Shana Sturla

List of Publications by Year in Descending Order

88 papers	1,694 citations	24 h-index	37 g-index
217 ext. papers	2,063 ext. citations	7.7 avg, IF	5.01 L-index

#	Paper	IF	Citations
88	Molecular beacons with oxidized bases report on substrate specificity of DNA oxoguanine glycosylases.. *Chemical Science*, **2022**, 13, 4295-4302	9.4	
87	A combination of direct reversion and nucleotide excision repair counters the mutagenic effects of DNA carboxymethylation.. *DNA Repair*, **2021**, 110, 103262	4.3	1
86	A Chemical Strategy for Intracellular Arming of an Endogenous Broad-Spectrum Antiviral Nucleotide. *Journal of Medicinal Chemistry*, **2021**, 64, 15429-15439	8.3	0
85	Impact of manipulation of glycerol/diol dehydratase activity on intestinal microbiota ecology and metabolism. *Environmental Microbiology*, **2021**, 23, 1765-1779	5.2	1
84	Repair of O6-carboxymethylguanine adducts by O6-methylguanine-DNA methyltransferase in human colon epithelial cells. *Carcinogenesis*, **2021**, 42, 1110-1118	4.6	2
83	Direct Alkylation of Deoxyguanosine by Azaserine Leads to -Carboxymethyldeoxyguanosine. *Chemical Research in Toxicology*, **2021**, 34, 1518-1529	4	4
82	ASSURED Point-of-Need Food Safety Screening: A Critical Assessment of Portable Food Analyzers. *Foods*, **2021**, 10,	4.9	9
81	A Chemical Link between Meat Consumption and Colorectal Cancer Development?. *Chemical Research in Toxicology*, **2021**, 34, 12-23	4	4
80	Molecular Dosimetry of Temozolomide: Quantification of Critical Lesions, Correlation to Cell Death Responses, and Threshold Doses. *Molecular Cancer Therapeutics*, **2021**, 20, 1789-1799	6.1	5
79	Confronting Racism in Chemistry Journals. *ACS Applied Nano Materials*, **2020**, 3, 6131-6133	5.6	
78	Confronting Racism in Chemistry Journals. *ACS Applied Polymer Materials*, **2020**, 2, 2496-2498	4.3	
77	Confronting Racism in Chemistry Journals. *Organometallics*, **2020**, 39, 2331-2333	3.8	
76	Synthesis of 4-Cyanoindole Nucleosides, 4-Cyanoindole-2SDeoxyribonucleoside-5STriphosphate (4CIN-TP), and Enzymatic Incorporation of 4CIN-TP into DNA. *Current Protocols in Nucleic Acid Chemistry*, **2020**, 80, e101	0.5	1
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	16.4	4
74	Update to Our Reader, Reviewer, and Author Communities4April 2020. *Energy & Fuels*, **2020**, 34, 5107-5108	4.1	
73	Update to Our Reader, Reviewer, and Author Communities4April 2020. *Organometallics*, **2020**, 39, 1665-1666	3.8	
72	Confronting Racism in Chemistry Journals. *Journal of Chemical Health and Safety*, **2020**, 27, 198-200	1.7	

71	Next-generation DNA damage sequencing. *Chemical Society Reviews*, **2020**, 49, 7354-7377	58.5	21
70	An adverse outcome pathway-based approach to assess steatotic mixture effects of hepatotoxic pesticides in vitro. *Food and Chemical Toxicology*, **2020**, 139, 111283	4.7	22
69	Gut microbial beta-glucuronidase and glycerol/diol dehydratase activity contribute to dietary heterocyclic amine biotransformation. *BMC Microbiology*, **2019**, 19, 99	4.5	16
68	Determining Steady-State Kinetics of DNA Polymerase Nucleotide Incorporation. *Methods in Molecular Biology*, **2019**, 1973, 299-311	1.4	1
67	A gene-targeted polymerase-mediated strategy to identify O-methylguanine damage. *Chemical Communications*, **2019**, 55, 3895-3898	5.8	4
66	Human in vitro models of nonalcoholic fatty liver disease. *Current Opinion in Toxicology*, **2019**, 16, 9-16	4.4	37
65	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	4	
64	Gut microbial transformation of the dietary mutagen MeIQx may reduce exposure levels without altering intestinal transport. *Toxicology in Vitro*, **2019**, 59, 238-245	3.6	8
63	DNA Adduct-Directed Synthetic Nucleosides. *Accounts of Chemical Research*, **2019**, 52, 1391-1399	24.3	6
62	Impact of DNA Oxidation on Toxicology: From Quantification to Genomics. *Chemical Research in Toxicology*, **2019**, 32, 345-347	4	5
61	Immunological and mass spectrometry-based approaches to determine thresholds of the mutagenic DNA adduct O-methylguanine in vivo. *Archives of Toxicology*, **2019**, 93, 559-572	5.8	11
60	High Sensitivity of Human Translesion DNA Synthesis Polymerase to Variation in O-Carboxymethylguanine Structures. *ACS Chemical Biology*, **2019**, 14, 214-222	4.9	4
59	Gut Microbial Glycerol Metabolism as an Endogenous Acrolein Source. *MBio*, **2018**, 9,	7.8	22
58	The Base Pairing Partner Modulates Alkylguanine Alkyltransferase. *ACS Chemical Biology*, **2018**, 13, 2534-2541	4.9	4
57	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	4	5
56	Hydrogen-Bonding Interactions at the DNA Terminus Promote Extension from Methylguanine Lesions by Human Extender DNA Polymerase *Biochemistry*, **2018**, 57, 5978-5988	3.2	1
55	Fluorescent Nucleobase Analogues with Extended Pi Surfaces Stabilize DNA Duplexes Containing O6-Alkylguanine Adducts. *Helvetica Chimica Acta*, **2018**, 101, e1800066	2	3
54	Drug-DNA adducts as biomarkers for metabolic activation of the nitro-aromatic nitrogen mustard prodrug PR-104A. *Biochemical Pharmacology*, **2018**, 154, 64-74	6	5

53	Nucleotide-Resolution Genome-Wide Mapping of Oxidative DNA Damage by Click-Code-Seq. *Journal of the American Chemical Society*, **2018**, 140, 9783-9787	16.4	49
52	DNA Adduct Profiles Predict in Vitro Cell Viability after Treatment with the Experimental Anticancer Prodrug PR104A. *Chemical Research in Toxicology*, **2017**, 30, 830-839	4	9
51	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	4	5
50	Systems Toxicology: Real World Applications and Opportunities. *Chemical Research in Toxicology*, **2017**, 30, 870-882	4	64
49	Iron phosphate nanoparticles for food fortification: Biological effects in rats and human cell lines. *Nanotoxicology*, **2017**, 11, 496-506	5.3	26
48	DNA Adducts from Anticancer Drugs as Candidate Predictive Markers for Precision Medicine. *Chemical Research in Toxicology*, **2017**, 30, 388-409	4	31
47	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	11.5	12
46	Structural basis for the selective incorporation of an artificial nucleotide opposite a DNA adduct by a DNA polymerase. *Chemical Communications*, **2017**, 53, 12704-12707	5.8	8
45	Gut Microbial Transformation of the Dietary Imidazoquinoxaline Mutagen MelQx Reduces Its Cytotoxic and Mutagenic Potency. *Toxicological Sciences*, **2017**, 159, 266-276	4.4	21
44	Copper carbenes alkylate guanine chemoselectively through a substrate directed reaction. *Chemical Science*, **2017**, 8, 499-506	9.4	23
43	Minor Groove 3-Deaza-Adenosine Analogues: Synthesis and Bypass in Translesion DNA Synthesis. *Chemistry - A European Journal*, **2017**, 23, 1101-1109	4.8	7
42	Ribonucleotide incorporation by human DNA polymerase Impacts translesion synthesis and RNase H2 activity. *Nucleic Acids Research*, **2017**, 45, 2600-2614	20.1	22
41	Bypass of Mutagenic O(6)-Carboxymethylguanine DNA Adducts by Human Y- and B-Family Polymerases. *Chemical Research in Toxicology*, **2016**, 29, 1493-503	4	15
40	Acrolein contributes strongly to antimicrobial and heterocyclic amine transformation activities of reuterin. *Scientific Reports*, **2016**, 6, 36246	4.9	56
39	In-Gene Quantification of O(6)-Methylguanine with Elongated Nucleoside Analogues on Gold Nanoprobes. *Journal of the American Chemical Society*, **2016**, 138, 8497-504	16.4	11
38	Sulforaphane Preconditioning Sensitizes Human Colon Cancer Cells towards the Bioreductive Anticancer Prodrug PR-104A. *PLoS ONE*, **2016**, 11, e0150219	3.7	20
37	The strict anaerobic gut microbe Eubacterium hallii transforms the carcinogenic dietary heterocyclic amine 2-amino-1-methyl-6-phenylimidazo[4,5-b]pyridine (PhIP). *Environmental Microbiology Reports*, **2016**, 8, 201-9	3.7	38
36	Impact of ribonucleotide incorporation by DNA polymerases and on oxidative base excision repair. *Nature Communications*, **2016**, 7, 10805	17.4	30

35	The use of an artificial nucleotide for polymerase-based recognition of carcinogenic O6-alkylguanine DNA adducts. *Nucleic Acids Research*, **2016**, 44, 6564-73	20.1	17
34	Torsional Constraints of DNA Substrates Impact Cas9 Cleavage. *Journal of the American Chemical Society*, **2016**, 138, 13842-13845	16.4	29
33	Nucleotides with altered hydrogen bonding capacities impede human DNA polymerase by reducing synthesis in the presence of the major cisplatin DNA adduct. *Journal of the American Chemical Society*, **2015**, 137, 4728-34	16.4	9
32	Development of a risk management tool for prioritizing chemical hazard-food pairs and demonstration for selected mycotoxins. *Regulatory Toxicology and Pharmacology*, **2015**, 72, 257-65	3.4	7
31	Data in support of quantification of pyrophosphate as a universal approach to determine polymerase activity and assay polymerase inhibitors. *Data in Brief*, **2015**, 4, 14-8	1.2	
30	Screening for DNA Alkylation Mono and Cross-Linked Adducts with a Comprehensive LC-MS(3) Adductomic Approach. *Analytical Chemistry*, **2015**, 87, 11706-13	7.8	33
29	Induction of complementary function reductase enzymes in colon cancer cells by dithiole-3-thione versus sodium selenite. *Journal of Biochemical and Molecular Toxicology*, **2015**, 29, 10-20	3.4	5
28	Altered minor-groove hydrogen bonds in DNA block transcription elongation by T7 RNA polymerase. *ChemBioChem*, **2015**, 16, 1212-8	3.8	3
27	Specific incorporation of an artificial nucleotide opposite a mutagenic DNA adduct by a DNA polymerase. *Journal of the American Chemical Society*, **2015**, 137, 30-3	16.4	27
26	Systems toxicology: from basic research to risk assessment. *Chemical Research in Toxicology*, **2014**, 27, 314-29	4	236
25	Gold nanoprobes for detecting DNA adducts. *Chemical Communications*, **2014**, 50, 15517-20	5.8	6
24	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, 443-53	4	31
23	O6-alkylguanine postlesion DNA synthesis is correct with the right complement of hydrogen bonding. *ACS Chemical Biology*, **2014**, 9, 2807-14	4.9	18
22	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, 13405-21	20.1	33
21	Sulfotransferase-independent genotoxicity of illudin S and its acylfulvene derivatives in bacterial and mammalian cells. *Archives of Toxicology*, **2014**, 88, 161-9	5.8	5
20	Reversible aggregation of DNA-decorated gold nanoparticles controlled by molecular recognition. *Langmuir*, **2013**, 29, 10824-30	4	29
19	Incorporation of nucleoside probes opposite O-methylguanine by Sulfolobus solfataricus DNA polymerase Dpo4: importance of hydrogen bonding. *ChemBioChem*, **2013**, 14, 1634-9	3.8	10
18	Oligonucleotide probes containing pyrimidine analogs reveal diminished hydrogen bonding capacity of the DNA adduct O-methyl-G in DNA duplexes. *Bioorganic and Medicinal Chemistry*, **2013**, 21, 6212-6	3.4	8

17	Tolerance of base pair size and shape in postlesion DNA synthesis. *Journal of the American Chemical Society*, **2013**, 135, 6384-7	16.4	28
16	Improved efficacy of acylfulvene in colon cancer cells when combined with a nuclear excision repair inhibitor. *Chemical Research in Toxicology*, **2013**, 26, 1674-82	4	9
15	Quantification of acylfulvene- and illudin S-DNA adducts in cells with variable bioactivation capacities. *Chemical Research in Toxicology*, **2013**, 26, 146-55	4	22
14	Recognition of O6-benzyl-2Sdeoxyguanosine by a perimidinone-derived synthetic nucleoside: a DNA interstrand stacking interaction. *Nucleic Acids Research*, **2013**, 41, 7566-76	20.1	14
13	Hydrogen bonding or stacking interactions in differentiating duplex stability in oligonucleotides containing synthetic nucleoside probes for alkylated DNA. *Chemistry - A European Journal*, **2013**, 19, 11062-7	4.8	22
12	Chemistry and biology of acylfulvenes: sesquiterpene-derived antitumor agents. *Chemical Reviews*, **2012**, 112, 3578-610	68.1	68
11	Up-regulation of human prostaglandin reductase 1 improves the efficacy of hydroxymethylacylfulvene, an antitumor chemotherapeutic agent. *Journal of Pharmacology and Experimental Therapeutics*, **2012**, 343, 426-33	4.7	25
10	Chemical and enzymatic reductive activation of acylfulvene to isomeric cytotoxic reactive intermediates. *Chemical Research in Toxicology*, **2011**, 24, 2044-54	4	9
9	Bioreduction-mediated food-drug interactions: opportunities for oncology nutrition. *Chimia*, **2011**, 65, 411-5	1.3	5
8	Susceptibility of the antioxidant selenoenyzmes thioredoxin reductase and glutathione peroxidase to alkylation-mediated inhibition by anticancer acylfulvenes. *Chemical Research in Toxicology*, **2011**, 24, 726-36	4	23
7	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	20.1	37
6	Investigating the biochemical impact of DNA damage with structure-based probes: abasic sites, photodimers, alkylation adducts, and oxidative lesions. *Biochemistry*, **2009**, 48, 9347-59	3.2	55
5	Depurinating acylfulvene-DNA adducts: characterizing cellular chemical reactions of a selective antitumor agent. *Journal of the American Chemical Society*, **2007**, 129, 2101-11	16.4	37
4	Quantitative correlation of drug bioactivation and deoxyadenosine alkylation by acylfulvene. *Chemical Research in Toxicology*, **2007**, 20, 1513-9	4	20
3	A synthetic nucleoside probe that discerns a DNA adduct from unmodified DNA. *Journal of the American Chemical Society*, **2007**, 129, 4882-3	16.4	34
2	Investigating the role of stereochemistry in the activity of anticancer acylfulvenes: synthesis, reductase-mediated bioactivation, and cellular toxicity. *Journal of Medicinal Chemistry*, **2006**, 49, 2593-9	8.3	26
1	Quantitation of pyridyloxobutyl DNA adducts of tobacco-specific nitrosamines in rat tissue DNA by high-performance liquid chromatography-electrospray ionization-tandem mass spectrometry. *Chemical Research in Toxicology*, **2006**, 19, 674-82	4	68