Stephen C Chmely

List of Publications by Year
in descending order

37	1,757	430754	330025
papers	citations	18 h-index	37 g-index

51	51	51	2564
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Computational Study of Bond Dissociation Enthalpies for a Large Range of Native and Modified Lignins. Journal of Physical Chemistry Letters, 2011, 2, 2846-2852.	2.1	318
2	A Mechanistic Investigation of Acid-Catalyzed Cleavage of Aryl-Ether Linkages: Implications for Lignin Depolymerization in Acidic Environments. ACS Sustainable Chemistry and Engineering, 2014, 2, 472-485.	3.2	317
3	Lignin depolymerisation by nickel supported layered-double hydroxide catalysts. Green Chemistry, 2014, 16, 824-835.	4.6	161
4	Lignin-Containing Photoactive Resins for 3D Printing by Stereolithography. ACS Applied Materials & Interfaces, 2018, 10, 36456-36463.	4.0	127
5	Lignin-coated cellulose nanocrystal filled methacrylate composites prepared via 3D stereolithography printing: Mechanical reinforcement and thermal stabilization. Carbohydrate Polymers, 2017, 169, 272-281.	5.1	89
6	Biomass Treatment Strategies for Thermochemical Conversion. Energy & Fuels, 2017, 31, 3525-3536.	2.5	83
7	Dual-emitting film with cellulose nanocrystal-assisted carbon dots grafted SrAl2O4, Eu2+, Dy3+ phosphors for temperature sensing. Carbohydrate Polymers, 2019, 206, 767-777.	5.1	53
8	Relationship between lignocellulosic biomass dissolution and physicochemical properties of ionic liquids composed of 3-methylimidazolium cations and carboxylate anions. Physical Chemistry Chemical Physics, 2018, 20, 2508-2516.	1.3	51
9	Catalytic transfer hydrogenolysis of organosolv lignin using B-containing FeNi alloyed catalysts. Catalysis Today, 2018, 302, 190-195.	2.2	49
10	Solution Interaction of Potassium and Calcium Bis(trimethylsilyl)amides; Preparation of Ca[N(SiMe₃)₂]₂ from Dibenzylcalcium. Inorganic Chemistry, 2009, 48, 1380-1384.	1.9	44
11	Mechanistic Study of a Ru-Xantphos Catalyst for Tandem Alcohol Dehydrogenation and Reductive Aryl-Ether Cleavage. ACS Catalysis, 2013, 3, 963-974.	5.5	42
12	Classical versus Bridged Allyl Ligands in Magnesium Complexes: The Role of Solvent. Journal of the American Chemical Society, 2009, 131, 6344-6345.	6.6	39
13	Bis(1,3â€trimethylsilylallyl)beryllium. Angewandte Chemie - International Edition, 2010, 49, 5870-5874.	7.2	34
14	Sustainable Hydrogels Based on Lignin-Methacrylate Copolymers with Enhanced Water Retention and Tunable Material Properties. Biomacromolecules, 2018, 19, 2665-2672.	2.6	34
15	Complexes with Sterically Bulky Allyl Ligands: Insights into Structure and Bonding. European Journal of Inorganic Chemistry, 2010, 2010, 1321-1337.	1.0	33
16	Preparation, Structure, and Ether Cleavage of a Mixed Hapticity Allyl Compound of Calcium. Organometallics, 2011, 30, 5291-5296.	1.1	25
17	Lattice Matched Carbideâ€“Phosphide Composites with Superior Electrocatalytic Activity and Stability. Chemistry of Materials, 2017, 29, 9369-9377.	3.2	22
18	s-Block Metal Complexes of the Bis(tetramethylcyclopentadienyl) Phosphonium Diylide [Me(t-Bu)P(C₅Me₄)₂]^{â^'}. Organometallics, 2008, 27, 1612-1616.	1.1	20

#	Article	IF	Citations
19	Structural changes in lignocellulosic biomass during activation with ionic liquids comprising 3-methylimidazolium cations and carboxylate anions. Biotechnology for Biofuels, 2018, 11, 265.	6.2	19
20	Mechanochemically directed metathesis in group 2 chemistry: calcium amide formation without solvent. Chemical Communications, 2019, 55, 2202-2205.	2.2	18
21	Using a chelating agent to generate low ash bioenergy feedstock. Biomass and Bioenergy, 2017, 96, 12-18.	2.9	17
22	Screening of Mixed-Metal Oxide Species for Catalytic Ex Situ Vapor-Phase Deoxygenation of Cellulose by py-GC/MS Coupled with Multivariate Analysis. Energy & Fuels, 2016, 30, 3167-3174.	2.5	16
23	Structural Distortions in M[E(SiMe₃)₂]₃ Complexes (M = Group) Tj ETQq1 1 0.784314 rgBT /Ov	1.9	15
24	Vapor-Phase Stabilization of Biomass Pyrolysis Vapors Using Mixed-Metal Oxide Catalysts. ACS Sustainable Chemistry and Engineering, 2019, 7, 7386-7394.	3.2	15
25	Improving UV Curing in Organosolv Lignin-Containing Photopolymers for Stereolithography by Reduction and Acylation. Polymers, 2021, 13, 3473.	2.0	15
26	Recycling hot-water extractions of lignocellulosic biomass in bio-refinery for synthesis of carbon nanoparticles with amplified luminescence and its application in temperature sensing. Industrial Crops and Products, 2020, 145, 112066.	2.5	14
27	Reaction of platinum(II) diamine and triamine complexes with selenomethionine. Inorganica Chimica Acta, 2011, 368, 187-193.	1.2	12
28	Iron piano-stool complexes containing NHC ligands outfitted with pendent arms: synthesis, characterization, and screening for catalytic transfer hydrogenation. RSC Advances, 2016, 6, 88050-88056.	1.7	12
29	Electrocatalytic Activity and Stability Enhancement through Preferential Deposition of Phosphide on Carbide. ChemCatChem, 2017, 9, 1054-1061.	1.8	11
30	Beneficial effects of Trametes versicolor pretreatment on saccharification and lignin enrichment of organosolv-pretreated pinewood. RSC Advances, 2017, 7, 45652-45661.	1.7	10
31	Hot water extraction as a pretreatment for reducing syngas inorganics impurities â€“ A parametric investigation on switchgrass and loblolly pine bark. Fuel, 2018, 220, 177-184.	3.4	9
32	A Sequential Autohydrolysis-Ionic Liquid Fractionation Process for High Quality Lignin Production. Energy & Fuels, 2021, 35, 2293-2302.	2.5	8
33	Stability of cyclopentadienyl aryloxide complexes of calcium and barium. Journal of Alloys and Compounds, 2009, 488, 528-532.	2.8	7
34	Influence of Ring Methylation in Group 15 Tetramethylcyclopentadienyl Complexes, M(C₅Me₄H)_nI_{3â^'n} (M = As, Sb). Organometallics, 2010, 29, 5551-5557.	1.1	6
35	Development of Nanocrystalline Graphite from Lignin Sources. ACS Sustainable Chemistry and Engineering, 2022, 10, 1786-1794.	3.2	6
36	Scalable and Tunable Carbideâ€“Phosphide Composite Catalyst System for the Thermochemical Conversion of Biomass. ACS Sustainable Chemistry and Engineering, 2017, 5, 7751-7758.	3.2	5

#	Article	IF	Citations
37	Environmentally Friendly Process for Recovery of Wood Preservative from Used Copper Naphthenate-Treated Railroad Ties. ACS Sustainable Chemistry and Engineering, 2017, 5, 10806-10814.	3.2	1