## Jennifer M Heemstra

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Systematically Modulating Aptamer Affinity and Specificity by Guanosine-to-Inosine Substitution. Analytical Chemistry, 2022, , .	6.5	9
2	Combating small molecule environmental contaminants: detection and sequestration using functional nucleic acids. Chemical Science, 2022, 13, 7670-7684.	7.4	7
3	RE-SELEX: restriction enzyme-based evolution of structure-switching aptamer biosensors. Chemical Science, 2021, 12, 11692-11702.	7.4	20
4	Direct Immunodetection of Global Aâ€ŧoâ€ŀ RNA Editing Activity with a Chemiluminescent Bioassay. Angewandte Chemie, 2021, 133, 17146-17154.	2.0	1
5	Direct Immunodetection of Global Aâ€ŧoâ€ŀ RNA Editing Activity with a Chemiluminescent Bioassay. Angewandte Chemie - International Edition, 2021, 60, 17009-17017.	13.8	10
6	Protein-based molecular recognition tools for detecting and profiling RNA modifications. Current Opinion in Structural Biology, 2021, 69, 1-10.	5.7	3
7	Sequestration and Removal of Multiple Small-Molecule Contaminants Using an Optimized Aptamer-Based Ultrafiltration System. Bioconjugate Chemistry, 2021, 32, 2043-2051.	3.6	6
8	Evaluating the effect of ionic strength on PNA:DNA duplex formation kinetics. RSC Chemical Biology, 2021, 2, 1249-1256.	4.1	10
9	Sweet sensation: Developing a single-cell fluorescent reporter of glycolytic heterogeneity. Cell Chemical Biology, 2021, 28, 1539-1541.	5.2	1
10	A Scientist's Guide to Social Media. ACS Central Science, 2020, 6, 1-5.	11.3	12
11	Thermoreversible Control of Nucleic Acid Structure and Function with Glyoxal Caging. Journal of the American Chemical Society, 2020, 142, 17766-17781.	13.7	33
12	EndoVIPERâ€seq for Improved Detection of Aâ€ŧoâ€ŀ Editing Sites in Cellular RNA. Current Protocols in Chemical Biology, 2020, 12, e82.	1.7	7
13	Chemical Profiling of Aâ€ŧoâ€ŀ RNA Editing Using a Click ompatible Phenylacrylamide. Chemistry - A European Journal, 2020, 26, 9874-9878.	3.3	13
14	Selective Enrichment of A-to-I Edited Transcripts from Cellular RNA Using Endonuclease V. Journal of the American Chemical Society, 2020, 142, 5241-5251.	13.7	30
15	Peptide nucleic acids harness dual information codes in a single molecule. Chemical Communications, 2020, 56, 1926-1935.	4.1	18
16	Single-Molecule Kinetics Show DNA Pyrimidine Content Strongly Affects RNA:DNA and TNA:DNA Heteroduplex Dissociation Rates. ACS Synthetic Biology, 2020, 9, 249-253.	3.8	4
17	Covalent live-cell labeling of proteins using a photoreactive fluorogen. Methods in Enzymology, 2020, 639, 355-377.	1.0	2
18	Probing the Mechanism of Structure-Switching Aptamer Assembly by Super-Resolution Localization of Individual DNA Molecules. Analytical Chemistry, 2020, 92, 6909-6917.	6.5	11

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19	DNA/TNA mesoscopic modeling of melting temperatures suggests weaker hydrogen bonding of CG than in DNA/RNA. Chemical Physics Letters, 2020, 749, 137413.	2.6	8
20	Small-Molecule Sequestration Using Aptamer-Functionalized Membranes. , 2019, 1, 568-572.		9
21	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.	13.7	40
22	Selfâ€Care Is Not the Enemy of Performance. ChemBioChem, 2019, 20, 2203-2206.	2.6	0
23	<i>FAIL</i> Is Not a Four-Letter Word: A Theoretical Framework for Exploring Undergraduate Students' Approaches to Academic Challenge and Responses to Failure in STEM Learning Environments. CBE Life Sciences Education, 2019, 18, ar11.	2.3	76
24	Fluorogenic Photoaffinity Labeling of Proteins in Living Cells. Bioconjugate Chemistry, 2019, 30, 1309-1313.	3.6	13
25	Thermostability Trends of TNA:DNA Duplexes Reveal Strong Purine Dependence. ACS Synthetic Biology, 2019, 8, 1144-1152.	3.8	8
26	Collaborating with Undergraduates To Contribute to Biochemistry Community Resources. Biochemistry, 2018, 57, 383-389.	2.5	9
27	Biomolecular Assemblies: Moving from Observation to Predictive Design. Chemical Reviews, 2018, 118, 11519-11574.	47.7	71
28	Single-Molecule Kinetic Investigation of Cocaine-Dependent Split-Aptamer Assembly. Analytical Chemistry, 2018, 90, 12964-12970.	6.5	29
29	Highâ€Throughput Measurement of Smallâ€Molecule Enantiopurity by Using Flow Cytometry. ChemBioChem, 2018, 19, 1853-1857.	2.6	7
30	In vitro selection of an XNA aptamer capable of small-molecule recognition. Nucleic Acids Research, 2018, 46, 8057-8068.	14.5	89
31	Chemical Labeling and Affinity Capture of Inosine-Containing RNAs Using Acrylamidofluorescein. Bioconjugate Chemistry, 2018, 29, 2899-2903.	3.6	26
32	Synthesis of comb-shaped DNA using a non-nucleosidic branching phosphoramidite. Organic and Biomolecular Chemistry, 2018, 16, 4659-4664.	2.8	2
33	Profile: early excellence in physical organic chemistry. Journal of Physical Organic Chemistry, 2016, 29, 380-381.	1.9	0
34	Temporal Control of Aptamer Biosensors Using Covalent Self-Caging To Shift Equilibrium. Journal of the American Chemical Society, 2016, 138, 6328-6331.	13.7	45
35	Synthesis and polymerase incorporation of β,γ-modified α-l-threofuranosyl thymine triphosphate mimics. Bioorganic and Medicinal Chemistry Letters, 2016, 26, 3958-3962	2.2	1
36	Reversible Oligonucleotide Chain Blocking Enables Bead Capture and Amplification of T-Cell Receptor α and β Chain mRNAs. Journal of the American Chemical Society, 2016, 138, 11073-11076.	13.7	20

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37	Effect of Buffer Conditions and Organic Cosolvents on the Rate of Strain-Promoted Azide–Alkyne Cycloaddition. Journal of Organic Chemistry, 2016, 81, 6816-6819.	3.2	15
38	Unzipping of A-Form DNA-RNA, A-Form DNA-PNA, and B-Form DNA-DNA in the α-Hemolysin Nanopore. Biophysical Journal, 2016, 110, 306-314.	0.5	26
39	Enhancing aptamer function and stability via in vitro selection using modified nucleic acids. Methods, 2016, 106, 29-36.	3.8	54
40	Learning from the unexpected in life and DNA self-assembly. Beilstein Journal of Organic Chemistry, 2015, 11, 2713-2720.	2.2	2
41	High-Throughput Enantiopurity Analysis Using Enantiomeric DNA-Based Sensors. Journal of the American Chemical Society, 2015, 137, 4198-4206.	13.7	76
42	3,3′-Dioctadecyloxacarbocyanine perchlorate (DiO) as a fluorogenic probe for measurement of critical micelle concentration. Analytical Methods, 2015, 7, 6877-6882.	2.7	16
43	Accelerating Strain-Promoted Azide–Alkyne Cycloaddition Using Micellar Catalysis. Bioconjugate Chemistry, 2015, 26, 1687-1691.	3.6	31
44	Modulating the Substrate Selectivity of DNA Aptamers Using Surfactants. Langmuir, 2015, 31, 11769-11773.	3.5	11
45	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.	6.1	34
46	Fluorescent RNA Labeling Using Self-Alkylating Ribozymes. ACS Chemical Biology, 2014, 9, 1680-1684.	3.4	35
47	Differential DNA and RNA sequence discrimination by PNA having charged side chains. Bioorganic and Medicinal Chemistry Letters, 2014, 24, 2360-2363.	2.2	5
48	General Approach for Engineering Small-Molecule-Binding DNA Split Aptamers. Analytical Chemistry, 2013, 85, 9916-9923.	6.5	60
49	Evaluating the Effect of Ionic Strength on Duplex Stability for PNA Having Negatively or Positively Charged Side Chains. PLoS ONE, 2013, 8, e58670.	2.5	35
50	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
51	Enzyme-Linked Small-Molecule Detection Using Split Aptamer Ligation. Analytical Chemistry, 2012, 84, 6104-6109.	6.5	105
52	Expansion of the Genetic Alphabet: Unnatural Nucleobases and Their Applications. Journal of Nucleic Acids, 2012, 2012, 1-2.	1.2	2
53	Convenient and Scalable Synthesis of Fmoc-Protected Peptide Nucleic Acid Backbone. Journal of Nucleic Acids, 2012, 2012, 1-5.	1.2	13
54	Small-Molecule-Dependent Split Aptamer Ligation. Journal of the American Chemical Society, 2011, 133, 12426-12429.	13.7	85

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55	A chemical screen for biological small molecule–RNA conjugates reveals CoA-linked RNA. Proceedings of the United States of America, 2009, 106, 7768-7773.	7.1	105
56	Templated Synthesis of Peptide Nucleic Acids via Sequence-Selective Base-Filling Reactions. Journal of the American Chemical Society, 2009, 131, 11347-11349.	13.7	47
57	Total Synthesis of (S)-Equol. Organic Letters, 2006, 8, 5441-5443.	4.6	59
58	The Chain-Length Dependence Test. Accounts of Chemical Research, 2006, 39, 11-20.	15.6	173
59	A novel indicator series for measuring pKa values in acetonitrile. Tetrahedron, 2004, 60, 7287-7292.	1.9	8
60	Enhanced Methylation Rate within a Foldable Molecular Receptor. Journal of Organic Chemistry, 2004, 69, 9234-9237.	3.2	30
61	Folding-Promoted Methylation of a Helical DMAP Analogue. Journal of the American Chemical Society, 2004, 126, 1648-1649.	13.7	61
62	Single-Site Modifications and Their Effect on the Folding Stability ofm-Phenylene Ethynylene Oligomers. Organic Letters, 2004, 6, 889-892.	4.6	38
63	Pyridine-Containingm-Phenylene Ethynylene Oligomers Having Tunable Basicities. Organic Letters, 2004, 6, 659-662.	4.6	31
64	Stimuli-responsive assembly of bilingual peptide nucleic acids. RSC Chemical Biology, 0, , .	4.1	1