

Daniel E Falvey

List of Publications by Year in descending order

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104
papers

3,652
citations

101535

36
h-index

155644

55
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127
all docs

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docs citations

127
times ranked

2418
citing authors

#	ARTICLE	IF	CITATIONS
1	Dynamics of α -CH Deprotonation and α -Desilylation Reactions of Tertiary Amine Cation Radicals. <i>Journal of the American Chemical Society</i> , 1994, 116, 4211-4220.	13.7	196
2	Ab Initio Characterization of Phenylnitrenium and Phenylcarbene: Remarkably Different Properties for Isoelectronic Species. <i>Journal of the American Chemical Society</i> , 1994, 116, 9787-9788.	13.7	123
3	Dynamics of Anilinium Radical $\hat{\pm}$ -Heterolytic Fragmentation Processes. Electrofugal Group, Substituent, and Medium Effects on Desilylation, Decarboxylation, and Retro-Aldol Cleavage Pathways. <i>Journal of the American Chemical Society</i> , 1998, 120, 10676-10686.	13.7	115
4	Protecting Groups That Can Be Removed through Photochemical Electron Transfer: $\hat{\pm}$ Mechanistic and Product Studies on Photosensitized Release of Carboxylates from Phenacyl Esters. <i>Journal of Organic Chemistry</i> , 1997, 62, 6245-6251.	3.2	88
5	Model Studies of DNA Photorepair: $\hat{\pm}$ Reduction Potentials of Thymine and Cytosine Cyclobutane Dimers Measured by Fluorescence Quenching. <i>Journal of the American Chemical Society</i> , 1997, 119, 1971-1977.	13.7	82
6	Photochemical Oxidation of Water by 2-Methyl-1,4-benzoquinone: $\hat{\pm}$ Evidence against the Formation of Free Hydroxyl Radical. <i>Journal of Physical Chemistry A</i> , 2002, 106, 2889-2894.	2.5	79
7	A simple route to fluids with photo-switchable viscosities based on a reversible transition between vesicles and wormlike micelles. <i>Soft Matter</i> , 2013, 9, 5025.	2.7	75
8	Structures of Reactive Nitrenium Ions: $\hat{\pm}$ Time-Resolved Infrared Laser Flash Photolysis and Computational Studies of Substituted N-Methyl-N-arylnitrenium Ions. <i>Journal of the American Chemical Society</i> , 2000, 122, 8271-8278.	13.7	74
9	In vitro studies on the photobiological properties of aloe emodin and aloin A. <i>Free Radical Biology and Medicine</i> , 2003, 34, 233-242.	2.9	74
10	Photogelling Colloidal Dispersions Based on Light-Activated Assembly of Nanoparticles. <i>Journal of the American Chemical Society</i> , 2009, 131, 7135-7141.	13.7	73
11	Photoinduced Electron-Transfer Reactions in Two Room-Temperature Ionic Liquids: $\hat{\pm}$ 1-Butyl-3-methylimidazolium Hexafluorophosphate and 1-Octyl-3-methylimidazolium Hexafluorophosphate. <i>Journal of Physical Chemistry B</i> , 2007, 111, 5023-5029.	2.6	72
12	Direct Photolysis of Phenacyl Protecting Groups Studied by Laser Flash Photolysis: $\hat{\pm}$ An Excited State Hydrogen Atom Abstraction Pathway Leads to Formation of Carboxylic Acids and Acetophenone. <i>Journal of the American Chemical Society</i> , 1998, 120, 2965-2966.	13.7	70
13	Model Studies of the (6 $\hat{\pm}$ 4) Photoproduct Photolyase Enzyme: $\hat{\pm}$ Laser Flash Photolysis Experiments Confirm Radical Ion Intermediates in the Sensitized Repair of Thymine Oxetane Adducts. <i>Journal of the American Chemical Society</i> , 2000, 122, 11219-11225.	13.7	68
14	Model studies of DNA photorepair: radical anion cleavage of thymine dimers probed by nanosecond laser spectroscopy. <i>Journal of the American Chemical Society</i> , 1991, 113, 8557-8558.	13.7	66
15	Model studies of the (6-4) photoproduct DNA photolyase: Synthesis and photosensitized splitting of a thymine-5,6-oxetane. <i>Journal of the American Chemical Society</i> , 1995, 117, 11375-11376.	13.7	65
16	Photoremovable protecting groups based on electron transfer chemistry. <i>Photochemical and Photobiological Sciences</i> , 2004, 3, 831.	2.9	64
17	A New Photolabile Protecting Group for Release of Carboxylic Acids by Visible-Light-Induced Direct and Mediated Electron Transfer. <i>Journal of Organic Chemistry</i> , 2009, 74, 3894-3899.	3.2	64
18	Photogenerated Arylnitrenium Ions: Reactions of N-tert-Butyl(4-substituted 2-acetylphenyl)nitrenium ions with Alcohols and Water Studied by Laser Flash Photolysis. <i>Journal of the American Chemical Society</i> , 1995, 117, 6544-6552.	13.7	63

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19	Singlet ¹ Triplet Splittings and 1,2-Hydrogen Shift Barriers for Methylphenylborene, Methylphenylcarbene, and Methylphenylnitrenium in the Gas Phase and Solution. What a Difference a Charge Makes. <i>Journal of the American Chemical Society</i> , 1997, 119, 12338-12342.	13.7	63
20	Picosecond time scale dynamics of perester photodecomposition: evidence for an acyloxy radical intermediate in the photolysis of tert-butyl 9-methylfluorene-9-percarboxylate. <i>Journal of the American Chemical Society</i> , 1986, 108, 7419-7420.	13.7	62
21	Solvent-Mediated Photoinduced Electron Transfer in a Pyridinium Ionic Liquid. <i>Journal of the American Chemical Society</i> , 2008, 130, 1552-1553.	13.7	61
22	Reactions of a Triplet Arylnitrenium Ion: Laser Flash Photolysis and Product Studies of N-tert-Butyl(2-acetyl-4-nitrophenyl)nitrenium Ion. <i>Journal of the American Chemical Society</i> , 1995, 117, 10186-10193.	13.7	59
23	Photogenerated Diarylnitrenium Ions: Laser Flash Photolysis and Product Studies on Diphenylnitrenium Ion Generated from Photolysis of 1-(N,N-Diphenylamino)pyridinium Ions. <i>Journal of the American Chemical Society</i> , 1996, 118, 8965-8966.	13.7	58
24	Photorelease of Carboxylic Acids, Amino Acids, and Phosphates from N-Alkylpicolinium Esters Using Photosensitization by High Wavelength Laser Dyes. <i>Journal of the American Chemical Society</i> , 2005, 127, 8000-8001.	13.7	58
25	Experimental Confirmation of the Iminocyclohexadienyl Cation-like Structure of Arylnitrenium Ions: Time-Resolved IR Studies of Diphenylnitrenium Ion. <i>Journal of the American Chemical Society</i> , 1997, 119, 11552-11553.	13.7	54
26	Aqueous Photochemistry of Methyl-Benzoquinone. <i>Journal of Physical Chemistry A</i> , 2008, 112, 2803-2812.	2.5	54
27	Photoreleasable protecting groups based on electron transfer chemistry. Donor sensitized release of phenacyl groups from alcohols, phosphates and diacids. <i>Tetrahedron</i> , 1999, 55, 12699-12710.	1.9	53
28	Photogenerated arylnitrenium ions: absorption spectra and absolute rate constants for tert-butyl(4-halo-2-acetylphenyl)nitrenium ions measured by time-resolved laser spectroscopy. <i>Journal of the American Chemical Society</i> , 1993, 115, 9870-9871.	13.7	50
29	C=O Bond Fragmentation of 4-Picolyl- and N-Methyl-4-picolinium Esters Triggered by Photochemical Electron Transfer. <i>Journal of Organic Chemistry</i> , 2004, 69, 5547-5554.	3.2	48
30	Photoinduced Electron Transfer to Pyrimidines and 5,6-Dihydropyrimidine Derivatives: Reduction Potentials Determined by Fluorescence Quenching Kinetics. <i>Journal of Physical Chemistry A</i> , 1997, 101, 4332-4337.	2.5	47
31	Neophyl-like rearrangement of alkoxy radicals: direct detection of a bridged intermediate by time-resolved absorption spectroscopy. <i>The Journal of Physical Chemistry</i> , 1990, 94, 1056-1059.	2.9	44
32	Computational prediction of a ground-state triplet arylnitrenium ion and a possible ground-state triplet silylene. <i>Tetrahedron Letters</i> , 1997, 38, 1515-1518.	1.4	44
33	Protecting group release through photoinduced electron transfer: Wavelength control through sensitized irradiation. <i>Tetrahedron Letters</i> , 1998, 39, 4635-4638.	1.4	44
34	Substituent Effects on the Lifetimes and Reactivities of Arylnitrenium Ions Studied by Laser Flash Photolysis and Photothermal Beam Deflection. <i>Journal of the American Chemical Society</i> , 1996, 118, 8127-8135.	13.7	43
35	Photochemically Removable Protecting Groups Based on Covalently Linked Electron Donor-Acceptor Systems. <i>Journal of the American Chemical Society</i> , 2000, 122, 9361-9366.	13.7	42
36	Model studies of DNA photorepair: energetic requirements for the radical anion mechanism determined by fluorescence quenching. <i>Journal of the American Chemical Society</i> , 1992, 114, 7313-7314.	13.7	41

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37	Photoinduced C-C Bond Cleavage in Dithiane Carbonyl Adducts: A Laser Flash Photolysis Study. <i>Journal of Organic Chemistry</i> , 2001, 66, 2887-2890.	3.2	38
38	Substituent and Solvent Effects on the Stability of <i>N</i> -Heterocyclic Carbene Complexes with CO ₂ . <i>Journal of Organic Chemistry</i> , 2017, 82, 1552-1557.	3.2	38
39	Singlet and triplet states in the reactions of nitrenium ions. <i>Journal of Physical Organic Chemistry</i> , 1999, 12, 589-596.	1.9	37
40	Solvent-Dependent Decarboxylation of 1,3-Dimethylimidazolium-2-Carboxylate. <i>Journal of Organic Chemistry</i> , 2014, 79, 4293-4299.	3.2	37
41	Benzylic Cations with Triplet Ground States: Computational Studies of Aryl Carbenium Ions, Silylenium Ions, Nitrenium Ions, and Oxenium Ions Substituted with Meta π -Donors. <i>Journal of the American Chemical Society</i> , 2007, 129, 10113-10119.	13.7	36
42	Photochemistry and Phototoxicity of Aloe Emodin. <i>Photochemistry and Photobiology</i> , 2002, 75, 346-352.	2.5	35
43	Effect of meta Electron-Donating Groups on the Electronic Structure of Substituted Phenyl Nitrenium Ions. <i>Journal of the American Chemical Society</i> , 2004, 126, 9661-9668.	13.7	35
44	Vinyl Cations Substituted with π -Donors Have Triplet Ground States. <i>Journal of the American Chemical Society</i> , 2010, 132, 215-222.	13.7	35
45	Photogenerated arylnitrenium ions: photoisomerization of the <i>N</i> -tert-butyl-3-methylantranilium ion and spin-selective reactivity of the isomeric arylnitrenium ion. <i>Journal of the American Chemical Society</i> , 1993, 115, 7254-7262.	13.7	34
46	Competitive singlet-singlet energy transfer and electron transfer activation of aryl azides: application to photo-cross-linking experiments. <i>Journal of Organic Chemistry</i> , 1988, 53, 3501-3507.	3.2	33
47	Reactions of Diarylnitrenium Ions with Electron Rich Alkenes: An Experimental and Theoretical Study. <i>Journal of Organic Chemistry</i> , 1997, 62, 2742-2751.	3.2	30
48	Reactions of <i>N</i> -Methyl- <i>N</i> -(4-biphenyl)nitrenium Ion with Electron-Rich Arenes: Laser Flash Photolysis and Product Studies. <i>Journal of the American Chemical Society</i> , 2002, 124, 3567-3577.	13.7	30
49	Singlet-Triplet Energy Gaps in Highly Stabilized Nitrenium Ions: Experimental and Theoretical Study of 1,3-Dimethylbenzotriazolium Ion. <i>Organic Letters</i> , 2000, 2, 2451-2454.	4.6	28
50	Photolytic Release of Carboxylic Acids Using Linked Donor-Acceptor Molecules: Direct versus Mediated Photoinduced Electron Transfer to <i>N</i> -Alkyl-4-picolinium Esters. <i>Organic Letters</i> , 2005, 7, 2631-2634.	4.6	28
51	Synthesis and Photochemical Cleavage of Cis-Syn Pyrimidine Cyclobutane Dimer Analogs. <i>Journal of Organic Chemistry</i> , 1995, 60, 624-631.	3.2	26
52	Photogenerated Nitrenium Ions: A Search for Triplet-State Reactivity in the Chemistry of the Diphenylnitrenium Ion. <i>Journal of Physical Chemistry A</i> , 2000, 104, 11154-11158.	2.5	26
53	Photochemical Reduction of CO ₂ Using 1,3-Dimethylimidazolyliidene. <i>Organic Letters</i> , 2015, 17, 4152-4155.	4.6	26
54	The Dynamics of <i>N</i> -Anilino Carboxylate and Related Cation Radical Heterolytic Fragmentations. <i>Journal of the American Chemical Society</i> , 1997, 119, 5261-5262.	13.7	24

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55	Photogenerated nitrenium ions: Singlet and triplet state reactions of tert-butyl-(2-acetyl-4-methyl)phenyl nitrenium ion. <i>Tetrahedron Letters</i> , 1994, 35, 4943-4946.	1.4	23
56	Photoinduced electron transfer cleavage of oxetane adducts of uracil and cytosine. <i>Photochemical and Photobiological Sciences</i> , 2002, 1, 632-635.	2.9	23
57	Photochemical Heterolysis of 3,5-Bis(dimethylamino)benzyl Alcohols and Esters: Generation of a Benzyl Cation with a Low-Energy Triplet State. <i>Organic Letters</i> , 2011, 13, 212-215.	4.6	23
58	2-(3,5-Dinitrophenyl)-1,3-dithiane Carbanion: A Benzylic Anion with a Low Energy Triplet State. <i>Journal of the American Chemical Society</i> , 2011, 133, 15553-15558.	13.7	22
59	Radical anion reactions of cyclobutane derivatives; electron-transfer cleavage of dithymoquinone. <i>Journal of Organic Chemistry</i> , 1993, 58, 3616-3618.	3.2	21
60	Photorelease of carboxylic and amino acids from N-methyl-4-picolinium esters by mediated electron transfer. <i>Photochemical and Photobiological Sciences</i> , 2006, 5, 116-121.	2.9	21
61	Photorelease of Carboxylic Acids Mediated by Visible-Light-Absorbing Gold-Nanoparticles. <i>Organic Letters</i> , 2008, 10, 457-460.	4.6	21
62	State-Dependent Photochemical and Photophysical Behavior of Dithiolate Ester and Trithiocarbonate Reversible Addition–Fragmentation Chain Transfer Polymerization Agents. <i>Journal of Physical Chemistry A</i> , 2020, 124, 4211-4222.	2.5	21
63	Free Radical Rearrangements in Uracil Derivatives. <i>Journal of Organic Chemistry</i> , 1994, 59, 4791-4799.	3.2	20
64	Reactions of Nitrenium Ions with Arenes: Laser Flash Photoysis Detection of a π -Complex between N,N-Diphenylnitrenium Ion and Alkoxybenzenes. <i>Journal of the American Chemical Society</i> , 2001, 123, 11329-11330.	13.7	20
65	Photothermal Beam Deflection Calorimetry in Solution Photochemistry: Recent Progress and Future Prospects. <i>Photochemistry and Photobiology</i> , 1997, 65, 4-9.	2.5	19
66	On the Solution Chemistry of Parent Nitrenium Ion NH_2^+ : The Role of the Singlet and Triplet States in Its Reactions with Water, Methanol, and Hydrocarbons. <i>Journal of Organic Chemistry</i> , 1999, 64, 5853-5857.	3.2	19
67	Photolysis of Thymine Oxetanes Produces Triplet Excited Carbonyl Compounds with High Efficiency. <i>Journal of the American Chemical Society</i> , 2001, 123, 3145-3146.	13.7	19
68	Carbazolyl Nitrenium Ion: Electron Configuration and Antiaromaticity Assessed by Laser Flash Photolysis, Trapping Rate Constants, Product Analysis, and Computational Studies. <i>Journal of Organic Chemistry</i> , 2007, 72, 8186-8195.	3.2	19
69	Ketocoumarin dyes as electron mediators for visible light induced carboxylate photorelease. <i>Photochemical and Photobiological Sciences</i> , 2010, 9, 854-860.	2.9	18
70	Photochemical Generation of Nitrenium Ions from Protonated 1,1-Diarylhydrazines. <i>Organic Letters</i> , 2004, 6, 4671-4674.	4.6	17
71	N,N-Di(4-halophenyl)nitrenium Ions: Nucleophilic Trapping, Aromatic Substitution, and Hydrogen Atom Transfer. <i>Journal of Organic Chemistry</i> , 2007, 72, 4626-4634.	3.2	16
72	Applications of photothermal beam deflection calorimetry to organic photochemistry. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 1995, 87, 13-21.	3.9	15

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73	Photogenerated N-Methyl-N-1-naphthyl nitrenium ion: A laser flash photolysis, trapping rates, and product study. <i>Journal of Organic Chemistry</i> , 2005, 70, 3127-3132.	3.2	15
74	Application of PET deprotection for orthogonal photocontrol of aqueous solution viscosity. <i>Chemical Communications</i> , 2010, 46, 8983.	4.1	14
75	Photochemically generated aryl nitrenium ions: A laser flash photolysis and product studies of the photochemistry of N-tert-butyl-3-methyl-6-chloroanthranilium ions. <i>Journal of Organic Chemistry</i> , 1996, 61, 3195-3199.	3.2	13
76	Investigation of the 2,7-dihalofluorenylidene: search for heavy atom effects in the reactions of triplet carbenes. <i>Journal of the American Chemical Society</i> , 1987, 109, 5003-5008.	13.7	12
77	Model studies of DNA photorepair: enthalpy of cleavage of a pyrimidine dimer measured by photothermal beam deflection calorimetry. <i>Photochemistry and Photobiology</i> , 1996, 64, 764-768.	2.5	12
78	A photothermal beam deflection apparatus for the time-resolved kinetic study of fast photophysical and photochemical processes. <i>Review of Scientific Instruments</i> , 1996, 67, 3260-3269.	1.3	12
79	Diphenyl nitrenium ion: A cyclization, electron transfer, and polymerization reactions. <i>Journal of Organic Chemistry</i> , 2005, 70, 5283-5290.	3.2	12
80	Visible light photorelease of carboxylic acids via charge-transfer excitation of N-methylpyridinium iodide esters. <i>Organic Letters</i> , 2015, 17, 3454-3457.	4.6	12
81	Elucidating complex triplet-state dynamics in the model system isopropylthioxanthone. <i>Science</i> , 2022, 25, 103600.	4.1	12
82	Uncaging alcohols using UV or visible light photoinduced electron transfer to 9-phenyl-9-tritylone ethers. <i>Organic Letters</i> , 2015, 17, 5986-5989.	4.6	11
83	Photoreleasable protecting groups triggered by sequential two-photon absorption of visible light: release of carboxylic acids from a linked anthraquinone-N-alkylpicolinium ester molecule. <i>Journal of Physical Chemistry A</i> , 2018, 122, 3204-3210.	2.5	11
84	Nitrenium ions. , 2005, , 593-650.		9
85	Photochemistry and phototoxicity of Aloe emodin. <i>Photochemistry and Photobiology</i> , 2002, 75, 346.	2.5	9
86	Stereochemistry of the solid state photodimerization of thymoquinone. <i>Tetrahedron Letters</i> , 1993, 34, 3509-3510.	1.4	8
87	Photogeneration of the xanthy cation: .beta.-cleavage from excited state ketones. <i>Journal of Organic Chemistry</i> , 1994, 59, 8023-8029.	3.2	8
88	Discrete existence of singlet nitrenium ions revisited: computational studies of non-aryl nitrenium ions and their rearrangements. <i>ACS Omega</i> , 2018, 3, 10418-10432.	3.5	8
89	Visible light initiated release of calcium ions through photochemical electron transfer reactions. <i>Photochemical and Photobiological Sciences</i> , 2017, 16, 1003-1008.	2.9	7
90	Photochemically generated aryl nitrenium ions: substituent effects on reactivity studied by laser flash photolysis. This paper is dedicated to Professor Fred Lewis on the event of his 60th birthday. <i>Photochemical and Photobiological Sciences</i> , 2003, 2, 1205.	2.9	6

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91	Fast reactions of arylnitrenium ions with amino acids and proteins: a laser flash photolysis study. <i>Journal of Physical Organic Chemistry</i> , 2006, 19, 291-294.	1.9	6
92	Nitrenium Ion Analogues of Nonclassical Carbocations: Cyclopropylnitrenium, Allylnitrenium, and Azetidenium Ions and Mechanisms for Their Interconversion. <i>Organic Letters</i> , 2015, 17, 484-487.	4.6	4
93	The 3,5-dinitroanilide anion: a singlet anilide anion with evidence for a thermally accessible triplet state. <i>Journal of Physical Organic Chemistry</i> , 2013, 26, 699-706.	1.9	3
94	Generation of <i>N</i> -Di(4-bromophenyl)nitrenium Ion under Acidic Conditions: Search for a Nitrenium Dication. <i>Journal of Organic Chemistry</i> , 2020, 85, 8844-8850.	3.2	3
95	Photoacid Generators Activated through Sequential Two-Photon Excitation: 1-Sulfonatoxy-2-alkoxyanthraquinone Derivatives. <i>Journal of Physical Chemistry A</i> , 2021, 125, 5227-5236.	2.5	3
96	Photolysis of 3-hydroxy-2,3-dihydro-2,1-benzisoxazole derivatives studied by EPR spectroscopy: Competing N—O and C—O bond scission. <i>Tetrahedron Letters</i> , 1996, 37, 2895-2898.	1.4	2
97	Chapter 9. Reaction mechanisms . Part (iv) Free-radical reactions. <i>Annual Reports on the Progress of Chemistry Section B</i> , 1998, 94, 321.	0.9	2
98	Solvent quality assurance in porphyrin research. <i>Energy & Fuels</i> , 1992, 6, 532-534.	5.1	1
99	Synthesis and Photochemical Cleavage of Cis-Syn Pyrimidine Cyclobutane Dimer Analogs. [Erratum to document cited in CA122:132825]. <i>Journal of Organic Chemistry</i> , 1995, 60, 4668-4668.	3.2	1
100	Introduction. <i>Annual Reports on the Progress of Chemistry Section B</i> , 2003, 99, 1.	0.9	1
101	Solvent-Dependent Photochemistry of 2,2,2-Tribromoethyl-(2-phenylacetate). <i>Journal of Organic Chemistry</i> , 2013, 78, 1934-1939.	3.2	1
102	Mechanism of the photorelease of alcohols from the 9-phenyl-9-tritylone protecting group. <i>Photochemical and Photobiological Sciences</i> , 2019, 18, 1990-1995.	2.9	1
103	Visible-Light Photocatalytic Oxidation of DMSO for RAFT Polymerization. <i>Photochemistry and Photobiology</i> , 2021, , .	2.5	1
104	Photoremovable Protecting Groups Based on Electron Transfer Chemistry. <i>ChemInform</i> , 2005, 36, no.	0.0	0