# Melanie S Sanford

## List of Publications by Citations

Source: https://exaly.com/author-pdf/2080357/melanie-s-sanford-publications-by-citations.pdf

Version: 2024-04-19

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

181 88 219 33,095 h-index g-index citations papers 10.8 8.03 35,687 279 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
219	Palladium-catalyzed ligand-directed C-H functionalization reactions. <i>Chemical Reviews</i> , <b>2010</b> , 110, 1147	-668.1	5150
218	Controlling site selectivity in palladium-catalyzed C-H bond functionalization. <i>Accounts of Chemical Research</i> , <b>2012</b> , 45, 936-46	24.3	1166
217	Mechanism and activity of ruthenium olefin metathesis catalysts. <i>Journal of the American Chemical Society</i> , <b>2001</b> , 123, 6543-54	16.4	1000
216	A highly selective catalytic method for the oxidative functionalization of C-H bonds. <i>Journal of the American Chemical Society</i> , <b>2004</b> , 126, 2300-1	16.4	910
215	Transition metal catalyzed oxidative functionalization of carbonBydrogen bonds. <i>Tetrahedron</i> , <b>2006</b> , 62, 2439-2463	2.4	815
214	Oxidative C-H activation/C-C bond forming reactions: synthetic scope and mechanistic insights. Journal of the American Chemical Society, <b>2005</b> , 127, 7330-1	16.4	688
213	High-valent organometallic copper and palladium in catalysis. <i>Nature</i> , <b>2012</b> , 484, 177-85	50.4	651
212	Palladium-catalyzed oxygenation of unactivated sp3 C-H bonds. <i>Journal of the American Chemical Society</i> , <b>2004</b> , 126, 9542-3	16.4	632
211	Merging visible-light photocatalysis and transition-metal catalysis in the copper-catalyzed trifluoromethylation of boronic acids with CF3I. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 9034-7	16.4	576
210	Room temperature palladium-catalyzed 2-arylation of indoles. <i>Journal of the American Chemical Society</i> , <b>2006</b> , 128, 4972-3	16.4	570
209	Catalytic and highly regioselective cross-coupling of aromatic C-H substrates. <i>Journal of the American Chemical Society</i> , <b>2007</b> , 129, 11904-5	16.4	532
208	Palladium-catalyzed fluorination of carbon-hydrogen bonds. <i>Journal of the American Chemical Society</i> , <b>2006</b> , 128, 7134-5	16.4	532
207	Room-temperature C-H arylation: merger of Pd-catalyzed C-H functionalization and visible-light photocatalysis. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 18566-9	16.4	513
206	Synthesis and activity of ruthenium alkylidene complexes coordinated with phosphine and N-heterocyclic carbene ligands. <i>Journal of the American Chemical Society</i> , <b>2003</b> , 125, 2546-58	16.4	491
205	Cascade catalysis for the homogeneous hydrogenation of CO2 to methanol. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 18122-5	16.4	472
204	Synthetic and mechanistic studies of Pd-catalyzed C-H arylation with diaryliodonium salts: evidence for a bimetallic high oxidation state Pd intermediate. <i>Journal of the American Chemical Society</i> , <b>2009</b> , 131, 11234-41	16.4	458
203	Oxone as an inexpensive, safe, and environmentally benign oxidant for C-H bond oxygenation. <i>Organic Letters</i> , <b>2006</b> , 8, 1141-4	6.2	382

# (2011-2001)

202	New insights into the mechanism of ruthenium-catalyzed olefin metathesis reactions. <i>Journal of the American Chemical Society</i> , <b>2001</b> , 123, 749-50	16.4	374
201	A Versatile Precursor for the Synthesis of New Ruthenium Olefin Metathesis Catalysts. <i>Organometallics</i> , <b>2001</b> , 20, 5314-5318	3.8	340
200	Unusually stable palladium(IV) complexes: detailed mechanistic investigation of C-O bond-forming reductive elimination. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 12790-1	16.4	333
199	Detailed study of C-O and C-C bond-forming reductive elimination from stable C2N2O2-ligated palladium(IV) complexes. <i>Journal of the American Chemical Society</i> , <b>2009</b> , 131, 10974-83	16.4	320
198	Reactivity of Pd(II) complexes with electrophilic chlorinating reagents: isolation of Pd(IV) products and observation of C-Cl bond-forming reductive elimination. <i>Journal of the American Chemical Society</i> , <b>2007</b> , 129, 15142-3	16.4	320
197	Reactions of hypervalent iodine reagents with palladium: mechanisms and applications in organic synthesis. <i>Inorganic Chemistry</i> , <b>2007</b> , 46, 1924-35	5.1	319
196	Tandem amine and ruthenium-catalyzed hydrogenation of CO2 to methanol. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 1028-31	16.4	315
195	Insights into directing group ability in palladium-catalyzed C-H bond functionalization. <i>Journal of the American Chemical Society</i> , <b>2008</b> , 130, 13285-93	16.4	315
194	A simple catalytic method for the regioselective halogenation of arenes. <i>Organic Letters</i> , <b>2006</b> , 8, 2523	-66.2	310
193	Highly regioselective catalytic oxidative coupling reactions: synthetic and mechanistic investigations. <i>Journal of the American Chemical Society</i> , <b>2006</b> , 128, 14047-9	16.4	307
192	N-Acyloxyphthalimides as nitrogen radical precursors in the visible light photocatalyzed room temperature C-H amination of arenes and heteroarenes. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 5607-10	16.4	290
191	Synthesis, structure, and activity of enhanced initiators for olefin metathesis. <i>Journal of the American Chemical Society</i> , <b>2003</b> , 125, 10103-9	16.4	286
190	Aryl-CF(3) bond-forming reductive elimination from palladium(IV). <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 2878-9	16.4	273
189	Construction of tetrahydrofurans by PdII/PdIV-catalyzed aminooxygenation of alkenes. <i>Angewandte Chemie - International Edition</i> , <b>2007</b> , 46, 5737-40	16.4	266
188	Scope and selectivity in palladium-catalyzed directed CH bond halogenation reactions. <i>Tetrahedron</i> , <b>2006</b> , 62, 11483-11498	2.4	265
187	Carbon-Hydrogen (C-H) Bond Activation at Pd: A Frontier in C-H Functionalization Catalysis. <i>Chemical Science</i> , <b>2015</b> , 6, 70-76	9.4	261
186	Synthesis and reactivity of a mono-sigma-aryl palladium(IV) fluoride complex. <i>Journal of the American Chemical Society</i> , <b>2009</b> , 131, 3796-7	16.4	255
185	Silver-mediated trifluoromethylation of arenes using TMSCF3. <i>Organic Letters</i> , <b>2011</b> , 13, 5464-7	6.2	247

184	Heterogenization of homogeneous catalysts in metal-organic frameworks via cation exchange. Journal of the American Chemical Society, <b>2013</b> , 135, 10586-9	16.4	240
183	Palladium-catalysed transannular C-H functionalization of alicyclic amines. <i>Nature</i> , <b>2016</b> , 531, 220-224	50.4	235
182	Late-stage [F]Fluorination: New Solutions to Old Problems. Chemical Science, 2014, 5, 4545-4553	9.4	235
181	Regioselectivity in palladium-catalyzed C-H activation/oxygenation reactions. <i>Organic Letters</i> , <b>2005</b> , 7, 4149-52	6.2	218
180	Aerobic Pd-catalyzed sp3 C-H olefination: a route to both N-heterocyclic scaffolds and alkenes. Journal of the American Chemical Society, <b>2011</b> , 133, 6541-4	16.4	214
179	Mechanism of benzoquinone-promoted palladium-catalyzed oxidative cross-coupling reactions. <i>Journal of the American Chemical Society</i> , <b>2009</b> , 131, 9651-3	16.4	214
178	Oxidation of a cyclometalated Pd(II) dimer with "CF3+": formation and reactivity of a catalytically competent monomeric Pd(IV) aquo complex. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 1468.	2 <del>-1</del> 6.4	213
177	Practical method for the Cu-mediated trifluoromethylation of arylboronic acids with CF3 radicals derived from NaSO2CF3 and tert-butyl hydroperoxide (TBHP). <i>Organic Letters</i> , <b>2012</b> , 14, 4979-81	6.2	190
176	Design, synthesis, and carbon-heteroatom coupling reactions of organometallic nickel(IV) complexes. <i>Science</i> , <b>2015</b> , 347, 1218-20	33.3	188
175	Mechanistic and computational studies of oxidatively-induced aryl-CF3 bond-formation at Pd: rational design of room temperature aryl trifluoromethylation. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 7577-84	16.4	178
174	Catalytic CO2 Hydrogenation to Formate by a Ruthenium Pincer Complex. ACS Catalysis, 2013, 3, 2412-	2 <b>4</b> 3.6	176
173	Synthesis of cyclopropanes via Pd(II/IV)-catalyzed reactions of enynes. <i>Journal of the American Chemical Society</i> , <b>2007</b> , 129, 5836-7	16.4	175
172	Pd-catalyzed C-H fluorination with nucleophilic fluoride. <i>Organic Letters</i> , <b>2012</b> , 14, 4094-7	6.2	171
171	Copper-catalyzed [18F]fluorination of (mesityl)(aryl)iodonium salts. <i>Organic Letters</i> , <b>2014</b> , 16, 3224-7	6.2	166
170	Synthesis of [18F]Arenes via the Copper-Mediated [18F]Fluorination of Boronic Acids. <i>Organic Letters</i> , <b>2015</b> , 17, 5780-3	6.2	166
169	Combining Transition Metal Catalysis with Radical Chemistry: Dramatic Acceleration of Palladium-Catalyzed C-H Arylation with Diaryliodonium Salts. <i>Advanced Synthesis and Catalysis</i> , <b>2012</b> , 354, 3517-3522	5.6	165
168	O-acetyl oximes as transformable directing groups for Pd-catalyzed C-H bond functionalization. <i>Organic Letters</i> , <b>2010</b> , 12, 532-5	6.2	165
167	Cu(OTf)2-mediated fluorination of aryltrifluoroborates with potassium fluoride. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 16292-5	16.4	160

# (2007-2015)

166	Evolutionary Design of Low Molecular Weight Organic Anolyte Materials for Applications in Nonaqueous Redox Flow Batteries. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 14465-72	16.4	154
165	Highly dispersed palladium(II) in a defective metal-organic framework: application to C-H activation and functionalization. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 20138-41	16.4	151
164	Chelating N-heterocyclic carbene alkoxide as a supporting ligand for Pd(II/IV) C-H bond functionalization catalysis. <i>Journal of the American Chemical Society</i> , <b>2009</b> , 131, 13912-3	16.4	150
163	Controlling site selectivity in Pd-catalyzed oxidative cross-coupling reactions. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 4455-64	16.4	147
162	Pyridine ligands as promoters in Pd(II/0)-catalyzed C-H olefination reactions. <i>Organic Letters</i> , <b>2012</b> , 14, 1760-3	6.2	146
161	Remarkably high reactivity of Pd(OAc)2/pyridine catalysts: nondirected C-H oxygenation of arenes. <i>Angewandte Chemie - International Edition</i> , <b>2011</b> , 50, 9409-12	16.4	144
160	Nitrate as a Redox Co-Catalyst for the Aerobic Pd-Catalyzed Oxidation of Unactivated sp(3)-C-H Bonds. <i>Chemical Science</i> , <b>2012</b> , 3, 3192-3195	9.4	142
159	Mild palladium-catalyzed C-H alkylation using potassium alkyltrifluoroborates in combination with MnF3. <i>Organic Letters</i> , <b>2013</b> , 15, 2302-5	6.2	142
158	Oxidatively intercepting Heck intermediates: Pd-catalyzed 1,2- and 1,1-arylhalogenation of alkenes. Journal of the American Chemical Society, <b>2008</b> , 130, 2150-1	16.4	141
157	Base-free nickel-catalysed decarbonylative Suzuki-Miyaura coupling of acid fluorides. <i>Nature</i> , <b>2018</b> , 563, 100-104	50.4	141
156	Cu-catalyzed fluorination of diaryliodonium salts with KF. Organic Letters, 2013, 15, 5134-7	6.2	135
155	Connecting binuclear Pd(III) and mononuclear Pd(IV) chemistry by Pd-Pd bond cleavage. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 12002-9	16.4	135
154	Catalyst Control of Site Selectivity in the PdII/IV-Catalyzed Direct Arylation of Naphthalene. <i>ACS Catalysis</i> , <b>2011</b> , 1, 170-174	13.1	131
153	Nucleophilic Deoxyfluorination of Phenols via Aryl Fluorosulfonate Intermediates. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 1452-1455	16.4	130
152	Catalyst-controlled selectivity in the C-H borylation of methane and ethane. <i>Science</i> , <b>2016</b> , 351, 1421-4	33.3	127
151	Mild copper-mediated fluorination of aryl stannanes and aryl trifluoroborates. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 4648-51	16.4	126
150	Carbon(sp(3))-fluorine bond-forming reductive elimination from palladium(IV) complexes. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 3414-7	16.4	121
149	CarbonNitrogen Bond-Forming Reactions of Palladacycles with Hypervalent Iodine Reagents.  Organometallics, 2007, 26, 1365-1370	3.8	120

148	Physical Organic Approach to Persistent, Cyclable, Low-Potential Electrolytes for Flow Battery Applications. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 2924-2927	16.4	118
147	C-H bond activation at palladium(IV) centers. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 1802	2 <del>-15</del> 6.4	118
146	Palladium-catalyzed C-H perfluoroalkylation of arenes. <i>Organic Letters</i> , <b>2011</b> , 13, 2548-51	6.2	118
145	Oxidatively induced reductive elimination from ((t)Bu2bpy)Pd(Me)2: palladium(IV) intermediates in a one-electron oxidation reaction. <i>Journal of the American Chemical Society</i> , <b>2009</b> , 131, 15618-20	16.4	118
144	Mechanism of the palladium-catalyzed arene C-H acetoxylation: a comparison of catalysts and ligand effects. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 3109-18	16.4	117
143	Synthesis and Reactivity of Neutral and Cationic Ruthenium(II) Tris(pyrazolyl)borate Alkylidenes. <i>Organometallics</i> , <b>1998</b> , 17, 5384-5389	3.8	117
142	Platinum-Catalyzed, Terminal-Selective C(sp(3))-H Oxidation of Aliphatic Amines. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 12796-9	16.4	116
141	Copper-Mediated Radiofluorination of Arylstannanes with [F]KF. Organic Letters, <b>2016</b> , 18, 5440-5443	6.2	114
140	Palladium-Catalyzed C-H Bond Acetoxylation via Electrochemical Oxidation. <i>Organic Letters</i> , <b>2018</b> , 20, 204-207	6.2	109
139	Mechanistic comparison between Pd-catalyzed ligand-directed C-H chlorination and C-H acetoxylation. <i>Organic Letters</i> , <b>2009</b> , 11, 4584-7	6.2	109
138	Platinum-catalyzed C-H arylation of simple arenes. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 15710-3	16.4	104
137	A detailed study of acetate-assisted C-H activation at palladium(IV) centers. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 6618-25	16.4	104
136	Oxidation of Ni(II) to Ni(IV) with Aryl Electrophiles Enables Ni-Mediated Aryl-CF3 Coupling. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 8034-7	16.4	103
135	Iron-Catalyzed Hydrogenation of Amides to Alcohols and Amines. ACS Catalysis, <b>2016</b> , 6, 6377-6383	13.1	101
134	Role of a Noninnocent Pincer Ligand in the Activation of CO2 at (PNN)Ru(H)(CO). <i>Organometallics</i> , <b>2012</b> , 31, 4643-4645	3.8	99
133	Role of Silver Salts in Palladium-Catalyzed Arene and Heteroarene CH Functionalization Reactions. <i>Organometallics</i> , <b>2017</b> , 36, 165-171	3.8	98
132	Palladium-catalyzed oxidative arylhalogenation of alkenes: synthetic scope and mechanistic insights. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 8419-27	16.4	89
131	Platinum and palladium complexes containing cationic ligands as catalysts for arene H/D exchange and oxidation. <i>Angewandte Chemie - International Edition</i> , <b>2010</b> , 49, 5884-6	16.4	88

130	Palladium-catalyzed C-H arylation of 2,5-substituted pyrroles. Organic Letters, 2011, 13, 288-91	6.2	86
129	Carbon-Carbon Bond-Forming Reductive Elimination from Isolated Nickel(III) Complexes. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 16105-16111	16.4	85
128	C(sp[)-O bond-forming reductive elimination from Pd(IV) with diverse oxygen nucleophiles. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 12771-5	16.4	84
127	High-Performance Oligomeric Catholytes for Effective Macromolecular Separation in Nonaqueous Redox Flow Batteries. <i>ACS Central Science</i> , <b>2018</b> , 4, 189-196	16.8	82
126	Platinum Model Studies for Palladium-Catalyzed Oxidative Functionalization of CH Bonds. <i>Organometallics</i> , <b>2005</b> , 24, 482-485	3.8	82
125	On the role of anionic ligands in the site-selectivity of oxidative CH functionalization reactions of arenes. <i>Chemical Science</i> , <b>2013</b> , 4, 2767	9.4	81
124	Competition between spI-C-N vs spI-C-F reductive elimination from Pd(IV) complexes. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 4097-100	16.4	79
123	Mechanism-Based Development of a Low-Potential, Soluble, and Cyclable Multielectron Anolyte for Nonaqueous Redox Flow Batteries. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 15378-1538	34 <sup>6.4</sup>	78
122	Palladium- and Nickel-Catalyzed Decarbonylative C-S Coupling to Convert Thioesters to Thioethers. Organic Letters, <b>2018</b> , 20, 44-47	6.2	77
121	Oxidatively Induced CarbonHalogen Bond-Forming Reactions at Nickel. <i>Organometallics</i> , <b>2009</b> , 28, 6142	<b>6.</b> 844	74
120	Cu-Mediated C-H F-Fluorination of Electron-Rich (Hetero)arenes. <i>Organic Letters</i> , <b>2017</b> , 19, 3939-3942	6.2	69
119	Pd-Catalyzed Decarbonylative Cross-Couplings of Aroyl Chlorides. <i>Organic Letters</i> , <b>2017</b> , 19, 4142-4145	6.2	67
118	Cyclopropenium Salts as Cyclable, High-Potential Catholytes in Nonaqueous Media. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1602027	21.8	67
117	CarbonHeteroatom Bond-Forming Reductive Elimination from Palladium(IV) Complexes. <i>Topics in Organometallic Chemistry</i> , <b>2011</b> , 61-84	0.6	66
116	Experimental and Computational Assessment of Reactivity and Mechanism in C(sp(3))-N Bond-Forming Reductive Elimination from Palladium(IV). <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 6049-60	16.4	66
115	Steric control of site selectivity in the Pd-catalyzed C-H acetoxylation of simple arenes. <i>Organic Letters</i> , <b>2013</b> , 15, 5428-31	6.2	65
114	Mechanism and Scope of Nickel-Catalyzed Decarbonylative Borylation of Carboxylic Acid Fluorides. Journal of the American Chemical Society, <b>2019</b> , 141, 17322-17330	16.4	63
113	Acyl azolium fluorides for room temperature nucleophilic aromatic fluorination of chloro- and nitroarenes. <i>Organic Letters</i> , <b>2015</b> , 17, 1866-9	6.2	61

112	Investigations into Transition Metal Catalyzed Arene Trifluoromethylation Reactions. <i>Synlett</i> , <b>2012</b> , 23, 2005-2013	2.2	61
111	Application of recyclable, polymer-immobilized iodine(III) oxidants in catalytic CH bond functionalization. <i>Journal of Molecular Catalysis A</i> , <b>2006</b> , 251, 108-113		60
110	Complexes Containing Redox Noninnocent Ligands for Symmetric, Multielectron Transfer Nonaqueous Redox Flow Batteries. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 15882-15889	3.8	59
109	Chelate-Directed Oxidative Functionalization of Carbon Hydrogen Bonds: Synthetic Applications and Mechanistic Insights. <i>Topics in Organometallic Chemistry</i> , <b>2007</b> , 85-116	0.6	59
108	Mechanism-Based Design of a High-Potential Catholyte Enables a 3.2 V All-Organic Nonaqueous Redox Flow Battery. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 15301-15306	16.4	58
107	Reactions of Platinum(II) Complexes with Chloride-Based Oxidants: Routes to Pt(III) and Pt(IV) Products. <i>Organometallics</i> , <b>2008</b> , 27, 1683-1689	3.8	57
106	Palladium Catalysts Containing Pyridinium-Substituted Pyridine Ligands for the CEI Oxygenation of Benzene with K2S2O8. <i>ACS Catalysis</i> , <b>2013</b> , 3, 700-703	13.1	56
105	Rhodium Hydrogenation Catalysts Supported in Metal Organic Frameworks: Influence of the Framework on Catalytic Activity and Selectivity. <i>ACS Catalysis</i> , <b>2016</b> , 6, 3569-3574	13.1	56
104	Mechanistic Investigations of Cu-Catalyzed Fluorination of Diaryliodonium Salts: Elaborating the Cu/Cu Manifold in Copper Catalysis. <i>Organometallics</i> , <b>2014</b> , 33, 5525-5534	3.8	55
103	Palladium (II/IV) catalyzed cyclopropanation reactions: scope and mechanism. <i>Tetrahedron</i> , <b>2009</b> , 65, 3211-3221	2.4	55
102	Anti-Markovnikov hydrofunctionalization of olefins mediated by rhodium-porphyrin complexes. <i>Angewandte Chemie - International Edition</i> , <b>2004</b> , 43, 588-90	16.4	55
101	Remote C(sp)-H Oxygenation of Protonated Aliphatic Amines with Potassium Persulfate. <i>Organic Letters</i> , <b>2017</b> , 19, 572-575	6.2	53
100	Anhydrous Tetramethylammonium Fluoride for Room-Temperature S(N)Ar Fluorination. <i>Journal of Organic Chemistry</i> , <b>2015</b> , 80, 12137-45	4.2	53
99	Asymmetric chiral ligand-directed alkene dioxygenation. <i>Organic Letters</i> , <b>2013</b> , 15, 46-9	6.2	52
98	Oxidatively Induced C-H Activation at High Valent Nickel. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 6058-6061	16.4	51
97	Second-Generation Palladium Catalyst System for Transannular C-H Functionalization of Azabicycloalkanes. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 5599-5606	16.4	50
96	Synthesis, Reactivity, and Catalytic Applications of Isolable (NHC)Cu(CHF2) Complexes. Organometallics, <b>2017</b> , 36, 1220-1223	3.8	49
95	Transition-metal-free acid-mediated synthesis of aryl sulfides from thiols and thioethers. <i>Journal of Organic Chemistry</i> , <b>2014</b> , 79, 2263-7	4.2	48

# (2017-2015)

94	Evaluation of Tris-Bipyridine Chromium Complexes for Flow Battery Applications: Impact of Bipyridine Ligand Structure on Solubility and Electrochemistry. <i>Inorganic Chemistry</i> , <b>2015</b> , 54, 10214-23	5.1	47	
93	Mechanism of Pd-Catalyzed ArAr Bond Formation Involving Ligand-Directed CH Arylation and Diaryliodonium Oxidants: Computational Studies of Orthopalladation at Binuclear Pd(II) Centers, Oxidation To Form Binuclear Palladium(III) Species, and ArWAr Reductive Coupling. <i>Organometallics</i> ,	3.8	47	
92	Synthesis and Reactivity of NiII(Phpy)2 (Phpy = 2-Phenylpyridine)□ <i>Organometallics</i> , <b>2010</b> , 29, 5446-5449	3.8	47	
91	Palladium-catalyzed 1,1-aryloxygenation of terminal olefins. <i>Organic Letters</i> , <b>2011</b> , 13, 1076-9	6.2	47	
90	Experimental and Computational Studies of High-Valent Nickel and Palladium Complexes. <i>Organometallics</i> , <b>2017</b> , 36, 4382-4393	3.8	46	
89	Multielectron Cycling of a Low-Potential Anolyte in Alkali Metal Electrolytes for Nonaqueous Redox Flow Batteries. <i>ACS Energy Letters</i> , <b>2017</b> , 2, 2430-2435	20.1	46	
88	Quantitative Assay for the Direct Comparison of Platinum Catalysts in Benzene H/D Exchange. <i>Organometallics</i> , <b>2009</b> , 28, 5316-5322	3.8	45	
87	Development of Customized [F]Fluoride Elution Techniques for the Enhancement of Copper-Mediated Late-Stage Radiofluorination. <i>Scientific Reports</i> , <b>2017</b> , 7, 233	4.9	44	
86	Iron-Catalyzed Oxyfunctionalization of Aliphatic Amines at Remote Benzylic C-H Sites. <i>Organic Letters</i> , <b>2016</b> , 18, 4258-61	6.2	43	
85	Participation of Carbonyl Oxygen in Carbontarboxylate Bond-Forming Reductive Elimination from Palladium. <i>Organometallics</i> , <b>2011</b> , 30, 6143-6149	3.8	43	
84	Stoichiometric and Catalytic Aryl-Perfluoroalkyl Coupling at Tri-tert-butylphosphine Palladium(II) Complexes. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 11662-11665	16.4	42	
83	Synthesis and reactivity of palladium(II) fluoride complexes containing nitrogen-donor ligands. <i>Dalton Transactions</i> , <b>2010</b> , 632-40	4.3	42	
82	Reversible carbon-carbon bond formation between carbonyl compounds and a ruthenium pincer complex. <i>Chemical Communications</i> , <b>2013</b> , 49, 7147-9	5.8	40	
81	Effect of Solvent and Ancillary Ligands on the Catalytic H/D Exchange Reactivity of Cp*IrIII(L) Complexes. <i>ACS Catalysis</i> , <b>2013</b> , 3, 2304-2310	13.1	39	
80	Nickel(IV)-Catalyzed C-H Trifluoromethylation of (Hetero)arenes. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 12872-12879	16.4	38	
79	Remarkably High Reactivity of Pd(OAc)2/Pyridine Catalysts: Nondirected C?H Oxygenation of Arenes. <i>Angewandte Chemie</i> , <b>2011</b> , 123, 9581-9584	3.6	38	
78	Base-Free Iridium-Catalyzed Hydrogenation of Esters and Lactones. ACS Catalysis, 2016, 6, 3113-3117	13.1	34	
77	Multiple Approaches to the In Situ Generation of Anhydrous Tetraalkylammonium Fluoride Salts for SAr Fluorination Reactions. <i>Journal of Organic Chemistry</i> , <b>2017</b> , 82, 5020-5026	4.2	33	

76	Formation of ethane from mono-methyl palladium(II) complexes. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 8237-42	16.4	33
75	Developing a Predictive Solubility Model for Monomeric and Oligomeric Cyclopropenium-Based Flow Battery Catholytes. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 10171-10176	16.4	32
74	Mild fluorination of chloropyridines with in situ generated anhydrous tetrabutylammonium fluoride. <i>Journal of Organic Chemistry</i> , <b>2014</b> , 79, 5827-33	4.2	32
73	Catalytic Cycle for Palladium-Catalyzed Decarbonylative Trifluoromethylation using Trifluoroacetic Esters as the CF3 Source. <i>Organometallics</i> , <b>2014</b> , 33, 2653-2660	3.8	32
72	Modulating Sterics in Trimethylplatinum(IV) Diimine Complexes To Achieve CL Bond-Forming Reductive Elimination. <i>Organometallics</i> , <b>2011</b> , 30, 3704-3707	3.8	32
71	An Organometalllic NiIV Complex That Participates in Competing Transmetalation and C(sp2) D Bond-Forming Reductive Elimination Reactions. <i>Organometallics</i> , <b>2017</b> , 36, 247-250	3.8	31
70	Facial Tridentate Ligands for Stabilizing Palladium(IV) Complexes. <i>Organometallics</i> , <b>2011</b> , 30, 6617-6627	<b>'</b> 3.8	30
69	One-pot synthesis of high molar activity 6-[F]fluoro-l-DOPA by Cu-mediated fluorination of a BPin precursor. <i>Organic and Biomolecular Chemistry</i> , <b>2019</b> , 17, 8701-8705	3.9	29
68	Carbon(sp3)?Fluorine Bond-Forming Reductive Elimination from Palladium(IV) Complexes. <i>Angewandte Chemie</i> , <b>2012</b> , 124, 3470-3473	3.6	29
67	Synthesis of Fluoroalkyl Palladium and Nickel Complexes via Decarbonylation of Acylmetal Species. Organometallics, <b>2014</b> , 33, 3831-3839	3.8	28
66	Copper-Mediated Late-stage Radiofluorination: Five Years of Impact on Pre-clinical and Clinical PET Imaging. <i>Clinical and Translational Imaging</i> , <b>2020</b> , 8, 167-206	2	27
65	Copper(II)-Mediated [C]Cyanation of Arylboronic Acids and Arylstannanes. <i>Organic Letters</i> , <b>2018</b> , 20, 1530-1533	6.2	26
64	Automated synthesis of PET radiotracers by copper-mediated F-fluorination of organoborons: Importance of the order of addition and competing protodeborylation. <i>Journal of Labelled Compounds and Radiopharmaceuticals</i> , <b>2018</b> , 61, 228-236	1.9	26
63	Connecting Organometallic Ni(III) and Ni(IV): Reactions of Carbon-Centered Radicals with High-Valent Organonickel Complexes. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 8914-8920	16.4	25
62	Room Temperature Deoxyfluorination of Benzaldehydes and Eketoesters with Sulfuryl Fluoride and Tetramethylammonium Fluoride. <i>Organic Letters</i> , <b>2019</b> , 21, 1350-1353	6.2	25
61	Palladium-Catalyzed Difluoromethylation of Aryl Chlorides and Bromides with TMSCFH. <i>Journal of Organic Chemistry</i> , <b>2019</b> , 84, 3735-3740	4.2	25
60	Copper-Mediated Aminoquinoline-Directed Radiofluorination of Aromatic C-H Bonds with K F. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 3119-3122	16.4	25
59	Reactions of Arylsulfonate Electrophiles with NMeF: Mechanistic Insight, Reactivity, and Scope.  Journal of Organic Chemistry, 2018, 83, 11178-11190	4.2	25

58	Low-Potential Pyridinium Anolyte for Aqueous Redox Flow Batteries. <i>Journal of Physical Chemistry C</i> , <b>2017</b> , 121, 24376-24380	3.8	24
57	Nickel-Catalyzed Decarbonylative Amination of Carboxylic Acid Esters. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 5918-5923	16.4	24
56	Computational and Experimental Studies of Methyl Group Exchange between Palladium(II) Centers. <i>Organometallics</i> , <b>2010</b> , 29, 1522-1525	3.8	24
55	Nickel-Catalyzed Decarbonylative Synthesis of Fluoroalkyl Thioethers. ACS Catalysis, 2020, 10, 8315-83	203.1	24
54	An organic super-electron-donor as a high energy density negative electrolyte for nonaqueous flow batteries. <i>Chemical Communications</i> , <b>2019</b> , 55, 11037-11040	5.8	23
53	Computational Study of Intramolecular Arene Palladation at a Palladium(IV) Center. <i>Organometallics</i> , <b>2015</b> , 34, 1085-1090	3.8	23
52	Realization of an Asymmetric Non-Aqueous Redox Flow Battery through Molecular Design to Minimize Active Species Crossover and Decomposition. <i>Chemistry - A European Journal</i> , <b>2020</b> , 26, 5369-	5 <del>3</del> 73	23
51	Aryl-Fluoride Bond-Forming Reductive Elimination from Nickel(IV) Centers. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 13261-13267	16.4	22
50	Platinum(II) Complexes Containing Quaternized Nitrogen Ligands: Synthesis, Stability, and Evaluation as Catalysts for Methane and Benzene H/D Exchange. <i>Organometallics</i> , <b>2010</b> , 29, 257-262	3.8	22
49	Computational study of C(sp)-O bond formation at a Pd centre. <i>Dalton Transactions</i> , <b>2017</b> , 46, 3742-374	184.3	20
48	Synthesis of high-molar-activity [F]6-fluoro-L-DOPA suitable for human use via Cu-mediated fluorination of a BPin precursor. <i>Nature Protocols</i> , <b>2020</b> , 15, 1742-1759	18.8	19
47	Structure Activity Relationship Study of Diimine PtII Catalysts for H/D Exchange. <i>Organometallics</i> , <b>2012</b> , 31, 1761-1766	3.8	19
46	Catalytically Relevant Intermediates in the Ni-Catalyzed C(sp)-H and C(sp)-H Functionalization of Aminoquinoline Substrates. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 17382-17387	16.4	17
45	Aryl <b>I</b> F3 Coupling from Phosphinoferrocene-Ligated Palladium(II) Complexes. <i>Organometallics</i> , <b>2019</b> , 38, 519-526	3.8	16
44	Impact of Oxidation State on Reactivity and Selectivity Differences between Nickel(III) and Nickel(IV) Alkyl Complexes. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 9104-9108	16.4	14
43	C-H Amination of Arenes with Hydroxylamine. <i>Organic Letters</i> , <b>2020</b> , 22, 2931-2934	6.2	14
42	Mechanistic studies of an unusual epoxide-forming elimination of a beta-hydroxyalkyl rhodium porphyrin. <i>Chemical Communications</i> , <b>2006</b> , 549-51	5.8	14
41	Bis(diisopropylamino)cyclopropenium-arene Cations as High Oxidation Potential and High Stability Catholytes for Non-aqueous Redox Flow Batteries. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 17564-17571	16.4	14

40	Nickel(II/IV) Manifold Enables Room-Temperature C(sp)-H Functionalization. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 19513-19520	16.4	14
39	Developing Efficient Nucleophilic Fluorination Methods and Application to Substituted Picolinate Esters. <i>Organic Process Research and Development</i> , <b>2014</b> , 18, 1045-1054	3.9	13
38	Development of SAr Nucleophilic Fluorination: A Fruitful Academia-Industry Collaboration. <i>Accounts of Chemical Research</i> , <b>2020</b> , 53, 2372-2383	24.3	13
37	Improved Synthesis of [CpRRhCl2]2 Complexes. <i>Organometallics</i> , <b>2018</b> , 37, 3240-3242	3.8	13
36	C-H F-fluorination of 8-methylquinolines with Ag[F]F. <i>Chemical Communications</i> , <b>2019</b> , 55, 2976-2979	5.8	12
35	Rh(III) Pyridinium Substituted Bipyridine Complexes as Catalysts for Arene H/D Exchange. <i>Topics in Catalysis</i> , <b>2012</b> , 55, 565-570	2.3	12
34	Palladium-Catalyzed C-H Arylation Using Aryltrifluoroborates in Conjunction with a Mn Oxidant under Mild Conditions. <i>Tetrahedron</i> , <b>2013</b> , 69, 5580-5587	2.4	12
33	Palladium-Catalyzed Ligand-Directed Oxidative Functionalization of Cyclopropanes. <i>Synthesis</i> , <b>2011</b> , 2579-2589	2.9	12
32	NHC-Copper Mediated Ligand-Directed Radiofluorination of Aryl Halides. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 7362-7367	16.4	11
31	Anti-Markovnikov Hydrofunctionalization of Olefins Mediated by Rhodium <b>P</b> orphyrin Complexes. <i>Angewandte Chemie</i> , <b>2004</b> , 116, 598-600	3.6	10
30	Copper-Mediated Functionalization of Aryl Trifluoroborates. Synlett, <b>2016</b> , 27, 2279-2284	2.2	10
29	Access to 3D Alicyclic Amine-Containing Fragments through Transannular CH Arylation. <i>Synlett</i> , <b>2019</b> , 30, 417-422	2.2	9
28	Sequential Ir/Cu-Mediated Method for the -Selective C-H Radiofluorination of (Hetero)Arenes. Journal of the American Chemical Society, <b>2021</b> , 143, 6915-6921	16.4	9
27	Radiosynthesis of [C]LY2795050 for Preclinical and Clinical PET Imaging Using Cu(II)-Mediated Cyanation. <i>ACS Medicinal Chemistry Letters</i> , <b>2018</b> , 9, 1274-1279	4.3	9
26	Palladium-Mediated C -H Functionalization of Alicyclic Amines. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 11227-11230	16.4	8
25	Isolable Pyridinium Trifluoromethoxide Salt for Nucleophilic Trifluoromethoxylation. <i>Organic Letters</i> , <b>2021</b> , 23, 5138-5142	6.2	8
24	Copper-Mediated Aminoquinoline-Directed Radiofluorination of Aromatic CH Bonds with K18F. <i>Angewandte Chemie</i> , <b>2019</b> , 131, 3151-3154	3.6	8
23	Model Complexes for the Palladium-Catalyzed Transannular C-H Functionalization of Alicyclic Amines. <i>Organometallics</i> , <b>2019</b> , 38, 138-142	3.8	8

22	Ring opening of epoxides with [F]FeF species to produce [F]fluorohydrin PET imaging agents. <i>Chemical Communications</i> , <b>2019</b> , 55, 6361-6364	5.8	7
21	Synthesis of [F]-마fluoro-珊unsaturated esters and ketones via vinylogous F-fluorination of Hiazoacetates with [F]AgF. <i>Synthesis</i> , <b>2019</b> , 51, 4401-4407	2.9	7
20	Oxidatively Induced Aryl©F3 Coupling at Diphosphine Nickel Complexes. <i>Organometallics</i> , <b>2020</b> , 39, 3-7	3.8	7
19	Simultaneously Enhancing the Redox Potential and Stability of Multi-Redox Organic Catholytes by Incorporating Cyclopropenium Substituents. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 13450	)- <del>1</del> 345	9 <sup>6</sup>
18	A spot test for determination of residual TBA levels in F-radiotracers for human use using Dragendorff reagent. <i>Analytical Methods</i> , <b>2020</b> , 12, 5004-5009	3.2	4
17	Tetramethylammonium Fluoride Alcohol Adducts for SAr Fluorination. <i>Organic Letters</i> , <b>2021</b> , 23, 4493-4	1498	4
16	SAr Radiofluorination with In Situ Generated [F]Tetramethylammonium Fluoride. <i>Journal of Organic Chemistry</i> , <b>2021</b> , 86, 14121-14130	4.2	4
15	Impact of Oxidation State on Reactivity and Selectivity Differences between Nickel(III) and Nickel(IV) Alkyl Complexes. <i>Angewandte Chemie</i> , <b>2019</b> , 131, 9202-9206	3.6	3
14	Decarbonylative Fluoroalkylation at Palladium(II): From Fundamental Organometallic Studies to Catalysis. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 18617-18625	16.4	3
13	SAr and C-H Amination of Electron Rich Arenes with Pyridine as a Nucleophile Using Photoredox Catalysis. <i>Organic Letters</i> , <b>2021</b> , 23, 5213-5217	6.2	3
12	Deoxyfluorination of (Hetero)aryl Aldehydes Using Tetramethylammonium Fluoride and Perfluorobutanesulfonyl Fluoride or Trifluoromethanesulfonic Anhydride. <i>Israel Journal of Chemistry</i> , <b>2020</b> , 60, 398-401	3.4	3
11	Targeted Optimization of Phenoxazine Redox Center for Nonaqueous Redox Flow Batteries <b>2022</b> , 4, 733-739		3
10	REktitelbild: Remarkably High Reactivity of Pd(OAc)2/Pyridine Catalysts: Nondirected C?H Oxygenation of Arenes (Angew. Chem. 40/2011). <i>Angewandte Chemie</i> , <b>2011</b> , 123, 9680-9680	3.6	2
9	Comparative Study of Organic Radical Cation Stability and Coulombic Efficiency for Nonaqueous Redox Flow Battery Applications. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 14170-14179	3.8	2
8	[18F]Fluorination of (Mesityl)(Aryl)Iodonium Salts <b>2015</b> , 129-137		1
7	Back Cover: Remarkably High Reactivity of Pd(OAc)2/Pyridine Catalysts: Nondirected C?H Oxygenation of Arenes (Angew. Chem. Int. Ed. 40/2011). <i>Angewandte Chemie - International Edition</i> , <b>2011</b> , 50, 9508-9508	16.4	1
6	Celebrating Women in Organic Chemistry. Organic Process Research and Development, 2020, 24, 111-114	43.9	1
5	A Nonaqueous Redox-Matched Flow Battery with Charge Storage in Insoluble Polymer Beads <i>Chemistry - A European Journal</i> , <b>2022</b> , e202200149	4.8	1

Development of High Energy Density Diaminocyclopropenium-Phenothiazine Hybrid Catholytes for Non-Aqueous Redox Flow Batteries. *Angewandte Chemie*, **2021**, 133, 27245

3.6 o

3 Fluorine-18 Radiochemistry **2020**, 251-289

О

2 Robert H. Grubbs (1942-2021).. Science, 2022, 375, 499

33.3

Palladium-Mediated C⊞ Functionalization of Alicyclic Amines. *Angewandte Chemie*, **2021**, 133, 11327-113,360