

Muhammad Shahid

Assistant Professor

NUST Institute of Civil Engineering

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About

Dr. Muhammad Shahid is working as Assistant Professor in the NUST Institute of Civil Engineering. Dr. Muhammad Shahid has a PhD in Hydrology And Water Resources Management. Dr. Muhammad Shahid has published 28 research articles & conference papers having a citation count of 633, carried out 3 projects and filed 0 intellectual property.

Qualifications

PhD in Hydrology And Water Resources Management Tsinghua University , China	2015 - 2019
MS in Water Resource Engg & Mgmt NUST, Islamabad , Pakistan	2011 - 2014
BSc in Civil Engineering BZU, Multan , Pakistan	2007 - 2011

Experience

Assistant Professor NUST Institute of Civil Engineering	2022- Present
Assistant Professor NUST Institute of Civil Engineering	2019 - 2022
Lecturer Abasyn University , Islamabad	2014 - 2015

Awards

CSC Scholarship CSC Scholarship for PhD	2015
Publication Award Research Publication award as a PG student in WRE&M	2014

Professional Memberships

PEC	Since 2011
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Research Projects

National Projects

Numerical Modeling for Landslide Dam Breach Case Studies from China and Pakistan

2020

Funding Agency: Scientific Cooperation Agreement for Visiting Scholar's Fund, China

Amount: PKR 1,959,200.00

Status: Approved_inprocess

Economic and environmental implications of Water harvesting practices under changing climate and land use scenarios across Pakistan

2021

Funding Agency: HEC

Amount: PKR 20,840,000.00

Status: Completed

Numerical modeling of landslide dam breach case studies from China and Pakistan

2020

Funding Agency: State Key Laboratory of Water Resources & Hydropower Engineering Science, Wuhan University, China

Amount: PKR 1,967,120.00

Status: Approved_inprocess

International Projects

Research Articles

Development of Artificial Geochemical Filter to Treat Acid Mine Drainage for Safe Disposal of Mine Water in Salt Range Portion of Indus Basin—A Lab to Pilot Scale Study

2022

Abdul Jabbar Khan Muhammad Shahid Gulraiz Akhter Yonggang Ge Khalil Ur Rahman

Sustainability , Volume 14, Issue 13, Article Number 7693

Impact Factor: 3.9 | **Quartile:** 2 | **Citations:** 3

DOI: 10.3390/su14137693

Evaluating the impact of the environment on depleting groundwater resources: a case study from a semi-arid and arid climatic region

2022

Khalil Ur Rahman Anwar Hussain Nuaman Ejaz Muhammad Shahid Zheng Dua Babak Mohammadi Pham Ngoc Hoai Quoc Bao Pham Khaled Mohamed Khedher Duong Tran Anh

Hydrological Sciences Journal , Volume 67, Issue 5, Pages 791-805,

Impact Factor: 3.787 | **Quartile:** 1 | **Citations:** 5

DOI: 10.1080/02626667.2022.2044483

Evaluation and comparison of four satellite-based precipitation products over the upper Tana River Basin

2022

F. Polong Q. B. Pham D. T. Anh K. U. Rahman Muhammad Shahid R. S. Alharb

International Journal of Environmental Science and Technology , Pages 1-16

Impact Factor: 2.860 | **Quartile:** 3 | **Citations:** 8

DOI: <https://doi.org/10.1007/s13762-022-03942-1>

Plausible Precipitation Trends over the Large River Basins of Pakistan in Twenty First Century

2022

Ammara Nusrat Hamza Farooq Gabriel Umm e Habiba Habib Ur Rehman Sajjad Haider Shakil Ahmad Muhammad Shahid Saad Ahmed Jamal Jahangir Ali

Atmosphere , Volume 13(2), Article Number 190

Impact Factor: 3.110 | **Quartile:** 3 | **Citations:** 4

DOI: 10.3390/atmos13020190

Quantitative assessment of regional land use and climate change impact on runoff across Gilgit watershed

2021

Muhammad Shahid Khalil Ur Rahman Sajjad Haider Hamza Farooq Gabriel Abdul Jabbar Khan Quoc Bao Pham Dr. Chaitanya Pande Nguyen Thi Thuy Linh Duong Tran Anh

Environmental Earth Sciences , Volume 80, Article Number 743

Impact Factor: 3.119 | **Quartile:** 2 | **Citations:** 60

DOI: 10.1007/s12665-021-10032-x

Investigating feasible sites for multi-purpose small dams in Swat District of Khyber Pakhtunkhwa Province, Pakistan: socioeconomic and environmental considerations

2021

Anwar Hussain Khalil Ur Rahman Muhammad Shahid Sajjad Haider Quoc Bao Pham Nguyen Thi Thuy Linh Saad Shauket Sammen

Environment, Development and Sustainability , Pages 1-24

Impact Factor: 3.219 | **Quartile:** 2 | **Citations:** 2

DOI: 10.1007/s10668-021-01886-z

<p>Assessing the potential and hydrological usefulness of the CHIRPS precipitation dataset over a complex topography in Pakistan</p> <p><i>Muhammad Shahid Khalil Ur Rahman Sajjad Haider Hamza Farooq Gabriel Abdul Jabbar Khan Quoc Bao Pham Babak Mohammadid Nguyen Thi Thuy Linh Duong Tran Anh</i></p> <p><i>Hydrological Sciences Journal</i> , Pages 1-21</p> <p>Impact Factor: 3.942 Quartile: 2 Citations: 25</p> <p>DOI: 10.1080/02626667.2021.1957476</p>	2021
<p>Development of a novel Weighted Average Least Squares-based ensemble multi-satellite precipitation dataset and its comprehensive evaluation over Pakistan</p> <p><i>Khalil Ur Rahman SonghaoShang Muhammad Shahid Yeqliang Wen Abdul Jabbar Khan</i></p> <p><i>Atmospheric Research</i> , Volume 246, Article Number 105133</p> <p>Impact Factor: 5.369 Quartile: 1 Citations: 20</p> <p>DOI: https://doi.org/10.1016/j.atmosres.2020.105133</p>	2020
<p>Application of precipitation products for flood modeling of transboundary river basin: a case study of Jhelum Basin</p> <p><i>Muhammad Umer Hamza Farooq Gabriel Sajjad Haider Ammara Nusrat Muhammad Shahid Muhammad Umer</i></p> <p><i>Theoretical and Applied Climatology</i> , Pages 1-16</p> <p>Impact Factor: 3.179 Quartile: 2 Citations: 14</p> <p>DOI: 10.1007/s00704-020-03471-2</p>	2020
<p>Application of Machine Learning Techniques to Delineate Homogeneous Climate Zones in River Basins of Pakistan for Hydro-Climatic Change Impact Studies</p> <p><i>Ammara Nusrat Hamza Farooq Gabriel Sajjad Haider Shakil Ahmad Muhammad Shahid Saad Ahmed Jamal</i></p> <p><i>Applied Sciences</i> , Volume 10, Issue 19, Article Number 6878</p> <p>Impact Factor: 2.679 Quartile: 2 Citations: 13</p> <p>DOI: 10.3390/app10196878</p>	2020
<p>An Integrated Geo-Physical Approach for Groundwater Investigation in Northwestern Part of Pakistan</p> <p><i>Abdul Jabbar Khan Fida Ul Mustafa Hamza Farooq Gabriel Haseeb Ullah Khan Wasi Haider Hussain Abbas Fida Ul Mustafa Hamza Farooq Gabriel Haseeb Ullah Khan Wasi Haider Hussain Abbas Muhammad Shahid</i></p> <p><i>International Journal of Advance Science and Technology</i> , Volume 29, Issue 10S, Pages 616-630</p> <p>Impact Factor: -</p> <p>DOI: Nil</p>	2020
<p>Hydrological evaluation of merged satellite precipitation datasets for streamflow simulation using SWAT: A case study of Potohar Plateau, Pakistan</p> <p><i>SonghaoShang KhalilUr Rahman Yeqliang Wen SonghaoShang Muhammad Shahid KhalilUr Rahman Yeqliang Wen</i></p> <p><i>Journal of Hydrology</i> , Volume 587, Article Number 125040</p> <p>Impact Factor: 5.722 Quartile: 1 Citations: 59</p> <p>DOI: 10.1016/j.jhydrol.2020.125040</p>	2020
<p>2D numerical modeling of two dam-break flood model studies in an urban locality</p> <p><i>Sajjad Haider Umer Saeed Muhammad Shahid</i></p> <p><i>Arabian Journal of Geosciences</i> , Volume 13, Article Number 682</p> <p>Impact Factor: 1.827 Quartile: 3 Citations: 6</p> <p>DOI: https://doi.org/10.1007/s12517-020-05709-9</p>	2020
<p>Application of Meta-Models for Accurate Calibration of Hydrological Model Parameters</p> <p><i>Ammara Nusrat Hamza Farooq Gabriel Sajjad Haider Muhammad Shahid</i></p> <p><i>Journal of Critical Reviews</i> , Volume 7, Issue 16, Pages 767-779</p> <p>Impact Factor: -</p> <p>DOI: 10.31838/jcr.07.16.103</p>	2020
<p>Hydrological drought indexing approach in response to climate and anthropogenic activities</p> <p><i>Waseem Muhammad Muhammad Shahid Noor Muhammad Khan Chen Si Waseem Muhammad Noor Muhammad Khan Chen Si</i></p> <p><i>Theoretical and Applied Climatology</i> , Pages 1-13</p> <p>Impact Factor: 3.179 Quartile: 2 Citations: 12</p> <p>DOI: 10.1007/s00704-020-03227-y</p>	2020
<p>Quantitative Contribution of Climate Change and Land Use Change to Runoff in Tarbela Catchment, Pakistan</p> <p><i>Rana Shahram Shaukat Mudasser Muneer Khan Muhammad Shahid Muhammad Shoaib Tanveer Ahmad Khan Muhammad Asif Aslam Rana Shahram Shaukat Mudasser Muneer Khan Muhammad Shoaib Tanveer Ahmad Khan Muhammad Asif Aslam</i></p>	2020

Impact Factor: 1.699 | **Quartile:** 4 | **Citations:** 9

DOI: 10.15244/pjoes/112214

Identifying the Annual and Seasonal Trends of Hydrological and Climatic Variables in the Indus Basin Pakistan

2020

Khalil-ur -Rahman Muhammad Shahid Khalil-ur -Rahman

Asia-Pacific Journal of Atmospheric Sciences, Pages 1-16

Impact Factor: 2.100 | **Quartile:** 3 | **Citations:** 34

DOI: 10.1007/s13143-020-00194-2

Impact assessment of land use and climate changes on the variation of runoff in Margalla Hills watersheds, Pakistan

2020

Muhammad Shahid Khalil-ur-Rahman Khaled S. Balkhair Amjad Nabi Amjad Nabi

Arabian Journal of Geosciences, Volume 13(5), Article number: 239

Impact Factor: 8.928 | **Quartile:** 1 | **Citations:** 23

DOI: 10.1007/s12517-020-5231-1

Anthropogenic Effects of Coal Mining on Ecological Resources of the Central Indus Basin, Pakistan

2020

Abdul Jabbar Khan Gulraiz Akhter Hamza Farooq Gabriel Muhammad Shahid

International Journal of Environmental Research and Public Health, Volume 17(4), Article Number 1255

Impact Factor: 3.390 | **Quartile:** 1 | **Citations:** 34

DOI: 10.3390/ijerph17041255

Application of a Dynamic Clustered Bayesian Model Averaging (DCBA) Algorithm for Merging Multisatellite Precipitation Products over Pakistan

2020

Khalil Ur Rahman Songhao Shang Muhammad Shahid Yeqiang Wen Zeeshan Khan

Journal of Hydrometeorology, Volume:21, Issue:1, Page(s): 17-37

Impact Factor: 4.349 | **Quartile:** 1 | **Citations:** 33

DOI: 10.1175/JHM-D-19-0087.1

An Appraisal of Dynamic Bayesian Model Averaging-Based Merged Multi-Satellite Precipitation Datasets Over Complex Topography and the Diverse Climate of Pakistan

2020

Khalil-ur-Rahman Songhao Shang Muhammad Shahid Yeqiang Wen

Remote Sensing, Volume 12(1), Article Number 10

Impact Factor: 4.848 | **Quartile:** 1 | **Citations:** 29

DOI: 10.3390/rs12010010

Performance Assessment of SM2RAIN-CCI and SM2RAIN-ASCAT Precipitation Products over Pakistan

2019

Khalil Ur Rahman Songhao Shang Muhammad Shahid Yeqiang Wen

Remote Sensing, Volume: 11, Issue: 17, Article Number 2040

Impact Factor: 4.509 | **Quartile:** 2 | **Citations:** 43

DOI: 10.3390/rs11172040

Developing an Ensemble Precipitation Algorithm from Satellite Products and Its Topographical and Seasonal Evaluations Over Pakistan

2018

Khalil Ur Rahman Songhao Shang Muhammad Shahid Jiang Li

Remote Sensing, Volume 10, Article Number 1835

Impact Factor: 4.118 | **Quartile:** 1 | **Citations:** 42

DOI: 10.3390/rs10111835

Understanding the impacts of climate change and human activities on streamflow: a case study of the Soan River basin, Pakistan

2018

Muhammad Shahid Zhentao Cong Danwu Zhang

Theoretical and Applied Climatology, Volume 134, Pages 205-219

Impact Factor: 2.720 | **Quartile:** 2 | **Citations:** 121

DOI: 10.1007/s00704-017-2269-4

Attribution of runoff change in the alpine basin: a case study of the Heihe Upstream Basin, China

2017

Zhentao Cong Muhammad Shahid Danwu Zhang Huimin Lei Dawen Yang

Hydrological Sciences Journal, Volume 62, No. 6, Pages 1013-1028

Impact Factor: 2.061 | **Quartile:** 2 | **Citations:** 34

DOI: 10.1080/02626667.2017.1283043

Relations of Catchment Area of Simly Lake Pakistan

Muhammad Shahid Hamza Farooq Gabriel Amjad Nabi Sajjad Haider Shaukat Ali Khan Syed Muhammad Ali Shah

Life Science Journal, Volume 11, Issue 7, Pages 11-15

Impact Factor: N/A

DOI: <http://www.dx.doi.org/10.7537/marslsj1107s14.02>

Conference Proceedings

Analyzing The Land-Use Impact on Flood Regime in Soan Basin

2022

Usama Nazar Dr. Muhammad Shahid Dr. Hamza Farooq Gabriel

4th Conference on Sustainability in Civil Engineering (CSCE'22), res.country(177,)

Citations: N/A

DOI: Nil

A meta-model assisted framework of optimization of the Hydrological model parameters for accurate calibration

2020

Ammara Nusrat Hamza Farooq Gabriel Sajjad Haider Muhammad Shahid Ammara Nusrat Hamza Farooq Gabriel Sajjad Haider Muhammad Shahid Ammara

Nusrat Hamza Farooq Gabriel Sajjad Haider Muhammad Shahid

22nd EGU General Assembly 2020 , res.country(12,)

Citations: N/A

DOI: 10.5194/egusphere-egu2020-21083

Editorial Activities

2022

Reviewed Papers for Journals

Impact Factor: 4.223

2022

Reviewed Papers for Journals

Impact Factor: 6.789

2022

Reviewed Papers for Journals

Impact Factor: 1.2

2022

Reviewed Papers for Journals

Impact Factor: 4.02

2022

Reviewed Papers for Journals

Impact Factor: 1.65

2020

Reviewed Papers for Journals

Impact Factor: 1.254

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Impact Factor: 2.191

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