Mohammad Shamsudduha

List of Publications by Year
in descending order

55 papers	4,673 citations	159585 30 h-index	175258 52 g-index
70 all docs	70 docs citations	70 times ranked	5090 citing authors

#	Article	IF	Citations
1	Ground water and climate change. Nature Climate Change, 2013, 3, 322-329.	18.8	1,513
2	Groundwater quality and depletion in the Indo-Gangetic Basin mapped from inÂsituÂobservations. Nature Geoscience, 2016, 9, 762-766.	12.9	341
3	Decoupling of As and Fe release to Bangladesh groundwater under reducing conditions. Part I: Evidence from sediment profiles. Geochimica Et Cosmochimica Acta, 2004, 68, 3459-3473.	3.9	300
4	Recent trends in groundwater levels in a highly seasonal hydrological system: the Ganges-Brahmaputra-Meghna Delta. Hydrology and Earth System Sciences, 2009, 13, 2373-2385.	4.9	198
5	Monitoring groundwater storage changes in the highly seasonal humid tropics: Validation of GRACE measurements in the Bengal Basin. Water Resources Research, 2012, 48, .	4.2	176
6	Geochemical and hydrogeological contrasts between shallow and deeper aquifers in two villages of Araihazar, Bangladesh: Implications for deeper aquifers as drinking water sources. Geochimica Et Cosmochimica Acta, 2005, 69, 5203-5218.	3.9	169
7	Observed controls on resilience of groundwater to climate variability in sub-Saharan Africa. Nature, 2019, 572, 230-234.	27.8	168
8	The impact of intensive groundwater abstraction on recharge to a shallow regional aquifer system: evidence from Bangladesh. Hydrogeology Journal, 2011, 19, 901-916.	2.1	163
9	Hydrological control of As concentrations in Bangladesh groundwater. Water Resources Research, 2007, 43, .	4.2	139
10	Hydrogeological typologies of the Indo-Gangetic basin alluvial aquifer, South Asia. Hydrogeology Journal, 2017, 25, 1377-1406.	2.1	117
11	Temporal variability of groundwater chemistry in shallow and deep aquifers of Araihazar, Bangladesh. Journal of Contaminant Hydrology, 2008, 99, 97-111.	3.3	101
12	Resilience to flash floods in wetland communities of northeastern Bangladesh. International Journal of Disaster Risk Reduction, 2018, 31, 478-488.	3.9	86
13	Quaternary stratigraphy, sediment characteristics and geochemistry of arsenic-contaminated alluvial aquifers in the Gangesâ€“Brahmaputra floodplain in central Bangladesh. Journal of Contaminant Hydrology, 2008, 99, 112-136.	3.3	78
14	Geochemistry and mineralogy of arsenic in (natural) anaerobic groundwaters. Applied Geochemistry, 2008, 23, 3205-3214.	3.0	75
15	Impact of local recharge on arsenic concentrations in shallow aquifers inferred from the electromagnetic conductivity of soils in Araihazar, Bangladesh. Water Resources Research, 2008, 44, .	4.2	69
16	Modeling regional-scale groundwater arsenic hazard in the transboundary Ganges River Delta, India and Bangladesh: Infusing physically-based model with machine learning. Science of the Total Environment, 2020, 748, 141107.	8.0	68
17	Satellite-derived surface and sub-surface water storage in the Gangesâ€“Brahmaputra River Basin. Journal of Hydrology: Regional Studies, 2015, 4, 15-35.	2.4	56
18	Vulnerability of low-arsenic aquifers to municipal pumping in Bangladesh. Journal of Hydrology, 2016, 539, 674-686.	5.4	54

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19	TheÂEl NiÃ±o event of 2015â€“2016: climate anomalies and their impact on groundwater resources in East and Southern Africa. Hydrology and Earth System Sciences, 2019, 23, 1751-1762.	4.9	52
20	Seasonal and Decadal Groundwater Changes in African Sedimentary Aquifers Estimated Using GRACE Products and LSMs. Remote Sensing, 2018, 10, 904.	4.0	50
21	Quaternary shoreline shifting and hydrogeologic influence on the distribution of groundwater arsenic in aquifers of the Bengal Basin. Journal of Asian Earth Sciences, 2007, 31, 177-194.	2.3	47
22	Delineating low-arsenic groundwater environments in the Bengal Aquifer System, Bangladesh. Applied Geochemistry, 2011, 26, 614-623.	3.0	44
23	Recent changes in terrestrial water storage in the Upper Nile Basin: an evaluation of commonly used gridded GRACE products. Hydrology and Earth System Sciences, 2017, 21, 4533-4549.	4.9	43
24	Groundwater storage dynamics in the world's large aquifer systems from GRACE: uncertainty and role of extreme precipitation. Earth System Dynamics, 2020, 11, 755-774.	7.1	35
25	Multi-hazard Groundwater Risks to Water Supply from Shallow Depths: Challenges to Achieving the Sustainable Development Goals in Bangladesh. Exposure and Health, 2020, 12, 657-670.	4.9	33
26	Near surface lithology and spatial variation of arsenic in the shallow groundwater: southeastern Bangladesh. Environmental Geology, 2009, 56, 1687-1695.	1.2	32
27	Spatial relationship of groundwater arsenic distribution with regional topography and water-table fluctuations in the shallow aquifers in Bangladesh. Environmental Geology, 2009, 57, 1521.	1.2	32
28	Indigenous peopleâ€™s responses to drought in northwest Bangladesh. Environmental Development, 2019, 29, 55-66.	4.1	32
29	A generalized regression model of arsenic variations in the shallow groundwater of Bangladesh. Water Resources Research, 2015, 51, 685-703.	4.2	31
30	Mineralogical profiling of alluvial sediments from arsenic-affected Gangesâ€“Brahmaputra floodplain in central Bangladesh. Applied Geochemistry, 2011, 26, 470-483.	3.0	30
31	Drinking Water Salinity, Urinary Macroâ€Mineral Excretions, and Blood Pressure in the Southwest Coastal Population of Bangladesh. Journal of the American Heart Association, 2019, 8, e012007.	3.7	30
32	Linkages between GRACE water storage, hydrologic extremes, and climate teleconnections in major African aquifers. Environmental Research Letters, 2022, 17, 014046.	5.2	28
33	Terrestrial water load and groundwater fluctuation in the Bengal Basin. Scientific Reports, 2017, 7, 3872.	3.3	25
34	Security of Deep Groundwater in the Coastal Bengal Basin Revealed by Tracers. Geophysical Research Letters, 2018, 45, 8241-8252.	4.0	25
35	Spatio-temporal changes in terrestrial water storage in the Himalayan river basins and risks to water security in the region: A review. International Journal of Disaster Risk Reduction, 2019, 35, 101068.	3.9	25
36	Climateâ€“groundwater dynamics inferred from GRACE and the role of hydraulic memory. Earth System Dynamics, 2020, 11, 775-791.	7.1	22

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37	Stepped-wedge cluster-randomised controlled trial to assess the cardiovascular health effects of a managed aquifer recharge initiative to reduce drinking water salinity in southwest coastal Bangladesh: study design and rationale. BMJ Open, 2017, 7, e015205.	1.9	18
38	Security of deep groundwater against arsenic contamination in the Bengal Aquifer System: a numerical modeling study in southeast Bangladesh. Sustainable Water Resources Management, 2019, 5, 1073-1087.	2.1	18
39	Groundwater recharge from heavy rainfall in the southwestern Lake Chad Basin: evidence from isotopic observations. Hydrological Sciences Journal, 2021, 66, 1359-1371.	2.6	17
40	Warning systems as social processes for Bangladesh cyclones. Disaster Prevention and Management, 2018, 27, 370-379.	1.2	15
41	Arsenic and fasting blood glucose in the context of other drinking water chemicals: a cross-sectional study in Bangladesh. Environmental Research, 2019, 172, 249-257.	7.5	13
42	Consequences of access to water from managed aquifer recharge systems for blood pressure and proteinuria in south-west coastal Bangladesh: a stepped-wedge cluster-randomized trial. International Journal of Epidemiology, 2021, 50, 916-928.	1.9	13
43	Groundwater recharge processes in an Asian mega-delta: hydrometric evidence from Bangladesh. Hydrogeology Journal, 2020, 28, 2917-2932.	2.1	13
44	Associations of drinking rainwater with macro-mineral intake and cardiometabolic health: a pooled cohort analysis in Bangladesh, 2016â€“2019. Npj Clean Water, 2020, 3, 20.	8.0	12
45	Groundwater depletion in northern India: Impacts of the subâ€regional anthropogenic landâ€use, socioâ€politics and changing climate. Hydrological Processes, 2021, 35, e14003.	2.6	11
46	The influence of groundwater abstraction on interpreting climate controls and extreme recharge events from well hydrographs in semi-arid South Africa. Hydrogeology Journal, 2021, 29, 2773-2787.	2.1	10
47	Groundwater Chemistry and Blood Pressure: A Cross-Sectional Study in Bangladesh. International Journal of Environmental Research and Public Health, 2019, 16, 2289.	2.6	6
48	Letter to the Editor Regarding, â€œThe Unintended Consequences of the Reverse Osmosis Revolutionâ€• Environmental Science & Technology, 2019, 53, 7173-7174.	10.0	6
49	Modeling the Relationship of Groundwater Salinity to Neonatal and Infant Mortality From the Bangladesh Demographic Health Survey 2000 to 2014. GeoHealth, 2020, 4, e2019GH000229.	4.0	6
50	Multi-Hazard Groundwater Risks to the Drinking Water Supply in Bangladesh: Challenges to Achieving the Sustainable Development Goals. , 2019, , .		6
51	Spatio-temporal patterns of pre-eclampsia and eclampsia in relation to drinking water salinity at the district level in Bangladesh from 2016 to 2018. Population and Environment, 2019, 41, 235-251.	3.0	5
52	Impacts of Human Development and Climate Change on Groundwater Resources in Bangladesh. Springer Hydrogeology, 2018, , 523-544.	0.3	3
53	Groundwater storage dynamics in the Himalayan river basins and impacts of global change in the Anthropocene. , 2021, , 47-63.		1
54	Drinking Water Salinity Categories and Lower Blood Pressure: Evidence from Coastal Bangladesh. ISEE Conference Abstracts, 2018, 2018, .	0.0	0

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55	Groundwater Arsenic and Fasting Blood Glucose in the Context of Other Groundwater Chemicals: A Cross-Sectional Study in Bangladesh. ISEE Conference Abstracts, 2018, 2018, .	0.0	0