

Edo Abraham

List of Publications by Year in descending order

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Version: 2024-02-01

49
papers

901
citations

471061
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500791
28
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56
all docs

56
docs citations

56
times ranked

815
citing authors

#	ARTICLE	IF	CITATIONS
1	Pressure-Leak Duality for Leak Detection and Localization in Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2022, 148, .	1.3	21
2	Nonlinear model predictive control of salinity and water level in polder networks: Case study of Lissertocht catchment. Agricultural Water Management, 2022, 264, 107502.	2.4	5
3	Multi-market demand response from pump-controlled open canal systems: an economic MPC approach to pump-scheduling. Journal of Hydroinformatics, 2022, 24, 838-855.	1.1	2
4	Integrative technology hubs for urban food-energy-water nexuses and cost-benefit-risk tradeoffs (I): Global trend and technology metrics. Critical Reviews in Environmental Science and Technology, 2021, 51, 1397-1442.	6.6	3
5	Integrative technology hubs for urban food-energy-water nexuses and cost-benefit-risk tradeoffs (II): Design strategies for urban sustainability. Critical Reviews in Environmental Science and Technology, 2021, 51, 1533-1583.	6.6	7
6	Electricity Price Forecasting in European Day Ahead Markets: A Greedy Consideration of Market Integration. IEEE Access, 2021, 9, 119954-119966.	2.6	16
7	The water use of heating pathways to 2050: analysis of national and urban energy scenarios. Environmental Research Letters, 2021, 16, 055031.	2.2	2
8	Dynamic Time Warping Clustering to Discover Socioeconomic Characteristics in Smart Water Meter Data. Journal of Water Resources Planning and Management - ASCE, 2021, 147, .	1.3	7
9	Operational planning of WEF infrastructure: quantifying the value of information sharing and cooperation in the Eastern Nile basin. Environmental Research Letters, 2021, 16, 085006.	2.2	2
10	Probabilistic DAM price forecasting using a combined Quantile Regression Deep Neural Network with less-crossing quantiles. , 2021, , .		2
11	Optimal Control for Precision Irrigation of a Large-scale Plantation. Water Resources Research, 2020, 56, e2019WR026989.	1.7	11
12	Multi-Objective Model Predictive Control for Real-Time Operation of a Multi-Reservoir System. Water (Switzerland), 2020, 12, 1898.	1.2	19
13	Battle of Postdisaster Response and Restoration. Journal of Water Resources Planning and Management - ASCE, 2020, 146, 04020067.	1.3	14
14	Sustainable Water Resources Management in an Arid Area Using a Coupled Optimization-Simulation Modeling. Water (Switzerland), 2020, 12, 885.	1.2	22
15	Managing Water Quality in Intermittent Supply Systems: The Case of Mukono Town, Uganda. Water (Switzerland), 2020, 12, 806.	1.2	13
16	Maximizing Water-Food-Energy Nexus Synergies at Basin Scale. Advances in Science, Technology and Innovation, 2020, , 67-70.	0.2	4
17	A Greedy Algorithm for Optimal Sensor Placement to Estimate Salinity in Polder Networks. Water (Switzerland), 2019, 11, 1101.	1.2	8
18	Identification of the Methanogenesis Inhibition Mechanism Using Comparative Analysis of Mathematical Models. Frontiers in Bioengineering and Biotechnology, 2019, 7, 93.	2.0	7

#	ARTICLE	IF	CITATIONS
19	Model Reduction and Outer Approximation for Optimizing the Placement of Control Valves in Complex Water Networks. Journal of Water Resources Planning and Management - ASCE, 2019, 145, .	1.3	19
20	Optimal salinity and water level control of water courses using Model Predictive Control. Environmental Modelling and Software, 2019, 112, 36-45.	1.9	9
21	Global optimality bounds for the placement of control valves in water supply networks. Optimization and Engineering, 2019, 20, 457-495.	1.3	16
22	Decreasing the Discoloration Risk of Drinking Water Distribution Systems through Optimized Topological Changes and Optimal Flow Velocity Control. Journal of Water Resources Planning and Management - ASCE, 2018, 144, .	1.3	18
23	Constraint-Preconditioned Inexact Newton Method for Hydraulic Simulation of Large-Scale Water Distribution Networks. IEEE Transactions on Control of Network Systems, 2017, 4, 610-619.	2.4	5
24	Penalty and relaxation methods for the optimal placement and operation of control valves in water supply networks. Computational Optimization and Applications, 2017, 67, 201-223.	0.9	11
25	Quadratic head loss approximations for optimisation problems in water supply networks. Journal of Hydroinformatics, 2017, 19, 493-506.	1.1	23
26	Investigating trade-offs between the operating cost and green house gas emissions from water distribution systems. Sustainable Energy Technologies and Assessments, 2017, 21, 13-22.	1.7	6
27	Network Analysis, Control Valve Placement and Optimal Control of Flow Velocity for Self-Cleaning Water Distribution Systems. Procedia Engineering, 2017, 186, 576-583.	1.2	6
28	Outer approximation methods for the solution of co-design optimisation problems in water distribution networks * *This work was supported by the NEC-Imperial SmartWater Systems project. The authors acknowledge the EPSRC Industrial CASE Studentship project EP/I501444/1, from which the case study model BWFLnet was derived.. IFAC-PapersOnLine, 2017, 50, 5373-5379.	0.5	6
29	Model Predictive Control of Salinity in a Polder Ditch Under High Saline Groundwater Exfiltration Conditions: A Test Case. IFAC-PapersOnLine, 2017, 50, 3160-3164.	0.5	2
30	Iterative Multistage Method for a Large Water Network Sectorization into DMAs under Multiple Design Objectives. Journal of Water Resources Planning and Management - ASCE, 2017, 143, .	1.3	20
31	Extending the Envelope of Demand Response Provision through Variable Speed Pumps. Procedia Engineering, 2017, 186, 584-591.	1.2	25
32	Scalable Pareto set generation for multiobjective co-design problems in water distribution networks: a continuous relaxation approach. Structural and Multidisciplinary Optimization, 2017, 55, 857-869.	1.7	19
33	Demonstrating demand response from water distribution system through pump scheduling. Applied Energy, 2016, 170, 377-387.	5.1	82
34	A Graph-Theoretic Framework for Assessing the Resilience of Sectorised Water Distribution Networks. Water Resources Management, 2016, 30, 1685-1699.	1.9	132
35	Modeling Variable Speed Pumps for Optimal Pump Scheduling. , 2016, , .		11
36	Exploring Optimal Pump Scheduling in Water Distribution Networks with Branch and Bound Methods. Water Resources Management, 2016, 30, 5333-5349.	1.9	38

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37	Sparse Null Space Algorithms for Hydraulic Analysis of Large-Scale Water Supply Networks. Journal of Hydraulic Engineering, 2016, 142, .	0.7	24
38	Approximation of System Components for Pump Scheduling Optimisation. Procedia Engineering, 2015, 119, 1059-1068.	1.2	22
39	Control of water distribution networks with dynamic DMA topology using strictly feasible sequential convex programming. Water Resources Research, 2015, 51, 9925-9941.	1.7	64
40	Mathematical Programming Methods for Pressure Management in Water Distribution Systems. Procedia Engineering, 2015, 119, 937-946.	1.2	12
41	Graph-theoretic Surrogate Measures for Analysing the Resilience of Water Distribution Networks. Procedia Engineering, 2015, 119, 1241-1248.	1.2	17
42	WaterBox. , 2015, , .		35
43	Efficient Preconditioned Iterative Methods for Hydraulic Simulation of Large Scale Water Distribution Networks. Procedia Engineering, 2015, 119, 623-632.	1.2	6
44	Lower-Order \mathcal{H}_∞ Filter Design for Bilinear Systems With Bounded Inputs. IEEE Transactions on Signal Processing, 2015, 63, 895-906.	3.2	6
45	Optimized Control of Pressure Reducing Valves in Water Distribution Networks with Dynamic Topology. Procedia Engineering, 2015, 119, 1003-1011.	1.2	17
46	Optimal Active Control and Optimization of a Wave Energy Converter. IEEE Transactions on Sustainable Energy, 2013, 4, 324-332.	5.9	77
47	Estimator design for input-constrained bilinear systems with application to wave energy conversion. , 2013, , .		2
48	Optimal active control of a wave energy converter. , 2012, , .		3
49	Model Predictive Control of Salinity and Water Level in a Hypothetical Polder Ditch: Is it Possible to Use the Discretized Linearized Physical Equations for Optimization. , 0, , .		0