# JosÃ© C S Dos Santos

List of Publications by Year
in descending order

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| 92 | 7,047 | 28274 | 69250 |
|---|---|---|---|
| papers | citations | 55 h-index | 77 g-index |

| 95 | 95 | 95 | 3415 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Importance of the Support Properties for Immobilization or Purification of Enzymes. ChemCatChem, 2015, 7, 2413-2432. | 3.7 | 466 |
| 2 | Immobilization of lipases on hydrophobic supports involves the open form of the enzyme. Enzyme and Microbial Technology, 2015, 71, 53-57. | 3.2 | 429 |
| 3 | Immobilization of lipases on hydrophobic supports: immobilization mechanism, advantages, problems, and solutions. Biotechnology Advances, 2019, 37, 746-770. | 11.7 | 409 |
| 4 | Novozym 435: the â€œperfectâ€•lipase immobilized biocatalyst?. Catalysis Science and Technology, 2019, 9, 2380-2420. | 4.1 | 393 |
| 5 | Polyethylenimine: a very useful ionic polymer in the design of immobilized enzyme biocatalysts. Journal of Materials Chemistry B, 2017, 5, 7461-7490. | 5.8 | 228 |
| 6 | Chemical Modification in the Design of Immobilized Enzyme Biocatalysts: Drawbacks and Opportunities. Chemical Record, 2016, 16, 1436-1455. | 5.8 | 183 |
| 7 | Opportunities for improving biodiesel production via lipase catalysis. Fuel, 2021, 288, 119577. | 6.4 | 157 |
| 8 | Inactivation of immobilized trypsin under dissimilar conditions produces trypsin molecules with different structures. RSC Advances, 2016, 6, 27329-27334. | 3.6 | 139 |
| 9 | Improved performance of lipases immobilized on heterofunctional octyl-glyoxyl agarose beads. RSC Advances, 2015, 5, 11212-11222. | 3.6 | 129 |
| 10 | Novel nanohybrid biocatalyst: application in the kinetic resolution of secondary alcohols. Journal of Materials Science, 2018, 53, 14121-14137. | 3.7 | 128 |
| 11 | Biotechnological potential of lipases from Pseudomonas: Sources, properties and applications. Process Biochemistry, 2018, 75, 99-120. | 3.7 | 120 |
| 12 | Enzymatic synthesis of sugar esters and their potential as surface-active stabilizers of coconut milk emulsions. Food Hydrocolloids, 2012, 27, 324-331. | 10.7 | 113 |
| 13 | Chemoenzymatic synthesis of (S)-Pindolol using lipases. Applied Catalysis A: General, 2017, 546, 7-14. | 4.3 | 110 |
| 14 | Characterization of supports activated with divinyl sulfone as a tool to immobilize and stabilize enzymes via multipoint covalent attachment. Application to chymotrypsin. RSC Advances, 2015, 5, 20639-20649. | 3.6 | 104 |
| 15 | Kinetic resolution of drug intermediates catalyzed by lipase B from Candida antarctica immobilized on immobeadâ€350. Biotechnology Progress, 2018, 34, 878-889. | 2.6 | 104 |
| 16 | Chitosan activated with divinyl sulfone: a new heterofunctional support for enzyme immobilization. Application in the immobilization of lipase B from Candida antarctica. International Journal of Biological Macromolecules, 2019, 130, 798-809. | 7.5 | 103 |
| 17 | Effect of chemical modification of Novozym 435 on its performance in the alcoholysis of camelina oil. Biochemical Engineering Journal, 2016, 111, 75-86. | 3.6 | 94 |
| 18 | Bovine trypsin immobilization on agarose activated with divinylsulfone: Improved activity and stability via multipoint covalent attachment. Journal of Molecular Catalysis B: Enzymatic, 2015, 117, 38-44. | 1.8 | 93 |

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| 19 | Chemical and physical Chitosan modification for designing enzymatic industrial biocatalysts: How to choose the best strategy?. International Journal of Biological Macromolecules, 2021, 181, 1124-1170. | 7.5 | 93 |
| 20 | Evaluation of divinylsulfone activated agarose to immobilize lipases and to tune their catalytic properties. Process Biochemistry, 2015, 50, 918-927. | 3.7 | 91 |
| 21 | Easy stabilization of interfacially activated lipases using heterofunctional divinyl sulfone activated-octyl agarose beads. Modulation of the immobilized enzymes by altering their nanoenvironment. Process Biochemistry, 2016, 51, 865-874. | 3.7 | 88 |
| 22 | Comparison of the immobilization of lipase from Pseudomonas fluorescens on divinylsulfone or p-benzoquinone activated support. International Journal of Biological Macromolecules, 2019, 134, 936-945. | 7.5 | 88 |
| 23 | Liquid lipase preparations designed for industrial production of biodiesel. Is it really an optimal solution?. Renewable Energy, 2021, 164, 1566-1587. | 8.9 | 88 |
| 24 | An overview on the conversion of glycerol to valueâ€added industrial products via chemical and biochemical routes. Biotechnology and Applied Biochemistry, 2022, 69, 2794-2818. | 3.1 | 87 |
| 25 | Immobilization of Lipase A from Candida antarctica onto Chitosan-Coated Magnetic Nanoparticles. International Journal of Molecular Sciences, 2019, 20, 4018. | 4.1 | 86 |
| 26 | Accurel MP 1000 as a support for the immobilization of lipase from Burkholderia cepacia : Application to the kinetic resolution of myo -inositol derivatives. Process Biochemistry, 2015, 50, 1557-1564. | 3.7 | 81 |
| 27 | Current Status and Future Perspectives of Supports and Protocols for Enzyme Immobilization. Catalysts, 2021, 11, 1222. | 3.5 | 81 |
| 28 | Stabilizing effects of cations on lipases depend on the immobilization protocol. RSC Advances, 2015, 5, 83868-83875. | 3.6 | 79 |
| 29 | Design of a lipase-nano particle biocatalysts and its use in the kinetic resolution of medicament precursors. Biochemical Engineering Journal, 2017, 125, 104-115. | 3.6 | 79 |
| 30 | Optimization of the Production of Enzymatic Biodiesel from Residual Babassu Oil (Orbignya sp.) via RSM. Catalysts, 2020, 10, 414. | 3.5 | 79 |
| 31 | Biotechnological relevance of the lipase A from Candida antarctica. Catalysis Today, 2021, 362, 141-154. | 4.4 | 78 |
| 32 | Biodiesel production from microalgae using lipase-based catalysts: Current challenges and prospects. Algal Research, 2022, 62, 102616. | 4.6 | 77 |
| 33 | Design of a coreâ€“shell support to improve lipase features by immobilization. RSC Advances, 2016, 6, 62814-62824. | 3.6 | 76 |
| 34 | A new heterofunctional support for enzyme immobilization: PEI functionalized Fe3O4 MNPs activated with divinyl sulfone. Application in the immobilization of lipase from Thermomyces lanuginosus. Enzyme and Microbial Technology, 2020, 138, 109560. | 3.2 | 76 |
| 35 | Tuning the catalytic properties of lipases immobilized on divinylsulfone activated agarose by altering its nanoenvironment. Enzyme and Microbial Technology, 2015, 77, 1-7. | 3.2 | 75 |
| 36 | Operational stabilities of different chemical derivatives of Novozym 435 in an alcoholysis reaction. Enzyme and Microbial Technology, 2016, 90, 35-44. | 3.2 | 75 |

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| 37 | Operational and Thermal Stability Analysis of Thermomyces lanuginosus Lipase Covalently Immobilized onto Modified Chitosan Supports. Applied Biochemistry and Biotechnology, 2018, 184, 182-196. | 2.9 | 74 |
| 38 | Immobilization of lipases on glyoxylâ€“octyl supports: Improved stability and reactivation strategies. Process Biochemistry, 2015, 50, 1211-1217. | 3.7 | 73 |
| 39 | Immobilization of CALB on activated chitosan: Application to enzymatic synthesis in supercritical and near-critical carbon dioxide. Biotechnology Reports (Amsterdam, Netherlands), 2017, 14, 16-26. | 4.4 | 72 |
| 40 | Taguchi design-assisted co-immobilization of lipase A and B from Candida antarctica onto chitosan: Characterization, kinetic resolution application, and docking studies. Chemical Engineering Research and Design, 2022, 177, 223-244. | 5.6 | 72 |
| 41 | Stabilizing hyperactivated lecitase structures through physical treatment with ionic polymers. Process Biochemistry, 2014, 49, 1511-1515. | 3.7 | 70 |
| 42 | Versatility of divinylsulfone supports permits the tuning of CALB properties during its immobilization. RSC Advances, 2015, 5, 35801-35810. | 3.6 | 70 |
| 43 | Reversible immobilization of lipases on octyl-glutamic agarose beads: A mixed adsorption that reinforces enzyme immobilization. Journal of Molecular Catalysis B: Enzymatic, 2016, 128, 10-18. | 1.8 | 70 |
| 44 | Lipase From Rhizomucor miehei Immobilized on Magnetic Nanoparticles: Performance in Fatty Acid Ethyl Ester (FAEE) Optimized Production by the Taguchi Method. Frontiers in Bioengineering and Biotechnology, 2020, 8, 693. | 4.1 | 70 |
| 45 | Chemical amination of lipases improves their immobilization on octyl-glyoxyl agarose beads. Catalysis Today, 2016, 259, 107-118. | 4.4 | 68 |
| 46 | Strategies of covalent immobilization of a recombinant Candida antarctica lipase B on pore-expanded SBA-15 and its application in the kinetic resolution of ( R , S )-Phenylethyl acetate. Journal of Molecular Catalysis B: Enzymatic, 2016, 133, 246-258. | 1.8 | 67 |
| 47 | Improved immobilization and stabilization of lipase from Rhizomucor miehei on octyl-glyoxyl agarose beads by using CaCl2. Process Biochemistry, 2016, 51, 48-52. | 3.7 | 67 |
| 48 | Efficient biotechnological synthesis of flavor esters using a low-cost biocatalyst with immobilized Rhizomucor miehei lipase. Molecular Biology Reports, 2019, 46, 597-608. | 2.3 | 66 |
| 49 | Tuning of Lecitase features via solid-phase chemical modification: Effect of the immobilization protocol. Process Biochemistry, 2014, 49, 604-616. | 3.7 | 65 |
| 50 | Cashew apple bagasse as a support for the immobilization of lipase B from Candida antarctica: Application to the chemoenzymatic production of (R)-Indanol. Journal of Molecular Catalysis B: Enzymatic, 2016, 130, 58-69. | 1.8 | 63 |
| 51 | Synthesis of Benzyl Acetate Catalyzed by Lipase Immobilized in Nontoxic Chitosan-Polyphosphate Beads. Molecules, 2017, 22, 2165. | 3.8 | 63 |
| 52 | Evaluation of Styrene-Divinylbenzene Beads as a Support to Immobilize Lipases. Molecules, 2014, 19, 7629-7645. | 3.8 | 62 |
| 53 | Immobilization of Proteins in Poly-Styrene-Divinylbenzene Matrices: Functional Properties and Applications. Current Organic Chemistry, 2015, 19, 1707-1718. | 1.6 | 62 |
| 54 | Improving the catalytic properties of immobilized Lecitase via physical coating with ionic polymers. Enzyme and Microbial Technology, 2014, 60, 1-8. | 3.2 | 61 |

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| 55 | Reversible Immobilization of Lipases on Heterofunctional Octyl-Amino Agarose Beads Prevents Enzyme Desorption. Molecules, 2016, 21, 646. | 3.8 | 58 |
| 56 | Effect of the Presence of Surfactants and Immobilization Conditions on Catalystsâ€™ Properties of Rhizomucor miehei Lipase onto Chitosan. Applied Biochemistry and Biotechnology, 2018, 184, 1263-1285. | 2.9 | 58 |
| 57 | Ethyl Butyrate Synthesis Catalyzed by Lipases A and B from Candida antarctica Immobilized onto Magnetic Nanoparticles. Improvement of Biocatalystsâ€™ Performance under Ultrasonic Irradiation. International Journal of Molecular Sciences, 2019, 20, 5807. | 4.1 | 58 |
| 58 | The Chemistry and Applications of Metalâ€“Organic Frameworks (MOFs) as Industrial Enzyme Immobilization Systems. Molecules, 2022, 27, 4529. | 3.8 | 57 |
| 59 | Further stabilization of lipase from Pseudomonas fluorescens immobilized on octyl coated nanoparticles via chemical modification with bifunctional agents. International Journal of Biological Macromolecules, 2019, 141, 313-324. | 7.5 | 56 |
| 60 | Modulation of lipase B from Candida antarctica properties via covalent immobilization on eco-friendly support for enzymatic kinetic resolution of rac-indanyl acetate. Bioprocess and Biosystems Engineering, 2020, 43, 2253-2268. | 3.4 | 54 |
| 61 | Designing of Nanomaterials-Based Enzymatic Biosensors: Synthesis, Properties, and Applications. Electrochem, 2021, 2, 149-184. | 3.3 | 48 |
| 62 | Reactivation of lipases by the unfolding and refolding of covalently immobilized biocatalysts. RSC Advances, 2015, 5, 55588-55594. | 3.6 | 43 |
| 63 | Lecitase ultra: A phospholipase with great potential in biocatalysis. Molecular Catalysis, 2019, 473, 110405. | 2.0 | 43 |
| 64 | DESIGN OF IMMOBILIZED ENZYME BIOCATALYSTS: DRAWBACKS AND OPPORTUNITIES. Quimica Nova, 2019, , . | 0.3 | 39 |
| 65 | Enzyme-Coated Micro-Crystals: An Almost Forgotten but Very Simple and Elegant Immobilization Strategy. Catalysts, 2020, 10, 891. | 3.5 | 35 |
| 66 | Lipase Cocktail for Optimized Biodiesel Production of Free Fatty Acids from Residual Chicken Oil. Catalysis Letters, 2021, 151, 1155-1166. | 2.6 | 31 |
| 67 | Modulation of Lecitase properties via immobilization on differently activated Immobead-350: Stabilization and inversion of enantiospecificity. Process Biochemistry, 2019, 87, 128-137. | 3.7 | 29 |
| 68 | Lipases Immobilized onto Nanomaterials as Biocatalysts in Biodiesel Production: Scientific Context, Challenges, and Opportunities. Revista Virtual De Quimica, 2021, 13, 875-891. | 0.4 | 29 |
| 69 | A Comprehensive Review on the Use of Metalâ€“Organic Frameworks (MOFs) Coupled with Enzymes as Biosensors. Electrochem, 2022, 3, 89-113. | 3.3 | 29 |
| 70 | Immobilization of Lipases on Heterofunctional Octylâ€“Glyoxyl Agarose Supports. Methods in Enzymology, 2016, 571, 73-85. | 1.0 | 28 |
| 71 | Sonohydrolysis using an enzymatic cocktail in the preparation of free fatty acid. 3 Biotech, 2020, 10, 254. | 2.2 | 28 |
| 72 | Chemical modification of clay nanocomposites for the improvement of the catalytic properties of Lipase A from Candida antarctica. Process Biochemistry, 2022, 120, 1-14. | 3.7 | 28 |

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| 73 | Improvement of enzymatic activity and stability of lipase A from Candida antartica onto halloysite nanotubes with Taguchi method for optimized immobilization. Applied Clay Science, 2022, 228, 106634. | 5.2 | 26 |
| 74 | Understanding the Biocatalytic Potential of Lipase from Rhizopus chinensis. Biointerface Research in Applied Chemistry, 2021, 12, 4230-4260. | 1.0 | 21 |
| 75 | The use of new hydrogel microcapsules in coconut juice as biocatalyst system for the reaction of quinine. Industrial Crops and Products, 2020, 145, 111890. | 5.2 | 20 |
| 76 | Preparation, Characterization, and Enantioselectivity of Polyacrylate Microcapsules Entrapping Ananas comosus Extract. Revista Virtual De Quimica, 2021, 13, 1319-1329. | 0.4 | 8 |
| 77 | IMPROVING THE CATALYTIC FEATURES OF THE LIPASE FROM Rhizomucor miehei IMMOBILIZED ON CHITOSAN-BASED HYBRID MATRICES BY ALTERING THE CHEMICAL ACTIVATION CONDITIONS. Quimica Nova, 0, , . | 0.3 | 8 |
| 78 | Editorial: Designing Carrier-Free Immobilized Enzymes for Biocatalysis. Frontiers in Bioengineering and Biotechnology, 0, 10, . | 4.1 | 8 |
| 79 | Chitosan Nanoparticle: Alternative for Sustainable Agriculture. Materials Horizons, 2021, , 95-132. | 0.6 | 6 |
| 80 | Enzymatic Biocatalyst using enzymes from Pineapple (Ananas comosus) Peel Immobilized in Hydrogel Beads. Revista EletrÃ´nica Em GestÃ£o EducaÃ§Ã£o E Tecnologia Ambiental, 0, 23, 32. | 0.0 | 3 |
| 81 | Enzymatic Reactions and Biocatalytic Processes. , 2019, , . | | 1 |
| 82 | Enzymatic synthesis of isoniazid using chitosan-based and octyl-silica-based systems. New Biotechnology, 2012, 29, S107. | 4.4 | 0 |
| 83 | A study of the factors that contribute to the corrosion process in produced water samples: a multivariate analysis approach. , 0, 220, 73-82. | | 0 |
| 84 | Nanotechnology Systems for Biofuels Production. Materials Horizons, 2021, , 445-471. | 0.6 | 0 |
| 85 | MODIFICAÃ‡ÃƒO QUÃMICA DE LECITASE ULTRA EM FASE SÃ“LIDA: EFEITO DO PROTOCOLO DE IMOBILIZAÃ‡ÃƒO (um espaÃ§o) (um espaÃ§o). , 0, , . | | 0 |
| 86 | ESTABILIZAÃ‡ÃƒO DA FORMA ABERTA DE LECITASE ATRAVÃ‰S DA MODIFICAÃ‡ÃƒO FÃSICA COM POLÃMEROS IÃ”NICOS. , 0, , . | | 0 |
| 87 | IMOBILIZAÃ‡ÃƒO DE LIPASE DE Aspergillus niger EM BAGAÃ‡O DE CAJU PRÃ‰- TRATADO COM PERÃ“XIDO DE HIDROGÃŠNIO ALCALINO. , 0, , . | | 0 |
| 88 | USO DE POLÃMEROS IÃ”NICOS PARA ESTABILIZAR ESTRUTURAS HIPERATIVADAS DE LECITASE ULTRA. , 0, , . | | 0 |
| 89 | AGAROSE ATIVADA COM DIVINILSULFONA: UM SUPORTE ADEQUADO PARA PROMOVER UMA INTENÃ‡A LIGAÃ‡ÃƒO COVALENTE MULTPONTUAL COM TRIPSINA E QUIMOTRIPSINA. , 0, , . | | 0 |
| 90 | DETERMINAÃ‡ÃƒO DA ATIVIDADE DE ESTERIFICAÃ‡ÃƒO DE LIPASES COMERCIAIS. , 2019, , . | | 0 |

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| 91 | AVALIAÃ‡ÃƒO DE PARÃ‚METROS TERMODINÂMICOS NA PRODUÃ‡ÃƒO ENZIMÃTICA DE ÃŒSTERES ETÃLICOS COM LECITASE ULTRA. , 2019, , . | | 0 |
| 92 | A new raw material in the production of biodiesel: purple pinion seeds.. Revista EletrÃ´nica Em GestÃ£o EducaÃ§Ã£o E Tecnologia Ambiental, 0, 23, 25. | 0.0 | 0 |