RÃ©gis Gauvin

List of Publications by Year
in descending order

95 papers	3,033 citations	117571 34 h-index	189801 50 g-index
105 all docs	105 docs citations	105 times ranked	2679 citing authors

#	Article	IF	Citations
1	Manganese Pincer Complexes for the Base-Free, Acceptorless Dehydrogenative Coupling of Alcohols to Esters: Development, Scope, and Understanding. ACS Catalysis, 2017, 7, 2022-2032.	5.5	213
2	Expanding the scope of metathesis: a survey of polyfunctional, single-site supported tungsten systems for hydrocarbon valorization. Chemical Society Reviews, 2013, 42, 9035.	18.7	101
3	¹⁷O NMR Gives Unprecedented Insights into the Structure of Supported Catalysts and Their Interaction with the Silica Carrier. Journal of the American Chemical Society, 2012, 134, 9263-9275.	6.6	93
4	A New General Method for the Preparation of Metal Carbene Complexes. Journal of the American Chemical Society, 2001, 123, 5372-5373.	6.6	92
5	Mechanistic Aspects of the Polymerization of Lactide Using a Highly Efficient Aluminum(III) Catalytic System. Journal of the American Chemical Society, 2017, 139, 6217-6225.	6.6	85
6	Catalytic Conversion of Alcohols into Carboxylic Acid Salts in Water: Scope, Recycling, and Mechanistic Insights. ChemSusChem, 2016, 9, 1413-1423.	3.6	84
7	Heteronuclear NMR Spectroscopy as a Surfaceâ€Selective Technique: A Unique Look at the Hydroxyl Groups of Î³â€Alumina.. Chemistry - A European Journal, 2014, 20, 4038-4046.	1.7	82
8	Polymerization of racemic Î²-butyrolactone using supported catalysts: a simple access to isotactic polymers. Chemical Communications, 2010, 46, 1032.	2.2	80
9	A Strong Support Effect in Selective Propane Dehydrogenation Catalyzed by Ga(i-Bu)₃ Grafted onto Î³-Alumina and Silica. ACS Catalysis, 2018, 8, 7566-7577.	5.5	79
10	Development of the first well-defined tungsten oxo alkyl derivatives supported on silica by SOMC: towards a model of WO3/SiO2 olefin metathesis catalyst. Chemical Communications, 2010, 46, 8944.	2.2	67
11	Deeper Mechanistic Insight into Ru Pincer-Mediated Acceptorless Dehydrogenative Coupling of Alcohols: Exchanges, Intermediates, and Deactivation Species. ACS Catalysis, 2018, 8, 4719-4734.	5.5	64
12	Controlling polymer stereochemistry in ring-opening polymerization: a decade of advances shaping the future of biodegradable polyesters. Chemical Society Reviews, 2021, 50, 13587-13608.	18.7	62
13	Measurement of Aluminumâ€“Carbon Distances Using Sâ€RESPDOR NMR Experiments. ChemPhysChem, 2012, 13, 3605-3615.	1.0	59
14	Synthesis and Structure of New Osmiumâ^'PCP Complexes. Osmium-Mediated Câ^'C Bond Activation. Organometallics, 2001, 20, 1719-1724.	1.1	57
15	Oxidative Transformations of Biosourced Alcohols Catalyzed by Earthâ€Abundant Transition Metals. ChemCatChem, 2017, 9, 2652-2660.	1.8	57
16	Accessing Realistic Models for the WO₃â€“SiO₂ Industrial Catalyst through the Design of Organometallic Precursors. ACS Catalysis, 2016, 6, 1-18.	5.5	54
17	Yttrium catalysts for syndioselective Î²-butyrolactone polymerization: on the origin of ligand-induced stereoselectivity. Polymer Chemistry, 2013, 4, 360-367.	1.9	53
18	Zirconiumâ^'Benzyl Complexes of a Tridentate C2-Symmetric Dialkoxo Ligand. Diastereoselectivity of Olefin Single-Insertion Reactions. Organometallics, 2000, 19, 2944-2946.	1.1	52

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19	Wellâ€Defined Silicaâ€Supported Calcium Reagents: Control of Schlenk Equilibrium by Grafting. Chemistry - A European Journal, 2009, 15, 4382-4393.	1.7	52
20	The D-HMQC MAS-NMR Technique. Annual Reports on NMR Spectroscopy, 2014, , 145-184.	0.7	52
21	A General Method for Preparation of Metal Carbenes via Solution- and Polymer-Based Approaches. Journal of the American Chemical Society, 2005, 127, 15265-15272.	6.6	51
22	Well-Defined Silica-Supported Rare-Earth Silylamides. Inorganic Chemistry, 2007, 46, 1062-1070.	1.9	51
23	A well-defined silica-supported aluminium alkyl through an unprecedented, consecutive two-step protonolysisâ€“alkyl transfer mechanism. Chemical Communications, 2011, 47, 2979.	2.2	51
24	Well-Defined Molybdenum Oxo Alkyl Complex Supported on Silica by Surface Organometallic Chemistry: A Highly Active Olefin Metathesis Precatalyst. Journal of the American Chemical Society, 2017, 139, 2144-2147.	6.6	49
25	Heteronuclear NMR Correlations To Probe the Local Structure of Catalytically Active Surface Aluminum Hydride Species on Î³â€Alumina. Angewandte Chemie - International Edition, 2010, 49, 9854-9858.	7.2	47
26	Acceptorless dehydrogenative coupling of alcohols catalysed by ruthenium PNP complexes: Influence of catalyst structure and of hydrogen mass transfer. Journal of Catalysis, 2016, 340, 331-343.	3.1	46
27	Vanadium Oxo Organometallic Species Supported on Silica for the Selective Non-oxidative Dehydrogenation of Propane. Organometallics, 2013, 32, 6452-6460.	1.1	44
28	Silica/MAO/(n-BuCp)₂ZrCl₂ catalyst: effect of support dehydroxylation temperature on the grafting of MAO and ethylene polymerization. Catalysis Science and Technology, 2016, 6, 2962-2974.	2.1	44
29	Silica-supported lanthanide silylamides for methyl methacrylate polymerisation: controlled grafting induces controlled reactivity. Chemical Communications, 2005, , 1146.	2.2	43
30	On the Track to Silica-Supported Tungsten Oxo Metathesis Catalysts: Input from ¹⁷O Solid-State NMR. Inorganic Chemistry, 2013, 52, 10119-10130.	1.9	40
31	Development of silica-supported frustrated Lewis pairs: highly active transition metal-free catalysts for the Z-selective reduction of alkynes. Catalysis Science and Technology, 2016, 6, 882-889.	2.1	39
32	Well-Defined Supported Mononuclear Tungsten Oxo Species as Olefin Metathesis Pre-Catalysts. ACS Catalysis, 2014, 4, 4232-4241.	5.5	38
33	Ligand Exchange-Mediated Activation and Stabilization of a Re-Based Olefin Metathesis Catalyst by Chlorinated Alumina. Journal of the American Chemical Society, 2016, 138, 12935-12947.	6.6	37
34	Grafted lanthanide amides: Versatile catalysts for various transformations. Journal of Molecular Catalysis A, 2006, 257, 31-40.	4.8	36
35	Osmium-Mediated Cï£¿H and Cï£¿C Bond Cleavage of a Phenolic Substrate:p-Quinone Methide and Methylene Arenium Pincer Complexes. Chemistry - A European Journal, 2007, 13, 1382-1393.	1.7	36
36	Development of a well-defined silica-supported tungstenocarbyne complex as efficient heterogeneous catalyst for alkyne metathesis. Journal of Organometallic Chemistry, 2008, 693, 1733-1737.	0.8	34

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37	A Study of Transitionâ€Metal Organometallic Complexes Combining ³⁵Cl Solidâ€State NMR Spectroscopy and ³⁵Clâ€…NQR Spectroscopy and Firstâ€Principles DFT Calculations. Chemistry - A European Journal, 2013, 19, 12396-12414.	1.7	34
38	Silica-Supported Tungsten Neosilyl Oxo Precatalysts: Impact of the Podality on Activity and Stability in Olefin Metathesis. Organometallics, 2016, 35, 2188-2196.	1.1	31
39	An Investigation of Chlorine Ligands in Transition-Metal Complexes via ³⁵Cl Solid-State NMR and Density Functional Theory Calculations. Inorganic Chemistry, 2014, 53, 9581-9597.	1.9	28
40	Solid-state NMR of quadrupolar nuclei for investigations into supported organometallic catalysts: scope and frontiers. Chemical Society Reviews, 2018, 47, 2572-2590.	18.7	28
41	Selective Grafting of Ga(i-Bu)₃ on the Silanols of Mesoporous H-ZSM-5 by Surface Organometallic Chemistry. Journal of Physical Chemistry C, 2015, 119, 26611-26619.	1.5	27
42	Crossâ€Metathesis of Biosourced Fatty Acid Derivatives: A Step Further Toward Improved Reactivity. ChemSusChem, 2015, 8, 1143-1146.	3.6	27
43	A well-defined silica-supported dinuclear tungsten(iii) amido species: synthesis, characterization and reactivity. Dalton Transactions, 2007, , 3127-3130.	1.6	25
44	Small Changes Have Consequences: Lessons from Tetrabenzyltitanium and â€zirconium Surface Organometallic Chemistry. Chemistry - A European Journal, 2013, 19, 964-973.	1.7	24
45	Well-defined silica-supported molybdenum nitride species: silica grafting triggers alkyne metathesis activity. Chemical Science, 2013, 4, 2680.	3.7	24
46	Enhanced Metathesis Activity and Stability of Methyltrioxorhenium on a Mostly Amorphous Alumina: Role of the Local Grafting Environment. Journal of the American Chemical Society, 2018, 140, 13854-13868.	6.6	24
47	Advances in Structural Studies on Alkylaluminum Species in the Solid State via Challenging 27Alâ€“13C NMR Spectroscopy and X-ray Diffraction. Journal of Physical Chemistry C, 2013, 117, 18091-18099.	1.5	22
48	Support effect in ethylene oligomerization mediated by heterogenized nickel catalysts. Catalysis Communications, 2010, 11, 597-600.	1.6	21
49	Design and Application of a Hybrid Material Featuring Wellâ€Defined, Tuneable Grafting Sites for Supported Catalysis.. ChemCatChem, 2013, 5, 1971-1977.	1.8	21
50	The design of a bipodal bis(pentafluorophenoxy)aluminate supported on silica as an activator for ethylene polymerization using surface organometallic chemistry. Chemical Communications, 2016, 52, 4776-4779.	2.2	21
51	On the Fate of Silica-Supported Half-Metallocene Cations: Elucidating a Catalystâ€™s Deactivation Pathways. Organometallics, 2012, 31, 4763-4768.	1.1	20
52	Solvent- and base-free synthesis of wax esters from fatty acid methyl esters by consecutive one-pot, two-step catalysis. Green Chemistry, 2017, 19, 5665-5673.	4.6	20
53	An easily accessible Re-based catalyst for the selective conversion of methanol: evidence for an unprecedented active site structure through combined operando techniques. Chemical Communications, 2011, 47, 4285.	2.2	19
54	Supported neodymium catalysts for MMA polymerization: on the origin of surface-induced stereoselectivity. Polymer Chemistry, 2012, 3, 1730-1739.	1.9	18

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55	Well-Defined Silica-Supported Zirconium-Benzyl Cationic Species: Improved Heterogenization of Single-Site Polymerization Catalysts. European Journal of Inorganic Chemistry, 2014, 2014, 888-895.	1.0	18
56	Heterogenized nickel catalysts for propene dimerization: Support effects on activity and selectivity. Catalysis Communications, 2013, 32, 32-35.	1.6	17
57	Multicatalysis from renewable resources: a direct route to furan-based polyesters. Green Chemistry, 2021, 23, 6931-6935.	4.6	17
58	Design of a well-defined, silica-supported chiral Zn scaffold for enantioselective catalysis. Dalton Transactions, 2010, 39, 3802.	1.6	16
59	Enforcing Z-selectivity in olefin metathesis through use of catalysts grafted on well-defined phenolic hybrid material. Catalysis Today, 2014, 235, 41-48.	2.2	15
60	Supported Neodymium Catalysts for Isoprene and racâ€Î²â€Butyrolactone Polymerization: Modulation of Reactivity by Controlled Grafting. Macromolecular Rapid Communications, 2011, 32, 215-219.	2.0	14
61	On the use of solid-state ⁴⁵Sc NMR for structural investigations of molecular and silica-supported scandium amide catalysts. Dalton Transactions, 2017, 46, 13176-13179.	1.6	14
62	A nano-organized ethylene oligomerization catalyst: Characterization and reactivity of the Ni(MeCN)6(BF4)2/[Al]-MCM-41/AlEt3 system. Microporous and Mesoporous Materials, 2006, 96, 109-114.	2.2	13
63	Chiral phenoxyimino-amido aluminum complexes for the asymmetric cyanation of aldehydes. Dalton Transactions, 2014, 43, 4530.	1.6	13
64	Efficient deuterium labelling of alcohols in deuterated water catalyzed by ruthenium pincer complexes. Catalysis Communications, 2016, 84, 67-70.	1.6	13
65	Bilirubin oxidase-based silica macrocellular robust catalyst for on line dyes degradation. Enzyme and Microbial Technology, 2019, 120, 77-83.	1.6	13
66	A New Donorâ€Stabilized Ditungsten Amido Alkoxido Species: Synthesis, Crystal Structure, Fluxionality, and Grafting onto Silica. European Journal of Inorganic Chemistry, 2007, 2007, 5541-5547.	1.0	12
67	2,5-Furandicarboxylic Acid: An Intriguing Precursor for Monomer and Polymer Synthesis. Molecules, 2022, 27, 4071.	1.7	12
68	Modification of silica-supported tungsten neosilyl oxo precatalysts: impact of substituted phenol on activity and stability in olefin metathesis. Catalysis Science and Technology, 2016, 6, 8532-8539.	2.1	11
69	Palladiumâ€Catalyzed Functionalization of Kraft Lignin: Ether Linkages through the Telomerization Reaction. ChemSusChem, 2018, 11, 1649-1655.	3.6	11
70	Caveat on the Actual Robustness of Heteronuclear NMR Methods for Probing the Surface of Î³-Alumina and Related Catalysts. Journal of Physical Chemistry C, 2019, 123, 12919-12927.	1.5	11
71	A Wellâ€Defined Silicaâ€Supported Lanthanum Bis(phosphinimino)methanide. European Journal of Inorganic Chemistry, 2011, 2011, 1366-1369.	1.0	10
72	¹⁷O MAS NMR studies of oxo-based olefin metathesis catalysts: a critical assessment of signal enhancement methods. Physical Chemistry Chemical Physics, 2016, 18, 28157-28163.	1.3	10

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73	Silica-Grafted Lanthanum Benzyl Species: Synthesis, Characterization, and Catalytic Applications. Organometallics, 2017, 36, 3912-3920.	1.1	10
74	Ethenolysis of Renewable Methyl Oleate Catalyzed by Readily Accessible Supported Group VI Oxo Catalysts. Organometallics, 2020, 39, 1105-1111.	1.1	10
75	Solventâ€Free Ringâ€Opening Metathesis Polymerization of Norbornene over Silicaâ€Supported Tungstenâ€“Oxo Perhydrocarbyl Catalysts. Macromolecular Rapid Communications, 2016, 37, 1832-1836.	2.0	9
76	New synthetic approach towards well-defined silica supported tungsten bis-oxo, active catalysts for olefin metathesis. Catalysis Communications, 2018, 108, 51-54.	1.6	9
77	Zirconium(IV) benzyl complexes that contain chelating diamido ligands: synthesis, fluxionality and ethylene polymerization activity. Journal of Molecular Catalysis A, 2002, 182-183, 411-417.	4.8	7
78	Solution structure and decomposition pathway of zwitterionic zirconium (IV) benzyl complexes. Journal of Organometallic Chemistry, 2002, 658, 1-8.	0.8	7
79	Shifting From Zieglerâ€“Natta to Philipsâ€Type Catalyst? A Simple and Safe Access to Reduced Titanium Systems for Ethylene Polymerization. Macromolecular Rapid Communications, 2011, 32, 1921-1924.	2.0	7
80	The Palladiumâ€Catalyzed Carbonylative Telomerization Reaction with Phenols, Polyphenols and Kraft Lignin. ChemSusChem, 2018, 11, 3917-3922.	3.6	7
81	The arched four-rung ladder structure of the unsolvated dilithium salt of N,Nâ€²-bis(trimethylsilyl)-2-aminobenzylamine, and its structural deformation on THF complexation. Chemical Communications, 2000, , 965-966.	2.2	6
82	Efficient synthesis and structural characterization of a post-metallocene Î±-olefin polymerization catalyst. Inorganica Chimica Acta, 2009, 362, 277-280.	1.2	6
83	Improved reactivity in the conversion of nitrile-functionalized olefins by metathesis. Catalysis Communications, 2016, 77, 75-78.	1.6	6
84	Grafting of a new bis-silylamido aluminum species on silica: insight from solid-state NMR into interactions with the surface. Dalton Transactions, 2019, 48, 5243-5252.	1.6	6
85	Online monitoring by infrared spectroscopy using multivariate analysis â€“ background theory and application to catalytic dehydrogenative coupling of butanol to butyl butyrate. Reaction Chemistry and Engineering, 2019, 4, 909-918.	1.9	6
86	Dismantling the salen framework: design of new asymmetric silylcyanation catalysts. Catalysis Science and Technology, 2013, 3, 580-583.	2.1	5
87	In SituGeneration of Molybdenum-Based Catalyst for Alkyne Metathesis: Further Developments and Mechanistic Insights. Oil and Gas Science and Technology, 2016, 71, 20.	1.4	5
88	Isonitrile ruthenium and iron PNP complexes: synthesis, characterization and catalytic assessment for base-free dehydrogenative coupling of alcohols. Dalton Transactions, 2021, 50, 10067-10081.	1.6	5
89	A smarter approach to catalysts by design: Combining surface organometallic chemistry on oxide and metal gives selective catalysts for dehydrogenation of 2,3-dimethylbutane. Molecular Catalysis, 2019, 471, 21-26.	1.0	4
90	Preparation of monopodal and bipodal aluminum surface species by selective protonolysis of highly reactive [AlH3(NMe2Et)] on silica. Dalton Transactions, 2017, 46, 11547-11551.	1.6	3

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91	In situ Mo(CO)â,†-based catalysts for alkyne metathesis: Silanols vs phenols as co-catalysts under thermal and photochemical activation. Catalysis Communications, 2020, 138, 105944.	1.6	3
92	Probing 29Si-17O connectivities and proximities by solid-state NMR. Journal of Magnetic Resonance, 2021, 330, 107029.	1.2	2
93	Olefin Metathesis by Group VI (Mo, W) Metal Compounds. , 2018, , .		1
94	Synthesis of an oxo trialkyl tungsten fluoride complex and its dual reactivity with silica dehydroxylated at high temperature. Journal of Organometallic Chemistry, 2018, 869, 11-17.	0.8	1
95	Catalytic Conversion of Alcohols into Carboxylic Acid Salts in Water: Scope, Recycling, and Mechanistic Insights. ChemSusChem, 2016, 9, 1350-1350.	3.6	0