

# Keith Woerpel

## List of Publications by Citations

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107  
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7,316  
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#	Paper	IF	Citations
97	Ferroptosis: A Regulated Cell Death Nexus Linking Metabolism, Redox Biology, and Disease. <i>Cell</i> , <b>2017</b> , 171, 273-285	56.2	1985
96	FINO initiates ferroptosis through GPX4 inactivation and iron oxidation. <i>Nature Chemical Biology</i> , <b>2018</b> , 14, 507-515	11.7	245
95	Stereochemistry of nucleophilic substitution reactions depending upon substituent: evidence for electrostatic stabilization of pseudoaxial conformers of oxocarbenium ions by heteroatom substituents. <i>Journal of the American Chemical Society</i> , <b>2003</b> , 125, 15521-8	16.4	227
94	A Stereoelectronic Model To Explain the Highly Stereoselective Reactions of Nucleophiles with Five-Membered-Ring Oxocarbenium Ions. <i>Journal of the American Chemical Society</i> , <b>1999</b> , 121, 12208-12209	16.4	190
93	Stereoselective C-glycosylation reactions of ribose derivatives: electronic effects of five-membered ring oxocarbenium ions. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 10879-84	16.4	181
92	Stereochemical Reversal of Nucleophilic Substitution Reactions Depending upon Substituent: Reactions of Heteroatom-Substituted Six-Membered-Ring Oxocarbenium Ions through Pseudoaxial Conformers. <i>Journal of the American Chemical Society</i> , <b>2000</b> , 122, 168-169	16.4	179
91	Electrostatic interactions in cations and their importance in biology and chemistry. <i>Organic and Biomolecular Chemistry</i> , <b>2006</b> , 4, 1195-201	3.9	125
90	Oxidation of Sterically Hindered Alkoxysilanes and Phenylsilanes under Basic Conditions. <i>Journal of Organic Chemistry</i> , <b>1996</b> , 61, 6044-6046	4.2	124
89	Structural evidence that alkoxy substituents adopt electronically preferred pseudoaxial orientations in six-membered ring dioxocarbenium ions. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 5322-3	16.4	94
88	Erosion of stereochemical control with increasing nucleophilicity: O-glycosylation at the diffusion limit. <i>Journal of Organic Chemistry</i> , <b>2010</b> , 75, 1107-18	4.2	93
87	Nucleophilic additions to fused bicyclic five-membered ring oxocarbenium ions: evidence for preferential attack on the inside face. <i>Journal of the American Chemical Society</i> , <b>2003</b> , 125, 14149-52	16.4	92
86	Correlations between nucleophilicities and selectivities in the substitutions of tetrahydropyran acetals. <i>Journal of Organic Chemistry</i> , <b>2009</b> , 74, 8039-50	4.2	89
85	Development of reactions of silacyclopropanes as new methods for stereoselective organic synthesis. <i>Accounts of Chemical Research</i> , <b>2000</b> , 33, 813-20	24.3	89
84	Five-Membered Ring Peroxide Selectively Initiates Ferroptosis in Cancer Cells. <i>ACS Chemical Biology</i> , <b>2016</b> , 11, 1305-12	4.9	71
83	Metal-catalyzed silacyclopropanation of mono- and disubstituted alkenes. <i>Journal of the American Chemical Society</i> , <b>2002</b> , 124, 9370-1	16.4	67
82	Mechanism of silver-mediated di-tert-butylsilylene transfer from a silacyclopropane to an alkene. <i>Journal of the American Chemical Society</i> , <b>2004</b> , 126, 9993-10002	16.4	65
81	Phosphine-catalyzed reductions of alkyl silyl peroxides by titanium hydride reducing agents: development of the method and mechanistic investigations. <i>Journal of Organic Chemistry</i> , <b>2010</b> , 75, 5083-91	4.3	64

80	Copper(I)-Catalyzed Oxidation of Alkenes Using Molecular Oxygen and Hydroxylamines: Synthesis and Reactivity of $\alpha$ -Oxygenated Ketones. <i>Organic Letters</i> , <b>2015</b> , 17, 2704-7	6.2	63
79	Tandem Aldol-Mishchenko Reactions of Lithium Enolates: A Highly Stereoselective Method for Diol and Triol Synthesis. <i>Journal of Organic Chemistry</i> , <b>1997</b> , 62, 5674-5675	4.2	63
78	Continuum of mechanisms for nucleophilic substitutions of cyclic acetals. <i>Organic Letters</i> , <b>2008</b> , 10, 4907-10	6.2	63
77	$^{13}\text{C}$ NMR spectroscopy for the quantitative determination of compound ratios and polymer end groups. <i>Organic Letters</i> , <b>2014</b> , 16, 1566-9	6.2	62
76	C-glycosylation reactions of sulfur-substituted glycosyl donors: evidence against the role of neighboring-group participation. <i>Journal of the American Chemical Society</i> , <b>2008</b> , 130, 2082-6	16.4	55
75	Kinetic resolution of hydroperoxides with enantiopure phosphines: preparation of enantioenriched tertiary hydroperoxides. <i>Journal of the American Chemical Society</i> , <b>2007</b> , 129, 3836-7	16.4	54
74	Synthesis of Silirenes by Palladium-Catalyzed Transfer of Silylene from Siliranes to Alkynes. <i>Organometallics</i> , <b>1997</b> , 16, 4824-4827	3.8	53
73	The [3 + 2] Annulation of Allylsilanes and Chlorosulfonyl Isocyanate: Stereoselective Synthesis of 2-Pyrrolidinones. <i>Journal of Organic Chemistry</i> , <b>1999</b> , 64, 1434-1435	4.2	53
72	Stereospecific and Regioselective Reactions of Silacyclopropanes with Carbonyl Compounds Catalyzed by Copper Salts: Evidence for a Transmetalation Mechanism. <i>Journal of the American Chemical Society</i> , <b>1999</b> , 121, 949-957	16.4	51
71	[3 + 2] Annulation of allylic silanes in acyclic stereocontrol: total synthesis of (9S)-dihydroerythronolide A. <i>Journal of the American Chemical Society</i> , <b>2003</b> , 125, 6018-9	16.4	50
70	Nucleophilic additions of trimethylsilyl cyanide to cyclic oxocarbenium ions: evidence for the loss of stereoselectivity at the limits of diffusion control. <i>Journal of the American Chemical Society</i> , <b>2006</b> , 128, 8671-7	16.4	48
69	Metal-catalyzed silylene insertions of allylic ethers: stereoselective formation of chiral allylic silanes. <i>Journal of the American Chemical Society</i> , <b>2007</b> , 129, 12602-3	16.4	46
68	Stereoselective Synthesis of (Z)- and (E)-Allylic Silanes by Copper-Mediated Substitution Reactions of Allylic Carbamates with Grignard Reagents. <i>Journal of Organic Chemistry</i> , <b>2000</b> , 65, 1601-1614	4.2	45
67	Synthesis of (+/-)-5-epi-citreoviral and (+/-)-citreoviral and the kinetic resolution of an allylic silane by a [3 + 2] annulation. <i>Organic Letters</i> , <b>2002</b> , 4, 2945-8	6.2	44
66	Stereospecific Palladium-Catalyzed Reactions of Siliranes with Alkynes. <i>Organometallics</i> , <b>1997</b> , 16, 1097-1099	3.8	43
65	Metal-catalyzed di-tert-butylsilylene transfer: synthesis and reactivity of silacyclopropanes. <i>Journal of Organic Chemistry</i> , <b>2004</b> , 69, 4007-12	4.2	40
64	Benzhydryldimethylsilyl allylic silanes: syntheses and applications to. <i>Organic Letters</i> , <b>2000</b> , 2, 1379-81	6.2	39
63	Nucleophilic Substitution Reactions of 2-Phenylthio-Substituted Carbohydrate Acetals and Related Systems: Episulfonium Ions vs. Oxocarbenium Ions as Reactive Intermediates. <i>European Journal of Organic Chemistry</i> , <b>2008</b> , 2008, 771-781	3.2	36

- 62 Mechanism of di-tert-butylsilylene transfer from a silacyclopropane to an alkene. *Journal of the American Chemical Society*, **2003**, 125, 10659-63 16.4 35
- 61 Diastereoselective silacyclopropanations of functionalized chiral alkenes. *Journal of the American Chemical Society*, **2002**, 124, 6524-5 16.4 34
- 60 Copper-Mediated Substitution Reactions of Alkylmagnesium Reagents with Allylic Carbamates: (Z)-Selective Alkene Synthesis. *Journal of the American Chemical Society*, **1998**, 120, 12998-12999 16.4 34
- 59 Insertions of silylenes into vinyl epoxides: diastereoselective synthesis of functionalized, optically active trans-dioxasilacyclooctenes. *Journal of the American Chemical Society*, **2009**, 131, 14182-3 16.4 33
- 58 Palladium-Catalyzed Reactions of Di-tert-butylsiliranes with Electron-Deficient Alkynes and Investigations of the Catalytic Cycle. *Organometallics*, **2001**, 20, 3691-3697 3.8 31
- 57 Solvent effects in the nucleophilic substitutions of tetrahydropyran acetals promoted by trimethylsilyl trifluoromethanesulfonate: trichloroethylene as solvent for stereoselective C- and O-glycosylations. *Organic Letters*, **2014**, 16, 3684-7 6.2 29
- 56 Silylene-mediated polarity reversal of dienones: additions of dienones to aldehydes at the Eposition to form trans-dioxasilacyclononenes. *Journal of the American Chemical Society*, **2011**, 133, 406-8 16.4 29
- 55 Palladium(II)-catalyzed cyclization of unsaturated hydroperoxides for the synthesis of 1,2-dioxanes. *Organic Letters*, **2009**, 11, 3290-3 6.2 29
- 54 Synthesis of silyl monoperoxyketals by regioselective cobalt-catalyzed peroxidation of silyl enol ethers: application to the synthesis of 1,2-dioxolanes. *Organic Letters*, **2014**, 16, 4280-3 6.2 28
- 53 Nucleophilic substitution reactions of sulfur-substituted cyclohexanone acetals: an analysis of the factors controlling stereoselectivity. *Journal of Organic Chemistry*, **2006**, 71, 5171-8 4.2 28
- 52 Formal synthesis of (+/-)-peduncularine: use of the. *Organic Letters*, **2000**, 2, 621-3 6.2 28
- 51 Reactions of Allylmagnesium Reagents with Carbonyl Compounds and Compounds with C?N Double Bonds: Their Diastereoselectivities Generally Cannot Be Analyzed Using the Felkin-Anh and Chelation-Control Models. *Chemical Reviews*, **2020**, 120, 1513-1619 68.1 26
- 50 Diastereoselective synthesis of seven-membered-ring trans-alkenes from dienes and aldehydes by silylene transfer. *Journal of the American Chemical Society*, **2012**, 134, 12482-4 16.4 24
- 49 Acceleration of acetal hydrolysis by remote alkoxy groups: evidence for electrostatic effects on the formation of oxocarbenium ions. *Angewandte Chemie - International Edition*, **2015**, 54, 3061-4 16.4 21
- 48 Nucleophilic addition to silyl-protected five-membered ring oxocarbenium ions governed by stereoelectronic effects. *Journal of Organic Chemistry*, **2013**, 78, 6609-21 4.2 21
- 47 Divergent Diastereoselectivity in the Addition of Nucleophiles to Five-Membered-Ring Oxonium Ions. *Journal of Organic Chemistry*, **1997**, 62, 6706-6707 4.2 21
- 46 Formation of chiral quaternary carbon stereocenters using silylene transfer reactions: enantioselective synthesis of (+)-5-epi-acetomycin. *Organic Letters*, **2007**, 9, 1037-40 6.2 21
- 45 Formation and reactivity of silacyclopropenes derived from siloxyalkynes: stereoselective formation of 1,2,4-triols. *Organic Letters*, **2006**, 8, 4109-12 6.2 21

44	Uncatalyzed Carboboration of Seven-Membered-Ring trans-Alkenes: Formation of Air-Stable Trialkylboranes. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 8404-8407	16.4	20
43	CuI-Catalyzed Synthesis of Propargyl Hydroperoxides Using Molecular Oxygen and Hydroxylamines. <i>European Journal of Organic Chemistry</i> , <b>2016</b> , 2016, 1860-1866	3.2	19
42	Effect of conformational rigidity on the stereoselectivity of nucleophilic additions to five-membered ring bicyclic oxocarbenium ion intermediates. <i>Organic and Biomolecular Chemistry</i> , <b>2014</b> , 12, 7083-91	3.9	18
41	Diastereoselective synthesis of eight-membered-ring allenes from propargylic epoxides and aldehydes by silylene insertion into carbon-oxygen bonds. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 13033-6	16.4	18
40	Structure and reactivity of an isolable seven-membered-ring trans-alkene. <i>Angewandte Chemie - International Edition</i> , <b>2015</b> , 54, 4295-8	16.4	17
39	Silver-Catalyzed Silacyclopropanation of 1-Heteroatom-Substituted Alkynes and Subsequent Rearrangement Reactions. <i>Organometallics</i> , <b>2005</b> , 24, 6212-6219	3.8	17
38	Evidence that Additions of Grignard Reagents to Aliphatic Aldehydes Do Not Involve Single-Electron-Transfer Processes. <i>Organic Letters</i> , <b>2015</b> , 17, 3906-9	6.2	16
37	Influence of alkoxy groups on rates of acetal hydrolysis and tosylate solvolysis: electrostatic stabilization of developing oxocarbenium ion intermediates and neighboring-group participation to form oxonium ions. <i>Journal of Organic Chemistry</i> , <b>2015</b> , 80, 4470-80	4.2	16
36	Stereo- and Regioselectivity of Reactions of Siliranes with Aldehydes and Related Substrates. <i>Journal of Organic Chemistry</i> , <b>1997</b> , 62, 4737-4745	4.2	16
35	Using nucleophilic substitution reactions to understand how a remote alkyl or alkoxy substituent influences the conformation of eight-membered ring oxocarbenium ions. <i>Organic Letters</i> , <b>2004</b> , 6, 4739-47	6.2	16
34	Silylene oxonium ylides: di-tert-butylsilylene insertion into C-O bonds. <i>Tetrahedron</i> , <b>2009</b> , 65, 5608-5613	2.4	15
33	Metal-catalyzed rearrangement of homoallylic ethers to silylmethyl allylic silanes in the presence of a Di-tert-butylsilylene source. <i>Organic Letters</i> , <b>2005</b> , 7, 5531-3	6.2	15
32	Formation of an Endoperoxide upon Chromium-Catalyzed Allylic Oxidation of a Triterpene by Oxygen. <i>Journal of Organic Chemistry</i> , <b>2015</b> , 80, 266-73	4.2	14
31	[4+2] Cycloadditions of Seven-Membered-Ring trans-Alkenes: Decreasing Reactivity with Increasing Substitution of the Seven-Membered Ring. <i>European Journal of Organic Chemistry</i> , <b>2016</b> , 2016, 2933-2943	3.2	14
30	Stereoelectronic Model To Explain Highly Stereoselective Reactions of Seven-Membered-Ring Oxocarbenium-Ion Intermediates. <i>Angewandte Chemie - International Edition</i> , <b>2016</b> , 55, 1816-9	16.4	14
29	Strained organosilacyclic compounds: synthesis of anti-Bredt olefins and trans-dioxasilacyclooctenes. <i>Dalton Transactions</i> , <b>2010</b> , 39, 9275-81	4.3	12
28	An SN1-type Reaction To Form the 1,2-Dioxepane Ring: Synthesis of 10,12-Peroxy calamenene. <i>Journal of Organic Chemistry</i> , <b>2015</b> , 80, 8262-7	4.2	11
27	Allylmagnesium Halides Do Not React Chemoselectively Because Reaction Rates Approach the Diffusion Limit. <i>Journal of Organic Chemistry</i> , <b>2017</b> , 82, 2300-2305	4.2	10

26	Mechanistic Insight into Additions of Allylic Grignard Reagents to Carbonyl Compounds. <i>Journal of Organic Chemistry</i> , <b>2018</b> , 83, 10197-10206	4.2	10
25	Participation of alkoxy groups in reactions of acetals: violation of the reactivity/selectivity principle in a Curtin-Hammett kinetic scenario. <i>Angewandte Chemie - International Edition</i> , <b>2015</b> , 54, 12087-90	16.4	10
24	High Reactivity of Strained Seven-Membered-Ring trans-Alkenes. <i>Angewandte Chemie - International Edition</i> , <b>2016</b> , 55, 790-3	16.4	10
23	Strain-Promoted Oxidation of Methylene-cyclopropane Derivatives using $\alpha$ -Hydroxyphthalimide and Molecular Oxygen in the Dark. <i>Organic Letters</i> , <b>2020</b> , 22, 5690-5694	6.2	8
22	Reactions of Allylmagnesium Halides with Carbonyl Compounds: Reactivity, Structure, and Mechanism. <i>Synthesis</i> , <b>2017</b> , 49, 3237-3246	2.9	8
21	Additions of Organomagnesium Halides to $\alpha$ -Alkoxy Ketones: Revision of the Chelation-Control Model. <i>Organic Letters</i> , <b>2017</b> , 19, 3346-3349	6.2	7
20	Acceleration of Acetal Hydrolysis by Remote Alkoxy Groups: Evidence for Electrostatic Effects on the Formation of Oxocarbenium Ions. <i>Angewandte Chemie</i> , <b>2015</b> , 127, 3104-3107	3.6	7
19	Cobalt-Catalyzed Oxygenation/De-aromatization of Furans. <i>Journal of Organic Chemistry</i> , <b>2018</b> , 83, 9067-9075	4.7	7
18	Diastereoselective silylene transfer reactions to chiral enantiopure alkenes: effects of ligand size and substrate bias. <i>Dalton Transactions</i> , <b>2017</b> , 46, 8763-8768	4.3	6
17	Structure and Reactivity of an Isolable Seven-Membered-Ring trans-Alkene. <i>Angewandte Chemie</i> , <b>2015</b> , 127, 4369-4372	3.6	6
16	Reactivity of Seven-Membered-Ring trans-Alkenes with Electrophiles. <i>Synlett</i> , <b>2017</b> , 28, 2478-2482	2.2	5
15	Cobalt-Catalyzed Intramolecular Silylperoxidation of Unsaturated Diisopropylsilyl Ethers. <i>Journal of Organic Chemistry</i> , <b>2019</b> , 84, 7564-7574	4.2	5
14	Using Neighboring-Group Participation for Acyclic Stereocontrol in Diastereoselective Substitution Reactions of Acetals. <i>Organic Letters</i> , <b>2020</b> , 22, 4113-4117	6.2	5
13	Diastereoselective peroxidation of derivatives of Baylis-Hillman adducts. <i>Tetrahedron</i> , <b>2019</b> , 75, 4118-4129	4.2	4
12	Evidence against Single-Electron Transfer in the Additions of Most Organomagnesium Reagents to Carbonyl Compounds. <i>Journal of Organic Chemistry</i> , <b>2020</b> , 85, 7848-7862	4.2	2
11	Insertion Reactions of Silacyclopropanes: Evidence for a Radical-Based Mechanism. <i>Organometallics</i> , <b>2016</b> , 35, 3132-3138	3.8	2
10	High Reactivity of Strained Seven-Membered-Ring trans-Alkenes. <i>Angewandte Chemie</i> , <b>2016</b> , 128, 800-803	16.4	2
9	Participation of Alkoxy Groups in Reactions of Acetals: Violation of the Reactivity/Selectivity Principle in a Curtin-Hammett Kinetic Scenario. <i>Angewandte Chemie</i> , <b>2015</b> , 127, 12255-12258	3.6	2

8	Diastereoselective Synthesis of Eight-Membered-Ring Allenes from Propargylic Epoxides and Aldehydes by Silylene Insertion into Carbon-Oxygen Bonds. <i>Angewandte Chemie</i> , <b>2013</b> , 125, 13271-13274	3.6	2
7	Synthesis of Enantiopure Triols from Racemic Baylis-Hillman Adducts Using a Diastereoselective Peroxidation Reaction. <i>Organic Letters</i> , <b>2020</b> , 22, 9075-9080	6.2	2
6	Chemiluminescence-promoted oxidation of alkyl enol ethers by NHPI under mild conditions and in the dark. <i>Tetrahedron</i> , <b>2021</b> , 82,	2.4	2
5	Stereoelectronic Model To Explain Highly Stereoselective Reactions of Seven-Membered-Ring Oxocarbenium-Ion Intermediates. <i>Angewandte Chemie</i> , <b>2016</b> , 128, 1848-1851	3.6	1
4	Diastereoselectivities in Reductions of $\alpha$ -Alkoxy Ketones Are Not Always Correlated to Chelation-Induced Rate Acceleration. <i>Synthesis</i> , <b>2019</b> , 51, 296-302	2.9	1
3	Carboalumination of Seven-Membered-Ring $\alpha$ -Alkenes. <i>Organic Letters</i> , <b>2020</b> , 22, 7518-7521	6.2	0
2	Diastereoselective Additions of Allylmagnesium Reagents to $\beta$ -Substituted Ketones When Stereochemical Models Cannot Be Used. <i>Journal of Organic Chemistry</i> , <b>2021</b> , 86, 7203-7217	4.2	0
1	Hydroperoxidations of Alkenes using Cobalt Picolinate Catalysts. <i>Organic Letters</i> , <b>2021</b> , 23, 5002-5006	6.2	0