Jianmin Gao

List of Publications by Year in descending order

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117625 155660 3,196 70 34 55 citations h-index g-index papers 77 77 77 3453 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	A Four-Base Paired Genetic Helix with Expanded Size. Science, 2003, 302, 868-871.	12.6	224
2	Localized thermodynamic coupling between hydrogen bonding and microenvironment polarity substantially stabilizes proteins. Nature Structural and Molecular Biology, 2009, 16, 684-690.	8.2	178
3	Toward a New Genetic System with Expanded Dimensions:  Size-Expanded Analogues of Deoxyadenosine and Thymidine. Journal of the American Chemical Society, 2004, 126, 1102-1109.	13.7	141
4	Fast and selective labeling of N-terminal cysteines at neutral pH via thiazolidino boronate formation. Chemical Science, 2016, 7, 4589-4593.	7.4	118
5	Libraries of Composite Polyfluors Built from Fluorescent Deoxyribosides. Journal of the American Chemical Society, 2002, 124, 11590-11591.	13.7	115
6	Iminoboronate-Based Peptide Cyclization That Responds to pH, Oxidation, and Small Molecule Modulators. Journal of the American Chemical Society, 2016, 138, 2098-2101.	13.7	106
7	Exploring and Exploiting Polarâ [^] ;ï€ Interactions with Fluorinated Aromatic Amino Acids. Accounts of Chemical Research, 2013, 46, 907-915.	15.6	104
8	Determinants for Dephosphorylation of the RNA Polymerase II C-Terminal Domain by Scp1. Molecular Cell, 2006, 24, 759-770.	9.7	103
9	Expanded-Size Bases in Naturally Sized DNA:Â Evaluation of Steric Effects in Watsonâ°Crick Pairing. Journal of the American Chemical Society, 2004, 126, 11826-11831.	13.7	102
10	Targeting biomolecules with reversible covalent chemistry. Current Opinion in Chemical Biology, 2016, 34, 110-116.	6.1	100
11	Size-Expanded Analogues of dG and dC:Â Synthesis and Pairing Properties in DNA. Journal of Organic Chemistry, 2005, 70, 639-647.	3.2	97
12	Modified DNA Analogues That Sense Light Exposure with Color Changes. Journal of the American Chemical Society, 2004, 126, 12748-12749.	13.7	92
13	Helix-Forming Properties of Size-Expanded DNA, an Alternative Four-Base Genetic Form. Journal of the American Chemical Society, 2005, 127, 1396-1402.	13.7	88
14	Assembly of the Complete Eight-Base Artificial Genetic Helix, xDNA, and Its Interaction with the Natural Genetic System. Angewandte Chemie - International Edition, 2005, 44, 3118-3122.	13.8	83
15	Targeting bacteria via iminoboronate chemistry of amine-presenting lipids. Nature Communications, 2015, 6, 6561.	12.8	77
16	Toward a Designed, Functioning Genetic System with Expanded-Size Base Pairs:  Solution Structure of the Eight-Base xDNA Double Helix. Journal of the American Chemical Society, 2006, 128, 14704-14711.	13.7	71
17	Expanding the Fluorous Arsenal: Tetrafluorinated Phenylalanines for Protein Design. Journal of the American Chemical Society, 2009, 131, 18-19.	13.7	68
18	Fast Diazaborine Formation of Semicarbazide Enables Facile Labeling of Bacterial Pathogens. Journal of the American Chemical Society, 2017, 139, 871-878.	13.7	65

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19	Probing the Folding Transition State Structure of the Villin Headpiece Subdomain via Side Chain and Backbone Mutagenesis. Journal of the American Chemical Society, 2009, 131, 7470-7476.	13.7	64
20	Iminoboronate Formation Leads to Fast and Reversible Conjugation Chemistry of αâ€Nucleophiles at Neutral pH. Chemistry - A European Journal, 2015, 21, 14748-14752.	3.3	62
21	Dielectrophoresis assisted rapid, selective and single cell detection of antibiotic resistant bacteria with G-FETs. Biosensors and Bioelectronics, 2020, 156, 112123.	10.1	62
22	Oligodeoxyfluorosides: strong sequence dependence of fluorescence emission. Tetrahedron, 2007, 63, 3427-3433.	1.9	61
23	Versatile Bioconjugation Chemistries of <i>ortho</i> of Chemical Research, 2018, 51, 2198-2206.	15.6	60
24	Efficient Replication Bypass of Sizeâ€Expanded DNA Base Pairs in Bacterial Cells. Angewandte Chemie - International Edition, 2009, 48, 4524-4527.	13.8	54
25	Solubilized Gramicidin A as Potential Systemic Antibiotics. ChemBioChem, 2012, 13, 51-55.	2.6	53
26	Phage Display of Dynamic Covalent Binding Motifs Enables Facile Development of Targeted Antibiotics. Journal of the American Chemical Society, 2018, 140, 6137-6145.	13.7	50
27	Understanding the mechanism of βâ€sheet folding from a chemical and biological perspective. Biopolymers, 2008, 90, 751-758.	2.4	48
28	Highly Specific Heterodimerization Mediated by Quadrupole Interactions. Angewandte Chemie - International Edition, 2010, 49, 8635-8639.	13.8	44
29	Fast and Stable Nâ€Terminal Cysteine Modification through Thiazolidino Boronate Mediated Acyl Transfer. Angewandte Chemie - International Edition, 2020, 59, 14246-14250.	13.8	44
30	Highly sensitive amyloid detection enabled by thioflavin T dimers. Molecular BioSystems, 2010, 6, 1791.	2.9	40
31	Stacked Fluoroaromatics as Supramolecular Synthons for Programming Protein Dimerization Specificity. Angewandte Chemie - International Edition, 2012, 51, 103-107.	13.8	39
32	Lysine-Targeting Reversible Covalent Inhibitors with Long Residence Time. Journal of the American Chemical Society, 2022, 144, 1152-1157.	13.7	39
33	Amide-to-E-Olefin versus Amide-to-Ester Backbone H-Bond Perturbations:Â Evaluating the Oâ^'O Repulsion for Extracting H-Bond Energies. Journal of the American Chemical Society, 2006, 128, 15948-15949.	13.7	38
34	Toward quantification of protein backbone–backbone hydrogen bonding energies: An energetic analysis of an amideâ€toâ€ester mutation in an αâ€helix within a protein. Protein Science, 2008, 17, 1096-1101.	7.6	38
35	Fluorescent xDNA nucleotides as efficient substrates for a template-independent polymerase. Nucleic Acids Research, 2011, 39, 1586-1594.	14.5	38
36	Cofactor-Free Detection of Phosphatidylserine with Cyclic Peptides Mimicking Lactadherin. Journal of the American Chemical Society, 2011, 133, 15280-15283.	13.7	30

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37	Fluorogenic diazaborine formation of semicarbazide with designed coumarin derivatives. Chemical Communications, 2017, 53, 12532-12535.	4.1	28
38	Toward a designed genetic system with biochemical function: polymerase synthesis of single and multiple size-expanded DNA base pairs. Organic and Biomolecular Chemistry, 2010, 8, 2704.	2.8	25
39	Synthesis of Tetrafluorinated Aromatic Amino Acids with Distinct Signatures in ¹⁹ F NMR. Organic Letters, 2012, 14, 528-531.	4.6	25
40	Genetically encoded fluorophenylalanines enable insights into the recognition of lysine trimethylation by an epigenetic reader. Chemical Communications, 2016, 52, 12606-12609.	4.1	23
41	N, S-Double Labeling of N-Terminal Cysteines via an Alternative Conjugation Pathway with 2-Cyanobenzothiazole. Journal of Organic Chemistry, 2020, 85, 1756-1763.	3.2	22
42	Fluorinated Aromatic Amino Acids Distinguish Cation-Ï€ Interactions from Membrane Insertion. Journal of Biological Chemistry, 2015, 290, 19334-19342.	3.4	21
43	Facile Synthesis of Tetrafluorotyrosine and Its Application in pH Triggered Membrane Lysis. Organic Letters, 2011, 13, 236-239.	4.6	18
44	Experimental Evaluation of CH–π Interactions in a Protein Core. Chemistry - A European Journal, 2012, 18, 5832-5836.	3.3	18
45	The Association of the Vanin-1 N131S Variant with Blood Pressure Is Mediated by Endoplasmic Reticulum-Associated Degradation and Loss of Function. PLoS Genetics, 2014, 10, e1004641.	3.5	16
46	Dynamic Formation of Imidazolidino Boronate Enables Design of Cysteine-Responsive Peptides. Organic Letters, 2018, 20, 20-23.	4.6	15
47	Iminoboronate-Mediated Peptide Cyclization with Lysine Homologues. Synlett, 2017, 28, 1913-1916.	1.8	14
48	Fast and Stable Nâ€Terminal Cysteine Modification through Thiazolidino Boronate Mediated Acyl Transfer. Angewandte Chemie, 2020, 132, 14352-14356.	2.0	13
49	Illuminating the lipidome to advance biomedical research: peptide-based probes of membrane lipids. Future Medicinal Chemistry, 2013, 5, 947-959.	2.3	12
50	Fast and Cysteineâ€5pecific Modification of Peptides, Proteins and Bacteriophage Using Chlorooximes. Chemistry - A European Journal, 2022, 28, .	3.3	12
51	A genome-wide atlas of antibiotic susceptibility targets and pathways to tolerance. Nature Communications, 2022, 13 , .	12.8	12
52	A FlAsH–Tetracysteine Assay for Quantifying the Association and Orientation of Transmembrane αâ€Helices. ChemBioChem, 2011, 12, 1018-1022.	2.6	10
53	Conformational Properties of Peptides Corresponding to the Ebolavirus GP2 Membrane-Proximal External Region in the Presence of Micelle-Forming Surfactants and Lipids. Biochemistry, 2013, 52, 3393-3404.	2.5	8
54	Understanding lipid recognition by protein-mimicking cyclic peptides. Tetrahedron, 2014, 70, 7632-7638.	1.9	8

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55	Gramicidinâ€A Mutants with Antibiotic Activity against Both Gramâ€Positive and Gramâ€Negative Bacteria. ChemMedChem, 2016, 11, 629-636.	3.2	7
56	Biocompatible conjugation of Tris base to 2-acetyl and 2-formyl phenylboronic acid. Organic and Biomolecular Chemistry, 2019, 17, 5908-5912.	2.8	7
57	Radiolabeled Cationic Peptides for Targeted Imaging of Infection. Contrast Media and Molecular Imaging, 2019, 2019, 1-11.	0.8	7
58	N-Terminal cysteine mediated backbone-side chain cyclization for chemically enhanced phage display. Chemical Science, 2022, 13, 8349-8354.	7.4	7
59	Peptide Probes of Colistin Resistance Discovered via Chemically Enhanced Phage Display. ACS Infectious Diseases, 2020, 6, 2410-2418.	3.8	6
60	Effects of lysine methylation on gramicidin A channel folding in lipid membranes. Biopolymers, 2013, 100, 656-661.	2.4	5
61	A split ligand for lanthanide binding: facile evaluation of dimerizing proteins. Chemical Communications, 2012, 48, 2997.	4.1	4
62	Towards the Replication of xDNA, a Size-expanded Unnatural Genetic System. Nucleic Acids Symposium Series, 2008, 52, 455-456.	0.3	3
63	Nonâ€additive stabilization by halogenated amino acids reveals protein plasticity on a subâ€angstrom scale. Protein Science, 2017, 26, 2051-2058.	7.6	3
64	Photoinduced Oscillations and Pulse Waves in the Hydrogen Peroxide–Sulfite–Ferrocyanide Reaction. Journal of Physical Chemistry A, 2018, 122, 1175-1184.	2.5	3
65	Rapid capillary mixing experiments for the analysis of hydrophobic membrane complexes directly from aqueous lipid bilayer solutions. Analyst, The, 2017, 142, 310-315.	3.5	2
66	Chemistry perspectives of reversible covalent drugs. Annual Reports in Medicinal Chemistry, 2021, , 75-94.	0.9	2
67	Recent Advances in Peptide Immunomodulators. Current Topics in Medicinal Chemistry, 2015, 16, 187-205.	2.1	2
68	Metalâ€Assisted Folding of Prolinomycin Allows Facile Design of Functional Peptides. ChemBioChem, 2017, 18, 479-482.	2.6	1
69	Cationâ~Ï€ Lights Up "Halo― Biochemistry, 2017, 56, 5221-5222.	2.5	0
70	Determinants for dephosphorylation of the RNA polymerase II Câ€terminal domain by Scp1. FASEB Journal, 2007, 21, A1032.	0.5	0