Anil K Patel

List of Publications by Year
in descending order

87 papers	7,550 citations	57719 44 h-index	58549 82 g-index
91 all docs	91 docs citations	91 times ranked	7015 citing authors

#	Article	IF	Citations
1	Recent advances in solid-state fermentation. Biochemical Engineering Journal, 2009, 44, 13-18.	1.8	638
2	Environmental application of biochar: Current status and perspectives. Bioresource Technology, 2017, 246, 110-122.	4.8	536
3	Advancement and comparative profiles in the production technologies using solid-state and submerged fermentation for microbial cellulases. Enzyme and Microbial Technology, 2010, 46, 541-549.	1.6	474
4	Recent developments in pretreatment technologies on lignocellulosic biomass: Effect of key parameters, technological improvements, and challenges. Bioresource Technology, 2020, 300, 122724.	4.8	462
5	Role and significance of beta-glucosidases in the hydrolysis of cellulose for bioethanol production. Bioresource Technology, 2013, 127, 500-507.	4.8	459
6	Co-digestion of food waste and sewage sludge for methane production: Current status and perspective. Bioresource Technology, 2018, 265, 519-531.	4.8	235
7	Cellulase adsorption on lignin: A roadblock for economic hydrolysis of biomass. Renewable Energy, 2016, 98, 29-42.	4.3	220
8	Coconut oil cakeâ€“â€“a potential raw material for the production of Î±-amylase. Bioresource Technology, 2004, 93, 169-174.	4.8	194
9	Thermostable cellulases: Current status and perspectives. Bioresource Technology, 2019, 279, 385-392.	4.8	188
10	Production and beneficial impact of biochar for environmental application: A comprehensive review. Bioresource Technology, 2021, 337, 125451.	4.8	180
11	Recent developments on solid-state fermentation for production of microbial secondary metabolites: Challenges and solutions. Bioresource Technology, 2021, 323, 124566.	4.8	145
12	Biological upgrading of volatile fatty acids, key intermediates for the valorization of biowaste through dark anaerobic fermentation. Bioresource Technology, 2013, 145, 166-174.	4.8	135
13	Effect of light conditions on mixotrophic cultivation of green microalgae. Bioresource Technology, 2019, 282, 245-253.	4.8	133
14	Emerging prospects of mixotrophic microalgae: Way forward to sustainable bioprocess for environmental remediation and cost-effective biofuels. Bioresource Technology, 2020, 300, 122741.	4.8	125
15	Separation and fractionation of exopolysaccharides from Porphyridium cruentum. Bioresource Technology, 2013, 145, 345-350.	4.8	124
16	Probiotic Bile Salt Hydrolase: Current Developments and Perspectives. Applied Biochemistry and Biotechnology, 2010, 162, 166-180.	1.4	118
17	Current understanding of the inhibition factors and their mechanism of action for the lignocellulosic biomass hydrolysis. Bioresource Technology, 2021, 332, 125042.	4.8	116
18	Global status of lignocellulosic biorefinery: Challenges and perspectives. Bioresource Technology, 2022, 344, 126415.	4.8	113

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19	Genetic modification: A tool for enhancing beta-glucosidase production for biofuel application. Bioresource Technology, 2017, 245, 1352-1361.	4.8	110
20	Adsorption of copper (II) in aqueous solution using biochars derived from Ascophyllum nodosum seaweed. Bioresource Technology, 2021, 328, 124829.	4.8	103
21	Trends in renewable energy production employing biomass-based biochar. Bioresource Technology, 2021, 340, 125644.	4.8	96
22	Enhanced cellulase production by Penicillium oxalicum for bio-ethanol application. Bioresource Technology, 2015, 188, 240-246.	4.8	94
23	A review on global perspectives of sustainable development in bioenergy generation. Bioresource Technology, 2022, 348, 126791.	4.8	91
24	Algae as an emerging source of bioactive pigments. Bioresource Technology, 2022, 351, 126910.	4.8	86
25	Structures, Properties and Applications of Alginates. Marine Drugs, 2022, 20, 364.	2.2	86
26	Comparative accounts of probiotic characteristics of Bacillus spp. isolated from food wastes. Food Research International, 2009, 42, 505-510.	2.9	82
27	Novel enzymatic processes applied to the food industry. Current Opinion in Food Science, 2016, 7, 64-72.	4.1	76
28	Resource recovery and biorefinery potential of apple orchard waste in the circular bioeconomy. Bioresource Technology, 2021, 321, 124496.	4.8	76
29	Alpha amylase from a fungal culture grown on oil cakes and its properties. Brazilian Archives of Biology and Technology, 2004, 47, 309-317.	0.5	74
30	Challenges in cellulase bioprocess for biofuel applications. Renewable and Sustainable Energy Reviews, 2021, 151, 111622.	8.2	70
31	Emerging prospects of macro- and microalgae as prebiotic. Microbial Cell Factories, 2021, 20, 112.	1.9	68
32	A sustainable mixotrophic microalgae cultivation from dairy wastes for carbon credit, bioremediation and lucrative biofuels. Bioresource Technology, 2020, 313, 123681.	4.8	67
33	Organic wastes bioremediation and its changing prospects. Science of the Total Environment, 2022, 824, 153889.	3.9	67
34	Microalgae Bioenergy with Carbon Capture and Storage (BECCS): An emerging sustainable bioprocess for reduced CO2 emission and biofuel production. Bioresource Technology Reports, 2019, 7, 100270.	1.5	66
35	Deep eutectic solvents as promising pretreatment agents for sustainable lignocellulosic biorefineries: A review. Bioresource Technology, 2022, 360, 127631.	4.8	66
36	Lignin valorisation via enzymes: A sustainable approach. Fuel, 2022, 311, 122608.	3.4	64

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37	Production, purification and chemical characterization of the catecholate siderophore from potent probiotic strains of Bacillus spp.. Bioresource Technology, 2009, 100, 368-373.	4.8	63
38	Recent advancements in mixotrophic bioprocessing for production of high value microalgal products. Bioresource Technology, 2021, 320, 124421.	4.8	59
39	Development of a chitosanâ€based adhesive. Application to wood bonding. Journal of Applied Polymer Science, 2013, 127, 5014-5021.	1.3	58
40	Consolidated bioprocessing of lignocellulosic biomass: Technological advances and challenges. Bioresource Technology, 2022, 354, 127153.	4.8	58
41	Sustainable blueberry waste recycling towards biorefinery strategy and circular bioeconomy: A review. Bioresource Technology, 2021, 332, 125181.	4.8	56
42	Split mixotrophy: A novel cultivation strategy to enhance the mixotrophic biomass and lipid yields of Chlorella protothecoides. Bioresource Technology, 2019, 291, 121820.	4.8	55
43	Genetic modification: a tool for enhancing cellulase secretion. Biofuel Research Journal, 2017, 4, 600-610.	7.2	54
44	Engineered mesoporous biochar derived from rice husk for efficient removal of malachite green from wastewaters. Bioresource Technology, 2022, 347, 126749.	4.8	52
45	Chitosan: Emergence as potent candidate for green adhesive market. Biochemical Engineering Journal, 2015, 102, 74-81.	1.8	47
46	Biohydrogen production from a novel alkalophilic isolate Clostridium sp. IODB-O3. Bioresource Technology, 2015, 175, 291-297.	4.8	46
47	Advances in micro- and nano bubbles technology for application in biochemical processes. Environmental Technology and Innovation, 2021, 23, 101729.	3.0	45
48	Role and significance of lytic polysaccharide monooxygenases (LPMOs) in lignocellulose deconstruction. Bioresource Technology, 2021, 335, 125261.	4.8	44
49	Recovery of resources from industrial wastewater employing electrochemical technologies: status, advancements and perspectives. Bioengineered, 2021, 12, 4697-4718.	1.4	43
50	Whey waste as potential feedstock for biohydrogen production. Renewable Energy, 2016, 98, 221-225.	4.3	42
51	Mixotrophic biorefinery: A promising algal platform for sustainable biofuels and high value coproducts. Renewable and Sustainable Energy Reviews, 2021, 152, 111669.	8.2	42
52	Developments in bioprocess for bacterial cellulose production. Bioresource Technology, 2022, 344, 126343.	4.8	42
53	Microalgal-Based Carbon Sequestration by Converting LNG-Fired Waste CO2 into Red Gold Astaxanthin: The Potential Applicability. Energies, 2019, 12, 1718.	1.6	41
54	Advances on tailored biochar for bioremediation of antibiotics, pesticides and polycyclic aromatic hydrocarbon pollutants from aqueous and solid phases. Science of the Total Environment, 2022, 817, 153054.	3.9	41

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55	Algal polysaccharides: current status and future prospects. Phytochemistry Reviews, 2023, 22, 1167-1196.	3.1	41
56	Polysaccharides as Adhesives. Reviews of Adhesion and Adhesives, 2013, 1, 312-345.	3.3	39
57	Production, Purification, and Application of Microbial Enzymes. , 2017, , 13-41.		38
58	Bioprospecting of marine microalgae from Kaohsiung Seacoast for lutein and lipid production. Bioresource Technology, 2022, 351, 126928.	4.8	38
59	Evaluation of Probiotic Characteristics of Siderophoregenic Bacillus spp. Isolated from Dairy Waste. Applied Biochemistry and Biotechnology, 2010, 160, 140-155.	1.4	37
60	Genetic modification for enhancing bacterial cellulose production and its applications. Bioengineered, 2021, 12, 6793-6807.	1.4	35
61	Development of multiple inhibitor tolerant yeast via adaptive laboratory evolution for sustainable bioethanol production. Bioresource Technology, 2022, 344, 126247.	4.8	34
62	Heterologous expression of bacterial CotA-laccase, characterization and its application for biodegradation of malachite green. Bioresource Technology, 2021, 340, 125708.	4.8	31
63	Enhanced biomass and lipid production of Neochloris oleoabundans under high light conditions by anisotropic nature of light-splitting CaCO3 crystal. Bioresource Technology, 2019, 287, 121483.	4.8	29
64	Molecular cloning, overexpression and biochemical characterization of hypothetical Î²-lactamases ofMycobacterium tuberculosisH37Rv. Journal of Applied Microbiology, 2008, 105, 59-67.	1.4	26
65	Emerging prospects of microbial production of omega fatty acids: Recent updates. Bioresource Technology, 2022, 360, 127534.	4.8	26
66	Sedimentation rate-based screening of oleaginous microalgae for utilization as a direct combustion fuel. Bioresource Technology, 2019, 293, 122045.	4.8	23
67	Recent advancements in prebiotic oligomers synthesis via enzymatic hydrolysis of lignocellulosic biomass. Bioengineered, 2022, 13, 2139-2172.	1.4	22
68	Preparation of chitosanâ€based adhesives and assessment of their mechanical properties. Journal of Applied Polymer Science, 2013, 127, 3869-3876.	1.3	21
69	A Critical Review on the Effect of Lignin Redeposition on Biomass in Controlling the Process of Enzymatic Hydrolysis. Bioenergy Research, 2022, 15, 863-874.	2.2	21
70	Advances and Challenges in Biocatalysts Application for High Solid-Loading of Biomass for 2nd Generation Bio-Ethanol Production. Catalysts, 2022, 12, 615.	1.6	20
71	Chitosan-based nanocomposites for removal of Cr(VI) and synthetic food colorants from wastewater. Bioresource Technology, 2022, 351, 127018.	4.8	19
72	Enhancing biohydrogen production from lignocellulosic biomass of Paulownia waste by charge facilitation in Zn doped SnO2 nanocatalysts. Bioresource Technology, 2022, 355, 127299.	4.8	17

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73	Novel application of microalgae platform for biodesalination process: A review. Bioresource Technology, 2021, 337, 125343.	4.8	16
74	Trends in Lignin Biotransformations for Bio-Based Products and Energy Applications. Bioenergy Research, 2023, 16, 88-104.	2.2	11
75	The effect of heavy rainfall on the exposure risks of sedimentary phthalate esters to aquatic organisms. Chemosphere, 2022, 290, 133204.	4.2	10
76	Effects of Lower Temperature on Expression and Biochemical Characteristics of HCV NS3 Antigen Recombinant Protein. Catalysts, 2021, 11, 1297.	1.6	9
77	Characterization of waste cell biomass derived glutamate decarboxylase for in vitro Î³-aminobutyric acid production and value-addition. Bioresource Technology, 2021, 337, 125423.	4.8	8
78	Extraction, Biochemical Characterization, and Health Effects of Native and Degraded Fucoidans from Sargassum crispifolium. Polymers, 2022, 14, 1812.	2.0	8
79	Land Applications of Biochar: An Emerging Area. Energy, Environment, and Sustainability, 2018, , 171-197.	0.6	7
80	Development of novel green methods for preparation of lead-free preserved pidan (duck egg). Journal of Food Science and Technology, 2023, 60, 966-974.	1.4	7
81	Promising enzymes for biomass processing. , 2020, , 245-271.		5
82	Production of Celluloytic Enzymes for Lignocellulosic Biomass Hydrolysis. , 2019, , 401-426.		4
83	Effects of Temperature and Salinity on Growth, Metabolism and Digestive Enzymes Synthesis of Goniopora columna. Biology, 2022, 11, 436.	1.3	4
84	Biofuels from Biomass. , 2014, , 25-44.		2
85	Solid-State Fermentation. , 2018, , 243-254.		2
86	Resveratrol butyrate esters inhibit lipid biosynthesis in 3T3-L1 cells by AMP-activated protein kinase phosphorylation. Journal of Food Science and Technology, 2023, 60, 1015-1025.	1.4	2
87	Pretreatment of Douglas Fir Wood Biomass for Improving Saccharification Efficiencies. Journal of ASTM International, 2010, 7, 1-8.	0.2	0