Corey R J Stephenson

List of Publications by Year
in descending order

131 papers	20,774 citations	18465 62 h-index	14197 128 g-index
204 all docs	204 docs citations	204 times ranked	11391 citing authors

#	Article	IF	Citations
1	Visible light photoredox catalysis: applications in organic synthesis. Chemical Society Reviews, 2011, 40, 102-113.	18.7	3,501
2	Shining Light on Photoredox Catalysis: Theory and Synthetic Applications. Journal of Organic Chemistry, 2012, 77, 1617-1622.	1.7	995
3	Visible Light-Mediated Atom Transfer Radical Addition via Oxidative and Reductive Quenching of Photocatalysts. Journal of the American Chemical Society, 2012, 134, 8875-8884.	6.6	851
4	Electron-Transfer Photoredox Catalysis: Development of a Tin-Free Reductive Dehalogenation Reaction. Journal of the American Chemical Society, 2009, 131, 8756-8757.	6.6	820
5	Photochemical Approaches to Complex Chemotypes: Applications in Natural Product Synthesis. Chemical Reviews, 2016, 116, 9683-9747.	23.0	792
6	Visible-Light Photoredox Catalysis: Aza-Henry Reactions via Câ˘'H Functionalization. Journal of the American Chemical Society, 2010, 132, 1464-1465.	6.6	750
7	Intermolecular Atom Transfer Radical Addition to Olefins Mediated by Oxidative Quenching of Photoredox Catalysts. Journal of the American Chemical Society, 2011, 133, 4160-4163.	6.6	701
8	Engaging unactivated alkyl, alkenyl and aryl iodides in visible-light-mediated free radical reactions. Nature Chemistry, 2012, 4, 854-859.	6.6	651
9	Amine Functionalization via Oxidative Photoredox Catalysis: Methodology Development and Complex Molecule Synthesis. Accounts of Chemical Research, 2015, 48, 1474-1484.	7.6	562
10	Free Radical Chemistry Enabled by Visible Light-Induced Electron Transfer. Accounts of Chemical Research, 2016, 49, 2295-2306.	7.6	483
11	A Photochemical Strategy for Lignin Degradation at Room Temperature. Journal of the American Chemical Society, 2014, 136, 1218-1221.	6.6	372
12	Functionally Diverse Nucleophilic Trapping of Iminium Intermediates Generated Utilizing Visible Light. Organic Letters, 2012, 14, 94-97.	2.4	353
13	Illuminating Photoredox Catalysis. Trends in Chemistry, 2019, 1, 111-125.	4.4	333
14	Visible Light-Mediated Intermolecular Câ˘'H Functionalization of Electron-Rich Heterocycles with Malonates. Organic Letters, 2010, 12, 3104-3107.	2.4	330
15	A scalable and operationally simple radical trifluoromethylation. Nature Communications, 2015, 6, 7919.	5.8	316
16	Electron Transfer Photoredox Catalysis: Intramolecular Radical Addition to Indoles and Pyrroles. Organic Letters, 2010, 12, 368-371.	2.4	311
17	Visible-light-mediated conversion of alcohols to halides. Nature Chemistry, 2011, 3, 140-145.	6.6	309
18	Visibleâ€Light Photoredox Catalysis in Flow. Angewandte Chemie - International Edition, 2012, 51, 4144-4147.	7.2	307

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19	Visible Light Photocatalysis: Applications and New Disconnections in the Synthesis of Pharmaceutical Agents. Organic Process Research and Development, 2016, 20, 1134-1147.	1.3	293
20	Chemistry and Biology of Resveratrol-Derived Natural Products. Chemical Reviews, 2015, 115, 8976-9027.	23.0	267
21	Asymmetric Synthesis of 3,3-Diarylpropanals with Chiral Dieneâˆ'Rhodium Catalysts. Journal of the American Chemical Society, 2005, 127, 10850-10851.	6.6	262
22	Photoredox activation and anion binding catalysis in the dual catalytic enantioselective synthesis of Î²-amino esters. Chemical Science, 2014, 5, 112-116.	3.7	257
23	Total Synthesis of (+)â€Gliocladinâ€...C Enabled by Visibleâ€Light Photoredox Catalysis. Angewandte Chemie - International Edition, 2011, 50, 9655-9659.	7.2	250
24	Tin-free radical cyclization reactions initiated by visible light photoredox catalysis. Chemical Communications, 2010, 46, 4985.	2.2	223
25	Photochemical Perfluoroalkylation with Pyridine N -Oxides: Mechanistic Insights and Performance on a Kilogram Scale. CheM, 2016, 1, 456-472.	5.8	221
26	Redox Catalysis Facilitates Lignin Depolymerization. ACS Central Science, 2017, 3, 621-628.	5.3	216
27	Arylsulfonylacetamides as bifunctional reagents for alkene aminoarylation. Science, 2018, 361, 1369-1373.	6.0	209
28	Radicals in natural product synthesis. Chemical Society Reviews, 2018, 47, 7851-7866.	18.7	200
29	Friedelâ€"Crafts Amidoalkylation via Thermolysis and Oxidative Photocatalysis. Journal of Organic Chemistry, 2012, 77, 4425-4431.	1.7	184
30	Highly Enantioselective Access to Primary Propargylamines:â€‰ 4-Piperidinone as a Convenient Protecting Group. Organic Letters, 2006, 8, 2437-2440.	2.4	165
31	A Visibleâ€Lightâ€Mediated Radical Smiles Rearrangement and its Application to the Synthesis of a Difluoroâ€Substituted Spirocyclic ORLâ€1 Antagonist. Angewandte Chemie - International Edition, 2015, 54, 14898-14902.	7.2	152
32	Catalytic Asymmetric Synthesis with Rhâˆ'Diene Complexes:â€‰ 1,4-Addition of Arylboronic Acids to Unsaturated Esters. Organic Letters, 2005, 7, 3821-3824.	2.4	150
33	Synthesis of (âˆ')-Pseudotabersonine, (âˆ')-Pseudovincadifformine, and (+)-Coronaridine Enabled by Photoredox Catalysis in Flow. Journal of the American Chemical Society, 2014, 136, 10270-10273.	6.6	149
34	Transition-metal catalyzed valorization of lignin: the key to a sustainable carbon-neutral future. Organic and Biomolecular Chemistry, 2016, 14, 1853-1914.	1.5	145
35	The Development of Visibleâ€Light Photoredox Catalysis in Flow. Israel Journal of Chemistry, 2014, 54, 351-360.	1.0	143
36	Oxidative photoredox catalysis: mild and selective deprotection of PMB ethers mediated by visible light. Chemical Communications, 2011, 47, 5040.	2.2	133

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37	Dimethylzinc-Mediated Additions of Alkenylzirconocenes to Aldimines. New Methodologies for Allylic Amine and C-Cyclopropylalkylamine Syntheses. Journal of the American Chemical Society, 2003, 125, 761-768.	6.6	128
38	Multicomponent Reaction Discovery: Three-Component Synthesis of Spirooxindoles. Organic Letters, 2010, 12, 572-575.	2.4	114
39	Tandem Visible Light-Mediated Radical Cyclizationâ€“Divinylcyclopropane Rearrangement to Tricyclic Pyrrolidinones. Organic Letters, 2011, 13, 5468-5471.	2.4	114
40	Light-Mediated Reductive Debromination of Unactivated Alkyl and Aryl Bromides. ACS Catalysis, 2016, 6, 5962-5967.	5.5	110
41	Photocatalytic Oxidation of Lignin Model Systems by Merging Visible-Light Photoredox and Palladium Catalysis. Organic Letters, 2016, 18, 5166-5169.	2.4	107
42	Catalytic Radical Domino Reactions in Organic Synthesis. ACS Catalysis, 2014, 4, 703-716.	5.5	105
43	Batch to flow deoxygenation using visible light photoredox catalysis. Chemical Communications, 2013, 49, 4352-4354.	2.2	102
44	Enchained by visible lightâ€“mediated photoredox catalysis. Science, 2015, 349, 1285-1286.	6.0	101
45	Ligand functionalization as a deactivation pathway in a fac-Ir(ppy)₃-mediated radical addition. Chemical Science, 2015, 6, 537-541.	3.7	98
46	A droplet microfluidic platform for high-throughput photochemical reaction discovery. Nature Communications, 2020, 11, 6202.	5.8	96
47	Selective Câ€“O Bond Cleavage of Lignin Systems and Polymers Enabled by Sequential Palladium-Catalyzed Aerobic Oxidation and Visible-Light Photoredox Catalysis. ACS Catalysis, 2019, 9, 2252-2260.	5.5	95
48	Visible Light-Mediated Decarboxylative Alkylation of Pharmaceutically Relevant Heterocycles. Organic Letters, 2018, 20, 3487-3490.	2.4	92
49	Aryl Transfer Strategies Mediated by Photoinduced Electron Transfer. Chemical Reviews, 2022, 122, 2695-2751.	23.0	90
50	Photocatalytic initiation of thiolâ€“ene reactions: synthesis of thiomorpholin-3-ones. Tetrahedron, 2014, 70, 4264-4269.	1.0	85
51	Transition-Metal-Mediated Cascade Reactions:ÂC,C-Dicyclopropylmethylamines by Way of Double C,C-Ïƒ-Bond Insertion into Bicyclobutanes. Journal of the American Chemical Society, 2003, 125, 14694-14695.	6.6	79
52	Photoredox Catalysis in a Complex Pharmaceutical Setting: Toward the Preparation of JAK2 Inhibitor LY2784544. Journal of Organic Chemistry, 2014, 79, 11631-11643.	1.7	78
53	Design and Implementation of a Catalytic Electron Donorâ€“Acceptor Complex Platform for Radical Trifluoromethylation and Alkylation. ACS Catalysis, 2020, 10, 12636-12641.	5.5	77
54	Dimethylzinc-Mediated Addition of Alkenylzirconocenes to Î±-Keto and Î±-Imino Esters. Organic Letters, 2003, 5, 2449-2452.	2.4	73

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55	Discovery and Characterization of Novel Small Molecule Inhibitors of Human Cdc25B Dual Specificity Phosphatase. Molecular Pharmacology, 2004, 66, 824-833.	1.0	71
56	Advancements in Visible-Light-Enabled Radical C(sp)2â€"H Alkylation of (Hetero)arenes. Synthesis, 2019, 51, 1063-1072.	1.2	69
57	Three-Component Aldimine Additionâ^'Cyclopropanation. An Efficient New Methodology for Amino Cyclopropane Synthesis. Journal of the American Chemical Society, 2001, 123, 5122-5123.	6.6	67
58	Synthesis of resveratrol tetramers via a stereoconvergent radical equilibrium. Science, 2016, 354, 1260-1265.	6.0	66
59	Intercepting Wacker Intermediates with Arenes: Câ€"H Functionalization and Dearomatization. Organic Letters, 2011, 13, 6320-6323.	2.4	65
60	Synthesis of symmetric anhydrides using visible light-mediated photoredox catalysis. Organic and Biomolecular Chemistry, 2012, 10, 4509.	1.5	64
61	A Scalable Biomimetic Synthesis of Resveratrol Dimers and Systematic Evaluation of their Antioxidant Activities. Angewandte Chemie - International Edition, 2015, 54, 3754-3757.	7.2	61
62	Arene dearomatization through a catalytic N-centered radical cascade reaction. Nature Communications, 2020, 11, 2528.	5.8	61
63	Visible Light Mediated Aryl Migration by Homolytic Câ^'N Cleavage of Aryl Amines. Angewandte Chemie - International Edition, 2018, 57, 12167-12170.	7.2	60
64	Electrocatalytic Lignin Oxidation. ACS Catalysis, 2021, 11, 10104-10114.	5.5	60
65	Providing a New Aniline Bioisostere through the Photochemical Production of 1-Aminonorbornanes. CheM, 2019, 5, 215-226.	5.8	58
66	Intermolecular Photocatalytic Câ€"H Functionalization of Electron-Rich Heterocycles with Tertiary Alkyl Halides. Synlett, 2016, 27, 754-758.	1.0	56
67	Radical Chlorodifluoromethylation: Providing a Motif for (Hetero)arene Diversification. Organic Letters, 2018, 20, 3491-3495.	2.4	54
68	Diversity-Oriented Synthesis of Azaspirocycles. Organic Letters, 2004, 6, 3009-3012.	2.4	47
69	Total Synthesis of Syringolin A. Organic Letters, 2010, 12, 3453-3455.	2.4	46
70	Enabling Chemical Synthesis with Visible Light. Accounts of Chemical Research, 2016, 49, 2059-2060.	7.6	45
71	Recent Advances and Outlook for the Isosteric Replacement of Anilines. ACS Medicinal Chemistry Letters, 2020, 11, 1785-1788.	1.3	43
72	Mechanism of Electrochemical Generation and Decomposition of Phthalimide-<i>N</i>-oxyl. Journal of the American Chemical Society, 2021, 143, 10324-10332.	6.6	42

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73	Photochemical Formal (4 + 2)-Cycloaddition of Imine-Substituted Bicyclo[1.1.1]pentanes and Alkenes. Journal of the American Chemical Society, 2021, 143, 21223-21228.	6.6	42
74	Three-Component Synthesis of Î±,Î²-Cyclopropyl-Î³-Amino Acids. Organic Letters, 2005, 7, 1137-1140.	2.4	41
75	Evolution towards green radical generation in total synthesis. Chemical Society Reviews, 2021, 50, 10044-10057.	18.7	41
76	Biosynthesis of an Anti-Addiction Agent from the Iboga Plant. Journal of the American Chemical Society, 2019, 141, 12979-12983.	6.6	39
77	Exploiting Imine Photochemistry for Masked Nâ€Centered Radical Reactivity. Angewandte Chemie - International Edition, 2019, 58, 19000-19006.	7.2	39
78	Asymmetric Wolff Rearrangement Reactions with Î±-Alkylated-Î±-diazoketones:â€‰ Stereoselective Synthesis of Î±-Substituted-Î²-amino Acid Derivativesâ€. Organic Letters, 2000, 2, 2177-2179.	2.4	38
79	Tandem Dienone Photorearrangementâ€"Cycloaddition for the Rapid Generation of Molecular Complexity. Journal of the American Chemical Society, 2013, 135, 17978-17982.	6.6	38
80	Enantioselective Synthesis of the Core of Banyaside, Suomilide, and Spumigin HKVV. Angewandte Chemie - International Edition, 2008, 47, 8852-8855.	7.2	37
81	The renaissance of organic radical chemistry â€" deja vu all over again. Beilstein Journal of Organic Chemistry, 2013, 9, 2778-2780.	1.3	33
82	Organocatalytic Approach to Photochemical Lignin Fragmentation. Organic Letters, 2020, 22, 8082-8085.	2.4	33
83	A Visibleâ€Lightâ€Mediated Radical Smiles Rearrangement and its Application to the Synthesis of a Difluoroâ€Substituted Spirocyclic ORLâ€1 Antagonist. Angewandte Chemie, 2015, 127, 15111-15115.	1.6	32
84	Canvass: A Crowd-Sourced, Natural-Product Screening Library for Exploring Biological Space. ACS Central Science, 2018, 4, 1727-1741.	5.3	32
85	A Pregnane X Receptor Agonist with Unique Species-Dependent Stereoselectivity and Its Implications in Drug Development. Molecular Pharmacology, 2005, 68, 403-413.	1.0	30
86	Radical Carbonâ€"Carbon Bond Formations Enabled by Visible Light Active Photocatalysts. Chimia, 2012, 66, 394.	0.3	30
87	Preparative Scale Demonstration and Mechanistic Investigation of a Visible Light-Mediated Radical Smiles Rearrangement. Organic Process Research and Development, 2016, 20, 1148-1155.	1.3	29
88	Spiroketals via oxidative rearrangement of enol ethers. Organic and Biomolecular Chemistry, 2007, 5, 58-60.	1.5	27
89	Electrochemical Dimerization of Phenylpropenoids and the Surprising Antioxidant Activity of the Resultant Quinone Methide Dimers. Angewandte Chemie - International Edition, 2018, 57, 17125-17129.	7.2	26
90	Peptide-Like Molecules (PLMs): A Journey from Peptide Bond Isosteres to Gramicidin S Mimetics and Mitochondrial Targeting Agents. Chimia, 2009, 63, 764-775.	0.3	25

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91	Microwave-assisted synthesis of allylic amines: considerable rate acceleration in the hydrozirconationâ€“transmetalationâ€“aldimine addition sequence. Organic and Biomolecular Chemistry, 2004, 2, 443-445.	1.5	24
92	Application of divergent multi-component reactions in the synthesis of a library of peptidomimetics based on Î³-amino-Î±,Î²-cyclopropyl acids. Tetrahedron, 2005, 61, 11488-11500.	1.0	24
93	Dual catalysis at the flick of a switch. Nature, 2015, 519, 42-43.	13.7	24
94	Opportunities in Photocatalytic Synthesis. Advanced Synthesis and Catalysis, 2014, 356, 2739-2739.	2.1	22
95	Mechanism of Visible Light-Mediated Alkene Aminoarylation with Arylsulfonylacetamides. ACS Catalysis, 2022, 12, 8511-8526.	5.5	21
96	Arylmigration durch sichtbares Licht unter homolytischer Câ€Nâ€Spaltung in Arylaminen. Angewandte Chemie, 2018, 130, 12344-12348.	1.6	20
97	Microwave-Assisted Synthesis of Heteroleptic Ir(III)⁺ Polypyridyl Complexes. Journal of Organic Chemistry, 2016, 81, 6988-6994.	1.7	19
98	Microwave-Assisted â€œLibraries from Librariesâ€• Approach toward the Synthesis of Allyl- andC-Cyclopropylalkylamides. ACS Combinatorial Science, 2005, 7, 322-330.	3.3	18
99	Use of transcriptional synergy to augment sensitivity of a splicing reporter assay. Rna, 2006, 12, 925-930.	1.6	18
100	Catalytic intramolecular aminoarylation of unactivated alkenes with aryl sulfonamides. Chemical Science, 2022, 13, 6942-6949.	3.7	18
101	[1,3] and [3,3] rearrangements of 3-amino-1,5-hexadienes: Solvent effect on the regioselectivity. Tetrahedron Letters, 1999, 40, 3119-3122.	0.7	16
102	Visible light mediated reductions of ethers, amines and sulfides. Journal of Photochemistry and Photobiology A: Chemistry, 2016, 328, 240-248.	2.0	16
103	Electro-reductive Fragmentation of Oxidized Lignin Models. Journal of Organic Chemistry, 2021, 86, 15927-15934.	1.7	16
104	Synthesis of Vitisins A and D Enabled by a Persistent Radical Equilibrium. Journal of the American Chemical Society, 2020, 142, 6499-6504.	6.6	15
105	Valorization of Ethanol: Ruthenium-Catalyzed Guerbet and Sequential Functionalization Processes. ACS Catalysis, 2022, 12, 6729-6736.	5.5	14
106	Trifluoroacetic acid-mediated intramolecular formal N-H insertion reactions with amino-Î±-diazoketones: a facile and efficient synthesis of optically pure pyrrolidinones and piperidinones. Canadian Journal of Chemistry, 2000, 78, 800-808.	0.6	13
107	Expanding the chemical diversity of spirooxindoles via alkylative pyridine dearomatization. Beilstein Journal of Organic Chemistry, 2012, 8, 986-993.	1.3	13
108	A One-Pot Photochemical Method for the Generation of Functionalized Aminocyclopentanes. Organic Letters, 2022, 24, 4344-4348.	2.4	13

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109	Lithium bis-catechol borate as an effective reductive quencher in photoredox catalysis. Tetrahedron, 2018, 74, 3246-3252.	1.0	12
110	New antiestrogens from a library screen of homoallylic amides, allylic amides, and C-cyclopropylalkylamides. Bioorganic and Medicinal Chemistry, 2005, 13, 157-164.	1.4	11
111	Quinone methide dimers lacking labile hydrogen atoms are surprisingly excellent radical-trapping antioxidants. Chemical Science, 2020, 11, 5676-5689.	3.7	11
112	Formation and trapping of azafulvene intermediates derived from manganese-mediated oxidative malonate coupling. Tetrahedron, 2016, 72, 3775-3780.	1.0	10
113	Exploiting Imine Photochemistry for Masked Nâ€Centered Radical Reactivity. Angewandte Chemie, 2019, 131, 19176-19182.	1.6	10
114	Nature-inspired total synthesis. Nature Chemical Biology, 2011, 7, 582-583.	3.9	6
115	Electrochemical Dimerization of Phenylpropenoids and the Surprising Antioxidant Activity of the Resultant Quinone Methide Dimers. Angewandte Chemie, 2018, 130, 17371-17375.	1.6	6
116	Design of a Two-Week Organic Chemistry Course for High School Students: â€œCatalysis, Solar Energy, and Green Chemical Synthesisâ€. Journal of Chemical Education, 2021, 98, 2449-2456.	1.1	6
117	Converting a Two-Week Chemistry Course for High School Students to a Virtual Format During COVID. Journal of Chemical Education, 2021, 98, 2457-2464.	1.1	3
118	Gliocladin C. Strategies and Tactics in Organic Synthesis, 2014, 10, 207-224.	0.1	2
119	Photochemically derived 1-aminonorbornanes provide structurally unique succinate dehydrogenase inhibitors with inÂvitro and in planta activity. Cell Reports Physical Science, 2021, 2, 100548.	2.8	1
120	Câ€"H Activation with Photoredox Catalysis. Methods in Pharmacology and Toxicology, 2022, , 297-325.	0.1	1
121	Depolymerization of Lignin by Homogeneous Photocatalysis. Springer Handbooks, 2022, , 1537-1562.	0.3	1
122	Dimethylzinc-Mediated Additions of Alkenylzirconocenes to Aldimines. New Methodologies for Allylic Amine and C-Cyclopropylalkylamine Syntheses.. ChemInform, 2003, 34, no.	0.1	0
123	Dimethylzinc-Mediated Addition of Alkenyzirconocenes to Î±-Keto and Î±-Imino Esters.. ChemInform, 2003, 34, no.	0.1	0
124	Transition-Metal-Mediated Cascade Reactions: C,C-Dicyclopropylmethylamines by Way of Double C,C-Ïƒ-Bond Insertion into Bicyclobutanes.. ChemInform, 2004, 35, no.	0.1	0
125	Microwave-Assisted Synthesis of Allylic Amines: Considerable Rate Acceleration in the Hydrozirconationâ€"Transmetalationâ€"Aldimine Addition Sequence.. ChemInform, 2004, 35, no.	0.1	0
126	Diversity-Oriented Synthesis of Azaspirocycles.. ChemInform, 2004, 35, no.	0.1	0

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127	Microwave-Assisted â€œLibraries from Librariesâ€•Approach Toward the Synthesis of Allyl- and C-Cyclopropylalkylamides.. ChemInform, 2005, 36, no.	0.1	0
128	Asymmetric Synthesis of 3,3-Diarylpropanals with Chiral Dieneâ€"Rhodium Catalysts.. ChemInform, 2005, 36, no.	0.1	0
129	Catalytic Asymmetric Synthesis with Rhâ€"Diene Complexes: 1,4-Addition of Arylboronic Acids to Unsaturated Esters.. ChemInform, 2006, 37, no.	0.1	0
130	(Invited) Insights and Strategies for Electrochemical Valorization of Lignin. ECS Meeting Abstracts, 2021, MA2021-01, 1264-1264.	0.0	0
131	Redox Catalysis for Biomass Degradation. ECS Meeting Abstracts, 2018, , .	0.0	0