Ajay Kalra

List of Publications by Citations

80 papers	1,712 citations	23 h-index	40 g-index
99 ext. papers	2,277 ext. citations	3.3 avg, IF	5.37 L-index

#	Paper	IF	Citations
80	Estimating soil moisture using remote sensing data: A machine learning approach. *Advances in Water Resources*, **2010**, 33, 69-80	4.7	263
79	Evaluating the effect of persistence on long-term trends and analyzing step changes in streamflows of the continental United States. *Journal of Hydrology*, **2014**, 517, 36-53	6	118
78	Changes in U.S. Streamflow and Western U.S. Snowpack. *Journal of Hydrologic Engineering - ASCE*, **2008**, 13, 156-163	1.8	73
77	Using oceanic-atmospheric oscillations for long lead time streamflow forecasting. *Water Resources Research*, **2009**, 45,	5.4	71
76	Increasing streamflow forecast lead time for snowmelt-driven catchment based on large-scale climate patterns. *Advances in Water Resources*, **2013**, 53, 150-162	4.7	67
75	Interconnections between oceanic□tmospheric indices and variability in the U.S. streamflow. *Journal of Hydrology*, **2015**, 525, 724-736	6	58
74	Evaluating changes and estimating seasonal precipitation for the Colorado River Basin using a stochastic nonparametric disaggregation technique. *Water Resources Research*, **2011**, 47,	5.4	58
73	Using large-scale climatic patterns for improving long lead time streamflow forecasts for Gunnison and San Juan River Basins. *Hydrological Processes*, **2013**, 27, 1543-1559	3.3	56
72	Improving Streamflow Forecast Lead Time Using Oceanic-Atmospheric Oscillations for Kaidu River Basin, Xinjiang, China. *Journal of Hydrologic Engineering - ASCE*, **2013**, 18, 1031-1040	1.8	52
71	Estimating annual precipitation for the Colorado River Basin using oceanic-atmospheric oscillations. *Water Resources Research*, **2012**, 48,	5.4	51
70	Interconnections between oceanic□tmospheric indices and variability in the U.S. streamflow. *Journal of Hydrology*, **2015**, 525, 724-736	6	48
69	Pacific Ocean SST and Z500 climate variability and western U.S. seasonal streamflow. *International Journal of Climatology*, **2016**, 36, 1515-1533	3.5	47
68	Wavelet analyses of western US streamflow with ENSO and PDO. *Journal of Water and Climate Change*, **2017**, 8, 26-39	2.3	41
67	Potential of rooftop rainwater harvesting to meet outdoor water demand in arid regions. *Journal of Arid Land*, **2018**, 10, 68-83	2.2	41
66	Temperature and precipitation changes in the Midwestern United States: implications for water management. *International Journal of Water Resources Development*, **2017**, 33, 1003-1019	3	40
65	Wavelet-Aided Analysis to Estimate Seasonal Variability and Dominant Periodicities in Temperature, Precipitation, and Streamflow in the Midwestern United States. *Water Resources Management*, **2016**, 30, 4649-4665	3.7	38
64	Identification of Streamflow Changes across the Continental United States Using Variable Record Lengths. *Hydrology*, **2016**, 3, 24	2.8	38

63	Understanding the Effects of Climate Change on Urban Stormwater Infrastructures in the Las Vegas Valley. *Hydrology*, **2016**, 3, 34	2.8	37
62	Using Paleo Reconstructions to Improve Streamflow Forecast Lead Time in the Western United States. *Journal of the American Water Resources Association*, **2013**, 49, 1351-1366	2.1	35
61	A dynamic model for exploring water-resource management scenarios in an inland arid area: Shanshan County, Northwestern China. *Journal of Mountain Science*, **2017**, 14, 1039-1057	2.1	32
60	Multi-Scale Correlation between the Western U.S. Snow Water Equivalent and ENSO/PDO Using Wavelet Analyses. *Water Resources Management*, **2017**, 31, 2745-2759	3.7	29
59	Long-range precipitation forecasts using paleoclimate reconstructions in the western United States. *Journal of Mountain Science*, **2016**, 13, 614-632	2.1	27
58	Modeling of GRACE-Derived Groundwater Information in the Colorado River Basin. *Hydrology*, **2019**, 6, 19	2.8	25
57	Coupling HEC-RAS and HEC-HMS in Precipitation Runoff Modelling and Evaluating Flood Plain Inundation Map **2017**,		23
56	Effects of ENSO on Temperature, Precipitation, and Potential Evapotranspiration of North India Monsoon: An Analysis of Trend and Entropy. *Water (Switzerland)*, **2019**, 11, 189	3	22
55	Spatiotemporal Variation in the Continental US Streamflow in Association with Large-Scale Climate Signals Across Multiple Spectral Bands. *Water Resources Management*, **2019**, 33, 1947-1968	3.7	19
54	Evaluating Future Flood Scenarios Using CMIP5 Climate Projections. *Water (Switzerland)*, **2018**, 10, 1866	3	19
53	Climatological Drought Forecasting Using Bias Corrected CMIP6 Climate Data: A Case Study for India. *Forecasting*, **2020**, 2, 59-84	2.3	18
52	Hydro-climatological changes in the Colorado River Basin over a century. *Hydrological Sciences Journal*, **2017**, 62, 2280-2296	3.5	18
51	Climatic variability of the Pacific and Atlantic Oceans and western US snowpack. *International Journal of Climatology*, **2018**, 38, 1257-1269	3.5	16
50	Hydrologic responses to climate change using downscaled GCM data on a watershed scale. *Journal of Water and Climate Change*, **2019**, 10, 63-77	2.3	15
49	Relationship between Ocean-Atmospheric Climate Variables and Regional Streamflow of the Conterminous United States. *Hydrology*, **2018**, 5, 30	2.8	14
48	Estimating High-Resolution Groundwater Storage from GRACE: A Random Forest Approach. *Environments - MDPI*, **2019**, 6, 63	3.2	13
47	Bringing statistical learning machines together for hydro-climatological predictions - Case study for Sacramento San joaquin River Basin, California. *Journal of Hydrology: Regional Studies*, **2020**, 27, 100651	3.6	11
46	Future Changes in Water Supply and Demand for Las Vegas Valley: A System Dynamic Approach based on CMIP3 and CMIP5 Climate Projections. *Hydrology*, **2020**, 7, 16	2.8	8

45	Flood Frequency Analysis Using Generalized Extreme Value Distribution and Floodplain Mapping for Hurricane Harvey in Buffalo Bayou **2018**,		8
44	CMIP5 Models' Ability to Capture Observed Trends under the Influence of Shifts and Persistence: An In-Depth Study on the Colorado River Basin. *Journal of Applied Meteorology and Climatology*, **2019**, 58, 1677-1688	2.7	8
43	Linkage between ENSO phases and western US snow water equivalent. *Atmospheric Research*, **2020** , 236, 104827	5.4	8
42	Streamflow Forecasting Using Singular Value Decomposition and Support Vector Machine for the Upper Rio Grande River Basin. *Journal of the American Water Resources Association*, **2019**, 55, 680-699	2.1	7
41	Conservation Reserve Program effects on floodplain land cover management. *Journal of Environmental Management*, **2018**, 214, 305-314	7.9	7
40	2D Unsteady Flow Routing and Flood Inundation Mapping for Lower Region of Brazos River Watershed **2017**,		7
39	Multi-Scale Correlation between the Western U.S. Snow Water Equivalent and ENSO/PDO Using Wavelet Analyses **2017**, 31, 2745		7
38	Rainfall-Runoff Simulation Using Climate Change Based Precipitation Prediction in HEC-HMS Model for Irwin Creek, Charlotte, North Carolina **2018**,		7
37	Response of Climate Change on Urban Watersheds: A Case Study for Las Vegas, NV **2017**,		6
36	Application of HEC-RAS to Study the Sediment Transport Characteristics of Maumee River in Ohio **2019**,		6
35	Rainfall-Runoff Simulation in Cache River Basin, Illinois, Using HEC-HMS **2019**,		5
34	Land–Ocean–Atmosphere Influences on Groundwater Variability in the South Atlantic–Gulf Region. *Hydrology*, **2020**, 7, 71	2.8	5
33	Understanding Suitability of MIKE 21 and HEC-RAS for 2D Floodplain Modeling **2020**,		5
32	Assessing the Effects of Climate Variability on Groundwater in Northern India **2020**,		5
31	Regional Climatological Drought: An Assessment Using High-Resolution Data. *Hydrology*, **2020**, 7, 33	2.8	5
30	A dynamic model for exploring water-resource management scenarios in an inland arid area: Shanshan County, Northwestern China **2017**, 14, 1039		5
29	Hydro-climatological changes in the Colorado River Basin over a century		5
28	Role of Low Impact Development in the Attenuation of Flood Flows in Urban Areas **2016**,		4

27	Improving Streamflow Reconstructions Using Oceanic-Atmospheric Climate Variability **2014**,		4
26	Flood Risk Assessment Using the Updated FEMA Floodplain Standard in the Ellicott City, Maryland, United States **2017**,		4
25	Insights into Reconstructing Sacramento River Flow Using Tree Rings and Pacific Ocean Climate Variability **2015**,		4
24	Temperature and precipitation changes in the Midwestern United States: implications for water management		4
23	Forecasting of Future Flooding and Risk Assessment under CMIP6 Climate Projection in Neuse River, North Carolina. *Forecasting*, **2020**, 2, 323-345	2.3	4
22	A Conceptualized Groundwater Flow Model Development for Integration with Surface Hydrology Model **2017**,		3
21	Using Wavelet to Analyze Periodicities in Hydrologic Variables **2017**,		3
20	Long-range precipitation forecasts using paleoclimate reconstructions in the western United States **2016**, 13, 614		3
19	Potential of rooftop rainwater harvesting to meet outdoor water demand in arid regions **2018**, 10, 68		3
18	Modeling Floodplain Inundation for Monument Creek, Colorado **2016**,		3
17	Implications of the 2015–2016 El Niño on Coastal Mississippi-Alabama Streamflow and Agriculture. *Hydrology*, **2019**, 6, 96	2.8	3
16	Using SWAT to Simulate Streamflow in Trinity River Basin, Texas, USA **2019**,		2
15	Is Climate Change Evident in U. S. Streamflow? **2006**,		2
14	Analyzing the Impacts of Serial Correlation and Shift on the Streamflow Variability within the Climate Regions of Contiguous United States. *Hydrology*, **2020**, 7, 91	2.8	2
13	Analyzing the Effects of Short-Term Persistence and Shift in Sea Level Records along the US Coast. *Hydrology*, **2021**, 8, 17	2.8	2
12	Effects of Soil Data Resolution on the Simulated Stream Flow and Water Quality: Application of Watershed-Based SWAT Model **2018**,		2
11	Financial Management of a Hypothetical Water Network Using System Dynamics **2018**,		2
10	Study of Lehman Creek Watershed Hydrologic Response to Climate Change Using Downscaled CMIP5 Projections **2016**,		1

9	Analyzing Long-Term Changes in Precipitation and Temperature in the Midwest United States **2016** ,		1
8	Exploring CCHE2D and Its Sediment Modelling Capabilities **2018**,		1
7	Dynamic Simulation of Lake Mead Water Levels in Response to Climate Change and Varying Demands **2018**,		1
6	A Dynamic Simulation Approach to Analyze Hydro-Electric Energy Production under Variable Flow and Demand Conditions **2018**,		1
5	Investigation of the Linkages between Oceanic Atmospheric Variability and Continental U.S. Streamflow **2014**,		1
4	Wavelet-Aided Analysis to Estimate Seasonal Variability and Dominant Periodicities in Temperature, Precipitation, and Streamflow in the Midwestern United States **2016**, 30, 4649		1
3	Patterns and Periodicities of the Continental U.S. Streamflow Change **2016**,		1
2	Analyzing the Association between ENSO and Groundwater Rise in the South Atlantic-Gulf Region in the Southeastern United States. *Hydrology*, **2021**, 8, 119	2.8	0
1	Incorporating Pacific Ocean climate information to enhance the tree-ring-based streamflow reconstruction skill. *Journal of Water and Climate Change*, **2021**, 12, 1891-1909	2.3	