Huan-Feng Duan

List of Publications by Citations

86	1,761	26	38
papers	citations	h-index	g-index
92	2,267	3.3	5.73
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
86	Unsteady friction and visco-elasticity in pipe fluid transients. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2010**, 48, 354-362	1.9	103
85	Leak detection in complex series pipelines by using the system frequency response method. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2011**, 49, 213-221	1.9	93
84	Experimental Investigation of Coupled Frequency and Time-Domain Transient Test-Based Techniques for Partial Blockage Detection in Pipelines. *Journal of Hydraulic Engineering*, **2013**, 139, 1033-1040	1.8	81
83	Extended Blockage Detection in Pipelines by Using the System Frequency Response Analysis. *Journal of Water Resources Planning and Management - ASCE*, **2012**, 138, 55-62	2.8	69
82	Frequency domain analysis of pipe fluid transient behaviour. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2013**, 51, 609-622	1.9	63
81	Multi-Objective Optimal Design of Detention Tanks in the Urban Stormwater Drainage System: LID Implementation and Analysis. *Water Resources Management*, **2016**, 30, 4635-4648	3.7	60
80	Relevance of Unsteady Friction to Pipe Size and Length in Pipe Fluid Transients. *Journal of Hydraulic Engineering*, **2012**, 138, 154-166	1.8	58
79	Extended Blockage Detection in Pipes Using the System Frequency Response: Analytical Analysis and Experimental Verification. *Journal of Hydraulic Engineering*, **2013**, 139, 763-771	1.8	54
78	Multi-Objective Optimal Design of Detention Tanks in the Urban Stormwater Drainage System: Framework Development and Case Study. *Water Resources Management*, **2015**, 29, 2125-2137	3.7	50
77	System Response Function-Based Leak Detection in Viscoelastic Pipelines. *Journal of Hydraulic Engineering*, **2012**, 138, 143-153	1.8	50
76	Transient wave-blockage interaction and extended blockage detection in elastic water pipelines. *Journal of Fluids and Structures*, **2014**, 46, 2-16	3.1	49
75	Transient frequency response based leak detection in water supply pipeline systems with branched and looped junctions. *Journal of Hydroinformatics*, **2017**, 19, 17-30	2.6	45
74	Essential system response information for transient-based leak detection methods. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2010**, 48, 650-657	1.9	45
73	Probabilistic Analysis of Transient Design for Water Supply Systems. *Journal of Water Resources Planning and Management - ASCE*, **2010**, 136, 678-687	2.8	44
72	State-of-the-art review on the transient flow modeling and utilization for urban water supply system (UWSS) management **2020**, 69, 858-893		42
71	Numerical and Experimental Study on the Effect of Signal Bandwidth on Pipe Assessment Using Fluid Transients. *Journal of Hydraulic Engineering*, **2015**, 141, 04014074	1.8	40
70	Further Developments in Rapidly Decelerating Turbulent Pipe Flow Modeling. *Journal of Hydraulic Engineering*, **2014**, 140, 04014028	1.8	39

69	Uncertainty Analysis of Transient Flow Modeling and Transient-Based Leak Detection in Elastic Water Pipeline Systems. *Water Resources Management*, **2015**, 29, 5413-5427	3.7	38
68	Machine learning based marine water quality prediction for coastal hydro-environment management. *Journal of Environmental Management*, **2021**, 284, 112051	7.9	34
67	Multiple-fault detection in water pipelines using transient-based time-frequency analysis. *Journal of Hydroinformatics*, **2016**, 18, 975-989	2.6	34
66	Local and Integral Energy-Based Evaluation for the Unsteady Friction Relevance in Transient Pipe Flows. *Journal of Hydraulic Engineering*, **2017**, 143, 04017015	1.8	31
65	Multi-objective Optimal Design of Detention Tanks in the Urban Stormwater Drainage System: Uncertainty and Sensitivity Analysis. *Water Resources Management*, **2016**, 30, 2213-2226	3.7	31
64	Accuracy and Sensitivity Evaluation of TFR Method for Leak Detection in Multiple-Pipeline Water Supply Systems. *Water Resources Management*, **2018**, 32, 2147-2164	3.7	30
63	Transient-Based Frequency Domain Method for Dead-End Side Branch Detection in Reservoir Pipeline-Valve Systems. *Journal of Hydraulic Engineering*, **2016**, 142, 04015042	1.8	30
62	Sustainable Design of Urban Stormwater Drainage Systems by Implementing Detention Tank and LID Measures for Flooding Risk Control and Water Quality Management. *Water Resources Management*, **2019**, 33, 3271-3288	3.7	26
61	Sensitivity Analysis of a Transient-Based Frequency Domain Method for Extended Blockage Detection in Water Pipeline Systems. *Journal of Water Resources Planning and Management - ASCE*, **2016**, 142, 04015073	2.8	26
60	The influence of non-uniform blockages on transient wave behavior and blockage detection in pressurized water pipelines. *Journal of Hydro-Environment Research*, **2017**, 17, 1-7	2.3	25
59	Influence of nonlinear turbulent friction on the system frequency response in transient pipe flow modelling and analysis. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2018**, 56, 451-463	1.9	24
58	FRF-based transient wave analysis for the viscoelastic parameters identification and leak detection in water-filled plastic pipes. *Mechanical Systems and Signal Processing*, **2021**, 146, 107056	7.8	24
57	Ultrasonic P-wave propagation through water-filled rock joint: An experimental investigation. *Journal of Applied Geophysics*, **2019**, 169, 1-14	1.7	21
56	Multistage Frequency-Domain Transient-Based Method for the Analysis of Viscoelastic Parameters of Plastic Pipes. *Journal of Hydraulic Engineering*, **2020**, 146, 04019068	1.8	21
55	Transient wave-based methods for anomaly detection in fluid pipes: A review. *Mechanical Systems and Signal Processing*, **2021**, 160, 107874	7.8	20
54	Multiple-risk assessment of water supply, hydropower and environment nexus in the water resources system. *Journal of Cleaner Production*, **2020**, 268, 122057	10.3	19
53	Efficient Numerical Approach for Simultaneous Calibration of Pipe Roughness Coefficients and Nodal Demands for Water Distribution Systems. *Journal of Water Resources Planning and Management - ASCE*, **2018**, 144, 04018063	2.8	19
52	Multi-Objective Optimal Design of Water Distribution Networks Accounting for Transient Impacts. *Water Resources Management*, **2020**, 34, 1517-1534	3.7	18

51	Energy Analysis of Viscoelasticity Effect in Pipe Fluid Transients. *Journal of Applied Mechanics, Transactions ASME*, **2010**, 77, 044503	2.7	18
50	Flooding Control and Hydro-Energy Assessment for Urban Stormwater Drainage Systems under Climate Change: Framework Development and Case Study. *Water Resources Management*, **2019**, 33, 3523-3545	3.7	15
49	Experimental and numerical study on transient air–water mixing flows in viscoelastic pipes. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2018**, 56, 877-887	1.9	14
48	Transient Frequency Responses for Pressurized Water Pipelines Containing Blockages with Linearly Varying Diameters. *Journal of Hydraulic Engineering*, **2018**, 144, 04018054	1.8	14
47	Energy Analysis of the Resonant Frequency Shift Pattern Induced by Nonuniform Blockages in Pressurized Water Pipes. *Journal of Hydraulic Engineering*, **2019**, 145, 04019027	1.8	13
46	Probabilistic Analysis and Evaluation of Nodal Demand Effect on Transient Analysis in Urban Water Distribution Systems. *Journal of Water Resources Planning and Management - ASCE*, **2017**, 143, 04017041	2.8	13
45	Efficient Leak Localization in Water Distribution Systems Using Multistage Optimal Valve Operations and Smart Demand Metering. *Water Resources Research*, **2020**, 56, e2020WR028285	5.4	12
44	Effects of filling fluid type and composition and joint orientation on acoustic wave propagation across individual fluid-filled rock joints. *International Journal of Rock Mechanics and Minings Sciences* , **2020**, 128, 104248	6	11
43	Radial Pressure Wave Behavior in Transient Laminar Pipe Flows Under Different Flow Perturbations. *Journal of Fluids Engineering, Transactions of the ASME*, **2018**, 140,	2.1	11
42	Transient Wave-blockage Interaction in Pressurized Water Pipelines. *Procedia Engineering*, **2014**, 70, 573-582		11
41	Experimental Validation of Existing Numerical Models for the Interaction of Fluid Transients With In-Line Air Pockets. *Journal of Fluids Engineering, Transactions of the ASME*, **2019**, 141,	2.1	10
40	Numerical study of the blockage length effect on the transient wave in pipe flows. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2018**, 56, 245-255	1.9	10
39	Experimental Investigation of the Interaction of Fluid Transients with an In-Line Air Pocket. *Journal of Hydraulic Engineering*, **2020**, 146, 04019067	1.8	10
38	Morphological environment survey and hydrodynamic modeling of a large bifurcation-confluence complex in Yangtze River, China. *Science of the Total Environment*, **2020**, 737, 139705	10.2	9
37	An Efficient Quasi-2D Simulation of Waterhammer in Complex Pipe Systems. *Journal of Fluids Engineering, Transactions of the ASME*, **2009**, 131,	2.1	9
36	Transient Response Analysis of Branched Pipe Systems toward a Reliable Skeletonization. *Journal of Water Resources Planning and Management - ASCE*, **2021**, 147, 04020109	2.8	9
35	Experimental study on the influence of river flow confluences on the open channel stage–discharge relationship. *Hydrological Sciences Journal*, **2019**, 64, 2025-2039	3.5	8
34	Transient Influence Zone Based Decomposition of Water Distribution Networks for Efficient Transient Analysis. *Water Resources Management*, **2017**, 31, 1915-1929	3.7	7

33	The effect of time-frequency discretization on the accuracy of the transmission line modelling of fluid transients. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2013**, 51, 273-283	1.9	7
32	Experimental Investigation of Wave Scattering Effect of Pipe Blockages on Transient Analysis. *Procedia Engineering*, **2014**, 89, 1314-1320		7
31	Transient Liquid Flow in Plastic Pipes. *Strojniski Vestnik/Journal of Mechanical Engineering*, **2020**, 77-90	1.3	7
30	Spectral based pipeline leak detection using a single spatial measurement. *Mechanical Systems and Signal Processing*, **2021**, 161, 107940	7.8	7
29	Catchment-Scale and Local-Scale Based Evaluation of LID Effectiveness on Urban Drainage System Performance. *Water Resources Management*, **2022**, 36, 507-526	3.7	6
28	Skeletonizing Pipes in Series within Urban Water Distribution Systems Using a Transient-Based Method. *Journal of Hydraulic Engineering*, **2019**, 145, 04018084	1.8	6
27	Spatiotemporal characterization and forecasting of coastal water quality in the semi-enclosed Tolo Harbour based on machine learning and EKC analysis. *Engineering Applications of Computational Fluid Mechanics*, **2022**, 16, 694-712	4.5	6
26	Novel Genetic Algorithm (GA) based hybrid machine learning-pedotransfer Function (ML-PTF) for prediction of spatial pattern of saturated hydraulic conductivity. *Engineering Applications of Computational Fluid Mechanics*, **2022**, 16, 1082-1099	4.5	6
25	Development of a TFR-Based Method for the Simultaneous Detection of Leakage and Partial Blockage in Water Supply Pipelines. *Journal of Hydraulic Engineering*, **2020**, 146, 04020051	1.8	5
24	Simulation of unsteady flow in viscoelastic pipes. *SN Applied Sciences*, **2019**, 1, 1	1.8	4
23	Transient Wave Scattering and Its Influence on Transient Analysis and Leak Detection in Urban Water Supply Systems: Theoretical Analysis and Numerical Validation. *Water (Switzerland)*, **2017**, 9, 789	3	4
22	Evaluation of Plane Wave Assumption in Transient Laminar Pipe Flow Modeling and Utilization. *Procedia Engineering*, **2016**, 154, 959-966		4
21	Investigation of Transient Wave Behavior in Water Pipelines with Blockages. *Journal of Hydraulic Engineering*, **2021**, 147, 04020095	1.8	4
20	Efficient leak detection in single and branched polymeric pipeline systems by transient wave analysis. *Mechanical Systems and Signal Processing*, **2022**, 162, 108084	7.8	4
19	Impacts of Nodal Demand Allocations on Transient-Based Skeletonization of Water Distribution Systems. *Journal of Hydraulic Engineering*, **2020**, 146, 04020058	1.8	3
18	Enhancing the effectiveness of urban drainage system design with an improved ACO-based method. *Journal of Hydro-Environment Research*, **2020**, 38, 96-96	2.3	3
17	Comparison of Numerical Models for the Interaction of a Fluid Transient with an Offline Air Pocket. *Journal of Hydraulic Engineering*, **2021**, 147, 04021014	1.8	3
16	Experimental Study on the Hydrodynamic Influence of River Flow Confluences to the Open Channel Stage-Discharge Relationship		2

15	On the leak-induced transient wave reflection and dominance analysis in water pipelines. *Mechanical Systems and Signal Processing*, **2022**, 167, 108512	7.8	2
14	Simulation of Transient Flow in Micro-hydraulic Pipe System. *Lecture Notes in Mechanical Engineering*, **2021**, 205-215	0.4	2
13	Simulation of unsteady flow with cavitation in plastic pipes using the discrete bubble cavity and Adamkowski models. *IOP Conference Series: Materials Science and Engineering*, **2019**, 710, 012013	0.4	2
12	Foul sewer model development using geotagged information and smart water meter data. *Water Research*, **2021**, 204, 117594	12.5	2
11	Extension of the Efficient Quasi-2D Water Hammer Model to Complex Pipe System **2009**, 2185-2191		1
10	Gradient-based optimization for spectral-based multiple-leak identification. *Mechanical Systems and Signal Processing*, **2022**, 171, 108840	7.8	1
9	Experimental Investigation of the Effects of Air Pocket Configuration on Fluid Transients in a Pipeline. *Journal of Hydraulic Engineering*, **2020**, 146, 04020081	1.8	1
8	Thermal Effect on Compressional Wave Propagation Across Fluid-Filled Rock Joints. *Rock Mechanics and Rock Engineering*, **2021**, 54, 455-462	5.7	1
7	Discussion of "Analysis of PVC Pipe-Wall Viscoelasticity during Water Hammer" by A. K. Soares, D. I. C. Covas, and L. F. R. Reis. *Journal of Hydraulic Engineering*, **2010**, 136, 547-548	1.8	0
6	Geomorphologic changes around a mid-river bar system at a meandering reach in the lower Yangtze River, China: Impacts of the three Gorges dam (TGD) and human activities. *Catena*, **2022**, 212, 106038	5.8	0
5	Ultrasonic S-wave responses of single rock joints filled with wet bentonite clay. *IOP Conference Series: Earth and Environmental Science*, **2021**, 861, 022041	0.3	0
4	Using DGCM to predict transient flow in plastic pipe. *IOP Conference Series: Earth and Environmental Science*, **2019**, 405, 012020	0.3	0
3	A novel leak localization method using forward and backward transient characteristics. *Measurement: Journal of the International Measurement Confederation*, **2022**, 194, 111065	4.6	0
2	Closure to "Skeletonizing Pipes in Series within Urban Water Distribution Systems Using a Transient-Based Method" by Yuan Huang, Feifei Zheng, Huan-Feng Duan, Tuqiao Zhang, Xinlei Guo, and Qingzhou Zhang. *Journal of Hydraulic Engineering*, **2020**, 146, 07020004	1.8	
1	A turbulent approach to unsteady friction. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2009**, 47, 824-829	1.9	