

Jennifer M Heemstra

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6076506/publications.pdf>

Version: 2024-02-01

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	Systematically Modulating Aptamer Affinity and Specificity by Guanosine-to-Inosine Substitution. <i>Analytical Chemistry</i> , 2022, , .	3.2	9
2	Combating small molecule environmental contaminants: detection and sequestration using functional nucleic acids. <i>Chemical Science</i> , 2022, 13, 7670-7684.	3.7	7
3	RE-SELEX: restriction enzyme-based evolution of structure-switching aptamer biosensors. <i>Chemical Science</i> , 2021, 12, 11692-11702.	3.7	20
4	Direct Immunodetection of Global A-to-I RNA Editing Activity with a Chemiluminescent Bioassay. <i>Angewandte Chemie</i> , 2021, 133, 17146-17154.	1.6	1
5	Direct Immunodetection of Global A-to-I RNA Editing Activity with a Chemiluminescent Bioassay. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 17009-17017.	7.2	10
6	Protein-based molecular recognition tools for detecting and profiling RNA modifications. <i>Current Opinion in Structural Biology</i> , 2021, 69, 1-10.	2.6	3
7	Sequestration and Removal of Multiple Small-Molecule Contaminants Using an Optimized Aptamer-Based Ultrafiltration System. <i>Bioconjugate Chemistry</i> , 2021, 32, 2043-2051.	1.8	6
8	Evaluating the effect of ionic strength on PNA:DNA duplex formation kinetics. <i>RSC Chemical Biology</i> , 2021, 2, 1249-1256.	2.0	10
9	Sweet sensation: Developing a single-cell fluorescent reporter of glycolytic heterogeneity. <i>Cell Chemical Biology</i> , 2021, 28, 1539-1541.	2.5	1
10	A Scientist's Guide to Social Media. <i>ACS Central Science</i> , 2020, 6, 1-5.	5.3	12
11	Thermoreversible Control of Nucleic Acid Structure and Function with Glyoxal Caging. <i>Journal of the American Chemical Society</i> , 2020, 142, 17766-17781.	6.6	33
12	EndoVIPER-seq for Improved Detection of A-to-I Editing Sites in Cellular RNA. <i>Current Protocols in Chemical Biology</i> , 2020, 12, e82.	1.7	7
13	Chemical Profiling of A-to-I RNA Editing Using a Click-Compatible Phenylacrylamide. <i>Chemistry - A European Journal</i> , 2020, 26, 9874-9878.	1.7	13
14	Selective Enrichment of A-to-I Edited Transcripts from Cellular RNA Using Endonuclease V. <i>Journal of the American Chemical Society</i> , 2020, 142, 5241-5251.	6.6	30
15	Peptide nucleic acids harness dual information codes in a single molecule. <i>Chemical Communications</i> , 2020, 56, 1926-1935.	2.2	18
16	Single-Molecule Kinetics Show DNA Pyrimidine Content Strongly Affects RNA:DNA and TNA:DNA Heteroduplex Dissociation Rates. <i>ACS Synthetic Biology</i> , 2020, 9, 249-253.	1.9	4
17	Covalent live-cell labeling of proteins using a photoreactive fluorogen. <i>Methods in Enzymology</i> , 2020, 639, 355-377.	0.4	2
18	Probing the Mechanism of Structure-Switching Aptamer Assembly by Super-Resolution Localization of Individual DNA Molecules. <i>Analytical Chemistry</i> , 2020, 92, 6909-6917.	3.2	11

#	ARTICLE	IF	CITATIONS
19	DNA/TNA mesoscopic modeling of melting temperatures suggests weaker hydrogen bonding of CG than in DNA/RNA. <i>Chemical Physics Letters</i> , 2020, 749, 137413.	1.2	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. <i>Journal of the American Chemical Society</i> , 2019, 141, 19038-19047.	6.6	40
22	Self-Care Is Not the Enemy of Performance. <i>ChemBioChem</i> , 2019, 20, 2203-2206.	1.3	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. <i>CBE Life Sciences Education</i> , 2019, 18, ar11.	1.1	76
24	Fluorogenic Photoaffinity Labeling of Proteins in Living Cells. <i>Bioconjugate Chemistry</i> , 2019, 30, 1309-1313.	1.8	13
25	Thermostability Trends of TNA:DNA Duplexes Reveal Strong Purine Dependence. <i>ACS Synthetic Biology</i> , 2019, 8, 1144-1152.	1.9	8
26	Collaborating with Undergraduates To Contribute to Biochemistry Community Resources. <i>Biochemistry</i> , 2018, 57, 383-389.	1.2	9
27	Biomolecular Assemblies: Moving from Observation to Predictive Design. <i>Chemical Reviews</i> , 2018, 118, 11519-11574.	23.0	71
28	Single-Molecule Kinetic Investigation of Cocaine-Dependent Split-Aptamer Assembly. <i>Analytical Chemistry</i> , 2018, 90, 12964-12970.	3.2	29
29	High-Throughput Measurement of Small-Molecule Enantiopurity by Using Flow Cytometry. <i>ChemBioChem</i> , 2018, 19, 1853-1857.	1.3	7
30	In vitro selection of an XNA aptamer capable of small-molecule recognition. <i>Nucleic Acids Research</i> , 2018, 46, 8057-8068.	6.5	89
31	Chemical Labeling and Affinity Capture of Inosine-Containing RNAs Using Acrylamidofluorescein. <i>Bioconjugate Chemistry</i> , 2018, 29, 2899-2903.	1.8	26
32	Synthesis of comb-shaped DNA using a non-nucleosidic branching phosphoramidite. <i>Organic and Biomolecular Chemistry</i> , 2018, 16, 4659-4664.	1.5	2
33	Profile: early excellence in physical organic chemistry. <i>Journal of Physical Organic Chemistry</i> , 2016, 29, 380-381.	0.9	0
34	Temporal Control of Aptamer Biosensors Using Covalent Self-Caging To Shift Equilibrium. <i>Journal of the American Chemical Society</i> , 2016, 138, 6328-6331.	6.6	45
35	Synthesis and polymerase incorporation of \hat{I}^2, \hat{I}^3 -modified \hat{I}^{\pm} -l-threofuranosyl thymine triphosphate mimics. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2016, 26, 3958-3962.	1.0	1
36	Reversible Oligonucleotide Chain Blocking Enables Bead Capture and Amplification of T-Cell Receptor \hat{I}^{\pm} and \hat{I}^2 Chain mRNAs. <i>Journal of the American Chemical Society</i> , 2016, 138, 11073-11076.	6.6	20

#	ARTICLE	IF	CITATIONS
37	Effect of Buffer Conditions and Organic Cosolvents on the Rate of Strain-Promoted Azide-Alkyne Cycloaddition. <i>Journal of Organic Chemistry</i> , 2016, 81, 6816-6819.	1.7	15
38	Unzipping of A-Form DNA-RNA, A-Form DNA-PNA, and B-Form DNA-DNA in the α -Hemolysin Nanopore. <i>Biophysical Journal</i> , 2016, 110, 306-314.	0.2	26
39	Enhancing aptamer function and stability via in vitro selection using modified nucleic acids. <i>Methods</i> , 2016, 106, 29-36.	1.9	54
40	Learning from the unexpected in life and DNA self-assembly. <i>Beilstein Journal of Organic Chemistry</i> , 2015, 11, 2713-2720.	1.3	2
41	High-Throughput Enantiopurity Analysis Using Enantiomeric DNA-Based Sensors. <i>Journal of the American Chemical Society</i> , 2015, 137, 4198-4206.	6.6	76
42	3,3'-Di-octadecyloxycarbocyanine perchlorate (DiO) as a fluorogenic probe for measurement of critical micelle concentration. <i>Analytical Methods</i> , 2015, 7, 6877-6882.	1.3	16
43	Accelerating Strain-Promoted Azide-Alkyne Cycloaddition Using Micellar Catalysis. <i>Bioconjugate Chemistry</i> , 2015, 26, 1687-1691.	1.8	31
44	Modulating the Substrate Selectivity of DNA Aptamers Using Surfactants. <i>Langmuir</i> , 2015, 31, 11769-11773.	1.6	11
45	Controlling self-assembly of DNA-polymer conjugates for applications in imaging and drug delivery. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2015, 7, 282-297.	3.3	34
46	Fluorescent RNA Labeling Using Self-Alkylating Ribozymes. <i>ACS Chemical Biology</i> , 2014, 9, 1680-1684.	1.6	35
47	Differential DNA and RNA sequence discrimination by PNA having charged side chains. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014, 24, 2360-2363.	1.0	5
48	General Approach for Engineering Small-Molecule-Binding DNA Split Aptamers. <i>Analytical Chemistry</i> , 2013, 85, 9916-9923.	3.2	60
49	Evaluating the Effect of Ionic Strength on Duplex Stability for PNA Having Negatively or Positively Charged Side Chains. <i>PLoS ONE</i> , 2013, 8, e58670.	1.1	35
50	Templating effect in DNA proximity ligation enables use of non-bioorthogonal chemistry in biological fluids. <i>Artificial DNA, PNA & XNA</i> , 2012, 3, 123-128.	1.4	10
51	Enzyme-Linked Small-Molecule Detection Using Split Aptamer Ligation. <i>Analytical Chemistry</i> , 2012, 84, 6104-6109.	3.2	105
52	Expansion of the Genetic Alphabet: Unnatural Nucleobases and Their Applications. <i>Journal of Nucleic Acids</i> , 2012, 2012, 1-2.	0.8	2
53	Convenient and Scalable Synthesis of Fmoc-Protected Peptide Nucleic Acid Backbone. <i>Journal of Nucleic Acids</i> , 2012, 2012, 1-5.	0.8	13
54	Small-Molecule-Dependent Split Aptamer Ligation. <i>Journal of the American Chemical Society</i> , 2011, 133, 12426-12429.	6.6	85

#	ARTICLE	IF	CITATIONS
55	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
56	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
57	Total Synthesis of (S)-Equlol. Organic Letters, 2006, 8, 5441-5443.	2.4	59
58	The Chain-Length Dependence Test. Accounts of Chemical Research, 2006, 39, 11-20.	7.6	173
59	A novel indicator series for measuring pKa values in acetonitrile. Tetrahedron, 2004, 60, 7287-7292.	1.0	8
60	Enhanced Methylation Rate within a Foldable Molecular Receptor. Journal of Organic Chemistry, 2004, 69, 9234-9237.	1.7	30
61	Folding-Promoted Methylation of a Helical DMAP Analogue. Journal of the American Chemical Society, 2004, 126, 1648-1649.	6.6	61
62	Single-Site Modifications and Their Effect on the Folding Stability of ω -Phenylene Ethynylene Oligomers. Organic Letters, 2004, 6, 889-892.	2.4	38
63	Pyridine-Containing ω -Phenylene Ethynylene Oligomers Having Tunable Basicities. Organic Letters, 2004, 6, 659-662.	2.4	31
64	Stimuli-responsive assembly of bilingual peptide nucleic acids. RSC Chemical Biology, 0, , .	2.0	1