69	Adjoint-Based Method for Contaminant Source Identification in Complex Distribution Systems Using Realistic Sensor Data. , 2012, , .		0
70	Enhanced In-Situ Remediation of Sorbing Groundwater Contaminants using Engineered Injection and Extraction. , 2013, , .		0
71	Source Identification in Water Distribution Systems Using the Adjoint Method with Non-Ideal Sensors and Non-Detect Measurements. , 2013, , .		0
72	Engineered Injection and Extraction for In Situ Remediation of Sorbing Contaminants in Aquifers. , 2014, , .		0

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73	Iterative Approach to Many-Objective Engineering Design: Balancing Conflicting Objectives for Engineered Injection and Extraction. , 2014, , .		0
74	Efficient Modeling Methods for Estimating Stream Depletion. , 2015, , .		0
75	Comprehending Dynamics of the Ecuadorian River Discharge Series Using Wavelet Analysis and Bandpass Filters. , 2016, , .		0
76	Naturally-Occurring Chaotic Advection in Groundwater and Surface-Water Systems. , 2017, , .		0
77	Adjoint Simulation of Heat Transport in Groundwater. , 2019, , .		0
78	Stream Depletion due to Cyclical Pumping. , 2021, , .		0
79	Adjoint Model to Quantify Stream Depletion Due to Pumping in Coupled Groundwater/Surface Water Systems. , 2011, , .		0
80	Effects of Varying Stream Channel Conductance on Siting New Pumping Wells in an Aquifer. , 2013, , .		0
81	Comparison of Effective Active Spreading Designs for In Situ Groundwater Remediation. , 2022, , .		0
82	Effects of Active and Passive Spreading on Mixing and Reaction during In Situ Groundwater Remediation. , 2022, , .		0