Richard A Manderville

List of Publications by Year
in descending order

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95 papers	3,660 citations	147786 31 h-index	138468 58 g-index
97 all docs	97 docs citations	97 times ranked	2889 citing authors

#	Article	IF	Citations
1	Ochratoxin A: An overview on toxicity and carcinogenicity in animals and humans. Molecular Nutrition and Food Research, 2007, 51, 61-99.	3.3	840
2	An Update on Direct Genotoxicity as a Molecular Mechanism of Ochratoxin A Carcinogenicity. Chemical Research in Toxicology, 2012, 25, 252-262.	3.3	194
3	Toxic mechanisms of microcystins in mammals. Toxicology Research, 2017, 6, 391-405.	2.1	127
4	Structures of Covalent Adducts between DNA and Ochratoxin A: A New Factor in Debate about Genotoxicity and Human Risk Assessment. Chemical Research in Toxicology, 2010, 23, 89-98.	3.3	123
5	Evidence for Covalent DNA Adduction by Ochratoxin A following Chronic Exposure to Rat and Subacute Exposure to Pig. Chemical Research in Toxicology, 2004, 17, 1289-1296.	3.3	113
6	Postsynthetic Guanine Arylation of DNA by Suzukiâ^'Miyaura Cross-Coupling. Journal of the American Chemical Society, 2011, 133, 42-50.	13.7	104
7	Oxidation of Ochratoxin A by an Feâ^'Porphyrin System:Â Model for Enzymatic Activation and DNA Cleavage. Chemical Research in Toxicology, 1999, 12, 1066-1076.	3.3	93
8	Ochratoxin A Forms a Carbon-Bonded C8-Deoxyguanosine Nucleoside Adduct:Â Implications for C8 Reactivity by a Phenolic Radical. Journal of the American Chemical Society, 2003, 125, 3716-3717.	13.7	90
9	Biomarkers for Phenol Carcinogen Exposure Act as pH-Sensing Fluorescent Probes. Journal of the American Chemical Society, 2007, 129, 1894-1895.	13.7	85
10	DNA Binding by 4-Methoxypyrrolic Natural Products. Preference for Intercalation at AT Sites by Tambjamine E and Prodigiosin. Journal of Organic Chemistry, 1999, 64, 6861-6869.	3.2	79
11	Detection and Characterization of a Glutathione Conjugate of Ochratoxin A. Chemical Research in Toxicology, 2002, 15, 1581-1588.	3.3	72
12	Genotoxicity of the Hydroquinone Metabolite of Ochratoxin A:Â Structure-Activity Relationships for Covalent DNA Adduction. Chemical Research in Toxicology, 2006, 19, 1241-1247.	3.3	70
13	Role of Phenoxyl Radicals in DNA Adduction by Chlorophenol Xenobiotics Following Peroxidase Activation. Chemical Research in Toxicology, 2005, 18, 771-779.	3.3	65
14	An Oxygen-Bonded C8-Deoxyguanosine Nucleoside Adduct of Pentachlorophenol by Peroxidase Activation:Â Evidence for Ambident C8 Reactivity by Phenoxyl Radicals. Chemical Research in Toxicology, 2003, 16, 817-821.	3.3	63
15	A Case for the Genotoxicity of Ochratoxin A by Bioactivation and Covalent DNA Adduction. Chemical Research in Toxicology, 2005, 18, 1091-1097.	3.3	61
16	Intrinsic â€œTurn-Onâ€•Aptasensor Detection of Ochratoxin A Using Energy-Transfer Fluorescence. Journal of Agricultural and Food Chemistry, 2020, 68, 2249-2255.	5.2	58
17	Electrochemical Oxidation of Ochratoxin A:Â Correlation with 4-Chlorophenol. Chemical Research in Toxicology, 2001, 14, 1266-1272.	3.3	45
18	Structureâ€“Activity Relationships Imply Different Mechanisms of Action for Ochratoxin A-Mediated Cytotoxicity and Genotoxicity. Chemical Research in Toxicology, 2012, 25, 181-190.	3.3	43

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19	Computational and Experimental Evidence for the Structural Preference of Phenolic C-8 Purine Adducts. Journal of Physical Chemistry A, 2008, 112, 3742-3753.	2.5	40
20	Ligand-Induced G-Quadruplex Polymorphism: A DNA Nanodevice for Label-Free Aptasensor Platforms. Journal of the American Chemical Society, 2019, 141, 14288-14297.	13.7	40
21	Structural and biochemical impact of C8-aryl-guanine adducts within the NarI recognition DNA sequence: influence of aryl ring size on targeted and semi-targeted mutagenicity. Nucleic Acids Research, 2014, 42, 13405-13421.	14.5	39
22	Molecular Aspects of the Transport and Toxicity of Ochratoxin A. Accounts of Chemical Research, 2004, 37, 874-881.	15.6	38
23	Binding of Ochratoxin A Derivatives to Human Serum Albumin. Journal of Physical Chemistry B, 2003, 107, 6644-6647.	2.6	36
24	Conformational Flexibility of C8-Phenoxyl-2â€²-deoxyguanosine Nucleotide Adducts. Journal of Physical Chemistry B, 2010, 114, 4373-4382.	2.6	36
25	The pH-Dependent Primary Photoreactions of Ochratoxin A. Journal of Physical Chemistry B, 2001, 105, 11369-11376.	2.6	35
26	A Simple Molecular Rotor for Defining Nucleoside Environment within a DNA Aptamerâ€“Protein Complex. ACS Chemical Biology, 2016, 11, 2576-2582.	3.4	35
27	Structureâ€“activity relationships for the fluorescence of ochratoxin A: Insight for detection of ochratoxin A metabolites. Analytica Chimica Acta, 2008, 617, 153-161.	5.4	34
28	C⁸-Heteroaryl-2â€²-deoxyguanosine Adducts as Conformational Fluorescent Probes in the NarI Recognition Sequence. Journal of Organic Chemistry, 2012, 77, 10498-10508.	3.2	34
29	Ambident reactivity of phenoxyl radicals in DNA adduction. Canadian Journal of Chemistry, 2005, 83, 1261-1267.	1.1	33
30	Glutathione Conjugates of Ochratoxin a as Biomarkers of Exposure / Glutationski Konjugati Okratoksina A Kao Biomarkeri IzloÅ¾enosti. Arhiv Za Higijenu Rada I Toksikologiju, 2012, 63, 417-427.	0.7	33
31	C-Linked 8-aryl guanine nucleobase adducts: biological outcomes and utility as fluorescent probes. Chemical Science, 2016, 7, 3482-3493.	7.4	31
32	DNA Aptamerâ€“Target Binding Motif Revealed Using a Fluorescent Guanine Probe: Implications for Food Toxin Detection. ACS Omega, 2017, 2, 4955-4963.	3.5	30
33	Concerning the Hydrolytic Stability of 8-Aryl-2â€²-deoxyguanosine Nucleoside Adducts: Implications for Abasic Site Formation at Physiological pH. Journal of Organic Chemistry, 2009, 74, 5793-5802.	3.2	28
34	Electronic tuning of fluorescent 8-aryl-guanine probes for monitoring DNA duplexâ€“quadruplex exchange. Chemical Science, 2014, 5, 788-796.	7.4	28
35	Positional Impact of Fluorescently Modified G-Tetrads within Polymorphic Human Telomeric G-Quadruplex Structures. ACS Chemical Biology, 2015, 10, 1311-1318.	3.4	28
36	Conformational Properties of a Phototautomerizable Nucleoside Biomarker for Phenolic Carcinogen Exposure. Journal of Physical Chemistry A, 2006, 110, 6224-6230.	2.5	27

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37	Structural and energetic characterization of the major DNA adduct formed from the food mutagen ochratoxin A in the NarI hotspot sequence: influence of adduct ionization on the conformational preferences and implications for the NER propensity. Nucleic Acids Research, 2014, 42, 11831-11845.	14.5	27
38	Modeling the Conformational Preference of the Carbon-Bonded Covalent Adduct Formed upon Exposure of 2â€²-Deoxyguanosine to Ochratoxin A. Chemical Research in Toxicology, 2013, 26, 803-816.	3.3	26
39	Ambident nucleophilic reactivity. 9. Regioselectivity in the reaction of ambident phenoxide ion and methoxide and hydroxide ions with 2,4,6-trinitroanisole. Kinetic and thermodynamic control. Journal of the American Chemical Society, 1992, 114, 5610-5619.	13.7	24
40	Dual fluorescent deoxyguanosine mimics for FRET detection of G-quadruplex folding. Chemical Communications, 2015, 51, 16829-16831.	4.1	23
41	Enhancing Bulge Stabilization through Linear Extension of C8-Aryl-Guanine Adducts to Promote Polymerase Blockage or Strand Realignment to Produce a C:C Mismatch. Chemical Research in Toxicology, 2015, 28, 1647-1658.	3.3	22
42	Structural Influence of C8-Phenoxy-Guanine in the NarI Recognition DNA Sequence. Chemical Research in Toxicology, 2013, 26, 1397-1408.	3.3	21
43	Harnessing G-tetrad scaffolds within G-quadruplex forming aptamers for fluorescence detection strategies. Chemical Communications, 2014, 50, 3097-3099.	4.1	21
44	Fluorescent Properties and Conformational Preferences of C-Linked Phenolic-DNA Adducts. Chemical Research in Toxicology, 2011, 24, 1694-1709.	3.3	19
45	Photophysical properties of pushâ€“pull 8-aryl-deoxyguanosine probes within duplex and G-quadruplex structures. Journal of Materials Chemistry C, 2016, 4, 2915-2924.	5.5	19
46	Ochratoxin A acts as a photoactivatable DNA cleaving agent. Chemical Communications, 1998, , 647-648.	4.1	18
47	Oxidation of a Biomarker for Phenol Carcinogen Exposure: Expanding the Redox Chemistry of 2â€²-Deoxyguanosine. Organic Letters, 2008, 10, 1839-1842.	4.6	18
48	Mutagenicity of Ochratoxin A and Its Hydroquinone Metabolite in the SupF Gene of the Mutation Reporter Plasmid Ps189. Toxins, 2012, 4, 267-280.	3.4	18
49	On the role of copper and iron in DNA cleavage by ochratoxin A. Structure-activity relationships in metal binding and copper-mediated DNA cleavage. Canadian Journal of Chemistry, 1998, 76, 907-918.	1.1	17
50	Effect of Watsonâ^'Crick and Hoogsteen Base Pairing on the Conformational Stability of C8-Phenoxyl-2â€²-deoxyguanosine Adducts. Journal of Physical Chemistry B, 2010, 114, 12995-13004.	2.6	17
51	An indole-linked C8-deoxyguanosine nucleoside acts as a fluorescent reporter of Watsonâ€“Crick versus Hoogsteen base pairing. Organic and Biomolecular Chemistry, 2011, 9, 1565.	2.8	17
52	Optimization of fluorescent 8-heteroaryl-guanine probes for monitoring protein-mediated duplex â†' G-quadruplex exchange. Organic and Biomolecular Chemistry, 2016, 14, 4409-4419.	2.8	17
53	Mutagenicity of Ochratoxin A: Role for a Carbon-Linked C8â€“Deoxyguanosine Adduct?. Journal of Agricultural and Food Chemistry, 2017, 65, 7097-7105.	5.2	17
54	Ratiometric fluorescent sensing of the parallel G-quadruplex produced by PS2.M: implications for K⁺detection. Analyst, The, 2020, 145, 1288-1293.	3.5	16

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55	Chapter 4 Genotoxicity of Chlorophenols and Ochratoxin A. Advances in Molecular Toxicology, 2006, 1, 85-138.	0.4	15
56	Formation of 2â€²â€deoxyguanosineâ€carbon 8â€bound ochratoxin A adduct in rat kidney DNA. Molecular Nutrition and Food Research, 2009, 53, 154-155.	3.3	15
57	Inversion of kinetic and thermodynamic preferences in Meisenheimer complex formation: regioselectivity in the reaction of 2,4,6-trimethylphenoxide ion with 2,4,6-trinitroanisole and the importance of stereoelectronic factors. Journal of the American Chemical Society, 1993, 115, 8985-8989.	13.7	14
58	Fluorescent C-Linked C8-Aryl-guanine Probe for Distinguishing syn from anti Structures in Duplex DNA. Chemical Research in Toxicology, 2012, 25, 1271-1282.	3.3	14
59	An internal charge transfer-DNA platform for fluorescence sensing of divalent metal ions. Chemical Communications, 2016, 52, 9586-9588.	4.1	14
60	A coumarinâ€“hemicyanine hybrid as a ratiometric fluorescent sensor of microenvironment proticity. Chemical Communications, 2019, 55, 3540-3543.	4.1	14
61	Reaction pathways for ambident aryloxide O- and C-nucleophiles inSNAr displacement versus Meisenheimer complex formation with picryl halides. Stereoelectronic effects on regioselectivity. Journal of Physical Organic Chemistry, 1996, 9, 515-528.	1.9	13
62	Chlorine Functionalization of a Model Phenolic C8-Guanine Adduct Increases Conformational Rigidity and Blocks Extension by a Y-Family DNA Polymerase. Chemical Research in Toxicology, 2015, 28, 1346-1356.	3.3	13
63	Acceptor Influence on Thiolate Sensing by Hemicyanine Dyes. Journal of Organic Chemistry, 2019, 84, 2261-2268.	3.2	13
64	Influence of the Linkage Type and Functional Groups in the Carcinogenic Moiety on the Conformational Preferences of Damaged DNA: Structural and Energetic Characterization of Carbon- and Oxygen-Linked C8-Phenolic-Guanine Adducts. Chemical Research in Toxicology, 2015, 28, 782-796.	3.3	12
65	A 5â€²-BODIPY End-label for Monitoring DNA Duplex-Quadruplex Exchange. Scientific Reports, 2018, 8, 16874.	3.3	12
66	Photochemically Catalyzed Reaction of Ochratoxin A with D- and L-cysteineÂ¶. Photochemistry and Photobiology, 2002, 76, 649.	2.5	11
67	Stoichiometric preference in copper-promoted oxidative DNA damage by ochratoxin A. Journal of Inorganic Biochemistry, 2003, 95, 87-96.	3.5	11
68	Manipulation of a DNA aptamerâ€“protein binding site through arylation of internal guanine residues. Organic and Biomolecular Chemistry, 2018, 16, 3831-3840.	2.8	11
69	Lighting Up the Thrombin-Binding Aptamer G-Quadruplex with an Internal Cyanine-Indole-Quinolinium Nucleobase Surrogate. Direct Fluorescent Intensity Readout for Thrombin Binding without Topology Switching. Bioconjugate Chemistry, 2020, 31, 2596-2606.	3.6	11
70	Tautomerization in gasâ€phase ion chemistry of isomeric Câ€8 deoxyguanosine adducts from phenolâ€induced DNA damage. Journal of Mass Spectrometry, 2011, 46, 41-49.	1.6	10
71	Application of a Fluorescent C-Linked Phenolic Purine Adduct for Selective N7-Metalation of DNA. Journal of Physical Chemistry B, 2012, 116, 6158-6165.	2.6	10
72	Influence of Chlorine Substitution on the Hydrolytic Stability of Biaryl Ether Nucleoside Adducts Produced by Phenolic Toxins. Journal of Organic Chemistry, 2013, 78, 7176-7185.	3.2	10

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73	Impact of the Position of the Chemically Modified 5-Furyl-2â€²-Deoxyuridine Nucleoside on the Thrombin DNA Aptamerâ€“Protein Complex: Structural Insights into Aptamer Response from MD Simulations. Molecules, 2019, 24, 2908.	3.8	10
74	Response to Comments of Peter G. Mantle. Toxins, 2010, 2, 2337-2339.	3.4	9
75	DNA Damage by Phenoxyl Radicals. , 0, , 421-443.		8
76	Utility of 5â€²-O-2,7-Dimethylpixyl for Solid-Phase Synthesis of Oligonucleotides Containing Acid-Sensitive 8-Aryl-Guanine Adducts. Journal of Organic Chemistry, 2014, 79, 692-699.	3.2	8
77	Molecular Modeling of the Major DNA Adduct Formed from Food Mutagen Ochratoxin A inNarI Two-Base Deletion Duplexes: Impact of Sequence Context and Adduct Ionization on Conformational Preference and Mutagenicity. Chemical Research in Toxicology, 2017, 30, 1582-1591.	3.3	8
78	Understanding the Mutagenicity of O-Linked and C-Linked Guanine DNA Adducts: A Combined Experimental and Computational Approach. Chemical Research in Toxicology, 2017, 30, 177-188.	3.3	8
79	Temperature Sensing of Thiolate Addition by Phenolate Merocyanine Dyes: Importance of the Quinone Methide Resonance Structure. Journal of Organic Chemistry, 2021, 86, 1583-1590.	3.2	8
80	Visible Fluorescent Light-up Probe for DNA Three-Way Junctions Provides Hostâ€“Guest Biosensing Applications. ACS Applied Bio Materials, 2021, 4, 6732-6741.	4.6	8
81	Conformational Preference and Fluorescence Response of a C-Linked C8-Biphenyl-Guanine Lesion in the NarI Mutational Hotspot: Evidence for Enhanced Syn Adduct Formation. Chemical Research in Toxicology, 2018, 31, 37-47.	3.3	7
82	Molecular Dynamics Simulations of Mismatched DNA Duplexes Associated with the Major C⁸-Linked 2â€²-Deoxyguanosine Adduct of the Food Mutagen Ochratoxin A: Influence of Opposing Base, Adduct Ionization State, and Sequence on the Structure of Damaged DNA. Chemical Research in Toxicology, 2018, 31, 712-720.	3.3	7
83	Molecular Dynamics Study of One-Base Deletion Duplexes Containing the Major DNA Adduct Formed by Ochratoxin A: Effects of Sequence Context and Adduct Ionization State on Lesion Site Structure and Mutagenicity. Journal of Physical Chemistry B, 2019, 123, 6980-6989.	2.6	7
84	On-Strand Knoevenagel Insertion of a Hemicyanine Molecular Rotor Loop Residue for Turn-On Fluorescence Detection of Pb-Induced G-Quadruplex Rigidity. Bioconjugate Chemistry, 2021, 32, 2224-2232.	3.6	7
85	Stepwise Formation of a Nonsymmetric Dinuclear Copper Complex of Ochratoxin A. Inorganic Chemistry, 1998, 37, 6385-6388.	4.0	6
86	Aptamer-induced thermofluorimetric protein stabilization and G-quadruplex nucleic acid staining by SYPRO orange dye. New Journal of Chemistry, 2019, 43, 4994-4997.	2.8	6
87	Hemicyanine-linked pyrimidine mimics as solvatochromic fluorophores with visible excitation wavelengths. Tetrahedron Letters, 2018, 59, 3699-3702.	1.4	4
88	Structure of an Unusual Tetracyclic Deoxyguanosine Adduct: Implications for Frameshift Mutagenicity of ortho-Cyano Nitroanilines. Chemical Research in Toxicology, 2020, 33, 584-593.	3.3	4
89	Screening Internal Donorâ€“Acceptor Biaryl Nucleobase Surrogates for Turn-On Fluorescence Affords an Anilineâ€“Carboxythiophene Probe for Protein Detection by G-Quadruplex DNA. Bioconjugate Chemistry, 2021, 32, 1791-1801.	3.6	4
90	Structural and biological impact of radical addition reactions with DNA nucleobases. Advances in Physical Organic Chemistry, 2009, 43, 177-218.	0.5	3

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91	Hydroxyl Radical-Induced Oxidation of a Phenolic C-Linked 2â€²-Deoxyguanosine Adduct Yields a Reactive Catechol. Chemical Research in Toxicology, 2012, 25, 315-325.	3.3	2
92	Chlorine substitution promotes phenyl radical loss from C8-phenoxy-2â€²-deoxyguanosine adducts: implications for biomarker identification from chlorophenol exposure. Journal of Mass Spectrometry, 2015, 50, 81-87.	1.6	2
93	Adduct Fluorescence as a Tool to Decipher Sequence Impact on Frameshift Mutations Mediated by a C-Linked C8-Biphenyl-Guanine Lesion. Chemical Research in Toxicology, 2019, 32, 784-791.	3.3	1
94	Approaches to the Compositional Analysis of DNA. Methods in Molecular Biology, 2009, 502, 11-17.	0.9	1
95	Photochemically Catalyzed Reaction of Ochratoxin A with d- and l-cysteineÂ¶. Photochemistry and Photobiology, 2002, 76, 649-656.	2.5	0