

Michael D Sevilla

List of Publications by Year in descending order

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50170

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140
all docs

140
docs citations

140
times ranked

2571
citing authors

#	ARTICLE	IF	CITATIONS
1	DFT Calculations of the Electron Affinities of Nucleic Acid Bases: Dealing with Negative Electron Affinities. <i>Journal of Physical Chemistry A</i> , 2002, 106, 1596-1603.	1.1	232
2	Ab Initio Molecular Orbital Calculations of DNA Radical Ions. 5. Scaling of Calculated Electron Affinities and Ionization Potentials to Experimental Values. <i>The Journal of Physical Chemistry</i> , 1995, 99, 1060-1063.	2.9	214
3	Investigation of Proton Transfer within DNA Base Pair Anion and Cation Radicals by Density Functional Theory (DFT). <i>Journal of Physical Chemistry B</i> , 2001, 105, 10115-10123.	1.2	191
4	Radiation-Induced DNA Damage as a Function of Hydration: I. Release of Unaltered Bases. <i>Radiation Research</i> , 1992, 129, 333.	0.7	185
5	Proton-Coupled Electron Transfer in DNA on Formation of Radiation-Produced Ion Radicals. <i>Chemical Reviews</i> , 2010, 110, 7002-7023.	23.0	185
6	The Chemical Consequences of Radiation Damage to DNA. <i>Advances in Radiation Biology</i> , 1993, , 121-180.	0.4	183
7	Density Functional Theory Studies of Electron Interaction with DNA: Can Zero eV Electrons Induce Strand Breaks?. <i>Journal of the American Chemical Society</i> , 2003, 125, 13668-13669.	6.6	179
8	Relative abundances of primary ion radicals in .gamma.-irradiated DNA: cytosine vs. thymine anions and guanine vs. adenine cations. <i>The Journal of Physical Chemistry</i> , 1991, 95, 3409-3415.	2.9	177
9	Ab initio molecular orbital calculations of DNA bases and their radical ions in various protonation states: evidence for proton transfer in GC base pair radical anions. <i>The Journal of Physical Chemistry</i> , 1992, 96, 661-668.	2.9	177
10	Ab initio molecular orbital calculations on DNA base pair radical ions: effect of base pairing on proton-transfer energies, electron affinities, and ionization potentials. <i>The Journal of Physical Chemistry</i> , 1992, 96, 9787-9794.	2.9	157
11	The Guanine Cation Radical: Investigation of Deprotonation States by ESR and DFT. <i>Journal of Physical Chemistry B</i> , 2006, 110, 24171-24180.	1.2	133
12	Electron Spin Resonance Study of Electron Transfer Rates in DNA: Determination of the Tunneling Constant I^2 for Single-Step Excess Electron Transfer. <i>Journal of Physical Chemistry B</i> , 2000, 104, 1128-1136.	1.2	112
13	Dehalogenation of 5-Halouracils after Low Energy Electron Attachment: A Density Functional Theory Investigation. <i>Journal of Physical Chemistry A</i> , 2002, 106, 11248-11253.	1.1	108
14	Direct Observation of the Hole Protonation State and Hole Localization Site in DNA-Oligomers. <i>Journal of the American Chemical Society</i> , 2009, 131, 8614-8619.	6.6	104
15	Relative abundance and reactivity of primary ion radicals in .gamma.-irradiated DNA at low temperatures. 2. Single- vs double-stranded DNA. <i>The Journal of Physical Chemistry</i> , 1992, 96, 1983-1989.	2.9	103
16	Radiation-Induced DNA Damage as a Function of Hydration. II. Base Damage from Electron-Loss Centers. <i>Radiation Research</i> , 1996, 145, 304.	0.7	99
17	Structure and Relative Stability of Deoxyribose Radicals in a Model DNA Backbone: Ab Initio Molecular Orbital Calculations. <i>The Journal of Physical Chemistry</i> , 1995, 99, 3867-3874.	2.9	97
18	Influence of Hydration on Proton Transfer in the Guanine ^{•+} Cytosine Radical Cation (G ⁺ C ^{•-}) Base Pair: A Density Functional Theory Study. <i>Journal of Physical Chemistry B</i> , 2009, 113, 11359-11361.	1.2	97

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19	Formation of 8-oxo-7,8-dihydroguanine-radicals in γ -irradiated DNA by multiple one-electron oxidations. <i>Nucleic Acids Research</i> , 2004, 32, 6565-6574.	6.5	95
20	Hydroxyl Radical (OH^{\bullet}) Reaction with Guanine in an Aqueous Environment: A DFT Study. <i>Journal of Physical Chemistry B</i> , 2011, 115, 15129-15137.	1.2	92
21	Electron Spin Resonance of DNA Irradiated with a Heavy-Ion Beam ($^{16}\text{O}^{8+}$): Evidence for Damage to the Deoxyribose Phosphate Backbone. <i>Radiation Research</i> , 1996, 146, 361.	0.7	88
22	A Simple ab Initio Model for the Hydrated Electron That Matches Experiment. <i>Journal of Physical Chemistry A</i> , 2015, 119, 9148-9159.	1.1	88
23	Ab initio molecular orbital calculations on DNA radical ions. 4. Effect of hydration on electron affinities and ionization potentials of base pairs. <i>The Journal of Physical Chemistry</i> , 1993, 97, 13852-13859.	2.9	86
24	DFT Investigation of Dehalogenation of Adenine \sim Thymine Base Pairs upon Low-Energy Electron Attachment. <i>Journal of the American Chemical Society</i> , 2003, 125, 8916-8920.	6.6	82
25	Low-Energy Electron Attachment to 5 d^{\bullet} -Thymidine Monophosphate: Modeling Single Strand Breaks Through Dissociative Electron Attachment. <i>Journal of Physical Chemistry B</i> , 2007, 111, 5464-5474.	1.2	81
26	Competitive Electron Scavenging by Chemically Modified Pyrimidine Bases in Bromine-Doped DNA: Relative Efficiencies and Relevance to Intrastrand Electron Migration Distances. <i>Journal of Physical Chemistry B</i> , 1997, 101, 1460-1467.	1.2	80
27	Effect of Base Stacking on the Acid \sim Base Properties of the Adenine Cation Radical [$\text{A}^{\bullet+}$] in Solution: ESR and DFT Studies. <i>Journal of the American Chemical Society</i> , 2008, 130, 10282-10292.	6.6	74
28	Electron Spin Resonance Study of DNA Irradiated with an Argon-Ion Beam: Evidence for Formation of Sugar Phosphate Backbone Radicals. <i>Radiation Research</i> , 2003, 160, 174-185.	0.7	72
29	The Role of π^* Excited States in Electron-Induced DNA Strand Break Formation: A Time-Dependent Density Functional Theory Study. <i>Journal of the American Chemical Society</i> , 2008, 130, 2130-2131.	6.6	71
30	Excess Electron Transfer in DNA: Effect of Base Sequence and Proton Transfer. <i>Journal of Physical Chemistry B</i> , 2002, 106, 2755-2762.	1.2	70
31	An ESR Investigation of the Reactions of Glutathione, Cysteine and Penicillamine Thiyl Radicals: Competitive Formation of RSO^{\bullet} , R^{\bullet} , RSSR , and RSS^{\bullet} . <i>International Journal of Radiation Biology</i> , 1988, 53, 767-786.	1.0	69
32	Electron Spin Resonance Study of the Temperature Dependence of Electron Transfer in DNA: Competitive Processes of Tunneling, Protonation at Carbon, and Hopping. <i>Journal of Physical Chemistry B</i> , 2000, 104, 10406-10411.	1.2	69
33	Protonation of Nucleobase Anions in Gamma-Irradiated DNA and Model Systems. Which DNA Base Is the Ultimate Sink for the Electron?. <i>Radiation Research</i> , 1994, 138, 9.	0.7	67
34	Yields of OH^{\bullet} in Gamma-Irradiated DNA as a Function of DNA Hydration: Hole Transfer in Competition with OH^{\bullet} Formation. <i>Radiation Research</i> , 1996, 145, 673.	0.7	67
35	UVA-visible photo-excitation of guanine radical cations produces sugar radicals in DNA and model structures. <i>Nucleic Acids Research</i> , 2005, 33, 5553-5564.	6.5	66
36	The Influence of Hydration on the Absolute Yields of Primary Ionic Free Radicals in β -Irradiated DNA at 77 K: I. Total Radical Yields. <i>Radiation Research</i> , 1993, 135, 146.	0.7	61

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37	Electron Spin Resonance Study of Electron Transfer in DNA: Inter-Double-Strand Tunneling Processes. <i>Journal of Physical Chemistry B</i> , 2000, 104, 6942-6949.	1.2	60
38	Photo-induced Hole Transfer from Base to Sugar in DNA: Relationship to Primary Radiation Damage. <i>Radiation Research</i> , 2006, 165, 479-484.	0.7	55
39	C5'- and C3'-sugar radicals produced via photo-excitation of one-electron oxidized adenine in 2'-deoxyadenosine and its derivatives. <i>Nucleic Acids Research</i> , 2006, 34, 1501-1511.	6.5	55
40	Density Functional Theory Studies of the Extent of Hole Delocalization in One-Electron Oxidized Adenine and Guanine Base Stacks. <i>Journal of Physical Chemistry B</i> , 2011, 115, 4990-5000.	1.2	55
41	Observation of dissociative quasi-free electron attachment to nucleoside via excited anion radical in solution. <i>Nature Communications</i> , 2019, 10, 102.	5.8	55
42	Prototropic equilibria in DNA containing one-electron oxidized GC: intra-duplex vs. duplex to solvent deprotonation. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 5353.	1.3	54
43	Reaction of Electrons with DNA: Radiation Damage to Radiosensitization. <i>International Journal of Molecular Sciences</i> , 2019, 20, 3998.	1.8	54
44	SOMO-HOMO Level Inversion in Biologically Important Radicals. <i>Journal of Physical Chemistry B</i> , 2018, 122, 98-105.	1.2	52
45	Studies of Excess Electron and Hole Transfer in DNA at Low Temperatures. <i>Topics in Current Chemistry</i> , 0, , 103-128.	4.0	48
46	DFT Treatment of Radiation Produced Radicals in DNA Model Systems. <i>Advances in Quantum Chemistry</i> , 2007, 52, 59-87.	0.4	48
47	Microhydration of the Guanine-Cytosine (GC) Base Pair in the Neutral and Anionic Radical States: A Density Functional Study. <i>Journal of Physical Chemistry B</i> , 2008, 112, 5189-5198.	1.2	48
48	ESR Detection at 77 K of the Hydroxyl Radical in the Hydration Layer of Gamma-Irradiated DNA. <i>Radiation Research</i> , 1994, 140, 123.	0.7	47
49	Gamma and ion-beam irradiation of DNA: Free radical mechanisms, electron effects, and radiation chemical track structure. <i>Radiation Physics and Chemistry</i> , 2016, 128, 60-74.	1.4	47
50	Interaction of the Chlorine Atom with Water: ESR and ab Initio MO Evidence for Three-Electron ($\sigma^2\pi^*$) Bonding. <i>Journal of Physical Chemistry A</i> , 1997, 101, 2910-2915.	1.1	45
51	Photoexcitation of Dinucleoside Radical Cations: A Time-Dependent Density Functional Study. <i>Journal of Physical Chemistry B</i> , 2006, 110, 24181-24188.	1.2	45
52	Role of Excited States in Low-Energy Electron (LEE) Induced Strand Breaks in DNA Model Systems: Influence of Aqueous Environment. <i>ChemPhysChem</i> , 2009, 10, 1426-1430.	1.0	45
53	Electron spin resonance evidence for intra- and intermolecular $\sigma-\sigma^*$ bonding in methionine radicals: relative stabilities of sulfur-chlorine, sulfur-bromine, sulfur-nitrogen, and sulfur-sulfur three-electron bonds. <i>The Journal of Physical Chemistry</i> , 1991, 95, 6487-6493.	2.9	44
54	Hydrogen Atom Loss in Pyrimidine DNA Bases Induced by Low-Energy Electrons: Energetics Predicted by Theory. <i>Journal of Physical Chemistry B</i> , 2004, 108, 19013-19019.	1.2	43

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55	Do Solvated Electrons (e_{aq}^-) Reduce DNA Bases? A Gaussian 4 and Density Functional Theory-Molecular Dynamics Study. <i>Journal of Physical Chemistry B</i> , 2016, 120, 2115-2123.	1.2	43
56	ESR study of DNA base cation radicals produced by attack of oxidizing radicals. <i>The Journal of Physical Chemistry</i> , 1981, 85, 1027-1031.	2.9	42
57	Sugar Radicals in DNA: Isolation of Neutral Radicals in Gamma-Irradiated DNA by Hole and Electron Scavenging. <i>Radiation Research</i> , 2005, 163, 591-602.	0.7	42
58	Hydroxyl Ion Addition to One-Electron Oxidized Thymine: Unimolecular Interconversion of C5 to C6 OH-Adducts. <i>Journal of the American Chemical Society</i> , 2013, 135, 3121-3135.	6.6	42
59	Sugar Radicals Formed by Photoexcitation of Guanine Cation Radical in Oligonucleotides. <i>Journal of Physical Chemistry B</i> , 2007, 111, 7415-7421.	1.2	41
60	Proton Transfer Induced SOMO-to-HOMO Level Switching in One-Electron Oxidized A-T and G-C Base Pairs: A Density Functional Theory Study. <i>Journal of Physical Chemistry B</i> , 2014, 118, 5453-5458.	1.2	40
61	Ab Initio Molecular Orbital Calculations of Radicals Formed by H ₂ O ₂ and H ₂ O Addition to the DNA Bases: Electron Affinities and Ionization Potentials. <i>The Journal of Physical Chemistry</i> , 1995, 99, 13033-13037.	2.9	39
62	The Formation of DNA Sugar Radicals from Photoexcitation of Guanine Cation Radicals. <i>Radiation Research</i> , 2004, 161, 582-590.	0.7	38
63	Structure and reactivity of peroxy and sulphonyl radicals from measurement of oxygen-17 hyperfine couplings: relationship with taft substituent parameters. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1990, 86, 3279.	1.7	36
64	Electron Spin Resonance Study of Electron and Hole Transfer in DNA: Effects of Hydration, Aliphatic Amine Cations, and Histone Proteins. <i>Journal of Physical Chemistry B</i> , 2001, 105, 6031-6041.	1.2	36
65	Photoexcitation of Adenine Cation Radical [A ^{•+}] in the near UV ^{vis} Region Produces Sugar Radicals in Adenosine and in Its Nucleotides. <i>Journal of Physical Chemistry B</i> , 2008, 112, 15844-15855.	1.2	36
66	Highly Oxidizing Excited States of One-Electron-Oxidized Guanine in DNA: Wavelength and pH Dependence. <i>Journal of the American Chemical Society</i> , 2011, 133, 4527-4537.	6.6	36
67	UV-Induced Adenine Radicals Induced in DNA A-Tracts: Spectral and Dynamical Characterization. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 3949-3953.	2.1	35
68	The Role of Charge and Spin Migration in DNA Radiation Damage. <i>Nanoscience and Technology</i> , 2007, , 139-175.	1.5	34
69	Formation of Sugar Radicals in RNA Model Systems and Oligomers via Excitation of Guanine Cation Radical. <i>Journal of Physical Chemistry B</i> , 2008, 112, 2168-2178.	1.2	33
70	Application of Isodesmic Reactions to the Calculation of the Enthalpies of H [•] and OH [•] Addition to DNA Bases: Estimated Heats of Formation of DNA Base Radicals and Hydrates. <i>Journal of Physical Chemistry A</i> , 1997, 101, 8935-8941.	1.1	32
71	Products of the reactions of the dry and aqueous electron with hydrated DNA: hydrogen and 5,6-dihydropyrimidines. <i>Radiation Physics and Chemistry</i> , 2005, 72, 257-264.	1.4	31
72	Track Structure in DNA Irradiated with Heavy Ions. <i>Radiation Research</i> , 2005, 163, 447-454.	0.7	31

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73	Electron spin resonance study of N1-substituted thymine .pi.-cation radicals. The Journal of Physical Chemistry, 1976, 80, 1898-1901.	2.9	30
74	An electron spin resonance study of .gamma.-irradiated frozen aqueous solutions containing N-acetylamino acids. The Journal of Physical Chemistry, 1979, 83, 2893-2897.	2.9	30
75	Density Functional Theory Investigation of the Electronic Structure and Spin Density Distribution in Peroxyl Radicals. Journal of Physical Chemistry A, 1999, 103, 1619-1626.	1.1	30
76	5-Thiocyanato-2â€²-deoxyuridine as a possible radiosensitizer: electron-induced formation of uracil-C5-thiyl radical and its dimerization. Physical Chemistry Chemical Physics, 2015, 17, 16907-16916.	1.3	29
77	Electron and Hole Transfer from DNA Base Radicals to Oxidized Products of Guanine in DNA. Radiation Research, 2003, 159, 411-419.	0.7	28
78	Esr Investigations of the Reactions of Radiation-Produced Thiyl and DNA Peroxyl Radicals: Formation of Sulfoxyl Radicals. Free Radical Research Communications, 1989, 6, 99-102.	1.8	27
79	Proton-Assisted Electron Transfer in Irradiated DNAâ€™Acrylamide Complexes:â€™ Modeled by Theory. Journal of Physical Chemistry B, 2001, 105, 1614-1617.	1.2	27
80	Formation of Sâ€™Cl Phosphorothioate Adduct Radicals in dsDNA S-Oligomers: Hole Transfer to Guanine vs Disulfide Anion Radical Formation. Journal of the American Chemical Society, 2013, 135, 12827-12838.	6.6	27
81	Modulating the Catalytic Activity of Cerium Oxide Nanoparticles with the Anion of the Precursor Salt. Journal of Physical Chemistry C, 2017, 121, 20039-20050.	1.5	26
82	Ab Initio Molecular Orbital Study of the Structures of Purine Hydrates. The Journal of Physical Chemistry, 1996, 100, 4420-4423.	2.9	25
83	Direct Strand Scission in Double Stranded RNA via a C5-Pyrimidine Radical. Journal of the American Chemical Society, 2012, 134, 3917-3924.	6.6	25
84	Electron Spin Resonance of Radicals in Irradiated DNA. , 2014, , 299-352.		25
85	Direct Formation of the C5â€™-Radical in the Sugarâ€™Phosphate Backbone of DNA by High-Energy Radiation. Journal of Physical Chemistry B, 2012, 116, 5900-5906.	1.2	24
86	Mechanisms of Radiation-Induced DNA Damage: Direct Effects. , 2010, , 509-542.		24
87	Chemical Reactions in Proteins Irradiated at Subfreezing Temperatures. Advances in Chemistry Series, 1979, , 109-140.	0.6	23
88	Ï€- vs Î¶-Radical States of One-Electron-Oxidized DNA/RNA Bases: A Density Functional Theory Study. Journal of Physical Chemistry B, 2013, 117, 11623-11632.	1.2	21
89	An electron spin resonance study of lactone radical cations formed in .gamma.-irradiated Freon matrixes. The Journal of Physical Chemistry, 1985, 89, 5251-5255.	2.9	20
90	Sugar Radical Formation by a Proton Coupled Hole Transfer in 2â€™-Deoxyguanosine Radical Cation (2â€™-dGâ€™): A Theoretical Treatment. Journal of Physical Chemistry B, 2009, 113, 13374-13380.	1.2	20

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91	One-Electron Oxidation of Neutral Sugar Radicals of 2-Deoxyguanosine and 2-Deoxythymidine: A Density Functional Theory (DFT) Study. <i>Journal of Physical Chemistry B</i> , 2012, 116, 9409-9416.	1.2	20
92	Ī-Radical to Īf-Radical Tautomerization in One-Electron-Oxidized 1-Methylcytosine and Its Analogs. <i>Journal of Physical Chemistry B</i> , 2015, 119, 11496-11505.	1.2	20
93	Direct observation of the oxidation of DNA bases by phosphate radicals formed under radiation: a model of the backbone-to-base hole transfer. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 14927-14937.	1.3	20
94	ESR studies of radiation damage to DNA and related biomolecules. <i>Electron Paramagnetic Resonance</i> , 0, , 243-278.	0.2	20
95	Modification of the Reductive Pathway in Gamma-Irradiated DNA by Electron Scavengers: Targeting the Sugar-Phosphate Backbone. <i>Radiation Research</i> , 1998, 149, 422.	0.7	19
96	Formation of Aminyl Radicals on Electron Attachment to AZT: Abstraction from the Sugar Phosphate Backbone versus One-Electron Oxidation of Guanine. <i>Journal of Physical Chemistry B</i> , 2010, 114, 9289-9299.	1.2	19
97	<i>In Situ</i> Generated Platinum Catalyst for Methanol Oxidation via Electrochemical Oxidation of Bis(trifluoromethylsulfonyl)imide Anion in Ionic Liquids at Anaerobic Condition. <i>Journal of Physical Chemistry C</i> , 2016, 120, 1004-1012.	1.5	18
98	Excited States of One-Electron Oxidized Guanine-Cytosine Base Pair Radicals: A Time Dependent Density Functional Theory Study. <i>Journal of Physical Chemistry A</i> , 2019, 123, 3098-3108.	1.1	18
99	Radiation Effects On DNA: Theoretical Investigations Of Electron, Hole And Excitation Pathways To DNA Damage. <i>Challenges and Advances in Computational Chemistry and Physics</i> , 2008, , 577-617.	0.6	17
100	Synthesis and EPR Studies of 2-Deoxyuridines with Alkynyl, Rodlike Linkages. <i>Chemistry - A European Journal</i> , 2009, 15, 7569-7577.	1.7	15
101	An ESR and DFT study of hydration of the 2-deoxyuridine-5-yl radical: a possible hydroxyl radical intermediate. <i>Chemical Communications</i> , 2014, 50, 14605-14608.	2.2	15
102	One-Electron Oxidation of Gemcitabine and Analogs: Mechanism of Formation of C3 and C2 Sugar Radicals. <i>Journal of the American Chemical Society</i> , 2014, 136, 15646-15653.	6.6	15
103	Temperature Effects on CO ₂ Electroreduction Pathways in an Imidazolium-Based Ionic Liquid on Pt Electrode. <i>Journal of Physical Chemistry C</i> , 2020, 124, 26094-26105.	1.5	15
104	One-electron oxidation of ds(5-GGG-3) and ds(5-G(8OG)G-3) and the nature of hole distribution: a density functional theory (DFT) study. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 5078-5089.	1.3	15
105	Photooxidation of Nucleic Acids on Metal Oxides: Physicochemical and Astrobiological Perspectives. <i>Journal of Physical Chemistry C</i> , 2011, 115, 3393-3403.	1.5	14
106	Excited state proton-coupled electron transfer in 8-oxoG-C and 8-oxoG-A base pairs: a time dependent density functional theory (TD-DFT) study. <i>Photochemical and Photobiological Sciences</i> , 2013, 12, 1328-1340.	1.6	14
107	Comment on "Proton Transfer of Guanine Radical Cations Studied by Time-Resolved Resonance Raman Spectroscopy Combined with Pulse Radiolysis". <i>Journal of Physical Chemistry B</i> , 2016, 120, 2984-2986.	1.2	14
108	Electron-Mediated Aminyl and Iminyl Radicals from C5 Azido-Modified Pyrimidine Nucleosides Augment Radiation Damage to Cancer Cells. <i>Organic Letters</i> , 2018, 20, 7400-7404.	2.4	14

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109	One-Electron Oxidation and Reduction of Sulfites and Sulfinic Acids in Oxygenated Media: The Formation of Sulfonyl and Sulfuranyl Peroxyl Radicals. <i>The Journal of Physical Chemistry</i> , 1996, 100, 4090-4096.	2.9	13
110	Kr-86 Ion-Beam Irradiation of Hydrated DNA: Free Radical and Unaltered Base Yields. <i>Radiation Research</i> , 2012, 178, 524.	0.7	13
111	Low-Energy Electron (LEE)-Induced DNA Damage: Theoretical Approaches to Modeling Experiment. , 2017, , 1741-1802.		13
112	Hydrogen Electrooxidation in Ionic Liquids Catalyzed by the NTF ₂ Radical. <i>Journal of Physical Chemistry C</i> , 2017, 121, 5161-5167.	1.5	13
113	Electron spin resonance study of radicals produced by one-electron loss from 6-azauracil, 6-azathymine, and 6-azacytosine. Evidence for both σ and π radicals. <i>The Journal of Physical Chemistry</i> , 1982, 86, 1751-1755.	2.9	11
114	Prehydrated One-Electron Attachment to Azido-Modified Pentofuranoses: Aminyl Radical Formation, Rapid H-Atom Transfer, and Subsequent Ring Opening. <i>Journal of Physical Chemistry B</i> , 2017, 121, 4968-4980.	1.2	11
115	Physicochemical Mechanisms of Radiation-Induced DNA Damage. , 2010, , 503-541.		11
116	Presolvated Electron Reactions with Methyl Acetoacetate: Electron Localization, Proton-Deuteron Exchange, and H-Atom Abstraction. <i>Molecules</i> , 2014, 19, 13486-13497.	1.7	10
117	Reactions of 5-methylcytosine cation radicals in DNA and model systems: Thermal deprotonation from the 5-methyl group vs. excited state deprotonation from sugar. <i>International Journal of Radiation Biology</i> , 2014, 90, 433-445.	1.0	10
118	Adsorption and Electrochemistry of Carbon Monoxide at the Ionic Liquid/Pt Interface. <i>Journal of Physical Chemistry B</i> , 2019, 123, 4726-4734.	1.2	10
119	Presolvated Low Energy Electron Attachment to Peptide Methyl Esters in Aqueous Solution: C=O Bond Cleavage at 77 K. <i>Journal of Physical Chemistry B</i> , 2013, 117, 2872-2877.	1.2	9
120	Cytosine Iminyl Radical (cytN [•]) Formation via Electron-Induced Debromination of 5-Bromocytosine: A DFT and Gaussian 4 Study. <i>Journal of Physical Chemistry A</i> , 2017, 121, 4825-4829.	1.1	9
121	Comment on "Theoretical Study of Polaron Formation in Poly(G) and Poly(C) Cations". <i>Journal of Physical Chemistry B</i> , 2011, 115, 8947-8948.	1.2	8
122	Low-Energy Electron (LEE)-Induced DNA Damage: Theoretical Approaches to Modeling Experiment. , 2012, , 1215-1256.		7
123	Anaerobic Oxidation of Methane to Methyl Radical in NTF ₂ -Based Ionic Liquids. <i>Journal of Physical Chemistry C</i> , 2016, 120, 13466-13473.	1.5	7
124	Independent Photochemical Generation and Reactivity of Nitrogen-Centered Purine Nucleoside Radicals from Hydrazines. <i>Organic Letters</i> , 2017, 19, 6444-6447.	2.4	7
125	Comment on Electron Transfer vs Differential Decay in Irradiated DNA. <i>Journal of Physical Chemistry B</i> , 2006, 110, 25122-25123.	1.2	5
126	Structural, spectroscopic, electrochemical, and magnetic properties for manganese(II) triazamacrocyclic complexes. <i>Inorganica Chimica Acta</i> , 2019, 486, 546-555.	1.2	5

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127	Electron-Induced Repair of 2-Deoxyribose Sugar Radicals in DNA: A Density Functional Theory (DFT) Study. International Journal of Molecular Sciences, 2021, 22, 1736.	1.8	5
128	Ne-22 Ion-Beam Radiation Damage to DNA: From Initial Free Radical Formation to Resulting DNA-Base Damage. ACS Omega, 2021, 6, 16600-16611.	1.6	5
129	Site of Azido Substitution in the Sugar Moiety of Azidopyrimidine Nucleosides Influences the Reactivity of Aminyl Radicals Formed by Dissociative Electron Attachment. Journal of Physical Chemistry B, 2020, 124, 11357-11370.	1.2	4
130	One Way Traffic: Base-to-Backbone Hole Transfer in Nucleoside Phosphorodithioate. Chemistry - A European Journal, 2020, 26, 9495-9505.	1.7	4
131	Radical Formation and Chemical Track Structure in Ion-Beam Irradiated DNA. , 2009, , .		3
132	Comment on "Excited States of DNA Base Pairs Using Long-Range Corrected Time-Dependent Density Functional Theory". Journal of Physical Chemistry A, 2009, 113, 11093-11094.	1.1	3
133	Proton-Transfer Reactions in One-Electron-Oxidized G-Quadruplexes: A Density Functional Theory Study. Journal of Physical Chemistry B, 2022, 126, 1483-1491.	1.2	3
134	Thermally Induced Oxidation of [Fe II (tacn) 2](OTf) 2 (tacn = 1,4,7-triazacyclononane). European Journal of Inorganic Chemistry, 2017, 2017, 5529-5535.	1.0	2
135	Modulation of the Directionality of Hole Transfer between the Base and the Sugar-Phosphate Backbone in DNA with the Number of Sulfur Atoms in the Phosphate Group. Journal of Physical Chemistry B, 2022, 126, 430-442.	1.2	2
136	Low-Energy Electron (LEE)-Induced DNA Damage: Theoretical Approaches to Modeling Experiment. , 2015, , 1-63.		1
137	One Way Traffic: Base-to-Backbone Hole Transfer in Nucleoside Phosphorodithioate. Chemistry - A European Journal, 2020, 26, 9407-9407.	1.7	0