Peter J Deuss

List of Publications by Year
in descending order

53 papers	3,268 citations	236912 25 h-index	175241 52 g-index
58 all docs	58 docs citations	58 times ranked	3215 citing authors

#	Article	IF	Citations
1	Chemicals from lignin by diol-stabilized acidolysis: reaction pathways and kinetics. Green Chemistry, 2022, 24, 3193-3207.	9.0	15
2	Pyrolytic lignin: a promising biorefinery feedstock for the production of fuels and valuable chemicals. Green Chemistry, 2022, 24, 4680-4702.	9.0	44
3	Tuning lignin properties by mild ionic-liquid-mediated selective alcohol incorporation. Chem Catalysis, 2022, 2, 1407-1427.	6.1	5
4	Mild Organosolv Delignification of Residual Aspen Bark after Extractives Isolation as a Step in Biorefinery Processing Schemes. Molecules, 2022, 27, 3185.	3.8	8
5	Selective Demethoxylation of Guaiacols to Phenols using Supported MoO₃ Catalysts. ChemCatChem, 2022, 14, .	3.7	4
6	New Mechanistic Insights into the Lignin Î²-O-4 Linkage Acidolysis with Ethylene Glycol Stabilization Aided by Multilevel Computational Chemistry. ACS Sustainable Chemistry and Engineering, 2021, 9, 2388-2399.	6.7	32
7	5-Hydroxy-2-Methylfurfural from Sugar Beet Thick Juice: Kinetic and Modeling Studies. ACS Sustainable Chemistry and Engineering, 2021, 9, 2626-2638.	6.7	5
8	Benzenetriol-Derived Compounds against Citrus Canker. Molecules, 2021, 26, 1436.	3.8	2
9	Iron Tetrasulfonatophthalocyanine-Catalyzed Starch Oxidation Using H₂O₂: Interplay between Catalyst Activity, Selectivity, and Stability. ACS Omega, 2021, 6, 13847-13857.	3.5	4
10	Correction to â€œNew Mechanistic Insights into the Lignin Î²-O-4 Linkage Acidolysis with Ethylene Glycol Stabilization Aided by Multilevel Computational Chemistryâ€ ACS Sustainable Chemistry and Engineering, 2021, 9, 9149-9149.	6.7	1
11	Mechanistic Investigations into the Catalytic Levulinic Acid Hydrogenation, Insight in H/D Exchange Pathways, and a Synthetic Route to d₈-Î³-Valerolactone. ACS Catalysis, 2021, 11, 10467-10477.	11.2	15
12	Tunable and functional deep eutectic solvents for lignocellulose valorization. Nature Communications, 2021, 12, 5424.	12.8	116
13	Catalytic Hydrogenolysis of Lignin: The Influence of Minor Units and Saccharides. ChemSusChem, 2021, 14, 5186-5198.	6.8	9
14	The effect of ball milling on birch, pine, reed, walnut shell enzymatic hydrolysis recalcitrance and the structure of the isolated residual enzyme lignin. Industrial Crops and Products, 2021, 167, 113493.	5.2	37
15	Ozone mediated depolymerization and solvolysis of technical lignins under ambient conditions in ethanol. Sustainable Energy and Fuels, 2020, 4, 265-276.	4.9	16
16	<i>Ex Situ</i> Catalytic Fast Pyrolysis of Lignin-Rich Digested Stillage over Na/ZSM-5, H/ZSM-5, and Fe/ZSM-5. Energy & Fuels, 2020, 34, 12710-12723.	5.1	6
17	Amphiphilic Copolymers Derived from Butanosolv Lignin and Acrylamide: Synthesis, Properties in Water Solution, and Potential Applications. ACS Applied Polymer Materials, 2020, 2, 5705-5715.	4.4	11
18	Catalyst Performance Studies on the Guerbet Reaction in a Continuous Flow Reactor Using Mono- and Bi-Metallic Cu-Ni Porous Metal Oxides. Catalysts, 2020, 10, 996.	3.5	12

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19	Towards Thermally Reversible Networks Based on Furan-Functionalization of Jatropha Oil. Molecules, 2020, 25, 3641.	3.8	4
20	Combined lignin defunctionalisation and synthesis gas formation by acceptorless dehydrogenative decarbonylation. Green Chemistry, 2020, 22, 3791-3801.	9.0	18
21	An Introduction to Model Compounds of Lignin Linking Motifs; Synthesis and Selection Considerations for Reactivity Studies. ChemSusChem, 2020, 13, 4238-4265.	6.8	50
22	Mild Organosolv Lignin Extraction with Alcohols: The Importance of Benzylic Alkoxylation. ACS Sustainable Chemistry and Engineering, 2020, 8, 5119-5131.	6.7	100
23	A Twoâ€Step Approach for the Conversion of Technical Lignins to Biofuels. Advanced Sustainable Systems, 2020, 4, 1900147.	5.3	11
24	Highâ€Yield 5â€Hydroxymethylfurfural Synthesis from Crude Sugar Beet Juice in a Biphasic Microreactor. ChemSusChem, 2019, 12, 4304-4312.	6.8	28
25	Efficient Depolymerization of Lignin to Biobased Chemicals Using a Two-Step Approach Involving Ozonation in a Continuous Flow Microreactor Followed by Catalytic Hydrotreatment. ACS Sustainable Chemistry and Engineering, 2019, 7, 18384-18394.	6.7	20
26	Bio-Based Chemicals: Selective Aerobic Oxidation of Tetrahydrofuran-2,5-dimethanol to Tetrahydrofuran-2,5-dicarboxylic Acid Using Hydrotalcite-Supported Gold Catalysts. ACS Sustainable Chemistry and Engineering, 2019, 7, 4647-4656.	6.7	19
27	Hydrotreatment of pyrolysis liquids derived from second-generation bioethanol production residues over NiMo and CoMo catalysts. Biomass and Bioenergy, 2019, 126, 84-93.	5.7	21
28	Valorization of Pyrolysis Liquids: Ozonation of the Pyrolytic Lignin Fraction and Model Components. ACS Sustainable Chemistry and Engineering, 2019, 7, 4755-4765.	6.7	27
29	Efficient Mild Organosolv Lignin Extraction in a Flow-Through Setup Yielding Lignin with High Î²-O-4 Content. Polymers, 2019, 11, 1913.	4.5	39
30	Lewis Acid Catalyzed Conversion of 5-Hydroxymethylfurfural to 1,2,4-Benzenetriol, an Overlooked Biobased Compound. ACS Sustainable Chemistry and Engineering, 2018, 6, 3419-3425.	6.7	35
31	Complete lignocellulose conversion with integrated catalyst recycling yielding valuable aromatics and fuels. Nature Catalysis, 2018, 1, 82-92.	34.4	350
32	Biobased Chemicals: 1,2,4-Benzenetriol, Selective Deuteration and Dimerization to Bifunctional Aromatic Compounds. Organic Process Research and Development, 2018, 22, 1663-1671.	2.7	17
33	Biobased chemicals from the catalytic depolymerization of Kraft lignin using supported noble metal-based catalysts. Fuel Processing Technology, 2018, 179, 143-153.	7.2	69
34	Biobased Furanics: Kinetic Studies on the Acid Catalyzed Decomposition of 2-Hydroxyacetyl Furan in Water Using BrÃ¶nsted Acid Catalysts. ACS Sustainable Chemistry and Engineering, 2017, 5, 3993-4001.	6.7	7
35	Phenolic acetals from lignins of varying compositions via iron(<scp>iii</scp>) triflate catalysed depolymerisation. Green Chemistry, 2017, 19, 2774-2782.	9.0	136
36	Enzyme Activity by Design: An Artificial Rhodium Hydroformylase for Linear Aldehydes. Angewandte Chemie - International Edition, 2017, 56, 13596-13600.	13.8	36

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37	Enzyme Activity by Design: An Artificial Rhodium Hydroformylase for Linear Aldehydes. Angewandte Chemie, 2017, 129, 13784-13788.	2.0	9
38	A Biocatalytic Oneâ€Pot Approach for the Preparation of Lignin Oligomers Using an Oxidase/Peroxidase Cascade Enzyme System. Advanced Synthesis and Catalysis, 2017, 359, 3354-3361.	4.3	18
39	Pre-treatment of lignocellulosic feedstocks using biorenewable alcohols: towards complete biomass valorisation. Green Chemistry, 2017, 19, 202-214.	9.0	232
40	Metal Triflates for the Production of Aromatics from Lignin. ChemSusChem, 2016, 9, 2974-2981.	6.8	82
41	Advanced Model Compounds for Understanding Acid-Catalyzed Lignin Depolymerization: Identification of Renewable Aromatics and a Lignin-Derived Solvent. Journal of the American Chemical Society, 2016, 138, 8900-8911.	13.7	202
42	From models to lignin: Transition metal catalysis for selective bond cleavage reactions. Coordination Chemistry Reviews, 2016, 306, 510-532.	18.8	221
43	New insights into the catalytic cleavage of the lignin Î²-O-4 linkage in multifunctional ionic liquid media. Catalysis Science and Technology, 2016, 6, 1882-1891.	4.1	50
44	Aromatic Monomers by in Situ Conversion of Reactive Intermediates in the Acid-Catalyzed Depolymerization of Lignin. Journal of the American Chemical Society, 2015, 137, 7456-7467.	13.7	477
45	Parallel Synthesis of Cell-Penetrating Peptide Conjugates of PMO Toward Exon Skipping Enhancement in Duchenne Muscular Dystrophy. Nucleic Acid Therapeutics, 2015, 25, 1-10.	3.6	19
46	Homogeneous catalysis for the conversion of biomass and biomass-derived platform chemicals. Catalysis Science and Technology, 2014, 4, 1174-1196.	4.1	267
47	Catalyst design in oxidation chemistry; from KMnO4 to artificial metalloenzymes. Bioorganic and Medicinal Chemistry, 2014, 22, 5657-5677.	3.0	28
48	Parallel synthesis and splicing redirection activity of cell-penetrating peptide conjugate libraries of a PNA cargo. Organic and Biomolecular Chemistry, 2013, 11, 7621.	2.8	21
49	Artificial Copper Enzymes for Asymmetric Dielsâ€"Alder Reactions. ChemCatChem, 2013, 5, 1184-1191.	3.7	50
50	Bioinspired Catalyst Design and Artificial Metalloenzymes. Chemistry - A European Journal, 2011, 17, 4680-4698.	3.3	177
51	Highly Efficient and Siteâ€Selective Phosphane Modification of Proteins through Hydrazone Linkage: Development of Artificial Metalloenzymes. Angewandte Chemie - International Edition, 2010, 49, 5315-5317.	13.8	54
52	Sequential Catalytic Modification of the Lignin Î±-Ethoxylated Î²-O-4 Motif To Facilitate Câ€"O Bond Cleavage by Ruthenium-Xantphos Catalyzed Hydrogen Transfer. ACS Sustainable Chemistry and Engineering, 0, , .	6.7	8
53	Efficient depolymerization of lignins to alkylphenols using phosphided NiMo catalysts. Catalysis Science and Technology, 0, , .	4.1	6