

Lucia Gardossi

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	A biorefinery approach for the conversion of <i>Cynara cardunculus</i> biomass to active films. <i>Food Hydrocolloids</i> , 2022, 122, 107099.	10.7	16
2	Effect of Binding Modules Fused to Cutinase on the Enzymatic Synthesis of Polyesters. <i>Catalysts</i> , 2022, 12, 303.	3.5	3
3	Rational Guidelines for the Two-Step Scalability of Enzymatic Polycondensation: Experimental and Computational Optimization of the Enzymatic Synthesis of Poly(glycerolazelate). <i>ChemSusChem</i> , 2022, 15, .	6.8	6
4	Renewable polymers and plastics: Performance beyond the green. <i>New Biotechnology</i> , 2021, 60, 146-158.	4.4	113
5	Criteria for Engineering Cutinases: Bioinformatics Analysis of Catalophores. <i>Catalysts</i> , 2021, 11, 784.	3.5	2
6	Turning biomass into functional composite materials: Rice husk for fully renewable immobilized biocatalysts. <i>EFB Bioeconomy Journal</i> , 2021, 1, 100008.	2.4	8
7	Azelaic Acid: A Bio-Based Building Block for Biodegradable Polymers. <i>Polymers</i> , 2021, 13, 4091.	4.5	11
8	Immobilization of <i>Arabidopsis thaliana</i> Hydroxynitrile Lyase (AtHNL) on EziG Opal. <i>Catalysts</i> , 2020, 10, 899.	3.5	10
9	Lipase mediated enzymatic kinetic resolution of phenylethyl halohydrins acetates: A case of study and rationalization. <i>Molecular Catalysis</i> , 2020, 485, 110819.	2.0	4
10	<i>Bacillus subtilis</i> Lipase A- Lipase or Esterase?. <i>Catalysts</i> , 2020, 10, 308.	3.5	21
11	Thermal Upgrade of Enzymatically Synthesized Aliphatic and Aromatic Oligoesters. <i>Materials</i> , 2020, 13, 368.	2.9	14
12	Integrating computational and experimental methods for efficient biocatalytic synthesis of polyesters. <i>Methods in Enzymology</i> , 2019, 627, 23-55.	1.0	1
13	Navigating within thiamine diphosphate-dependent decarboxylases: Sequences, structures, functional positions, and binding sites. <i>Proteins: Structure, Function and Bioinformatics</i> , 2019, 87, 774-785.	2.6	2
14	Functionalization of Enzymatically Synthesized Rigid Poly(itaconate)s via Post-Polymerization Aza-Michael Addition of Primary Amines. <i>Advanced Synthesis and Catalysis</i> , 2019, 361, 2559-2573.	4.3	37
15	Evolving biocatalysis to meet bioeconomy challenges and opportunities. <i>New Biotechnology</i> , 2018, 40, 154-169.	4.4	99
16	Rice Husk as an Inexpensive Renewable Immobilization Carrier for Biocatalysts Employed in the Food, Cosmetic and Polymer Sectors. <i>Catalysts</i> , 2018, 8, 471.	3.5	33
17	Enzyme-catalyzed functionalization of poly(L-lactic acid) for drug delivery applications. <i>Process Biochemistry</i> , 2017, 59, 77-83.	3.7	42
18	Fully renewable polyesters via polycondensation catalyzed by <i>Thermobifida cellulolytica</i> cutinase 1: an integrated approach. <i>Green Chemistry</i> , 2017, 19, 490-502.	9.0	29

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19	Nature Inspired Solutions for Polymers: Will Cutinase Enzymes Make Polyesters and Polyamides Greener?. <i>Catalysts</i> , 2016, 6, 205.	3.5	42
20	Exploring mild enzymatic sustainable routes for the synthesis of bio-degradable aromatic-aliphatic oligoesters. <i>Biotechnology Journal</i> , 2016, 11, 642-647.	3.5	24
21	Renewable building blocks for sustainable polyesters: new biotechnological routes for greener plastics. <i>Polymer International</i> , 2016, 65, 861-871.	3.1	127
22	The Closure of the Cycle: Enzymatic Synthesis and Functionalization of Bio-Based Polyesters. <i>Trends in Biotechnology</i> , 2016, 34, 316-328.	9.3	107
23	Investigating the Role of Conformational Effects on Laccase Stability and Hyperactivation under Stress Conditions. <i>ChemBioChem</i> , 2015, 16, 2365-2372.	2.6	11
24	Towards feasible and scalable solvent-free enzymatic polycondensations: integrating robust biocatalysts with thin film reactions. <i>Green Chemistry</i> , 2015, 17, 1756-1766.	9.0	72
25	Understanding Potentials and Restrictions of Solvent-Free Enzymatic Polycondensation of Itaconic Acid: An Experimental and Computational Analysis. <i>Advanced Synthesis and Catalysis</i> , 2015, 357, 1763-1774.	4.3	67
26	Modelling and Predicting Enzyme Enantioselectivity: the Aid of Computational Methods for the Rational use of Lipase B from <i>Candida antarctica</i> . <i>Current Biotechnology</i> , 2015, 4, 87-99.	0.4	7
27	BioGPS Descriptors for Rational Engineering of Enzyme Promiscuity and Structure Based Bioinformatic Analysis. <i>PLoS ONE</i> , 2014, 9, e109354.	2.5	18
28	An integrated platform for automatic design and screening of virtual mutants based on 3D-QSAR analysis. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2014, 101, 7-15.	1.8	9
29	Thermodynamic analysis of enzyme enantioselectivity: a statistical approach by means of new differential HybridMIF descriptors. <i>Biocatalysis and Biotransformation</i> , 2013, 31, 272-280.	2.0	1
30	Efficient immobilisation of industrial biocatalysts: criteria and constraints for the selection of organic polymeric carriers and immobilisation methods. <i>Chemical Society Reviews</i> , 2013, 42, 6262.	38.1	397
31	Lipases Immobilization for Effective Synthesis of Biodiesel Starting from Coffee Waste Oils. <i>Biomolecules</i> , 2013, 3, 514-534.	4.0	19
32	Elucidating the structural and conformational factors responsible for the activity and substrate specificity of alkanesulfonate monooxygenase. <i>Journal of Biomolecular Structure and Dynamics</i> , 2012, 30, 74-88.	3.5	5
33	Enzymatic kinetic resolution of hydroxystearic acids: A combined experimental and molecular modelling investigation. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2012, 83, 38-45.	1.8	17
34	BESSICC, a COSMO-RS based tool for in silico solvent screening of biocatalyzed reactions. <i>Biotechnology and Bioengineering</i> , 2012, 109, 1864-1868.	3.3	4
35	Structural bases for understanding the stereoselectivity in ketone reductions with ADH from <i>Thermus thermophilus</i> : A quantitative model. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2011, 70, 23-31.	1.8	16
36	Conformational Changes of Lipases in Aqueous Media: A Comparative Computational Study and Experimental Implications. <i>Advanced Synthesis and Catalysis</i> , 2011, 353, 2466-2480.	4.3	44

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37	Endo- and exo-inulinases: Enzyme-substrate interaction and rational immobilization. <i>Biotechnology Progress</i> , 2010, 26, 397-405.	2.6	32
38	Guidelines for reporting of biocatalytic reactions. <i>Trends in Biotechnology</i> , 2010, 28, 171-180.	9.3	144
39	Fructose Production by Inulinase Covalently Immobilized on Sepabeads in Batch and Fluidized Bed Bioreactor. <i>International Journal of Molecular Sciences</i> , 2010, 11, 1180-1189.	4.1	29
40	Effect of Microwave Radiation on Enzymatic and Chemical Peptide Bond Synthesis on Solid Phase. <i>International Journal of Peptides</i> , 2009, 2009, 1-4.	0.7	3
41	Synbeads Porous-Rigid Methacrylic Support: Application to Solid Phase Peptide Synthesis and Characterization of the Polymeric Matrix by FTIR Microspectroscopy and High Resolution Magic Angle Spinning NMR. <i>ACS Combinatorial Science</i> , 2009, 11, 835-845.	3.3	11
42	A Three-Dimensional Quantitative Structure-Activity Relationship (3D-QSAR) Model for Predicting the Enantioselectivity of <i>Candida antarctica</i> Lipase B. <i>Advanced Synthesis and Catalysis</i> , 2009, 351, 1293-1302.	4.3	29
43	Understanding enzyme immobilisation. <i>Chemical Society Reviews</i> , 2009, 38, 453-468.	38.1	1,124
44	In Silico Analysis of Enzyme Surface and Glycosylation Effect as a Tool for Efficient Covalent Immobilisation of CalB and PGA on Sepabeads ^A . <i>Advanced Synthesis and Catalysis</i> , 2007, 349, 877-886.	4.3	53
45	Resolution of (R,S)-flurbiprofen catalysed by dry mycelia in organic solvent. <i>Tetrahedron</i> , 2007, 63, 11005-11010.	1.9	27
46	Volsurf computational method applied to the prediction of stability of thermostable enzymes. <i>Biotechnology Journal</i> , 2007, 2, 214-220.	3.5	15
47	In Silico Prediction of Medium Effects on Esterification Equilibrium Using the COSMO-RS Method. <i>Biotechnology Progress</i> , 2006, 22, 1146-1152.	2.6	23
48	Preparation of d-amino acids by enzymatic kinetic resolution using a mutant of penicillin-G acylase from <i>E. coli</i> . <i>Tetrahedron: Asymmetry</i> , 2006, 17, 245-251.	1.8	17
49	Computational methods to rationalize experimental strategies in biocatalysis. <i>Trends in Biotechnology</i> , 2006, 24, 419-425.	9.3	36
50	Kinetically controlled synthesis of ampicillin and cephalixin in highly condensed systems in the absence of a liquid aqueous phase. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2006, 39, 105-111.	1.8	20
51	Kinetic resolution of (R, S)-1,2-O-isopropylidenglycerol by esterification with dry mycelia of moulds. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2006, 41, 71-74.	1.8	14
52	High-level production and covalent immobilization of <i>Providencia rettgeri</i> penicillin G acylase (PAC) from recombinant <i>Pichia pastoris</i> for the development of a novel and stable biocatalyst of industrial applicability. <i>Biotechnology and Bioengineering</i> , 2006, 93, 344-354.	3.3	14
53	Properties and applications of supports for enzyme-mediated transformations in solid phase synthesis. <i>Journal of Chemical Technology and Biotechnology</i> , 2006, 81, 1626-1640.	3.2	20
54	3D-QSAR Applied to the Quantitative Prediction of Penicillin G Amidase Selectivity. <i>Advanced Synthesis and Catalysis</i> , 2006, 348, 773-780.	4.3	13

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55	Optimized polymer-enzyme electrostatic interactions significantly improve penicillin G amidase efficiency in charged PEGA polymers. <i>Tetrahedron</i> , 2005, 61, 971-976.	1.9	11
56	Penicillin G Amidase-Catalysed Hydrolysis of Phenylacetic Hydrazides on a Solid Phase: A New Route to Enzyme-Cleavable Linkers. <i>Advanced Synthesis and Catalysis</i> , 2005, 347, 963-966.	4.3	5
57	Nonswelling Macroporous Synbeads for Improved Efficiency of Solid-Phase Biotransformations. <i>Chemistry - A European Journal</i> , 2004, 10, 1007-1013.	3.3	19
58	Quantitative enzymatic protection of d-amino acid methyl esters by exploiting a relaxed enantioselectivity of penicillin-G amidase in organic solvent. <i>Tetrahedron Letters</i> , 2004, 45, 9649-9652.	1.4	18
59	Introduction of permanently charged groups into PEGA resins leads to improved biotransformations on solid support. <i>Tetrahedron</i> , 2004, 60, 589-594.	1.9	14
60	Enzymatic resolution of 4-N-phenylacetyl-amino-derivatives obtained from multicomponent reactions using PenG amidase and in silico studies. <i>Tetrahedron</i> , 2004, 60, 683-691.	1.9	18
61	An innovative application of the "flexible" GRID/PCA computational method: study of differences in selectivity between PGAs from <i>Escherichia coli</i> and a <i>Providentia rettgeri</i> mutant. <i>Biotechnology Progress</i> , 2004, 20, 1025-1031.	2.6	11
62	A Homology Model of Penicillin Acylase from <i>Alcaligenes faecalis</i> and In Silico Evaluation of its Selectivity. <i>ChemBioChem</i> , 2003, 4, 615-622.	2.6	7
63	Organically modified xerogels as novel tailor-made supports for covalent immobilisation of enzymes (penicillin G acylase). <i>Tetrahedron Letters</i> , 2003, 44, 5889-5891.	1.4	18
64	Organically modified xerogels as supports for solid-phase chemistry. <i>Tetrahedron Letters</i> , 2003, 44, 6083-6085.	1.4	11
65	Improved biotransformations on charged PEGA supports. <i>Chemical Communications</i> , 2003, , 1296.	4.1	23
66	Biocatalysis in Reaction Mixtures with Undissolved Solid Substrates and Products. <i>Current Organic Chemistry</i> , 2003, 7, 1333-1346.	1.6	18
67	Glutaryl-7-ACA acylase catalyses the synthesis of amide bond in heterogeneous substrate mixtures. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2002, 19-20, 135-141.	1.8	8
68	Computational analysis of the aminic subsite of PGA explains the influence of amine structure on enantioselectivity. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2002, 19-20, 423-430.	1.8	10
69	Solvent selection for solid-to-solid synthesis. <i>Biotechnology and Bioengineering</i> , 2002, 80, 509-515.	3.3	19
70	GRID/tetrahedral intermediate computational approach to the study of selectivity of penicillin G acylase in amide bond synthesis. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2002, 1601, 85-92.	2.3	12
71	Synthesis of octyl glucopyranoside by almond β -glucosidase adsorbed onto Celite R-640 [®] . <i>Tetrahedron Letters</i> , 2002, 43, 2005-2008.	1.4	30
72	High isolated yields in thermolysin-catalysed synthesis of Z-l-aspartyl-l-phenylalanine methyl ester in toluene at controlled water activity. <i>Tetrahedron Letters</i> , 2001, 42, 3395-3397.	1.4	17

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73	Activity of covalently immobilised PGA in water miscible solvents at controlled aw. Journal of Molecular Catalysis B: Enzymatic, 2001, 11, 851-855.	1.8	18
74	Selectivity of penicillin G acylase towards phenylacetic acid derivatives in amide bond synthesis in toluene. Journal of Molecular Catalysis B: Enzymatic, 2001, 16, 73-80.	1.8	7
75	A novel support for enzyme adsorption: properties and applications of aerogels in low water media. Tetrahedron Letters, 2000, 41, 8627-8630.	1.4	24
76	d-Phenylglycine and d-4-hydroxyphenylglycine methyl esters via penicillin G acylase catalysed resolution in organic solvents. Tetrahedron: Asymmetry, 2000, 11, 1789-1796.	1.8	29
77	Controlling the hydration of covalently immobilised penicillin G amidase in low-water medium: properties and use of Celite R-640. Journal of Molecular Catalysis B: Enzymatic, 2000, 8, 245-253.	1.8	14
78	High isolated yields in thermodynamically controlled peptide synthesis in toluene catalysed by thermolysin adsorbed on Celite R-640. Chemical Communications, 2000, , 467-468.	4.1	33
79	Enzymatic regioselective deprotection of peracetylated mono- and disaccharides. Journal of Molecular Catalysis B: Enzymatic, 1999, 6, 89-94.	1.8	11
80	Penicillin G amidase in low-water media: immobilisation and control of water activity by means of celite rods. Journal of Molecular Catalysis B: Enzymatic, 1999, 6, 437-445.	1.8	20
81	Enzymatic modification of fullerene derivatives. Tetrahedron Letters, 1998, 39, 7791-7794.	1.4	25
82	Activity of immobilised penicillin amidase in toluene at controlled water activity. Journal of Molecular Catalysis B: Enzymatic, 1998, 5, 241-244.	1.8	13
83	Influence of organic solvents on enzyme chemoselectivity and their role in enzyme-substrate interaction. Tetrahedron, 1996, 52, 4867-4876.	1.9	17
84	Control of enzyme hydration in penicillin amidase catalysed synthesis of amide bond. Tetrahedron Letters, 1996, 37, 9377-9380.	1.4	26
85	Chemoselectivity and enhanced activity of poly(ethylene glycol)-modified lipases acylating hydrophilic aminoacid derivatives in organic solvents. Biotechnology Letters, 1994, 8, 811-816.	0.5	2
86	Chemical regioselective hydrolysis of peracetylated reducing disaccharides, specifically at the anomeric centre: Intermediates for the synthesis of oligosaccharides. Tetrahedron Letters, 1994, 35, 4247-4250.	1.4	5
87	One-step stereospecific synthesis of $\hat{1}\pm, \hat{1}^2$ -dehydroamino acids and dehydropeptides.. Tetrahedron Letters, 1992, 33, 8145-8148.	1.4	19
88	Improved lipase-mediated resolution of mandelic acid esters by multivariate investigation of experimental factors. Tetrahedron: Asymmetry, 1992, 3, 903-912.	1.8	19
89	Selective acylation of peptides catalyzed by lipases in organic solvents. Journal of the American Chemical Society, 1991, 113, 6328-6329.	13.7	77