# Jorge Rencoret

List of Publications by Year
in descending order



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|---|---|---|---|
| 107 papers | 7,742 citations | 38660 50 h-index | 53109 85 g-index |
| 111 all docs | 111 docs citations | 111 times ranked | 6543 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Flavonoids naringenin chalcone, naringenin, dihydrotricin, and tricin are lignin monomers in papyrus. Plant Physiology, 2022, 188, 208-219. | 2.3 | 28 |
| 2 | Density functional theory study on the coupling and reactions of diferuloylputrescine as a lignin monomer. Phytochemistry, 2022, 197, 113122. | 1.4 | 0 |
| 3 | Unconventional lignin monomersâ€"Extension of the lignin paradigm. Advances in Botanical Research, 2022, , 1-39. | 0.5 | 13 |
| 4 | Induced lignoâ€suberin vascular coating and tyramineâ€derived hydroxycinnamic acid amides restrict <i>Ralstonia solanacearum</i> colonization in resistant tomato. New Phytologist, 2022, 234, 1411-1429. | 3.5 | 26 |
| 5 | Chemical Composition of Lipophilic Compounds From Rice (Oryza sativa) Straw: An Attractive Feedstock for Obtaining Valuable Phytochemicals. Frontiers in Plant Science, 2022, 13, 868319. | 1.7 | 8 |
| 6 | Papyrus production revisited: differences between ancient and modern production modes. Cellulose, 2022, 29, 4931-4950. | 2.4 | 6 |
| 7 | Cotton farming sustainability: Formation of trans-isoeugenol/ bio-aromatics, 5-chloromethylfurfural, C13â€"C17 liquid hydrocarbons & fertilizer from cotton gin trash. Journal of Cleaner Production, 2022, 363, 132404. | 4.6 | 2 |
| 8 | Structural Characteristics of the Guaiacyl-Rich Lignins From Rice (Oryza sativa L.) Husks and Straw. Frontiers in Plant Science, 2021, 12, 640475. | 1.7 | 28 |
| 9 | Radical Coupling Reactions of Hydroxystilbene Glucosides and Coniferyl Alcohol: A Density Functional Theory Study. Frontiers in Plant Science, 2021, 12, 642848. | 1.7 | 8 |
| 10 | A Multiomic Approach to Understand How Pleurotus eryngii Transforms Non-Woody Lignocellulosic Material. Journal of Fungi (Basel, Switzerland), 2021, 7, 426. | 1.5 | 9 |
| 11 | Lignin Quantification of Papyri by TGAâ€"Not a Good Idea. Molecules, 2021, 26, 4384. | 1.7 | 10 |
| 12 | Agaricales Mushroom Lignin Peroxidase: From Structureâ€"Function to Degradative Capabilities. Antioxidants, 2021, 10, 1446. | 2.2 | 12 |
| 13 | New Insights on Structures Forming the Lignin-Like Fractions of Ancestral Plants. Frontiers in Plant Science, 2021, 12, 740923. | 1.7 | 17 |
| 14 | Differences in the content, composition and structure of the lignins from rind and pith of papyrus (Cyperus papyrus L.) culms. Industrial Crops and Products, 2021, 174, 114226. | 2.5 | 12 |
| 15 | Coupling and Reactions of Lignols and New Lignin Monomers: A Density Functional Theory Study. ACS Sustainable Chemistry and Engineering, 2020, 8, 11033-11045. | 3.2 | 12 |
| 16 | Deciphering the Unique Structure and Acylation Pattern of <i>Posidonia oceanica</i> Lignin. ACS Sustainable Chemistry and Engineering, 2020, 8, 12521-12533. | 3.2 | 24 |
| 17 | Differentiation of Tracheary Elements in Sugarcane Suspension Cells Involves Changes in Secondary Wall Deposition and Extensive Transcriptional Reprogramming. Frontiers in Plant Science, 2020, 11, 617020. | 1.7 | 10 |
| 18 | Lignin from Tree Barks: Chemical Structure and Valorization. ChemSusChem, 2020, 13, 4537-4547. | 3.6 | 33 |

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|---|---|---|---|
| 19 | One-Pot Processing of <i>Eucalyptus globulus</i> Wood under Microwave Heating: Simultaneous Delignification and Polysaccharide Conversion into Platform Chemicals. ACS Sustainable Chemistry and Engineering, 2020, 8, 10115-10124. | 3.2 | 8 |
| 20 | Lignin Monomers from beyond the Canonical Monolignol Biosynthetic Pathway: Another Brick in the Wall. ACS Sustainable Chemistry and Engineering, 2020, 8, 4997-5012. | 3.2 | 184 |
| 21 | Lipophilic compounds from maize fiber and rice husk residues â€“ An abundant and inexpensive source of valuable phytochemicals. Industrial Crops and Products, 2020, 146, 112203. | 2.5 | 11 |
| 22 | Lignin degradation and detoxification of eucalyptus wastes by on-site manufacturing fungal enzymes to enhance second-generation ethanol yield. Applied Energy, 2020, 262, 114493. | 5.1 | 59 |
| 23 | Comparative Recalcitrance and Extractability of Cell Wall Polysaccharides from Cereal (Wheat, Rye,) Tj ETQq1 1 0.784314 rgBT /Overloc 7192-7204. | 3.2 | 17 |
| 24 | Cell wall remodeling under salt stress: Insights into changes in polysaccharides, feruloylation, lignification, and phenolic metabolism in maize. Plant, Cell and Environment, 2020, 43, 2172-2191. | 2.8 | 79 |
| 25 | Peroxidase evolution in white-rot fungi follows wood lignin evolution in plants. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 17900-17905. | 3.3 | 47 |
| 26 | Radical coupling reactions of piceatannol and monolignols: A density functional theory study. Phytochemistry, 2019, 164, 12-23. | 1.4 | 17 |
| 27 | Hydroxystilbene Glucosides Are Incorporated into Norway Spruce Bark Lignin. Plant Physiology, 2019, 180, 1310-1321. | 2.3 | 43 |
| 28 | Structural Characterization of Lignin from Maize (Zea mays L.) Fibers: Evidence for Diferuloylputrescine Incorporated into the Lignin Polymer in Maize Kernels. Journal of Agricultural and Food Chemistry, 2018, 66, 4402-4413. | 2.4 | 38 |
| 29 | Catalytic Conversion of Organosolv Lignins to Phenolic Monomers in Different Organic Solvents and Effect of Operating Conditions on Yield with Methyl Isobutyl Ketone. ACS Sustainable Chemistry and Engineering, 2018, 6, 3010-3018. | 3.2 | 32 |
| 30 | Variability in Lignin Composition and Structure in Cell Walls of Different Parts of MacaÃºba (<i>Acrocomia aculeata</i>) Palm Fruit. Journal of Agricultural and Food Chemistry, 2018, 66, 138-153. | 2.4 | 70 |
| 31 | Structural characteristics of lignin in pruning residues of olive tree (<i>Olea europaea</i> L.). Holzforschung, 2018, 73, 25-34. | 0.9 | 18 |
| 32 | A commercial laccase-mediator system to delignify and improve saccharification of the fast-growing<i>Paulownia fortunei</i>(Seem.) Hemsl.. Holzforschung, 2018, 73, 45-54. | 0.9 | 13 |
| 33 | Elucidating Tricin-Lignin Structures: Assigning Correlations in HSQC Spectra of Monocot Lignins. Polymers, 2018, 10, 916. | 2.0 | 30 |
| 34 | Fate of p-hydroxycinnamates and structural characteristics of residual hemicelluloses and lignin during alkaline-sulfite chemithermomechanical pretreatment of sugarcane bagasse. Biotechnology for Biofuels, 2018, 11, 153. | 6.2 | 27 |
| 35 | Radically different lignin composition in Posidonia species may link to differences in organic carbon sequestration capacity. Organic Geochemistry, 2018, 124, 247-256. | 0.9 | 31 |
| 36 | Changes In Cell Wall Polymers And Degradability In Maize Mutants Lacking 3'- And 5'- <i>O</i> -Methyltransferases Involved In Lignin Biosynthesis. Plant and Cell Physiology, 2017, 58, pcw198. | 1.5 | 32 |

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| 37 | Structural Characteristics of Bagasse Furfural Residue and Its Lignin Component. An NMR, Py-GC/MS, and FTIR Study. ACS Sustainable Chemistry and Engineering, 2017, 5, 4846-4855. | 3.2 | 87 |
| 38 | Oxidoreductases on their way to industrial biotransformations. Biotechnology Advances, 2017, 35, 815-831. | 6.0 | 205 |
| 39 | Hydroxystilbenes Are Monomers in Palm Fruit Endocarp Lignins. Plant Physiology, 2017, 174, 2072-2082. | 2.3 | 90 |
| 40 | Alkaline Pretreatment Severity Leads to Different Lignin Applications in Sugar Cane Biorefineries. ACS Sustainable Chemistry and Engineering, 2017, 5, 5702-5712. | 3.2 | 51 |
| 41 | Lignin Films from Spruce, Eucalyptus, and Wheat Straw Studied with Electroacoustic and Optical Sensors: Effect of Composition and Electrostatic Screening on Enzyme Binding. Biomacromolecules, 2017, 18, 1322-1332. | 2.6 | 33 |
| 42 | Modification of Monolignol Biosynthetic Pathway in Jute: Different Gene, Different Consequence. Scientific Reports, 2017, 7, 39984. | 1.6 | 29 |
| 43 | Characterization and Elimination of Undesirable Protein Residues in Plant Cell Wall Materials for Enhancing Lignin Analysis by Solution-State Nuclear Magnetic Resonance Spectroscopy. Biomacromolecules, 2017, 18, 4184-4195. | 2.6 | 94 |
| 44 | Chemical changes and increased degradability of wheat straw and oak wood chips treated with the white rot fungi Ceriporiopsis subvermispora and Lentinula edodes. Biomass and Bioenergy, 2017, 105, 381-391. | 2.9 | 40 |
| 45 | Delignification and Saccharification Enhancement of Sugarcane Byproducts by a Laccase-Based Pretreatment. ACS Sustainable Chemistry and Engineering, 2017, 5, 7145-7154. | 3.2 | 53 |
| 46 | Xylan extraction from pretreated sugarcane bagasse using alkaline and enzymatic approaches. Biotechnology for Biofuels, 2017, 10, 296. | 6.2 | 65 |
| 47 | Lignin Composition and Structure Differs between Xylem, Phloem and Phellem in Quercus suber L.. Frontiers in Plant Science, 2016, 7, 1612. | 1.7 | 104 |
| 48 | Maize Tricin-Oligolignol Metabolites and their Implications for Monocot Lignification. Plant Physiology, 2016, 171, pp.02012.2016. | 2.3 | 55 |
| 49 | A secretomic view of woody and nonwoody lignocellulose degradation by Pleurotus ostreatus. Biotechnology for Biofuels, 2016, 9, 49. | 6.2 | 85 |
| 50 | Effects of Fe deficiency on the protein profiles and lignin composition of stem tissues from Medicago truncatula in absence or presence of calcium carbonate. Journal of Proteomics, 2016, 140, 1-12. | 1.2 | 12 |
| 51 | Ligninâ€"carbohydrate complexes from sisal (Agave sisalana) and abaca (Musa textilis): chemical composition and structural modifications during the isolation process. Planta, 2016, 243, 1143-1158. | 1.6 | 37 |
| 52 | Effects of an alkali-acid purification process on the characteristics of eucalyptus lignin fractionated from a MIBK-based organosolv process. RSC Advances, 2016, 6, 92638-92647. | 1.7 | 15 |
| 53 | Tricinâ€lignins: occurrence and quantitation of tricin in relation to phylogeny. Plant Journal, 2016, 88, 1046-1057. | 2.8 | 118 |
| 54 | Structural Changes of Sugar Cane Bagasse Lignin during Cellulosic Ethanol Production Process. ACS Sustainable Chemistry and Engineering, 2016, 4, 5483-5494. | 3.2 | 36 |

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| 55 | Rapid Py-GC/MS assessment of the structural alterations of lignins in genetically modified plants. Journal of Analytical and Applied Pyrolysis, 2016, 121, 155-164. | 2.6 | 18 |
| 56 | Role of surface tryptophan for peroxidase oxidation of nonphenolic lignin. Biotechnology for Biofuels, 2016, 9, 198. | 6.2 | 37 |
| 57 | Selective ligninolysis of wheat straw and wood chips by the white-rot fungus Lentinula edodes and its influence on in vitro rumen degradability. Journal of Animal Science and Biotechnology, 2016, 7, 55. | 2.1 | 28 |
| 58 | Laccase-Mediator Pretreatment of Wheat Straw Degrades Lignin and Improves Saccharification. Bioenergy Research, 2016, 9, 917-930. | 2.2 | 52 |
| 59 | Ferulates and lignin structural composition in cork. Holzforschung, 2016, 70, 275-289. | 0.9 | 53 |
| 60 | Analysis of a Modern Hybrid and an Ancient Sugarcane Implicates a Complex Interplay of Factors in Affecting Recalcitrance to Cellulosic Ethanol Production. PLoS ONE, 2015, 10, e0134964. | 1.1 | 12 |
| 61 | STRUCTURAL CHARACTERISTICS AND DISTRIBUTION OF LIGNIN IN EUCALYPTUS GLOBULUS PULPS OBTAINED BY A COMBINED AUTOHYDROLSIS/ALKALINE EXTRACTION PROCESS FOR ENZYMATIC SACCHARIFICATION OF CELLULOSE. Journal of the Chilean Chemical Society, 2015, 60, 2954-2960. | 0.5 | 12 |
| 62 | Cell wall modifications triggered by the down-regulation of Coumarate 3-hydroxylase-1 in maize. Plant Science, 2015, 236, 272-282. | 1.7 | 44 |
| 63 | Isolation and Structural Characterization of the Milled Wood Lignin, Dioxane Lignin, and Cellulolytic Lignin Preparations from Brewerâ€™s Spent Grain. Journal of Agricultural and Food Chemistry, 2015, 63, 603-613. | 2.4 | 110 |
| 64 | Isolation and Structural Characterization of Lignin from Cardoon (Cynara cardunculus L.) Stalks. Bioenergy Research, 2015, 8, 1946-1955. | 2.2 | 13 |
| 65 | Tricin, a Flavonoid Monomer in Monocot Lignification Â. Plant Physiology, 2015, 167, 1284-1295. | 2.3 | 283 |
| 66 | Differences in the chemical structure of the lignins from sugarcane bagasse and straw. Biomass and Bioenergy, 2015, 81, 322-338. | 2.9 | 227 |
| 67 | Demonstration of Lignin-to-Peroxidase Direct Electron Transfer. Journal of Biological Chemistry, 2015, 290, 23201-23213. | 1.6 | 30 |
| 68 | In-Depth 2D NMR Study of Lignin Modification During Pretreatment of Eucalyptus Wood with Laccase and Mediators. Bioenergy Research, 2015, 8, 211-230. | 2.2 | 35 |
| 69 | Analysis of the Phlebiopsis gigantea Genome, Transcriptome and Secretome Provides Insight into Its Pioneer Colonization Strategies of Wood. PLoS Genetics, 2014, 10, e1004759. | 1.5 | 90 |
| 70 | Structural insights on laccase biografting of ferulic acid onto lignocellulosic fibers. Biochemical Engineering Journal, 2014, 86, 16-23. | 1.8 | 20 |
| 71 | Analysis of ligninâ€"carbohydrate and ligninâ€"lignin linkages after hydrolase treatment of xylanâ€"lignin, glucomannanâ€"lignin and glucanâ€"lignin complexes from spruce wood. Planta, 2014, 239, 1079-90. | 1.6 | 73 |
| 72 | Monolignol Ferulate Transferase Introduces Chemically Labile Linkages into the Lignin Backbone. Science, 2014, 344, 90-93. | 6.0 | 337 |

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| 73 | Accumulation of <i>N</i>-Acetylglucosamine Oligomers in the Plant Cell Wall Affects Plant Architecture in a Dose-Dependent and Conditional Manner Â Â. Plant Physiology, 2014, 165, 290-308. | 2.3 | 25 |
| 74 | Pretreatment with laccase and a phenolic mediator degrades lignin and enhances saccharification of Eucalyptus feedstock. Biotechnology for Biofuels, 2014, 7, 6. | 6.2 | 161 |
| 75 | Understanding Pulp Delignification by Laccaseâ€"Mediator Systems through Isolation and Characterization of Ligninâ€"Carbohydrate Complexes. Biomacromolecules, 2013, 14, 3073-3080. | 2.6 | 44 |
| 76 | Structural Characterization of Lignin Isolated from Coconut (<i>Cocos nucifera</i>) Coir Fibers. Journal of Agricultural and Food Chemistry, 2013, 61, 2434-2445. | 2.4 | 130 |
| 77 | Modification of the Lignin Structure during Alkaline Delignification of Eucalyptus Wood by Kraft, Soda-AQ, and Soda-O<sub>2</sub>Cooking. Industrial & Engineering Chemistry Research, 2013, 52, 15702-15712. | 1.8 | 67 |
| 78 | Structural Modifications of Residual Lignins from Sisal and Flax Pulps during Soda-AQ Pulping and TCF/ECF Bleaching. Industrial & Engineering Chemistry Research, 2013, 52, 4695-4703. | 1.8 | 13 |
| 79 | An Engineered Monolignol 4-<i>O</i>-Methyltransferase Depresses Lignin Biosynthesis and Confers Novel Metabolic Capability in <i>Arabidopsis</i>. Plant Cell, 2012, 24, 3135-3152. | 3.1 | 92 |
| 80 | Demonstration of laccase-based removal of lignin from wood and non-wood plant feedstocks. Bioresource Technology, 2012, 119, 114-122. | 4.8 | 130 |
| 81 | Structural Characterization of Wheat Straw Lignin as Revealed by Analytical Pyrolysis, 2D-NMR, and Reductive Cleavage Methods. Journal of Agricultural and Food Chemistry, 2012, 60, 5922-5935. | 2.4 | 650 |
| 82 | Structural Characterization of the Lignin in the Cortex and Pith of Elephant Grass (<i>Pennisetum) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 | 2.4 | 172 |
| 83 | Morphological characteristics and composition of lipophilic extractives and lignin in Brazilian woods from different eucalypt hybrids. Industrial Crops and Products, 2012, 36, 572-583. | 2.5 | 32 |
| 84 | Origin of the acetylated structures present in white birch (Betula pendula Roth) milled wood lignin. Wood Science and Technology, 2012, 46, 459-471. | 1.4 | 17 |
| 85 | Structural Characterization of Guaiacyl-rich Lignins in Flax (Linum usitatissimum) Fibers and Shives. Journal of Agricultural and Food Chemistry, 2011, 59, 11088-11099. | 2.4 | 92 |
| 86 | Selective lignin and polysaccharide removal in natural fungal decay of wood as evidenced by <i>in situ</i> structural analyses. Environmental Microbiology, 2011, 13, 96-107. | 1.8 | 93 |
| 87 | Towards industrially-feasible delignification and pitch removal by treating paper pulp with Myceliophthora thermophila laccase and a phenolic mediator. Bioresource Technology, 2011, 102, 6717-6722. | 4.8 | 71 |
| 88 | Lignin Composition and Structure in Young versus Adult<i>Eucalyptus globulus</i>Plants. Plant Physiology, 2011, 155, 667-682. | 2.3 | 263 |
| 89 | Polymerization of lignosulfonates by the laccase-HBT (1-hydroxybenzotriazole) system improves dispersibility. Bioresource Technology, 2010, 101, 5054-5062. | 4.8 | 112 |
| 90 | Engineering traditional monolignols out of lignin by concomitant up-regulation of F5H1 and down-regulation of COMT in Arabidopsis. Plant Journal, 2010, 64, 885-897. | 2.8 | 114 |

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| 91 | Kinetic and chemical characterization of aldehyde oxidation by fungal aryl-alcohol oxidase. Biochemical Journal, 2010, 425, 585-593. | 1.7 | 69 |
| 92 | Evaluation of the Chemical Composition of Different Non-Woody Plant Fibers Used for Pulp and Paper Manufacturing. Open Agriculture Journal, 2010, 4, 93-101. | 0.3 | 75 |
| 93 | HSQC-NMR analysis of lignin in woody (<i>Eucalyptus globulus</i> and <i>Picea abies</i>) and non-woody (<i>Agave sisalana</i>) ball-milled plant materials at the gel state 10<sup>th</sup> EWLP, Stockholm, Sweden, August 25â€"28, 2008. Holzforschung, 2009, 63, 691-698. | 0.9 | 130 |
| 94 | Isolation and structural characterization of the milled-wood lignin from Paulownia fortunei wood. Industrial Crops and Products, 2009, 30, 137-143. | 2.5 | 135 |
| 95 | Structural Characterization of the Lignin from Jute (<i>Corchorus capsularis</i>) Fibers. Journal of Agricultural and Food Chemistry, 2009, 57, 10271-10281. | 2.4 | 163 |
| 96 | Oxidative degradation of model lipids representative for main paper pulp lipophilic extractives by the laccaseâ€"mediator system. Applied Microbiology and Biotechnology, 2008, 80, 211-222. | 1.7 | 31 |
| 97 | Monolignol acylation and lignin structure in some nonwoody plants: A 2D NMR study. Phytochemistry, 2008, 69, 2831-2843. | 1.4 | 197 |
| 98 | Highly Acylated (Acetylated and/or <i>p</i>-Coumaroylated) Native Lignins from Diverse Herbaceous Plants. Journal of Agricultural and Food Chemistry, 2008, 56, 9525-9534. | 2.4 | 172 |
| 99 | Structural characterization of milled wood lignins from different eucalypt species. Holzforschung, 2008, 62, 514-526. | 0.9 | 147 |
| 100 | Structural modification of eucalypt pulp lignin in a totally chlorine-free bleaching sequence including a laccase-mediator stage. Holzforschung, 2007, 61, 634-646. | 0.9 | 62 |
| 101 | Lipid and lignin composition of woods from different eucalypt species. Holzforschung, 2007, 61, 165-174. | 0.9 | 83 |
| 102 | Removal of Lipophilic Extractives from Paper Pulp by Laccase and Lignin-Derived Phenols as Natural Mediators. Environmental Science & Technology, 2007, 41, 4124-4129. | 4.6 | 91 |
| 103 | Lignin Modification duringEucalyptus globulusKraft Pulping Followed by Totally Chlorine-Free Bleaching:Â A Two-Dimensional Nuclear Magnetic Resonance, Fourier Transform Infrared, and Pyrolysisâˆ'Gas Chromatography/Mass Spectrometry Study. Journal of Agricultural and Food Chemistry, 2007, 55, 3477-3490. | 2.4 | 118 |
| 104 | Occurrence of Naturally Acetylated Lignin Units. Journal of Agricultural and Food Chemistry, 2007, 55, 5461-5468. | 2.4 | 173 |
| 105 | Enzymatic Removal of Free and Conjugated Sterols Forming Pitch Deposits in Environmentally Sound Bleaching of Eucalypt Paper Pulp. Environmental Science & Technology, 2006, 40, 3416-3422. | 4.6 | 47 |
| 106 | Main lipophilic extractives in different paper pulp types can be removed using the laccaseâ€"mediator system. Applied Microbiology and Biotechnology, 2006, 72, 845-851. | 1.7 | 54 |
| 107 | Using Undigested Biomass Solid Leftovers from the Saccharification Process to Integrate Lignosulfonate Production in a Sugarcane Bagasse Biorefinery. ACS Sustainable Chemistry and Engineering, 0, , . | 3.2 | 4 |