

William J Leigh

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Photochemical Generation and Characterization of Di- <i>tert</i> -butylsilylene (Si ⁺ t ⁻ Bu ₂) in Solution. <i>Organometallics</i> , 2019, 38, 933-943.	1.1	0
2	Photochemical generation of 9-fluorenyl radicals. <i>Journal of Physical Organic Chemistry</i> , 2019, 32, e3920.	0.9	0
3	Fast kinetics studies of the Lewis acid-base complexation of transient stannylenes with σ - and π -donors in solution. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 20555-20570.	1.3	5
4	Direct Detection, Dimerization, and Chemical Trapping of Dimethyl- and Diphenylstannylene from Photolysis of Stannacyclopent-3-enes in Solution. <i>Organometallics</i> , 2015, 34, 5029-5044.	1.1	8
5	A combined kinetic and computational study of the reactions of transient germylenes with oxiranes and thiiranes in solution. <i>Canadian Journal of Chemistry</i> , 2015, 93, 435-444.	0.6	5
6	Electronic and Steric Effects on the Lewis Acidities of Transient Silylenes and Germylenes: Equilibrium Constants for Complexation with Chalcogen and Pnictogen Donors. <i>Organometallics</i> , 2012, 31, 3755-3767.	1.1	19
7	A Glimpse at the Chemistry of GeH ₂ in Solution. Direct Detection of an Intramolecular Germylene-Alkene π -Complex. <i>Journal of the American Chemical Society</i> , 2011, 133, 10523-10534.	6.6	23
8	Silanones and Silanethiones from the Reactions of Transient Silylenes with Oxiranes and Thiiranes in Solution. The Direct Detection of Diphenylsilanethione. <i>Journal of the American Chemical Society</i> , 2011, 133, 4377-4388.	6.6	20
9	Kinetics and mechanisms of the reactions of transient silylenes with amines. <i>Journal of Physical Organic Chemistry</i> , 2011, 24, 937-946.	0.9	8
10	Kinetic and mechanistic studies of the reactions of diarylgermylenes and tetraaryldigermenes with carbon tetrachloride. <i>Canadian Journal of Chemistry</i> , 2011, 89, 241-255.	0.6	11
11	Photochemical generation of thiophene analogs of 9-fluorenyl cations. <i>Journal of Physical Organic Chemistry</i> , 2010, 23, 1202-1213.	0.9	9
12	Fast Kinetics Study of the Reactions of Transient Silylenes with Alcohols. Direct Detection of Silylene-Alcohol Complexes in Solution. <i>Organometallics</i> , 2010, 29, 662-670.	1.1	24
13	A Better Sunscreen: Structural Effects on Spectral Properties. <i>Journal of Chemical Education</i> , 2010, 87, 1384-1387.	1.1	14
14	Photoinduced Intramolecular Macrocyclization Reaction between a Bpa and a Met Residue in a Helical Peptide: 3D Structures of the Diastereomeric Products. <i>Chemistry - A European Journal</i> , 2009, 15, 67-70.	1.7	13
15	Photochemistry of Cyclic Trisilanes: σ -Spring-Loaded Precursors to Methylphenylsilylene. <i>Chemistry - A European Journal</i> , 2009, 15, 8485-8491.	1.7	9
16	Gas-phase synthesis and characterization of heteroleptic divalent germanium compounds by FVT/UV-PES. <i>Journal of Organometallic Chemistry</i> , 2009, 694, 43-51.	0.8	16
17	Laser Flash Photolysis Studies of Some Dimethylgermylene Precursors. <i>Organometallics</i> , 2009, 28, 3239-3246.	1.1	13
18	Kinetic and Mechanistic Studies of the Formal (1+2)- and (1+4)-Cycloadditions of Germylenes to Conjugated Dienes. <i>Organometallics</i> , 2009, 28, 6777-6788.	1.1	17

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19	Fast Kinetic Studies of the Reactivities of Transient Germynes in Methanol and Tetrahydrofuran Solution. <i>Organometallics</i> , 2009, 28, 1484-1494.	1.1	15
20	Competing Germene and Germylene Extrusion from Photolysis of 1,1-Diarylgermacyclobutanes. Substituent Effects on Germene Reactivity. <i>Organometallics</i> , 2008, 27, 5948-5959.	1.1	16
21	Substituent effects on silene reactivity $\hat{\epsilon}$ Reactive silenes from photolysis of phenylated tri- and tetrasilanes. <i>Canadian Journal of Chemistry</i> , 2008, 86, 1105-1117.	0.6	10
22	Substituent Effects on the Reactions of Diarylgermylenes and Tetraaryldigermenes with Acetic Acid and Other Lewis Bases in Hydrocarbon Solution. <i>Organometallics</i> , 2007, 26, 1339-1348.	1.1	30
23	Direct Detection of Diphenylsilylene and Tetraphenyldisilene in Solution. <i>Organometallics</i> , 2007, 26, 6268-6276.	1.1	28
24	Comparison of the Reactivities of Dimethylsilylene (SiMe ₂) and Diphenylsilylene (SiPh ₂) in Solution by Laser Flash Photolysis Methods. <i>Organometallics</i> , 2007, 26, 6277-6289.	1.1	34
25	Forward and Backward Pericyclic Photochemical Reactions Have Intermediates in Common, Yet Cyclobutenes Break the Rules. <i>ChemPhysChem</i> , 2007, 8, 592-598.	1.0	10
26	Introduction to the Special Issue in Honor of J. C. (Tito) Scaiano. <i>Photochemistry and Photobiology</i> , 2007, 82, 1-4.	1.3	0
27	The photochemistry of a potential diphenylsilylene precursor. Time-resolved spectroscopic studies of the reactivity of a transient vinylsilirane. <i>Silicon Chemistry</i> , 2007, 3, 139-149.	0.8	8
28	Time-Resolved Spectroscopic Studies of the Reactivities of Dimethylgermylene and Tetramethyldigermene in Solution. <i>Organometallics</i> , 2006, 25, 2055-2065.	1.1	48
29	A Combined Experimental and Theoretical Study of the Kinetics and Mechanism of the Addition of Alcohols to Electronically Stabilized Silenes: A New Mechanism for the Addition of Alcohols to the SiC Bond. <i>Journal of the American Chemical Society</i> , 2006, 128, 10772-10783.	6.6	27
30	First Detection of Methylgermylene in the Gas Phase and Time-Resolved Study of Some of Its Reactions. <i>Organometallics</i> , 2006, 25, 4439-4443.	1.1	19
31	Diphenylsilylene. <i>Journal of the American Chemical Society</i> , 2006, 128, 14442-14443.	6.6	33
32	Bimolecular Hydrogen Abstraction from Phenols by Aromatic Ketone Triplets $\hat{\epsilon}$. <i>Photochemistry and Photobiology</i> , 2006, 82, 291.	1.3	64
33	Direct detection of methylphenylgermylene and 1,2-dimethyl-1,2-diphenyldigermene $\hat{\epsilon}$ Kinetic studies of their reactivities in solution. <i>Canadian Journal of Chemistry</i> , 2006, 84, 934-948.	0.6	20
34	Kinetics and Mechanisms of the Reactions of Diaryl- and Dialkylgermylenes with Alcohols and Ethers in Solution. <i>Organometallics</i> , 2006, 25, 5424-5434.	1.1	14
35	Time-resolved spectroscopic studies of the photochemistry of some diphenylgermylene (Ph ₂ Ge:) precursors. <i>Canadian Journal of Chemistry</i> , 2005, 83, 1324-1338.	0.6	16
36	Di- and Trivalent Organogermanium Reactive Intermediates. Kinetics and Mechanisms of Some Reactions of Diphenylgermylene and Tetraphenyldigermene in Solution. <i>Journal of the American Chemical Society</i> , 2005, 127, 5084-5096.	6.6	41

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37	Direct Detection of Dimethylstannylene and Tetramethyldistannene in Solution and the Gas Phase by Laser Flash Photolysis of 1,1-Dimethylstannacyclopent-3-enes. <i>Journal of the American Chemical Society</i> , 2005, 127, 17469-17478.	6.6	31
38	Direct Detection of 1,1-Diphenyl-2-neopentylsilene and the Effects of Solvent Polarity on Its Reactivity with Nucleophiles. <i>Organometallics</i> , 2005, 24, 2307-2318.	1.1	10
39	Flash vacuum thermolysis of 3,4-dimethyl-1-germacyclopent-3-enes: UV photoelectron spectroscopic characterization of GeH ₂ and GeMe ₂ . <i>Applied Organometallic Chemistry</i> , 2004, 18, 676-683.	1.7	23
40	Organogermanium Reactive Intermediates. The Direct Detection and Characterization of Transient Germylenes and Digermenes in Solution. <i>Journal of the American Chemical Society</i> , 2004, 126, 16105-16116.	6.6	73
41	Kinetic Studies of the Reactions of Si:C and Si:Si Bonds. <i>ChemInform</i> , 2003, 34, no.	0.1	1
42	Kinetics and Mechanism of the Addition of Aliphatic Amines to Transient Silenes. <i>Journal of Physical Chemistry A</i> , 2003, 107, 1517-1524.	1.1	5
43	Intramolecular Nucleophile-Induced Photorearrangements and Silene Formation from an o-(Methoxymethyl)phenylsilacyclobutane. <i>Journal of the American Chemical Society</i> , 2003, 125, 8096-8097.	6.6	12
44	Steric Effects on Silene Reactivity. The Effects of ortho-Methyl Substituents on the Kinetics and Mechanisms of the Reactions of 1,1-Diarylsilenes with Nucleophiles. <i>Organometallics</i> , 2003, 22, 5518-5525.	1.1	9
45	Effects of Ether Solvents on the Reactivity of Transient Silenes. <i>Organometallics</i> , 2002, 21, 1197-1207.	1.1	11
46	Geometric and solvent effects on intramolecular phenolic hydrogen abstraction by carbonyl n,ï€* and ï€ï€* triplets. <i>Canadian Journal of Chemistry</i> , 2001, 79, 1851-1863.	0.6	11
47	Solvent, Substituent, and Temperature Effects on the Absolute Rate Constants for Addition of Methoxytrimethylsilane to 1,1-Diarylsilenes. <i>Organometallics</i> , 2001, 20, 932-936.	1.1	6
48	Direct Detection of Wiberg's Silene (1,1-Dimethyl-2,2-bis(trimethylsilyl)silene) and Absolute Rate Constants for Its Reactions in Solution. <i>Organometallics</i> , 2001, 20, 5707-5716.	1.1	11
49	Substituent Effects on the Reactivity of the Silicon-Carbon Double Bond. <i>Accounts of Chemical Research</i> , 2001, 34, 129-136.	7.6	99
50	Arrhenius Parameters for the Head-to-Tail Dimerizations of 1,1-Diphenylsilene and 1,1-Diphenylgermene in Solution. <i>Organometallics</i> , 2001, 20, 4537-4541.	1.1	4
51	Simultaneous pH-rate profiles applied to the two step consecutive sequence Aâ€Šâ†'â€ŠBâ€Šâ†'â€ŠCâ€Š: a theoretical analysis and experimental verificationâ€Šâ€. <i>Perkin Transactions II RSC</i> , 2000, , 365-373.	1.1	2
52	The one- and two-photon photochemistry of benzylsilacyclobutanes, acyclic benzylsilanes, and 1,1,2-triphenylsilacyclobutane. <i>Canadian Journal of Chemistry</i> , 2000, 78, 1459-1468.	0.6	10
53	Photochemistry of Group 14 1,1,1-Trimethyl-2,2,2-triphenyldimetalanes (Ph ₃ MMMe ₃ ; M, M = Si, Ge). Direct Detection and Characterization of Silene and Germene Reactive Intermediates. <i>Organometallics</i> , 2000, 19, 3232-3241.	1.1	27
54	Substituent Effects on the Reactivity of the Silicon-Carbon Double Bond. Substituted 1,1-Dimethylsilenes from Far-UV Laser Flash Photolysis of ï€-Silylketenes and (Trimethylsilyl)diazomethane. <i>Journal of the American Chemical Society</i> , 1999, 121, 4744-4753.	6.6	33

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55	Homo- and Cross-[2+2]-Cycloaddition of 1,1-Diphenylsilene and 1,1-Diphenylgermene. Absolute Rate Constants for Dimerization and the Molecular Structures and Photochemistry of the Resulting 1,3-Dimetallacyclobutanes. <i>Organometallics</i> , 1999, 18, 5643-5652.	1.1	35
56	Geometrical Effects on Intramolecular Quenching of Aromatic Ketone ($\dot{\text{C}}\text{C}^*$) Triplets by Remote Phenolic Hydrogen Abstraction. <i>Journal of the American Chemical Society</i> , 1999, 121, 11984-11992.	6.6	29
57	Stereospecific (Conrotatory) Photochemical Ring Opening of Alkylcyclobutenes in the Gas Phase and in Solution. Ring Opening from the Rydberg Excited State or by Hot Ground State Reaction?. <i>Journal of Organic Chemistry</i> , 1999, 64, 5256-5263.	1.7	15
58	Steady state and time-resolved spectroscopic studies of the photochemistry of 1-arylsilacyclobutanes and the chemistry of 1-arylsilenes. <i>Canadian Journal of Chemistry</i> , 1999, 77, 1136-1147.	0.6	9
59	A transient spectroscopic study of the photochemistry of vinyldisilanes. <i>Journal of Organometallic Chemistry</i> , 1998, 561, 19-27.	0.8	10
60	Substituent Effects on the Reactivity of the Silicon C Carbon Double Bond. Mechanistic Studies of the Ene-Addition of Acetone to Reactive Arylsilenes. <i>Organometallics</i> , 1998, 17, 645-651.	1.1	29
61	Direct Detection of 1,1-Diphenylgermene in Solution and Absolute Rate Constants for Germene Trapping Reactions. <i>Journal of the American Chemical Society</i> , 1998, 120, 1172-1178.	6.6	38
62	Substituent Effects on the Reactivity of the Silicon C Carbon Double Bond. Resonance, Inductive, and Steric Effects of Substituents at Silicon on the Reactivity of Simple 1-Methylsilenes. <i>Journal of the American Chemical Society</i> , 1998, 120, 9504-9512.	6.6	48
63	Thermal and Photochemical [2+2] Cycloreversion of a 1,2-Disilacyclobutane and a 1,2-Digermacyclobutane. <i>Journal of the American Chemical Society</i> , 1998, 120, 1398-1404.	6.6	35
64	Substituent effects on the reactivity of the silicon C carbon double bond. Arrhenius parameters for the reaction of 1,1-diarylsilenes with alcohols and acetic acid. <i>Canadian Journal of Chemistry</i> , 1997, 75, 1393-1402.	0.6	33
65	Far-UV laser flash photolysis in solution. A time-resolved spectroscopic study of the chemistry of 1,1-dimethyl-1,3-(1-sila)-butadiene. <i>Canadian Journal of Chemistry</i> , 1997, 75, 975-982.	0.6	16
66	Direct Detection and Characterization of a Transient 1-Silaallene Derivative in Solution. <i>Journal of the American Chemical Society</i> , 1997, 119, 466-471.	6.6	32
67	A Laser Flash Photolysis Study of the Photochemistry of (Phenylethynyl)pentamethylsilane. Absolute Rate Constants for Trapping of a Reactive 1-Silaallene by Nucleophiles. <i>Organometallics</i> , 1997, 16, 5804-5810.	1.1	22
68	Far-UV laser flash photolysis in solution. A study of the chemistry of 1,1-dimethylsilene in hydrocarbon solvents. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 1997, 110, 243-246.	2.0	17
69	Photoinduced Hydrogen Abstraction from Phenols by Aromatic Ketones. A New Mechanism for Hydrogen Abstraction by Carbonyl $n, \dot{\text{C}}\text{C}^*$ and $\dot{\text{C}}\text{C}^*$ Triplets. <i>Journal of the American Chemical Society</i> , 1996, 118, 12339-12348.	6.6	132
70	Synthesis and Isolation of Stable 1,2-Siloxetanes from Reaction of Transient Silenes with Acetone. <i>Organometallics</i> , 1996, 15, 2554-2561.	1.1	28
71	Nanosecond Laser Flash Photolysis Studies of the Photochemistry of Dimesitylgermylene Precursors. <i>Organometallics</i> , 1996, 15, 3732-3736.	1.1	28
72	Mechanistic Studies of the Reactions of Silicon C Carbon Double Bonds. Addition of Alcohols to 1,1-Diphenylsilene. <i>Organometallics</i> , 1996, 15, 2246-2253.	1.1	42

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73	Cyclobutene photochemistry. Adiabatic photochemical ring opening of alkylcyclobutenes. Canadian Journal of Chemistry, 1996, 74, 951-964.	0.6	6
74	Arrhenius Parameters for the Addition of Nucleophiles to the Silicon-Carbon Double Bond of 1,1-Diphenylsilene. Journal of the American Chemical Society, 1996, 118, 8971-8972.	6.6	34
75	Orbital Symmetry and the Photochemical Ring Opening of Cyclobutene. Journal of the American Chemical Society, 1995, 117, 7826-7827.	6.6	18
76	Aryldisilane photochemistry. Substituent and solvent effects on the photochemistry of aryldisilanes and the reactivity of 1,3,5-(1-sila)hexatrienes. Organometallics, 1994, 13, 269-281.	1.1	54
77	Aryldisilane Photochemistry. The Role of Silyl Free Radicals in Silene Formation from Photolysis of Methylpentaphenyldisilane. Organometallics, 1994, 13, 1005-1013.	1.1	18
78	Aryldisilane photochemistry. A kinetic and product study of the mechanism of alcohol additions to transient silenes. Journal of the American Chemical Society, 1994, 116, 10468-10476.	6.6	41
79	The role of central bond torsional motions in the direct cis-trans-photoisomerization of conjugated dienes. Journal of the Chemical Society Chemical Communications, 1993, .	2.0	4
80	Triplet-state photoreactivity of phenyldisilanes. Journal of the American Chemical Society, 1993, 115, 7531-7532.	6.6	26
81	1,1-Diphenylsilene. Journal of the American Chemical Society, 1993, 115, 5332-5333.	6.6	37
82	1992 Merck-Frosst Award Lecture Orbital symmetry and the photochemistry of cyclobutene. Canadian Journal of Chemistry, 1993, 71, 147-155.	0.6	20
83	Reactive intermediates from the photolysis of methylpentaphenyl- and pentamethylphenyldisilane. Journal of the American Chemical Society, 1992, 114, 1195-1201.	6.6	50
84	Photochemistry of 1,2-di-tert-butyl-1,1,2,2-tetraphenyldisilane, a clean, direct source of arylalkylsilyl radicals. Organometallics, 1992, 11, 3731-3736.	1.1	29
85	End-to-end intramolecular quenching of aromatic ketone triplets in aqueous solutions of 2,6-di-(O-methyl)-cyclodextrins. Journal of Photochemistry and Photobiology A: Chemistry, 1991, 57, 97-109.	2.0	28
86	Miscibility studies of the smectic phases of trans,trans-4-alkylbicyclohexyl-4-carbonitrile (CCH) liquid crystals. Liquid Crystals, 1989, 4, 39-51.	0.9	4
87	Cyclobutene photochemistry. Nonstereospecific photochemical ring opening of simple cyclobutenes. Journal of the American Chemical Society, 1987, 109, 6086-6092.	6.6	29
88	Merostabilization in radical ions, triplets, and biradicals. 5. The thermal cis-trans isomerization of para-substituted tetraphenylethylenes. Canadian Journal of Chemistry, 1981, 59, 609-620.	0.6	28
89	The two-parameter linear free energy treatment of the substituent effects on the half-wave reduction potentials and n, ϵ^* triplet energies of aromatic ketones. A test of the validity of the approach.. Tetrahedron Letters, 1981, 22, 909-912.	0.7	7
90	Merostabilization in radical ions, triplets, and biradicals. 4. Substituent effects on the half-wave reduction potentials and n, ϵ^* triplet energies of aromatic ketones. Canadian Journal of Chemistry, 1980, 58, 2537-2549.	0.6	64

#	ARTICLE	IF	CITATIONS
91	Kinetic Studies of the Reactions of $\text{Si}\ddot{\text{t}}\text{t}\frac{3}{4}\text{C}$ and $\text{Si}\ddot{\text{t}}\text{t}\frac{3}{4}\text{Si}$ Bonds. , 0, , 949-1026.		15