Yan Xu

List of Publications by Year
in descending order

79 papers	4,242 citations	147566 31 h-index	114278 63 g-index
87 all docs	87 docs citations	87 times ranked	3743 citing authors

#	Article	IF	Citations
1	The new models of the human telomere d[AGGG(TTAGGG)3] in K+ solution. Bioorganic and Medicinal Chemistry, 2006, 14, 5584-5591.	1.4	373
2	Influenza Virus Z-RNAs Induce ZBP1-Mediated Necroptosis. Cell, 2020, 180, 1115-1129.e13.	13.5	288
3	Chemistry in human telomere biology: structure, function and targeting of telomere DNA/RNA. Chemical Society Reviews, 2011, 40, 2719.	18.7	287
4	Nanomechanical DNA origami 'single-molecule beacons' directly imaged by atomic force microscopy. Nature Communications, 2011, 2, 449.	5.8	247
5	(P)-Helicene Displays Chiral Selection in Binding to Z-DNA. Journal of the American Chemical Society, 2004, 126, 6566-6567.	6.6	215
6	Formation of the G-quadruplex and i-motif structures in retinoblastoma susceptibility genes (Rb). Nucleic Acids Research, 2006, 34, 949-954.	6.5	200
7	A Chiral Wedge Molecule Inhibits Telomerase Activity. Journal of the American Chemical Society, 2010, 132, 3778-3782.	6.6	179
8	G-Quadruplex Formation by Human Telomeric Repeats-Containing RNA in Na⁺ Solution. Journal of the American Chemical Society, 2008, 130, 11179-11184.	6.6	168
9	Telomeric repeat-containing RNA structure in living cells. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 14579-14584.	3.3	162
10	ADAR1 masks the cancer immunotherapeutic promise of ZBP1-driven necroptosis. Nature, 2022, 606, 594-602.	13.7	149
11	Targeting Human Telomeric Higher-Order DNA: Dimeric G-Quadruplex Units Serve as Preferred Binding Site. Journal of the American Chemical Society, 2013, 135, 18786-18789.	6.6	123
12	Consecutive Formation of Gâ€Quadruplexes in Human Telomericâ€Overhang DNA: A Protective Capping Structure for Telomere Ends. Angewandte Chemie - International Edition, 2009, 48, 7833-7836.	7.2	122
13	Characterization of human telomere RNA G-quadruplex structures in vitro and in living cells using 19F NMR spectroscopy. Nucleic Acids Research, 2017, 45, 5501-5511.	6.5	91
14	Structure of a human telomeric DNA sequence stabilized by 8-bromoguanosine substitutions, as determined by NMR in a K+ solution. FEBS Journal, 2007, 274, 3545-3556.	2.2	85
15	Click Chemistry for the Identification of Gâ€Quadruplex Structures: Discovery of a DNAâ€“RNA Gâ€Quadruplex. Angewandte Chemie - International Edition, 2009, 48, 3281-3284.	7.2	76
16	8-Methylguanosine:Â A Powerful Z-DNA Stabilizer. Journal of the American Chemical Society, 2003, 125, 13519-13524.	6.6	75
17	Hybrid-type and two-tetrad antiparallel telomere DNA G-quadruplex structures in living human cells. Nucleic Acids Research, 2019, 47, 4940-4947.	6.5	75
18	A U-Tetrad Stabilizes Human Telomeric RNA G-Quadruplex Structure. Journal of the American Chemical Society, 2010, 132, 7231-7233.	6.6	59

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19	Photochemical Approach to Probing Different DNA Structures. Angewandte Chemie - International Edition, 2006, 45, 1354-1362.	7.2	57
20	Efficient Generation of 2â€˜-Deoxyuridin-5-yl at 5â€˜-(G/C)AAXUXU-3â€˜ (X = Br, I) Sequences in Duplex DNA under UV Irradiation. Journal of the American Chemical Society, 2005, 127, 44-45.	6.6	56
21	Human Telomeric DNA Sequence-Specific Cleaving by G-Quadruplex Formation. Journal of the American Chemical Society, 2009, 131, 2871-2874.	6.6	55
22	Highly Efficient Photochemical 2â€˜-Deoxyribonolactone Formation at the Diagonal Loop of a 5-Iodouracil-Containing Antiparallel G-Quartet. Journal of the American Chemical Society, 2004, 126, 6274-6279.	6.6	53
23	Oligonucleotide Models of Telomeric DNA and RNA Form a Hybrid G-quadruplex Structure as a Potential Component of Telomeres. Journal of Biological Chemistry, 2012, 287, 41787-41796.	1.6	52
24	Structure-Dependent Binding of hnRNPA1 to Telomere RNA. Journal of the American Chemical Society, 2017, 139, 7533-7539.	6.6	48
25	An intramolecular antiparallel G-quadruplex formed by human telomere RNA. Chemical Communications, 2018, 54, 3944-3946.	2.2	46
26	Stable Lariat Formation Based on a G-Quadruplex Scaffold. Journal of the American Chemical Society, 2008, 130, 16470-16471.	6.6	45
27	Investigation of higher-order RNA G-quadruplex structures in vitro and in living cells by 19F NMR spectroscopy. Nature Protocols, 2018, 13, 652-665.	5.5	43
28	Structure, function and targeting of human telomere RNA. Methods, 2012, 57, 100-105.	1.9	41
29	Photochemical determination of different DNA structures. Nature Protocols, 2007, 2, 78-87.	5.5	35
30	Inhibition of Translation by Small RNA-Stabilized mRNA Structures in Human Cells. Journal of the American Chemical Society, 2011, 133, 19153-19159.	6.6	35
31	Efficient and Erroneous Incorporation of Oxidized DNA Precursors by Human DNA Polymerase Î·. Biochemistry, 2007, 46, 5515-5522.	1.2	34
32	Unusual Topological RNA Architecture with an Eight-Stranded Helical Fragment Containing A-, G-, and U-Tetrads. Journal of the American Chemical Society, 2017, 139, 2565-2568.	6.6	31
33	SWI/SNF-mediated chromatin remodeling induces Z-DNA formation on a nucleosome. Cell and Bioscience, 2012, 2, 3.	2.1	29
34	A Chemistry-Based Method To Detect Individual Telomere Length at a Single Chromosome Terminus. Journal of the American Chemical Society, 2013, 135, 14-17.	6.6	29
35	Telomeric DNAâ€“RNA-hybrid G-quadruplex exists in environmental conditions of HeLa cells. Chemical Communications, 2020, 56, 6547-6550.	2.2	29
36	Formation and stabilization of the telomeric antiparallel G-quadruplex and inhibition of telomerase by novel benzothioxanthene derivatives with anti-tumor activity. Scientific Reports, 2015, 5, 13693.	1.6	26

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37	I-motif and quadruplex-based device that can control a protein release or bind and release small molecule to influence biological processes. Bioorganic and Medicinal Chemistry, 2007, 15, 1275-1279.	1.4	25
38	Conjugation of Peptide Nucleic Acid with a Pyrrole/Imidazole Polyamide to Specifically Recognize and Cleave DNA. Angewandte Chemie - International Edition, 2013, 52, 13681-13684.	7.2	25
39	Antiparallel RNA G-quadruplex Formed by Human Telomere RNA Containing 8-Bromoguanosine. Scientific Reports, 2017, 7, 6695.	1.6	23
40	Gâ€Rich Sequenceâ€Specific Recognition and Scission of Human Genome by PNA/DNA Hybrid Gâ€Quadruplex Formation. Angewandte Chemie - International Edition, 2012, 51, 7198-7202.	7.2	22
41	Human Telomeric RNA in G-quadruplex Structure. Nucleic Acids Symposium Series, 2008, 52, 175-176.	0.3	21
42	A 6-mer Photocontrolled Oligonucleotide as an Effective Telomerase Inhibitor. Journal of the American Chemical Society, 2010, 132, 631-637.	6.6	21
43	Fluorescence imaging of chromosomal DNA using click chemistry. Scientific Reports, 2016, 6, 33217.	1.6	20
44	HnRNPA1 Specifically Recognizes the Base of Nucleotide at the Loop of RNA G-Quadruplex. Molecules, 2018, 23, 237.	1.7	20
45	A multi-functional guanine derivative for studying the DNA G-quadruplex structure. Analyst, The, 2017, 142, 4083-4088.	1.7	18
46	A Nucleoside Derivative 5-Vinyluridine (VrU) for Imaging RNA in Cells and Animals. Bioconjugate Chemistry, 2019, 30, 2958-2966.	1.8	17
47	A Simple and Sensitive ¹⁹Fâ€‰NMR Approach for Studying the Interaction of RNA Gâ€Quadruplex with Ligand Molecule and Protein. ChemistrySelect, 2017, 2, 4170-4175.	0.7	16
48	Studying DNA G-Quadruplex Aptamer by ¹⁹F NMR. ACS Omega, 2017, 2, 8843-8848.	1.6	16
49	2â€²-O-Methyl-8-methylguanosine as a Z-Form RNA Stabilizer for Structural and Functional Study of Z-RNA. Molecules, 2018, 23, 2572.	1.7	16
50	Improving Thermodynamic Stability and Anticoagulant Activity of a Thrombin Binding Aptamer by Incorporation of 8-trifluoromethyl-2â€²-deoxyguanosine. Journal of Medicinal Chemistry, 2021, 64, 711-718.	2.9	16
51	Evidence for Gâ€Quadruplex DNA in Human Cells. ChemBioChem, 2013, 14, 927-928.	1.3	15
52	Finding a human telomere DNAâ€“RNA hybrid G-quadruplex formed by human telomeric 6-mer RNA and 16-mer DNA using click chemistry: A protective structure for telomere end. Bioorganic and Medicinal Chemistry, 2014, 22, 4419-4421.	1.4	15
53	DNA nanotechnology enhanced single-molecule biosensing and imaging. TrAC - Trends in Analytical Chemistry, 2021, 140, 116267.	5.8	15
54	Oligonucleotides DNA containing 8-trifluoromethyl-2â€²-deoxyguanosine for observing Z-DNA structure. Nucleic Acids Research, 2020, 48, 7041-7051.	6.5	14

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55	Structural and functional characterizations of the G-quartet and i-motif elements in retinoblastoma susceptibility genes (Rb). Nucleic Acids Symposium Series, 2005, 49, 177-178.	0.3	11
56	Recent progress in human telomere RNA structure and function. Bioorganic and Medicinal Chemistry Letters, 2018, 28, 2577-2584.	1.0	11
57	Characterization of Structure and Catalytic Activity of a Complex between Heme and an All Parallel-Stranded Tetrameric G-Quadruplex Formed from DNA/RNA Chimera Sequence d(TTA)r(GGG)dT. Bulletin of the Chemical Society of Japan, 2020, 93, 621-629.	2.0	11
58	19F NMR Spectroscopy for the Analysis of DNA G-Quadruplex Structures Using 19F-Labeled Nucleobase. Methods in Molecular Biology, 2019, 2035, 407-433.	0.4	10
59	The recognition of higher-order Gâ€“quadruplex by chiral cyclic-helicene molecules. Nucleic Acids Symposium Series, 2006, 50, 183-184.	0.3	9
60	The new models of the human telomere DNA in K+ solution revealed by NMR analysis assisted by the incorporation of 8-bromoguanines. Nucleic Acids Symposium Series, 2006, 50, 45-46.	0.3	9
61	Human Telomere RNA: A Potential Target for Ligand Recognition. Current Pharmaceutical Design, 2012, 18, 2096-2101.	0.9	9
62	A Small Ligand That Selectively Binds to the G-quadruplex at the Human Vascular Endothelial Growth Factor Internal Ribosomal Entry Site and Represses the Translation. Frontiers in Chemistry, 2021, 9, 781198.	1.8	9
63	SIPA1 Enhances Aerobic Glycolysis Through HIF-2Î± Pathway to Promote Breast Cancer Metastasis. Frontiers in Cell and Developmental Biology, 2021, 9, 779169.	1.8	9
64	The Conformational Study of Two Carbocyclic Nucleosides: Why Carbocyclic Nucleic Acids (CarNAs) Form More Stable Duplexes with RNA than DNA Does. Journal of Biomolecular Structure and Dynamics, 2002, 20, 437-446.	2.0	7
65	Sipa1 deficiency unleashes a host-immune mechanism eradicating chronic myelogenous leukemia-initiating cells. Nature Communications, 2018, 9, 914.	5.8	7
66	Thymic Development of a Unique Bone Marrowâ€“Resident Innate-like T Cell Subset with a Potent Innate Immune Function. Journal of Immunology, 2019, 203, 167-177.	0.4	7
67	Linear consecutive hexaoxazoles as G4 ligands inducing chair-type anti-parallel topology of a telomeric G-quadruplex. RSC Advances, 2020, 10, 43319-43323.	1.7	7
68	Binding of Distamycin A to UV-Damaged DNA. Journal of the American Chemical Society, 2004, 126, 11017-11023.	6.6	6
69	Systematic Approach to DNA Aptamer Design Using Amino Acidâ€“Nucleic Acid Hybrids (ANHs) Targeting Thrombin. ACS Biomaterials Science and Engineering, 2021, 7, 1338-1343.	2.6	6
70	Allosteric control of nanomechanical DNA origami pinching devices for enhanced target binding. Chemical Communications, 2017, 53, 8276-8279.	2.2	5
71	Direct Light-up of cAMP Derivatives in Living Cells by Click Reactions. Molecules, 2013, 18, 12909-12915.	1.7	4
72	The recognition of Z-DNA by chiral helicene. Nucleic Acids Symposium Series, 2004, 48, 87-88.	0.3	3

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73	Stability and properties of Z-DNA containing artificial nucleobase 2â€²-O-methyl-8-methyl guanosine. Bioorganic and Medicinal Chemistry, 2019, 27, 364-369.	1.4	3
74	Observation of Zâ€DNA Structure via the Synthesis of Oligonucleotide DNA Containing 8â€Trifluoromethylâ€2â€Deoxyguanosine. Current Protocols, 2021, 1, e28.	1.3	2
75	Nanomechanical DNA origami devices as versatile molecular sensors. , 2012, , .		1
76	Clipping of Telomere from Human Chromosomes Using a Chemistryâ€Based Artificial Restriction DNA Cutter. Current Protocols in Nucleic Acid Chemistry, 2015, 61, 6.13.1-6.13.13.	0.5	1
77	Conformation of G-quadruplex Controlled by Click Reaction. Molecules, 2020, 25, 4339.	1.7	1
78	Photoreactivity of 5-iodouracil-containing telomeric DNA. Nucleic Acids Symposium Series, 2003, 3, 71-72.	0.3	0
79	CHAPTER 12. Covalent and Non-covalent Conjugates of Oligonucleotides as Artificial Restriction DNA Cutters. RSC Biomolecular Sciences, 2012, , 278-295.	0.4	0