Suse Broyde

List of Publications by Year
in descending order

88 papers	3,945 citations	101543 36 h-index	138484 58 g-index
113 all docs	113 docs citations	113 times ranked	1411 citing authors

#	Article	IF	Citations
1	NMR Solution Structures of Stereoisomeric Covalent Polycyclic Aromatic Carcinogenâ^'DNA Adducts:â€‰Principles, Patterns, and Diversity. Chemical Research in Toxicology, 1997, 10, 111-146.	3.3	331
2	Influence of benzo[a]pyrenediol epoxide chirality on solution conformations of DNA covalent adducts: the (-)-trans-anti-[BP]G.cntdot.C adduct structure and comparison with the (+)-trans-anti[BP]G.cntdot.C enantiomer. Biochemistry, 1992, 31, 5245-5252.	2.5	176
3	Solution conformation of the (+)-cis-anti-[BP]dG adduct in a DNA duplex: Intercalation of the covalently attached benzo[a]pyrenyl ring into the helix and displacement of the modified deoxyguanosine. Biochemistry, 1993, 32, 4145-4155.	2.5	169
4	Structural characterization of an N-acetyl-2-aminofluorene (AAF) modified DNA oligomer by NMR, energy minimization, and molecular dynamics. Biochemistry, 1993, 32, 2481-2497.	2.5	143
5	Thermodynamic and structural factors in the removal of bulky DNA adducts by the nucleotide excision repair machinery. Biopolymers, 2002, 65, 202-210.	2.4	128
6	Nuclear Magnetic Resonance Solution Structures of Covalent Aromatic Amineâ^'DNA Adducts and Their Mutagenic Relevance. Chemical Research in Toxicology, 1998, 11, 391-407.	3.3	127
7	The human DNA repair factor XPC-HR23B distinguishes stereoisomeric benzo[a]pyrenyl-DNA lesions. EMBO Journal, 2007, 26, 2923-2932.	7.8	94
8	Solution Conformation of the (-)-trans-anti-Benzo[c]phenanthrene-dA ([BPh]dA) Adduct opposite dT in a DNA Duplex: Intercalation of the Covalently Attached Benzo[c]phenanthrenyl Ring to the 3'-Side of the Adduct Site and Comparison with the (+)-trans-anti-[BPh]dA opposite dT Stereoisomer. Biochemistry, 1995, 34, 1295-1307.	2.5	91
9	Prediction of DNA structure from sequence: A build-up technique. Biopolymers, 1989, 28, 1195-1222.	2.4	87
10	Solution conformation of the (+)-trans-anti-[BPh]dA adduct opposite dT in a DNA duplex: Intercalation of the covalently attached benzo[c]phenanthrene to the 5'-side of the adduct site without disruption of the modified base pair. Biochemistry, 1993, 32, 12488-12497.	2.5	87
11	Solution Conformation of the (â^')-cis-anti-Benzo[a]pyrenyl-dG Adduct Opposite dC in a DNA Duplex:â€‰Intercalation of the Covalently Attached BP Ring into the Helix with Base Displacement of the Modified Deoxyguanosine into the Major Groove. Biochemistry, 1996, 35, 9850-9863.	2.5	85
12	Structural basis for the recognition of diastereomeric 5â€²,8-cyclo-2â€²-deoxypurine lesions by the human nucleotide excision repair system. Nucleic Acids Research, 2014, 42, 5020-5032.	14.5	69
13	Solution Structure of the Aminofluorene [AF]-Intercalated Conformer of thesyn-[AF]-C8-dG Adduct Opposite dC in a DNA Duplexâ€. Biochemistry, 1998, 37, 81-94.	2.5	68
14	The Sequence Dependence of Human Nucleotide Excision Repair Efficiencies of Benzo[a]pyrene-derived DNA Lesions: Insights into the Structural Factors that Favor Dual Incisions. Journal of Molecular Biology, 2009, 386, 1193-1203.	4.2	67
15	Molecular topology of polycyclic aromatic carcinogens determines DNA adduct conformation: a link to tumorigenic activity. Journal of Molecular Biology, 2001, 306, 1059-1080.	4.2	63
16	Solution Structure of the Aminofluorene [AF]-External Conformer of theanti-[AF]-C8-dG Adduct Opposite dC in a DNA Duplexâ€. Biochemistry, 1998, 37, 95-106.	2.5	62
17	Resistance of bulky DNA lesions to nucleotide excision repair can result from extensive aromatic lesionâ€“base stacking interactions. Nucleic Acids Research, 2011, 39, 8752-8764.	14.5	62
18	Nucleotide excision repair of 2-acetylaminofluorene- and 2-aminofluorene-(C8)-guanine adducts: molecular dynamics simulations elucidate how lesion structure and base sequence context impact repair efficiencies. Nucleic Acids Research, 2012, 40, 9675-9690.	14.5	61

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19	DNA Adducts from a Tumorigenic Metabolite of Benzo[a]pyrene Block Human RNA Polymerase II Elongation in a Sequence- and Stereochemistry-dependent Manner. Journal of Molecular Biology, 2002, 321, 29-47.	4.2	59
20	Lesion processing: high-fidelity versus lesion-bypass DNA polymerases. Trends in Biochemical Sciences, 2008, 33, 209-219.	7.5	59
21	Solution Conformation of theN-(Deoxyguanosin-8-yl)-1-aminopyrene ([AP]dG) Adduct Opposite dC in a DNA Duplexâ€. Biochemistry, 1996, 35, 12659-12670.	2.5	55
22	Molecular basis for damage recognition and verification by XPC-RAD23B and TFIIH in nucleotide excision repair. DNA Repair, 2018, 71, 33-42.	2.8	55
23	DNA Adduct Structureâ€“Function Relationships: Comparing Solution with Polymerase Structures. Chemical Research in Toxicology, 2008, 21, 45-52.	3.3	52
24	Stereochemical, Structural, and Thermodynamic Origins of Stability Differences between Stereoisomeric Benzo[a]pyrene Diol Epoxide Deoxyadenosine Adducts in a DNA Mutational Hot Spot Sequence. Journal of the American Chemical Society, 2001, 123, 7054-7066.	13.7	51
25	Solution Conformation of the (+)-cis-anti-[BP]dG Adduct Opposite a Deletion Site in a DNA Duplex: Intercalation of the Covalently Attached Benzo[a]pyrene into the Helix with Base Displacement of the Modified Deoxyguanosine into the Minor Groove. Biochemistry, 1994, 33, 11518-11527.	2.5	50
26	Probing for DNA damage with Î²-hairpins: Similarities in incision efficiencies of bulky DNA adducts by prokaryotic and human nucleotide excision repair systems in vitro. DNA Repair, 2011, 10, 684-696.	2.8	49
27	Differential Nucleotide Excision Repair Susceptibility of Bulky DNA Adducts in Different Sequence Contexts: Hierarchies of Recognition Signals. Journal of Molecular Biology, 2009, 385, 30-44.	4.2	48
28	Repair-Resistant DNA Lesions. Chemical Research in Toxicology, 2017, 30, 1517-1548.	3.3	48
29	Structure and mechanism of pyrimidineâ€“pyrimidone (6-4) photoproduct recognition by the Rad4/XPC nucleotide excision repair complex. Nucleic Acids Research, 2019, 47, 6015-6028.	14.5	48
30	Dynamics of a Benzo[a]pyrene-derived Guanine DNA Lesion in TGT and CGC Sequence Contexts: Enhanced Mobility in TGT Explains Conformational Heterogeneity, Flexible Bending, and Greater Susceptibility to Nucleotide Excision Repair. Journal of Molecular Biology, 2007, 374, 292-305.	4.2	46
31	Nucleotide Excision Repair Efficiencies of Bulky Carcinogenâ€“DNA Adducts Are Governed by a Balance between Stabilizing and Destabilizing Interactions. Biochemistry, 2012, 51, 1486-1499.	2.5	46
32	Stereochemical Origin of Opposite Orientations in DNA Adducts Derived from Enantiomeric anti-Benzo[a]pyrene Diol Epoxides with Different Tumorigenic Potentials. Biochemistry, 1999, 38, 2956-2968.	2.5	42
33	Adenineâ€“DNA Adducts Derived from the Highly Tumorigenic Dibenzo[a,l]pyrene Are Resistant to Nucleotide Excision Repair while Guanine Adducts Are Not. Chemical Research in Toxicology, 2013, 26, 783-793.	3.3	40
34	Solution Structure of the (+)-cis-anti-Benzo[a]pyrene-dA ([BP]dA) Adduct Opposite dT in a DNA Duplexâ€. Biochemistry, 1999, 38, 10831-10842.	2.5	39
35	5-Formylcytosine mediated DNAâ€“protein cross-links block DNA replication and induce mutations in human cells. Nucleic Acids Research, 2018, 46, 6455-6469.	14.5	39
36	Minor-Groove Binding Models for Acetylaminofluorene Modified DNA. Journal of Biomolecular Structure and Dynamics, 1989, 7, 493-513.	3.5	37

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37	Energy Minimized Structures of Carcinogen-DNA. Adducts: 2-Acetylaminofluorene and 2-Aminofluorene. Journal of Biomolecular Structure and Dynamics, 1986, 4, 365-372.	3.5	35
38	Solution Conformation of [AF]dG Opposite a -1 Deletion Site in a DNA Duplex: Intercalation of the Covalently Attached Aminofluorene Ring into the Helix with Base Displacement of the C8-Modified Syn Guanine into the Major Groove. Biochemistry, 1995, 34, 6226-6238.	2.5	35
39	Solution Conformation of the (â˜)-trans-anti-[BP]dG Adduct Opposite a Deletion Site in a DNA Duplex:Â Intercalation of the Covalently Attached Benzo[a]pyrene into the Helix with Base Displacement of the Modified Deoxyguanosine into the Minor Grooveâ€. Biochemistry, 1997, 36, 13780-13790.	2.5	34
40	Distant Neighbor Base Sequence Context Effects in Human Nucleotide Excision Repair of a Benzo[a]pyrene-derived DNA Lesion. Journal of Molecular Biology, 2010, 399, 397-409.	4.2	34
41	Assignment of Absolute Configurations of the Enantiomeric Spiroiminodihydantoin Nucleobases by Experimental and Computational Optical Rotatory Dispersion Methods. Chemical Research in Toxicology, 2006, 19, 908-913.	3.3	33
42	Base Sequence Context Effects on Nucleotide Excision Repair. Journal of Nucleic Acids, 2010, 2010, 1-9.	1.2	33
43	The relationships between XPC binding to conformationally diverse DNA adducts and their excision by the human NER system: Is there a correlation?. DNA Repair, 2014, 19, 55-63.	2.8	33
44	Bypass of DNA-Protein Cross-links Conjugated to the 7-Deazaguanine Position of DNA by Translesion Synthesis Polymerases. Journal of Biological Chemistry, 2016, 291, 23589-23603.	3.4	33
45	Exocyclic amino groups of flanking guanines govern sequence-dependent adduct conformations and local structural distortions for minor groove-aligned benzo[a]pyrenyl-guanine lesions in a GG mutation hotspot context. Nucleic Acids Research, 2007, 35, 1555-1568.	14.5	32
46	Nucleotide Excision Repair Lesion-Recognition Protein Rad4 Captures a Pre-Flipped Partner Base in a Benzo[a]pyrene-Derived DNA Lesion: How Structure Impacts the Binding Pathway. Chemical Research in Toxicology, 2017, 30, 1344-1354.	3.3	32
47	Carcinogen-base stacking and base-base stacking in dCpdG modified by (+) and (?)anti-BPDE. Biopolymers, 1985, 24, 2279-2299.	2.4	31
48	Origins of Conformational Differences between Cis and Trans DNA Adducts Derived from Enantiomeric anti-Benzo[a]Pyrene Diol Epoxides. Chemical Research in Toxicology, 1999, 12, 597-609.	3.3	31
49	An analysis of the structural and energetic properties of deoxyribose by potential energy methods. Journal of Computational Chemistry, 1987, 8, 1199-1224.	3.3	29
50	Solution Structure of theN-(Deoxyguanosin-8-yl)-1-aminopyrene ([AP]dG) Adduct Opposite dA in a DNA Duplexâ€. Biochemistry, 1999, 38, 10843-10854.	2.5	29
51	Structural, energetic and dynamic properties of guanine(C8)â€“thymine(N3) cross-links in DNA provide insights on susceptibility to nucleotide excision repair. Nucleic Acids Research, 2012, 40, 2506-2517.	14.5	29
52	Intercalative Conformations of the 14R (+)- and 14S (â˜)-trans-anti-DB[a,l]P-N⁶-dA Adducts: Molecular Modeling and MD Simulations. Chemical Research in Toxicology, 2011, 24, 522-531.	3.3	28
53	Conformational Analysis of the Major DNA Adduct Derived from the Food Mutagen 2-Amino-3-methylimidazo[4,5-f]quinoline. Chemical Research in Toxicology, 1999, 12, 895-905.	3.3	26
54	Recognition of Damaged DNA for Nucleotide Excision Repair: A Correlated Motion Mechanism with a Mismatched cis-syn Thymine Dimer Lesion. Biochemistry, 2015, 54, 5263-5267.	2.5	26

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55	Solution Structures of Aminofluorene [AF]-Stacked Conformers of thesyn[AF]â^'C8-dG Adduct Positioned Opposite dC or dA at a Template-Primer Junctionâ€. Biochemistry, 1999, 38, 10855-10870.	2.5	25
56	Enhanced spontaneous DNA twisting/bending fluctuations unveiled by fluorescence lifetime distributions promote mismatch recognition by the Rad4 nucleotide excision repair complex. Nucleic Acids Research, 2018, 46, 1240-1255.	14.5	23
57	Role of Base Sequence Context in Conformational Equilibria and Nucleotide Excision Repair of Benzo[a]pyrene Diol Epoxideâ^'Adenine Adducts. Biochemistry, 2003, 42, 2339-2354.	2.5	20
58	Nucleosome Histone Tail Conformation and Dynamics: Impacts of Lysine Acetylation and a Nearby Minor Groove Benzo[a]pyrene-Derived Lesion. Biochemistry, 2017, 56, 1963-1973.	2.5	20
59	Lesion Sensing during Initial Binding by Yeast XPC/Rad4: Toward Predicting Resistance to Nucleotide Excision Repair. Chemical Research in Toxicology, 2018, 31, 1260-1268.	3.3	20
60	Conformational Determinants of Structures in Stereoisomeric Cis-Opened anti-Benzo[a]pyrene Diol Epoxide Adducts to Adenine in DNA. Chemical Research in Toxicology, 2000, 13, 811-822.	3.3	19
61	Ribonucleotides as nucleotide excision repair substrates. DNA Repair, 2014, 13, 55-60.	2.8	19
62	Free Energy Profiles of Base Flipping in Intercalative Polycyclic Aromatic Hydrocarbon-Damaged DNA Duplexes: Energetic and Structural Relationships to Nucleotide Excision Repair Susceptibility. Chemical Research in Toxicology, 2013, 26, 1115-1125.	3.3	18
63	Nucleotide Excision Repair and Impact of Site-Specific 5â€²,8-Cyclopurine and Bulky DNA Lesions on the Physical Properties of Nucleosomes. Biochemistry, 2019, 58, 561-574.	2.5	18
64	Transcriptional Bypass of DNAâ€“Protein and DNAâ€“Peptide Conjugates by T7 RNA Polymerase. ACS Chemical Biology, 2019, 14, 2564-2575.	3.4	17
65	Resistance to Nucleotide Excision Repair of Bulky Guanine Adducts Opposite Abasic Sites in DNA Duplexes and Relationships between Structure and Function. PLoS ONE, 2015, 10, e0137124.	2.5	17
66	Visualizing Sequence-Governed Nucleotide Selectivities and Mutagenic Consequences through a Replicative Cycle: Processing of a Bulky Carcinogen N²-dG Lesion in a Y-Family DNA Polymerase. Biochemistry, 2009, 48, 4677-4690.	2.5	16
67	5-Formylcytosine-induced DNAâ€“peptide cross-links reduce transcription efficiency, but do not cause transcription errors in human cells. Journal of Biological Chemistry, 2019, 294, 18387-18397.	3.4	16
68	A Molecular Mechanics and Dynamics Study of the Minor Adduct between DNA and the Carcinogen 2-(Acetylamino)fluorene (dG-N2-AAF). Chemical Research in Toxicology, 1997, 10, 1123-1132.	3.3	15
69	Transcription of DNA containing the 5-guanidino-4-nitroimidazole lesion by human RNA polymerase II and bacteriophage T7 RNA polymerase. DNA Repair, 2008, 7, 1276-1288.	2.8	15
70	Role of Structural and Energetic Factors in Regulating Repair of a Bulky DNA Lesion with Different Opposite Partner Bases. Biochemistry, 2013, 52, 5517-5521.	2.5	15
71	Differences in the Access of Lesions to the Nucleotide Excision Repair Machinery in Nucleosomes. Biochemistry, 2015, 54, 4181-4185.	2.5	15
72	Rotational and translational positions determine the structural and dynamic impact of a single ribonucleotide incorporated in the nucleosome. DNA Repair, 2019, 73, 155-163.	2.8	15

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73	The Nonbulky DNA Lesions Spiroiminodihydantoin and 5-Guanidinohydantoin Significantly Block Human RNA Polymerase II Elongation in Vitro. Biochemistry, 2017, 56, 3008-3018.	2.5	14
74	Nuclear Magnetic Resonance Solution Structure of an N2-Guanine DNA Adduct Derived from the Potent Tumorigen Dibenzo[a,l]pyrene: Intercalation from the Minor Groove with Ruptured Watsonâ€“Crick Base Pairing. Biochemistry, 2012, 51, 9751-9762.	2.5	12
75	Entrapment of a Histone Tail by a DNA Lesion in a Nucleosome Suggests the Lesion Impacts Epigenetic Marking: A Molecular Dynamics Study. Biochemistry, 2016, 55, 239-242.	2.5	10
76	Synergistic effects of H3 and H4 nucleosome tails on structure and dynamics of a lesion-containing DNA: Binding of a displaced lesion partner base to the H3 tail for GG-NER recognition. DNA Repair, 2018, 65, 73-78.	2.8	10
77	Tethering-facilitated DNA â€˜openingâ€™ and complementary roles of Î²-hairpin motifs in the Rad4/XPC DNA damage sensor protein. Nucleic Acids Research, 2020, 48, 12348-12364.	14.5	9
78	The Food Mutagen 2-Amino-3,8-dimethylimidazo[4,5-f]quinoxaline: A Conformational Analysis of Its Major DNA Adduct and Comparison with the 2-Amino-3-methylimidazo[4,5-f]quinoline Adduct. Chemical Research in Toxicology, 2001, 14, 476-482.	3.3	8
79	Nuclear Magnetic Resonance Studies of an N²-Guanine Adduct Derived from the Tumorigen Dibenzo[a,l]pyrene in DNA: Impact of Adduct Stereochemistry, Size, and Local DNA Sequence on Solution Conformations. Biochemistry, 2014, 53, 1827-1841.	2.5	8
80	Translesion Synthesis Past 5-Formylcytosine-Mediated DNAâ€“Peptide Cross-Links by hPolÎ· Is Dependent on the Local DNA Sequence. Biochemistry, 2021, 60, 1797-1807.	2.5	8
81	Molecular dynamics simulations reveal how H3K56 acetylation impacts nucleosome structure to promote DNA exposure for lesion sensing. DNA Repair, 2021, 107, 103201.	2.8	8
82	Variable impact of conformationally distinct DNA lesions on nucleosome structure and dynamics: Implications for nucleotide excision repair. DNA Repair, 2020, 87, 102768.	2.8	7
83	Mechanism of lesion verification by the human XPD helicase in nucleotide excision repair. Nucleic Acids Research, 2022, 50, 6837-6853.	14.5	6
84	Impact of DNA sequences on DNA â€˜openingâ€™ by the Rad4/XPC nucleotide excision repair complex. DNA Repair, 2021, 107, 103194.	2.8	5
85	The DNA damage-sensing NER repair factor XPC-RAD23B does not recognize bulky DNA lesions with a missing nucleotide opposite the lesion. DNA Repair, 2020, 96, 102985.	2.8	5
86	Visualizing Spontaneous DNA Dynamics and its Role in Mismatch Recognition by Damage Recognition Protein Rad4. Biophysical Journal, 2018, 114, 85a.	0.5	3
87	Light-induced modulation of DNA recognition by the Rad4/XPC damage sensor protein. RSC Chemical Biology, 2021, 2, 523-536.	4.1	3
88	The molecular mechanics program DUPLEX: Computing structures of carcinogen modified DNA by surveying the potential energy surface. Molecular Engineering, 1995, 5, 219-227.	0.2	0