Joseph SÂ m Samec

List of Publications by Year
in descending order

72 papers	4,874 citations	172386 29 h-index	91828 69 g-index
79 all docs	79 docs citations	79 times ranked	4414 citing authors

#	Article	IF	Citations
1	Mechanistic aspects of transition metal-catalyzed hydrogen transfer reactions. Chemical Society Reviews, 2006, 35, 237.	18.7	997
2	Lignin Valorization through Catalytic Lignocellulose Fractionation: A Fundamental Platform for the Future Biorefinery. ChemSusChem, 2016, 9, 1544-1558.	3.6	469
3	Guidelines for performing lignin-first biorefining. Energy and Environmental Science, 2021, 14, 262-292.	15.6	416
4	Efficient Ruthenium-Catalyzed Aerobic Oxidation of Amines by Using a Biomimetic Coupled Catalytic System. Chemistry - A European Journal, 2005, 11, 2327-2334.	1.7	253
5	Selective Route to 2â€Propenyl Aryls Directly from Wood by a Tandem Organosolv and Palladiumâ€Catalysed Transfer Hydrogenolysis. ChemSusChem, 2014, 7, 2154-2158.	3.6	243
6	Ruthenium-Catalyzed Transfer Hydrogenation of Imines by Propan-2-ol in Benzene. Chemistry - A European Journal, 2002, 8, 2955.	1.7	201
7	Lignin depolymerization to monophenolic compounds in a flow-through system. Green Chemistry, 2017, 19, 5767-5771.	4.6	164
8	Hydrogenâ€free catalytic fractionation of woody biomass. ChemSusChem, 2016, 9, 3280-3287.	3.6	149
9	Mild Heterogeneous Palladiumâ€Catalyzed Cleavage of Î²â€‹<i>O</i>â€4â€²â€Ether Linkages of Lignin Model Compounds and Native Lignin in Air. ChemCatChem, 2014, 6, 179-184.	1.8	141
10	Mechanistic Study of Hydrogen Transfer to Imines from a Hydroxycyclopentadienyl Ruthenium Hydride. Experimental Support for a Mechanism Involving Coordination of Imine to Ruthenium Prior to Hydrogen Transfer. Journal of the American Chemical Society, 2006, 128, 14293-14305.	6.6	125
11	Oxidative cleavage of Câ€“C bonds in lignin. Nature Chemistry, 2021, 13, 1118-1125.	6.6	113
12	Techno-economic analysis and life cycle assessment of a biorefinery utilizing reductive catalytic fractionation. Energy and Environmental Science, 2021, 14, 4147-4168.	15.6	106
13	Pd-Catalyzed Transfer Hydrogenolysis of Primary, Secondary, and Tertiary Benzylic Alcohols by Formic Acid: A Mechanistic Study. ACS Catalysis, 2013, 3, 635-642.	5.5	97
14	Mild and Robust Redoxâ€Neutral Pd/Câ€Catalyzed Lignol Î²â€Oâ€4â€² Bond Cleavage Through a Lowâ€Energyâ€Barrier Pathway. ChemSusChem, 2015, 8, 2187-2192.	3.6	93
15	Selective Aerobic Benzylic Alcohol Oxidation of Lignin Model Compounds: Route to Aryl Ketones. ChemCatChem, 2015, 7, 401-404.	1.8	67
16	Lignin Valorization by Cobaltâ€Catalyzed Fractionation of Lignocellulose to Yield Monophenolic Compounds. ChemSusChem, 2019, 12, 404-408.	3.6	67
17	BrÃ¸nsted Acid-Catalyzed Intramolecular Nucleophilic Substitution of the Hydroxyl Group in Stereogenic Alcohols with Chirality Transfer. Journal of the American Chemical Society, 2015, 137, 4646-4649.	6.6	58
18	Mechanism of hydrogen transfer to imines from a hydroxycyclopentadienyl ruthenium hydride. Support for a stepwise mechanism. Chemical Communications, 2004, , 2748-2749.	2.2	57

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19	Design and synthesis of biobased epoxy thermosets from biorenewable resources. Comptes Rendus Chimie, 2017, 20, 1006-1016.	0.2	57
20	DFT Study of an Inner-Sphere Mechanism in the Hydrogen Transfer from a Hydroxycyclopentadienyl Ruthenium Hydride to Imines. Organometallics, 2007, 26, 2840-2848.	1.1	55
21	Intramolecular substitutions of secondary and tertiary alcohols with chirality transfer by an iron(III) catalyst. Nature Communications, 2019, 10, 3826.	5.8	54
22	Green Diesel from Kraft Lignin in Three Steps. ChemSusChem, 2016, 9, 1392-1396.	3.6	51
23	The Efficiency of the Metal Catalysts in the Nucleophilic Substitution of Alcohols is Dependent on the Nucleophile and Not on the Electrophile. Chemistry - an Asian Journal, 2013, 8, 974-981.	1.7	46
24	Functionalized spirolactones by photoinduced dearomatization of biaryl compounds. Chemical Science, 2019, 10, 3681-3686.	3.7	46
25	A gold(i)-catalyzed route to Î±-sulfenylated carbonyl compounds from propargylic alcohols and aryl thiols. Chemical Communications, 2012, 48, 6586.	2.2	40
26	Diglycidylether of iso-eugenol: a suitable lignin-derived synthon for epoxy thermoset applications. RSC Advances, 2016, 6, 68732-68738.	1.7	39
27	Tsujiâ€"Trost Reaction of Nonâ€Derivatized Allylic Alcohols. Chemistry - A European Journal, 2018, 24, 3488-3498.	1.7	36
28	A General Route to Î²-Substituted Pyrroles by Transition-Metal Catalysis. Journal of Organic Chemistry, 2016, 81, 1450-1460.	1.7	35
29	Atomâ€Efficient Gold(I)â€Chlorideâ€Catalyzed Synthesis of Î±â€Sulfenylated Carbonyl Compounds from Propargylic Alcohols and Aryl Thiols: Substrate Scope and Experimental and Theoretical Mechanistic Investigation. Chemistry - A European Journal, 2013, 19, 17939-17950.	1.7	33
30	An atom efficient route to N-aryl and N-alkyl pyrrolines by transition metal catalysis. Organic and Biomolecular Chemistry, 2011, 9, 2548.	1.5	31
31	Zeoliteâ€Assisted Ligninâ€First Fractionation of Lignocellulose: Overcoming Lignin Recondensation through Shapeâ€Selective Catalysis. ChemSusChem, 2020, 13, 4528-4536.	3.6	30
32	Ruthenium Carbene Complexes Bearing an Anionic Carboxylate Chelated to a Hemilabile Ligand. Chemistry - A European Journal, 2008, 14, 2686-2692.	1.7	28
33	Tandem Pd/Auâ€Catalyzed Route to Î±â€Sulfenylated Carbonyl Compounds from Terminal Propargylic Alcohols and Thiols. Chemistry - A European Journal, 2014, 20, 2159-2163.	1.7	25
34	Valorization of <i>Quercus suber</i> Bark toward Hydrocarbon Bio-Oil and 4-Ethylguaiacol. ACS Sustainable Chemistry and Engineering, 2018, 6, 5737-5742.	3.2	25
35	Mechanistic Insights into the Pdâ€Catalyzed Direct Amination of Allyl Alcohols: Evidence for an Outerâ€Sphere Mechanism Involving a Palladium Hydride Intermediate. Chemistry - A European Journal, 2014, 20, 1520-1524.	1.7	24
36	Conversion of birch bark to biofuels. Green Chemistry, 2020, 22, 2255-2263.	4.6	24

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37	H₃PO₂-Catalyzed Intramolecular Stereospecific Substitution of the Hydroxyl Group in Enantioenriched Secondary Alcohols by N-, O-, and S-Centered Nucleophiles to Generate Heterocycles. ACS Catalysis, 2020, 10, 1344-1352.	5.5	23
38	Debottlenecking a Pulp Mill by Producing Biofuels from Black Liquor in Three Steps. ChemSusChem, 2021, 14, 2414-2425.	3.6	23
39	Nickel-Catalyzed Suzuki-Miyaura Cross-Coupling Reaction of Naphthyl and Quinolyl Alcohols with Boronic Acids. Organic Letters, 2019, 21, 4782-4787.	2.4	22
40	One-Pot Synthesis of Keto Thioethers by Palladium/Gold-Catalyzed Click and Pinacol Reactions. Organic Letters, 2014, 16, 5556-5559.	2.4	21
41	High Yields of Bio Oils from Hydrothermal Processing of Thin Black Liquor without the Use of Catalysts or Capping Agents. ACS Omega, 2018, 3, 6757-6763.	1.6	18
42	Pd/C-Catalyzed Hydrogenolysis of Dibenzodioxocin Lignin Model Compounds Using Silanes and Water as Hydrogen Source. ACS Sustainable Chemistry and Engineering, 2017, 5, 3726-3731.	3.2	17
43	Quantitative Determination of the Regioselectivity of Nucleophilic Addition to Î·³-Propargyl Rhenium Complexes and Direct Observation of an Equilibrium between Î·³-Propargyl Rhenium Complexes and Rhenacyclobutenes. Organometallics, 2009, 28, 123-131.	1.1	16
44	ReaxFF Simulations of Lignin Fragmentation on a Palladium-Based Heterogeneous Catalyst in Methanolâ€“Water Solution. Journal of Physical Chemistry Letters, 2018, 9, 5233-5239.	2.1	16
45	An aqueous and recyclable copper(i)-catalyzed route to Î±-sulfenylated carbonyl compounds from propargylic alcohols and aryl thiols. Green Chemistry, 2013, 15, 3176.	4.6	14
46	Ductile Pdâ€Catalysed Hydrodearomatization of Phenolâ€Containing Bioâ€Oils Into Either Ketones or Alcohols using PMHS and H₂O as Hydrogen Source. Advanced Synthesis and Catalysis, 2018, 360, 3924-3929.	2.1	14
47	Transition-Metal-Catalyzed Suzukiâ€“Miyaura-Type Cross-Coupling Reactions of Ï€-Activated Alcohols. Synthesis, 2020, 52, 645-659.	1.2	14
48	Assessing Methodologies to Synthesize Î±â€Sulfenylated Carbonyl Compounds by Green Chemistry Metrics. ChemSusChem, 2021, 14, 808-823.	3.6	14
49	Holistic Valorization of Hemp through Reductive Catalytic Fractionation. ACS Sustainable Chemistry and Engineering, 2021, 9, 17207-17213.	3.2	14
50	Equilibrium Study of Pd(dba)₂ and P(OPh)₃ in the Pd-Catalyzed Allylation of Aniline by Allyl Alcohol. Organometallics, 2014, 33, 249-253.	1.1	13
51	Thermal and Mechanical Properties of Esterified Lignin in Various Polymer Blends. Molecules, 2021, 26, 3219.	1.7	13
52	Dual Gold(I)â€catalyzed Cyclization of Dialkynyl Pyridinium Salts. ChemCatChem, 2017, 9, 1915-1920.	1.8	11
53	Preface to Special Issue ofChemSusChemon Lignin Valorization: From Theory to Practice. ChemSusChem, 2020, 13, 4175-4180.	3.6	10
54	A New Family of Renewable Thermosets: Kraft Lignin Polyâ€adipates. ChemSusChem, 2022, 15, .	3.6	10

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55	High-Atom Economic Approach To Prepare Chiral Î±-Sulfenylated Ketones. Journal of Organic Chemistry, 2019, 84, 11219-11227.	1.7	9
56	Adsorption Isotherms of Lignin-Derived Compounds on a Palladium Catalyst. Industrial & Engineering Chemistry Research, 2019, 58, 6899-6906.	1.8	9
57	A combination of experimental and computational methods to study the reactions during a Lignin-First approach. Pure and Applied Chemistry, 2020, 92, 631-639.	0.9	9
58	Iron(III)-Catalyzed Nucleophilic Substitution of the Hydroxy Group in Benzoin by Alcohols. Synthesis, 2012, 44, 1213-1218.	1.2	8
59	Detecting Important Intermediates in Pd Catalyzed Depolymerization of a Lignin Model Compound by a Combination of DFT Calculations and Constrained Minima Hopping. Journal of Physical Chemistry C, 2016, 120, 23469-23479.	1.5	8
60	Sustainable sources need reliable standards. Faraday Discussions, 2017, 202, 281-301.	1.6	8
61	Pd-Catalyzed Substitution of the OH Group of Nonderivatized Allylic Alcohols by Phenols. Journal of Organic Chemistry, 2018, 83, 4099-4104.	1.7	8
62	Waste-to-Fuel Approach: Valorization of Lignin from Coconut Coir Pith. ACS Agricultural Science and Technology, 2022, 2, 349-358.	1.0	8
63	Intermolecular Stereospecific Substitution of Underivatized Enantioenriched Secondary Alcohols by Organocatalysis. Angewandte Chemie - International Edition, 2019, 58, 17908-17910.	7.2	5
64	OrganoSoxhlet: circular fractionation to produce pulp for textiles using CO₂ as acid source. Green Chemistry, 2021, 23, 9401-9405.	4.6	4
65	Synthesis of (Z)-Cinnamate Esters by Nickel-Catalyzed Stereoinvertive Deoxygenation of trans-3-Arylglycidates. Synlett, 2022, 33, 1353-1356.	1.0	4
66	Nucleophilic Substitution of the Hydroxyl Group in Stereogenic Alcohols with Chirality Transfer. Synlett, 2016, 27, 173-176.	1.0	3
67	Bio-based materials: general discussion. Faraday Discussions, 2017, 202, 121-139.	1.6	3
68	Feedstocks and analysis: general discussion. Faraday Discussions, 2017, 202, 497-519.	1.6	2
69	Intermolekulare stereospezifische Substitution von underivatisierten enantiomerenangereicherten sekundÃren Alkoholen durch Organokatalyse. Angewandte Chemie, 2019, 131, 18074-18076.	1.6	2
70	Lignin Valorization by Cobalt-Catalyzed Fractionation of Lignocellulose to Yield Monophenolic Compounds. ChemSusChem, 2019, 12, 342-342.	3.6	1
71	Bio-based chemicals: general discussion. Faraday Discussions, 2017, 202, 227-245.	1.6	0
72	Conversion technologies: general discussion. Faraday Discussions, 2017, 202, 371-389.	1.6	0