Guangtao Fu

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7681897/publications.pdf

Version: 2024-02-01

138 papers	6,553 citations	66250 44 h-index	81351 76 g-index
141 all docs	141 docs citations	141 times ranked	6360 citing authors

#	Article	IF	Citations
1	Surface water temperature prediction in large-deep reservoirs using a long short-term memory model. Ecological Indicators, 2022, 134, 108491.	2.6	24
2	General resilience: Conceptual formulation and quantitative assessment for intervention development in the urban wastewater system. Water Research, 2022, 211, 118108.	5.3	11
3	Benchmarking strategies to control GHG production and emissions. , 2022, , 213-228.		0
4	Basin-Wide Water Resources Management Strategies Improve Cooperation Effectiveness and Benefits. Journal of Water Resources Planning and Management - ASCE, 2022, 148, .	1.3	1
5	Developing stacking ensemble models for multivariate contamination detection in water distribution systems. Science of the Total Environment, 2022, 828, 154284.	3.9	17
6	Hybrid CNN-LSTM models for river flow prediction. Water Science and Technology: Water Supply, 2022, 22, 4902-4919.	1.0	11
7	Sponge city practice in China: A review of construction, assessment, operational and maintenance. Journal of Cleaner Production, 2021, 280, 124963.	4.6	91
8	Pricing Strategy for Residential Water in Drought Years. Application to the City of Tianjin, China. Water (Switzerland), 2021, 13, 1073.	1.2	1
9	Unraveling the effect of inter-basin water transfer on reducing water scarcity and its inequality in China. Water Research, 2021, 194, 116931.	5.3	76
10	Identifying Flow Patterns in Water Pipelines Using Complex Network Theory. Journal of Hydraulic Engineering, 2021, 147, .	0.7	3
11	Exploring the Spatial Impact of Green Infrastructure on Urban Drainage Resilience. Water (Switzerland), 2021, 13, 1789.	1.2	11
12	Towards Regional Scale Stormwater Flood Management Strategies through Rapid Preliminary Intervention Screening. Water (Switzerland), 2021, 13, 2027.	1.2	6
13	Deep Reinforcement Learning for Optimal Hydropower Reservoir Operation. Journal of Water Resources Planning and Management - ASCE, 2021, 147, .	1.3	9
14	Modular interdependency analysis for water distribution systems. Water Research, 2021, 201, 117320.	5.3	11
15	Environmental and economic benefit comparison between coupled grey-green infrastructure system and traditional grey one through a life cycle perspective. Resources, Conservation and Recycling, 2021, 174, 105804.	5.3	29
16	From site-focused intervention towards landscape-scale surface water management using Synthetic Stream Networks and Rapid Scenario Screening. Blue-Green Systems, 2021, 3, 13-30.	0.6	0
17	Assessing Surface Water Flood Risks in Urban Areas Using Machine Learning. Water (Switzerland), 2021, 13, 3520.	1.2	5
18	Optimal Sampling of Water Distribution Network Dynamics Using Graph Fourier Transform. IEEE Transactions on Network Science and Engineering, 2020, 7, 1570-1582.	4.1	14

#	Article	IF	Citations
19	Reference Point Based Multi-Objective Optimization of Reservoir Operation: a Comparison of Three Algorithms. Water Resources Management, 2020, 34, 1005-1020.	1.9	17
20	Regulatory Implications of Integrated Real-Time Control Technology under Environmental Uncertainty. Environmental Science & Technology, 2020, 54, 1314-1325.	4.6	9
21	Is green infrastructure a viable strategy for managing urban surface water flooding?. Urban Water Journal, 2020, 17, 598-608.	1.0	32
22	Comparing Performance Indicators for Assessing and Building Resilient Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2020, 146, .	1.3	15
23	Preconditioning Water Distribution Network Optimization with Head Lossâ€“Based Design Method. Journal of Water Resources Planning and Management - ASCE, 2020, 146, .	1.3	9
24	A comprehensive review on the design and optimization of surface water quality monitoring networks. Environmental Modelling and Software, 2020, 132, 104792.	1.9	68
25	Towards Integrated Flood Risk and Resilience Management. Water (Switzerland), 2020, 12, 1789.	1.2	14
26	Using long short-term memory networks for river flow prediction. Hydrology Research, 2020, 51, 1358-1376.	1.1	53
27	Flash Flood Peak Estimation in Small Mountainous Catchments Based on Distributed Geomorphological Unit Hydrographs Using Fuzzy C-Means Clustering. Journal of Hydrologic Engineering - ASCE, 2020, 25, .	0.8	4
28	Performance assessment of coupled green-grey-blue systems for Sponge City construction. Science of the Total Environment, 2020, 728, 138608.	3.9	64
29	Performance evaluation of time-sharing utilization of multi-function sponge space to reduce waterlogging in a highly urbanizing area. Journal of Environmental Management, 2020, 269, 110760.	3.8	18
30	Battle of Postdisaster Response and Restoration. Journal of Water Resources Planning and Management - ASCE, 2020, 146, 04020067.	1.3	14
31	Strategic planning of the integrated urban wastewater system using adaptation pathways. Water Research, 2020, 182, 116013.	5.3	20
32	Unraveling the Effects of Long-Distance Water Transfer for Ecological Recharge. Journal of Water Resources Planning and Management - ASCE, 2020, 146, .	1.3	9
33	Optimal sensor placement for pipe burst detection in water distribution systems using costâ€“benefit analysis. Journal of Hydroinformatics, 2020, 22, 606-618.	1.1	13
34	Integrated 1D and 2D model for better assessing runoff quantity control of low impact development facilities on community scale. Science of the Total Environment, 2020, 720, 137630.	3.9	64
35	Pollution exacerbates Chinaâ€™s water scarcity and its regional inequality. Nature Communications, 2020, 11, 650.	5.8	260
36	Quantifying Resilience via Multiscale Feedback Loops in Water Distribution Networks. Journal of Water Resources Planning and Management - ASCE, 2020, 146, .	1.3	15

#	Article	IF	Citations
37	Automation and real-time control of urban wastewater systems: a review of the move towards sustainability. Journal of Water Supply: Research and Technology - AQUA, 2020, 69, 751-768.	0.6	4
38	An Integrated Approach to Water Resources and Investment Planning for Water Utilities. Springer Water, 2020, , 241-256.	0.2	0
39	Green infrastructures and their impact on resilience. , 2020, , .		2
40	Co-producing research with academics and industry to create a more resilient UK water sector. Research for All, 2020, 4, .	0.1	0
41	Impact of robustness of hydrological model parameters on flood prediction uncertainty. Journal of Flood Risk Management, 2019, 12, .	1.6	12
42	Two-Archive Evolutionary Algorithm for Constrained Multiobjective Optimization. IEEE Transactions on Evolutionary Computation, 2019, 23, 303-315.	7.5	285
43	Assessing catchment scale flood resilience of urban areas using a grid cell based metric. Water Research, 2019, 163, 114852.	5.3	63
44	Identifying hydro-climatic and socioeconomic forces of water scarcity through structural decomposition analysis: A case study of Beijing city. Science of the Total Environment, 2019, 687, 590-600.	3.9	24
45	Flow regime identification for air valves failure evaluation in water pipelines using pressure data. Water Research, 2019, 165, 115002.	5.3	14
46	Deep learning identifies accurate burst locations in water distribution networks. Water Research, 2019, 166, 115058.	5.3	133
47	Which Isolation Valves Are Most Important?. , 2019, , .		4
48	Recent Advances in Adaptive Catchment Management and Reservoir Operation. Water (Switzerland), 2019, 11, 427.	1.2	3
49	Use of Artificial Intelligence to Improve Resilience and Preparedness Against Adverse Flood Events. Water (Switzerland), 2019, 11, 973.	1.2	46
50	A Model-Based Engineering Methodology and Architecture for Resilience in Systems-of-Systems: A Case of Water Supply Resilience to Flooding. Water (Switzerland), 2019, 11, 496.	1.2	12
51	Cost-Benefit Framework for Optimal Design of Water Transfer Systems. Journal of Water Resources Planning and Management - ASCE, 2019, 145, .	1.3	8
52	Validating a rapid assessment framework for screening surface water flood risk. Water and Environment Journal, 2019, 33, 427-442.	1.0	9
53	Uncertainty Impacts of Climate Change and Downscaling Methods on Future Runoff Projections in the Biliu River Basin. Water (Switzerland), 2019, 11, 2130.	1.2	9
54	Exploring wastewater system performance under future threats: Does enhancing resilience increase sustainability?. Water Research, 2019, 149, 448-459.	5.3	24

#	Article	IF	Citations
55	Comparing costâ€effectiveness of surface water flood management interventions in a UK catchment. Journal of Flood Risk Management, 2019, 12, e12523.	1.6	14
56	Spatial variations of pollutants from sewer interception system overflow. Journal of Environmental Management, 2019, 233, 748-756.	3.8	8
57	Attribute-based intervention development for increasing resilience of urban drainage systems. Water Science and Technology, 2018, 77, 1757-1764.	1.2	18
58	Greenhouse gas emissions from integrated urban drainage systems: Where do we stand?. Journal of Hydrology, 2018, 559, 307-314.	2.3	31
59	Rapid assessment of surface-water flood-management options in urban catchments. Urban Water Journal, 2018, 15, 210-217.	1.0	22
60	Rapid surface water intervention performance comparison for urban planning. Water Science and Technology, 2018, 77, 2084-2092.	1.2	14
61	Exploring the potential climate change impact on urban growth in London by a cellular automata-based Markov chain model. Computers, Environment and Urban Systems, 2018, 68, 121-132.	3.3	49
62	Comparing Topological Partitioning Methods for District Metered Areas in the Water Distribution Network. Water (Switzerland), 2018, 10, 368.	1.2	15
63	Measuring surplus capacity for multiobjective optimal design of foul sewer systems. Urban Water Journal, 2018, 15, 723-731.	1.0	1
64	Water-energy-food nexus: Concepts, questions and methodologies. Journal of Cleaner Production, 2018, 195, 625-639.	4.6	325
65	Assessing spatial and temporal variations in regional sustainability in mainland China from 2004 to 2014. Clean Technologies and Environmental Policy, 2018, 20, 1185-1194.	2.1	5
66	Assessing real options in urban surface water flood risk management under climate change. Natural Hazards, 2018, 94, 1-18.	1.6	47
67	Topological attributes of network resilience: A study in water distribution systems. Water Research, 2018, 143, 376-386.	5.3	123
68	Reliable, Resilient and Sustainable Urban Drainage Systems: An Analysis of Robustness under Deep Uncertainty. Environmental Science & Technology, 2018, 52, 9008-9021.	4.6	67
69	An integrated framework for high-resolution urban flood modelling considering multiple information sources and urban features. Environmental Modelling and Software, 2018, 107, 85-95.	1.9	150
70	Failure Impact Analysis of Isolation Valves in a Water Distribution Network. Journal of Water Resources Planning and Management - ASCE, 2017, 143, .	1.3	41
71	Exploring the Relationships among Reliability, Resilience, and Vulnerability of Water Supply Using Many-Objective Analysis. Journal of Water Resources Planning and Management - ASCE, 2017, 143, .	1.3	38
72	Stochastic sensitivity analysis of nitrogen pollution to climate change in a river basin with complex pollution sources. Environmental Science and Pollution Research, 2017, 24, 26545-26561.	2.7	12

#	Article	IF	Citations
73	Bi-Level Optimization for Determining Operating Strategies for Inter-Basin Water Transfer-Supply Reservoirs. Water Resources Management, 2017, 31, 4415-4432.	1.9	12
74	Cost-Effective River Water Quality Management using Integrated Real-Time Control Technology. Environmental Science & Technology, 2017, 51, 9876-9886.	4.6	39
75	A framework to support decision making in the selection of sustainable drainage system design alternatives. Journal of Environmental Management, 2017, 201, 145-152.	3.8	51
76	Reliable, Robust, and Resilient System Design Framework with Application to Wastewater-Treatment Plant Control. Journal of Environmental Engineering, ASCE, 2017, 143, .	0.7	22
77	Reliable, resilient and sustainable water management: the Safe & SuRe approach. Global Challenges, 2017, 1, 63-77.	1.8	176
78	A two-step sensitivity analysis for hydrological signatures in Jinhua River Basin, East China. Hydrological Sciences Journal, 2017, 62, 2511-2530.	1.2	14
79	Use of Many-Objective Visual Analytics to Analyze Water Supply Objective Trade-Offs with Water Transfer. Journal of Water Resources Planning and Management - ASCE, 2017, 143, .	1.3	13
80	Evaluation of global fine-resolution precipitation products and their uncertainty quantification in ensemble discharge simulations. Hydrology and Earth System Sciences, 2016, 20, 903-920.	1.9	82
81	Water quality permitting: From end-of-pipe to operational strategies. Water Research, 2016, 101, 114-126.	5.3	45
82	Historical pan evaporation changes in the Qiantang River Basin, East China. International Journal of Climatology, 2016, 36, 1928-1942.	1.5	16
83	Urban flooding in China: main causes and policy recommendations. Hydrological Processes, 2016, 30, 1149-1152.	1.1	34
84	Experimental Assessment of Building Blockage Effects in a Simplified Urban District. Procedia Engineering, 2016, 154, 844-852.	1.2	18
85	Global resilience analysis of water distribution systems. Water Research, 2016, 106, 383-393.	5.3	148
86	Imprecise probabilistic estimation of design floods with epistemic uncertainties. Water Resources Research, 2016, 52, 4823-4844.	1.7	26
87	Quantifying Uncertainties in Extreme Flood Predictions under Climate Change for a Medium-Sized Basin in Northeastern China. Journal of Hydrometeorology, 2016, 17, 3099-3112.	0.7	35
88	Quantifying dynamic sensitivity of optimization algorithm parameters to improve hydrological model calibration. Journal of Hydrology, 2016, 533, 213-223.	2.3	29
89	Catchment & sewer network simulation model to benchmark control strategies within urban wastewater systems. Environmental Modelling and Software, 2016, 78, 16-30.	1.9	30
90	Modeling middle and final flush effects of urban runoff pollution in an urbanizing catchment. Journal of Hydrology, 2016, 534, 638-647.	2.3	40

#	Article	IF	Citations
91	Spatiotemporal patterns and source attribution of nitrogen load in a river basin with complex pollution sources. Water Research, 2016, 94, 187-199.	5.3	95
92	Twin-Hierarchy Decomposition for Optimal Design of Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2016, 142, .	1.3	15
93	The impact of atmospheric wet deposition on roof runoff quality in an urbanized area. Hydrology Research, 2015, 46, 880-892.	1.1	3
94	Enhancing resilience in urban water systems for future cities. Water Science and Technology: Water Supply, 2015, 15, 1343-1352.	1.0	37
95	Improving multi-objective reservoir operation optimization with sensitivity-informed dimension reduction. Hydrology and Earth System Sciences, 2015, 19, 3557-3570.	1.9	23
96	A global analysis approach for investigating structural resilience in urban drainage systems. Water Research, 2015, 81, 15-26.	5.3	213
97	An Integrated Environmental Assessment of Green and Gray Infrastructure Strategies for Robust Decision Making. Environmental Science & Technology, 2015, 49, 8307-8314.	4.6	102
98	Global Land Data Assimilation System data assessment using a distributed biosphere hydrological model. Journal of Hydrology, 2015, 528, 652-667.	2.3	34
99	Does carbon reduction increase sustainability? A study in wastewater treatment. Water Research, 2015, 87, 522-530.	5.3	24
100	Hierarchical Decomposition of Water Distribution Systems for Background Leakage Assessment. Procedia Engineering, 2014, 89, 53-58.	1.2	7
101	A New Approach to Urban Water Management: Safe and Sure. Procedia Engineering, 2014, 89, 347-354.	1.2	125
102	The impacts of climate change on water diversion strategies for a water deficit reservoir. Journal of Hydroinformatics, 2014, 16, 872-889.	1.1	25
103	Clustering analysis of water distribution systems: identifying critical components and community impacts. Water Science and Technology, 2014, 70, 1764-1773.	1.2	39
104	Multi-objective optimisation of wastewater treatment plant control to reduce greenhouse gas emissions. Water Research, 2014, 55, 52-62.	5.3	102
105	Battle of the Water Networks II. Journal of Water Resources Planning and Management - ASCE, 2014, 140, .	1.3	92
106	Environmental and ecological impacts of water supplement schemes in a heavily polluted estuary. Science of the Total Environment, 2014, 472, 704-711.	3.9	19
107	Identifying sensitive sources and key control handles for the reduction of greenhouse gas emissions from wastewater treatment. Water Research, 2014, 62, 249-259.	5.3	47
108	Uncertainties in SWAT extreme flow simulation under climate change. Journal of Hydrology, 2014, 515, 205-222.	2.3	86

#	Article	IF	Citations
109	Copula-based frequency analysis of overflow and flooding in urban drainage systems. Journal of Hydrology, 2014, 510, 49-58.	2.3	85
110	A two stage <scp>B</scp>ayesian stochastic optimization model for cascaded hydropower systems considering varying uncertainty of flow forecasts. Water Resources Research, 2014, 50, 9267-9286.	1.7	72
111	Future potential evapotranspiration changes and contribution analysis in Zhejiang Province, East China. Journal of Geophysical Research D: Atmospheres, 2014, 119, 2174-2192.	1.2	43
112	Identifying key sources of uncertainty in the modelling of greenhouse gas emissions from wastewater treatment. Water Research, 2013, 47, 4652-4665.	5.3	48
113	Optimal Design of Water Distribution Systems Using Many-Objective Visual Analytics. Journal of Water Resources Planning and Management - ASCE, 2013, 139, 624-633.	1.3	131
114	Optimal Water Quality Management Considering Spatial and Temporal Variations in a Tidal River. Water Resources Management, 2013, 27, 843-858.	1.9	7
115	The effects of low impact development on urban flooding under different rainfall characteristics. Journal of Environmental Management, 2013, 129, 577-585.	3.8	378
116	Sobolâ€²â€™s sensitivity analysis for a distributed hydrological model of Yichun River Basin, China. Journal of Hydrology, 2013, 480, 58-68.	2.3	119
117	Frequency analysis of urban runoff quality in an urbanizing catchment of Shenzhen, China. Journal of Hydrology, 2013, 496, 79-88.	2.3	11
118	Flood analysis of urban drainage systems: Probabilistic dependence structure of rainfall characteristics and fuzzy model parameters. Journal of Hydroinformatics, 2013, 15, 687-699.	1.1	24
119	Frequency analysis of river water quality using integrated urban wastewater models. Water Science and Technology, 2012, 65, 2112-2117.	1.2	10
120	Reducing the Complexity of Multiobjective Water Distribution System Optimization through Global Sensitivity Analysis. Journal of Water Resources Planning and Management - ASCE, 2012, 138, 196-207.	1.3	82
121	Assessing the combined effects of urbanisation and climate change on the river water quality in an integrated urban wastewater system in the UK. Journal of Environmental Management, 2012, 112, 1-9.	3.8	112
122	Separating aleatory and epistemic uncertainties: Probabilistic sewer flooding evaluation using probability box. Journal of Hydrology, 2012, 420-421, 360-372.	2.3	39
123	Imprecise probabilistic evaluation of sewer flooding in urban drainage systems using random set theory. Water Resources Research, 2011, 47, .	1.7	52
124	Fuzzy probabilistic design of water distribution networks. Water Resources Research, 2011, 47, .	1.7	69
125	Embedding Neural Networks in Multiobjective Genetic Algorithms for Water Distribution System Design. , 2011, , .		5
126	Sensitivity Analysis to Improve Water Distribution System Optimisation. , 2011, , .		1

#	Article	IF	Citations
127	Comparison of runoff modelled using rainfall from different downscaling methods for historical and future climates. Journal of Hydrology, 2010, 387, 10-23.	2.3	136
128	Optimal Distribution and Control of Storage Tank to Mitigate the Impact of New Developments on Receiving Water Quality. Journal of Environmental Engineering, ASCE, 2010, 136, 335-342.	0.7	38
129	Simulation of urban wastewater systems using artificial neural networks: embedding urban areas in integrated catchment modelling. Journal of Hydroinformatics, 2010, 12, 140-149.	1.1	14
130	Classified real-time flood forecasting by coupling fuzzy clustering and neural network. International Journal of Sediment Research, 2010, 25, 134-148.	1.8	35
131	Use of surrogate modelling for multiobjective optimisation of urban wastewater systems. Water Science and Technology, 2009, 60, 1641-1647.	1.2	12
132	The impact of new developments on river water quality from an integrated system modelling perspective. Science of the Total Environment, 2009, 407, 1257-1267.	3.9	43
133	A fuzzy optimization method for multicriteria decision making: An application to reservoir flood control operation. Expert Systems With Applications, 2008, 34, 145-149.	4.4	183
134	Multiple objective optimal control of integrated urban wastewater systems. Environmental Modelling and Software, 2008, 23, 225-234.	1.9	129
135	Imprecise probabilities of climate change: aggregation of fuzzy scenarios and model uncertainties. Climatic Change, 2007, 81, 265-281.	1.7	44
136	A fuzzy approach to the lectotype optimization of offshore platforms. Ocean Engineering, 2003, 30, 877-891.	1.9	12
137	A DRASTIC-based fuzzy pattern recognition methodology for groundwater vulnerability evaluation. Hydrological Sciences Journal, 2003, 48, 211-220.	1.2	50
138	Decision Making Methods for Water Resources Planning in England and Wales. , 0, , .		0