Muhammad Wajid Ullah

List of Publications by Year in descending order

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		50273	76898
121	6,038	46	74
papers	citations	h-index	g-index
132	132	132	5584
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Electroconductive natural polymer-based hydrogels. Biomaterials, 2016, 111, 40-54.	11.4	287
2	Bioprinting and its applications in tissue engineering and regenerative medicine. International Journal of Biological Macromolecules, 2018, 107, 261-275.	7.5	242
3	Strategies for cost-effective and enhanced production of bacterial cellulose. International Journal of Biological Macromolecules, 2017, 102, 1166-1173.	7.5	192
4	Current Challenges of Cancer Anti-angiogenic Therapy and the Promise of Nanotherapeutics. Theranostics, 2018, 8, 533-548.	10.0	188
5	Synthesis of regenerated bacterial cellulose-zinc oxide nanocomposite films for biomedical applications. Cellulose, 2014, 21, 433-447.	4.9	187
6	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.	10.1	150
7	In Situ Synthesized Selenium Nanoparticlesâ€Decorated Bacterial Cellulose/Gelatin Hydrogel with Enhanced Antibacterial, Antioxidant, and Antiâ€Inflammatory Capabilities for Facilitating Skin Wound Healing. Advanced Healthcare Materials, 2021, 10, e2100402.	7.6	149
8	Bacterial cellulose-titanium dioxide nanocomposites: nanostructural characteristics, antibacterial mechanism, and biocompatibility. Cellulose, 2015, 22, 565-579.	4.9	143
9	Innovative production of bio-cellulose using a cell-free system derived from a single cell line. Carbohydrate Polymers, 2015, 132, 286-294.	10.2	136
10	Role of Recombinant DNA Technology to Improve Life. International Journal of Genomics, 2016, 2016, 1-14.	1.6	127
11	Bacterial cellulose composites: Synthetic strategies and multiple applications in bioâ€medical and electroâ€conductive fields. Biotechnology Journal, 2015, 10, 1847-1861.	3.5	124
12	Structural and physico-mechanical characterization of bio-cellulose produced by a cell-free system. Carbohydrate Polymers, 2016, 136, 908-916.	10.2	124
13	Fabrication of bacterial cellulose/polyaniline/single-walled carbon nanotubes membrane for potential application as biosensor. Carbohydrate Polymers, 2017, 163, 62-69.	10.2	124
14	Plant extract-loaded bacterial cellulose composite membrane for potential biomedical applications. Journal of Bioresources and Bioproducts, 2021, 6, 26-32.	20.5	118
15	A transparent wound dressing based on bacterial cellulose whisker and poly(2-hydroxyethyl) Tj ETQq1 1 0.78431	4 rgBT /O	verlock 10 Tf
16	Biobased materials for active food packaging: A review. Food Hydrocolloids, 2022, 125, 107419.	10.7	110
17	Bacterial biosensing: Recent advances in phage-based bioassays and biosensors. Biosensors and Bioelectronics, 2018, 118, 204-216.	10.1	109
18	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.	2.7	98

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19	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.	7.5	96
20	Current Trends and Potential Applications of Microbial Interactions for Human Welfare. Frontiers in Microbiology, 2018, 9, 1156.	3.5	96
21	Synthesis and applications of fungal mycelium-based advanced functional materials. Journal of Bioresources and Bioproducts, 2021, 6, 1-10.	20.5	95
22	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.	12.7	91
23	Bacterial cellulose–poly(3,4-ethylenedioxythiophene)–poly(styrenesulfonate) composites for optoelectronic applications. Carbohydrate Polymers, 2015, 127, 86-93.	10.2	89
24	Fabrication and characterization of porous polycaprolactone scaffold via extrusion-based cryogenic 3D printing for tissue engineering. Materials and Design, 2019, 180, 107946.	7.0	87
25	The use of bacterial polysaccharides in bioprinting. Biotechnology Advances, 2019, 37, 107448.	11.7	86
26	Self-assembly of bio-cellulose nanofibrils through intermediate phase in a cell-free enzyme system. Biochemical Engineering Journal, 2019, 142, 135-144.	3.6	80
27	Enhanced cell proliferation by electrical stimulation based on electroactive regenerated bacterial cellulose hydrogels. Carbohydrate Polymers, 2020, 249, 116829.	10.2	78
28	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.	7.5	76
29	Comparative study of plant and bacterial cellulose pellicles regenerated from dissolved states. International Journal of Biological Macromolecules, 2019, 137, 247-252.	7.5	76
30	Bacterial cellulose: Molecular regulation of biosynthesis, supramolecular assembly, and tailored structural and functional properties. Progress in Materials Science, 2022, 129, 100972.	32.8	71
31	Three-dimensionally microporous and highly biocompatible bacterial cellulose–gelatin composite scaffolds for tissue engineering applications. RSC Advances, 2016, 6, 110840-110849.	3.6	67
32	Bacteriophage-based advanced bacterial detection: Concept, mechanisms, and applications. Biosensors and Bioelectronics, 2021, 177, 112973.	10.1	66
33	Recent Advancement in Cellulose based Nanocomposite for Addressing Environmental Challenges. Recent Patents on Nanotechnology, 2016, 10, 169-180.	1.3	63
34	In situ synthesis of a bio-cellulose/titanium dioxide nanocomposite by using a cell-free system. RSC Advances, 2016, 6, 22424-22435.	3.6	62
35	Ex situ development and characterization of green antibacterial bacterial cellulose-based composites for potential biomedical applications. Advanced Composites and Hybrid Materials, 2022, 5, 307-321.	21.1	62
36	Fabrication of Bacterial Cellulose-Curcumin Nanocomposite as a Novel Dressing for Partial Thickness Skin Burn. Frontiers in Bioengineering and Biotechnology, 2020, 8, 553037.	4.1	61

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37	Injectable immunomodulation-based porous chitosan microspheres/HPCH hydrogel composites as a controlled drug delivery system for osteochondral regeneration. Biomaterials, 2022, 285, 121530.	11.4	60
38	Metabolic engineering of synthetic cell-free systems: Strategies and applications. Biochemical Engineering Journal, 2016, 105, 391-405.	3.6	56
39	Titanium oxide-bacterial cellulose bioadsorbent for the removal of lead ions from aqueous solution. International Journal of Biological Macromolecules, 2019, 129, 965-971.	7.5	56
40	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, 2022, 5, 973-990.	21.1	55
41	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.	7.5	53
42	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.	2.7	52
43	Fabrication of pH-electroactive Bacterial Cellulose/Polyaniline Hydrogel for the Development of a Controlled Drug Release System. ES Materials & Manufacturing, 2018, , .	1.9	51
44	Cryogenic free-form extrusion bioprinting of decellularized small intestinal submucosa for potential applications in skin tissue engineering. Biofabrication, 2019, 11, 035023.	7.1	49
45	Synthesis and Characterization of Sintered Sr/Fe-Modified Hydroxyapatite Bioceramics for Bone Tissue Engineering Applications. ACS Biomaterials Science and Engineering, 2020, 6, 375-388.	5.2	49
46	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, 8343-8349.	2.8	48
47	Simultaneous co-substitution of Sr2+/Fe3+ in hydroxyapatite nanoparticles for potential biomedical applications. Ceramics International, 2018, 44, 21338-21348.	4.8	48
48	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.	7.3	48
49	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.	20.5	46
50	Development and Characterization of Yeast-Incorporated Antimicrobial Cellulose Biofilms for Edible Food Packaging Application. Polymers, 2021, 13, 2310.	4.5	46
51	Engineered regenerated bacterial cellulose scaffolds for application in in vitro tissue regeneration. RSC Advances, 2015, 5, 84565-84573.	3.6	45
52	Bio-ethanol production through simultaneous saccharification and fermentation using an encapsulated reconstituted cell-free enzyme system. Biochemical Engineering Journal, 2014, 91, 110-119.	3.6	43
53	Current advancements of magnetic nanoparticles in adsorption and degradation of organic pollutants. Environmental Science and Pollution Research, 2017, 24, 12713-12722.	5.3	42
54	Catechins-Modified Selenium-Doped Hydroxyapatite Nanomaterials for Improved Osteosarcoma Therapy Through Generation of Reactive Oxygen Species. Frontiers in Oncology, 2019, 9, 499.	2.8	42

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55	Fabrication strategies and biomedical applications of three-dimensional bacterial cellulose-based scaffolds: A review. International Journal of Biological Macromolecules, 2022, 209, 9-30.	7.5	42
56	Yeast cell-free enzyme system for bio-ethanol production at elevated temperatures. Process Biochemistry, 2014, 49, 357-364.	3.7	41
57	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.	4.9	40
58	Prevention and treatment of COVID-19: Focus on interferons, chloroquine/hydroxychloroquine, azithromycin, and vaccine. Biomedicine and Pharmacotherapy, 2021, 133, 111008.	5.6	40
59	Silver Nanoparticles Embedded in Gelatin Biopolymer Hydrogel as Catalyst for Reductive Degradation of Pollutants. Journal of Polymers and the Environment, 2020, 28, 399-410.	5.0	39
60	Microbes as Structural Templates in Biofabrication: Study of Surface Chemistry and Applications. ACS Sustainable Chemistry and Engineering, 2017, 5, 11163-11175.	6.7	38
61	Amphiphilic core-shell nanoparticles: Synthesis, biophysical properties, and applications. Colloids and Surfaces B: Biointerfaces, 2018, 172, 68-81.	5.0	37
62	Developmental strategies and regulation of cell-free enzyme system for ethanol production: a molecular prospective. Applied Microbiology and Biotechnology, 2014, 98, 9561-9578.	3.6	34
63	Three-dimensional printing of alginate-gelatin-agar scaffolds using free-form motor assisted microsyringe extrusion system. Journal of Polymer Research, 2018, 25, 1.	2.4	34
64	Fungi from the extremes of life: an untapped treasure for bioactive compounds. Applied Microbiology and Biotechnology, 2020, 104, 2777-2801.	3.6	34
65	Immobilized thrombin on X-ray radiopaque polyvinyl alcohol/chitosan embolic microspheres for precise localization and topical blood coagulation. Bioactive Materials, 2021, 6, 2105-2119.	15.6	34
66	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.	2.6	29
67	Overview on the Role of Advance Genomics in Conservation Biology of Endangered Species. International Journal of Genomics, 2016, 2016, 1-8.	1.6	29
68	Antimicrobial Inks: The Anti-Infective Applications of Bioprinted Bacterial Polysaccharides. Trends in Biotechnology, 2019, 37, 1155-1159.	9.3	28
69	Ex situ Synthesis and Characterization of High Strength Multipurpose Bacterial Cellulose-Aloe vera Hydrogels. Frontiers in Bioengineering and Biotechnology, 2021, 9, 601988.	4.1	28
70	Silver Decorated Bacterial Cellulose Nanocomposites as Antimicrobial Food Packaging Materials. ES Food & Agroforestry, 2021, , .	1.3	26
71	Microbial Cells with a Fe ₃ O ₄ Doped Hydrogel Extracellular Matrix: Manipulation of Living Cells by Magnetic Stimulus. Macromolecular Bioscience, 2016, 16, 1506-1514.	4.1	25
72	Perspective Applications and Associated Challenges of Using Nanocellulose in Treating Bone-Related Diseases. Frontiers in Bioengineering and Biotechnology, 2021, 9, 616555.	4.1	25

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73	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.	9.3	25
74	Development of finasteride/PHBV@polyvinyl alcohol/chitosan reservoir-type microspheres as a potential embolic agent: from <i>in vitro</i> evaluation to animal study. Biomaterials Science, 2020, 8, 2797-2813.	5.4	24
75	Antimicrobial and Biocompatible Properties of Nanomaterials. Journal of Nanoscience and Nanotechnology, 2014, 14, 780-791.	0.9	23
76	Fabrication of nanocomposites and hybrid materials using microbial biotemplates. Advanced Composites and Hybrid Materials, 2018, 1, 79-93.	21.1	21
77	Encapsulation of E. coli in biomimetic and Fe3O4-doped hydrogel: structural and viability analyses. Applied Microbiology and Biotechnology, 2018, 102, 933-944.	3.6	19
78	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.	2.7	17
79	Biotransformation of nylon-6,6 hydrolysate to bacterial cellulose. Green Chemistry, 2021, 23, 7805-7815.	9.0	17
80	Fabrication of magnetic core shell particles coated with phenylalanine imprinted polymer. Polymer Testing, 2019, 75, 262-269.	4.8	16
81	Application of Sodium Alginate Hydrogel. IOSR Journal of Biotechnology and Biochemistry, 2017, 03, 19-31.	0.1	16
82	Biotemplate-Mediated Green Synthesis and Applications of Nanomaterials. Current Pharmaceutical Design, 2020, 26, 5819-5836.	1.9	14
83	Synthesis, Chemistry, and Medical Application of Bacterial Cellulose Nanocomposites. Advanced Structured Materials, 2015, , 399-437.	0.5	13
84	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, , .	2.3	13
85	Potential Applications of Bacterial Cellulose in Environmental and Pharmaceutical Sectors. Current Pharmaceutical Design, 2020, 26, 5793-5806.	1.9	13
86	Surface engineering of microbial cells: Strategies and applications. Engineered Science, 2018, , .	2.3	11
87	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.	7.3	10
88	Bacterial Cellulose: A Versatile Material for Fabrication of Conducting Nanomaterials. Current Nanoscience, 2021, 17, 393-405.	1.2	10
89	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.	7.3	9
90	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.	5.3	9

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91	Fast 4-nitrophenol Reduction Using Gelatin Hydrogel Containing Silver Nanoparticles. Engineered Science, 2020, , .	2.3	9
92	Fabrication of Thermally Stable Graphite-Based Poly(acrylonitrile-co-acrylic acid) Composite with Impressive Antimicrobial Properties. Engineered Science, 2019, , .	2.3	9
93	Fluorimetric Detection of Single Pathogenic Bacterium in Milk and Sewage Water Using pH-Sensitive Fluorescent Carbon Dots and MALDI-TOF MS. Microorganisms, 2020, 8, 53.	3.6	8
94	Editorial: Nanocellulose: A Multipurpose Advanced Functional Material. Frontiers in Bioengineering and Biotechnology, 2021, 9, 738779.	4.1	8
95	Preparation and functionalization of zinc oxide nanoparticles with polymer microgels for potential catalytic applications. Journal of Dispersion Science and Technology, 2022, 43, 259-272.	2.4	6
96	Bacterial cellulose: Trends in synthesis, characterization, and applications. , 2021, , 923-974.		6
97	Interlayered modified hydroxides for removal of graphene oxide from water: Mechanism and secondary applications. Separation and Purification Technology, 2022, 284, 120305.	7.9	6
98	Methods for Predicting Ethylene/Cyclic Olefin Copolymerization Rates Promoted by Single-Site Metallocene: Kinetics Is the Key. Polymers, 2022, 14, 459.	4.5	6
99	Editorial: Nanocellulose: A Multipurpose Advanced Functional Material, Volume II. Frontiers in Bioengineering and Biotechnology, 2022, 10, .	4.1	6
100	Introduction to Nanocellulose. , 2021, , 1-50.		5
101	Impact of COVID-19 on Environment Sustainability. ES Energy & Environments, 2020, , .	1.1	5
102	Principle and Development of Phage-Based Biosensors. , 0, , .		4
103	Arsenic Trioxide-based Nanomedicines as a Therapeutic Combination Approach for Treating Gliomas: A Review. Current Nanoscience, 2021, 17, 406-417.	1.2	3
104	Endogenous Hydrolyzing Enzymes: Isolation, Characterization, and Applications in Biological Processes. , 2015, , 535-579.		2
105	Current trends and biomedical applications of resorbable polymers. , 2019, , 41-86.		2
106	Recent developments in the synthesis, properties, and applications of various microbial polysaccharides. , 2021, , 975-1015.		2
107	Recent Developments in Synthesis, Properties, and Biomedical Applications of Cellulose-Based Hydrogels. , 2021, , 121-153.		2
108	Cell-Free Nanocellulose Synthesis. , 2021, , 27-53.		2

Cell-Free Nanocellulose Synthesis. , 2021, , 27-53. 108

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109	Recent advancement in cellulose based Nanocomposite for addressing environmental challenges. Recent Patents on Nanotechnology, 2016, 10, 1-1.	1.3	2
110	Therapeutic Options for Treating COVID-19. Engineered Science, 2020, , .	2.3	2
111	Applications of Phage-Based Biosensors in the Diagnosis of Infectious Diseases, Food Safety, and Environmental Monitoring. , 2019, , .		1
112	Nanocellulose as a Green Material to Eradicate Environment and Renewable Energy Issues. , 2021, , 287-322.		1
113	Synthesis of Bacterial Cellulose Sheets from Alternative Natural and Waste Resources. , 2021, , 99-113.		1
114	Production of bio-cellulose from renewable resources: Properties and applications. , 2022, , 307-339.		1
115	Dynamic Foam Characteristics during Cultivation of Arthrospira platensis. Bioengineering, 2022, 9, 257.	3.5	1
116	Applications of Nanofibrillar Celluloses in Drug Delivery: From Conventional Tablet Excipient to Novel Drug Carrier. , 2021, , 195-255.		0
117	Nanocellulose-Reinforced Starch Nanocomposites. , 2021, , 93-119.		0
118	Synthesis Routes and Applications of Cellulose in Food Industry. , 2021, , 115-143.		0
119	Bacterial Cellulose and Its Composites for Biomedical and Industrial Applications. , 2021, , 55-77.		0
120	Endogenous Hydrolyzing : Isolation, Characterization, and Applications in Biological Processes. , 2014, , 1-38.		0
121	Editorial: Neurological Disorders and COVID-19: Interconnections, Molecular Links, and Therapeutic Perspectives. Frontiers in Medicine, 0, 9, .	2.6	0