

# Francesco Secundo

## List of Publications by Year in descending order

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117  
papers

4,413  
citations

126907

33  
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126  
docs citations

126  
times ranked

5200  
citing authors

#	ARTICLE	IF	CITATIONS
1	Conformational changes of enzymes upon immobilisation. <i>Chemical Society Reviews</i> , 2013, 42, 6250.	38.1	484
2	Dissolution of <i>Candida antarctica</i> lipase B in ionic liquids: effects on structure and activity. <i>Green Chemistry</i> , 2004, 6, 483.	9.0	300
3	Biotechnological Applications of Proteases in Food Technology. <i>Comprehensive Reviews in Food Science and Food Safety</i> , 2018, 17, 412-436.	11.7	183
4	The first crystal structure of a phospholipase D. <i>Structure</i> , 2000, 8, 655-667.	3.3	167
5	Effects of medium and of reaction conditions on the enantioselectivity of lipases in organic solvents and possible rationales. <i>Tetrahedron: Asymmetry</i> , 1992, 3, 267-280.	1.8	150
6	Structure and activity of <i>Candida antarctica</i> lipase B in ionic liquids. <i>Green Chemistry</i> , 2006, 8, 282-286.	9.0	145
7	Enzyme Stability and Activity in Non-Aqueous Reaction Systems: A Mini Review. <i>Catalysts</i> , 2016, 6, 32.	3.5	124
8	Sequence of the lid affects activity and specificity of <i>Candida rugosa</i> lipase isoenzymes. <i>Protein Science</i> , 2009, 12, 2312-2319.	7.6	119
9	Structural and Enzymatic Characterization of ABgp46, a Novel Phage Endolysin with Broad Anti-Gram-Negative Bacterial Activity. <i>Frontiers in Microbiology</i> , 2016, 7, 208.	3.5	118
10	ATR-FT/IR Study on the Interactions between Gliadins and Dextrin and Their Effects on Protein Secondary Structure. <i>Journal of Agricultural and Food Chemistry</i> , 2005, 53, 1757-1764.	5.2	114
11	The lid is a structural and functional determinant of lipase activity and selectivity. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2006, 39, 166-170.	1.8	110
12	Enzymatic synthesis of various 1- $\alpha$ -O-sucrose and 1-O-fructose esters. <i>Journal of the Chemical Society Perkin Transactions 1</i> , 1989, , 1057-1061.	0.9	94
13	Algal Biofertilizers and Plant Growth Stimulants for Sustainable Agriculture. <i>Industrial Biotechnology</i> , 2018, 14, 203-211.	0.8	82
14	Purification and properties of two phospholipases D from <i>Streptomyces</i> sp.. <i>Lipids and Lipid Metabolism</i> , 1995, 1255, 273-279.	2.6	70
15	CD and small-angle x-ray scattering of silk fibroin in solution. <i>Biopolymers</i> , 1989, 28, 1613-1624.	2.4	68
16	Preparation and properties of lipase immobilized on MCM-36 support. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2003, 22, 119-133.	1.8	65
17	Activity of different <i>Candida antarctica</i> lipase B formulations in organic solvents. <i>Biotechnology and Bioengineering</i> , 2001, 73, 157-163.	3.3	63
18	Regioselective acylation of bile acid derivatives with <i>Candida cylindracea</i> lipase in anhydrous benzene. <i>Journal of Organic Chemistry</i> , 1989, 54, 3161-3164.	3.2	62

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19	Purification and Characterization of a Novel Recombinant Highly Enantioselective Short-Chain NAD(H)-Dependent Alcohol Dehydrogenase from <i>Thermus thermophilus</i> . Applied and Environmental Microbiology, 2008, 74, 3949-3958.	3.1	60
20	Lipase activity and conformation in neat organic solvents. Journal of Molecular Catalysis B: Enzymatic, 2002, 19-20, 93-102.	1.8	54
21	Cloning, characterization and substrate degradation mode of a novel chitinase from <i>Streptomyces albolongus</i> ATCC 27414. Food Chemistry, 2018, 261, 329-336.	8.2	53
22	Optimization of Hydrolase Efficiency in Organic Solvents. Chemistry - A European Journal, 2003, 9, 3194-3199.	3.3	51
23	Optimization of <i>Pseudomonas cepacia</i> lipase preparations for catalysis in organic solvents. , 1999, 62, 554-561.		50
24	Immobilization and Photocurrent Activity of a Light-Harvesting Antenna Complex II, LHCI, Isolated from a Plant on Electrodes. ACS Macro Letters, 2012, 1, 296-299.	4.8	50
25	An interesting example of complementary regioselective acylation of secondary hydroxyl groups by different lipases. Tetrahedron Letters, 1989, 30, 1703-1704.	1.4	47
26	Adsorption and activities of lipases on synthetic beidellite clays with variable composition. Microporous and Mesoporous Materials, 2008, 109, 350-361.	4.4	46
27	Molecular mechanism of deactivation of <i>C. antarctica</i> lipase B by methanol. Journal of Biotechnology, 2013, 168, 462-469.	3.8	45
28	Asymmetric oxidation of sulfides by cyclohexanone monooxygenase. Tetrahedron: Asymmetry, 1993, 4, 1981-1982.	1.8	44
29	The C-terminal domain of the transcriptional corepressor CtBP is intrinsically unstructured. Protein Science, 2006, 15, 1042-1050.	7.6	44
30	Effects of water miscible organic solvents on the activity and conformation of the baeyer-villiger monooxygenases from <i>Thermobifida fusca</i> and <i>Acinetobacter calcoaceticus</i> : A comparative study. Biotechnology and Bioengineering, 2011, 108, 491-499.	3.3	44
31	Chemo-enzymatic Synthesis of 6'-O-(3-Arylprop-2-enoyl) Derivatives of the Flavonol Glucoside Isoquercitrin. Helvetica Chimica Acta, 1993, 76, 2981-2991.	1.6	42
32	Effects of pH on enantiospecificity of alcohol dehydrogenases from <i>Thermoanaerobacter ethanolicus</i> and horse liver. Enzyme and Microbial Technology, 1996, 19, 487-492.	3.2	39
33	Temperature-Dependent, Irreversible Formation of Amyloid Fibrils by a Soluble Human Ataxin-3 Carrying a Moderately Expanded Polyglutamine Stretch (Q36). Biochemistry, 2003, 42, 14626-14632.	2.5	39
34	Fourier-transform infrared spectroscopy study of dehydrated lipases from <i>Candida antarctica</i> B and <i>Pseudomonas cepacia</i> . , 1999, 64, 545-551.		38
35	Biophysical and mutagenic analysis of <i>Thermoanaerobacter ethanolicus</i> secondary-alcohol dehydrogenase activity and specificity. Biochemical Journal, 1997, 326, 717-724.	3.7	33
36	Activity and enantioselectivity of wildtype and lid mutated <i>Candida rugosa</i> lipase isoform 1 in organic solvents. Biotechnology and Bioengineering, 2004, 86, 236-240.	3.3	30

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37	Activity, stability, and conformation of methoxypoly(ethylene glycol)-subtilisin at different concentrations of water in dioxane. , 1997, 54, 50-57.		29
38	Ataxin-3 is subject to autolytic cleavage. FEBS Journal, 2006, 273, 4277-4286.	4.7	27
39	Natural flavor ester synthesis catalyzed by lipases. Flavour and Fragrance Journal, 2020, 35, 209-218.	2.6	27
40	Functional Lipids in Autoimmune Inflammatory Diseases. International Journal of Molecular Sciences, 2020, 21, 3074.	4.1	27
41	A combinatorial biocatalysis approach to an array of cholic acid derivatives. Biotechnology and Bioengineering, 2003, 81, 391-396.	3.3	26
42	Mono- and disaccharides enhance the activity and enantioselectivity of Burkholderia cepacia lipase in organic solvent but do not significantly affect its conformation. Biotechnology and Bioengineering, 2005, 92, 438-446.	3.3	26
43	Cyclohexanone monooxygenase catalyzed oxidation of methyl phenyl sulfide and cyclohexanone with macromolecular NADP in a membrane reactor. Biotechnology Letters, 1993, 15, 865.	2.2	25
44	Evidence for an Essential Lysyl Residue in Phospholipase D from Streptomyces sp. by Modification with Diethyl Pyrocarbonate and Pyridoxal 5-Phosphate. Biochemistry, 1996, 35, 9631-9636.	2.5	25
45	Enantioselective enzymatic resolution of racemic alcohols by lipases in green organic solvents. Tetrahedron: Asymmetry, 2017, 28, 473-478.	1.8	25
46	Whole-Cell Biocatalytic Synthesis of Cinnamyl Acetate with a Novel Esterase from the DNA Library of <i>Acinetobacter hemolyticus</i> . Journal of Agricultural and Food Chemistry, 2017, 65, 2120-2128.	5.2	25
47	Biocatalytic procedure for obtaining all four diastereoisomers of 1-(1-hydroxyethyl)-3-ethylferrocene: synthons for chiral 1,3-disubstituted ferrocenes. Tetrahedron: Asymmetry, 2004, 15, 3835-3840.	1.8	24
48	Time-resolved fluoroimmunoassay for quantitative determination of ampicillin in cow milk samples with different fat contents. Talanta, 2008, 77, 126-130.	5.5	24
49	Cargo-Compatible Encapsulation in Virus-Based Nanoparticles. Nano Letters, 2019, 19, 2700-2706.	9.1	24
50	Enzymatic transesterification monitored by an easy-to-use Fourier transform infrared spectroscopy method. Biotechnology Journal, 2013, 8, 133-138.	3.5	23
51	Application of enzymes as a feed additive in aquaculture. Marine Life Science and Technology, 2022, 4, 208-221.	4.6	23
52	Phospholipids hydrolysis in organic solvents catalysed by immobilised phospholipase C. Journal of Molecular Catalysis B: Enzymatic, 1999, 6, 125-132.	1.8	22
53	Structural and functional characterization of the porcine proline-rich antifungal peptide SPB isolated from salivary gland granules. Journal of Peptide Science, 2008, 14, 251-260.	1.4	22
54	A new enzymatic route to the synthesis of 12-ketoursodeoxycholic acid. Biotechnology Letters, 1996, 18, 305.	2.2	21

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55	Pegylated enzyme entrapped in poly(vinyl alcohol) hydrogel for biocatalytic application. <i>Il Farmaco</i> , 2001, 56, 541-547.	0.9	21
56	Rational Design of Practically Important Enzymes. <i>Moscow University Chemistry Bulletin</i> , 2018, 73, 1-6.	0.6	21
57	Properties of hydrolyzed guar gum fermented in vitro with pig fecal inocula and its favorable impacts on microbiota. <i>Carbohydrate Polymers</i> , 2020, 237, 116116.	10.2	21
58	Can an inactivating agent increase enzyme activity in organic solvent? Effects of 18-crown-6 on lipase activity, enantioselectivity, and conformation. <i>Biotechnology and Bioengineering</i> , 2007, 97, 12-18.	3.3	20
59	Spectroscopic investigation of lipase from <i>Pseudomonas cepacia</i> solubilized in 1,4-dioxane by non-covalent complexation with methoxypoly(ethylene glycol). , 1999, 64, 624-629.		19
60	Effect of chemical composition of SBA-15 on the adsorption and catalytic activity of $\beta$ -chymotrypsin. <i>Journal of Materials Chemistry</i> , 2011, 21, 15619.	6.7	19
61	Partial purification of <i>Nigella sativa</i> L. Seed lipase and its application in transesterification reactions. <i>JAACS, Journal of the American Oil Chemists' Society</i> , 2003, 80, 43-48.	1.9	18
62	Immobilization of <i>Thermoanaerobium brockii</i> alcohol dehydrogenase on SBA-15. <i>Bioprocess and Biosystems Engineering</i> , 2011, 34, 247-251.	3.4	18
63	Self-Assembled Squalene-based Fluorescent Heteronanoparticles. <i>ChemPlusChem</i> , 2015, 80, 47-49.	2.8	18
64	$\beta$ -Chymotrypsin Immobilized on a Low-Density Polyethylene Surface Successfully Weakens <i>Escherichia coli</i> Biofilm Formation. <i>International Journal of Molecular Sciences</i> , 2018, 19, 4003.	4.1	18
65	Comparative study of the properties of wild type and recombinant cyclohexanone monooxygenase, an enzyme of synthetic interest. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2005, 34, 1-6.	1.8	17
66	Construction of a Super-Folder Fluorescent Protein-Guided Secretory Expression System for the Production of Phospholipase D in <i>Bacillus subtilis</i> . <i>Journal of Agricultural and Food Chemistry</i> , 2021, 69, 6842-6849.	5.2	17
67	The enantioselectivity of lipase PS in chlorinated solvents increases as a function of substrate conversion. <i>Tetrahedron: Asymmetry</i> , 1997, 8, 2167-2173.	1.8	15
68	Coating polypropylene surfaces with protease weakens the adhesion and increases the dispersion of <i>Candida albicans</i> cells. <i>Biotechnology Letters</i> , 2017, 39, 423-428.	2.2	15
69	Identification of a Novel Esterase from Marine Environmental Genomic DNA Libraries and Its Application in Production of Free All- <i>trans</i> -Astaxanthin. <i>Journal of Agricultural and Food Chemistry</i> , 2018, 66, 2812-2821.	5.2	15
70	$\beta$ -Functionalized Esters by Enzymatic Acylation. <i>Synthetic Communications</i> , 1990, 20, 679-685.	2.1	14
71	Crystallization and preliminary X-ray diffraction studies of phospholipase D from <i>Streptomyces</i> sp.. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2000, 56, 466-468.	2.5	14
72	Activation of subtilisin Carlsberg in organic solvents by methyl- $\beta$ -cyclodextrin: Lyoprotection versus substrate and product-complex effect. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2006, 42, 20-26.	1.8	14

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73	Effect of prolonged exposure to organic solvents on the active site environment of subtilisin Carlsberg. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2010, 64, 38-44.	1.8	14
74	Co-immobilization of two-component hydroxylase monooxygenase by functionalized magnetic nanoparticles for preserving high catalytic activity and enhancing enzyme stability. <i>International Journal of Biological Macromolecules</i> , 2020, 164, 3163-3170.	7.5	14
75	Effects of Tyrosine Ring Fluorination on Rates and Equilibria of Formation of Intermediates in the Reactions of Carbon-Carbon Lyases. <i>FEBS Journal</i> , 1997, 244, 658-663.	0.2	13
76	On the activity loss of hydrolases in organic solvents: II. a mechanistic study of subtilisin Carlsberg. <i>BMC Biotechnology</i> , 2006, 6, 51.	3.3	13
77	Cigarette smoke induces alterations in the drug-binding properties of human serum albumin. <i>Blood Cells, Molecules, and Diseases</i> , 2014, 52, 166-174.	1.4	13
78	Improvement of <i>Aspergillus flavus</i> saponin hydrolase thermal stability and productivity via immobilization on a novel carrier based on sugarcane bagasse. <i>Biotechnology Reports (Amsterdam)</i> , 2021, 10, 100000.	1.0	10
79	Activation/Inactivation Role of Ionic Liquids on Formate Dehydrogenase from <i>Pseudomonas</i> sp. 101 and Its Mutated Thermostable Form. <i>ChemCatChem</i> , 2018, 10, 3247-3259.	3.7	13
80	Rapid time-resolved fluoroimmunoassay for diethylstilbestrol in cow milk samples with a highly luminescent Tb <sup>3+</sup> chelate. <i>Journal of Food Composition and Analysis</i> , 2012, 25, 221-225.	3.9	12
81	Biochemical characterization of two $\hat{1}^2$ -N-acetylglucosaminidases from <i>Streptomyces violascens</i> for efficient production of N-acetyl-d-glucosamine. <i>Food Chemistry</i> , 2021, 364, 130393.	8.2	12
82	Preparation of Fluorinated Amino Acids with Tyrosine Phenol Lyase. <i>ACS Symposium Series</i> , 1996, , 95-104.	0.5	11
83	Purification and applications of a phospholipase D from a new strain of <i>Streptomyces</i> . <i>Biotechnology Letters</i> , 1997, 19, 1083-1085.	2.2	11
84	Antibodies conjugated with new highly luminescent Eu <sup>3+</sup> and Tb <sup>3+</sup> chelates as markers for time resolved immunoassays. Application to simultaneous determination of clenbuterol and free cortisol in horse urine. <i>Talanta</i> , 2009, 80, 954-958.	5.5	11
85	Water miscible mono alcohols effect on the structural conformation of <i>Bacillus clausii</i> GMBAE 42 serine alkaline protease. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2010, 64, 184-188.	1.8	11
86	On the Kinetic Mechanism of Phospholipase D from <i>Streptomyces</i> SP. In an Emulsion System. <i>Biocatalysis and Biotransformation</i> , 1997, 15, 251-264.	2.0	10
87	Electrospray mass spectrometric analysis of poly(ethylene glycol)-protein conjugates. <i>Rapid Communications in Mass Spectrometry</i> , 1997, 11, 1219-1222.	1.5	10
88	Temperature-Induced Conformational Change at the Catalytic Site of <i>Sulfolobus solfataricus</i> Alcohol Dehydrogenase Highlighted by Asn249Tyr Substitution. A Hydrogen/Deuterium Exchange, Kinetic, and Fluorescence Quenching Study. <i>Biochemistry</i> , 2005, 44, 11040-11048.	2.5	10
89	Immobilized Hydrolytic Enzymes Exhibit Antibiofilm Activity Against <i>Escherichia coli</i> at Sub-Lethal Concentrations. <i>Current Microbiology</i> , 2015, 71, 106-114.	2.2	10
90	The effect of thermodynamic properties of solvent mixtures explains the difference between methanol and ethanol in <i>C. antarctica</i> lipase B catalyzed alcoholysis. <i>Journal of Biotechnology</i> , 2015, 214, 1-8.	3.8	10

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91	Cloning, Expression, and Characterization of a Novel Thermostable and Alkaline-stable Esterase from <i>Stenotrophomonas maltophilia</i> OUC_Est10 Catalytically Active in Organic Solvents. <i>Catalysts</i> , 2019, 9, 401.	3.5	10
92	Effect of Reaction Conditions on the Activity and Enantioselectivity of Lipases in Organic Solvents. <i>Progress in Biotechnology</i> , 1992, , 111-119.	0.2	10
93	Different Structural Behaviors Evidenced in Thaumatin-Like Proteins: A Spectroscopic Study. <i>Protein Journal</i> , 2008, 27, 13-20.	1.6	9
94	A chemoenzymatic approach to the synthesis of the stereoisomers of a $\beta$ -adrenergic receptor antagonist. <i>Tetrahedron: Asymmetry</i> , 2000, 11, 2741-2751.	1.8	8
95	Effects of stabilizing additives on the activity of alpha-chymotrypsin in organic solvent. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2012, 84, 128-131.	1.8	8
96	Enzymatic Resolution Of 3-Butene-1, 2-Diol In Organic Solvents And Optimization Of Reaction Conditions. <i>Biocatalysis and Biotransformation</i> , 1999, 17, 241-250.	2.0	6
97	Biocatalytic synthesis of cyclopropanol from cyclopropyl methyl ketone using whole cells of <i>Rhodococcus erythropolis</i> . <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2003, 21, 51-53.	1.8	6
98	Role of methoxypolyethylene glycol on the hydration, activity, conformation and dynamic properties of a lipase in a dry film. <i>Biotechnology and Bioengineering</i> , 2008, 101, 255-262.	3.3	6
99	The effect of methionine to cysteine substitution on the stability of formate dehydrogenase from <i>Candida methylca</i> . <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2012, 82, 109-114.	1.8	6
100	Fatty acid composition and fat content in milk from cows grazing in the Alpine region. <i>European Food Research and Technology</i> , 2015, 241, 413-418.	3.3	6
101	Visible-light-driven CO <sub>2</sub> reduction to formate with a system of water-soluble zinc porphyrin and formate dehydrogenase in ionic liquid/aqueous media. <i>RSC Advances</i> , 2020, 10, 42354-42362.	3.6	6
102	Enzymatic Regioselective Acylation of Polyhydroxylated Natural Compounds in Organic Solvents. <i>Annals of the New York Academy of Sciences</i> , 1990, 613, 712-716.	3.8	4
103	Partial purification of <i>nigella sativa</i> L. Seed lipase and its application in hydrolytic reactions. Enrichment of $\gamma$ -linolenic acid from borage oil. <i>JAOCS, Journal of the American Oil Chemists' Society</i> , 2003, 80, 237-241.	1.9	4
104	Preparation and Comparison of Hydrolase-Coated Plastics. <i>ChemistrySelect</i> , 2016, 1, 1490-1495.	1.5	4
105	Step-wise immobilization of multi-enzymes by zirconium-based coordination polymer in situ self-assembly and specific absorption. <i>Journal of Inorganic Biochemistry</i> , 2020, 208, 111093.	3.5	4
106	Discriminating between dispersion and lyoprotection effects in biocatalysis in organic media. <i>Canadian Journal of Chemistry</i> , 2002, 80, 551-554.	1.1	3
107	Highly efficient preparation of free all- <i>trans</i> -astaxanthin from <i>Haematococcus pluvialis</i> extract by a rapid biocatalytic method based on crude extracellular enzyme extract. <i>International Journal of Food Science and Technology</i> , 2019, 54, 376-386.	2.7	3
108	Galvanic Displacement of Nanostructured Gold for Flavoenzyme Adsorption in Biotechnology. <i>ECS Transactions</i> , 2010, 33, 59-66.	0.5	2

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109	Editorial: Protein stabilization â€“ crossroad for proteinâ€based processes and products. <i>Biotechnology Journal</i> , 2015, 10, 341-342.	3.5	2
110	Oxidation of Terpenoids to Achieve High-Value Flavor and Fragrancesâ€”Questioning Microalgae Oxidative Capabilities in the Biotransformation of the Sesquiterpene Valencene and of Selected Natural Apocarotenoids. <i>Chemistry</i> , 2021, 3, 821-830.	2.2	2
111	Electroless Synthesis of Metallic Nanostructures for Biomedical Technologies. <i>Modern Aspects of Electrochemistry</i> , 2012, , 73-99.	0.2	1
112	Water-Retaining Polymers in Organic Solvent Increase Lipase Activity for Biodiesel Synthesis. <i>Insights in Enzyme Research</i> , 2018, 01, .	0.3	1
113	Enhanced whole-cell biotransformation of 3-chloropropiophenone into 1-phenyl-1-propanone by hydrogel entrapped <i>Chlorella emersonii</i> (211.8b). <i>Biotechnology Letters</i> , 2021, 43, 2259-2272.	2.2	1
114	Optimization of Hydrolase Efficiency in Organic Solvents.. <i>ChemInform</i> , 2003, 34, no.	0.0	0
115	Importance of Enzyme Formulation for the Activity and Enantioselectivity of Lipases in Organic Solvents. , 0, , 67-77.		0
116	Nanostructured Gold for Immobilization of Thioaniline Functionalized Glucose Oxidase and Au Nanoparticles by Electropolymerization. <i>ECS Transactions</i> , 2013, 45, 31-35.	0.5	0
117	Gliadins and Polysaccharides Interaction. <i>Special Publication - Royal Society of Chemistry</i> , 2007, , 349-352.	0.0	0