Seth B Herzon

List of Publications by Year
in descending order

83	2,859	126858	197736
papers	citations	33 h-index	49 g-index

99	99	99	2465
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Structure elucidation of colibactin and its DNA cross-links. Science, 2019, 365, .	6.0	158
2	Intermolecular Hydropyridylation of Unactivated Alkenes. Journal of the American Chemical Society, 2016, 138, 8718-8721.	6.6	153
3	A Method for the Selective Hydrogenation of Alkenyl Halides to Alkyl Halides. Journal of the American Chemical Society, 2014, 136, 6884-6887.	6.6	134
4	Hydroheteroarylation of Unactivated Alkenes Using N-Methoxyheteroarenium Salts. Journal of the American Chemical Society, 2017, 139, 5998-6007.	6.6	133
5	Non-classical selectivities in the reduction of alkenes by cobalt-mediated hydrogen atom transfer. Chemical Science, 2015, 6, 6250-6255.	3.7	74
6	The cytotoxicity of (â^')-lomaiviticin A arises from induction of double-strand breaks in DNA. Nature Chemistry, 2014, 6, 504-510.	6.6	73
7	The diazofluorene antitumor antibiotics: Structural elucidation, biosynthetic, synthetic, and chemical biological studies. Natural Product Reports, 2012, 29, 87-118.	5.2	70
8	11-Step Enantioselective Synthesis of (â^')-Lomaiviticin Aglycon. Journal of the American Chemical Society, 2011, 133, 7260-7263.	6.6	68
9	A Mechanistic Model for Colibactin-Induced Genotoxicity. Journal of the American Chemical Society, 2016, 138, 15563-15570.	6.6	66
10	Antibacterial properties and clinical potential of pleuromutilins. Natural Product Reports, 2019, 36, 220-247.	5.2	64
11	Isolation of Lomaiviticins Câ€“E, Transformation of Lomaiviticin C to Lomaiviticin A, Complete Structure Elucidation of Lomaiviticin A, and Structureâ€“Activity Analyses. Journal of the American Chemical Society, 2012, 134, 15285-15288.	6.6	63
12	Total Syntheses of (â^')â€Acutumine and (â^')â€Dechloroacutumine. Angewandte Chemie - International Edition, 2013, 52, 3642-3645.	7.2	61
13	Efficient Entry to the Hasubanan Alkaloids: First Enantioselective Total Syntheses of (â^')â€Hasubanonine, (â^')â€Runanine, (â^')â€Delavayine, and (+)â€Periglaucineâ€...B. Angewandte Chemie - International Edition, 2011, 50, 8863-8866.	7.2	60
14	A modular and enantioselective synthesis of the pleuromutilin antibiotics. Science, 2017, 356, 956-959.	6.0	57
15	A concise synthesis of (+)-batzelladine B from simple pyrrole-based starting materials. Nature, 2015, 525, 507-510.	13.7	54
16	Scope and Limitations of 2-Deoxy- and 2,6-Dideoxyglycosyl Bromides as Donors for the Synthesis of Î²-2-Deoxy- and Î²-2,6-Dideoxyglycosides. Organic Letters, 2014, 16, 2776-2779.	2.4	53
17	ClbS Is a Cyclopropane Hydrolase That Confers Colibactin Resistance. Journal of the American Chemical Society, 2017, 139, 17719-17722.	6.6	52
18	A robust and scalable synthesis of the potent neuroprotective agent (â^')-huperzine A. Chemical Science, 2011, 2, 2251.	3.7	51

#	Article	IF	Citations
19	Temporal separation of catalytic activities allows anti-Markovnikov reductive functionalization of terminal alkynes. Nature Chemistry, 2014, 6, 22-27.	6.6	51
20	Programmable Synthesis of 2-Deoxyglycosides. Journal of the American Chemical Society, 2019, 141, 8098-8103.	6.6	51
21	Broadâ€Spectrum Catalysts for the Ambient Temperature Antiâ€Markovnikov Hydration of Alkynes. Angewandte Chemie - International Edition, 2014, 53, 7892-7895.	7.2	50
22	Convergent and Modular Synthesis of Candidate Precolibactins. Structural Revision of Precolibactin A. Journal of the American Chemical Society, 2016, 138, 5426-5432.	6.6	49
23	Domain-Targeted Metabolomics Delineates the Heterocycle Assembly Steps of Colibactin Biosynthesis. Journal of the American Chemical Society, 2017, 139, 4195-4201.	6.6	48
24	Development of a Convergent Entry to the Diazofluorene Antitumor Antibiotics: Enantioselective Synthesis of Kinamycin F. Journal of the American Chemical Society, 2010, 132, 2540-2541.	6.6	46
25	Development of a Modular Synthetic Route to (+)-Pleuromutilin, (+)-12-epi-Mutilins, and Related Structures. Journal of the American Chemical Society, 2017, 139, 16377-16388.	6.6	46
26	Development of Enantioselective Synthetic Routes to the Hasubanan and Acutumine Alkaloids. Journal of Organic Chemistry, 2013, 78, 10031-10057.	1.7	44
27	Structure and bioactivity of colibactin. Bioorganic and Medicinal Chemistry Letters, 2020, 30, 127280.	1.0	44
28	Characterization of Cardiac Glycoside Natural Products as Potent Inhibitors of DNA Double-Strand Break Repair by a Whole-Cell Double Immunofluorescence Assay. Journal of the American Chemical Society, 2016, 138, 3844-3855.	6.6	43
29	Synthesis of the Fully Glycosylated Cyclohexenone Core of Lomaiviticin A. Organic Letters, 2009, 11, 4322-4325.	2.4	39
30	Molecular Basis of Gut Microbiome-Associated Colorectal Cancer: AÂSynthetic Perspective. Journal of the American Chemical Society, 2017, 139, 14817-14824.	6.6	39
31	Characterization of Natural Colibactinâ€“Nucleobase Adducts by Tandem Mass Spectrometry and Isotopic Labeling. Support for DNA Alkylation by Cyclopropane Ring Opening. Biochemistry, 2018, 57, 6391-6394.	1.2	39
32	Development of Enantioselective Synthetic Routes to (â^')-Kinamycin F and (â^')-Lomaiviticin Aglycon. Journal of the American Chemical Society, 2012, 134, 17262-17273.	6.6	37
33	Synthesis of Ketones and Esters from Heteroatom-Functionalized Alkenes by Cobalt-Mediated Hydrogen Atom Transfer. Journal of Organic Chemistry, 2016, 81, 8673-8695.	1.7	37
34	Structure Revision of the Lomaiviticins. Journal of the American Chemical Society, 2021, 143, 6578-6585.	6.6	36
35	Structure and Functional Analysis of ClbQ, an Unusual Intermediate-Releasing Thioesterase from the Colibactin Biosynthetic Pathway. ACS Chemical Biology, 2017, 12, 2598-2608.	1.6	32
36	Fragment Coupling Reactions in Total Synthesis That Form Carbonâ€“Carbon Bonds via Carbanionic or Free Radical Intermediates. Angewandte Chemie - International Edition, 2021, 60, 1116-1150.	7.2	32

#	Article	IF	Citations
37	Synthesis and reactivity of precolibactin 886. Nature Chemistry, 2019, 11, 890-898.	6.6	31
38	Structural basis for DNA cleavage by the potent antiproliferative agent (â€“)-lomaiviticin A. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 2851-2856.	3.3	29
39	Synthesis of 1,3-Amino Alcohols, 1,3-Diols, Amines, and Carboxylic Acids from Terminal Alkynes. Journal of Organic Chemistry, 2015, 80, 8604-8618.	1.7	28
40	Depurination of Colibactin-Derived Interstrand Cross-Links. Biochemistry, 2020, 59, 892-900.	1.2	25
41	The Discovery of a Novel Route to Highly Substituted Î±-Tropolones Enables Expedient Entry to the Core of the Gukulenins. Organic Letters, 2015, 17, 2030-2033.	2.4	24
42	Directed Câ€“H Bond Oxidation of (+)-Pleuromutilin. Journal of Organic Chemistry, 2018, 83, 6843-6892.	1.7	23
43	Model Colibactins Exhibit Human Cell Genotoxicity in the Absence of Host Bacteria. ACS Chemical Biology, 2018, 13, 3286-3293.	1.6	23
44	Single-Step Synthesis of Secondary Phosphine Oxides. Organometallics, 2010, 29, 4193-4195.	1.1	22
45	Analysis of Diazofluorene DNA Binding and Damaging Activity: DNA Cleavage by a Synthetic Monomeric Diazofluorene. Angewandte Chemie - International Edition, 2014, 53, 9325-9328.	7.2	22
46	Chemoproteomic Profiling by Cysteine Fluoroalkylation Reveals Myrocin G as an Inhibitor of the Nonhomologous End Joining DNA Repair Pathway. Journal of the American Chemical Society, 2021, 143, 20332-20342.	6.6	22
47	The Mechanism of Action of (â^')-Lomaiviticin A. Accounts of Chemical Research, 2017, 50, 2577-2588.	7.6	20
48	General Method for the Synthesis of Î±- or Î²-Deoxyaminoglycosides Bearing Basic Nitrogen. Journal of the American Chemical Society, 2021, 143, 2777-2783.	6.6	20
49	The Hasubanan and Acutumine Alkaloids. The Alkaloids Chemistry and Biology, 2014, 73, 161-222.	0.8	18
50	Substrate-Modified Functional Group Reactivity: Hasubanan and Acutumine Alkaloid Syntheses. Journal of Organic Chemistry, 2014, 79, 8937-8947.	1.7	18
51	Direct Synthesis of Î²â€Nâ€Glycosides by the Reductive Glycosylation of Azides with Protected and Native Carbohydrate Donors. Angewandte Chemie - International Edition, 2013, 52, 6068-6071.	7.2	17
52	Mechanism of Action Studies of Lomaiviticin A and the Monomeric Lomaiviticin Aglycon. Selective and Potent Activity Toward DNA Double-Strand Break Repair-Deficient Cell Lines. Journal of the American Chemical Society, 2015, 137, 5741-5747.	6.6	17
53	Characterization of a reductively-activated elimination pathway relevant to the biological chemistry of the kinamycins and lomaiviticins. Chemical Science, 2012, 3, 1070-1074.	3.7	16
54	Synthesis of Myrocin G, the Putative Active Form of the Myrocin Antitumor Antibiotics. Journal of the American Chemical Society, 2018, 140, 16058-16061.	6.6	16

#	Article	IF	Citations
55	Cobalt bis(acetylacetonate)â€“tert-butyl hydroperoxideâ€“triethylsilane: a general reagent combination for the Markovnikov-selective hydrofunctionalization of alkenes by hydrogen atom transfer. Beilstein Journal of Organic Chemistry, 2018, 14, 2259-2265.	1.3	16
56	Enantioselective Synthesis of Euonyminol. Journal of the American Chemical Society, 2021, 143, 699-704.	6.6	15
57	Stereoselective Multicomponent Reactions Using Zincate Nucleophiles: Î²-Dicarbonyl Synthesis and Functionalization. Organic Letters, 2016, 18, 4880-4883.	2.4	12
58	Mechanism of Nucleophilic Activation of (â^')-Lomaiviticin A. Journal of the American Chemical Society, 2016, 138, 15559-15562.	6.6	12
59	Employing chemical synthesis to study the structure and function of colibactin, a â€œdark matterâ€• metabolite. Natural Product Reports, 2020, 37, 1532-1548.	5.2	12
60	A convergent approach to batzelladine alkaloids. Total syntheses of (+)-batzelladine E, (â^')-dehydrobatzelladine C, and (+)-batzelladine K. Tetrahedron, 2018, 74, 3188-3197.	1.0	11
61	Scalable Synthesis of a Key Intermediate for the Production of Pleuromutilin-Based Antibiotics. Organic Letters, 2017, 19, 4980-4983.	2.4	10
62	Metric-Based Analysis of Convergence in Complex Molecule Synthesis. Accounts of Chemical Research, 2021, 54, 903-916.	7.6	10
63	Synthesis and Biological Evaluation of (2S,2â€²S)-Lomaiviticin A. Journal of the American Chemical Society, 2021, 143, 1126-1132.	6.6	8
64	Probing Microbiome Genotoxicity: A Stable Colibactin Provides Insight into Structureâ€“Activity Relationships and Facilitates Mechanism of Action Studies. Journal of the American Chemical Society, 2021, 143, 15824-15833.	6.6	8
65	The Kinamycins. , 2012, , 39-65.		7
66	Introduction: Natural Product Synthesis. Chemical Reviews, 2017, 117, 11649-11650.	23.0	7
67	A practical method for regiocontrolled one-carbon ring contraction. Tetrahedron, 2013, 69, 5634-5639.	1.0	6
68	Macrocyclic colibactins. Nature Chemistry, 2020, 12, 1005-1006.	6.6	6
69	Synthesis of the bis(cyclohexenone) core of (â^')-lomaiviticin A. Chemical Science, 2020, 11, 7462-7467.	3.7	6
70	Development of an Enantioselective Synthesis of (â^')-Euonyminol. Journal of Organic Chemistry, 2021, 86, 17011-17035.	1.7	6
71	Synthesis of (R)-(+)-4-Methylcyclohex-2-ene-1-one. Journal of Organic Chemistry, 2012, 77, 9422-9425.	1.7	5
72	Development of a Convergent Enantioselective Synthetic Route to (â^')-Myrocin G. Journal of Organic Chemistry, 2020, 85, 8952-8989.	1.7	5

#	Article	IF	Citations
73	FragmentverknÃ¼pfungen in der Totalsynthese â€“ Bildung von Câ€“Câ€“Bindungen Ã¼ber intermediÃre Carbanionen oder freie Radikale. Angewandte Chemie, 2021, 133, 1132-1167.	1.6	5
74	Synergistic potentiation of (â˜)-lomaiviticin A cytotoxicity by the ATR inhibitor VE-821. Bioorganic and Medicinal Chemistry Letters, 2016, 26, 3122-3126.	1.0	4
75	A complex stereochemical relay approach to the antimalarial alkaloid ocimicide A₁. Evidence for a structural revision. Chemical Science, 2017, 8, 4867-4871.	3.7	3
76	Emergent Properties of Natural Products. Synlett, 2018, 29, 1823-1835.	1.0	3
77	New Leads for the Treatment of Multidrug Resistant Mycobacterium tuberculosis. ACS Central Science, 2020, 6, 833-835.	5.3	3
78	Natural Products: An Era of Discovery in Organic Chemistry. Journal of Organic Chemistry, 2021, 86, 10943-10945.	1.7	3
79	On the Stability and Spectroscopic Properties of 5-Hydroxyoxazole-4-carboxylic Acid Derivatives. Organic Letters, 2021, 23, 5457-5460.	2.4	2
80	Multigram synthesis of 1- O -acetyl-3- O -(4-methoxybenzyl)-4- N -(9-fluorenylmethoxycarbonyl)-4- N -methyl- l -pyrrolosamine. Tetrahedron Letters, 2015, 56, 3231-3234.	0.7	1
81	Cover Picture: Efficient Entry to the Hasubanan Alkaloids: First Enantioselective Total Syntheses of (â˜)â€Hasubanonine, (â˜)â€Runanine, (â˜)â€Delavayine, and (+)â€Periglaucineâ€…B (Angew. Chem. Int. Ed. 38/2011). Angewandte Chemie - International Edition, 2011, 50, 8761-8761.	7.1	0
82	DNA Repair: Unconventional Lesions Require Unconventional Repair. Biochemistry, 2018, 57, 1057-1058.	1.2	0
83	Synthesis of (â€“)-Myrocin G via a Cascade Coupling. Trends in Chemistry, 2020, 2, 776-777.	4.4	0