Roberto Revelli

List of Publications by Year
in descending order

57 papers	2,298 citations	279798 23 h-index	214800 47 g-index
62 all docs	62 docs citations	62 times ranked	2158 citing authors

#	Article	IF	Citations
1	The Very Low Head Turbine for hydropower generation in existing hydraulic infrastructures: State of the art and future challenges. Sustainable Energy Technologies and Assessments, 2022, 51, 101924.	2.7	6
2	Optimal design process of crossflow Banki turbines: Literature review and novel expeditious equations. Ocean Engineering, 2022, 257, 111582.	4.3	5
3	Experimental Analysis of Effect of Canal Geometry and Water Levels on Rotary Hydrostatic Pressure Machine. Journal of Hydraulic Engineering, 2020, 146, .	1.5	6
4	A Scoring Matrix Method for Integrated Evaluation of Water-Related Ecosystem Services Provided by Urban Parks. Environmental Management, 2020, 66, 756-769.	2.7	7
5	Performance Optimization of Overshot Water Wheels at High Rotational Speeds for Hydropower Applications. Journal of Hydraulic Engineering, 2020, 146, .	1.5	7
6	Functional Analysis of Piedmont (Italy) Ancient Water Mills Aimed at Their Recovery or Reconversion. Machines, 2019, 7, 32.	2.2	12
7	Power Transmission and Mechanisms of an Old Water Mill. Mechanisms and Machine Science, 2019, , 29-37.	0.5	1
8	Ecohydrology of Urban Ecosystems. , 2019, , 533-571.		3
9	Ecohydrological model for the quantification of ecosystem services provided by urban street trees. Urban Ecosystems, 2018, 21, 489-504.	2.4	25
10	Gravity water wheels as a micro hydropower energy source: A review based on historic data, design methods, efficiencies and modern optimizations. Renewable and Sustainable Energy Reviews, 2018, 97, 414-427.	16.4	74
11	A dynamical systems framework for crop models: Toward optimal fertilization and irrigation strategies under climatic variability. Ecological Modelling, 2017, 365, 80-92.	2.5	22
12	Hydraulic Behavior and Performance of Breastshot Water Wheels for Different Numbers of Blades. Journal of Hydraulic Engineering, 2017, 143, .	1.5	20
13	CFD simulations to optimize the blade design of water wheels. Drinking Water Engineering and Science, 2017, 10, 27-32.	0.8	26
14	Experimental and dimensional analysis of a breastshot water wheel. Journal of Hydraulic Research/De Recherches Hydrauliques, 2016, 54, 473-479.	1.7	10
15	Performance characteristics, power losses and mechanical power estimation for a breastshot water wheel. Energy, 2015, 87, 315-325.	8.8	43
16	Groundwater impact on methane emissions from flooded paddy fields. Advances in Water Resources, 2015, 83, 340-350.	3.8	7
17	Output power and power losses estimation for an overshot water wheel. Renewable Energy, 2015, 83, 979-987.	8.9	36
18	Characterization of alum floc in water treatment by image analysis and modeling. Cogent Engineering, 2014, 1, 944767.	2.2	10

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19	Ecohydrology of street trees: design and irrigation requirements for sustainable water use. Ecohydrology, 2014, 7, 508-523.	2.4	45
20	Decreasing of methanogenic activity in paddy fields via lowering ponding water temperature: A modeling investigation. Soil Biology and Biochemistry, 2014, 75, 211-222.	8.8	6
21	Hyporheic flow and transport processes: Mechanisms, models, and biogeochemical implications. Reviews of Geophysics, 2014, 52, 603-679.	23.0	642
22	Community Detection as a Tool for District Metered Areas Identification. Procedia Engineering, 2014, 70, 1518-1523.	1.2	9
23	The weight of water. Physics Today, 2014, 67, 41-46.	0.3	4
24	Modeling the Fate of Disinfection By-products in Water Distribution Systems. Procedia Engineering, 2014, 89, 255-261.	1.2	2
25	Role of water flow in modeling methane emissions from flooded paddy soils. Advances in Water Resources, 2013, 52, 261-274.	3.8	12
26	Recovering the Release History of a Pollutant Intrusion into a Water Supply System through a Geostatistical Approach. Journal of Water Resources Planning and Management - ASCE, 2013, 139, 418-425.	2.6	3
27	Community detection as a tool for complex pipe network clustering. Europhysics Letters, 2013, 103, 48001.	2.0	25
28	The impacts of increasing current velocity on the drift ofSimulium monticola(Diptera: Simuliidae): a laboratory approach. Italian Journal of Zoology, 2013, 80, 443-448.	0.6	11
29	Modeling hyporheic exchange with unsteady stream discharge and bedform dynamics. Water Resources Research, 2013, 49, 4089-4099.	4.2	39
30	Smallâ€scale permeability heterogeneity has negligible effects on nutrient cycling in streambeds. Geophysical Research Letters, 2013, 40, 1118-1122.	4.0	48
31	Nutrient cycling in bedform induced hyporheic zones. Geochimica Et Cosmochimica Acta, 2012, 84, 47-61.	3.9	191
32	Water and solute exchange through flat streambeds induced by large turbulent eddies. Journal of Hydrology, 2011, 402, 290-296.	5.4	31
33	Generalized collocation method for linear and nonlinear convection-diffusion models. KSCE Journal of Civil Engineering, 2011, 15, 589-593.	1.9	1
34	Effect of streamflow stochasticity on bedform-driven hyporheic exchange. Advances in Water Resources, 2010, 33, 1367-1374.	3.8	35
35	A linear model for the coupled surfaceâ€subsurface flow in a meandering stream. Water Resources Research, 2010, 46, .	4.2	34
36	Quantifying the impact of groundwater discharge on the surfaceâ€“subsurface exchange. Hydrological Processes, 2009, 23, 2108-2116.	2.6	60

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37	Numerical model application for the restoration of the Racconigi Royal Park (CN, Italy). Journal of Cultural Heritage, 2009, 10, 514-519.	3.3	6
38	Transportâ€“diffusion models with nonlinear boundary conditions and solution by generalized collocation methods. Computers and Mathematics With Applications, 2009, 58, 558-565.	2.7	3
39	Generalized collocation method for two-dimensional reaction-diffusion problems with homogeneous Neumann boundary conditions. Computers and Mathematics With Applications, 2008, 56, 2360-2370.	2.7	3
40	Reduction of the hyporheic zone volume due to the streamâ€•aquifer interaction. Geophysical Research Letters, 2008, 35, .	4.0	107
41	Intraâ€•meander hyporheic flow in alluvial rivers. Water Resources Research, 2008, 44, .	4.2	72
42	Closure to â€œGreenâ€™s Function of the Linearized de Saint-Venant Equationsâ€•by Luca Ridolfi, Amilcare Porporato, and Roberto Revelli. Journal of Engineering Mechanics - ASCE, 2008, 134, 809-809.	2.9	0
43	Bedform-induced hyporheic exchange with unsteady flows. Advances in Water Resources, 2007, 30, 148-156.	3.8	132
44	Greenâ€™s Function of the Linearized de Saint-Venant Equations. Journal of Engineering Mechanics - ASCE, 2006, 132, 125-132.	2.9	19
45	Sinuosity-driven hyporheic exchange in meandering rivers. Geophysical Research Letters, 2006, 33, n/a-n/a.	4.0	159
46	Stochastic modelling of DO and BOD components in a stream with random inputs. Advances in Water Resources, 2006, 29, 1341-1350.	3.8	32
47	Nonlinear convection-dispersion models with a localized pollutant source, IIâ€”A class of inverse problems. Mathematical and Computer Modelling, 2005, 42, 601-612.	2.0	9
48	Source identification in river pollution problems: A geostatistical approach. Water Resources Research, 2005, 41, .	4.2	41
49	Stochastic dynamics of BOD in a stream with random inputs. Advances in Water Resources, 2004, 27, 943-952.	3.8	24
50	Transport of reactive chemicals in sediment-laden streams. Advances in Water Resources, 2003, 26, 815-831.	3.8	13
51	Sinc collocation-interpolation method for the simulation of nonlinear waves. Computers and Mathematics With Applications, 2003, 46, 1443-1453.	2.7	26
52	Influence of suspended sediment on the transport processes of nonlinear reactive substances in turbulent streams. Journal of Fluid Mechanics, 2002, 472, 307-331.	3.4	11
53	Fuzzy Approach for Analysis of Pipe Networks. Journal of Hydraulic Engineering, 2002, 128, 93-101.	1.5	80
54	Brief Note â€“ Inception of Channelization Over a Non-flat Bed. Meccanica, 2000, 35, 457-461.	2.0	7

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55	Influence Zone of Recharging-Dewatering Actions in Unconfined Aquifer. Journal of Irrigation and Drainage Engineering - ASCE, 2000, 126, 110-112.	1.0	4
56	Influence of heterogeneity on the flow in unconfined aquifers. Journal of Hydrology, 2000, 228, 150-159.	5.4	10
57	On the use of neural networks for dendroclimatic reconstructions. Geophysical Research Letters, 2000, 27, 791-794.	4.0	21