Georg M Guebitz

List of Publications by Year
in descending order

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389 papers	18,677 citations	10986 71 h-index	23533 111 g-index
406 all docs	406 docs citations	406 times ranked	14984 citing authors

#	Article	IF	Citations
1	Decolorization and Detoxification of Textile Dyes with a Laccase from Trametes hirsuta. Applied and Environmental Microbiology, 2000, 66, 3357-3362.	3.1	644
2	Exploitation of the tropical oil seed plant Jatropha curcas L.. Bioresource Technology, 1999, 67, 73-82.	9.6	546
3	Conversion of sewage sludge into lipids by Lipomyces starkeyi for biodiesel production. Bioresource Technology, 2008, 99, 3051-3056.	9.6	342
4	Enzymatic Surface Hydrolysis of PET: Effect of Structural Diversity on Kinetic Properties of Cutinases from Thermobifida. Macromolecules, 2011, 44, 4632-4640.	4.8	298
5	CuOâ€“cotton nanocomposite: Formation, morphology, and antibacterial activity. Surface and Coatings Technology, 2009, 204, 54-57.	4.8	295
6	Potential applications of laccase-mediated coupling and grafting reactions: A review. Enzyme and Microbial Technology, 2011, 48, 195-208.	3.2	270
7	Antimicrobial enzymes: An emerging strategy to fight microbes and microbial biofilms. Biotechnology Journal, 2013, 8, 97-109.	3.5	249
8	Decolorization of textile dyes by laccases from a newly isolated strain of Trametes modesta. Water Research, 2002, 36, 1449-1456.	11.3	236
9	Indigo degradation with purified laccases from Trametes hirsuta and Sclerotium rolfsii. Journal of Biotechnology, 2001, 89, 131-139.	3.8	227
10	Formal Asymmetric Biocatalytic Reductive Amination. Angewandte Chemie - International Edition, 2008, 47, 9337-9340.	13.8	219
11	A New Alkali-Thermostable Azoreductase from Bacillus sp. Strain SF. Applied and Environmental Microbiology, 2004, 70, 837-844.	3.1	210
12	Enzymes go big: surface hydrolysis and functionalisation of synthetic polymers. Trends in Biotechnology, 2008, 26, 32-38.	9.3	183
13	Enzymatic surface hydrolysis of poly(ethylene terephthalate) and bis(benzoyloxyethyl) terephthalate by lipase and cutinase in the presence of surface active molecules. Journal of Biotechnology, 2009, 143, 207-212.	3.8	183
14	Tailoring cutinase activity towards polyethylene terephthalate and polyamide 6,6 fibers. Journal of Biotechnology, 2007, 128, 849-857.	3.8	161
15	Bio-preparation of cotton fabrics. Enzyme and Microbial Technology, 2001, 29, 357-362.	3.2	157
16	Antimicrobial and antioxidant properties of chitosan enzymatically functionalized with flavonoids. Process Biochemistry, 2009, 44, 749-756.	3.7	157
17	Influence of redox mediators and metal ions on synthetic acid dye decolourization by crude laccase from Trametes hirsuta. Chemosphere, 2005, 58, 417-422.	8.2	152
18	Enhanced Cutinase-Catalyzed Hydrolysis of Polyethylene Terephthalate by Covalent Fusion to Hydrophobins. Applied and Environmental Microbiology, 2015, 81, 3586-3592.	3.1	149

#	Article	IF	Citations
19	A New Esterase from Thermobifida halotolerans Hydrolyses Polyethylene Terephthalate (PET) and Polylactic Acid (PLA). Polymers, 2012, 4, 617-629.	4.5	146
20	Stainless steel sponge: a novel carrier for the immobilisation of the white-rot fungus Trametes hirsuta for decolourization of textile dyes. Bioresource Technology, 2004, 95, 67-72.	9.6	141
21	Characterization of a chitinase and an endo-Î²-1,3-glucanase from Trichoderma harzianum Rifai T24 involved in control of the phytopathogen Sclerotium rolfsii. Applied Microbiology and Biotechnology, 2001, 56, 137-143.	3.6	138
22	Hydrolysis of polyethyleneterephthalate by pâ€nitrobenzylesterase from Bacillus subtilis. Biotechnology Progress, 2011, 27, 951-960.	2.6	138
23	Fusion of Binding Domains to Thermobifida cellulosilytica Cutinase to Tune Sorption Characteristics and Enhancing PET Hydrolysis. Biomacromolecules, 2013, 14, 1769-1776.	5.4	137
24	Influence of trace elements on methane formation from a synthetic model substrate for maize silage. Bioresource Technology, 2010, 101, 836-839.	9.6	135
25	Immobilized laccase for decolourization of Reactive Black 5 dyeing effluent. Biotechnology Letters, 2003, 25, 1473-1477.	2.2	131
26	Renewable building blocks for sustainable polyesters: new biotechnological routes for greener plastics. Polymer International, 2016, 65, 861-871.	3.1	127
27	New model substrates for enzymes hydrolysing polyethyleneterephthalate and polyamide fibres. Journal of Proteomics, 2006, 69, 89-99.	2.4	125
28	Characterization of a new cutinase fromThermobifida albafor PET-surface hydrolysis. Biocatalysis and Biotransformation, 2012, 30, 2-9.	2.0	125
29	Hydrogen peroxide generation with immobilized glucose oxidase for textile bleaching. Journal of Biotechnology, 2002, 93, 87-94.	3.8	124
30	New substrates for reliable enzymes: enzymatic modification of polymers. Current Opinion in Biotechnology, 2003, 14, 577-582.	6.6	124
31	Antifouling and Antibacterial Multifunctional Polyzwitterion/Enzyme Coating on Silicone Catheter Material Prepared by Electrostatic Layer-by-Layer Assembly. Langmuir, 2016, 32, 1347-1359.	3.5	122
32	Application of power ultrasound for azo dye degradation. Ultrasonics Sonochemistry, 2004, 11, 177-182.	8.2	118
33	Enzymatic and chemical hydrolysis of poly(ethylene terephthalate) fabrics. Journal of Polymer Science Part A, 2008, 46, 6435-6443.	2.3	118
34	Surface engineering of a cutinase from Thermobifida cellulosilytica for improved polyester hydrolysis. Biotechnology and Bioengineering, 2013, 110, 2581-2590.	3.3	118
35	Study of dye decolorization in an immobilized laccase enzyme-reactor using online spectroscopy. Biotechnology and Bioengineering, 2004, 87, 552-563.	3.3	117
36	Polymerization of lignosulfonates by the laccase-HBT (1-hydroxybenzotriazole) system improves dispersibility. Bioresource Technology, 2010, 101, 5054-5062.	9.6	112

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37	Production of laccase by a newly isolated strain of Trametes modesta. Bioresource Technology, 2002, 84, 259-263.	9.6	110
38	Voltammetric monitoring of laccase-catalysed mediated reactions. Bioelectrochemistry, 2002, 58, 149-156.	4.6	110
39	Purification and characterization of a new bioscouring pectate lyase from Bacillus pumilus BK2. Journal of Biotechnology, 2006, 121, 390-401.	3.8	107
40	The Closure of the Cycle: Enzymatic Synthesis and Functionalization of Bio-Based Polyesters. Trends in Biotechnology, 2016, 34, 316-328.	9.3	107
41	Cutinase?A new tool for biomodification of synthetic fibers. Journal of Polymer Science Part A, 2005, 43, 2448-2450.	2.3	106
42	Immobilization of catalases from Bacillus SF on alumina for the treatment of textile bleaching effluents. Enzyme and Microbial Technology, 2001, 28, 815-819.	3.2	105
43	An acid-stable laccase from Sclerotium rolfsii with potential for wool dye decolourization. Enzyme and Microbial Technology, 2003, 33, 766-774.	3.2	104
44	Enzymatic hydrolysis of poly(ethylene furanoate). Journal of Biotechnology, 2016, 235, 47-53.	3.8	104
45	Hydrolysis of PET and bis-(benzoyloxyethyl) terephthalate with a new polyesterase fromPenicillium citrinum. Biocatalysis and Biotransformation, 2007, 25, 171-177.	2.0	103
46	Siloxane removal from biogas by biofiltration: biodegradation studies. Clean Technologies and Environmental Policy, 2008, 10, 211-218.	4.1	99
47	Impact of nickel and cobalt on biogas production and process stability during semi-continuous anaerobic fermentation of a model substrate for maize silage. Water Research, 2011, 45, 781-787.	11.3	98
48	Laccase-assisted formation of bioactive chitosan/gelatin hydrogel stabilized with plant polyphenols. Carbohydrate Polymers, 2013, 92, 989-996.	10.2	95
49	Chitosan: Sources, Processing and Modification Techniques. Gels, 2022, 8, 393.	4.5	91
50	Enzymatic Decolorization of Textile Dyeing Effluents. Textile Reseach Journal, 2000, 70, 409-414.	2.2	90
51	Investigations on the laccase-catalyzed polymerization of lignin model compounds using size-exclusion HPLC. Enzyme and Microbial Technology, 2002, 31, 403-410.	3.2	90
52	New enzymes with potential for PET surface modification. Biocatalysis and Biotransformation, 2004, 22, 341-346.	2.0	90
53	Esterase and lipase activity in Jatropha curcas L. Seeds. Journal of Biotechnology, 1999, 75, 117-126.	3.8	89
54	Enzymatic recovery of polyester building blocks from polymer blends. Process Biochemistry, 2017, 59, 58-64.	3.7	89

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55	Enzymatic Hydrolysis of Polyester Thin Films at the Nanoscale: Effects of Polyester Structure and Enzyme Active-Site Accessibility. Environmental Science & Technology, 2017, 51, 7476-7485.	10.0	89
56	Stability and decolourization ability of Trametes villosa laccase in liquid ultrasonic fields. Ultrasonics Sonochemistry, 2007, 14, 355-362.	8.2	88
57	Two Novel Class II Hydrophobins from Trichoderma spp. Stimulate Enzymatic Hydrolysis of Poly(Ethylene Terephthalate) when Expressed as Fusion Proteins. Applied and Environmental Microbiology, 2013, 79, 4230-4238.	3.1	86
58	Improving enzymatic polyurethane hydrolysis by tuning enzyme sorption. Polymer Degradation and Stability, 2016, 132, 69-77.	5.8	85
59	Synergistic chemoâ€enzymatic hydrolysis of poly(ethylene terephthalate) from textile waste. Microbial Biotechnology, 2017, 10, 1376-1383.	4.2	85
60	Laccases to Improve the Whiteness in a Conventional Bleaching of Cotton. Macromolecular Materials and Engineering, 2003, 288, 807-810.	3.6	84
61	Development and industrialisation of enzymatic shrink-resist process based on modified proteases for wool machine washability. Enzyme and Microbial Technology, 2007, 40, 1656-1661.	3.2	84
62	Hydrolysis of isolated coffee mannan and coffee extract by mannanases of Sclerotium rolfsii. Journal of Biotechnology, 2000, 80, 127-134.	3.8	83
63	Enhancement of biogas production by addition of hemicellulolytic bacteria immobilised on activated zeolite. Water Research, 2010, 44, 1970-1980.	11.3	82
64	PpEst is a novel PBAT degrading polyesterase identified by proteomic screening of Pseudomonas pseudoalcaligenes. Applied Microbiology and Biotechnology, 2017, 101, 2291-2303.	3.6	82
65	Treatment of wool fibres with subtilisin and subtilisin-PEG. Enzyme and Microbial Technology, 2005, 36, 917-922.	3.2	81
66	Influence of structure on dye degradation with laccase mediator systems. Biocatalysis and Biotransformation, 2004, 22, 315-324.	2.0	80
67	Enzymatic surface hydrolysis of poly(ethylene furanoate) thin films of various crystallinities. Green Chemistry, 2017, 19, 5381-5384.	9.0	80
68	Studies of stabilization of native catalase using additives. Enzyme and Microbial Technology, 2002, 30, 387-391.	3.2	79
69	Chitosan hydrogel formation using laccase activated phenolics as cross-linkers. Carbohydrate Polymers, 2017, 157, 814-822.	10.2	78
70	Folic acid-functionalized human serum albumin nanocapsules for targeted drug delivery to chronically activated macrophages. International Journal of Pharmaceutics, 2012, 427, 460-466.	5.2	77
71	Predicting Dye Biodegradation from Redox Potentials. Biotechnology Progress, 2004, 20, 1588-1592.	2.6	76
72	Laccase immobilization on enzymatically functionalized polyamide 6,6 fibres. Enzyme and Microbial Technology, 2007, 41, 867-875.	3.2	76

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73	Enzymatic Degradation of Poly(ethylene 2,5-furanoate) Powders and Amorphous Films. Catalysts, 2017, 7, 318.	3.5	76
74	Characterization of a poly(butylene adipate-co-terephthalate)-hydrolyzing lipase from Pelosinus fermentans. Applied Microbiology and Biotechnology, 2016, 100, 1753-1764.	3.6	75
75	Environmentally friendly bleaching of cotton using laccases. Environmental Chemistry Letters, 2005, 3, 66-69.	16.2	74
76	Degradation of azo dyes by oxidative processes â€“ Laccase and ultrasound treatment. Bioresource Technology, 2008, 99, 4213-4220.	9.6	72
77	Characterization of endoglucanases from the brown rot fungi Gloeophyllum sepiarium and Gloeophyllum trabeum. Enzyme and Microbial Technology, 1998, 23, 133-140.	3.2	71
78	Biotransformation of phenolics with laccase containing bacterial spores. Environmental Chemistry Letters, 2005, 3, 74-77.	16.2	71
79	Xylan Binding Subsite Mapping in the Xylanase fromPenicillium simplicissimumUsing Xylooligosaccharides as Cryo-Protectantâ€,â€¡. Biochemistry, 1999, 38, 2403-2412.	2.5	70
80	Nitrile Hydratase and Amidase from Rhodococcus rhodochrous Hydrolyze Acrylic Fibers and Granular Polyacrylonitriles. Applied and Environmental Microbiology, 2000, 66, 1634-1638.	3.1	70
81	Cross-linking of collagen with laccases and tyrosinases. Materials Science and Engineering C, 2011, 31, 1068-1077.	7.3	70
82	Enzymatic surface functionalisation of lignocellulosic materials with tannins for enhancing antibacterial properties. Process Biochemistry, 2010, 45, 1072-1081.	3.7	69
83	Ultrasound Radiation as a â€œThrowing Stonesâ€•Technique for the Production of Antibacterial Nanocomposite Textiles. ACS Applied Materials & Interfaces, 2010, 2, 1999-2004.	8.0	69
84	Lipid composition of peroxisomes from the yeast Pichia pastoris grown on different carbon sources. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2007, 1771, 455-461.	2.4	68
85	Degradation of Azo Dyes by Laccase and Ultrasound Treatment. Applied and Environmental Microbiology, 2005, 71, 2600-2607.	3.1	66
86	A novel metalloprotease from Bacillus cereus for protein fibre processing. Enzyme and Microbial Technology, 2007, 40, 1772-1781.	3.2	66
87	Antimicrobial and antioxidant linen via laccase-assisted grafting. Reactive and Functional Polymers, 2011, 71, 713-720.	4.1	66
88	Hydrolysis of synthetic polyesters by Clostridium botulinum esterases. Biotechnology and Bioengineering, 2016, 113, 1024-1034.	3.3	65
89	Purification and properties of an acidic Î±-mannanase from Sclerotium rolfsii. Journal of Biotechnology, 1996, 45, 165-172.	3.8	64
90	Thermo-alkali-stable catalases from newly isolated Bacillus sp. for the treatment and recycling of textile bleaching effluents. Journal of Biotechnology, 2001, 89, 147-153.	3.8	64

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91	Enzymatic coating of lignocellulosic surfaces with polyphenols. Biotechnology Journal, 2007, 2, 334-341.	3.5	64
92	Effect of endoglucanases and hemicellulases in magnetic and flotation deinking of xerographic and laser-printed papers. Journal of Biotechnology, 1998, 65, 209-215.	3.8	63
93	Enzymatic hydrolysis of PTT polymers and oligomers. Journal of Biotechnology, 2008, 135, 45-51.	3.8	63
94	Towards Sustainable Highâ€Performance Thermoplastics: Synthesis, Characterization, and Enzymatic Hydrolysis of Bisguaiacolâ€Based Polyesters. ChemSusChem, 2018, 11, 2529-2539.	6.8	63
95	Mannan-degrading enzymes from Sclerotium rolfsii: Characterisation and synergism of two endo Î²-mannanases and a Î²-mannosidase. Bioresource Technology, 1996, 58, 127-135.	9.6	62
96	Enzymatic Degradation of Aromatic and Aliphatic Polyesters by P. pastoris Expressed Cutinase 1 from Thermobifida cellulosilytica. Frontiers in Microbiology, 2017, 8, 938.	3.5	62
97	Purification and characterization of a new low molecular weight endoxylanase from Penicillium capsulatum. Enzyme and Microbial Technology, 2003, 33, 775-785.	3.2	61
98	Purification and Properties of a Feruloyl Esterase Involved in Lignocellulose Degradation by Aureobasidium pullulans. Applied and Environmental Microbiology, 2003, 69, 5622-5626.	3.1	61
99	Novel peptidoglycan-based diagnostic devices for detection of wound infection. Diagnostic Microbiology and Infectious Disease, 2011, 71, 12-23.	1.8	60
100	Laccase catalyzed covalent coupling of fluorophenols increases lignocellulose surface hydrophobicity. Bioresource Technology, 2010, 101, 2793-2799.	9.6	59
101	Investigation of mircroorganisms colonising activated zeolites during anaerobic biogas production from grass silage. Bioresource Technology, 2011, 102, 4353-4359.	9.6	59
102	Enzymatic removal of hemicellulose from dissolving pulps. Biotechnology Letters, 1997, 19, 491-495.	2.2	58
103	Enzymatic synthesis of lignin derivable pyridine based polyesters for the substitution of petroleum derived plastics. Nature Communications, 2019, 10, 1762.	12.8	58
104	Influence of mechanical agitation on cutinases and protease activity towards polyamide substrates. Enzyme and Microbial Technology, 2007, 40, 1678-1685.	3.2	56
105	Laccaseâ€Mediated Wood Surface Functionalization. Engineering in Life Sciences, 2008, 8, 297-302.	3.6	56
106	Analysis of myeloperoxidase activity in wound fluids as a marker of infection. Annals of Clinical Biochemistry, 2013, 50, 245-254.	1.6	56
107	Substrate specificities of cutinases on aliphaticâ€“aromatic polyesters and on their model substrates. New Biotechnology, 2016, 33, 295-304.	4.4	56
108	Small cause, large effect: Structural characterization of cutinases from Thermobifida cellulosilytica. Biotechnology and Bioengineering, 2017, 114, 2481-2488.	3.3	56

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109	Reactivity of long chain alkylamines to lignin moieties: Implications on hydrophobicity of lignocellulose materials. Journal of Biotechnology, 2010, 149, 81-87.	3.8	55
110	Sensor materials for the detection of human neutrophil elastase and cathepsin G activity in wound fluid. Experimental Dermatology, 2011, 20, 508-513.	2.9	55
111	Biocatalyzed approach for the surface functionalization of poly(Lâ€lactic acid) films using hydrolytic enzymes. Biotechnology Journal, 2015, 10, 1739-1749.	3.5	55
112	Influence of Oxygen and Mediators on Laccase-Catalyzed Polymerization of Lignosulfonate. ACS Sustainable Chemistry and Engineering, 2016, 4, 5303-5310.	6.7	55
113	Characterization of a Thermostable NADPH:FMN Oxidoreductase from the Mesophilic BacteriumBacillus subtilisâ€. Biochemistry, 2006, 45, 7083-7091.	2.5	53
114	Biogas production fromJatropha curcas press-cake. Applied Biochemistry and Biotechnology, 1997, 63-65, 457-467.	2.9	52
115	Enzyme functionalized electrospun chitosan mats for antimicrobial treatment. Carbohydrate Polymers, 2018, 181, 551-559.	10.2	52
116	Enzymatic grafting of functional molecules to the lignin model dibenzodioxocin and lignocellulose material. Enzyme and Microbial Technology, 2010, 46, 272-280.	3.2	51
117	Surface engineering of polyester-degrading enzymes to improve efficiency and tune specificity. Applied Microbiology and Biotechnology, 2018, 102, 3551-3559.	3.6	51
118	A catalase-peroxidase from a newly isolated thermoalkaliphilic Bacillus sp. with potential for the treatment of textile bleaching effluents. Extremophiles, 2001, 5, 423-429.	2.3	50
119	Laccase-catalyzed decolorization of the synthetic azo-dye diamond black PV 200 and of some structurally related derivatives. Biocatalysis and Biotransformation, 2004, 22, 331-339.	2.0	50
120	Biological Coloration of Flax Fabrics with Flavonoids using Laccase fromTrametes hirsuta. Engineering in Life Sciences, 2008, 8, 324-330.	3.6	50
121	Ultrasound-enhanced enzymatic hydrolysis of poly(ethylene terephthalate). Bioresource Technology, 2016, 218, 1298-1302.	9.6	50
122	â€œIn Situâ€•Enzymatically Prepared Polymers for Wool Coloration. Macromolecular Materials and Engineering, 2001, 286, 691.	3.6	49
123	Cellulose oxidation and bleaching processes based on recombinant Myriococcum thermophilum cellobiose dehydrogenase. Enzyme and Microbial Technology, 2013, 52, 60-67.	3.2	49
124	Laccase mediated oxidation of industrial lignins: Is oxygen limiting?. Process Biochemistry, 2015, 50, 1277-1283.	3.7	49
125	Biocatalytic Single-Step Alkene Cleavage from Aryl Alkenes: An Enzymatic Equivalent to Reductive Ozonization. Angewandte Chemie - International Edition, 2006, 45, 5201-5203.	13.8	48
126	Effect of the agitation on the adsorption and hydrolytic efficiency of cutinases on polyethylene terephthalate fibres. Enzyme and Microbial Technology, 2007, 40, 1801-1805.	3.2	48

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127	Cytotoxicity of Biochar: A Workplace Safety Concern?. Environmental Science and Technology Letters, 2017, 4, 362-366.	8.7	48
128	Mode of depolymerisation of hemicellulose by various mannanases and xylanases in relation to their ability to bleach softwood pulp. Applied Microbiology and Biotechnology, 1997, 47, 658-662.	3.6	47
129	Coupling of 2,4,6-trinitrotoluene (TNT) metabolites onto humic monomers by a new laccase from Trametes modesta. Chemosphere, 2006, 64, 359-370.	8.2	47
130	Highly Selective Enzymatic Recovery of Building Blocks from Wool-Cotton-Polyester Textile Waste Blends. Polymers, 2018, 10, 1107.	4.5	47
131	Production of Laccase byTrametes hirsuta Grown in an Immersion Bioreactor and its Application in the Docolorization of Dyes from a Leather Factory. Engineering in Life Sciences, 2004, 4, 233-238.	3.6	46
132	A novel aryl acylamidase from Nocardia farcinica hydrolyses polyamide. Biotechnology and Bioengineering, 2009, 102, 1003-1011.	3.3	46
133	Enzymatic polymerization on the surface of functionalized cellulose fibers. Enzyme and Microbial Technology, 2007, 40, 1782-1787.	3.2	45
134	Wax removal for accelerated cotton scouring with alkaline pectinase. Biotechnology Journal, 2007, 2, 306-315.	3.5	45
135	Coupling of aromatic amines onto syringylglycerol Î²-guaiacylether using Bacillus SF spore laccase: A model for functionalization of lignin-based materials. Journal of Molecular Catalysis B: Enzymatic, 2009, 61, 143-149.	1.8	45
136	Biomarkers for infection: enzymes, microbes, and metabolites. Applied Microbiology and Biotechnology, 2015, 99, 4595-4614.	3.6	45
137	An immobilised catalase peroxidase from the alkalothermophilic Bacillus SF for the treatment of textile-bleaching effluents. Applied Microbiology and Biotechnology, 2002, 60, 313-319.	3.6	44
138	A Dual-Enzyme Hydrogen Peroxide Generation Machinery in Hydrogels Supports Antimicrobial Wound Treatment. ACS Applied Materials & Interfaces, 2017, 9, 15307-15316.	8.0	44
139	Influence of Cellulases on Indigo Backstaining. Textile Reseach Journal, 2000, 70, 628-632.	2.2	43
140	Two-stage anaerobic fermentation of organic waste in CSTR and UFAF-reactors. Bioresource Technology, 2002, 81, 19-24.	9.6	42
141	The influence of enzymatic treatment on wool fibre properties using PEG-modified proteases. Enzyme and Microbial Technology, 2007, 40, 1705-1711.	3.2	42
142	Nature Inspired Solutions for Polymers: Will Cutinase Enzymes Make Polyesters and Polyamides Greener?. Catalysts, 2016, 6, 205.	3.5	42
143	Enzyme-catalyzed functionalization of poly(L-lactic acid) for drug delivery applications. Process Biochemistry, 2017, 59, 77-83.	3.7	42
144	Biotechnological production and high potential of furan-based renewable monomers and polymers. Biotechnology Advances, 2021, 48, 107707.	11.7	42

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145	Enzymes as Green Catalysts and Interactive Biomolecules in Wound Dressing Hydrogels. Trends in Biotechnology, 2018, 36, 1040-1053.	9.3	41
146	Enzymatic hydrolysis of poly(1,4-butylene 2,5-thiophenedicarboxylate) (PBTF) and poly(1,4-butylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 104852.	10.0	41
147	Laccase kinetics of degradation and coupling reactions. Journal of Molecular Catalysis B: Enzymatic, 2005, 33, 23-28.	1.8	40
148	Surface hydrolysis of polyacrylonitrile with nitrile hydrolysing enzymes from Micrococcus luteus BST20. Journal of Biotechnology, 2007, 129, 62-68.	3.8	40
149	Enzymatic cross-linking of gelatine with laccase and tyrosinase. Biocatalysis and Biotransformation, 2012, 30, 86-95.	2.0	40
150	An antioxidant regenerating system for continuous quenching of free radicals in chronic wounds. European Journal of Pharmaceutics and Biopharmaceutics, 2013, 83, 396-404.	4.3	40
151	Enzymatic Systems for Cellulose Acetate Degradation. Catalysts, 2017, 7, 287.	3.5	40
152	Preventing microbial colonisation of catheters: Antimicrobial and antibiofilm activities of cellobiose dehydrogenase. International Journal of Antimicrobial Agents, 2014, 44, 402-408.	2.5	39
153	An Esterase from Anaerobic Clostridium hathewayi Can Hydrolyze Aliphaticâ€“Aromatic Polyesters. Environmental Science & Technology, 2016, 50, 2899-2907.	10.0	39
154	Biodegradation of 2,4,6-trinitrotoluene (TNT): An enzymatic perspective. Biocatalysis and Biotransformation, 2005, 23, 53-69.	2.0	38
155	Purification and mechanistic characterisation of two polygalacturonases from Sclerotium rolfsii. Enzyme and Microbial Technology, 2007, 40, 1739-1747.	3.2	38
156	Oxidation of glycerol by 2,2,6,6-tetramethylpiperidine-N-oxyl (TEMPO) in the presence of laccase. Bioresource Technology, 2009, 100, 4541-4545.	9.6	38
157	Semi-rational engineering of cellobiose dehydrogenase for improved hydrogen peroxide production. Microbial Cell Factories, 2013, 12, 38.	4.0	38
158	Anti-inflammatory and anti-oxidant properties of laccase-synthesized phenolic-O-carboxymethyl chitosan hydrogels. New Biotechnology, 2018, 40, 236-244.	4.4	38
159	Lignin-hemicellulose complexes restrict enzymatic solubilization of mannan and xylan from dissolving pulp. Applied Microbiology and Biotechnology, 1998, 50, 390-395.	3.6	37
160	Indigo-Cellulase Interactions. Textile Reseach Journal, 2000, 70, 532-536.	2.2	37
161	Coating of immobilised laccase for stability enhancement: A novel approach. Applied Catalysis A: General, 2007, 329, 156-160.	4.3	37
162	Antioxidant activity assay based on laccase-generated radicals. Analytical and Bioanalytical Chemistry, 2009, 393, 679-687.	3.7	37

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163	Extracellular serine proteases from Stenotrophomonas maltophilia: Screening, isolation and heterologous expression in E. coli. Journal of Biotechnology, 2012, 157, 140-147.	3.8	37
164	Dyeing in catalase-treated bleaching baths. Coloration Technology, 2001, 117, 1-5.	1.5	36
165	Polymerization of Guaiacol and a Phenolic Î²-O-4-Substructure by Trametes hirsuta Laccase in the Presence of ABTS. Biotechnology Progress, 2003, 19, 1505-1509.	2.6	36
166	Tyrosinase-catalysed coupling of functional molecules onto protein fibres. Enzyme and Microbial Technology, 2008, 42, 535-542.	3.2	36
167	Enzymatic synthesis of catechol and hydroxyl-carboxic acid functionalized chitosan microspheres for iron overload therapy. European Journal of Pharmaceutics and Biopharmaceutics, 2011, 79, 294-303.	4.3	36
168	Banning toxic heavy-metal catalysts from paints: enzymatic cross-linking of alkyd resins. Green Chemistry, 2013, 15, 381.	9.0	36
169	Harnessing the Power of Enzymes for Tailoring and Valorizing Lignin. Trends in Biotechnology, 2020, 38, 1215-1231.	9.3	36
170	Biotechnology in the textile industryâ€"perspectives for the new millennium. Journal of Biotechnology, 2001, 89, 89-90.	3.8	35
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