Matt L Clarke

List of Publications by Year
in descending order

97 papers	4,193 citations	94269 37 h-index	128067 60 g-index
119 all docs	119 docs citations	119 times ranked	3446 citing authors

#	Article	IF	Citations
1	A Highly Active Manganese Catalyst for Enantioselective Ketone and Ester Hydrogenation. Angewandte Chemie - International Edition, 2017, 56, 5825-5828.	7.2	221
2	The carbonyl ene reaction. Tetrahedron, 2008, 64, 9003-9031.	1.0	171
3	Self-Assembly of Organocatalysts: Fine-Tuning Organocatalytic Reactions. Angewandte Chemie - International Edition, 2007, 46, 930-933.	7.2	167
4	Remarkable Lewis acid catalytic performance of the scandium trimesate metal organic framework MIL-100(Sc) for Câ€“C and Cî€N bond-forming reactions. Catalysis Science and Technology, 2013, 3, 606-617.	2.1	136
5	Hydrogenation of Aldehydes, Esters, Imines, and Ketones Catalyzed by a Ruthenium Complex of a Chiral Tridentate Ligand. Organometallics, 2007, 26, 16-19.	1.1	120
6	An Asymmetric Hydroformylation Catalyst that Delivers Branched Aldehydes from Alkyl Alkenes. Angewandte Chemie - International Edition, 2012, 51, 2477-2480.	7.2	118
7	Highly Enantioselective Hydroxycarbonylation and Alkoxycarbonylation of Alkenes using Dipalladium Complexes as Precatalysts. Angewandte Chemie - International Edition, 2010, 49, 9197-9200.	7.2	104
8	Mixedâ€Metal MILâ€100(Sc,M) (M=Al, Cr, Fe) for Lewis Acid Catalysis and Tandem Cï£¿C Bond Formation and Alcohol Oxidation. Chemistry - A European Journal, 2014, 20, 17185-17197.	1.7	104
9	Recent developments in the homogeneous hydrogenation of carboxylic acid esters. Catalysis Science and Technology, 2012, 2, 2418.	2.1	100
10	Phenylphosphatrioxa-adamantanes: bulky, robust, electron-poor ligands that give very efficient rhodium(i) hydroformylation catalysts. Dalton Transactions, 2005, , 1079.	1.6	82
11	Branched Selective Hydroformylation: A Useful Tool for Organic Synthesis. Current Organic Chemistry, 2005, 9, 701-718.	0.9	82
12	Highly Regioselective Rhodium-Catalysed Hydroformylation of Unsaturated Esters: The First Practical Method for Quaternary Selective Carbonylation. Chemistry - A European Journal, 2006, 12, 7978-7986.	1.7	82
13	Platinum-Catalysed Allylic Alkylation: Reactivity, Enantioselectivity, and Regioselectivity. Chemistry - A European Journal, 2000, 6, 353-360.	1.7	81
14	Pâ€“N bond formation as a route to highly electron rich phosphine ligands. Chemical Communications, 2000, , 2065-2066.	2.2	79
15	Enantiomerically Pure Bis(phosphanyl)carbaborane(12) Compounds. European Journal of Inorganic Chemistry, 2009, 2009, 2776-2788.	1.0	76
16	Simultaneous control of regioselectivity and enantioselectivity in the hydroxycarbonylation and methoxycarbonylation of vinyl arenes. Chemical Communications, 2013, 49, 3306.	2.2	76
17	On the Functional Group Tolerance of Ester Hydrogenation and Polyester Depolymerisation Catalysed by Ruthenium Complexes of Tridentate Aminophosphine Ligands. Chemistry - A European Journal, 2015, 21, 10851-10860.	1.7	70
18	Enantioselective Hydrogenation and Transfer Hydrogenation of Bulky Ketones Catalysed by a Ruthenium Complex of a Chiral Tridentate Ligand. Chemistry - A European Journal, 2009, 15, 1227-1232.	1.7	68

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19	A Highly Active Manganese Catalyst for Enantioselective Ketone and Ester Hydrogenation. Angewandte Chemie, 2017, 129, 5919-5922.	1.6	64
20	Synthesis of bulky, electron rich hemilabile phosphines and their application in the Suzuki coupling reaction of aryl chlorides. Dalton Transactions RSC, 2001, , 2721-2723.	2.3	63
21	The electron-poor phosphines P{C6H3(CF3)2-3,5}3 and P(C6F5)3 do not mimic phosphites as ligands for hydroformylation. A comparison of the coordination chemistry of P{C6H3(CF3)2-3,5}3 and P(C6F5)3 and the unexpectedly low hydroformylation activity of their rhodium complexes. Dalton Transactions, 2005, , 1294.	1.6	63
22	Understanding a Hydroformylation Catalyst that Produces Branched Aldehydes from Alkyl Alkenes. Journal of the American Chemical Society, 2017, 139, 15921-15932.	6.6	63
23	First Microwave-Accelerated Hiyama Coupling of Aryl- and Vinylsiloxane Derivatives: Clean Cross-Coupling of Aryl Chlorides within Minutes. Advanced Synthesis and Catalysis, 2005, 347, 303-307.	2.1	62
24	Highly electron rich alkyl- and dialkyl-N-pyrrolidinyl phosphines: an evaluation of their electronic and structural properties. Dalton Transactions RSC, 2002, , 1093-1103.	2.3	58
25	Synthesis and Structure of Enantiomerically Pure Platinum Complexes of Phosphino-oxazolines and Their Use in Asymmetric Catalysis. Organometallics, 1999, 18, 2867-2873.	1.1	57
26	On the NH Effect in Rutheniumâ€Catalysed Hydrogenation of Ketones: Rational Design of Phosphineâ€Aminoâ€Alcohol Ligands for Asymmetric Hydrogenation of Ketones. Chemistry - A European Journal, 2010, 16, 8002-8005.	1.7	57
27	Palladium(II) Complexes of New Bulky Bidentate Phosphanes: Active and Highly Regioselective Catalysts for the Hydroxycarbonylation of Styrene. Chemistry - A European Journal, 2009, 15, 10504-10513.	1.7	55
28	Palladium-catalysed synthesis of aryl-alkyl ethers using alkoxysilanes as nucleophiles. Organic and Biomolecular Chemistry, 2009, 7, 2645.	1.5	55
29	Manganese Catalyzed Hydrogenation of Enantiomerically Pure Esters. Organic Letters, 2018, 20, 2654-2658.	2.4	54
30	Recent advances in homogeneous catalysis using platinum complexes. Polyhedron, 2001, 20, 151-164.	1.0	53
31	Pâ€“N bond formation as a route to a highly electron rich bidentate phosphine ligand and its application in homogenous catalysis. Dalton Transactions RSC, 2001, , 969-971.	2.3	45
32	Synthesis and structure of novel rhodium complexes of multi-functionalised amine-phosphine ligands. Dalton Transactions RSC, 2001, , 3421-3429.	2.3	44
33	The Importance of Ligand Steric Effects on Transmetalation. Organometallics, 2005, 24, 6475-6478.	1.1	43
34	Regioselective and Enantioselective Hydroformylation of Dialkylacrylamides. Advanced Synthesis and Catalysis, 2010, 352, 1047-1054.	2.1	41
35	Convenient and improved protocols for the hydrogenation of esters using Ru catalysts derived from (P,P), (P,N,N) and (P,N,O) ligands. Dalton Transactions, 2012, 41, 10136.	1.6	41
36	Rhodium/phospholaneâ€“phosphite catalysts give unusually high regioselectivity in the enantioselective hydroformylation of vinyl arenes. Chemical Communications, 2014, 50, 1475-1477.	2.2	40

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37	A Bifunctional MOF Catalyst Containing Metalâ€“Phosphine and Lewis Acidic Active Sites. Chemistry - A European Journal, 2018, 24, 15309-15318.	1.7	40
38	A highly efficient procedure for hydroformylation and hydroamino-vinylation of methyl acrylate. Green Chemistry, 2007, 9, 792.	4.6	39
39	Use of Tricyclohexylphosphine To Control Regiochemistry in Palladium-Catalyzed Allylic Alkylation. Organic Letters, 1999, 1, 1969-1971.	2.4	38
40	Towards practical earth abundant reduction catalysis: design of improved catalysts for manganese catalysed hydrogenation. Catalysis Science and Technology, 2019, 9, 6047-6058.	2.1	38
41	High iso Aldehyde Selectivity in the Hydroformylation of Shortâ€Chain Alkenes. Angewandte Chemie - International Edition, 2019, 58, 2120-2124.	7.2	38
42	Palladium-catalysed Grignard cross-coupling using highly concentrated Grignards in methyl-tetrahydrofuran. Green Chemistry, 2010, 12, 381.	4.6	37
43	On the rate-determining step and the ligand electronic effects in rhodium catalysed hydrogenation of enamines and the hydroaminomethylation of alkenes. Catalysis Science and Technology, 2011, 1, 431.	2.1	36
44	Rapid Asymmetric Transfer Hydroformylation (ATHF) of Disubstituted Alkenes Using Paraformaldehyde as a Syngas Surrogate. Chemistry - A European Journal, 2015, 21, 10645-10649.	1.7	35
45	Rhodium catalysed hydroformylation of unsaturated esters. Tetrahedron Letters, 2004, 45, 4043-4045.	0.7	34
46	Synthesis of organocatalysts using non-covalent chemistry; understanding the reactivity of ProNap, an enamine-type organocatalyst that can self assemble with complementary co-catalysts. Chemical Science, 2011, 2, 1997.	3.7	34
47	Synthesis and transition metal chemistry of â€˜phosphomideâ€™ ligands: a comparison of the reactivity and electronic properties of diphenyl-P-perfluoro-octanoyl-phosphine, P-acetyl-diphenylphosphine and P-anisoyl-diphenylphosphine. X-ray crystal structure of [RhCp*(Ph2PC(O)CH3)Cl2]. Journal of Organometallic Chemistry, 2003, 667, 112-119.	0.8	33
48	Evaluation of C4 diphosphine ligands in rhodium catalysed methanol carbonylation under a syngas atmosphere: synthesis, structure, stability and reactivity of rhodium(i) carbonyl and rhodium(iii) acetyl intermediates. Dalton Transactions, 2007, , 5582.	1.6	31
49	Palladiumâ€catalysed Pï£¿C bond forming reactions between diphenylphosphine and orthoâ€substituted aryl bromides. Applied Organometallic Chemistry, 2009, 23, 272-276.	1.7	30
50	Asymmetric Hydroformylation of an Enantiomerically Pure Bicyclic Lactam: Efficient Synthesis of Functionalised Cyclopentylamines. Chemistry - A European Journal, 2010, 16, 12788-12791.	1.7	27
51	A Highly Enantioselective Alkene Methoxycarbonylation Enables a Concise Synthesis of (S)â€Flurbiprofen. European Journal of Organic Chemistry, 2017, 2017, 4859-4863.	1.2	27
52	Manganese-catalysed transfer hydrogenation of esters. Chemical Communications, 2020, 56, 8635-8638.	2.2	27
53	A rationally designed cocatalyst for the Moritaâ€“Baylisâ€“Hillman reaction. Tetrahedron Letters, 2008, 49, 4666-4669.	0.7	26
54	Palladium complexes of bulky ortho-trifluoromethylphenyl-substituted phosphines: Unusually regioselective catalysts for the hydroxycarbonylation and alkoxycarbonylation of alkenes. Journal of Molecular Catalysis A, 2010, 330, 18-25.	4.8	26

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55	Synthesis and co-ordination chemistry of a novel multifunctional bis-phosphine containing a Pâ€“Nâ€“Siâ€“Nâ€“P backbone. Dalton Transactions RSC, 2001, , 972-976.	2.3	24
56	Platinum complexes of tertiary amine functionalised phosphines. Polyhedron, 2003, 22, 19-26.	1.0	24
57	Highly enantioselective hydrogenation and transfer hydrogenation of cycloalkyl and heterocyclic ketones catalysed by an iridium complex of a tridentate phosphine-diamine ligand. Chemical Communications, 2013, 49, 10245.	2.2	23
58	Organometallic chemistry of bromodifluoromethyl substituted phosphines. The development of a novel nickel catalysed Pâ€“C bond forming reaction. Dalton Transactions, 2003, , 4393-4394.	1.6	22
59	Palladium complexes of new bulky fluorinated diphosphines give particularly active and regioselective catalysts for hydroxycarbonylation of styrene. Dalton Transactions, 2008, , 1976.	1.6	22
60	STA-27, a porous Lewis acidic scandium MOF with an unexpected topology type prepared with 2,3,5,6-tetrakis(4-carboxyphenyl)pyrazine. Journal of Materials Chemistry A, 2019, 7, 5685-5701.	5.2	22
61	Exploring the role of phosphorus substituents on the enantioselectivity of Ru-catalysed ketone hydrogenation using tridentate phosphine-diamine ligands. Catalysis Science and Technology, 2011, 1, 1336.	2.1	20
62	Isomerisation versus carbonylative pathways in the hydroxy-carbonylation, methoxy-carbonylation, and amino-carbonylation of N-tosyl-3-pyrroline. Catalysis Science and Technology, 2016, 6, 7477-7485.	2.1	20
63	A modular family of phosphine-phosphoramidite ligands and their hydroformylation catalysts: steric tuning impacts upon the coordination geometry of trigonal bipyramidal complexes of type [Rh(H)(CO)‹sub›2‹/sub›(P^P*)]. Catalysis Science and Technology, 2016, 6, 118-124.	2.1	20
64	Co-ordination chemistry and metal catalysed carbonylation reactions using 8-(diphenylphosphino)methylaminoquinoline: a ligand that displays monodentate, bidentate and tridentate co-ordination modes. Dalton Transactions RSC, 2002, , 1618-1624.	2.3	19
65	Diastereoselective and Branched-Aldehyde-Selective Tandem Hydroformylationâ€“Hemiaminal Formation: Synthesis of Functionalized Piperidines and Amino Alcohols. Organic Letters, 2017, 19, 2845-2848.	2.4	19
66	A supramolecular approach to chiral ligand modification: coordination chemistry of a multifunctionalised tridentate amine-phosphine ligand. New Journal of Chemistry, 2008, 32, 689.	1.4	17
67	Application of palladium (trioxo-adamantyl cage phosphine)chloride complexes as catalysts for the alkoxycarbonylation of styrene; Pd catalysed tert-butoxycarbonylation of styrene. Catalysis Science and Technology, 2012, 2, 715.	2.1	17
68	Catalytic Hydrogenation of Low-Reactivity Carbonyl Groups Using BifuncÂtional Chiral Tridentate Ligands. Synlett, 2014, 25, 1371-1380.	1.0	17
69	Understanding Catalyst Structureâ€“Selectivity Relationships in Pd-Catalyzed Enantioselective Methoxycarbonylation of Styrene. Organometallics, 2020, 39, 4544-4556.	1.1	17
70	Effect of Ligand Backbone on the Selectivity and Stability of Rhodium Hydroformylation Catalysts Derived from Phospholane-Phosphites. Organometallics, 2021, 40, 3966-3978.	1.1	13
71	A consecutive process for Câ€“C and Câ€“N bond formation with high enantio-and diastereo-control: direct reductive amination of chiral ketones using hydrogenation catalysts. Chemical Communications, 2019, 55, 6409-6412.	2.2	12
72	Preparation and coordination chemistry of Ph2P(CH2)nNHPiPr2 (n=2, 3). Polyhedron, 2002, 21, 2639-2645.	1.0	11

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73	Enantio- and Diastereoselective Hydrogenation of a Fluorinated Diketone. Synlett, 2007, 2007, 1739-1741.	1.0	10
74	The first organocatalytic carbonyl-ene reaction: isomerisation-free C-C bond formations catalysed by H-bonding thio-ureas. Beilstein Journal of Organic Chemistry, 2007, 3, 24.	1.3	10
75	A convenient catalyst system for microwave accelerated cross-coupling of a range of aryl boronic acids with aryl chlorides. Beilstein Journal of Organic Chemistry, 2007, 3, 18.	1.3	10
76	New phosphine-diamine and phosphine-amino-alcohol tridentate ligands for ruthenium catalysed enantioselective hydrogenation of ketones and a concise lactone synthesis enabled by asymmetric reduction of cyano-ketones. Chemistry Central Journal, 2012, 6, 151.	2.6	10
77	Catalytic constructive deoxygenation of lignin-derived phenols: new Câ€“C bond formation processes from imidazole-sulfonates and ether cleavage reactions. Chemical Communications, 2014, 50, 11511-11513.	2.2	10
78	Hydrogenation of unactivated enamines to tertiary amines: rhodium complexes of fluorinated phosphines give marked improvements in catalytic activity. Beilstein Journal of Organic Chemistry, 2015, 11, 622-627.	1.3	10
79	Remarkable co-catalyst effects on the enantioselective hydrogenation of unfunctionalised enamines: both enantiomers of product from the same enantiomer of catalyst. Catalysis Science and Technology, 2016, 6, 677-680.	2.1	10
80	COâ€Free Enantioselective Hydroformylation of Functionalised Alkenes: Using a Dual Catalyst System to Give Improved Selectivity and Yield. Advanced Synthesis and Catalysis, 2019, 361, 4334-4341.	2.1	10
81	A mechanistic investigation into the elimination of phosphonium salts from rhodiumâ€“TRIPHOS complexes under methanol carbonylation conditions. Dalton Transactions, 2008, , 4946.	1.6	9
82	Composition of catalyst resting states of hydroformylation catalysts derived from bulky mono-phosphorus ligands, rhodium dicarbonyl acetylacetonate and syngas. Molecular Catalysis, 2017, 434, 116-122.	1.0	9
83	High iso Aldehyde Selectivity in the Hydroformylation of Shortâ€Chain Alkenes. Angewandte Chemie, 2019, 131, 2142-2146.	1.6	9
84	Microwave accelerated Suzuki coupling of chloro-aryl phosphine-oxides: A method for introducing diversity into phosphine ligands. Journal of Molecular Catalysis A, 2008, 284, 46-51.	4.8	8
85	Iridium complexes of chiral diamines containing carbon and nitrogen stereocentres: synthesis, structure and evaluation as transfer hydrogenation catalysts. New Journal of Chemistry, 2009, 33, 466-470.	1.4	8
86	Less hindered ligands give improved catalysts for the nickel catalysed Grignard cross-coupling of aromatic ethers. Catalysis Science and Technology, 2018, 8, 328-334.	2.1	8
87	Rhodium catalysts derived from a fluorinated phanephos ligand are highly active catalysts for direct asymmetric reductive amination of secondary amines. Tetrahedron, 2021, 80, 131863.	1.0	6
88	One ponytail will do: new partially fluorinated phosphines with applications in fluorous biphasic solvent systems. Journal of Organometallic Chemistry, 2003, 665, 65-68.	0.8	5
89	First examples of Mâ€“Seâ€“Pâ€“Nâ€“N heterocycles. Inorganic Chemistry Communication, 2001, 4, 115-118.	1.8	4
90	Deoxygenation of Pyridine N-Oxides by Palladium-Catalysed Transfer ÂOxidation of Trialkylamines. Synlett, 2008, 2008, 2579-2582.	1.0	4

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91	Reaction of a rhodium(I) carbonyl complex of a para-dimethylaminophenyl substituted diphosphine with methyl iodide and hydrogen iodide. Inorganica Chimica Acta, 2009, 362, 4263-4267.	1.2	4
92	The Stability of Imidazolidinones is the Primary Influence on the Catalytic Activity of Proline Amides and Proline Sulfonamides in Enamine Catalysis Using Alkyl Aldehyde Substrates. European Journal of Organic Chemistry, 2013, 2013, 141-147.	1.2	3
93	Phospholaneâ€Phosphite Ligands for Rh Catalyzed Enantioselective Conjugate Addition: Unusually Reactive Catalysts for Challenging Couplings. European Journal of Organic Chemistry, 2020, 2020, 3071-3076.	1.2	2
94	Co-Ordination Chemistry of a Novel Diphosphine Ligand Containing a P-N-Si-N-P Backbone. Phosphorus, Sulfur and Silicon and the Related Elements, 2001, 169, 5-8.	0.8	1
95	Suzuki Coupling Reactions. , 2005, , 59-90.		1
96	Rhodium-Catalyzed Hydroformylation of Unsaturated Esters.. ChemInform, 2004, 35, no.	0.1	0
97	Enantioselective Reduction of Benzofuranyl Aryl Ketones. Synlett, 2011, 2011, 65-68.	1.0	0