

# Carla Silva

## List of Publications by Year in descending order

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133  
papers

3,007  
citations

201385

27  
h-index

223531

46  
g-index

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. <i>Journal of Biotechnology</i> , 2007, 128, 849-857.	1.9	161
2	Practical insights on enzyme stabilization. <i>Critical Reviews in Biotechnology</i> , 2018, 38, 335-350.	5.1	152
3	Laccase: a green catalyst for the biosynthesis of poly-phenols. <i>Critical Reviews in Biotechnology</i> , 2018, 38, 294-307.	5.1	134
4	Engineered <i>Thermobifida fusca</i> cutinase with increased activity on polyester substrates. <i>Biotechnology Journal</i> , 2011, 6, 1230-1239.	1.8	127
5	Polymerization of liginosulfonates by the laccase-HBT (1-hydroxybenzotriazole) system improves dispersibility. <i>Bioresource Technology</i> , 2010, 101, 5054-5062.	4.8	112
6	Cutinase?A new tool for biomodification of synthetic fibers. <i>Journal of Polymer Science Part A</i> , 2005, 43, 2448-2450.	2.5	106
7	Laccase immobilization on bacterial nanocellulose membranes: Antimicrobial, kinetic and stability properties. <i>Carbohydrate Polymers</i> , 2016, 145, 1-12.	5.1	90
8	Laccase immobilization on enzymatically functionalized polyamide 6,6 fibres. <i>Enzyme and Microbial Technology</i> , 2007, 41, 867-875.	1.6	76
9	Microbial lipids and added value metabolites production by <i>Yarrowia lipolytica</i> from pork lard. <i>Journal of Biotechnology</i> , 2018, 265, 76-85.	1.9	75
10	Antimicrobial and antioxidant linen via laccase-assisted grafting. <i>Reactive and Functional Polymers</i> , 2011, 71, 713-720.	2.0	66
11	Influence of mechanical agitation on cutinases and protease activity towards polyamide substrates. <i>Enzyme and Microbial Technology</i> , 2007, 40, 1678-1685.	1.6	56
12	Ultrasound enhanced laccase applications. <i>Green Chemistry</i> , 2015, 17, 1362-1374.	4.6	52
13	Protective Effect of Saccharides on Freeze-Dried Liposomes Encapsulating Drugs. <i>Frontiers in Bioengineering and Biotechnology</i> , 2019, 7, 424.	2.0	45
14	Polyoxometalate/laccase-mediated oxidative polymerization of catechol for textile dyeing. <i>Applied Microbiology and Biotechnology</i> , 2011, 89, 981-987.	1.7	44
15	Ultrasonic pilot-scale reactor for enzymatic bleaching of cotton fabrics. <i>Ultrasonics Sonochemistry</i> , 2014, 21, 1535-1543.	3.8	38
16	Evaluation of drug release property and blood compatibility of aspirin-loaded electrospun PLA/RSF composite nanofibers. <i>Iranian Polymer Journal (English Edition)</i> , 2013, 22, 729-737.	1.3	37
17	Enzymatic processing of protein-based fibers. <i>Applied Microbiology and Biotechnology</i> , 2015, 99, 10387-10397.	1.7	37
18	Monitoring biotransformations in polyamide fibres. <i>Biocatalysis and Biotransformation</i> , 2004, 22, 357-360.	1.1	35

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19	Proteolytic Enzyme Engineering: A Tool for Wool. <i>Biomacromolecules</i> , 2009, 10, 1655-1661.	2.6	34
20	Antioxidant cosmetotextiles: Cotton coating with nanoparticles containing vitamin E. <i>Process Biochemistry</i> , 2017, 59, 46-51.	1.8	34
21	Characterisation of enzymatically oxidised lignosulfonates and their application on lignocellulosic fabrics. <i>Polymer International</i> , 2009, 58, 863-868.	1.6	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.	2.5	32
23	Sonochemical and hydrodynamic cavitation reactors for laccase/hydrogen peroxide cotton bleaching. <i>Ultrasonics Sonochemistry</i> , 2014, 21, 774-781.	3.8	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.	1.1	31
25	Enzymatic colouration with laccase and peroxidases: Recent progress. <i>Biocatalysis and Biotransformation</i> , 2012, 30, 125-140.	1.1	30
26	Bio-processing of bamboo fibres for textile applications: a mini review. <i>Biocatalysis and Biotransformation</i> , 2012, 30, 141-153.	1.1	29
27	Lipase-ultrasound assisted synthesis of polyesters. <i>Ultrasonics Sonochemistry</i> , 2017, 38, 496-502.	3.8	29
28	Light driven PVDF fibers based on photochromic nanosilica@naphthopyran fabricated by wet spinning. <i>Applied Surface Science</i> , 2019, 470, 951-958.	3.1	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.	2.5	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.	2.0	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.	2.0	26
32	Odorant binding proteins: a biotechnological tool for odour control. <i>Applied Microbiology and Biotechnology</i> , 2014, 98, 3629-3638.	1.7	26
33	Bio-coloration of bacterial cellulose assisted by immobilized laccase. <i>AMB Express</i> , 2018, 8, 19.	1.4	26
34	High-Efficiency Wastewater Purification System Based on Coupled Photoelectric Catalytic Action Provided by Triboelectric Nanogenerator. <i>Nano-Micro Letters</i> , 2021, 13, 194.	14.4	26
35	In situ laccase-assisted overdyeing of denim using flavonoids. <i>Biotechnology Journal</i> , 2011, 6, 1272-1279.	1.8	24
36	Silk-Based Antimicrobial Polymers as a New Platform to Design Drug-Free Materials to Impede Microbial Infections. <i>Macromolecular Bioscience</i> , 2018, 18, e1800262.	2.1	24

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37	Photochromic polypropylene fibers based on UV-responsive silica@phosphomolybdate nanoparticles through melt spinning technology. <i>Chemical Engineering Journal</i> , 2018, 350, 856-866.	6.6	24
38	Tunable nano-carriers from clicked glycosaminoglycan block copolymers. <i>Journal of Materials Chemistry B</i> , 2014, 2, 4177-4184.	2.9	23
39	The effect of high-energy environments on the structure of laccase-polymerized poly(catechol). <i>Ultrasonics Sonochemistry</i> , 2018, 48, 275-280.	3.8	23
40	Design of Novel BSA/Hyaluronic Acid Nanodispersions for Transdermal Pharma Purposes. <i>Molecular Pharmaceutics</i> , 2014, 11, 1479-1488.	2.3	22
41	Ultrasound-assisted lipase catalyzed hydrolysis of aspirin methyl ester. <i>Ultrasonics Sonochemistry</i> , 2018, 40, 587-593.	3.8	22
42	Zein impart hydrophobic and antimicrobial properties to cotton textiles. <i>Reactive and Functional Polymers</i> , 2020, 154, 104664.	2.0	22
43	Ultrasound-assisted swelling of bacterial cellulose. <i>Engineering in Life Sciences</i> , 2017, 17, 1108-1117.	2.0	21
44	Design of protein delivery systems by mimicking extracellular mechanisms for protection of growth factors. <i>Acta Biomaterialia</i> , 2017, 63, 283-293.	4.1	21
45	Ultrasound-Assisted Encapsulation of Sacha Inchi ( <i>Plukenetia volubilis</i> Linneo.) Oil in Alginate-Chitosan Nanoparticles. <i>Polymers</i> , 2019, 11, 1245.	2.0	21
46	Biotransformations in synthetic fibres. <i>Biocatalysis and Biotransformation</i> , 2008, 26, 350-356.	1.1	20
47	PEGylation Greatly Enhances Laccase Polymerase Activity. <i>ChemCatChem</i> , 2017, 9, 3888-3894.	1.8	20
48	Green Extraction of Cork Bioactive Compounds Using Natural Deep Eutectic Mixtures. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 7974-7989.	3.2	20
49	Following the enzymatic digestion of chondroitin sulfate by a simple GPC analysis. <i>Analytica Chimica Acta</i> , 2015, 885, 207-213.	2.6	19
50	The electromagnetic interference shielding performance of continuous carbon fiber composites with different arrangements. <i>Journal of Industrial Textiles</i> , 2016, 46, 45-58.	1.1	19
51	Conductive Cotton by In Situ Laccase-Polymerization of Aniline. <i>Polymers</i> , 2018, 10, 1023.	2.0	19
52	Exploring PEGylated and immobilized laccases for catechol polymerization. <i>AMB Express</i> , 2018, 8, 134.	1.4	19
53	Keratin-based particles for protection and restoration of hair properties. <i>International Journal of Cosmetic Science</i> , 2018, 40, 408-419.	1.2	19
54	Substrate hydrophobicity and enzyme modifiers play a major role in the activity of lipase from <i>Thermomyces lanuginosus</i> . <i>Catalysis Science and Technology</i> , 2020, 10, 5913-5924.	2.1	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.	2.4	19
56	Protein Formulations for Emulsions and Solid-in-Oil Dispersions. <i>Trends in Biotechnology</i> , 2016, 34, 496-505.	4.9	18
57	Hydrophobic functionalization of jute fabrics by enzymatic-assisted grafting of vinyl copolymers. <i>New Journal of Chemistry</i> , 2017, 41, 3773-3780.	1.4	18
58	Conductive bacterial cellulose by in situ laccase polymerization of aniline. <i>PLoS ONE</i> , 2019, 14, e0214546.	1.1	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.	2.0	18
60	OBP fused with cell-penetrating peptides promotes liposomal transduction. <i>Colloids and Surfaces B: Biointerfaces</i> , 2018, 161, 645-653.	2.5	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.	4.6	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.	1.7	16
63	Ultrasound-assisted biosynthesis of novel methotrexate-conjugates. <i>Ultrasonics Sonochemistry</i> , 2018, 48, 51-56.	3.8	16
64	Release of Fragrances from Cotton Functionalized with Carbohydrate-Binding Module Proteins. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 28499-28506.	4.0	16
65	Bamboo fibre processing: insights into hemicellulase and cellulase substrate accessibility. <i>Biocatalysis and Biotransformation</i> , 2012, 30, 27-37.	1.1	15
66	Can Laccase-Assisted Processing Conditions Influence the Structure of the Reaction Products?. <i>Trends in Biotechnology</i> , 2019, 37, 683-686.	4.9	15
67	Improvement of bacterial cellulose nonwoven fabrics by physical entrapment of lauryl gallate oligomers. <i>Textile Research Journal</i> , 2020, 90, 166-178.	1.1	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.	1.4	14
69	Preliminary research on bamboo degumming with xylanase. <i>Biocatalysis and Biotransformation</i> , 2008, 26, 450-454.	1.1	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.	2.0	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.	1.0	12
72	Laccase coating of catheters with poly(catechin) for biofilm reduction. <i>Biocatalysis and Biotransformation</i> , 2014, 32, 2-12.	1.1	12

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73	Stabilization of enzymes in micro-emulsions for ultrasound processes. <i>Biochemical Engineering Journal</i> , 2015, 93, 115-118.	1.8	12
74	Jute hydrophobization via laccase-catalyzed grafting of fluorophenol and fluoroamine. <i>RSC Advances</i> , 2016, 6, 90427-90434.	1.7	12
75	In-situ lipase-catalyzed cotton coating with polyesters from ethylene glycol and glycerol. <i>Process Biochemistry</i> , 2018, 66, 82-88.	1.8	12
76	Absence of Albumin Improves <i>in Vitro</i> Cellular Uptake and Disruption of Poloxamer 407-Based Nanoparticles inside Cancer Cells. <i>Molecular Pharmaceutics</i> , 2018, 15, 527-535.	2.3	12
77	Ultrasound-assisted extraction of hemicellulose and phenolic compounds from bamboo bast fiber powder. <i>PLoS ONE</i> , 2018, 13, e0197537.	1.1	12
78	Fusion proteins with chromogenic and keratin binding modules. <i>Scientific Reports</i> , 2019, 9, 14044.	1.6	12
79	Coloured and low conductive fabrics by in situ laccase-catalysed polymerization. <i>Process Biochemistry</i> , 2019, 77, 77-84.	1.8	12
80	Poloxamer 407 based-nanoparticles for controlled release of methotrexate. <i>International Journal of Pharmaceutics</i> , 2020, 575, 118924.	2.6	12
81	Biotechnological applications of mammalian odorant-binding proteins. <i>Critical Reviews in Biotechnology</i> , 2021, 41, 441-455.	5.1	12
82	A nanoporous Three-dimensional graphene aerogel doped with a carbon quantum Dot-TiO <sub>2</sub> composite that exhibits superior activity for the catalytic photodegradation of organic pollutants. <i>Applied Surface Science</i> , 2021, 569, 151116.	3.1	12
83	Catalytic Activation of Esterases by PEGylation for Polyester Synthesis. <i>ChemCatChem</i> , 2019, 11, 2490-2499.	1.8	11
84	Changes in the bacterial community structure and diversity during bamboo retting. <i>Biotechnology Journal</i> , 2011, 6, 1262-1271.	1.8	10
85	Growth of photoluminescent Ag <sub>2</sub> Se nanowires from a simple precursor solution. <i>CrystEngComm</i> , 2014, 16, 10534-10538.	1.3	10
86	Quantum dots-hyperbranched polyether hybrid nanospheres towards delivery and real-time detection of nitric oxide. <i>Materials Science and Engineering C</i> , 2014, 45, 37-44.	3.8	10
87	Carboxymethyl Cellulose (CMC) as a Template for Laccase-Assisted Oxidation of Aniline. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 438.	2.0	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. <i>Journal of the Textile Institute</i> , 2014, 105, 196-202.	1.0	9
90	Polymers from Bamboo Extracts Produced by Laccase. <i>Polymers</i> , 2018, 10, 1141.	2.0	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.	1.1	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.	2.0	9
93	Production of conductive bacterial cellulose-polyaniline membranes in the presence of metal salts. <i>Textile Reseach Journal</i> , 2020, 90, 1517-1526.	1.1	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.	1.5	8
96	Enzymatic coating of cotton with poly (ethylene glutarate). <i>Process Biochemistry</i> , 2017, 59, 91-96.	1.8	8
97	Two Engineered OBPs with opposite temperature-dependent affinities towards 1-aminoanthracene. <i>Scientific Reports</i> , 2018, 8, 14844.	1.6	8
98	Carbon Dotâ€“Doped Titanium Dioxide Sheets for the Efficient Photocatalytic Performance of Refractory Pollutants. <i>Frontiers in Chemistry</i> , 2021, 9, 706343.	1.8	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.	1.7	8
100	Crystallin Fusion Proteins Improve the Thermal Properties of Hair. <i>Frontiers in Bioengineering and Biotechnology</i> , 2019, 7, 298.	2.0	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.	1.7	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.	1.9	6
103	Cutinase promotes dry esterification of cotton cellulose. <i>Biotechnology Progress</i> , 2016, 32, 60-65.	1.3	6
104	Proteinâ€“based nanoformulations for Î±â€“tocopherol encapsulation. <i>Engineering in Life Sciences</i> , 2017, 17, 523-527.	2.0	6
105	PTS micelles for the delivery of hydrophobic methotrexate. <i>International Journal of Pharmaceutics</i> , 2019, 566, 282-290.	2.6	6
106	Oil-based cyclo-oligosaccharide nanodevices for drug encapsulation. <i>Colloids and Surfaces B: Biointerfaces</i> , 2017, 159, 259-267.	2.5	5
107	1-Aminoanthracene Transduction into Liposomes Driven by Odorant-Binding Protein Proximity. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 27531-27539.	4.0	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.	0.8	5

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109	Established an eco-friendly cotton fabric treating process with enhancing anti-wrinkle performance. <i>Journal of Engineered Fibers and Fabrics</i> , 2021, 16, 155892502110034.	0.5	5
110	Chemical modification of lipases: A powerful tool for activity improvement. <i>Biotechnology Journal</i> , 2022, 17, e2100523.	1.8	5
111	Strategies for the synthesis of fluorinated polyesters. <i>RSC Advances</i> , 2019, 9, 1799-1806.	1.7	4
112	Î±-Chymotrypsin catalyses the synthesis of methotrexate oligomers. <i>Process Biochemistry</i> , 2020, 98, 193-201.	1.8	4
113	The Structural Properties of Odorants Modulate Their Association to Human Odorant Binding Protein. <i>Biomolecules</i> , 2021, 11, 145.	1.8	4
114	Chemically Modified Lipase from <i>Thermomyces lanuginosus</i> with Enhanced Esterification and Transesterification Activities. <i>ChemCatChem</i> , 2021, 13, 4524-4531.	1.8	4
115	Electrospinning of polyacrylonitrile nanofibers using strain-hardening spinning solutions. <i>Fibers and Polymers</i> , 2014, 15, 2441-2445.	1.1	3
116	Xylanase and cellulase aided bioprocessing of bamboo. <i>Engineering in Life Sciences</i> , 2015, 15, 605-611.	2.0	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. <i>Process Biochemistry</i> , 2021, 102, 82-91.	1.8	3
119	Changing the shape of wool yarns via laccase-mediated grafting of tyrosine. <i>Journal of Biotechnology</i> , 2021, 339, 73-80.	1.9	3
120	Assessment of a Protease Inhibitor Peptide for Anti-Ageing. <i>Protein and Peptide Letters</i> , 2015, 22, 1041-1049.	0.4	3
121	Solvents Regulation and Thermodynamic Control the Morphologies of Cu <sub>2</sub> O Nanocrystals. <i>Integrated Ferroelectrics</i> , 2015, 162, 77-84.	0.3	2
122	Biosynthesis of polyesters and their application on cellulosic fibers. , 2019, , 49-75.		2
123	Î±-Chymotrypsin catalysed oligopeptide synthesis for hair modelling. <i>Journal of Cleaner Production</i> , 2019, 237, 117743.	4.6	2
124	Color matching of vortex spun yarn and ring spun yarn by the composition of dope-dyed fiber. <i>Journal of the Textile Institute</i> , 2020, 111, 172-177.	1.0	2
125	The comfort properties of cosmeo-textiles functionalized with protein-based nanoemulsions encapsulating Vitamin-E. <i>Journal of Natural Fibers</i> , 0, , 1-13.	1.7	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. <i>Fibers and Polymers</i> , 2021, 22, 3490-3500.	1.1	2



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127	Evaluation of bamboo water-retting for fiber bundle extraction. <i>Textile Reseach Journal</i> , 2022, 92, 3289-3298.	1.1	2
128	Hybrid aerogel composites reinforced with aramid fiber fabric for thermal protection. <i>Journal of Sol-Gel Science and Technology</i> , 2022, 103, 416-424.	1.1	2
129	Decolourization of paprika dye effluent with hydrogen peroxide produced by glucose oxidase. <i>Biocatalysis and Biotransformation</i> , 2012, 30, 255-259.	1.1	1
130	A Facile, Effective Synthesis of Excellent Fluorescent Carbon Dots with Optical Properties. <i>ChemistrySelect</i> , 2019, 4, 12762-12767.	0.7	1
131	Antimicrobial lubricant formulations containing poly(hydroxybenzene)-trimethoprim conjugates synthesized by tyrosinase. <i>Applied Microbiology and Biotechnology</i> , 2015, 99, 4225-4235.	1.7	0
132	Analysis of Adhesion Effect of Solution on Cotton Fibers in Adhesive-aided Ring Spinning. <i>Fibers and Polymers</i> , 2021, 22, 2323-2332.	1.1	0
133	Hair Styling Based on Eutectic Formulations with Peptides. <i>ACS Sustainable Chemistry and Engineering</i> , 0, , .	3.2	0