

# Claire L McMullin

## List of Publications by Year in descending order

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Version: 2024-02-01

80  
papers

3,618  
citations

159358

30  
h-index

143772

57  
g-index

85  
all docs

85  
docs citations

85  
times ranked

3485  
citing authors

#	ARTICLE	IF	CITATIONS
1	Rubidium and caesium aluminyls: synthesis, structures and reactivity in C-H bond activation of benzene. <i>Chemical Communications</i> , 2022, 58, 1390-1393.	2.2	31
2	Carbon-chalcogen bond formation initiated by [Al(NON <sup>Dipp</sup> )(E)] <sup>+</sup> anions containing Al-E <sub>16</sub> (E <sub>16</sub> = S, Se) multiple bonds. <i>Chemical Science</i> , 2022, 13, 4635-4646.	3.7	10
3	On the reactivity of Al-group 11 (Cu, Ag, Au) bonds. <i>Dalton Transactions</i> , 2022, 51, 3913-3924.	1.6	23
4	Potassium Aluminyl Promoted Carbonylation of Ethene. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	0
5	Potassium Aluminyl Promoted Carbonylation of Ethene. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	19
6	A Terphenyl Supported Dioxophosphorane Dimer: the Light Congener of Lawesson's and Woollins <sup>TM</sup> Reagents. <i>Chemistry - A European Journal</i> , 2022, , .	1.7	2
7	DFT calculations bring insight to internal alkyne-to-vinylidene transformations at rhodium PNP- and PONOP-pincer complexes. <i>RSC Advances</i> , 2021, 11, 11793-11803.	1.7	1
8	Ambiphilic Al <sup>+</sup> Cu Bonding. <i>Angewandte Chemie</i> , 2021, 133, 14511-14514.	1.6	13
9	Ambiphilic Al <sup>+</sup> Cu Bonding. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 14390-14393.	7.2	44
10	Dihydrogen Activation by Lithium <sup>+</sup> and Sodium <sup>+</sup> Aluminyls. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 22289-22292.	7.2	33
11	Dihydrogen Activation by Lithium <sup>+</sup> and Sodium <sup>+</sup> Aluminyls. <i>Angewandte Chemie</i> , 2021, 133, 22463-22466.	1.6	9
12	Seven <sup>+</sup> Membered Cyclic Potassium Diamidoaluminyls. <i>Chemistry - A European Journal</i> , 2021, 27, 14971-14980.	1.7	20
13	Double insertion of CO <sub>2</sub> into an Al <sup>+</sup> Te multiple bond. <i>Chemical Communications</i> , 2021, 57, 2673-2676.	2.2	15
14	Reductive Dimerization of CO by a Na/Mg(I) Diamide. <i>Journal of the American Chemical Society</i> , 2021, 143, 17851-17856.	6.6	31
15	Controlling Al <sup>+</sup> <b>M</b> Interactions in Group 1 Metal Aluminyls (<b>M</b> = Li, Na, and K). Facile Conversion of Dimers to Monomeric and Separated Ion Pairs. <i>Inorganic Chemistry</i> , 2021, 60, 18423-18431.	1.9	12
16	Isocyanate deoxygenation by a molecular magnesium silanide. <i>Dalton Transactions</i> , 2021, 51, 136-144.	1.6	4
17	Reductive dehydrocoupling of diphenyltin dihydride with LiAlH <sub>4</sub> : selective synthesis and structures of the first bicyclo[2.2.1]heptastannane-1,4-diide and bicyclo[2.2.2]octastannane-1,4-diide. <i>Chemical Communications</i> , 2020, 56, 336-339.	2.2	5
18	A Stable Calcium Aluminyl. <i>Angewandte Chemie</i> , 2020, 132, 3956-3960.	1.6	60

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19	A Stable Calcium Alumanyl. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 3928-3932.	7.2	117
20	Phosphinoborane interception at magnesium by borane-assisted phosphine-borane dehydrogenation. <i>Dalton Transactions</i> , 2020, 49, 14584-14591.	1.6	10
21	The first ring-expanded NHC-copper( <i>i</i> ) phosphides as catalysts in the highly selective hydrophosphination of isocyanates. <i>Chemical Communications</i> , 2020, 56, 13359-13362.	2.2	27
22	Synthesis and reactivity of alkaline-earth stannanide complexes by hydride-mediated distannane metathesis and organostannane dehydrogenation. <i>Dalton Transactions</i> , 2020, 49, 10523-10534.	1.6	6
23	Nucleophilic Magnesium Silanide and Silaamidinate Derivatives. <i>Inorganic Chemistry</i> , 2020, 59, 13679-13689.	1.9	6
24	Carbon-Carbon Bond Forming Reactions Promoted by Alumanyl and Alumoxane Anions: Introducing the Ethenetetraolate Ligand. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 12806-12810.	7.2	37
25	[BO <sub>2</sub> ] as a Synthon for the Generation of Boron-Centered Carbamate and Carboxylate Isosteres. <i>Angewandte Chemie</i> , 2020, 132, 13730-13734.	1.6	7
26	[BO <sub>2</sub> ] <sup>+</sup> as a Synthon for the Generation of Boron-Centered Carbamate and Carboxylate Isosteres. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 13628-13632.	7.2	15
27	Carbon-Carbon Bond Forming Reactions Promoted by Alumanyl and Alumoxane Anions: Introducing the Ethenetetraolate Ligand. <i>Angewandte Chemie</i> , 2020, 132, 12906-12910.	1.6	12
28	A computational study on the identity of the active catalyst structure for Ru(ii) carboxylate assisted C-H activation in acetonitrile. <i>Organic and Biomolecular Chemistry</i> , 2019, 17, 6678-6686.	1.5	3
29	Diborane heterolysis and P( <i>v</i> ) reduction by Ph <sub>3</sub> PfO coordination to magnesium. <i>Chemical Communications</i> , 2019, 55, 9035-9038.	2.2	25
30	Azulenes with aryl substituents bearing pentafluorosulfanyl groups: synthesis, spectroscopic and halochromic properties. <i>New Journal of Chemistry</i> , 2019, 43, 992-1000.	1.4	15
31	Snapshots of magnesium-centred diborane heterolysis by an outer sphere S <sub>N</sub> 2 process. <i>Chemical Science</i> , 2019, 10, 6672-6682.	3.7	19
32	Understanding electronic effects on carboxylate-assisted C-H activation at ruthenium: the importance of kinetic and thermodynamic control. <i>Faraday Discussions</i> , 2019, 220, 386-403.	1.6	23
33	The Importance of Kinetic and Thermodynamic Control when Assessing Mechanisms of Carboxylate-Assisted C-H Activation. <i>Journal of the American Chemical Society</i> , 2019, 141, 8896-8906.	6.6	66
34	Azulene-Derived Fluorescent Probe for Bioimaging: Detection of Reactive Oxygen and Nitrogen Species by Two-Photon Microscopy. <i>Journal of the American Chemical Society</i> , 2019, 141, 19389-19396.	6.6	125
35	Calcium stannyl formation by organostannane dehydrogenation. <i>Chemical Communications</i> , 2019, 55, 12964-12967.	2.2	14
36	Magnesium-Mediated Nucleophilic Borylation of Carbonyl Electrophiles. <i>Organometallics</i> , 2018, 37, 4457-4464.	1.1	20

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37	Remote C6-Selective Ruthenium-Catalyzed C-H Alkylation of Indole Derivatives via $\eta^6$ -Activation. ACS Catalysis, 2017, 7, 2616-2623.	5.5	141
38	Easy access to nucleophilic boron through diborane to magnesium boryl metathesis. Nature Communications, 2017, 8, 15022.	5.8	87
39	Computational Studies of Carboxylate-Assisted C-H Activation and Functionalization at Group 8-10 Transition Metal Centers. Chemical Reviews, 2017, 117, 8649-8709.	23.0	472
40	Large, weakly basic bis(carboranyl)phosphines: an experimental and computational study. Dalton Transactions, 2017, 46, 5218-5228.	1.6	18
41	Ruthenium-Catalyzed $\eta^6$ -Selective C-H Alkylation of Aniline Derivatives. Angewandte Chemie, 2017, 129, 15327-15331.	1.6	28
42	Ruthenium-Catalyzed $\eta^6$ -Selective C-H Alkylation of Aniline Derivatives. Angewandte Chemie - International Edition, 2017, 56, 15131-15135.	7.2	108
43	Azulene-boronate esters: colorimetric indicators for fluoride in drinking water. Chemical Communications, 2017, 53, 12580-12583.	2.2	65
44	Magnesium Boryl Reactivity with $\eta^6$ -BBN and $\text{Ph}_3\text{B}$ : Rational B-B Bond Formation and Diborane Isomerization. Angewandte Chemie, 2017, 129, 16581-16584.	1.6	17
45	Magnesium Boryl Reactivity with $\eta^6$ -BBN and $\text{Ph}_3\text{B}$ : Rational B-B Bond Formation and Diborane Isomerization. Angewandte Chemie - International Edition, 2017, 56, 16363-16366.	7.2	36
46	$\eta^6$ -Halo carbonyls enable meta selective primary, secondary and tertiary C-H alkylations by ruthenium catalysis. Organic and Biomolecular Chemistry, 2017, 15, 5993-6000.	1.5	47
47	Ruthenium(II)-Catalyzed C-H Functionalization Using the Oxazolidinone Heterocycle as a Weakly Coordinating Directing Group: Experimental and Computational Insights. ACS Catalysis, 2016, 6, 5520-5529.	5.5	87
48	Experimental and DFT Studies Explain Solvent Control of C-H Activation and Product Selectivity in the Rh(III)-Catalyzed Formation of Neutral and Cationic Heterocycles. Journal of the American Chemical Society, 2015, 137, 9659-9669.	6.6	108
49	Computational Studies on Heteroatom-Assisted C-H Activation and Functionalisation at Group 8 and 9 Metal Centres. Topics in Organometallic Chemistry, 2015, , 53-76.	0.7	7
50	Modelling and Rationalizing Organometallic Chemistry with Computation: Where Are We?. Structure and Bonding, 2015, , 1-37.	1.0	13
51	Combined Experimental and Computational Investigations of Rhodium-Catalysed C-H Functionalisation of Pyrazoles with Alkenes. Chemistry - A European Journal, 2015, 21, 3087-3096.	1.7	27
52	The Challenge of Palladium-Catalyzed Aromatic Azidocarbonylation: From Mechanistic and Catalyst Deactivation Studies to a Highly Efficient Process. Organometallics, 2014, 33, 736-752.	1.1	68
53	Unexpectedly High Barriers to M-P Rotation in Tertiary Phobane Complexes: PhobPR Behavior That Is Commensurate with $t\text{Bu}_2\text{PR}$ . Organometallics, 2014, 33, 702-714.	1.1	3
54	Computed ligand effects on the oxidative addition of phenyl halides to phosphine supported palladium(0) catalysts. Dalton Transactions, 2014, 43, 13545-13556.	1.6	100

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55	Cobalt PCP Pincer Complexes via an Unexpected Sequence of Ortho Metalations. <i>Organometallics</i> , 2014, 33, 5686-5692.	1.1	21
56	Correlations of the Structural Properties of a Complete R <sub>2</sub> PX Series (X = Hydrogen or Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 472 Td	1.0	2
57	Copper(II) Anilides in sp <sup>3</sup> C-H Amination. <i>Journal of the American Chemical Society</i> , 2014, 136, 10930-10940.	6.6	99
58	Combined Experimental and Computational Investigations of Rhodium- and Ruthenium-Catalyzed C-H Functionalization of Pyrazoles with Alkynes. <i>Journal of Organic Chemistry</i> , 2014, 79, 1954-1970.	1.7	75
59	Dehydrogenative Boron Homocoupling of an Amine-Borane. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 9776-9780.	7.2	66
60	Complete methane-to-methanol catalytic cycle: A DFT study of oxygen atom transfer from N <sub>2</sub> O to late-row (Mn, Cu, Zn) $\eta^2$ -diketiminato CH activation catalysts. <i>Polyhedron</i> , 2013, 52, 945-956.	1.0	20
61	$\lambda^5$ -Diphospholylamines: A New Family of Ligands for Highly Active, Chromium-Based, Selective Ethene Oligomerisation Catalysts. <i>ChemCatChem</i> , 2013, 5, 2946-2954.	1.8	28
62	Catalytic Hydroarylation of Ethylene Using TpRu(L)(NCMe)Ph (L = Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 472 Td (2,6,7-Trioxa-1-phospha	1.1	43
	2012, 31, 6851-6860.		
63	Coordination Chemistry of 4-Methyl-2,6,7-trioxa-1-phosphabicyclo[2,2,1]heptane: Preparation and Characterization of Ru(II) Complexes. <i>Inorganic Chemistry</i> , 2012, 51, 4791-4801.	1.9	30
64	Reaction of Cu <sup>I</sup> with Dialkyl Peroxides: Cu <sup>II</sup> -Alkoxides, Alkoxy Radicals, and Catalytic C-H Etherification. <i>Journal of the American Chemical Society</i> , 2012, 134, 17350-17353.	6.6	143
65	C-H Functionalization Reactivity of a Nickel-Imide. <i>Journal of the American Chemical Society</i> , 2012, 134, 10114-10121.	6.6	122
66	Stable Fluorophosphines: Predicted and Realized Ligands for Catalysis. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 118-122.	7.2	46
67	Cyclopropenylidene carbene ligands in palladium catalysed coupling reactions: carbene ligand rotation and application to the Stille reaction. <i>Dalton Transactions</i> , 2011, 40, 5316.	1.6	15
68	Cage Phosphinites: Ligands for Efficient Nickel-Catalyzed Hydrocyanation of 3-Pentenenitrile. <i>Organometallics</i> , 2011, 30, 974-985.	1.1	26
69	$\lambda^5$ -Bis(diphenylphosphino)diaminophenylphosphine Ligands for Chromium-Catalyzed Selective Ethylene Oligomerization Reactions. <i>Organometallics</i> , 2011, 30, 935-941.	1.1	39
70	Organometallic reactivity: the role of metal-ligand bond energies from a computational perspective. <i>Dalton Transactions</i> , 2011, 40, 11184.	1.6	57
71	Chiral palladacycles based on resorcinol monophosphite ligands: the role of the meta-hydroxyl in ligand C-H activation and catalysis. <i>Dalton Transactions</i> , 2011, 40, 9042.	1.6	10
72	Tuning ligand structure in chiral bis(phosphite) and mixed phosphite-phosphinite PCP-palladium pincer complexes. <i>Dalton Transactions</i> , 2011, 40, 9034.	1.6	13

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73	Diphosphanes derived from phobane and phosphatrioxa-adamantane: similarities, differences and anomalies. Dalton Transactions, 2011, 40, 7137.	1.6	28
74	Is restricted $\text{M}\text{-}\text{P}$ rotation a common feature of enantioselective monophos catalysts? An example of restricted $\text{Rh}\text{-}\text{P}$ rotation in a secondary phosphine complex. Tetrahedron: Asymmetry, 2010, 21, 1206-1209.	1.8	19
75	Computational study of $\text{PtBu}_3$ as ligand in the palladium-catalysed amination of phenylbromide with morpholine†. Journal of Molecular Catalysis A, 2010, 324, 48-55.	4.8	26
76	Subtleties in asymmetric catalyst structure: the resolution of a 6-phospha-2,4,8-trioxa-adamantane and its applications in asymmetric hydrogenation catalysis. Chemical Communications, 2010, 46, 100-102.	2.2	26
77	Accurate modelling of $\text{Pd}(0) + \text{PhX}$ oxidative addition kinetics. Dalton Transactions, 2010, 39, 10833.	1.6	179
78	Ligand effects in chromium diphosphine catalysed olefin co-trimerisation and diene trimerisation. Dalton Transactions, 2010, 39, 560-567.	1.6	47
79	Rhodium Complexes of Cyclopropenylidene Carbene Ligands: Synthesis, Structure, and Hydroformylation Catalysis. Organometallics, 2009, 28, 1476-1479.	1.1	17
80	A ligand knowledge base for carbenes (LKB-C): maps of ligand space. Dalton Transactions, 2009, , 8183.	1.6	59