

Efi Foufoula-Georgiou

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

229 papers	8,587 citations	49 h-index	83 g-index
256 ext. papers	9,635 ext. citations	5.5 avg, IF	6.34 L-index

#	Paper	IF	Citations
229	Wavelet analysis for geophysical applications. <i>Reviews of Geophysics</i> , 1997 , 35, 385-412	23.1	622
228	Channel network source representation using digital elevation models. <i>Water Resources Research</i> , 1993 , 29, 3925-3934	5.4	525
227	Science and regulation. Mountaintop mining consequences. <i>Science</i> , 2010 , 327, 148-9	33.3	399
226	ENVIRONMENTAL SCIENCE. Profiling risk and sustainability in coastal deltas of the world. <i>Science</i> , 2015 , 349, 638-43	33.3	341
225	A multicomponent decomposition of spatial rainfall fields: 1. Segregation of large- and small-scale features using wavelet transforms. <i>Water Resources Research</i> , 1993 , 29, 2515-2532	5.4	162
224	Advanced Concepts on Remote Sensing of Precipitation at Multiple Scales. <i>Bulletin of the American Meteorological Society</i> , 2011 , 92, 1353-1357	6.1	157
223	A geometric framework for channel network extraction from lidar: Nonlinear diffusion and geodesic paths. <i>Journal of Geophysical Research</i> , 2010 , 115,		147
222	Channel network extraction from high resolution topography using wavelets. <i>Geophysical Research Letters</i> , 2007 , 34, n/a-n/a	4.9	142
221	Model for multiscale disaggregation of spatial rainfall based on coupling meteorological and scaling descriptions. <i>Journal of Geophysical Research</i> , 1996 , 101, 26347-26361		133
220	Normal and anomalous diffusion of gravel tracer particles in rivers. <i>Journal of Geophysical Research</i> , 2010 , 115,		129
219	Scale issues in verification of precipitation forecasts. <i>Journal of Geophysical Research</i> , 2001 , 106, 11775-11784		121
218	Revisiting multifractality of high-resolution temporal rainfall using a wavelet-based formalism. <i>Water Resources Research</i> , 2006 , 42,	5.4	103
217	Contribution of wetlands to nitrate removal at the watershed scale. <i>Nature Geoscience</i> , 2018 , 11, 127-132	28.3	101
216	Dynamic connectivity in a fluvial network for identifying hotspots of geomorphic change. <i>Water Resources Research</i> , 2015 , 51, 1401-1421	5.4	99
215	Testing space-scale methodologies for automatic geomorphic feature extraction from lidar in a complex mountainous landscape. <i>Water Resources Research</i> , 2010 , 46,	5.4	96
214	Multiscale Statistical Properties of a High-Resolution Precipitation Forecast. <i>Journal of Hydrometeorology</i> , 2001 , 2, 406-418	3.7	96
213	A Markov Renewal Model for rainfall occurrences. <i>Water Resources Research</i> , 1987 , 23, 875-884	5.4	94

212	Self-Affinity in Braided Rivers. <i>Water Resources Research</i> , 1996 , 32, 1429-1439	5.4	87
211	A multicomponent decomposition of spatial rainfall fields: 2. Self-similarity in fluctuations. <i>Water Resources Research</i> , 1993 , 29, 2533-2544	5.4	83
210	Space-time rainfall organization and its role in validating quantitative precipitation forecasts. <i>Journal of Geophysical Research</i> , 2000 , 105, 10129-10146		82
209	Revisiting the Local Scaling Hypothesis in Stably Stratified Atmospheric Boundary-Layer Turbulence: an Integration of Field and Laboratory Measurements with Large-Eddy Simulations. <i>Boundary-Layer Meteorology</i> , 2006 , 119, 473-500	3.4	80
208	Experimental evidence for statistical scaling and intermittency in sediment transport rates. <i>Journal of Geophysical Research</i> , 2009 , 114,		78
207	Forecasting the response of Earth's surface to future climatic and land use changes: A review of methods and research needs. <i>Earth's Future</i> , 2015 , 3, 220-251	7.9	77
206	On the use of digital elevation model data for Hortonian and fractal analyses of channel networks. <i>Water Resources Research</i> , 1993 , 29, 2599-2613	5.4	77
205	Linkage of scaling and thermodynamic parameters of rainfall: Results from midlatitude mesoscale convective systems. <i>Journal of Geophysical Research</i> , 1996 , 101, 7431-7448		76
204	A scaling model of a storm hyetograph. <i>Water Resources Research</i> , 1993 , 29, 2345-2361	5.4	76
203	A network-based framework for identifying potential synchronizations and amplifications of sediment delivery in river basins. <i>Water Resources Research</i> , 2014 , 50, 3826-3851	5.4	74
202	Evidence of dynamic scaling in space-time rainfall. <i>Journal of Geophysical Research</i> , 1999 , 104, 31599-31610		73
201	High spatiotemporal resolution of river planform dynamics from Landsat: The RivMAP toolbox and results from the Ucayali River. <i>Earth and Space Science</i> , 2017 , 4, 46-75	3.1	72
200	Automatic geomorphic feature extraction from lidar in flat and engineered landscapes. <i>Water Resources Research</i> , 2012 , 48,	5.4	72
199	A probabilistic storm transposition approach for estimating exceedance probabilities of extreme precipitation depths. <i>Water Resources Research</i> , 1989 , 25, 799-815	5.4	71
198	A nonlocal theory of sediment transport on hillslopes. <i>Journal of Geophysical Research</i> , 2010 , 115,		70
197	Toward a unified science of the Earth's surface: Opportunities for synthesis among hydrology, geomorphology, geochemistry, and ecology. <i>Water Resources Research</i> , 2006 , 42,	5.4	70
196	Gradient dynamic programming for stochastic optimal control of multidimensional water resources systems. <i>Water Resources Research</i> , 1988 , 24, 1345-1359	5.4	69
195	Population dynamics, delta vulnerability and environmental change: comparison of the Mekong, Ganges-Brahmaputra and Amazon delta regions. <i>Sustainability Science</i> , 2016 , 11, 539-554	6.4	66

194	Delta channel networks: 1. A graph-theoretic approach for studying connectivity and steady state transport on deltaic surfaces. <i>Water Resources Research</i> , 2015 , 51, 3998-4018	5.4	65
193	Do gravel bed river size distributions record channel network structure?. <i>Water Resources Research</i> , 2006 , 42,	5.4	62
192	The change of nature and the nature of change in agricultural landscapes: Hydrologic regime shifts modulate ecological transitions. <i>Water Resources Research</i> , 2015 , 51, 6649-6671	5.4	61
191	Experimental evidence of dynamic scaling and indications of self-organized criticality in braided rivers. <i>Water Resources Research</i> , 1997 , 33, 1983-1991	5.4	61
190	Generalized hydraulic geometry: Derivation based on a multiscaling formalism. <i>Water Resources Research</i> , 2004 , 40,	5.4	57
189	A space-time downscaling model for rainfall. <i>Journal of Geophysical Research</i> , 1999 , 104, 19705-19721		57
188	Delta channel networks: 2. Metrics of topologic and dynamic complexity for delta comparison, physical inference, and vulnerability assessment. <i>Water Resources Research</i> , 2015 , 51, 4019-4045	5.4	56
187	Multiscale statistical characterization of migrating bed forms in gravel and sand bed rivers. <i>Water Resources Research</i> , 2011 , 47,	5.4	56
186	On the influence of gravel bed dynamics on velocity power spectra. <i>Water Resources Research</i> , 2010 , 46,	5.4	56
185	The life of a meander bend: Connecting shape and dynamics via analysis of a numerical model. <i>Journal of Geophysical Research F: Earth Surface</i> , 2015 , 120, 690-710	3.8	54
184	Space-time dynamics of depositional systems: Experimental evidence and theoretical modeling of heavy-tailed statistics. <i>Journal of Geophysical Research</i> , 2011 , 116,		53
183	Global, Regional, and Megacity Trends in the Highest Temperature of the Year: Diagnostics and Evidence for Accelerating Trends. <i>Earth's Future</i> , 2018 , 6, 71-79	7.9	52
182	Hydrological Aspects of Weather Prediction and Flood Warnings: Report of the Ninth Prospectus Development Team of the U.S. Weather Research Program. <i>Bulletin of the American Meteorological Society</i> , 2000 , 81, 2665-2680	6.1	51
181	Meander cutoffs nonlocally accelerate upstream and downstream migration and channel widening. <i>Geophysical Research Letters</i> , 2016 , 43, 12,437	4.9	50
180	Critical transition in critical zone of intensively managed landscapes. <i>Anthropocene</i> , 2018 , 22, 10-19	3.9	49
179	A nonlocal theory of sediment buffering and bedrock channel evolution. <i>Journal of Geophysical Research</i> , 2009 , 114,		48
178	Floodplain morphometry extraction from a high-resolution digital elevation model: a simple algorithm for regional analysis studies. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2006 , 3, 410-413	4.1	48
177	Human amplified changes in precipitation runoff patterns in large river basins of the Midwestern United States. <i>Hydrology and Earth System Sciences</i> , 2017 , 21, 5065-5088	5.5	47

176	Remote Sensing of River Delta Inundation: Exploiting the Potential of Coarse Spatial Resolution, Temporally-Dense MODIS Time Series. <i>Remote Sensing</i> , 2015 , 7, 8516-8542	5	45
175	Fluvial processes and streamflow variability: Interplay in the scale-frequency continuum and implications for scaling. <i>Water Resources Research</i> , 2005 , 41,	5-4	45
174	Area and width functions of river networks: New results on multifractal properties. <i>Water Resources Research</i> , 2007 , 43,	5-4	43
173	Scale Invariances in the Morphology and Evolution of Braided Rivers. <i>Mathematical Geosciences</i> , 2001 , 33, 273-291		43
172	Assessing dependence among weights in a multiplicative cascade model of temporal rainfall. <i>Journal of Geophysical Research</i> , 1996 , 101, 26363-26370		43
171	Wavelet Analysis in Geophysics: An Introduction. <i>Wavelet Analysis and Its Applications</i> , 1994 , 4, 1-43		42
170	Horizontal and vertical self-organization of braided rivers toward a critical state. <i>Water Resources Research</i> , 1999 , 35, 843-851	5-4	41
169	A new metric for comparing precipitation patterns with an application to ensemble forecasts. <i>Journal of Geophysical Research</i> , 2005 , 110,		40
168	Application of dynamic subgrid-scale concepts from large-eddy simulation to modeling landscape evolution. <i>Water Resources Research</i> , 2006 , 42,	5-4	40
167	The influence of migrating bed forms on the velocity-intermittency structure of turbulent flow over a gravel bed. <i>Geophysical Research Letters</i> , 2013 , 40, 1351-1355	4-9	39
166	Recent advances in rainfall modeling, estimation, and forecasting. <i>Reviews of Geophysics</i> , 1995 , 33, 1125-1137	3-13	39
165	Energy decomposition of rainfall in the time-frequency-scale domain using wavelet packets. <i>Journal of Hydrology</i> , 1996 , 187, 3-27	6	39
164	Landscape reorganization under changing climatic forcing: Results from an experimental landscape. <i>Water Resources Research</i> , 2015 , 51, 4320-4337	5-4	38
163	Synthetic turbulence, fractal interpolation, and large-eddy simulation. <i>Physical Review E</i> , 2004 , 70, 026310	1-4	38
162	Study of spatial scaling in braided river patterns using synthetic aperture radar imagery. <i>Water Resources Research</i> , 1998 , 34, 1795-1807	5-4	38
161	Entropy and optimality in river deltas. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 11651-11656	11-5	36
160	Stochastic storm transposition coupled with rainfall runoff modeling for estimation of exceedance probabilities of design floods. <i>Journal of Hydrology</i> , 1996 , 175, 511-532	6	36
159	A Diagnostic Framework for Understanding Climatology of Tails of Hourly Precipitation Extremes in the United States. <i>Water Resources Research</i> , 2018 , 54, 6725-6738	5-4	35

158	Validation of Braided-Stream Models: Spatial state-space plots, self-affine scaling, and island shapes. <i>Water Resources Research</i> , 1998 , 34, 2353-2364	5.4	35
157	A probability-weighted moment test to assess simple scaling. <i>Stochastic Hydrology & Hydraulics</i> , 1994 , 8, 173-183		35
156	Subordinated Brownian motion model for sediment transport. <i>Physical Review E</i> , 2009 , 80, 011111	2.4	34
155	Advancing the Remote Sensing of Precipitation. <i>Bulletin of the American Meteorological Society</i> , 2011 , 92, 1271-1272	6.1	34
154	Robust classification for the joint velocity-intermittency structure of turbulent flow over fixed and mobile bedforms. <i>Earth Surface Processes and Landforms</i> , 2014 , 39, 1717-1728	3.7	33
153	Are American rivers Tokunaga self-similar? New results on fluvial network topology and its climatic dependence. <i>Journal of Geophysical Research F: Earth Surface</i> , 2013 , 118, 166-183	3.8	33
152	Transport on river networks: A dynamic tree approach. <i>Journal of Geophysical Research</i> , 2010 , 115,		33
151	Unravelling the association between the impact of natural hazards and household poverty: evidence from the Indian Sundarban delta. <i>Sustainability Science</i> , 2017 , 12, 453-464	6.4	31
150	A new interhemispheric teleconnection increases predictability of winter precipitation in southwestern US. <i>Nature Communications</i> , 2018 , 9, 2332	17.4	31
149	Coupled dynamics of the co-evolution of gravel bed topography, flow turbulence and sediment transport in an experimental channel. <i>Journal of Geophysical Research</i> , 2012 , 117, n/a-n/a		31
148	Catalyzing action towards the sustainability of deltas. <i>Current Opinion in Environmental Sustainability</i> , 2016 , 19, 182-194	7.2	30
147	Impact of Small-Scale Rainfall Variability on Larger-Scale Spatial Organization of Land-Atmosphere Fluxes. <i>Journal of Hydrometeorology</i> , 2001 , 2, 105-121	3.7	30
146	Scaling behavior of high resolution temporal rainfall: New insights from a wavelet-based cumulant analysis. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2006 , 348, 335-345	2.3	29
145	Anisotropic scaling in braided rivers: An integrated theoretical framework and results from application to an experimental river. <i>Water Resources Research</i> , 1998 , 34, 863-867	5.4	29
144	The 'perfect storm'—From across the Atlantic to the hills of Genoa. <i>Eos</i> , 2012 , 93, 225-226	1.5	28
143	Modeling kinetic non-equilibrium using the first two moments of the residence time distribution. <i>Stochastic Hydrology & Hydraulics</i> , 1991 , 5, 155-171		28
142	Interplay between spatially explicit sediment sourcing, hierarchical river-network structure, and in-channel bed material sediment transport and storage dynamics. <i>Journal of Geophysical Research F: Earth Surface</i> , 2017 , 122, 1090-1120	3.8	27
141	Making SDGs Work for Climate Change Hotspots. <i>Environment</i> , 2016 , 58, 24-33	2.8	27

140	Quantifying the signature of sediment composition on the topologic and dynamic complexity of river delta channel networks and inferences toward delta classification. <i>Geophysical Research Letters</i> , 2016 , 43, 3280-3287	4.9	27
139	Revisiting scaling laws in river basins: New considerations across hillslope and fluvial regimes. <i>Water Resources Research</i> , 2011 , 47,	5.4	27
138	Soil moisture variability and scale-dependency of nonlinear parameterizations in coupled land-atmosphere models. <i>Advances in Water Resources</i> , 2001 , 24, 1143-1157	4.7	27
137	Subgrid variability and stochastic downscaling of modeled clouds: Effects on radiative transfer computations for rainfall retrieval. <i>Journal of Geophysical Research</i> , 2001 , 106, 10349-10362		27
136	Compatibility of Continuous Rainfall Occurrence Models With Discrete Rainfall Observations. <i>Water Resources Research</i> , 1986 , 22, 1316-1322	5.4	27
135	Precise Temporal Disaggregation Preserving Marginals and Correlations (DiPMaC) for Stationary and Nonstationary Processes. <i>Water Resources Research</i> , 2018 , 54, 7435-7458	5.4	27
134	Spectral description of migrating bed forms and sediment transport. <i>Journal of Geophysical Research F: Earth Surface</i> , 2014 , 119, 123-137	3.8	26
133	Do the Current Landscape Evolution Models Show Self-Organized Criticality?. <i>Water Resources Research</i> , 1996 , 32, 1109-1112	5.4	26
132	Kinematic controls on the geometry of the preserved cross sets. <i>Journal of Geophysical Research F: Earth Surface</i> , 2013 , 118, 1296-1307	3.8	25
131	Evidence for inherent nonlinearity in temporal rainfall. <i>Advances in Water Resources</i> , 2009 , 32, 41-48	4.7	25
130	Scaling in river corridor widths depicts organization in valley morphology. <i>Geomorphology</i> , 2007 , 91, 198-215	4.5	25
129	A New Look at Rainfall Fluctuations and Scaling Properties of Spatial Rainfall Using Orthogonal Wavelets. <i>Journal of Applied Meteorology and Climatology</i> , 1993 , 32, 209-222		25
128	Diffusion Dynamics and Optimal Coupling in Multiplex Networks with Directed Layers. <i>Physical Review X</i> , 2018 , 8,	9.1	25
127	Shrunk Locally Linear Embedding for Passive Microwave Retrieval of Precipitation. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2015 , 53, 3720-3736	8.1	24
126	Contextualizing Wetlands Within a River Network to Assess Nitrate Removal and Inform Watershed Management. <i>Water Resources Research</i> , 2018 , 54, 1312-1337	5.4	24
125	A mechanistic-stochastic formulation of bed load particle motions: From individual particle forces to the Fokker-Planck equation under low transport rates. <i>Journal of Geophysical Research F: Earth Surface</i> , 2014 , 119, 464-482	3.8	24
124	Estimating intermittency exponent in neutrally stratified atmospheric surface layer flows: A robust framework based on magnitude cumulant and surrogate analyses. <i>Physics of Fluids</i> , 2007 , 19, 115102	4.4	24
123	Incorporating the spatio-temporal distribution of rainfall and basin geomorphology into nonlinear analyses of streamflow dynamics. <i>Advances in Water Resources</i> , 2005 , 28, 711-728	4.7	24

122	International Year of Deltas 2013: A proposal. <i>Eos</i> , 2011 , 92, 340-341	1.5	23
121	Introduction to special section on Stochastic Transport and Emergent Scaling on Earth's Surface: Rethinking geomorphic transportStochastic theories, broad scales of motion and nonlocality. <i>Journal of Geophysical Research</i> , 2010 , 115,		23
120	Scale-recursive estimation for multisensor Quantitative Precipitation Forecast verification: A preliminary assessment. <i>Journal of Geophysical Research</i> , 2003 , 108, CIP 2-1		23
119	Error analysis of conventional discrete and gradient dynamic programming. <i>Water Resources Research</i> , 1987 , 23, 845-858	5.4	23
118	Continuous-Time Versus Discrete-Time Point Process Models for Rainfall Occurrence Series. <i>Water Resources Research</i> , 1986 , 22, 531-542	5.4	23
117	Coupling freshwater mussel ecology and river dynamics using a simplified dynamic interaction model. <i>Freshwater Science</i> , 2016 , 35, 200-215	2	23
116	Zonally contrasting shifts of the tropical rainbelt in response to climate change. <i>Nature Climate Change</i> , 2021 , 11, 143-151	21.4	23
115	Tidal asymmetry and residual sediment transport in a short tidal basin under sea level rise. <i>Advances in Water Resources</i> , 2018 , 121, 1-8	4.7	22
114	A methodology for merging multisensor precipitation estimates based on expectation-maximization and scale-recursive estimation. <i>Journal of Geophysical Research</i> , 2006 , 111,		22
113	Characterizing Multiscale Variability of Zero Intermittency in Spatial Rainfall. <i>Journal of Applied Meteorology and Climatology</i> , 1994 , 33, 1516-1525		22
112	Sustainable Development Goals Offer New Opportunities for Tropical Delta Regions. <i>Environment</i> , 2015 , 57, 16-23	2.8	21
111	Exploring a semimechanistic episodic Langevin model for bed load transport: Emergence of normal and anomalous advection and diffusion regimes. <i>Water Resources Research</i> , 2016 , 52, 2789-2801	5.4	20
110	Scale-dependent erosional patterns in steady-state and transient-state landscapes. <i>Science Advances</i> , 2017 , 3, e1701683	14.3	19
109	Inferring changes in water cycle dynamics of intensively managed landscapes via the theory of time-variant travel time distributions. <i>Water Resources Research</i> , 2016 , 52, 7593-7614	5.4	19
108	Global Multiscale Evaluation of Satellite Passive Microwave Retrieval of Precipitation during the TRMM and GPM Eras: Effective Resolution and Regional Diagnostics for Future Algorithm Development. <i>Journal of Hydrometeorology</i> , 2017 , 18, 3051-3070	3.7	18
107	The complexity of gravel bed river topography examined with gradual wavelet reconstruction. <i>Journal of Geophysical Research F: Earth Surface</i> , 2014 , 119, 682-700	3.8	18
106	Sparse regularization for precipitation downscaling. <i>Journal of Geophysical Research</i> , 2012 , 117, n/a-n/a		18
105	Detection of nonlinearity and chaoticity in time series using the transportation distance function. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2002 , 301, 413-423	2.3	18

104	On variational downscaling, fusion, and assimilation of hydrometeorological states: A unified framework via regularization. <i>Water Resources Research</i> , 2013 , 49, 5944-5963	5.4	17
103	Assessment of a class of Neyman-Scott models for temporal rainfall. <i>Journal of Geophysical Research</i> , 1987 , 92, 9679		17
102	Prevalence of exponential bed thickness distributions in the stratigraphic record: Experiments and theory. <i>Journal of Geophysical Research</i> , 2012 , 117, n/a-n/a		16
101	Nonlinearity and complexity in gravel bed dynamics. <i>Stochastic Environmental Research and Risk Assessment</i> , 2009 , 23, 967-975	3.5	16
100	Analytical Solution for Anomalous Diffusion of Bedload Tracers Gradually Undergoing Burial. <i>Journal of Geophysical Research F: Earth Surface</i> , 2019 , 124, 21-37	3.8	16
99	Downscaling Satellite Precipitation with Emphasis on Extremes: A Variational ℓ_1 -Norm Regularization in the Derivative Domain. <i>Surveys in Geophysics</i> , 2014 , 35, 765-783	7.6	15
98	Does the flow of information in a landscape have direction?. <i>Geophysical Research Letters</i> , 2012 , 39, n/a-n/a	4.9	15
97	Orographic signature on multiscale statistics of extreme rainfall: A storm-scale study. <i>Journal of Geophysical Research</i> , 2010 , 115,		15
96	Hydrologic Advances in Space-Time Precipitation Modeling and Forecasting 1991 , 47-65		15
95	Bedform effect on the reorganization of surface and subsurface grain size distribution in gravel bedded channels. <i>Acta Geophysica</i> , 2012 , 60, 1607-1638	2.2	14
94	Estimating and scaling stream ecosystem metabolism along channels with heterogeneous substrate. <i>Ecohydrology</i> , 2013 , 6, 679-688	2.5	14
93	Generalized hydraulic geometry: Insights based on fluvial instability analysis and a physical model. <i>Water Resources Research</i> , 2004 , 40,	5.4	14
92	Effects of underrepresented hydrometeor variability and partial beam filling on microwave brightness temperatures for rainfall retrieval. <i>Journal of Geophysical Research</i> , 2003 , 108,		14
91	A Prognostic Nested -Nearest Approach for Microwave Precipitation Phase Detection over Snow Cover. <i>Journal of Hydrometeorology</i> , 2019 , 20, 251-274	3.7	13
90	Study of self-similar and self-affine objects using logarithmic correlation integral. <i>Journal of Physics A</i> , 1995 , 28, 559-571		13
89	In search of regularities in extreme rainstorms. <i>Journal of Geophysical Research</i> , 1990 , 95, 2061		13
88	A Transfer Function Approach to Sampling Network Design for Groundwater Contamination. <i>Water Resources Research</i> , 1991 , 27, 2759-2769	5.4	13
87	Solving water quality problems in agricultural landscapes: New approaches for these nonlinear, multiprocess, multiscale systems. <i>Water Resources Research</i> , 2017 , 53, 2585-2590	5.4	12

86	Coping with model error in variational data assimilation using optimal mass transport. <i>Water Resources Research</i> , 2014 , 50, 5817-5830	5.4	12
85	A sub-grid scale closure for nonlinear hillslope sediment transport models. <i>Journal of Geophysical Research</i> , 2012 , 117, n/a-n/a		12
84	Signature of microphysics on spatial rainfall statistics. <i>Journal of Geophysical Research</i> , 2011 , 116,		12
83	Evaluation of ShARP Passive Rainfall Retrievals over Snow-Covered Land Surfaces and Coastal Zones. <i>Journal of Hydrometeorology</i> , 2016 , 17, 1013-1029	3.7	12
82	StreamLab Collaboratory: Experiments, data sets, and research synthesis. <i>Water Resources Research</i> , 2013 , 49, 1746-1752	5.4	11
81	Statistics of precipitation reflectivity images and cascade of Gaussian-scale mixtures in the wavelet domain: A formalism for reproducing extremes and coherent multiscale structures. <i>Journal of Geophysical Research</i> , 2011 , 116,		11
80	DRIHM(2US): An e-Science Environment for Hydrometeorological Research on High-Impact Weather Events. <i>Bulletin of the American Meteorological Society</i> , 2017 , 98, 2149-2166	6.1	10
79	ON SCALING THEORIES OF SPACE-TIME RAINFALL: SOME RECENT RESULTS AND OPEN PROBLEMS. <i>Advanced Series on Statistical Science & Applied Probability</i> , 1998 , 25-72		10
78	Fertilizer, landscape features and climate regulate phosphorus retention and river export in diverse Midwestern watersheds. <i>Biogeochemistry</i> , 2019 , 146, 293-309	3.8	10
77	Machine learning to predict final fire size at the time of ignition. <i>International Journal of Wildland Fire</i> , 2019 , 28, 861-873	3.2	9
76	Comment on Climate and agricultural land use change impacts on streamflow in the upper midwestern United States by Satish C. Gupta et al.. <i>Water Resources Research</i> , 2016 , 52, 7536-7539	5.4	9
75	Multiplex Networks: A Framework for Studying Multiprocess Multiscale Connectivity Via Coupled-Network Theory With an Application to River Deltas. <i>Geophysical Research Letters</i> , 2018 , 45, 9681-9689	4.9	9
74	A combined nonlinear and nonlocal model for topographic evolution in channelized depositional systems. <i>Journal of Geophysical Research F: Earth Surface</i> , 2013 , 118, 1617-1627	3.8	9
73	Comment on Objective extraction of channel heads from high-resolution topographic data by Fiona J. Clubb et al.. <i>Water Resources Research</i> , 2015 , 51, 1372-1376	5.4	9
72	Variational data assimilation via sparse regularisation. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , 2014 , 66, 21789	2	9
71	Subgrid-scale rainfall variability and its effects on atmospheric and surface variable predictions. <i>Journal of Geophysical Research</i> , 1997 , 102, 19559-19573		9
70	Multiscale interactions between surface shear stress and velocity in turbulent boundary layers. <i>Journal of Geophysical Research</i> , 2003 , 108,		9
69	Data and analysis toolbox for modeling the nexus of food, energy, and water. <i>Sustainable Cities and Society</i> , 2020 , 61, 102281	10.1	9

68	Self-dissimilar landscapes: Revealing the signature of geologic constraints on landscape dissection via topologic and multi-scale analysis. <i>Geomorphology</i> , 2017 , 295, 16-27	4.3	8
67	On the Vertical Structure of Modeled and Observed Deep Convective Storms: Insights for Precipitation Retrieval and Microphysical Parameterization. <i>Journal of Applied Meteorology and Climatology</i> , 2005 , 44, 1866-1884		8
66	Predictability of atmospheric boundary-layer flows as a function of scale. <i>Geophysical Research Letters</i> , 2002 , 29, 34-1	4.9	8
65	Event-specific multiplicative cascade models and an application to rainfall. <i>Journal of Geophysical Research</i> , 1999 , 104, 31611-31622		8
64	Fourier domain shape analysis methods: A brief review and an illustrative application to rainfall area evolution. <i>Water Resources Research</i> , 1990 , 26, 2219-2227	5.4	8
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