Lorena Wilson

List of Publications by Year
in descending order

86	2,822	165694	182759
papers	citations	29 h-index	51 g-index

90	90	90	2576
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Oneâ€pot Heterogeneous Biocatalysis under Thermal Decay for Fructose Production from Lactose using Coâ€immobilized Enzymes: Modeling and Simulation. ChemCatChem, 2024, 16, .	3.8	0
2	Oneâ€pot Heterogeneous Biocatalysis under Thermal Decay for Fructose Production from Lactose using Coâ€immobilized Enzymes: Modeling and Simulation. ChemCatChem, 2024, 16, .	3.8	0
3	Amination of naringinase to improve citrus juice debittering using a catalyst immobilized on glyoxyl-agarose. Food Chemistry, 2024, 452, 139600.	8.4	0
4	Enzymatic Synthesis of Ascorbyl Palmitate in a Rotating Bed Reactor. Molecules, 2023, 28, 644.	3.9	6
5	Co-immobilized carrier-free enzymes for lactose upgrading. Current Opinion in Green and Sustainable Chemistry, 2022, 33, 100553.	6.3	9
6	Enzyme Biocatalysis and Sustainability. , 2021, , 383-413.		5
7	ZnO Materials as Effective Anodes for the Photoelectrochemical Regeneration of Enzymatically Active NAD⁺. ACS Applied Materials & Interfaces, 2021, 13, 10719-10727.	8.3	11
8	Encapsulation of Combi-CLEAs of Glycosidases in Alginate Beads and Polyvinyl Alcohol for Wine Aroma Enhancement. Catalysts, 2021, 11, 866.	3.6	5
9	Development of a Hybrid Bioinorganic Nanobiocatalyst: Remarkable Impact of the Immobilization Conditions on Activity and Stability of Î²-Galactosidase. Molecules, 2021, 26, 4152.	3.9	5
10	Catalyst Replacement Policy on Multienzymatic Systems: Theoretical Study in the One-Pot Sequential Batch Production of Lactofructose Syrup. Catalysts, 2021, 11, 1167.	3.6	4
11	Entrapment of enzyme aggregates in chitosan beads for aroma release in white wines. International Journal of Biological Macromolecules, 2020, 154, 1082-1090.	7.7	38
12	Biocatalysis in the winemaking industry: Challenges and opportunities for immobilized enzymes. Comprehensive Reviews in Food Science and Food Safety, 2020, 19, 595-621.	12.2	40
13	Parameters for the Evaluation of Immobilized Enzymes Under Process Conditions. Methods in Molecular Biology, 2020, 2100, 65-81.	0.0	16
14	Synthesis with Immobilized Lipases and Downstream Processing of Ascorbyl Palmitate. Molecules, 2019, 24, 3227.	3.9	23
15	Design of combined crosslinked enzyme aggregates (combi-CLEAs) of Î²-galactosidase and glucose isomerase for the one-pot production of fructose syrup from lactose. Food Chemistry, 2019, 288, 102-107.	8.4	40
16	Use of chitosan heterofunctionality for enzyme immobilization: Î²-galactosidase immobilization for galacto-oligosaccharide synthesis. International Journal of Biological Macromolecules, 2018, 116, 182-193.	7.7	66
17	Selective and eco-friendly synthesis of lipoaminoacid-based surfactants for food, using immobilized lipase and protease biocatalysts. Food Chemistry, 2018, 239, 189-195.	8.4	50
18	Enhanced long-chain fatty alcohol oxidation by immobilization of alcohol dehydrogenase from S. cerevisiae. Applied Microbiology and Biotechnology, 2018, 102, 237-247.	3.7	16

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19	Bio-inspired silica lipase nanobiocatalysts for the synthesis of fatty acid methyl esters. Process Biochemistry, 2018, 74, 86-93.	3.8	25
20	Co-immobilized Î²-galactosidase and Saccharomyces cerevisiae cells for the simultaneous synthesis and purification of galacto-oligosaccharides. Enzyme and Microbial Technology, 2018, 118, 102-108.	3.3	15
21	Chapter 16. Technical Biocatalysis. RSC Catalysis Series, 2018, , 473-515.	0.0	2
22	Synthesis of butyl-Î²- d -galactoside with commercial Î²-galactosidases. Food and Bioproducts Processing, 2017, 103, 66-75.	3.7	11
23	Synthesis of propyl-Î²-d-galactoside with free and immobilized Î²-galactosidase from Aspergillus oryzae. Process Biochemistry, 2017, 53, 162-171.	3.8	14
24	Effect of enzyme load and catalyst particle size on the diffusional restrictions in reactions of synthesis and hydrolysis catalyzed by Î±-chymotrypsin immobilized into glyoxal-agarose. Process Biochemistry, 2017, 53, 172-179.	3.8	24
25	Mathematical determination of kinetic parameters for assessing the effect of theÂorganic solvent on the selectivity of peptide synthesis with immobilized Î±-chymotrypsin. Journal of Bioscience and Bioengineering, 2017, 124, 618-622.	2.2	2
26	Optimization of reaction conditions and the donor substrate in the synthesis of hexyl-Î²- d -galactoside. Process Biochemistry, 2017, 58, 128-136.	3.8	12
27	Aroma Release in Wine Using Co-Immobilized Enzyme Aggregates. Molecules, 2016, 21, 1485.	3.9	27
28	In situ immobilization of Î²â€galactosidase from Bacillus circulans in silica by solâ€gel process: Application in prebiotic synthesis. Engineering in Life Sciences, 2016, 16, 396-404.	4.0	14
29	Synthesis of the kyotorphin precursor benzoyl-L-tyrosine-L-argininamide with immobilized Î±-chymotrypsin in sequential batch with enzyme reactivation. Biotechnology Progress, 2016, 32, 54-59.	2.6	5
30	Simultaneous synthesis and purification (SSP) of galacto-oligosaccharides in batch operation. LWT - Food Science and Technology, 2016, 72, 81-89.	5.3	16
31	Immobilization of Alcaligenes sp. lipase as catalyst for the transesterification of vegetable oils to produce biodiesel. Catalysis Today, 2016, 259, 177-182.	4.9	26
32	Asymmetric hydrolysis of dimethyl-3-phenylglutarate in sequential batch reactor operation catalyzed by immobilized Geobacillus thermocatenulatus lipase. Catalysis Today, 2015, 255, 21-26.	4.9	34
33	Improvement of Efficiency in the Enzymatic Synthesis of Lactulose Palmitate. Journal of Agricultural and Food Chemistry, 2015, 63, 3716-3724.	5.3	39
34	Production of combi-CLEAs of glycosidases utilized for aroma enhancement in wine. Food and Bioproducts Processing, 2015, 94, 555-560.	3.7	28
35	Heterofunctional Hydrophilicâ€“Hydrophobic Porous Silica as Support for Multipoint Covalent Immobilization of Lipases: Application to Lactulose Palmitate Synthesis. Langmuir, 2014, 30, 3557-3566.	3.7	119
36	Synthesis of Ascorbyl Palmitate with Immobilized Lipase from Pseudomonas stutzeri. JAOCS, Journal of the American Oil Chemists' Society, 2014, 91, 405-410.	1.9	10

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37	Carbonaceousâ€“siliceous composite materials as immobilization support for lipase from Alcaligenes sp.: Application to the synthesis of antioxidants. Carbon, 2014, 74, 96-103.	10.7	12
38	Influence of chitosan derivatization on its physicochemical characteristics and its use as enzyme support. Journal of Applied Polymer Science, 2014, 131, .	2.7	17
39	Improvement of Chitosan Derivatization for the Immobilization of Bacillus circulans Î²-Galactosidase and Its Further Application in Galacto-oligosaccharide Synthesis. Journal of Agricultural and Food Chemistry, 2014, 62, 10126-10135.	5.3	27
40	Evaluation of kinetic parameters of immobilized penicillin G acylase subject to an inactivation and reactivation process. Journal of Molecular Catalysis B: Enzymatic, 2014, 104, 70-74.	1.7	7
41	Hierarchical meso-macroporous silica grafted with glyoxyl groups: opportunities for covalent immobilization of enzymes. New Biotechnology, 2013, 30, 500-506.	4.6	41
42	Detailed Analysis of Galactooligosaccharides Synthesis with Î²-Galactosidase from Aspergillus oryzae. Journal of Agricultural and Food Chemistry, 2013, 61, 1081-1087.	5.3	114
43	Enzyme Reactor Design and Operation under Ideal Conditions. , 2013, , 141-180.		0
44	Enzyme Kinetics in a Homogeneous System. , 2013, , 11-86.		0
45	Enzyme Kinetics in a Heterogeneous System. , 2013, , 87-140.		0
46	Facts and Figures in Enzyme Biocatalysis. , 2013, , 1-10.		0
47	Enzyme Reactor Design and Operation under Massâ€Transfer Limitations. , 2013, , 181-202.		2
48	Enzyme Reactor Design and Operation under Biocatalyst Inactivation. , 2013, , 203-242.		0
49	Optimization of Enzyme Reactor Operation. , 2013, , 243-276.		0
50	Effect of inactivation and reactivation conditions on activity recovery of enzyme catalysts. Electronic Journal of Biotechnology, 2013, 16, .	2.3	4
51	Comparative study of the enzymatic synthesis of cephalexin at high substrate concentration in aqueous and organic media using statistical model. Biotechnology and Bioprocess Engineering, 2012, 17, 711-721.	2.6	9
52	Recent trends in biocatalysis engineering. Bioresource Technology, 2012, 115, 48-57.	9.7	233
53	Reactivation of penicillin acylase biocatalysts: Effect of the intensity of enzymeâ€“support attachment and enzyme load. Journal of Molecular Catalysis B: Enzymatic, 2012, 74, 224-229.	1.7	36
54	Influence of different immobilization techniques for Candida cylindracea lipase on its stability and fish oil hydrolysis. Journal of Molecular Catalysis B: Enzymatic, 2012, 78, 111-118.	1.7	56

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55	Batch reactor performance for the enzymatic synthesis of cephalexin: influence of catalyst enzyme loading and particle size. New Biotechnology, 2012, 29, 218-226.	4.6	21
56	Reactivation of immobilized penicillin G acylase: Influence of cosolvents and catalytic modulators. Journal of Molecular Catalysis B: Enzymatic, 2011, 68, 77-82.	1.7	11
57	Effect of Internal Diffusional Restrictions on the Hydrolysis of Penicillin G: Reactor Performance and Specific Productivity of 6-APA with Immobilized Penicillin Acylase. Applied Biochemistry and Biotechnology, 2011, 165, 426-441.	3.0	15
58	Crossâ€Linking of Lipases Adsorbed on Hydrophobic Supports: Highly Selective Hydrolysis of Fish Oil Catalyzed by RML. JAOCS, Journal of the American Oil Chemists' Society, 2011, 88, 801-807.	1.9	48
59	Synthesis of galacto-oligosaccharides at very high lactose concentrations with immobilized Î²-galactosidases from Aspergillus oryzae. Process Biochemistry, 2011, 46, 245-252.	3.8	108
60	Evaluation of the incidence of diffusional restrictions on the enzymatic reactions of hydrolysis of penicillin G and synthesis of cephalexin. Enzyme and Microbial Technology, 2010, 47, 268-276.	3.3	28
61	Effect of particle size distribution on the simulation of immobilized enzyme reactor performance. Biochemical Engineering Journal, 2010, 49, 256-263.	3.8	21
62	Diffusional restrictions in glyoxyl-agarose immobilized penicillin G acylase of different particle size and protein loading. Electronic Journal of Biotechnology, 2010, 13, .	2.3	20
63	Simple strategy of reactivation of a partially inactivated penicillin g acylase biocatalyst in organic solvent and its impact on the synthesis of Î²â€lactam antibiotics. Biotechnology and Bioengineering, 2009, 103, 472-479.	3.5	21
64	Synthesis of Cephalexin in Aqueous Medium with Carrier-bound and Carrier-free Penicillin Acylase Biocatalysts. Applied Biochemistry and Biotechnology, 2009, 157, 98-110.	3.0	21
65	Effect of chain length on the activity of free and immobilized alcohol dehydrogenase towards aliphatic alcohols. Enzyme and Microbial Technology, 2009, 44, 135-138.	3.3	19
66	Effect of the degree of cross-linking on the properties of different CLEAs of penicillin acylase. Process Biochemistry, 2009, 44, 322-326.	3.8	39
67	Reactivation of covalently immobilized lipase from Thermomyces lanuginosus. Process Biochemistry, 2009, 44, 641-646.	3.8	37
68	Carrier-bound and carrier-free penicillin acylase biocatalysts for the thermodynamically controlled synthesis of Î²-lactam compounds in organic medium. Enzyme and Microbial Technology, 2008, 43, 442-447.	3.3	14
69	Study Cases of Enzymatic Processes. , 2008, , 253-378.		5
70	Homogeneous Enzyme Kinetics. , 2008, , 107-153.		12
71	Heterogeneous Enzyme Kinetics. , 2008, , 155-203.		14
72	Evaluation of different immobilization strategies to prepare an industrial biocatalyst of formate dehydrogenase from Candida boidinii. Enzyme and Microbial Technology, 2007, 40, 540-546.	3.3	65

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73	Synthesis of cephalexin with immobilized penicillin acylase at very high substrate concentrations in fully aqueous medium. Journal of Molecular Catalysis B: Enzymatic, 2007, 47, 72-78.	1.7	31
74	Improvement of the stability of alcohol dehydrogenase by covalent immobilization on glyoxyl-agarose. Journal of Biotechnology, 2006, 125, 85-94.	3.9	86
75	Stabilization of a Formate Dehydrogenase by Covalent Immobilization on Highly Activated Glyoxyl-Agarose Supports. Biomacromolecules, 2006, 7, 669-673.	5.6	75
76	Immobilization and Stabilization of a Cyclodextrin Glycosyltransferase by Covalent Attachment on Highly Activated Glyoxyl-Agarose Supports. Biotechnology Progress, 2006, 22, 1140-1145.	2.6	38
77	CLEAs of lipases and poly-ionic polymers: A simple way of preparing stable biocatalysts with improved properties. Enzyme and Microbial Technology, 2006, 39, 750-755.	3.3	114
78	Improvement of the functional properties of a thermostable lipase from alcaligenes sp. via strong adsorption on hydrophobic supports. Enzyme and Microbial Technology, 2006, 38, 975-980.	3.3	75
79	Effect of lipaseâ€“lipase interactions in the activity, stability and specificity of a lipase from Alcaligenes sp.. Enzyme and Microbial Technology, 2006, 39, 259-264.	3.3	65
80	Crosslinked Penicillin Acylase Aggregates for Synthesis of Î²-Lactam Antibiotics in Organic Medium. Applied Biochemistry and Biotechnology, 2006, 133, 189-202.	3.0	46
81	Encapsulation of crosslinked penicillin G acylase aggregates in lentikats: Evaluation of a novel biocatalyst in organic media. Biotechnology and Bioengineering, 2004, 86, 558-562.	3.5	132
82	Cross-Linked Aggregates of Multimeric Enzymes:Â A Simple and Efficient Methodology To Stabilize Their Quaternary Structure. Biomacromolecules, 2004, 5, 814-817.	5.6	98
83	Co-Aggregation of Penicillin G Acylase and Polyionic Polymers:Â An Easy Methodology To Prepare Enzyme Biocatalysts Stable in Organic Media. Biomacromolecules, 2004, 5, 852-857.	5.6	120
84	Synthesis of cephalexin in ethylene glycol with glyoxyl-agarose immobilised penicillin acylase: temperature and pH optimisation. Process Biochemistry, 2003, 39, 111-117.	3.8	28
85	Enzyme Reactor Design Under Thermal Inactivation. Critical Reviews in Biotechnology, 2003, 23, 61-93.	9.4	34
86	Effect of modulation of enzyme inactivation on temperature optimization for reactor operation with chitin-immobilized lactase. Journal of Molecular Catalysis B: Enzymatic, 2001, 11, 531-540.	1.7	29