

# Rabin Bhattacharai

## List of Publications by Year in descending order

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Version: 2024-02-01

66  
papers

1,311  
citations

361045

20  
h-index

377514

34  
g-index

69  
all docs

69  
docs citations

69  
times ranked

1363  
citing authors

#	ARTICLE	IF	CITATIONS
1	Estimation of Soil Erosion and Sediment Yield Using GIS at Catchment Scale. <i>Water Resources Management</i> , 2007, 21, 1635-1647.	1.9	141
2	Iran's Agriculture in the Anthropocene. <i>Earth's Future</i> , 2020, 8, e2020EF001547.	2.4	82
3	Anthropogenic depletion of Iran's aquifers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	82
4	Towards sustainable coal industry: Turning coal bottom ash into wealth. <i>Science of the Total Environment</i> , 2022, 804, 149985.	3.9	75
5	Estimating the Impact of Climate Change on Water Availability in Bagmati Basin, Nepal. <i>Environmental Processes</i> , 2016, 3, 1-17.	1.7	63
6	Utilization of coal fly and bottom ash pellet for phosphorus adsorption: Sustainable management and evaluation. <i>Resources, Conservation and Recycling</i> , 2019, 149, 372-380.	5.3	60
7	Complex dynamics of water quality mixing in a warm mono-mictic reservoir. <i>Science of the Total Environment</i> , 2021, 777, 146097.	3.9	55
8	Nutrient transport through a Vegetative Filter Strip with subsurface drainage. <i>Journal of Environmental Management</i> , 2009, 90, 1868-1876.	3.8	51
9	Climate Change Impacts on Flow, Sediment and Nutrient Export in a Great Lakes Watershed Using SWAT. <i>Clean - Soil, Air, Water</i> , 2015, 43, 1464-1474.	0.7	50
10	PVA/PEI crosslinked electrospun nanofibers with embedded La(OH) <sub>3</sub> nanorod for selective adsorption of high flux low concentration phosphorus. <i>Journal of Hazardous Materials</i> , 2020, 384, 121457.	6.5	45
11	Metal contamination assessment in water column and surface sediments of a warm monomictic man-made lake: Sabalan Dam Reservoir, Iran. <i>Hydrology Research</i> , 2020, 51, 799-814.	1.1	33
12	Exploring the effects of nitrogen fertilization management alternatives on nitrate loss and crop yields in tile-drained fields in Illinois. <i>Journal of Environmental Management</i> , 2018, 213, 341-352.	3.8	31
13	Characterization of fly ash ceramic pellet for phosphorus removal. <i>Journal of Environmental Management</i> , 2017, 189, 67-74.	3.8	28
14	Analysis of Best Management Practices Implementation on Water Quality Using the Soil and Water Assessment Tool. <i>Water (Switzerland)</i> , 2016, 8, 145.	1.2	26
15	Application of Web Erosivity Module (WERM) for estimation of annual and monthly R factor in Korea. <i>Catena</i> , 2016, 147, 225-237.	2.2	26
16	Composite fouling of drip emitters applying surface water with high sand concentration: Dynamic variation and formation mechanism. <i>Agricultural Water Management</i> , 2019, 215, 25-43.	2.4	25
17	Green synthesis of ultrapure La(OH) <sub>3</sub> nanoparticles by one-step method through spark ablation and electrospinning and its application to phosphate removal. <i>Chemical Engineering Journal</i> , 2020, 388, 124373.	6.6	25
18	Evaluation of compost blankets for erosion control from disturbed lands. <i>Journal of Environmental Management</i> , 2011, 92, 803-812.	3.8	24

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19	A comparative analysis of sediment yield simulation by empirical and process-oriented models in Thailand / Une analyse comparative de simulations de l'exportation sédimentaire en Thaïlande à l'aide de modèles empiriques et de processus. <i>Hydrological Sciences Journal</i> , 2008, 53, 1253-1269.	1.2	23
20	Synergism in nitrate and orthophosphate removal in subsurface bioreactors. <i>Ecological Engineering</i> , 2015, 84, 559-568.	1.6	22
21	Development of web-based WERM-S module for estimating spatially distributed rainfall erosivity index (EI30) using RADAR rainfall data. <i>Catena</i> , 2018, 161, 37-49.	2.2	19
22	Evaluation of fly ash pellets for phosphorus removal in a laboratory scale denitrifying bioreactor. <i>Journal of Environmental Management</i> , 2018, 207, 269-275.	3.8	18
23	Impacts of Dem Source, Resolution and Area Threshold Values on SWAT Generated Stream Network and Streamflow in Two Distinct Nepalese Catchments. <i>Environmental Processes</i> , 2019, 6, 597-617.	1.7	18
24	Development of Climate Data Bias Corrector (CDBC) Tool and Its Application over the Agro-Ecological Zones of India. <i>Water (Switzerland)</i> , 2019, 11, 1102.	1.2	18
25	ThSSim: A novel tool for simulation of reservoir thermal stratification. <i>Scientific Reports</i> , 2019, 9, 18524.	1.6	18
26	Phosphorus pollution control using waste-based adsorbents: Material synthesis, modification, and sustainability. <i>Critical Reviews in Environmental Science and Technology</i> , 2022, 52, 2023-2059.	6.6	16
27	Analysis of the Long-term Precipitation Trend in Illinois and Its Implications for Agricultural Production. <i>Water (Switzerland)</i> , 2018, 10, 433.	1.2	15
28	Reliability of functional forms for calculation of longitudinal dispersion coefficient in rivers. <i>Science of the Total Environment</i> , 2021, 791, 148394.	3.9	14
29	Impact of global climate change on stream low flows: A case study of the great Miami river watershed, Ohio, USA. <i>International Journal of Agricultural and Biological Engineering</i> , 2019, 12, 84-95.	0.3	14
30	Combining Environmental Monitoring and Remote Sensing Technologies to Evaluate Cropping System Nitrogen Dynamics at the Field-Scale. <i>Frontiers in Sustainable Food Systems</i> , 2019, 3, .	1.8	13
31	Insights from socio-hydrological modeling to design sustainable wastewater reuse strategies for agriculture at the watershed scale. <i>Agricultural Water Management</i> , 2020, 231, 105983.	2.4	13
32	Evaluation of nitrogen loss reduction strategies using DRAINMOD-DSSAT in east-central Illinois. <i>Agricultural Water Management</i> , 2020, 240, 106322.	2.4	13
33	Investigation of Rotavirus Survival in Different Soil Fractions and Temperature Conditions. <i>Journal of Environmental Protection</i> , 2013, 04, 1-9.	0.3	13
34	Prediction of Nitrate and Phosphorus Concentrations Using Machine Learning Algorithms in Watersheds with Different Landuse. <i>Water (Switzerland)</i> , 2021, 13, 3096.	1.2	12
35	In-season split nitrogen application and cover cropping effects on nitrous oxide emissions in rainfed maize. <i>Agriculture, Ecosystems and Environment</i> , 2022, 326, 107813.	2.5	11
36	Split nitrogen application with cover cropping reduces subsurface nitrate losses while maintaining corn yields. <i>Journal of Environmental Quality</i> , 2021, 50, 1408-1418.	1.0	10

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37	Development of a physically-based model for transport of <i>Cryptosporidium parvum</i> in overland flow. <i>Environmental Modelling and Software</i> , 2011, 26, 1289-1297.	1.9	8
38	Effects of Soil Type and Cover Condition on <i>Cryptosporidium parvum</i> Transport in Overland Flow. <i>Water, Air, and Soil Pollution</i> , 2014, 225, 1.	1.1	8
39	Relative performance of different data mining techniques for nitrate concentration and load estimation in different type of watersheds. <i>Environmental Pollution</i> , 2020, 263, 114618.	3.7	8
40	Evaluation of Conservation Drainage Systems in Illinois - Bioreactors. , 2010, , .		7
41	Simulated responses of tile-drained agricultural systems to recent changes in ambient atmospheric gradients. <i>Agricultural Systems</i> , 2019, 168, 48-55.	3.2	7
42	Design flow and nitrate removal evaluation of a wide denitrifying bioreactor with baffles. <i>Ecological Engineering</i> , 2020, 158, 106068.	1.6	7
43	Overland Transport of Rotavirus and the Effect of Soil Type and Vegetation. <i>Water (Switzerland)</i> , 2016, 8, 78.	1.2	6
44	Soil quality indicators to evaluate environmental services at different landscape positions and land uses in the Atlantic Forest biome. <i>Environmental and Sustainability Indicators</i> , 2020, 7, 100047.	1.7	6
45	Efficacy of heated tourmaline in reducing biomass clogging within woodchip bioreactors. <i>Science of the Total Environment</i> , 2021, 755, 142401.	3.9	6
46	Field evaluation of sediment retention devices under concentrated flow conditions. <i>Journal of Soils and Sediments</i> , 2015, 15, 2022-2031.	1.5	4
47	Soil surface roughness under tillage practices and its consequences for water and sediment losses. <i>Journal of Soil Science and Plant Nutrition</i> , 2016, , 0-0.	1.7	4
48	Analysis of Long-Term Temperature Trend in Illinois and its Implication on the Cropping System. <i>Environmental Processes</i> , 2018, 5, 451-464.	1.7	4
49	How climate scenarios alter future predictions of field-scale water and nitrogen dynamics and crop yields. <i>Journal of Environmental Management</i> , 2019, 252, 109623.	3.8	4
50	Sediment Transport Modeling Using GIS in Bagmati Basin, Nepal. , 0, , .		3
51	Assessment of water quality in Little Vermillion River watershed using principal component and nearest neighbor analyses. <i>Water Science and Technology: Water Supply</i> , 2015, 15, 327-338.	1.0	3
52	Modeling effect of cover condition and soil type on rotavirus transport in surface flow. <i>Journal of Water and Health</i> , 2017, 15, 545-554.	1.1	3
53	Assessment of Surface Inlets Performance on Sediment Transport to Subsurface Drainage System. <i>Applied Engineering in Agriculture</i> , 2017, 33, 217-224.	0.3	3
54	Runoff sediment and P losses from various soil management practices: modelling in hilly slopes. <i>Journal of Soil Science and Plant Nutrition</i> , 2018, , 0-0.	1.7	3

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55	Low-Water Crossings: An Overview of Designs Implemented along Rural, Low-Volume Roads. Environments - MDPI, 2018, 5, 22.	1.5	3
56	Comparison of simulated nitrogen management strategies using DRAINMOD-DSSAT and RZWQM2. Agricultural Water Management, 2022, 266, 107597.	2.4	3
57	Can functional leaf traits be used for monitoring wetland restoration? A comparison between commonly used monitoring metrics and functional leaf traits. Ecological Indicators, 2022, 140, 109032.	2.6	3
58	How Å...ngstrÃ¼mâ€“Prescott Coefficients Alter the Estimation of Agricultural Water Demand in South Korea. Water (Switzerland), 2018, 10, 1851.	1.2	2
59	Relative Contribution of Climate Change and Anthropogenic Activities to Streamflow Alterations in Illinois. Water (Switzerland), 2021, 13, 3226.	1.2	2
60	Integrating WEPP and a Pathogen Transport Model to Simulate Fate and Transport of Cryptosporidium and Rotavirus in Surface Flow. , 2011, , .		1
61	&lt;i&gt;DEVELOPMENT OF A PROCESS-BASED SUBSURFACE BIOREACTOR MODEL&lt;/i&gt;. , 2018, , .		1
62	Assessment of Various Erosion and Sediment Control Practices within an Experimental Facility. , 2011, , .		0
63	&lt;i&gt;EVALUATION OF LIDAR DATA FOR ENGINEERING DESIGN&lt;/i&gt;. , 2018, , .		0
64	Comparison of various estimation techniques to predict nitrate load in Maumee River. , 2018, , .		0
65	Analysis of Long-term Trends in Climate Indices and Its Effect on Crop Yield in Illinois. , 2018, , .		0
66	Extensible Framework for Analysis of Farm Practices and Programs. , 2019, , .		0