

Matthew S Platz

List of Publications by Year in descending order

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1770
citing authors

#	ARTICLE	IF	CITATIONS
1	Investigation of phenyl azide photochemistry by conventional and time-resolved spectroscopy. Elucidation of intermediates and reaction mechanisms. <i>Journal of Photochemistry and Photobiology</i> , 2022, 11, 100126.	1.1	2
2	Fluoro Aryl Azides: Synthesis, Reactions and Applications. <i>Current Organic Chemistry</i> , 2020, 24, 1161-1180.	0.9	7
3	An ultrafast time-resolved infrared and UV-vis spectroscopic and computational study of the photochemistry of acyl azides. <i>Journal of Physical Organic Chemistry</i> , 2012, 25, 693-703.	0.9	33
4	Steady state and transient kinetics in crystalline solids: the photochemistry of nanocrystalline 1,1,3-triphenyl-3-hydroxy-2-indanone. <i>Chemical Science</i> , 2011, 2, 1497.	3.7	17
5	Ultrafast time-resolved studies of the photochemistry of diazo carbonyl compounds. <i>Journal of Physical Organic Chemistry</i> , 2010, 23, 308-314.	0.9	33
6	An Ab Initio Study of the Ground and Excited State Chemistry of Phenyldiazirine and Phenyldiazomethane. <i>Journal of Physical Chemistry A</i> , 2010, 114, 5902-5912.	1.1	23
7	Photochemistry of Phenyl Azide. <i>Advances in Photochemistry</i> , 2007, , 69-143.	0.4	94
8	Ultrafast Study of 9-Diazofluorene: Direct Observation of the First Two Singlet States of Fluorenylidene. <i>Journal of the American Chemical Society</i> , 2007, 129, 13683-13690.	6.6	49
9	Photochemical Electron Transfer Reactions of Tirapazamine. <i>Photochemistry and Photobiology</i> , 2007, 75, 339-345.	1.3	1
10	Binding Affinities of Commonly Employed Sensitizers of Viral Inactivation. <i>Photochemistry and Photobiology</i> , 2007, 75, 561-564.	1.3	2
11	Ultrafast Study of the Photochemistry of 2-Azidonitrobenzene. <i>Organic Letters</i> , 2006, 8, 1637-1640.	2.4	17
12	Hydroxyl Radical Production from Irradiated Arctic Dissolved Organic Matter. <i>Biogeochemistry</i> , 2006, 78, 51-66.	1.7	34
13	Stable Singlet Carbenes. , 2005, , 329-373.		13
14	Triplet Carbenes. , 2005, , 375-461.		22
15	Crossing the Borderline between SN1 and SN2 Nucleophilic Substitution at Aliphatic Carbon. , 2005, , 41-68.		3
16	Carbanions. , 2005, , 69-119.		4
17	Carbocations. , 2005, , 1-40.		1
18	Radicals. , 2005, , 121-163.		3

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19	Non-Kekulé Molecules as Reactive Intermediates. , 2005, , 165-203.		11
20	Synthetic Carbene and Nitrene Chemistry. , 2005, , 561-592.		14
21	Organic Radical Ions. , 2005, , 205-272.		3
22	Atomic Carbon. , 2005, , 463-500.		8
23	Singlet Carbenes. , 2005, , 273-328.		34
24	Nitrenes. , 2005, , 501-559.		53
25	Nitrenium Ions. , 2005, , 593-650.		9
26	Strained Hydrocarbons: Structures, Stability, and Reactivity. , 2005, , 717-740.		2
27	Arynes. , 2005, , 741-794.		10
28	Silylenes (and Germylenes, Stannylenes, Plumblylenes). , 2005, , 651-715.		29
29	Matrix Isolation. , 2005, , 795-845.		2
30	Reactions on the Femtosecond Time Scale. , 2005, , 899-924.		0
31	The Picosecond Realm. , 2005, , 873-897.		0
32	Potential Energy Surfaces and Reaction Dynamics. , 2005, , 925-960.		12
33	The Partnership between Electronic Structure Calculations and Experiments in the Study of Reactive Intermediates. , 2005, , 961-1004.		1
34	Nanosecond Laser Flash Photolysis: A Tool for Physical Organic Chemistry. , 2005, , 847-871.		21
35	An Action Spectrum of the Riboflavin-photosensitized Inactivation of Lambda Phage [†] . Photochemistry and Photobiology, 2005, 81, 474-480.	1.3	2
36	Time Resolved Spectroscopy of Some Aromatic N-Oxide Triplets, Radical Anions, and Related Radicals. Journal of Physical Chemistry A, 2004, 108, 4385-4390.	1.1	11

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37	Flash Photolysis of the Naphthyl Azides with UV-Vis and IR Detection of Intermediates. <i>Journal of Physical Chemistry A</i> , 2004, 108, 1169-1176.	1.1	16
38	Generation and Characterization of New Fluoro-Substituted Carbenes. <i>Journal of Physical Chemistry A</i> , 2004, 108, 1033-1041.	1.1	12
39	Riboflavin and UV-Light Based Pathogen Reduction: Extent and Consequence of DNA Damage at the Molecular Level. <i>Photochemistry and Photobiology</i> , 2004, 80, 15-21.	1.3	13
40	A Laser Flash Photolysis and Computational Chemistry Study of 9-Anthrylnitrene. <i>Journal of Physical Chemistry A</i> , 2003, 107, 8879-8884.	1.1	9
41	Laser Flash Photolysis Study of Chlorofluorocarbene. <i>Journal of Physical Chemistry A</i> , 2003, 107, 8547-8551.	1.1	10
42	Matrix isolation photolysis study of tetrazolo[1,5-b]pyridazine Dedicated to Professor Dr Z. R. Grabowski and Professor Dr J. Wirz on the occasions of their 75th and 60th birthdays.. <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 1051-1058.	1.3	10
43	Bystander Effects on Carbene Rearrangements: A Computational Study. <i>Journal of Physical Chemistry A</i> , 2002, 106, 4970-4979.	1.1	14
44	The Photochemistry of Riboflavin Tetraacetate and Nucleosides. A Study Using Density Functional Theory, Laser Flash Photolysis, Fluorescence, UV-Vis, and Time Resolved Infrared Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2002, 106, 10263-10271.	1.2	55
45	Photochemistry of 2,2,4,4-Tetramethyl-3-thietan-1-ylidene: A Heterocyclic Carbene with an Unusually Short Lifetime and Evidence for a Nonclassical Structure. <i>Journal of Physical Chemistry A</i> , 2001, 105, 2106-2111.	1.1	6
46	Direct Characterization of Radical Species Generated on One-Electron Oxidation of 3,6-Diamino-10-methylacridan. <i>Journal of Physical Chemistry A</i> , 2001, 105, 875-879.	1.1	7
47	Rearrangement of 1-Noradamantyl and 1-Adamantylcarbene to Bridgehead Alkenes: Lifetimes of Two Bridgehead Carbenes in Solution. <i>Journal of Physical Chemistry A</i> , 2001, 105, 10146-10154.	1.1	8
48	A Laser Flash Photolysis and Quantum Chemical Study of the Fluorinated Derivatives of Singlet Phenylnitrene. <i>Journal of the American Chemical Society</i> , 2001, 123, 1951-1962.	6.6	79
49	A Matrix Isolation, Laser Flash Photolysis, and Computational Study of Adamantene. <i>Journal of Physical Chemistry A</i> , 2001, 105, 3803-3807.	1.1	23
50	Matrix and Time-Resolved Infrared Spectroscopy of Chloro-p-nitrophenylcarbene and Related Species. <i>Journal of Physical Chemistry A</i> , 2001, 105, 8413-8416.	1.1	19
51	Singlet-Triplet Splittings and Barriers to Wolff Rearrangement for Carbonyl Carbenes. <i>Journal of the American Chemical Society</i> , 2001, 123, 6069-6076.	6.6	68
52	A Laser Flash Photolysis Study of a Carbene-Ether Ylide. <i>Journal of Physical Chemistry A</i> , 2001, 105, 3752-3756.	1.1	10
53	The Interplay of Theory and Experiment in the Study of Phenylnitrene. <i>Accounts of Chemical Research</i> , 2000, 33, 765-771.	7.6	225
54	The Photochemistry of Sulfur Analogues of Dialkyldiazomalonates. <i>Journal of Physical Chemistry A</i> , 2000, 104, 9276-9280.	1.1	5

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55	Hydrogen-Transferred Radical Cations of NADH Model Compounds. 3. 1,8-Acridinediones. Journal of Physical Chemistry A, 2000, 104, 724-728.	1.1	15
56	Excited Precursor Reactivity, Fast 1,2-H Shifts, and Diffusion-Controlled Methanol Insertion in 1,2-Diphenylalkylidenes. Journal of Organic Chemistry, 1999, 64, 5139-5147.	1.7	15
57	A Laser Flash Photolysis Study of Some Simple Para-Substituted Derivatives of Singlet Phenyl Nitrene. Journal of Physical Chemistry A, 1999, 103, 4465-4469.	1.1	64
58	Generation and Study of Benzylchlorocarbene from a Phenanthrene Precursor. Journal of the American Chemical Society, 1998, 120, 8055-8059.	6.6	51
59	Issues and challenges in the chemistry of alkylcarbenes. Advances in Carbene Chemistry, 1998, , 133-174.	0.1	22
60	Direct Observation of Singlet Phenylnitrene and Measurement of Its Rate of Rearrangement. Journal of the American Chemical Society, 1997, 119, 5059-5060.	6.6	101
61	Spectroscopy and Kinetics of Singlet Perfluoro-4-biphenylnitrene and Singlet Perfluorophenylnitrene. Journal of Physical Chemistry A, 1997, 101, 2833-2840.	1.1	79
62	Laser Flash Photolysis Study of Phenylcarbene and Pentafluorophenylcarbene. Journal of Physical Chemistry A, 1997, 101, 3832-3840.	1.1	50
63	Absolute reactivity of singlet pentafluorophenylnitrene with representative alkenes. Journal of Physical Organic Chemistry, 1997, 10, 22-26.	0.9	9
64	LASER FLASH PHOTOLYSIS STUDY OF PHENYLCARBENE,o-TOLYLCARBENE AND MESITYLCARBENE. Journal of Physical Organic Chemistry, 1997, 10, 207-220.	0.9	22
65	Sequential Electron~Proton~Electron Transfer in the Radiolytic and Photochemical Oxidation of Thioxanthene and Xanthene. The Journal of Physical Chemistry, 1996, 100, 13539-13543.	2.9	21
66	The Photochemistry of Various Para-Substituted Tetrafluorophenyl Azides in Acidic Media and the Formation of Nitrenium Ions. The Journal of Physical Chemistry, 1996, 100, 14028-14036.	2.9	47
67	Exploratory Photochemistry of Polyfluorinated 2-Naphthyl Azide. The Journal of Physical Chemistry, 1996, 100, 9568-9572.	2.9	6
68	Photochemical and Photophysical Studies of 3-aminobenzoxindole and the Inactivation of λ Phage. Photochemistry and Photobiology, 1996, 64, 622-631.	1.3	11
69	Geometric isomers of 2-naphthylphenylcarbene: A revised assignment. Journal of Physical Organic Chemistry, 1996, 9, 252-254.	0.9	8
70	Direct observation of the ylides formed upon reaction of cyclopentadienylidene with acetic anhydride, dimethyl carbonate, ethyl acetate and acetone. Journal of Physical Organic Chemistry, 1996, 9, 689-694.	0.9	12
71	The reaction of cyclopentadienylidene, fluorenylidene and tetrachlorocyclopentadienylidene with alcohols. A laser flash photolysis study. Journal of Physical Organic Chemistry, 1996, 9, 759-769.	0.9	18
72	EXPLORATORY PHOTOCHEMISTRY OF 5-AMINO-8-ALKOXY-6-SUBSTITUTED PSORALENS FREE AND BOUND TO DNA. Photochemistry and Photobiology, 1995, 61, 600-606.	1.3	6

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73	Exploratory photochemistry of alkylbromo- and alkylfluorodiazirines. Excited-state hydrogen migration and carbene formation. <i>Journal of Physical Organic Chemistry</i> , 1994, 7, 24-27.	0.9	13
74	Unusually long lifetimes of the singlet nitrenes derived from 4-azido-2,3,5,6-tetrafluorobenzamides. <i>The Journal of Physical Chemistry</i> , 1994, 98, 412-419.	2.9	59
75	Photochemical and radiolytic cleavage of 10-methylacridine dimer in solutions and cryogenic glasses. <i>Journal of Physical Organic Chemistry</i> , 1993, 6, 254-256.	0.9	6
76	DRAMATIC IMPROVEMENTS IN VIRAL INACTIVATION WITH BROMINATED PSORALENS, NAPHTHALENES AND ANTHRACENES. <i>Photochemistry and Photobiology</i> , 1993, 58, 59-65.	1.3	24
77	Evidence for stepwise nitrogen extrusion and ring expansion upon photolysis of phenyl azide. <i>Journal of the American Chemical Society</i> , 1993, 115, 8609-8612.	6.6	62
78	Deduction of the activation parameters for ring expansion and intersystem crossing in fluorinated singlet phenylnitrenes. <i>The Journal of Physical Chemistry</i> , 1993, 97, 12674-12677.	2.9	32
79	Laser flash photolysis study of 10, 10-dimethyl-9-anthrylidene, a carbene with nearly degenerate singlet and triplet states. <i>Journal of Physical Organic Chemistry</i> , 1992, 5, 123-128.	0.9	5
80	Photolysis of 3-aryl-3-(trifluoromethyl)diazirines: a caveat regarding their use in photoaffinity probes. <i>Bioconjugate Chemistry</i> , 1991, 2, 337-341.	1.8	42
81	Mechanistic analysis of the reactions of (pentafluorophenyl)nitrene in alkanes. <i>Journal of Organic Chemistry</i> , 1991, 56, 6403-6406.	1.7	50
82	THE PHOTOCHEMISTRY OF IODO, METHYL AND THIOMETHYL SUBSTITUTED ARYL AZIDES IN TOLUENE SOLUTION AND FROZEN POLYCRYSTALS. <i>Photochemistry and Photobiology</i> , 1991, 54, 329-333.	1.3	12
83	Kinetic and spectroscopy of 2-naphthylphenylcarbene. <i>Journal of Physical Organic Chemistry</i> , 1990, 3, 135-138.	0.9	13
84	Exploratory photochemistry of iodinated aromatic azides. <i>Tetrahedron Letters</i> , 1989, 30, 899-902.	0.7	38
85	Photochemistry of fluorinated aryl azides in toluene solution and in frozen polycrystals. <i>Journal of Organic Chemistry</i> , 1989, 54, 5938-5945.	1.7	71
86	Reaction of triethylsilyl radical with sulfides, a laser flash photolysis study. <i>Journal of Physical Organic Chemistry</i> , 1988, 1, 39-46.	0.9	10
87	EPR SPECTROSCOPY OF ETHIDIUM NITRENE AND PROFLAVINE NITRENE COORDINATED TO SELF-COMPLEMENTARY DINUCLEOTIDE MINI-DUPLEXES. <i>Photochemistry and Photobiology</i> , 1987, 45, 667-669.	1.3	1
88	Photochemistry of phenyl azide: the role of singlet and triplet phenylnitrene as transient intermediates. <i>Journal of the American Chemical Society</i> , 1986, 108, 3783-3790.	6.6	229
89	A formal CH insertion reaction of an aryl nitrene into an alkyl CH bond. Implications for photoaffinity labelling. <i>Tetrahedron Letters</i> , 1986, 27, 791-794.	0.7	28
90	Reactive Intermediates in Combustion. , 0, , 247-270.		0

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91	Reactive Intermediates in Crystals: Form and Function. , 0, , 271-331.		6
92	Tetrahedral Intermediates Derived from Carbonyl Compounds, Pentacoordinate Intermediates Derived from Phosphoryl and Sulfonyl Compounds, and Concerted Paths Which Avoid Them. , 0, , 1-46.		1
93	Quantum Mechanical Tunneling in Organic Reactive Intermediates. , 0, , 415-463.		16
94	Time-Resolved Infrared (TRIR) Studies of Organic Reactive Intermediates. , 0, , 183-205.		3
95	Conical Intersection Species as Reactive Intermediates. , 0, , 379-414.		8
96	An Introduction to Time-Resolved Resonance Raman Spectroscopy and Its Application to Reactive Intermediates. , 0, , 121-182.		2
97	Silicon-, Germanium-, and Tin-Centered Cations, Radicals, and Anions. , 0, , 47-120.		14
98	The Chemical Reactions of DNA Damage and Degradation. , 0, , 333-378.		16
99	Studies of the Thermochemical Properties of Reactive Intermediates by Mass Spectrometric Methods. , 0, , 207-246.		1
100	Wavelength-dependent photochemistry of 1-phenyl-1-diazopropane. Journal of Physical Organic Chemistry, 0, , e4298.	0.9	1