Donald J Wink

List of Publications by Citations

125 papers	1,886 citations	24 h-index	37 g-index
141 ext. papers	2,148 ext. citations	5.7 avg, IF	4.9 L-index

#	Paper	IF	Citations
125	Inquiry-based and research-based laboratory pedagogies in undergraduate science. *Nature Chemical Biology*, **2008**, 4, 577-80	11.7	176
124	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 beta-arabinofuranosides: importance of the activation method. *Journal of Organic Chemistry*, **2007**, 72, 1553-65	4.2	101
123	Cluster-seeded synthesis of doped CdSe:Cu4 quantum dots. *ACS Nano*, **2013**, 7, 3190-7	16.7	68
122	Direct synthesis of beta-mannans. A hexameric [-->3)-beta-D-Man-(1](3) subunit of the antigenic polysaccharides from Leptospira biflexa and the octameric (1-->2)-linked beta-D-mannan of the Candida albicans phospholipomannan. X-ray crystal structure of a protected tetramer. *Journal of the American Chemical Society*, **2001**, 123, 5826-8	16.4	64
121	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	5.1	63
120	Preparation and rearrangement of N-vinyl nitrones: synthesis of spiroisoxazolines and fluorene-tethered isoxazoles. *Organic Letters*, **2012**, 14, 5180-3	6.2	61
119	Characterization and application of catalytic regioselective hydroformylation with a cationic bis(dioxaphospholane)rhodium catalyst precursor. *Organometallics*, **1993**, 12, 1954-1959	3.8	60
118	Highly regiocontrolled Pd-catalyzed cross-coupling reaction of terminal alkynes and allenylphosphine oxides. *Journal of Organic Chemistry*, **2003**, 68, 6251-6	4.2	48
117	Solvent-controlled bifurcated cascade process for the selective preparation of dihydrocarbazoles or dihydropyridoindoles. *Chemistry - A European Journal*, **2014**, 20, 13217-25	4.8	45
116	Stereoselective formation of glycosyl sulfoxides and their subsequent equilibration: ring inversion of an alpha-xylopyranosyl sulfoxide dependent on the configuration at sulfur. *Journal of the American Chemical Society*, **2002**, 124, 6028-36	16.4	45
115	Rh(II)-Catalyzed Ring Expansion of Cyclobutanol-Substituted Aryl Azides To Access Medium-Sized N-Heterocycles. *Journal of the American Chemical Society*, **2017**, 139, 5031-5034	16.4	44
114	Drug binding by branched DNA: selective interaction of tetrapyridyl porphyrins with an immobile junction. *Biochemistry*, **1990**, 29, 1614-24	3.2	40
113	Single-Step Modular Synthesis of Unsaturated Morpholine N-Oxides and Their Cycloaddition Reactions. *Angewandte Chemie - International Edition*, **2017**, 56, 3059-3063	16.4	38
112	Facile Synthesis of Azetidine Nitrones and Diastereoselective Conversion into Densely Substituted Azetidines. *Angewandte Chemie - International Edition*, **2017**, 56, 11579-11583	16.4	38
111	Stereoselective sulfoxidation of □-mannopyranosyl thioglycosides: the exo-anomeric effect in action. *Chemical Communications*, **1998**, 2763-2764	5.8	38
110	Structure and reactivity of alkynyl ruthenium alkylidenes. *Journal of the American Chemical Society*, **2009**, 131, 24-5	16.4	34
109	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, 956-9	6.2	30

108	Structure and reactivity of alkyne-chelated ruthenium alkylidene complexes. *Journal of the American Chemical Society*, **2009**, 131, 15114-5	16.4	29
107	TiCl4-promoted multicomponent reaction: a new entry to functionalized alpha-amino acids. *Organic Letters*, **2005**, 7, 7-10	6.2	29
106	Reinvestigation of the reaction of tert-butyllithium with uranium tetrachloride: formation of catalytically active uranium(III) hydride complexes. *Inorganic Chemistry*, **1982**, 21, 2565-2573	5.1	29
105	Catalytic Asymmetric Synthesis of Dihydropyrido[1,2-a]indoles from Nitrones and Allenoates. *Angewandte Chemie - International Edition*, **2016**, 55, 9183-6	16.4	27
104	A new reactivity mode for the diazo group: diastereoselective 1,3-aminoalkylation reaction of -amino--diazoesters to give triazolines. *Angewandte Chemie - International Edition*, **2014**, 53, 9021-5	16.4	27
103	Synthesis of N-styrenyl amidines from -unsaturated nitrones and isocyanates through CO2 elimination and styrenyl migration. *Organic Letters*, **2014**, 16, 3696-9	6.2	26
102	Copper-Catalyzed Formation of -Alkoxycycloalkenones from N-Tosylhydrazones. *Angewandte Chemie - International Edition*, **2015**, 54, 12942-6	16.4	25
101	Cascade Synthesis of 3-Functionalized Indoles from Nitrones and Their Conversion to Cycloheptanone-Fused Indoles. *Journal of Organic Chemistry*, **2018**, 83, 1085-1094	4.2	21
100	Development of a biochemistry laboratory course with a project-oriented goal. *Biochemistry and Molecular Biology Education*, **2003**, 31, 106-112	1.3	19
99	Au-Catalyzed Pentannulation Reaction of Propargylic Esters Occurring at C(sp(3))-H Site. *Organic Letters*, **2015**, 17, 4062-5	6.2	18
98	Template-directed C?H activation: development and application to the total synthesis of 7-episordidin. *Tetrahedron: Asymmetry*, **2003**, 14, 929-940		18
97	Stereoselective construction of quaternary carbon centers by three component coupling reactions. *Tetrahedron Letters*, **2000**, 41, 8425-8429	2	18
96	Absence of Diffusively Free Radical Cation Intermediates in Reactions of (Phosphatoxy)alkyl Radicals. *Journal of the American Chemical Society*, **1998**, 120, 211-212	16.4	18
95	Charge dependence of Fe(II)-catalyzed DNA cleavage. *Nucleic Acids Research*, **1990**, 18, 3333-7	20.1	18
94	Qualitative molecular orbital studies of d6 M(alkyne)2L2 and M(alkyne)3L complexes. *Organometallics*, **1990**, 9, 328-334	3.8	18
93	Steric factors in neutral and anionic alkyne complexes of tungsten(0). *Organometallics*, **1991**, 10, 494-500	3.8	18
92	Alder-ene reactions driven by high steric strain and bond angle distortion to form benzocyclobutenes. *Chemical Science*, **2019**, 10, 2212-2217	9.4	17
91	Oxidation of Nonactivated Anilines to Generate -Aryl Nitrenoids. *Journal of the American Chemical Society*, **2020**, 142, 4456-4463	16.4	17

90	Sequential reactions of trimethylsilyldiazomethane with 4-alkenyl ketones and aldehydes catalyzed by Lewis bases. *Organic Letters*, **2013**, 15, 2974-7	6.2	17
89	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	4.2	17
88	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	4.2	17
87	Achieving Site Selectivity in Metal-Catalyzed Electron-Rich Carbene Transfer Reactions from N-Tosylhydrazones. *Organic Letters*, **2017**, 19, 3990-3993	6.2	16
86	Radical contraction of 1,3,2-dioxaphosphepanes to 1,3,2-dioxaphosphorinanes: a kinetic and (17)O NMR spectroscopic study. *Journal of Organic Chemistry*, **2002**, 67, 3360-4	4.2	16
85	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	3.8	16
84	Silver-Catalyzed Annulation of Arynes with Nitriles for Synthesis of Structurally Diverse Quinazolines. *Organic Letters*, **2020**, 22, 626-630	6.2	16
83	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	16.4	15
82	Formal aminocyanation of □unsaturated cyclic enones for the efficient synthesis of □amino ketones. *Angewandte Chemie - International Edition*, **2014**, 53, 3197-200	16.4	14
81	Student learning through journal writing in a general education chemistry course for pre-elementary education majors. *Science Education*, **2012**, 96, 543-565	4.3	14
80	Synthesis of simple CrL4(alkyne) complexes by displacement of a labile cyclooctadiene ligand. *Journal of the American Chemical Society*, **1990**, 112, 8585-8586	16.4	14
79	A simple, inexpensive synthesis of dipotassium cyclooctatetraenide, K2C8H8. *Journal of Organic Chemistry*, **1981**, 46, 3925-3928	4.2	14
78	Connecting Protein Structure to Intermolecular Interactions: A Computer Modeling Laboratory. *Journal of Chemical Education*, **2016**, 93, 1353-1363	2.4	13
77	Synthesis and Properties of New N-Heteroheptacenes for Solution-Based Organic Field Effect Transistors. *Chemistry - A European Journal*, **2017**, 23, 12542-12549	4.8	13
76	Design and synthesis of highly constrained factor Xa inhibitors: amidine-substituted bis(benzoyl)--diazepan-2-ones and bis(benzylidene)-bis(gem-dimethyl)cycloketones. *Bioorganic and Medicinal Chemistry*, **2003**, 11, 3379-92	3.4	13
75	"Almost Like Weighing Someone's Soul": Chemistry in Contemporary Film. *Journal of Chemical Education*, **2001**, 78, 481	2.4	13
74	Synthesis of Spirocyclic 1-Pyrrolines from Nitrones and Arynes through a Dearomative [3,3']-Sigmatropic Rearrangement. *Angewandte Chemie - International Edition*, **2020**, 59, 15244-15248	16.4	12
73	Synthesis Of Fully-Substituted Enediynes by the Corey-Winter Reaction. *Synthetic Communications*, **1999**, 29, 359-377	1.7	12

72	Catalyst-controlled cascade synthesis of bridged bicyclic tetrahydrobenz[b]azepine-4-ones. *Chemical Communications*, **2019**, 55, 2309-2312	5.8	11
71	A New Reactivity Mode for the Diazo Group: Diastereoselective 1,3-Aminoalkylation Reaction of α-Amino-α-Diazoesters To Give Triazolines. *Angewandte Chemie*, **2014**, 126, 9167-9171	3.6	11
70	Expedient two-step synthesis of phenolic cyclitols from benzene. *Journal of Organic Chemistry*, **2006**, 71, 4521-4	4.2	10
69	Anomalous carbonylation of [Pd(dppm)(O2CCF3)]2 to give an asymmetric μ-CO complex. *Inorganica Chimica Acta*, **1991**, 180, 183-187	2.7	10
68	Generation and Rearrangement of N,O-Dialkenylhydroxylamines for the Synthesis of 2-Aminotetrahydrofurans. *Angewandte Chemie - International Edition*, **2018**, 57, 6597-6600	16.4	9
67	Single-Step Modular Synthesis of Unsaturated Morpholine N-Oxides and Their Cycloaddition Reactions. *Angewandte Chemie*, **2017**, 129, 3105-3109	3.6	8
66	Facile Synthesis of Azetidine Nitrones and Diastereoselective Conversion into Densely Substituted Azetidines. *Angewandte Chemie*, **2017**, 129, 11737-11741	3.6	8
65	Regio- and stereospecific conversion of chromium dienes into olefins via anionic allyl complexes. *Organometallics*, **1989**, 8, 259-261	3.8	8
64	Lorenzo'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	2.4	7
63	Using the Activity Model of Inquiry To Enhance General Chemistry Students' Understanding of Nature of Science. *Journal of Chemical Education*, **2011**, 88, 1041-1047	2.4	7
62	The MATCH Program: A Preparatory Chemistry and Intermediate Algebra Curriculum. *Journal of Chemical Education*, **2000**, 77, 999	2.4	7
61	Exchange of bridging and terminal hydrides in [Co(terpy)(H2BH2)]. *Journal of the Chemical Society Dalton Transactions*, **1984**, 1257		7
60	C-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	6.2	7
59	Silver-Catalyzed Selective Multicomponent Coupling Reactions of Arynes with Nitriles and Isonitriles. *Organic Letters*, **2020**, 22, 642-647	6.2	7
58	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	2.4	7
57	Dialysis, Albumin Binding, and Competitive Binding: A Laboratory Lesson Relating Three Chemical Concepts to Healthcare. *Journal of Chemical Education*, **2017**, 94, 1102-1106	2.4	6
56	Formal Aminocyanation of α,β-Unsaturated Cyclic Enones for the Efficient Synthesis of α-Amino Ketones. *Angewandte Chemie*, **2014**, 126, 3261-3264	3.6	6
55	Octahydronaphthoquinolizines, a new biologically active tetracyclic ring system. *Tetrahedron Letters*, **1993**, 34, 2067-2070	2	6

54	Efficient synthesis of substituted derivatives of (naphthalene)chromium(0) carbonyls. *Organometallics*, **1991**, 10, 336-340	3.8	6
53	Ruthenabenzene: A Robust Precatalyst. *Journal of the American Chemical Society*, **2021**, 143, 7490-7500	16.4	6
52	Catalytic Asymmetric Synthesis of Dihydropyrido[1,2-a]indoles from Nitrones and Allenoates. *Angewandte Chemie*, **2016**, 128, 9329-9332	3.6	6
51	Controlling the Selectivity Patterns of Au-Catalyzed Cyclization-Migration Reactions. *Organic Letters*, **2019**, 21, 1555-1558	6.2	6
50	Synthesis of Spirocyclic 1-Pyrrolines from Nitrones and Arynes through a Dearomative [3,3?]-Sigmatropic Rearrangement. *Angewandte Chemie*, **2020**, 132, 15356-15360	3.6	5
49	Pennies and Eggs: Initiation into Inquiry Learning for Preservice Elementary Education Teachers. *Journal of Chemical Education*, **2008**, 85, 396	2.4	5
48	Synthesis of □-oxygenated ketones and substituted catechols via the rearrangement of N-enoxy- and N-aryloxyphthalimides. *Tetrahedron*, **2017**, 73, 4125-4137	2.4	4
47	The Logic of Proportional Reasoning and Its Transfer into Chemistry. *ACS Symposium Series*, **2019**, 157-176	0.4	4
46	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		4
45	Generation and Rearrangement of N,O-Dialkenylhydroxylamines for the Synthesis of 2-Aminotetrahydrofurans. *Angewandte Chemie*, **2018**, 130, 6707-6710	3.6	3
44	Constructivist Frameworks in Chemistry Education and the Problem of the □thumb in the Eye□ *Journal of Chemical Education*, **2014**, 91, 617-622	2.4	3
43	Chemodivergent Transformations of Alkynyl Imines. *Synlett*, **2006**, 2006, 2325-2328	2.2	3
42	Connections Between Pedagogical and Epistemological Constructivism: Questions for Teaching and Research in Chemistry. *Foundations of Chemistry*, **2006**, 8, 111-151	0.7	3
41	Reconstructing Student Meaning: A Theory of Perspective Transformation. *Journal of Chemical Education*, **2001**, 78, 1107	2.4	3
40	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	3.8	3
39	Photochemical synthesis and thermal interconversion of mer- and fac-W(CO)3(P(OMe)3(.eta.4-1,5-cyclooctadiene). *Organometallics*, **1990**, 9, 2403-2406	3.8	3
38	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	3.8	3
37	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	3.8	3

36	Rh(II)-Catalyzed Intermolecular -Aryl Aziridination of Olefins Using Nonactivated N Atom Precursors. *Journal of the American Chemical Society*, **2021**, 143, 19149-19159	16.4	3
35	Counterion Control of t-BuO-Mediated Single Electron Transfer to Nitrostilbenes to Construct N-Hydroxyindoles or Oxindoles. *Angewandte Chemie - International Edition*, **2021**, 60, 19207-19213	16.4	3
34	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	2.4	3
33	JCE Classroom Activity #112: Guessing the Number of Candies in the Jar—Who Needs Guessing?. *Journal of Chemical Education*, **2012**, 89, 1171-1173	2.4	2
32	The Center for Authentic Science Practice in Education: Integrating Science Research into the Undergraduate Laboratory Curriculum193-206		2
31	Research Opportunities for Undergraduate Institutions at the NSF Web Site. *Journal of Chemical Education*, **2000**, 77, 1549	2.4	2
30	WebCASPAR: NSF's Educational Database Engine. *Journal of Chemical Education*, **1999**, 76, 1479	2.4	2
29	Alkene-Chelated Ruthenium Alkylidenes: A Missing Link to New Catalysts. *ACS Catalysis*, **2021**, 11, 1977-1987	13.7	2
28	The Inquiry Wheel, an Alternative to the Scientific Method. A View of the Science Education Research Literature. *Journal of Chemical Education*, **2005**, 82, 682	2.4	1
27	Chemistry Education and the Post-constructivist Perspective of Bruno Latour. *Journal of Chemical Education*, **2020**, 97, 4268-4275	2.4	0
26	Examining an Acid–Base Laboratory Practical Assessment from the Perspective of Evidence-Centered Design. *Journal of Chemical Education*, **2021**, 98, 1898-1909	2.4	0
25	Counterion Control of t-BuO-Mediated Single Electron Transfer to Nitrostilbenes to Construct N-Hydroxyindoles or Oxindoles. *Angewandte Chemie*, **2021**, 133, 19356-19362	3.6	0
24	Working To Build a Chemical Education Practice. *ACS Symposium Series*, **2013**, 111-127	0.4	
23	Philosophical, Cognitive, and Sociological Roots for Connections in Chemistry Teaching and Learning1-25		
22	"These Kids Can't Do Inquiry," Another Urban Legend. *ACS Symposium Series*, **2011**, 83-110	0.4	
21	CHED Events: Salt Lake City. *Journal of Chemical Education*, **2009**, 86, 285	2.4	
20	Manual and Automated Document Retrieval at the NSF Web Site. *Journal of Chemical Education*, **1998**, 75, 535	2.4	
19	CHED Events: Philadelphia. *Journal of Chemical Education*, **2008**, 85, 1041	2.4	

18	CHED Events: New Orleans. *Journal of Chemical Education*, **2008**, 85, 354	2.4
17	. *Journal of Chemical Education*, **2006**, 83, 371	2.4
16	New Guidelines for Undergraduate and Technological Education at the NSF Web Site. *Journal of Chemical Education*, **2000**, 77, 560	2.4
15	NSF Web Site Information on New and Continuing Programs in Science Education. *Journal of Chemical Education*, **2000**, 77, 443	2.4
14	New Guidelines for Elementary, Secondary, and Informal Education. *Journal of Chemical Education*, **2000**, 77, 150	2.4
13	NSF Web Site Links on Instructional Technology and Education. *Journal of Chemical Education*, **2000**, 77, 25	2.4
12	Information Technology Research and Education at NSF. *Journal of Chemical Education*, **2000**, 77, 1395	2.4
11	Information Available through the NSF Web Site. *Journal of Chemical Education*, **2001**, 78, 160	2.4
10	Education, Emerging Information Technology, and the NSF. *Journal of Chemical Education*, **1998**, 75, 1370	2.4
9	Science and Engineering Indicators 1998. *Journal of Chemical Education*, **1998**, 75, 1078	2.4
8	Upcoming Deadlines in Educational Grant Programs. *Journal of Chemical Education*, **1998**, 75, 1208	2.4
7	Exploring the NSF Education Web Sites. *Journal of Chemical Education*, **1998**, 75, 405	2.4
6	Proposal Preparation Aids at the NSF Web Site. *Journal of Chemical Education*, **1998**, 75, 955	2.4
5	Systemic Education Reform: Links from the NSF Web Site. *Journal of Chemical Education*, **1999**, 76, 162	2.4
4	Teacher Preparation and Enhancement Programs at the NSF Web Site. *Journal of Chemical Education*, **1999**, 76, 21	2.4
3	Working at the NSF FastLane Web Site. *Journal of Chemical Education*, **1999**, 76, 1181	2.4
2	Shaping the Future: A Developing NSF Feature. *Journal of Chemical Education*, **1999**, 76, 461	2.4
1	The National Science Board on Science Education. *Journal of Chemical Education*, **1999**, 76, 751	2.4