Armando Carravetta

List of Publications by Year
in descending order

54	1,720	331259	288905
papers	citations	21 h-index	40 g-index

56	56	56	880
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Energy Production in Water Distribution Networks: A PAT Design Strategy. Water Resources Management, 2012, 26, 3947-3959.	1.9	173
2	PAT Design Strategy for Energy Recovery in Water Distribution Networks by Electrical Regulation. Energies, 2013, 6, 411-424.	1.6	153
3	Banki-Michell Optimal Design by Computational Fluid Dynamics Testing and Hydrodynamic Analysis. Energies, 2013, 6, 2362-2385.	1.6	112
4	Hydropower Potential in Water Distribution Networks: Pressure Control by PATs. Water Resources Management, 2015, 29, 699-714.	1.9	107
5	A permeability model for naturally fractured carbonate reservoirs. Marine and Petroleum Geology, 2013, 40, 115-134.	1.5	85
6	Cost-Benefit Analysis for Hydropower Production in Water Distribution Networks by a Pump as Turbine. Journal of Water Resources Planning and Management - ASCE, 2014, 140, .	1.3	77
7	Pump as Turbine (PAT) Design in Water Distribution Network by System Effectiveness. Water (Switzerland), 2013, 5, 1211-1225.	1.2	74
8	An improved affinity model to enhance variable operating strategy for pumps used as turbines. Journal of Hydraulic Research/De Recherches Hydrauliques, 2016, 54, 332-341.	0.7	69
9	Zero-net energy management for the monitoring and control of dynamically-partitioned smart water systems. Journal of Cleaner Production, 2020, 252, 119745.	4.6	66
10	Energy Recovery in Water Systems by PATs: A Comparisons among the Different Installation Schemes. Procedia Engineering, 2014, 70, 275-284.	1.2	64
11	Cost Model for Pumps as Turbines in Run-of-River and In-Pipe Microhydropower Applications. Journal of Water Resources Planning and Management - ASCE, 2019, 145, .	1.3	50
12	Measuring the velocity fields of granular flows â€“ Employment of a multi-pass two-dimensional particle image velocimetry (2D-PIV) approach. Advanced Powder Technology, 2018, 29, 3107-3123.	2.0	49
13	Fine Tuning a PAT Hydropower Plant in a Water Supply Network to Improve System Effectiveness. Journal of Water Resources Planning and Management - ASCE, 2018, 144, .	1.3	46
14	A new low-cost installation scheme of PATs for pico-hydropower to recover energy in residential areas. Renewable Energy, 2018, 125, 1003-1014.	4.3	41
15	Non Breaking Wave Forces at the Front Face of Seawave Slotcone Generators. Energies, 2012, 5, 4779-4803.	1.6	37
16	Hydraulic Design of a USBR Type II Stilling Basin. Journal of Irrigation and Drainage Engineering - ASCE, 2017, 143, .	0.6	33
17	A Comparison of Energy Recovery by PATs against Direct Variable Speed Pumping in Water Distribution Networks. Fluids, 2018, 3, 41.	0.8	31
18	Energy Saving in a Water Supply Network by Coupling a Pump and a Pump As Turbine (PAT) in a Turbopump. Water (Switzerland), 2017, 9, 62.	1.2	28

#	Article	IF	Citations
19	A new mixed integer non-linear programming model for optimal PAT and PRV location in water distribution networks. Urban Water Journal, 2021, 18, 394-409.	1.0	26
20	Evaluation of PAT Performances by Modified Affinity Law.. Procedia Engineering, 2014, 89, 581-587.	1.2	25
21	PAT Efficiency Variation with Design Parameters. Procedia Engineering, 2014, 70, 285-291.	1.2	24
22	New Challenges towards Smart Systemsâ€™ Efficiency by Digital Twin in Water Distribution Networks. Water (Switzerland), 2022, 14, 1304.	1.2	24
23	A two-layer depth-averaged approach to describe the regime stratification in collapses of dry granular columns. Physics of Fluids, 2014, 26, .	1.6	22
24	Numerical simulation on pump as turbine: Mesh reliability and performance concerns. , 2011, , .		21
25	Pressure Coefficient in Dam-Break Flows of Dry Granular Matter. Journal of Hydraulic Engineering, 2013, 139, 1126-1133.	0.7	21
26	Optimal Pump Scheduling for Urban Drainage under Variable Flow Conditions. Resources, 2018, 7, 73.	1.6	21
27	Some considerations on numerical schemes for treating hyperbolicity issues in two-layer models. Advances in Water Resources, 2017, 100, 183-198.	1.7	19
28	Challenges and improvements in applying a particle image velocimetry (PIV) approach to granular flows. Journal of Physics: Conference Series, 2019, 1249, 012011.	0.3	19
29	Multi-Country Scale Assessment of Available Energy Recovery Potential Using Micro-Hydropower in Drinking, Pressurised Irrigation and Wastewater Networks, Covering Part of the EU. Water (Switzerland), 2021, 13, 899.	1.2	19
30	Optimization of Osmotic Desalination Plants for Water Supply Networks. Water Resources Management, 2016, 30, 3965-3978.	1.9	16
31	Flow Conditions for PATs Operating in Parallel: Experimental and Numerical Analyses. Energies, 2019, 12, 901.	1.6	15
32	Flow Velocity Distribution Towards Flowmeter Accuracy: CFD, UDV, and Field Tests. Water (Switzerland), 2018, 10, 1807.	1.2	14
33	Sustainable Water-Energy Nexus towards Developing Countriesâ€™ Water Sector Efficiency. Energies, 2021, 14, 3525.	1.6	14
34	Energy Transfer from the Freshwater to the Wastewater Network Using a PAT-Equipped Turbopump. Water (Switzerland), 2020, 12, 38.	1.2	13
35	Velocities in a Centrifugal PAT Operation: Experiments and CFD Analyses. Fluids, 2018, 3, 3.	0.8	12
36	New Challenges in Water Systems. Water (Switzerland), 2020, 12, 2340.	1.2	12

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37	Experimental Analysis of a Vertical Drop Shaft. Water (Switzerland), 2013, 5, 1380-1392.	1.2	10
38	Potential Energy, Economic, and Environmental Impacts of Hydro Power Pressure Reduction on the Water-Energy-Food Nexus. Journal of Water Resources Planning and Management - ASCE, 2022, 148, .	1.3	10
39	A New Low-Cost Technology Based on Pump as Turbines for Energy Recovery in Peripheral Water Networks Branches. Water (Switzerland), 2022, 14, 1526.	1.2	10
40	Pressure Drop and Energy Recovery with a New Centrifugal Micro-Turbine: Fundamentals and Application in a Real WDN. Energies, 2022, 15, 1528.	1.6	9
41	Assessment of Rheological Characteristics of a Natural Bingham-Plastic Mixture in Turbulent Pipe Flow. Journal of Hydraulic Engineering, 2010, 136, 820-825.	0.7	8
42	A New Preliminary Model to Optimize PATs Location in a Water Distribution Network. Environmental Sciences Proceedings, 2020, 2, .	0.3	7
43	Asymptotic analysis of the eigenstructure of the two-layer model and a new family of criteria for evaluating the model hyperbolicity. Advances in Water Resources, 2021, 154, 103966.	1.7	7
44	Flow regimes in a vertical drop shaft with a sharp-edged intake. Journal of Applied Water Engineering and Research, 2015, 3, 29-34.	1.0	5
45	Performance of Slurry Flow Models in Pressure Pipe Tests. Journal of Hydraulic Engineering, 2016, 142, .	0.7	4
46	Reducing the Energy Dependency of Water Networks in Irrigation, Public Drinking Water, and Process Industry: REDAWN Project. Proceedings (mdpi), 2018, 2, 681.	0.2	4
47	Rheological Characterization of Non-Newtonian Mixtures by Pressure Pipe Tests. Fluids, 2021, 6, 419.	0.8	4
48	Preliminary Development of a Method for Impact Erosion Prediction in Pumps Running as Turbines. Proceedings (mdpi), 2018, 2, .	0.2	3
49	Application of Innovative Technologies for Active Control and Energy Efficiency in Water Supply Systems. Water (Switzerland), 2020, 12, 3278.	1.2	2
50	PAT Selection. Springer Tracts in Mechanical Engineering, 2018, , 77-96.	0.1	1
51	Fostering Renewable Energies and Energy Efficiency in the Water Sector Using PATs and Wheels. Proceedings (mdpi), 2018, 2, .	0.2	1
52	Environmental Hydraulics Research. Water (Switzerland), 2020, 12, 2749.	1.2	1
53	Location of a PAT in a Water Transmission and Distribution System. Springer Tracts in Mechanical Engineering, 2018, , 139-171.	0.1	0
54	Energy harvesting in water supply systems. , 2020, , 229-254.		0