Martin Lawoko

List of Publications by Year
in descending order

58 papers	3,619 citations	159358 30 h-index	143772 57 g-index
59 all docs	59 docs citations	59 times ranked	3471 citing authors

#	Article	IF	Citations
1	A review on lignin-based polymeric, micro- and nano-structured materials. Reactive and Functional Polymers, 2014, 85, 78-96.	2.0	578
2	Structural Differences between the Ligninâ˜’Carbohydrate Complexes Present in Wood and in Chemical Pulps. Biomacromolecules, 2005, 6, 3467-3473.	2.6	264
3	Tunable Thermosetting Epoxies Based on Fractionated and Well-Characterized Lignins. Journal of the American Chemical Society, 2018, 140, 4054-4061.	6.6	220
4	A critical review on the analysis of lignin carbohydrate bonds. Green Chemistry, 2019, 21, 1573-1595.	4.6	204
5	Ligninâ€Retaining Transparent Wood. ChemSusChem, 2017, 10, 3445-3451.	3.6	192
6	Solvent screening for the fractionation of industrial kraft lignin. Holzforschung, 2016, 70, 11-20.	0.9	161
7	Characterisation of lignin-carbohydrate complexes (LCCs) of spruce wood (Picea abies L.) isolated with two methods. Holzforschung, 2006, 60, 156-161.	0.9	133
8	Lignin-Based Epoxy Resins: Unravelling the Relationship between Structure and Material Properties. Biomacromolecules, 2020, 21, 1920-1928.	2.6	118
9	Kinetics and mechanism of autohydrolysis of hardwoods. Bioresource Technology, 2010, 101, 7812-7819.	4.8	103
10	Fractional Profiling of Kraft Lignin Structure: Unravelling Insights on Lignin Reaction Mechanisms. ACS Sustainable Chemistry and Engineering, 2020, 8, 1112-1120.	3.2	88
11	Fractionation of Technical Lignin: Molecular Mass and pH Effects. BioResources, 2013, 8, .	0.5	87
12	Differences in extractability under subcritical water reveal interconnected hemicellulose and lignin recalcitrance in birch hardwoods. Green Chemistry, 2018, 20, 2534-2546.	4.6	75
13	Changes in the lignin-carbohydrate complex in softwood kraft pulp during kraft and oxygen delignification. Holzforschung, 2004, 58, 603-610.	0.9	74
14	Structural features of mildly fractionated lignin carbohydrate complexes (LCC) from spruce. RSC Advances, 2016, 6, 42120-42131.	1.7	74
15	Structural Insights on Recalcitrance during Hydrothermal Hemicellulose Extraction from Wood. ACS Sustainable Chemistry and Engineering, 2017, 5, 5156-5165.	3.2	73
16	Reversible crosslinking of lignin via the furanâ€“maleimide Dielsâ€“Alder reaction. Green Chemistry, 2015, 17, 4991-5000.	4.6	71
17	In muro deacetylation of xylan affects lignin properties and improves saccharification of aspen wood. Biotechnology for Biofuels, 2017, 10, 98.	6.2	64
18	Renewable Thiolâ€“Ene Thermosets Based on Refined and Selectively Allylated Industrial Lignin. ACS Sustainable Chemistry and Engineering, 2017, 5, 10918-10925.	3.2	61

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19	Structural Basis for the Formation and Regulation of Ligninâ€“Xylan Bonds in Birch. ACS Sustainable Chemistry and Engineering, 2016, 4, 5319-5326.	3.2	60
20	A molecular dynamics study of the effect of glycosidic linkage type in the hemicellulose backbone on the molecular chain flexibility. Plant Journal, 2016, 88, 56-70.	2.8	58
21	A glucuronoyl esterase from <i>Acremonium alcalophilum</i> cleaves native ligninâ€carbohydrate ester bonds. FEBS Letters, 2016, 590, 2611-2618.	1.3	57
22	Characterization of lignin-carbohydrate complexes from spruce sulfite pulp. Holzforschung, 2006, 60, 162-165.	0.9	51
23	Mechanical and Morphological Properties of Lignin-Based Thermosets. ACS Applied Polymer Materials, 2020, 2, 668-676.	2.0	51
24	On the formation of lignin polysaccharide networks in Norway spruce. Phytochemistry, 2015, 111, 177-184.	1.4	44
25	Lignin-carbohydrate network in wood and pulps: A determinant for reactivity. Holzforschung, 2007, 61, 668-674.	0.9	43
26	Exploring the Effects of Different Cross-Linkers on Lignin-Based Thermoset Properties and Morphologies. ACS Sustainable Chemistry and Engineering, 2021, 9, 1692-1702.	3.2	43
27	The structure of galactoglucomannan impacts the degradation under alkaline conditions. Cellulose, 2019, 26, 2155-2175.	2.4	41
28	Unveiling the structure and ultrastructure of lignin carbohydrate complexes in softwoods. International Journal of Biological Macromolecules, 2013, 62, 705-713.	3.6	37
29	On the solubility of wood in non-derivatising ionic liquids. Green Chemistry, 2013, 15, 2374.	4.6	35
30	Modification of Kraft Lignin to Expose Diazobenzene Groups: Toward pH- and Light-Responsive Biobased Polymers. Biomacromolecules, 2015, 16, 2979-2989.	2.6	35
31	Allylation of a lignin model phenol: a highly selective reaction under benign conditions towards a new thermoset resin platform. RSC Advances, 2016, 6, 96281-96288.	1.7	32
32	Toward a Consolidated Lignin Biorefinery: Preserving the Lignin Structure through Additiveâ€Free Protection Strategies. ChemSusChem, 2020, 13, 4666-4677.	3.6	31
33	Transforming technical lignins to structurally defined star-copolymers under ambient conditions. Green Chemistry, 2019, 21, 2478-2486.	4.6	30
34	SEPARATION OF GALACTOGLUCOMANNANS, LIGNIN, AND LIGNIN-CARBOHYDRATE COMPLEXES FROM HOT-WATER-EXTRACTED NORWAY SPRUCE BY CROSS-FLOW FILTRATION AND ADSORPTION CHROMATOGRAPHY. BioResources, 2012, 7, .	0.5	26
35	Application of mild autohydrolysis to facilitate the dissolution of wood chips in direct-dissolution solvents. Green Chemistry, 2016, 18, 3286-3294.	4.6	26
36	Deciphering lignin heterogeneity in ball milled softwood: unravelling the synergy between the supramolecular cell wall structure and molecular events. Green Chemistry, 2021, 23, 3348-3364.	4.6	26

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37	Acetylation and Sugar Composition Influence the (In)Solubility of Plant Î²-Mannans and Their Interaction with Cellulose Surfaces. ACS Sustainable Chemistry and Engineering, 2020, 8, 10027-10040.	3.2	25
38	Enrichment and Identification of Ligninâ€“Carbohydrate Complexes in Softwood Extract. ACS Sustainable Chemistry and Engineering, 2020, 8, 11795-11804.	3.2	23
39	The reactivity of lignin carbohydrate complex (LCC) during manufacture of dissolving sulfite pulp from softwood. Industrial Crops and Products, 2018, 115, 315-322.	2.5	21
40	New Structures in <i>Eucalyptus</i> Kraft Lignin with Complex Mechanistic Implications. ACS Sustainable Chemistry and Engineering, 0, , .	3.2	19
41	<i>Phoma herbarum</i>, a soil fungus able to grow on natural lignin and synthetic lignin (DHP) as sole carbon source and cause lignin degradation. Journal of Industrial Microbiology and Biotechnology, 2016, 43, 1175-1182.	1.4	17
42	Nativity of lignin carbohydrate bonds substantiated by biomimetic synthesis. Journal of Experimental Botany, 2019, 70, 5591-5601.	2.4	16
43	A one-pot biomimetic synthesis of selectively functionalized lignins from monomers: a green functionalization platform. Green Chemistry, 2018, 20, 2651-2662.	4.6	15
44	High Value Use of Technical Lignin. Fractionated Lignin Enables Facile Synthesis of Microcapsules with Various Shapes: Hemisphere, Bowl, Mini-tablets, or Spheres with Single Holes. ACS Sustainable Chemistry and Engineering, 2020, 8, 13282-13291.	3.2	14
45	Protected lignin biorefining through cyclic extraction: gaining fundamental insights into the tuneable properties of lignin by chemometrics. Green Chemistry, 2022, 24, 1211-1223.	4.6	14
46	Lignin as a Renewable Substrate for Polymers: From Molecular Understanding and Isolation to Targeted Applications. ACS Sustainable Chemistry and Engineering, 2021, 9, 5481-5485.	3.2	13
47	Active role of lignin in anchoring wood-based stabilizers to the emulsion interface. Green Chemistry, 2021, 23, 9084-9098.	4.6	13
48	Fractionation and Characterization of Completely Dissolved Ball Milled Hardwood. Journal of Wood Chemistry and Technology, 2011, 31, 183-203.	0.9	11
49	Structural changes in residual kraft pulp lignins. Effects of kappa number and degree of oxygen delignification. Nordic Pulp and Paper Research Journal, 2003, 18, 395-399.	0.3	9
50	On the effect of hemicellulose removal on celluloselignin interactions. Nordic Pulp and Paper Research Journal, 2017, 32, 542-549.	0.3	7
51	Structural basis for lignin recalcitrance during sulfite pulping for production of dissolving pulp from pine heartwood. Industrial Crops and Products, 2022, 177, 114391.	2.5	7
52	Fundamental Insights on the Physical and Chemical Properties of Organosolv Lignin from Norway Spruce Bark. Biomacromolecules, 2022, 23, 3349-3358.	2.6	7
53	Intrinsic dissolution kinetics and topochemistry of xylan, mannan, and lignin during autoâ€hydrolysis of red maple wood meal. Canadian Journal of Chemical Engineering, 2019, 97, 649-661.	0.9	6
54	Lignin carbohydrate complex studies during kraft pulping for producing paper grade pulp from birch. Tappi Journal, 2020, 19, 447-460.	0.2	4

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55	Recent Strategies for Lignin-Based Thermosets. ACS Symposium Series, 2021, , 175-206.	0.5	3
56	Self-assembled carbon spheres prepared from abundant lignin and urea for photocatalytic and self-propelling applications. Carbon Trends, 2021, 3, 100040.	1.4	3
57	On the effect of hemicellulose removal on cellulose-lignin interactions. - OPEN ACCESS. Nordic Pulp and Paper Research Journal, 2017, 32, 542-549.	0.3	3
58	Stabilising mannose using sodium dithionite at alkaline conditions. Holzforschung, 2020, 74, 131-140.	0.9	1