Luca Ridolfi

List of Publications by Year in Descending Order

269 papers	10,791 citations	54 h-index	94 g-index
277 ext. papers	12,126 ext. citations	4.5 avg, IF	6.55 L-index

#	Paper	IF	Citations
269	A computational analysis of atrial fibrillation effects on coronary perfusion across the different myocardial layers.. *Scientific Reports*, **2022**, 12, 841	4.9	2
268	Cardiovascular Response to Posture Changes: Multiscale Modeling and Validation During Head-Up Tilt.. *Frontiers in Physiology*, **2022**, 13, 826989	4.6	1
267	An innovative approach to select urban-rural sites for Urban Heat Island analysis: the case of Turin (Italy). *Urban Climate*, **2022**, 42, 101099	6.8	0
266	Rayleigh-Bénard convection with thermal boundary inhomogeneities.. *Physical Review E*, **2022**, 105, 025108	2.4	0
265	Role of trade agreements in the global cereal market and implications for virtual water flows.. *Scientific Reports*, **2022**, 12, 6790	4.9	
264	Trade of economically and physically scarce virtual water in the global food network. *Scientific Reports*, **2021**, 11, 22806	4.9	3
263	Vulnerability of cities to toxic airborne releases is written in their topology. *Scientific Reports*, **2021**, 11, 23029	4.9	0
262	A review of multiscale 0D-1D computational modeling of coronary circulation with applications to cardiac arrhythmias.. *Reviews in Cardiovascular Medicine*, **2021**, 22, 1461-1469	3.9	0
261	Increased beat-to-beat variability of cerebral microcirculatory perfusion during atrial fibrillation: a near-infrared spectroscopy study. *Europace*, **2021**, 23, 1219-1226	3.9	5
260	Cerebral spatially resolved near-infrared spectroscopy (SRS-NIRS): paving the way for non-invasive assessment of cerebral hemodynamics during atrial fibrillation. *Minerva Cardiology and Angiology*, **2021**, 69, 124-126	2.4	
259	Large-to-small scale frequency modulation analysis in wall-bounded turbulence via visibility networks. *Journal of Fluid Mechanics*, **2021**, 918,	3.7	2
258	Different Impact of Heart Rate Variability in the Deep Cerebral and Central Hemodynamics at Rest: An Investigation. *Frontiers in Neuroscience*, **2021**, 15, 600574	5.1	
257	Combining 4D Flow MRI and Complex Networks Theory to Characterize the Hemodynamic Heterogeneity in Dilated and Non-dilated Human Ascending Aortas. *Annals of Biomedical Engineering*, **2021**, 49, 2441-2453	4.7	3
256	A review on turbulent and vortical flow analyses via complex networks. *Physica A: Statistical Mechanics and Its Applications*, **2021**, 563, 125476	3.3	17
255	Testing a Patient-Specific In-Silico Model to Noninvasively Estimate Central Blood Pressure. *Cardiovascular Engineering and Technology*, **2021**, 12, 144-157	2.2	2
254	Dynamics of bubbles under stochastic pressure forcing. *Physical Review E*, **2021**, 103, 023108	2.4	1
253	Network analysis of Reynolds number scaling in wall-bounded Lagrangian mixing. *Physical Review Fluids*, **2021**, 6,	2.8	1

252	Wall-induced anisotropy effects on turbulent mixing in channel flow: A network-based analysis. *Physical Review E*, **2020**, 102, 043109	2.4	4
251	Fault detection in level and flow rate sensors for safe and performant remote-control in a water supply system. *Journal of Hydroinformatics*, **2020**, 22, 132-147	2.6	3
250	On the scaling of large-scale structures in smooth-bed turbulent open-channel flows. *Journal of Fluid Mechanics*, **2020**, 889,	3.7	9
249	Embedding the intrinsic relevance of vertices in network analysis: the case of centrality metrics. *Scientific Reports*, **2020**, 10, 3297	4.9	7
248	Charting out the future agricultural trade and its impact on water resources. *Science of the Total Environment*, **2020**, 714, 136626	10.2	7
247	Tools for reconstructing the bilateral trade network: a critical assessment. *Economic Systems Research*, **2020**, 32, 378-394	2.1	5
246	Street canyon ventilation: Combined effect of cross-section geometry and wall heating. *Quarterly Journal of the Royal Meteorological Society*, **2020**, 146, 2347-2367	6.4	7
245	Centrality metric for the vulnerability of urban networks to toxic releases. *Physical Review E*, **2020**, 101, 032312	2.4	2
244	Is water consumption embedded in crop prices? A global data-driven analysis. *Environmental Research Letters*, **2020**, 15, 104016	6.2	2
243	To What Extent Does Heart Rate Alter the Cerebral Hemodynamic Patterns During Atrial Fibrillation?. *IFMBE Proceedings*, **2020**, 108-116	0.2	
242	A Closed-Loop Multiscale Model of the Cardiovascular System: Application to Heart Pacing and Open-Loop Response. *IFMBE Proceedings*, **2020**, 577-585	0.2	3
241	A review of nature-based solutions for greywater treatment: Applications, hydraulic design, and environmental benefits. *Science of the Total Environment*, **2020**, 711, 134731	10.2	88
240	Measuring economic water scarcity in agriculture: a cross-country empirical investigation. *Environmental Science and Policy*, **2020**, 114, 73-85	6.2	23
239	Role of the Hyporheic Zone in Increasing the Resilience of Mountain Streams Facing Intermittency. *Water (Switzerland)*, **2020**, 12, 2034	3	4
238	Cardiovascular deconditioning during long-term spaceflight through multiscale modeling. *Npj Microgravity*, **2020**, 6, 27	5.3	13
237	Water disinfection by orifice-induced hydrodynamic cavitation. *Ultrasonics Sonochemistry*, **2020**, 60, 104740	7.9	19
236	The globalization of riverine environmental resources through the food trade. *Environmental Research Letters*, **2019**, 14, 024020	6.2	6
235	Impaired coronary blood flow at higher heart rates during atrial fibrillation: Investigation via multiscale modelling. *Computer Methods and Programs in Biomedicine*, **2019**, 175, 95-102	6.9	12

234	Higher ventricular rate during atrial fibrillation relates to increased cerebral hypoperfusions and hypertensive events. *Scientific Reports*, **2019**, 9, 3779	4.9	26
233	Spatial Distribution of the International Food Prices: Unexpected Heterogeneity and Randomness. *Ecological Economics*, **2019**, 159, 122-132	5.6	6
232	Overshoots in the water-level control of hydropower plants. *Renewable Energy*, **2019**, 131, 800-810	8.1	3
231	Experimental investigation of vertical turbulent transport of a passive scalar in a boundary layer: Statistics and visibility graph analysis. *Physical Review Fluids*, **2019**, 4,	2.8	9
230	Hydrological and Geomorphological Significance of Riparian Vegetation in Drylands **2019**, 239-275		3
229	Lagrangian network analysis of turbulent mixing. *Journal of Fluid Mechanics*, **2019**, 865, 546-562	3.7	13
228	Tailoring Centrality Metrics for Water Distribution Networks. *Water Resources Research*, **2019**, 55, 2348-2369	5.4	28
227	Global virtual water trade and the hydrological cycle: patterns, drivers, and socio-environmental impacts. *Environmental Research Letters*, **2019**, 14, 053001	6.2	62
226	Propagation of toxic substances in the urban atmosphere: A complex network perspective. *Atmospheric Environment*, **2019**, 198, 291-301	5.3	13
225	Multiscale mathematical modeling vs. the generalized transfer function approach for aortic pressure estimation: a comparison with invasive data. *Hypertension Research*, **2019**, 42, 690-698	4.7	11
224	Flood reduction as an ecosystem service of constructed wetlands for combined sewer overflow. *Journal of Hydrology*, **2018**, 560, 150-159	6	21
223	Visibility graph analysis of wall turbulence time-series. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2018**, 382, 1-11	2.3	22
222	Changes in bacteria composition and efficiency of constructed wetlands under sustained overloads: A modeling experiment. *Science of the Total Environment*, **2018**, 612, 1480-1487	10.2	10
221	Spatial characterization of turbulent channel flow via complex networks. *Physical Review E*, **2018**, 98, 013107	2.4	9
220	Shock transmission in the International Food Trade Network. *PLoS ONE*, **2018**, 13, e0200639	3.7	21
219	National water, food, and trade modeling framework: The case of Egypt. *Science of the Total Environment*, **2018**, 639, 485-496	10.2	35
218	Hydraulics of braided river dynamics. Insights from flume experiments. *E3S Web of Conferences*, **2018**, 40, 02020	0.5	0
217	A change of perspective in network centrality. *Scientific Reports*, **2018**, 8, 15269	4.9	23

216	Mutual information analysis to approach nonlinearity in groundwater stochastic fields. *Stochastic Environmental Research and Risk Assessment*, **2018**, 32, 2933-2942	3.5	4
215	Effects of atrial fibrillation on the arterial fluid dynamics: a modelling perspective. *Meccanica*, **2018**, 53, 3251-3267	2.1	8
214	Coronary fluid mechanics in an ageing cardiovascular system. *Meccanica*, **2017**, 52, 503-514	2.1	6
213	In silico analysis of the anti-hypertensive drugs impact on myocardial oxygen balance. *Biomechanics and Modeling in Mechanobiology*, **2017**, 16, 1035-1047	3.8	6
212	Non-invasive aortic systolic pressure and pulse wave velocity estimation in a primary care setting: An in silico study. *Medical Engineering and Physics*, **2017**, 42, 91-98	2.4	6
211	Impact of seasonal forcing on reactive ecological systems. *Journal of Theoretical Biology*, **2017**, 419, 23-35	2.3	9
210	Alteration of cerebrovascular haemodynamic patterns due to atrial fibrillation: an investigation. *Journal of the Royal Society Interface*, **2017**, 14,	4.1	13
209	Biofilm-induced bioclogging produces sharp interfaces in hyporheic flow, redox conditions, and microbial community structure. *Geophysical Research Letters*, **2017**, 44, 4917-4925	4.9	35
208	Effect of sampling time in the laboratory investigation of braided rivers. *Water Resources Research*, **2017**, 53, 5184-5197	5.4	2
207	Network structure classification and features of water distribution systems. *Water Resources Research*, **2017**, 53, 3407-3423	5.4	22
206	From time-series to complex networks: Application to the cerebrovascular flow patterns in atrial fibrillation. *Chaos*, **2017**, 27, 093107	3.3	19
205	Effect of river flow fluctuations on riparian vegetation dynamics: Processes and models. *Advances in Water Resources*, **2017**, 110, 29-50	4.7	55
204	The environmental cost of a reference withdrawal from surface waters: Definition and geography. *Advances in Water Resources*, **2017**, 110, 228-237	4.7	9
203	A Fast Track approach to deal with the temporal dimension of crop water footprint. *Environmental Research Letters*, **2017**, 12, 074010	6.2	34
202	Age distribution dynamics with stochastic jumps in mortality. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2017**, 473, 20170451	2.4	2
201	To trade or not to trade: Link prediction in the virtual water network. *Advances in Water Resources*, **2017**, 110, 528-537	4.7	29
200	Convective-absolute nature of ripple instabilities on ice and icicles. *Physical Review Fluids*, **2017**, 2,	2.8	6
199	A Computational Study on the Relation between Resting Heart Rate and Atrial Fibrillation Hemodynamics under Exercise. *PLoS ONE*, **2017**, 12, e0169967	3.7	14

198	River bedform inception by flow unsteadiness: A modal and nonmodal analysis. *Physical Review E*, **2016**, 93, 053110	2.4	6
197	Global effects of local food-production crises: a virtual water perspective. *Scientific Reports*, **2016**, 6, 18803	4.9	47
196	Transient cerebral hypoperfusion and hypertensive events during atrial fibrillation: a plausible mechanism for cognitive impairment. *Scientific Reports*, **2016**, 6, 28635	4.9	48
195	Impact of watershed topography on hyporheic exchange. *Advances in Water Resources*, **2016**, 94, 400-411	4.7	25
194	Fluid dynamics of heart valves during atrial fibrillation: a lumped parameter-based approach. *Computer Methods in Biomechanics and Biomedical Engineering*, **2016**, 19, 1060-8	2.1	15
193	Computational fluid dynamics modelling of left valvular heart diseases during atrial fibrillation. *PeerJ*, **2016**, 4, e2240	3.1	12
192	Central Pressure Appraisal: Clinical Validation of a Subject-Specific Mathematical Model. *PLoS ONE*, **2016**, 11, e0151523	3.7	8
191	The past and future of food stocks. *Environmental Research Letters*, **2016**, 11, 035010	6.2	13
190	Recovery times of riparian vegetation. *Water Resources Research*, **2016**, 52, 2934-2950	5.4	5
189	Complex Networks Unveiling Spatial Patterns in Turbulence. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2016**, 26, 1650223	2	25
188	Stochastic ice stream dynamics. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, E4594-600	11.5	6
187	Can diversity in root architecture explain plant water use efficiency? A modeling study. *Ecological Modelling*, **2015**, 312, 200-210	3	56
186	Groundwater impact on methane emissions from flooded paddy fields. *Advances in Water Resources* , **2015**, 83, 340-350	4.7	6
185	Thin-film-induced morphological instabilities over calcite surfaces. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2015**, 471, 20150031	2.4	10
184	Global sensitivity of high-resolution estimates of crop water footprint. *Water Resources Research*, **2015**, 51, 8257-8272	5.4	64
183	Indicators of collapse in systems undergoing unsustainable growth. *Bulletin of Mathematical Biology*, **2015**, 77, 339-47	2.1	3
182	Modelling and subject-specific validation of the heart-arterial tree system. *Annals of Biomedical Engineering*, **2015**, 43, 222-37	4.7	22
181	The signature of randomness in riparian plant root distributions. *Geophysical Research Letters*, **2015** , 42, 7098-7106	4.9	32

180	Noise-driven cooperative dynamics between vegetation and topography in riparian zones. *Geophysical Research Letters*, **2015**, 42, 8021-8030	4.9	19
179	General metrics for segmenting infrastructure networks. *Journal of Hydroinformatics*, **2015**, 17, 505-517	2.6	13
178	Supraglacial channel inception: Modeling and processes. *Water Resources Research*, **2015**, 51, 7044-7063	5.4	11
177	Water Distribution System Modeling and Optimization: A Case Study. *Procedia Engineering*, **2015**, 119, 719-724		4
176	Rate control management of atrial fibrillation: may a mathematical model suggest an ideal heart rate?. *PLoS ONE*, **2015**, 10, e0119868	3.7	17
175	Compensatory Effect between Aortic Stiffening and Remodelling during Ageing. *PLoS ONE*, **2015**, 10, e0139211	3.7	19
174	The Globalisation of Food and Water: The Italian Case **2015**, 145-158		
173	Decreasing of methanogenic activity in paddy fields via lowering ponding water temperature: A modeling investigation. *Soil Biology and Biochemistry*, **2014**, 75, 211-222	7.5	5
172	Drivers of the virtual water trade. *Water Resources Research*, **2014**, 50, 17-28	5.4	91
171	Impact of atrial fibrillation on the cardiovascular system through a lumped-parameter approach. *Medical and Biological Engineering and Computing*, **2014**, 52, 905-920	3.1	26
170	Effect of water table fluctuations on phreatophytic root distribution. *Journal of Theoretical Biology*, **2014**, 360, 102-108	2.3	15
169	Hyporheic flow and transport processes: Mechanisms, models, and biogeochemical implications. *Reviews of Geophysics*, **2014**, 52, 603-679	23.1	468
168	Community Detection as a Tool for District Metered Areas Identification. *Procedia Engineering*, **2014**, 70, 1518-1523		9
167	Mean root depth estimation at landslide slopes. *Ecological Engineering*, **2014**, 69, 118-125	3.9	15
166	Modelling the response of laboratory horizontal flow constructed wetlands to unsteady organic loads with HYDRUS-CWM1. *Ecological Engineering*, **2014**, 68, 209-213	3.9	28
165	A novel infrastructure modularity index for the segmentation of water distribution networks. *Water Resources Research*, **2014**, 50, 7648-7661	5.4	27
164	Modularity Index for Hydraulic System Segmentation. *Procedia Engineering*, **2014**, 89, 1152-1159		1
163	WQNetXL: A MS-excel Water Quality System Tool for WDNs. *Procedia Engineering*, **2014**, 89, 262-272		1

162	New Modularity-Based Approach to Segmentation of Water Distribution Networks. *Journal of Hydraulic Engineering*, **2014**, 140, 04014049	1.8	59
161	On the convective-absolute nature of river bedform instabilities. *Physics of Fluids*, **2014**, 26, 124104	4.4	14
160	Feeding humanity through global food trade. *Earth's Future*, **2014**, 2, 458-469	7.9	202
159	Precursors of state transitions in stochastic systems with delay. *Theoretical Ecology*, **2013**, 6, 265-270	1.6	6
158	Plant water uptake strategies to cope with stochastic rainfall. *Advances in Water Resources*, **2013**, 53, 118-130	4.7	9
157	MODELING THE INTERACTIONS BETWEEN RIVER MORPHODYNAMICS AND RIPARIAN VEGETATION. *Reviews of Geophysics*, **2013**, 51, 379-414	23.1	143
156	Water footprint of a large-sized food company: The case of Barilla pasta production. *Water Resources and Industry*, **2013**, 1-2, 7-24	4.5	52
155	Role of water flow in modeling methane emissions from flooded paddy soils. *Advances in Water Resources*, **2013**, 52, 261-274	4.7	12
154	Can microbial fuel cells be an effective mitigation strategy for methane emissions from paddy fields?. *Ecological Engineering*, **2013**, 60, 167-171	3.9	15
153	Inter-species competition-facilitation in stochastic riparian vegetation dynamics. *Journal of Theoretical Biology*, **2013**, 318, 13-21	2.3	15
152	Flume Experiments on Turbulent Flows Across Gaps of Permeable and Impermeable Boundaries. *Boundary-Layer Meteorology*, **2013**, 147, 21-39	3.4	16
151	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	2.8	2
150	Analysis of Relationship between Porosity and Roughness of Surface Based on Fractal Model. *Advanced Materials Research*, **2013**, 683, 413-418	0.5	1
149	Community detection as a tool for complex pipe network clustering. *Europhysics Letters*, **2013**, 103, 48001	1.6	22
148	The impacts of increasing current velocity on the drift of Simulium monticola (Diptera: Simuliidae): a laboratory approach. *Italian Journal of Zoology*, **2013**, 80, 443-448		8
147	Modeling hyporheic exchange with unsteady stream discharge and bedform dynamics. *Water Resources Research*, **2013**, 49, 4089-4099	5.4	33
146	Small-scale permeability heterogeneity has negligible effects on nutrient cycling in streambeds. *Geophysical Research Letters*, **2013**, 40, 1118-1122	4.9	39
145	Local and global perspectives on the virtual water trade. *Hydrology and Earth System Sciences*, **2013**, 17, 1205-1215	5.5	33

144	Recent history and geography of virtual water trade. *PLoS ONE*, **2013**, 8, e55825	3.7	97
143	Climate dynamics: a network-based approach for the analysis of global precipitation. *PLoS ONE*, **2013**, 8, e71129	3.7	49
142	Global spatio-temporal patterns in human migration: a complex network perspective. *PLoS ONE*, **2013**, 8, e53723	3.7	62
141	Dynamical Systems Driven by Dichotomous Noise. *Modeling and Simulation in Science, Engineering and Technology*, **2013**, 59-77	0.8	
140	Stochastic resonance and coherence resonance in groundwater-dependent plant ecosystems. *Journal of Theoretical Biology*, **2012**, 293, 65-73	2.3	12
139	A spectral approach for the stability analysis of turbulent open-channel flows over granular beds. *Theoretical and Computational Fluid Dynamics*, **2012**, 26, 51-80	2.3	11
138	Ice ripple formation at large Reynolds numbers. *Journal of Fluid Mechanics*, **2012**, 694, 225-251	3.7	23
137	A lumped hydrodynamic model to assess ageing and hypertension effects on the aortic stiffness. *European Journal of Mechanics, B/Fluids*, **2012**, 35, 111-116	2.4	
136	Spatio-temporal stochastic resonance induces patterns in wetland vegetation dynamics. *Ecological Complexity*, **2012**, 10, 93-101	2.6	11
135	Nutrient cycling in bedform induced hyporheic zones. *Geochimica Et Cosmochimica Acta*, **2012**, 84, 47-61	5.5	152
134	Noise-sustained fluctuations in stochastic dynamics with a delay. *Physical Review E*, **2012**, 85, 041106	2.4	4
133	On the temporal variability of the virtual water network. *Geophysical Research Letters*, **2012**, 39, n/a-n/a	4.9	64
132	A phenomenological model to describe turbulent friction in permeable-wall flows. *Geophysical Research Letters*, **2012**, 39, n/a-n/a	4.9	20
131	Numerical and experimental characterization of a novel modular passive micromixer. *Biomedical Microdevices*, **2012**, 14, 849-62	3.7	20
130	Inequalities in the networks of virtual water flow. *Eos*, **2012**, 93, 309-310	1.5	16
129	Bed evolution measurement with flowing water in morphodynamics experiments. *Earth Surface Processes and Landforms*, **2012**, 37, 818-827	3.7	12
128	Hydrodynamic-driven stability analysis of morphological patterns on stalactites and implications for cave paleoflow reconstructions. *Physical Review Letters*, **2012**, 108, 238501	7.4	21
127	A shallow-water theory of river bedforms in supercritical conditions. *Physics of Fluids*, **2012**, 24, 094104	4.4	12

126	Spatial organization and drivers of the virtual water trade: a community-structure analysis. *Environmental Research Letters*, **2012**, 7, 034007	6.2	41
125	Transient growths of stable modes in riverbed dynamics. *Europhysics Letters*, **2012**, 100, 64002	1.6	6
124	Turbulent friction in flows over permeable walls. *Geophysical Research Letters*, **2011**, 38, n/a-n/a	4.9	25
123	A flow resistance model for assessing the impact of vegetation on flood routing mechanics. *Water Resources Research*, **2011**, 47,	5.4	42
122	Crossing properties for geophysical systems forced by Poisson noise. *Geophysical Research Letters*, **2011**, 38, n/a-n/a	4.9	8
121	Modal versus nonmodal linear stability analysis of river dunes. *Physics of Fluids*, **2011**, 23, 104102	4.4	15
120	Long-term morphological river response to hydrological changes. *Advances in Water Resources*, **2011**, 34, 1643-1655	4.7	14
119	Spatial pattern formation induced by Gaussian white noise. *Mathematical Biosciences*, **2011**, 229, 174-84	3.9	16
118	Modeling the impact of river damming on riparian vegetation. *Journal of Hydrology*, **2011**, 396, 302-312	6	55
117	Water and solute exchange through flat streambeds induced by large turbulent eddies. *Journal of Hydrology*, **2011**, 402, 290-296	6	29
116	Generalized collocation method for linear and nonlinear convection-diffusion models. *KSCE Journal of Civil Engineering*, **2011**, 15, 589-593	1.9	1
115	Unsteady overland flow on flat surfaces induced by spatial permeability contrasts. *Advances in Water Resources*, **2011**, 34, 1049-1058	4.7	32
114	Transient growth induces unexpected deterministic spatial patterns in the Turing process. *Europhysics Letters*, **2011**, 95, 18003	1.6	12
113	Turbulent boundary layers over permeable walls: scaling and near-wall structure. *Journal of Fluid Mechanics*, **2011**, 687, 141-170	3.7	86
112	Noise-Induced Phenomena in the Environmental Sciences **2011**,		104
111	Ecohydrology of Terrestrial Ecosystems. *BioScience*, **2010**, 60, 898-907	5.7	85
110	Stochastic description of water table fluctuations in wetlands. *Geophysical Research Letters*, **2010**, 37, n/a-n/a	4.9	23
109	Does globalization of water reduce societal resilience to drought?. *Geophysical Research Letters*, **2010**, 37, n/a-n/a	4.9	71

108	Role of discharge variability on pseudomeandering channel morphodynamics: Results from laboratory experiments. *Journal of Geophysical Research*, **2010**, 115,		28
107	Comment on "Pore water flow due to near-bed turbulence and associated solute transfer in a stream or lake sediment bed" by M. Higashino et al.. *Water Resources Research*, **2010**, 46,	5.4	4
106	Biogeochemical zonation due to intrameander hyporheic flow. *Water Resources Research*, **2010**, 46,	5.4	112
105	Effect of streamflow stochasticity on bedform-driven hyporheic exchange. *Advances in Water Resources*, **2010**, 33, 1367-1374	4.7	33
104	Interplay among river meandering, discharge stochasticity and riparian vegetation. *Journal of Hydrology*, **2010**, 382, 138-144	6	39
103	A stochastic model for vegetation water stress. *Ecohydrology*, **2010**, 3, n/a-n/a	2.5	2
102	Longitudinal dispersion in vegetated rivers with stochastic flows. *Advances in Water Resources*, **2010**, 33, 562-571	4.7	12
101	Flow non-normality-induced transient growth in superposed Newtonian and non-Newtonian fluid layers. *Physical Review E*, **2009**, 80, 036312	2.4	3
100	Quantifying the impact of groundwater discharge on the surface–subsurface exchange. *Hydrological Processes*, **2009**, 23, 2108-2116	3.3	52
99	Estimation of the dispersion coefficient in rivers with riparian vegetation. *Advances in Water Resources*, **2009**, 32, 78-87	4.7	44
98	Modelling river and riparian vegetation interactions and related importance for sustainable ecosystem management. *Aquatic Sciences*, **2009**, 71, 266-278	2.5	59
97	Transport–diffusion models with nonlinear boundary conditions and solution by generalized collocation methods. *Computers and Mathematics With Applications*, **2009**, 58, 558-565	2.7	3
96	Mathematical models of vegetation pattern formation in ecohydrology. *Reviews of Geophysics*, **2009**, 47,	23.1	201
95	Gravity-driven water exchange between streams and hyporheic zones. *Geophysical Research Letters*, **2009**, 36,	4.9	31
94	Ecohydrology of groundwater-dependent ecosystems: 1. Stochastic water table dynamics. *Water Resources Research*, **2009**, 45,	5.4	67
93	Ecohydrology of groundwater-dependent ecosystems: 2. Stochastic soil moisture dynamics. *Water Resources Research*, **2009**, 45,	5.4	43
92	Nonnormality and transient behavior of the de Saint-Venant-Exner equations. *Water Resources Research*, **2009**, 45,	5.4	13
91	Significance of cutoff in meandering river dynamics. *Journal of Geophysical Research*, **2008**, 113,		71

90	Coupled stochastic dynamics of water table and soil moisture in bare soil conditions. *Water Resources Research*, **2008**, 44,	5.4	40
89	Reduction of the hyporheic zone volume due to the stream-aquifer interaction. *Geophysical Research Letters*, **2008**, 35,	4.9	95
88	Intra-meander hyporheic flow in alluvial rivers. *Water Resources Research*, **2008**, 44,	5.4	63
87	Closure to "Green's Function of the Linearized de Saint-Venant Equations" by Luca Ridolfi, Amilcare Porporato, and Roberto Revelli. *Journal of Engineering Mechanics - ASCE*, **2008**, 134, 809-809	2.4	
86	Noise-induced transitions in state-dependent dichotomous processes. *Physical Review E*, **2008**, 78, 031137	2.4	10
85	Fertility Island Formation and Evolution in Dryland Ecosystems. *Ecology and Society*, **2008**, 13,	4.1	54
84	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
83	Biodiversity enhancement induced by environmental noise. *Journal of Theoretical Biology*, **2008**, 255, 332-7	2.3	30
82	Hierarchy of models for meandering rivers and related morphodynamic processes. *Reviews of Geophysics*, **2007**, 45,	23.1	145
81	Probabilistic prediction of real-world time series: A local regression approach. *Geophysical Research Letters*, **2007**, 34,	4.9	1
80	A stochastic process for the interannual snow storage and melting dynamics. *Journal of Geophysical Research*, **2007**, 112,		19
79	Noise-induced vegetation patterns in fire-prone savannas. *Journal of Geophysical Research*, **2007**, 112,		26
78	Significance of the riparian vegetation dynamics on meandering river morphodynamics. *Water Resources Research*, **2007**, 43,	5.4	148
77	Effect of rainfall interannual variability on the stability and resilience of dryland plant ecosystems. *Water Resources Research*, **2007**, 43,	5.4	39
76	Noise-induced phenomena in riparian vegetation dynamics. *Geophysical Research Letters*, **2007**, 34,	4.9	18
75	A continuous time random walk approach to the stream transport of solutes. *Water Resources Research*, **2007**, 43,	5.4	88
74	Challenges in humid land ecohydrology: Interactions of water table and unsaturated zone with climate, soil, and vegetation. *Water Resources Research*, **2007**, 43,	5.4	97
73	Reply to comment by S. Nadarajah on "Riparian vegetation distribution induced by river flow variability: A stochastic approach" *Water Resources Research*, **2007**, 43,	5.4	

72	Bedform-induced hyporheic exchange with unsteady flows. *Advances in Water Resources*, **2007**, 30, 148-156	4.7	117
71	Vegetation dynamics induced by phreatophyte--aquifer interactions. *Journal of Theoretical Biology*, **2007**, 248, 301-10	2.3	38
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