

Mantha S Phanikumar

List of Publications by Year in descending order

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Version: 2024-02-01

55
papers

2,151
citations

236925

25
h-index

233421

45
g-index

56
all docs

56
docs citations

56
times ranked

2433
citing authors

#	ARTICLE	IF	CITATIONS
1	Surface–subsurface model intercomparison: A first set of benchmark results to diagnose integrated hydrology and feedbacks. <i>Water Resources Research</i> , 2014, 50, 1531-1549.	4.2	222
2	Quantitative Detection of Human Adenoviruses in Wastewater and Combined Sewer Overflows Influencing a Michigan River. <i>Applied and Environmental Microbiology</i> , 2010, 76, 715-723.	3.1	199
3	A process-based, distributed hydrologic model based on a large-scale method for surface–subsurface coupling. <i>Advances in Water Resources</i> , 2010, 33, 1524-1541.	3.8	156
4	A novel numerical method for the time variable fractional order mobile–immobile advection–dispersion model. <i>Computers and Mathematics With Applications</i> , 2013, 66, 693-701.	2.7	156
5	Evaluation of public health risks at recreational beaches in Lake Michigan via detection of enteric viruses and a human-specific bacteriological marker. <i>Water Research</i> , 2009, 43, 1137-1149.	11.3	123
6	Modeling the Transport and Inactivation of <i>E. coli</i> and Enterococci in the Near-Shore Region of Lake Michigan. <i>Environmental Science & Technology</i> , 2006, 40, 5022-5028.	10.0	122
7	Evaluating controls on coupled hydrologic and vegetation dynamics in a humid continental climate watershed using a subsurface–land surface processes model. <i>Water Resources Research</i> , 2013, 49, 2552-2572.	4.2	97
8	Tempered fractional time series model for turbulence in geophysical flows. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2014, 2014, P09023.	2.3	63
9	Budget Analysis of <i>Escherichia coli</i> at a Southern Lake Michigan Beach. <i>Environmental Science & Technology</i> , 2010, 44, 1010-1016.	10.0	60
10	Estimating longitudinal dispersion in rivers using Acoustic Doppler Current Profilers. <i>Advances in Water Resources</i> , 2010, 33, 615-623.	3.8	54
11	Impacts of a changing earth on microbial dynamics and human health risks in the continuum between beach water and sand. <i>Water Research</i> , 2019, 162, 456-470.	11.3	53
12	Quantifying storage changes in regional Great Lakes watersheds using a coupled subsurface–land surface process model and GRACE, MODIS products. <i>Water Resources Research</i> , 2014, 50, 7359-7377.	4.2	51
13	Nearshore hydrodynamics as loading and forcing factors for <i>Escherichia coli</i> contamination at an embayed beach. <i>Limnology and Oceanography</i> , 2012, 57, 362-381.	3.1	48
14	Wave-Induced Mass Transport Affects Daily <i>Escherichia coli</i> Fluctuations in Nearshore Water. <i>Environmental Science & Technology</i> , 2012, 46, 2204-2211.	10.0	47
15	Surface storage dynamics in large rivers: Comparing three-dimensional particle transport, one-dimensional fractional derivative, and multirate transient storage models. <i>Water Resources Research</i> , 2011, 47, .	4.2	42
16	Modeling watershed-scale solute transport using an integrated, process-based hydrologic model with applications to bacterial fate and transport. <i>Journal of Hydrology</i> , 2015, 529, 35-48.	5.4	42
17	Real-Time Nowcasting of Microbiological Water Quality at Recreational Beaches: A Wavelet and Artificial Neural Network-Based Hybrid Modeling Approach. <i>Environmental Science & Technology</i> , 2018, 52, 8446-8455.	10.0	41
18	Summer circulation and exchange in the Saginaw Bay-Lake Huron system. <i>Journal of Geophysical Research: Oceans</i> , 2014, 119, 2713-2734.	2.6	37

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19	Evaluating Bacteriophage P22 as a Tracer in a Complex Surface Water System: The Grand River, Michigan. <i>Environmental Science & Technology</i> , 2008, 42, 2426-2431.	10.0	35
20	An efficient space-fractional dispersion approximation for stream solute transport modeling. <i>Advances in Water Resources</i> , 2009, 32, 1482-1494.	3.8	34
21	Elimination of the Reaction Rate Scale Effect: Application of the Lagrangian Reactive Particle Tracking Method to Simulate Mixing-Limited, Field-Scale Biodegradation at the Schoolcraft (MI), Tj ETQ1 1 0.784314 rgt	11.3	33
22	Interaction of bacterial communities and indicators of water quality in shoreline sand, sediment, and water of Lake Michigan. <i>Water Research</i> , 2020, 178, 115671.	11.3	33
23	Comparative Evaluation of Statistical and Mechanistic Models of <i>Escherichia coli</i> at Beaches in Southern Lake Michigan. <i>Environmental Science & Technology</i> , 2016, 50, 2442-2449.	10.0	32
24	Separating surface storage from hyporheic retention in natural streams using wavelet decomposition of acoustic Doppler current profiles. <i>Water Resources Research</i> , 2007, 43, .	4.2	31
25	Prototypic automated continuous recreational water quality monitoring of nine Chicago beaches. <i>Journal of Environmental Management</i> , 2016, 166, 285-293.	7.8	27
26	Evaluating the role of sediment-bacteria interactions on <i>Escherichia coli</i> concentrations at beaches in southern Lake Michigan. <i>Journal of Geophysical Research: Oceans</i> , 2013, 118, 7049-7065.	2.6	26
27	Identifying and Eliminating Sources of Recreational Water Quality Degradation along an Urban Coast. <i>Journal of Environmental Quality</i> , 2018, 47, 1042-1050.	2.0	25
28	Direct numerical simulations of turbulence and hyporheic mixing near sediment-water interfaces. <i>Journal of Fluid Mechanics</i> , 2020, 892, .	3.4	21
29	Impact of domestic wells and hydrogeologic setting on water quality in peri-urban Dar es Salaam, Tanzania. <i>Science of the Total Environment</i> , 2019, 686, 1238-1250.	8.0	19
30	Evaluating the impacts of drought on rice productivity over Cambodia in the Lower Mekong Basin. <i>Journal of Hydrology</i> , 2021, 599, 126291.	5.4	19
31	A multi-species reactive transport model to estimate biogeochemical rates based on single-well push-pull test data. <i>Computers and Geosciences</i> , 2010, 36, 997-1004.	4.2	17
32	Formation Criteria for Hyporheic Anoxic Microzones: Assessing Interactions of Hydraulics, Nutrients, and Biofilms. <i>Water Resources Research</i> , 2020, 56, no.	4.2	17
33	Evaluating the role of groundwater in circulation and thermal structure within a deep inland lake. <i>Advances in Water Resources</i> , 2017, 108, 310-327.	3.8	15
34	Ice cover, winter circulation, and exchange in Saginaw Bay and Lake Huron. <i>Limnology and Oceanography</i> , 2017, 62, 376-393.	3.1	14
35	Origin of stratified basal ice in outlet glaciers of Vatnajökull and Álfajökull, Iceland. <i>Boreas</i> , 2010, 39, 457-470.	2.4	13
36	Solute dispersion in the coastal boundary layer of southern Lake Michigan. <i>Journal of Geophysical Research: Oceans</i> , 2013, 118, 1606-1617.	2.6	13

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37	Evaluating a Coupled Phenology–Surface Energy Balance Model to Understand Stream–Subsurface Temperature Dynamics in a Mixed–Use Farmland Catchment. <i>Water Resources Research</i> , 2019, 55, 1675-1697.	4.2	13
38	Numerical Modeling of Microbial Fate and Transport in Natural Waters: Review and Implications for Normal and Extreme Storm Events. <i>Water (Switzerland)</i> , 2020, 12, 1876.	2.7	13
39	Quantifying the space – time variability of water balance components in an agricultural basin using a process-based hydrologic model and the Budyko framework. <i>Science of the Total Environment</i> , 2019, 676, 176-189.	8.0	11
40	Linking Cross Contamination of Domestic Water with Storage Practices at the Point of Use in Urban Areas of Dar es Salaam, Tanzania. <i>Journal of Environmental Engineering, ASCE</i> , 2019, 145, 04019017.	1.4	11
41	Evaluating the impacts of foreshore sand and birds on microbiological contamination at a freshwater beach. <i>Water Research</i> , 2021, 190, 116671.	11.3	11
42	Manifold methods for assimilating geophysical and meteorological data in Earth system models and their components. <i>Journal of Hydrology</i> , 2017, 544, 383-396.	5.4	10
43	Analysis of water security and source preferences in rural Tanzania. <i>Journal of Water Sanitation and Hygiene for Development</i> , 2018, 8, 439-448.	1.8	8
44	Modeling the photoinactivation and transport of somatic and F–specific coliphages at a Great Lakes beach. <i>Journal of Environmental Quality</i> , 2020, 49, 1612-1623.	2.0	7
45	Modeling the effects of vegetation on stream temperature dynamics in a large, mixed land cover watershed in the Great Lakes region. <i>Journal of Hydrology</i> , 2020, 581, 124283.	5.4	6
46	Influence of Filter Pore Size on Composition and Relative Abundance of Bacterial Communities and Select Host-Specific MST Markers in Coastal Waters of Southern Lake Michigan. <i>Frontiers in Microbiology</i> , 2021, 12, 665664.	3.5	5
47	Quantifying the Effects of Bed Roughness on Transit Time Distributions via Direct Numerical Simulations of Turbulent Hyporheic Exchange. <i>Water Resources Research</i> , 2022, 58, .	4.2	5
48	Comparison of negative skewed space fractional models with time nonlocal approaches for stream solute transport modeling. <i>Journal of Hydrology</i> , 2020, 582, 124504.	5.4	3
49	Decreasing Groundwater Supply Can Exacerbate Lake Warming and Trigger Algal Blooms. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2021, 126, e2021JG006455.	3.0	3
50	Improving safe sanitation practices using groundwater transport modelling and water quality monitoring data. <i>Water Science and Technology</i> , 2021, 84, 3311-3322.	2.5	2
51	Quantifying the spatiotemporal dynamics of recharge in a composite Great Lakes watershed using a high-resolution hydrology model and multi-source data. <i>Journal of Hydrology</i> , 2021, 601, 126594.	5.4	2
52	Evaluation of Modeling Approaches for Sorption–Desorption Processes in Flow-Through Soil Columns. <i>Journal of Environmental Engineering, ASCE</i> , 2022, 148, .	1.4	2
53	Microbial source tracking and evaluation of best management practices for restoring degraded beaches of Lake Michigan. <i>Journal of Great Lakes Research</i> , 2022, 48, 441-454.	1.9	1
54	Fecal Indicator Organism Modeling and Microbial Source Tracking in Environmental Waters. , 0, , 3.4.6-1-3.4.6-16.		0

#	ARTICLE	IF	CITATIONS
55	Wind speed and direction estimation using manifold approximation. , 2015, , .		0