# Francesco Secundo

List of Publications by Year
in descending order



| 117 | 4,413 | 126858 | 123376 |
|---|---|---|---|
| papers | citations | 33 h-index | 61 g-index |

| 126 | 126 | 126 | 5200 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Conformational changes of enzymes upon immobilisation. Chemical Society Reviews, 2013, 42, 6250. | 18.7 | 484 |
| 2 | Dissolution of Candida antarctica lipase B in ionic liquids: effects on structure and activity. Green Chemistry, 2004, 6, 483. | 4.6 | 300 |
| 3 | Biotechnological Applications of Proteases in Food Technology. Comprehensive Reviews in Food Science and Food Safety, 2018, 17, 412-436. | 5.9 | 183 |
| 4 | The first crystal structure of a phospholipase D. Structure, 2000, 8, 655-667. | 1.6 | 167 |
| 5 | Effects of medium and of reaction conditions on the enantioselectivity of lipases in organic solvents and possible rationales. Tetrahedron: Asymmetry, 1992, 3, 267-280. | 1.8 | 150 |
| 6 | Structure and activity of Candida antarctica lipase B in ionic liquids. Green Chemistry, 2006, 8, 282-286. | 4.6 | 145 |
| 7 | Enzyme Stability and Activity in Non-Aqueous Reaction Systems: A Mini Review. Catalysts, 2016, 6, 32. | 1.6 | 124 |
| 8 | Sequence of the lid affects activity and specificity of Candida rugosa lipase isoenzymes. Protein Science, 2009, 12, 2312-2319. | 3.1 | 119 |
| 9 | Structural and Enzymatic Characterization of ABgp46, a Novel Phage Endolysin with Broad Anti-Gram-Negative Bacterial Activity. Frontiers in Microbiology, 2016, 7, 208. | 1.5 | 118 |
| 10 | ATR-FT/IR Study on the Interactions between Gliadins and Dextrin and Their Effects on Protein Secondary Structure. Journal of Agricultural and Food Chemistry, 2005, 53, 1757-1764. | 2.4 | 114 |
| 11 | The lid is a structural and functional determinant of lipase activity and selectivity. Journal of Molecular Catalysis B: Enzymatic, 2006, 39, 166-170. | 1.8 | 110 |
| 12 | Enzymatic synthesis of various 1â€²-O-sucrose and 1-O-fructose esters. Journal of the Chemical Society Perkin Transactions 1, 1989, , 1057-1061. | 0.9 | 94 |
| 13 | Algal Biofertilizers and Plant Growth Stimulants for Sustainable Agriculture. Industrial Biotechnology, 2018, 14, 203-211. | 0.5 | 82 |
| 14 | Purification and properties of two phospholipases D from Streptomyces sp.. Lipids and Lipid Metabolism, 1995, 1255, 273-279. | 2.6 | 70 |
| 15 | CD and small-angle x-ray scattering of silk fibroin in solution. Biopolymers, 1989, 28, 1613-1624. | 1.2 | 68 |
| 16 | Preparation and properties of lipase immobilized on MCM-36 support. Journal of Molecular Catalysis B: Enzymatic, 2003, 22, 119-133. | 1.8 | 65 |
| 17 | Activity of differentCandida antarctica lipase B formulations in organic solvents. Biotechnology and Bioengineering, 2001, 73, 157-163. | 1.7 | 63 |
| 18 | Regioselective acylation of bile acid derivatives with Candida cylindracea lipase in anhydrous benzene. Journal of Organic Chemistry, 1989, 54, 3161-3164. | 1.7 | 62 |

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|---|---|---|---|
| 19 | Purification and Characterization of a Novel Recombinant Highly Enantioselective Short-Chain NAD(H)-Dependent Alcohol Dehydrogenase from Thermus thermophilus. Applied and Environmental Microbiology, 2008, 74, 3949-3958. | 1.4 | 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 Streptomyces albolongus ATCC 27414. Food Chemistry, 2018, 261, 329-336. | 4.2 | 53 |
| 22 | Optimization of Hydrolase Efficiency in Organic Solvents. Chemistry - A European Journal, 2003, 9, 3194-3199. | 1.7 | 51 |
| 23 | Optimization ofPseudomonas cepacia lipase preparations for catalysis in organic solvents. , 1999, 62, 554-561. | | 50 |
| 24 | Immobilization and Photocurrent Activity of a Light-Harvesting Antenna Complex II, LHCII, Isolated from a Plant on Electrodes. ACS Macro Letters, 2012, 1, 296-299. | 2.3 | 50 |
| 25 | An interesting example of complementary regioselective acylation of secondary hydroxyl groups by different lipases. Tetrahedron Letters, 1989, 30, 1703-1704. | 0.7 | 47 |
| 26 | Adsorption and activities of lipases on synthetic beidellite clays with variable composition. Microporous and Mesoporous Materials, 2008, 109, 350-361. | 2.2 | 46 |
| 27 | Molecular mechanism of deactivation of C. antarctica lipase B by methanol. Journal of Biotechnology, 2013, 168, 462-469. | 1.9 | 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. | 3.1 | 44 |
| 30 | Effects of water miscible organic solvents on the activity and conformation of the baeyerâ€“villiger monooxygenases from Thermobifida fusca and Acinetobacter calcoaceticus: A comparative study. Biotechnology and Bioengineering, 2011, 108, 491-499. | 1.7 | 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. | 1.0 | 42 |
| 32 | Effects of pH on enantiospecificity of alcohol dehydrogenases from Thermoanaerobacter ethanolicus and horse liver. Enzyme and Microbial Technology, 1996, 19, 487-492. | 1.6 | 39 |
| 33 | Temperature-Dependent, Irreversible Formation of Amyloid Fibrils by a Soluble Human Ataxin-3 Carrying a Moderately Expanded Polyglutamine Stretch (Q36)â€. Biochemistry, 2003, 42, 14626-14632. | 1.2 | 39 |
| 34 | Fourier-transform infrared spectroscopy study of dehydrated lipases fromCandida antarctica B andPseudomonas cepacia. , 1999, 64, 545-551. | | 38 |
| 35 | Biophysical and mutagenic analysis of Thermoanaerobacter ethanolicus secondary-alcohol dehydrogenase activity and specificity. Biochemical Journal, 1997, 326, 717-724. | 1.7 | 33 |
| 36 | Activity and enantioselectivity of wildtype and lid mutatedCandida rugosa lipase isoform 1 in organic solvents. Biotechnology and Bioengineering, 2004, 86, 236-240. | 1.7 | 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. | 2.2 | 27 |
| 39 | Natural flavor ester synthesis catalyzed by lipases. Flavour and Fragrance Journal, 2020, 35, 209-218. | 1.2 | 27 |
| 40 | Functional Lipids in Autoimmune Inflammatory Diseases. International Journal of Molecular Sciences, 2020, 21, 3074. | 1.8 | 27 |
| 41 | A combinatorial biocatalysis approach to an array of cholic acid derivatives. Biotechnology and Bioengineering, 2003, 81, 391-396. | 1.7 | 26 |
| 42 | Mono- and disaccharides enhance the activity and enantioselectivity ofBurkholderia cepacia lipase in organic solvent but do not significantly affect its conformation. Biotechnology and Bioengineering, 2005, 92, 438-446. | 1.7 | 26 |
| 43 | Cyclohexanone monooxygenase catalyzed oxidation of methyl phenyl sulfide and cyclohexanone with macromolecular NADP in a membrane reactor. Biotechnology Letters, 1993, 15, 865. | 1.1 | 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. | 1.2 | 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 Acinetobacter hemolyticus. Journal of Agricultural and Food Chemistry, 2017, 65, 2120-2128. | 2.4 | 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. | 2.9 | 24 |
| 49 | Cargo-Compatible Encapsulation in Virus-Based Nanoparticles. Nano Letters, 2019, 19, 2700-2706. | 4.5 | 24 |
| 50 | Enzymatic transesterification monitored by an easyâ€toâ€use Fourier transform infrared spectroscopy method. Biotechnology Journal, 2013, 8, 133-138. | 1.8 | 23 |
| 51 | Application of enzymes as a feed additive in aquaculture. Marine Life Science and Technology, 2022, 4, 208-221. | 1.8 | 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 prolineâ€“rich antifungal peptide SPâ€B isolated from salivary gland granules. Journal of Peptide Science, 2008, 14, 251-260. | 0.8 | 22 |
| 54 | A new enzymatic route to the synthesis of 12-ketoursodeoxycholic acid. Biotechnology Letters, 1996, 18, 305. | 1.1 | 21 |

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| 55 | Pegylated enzyme entrapped in poly(vinyl alcohol) hydrogel for biocatalytic application. Il Farmaco, 2001, 56, 541-547. | 0.9 | 21 |
| 56 | Rational Design of Practically Important Enzymes. Moscow University Chemistry Bulletin, 2018, 73, 1-6. | 0.2 | 21 |
| 57 | Properties of hydrolyzed guar gum fermented in vitro with pig fecal inocula and its favorable impacts on microbiota. Carbohydrate Polymers, 2020, 237, 116116. | 5.1 | 21 |
| 58 | Can an inactivating agent increase enzyme activity in organic solvent? Effects of 18-crown-6 on lipase activity, enantioselectivity, and conformation. Biotechnology and Bioengineering, 2007, 97, 12-18. | 1.7 | 20 |
| 59 | Spectroscopic investigation of lipase fromPseudomonas cepacia 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 Î±-chymotrypsin. Journal of Materials Chemistry, 2011, 21, 15619. | 6.7 | 19 |
| 61 | Partial purification of Nigella sativa L. Seed lipase and its application in transesterification reactions. JAOCS, Journal of the American Oil Chemists' Society, 2003, 80, 43-48. | 0.8 | 18 |
| 62 | Immobilization of Thermoanaerobium brockii alcohol dehydrogenase on SBA-15. Bioprocess and Biosystems Engineering, 2011, 34, 247-251. | 1.7 | 18 |
| 63 | Selfâ€Assembled Squaleneâ€based Fluorescent Heteronanoparticles. ChemPlusChem, 2015, 80, 47-49. | 1.3 | 18 |
| 64 | Î±-Chymotrypsin Immobilized on a Low-Density Polyethylene Surface Successfully Weakens Escherichia coli Biofilm Formation. International Journal of Molecular Sciences, 2018, 19, 4003. | 1.8 | 18 |
| 65 | Comparative study of the properties of wild type and recombinant cyclohexanone monooxygenase, an enzyme of synthetic interest. Journal of Molecular Catalysis B: Enzymatic, 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 Bacillus subtilis. Journal of Agricultural and Food Chemistry, 2021, 69, 6842-6849. | 2.4 | 17 |
| 67 | The enantioselectivity of lipase PS in chlorinated solvents increases as a function of substrate conversion. Tetrahedron: Asymmetry, 1997, 8, 2167-2173. | 1.8 | 15 |
| 68 | Coating polypropylene surfaces with protease weakens the adhesion and increases the dispersion of Candida albicans cells. Biotechnology Letters, 2017, 39, 423-428. | 1.1 | 15 |
| 69 | Identification of a Novel Esterase from Marine Environmental Genomic DNA Libraries and Its Application in Production of Free All-trans-Astaxanthin. Journal of Agricultural and Food Chemistry, 2018, 66, 2812-2821. | 2.4 | 15 |
| 70 | Ï‰-Functionalized Esters by Enzymatic Acylation. Synthetic Communications, 1990, 20, 679-685. | 1.1 | 14 |
| 71 | Crystallization and preliminary X-ray diffraction studies of phospholipase D fromStreptomycessp.. Acta Crystallographica Section D: Biological Crystallography, 2000, 56, 466-468. | 2.5 | 14 |
| 72 | Activation of subtilisin Carlsberg in organic solvents by methyl-Î²-cyclodextrin: Lyoprotection versus substrate and product-complex effect. Journal of Molecular Catalysis B: Enzymatic, 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. Journal of Molecular Catalysis B: Enzymatic, 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 stabilty. International Journal of Biological Macromolecules, 2020, 164, 3163-3170. | 3.6 | 14 |
| 75 | Effects of Tyrosine Ring Fluorination on Rates and Equilibria of Formation of Intermediates in the Reactions of Carbon-Carbon Lyases. FEBS Journal, 1997, 244, 658-663. | 0.2 | 13 |
| 76 | On the activity loss of hydrolases in organic solvents: II. a mechanistic study of subtilisin Carlsberg. BMC Biotechnology, 2006, 6, 51. | 1.7 | 13 |
| 77 | Cigarette smoke induces alterations in the drug-binding properties of human serum albumin. Blood Cells, Molecules, and Diseases, 2014, 52, 166-174. | 0.6 | 13 |
| 78 | Improvement of Aspergillus flavus saponin hydrolase thermal stability and productivity via immobilization on a novel carrier based on sugarcane bagasse. Biotechnology Reports (Amsterdam,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 | 2.3 | 13 |
| 79 | Activation/Inactivation Role of Ionic Liquids on Formate Dehydrogenase from Pseudomonas sp. 101 and Its Mutated Thermostable Form. ChemCatChem, 2018, 10, 3247-3259. | 1.8 | 13 |
| 80 | Rapid time-resolved fluoroimmunoassay for diethylstilbestrol in cow milk samples with a highly luminescent Tb3+ chelate. Journal of Food Composition and Analysis, 2012, 25, 221-225. | 1.9 | 12 |
| 81 | Biochemical characterization of two Î²-N-acetylglucosaminidases from Streptomyces violascens for efficient production of N-acetyl-d-glucosamine. Food Chemistry, 2021, 364, 130393. | 4.2 | 12 |
| 82 | Preparation of Fluorinated Amino Acids with Tyrosine Phenol Lyase. ACS Symposium Series, 1996, , 95-104. | 0.5 | 11 |
| 83 | Purification and applications of a phospholipase D from a new strain of Streptomyces. Biotechnology Letters, 1997, 19, 1083-1085. | 1.1 | 11 |
| 84 | Antibodies conjugated with new highly luminescent Eu3+ and Tb3+ chelates as markers for time resolved immunoassays. Application to simultaneous determination of clenbuterol and free cortisol in horse urine. Talanta, 2009, 80, 954-958. | 2.9 | 11 |
| 85 | Water miscible mono alcohols effect on the structural conformation of Bacillus clausii GMBAE 42 serine alkaline protease. Journal of Molecular Catalysis B: Enzymatic, 2010, 64, 184-188. | 1.8 | 11 |
| 86 | On the Kinetic Mechanism of Phospholipase D fromStreptomycesSP. In an Emulsion System. Biocatalysis and Biotransformation, 1997, 15, 251-264. | 1.1 | 10 |
| 87 | Electrospray mass spectrometric analysis of poly(ethylene glycol)-protein conjugates. Rapid Communications in Mass Spectrometry, 1997, 11, 1219-1222. | 0.7 | 10 |
| 88 | Temperature-Induced Conformational Change at the Catalytic Site ofSulfolobus solfataricusAlcohol Dehydrogenase Highlighted by Asn249Tyr Substitution. A Hydrogen/Deuterium Exchange, Kinetic, and Fluorescence Quenching Study. Biochemistry, 2005, 44, 11040-11048. | 1.2 | 10 |
| 89 | Immobilized Hydrolytic Enzymes Exhibit Antibiofilm Activity Against Escherichia coli at Sub-Lethal Concentrations. Current Microbiology, 2015, 71, 106-114. | 1.0 | 10 |
| 90 | The effect of thermodynamic properties of solvent mixtures explains the difference between methanol and ethanol in C.antarctica lipase B catalyzed alcoholysis. Journal of Biotechnology, 2015, 214, 1-8. | 1.9 | 10 |

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| 91 | Cloning, Expression, and Characterization of a Novel Thermostable and Alkaline-stable Esterase from Stenotrophomonas maltophilia OUC_Est10 Catalytically Active in Organic Solvents. Catalysts, 2019, 9, 401. | 1.6 | 10 |
| 92 | Effect of Reaction Conditions on the Activity and Enantioselectivity of Lipases in Organic Solvents. Progress in Biotechnology, 1992, , 111-119. | 0.2 | 10 |
| 93 | Different Structural Behaviors Evidenced in Thaumatin-Like Proteins: A Spectroscopic Study. Protein Journal, 2008, 27, 13-20. | 0.7 | 9 |
| 94 | A chemoenzymatic approach to the synthesis of the stereoisomers of a Î²-adrenergic receptor antagonist. Tetrahedron: Asymmetry, 2000, 11, 2741-2751. | 1.8 | 8 |
| 95 | Effects of stabilizing additives on the activity of alpha-chymotrypsin in organic solvent. Journal of Molecular Catalysis B: Enzymatic, 2012, 84, 128-131. | 1.8 | 8 |
| 96 | Enzymatic Resolution Of 3-Butene-1, 2-Diol In Organic Solvents And Optimization Of Reaction Conditions. Biocatalysis and Biotransformation, 1999, 17, 241-250. | 1.1 | 6 |
| 97 | Biocatalytic synthesis of cyclopropanol from cyclopropyl methyl ketone using whole cells of Rhodococcus erythropolis. Journal of Molecular Catalysis B: Enzymatic, 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. Biotechnology and Bioengineering, 2008, 101, 255-262. | 1.7 | 6 |
| 99 | The effect of methionine to cysteine substitution on the stability of formate dehydrogenase from Candida methylica. Journal of Molecular Catalysis B: Enzymatic, 2012, 82, 109-114. | 1.8 | 6 |
| 100 | Fatty acid composition and fat content in milk from cows grazing in the Alpine region. European Food Research and Technology, 2015, 241, 413-418. | 1.6 | 6 |
| 101 | Visible-light-driven CO2reduction to formate with a system of water-soluble zinc porphyrin and formate dehydrogenase in ionic liquid/aqueous media. RSC Advances, 2020, 10, 42354-42362. | 1.7 | 6 |
| 102 | Enzymatic Regioselective Acylation of Polyhydroxylated Natural Compounds in Organic Solvents. Annals of the New York Academy of Sciences, 1990, 613, 712-716. | 1.8 | 4 |
| 103 | Partial purification of nigella sativa L. Seed lipase and its application in hydrolytic reactions. Enrichment of Î³-linolenic acid from borage oil. JAOCS, Journal of the American Oil Chemists' Society, 2003, 80, 237-241. | 0.8 | 4 |
| 104 | Preparation and Comparison of Hydrolase-Coated Plastics. ChemistrySelect, 2016, 1, 1490-1495. | 0.7 | 4 |
| 105 | Step-wise immobilization of multi-enzymes by zirconium-based coordination polymer in situ self-assembly and specific absorption. Journal of Inorganic Biochemistry, 2020, 208, 111093. | 1.5 | 4 |
| 106 | Discriminating between dispersion and lyoprotection effects in biocatalysis in organic media. Canadian Journal of Chemistry, 2002, 80, 551-554. | 0.6 | 3 |
| 107 | Highly efficient preparation of free allâ€‹transâ€astaxanthin from Haematococcus pluvialis extract by a rapid biocatalytic method based on crude extracellular enzyme extract. International Journal of Food Science and Technology, 2019, 54, 376-386. | 1.3 | 3 |
| 108 | Galvanic Displacement of Nanostructured Gold for Flavoenzyme Adsorption in Biotechnology. ECS Transactions, 2010, 33, 59-66. | 0.3 | 2 |

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| 109 | Editorial: Protein stabilization â€“ crossroad for proteinâ€based processes and products. Biotechnology Journal, 2015, 10, 341-342. | 1.8 | 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. Chemistry, 2021, 3, 821-830. | 0.9 | 2 |
| 111 | Electroless Synthesis of Metallic Nanostructures for Biomedical Technologies. Modern Aspects of Electrochemistry, 2012, , 73-99. | 0.2 | 1 |
| 112 | Water-Retaining Polymers in Organic Solvent Increase Lipase Activity for Biodiesel Synthesis. Insights in Enzyme Research, 2018, 01, . | 0.3 | 1 |
| 113 | Enhanced whole-cell biotransformation of 3-chloropropiophenone into 1-phenyl-1-propanone by hydrogel entrapped Chlorella emersonii (211.8b). Biotechnology Letters, 2021, 43, 2259-2272. | 1.1 | 1 |
| 114 | Optimization of Hydrolase Efficiency in Organic Solvents.. ChemInform, 2003, 34, no. | 0.1 | 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. ECS Transactions, 2013, 45, 31-35. | 0.3 | 0 |
| 117 | Gliadins and Polysaccharides Interaction. Special Publication - Royal Society of Chemistry, 2007, , 349-352. | 0.0 | 0 |