

Shuming Chen

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8089496/publications.pdf>

Version: 2024-02-01

50
papers

1,585
citations

257357

24
h-index

315616

38
g-index

52
all docs

52
docs citations

52
times ranked

1512
citing authors

#	ARTICLE	IF	CITATIONS
1	Photochemical intermolecular dearomative cycloaddition of bicyclic azaarenes with alkenes. <i>Science</i> , 2021, 371, 1338-1345.	6.0	119
2	Non- <i>C</i> ₂ -Symmetric Chiral-at-Ruthenium Catalyst for Highly Efficient Enantioselective Intramolecular C(sp ³)-H Amidation. <i>Journal of the American Chemical Society</i> , 2019, 141, 19048-19057.	6.6	102
3	FAD-dependent enzyme-catalysed intermolecular [4+2] cycloaddition in natural product biosynthesis. <i>Nature Chemistry</i> , 2020, 12, 620-628.	6.6	97
4	Catalytic Enantioselective Intramolecular C(sp ³)-H Amination of 2-Azidoacetamides. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 1088-1093.	7.2	76
5	Proton Donor Acidity Controls Selectivity in Nonaromatic Nitrogen Heterocycle Synthesis. <i>Science</i> , 2013, 339, 678-682.	6.0	68
6	Atroposelective Synthesis of Axially Chiral N-Arylpyrroles by Chiral-Rhodium Catalysis. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 13552-13556.	7.2	66
7	Catalytic $\hat{\pm}$ -Deracemization of Ketones Enabled by Photoredox Deprotonation and Enantioselective Protonation. <i>Journal of the American Chemical Society</i> , 2021, 143, 13393-13400.	6.6	65
8	Open-Shell Fluorination of Alkyl Bromides: Unexpected Selectivity in a Silyl Radical-Mediated Chain Process. <i>Journal of the American Chemical Society</i> , 2019, 141, 20031-20036.	6.6	63
9	Catalytic Asymmetric Staudinger-aza-Wittig Reaction for the Synthesis of Heterocyclic Amines. <i>Journal of the American Chemical Society</i> , 2019, 141, 9537-9542.	6.6	60
10	Origins of Enantioselectivity in Asymmetric Radical Additions to Octahedral Chiral-at-Rhodium Enolates: A Computational Study. <i>Journal of the American Chemical Society</i> , 2017, 139, 17902-17907.	6.6	58
11	Regio- and Stereoselective 1,2-Dihydropyridine Alkylation/Addition Sequence for the Synthesis of Piperidines with Quaternary Centers. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 3877-3880.	7.2	55
12	Highly Diastereoselective Functionalization of Piperidines by Photoredox-Catalyzed $\hat{\pm}$ -Amino C-H Arylation and Epimerization. <i>Journal of the American Chemical Society</i> , 2020, 142, 8194-8202.	6.6	52
13	Stereocontrolled 1,3-nitrogen migration to access chiral $\hat{\pm}$ -amino acids. <i>Nature Chemistry</i> , 2022, 14, 566-573.	6.6	43
14	Facile Rh(III)-Catalyzed Synthesis of Fluorinated Pyridines. <i>Organic Letters</i> , 2015, 17, 2567-2569.	2.4	42
15	Facile access to fused 2D/3D rings via intermolecular cascade dearomative [2+2] cycloaddition/rearrangement reactions of quinolines with alkenes. <i>Nature Catalysis</i> , 2022, 5, 405-413.	16.1	42
16	Synthetic, Mechanistic, and Biological Interrogation of <i>Ginkgo biloba</i> Chemical Space En Route to ($\hat{\pm}$)-Bilobalide. <i>Journal of the American Chemical Society</i> , 2020, 142, 18599-18618.	6.6	40
17	Efficient <i>Z</i> -Selective Olefin-Acrylamide Cross-Metathesis Enabled by Sterically Demanding Cyclometalated Ruthenium Catalysts. <i>Journal of the American Chemical Society</i> , 2020, 142, 20987-20993.	6.6	40
18	Intercepting fleeting cyclic allenes with asymmetric nickel catalysis. <i>Nature</i> , 2020, 586, 242-247.	13.7	37

#	ARTICLE	IF	CITATIONS
19	Electronic complementarity permits hindered butenolide heterodimerization and discovery of novel cGAS/STING pathway antagonists. <i>Nature Chemistry</i> , 2020, 12, 310-317.	6.6	34
20	Asymmetric Photocatalysis by Intramolecular Hydrogen-Atom Transfer in Photoexcited Catalyst-Substrate Complex. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 14462-14466.	7.2	33
21	Pd/NHC-Controlled Regiodivergent Defluorinative Allylation of <i>gem</i> -Difluorocyclopropanes with Allylboronates. <i>ACS Catalysis</i> , 2022, 12, 6495-6505.	5.5	30
22	New Regio- and Stereoselective Cascades via Unstabilized Azomethine Ylide Cycloadditions for the Synthesis of Highly Substituted Tropane and Indolizidine Frameworks. <i>Journal of the American Chemical Society</i> , 2016, 138, 12664-12670.	6.6	26
23	Arylketone π -Conjugation Controls Enantioselectivity in Asymmetric Alkynylations Catalyzed by Centrochiral Ruthenium Complexes. <i>Journal of the American Chemical Society</i> , 2018, 140, 5146-5152.	6.6	26
24	Ambimodal Dipolar/Diels-Alder Cycloaddition Transition States Involving Proton Transfers. <i>Journal of the American Chemical Society</i> , 2018, 140, 18124-18131.	6.6	26
25	Intramolecular C(sp ³)-H Bond Oxygenation by Transition-Metal Acylnitrenoids. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 21706-21710.	7.2	26
26	Regio- and Diastereoselective Synthesis of Highly Substituted, Oxygenated Piperidines from Tetrahydropyridines. <i>Journal of Organic Chemistry</i> , 2015, 80, 6660-6668.	1.7	25
27	The mechanism of the triple aryne-tetrazine reaction cascade: theory and experiment. <i>Chemical Science</i> , 2018, 9, 7688-7693.	3.7	24
28	Catalytic Effects of Ammonium and Sulfonium Salts and External Electric Fields on Aza-Diels-Alder Reactions. <i>Journal of Organic Chemistry</i> , 2020, 85, 2618-2625.	1.7	23
29	Atroposelective Synthesis of Axially Chiral Arylpyrroles by Chiral Rhodium Catalysis. <i>Angewandte Chemie</i> , 2020, 132, 13654-13658.	1.6	22
30	Catalytic Enantioselective Intramolecular C(sp ³)-H Amination of α -Azidoacetamides. <i>Angewandte Chemie</i> , 2019, 131, 1100-1105.	1.6	20
31	Computational Exploration of the Mechanism of Critical Steps in the Biomimetic Synthesis of Preisolactone A, and Discovery of New Ambimodal (5 + 2)/(4 + 2) Cycloadditions. <i>Journal of the American Chemical Society</i> , 2021, 143, 6601-6608.	6.6	19
32	Origins of Selective Formation of 5-Vinyl-2-methylene Furans from Oxyallyl/Diene (3+2) Cycloadditions with Pd(0) Catalysis. <i>Journal of the American Chemical Society</i> , 2019, 141, 12382-12387.	6.6	17
33	General Light-Mediated, Highly Diastereoselective Piperidine Epimerization: From Most Accessible to Most Stable Stereoisomer. <i>Journal of the American Chemical Society</i> , 2021, 143, 126-131.	6.6	14
34	Boron tribromide as a reagent for anti-Markovnikov addition of HBr to cyclopropanes. <i>Chemical Science</i> , 2020, 11, 9426-9433.	3.7	11
35	Energy of Concert and Origins of Regioselectivity for 1,3-Dipolar Cycloadditions of Diazomethane. <i>Journal of Organic Chemistry</i> , 2021, 86, 6840-6846.	1.7	11
36	Breaking Amide C-N Bonds in an Undergraduate Organic Chemistry Laboratory. <i>Journal of Chemical Education</i> , 2019, 96, 776-780.	1.1	10

#	ARTICLE	IF	CITATIONS
37	Asymmetric Photocatalysis by Intramolecular Hydrogen-Atom Transfer in Photoexcited Catalyst-Substrate Complex. <i>Angewandte Chemie</i> , 2019, 131, 14604-14608.	1.6	9
38	Visible Light-Mediated, Highly Diastereoselective Epimerization of Lactams from the Most Accessible to the More Stable Stereoisomer. <i>ACS Catalysis</i> , 2022, 12, 7798-7803.	5.5	9
39	Origins of Stereoselectivity in Mannich Reactions Catalyzed by Chiral Vicinal Diamines. <i>Journal of Organic Chemistry</i> , 2018, 83, 3171-3176.	1.7	8
40	Stereodivergent Attached-Ring Synthesis via Non-Covalent Interactions: A Short Formal Synthesis of Merrilactone A. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	8
41	Let There Be Light: Hypothesis-Driven Investigation of Ligand Effects in Photoredox Catalysis for the Undergraduate Organic Chemistry Laboratory. <i>Journal of Chemical Education</i> , 2018, 95, 872-875.	1.1	5
42	Intramolecular C(sp ³)-H Bond Oxygenation by Transition-Metal Acylnitrenoids. <i>Angewandte Chemie</i> , 2020, 132, 21890-21894.	1.6	5
43	Mechanism of the Manolikakes Enamide-Based Domino Reaction for the Stereospecific Construction of Tetrahydropyrans. <i>Journal of Organic Chemistry</i> , 2020, 85, 3806-3811.	1.7	4
44	Formation of Aminocyclopentadienes from Silyldihydropyridines: Ring Contractions Driven by Anion Stabilization. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 6605-6609.	7.2	2
45	Room-Temperature C-H Functionalization Sequence under Benchtop Conditions for the Undergraduate Chemistry Laboratory. <i>Journal of Chemical Education</i> , 2018, 95, 1050-1053.	1.1	2
46	ïƒ-Facial Selectivities in Hydride Reductions of Hindered Endocyclic Iminium Ions. <i>Journal of Organic Chemistry</i> , 2019, 84, 273-281.	1.7	2
47	Mechanism and Selectivities in Ru-Catalyzed Anti-Markovnikov Formal Hydroalkylation of 1,3-Dienes and Enynes: A Computational Study. <i>Journal of Organic Chemistry</i> , 2021, 86, 11895-11904.	1.7	2
48	Formation of Aminocyclopentadienes from Silyldihydropyridines: Ring Contractions Driven by Anion Stabilization. <i>Angewandte Chemie</i> , 2018, 130, 6715-6719.	1.6	0
49	Origins of Contrasteric ïƒ-Facial Selectivity in Epoxidations of Encumbered Tetrahydropyridines by a Bifunctional Peracid. <i>Synlett</i> , 2019, 30, 459-463.	1.0	0
50	Stereodivergent Attached-Ring Synthesis via Non-Covalent Interactions: A Short Formal Synthesis of Merrilactone A. <i>Angewandte Chemie</i> , 2022, 134, e202114514.	1.6	0