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	A combination of direct reversion and nucleotide excision repair counters the mutagenic effects of DNA carboxymethylation. DNA Repair, 2022, 110, 103262.	2.8	3
2	Molecular beacons with oxidized bases report on substrate specificity of DNA oxoguanine glycosylases. Chemical Science, 2022, 13, 4295-4302.	7.4	3
3	A Chemical Link between Meat Consumption and Colorectal Cancer Development?. Chemical Research in Toxicology, 2021, 34, 12-23.	3.3	6
4	Impact of manipulation of glycerol/diol dehydratase activity on intestinal microbiota ecology and metabolism. Environmental Microbiology, 2021, 23, 1765-1779.	3.8	10
5	Repair of O6-carboxymethylguanine adducts by O6-methylguanine-DNA methyltransferase in human colon epithelial cells. Carcinogenesis, 2021, 42, 1110-1118.	2.8	5
6	Direct Alkylation of Deoxyguanosine by Azaserine Leads to O6-Carboxymethyldeoxyguanosine. Chemical Research in Toxicology, 2021, 34, 1518-1529.	3.3	8
7	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
8	Next-generation DNA damage sequencing. Chemical Society Reviews, 2020, 49, 7354-7377.	38.1	56
9	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
10	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
11	Gut microbial beta-glucuronidase and glycerol/diol dehydratase activity contribute to dietary heterocyclic amine biotransformation. BMC Microbiology, 2019, 19, 99.	3.3	42
12	Determining Steady-State Kinetics of DNA Polymerase Nucleotide Incorporation. Methods in Molecular Biology, 2019, 1973, 299-311.	0.9	2
13	A gene-targeted polymerase-mediated strategy to identifyO⁶-methylguanine damage. Chemical Communications, 2019, 55, 3895-3898.	4.1	7
14	Human inÂvitro models of nonalcoholic fatty liver disease. Current Opinion in Toxicology, 2019, 16, 9-16.	5.0	76
15	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
16	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
17	DNA Adduct-Directed Synthetic Nucleosides. Accounts of Chemical Research, 2019, 52, 1391-1399.	15.6	9
18	Impact of DNA Oxidation on Toxicology: From Quantification to Genomics. Chemical Research in Toxicology, 2019, 32, 345-347.	3.3	6

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19	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
20	High Sensitivity of Human Translesion DNA Synthesis Polymerase Îº to Variation in O⁶-Carboxymethylguanine Structures. ACS Chemical Biology, 2019, 14, 214-222.	3.4	6
21	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
22	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
23	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
24	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
25	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
26	The Base Pairing Partner Modulates Alkylguanine Alkyltransferase. ACS Chemical Biology, 2018, 13, 2534-2541.	3.4	4
27	Ribonucleotide incorporation by human DNA polymerase Î· impacts translesion synthesis and RNase H2 activity. Nucleic Acids Research, 2017, 45, gkw1275.	14.5	31
28	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
29	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
30	Systems Toxicology: Real World Applications and Opportunities. Chemical Research in Toxicology, 2017, 30, 870-882.	3.3	93
31	Iron phosphate nanoparticles for food fortification: Biological effects in rats and human cell lines. Nanotoxicology, 2017, 11, 496-506.	3.0	36
32	DNA Adducts from Anticancer Drugs as Candidate Predictive Markers for Precision Medicine. Chemical Research in Toxicology, 2017, 30, 388-409.	3.3	45
33	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
34	Gut Microbial Transformation of the Dietary Imidazoquinoxaline Mutagen MeIQx Reduces Its Cytotoxic and Mutagenic Potency. Toxicological Sciences, 2017, 159, 266-276.	3.1	29
35	Copper carbenes alkylate guanine chemoselectively through a substrate directed reaction. Chemical Science, 2017, 8, 499-506.	7.4	25
36	Minor Groove 3â€Deazaâ€Adenosine Analogues: Synthesis and Bypass in Translesion DNA Synthesis. Chemistry - A European Journal, 2017, 23, 1101-1109.	3.3	10

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37	Sulforaphane Preconditioning Sensitizes Human Colon Cancer Cells towards the Bioreductive Anticancer Prodrug PR-104A. PLoS ONE, 2016, 11, e0150219.	2.5	22
38	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
39	Impact of ribonucleotide incorporation by DNA polymerases Î² and Î» on oxidative base excision repair. Nature Communications, 2016, 7, 10805.	12.8	34
40	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
41	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
42	Acrolein contributes strongly to antimicrobial and heterocyclic amine transformation activities of reuterin. Scientific Reports, 2016, 6, 36246.	3.3	90
43	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
44	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
45	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
46	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
47	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
48	Computational Data Integration in Toxicogenomics. Methods in Pharmacology and Toxicology, 2015, , 371-392.	0.2	0
49	O⁶-Alkylguanine Postlesion DNA Synthesis Is Correct with the Right Complement of Hydrogen Bonding. ACS Chemical Biology, 2014, 9, 2807-2814.	3.4	20
50	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
51	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
52	Systems Toxicology: From Basic Research to Risk Assessment. Chemical Research in Toxicology, 2014, 27, 314-329.	3.3	287
53	Gold nanoprobes for detecting DNA adducts. Chemical Communications, 2014, 50, 15517-15520.	4.1	7
54	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

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55	Transcriptomic Responses of Cancerous and Noncancerous Human Colon Cells to Sulforaphane and Selenium. Chemical Research in Toxicology, 2014, 27, 377-386.	3.3	10
56	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
57	Reversible Aggregation of DNA-Decorated Gold Nanoparticles Controlled by Molecular Recognition. Langmuir, 2013, 29, 10824-10830.	3.5	36
58	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
59	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
60	Tolerance of Base Pair Size and Shape in Postlesion DNA Synthesis. Journal of the American Chemical Society, 2013, 135, 6384-6387.	13.7	33
61	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
62	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
63	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
64	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
65	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
66	Chemistry and Biology of Acylfulvenes: Sesquiterpene-Derived Antitumor Agents. Chemical Reviews, 2012, 112, 3578-3610.	47.7	77
67	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
68	Chemical and Enzymatic Reductive Activation of Acylfulvene to Isomeric Cytotoxic Reactive Intermediates. Chemical Research in Toxicology, 2011, 24, 2044-2054.	3.3	10
69	Bioreduction-Mediated Food-Drug Interactions: Opportunities for Oncology Nutrition. Chimia, 2011, 65, 411.	0.6	5
70	Synthesis of 8â€Phenoxyâ€2â€²â€deoxyguanosine Nucleoside Analogues. European Journal of Organic Chemistry, 2011, 2011, 2987-2992.	2.4	6
71	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
72	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

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73	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
74	Profiling patterns of glutathione reductase inhibition by the natural product illudin S and its acylfulvene analogues. Molecular BioSystems, 2009, 5, 1013.	2.9	19
75	Deoxygenated phosphorothioate inositol phosphate analogs: Synthesis, phosphatase stability, and binding affinity. Bioorganic and Medicinal Chemistry, 2008, 16, 3419-3427.	3.0	10
76	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
77	Nucleobase-Dependent Reactivity of a Quinone Metabolite of Pentachlorophenol. Chemical Research in Toxicology, 2007, 20, 913-919.	3.3	31
78	Quantitative Correlation of Drug Bioactivation and Deoxyadenosine Alkylation by Acylfulvene. Chemical Research in Toxicology, 2007, 20, 1513-1519.	3.3	21
79	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
80	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
81	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
82	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
83	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
84	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
85	Identification of O2-Substituted Pyrimidine Adducts Formed in Reactions of 4-(Acetoxymethylnitrosamino)- 1-(3-pyridyl)-1-butanone and 4-(Acetoxymethylnitros-) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 2	3.3	65
86	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
87	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
88	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
89	Cobaltâ”Phosphite-Catalyzed Asymmetric Pausonâ”Khand Reaction. Journal of Organic Chemistry, 2002, 67, 3398-3403.	3.2	84
90	Monocyclopentadienyltitanium Aryloxide Complexes:Â Preparation, Characterization, and Application in Cyclization Reactions. Organometallics, 2002, 21, 739-748.	2.3	62

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91	Catalytic Asymmetric Cyclocarbonylation of Nitrogen-Containing Enynes. Journal of Organic Chemistry, 1999, 64, 5547-5550.	3.2	71
92	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