AndrÃ©s R AlcÃ¡ntara

List of Publications by Year
in descending order

105 papers	4,930 citations	94433 37 h-index	98798 67 g-index
136 all docs	136 docs citations	136 times ranked	4494 citing authors

#	Article	IF	Citations
1	2â€MethyltetrahydrofuranÂ (2â€MeTHF): A Biomassâ€Derived Solvent with Broad Application in Organic Chemistry. ChemSusChem, 2012, 5, 1369-1379.	6.8	520
2	Immobilization of lipases on hydrophobic supports: immobilization mechanism, advantages, problems, and solutions. Biotechnology Advances, 2019, 37, 746-770.	11.7	409
3	Chitosan: An Overview of Its Properties and Applications. Polymers, 2021, 13, 3256.	4.5	373
4	Biocatalytic Strategies for the Asymmetric Synthesis of Î±-Hydroxy Ketones. Accounts of Chemical Research, 2010, 43, 288-299.	15.6	211
5	Understanding Candida rugosa lipases: An overview. Biotechnology Advances, 2006, 24, 180-196.	11.7	199
6	Industrial biotransformations in the synthesis of building blocks leading to enantiopure drugs. Bioresource Technology, 2012, 115, 196-207.	9.6	185
7	Enzyme co-immobilization: Always the biocatalyst designers' choiceâ€¦or not?. Biotechnology Advances, 2021, 51, 107584.	11.7	152
8	Microbial cells as catalysts for stereoselective redâ€“ox reactions. Biotechnology Advances, 2009, 27, 686-714.	11.7	151
9	Applied Biotransformations in Green Solvents. Chemistry - A European Journal, 2010, 16, 9422-9437.	3.3	99
10	Cyclopentyl Methyl Ether (CPME): A Versatile Ecoâ€Friendly Solvent for Applications in Biotechnology and Biorefineries. ChemSusChem, 2019, 12, 2083-2097.	6.8	99
11	Enzyme production of<scp>d</scp>-gluconic acid and glucose oxidase: successful tales of cascade reactions. Catalysis Science and Technology, 2020, 10, 5740-5771.	4.1	80
12	Biotechnological relevance of the lipase A from Candida antarctica. Catalysis Today, 2021, 362, 141-154.	4.4	78
13	Dynamic Kinetic Resolution via Hydrolaseâ€Metal Combo Catalysis in Stereoselective Synthesis of Bioactive Compounds. Advanced Synthesis and Catalysis, 2012, 354, 2585-2611.	4.3	76
14	Synthesis of 2â€²-hydroxychalcones and related compounds in interfacial solid-liquid conditions. Tetrahedron Letters, 1987, 28, 1515-1518.	1.4	70
15	Dynamic Kinetic Resolution of Benzoins by Lipaseâ€'Metal Combo Catalysis. Journal of Organic Chemistry, 2006, 71, 7632-7637.	3.2	70
16	Biocatalysis as Useful Tool in Asymmetric Synthesis: An Assessment of Recently Granted Patents (2014â€“2019). Catalysts, 2019, 9, 802.	3.5	69
17	2-Methyltetrahydrofuran as a suitable green solvent for phthalimide functionalization promoted by supported KF. Green Chemistry, 2010, 12, 1380.	9.0	68
18	Improved Arndtâ€'Eistert Synthesis of Î±-Diazoketones Requiring Minimal Diazomethane in the Presence of Calcium Oxide as Acid Scavenger. Journal of Organic Chemistry, 2010, 75, 5760-5763.	3.2	65

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19	Chemoenzymatic Dynamic Kinetic Resolution of Allylic Alcohols:â€‰ A Highly Enantioselective Route to Acyloin Acetates. Organic Letters, 2007, 9, 3401-3404.	4.6	64
20	Regioselective enzymatic acylation of pharmacologically interesting nucleosides in 2-methyltetrahydrofuran, a greener substitute for THF. Green Chemistry, 2009, 11, 855.	9.0	64
21	Recent Advances on the Use of 2-methyltetrahydrofuran (2-MeTHF) in Biotransformations. Current Green Chemistry, 2018, 5, 86-103.	1.1	63
22	Different phyllosilicates as supports for lipase immobilisation. Journal of Molecular Catalysis B: Enzymatic, 2001, 11, 657-663.	1.8	62
23	Carica papaya lipase (CPL): An emerging and versatile biocatalyst. Biotechnology Advances, 2006, 24, 493-499.	11.7	62
24	Enantioselective Esterification of 2-Arylpropionic Acids Catalyzed by ImmobilizedRhizomucor mieheiLipase. Journal of Organic Chemistry, 1997, 62, 1831-1840.	3.2	61
25	Developments with multi-target drugs for Alzheimerâ€™s disease: an overview of the current discovery approaches. Expert Opinion on Drug Discovery, 2019, 14, 879-891.	5.0	60
26	Genipin as An Emergent Tool in the Design of Biocatalysts: Mechanism of Reaction and Applications. Catalysts, 2019, 9, 1035.	3.5	55
27	One Pot Use of Combilipases for Full Modification of Oils and Fats: Multifunctional and Heterogeneous Substrates. Catalysts, 2020, 10, 605.	3.5	55
28	Biocatalysis as Key to Sustainable Industrial Chemistry. ChemSusChem, 2022, 15, e202102709.	6.8	52
29	Title is missing!. Biotechnology Letters, 1998, 20, 499-505.	2.2	46
30	Effective Monoallylation of Anilines Catalyzed by Supported KF. Organic Letters, 2007, 9, 2661-2664.	4.6	45
31	Enantioselective monoreduction of different 1,2-diaryl-1,2-diketones catalysed by lyophilised whole cells from Pichia glucozyma. Tetrahedron, 2008, 64, 7929-7936.	1.9	45
32	Stereoselective synthesis of novel benzoins catalysed by benzaldehyde lyase in a gel-stabilised two-phase system. Tetrahedron, 2005, 61, 7378-7383.	1.9	43
33	Magnetic micro-macro biocatalysts applied to industrial bioprocesses. Bioresource Technology, 2021, 322, 124547.	9.6	42
34	Optimised Dynamic Kinetic Resolution of benzoin by a chemoenzymatic approach in 2-MeTHF. Journal of Molecular Catalysis B: Enzymatic, 2011, 72, 20-24.	1.8	41
35	Chemoselective Synthesis of Nâ€Substituted Î±â€Aminoâ€Î±â€²â€chloro Ketones via Chloromethylation of Glycineâ€Derived Weinreb Amides. Advanced Synthesis and Catalysis, 2013, 355, 919-926.	4.3	41
36	Highly efficient one pot dynamic kinetic resolution of benzoins with entrapped Pseudomonas stutzeri lipase. Journal of Molecular Catalysis B: Enzymatic, 2008, 52-53, 133-139.	1.8	39

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37	Highly efficient chemoselective N-TBS protection of anilines under exceptional mild conditions in the eco-friendly solvent 2-methyltetrahydrofuran. Green Chemistry, 2011, 13, 1986.	9.0	37
38	Biocatalyzed Synthesis of Statins: A Sustainable Strategy for the Preparation of Valuable Drugs. Catalysts, 2019, 9, 260.	3.5	36
39	Enzyme-Coated Micro-Crystals: An Almost Forgotten but Very Simple and Elegant Immobilization Strategy. Catalysts, 2020, 10, 891.	3.5	35
40	Enantioselective reduction and deracemisation using the non-conventional yeast Pichia glucozyma in water/organic solvent biphasic systems: preparation of (S)-1,2-diaryl-2-hydroxyethanones (benzoins). Tetrahedron, 2012, 68, 523-528.	1.9	34
41	Dextran Aldehyde in Biocatalysis: More Than a Mere Immobilization System. Catalysts, 2019, 9, 622.	3.5	32
42	Efficient Hornerâ€“Wadsworthâ€“Emmons intramolecular cyclisation of a N-substituted phthalimide promoted by KF-Alumina: a general tool for the synthesis of functionalised isoindolinones. Tetrahedron Letters, 2009, 50, 3050-3053.	1.4	30
43	Robust eco-friendly protocol for the preparation of Î³-hydroxy-Î±,Î²-acetylenic esters by sequential one-pot eliminationâ€“addition of 2-bromoacrylates to aldehydes promoted by LTMP in 2-MeTHF. Green Chemistry, 2012, 14, 1859.	9.0	30
44	Lipase from Pseudomonas stutzeri: Purification, homology modelling and rational explanation of the substrate binding mode. Journal of Molecular Catalysis B: Enzymatic, 2013, 87, 88-98.	1.8	30
45	Rhizomucor miehei lipase as the catalyst in the resolution of chiral compounds: an overview. Chemistry and Physics of Lipids, 1998, 93, 169-184.	3.2	28
46	Immobilization of the acylase from Escherichia coli on glyoxyl-agarose gives efficient catalyst for the synthesis of cephalosporins. Enzyme and Microbial Technology, 2008, 42, 121-129.	3.2	28
47	Chemoenzymatic synthesis of chiral unsymmetrical benzoin esters. Tetrahedron, 2011, 67, 7321-7329.	1.9	26
48	Redesigning the synthesis of vidarabine via a multienzymatic reaction catalyzed by immobilized nucleoside phosphorylases. RSC Advances, 2015, 5, 23569-23577.	3.6	26
49	Highly Efficient Synthesis of New Î±â€Arylaminoâ€Î±â€²â€chloropropanâ€2â€ones via Oxidative Hydrolysis of Vinyl Chlorides Promoted by Calcium Hypochlorite. Advanced Synthesis and Catalysis, 2009, 351, 3199-3206.	4.3	25
50	Biocatalysis in the Pharmaceutical Industry. A Greener Future. Current Green Chemistry, 2013, 1, 155-181.	1.1	24
51	Heptyl oleate synthesis as useful tool to discriminate between lipases, proteases and other hydrolases in crude preparations. Enzyme and Microbial Technology, 2002, 31, 283-288.	3.2	23
52	Celite-Supported Reagents in Organic Synthesis: An Overview. Current Organic Chemistry, 2010, 14, 2384-2408.	1.6	23
53	Immobilization of different protein fractions from Rhizomucor miehei lipase crude extract. Enzyme and Microbial Technology, 2005, 37, 514-520.	3.2	22
54	Highly efficient and environmentally benign preparation of Weinreb amides in the biphasic system 2-MeTHF/water. RSC Advances, 2013, 3, 10158.	3.6	22

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55	Biocatalysis and Pharmaceuticals: A Smart Tool for Sustainable Development. Catalysts, 2019, 9, 792.	3.5	22
56	Candida rugosa Lipase: A Traditional and Complex Biocatalyst. Current Organic Chemistry, 2006, 10, 1053-1066.	1.6	21
57	Merging lithium carbenoid homologation and enzymatic reduction: A combinative approach to the HIV-protease inhibitor Nelfinavir. Tetrahedron, 2018, 74, 2211-2217.	1.9	21
58	Enantioselective enzymatic hydrolysis of racemic glycidyl esters by using immobilized porcine pancreas lipase with improved catalytic properties. Journal of Molecular Catalysis B: Enzymatic, 2001, 11, 757-763.	1.8	20
59	Synthesis of peptides catalysed by enzymes: A practical overview. Journal of Molecular Catalysis, 1993, 84, 327-364.	1.2	18
60	Chemoselective CaOâ€Mediated Acylation of Alcohols and Amines in 2â€Methyltetrahydrofuran. ChemSusChem, 2013, 6, 905-910.	6.8	18
61	Efficient reduction of Toluidine Blue O dye using silver nanoparticles synthesized by low molecular weight chitosans. International Journal of Biological Macromolecules, 2019, 131, 682-690.	7.5	17
62	Ba(OH)2 as the catalyst in organic reactions XVIII. Influence of the microcrystalline structure and the nature of active sites on catalytic activity. Journal of Catalysis, 1988, 112, 528-542.	6.2	16
63	Small water amounts increase the catalytic behaviour of polar organic solvents pre-treated Candida rugosa lipase. Journal of Molecular Catalysis B: Enzymatic, 2001, 11, 939-947.	1.8	16
64	Structural bases for understanding the stereoselectivity in ketone reductions with ADH from Thermus thermophilus: A quantitative model. Journal of Molecular Catalysis B: Enzymatic, 2011, 70, 23-31.	1.8	16
65	Recent Developments in the Synthesis of Î²-Diketones. Pharmaceuticals, 2021, 14, 1043.	3.8	16
66	Acyl transfer strategy for the biocatalytical characterisation of Candida rugosa lipases in organic solvents. Enzyme and Microbial Technology, 2006, 38, 199-208.	3.2	15
67	Enantioselective properties of Fusarium solani pisi cutinase on transesterification of acyclic diols: activity and stability evaluation. Journal of Molecular Catalysis B: Enzymatic, 2001, 11, 613-622.	1.8	14
68	Regioselective resolution of 1,n-diols catalysed by lipases: a rational explanation of the enzymayic selectivity. Journal of Molecular Catalysis B: Enzymatic, 2001, 11, 1013-1024.	1.8	14
69	Rational strategy for the production of new crude lipases from Candida rugosa. Biotechnology Letters, 2005, 27, 499-503.	2.2	14
70	Covalent Immobilization of Pseudomonas stutzeri Lipase on a Porous Polymer: An Efficient Biocatalyst for a Scalable Production of Enantiopure Benzoin Esters under Sustainable Conditions. Organic Process Research and Development, 2015, 19, 687-694.	2.7	14
71	Biocatalysis at Extreme Temperatures: Enantioselective Synthesis of both Enantiomers of Mandelic Acid by Transesterification Catalyzed by a Thermophilic Lipase in Ionic Liquids at 120 Â°C. Catalysts, 2020, 10, 1055.	3.5	12
72	Multienzymatic Processes Involving Baeyerâ€“Villiger Monooxygenases. Catalysts, 2021, 11, 605.	3.5	12

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73	Highly Regioselective and Efficient Synthesis of Aminoepoxides by Ring Closure of Aminohalohydrins Mediated by KF-Celite. Synlett, 2011, 2011, 1831-1834.	1.8	11
74	Taking advantage of lithium monohalocarbenoid intrinsic Î±-elimination in 2-MeTHF: controlled epoxide ring-opening en route to halohydrins. Organic and Biomolecular Chemistry, 2021, 19, 2038-2043.	2.8	10
75	Acyclic phenylalkanediols as substrates for the study of enzyme recognition. Regioselective acylation by porcine pancreatic lipase: a structural hypothesis for the enzymatic selectivity. Tetrahedron, 1999, 55, 14961-14974.	1.9	9
76	Chemoselective oxidative hydrolysis of EWG protected Î±-arylamino vinyl bromides to Î±-arylamino-Î±â€²-bromoacetones. Tetrahedron Letters, 2013, 54, 4369-4372.	1.4	9
77	Chemoenzymatic Synthesis of Carbohydrates as Antidiabetic and Anticancer Drugs. Current Topics in Medicinal Chemistry, 2015, 14, 2694-2711.	2.1	9
78	Ba(OH)2 as the catalyst in organic reactions. Journal of Colloid and Interface Science, 1987, 115, 520-528.	9.4	7
79	Influence of organic-aqueous media in the DNSAE activity of micrococcal endonuclease. Journal of Molecular Catalysis, 1989, 52, 323-336.	1.2	7
80	New methodology for tosylation of hydroxylic supports as exemplified by the immobilization of micrococcal endonuclease on agarose. Applied Biochemistry and Biotechnology, 1990, 26, 297-310.	2.9	7
81	Acyclic phenylalkanediols as substrates for the study of enzyme recognition: synthesis of substrates and enzymatic resolution via hydrolysis and transesterification. Tetrahedron, 1999, 55, 14947-14960.	1.9	7
82	Biocatalyzed Production of Fine Chemicals. , 2011, , 309-331.		7
83	Biocatalyzed Production of Fine Chemicals. , 2017, , 334-373.		7
84	Structural insights into the desymmetrization of bulky 1,2-dicarbonyls through enzymatic monoreduction. Bioorganic Chemistry, 2021, 108, 104644.	4.1	6
85	Biocatalyzed On Water Synthesis of Chiral Building Blocks for the Preparation of Anti-Cancer Drugs: a GreenerApproach. Current Organic Chemistry, 2013, 17, 1132-1157.	1.6	6
86	Microgels as soluble supports for enzyme active against polymeric substrates: micrococcal nuclease. Journal of Molecular Catalysis, 1991, 70, 381-389.	1.2	5
87	Biocatalyzed synthesis of antidiabetic drugs: A review. Biocatalysis and Biotransformation, 2018, 36, 12-46.	2.0	5
88	Ba(OH)2 as catalyst in organic reactions. VIII. Nature of the adsorbed species in Claisen-Schmidt reaction. Reaction Kinetics and Catalysis Letters, 1986, 32, 377-385.	0.6	4
89	Specificity to leaving group in transesterification of substituted phenyl esters in organic solvents catalysed by subtilisinâ€"microgel sols. Journal of Molecular Catalysis, 1993, 81, 119-131.	1.2	4
90	Organic reactions catalyzed by insolubilized enzymes. Part III. Synthesis of peptides catalyzed by Î±-chymotrypsin immobilized on graft copolymers. Journal of Molecular Catalysis A, 1995, 101, 255-265.	4.8	4

#	ARTICLE	IF	CITATIONS
91	First stereoselective acylation of a primary diol possessing a prochiral quaternary center mediated by lipase TL from Pseudomonas stutzeri. Tetrahedron, 2015, 71, 9172-9176.	1.9	4
92	Importance of Hansch's Ï€ parameter in the catalytic action of microgel-immobilised subtilisin dissolved in tetrahydrofuran solvent. Journal of Molecular Catalysis, 1993, 80, 137-143.	1.2	3
93	Biotransformations. , 2009, , 212-251.		3
94	First General Route to Substituted Î±-Arylamino-Î±â€²-chloropropan-2-ones by Oxidation of N-Protected Aminohalohydrins: The Importance of Disrupting Hydrogen Bond Networks. Synthesis, 2010, 2010, 3545-3555.	2.3	3
95	Covalent immobilization of crude and partially-purified lipases onto inorganic supports: stability and hyperactivation.. Progress in Biotechnology, 1998, 15, 571-576.	0.2	2
96	Biocatalysis as Key to Sustainable Industrial Chemistry. ChemSusChem, 2022, , e202200709.	6.8	2
97	Preface to Special Issue on Biocatalysis as Key to Sustainable Industrial Chemistry. ChemSusChem, 2022, 15, e202200640.	6.8	2
98	CHAPTER 9. Biomass-derived Solvents. , 2021, , 239-279.		1
99	Biotransformations catalyzed by Candida rugosa lipase partially purified by precipitation and by organic solvents treatment. Progress in Biotechnology, 1998, 15, 741-746.	0.2	0
100	Dynamic Kinetic Resolution of Benzoins by Lipase-Ru Catalysis. Synfacts, 2007, 2007, 0070-0070.	0.0	0
101	Synthesis of 2-Aminoepoxides from Aminohalohydrins Using KF on Celite. Synfacts, 2011, 2011, 1051-1051.	0.0	0
102	Biocatalysis in Spain: A field of success and innovation. Biocatalysis and Biotransformation, 2018, 36, 180-183.	2.0	0
103	Special Issue on â€œApplied Biocatalysis in Europe: A Sustainable Tool for Improving Life Qualityâ€• Catalysts, 2021, 11, 339.	3.5	0
104	Biocatalyzed Synthesis of Antidiabetic Drugs. , 2019, , 349-436.		0
105	Editorial: Recent Advances in Biocatalysis: Focusing on Applications of These Processes. Frontiers in Bioengineering and Biotechnology, 2022, 10, 844741.	4.1	0