Scott J. Miller

List of Publications by Citations

231 papers	17,668 citations	73 h-index	127 g-index
422 ext. papers	19,305 ext. citations	10.5 avg, IF	7.21 L-index

#	Paper	IF	Citations
231	Ring-Closing Metathesis and Related Processes in Organic Synthesis. *Accounts of Chemical Research* , **1995**, 28, 446-452	24.3	903
230	Amino acids and peptides as asymmetric organocatalysts. *Tetrahedron*, **2002**, 58, 2481-2495	2.4	552
229	Asymmetric catalysis mediated by synthetic peptides. *Chemical Reviews*, **2007**, 107, 5759-812	68.1	541
228	Enantioselective catalysis and complexity generation from allenoates. *Chemical Society Reviews*, **2009**, 38, 3102-16	58.5	518
227	Nucleophilic chiral amines as catalysts in asymmetric synthesis. *Chemical Reviews*, **2003**, 103, 2985-3012	68.1	424
226	Application of Ring-Closing Metathesis to the Synthesis of Rigidified Amino Acids and Peptides. *Journal of the American Chemical Society*, **1996**, 118, 9606-9614	16.4	391
225	In search of peptide-based catalysts for asymmetric organic synthesis. *Accounts of Chemical Research*, **2004**, 37, 601-10	24.3	362
224	Dynamic kinetic resolution of biaryl atropisomers via peptide-catalyzed asymmetric bromination. *Science*, **2010**, 328, 1251-5	33.3	354
223	Enantioselective [3+2]-cycloadditions catalyzed by a protected, multifunctional phosphine-containing alpha-amino acid. *Journal of the American Chemical Society*, **2007**, 129, 10988-9	16.4	325
222	Chiral Bis(oxazoline)copper(II) Complexes as Lewis Acid Catalysts for the Enantioselective Diels□Alder Reaction. *Journal of the American Chemical Society*, **1999**, 121, 7559-7573	16.4	302
221	The role of organometallic copper(III) complexes in homogeneous catalysis. *Chemical Science*, **2013**, 4, 2301	9.4	292
220	The Rauhut□Currier reaction: a history and its synthetic application. *Tetrahedron*, **2009**, 65, 4069-4084	2.4	279
219	Iridium-catalyzed hydrogenation of N-heterocyclic compounds under mild conditions by an outer-sphere pathway. *Journal of the American Chemical Society*, **2011**, 133, 7547-62	16.4	257
218	C2-Symmetric Cationic Copper(II) Complexes as Chiral Lewis Acids: Counterion Effects in the Enantioselective Diels□Alder Reaction. *Angewandte Chemie International Edition in English*, **1995**, 34, 798-800		257
217	Stereospecific C-H oxidation with H2O2 catalyzed by a chemically robust site-isolated iron catalyst. *Angewandte Chemie - International Edition*, **2009**, 48, 5720-3	16.4	234
216	Selection of enantioselective acyl transfer catalysts from a pooled peptide library through a fluorescence-based activity assay: an approach to kinetic resolution of secondary alcohols of broad structural scope. *Journal of the American Chemical Society*, **2001**, 123, 6496-502	16.4	232
215	Catalytic Ring-Closing Metathesis of Dienes: Application to the Synthesis of Eight-Membered Rings. *Journal of the American Chemical Society*, **1995**, 117, 2108-2109	16.4	229

214	Bis(oxazoline) and Bis(oxazolinyl)pyridine Copper Complexes as Enantioselective Diels-Alder Catalysts: Reaction Scope and Synthetic Applications. *Journal of the American Chemical Society*, **1999**, 121, 7582-7594	16.4	215
213	Bis(oxazoline)copper(II) complexes as chiral catalysts for the enantioselective Diels-Alder reaction. *Journal of the American Chemical Society*, **1993**, 115, 6460-6461	16.4	215
212	Kinetic Resolution of Alcohols Catalyzed by Tripeptides Containing the N-Alkylimidazole Substructure. *Journal of the American Chemical Society*, **1998**, 120, 1629-1630	16.4	194
211	Asymmetric epoxidation with H2O2 by manipulating the electronic properties of non-heme iron catalysts. *Journal of the American Chemical Society*, **2013**, 135, 14871-8	16.4	189
210	A Biomimetic Approach to Asymmetric Acyl Transfer Catalysis. *Journal of the American Chemical Society*, **1999**, 121, 11638-11643	16.4	186
209	Site-selective derivatization and remodeling of erythromycin A by using simple peptide-based chiral catalysts. *Angewandte Chemie - International Edition*, **2006**, 45, 5616-9	16.4	184
208	Enantioselective Rauhut-Currier reactions promoted by protected cysteine. *Journal of the American Chemical Society*, **2007**, 129, 256-7	16.4	180
207	Asymmetric azidation-cycloaddition with open-chain peptide-based catalysts. A sequential enantioselective route to triazoles. *Journal of the American Chemical Society*, **2002**, 124, 2134-6	16.4	180
206	A Chemosensor-Based Approach to Catalyst Discovery in Solution and on Solid Support. *Journal of the American Chemical Society*, **1999**, 121, 4306-4307	16.4	176
205	Discovery of a catalytic asymmetric phosphorylation through selection of a minimal kinase mimic: a concise total synthesis of D-myo-inositol-1-phosphate. *Journal of the American Chemical Society*, **2001**, 123, 10125-6	16.4	171
204	Synthesis of Conformationally Restricted Amino Acids and Peptides Employing Olefin Metathesis. *Journal of the American Chemical Society*, **1995**, 117, 5855-5856	16.4	169
203	Dual catalyst control in the amino acid-peptide-catalyzed enantioselective Baylis-Hillman reaction. *Organic Letters*, **2003**, 5, 3741-3	6.2	158
202	Thiazolylalanine-derived catalysts for enantioselective intermolecular aldehyde-imine cross-couplings. *Journal of the American Chemical Society*, **2005**, 127, 1654-5	16.4	157
201	Pursuit of Noncovalent Interactions for Strategic Site-Selective Catalysis. *Accounts of Chemical Research*, **2017**, 50, 609-615	24.3	147
200	Enantioselective synthesis of 3-arylquinazolin-4(3H)-ones via peptide-catalyzed atroposelective bromination. *Journal of the American Chemical Society*, **2015**, 137, 12369-77	16.4	144
199	Enantiodivergence in small-molecule catalysis of asymmetric phosphorylation: concise total syntheses of the enantiomeric D-myo-inositol-1-phosphate and D-myo-inositol-3-phosphate. *Journal of the American Chemical Society*, **2002**, 124, 11653-6	16.4	141
198	Aspartate-catalyzed asymmetric epoxidation reactions. *Journal of the American Chemical Society*, **2007**, 129, 8710-1	16.4	134
197	A peptide-based catalyst approach to regioselective functionalization of carbohydrates. *Tetrahedron*, **2003**, 59, 8869-8875	2.4	133

196	Fluorescence-based screening of asymmetric acylation catalysts through parallel enantiomer analysis. Identification of a catalyst for tertiary alcohol resolution. *Journal of Organic Chemistry*, **2001**, 66, 5522-7	4.2	123
195	Minimal Acylase-Like Peptides. Conformational Control of Absolute Stereospecificity. *Journal of Organic Chemistry*, **1998**, 63, 6784-6785	4.2	122
194	Enantioselective synthesis of atropisomeric benzamides through peptide-catalyzed bromination. *Journal of the American Chemical Society*, **2013**, 135, 2963-6	16.4	121
193	Dual catalyst control in the enantioselective intramolecular Morita-Baylis-Hillman reaction. *Organic Letters*, **2005**, 7, 3849-51	6.2	121
192	Applications of Nonenzymatic Catalysts to the Alteration of Natural Products. *Chemical Reviews*, **2017**, 117, 11894-11951	68.1	120
191	Spontaneous transfer of chirality in an atropisomerically enriched two-axis system. *Nature*, **2014**, 509, 71-5	50.4	119
190	Combinatorial evolution of site- and enantioselective catalysts for polyene epoxidation. *Nature Chemistry*, **2012**, 4, 990-5	17.6	119
189	Vibrational characterization of simple peptides using cryogenic infrared photodissociation of H2-tagged, mass-selected ions. *Journal of the American Chemical Society*, **2011**, 133, 6440-8	16.4	119
188	Pyridylalanine (pal)-peptide catalyzed enantioselective allenoate additions to N-acyl imines. *Journal of the American Chemical Society*, **2009**, 131, 6105-7	16.4	119
187	Peptide-Based Catalysts Reach the Outer Sphere through Remote Desymmetrization and Atroposelectivity. *Accounts of Chemical Research*, **2019**, 52, 199-215	24.3	119
186	Determination of noncovalent docking by infrared spectroscopy of cold gas-phase complexes. *Science*, **2012**, 335, 694-8	33.3	116
185	Biologically inspired non-heme iron-catalysts for asymmetric epoxidation; design principles and perspectives. *Chemical Communications*, **2015**, 51, 14285-98	5.8	115
184	Enantioselective sulfonylation reactions mediated by a tetrapeptide catalyst. *Nature Chemistry*, **2009**, 1, 630-4	17.6	113
183	Total synthesis and isolation of citrinalin and cyclopiamine congeners. *Nature*, **2014**, 509, 318-324	50.4	112
182	Regio- and stereoselective synthesis of fluoroalkenes by directed Au(I) catalysis. *Organic Letters*, **2009**, 11, 4318-21	6.2	112
181	n --> pi* Interaction and n)(pi Pauli repulsion are antagonistic for protein stability. *Journal of the American Chemical Society*, **2010**, 132, 6651-3	16.4	112
180	Functional analysis of an aspartate-based epoxidation catalyst with amide-to-alkene peptidomimetic catalyst analogues. *Angewandte Chemie - International Edition*, **2008**, 47, 6707-11	16.4	111
179	A peptide-catalyzed asymmetric Stetter reaction. *Chemical Communications*, **2005**, 195-7	5.8	110

178	Chemoselective and enantioselective oxidation of indoles employing aspartyl peptide catalysts. *Journal of the American Chemical Society*, **2011**, 133, 9104-11	16.4	103
177	A biomimetic iron catalyst for the epoxidation of olefins with molecular oxygen at room temperature. *Angewandte Chemie - International Edition*, **2011**, 50, 1425-9	16.4	101
176	Amine-catalyzed coupling of allenic esters to alpha,beta-unsaturated carbonyls. *Journal of the American Chemical Society*, **2003**, 125, 12394-5	16.4	101
175	Regioselective oxidation of nonactivated alkyl C-H groups using highly structured non-heme iron catalysts. *Journal of Organic Chemistry*, **2013**, 78, 1421-33	4.2	96
174	Lightdriven deracemization enabled by excitedstate electron transfer. *Science*, **2019**, 366, 364-369	33.3	95
173	Diastereo- and enantioselective addition of anilide-functionalized allenoates to N-acylimines catalyzed by a pyridylalanine-based peptide. *Journal of the American Chemical Society*, **2014**, 136, 3285-92	16.4	94
172	Peptide-catalyzed kinetic resolution of formamides and thioformamides as an entry to nonracemic amines. *Journal of the American Chemical Society*, **2010**, 132, 2870-1	16.4	94
171	Incorporation of Peptide Isosteres into Enantioselective Peptide-Based Catalysts as Mechanistic Probes. *Angewandte Chemie - International Edition*, **2001**, 40, 2824-2827	16.4	91
170	Desymmetrization of glycerol derivatives with peptide-based acylation catalysts. *Organic Letters*, **2005**, 7, 3021-3	6.2	88
169	Catalytic enantioselective synthesis of sulfinate esters through the dynamic resolution of tert-butanesulfinyl chloride. *Journal of the American Chemical Society*, **2004**, 126, 8134-5	16.4	87
168	A case of remote asymmetric induction in the peptide-catalyzed desymmetrization of a bis(phenol). *Journal of the American Chemical Society*, **2008**, 130, 16358-65	16.4	86
167	Site-selective bromination of vancomycin. *Journal of the American Chemical Society*, **2012**, 134, 6120-3	16.4	85
166	Bis(imine)-copper(II) complexes as chiral lewis acid catalysts for the Diels-Alder reaction. *Tetrahedron Letters*, **1993**, 34, 7027-7030	2	85
165	Diversity of Secondary Structure in Catalytic Peptides with β-Turn-Biased Sequences. *Journal of the American Chemical Society*, **2017**, 139, 492-516	16.4	81
164	Asymmetric catalysis at a distance: catalytic, site-selective phosphorylation of teicoplanin. *Journal of the American Chemical Society*, **2013**, 135, 12414-21	16.4	80
163	Iron Catalyzed Highly Enantioselective Epoxidation of Cyclic Aliphatic Enones with Aqueous H2O2. *Journal of the American Chemical Society*, **2016**, 138, 2732-8	16.4	78
162	Catalytic site-selective thiocarbonylations and deoxygenations of vancomycin reveal hydroxyl-dependent conformational effects. *Journal of the American Chemical Society*, **2012**, 134, 9755-61	16.4	77
161	Amine-catalyzed addition of azide ion to alpha,beta-unsaturated carbonyl compounds. *Organic Letters*, **1999**, 1, 1107-9	6.2	77

160	Remote desymmetrization at near-nanometer group separation catalyzed by a miniaturized enzyme mimic. *Journal of the American Chemical Society*, **2006**, 128, 16454-5	16.4	76
159	Asymmetric synthesis of the benzoquinoid ansamycin antitumor antibiotics: total synthesis of (+)-macbecin. *Journal of Organic Chemistry*, **1993**, 58, 471-485	4.2	74
158	Disparate Catalytic Scaffolds for Atroposelective Cyclodehydration. *Journal of the American Chemical Society*, **2019**, 141, 6698-6705	16.4	72
157	Peptide bond isosteres: ester or (E)-alkene in the backbone of the collagen triple helix. *Organic Letters*, **2005**, 7, 2619-22	6.2	72
156	Development of a cysteine-catalyzed enantioselective Rauhut-Currier reaction. *Journal of Organic Chemistry*, **2010**, 75, 5784-96	4.2	71
155	Structure-selectivity relationships and structure for a peptide-based enantioselective acylation catalyst. *Journal of the American Chemical Society*, **2004**, 126, 6967-71	16.4	71
154	Potent Noncovalent Inhibitors of the Main Protease of SARS-CoV-2 from Molecular Sculpting of the Drug Perampanel Guided by Free Energy Perturbation Calculations. *ACS Central Science*, **2021**, 7, 467-475	16.8	70
153	Divergent Control of Point and Axial Stereogenicity: Catalytic Enantioselective C-N Bond-Forming Cross-Coupling and Catalyst-Controlled Atroposelective Cyclodehydration. *Angewandte Chemie - International Edition*, **2018**, 57, 6251-6255	16.4	69
152	Chiral copper(II) complex-catalyzed reactions of partially protected carbohydrates. *Organic Letters*, **2013**, 15, 6178-81	6.2	69
151	Nonenzymatic peptide-based catalytic asymmetric phosphorylation of inositol derivatives. *Chemical Communications*, **2003**, 1781-5	5.8	69
150	Synergistic interplay of a non-heme iron catalyst and amino acid coligands in H2 O2 activation for asymmetric epoxidation of □alkyl-substituted styrenes. *Angewandte Chemie - International Edition*, **2015**, 54, 2729-33	16.4	68
149	A Polymeric and Fluorescent Gel for Combinatorial Screening of Catalysts. *Journal of the American Chemical Society*, **2000**, 122, 11270-11271	16.4	67
148	Chemical tailoring of teicoplanin with site-selective reactions. *Journal of the American Chemical Society*, **2013**, 135, 8415-22	16.4	66
147	Divergent Reactivity in Amine- and Phosphine-Catalyzed C□ Bond-Forming Reactions of Allenoates with 2,2,2-Trifluoroacetophenones. *ACS Catalysis*, **2011**, 1, 1347-1350	13.1	65
146	Selective partial reduction of quinolines: Hydrosilylation vs. transfer hydrogenation. *Journal of Organometallic Chemistry*, **2008**, 693, 1815-1821	2.3	63
145	An approach to the site-selective deoxygenation of hydroxy groups based on catalytic phosphoramidite transfer. *Angewandte Chemie - International Edition*, **2012**, 51, 2907-11	16.4	62
144	Asymmetric phosphorylation through catalytic P(III) phosphoramidite transfer: enantioselective synthesis of D-myo-inositol-6-phosphate. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 20620-4	11.5	62
143	An approach to the site-selective diversification of apoptolidin A with peptide-based catalysts. *Journal of Natural Products*, **2009**, 72, 1864-9	4.9	61

142	Site-selective catalysis of phenyl thionoformate transfer as a tool for regioselective deoxygenation of polyols. *Journal of Organic Chemistry*, **2008**, 73, 1774-82	4.2	60
141	Studies of folded peptide-based catalysts for asymmetric organic synthesis. *Biopolymers*, **2006**, 84, 38-47	2.2	60
140	A nonenzymatic acid/peracid catalytic cycle for the Baeyer-Villiger oxidation. *Organic Letters*, **2008**, 10, 3049-52	6.2	57
139	Amino acid-peptide-catalyzed enantioselective Morita□Baylis□Hillman reactions. *Tetrahedron*, **2006**, 62, 11450-11459	2.4	57
138	Asymmetric syntheses of phosphatidylinositol-3-phosphates with saturated and unsaturated side chains through catalytic asymmetric phosphorylation. *Journal of the American Chemical Society*, **2004**, 126, 13182-3	16.4	56
137	Synthesis of atropisomerically defined, highly substituted biaryl scaffolds through catalytic enantioselective bromination and regioselective cross-coupling. *Angewandte Chemie - International Edition*, **2011**, 50, 5125-9	16.4	55
136	A chemoselective strategy for late-stage functionalization of complex small molecules with polypeptides and proteins. *Nature Chemistry*, **2019**, 11, 78-85	17.6	55
135	Peptide-catalyzed conversion of racemic oxazol-5(4H)-ones into enantiomerically enriched □-amino acid derivatives. *Journal of Organic Chemistry*, **2014**, 79, 1542-54	4.2	52
134	Structure diversification of vancomycin through peptide-catalyzed, site-selective lipidation: a catalysis-based approach to combat glycopeptide-resistant pathogens. *Journal of Medicinal Chemistry*, **2015**, 58, 2367-77	8.3	51
133	Asymmetric Michael addition of □-nitro-ketones using catalytic peptides. *Tetrahedron Letters*, **2007**, 48, 1993-1997	2	51
132	Phosphothreonine as a catalytic residue in peptide-mediated asymmetric transfer hydrogenations of 8-aminoquinolines. *Angewandte Chemie - International Edition*, **2015**, 54, 11173-6	16.4	50
131	Linear free-energy relationship analysis of a catalytic desymmetrization reaction of a diarylmethane-bis(phenol). *Organic Letters*, **2010**, 12, 2794-7	6.2	50
130	ortho-Acidic aromatic thiols as efficient catalysts of intramolecular Morita□Baylis□Hillman and Rauhut□Currier reactions. *Tetrahedron Letters*, **2011**, 52, 2148-2151	2	50
129	Asymmetric synthesis of macbecin I. *Journal of Organic Chemistry*, **1992**, 57, 1067-1069	4.2	50
128	Catalyst control over regio- and enantioselectivity in Baeyer-Villiger oxidations of functionalized ketones. *Journal of the American Chemical Society*, **2014**, 136, 14019-22	16.4	49
127	Site-Selective Derivatization and Remodeling of Erythromycin A by Using Simple Peptide-Based Chiral Catalysts. *Angewandte Chemie*, **2006**, 118, 5744-5747	3.6	49
126	Site- and Stereoselective Chemical Editing of Thiostrepton by Rh-Catalyzed Conjugate Arylation: New Analogues and Collateral Enantioselective Synthesis of Amino Acids. *Journal of the American Chemical Society*, **2017**, 139, 15460-15466	16.4	48
125	Rapid phenolic O-glycosylation of small molecules and complex unprotected peptides in aqueous solvent. *Nature Chemistry*, **2018**, 10, 644-652	17.6	48

124	Aqueous Glycosylation of Unprotected Sucrose Employing Glycosyl Fluorides in the Presence of Calcium Ion and Trimethylamine. *Journal of the American Chemical Society*, **2016**, 138, 3175-82	16.4	46
123	Quasi-Biomimetic Ring Contraction Catalyzed by a Cysteine-Based Nucleophile: Total Synthesis of Sch-642305, Some Analogs and their Putative anti-HIV Activities. *Chemical Science*, **2011**, 2,	9.4	45
122	Streamlined synthesis of phosphatidylinositol (PI), PI3P, PI3,5P2, and deoxygenated analogues as potential biological probes. *Journal of Organic Chemistry*, **2006**, 71, 4919-28	4.2	45
121	Dihedral angle restriction within a peptide-based tertiary alcohol kinetic resolution catalyst. *Tetrahedron*, **2006**, 62, 5254-5261	2.4	45
120	Chemistry and biology of deoxy-myo-inositol phosphates: stereospecificity of substrate interactions within an archaeal and a bacterial IMPase. *Journal of the American Chemical Society*, **2004**, 126, 15370-1	16.4	44
119	C2-Symmetrische, kationische Kupfer(II)-Komplexe als chirale Lewis-Säuren Einfluß des Gegenions bei enantioselektiven Diels-Alder-Reaktionen. *Angewandte Chemie*, **1995**, 107, 864-867	3.6	44
118	Asymmetric Catalysis Mediated by Synthetic Peptides, Version 2.0: Expansion of Scope and Mechanisms. *Chemical Reviews*, **2020**, 120, 11479-11615	68.1	43
117	Distal Stereocontrol Using Guanidinylated Peptides as Multifunctional Ligands: Desymmetrization of Diarylmethanes via Ullman Cross-Coupling. *Journal of the American Chemical Society*, **2016**, 138, 7939-45	16.4	42
116	N-Methylimidazole-catalyzed synthesis of carbamates from hydroxamic acids via the Lossen rearrangement. *Organic Letters*, **2013**, 15, 602-5	6.2	42
115	Development of a bio-inspired acyl-anion equivalent macrocyclization and synthesis of a trans-resorcylide precursor. *Journal of Organic Chemistry*, **2007**, 72, 5260-9	4.2	42
114	Unified total syntheses of the inositol polyphosphates: D-I-3,5,6P3, D-I-3,4,5P3, D-I-3,4,6P3, and D-I-3,4,5,6P4 via catalytic enantioselective and site-selective phosphorylation. *Journal of Organic Chemistry*, **2006**, 71, 6923-31	4.2	42
113	Catalytic site-selective synthesis and evaluation of a series of erythromycin analogs. *Bioorganic and Medicinal Chemistry Letters*, **2008**, 18, 6007-11	2.9	40
112	Site-Selective Reactions with Peptide-Based Catalysts. *Topics in Current Chemistry*, **2016**, 372, 157-201		38
111	Parameterization and Analysis of Peptide-Based Catalysts for the Atroposelective Bromination of 3-Arylquinazolin-4(3H)-ones. *Journal of the American Chemical Society*, **2018**, 140, 868-871	16.4	38
110	Polymer-supported enantioselective bifunctional catalysts for nitro-Michael addition of ketones and aldehydes. *Chemistry - A European Journal*, **2012**, 18, 2290-6	4.8	38
109	Experimental lineage and functional analysis of a remotely directed peptide epoxidation catalyst. *Journal of the American Chemical Society*, **2014**, 136, 5301-8	16.4	37
108	Enantioselective synthesis of an aziridinomitosane and selective functionalizations of a key intermediate. *Journal of Organic Chemistry*, **2003**, 68, 2728-34	4.2	37
107	A peptide-embedded trifluoromethyl ketone catalyst for enantioselective epoxidation. *Organic Letters*, **2012**, 14, 1138-41	6.2	36

106	Proton-activated fluorescence as a tool for simultaneous screening of combinatorial chemical reactions. *Current Opinion in Chemical Biology*, **2002**, 6, 333-8	9.7	35
105	One-bead-one-catalyst approach to aspartic acid-based oxidation catalyst discovery. *ACS Combinatorial Science*, **2011**, 13, 321-6	3.9	34
104	Template-promoted dimerization of C-allylglycine: A convenient synthesis of (S,S)-2,7-diaminosuberic acid. *Tetrahedron Letters*, **1998**, 39, 1689-1690	2	34
103	Enantioselective synthesis of a mitosane core assisted by diversity-based catalyst discovery. *Organic Letters*, **2001**, 3, 2879-82	6.2	34
102	Translation of Diverse Aramid- and 1,3-Dicarbonyl-peptides by Wild Type Ribosomes. *ACS Central Science*, **2019**, 5, 1289-1294	16.8	32
101	Asymmetric Syntheses of L,L- and L,D-di-myo-inositol-1,1Ꞌ-phosphate and their behavior as stabilizers of enzyme activity at extreme temperatures. *Angewandte Chemie - International Edition*, **2009**, 48, 4158-61	16.4	30
100	Asymmetric Acylation Reactions Catalyzed by Conformationally Biased Octapeptides. *Tetrahedron*, **2000**, 56, 9773-9779	2.4	30
99	A His-Pro-Aib peptide that exhibits an Asx-Pro-turn-like structure. *Organic Letters*, **2000**, 2, 1247-9	6.2	30
98	Aspartyl Oxidation Catalysts That Dial In Functional Group Selectivity, along with Regio- and Stereoselectivity. *ACS Central Science*, **2016**, 2, 733-739	16.8	30
97	Enantioselective Intermolecular C-O Bond Formation in the Desymmetrization of Diarylmethines Employing a Guanidinylated Peptide-Based Catalyst. *Journal of the American Chemical Society*, **2017**, 139, 18107-18114	16.4	29
96	The roles of counterion and water in a stereoselective cysteine-catalyzed Rauhut-Currier reaction: a challenge for computational chemistry. *Chemistry - A European Journal*, **2013**, 19, 14245-53	4.8	29
95	Production, analysis, and application of spatially resolved shells in solid-phase polymer spheres. *Journal of the American Chemical Society*, **2002**, 124, 1994-2003	16.4	29
94	Terahertz Spectroscopy of Tetrameric Peptides. *Journal of Physical Chemistry Letters*, **2019**, 10, 2624-2628	4.4	28
93	Diversity-generation from an allenoate–enone coupling: syntheses of azepines and pyrimidones from common precursors. *Tetrahedron*, **2005**, 61, 6309-6314	2.4	28
92	Insights into the structural specificity of the cytotoxicity of 3-deoxyphosphatidylinositols. *Journal of the American Chemical Society*, **2008**, 130, 7746-55	16.4	27
91	Cobalt(III)-Catalyzed C-H Amidation of Dehydroalanine for the Site-Selective Structural Diversification of Thiostrepton. *Angewandte Chemie - International Edition*, **2020**, 59, 890-895	16.4	27
90	Function-Oriented Investigations of a Peptide-Based Catalyst that Mediates Enantioselective Allylic Alcohol Epoxidation. *Chemical Science*, **2014**, 5, 4504-4511	9.4	26
89	Phosphine-Catalyzed Annulation Reactions of 2-Butynoate and α-Keto Esters: Synthesis of Cyclopentene Derivatives. *ACS Catalysis*, **2014**, 4, 3671-3674	13.1	25

88	A Synergistic Combinatorial and Chiroptical Study of Peptide Catalysts for Asymmetric Baeyer-Villiger Oxidation. *Advanced Synthesis and Catalysis*, **2015**, 357, 2301-2309	5.6	25
87	Synthesis of the pro-gly dipeptide alkene isostere using olefin cross-metathesis. *Journal of Organic Chemistry*, **2002**, 67, 6240-2	4.2	25
86	Catalytic Dynamic Kinetic Resolutions in Tandem to Construct Two-Axis Terphenyl Atropisomers. *Journal of the American Chemical Society*, **2020**, 142, 16461-16470	16.4	25
85	Structural studies of β-turn-containing peptide catalysts for atroposelective quinazolinone bromination. *Chemical Communications*, **2016**, 52, 4816-9	5.8	25
84	A Bottom Up Approach Towards Artificial Oxygenases by Combining Iron Coordination Complexes and Peptides. *Chemical Science*, **2017**, 8, 3660-3667	9.4	24
83	Pyridylalanine (Pal)-peptide catalyzed enantioselective allenoate additions to N-acyl imines proceed via an atypical "aza-Morita-Baylis-Hillman" mechanism. *Organic Letters*, **2010**, 12, 4800-3	6.2	24
82	Incorporation of Peptide Isosteres into Enantioselective Peptide-Based Catalysts as Mechanistic Probes. *Angewandte Chemie*, **2001**, 113, 2906-2909	3.6	24
81	Desymmetrization of Diarylmethylamido Bis(phenols) through Peptide-Catalyzed Bromination: Enantiodivergence as a Consequence of a 2 amu Alteration at an Achiral Residue within the Catalyst. *Journal of Organic Chemistry*, **2017**, 82, 11326-11336	4.2	23
80	Synthesis of aziridinomitosenes through base-catalyzed conjugate addition. *Tetrahedron*, **2004**, 60, 7367-7374	2.4	23
79	Catalytic asymmetric and stereodivergent oligonucleotide synthesis. *Science*, **2021**, 371, 702-707	33.3	23
78	A β-boronopeptide bundle of known structure as a vehicle for polyol recognition. *Organic Letters*, **2013**, 15, 5048-51	6.2	22
77	Divergent Control of Point and Axial Stereogenicity: Catalytic Enantioselective C–N Bond-Forming Cross-Coupling and Catalyst-Controlled Atroposelective Cyclodehydration. *Angewandte Chemie*, **2018**, 130, 6359-6363	3.6	21
76	Phosphothreonine (pThr)-Based Multifunctional Peptide Catalysis for Asymmetric Baeyer-Villiger Oxidations of Cyclobutanones. *ACS Catalysis*, **2019**, 9, 242-252	13.1	21
75	Molecular Dynamics Simulations of a Conformationally Mobile Peptide-Based Catalyst for Atroposelective Bromination. *ACS Catalysis*, **2018**, 8, 9968-9979	13.1	21
74	Peptide-Catalyzed Fragment Couplings that Form Axially Chiral Non-C -Symmetric Biaryls. *Angewandte Chemie - International Edition*, **2020**, 59, 2875-2880	16.4	20
73	Disulfide-Bridged Peptides That Mediate Enantioselective Cycloadditions through Thiyl Radical Catalysis. *Organic Letters*, **2018**, 20, 1621-1625	6.2	19
72	X-ray crystal structure of teicoplanin A2-2 bound to a catalytic peptide sequence via the carrier protein strategy. *Journal of Organic Chemistry*, **2014**, 79, 8550-6	4.2	19
71	Combined Lewis acid and Brønsted acid-mediated reactivity of glycosyl trichloroacetimidate donors. *Carbohydrate Research*, **2013**, 382, 36-42	2.9	19

70	Synergistic Interplay of a Non-Heme Iron Catalyst and Amino Acid Coligands in H2O2 Activation for Asymmetric Epoxidation of Alkyl-Substituted Styrenes. *Angewandte Chemie*, **2015**, 127, 2767-2771	3.6	19
69	The temperature dependence of the inositol monophosphatase Km correlates with accumulation of di-myo-inositol 1,1Nphosphate in Archaeoglobus fulgidus. *Biochemistry*, **2006**, 45, 3307-14	3.2	19
68	Improved Carbohydrate Recognition in Water with an Electrostatically Enhanced Peptide Bundle. *Organic Letters*, **2015**, 17, 4718-21	6.2	18
67	From Substituent Effects to Applications: Enhancing the Optical Response of a Four-Component Assembly for Reporting EE Values. *Chemical Science*, **2016**, 7, 4085-4090	9.4	18
66	Photolithographic Patterning of Ring-Opening Metathesis Catalysts on Silicon. *Advanced Materials*, **2005**, 17, 39-42	24	18
65	Identification and Partial Structural Characterization of Mass Isolated Valsartan and Its Metabolite with Messenger Tagging Vibrational Spectroscopy. *Journal of the American Society for Mass Spectrometry*, **2017**, 28, 2414-2422	3.5	17
64	An Approach to the Site-Selective Deoxygenation of Hydroxy Groups Based on Catalytic Phosphoramidite Transfer. *Angewandte Chemie*, **2012**, 124, 2961-2965	3.6	17
63	Synthesis of Atropisomerically Defined, Highly Substituted Biaryl Scaffolds through Catalytic Enantioselective Bromination and Regioselective Cross-Coupling. *Angewandte Chemie*, **2011**, 123, 5231-5235	3.6	17
62	Catalyst-Dependent Syntheses of Phosphatidylinositol-5 Phosphate-DiC8 and its Enantiomer. *Tetrahedron*, **2008**, 64, 7015-7020	2.4	17
61	Site-selective acylation of natural products with BINOL-derived phosphoric acids. *ACS Catalysis*, **2019**, 9, 9794-9799	13.1	16
60	Catalytic Enantioselective Pyridine -Oxidation. *Journal of the American Chemical Society*, **2019**, 141, 18624-18629	14.4	16
59	Solution Structures and Molecular Associations of a Peptide-Based Catalyst for the Stereoselective Baeyer-Villiger Oxidation. *Organic Letters*, **2016**, 18, 4646-9	6.2	15
58	Disparate behavior of carbonyl and thiocarbonyl compounds: acyl chlorides vs thiocarbonyl chlorides and isocyanates vs isothiocyanates. *Journal of Organic Chemistry*, **2009**, 74, 3659-64	4.2	15
57	Dual Genetic Encoding of Acetyl-lysine and Non-deacetylatable Thioacetyl-lysine Mediated by Flexizyme. *Angewandte Chemie - International Edition*, **2016**, 55, 4083-6	16.4	15
56	Regioselective derivatizations of a tribrominated atropisomeric benzamide scaffold. *Organic Letters*, **2015**, 17, 580-3	6.2	14
55	Stereodynamic Quinone-Hydroquinone Molecules That Enantiomerize at sp-Carbon via Redox-Interconversion. *Journal of the American Chemical Society*, **2017**, 139, 15239-15244	16.4	13
54	Murine teratology and pharmacokinetics of the enantiomers of sodium 2-ethylhexanoate. *Toxicology and Applied Pharmacology*, **1992**, 112, 257-65	4.6	12
53	Structure-guided design of a perampanel-derived pharmacophore targeting the SARS-CoV-2 main protease. *Structure*, **2021**, 29, 823-833.e5	5.2	12

52	Diastereoselective Enolsilane Coupling Reactions. *Journal of Organic Chemistry*, **1997**, 62, 5680-5681	4.2	11
51	Asymmetric Catalysis upon Helically Chiral Loratadine Analogues Unveils Enantiomer-Dependent Antihistamine Activity. *Journal of the American Chemical Society*, **2020**, 142, 12690-12698	16.4	10
50	Divergent Stereoselectivity in Phosphothreonine (pThr)-Catalyzed Reductive Aminations of 3-Amidocyclohexanones. *Journal of Organic Chemistry*, **2018**, 83, 4491-4504	4.2	10
49	An efficient chemical synthesis of carboxylate-isostere analogs of daptomycin. *Organic and Biomolecular Chemistry*, **2013**, 11, 4680-5	3.9	10
48	Multivalency as a key factor for high activity of selective supported organocatalysts for the Baylis-Hillman reaction. *Chemistry - A European Journal*, **2015**, 21, 1191-7	4.8	9
47	A fully synthetic and biochemically validated phosphatidyl inositol-3-phosphate hapten via asymmetric synthesis and native chemical ligation. *Journal of the American Chemical Society*, **2014**, 136, 412-8	16.4	9
46	Catalytic Enantioselective Synthesis of Pyridyl Sulfoximines. *Journal of the American Chemical Society*, **2021**, 143, 9230-9235	16.4	9
45	Reengineering a Reversible Covalent-Bonding Assembly to Optically Detect ee in Chiral Primary Alcohols. *CheM*, **2019**, 5, 3196-3206	16.2	9
44	Synthesis and evaluation of phenylalanine-derived trifluoromethyl ketones for peptide-based oxidation catalysis. *Bioorganic and Medicinal Chemistry*, **2016**, 24, 4871-4874	3.4	8
43	Phosphothreonine as a Catalytic Residue in Peptide-Mediated Asymmetric Transfer Hydrogenations of 8-Aminoquinolines. *Angewandte Chemie*, **2015**, 127, 11325-11328	3.6	8
42	A Stereodynamic Redox-Interconversion Network of Vicinal Tertiary and Quaternary Carbon Stereocenters in Hydroquinone-Quinone Hybrid Dihydrobenzofurans. *Angewandte Chemie - International Edition*, **2018**, 57, 15107-15111	16.4	8
41	A stepwise dechlorination/cross-coupling strategy to diversify the vancomycin N-chloride. *Bioorganic and Medicinal Chemistry Letters*, **2016**, 26, 1025-1028	2.9	7
40	Chemoenzymatic synthesis of each enantiomer of orthogonally protected 4,4-difluoroglutamic acid: a candidate monomer for chiral Brønsted acid peptide-based catalysts. *Journal of Organic Chemistry*, **2011**, 76, 9785-91	4.2	7
39	Optimization of Triarylpyridinone Inhibitors of the Main Protease of SARS-CoV-2 to Low-Nanomolar Antiviral Potency. *ACS Medicinal Chemistry Letters*, **2021**, 12, 1325-1332	4.3	7
38	Troponoid Atropisomerism: Studies on the Configurational Stability of Tropone-Amide Chiral Axes. *Organic Letters*, **2019**, 21, 2412-2415	6.2	6
37	Palladium-Catalyzed Suzuki-Miyaura Reactions of Aspartic Acid Derived Phenyl Esters. *Organic Letters*, **2019**, 21, 5762-5766	6.2	6
36	Incorporation of Peptide Isosteres into Enantioselective Peptide-Based Catalysts as Mechanistic Probes This research is supported by the U.S. National Science Foundation (CHE-9874963). We are also grateful to the U.S. NIH (GM-57595), DuPont, Eli Lilly, Glaxo-Wellcome, and Merck for research support. S.J.M. is a Fellow of the Alfred P. Sloan Foundation, a Cottrell Scholar of Research	16.4	6
35	Cobalt(III)-Catalyzed C–H Amidation of Dehydroalanine for the Site-Selective Structural Diversification of Thiostrepton. *Angewandte Chemie*, **2020**, 132, 900-905	3.6	5

34	Chemistry. Total chemical synthesis peers into the biosynthetic black box. *Science*, **2009**, 324, 186-7	33.3	5
33	Catalytic Sulfamoylation of Alcohols with Activated Aryl Sulfamates. *Organic Letters*, **2020**, 22, 168-174	6.2	5
32	Structure and Reactivity of Highly Twisted N-Acylimidazoles. *Organic Letters*, **2019**, 21, 2346-2351	6.2	4
31	Isolating Conformers to Assess Dynamics of Peptidic Catalysts Using Computationally Designed Macrocyclic Peptides. *ACS Catalysis*, **2021**, 11, 4395-4400	13.1	4
30	d-3-Deoxy-dioctanoylphosphatidylinositol induces cytotoxicity in human MCF-7 breast cancer cells via a mechanism that involves downregulation of the D-type cyclin-retinoblastoma pathway. *Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids*, **2016**, 1861, 1808-1815	5	4
29	Outer-Sphere Control for Divergent Multicatalysis with Common Catalytic Moieties. *Journal of Organic Chemistry*, **2019**, 84, 1664-1672	4.2	4
28	Tunable and Cooperative Catalysis for Enantioselective Pictet-Spengler Reaction with Varied Nitrogen-Containing Heterocyclic Carboxaldehydes. *Angewandte Chemie - International Edition*, **2021**, 60, 24573-24581	16.4	4
27	Application of High-Throughput Competition Experiments in the Development of Aspartate-Directed Site-Selective Modification of Tyrosine Residues in Peptides. *Journal of Organic Chemistry*, **2020**, 85, 9424-9433	4.2	3
26	Catalysis-Enabled Access to Cryptic Geldanamycin Oxides. *ACS Central Science*, **2020**, 6, 426-435	16.8	3
25	Acyl Sulfonamide Catalysts for Glycosylation Reactions with Trichloroacetimidate Donors. *Synlett*, **2003**, 2003, 1923-1926	2.2	3
24	A Stereodynamic Redox-Interconversion Network of Vicinal Tertiary and Quaternary Carbon Stereocenters in Hydroquinone□Quinone Hybrid Dihydrobenzofurans. *Angewandte Chemie*, **2018**, 130, 15327-15331	3.6	3
23	Kinetic Analysis of a Cysteine-Derived Thiyl-Catalyzed Asymmetric Vinylcyclopropane Cycloaddition Reflects Numerous Attractive Noncovalent Interactions. *Journal of the American Chemical Society*, **2021**, 143, 16173-16183	16.4	3
22	Chemistry. Climbing Jacob□s ladder. *Science*, **2015**, 347, 829	33.3	2
21	Atroposelective Desymmetrization of Resorcinol-Bearing Quinazolinones via Cu-Catalyzed C-O Bond Formation.. *Organic Letters*, **2022**, 24, 762-766	6.2	2
20	Green Chemistry: A Framework for a Sustainable Future. *Organometallics*, **2021**, 40, 1801-1805	3.8	2
19	Green Chemistry: A Framework for a Sustainable Future. *Environmental Science and Technology Letters*, **2021**, 8, 487-491	11	2
18	Tunable and Cooperative Catalysis for Enantioselective Pictet-Spengler Reaction with Varied Nitrogen-Containing Heterocyclic Carboxaldehydes. *Angewandte Chemie*, **2021**, 133, 24778	3.6	2
17	Bifunctional Catalysis with Lewis Base and X-H Sites That Facilitate Proton Transfer or Hydrogen Bonding (n?->?□) **2016**, 1259-1288		1

16	Peptide-Catalyzed Fragment Couplings that Form Axially Chiral Non-C2-Symmetric Biaryls. *Angewandte Chemie*, **2020**, 132, 2897-2902	3.6	1
15	Site-Selective Nitrene Transfer to Conjugated Olefins Directed by Oxazoline Peptide Ligands. *Advanced Synthesis and Catalysis*, **2020**, 362, 289-294	5.6	1
14	Identifying Peptide Structures with THz Spectroscopy **2018**,		1
13	Straddling the Rooftop: Finding a Balance between Traditional and Modern Views of Chemistry *Inorganic Chemistry*, **2018**, 57, 11299-11305	5.1	1
12	Straddling the Rooftop: Finding a Balance between Traditional and Modern Views of Chemistry. *Organometallics*, **2018**, 37, 2825-2831	3.8	1
11	Chirality-matched catalyst-controlled macrocyclization reactions. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	1
10	Enantioselective Synthesis of Amino Acids via Conjugate Addition to Unsaturated Carbonyl Compounds **2005**, 351-376		0
9	Confronting Racism in Chemistry Journals. *ACS Applied Nano Materials*, **2020**, 3, 6131-6133	5.6	
8	Confronting Racism in Chemistry Journals. *ACS Applied Polymer Materials*, **2020**, 2, 2496-2498	4.3	
7	Confronting Racism in Chemistry Journals. *Organometallics*, **2020**, 39, 2331-2333	3.8	
6	Update to Our Reader, Reviewer, and Author Communities April 2020. *Energy & Fuels*, **2020**, 34, 5107-5108	4.1	
5	Update to Our Reader, Reviewer, and Author Communities April 2020. *Organometallics*, **2020**, 39, 1665-1666	3.8	
4	Straddling the Rooftop: Finding a Balance between Traditional and Modern Views of Chemistry *Organic Letters*, **2018**, 20, 5075-5081	6.2	
3	Confronting Racism in Chemistry Journals. *Journal of Chemical Health and Safety*, **2020**, 27, 198-200	1.7	
2	Green Chemistry: A Framework for a Sustainable Future. *Industrial & Engineering Chemistry Research*, **2021**, 60, 8964-8968	3.9	
1	Straddling the Rooftop: Finding a Balance between Traditional and Modern Views of Chemistry *Journal of Organic Chemistry*, **2018**, 83, 9573-9579	4.2	