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List of Publications by Year
in descending order

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64 papers	1,820 citations	218381 26 h-index	276539 41 g-index
67 all docs	67 docs citations	67 times ranked	2328 citing authors

#	Article	IF	Citations
1	The Chain-Length Dependence Test. Accounts of Chemical Research, 2006, 39, 11-20.	7.6	173
2	A chemical screen for biological small moleculeâ€“RNA conjugates reveals CoA-linked RNA. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 7768-7773.	3.3	105
3	Enzyme-Linked Small-Molecule Detection Using Split Aptamer Ligation. Analytical Chemistry, 2012, 84, 6104-6109.	3.2	105
4	In vitro selection of an XNA aptamer capable of small-molecule recognition. Nucleic Acids Research, 2018, 46, 8057-8068.	6.5	89
5	Small-Molecule-Dependent Split Aptamer Ligation. Journal of the American Chemical Society, 2011, 133, 12426-12429.	6.6	85
6	High-Throughput Enantiopurity Analysis Using Enantiomeric DNA-Based Sensors. Journal of the American Chemical Society, 2015, 137, 4198-4206.	6.6	76
7	FAIL Is Not a Four-Letter Word: A Theoretical Framework for Exploring Undergraduate Studentsâ€™ Approaches to Academic Challenge and Responses to Failure in STEM Learning Environments. CBE Life Sciences Education, 2019, 18, ar11.	1.1	76
8	Biomolecular Assemblies: Moving from Observation to Predictive Design. Chemical Reviews, 2018, 118, 11519-11574.	23.0	71
9	Folding-Promoted Methylation of a Helical DMAP Analogue. Journal of the American Chemical Society, 2004, 126, 1648-1649.	6.6	61
10	General Approach for Engineering Small-Molecule-Binding DNA Split Aptamers. Analytical Chemistry, 2013, 85, 9916-9923.	3.2	60
11	Total Synthesis of (S)-Equol. Organic Letters, 2006, 8, 5441-5443.	2.4	59
12	Enhancing aptamer function and stability via in vitro selection using modified nucleic acids. Methods, 2016, 106, 29-36.	1.9	54
13	Templated Synthesis of Peptide Nucleic Acids via Sequence-Selective Base-Filling Reactions. Journal of the American Chemical Society, 2009, 131, 11347-11349.	6.6	47
14	Temporal Control of Aptamer Biosensors Using Covalent Self-Caging To Shift Equilibrium. Journal of the American Chemical Society, 2016, 138, 6328-6331.	6.6	45
15	Bilingual Peptide Nucleic Acids: Encoding the Languages of Nucleic Acids and Proteins in a Single Self-Assembling Biopolymer. Journal of the American Chemical Society, 2019, 141, 19038-19047.	6.6	40
16	Single-Site Modifications and Their Effect on the Folding Stability ofm-Phenylene Ethynylene Oligomers. Organic Letters, 2004, 6, 889-892.	2.4	38
17	Fluorescent RNA Labeling Using Self-Alkylating Ribozymes. ACS Chemical Biology, 2014, 9, 1680-1684.	1.6	35
18	Evaluating the Effect of Ionic Strength on Duplex Stability for PNA Having Negatively or Positively Charged Side Chains. PLoS ONE, 2013, 8, e58670.	1.1	35

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19	Controlling selfâ€assembly of DNA â€polymer conjugates for applications in imaging and drug delivery. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2015, 7, 282-297.	3.3	34
20	Thermoreversible Control of Nucleic Acid Structure and Function with Glyoxal Caging. Journal of the American Chemical Society, 2020, 142, 17766-17781.	6.6	33
21	Pyridine-Containingm-Phenylene Ethynylene Oligomers Having Tunable Basicities. Organic Letters, 2004, 6, 659-662.	2.4	31
22	Accelerating Strain-Promoted Azideâ€“Alkyne Cycloaddition Using Micellar Catalysis. Bioconjugate Chemistry, 2015, 26, 1687-1691.	1.8	31
23	Enhanced Methylation Rate within a Foldable Molecular Receptor. Journal of Organic Chemistry, 2004, 69, 9234-9237.	1.7	30
24	Selective Enrichment of A-to-I Edited Transcripts from Cellular RNA Using Endonuclease V. Journal of the American Chemical Society, 2020, 142, 5241-5251.	6.6	30
25	Single-Molecule Kinetic Investigation of Cocaine-Dependent Split-Aptamer Assembly. Analytical Chemistry, 2018, 90, 12964-12970.	3.2	29
26	Unzipping of A-Form DNA-RNA, A-Form DNA-PNA, and B-Form DNA-DNA in the Î±-Hemolysin Nanopore. Biophysical Journal, 2016, 110, 306-314.	0.2	26
27	Chemical Labeling and Affinity Capture of Inosine-Containing RNAs Using Acrylamidofluorescein. Bioconjugate Chemistry, 2018, 29, 2899-2903.	1.8	26
28	Reversible Oligonucleotide Chain Blocking Enables Bead Capture and Amplification of T-Cell Receptor Î± and Î² Chain mRNAs. Journal of the American Chemical Society, 2016, 138, 11073-11076.	6.6	20
29	RE-SELEX: restriction enzyme-based evolution of structure-switching aptamer biosensors. Chemical Science, 2021, 12, 11692-11702.	3.7	20
30	Peptide nucleic acids harness dual information codes in a single molecule. Chemical Communications, 2020, 56, 1926-1935.	2.2	18
31	3,3â€²-Dioctadecyloxacarbocyanine perchlorate (DiO) as a fluorogenic probe for measurement of critical micelle concentration. Analytical Methods, 2015, 7, 6877-6882.	1.3	16
32	Effect of Buffer Conditions and Organic Cosolvents on the Rate of Strain-Promoted Azideâ€“Alkyne Cycloaddition. Journal of Organic Chemistry, 2016, 81, 6816-6819.	1.7	15
33	Convenient and Scalable Synthesis of Fmoc-Protected Peptide Nucleic Acid Backbone. Journal of Nucleic Acids, 2012, 2012, 1-5.	0.8	13
34	Fluorogenic Photoaffinity Labeling of Proteins in Living Cells. Bioconjugate Chemistry, 2019, 30, 1309-1313.	1.8	13
35	Chemical Profiling of Aâ€toâ€I RNA Editing Using a Clickâ€Compatible Phenylacrylamide. Chemistry - A European Journal, 2020, 26, 9874-9878.	1.7	13
36	A Scientistâ€™s Guide to Social Media. ACS Central Science, 2020, 6, 1-5.	5.3	12

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37	Modulating the Substrate Selectivity of DNA Aptamers Using Surfactants. Langmuir, 2015, 31, 11769-11773.	1.6	11
38	Probing the Mechanism of Structure-Switching Aptamer Assembly by Super-Resolution Localization of Individual DNA Molecules. Analytical Chemistry, 2020, 92, 6909-6917.	3.2	11
39	Templating effect in DNA proximity ligation enables use of non-bioorthogonal chemistry in biological fluids. Artificial DNA, PNA & XNA, 2012, 3, 123-128.	1.4	10
40	Direct Immunodetection of Global Aâ€toâ€I RNA Editing Activity with a Chemiluminescent Bioassay. Angewandte Chemie - International Edition, 2021, 60, 17009-17017.	7.2	10
41	Evaluating the effect of ionic strength on PNA:DNA duplex formation kinetics. RSC Chemical Biology, 2021, 2, 1249-1256.	2.0	10
42	Collaborating with Undergraduates To Contribute to Biochemistry Community Resources. Biochemistry, 2018, 57, 383-389.	1.2	9
43	Small-Molecule Sequestration Using Aptamer-Functionalized Membranes. , 2019, 1, 568-572.		9
44	Systematically Modulating Aptamer Affinity and Specificity by Guanosine-to-Inosine Substitution. Analytical Chemistry, 2022, , .	3.2	9
45	A novel indicator series for measuring pKa values in acetonitrile. Tetrahedron, 2004, 60, 7287-7292.	1.0	8
46	Thermostability Trends of TNA:DNA Duplexes Reveal Strong Purine Dependence. ACS Synthetic Biology, 2019, 8, 1144-1152.	1.9	8
47	DNA/TNA mesoscopic modeling of melting temperatures suggests weaker hydrogen bonding of CG than in DNA/RNA. Chemical Physics Letters, 2020, 749, 137413.	1.2	8
48	Highâ€Throughput Measurement of Smallâ€Molecule Enantiopurity by Using Flow Cytometry. ChemBioChem, 2018, 19, 1853-1857.	1.3	7
49	EndoVIPERâ€seq for Improved Detection of Aâ€toâ€I Editing Sites in Cellular RNA. Current Protocols in Chemical Biology, 2020, 12, e82.	1.7	7
50	Combating small molecule environmental contaminants: detection and sequestration using functional nucleic acids. Chemical Science, 2022, 13, 7670-7684.	3.7	7
51	Sequestration and Removal of Multiple Small-Molecule Contaminants Using an Optimized Aptamer-Based Ultrafiltration System. Bioconjugate Chemistry, 2021, 32, 2043-2051.	1.8	6
52	Differential DNA and RNA sequence discrimination by PNA having charged side chains. Bioorganic and Medicinal Chemistry Letters, 2014, 24, 2360-2363.	1.0	5
53	Single-Molecule Kinetics Show DNA Pyrimidine Content Strongly Affects RNA:DNA and TNA:DNA Heteroduplex Dissociation Rates. ACS Synthetic Biology, 2020, 9, 249-253.	1.9	4
54	Protein-based molecular recognition tools for detecting and profiling RNA modifications. Current Opinion in Structural Biology, 2021, 69, 1-10.	2.6	3

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55	Expansion of the Genetic Alphabet: Unnatural Nucleobases and Their Applications. Journal of Nucleic Acids, 2012, 2012, 1-2.	0.8	2
56	Learning from the unexpected in life and DNA self-assembly. Beilstein Journal of Organic Chemistry, 2015, 11, 2713-2720.	1.3	2
57	Synthesis of comb-shaped DNA using a non-nucleosidic branching phosphoramidite. Organic and Biomolecular Chemistry, 2018, 16, 4659-4664.	1.5	2
58	Covalent live-cell labeling of proteins using a photoreactive fluorogen. Methods in Enzymology, 2020, 639, 355-377.	0.4	2
59	Synthesis and polymerase incorporation of Î²,Î³-modified Î±-l-threofuranosyl thymine triphosphate mimics. Bioorganic and Medicinal Chemistry Letters, 2016, 26, 3958-3962.	1.0	1
60	Direct Immunodetection of Global Aâ€toâ€I RNA Editing Activity with a Chemiluminescent Bioassay. Angewandte Chemie, 2021, 133, 17146-17154.	1.6	1
61	Sweet sensation: Developing a single-cell fluorescent reporter of glycolytic heterogeneity. Cell Chemical Biology, 2021, 28, 1539-1541.	2.5	1
62	Stimuli-responsive assembly of bilingual peptide nucleic acids. RSC Chemical Biology, 0, , .	2.0	1
63	Profile: early excellence in physical organic chemistry. Journal of Physical Organic Chemistry, 2016, 29, 380-381.	0.9	0
64	Selfâ€Care Is Not the Enemy of Performance. ChemBioChem, 2019, 20, 2203-2206.	1.3	0