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	Hyporheic flow and transport processes: Mechanisms, models, and biogeochemical implications. Reviews of Geophysics, 2014, 52, 603-679.	23.0	642
2	Nutrient cycling in bedform induced hyporheic zones. Geochimica Et Cosmochimica Acta, 2012, 84, 47-61.	3.9	191
3	Sinuosity-driven hyporheic exchange in meandering rivers. Geophysical Research Letters, 2006, 33, n/a-n/a.	4.0	159
4	Bedform-induced hyporheic exchange with unsteady flows. Advances in Water Resources, 2007, 30, 148-156.	3.8	132
5	Reduction of the hyporheic zone volume due to the streamâ€aquifer interaction. Geophysical Research Letters, 2008, 35, .	4.0	107
6	Fuzzy Approach for Analysis of Pipe Networks. Journal of Hydraulic Engineering, 2002, 128, 93-101.	1.5	80
7	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
8	Intraâ€meander hyporheic flow in alluvial rivers. Water Resources Research, 2008, 44, .	4.2	72
9	Quantifying the impact of groundwater discharge on the surfaceâ€“subsurface exchange. Hydrological Processes, 2009, 23, 2108-2116.	2.6	60
10	Smallâ€scale permeability heterogeneity has negligible effects on nutrient cycling in streambeds. Geophysical Research Letters, 2013, 40, 1118-1122.	4.0	48
11	Ecohydrology of street trees: design and irrigation requirements for sustainable water use. Ecohydrology, 2014, 7, 508-523.	2.4	45
12	Performance characteristics, power losses and mechanical power estimation for a breastshot water wheel. Energy, 2015, 87, 315-325.	8.8	43
13	Source identification in river pollution problems: A geostatistical approach. Water Resources Research, 2005, 41, .	4.2	41
14	Modeling hyporheic exchange with unsteady stream discharge and bedform dynamics. Water Resources Research, 2013, 49, 4089-4099.	4.2	39
15	Output power and power losses estimation for an overshot water wheel. Renewable Energy, 2015, 83, 979-987.	8.9	36
16	Effect of streamflow stochasticity on bedform-driven hyporheic exchange. Advances in Water Resources, 2010, 33, 1367-1374.	3.8	35
17	A linear model for the coupled surfaceâ€subsurface flow in a meandering stream. Water Resources Research, 2010, 46, .	4.2	34
18	Stochastic modelling of DO and BOD components in a stream with random inputs. Advances in Water Resources, 2006, 29, 1341-1350.	3.8	32

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19	Water and solute exchange through flat streambeds induced by large turbulent eddies. Journal of Hydrology, 2011, 402, 290-296.	5.4	31
20	Sinc collocation-interpolation method for the simulation of nonlinear waves. Computers and Mathematics With Applications, 2003, 46, 1443-1453.	2.7	26
21	CFD simulations to optimize the blade design of water wheels. Drinking Water Engineering and Science, 2017, 10, 27-32.	0.8	26
22	Community detection as a tool for complex pipe network clustering. Europhysics Letters, 2013, 103, 48001.	2.0	25
23	Ecohydrological model for the quantification of ecosystem services provided by urban street trees. Urban Ecosystems, 2018, 21, 489-504.	2.4	25
24	Stochastic dynamics of BOD in a stream with random inputs. Advances in Water Resources, 2004, 27, 943-952.	3.8	24
25	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
26	On the use of neural networks for dendroclimatic reconstructions. Geophysical Research Letters, 2000, 27, 791-794.	4.0	21
27	Hydraulic Behavior and Performance of Breastshot Water Wheels for Different Numbers of Blades. Journal of Hydraulic Engineering, 2017, 143, .	1.5	20
28	Greenâ€™s Function of the Linearized de Saint-Venant Equations. Journal of Engineering Mechanics - ASCE, 2006, 132, 125-132.	2.9	19
29	Transport of reactive chemicals in sediment-laden streams. Advances in Water Resources, 2003, 26, 815-831.	3.8	13
30	Role of water flow in modeling methane emissions from flooded paddy soils. Advances in Water Resources, 2013, 52, 261-274.	3.8	12
31	Functional Analysis of Piedmont (Italy) Ancient Water Mills Aimed at Their Recovery or Reconversion. Machines, 2019, 7, 32.	2.2	12
32	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
33	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
34	Influence of heterogeneity on the flow in unconfined aquifers. Journal of Hydrology, 2000, 228, 150-159.	5.4	10
35	Characterization of alum floc in water treatment by image analysis and modeling. Cogent Engineering, 2014, 1, 944767.	2.2	10
36	Experimental and dimensional analysis of a breastshot water wheel. Journal of Hydraulic Research/De Recherches Hydrauliques, 2016, 54, 473-479.	1.7	10

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37	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
38	Community Detection as a Tool for District Metered Areas Identification. Procedia Engineering, 2014, 70, 1518-1523.	1.2	9
39	Brief Note â€" Inception of Channelization Over a Non-flat Bed. Meccanica, 2000, 35, 457-461.	2.0	7
40	Groundwater impact on methane emissions from flooded paddy fields. Advances in Water Resources, 2015, 83, 340-350.	3.8	7
41	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
42	Performance Optimization of Overshot Water Wheels at High Rotational Speeds for Hydropower Applications. Journal of Hydraulic Engineering, 2020, 146, .	1.5	7
43	Numerical model application for the restoration of the Racconigi Royal Park (CN, Italy). Journal of Cultural Heritage, 2009, 10, 514-519.	3.3	6
44	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
45	Experimental Analysis of Effect of Canal Geometry and Water Levels on Rotary Hydrostatic Pressure Machine. Journal of Hydraulic Engineering, 2020, 146, .	1.5	6
46	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
47	Optimal design process of crossflow Banki turbines: Literature review and novel expeditious equations. Ocean Engineering, 2022, 257, 111582.	4.3	5
48	Influence Zone of Recharging-Dewatering Actions in Unconfined Aquifer. Journal of Irrigation and Drainage Engineering - ASCE, 2000, 126, 110-112.	1.0	4
49	The weight of water. Physics Today, 2014, 67, 41-46.	0.3	4
50	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
51	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
52	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
53	Ecohydrology of Urban Ecosystems. , 2019, , 533-571.		3
54	Modeling the Fate of Disinfection By-products in Water Distribution Systems. Procedia Engineering, 2014, 89, 255-261.	1.2	2

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55	Generalized collocation method for linear and nonlinear convection-diffusion models. KSCE Journal of Civil Engineering, 2011, 15, 589-593.	1.9	1
56	Power Transmission and Mechanisms of an Old Water Mill. Mechanisms and Machine Science, 2019, , 29-37.	0.5	1
57	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