Avi A Ostfeld

List of Publications by Year in descending order

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251 papers 7,265 citations

66343 42 h-index 79 g-index

255 all docs

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255 times ranked 4501 citing authors

| # | Article | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Convex Heuristics for Optimal Placement and Operation of Valves and Chlorine Boosters in Water Networks. Journal of Water Resources Planning and Management - ASCE, 2022, 148, . | 2.6 | 6 |
| 2 | A Graph Theory-Based Layout Algorithm for PRVs Placement and Setpoint Determination in Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2022, 148, . | 2.6 | 5 |
| 3 | Optimizing the Control of Decentralized Rainwater Harvesting Systems for Reducing Urban Drainage Flows. Water (Switzerland), 2022, 14, 571. | 2.7 | 7 |
| 4 | A Hybrid Data-Driven-Agent-Based Modelling Framework for Water Distribution Systems Contamination Response during COVID-19. Water (Switzerland), 2022, 14, 1088. | 2.7 | 11 |
| 5 | Using Hydraulic Transients for Biofilm Detachment in Water Distribution Systems: Approximated Model. Journal of Water Resources Planning and Management - ASCE, 2022, 148, . | 2.6 | 4 |
| 6 | Optimizing Water Quality Treatment Levels for Water Distribution Systems under Mixing Uncertainty at Junctions. Journal of Water Resources Planning and Management - ASCE, 2022, 148, . | 2.6 | 8 |
| 7 | Examining the Longitudinal Dispersion of Solutes Inside Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2022, 148, . | 2.6 | 7 |
| 8 | Hydraulic Ram Pump Integration into Water Distribution Systems for Energy Recovery Application. Water (Switzerland), 2022, 14, 21. | 2.7 | 4 |
| 9 | Effects of the COVID-19 Pandemic on Water Utility Operations and Vulnerability. Journal of Water Resources Planning and Management - ASCE, 2022, 148, . | 2.6 | 14 |
| 10 | Making waves: Applying systems biology principles in water distribution systems engineering. Water Research, 2022, 219, 118527. | 11.3 | 1 |
| 11 | Contaminant Fate and Transport Modeling in Distribution Systems: EPANET-C. Water (Switzerland), 2022, 14, 1665. | 2.7 | 4 |
| 12 | Hydraulic Model Database for Applied Water Distribution Systems Research. Journal of Water Resources Planning and Management - ASCE, 2022, 148, . | 2.6 | 6 |
| 13 | Robust Multi-Objective Optimization of Water Distribution Systems. , 2022, , . | | 2 |
| 14 | Optimal Control of Chlorine Concentration in Water Distribution System., 2022,,. | | 2 |
| 15 | Utilization of Network Subsystems for Designing a Level-1 Redundant Water Distribution Network. , 2022, , . | | O |
| 16 | Real-Time Monitoring and Controlling of Water Quality in Water Distribution Networks Based on Flow Cytometry and Fluorescence Spectroscopy. , 2022, , . | | 2 |
| 17 | Appraisal of the Position of Water Distribution Systems as a PFAS Exposure Pathway. , 2022, , . | | O |
| 18 | EPANET-Câ€"An Umbrella Simulation Tool for Water Distribution System Quality Analysis. , 2022, , . | | 0 |

| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Hydraulic Ram Pump Application in Urban Water Distribution Systems. , 2022, , . | | O |
| 20 | Source Treatment Level Optimization in Water Distribution Networks Considering Mixing Uncertainty at Cross Junctions: A Robust Counterpart Approach. , 2022, , . | | 0 |
| 21 | A Socio-Technological Framework for Optimizing Water Utility Strategies and Resilience to Pandemic Changes and Contamination Events. , 2022, , . | | 0 |
| 22 | Establishing an Experimental and Simulation Interface for Online Monitoring and Modeling of Bacterial Growth in Water Distribution Systems. , 2022, , . | | 2 |
| 23 | An Agent-Based Model for Contamination Response in Water Distribution Systems during the COVID-19 Pandemic. Journal of Water Resources Planning and Management - ASCE, 2022, 148, . | 2.6 | 12 |
| 24 | Robust Multi-Objective Design Optimization of Water Distribution System under Uncertainty. Water (Switzerland), 2022, 14, 2199. | 2.7 | 6 |
| 25 | Analytical Optimization Approach for Simultaneous Design and Operation of Water Distribution–Systems Optimization. Journal of Water Resources Planning and Management - ASCE, 2021, 147, . | 2.6 | 3 |
| 26 | Resilience Assessment of Water Quality Sensor Designs under Cyber-Physical Attacks. Water (Switzerland), 2021, 13, 647. | 2.7 | 17 |
| 27 | Water Leak Localization Using High-Resolution Pressure Sensors. Water (Switzerland), 2021, 13, 591. | 2.7 | 19 |
| 28 | Modeling Bacterial Regrowth and Trihalomethane Formation in Water Distribution Systems. Water (Switzerland), 2021, 13, 463. | 2.7 | 19 |
| 29 | Modeling the Formation and Propagation of 2,4,6-trichloroanisole, a Dominant Taste and Odor Compound, in Water Distribution Systems. Water (Switzerland), 2021, 13, 638. | 2.7 | 4 |
| 30 | An Analytical Model for the Decontamination of Water Distribution Systems Using Slugâ€Feed Method of Disinfection. Water Resources Research, 2021, 57, e2020WR028277. | 4.2 | 3 |
| 31 | Relax-tighten-round algorithm for optimal placement and control of valves and chlorine boosters in water networks. European Journal of Operational Research, 2021, 295, 690-698. | 5.7 | 9 |
| 32 | A Head Formulation for the Steady-State Analysis of Water Distribution Systems Using an Explicit and Exact Expression of the Colebrook–White Equation. Water (Switzerland), 2021, 13, 1163. | 2.7 | 8 |
| 33 | DMA Segmentation and Multiobjective Optimization for Trading Off Water Age, Excess Pressure, and Pump Operational Cost in Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2021, 147, . | 2.6 | 12 |
| 34 | Water and Wastewater Systems and Utilities: Challenges and Opportunities during the COVID-19 Pandemic. Journal of Water Resources Planning and Management - ASCE, 2021, 147, . | 2.6 | 31 |
| 35 | Considering COVID-19 Pandemic Reaction and Response Analogies in an Agent-Based Modeling Framework for Water Distribution System Contamination Response. , 2021, , . | | 0 |
| 36 | Multi-Objective Operation-Leakage Optimization and Calibration of Water Distribution Systems. Water (Switzerland), 2021, 13, 1606. | 2.7 | 8 |

3

| # | Article | IF | CITATIONS |
|----|--|------|-----------|
| 37 | Using Graph Theory for Determining Grab Sampling Location in Real Time upon a Contamination Detection in Water Distribution System. , 2021, , . | | O |
| 38 | Optimal Wellfield Operation under Water Quality Constraints. Journal of Water Resources Planning and Management - ASCE, 2021, 147, . | 2.6 | 1 |
| 39 | Water quality modeling in sewer networks: Review and future research directions. Water Research, 2021, 202, 117419. | 11.3 | 35 |
| 40 | Model-based investigation of the formation, transmission, and health risk of perfluorooctanoic acid, a member of PFASs group, in drinking water distribution systems. Water Research, 2021, 204, 117626. | 11.3 | 11 |
| 41 | Modeling the Response of Nonchlorinated, Chlorinated, and Chloraminated Water Distribution Systems toward Arsenic Contamination. Journal of Environmental Engineering, ASCE, 2021, 147, . | 1.4 | 8 |
| 42 | Incorporation of COVID-19-Inspired Behaviour into Agent-Based Modelling for Water Distribution Systems' Contamination Responses. Water (Switzerland), 2021, 13, 2863. | 2.7 | 6 |
| 43 | Analytical Solutions to Conservative and Non-Conservative Water Quality Constituents in Water Distribution System Storage Tanks. Water (Switzerland), 2021, 13, 3502. | 2.7 | 0 |
| 44 | Dynamic Clustering for Water Distribution System Water Quality Management., 2020,,. | | 4 |
| 45 | A Two-Stage LP-NLP Methodology for the Least-Cost Design and Operation of Water Distribution Systems. Water (Switzerland), 2020, 12, 1364. | 2.7 | 7 |
| 46 | A Review of Cybersecurity Incidents in the Water Sector. Journal of Environmental Engineering, ASCE, 2020, 146, . | 1.4 | 98 |
| 47 | Active Contamination Detection in Water-Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2020, 146, . | 2.6 | 12 |
| 48 | A framework for real-time disinfection plan assembling for a contamination event in water distribution systems. Water Research, 2020, 174, 115625. | 11.3 | 16 |
| 49 | Simultaneous Sensor Placement and Pressure Reducing Valve Localization for Pressure Control of Water Distribution Systems. Water (Switzerland), 2019, 11, 1352. | 2.7 | 12 |
| 50 | Rehabilitation of Water Distribution Systems following a Cadmium Contamination Intrusion— A Solution Based on Water Quality and Water Distribution Systems Modeling. , 2019, , . | | 1 |
| 51 | Grab Sampling Placement Modeling for Real Time Contamination Event Detection in Water Networks. , 2019, , . | | 1 |
| 52 | Bayesian Localization of Water Distribution System Contamination Intrusion Events Using Inline Mobile Sensor Data. Journal of Water Resources Planning and Management - ASCE, 2019, 145, . | 2.6 | 17 |
| 53 | Protecting Water Infrastructure From Cyber and Physical Threats: Using Multimodal Data Fusion and Adaptive Deep Learning to Monitor Critical Systems. IEEE Signal Processing Magazine, 2019, 36, 36-48. | 5.6 | 50 |
| 54 | Clustering for Real-Time Response to Water Distribution System Contamination Event Intrusions. Journal of Water Resources Planning and Management - ASCE, 2019, 145, . | 2.6 | 8 |

| # | Article | IF | Citations |
|----|---|-----|-----------|
| 55 | Clustering for Analysis of Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2018, 144, . | 2.6 | 14 |
| 56 | Stochastic Scenario Evaluation in Evolutionary Algorithms Used for Robust Scenarioâ€Based Optimization. Water Resources Research, 2018, 54, 2813-2833. | 4.2 | 3 |
| 57 | Industry Effluent Disposal into Rivers: Coupled Multiobjective-Analytical Optimization Model. Journal of Water Resources Planning and Management - ASCE, 2018, 144, 06017008. | 2.6 | 2 |
| 58 | Reducing Combined Sewer Overflows through Model Predictive Control and Capital Investment. Journal of Water Resources Planning and Management - ASCE, 2018, 144, 04017091. | 2.6 | 9 |
| 59 | Prediction of erosional rates for cohesive sediments in annular flume experiments using artificial neural networks. H2Open Journal, 2018, 1, 99-111. | 1.7 | 0 |
| 60 | Analyzing multi-variate water quality signals for water quality monitoring station placement in water distribution systems. Journal of Hydroinformatics, 2018, 20, 1323-1342. | 2.4 | 5 |
| 61 | A Time Varying Minimum Volume Ellipsoid (MVE) Method for Water Distribution Systems Event Detection. , 2018, , . | | 0 |
| 62 | Battle of the Attack Detection Algorithms: Disclosing Cyber Attacks on Water Distribution Networks. Journal of Water Resources Planning and Management - ASCE, 2018, 144, . | 2.6 | 127 |
| 63 | Multiobjective Optimization of Inline Mobile and Fixed Wireless Sensor Networks under Conditions of Demand Uncertainty. Journal of Water Resources Planning and Management - ASCE, 2018, 144, . | 2.6 | 17 |
| 64 | Decomposing Water Distribution System into District Metered Areas for Leakage and Water Age Reduction. , $2018, $, . | | 0 |
| 65 | Characterizing Cyber-Physical Attacks on Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2017, 143, . | 2.6 | 130 |
| 66 | Scaled Multiobjective Optimization of an Intensive Early Warning System for Water Distribution System Security. Journal of Hydraulic Engineering, 2017, 143, 04017025. | 1.5 | 6 |
| 67 | Early Warning System Design for Contamination Event Detection Incorporating Surrogate Water Quality Indicators in Water Distribution Systems. , 2017, , . | | 0 |
| 68 | Importance Sampling of Water Distribution System Contamination Events Based on Nodal Neighborhood Populations., 2017,,. | | 0 |
| 69 | Water Age Clustering for Water Distribution Systems. Procedia Engineering, 2017, 186, 470-474. | 1.2 | 2 |
| 70 | Inclusion of Variable Disinfection Levels in Slug Feed Optimal Disinfection of Water Distribution Systems. , 2017, , . | | 0 |
| 71 | Modelling of resuspension due to fish activity: Mathematical modeling and annular flume experiments. International Journal of Sediment Research, 2017, 32, 421-431. | 3.5 | 2 |
| 72 | Battle of Water Networks DMAs: Multistage Design Approach. Journal of Water Resources Planning and Management - ASCE, 2017, 143, . | 2.6 | 20 |

| # | Article | IF | Citations |
|----|--|-----|-----------|
| 73 | Incorporating Operational Uncertainty in Early Warning System Design Optimization for Water Distribution System Security. Procedia Engineering, 2017, 186, 160-167. | 1.2 | 10 |
| 74 | Inline Mobile Sensors for Contaminant Early Warning Enhancement in Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2017, 143, . | 2.6 | 11 |
| 75 | A versatile and low-cost open source pipetting robot for automation of toxicological and ecotoxicological bioassays. PLoS ONE, 2017, 12, e0179636. | 2.5 | 23 |
| 76 | Fish Activity Impact on Sediment Erosion Resuspension: Mathematical Modeling and Annular Flume Verification Experiments. , $2017,\ldots$ | | 0 |
| 77 | Optimal closure of system actuators for transient control: an analytical approach. Journal of Hydroinformatics, 2016, 18, 393-408. | 2.4 | 7 |
| 78 | Mobile sensor networks for optimal leak and backflow detection and localization in municipal water networks. Environmental Modelling and Software, 2016, 80, 306-321. | 4.5 | 43 |
| 79 | Least-Cost Robust Design Optimization of Water Distribution Systems under Multiple Loading. Journal of Water Resources Planning and Management - ASCE, 2016, 142, . | 2.6 | 21 |
| 80 | Slug Feed Optimal Disinfection of Water Distribution Networks Following a Contamination Event. , 2016, , . | | 0 |
| 81 | A Graph Theory Modelling Approach for the Optimal Operation of Water Distribution Systems under Water Quality Constraints. , 2016, , . | | 0 |
| 82 | A sensitive biomarker for the detection of aquatic contamination based on behavioral assays using zebrafish larvae. Ecotoxicology and Environmental Safety, 2016, 133, 271-280. | 6.0 | 34 |
| 83 | Optimal Pump Scheduling in Water Distribution Systems Using Graph Theory under Hydraulic and Chlorine Constraints. Journal of Water Resources Planning and Management - ASCE, 2016, 142, . | 2.6 | 23 |
| 84 | Limited Multistage Stochastic Programming for Water Distribution Systems Optimal Operation. Journal of Water Resources Planning and Management - ASCE, 2016, 142, . | 2.6 | 6 |
| 85 | New formulation and optimization methods for water sensor placement. Environmental Modelling and Software, 2016, 76, 128-136. | 4.5 | 44 |
| 86 | Spatial event classification using simulated water quality data. Environmental Modelling and Software, 2016, 77, 71-80. | 4.5 | 18 |
| 87 | Graph Theory Modeling Approach for Optimal Operation of Water Distribution Systems. Journal of Hydraulic Engineering, 2016, 142, . | 1.5 | 10 |
| 88 | Successive Linear Programming Approach Applied to BBLAWN. Journal of Water Resources Planning and Management - ASCE, 2016, 142, . | 2.6 | 3 |
| 89 | Inclusion of Mobile Sensors in Water Distribution System Monitoring Operations. Journal of Water Resources Planning and Management - ASCE, 2016, 142, . | 2.6 | 20 |
| 90 | Comparison of two multivariate classification models for contamination event detection in water quality time series. Journal of Water Supply: Research and Technology - AQUA, 2015, 64, 558-566. | 1.4 | 7 |

| # | Article | IF | Citations |
|-----|---|------|-----------|
| 91 | Water Quality Event Detection in Water Networks through Multiple Sensors Data., 2015,,. | | O |
| 92 | A Multi-Objective Approach for Minimizing Water Network Disinfection Time and Disinfectant Quantity. Procedia Engineering, 2015, 119, 347-351. | 1.2 | 1 |
| 93 | Utilizing Discrete Choice Models for Fusing Alarms from Multiple Water Quality Indicators. , 2015, , . | | O |
| 94 | Pieceâ€wise mixed integer programming for optimal sizing of surge control devices in water distribution systems. Water Resources Research, 2015, 51, 4391-4408. | 4.2 | 6 |
| 95 | The future of water resources systems analysis: Toward a scientific framework for sustainable water management. Water Resources Research, 2015, 51, 6110-6124. | 4.2 | 214 |
| 96 | Reducing System Wide Event Detection False Positive Alerts by Using Reversed Hydraulic Simulation. , 2015, , . | | 0 |
| 97 | Water Distribution Networks. Studies in Computational Intelligence, 2015, , 101-124. | 0.9 | 6 |
| 98 | Optimal Sensors Location Using Contamination Detailed Chemistry Reactions. , 2015, , . | | 0 |
| 99 | Modelling Heavy Metal Contamination Events in Water Distribution Systems. Procedia Engineering, 2015, 119, 328-336. | 1.2 | 7 |
| 100 | Mobile Sensors for Water Quality Management in Water Distribution Systems., 2015,,. | | 2 |
| 101 | Optimal sensor placement for detecting organophosphate intrusions into water distribution systems. Water Research, 2015, 73, 193-203. | 11.3 | 37 |
| 102 | Network hydraulics inclusion in water quality event detection using multiple sensor stations data. Water Research, 2015, 80, 47-58. | 11.3 | 19 |
| 103 | An integrated logit model for contamination event detection in water distribution systems. Water Research, 2015, 75, 210-223. | 11.3 | 34 |
| 104 | Evolutionary algorithm enhancement for model predictive control and real-time decision support. Environmental Modelling and Software, 2015, 69, 330-341. | 4.5 | 31 |
| 105 | Coupled Data-Driven Evolutionary Algorithm for Toxic Cyanobacteria (Blue-Green Algae) Forecasting in Lake Kinneret. Journal of Water Resources Planning and Management - ASCE, 2015, 141, 04014069. | 2.6 | 7 |
| 106 | Bi-level Optimization of Closed Surge Tanks Placement and Sizing in Water Distribution System Subjected to Transient Events. Procedia Engineering, 2014, 89, 1329-1335. | 1.2 | 8 |
| 107 | Smart Grid for Optimal Provider-consumer Collaboration. Procedia Engineering, 2014, 89, 1292-1297. | 1.2 | 0 |
| 108 | Sensing and Cyberinfrastructure for Smarter Water Management: The Promise and Challenge of Ubiquity. Journal of Water Resources Planning and Management - ASCE, 2014, 140, . | 2.6 | 25 |

| # | Article | IF | Citations |
|-----|--|------|-----------|
| 109 | Uncertainty and Risk Inclusions in Water Distribution Systems Management: Review and Challenges. , 2014, , . | | 2 |
| 110 | Optimal Water System Operation Using Graph Theory Algorithms. Procedia Engineering, 2014, 89, 502-508. | 1.2 | 5 |
| 111 | Optimal Water System Operation Using Successive Shortest Path Graph Algorithm. , 2014, , . | | 0 |
| 112 | Distributed estimation and control of water distribution networks by logical consensus. , 2014, , . | | 3 |
| 113 | Integrated hydraulic and organophosphate pesticide injection simulations for enhancing event detection in water distribution systems. Water Research, 2014, 63, 271-284. | 11.3 | 31 |
| 114 | Optimal Disinfection of Water Distribution Networks Following a Contamination Event. Procedia Engineering, 2014, 89, 168-172. | 1.2 | 4 |
| 115 | Comparison of Multivariate Classification Methods for Contamination Event Detection in Water Distribution Systems. Procedia Engineering, 2014, 70, 1271-1279. | 1.2 | 3 |
| 116 | A coupled classification – Evolutionary optimization model for contamination event detection in water distribution systems. Water Research, 2014, 51, 234-245. | 11.3 | 45 |
| 117 | Optimal design and operation of booster chlorination stations layout in water distribution systems. Water Research, 2014, 58, 209-220. | 11.3 | 60 |
| 118 | Multiobjective Optimization for Least Cost Design and Resiliency of Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2014, 140, . | 2.6 | 27 |
| 119 | Battle of the Water Networks II. Journal of Water Resources Planning and Management - ASCE, 2014, 140, . | 2.6 | 92 |
| 120 | Leakage Calibration of Water Distribution Systems. , 2014, , . | | 2 |
| 121 | Discrete Pump Scheduling and Leakage Control Using Linear Programming for Optimal Operation of Water Distribution Systems. Journal of Hydraulic Engineering, 2014, 140, . | 1.5 | 26 |
| 122 | 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 |
| 123 | Practical Approach to Water System Optimal Operation. Procedia Engineering, 2014, 70, 1362-1368. | 1.2 | 1 |
| 124 | Minimum volume ellipsoid classification model for contamination event detection in water distribution systems. Environmental Modelling and Software, 2014, 57, 1-12. | 4.5 | 34 |
| 125 | Modeling and Optimizing Hydraulic Transients in Water Distribution Systems. Procedia Engineering, 2014, 70, 1558-1565. | 1.2 | 9 |
| 126 | A hybrid evolutionary data driven model for river water quality early warning. Journal of Environmental Management, 2014, 143, 8-16. | 7.8 | 45 |

| # | Article | IF | CITATIONS |
|-----|---|------|-----------|
| 127 | Multiobjective Water Distribution Systems Control of Pumping Cost, Water Quality, and Storage-Reliability Constraints. Journal of Water Resources Planning and Management - ASCE, 2014, 140, 184-193. | 2.6 | 43 |
| 128 | Optimal Sensor Placement in Water Distribution Systems for Injection of Chlorpyrifos., 2014,,. | | 9 |
| 129 | Battle of Background Leakage Assessment for Water Networks Using Successive Linear Programing. Procedia Engineering, 2014, 89, 45-52. | 1.2 | 10 |
| 130 | Optimization of Surge Protection Devices in Water Distribution Systems. , 2014, , . | | 1 |
| 131 | Operation of remote mobile sensors for security of drinking water distribution systems. Water Research, 2013, 47, 4217-4226. | 11.3 | 48 |
| 132 | Robust optimization for water distribution systems least cost design. Water Resources Research, 2013, 49, 6795-6809. | 4.2 | 41 |
| 133 | Explicit Demand Uncertainty Formulation for Robust Design of Water Distribution Systems. , 2013, , . | | 2 |
| 134 | Multi-objective evolutionary optimization for greywater reuse in municipal sewer systems. Water Research, 2013, 47, 5911-5920. | 11.3 | 42 |
| 135 | Multi-objective optimization of water quality, pumps operation, and storage sizing of water distribution systems. Journal of Environmental Management, 2013, 115, 189-197. | 7.8 | 100 |
| 136 | A dynamic thresholds scheme for contaminant event detection in water distribution systems. Water Research, 2013, 47, 1899-1908. | 11.3 | 89 |
| 137 | Limited multi-stage stochastic programming for managing water supply systems. Environmental Modelling and Software, 2013, 41, 53-64. | 4.5 | 48 |
| 138 | Iterative Linearization Scheme for Convex Nonlinear Equations: Application to Optimal Operation of Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2013, 139, 299-312. | 2.6 | 38 |
| 139 | Implicit Mean-Variance Approach for Optimal Management of a Water Supply System under Uncertainty. Journal of Water Resources Planning and Management - ASCE, 2013, 139, 634-643. | 2.6 | 6 |
| 140 | Least-cost design of water distribution systems under demand uncertainty: the robust counterpart approach. Journal of Hydroinformatics, 2013, 15, 737-750. | 2.4 | 13 |
| 141 | A deterministic approach for optimization of booster disinfection placement and operation for a water distribution system in Beijing. Journal of Hydroinformatics, 2013, 15, 1042-1058. | 2.4 | 12 |
| 142 | Enhancing Water Distribution System Security through Water Quality Mobile Sensor Operation. , 2013, , . | | 4 |
| 143 | Bayesian Networks for Source Intrusion Detection. Journal of Water Resources Planning and Management - ASCE, 2013, 139, 426-432. | 2.6 | 36 |
| 144 | Application of Graph Theory to Sensor Placement in Water Distribution Systems., 2013,,. | | 12 |

| # | Article | IF | Citations |
|-----|--|------|-----------|
| 145 | Iterative LP water system optimal operation including headloss, leakage, total head and source cost. Journal of Hydroinformatics, 2013, 15, 1203-1223. | 2.4 | 7 |
| 146 | Water Distribution Systems Complex Contamination Simulations for Event Detection Model Calibration and Verification. , $2013, , .$ | | 0 |
| 147 | Box-Constrained Optimization Methodology and Its Application for a Water Supply System Model. Journal of Water Resources Planning and Management - ASCE, 2012, 138, 651-659. | 2.6 | 6 |
| 148 | Optimal Multi-Year Management of a Regional Water Supply System under Uncertainty: The Affine Adjustable Robust Counterpart (AARC) Approach. , 2012, , . | | 1 |
| 149 | Extreme Impact Contamination Events Sampling for Real-Sized Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2012, 138, 581-585. | 2.6 | 17 |
| 150 | Some observations on biofouling prediction in pipelines using model trees and artificial neural networks versus logistic regression. Urban Water Journal, 2012, 9, 11-20. | 2.1 | 1 |
| 151 | Computationally Implicit Hydraulics for Real-Time Combined Sewer Overflow Modeling and Decision Support., 2012,,. | | 0 |
| 152 | Climate change impacts on river basin and freshwater ecosystems: some observations on challenges and emerging solutions. Journal of Water and Climate Change, 2012, 3, 171-184. | 2.9 | 14 |
| 153 | Optimal Mobile Self-Powered Sensor Operation for Water Distribution Systems Water Quality Enhancements., 2012,,. | | 4 |
| 154 | A Successive Linear Programming Scheme for Optimal Operation of Water Distribution Networks. , 2012, , . | | 1 |
| 155 | Water-Distribution Systems Simplifications through Clustering. Journal of Water Resources Planning and Management - ASCE, 2012, 138, 218-229. | 2.6 | 57 |
| 156 | Water distribution systems event detection., 2012,,. | | 5 |
| 157 | Event Detection in Water Distribution Systems from Multivariate Water Quality Time Series. Environmental Science & Environment | 10.0 | 122 |
| 158 | Seasonal multi-year optimal management of quantities and salinities in regional water supply systems. Environmental Modelling and Software, 2012, 37, 55-67. | 4.5 | 7 |
| 159 | Optimal reliable design and operation of water distribution systems through decomposition. Water Resources Research, 2012, 48, . | 4.2 | 20 |
| 160 | Battle of the Water Calibration Networks. Journal of Water Resources Planning and Management - ASCE, 2012, 138, 523-532. | 2.6 | 134 |
| 161 | A Coupled Decision Trees Bayesian Approach for Water Distribution Systems Event Detection., 2012,,. | | 1 |
| 162 | Chemical Water Stability in Optimal Operation of Water Distribution Systems with Blended Desalinated Water. Journal of Water Resources Planning and Management - ASCE, 2011, 137, 531-541. | 2.6 | 7 |

| # | Article | IF | CITATIONS |
|-----|---|------|-----------|
| 163 | Efficient Hydraulic State Estimation Technique Using Reduced Models of Urban Water Networks. Journal of Water Resources Planning and Management - ASCE, 2011, 137, 343-351. | 2.6 | 54 |
| 164 | Optimal multiyear management of a water supply system under uncertainty: Robust counterpart approach. Water Resources Research, 2011, 47, . | 4.2 | 22 |
| 165 | Chemical Stability Inclusion in Optimizing the Operation of Water Networks. , $2011, \ldots$ | | 1 |
| 166 | A coupled model tree (MT) genetic algorithm (GA) scheme for biofouling assessment in pipelines. Water Research, 2011, 45, 6277-6288. | 11.3 | 8 |
| 167 | Multi-Year Optimal Management of Quantities and Salinities in Water Supply Systems. , 2011, , . | | 0 |
| 168 | Bayesian Networks for Estimating Contaminant Source and Propagation in a Water Distribution System Using Cluster Structure., 2011,,. | | 3 |
| 169 | Optimal Design of Regional Wastewater Pipelines and Treatment Plant Systems. Water Environment Research, 2011, 83, 53-64. | 2.7 | 21 |
| 170 | Optimal Multi-Year Management of a Water Supply System under Uncertainty: Robust Counterpart Approach., 2011,,. | | 2 |
| 171 | Multi-objective optimization for conjunctive placement of hydraulic and water quality sensors in water distribution systems. Water Science and Technology: Water Supply, 2011, 11, 166-171. | 2.1 | 14 |
| 172 | Search Method for Box-Constrained Optimization., 2011,,. | | 0 |
| 173 | Topological clustering for water distribution systems analysis. Environmental Modelling and Software, 2011, 26, 969-972. | 4.5 | 145 |
| 174 | Identification of Possible Contamination Sources Using Reverse Hydraulic Simulation., 2011,,. | | 3 |
| 175 | Hydraulic uncertainty inclusion in water distribution systems contamination source identification. Urban Water Journal, 2011, 8, 267-277. | 2.1 | 20 |
| 176 | Protecting Water and Wastewater Systems: Water Distribution Systems Security Modeling. , 2011, , 247-264. | | 0 |
| 177 | Benefits of Meta-Model Validation for Real-Time Sewer System Decision Support., 2011,,. | | 0 |
| 178 | Alternative Formulation for DBP's Minimization by Optimal Design of Booster Chlorination Stations. , 2010, , . | | 2 |
| 179 | Cluster Analysis for Water Distribution Systems Security Enhancement. , 2010, , . | | 2 |
| 180 | Biofouling formation and modeling in nanofiltration membranes applied to wastewater treatment. Journal of Membrane Science, 2010, 360, 165-173. | 8.2 | 45 |

| # | Article | IF | CITATIONS |
|-----|--|--------------|-----------|
| 181 | Extreme Impact Contamination Events Sampling for Water Distribution Systems Security. Journal of Water Resources Planning and Management - ASCE, 2010, 136, 80-87. | 2.6 | 20 |
| 182 | Optimal groundwater contamination monitoring using pumping wells. Water Science and Technology, 2010, 62, 556-569. | 2.5 | 2 |
| 183 | State of the Art for Genetic Algorithms and Beyond in Water Resources Planning and Management. Journal of Water Resources Planning and Management - ASCE, 2010, 136, 412-432. | 2.6 | 490 |
| 184 | Evolutionary Algorithm Memory Enhancement for Real-Time CSO Control. , 2010, , . | | 1 |
| 185 | Evolutionary Optimization of Combined Sewer Overflow Control. , 2009, , . | | O |
| 186 | Modeling highway runoff pollutant levels using a data driven model. Water Science and Technology, 2009, 60, 19-28. | 2.5 | 16 |
| 187 | Online Hydraulic State Prediction for Water Distribution Systems. , 2009, , . | | 20 |
| 188 | Chemical stability of inline blends of desalinated, surface and ground waters: the need for higher alkalinity values in desalinated water. Desalination, 2009, 239, 334-345. | 8.2 | 19 |
| 189 | Coupled Genetic Algorithm—Linear Programming Scheme for Least-Cost Pipe Sizing of Water-Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2009, 135, 298-302. | 2.6 | 41 |
| 190 | Single and multi-objective optimal design of water distribution systems: application to the case study of the Hanoi system. Water Science and Technology: Water Supply, 2009, 9, 395-404. | 2.1 | 7 |
| 191 | Sensor Network Design with Improved Water Quality Models at Cross Junctions. , 2009, , . | | 5 |
| 192 | A coupled model tree–genetic algorithm scheme for flow and water quality predictions in watersheds. Journal of Hydrology, 2008, 349, 364-375. | 5 . 4 | 48 |
| 193 | Cross Entropy multiobjective optimization for water distribution systems design. Water Resources Research, 2008, 44, . | 4.2 | 32 |
| 194 | Ant Colony Optimization for Least-Cost Design and Operation of Pumping Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2008, 134, 107-118. | 2.6 | 91 |
| 195 | Multiobjective Contaminant Sensor Network Design for Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2008, 134, 366-377. | 2.6 | 98 |
| 196 | Multiobjective contaminant response modeling for water distribution systems security. Journal of Hydroinformatics, 2008, 10, 267-274. | 2.4 | 48 |
| 197 | The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms. Journal of Water Resources Planning and Management - ASCE, 2008, 134, 556-568. | 2.6 | 464 |
| 198 | Multiobjective Sensor Design for Water Distribution Systems Security. , 2008, , . | | 12 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 199 | Sensor Network Design Proposal for the Battle of the Water Sensor Networks (BWSN)., 2008,,. | | 12 |
| 200 | Data-driven modelling: some past experiences and new approaches. Journal of Hydroinformatics, 2008, 10, 3-22. | 2.4 | 471 |
| 201 | Assessment of the reliability of an on-site MBR system for greywater treatment and the associated aesthetic and health risks. Water Science and Technology, 2008, 57, 1103-1110. | 2.5 | 8 |
| 202 | Genetic algorithm for contaminant source characterization using imperfect sensors. Civil Engineering and Environmental Systems, 2008, 25, 29-39. | 0.9 | 73 |
| 203 | Water Distribution System Aggregation for Water Quality Analysis. Journal of Water Resources Planning and Management - ASCE, 2008, 134, 303-309. | 2.6 | 20 |
| 204 | Uncertainty Quantification of Contamination Source Identification., 2008,,. | | 1 |
| 205 | Aggregation of Water Distribution Systems for Contamination Detection. , 2008, , . | | 0 |
| 206 | Optimal Sensors Layout for Contamination Source Identification in Water Distribution Systems. , 2008, , . | | 4 |
| 207 | Prologue: special issue on data driven modeling and evolutionary optimization for river basin management. Journal of Hydroinformatics, 2008, 10, 1-1. | 2.4 | 0 |
| 208 | Optimal Design of Pressure Surge Control Devices in Water Distribution Systems. , 2008, , . | | 0 |
| 209 | Demand Loading Conditions: To What Extent are They Representative?. , 2008, , . | | 0 |
| 210 | Efficient Contamination Events Sampling for Sensors Layout Design., 2007,,. | | 1 |
| 211 | A contamination source identification model for water distribution system security. Engineering Optimization, 2007, 39, 941-947. | 2.6 | 50 |
| 212 | An adaptive heuristic cross-entropy algorithm for optimal design of water distribution systems. Engineering Optimization, 2007, 39, 413-428. | 2.6 | 61 |
| 213 | Conjunctive optimal scheduling of pumping and booster chlorine injections in water distribution systems. Engineering Optimization, 2006, 38, 337-352. | 2.6 | 61 |
| 214 | Contamination Source Identification in Water Systems: A Hybrid Model Trees–Linear Programming Scheme. Journal of Water Resources Planning and Management - ASCE, 2006, 132, 263-273. | 2.6 | 101 |
| 215 | Case Studies for Environmental and Water Resources Systems Analysis Education. , 2006, , 1. | | 1 |
| 216 | A Hybrid Model Tree (MT) â€" Genetic Algorithm (GA) Scheme for Toxic Cyanobacteria Predictions in Lake Kinneret. , 2006, , 1. | | 2 |

| # | Article | IF | Citations |
|-----|---|-----|-----------|
| 217 | Enhancing Water-Distribution System Security through Modeling. Journal of Water Resources Planning and Management - ASCE, 2006, 132, 209-210. | 2.6 | 15 |
| 218 | Locating Monitors in Water Distribution Systems: Red Team–Blue Team Exercise. Journal of Water Resources Planning and Management - ASCE, 2006, 132, 300-304. | 2.6 | 21 |
| 219 | Calibration of CAEDYM Using a Genetic Algorithm — The Lake Kinneret Case Study. , 2006, , . | | 1 |
| 220 | A Hybrid (MT – LP) Approach to Water Distribution Systems Inverse Modeling. , 2005, , 1. | | 1 |
| 221 | Multi-Objective Design of Water Distribution Systems Using Cross Entropy. , 2005, , 1. | | 2 |
| 222 | Red Team-Blue Team Exercise for Locating Monitors in Distribution Systems. , 2005, , 1. | | 1 |
| 223 | Solving the Inverse Problem of Deliberate Contaminants Intrusions into Water Distribution Systems. , 2005, , 1. | | 9 |
| 224 | Optimal Design and Operation of Multiquality Networks under Unsteady Conditions. Journal of Water Resources Planning and Management - ASCE, 2005, 131, 116-124. | 2.6 | 36 |
| 225 | Water Distribution Systems Connectivity Analysis. Journal of Water Resources Planning and Management - ASCE, 2005, 131, 58-66. | 2.6 | 46 |
| 226 | Securing Water Distribution Systems Using Online Contamination Monitoring. Journal of Water Resources Planning and Management - ASCE, 2005, 131, 402-405. | 2.6 | 49 |
| 227 | Water distribution systems optimal design using cross entropy. , 2005, , . | | 5 |
| 228 | Optimal early warning monitoring system layout for water networks security: inclusion of sensors sensitivities and response delays. Civil Engineering and Environmental Systems, 2005, 22, 151-169. | 0.9 | 33 |
| 229 | A hybrid geneticâ€"instance based learning algorithm for CE-QUAL-W2 calibration. Journal of Hydrology, 2005, 310, 122-142. | 5.4 | 57 |
| 230 | Reliable Optimal Design and Operation of Multiquality Networks: Unsteady Conditions., 2005,, 1. | | 2 |
| 231 | A GA â€" LP Approach to Water Distribution Systems Optimal Design. , 2005, , 1. | | 1 |
| 232 | Optimal Simultaneous Design and Operation of Multi-Quality Water Distribution Systems Under Unsteady Hydraulics., 2004, , 1. | | 0 |
| 233 | A Stochastic Early Warning Detection System Model for Drinking Water Distribution Systems Security. , 2004, , 1. | | 9 |
| 234 | Reliability analysis of water distribution systems. Journal of Hydroinformatics, 2004, 6, 281-294. | 2.4 | 55 |

| # | Article | IF | Citations |
|-----|--|-----|-----------|
| 235 | Optimal Layout of Early Warning Detection Stations for Water Distribution Systems Security. Journal of Water Resources Planning and Management - ASCE, 2004, 130, 377-385. | 2.6 | 288 |
| 236 | A contaminant detection system for early warning in water distribution networks. Engineering Optimization, 2004, 36, 525-538. | 2.6 | 26 |
| 237 | Optimal operation of multiquality water distribution systems: unsteady conditions. Engineering Optimization, 2004, 36, 337-359. | 2.6 | 24 |
| 238 | Ipclass â€" an interactive program for calibrating activated sludge systems. Environmental Modelling and Software, 2002, 17, 703-719. | 4.5 | 0 |
| 239 | Reliability simulation of water distribution systems – single and multiquality. Urban Water, 2002, 4, 53-61. | 0.5 | 78 |
| 240 | Reliability analysis of regional water distribution systems. Urban Water, 2001, 3, 253-260. | 0.5 | 48 |
| 241 | Reliability Analysis of Regional Water Distribution Systems–A Case Study. , 2000, , 1. | | 0 |
| 242 | An Overview of HANDSS: Hula Aggregated Numerical Decision Support System. , 2000, , 1. | | 1 |
| 243 | Detecting Accidental Contaminations in Municipal Water Networks. Journal of Water Resources Planning and Management - ASCE, 1999, 125, 308-310. | 2.6 | 57 |
| 244 | Analytical Ground-Water Flow Solutions for Channel-Aquifer Interaction. Journal of Irrigation and Drainage Engineering - ASCE, 1999, 125, 196-202. | 1.0 | 16 |
| 245 | Single-Sludge Nitrogen Removal Model: Calibration and Verification. Journal of Environmental Engineering, ASCE, 1999, 125, 608-617. | 1.4 | 12 |
| 246 | Detecting Accidental Contaminations in Municipal Water Networks. Journal of Water Resources Planning and Management - ASCE, 1998, 124, 192-198. | 2.6 | 220 |
| 247 | Design of Optimal Reliable Multiquality Water-Supply Systems. Journal of Water Resources Planning and Management - ASCE, 1996, 122, 322-333. | 2.6 | 69 |
| 248 | Incorporating reliability in optimal design of water distribution networksâ€"review and new concepts. Reliability Engineering and System Safety, 1993, 42, 5-11. | 8.9 | 19 |
| 249 | Optimal Operation of Multiquality Networks. II: Unsteady Conditions. Journal of Water Resources Planning and Management - ASCE, 1993, 119, 663-684. | 2.6 | 34 |
| 250 | Optimal Operation of Multiquality Networks. I: Steadyâ€State Conditions. Journal of Water Resources Planning and Management - ASCE, 1993, 119, 645-662. | 2.6 | 47 |
| 251 | Evolutionary Computation for Single and Multiobjective Water Distribution Systems Optimal Design. , 0, , 332-345. | | 0 |