Muhammad Wajid Ullah

List of Publications by Citations

114 papers	3,432 citations	35 h-index	55 g-index
132 ext. papers	4,700 ext. citations	7 avg, IF	6.02 L-index

#	Paper	IF	Citations
114	Electroconductive natural polymer-based hydrogels. *Biomaterials*, **2016**, 111, 40-54	15.6	230
113	Bioprinting and its applications in tissue engineering and regenerative medicine. *International Journal of Biological Macromolecules*, **2018**, 107, 261-275	7.9	172
112	Synthesis of regenerated bacterial cellulose-zinc oxide nanocomposite films for biomedical applications. *Cellulose*, **2014**, 21, 433-447	5.5	158
111	Strategies for cost-effective and enhanced production of bacterial cellulose. *International Journal of Biological Macromolecules*, **2017**, 102, 1166-1173	7.9	119
110	Current Challenges of Cancer Anti-angiogenic Therapy and the Promise of Nanotherapeutics. *Theranostics*, **2018**, 8, 533-548	12.1	119
109	Bacterial cellulose-titanium dioxide nanocomposites: nanostructural characteristics, antibacterial mechanism, and biocompatibility. *Cellulose*, **2015**, 22, 565-579	5.5	118
108	Structural and physico-mechanical characterization of bio-cellulose produced by a cell-free system. *Carbohydrate Polymers*, **2016**, 136, 908-16	10.3	94
107	Bacterial cellulose composites: Synthetic strategies and multiple applications in bio-medical and electro-conductive fields. *Biotechnology Journal*, **2015**, 10, 1847-61	5.6	93
106	Fabrication of bacterial cellulose/polyaniline/single-walled carbon nanotubes membrane for potential application as biosensor. *Carbohydrate Polymers*, **2017**, 163, 62-69	10.3	91
105	Innovative production of bio-cellulose using a cell-free system derived from a single cell line. *Carbohydrate Polymers*, **2015**, 132, 286-94	10.3	88
104	A transparent wound dressing based on bacterial cellulose whisker and poly(2-hydroxyethyl methacrylate). *International Journal of Biological Macromolecules*, **2017**, 105, 638-644	7.9	85
103	Role of Recombinant DNA Technology to Improve Life. *International Journal of Genomics*, **2016**, 2016, 2405954	2.5	76
102	Preparation and structural characterization of surface modified microporous bacterial cellulose scaffolds: A potential material for skin regeneration applications in vitro and in vivo. *International Journal of Biological Macromolecules*, **2018**, 117, 1200-1210	7.9	72
101	Bacterial biosensing: Recent advances in phage-based bioassays and biosensors. *Biosensors and Bioelectronics*, **2018**, 118, 204-216	11.8	64
100	Bacterial cellulose-poly(3,4-ethylenedioxythiophene)-poly(styrenesulfonate) composites for optoelectronic applications. *Carbohydrate Polymers*, **2015**, 127, 86-93	10.3	61
99	Fabrication and characterization of porous polycaprolactone scaffold via extrusion-based cryogenic 3D printing for tissue engineering. *Materials and Design*, **2019**, 180, 107946	8.1	55
98	High-density phage particles immobilization in surface-modified bacterial cellulose for ultra-sensitive and selective electrochemical detection of Staphylococcus aureus. *Biosensors and Bioelectronics*, **2020**, 157, 112163	11.8	55

97	Three-dimensionally microporous and highly biocompatible bacterial cellulose-gelatin composite scaffolds for tissue engineering applications. *RSC Advances*, **2016**, 6, 110840-110849	3.7	53
96	Current Trends and Potential Applications of Microbial Interactions for Human Welfare. *Frontiers in Microbiology*, **2018**, 9, 1156	5.7	53
95	The use of bacterial polysaccharides in bioprinting. *Biotechnology Advances*, **2019**, 37, 107448	17.8	52
94	In situ synthesis of a bio-cellulose/titanium dioxide nanocomposite by using a cell-free system. *RSC Advances*, **2016**, 6, 22424-22435	3.7	48
93	Recent Advancement in Cellulose based Nanocomposite for Addressing Environmental Challenges. *Recent Patents on Nanotechnology*, **2016**, 10, 169-180	1.2	47
92	Development of three-dimensional bacterial cellulose/chitosan scaffolds: Analysis of cell-scaffold interaction for potential application in the diagnosis of ovarian cancer. *International Journal of Biological Macromolecules*, **2019**, 137, 1050-1059	7.9	45
91	Self-assembly of bio-cellulose nanofibrils through intermediate phase in a cell-free enzyme system. *Biochemical Engineering Journal*, **2019**, 142, 135-144	4.2	45
90	Metabolic engineering of synthetic cell-free systems: Strategies and applications. *Biochemical Engineering Journal*, **2016**, 105, 391-405	4.2	39
89	Titanium oxide-bacterial cellulose bioadsorbent for the removal of lead ions from aqueous solution. *International Journal of Biological Macromolecules*, **2019**, 129, 965-971	7.9	38
88	Nano-gold assisted highly conducting and biocompatible bacterial cellulose-PEDOT:PSS films for biology-device interface applications. *International Journal of Biological Macromolecules*, **2018**, 107, 865-873	7.9	38
87	Comparative study of plant and bacterial cellulose pellicles regenerated from dissolved states. *International Journal of Biological Macromolecules*, **2019**, 137, 247-252	7.9	37
86	Yeast cell-free enzyme system for bio-ethanol production at elevated temperatures. *Process Biochemistry*, **2014**, 49, 357-364	4.8	37
85	Production of bacterial cellulose from alternative cheap and waste resources: A step for cost reduction with positive environmental aspects. *Korean Journal of Chemical Engineering*, **2020**, 37, 925-937	2.8	36
84	Enhanced cell proliferation by electrical stimulation based on electroactive regenerated bacterial cellulose hydrogels. *Carbohydrate Polymers*, **2020**, 249, 116829	10.3	36
83	Recent advancements in bioreactions of cellular and cell-free systems: A study of bacterial cellulose as a model. *Korean Journal of Chemical Engineering*, **2017**, 34, 1591-1599	2.8	35
82	Cryogenic free-form extrusion bioprinting of decellularized small intestinal submucosa for potential applications in skin tissue engineering. *Biofabrication*, **2019**, 11, 035023	10.5	35
81	Bio-ethanol production through simultaneous saccharification and fermentation using an encapsulated reconstituted cell-free enzyme system. *Biochemical Engineering Journal*, **2014**, 91, 110-119	4.2	35
80	Fabrication of pH-electroactive Bacterial Cellulose/Polyaniline Hydrogel for the Development of a Controlled Drug Release System. *ES Materials & Manufacturing*, **2018**,	3.7	35

79	Production, characterization and biological features of bacterial cellulose from scum obtained during preparation of sugarcane jaggery (gur). *Journal of Food Science and Technology*, **2015**, 52, 8343-9	3.3	33
78	Microbes as Structural Templates in Biofabrication: Study of Surface Chemistry and Applications. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 11163-11175	8.3	32
77	Engineered regenerated bacterial cellulose scaffolds for application in in vitro tissue regeneration. *RSC Advances*, **2015**, 5, 84565-84573	3.7	31
76	Plant extract-loaded bacterial cellulose composite membrane for potential biomedical applications. *Journal of Bioresources and Bioproducts*, **2021**, 6, 26-32	18.7	31
75	Current advancements of magnetic nanoparticles in adsorption and degradation of organic pollutants. *Environmental Science and Pollution Research*, **2017**, 24, 12713-12722	5.1	30
74	Synthesis and characterization of a novel bacterial cellulose–poly(3,4-ethylenedioxythiophene)–poly(styrene sulfonate) composite for use in biomedical applications. *Cellulose*, **2015**, 22, 2141-2148	5.5	30
73	In Situ Synthesized Selenium Nanoparticles-Decorated Bacterial Cellulose/Gelatin Hydrogel with Enhanced Antibacterial, Antioxidant, and Anti-Inflammatory Capabilities for Facilitating Skin Wound Healing. *Advanced Healthcare Materials*, **2021**, 10, e2100402	10.1	29
72	Simultaneous co-substitution of Sr2+/Fe3+ in hydroxyapatite nanoparticles for potential biomedical applications. *Ceramics International*, **2018**, 44, 21338-21348	5.1	28
71	Synthesis and applications of fungal mycelium-based advanced functional materials. *Journal of Bioresources and Bioproducts*, **2021**, 6, 1-10	18.7	28
70	Fabrication of Bacterial Cellulose-Curcumin Nanocomposite as a Novel Dressing for Partial Thickness Skin Burn. *Frontiers in Bioengineering and Biotechnology*, **2020**, 8, 553037	5.8	26
69	Amphiphilic core-shell nanoparticles: Synthesis, biophysical properties, and applications. *Colloids and Surfaces B: Biointerfaces*, **2018**, 172, 68-81	6	26
68	Three-dimensional printing of alginate-gelatin-agar scaffolds using free-form motor assisted microsyringe extrusion system. *Journal of Polymer Research*, **2018**, 25, 1	2.7	25
67	Developmental strategies and regulation of cell-free enzyme system for ethanol production: a molecular prospective. *Applied Microbiology and Biotechnology*, **2014**, 98, 9561-78	5.7	24
66	Impact of structural features of Sr/Fe co-doped HAp on the osteoblast proliferation and osteogenic differentiation for its application as a bone substitute. *Materials Science and Engineering C*, **2020**, 110, 110633	8.3	24
65	Synthesis and Characterization of Sintered Sr/Fe-Modified Hydroxyapatite Bioceramics for Bone Tissue Engineering Applications. *ACS Biomaterials Science and Engineering*, **2020**, 6, 375-388	5.5	24
64	Synergistic effect of highly aligned bacterial cellulose/gelatin membranes and electrical stimulation on directional cell migration for accelerated wound healing. *Chemical Engineering Journal*, **2021**, 424, 130563	14.7	23
63	Catechins-Modified Selenium-Doped Hydroxyapatite Nanomaterials for Improved Osteosarcoma Therapy Through Generation of Reactive Oxygen Species. *Frontiers in Oncology*, **2019**, 9, 499	5.3	22
62	Antimicrobial Inks: The Anti-Infective Applications of Bioprinted Bacterial Polysaccharides. *Trends in Biotechnology*, **2019**, 37, 1155-1159	15.1	21

61	Antimicrobial and biocompatible properties of nanomaterials. *Journal of Nanoscience and Nanotechnology*, **2014**, 14, 780-91	1.3	21
60	Encapsulated yeast cell-free system: A strategy for cost-effective and sustainable production of bio-ethanol in consecutive batches. *Biotechnology and Bioprocess Engineering*, **2015**, 20, 561-575	3.1	20
59	Bacteriophage-based advanced bacterial detection: Concept, mechanisms, and applications. *Biosensors and Bioelectronics*, **2021**, 177, 112973	11.8	20
58	Fabrication of nanocomposites and hybrid materials using microbial biotemplates. *Advanced Composites and Hybrid Materials*, **2018**, 1, 79-93	8.7	19
57	Silver Nanoparticles Embedded in Gelatin Biopolymer Hydrogel as Catalyst for Reductive Degradation of Pollutants. *Journal of Polymers and the Environment*, **2020**, 28, 399-410	4.5	19
56	Microbial Cells with a Fe O Doped Hydrogel Extracellular Matrix: Manipulation of Living Cells by Magnetic Stimulus. *Macromolecular Bioscience*, **2016**, 16, 1506-1514	5.5	18
55	Fungi from the extremes of life: an untapped treasure for bioactive compounds. *Applied Microbiology and Biotechnology*, **2020**, 104, 2777-2801	5.7	17
54	Development and Characterization of Yeast-Incorporated Antimicrobial Cellulose Biofilms for Edible Food Packaging Application. *Polymers*, **2021**, 13,	4.5	17
53	Synthesis, Structure, and Properties of Bacterial Cellulose **2019**, 81-113		16
52	Enhanced bio-ethanol production via simultaneous saccharification and fermentation through a cell free enzyme system prepared by disintegration of waste of beer fermentation broth. *Korean Journal of Chemical Engineering*, **2015**, 32, 694-701	2.8	15
51	Bacterial cellulose/glycolic acid/glycerol composite membrane as a system to deliver glycolic acid for anti-aging treatment. *Journal of Bioresources and Bioproducts*, **2021**, 6, 129-141	18.7	15
50	Overview on the Role of Advance Genomics in Conservation Biology of Endangered Species. *International Journal of Genomics*, **2016**, 2016, 3460416	2.5	15
49	Prevention and treatment of COVID-19: Focus on interferons, chloroquine/hydroxychloroquine, azithromycin, and vaccine. *Biomedicine and Pharmacotherapy*, **2021**, 133, 111008	7.5	14
48	Encapsulation of E. coli in biomimetic and FeO-doped hydrogel: structural and viability analyses. *Applied Microbiology and Biotechnology*, **2018**, 102, 933-944	5.7	14
47	Biobased materials for active food packaging: A review. *Food Hydrocolloids*, **2021**, 125, 107419	10.6	13
46	Synthesis, Chemistry, and Medical Application of Bacterial Cellulose Nanocomposites. *Advanced Structured Materials*, **2015**, 399-437	0.6	12
45	Perspective Applications and Associated Challenges of Using Nanocellulose in Treating Bone-Related Diseases. *Frontiers in Bioengineering and Biotechnology*, **2021**, 9, 616555	5.8	11
44	Application of Sodium Alginate Hydrogel. *IOSR Journal of Biotechnology and Biochemistry*, **2017**, 03, 19-31		10

43	Fabrication of magnetic core shell particles coated with phenylalanine imprinted polymer. *Polymer Testing*, **2019**, 75, 262-269	4.5	9
42	Silver Decorated Bacterial Cellulose Nanocomposites as Antimicrobial Food Packaging Materials. *ES Food & Agroforestry*, **2021**,	3	9
41	Surface engineering of microbial cells: Strategies and applications. *Engineered Science*, **2018**,	3.8	9
40	Fabrication of Thermally Stable Graphite-Based Poly(acrylonitrile-co-acrylic acid) Composite with Impressive Antimicrobial Properties. *Engineered Science*, **2019**,	3.8	9
39	Synthesis and Characterization of High Strength Multipurpose Bacterial Cellulose- Hydrogels. *Frontiers in Bioengineering and Biotechnology*, **2021**, 9, 601988	5.8	9
38	Ex situ development and characterization of green antibacterial bacterial cellulose-based composites for potential biomedical applications. *Advanced Composites and Hybrid Materials*,1	8.7	8
37	Fast 4-nitrophenol Reduction Using Gelatin Hydrogel Containing Silver Nanoparticles. *Engineered Science*, **2020**,	3.8	8
36	Potential Applications of Bacterial Cellulose in Environmental and Pharmaceutical Sectors. *Current Pharmaceutical Design*, **2020**, 26, 5793-5806	3.3	8
35	Immobilized thrombin on X-ray radiopaque polyvinyl alcohol/chitosan embolic microspheres for precise localization and topical blood coagulation. *Bioactive Materials*, **2021**, 6, 2105-2119	16.7	8
34	Development of finasteride/PHBV@polyvinyl alcohol/chitosan reservoir-type microspheres as a potential embolic agent: from in vitro evaluation to animal study. *Biomaterials Science*, **2020**, 8, 2797-2813	7.4	6
33	Fluorimetric Detection of Single Pathogenic Bacterium in Milk and Sewage Water Using pH-Sensitive Fluorescent Carbon Dots and MALDI-TOF MS. *Microorganisms*, **2019**, 8,	4.9	6
32	Fabrication strategies and biomedical applications of three-dimensional bacterial cellulose-based scaffolds: A review.. *International Journal of Biological Macromolecules*, **2022**, 209, 9-30	7.9	6
31	Water-stable and finasteride-loaded polyvinyl alcohol nanofibrous particles with sustained drug release for improved prostatic artery embolization - In vitro and in vivo evaluation. *Materials Science and Engineering C*, **2020**, 115, 111107	8.3	5
30	Biotemplate-Mediated Green Synthesis and Applications of Nanomaterials. *Current Pharmaceutical Design*, **2020**, 26, 5819-5836	3.3	5
29	Microencapsulation of Poorly Water-soluble Finasteride in Polyvinyl Alcohol/chitosan Microspheres as a Long-term Sustained Release System for Potential Embolization Applications. *Engineered Science*, **2020**,	3.8	5
28	Bacterial Cellulose: A Versatile Material for Fabrication of Conducting Nanomaterials. *Current Nanoscience*, **2021**, 17, 393-405	1.4	5
27	Injectable immunomodulation-based porous chitosan microspheres/HPCH hydrogel composites as a controlled drug delivery system for osteochondral regeneration.. *Biomaterials*, **2022**, 285, 121530	15.6	5
26	Development and characterization of plant oil-incorporated carboxymethyl cellulose/bacterial cellulose/glycerol-based antimicrobial edible films for food packaging applications. *Advanced Composites and Hybrid Materials*,1	8.7	4

25	Biotransformation of nylon-6,6 hydrolysate to bacterial cellulose. *Green Chemistry*,	10	4
24	Bacterial cellulose: Molecular regulation of biosynthesis, supramolecular assembly, and tailored structural and functional properties. *Progress in Materials Science*, **2022**, 100972	42.2	4
23	Structure, Chemistry and Pharmaceutical Applications of Biodegradable Polymers **2015**, 517-540		3
22	Impact of COVID-19 on Environment Sustainability. *ES Energy & Environments*, **2020**,	2.9	3
21	Principle and Development of Phage-Based Biosensors **2019**,		3
20	Bacterial cellulose: Trends in synthesis, characterization, and applications **2021**, 923-974		3
19	Therapeutic Options for Treating COVID-19. *Engineered Science*, **2020**,	3.8	2
18	A comparison of hepatotoxicity induced by different lengths of tungsten trioxide nanorods and the protective effects of melatonin in BALB/c mice. *Environmental Science and Pollution Research*, **2021**, 28, 40793-40807	5.1	2
17	Preparation and evaluation of ion-exchange porous polyvinyl alcohol microspheres as a potential drug delivery embolization system. *Materials Science and Engineering C*, **2021**, 121, 111889	8.3	2
16	Endogenous Hydrolyzing Enzymes: Isolation, Characterization, and Applications in Biological Processes **2015**, 535-579		1
15	Preparation and functionalization of zinc oxide nanoparticles with polymer microgels for potential catalytic applications. *Journal of Dispersion Science and Technology*, **2020**, 1-14	1.5	1
14	Current trends and biomedical applications of resorbable polymers **2019**, 41-86		1
13	Methods for Predicting Ethylene/Cyclic Olefin Copolymerization Rates Promoted by Single-Site Metallocene: Kinetics Is the Key.. *Polymers*, **2022**, 14,	4.5	1
12	Recent Advances in Biopolymer Composites for Environmental Issues673-691		1
11	Arsenic Trioxide-based Nanomedicines as a Therapeutic Combination Approach for Treating Gliomas: A Review. *Current Nanoscience*, **2021**, 17, 406-417	1.4	1
10	Applications of Phage-Based Biosensors in the Diagnosis of Infectious Diseases, Food Safety, and Environmental Monitoring **2019**,		1
9	Recent developments in the synthesis, properties, and applications of various microbial polysaccharides **2021**, 975-1015		1
8	Biological delignification of rice straw using laccase from Bacillus ligniniphilus L1 for bioethanol production: A clean approach for agro-biomass utilization. *Journal of Cleaner Production*, **2022**, 360, 132171	10.3	1

7	Interlayered modified hydroxides for removal of graphene oxide from water: Mechanism and secondary applications. *Separation and Purification Technology*, **2022**, 284, 120305	8.3	0
6	Production of bio-cellulose from renewable resources: Properties and applications **2022**, 307-339		0
5	Microbiome as Cancer Biomarkers **2022**, 101-148		0
4	Introduction to Science and Engineering Principles for the Development of Bioinspired Materials **2018**, 1-16		
3	Electroconductive Bioscaffolds for 2D and 3D Cell Culture **2018**, 131-147		
2	Endogenous Hydrolyzing Enzymes: Isolation, Characterization, and Applications in Biological Processes **2014**, 1-38		
1	Applications of Fungal Mycelium-Based Functional Biomaterials **2022**, 147-168		