Holger Maier

List of Publications by Year
in descending order

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213	16,055	18482 62	18647 119
papers	citations	h-index	g-index

217	217	217	11922
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Neural networks for the prediction and forecasting of water resources variables: a review of modelling issues and applications. Environmental Modelling and Software, 2000, 15, 101-124.	4.5	1,876
2	Methods used for the development of neural networks for the prediction of water resource variables in river systems: Current status and future directions. Environmental Modelling and Software, 2010, 25, 891-909.	4.5	690
3	Selecting among five common modelling approaches for integrated environmental assessment and management. Environmental Modelling and Software, 2013, 47, 159-181.	4.5	578
4	Evolutionary algorithms and other metaheuristics in water resources: Current status, research challenges and future directions. Environmental Modelling and Software, 2014, 62, 271-299.	4.5	477
5	Input determination for neural network models in water resources applications. Part 1â€"background and methodology. Journal of Hydrology, 2005, 301, 75-92.	5.4	446
6	The Use of Artificial Neural Networks for the Prediction of Water Quality Parameters. Water Resources Research, 1996, 32, 1013-1022.	4.2	415
7	Ant Colony Optimization for Design of Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2003, 129, 200-209.	2.6	387
8	Future research challenges for incorporation of uncertainty in environmental and ecological decision-making. Ecological Modelling, 2008, 219, 383-399.	2.5	369
9	An uncertain future, deep uncertainty, scenarios, robustness and adaptation: How do they fit together?. Environmental Modelling and Software, 2016, 81, 154-164.	4.5	299
10	Data Division for Developing Neural Networks Applied to Geotechnical Engineering. Journal of Computing in Civil Engineering, 2004, 18, 105-114.	4.7	262
11	Optimal division of data for neural network models in water resources applications. Water Resources Research, 2002, 38, 2-1-2-11.	4.2	257
12	Predicting Settlement of Shallow Foundations using Neural Networks. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2002, 128, 785-793.	3.0	244
13	Non-linear variable selection for artificial neural networks using partial mutual information. Environmental Modelling and Software, 2008, 23, 1312-1326.	4.5	241
14	Protocol for developing ANN models and its application to the assessment of the quality of the ANN model development process in drinking water quality modelling. Environmental Modelling and Software, 2014, 54, 108-127.	4.5	229
15	The Future of Sensitivity Analysis: An essential discipline for systems modeling and policy support. Environmental Modelling and Software, 2021, 137, 104954.	4.5	209
16	The effect of internal parameters and geometry on the performance of back-propagation neural networks: an empirical study. Environmental Modelling and Software, 1998, 13, 193-209.	4.5	189
17	Data splitting for artificial neural networks using SOM-based stratified sampling. Neural Networks, 2010, 23, 283-294.	5.9	188
18	Input determination for neural network models in water resources applications. Part 2. Case study: forecasting salinity in a river. Journal of Hydrology, 2005, 301, 93-107.	5.4	181

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19	A hybrid approach to monthly streamflow forecasting: Integrating hydrological model outputs into a Bayesian artificial neural network. Journal of Hydrology, 2016, 540, 623-640.	5.4	178
20	Genetic Algorithms for Reliability-Based Optimization of Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2004, 130, 63-72.	2.6	177
21	Introductory overview: Optimization using evolutionary algorithms and other metaheuristics. Environmental Modelling and Software, 2019, 114, 195-213.	4.5	169
22	Review of Input Variable Selection Methods for Artificial Neural Networks. , 0, , .		168
23	Use of artificial neural networks for predicting optimal alum doses and treated water quality parameters. Environmental Modelling and Software, 2004, 19, 485-494.	4.5	163
24	An evaluation framework for input variable selection algorithms for environmental data-driven models. Environmental Modelling and Software, 2014, 62, 33-51.	4.5	163
25	Neural network based modelling of environmental variables: A systematic approach. Mathematical and Computer Modelling, 2001, 33, 669-682.	2.0	149
26	Application of partial mutual information variable selection to ANN forecasting of water quality in water distribution systems. Environmental Modelling and Software, 2008, 23, 1289-1299.	4.5	147
27	Use of artificial neural networks for modelling cyanobacteria Anabaena spp. in the River Murray, South Australia. Ecological Modelling, 1998, 105, 257-272.	2.5	143
28	Selection of input variables for data driven models: An average shifted histogram partial mutual information estimator approach. Journal of Hydrology, 2009, 367, 165-176.	5.4	143
29	Robustness Metrics: How Are They Calculated, When Should They Be Used and Why Do They Give Different Results?. Earth's Future, 2018, 6, 169-191.	6.3	142
30	Parametric Study for an Ant Algorithm Applied to Water Distribution System Optimization. IEEE Transactions on Evolutionary Computation, 2005, 9, 175-191.	10.0	138
31	Application of two ant colony optimisation algorithms to water distribution system optimisation. Mathematical and Computer Modelling, 2006, 44, 451-468.	2.0	137
32	Water Distribution System Optimization Using Metamodels. Journal of Water Resources Planning and Management - ASCE, 2005, 131, 172-180.	2.6	127
33	An Adaptive Convergence-Trajectory Controlled Ant Colony Optimization Algorithm With Application to Water Distribution System Design Problems. IEEE Transactions on Evolutionary Computation, 2017, 21, 773-791.	10.0	114
34	Improved genetic algorithm optimization of water distribution system design by incorporating domain knowledge. Environmental Modelling and Software, 2015, 69, 370-381.	4.5	113
35	Evaluation of outputs from automated baseflow separation methods against simulated baseflow from a physically based, surface water-groundwater flow model. Journal of Hydrology, 2012, 458-459, 28-39.	5.4	111
36	First-order reliability method for estimating reliability, vulnerability, and resilience. Water Resources Research, 2001, 37, 779-790.	4.2	109

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37	Accounting for Greenhouse Gas Emissions in Multiobjective Genetic Algorithm Optimization of Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2010, 136, 146-155.	2.6	105
38	Incorporating uncertainty in the PROMETHEE MCDA method. Journal of Multi-Criteria Decision Analysis, 2003, 12, 245-259.	1.9	100
39	Ant Colony Optimization Applied to Water Distribution System Design: Comparative Study of Five Algorithms. Journal of Water Resources Planning and Management - ASCE, 2007, 133, 87-92.	2.6	96
40	Hybrid discrete dynamically dimensioned search (HDâ€DDS) algorithm for water distribution system design optimization. Water Resources Research, 2009, 45, .	4.2	96
41	Battle of the Water Networks II. Journal of Water Resources Planning and Management - ASCE, 2014, 140, .	2.6	92
42	Understanding the behaviour and optimising the performance of back-propagation neural networks: an empirical study. Environmental Modelling and Software, 1998, 13, 179-191.	4.5	91
43	A distance-based uncertainty analysis approach to multi-criteria decision analysis for water resource decision making. Journal of Environmental Management, 2005, 77, 278-290.	7.8	90
44	Crowdsourcing Methods for Data Collection in Geophysics: State of the Art, Issues, and Future Directions. Reviews of Geophysics, 2018, 56, 698-740.	23.0	90
45	Bayesian training of artificial neural networks used for water resources modeling. Water Resources Research, 2005, 41, .	4.2	89
46	Adaptive, multiobjective optimal sequencing approach for urban water supply augmentation under deep uncertainty. Water Resources Research, 2015, 51, 1529-1551.	4.2	89
47	Recent Advances and Future Challenges for Artificial Neural Systems in Geotechnical Engineering Applications. Advances in Artificial Neural Systems, 2009, 2009, 1-9.	1.0	84
48	A bottomâ€up approach to identifying the maximum operational adaptive capacity of water resource systems to a changing climate. Water Resources Research, 2016, 52, 6751-6768.	4.2	83
49	An R package for modelling actual, potential and reference evapotranspiration. Environmental Modelling and Software, 2016, 78, 216-224.	4.5	83
50	Reliability-Based Approach to Multicriteria Decision Analysis for Water Resources. Journal of Water Resources Planning and Management - ASCE, 2004, 130, 429-438.	2.6	82
51	Review of literature on decision support systems for natural hazard risk reduction: Current status and future research directions. Environmental Modelling and Software, 2017, 96, 378-409.	4.5	81
52	Determining Inputs for Neural Network Models of Multivariate Time Series. Computer-Aided Civil and Infrastructure Engineering, 1997, 12, 353-368.	9.8	80
53	Distance-based and stochastic uncertainty analysis for multi-criteria decision analysis in Excel using Visual Basic for Applications. Environmental Modelling and Software, 2006, 21, 1695-1710.	4.5	79
54	Optimal Operation of Complex Water Distribution Systems Using Metamodels. Journal of Water Resources Planning and Management - ASCE, 2010, 136, 433-443.	2.6	79

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55	Forecasting chlorine residuals in a water distribution system using a general regression neural network. Mathematical and Computer Modelling, 2006, 44, 469-484.	2.0	78
56	Robust optimization of water infrastructure planning under deep uncertainty using metamodels. Environmental Modelling and Software, 2017, 93, 92-105.	4.5	78
57	Integrating modelling and smart sensors for environmental and human health. Environmental Modelling and Software, 2015, 74, 238-246.	4.5	77
58	A benchmarking approach for comparing data splitting methods for modeling water resources parameters using artificial neural networks. Water Resources Research, 2013, 49, 7598-7614.	4.2	76
59	Sensitivity of potential evapotranspiration to changes in climate variables for different Australian climatic zones. Hydrology and Earth System Sciences, 2017, 21, 2107-2126.	4.9	76
60	Comparison of the Searching Behavior of NSGA-II, SAMODE, and Borg MOEAs Applied to Water Distribution System Design Problems. Journal of Water Resources Planning and Management - ASCE, 2016, 142, .	2.6	74
61	On Lack of Robustness in Hydrological Model Development Due to Absence of Guidelines for Selecting Calibration and Evaluation Data: Demonstration for Dataâ€Driven Models. Water Resources Research, 2018, 54, 1013-1030.	4.2	71
62	Investigation into the relationship between chlorine decay and water distribution parameters using data driven methods. Mathematical and Computer Modelling, 2006, 44, 485-498.	2.0	70
63	Flow management strategies to control blooms of the cyanobacterium,Anabaena circinalis, in the River Murray at Morgan, South Australia. River Research and Applications, 2001, 17, 637-650.	0.8	66
64	Calibration and validation of neural networks to ensure physically plausible hydrological modeling. Journal of Hydrology, 2005, 314, 158-176.	5.4	65
65	Empirical comparison of various methods for training feed-Forward neural networks for salinity forecasting. Water Resources Research, 1999, 35, 2591-2596.	4.2	64
66	Single-Objective versus Multiobjective Optimization of Water Distribution Systems Accounting for Greenhouse Gas Emissions by Carbon Pricing. Journal of Water Resources Planning and Management - ASCE, 2010, 136, 555-565.	2.6	64
67	Multiobjective optimization of water distribution systems accounting for economic cost, hydraulic reliability, and greenhouse gas emissions. Water Resources Research, 2013, 49, 1211-1225.	4.2	61
68	Relative magnitudes of sources of uncertainty in assessing climate change impacts on water supply security for the southern Adelaide water supply system. Water Resources Research, 2013, 49, 1643-1667.	4.2	61
69	Integrated framework for assessing urban water supply security of systems with non-traditional sources under climate change. Environmental Modelling and Software, 2014, 60, 302-319.	4.5	59
70	Optimization of irrigation scheduling using ant colony algorithms and an advanced cropping system model. Environmental Modelling and Software, 2017, 97, 32-45.	4.5	58
71	Interpreting streamflow generation mechanisms from integrated surface-subsurface flow models of a riparian wetland and catchment. Water Resources Research, 2013, 49, 5501-5519.	4.2	56
72	Incorporation of Variable-Speed Pumping in Multiobjective Genetic Algorithm Optimization of the Design of Water Transmission Systems. Journal of Water Resources Planning and Management - ASCE, 2012, 138, 543-552.	2.6	54

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73	Improved PMI-based input variable selection approach for artificial neural network and other data driven environmental and water resource models. Environmental Modelling and Software, 2015, 65, 15-29.	4.5	54
74	A hydraulic mixing-cell method to quantify the groundwater component of streamflow within spatially distributed fully integrated surface waterâ€“groundwater flow models. Environmental Modelling and Software, 2011, 26, 886-898.	4.5	53
75	Data Mining to Uncover Heterogeneous Water Use Behaviors From Smart Meter Data. Water Resources Research, 2019, 55, 9315-9333.	4.2	53
76	Realâ€time deployment of artificial neural network forecasting models: Understanding the range of applicability. Water Resources Research, 2012, 48, .	4.2	52
77	Modelling cyanobacteria (blue-green algae) in the River Murray using artificial neural networks. Mathematics and Computers in Simulation, 1997, 43, 377-386.	4.4	51
78	Including adaptation and mitigation responses to climate change in a multiobjective evolutionary algorithm framework for urban water supply systems incorporating GHG emissions. Water Resources Research, 2014, 50, 6285-6304.	4.2	51
79	Best practices for conceptual modelling in environmental planning and management. Environmental Modelling and Software, 2016, 80, 113-121.	4.5	51
80	Optimal sequencing of water supply options at the regional scale incorporating alternative water supply sources and multiple objectives. Environmental Modelling and Software, 2014, 53, 137-153.	4.5	50
81	Selection of smoothing parameter estimators for general regression neural networks â€“ Applications to hydrological and water resources modelling. Environmental Modelling and Software, 2014, 59, 162-186.	4.5	49
82	Improved validation framework and R-package for artificial neural network models. Environmental Modelling and Software, 2017, 92, 82-106.	4.5	49
83	Multiobjective optimization of clusterâ€scale urban water systems investigating alternative water sources and level of decentralization. Water Resources Research, 2014, 50, 7915-7938.	4.2	48
84	Impact of evapotranspiration process representation on runoff projections from conceptual rainfallâ€runoff models. Water Resources Research, 2017, 53, 435-454.	4.2	48
85	Temperature stratification in the lower River Murray, Australia: implication for cyanobacterial bloom development. Marine and Freshwater Research, 1997, 48, 647.	1.3	47
86	Data-driven modelling approaches for socio-hydrology: opportunities and challenges within the Panta Rhei Science Plan. Hydrological Sciences Journal, 0, , 1-17.	2.6	47
87	Achieving Water Quality System Reliability Using Genetic Algorithms. Journal of Environmental Engineering, ASCE, 2000, 126, 954-962.	1.4	46
88	A genetic algorithm calibration method based on convergence due to genetic drift. Information Sciences, 2008, 178, 2857-2869.	6.9	44
89	Multi-objective optimisation framework for calibration of Cellular Automata land-use models. Environmental Modelling and Software, 2018, 100, 175-200.	4.5	44
90	Scenario driven optimal sequencing under deep uncertainty. Environmental Modelling and Software, 2015, 68, 181-195.	4.5	43

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91	Dynamic, multi-objective optimal design and operation of water-energy systems for small, off-grid islands. Applied Energy, 2019, 250, 605-616.	10.1	43
92	Settlement prediction of shallow foundations on granular soils using B-spline neurofuzzy models. Computers and Geotechnics, 2003, 30, 637-647.	4.7	42
93	Performance assessment and improvement of recursive digital baseflow filters for catchments with different physical characteristics and hydrological inputs. Environmental Modelling and Software, 2014, 54, 39-52.	4.5	42
94	Ant colony optimization for power plant maintenance scheduling optimizationâ€"a five-station hydropower system. Annals of Operations Research, 2008, 159, 433-450.	4.1	41
95	An inverse approach to perturb historical rainfall data for scenario-neutral climate impact studies. Journal of Hydrology, 2018, 556, 877-890.	5.4	39
96	Anthropocene flooding: Challenges for science and society. Hydrological Processes, 2020, 34, 1996-2000.	2.6	39
97	A framework for using ant colony optimization to schedule environmental flow management alternatives for rivers, wetlands, and floodplains. Water Resources Research, 2012, 48, .	4.2	37
98	A Comprehensive Framework to Evaluate Hydraulic and Water Quality Impacts of Pipe Breaks on Water Distribution Systems. Water Resources Research, 2018, 54, 8174-8195.	4.2	37
99	A multiobjective ant colony optimization approach for scheduling environmental flow management alternatives with application to the River Murray, Australia. Water Resources Research, 2013, 49, 6393-6411.	4.2	36
100	Many-objective portfolio optimization approach for stormwater management project selection encouraging decision maker buy-in. Environmental Modelling and Software, 2019, 111, 340-355.	4.5	36
101	Controlling rainwater storage as a system: An opportunity to reduce urban flood peaks for rare, long duration storms. Environmental Modelling and Software, 2019, 111, 34-41.	4.5	36
102	A generic framework for regression regionalization in ungauged catchments. Environmental Modelling and Software, 2012, 27-28, 1-14.	4.5	35
103	Including stakeholder input in formulating and solving real-world optimisation problems: Generic framework and case study. Environmental Modelling and Software, 2016, 79, 197-213.	4.5	35
104	Water quality modeling in sewer networks: Review and future research directions. Water Research, 2021, 202, 117419.	11.3	35
105	Improved understanding of the searching behavior of ant colony optimization algorithms applied to the water distribution design problem. Water Resources Research, 2012, 48, .	4.2	34
106	Sensitivity of Optimal Tradeoffs between Cost and Greenhouse Gas Emissions for Water Distribution Systems to Electricity Tariff and Generation. Journal of Water Resources Planning and Management - ASCE, 2012, 138, 182-186.	2.6	34
107	Management Option Rank Equivalence (MORE) â€" A new method of sensitivity analysis for decision-making. Environmental Modelling and Software, 2010, 25, 171-181.	4.5	33
108	An adaptive ant colony optimization framework for scheduling environmental flow management alternatives under varied environmental water availability conditions. Water Resources Research, 2014, 50, 7606-7625.	4.2	33

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109	Framework for developing hybrid process-driven, artificial neural network and regression models for salinity prediction in river systems. Hydrology and Earth System Sciences, 2018, 22, 2987-3006.	4.9	33
110	Bayesian model selection applied to artificial neural networks used for water resources modeling. Water Resources Research, 2008, 44, .	4.2	32
111	Power plant maintenance scheduling using ant colony optimization: an improved formulation. Engineering Optimization, 2008, 40, 309-329.	2.6	32
112	A systematic approach to determining metamodel scope for risk-based optimization and its application to water distribution system design. Environmental Modelling and Software, 2015, 69, 382-395.	4.5	32
113	Multiobjective Optimization of Distributed Stormwater Harvesting Systems. Journal of Water Resources Planning and Management - ASCE, 2017, 143, .	2.6	31
114	A computational software tool for the minimization of costs and greenhouse gas emissions associated with water distribution systems. Environmental Modelling and Software, 2015, 69, 452-467.	4.5	30
115	Using characteristics of the optimisation problem to determine the Genetic Algorithm population size when the number of evaluations is limited. Environmental Modelling and Software, 2015, 69, 226-239.	4.5	30
116	Better Understanding of the Capacity of Pressure Sensor Systems to Detect Pipe Burst within Water Distribution Networks. Journal of Water Resources Planning and Management - ASCE, 2018, 144, .	2.6	30
117	State updating and calibration period selection to improve dynamic monthly streamflow forecasts for an environmental flow management application. Hydrology and Earth System Sciences, 2018, 22, 871-887.	4.9	30
118	Data transformation for neural network models in water resources applications. Journal of Hydroinformatics, 2003, 5, 245-258.	2.4	29
119	Framework for assessing and improving the performance of recursive digital filters for baseflow estimation with application to the Lyne and Hollick filter. Environmental Modelling and Software, 2013, 41, 163-175.	4.5	29
120	What constitutes a good literature review and why does its quality matter?. Environmental Modelling and Software, 2013, 43, 3-4.	4.5	29
121	Framework for computationally efficient optimal crop and water allocation using ant colony optimization. Environmental Modelling and Software, 2016, 76, 37-53.	4.5	29
122	Use of a scenario-neutral approach to identify the key hydro-meteorological attributes that impact runoff from a natural catchment. Journal of Hydrology, 2017, 554, 317-330.	5.4	29
123	On the Robustness of Conceptual Rainfallâ€Runoff Models to Calibration and Evaluation Data Set Splits Selection: A Large Sample Investigation. Water Resources Research, 2020, 56, e2019WR026752.	4.2	29
124	Forecasting cyanobacterium Anabaena spp. in the River Murray, South Australia, using B-spline neurofuzzy models. Ecological Modelling, 2001, 146, 85-96.	2.5	28
125	Comparison of Genetic Algorithm Parameter Setting Methods for Chlorine Injection Optimization. Journal of Water Resources Planning and Management - ASCE, 2010, 136, 288-291.	2.6	28
126	Real-Time, Smart Rainwater Storage Systems: Potential Solution to Mitigate Urban Flooding. Water (Switzerland), 2019, 11, 2428.	2.7	28

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127	The response of freshwater plants to salinity pulses. Aquatic Botany, 2010, 93, 59-67.	1.6	27
128	A probabilistic method for assisting knowledge extraction from artificial neural networks used for hydrological prediction. Mathematical and Computer Modelling, 2006, 44, 499-512.	2.0	26
129	Relationship between problem characteristics and the optimal number of genetic algorithm generations. Engineering Optimization, 2011, 43, 349-376.	2.6	26
130	The changing nature of the waterâ€“energy nexus in urban water supply systems: a critical review of changes and responses. Journal of Water and Climate Change, 2020, 11, 1095-1122.	2.9	26
131	Advection, growth and nutrient status of phytoplankton populations in the lower River Murray, South Australia. River Research and Applications, 2000, 16, 327-344.	0.8	25
132	Risk-based approach for assessing the effectiveness of flow management in controlling cyanobacterial blooms in rivers. River Research and Applications, 2004, 20, 459-471.	1.7	25
133	Use of Domain Knowledge to Increase the Convergence Rate of Evolutionary Algorithms for Optimizing the Cost and Resilience of Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2016, 142, 04016027.	2.6	25
134	A modified Sobolâ€² sensitivity analysis method for decision-making in environmental problems. Environmental Modelling and Software, 2016, 75, 15-27.	4.5	25
135	Impact of Scenario Selection on Robustness. Water Resources Research, 2020, 56, e2019WR026515.	4.2	25
136	Application of Artificial Neural Networks to Forecasting of Surface Water Quality Variables: Issues, Applications and Challenges. Water Science and Technology Library, 2000, , 287-309.	0.3	25
137	An active learning approach for identifying the smallest subset of informative scenarios for robust planning under deep uncertainty. Environmental Modelling and Software, 2020, 127, 104681.	4.5	24
138	Exploratory scenario analysis for disaster risk reduction: Considering alternative pathways in disaster risk assessment. International Journal of Disaster Risk Reduction, 2019, 39, 101230.	3.9	23
139	Neural network based stochastic design charts for settlement prediction. Canadian Geotechnical Journal, 2005, 42, 110-120.	2.8	22
140	Optimising the design and real-time operation of systems of distributed stormwater storages to reduce urban flooding at the catchment scale. Journal of Hydrology, 2021, 602, 126787.	5.4	22
141	Forecasting Cyanobacterial Concentrations Using B-Spline Networks. Journal of Computing in Civil Engineering, 2000, 14, 183-189.	4.7	21
142	Water Distribution System Pumping Operational Greenhouse Gas Emissions Minimization by Considering Time-Dependent Emissions Factors. Journal of Water Resources Planning and Management - ASCE, 2015, 141, .	2.6	21
143	Identification of Optimal Water Supply Portfolios for a Major City. Journal of Water Resources Planning and Management - ASCE, 2017, 143, .	2.6	21
144	Enhancing the policy relevance of exploratory scenarios: Generic approach and application to disaster risk reduction. Futures, 2018, 99, 1-15.	2.5	21

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145	Identifying critical climate conditions for use in scenario-neutral climate impact assessments. Environmental Modelling and Software, 2021, 136, 104948.	4.5	21
146	Chapter Five Uncertainty in Environmental Decision Making: Issues, Challenges and Future Directions. Developments in Integrated Environmental Assessment, 2008, , 69-85.	0.0	20
147	Sensitivity analysis for decision-making using the MORE methodâ€"A Pareto approach. Reliability Engineering and System Safety, 2009, 94, 1229-1237.	8.9	20
148	Calibration and Optimization of the Pumping and Disinfection of a Real Water Supply System. Journal of Water Resources Planning and Management - ASCE, 2010, 136, 493-501.	2.6	20
149	The costâ€"greenhouse gas emission nexus for water distribution systems including the consideration of energy generating infrastructure: an integrated conceptual optimization framework and review of literature. Earth Perspectives -- Transdisciplinarity Enabled, 2014, 1, 9.	1.4	20
150	Meeting the challenges of engineering education via online roleplay simulations. Australasian Journal of Engineering Education, 2007, 13, 31-39.	1.4	19
151	Improving partial mutual information-based input variable selection by consideration of boundary issues associated with bandwidth estimation. Environmental Modelling and Software, 2015, 71, 78-96.	4.5	19
152	Integrated Approach for Optimizing the Design of Aquifer Storage and Recovery Stormwater Harvesting Schemes Accounting for Externalities and Climate Change. Journal of Water Resources Planning and Management - ASCE, 2016, 142, .	2.6	19
153	A multi-stakeholder portfolio optimization framework applied to stormwater best management practice (BMP) selection. Environmental Modelling and Software, 2017, 97, 16-31.	4.5	19
154	Improved Ant Colony Optimization for Optimal Crop and Irrigation Water Allocation by Incorporating Domain Knowledge. Journal of Water Resources Planning and Management - ASCE, 2016, 142, .	2.6	18
155	Effect of Storage Tank Size on the Minimization of Water Distribution System Cost and Greenhouse Gas Emissions While Considering Time-Dependent Emissions Factors. Journal of Water Resources Planning and Management - ASCE, 2016, 142, .	2.6	18
156	Generating realistic perturbed hydrometeorological time series to inform scenario-neutral climate impact assessments. Journal of Hydrology, 2019, 576, 111-122.	5.4	18
157	Ant Colony Optimization for the Design of Water Distribution Systems. , 2001, , 1.		17
158	Assessment of the internal dynamics of the Australian Water Balance Model under different calibration regimes. Environmental Modelling and Software, 2015, 66, 57-68.	4.5	16
159	Surplus Power Factor as a Resilience Measure for Assessing Hydraulic Reliability in Water Transmission System Optimization. Journal of Water Resources Planning and Management - ASCE, 2011, 137, 542-546.	2.6	15
160	Empirically derived method and software for semi-automatic calibration of Cellular Automata land-use models. Environmental Modelling and Software, 2018, 108, 208-239.	4.5	15
161	An integrated framework for selecting and evaluating the performance of stormwater harvesting options to supplement existing water supply systems. Environmental Modelling and Software, 2019, 122, 104554.	4.5	15
162	Alternative modelling approaches for the estimation of irreducible water saturation: Australian hydrocarbon basins. Journal of Petroleum Science and Engineering, 2007, 57, 60-69.	4.2	14

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163	The effect of inundation and salinity on the germination of seed banks from wetlands in South Australia. Aquatic Botany, 2011, 94, 102-106.	1.6	14
164	Impact of Starting Position and Searching Mechanism on the Evolutionary Algorithm Convergence Rate. Journal of Water Resources Planning and Management - ASCE, 2016, 142, .	2.6	14
165	Tomorrow's disasters â€“ Embedding foresight principles into disaster risk assessment and treatment. International Journal of Disaster Risk Reduction, 2020, 45, 101437.	3.9	13
166	Optimising the mutual information of ecological data clusters using evolutionary algorithms. Mathematical and Computer Modelling, 2006, 44, 439-450.	2.0	11
167	Influence of wind on water levels and lagoonriver exchange in the River Murray, Australia. Marine and Freshwater Research, 1997, 48, 541.	1.3	11
168	Ant colony optimization for power plant maintenance scheduling optimization. , 2005, , .		10
169	A hybrid (semi) automatic calibration method for Cellular Automata land-use models: Combining evolutionary algorithms with process understanding. Environmental Modelling and Software, 2020, 134, 104830.	4.5	10
170	Guidance framework and software for understanding and achieving system robustness. Environmental Modelling and Software, 2021, 142, 105059.	4.5	10
171	Minimum Number of Generations Required for Convergence of Genetic Algorithms. , 0, , .		9
172	Evaluation of parameter setting for two GIS based unit hydrograph models. Journal of Hydrology, 2010, 393, 197-205.	5.4	9
173	A modelling framework and R-package for evaluating system performance under hydroclimate variability and change. Environmental Modelling and Software, 2021, 139, 104999.	4.5	8
174	Achieving Robust and Transferable Performance for Conservationâ€Based Models of Dynamical Physical Systems. Water Resources Research, 2022, 58, .	4.2	8
175	Water Distribution Network Reliability Estimation Using the First-Order Reliability Method. , 2001, , 1.		7
176	A Metamodeling Approach to Water Distribution System Optimization. , 2004, , 1.		7
177	Critical Values of a Kernel Density-based Mutual Information Estimator. , 2006, , .		7
178	Water Distribution System Optimisation Accounting for a Range of Future Possible Carbon Prices. , 2009, , .		7
179	RAINFALL RUNOFF MODELLING USING NEURAL NETWORKS: STATE-OF-THE-ART AND FUTURE RESEARCH NEEDS. ISH Journal of Hydraulic Engineering, 2009, 15, 52-74.	2.1	7
180	An integrated dynamic modeling framework for investigating the impact of climate change and variability on irrigated agriculture. Water Resources Research, 2011, 47, .	4.2	7

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181	Framework for minimising the impact of regional shocks on global food security using multi-objective ant colony optimisation. Environmental Modelling and Software, 2017, 95, 303-319.	4.5	7
182	A comparative study of artificial neural network techniques for river stage forecasting. , 0, , .		6
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