

DNA stability: a central design consideration for DNA d

Nature Communications

12, 1358

DOI: [10.1038/s41467-021-21587-5](https://doi.org/10.1038/s41467-021-21587-5)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Mini review: Enzyme-based DNA synthesis and selective retrieval for data storage. Computational and Structural Biotechnology Journal, 2021, 19, 2468-2476.	4.1	9
3	Promiscuous molecules for smarter file operations in DNA-based data storage. Nature Communications, 2021, 12, 3518.	12.8	19
4	Bioorthogonal information storage in l-DNA with a high-fidelity mirror-image Pfu DNA polymerase. Nature Biotechnology, 2021, 39, 1548-1555.	17.5	47
5	UV-Vis Spectrophotometric Analysis of DNA Retrieval for DNA Storage Applications. Actuators, 2021, 10, 246.	2.3	4
6	Insights on Alanine and Arginine Binding to Silica with Atomic Resolution. Journal of Physical Chemistry Letters, 2021, 12, 9384-9390.	4.6	6
7	Formation and Repair of an Interstrand DNA Cross-Link Arising from a Common Endogenous Lesion. Journal of the American Chemical Society, 2021, 143, 15344-15357.	13.7	22
9	Electrically Controlled Nanofluidic DNA Sluice for Data Storage Applications. ACS Applied Nano Materials, 2021, 4, 11063-11069.	5.0	5
11	PAMAM-calix-dendrimers: Synthesis and Thiacalixarene Conformation Effect on DNA Binding. International Journal of Molecular Sciences, 2021, 22, 11901.	4.1	13
12	Electronic Sensing Platform (ESP) Based on Open-Gate Junction Field-Effect Transistor (OG-JFET) for Life Science Applications: Design, Modeling and Experimental Results. Sensors, 2021, 21, 7491.	3.8	6
13	Novel Field-Effect Transistor Sensor for DNA Storage Monitoring. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-11.	4.7	3
14	Electrochemical Sensing of Interactions between DNA and Charged Macrocycles. Chemosensors, 2021, 9, 347.	3.6	8
15	DNA-Based Concatenated Encoding System for High Reliability and High Density Data Storage. Small Methods, 2022, 6, e2101335.	8.6	20
16	Encoding of non-biological information for its long-term storage in DNA. BioSystems, 2022, 215-216, 104664.	2.0	3
17	Towards practical and robust DNA-based data archiving using the yin-yang codec system. Nature Computational Science, 2022, 2, 234-242.	8.0	33
18	Design considerations for advancing data storage with synthetic DNA for long-term archiving. Materials Today Bio, 2022, 15, 100306.	5.5	9
19	Development of recombinant positive control for detection of porcine circovirus type 3 by polymerase chain reaction. Journal for Veterinary Medicine Biotechnology and Biosafety, 2021, 7, 19-23.	0.1	0
20	The bug in a teacup—monitoring arthropod-plant associations with environmental DNA from dried plant material. Biology Letters, 2022, 18, .	2.3	15
21	A review on the current progress of layered double hydroxide application in biomedical sectors. European Physical Journal Plus, 2022, 137, .	2.6	4

#	ARTICLE	IF	CITATIONS
22	Hidden Addressing Encoding for DNA Storage. <i>Frontiers in Bioengineering and Biotechnology</i> , 0, 10, .	4.1	10
23	Multi-Domains in a Single Lattice Formed by DNA Self-Assembly. <i>ACS Omega</i> , 0, , .	3.5	0
24	A New Algebraic Approach for String Reconstruction from Substring Compositions. , 2022, , .		1
25	DNA stability in biodosimetry, pharmacy and DNA based datastorage: Optimal storage and handling conditions. <i>ChemBioChem</i> , 0, , .	2.6	4
26	In vivo processing of digital information molecularly with targeted specificity and robust reliability. <i>Science Advances</i> , 2022, 8, .	10.3	13
27	Robust data storage in DNA by de Bruijn graph-based de novo strand assembly. <i>Nature Communications</i> , 2022, 13, .	12.8	20
28	Protection of DNA by metal ions at 95 Å°C: from lower critical solution temperature (LCST) behavior to coordination-driven self-assembly. <i>Nanoscale</i> , 2022, 14, 14613-14622.	5.6	5
29	Resolution of Identity in Gas-Phase Dissociations of Mono- and Diprotonated DNA Trinucleotide Codons by <sup>15</sup> N-Labeling and Computational Structure Analysis. <i>Journal of the American Society for Mass Spectrometry</i> , 2022, 33, 1936-1950.	2.8	5
30	Engineered Spore-Forming <i>Bacillus</i> as a Microbial Vessel for Long-Term DNA Data Storage. <i>ACS Synthetic Biology</i> , 2022, 11, 3583-3591.	3.8	5
31	Preserving DNA in Biodegradable Organosilica Encapsulates. <i>Langmuir</i> , 2022, 38, 11191-11198.	3.5	1
32	Integrated Microfluidic DNA Storage Platform with Automated Sample Handling and Physical Data Partitioning. <i>Analytical Chemistry</i> , 2022, 94, 13153-13162.	6.5	6
33	Synthesizing the biochemical and semiconductor worlds: the future of nucleic acid nanotechnology. <i>Nanoscale</i> , 2022, 14, 15586-15595.	5.6	2
34	Emerging Approaches to DNA Data Storage: Challenges and Prospects. <i>ACS Nano</i> , 2022, 16, 17552-17571.	14.6	48
35	Information decay and enzymatic information recovery for DNA data storage. <i>Communications Biology</i> , 2022, 5, .	4.4	2
36	Czy plastik może rozpocząć nową erę™ w archiwizacji danych?. <i>Archeion</i> , 0, 123, .	0.1	0
37	Navigating bottlenecks and trade-offs in genomic data analysis. <i>Nature Reviews Genetics</i> , 2023, 24, 235-250.	16.3	6
38	Reading Information Stored in Synthetic Macromolecules. <i>Journal of the American Chemical Society</i> , 2022, 144, 22378-22390.	13.7	14
39	Diversifying Design of Nucleic Acid Aptamers Using Unsupervised Machine Learning. <i>Journal of Physical Chemistry B</i> , 2023, 127, 62-68.	2.6	2

#	ARTICLE	IF	CITATIONS
40	Metal-Organic Frameworks in Microfluidics Enable Fast Encapsulation/Extraction of DNA for Automated and Integrated Data Storage. <i>ACS Nano</i> , 2023, 17, 2840-2850.	14.6	13
42	Application of CRISPR Cas systems in DNA recorders and writers. <i>BioSystems</i> , 2023, 225, 104870.	2.0	0
43	DNA-Aeon provides flexible arithmetic coding for constraint adherence and error correction in DNA storage. <i>Nature Communications</i> , 2023, 14, .	12.8	15
44	Effect of Demographics and Time to Sample Processing on the qPCR Detection of Pathogenic <i>Leptospira</i> spp. from Human Samples in the National Reference Laboratory for Leptospirosis, Brazil. <i>Tropical Medicine and Infectious Disease</i> , 2023, 8, 151.	2.3	0
45	RBS: A Rotational Coding Based on Blocking Strategy for DNA Storage. <i>IEEE Transactions on Nanobioscience</i> , 2023, 22, 912-922.	3.3	3
46	The emerging landscape of microfluidic applications in DNA data storage. <i>Lab on A Chip</i> , 2023, 23, 1981-2004.	6.0	2
48	Immunogenicity of COVID-eVax Delivered by Electroporation Is Moderately Impacted by Temperature and Molecular Isoforms. <i>Vaccines</i> , 2023, 11, 678.	4.4	1
50	Reconfigurable DNA triplex structure for pH responsive logic gates. <i>RSC Advances</i> , 2023, 13, 9864-9870.	3.6	3
51	The bottom of the memory hierarchy: Semiconductor and DNA data storage. <i>MRS Bulletin</i> , 2023, 48, 547-559.	3.5	1
52	Phosphate-driven H <sub>2</sub> O <sub>2</sub> decomposition on DNA-bound bio-inspired activated carbon-based sensing platform for biological and food samples. <i>Food Chemistry</i> , 2023, 421, 136234.	8.2	2
53	Electrochemical DNA-Sensor Based on Macrocyclic Dendrimers with Terminal Amino Groups and Carbon Nanomaterials. <i>Sensors</i> , 2023, 23, 4761.	3.8	1
54	DNA storage in thermoresponsive microcapsules for repeated random multiplexed data access. <i>Nature Nanotechnology</i> , 2023, 18, 912-921.	31.5	6
55	Synthetic Biology Pathway to Nucleoside Triphosphates for Expanded Genetic Alphabets. <i>ACS Synthetic Biology</i> , 2023, 12, 1772-1781.	3.8	2
56	Expression of GFP and DsRed fluorescent proteins after gene electrotransfer of tumour cells in vitro. <i>Bioelectrochemistry</i> , 2023, 153, 108490.	4.6	0
59	Engineering DNA Materials for Sustainable Data Storage Using a DNA Movable-Type System. <i>Engineering</i> , 2023, 29, 130-136.	6.7	0
60	Magnetic Bead Spherical Nucleic Acid Microstructure for Reliable DNA Preservation and Repeated DNA Reading. <i>ACS Synthetic Biology</i> , 2023, 12, 2393-2402.	3.8	1
61	Physical characteristics and stability profile of recombinant plasmid DNA within a film matrix. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2023, 190, 270-283.	4.3	0
62	BO-DNA: Biologically optimized encoding model for a highly-reliable DNA data storage. <i>Computers in Biology and Medicine</i> , 2023, 165, 107404.	7.0	3

#	ARTICLE	IF	CITATIONS
64	Processing DNA Storage through Programmable Assembly in a Droplet-Based Fluidics System. <i>Advanced Science</i> , 2023, 10, .	11.2	2
65	Framed: framework for DNA-based data storage design, verification, and validation. <i>Bioinformatics</i> , 2023, 39, .	4.1	0
66	Digital data storage on DNA tape using CRISPR base editors. <i>Nature Communications</i> , 2023, 14, .	12.8	1
67	Neural network execution using nicked DNA and microfluidics. <i>PLoS ONE</i> , 2023, 18, e0292228.	2.5	0
68	Unravelling bird nest arthropod community structure using metabarcoding. <i>Metabarcoding and Metagenomics</i> , 0, 7, .	0.0	0
69	Unlocking the potential of DNA-based tagging: current market solutions and expanding horizons. <i>Nature Communications</i> , 2023, 14, .	12.8	0
70	Data Storage Using DNA. <i>Advanced Materials</i> , 2024, 36, .	21.0	0
71	Management practices and technologies for efficient biological sample collection from domestic animals with special reference to Indian field conditions. <i>Animal Diseases</i> , 2023, 3, .	1.4	0
72	Applications and Future Trends of Extracellular Vesicles in Biomaterials Science and Engineering. <i>Physiology</i> , 0, , .	10.0	0
73	Factors Affecting Stability of RNA – Temperature, Length, Concentration, pH, and Buffering Species. <i>Journal of Pharmaceutical Sciences</i> , 2024, 113, 377-385.	3.3	0
75	Identifying invertebrate species in Arctic muskox dung using DNA barcoding. <i>Polar Research</i> , 0, 42, .	1.6	0
76	Reducing Read Amplification and Re-synthesis in DNA-based Archival Storage. , 2023, , .		0
77	Robust multi-read reconstruction from noisy clusters using deep neural network for DNA storage. <i>Computational and Structural Biotechnology Journal</i> , 2024, 23, 1076-1087.	4.1	0
78	Advances in nanomaterial-mediated sensing methods for detecting human-pathogenic DNA viruses. , 2024, , 115-129.		0
79	Recent Progress in High-Throughput Enzymatic DNA Synthesis for Data Storage. <i>Biochip Journal</i> , 0, , .	4.9	0
80	High-throughput DNA synthesis for data storage. <i>Chemical Society Reviews</i> , 2024, 53, 4463-4489.	38.1	0
81	Efficient data reconstruction: The bottleneck of large-scale application of DNA storage. <i>Cell Reports</i> , 2024, 43, 113699.	6.4	0