Shana J Sturla

List of Publications by Year in descending order

92 papers	2,962 citations	147801 31 h-index	189892 50 g-index
100 all docs	100 docs citations	100 times ranked	3430 citing authors

#	Article	IF	Citations
1	Systems Toxicology: From Basic Research to Risk Assessment. Chemical Research in Toxicology, 2014, 27, 314-329.	3.3	287
2	Reactions of Formaldehyde Plus Acetaldehyde with Deoxyguanosine and DNA:â€‰ Formation of Cyclic Deoxyguanosine Adducts and Formaldehyde Cross-Links. Chemical Research in Toxicology, 2003, 16, 145-152.	3.3	127
3	A Titanocene-Catalyzed Intramolecular Ene Reaction:Â Cycloisomerization of Enynes and Dienynes. Journal of the American Chemical Society, 1999, 121, 1976-1977.	13.7	120
4	Systems Toxicology: Real World Applications and Opportunities. Chemical Research in Toxicology, 2017, 30, 870-882.	3.3	93
5	Identification of Adducts Formed by Pyridyloxobutylation of Deoxyguanosine and DNA by 4-(Acetoxymethylnitrosamino)-1-(3-pyridyl)-1-butanone, a Chemically Activated Form of Tobacco Specific Carcinogens. Chemical Research in Toxicology, 2003, 16, 616-626.	3.3	91
6	Acrolein contributes strongly to antimicrobial and heterocyclic amine transformation activities of reuterin. Scientific Reports, 2016, 6, 36246.	3.3	90
7	Nucleotide-Resolution Genome-Wide Mapping of Oxidative DNA Damage by Click-Code-Seq. Journal of the American Chemical Society, 2018, 140, 9783-9787.	13.7	88
8	Cobaltâ^'Phosphite-Catalyzed Asymmetric Pausonâ^'Khand Reaction. Journal of Organic Chemistry, 2002, 67, 3398-3403.	3.2	84
9	Chemistry and Biology of Acylfulvenes: Sesquiterpene-Derived Antitumor Agents. Chemical Reviews, 2012, 112, 3578-3610.	47.7	77
10	Human inÂvitro models of nonalcoholic fatty liver disease. Current Opinion in Toxicology, 2019, 16, 9-16.	5.0	76
11	Quantitation of Pyridyloxobutyl DNA Adducts of Tobacco-Specific Nitrosamines in Rat Tissue DNA by High-Performance Liquid Chromatographyâ^'Electrospray Ionizationâ^'Tandem Mass Spectrometry. Chemical Research in Toxicology, 2006, 19, 674-682.	3.3	75
12	Catalytic Asymmetric Cyclocarbonylation of Nitrogen-Containing Enynes. Journal of Organic Chemistry, 1999, 64, 5547-5550.	3.2	71
13	Monocyclopentadienyltitanium Aryloxide Complexes:Â Preparation, Characterization, and Application in Cyclization Reactions. Organometallics, 2002, 21, 739-748.	2.3	62
14	Investigating the Biochemical Impact of DNA Damage with Structure-Based Probes: Abasic Sites, Photodimers, Alkylation Adducts, and Oxidative Lesions. Biochemistry, 2009, 48, 9347-9359.	2.5	62
15	Next-generation DNA damage sequencing. Chemical Society Reviews, 2020, 49, 7354-7377.	38.1	56
16	Identification of O2-Substituted Pyrimidine Adducts Formed in Reactions of 4-(Acetoxymethylnitrosamino)- 1-(3-pyridyl)-1-butanone and 4-(Acetoxymethylnitros-) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 157 Td (ami	3.3	55
17	Mass Spectrometric Analysis of Relative Levels of Pyridyloxobutylation Adducts Formed in the Reaction of DNA with a Chemically Activated Form of the Tobacco-Specific Carcinogen 4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanone. Chemical Research in Toxicology, 2005, 18, 1048-1055.	3.3	54
18	The strict anaerobic gut microbe Eubacterium hallii transforms the carcinogenic dietary heterocyclic amine 2â€aminoâ€1â€methylâ€6â€phenylimidazo[4,5â€b]pyridine (<scp>PhIP</scp>). Environmental Microbiology Reports, 2016, 8, 201-209.	2.4	48

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19	Screening for DNA Alkylation Mono and Cross-Linked Adducts with a Comprehensive LC-MS³ Adductomic Approach. Analytical Chemistry, 2015, 87, 11706-11713.	6.5	45
20	DNA Adducts from Anticancer Drugs as Candidate Predictive Markers for Precision Medicine. Chemical Research in Toxicology, 2017, 30, 388-409.	3.3	45
21	Simultaneous determination of inositol and inositol phosphates in complex biological matrices: quantitative ionâ€exchange chromatography/tandem mass spectrometry. Rapid Communications in Mass Spectrometry, 2009, 23, 705-712.	1.5	44
22	Depurinating Acylfulveneâ”DNA Adducts:Â Characterizing Cellular Chemical Reactions of a Selective Antitumor Agent. Journal of the American Chemical Society, 2007, 129, 2101-2111.	13.7	42
23	Gut microbial beta-glucuronidase and glycerol/diol dehydratase activity contribute to dietary heterocyclic amine biotransformation. BMC Microbiology, 2019, 19, 99.	3.3	42
24	Influence of C-5 substituted cytosine and related nucleoside analogs on the formation of benzo[a]pyrene diol epoxide-dG adducts at CG base pairs of DNA. Nucleic Acids Research, 2011, 39, 3988-4006.	14.5	40
25	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
26	A Synthetic Nucleoside Probe that Discerns a DNA Adduct from Unmodified DNA. Journal of the American Chemical Society, 2007, 129, 4882-4883.	13.7	36
27	Reversible Aggregation of DNA-Decorated Gold Nanoparticles Controlled by Molecular Recognition. Langmuir, 2013, 29, 10824-10830.	3.5	36
28	Systems Toxicology Approach to Understand the Kinetics of Benzo(a)pyrene Uptake, Biotransformation, and DNA Adduct Formation in a Liver Cell Model. Chemical Research in Toxicology, 2014, 27, 443-453.	3.3	36
29	Iron phosphate nanoparticles for food fortification: Biological effects in rats and human cell lines. Nanotoxicology, 2017, 11, 496-506.	3.0	36
30	Up-Regulation of Human Prostaglandin Reductase 1 Improves the Efficacy of Hydroxymethylacylfulvene, an Antitumor Chemotherapeutic Agent. Journal of Pharmacology and Experimental Therapeutics, 2012, 343, 426-433.	2.5	34
31	Impact of ribonucleotide incorporation by DNA polymerases Î² and Î» on oxidative base excision repair. Nature Communications, 2016, 7, 10805.	12.8	34
32	Tolerance of Base Pair Size and Shape in Postlesion DNA Synthesis. Journal of the American Chemical Society, 2013, 135, 6384-6387.	13.7	33
33	Specific Incorporation of an Artificial Nucleotide Opposite a Mutagenic DNA Adduct by a DNA Polymerase. Journal of the American Chemical Society, 2015, 137, 30-33.	13.7	33
34	Nucleobase-Dependent Reactivity of a Quinone Metabolite of Pentachlorophenol. Chemical Research in Toxicology, 2007, 20, 913-919.	3.3	31
35	DNA adduct profiles: chemical approaches to addressing the biological impact of DNA damage from small molecules. Current Opinion in Chemical Biology, 2007, 11, 293-299.	6.1	31
36	Ribonucleotide incorporation by human DNA polymerase Î· impacts translesion synthesis and RNase H2 activity. Nucleic Acids Research, 2017, 45, gkw1275.	14.5	31

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37	Identification of Adducts Produced by the Reaction of 4-(Acetoxymethylnitrosamino)-1-(3-pyridyl)-1-butanol with Deoxyguanosine and DNA. Chemical Research in Toxicology, 2003, 16, 180-190.	3.3	30
38	Gut Microbial Transformation of the Dietary Imidazoquinoxaline Mutagen MelQx Reduces Its Cytotoxic and Mutagenic Potency. Toxicological Sciences, 2017, 159, 266-276.	3.1	29
39	Characterization of a Deoxyguanosine Adduct of Tetrachlorobenzoquinone:â€‰ Dichlorobenzoquinone-1,N2-etheno-2â€˜-deoxyguanosine. Chemical Research in Toxicology, 2005, 18, 1770-1776.	3.3	27
40	Investigating the Role of Stereochemistry in the Activity of Anticancer Acylfulvenes:Â Synthesis, Reductase-Mediated Bioactivation, and Cellular Toxicity. Journal of Medicinal Chemistry, 2006, 49, 2593-2599.	6.4	27
41	Susceptibility of the Antioxidant Selenoenyzmes Thioredoxin Reductase and Glutathione Peroxidase to Alkylation-Mediated Inhibition by Anticancer Acylfulvenes. Chemical Research in Toxicology, 2011, 24, 726-736.	3.3	26
42	Quantification of Acylfulveneâ€“ and Illudin Sâ€“DNA Adducts in Cells with Variable Bioactivation Capacities. Chemical Research in Toxicology, 2013, 26, 146-155.	3.3	26
43	Copper carbenes alkylate guanine chemoselectively through a substrate directed reaction. Chemical Science, 2017, 8, 499-506.	7.4	25
44	Hydrogen Bonding or Stacking Interactions in Differentiating Duplex Stability in Oligonucleotides Containing Synthetic Nucleoside Probes for Alkylated DNA. Chemistry - A European Journal, 2013, 19, 11062-11067.	3.3	24
45	Sulforaphane Preconditioning Sensitizes Human Colon Cancer Cells towards the Bioreductive Anticancer Prodrug PR-104A. PLoS ONE, 2016, 11, e0150219.	2.5	22
46	Quantitative Correlation of Drug Bioactivation and Deoxyadenosine Alkylation by Acylfulvene. Chemical Research in Toxicology, 2007, 20, 1513-1519.	3.3	21
47	O⁶-Alkylguanine Postlesion DNA Synthesis Is Correct with the Right Complement of Hydrogen Bonding. ACS Chemical Biology, 2014, 9, 2807-2814.	3.4	20
48	The use of an artificial nucleotide for polymerase-based recognition of carcinogenicO⁶-alkylguanine DNA adducts. Nucleic Acids Research, 2016, 44, 6564-6573.	14.5	20
49	Profiling patterns of glutathione reductase inhibition by the natural product illudin S and its acylfulvene analogues. Molecular BioSystems, 2009, 5, 1013.	2.9	19
50	Mechanism of RNA polymerase II stalling by DNA alkylation. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 12172-12177.	7.1	18
51	Recognition of O6 -benzyl-2â€²-deoxyguanosine by a perimidinone-derived synthetic nucleoside: a DNA interstrand stacking interaction. Nucleic Acids Research, 2013, 41, 7566-7576.	14.5	17
52	Immunological and mass spectrometry-based approaches to determine thresholds of the mutagenic DNA adduct O6-methylguanine in vivo. Archives of Toxicology, 2019, 93, 559-572.	4.2	17
53	Bypass of Mutagenic O6-Carboxymethylguanine DNA Adducts by Human Y- and B-Family Polymerases. Chemical Research in Toxicology, 2016, 29, 1493-1503.	3.3	16
54	In-Gene Quantification of O⁶-Methylguanine with Elongated Nucleoside Analogues on Gold Nanoprobes. Journal of the American Chemical Society, 2016, 138, 8497-8504.	13.7	16

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55	Molecular Dosimetry of Temozolomide: Quantification of Critical Lesions, Correlation to Cell Death Responses, and Threshold Doses. Molecular Cancer Therapeutics, 2021, 20, 1789-1799.	4.1	14
56	Improved Efficacy of Acylfulvene in Colon Cancer Cells When Combined with a Nuclear Excision Repair Inhibitor. Chemical Research in Toxicology, 2013, 26, 1674-1682.	3.3	13
57	DNA Adduct Profiles Predict in Vitro Cell Viability after Treatment with the Experimental Anticancer Prodrug PR104A. Chemical Research in Toxicology, 2017, 30, 830-839.	3.3	13
58	Gut microbial transformation of the dietary mutagen MeIQx may reduce exposure levels without altering intestinal transport. Toxicology in Vitro, 2019, 59, 238-245.	2.4	13
59	Incorporation of Nucleoside Probes Opposite O⁶â€Methylguanine by Sulfolobus solfataricus DNA Polymerase Dpo4: Importance of Hydrogen Bonding. ChemBioChem, 2013, 14, 1634-1639.	2.6	11
60	Deoxygenated phosphorothioate inositol phosphate analogs: Synthesis, phosphatase stability, and binding affinity. Bioorganic and Medicinal Chemistry, 2008, 16, 3419-3427.	3.0	10
61	Chemical and Enzymatic Reductive Activation of Acylfulvene to Isomeric Cytotoxic Reactive Intermediates. Chemical Research in Toxicology, 2011, 24, 2044-2054.	3.3	10
62	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
63	Transcriptomic Responses of Cancerous and Noncancerous Human Colon Cells to Sulforaphane and Selenium. Chemical Research in Toxicology, 2014, 27, 377-386.	3.3	10
64	Minor Groove 3â€Deazaâ€Adenosine Analogues: Synthesis and Bypass in Translesion DNA Synthesis. Chemistry - A European Journal, 2017, 23, 1101-1109.	3.3	10
65	Impact of manipulation of glycerol/diol dehydratase activity on intestinal microbiota ecology and metabolism. Environmental Microbiology, 2021, 23, 1765-1779.	3.8	10
66	Nucleotides with Altered Hydrogen Bonding Capacities Impede Human DNA Polymerase Î· by Reducing Synthesis in the Presence of the Major Cisplatin DNA Adduct. Journal of the American Chemical Society, 2015, 137, 4728-4734.	13.7	9
67	DNA Adduct-Directed Synthetic Nucleosides. Accounts of Chemical Research, 2019, 52, 1391-1399.	15.6	9
68	Oligonucleotide probes containing pyrimidine analogs reveal diminished hydrogen bonding capacity of the DNA adduct O6-methyl-G in DNA duplexes. Bioorganic and Medicinal Chemistry, 2013, 21, 6212-6216.	3.0	8
69	Sulfotransferase-independent genotoxicity of illudin S and its acylfulvene derivatives in bacterial and mammalian cells. Archives of Toxicology, 2014, 88, 161-169.	4.2	8
70	Direct Alkylation of Deoxyguanosine by Azaserine Leads to O6-Carboxymethyldeoxyguanosine. Chemical Research in Toxicology, 2021, 34, 1518-1529.	3.3	8
71	Gold nanoprobes for detecting DNA adducts. Chemical Communications, 2014, 50, 15517-15520.	4.1	7
72	Modulation of Cytotoxicity by Transcription-Coupled Nucleotide Excision Repair Is Independent of the Requirement for Bioactivation of Acylfulvene. Chemical Research in Toxicology, 2017, 30, 769-776.	3.3	7

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73	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
74	A gene-targeted polymerase-mediated strategy to identifyO⁶-methylguanine damage. Chemical Communications, 2019, 55, 3895-3898.	4.1	7
75	Sequence-Specific Quantitation of Mutagenic DNA Damage via Polymerase Amplification with an Artificial Nucleotide. Journal of the American Chemical Society, 2020, 142, 6962-6969.	13.7	7
76	Synthesis of 8â€Phenoxyâ€2â€²â€deoxyguanosine Nucleoside Analogues. European Journal of Organic Chemistry, 2011, 2011, 2987-2992.	2.4	6
77	Induction of Complementary Function Reductase Enzymes in Colon Cancer Cells by Dithioleâ€3â€thione versus Sodium Selenite. Journal of Biochemical and Molecular Toxicology, 2015, 29, 10-20.	3.0	6
78	Drug-DNA adducts as biomarkers for metabolic activation of the nitro-aromatic nitrogen mustard prodrug PR-104A. Biochemical Pharmacology, 2018, 154, 64-74.	4.4	6
79	Impact of DNA Oxidation on Toxicology: From Quantification to Genomics. Chemical Research in Toxicology, 2019, 32, 345-347.	3.3	6
80	High Sensitivity of Human Translesion DNA Synthesis Polymerase Î¹ to Variation in O⁶-Carboxymethylguanine Structures. ACS Chemical Biology, 2019, 14, 214-222.	3.4	6
81	A Chemical Link between Meat Consumption and Colorectal Cancer Development?. Chemical Research in Toxicology, 2021, 34, 12-23.	3.3	6
82	Bioreduction-Mediated Food-Drug Interactions: Opportunities for Oncology Nutrition. Chimia, 2011, 65, 411.	0.6	5
83	Repair of O6-carboxymethylguanine adducts by O6-methylguanine-DNA methyltransferase in human colon epithelial cells. Carcinogenesis, 2021, 42, 1110-1118.	2.8	5
84	Fluorescent Nucleobase Analogues with Extended Pi Surfaces Stabilize <scp>DNA</scp> Duplexes Containing O⁶â€Alkylguanine Adducts. Helvetica Chimica Acta, 2018, 101, e1800066.	1.6	4
85	The Base Pairing Partner Modulates Alkylguanine Alkyltransferase. ACS Chemical Biology, 2018, 13, 2534-2541.	3.4	4
86	Synthesis of 4â€Cyanoindole Nucleosides, 4â€Cyanoindoleâ€2Ê¹â€Deoxyribonucleosideâ€5Ê¹â€Triphosphate (4CINâ€TP), and Enzymatic Incorporation of 4CINâ€TP into DNA. Current Protocols in Nucleic Acid Chemistry, 2020, 80, e101.	0.5	4
87	A combination of direct reversion and nucleotide excision repair counters the mutagenic effects of DNA carboxymethylation. DNA Repair, 2022, 110, 103262.	2.8	3
88	Molecular beacons with oxidized bases report on substrate specificity of DNA oxoguanine glycosylases. Chemical Science, 2022, 13, 4295-4302.	7.4	3
89	Hydrogen-Bonding Interactions at the DNA Terminus Promote Extension from Methylguanine Lesions by Human Extender DNA Polymerase Î¶. Biochemistry, 2018, 57, 5978-5988.	2.5	2
90	Determining Steady-State Kinetics of DNA Polymerase Nucleotide Incorporation. Methods in Molecular Biology, 2019, 1973, 299-311.	0.9	2

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91	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
92	Computational Data Integration in Toxicogenomics. Methods in Pharmacology and Toxicology, 2015, , 371-392.	0.2	0