Randall Hunt

List of Publications by Year
in descending order

73 papers	3,054 citations	172457 29 h-index	206112 48 g-index
114 all docs	114 docs citations	114 times ranked	3051 citing authors

#	Article	IF	Citations
1	Are Models Too Simple? Arguments for Increased Parameterization. Ground Water, 2007, 45, 254-262.	1.3	147
2	Two statistics for evaluating parameter identifiability and error reduction. Journal of Hydrology, 2009, 366, 119-127.	5.4	125
3	Vulnerability of Drinking-Water Wells in La Crosse, Wisconsin, to Enteric-Virus Contamination from Surface Water Contributions. Applied and Environmental Microbiology, 2004, 70, 5937-5946.	3.1	118
4	Using groundwater temperature data to constrain parameter estimation in a groundwater flow model of a wetland system. Water Resources Research, 2002, 38, 28-1-28-14.	4.2	99
5	Comparison of total mercury and methylmercury cycling at five sites using the small watershed approach. Environmental Pollution, 2008, 154, 143-154.	7.5	96
6	Improving a Complex Finite-Difference Ground Water Flow Model Through the Use of an Analytic Element Screening Model. Ground Water, 1998, 36, 1011-1017.	1.3	88
7	Ground Water Modeling Applications Using the Analytic Element Method. Ground Water, 2006, 44, 5-15.	1.3	86
8	Source and Transport of Human Enteric Viruses in Deep Municipal Water Supply Wells. Environmental Science & Technology, 2013, 47, 4096-4103.	10.0	86
9	Characterizing hydrology and the importance of ground-water discharge in natural and constructed wetlands. Wetlands, 1999, 19, 458-472.	1.5	85
10	Effective modeling for Integrated Water Resource Management: A guide to contextual practices by phases and steps and future opportunities. Environmental Modelling and Software, 2019, 116, 40-56.	4.5	76
11	Estimating evapotranspiration in natural and constructed wetlands. Wetlands, 2001, 21, 614-628.	1.5	73
12	Investigating surface waterâ€“well interaction using stable isotope ratios of water. Journal of Hydrology, 2005, 302, 154-172.	5.4	72
13	Simulating Ground Water-Lake Interactions: Approaches and Insights. Ground Water, 2003, 41, 227-237.	1.3	68
14	On Constraining Pilot Point Calibration with Regularization in PEST. Ground Water, 2009, 47, 835-844.	1.3	65
15	Assessment of Sewer Source Contamination of Drinking Water Wells Using Tracers and Human Enteric Viruses. Environmental Science & Technology, 2010, 44, 7956-7963.	10.0	64
16	Flowpath Delineation and Ground Water Age, Allequash Basin, Wisconsin. Ground Water, 2003, 41, 895-902.	1.3	61
17	Assessing hydrogeochemical heterogeneity in natural and constructed wetlands. Biogeochemistry, 1997, 39, 271-293.	3.5	59
18	Using Stable Isotopes of Water and Strontium to Investigate the Hydrology of a Natural and a Constructed Wetland. Ground Water, 1998, 36, 434-443.	1.3	58

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19	Measuring groundwaterâ€“surface water interaction and its effect on wetland stream benthic productivity, Trout Lake watershed, northern Wisconsin, USA. Journal of Hydrology, 2006, 320, 370-384.	5.4	58
20	Importance of Unsaturated Zone Flow for Simulating Recharge in a Humid Climate. Ground Water, 2008, 46, 551-560.	1.3	58
21	Using a Cloud to Replenish Parched Groundwater Modeling Efforts. Ground Water, 2010, 48, 360-365.	1.3	56
22	Ice duration drives winter nitrate accumulation in north temperate lakes. Limnology and Oceanography Letters, 2017, 2, 177-186.	3.9	54
23	A framework for characterising and evaluating the effectiveness of environmental modelling. Environmental Modelling and Software, 2019, 118, 83-98.	4.5	54
24	Modeling Water Quality in Watersheds: From Here to the Next Generation. Water Resources Research, 2020, 56, e2020WR027721.	4.2	54
25	The importance of diverse data types to calibrate a watershed model of the Trout Lake Basin, Northern Wisconsin, USA. Journal of Hydrology, 2006, 321, 286-296.	5.4	47
26	Using High Hydraulic Conductivity Nodes to Simulate Seepage Lakes. Ground Water, 2002, 40, 117-122.	1.3	42
27	Preface: hydrogeoecology, the interdisciplinary study of groundwater dependent ecosystems. Hydrogeology Journal, 2009, 17, 1-3.	2.1	38
28	Delineating a Recharge Area for a Spring Using Numerical Modeling, Monte Carlo Techniques, and Geochemical Investigation. Ground Water, 2001, 39, 702-712.	1.3	35
29	Pathogen transport in groundwater systems: contrasts with traditional solute transport. Hydrogeology Journal, 2017, 25, 921-930.	2.1	34
30	Integrated Groundwater Management: An Overview of Concepts and Challenges. , 2016, , 3-20.		33
31	Improving a Regional Model Using Reduced Complexity and Parameter Estimation. Ground Water, 2002, 40, 132-143.	1.3	30
32	MODFLOWâ€NWT: Robust Handling of Dry Cells Using a Newton Formulation of MODFLOWâ€2005. Ground Water, 2012, 50, 659-663.	1.3	29
33	Estimating Recharge Rates with Analytic Element Models and Parameter Estimation. Ground Water, 2006, 44, 47-55.	1.3	28
34	Taking Account of â€œUnknown Unknownsâ€• Ground Water, 2010, 48, 477-477.	1.3	28
35	Ecohydrology-Why Hydrologists Should Care. Ground Water, 2003, 41, 289-289.	1.3	24
36	Variability of Isotope and Major Ion Chemistry in the Allequash Basin, Wisconsin. Ground Water, 2003, 41, 883-894.	1.3	21

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37	Revisiting â€œAn Exercise in Groundwater Model Calibration and Predictionâ€•After 30 Years: Insights and New Directions. Ground Water, 2020, 58, 168-182.	1.3	20
38	Scale Effects of Hydrostratigraphy and Recharge Zonation on Base Flow. Ground Water, 2006, 44, 362-370.	1.3	19
39	The importance of subsurface geology for water source and vegetation communities in Cherokee Marsh, Wisconsin. Wetlands, 2007, 27, 189-202.	1.5	19
40	Response to Comment on â€œTwo statistics for evaluating parameter identifiability and error reductionâ€• Journal of Hydrology, 2010, 380, 489-496.	5.4	19
41	Viruses as Groundwater Tracers: Using Ecohydrology to Characterize Short Travel Times in Aquifers. Ground Water, 2014, 52, 187-193.	1.3	19
42	Highâ€Throughput Computing Versus Highâ€Performance Computing for Groundwater Applications. Ground Water, 2015, 53, 180-184.	1.3	19
43	The Current State of Modeling. Ground Water, 2012, 50, 330-333.	1.3	18
44	Methods for Exploring Uncertainty in Groundwater Management Predictions. , 2016, , 711-737.		17
45	Stepwise Use of GFLOW and MODFLOW to Determine Relative Importance of Shallow and Deep Receptors. Ground Water, 2003, 41, 190-199.	1.3	12
46	Using Every Tool in the Toolbox. Ground Water, 2012, 50, 323-323.	1.3	12
47	A Hybrid Finiteâ€Difference and Analytic Element Groundwater Model. Ground Water, 2010, 48, 538-548.	1.3	11
48	Model Calibration. , 2015, , 375-441.		11
49	Relating groundwater to seasonal wetlands in southeastern Wisconsin, USA. Hydrogeology Journal, 2009, 17, 215-228.	2.1	10
50	Automated Time Series Measurement of Microbial Concentrations in Groundwater-Derived Water Supplies. Ground Water, 2019, 57, 329-336.	1.3	10
51	A Simple Method for Simulating Groundwater Interactions with Fens to Forecast Development Effects. Ground Water, 2020, 58, 524-534.	1.3	10
52	Riskâ€Based Wellhead Protection Decision Support: A Repeatable Workflow Approach. Ground Water, 2022, 60, 71-86.	1.3	10
53	Dynamics of CFCs in northern temperate lakes and adjacent groundwater. Water Resources Research, 2007, 43, .	4.2	9
54	Evaluating Lower Computational Burden Approaches for Calibration of Large Environmental Models. Ground Water, 2021, 59, 788-798.	1.3	9

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55	Foreword: Ground Water Flow Modeling with the Analytic Element Method. Ground Water, 2006, 44, 1-2.	1.3	8
56	Applied Uncertainty. Ground Water, 2017, 55, 771-772.	1.3	8
57	Interesting or Important? Resetting the Balance of Theory and Application. Ground Water, 2011, 49, 301-301.	1.3	6
58	Spatial Discretization and ParameterÂAssignment. , 2015, , 181-255.		5
59	Model Dimensionality and Setting Boundaries. , 2015, , 117-180.		5
60	NWTOPT â€“ A hyperparameter optimization approach for selection of environmental model solver settings. Environmental Modelling and Software, 2022, 147, 105250.	4.5	4
61	Modeling Purpose and Conceptual Model. , 2015, , 27-67.		3
62	Improving Wetland Simulations by Including Heat Transport in Groundwater Flow Modeling. , 2000, , 1.		2
63	Luna B. Leopold-Pioneer Setting the Stage for Modern Hydrology. Ground Water, 2012, 50, 966-970.	1.3	2
64	For Whom Do We Write? Suggestions for Getting Read in the 21st Century. Ground Water, 2014, 52, 163-164.	1.3	2
65	Basic Mathematics and the Computer Code. , 2015, , 69-114.		2
66	Ecohydrology and Its Relation to Integrated Groundwater Management. , 2016, , 297-312.		2
67	Interactions of Water Quality and Integrated Groundwater Management: Examples from the United States and Europe. , 2016, , 347-376.		2
68	More on Sources and Sinks. , 2015, , 257-301.		1
69	Forecasting and Uncertainty Analysis. , 2015, , 443-491.		1
70	Steady-State and Transient Simulations. , 2015, , 303-327.		1
71	Field Test of a Hybrid Finite-Difference and Analytic Element Regional Model. Ground Water, 2016, 54, 66-73.	1.3	1
72	The Modeling Report, Archive, andÂReview. , 2015, , 495-514.		0

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73	Beyond Basic Modeling Concepts. , 2015, , 515-533.		0