Random access in large-scale DNA data storage

Citation Report

#	ARTICLE	IF	CITATIONS
2	An archive written in DNA. Nature Biotechnology, 2018, 36, 236-237.	17.5	5
3	Parallelized Linear Classification with Volumetric Chemical Perceptrons. , 2018, , .		7
4	ReGene: Blockchain backup of genome data and restoration of pre-engineered expressed phenotype. , 2018, , .		5
6	DNA Computing and Molecular Programming. Lecture Notes in Computer Science, 2018, , .	1.3	1
7	Parallel, Large-Scale, and Long Synthetic Oligodeoxynucleotide Purification Using the Catching Full-Length Sequence by Polymerization Technique. Organic Process Research and Development, 2018, 22, 1282-1288.	2.7	1
9	The best Cas scenario. Nature Medicine, 2018, 24, 528-530.	30.7	0
10	Incorporation of Sensitive Ester and Chloropurine Groups into Oligodeoxynucleotides through Solidâ€Phase Synthesis. ChemistrySelect, 2018, 3, 8857-8862.	1.5	8
11	A framework and an algorithm to detect low-abundance DNA by a handy sequencer and a palm-sized computer. Bioinformatics, 2019, 35, 584-592.	4.1	9
12	Structural colour QR codes for multichannel information storage with enhanced optical security and life expectancy. Nanotechnology, 2019, 30, 405301.	2.6	10
13	DNA Computing and Molecular Programming. Lecture Notes in Computer Science, 2019, , .	1.3	3
14	SIMD||DNA: Single Instruction, Multiple Data Computation with DNA Strand Displacement Cascades. Lecture Notes in Computer Science, 2019, , 219-235.	1.3	10
15	A Characterization of the DNA Data Storage Channel. Scientific Reports, 2019, 9, 9663.	3.3	151
16	Optimized Code Design for Constrained DNA Data Storage With Asymmetric Errors. IEEE Access, 2019, 7, 84107-84121.	4.2	21
17	DNA assembly for nanopore data storage readout. Nature Communications, 2019, 10, 2933.	12.8	80
18	Encoding Carbon Nanotubes with Tubular Nucleic Acids for Information Storage. Journal of the American Chemical Society, 2019, 141, 17861-17866.	13.7	36
19	Graphene: Simultaneous Electrochemical Dualâ€Electrode Exfoliation of Graphite toward Scalable Production of Highâ€Quality Graphene (Adv. Funct. Mater. 37/2019). Advanced Functional Materials, 2019, 29, 1970257.	14.9	11
20	LDPC Codes for Portable DNA Storage. , 2019, , .		15
21	Data storage in DNA with fewer synthesis cycles using composite DNA letters. Nature Biotechnology, 2019, 37, 1229-1236.	17.5	110

#	ARTICLE	IF	CITATIONS
22	Controlled polymers: accessing new platforms for material synthesis. Molecular Systems Design and Engineering, 2019, 4, 144-161.	3.4	7
23	Nucleic Acid Databases and Molecular-Scale Computing. ACS Nano, 2019, 13, 6256-6268.	14.6	56
24	Driving the Scalability of DNA-Based Information Storage Systems. ACS Synthetic Biology, 2019, 8, 1241-1248.	3.8	56
25	High information capacity DNA-based data storage with augmented encoding characters using degenerate bases. Scientific Reports, 2019, 9, 6582.	3.3	53
26	Carbon-based archiving: current progress and future prospects of DNA-based data storage. GigaScience, 2019, 8, .	6.4	39
27	Electrophilic oligodeoxynucleotide synthesis using dM-Dmoc for amino protection. Beilstein Journal of Organic Chemistry, 2019, 15, 1116-1128.	2.2	9
28	Transmitter and Receiver Architectures for Molecular Communications: A Survey on Physical Design With Modulation, Coding, and Detection Techniques. Proceedings of the IEEE, 2019, 107, 1302-1341.	21.3	106
29	Terminator-free template-independent enzymatic DNA synthesis for digital information storage. Nature Communications, 2019, 10, 2383.	12.8	133
30	DNA event recorders send past information of cells to the time of observation. Current Opinion in Chemical Biology, 2019, 52, 54-62.	6.1	12
31	Puddle. , 2019, , .		24
32	Molecular digital data storage using DNA. Nature Reviews Genetics, 2019, 20, 456-466.	16.3	312
33	Combining Data Longevity with High Storage Capacity—Layer‐by‐Layer DNA Encapsulated in Magnetic Nanoparticles. Advanced Functional Materials, 2019, 29, 1901672.	14.9	65
34	Construction of Bio-Constrained Code for DNA Data Storage. IEEE Communications Letters, 2019, 23, 963-966.	4.1	46
35	Storage of Information Using Small Organic Molecules. ACS Central Science, 2019, 5, 911-916.	11.3	70
36	Demonstration of End-to-End Automation of DNA Data Storage. Scientific Reports, 2019, 9, 4998.	3.3	81
37	Capacity Upper Bounds for Deletion-type Channels. Journal of the ACM, 2019, 66, 1-79.	2.2	14
38	High density DNA data storage library via dehydration with digital microfluidic retrieval. Nature Communications, 2019, 10, 1706.	12.8	99
39	Transducing Protease Activity into DNA Output for Developing Smart Bionanosensors. Small, 2019, 15, 1805384.	10.0	16

#	Article	IF	Citations
40	Specificity from nonspecific interaction: regulation of tumor necrosis factor-α activity by DNA. Journal of Biological Chemistry, 2019, 294, 6397-6404.	3.4	12
41	Capacity Results for the Noisy Shuffling Channel. , 2019, , .		38
42	Beyond Trace Reconstruction: Population Recovery from the Deletion Channel. , 2019, , .		12
43	An Upper Bound on the Capacity of the DNA Storage Channel. , 2019, , .		22
44	Linear-Time Encoders for Codes Correcting a Single Edit for DNA-Based Data Storage. , 2019, , .		6
45	Construction of tandem duplication correcting codes. IET Communications, 2019, 13, 2217-2225.	2.2	3
46	Coded Trace Reconstruction. , 2019, , .		11
47	Improved read/write cost tradeoff in DNA-based data storage using LDPC codes. , 2019, , .		34
48	A Language for Molecular Computation. CheM, 2019, 5, 3017-3019.	11.7	3
49	High capacity DNA data storage with variable-length Oligonucleotides using repeat accumulate code and hybrid mapping. Journal of Biological Engineering, 2019, 13, 89.	4.7	26
50	Clustering-Correcting Codes. , 2019, , .		10
51	Digital Data Storage Using DNA Nanostructures and Solid-State Nanopores. Nano Letters, 2019, 19, 1210-1215.	9.1	123
52	TCTGCTTAT ATTACT TGGATTACTCAT GATAATGCT. Microbes and Infection, 2019, 21, 129-132.	1.9	0
53	Foundations and Application of Precision Medicine. , 2019, , 21-45.		0
54	DNA Data Storage and Hybrid Molecular–Electronic Computing. Proceedings of the IEEE, 2019, 107, 63-72.	21.3	44
55	CAMPS: Efficient and privacy-preserving medical primary diagnosis over outsourced cloud. Information Sciences, 2020, 527, 560-575.	6.9	19
56	Oligo Design with Single Primer Binding Site for High Capacity DNA-Based Data Storage. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2020, 17, 2176-2182.	3.0	10
57	High-density information storage in an absolutely defined aperiodic sequence of monodisperse copolyester. Nature Communications, 2020, 11, 56.	12.8	64

#	ARTICLE	IF	CITATIONS
58	A DNA-of-things storage architecture to create materials with embedded memory. Nature Biotechnology, 2020, 38, 39-43.	17.5	113
59	Reading and writing digital data in DNA. Nature Protocols, 2020, 15, 86-101.	12.0	81
60	Coding Over Sets for DNA Storage. IEEE Transactions on Information Theory, 2020, 66, 2331-2351.	2.4	47
61	Enzymatic Synthesis of Designer DNA Using Cyclic Reversible Termination and a Universal Template. ACS Synthetic Biology, 2020, 9, 283-293.	3.8	15
62	What is the resource footprint of a computer science department? Place, people, and Pedagogy. Data & Policy, 2020, 2, .	1.8	0
63	Decoding DNA data storage for investment. Biotechnology Advances, 2020, 45, 107639.	11.7	10
64	Metastable hybridization-based DNA information storage to allow rapid and permanent erasure. Nature Communications, 2020, 11, 5008.	12.8	12
65	HEDGES error-correcting code for DNA storage corrects indels and allows sequence constraints. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 18489-18496.	7.1	75
66	DNA synthesis for true random number generation. Nature Communications, 2020, 11, 5869.	12.8	23
67	Low-Bias Manipulation of DNA Oligo Pool for Robust Data Storage. ACS Synthetic Biology, 2020, 9, 3344-3352.	3.8	22
68	Construction of GC-Balanced DNA With Deletion/Insertion/Mutation Error Correction for DNA Storage System. IEEE Access, 2020, 8, 140972-140980.	4.2	12
69	Construction of Duplication Correcting Codes. IEEE Access, 2020, 8, 96150-96161.	4.2	1
70	DNA Micro–Disks for the Management of DNA–Based Data Storage with Index and Write–Once–Read–Many (WORM) Memory Features. Advanced Materials, 2020, 32, e2001249.	21.0	40
71	A mixed culture of bacterial cells enables an economic DNA storage on a large scale. Communications Biology, 2020, 3, 416.	4.4	21
72	Low cost DNA data storage using photolithographic synthesis and advanced information reconstruction and error correction. Nature Communications, 2020, 11, 5345.	12.8	66
73	Reading and Writing Digital Information in TNA. ACS Synthetic Biology, 2020, 9, 2936-2942.	3.8	22
74	Error Rate-Based Log-Likelihood Ratio Processing for Low-Density Parity-Check Codes in DNA Storage. IEEE Access, 2020, 8, 162892-162902.	4.2	9
75	Coding for Efficient DNA Synthesis. , 2020, , .		16

#	Article	IF	Citations
76	Thermodynamically Stable DNA Code Design using a Similarity Significance Model. , 2020, , .		3
77	Constrained Coding with Error Control for DNA-Based Data Storage. , 2020, , .		15
78	The Error Probability of Maximum-Likelihood Decoding over Two Deletion/Insertion Channels. , 2020, , .		8
79	Aerolysin nanopores decode digital information stored in tailored macromolecular analytes. Science Advances, 2020, 6, .	10.3	57
80	Compressed DNA Coding Using Minimum Variance Huffman Tree. IEEE Communications Letters, 2020, 24, 1602-1606.	4.1	14
81	Dynamic and scalable DNA-based information storage. Nature Communications, 2020, 11, 2981.	12.8	52
82	Biosensors for Biomolecular Computing: a Review and Future Perspectives. BioNanoScience, 2020, 10, 554-563.	3.5	4
83	Coded Trace Reconstruction. IEEE Transactions on Information Theory, 2020, 66, 6084-6103.	2.4	42
84	Efficient Constrained Encoders Correcting a Single Nucleotide Edit in DNA Storage. , 2020, , .		2
85	Overcoming High Nanopore Basecaller Error Rates for DNA Storage via Basecaller-Decoder Integration and Convolutional Codes. , 2020, , .		21
86	Capacity of the Erasure Shuffling Channel. , 2020, , .		3
87	Sequence-Subset Distance and Coding for Error Control in DNA-Based Data Storage. IEEE Transactions on Information Theory, 2020, 66, 6048-6065.	2.4	9
88	Genomic Encryption of Digital Data Stored in Synthetic DNA. Angewandte Chemie, 2020, 132, 8554-8558.	2.0	3
89	Principles of Information Storage in Small-Molecule Mixtures. IEEE Transactions on Nanobioscience, 2020, 19, 378-384.	3.3	17
90	An Intelligent Optimization Algorithm for Constructing a DNA Storage Code: NOL-HHO. International Journal of Molecular Sciences, 2020, 21, 2191.	4.1	33
91	Recent advances in multi-temperature-responsive polymeric materials. Polymer Journal, 2020, 52, 681-689.	2.7	63
92	Efficient Encoding/Decoding of GC-Balanced Codes Correcting Tandem Duplications. IEEE Transactions on Information Theory, 2020, 66, 4892-4903.	2.4	9
93	Nanopore-Based DNA Hard Drives for Rewritable and Secure Data Storage. Nano Letters, 2020, 20, 3754-3760.	9.1	88

#	Article	IF	Citations
94	Quantifying molecular bias in DNA data storage. Nature Communications, 2020, 11, 3264.	12.8	53
95	Genomic Encryption of Digital Data Stored in Synthetic DNA. Angewandte Chemie - International Edition, 2020, 59, 8476-8480.	13.8	13
96	Probing the physical limits of reliable DNA data retrieval. Nature Communications, 2020, 11, 616.	12.8	62
97	Stabilizing synthetic DNA for long-term data storage with earth alkaline salts. Chemical Communications, 2020, 56, 3613-3616.	4.1	38
98	Current and Emerging Methods for the Synthesis of Single-Stranded DNA. Genes, 2020, 11, 116.	2.4	33
99	DNA storage: research landscape and future prospects. National Science Review, 2020, 7, 1092-1107.	9.5	106
100	Advancing DNA Steganography with Incorporation of Randomness. ChemBioChem, 2020, 21, 2503-2511.	2.6	4
101	DNA Data Storage: Automated DNA Synthesis and Sequencing Are Key to Unlocking Virtually Unlimited Data Storage. Computer, 2020, 53, 63-67.	1.1	5
102	Achieving the Capacity of the DNA Storage Channel. , 2020, , .		10
103	An Overview of Capacity Results for Synchronization Channels. IEEE Transactions on Information Theory, 2021, 67, 3207-3232.	2.4	24
104	Covering Codes Using Insertions or Deletions. IEEE Transactions on Information Theory, 2021, 67, 3376-3388.	2.4	1
105	Trace Reconstruction Problems in Computational Biology. IEEE Transactions on Information Theory, 2021, 67, 3295-3314.	2.4	13
106	Future DNA computing device and accompanied tool stack: Towards high-throughput computation. Future Generation Computer Systems, 2021, 117, 111-124.	7.5	6
107	SOLQC: Synthetic Oligo Library Quality Control tool. Bioinformatics, 2021, 37, 720-722.	4.1	14
108	Design of Nonbinary Error Correction Codes With a Maximum Run-Length Constraint to Correct a Single Insertion or Deletion Error for DNA Storage. IEEE Access, 2021, 9, 135354-135363.	4.2	4
110	On Levenshtein's Reconstruction Problem Under Insertions, Deletions, and Substitutions. IEEE Transactions on Information Theory, 2021, 67, 7132-7158.	2.4	8
111	An Empirical Comparison of Preservation Methods for Synthetic DNA Data Storage. Small Methods, 2021, 5, e2001094.	8.6	34
112	Leveraging autocatalytic reactions for chemical domain image classification. Chemical Science, 2021, 12, 5464-5472.	7.4	4

#	ARTICLE	IF	CITATIONS
113	Robust direct digital-to-biological data storage in living cells. Nature Chemical Biology, 2021, 17, 246-253.	8.0	51
114	DNA-Based Molecular Computing, Storage, and Communications. IEEE Internet of Things Journal, 2022, 9, 897-915.	8.7	8
115	A Survey of Molecular Communication in Cell Biology: Establishing a New Hierarchy for Interdisciplinary Applications. IEEE Communications Surveys and Tutorials, 2021, 23, 1494-1545.	39.4	42
116	Mini review: Enzyme-based DNA synthesis and selective retrieval for data storage. Computational and Structural Biotechnology Journal, 2021, 19, 2468-2476.	4.1	9
118	The visual story of data storage: From storage properties to user interfaces. Computational and Structural Biotechnology Journal, 2021, 19, 4904-4918.	4.1	8
119	Functional Nucleic Acid Hybrid Materials for Photovoltaic Cells: Design, Fabrication, and Performance. , 2021, , 67-93.		0
120	DNA Structural Barcode Copying and Random Access. Small Structures, 2021, 2, 2000144.	12.0	16
121	An artificial chromosome for data storage. National Science Review, 2021, 8, nwab028.	9.5	59
122	Autonomous Computing Materials. ACS Nano, 2021, 15, 3586-3592.	14.6	14
123	Preservation of DNA for data storage. Russian Chemical Reviews, 2021, 90, 280-291.	6.5	10
124	DNA stability: a central design consideration for DNA data storage systems. Nature Communications, 2021, 12, 1358.	12.8	81
126	Cooperative sequence clustering and decoding for DNA storage system with fountain codes. Bioinformatics, 2021, 37, 3136-3143.	4.1	22
127	Toward Smart Information Processing with Synthetic DNA Molecules. Macromolecular Rapid Communications, 2021, 42, 2100084.	3.9	2
128	Uncertainties in synthetic DNA-based data storage. Nucleic Acids Research, 2021, 49, 5451-5469.	14.5	26
129	An alternative approach to nucleic acid memory. Nature Communications, 2021, 12, 2371.	12.8	38
130	On Decoding Fountain Codes with Erroneous Received Symbols. , 2021, , .		1
131	Rapid Visual Authentication Based on DNA Strand Displacement. ACS Applied Materials & Interfaces, 2021, 13, 19476-19486.	8.0	9
132	DNA Sequencing Flow Cells and the Security of the Molecular-Digital Interface. Proceedings on Privacy Enhancing Technologies, 2021, 2021, 413-432.	2.8	1

#	Article	IF	Citations
135	Minimum Free Energy Coding for DNA Storage. IEEE Transactions on Nanobioscience, 2021, 20, 212-222.	3.3	34
136	Concatenated Codes for Recovery From Multiple Reads of DNA Sequences. , 2021, , .		9
137	CLGBO: An Algorithm for Constructing Highly Robust Coding Sets for DNA Storage. Frontiers in Genetics, 2021, 12, 644945.	2.3	14
138	Correcting a Single Indel/Edit for DNA-Based Data Storage: Linear-Time Encoders and Order-Optimality. IEEE Transactions on Information Theory, 2021, 67, 3438-3451.	2.4	30
139	High-density information storage and random access scheme using synthetic DNA. 3 Biotech, 2021, 11, 328.	2.2	4
141	IMG-DNA. , 2021, , .		6
142	Promiscuous molecules for smarter file operations in DNA-based data storage. Nature Communications, 2021, 12, 3518.	12.8	19
143	Image Encoding Using Multiâ€Level DNA Barcodes with Nanopore Readout. Small, 2021, 17, e2100711.	10.0	32
144	DNA-Based Storage: Models and Fundamental Limits. IEEE Transactions on Information Theory, 2021, 67, 3675-3689.	2.4	32
145	The art of molecular computing: Whence and whither. BioEssays, 2021, 43, e2100051.	2.5	5
146	Synchronization Strings and Codes for Insertions and Deletionsâ€"A Survey. IEEE Transactions on Information Theory, 2021, 67, 3190-3206.	2.4	19
147	Chemical and photochemical error rates in light-directed synthesis of complex DNA libraries. Nucleic Acids Research, 2021, 49, 6687-6701.	14.5	20
148	Large-Scale de novo Oligonucleotide Synthesis for Whole-Genome Synthesis and Data Storage: Challenges and Opportunities. Frontiers in Bioengineering and Biotechnology, 2021, 9, 689797.	4.1	34
149	Random access DNA memory using Boolean search in an archival file storage system. Nature Materials, 2021, 20, 1272-1280.	27.5	68
150	On Coding for an Abstracted Nanopore Channel for DNA Storage. , 2021, , .		9
151	Synthesis Strategy of Reversible Circuits on DNA Computers. Symmetry, 2021, 13, 1242.	2.2	0
152	DNA archival storage, a bottom up approach. , 2021, , .		0
153	Trellis BMA: Coded Trace Reconstruction on IDS Channels for DNA Storage. , 2021, , .		31

#	ARTICLE	IF	CITATIONS
154	Approximate Trace Reconstruction: Algorithms. , 2021, , .		8
155	Capacity of the Torn Paper Channel with Lost Pieces. , 2021, , .		5
156	Mean-Based Trace Reconstruction over Practically any Replication-Insertion Channel. , 2021, , .		3
157	Correcting Two Deletions with More Reads. , 2021, , .		5
158	Data storage using peptide sequences. Nature Communications, 2021, 12, 4242.	12.8	20
159	Combinatorial constraint coding based on the EORS algorithm in DNA storage. PLoS ONE, 2021, 16, e0255376.	2.5	5
160	Purification of multiplex oligonucleotide libraries by synthesis and selection. Nature Biotechnology, 2022, 40, 47-53.	17.5	13
161	Batch Optimization for DNA Synthesis. , 2021, , .		3
163	Coding for Segmented Edits with Local Weight Constraints. , 2021, , .		8
164	Research on constructing artificial neural networks using genetic circuits to realize neuromorphic computing. Chinese Science Bulletin, 2021, , .	0.7	0
166	Capacity-Approaching Constrained Codes With Error Correction for DNA-Based Data Storage. IEEE Transactions on Information Theory, 2021, 67, 5602-5613.	2.4	36
168	A last-in first-out stack data structure implemented in DNA. Nature Communications, 2021, 12, 4861.	12.8	11
169	A Hierarchical Error Correction Strategy for Text DNA Storage. Interdisciplinary Sciences, Computational Life Sciences, 2022, 14, 141-150.	3.6	9
170	Molecular-level similarity search brings computing to DNA data storage. Nature Communications, 2021, 12, 4764.	12.8	34
171	Multidimensional data organization and random access in large-scale DNA storage systems. Theoretical Computer Science, 2021, 894, 190-202.	0.9	4
172	UV-Vis Spectrophotometric Analysis of DNA Retrieval for DNA Storage Applications. Actuators, 2021, 10, 246.	2.3	4
173	TETâ€Like Oxidation in 5â€Methylcytosine and Derivatives: A Computational and Experimental Study. ChemBioChem, 2021, 22, 3333-3340.	2.6	6
174	A self-contained and self-explanatory DNA storage system. Scientific Reports, 2021, 11, 18063.	3.3	9

#	Article	IF	Citations
176	Novel Modalities in DNA Data Storage. Trends in Biotechnology, 2021, 39, 990-1003.	9.3	23
177	Translational control of enzyme scavenger expression with toxin-induced micro RNA switches. Scientific Reports, 2021, 11, 2462.	3.3	2
179	Data Storage Based on DNA. Small Structures, 2021, 2, 2000046.	12.0	36
180	A Content-Addressable DNA Database with Learned Sequence Encodings. Lecture Notes in Computer Science, 2018, , 55-70.	1.3	20
194	Torn-Paper Coding. IEEE Transactions on Information Theory, 2021, 67, 7904-7913.	2.4	5
195	Enhancing Physical and Thermodynamic Properties of DNA Storage Sets With End-Constraint. IEEE Transactions on Nanobioscience, 2022, 21, 184-193.	3.3	19
196	Electrically Controlled Nanofluidic DNA Sluice for Data Storage Applications. ACS Applied Nano Materials, 2021, 4, 11063-11069.	5.0	5
197	Storing and Reading Information in Mixtures of Fluorescent Molecules. ACS Central Science, 2021, 7, 1728-1735.	11.3	29
198	Molecular Genetics and Vascular Anomalies. , 2018, , 21-24.		0
199	Storing Digital Information in Long-Read DNA. Genomics and Informatics, 2018, 16, e30.	0.8	1
200	DNA Based Storage: Introduction, Characteristics, Applications and Challenges. International Journal of Machine Learning and Networked Collaborative Engineering, 2019, 2, .	0.1	0
203	The Power of Being Explicit: Demystifying Work, Heat,Âand Free Energy in the Physics of Computation. , 2019, , 307-351.		0
211	Covering Codes for Insertions and Deletions. , 2020, , .		1
212	Symbolwise MAP Estimation for Multiple-Trace Insertion/Deletion/Substitution Channels. , 2020, , .		4
214	CRISPR-Powered DNA Computing and Digital Display. ACS Synthetic Biology, 2021, 10, 3148-3157.	3.8	3
215	Communicating over the Torn-Paper Channel. , 2020, , .		5
216	Coding for Sequence Reconstruction for Single Edits. IEEE Transactions on Information Theory, 2022, 68, 66-79.	2.4	12
219	ÐÐÐÐ›Ð†Ð— ÐœÐžÐ—Ð›Ð’ÐžÐ¡Ð¢Ð•Ð™ Ð"ÐžÐ'Ð"ÐžÐ¡Ð¢ÐÐžÐšÐžÐ'ÐžÐ"Ðž Ð—Ð'Ð•ÐÐ†Ð"ÐÐÐ¯ Ð"ÐÐÐ˜Ð¥.ÐÐ»Ð"Ðš. Medi		

#	ARTICLE	IF	CITATIONS
220	Current and emerging opportunities in biological mediumâ€based computing and digital data storage. Nano Select, 2022, 3, 883-902.	3.7	2
221	Development of Synthetic DNA Circuit and Networks for Molecular Information Processing. Nanomaterials, 2021, 11, 2955.	4.1	5
223	On the efficient digital code representation in DNA-based data storage. , 2020, , .		5
225	Electrochemical DNA synthesis and sequencing on a single electrode with scalability for integrated data storage. Science Advances, 2021, 7, eabk0100.	10.3	27
226	Scaling DNA data storage with nanoscale electrode wells. Science Advances, 2021, 7, eabi6714.	10.3	35
227	Clustering-Correcting Codes. IEEE Transactions on Information Theory, 2022, 68, 1560-1580.	2.4	3
228	A brief review on DNA storage, compression, and digitalization. Nano Communication Networks, 2022, 31, 100391.	2.9	11
229	Coded trace reconstruction in a constant number of traces. , 2020, , .		11
230	DNA Sequence Error Corrections based on TensorFlow. , 2020, , .		2
231	Biochemical constraint compatible address design for fuzzy retrieval of images in DNA Storage. , 2020, , .		0
232	Sequence Reconstruction Under Stutter Noise in Enzymatic DNA Synthesis. , 2021, , .		4
233	Correcting deletion errors in DNA data storage with enzymatic synthesis. , 2021, , .		3
234	Synthetic DNA applications in information technology. Nature Communications, 2022, 13, 352.	12.8	52
235	High-scale random access on DNA storage systems. NAR Genomics and Bioinformatics, 2022, 4, lqab126.	3.2	15
236	Biological nanopores for sensing applications. Proteins: Structure, Function and Bioinformatics, 2022, 90, 1786-1799.	2.6	12
237	CMOS Capacitive Dry DNA Storage Monitoring: Design, Implementation and Experimental Results. IEEE Sensors Journal, 2022, 22, 5521-5530.	4.7	0
239	Rewritable Macromolecular Data Storage with Automated Readâ€out. Angewandte Chemie, 2022, 134, .	2.0	3
240	Rewritable Macromolecular Data Storage with Automated Readâ€out. Angewandte Chemie - International Edition, 2022, 61, .	13.8	18

#	ARTICLE	IF	CITATIONS
241	Anhydrous calcium phosphate crystals stabilize DNA for dry storage. Chemical Communications, 2022, 58, 3174-3177.	4.1	8
242	DNAâ€Based Concatenated Encoding System for Highâ€Reliability and Highâ€Density Data Storage. Small Methods, 2022, 6, e2101335.	8.6	20
243	Recovery of Information Stored in Modified DNA with an Evolved Polymerase. ACS Synthetic Biology, 2022, 11, 554-561.	3.8	3
244	Coded Shotgun Sequencing. IEEE Journal on Selected Areas in Information Theory, 2022, 3, 147-159.	2.5	4
245	Mean-Based Trace Reconstruction Over Oblivious Synchronization Channels. IEEE Transactions on Information Theory, 2022, 68, 4272-4281.	2.4	0
246	Combinatorial PCR Method for Efficient, Selective Oligo Retrieval from Complex Oligo Pools. ACS Synthetic Biology, 2022, 11, 1727-1734.	3.8	8
247	Integrating DNA Encapsulates and Digital Microfluidics for Automated Data Storage in DNA. Small, 2022, 18, e2107381.	10.0	21
248	Expanding the Molecular Alphabet of DNA-Based Data Storage Systems with Neural Network Nanopore Readout Processing. Nano Letters, 2022, 22, 1905-1914.	9.1	18
249	Semiautomated synthesis of sequence-defined polymers for information storage. Science Advances, 2022, 8, eabl8614.	10.3	27
250	Mainstream encodingâ€"decoding methods of DNA data storage. CCF Transactions on High Performance Computing, 2022, 4, 23-33.	1.7	2
252	How to Enable Index Scheme for Reducing the Writing Cost of DNA Storage on Insertion and Deletion. Transactions on Embedded Computing Systems, 0, , .	2.9	0
253	Extended XOR Algorithm with Biotechnology Constraints for Data Security in DNA Storage. Current Bioinformatics, 2022, 17, 401-410.	1.5	1
255	Fabrication and Decryption of a Microarray of Digital Dithiosuccinimide Oligomers. Macromolecular Rapid Communications, 2022, 43, e2200029.	3.9	8
256	What kind of network is the brain?. Trends in Cognitive Sciences, 2022, 26, 312-324.	7.8	3
257	Encoding of non-biological information for its long-term storage in DNA. BioSystems, 2022, 215-216, 104664.	2.0	3
258	Hierarchical lossless coding of light fields with improved random access. Signal Processing: Image Communication, 2022, 105, 116687.	3.2	2
259	Deep Hashing Based Model for Image Similarity Retrieval in DNA Storage. , 2021, , .		0
260	On the Capacity of DNA-based Data Storage under Substitution Errors. , 2021, , .		2

#	Article	IF	Citations
261	Cascadable Stochastic Logic for DNA Storage. , 2021, , .		0
262	Fractal construction of constrained code words for DNA storage systems. Nucleic Acids Research, 2022, 50, e30-e30.	14.5	14
263	Highly reliable and efficient encoding systems for hexadecimal polypeptide-based data storage. Fundamental Research, 2023, 3, 298-304.	3.3	13
264	Ampoule€Like Microvolume Containers with Transparent Code for Easy€to€Use and Space€Saving Storage of Small€Volume Biospecimens. Advanced Materials Technologies, 0, , 2101266.	5.8	2
265	Achieving the Capacity of a DNA Storage Channel with Linear Coding Schemes. , 2022, , .		0
267	Towards practical and robust DNA-based data archiving using the yin€"yang codec system. Nature Computational Science, 2022, 2, 234-242.	8.0	33
268	DeSP: a systematic DNA storage error simulation pipeline. BMC Bioinformatics, 2022, 23, 185.	2.6	5
269	Error Probability Bounds for Coded-Index DNA Storage Systems. IEEE Transactions on Information Theory, 2022, 68, 7005-7022.	2.4	1
270	The DNA Storage Channel: Capacity and Error Probability Bounds. IEEE Transactions on Information Theory, 2022, 68, 5657-5700.	2.4	7
271	Design considerations for advancing data storage with synthetic DNA for long-term archiving. Materials Today Bio, 2022, 15, 100306.	5.5	9
272	Flexible and Automatable Microfluidic-based Architecture and CAD Algorithm for Implementation of Large DNA Digital Storage. , 2022, , .		0
274	Managing reliability skew in DNA storage. , 2022, , .		3
275	Cipher constrained encoding for constraint optimization in extended nucleic acid memory. Computational Biology and Chemistry, 2022, 99, 107696.	2.3	0
276	Correcting Deletions With Multiple Reads. IEEE Transactions on Information Theory, 2022, 68, 7141-7158.	2.4	7
277	Batch Optimization for DNA Synthesis. IEEE Transactions on Information Theory, 2022, 68, 7454-7470.	2.4	3
278	Adaptive coding for DNA storage with high storage density and low coverage. Npj Systems Biology and Applications, 2022, 8, .	3.0	26
279	Preservation and Encryption in DNA Digital Data Storage. ChemPlusChem, 2022, 87, .	2.8	9
280	Hidden Addressing Encoding for DNA Storage. Frontiers in Bioengineering and Biotechnology, 0, 10, .	4.1	10

#	Article	IF	Citations
281	CMIC: an efficient quality score compressor with random access functionality. BMC Bioinformatics, 2022, 23, .	2.6	1
282	Correcting multiple short duplication and substitution errors. , 2022, , .		2
283	Capacity of the Shotgun Sequencing Channel. , 2022, , .		0
284	Sequence Reconstruction Problem for Deletion Channels: A Complete Asymptotic Solution. , 2022, , .		2
285	Bee Identification Problem for DNA Strands. , 2022, , .		3
286	Adversarial Torn-paper Codes. , 2022, , .		5
287	Nonlinear manipulation and analysis of large DNA datasets. Nucleic Acids Research, 2022, 50, 8974-8985.	14.5	0
290	In vivo processing of digital information molecularly with targeted specificity and robust reliability. Science Advances, 2022, 8, .	10.3	13
293	Clover: tree structure-based efficient DNA clustering for DNA-based data storage. Briefings in Bioinformatics, 2022, 23, .	6.5	11
294	Oligo replication advantage driven by GC content and Gibbs free energy. Biotechnology Letters, 2022, 44, 1189-1199.	2.2	5
295	Design of DNA Storage Coding with Enhanced Constraints. Entropy, 2022, 24, 1151.	2.2	3
296	Robust data storage in DNA by de Bruijn graph-based de novo strand assembly. Nature Communications, 2022, 13, .	12.8	20
297	10 Years of Natural Data Storage. IEEE Transactions on Molecular, Biological, and Multi-Scale Communications, 2022, 8, 263-275.	2.1	1
298	Concatenated Codes for Multiple Reads of a DNA Sequence. IEEE Transactions on Information Theory, 2023, 69, 910-927.	2.4	5
299	Beyond Single-Deletion Correcting Codes: Substitutions and Transpositions. IEEE Transactions on Information Theory, 2023, 69, 169-186.	2.4	8
300	DNA Storage Monitoring with a CMOS Capacitive Sensor. , 2022, , .		0
301	Nanopore Detection Assisted DNA Information Processing. Nanomaterials, 2022, 12, 3135.	4.1	4
302	Integrated Microfluidic DNA Storage Platform with Automated Sample Handling and Physical Data Partitioning. Analytical Chemistry, 2022, 94, 13153-13162.	6.5	6

#	Article	IF	Citations
305	Emerging Approaches to DNA Data Storage: Challenges and Prospects. ACS Nano, 2022, 16, 17552-17571.	14.6	48
306	Information decay and enzymatic information recovery for DNA data storage. Communications Biology, 2022, 5, .	4.4	2
307	Magnetic Microsphere/Silica Nanoparticle Composite Structures for Switchable DNA Storage. ACS Applied Nano Materials, 2022, 5, 15619-15628.	5.0	1
308	FMG: An observable DNA storage coding method based on frequency matrix game graphs. Computers in Biology and Medicine, 2022, 151, 106269.	7.0	17
309	An Asymmetric-Error-Aware LDPC Decoding Algorithm for DNA Storage. IEEE Communications Letters, 2023, 27, 32-36.	4.1	3
310	Log-likelihood Ratio for Low-Density Parity-Check Codes Under Binary Symmetric Erasure Channel in DNA Storage. , 2022, , .		0
311	Catalytic DNA–Assisted Mass Production of Arbitrary Single–Stranded DNA. Angewandte Chemie - International Edition, 2023, 62, .	13.8	9
312	Catalytic DNA–Assisted Mass Production of Arbitrary Single–Stranded DNA. Angewandte Chemie, 0, , .	2.0	0
313	Levy Equilibrium Optimizer algorithm for the DNA storage code set. PLoS ONE, 2022, 17, e0277139.	2.5	1
314	On the Size of Balls and Anticodes of Small Diameter Under the Fixed-Length Levenshtein Metric. IEEE Transactions on Information Theory, 2023, 69, 2324-2340.	2.4	1
315	Variable-position centrifugal platform achieves droplet manipulation and logic circuitries on-chip. Lab on A Chip, 2023, 23, 349-361.	6.0	3
316	Effect of storage temperature and duration on direct PCR amplification of various feather types and DBS matrices. Gene, 2023, 854, 147116.	2.2	0
317	A Segmented-Edit Error-Correcting Code With Re-Synchronization Function for DNA-Based Storage Systems. IEEE Transactions on Emerging Topics in Computing, 2022, , 1-13.	4.6	4
318	The Noisy Drawing Channel: Reliable Data Storage in DNA Sequences. IEEE Transactions on Information Theory, 2022, , 1-1.	2.4	0
319	Correcting two-deletion with a constant number of reads. IEEE Transactions on Information Theory, 2022, , 1-1.	2.4	1
320	DNA computing-based Big Data storage. Advances in Computers, 2022, , .	1.6	0
321	HL-DNA: A Hybrid Lossy/Lossless Encoding Scheme to Enhance DNA Storage Density and Robustness for Images. , 2022, , .		1
322	The Input and Output Entropies of the k-Deletion/Insertion Channel with Small Radii. , 2022, , .		0

#	Article	IF	Citations
323	Bionic‐structure thermo‐responsive (best) hydrogels with controllable layer for high‐capacity DNA data storage. Nano Select, 0, , .	3.7	1
324	Encoding, Decoding, and Rendering Information in DNA Nanoswitch Libraries. ACS Synthetic Biology, 2023, 12, 978-983.	3.8	2
325	Reading Information Stored in Synthetic Macromolecules. Journal of the American Chemical Society, 2022, 144, 22378-22390.	13.7	14
326	Deep dynamic spiking neural P systems with applications in organ segmentation. Journal of Membrane Computing, 2022, 4, 329-340.	1.8	2
327	Toehold-Mediated Strand Displacement in Random Sequence Pools. Journal of the American Chemical Society, 2023, 145, 634-644.	13.7	18
328	Modelling, Characterization of Data-Dependent and Process-Dependent Errors in DNA Data Storage. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2023, 20, 2147-2158.	3.0	2
329	Low-Redundancy Codes for Correcting Multiple Short-Duplication and Edit Errors. IEEE Transactions on Information Theory, 2023, 69, 2940-2954.	2.4	2
330	Generative Adversarial Networks for DNA Storage Channel Simulator. IEEE Access, 2023, 11, 3781-3793.	4.2	2
331	Digital circuits and neural networks based on acid-base chemistry implemented by robotic fluid handling. Nature Communications, 2023, 14, .	12.8	3
332	Basis-Finding Algorithm for Decoding Fountain Codes for DNA-Based Data Storage. IEEE Transactions on Information Theory, 2023, 69, 3691-3707.	2.4	1
333	Metal–Organic Frameworks in Microfluidics Enable Fast Encapsulation/Extraction of DNA for Automated and Integrated Data Storage. ACS Nano, 2023, 17, 2840-2850.	14.6	13
334	Application of CRISPR Cas systems in DNA recorders and writers. BioSystems, 2023, 225, 104870.	2.0	0
335	Self-assembly of DNA origami for nanofabrication, biosensing, drug delivery, and computational storage. IScience, 2023, 26, 106638.	4.1	9
336	System Design Considerations for Automated Digital Data Storage in DNA. , 2022, , .		0
338	DNA-Aeon provides flexible arithmetic coding for constraint adherence and error correction in DNA storage. Nature Communications, 2023, 14, .	12.8	15
339	Enabling technology and core theory of synthetic biology. Science China Life Sciences, 2023, 66, 1742-1785.	4.9	10
340	DNAsmart: Multiple attribute ranking tool for DNA data storage systems. Computational and Structural Biotechnology Journal, 2023, 21, 1448-1460.	4.1	5
341	Digital synthetic polymers for information storage. Chemical Society Reviews, 2023, 52, 1529-1548.	38.1	9

#	Article	IF	Citations
342	GCNSA: DNA storage encoding with a graph convolutional network and self-attention. IScience, 2023, 26, 106231.	4.1	11
343	Sequence Reconstruction Under Single-Burst-Insertion/Deletion/Edit Channel. IEEE Transactions on Information Theory, 2023, 69, 4466-4483.	2.4	0
344	RBS: A Rotational Coding Based on Blocking Strategy for DNA Storage. IEEE Transactions on Nanobioscience, 2023, 22, 912-922.	3.3	3
345	The emerging landscape of microfluidic applications in DNA data storage. Lab on A Chip, 2023, 23, 1981-2004.	6.0	2
346	An Improved Marker Code Scheme Based on Nucleotide Bases for DNA Data Storage. Applied Sciences (Switzerland), 2023, 13, 3632.	2.5	1
348	Evolutionary approach to construct robust codes for DNA-based data storage. Frontiers in Genetics, 0, 14, .	2.3	5
349	High Net Information Density DNA Data Storage by the MOPE Encoding Algorithm. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2023, , 1-10.	3.0	3
350	An outlook on the current challenges and opportunities in DNA data storage. Biotechnology Advances, 2023, 66, 108155.	11.7	7
351	The bottom of the memory hierarchy: Semiconductor and DNA data storage. MRS Bulletin, 2023, 48, 547-559.	3.5	1
352	In-vitro validated methods for encoding digital data in deoxyribonucleic acid (DNA). BMC Bioinformatics, 2023, 24, .	2.6	2
353	Mobile and Selfâ€Sustained Data Storage in an Extremophile Genomic DNA. Advanced Science, 2023, 10, .	11.2	6
354	BIC Codes: Bit Insertion-Based Constrained Codes With Error Correction for DNA Storage. IEEE Transactions on Emerging Topics in Computing, 2023, 11, 764-777.	4.6	3
355	Content-based filter queries on DNA data storage systems. Scientific Reports, 2023, 13, .	3.3	4
356	DNA storage in thermoresponsive microcapsules for repeated random multiplexed data access. Nature Nanotechnology, 2023, 18, 912-921.	31.5	6
357	Toward highly effective loading of DNA in hydrogels for high-density and long-term information storage. Science Advances, 2023, 9, .	10.3	0
358	Magnetic DNA random access memory with nanopore readouts and exponentially-scaled combinatorial addressing. Scientific Reports, 2023, 13, .	3.3	2
359	Magnetic control of self-assembly and disassembly in organic materials. Nature Communications, 2023, 14, .	12.8	1
361	Sustainable DNA Data Storage on Cellulose Paper. Small Methods, 2023, 7, .	8.6	0

#	Article	IF	Citations
362	DNA Data Storage. BioTech, 2023, 12, 44.	2.6	1
363	A Robust and Efficient DNA Storage Architecture Based on Modulation Encoding and Decoding. Journal of Chemical Information and Modeling, 2023, 63, 3967-3976.	5.4	3
364	Iterative Soft Decoding Algorithm for DNA Storage Using Quality Score and Redecoding. IEEE Transactions on Nanobioscience, 2024, 23, 81-90.	3.3	0
365	Leveraging nature to advance data storage: <scp>DNA</scp> as a storage medium. Microbial Biotechnology, 2023, 16, 1709-1712.	4.2	1
366	Integrating FPGA Acceleration in the DNAssim Framework for Faster DNA-Based Data Storage Simulations. Electronics (Switzerland), 2023, 12, 2621.	3.1	2
367	Towards long double-stranded chains and robust DNA-based data storage using the random code system. Frontiers in Genetics, 0, 14, .	2.3	0
368	Addressable <scp>DNA</scp> information processing system with a fluorescent readout for rewritable memory. Chinese Journal of Chemistry, 0, , .	4.9	1
369	Optimal Reference for DNA Synthesis. IEEE Transactions on Information Theory, 2023, 69, 6941-6955.	2.4	0
370	A Cationic Copolymer Enhances Responsiveness andÂRobustness ofÂDNA Circuits. Small, 2023, 19, .	10.0	2
372	Index-Based Concatenated Codes for the Multi-Draw DNA Storage Channel. , 2023, , .		0
374	Massively parallel evaluation and computational prediction of the activities and specificities of 17 small Cas9s. Nature Methods, 2023, 20, 999-1009.	19.0	5
375	Assembly of Reusable DNA Blocks for Data Storage Using the Principle of Movable Type Printing. ACS Applied Materials & Interfaces, 2023, 15, 24097-24108.	8.0	0
376	Engineering DNA Materials for Sustainable Data Storage Using a DNA Movable-Type System. Engineering, 2023, 29, 130-136.	6.7	0
377	The DNA Data Storage Model. Computer, 2023, 56, 78-85.	1.1	0
378	Scaling UpÂDNA Computing withÂArray-Based Synthesis andÂHigh-Throughput Sequencing. Natural Computing Series, 2023, , 281-293.	2.2	0
379	Using Soft Information to Improve Error Tolerance of Motif-Based DNA Storage Systems. , 2023, , .		0
380	Programmable Molecular Signal Transmission Architecture and Reactant Regeneration Strategy Driven by EXO Î» for DNA Circuits. ACS Synthetic Biology, 2023, 12, 2107-2117.	3.8	2
381	Adversarial Torn-paper Codes. IEEE Transactions on Information Theory, 2023, , 1-1.	2.4	0

#	ARTICLE	IF	CITATIONS
382	Bee Identification Problem for DNA Strands. IEEE Journal on Selected Areas in Information Theory, 2023, 4, 190-204.	2.5	1
383	DUHI: Dynamically updated hash index clustering method for DNA storage. Computers in Biology and Medicine, 2023, 164, 107244.	7.0	2
385	Efficient DNA-Based Image Coding and Storage. , 2023, , .		0
386	DNA Encoding-Based Nucleotide Pattern and Deep Features for Instance and Class-Based Image Retrieval. IEEE Transactions on Nanobioscience, 2024, 23, 190-201.	3.3	2
387	How to make DNA data storage more applicable. Trends in Biotechnology, 2023, , .	9.3	1
388	DNA technology for big data storage and error detection solutions: Hamming code vs Cyclic Redundancy Check (CRC). E3S Web of Conferences, 2023, 412, 01090.	0.5	0
389	BO-DNA: Biologically optimized encoding model for a highly-reliable DNA data storage. Computers in Biology and Medicine, 2023, 165, 107404.	7.0	3
390	Liquid Metal Electrodynamic Accumulation Microfluidics System for DNA Memory and Liquid Biopsy. Advanced Functional Materials, 2023, 33, .	14.9	1
392	Reducing cost in DNA-based data storage by sequence analysis-aided soft information decoding of variable-length reads. Bioinformatics, 2023, 39, .	4.1	1
393	Temporal logic circuits implementation using a dual cross-inhibition mechanism based on DNA strand displacement. RSC Advances, 2023, 13, 27125-27134.	3.6	0
394	DBTRG: De Bruijn Trim rotation graph encoding for reliable DNA storage. Computational and Structural Biotechnology Journal, 2023, 21, 4469-4477.	4.1	1
395	Processing DNA Storage through Programmable Assembly in a Droplet€Based Fluidics System. Advanced Science, 2023, 10, .	11.2	2
396	Scaling logical density of DNA storage with enzymatically-ligated composite motifs. Scientific Reports, 2023, 13, .	3.3	2
397	Improving error-correcting capability in DNA digital storage via soft-decision decoding. National Science Review, 2024, 11, .	9.5	1
398	A digital twin for DNA data storage based on comprehensive quantification of errors and biases. Nature Communications, 2023, 14, .	12.8	0
399	FrameD: framework for DNA-based data storage design, verification, and validation. Bioinformatics, 2023, 39, .	4.1	0
400	Data-Driven Bee Identification for DNA Strands. , 2023, , .		1
401	Cover Your Bases: How to Minimize the Sequencing Coverage in DNA Storage Systems. , 2023, , .		2

#	ARTICLE	IF	CITATIONS
402	Deletion Correcting Codes for Efficient DNA Synthesis. , 2023, , .		2
403	On the Design of Codes for DNA Computing: Secondary Structure Avoidance Codes. , 2023, , .		1
404	DNA-Correcting Codes: End-to-end Correction in DNA Storage Systems. , 2023, , .		2
405	How close are we to storing data in DNA?. Trends in Biotechnology, 2024, 42, 156-167.	9.3	0
406	Parallel molecular computation on digital data stored in DNA. Proceedings of the National Academy of Sciences of the United States of America, 2023, 120, .	7.1	3
407	Direct Transposition Interleaving Technique for DNA Data Storage. , 2023, , .		0
409	Limit and screen sequences with high degree of secondary structures in DNA storage by deep learning method. Computers in Biology and Medicine, 2023, 166, 107548.	7.0	0
410	Survey of Information Encoding Techniques for DNA. ACM Computing Surveys, 2024, 56, 1-30.	23.0	1
411	Data Storage Using DNA. Advanced Materials, 2024, 36, .	21.0	0
413	A Hybrid Approach of Image Retrieving In Biometric ID. , 2023, , .		0
414	Finite Blocklength Performance Bound for the DNA Storage Channel. , 2023, , .		0
415	Towards Chinese text and DNA shift encoding scheme based on biomass plasmid storage. Frontiers in Bioinformatics, 0, 3, .	2.1	0
416	An Extension of DNAContainer with a Small Memory Footprint. Datenbank-Spektrum, 2023, 23, 211-220.	1.3	0
417	Applications and Future Trends of Extracellular Vesicles in Biomaterials Science and Engineering. Physiology, 0, , .	10.0	0
418	Embracing errors is more effective than avoiding them through constrained coding for DNA data storage. , 2023, , .		0
419	Sequence Design and Reconstruction Under the Repeat Channel in Enzymatic DNA Synthesis. IEEE Transactions on Communications, 2024, 72, 675-691.	7.8	0
420	Deep Joint Source-Channel Coding for DNA Image Storage: A Novel Approach with Enhanced Error Resilience and Biological Constraint Optimization. IEEE Transactions on Molecular, Biological, and Multi-Scale Communications, 2023, , 1-1.	2.1	0
421	DNA-Based Storage of RDF Graph Data: A Futuristic Approach to Data Analytics. IEEE Access, 2023, 11, 129931-129944.	4.2	0

#	ARTICLE	IF	CITATIONS
422	Highly Accurate Sequence- and Position-Independent Error Profiling of DNA Synthesis and Sequencing. ACS Synthetic Biology, 0, , .	3.8	0
423	On secondary structure avoidance of codes for DNA storage. Computational and Structural Biotechnology Journal, 2024, 23, 140-147.	4.1	0
424	Rapid Information Retrieval from DNA Storage with Microfluidic Very Large‐Scale Integration Platform. Small, 0, , .	10.0	0
425	Efficiently Enabling Block Semantics and Data Updates in DNA Storage. , 2023, , .		0
426	DNA-Based Cryptography. Studies in Computational Intelligence, 2023, , 125-151.	0.9	0
428	Storage‐D: A user‐friendly platform that enables practical and personalized DNA data storage. , 2024, 3, .		0
430	<i>In Vitro</i> Enzyme Self-Selection Using Molecular Programs. ACS Synthetic Biology, 2024, 13, 474-484.	3.8	1
431	Reconstruction algorithms for DNA-storage systems. Scientific Reports, 2024, 14, .	3.3	1
434	Nanoporous Dna Field Effect Transistor with Potential for Random‐Access Memory Applications: A Selectivity Performance Evaluation. , 2024, 3, .		0
435	A novel approach to encode melodies in DNA. BioSystems, 2024, 237, 105136.	2.0	0
436	DNA as a universal chemical substrate for computing and data storage. Nature Reviews Chemistry, 2024, 8, 179-194.	30.2	0
437	â€œCell Diskâ€•DNA Storage System Capable of Random Reading and Rewriting. Advanced Science, 2024, 11, .	11.2	0
439	Constructions and decoding of GC-balanced codes for edit errors. Finite Fields and Their Applications, 2024, 95, 102391.	1.0	0
440	Robust multi-read reconstruction from noisy clusters using deep neural network for DNA storage. Computational and Structural Biotechnology Journal, 2024, 23, 1076-1087.	4.1	0
441	Storing Images in DNA via base128 Encoding. Journal of Chemical Information and Modeling, 2024, 64, 1719-1729.	5.4	0
442	A Novel Microfluidic Strategy for DNA Data Random Access Via Droplet Digital PCR. , 2024, , .		0
443	Recent Progress in High-Throughput Enzymatic DNA Synthesis for Data Storage. Biochip Journal, 0, , .	4.9	0
444	High-throughput DNA synthesis for data storage. Chemical Society Reviews, 2024, 53, 4463-4489.	38.1	0

#	ARTICLE	IF	CITATIONS
445	Efficient data reconstruction: The bottleneck of large-scale application of DNA storage. Cell Reports, 2024, 43, 113699.	6.4	0