John H Grabber

List of Publications by Year
in descending order

58 papers	5,049 citations	136740 32 h-index	138251 58 g-index
58 all docs	58 docs citations	58 times ranked	3748 citing authors

#	Article	IF	Citations
1	How Do Lignin Composition, Structure, and Crossâ€Linking Affect Degradability? A Review of Cell Wall Model Studies. Crop Science, 2005, 45, 820-831.	0.8	438
2	Pathway of p-Coumaric Acid Incorporation into Maize Lignin As Revealed by NMR. Journal of the American Chemical Society, 1994, 116, 9448-9456.	6.6	403
3	Lignin-ferulate cross-links in grasses: active incorporation of ferulate polysaccharide esters into ryegrass lignins. Carbohydrate Research, 1995, 275, 167-178.	1.1	386
4	Identification and synthesis of new ferulic acid dehydrodimers present in grass cell walls. Journal of the Chemical Society Perkin Transactions 1, 1994, , 3485.	0.9	353
5	Metabolic engineering of novel lignin in biomass crops. New Phytologist, 2012, 196, 978-1000.	3.5	338
6	Peroxidase-dependent cross-linking reactions of p-hydroxycinnamates in plant cell walls. Phytochemistry Reviews, 2004, 3, 79-96.	3.1	239
7	Ferulate cross-linking in cell walls isolated from maize cell suspensions. Phytochemistry, 1995, 40, 1077-1082.	1.4	226
8	Cross-Linking of Maize Walls by Ferulate Dimerization and Incorporation into Lignin. Journal of Agricultural and Food Chemistry, 2000, 48, 6106-6113.	2.4	196
9	Ferulate Cross-Links Limit the Enzymatic Degradation of Synthetically Lignified Primary Walls of Maize. Journal of Agricultural and Food Chemistry, 1998, 46, 2609-2614.	2.4	171
10	Monolignol ferulate conjugates are naturally incorporated into plant lignins. Science Advances, 2016, 2, e1600393.	4.7	147
11	p-coumaroylated syringyl units in maize lignin: Implications for Î²-ether cleavage by thioacidolysis. Phytochemistry, 1996, 43, 1189-1194.	1.4	137
12	Cell wall fermentation kinetics are impacted more by lignin content and ferulate crossâ€linking than by lignin composition. Journal of the Science of Food and Agriculture, 2009, 89, 122-129.	1.7	116
13	Cover Crop and Liquid Manure Effects on Soil Quality Indicators in a Corn Silage System. Agronomy Journal, 2009, 101, 727-737.	0.9	115
14	Identification of the structure and origin of a thioacidolysis marker compound for ferulic acid incorporation into angiosperm lignins (and an indicator for cinnamoyl CoA reductase deficiency). Plant Journal, 2008, 53, 368-379.	2.8	114
15	Coniferyl Ferulate Incorporation into Lignin Enhances the Alkaline Delignification and Enzymatic Degradation of Cell Walls. Biomacromolecules, 2008, 9, 2510-2516.	2.6	114
16	Acetone Enhances the Direct Analysis of Procyanidin- and Prodelphinidin-Based Condensed Tannins in Lotus Species by the Butanolâ€"HClâ€"Iron Assay. Journal of Agricultural and Food Chemistry, 2013, 61, 2669-2678.	2.4	112
17	A potential role for sinapyl p-coumarate as a radical transfer mechanism in grass lignin formation. Planta, 2008, 228, 919-928.	1.6	107
18	Model Studies of Ferulateâ^'Coniferyl Alcohol Cross-Product Formation in Primary Maize Walls:Â Implications for Lignification in Grasses. Journal of Agricultural and Food Chemistry, 2002, 50, 6008-6016.	2.4	103

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19	p-Hydroxyphenyl, Guaiacyl, and Syringyl Lignins Have Similar Inhibitory Effects on Wall Degradability. Journal of Agricultural and Food Chemistry, 1997, 45, 2530-2532.	2.4	102
20	Relationship of growth cessation with the formation of diferulate cross-links and p -coumaroylated lignins in tall fescue leaf blades. Planta, 2002, 215, 785-793.	1.6	94
21	Grass lignin acylation: p-coumaroyl transferase activity and cell wall characteristics of C3 and C4 grasses. Planta, 2009, 229, 1253-1267.	1.6	94
22	Formation of ferulic acid dehydrodimers through oxidative cross-linking of sugar beet pectin. Carbohydrate Research, 1997, 300, 179-181.	1.1	78
23	Identifying new lignin bioengineering targets: 1. Monolignol-substitute impacts on lignin formation and cell wall fermentability. BMC Plant Biology, 2010, 10, 114.	1.6	75
24	Dehydrogenation Polymerâ˘Cell Wall Complexes as a Model for Lignified Grass Walls. Journal of Agricultural and Food Chemistry, 1996, 44, 1453-1459.	2.4	61
25	Apoplastic pH and Monolignol Addition Rate Effects on Lignin Formation and Cell Wall Degradability in Maize. Journal of Agricultural and Food Chemistry, 2003, 51, 4984-4989.	2.4	54
26	Hydroxycinnamate Conjugates as Potential Monolignol Replacements: Inâ€…vitro Lignification and Cell Wall Studies with Rosmarinic Acid. ChemSusChem, 2012, 5, 676-686.	3.6	54
27	Cell culture systems: invaluable tools to investigate lignin formation and cell wall properties. Current Opinion in Biotechnology, 2019, 56, 215-222.	3.3	49
28	Severe inhibition of maize wall degradation by synthetic lignins formed with coniferaldehyde. Journal of the Science of Food and Agriculture, 1998, 78, 81-87.	1.7	45
29	Protein Precipitation Behavior of Condensed Tannins from <i>Lotus pedunculatus</i> and <i>Trifolium repens</i> with Different Mean Degrees of Polymerization. Journal of Agricultural and Food Chemistry, 2015, 63, 1160-1168.	2.4	42
30	Fluorescence-Tagged Monolignols: Synthesis, and Application to Studying In Vitro Lignification. Biomacromolecules, 2011, 12, 1752-1761.	2.6	37
31	Epigallocatechin gallate incorporation into lignin enhances the alkaline delignification and enzymatic saccharification of cell walls. Biotechnology for Biofuels, 2012, 5, 59.	6.2	35
32	¹Hâ€“¹³C HSQC NMR Spectroscopy for Estimating Procyanidin/Prodelphinidin and <i>cis</i>/<i>trans</i>-Flavan-3-ol Ratios of Condensed Tannin Samples: Correlation with Thiolysis. Journal of Agricultural and Food Chemistry, 2015, 63, 1967-1973.	2.4	34
33	Model studies of lignified fiber fermentation by human fecal microbiota and its impact on heterocyclic aromatic amine adsorption. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2007, 624, 41-48.	0.4	30
34	Identifying New Lignin Bioengineering Targets: Impact of Epicatechin, Quercetin Glycoside, and Gallate Derivatives on the Lignification and Fermentation of Maize Cell Walls. Journal of Agricultural and Food Chemistry, 2012, 60, 5152-5160.	2.4	30
35	Formation of syringyl-rich lignins in maize as influenced by feruloylated xylans and p-coumaroylated monolignols. Planta, 2007, 226, 741-751.	1.6	28
36	Chemical Composition and Enzymatic Degradability of Xylem and Nonxylem Walls Isolated from Alfalfa Internodes. Journal of Agricultural and Food Chemistry, 2002, 50, 2595-2600.	2.4	27

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37	Influence of Lignification and Feruloylation of Maize Cell Walls on the Adsorption of Heterocyclic Aromatic Amines. Journal of Agricultural and Food Chemistry, 2006, 54, 1860-1867.	2.4	27
38	Soil Nitrogen and Forage Yields of Corn Grown with Clover or Grass Companion Crops and Manure. Agronomy Journal, 2014, 106, 952-961.	0.9	26
39	Prohexadioneâ€“Calcium Improves Stand Density and Yield of Alfalfa Interseeded into Silage Corn. Agronomy Journal, 2016, 108, 726-735.	0.9	23
40	Mechanical Maceration Divergently Shifts Protein Degradability in Condensedâ€Tannin vs. <i>o</i>â€Quinone Containing Conserved Forages. Crop Science, 2008, 48, 804-813.	0.8	22
41	Moderate Ferulate and Diferulate Levels Do Not Impede Maize Cell Wall Degradation by Human Intestinal Microbiota. Journal of Agricultural and Food Chemistry, 2007, 55, 2418-2423.	2.4	18
42	Methyl Esterification Divergently Affects the Degradability of Pectic Uronosyls in Nonlignified and Lignified Maize Cell Walls. Journal of Agricultural and Food Chemistry, 2005, 53, 1546-1549.	2.4	17
43	Prohexadioneâ€Calcium Rate and Timing Effects on Alfalfa Interseeded into Silage Corn. Agronomy Journal, 2018, 110, 85-94.	0.9	16
44	Structural features of alternative lignin monomers associated with improved digestibility of artificially lignified maize cell walls. Plant Science, 2019, 287, 110070.	1.7	14
45	Alfalfa establishment by interseeding with silage corn projected to increase profitability of corn silageâ€“alfalfa rotations. Agronomy Journal, 2020, 112, 4120-4132.	0.9	14
46	Effects of feeding Lespedeza cuneata pellets with Medicago sativa hay to sheep: Nutritional impact, characterization and degradation of condensed tannin during digestion. Animal Feed Science and Technology, 2018, 245, 41-47.	1.1	11
47	Ecological Intensification of Food Production by Integrating Forages. Agronomy, 2021, 11, 2580.	1.3	11
48	Adjuvants for Prohexadioneâ€Calcium Applied to Alfalfa Interseeded into Corn. Agronomy Journal, 2018, 110, 2687-2690.	0.9	10
49	Incorporation of Flavonoid Derivatives or Pentagalloyl Glucose into Lignin Enhances Cell Wall Saccharification Following Mild Alkaline or Acidic Pretreatments. Bioenergy Research, 2015, 8, 1391-1400.	2.2	8
50	Benefits of alfalfa interseeding include reduced residual soil nitrate following corn production. Agricultural and Environmental Letters, 2021, 6, e20053.	0.8	8
51	Interseeding alfalfa into corn silage increases corn N fertilizer demand and increases system yield. Agronomy for Sustainable Development, 2021, 41, 1.	2.2	8
52	PRE- and POST-applied herbicide options for alfalfa interseeded with corn silage. Weed Technology, 2021, 35, 263-270.	0.4	7
53	Differential survival of alfalfa varieties interseeded into corn silage. Crop Science, 2021, 61, 1797-1808.	0.8	7
54	Direct versus Sequential Analysis of Procyanidin- and Prodelphinidin-Based Condensed Tannins by the HClâ€“Butanolâ€“Acetoneâ€“Iron Assay. Journal of Agricultural and Food Chemistry, 2020, 68, 2906-2916.	2.4	5

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55	Establishment and First Year Yield of Interseeded Alfalfa as Influenced by Corn Plant Density and Treatment with Prohexadione, Fungicide and Insecticide. Agronomy, 2021, 11, 2343.	1.3	5
56	Severe inhibition of maize wall degradation by synthetic lignins formed with coniferaldehyde. Journal of the Science of Food and Agriculture, 1998, 78, 81-87.	1.7	4
57	Relationships between Cell Wall Digestibility and Lignin Content as Influenced by Lignin Type and Analysis Method. Crop Science, 2019, 59, 1122-1132.	0.8	3
58	Sorghum-Sudangrass Responses to Nitrogen and Tillage following Polyphenol-Containing Legumes, Alfalfa, Reed Canarygrass, and Kale. Agronomy Journal, 2017, 109, 2050-2062.	0.9	1