Efi Foufoula-Georgiou

List of Publications by Year in Descending Order

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	Critical Tokunaga model for river networks.. *Physical Review E*, **2022**, 105, 014301	2.4	0
228	Ensemble Riemannian data assimilation: towards large-scale dynamical systems. *Nonlinear Processes in Geophysics*, **2022**, 29, 77-92	2.9	0
227	Climate Signatures on Lake And Wetland Size Distributions in Arctic Deltas. *Geophysical Research Letters*, **2021**, 48, e2021GL094437	4.9	2
226	Evaluating Landscape Complexity and the Contribution of Non-Locality to Geomorphometry. *Journal of Geophysical Research F: Earth Surface*, **2021**, 126, e2020JF005765	3.8	1
225	Underestimated MJO variability in CMIP6 models. *Geophysical Research Letters*, **2021**, 48, e2020GL092244	4.9	5
224	Integrated assessment modeling reveals near-channel management as cost-effective to improve water quality in agricultural watersheds. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	6
223	Quantitative Investigation of Radiometric Interactions between Snowfall, Snow Cover, and Cloud Liquid Water over Land. *Remote Sensing*, **2021**, 13, 2641	5	1
222	Rotated Spectral Principal Component Analysis (rsPCA) for Identifying Dynamical Modes of Variability in Climate Systems. *Journal of Climate*, **2021**, 34, 715-736	4.4	3
221	A velocity-variation-based formulation for bedload particle hops in rivers. *Journal of Fluid Mechanics* , **2021**, 912,	3.7	3
220	Probabilistic Evaluation of Drought in CMIP6 Simulations. *Earth's Future*, **2021**, 9, e2021EF002150	7.9	4
219	Zonally contrasting shifts of the tropical rainbelt in response to climate change. *Nature Climate Change*, **2021**, 11, 143-151	21.4	23
218	Channel Network Control on Seasonal Lake Area Dynamics in Arctic Deltas. *Geophysical Research Letters*, **2020**, 47, e2019GL086710	4.9	3
217	Forecasting Daily Wildfire Activity Using Poisson Regression. *IEEE Transactions on Geoscience and Remote Sensing*, **2020**, 58, 4837-4851	8.1	5
216	Hilbert-Conditioned Hypsometry: A Refinement to a Classical Approach for the Characterization of Topography. *Water Resources Research*, **2020**, 56, e2019WR025412	5.4	3
215	Advancing Precipitation Estimation, Prediction, and Impact Studies. *Bulletin of the American Meteorological Society*, **2020**, 101, E1584-E1592	6.1	8
214	Multiscale Evaluation of Satellite Precipitation Products: Effective Resolution of IMERG. *Advances in Global Change Research*, **2020**, 533-558	1.2	0
213	Data and analysis toolbox for modeling the nexus of food, energy, and water. *Sustainable Cities and Society*, **2020**, 61, 102281	10.1	9

212	Beyond the Pixel: Using Patterns and Multiscale Spatial Information to Improve the Retrieval of Precipitation from Spaceborne Passive Microwave Imagers. *Journal of Atmospheric and Oceanic Technology*, **2020**, 37, 1571-1591	2	3
211	Generalization of Hop Distance-Time Scaling and Particle Velocity Distributions via a Two-Regime Formalism of Bedload Particle Motions. *Water Resources Research*, **2020**, 56, e2019WR025116	5.4	5
210	Forecasting Global Fire Emissions on Subseasonal to Seasonal (S2S) Time Scales. *Journal of Advances in Modeling Earth Systems*, **2020**, 12, e2019MS001955	7.1	4
209	From turbulence to landscapes: Logarithmic mean profiles in bounded complex systems. *Physical Review E*, **2020**, 102, 033107	2.4	4
208	Graph-Guided Regularized Regression of Pacific Ocean Climate Variables to Increase Predictive Skill of Southwestern U.S. Winter Precipitation. *Journal of Climate*, **2020**, 34, 737-754	4.4	5
207	Machine learning to predict final fire size at the time of ignition. *International Journal of Wildland Fire*, **2019**, 28, 861-873	3.2	9
206	A Prognostic Nested -Nearest Approach for Microwave Precipitation Phase Detection over Snow Cover. *Journal of Hydrometeorology*, **2019**, 20, 251-274	3.7	13
205	Climatic Controls on Landscape Dissection and Network Structure in the Absence of Vegetation. *Geophysical Research Letters*, **2019**, 46, 3216-3224	4.9	7
204	The Power of Environmental Observatories for Advancing Multidisciplinary Research, Outreach, and Decision Support: The Case of the Minnesota River Basin. *Water Resources Research*, **2019**, 55, 3576-3592	5.4	5
203	Reply to: A critical examination of a newly proposed interhemispheric teleconnection to Southwestern US winter precipitation. *Nature Communications*, **2019**, 10, 2918	17.4	3
202	Fertilizer, landscape features and climate regulate phosphorus retention and river export in diverse Midwestern watersheds. *Biogeochemistry*, **2019**, 146, 293-309	3.8	10
201	Analytical Solution for Anomalous Diffusion of Bedload Tracers Gradually Undergoing Burial. *Journal of Geophysical Research F: Earth Surface*, **2019**, 124, 21-37	3.8	16
200	Critical transition in critical zone of intensively managed landscapes. *Anthropocene*, **2018**, 22, 10-19	3.9	49
199	Contribution of wetlands to nitrate removal at the watershed scale. *Nature Geoscience*, **2018**, 11, 127-132	28.3	101
198	Contextualizing Wetlands Within a River Network to Assess Nitrate Removal and Inform Watershed Management. *Water Resources Research*, **2018**, 54, 1312-1337	5.4	24
197	Global, Regional, and Megacity Trends in the Highest Temperature of the Year: Diagnostics and Evidence for Accelerating Trends. *Earth's Future*, **2018**, 6, 71-79	7.9	52
196	Multiplex Networks: A Framework for Studying Multiprocess Multiscale Connectivity Via Coupled-Network Theory With an Application to River Deltas. *Geophysical Research Letters*, **2018**, 45, 9681-9689	4.9	9
195	Tidal asymmetry and residual sediment transport in a short tidal basin under sea level rise. *Advances in Water Resources*, **2018**, 121, 1-8	4.7	22

194	A Diagnostic Framework for Understanding Climatology of Tails of Hourly Precipitation Extremes in the United States. *Water Resources Research*, **2018**, 54, 6725-6738	5.4	35
193	A new interhemispheric teleconnection increases predictability of winter precipitation in southwestern US. *Nature Communications*, **2018**, 9, 2332	17.4	31
192	A Multivariate Probabilistic Framework for Tracking the Intertropical Convergence Zone: Analysis of Recent Climatology and Past Trends. *Geophysical Research Letters*, **2018**, 45, 13,080	4.9	4
191	Resolving Surface Rain from GMI High-Frequency Channels: Limits Imposed by the Three-Dimensional Structure of Precipitation. *Journal of Atmospheric and Oceanic Technology*, **2018**, 35, 1835-1847	2	4
190	Diffusion Dynamics and Optimal Coupling in Multiplex Networks with Directed Layers. *Physical Review X*, **2018**, 8,	9.1	25
189	Precise Temporal Disaggregation Preserving Marginals and Correlations (DiPMaC) for Stationary and Nonstationary Processes. *Water Resources Research*, **2018**, 54, 7435-7458	5.4	27
188	Unravelling the association between the impact of natural hazards and household poverty: evidence from the Indian Sundarban delta. *Sustainability Science*, **2017**, 12, 453-464	6.4	31
187	Solving water quality problems in agricultural landscapes: New approaches for these nonlinear, multiprocess, multiscale systems. *Water Resources Research*, **2017**, 53, 2585-2590	5.4	12
186	Interplay between spatially explicit sediment sourcing, hierarchical river-network structure, and in-channel bed material sediment transport and storage dynamics. *Journal of Geophysical Research F: Earth Surface*, **2017**, 122, 1090-1120	3.8	27
185	Self-dissimilar landscapes: Revealing the signature of geologic constraints on landscape dissection via topologic and multi-scale analysis. *Geomorphology*, **2017**, 295, 16-27	4.3	8
184	DRIHM(2US): An e-Science Environment for Hydrometeorological Research on High-Impact Weather Events. *Bulletin of the American Meteorological Society*, **2017**, 98, 2149-2166	6.1	10
183	High spatiotemporal resolution of river planform dynamics from Landsat: The RivMAP toolbox and results from the Ucayali River. *Earth and Space Science*, **2017**, 4, 46-75	3.1	72
182	Scale-dependent erosional patterns in steady-state and transient-state landscapes. *Science Advances*, **2017**, 3, e1701683	14.3	19
181	Entropy and optimality in river deltas. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 11651-11656	11.5	36
180	A multi-sensor data-driven methodology for all-sky passive microwave inundation retrieval. *Hydrology and Earth System Sciences*, **2017**, 21, 2685-2700	5.5	5
179	Human amplified changes in precipitation□unoff patterns in large river basins of the Midwestern United States. *Hydrology and Earth System Sciences*, **2017**, 21, 5065-5088	5.5	47
178	Network robustness assessed within a dual connectivity framework: joint dynamics of the Active and Idle Networks. *Scientific Reports*, **2017**, 7, 8567	4.9	2
177	Are process nonlinearities encoded in meandering river planform morphology?. *Journal of Geophysical Research F: Earth Surface*, **2017**, 122, 1534-1552	3.8	6

176	Time-variant Lagrangian transport formulation reduces aggregation bias of water and solute mean travel time in heterogeneous catchments. *Geophysical Research Letters*, **2017**, 44, 4880-4888	4.9	4
175	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. *Journal of Hydrometeorology*, **2017**, 18, 3051-3070	3.7	18
174	Population dynamics, delta vulnerability and environmental change: comparison of the Mekong, Ganges-Brahmaputra and Amazon delta regions. *Sustainability Science*, **2016**, 11, 539-554	6.4	66
173	Making SDGs Work for Climate Change Hotspots. *Environment*, **2016**, 58, 24-33	2.8	27
172	Comment on "Climate and agricultural land use change impacts on streamflow in the upper midwestern United States" by Satish C. Gupta et al.. *Water Resources Research*, **2016**, 52, 7536-7539	5.4	9
171	Quantifying the signature of sediment composition on the topologic and dynamic complexity of river delta channel networks and inferences toward delta classification. *Geophysical Research Letters*, **2016**, 43, 3280-3287	4.9	27
170	Catalyzing action towards the sustainability of deltas. *Current Opinion in Environmental Sustainability*, **2016**, 19, 182-194	7.2	30
169	Inferring changes in water cycle dynamics of intensively managed landscapes via the theory of time-variant travel time distributions. *Water Resources Research*, **2016**, 52, 7593-7614	5.4	19
168	Wavelet-Compressed Representation of Landscapes for Hydrologic and Geomorphologic Applications. *IEEE Geoscience and Remote Sensing Letters*, **2016**, 13, 480-484	4.1	6
167	Exploring a semimechanistic episodic Langevin model for bed load transport: Emergence of normal and anomalous advection and diffusion regimes. *Water Resources Research*, **2016**, 52, 2789-2801	5.4	20
166	Meander cutoffs nonlocally accelerate upstream and downstream migration and channel widening. *Geophysical Research Letters*, **2016**, 43, 12,437	4.9	50
165	Evaluation of ShARP Passive Rainfall Retrievals over Snow-Covered Land Surfaces and Coastal Zones. *Journal of Hydrometeorology*, **2016**, 17, 1013-1029	3.7	12
164	Coupling freshwater mussel ecology and river dynamics using a simplified dynamic interaction model. *Freshwater Science*, **2016**, 35, 200-215	2	23
163	ENVIRONMENTAL SCIENCE. Profiling risk and sustainability in coastal deltas of the world. *Science*, **2015**, 349, 638-43	33.3	341
162	Shrunken Locally Linear Embedding for Passive Microwave Retrieval of Precipitation. *IEEE Transactions on Geoscience and Remote Sensing*, **2015**, 53, 3720-3736	8.1	24
161	The life of a meander bend: Connecting shape and dynamics via analysis of a numerical model. *Journal of Geophysical Research F: Earth Surface*, **2015**, 120, 690-710	3.8	54
160	Dynamic connectivity in a fluvial network for identifying hotspots of geomorphic change. *Water Resources Research*, **2015**, 51, 1401-1421	5.4	99
159	The change of nature and the nature of change in agricultural landscapes: Hydrologic regime shifts modulate ecological transitions. *Water Resources Research*, **2015**, 51, 6649-6671	5.4	61

158	Landscape reorganization under changing climatic forcing: Results from an experimental landscape. *Water Resources Research*, **2015**, 51, 4320-4337	5.4	38
157	Delta channel networks: 2. Metrics of topologic and dynamic complexity for delta comparison, physical inference, and vulnerability assessment. *Water Resources Research*, **2015**, 51, 4019-4045	5.4	56
156	Delta channel networks: 1. A graph-theoretic approach for studying connectivity and steady state transport on deltaic surfaces. *Water Resources Research*, **2015**, 51, 3998-4018	5.4	65
155	Forecasting the response of Earth's surface to future climatic and land use changes: A review of methods and research needs. *Earth's Future*, **2015**, 3, 220-251	7.9	77
154	Comment on "Objective extraction of channel heads from high-resolution topographic data" by Fiona J. Clubb et al.. *Water Resources Research*, **2015**, 51, 1372-1376	5.4	9
153	Compressive Earth observatory: An insight from AIRS/AMSU retrievals. *Geophysical Research Letters* , **2015**, 42, 362-369	4.9	3
152	Remote Sensing of River Delta Inundation: Exploiting the Potential of Coarse Spatial Resolution, Temporally-Dense MODIS Time Series. *Remote Sensing*, **2015**, 7, 8516-8542	5	45
151	Sustainable Development Goals Offer New Opportunities for Tropical Delta Regions. *Environment*, **2015**, 57, 16-23	2.8	21
150	Compressive Earth observatory: An insight from AIRS/AMSU retrievals **2015**, 42, 362		0
149	Landscape reorganization under changing climatic forcing: Results from an experimental landscape **2015**, 51, 4320		0
148	The change of nature and the nature of change in agricultural landscapes: Hydrologic regime shifts modulate ecological transitions **2015**, 51, 6649		0
147	Robust classification for the joint velocity-intermittency structure of turbulent flow over fixed and mobile bedforms. *Earth Surface Processes and Landforms*, **2014**, 39, 1717-1728	3.7	33
146	A network-based framework for identifying potential synchronizations and amplifications of sediment delivery in river basins. *Water Resources Research*, **2014**, 50, 3826-3851	5.4	74
145	River basin organization around the main stem: Scale invariance in tributary branching and the incremental area function. *Journal of Geophysical Research F: Earth Surface*, **2014**, 119, 2174-2193	3.8	5
144	Coping with model error in variational data assimilation using optimal mass transport. *Water Resources Research*, **2014**, 50, 5817-5830	5.4	12
143	Spectral description of migrating bed forms and sediment transport. *Journal of Geophysical Research F: Earth Surface*, **2014**, 119, 123-137	3.8	26
142	A mechanistic-stochastic formulation of bed load particle motions: From individual particle forces to the Fokker-Planck equation under low transport rates. *Journal of Geophysical Research F: Earth Surface*, **2014**, 119, 464-482	3.8	24
141	The complexity of gravel bed river topography examined with gradual wavelet reconstruction. *Journal of Geophysical Research F: Earth Surface*, **2014**, 119, 682-700	3.8	18

140	Variational data assimilation via sparse regularisation. *Tellus, Series A: Dynamic Meteorology and Oceanography*, **2014**, 66, 21789	2	9
139	Downscaling Satellite Precipitation with Emphasis on Extremes: A Variational ℓ1-Norm Regularization in the Derivative Domain. *Surveys in Geophysics*, **2014**, 35, 765-783	7.6	15
138	A combined nonlinear and nonlocal model for topographic evolution in channelized depositional systems. *Journal of Geophysical Research F: Earth Surface*, **2013**, 118, 1617-1627	3.8	9
137	2.8 Nonlocal Transport Theories in Geomorphology: Mathematical Modeling of Broad Scales of Motion **2013**, 98-116		1
136	The influence of migrating bed forms on the velocity-intermittency structure of turbulent flow over a gravel bed. *Geophysical Research Letters*, **2013**, 40, 1351-1355	4.9	39
135	Effect of Migrating Bed Topography on Flow Turbulence: Implications for Modelling Sediment Transport **2013**, 323-339		3
134	StreamLab Collaboratory: Experiments, data sets, and research synthesis. *Water Resources Research* , **2013**, 49, 1746-1752	5.4	11
133	Assessment of a Class of Neyman-Scott Models for Temporal Rainfall. *Collected Reprint Series*, **2013** , 9679-9682		1
132	Are American rivers Tokunaga self-similar? New results on fluvial network topology and its climatic dependence. *Journal of Geophysical Research F: Earth Surface*, **2013**, 118, 166-183	3.8	33
131	Estimating and scaling stream ecosystem metabolism along channels with heterogeneous substrate. *Ecohydrology*, **2013**, 6, 679-688	2.5	14
130	Kinematic controls on the geometry of the preserved cross sets. *Journal of Geophysical Research F: Earth Surface*, **2013**, 118, 1296-1307	3.8	25
129	On variational downscaling, fusion, and assimilation of hydrometeorological states: A unified framework via regularization. *Water Resources Research*, **2013**, 49, 5944-5963	5.4	17
128	Downscaling Satellite Precipitation with Emphasis on Extremes: A Variational ℓ1-Norm Regularization in the Derivative Domain. *Space Sciences Series of ISSI*, **2013**, 765-783	0.1	1
127	Are American rivers Tokunaga self-similar? New results on fluvial network topology and its climatic dependence **2013**, 118, 166		3
126	StreamLab Collaboratory: Experiments, data sets, and research synthesis **2013**, 49, 1746		0
125	Bedform effect on the reorganization of surface and subsurface grain size distribution in gravel bedded channels. *Acta Geophysica*, **2012**, 60, 1607-1638	2.2	14
124	Does the flow of information in a landscape have direction?. *Geophysical Research Letters*, **2012**, 39, n/a-n/a	4.9	15
123	Sparse regularization for precipitation downscaling. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		18

122	Prevalence of exponential bed thickness distributions in the stratigraphic record: Experiments and theory. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		16
121	A sub-grid scale closure for nonlinear hillslope sediment transport models. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		12
120	Coupled dynamics of the co-evolution of gravel bed topography, flow turbulence and sediment transport in an experimental channel. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		31
119	Automatic geomorphic feature extraction from lidar in flat and engineered landscapes. *Water Resources Research*, **2012**, 48,	5.4	72
118	Marine-hydrokinetic energy and the environment: Observations, modeling, and basic processes. *Eos* , **2012**, 93, 111-111	1.5	5
117	The perfect storm—From across the Atlantic to the hills of Genoa. *Eos*, **2012**, 93, 225-226	1.5	28
116	Signature of microphysics on spatial rainfall statistics. *Journal of Geophysical Research*, **2011**, 116,		12
115	Statistics of precipitation reflectivity images and cascade of Gaussian-scale mixtures in the wavelet domain: A formalism for reproducing extremes and coherent multiscale structures. *Journal of Geophysical Research*, **2011**, 116,		11
114	Space-time dynamics of depositional systems: Experimental evidence and theoretical modeling of heavy-tailed statistics. *Journal of Geophysical Research*, **2011**, 116,		53
113	Revisiting scaling laws in river basins: New considerations across hillslope and fluvial regimes. *Water Resources Research*, **2011**, 47,	5.4	27
112	Multiscale statistical characterization of migrating bed forms in gravel and sand bed rivers. *Water Resources Research*, **2011**, 47,	5.4	56
111	Murugesu Sivapalan receives 2010 Hydrologic Sciences Award: Citation. *Eos*, **2011**, 92, 213-214	1.5	
110	International Year of Deltas 2013: A proposal. *Eos*, **2011**, 92, 340-341	1.5	23
109	Chaotic behavior in the flow along a wedge modeled by the Blasius equation. *Nonlinear Processes in Geophysics*, **2011**, 18, 171-178	2.9	1
108	Adaptive fusion of multisensor precipitation using Gaussian-scale mixtures in the wavelet domain. *Journal of Geophysical Research*, **2011**, 116, n/a-n/a		7
107	Advanced Concepts on Remote Sensing of Precipitation at Multiple Scales. *Bulletin of the American Meteorological Society*, **2011**, 92, 1353-1357	6.1	157
106	Advancing the Remote Sensing of Precipitation. *Bulletin of the American Meteorological Society*, **2011**, 92, 1271-1272	6.1	34
105	Science and regulation. Mountaintop mining consequences. *Science*, **2010**, 327, 148-9	33.3	399

104	A geometric framework for channel network extraction from lidar: Nonlinear diffusion and geodesic paths. *Journal of Geophysical Research*, **2010**, 115,		147
103	A nonlocal theory of sediment transport on hillslopes. *Journal of Geophysical Research*, **2010**, 115,		70
102	Transport on river networks: A dynamic tree approach. *Journal of Geophysical Research*, **2010**, 115,		33
101	On the influence of gravel bed dynamics on velocity power spectra. *Water Resources Research*, **2010**, 46,	5.4	56
100	Testing space-scale methodologies for automatic geomorphic feature extraction from lidar in a complex mountainous landscape. *Water Resources Research*, **2010**, 46,	5.4	96
99	Orographic signature on multiscale statistics of extreme rainfall: A storm-scale study. *Journal of Geophysical Research*, **2010**, 115,		15
98	Introduction to special section on Stochastic Transport and Emergent Scaling on Earth's Surface: Rethinking geomorphic transport□Stochastic theories, broad scales of motion and nonlocality. *Journal of Geophysical Research*, **2010**, 115,		23
97	Normal and anomalous diffusion of gravel tracer particles in rivers. *Journal of Geophysical Research*, **2010**, 115,		129
96	Subordinated Brownian motion model for sediment transport. *Physical Review E*, **2009**, 80, 011111	2.4	34
95	Nonlinearity and complexity in gravel bed dynamics. *Stochastic Environmental Research and Risk Assessment*, **2009**, 23, 967-975	3.5	16
94	Evidence for inherent nonlinearity in temporal rainfall. *Advances in Water Resources*, **2009**, 32, 41-48	4.7	25
93	Experimental evidence for statistical scaling and intermittency in sediment transport rates. *Journal of Geophysical Research*, **2009**, 114,		78
92	Correction to □Experimental evidence for statistical scaling and intermittency in sediment transport rates□*Journal of Geophysical Research*, **2009**, 114,		2
91	Atmospheric Water and Precipitation **2009**, 651-660		
90	A nonlocal theory of sediment buffering and bedrock channel evolution. *Journal of Geophysical Research*, **2009**, 114,		48
89	Foufoula-Geogiou Receives 2007 Hydrologic Sciences Award. *Eos*, **2008**, 89, 110	1.5	
88	Advancing the Theory and Practice of Hydrologic Science: Resilience and Vulnerability of Natural and Managed Hydrologic Systems: Inaugural Biennial Colloquium on Hydrologic Science and Engineering; Boulder, Colorado, 14□16 July 2008. *Eos*, **2008**, 89, 364-364	1.5	1
87	Area and width functions of river networks: New results on multifractal properties. *Water Resources Research*, **2007**, 43,	5.4	43

86	Channel network extraction from high resolution topography using wavelets. *Geophysical Research Letters*, **2007**, 34, n/a-n/a	4.9	142
85	Upscaling river biomass using dimensional analysis and hydrogeomorphic scaling. *Geophysical Research Letters*, **2007**, 34,	4.9	6
84	Estimating intermittency exponent in neutrally stratified atmospheric surface layer flows: A robust framework based on magnitude cumulant and surrogate analyses. *Physics of Fluids*, **2007**, 19, 115102	4.4	24
83	Scaling in river corridor widths depicts organization in valley morphology. *Geomorphology*, **2007**, 91, 198-215	4.3	25
82	An Exponential Langevin-type Model for Rainfall Exhibiting Spatial and Temporal Scaling **2007**, 87-100		6
81	Floodplain morphometry extraction from a high-resolution digital elevation model: a simple algorithm for regional analysis studies. *IEEE Geoscience and Remote Sensing Letters*, **2006**, 3, 410-413	4.1	48
80	A methodology for merging multisensor precipitation estimates based on expectation-maximization and scale-recursive estimation. *Journal of Geophysical Research*, **2006**, 111,		22
79	Toward a unified science of the Earth's surface: Opportunities for synthesis among hydrology, geomorphology, geochemistry, and ecology. *Water Resources Research*, **2006**, 42,	5.4	70
78	Revisiting multifractality of high-resolution temporal rainfall using a wavelet-based formalism. *Water Resources Research*, **2006**, 42,	5.4	103
77	Do gravel bed river size distributions record channel network structure?. *Water Resources Research*, **2006**, 42,	5.4	62
76	Application of dynamic subgrid-scale concepts from large-eddy simulation to modeling landscape evolution. *Water Resources Research*, **2006**, 42,	5.4	40
75	Scaling behavior of high resolution temporal rainfall: New insights from a wavelet-based cumulant analysis. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2006**, 348, 335-345	2.3	29
74	Revisiting the Local Scaling Hypothesis in Stably Stratified Atmospheric Boundary-Layer Turbulence: an Integration of Field and Laboratory Measurements with Large-Eddy Simulations. *Boundary-Layer Meteorology*, **2006**, 119, 473-500	3.4	80
73	A new metric for comparing precipitation patterns with an application to ensemble forecasts. *Journal of Geophysical Research*, **2005**, 110,		40
72	Fluvial processes and streamflow variability: Interplay in the scale-frequency continuum and implications for scaling. *Water Resources Research*, **2005**, 41,	5.4	45
71	On the Vertical Structure of Modeled and Observed Deep Convective Storms: Insights for Precipitation Retrieval and Microphysical Parameterization. *Journal of Applied Meteorology and Climatology*, **2005**, 44, 1866-1884		8
70	Incorporating the spatio-temporal distribution of rainfall and basin geomorphology into nonlinear analyses of streamflow dynamics. *Advances in Water Resources*, **2005**, 28, 711-728	4.7	24
69	Synthetic turbulence, fractal interpolation, and large-eddy simulation. *Physical Review E*, **2004**, 70, 026310	2.4	38

68	Generalized hydraulic geometry: Insights based on fluvial instability analysis and a physical model. *Water Resources Research*, **2004**, 40,	5.4	14
67	Generalized hydraulic geometry: Derivation based on a multiscaling formalism. *Water Resources Research*, **2004**, 40,	5.4	57
66	Scale-recursive estimation for multisensor Quantitative Precipitation Forecast verification: A preliminary assessment. *Journal of Geophysical Research*, **2003**, 108, CIP 2-1		23
65	Effects of underrepresented hydrometeor variability and partial beam filling on microwave brightness temperatures for rainfall retrieval. *Journal of Geophysical Research*, **2003**, 108,		14
64	Multiscale interactions between surface shear stress and velocity in turbulent boundary layers. *Journal of Geophysical Research*, **2003**, 108,		9
63	Detection of nonlinearity and chaoticity in time series using the transportation distance function. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2002**, 301, 413-423	2.3	18
62	Predictability of atmospheric boundary-layer flows as a function of scale. *Geophysical Research Letters*, **2002**, 29, 34-1	4.9	8
61	Impact of Small-Scale Rainfall Variability on Larger-Scale Spatial Organization of Land–Atmosphere Fluxes. *Journal of Hydrometeorology*, **2001**, 2, 105-121	3.7	30
60	Multiscale Statistical Properties of a High-Resolution Precipitation Forecast. *Journal of Hydrometeorology*, **2001**, 2, 406-418	3.7	96
59	Soil moisture variability and scale-dependency of nonlinear parameterizations in coupled land–atmosphere models. *Advances in Water Resources*, **2001**, 24, 1143-1157	4.7	27
58	Scale Invariances in the Morphology and Evolution of Braided Rivers. *Mathematical Geosciences*, **2001**, 33, 273-291		43
57	Scale issues in verification of precipitation forecasts. *Journal of Geophysical Research*, **2001**, 106, 11775-11784		121
56	Subgrid variability and stochastic downscaling of modeled clouds: Effects on radiative transfer computations for rainfall retrieval. *Journal of Geophysical Research*, **2001**, 106, 10349-10362		27
55	Hydrological Aspects of Weather Prediction and Flood Warnings: Report of the Ninth Prospectus Development Team of the U.S. Weather Research Program. *Bulletin of the American Meteorological Society*, **2000**, 81, 2665-2680	6.1	51
54	Space-time rainfall organization and its role in validating quantitative precipitation forecasts. *Journal of Geophysical Research*, **2000**, 105, 10129-10146		82
53	Horizontal and vertical self-organization of braided rivers toward a critical state. *Water Resources Research*, **1999**, 35, 843-851	5.4	41
52	A space-time downscaling model for rainfall. *Journal of Geophysical Research*, **1999**, 104, 19705-19721		57
51	Event-specific multiplicative cascade models and an application to rainfall. *Journal of Geophysical Research*, **1999**, 104, 31611-31622		8

50	Evidence of dynamic scaling in space-time rainfall. *Journal of Geophysical Research*, **1999**, 104, 31599-31610		73
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