# Dimitris S Argyropoulos

## List of Publications by Citations



| | | | |
|---|---|---|---|
| 168 papers | 9,161 citations | 49 h-index | 91 g-index |
| 179 ext. papers | 10,009 ext. citations | 4.3 avg, IF | 6.39 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 168 | Dissolution of wood in ionic liquids. *Journal of Agricultural and Food Chemistry*, **2007**, 55, 9142-8 | 5.7 | 781 |
| 167 | 2-Chloro-4,4,5,5-tetramethyl-1,3,2-dioxaphospholane, a Reagent for the Accurate Determination of the Uncondensed and Condensed Phenolic Moieties in Lignins. *Journal of Agricultural and Food Chemistry*, **1995**, 43, 1538-1544 | 5.7 | 631 |
| 166 | Thermal properties of lignin in copolymers, blends, and composites: a review. *Green Chemistry*, **2015**, 17, 4862-4887 | 10 | 286 |
| 165 | On the structure of softwood kraft lignin. *Green Chemistry*, **2017**, 19, 4104-4121 | 10 | 240 |
| 164 | Structural Analysis of Wheat Straw Lignin by Quantitative 31P and 2D NMR Spectroscopy. The Occurrence of Ester Bonds and □O-4 Substructures. *Journal of Agricultural and Food Chemistry*, **1997**, 45, 1212-1219 | 5.7 | 195 |
| 163 | Spectral characterization of eucalyptus wood. *Applied Spectroscopy*, **2007**, 61, 1168-77 | 3.1 | 193 |
| 162 | Photobactericidal porphyrin-cellulose nanocrystals: synthesis, characterization, and antimicrobial properties. *Biomacromolecules*, **2011**, 12, 3528-39 | 6.9 | 192 |
| 161 | Quantitative Phosphorus-31 NMR Analysis of Lignins, a New Tool for the Lignin Chemist. *Journal of Wood Chemistry and Technology*, **1994**, 14, 45-63 | 2 | 189 |
| 160 | Toward a better understanding of the lignin isolation process from wood. *Journal of Agricultural and Food Chemistry*, **2006**, 54, 5939-47 | 5.7 | 182 |
| 159 | Review of Cellulose Non-Derivatizing Solvent Interactions with Emphasis on Activity in Inorganic Molten Salt Hydrates. *ACS Sustainable Chemistry and Engineering*, **2013**, 1, 858-870 | 8.3 | 178 |
| 158 | Comparative evaluation of three lignin isolation protocols for various wood species. *Journal of Agricultural and Food Chemistry*, **2006**, 54, 9696-705 | 5.7 | 174 |
| 157 | Production of cellulose nanocrystals using hydrobromic acid and click reactions on their surface. *Journal of Materials Science*, **2011**, 46, 7344-7355 | 4.3 | 170 |
| 156 | Thorough chemical modification of wood-based lignocellulosic materials in ionic liquids. *Biomacromolecules*, **2007**, 8, 3740-8 | 6.9 | 167 |
| 155 | Regular linking of cellulose nanocrystals via click chemistry: synthesis and formation of cellulose nanoplatelet gels. *Biomacromolecules*, **2010**, 11, 1060-6 | 6.9 | 161 |
| 154 | Biodiesel synthesis via homogeneous Lewis acid-catalyzed transesterification. *Fuel*, **2009**, 88, 560-565 | 7.1 | 151 |
| 153 | Vibrational spectroscopy and X-ray diffraction methods to establish the differences between hardwood and softwood. *Carbohydrate Polymers*, **2009**, 77, 851-857 | 10.3 | 149 |
| 152 | Toward Thermoplastic Lignin Polymers. Part 1. Selective Masking of Phenolic Hydroxyl Groups in Kraft Lignins via Methylation and Oxypropylation Chemistries. *Industrial & Engineering Chemistry Research*, **2012**, 51, 16713-16720 | 3.9 | 144 |

| | | | |
|---|---|---|---|
| 151 | Factors Affecting Wood Dissolution and Regeneration of Ionic Liquids. *Industrial & Engineering Chemistry Research*, **2010**, 49, 2477-2484 | 3.9 | 141 |
| 150 | Determination of hydroxyl groups in biorefinery resources via quantitative P NMR spectroscopy. *Nature Protocols*, **2019**, 14, 2627-2647 | 18.8 | 138 |
| 149 | Fractional Precipitation of Softwood Kraft Lignin: Isolation of Narrow Fractions Common to a Variety of Lignins. *ACS Sustainable Chemistry and Engineering*, **2014**, 2, 959-968 | 8.3 | 135 |
| 148 | The early oxidative biodegradation steps of residual kraft lignin models with laccase. *Bioorganic and Medicinal Chemistry*, **1998**, 6, 2161-9 | 3.4 | 115 |
| 147 | 31P NMR in wood chemistry: A review of recent progress. *Research on Chemical Intermediates*, **1995** , 21, 373-395 | 2.8 | 114 |
| 146 | Immobilized methyltrioxo rhenium (MTO)/H2O2 systems for the oxidation of lignin and lignin model compounds. *Bioorganic and Medicinal Chemistry*, **2006**, 14, 5292-302 | 3.4 | 111 |
| 145 | Correlations of the Antioxidant Properties of Softwood Kraft Lignin Fractions with the Thermal Stability of Its Blends with Polyethylene. *ACS Sustainable Chemistry and Engineering*, **2015**, 3, 349-356 | 8.3 | 110 |
| 144 | Determination of Hydroxyl Groups in Lignins Evaluation of 1H-, 13C-, 31P-NMR, FTIR and Wet Chemical Methods. *Holzforschung*, **1994**, 48, 387-394 | 2 | 109 |
| 143 | The effect of isolation method on the chemical structure of residual lignin. *Wood Science and Technology*, **2003**, 37, 91-102 | 2.5 | 106 |
| 142 | Accurate and reproducible determination of lignin molar mass by acetobromination. *Journal of Agricultural and Food Chemistry*, **2012**, 60, 8968-73 | 5.7 | 100 |
| 141 | Quantitative (13)C NMR analysis of lignins with internal standards. *Journal of Agricultural and Food Chemistry*, **2001**, 49, 3573-8 | 5.7 | 91 |
| 140 | Dispersion of cellulose crystallites by nonionic surfactants in a hydrophobic polymer matrix. *Polymer Engineering and Science*, **2009**, 49, 2054-2061 | 2.3 | 84 |
| 139 | Porphyrin-cellulose nanocrystals: a photobactericidal material that exhibits broad spectrum antimicrobial activity. *Photochemistry and Photobiology*, **2012**, 88, 527-36 | 3.6 | 82 |
| 138 | Toward Thermoplastic Lignin Polymers; Part II: Thermal & Polymer Characteristics of Kraft Lignin & Derivatives. *BioResources*, **2012**, 8, | 1.3 | 79 |
| 137 | Correlation analysis of 31P NMR chemical shifts with substituent effects of phenols. *Magnetic Resonance in Chemistry*, **1995**, 33, 375-382 | 2.1 | 78 |
| 136 | On the propensity of lignin to associate: a size exclusion chromatography study with lignin derivatives isolated from different plant species. *Phytochemistry*, **2007**, 68, 2570-83 | 4 | 76 |
| 135 | Propensity of lignin to associate: light scattering photometry study with native lignins. *Biomacromolecules*, **2008**, 9, 3362-9 | 6.9 | 74 |
| 134 | Tosylation and acylation of cellulose in 1-allyl-3-methylimidazolium chloride. *Cellulose*, **2008**, 15, 481-488 | 5.5 | 73 |

| | | | |
|---|---|---|---|
| 133 | On the mechanism of the laccase-mediator system in the oxidation of lignin. *Chemistry - A European Journal*, **2003**, 9, 5371-8 | 4.8 | 73 |
| 132 | Synthesis, Characterization, and Antimicrobial Efficacy of Photomicrobicidal Cellulose Paper. *Biomacromolecules*, **2015**, 16, 2482-92 | 6.9 | 70 |
| 131 | Abundance and reactivity of dibenzodioxocins in softwood lignin. *Journal of Agricultural and Food Chemistry*, **2002**, 50, 658-66 | 5.7 | 70 |
| 130 | In situ determination of lignin phenolics and wood solubility in imidazolium chlorides using (31)P NMR. *Journal of Agricultural and Food Chemistry*, **2009**, 57, 8236-43 | 5.7 | 65 |
| 129 | Quantitative Phosphorus-31 NMR Analysis of Six Soluble Lignins. *Journal of Wood Chemistry and Technology*, **1994**, 14, 65-82 | 2 | 65 |
| 128 | Chemicals and energy from biomass. *Canadian Journal of Chemistry*, **2006**, 84, 960-970 | 0.9 | 63 |
| 127 | A comparison of lignin polymer models (DHPs) and lignins by 31P NMR spectroscopy. *Phytochemistry*, **1996**, 43, 499-507 | 4 | 62 |
| 126 | Methylation of softwood kraft lignin with dimethyl carbonate. *Green Chemistry*, **2015**, 17, 1077-1087 | 10 | 59 |
| 125 | Determination of arylglycerol-beta-aryl ethers and other linkages in lignins using DFRC/(31)P NMR. *Journal of Agricultural and Food Chemistry*, **2001**, 49, 536-42 | 5.7 | 59 |
| 124 | Effect of Fatty Acid Esterification on the Thermal Properties of Softwood Kraft Lignin. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 5238-5247 | 8.3 | 57 |
| 123 | Structure-property relationships for technical lignins for the production of lignin-phenol-formaldehyde resins. *Industrial Crops and Products*, **2017**, 108, 316-326 | 5.9 | 56 |
| 122 | Molecular weight distributions and linkages in lignocellulosic materials derivatized from ionic liquid media. *Journal of Agricultural and Food Chemistry*, **2011**, 59, 829-38 | 5.7 | 54 |
| 121 | Acidolysis of Wood in Ionic Liquids. *Industrial & Engineering Chemistry Research*, **2010**, 49, 3126-3136 | 3.9 | 54 |
| 120 | Kraft lignin chain extension chemistry via propargylation, oxidative coupling, and Claisen rearrangement. *Biomacromolecules*, **2013**, 14, 3399-408 | 6.9 | 52 |
| 119 | Ionic Liquid Character of Zinc Chloride Hydrates Define Solvent Characteristics that Afford the Solubility of Cellulose. *Journal of Physical Chemistry B*, **2016**, 120, 1134-41 | 3.4 | 48 |
| 118 | Stable Organic Radicals in Lignin: A Review. *ChemSusChem*, **2017**, 10, 3284-3303 | 8.3 | 46 |
| 117 | 31P NMR Spectroscopy in Wood Chemistry. I. Model Compounds. *Journal of Wood Chemistry and Technology*, **1991**, 11, 137-157 | 2 | 44 |
| 116 | NMReDATA, a standard to report the NMR assignment and parameters of organic compounds. *Magnetic Resonance in Chemistry*, **2018**, 56, 703-715 | 2.1 | 43 |

| | | | |
|---|---|---|---|
| 115 | A new method for rapid degree of substitution and purity determination of chloroform-soluble cellulose esters, using 31P NMR. *Analytical Methods*, **2010**, 2, 1499 | 3.2 | 42 |
| 114 | Macroscopic Behavior of Kraft Lignin Fractions: Melt Stability Considerations for Lignin–Polyethylene Blends. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 5160-5166 | 8.3 | 40 |
| 113 | Antihypertensive drug valsartan in solution and at the AT1 receptor: conformational analysis, dynamic NMR spectroscopy, in silico docking, and molecular dynamics simulations. *Journal of Chemical Information and Modeling*, **2009**, 49, 726-39 | 6.1 | 39 |
| 112 | A Study of Poly(hydroxyalkanoate)s by Quantitative 31P NMR Spectroscopy: Molecular Weight and Chain Cleavage. *Macromolecules*, **1997**, 30, 327-329 | 5.5 | 38 |
| 111 | Isolation and characterization of lignins from Eucalyptus grandis Hill ex Maiden and Eucalyptus globulus Labill. by enzymatic mild acidolysis (EMAL). *Holzforschung*, **2008**, 62, 24-30 | 2 | 38 |
| 110 | Understanding the pyrolysis of CCA-treated wood: Part I. Effect of metal ions. *Journal of Analytical and Applied Pyrolysis*, **2008**, 81, 60-64 | 6 | 38 |
| 109 | 31P NMR Spectroscopy in Wood Chemistry Part V. Qualitative Analysis of Lignin Functional Groups. *Journal of Wood Chemistry and Technology*, **1993**, 13, 187-212 | 2 | 38 |
| 108 | Synthesis and Characterization of Poly(arylene ether sulfone) Kraft Lignin Heat Stable Copolymers. *ACS Sustainable Chemistry and Engineering*, **2014**, 2, 264-271 | 8.3 | 37 |
| 107 | Development of the partial least squares models for the interpretation of the UV resonance Raman spectra of lignin model compounds. *Vibrational Spectroscopy*, **2005**, 37, 111-121 | 2.1 | 37 |
| 106 | Photochemically Induced Solid-State Degradation, Condensation, and Rearrangement Reactions in Lignin Model Compounds and Milled Wood Lignin. *Photochemistry and Photobiology*, **1996**, 64, 510-517 | 3.6 | 37 |
| 105 | Structural modifications induced during biodegradation of wheat lignin by Lentinula edodes. *Bioorganic and Medicinal Chemistry*, **1998**, 6, 967-73 | 3.4 | 36 |
| 104 | Factors limiting oxygen delignification of kraft pulp. *Canadian Journal of Chemistry*, **2001**, 79, 201-210 | 0.9 | 36 |
| 103 | Structure of the polyphenolic component of suberin isolated from potato (Solanum tuberosum var. Nikola). *Journal of Agricultural and Food Chemistry*, **2009**, 57, 9747-53 | 5.7 | 35 |
| 102 | Fundamentals of oxygen delignification. Part II. Functional group formation/elimination in residual kraft lignin. *Canadian Journal of Chemistry*, **1998**, 76, 1606-1615 | 0.9 | 35 |
| 101 | Hydrophobic interactions determining functionalized lignocellulose solubility in dialkylimidazolium chlorides, as probed by 31P NMR. *Biomacromolecules*, **2009**, 10, 458-63 | 6.9 | 34 |
| 100 | Quantitative 31P NMR detection of oxygen-centered and carbon-centered radical species. *Bioorganic and Medicinal Chemistry*, **2006**, 14, 4017-28 | 3.4 | 34 |
| 99 | Quantitative 31P NMR Spectroscopy of Lignins from Transgenic Poplars. *Holzforschung*, **2001**, 55, 386-392 | 2.0 | 34 |
| 98 | 19F nuclear magnetic resonance spectroscopy for the quantitative detection and classification of carbonyl groups in lignins. *Journal of Agricultural and Food Chemistry*, **1999**, 47, 190-201 | 5.7 | 34 |

| | | | |
|---|---|---|---|
| 97 | A facile strategy for photoactive nanocellulose-based antimicrobial materials. *Green Chemistry*, **2019**, 21, 3424-3435 | 10 | 33 |
| 96 | Extraction and characterization of lignin from corncob residue after acid-catalyzed steam explosion pretreatment. *Industrial Crops and Products*, **2019**, 133, 241-249 | 5.9 | 33 |
| 95 | Are lignin-derived carbon fibers graphitic enough?. *Green Chemistry*, **2019**, 21, 4253-4265 | 10 | 33 |
| 94 | Highly compatible wood thermoplastic composites from lignocellulosic material modified in ionic liquids: Preparation and thermal properties. *Journal of Applied Polymer Science*, **2009**, 111, 2468-2476 | 2.9 | 33 |
| 93 | Improving the physical and chemical functionality of starch-derived films with biopolymers. *Journal of Applied Polymer Science*, **2006**, 100, 2542-2548 | 2.9 | 33 |
| 92 | Lignin. *Advances in Biochemical Engineering/Biotechnology*, **1997**, 127-158 | 1.7 | 32 |
| 91 | 31P-N.m.r. spectroscopy in wood chemistry. Phosphite derivatives of carbohydrates. *Carbohydrate Research*, **1991**, 220, 49-61 | 2.9 | 32 |
| 90 | Catalysis and Activation of Oxygen and Peroxide Delignification of Chemical Pulps: A Review. *ACS Symposium Series*, **2001**, 2-43 | 0.4 | 31 |
| 89 | Observation of quinonoid groups during the light-induced yellowing of softwood mechanical pulp. *Research on Chemical Intermediates*, **1995**, 21, 263-274 | 2.8 | 30 |
| 88 | Factors limiting oxygen delignification of kraft pulp. *Canadian Journal of Chemistry*, **2001**, 79, 201-210 | 0.9 | 30 |
| 87 | The effect of metal ions on the reaction of hydrogen peroxide with Kraft lignin model compounds. *Canadian Journal of Chemistry*, **1999**, 77, 667-675 | 0.9 | 29 |
| 86 | Fractionation of Lignocellulosic Materials with Ionic Liquids. 1. Effect of Mechanical Treatment. *Industrial & Engineering Chemistry Research*, **2011**, 50, 12349-12357 | 3.9 | 28 |
| 85 | A Comparison of the Reactivity and Efficiency of Ozone, Chlorine Dioxide, Dimethyldioxirane and Hydrogen Peroxide with Residual Kraft Lignin. *Holzforschung*, **1996**, 50, 175-182 | 2 | 28 |
| 84 | Lignins as Emulsion Stabilizers. *ACS Symposium Series*, **2007**, 182-199 | 0.4 | 27 |
| 83 | Determination of Cellulose Reactivity by Using Phosphitylation and Quantitative 31P NMR Spectroscopy. *Industrial & Engineering Chemistry Research*, **2008**, 47, 8906-8910 | 3.9 | 26 |
| 82 | Fractionation of Lignocellulosic Materials Using Ionic Liquids: Part 2. Effect of Particle Size on the Mechanisms of Fractionation. *Industrial & Engineering Chemistry Research*, **2013**, 52, 3958-3966 | 3.9 | 24 |
| 81 | Monitoring Cellulase Protein Adsorption and Recovery Using SDS-PAGE. *Industrial & Engineering Chemistry Research*, **2010**, 49, 8333-8338 | 3.9 | 24 |
| 80 | Photoresponsive Cellulose Nanocrystals. *Nanomaterials and Nanotechnology*, **2011**, 1, 7 | 2.9 | 23 |

| | | | |
|---|---|---|---|
| 79 | Microwave-assisted lignin isolation using the enzymatic mild acidolysis (EMAL) protocol. *Journal of Agricultural and Food Chemistry*, **2008**, 56, 10115-22 | 5.7 | 23 |
| 78 | Molecular weight-functional group relations in softwood residual kraft lignins. *Holzforschung*, **2005**, 59, 612-619 | 2 | 23 |
| 77 | 31P NMR Spectroscopy in Wood Chemistry. Part IV. Lignin Models: Spin Lattice Relaxation Times and Solvent Effects in 31P NMR. *Holzforschung*, **1993**, 47, 50-56 | 2 | 23 |
| 76 | Gel degradation theory. 1. An experimental verification with a model trifunctional network. *Macromolecules*, **1987**, 20, 2915-2922 | 5.5 | 23 |
| 75 | Ultrasound assisted polyacrylamide grafting on nano-fibrillated cellulose. *Carbohydrate Polymers*, **2018**, 181, 1071-1077 | 10.3 | 23 |
| 74 | E-beam irradiation & steam explosion as biomass pretreatment, and the complex role of lignin in substrate recalcitrance. *Biomass and Bioenergy*, **2017**, 103, 21-28 | 5.3 | 22 |
| 73 | Toward Carbon Fibers from Single Component Kraft Lignin Systems: Optimization of Chain Extension Chemistry. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 5230-5237 | 8.3 | 22 |
| 72 | Products and Functional Group Distributions in Pyrolysis Oil of Chromated Copper Arsenate (CCA)-Treated Wood, as Elucidated by Gas Chromatography and a Novel 31P NMR-Based Method. *Industrial & Engineering Chemistry Research*, **2007**, 46, 5258-5264 | 3.9 | 22 |
| 71 | Refining of Ethanol Biorefinery Residues to Isolate Value Added Lignins. *ACS Sustainable Chemistry and Engineering*, **2015**, 3, 1632-1641 | 8.3 | 21 |
| 70 | On the formation of diphenylmethane structures in lignin under kraft, EMCC , and soda pulping conditions. *Canadian Journal of Chemistry*, **1998**, 76, 506-512 | 0.9 | 21 |
| 69 | Determination of arylglycerol-beta-aryl ether linkages in enzymatic mild acidolysis lignins (EMAL): comparison of DFRC/(31)P NMR with thioacidolysis. *Journal of Natural Products*, **2008**, 71, 836-41 | 4.9 | 21 |
| 68 | Spectral Monitoring of the Formation and Degradation of Polysulfide Ions in Alkaline Conditions. *Industrial & Engineering Chemistry Research*, **2006**, 45, 7388-7392 | 3.9 | 21 |
| 67 | Heteronuclear NMR Spectroscopy of Lignins **2010**, 245-265 | | 20 |
| 66 | Understanding the pyrolysis of CCA-treated wood. *Journal of Analytical and Applied Pyrolysis*, **2008**, 82, 140-144 | 6 | 20 |
| 65 | Quantitative 31P NMR analysis of solid wood offers an insight into the acetylation of its components. *Carbohydrate Polymers*, **2014**, 113, 552-60 | 10.3 | 19 |
| 64 | Efficient one-pot synthesis of 5-chloromethylfurfural (CMF) from carbohydrates in mild biphasic systems. *Molecules*, **2013**, 18, 7675-85 | 4.8 | 19 |
| 63 | 19F Nuclear Magnetic Resonance Spectroscopy for the Elucidation of Carbonyl Groups in Lignins. 1. Model Compounds. *Journal of Agricultural and Food Chemistry*, **1996**, 44, 2167-2175 | 5.7 | 19 |
| 62 | 31P NMR Spectroscopy in Wood Chemistry. Part VI. Solid State 31P NMR of Trimethyl Phosphite Derivatives of Chromophores and Carboxylic Acids Present in Mechanical Pulps; a Method for the Quantitative Determination of ortho-Quinones. *Holzforschung*, **1994**, 48, 112-116 | 2 | 19 |

| | | | |
|---|---|---|---|
| 61 | Wood Extractives Promote Cellulase Activity on Cellulosic Substrates. *Biomacromolecules*, **2015**, 16, 3226-34 | 6.9 | 18 |
| 60 | Phenoxy radical detection using 31P NMR spin trapping. *Journal of Physical Organic Chemistry*, **2009**, 22, 1070-1077 | 2.1 | 18 |
| 59 | Charge and the dry-strength performance of polyampholytes. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2007**, 301, 23-32 | 5.1 | 18 |
| 58 | Quantitative 1H NMR analysis of alkaline polysulfide solutions. *Holzforschung*, **2005**, 59, 124-131 | 2 | 17 |
| 57 | P NMR Spectroscopy in Wood Chemistry - Part III. Solid State 31P NMR of Trimethyl Phosphite Derivatives of Chromophores in Mechanical Pulp. *Holzforschung*, **1992**, 46, 211-218 | 2 | 17 |
| 56 | Colloidal effects of acrylamide polyampholytes. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2006**, 289, 89-95 | 5.1 | 16 |
| 55 | Condensation of Lignin in Dioxane-Water-HCl. *Journal of Wood Chemistry and Technology*, **1987**, 7, 1-23 | 2 | 15 |
| 54 | Understanding the radical mechanism of lipoxygenases using 31P NMR spin trapping. *Bioorganic and Medicinal Chemistry*, **2011**, 19, 3022-8 | 3.4 | 14 |
| 53 | A simple method to tune the gross antibacterial activity of cellulosic biomaterials. *Carbohydrate Polymers*, **2007**, 69, 805-810 | 10.3 | 14 |
| 52 | Influence of Natural Biomaterials on the Elastic Properties of Starch-Derived Films: An Optimization Study. *Industrial & Engineering Chemistry Research*, **2006**, 45, 627-633 | 3.9 | 14 |
| 51 | Species distribution within the soluble phase beyond the gel point. *Macromolecules*, **1987**, 20, 357-361 | 5.5 | 14 |
| 50 | Detection of ketyl radicals using 31P NMR spin trapping. *Journal of Physical Organic Chemistry*, **2009**, 23, 505-512 | 2.1 | 13 |
| 49 | Semiquantitative Determination of Quinonoid Structures in Isolated Lignins by31P Nuclear Magnetic Resonance. *Journal of Agricultural and Food Chemistry*, **1998**, 46, 4628-4634 | 5.7 | 13 |
| 48 | Colloidal effects of acrylamide polyampholytes. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2006**, 281, 74-81 | 5.1 | 12 |
| 47 | Synthesis and characterization of nano fibrillated cellulose/CuO films; micro and nano particle nucleation effects. *Carbohydrate Polymers*, **2018**, 197, 614-622 | 10.3 | 11 |
| 46 | Characterization of free radical spin adducts of the DIPPMPO using mass spectrometry and (31)P NMR. *European Journal of Mass Spectrometry*, **2010**, 16, 175-85 | 1.1 | 11 |
| 45 | An efficient and stereoselective dearylation of asarinin and sesamin tetrahydrofurofuran lignans to acuminatolide by methyltrioxorhenium/H(2)O(2) and UHP systems. *Journal of Natural Products*, **2007**, 70, 39-42 | 4.9 | 11 |
| 44 | Measurement of Cellulase Activity with Piezoelectric Resonators. *ACS Symposium Series*, **2007**, 478-494 | 0.4 | 11 |

| | | | |
|---|---|---|---|
| 43 | Nitrogen-Centered Activators of Peroxide-Reinforced Oxygen Delignification. *Industrial & Engineering Chemistry Research*, **2004**, 43, 1200-1205 | 3.9 | 11 |
| 42 | Coupling P-31 NMR with the Mannich reaction for the quantitative analysis of lignin. *Canadian Journal of Chemistry*, **1998**, 76, 612-622 | 0.9 | 11 |
| 41 | Thermodynamic parameters governing the stereoselective degradation of arylglycerol-B-aryl ether bonds in milled wood lignin under kraft pulping conditions. *Nordic Pulp and Paper Research Journal*, **1997**, 12, 282-288 | 1.1 | 10 |
| 40 | Milox pulping: Lignin characterization by 31P NMR spectroscopy and oxidative degradation. *Nordic Pulp and Paper Research Journal*, **1995**, 10, 68-73 | 1.1 | 10 |
| 39 | Polymerization beyond the gel point, 2. A study of the soluble fraction as a function of the extent of reaction. *Die Makromolekulare Chemie*, **1987**, 188, 1985-1992 | | 10 |
| 38 | The gel degradation theory, 2. An experimental verification with model networks formed by the random crosslinking of monodisperse primary chains. *Die Makromolekulare Chemie*, **1988**, 189, 607-618 | | 10 |
| 37 | Computer Assisted Structure Elucidation (CASE): Current and future perspectives. *Magnetic Resonance in Chemistry*, **2021**, 59, 669-690 | 2.1 | 10 |
| 36 | Charge and the dry-strength performance of polyampholytes. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2007**, 301, 33-40 | 5.1 | 9 |
| 35 | Chemicals, Materials, and Energy from Biomass: A Review. *ACS Symposium Series*, **2007**, 2-30 | 0.4 | 9 |
| 34 | The Gel Degradation Theory. Part III. An Experimental Kinetic Verification. *Journal of Wood Chemistry and Technology*, **1987**, 7, 499-511 | 2 | 9 |
| 33 | Aspects of retention and formation. *Nordic Pulp and Paper Research Journal*, **2006**, 21, 638-645 | 1.1 | 9 |
| 32 | Protein analysis by 31p NMR spectroscopy in ionic liquid: quantitative determination of enzymatically created cross-links. *Journal of Agricultural and Food Chemistry*, **2011**, 59, 1352-62 | 5.7 | 8 |
| 31 | Dependency of polyelectrolyte complex stoichiometry on the order of addition: 2. Aluminum chloride and poly-vinylsulfate. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2004**, 246, 71-79 | 5.1 | 8 |
| 30 | Proton spin-lattice relaxation time measurements of solid wood and its constituents as a function of pH: part II. *Solid State Nuclear Magnetic Resonance*, **1999**, 15, 49-57 | 3.1 | 8 |
| 29 | Photostabilizing milled wood lignin with benzotriazoles and hindered nitroxide. *Photochemistry and Photobiology*, **2001**, 73, 605-10 | 3.6 | 8 |
| 28 | Photoyellowing Inhibition of Bleached High Yield Pulps Using Novel Water-Soluble UV Screens. *Photochemistry and Photobiology*, **2000**, 71, 141-148 | 3.6 | 7 |
| 27 | A Comparison of the Structural Changes Occurring in Lignin during Alcell and Kraft Pulping of Hardwoods and Softwoods. *ACS Symposium Series*, **1999**, 447-464 | 0.4 | 7 |
| 26 | 3D Photoinduced Spatiotemporal Resolution of Cellulose-Based Hydrogels for Fabrication of Biomedical Devices.. *ACS Applied Bio Materials*, **2020**, 3, 5007-5019 | 4.1 | 6 |

| | | | |
|---|---|---|---|
| 25 | Magnetic Field and Temperature Effects on the Solid State Proton Spin-Lattice Relaxation Time Measurements of Wood and Pulps. *Holzforschung*, **1995**, 49, 115-118 | 2 | 6 |
| 24 | Polymerization beyond the gel point. I. The molecular weight of sol as a function of the extent of reaction. *Journal of Polymer Science, Part B: Polymer Physics*, **1987**, 25, 1191-1202 | 2.6 | 6 |
| 23 | Characterization of the soluble phase beyond the gel point. *Macromolecules*, **1986**, 19, 3001-3003 | 5.5 | 6 |
| 22 | Quantitative Study of the Interfacial Adsorption of Cellullase to Cellulose. *Journal of Physical Chemistry C*, **2015**, 150612090427003 | 3.8 | 4 |
| 21 | Determination of molecular weight distributions in native and pretreated wood. *Carbohydrate Polymers*, **2015**, 119, 44-52 | 10.3 | 4 |
| 20 | On the Role of 1-Hydroxybenzotriazole as Mediator in Laccase Oxidation of Residual Kraft Lignin. *ACS Symposium Series*, **2001**, 373-390 | 0.4 | 4 |
| 19 | Kinetics of gelation in model polycondensates. *Industrial & Engineering Chemistry Product Research and Development*, **1986**, 25, 578-582 | | 4 |
| 18 | A facile synthesis of monodisperse carboxylated polystyrene and derivatives. *Die Makromolekulare Chemie*, **1986**, 187, 1887-1894 | | 4 |
| 17 | On the interaction of UV screens with the lignocellulosic matrix. *Photochemistry and Photobiology*, **2000**, 71, 149-56 | 3.6 | 4 |
| 16 | Bio-based materials: general discussion. *Faraday Discussions*, **2017**, 202, 121-139 | 3.6 | 3 |
| 15 | Solubilizing amino acids and polypeptides in supercritical CO2 via reverse micelle formation. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2008**, 315, 110-116 | 5.1 | 3 |
| 14 | Modifying the Functionality of Starch Films with Natural Polymers. *ACS Symposium Series*, **2007**, 200-218 | 0.4 | 3 |
| 13 | Dependency of polyelectrolyte complex stoichiometry on the order of addition. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2004**, 246, 71-79 | 5.1 | 3 |
| 12 | Alkaline oxidative degradation of diphenylmethane structures ? Activation energy and computational analysis of the reaction mechanism. *Canadian Journal of Chemistry*, **2001**, 79, 1394-1401 | 0.9 | 3 |
| 11 | Feedstocks and analysis: general discussion. *Faraday Discussions*, **2017**, 202, 497-519 | 3.6 | 2 |
| 10 | A perspective of lignin processing and utilization technologies for composites and plastics with emphasis on technical and market trends. *BioResources*, **2020**, 16, 2084-2115 | 1.3 | 2 |
| 9 | Opportunities with Wood Dissolved in Ionic Liquids. *ACS Symposium Series*, **2010**, 343-363 | 0.4 | 1 |
| 8 | On the Interaction of UV Screens with the Lignocellulosic Matrix. *Photochemistry and Photobiology*, **2007**, 71, 149-156 | 3.6 | 1 |

# List of Publications

| | | | |
|---|---|---|---|
| 7 | Photostabilizing Milled Wood Lignin with Benzotriazoles and Hindered Nitroxides. *Photochemistry and Photobiology*, **2007**, 73, 605-610 | 3.6 | 1 |
| 6 | Oxidative Chemistry of Lignin in Supercritical Carbon Dioxide and Expanded Liquids. *ACS Symposium Series*, **2007**, 311-331 | 0.4 | 1 |
| 5 | Alkaline oxidative degradation of diphenylmethane structures ? Activation energy and computational analysis of the reaction mechanism. *Canadian Journal of Chemistry*, **2001**, 79, 1394-1401 | 0.9 | 1 |
| 4 | Maintaining the Brightness of Mechanical Pulps with Solid-State Perborate Bleaching. *Holzforschung*, **1998**, 52, 319-324 | 2 | 1 |
| 3 | Copolymers of starch, a sustainable template for biomedical applications: A review.. *Carbohydrate Polymers*, **2022**, 278, 118973 | 10.3 | 1 |
| 2 | Pyrolysis Oils from Biomass and Their Upgrading **2012**, 263-280 | | |
| 1 | A Detailed Study of the Alkaline Oxidative Degradation of a Residual Kraft Lignin Model Compound. *ACS Symposium Series*, **2001**, 130-148 | 0.4 | |