Eric M Simmons

List of Publications by Year
in descending order

43 papers	4,133 citations	304368 22 h-index	233125 45 g-index
51 all docs	51 docs citations	51 times ranked	4107 citing authors

#	Article	IF	Citations
1	On the Interpretation of Deuterium Kinetic Isotope Effects in Cï£¿H Bond Functionalizations by Transitionâ€Metal Complexes. Angewandte Chemie - International Edition, 2012, 51, 3066-3072.	7.2	1,673
2	Catalytic functionalization of unactivated primary Câ€“H bonds directed by an alcohol. Nature, 2012, 483, 70-73.	13.7	366
3	Iridium-Catalyzed Arene Ortho-Silylation by Formal Hydroxyl-Directed Câ^'H Activation. Journal of the American Chemical Society, 2010, 132, 17092-17095.	6.6	225
4	A Pharmaceutical Industry Perspective on Sustainable Metal Catalysis. Organometallics, 2019, 38, 36-46.	1.1	210
5	Ga(III)-Catalyzed Cycloisomerization Strategy for the Synthesis of Icetexane Diterpenoids:â€‰ Total Synthesis of (Â±)-Salviasperanol. Organic Letters, 2006, 8, 2883-2886.	2.4	90
6	Ni-Catalyzed Carbonâ€“Carbon Bond-Forming Reductive Amination. Journal of the American Chemical Society, 2018, 140, 2292-2300.	6.6	81
7	High-Throughput Automation in Chemical Process Development. Annual Review of Chemical and Biomolecular Engineering, 2017, 8, 525-547.	3.3	79
8	Rapid Construction of the Cortistatin Pentacyclic Core. Angewandte Chemie - International Edition, 2008, 47, 6650-6653.	7.2	74
9	Structure, biosynthetic relationships and chemical synthesis of the icetexane diterpenoids. Natural Product Reports, 2009, 26, 1195.	5.2	69
10	Iridiumâ€Catalyzed, Diastereoselective Dehydrogenative Silylation of Terminal Alkenes with (TMSO)₂MeSiH. Angewandte Chemie - International Edition, 2013, 52, 8984-8989.	7.2	57
11	Formal total synthesis of (Â±)-cortistatin A. Tetrahedron, 2010, 66, 4696-4700.	1.0	49
12	Synthetic Strategies Directed Towards the Cortistatin Family of Natural Products. European Journal of Organic Chemistry, 2010, 2010, 3553-3567.	1.2	49
13	Decarboxylative Intramolecular Arene Alkylation Using N-(Acyloxy)phthalimides, an Organic Photocatalyst, and Visible Light. Journal of Organic Chemistry, 2019, 84, 8360-8379.	1.7	49
14	Reconciling Icetexane Biosynthetic Connections with Their Chemical Synthesis:Â Total Synthesis of (Â±)-5,6-Dihydro-6Î±-hydroxysalviasperanol, (Â±)-Brussonol, and (Â±)-Abrotanone. Organic Letters, 2007, 9, 2705-2708.	2.4	47
15	Nickel-Catalyzed Synthesis of Quinazolinediones. Organic Letters, 2017, 19, 1052-1055.	2.4	46
16	Adventures in Atropisomerism: Total Synthesis of a Complex Active Pharmaceutical Ingredient with Two Chirality Axes. Organic Letters, 2018, 20, 3736-3740.	2.4	45
17	A data-driven strategy for predicting greenness scores, rationally comparing synthetic routes and benchmarking PMI outcomes for the synthesis of molecules in the pharmaceutical industry. Green Chemistry, 2017, 19, 127-139.	4.6	39
18	Palladium-Catalyzed Amidation and Amination of (Hetero)aryl Chlorides under Homogeneous Conditions Enabled by a Soluble DBU/NaTFA Dual-Base System. Organic Process Research and Development, 2019, 23, 1529-1537.	1.3	39

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19	A Process Chemistry Benchmark for sp²â€“sp³ Cross Couplings. Journal of Organic Chemistry, 2021, 86, 10380-10396.	1.7	30
20	Advances in Base-Metal Catalysis: Development of a Screening Platform for Nickel-Catalyzed Borylations of Aryl (Pseudo)halides with B₂(OH)₄. Organometallics, 2019, 38, 157-166.	1.1	24
21	Development of a Kilogram-Scale Process for the Enantioselective Synthesis of 3-Isopropenyl-cyclohexan-1-one via Rh/DTBM-SEGPHOS-Catalyzed Asymmetric Hayashi Addition Enabled by 1,3-Diol Additives. Organic Process Research and Development, 2017, 21, 1659-1667.	1.3	23
22	Pd- and Ni-Based Systems for the Catalytic Borylation of Aryl (Pseudo)halides with B₂(OH)₄. Journal of Organic Chemistry, 2020, 85, 10334-10349.	1.7	23
23	Predicting Performance of Photochemical Transformations for Scaling Up in Different Platforms by Combining High-Throughput Experimentation with Computational Modeling. Organic Process Research and Development, 2020, 24, 2128-2138.	1.3	23
24	Cobalt-Catalyzed C(sp²)â€“C(sp³) Suzukiâ€“Miyaura Cross Coupling. Organic Letters, 2021, 23, 625-630.	2.4	23
25	Synthetic studies on the icetexones: enantioselective formal syntheses of icetexone and epi-icetexone. Tetrahedron, 2013, 69, 5665-5676.	1.0	20
26	Enantioselective Synthesis of a Î³-Secretase Modulator via Vinylogous Dynamic Kinetic Resolution. Journal of Organic Chemistry, 2018, 83, 11133-11144.	1.7	19
27	Design and evolution of the BMS process greenness scorecard. Green Chemistry, 2017, 19, 5163-5171.	4.6	17
28	An Enantioselective Total Synthesis of (+)-Duocarmycin SA. Journal of Organic Chemistry, 2018, 83, 3928-3940.	1.7	17
29	Development of a Scalable Synthesis of BMS-978587 Featuring a Stereospecific Suzuki Coupling of a Cyclopropane Carboxylic Acid. Organic Process Research and Development, 2018, 22, 888-897.	1.3	16
30	Cobalt-Catalyzed C(sp²)â€“C(sp³) Suzukiâ€“Miyaura Cross-Coupling Enabled by Well-Defined Precatalysts with L,X-Type Ligands. ACS Catalysis, 2022, 12, 1905-1918.	5.5	16
31	Biphenyl Acid Derivatives as APJ Receptor Agonists. Journal of Medicinal Chemistry, 2019, 62, 10456-10465.	2.9	15
32	Development of a Commercial Process for Deucravacitinib, a Deuterated API for TYK2 Inhibition. Organic Process Research and Development, 2022, 26, 1202-1222.	1.3	14
33	Palladium-Catalyzed Câ€“O Coupling of a Sterically Hindered Secondary Alcohol with an Aryl Bromide and Significant Purity Upgrade in the API Step. Organic Process Research and Development, 2018, 22, 585-594.	1.3	13
34	Advancing Base-Metal Catalysis: Development of a Screening Method for Nickel-Catalyzed Suzukiâ€“Miyaura Reactions of Pharmaceutically Relevant Heterocycles. Organic Process Research and Development, 2022, 26, 785-794.	1.3	13
35	Development of Robust, Scaleable Catalytic Processes through Fundamental Understanding of Reaction Mechanisms. Topics in Catalysis, 2017, 60, 620-630.	1.3	11
36	Utilizing Native Directing Groups: Mechanistic Understanding of a Direct Arylation Leads to Formation of Tetracyclic Heterocycles via Tandem Intermolecular, Intramolecular Câ€“H Activation. Journal of Organic Chemistry, 2019, 84, 7961-7970.	1.7	9

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37	Nickel-Catalyzed Suzukiâ€“Miyaura Cross-Coupling Facilitated by a Weak Amine Base with Water as a Cosolvent. Organometallics, 2022, 41, 1269-1274.	1.1	9
38	Leveraging High-Throughput Experimentation to Drive Pharmaceutical Route Invention: A Four-Step Commercial Synthesis of Branebrutinib (BMS-986195). Organic Process Research and Development, 2022, 26, 1174-1183.	1.3	8
39	Increasing saturation: development of broadly applicable photocatalytic C_{sp2}â€“C_{sp3} cross-couplings of alkyl trifluoroborates and (hetero)aryl bromides for array synthesis. Reaction Chemistry and Engineering, 2021, 6, 1666-1676.	1.9	7
40	Advancing Base Metal Catalysis through Data Science: Insight and Predictive Models for Ni-Catalyzed Borylation through Supervised Machine Learning. Organometallics, 2022, 41, 1847-1864.	1.1	7
41	Synthesis Optimization, Scale-Up, and Catalyst Screening Efforts toward the MGAT2 Clinical Candidate, BMS-963272. Organic Process Research and Development, 2022, 26, 1327-1335.	1.3	4
42	Mechanistic Studies of a Pd-Catalyzed Direct Arylation En Route to Beclabuvir: Dual Role of a Tetramethylammonium Cation and an Unusual Turnover-Limiting Step. ACS Catalysis, 2021, 11, 2460-2472.	5.5	2
43	A Radical Addition Approach to a Heptafluoroisopropyl Substituted Arene, Combined with a Highly Diastereoselective Annulation Reaction To Synthesize the Tricyclic Core of BMS-986251. Organic Process Research and Development, 2022, 26, 592-600.	1.3	2