

Carla Silva

List of Publications by Year in descending order

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133
papers

3,007
citations

201674
27
h-index

223800
46
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138
all docs

138
docs citations

138
times ranked

3478
citing authors

#	ARTICLE	IF	CITATIONS
1	Tailoring cutinase activity towards polyethylene terephthalate and polyamide 6,6 fibers. Journal of Biotechnology, 2007, 128, 849-857.	3.8	161
2	Practical insights on enzyme stabilization. Critical Reviews in Biotechnology, 2018, 38, 335-350.	9.0	152
3	Laccase: a green catalyst for the biosynthesis of poly-phenols. Critical Reviews in Biotechnology, 2018, 38, 294-307.	9.0	134
4	Engineered <i>Thermobifida fusca</i> cutinase with increased activity on polyester substrates. Biotechnology Journal, 2011, 6, 1230-1239.	3.5	127
5	Polymerization of lignosulfonates by the laccase-HBT (1-hydroxybenzotriazole) system improves dispersibility. Bioresource Technology, 2010, 101, 5054-5062.	9.6	112
6	Cutinase?A new tool for biomodification of synthetic fibers. Journal of Polymer Science Part A, 2005, 43, 2448-2450.	2.3	106
7	Laccase immobilization on bacterial nanocellulose membranes: Antimicrobial, kinetic and stability properties. Carbohydrate Polymers, 2016, 145, 1-12.	10.2	90
8	Laccase immobilization on enzymatically functionalized polyamide 6,6 fibres. Enzyme and Microbial Technology, 2007, 41, 867-875.	3.2	76
9	Microbial lipids and added value metabolites production by <i>Yarrowia lipolytica</i> from pork lard. Journal of Biotechnology, 2018, 265, 76-85.	3.8	75
10	Antimicrobial and antioxidant linen via laccase-assisted grafting. Reactive and Functional Polymers, 2011, 71, 713-720.	4.1	66
11	Influence of mechanical agitation on cutinases and protease activity towards polyamide substrates. Enzyme and Microbial Technology, 2007, 40, 1678-1685.	3.2	56
12	Ultrasound enhanced laccase applications. Green Chemistry, 2015, 17, 1362-1374.	9.0	52
13	Protective Effect of Saccharides on Freeze-Dried Liposomes Encapsulating Drugs. Frontiers in Bioengineering and Biotechnology, 2019, 7, 424.	4.1	45
14	Polyoxometalate/laccase-mediated oxidative polymerization of catechol for textile dyeing. Applied Microbiology and Biotechnology, 2011, 89, 981-987.	3.6	44
15	Ultrasonic pilot-scale reactor for enzymatic bleaching of cotton fabrics. Ultrasonics Sonochemistry, 2014, 21, 1535-1543.	8.2	38
16	Evaluation of drug release property and blood compatibility of aspirin-loaded electrospun PLA/RSF composite nanofibers. Iranian Polymer Journal (English Edition), 2013, 22, 729-737.	2.4	37
17	Enzymatic processing of protein-based fibers. Applied Microbiology and Biotechnology, 2015, 99, 10387-10397.	3.6	37
18	Monitoring biotransformations in polyamide fibres. Biocatalysis and Biotransformation, 2004, 22, 357-360.	2.0	35

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19	Proteolytic Enzyme Engineering: A Tool for Wool. <i>Biomacromolecules</i> , 2009, 10, 1655-1661.	5.4	34
20	Antioxidant cosmetotextiles: Cotton coating with nanoparticles containing vitamin E. <i>Process Biochemistry</i> , 2017, 59, 46-51.	3.7	34
21	Characterisation of enzymatically oxidised lignosulfonates and their application on lignocellulosic fabrics. <i>Polymer International</i> , 2009, 58, 863-868.	3.1	33
22	Influence of organic solvents on cutinase stability and accessibility to polyamide fibers. <i>Journal of Polymer Science Part A</i> , 2005, 43, 2749-2753.	2.3	32
23	Sonochemical and hydrodynamic cavitation reactors for laccase/hydrogen peroxide cotton bleaching. <i>Ultrasonics Sonochemistry</i> , 2014, 21, 774-781.	8.2	31
24	Public communication by research institutes compared across countries and sciences: Building capacity for engagement or competing for visibility?. <i>PLoS ONE</i> , 2020, 15, e0235191.	2.5	31
25	Enzymatic colouration with laccase and peroxidases: Recent progress. <i>Biocatalysis and Biotransformation</i> , 2012, 30, 125-140.	2.0	30
26	Bio-processing of bamboo fibres for textile applications: a mini review. <i>Biocatalysis and Biotransformation</i> , 2012, 30, 141-153.	2.0	29
27	Lipase-ultrasound assisted synthesis of polyesters. <i>Ultrasonics Sonochemistry</i> , 2017, 38, 496-502.	8.2	29
28	Light driven PVDF fibers based on photochromic nanosilica@naphthopyran fabricated by wet spinning. <i>Applied Surface Science</i> , 2019, 470, 951-958.	6.1	28
29	In vitro and computational studies of transdermal perfusion of nanoformulations containing a large molecular weight protein. <i>Colloids and Surfaces B: Biointerfaces</i> , 2013, 108, 271-278.	5.0	27
30	Antimicrobial coating of textiles by laccase in situ polymerization of catechol and p-phenylenediamine. <i>Reactive and Functional Polymers</i> , 2019, 136, 25-33.	4.1	27
31	Functionalization of gauzes with liposomes entrapping an anti-inflammatory drug: A strategy to improve wound healing. <i>Reactive and Functional Polymers</i> , 2013, 73, 1328-1334.	4.1	26
32	Odorant binding proteins: a biotechnological tool for odour control. <i>Applied Microbiology and Biotechnology</i> , 2014, 98, 3629-3638.	3.6	26
33	Bio-coloration of bacterial cellulose assisted by immobilized laccase. <i>AMB Express</i> , 2018, 8, 19.	3.0	26
34	High-Efficiency Wastewater Purification System Based on Coupled Photoelectricâ€Catalytic Action Provided by Triboelectric Nanogenerator. <i>Nano-Micro Letters</i> , 2021, 13, 194.	27.0	26
35	In situ laccaseâ€Cassisted overdyeing of denim using flavonoids. <i>Biotechnology Journal</i> , 2011, 6, 1272-1279.	3.5	24
36	Silkâ€CBased Antimicrobial Polymers as a New Platform to Design Drugâ€CFree Materials to Impede Microbial Infections. <i>Macromolecular Bioscience</i> , 2018, 18, e1800262.	4.1	24

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37	Photochromic polypropylene fibers based on UV-responsive silica@phosphomolybdate nanoparticles through melt spinning technology. Chemical Engineering Journal, 2018, 350, 856-866.	12.7	24
38	Tunable nano-carriers from clicked glycosaminoglycan block copolymers. Journal of Materials Chemistry B, 2014, 2, 4177-4184.	5.8	23
39	The effect of high-energy environments on the structure of laccase-polymerized poly(catechol). Ultrasonics Sonochemistry, 2018, 48, 275-280.	8.2	23
40	Design of Novel BSA/Hyaluronic Acid Nanodispersions for Transdermal Pharma Purposes. Molecular Pharmaceutics, 2014, 11, 1479-1488.	4.6	22
41	Ultrasound-assisted lipase catalyzed hydrolysis of aspirin methyl ester. Ultrasonics Sonochemistry, 2018, 40, 587-593.	8.2	22
42	Zein impart hydrophobic and antimicrobial properties to cotton textiles. Reactive and Functional Polymers, 2020, 154, 104664.	4.1	22
43	Ultrasound-assisted swelling of bacterial cellulose. Engineering in Life Sciences, 2017, 17, 1108-1117.	3.6	21
44	Design of protein delivery systems by mimicking extracellular mechanisms for protection of growth factors. Acta Biomaterialia, 2017, 63, 283-293.	8.3	21
45	Ultrasound-Assisted Encapsulation of Sacha Inchi (Plukenetia volubilis Linneo.) Oil in Alginate-Chitosan Nanoparticles. Polymers, 2019, 11, 1245.	4.5	21
46	Biotransformations in synthetic fibres. Biocatalysis and Biotransformation, 2008, 26, 350-356.	2.0	20
47	PEGylation Greatly Enhances Laccase Polymerase Activity. ChemCatChem, 2017, 9, 3888-3894.	3.7	20
48	Green Extraction of Cork Bioactive Compounds Using Natural Deep Eutectic Mixtures. ACS Sustainable Chemistry and Engineering, 2022, 10, 7974-7989.	6.7	20
49	Following the enzymatic digestion of chondroitin sulfate by a simple GPC analysis. Analytica Chimica Acta, 2015, 885, 207-213.	5.4	19
50	The electromagnetic interference shielding performance of continuous carbon fiber composites with different arrangements. Journal of Industrial Textiles, 2016, 46, 45-58.	2.4	19
51	Conductive Cotton by In Situ Laccase-Polymerization of Aniline. Polymers, 2018, 10, 1023.	4.5	19
52	Exploring PEGylated and immobilized laccases for catechol polymerization. AMB Express, 2018, 8, 134.	3.0	19
53	Keratin-based particles for protection and restoration of hair properties. International Journal of Cosmetic Science, 2018, 40, 408-419.	2.6	19
54	Substrate hydrophobicity and enzyme modifiers play a major role in the activity of lipase from <i>Thermomyces lanuginosus</i> . Catalysis Science and Technology, 2020, 10, 5913-5924.	4.1	19

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55	Highly efficient and durable antibacterial cotton fabrics finished with zwitterionic polysulfobetaine by one-step eco-friendly strategy. <i>Cellulose</i> , 2021, 28, 1139-1152.	4.9	19
56	Protein Formulations for Emulsions and Solid-in-Oil Dispersions. <i>Trends in Biotechnology</i> , 2016, 34, 496-505.	9.3	18
57	Hydrophobic functionalization of jute fabrics by enzymatic-assisted grafting of vinyl copolymers. <i>New Journal of Chemistry</i> , 2017, 41, 3773-3780.	2.8	18
58	Conductive bacterial cellulose by in situ laccase polymerization of aniline. <i>PLoS ONE</i> , 2019, 14, e0214546.	2.5	18
59	Functionalization of Bacterial Cellulose Nonwoven by Poly(fluorophenol) to Improve Its Hydrophobicity and Durability. <i>Frontiers in Bioengineering and Biotechnology</i> , 2019, 7, 332.	4.1	18
60	OBP fused with cell-penetrating peptides promotes liposomal transduction. <i>Colloids and Surfaces B: Biointerfaces</i> , 2018, 161, 645-653.	5.0	17
61	Enzymatic polymerization of catechol under high-pressure homogenization for the green coloration of textiles. <i>Journal of Cleaner Production</i> , 2018, 202, 792-798.	9.3	17
62	Enzymatic synthesis of poly(catechin)-antibiotic conjugates: an antimicrobial approach for indwelling catheters. <i>Applied Microbiology and Biotechnology</i> , 2015, 99, 637-651.	3.6	16
63	Ultrasound-assisted biosynthesis of novel methotrexate-conjugates. <i>Ultrasonics Sonochemistry</i> , 2018, 48, 51-56.	8.2	16
64	Release of Fragrances from Cotton Functionalized with Carbohydrate-Binding Module Proteins. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 28499-28506.	8.0	16
65	Bamboo fibre processing: insights into hemicellulase and cellulase substrate accessibility. <i>Biocatalysis and Biotransformation</i> , 2012, 30, 27-37.	2.0	15
66	Can Laccase-Assisted Processing Conditions Influence the Structure of the Reaction Products?. <i>Trends in Biotechnology</i> , 2019, 37, 683-686.	9.3	15
67	Improvement of bacterial cellulose nonwoven fabrics by physical entrapment of lauryl gallate oligomers. <i>Textile Research Journal</i> , 2020, 90, 166-178.	2.2	15
68	A novel xylanase from <i>Streptomyces</i> sp. FA1: Purification, characterization, identification, and heterologous expression. <i>Biotechnology and Bioprocess Engineering</i> , 2014, 19, 8-17.	2.6	14
69	Preliminary research on bamboo degumming with xylanase. <i>Biocatalysis and Biotransformation</i> , 2008, 26, 450-454.	2.0	13
70	Inhibition of Escherichia Virus MS2, Surrogate of SARS-CoV-2, via Essential Oils-Loaded Electrospun Fibrous Mats: Increasing the Multifunctionality of Antivirus Protection Masks. <i>Pharmaceutics</i> , 2022, 14, 303.	4.5	13
71	Attaching Different Kinds of Proteinaceous Nanospheres to a Variety of Fabrics Using Ultrasound Radiation. <i>Israel Journal of Chemistry</i> , 2010, 50, 524-529.	2.3	12
72	Laccase coating of catheters with poly(catechin) for biofilm reduction. <i>Biocatalysis and Biotransformation</i> , 2014, 32, 2-12.	2.0	12

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73	Stabilization of enzymes in micro-emulsions for ultrasound processes. Biochemical Engineering Journal, 2015, 93, 115-118.	3.6	12
74	Jute hydrophobization via laccase-catalyzed grafting of fluorophenol and fluoroamine. RSC Advances, 2016, 6, 90427-90434.	3.6	12
75	En-situ lipase-catalyzed cotton coating with polyesters from ethylene glycol and glycerol. Process Biochemistry, 2018, 66, 82-88.	3.7	12
76	Absence of Albumin Improves <i>in Vitro</i> Cellular Uptake and Disruption of Poloxamer 407-Based Nanoparticles inside Cancer Cells. Molecular Pharmaceutics, 2018, 15, 527-535.	4.6	12
77	Ultrasound-assisted extraction of hemicellulose and phenolic compounds from bamboo bast fiber powder. PLoS ONE, 2018, 13, e0197537.	2.5	12
78	Fusion proteins with chromogenic and keratin binding modules. Scientific Reports, 2019, 9, 14044.	3.3	12
79	Coloured and low conductive fabrics by in situ laccase-catalysed polymerization. Process Biochemistry, 2019, 77, 77-84.	3.7	12
80	Poloxamer 407 based-nanoparticles for controlled release of methotrexate. International Journal of Pharmaceutics, 2020, 575, 118924.	5.2	12
81	Biotechnological applications of mammalian odorant-binding proteins. Critical Reviews in Biotechnology, 2021, 41, 441-455.	9.0	12
82	A nanoporous Three-dimensional graphene aerogel doped with a carbon quantum Dot-TiO ₂ composite that exhibits superior activity for the catalytic photodegradation of organic pollutants. Applied Surface Science, 2021, 569, 151116.	6.1	12
83	Catalytic Activation of Esterases by PEGylation for Polyester Synthesis. ChemCatChem, 2019, 11, 2490-2499.	3.7	11
84	Changes in the bacterial community structure and diversity during bamboo retting. Biotechnology Journal, 2011, 6, 1262-1271.	3.5	10
85	Growth of photoluminescent Ag ₂ Se nanowires from a simple precursor solution. CrystEngComm, 2014, 16, 10534-10538.	2.6	10
86	Quantum dots-hyperbranched polyether hybrid nanospheres towards delivery and real-time detection of nitric oxide. Materials Science and Engineering C, 2014, 45, 37-44.	7.3	10
87	Carboxymethyl Cellulose (CMC) as a Template for Laccase-Assisted Oxidation of Aniline. Frontiers in Bioengineering and Biotechnology, 2020, 8, 438.	4.1	10
88	Enzymatic hydrolysis and modification of core polymer fibres for textile and other applications. , 2010, , 77-97.		9
89	Antimicrobial activity and mechanism of PLA/TP composite nanofibrous films. Journal of the Textile Institute, 2014, 105, 196-202.	1.9	9
90	Polymers from Bamboo Extracts Produced by Laccase. Polymers, 2018, 10, 1141.	4.5	9

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91	Eco-friendly and Durable Antibacterial Cotton Fabrics Prepared with Polysulfopropylbetaine. <i>Fibers and Polymers</i> , 2018, 19, 1228-1236.	2.1	9
92	Effect of Additives on the in situ Laccase-Catalyzed Polymerization of Aniline Onto Bacterial Cellulose. <i>Frontiers in Bioengineering and Biotechnology</i> , 2019, 7, 264.	4.1	9
93	Production of conductive bacterial cellulose-polyaniline membranes in the presence of metal salts. <i>Textile Research Journal</i> , 2020, 90, 1517-1526.	2.2	9
94	Enzymatic biofinishes for synthetic textiles. , 2015, , 153-191.		8
95	A biologically active delivery material with dried-rehydrated vesicles containing the anti-inflammatory diclofenac for potential wound healing. <i>Journal of Liposome Research</i> , 2016, 26, 269-275.	3.3	8
96	Enzymatic coating of cotton with poly (ethylene glutarate). <i>Process Biochemistry</i> , 2017, 59, 91-96.	3.7	8
97	Two Engineered OBPs with opposite temperature-dependent affinities towards 1-aminoanthracene. <i>Scientific Reports</i> , 2018, 8, 14844.	3.3	8
98	Carbon Dotâ€Doped Titanium Dioxide Sheets for the Efficient Photocatalytic Performance of Refractory Pollutants. <i>Frontiers in Chemistry</i> , 2021, 9, 706343.	3.6	8
99	Eco-friendly approach for preparation of hybrid silica aerogel via freeze drying method. <i>Journal of Materials Science</i> , 2022, 57, 7491-7502.	3.7	8
100	Crystallin Fusion Proteins Improve the Thermal Properties of Hair. <i>Frontiers in Bioengineering and Biotechnology</i> , 2019, 7, 298.	4.1	7
101	Grafting of Poly(tyrosine) by Laccase Improves the Tensile Strength and Anti-shrinkage of Wool. <i>Journal of Natural Fibers</i> , 2022, 19, 10979-10991.	3.1	7
102	Molecular recognition of esterase plays a major role on the removal of fatty soils during detergency. <i>Journal of Biotechnology</i> , 2012, 161, 228-234.	3.8	6
103	Cutinase promotes dry esterification of cotton cellulose. <i>Biotechnology Progress</i> , 2016, 32, 60-65.	2.6	6
104	Proteinâ€based nanoformulations for Î±â€tocopherol encapsulation. <i>Engineering in Life Sciences</i> , 2017, 17, 523-527.	3.6	6
105	PTS micelles for the delivery of hydrophobic methotrexate. <i>International Journal of Pharmaceutics</i> , 2019, 566, 282-290.	5.2	6
106	Oil-based cyclo-oligosaccharide nanodevices for drug encapsulation. <i>Colloids and Surfaces B: Biointerfaces</i> , 2017, 159, 259-267.	5.0	5
107	1-Aminoanthracene Transduction into Liposomes Driven by Odorant-Binding Protein Proximity. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 27531-27539.	8.0	5
108	The development of vocabulary and grammar: a longitudinal study of European Portuguese-speaking toddlers. <i>Journal of Child Language</i> , 2019, 46, 653-681.	1.2	5

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109	Established an eco-friendly cotton fabric treating process with enhancing anti-wrinkle performance. Journal of Engineered Fibers and Fabrics, 2021, 16, 155892502110034.	1.0	5
110	Chemical modification of lipases: A powerful tool for activity improvement. Biotechnology Journal, 2022, 17, e2100523.	3.5	5
111	Strategies for the synthesis of fluorinated polyesters. RSC Advances, 2019, 9, 1799-1806.	3.6	4
112	Î±-Chymotrypsin catalyses the synthesis of methotrexate oligomers. Process Biochemistry, 2020, 98, 193-201.	3.7	4
113	The Structural Properties of Odorants Modulate Their Association to Human Odorant Binding Protein. Biomolecules, 2021, 11, 145.	4.0	4
114	Chemically Modified Lipase from <i>Thermomyces lanuginosus</i> with Enhanced Esterification and Transesterification Activities. ChemCatChem, 2021, 13, 4524-4531.	3.7	4
115	Electrospinning of polyacrylonitrile nanofibers using strain-hardening spinning solutions. Fibers and Polymers, 2014, 15, 2441-2445.	2.1	3
116	Xylanase and cellulase aided bioprocessing of bamboo. Engineering in Life Sciences, 2015, 15, 605-611.	3.6	3
117	Enzyme stabilization for biotechnological applications. , 2019, , 107-131.		3
118	Insight into the in-situ solvent-free lipase-catalyzed coating on cotton with polyesters. Process Biochemistry, 2021, 102, 82-91.	3.7	3
119	Changing the shape of wool yarns via laccase-mediated grafting of tyrosine. Journal of Biotechnology, 2021, 339, 73-80.	3.8	3
120	Assessment of a Protease Inhibitor Peptide for Anti-Ageing. Protein and Peptide Letters, 2015, 22, 1041-1049.	0.9	3
121	Solvents Regulation and Thermodynamic Control the Morphologies of Cu ₂ O Nanocrystals. Integrated Ferroelectrics, 2015, 162, 77-84.	0.7	2
122	Biosynthesis of polyesters and their application on cellulosic fibers. , 2019, , 49-75.		2
123	Î±-Chymotrypsin catalysed oligopeptide synthesis for hair modelling. Journal of Cleaner Production, 2019, 237, 117743.	9.3	2
124	Color matching of vortex spun yarn and ring spun yarn by the composition of dope-dyed fiber. Journal of the Textile Institute, 2020, 111, 172-177.	1.9	2
125	The comfort properties of cosmeo-textiles functionalized with protein-based nanoemulsions encapsulating Vitamin-E. Journal of Natural Fibers, 0, , 1-13.	3.1	2
126	Study on Gathering-and-twisting Mechanism of Fibers and CMC-Na/PAM/PVA Solution Optimization for Enhancing Cotton Yarn Performance by Adhesive-aided Ring Spinning. Fibers and Polymers, 2021, 22, 3490-3500.	2.1	2

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127	Evaluation of bamboo water-retting for fiber bundle extraction. Textile Research Journal, 2022, 92, 3289-3298.	2.2	2
128	Hybrid aerogel composites reinforced with aramid fiber fabric for thermal protection. Journal of Sol-Gel Science and Technology, 2022, 103, 416-424.	2.4	2
129	Decolourization of paprika dye effluent with hydrogen peroxide produced by glucose oxidase. Biocatalysis and Biotransformation, 2012, 30, 255-259.	2.0	1
130	A Facile, Effective Synthesis of Excellent Fluorescent Carbon Dots with Optical Properties. ChemistrySelect, 2019, 4, 12762-12767.	1.5	1
131	Antimicrobial lubricant formulations containing poly(hydroxybenzene)-trimethoprim conjugates synthesized by tyrosinase. Applied Microbiology and Biotechnology, 2015, 99, 4225-4235.	3.6	0
132	Analysis of Adhesion Effect of Solution on Cotton Fibers in Adhesive-aided Ring Spinning. Fibers and Polymers, 2021, 22, 2323-2332.	2.1	0
133	Hair Styling Based on Eutectic Formulations with Peptides. ACS Sustainable Chemistry and Engineering, 0, , .	6.7	0