Mahdi M Abu-Omar

List of Publications by Year in descending order

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191 papers 13,452 citations

18482 62 h-index 24258 110 g-index

196 all docs

196
docs citations

196 times ranked

11567 citing authors

#	Article	IF	CITATIONS
1	Crosslinking of renewable polyesters with epoxides to form bio-based epoxy thermosets. Polymer, 2022, 238, 124363.	3.8	2
2	Recycling Waste Polycarbonate to Bisphenol A-Based Oligoesters as Epoxy-Curing Agents, and Degrading Epoxy Thermosets and Carbon Fiber Composites into Useful Chemicals. ACS Sustainable Chemistry and Engineering, 2022, 10, 2429-2440.	6.7	19
3	Preparation and Degradation of Waste Polycarbonate-Derived Epoxy Thermosets and Composites. ACS Applied Polymer Materials, 2022, 4, 413-424.	4.4	11
4	Catalytic conversion of high S-lignin to a sustainable tri-epoxide polymer precursor. Green Chemistry, 2022, 24, 4958-4968.	9.0	8
5	Guidelines for performing lignin-first biorefining. Energy and Environmental Science, 2021, 14, 262-292.	30.8	416
6	A Heterogeneous Pt-ReO _{<i>x</i>} /C Catalyst for Making Renewable Adipates in One Step from Sugar Acids. ACS Catalysis, 2021, 11, 95-109.	11.2	20
7	Ligand-Controlled C _{sp} ² â€"H versus C _{sp} ³ â€"H Bond Formation in Cycloplatinated Complexes: A Joint Experimental and Theoretical Mechanistic Investigation. Inorganic Chemistry, 2021, 60, 1998-2008.	4.0	6
8	Lignin extraction and valorization using heterogeneous transition metal catalysts. Advances in Inorganic Chemistry, 2021, 77, 137-174.	1.0	8
9	Lignin-Derived Non-Heme Iron and Manganese Complexes: Catalysts for the On-Demand Production of Chlorine Dioxide in Water under Mild Conditions. Inorganic Chemistry, 2021, 60, 2905-2913.	4.0	8
10	Selectivity and competition between N–H and C–H bond activation using an organoplatinum (II) complex. Applied Organometallic Chemistry, 2021, 35, e6234.	3.5	3
11	Catalytic Depolymerization of Date Palm Waste to Valuable C5–C12 Compounds. Catalysts, 2021, 11, 371.	3.5	2
12	Organosolv Fractionation of Walnut Shell Biomass to Isolate Lignocellulosic Components for Chemical Upgrading of Lignin to Aromatics. ACS Omega, 2021, 6, 8142-8150.	3.5	15
13	Degradation of Thermal-Mechanically Stable Epoxy Thermosets, Recycling of Carbon Fiber, and Reapplication of the Degraded Products. ACS Sustainable Chemistry and Engineering, 2021, 9, 5304-5314.	6.7	21
14	Kinetics of Ethylene/1-Hexene Copolymerization over a Single-Site Hafnium Bis(phenolate) Catalyst: Insights into Insertion Complexity and Deactivation Pathways. Macromolecules, 2021, 54, 4101-4111.	4.8	6
15	Selectivity in Competitive C _{sp²} â€"C _{sp³} versus C _{sp³} â€"C _{sp³} Reductive Eliminations at Pt(IV) Complexes: Experimental and Computational Approaches. Organometallics, 2021, 40, 2051-2063.	2.3	9
16	Origins of Lithium/Sodium Reverse Permeability Selectivity in 12-Crown-4-Functionalized Polymer Membranes. ACS Macro Letters, 2021, 10, 1167-1173.	4.8	13
17	Engineering Li/Na selectivity in 12-Crown-4–functionalized polymer membranes. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	65
18	Preparation and properties of renewable polyesters based on lignin-derived bisphenol. Polymer, 2021, 233, 124202.	3.8	8

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19	Materials Based on Technical Bulk Lignin. ACS Sustainable Chemistry and Engineering, 2021, 9, 1477-1493.	6.7	32
20	Tetranuclear Rollover Cyclometalated Organoplatinum-Rhenium Compound; C-I Oxidative Addition and C-C Reductive Elimination Using a Rollover Cycloplatinated Dimer. Dalton Transactions, 2021, 50, 15015-15026.	3.3	2
21	Chemical Upcycling of Polyethylene to Value-Added α,ï‰-Divinyl-Functionalized Oligomers. ACS Sustainable Chemistry and Engineering, 2021, 9, 13926-13936.	6.7	34
22	Preparation of Sustainable Polar Aprotic Solvents from Biomass: One-Pot Two-Step Catalytic Reaction of Cellulose with <i>N</i> , <i>N</i> -Dimethylurea over Ru/C. ACS Sustainable Chemistry and Engineering, 2021, 9, 15008-15015.	6.7	2
23	Advanced Paramagnetic Resonance Studies on Manganese and Iron Corroles with a Formal d ⁴ Electron Count. Inorganic Chemistry, 2020, 59, 1075-1090.	4.0	24
24	Hydrogenolysis of Organosolv Lignin in Ethanol/Isopropanol Media without Added Transition-Metal Catalyst. ACS Sustainable Chemistry and Engineering, 2020, 8, 1023-1030.	6.7	55
25	One-pot hydrodeoxygenation (HDO) of lignin monomers to C9 hydrocarbons co-catalysed by Ru/C and Nb ₂ O ₅ . Green Chemistry, 2020, 22, 7406-7416.	9.0	33
26	Polyethylene upcycling to long-chain alkylaromatics by tandem hydrogenolysis/aromatization. Science, 2020, 370, 437-441.	12.6	378
27	Degradation Rates of Plastics in the Environment. ACS Sustainable Chemistry and Engineering, 2020, 8, 3494-3511.	6.7	1,463
28	Synthesis and Characterization of Rh ^{III} â€"M ^{II} (M = Pt, Pd) Heterobimetallic Complexes Based on a Bisphosphine Ligand: Tandem Reactions Using Ethanol. Organometallics, 2020, 39, 3879-3891.	2.3	6
29	Investigation of Non-Isothermal Kinetics and Thermodynamic Parameters for the Pyrolysis of Different Date Palm Parts. Energies, 2020, 13, 6553.	3.1	10
30	Deoxydehydration and Catalytic Transfer Hydrogenation: New Strategy to Valorize Tartaric Acid and Succinic Acid to \hat{I}^3 -Butyrolactone and Tetrahydrofuran. Energies, 2020, 13, 6402.	3.1	3
31	Full atom-efficiency transformation of wasted polycarbonates into epoxy thermosets and the catalyst-free degradation of the thermosets for environmental sustainability. Green Chemistry, 2020, 22, 4683-4696.	9.0	13
32	Discovery and mechanistic investigation of Pt-catalyzed oxidative homocoupling of benzene with PhI(OAc) ₂ . Dalton Transactions, 2020, 49, 2477-2486.	3.3	7
33	Ligand-Mediated C–Br Oxidative Addition to Cycloplatinated(II) Complexes and Benzyl-Me C–C Bond Reductive Elimination from a Cycloplatinated(IV) Complex. ACS Omega, 2020, 5, 28621-28631.	3.5	5
34	A facile strategy to achieve fully bio-based epoxy thermosets from eugenol. Green Chemistry, 2019, 21, 4475-4488.	9.0	95
35	Overcoming cellulose recalcitrance in woody biomass for the lignin-first biorefinery. Biotechnology for Biofuels, 2019, 12, 171.	6.2	37
36	Chelating and Bridging Roles of 2-(2-Pyridyl)benzimidazole and Bis(diphenylphosphino)acetylene in Stabilizing a Cyclic Tetranuclear Platinum(II) Complex. Inorganic Chemistry, 2019, 58, 14608-14616.	4.0	3

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37	Synthesis, structural characterization, and luminescence properties of mono- and di-nuclear platinum(II) complexes containing 2-(2-pyridyl)-benzimidazole. Inorganica Chimica Acta, 2019, 498, 119133.	2.4	4
38	Deoxydehydration of Biomass-Derived Polyols with a Reusable Unsupported Rhenium Nanoparticles Catalyst. ACS Sustainable Chemistry and Engineering, 2019, 7, 11438-11447.	6.7	26
39	Synthesis and Properties of Quinoxaline-Containing Benzoxazines and Polybenzoxazines. ACS Omega, 2019, 4, 9092-9101.	3.5	15
40	The reaction of activated esters with epoxides for self-curable, highly flexible, A ₂ B ₂ - and A ₃ B ₃ -type epoxy compounds. Polymer Chemistry, 2019, 10, 3983-3995.	3.9	35
41	Structure-property relationship of vinyl-terminated oligo(2,6-dimethyl-1,4-phenylene ether)s (OPEs): Seeking an OPE with better properties. European Polymer Journal, 2019, 117, 94-104.	5.4	9
42	Catechol-Mediated Glycidylation toward Epoxy Vitrimers/Polymers with Tunable Properties. Macromolecules, 2019, 52, 3646-3654.	4.8	82
43	Arene Câ€"H bond activation and methane formation by a methylplatinum(<scp>ii</scp>) complex: experimental and theoretical elucidation of the mechanism. New Journal of Chemistry, 2019, 43, 8005-8014.	2.8	9
44	Isolation and characterization of cellulose and \hat{l}_{\pm} -cellulose from date palm biomass waste. Heliyon, 2019, 5, e02937.	3.2	84
45	N-methylation versus oxidative addition using Mel in the reaction of organoplatinum(II) complexes containing pyrazine ligand. Journal of Organometallic Chemistry, 2019, 880, 232-240.	1.8	5
46	Renewable thermoset polymers based on lignin and carbohydrate derived monomers. Green Chemistry, 2018, 20, 1131-1138.	9.0	65
47	Lignin extraction and catalytic upgrading from genetically modified poplar. Green Chemistry, 2018, 20, 745-753.	9.0	96
48	Carbon–Oxygen Bond Forming Reductive Elimination from Cycloplatinated(IV) Complexes. Organometallics, 2018, 37, 87-98.	2.3	22
49	Renewable Epoxy Thermosets from Fully Lignin-Derived Triphenols. ACS Sustainable Chemistry and Engineering, 2018, 6, 7600-7608.	6.7	79
50	Recyclable and Malleable Epoxy Thermoset Bearing Aromatic Imine Bonds. Macromolecules, 2018, 51, 9816-9824.	4.8	241
51	Quantitative Modeling of the Temperature Dependence of the Kinetic Parameters for Zirconium Amine Bis(Phenolate) Catalysts for 1-Hexene Polymerization. ACS Catalysis, 2018, 8, 10407-10418.	11.2	9
52	Formaldehyde-Free Method for Incorporating Lignin into Epoxy Thermosets. ACS Sustainable Chemistry and Engineering, 2018, 6, 10628-10636.	6.7	47
53	Mechanistic Insights into Chromium-Catalyzed Ethylene Trimerization. ACS Catalysis, 2018, 8, 6810-6819.	11.2	23
54	Mechanism of Me–Re Bond Addition to Platinum(II) and Dioxygen Activation by the Resulting Pt–Re Bimetallic Center. Inorganic Chemistry, 2017, 56, 2145-2152.	4.0	10

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55	Synthesis of Renewable Thermoset Polymers through Successive Lignin Modification Using Lignin-Derived Phenols. ACS Sustainable Chemistry and Engineering, 2017, 5, 5059-5066.	6.7	119
56	Renewable Thermoplastics Based on Lignin-Derived Polyphenols. Macromolecules, 2017, 50, 3573-3581.	4.8	82
57	Mild, Selective Sulfoxidation with Molybdenum(VI) <i>cis</i> -Dioxo Catalysts. ACS Omega, 2017, 2, 1778-1785.	3.5	15
58	Synthesis, characterization and DFT study of digold(II) naphth-di-yl complex. Journal of Organometallic Chemistry, 2017, 844, 30-34.	1.8	3
59	Carbon Dioxide Reduction to Silyl-Protected Methanol Catalyzed by an Oxorhenium Pincer PNN Complex. Organometallics, 2017, 36, 1688-1691.	2.3	30
60	Synthesis and Characterization of Cu ₃ (Sb _{1â€"<i>x</i>} As _{<i>x</i>})S ₄ Semiconducting Nanocrystal Alloys with Tunable Properties for Optoelectronic Device Applications. Chemistry of Materials, 2017, 29, 573-578.	6.7	22
61	Ring flipping in heterobimetallic Re-Ir complexes and its effect on structural isomerism: Dynamic NMR and DFT study. Journal of Organometallic Chemistry, 2017, 843, 62-65.	1.8	1
62	Steric and Solvation Effects on Polymerization Kinetics, Dormancy, and Tacticity of Zr-Salan Catalysts. Organometallics, 2017, 36, 2237-2244.	2.3	10
63	Atomic-Level Structure Characterization of Biomass Pre- and Post-Lignin Treatment by Dynamic Nuclear Polarization-Enhanced Solid-State NMR. Journal of Physical Chemistry A, 2017, 121, 623-630.	2.5	57
64	Mechanistic Insights into Concerted C–C Reductive Elimination from Homoleptic Uranium Alkyls. Organometallics, 2017, 36, 3491-3497.	2.3	13
65	Initial Products and Reaction Mechanisms for Fast Pyrolysis of Synthetic Gâ€Lignin Oligomers with βâ€Oâ€4 Linkages via Onâ€Line Mass Spectrometry and Quantum Chemical Calculations. ChemistrySelect, 2017, 2, 7185-7193.	1.5	12
66	Which is the Stronger Nucleophile, Platinum or Nitrogen in Rollover Cycloplatinated(II) Complexes?. Inorganic Chemistry, 2017, 56, 14706-14713.	4.0	11
67	Interaction between Two Active Sites of the Same Catalyst for Macromonomer Enchained Olefin Polymerization. Macromolecules, 2017, 50, 9151-9161.	4.8	5
68	In-situ cleaning of heavy metal contaminated plastic water pipes using a biomass derived ligand. Journal of Environmental Chemical Engineering, 2017, 5, 3622-3631.	6.7	14
69	Highly Regioselective î±-Olefin Dimerization Using Zirconium and Hafnium Amine Bis(phenolate) Complexes. Organometallics, 2017, 36, 2934-2939.	2.3	9
70	Quantitative Comparative Kinetics of 1-Hexene Polymerization across Group IV Bis-Phenolate Catalysts. ACS Catalysis, 2016, 6, 5138-5145.	11.2	18
71	Renewable Epoxy Networks Derived from Lignin-Based Monomers: Effect of Cross-Linking Density. ACS Sustainable Chemistry and Engineering, 2016, 4, 6082-6089.	6.7	133
72	Identification of the Phenol Functionality in Deprotonated Monomeric and Dimeric Lignin Degradation Products via Tandem Mass Spectrometry Based on Ion–Molecule Reactions with Diethylmethoxyborane. Journal of the American Society for Mass Spectrometry, 2016, 27, 1813-1823.	2.8	12

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73	Lewisâ€Acidâ€assisted Hydrogen Atom Transfer to Manganese(V)â€Oxo Corrole through Valence Tautomerization. ChemistryOpen, 2016, 5, 522-524.	1.9	9
74	Maleic acid and aluminum chloride catalyzed conversion of glucose to 5-(hydroxymethyl) furfural and levulinic acid in aqueous media. Green Chemistry, 2016, 18, 5219-5229.	9.0	110
75	Solution-based synthesis and characterization of earth abundant Cu ₃ (As,Sb)Se ₄ nanocrystal alloys: towards scalable room-temperature thermoelectric devices. Journal of Materials Chemistry A, 2016, 4, 2198-2204.	10.3	17
76	Configuration Control in the Synthesis of Homo- and Heteroleptic Bis(oxazolinylphenolato/thiazolinylphenolato) Chelate Ligand Complexes of Oxorhenium(V): Isomer Effect on Ancillary Ligand Exchange Dynamics and Implications for Perchlorate Reduction Catalysis. Inorganic Chemistry, 2016, 55, 2597-2611.	4.0	26
77	Mechanistic investigation of the Zn/Pd/C catalyzed cleavage and hydrodeoxygenation of lignin. Green Chemistry, $2016, 18, 2399-2405$.	9.0	119
78	Mechanism of Isomerization and Methyl Migration in Heterobimetallic Rhenium–Iridium Complexes: Experimental and DFT Study. Organometallics, 2016, 35, 605-611.	2.3	5
79	Total Utilization of Miscanthus Biomass, Lignin and Carbohydrates, Using Earth Abundant Nickel Catalyst. ACS Sustainable Chemistry and Engineering, 2016, 4, 2316-2322.	6.7	182
80	Catalytic Upgrading of 5â€Hydroxymethylfurfural to Dropâ€in Biofuels by Solid Base and Bifunctional Metal–Acid Catalysts. ChemSusChem, 2015, 8, 4022-4029.	6.8	79
81	Upgrading Furfurals to Drop-in Biofuels: An Overview. ACS Sustainable Chemistry and Engineering, 2015, 3, 1263-1277.	6.7	259
82	Valence Tautomerization of High-Valent Manganese(V)-Oxo Corrole Induced by Protonation of the Oxo Ligand. Journal of the American Chemical Society, 2015, 137, 14481-14487.	13.7	56
83	Tandem mass spectrometric characterization of the conversion of xylose to furfural. Biomass and Bioenergy, 2015, 74, 1-5.	5.7	10
84	Current Technologies, Economics, and Perspectives for 2,5â€Dimethylfuran Production from Biomassâ€Derived Intermediates. ChemSusChem, 2015, 8, 1133-1142.	6.8	101
85	Biobased Epoxy Nanocomposites Derived from Lignin-Based Monomers. Biomacromolecules, 2015, 16, 2025-2031.	5.4	114
86	Lignin depolymerization over Ni/C catalyst in methanol, a continuation: effect of substrate and catalyst loading. Catalysis Science and Technology, 2015, 5, 3242-3245.	4.1	129
87	Catalytic Two-Electron Reduction of Dioxygen by Ferrocene Derivatives with Manganese(V) Corroles. Inorganic Chemistry, 2015, 54, 4285-4291.	4.0	33
88	Synthesis and Characterization of Copper Arsenic Sulfide Nanocrystals from Earth Abundant Elements for Solar Energy Conversion. Chemistry of Materials, 2015, 27, 2290-2293.	6.7	21
89	Mechanistic study of a manganese porphyrin catalyst for on-demand production of chlorine dioxide in water. Journal of Porphyrins and Phthalocyanines, 2015, 19, 492-499.	0.8	5
90	Speciation and kinetic study of iron promoted sugar conversion to 5-hydroxymethylfurfural (HMF) and levulinic acid (LA). Organic Chemistry Frontiers, 2015, 2, 1388-1396.	4. 5	46

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91	Activationless Electron Self-Exchange of High-Valent Oxo and Imido Complexes of Chromium Corroles. Inorganic Chemistry, 2015, 54, 9223-9228.	4.0	11
92	A synergistic biorefinery based on catalytic conversion of lignin prior to cellulose starting from lignocellulosic biomass. Green Chemistry, 2015, 17, 1492-1499.	9.0	370
93	From Furfural to Fuel: Synthesis of Furoins by Organocatalysis and their Hydrodeoxygenation by Cascade Catalysis. ChemSusChem, 2014, 7, 2742-2747.	6.8	63
94	Concurrent Stabilization of Ï€â€Donor and Ï€â€Acceptor Ligands in Aromatized and Dearomatized Pincer [(PNN)Re(CO)(O) ₂] Complexes. Angewandte Chemie - International Edition, 2014, 53, 8320-8322.	13.8	7
95	Selective Degenerative Benzyl Group Transfer in Olefin Polymerization. ACS Catalysis, 2014, 4, 1162-1170.	11.2	14
96	Non-Heme Manganese Catalysts for On-Demand Production of Chlorine Dioxide in Water and Under Mild Conditions. Journal of the American Chemical Society, 2014, 136, 3680-3686.	13.7	26
97	Efficient Solid Acid Catalyst Containing Lewis and BrÃ,nsted Acid Sites for the Production of Furfurals. ChemSusChem, 2014, 7, 2342-2350.	6.8	106
98	Advances in 5-hydroxymethylfurfural production from biomass in biphasic solvents. Green Chemistry, 2014, 16, 24-38.	9.0	470
99	Synthesis, Dynamics, and DFT Studies of Rhenium Dicarbonyl PNN Pincer Complexes in Three Different Oxidation States. Organometallics, 2014, 33, 1672-1677.	2.3	11
100	Zincâ€Assisted Hydrodeoxygenation of Biomassâ€Derived 5â€Hydroxymethylfurfural to 2,5â€Dimethylfuran. ChemSusChem, 2014, 7, 3095-3101.	6.8	152
101	C–H Activation of Methyltrioxorhenium by Pincer Iridium Hydride To Give Agile Ir–Re Bimetallic Compounds. Organometallics, 2014, 33, 5089-5092.	2.3	6
102	High-Valent Chromium–Oxo Complex Acting as an Efficient Catalyst Precursor for Selective Two-Electron Reduction of Dioxygen by a Ferrocene Derivative. Inorganic Chemistry, 2014, 53, 7780-7788.	4.0	49
103	Titanium hydrogenphosphate: An efficient dual acidic catalyst for 5-hydroxymethylfurfural (HMF) production. Applied Catalysis A: General, 2014, 486, 42-48.	4.3	64
104	Zwitterionic Ring-Opening Polymerization: Models for Kinetics of Cyclic Poly(caprolactone) Synthesis. Macromolecules, 2014, 47, 2955-2963.	4.8	63
105	Effects of Electronic Perturbations on 1-Hexene Polymerization Catalyzed by Zirconium Amine Bisphenolate Complexes. ACS Catalysis, 2014, 4, 2186-2190.	11.2	12
106	The mechanism of mediated oxidation of carboxylates with ferrocene as redox catalyst in absence of grafting effects. An experimental and theoretical approach. Electrochimica Acta, 2014, 136, 542-549.	5.2	18
107	An additional substrate binding site in a bacterial phenylalanine hydroxylase. European Biophysics Journal, 2013, 42, 691-708.	2.2	10
108	Comparison of Selected Zirconium and Hafnium Amine Bis(phenolate) Catalysts for 1-Hexene Polymerization. Organometallics, 2013, 32, 4862-4867.	2.3	14

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109	Synthesis and Electrochemical Reactivity of Molybdenum Dicarbonyl Supported by a Redox-Active α-Diimine Ligand. Inorganic Chemistry, 2013, 52, 5457-5463.	4.0	14
110	Cleavage and hydrodeoxygenation (HDO) of C–O bonds relevant to lignin conversion using Pd/Zn synergistic catalysis. Chemical Science, 2013, 4, 806-813.	7.4	294
111	Effects of Pendant Ligand Binding Affinity on Chain Transfer for 1-Hexene Polymerization Catalyzed by Single-Site Zirconium Amine Bis-Phenolate Complexes. Journal of the American Chemical Society, 2013, 135, 6280-6288.	13.7	38
112	Mechanism of MTO-Catalyzed Deoxydehydration of Diols to Alkenes Using Sacrificial Alcohols. Organometallics, 2013, 32, 3210-3219.	2.3	69
113	Porphyrin-based porous organic polymer-supported iron(III) catalyst for efficient aerobic oxidation of 5-hydroxymethyl-furfural into 2,5-furandicarboxylic acid. Journal of Catalysis, 2013, 299, 316-320.	6.2	179
114	The effect of hydrochloric acid on the conversion of glucose to 5-hydroxymethylfurfural in AlCl3–H2O/THF biphasic medium. Journal of Molecular Catalysis A, 2013, 376, 98-102.	4.8	65
115	Conversion of carbohydrates and lignocellulosic biomass into 5-hydroxymethylfurfural using AlCl ₃ Â-6H ₂ O catalyst in a biphasic solvent system. Green Chemistry, 2012, 14, 509-513.	9.0	298
116	Selective Conversion of Biomass Hemicellulose to Furfural Using Maleic Acid with Microwave Heating. Energy & Samp; Fuels, 2012, 26, 1298-1304.	5.1	121
117	High-Performance Liquid Chromatography/High-Resolution Multiple Stage Tandem Mass Spectrometry Using Negative-Ion-Mode Hydroxide-Doped Electrospray Ionization for the Characterization of Lignin Degradation Products. Analytical Chemistry, 2012, 84, 6000-6007.	6.5	94
118	Solvent-Free Methods for Making Acetals Derived from Glycerol and Furfural and Their Use as a Biodiesel Fuel Component. ACS Catalysis, 2012, 2, 2524-2530.	11.2	80
119	Trioxorhena(VII)carborane Anion and Its Methyl-Substituted Analogue: Synthesis, Structure, DFT, and Catalytic Studies. Organometallics, 2012, 31, 1888-1896.	2.3	6
120	Aerobic oxidation of 5-hydroxylmethylfurfural with homogeneous and nanoparticulate catalysts. Catalysis Science and Technology, 2012, 2, 79-81.	4.1	136
121	Heteropolyacid catalyzed conversion of fructose, sucrose, and inulin to 5-ethoxymethylfurfural, a liquid biofuel candidate. Applied Energy, 2012, 99, 80-84.	10.1	131
122	Structure–Activity Correlation for Relative Chain Initiation to Propagation Rates in Single-Site Olefin Polymerization Catalysis. Organometallics, 2012, 31, 602-618.	2.3	20
123	Kinetic Modeling of 1-Hexene Polymerization Catalyzed by Zr(<i>t</i> Bu-ON ^{NMe₂3< Macromolecules, 2012, 45, 4978-4988.}	su 8 >.	20
124	Synthesis of Furfural from Xylose, Xylan, and Biomass Using AlCl ₃ â<6 H ₂ O in Biphasic Media via Xylose Isomerization to Xylulose. ChemSusChem, 2012, 5, 405-410.	6.8	172
125	Rheniumâ€Catalyzed Transfer Hydrogenation and Deoxygenation of Biomassâ€Derived Polyols to Small and Useful Organics. ChemSusChem, 2012, 5, 1401-1404.	6.8	115
126	Characterization of model compounds of processed lignin and the lignome by using atmospheric pressure ionization tandem mass spectrometry. Fuel, 2012, 95, 634-641.	6.4	47

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127	Direct conversion of cellulose and lignocellulosic biomass into chemicals and biofuel with metal chloride catalysts. Journal of Catalysis, 2012, 288, 8-15.	6.2	232
128	High-valent iron and manganese complexes of corrole and porphyrin in atom transfer and dioxygen evolving catalysis. Dalton Transactions, 2011, 40, 3435.	3.3	96
129	Computational Investigation of the Concerted Dismutation of Chlorite Ion by Water-Soluble Iron Porphyrins. Inorganic Chemistry, 2011, 50, 7928-7930.	4.0	19
130	Observation of Inductive Effects That Cause a Change in the Rate-Determining Step for the Conversion of Rhenium Azides to Imido Complexes. Inorganic Chemistry, 2011, 50, 10505-10514.	4.0	16
131	Folding dynamics of phenylalanine hydroxylase depends on the enzyme's metallation state: the native metal, iron, protects against aggregate intermediates. European Biophysics Journal, 2011, 40, 959-968.	2.2	4
132	Chlorite Dismutation to Chlorine Dioxide Catalyzed by a Waterâ€Soluble Manganese Porphyrin. Angewandte Chemie - International Edition, 2011, 50, 699-702.	13.8	26
133	Mechanistic Detail Revealed via Comprehensive Kinetic Modeling of [<i>rac</i> -C ₂]-Catalyzed 1-Hexene Polymerization. Journal of the American Chemical Society, 2010, 132, 558-566.	13.7	46
134	Dehydrocoupling of Organosilanes with a Dinuclear Nickel Hydride Catalyst and Isolation of a Nickel Silyl Complex. Organometallics, 2010, 29, 6527-6533.	2.3	47
135	A Solvent-Free Method for Making Dioxolane and Dioxane from the Biorenewables Glycerol and Furfural Catalyzed by Oxorhenium(V) Oxazoline. Inorganic Chemistry, 2010, 49, 4741-4743.	4.0	33
136	An Efficient Method for the Preparation of Oxo Molybdenum Salalen Complexes and Their Unusual Use as Hydrosilylation Catalysts. Inorganic Chemistry, 2009, 48, 11290-11296.	4.0	41
137	Concerted Dismutation of Chlorite Ion: Water-Soluble Iron-Porphyrins As First Generation Model Complexes for Chlorite Dismutase. Inorganic Chemistry, 2009, 48, 2260-2268.	4.0	38
138	H ₂ -Driven Deoxygenation of Epoxides and Diols to Alkenes Catalyzed by Methyltrioxorhenium. Inorganic Chemistry, 2009, 48, 9998-10000.	4.0	152
139	Bioinspired Dismutation of Chlorite to Dioxygen and Chloride Catalyzed by a Waterâ€Soluble Iron Porphyrin. Angewandte Chemie - International Edition, 2008, 47, 7697-7700.	13.8	33
140	Cationic oxorhenium chiral salen complexes for asymmetric hydrosilylation and kinetic resolution of alcohols. Inorganica Chimica Acta, 2008, 361, 3184-3192.	2.4	28
141	Quantitative Effects of Ion Pairing and Sterics on Chain Propagation Kinetics for 1-Hexene Polymerization Catalyzed by Mixed Cp′/ArO Complexes. Organometallics, 2008, 27, 5504-5520.	2.3	25
142	Mechanism of and exquisite selectivity for O–O bond formation by the heme-dependent chlorite dismutase. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 15654-15659.	7.1	80
143	Manganese(III) Corrole-Oxidant Adduct as the Active Intermediate in Catalytic Hydrogen Atom Transfer. Inorganic Chemistry, 2008, 47, 10718-10722.	4.0	26
144	Kinetics of Thermal Unfolding of Phenylalanine Hydroxylase Variants Containing Different Metal Cofactors (Fe ^{II} , Co ^{II} , and Zn ^{II}) and Their Isokinetic Relationship. Inorganic Chemistry, 2008, 47, 4877-4883.	4.0	11

#	Article	IF	Citations
145	Oxo and Imido Complexes of Rhenium and Molybdenum in Catalytic Reductions. Current Organic Chemistry, 2008, 12, 1185-1198.	1.6	50
146	Hydrogen Atom Transfer Reactions of Imido Manganese(V) Corrole:  One Reaction with Two Mechanistic Pathways. Journal of the American Chemical Society, 2007, 129, 11505-11511.	13.7	85
147	Multi-electron Activation of Dioxygen on Zirconium(IV) to Give an Unprecedented Bisperoxo Complex. Journal of the American Chemical Society, 2007, 129, 12400-12401.	13.7	121
148	Structureâ^'Activity Correlation in Titanium Single-Site Olefin Polymerization Catalysts Containing Mixed Cyclopentadienyl/Aryloxide Ligation. Journal of the American Chemical Society, 2007, 129, 3776-3777.	13.7	51
149	Synthesis of Cationic Rhenium(VII) Oxo Imido Complexes and Their Tunability Towards Oxygen Atom Transfer. Journal of the American Chemical Society, 2007, 129, 1167-1178.	13.7	38
150	Mechanistic Insight into Hydrosilylation Reactions Catalyzed by High Valent Reâ‹®X (X = O, NAr, or N) Complexes:Â The Silane (SiH) Does Not Add across the Metalâ´'Ligand Multiple Bond. Journal of the American Chemical Society, 2007, 129, 5180-5187.	13.7	103
151	Diverse Pathways of Activation and Deactivation of Half-Sandwich Aryloxide Titanium Polymerization Catalysts. Organometallics, 2006, 25, 214-220.	2.3	48
152	Mechanism of Catalytic Aziridination with Manganese Corrole:Â The Often Postulated High-Valent Mn(V) Imido Is Not the Group Transfer Reagent. Journal of the American Chemical Society, 2006, 128, 16971-16979.	13.7	129
153	Synthesis of Cationic Oxorhenium Salen Complexes via $\hat{l}\frac{1}{4}$ -Oxo Abstraction and Their Activity in Catalytic Reductions. Inorganic Chemistry, 2006, 45, 2385-2387.	4.0	54
154	Catalytic Hydrosilylation of Carbonyl Compounds with Cationic Oxorhenium(V) Salen. Organometallics, 2006, 25, 4920-4923.	2.3	76
155	EPR and UVâ ⁻ 'Vis Studies of the Nitric Oxide Adducts of Bacterial Phenylalanine Hydroxylase:Â Effects of Cofactor and Substrate on the Iron Environment. Inorganic Chemistry, 2006, 45, 4277-4283.	4.0	19
156	On the Mechanism of the Reaction of Organic Azides with Transition Metals: Evidence for Triplet Nitrene Capture. Angewandte Chemie - International Edition, 2005, 44, 6203-6207.	13.8	29
157	Effect of temperature, pH, and metals on the stability and activity of phenylalanine hydroxylase from Chromobacterium violaceum. Journal of Inorganic Biochemistry, 2005, 99, 771-775.	3.5	17
158	Mechanism for Reduction Catalysis by Metal Oxo:  Hydrosilation of Organic Carbonyl Groups Catalyzed by a Rhenium(V) Oxo Complex. Journal of the American Chemical Society, 2005, 127, 15374-15375.	13.7	113
159	High-Valent Imido Complexes of Manganese and Chromium Corroles. Inorganic Chemistry, 2005, 44, 3700-3708.	4.0	81
160	Reaction Mechanisms of Mononuclear Non-Heme Iron Oxygenases. Chemical Reviews, 2005, 105, 2227-2252.	47.7	521
161	Hydrogen Production from Hydrolytic Oxidation of Organosilanes Using a Cationic Oxorhenium Catalyst. Journal of the American Chemical Society, 2005, 127, 11938-11939.	13.7	165
162	Role of the second coordination sphere residue tyrosine 179 in substrate affinity and catalytic activity of phenylalanine hydroxylase. Journal of Biological Inorganic Chemistry, 2004, 9, 289-296.	2.6	6

#	Article	IF	Citations
163	Organometallic and Coordination Complexes. Inorganic Syntheses, 2004, , 49-95.	0.3	3
164	Multielectron Atom Transfer Reactions of Perchlorate and Other Substrates Catalyzed by Rhenium Oxazoline and Thiazoline Complexes:Â Reaction Kinetics, Mechanisms, and Density Functional Theory Calculations. Inorganic Chemistry, 2004, 43, 4036-4050.	4.0	92
165	Hydroxyl Radical is the Active Species in Photochemical DNA Strand Scission by Bis(peroxo)vanadium(V) Phenanthroline. Inorganic Chemistry, 2004, 43, 8447-8455.	4.0	78
166	Catalytic Olefin Epoxidation and Dihydroxylation with Hydrogen Peroxide in Common Ionic Liquids: Comparative Kinetics and Mechanistic Study. ACS Symposium Series, 2003, , 277-288.	0.5	3
167	Order of substrate binding in bacterial phenylalanine hydroxylase and its mechanistic implication for pterin-dependent oxygenases. Journal of Biological Inorganic Chemistry, 2003, 8, 121-128.	2.6	37
168	Kinetics and Mechanistic Studies of Anticarcinogenic Bisperoxovanadium(V) Compounds:Â Ligand Substitution Reactions at Physiological pH and Relevance to DNA Interactions. Inorganic Chemistry, 2003, 42, 7967-7977.	4.0	44
169	Posttranslational Hydroxylation of Human Phenylalanine Hydroxylase Is a Novel Example of Enzyme Self-Repair within the Second Coordination Sphere of Catalytic Iron. Journal of the American Chemical Society, 2003, 125, 4710-4711.	13.7	18
170	Swift oxo transfer reactions of perchlorate and other substrates catalyzed by rhenium oxazoline and thiazoline complexesElectronic supplementary information (ESI) available: colour versions of Figs. 3 and 4. See http://www.rsc.org/suppdata/cc/b3/b300189j/. Chemical Communications, 2003, , 2102.	4.1	42
171	Effective and Catalytic Reduction of Perchlorate by Atom Transfer–Reaction Kinetics and Mechanisms. Comments on Inorganic Chemistry, 2003, 24, 15-37.	5.2	15
172	Excited-State Distortions Determined from Structured Luminescence of Nitridorhenium(V) Complexes. Inorganic Chemistry, 2002, 41, 1755-1760.	4.0	20
173	Catalytic Oxidations in Ionic Liquids. ACS Symposium Series, 2002, , 321-333.	0.5	5
174	Structural Comparison of Bacterial and Human Iron-dependent Phenylalanine Hydroxylases: Similar Fold, Different Stability and Reaction Rates. Journal of Molecular Biology, 2002, 320, 645-661.	4.2	68
175	Kinetics of MTO-Catalyzed Olefin Epoxidation in Ambient Temperature Ionic Liquids: UV/Vis and 2H NMR Study MTO= methyltrioxorhenium Chemistry - A European Journal, 2002, 8, 3053.	3.3	57
176	Comparative kinetic investigations in ionic liquids using the MTO/peroxide system. Journal of Molecular Catalysis A, 2002, 187, 215-225.	4.8	88
177	Kinetics and Mechanisms of Methyl Vinyl Ketone Hydroalkoxylation Catalyzed by Palladium(II) Complexes. Organometallics, 2001, 20, 4403-4412.	2.3	74
178	Properties of Photogenerated Tryptophan and Tyrosyl Radicals in Structurally Characterized Proteins Containing Rhenium(I) Tricarbonyl Diimines. Journal of the American Chemical Society, 2001, 123, 3181-3182.	13.7	123
179	Kinetics and Mechanisms of Catalytic Oxygen Atom Transfer with Oxorhenium(V) Oxazoline Complexes. Inorganic Chemistry, 2001, 40, 2185-2192.	4.0	119
180	Synthesis of Enantiopure Oxorhenium(V) and Arylimidorhenium(V) "3 + 2―Schiff Base Complexes. X-ray Diffraction, Cyclic Voltammetry, UVâ^²Vis, and Circular Dichroism Characterizations. Inorganic Chemistry, 2001, 40, 6767-6773.	4.0	38

#	Article	IF	CITATIONS
181	Fluorescent Probes of the Molecular Environment within Mesostructured Silica/Surfactant Composites under High Pressure. Nano Letters, 2001, 1, 27-31.	9.1	36
182	Rhenium oxo complexes in catalytic oxidations. Catalysis Today, 2000, 55, 317-363.	4.4	174
183	Methyltrioxorhenium-catalyzed epoxidations in ionic liquids. Chemical Communications, 2000, , $1165\text{-}1166$.	4.1	138
184	New vanadium oxazoline catalysts for epoxidation of allylic alcohols. Tetrahedron Letters, 1999, 40, 8313-8316.	1.4	24
185	Synthesis, Characterization, and Reactivity of Palladium(II) Salen and Oxazoline Complexes. Inorganic Chemistry, 1999, 38, 4510-4514.	4.0	38
186	Molecular Rhenium(V) Oxotransferases:Â Oxidation of Thiols to Disulfides with Sulfoxides. The Case of Substrate-Inhibited Catalysis. Inorganic Chemistry, 1998, 37, 4979-4985.	4.0	59
187	Deactivation of Methylrhenium Trioxideâ^'Peroxide Catalysts by Diverse and Competing Pathways. Journal of the American Chemical Society, 1996, 118, 4966-4974.	13.7	124
188	Oxygen-Transfer Reactions of Methylrhenium Oxides. Inorganic Chemistry, 1996, 35, 7751-7757.	4.0	89
189	Oxidations of Cyclic β-Diketones Catalyzed by Methylrhenium Trioxide. Organometallics, 1996, 15, 3543-3549.	2.3	50
190	Facile Abstraction of Successive Oxygen Atoms from Perchlorate Ions by Methylrhenium Dioxide. Inorganic Chemistry, 1995, 34, 6239-6240.	4.0	54
191	Oxidations of ER3 (E = P, As, or Sb) by Hydrogen Peroxide: Methylrhenium Trioxide as Catalyst. Journal of the American Chemical Society, 1995, 117, 272-280.	13.7	108