Shannon S Stahl

List of Publications by Citations

288 papers	30,475 citations	96 h-index	170 g-index
313 ext. papers	33,827 ext. citations	13.2 avg, IF	8.06 L-index

#	Paper	IF	Citations
288	Palladium oxidase catalysis: selective oxidation of organic chemicals by direct dioxygen-coupled turnover. *Angewandte Chemie - International Edition*, **2004**, 43, 3400-20	16.4	1230
287	Copper-catalyzed aerobic oxidative C-H functionalizations: trends and mechanistic insights. *Angewandte Chemie - International Edition*, **2011**, 50, 11062-87	16.4	1118
286	Palladium(II)-catalyzed alkene functionalization via nucleopalladation: stereochemical pathways and enantioselective catalytic applications. *Chemical Reviews*, **2011**, 111, 2981-3019	68.1	1003
285	Formic-acid-induced depolymerization of oxidized lignin to aromatics. *Nature*, **2014**, 515, 249-52	50.4	780
284	Overcoming the "oxidant problem": strategies to use O2 as the oxidant in organometallic C-H oxidation reactions catalyzed by Pd (and Cu). *Accounts of Chemical Research*, **2012**, 45, 851-63	24.3	657
283	Electrochemical water oxidation with cobalt-based electrocatalysts from pH 0-14: the thermodynamic basis for catalyst structure, stability, and activity. *Journal of the American Chemical Society*, **2011**, 133, 14431-42	16.4	592
282	Highly practical copper(I)/TEMPO catalyst system for chemoselective aerobic oxidation of primary alcohols. *Journal of the American Chemical Society*, **2011**, 133, 16901-10	16.4	561
281	Operando Analysis of NiFe and Fe Oxyhydroxide Electrocatalysts for Water Oxidation: Detection of Fe by Mssbauer Spectroscopy. *Journal of the American Chemical Society*, **2015**, 137, 15090-3	16.4	508
280	Homogeneous Oxidation of Alkanes by Electrophilic Late Transition Metals. *Angewandte Chemie - International Edition*, **1998**, 37, 2180-2192	16.4	507
279	Chemoselective metal-free aerobic alcohol oxidation in lignin. *Journal of the American Chemical Society*, **2013**, 135, 6415-8	16.4	460
278	Chemistry. Palladium-catalyzed oxidation of organic chemicals with O2. *Science*, **2005**, 309, 1824-6	33.3	452
277	Copper-catalyzed aerobic oxidative amidation of terminal alkynes: efficient synthesis of ynamides. *Journal of the American Chemical Society*, **2008**, 130, 833-5	16.4	421
276	Tetramethylpiperidine N-Oxyl (TEMPO), Phthalimide N-Oxyl (PINO), and Related N-Oxyl Species: Electrochemical Properties and Their Use in Electrocatalytic Reactions. *Chemical Reviews*, **2018**, 118, 4834-4885	68.1	419
275	Practical aerobic oxidations of alcohols and amines with homogeneous copper/TEMPO and related catalyst systems. *Angewandte Chemie - International Edition*, **2014**, 53, 8824-38	16.4	395
274	Copper-catalyzed aerobic oxidative functionalization of an arene C-H bond: evidence for an aryl-copper(III) intermediate. *Journal of the American Chemical Society*, **2010**, 132, 12068-73	16.4	394
273	Mechanism of copper(I)/TEMPO-catalyzed aerobic alcohol oxidation. *Journal of the American Chemical Society*, **2013**, 135, 2357-67	16.4	393
272	Highly regioselective Pd-catalyzed intermolecular aminoacetoxylation of alkenes and evidence for cis-aminopalladation and S(N)2 C-O bond formation. *Journal of the American Chemical Society*, **2006**, 128, 7179-81	16.4	374

271	Mimicry of antimicrobial host-defense peptides by random copolymers. *Journal of the American Chemical Society*, **2007**, 129, 15474-6	16.4	361
270	Divergence between organometallic and single-electron-transfer mechanisms in copper(II)-mediated aerobic C-H oxidation. *Journal of the American Chemical Society*, **2013**, 135, 9797-804	16.4	357
269	Copper-Catalyzed Aerobic Oxidations of Organic Molecules: Pathways for Two-Electron Oxidation with a Four-Electron Oxidant and a One-Electron Redox-Active Catalyst. *Accounts of Chemical Research*, **2015**, 48, 1756-66	24.3	351
268	Enantioselective cyanation of benzylic C-H bonds via copper-catalyzed radical relay. *Science*, **2016**, 353, 1014-1018	33.3	347
267	Palladium-catalyzed aerobic dehydrogenation of substituted cyclohexanones to phenols. *Science*, **2011**, 333, 209-13	33.3	344
266	Palladiumoxidasekatalyse: selektive Oxidation durch direkte disauerstoffgekoppelte Umsetzung. *Angewandte Chemie*, **2004**, 116, 3480-3501	3.6	337
265	Ligand-Promoted Palladium-Catalyzed Aerobic Oxidation Reactions. *Chemical Reviews*, **2018**, 118, 2636-2679	60.6	330
264	Carbon-nitrogen bond formation involving well-defined aryl-copper(III) complexes. *Journal of the American Chemical Society*, **2008**, 130, 9196-7	16.4	325
263	Mechanistic study of copper-catalyzed aerobic oxidative coupling of arylboronic esters and methanol: insights into an organometallic oxidase reaction. *Journal of the American Chemical Society*, **2009**, 131, 5044-5	16.4	309
262	Kupferkatalysierte aerobe oxidative C-H-Funktionalisierungen: Trends und Erkenntnisse zum Mechanismus. *Angewandte Chemie*, **2011**, 123, 11256-11283	3.6	291
261	Mechanistic study of alcohol oxidation by the Pd(OAc)(2)/O(2)/DMSO catalyst system and implications for the development of improved aerobic oxidation catalysts. *Journal of the American Chemical Society*, **2002**, 124, 766-7	16.4	283
260	Synthesis of cyclic enones via direct palladium-catalyzed aerobic dehydrogenation of ketones. *Journal of the American Chemical Society*, **2011**, 133, 14566-9	16.4	280
259	Cooperative electrocatalytic alcohol oxidation with electron-proton-transfer mediators. *Nature*, **2016**, 535, 406-10	50.4	276
258	Palladium-catalyzed aerobic oxidative amination of alkenes: development of intra- and intermolecular aza-Wacker reactions. *Inorganic Chemistry*, **2007**, 46, 1910-23	5.1	270
257	Exploring the Mechanism of Aqueous C□H Activation by Pt(II) through Model Chemistry: Evidence for the Intermediacy of Alkylhydridoplatinum(IV) and Alkane □Adducts. *Journal of the American Chemical Society*, **1996**, 118, 5961-5976	16.4	262
256	Copper(I)/ABNO-catalyzed aerobic alcohol oxidation: alleviating steric and electronic constraints of Cu/TEMPO catalyst systems. *Journal of the American Chemical Society*, **2013**, 135, 15742-5	16.4	259
255	Oxygenation of nitrogen-coordinated palladium(0): synthetic, structural, and mechanistic studies and implications for aerobic oxidation catalysis. *Journal of the American Chemical Society*, **2001**, 123, 7188-9	16.4	248
254	Quinone-Catalyzed Selective Oxidation of Organic Molecules. *Angewandte Chemie - International Edition*, **2015**, 54, 14638-58	16.4	231

253	Allylic C-H acetoxylation with a 4,5-diazafluorenone-ligated palladium catalyst: a ligand-based strategy to achieve aerobic catalytic turnover. *Journal of the American Chemical Society*, **2010**, 132, 15116-9	16.4	228
252	Direct observation of CuI/CuIII redox steps relevant to Ullmann-type coupling reactions. *Chemical Science*, **2010**, 1, 326	9.4	226
251	Mechanistic Studies of the Reaction of Reduced Methane Monooxygenase Hydroxylase with Dioxygen and Substrates. *Journal of the American Chemical Society*, **1999**, 121, 3876-3887	16.4	219
250	Aerobic oxidative amination of unactivated alkenes catalyzed by palladium. *Journal of the American Chemical Society*, **2005**, 127, 2868-9	16.4	206
249	Mechanism of Pd(OAc)2/DMSO-catalyzed aerobic alcohol oxidation: mass-transfer-limitation effects and catalyst decomposition pathways. *Journal of the American Chemical Society*, **2006**, 128, 4348-55	16.4	204
248	Two-faced reactivity of alkenes: cis- versus trans-aminopalladation in aerobic Pd-catalyzed intramolecular aza-Wacker reactions. *Journal of the American Chemical Society*, **2007**, 129, 6328-35	16.4	202
247	Structure-activity relationships among random nylon-3 copolymers that mimic antibacterial host-defense peptides. *Journal of the American Chemical Society*, **2009**, 131, 9735-45	16.4	194
246	Characterization of peroxo and hydroperoxo intermediates in the aerobic oxidation of N-heterocyclic-carbene-coordinated palladium(0). *Journal of the American Chemical Society*, **2004**, 126, 10212-3	16.4	186
245	Mechanistic characterization of aerobic alcohol oxidation catalyzed by Pd(OAc)(2)/pyridine including identification of the catalyst resting state and the origin of nonlinear [catalyst] dependence. *Journal of the American Chemical Society*, **2004**, 126, 11268-78	16.4	184
244	Ligand-modulated palladium oxidation catalysis: mechanistic insights into aerobic alcohol oxidation with the Pd(OAc)(2)/pyridine catalyst system. *Organic Letters*, **2002**, 4, 4179-81	6.2	180
243	A survey of diverse earth abundant oxygen evolution electrocatalysts showing enhanced activity from Ni-Fe oxides containing a third metal. *Energy and Environmental Science*, **2014**, 7, 2376-2382	35.4	178
242	Catalytic transamidation under moderate conditions. *Journal of the American Chemical Society*, **2003**, 125, 3422-3	16.4	172
241	Copper/TEMPO-Catalyzed Aerobic Alcohol Oxidation: Mechanistic Assessment of Different Catalyst Systems. *ACS Catalysis*, **2013**, 3, 2599-2605	13.1	169
240	Electrochemical Oxidation of Organic Molecules at Lower Overpotential: Accessing Broader Functional Group Compatibility with Electron-Proton Transfer Mediators. *Accounts of Chemical Research*, **2020**, 53, 561-574	24.3	159
239	Bioinspired aerobic oxidation of secondary amines and nitrogen heterocycles with a bifunctional quinone catalyst. *Journal of the American Chemical Society*, **2014**, 136, 506-12	16.4	158
238	Aerobic dehydrogenation of cyclohexanone to phenol catalyzed by Pd(TFA)2/2-dimethylaminopyridine: evidence for the role of Pd nanoparticles. *Journal of the American Chemical Society*, **2013**, 135, 8213-21	16.4	157
237	Reaction of molecular oxygen with a Pd(II)-hydride to produce a Pd(II)-hydroperoxide: experimental evidence for an HX-reductive-elimination pathway. *Journal of the American Chemical Society*, **2008**, 130, 5753-62	16.4	154
236	Regioselective copper-catalyzed chlorination and bromination of arenes with O(2) as the oxidant. *Chemical Communications*, **2009**, 6460-2	5.8	153

235	Catalytic transamidation reactions compatible with tertiary amide metathesis under ambient conditions. *Journal of the American Chemical Society*, **2009**, 131, 10003-8	16.4	151
234	Dual mechanism of bacterial lethality for a cationic sequence-random copolymer that mimics host-defense antimicrobial peptides. *Journal of Molecular Biology*, **2008**, 379, 38-50	6.5	150
233	Efficient intramolecular oxidative amination of olefins through direct dioxygen-coupled palladium catalysis. *Angewandte Chemie - International Edition*, **2002**, 41, 164-6	16.4	150
232	Mechanism of alcohol oxidation mediated by copper(II) and nitroxyl radicals. *Journal of the American Chemical Society*, **2014**, 136, 12166-73	16.4	146
231	Aerobic dehydrogenation of cyclohexanone to cyclohexenone catalyzed by Pd(DMSO)2(TFA)2: evidence for ligand-controlled chemoselectivity. *Journal of the American Chemical Society*, **2013**, 135, 8205-12	16.4	146
230	Inverse spinel NiFeAlO4 as a highly active oxygen evolution electrocatalyst: promotion of activity by a redox-inert metal ion. *Energy and Environmental Science*, **2014**, 7, 1382	35.4	144
229	Co/NHPI-mediated aerobic oxygenation of benzylic C-H bonds in pharmaceutically relevant molecules. *Chemical Science*, **2017**, 8, 1282-1287	9.4	144
228	Electrocatalytic Alcohol Oxidation with TEMPO and Bicyclic Nitroxyl Derivatives: Driving Force Trumps Steric Effects. *Journal of the American Chemical Society*, **2015**, 137, 14751-7	16.4	143
227	Reaction of molecular oxygen with a PdII- hydride to produce a PdII-hydroperoxide: acid catalysis and implications for Pd-catalyzed aerobic oxidation reactions. *Angewandte Chemie - International Edition*, **2006**, 45, 2904-7	16.4	142
226	Experimental Limiting Oxygen Concentrations for Nine Organic Solvents at Temperatures and Pressures Relevant to Aerobic Oxidations in the Pharmaceutical Industry. *Organic Process Research and Development*, **2015**, 19, 1537-1543	3.9	139
225	Cu/Nitroxyl Catalyzed Aerobic Oxidation of Primary Amines into Nitriles at Room Temperature. *ACS Catalysis*, **2013**, 3, 1652-1656	13.1	138
224	Modular o-quinone catalyst system for dehydrogenation of tetrahydroquinolines under ambient conditions. *Journal of the American Chemical Society*, **2014**, 136, 11910-3	16.4	137
223	Direct Aerobic □□Dehydrogenation of Aldehydes and Ketones with a Pd(TFA)(2)/4,5-Diazafluorenone Catalyst(). *Chemical Science*, **2012**, 3, 887-891	9.4	137
222	Copper(I)/TEMPO-catalyzed aerobic oxidation of primary alcohols to aldehydes with ambient air. *Nature Protocols*, **2012**, 7, 1161-6	18.8	136
221	Development of Safe and Scalable Continuous-Flow Methods for Palladium-Catalyzed Aerobic Oxidation Reactions. *Green Chemistry*, **2010**, 12, 1180-1186	10	136
220	Aerobic intramolecular oxidative amination of alkenes catalyzed by NHC-coordinated palladium complexes. *Organic Letters*, **2006**, 8, 2257-60	6.2	130
219	Dioxygen-coupled oxidative amination of styrene. *Journal of the American Chemical Society*, **2003**, 125, 12996-7	16.4	130
218	Regiocontrolled aerobic oxidative coupling of indoles and benzene using Pd catalysts with 4,5-diazafluorene ligands. *Chemical Communications*, **2011**, 47, 10257-9	5.8	127

217	"Inverse-electron-demand" ligand substitution in palladium(0)-olefin complexes. *Journal of the American Chemical Society*, **2003**, 125, 12-3	16.4	127
216	The "Best Catalyst" for Water Oxidation Depends on the Oxidation Method Employed: A Case Study of Manganese Oxides. *Journal of the American Chemical Society*, **2015**, 137, 8384-7	16.4	126
215	Chemoselective organocatalytic aerobic oxidation of primary amines to secondary imines. *Organic Letters*, **2012**, 14, 2850-3	6.2	126
214	Quinone 1 e and 2 e/2 H Reduction Potentials: Identification and Analysis of Deviations from Systematic Scaling Relationships. *Journal of the American Chemical Society*, **2016**, 138, 15903-15910	16.4	124
213	Cobalt analogs of Ru-based water oxidation catalysts: overcoming thermodynamic instability and kinetic lability to achieve electrocatalytic O2 evolution. *Chemical Science*, **2012**, 3, 3058	9.4	123
212	Aerobic oxidative Heck/dehydrogenation reactions of cyclohexenones: efficient access to meta-substituted phenols. *Angewandte Chemie - International Edition*, **2013**, 52, 3672-5	16.4	121
211	Insertion of molecular oxygen into a palladium-hydride bond: computational evidence for two nearly isoenergetic pathways. *Journal of the American Chemical Society*, **2007**, 129, 4410-22	16.4	121
210	Catalyst-controlled regioselectivity in the synthesis of branched conjugated dienes via aerobic oxidative Heck reactions. *Journal of the American Chemical Society*, **2012**, 134, 16496-9	16.4	120
209	Formation and Reductive Elimination of a Hydridoalkylplatinum(IV) Intermediate upon Protonolysis of an Alkylplatinum(II) Complex. *Journal of the American Chemical Society*, **1995**, 117, 9371-9372	16.4	120
208	Characterization of NiFe oxyhydroxide electrocatalysts by integrated electronic structure calculations and spectroelectrochemistry. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 3050-3055	11.5	119
207	Enantioselective hydroformylation of N-vinyl carboxamides, allyl carbamates, and allyl ethers using chiral diazaphospholane ligands. *Journal of the American Chemical Society*, **2010**, 132, 14027-9	16.4	119
206	Observation and mechanistic study of facile C-O bond formation between a well-defined aryl-copper(III) complex and oxygen nucleophiles. *Chemistry - A European Journal*, **2011**, 17, 10643-50	4.8	113
205	Unexpected roles of molecular sieves in palladium-catalyzed aerobic alcohol oxidation. *Journal of Organic Chemistry*, **2006**, 71, 1861-8	4.2	113
204	Merging Photochemistry with Electrochemistry: Functional-Group Tolerant Electrochemical Amination of C(sp)-H Bonds. *Angewandte Chemie - International Edition*, **2019**, 58, 6385-6390	16.4	111
203	N-Hydroxyphthalimide-Mediated Electrochemical Iodination of Methylarenes and Comparison to Electron-Transfer-Initiated C-H Functionalization. *Journal of the American Chemical Society*, **2018**, 140, 22-25	16.4	110
202	Mechanistic study of asymmetric oxidative biaryl coupling: evidence for self-processing of the copper catalyst to achieve control of oxidase vs oxygenase activity. *Journal of the American Chemical Society*, **2008**, 130, 12232-3	16.4	109
201	Efficient Aerobic Oxidation of Secondary Alcohols at Ambient Temperature with an ABNO/NOx Catalyst System. *ACS Catalysis*, **2013**, 3, 2612-2616	13.1	108
200	Pd-catalyzed Semmler-Wolff reactions for the conversion of substituted cyclohexenone oximes to primary anilines. *Journal of the American Chemical Society*, **2013**, 135, 13664-7	16.4	106

199	Brønsted base-modulated regioselectivity in the aerobic oxidative amination of styrene catalyzed by palladium. *Journal of the American Chemical Society*, **2005**, 127, 17888-93	16.4	106
198	Catalytic Aerobic Dehydrogenation of Nitrogen Heterocycles Using Heterogeneous Cobalt Oxide Supported on Nitrogen-Doped Carbon. *Organic Letters*, **2015**, 17, 4404-7	6.2	105
197	Insights into the spin-forbidden reaction between L2Pd0 and molecular oxygen. *Journal of the American Chemical Society*, **2004**, 126, 16302-3	16.4	102
196	Efficient and selective Cu/nitroxyl-catalyzed methods for aerobic oxidative lactonization of diols. *Journal of the American Chemical Society*, **2015**, 137, 3767-70	16.4	101
195	Palladium-Catalyzed Aerobic Dehydrogenation of Cyclic Hydrocarbons for the Synthesis of Substituted Aromatics and Other Unsaturated Products. *ACS Catalysis*, **2016**, 6, 8201-8213	13.1	101
194	PdII complexes possessing a seven-membered N-heterocyclic carbene ligand. *Angewandte Chemie - International Edition*, **2005**, 44, 5269-72	16.4	99
193	Lignin Conversion to Low-Molecular-Weight Aromatics via an Aerobic Oxidation-Hydrolysis Sequence: Comparison of Different Lignin Sources. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 3367-3374	8.3	97
192	Synthesis of pyrrolidines via palladium(II)-catalyzed aerobic oxidative carboamination of butyl vinyl ether and styrenes with allyl tosylamides. *Organic Letters*, **2006**, 8, 3251-4	6.2	95
191	Kinetic and Spectroscopic Studies of Aerobic Copper(II)-Catalyzed Methoxylation of Arylboronic Esters and Insights into Aryl Transmetalation to Copper(II). *Organometallics*, **2012**, 31, 7948-7957	3.8	94
190	Discovery and mechanistic study of Al(III)-catalyzed transamidation of tertiary amides. *Journal of the American Chemical Society*, **2008**, 130, 647-54	16.4	94
189	Praktische aerobe Oxidationen von Alkoholen und Aminen mit dem homogenen Kupfer/TEMPO-und verwandten Katalysatorsystemen. *Angewandte Chemie*, **2014**, 126, 8968-8983	3.6	93
188	Aerobic Oxidative Coupling of o-Xylene: Discovery of 2-Fluoropyridine as a Ligand to Support Selective Pd-Catalyzed C-H Functionalization. *Advanced Synthesis and Catalysis*, **2010**, 352, 3223-3229	5.6	93
187	Characterization of DMSO coordination to palladium(II) in solution and insights into the aerobic oxidation catalyst, Pd(DMSO)2(TFA)2. *Inorganic Chemistry*, **2012**, 51, 11898-909	5.1	92
186	Mechanism of Pd(OAc)2/pyridine catalyst reoxidation by O2: influence of labile monodentate ligands and identification of a biomimetic mechanism for O2 activation. *Chemistry - A European Journal*, **2009**, 15, 2915-22	4.8	92
185	Formation of enamides via palladium(II)-catalyzed vinyl transfer from vinyl ethers to nitrogen nucleophiles. *Organic Letters*, **2004**, 6, 1845-8	6.2	92
184	Enantioselective Pd(II)-catalyzed aerobic oxidative amidation of alkenes and insights into the role of electronic asymmetry in pyridine-oxazoline ligands. *Organic Letters*, **2011**, 13, 2830-3	6.2	91
183	Feedstocks to Pharmacophores: Cu-Catalyzed Oxidative Arylation of Inexpensive Alkylarenes Enabling Direct Access to Diarylalkanes. *Journal of the American Chemical Society*, **2017**, 139, 7705-7708	16.4	89
182	Modular synthesis of 1,2-diamine derivatives by palladium-catalyzed aerobic oxidative cyclization of allylic sulfamides. *Angewandte Chemie - International Edition*, **2010**, 49, 5529-32	16.4	88

181	Co(salophen)-Catalyzed Aerobic Oxidation of p-Hydroquinone: Mechanism and Implications for Aerobic Oxidation Catalysis. *Journal of the American Chemical Society*, **2016**, 138, 4186-93	16.4	85
180	Continuous-Flow Aerobic Oxidation of Primary Alcohols with a Copper(I)/TEMPO Catalyst. *Organic Process Research and Development*, **2013**, 17, 1247-1251	3.9	84
179	Pd-catalyzed aerobic oxidative coupling of arenes: evidence for transmetalation between two Pd(II)-aryl intermediates. *Journal of the American Chemical Society*, **2014**, 136, 9914-7	16.4	83
178	Chinon-katalysierte, selektive Oxidation organischer Molekle. *Angewandte Chemie*, **2015**, 127, 14848-14868	3.8	83
177	Synthesis of Pd Complexes Bearing an Enantiomerically-Resolved Seven-Membered N-Heterocyclic Carbene Ligands and Initial Studies of their Use in Asymmetric Wacker-Type Oxidative Cyclization Reactions. *Tetrahedron*, **2009**, 65, 5084-5092	2.4	81
176	Practical Synthesis of Amides via Copper/ABNO-Catalyzed Aerobic Oxidative Coupling of Alcohols and Amines. *Journal of the American Chemical Society*, **2016**, 138, 6416-9	16.4	81
175	Mechanism of Al(III)-catalyzed transamidation of unactivated secondary carboxamides. *Journal of the American Chemical Society*, **2006**, 128, 5177-83	16.4	80
174	Electrochemical Aminoxyl-Mediated Cyanation of Secondary Piperidines for Pharmaceutical Building Block Diversification. *Journal of the American Chemical Society*, **2018**, 140, 11227-11231	16.4	79
173	Noncovalent Immobilization of Molecular Electrocatalysts for Chemical Synthesis: Efficient Electrochemical Alcohol Oxidation with a Pyrene-TEMPO Conjugate. *Angewandte Chemie - International Edition*, **2017**, 56, 8892-8897	16.4	78
172	Development of 7-membered N-heterocyclic carbene ligands for transition metals. *Journal of Organometallic Chemistry*, **2005**, 690, 6143-6155	2.3	78
171	Intramolecular Pd(II)-catalyzed aerobic oxidative amination of alkenes: synthesis of six-membered N-heterocycles. *Organic Letters*, **2012**, 14, 1234-7	6.2	77
170	Reversible alkene insertion into the Pd-N bond of Pd(II)-sulfonamidates and implications for catalytic amidation reactions. *Journal of the American Chemical Society*, **2011**, 133, 18594-7	16.4	76
169	Reconciling the stereochemical course of nucleopalladation with the development of enantioselective wacker-type cyclizations. *Angewandte Chemie - International Edition*, **2012**, 51, 11505-9	16.4	74
168	Reaction of molecular oxygen with an NHC-coordinated Pd0 complex: computational insights and experimental implications. *Angewandte Chemie - International Edition*, **2007**, 46, 601-4	16.4	73
167	Palladium-Catalyzed Oxidation Reactions: Comparison of Benzoquinone and Molecular Oxygen as Stoichiometric Oxidants **2006**, 149-189		73
166	Mechanistic studies of Wacker-type intramolecular aerobic oxidative amination of alkenes catalyzed by Pd(OAc)2/pyridine. *Journal of Organic Chemistry*, **2011**, 76, 1031-44	4.2	72
165	High-Potential Electrocatalytic O2 Reduction with Nitroxyl/NO x Mediators: Implications for Fuel Cells and Aerobic Oxidation Catalysis. *ACS Central Science*, **2015**, 1, 234-43	16.8	71
164	Palladium-catalyzed oxidative amination of alkenes: improved catalyst reoxidation enables the use of alkene as the limiting reagent. *Organic Letters*, **2007**, 9, 4331-4	6.2	71

163	Electrochemical Functional-Group-Tolerant Shono-type Oxidation of Cyclic Carbamates Enabled by Aminoxyl Mediators. *Angewandte Chemie - International Edition*, **2018**, 57, 6686-6690	16.4	69
162	O2insertion into a palladium(II)-hydride bond: Observation of mechanistic crossover between HX-reductive-elimination and hydrogen-atom-abstraction pathways. *Chemical Science*, **2011**, 2, 326-330	9.4	69
161	Process Development of CuI/ABNO/NMI-Catalyzed Aerobic Alcohol Oxidation. *Organic Process Research and Development*, **2015**, 19, 1548-1553	3.9	68
160	Electrochemical Oxidation of Alcohols and Aldehydes to Carboxylic Acids Catalyzed by 4-Acetamido-TEMPO: An Alternative to Anelli and Pinnick Oxidations. *ACS Catalysis*, **2018**, 8, 6738-6744	13.1	68
159	Molecular Cobalt Catalysts for O Reduction: Low-Overpotential Production of HO and Comparison with Iron-Based Catalysts. *Journal of the American Chemical Society*, **2017**, 139, 16458-16461	16.4	67
158	Palladium-catalyzed aerobic oxidative dehydrogenation of cyclohexenes to substituted arene derivatives. *Journal of the American Chemical Society*, **2015**, 137, 3454-7	16.4	62
157	Discovery of Multicomponent Heterogeneous Catalysts via Admixture Screening: PdBiTe Catalysts for Aerobic Oxidative Esterification of Primary Alcohols. *Journal of the American Chemical Society*, **2017**, 139, 1690-1698	16.4	60
156	Aerobic Alcohol Oxidation Using a Copper(I)/TEMPO Catalyst System: A Green, Catalytic Oxidation Reaction for the Undergraduate Organic Chemistry Laboratory. *Journal of Chemical Education*, **2013**, 90, 102-105	2.4	59
155	Palladium-catalyzed intermolecular aminoacetoxylation of alkenes and the influence of PhI(OAc)2 on aminopalladation stereoselectivity. *Journal of Organic Chemistry*, **2013**, 78, 6309-15	4.2	59
154	Electrochemical Aminoxyl-Mediated Oxidation of Primary Alcohols in Lignin to Carboxylic Acids: Polymer Modification and Depolymerization. *Journal of the American Chemical Society*, **2019**, 141, 15266-15276	16.4	58
153	Aerobic oxidation of diverse primary alcohols to methyl esters with a readily accessible heterogeneous Pd/Bi/Te catalyst. *Organic Letters*, **2013**, 15, 5072-5	6.2	58
152	Development of an O2-sensitive fluorescence-quenching assay for the combinatorial discovery of electrocatalysts for water oxidation. *Angewandte Chemie - International Edition*, **2012**, 51, 6676-80	16.4	57
151	Fluoride-modulated cobalt catalysts for electrochemical oxidation of water under non-alkaline conditions. *ChemSusChem*, **2010**, 3, 1176-9	8.3	56
150	Site-Selective Copper-Catalyzed Azidation of Benzylic C-H Bonds. *Journal of the American Chemical Society*, **2020**, 142, 11388-11393	16.4	55
149	Selective electrochemical generation of benzylic radicals enabled by ferrocene-based electron-transfer mediators. *Chemical Science*, **2018**, 9, 356-361	9.4	54
148	Copper-catalysed benzylic C-H coupling with alcohols via radical relay enabled by redox buffering. *Nature Catalysis*, **2020**, 3, 358-367	36.5	52
147	Copper(II)-mediated oxidative cyclization of enamides to oxazoles. *Organic and Biomolecular Chemistry*, **2012**, 10, 3866-70	3.9	52
146	Benzoquinone-promoted reaction of O2 with a Pd(II)-hydride. *Journal of the American Chemical Society*, **2011**, 133, 5732-5	16.4	52

145	Reaction of Molecular Oxygen with a PdII Hydride To Produce a PdII Hydroperoxide: Acid Catalysis and Implications for Pd-Catalyzed Aerobic Oxidation Reactions. *Angewandte Chemie*, **2006**, 118, 2970-2973	3.6	51
144	Synthesis of vicinal aminoalcohols by stereoselective aza-Wacker cyclizations: access to (-)-acosamine by redox relay. *Angewandte Chemie - International Edition*, **2013**, 52, 11867-70	16.4	50
143	Titanium(IV)-Mediated Conversion of Carboxamides to Amidines and Implications for Catalytic Transamidation. *Organometallics*, **2005**, 24, 5208-5210	3.8	50
142	Detection of Palladium(I) in Aerobic Oxidation Catalysis. *Angewandte Chemie - International Edition*, **2017**, 56, 3605-3610	16.4	47
141	Reaction of O2 with [(-)-sparteine]Pd(H)Cl: evidence for an intramolecular [H-L]+ "reductive elimination" pathway. *Journal of the American Chemical Society*, **2011**, 133, 13268-71	16.4	47
140	Mediated Fuel Cells: Soluble Redox Mediators and Their Applications to Electrochemical Reduction of O and Oxidation of H, Alcohols, Biomass, and Complex Fuels. *Chemical Reviews*, **2020**, 120, 3749-3786	68.1	46
139	Synthesis and isolation of a stable, axially-chiral seven-membered N-heterocyclic carbene. *Dalton Transactions*, **2009**, 2284-6	4.3	46
138	Continuous Flow Aerobic Alcohol Oxidation Reactions Using a Heterogeneous Ru(OH) /AlO Catalyst. *Organic Process Research and Development*, **2014**, 18, 1503-1508	3.9	45
137	Mechanism of Copper/Azodicarboxylate-Catalyzed Aerobic Alcohol Oxidation: Evidence for Uncooperative Catalysis. *Journal of the American Chemical Society*, **2016**, 138, 199-206	16.4	44
136	Palladium Catalyzed Aryl C-H Amination with O via In Situ Formation of Peroxide-Based Oxidant(s) from Dioxane. *Catalysis Science and Technology*, **2014**, 4, 4301-4307	5.5	44
135	Diazafluorenone-Promoted Oxidation Catalysis: Insights into the Role of Bidentate Ligands in Pd-Catalyzed Aerobic Aza-Wacker Reactions. *ACS Catalysis*, **2016**, 6, 3340-3348	13.1	43
134	PTFE-Membrane Flow Reactor for Aerobic Oxidation Reactions and Its Application to Alcohol Oxidation. *Organic Process Research and Development*, **2015**, 19, 858-864	3.9	42
133	Aerobic Oxidation of Diverse Primary Alcohols to Carboxylic Acids with a Heterogeneous PdBiTe/C (PBT/C) Catalyst. *Organic Process Research and Development*, **2017**, 21, 1388-1393	3.9	42
132	Funneling aromatic products of chemically depolymerized lignin into 2-pyrone-4-6-dicarboxylic acid with Novosphingobium aromaticivorans. *Green Chemistry*, **2019**, 21, 1340-1350	10	42
131	Cooperative Electrocatalytic O Reduction Involving Co(salophen) with p-Hydroquinone as an Electron-Proton Transfer Mediator. *Journal of the American Chemical Society*, **2017**, 139, 18472-18475	16.4	40
130	Mechanistic analysis of trans C-N reductive elimination from a square-planar macrocyclic aryl-copper(III) complex. *Dalton Transactions*, **2011**, 40, 8959-63	4.3	40
129	Structural Effects on the pH-Dependent Redox Properties of Organic Nitroxyls: Pourbaix Diagrams for TEMPO, ABNO, and Three TEMPO Analogs. *Journal of Organic Chemistry*, **2018**, 83, 7323-7330	4.2	40
128	Pd-Catalyzed Aerobic Oxidative Biaryl Coupling: Non-Redox Cocatalysis by Cu(OTf) and Discovery of Fe(OTf) as a Highly Effective Cocatalyst. *Journal of the American Chemical Society*, **2017**, 139, 5704-5707	16.4	39

127	Merging Photochemistry with Electrochemistry: Functional-Group Tolerant Electrochemical Amination of C(sp3)□H Bonds. *Angewandte Chemie*, **2019**, 131, 6451-6456	3.6	39
126	Stereoselective synthesis of cis-2,5-disubstituted pyrrolidines via Wacker-type aerobic oxidative cyclization of alkenes with tert-butanesulfinamide nucleophiles. *Organic Letters*, **2012**, 14, 1242-5	6.2	39
125	Molecular mechanism of acid-triggered aryl-halide reductive elimination in well-defined aryl-Cu(III)-halide species. *Dalton Transactions*, **2010**, 39, 10458-63	4.3	39
124	"Inverse-electron-demand" ligand substitution: experimental and computational insights into olefin exchange at palladium(0). *Journal of the American Chemical Society*, **2004**, 126, 14832-42	16.4	39
123	Electronic Structural Analysis of Copper(II)-TEMPO/ABNO Complexes Provides Evidence for Copper(I)-Oxoammonium Character. *Journal of the American Chemical Society*, **2017**, 139, 13507-13517	16.4	38
122	Structurally Diverse Diazafluorene-Ligated Palladium(II) Complexes and Their Implications for Aerobic Oxidation Reactions. *Journal of the American Chemical Society*, **2016**, 138, 4869-80	16.4	37
121	Cu-Catalyzed Aerobic Oxidative N-N Coupling of Carbazoles and Diarylamines Including Selective Cross-Coupling. *Journal of the American Chemical Society*, **2018**, 140, 9074-9077	16.4	37
120	Stable TEMPO and ABNO Catalyst Solutions for User-Friendly (bpy)Cu/Nitroxyl-Catalyzed Aerobic Alcohol Oxidation. *Journal of Organic Chemistry*, **2015**, 80, 11184-8	4.2	36
119	Efficient Intramolecular Oxidative Amination of Olefins through Direct Dioxygen-Coupled Palladium Catalysis. *Angewandte Chemie*, **2002**, 114, 172-174	3.6	36
118	Synthesis of Indole-2-carboxylate Derivatives via Palladium-Catalyzed Aerobic Amination of Aryl C-H Bonds. *Organic Letters*, **2016**, 18, 3586-9	6.2	36
117	Aerobic Oxidative Heck/Dehydrogenation Reactions of Cyclohexenones: Efficient Access to meta-Substituted Phenols. *Angewandte Chemie*, **2013**, 125, 3760-3763	3.6	35
116	C(sp)-H methylation enabled by peroxide photosensitization and Ni-mediated radical coupling. *Science*, **2021**, 372, 398-403	33.3	35
115	Similarities between the reactions of dioxygen and alkenes with palladium(0): Relevance to the use of benzoquinone and molecular oxygen as stoichiometric oxidants in palladium-catalyzed oxidation reactions. *Journal of Molecular Catalysis A*, **2006**, 251, 2-7		34
114	Br□sted Acid Scaling Relationships Enable Control Over Product Selectivity from O Reduction with a Mononuclear Cobalt Porphyrin Catalyst. *ACS Central Science*, **2019**, 5, 1024-1034	16.8	32
113	Steric modulation of chiral biaryl diamines via Pd-catalyzed directed C-H arylation. *Journal of Organic Chemistry*, **2009**, 74, 2613-5	4.2	32
112	Second-Order Biomimicry: In Situ Oxidative Self-Processing Converts Copper(I)/Diamine Precursor into a Highly Active Aerobic Oxidation Catalyst. *ACS Central Science*, **2017**, 3, 314-321	16.8	31
111	Replacement of Stoichiometric DDQ with a Low Potential o-Quinone Catalyst Enabling Aerobic Dehydrogenation of Tertiary Indolines in Pharmaceutical Intermediates. *Organic Letters*, **2019**, 21, 1176-1181	6.2	31
110	Kinetic and Mechanistic Characterization of Low-Overpotential, HO-Selective Reduction of O Catalyzed by NO-Ligated Cobalt Complexes. *Journal of the American Chemical Society*, **2018**, 140, 10890-10899	16.4	31

109	Regioselective aerobic oxidative Heck reactions with electronically unbiased alkenes: efficient access to -alkyl vinylarenes. *Chemical Communications*, **2015**, 51, 12771-4	5.8	30
108	Palladium-Catalyzed Aerobic Acetoxylation of Benzene using NO-Based Redox Mediators. *Journal of Organometallic Chemistry*, **2015**, 52, 97-102	2.3	29
107	Modular Synthesis of 1,2-Diamine Derivatives via Palladium-Catalyzed Aerobic Oxidative Cyclization of Allylic Sulfamides. *Angewandte Chemie*, **2010**, 122, 5661-5664	3.6	29
106	Electrochemical C-H oxygenation and alcohol dehydrogenation involving Fe-oxo species using water as the oxygen source. *Chemical Science*, **2019**, 10, 7542-7548	9.4	28
105	Noncovalent Immobilization of Molecular Electrocatalysts for Chemical Synthesis: Efficient Electrochemical Alcohol Oxidation with a Pyrene-TEMPO Conjugate. *Angewandte Chemie*, **2017**, 129, 9018-9023	3.6	27
104	Electrochemical Strategy for Hydrazine Synthesis: Development and Overpotential Analysis of Methods for Oxidative N-N Coupling of an Ammonia Surrogate. *Journal of the American Chemical Society*, **2020**, 142, 12349-12356	16.4	27
103	Electrochemical Functional-Group-Tolerant Shono-type Oxidation of Cyclic Carbamates Enabled by Aminoxyl Mediators. *Angewandte Chemie*, **2018**, 130, 6796-6800	3.6	27
102	Platinum-Based Heterogeneous Catalysts for Nitrile Synthesis via Aerobic Oxidative Coupling of Alcohols and Ammonia. *ACS Omega*, **2018**, 3, 6091-6096	3.9	27
101	Copper-Catalyzed C-H Fluorination/Functionalization Sequence Enabling Benzylic C-H Cross Coupling with Diverse Nucleophiles. *Organic Letters*, **2020**, 22, 5753-5757	6.2	25
100	Quinone-Mediated Electrochemical O2 Reduction Accessing High Power Density with an Off-Electrode Co-N/C Catalyst. *Joule*, **2018**, 2, 2722-2731	27.8	24
99	Operando Spectroscopic and Kinetic Characterization of Aerobic Allylic C-H Acetoxylation Catalyzed by Pd(OAc)/4,5-Diazafluoren-9-one. *Journal of the American Chemical Society*, **2019**, 141, 10462-10474	16.4	23
98	O-Promoted Allylic Acetoxylation of Alkenes: Assessment of "Push" vs. "Pull" Mechanisms and Comparison between O and Benzoquinone. *Polyhedron*, **2014**, 84, 96-102	2.7	23
97	Mechanistic Basis for Efficient, Site-Selective, Aerobic Catalytic Turnover in Pd-Catalyzed C-H Imidoylation of Heterocycle-Containing Molecules. *Journal of the American Chemical Society*, **2017**, 139, 14533-14541	16.4	23
96	Electronic structural comparison of the reactions of dioxygen and alkenes with nitrogen-chelated palladium(0). *Inorganic Chemistry*, **2010**, 49, 8200-7	5.1	23
95	KetoABNO/NOx Cocatalytic Aerobic Oxidation of Aldehydes to Carboxylic Acids and Access to -Chiral Carboxylic Acids via Sequential Asymmetric Hydroformylation/Oxidation. *Organic Letters*, **2016**, 18, 3590-3	6.2	22
94	"Oxidatively induced" reductive elimination of dioxygen from an eta2-peroxopalladium(II) complex promoted by electron-deficient alkenes. *Journal of the American Chemical Society*, **2006**, 128, 2804-5	16.4	21
93	Molecular Cobalt Catalysts for O2 Reduction to H2O2: Benchmarking Catalyst Performance via Rate-Overpotential Correlations. *ACS Catalysis*, **2020**, 10, 12031-12039	13.1	21
92	Mechanistic Study of Diaryl Ether Bond Cleavage during Palladium-Catalyzed Lignin Hydrogenolysis. *ChemSusChem*, **2020**, 13, 4487-4494	8.3	20

91	Mechanistic studies of Wacker-type amidocyclization of alkenes catalyzed by (IMes)Pd(TFA)2(H2O): kinetic and stereochemical implications of proton transfer. *Journal of Organic Chemistry*, **2013**, 78, 2083-90	4.2	20
90	Reconciling the Stereochemical Course of Nucleopalladation with the Development of Enantioselective Wacker-Type Cyclizations. *Angewandte Chemie*, **2012**, 124, 11673-11677	3.6	20
89	Kinetics of Anionic Ring-Opening Polymerization of Variously Substituted -Lactams: Homopolymerization and Copolymerization. *Macromolecules*, **2010**, 43, 5618-5626	5.5	20
88	Integration of Anodic and Cathodic Catalysts of Earth-Abundant Materials for Efficient, Scalable CO2 Reduction. *Topics in Catalysis*, **2015**, 58, 57-66	2.3	19
87	Synthesis of Vicinal Aminoalcohols by Stereoselective Aza-Wacker Cyclizations: Access to ()-Acosamine by Redox Relay. *Angewandte Chemie*, **2013**, 125, 12083-12086	3.6	19
86	Catalytic metathesis of simple secondary amides. *Angewandte Chemie - International Edition*, **2007**, 46, 761-3	16.4	18
85	Mechanistic insights into copper-catalyzed aerobic oxidative coupling of N-N bonds. *Chemical Science*, **2019**, 11, 1170-1175	9.4	18
84	Comparison of Quinone-Based Catholytes for Aqueous Redox Flow Batteries and Demonstration of Long-Term Stability with Tetrasubstituted Quinones. *Advanced Energy Materials*, **2020**, 10, 2000340	21.8	18
83	Mechanistic Insights into Aerobic Oxidative Methyl Esterification of Primary Alcohols with Heterogeneous PdBiTe Catalysts. *ACS Catalysis*, **2018**, 8, 1038-1047	13.1	18
82	PdII Complexes Possessing a Seven-Membered N-Heterocyclic Carbene Ligand. *Angewandte Chemie* , **2005**, 117, 5403-5406	3.6	17
81	Copper-Catalyzed Functionalization of Benzylic C-H Bonds with -Fluorobenzenesulfonimide: Switch from C-N to C-F Bond Formation Promoted by a Redox Buffer and Brsted Base. *Organic Letters*, **2020**, 22, 5749-5752	6.2	17
80	Modular Electrochemical Synthesis Using a Redox Reservoir Paired with Independent Half-Reactions. *Joule*, **2021**, 5, 149-165	27.8	17
79	Oxidative Amide Coupling from Functionally Diverse Alcohols and Amines Using Aerobic Copper/Nitroxyl Catalysis. *Angewandte Chemie - International Edition*, **2019**, 58, 12211-12215	16.4	16
78	Speciation Behavior of Copper(II) Acetate in Simple Organic Solvents Revealing the Effect of Trace Water. *European Journal of Inorganic Chemistry*, **2014**, 2014, 1407-1412	2.3	16
77	Tailored quinones support high-turnover Pd catalysts for oxidative C-H arylation with O. *Science*, **2020**, 370, 1454-1460	33.3	16
76	Copper/TEMPO Redox Redux: Analysis of PCET Oxidation of TEMPOH by Copper(II) and the Reaction of TEMPO with Copper(I). *Inorganic Chemistry*, **2019**, 58, 10194-10200	5.1	15
75	Integrated Two-Stage Alkaline-Oxidative Pretreatment of Hybrid Poplar. Part 1: Impact of Alkaline Pre-Extraction Conditions on Process Performance and Lignin Properties. *Industrial & Engineering Chemistry Research*, **2019**, 58, 15989-15999	3.9	14
74	Aerobic Acyloxylation of Allylic C-H Bonds Initiated by a Pd Precatalyst with 4,5-Diazafluoren-9-one as an Ancillary Ligand. *ChemSusChem*, **2019**, 12, 3003-3007	8.3	13

73	Can Donor Ligands Make Pd(OAc) a Stronger Oxidant? Access to Elusive Palladium(II) Reduction Potentials and Effects of Ancillary Ligands via Palladium(II)/Hydroquinone Redox Equilibria. *Journal of the American Chemical Society*, **2020**, 142, 19678-19688	16.4	13
72	Discovering Inexpensive, Effective Catalysts for Solar Energy Conversion: An Authentic Research Laboratory Experience. *Journal of Chemical Education*, **2016**, 93, 650-657	2.4	12
71	Efficient electrochemical synthesis of robust, densely functionalized water soluble quinones. *Chemical Communications*, **2020**, 56, 1199-1202	5.8	12
70	Nucleophilic Thiols Reductively Cleave Ether Linkages in Lignin Model Polymers and Lignin. *ChemSusChem*, **2020**, 13, 4394-4399	8.3	12
69	Processes for Electrochemical Production of Electrolyte-free Hydrogen Peroxide. *Joule*, **2019**, 3, 2889-2891	27.8	12
68	Catalytic Behavior of Mono-N-Protected Amino-Acid Ligands in Ligand-Accelerated C-H Activation by Palladium(II). *Angewandte Chemie - International Edition*, **2020**, 59, 10873-10877	16.4	11
67	Oxidative Catalytic Fractionation of Lignocellulosic Biomass under Non-alkaline Conditions. *Journal of the American Chemical Society*, **2021**, 143, 15462-15470	16.4	11
66	Anthraquinone-Mediated Fuel Cell Anode with an Off-Electrode Heterogeneous Catalyst Accessing High Power Density when Paired with a Mediated Cathode. *ACS Energy Letters*, **2020**, 5, 1407-1412	20.1	10
65	Development of an O2-Sensitive Fluorescence-Quenching Assay for the Combinatorial Discovery of Electrocatalysts for Water Oxidation. *Angewandte Chemie*, **2012**, 124, 6780-6784	3.6	10
64	Iron(III) Nitrate/TEMPO-Catalyzed Aerobic Alcohol Oxidation: Distinguishing between Serial versus Integrated Redox Cooperativity. *Journal of the American Chemical Society*, **2021**, 143, 10565-10570	16.4	10
63	Noncatalyzed Radical Chain Oxidation: Cumene Hydroperoxide **2016**, 15-31		10
62	Chemistry and Mechanism of Oxidation of para-Xylene to Terephthalic Acid Using Co/Mn/Br Catalyst **2016**, 41-66		10
61	Copper-Catalyzed Cross-Coupling of Benzylic C-H Bonds and Azoles with Controlled -Site Selectivity. *Journal of the American Chemical Society*, **2021**, 143, 14438-14444	16.4	10
60	N-Heterocyclic Carbenes as Ligands for High-Oxidation-State Metal Complexes and Oxidation Catalysis. *Topics in Organometallic Chemistry*, **2006**, 21-46	0.6	9
59	Detection of Palladium(I) in Aerobic Oxidation Catalysis. *Angewandte Chemie*, **2017**, 129, 3659-3664	3.6	8
58	Pd-Catalyzed Aerobic Oxidative Coupling of Thiophenes: Synergistic Benefits of Phenanthroline Dione and a Cu Cocatalyst. *Journal of the American Chemical Society*, **2020**,	16.4	8
57	From Terephthalic Acid to 2,5-Furandicarboxylic Acid: An Industrial Perspective **2016**, 311-329		8
56	Stable Tetrasubstituted Quinone Redox Reservoir for Enhancing Decoupled Hydrogen and Oxygen Evolution. *ACS Energy Letters*, **2021**, 6, 1533-1539	20.1	8

55	Effective Biomass Fractionation through Oxygen-Enhanced Alkaline Oxidative Pretreatment. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 1118-1127	8.3	8
54	Are Phosphines Viable Ligands for Pd-Catalyzed Aerobic Oxidation Reactions? Contrasting Insights from a Survey of Six Reactions. *ACS Catalysis*, **2018**, 8, 3708-3714	13.1	7
53	Oxidative Amide Coupling from Functionally Diverse Alcohols and Amines Using Aerobic Copper/Nitroxyl Catalysis. *Angewandte Chemie*, **2019**, 131, 12339-12343	3.6	6
52	Ammonolysis of anilides promoted by ethylene glycol and phosphoric acid. *RSC Advances*, **2014**, 4, 46840-46843	3.7	6
51	"How Should I Think about Voltage? What Is Overpotential?": Establishing an Organic Chemistry Intuition for Electrochemistry. *Journal of Organic Chemistry*, **2021**, 86, 15875-15885	4.2	6
50	Scalable Flow Electrochemical Alcohol Oxidation: Maintaining High Stereochemical Fidelity in the Synthesis of Levetiracetam.. *Organic Process Research and Development*, **2021**, 25, 2601-2607	3.9	6
49	Quinones in Hydrogen Peroxide Synthesis and Catalytic Aerobic Oxidation Reactions **2016**, 219-237		6
48	Benzylic C-H isocyanation/amine coupling sequence enabling high-throughput synthesis of pharmaceutically relevant ureas. *Chemical Science*, **2021**, 12, 10380-10387	9.4	6
47	Cover Picture: Palladium Oxidase Catalysis: Selective Oxidation of Organic Chemicals by Direct Dioxygen-Coupled Turnover (Angew. Chem. Int. Ed. 26/2004). *Angewandte Chemie - International Edition*, **2004**, 43, 3347-3347	16.4	5
46	Titelbild: Palladiumoxidasekatalyse: selektive Oxidation durch direkte disauerstoffgekoppelte Umsetzung (Angew. Chem. 26/2004). *Angewandte Chemie*, **2004**, 116, 3425-3425	3.6	5
45	Deriving the Turnover Frequency of Aminoxyl-Catalyzed Alcohol Oxidation by Chronoamperometry: An Introduction to Organic Electrocatalysis. *Journal of Chemical Education*, **2021**, 98, 600-606	2.4	5
44	N-Hydroxyphthalimide (NHPI)-Organocatalyzed Aerobic Oxidations: Advantages, Limits, and Industrial Perspectives **2016**, 253-265		5
43	Reactor Concepts for Aerobic Liquid phase Oxidation: Microreactors and Tube Reactors **2016**, 397-419		5
42	Phenol Oxidations **2016**, 97-111		5
41	Radical C(sp3)H functionalization and cross-coupling reactions. *Nature Reviews Chemistry*,	34.6	5
40	Industrial Prospects for the Chemical and Photochemical Singlet Oxygenation of Organic Compounds **2016**, 369-395		4
39	Copper-Catalyzed Benzylic CH Coupling with Alcohols via Radical Relay		4
38	From Lignin to Valuable Aromatic Chemicals: Lignin Depolymerization and Monomer Separation via Centrifugal Partition Chromatography. *ACS Central Science*, **2021**, 7, 1831-1837	16.8	4

37	1,4-Butanediol from 1,3-Butadiene **2016**, 159-171		4
36	Cyclohexane Oxidation: History of Transition from Catalyzed to Noncatalyzed **2016**, 33-39		4
35	Cu-Catalyzed Aerobic Oxidation: Overview and New Developments **2016**, 67-83		4
34	Copper-Catalyzed Oxidation of Hydrazones to Diazo Compounds Using Oxygen as the Terminal Oxidant. *ACS Catalysis*, **2021**, 11, 2676-2683	13.1	4
33	Mechanism of the reaction of an NHC-coordinated palladium(II)-hydride with O2 in acetonitrile. *Polyhedron*, **2020**, 182, 114501	2.7	3
32	Pd-Catalyzed Aerobic Oxidation Reactions: Industrial Applications and New Developments **2016**, 113-138		3
31	Cu-Catalyzed Site-Selective Benzylic Chlorination Enabling Net C-H Coupling with Oxidatively Sensitive Nucleophiles.. *Organic Letters*, **2021**,	6.2	3
30	Green Oxidation of Sulfide to Sulfoxide and Sulfone **2019**, 329-360		2
29	Green Oxidative Synthesis of Aldehydes and Ketones **2019**, 35-78		2
28	Catalytic Behavior of Mono-N-Protected Amino-Acid Ligands in Ligand-Accelerated C□H Activation by Palladium(II). *Angewandte Chemie*, **2020**, 132, 10965-10969	3.6	2
27	Multichannel gas-uptake/evolution reactor for monitoring liquid-phase chemical reactions. *Review of Scientific Instruments*, **2021**, 92, 044103	1.7	2
26	Catalyst-Controlled Regioselectivity in Pd-Catalyzed Aerobic Oxidative Arylation of Indoles. *Organometallics*, **2021**, 40, 2198-2203	3.8	2
25	Carbon Materials as Nonmetal Catalysts for Aerobic Oxidations: The Industrial Glyphosate Process and New Developments **2016**, 267-287		2
24	Oxidative Conversion of Renewable Feedstock: Carbohydrate Oxidation **2016**, 349-368		2
23	Overview of Radical Chain Oxidation Chemistry **2016**, 1-14		2
22	Oxidative Carbonylation: Diphenyl Carbonate **2016**, 189-208		2
21	NO x Cocatalysts for Aerobic Oxidation Reactions: Application to Alcohol Oxidation **2016**, 239-251		2
20	Copper-Catalyzed Aerobic Alcohol Oxidation **2016**, 85-96		2

19	Acetaldehyde from Ethylene and Related Wacker-Type Reactions **2016**, 139-158		2
18	Ethylene oligomerization into linear olefins over cobalt oxide on carbon catalyst. *Catalysis Science and Technology*, **2021**, 11, 3599-3608	5.5	2
17	Sequential oxidation-depolymerization strategies for lignin conversion to low molecular weight aromatic chemicals. *Advances in Inorganic Chemistry*, **2021**, 77, 99-136	2.1	2
16	Green Oxidative Synthesis of Heterocyclic Compounds **2019**, 307-327		1
15	The Recent Developments of Photocatalytic Oxidation **2019**, 383-408		1
14	Green Oxidative Synthesis of Nitriles **2019**, 199-220		1
13	Benzoquinone Cocatalyst Contributions to DAF/Pd(OAc)-Catalyzed Aerobic Allylic Acetoxylation in the Absence and Presence of a Co(salophen) Cocatalyst. *ACS Catalysis*, **2021**, 11, 6363-6370	13.1	1
12	Azelaic Acid from Vegetable Feedstock via Oxidative Cleavage with Ozone or Oxygen **2016**, 331-348		1
11	Green Oxidative Synthesis of Substituted Arenes **2019**, 281-305		
10	Green Oxidative Synthesis of Substituted Olefins and Alkynes **2019**, 259-279		
9	Green Oxidative **2019**, 1-34		
8	Cluster Preface: Catalytic Aerobic Oxidations. *Synlett*, **2017**, 28, 1546-1547	2.2	
7	Organometallic Chemistry: Development and Study of Catalytic Activity. *Journal of Chemical Education*, **2008**, 85, 1453	2.4	
6	Air Oxidation of Primary Alcohols Catalyzed by Copper(I)/TEMPO. Preparation of 2-Amino-5-bromo-benzaldehyde **2014**, 240-250		
5	Mitsubishi Chemicals Liquid Phase Palladium-Catalyzed Oxidation Technology: Oxidation of Cyclohexene, Acrolein, and Methyl Acrylate to Useful Industrial Chemicals **2016**, 173-187		
4	Aerobic Oxidative Esterification of Aldehydes with Alcohols: The Evolution from PdPb Intermetallic Catalysts to AuNiO x Nanoparticle Catalysts for the Production of Methyl Methacrylate **2016**, 209-218		
3	Enzyme Catalysis: Exploiting Biocatalysis and Aerobic Oxidations for High-Volume and High-Value Pharmaceutical Syntheses **2016**, 289-309		
2	Sustainable Pd(OAc)2/Hydroquinone Cocatalyst System for Cis-Selective Dibenzoyloxylation of 1,3-Cyclohexadiene. *Angewandte Chemie*, **2021**, 133, 23366	3.6	

1	Sustainable Pd(OAc) /Hydroquinone Cocatalyst System for Cis-Selective Dibenzoyloxylation of 1,3-Cyclohexadiene. *Angewandte Chemie - International Edition*, **2021**, 60, 23182-23186	16.4