Subimal Ghosh

List of Publications by Year in Descending Order

128 papers	3,776 citations	35 h-index	57 g-index
144 ext. papers	4,753 ext. citations	4.8 avg, IF	6.17 L-index

#	Paper	IF	Citations
128	Exploring the potential of SWOT mission for reservoir monitoring in Mahanadi basin. *Advances in Space Research*, **2022**, 69, 1481-1493	2.4	3
127	Flood Modelling for an Urban Indian Catchment: Challenges and Way Forward. *Lecture Notes in Civil Engineering*, **2022**, 51-62	0.3	0
126	Hazard at weather scale for extreme rainfall forecast reduces uncertainty. *Water Security*, **2021**, 14, 100106	3.6	0
125	Pollutants control the process networks of urban environmental-meteorology. *Environmental Research Letters*, **2021**, 16, 014021	6.2	1
124	Radar reflectivity and radial velocity assimilation in a hybrid ETKF-3DVAR system for prediction of a heavy convective rainfall. *Quarterly Journal of the Royal Meteorological Society*, **2021**, 147, 2264-2280	6.4	0
123	Short and Medium Range Irrigation Scheduling Using Stochastic Simulation-Optimization Framework With Farm-Scale Ecohydrological Model and Weather Forecasts. *Water Resources Research*, **2021**, 57, e2020WR029004	5.4	2
122	Does statistical model perform at par with computationally expensive general circulation model for decadal prediction?. *Environmental Research Letters*, **2021**, 16, 064028	6.2	2
121	Feedback From Vegetation to Interannual Variations of Indian Summer Monsoon Rainfall. *Water Resources Research*, **2021**, 57, e2020WR028750	5.4	1
120	Rationalization of automatic weather stations network over a coastal urban catchment: A multivariate approach. *Atmospheric Research*, **2021**, 254, 105511	5.4	0
119	Flood evacuation during pandemic: a multi-objective framework to handle compound hazard. *Environmental Research Letters*, **2021**, 16, 034034	6.2	11
118	Components of Himalayan River Flows in a Changing Climate. *Water Resources Research*, **2021**, 57, e2020WR027589	5.4	5
117	Impact of green roofs on heavy rainfall in tropical, coastal urban area. *Environmental Research Letters*, **2021**, 16, 074051	6.2	2
116	Identification of flood seasonality and drivers across Canada. *Hydrological Processes*, **2021**, 35, e14398	3.3	0
115	Climate controls on the terrestrial water balance: Influence of aridity on the basin characteristics parameter in the Budyko framework. *Science of the Total Environment*, **2020**, 739, 139863	10.2	7
114	On the role of rainfall deficits and cropping choices in loss of agricultural yield in Marathwada, India. *Environmental Research Letters*, **2020**,	6.2	7
113	Improving Convective Precipitation Forecasts Using Ensemble-Based Background Error Covariance in 3DVAR Radar Assimilation System. *Earth and Space Science*, **2020**, 7, e2019EA000667	3.1	3
112	Significance of 4DVAR Radar Data Assimilation in Weather Research and Forecast Model-Based Nowcasting System. *Journal of Geophysical Research D: Atmospheres*, **2020**, 125, e2019JD031369	4.4	2

111	Relative Impacts of Projected Climate and Land Use Changes on Terrestrial Water Balance: A Case Study on Ganga River Basin. *Frontiers in Water*, **2020**, 2,	2.6	1
110	Urbanization alters rainfall extremes over the contiguous United States. *Environmental Research Letters*, **2020**, 15, 074033	6.2	15
109	Improved simulation of very heavy rainfall events by incorporating WUDAPT urban land use/land cover in WRF. *Urban Climate*, **2020**, 32, 100616	6.8	13
108	Uncertainty Quantification in Water Resource Systems Modeling: Case Studies from India. *Water (Switzerland)*, **2020**, 12, 1793	3	5
107	A comprehensive India-wide social vulnerability analysis: highlighting its influence on hydro-climatic risk. *Environmental Research Letters*, **2020**, 15, 014005	6.2	9
106	Extreme Storms **2020**, 155-173		4
105	Tide-rainfall flood quotient: an incisive measure of comprehending a region response to storm-tide and pluvial flooding. *Environmental Research Letters*, **2020**, 15, 064029	6.2	10
104	Gravimetry-based water storage shifting over the China-India border area controlled by regional climate variability. *Science of the Total Environment*, **2020**, 714, 136360	10.2	1
103	Increasing agricultural risk to hydro-climatic extremes in India. *Environmental Research Letters*, **2020** , 15, 034010	6.2	10
102	A new bivariate risk classifier for flood management considering hazard and socio-economic dimensions. *Journal of Environmental Management*, **2020**, 255, 109733	7.9	25
101	Flood risk forecasting at weather to medium range incorporating weather model, topography, socio-economic information and land use exposure. *Advances in Water Resources*, **2020**, 146, 103785	4.7	3
100	Partitioning of memory and real-time connections between variables in Himalayan ecohydrological process networks. *Journal of Hydrology*, **2020**, 590, 125434	6	4
99	Sensitivity of various topographic data in flood management: Implications on inundation mapping over large data-scarce regions. *Journal of Hydrology*, **2020**, 590, 125523	6	9
98	Observed Evidence for Steep Rise in the Extreme Flow of Western Himalayan Rivers. *Geophysical Research Letters*, **2020**, 47, e2020GL087815	4.9	6
97	Thinking about water and air to attain Sustainable Development Goals during times of COVID-19 Pandemic. *Journal of Earth System Science*, **2020**, 129, 1	1.8	29
96	Revamping extended range forecast of Indian summer monsoon. *Climate Dynamics*, **2020**, 55, 3397-3411	4.2	1
95	Diametrically Opposite Scaling of Extreme Precipitation and Streamflow to Temperature in South and Central Asia. *Geophysical Research Letters*, **2020**, 47, e2020GL089386	4.9	9
94	Added value of CMIP6 over CMIP5 models in simulating Indian summer monsoon rainfall. *Atmospheric Research*, **2020**, 232, 104680	5.4	93

93	Capturing transformation of flood hazard over a large River Basin under changing climate using a top-down approach. *Science of the Total Environment*, **2020**, 726, 138600	10.2	9
92	Performance evaluation of WRF for extreme flood forecasts in a coastal urban environment. *Atmospheric Research*, **2019**, 223, 39-48	5.4	22
91	Indian summer monsoon: Extreme events, historical changes, and role of anthropogenic forcings. *Wiley Interdisciplinary Reviews: Climate Change*, **2019**, 10, e571	8.4	52
90	Assimilation of Doppler Weather Radar data with a regional WRF-3DVAR system: Impact of control variables on forecasts of a heavy rainfall case. *Advances in Water Resources*, **2019**, 126, 24-39	4.7	11
89	Disentangling sea-surface temperature and anthropogenic aerosol influences on recent trends in South Asian monsoon rainfall. *Climate Dynamics*, **2019**, 52, 2287-2302	4.2	16
88	Future Heat Wave Projections and Impacts **2019**, 91-107		2
87	Land-Surface Feedback and Impacts of Land-Use Change to Indian Monsoon Rainfall **2019**, 3-20		0
86	Urbanisation and Surface Urban Heat Island Intensity (SUHII) **2019**, 73-90		4
85	A minimalistic seasonal prediction model for Indian monsoon based on spatial patterns of rainfall anomalies. *Climate Dynamics*, **2019**, 52, 3661-3681	4.2	6
84	Choice of Irrigation Water Management Practice Affects Indian Summer Monsoon Rainfall and Its Extremes. *Geophysical Research Letters*, **2019**, 46, 9126-9135	4.9	23
83	Assessment of the interannual variability of local atmospheric and ITF contribution to the subsurface heat content of southern tropical Indian Ocean in GECCO2 and ORAS4 using ROMS. *Global and Planetary Change*, **2019**, 181, 102974	4.2	7
82	Can the weakening of Indian Monsoon be attributed to anthropogenic aerosols?. *Environmental Research Communications*, **2019**, 1, 061006	3.1	4
81	Land□Atmosphere Interactions in Indian Monsoon at Sub-seasonal to Seasonal Scale. *Springer Water*, **2019**, 139-152	0.3	
80	Multi-Scale Association between Vegetation Growth and Climate in India: A Wavelet Analysis Approach. *Remote Sensing*, **2019**, 11, 2703	5	7
79	Future urban rainfall projections considering the impacts of climate change and urbanization with statistical□ynamical integrated approach. *Climate Dynamics*, **2019**, 52, 6033-6051	4.2	15
78	Role of vertical velocity in improving finer scale statistical downscaling for projection of extreme precipitation. *Theoretical and Applied Climatology*, **2019**, 137, 791-804	3	4
77	Performance of the CORDEX regional climate models in simulating offshore wind and wind potential. *Theoretical and Applied Climatology*, **2019**, 135, 1449-1464	3	3
76	Understanding the role of moisture transport on the dry bias in indian monsoon simulations by CFSv2. *Climate Dynamics*, **2019**, 52, 637-651	4.2	7

75	Perturbations in the initial soil moisture conditions: Impacts on hydrologic simulation in a large river basin. *Journal of Hydrology*, **2018**, 561, 509-522	6	5
74	Climate change impact assessment of a river basin using CMIP5 climate models and the VIC hydrological model. *Hydrological Sciences Journal*, **2018**, 63, 596-614	3.5	10
73	Moisture Supply From the Western Ghats Forests to Water Deficit East Coast of India. *Geophysical Research Letters*, **2018**, 45, 4337-4344	4.9	23
72	The Impact of Land Cover and Land Use Change on the Indian Monsoon Region Hydroclimate. *Springer Remote Sensing/photogrammetry*, **2018**, 553-575	0.2	10
71	Increased Spatial Variability and Intensification of Extreme Monsoon Rainfall due to Urbanization. *Scientific Reports*, **2018**, 8, 3918	4.9	74
70	Impact of active and break wind spells on the demand□upply balance in wind energy in India. *Meteorology and Atmospheric Physics*, **2018**, 130, 81-97	2	5
69	Future projections of Indian summer monsoon rainfall extremes over India with statistical downscaling and its consistency with observed characteristics. *Climate Dynamics*, **2018**, 51, 1-15	4.2	29
68	The Chennai extreme rainfall event in 2015: The Bay of Bengal connection. *Climate Dynamics*, **2018**, 50, 2867-2879	4.2	20
67	Multi-ensemble regional simulation of Indian monsoon during contrasting rainfall years: role of convective schemes and nested domain. *Climate Dynamics*, **2018**, 50, 4127-4147	4.2	14
66	Framework for assessment of climate change impact on offshore wind energy. *Meteorological Applications*, **2018**, 25, 94-104	2.1	5
65	Coupled Land-Atmosphere Regional Model Reduces Dry Bias in Indian Summer Monsoon Rainfall Simulated by CFSv2. *Geophysical Research Letters*, **2018**, 45, 2476-2486	4.9	15
64	Regionalized Design Rainfall Estimation: an Appraisal of Inundation Mapping for Flood Management Under Data-Scarce Situations. *Water Resources Management*, **2018**, 32, 4725-4746	3.7	11
63	An Improved Prediction of Indian Summer Monsoon Onset From State-of-the-Art Dynamic Model Using Physics-Guided Data-Driven Approach. *Geophysical Research Letters*, **2018**, 45, 8510-8518	4.9	5
62	Can statistical downscaling improve consensus among CMIP5 models for Indian summer monsoon rainfall projections?. *International Journal of Climatology*, **2018**, 38, 2449-2461	3.5	1
61	Understanding the cascade of GCM and downscaling uncertainties in hydro-climatic projections over India. *International Journal of Climatology*, **2018**, 38, e178-e190	3.5	23
60	Hydrologic impacts of climate change: Comparisons between hydrological parameter uncertainty and climate model uncertainty. *Journal of Hydrology*, **2018**, 566, 1-22	6	40
59	Characteristics of Bay of Bengal Monsoon Depressions in the 21st Century. *Geophysical Research Letters*, **2018**, 45, 6637-6645	4.9	15
58	Do dynamic regional models add value to the global model projections of Indian monsoon?. *Climate Dynamics*, **2017**, 48, 1375-1397	4.2	61

57	Flip flop of Day-night and Summer-Winter Surface Urban Heat Island Intensity in India. *Scientific Reports*, **2017**, 7, 40178	4.9	85
56	Improving Global Forecast System of extreme precipitation events with regional statistical model: Application of quantile-based probabilistic forecasts. *Journal of Geophysical Research D: Atmospheres*, **2017**, 122, 1617-1634	4.4	13
55	Spatio-temporal analysis of sub-hourly rainfall over Mumbai, India: Is statistical forecasting futile?. *Journal of Earth System Science*, **2017**, 126, 1	1.8	13
54	Increasing probability of mortality during Indian heat waves. *Science Advances*, **2017**, 3, e1700066	14.3	149
53	Decadal temperature predictions over the continental United States: Analysis and Enhancement. *Climate Dynamics*, **2017**, 49, 3587-3604	4.2	6
52	Role of Oceanic and Land Moisture Sources and Transport in the Seasonal and Interannual Variability of Summer Monsoon in India. *Journal of Climate*, **2017**, 30, 1839-1859	4.4	56
51	A threefold rise in widespread extreme rain events over central India. *Nature Communications*, **2017** , 8, 708	17.4	216
50	Role of Oceanic and Terrestrial Atmospheric Moisture Sources in Intraseasonal Variability of Indian Summer Monsoon Rainfall. *Scientific Reports*, **2017**, 7, 12729	4.9	32
49	Engaging the User Community for Advancing Societal Applications of the Surface Water Ocean Topography Mission. *Bulletin of the American Meteorological Society*, **2017**, 98, ES285-ES290	6.1	7
48	Water□ood□nergy nexus with changing agricultural scenarios in India during recent decades. *Hydrology and Earth System Sciences*, **2017**, 21, 3041-3060	5.5	32
47	Credibility of statistical downscaling under nonstationary climate. *Climate Dynamics*, **2016**, 46, 1991-2023	4.2	46
46	Lack of Dependence of Indian Summer Monsoon Rainfall Extremes on Temperature: An Observational Evidence. *Scientific Reports*, **2016**, 6, 31039	4.9	36
45	Projections of Extreme Dry and Wet Spells in the 21st Century India Using Stationary and Non-stationary Standardized Precipitation Indices. *Climatic Change*, **2016**, 139, 667-681	4.5	10
44	Urbanization causes nonstationarity in Indian Summer Monsoon Rainfall extremes. *Geophysical Research Letters*, **2016**, 43, 11,269	4.9	30
43	Evaluation of wind extremes and wind potential under changing climate for Indian offshore using ensemble of 10 GCMs. *Ocean and Coastal Management*, **2016**, 121, 141-152	3.9	20
42	Indian Summer Monsoon Rainfall: Implications of Contrasting Trends in the Spatial Variability of Means and Extremes. *PLoS ONE*, **2016**, 11, e0158670	3.7	70
41	Early Prediction of Extreme Rainfall Events: A Deep Learning Approach. *Lecture Notes in Computer Science*, **2016**, 154-167	0.9	6
40	Use of Atmospheric Budget to Reduce Uncertainty in Estimated Water Availability over South Asia from Different Reanalyses. *Scientific Reports*, **2016**, 6, 29664	4.9	19

39	Weakening of Indian Summer Monsoon Rainfall due to Changes in Land Use Land Cover. *Scientific Reports*, **2016**, 6, 32177	4.9	103
38	Breaking out of the Box: India and Climate Action on Short-Lived Climate Pollutants. *Environmental Science & Technology*, **2016**, 50, 12527-12529	10.3	7
37	The influence of the El Niño Southern Oscillation on heat waves in India. *Meteorological Applications*, **2016**, 23, 705-713	2.1	20
36	Intensification of future severe heat waves in India and their effect on heat stress and mortality. *Regional Environmental Change*, **2015**, 15, 569-579	4.3	85
35	Effect of Climate Change on Wind Persistence at Selected Indian Offshore Locations. *Procedia Engineering*, **2015**, 116, 615-622		5
34	Impacts of urbanization on Indian summer monsoon rainfall extremes. *Journal of Geophysical Research D: Atmospheres*, **2015**, 120, 496-516	4.4	78
33	A Framework for Investigating the Diagnostic Trend in Stationary and Nonstationary Flood Frequency Analyses Under Changing Climate. *Journal of Climate Change*, **2015**, 1, 47-65	0.7	8
32	Shift in Indian summer monsoon onset during 1976/1977. *Environmental Research Letters*, **2015**, 10, 054006	6.6	47
31	Uncertainty resulting from multiple data usage in statistical downscaling. *Geophysical Research Letters*, **2014**, 41, 4013-4019	4.9	18
30	Failure of CMIP5 climate models in simulating post-1950 decreasing trend of Indian monsoon. *Geophysical Research Letters*, **2014**, 41, 7323-7330	4.9	118
29	Precipitation Recycling in the Indian Subcontinent during Summer Monsoon. *Journal of Hydrometeorology*, **2014**, 15, 2050-2066	3.7	68
28	Do CMIP5 simulations of Indian summer monsoon rainfall differ from those of CMIP3?. *Atmospheric Science Letters*, **2014**, 15, 79-85	2.4	47
27	Comparing statistically downscaled simulations of Indian monsoon at different spatial resolutions. *Journal of Hydrology*, **2014**, 519, 3163-3177	6	31
26	Changes in the design and operational wind due to climate change at the Indian offshore sites. *Marine Structures*, **2014**, 37, 33-53	3.8	16
25	A nonparametric kernel regression model for downscaling multisite daily precipitation in the Mahanadi basin. *Water Resources Research*, **2013**, 49, 1360-1385	5.4	51
24	Prediction of extreme rainfall event using weather pattern recognition and support vector machine classifier. *Theoretical and Applied Climatology*, **2013**, 114, 583-603	3	35
23	High-resolution multisite daily rainfall projections in India with statistical downscaling for climate change impacts assessment. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 3557-3578	4.4	75
22	Diametric changes in trends and patterns of extreme rainfall over India from pre-1950 to post-1950. *Geophysical Research Letters*, **2013**, 40, 3253-3258	4.9	75

21	Near-term acceleration of hydroclimatic change in the western U.S.. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 10,676-10,693	4.4	76
20	Predicting Sea Surface Temperatures in the North Indian Ocean with Nonlinear Autoregressive Neural Networks. *International Journal of Oceanography*, **2013**, 2013, 1-11		13
19	Modeling Uncertainty Resulting from Multiple Downscaling Methods in Assessing Hydrological Impacts of Climate Change. *Water Resources Management*, **2012**, 26, 3559-3579	3.7	39
18	Lack of uniform trends but increasing spatial variability in observed Indian rainfall extremes. *Nature Climate Change*, **2012**, 2, 86-91	21.4	197
17	Evaluation of global climate models for Indian monsoon climatology. *Environmental Research Letters*, **2012**, 7, 014012	6.2	22
16	Prediction of daily rainfall state in a river basin using statistical downscaling from GCM output. *Stochastic Environmental Research and Risk Assessment*, **2011**, 25, 457-474	3.5	60
15	Fuzzy waste load allocation model: a multiobjective approach. *Journal of Hydroinformatics*, **2010**, 12, 83-96	2.6	22
14	SVM-PGSL coupled approach for statistical downscaling to predict rainfall from GCM output. *Journal of Geophysical Research*, **2010**, 115,		68
13	Streamflow prediction using multi-site rainfall obtained from hydroclimatic teleconnection. *Journal of Hydrology*, **2010**, 395, 23-38	6	38
12	Modelling bivariate rainfall distribution and generating bivariate correlated rainfall data in neighbouring meteorological subdivisions using copula. *Hydrological Processes*, **2010**, 24, 3558-3567	3.3	41
11	Assessing Hydrological Impacts of Climate Change: Modeling Techniques and Challenges. *The Open Hydrology Journal*, **2010**, 4, 115-121		19
10	IMPRECISE PROBABILITY FOR MODELING PARTIAL IGNORANCE: APPLICATION TO WASTE LOAD ALLOCATION IN A RIVER SYSTEM. *ISH Journal of Hydraulic Engineering*, **2009**, 15, 258-271	1.5	
9	Trend analysis of Indian summer monsoon rainfall at different spatial scales. *Atmospheric Science Letters*, **2009**, 10, n/a-n/a	2.4	27
8	Climate change impact assessment: Uncertainty modeling with imprecise probability. *Journal of Geophysical Research*, **2009**, 114,		63
7	Modeling GCM and scenario uncertainty using a possibilistic approach: Application to the Mahanadi River, India. *Water Resources Research*, **2008**, 44,	5.4	87
6	CLIMATE CHANGE IMPACT ON HYDROLOGY AND WATER RESOURCES. *ISH Journal of Hydraulic Engineering*, **2008**, 14, 1-17	1.5	9
5	Statistical downscaling of GCM simulations to streamflow using relevance vector machine. *Advances in Water Resources*, **2008**, 31, 132-146	4.7	229
4	Nonparametric methods for modeling GCM and scenario uncertainty in drought assessment. *Water Resources Research*, **2007**, 43,	5.4	92

List of Publications

3	Risk minimization in water quality control problems of a river system. *Advances in Water Resources*, **2006**, 29, 458-470	4.7	46
2	Risk Evaluation in Water Quality Management of a River System. *Journal of Water Resources Planning and Management - ASCE*, **2004**, 130, 411-423	2.8	39
1	Water Food Energy Nexus: Changing Scenarios in India during recent Decades		5