# Georg M Guebitz

#### List of Publications by Citations

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377 papers

**14,959** citations

66 h-index

100 g-index

406 ext. papers

16,651 ext. citations

5.4 avg, IF

6.53 L-index

#	Paper	IF	Citations
377	Decolorization and detoxification of textile dyes with a laccase from Trametes hirsuta. <i>Applied and Environmental Microbiology</i> , <b>2000</b> , 66, 3357-62	4.8	579
376	Exploitation of the tropical oil seed plant Jatropha curcas L <i>Bioresource Technology</i> , <b>1999</b> , 67, 73-82	11	440
375	Conversion of sewage sludge into lipids by Lipomyces starkeyi for biodiesel production. <i>Bioresource Technology</i> , <b>2008</b> , 99, 3051-6	11	307
374	CuOflotton nanocomposite: Formation, morphology, and antibacterial activity. <i>Surface and Coatings Technology</i> , <b>2009</b> , 204, 54-57	4.4	252
373	Potential applications of laccase-mediated coupling and grafting reactions: a review. <i>Enzyme and Microbial Technology</i> , <b>2011</b> , 48, 195-208	3.8	235
372	Decolorization of textile dyes by laccases from a newly isolated strain of Trametes modesta. <i>Water Research</i> , <b>2002</b> , 36, 1449-56	12.5	209
371	Enzymatic Surface Hydrolysis of PET: Effect of Structural Diversity on Kinetic Properties of Cutinases from Thermobifida. <i>Macromolecules</i> , <b>2011</b> , 44, 4632-4640	5.5	205
370	Formal asymmetric biocatalytic reductive amination. <i>Angewandte Chemie - International Edition</i> , <b>2008</b> , 47, 9337-40	16.4	194
369	Indigo degradation with purified laccases from Trametes hirsuta and Sclerotium rolfsii. <i>Journal of Biotechnology</i> , <b>2001</b> , 89, 131-9	3.7	194
368	Antimicrobial enzymes: an emerging strategy to fight microbes and microbial biofilms. <i>Biotechnology Journal</i> , <b>2013</b> , 8, 97-109	5.6	189
367	A new alkali-thermostable azoreductase from Bacillus sp. strain SF. <i>Applied and Environmental Microbiology</i> , <b>2004</b> , 70, 837-44	4.8	177
366	Enzymes go big: surface hydrolysis and functionalization of synthetic polymers. <i>Trends in Biotechnology</i> , <b>2008</b> , 26, 32-8	15.1	162
365	Enzymatic surface hydrolysis of poly(ethylene terephthalate) and bis(benzoyloxyethyl) terephthalate by lipase and cutinase in the presence of surface active molecules. <i>Journal of Biotechnology</i> , <b>2009</b> , 143, 207-12	3.7	141
364	Tailoring cutinase activity towards polyethylene terephthalate and polyamide 6,6 fibers. <i>Journal of Biotechnology</i> , <b>2007</b> , 128, 849-57	3.7	135
363	Antimicrobial and antioxidant properties of chitosan enzymatically functionalized with flavonoids. <i>Process Biochemistry</i> , <b>2009</b> , 44, 749-756	4.8	133
362	Stainless steel sponge: a novel carrier for the immobilisation of the white-rot fungus Trametes hirsuta for decolourization of textile dyes. <i>Bioresource Technology</i> , <b>2004</b> , 95, 67-72	11	127
361	Bio-preparation of cotton fabrics. <i>Enzyme and Microbial Technology</i> , <b>2001</b> , 29, 357-362	3.8	127

#### (2002-2005)

360	Influence of redox mediators and metal ions on synthetic acid dye decolourization by crude laccase from Trametes hirsuta. <i>Chemosphere</i> , <b>2005</b> , 58, 417-22	8.4	123	
359	Characterization of a chitinase and an endo-beta-1,3-glucanase from Trichoderma harzianum Rifai T24 involved in control of the phytopathogen Sclerotium rolfsii. <i>Applied Microbiology and Biotechnology</i> , <b>2001</b> , 56, 137-43	5.7	119	
358	New substrates for reliable enzymes: enzymatic modification of polymers. <i>Current Opinion in Biotechnology</i> , <b>2003</b> , 14, 577-82	11.4	117	
357	Influence of trace elements on methane formation from a synthetic model substrate for maize silage. <i>Bioresource Technology</i> , <b>2010</b> , 101, 836-9	11	116	
356	Immobilized laccase for decolourization of Reactive Black 5 dyeing effluent. <i>Biotechnology Letters</i> , <b>2003</b> , 25, 1473-7	3	112	
355	Hydrogen peroxide generation with immobilized glucose oxidase for textile bleaching. <i>Journal of Biotechnology</i> , <b>2002</b> , 93, 87-94	3.7	110	
354	Enhanced cutinase-catalyzed hydrolysis of polyethylene terephthalate by covalent fusion to hydrophobins. <i>Applied and Environmental Microbiology</i> , <b>2015</b> , 81, 3586-92	4.8	109	
353	New model substrates for enzymes hydrolysing polyethyleneterephthalate and polyamide fibres. Journal of Proteomics, <b>2006</b> , 69, 89-99		108	
352	Renewable building blocks for sustainable polyesters: new biotechnological routes for greener plastics. <i>Polymer International</i> , <b>2016</b> , 65, 861-871	3.3	107	
351	Application of power ultrasound for azo dye degradation. <i>Ultrasonics Sonochemistry</i> , <b>2004</b> , 11, 177-82	8.9	103	
350	Fusion of binding domains to Thermobifida cellulosilytica cutinase to tune sorption characteristics and enhancing PET hydrolysis. <i>Biomacromolecules</i> , <b>2013</b> , 14, 1769-76	6.9	102	
349	Antifouling and Antibacterial Multifunctional Polyzwitterion/Enzyme Coating on Silicone Catheter Material Prepared by Electrostatic Layer-by-Layer Assembly. <i>Langmuir</i> , <b>2016</b> , 32, 1347-59	4	101	
348	Enzymatic and chemical hydrolysis of poly(ethylene terephthalate) fabrics. <i>Journal of Polymer Science Part A</i> , <b>2008</b> , 46, 6435-6443	2.5	101	
347	A New Esterase from Thermobifida halotolerans Hydrolyses Polyethylene Terephthalate (PET) and Polylactic Acid (PLA). <i>Polymers</i> , <b>2012</b> , 4, 617-629	4.5	100	
346	Voltammetric monitoring of laccase-catalysed mediated reactions. <i>Bioelectrochemistry</i> , <b>2002</b> , 58, 149-5	6 <b>6</b> 5.6	99	
345	Immobilization of catalases from Bacillus SF on alumina for the treatment of textile bleaching effluents. <i>Enzyme and Microbial Technology</i> , <b>2001</b> , 28, 815-819	3.8	98	
344	Study of dye decolorization in an immobilized laccase enzyme-reactor using online spectroscopy. <i>Biotechnology and Bioengineering</i> , <b>2004</b> , 87, 552-63	4.9	96	
343	Production of laccase by a newly isolated strain of Trametes modesta. <i>Bioresource Technology</i> , <b>2002</b> , 84, 259-63	11	96	

342	Hydrolysis of polyethyleneterephthalate by p-nitrobenzylesterase from Bacillus subtilis. <i>Biotechnology Progress</i> , <b>2011</b> , 27, 951-60	2.8	95
341	An acid-stable laccase from Sclerotium rolfsii with potential for wool dye decolourization. <i>Enzyme and Microbial Technology</i> , <b>2003</b> , 33, 766-774	3.8	93
340	The Closure of the Cycle: Enzymatic Synthesis and Functionalization of Bio-Based Polyesters. <i>Trends in Biotechnology</i> , <b>2016</b> , 34, 316-328	15.1	92
339	Characterization of a new cutinase from Thermobifida alba for PET-surface hydrolysis. <i>Biocatalysis and Biotransformation</i> , <b>2012</b> , 30, 2-9	2.5	90
338	Purification and characterization of a new bioscouring pectate lyase from Bacillus pumilus BK2. <i>Journal of Biotechnology</i> , <b>2006</b> , 121, 390-401	3.7	89
337	Siloxane removal from biogas by biofiltration: biodegradation studies. <i>Clean Technologies and Environmental Policy</i> , <b>2008</b> , 10, 211-218	4.3	86
336	Surface engineering of a cutinase from Thermobifida cellulosilytica for improved polyester hydrolysis. <i>Biotechnology and Bioengineering</i> , <b>2013</b> , 110, 2581-90	4.9	85
335	Impact of nickel and cobalt on biogas production and process stability during semi-continuous anaerobic fermentation of a model substrate for maize silage. <i>Water Research</i> , <b>2011</b> , 45, 781-7	12.5	85
334	Polymerization of lignosulfonates by the laccase-HBT (1-hydroxybenzotriazole) system improves dispersibility. <i>Bioresource Technology</i> , <b>2010</b> , 101, 5054-62	11	85
333	Investigations on the laccase-catalyzed polymerization of lignin model compounds using size-exclusion HPLC. <i>Enzyme and Microbial Technology</i> , <b>2002</b> , 31, 403-410	3.8	85
332	Stability and decolourization ability of Trametes villosa laccase in liquid ultrasonic fields. <i>Ultrasonics Sonochemistry</i> , <b>2007</b> , 14, 355-62	8.9	84
331	CutinaseA new tool for biomodification of synthetic fibers. <i>Journal of Polymer Science Part A</i> , <b>2005</b> , 43, 2448-2450	2.5	84
330	Enzymatic hydrolysis of poly(ethylene furanoate). <i>Journal of Biotechnology</i> , <b>2016</b> , 235, 47-53	3.7	82
329	Enzymatic Decolorization of Textile Dyeing Effluents. <i>Textile Reseach Journal</i> , <b>2000</b> , 70, 409-414	1.7	81
328	Hydrolysis of PET and bis-(benzoyloxyethyl) terephthalate with a new polyesterase from Penicillium citrinum. <i>Biocatalysis and Biotransformation</i> , <b>2007</b> , 25, 171-177	2.5	79
327	New enzymes with potential for PET surface modification. <i>Biocatalysis and Biotransformation</i> , <b>2004</b> , 22, 341-346	2.5	79
326	Esterase and lipase activity in Jatropha curcas L. seeds. <i>Journal of Biotechnology</i> , <b>1999</b> , 75, 117-26	3.7	78
325	Laccase-assisted formation of bioactive chitosan/gelatin hydrogel stabilized with plant polyphenols. <i>Carbohydrate Polymers</i> , <b>2013</b> , 92, 989-96	10.3	77

#### (2007-2005)

324	Treatment of wool fibres with subtilisin and subtilisin-PEG. <i>Enzyme and Microbial Technology</i> , <b>2005</b> , 36, 917-922	3.8	75
323	Enhancement of biogas production by addition of hemicellulolytic bacteria immobilised on activated zeolite. <i>Water Research</i> , <b>2010</b> , 44, 1970-80	12.5	74
322	Development and industrialisation of enzymatic shrink-resist process based on modified proteases for wool machine washability. <i>Enzyme and Microbial Technology</i> , <b>2007</b> , 40, 1656-1661	3.8	73
321	Hydrolysis of isolated coffee mannan and coffee extract by mannanases of Sclerotium rolfsii. <i>Journal of Biotechnology</i> , <b>2000</b> , 80, 127-34	3.7	7²
320	Two novel class II hydrophobins from Trichoderma spp. stimulate enzymatic hydrolysis of poly(ethylene terephthalate) when expressed as fusion proteins. <i>Applied and Environmental Microbiology</i> , <b>2013</b> , 79, 4230-8	4.8	71
319	Predicting dye biodegradation from redox potentials. <i>Biotechnology Progress</i> , <b>2004</b> , 20, 1588-92	2.8	71
318	Influence of structure on dye degradation with laccase mediator systems. <i>Biocatalysis and Biotransformation</i> , <b>2004</b> , 22, 315-324	2.5	70
317	Laccases to Improve the Whiteness in a Conventional Bleaching of Cotton. <i>Macromolecular Materials and Engineering</i> , <b>2003</b> , 288, 807-810	3.9	70
316	Laccase immobilization on enzymatically functionalized polyamide 6,6 fibres. <i>Enzyme and Microbial Technology</i> , <b>2007</b> , 41, 867-875	3.8	69
315	Degradation of azo dyes by oxidative processeslaccase and ultrasound treatment. <i>Bioresource Technology</i> , <b>2008</b> , 99, 4213-20	11	68
314	Studies of stabilization of native catalase using additives. <i>Enzyme and Microbial Technology</i> , <b>2002</b> , 30, 387-391	3.8	68
313	Ultrasound radiation as a "throwing stones" technique for the production of antibacterial nanocomposite textiles. <i>ACS Applied Materials &amp; Amp; Interfaces</i> , <b>2010</b> , 2, 1999-2004	9.5	67
312	Folic acid-functionalized human serum albumin nanocapsules for targeted drug delivery to chronically activated macrophages. <i>International Journal of Pharmaceutics</i> , <b>2012</b> , 427, 460-6	6.5	66
311	Nitrile hydratase and amidase from Rhodococcus rhodochrous hydrolyze acrylic fibers and granular polyacrylonitriles. <i>Applied and Environmental Microbiology</i> , <b>2000</b> , 66, 1634-8	4.8	65
310	Xylan binding subsite mapping in the xylanase from Penicillium simplicissimum using xylooligosaccharides as cryo-protectant. <i>Biochemistry</i> , <b>1999</b> , 38, 2403-12	3.2	64
309	Characterization of endoglucanases from the brown rot fungi Gloeophyllum sepiarium and Gloeophyllum trabeum. <i>Enzyme and Microbial Technology</i> , <b>1998</b> , 23, 133-140	3.8	63
308	Antimicrobial and antioxidant linen via laccase-assisted grafting. <i>Reactive and Functional Polymers</i> , <b>2011</b> , 71, 713-720	4.6	62
307	Enzymatic coating of lignocellulosic surfaces with polyphenols. <i>Biotechnology Journal</i> , <b>2007</b> , 2, 334-41	5.6	62

306	Lipid composition of peroxisomes from the yeast Pichia pastoris grown on different carbon sources. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , <b>2007</b> , 1771, 455-61	5	62
305	Enzymatic surface hydrolysis of poly(ethylene furanoate) thin films of various crystallinities. <i>Green Chemistry</i> , <b>2017</b> , 19, 5381-5384	10	61
304	Enzymatic surface functionalisation of lignocellulosic materials with tannins for enhancing antibacterial properties. <i>Process Biochemistry</i> , <b>2010</b> , 45, 1072-1081	4.8	61
303	Enzymatic hydrolysis of PTT polymers and oligomers. <i>Journal of Biotechnology</i> , <b>2008</b> , 135, 45-51	3.7	60
302	A novel metalloprotease from Bacillus cereus for protein fibre processing. <i>Enzyme and Microbial Technology</i> , <b>2007</b> , 40, 1772-1781	3.8	60
301	Cross-linking of collagen with laccases and tyrosinases. <i>Materials Science and Engineering C</i> , <b>2011</b> , 31, 1068-1077	8.3	58
300	Environmentally friendly bleaching of cotton using laccases. <i>Environmental Chemistry Letters</i> , <b>2005</b> , 3, 66-69	13.3	58
299	Enzymatic recovery of polyester building blocks from polymer blends. <i>Process Biochemistry</i> , <b>2017</b> , 59, 58-64	4.8	57
298	Chitosan hydrogel formation using laccase activated phenolics as cross-linkers. <i>Carbohydrate Polymers</i> , <b>2017</b> , 157, 814-822	10.3	57
297	Purification and characterization of a new low molecular weight endoxylanase from Penicillium capsulatum. <i>Enzyme and Microbial Technology</i> , <b>2003</b> , 33, 775-785	3.8	57
296	Degradation of azo dyes by laccase and ultrasound treatment. <i>Applied and Environmental Microbiology</i> , <b>2005</b> , 71, 2600-7	4.8	56
295	Biotransformation of phenolics with laccase containing bacterial spores. <i>Environmental Chemistry Letters</i> , <b>2005</b> , 3, 74-77	13.3	56
294	Enzymatic Degradation of Poly(ethylene 2,5-furanoate) Powders and Amorphous Films. <i>Catalysts</i> , <b>2017</b> , 7, 318	4	54
293	Purification and properties of a feruloyl esterase involved in lignocellulose degradation by Aureobasidium pullulans. <i>Applied and Environmental Microbiology</i> , <b>2003</b> , 69, 5622-6	4.8	54
292	Thermo-alkali-stable catalases from newly isolated Bacillus sp. for the treatment and recycling of textile bleaching effluents. <i>Journal of Biotechnology</i> , <b>2001</b> , 89, 147-53	3.7	54
291	Mannan-degrading enzymes from Sclerotium rolfsii: Characterisation and synergism of two endo Emannanases and a Emannosidase. <i>Bioresource Technology</i> , <b>1996</b> , 58, 127-135	11	54
290	Effect of endoglucanases and hemicellulases in magnetic and flotation deinking of xerographic and laser-printed papers. <i>Journal of Biotechnology</i> , <b>1998</b> , 65, 209-215	3.7	53
289	Purification and properties of an acidic #mannanase from Sclerotium rolfsii. <i>Journal of Biotechnology</i> , <b>1996</b> , 45, 165-172	3.7	53

## (2001-2017)

288	Synergistic chemo-enzymatic hydrolysis of poly(ethylene terephthalate) from textile waste. <i>Microbial Biotechnology</i> , <b>2017</b> , 10, 1376-1383	6.3	51
287	Towards Sustainable High-Performance Thermoplastics: Synthesis, Characterization, and Enzymatic Hydrolysis of Bisguaiacol-Based Polyesters. <i>ChemSusChem</i> , <b>2018</b> , 11, 2529-2539	8.3	51
286	Reactivity of long chain alkylamines to lignin moieties: implications on hydrophobicity of lignocellulose materials. <i>Journal of Biotechnology</i> , <b>2010</b> , 149, 81-7	3.7	51
285	Laccase-Mediated Wood Surface Functionalization. <i>Engineering in Life Sciences</i> , <b>2008</b> , 8, 297-302	3.4	51
284	Investigation of mircroorganisms colonising activated zeolites during anaerobic biogas production from grass silage. <i>Bioresource Technology</i> , <b>2011</b> , 102, 4353-9	11	50
283	Characterization of a poly(butylene adipate-co-terephthalate)- hydrolyzing lipase from Pelosinus fermentans. <i>Applied Microbiology and Biotechnology</i> , <b>2016</b> , 100, 1753-1764	5.7	49
282	Novel peptidoglycan-based diagnostic devices for detection of wound infection. <i>Diagnostic Microbiology and Infectious Disease</i> , <b>2011</b> , 71, 12-23	2.9	49
281	Enzymatic grafting of functional molecules to the lignin model dibenzodioxocin and lignocellulose material. <i>Enzyme and Microbial Technology</i> , <b>2010</b> , 46, 272-280	3.8	49
<b>2</b> 80	Laccase catalyzed covalent coupling of fluorophenols increases lignocellulose surface hydrophobicity. <i>Bioresource Technology</i> , <b>2010</b> , 101, 2793-9	11	49
279	Influence of mechanical agitation on cutinases and protease activity towards polyamide substrates. <i>Enzyme and Microbial Technology</i> , <b>2007</b> , 40, 1678-1685	3.8	48
278	Characterization of a thermostable NADPH:FMN oxidoreductase from the mesophilic bacterium Bacillus subtilis. <i>Biochemistry</i> , <b>2006</b> , 45, 7083-91	3.2	48
277	Biogas production fromJatropha curcas press-cake. <i>Applied Biochemistry and Biotechnology</i> , <b>1997</b> , 63-65, 457-467	3.2	47
276	Improving enzymatic polyurethane hydrolysis by tuning enzyme sorption. <i>Polymer Degradation and Stability</i> , <b>2016</b> , 132, 69-77	4.7	46
275	Enzymatic removal of hemicellulose from dissolving pulps. <i>Biotechnology Letters</i> , <b>1997</b> , 19, 491-495	3	46
274	Biological Coloration of Flax Fabrics with Flavonoids using Laccase from Trametes hirsuta. <i>Engineering in Life Sciences</i> , <b>2008</b> , 8, 324-330	3.4	46
273	Biocatalyzed approach for the surface functionalization of poly(L-lactic acid) films using hydrolytic enzymes. <i>Biotechnology Journal</i> , <b>2015</b> , 10, 1739-49	5.6	45
272	A catalase-peroxidase from a newly isolated thermoalkaliphilic Bacillus sp. with potential for the treatment of textile bleaching effluents. <i>Extremophiles</i> , <b>2001</b> , 5, 423-9	3	45
271	Ih SitulEnzymatically Prepared Polymers for Wool Coloration. <i>Macromolecular Materials and Engineering</i> , <b>2001</b> , 286, 691	3.9	45

270	Hydrolysis of synthetic polyesters by Clostridium botulinum esterases. <i>Biotechnology and Bioengineering</i> , <b>2016</b> , 113, 1024-34	4.9	43
269	Biocatalytic single-step alkene cleavage from aryl alkenes: an enzymatic equivalent to reductive ozonization. <i>Angewandte Chemie - International Edition</i> , <b>2006</b> , 45, 5201-3	16.4	43
268	Effect of the agitation on the adsorption and hydrolytic efficiency of cutinases on polyethylene terephthalate fibres. <i>Enzyme and Microbial Technology</i> , <b>2007</b> , 40, 1801-1805	3.8	42
267	Laccase-catalyzed decolorization of the synthetic azo-dye diamond black PV 200 and of some structurally related derivatives. <i>Biocatalysis and Biotransformation</i> , <b>2004</b> , 22, 331-339	2.5	42
266	An immobilised catalase peroxidase from the alkalothermophilic Bacillus SF for the treatment of textile-bleaching effluents. <i>Applied Microbiology and Biotechnology</i> , <b>2002</b> , 60, 313-9	5.7	42
265	Enzymatic Hydrolysis of Polyester Thin Films at the Nanoscale: Effects of Polyester Structure and Enzyme Active-Site Accessibility. <i>Environmental Science &amp; Enzyme Active-Site Accessibility</i> . <i>Environmental Science &amp; Enzyme Active-Site Accessibility</i> . <i>Environmental Science &amp; Enzyme Active-Site Accessibility</i> .	10.3	41
264	Analysis of myeloperoxidase activity in wound fluids as a marker of infection. <i>Annals of Clinical Biochemistry</i> , <b>2013</b> , 50, 245-54	2.2	41
263	Sensor materials for the detection of human neutrophil elastase and cathepsin G activity in wound fluid. <i>Experimental Dermatology</i> , <b>2011</b> , 20, 508-13	4	41
262	Enzyme functionalized electrospun chitosan mats for antimicrobial treatment. <i>Carbohydrate Polymers</i> , <b>2018</b> , 181, 551-559	10.3	41
261	Enzymatic Degradation of Aromatic and Aliphatic Polyesters by Expressed Cutinase 1 from. <i>Frontiers in Microbiology</i> , <b>2017</b> , 8, 938	5.7	40
260	A novel aryl acylamidase from Nocardia farcinica hydrolyses polyamide. <i>Biotechnology and Bioengineering</i> , <b>2009</b> , 102, 1003-11	4.9	40
259	Mode of depolymerisation of hemicellulose by various mannanases and xylanases in relation to their ability to bleach softwood pulp. <i>Applied Microbiology and Biotechnology</i> , <b>1997</b> , 47, 658-662	5.7	40
258	The influence of enzymatic treatment on wool fibre properties using PEG-modified proteases. <i>Enzyme and Microbial Technology</i> , <b>2007</b> , 40, 1705-1711	3.8	40
257	Wax removal for accelerated cotton scouring with alkaline pectinase. <i>Biotechnology Journal</i> , <b>2007</b> , 2, 306-15	5.6	40
256	Ultrasound-enhanced enzymatic hydrolysis of poly(ethylene terephthalate). <i>Bioresource Technology</i> , <b>2016</b> , 218, 1298-302	11	40
255	Cellulose oxidation and bleaching processes based on recombinant Myriococcum thermophilum cellobiose dehydrogenase. <i>Enzyme and Microbial Technology</i> , <b>2013</b> , 52, 60-7	3.8	39
254	Coupling of aromatic amines onto syringylglycerol Equaiacylether using Bacillus SF spore laccase: A model for functionalization of lignin-based materials. <i>Journal of Molecular Catalysis B: Enzymatic</i> , <b>2009</b> , 61, 143-149		39
253	Coupling of 2,4,6-trinitrotoluene (TNT) metabolites onto humic monomers by a new laccase from Trametes modesta. <i>Chemosphere</i> , <b>2006</b> , 64, 359-70	8.4	39

## (2017-2004)

252	Production of Laccase by Trametes hirsuta Grown in an Immersion Bioreactor and its Application in the Docolorization of Dyes from a Leather Factory. <i>Engineering in Life Sciences</i> , <b>2004</b> , 4, 233-238	3.4	38
251	Nature Inspired Solutions for Polymers: Will Cutinase Enzymes Make Polyesters and Polyamides Greener?. <i>Catalysts</i> , <b>2016</b> , 6, 205	4	38
250	Enzymatic synthesis of lignin derivable pyridine based polyesters for the substitution of petroleum derived plastics. <i>Nature Communications</i> , <b>2019</b> , 10, 1762	17.4	37
249	Cytotoxicity of Biochar: A Workplace Safety Concern?. <i>Environmental Science and Technology Letters</i> , <b>2017</b> , 4, 362-366	11	37
248	An antioxidant regenerating system for continuous quenching of free radicals in chronic wounds. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , <b>2013</b> , 83, 396-404	5.7	37
247	Coating of immobilised laccase for stability enhancement: A novel approach. <i>Applied Catalysis A: General</i> , <b>2007</b> , 329, 156-160	5.1	37
246	Enzymatic polymerization on the surface of functionalized cellulose fibers. <i>Enzyme and Microbial Technology</i> , <b>2007</b> , 40, 1782-1787	3.8	37
245	Surface hydrolysis of polyacrylonitrile with nitrile hydrolysing enzymes from Micrococcus luteus BST20. <i>Journal of Biotechnology</i> , <b>2007</b> , 129, 62-8	3.7	37
244	Influence of Cellulases on Indigo Backstaining. Textile Reseach Journal, 2000, 70, 628-632	1.7	36
243	Laccase mediated oxidation of industrial lignins: Is oxygen limiting?. <i>Process Biochemistry</i> , <b>2015</b> , 50, 12	77 <sub>4</sub> 1828:	B 35
242	Influence of Oxygen and Mediators on Laccase-Catalyzed Polymerization of Lignosulfonate. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2016</b> , 4, 5303-5310	8.3	35
242		8.3	35 35
	Sustainable Chemistry and Engineering, <b>2016</b> , 4, 5303-5310  Small cause, large effect: Structural characterization of cutinases from Thermobifida cellulosilytica.		
241	Small cause, large effect: Structural characterization of cutinases from Thermobifida cellulosilytica.  Biotechnology and Bioengineering, 2017, 114, 2481-2488  Enzymatic cross-linking of gelatine with laccase and tyrosinase. Biocatalysis and Biotransformation,	4.9	35
241 240	Small cause, large effect: Structural characterization of cutinases from Thermobifida cellulosilytica. <i>Biotechnology and Bioengineering</i> , <b>2017</b> , 114, 2481-2488  Enzymatic cross-linking of gelatine with laccase and tyrosinase. <i>Biocatalysis and Biotransformation</i> , <b>2012</b> , 30, 86-95  Antioxidant activity assay based on laccase-generated radicals. <i>Analytical and Bioanalytical</i>	4.9	35 35
241 240 239	Small cause, large effect: Structural characterization of cutinases from Thermobifida cellulosilytica. <i>Biotechnology and Bioengineering</i> , <b>2017</b> , 114, 2481-2488  Enzymatic cross-linking of gelatine with laccase and tyrosinase. <i>Biocatalysis and Biotransformation</i> , <b>2012</b> , 30, 86-95  Antioxidant activity assay based on laccase-generated radicals. <i>Analytical and Bioanalytical Chemistry</i> , <b>2009</b> , 393, 679-87  Tyrosinase-catalysed coupling of functional molecules onto protein fibres. <i>Enzyme and Microbial</i>	4.9 2.5	35 35 35
241 240 239 238	Small cause, large effect: Structural characterization of cutinases from Thermobifida cellulosilytica. <i>Biotechnology and Bioengineering</i> , <b>2017</b> , 114, 2481-2488  Enzymatic cross-linking of gelatine with laccase and tyrosinase. <i>Biocatalysis and Biotransformation</i> , <b>2012</b> , 30, 86-95  Antioxidant activity assay based on laccase-generated radicals. <i>Analytical and Bioanalytical Chemistry</i> , <b>2009</b> , 393, 679-87  Tyrosinase-catalysed coupling of functional molecules onto protein fibres. <i>Enzyme and Microbial Technology</i> , <b>2008</b> , 42, 535-542  Two-stage anaerobic fermentation of organic waste in CSTR and UFAF-reactors. <i>Bioresource</i>	4.9 2.5 4.4 3.8	35 35 35 35

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232	Laccase kinetics of degradation and coupling reactions. <i>Journal of Molecular Catalysis B: Enzymatic</i> , <b>2005</b> , 33, 23-28		34
231	Surface engineering of polyester-degrading enzymes to improve efficiency and tune specificity. <i>Applied Microbiology and Biotechnology</i> , <b>2018</b> , 102, 3551-3559	5.7	33
230	Banning toxic heavy-metal catalysts from paints: enzymatic cross-linking of alkyd resins. <i>Green Chemistry</i> , <b>2013</b> , 15, 381	10	33
229	Enzyme-catalyzed functionalization of poly(L-lactic acid) for drug delivery applications. <i>Process Biochemistry</i> , <b>2017</b> , 59, 77-83	4.8	33
228	Polymerization of guaiacol and a phenolic beta-O-4-substructure by Trametes hirsuta laccase in the presence of ABTS. <i>Biotechnology Progress</i> , <b>2003</b> , 19, 1505-9	2.8	33
227	Enlarging the tools for efficient enzymatic polycondensation: structural and catalytic features of cutinase 1 from Thermobifida cellulosilytica. <i>Catalysis Science and Technology</i> , <b>2016</b> , 6, 3430-3442	5.5	32
226	Substrate specificities of cutinases on aliphatic-aromatic polyesters and on their model substrates. <i>New Biotechnology</i> , <b>2016</b> , 33, 295-304	6.4	32
225	Semi-rational engineering of cellobiose dehydrogenase for improved hydrogen peroxide production. <i>Microbial Cell Factories</i> , <b>2013</b> , 12, 38	6.4	32
224	Oxidation of glycerol by 2,2,6,6-tetramethylpiperidine-N-oxyl (TEMPO) in the presence of laccase. <i>Bioresource Technology</i> , <b>2009</b> , 100, 4541-5	11	32
223	Chemical modification of proteases for wool cuticle scale removal. <i>Biocatalysis and Biotransformation</i> , <b>2004</b> , 22, 299-305	2.5	32
222	Influence of organic solvents on cutinase stability and accessibility to polyamide fibers. <i>Journal of Polymer Science Part A</i> , <b>2005</b> , 43, 2749-2753	2.5	32
221	Peptide Anchor for Folate-Targeted Liposomal Delivery. <i>Biomacromolecules</i> , <b>2015</b> , 16, 2904-10	6.9	31
220	Incorporation of 2,4,6-trinitrotoluene (TNT) transforming bacteria into explosive formulations. <i>Journal of Hazardous Materials</i> , <b>2009</b> , 165, 285-90	12.8	31
219	Enzymatic reduction and oxidation of fibre-bound azo-dyes. <i>Enzyme and Microbial Technology</i> , <b>2007</b> , 40, 1732-1738	3.8	31
218	Purification and mechanistic characterisation of two polygalacturonases from Sclerotium rolfsii. <i>Enzyme and Microbial Technology</i> , <b>2007</b> , 40, 1739-1747	3.8	31
217	Using a nitrilase for the surface modification of acrylic fibres. <i>Biotechnology Journal</i> , <b>2007</b> , 2, 353-60	5.6	31

216	Dyeing in catalase-treated bleaching baths. <i>Coloration Technology</i> , <b>2001</b> , 117, 1-5	2	31
215	Indigo-Cellulase Interactions. <i>Textile Reseach Journal</i> , <b>2000</b> , 70, 532-536	1.7	31
214	Biomarkers for infection: enzymes, microbes, and metabolites. <i>Applied Microbiology and Biotechnology</i> , <b>2015</b> , 99, 4595-614	5.7	29
213	Anti-inflammatory and anti-oxidant properties of laccase-synthesized phenolic-O-carboxymethyl chitosan hydrogels. <i>New Biotechnology</i> , <b>2018</b> , 40, 236-244	6.4	29
212	Two-step enzymatic functionalisation of polyamide with phenolics. <i>Journal of Molecular Catalysis B: Enzymatic</i> , <b>2012</b> , 79, 54-60		29
211	Enzymatic synthesis of catechol and hydroxyl-carboxic acid functionalized chitosan microspheres for iron overload therapy. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , <b>2011</b> , 79, 294-303	5.7	28
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209	New enzyme-based process direction to prevent wool shrinking without substantial tensile strength loss. <i>Biotechnology Letters</i> , <b>2006</b> , 28, 711-6	3	28
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206	Biodegradation of 2,4,6-trinitrotoluene (TNT): An enzymatic perspective. <i>Biocatalysis and Biotransformation</i> , <b>2005</b> , 23, 53-69	2.5	27
205	Recycling of textile bleaching effluents for dyeing using immobilized catalase. <i>Biotechnology Letters</i> , <b>2002</b> , 24, 173-176	3	27
204	Bioactive albumin functionalized polylactic acid membranes for improved biocompatibility. <i>Reactive and Functional Polymers</i> , <b>2013</b> , 73, 1399-1404	4.6	26
203	Enzymatic colouration with laccase and peroxidases: Recent progress. <i>Biocatalysis and Biotransformation</i> , <b>2012</b> , 30, 125-140	2.5	26
202	Comparison of biogas sludge and raw crop material as source of hydrolytic cultures for anaerobic digestion. <i>Bioresource Technology</i> , <b>2016</b> , 207, 244-51	11	25
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200	Extracellular serine proteases from Stenotrophomonas maltophilia: Screening, isolation and heterologous expression in E. coli. <i>Journal of Biotechnology</i> , <b>2012</b> , 157, 140-7	3.7	25
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187	Polyol Structure Influences Enzymatic Hydrolysis of Bio-Based 2,5-Furandicarboxylic Acid (FDCA) Polyesters. <i>Biotechnology Journal</i> , <b>2017</b> , 12, 1600741	5.6	22
186	Engineering Strategies for Successful Development of Functional Polymers Using Oxidative Enzymes. <i>Chemical Engineering and Technology</i> , <b>2012</b> , 35, 1359-1372	2	22
185	Covalent bonding of protease to different sized enteric polymers and their potential use in wool processing. <i>Enzyme and Microbial Technology</i> , <b>2010</b> , 47, 105-111	3.8	22
184	Laccase-induced grafting on plasma-pretreated polypropylene. <i>Biomacromolecules</i> , <b>2008</b> , 9, 2735-41	6.9	22
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179	Cellobiose dehydrogenase and chitosan-based lysozyme responsive materials for antimicrobial wound treatment. <i>Biotechnology and Bioengineering</i> , <b>2017</b> , 114, 416-422	4.9	21
178	Novel protease-based diagnostic devices for detection of wound infection. <i>Wound Repair and Regeneration</i> , <b>2013</b> , 21, 482-9	3.6	21
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176	Laccase-generated tetramethoxy azobismethylene quinone (TMAMQ) as a tool for antioxidant activity measurement. <i>Food Chemistry</i> , <b>2010</b> , 118, 437-444	8.5	21
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166	The effect of additives and mechanical agitation in surface modification of acrylic fibres by cutinase and esterase. <i>Biotechnology Journal</i> , <b>2006</b> , 1, 842-9	5.6	19
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160	Discovery of Polyesterases from Moss-Associated Microorganisms. <i>Applied and Environmental Microbiology</i> , <b>2017</b> , 83,	4.8	17
159	An electrochemical sensor for fast detection of wound infection based on myeloperoxidase activity. <i>Sensors and Actuators B: Chemical</i> , <b>2015</b> , 209, 265-274	8.5	17
158	Harnessing the Power of Enzymes for Tailoring and Valorizing Lignin. <i>Trends in Biotechnology</i> , <b>2020</b> , 38, 1215-1231	15.1	17
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140	Enzymatic production of clickable and PEGylated recombinant polyhydroxyalkanoates. <i>Green Chemistry</i> , <b>2017</b> , 19, 5494-5504	10	15
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132	Enzymatic synthesis of antibody-human serum albumin conjugate for targeted drug delivery using tyrosinase from Agaricus bisporus. <i>RSC Advances</i> , <b>2013</b> , 3, 1460-1467	3.7	14
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115	Lysozyme-responsive polymer systems for detection of infection. <i>Engineering in Life Sciences</i> , <b>2015</b> , 15, 368-375	3.4	12
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	Trydrotysis of Cutili by FET-frydrotases. Mucromotecutar Symposia, 2010, 290, 342-340	0.0	
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113	Enzymatic polymer functionalisation: advances in laccase and peroxidase derived lignocellulose		12
	Enzymatic polymer functionalisation: advances in laccase and peroxidase derived lignocellulose functional polymers. <i>Advances in Biochemical Engineering/Biotechnology</i> , <b>2011</b> , 125, 47-68	1.7	
112	Enzymatic polymer functionalisation: advances in laccase and peroxidase derived lignocellulose functional polymers. <i>Advances in Biochemical Engineering/Biotechnology</i> , <b>2011</b> , 125, 47-68  Cellobiose dehydrogenase-based biomedical applications. <i>Process Biochemistry</i> , <b>2017</b> , 59, 37-45  Hydrolytic degradation of ROMP thermosetting materials catalysed by bio-derived acids and	1.7 4.8	11

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