

Naoto Chatani

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282
papers

23,835
citations

85
h-index

148
g-index

320
ext. papers

26,153
ext. citations

8.1
avg, IF

7.82
L-index

#	Paper	IF	Citations
282	Catalytic functionalization of C(sp ²)-H and C(sp ³)-H bonds by using bidentate directing groups. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 11726-43	16.4	1710
281	Efficient catalytic addition of aromatic carbon-hydrogen bonds to olefins. <i>Nature</i> , 1993 , 366, 529-531	50.4	1120
280	Catalytic Methods for C-H Bond Functionalization: Application in Organic Synthesis. <i>Advanced Synthesis and Catalysis</i> , 2003 , 345, 1077-1101	5.6	993
279	Katalytische Funktionalisierung von C(sp ²)-H- und C(sp ³)-H-Bindungen unter Verwendung von zweizähligen dirigierenden Gruppen. <i>Angewandte Chemie</i> , 2013 , 125, 11942-11959	3.6	498
278	Cross-Couplings Using Aryl Ethers via C-O Bond Activation Enabled by Nickel Catalysts. <i>Accounts of Chemical Research</i> , 2015 , 48, 1717-26	24.3	489
277	Bidentate Directing Groups: An Efficient Tool in C-H Bond Functionalization Chemistry for the Expedient Construction of C-C Bonds. <i>Chemical Reviews</i> , 2020 , 120, 1788-1887	68.1	406
276	Nickel-catalyzed cross-coupling of aryl methyl ethers with aryl boronic esters. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 4866-9	16.4	366
275	Catalytic reactions involving the cleavage of carbon-cyano and carbon-carbon triple bonds. <i>Chemical Society Reviews</i> , 2008 , 37, 300-7	58.5	351
274	Nickel-catalyzed direct alkylation of C-H bonds in benzamides and acrylamides with functionalized alkyl halides via bidentate-chelation assistance. <i>Journal of the American Chemical Society</i> , 2013 , 135, 5308-11	16.4	345
273	Nickel Catalysts/N,N'-Bidentate Directing Groups: An Excellent Partnership in Directed C-H Activation Reactions. <i>Chemistry Letters</i> , 2015 , 44, 410-421	1.7	341
272	Nickel-catalyzed direct arylation of C(sp ³)-H bonds in aliphatic amides via bidentate-chelation assistance. <i>Journal of the American Chemical Society</i> , 2014 , 136, 898-901	16.4	340
271	Palladium-catalyzed direct ethynylation of C(sp ³)-H bonds in aliphatic carboxylic acid derivatives. <i>Journal of the American Chemical Society</i> , 2011 , 133, 12984-6	16.4	335
270	Nickel-catalyzed chelation-assisted transformations involving ortho C-H bond activation: regioselective oxidative cycloaddition of aromatic amides to alkynes. <i>Journal of the American Chemical Society</i> , 2011 , 133, 14952-5	16.4	330
269	Catalytic Addition of Aromatic Carbon-Hydrogen Bonds to Olefins with the Aid of Ruthenium Complexes. <i>Bulletin of the Chemical Society of Japan</i> , 1995 , 68, 62-83	5.1	304
268	Ru(3)(CO)(12)-catalyzed coupling reaction of sp ³ C-H bonds adjacent to a nitrogen atom in alkylamines with alkenes. <i>Journal of the American Chemical Society</i> , 2001 , 123, 10935-41	16.4	293
267	Nickel-catalyzed reaction of arylzinc reagents with N-aromatic heterocycles: a straightforward approach to C-H bond arylation of electron-deficient heteroaromatic compounds. <i>Journal of the American Chemical Society</i> , 2009 , 131, 12070-1	16.4	258
266	Ruthenium-catalyzed carbonylation at ortho C-H bonds in aromatic amides leading to phthalimides: C-H bond activation utilizing a bidentate system. <i>Journal of the American Chemical Society</i> , 2009 , 131, 6898-9	16.4	242

- 265 Modular synthesis of phenanthridine derivatives by oxidative cyclization of 2-isocyanobiphenyls with organoboron reagents. *Angewandte Chemie - International Edition*, **2012**, 51, 11363-6 16.4 239
- 264 Highly regioselective carbonylation of unactivated C(sp³)-H bonds by ruthenium carbonyl. *Journal of the American Chemical Society*, **2011**, 133, 8070-3 16.4 237
- 263 Nickel-catalyzed Suzuki-Miyaura reaction of aryl fluorides. *Journal of the American Chemical Society*, **2011**, 133, 19505-11 16.4 223
- 262 Ruthenium-catalyzed functionalization of aryl carbon-oxygen bonds in aromatic ethers with organoboron compounds. *Journal of the American Chemical Society*, **2004**, 126, 2706-7 16.4 214
- 261 Rhodium-Catalyzed C(sp²)- or C(sp³)-H Bond Functionalization Assisted by Removable Directing Groups. *Angewandte Chemie - International Edition*, **2019**, 58, 8304-8329 16.4 214
- 260 Highly Selective Skeletal Reorganization of 1,6- and 1,7-Enynes to 1-Vinylcycloalkenes Catalyzed by [RuCl₂(CO)₃]₂. *Journal of the American Chemical Society*, **1994**, 116, 6049-6050 16.4 213
- 259 Nickel-catalyzed amination of aryl pivalates by the cleavage of aryl C-O bonds. *Angewandte Chemie - International Edition*, **2010**, 49, 2929-32 16.4 211
- 258 Ni(II)-catalyzed oxidative coupling between C(sp²)-H in benzamides and C(sp³)-H in toluene derivatives. *Journal of the American Chemical Society*, **2014**, 136, 15509-12 16.4 209
- 257 Palladium-catalyzed direct alkynylation of C-H bonds in benzenes. *Organic Letters*, **2009**, 11, 3250-2 6.2 206
- 256 PtCl₂-Catalyzed Conversion of 1,6- and 1,7-Enynes to 1-Vinylcycloalkenes. Anomalous Bond Connection in Skeletal Reorganization of Enynes. *Organometallics*, **1996**, 15, 901-903 3.8 205
- 255 A catalytic approach for the functionalization of C(sp³)-H bonds. *Angewandte Chemie - International Edition*, **2006**, 45, 1683-4 16.4 201
- 254 Catalytic skeletal reorganization of enynes through electrophilic activation of alkynes: double cleavage of C-C double and triple bonds. *Chemical Communications*, **2009**, 371-84 5.8 180
- 253 Ruthenium-catalyzed direct arylation of C-H bonds in aromatic amides containing a bidentate directing group: significant electronic effects on arylation. *Chemical Science*, **2013**, 4, 664-670 9.4 177
- 252 Ruthenium-catalyzed ortho-C-H bond alkylation of aromatic amides with α -unsaturated ketones via bidentate-chelation assistance. *Chemical Science*, **2013**, 4, 2201 9.4 176
- 251 Construction of Novel Polycyclic Ring Systems by Transition-Metal-Catalyzed Cycloisomerization of Ene-Enynes. Interception of a Carbenoid Intermediate in Skeletal Reorganization of Enynes. *Journal of the American Chemical Society*, **1998**, 120, 9104-9105 16.4 172
- 250 Carbonylation at sp³ C-H Bonds Adjacent to a Nitrogen Atom in Alkylamines Catalyzed by Rhodium Complexes. *Journal of the American Chemical Society*, **2000**, 122, 12882-12883 16.4 165
- 249 Cobalt(II)-catalyzed C-H functionalization using an N,N'-bidentate directing group. *Coordination Chemistry Reviews*, **2017**, 350, 117-135 23.2 162
- 248 Direct observation of the oxidative addition of the aryl carbon-oxygen bond to a ruthenium complex and consideration of the relative reactivity between aryl carbon-oxygen and aryl carbon-hydrogen bonds. *Journal of the American Chemical Society*, **2006**, 128, 16516-7 16.4 156

- 247 Rhodium-catalyzed silylation and intramolecular arylation of nitriles via the silicon-assisted cleavage of carbon-cyano bonds. *Journal of the American Chemical Society*, **2008**, 130, 15982-9 16.4 155
- 246 Nickel-catalyzed reductive cleavage of aryl-oxygen bonds in alkoxy- and pivaloxyarenes using hydrosilanes as a mild reducing agent. *Chemical Communications*, **2011**, 47, 2946-8 5.8 149
- 245 Ni0-catalyzed Direct Amination of Anisoles Involving the Cleavage of Carbon-Oxygen Bonds. *Chemistry Letters*, **2009**, 38, 710-711 1.7 147
- 244 Ru₃(CO)₁₂-catalyzed silylation of benzylic C-H bonds in arylpyridines and arylpyrazoles with hydrosilanes via C-H bond cleavage. *Journal of the American Chemical Society*, **2004**, 126, 12792-3 16.4 146
- 243 Devising boron reagents for orthogonal functionalization through Suzuki-Miyaura cross-coupling. *Angewandte Chemie - International Edition*, **2009**, 48, 3565-8 16.4 144
- 242 Skeletal reorganization of enynes to 1-vinylcycloalkenes catalyzed by GaCl₃. *Journal of the American Chemical Society*, **2002**, 124, 10294-5 16.4 144
- 241 Palladium-catalyzed direct ortho-alkynylation of aromatic carboxylic acid derivatives. *Organic Letters*, **2012**, 14, 354-7 6.2 142
- 240 The Ru(cod)(cot)-catalyzed alkenylation of aromatic C-H bonds with alkenyl acetates. *Journal of the American Chemical Society*, **2007**, 129, 9858-9 16.4 142
- 239 Rh(I)-catalyzed silylation of aryl and alkenyl cyanides involving the cleavage of C-C and Si-Si bonds. *Journal of the American Chemical Society*, **2006**, 128, 8152-3 16.4 142
- 238 Nickel-catalyzed reductive and borylative cleavage of aromatic carbon-nitrogen bonds in N-aryl amides and carbamates. *Journal of the American Chemical Society*, **2014**, 136, 5587-90 16.4 141
- 237 Ru₃(CO)₁₂-Catalyzed Decarbonylative Cleavage of a C≡C Bond of Alkyl Phenyl Ketones. *Journal of the American Chemical Society*, **1999**, 121, 8645-8646 16.4 140
- 236 Ru₃(CO)₁₂-Catalyzed Coupling of Heteroaromatic C≡C/CO/Olefins. Regioselective Acylation of the Imidazole Ring. *Journal of the American Chemical Society*, **1996**, 118, 493-494 16.4 139
- 235 Ru(3)(CO)(12)-Catalyzed Reaction of Pyridylbenzenes with Carbon Monoxide and Olefins. Carbonylation at a C-H Bond in the Benzene Ring. *Journal of Organic Chemistry*, **1997**, 62, 2604-2610 4.2 129
- 234 Ru₃(CO)₁₂-Catalyzed Cyclocarbonylation of 1,6-Enynes to Bicyclo[3.3.0]octenones. *Journal of Organic Chemistry*, **1997**, 62, 3762-3765 4.2 129
- 233 Rhodium-catalyzed carbon-silicon bond activation for synthesis of benzosilole derivatives. *Journal of the American Chemical Society*, **2012**, 134, 19477-88 16.4 125
- 232 Rhodium-catalyzed coupling of 2-silylphenylboronic acids with alkynes leading to benzosiloles: catalytic cleavage of the carbon-silicon bond in trialkylsilyl groups. *Journal of the American Chemical Society*, **2009**, 131, 7506-7 16.4 122
- 231 Nickel-catalyzed borylation of arenes and indoles via C-H bond cleavage. *Chemical Communications*, **2015**, 51, 6508-11 5.8 120
- 230 Cycloisomerization of omega-aryl-1-alkynes: GaCl₃ as a highly electrophilic catalyst for alkyne activation. *Journal of Organic Chemistry*, **2002**, 67, 1414-7 4.2 120

229	Direct arylation of C(sp ³)-H bonds in aliphatic amides with diaryliodonium salts in the presence of a nickel catalyst. <i>Journal of Organic Chemistry</i> , 2014 , 79, 11933-9	4.2	118
228	Visible Light-mediated Direct Arylation of Arenes and Heteroarenes Using Diaryliodonium Salts in the Presence and Absence of a Photocatalyst. <i>Chemistry Letters</i> , 2013 , 42, 1203-1205	1.7	117
227	The ruthenium-catalyzed silylation of aromatic C-H bonds with triethylsilane. <i>Journal of Organometallic Chemistry</i> , 2003 , 686, 134-144	2.3	116
226	Ru(II)- and Pt(II)-catalyzed cycloisomerization of omega-aryl-1-alkynes. Generation Of carbocationic species from alkynes and transition metal halides and its interception by an aromatic ring. <i>Journal of Organic Chemistry</i> , 2000 , 65, 4913-8	4.2	116
225	Nickel(II)-catalyzed direct arylation of C-H bonds in aromatic amides containing an 8-aminoquinoline moiety as a directing group. <i>Journal of Organic Chemistry</i> , 2014 , 79, 11922-32	4.2	115
224	Iridium(I)-catalyzed cycloisomerization of enynes. <i>Journal of Organic Chemistry</i> , 2001 , 66, 4433-6	4.2	113
223	Rhodium-catalyzed borylation of aryl 2-pyridyl ethers through cleavage of the carbon-oxygen bond: borylative removal of the directing group. <i>Journal of the American Chemical Society</i> , 2015 , 137, 1593-600	16.4	112
222	Platinum and ruthenium chloride-catalyzed cycloisomerization of 1-alkyl-2-ethynylbenzenes: interception of pi-activated alkynes with a benzylic C-H bond. <i>Journal of Organic Chemistry</i> , 2009 , 74, 5471-5	4.2	112
221	Nickel-catalyzed cross-coupling reaction of alkenyl methyl ethers with aryl boronic esters. <i>Organic Letters</i> , 2009 , 11, 4890-2	6.2	110
220	Synthesis of 2-boryl- and silylindoles by copper-catalyzed borylative and silylative cyclization of 2-alkenylaryl isocyanides. <i>Journal of Organic Chemistry</i> , 2010 , 75, 4841-7	4.2	109
219	Rhodium-catalyzed reductive cleavage of carbon-cyano bonds with hydrosilane: a catalytic protocol for removal of cyano groups. <i>Journal of the American Chemical Society</i> , 2009 , 131, 3174-5	16.4	109
218	Nickel-Catalyzed Cross-Coupling of Aryl Methyl Ethers with Aryl Boronic Esters. <i>Angewandte Chemie</i> , 2008 , 120, 4944-4947	3.6	109
217	1,3-Dicyclohexylimidazol-2-ylidene as a superior ligand for the nickel-catalyzed cross-couplings of aryl and benzyl methyl ethers with organoboron reagents. <i>Organic Letters</i> , 2014 , 16, 5572-5	6.2	108
216	Palladium-catalyzed direct synthesis of phosphole derivatives from triarylphosphines through cleavage of carbon-hydrogen and carbon-phosphorus bonds. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 11892-5	16.4	108
215	A New Chelation-Assistance Mode for a Ruthenium-Catalyzed Silylation at the C-H Bond in Aromatic Ring with Hydrosilanes. <i>Chemistry Letters</i> , 2002 , 31, 396-397	1.7	108
214	Nickel-Catalyzed Alkylative Cross-Coupling of Anisoles with Grignard Reagents via C-O Bond Activation. <i>Journal of the American Chemical Society</i> , 2016 , 138, 6711-4	16.4	108
213	Nickel-catalyzed alkylation of anisoles via C-O bond cleavage. <i>Organic Letters</i> , 2015 , 17, 680-3	6.2	103
212	Phenyltrimethylammonium Salts as Methylation Reagents in the Nickel-Catalyzed Methylation of C-H Bonds. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 3162-5	16.4	101

211	A GaCl ₃ -catalyzed [4+1] cycloaddition of alpha,beta-unsaturated carbonyl compounds and isocyanides leading to unsaturated gamma-lactone derivatives. <i>Journal of the American Chemical Society</i> , 2003 , 125, 7812-3	16.4	100
210	C-H functionalization at sterically congested positions by the platinum-catalyzed borylation of arenes. <i>Journal of the American Chemical Society</i> , 2015 , 137, 12211-4	16.4	97
209	Nickel-Catalyzed Reaction of C≡C Bonds in Amides with I ₂ : ortho-Iodination via the Cleavage of C(sp ²)≡C Bonds and Oxidative Cyclization to β -Lactams via the Cleavage of C(sp ³)≡C Bonds. <i>ACS Catalysis</i> , 2016 , 6, 4323-4329	13.1	97
208	Ru ₃ (CO) ₁₂ -Catalyzed Cyclocarbonylation of Yne-Aldehydes to Bicyclic β -Unsaturated β -Butyrolactones. <i>Journal of the American Chemical Society</i> , 1998 , 120, 5335-5336	16.4	96
207	Nickel-Catalyzed Cross-Coupling of Anisoles with Alkyl Grignard Reagents via C-O Bond Cleavage. <i>Organic Letters</i> , 2015 , 17, 4352-5	6.2	94
206	Palladium-catalyzed cyclocoupling of 2-halobiaryls with isocyanides via the cleavage of carbon-hydrogen bonds. <i>Journal of Organic Chemistry</i> , 2010 , 75, 4835-40	4.2	92
205	Rhodium-Catalyzed Si-F Exchange Reaction between Fluorobenzenes and a Disilane. Catalytic Reaction Involving Cleavage of C-F Bonds. <i>Chemistry Letters</i> , 1998 , 27, 157-158	1.7	92
204	Catalytic cross-coupling reaction of esters with organoboron compounds and decarbonylative reduction of esters with HCOONH ₄ : a new route to acyl transition metal complexes through the cleavage of acyl-oxygen bonds in esters. <i>Journal of Organic Chemistry</i> , 2004 , 69, 5615-21	4.2	91
203	Rhodium-catalyzed alkylation of C-H bonds in aromatic amides with β -unsaturated esters. <i>Organic Letters</i> , 2014 , 16, 5148-51	6.2	89
202	Nickel-catalyzed reductive cleavage of aryl alkyl ethers to arenes in absence of external reductant. <i>Chemical Science</i> , 2015 , 6, 3410-3414	9.4	88
201	The Ruthenium-Catalyzed Addition of C≡C Bonds in Aldehydes to Olefins. <i>Chemistry Letters</i> , 2001 , 30, 386-387	1.7	88
200	Ru ₃ (CO) ₁₂ -Catalyzed Site-Selective Carbonylation Reactions at a C≡C Bond in Aza-Heterocycles. <i>Journal of the American Chemical Society</i> , 1998 , 120, 11522-11523	16.4	88
199	Dicumyl Peroxide as a Methylating Reagent in the Ni-Catalyzed Methylation of Ortho C-H Bonds in Aromatic Amides. <i>Organic Letters</i> , 2016 , 18, 1698-701	6.2	85
198	Ni(0)/NHC-catalyzed amination of N-heteroaryl methyl ethers through the cleavage of carbon-oxygen bonds. <i>Tetrahedron</i> , 2012 , 68, 5157-5161	2.4	85
197	Renaissance of Organic Synthesis Using Isocyanides. <i>Chemistry Letters</i> , 2011 , 40, 330-340	1.7	84
196	Catalytic Transformations Involving the Activation of sp ² Carbon-Oxygen Bonds. <i>Topics in Organometallic Chemistry</i> , 2012 , 35-53	0.6	80
195	Rhodium-Catalyzed Reaction of N-(2-Pyridinyl)piperazines with CO and Ethylene. A Novel Carbonylation at a C≡C Bond in the Piperazine Ring. <i>Organometallics</i> , 1997 , 16, 3615-3622	3.8	80
194	Rh(II)-Catalyzed skeletal reorganization of 1,6- and 1,7-enynes through electrophilic activation of alkynes. <i>Journal of the American Chemical Society</i> , 2009 , 131, 15203-11	16.4	79

193	A New Synthetic Method for the Preparation of Indenones from Aromatic Imines. Ru ₃ (CO) ₁₂ -Catalyzed Carbonylation at an ortho C-H Bond in the Aromatic Imines. <i>Journal of Organic Chemistry</i> , 1997 , 62, 5647-5650	4.2	79
192	The Ruthenium-Catalyzed Addition of C-H Bonds in Aromatic Nitriles to Olefins. <i>Chemistry Letters</i> , 1999 , 28, 1083-1084	1.7	79
191	Skeletal reorganization of enynes catalyzed by InCl ₃ . <i>Organic Letters</i> , 2006 , 8, 2155-8	6.2	78
190	Catalytic [4+1] cycloaddition of alpha,beta-unsaturated carbonyl compounds with isocyanides. <i>Journal of the American Chemical Society</i> , 2005 , 127, 761-6	16.4	77
189	Chelation-Assisted Nickel-Catalyzed C-H Functionalizations. <i>Trends in Chemistry</i> , 2019 , 1, 524-539	14.8	76
188	Ru ₃ (CO) ₁₂ -Catalyzed Intermolecular Cyclocoupling of Ketones, Alkenes or Alkynes, and Carbon Monoxide. [2 + 2 + 1] Cycloaddition Strategy for the Synthesis of Functionalized Butyrolactones. <i>Journal of the American Chemical Society</i> , 2000 , 122, 12663-12674	16.4	76
187	Cobalt-catalyzed chelation assisted C-H allylation of aromatic amides with unactivated olefins. <i>Chemical Communications</i> , 2016 , 52, 10129-32	5.8	75
186	Brønsted acid catalyzed formal insertion of isocyanides into a C-O bond of acetals. <i>Journal of the American Chemical Society</i> , 2007 , 129, 11431-7	16.4	75
185	Nickel-Catalyzed Cross-Coupling Reactions of Unreactive Phenolic Electrophiles via C-O Bond Activation. <i>Topics in Current Chemistry</i> , 2016 , 374, 41	7.2	74
184	The Nickel(II)-Catalyzed Direct Benzylolation, Allylation, Alkylation, and Methylation of C-H Bonds in Aromatic Amides Containing an 8-Aminoquinoline Moiety as the Directing Group. <i>Bulletin of the Chemical Society of Japan</i> , 2015 , 88, 438-446	5.1	74
183	Ruthenium- and rhodium-catalyzed direct carbonylation of the ortho C-H bond in the benzene ring of N-arylpiperazines. <i>Journal of Organic Chemistry</i> , 2004 , 69, 4433-40	4.2	72
182	Acylation of five-membered N-heteroaromatic compounds by ruthenium carbonyl-catalyzed direct carbonylation at a C-H bond. <i>Journal of Organic Chemistry</i> , 2000 , 65, 4039-47	4.2	70
181	Ruthenium-Catalyzed Addition of Aromatic Esters at the ortho C-H Bonds to Olefins. <i>Chemistry Letters</i> , 1996 , 25, 109-110	1.7	70
180	Nickel-Mediated Decarbonylation of Simple Unstrained Ketones through the Cleavage of Carbon-Carbon Bonds. <i>Journal of the American Chemical Society</i> , 2017 , 139, 1416-1419	16.4	68
179	Rh(I)-Catalyzed Alkylation of ortho-C-H Bonds in Aromatic Amides with Maleimides. <i>Organic Letters</i> , 2017 , 19, 4544-4547	6.2	67
178	The ruthenium-catalyzed reductive decarboxylation of esters: catalytic reactions involving the cleavage of acyl-oxygen bonds of esters. <i>Journal of the American Chemical Society</i> , 2001 , 123, 4849-50	16.4	67
177	Catalytic arylation of a C-H bond in pyridine and related six-membered N-heteroarenes using organozinc reagents. <i>Chemistry - an Asian Journal</i> , 2012 , 7, 1357-65	4.5	66
176	Direct carbonylation at a C-H bond in the benzene ring of 2-phenyloxazolines catalyzed by Ru ₃ (CO) ₁₂ . Scope, limitations, and mechanistic aspects. <i>Journal of Organic Chemistry</i> , 2000 , 65, 1475-82	4.2	66

- 175 Combined Theoretical and Experimental Studies of Nickel-Catalyzed Cross-Coupling of Methoxyarenes with Arylboronic Esters via C-O Bond Cleavage. *Journal of the American Chemical Society*, **2017**, 139, 10347-10358 16.4 64
- 174 The First Catalytic Carbonylative [4 + 1] Cycloaddition Using a 1,3-Conjugated System. A New Transformation of β -Unsaturated Imines to Unsaturated β -Lactams Catalyzed by Ru₃(CO)₁₂. *Journal of the American Chemical Society*, **1999**, 121, 1758-1759 16.4 64
- 173 Palladium(ii)-catalyzed synthesis of dibenzothiophene derivatives the cleavage of carbon-sulfur and carbon-hydrogen bonds. *Chemical Science*, **2016**, 7, 2587-2591 9.4 63
- 172 Mechanistic Study of the Ru(H)₂(CO)(PPh₃)₃-Catalyzed Addition of C≡C Bonds in Aromatic Esters to Olefins. *Chemistry Letters*, **2001**, 30, 918-919 1.7 62
- 171 Catalytic carbonylation reactions of benzyne derivatives. *Journal of the American Chemical Society*, **2001**, 123, 12686-7 16.4 62
- 170 Rhodium-catalyzed alkenylation of nitriles via silicon-assisted C-CN bond cleavage. *Organic Letters*, **2010**, 12, 1864-7 6.2 60
- 169 Rhodium-catalyzed silylation of aromatic carbon-hydrogen bonds in 2-arylpyridines with disilane. *Chemistry - an Asian Journal*, **2008**, 3, 1585-91 4.5 60
- 168 Ruthenium Carbonyl-Catalyzed [2 + 2 + 1]- Cycloaddition of Ketones, Olefins, and Carbon Monoxide, Leading to Functionalized β -Butyrolactones. *Journal of the American Chemical Society*, **1999**, 121, 7160-7161 16.4 60
- 167 Palladium(II)-catalyzed ortho-C-H arylation/alkylation of N-benzoyl β -amino ester derivatives. *Chemistry - A European Journal*, **2014**, 20, 4548-53 4.8 58
- 166 Chelation-Assisted Nickel-Catalyzed Oxidative Annulation via Double C-H Activation/Alkyne Insertion Reaction. *Chemistry - A European Journal*, **2016**, 22, 1362-7 4.8 58
- 165 Strategic evolution in transition metal-catalyzed directed C≡C bond activation and future directions. *Coordination Chemistry Reviews*, **2021**, 431, 213683 23.2 58
- 164 Nickel-Catalyzed Formal Homocoupling of Methoxyarenes for the Synthesis of Symmetrical Biaryls via C-O Bond Cleavage. *Organic Letters*, **2015**, 17, 6142-5 6.2 57
- 163 Chemistry. Remote control by steric effects. *Science*, **2014**, 343, 850-1 33.3 56
- 162 Ruthenium-Catalyzed Coupling of Aromatic Carbon-Hydrogen Bonds in Aromatic Imidates with Olefins. *Chemistry Letters*, **1999**, 28, 19-20 1.7 56
- 161 Nickel-Catalyzed Amination of Aryl Pivalates by the Cleavage of Aryl C=O Bonds. *Angewandte Chemie*, **2010**, 122, 2991-2994 3.6 55
- 160 Carbonylative. *Journal of Organic Chemistry*, **2000**, 65, 9230-3 4.2 55
- 159 Ruthenium-catalyzed C-H/CO/Olefin coupling reaction of N-arylpyrazoles. Extraordinary reactivity of N-arylpyrazoles toward carbonylation at C-H bonds. *Journal of Organic Chemistry*, **2003**, 68, 7538-40 4.2 54
- 158 A New Synthetic Route to Heteroarylsilanes via Ruthenium-Catalyzed C-H/SiR₃Coupling. *Chemistry Letters*, **2000**, 29, 750-751 1.7 54

157	C≡C activation. <i>Nature Reviews Methods Primers</i> , 2021 , 1,		52
156	Nickel-catalyzed C-H/N-H annulation of aromatic amides with alkynes in the absence of a specific chelation system. <i>Chemical Science</i> , 2017 , 8, 6650-6655	9.4	51
155	Ruthenium-catalyzed cyclocarbonylation of aliphatic amides through the regioselective activation of unactivated C(sp ³)≡C bonds. <i>Tetrahedron</i> , 2013 , 69, 4466-4472	2.4	51
154	Ruthenium-catalyzed reaction of 1,6-diynes with hydrosilanes and carbon monoxide: a third way of incorporating CO. <i>Journal of the American Chemical Society</i> , 1993 , 115, 11614-11615	16.4	51
153	Ein katalytischer Ansatz zur Funktionalisierung von C(sp ³)-H-Bindungen. <i>Angewandte Chemie</i> , 2006 , 118, 1713-1715	3.6	50
152	Ru ₃ (CO) ₁₂ -catalyzed C-H/CO/olefin coupling of N-pyridylindolines. Direct carbonylation at a C-H bond delta to the pyridine nitrogen. <i>Journal of Organic Chemistry</i> , 2002 , 67, 7557-60	4.2	50
151	Nickel-catalyzed Cross-coupling of Anisole Derivatives with Trimethylaluminum through the Cleavage of Carbon-Oxygen Bonds. <i>Chemistry Letters</i> , 2015 , 44, 1729-1731	1.7	48
150	GaCl ₃ -catalyzed insertion of isocyanides into a C-O bond in cyclic ketals and acetals. <i>Organic Letters</i> , 2005 , 7, 3697-9	6.2	48
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21	Direct and Regioselective Introduction of Acetals into Imidazoles at the 2-Position by an Iridium-Catalyzed Reaction with Formates in the Presence of Hydrosilanes. <i>European Journal of Organic Chemistry</i> , 2017 , 2017, 1662-1665	3.2	1
20	Nickel-Catalyzed Cross-Coupling Reactions of Unreactive Phenolic Electrophiles via C _O Bond Activation. <i>Topics in Current Chemistry Collections</i> , 2017 , 129-156	1.8	1
19	ortho-Directed C _H Alkylation of Substituted Benzenes 2019 , 621-670		1
18	Amination of Arylboronic Compounds via the Copper-Catalyzed Addition of Arylboronic Esters to Azodicarboxylates. <i>Synthesis</i> , 2015 , 47, 3746-3750	2.9	1
17	Palladium-Catalyzed Site-Selective [5 + 1] Annulation of Aromatic Amides with Alkenes: Acceleration of β -Hydride Elimination by Maleic Anhydride from Palladacycle. <i>ACS Catalysis</i> , 2022 , 12, 1595-1600	13.1	1
16	Nickel-catalyzed C _O /O _H Annulation of Salicylate Esters with Alkynes: Activation of C _O Bond in Esters. <i>Chemistry Letters</i> , 2021 , 50, 510-512	1.7	1
15	Mechanism and Origins of Regiochemical Control in Rh(III)-Catalyzed Oxidative C _H Alkenylation and Coupling Sequence of Unprotected 1-Naphthylamines with β -Unsaturated Esters. <i>Organometallics</i> , 2021 , 40, 1371-1378	3.8	1
14	Nickel-Catalyzed Suzuki-Miyaura Cross-Coupling Involving C _O Bond Activation. <i>Helvetica Chimica Acta</i> , 2021 , 104, e2100089	2	1

13	A New Class of Redox Isomerization of N-Alkylpropargylamines into N-Alkylideneallylamines Catalyzed by a ReBr(CO)/Amine N-oxide System. <i>Organic Letters</i> , 2019 , 21, 1760-1765	6.2	1
12	Co ₂ (CO) ₈ -Catalyzed Reactions of Acetals or Lactones with Hydrosilanes and Carbon Monoxide. A New Access to the Preparation of 1,2-Diol Derivatives through Siloxymethylation. <i>Bulletin of the Chemical Society of Japan</i> , 2021 , 94, 81-90	5.1	1
11	Nickel-Catalyzed C-F/O-H [4+2] Annulation of ortho-Fluoro Aromatic Carboxylic Acids with Alkynes. <i>Chemistry Letters</i> ,	1.7	1
10	Synthesis of β -Amino Acid Derivatives through the Iridium-catalyzed α -C-H Amidation of 2-Acylimidazoles with Dioxazolones under Continuous-flow. <i>Chemistry Letters</i> , 2021 , 50, 1722-1724	1.7	1
9	Rh(III)-Catalyzed [3 + 2] Annulation of Aniline Derivatives with Vinylsilanes via C \equiv H Activation/Alkene Cyclization: Access to Highly Regioselective Indoline Derivatives. <i>ACS Catalysis</i> , 2021 , 11, 12375-12383	13.1	1
8	Palladium-catalyzed 1,1-alkynylbromination of alkenes with alkynyl bromides. <i>Chemical Science</i> , 2021 , 12, 12326-12332	9.4	1
7	Double 1,2-Migration of Bromine and Silicon in Directed C \equiv H Alkynylation Reactions with Silyl-Substituted Alkynyl Bromides through an Iridium Vinylidene Intermediate. <i>Organometallics</i> , 2022 , 41, 20-28	3.8	1
6	Palladium-Catalyzed Carbonylation of 2-(Propargyl)allyl Phosphates Leading to Highly Unsaturated β -Lactones. <i>Angewandte Chemie</i> , 2003 , 115, 1435-1437	3.6	0
5	Rhodium-catalyzed Reaction of Alkynes with Hydrosilanes and n-Octyl Isocyanide: A Silylimination/1,4-Hydrosilylation Sequence Leading to β -Silylmethyl-N-silylenamines. <i>Chemistry Letters</i> , 2020 , 49, 357-360	1.7	
4	5-Chloro-8-quinolinamine 2017 , 1-4		
3	Titelbild: Palladium-Catalyzed Direct Synthesis of Phosphole Derivatives from Triarylphosphines through Cleavage of Carbon-Hydrogen and Carbon-Phosphorus Bonds (Angew. Chem. 45/2013). <i>Angewandte Chemie</i> , 2013 , 125, 11883-11883	3.6	
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