Arvind Singh

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8221165/publications.pdf

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54	1,163	361296	395590
papers	citations	20 h-index	33 g-index

58	58	58	908
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Experimental evidence for statistical scaling and intermittency in sediment transport rates. Journal of Geophysical Research, 2009, 114, .	3.3	104
2	On the statistics of wind turbine wake meandering: An experimental investigation. Physics of Fluids, 2015, 27, .	1.6	70
3	On the influence of gravel bed dynamics on velocity power spectra. Water Resources Research, 2010, 46, .	1.7	66
4	Critical Nodes in River Networks. Scientific Reports, 2019, 9, 11178.	1.6	64
5	Multiscale statistical characterization of migrating bed forms in gravel and sand bed rivers. Water Resources Research, 2011, 47, .	1.7	60
6	Hydrologic controls on junction angle of river networks. Water Resources Research, 2017, 53, 4073-4083.	1.7	51
7	Landscape reorganization under changing climatic forcing: Results from an experimental landscape. Water Resources Research, 2015, 51, 4320-4337.	1.7	46
8	Subordinated Brownian motion model for sediment transport. Physical Review E, 2009, 80, 011111.	0.8	44
9	The influence of migrating bed forms on the velocityâ€intermittency structure of turbulent flow over a gravel bed. Geophysical Research Letters, 2013, 40, 1351-1355.	1.5	43
10	Effects of Freestream Turbulence in a Model Wind Turbine Wake. Energies, 2016, 9, 830.	1.6	39
11	Robust classification for the joint velocityâ€intermittency structure of turbulent flow over fixed and mobile bedforms. Earth Surface Processes and Landforms, 2014, 39, 1717-1728.	1.2	38
12	Coupled dynamics of the coâ€evolution of gravel bed topography, flow turbulence and sediment transport in an experimental channel. Journal of Geophysical Research, 2012, 117, .	3.3	37
13	On the homogenization of turbulent flow structures in the wake of a model wind turbine. Physics of Fluids, 2014, 26, .	1.6	37
14	Spectral description of migrating bed forms and sediment transport. Journal of Geophysical Research F: Earth Surface, 2014, 119, 123-137.	1.0	36
15	Quantifying Climatic Controls on River Network Branching Structure Across Scales. Water Resources Research, 2018, 54, 7347-7360.	1.7	29
16	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.	1.7	26
17	Analytical Solution for Anomalous Diffusion of Bedload Tracers Gradually Undergoing Burial. Journal of Geophysical Research F: Earth Surface, 2019, 124, 21-37.	1.0	24
18	Scale-dependent erosional patterns in steady-state and transient-state landscapes. Science Advances, 2017, 3, e1701683.	4.7	23

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19	The complexity of gravel bed river topography examined with gradual wavelet reconstruction. Journal of Geophysical Research F: Earth Surface, 2014, 119, 682-700.	1.0	21
20	Optical Cloud Pixel Recovery via Machine Learning. Remote Sensing, 2017, 9, 527.	1.8	21
21	Transient Anomalous Diffusion and Advective Slowdown of Bedload Tracers by Particle Burial and Exhumation. Water Resources Research, 2019, 55, 7964-7982.	1.7	20
22	A velocity-variation-based formulation for bedload particle hops in rivers. Journal of Fluid Mechanics, 2021, 912, .	1.4	20
23	Reorganization of river networks under changing spatiotemporal precipitation patterns: An optimal channel network approach. Water Resources Research, 2016, 52, 8845-8860.	1.7	19
24	Nonlinearity and complexity in gravel bed dynamics. Stochastic Environmental Research and Risk Assessment, 2009, 23, 967-975.	1.9	18
25	A New Framework for Exploring Process Controls of Flow Duration Curves. Water Resources Research, 2020, 56, e2019WR026083.	1.7	17
26	Assessing the Resilience of Coastal Wetlands to Extreme Hydrologic Events Using Vegetation Indices: A Review. Remote Sensing, 2018, 10, 1390.	1.8	16
27	Bedform effect on the reorganization of surface and subsurface grain size distribution in gravel bedded channels. Acta Geophysica, 2012, 60, 1607-1638.	1.0	15
28	Highâ€Frequency Sensor Data Reveal Acrossâ€Scale Nitrate Dynamics in Response to Hydrology and Biogeochemistry in Intensively Managed Agricultural Basins. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 2168-2182.	1.3	15
29	A Mixed Length Scale Model for Migrating Fluvial Bedforms. Geophysical Research Letters, 2020, 47, e10.1029/2019GL086625.	1.5	12
30	StreamLab Collaboratory: Experiments, data sets, and research synthesis. Water Resources Research, 2013, 49, 1746-1752.	1.7	11
31	Emergent spectral properties of river network topology: an optimal channel network approach. Scientific Reports, 2017, 7, 11486.	1.6	11
32	On the effect of solute release position on plume dispersion. Journal of Hydrology, 2018, 566, 607-615.	2.3	11
33	Fate and transport of radioactive gypsum stack water entering the Floridan aquifer due to a sinkhole collapse. Scientific Reports, 2018, 8, 11439.	1.6	11
34	Climatic Controls on Landscape Dissection and Network Structure in the Absence of Vegetation. Geophysical Research Letters, 2019, 46, 3216-3224.	1.5	9
35	Resilience of coastal wetlands to extreme hydrologic events in Apalachicola Bay. Geophysical Research Letters, 2016, 43, 7529-7537.	1.5	8
36	Climate and Landscape Controls of Regional Patterns of Flow Duration Curves Across the Continental United States: Statistical Approach. Water Resources Research, 2020, 56, e2020WR028041.	1.7	8

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37	Wetland Dynamics Inferred from Spectral Analyses of Hydro-Meteorological Signals and Landsat Derived Vegetation Indices. Remote Sensing, 2020, 12, 12.	1.8	8
38	From turbulence to landscapes: Logarithmic mean profiles in bounded complex systems. Physical Review E, 2020, 102, 033107.	0.8	6
39	Entropy and Intermittency of River Bed Elevation Fluctuations. Journal of Geophysical Research F: Earth Surface, 2020, 125, e2019JF005499.	1.0	6
40	Interbasin and Intrabasin Competitions Control Drainage Network Density. Geophysical Research Letters, 2019, 46, 661-669.	1.5	5
41	HÃ¶lderâ€Conditioned Hypsometry: A Refinement toÂaÂClassical Approach for the Characterization ofÂTopography. Water Resources Research, 2020, 56, e2019WR025412.	1.7	5
42	A measure of scale-dependent asymmetry in turbulent boundary layer flows: scaling and Reynolds number similarity. Journal of Fluid Mechanics, 2016, 797, 549-563.	1.4	4
43	Consistent Long-Term Monthly Coastal Wetland Vegetation Monitoring Using a Virtual Satellite Constellation. Remote Sensing, 2021, 13, 438.	1.8	4
44	Hydro-geomorphic response of Everglades to changing climate and anthropogenic activities. Journal of Hydrology, 2016, 543, 861-872.	2.3	3
45	Controls of the Topological Connectivity on the Structural and Functional Complexity of River Networks. Geophysical Research Letters, 2020, 47, e2020GL087737.	1.5	3
46	Time Compression Approximation Relationship for Infiltration in the Presence of a Shallow Water Table: Evaluating the Role of PÃ©clet Number. Water Resources Research, 2018, 54, 9384-9397.	1.7	2
47	Can we infer the age of karst conduit from the profile of potentiometric surface?. Journal of Hydrology, 2020, 584, 124679.	2.3	2
48	Evaluating Landscape Complexity and the Contribution of Nonâ€Locality to Geomorphometry. Journal of Geophysical Research F: Earth Surface, 2021, 126, e2020JF005765.	1.0	2
49	Dynamic Clusters to Infer Topologic Controls on Environmental Transport of River Networks. Geophysical Research Letters, 2022, 49, .	1.5	2
50	Sediment Load and Grain Size Controls on Channel Migration Patterns in Experimental Deltas. Journal of Geophysical Research F: Earth Surface, 2022, 127, .	1.0	2
51	Reconstructing Sediment Transport by Migrating Bedforms in the Physical and Spectral Domains. Water Resources Research, 2022, 58, .	1.7	2
52	Landscape reorganization under changing climatic forcing: Results from an experimental landscape. , 2015, 51, 4320.		1
53	StreamLab Collaboratory: Experiments, data sets, and research synthesis. , 2013, 49, 1746.		1
54	Upstream Propagation of Seaâ€Level Signals in Fluvioâ€Deltaic Environments: Timeâ€Lags and the Dynamics of the Fluvial Surface. Geophysical Research Letters, 2022, 49, .	1.5	1