

Antonio Olmo Ballesteros

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3337567/publications.pdf>

Version: 2024-02-01

87
papers

4,639
citations

101496

36
h-index

106281

65
g-index

89
all docs

89
docs citations

89
times ranked

4440
citing authors

#	ARTICLE	IF	CITATIONS
1	Environmental biocatalysis: from remediation with enzymes to novel green processes. Trends in Biotechnology, 2006, 24, 281-287.	4.9	352
2	Laccases and Their Applications: A Patent Review. Recent Patents on Biotechnology, 2008, 2, 10-24.	0.4	251
3	Synthesis of sugar esters in solvent mixtures by lipases from <i>Thermomyces lanuginosus</i> and <i>Candida antarctica</i> B, and their antimicrobial properties. Enzyme and Microbial Technology, 2005, 36, 391-398.	1.6	219
4	Enzymatic acylation of di- and trisaccharides with fatty acids: choosing the appropriate enzyme, support and solvent. Journal of Biotechnology, 2002, 96, 55-66.	1.9	183
5	Novel Polyphenol Oxidase Mined from a Metagenome Expression Library of Bovine Rumen. Journal of Biological Chemistry, 2006, 281, 22933-22942.	1.6	168
6	Immobilized Biocatalysts: Novel Approaches and Tools for Binding Enzymes to Supports. Advanced Materials, 2011, 23, 5275-5282.	11.1	152
7	Laboratory Evolution of High-Redox Potential Laccases. Chemistry and Biology, 2010, 17, 1030-1041.	6.2	147
8	Purification and kinetic characterization of a fructosyltransferase from <i>Aspergillus aculeatus</i> . Journal of Biotechnology, 2007, 128, 204-211.	1.9	140
9	Lipase-catalyzed regioselective acylation of sucrose in two-solvent mixtures. , 1999, 65, 10-16.		139
10	Comparative Surface Activities of Di- and Trisaccharide Fatty Acid Esters. Langmuir, 2002, 18, 667-673.	1.6	109
11	Detailed Analysis of Galactooligosaccharides Synthesis with β -Galactosidase from <i>Aspergillus oryzae</i> . Journal of Agricultural and Food Chemistry, 2013, 61, 1081-1087.	2.4	108
12	Characterization of a β -fructofuranosidase from <i>Schwanniomyces occidentalis</i> with transfructosylating activity yielding the prebiotic 6-kestose. Journal of Biotechnology, 2007, 132, 75-81.	1.9	106
13	In Vitro Evolution of a Fungal Laccase in High Concentrations of Organic Cosolvents. Chemistry and Biology, 2007, 14, 1052-1064.	6.2	104
14	Galactooligosaccharides formation during enzymatic hydrolysis of lactose: Towards a prebiotic-enriched milk. Food Chemistry, 2014, 145, 388-394.	4.2	104
15	Immobilization on Eupergit C of cyclodextrin glucosyltransferase (CGTase) and properties of the immobilized biocatalyst. Journal of Molecular Catalysis B: Enzymatic, 2003, 21, 299-308.	1.8	99
16	Immobilisation of fructosyltransferase from <i>Aspergillus aculeatus</i> on epoxy-activated Sepabeads EC for the synthesis of fructo-oligosaccharides. Journal of Molecular Catalysis B: Enzymatic, 2005, 35, 19-27.	1.8	97
17	Galacto-oligosaccharide Synthesis from Lactose Solution or Skim Milk Using the β -Galactosidase from <i>Bacillus circulans</i> . Journal of Agricultural and Food Chemistry, 2012, 60, 6391-6398.	2.4	96
18	Analysis of Tween 80 as an esterase/ lipase substrate for lipolytic activity assay. Biotechnology Letters, 1998, 12, 183-186.	0.5	85

#	ARTICLE	IF	CITATIONS
19	High-yield production of mono- and di-oleylglycerol by lipase-catalyzed hydrolysis of triolein. <i>Enzyme and Microbial Technology</i> , 1996, 18, 66-71.	1.6	77
20	A Simple Procedure for the Regioselective Synthesis of Fatty Acid Esters of Maltose, Leucrose, Maltotriose and n-Dodecyl Maltosides. <i>Tetrahedron</i> , 2000, 56, 4053-4061.	1.0	73
21	Regioselective Lipase-Catalyzed Synthesis of 3-O-Acyl Derivatives of Resveratrol and Study of Their Antioxidant Properties. <i>Journal of Agricultural and Food Chemistry</i> , 2010, 58, 807-813.	2.4	68
22	Levan versus fructooligosaccharide synthesis using the levansucrase from <i>Zymomonas mobilis</i> : Effect of reaction conditions. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2015, 119, 18-25.	1.8	66
23	Enzymatic Synthesis of β -Glucosides of Resveratrol with Surfactant Activity. <i>Advanced Synthesis and Catalysis</i> , 2011, 353, 1077-1086.	2.1	64
24	Screening Mutant Libraries of Fungal Laccases in the Presence of Organic Solvents. <i>Journal of Biomolecular Screening</i> , 2005, 10, 624-631.	2.6	62
25	Glucosyltransferases acting on starch or sucrose for the synthesis of oligosaccharides. <i>Canadian Journal of Chemistry</i> , 2002, 80, 743-752.	0.6	59
26	Immobilization of Dextranase from <i>Leuconostoc mesenteroides</i> NRRL B-512F on Eupergit C Supports. <i>Biotechnology Progress</i> , 2004, 20, 1414-1420.	1.3	56
27	Beet Sugar Syrup and Molasses as Low-Cost Feedstock for the Enzymatic Production of Fructo-oligosaccharides. <i>Journal of Agricultural and Food Chemistry</i> , 2006, 54, 2964-2968.	2.4	56
28	Altering the laccase functionality by <i>in vivo</i> assembly of mutant libraries with different mutational spectra. <i>Proteins: Structure, Function and Bioinformatics</i> , 2008, 71, 250-260.	1.5	56
29	Enzymatic production of fully deacetylated chitooligosaccharides and their neuroprotective and anti-inflammatory properties. <i>Biocatalysis and Biotransformation</i> , 2018, 36, 57-67.	1.1	55
30	Dried alginate-entrapped enzymes (DALGEEs) and their application to the production of fructooligosaccharides. <i>Process Biochemistry</i> , 2013, 48, 677-682.	1.8	53
31	Widening the pH Activity Profile of a Fungal Laccase by Directed Evolution. <i>ChemBioChem</i> , 2013, 14, 934-937.	1.3	52
32	Analysis of fermentation selectivity of purified galacto-oligosaccharides by <i>in vitro</i> human faecal fermentation. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 5743-5752.	1.7	51
33	Immobilization of <i>Trichoderma reesei</i> laccase on Eupergit C: Stabilization and treatment of olive oil mill wastewaters. <i>Biocatalysis and Biotransformation</i> , 2007, 25, 130-134.	1.1	48
34	Parameters affecting productivity in the lipase-catalysed synthesis of sucrose palmitate. <i>Biocatalysis and Biotransformation</i> , 2005, 23, 19-27.	1.1	42
35	Effect of the Immobilization Method of Lipase from <i>Thermomyces lanuginosus</i> on Sucrose Acylation. <i>Biocatalysis and Biotransformation</i> , 2002, 20, 63-71.	1.1	41
36	Continuous Packed Bed Reactor with Immobilized β -Galactosidase for Production of Galactooligosaccharides (GOS). <i>Catalysts</i> , 2016, 6, 189.	1.6	39

#	ARTICLE	IF	CITATIONS
37	Combinatorial Saturation Mutagenesis by In Vivo Overlap Extension for the Engineering of Fungal Laccases. <i>Combinatorial Chemistry and High Throughput Screening</i> , 2006, 9, 719-727.	0.6	37
38	Synthesis and Properties of Ascorbyl Esters Catalyzed by Lipozyme TL IM using Triglycerides as Acyl Donors. <i>JAOCS, Journal of the American Oil Chemists' Society</i> , 2011, 88, 57-64.	0.8	36
39	Chemical modification of lysine side chains of cyclodextrin glycosyltransferase from <i>Thermoanaerobacter</i> causes a shift from cyclodextrin glycosyltransferase to α -amylase specificity. <i>FEBS Letters</i> , 1999, 445, 333-337.	1.3	33
40	Improved synthesis of sucrose fatty acid monoesters. <i>JAOCS, Journal of the American Oil Chemists' Society</i> , 2001, 78, 541-546.	0.8	33
41	Encapsulation in LentiKats of Dextranucrase from <i>Leuconostoc mesenteroides</i> NRRL B-1299, and its Effect on Product Selectivity. <i>Biocatalysis and Biotransformation</i> , 2003, 21, 325-331.	1.1	32
42	Antitumour activity of fatty acid maltotriose esters obtained by enzymatic synthesis. <i>Biotechnology and Applied Biochemistry</i> , 2005, 42, 35.	1.4	32
43	Conversion of a Carboxylesterase into a Triacylglycerol Lipase by a Random Mutation. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 7553-7557.	7.2	32
44	Combinatorial Saturation Mutagenesis of the <i>Myceliophthora thermophila</i> Laccase T2 Mutant: the Connection between the C-Terminal Plug and the Conserved VSG Tripeptide. <i>Combinatorial Chemistry and High Throughput Screening</i> , 2008, 11, 807-816.	0.6	32
45	Title is missing!. <i>Biotechnology Letters</i> , 1999, 13, 749-755.	0.5	30
46	Tailored Enzymatic Synthesis of Chitooligosaccharides with Different Deacetylation Degrees and Their Anti-Inflammatory Activity. <i>Catalysts</i> , 2019, 9, 405.	1.6	29
47	Effect of α -Glucosylation on the Stability, Antioxidant Properties, Toxicity, and Neuroprotective Activity of (α)-Epigallocatechin Gallate. <i>Frontiers in Nutrition</i> , 2019, 6, 30.	1.6	29
48	Vinyl sulfone-activated silica for efficient covalent immobilization of alkaline unstable enzymes: application to levansucrase for fructooligosaccharide synthesis. <i>RSC Advances</i> , 2016, 6, 64175-64181.	1.7	28
49	Selective Synthesis of Galactooligosaccharides Containing $\beta(1\rightarrow3)$ Linkages with β -Galactosidase from <i>Bifidobacterium bifidum</i> (Saphera). <i>Journal of Agricultural and Food Chemistry</i> , 2020, 68, 4930-4938.	2.4	27
50	Enzymatic Synthesis and Characterization of Different Families of Chitooligosaccharides and Their Bioactive Properties. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 3212.	1.3	27
51	Characterization and application of a sterol esterase immobilized on polyacrylate epoxy-activated carriers (Dilbeads [®] , ϵ). <i>Catalysis Communications</i> , 2008, 9, 539-545.	1.6	26
52	Switching from blue to yellow: altering the spectral properties of a high redox potential laccase by directed evolution. <i>Biocatalysis and Biotransformation</i> , 2013, 31, 8-21.	1.1	25
53	Immobilization of the glucose isomerase from <i>Caldicoprobacter algeriensis</i> on Sepabeads EC-HA and its efficient application in continuous High Fructose Syrup production using packed bed reactor. <i>Food Chemistry</i> , 2020, 309, 125710.	4.2	25
54	Synthesis of maltooligosyl fructofuranosides catalyzed by immobilized cyclodextrin glycosyltransferase using starch as donor. <i>Tetrahedron</i> , 2004, 60, 529-534.	1.0	24

#	ARTICLE	IF	CITATIONS
55	Evolved alkaline fungal laccase secreted by <i>Saccharomyces cerevisiae</i> as useful tool for the synthesis of C ¹⁴ N heteropolymeric dye. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2016, 134, 323-330.	1.8	24
56	Synthesis of methyl α -D-glucooligosaccharides by entrapped dextransucrase from <i>Leuconostoc mesenteroides</i> B-1299. <i>Journal of Biotechnology</i> , 2006, 124, 439-445.	1.9	23
57	Bioremediation of polycyclic aromatic hydrocarbons by fungal laccases engineered by directed evolution. <i>Biocatalysis and Biotransformation</i> , 2007, 25, 219-228.	1.1	23
58	Efficient conversion of chitosan into chitooligosaccharides by a chitosanolytic activity from <i>Bacillus thuringiensis</i> . <i>Process Biochemistry</i> , 2018, 73, 102-108.	1.8	22
59	Succinylation of cyclodextrin glycosyltransferase from <i>Thermoanaerobacter</i> sp. 501 enhances its transferase activity using starch as donor. <i>Journal of Biotechnology</i> , 2001, 86, 71-80.	1.9	20
60	Efficient α -Glucosylation of Epigallocatechin Gallate Catalyzed by Cyclodextrin Glucanotransferase from <i>Thermoanaerobacter</i> Species. <i>Journal of Agricultural and Food Chemistry</i> , 2018, 66, 7402-7408.	2.4	20
61	Synthesis of α (1 \rightarrow 3) and α (1 \rightarrow 6) galactooligosaccharides from lactose and whey using a recombinant β -galactosidase from <i>Pantoea anthophila</i> . <i>Electronic Journal of Biotechnology</i> , 2021, 49, 14-21.	1.2	20
62	Optimization of Regioselective α -Glucosylation of Hesperetin Catalyzed by Cyclodextrin Glucanotransferase. <i>Molecules</i> , 2018, 23, 2885.	1.7	19
63	Enzymatic Synthesis of a Novel Pterostilbene α -Glucoside by the Combination of Cyclodextrin Glucanotransferase and Amyloglucosidase. <i>Molecules</i> , 2018, 23, 1271.	1.7	19
64	Immobilization of the β -fructofuranosidase from <i>Xanthophyllomyces dendrorhous</i> by Entrapment in Polyvinyl Alcohol and Its Application to Neo-Fructooligosaccharides Production. <i>Catalysts</i> , 2018, 8, 201.	1.6	18
65	Kinetic properties of ATP phosphoribosyltransferase of <i>Escherichia coli</i> . <i>Molecular and Cellular Biochemistry</i> , 1976, 11, 131-136.	1.4	16
66	Enzymatic Synthesis of Partially Acylated Sucroses. <i>Annals of the New York Academy of Sciences</i> , 1995, 750, 332-337.	1.8	16
67	Galactooligosaccharide Production from <i>Pantoea anthophila</i> Strains Isolated from Tejuino, a Mexican Traditional Fermented Beverage. <i>Catalysts</i> , 2017, 7, 242.	1.6	15
68	Kinetic and Enantioselective Behaviour of Isoenzymes A and B from <i>Candida rugosa</i> Lipase in the Hydrolysis of Lipids and Esters. <i>Biocatalysis and Biotransformation</i> , 1997, 15, 75-89.	1.1	14
69	Micro-scale procedure for enzyme immobilization screening and operational stability assays. <i>Biotechnology Letters</i> , 2015, 37, 1593-1600.	1.1	14
70	Fructosylation of Hydroxytyrosol by the β -Fructofuranosidase from <i>Xanthophyllomyces dendrorhous</i> : Insights into the Molecular Basis of the Enzyme Specificity. <i>ChemCatChem</i> , 2018, 10, 4878-4887.	1.8	14
71	Effect of Surfactants on Activity and Stability of Native and Chemically Modified Lipases A and B from <i>Candida rugosa</i> . <i>Biocatalysis and Biotransformation</i> , 1996, 13, 271-285.	1.1	13
72	Lipase-catalyzed preparation of mono- and diesters of ferulic acid. <i>Biocatalysis and Biotransformation</i> , 2015, 33, 89-97.	1.1	11

#	ARTICLE	IF	CITATIONS
73	Effect of Chemical Modification of Cyclodextrin Glycosyltransferase (CGTase) from <i>Thermoanaerobacter</i> sp. on Its Activity and Product Selectivity. <i>Annals of the New York Academy of Sciences</i> , 1998, 864, 183-187.	1.8	10
74	Solubility Measurements of Fatty Acid Glucose and Sucrose Esters in 2-Methyl-2-butanol and Mixtures of 2-Methyl-2-butanol with Dimethyl Sulfoxide. <i>Journal of Chemical & Engineering Data</i> , 2002, 47, 1517-1520.	1.0	10
75	Production and Surfactant Properties of Tert-Butyl α -D-Glucopyranosides Catalyzed by Cyclodextrin Glucanotransferase. <i>Catalysts</i> , 2019, 9, 575.	1.6	10
76	Enzymatic Synthesis of Phloretin α -Glucosides Using a Sucrose Phosphorylase Mutant and its Effect on Solubility, Antioxidant Properties and Skin Absorption. <i>Advanced Synthesis and Catalysis</i> , 2021, 363, 3079-3089.	2.1	10
77	Chemical modification of carboxylic residues in a cyclodextrin glucanotransferase and its implication in the hydrolysis/transglycosylation ratio of the α -amylase family. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2003, 26, 57-67.	1.8	9
78	Acylation of subtilisin with long fatty acyl residues affects its activity and thermostability in aqueous medium. <i>FEBS Letters</i> , 1994, 339, 200-204.	1.3	8
79	Computational Studies of Subtilisin-Catalyzed Transesterification of Sucrose: Importance of Entropic Effects.. <i>ChemBioChem</i> , 2002, 3, 907-910.	1.3	6
80	On the Enzyme Specificity for the Synthesis of Prebiotic Galactooligosaccharides. , 2013, , 23-39.		5
81	Deciphering the molecular specificity of phenolic compounds as inhibitors or glycosyl acceptors of β -fructofuranosidase from <i>Xanthophyllomyces dendrorhous</i> . <i>Scientific Reports</i> , 2019, 9, 17441.	1.6	5
82	Reuse of Immobilized <i>Komagataella phaffii</i> Cells for the Elimination of α -Glucose in Syrups of Bioactive Carbohydrates. <i>ACS Food Science & Technology</i> , 2022, 2, 682-690.	1.3	4
83	Enzymatic Synthesis of Oleins in Organic Media. <i>Annals of the New York Academy of Sciences</i> , 1995, 750, 242-245.	1.8	2
84	Stability in the presence of organic solvents of dextransucrase from <i>Leuconostoc mesenteroides</i> NRRL B-512F immobilized in calcium-alginate beads. <i>Progress in Biotechnology</i> , 1998, 15, 535-540.	0.2	2
85	Lipase-Catalyzed Synthesis of Fatty Acid Esters of Trisaccharides. <i>Methods in Molecular Biology</i> , 2018, 1835, 287-296.	0.4	2
86	Low-Lactose, Prebiotic-Enriched Milk. , 2016, , 47-57.		1
87	Editorial "farewell to Prof. David Leak. <i>Biocatalysis and Biotransformation</i> , 2018, 36, 279-279.	1.1	0