Muhammad Tayyab

List of Publications by Year
in descending order

85 papers	2,596 citations	186265 28 h-index	214800 47 g-index
85 all docs	85 docs citations	85 times ranked	2015 citing authors

#	Article	IF	Citations
1	Simultaneous hydrogen production with the selective oxidation of benzyl alcohol to benzaldehyde by a noble-metal-free photocatalyst VC/CdS nanowires. Chinese Journal of Catalysis, 2022, 43, 1165-1175.	14.0	190
2	Single‐Atom Pt Loaded Zinc Vacancies ZnO–ZnS Induced Type‐V Electron Transport for Efficiency Photocatalytic H_2 Evolution. Solar Rrl, 2021, 5, 2100536.	5.8	153
3	Direct and efficient reduction of perfluorooctanoic acid using bimetallic catalyst supported on carbon. Journal of Hazardous Materials, 2021, 412, 125224.	12.4	138
4	A Survey on Handover Management: From LTE to NR. IEEE Access, 2019, 7, 118907-118930.	4.2	131
5	Spatiotemporal analysis of precipitation variability in annual, seasonal and extreme values over upper Indus River basin. Atmospheric Research, 2018, 213, 346-360.	4.1	113
6	Optimal production delivery policies for supplier and manufacturer in a constrained closed-loop supply chain for returnable transport packaging through metaheuristic approach. Computers and Industrial Engineering, 2019, 135, 987-1003.	6.3	97
7	Optimal batch quantity in a cleaner multi-stage lean production system with random defective rate. Journal of Cleaner Production, 2016, 139, 922-934.	9.3	83
8	Autonomation policy to control work-in-process inventory in a smart production system. International Journal of Production Research, 2021, 59, 1258-1280.	7.5	83
9	A sustainable development framework for a cleaner multi-item multi-stage textile production system with a process improvement initiative. Journal of Cleaner Production, 2020, 246, 119055.	9.3	76
10	Insect-fungal-interactions: A detailed review on entomopathogenic fungi pathogenicity to combat insect pests. Microbial Pathogenesis, 2021, 159, 105122.	2.9	74
11	An adaptive dynamic short-term wind speed forecasting model using secondary decomposition and an improved regularized extreme learning machine. Energy, 2018, 165, 939-957.	8.8	68
12	Effect of soft template variation on the synthesis, physical, and electrochemical properties of Mn_3O_4 nanomaterial. Inorganic and Nano-Metal Chemistry, 2021, 51, 359-365.	1.6	68
13	Large-scale disaster waste management under uncertain environment. Journal of Cleaner Production, 2019, 212, 200-222.	9.3	64
14	Silicon-mediated plant defense against pathogens and insect pests. Pesticide Biochemistry and Physiology, 2020, 168, 104641.	3.6	62
15	Soil Sickness in Aged Tea Plantation Is Associated With a Shift in Microbial Communities as a Result of Plant Polyphenol Accumulation in the Tea Gardens. Frontiers in Plant Science, 2020, 11, 601.	3.6	54
16	Plant microRNAs: Front line players against invading pathogens. Microbial Pathogenesis, 2018, 118, 9-17.	2.9	48
17	Long-Term Monoculture Negatively Regulates Fungal Community Composition and Abundance of Tea Orchards. Agronomy, 2019, 9, 466.	3.0	43
18	GIS-Based Urban Flood Resilience Assessment Using Urban Flood Resilience Model: A Case Study of Peshawar City, Khyber Pakhtunkhwa, Pakistan. Remote Sensing, 2021, 13, 1864.	4.0	43

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19	Management of animal fat-based biodiesel supply chain under the paradigm of sustainability. Energy Conversion and Management, 2020, 225, 113345.	9.2	40
20	GIS-Based Multi-Criteria Approach for Flood Vulnerability Assessment and Mapping in District Shangla: Khyber Pakhtunkhwa, Pakistan. Sustainability, 2021, 13, 3126.	3.2	38
21	Short-Term Effects of Different Organic Amendments on Soil Fungal Composition. Sustainability, 2019, 11, 198.	3.2	36
22	Bacteria with Different Assemblages in the Soil Profile Drive the Diverse Nutrient Cycles in the Sugarcane Straw Retention Ecosystem. Diversity, 2019, 11, 194.	1.7	36
23	Imperfect Multi-Stage Lean Manufacturing System with Rework under Fuzzy Demand. Mathematics, 2019, 7, 13.	2.2	36
24	Management of Tobacco Mosaic Virus through Natural Metabolites. Records of Natural Products, 2018, 12, 403-415.	1.3	36
25	Effect of Sugarcane Straw and Goat Manure on Soil Nutrient Transformation and Bacterial Communities. Sustainability, 2018, 10, 2361.	3.2	35
26	Sustainable Inventory Management for Environmental Impact through Partial Backordering and Multi-Trade-Credit-Period. Sustainability, 2018, 10, 4761.	3.2	33
27	Liming Positively Modulates Microbial Community Composition and Function of Sugarcane Fields. Agronomy, 2019, 9, 808.	3.0	30
28	Rainfall-runoff modeling at Jinsha River basin by integrated neural network with discrete wavelet transform. Meteorology and Atmospheric Physics, 2019, 131, 115-125.	2.0	30
29	Polychronicity at work: Work engagement as a mediator of the relationships between job outcomes. Journal of Hospitality and Tourism Management, 2020, 45, 470-478.	6.6	30
30	Response of Soil Fungal Diversity and Community Composition to Varying Levels of Bamboo Biochar in Red Soils. Microorganisms, 2021, 9, 1385.	3.6	29
31	Sugarcane monoculture drives microbial community composition, activity and abundance of agricultural-related microorganisms. Environmental Science and Pollution Research, 2021, 28, 48080-48096.	5.3	28
32	A linear bi-level multi-objective program for optimal allocation of water resources. PLoS ONE, 2018, 13, e0192294.	2.5	28
33	Screening of EMS-Induced Drought-Tolerant Sugarcane Mutants Employing Physiological, Molecular and Enzymatic Approaches. Agronomy, 2018, 8, 226.	3.0	25
34	Continuous Sugarcane Planting Negatively Impacts Soil Microbial Community Structure, Soil Fertility, and Sugarcane Agronomic Parameters. Microorganisms, 2021, 9, 2008.	3.6	25
35	Evaluation of the Impact of Implementing the Prone Jackknife Position for the Perineal Phase of Abdominoperineal Excision of the Rectum. Diseases of the Colon and Rectum, 2012, 55, 316-321.	1.3	24
36	Promising role of silicon to enhance drought resistance in wheat. Communications in Soil Science and Plant Analysis, 2018, 49, 2932-2941.	1.4	23

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37	Divergent consequences of different biochar amendments on carbon dioxide (CO_2) and nitrous oxide (N_2O) emissions from the red soil. Science of the Total Environment, 2021, 754, 141935.	8.0	23
38	Application of Integrated Artificial Neural Networks Based on Decomposition Methods to Predict Streamflow at Upper Indus Basin, Pakistan. Atmosphere, 2018, 9, 494.	2.3	22
39	Sustainable Lot Size in a Multistage Lean-Green Manufacturing Process under Uncertainty. Mathematics, 2019, 7, 20.	2.2	21
40	Effect of Cu concentration and dopant site on the band gap of MoS2: A DFT study. Computational Condensed Matter, 2020, 24, e00494.	2.1	21
41	Straw retention efficiently improves fungal communities and functions in the fallow ecosystem. BMC Microbiology, 2021, 21, 52.	3.3	20
42	Correlation of rectal tumor volumes with oncological outcomes for low rectal cancers: does tumor size matter?. Surgery Today, 2015, 45, 826-833.	1.5	19
43	Protein Phosphatase (PP2C9) Induces Protein Expression Differentially to Mediate Nitrogen Utilization Efficiency in Rice under Nitrogen-Deficient Condition. International Journal of Molecular Sciences, 2018, 19, 2827.	4.1	18
44	Product Channeling in an O2O Supply Chain Management as Power Transmission in Electric Power Distribution Systems. Mathematics, 2019, 7, 4.	2.2	17
45	Restoration of Long-Term Monoculture Degraded Tea Orchard by Green and Goat Manures Applications System. Sustainability, 2019, 11, 1011.	3.2	16
46	Depth-dependent influence of biochar application on the abundance and community structure of diazotrophic under sugarcane growth. PLoS ONE, 2021, 16, e0253970.	2.5	16
47	Modeling Water Quality Parameters Using Landsat Multispectral Images: A Case Study of Erlong Lake, Northeast China. Remote Sensing, 2021, 13, 1603.	4.0	15
48	Integrating Artificial Neural Networks into the VIC Model for Rainfall-Runoff Modeling. Water (Switzerland), 2016, 8, 407.	2.7	14
49	The Critical Role of Small RNAs in Regulating Plant Innate Immunity. Biomolecules, 2021, 11, 184.	4.0	14
50	Band-gap tuning of graphene by Mg doping and adsorption of Br and Be on impurity: A DFT study. Computational Condensed Matter, 2020, 23, e00469.	2.1	13
51	Influence of Intraspecific Competition Stress on Soil Fungal Diversity and Composition in Relation to Tree Growth and Soil Fertility in Sub-Tropical Soils under Chinese Fir Monoculture. Sustainability, 2021, 13, 10688.	3.2	13
52	Genome characterization of Sugarcane Yellow Leaf Virus with special reference to RNAi based molecular breeding. Microbial Pathogenesis, 2018, 120, 187-197.	2.9	11
53	WRF model for precipitation simulation and its application in real-time flood forecasting in the Jinshajiang River Basin, China. Meteorology and Atmospheric Physics, 2018, 130, 635-647.	2.0	11
54	Differential response of soil microbial and animal communities along the chronosequence of Cunninghamia lanceolata at different soil depth levels in subtropical forest ecosystem. Journal of Advanced Research, 2021, 38, 41-54.	9.5	11

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55	Natural forest chronosequence maintains better soil fertility indicators and assemblage of total belowground soil biota than Chinese fir monoculture in subtropical ecosystem. Journal of Cleaner Production, 2022, 334, 130228.	9.3	11
56	A Radio Frequency Sensor Array for Dielectric Constant Estimation of Multiphase Oil Flow in Pipelines. IEEE Sensors Journal, 2017, 17, 5900-5907.	4.7	10
57	Uplink Reference Signals for Energy-Efficient Handover. IEEE Access, 2020, 8, 163060-163076.	4.2	10
58	Effect of copper concentration and sulfur vacancies on electronic properties of MoS2 monolayer: a computational study. Journal of Molecular Modeling, 2021, 27, 213.	1.8	10
59	Sugarcane cultivar-dependent changes in assemblage of soil rhizosphere fungal communities in subtropical ecosystem. Environmental Science and Pollution Research, 2022, 29, 20795-20807.	5.3	10
60	The role of information and innovative technology for rehabilitation of children with Autism: A Systematic Literature Review. , 2017, , .		9
61	Application of Artificial Intelligence Method Coupled with Discrete Wavelet Transform Method. Procedia Computer Science, 2017, 107, 212-217.	2.0	8
62	A Simulation Study on LTE Handover and the Impact of Cell Size. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2019, , 398-408.	0.3	8
63	Identification of Shift in Sowing and Harvesting Dates of Rice Crop (L. Oryza sativa) through Remote Sensing Techniques: A Case Study of Larkana District. Sustainability, 2020, 12, 3586.	3.2	7
64	Uplink Reference Signals for Power-Efficient Handover in Cellular Networks With Mobile Relays. IEEE Access, 2021, 9, 24446-24461.	4.2	7
65	Identifying Half-Century Precipitation Trends in a Chinese Lake Basin. Polish Journal of Environmental Studies, 2019, 28, 1397-1412.	1.2	7
66	A computational study of MoS$_2$ for band gap engineering by substitutional doping of TMN (T = transition metal (Cu), MÂ=Âmetalloid (B) and N = non-metal (C)). Materials Research Express, 2021, 8, 046301.	1.6	6
67	The Ventilation Efficiency of Urban Built Intensity and Ventilation Path Identification: A Case Study of Wuhan. International Journal of Environmental Research and Public Health, 2021, 18, 11684.	2.6	6
68	A wearable RF sensor on fabric substrate for pulmonary edema monitoring. , 2017, , .		5
69	Kernel Clustering with a Differential Harmony Search Algorithm for Scheme Classification. Algorithms, 2017, 10, 14.	2.1	5
70	Streamflow Prediction by Applying Generalized Regression Network with Time Series Decomposition Method. Indonesian Journal of Electrical Engineering and Computer Science, 2016, 4, 611.	0.8	5
71	Sugarcane cultivars manipulate rhizosphere bacterial communitiesâ€™ structure and composition of agriculturally important keystone taxa. 3 Biotech, 2022, 12, 32.	2.2	5
72	Spatial Climatic Variability and Impact of El NiÃ±oâ€"Southern Oscillation on Extreme Precipitation of River Catchment. Environmental Engineering Science, 2020, 37, 346-364.	1.6	4

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73	Integrated Combination of the Multi Hydrological Models by Applying the Least Square Method. Research Journal of Applied Sciences, Engineering and Technology, 2015, 10, 107-111.	0.1	3
74	A low complexity RF based sensor array for lung disease detection using inkjet printing. International Journal of RF and Microwave Computer-Aided Engineering, 2019, 29, e21586.	1.2	3
75	The Ventilation Path Assessment of Urban Street in Wuhan. Polish Journal of Environmental Studies, 2021, 30, 2877-2889.	1.2	2
76	Design, Synthesis, Crystal Structure, Fluorescence, Molecular Docking and DFT Studies of 3,6-Dinitro-N-octylcarbazole. Current Organic Chemistry, 2019, 23, 1681-1687.	1.6	2
77	Filtered mud improves sugarcane growth and modifies the functional abundance and structure of soil microbial populations. PeerJ, 2022, 10, e12753.	2.0	2
78	An integrated approach for energy efficient handover and key distribution protocol for secure NC-enabled small cells. Computer Networks, 2022, 206, 108806.	5.1	2
79	Low complexity RF sensor for multiphase oil flow estimation in pipelines. , 2017, , .		1
80	Adaptive Auditory Feedback. , 2018, , .		1
81	An Efficient Protocol for the Synthesis, Biological Screening and Molecular Docking Studies of 3,4-Dihydropyrimidine-2-one/thione Derivatives. Letters in Drug Design and Discovery, 2020, 17, 330-340.	0.7	1
82	Exchange Rate Forecasting Based on Combined Fuzzification Strategy and Advanced Optimization Algorithm. Processes, 2021, 9, 2204.	2.8	1
83	A tailored approach to abdominoperineal resection for rectal cancer: multicentre analysis of short-term outcomes and impact on oncological survival. Langenbeck's Archives of Surgery, 2021, 406, 813-819.	1.9	0
84	Power efficient mobile small cell placement for network-coded cooperation in UDNs. Computer Networks, 2021, , 108559.	5.1	0
85	Impact of spatial and temporal changes in climate on the Kunhar River Watershed, Pakistan. Arabian Journal of Geosciences, 2022, 15, .	1.3	0