

Silvia Meniconi

List of Publications by Year in descending order

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104
papers

2,616
citations

147726

31
h-index

214721

47
g-index

109
all docs

109
docs citations

109
times ranked

757
citing authors

#	ARTICLE	IF	CITATIONS
1	Anomaly pre-localization in distribution transmission mains by pump trip: preliminary field tests in the Milan pipe system. <i>Journal of Hydroinformatics</i> , 2015, 17, 377-389.	1.1	113
2	Wavelets for the Analysis of Transient Pressure Signals for Leak Detection. <i>Journal of Hydraulic Engineering</i> , 2007, 133, 1274-1282.	0.7	109
3	Water-hammer pressure waves interaction at cross-section changes in series in viscoelastic pipes. <i>Journal of Fluids and Structures</i> , 2012, 33, 44-58.	1.5	97
4	Experimental Investigation of Coupled Frequency and Time-Domain Transient Test-Based Techniques for Partial Blockage Detection in Pipelines. <i>Journal of Hydraulic Engineering</i> , 2013, 139, 1033-1040.	0.7	96
5	Small Amplitude Sharp Pressure Waves to Diagnose Pipe Systems. <i>Water Resources Management</i> , 2011, 25, 79-96.	1.9	89
6	Leak detection in branched pipe systems coupling wavelet analysis and a Lagrangian model. <i>Journal of Water Supply: Research and Technology - AQUA</i> , 2009, 58, 95-106.	0.6	84
7	In-Line Pipe Device Checking by Short-Period Analysis of Transient Tests. <i>Journal of Hydraulic Engineering</i> , 2011, 137, 713-722.	0.7	72
8	Portable pressure wave maker for leak detection and pipe system characterization. <i>Journal - American Water Works Association</i> , 2008, 100, 108-116.	0.2	71
9	Matched-field processing for leak localization in a viscoelastic pipe: An experimental study. <i>Mechanical Systems and Signal Processing</i> , 2019, 124, 459-478.	4.4	67
10	Experimental Evidence of Hysteresis in the Head-Discharge Relationship for a Leak in a Polyethylene Pipe. <i>Journal of Hydraulic Engineering</i> , 2011, 137, 775-780.	0.7	63
11	Single-Event Leak Detection in Pipeline Using First Three Resonant Responses. <i>Journal of Hydraulic Engineering</i> , 2013, 139, 645-655.	0.7	60
12	Energy dissipation and pressure decay during transients in viscoelastic pipes with an in-line valve. <i>Journal of Fluids and Structures</i> , 2014, 45, 235-249.	1.5	58
13	Leak Size, Detectability and Test Conditions in Pressurized Pipe Systems. <i>Water Resources Management</i> , 2014, 28, 4583-4598.	1.9	56
14	Leak Detection in a Real Transmission Main Through Transient Tests: Deeds and Misdeeds. <i>Water Resources Research</i> , 2021, 57, e2020WR027838.	1.7	56
15	Transient tests for locating and sizing illegal branches in pipe systems. <i>Journal of Hydroinformatics</i> , 2011, 13, 334-345.	1.1	55
16	Two-Dimensional Features of Viscoelastic Models of Pipe Transients. <i>Journal of Hydraulic Engineering</i> , 2014, 140, 04014036.	0.7	55
17	Numerical analysis of the transient pressure damping in a single polymeric pipe with a leak. <i>Urban Water Journal</i> , 2018, 15, 760-768.	1.0	53
18	Potential of Transient Tests to Diagnose Real Supply Pipe Systems: What Can Be Done with a Single Extemporary Test. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2011, 137, 238-241.	1.3	51

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19	Further Developments in Rapidly Decelerating Turbulent Pipe Flow Modeling. Journal of Hydraulic Engineering, 2014, 140, .	0.7	51
20	Leak-edge detection. Journal of Hydraulic Research/De Recherches Hydrauliques, 2009, 47, 233-241.	0.7	50
21	Transient hydrodynamics of in-line valves in viscoelastic pressurized pipes: long-period analysis. Experiments in Fluids, 2012, 53, 265-275.	1.1	48
22	Local and Integral Energy-Based Evaluation for the Unsteady Friction Relevance in Transient Pipe Flows. Journal of Hydraulic Engineering, 2017, 143, .	0.7	47
23	Relevance of Pipe Period on Kelvin-Voigt Viscoelastic Parameters: 1D and 2D Inverse Transient Analysis. Journal of Hydraulic Engineering, 2016, 142, .	0.7	46
24	Is the leak headâ€“discharge relationship in polyethylene pipes a bijective function?. Journal of Hydraulic Research/De Recherches Hydrauliques, 2012, 50, 409-417.	0.7	45
25	Pipeline leak localization using matched-field processing incorporating prior information of modeling error. Mechanical Systems and Signal Processing, 2020, 143, 106849.	4.4	42
26	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.	4.4	41
27	On the Role of Minor Branches, Energy Dissipation, and Small Defects in the Transient Response of Transmission Mains. Water (Switzerland), 2018, 10, 187.	1.2	40
28	Design criteria and performance analysis of a smart portable device for leak detection in water transmission mains. Measurement: Journal of the International Measurement Confederation, 2021, 183, 109844.	2.5	39
29	Discussion of â€œDetection of Partial Blockage in Single Pipelinesâ€“by P. K. Mohapatra, M. H. Chaudhry, A. A. Kassem, and J. Moloo. Journal of Hydraulic Engineering, 2008, 134, 872-874.	0.7	38
30	CFD and 1D Approaches for the Unsteady Friction Analysis of Low Reynolds Number Turbulent Flows. Journal of Hydraulic Engineering, 2017, 143, .	0.7	35
31	Objective Functions for Transient-Based Pipeline Leakage Detection in a Noisy Environment: Least Square and Matched-Filter. Journal of Water Resources Planning and Management - ASCE, 2019, 145, 04019042.	1.3	34
32	Local and Global Leak Laws. Water Resources Management, 2014, 28, 3761-3782.	1.9	32
33	Mechanism of interaction of pressure waves at a discrete partial blockage. Journal of Fluids and Structures, 2016, 62, 33-45.	1.5	31
34	An approximate inverse scattering technique for reconstructing blockage profiles in water pipelines using acoustic transients. Journal of the Acoustical Society of America, 2018, 143, EL322-EL327.	0.5	31
35	Multistage Frequency-Domain Transient-Based Method for the Analysis of Viscoelastic Parameters of Plastic Pipes. Journal of Hydraulic Engineering, 2020, 146, .	0.7	31
36	Time-domain Analysis of Laboratory Experiments on the Transient Pressure Damping in a Leaky Polymeric Pipe. Water Resources Management, 2020, 34, 501-514.	1.9	31

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37	Hydraulic characterization and transient response of pressure reducing valves: laboratory experiments. <i>Journal of Hydroinformatics</i> , 2017, 19, 798-810.	1.1	29
38	How severe can transients be after a sudden depressurization?. <i>Journal - American Water Works Association</i> , 2012, 104, E243.	0.2	28
39	Detection and sizing of extended partial blockages in pipelines by means of a stochastic successive linear estimator. <i>Journal of Hydroinformatics</i> , 2014, 16, 248-258.	1.1	28
40	Numerical and experimental investigation of leaks in viscoelastic pressurized pipe flow. <i>Drinking Water Engineering and Science</i> , 2013, 6, 11-16.	0.8	25
41	Leak behaviour in pressurized PVC pipes. <i>Water Science and Technology: Water Supply</i> , 2013, 13, 987-992.	1.0	24
42	Efficient Computational Fluid Dynamics Model for Transient Laminar Flow Modeling: Pressure Wave Propagation and Velocity Profile Changes. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2018, 140, .	0.8	22
43	Experimental Study of the Eigenfrequency Shift Mechanism in a Blocked Pipe System. <i>Journal of Hydraulic Engineering</i> , 2017, 143, .	0.7	21
44	Experimental investigation of leak hydraulics. <i>Journal of Hydroinformatics</i> , 2013, 15, 666-675.	1.1	19
45	Surfactant effect on titanium dioxide photosensitized oxidation of 4-dodecyloxybenzyl alcohol. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2012, 229, 53-59.	2.0	17
46	Transient Response Analysis of Branched Pipe Systems toward a Reliable Skeletonization. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2021, 147, .	1.3	16
47	The Leak Law: From Local to Global Scale. <i>Procedia Engineering</i> , 2014, 70, 651-659.	1.2	15
48	A stochastic approach for extended partial blockage detection in viscoelastic pipelines: numerical and laboratory experiments. <i>Journal of Water Supply: Research and Technology - AQUA</i> , 2015, 64, 583-595.	0.6	15
49	Estimating viscoelasticity of pipes with unknown leaks. <i>Mechanical Systems and Signal Processing</i> , 2020, 143, 106821.	4.4	15
50	Experimental verification of the accuracy and robustness of Area Reconstruction Method for Pressurized Water Pipe System. <i>Journal of Hydraulic Engineering</i> , 2020, 146, .	0.7	15
51	Transient Effects of Self-adjustment of Pressure Reducing Valves. <i>Procedia Engineering</i> , 2015, 119, 1030-1038.	1.2	14
52	Experimental analysis of the water consumption effect on the dynamic behaviour of a real pipe network. <i>Journal of Hydraulic Research/De Recherches Hydrauliques</i> , 2021, 59, 477-487.	0.7	14
53	Efficient leak detection in single and branched polymeric pipeline systems by transient wave analysis. <i>Mechanical Systems and Signal Processing</i> , 2022, 162, 108084.	4.4	14
54	Diagnosis of Pipe Systems by means of a Stochastic Successive Linear Estimator. <i>Water Resources Management</i> , 2013, 27, 4637-4654.	1.9	13

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55	Radial Pressure Wave Behavior in Transient Laminar Pipe Flows Under Different Flow Perturbations. Journal of Fluids Engineering, Transactions of the ASME, 2018, 140, .	0.8	13
56	Stochastic Approach for the Analysis of Demand Induced Transients in Real Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2022, 148, .	1.3	13
57	Pressure Reducing Valve Characterization for Pipe System Management. Procedia Engineering, 2016, 162, 455-462.	1.2	12
58	Bragg-Type Resonance in Blocked Pipe System and Its Effect on the Eigenfrequency Shift. Journal of Hydraulic Engineering, 2018, 144, .	0.7	12
59	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, .	0.8	12
60	Effectiveness Assessment of Pipe Systems by Means of Transient Test-based Techniques. Procedia Environmental Sciences, 2013, 19, 814-822.	1.3	11
61	Safe Transients for Pipe Survey in a Real Transmission Main by Means of a Portable Device: The Case Study of the Trento (I) Supply System. Procedia Engineering, 2017, 186, 228-235.	1.2	11
62	Experimental Investigation of the Interaction of Fluid Transients with an In-Line Air Pocket. Journal of Hydraulic Engineering, 2020, 146, .	0.7	11
63	Water distribution network analysis accounting for different background leakage models. Procedia Engineering, 2015, 119, 680-689.	1.2	10
64	A Stochastic Tool for Determining the Presence of Partial Blockages in Viscoelastic Pipelines: First Experimental Results. Procedia Engineering, 2014, 70, 1112-1120.	1.2	9
65	Numerical transient analysis of random leakage in time and frequency domains. Civil Engineering and Environmental Systems, 2016, 33, 70-84.	0.4	9
66	Interdependence of flow and pipe characteristics in transient induced contamination intrusion: numerical analysis. Journal of Hydroinformatics, 2020, 22, 473-490.	1.1	9
67	Equivalent hydraulic resistance to simulate pipes subject to diffuse outflows. Journal of Hydroinformatics, 2012, 14, 65-74.	1.1	8
68	The Characterization of Milan WDS by Pumping Switching off: Field Test Assessment. Procedia Engineering, 2014, 70, 201-208.	1.2	8
69	Leak-Induced Pressure Decay During Transients in Viscoelastic Pipes. Preliminary Results. Procedia Engineering, 2015, 119, 243-252.	1.2	8
70	In-Line Partially Closed Valves: How to Detect by Transient Tests. , 2009, , .		7
71	Selective photocatalytic oxidation at TiO ₂ /Ti anodes of 4-methoxybenzyl alcohol to the corresponding benzaldehyde in "green" conditions. Journal of Photochemistry and Photobiology A: Chemistry, 2011, 222, 180-184.	2.0	7
72	Real Data Analysis and Efficiency of the TEA Mantova Casale (Italy) Variable-speed Pumping Station. Procedia Engineering, 2014, 70, 248-255.	1.2	7

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73	Groundwater Supply and Climate Change Management by Means of Global Atmospheric Datasets. Preliminary Results. Procedia Engineering, 2017, 186, 420-427.	1.2	7
74	Unsteady friction and visco-elasticity in pipe fluid transients. Journal of Hydraulic Research/De Recherches Hydrauliques, 2011, 49, 402-403.	0.7	6
75	Transient Energy Analysis in Water-Filled Viscoelastic Pipelines. Journal of Hydraulic Engineering, 2022, 148, .	0.7	6
76	A Nelderâ€œMead algorithm-based inverse transient analysis for leak detection and sizing in a single pipe. Water Science and Technology: Water Supply, 2021, 21, 1580-1593.	1.0	5
77	Characterisation of low-Reynolds number flow through an orifice: CFD results vs. laboratory data. Journal of Hydroinformatics, 2021, 23, 709-723.	1.1	5
78	Engineering task models. , 0, , .		4
79	Diagnosis of pipe systems by the SLE: first results. Water Science and Technology: Water Supply, 2013, 13, 958-965.	1.0	4
80	Delineation of Wellhead Protection Areas in the Umbria Region. 1. A simplified Procedure. Procedia Environmental Sciences, 2015, 25, 90-95.	1.3	4
81	Hydraulic Characterization of PVC-O Pipes by Means of Transient Tests. Procedia Engineering, 2015, 119, 263-269.	1.2	4
82	Delineation of Wellhead Protection Areas in the Umbria region. 2. Validation of the Proposed Procedure. Procedia Environmental Sciences, 2015, 25, 96-103.	1.3	4
83	Fast Transients As a Tool for Partial Blockage Detection in Pipes: First Experimental Results. , 2011, , .		3
84	Effect of Uncertainty Demand Location on Transient behavior of WDS. Procedia Engineering, 2014, 89, 1321-1328.	1.2	3
85	Monitoring the Water Mass Balance Variability of Small Shallow Lakes by an ERA5-Land Reanalysis and Water Level Measurement-Based Model. An Application to the Trasimeno Lake, Italy. Atmosphere, 2022, 13, 949.	1.0	3
86	Discussion of â€œCase Studies of Leak Detection and Location in Water Pipe Systems by Inverse Transient Analysisâ€œby DÃ¡dia Covas and Helena Ramos. Journal of Water Resources Planning and Management - ASCE, 2013, 139, 126-127.	1.3	2
87	The Skeletonization of Milan WDS on Transients Due to Pumping Switching off: Preliminary Results. Procedia Engineering, 2014, 70, 1131-1136.	1.2	2
88	The Dependence of District Minimum Night Flow on Pressure Head: The Case Study of Lenola. Procedia Engineering, 2014, 89, 1224-1230.	1.2	2
89	Aqualibrium Competition: Laboratory Data and EPAnet Simulations. Procedia Engineering, 2017, 186, 522-529.	1.2	2
90	Legionella Survey in the Plumbing System of a Sparse Academic Campus: A Case Study at the University of Perugia. Water (Switzerland), 2017, 9, 662.	1.2	2

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91	Advanced Hydroinformatic Techniques for the Simulation and Analysis of Water Supply and Distribution Systems. <i>Water (Switzerland)</i> , 2018, 10, 440.	1.2	2
92	Simulation of the Water Table Elevation in Shallow Unconfined Aquifers by means of the ERA5 Soil Moisture Dataset: The Umbria Region Case Study. <i>Earth Interactions</i> , 2021, 25, 15-32.	0.7	2
93	Functioning conditions of the Casale pumping station in Mantova, Italy. <i>Drinking Water Engineering and Science</i> , 2014, 7, 93-97.	0.8	2
94	Transmission Main Survey by Transient Tests: The Case of Villanova Plan in Mantova (I). <i>Procedia Engineering</i> , 2014, 89, 1343-1349.	1.2	1
95	Checking Procedure of the Trieste (Italy) Subsea Pipeline by Transient Tests. Preliminary Results. <i>Proceedings (mdpi)</i> , 2020, 48, 2.	0.2	1
96	Discussion of "Theoretical Investigation of Leak's Impact on Normal Modes of a Water-Filled Pipe: Small to Large Leak Impedance" by Jingrong Lin, Xun Wang, and Mohamed S. Ghidaoui. <i>Journal of Hydraulic Engineering</i> , 2021, 147, .	0.7	1
97	Improvement of the Carrying Capacity of Cast Iron Pipes Due to the Coating Lapping Process. <i>Journal of Pipeline Systems Engineering and Practice</i> , 2022, 13, .	0.9	1
98	Leakage and Pipe Materials. , 2011, , .		0
99	Discussion of "Single-Event Leak Detection in Pipeline Using First Three Resonant Responses" by Jinzhe Gong, Martin F. Lambert, Angus R. Simpson, and Aaron C. Zecchin. <i>Journal of Hydraulic Engineering</i> , 2015, 141, 07014019.	0.7	0
100	Editorial: Hydroinformatics for water distribution systems analysis and management. <i>Journal of Hydroinformatics</i> , 2016, 18, 1-3.	1.1	0
101	A Model for Simulating Transients in Looped Viscoelastic Pipe Systems. Preliminary Results. <i>Applied Condition Monitoring</i> , 2021, , 183-190.	0.4	0
102	Discussion of "Effect of Boundary on Water Hammer Wave Attenuation and Shape" by Huade Cao, Ioan Nistor, and Magdi Mohareb. <i>Journal of Hydraulic Engineering</i> , 2021, 147, 07021010.	0.7	0
103	Preface: CCWI 2013. <i>Drinking Water Engineering and Science</i> , 2014, 7, 99-100.	0.8	0
104	Corrigendum to "Preface: CCWI 2013" published in <i>Drink. Water Eng. Sci.</i> , 7, 99-100, 2014. <i>Drinking Water Engineering and Science</i> , 2015, 8, 1-1.	0.8	0