Andrew D Ellington

List of Publications by Year
in descending order

303 papers	32,666 citations	7672 79 h-index	5102 172 g-index
326 all docs	326 docs citations	326 times ranked	26084 citing authors

#	Article	IF	Citations
1	Improved Bst DNA Polymerase Variants Derived via a Machine Learning Approach. Biochemistry, 2023, 62, 410-418.	1.2	20
2	Biocompatible Materials Enabled by Biobased Production of Pyomelanin Isoforms Using an Engineered Yarrowia lipolytica. Advanced Functional Materials, 2022, 32, 2109366.	7.8	5
3	Evolving a Generalist Biosensor for Bicyclic Monoterpenes. ACS Synthetic Biology, 2022, 11, 265-272.	1.9	31
4	Recovery of Information Stored in Modified DNA with an Evolved Polymerase. ACS Synthetic Biology, 2022, 11, 554-561.	1.9	3
5	Making Security Viral: Shifting Engineering Biology Culture and Publishing. ACS Synthetic Biology, 2022, 11, 522-527.	1.9	6
6	Preparation and Use of Cellular Reagents: A Lowâ€resource Molecular Biology Reagent Platform. Current Protocols, 2022, 2, e387.	1.3	4
7	Charge Engineering Improves the Performance of Bst DNA Polymerase Fusions. ACS Synthetic Biology, 2022, 11, 1488-1496.	1.9	14
8	Chemical insights into flexizyme-mediated tRNA acylation. Cell Chemical Biology, 2022, 29, 1071-1112.	2.5	7
9	Systematic Review of Aptamer Sequence Reporting in the Literature Reveals Widespread Unexplained Sequence Alterations. Analytical Chemistry, 2022, 94, 7731-7737.	3.2	11
10	Machine learning-aided engineering of hydrolases for PET depolymerization. Nature, 2022, 604, 662-667.	13.7	396
11	Developing predictive hybridization models for phosphorothioate oligonucleotides using high-resolution melting. PLoS ONE, 2022, 17, e0268575.	1.1	1
12	Functional expression of opioid receptors and other human GPCRs in yeast engineered to produce human sterols. Nature Communications, 2022, 13, .	5.8	13
13	Using fungible biosensors to evolve improved alkaloid biosyntheses. Nature Chemical Biology, 2022, 18, 981-989.	3.9	35
14	Hurdling and Hurtling Toward New Genetic Codes. ACS Central Science, 2021, 7, 7-10.	5.3	1
15	Ribosome-mediated incorporation of fluorescent amino acids into peptides in vitro. Chemical Communications, 2021, 57, 2661-2664.	2.2	12
16	High-Surety Isothermal Amplification and Detection of SARS-CoV-2. MSphere, 2021, 6, .	1.3	52
17	Guiding Ethical Principles in Engineering Biology Research. ACS Synthetic Biology, 2021, 10, 907-910.	1.9	10
18	Directed Evolution of an Improved Aminoacylâ€tRNA Synthetase for Incorporation of Lâ€3,4â€Đihydroxyphenylalanine (Lâ€ĐOPA). Angewandte Chemie - International Edition, 2021, 60, 14811-14816.	7.2	14

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19	Directed Evolution of an Improved Aminoacylâ€tRNA Synthetase for Incorporation of Lâ€3,4â€Dihydroxyphenylalanine (Lâ€DOPA). Angewandte Chemie, 2021, 133, 14937-14942.	1.6	6
20	Minimizing Leakage in Stacked Strand Exchange Amplification Circuits. ACS Synthetic Biology, 2021, 10, 1277-1283.	1.9	3
21	Producing molecular biology reagents without purification. PLoS ONE, 2021, 16, e0252507.	1.1	9
22	Recombineering and MAGE. Nature Reviews Methods Primers, 2021, 1, .	11.8	47
23	Learning the local landscape of protein structures with convolutional neural networks. Journal of Biological Physics, 2021, 47, 435-454.	0.7	13
24	Heat Adaptation of Phage T7 Under an Extended Genetic Code. Virus Evolution, 2021, 7, veab100.	2.2	4
25	Delineation of the Ancestral Tus-Dependent Replication Fork Trap. International Journal of Molecular Sciences, 2021, 22, 13533.	1.8	4
26	Bringing Microscopy-By-Sequencing into View. Trends in Biotechnology, 2020, 38, 154-162.	4.9	10
27	Oligonucleotide-functionalized hydrogels for sustained release of small molecule (aptamer) therapeutics. Acta Biomaterialia, 2020, 102, 315-325.	4.1	16
28	Discovery of Novel Gain-of-Function Mutations Guided by Structure-Based Deep Learning. ACS Synthetic Biology, 2020, 9, 2927-2935.	1.9	80
29	One-Enzyme Reverse Transcription qPCR Using Taq DNA Polymerase. Biochemistry, 2020, 59, 4638-4645.	1.2	20
30	How a B family DNA polymerase has been evolved to copy RNA. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 21274-21280.	3.3	10
31	Dynamic Programming of a DNA Walker Controlled by Protons. ACS Nano, 2020, 14, 4007-4013.	7.3	78
32	Site-specific 5-hydroxytryptophan incorporation into apolipoprotein A-I impairs cholesterol efflux activity and high-density lipoprotein biogenesis. Journal of Biological Chemistry, 2020, 295, 4836-4848.	1.6	13
33	Engineered symbionts activate honey bee immunity and limit pathogens. Science, 2020, 367, 573-576.	6.0	161
34	A facile technology for the high-throughput sequencing of the paired VH:VL and TCRÎ²:TCRÎ± repertoires. Science Advances, 2020, 6, eaay9093.	4.7	18
35	Ribosomal incorporation of cyclic Î²-amino acids into peptides using in vitro translation. Chemical Communications, 2020, 56, 5597-5600.	2.2	28
36	Emulsion-based directed evolution of enzymes and proteins in yeast. Methods in Enzymology, 2020, 643, 87-110.	0.4	1

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37	Aptamers in Education: Undergraduates Make Aptamers and Acquire 21st Century Skills Along the Way. Sensors, 2019, 19, 3270.	2.1	3
38	Selection of self-priming molecular replicators. Nucleic Acids Research, 2019, 47, 2169-2176.	6.5	7
39	Expanding the limits of the second genetic code with ribozymes. Nature Communications, 2019, 10, 5097.	5.8	83
40	Retrons and their applications in genome engineering. Nucleic Acids Research, 2019, 47, 11007-11019.	6.5	60
41	Employing 25-Residue Docking Motifs from Modular Polyketide Synthases as Orthogonal Protein Connectors. ACS Synthetic Biology, 2019, 8, 2017-2024.	1.9	5
42	Single-Molecule Mechanistic Study of Enzyme Hysteresis. ACS Central Science, 2019, 5, 1691-1698.	5.3	23
43	Synthetic evolution. Nature Biotechnology, 2019, 37, 730-743.	9.4	63
44	Pattern Generation with Nucleic Acid Chemical Reaction Networks. Chemical Reviews, 2019, 119, 6370-6383.	23.0	40
45	Hachimoji DNA and RNA: A genetic system with eight building blocks. Science, 2019, 363, 884-887.	6.0	337
46	Reprogramming the brain with synthetic neurobiology. Current Opinion in Biotechnology, 2019, 58, 37-44.	3.3	2
47	Supercharging enables organized assembly of synthetic biomolecules. Nature Chemistry, 2019, 11, 204-212.	6.6	70
48	Synthesis of Ferrocene Derivatives Allowing Linear Free Energy Studies of Redox Potentials. Helvetica Chimica Acta, 2019, 102, e1800186.	1.0	2
49	Synthetic GPCRs and signal transduction cascades. Emerging Topics in Life Sciences, 2019, 3, 609-614.	1.1	1
50	Evolving Bacterial Fitness with an Expanded Genetic Code. Scientific Reports, 2018, 8, 3288.	1.6	8
51	Directed evolution of a synthetic phylogeny of programmable Trp repressors. Nature Chemical Biology, 2018, 14, 361-367.	3.9	53
52	Construction of synthetic T7 RNA polymerase expression systems. Methods, 2018, 143, 110-120.	1.9	18
53	Strand Displacement Probes Combined with Isothermal Nucleic Acid Amplification for Instrument-Free Detection from Complex Samples. Analytical Chemistry, 2018, 90, 6580-6586.	3.2	86
54	Evolution of a Thermophilic Strand-Displacing Polymerase Using High-Temperature Isothermal Compartmentalized Self-Replication. Biochemistry, 2018, 57, 4607-4619.	1.2	32

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55	Continuous directed evolution for strain and protein engineering. Current Opinion in Biotechnology, 2018, 53, 158-163.	3.3	36
56	Portable platform for rapid in-field identification of human fecal pollution in water. Water Research, 2018, 131, 186-195.	5.3	37
57	Functional interrogation and mining of natively paired human VH:VL antibody repertoires. Nature Biotechnology, 2018, 36, 152-155.	9.4	109
58	Genetic Engineering of Bee Gut Microbiome Bacteria with a Toolkit for Modular Assembly of Broad-Host-Range Plasmids. ACS Synthetic Biology, 2018, 7, 1279-1290.	1.9	87
59	Fingerprinting Non-Terran Biosignatures. Astrobiology, 2018, 18, 915-922.	1.5	40
60	A highly parallel strategy for storage of digital information in living cells. BMC Biotechnology, 2018, 18, 64.	1.7	10
61	Simultaneous Detection of Different Zika Virus Lineages via Molecular Computation in a Point-of-Care Assay. Viruses, 2018, 10, 714.	1.5	13
62	Effective design principles for leakless strand displacement systems. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E12182-E12191.	3.3	94
63	Viral attenuation by engineered protein fragmentation. Virus Evolution, 2018, 4, vey017.	2.2	2
64	Retroelement-Based Genome Editing and Evolution. ACS Synthetic Biology, 2018, 7, 2600-2611.	1.9	44
65	Predicting Evolution of the Transcription Regulatory Network in a Bacteriophage. Genome Biology and Evolution, 2018, 10, 2614-2628.	1.1	1
66	Direct nucleic acid analysis of mosquitoes for high fidelity species identification and detection of Wolbachia using a cellphone. PLoS Neglected Tropical Diseases, 2018, 12, e0006671.	1.3	24
67	Phosphorothioated Primers Lead to Loop-Mediated Isothermal Amplification at Low Temperatures. Analytical Chemistry, 2018, 90, 8290-8294.	3.2	73
68	In Vitro Transcription Networks Based on Hairpin Promoter Switches. ACS Synthetic Biology, 2018, 7, 1937-1945.	1.9	13
69	Cellular reagents for diagnostics and synthetic biology. PLoS ONE, 2018, 13, e0201681.	1.1	17
70	Custom selenoprotein production enabled by laboratory evolution of recoded bacterial strains. Nature Biotechnology, 2018, 36, 624-631.	9.4	39
71	Compartmentalized Selfâ€Replication for Evolution of a DNA Polymerase. Current Protocols in Chemical Biology, 2018, 10, 1-17.	1.7	6
72	How to Balance the Many Roles of tRNAs During the Creation of New Genetic Codes. FASEB Journal, 2018, 32, 105.2.	0.2	0

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73	Amplicon Competition Enables Endâ€Point Quantitation of Nucleic Acids Following Isothermal Amplification. ChemBioChem, 2017, 18, 1692-1695.	1.3	16
74	Characterization of trimethoprim resistant E. coli dihydrofolate reductase mutants by mass spectrometry and inhibition by propargyl-linked antifolates. Chemical Science, 2017, 8, 4062-4072.	3.7	34
75	Synthetic DNA Synthesis and Assembly: Putting the Synthetic in Synthetic Biology. Cold Spring Harbor Perspectives in Biology, 2017, 9, a023812.	2.3	271
76	Coupling Sensitive Nucleic Acid Amplification with Commercial Pregnancy Test Strips. Angewandte Chemie, 2017, 129, 1012-1016.	1.6	21
77	Coupling Sensitive Nucleic Acid Amplification with Commercial Pregnancy Test Strips. Angewandte Chemie - International Edition, 2017, 56, 992-996.	7.2	135
78	Genetic alphabet expansion transcription generating functional RNA molecules containing a five-letter alphabet including modified unnatural and natural base nucleotides by thermostable T7 RNA polymerase variants. Chemical Communications, 2017, 53, 12309-12312.	2.2	21
79	The Design Space of Strand Displacement Cascades with Toehold-Size Clamps. Lecture Notes in Computer Science, 2017, , 64-81.	1.0	8
80	Charge Shielding Prevents Aggregation of Supercharged GFP Variants at High Protein Concentration. Molecular Pharmaceutics, 2017, 14, 3269-3280.	2.3	27
81	A Simple, Cleated DNA Walker That Hangs on to Surfaces. ACS Nano, 2017, 11, 8047-8054.	7.3	107
82	Compartmentalized partnered replication for the directed evolution of genetic parts and circuits. Nature Protocols, 2017, 12, 2493-2512.	5.5	19
83	Differential array sensing for cancer cell classification and novelty detection. Organic and Biomolecular Chemistry, 2017, 15, 9866-9874.	1.5	19
84	Massively Parallel Biophysical Analysis of CRISPR-Cas Complexes on Next Generation Sequencing Chips. Cell, 2017, 170, 35-47.e13.	13.5	96
85	Evolving Orthogonal Suppressor tRNAs To Incorporate Modified Amino Acids. ACS Synthetic Biology, 2017, 6, 108-119.	1.9	33
86	Purification of single-stranded DNA by co-polymerization with acrylamide and electrophoresis. BioTechniques, 2017, 62, 275-282.	0.8	20
87	Recent advances in synthetic biosafety. F1000Research, 2016, 5, 2118.	0.8	17
88	Strand-Exchange Nucleic Acid Circuitry with Enhanced Thermo-and Structure- Buffering Abilities Turns Gene Diagnostics Ultra-Reliable and Environmental Compatible. Scientific Reports, 2016, 6, 36605.	1.6	16
89	A primerless molecular diagnostic: phosphorothioated-terminal hairpin formation and self-priming extension (PS-THSP). Analytical and Bioanalytical Chemistry, 2016, 408, 8583-8591.	1.9	20
90	Large-scale sequence and structural comparisons of human naive and antigen-experienced antibody repertoires. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E2636-45.	3.3	179

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91	Expanded Genetic Codes Create New Mutational Routes to Rifampicin Resistance inEscherichia coli. Molecular Biology and Evolution, 2016, 33, 2054-2063.	3.5	14
92	Synthesis of alanyl nucleobase amino acids and their incorporation into proteins. Bioorganic and Medicinal Chemistry, 2016, 24, 4177-4187.	1.4	11
93	Design and engineering of a transmissible antiviral defense. Journal of Biological Engineering, 2016, 10, 12.	2.0	0
94	Molecular-level analysis of the serum antibody repertoire in young adults before and after seasonal influenza vaccination. Nature Medicine, 2016, 22, 1456-1464.	15.2	271
95	Synthesis and structural analyses of phenylethynyl-substituted tris(2-pyridylmethyl)amines and their copper(ii) complexes. Dalton Transactions, 2016, 45, 10585-10598.	1.6	3
96	Synthetic evolutionary origin of a proofreading reverse transcriptase. Science, 2016, 352, 1590-1593.	6.0	119
97	Engineering Signaling Aptamers That Rely on Kinetic Rather Than Equilibrium Competition. Analytical Chemistry, 2016, 88, 2250-2257.	3.2	16
98	Addicting diverse bacteria to a noncanonical amino acid. Nature Chemical Biology, 2016, 12, 138-140.	3.9	55
99	Ultra-high-throughput sequencing of the immune receptor repertoire from millions of lymphocytes. Nature Protocols, 2016, 11, 429-442.	5.5	140
100	An in vitro selection for small molecule induced switching RNA molecules. Methods, 2016, 106, 51-57.	1.9	9
101	Virus wars: using one virus to block the spread of another. PeerJ, 2016, 4, e2166.	0.9	5
102	Nextâ€Generation Sequencing as Input for Chemometrics in Differential Sensing Routines. Angewandte Chemie - International Edition, 2015, 54, 6339-6342.	7.2	5
103	Real-Time Sequence-Validated Loop-Mediated Isothermal Amplification Assays for Detection of Middle East Respiratory Syndrome Coronavirus (MERS-CoV). PLoS ONE, 2015, 10, e0123126.	1.1	122
104	One-step tumor detection from dynamic morphology tracking on aptamer-grafted surfaces. Technology, 2015, 03, 194-200.	1.4	8
105	Industrialization of Biology. ACS Synthetic Biology, 2015, 4, 1053-1055.	1.9	14
106	Landscape-Based Biology. Journal of Molecular Evolution, 2015, 81, 144-145.	0.8	2
107	Chemical Tools To Decipher Regulation of Phosphatases by Proline Isomerization on Eukaryotic RNA Polymerase II. ACS Chemical Biology, 2015, 10, 2405-2414.	1.6	22
108	3D Printing with Nucleic Acid Adhesives. ACS Biomaterials Science and Engineering, 2015, 1, 19-26.	2.6	23

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109	Controlled Assembly of Artificial Proteinâ€“Protein Complexes via DNA Duplex Formation. Bioconjugate Chemistry, 2015, 26, 427-434.	1.8	2
110	Design, Synthesis, and Application of Spinach Molecular Beacons Triggered by Strand Displacement. Methods in Enzymology, 2015, 550, 215-249.	0.4	8
111	Six pack and stack. Nature Chemistry, 2015, 7, 617-619.	6.6	2
112	A Sweet Spot for Molecular Diagnostics: Coupling Isothermal Amplification and Strand Exchange Circuits to Glucometers. Scientific Reports, 2015, 5, 11039.	1.6	66
113	Structural Characterization of Dihydrofolate Reductase Complexes by Top-Down Ultraviolet Photodissociation Mass Spectrometry. Journal of the American Chemical Society, 2015, 137, 9128-9135.	6.6	69
114	Robust Strand Exchange Reactions for the Sequence-Specific, Real-Time Detection of Nucleic Acid Amplicons. Analytical Chemistry, 2015, 87, 3314-3320.	3.2	128
115	A microbial model of economic trading and comparative advantage. Journal of Theoretical Biology, 2015, 364, 326-343.	0.8	14
116	In Vitro Selection for Small-Molecule-Triggered Strand Displacement and Riboswitch Activity. ACS Synthetic Biology, 2015, 4, 1144-1150.	1.9	23
117	High-affinity RNA Aptamers Against the HIV-1 Protease Inhibit Both In Vitro Protease Activity and Late Events of Viral Replication. Molecular Therapy - Nucleic Acids, 2015, 4, e228.	2.3	40
118	Transcription yield of fully 2â€²-modified RNA can be increased by the addition of thermostabilizing mutations to T7 RNA polymerase mutants. Nucleic Acids Research, 2015, 43, 7480-7488.	6.5	57
119	RNA as a conception. Rna, 2015, 21, 608-608.	1.6	0
120	In-depth determination and analysis of the human paired heavy- and light-chain antibody repertoire. Nature Medicine, 2015, 21, 86-91.	15.2	345
121	Directed Evolution of a Panel of Orthogonal T7 RNA Polymerase Variants for in Vivo or in Vitro Synthetic Circuitry. ACS Synthetic Biology, 2015, 4, 1070-1076.	1.9	51
122	Fine-tuning citrate synthase flux potentiates and refines metabolic innovation in the Lenski evolution experiment. ELife, 2015, 4, .	2.8	79
123	Alternative ELISA Using a RNA Aptamer against Calf Intestinal Alkaline Phosphatase. FASEB Journal, 2015, 29, 562.6.	0.2	0
124	Mismatches Improve the Performance of Strandâ€Displacement Nucleic Acid Circuits. Angewandte Chemie - International Edition, 2014, 53, 1845-1848.	7.2	164
125	Design and application of cotranscriptional non-enzymatic RNA circuits and signal transducers. Nucleic Acids Research, 2014, 42, e58-e58.	6.5	71
126	Exquisite allele discrimination by toehold hairpin primers. Nucleic Acids Research, 2014, 42, e120-e120.	6.5	8

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127	Diagnostic Applications of Nucleic Acid Circuits. Accounts of Chemical Research, 2014, 47, 1825-1835.	7.6	269
128	Structure-based non-canonical amino acid design to covalently crosslink an antibodyâ€“antigen complex. Journal of Structural Biology, 2014, 185, 215-222.	1.3	20
129	Directed evolution of genetic parts and circuits by compartmentalized partnered replication. Nature Biotechnology, 2014, 32, 97-101.	9.4	133
130	Bacteriophages use an expanded genetic code on evolutionary paths to higher fitness. Nature Chemical Biology, 2014, 10, 178-180.	3.9	44
131	A proteomic survey of widespread protein aggregation in yeast. Molecular BioSystems, 2014, 10, 851.	2.9	53
132	A Spinach molecular beacon triggered by strand displacement. Rna, 2014, 20, 1183-1194.	1.6	54
133	Progress Report on the Generation of Polyfunctional Microscale Particles for Programmed Self-Assembly. Chemistry of Materials, 2014, 26, 1457-1462.	3.2	4
134	Directed evolution of the substrate specificity of biotin ligase. Biotechnology and Bioengineering, 2014, 111, 1071-1081.	1.7	18
135	Modeling scalable pattern generation in DNA reaction networks. Natural Computing, 2014, 13, 583-595.	1.8	4
136	In Vitro Selection Using Modified or Unnatural Nucleotides. Current Protocols in Nucleic Acid Chemistry, 2014, 56, 9.6.1-33.	0.5	30
137	Design and Selection of a Synthetic Operon. ACS Synthetic Biology, 2014, 3, 410-415.	1.9	2
138	Library Generation by Gene Shuffling. Current Protocols in Molecular Biology, 2014, 105, Unit 15.12..	2.9	16
139	Recursive genomewide recombination and sequencing reveals a key refinement step in the evolution of a metabolic innovation in Escherichia coli. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 2217-2222.	3.3	75
140	An amino acid depleted cell-free protein synthesis system for the incorporation of non-canonical amino acid analogs into proteins. Journal of Biotechnology, 2014, 178, 12-22.	1.9	33
141	Analyzing machupo virus-receptor binding by molecular dynamics simulations. PeerJ, 2014, 2, e266.	0.9	9
142	Proliferation and migration of tumor cells in tapered channels. Biomedical Microdevices, 2013, 15, 635-643.	1.4	32
143	Generalized bacterial genome editing using mobile group II introns and Creâ€lox. Molecular Systems Biology, 2013, 9, 685.	3.2	70
144	Pattern transformation with DNA circuits. Nature Chemistry, 2013, 5, 1000-1005.	6.6	122

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145	In vitro selection of proteins via emulsion compartments. Methods, 2013, 60, 75-80.	1.9	24
146	Real-Time Detection of Isothermal Amplification Reactions with Thermostable Catalytic Hairpin Assembly. Journal of the American Chemical Society, 2013, 135, 7430-7433.	6.6	243
147	Effect of Complementary Nucleobase Interactions on the Copolymer Composition of RAFT Copolymerizations. ACS Macro Letters, 2013, 2, 581-586.	2.3	62
148	DNA Detection Using Origami Paper Analytical Devices. Analytical Chemistry, 2013, 85, 9713-9720.	3.2	109
149	Continuous In Vitro evolution of a ribozyme ligase: A model experiment for the evolution of a biomolecule. Biochemistry and Molecular Biology Education, 2013, 41, 433-442.	0.5	0
150	Stacking nonenzymatic circuits for high signal gain. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 5386-5391.	3.3	223
151	Alternative Computational Protocols for Supercharging Protein Surfaces for Reversible Unfolding and Retention of Stability. PLoS ONE, 2013, 8, e64363.	1.1	73
152	A General RNA Motif for Cellular Transfection. Molecular Therapy, 2012, 20, 616-624.	3.7	36
153	An in vitro Autogene. ACS Synthetic Biology, 2012, 1, 190-196.	1.9	16
154	Probing Spatial Organization of DNA Strands Using Enzyme-Free Hairpin Assembly Circuits. Journal of the American Chemical Society, 2012, 134, 13918-13921.	6.6	217
155	Origins for Everyone. Evolution: Education and Outreach, 2012, 5, 361-366.	0.3	7
156	Exploration of plasticizer and plastic explosive detection and differentiation with serum albumin cross-reactive arrays. Chemical Science, 2012, 3, 1773.	3.7	28
157	Adapting Enzyme-Free DNA Circuits to the Detection of Loop-Mediated Isothermal Amplification Reactions. Analytical Chemistry, 2012, 84, 8371-8377.	3.2	90
158	Spatial Control of DNA Reaction Networks by DNA Sequence. Molecules, 2012, 17, 13390-13402.	1.7	15
159	DNA circuits as amplifiers for the detection of nucleic acids on a paperfluidic platform. Lab on A Chip, 2012, 12, 2951.	3.1	80
160	A fully-electronic charge-based DNA sequencing CMOS biochip. , 2012, , .		16
161	Structure-Based Design of Supercharged, Highly Thermoresistant Antibodies. Chemistry and Biology, 2012, 19, 449-455.	6.2	127
162	Ribozymes as Molecular Biology Reagents. , 2012, , 293-312.		0

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163	Rational, modular adaptation of enzyme-free DNA circuits to multiple detection methods. Nucleic Acids Research, 2011, 39, e110-e110.	6.5	438
164	Inhibition of Cell Proliferation by an Anti-EGFR Aptamer. PLoS ONE, 2011, 6, e20299.	1.1	149
165	Identifying Protein Variants with Crossâ€Reactive Aptamer Arrays. ChemBioChem, 2011, 12, 2021-2024.	1.3	16
166	Shaping up nucleic acid computation. Current Opinion in Biotechnology, 2010, 21, 392-400.	3.3	54
167	Beyond allostery: Catalytic regulation of a deoxyribozyme through an entropy-driven DNA amplifier. Journal of Systems Chemistry, 2010, 1, .	1.7	34
168	Aptamers as therapeutics. Nature Reviews Drug Discovery, 2010, 9, 537-550.	21.5	1,780
169	Aptamer Antagonists of Myelin-Derived Inhibitors Promote Axon Growth. PLoS ONE, 2010, 5, e9726.	1.1	11
170	In Vitro Selection of RNA Aptamers to a Protein Target by Filter Immobilization. Current Protocols in Molecular Biology, 2010, 89, Unit 24.3.	2.9	7
171	In Vitro Selection of RNA Aptamers to a Protein Target by Filter Immobilization. Current Protocols in Nucleic Acid Chemistry, 2010, 40, Unit 9.3.1-27.	0.5	7
172	In Vitro Selection of RNA Aptamers to a Small Molecule Target. Current Protocols in Nucleic Acid Chemistry, 2010, 40, Unit 9.5.1-23.	0.5	13
173	Directed Evolution of Proteins In Vitro Using Compartmentalization in Emulsions. Current Protocols in Molecular Biology, 2009, 87, Unit 24.6.	2.9	12
174	Design Principles for Ligand-Sensing, Conformation-Switching Ribozymes. PLoS Computational Biology, 2009, 5, e1000620.	1.5	43
175	Modelling amorphous computations with transcription networks. Journal of the Royal Society Interface, 2009, 6, S523-33.	1.5	18
176	Kinetic optimization of a proteinâ€responsive aptamer beacon. Biotechnology and Bioengineering, 2009, 103, 1049-1059.	1.7	22
177	Back to the future of nucleic acid self-amplification. Nature Chemical Biology, 2009, 5, 200-201.	3.9	10
178	Direct selection for ribozyme cleavage activity in cells. Rna, 2009, 15, 2035-2045.	1.6	21
179	Evolutionary origins and directed evolution of RNA. International Journal of Biochemistry and Cell Biology, 2009, 41, 254-265.	1.2	65
180	A Synthetic Genetic Edge Detection Program. Cell, 2009, 137, 1272-1281.	13.5	442

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181	Applications of Aptamers as Sensors. Annual Review of Analytical Chemistry, 2009, 2, 241-264.	2.8	714
182	Technical and Biological Issues Relevant to Cell Typing with Aptamers. Journal of Proteome Research, 2009, 8, 2438-2448.	1.8	90
183	Aptamer Microarrays. , 2009, , 287-308.		0
184	Selection of fluorescent aptamer beacons that light up in the presence of zinc. Analytical and Bioanalytical Chemistry, 2008, 390, 1067-1075.	1.9	139
185	Bioinformatic Analysis of the Contribution of Primer Sequences to Aptamer Structures. Journal of Molecular Evolution, 2008, 67, 95-102.	0.8	85
186	Real-time PCR detection of protein analytes with conformation-switching aptamers. Analytical Biochemistry, 2008, 380, 164-173.	1.1	42
187	Directed Evolution of Streptavidin Variants Using In Vitro Compartmentalization. Chemistry and Biology, 2008, 15, 979-989.	6.2	26
188	Using RNA Aptamers and the Proximity Ligation Assay for the Detection of Cell Surface Antigens. Methods in Molecular Biology, 2008, 504, 385-398.	0.4	21
189	Aptamer-Targeted Gold Nanoparticles As Molecular-Specific Contrast Agents for Reflectance Imaging. Bioconjugate Chemistry, 2008, 19, 1309-1312.	1.8	166
190	Aptamer amplification: divide and signal. Expert Opinion on Medical Diagnostics, 2008, 2, 1333-1346.	1.6	7
191	Synthetic Biology Design and Analysis: A Case Study of Frequency Entrained Biological Clock. , 2008, , .		0
192	Man versus Machine versus Ribozyme. PLoS Biology, 2008, 6, e132.	2.6	3
193	NUCLEIC ACIDS FOR REAGENTLESS BIOSENSORS. , 2008, , 493-541.		3
194	Whatâ€™s So Great about RNA?. ACS Chemical Biology, 2007, 2, 445-448.	1.6	7
195	Real-Time Rolling Circle Amplification for Protein Detection. Analytical Chemistry, 2007, 79, 3320-3329.	3.2	176
196	Ribozyme Catalysis of Metabolism in the RNA World. Chemistry and Biodiversity, 2007, 4, 633-655.	1.0	165
197	Synthetic RNA circuits. Nature Chemical Biology, 2007, 3, 23-28.	3.9	47
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