Joseph M O'connor

List of Publications by Year
in descending order

86 papers	2,619 citations	218381 26 h-index	197535 49 g-index
88 all docs	88 docs citations	88 times ranked	1971 citing authors

#	Article	IF	Citations
1	Ring-slippage chemistry of transition metal cyclopentadienyl and indenyl complexes. Chemical Reviews, 1987, 87, 307-318.	23.0	478
2	Hexahapto Metal Coordination to Curved Polyaromatic Hydrocarbon Surfaces:Â The First Transition Metal Corannulene Complex. Journal of the American Chemical Society, 1997, 119, 4781-4782.	6.6	124
3	Structural and Spectroscopic Characterization of a Charge-Separated Uranium Benzophenone Ketyl Radical Complex. Journal of the American Chemical Society, 2008, 130, 6567-6576.	6.6	103
4	Some aspects of palladium-catalyzed reactions of aryl and vinylic halides with conjugated dienes in the presence of mild nucleophiles. Journal of Organic Chemistry, 1983, 48, 807-809.	1.7	94
5	Nucleophilic Addition to ap-Benzyne Derived from an Enediyne:Â A New Mechanism for Halide Incorporation into Biomolecules. Journal of the American Chemical Society, 2007, 129, 4795-4799.	6.6	89
6	Metal-catalyzed decarbonylation of primary aldehydes at room temperature. Journal of Organic Chemistry, 1992, 57, 5075-5077.	1.7	80
7	Charge-Separation in Uranium Diazomethane Complexes Leading to Câ˜H Activation and Chemical Transformation. Journal of the American Chemical Society, 2008, 130, 2806-2816.	6.6	76
8	[2 + 2 + 1] Alkyne Cyclotrimerizations:â€‰ A Metallacyclopentadiene Route to Fulvenes. Journal of the American Chemical Society, 1997, 119, 3631-3632.	6.6	69
9	Synthesis of electrophilic (dimethylcarbene)iron complexes. Journal of the American Chemical Society, 1982, 104, 3761-3762.	6.6	68
10	Surreptitious involvement of a metallacycle substituent in metal-mediated alkyne cleavage chemistry. Journal of the American Chemical Society, 1990, 112, 9013-9015.	6.6	59
11	A Transition-Metal-Catalyzed Enediyne Cycloaromatization. Journal of the American Chemical Society, 2005, 127, 16342-16343.	6.6	59
12	Interconversions of .eta.5-cyclopentadienyl, .eta.1-cyclopentadienyl, and ionic ".eta.0"-cyclopentadienyl rhenium compounds - x-ray crystal structure of tetrakis(trimethylphosphine)methylnitrosylrhenium cyclopentadienide. Journal of the American Chemical Society, 1985, 107, 1241-1246.	6.6	55
13	Inhibition and Acceleration of the Bergman Cycloaromatization Reaction by the Pentamethylcyclopentadienyl Ruthenium Cation. Journal of the American Chemical Society, 2000, 122, 12057-12058.	6.6	51
14	Ruthenium-Mediated Cycloaromatization of Acyclic Enediynes and Dienynes at Ambient Temperature. Journal of the American Chemical Society, 2002, 124, 3506-3507.	6.6	50
15	Synthesis, structure, and reactivity of metallacycle-carbene and -bis(carbene) complexes. A new intramolecular carbene-carbene coupling process. Journal of the American Chemical Society, 1990, 112, 6232-6247.	6.6	49
16	The .eta.5 to .eta.1 conversions of indenyltricarbonylrhenium. Organometallics, 1985, 4, 384-388.	1.1	48
17	Formation of a stable metallacyclobutene complex from .alpha.-diazocarbonyl and alkyne substrates. Journal of the American Chemical Society, 1993, 115, 1586-1588.	6.6	46
18	Stepwise assembly of a trinuclear bis(carbyne) complex from cyclopentadienylcobalt units with bis(trimethylsilyl)acetylene: isolation and conversion of Cp2M2(RC.tplbond.CR) and CpM3(RC.tplbond.CR) [M = Co and R = (CH3)3Si]. Organometallics, 1986, 5, 394-397.	1.1	43

#	Article	IF	Citations
19	Acceleration of Conjugated Dienyne Cycloaromatization. Chemical Reviews, 2011, 111, 7904-7922.	23.0	41
20	Intermediates in the associative phosphine substitution reaction of (.eta.5-C5H5)Re(CO)3. Organometallics, 1983, 2, 535-538.	1.1	40
21	Iridacyclopentadiene Reactions with Terminal Alkynes:Â Tandem Cycloaromatization and Orthometalation. Organometallics, 2001, 20, 3710-3717.	1.1	37
22	On the mechanism of a new metallacycle annelation reaction: evidence for an intramolecular methoxy group transfer. Journal of the American Chemical Society, 1990, 112, 9663-9665.	6.6	35
23	Hydrotris(pyrazolyl)borate Metallacycles:Â Conversion of a Late-Metal Metallacyclopentene to a Stable Metallacyclopentadieneâ^'Alkene Complex. Journal of the American Chemical Society, 2002, 124, 2434-2435.	6.6	34
24	Ring selectivity and migratory aptitude of Cp*Ru+ complexation to acecorannuleneElectronic supplementary information (ESI) available: experimental details. See http://www.rsc.org/suppdata/cc/b3/b316061k/. Chemical Communications, 2004, , 950.	2.2	34
25	Late metal metallacyclobutene chemistry: conversion to .eta.4-vinylketene, .eta.4-vinylketenimine, and furan products. Journal of the American Chemical Society, 1993, 115, 9846-9847.	6.6	29
26	The first stable metallacycle-carbene complexes: structural characterization of [cyclic] Ir(CR:CRCR:CR)(PPh3)2(CO)(:C(CH2)3O)+BF4-, R = CO2CH3. Journal of the American Chemical Society, 1987, 109, 7578-7579.	6.6	27
27	Oxidative coupling of cis-carbene ligands: synthesis, structure, and reactivity of an iridium(III) bis(oxacyclopentylidene) complex. Journal of the American Chemical Society, 1989, 111, 4129-4130.	6.6	27
28	Sulfoxide Carbonâ^'Sulfur Bond Activation. Journal of the American Chemical Society, 2005, 127, 4180-4181.	6.6	27
29	Cobalt 1,3-Diisopropyl-1H-imidazol-2-ylidene Complexes: Synthesis, Solid-State Structures, and Quantum Chemistry Calculations. Organometallics, 2010, 29, 6695-6702.	1.1	27
30	Prop-2-ynyl alcohol as a precursor to the Î·1-ethenyl ligand. Journal of the Chemical Society Chemical Communications, 1995, , 1209-1210.	2.0	26
31	Keto-enol tautomerization in metal-acyl complexes: the enolization properties of bimetallic .mu.-malonyl compounds. Journal of the American Chemical Society, 1991, 113, 4530-4544.	6.6	25
32	A new mode of carbene reactivity: coupling with two alkynes to generate highly substituted cyclopentadiene products. Journal of the American Chemical Society, 1989, 111, 1889-1891.	6.6	24
33	Metallacycle annelation: reaction of a metallacycle .alpha.-substituent and a vinylidene ligand to give a bicyclic metallalactone complex. Journal of the American Chemical Society, 1990, 112, 9627-9628.	6.6	24
34	Synthesis and Structure of Annelated Carbon Rings Containing a Bridgehead Transition Metal. Angewandte Chemie International Edition in English, 1990, 29, 543-545.	4.4	23
35	A New Metal-Mediated Cyclization: Conversion of a Metallacyclobutene and Alkyne Substrates to .eta.4-Cyclopentadiene Products. Journal of the American Chemical Society, 1995, 117, 8029-8030.	6.6	22
36	Synthesis and Solid State Characterization of a Meridional Triphos Iridium Metallacycleâ^'Carbene Complex:â€‰ [{PhP(CH2CH2PPh2)2} Ir(CRCRCRCR){=C(CH2)3O}][BF4] (R = Co2Me). Organometallics, 2001, 20, 1482-1485.	1.1	22

#	Article	IF	Citations
37	An Î·6-Dienyne Transition-Metal Complex. Journal of the American Chemical Society, 2005, 127, 9346-9347.	6.6	20
38	Carbene ligand insertion into a metallacycle ring: a metallacyclopentadiene to metallacyclobutene conversion. Journal of the American Chemical Society, 1990, 112, 6731-6732.	6.6	19
39	Synthesis and reactions of a cyclopentadienylidene ketene complex. Journal of the American Chemical Society, 1985, 107, 3172-3177.	6.6	18
40	Reactions of a Metallacyclobutene Complex with Alkenes. Journal of the American Chemical Society, 2008, 130, 10093-10095.	6.6	18
41	Transition-Metal Hydrides as Hydrogen Atom Donors: Stronger Metalâ^'Hydrogen Bonds Can Be Advantageous. Organometallics, 2008, 27, 4280-4281.	1.1	18
42	New transition metal binding modes for creatinine: molecular structures of [(C4R4)Ir(C4H7N3O)(PPh3)2Cl] and [(C4R4)Ir(C4H7N3O)(PPh3)2]BF4, (R = CO2CH3). Polyhedron, 1997, 16, 2029-2035.	1.0	17
43	Thermolysis of [(Î·5-C5H5)Co(PPh3)(Î·2-DMAD)], revisited: a solid state analysis reveals the true structure of the triphenylphosphineâ€“alkyne coupling product. Journal of Organometallic Chemistry, 2003, 671, 1-7.	0.8	17
44	Chemistry at the Alkyneâ€“Carbene Intersection: A Metallacyclobuteneâ^'Î·³-Vinylcarbene Equilibration. Journal of the American Chemical Society, 2013, 135, 8826-8829.	6.6	17
45	Formal Vinylidene Ligand Insertion into a Metal Halide Bond. Journal of the American Chemical Society, 1995, 117, 8861-8862.	6.6	16
46	Diazoketones Undergo Reaction with a Cobalt Alkyne Complex To Give Highly Functionalized Conjugated Dienes. Organometallics, 1997, 16, 5589-5591.	1.1	16
47	Conversion of an .eta.5-C5H5 complex into a cyclopentadienylidene ketene complex. Journal of the American Chemical Society, 1983, 105, 2919-2920.	6.6	15
48	Conversion of a Metallacyclobutene to Cobaltâ^'Allene Complexes. Journal of the American Chemical Society, 1998, 120, 1100-1101.	6.6	15
49	Conversion of (Î·5-C5H5)Co(PPh3)2and Nitro Compounds to Mononuclear Î·1(N)-Nitrosoalkyl and Dinuclear Î¼-Î·1(N):Î·2(N,O)-Nitrosoaryl Complexes. Organometallics, 2003, 22, 5268-5273.	1.1	14
50	Nucleophilic cleavage of the sp3 carbon-oxygen bond in alkoxycarbene complexes: conversion of 2-oxacyclopentylidene ligands to pyridinium-substituted acyl ligands. Organometallics, 1988, 7, 2060-2062.	1.1	13
51	Synthesis and Structural Characterization of a Diiridium .mu.-Acyl Complex. Organometallics, 1995, 14, 2102-2105.	1.1	13
52	Fluoride induced isomerization of cobalt diene complexes. Tetrahedron Letters, 1997, 38, 5241-5244.	0.7	13
53	Transitionâ€Metal Catalysis of Triene 6Ï€ Electrocyclization: The Ï€â€Complexation Strategy Realized. Angewandte Chemie - International Edition, 2020, 59, 17958-17965.	7.2	13
54	Synthesis and structural characterization of bimetallic .mu.-malonyl complexes. Journal of the American Chemical Society, 1990, 112, 7585-7598.	6.6	12

#	Article	IF	Citations
55	Bimetallic .mu.-malonyl compounds. Synthesis, characterization, and reactivity of (.eta.5-C5Me5)Re(NO)(PPh3)-cyclo[(.mu.-.eta.1,.eta.2-COCH2CO)M(CO)4] (M = Re, Mn). Organometallics, 1987, 6, 1987-1989.	1.1	11
56	Synthesis and characterization of a novel bimetallic .mu.-malonyl complex. The first x-ray crystal structure of alkali metal chelation by a neutral malonyl compound. Journal of the American Chemical Society, 1989, 111, 7633-7634.	6.6	11
57	Phosphine induced cyclopentadienyl ring slippage catalyzes CO insertion into a methyl rhenium compound to produce an acetyl rhenium compound. Journal of Organometallic Chemistry, 1992, 428, 99-105.	0.8	11
58	A high-yield conversion of trans-carbonylchlorobis(triphenylphosphine)rhodium to chlorotris(triphenylphosphine) rhodium. Inorganic Chemistry, 1993, 32, 1866-1867.	1.9	11
59	Nitroso Compounds Serve as Precursors to Late-Metal Î·²(N,O)-Hydroxylamido Complexes. Organometallics, 2009, 28, 394-396.	1.1	11
60	Ring-strain effects on the oxidation potential of enediynes and enediyne complexes. Organic and Biomolecular Chemistry, 2003, 1, 763-766.	1.5	10
61	Observation of a transition metal-enol complex and stereoselective keto-enol tautomerization in transition metal-acyl compounds. Journal of the American Chemical Society, 1988, 110, 4448-4450.	6.6	9
62	Structural Characterization of (C₅H₅)Co(PPh₃)(Î·²-alkyne) and (C₅H₅)Co(Î·²-alkyne) Complexes of Highly Polarized Alkynes. Organometallics, 2013, 32, 5473-5480.	1.1	9
63	Envelope-Flip Dynamics in CpCo(Diene) Complexes:Â an ab Initio Quantum Mechanical Study. Journal of Physical Chemistry A, 1999, 103, 10126-10131.	1.1	8
64	Synthesis and solid-state structures of (triphos)iridacyclopentadiene complexes as models for vinylidene intermediates in the [2+2+1] cyclotrimerization of alkynes. Inorganica Chimica Acta, 2010, 364, 220-225.	1.2	8
65	Addition of Dissimilar Carbenes across an Unsymmetrically Substituted Alkyne: Regio- and Stereoselective Synthesis of Trisubstituted 1,3-Dienes. Organometallics, 2011, 30, 369-371.	1.1	8
66	Photoactivated Transition-Metal Triggers for Ambient Temperature Enediyne and Dienyne Cyclization: Ruthenium-Î·⁶-Naphthalene Complexes. Organometallics, 2017, 36, 3967-3973.	1.1	7
67	Electrochemistry Studies of a Metallacyclobutene Complex:Â Synthesis of a Furan Product by Oxidation of a Cobaltacyclobutene. Organometallics, 1998, 17, 1007-1009.	1.1	6
68	Iridium(III)â€“vinylidene chemistry: Conversion of an iridacyclopentadiene-chlorido complex and terminal alkynes to iridacyclopentadieneâ€“vinyl complexes. Inorganica Chimica Acta, 2008, 361, 3033-3041.	1.2	6
69	Thermodynamic control of stereochemistry in alkylation of chiral transition-metal .beta.-oxoacyl compounds: enolization without epimerization. Organometallics, 1988, 7, 2422-2424.	1.1	5
70	Low-valent Organorhenium Compounds. , 1995, , 167-229.		5
71	Protonation of Cobaltâˆ'Allene Constitutional Isomers: Highly Selective Formation of Cobaltâˆ'Allyl and Oxacobaltacyclopentadiene Complexes. Organometallics, 2010, 29, 6161-6164.	1.1	5
72	Reactivity studies on bimetallic Î¼-malonyl complexes: cleavage and alkylation chemistry of the malonyl ligand. Journal of Organometallic Chemistry, 1993, 455, 143-156.	0.8	4

#	Article	IF	Citations
73	Conversion of a metallaenolate complex to a bimetallic Î¼-ketene complex: molecular structure of (Î·5-C5Me5)(NO)(PPh3)Re[Î¼-(COCH2)-C1:C2]Re(CO)4(PPh3). Polyhedron, 1993, 12, 527-532.	1.0	3
74	A Photochemical Metallocene Route to Anionic Enediynes: Synthesis, Solid-State Structures, and ab Initio Computations on Cyclopentadienidoenediynes. Journal of the American Chemical Society, 2010, 132, 11030-11032.	6.6	3
75	Synthesis of the cobaltâ€“alkyne complex (Î·5-C5H5)(PPh3)Co{Î·2-(Me3Si)CC(CO2Et)} and structural characterization of trimethylsilyl substituted cobaltacyclopentadiene complexes derived therefrom. Journal of Organometallic Chemistry, 2014, 749, 100-105.	0.8	3
76	Structure and dynamics in unsymmetrically substituted fiveâ€coordinate iridacyclopentadiene complexes. Journal of Physical Organic Chemistry, 2015, 28, 199-202.	0.9	3
77	Stereospecific Oxidative Demetallation of Highly Functionalized CpCo(1,3-Diene) Complexes: An Experimental and Computational Study. Synlett, 2015, 26, 2243-2246.	1.0	3
78	Stereoselective Formation of Î·⁶-Arene Ruthenium(II) Complexes via Metal-Triggered Bergman and Hopf Cycloaromatizations. Organometallics, 2017, 36, 4256-4267.	1.1	3
79	Structure of [P(CH3)(C6H5)3]2[{IPd[CC(=O)(OCH3)]4}2]. Acta Crystallographica Section C: Crystal Structure Communications, 1989, 45, 1626-1628.	0.4	2
80	The Isolation of a Large Cyclopentadienylcobaltsulfide Cluster. The Synthesis and Crystal Structure of Octahedral closo-(Î·5-C5H5Co)5S. Journal of Cluster Science, 2009, 20, 261-265.	1.7	2
81	Selective Oxidation of a Highly-Substituted Î·4-Cyclopentadiene Cobalt Complex: Partitioning Between Uncomplexed Diene and Cobalticinium Cation Products. Synlett, 1989, 1989, 57-59.	1.0	1
82	Acid-Induced Liberation of Polysubstituted Cyclopentadiene Ligands from Cyclopentadienyl Cobalt: A [2 + 2 + 1] Cycloaddition Route toward 1,2,4-Trisubstituted Cyclopentadienes. Journal of Organic Chemistry, 2019, 84, 13992-14004.	1.7	1
83	Triple carbon â€“ fluorine bond activation for modification of metal ligands: Synthesis of the first Î·5-C5Me4(CHPh2) transition metal complex. Polyhedron, 2019, 157, 406-409.	1.0	1
84	NMR cyberinfrastructure: Web-based virtual file system for managing distributed NMR data. , 2010, , .		0
85	Metal-Alkyne and Metallacyclobutene Reactivity toward a Diazoacetamide: Conversion to Highly Functionalized 1,3-Diene Complexes and Oxametallacyclopentadienes. Organometallics, 2019, 38, 863-869.	1.1	0
86	Transitionâ€Metal Catalysis of Triene 6Ï€ Electrocyclization: The Ï€â€Complexation Strategy Realized. Angewandte Chemie, 2020, 132, 18114-18121.	1.6	0