Donald J Wink

List of Publications by Year
in descending order

126 papers	2,395 citations	236612 25 h-index	264894 42 g-index
141 all docs	141 docs citations	141 times ranked	2254 citing authors

#	Article	IF	Citations
1	Inquiry-based and research-based laboratory pedagogies in undergraduate science. Nature Chemical Biology, 2008, 4, 577-580.	3.9	253
2	On the Use of 3,5-O-Benzylidene and 3,5-O-(Di-tert-butylsilylene)-2-O-benzylarabinothiofuranosides and Their Sulfoxides as Glycosyl Donors for the Synthesis of Î²-Arabinofuranosides:Â Importance of the Activation Method. Journal of Organic Chemistry, 2007, 72, 1553-1565.	1.7	112
3	Cluster-Seeded Synthesis of Doped CdSe:Cu₄ Quantum Dots. ACS Nano, 2013, 7, 3190-3197.	7.3	81
4	Practical syntheses of chelating bis(dioxaphospholane) ligands through chlorodioxaphospholane intermediates and demonstration of catalytic competence of bis(phosphite)rhodium cation. Inorganic Chemistry, 1990, 29, 5006-5008.	1.9	74
5	1]3Subunit of the Antigenic Polysaccharides fromLeptospirabiflexaand the Octameric (1â†’2)-Linked Î²-d-Mannan of theCandida albicansPhospholipomannan. X-ray Crystal Structure of a Protected Tetramer. Journal of the American Chemical Society, 2001, 123, 5826-5828.	6.6	72
6	Characterization and application of catalytic regioselective hydroformylation with a cationic bis(dioxaphospholane)rhodium catalyst precursor. Organometallics, 1993, 12, 1954-1959.	1.1	67
7	Preparation and Rearrangement of <i>N</i>-Vinyl Nitrones: Synthesis of Spiroisoxazolines and Fluorene-Tethered Isoxazoles. Organic Letters, 2012, 14, 5180-5183.	2.4	66
8	Rh₂(II)-Catalyzed Ring Expansion of Cyclobutanol-Substituted Aryl Azides To Access Medium-Sized <i>N</i>-Heterocycles. Journal of the American Chemical Society, 2017, 139, 5031-5034.	6.6	56
9	Highly Regiocontrolled Pd-Catalyzed Cross-Coupling Reaction of Terminal Alkynes and Allenylphosphine Oxides. Journal of Organic Chemistry, 2003, 68, 6251-6256.	1.7	54
10	Solventâ€Controlled Bifurcated Cascade Process for the Selective Preparation of Dihydrocarbazoles or Dihydropyridoindoles. Chemistry - A European Journal, 2014, 20, 13217-13225.	1.7	52
11	Facile Synthesis of Azetidine Nitrones and Diastereoselective Conversion into Densely Substituted Azetidines. Angewandte Chemie - International Edition, 2017, 56, 11579-11583.	7.2	49
12	Stereoselective Formation of Glycosyl Sulfoxides and Their Subsequent Equilibration:Â Ring Inversion of an Î±-Xylopyranosyl Sulfoxide Dependent on the Configuration at Sulfur. Journal of the American Chemical Society, 2002, 124, 6028-6036.	6.6	46
13	Drug binding by branched DNA: selective interaction of tetrapyridyl porphyrins with an immobile junction. Biochemistry, 1990, 29, 1614-1624.	1.2	44
14	Singleâ€Step Modular Synthesis of Unsaturated Morpholine <i>N</i>â€Oxides and Their Cycloaddition Reactions. Angewandte Chemie - International Edition, 2017, 56, 3059-3063.	7.2	43
15	Stereoselective sulfoxidation of Î±-mannopyranosyl thioglycosides: the exo-anomeric effect in action. Chemical Communications, 1998, , 2763-2764.	2.2	40
16	TiCl4-Promoted Multicomponent Reaction:â€‰ A New Entry to Functionalized Î±-Amino Acids. Organic Letters, 2005, 7, 7-10.	2.4	35
17	Structure and Reactivity of Alkynyl Ruthenium Alkylidenes. Journal of the American Chemical Society, 2009, 131, 24-25.	6.6	35
18	Pyridine Group Assisted Addition of Diazo-Compounds to Imines in the 3-CC Reaction of 2-Aminopyridines, Aldehydes, and Diazo-Compounds. Organic Letters, 2013, 15, 956-959.	2.4	35

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19	A New Reactivity Mode for the Diazo Group: Diastereoselective 1,3â€Aminoalkylation Reaction of Î²â€Aminoâ€Î±â€Diazoesters To Give Triazolines. Angewandte Chemie - International Edition, 2014, 53, 9021-9025.	7.2	35
20	Reinvestigation of the reaction of tert-butyllithium with uranium tetrachloride: formation of catalytically active uranium(III) hydride complexes. Inorganic Chemistry, 1982, 21, 2565-2573.	1.9	34
21	Catalytic Asymmetric Synthesis of Dihydropyrido[1,2â€<i>a</i>]indoles from Nitrones and Allenoates. Angewandte Chemie - International Edition, 2016, 55, 9183-9186.	7.2	34
22	Synthesis of <i>N</i>-Styrenyl Amidines from Î±,Î²-Unsaturated Nitrones and Isocyanates through CO₂ Elimination and Styrenyl Migration. Organic Letters, 2014, 16, 3696-3699.	2.4	32
23	Structure and Reactivity of Alkyne-Chelated Ruthenium Alkylidene Complexes. Journal of the American Chemical Society, 2009, 131, 15114-15115.	6.6	31
24	Oxidation of Nonactivated Anilines to Generate N-Aryl Nitrenoids. Journal of the American Chemical Society, 2020, 142, 4456-4463.	6.6	30
25	Ruthenabenzene: A Robust Precatalyst. Journal of the American Chemical Society, 2021, 143, 7490-7500.	6.6	30
26	Copperâ€•Catalyzed Formation of Î±â€Alkoxycycloalkenones from <i>N</i>â€•Tosylhydrazones. Angewandte Chemie - International Edition, 2015, 54, 12942-12946.	7.2	28
27	Alder-ene reactions driven by high steric strain and bond angle distortion to form benzocyclobutenes. Chemical Science, 2019, 10, 2212-2217.	3.7	27
28	Cascade Synthesis of 3-Functionalized Indoles from Nitrones and Their Conversion to Cycloheptanone-Fused Indoles. Journal of Organic Chemistry, 2018, 83, 1085-1094.	1.7	25
29	Synthesis of Spirocyclic 1â€Pyrrolines from Nitrones and Arynes through a Dearomative [3,3â€²]â€Sigmatropic Rearrangement. Angewandte Chemie - International Edition, 2020, 59, 15244-15248.	7.2	25
30	Diverging Effects of Steric Congestion on the Reaction of Tributylstannyl Radicals with Areneselenols and Aryl Bromides and Their Mechanistic Implications. Journal of Organic Chemistry, 1999, 64, 2877-2882.	1.7	24
31	Au-Catalyzed Pentannulation Reaction of Propargylic Esters Occurring at C(sp³)â€“H Site. Organic Letters, 2015, 17, 4062-4065.	2.4	24
32	Catalytic Asymmetric Synthesis of Dihydropyrido[1,2â€•a]indoles from Nitrones and Allenoates. Angewandte Chemie, 2016, 128, 9329-9332.	1.6	23
33	Development of a biochemistry laboratory course with a project-oriented goal. Biochemistry and Molecular Biology Education, 2003, 31, 106-112.	0.5	22
34	Silver-Catalyzed Annulation of Arynes with Nitriles for Synthesis of Structurally Diverse Quinazolines. Organic Letters, 2020, 22, 626-630.	2.4	22
35	Stereochemistry of [2 + 2] photocycloaddition of cyclic enones to alkenes: structural and mechanistic considerations in formation of trans-fused cycloadducts. Journal of Organic Chemistry, 1991, 56, 561-567.	1.7	21
36	Achieving Site Selectivity in Metal-Catalyzed Electron-Rich Carbene Transfer Reactions from N-Tosylhydrazones. Organic Letters, 2017, 19, 3990-3993.	2.4	21

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37	Rh₂(II)-Catalyzed Intermolecular <i>N</i>-Aryl Aziridination of Olefins Using Nonactivated N Atom Precursors. Journal of the American Chemical Society, 2021, 143, 19149-19159.	6.6	21
38	One- and two-electron reduction of a chromium(0) alkyne complex and isolation of the chromium(1-) product. Journal of the American Chemical Society, 1985, 107, 5012-5014.	6.6	20
39	Stereoselective construction of quaternary carbon centers by three component coupling reactions. Tetrahedron Letters, 2000, 41, 8425-8429.	0.7	20
40	Template-directed Cî—¸H activation: development and application to the total synthesis of 7-episordidin. Tetrahedron: Asymmetry, 2003, 14, 929-940.	1.8	20
41	Synthesis and Properties of New Nâ€Heteroheptacenes for Solutionâ€Based Organic Field Effect Transistors. Chemistry - A European Journal, 2017, 23, 12542-12549.	1.7	20
42	Charge dependence of Fe(II)-catalyzed DNA cleavage. Nucleic Acids Research, 1990, 18, 3333-3337.	6.5	19
43	Qualitative molecular orbital studies of d6 M(alkyne)2L2 and M(alkyne)3L complexes. Organometallics, 1990, 9, 328-334.	1.1	19
44	Absence of Diffusively Free Radical Cation Intermediates in Reactions of Î²-(Phosphatoxy)alkyl Radicals. Journal of the American Chemical Society, 1998, 120, 211-212.	6.6	19
45	Synthesis of simple CrL4(alkyne) complexes by displacement of a labile cyclooctadiene ligand. Journal of the American Chemical Society, 1990, 112, 8585-8586.	6.6	18
46	Isolation and characterization of a labile intermediate in the nucleophilic attack of hydride on a chromium diene complex: [NEt4][Cr(CO)3(P(OMe)3)(.eta.3-(Z)-MeCHCHCH2)]. Organometallics, 1990, 9, 335-340.	1.1	18
47	Steric factors in neutral and anionic alkyne complexes of tungsten(0). Organometallics, 1991, 10, 494-500.	1.1	18
48	Science and Engineering Indicators 1998. Journal of Chemical Education, 1998, 75, 1078.	1.1	18
49	Synthesis Of Fully-Substituted Enediynes by the Corey-Winter Reaction. Synthetic Communications, 1999, 29, 359-377.	1.1	18
50	Student learning through journal writing in a general education chemistry course for preâ€elementary education majors. Science Education, 2012, 96, 543-565.	1.8	18
51	Sequential Reactions of Trimethylsilyldiazomethane with 4-Alkenyl Ketones and Aldehydes Catalyzed by Lewis Bases. Organic Letters, 2013, 15, 2974-2977.	2.4	18
52	A simple, inexpensive synthesis of dipotassium cyclooctatetraenide, K2C8H8. Journal of Organic Chemistry, 1981, 46, 3925-3928.	1.7	17
53	Connecting Protein Structure to Intermolecular Interactions: A Computer Modeling Laboratory. Journal of Chemical Education, 2016, 93, 1353-1363.	1.1	17
54	Radical Contraction of 1,3,2-Dioxaphosphepanes to 1,3,2-Dioxaphosphorinanes:Â A Kinetic and17O NMR Spectroscopic Study. Journal of Organic Chemistry, 2002, 67, 3360-3364.	1.7	16

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55	Formal Aminocyanation of Î±,Î²â€Unsaturated Cyclic Enones for the Efficient Synthesis of Î±â€Amino Ketones. Angewandte Chemie - International Edition, 2014, 53, 3197-3200.	7.2	16
56	Generation and Rearrangement of <i>N</i>,<i>O</i>â€Dialkenylhydroxylamines for the Synthesis of 2â€Aminotetrahydrofurans. Angewandte Chemie - International Edition, 2018, 57, 6597-6600.	7.2	15
57	Catalyst-controlled cascade synthesis of bridged bicyclic tetrahydrobenz[<i>b</i>]azepine-4-ones. Chemical Communications, 2019, 55, 2309-2312.	2.2	15
58	"Almost Like Weighing Someone's Soul": Chemistry in Contemporary Film. Journal of Chemical Education, 2001, 78, 481.	1.1	14
59	Design and synthesis of highly constrained factor Xa inhibitors: amidine-Substituted bis(benzoyl)-[and]-diazepan-2-ones and bis(benzylidene)-bis(gem-dimethyl)cycloketones. Bioorganic and Medicinal Chemistry, 2003, 11, 3379-3392.	1.4	14
60	Counterion Control of t â€BuOâ€Mediated Single Electron Transfer to Nitrostilbenes to Construct N â€Hydroxyindoles or Oxindoles. Angewandte Chemie - International Edition, 2021, 60, 19207-19213.	7.2	13
61	Anomalous carbonylation of [Pd(dppm)(O2CCF3)]2 to give an asymmetric Î¼-CO complex. Inorganica Chimica Acta, 1991, 180, 183-187.	1.2	12
62	Expedient Two-Step Synthesis of Phenolic Cyclitols from Benzene. Journal of Organic Chemistry, 2006, 71, 4521-4524.	1.7	12
63	Silver-Catalyzed Selective Multicomponent Coupling Reactions of Arynes with Nitriles and Isonitriles. Organic Letters, 2020, 22, 642-647.	2.4	12
64	Relating Chemistry to Healthcare and MORE: Implementation of MORE in a Survey Organic and Biochemistry Course for Prehealth Students. Journal of Chemical Education, 2018, 95, 37-46.	1.1	11
65	Using the Activity Model of Inquiry To Enhance General Chemistry Studentsâ€™ Understanding of Nature of Science. Journal of Chemical Education, 2011, 88, 1041-1047.	1.1	10
66	Exchange of bridging and terminal hydrides in [Co(terpy)(H2BH2)]. Journal of the Chemical Society Dalton Transactions, 1984, , 1257.	1.1	9
67	Regio- and stereospecific conversion of chromium dienes into olefins via anionic allyl complexes. Organometallics, 1989, 8, 259-261.	1.1	9
68	Facile Synthesis of Azetidine Nitrones and Diastereoselective Conversion into Densely Substituted Azetidines. Angewandte Chemie, 2017, 129, 11737-11741.	1.6	9
69	The American Chemical Society General Chemistry Performance Expectations Project: From Task Force to Distributed Process for Implementing Multidimensional Learning. Journal of Chemical Education, 2021, 98, 1112-1123.	1.1	9
70	Octahydronaphthoquinolizines, a new biologically active tetracyclic ring system. Tetrahedron Letters, 1993, 34, 2067-2070.	0.7	8
71	Lorenzoâ€™s Oil as a Vehicle for Teaching Chemistry Content, Processes of Science, and Sociology of Science in a General Education Chemistry Classroom. Journal of Chemical Education, 2011, 88, 1380-1384.	1.1	8
72	Singleâ€Step Modular Synthesis of Unsaturated Morpholine N â€Oxides and Their Cycloaddition Reactions. Angewandte Chemie, 2017, 129, 3105-3109.	1.6	8

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73	Controlling the Selectivity Patterns of Au-Catalyzed Cyclizationâ€"Migration Reactions. Organic Letters, 2019, 21, 1555-1558.	2.4	8
74	Câ€"H Insertion by Alkylidene Carbenes To Form 1,2,3-Triazines and Anionic [3 + 2] Dipolar Cycloadditions To Form Tetrazoles: Crucial Roles of Stereoelectronic and Steric Effects. Organic Letters, 2020, 22, 718-723.	2.4	8
75	Efficient synthesis of substituted derivatives of (naphthalene)chromium(0) carbonyls. Organometallics, 1991, 10, 336-340.	1.1	7
76	The MATCH Program: A Preparatory Chemistry and Intermediate Algebra Curriculum. Journal of Chemical Education, 2000, 77, 999.	1.1	7
77	Constructivist Frameworks in Chemistry Education and the Problem of the â€œThumb in the Eyeâ€. Journal of Chemical Education, 2014, 91, 617-622.	1.1	7
78	Dialysis, Albumin Binding, and Competitive Binding: A Laboratory Lesson Relating Three Chemical Concepts to Healthcare. Journal of Chemical Education, 2017, 94, 1102-1106.	1.1	7
79	The Logic of Proportional Reasoning and Its Transfer into Chemistry. ACS Symposium Series, 2019, , 157-171.	0.5	7
80	Pennies and Eggs: Initiation into Inquiry Learning for Preservice Elementary Education Teachers. Journal of Chemical Education, 2008, 85, 396.	1.1	6
81	Synthesis of Î±-oxygenated ketones and substituted catechols via the rearrangement of N-enoxy- and N-aryloxyphthalimides. Tetrahedron, 2017, 73, 4125-4137.	1.0	6
82	Structural evidence for ligand back-bonding in distortions from octahedral geometry of complexes of d6 ML4 fragments with .pi.-ligands. Organometallics, 1991, 10, 442-447.	1.1	5
83	Reconstructing Student Meaning: A Theory of Perspective Transformation. Journal of Chemical Education, 2001, 78, 1107.	1.1	5
84	Connections Between Pedagogical and Epistemological Constructivism: Questions for Teaching and Research in Chemistry. Foundations of Chemistry, 2006, 8, 111-151.	0.4	5
85	Fostering Preservice Teacher Identity in Science through a Student-Selected Project. The Feminist Teacher: A Journal of the Practicesories, and Scholarship of Feminist Teaching, 2008, 19, 31-46.	0.0	5
86	Synthesis of Spirocyclic 1â€Pyrrolines from Nitrones and Arynes through a Dearomative [3,3â€²]â€Sigmatropic Rearrangement. Angewandte Chemie, 2020, 132, 15356-15360.	1.6	5
87	Alkene-Chelated Ruthenium Alkylidenes: A Missing Link to New Catalysts. ACS Catalysis, 2021, 11, 1977-1987.	5.5	5
88	CoLab: A Workshop-Based Undergraduate Research Experience for Entering College Students. Journal of Chemical Education, 2022, 99, 4085-4093.	1.1	5
89	Substitution reactions of mer-Cr(CO)3(P(OMe)3)(.eta.4-1,5-cyclooctadiene); ligand effects on diene binding preferences. Organometallics, 1989, 8, 561-562.	1.1	4
90	Photochemical synthesis and thermal interconversion of mer- and		

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91	A polyfunctional chromium arene complex: synthesis and derivatization of tricarbonyl(.eta.6-1,4-epoxy-1,2,3,4-tetrahydronaphthalene)chromium(0). Organometallics, 1991, 10, 2499-2505.	1.1	3
92	Chemodivergent Transformations of Alkynyl Imines. Synlett, 2006, 2006, 2325-2328.	1.0	3
93	Immigrant Students in the U.S. Chemistry Classroom: An Educational Opportunity and Challenge. Journal of Chemical Education, 2015, 92, 1771-1772.	1.1	3
94	Generation and Rearrangement of N , O â€Dialkenylhydroxylamines for the Synthesis of 2â€Aminotetrahydrofurans. Angewandte Chemie, 2018, 130, 6707-6710.	1.6	3
95	WebCASPAR: NSF's Educational Database Engine. Journal of Chemical Education, 1999, 76, 1479.	1.1	2
96	Research Opportunities for Undergraduate Institutions at the NSF Web Site. Journal of Chemical Education, 2000, 77, 1549.	1.1	2
97	JCE Classroom Activity #112: Guessing the Number of Candies in the Jarâ€"Who Needs Guessing?. Journal of Chemical Education, 2012, 89, 1171-1173.	1.1	2
98	Engaging Social Science and Humanities Students in Community-Based Research on Nitrogen Oxide Pollution. Journal of Chemical Education, 2021, 98, 3940-3946.	1.1	2
99	Manual and Automated Document Retrieval at the NSF Web Site. Journal of Chemical Education, 1998, 75, 535.	1.1	1
100	The Inquiry Wheel, an Alternative to the Scientific Method. A View of the Science Education Research Literature. Journal of Chemical Education, 2005, 82, 682.	1.1	1
101	Would We Have Chemistry without Marvelous Metals?. Journal of Chemical Education, 2019, 96, 2067-2068.	1.1	1
102	Chemistry Education and the Post-constructivist Perspective of Bruno Latour. Journal of Chemical Education, 2020, 97, 4268-4275.	1.1	1
103	Examining an Acidâ€"Base Laboratory Practical Assessment from the Perspective of Evidence-Centered Design. Journal of Chemical Education, 2021, 98, 1898-1909.	1.1	1
104	Counterion Control of t â€BuOâ€Mediated Single Electron Transfer to Nitrostilbenes to Construct N â€Hydroxyindoles or Oxindoles. Angewandte Chemie, 2021, 133, 19356-19362.	1.6	1
105	Education, Emerging Information Technology, and the NSF. Journal of Chemical Education, 1998, 75, 1370.	1.1	0
106	Upcoming Deadlines in Educational Grant Programs. Journal of Chemical Education, 1998, 75, 1208.	1.1	0
107	Exploring the NSF Education Web Sites. Journal of Chemical Education, 1998, 75, 405.	1.1	0
108	Proposal Preparation Aids at the NSF Web Site. Journal of Chemical Education, 1998, 75, 955.	1.1	0

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109	Systemic Education Reform: Links from the NSF Web Site. Journal of Chemical Education, 1999, 76, 162.	1.1	0
110	Teacher Preparation and Enhancement Programs at the NSF Web Site. Journal of Chemical Education, 1999, 76, 21.	1.1	0
111	Working at the NSF FastLane Web Site. Journal of Chemical Education, 1999, 76, 1181.	1.1	0
112	Shaping the Future: A Developing NSF Feature. Journal of Chemical Education, 1999, 76, 461.	1.1	0
113	The National Science Board on Science Education. Journal of Chemical Education, 1999, 76, 751.	1.1	0
114	New Guidelines for Undergraduate and Technological Education at the NSF Web Site. Journal of Chemical Education, 2000, 77, 560.	1.1	0
115	NSF Web Site Information on New and Continuing Programs in Science Education. Journal of Chemical Education, 2000, 77, 443.	1.1	0
116	New Guidelines for Elementary, Secondary, and Informal Education. Journal of Chemical Education, 2000, 77, 150.	1.1	0
117	NSF Web Site Links on Instructional Technology and Education. Journal of Chemical Education, 2000, 77, 25.	1.1	0
118	Information Technology Research and Education at NSF. Journal of Chemical Education, 2000, 77, 1395.	1.1	0
119	Information Available through the NSF Web Site. Journal of Chemical Education, 2001, 78, 160.	1.1	0
120	Highly Regiocontrolled Pd-Catalyzed Cross-Coupling Reaction of Terminal Alkynes and Allenylphosphine Oxides.. ChemInform, 2003, 34, no.	0.1	0
121	CHED Events: Atlanta. Journal of Chemical Education, 2006, 83, 371.	1.1	0
122	CHED Events: Philadelphia. Journal of Chemical Education, 2008, 85, 1041.	1.1	0
123	CHED Events: New Orleans. Journal of Chemical Education, 2008, 85, 354.	1.1	0
124	CHED Events: Salt Lake City. Journal of Chemical Education, 2009, 86, 285.	1.1	0
125	â€œThese Kids Canâ€™t Do Inquiry,â€•Another Urban Legend. ACS Symposium Series, 2011, , 83-110.	0.5	0
126	Working To Build a Chemical Education Practice. ACS Symposium Series, 2013, , 111-127.	0.5	0