

# Molecular force spectroscopy with a DNA origamiâ€“ba

Science

354, 305-307

DOI: [10.1126/science.aah5974](https://doi.org/10.1126/science.aah5974)

Citation Report

#	ARTICLE	IF	CITATIONS
3	The Beauty and Utility of DNA Origami. <i>CheM</i> , 2017, 2, 359-382.	11.7	269
4	New degrees of freedom in nonlinear metamaterials. <i>Physica Status Solidi (B): Basic Research</i> , 2017, 254, 1600462.	1.5	15
5	Same same but different: The evolution of TBP in archaea and their eukaryotic offspring. <i>Transcription</i> , 2017, 8, 162-168.	3.1	10
6	DNA Origami: Scaffolds for Creating Higher Order Structures. <i>Chemical Reviews</i> , 2017, 117, 12584-12640.	47.7	834
7	Reconfiguration of DNA molecular arrays driven by information relay. <i>Science</i> , 2017, 357, .	12.6	160
8	Science policy in the days of Trump. <i>Nature Nanotechnology</i> , 2017, 12, 934-935.	31.5	17
9	Distance dependent photoacoustics revealed through DNA nanostructures. <i>Nanoscale</i> , 2017, 9, 16193-16199.	5.6	15
10	Engineering Cell Surface Function with DNA Origami. <i>Advanced Materials</i> , 2017, 29, 1703632.	21.0	101
11	On-command molecular Trojans. <i>Nature Nanotechnology</i> , 2017, 12, 1117-1119.	31.5	2
12	Limiting the valence: advancements and new perspectives on patchy colloids, soft functionalized nanoparticles and biomolecules. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 19847-19868.	2.8	64
13	A DNA Walker as a Fluorescence Signal Amplifier. <i>Nano Letters</i> , 2017, 17, 5368-5374.	9.1	104
14	The mechanics of DNA loops bridged by proteins unveiled by single-molecule experiments. <i>Biochimie</i> , 2017, 142, 80-92.	2.6	6
15	Polymorphic design of DNA origami structures through mechanical control of modular components. <i>Nature Communications</i> , 2017, 8, 2067.	12.8	33
16	Single-stranded DNA and RNA origami. <i>Science</i> , 2017, 358, .	12.6	202
17	Programmable self-assembly of three-dimensional nanostructures from 10,000 unique components. <i>Nature</i> , 2017, 552, 72-77.	27.8	335
18	DNA origami devices for molecular-scale precision measurements. <i>MRS Bulletin</i> , 2017, 42, 925-929.	3.5	27
19	Dissipative Synthetic DNA-Based Receptors for the Transient Loading and Release of Molecular Cargo. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 10489-10493.	13.8	82
20	Optical Voltage Sensing Using DNA Origami. <i>Nano Letters</i> , 2018, 18, 1962-1971.	9.1	43

#	ARTICLE	IF	CITATIONS
21	Ultrashort Nucleic Acid Duplexes Exhibit Long Wormlike Chain Behavior with Force-Dependent Edge Effects. <i>Physical Review Letters</i> , 2018, 120, 068102.	7.8	12
22	DNA bipedal motor walking dynamics: an experimental and theoretical study of the dependency on step size. <i>Nucleic Acids Research</i> , 2018, 46, 1553-1561.	14.5	33
23	Dissipative Synthetic DNA-Based Receptors for the Transient Loading and Release of Molecular Cargo. <i>Angewandte Chemie</i> , 2018, 130, 10649-10653.	2.0	35
24	Quantifying absolute addressability in DNA origami with molecular resolution. <i>Nature Communications</i> , 2018, 9, 1600.	12.8	97
25	Study of DNA Origami Dimerization and Dimer Dissociation Dynamics and of the Factors that Limit Dimerization. <i>Small</i> , 2018, 14, e1800218.	10.0	12
26	Light-Responsive Polymer Particles as Force Clamps for the Mechanical Unfolding of Target Molecules. <i>Nano Letters</i> , 2018, 18, 2630-2636.	9.1	16
27	DNA-based construction at the nanoscale: emerging trends and applications. <i>Nanotechnology</i> , 2018, 29, 062001.	2.6	45
28	Programmable autonomous synthesis of single-stranded DNA. <i>Nature Chemistry</i> , 2018, 10, 155-164.	13.6	190
29	Force Spectroscopy and Beyond: Innovations and Opportunities. <i>Biophysical Journal</i> , 2018, 115, 2279-2285.	0.5	16
30	A DNA Origami-Based Chiral Plasmonic Sensing Device. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 44221-44225.	8.0	89
31	Force-Induced Unravelling of DNA Origami. <i>ACS Nano</i> , 2018, 12, 6734-6747.	14.6	55
32	Multifluorophore DNA Origami Beacon as a Biosensing Platform. <i>ACS Nano</i> , 2018, 12, 5699-5708.	14.6	94
33	On the Stability of DNA Origami Nanostructures in Low-Magnesium Buffers. <i>Angewandte Chemie</i> , 2018, 130, 9614-9618.	2.0	29
34	On the Stability of DNA Origami Nanostructures in Low-Magnesium Buffers. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 9470-9474.	13.8	168
35	3D DNA Origami Nanoparticles: From Basic Design Principles to Emerging Applications in Soft Matter and (Bio-)Nanosciences. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 10436-10448.	13.8	41
36	A Practical Guide to Molecular Dynamics Simulations of DNA Origami Systems. <i>Methods in Molecular Biology</i> , 2018, 1811, 209-229.	0.9	6
37	Directed Protein Adsorption Through DNA Origami Masks. <i>Methods in Molecular Biology</i> , 2018, 1811, 253-262.	0.9	2
38	A Synthetic Light-Driven Substrate Channeling System for Precise Regulation of Enzyme Cascade Activity Based on DNA Origami. <i>Journal of the American Chemical Society</i> , 2018, 140, 8990-8996.	13.7	108

#	ARTICLE	IF	CITATIONS
39	Dynamic DNA Origami Devices: from Strand-Displacement Reactions to External-Stimuli Responsive Systems. International Journal of Molecular Sciences, 2018, 19, 2114.	4.1	73
40	Sequence-programmable covalent bonding of designed DNA assemblies. Science Advances, 2018, 4, eaau1157.	10.3	174
41	3D-DNA-Origami-Nanopartikel: von grundlegenden Designprinzipien hin zu neuartigen Anwendungen in der weichen Materie und den (Bio-)Nanowissenschaften. Angewandte Chemie, 2018, 130, 10594-10607.	2.0	7
42	Programmable Multivalent DNA-Origami Tension Probes for Reporting Cellular Traction Forces. Nano Letters, 2018, 18, 4803-4811.	9.1	97
43	DNA Nanotechnology. Methods in Molecular Biology, 2018, , .	0.9	3
44	DNA nanostructures: A versatile lab-bench for interrogating biological reactions. Computational and Structural Biotechnology Journal, 2019, 17, 832-842.	4.1	7
45	Dual Aptamer-Functionalized 3D Plasmonic Metamolecule for Thrombin Sensing. Applied Sciences (Switzerland), 2019, 9, 3006.	2.5	28
46	A Single-Molecule View of Archaeal Transcription. Journal of Molecular Biology, 2019, 431, 4116-4131.	4.2	13
47	Periodic Operation of a Dynamic DNA Origami Structure Utilizing the Hydrophilic-Hydrophobic Phase-Transition of Stimulus-Sensitive Polypeptides. Small, 2019, 15, 1903541.	10.0	16
48	Evolutionary Refinement of DNA Nanostructures Using Coarse-Grained Molecular Dynamics Simulations. ACS Nano, 2019, 13, 12591-12598.	14.6	20
49	From DNA Tiles to Functional DNA Materials. Trends in Chemistry, 2019, 1, 799-814.	8.5	43
50	Emerging uses of DNA mechanical devices. Science, 2019, 365, 1080-1081.	12.6	67
51	The path towards functional nanoparticle-DNA origami composites. Materials Science and Engineering Reports, 2019, 138, 153-209.	31.8	15
53	Probing dynamics in single molecules. , 2019, , 71-115.		5
54	A modular DNA scaffold to study protein-protein interactions at single-molecule resolution. Nature Nanotechnology, 2019, 14, 988-993.	31.5	41
55	Modular Design of Programmable Mechanofluorescent DNA Hydrogels. Nature Communications, 2019, 10, 528.	12.8	111
56	Graphene qubit motivates materials science. Nature Nanotechnology, 2019, 14, 102-103.	31.5	10
57	Submicrometer elasticity of double-stranded DNA revealed by precision force-extension measurements with magnetic tweezers. Science Advances, 2019, 5, eaav1697.	10.3	50

#	ARTICLE	IF	CITATIONS
58	Programming Structured DNA Assemblies to Probe Biophysical Processes. Annual Review of Biophysics, 2019, 48, 395-419.	10.0	56
59	Create Nanoscale Patterns with DNA Origami. Small, 2019, 15, e1805554.	10.0	51
60	Fold 2D Woven DNA Origami to Origami<sup>+</sup> Structures. Advanced Functional Materials, 2019, 29, 1809097.	14.9	18
61	Programming chain-growth copolymerization of DNA hairpin tiles for in-vitro hierarchical supramolecular organization. Nature Communications, 2019, 10, 1006.	12.8	26
62	From DNA Nanotechnology to Material Systems Engineering. Advanced Materials, 2019, 31, e1806294.	21.0	119
63	Molecular scaffolds: when DNA becomes the hardware for single-molecule investigations. Current Opinion in Chemical Biology, 2019, 53, 192-203.	6.1	7
64	Single molecule analysis of structural fluctuations in DNA nanostructures. Nanoscale, 2019, 11, 18475-18482.	5.6	9
65	Self-Assembly of DNA Origami Heterodimers in High Yields and Analysis of the Involved Mechanisms. Small, 2019, 15, e1902979.	10.0	4
66	Coarse-grained modelling of the structural properties of DNA origami. Nucleic Acids Research, 2019, 47, 1585-1597.	14.5	75
67	Triangulated Wireframe Structures Assembled Using Single-Stranded DNA Tiles. ACS Nano, 2019, 13, 1839-1848.	14.6	21
68	Binding to nanopatterned antigens is dominated by the spatial tolerance of antibodies. Nature Nanotechnology, 2019, 14, 184-190.	31.5	134
69	Great stretches for your antibody workout. Nature Nanotechnology, 2019, 14, 101-102.	31.5	4
70	Building machines with DNA molecules. Nature Reviews Genetics, 2020, 21, 5-26.	16.3	198
71	DNA Origami Post-Processing by CRISPR-Cas12a. Angewandte Chemie - International Edition, 2020, 59, 3956-3960.	13.8	22
72	A DNA Origami Platform for Single-Pair Förster Resonance Energy Transfer Investigation of DNA-DNA Interactions and Ligation. Journal of the American Chemical Society, 2020, 142, 815-825.	13.7	21
73	Progress in the mechanical modulation of cell functions in tissue engineering. Biomaterials Science, 2020, 8, 7033-7081.	5.4	36
74	Programming the Curvatures in Reconfigurable DNA Domino Origami by Using Asymmetric Units. Nano Letters, 2020, 20, 8236-8241.	9.1	19
75	Adenita: interactive 3D modelling and visualization of DNA nanostructures. Nucleic Acids Research, 2020, 48, 8269-8275.	14.5	33

#	ARTICLE	IF	CITATIONS
76	Ultrathin Silica Coating of DNA Origami Nanostructures. Chemistry of Materials, 2020, 32, 6657-6665.	6.7	52
77	DNA Nanodevices to Probe and Program Membrane Organization, Dynamics, and Applications. Journal of Membrane Biology, 2020, 253, 577-587.	2.1	4
78	Complex multicomponent patterns rendered on a 3D DNA-barrel pegboard. Nature Communications, 2020, 11, 5768.	12.8	33
79	Self-Limiting Polymerization of DNA Origami Subunits with Strain Accumulation. ACS Nano, 2020, 14, 17428-17441.	14.6	29
80	Computing the Elastic Mechanical Properties of Rodlike DNA Nanostructures. Journal of Chemical Theory and Computation, 2020, 16, 7748-7763.	5.3	13
81	Arranging Small Molecules with Subnanometer Precision on DNA Origami Substrates for the Single-Molecule Investigation of Protein-Ligand Interactions. Small Structures, 2020, 1, 2000038.	12.0	31
82	Wi-Fi Live-Streaming Centrifuge Force Microscope for Benchtop Single-Molecule Experiments. Biophysical Journal, 2020, 119, 2231-2239.	0.5	5
83	Emerging applications at the interface of DNA nanotechnology and cellular membranes: Perspectives from biology, engineering, and physics. APL Bioengineering, 2020, 4, 041507.	6.2	19
84	Measuring Internal Forces in Single-Stranded DNA: Application to a DNA Force Clamp. Journal of Chemical Theory and Computation, 2020, 16, 7764-7775.	5.3	10
85	Encoding quantized fluorescence states with fractal DNA frameworks. Nature Communications, 2020, 11, 2185.	12.8	36
86	Programming Switchable Transcription of Topologically Constrained DNA. Journal of the American Chemical Society, 2020, 142, 10739-10746.	13.7	41
87	Single-molecule methods in structural DNA nanotechnology. Chemical Society Reviews, 2020, 49, 4220-4233.	38.1	31
88	Allostery of DNA nanostructures controlled by enzymatic modifications. Nucleic Acids Research, 2020, 48, 7595-7600.	14.5	5
89	DNA origami-based single-molecule force spectroscopy elucidates RNA Polymerase III pre-initiation complex stability. Nature Communications, 2020, 11, 2828.	12.8	36
90	DNA Origami Post-Processing by CRISPR-Cas12a. Angewandte Chemie, 2020, 132, 3984-3988.	2.0	3
91	Processing DNA-Based Molecular Signals into Graphical Displays. ACS Synthetic Biology, 2020, 9, 1490-1498.	3.8	5
92	Robotic DNA Nanostructures. ACS Synthetic Biology, 2020, 9, 1923-1940.	3.8	102
93	Programming bulk enzyme heterojunctions for biosensor development with tetrahedral DNA framework. Nature Communications, 2020, 11, 838.	12.8	84

#	ARTICLE	IF	CITATIONS
94	Near-Atomic Fabrication with Nucleic Acids. ACS Nano, 2020, 14, 1319-1337.	14.6	22
95	Information Coding in a Reconfigurable DNA Origami Domino Array. Angewandte Chemie, 2020, 132, 13091-13097.	2.0	11
96	Information Coding in a Reconfigurable DNA Origami Domino Array. Angewandte Chemie - International Edition, 2020, 59, 12991-12997.	13.8	50
97	Progress in Nanorobotics for Advancing Biomedicine. IEEE Transactions on Biomedical Engineering, 2021, 68, 130-147.	4.2	32
98	DNA origami-based protein networks: from basic construction to emerging applications. Chemical Society Reviews, 2021, 50, 1846-1873.	38.1	51
99	CopR, a Global Regulator of Transcription to Maintain Copper Homeostasis in Pyrococcus furiosus. Frontiers in Microbiology, 2020, 11, 613532.	3.5	10
100	DNA nanotechnology-empowered nanoscopic imaging of biomolecules. Chemical Society Reviews, 2021, 50, 5650-5667.	38.1	73
101	DNA origami. Nature Reviews Methods Primers, 2021, 1, .	21.2	382
102	Multivalency Pattern Recognition to Sort Colloidal Assemblies. Small, 2021, 17, e2005668.	10.0	5
104	Mechanical unfolding of ensemble biomolecular structures by shear force. Chemical Science, 2021, 12, 10159-10164.	7.4	7
105	DNA origami nano-mechanics. Chemical Society Reviews, 2021, 50, 11966-11978.	38.1	39
106	Modular Imaging Scaffold for Single-Particle Electron Microscopy. ACS Nano, 2021, 15, 4186-4196.	14.6	7
107	DNA Nanodevices as Mechanical Probes of Protein Structure and Function. Applied Sciences (Switzerland), 2021, 11, 2802.	2.5	5
108	FRET-based dynamic structural biology: Challenges, perspectives and an appeal for open-science practices. ELife, 2021, 10, .	6.0	152
109	Cryo-Electron Microscopy and Mass Analysis of Oligolysine-Coated DNA Nanostructures. ACS Nano, 2021, 15, 9391-9403.	14.6	18
110	Constructing Large 2D Lattices Out of DNA-Tiles. Molecules, 2021, 26, 1502.	3.8	15
111	Choice of fluorophore affects dynamic DNA nanostructures. Nucleic Acids Research, 2021, 49, 4186-4195.	14.5	20
112	Design of Transformable Hinged Ori-Block Dissected from Cylinders and Cones. Journal of Mechanical Design, Transactions of the ASME, 2021, 143, .	2.9	13

#	ARTICLE	IF	CITATIONS
113	Environment-Resistant DNA Origami Crystals Bridged by Rigid DNA Rods with Adjustable Unit Cells. Nano Letters, 2021, 21, 3581-3587.	9.1	13
114	Graphene-on-Glass Preparation and Cleaning Methods Characterized by Single-Molecule DNA Origami Fluorescent Probes and Raman Spectroscopy. ACS Nano, 2021, 15, 6430-6438.	14.6	20
115	Strategies for Constructing and Operating DNA Origami Linear Actuators. Small, 2021, 17, e2007704.	10.0	11
116	Advancing Biophysics Using DNA Origami. Annual Review of Biophysics, 2021, 50, 469-492.	10.0	36
117	DNA nanotechnology enhanced single-molecule biosensing and imaging. TrAC - Trends in Analytical Chemistry, 2021, 140, 116267.	11.4	15
119	Active liquid crystals powered by force-sensing DNA-motor clusters. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	13
120	A nanoscale DNA force spectrometer capable of applying tension and compression on biomolecules. Nucleic Acids Research, 2021, 49, 8987-8999.	14.5	24
121	Double- to Single-Strand Transition Induces Forces and Motion in DNA Origami Nanostructures. Advanced Materials, 2021, 33, e2101986.	21.0	22
123	Programmable and scalable assembly of a flexible hexagonal DNA origami. Nanotechnology, 2022, 33, 105606.	2.6	3
124	Obtaining Precise Molecular Information via DNA Nanotechnology. Membranes, 2021, 11, 683.	3.0	1
126	The potential of DNA origami to build multifunctional materials. Multifunctional Materials, 2020, 3, 032001.	3.7	48
131	Extending the Capabilities of Molecular Force Sensors via DNA Nanotechnology. Critical Reviews in Biomedical Engineering, 2020, 48, 1-16.	0.9	4
132	Empowering single-molecule analysis with self-assembled DNA nanostructures. Matter, 2021, 4, 3121-3145.	10.0	10
133	An Aptamer-Modified DNA Tetrahedron-Based Nanogel for Combined Chemo/Gene Therapy of Multidrug-Resistant Tumors. ACS Applied Bio Materials, 2021, 4, 7701-7707.	4.6	22
134	DNA Origami Voltage Sensors for Transmembrane Potentials with Single-Molecule Sensitivity. Nano Letters, 2021, 21, 8634-8641.	9.1	22
137	Measuring Internal Forces in Single-Stranded DNA. Springer Theses, 2019, , 95-125.	0.1	0
138	Force-Induced Unravelling of DNA Origami. Springer Theses, 2019, , 69-93.	0.1	0
141	Engineering DNA Nanostructures to Manipulate Immune Receptor Signaling and Immune Cell Fates. Advanced Healthcare Materials, 2022, 11, e2101844.	7.6	12



#	ARTICLE	IF	CITATIONS
142	SiRNA-templated 3D framework nucleic acids for chemotactic recognition, and programmable and visualized precise delivery for synergistic cancer therapy. Chemical Science, 2021, 12, 15353-15361.	7.4	15
143	Single-molecule force spectroscopy: A facile technique for studying the interactions between biomolecules and materials interfaces. Reviews in Analytical Chemistry, 2020, 39, 116-129.	3.2	6
144	Stimuli-Responsive DNA Origami Nanodevices and Their Biological Applications. ChemMedChem, 2022, 17, .	3.2	17
145	DNA origami-based microtubule analogue. Nanotechnology, 2020, 31, 50LT01.	2.6	1
147	Membrane Activity of a DNA-Based Ion Channel Depends on the Stability of Its Double-Stranded Structure. Nano Letters, 2021, 21, 9789-9796.	9.1	5
148	Massively Parallelized Molecular Force Manipulation with On-Demand Thermal and Optical Control. Journal of the American Chemical Society, 2021, 143, 19466-19473.	13.7	6
149	Hierarchical Assembly of Super-DNA Origami Based on a Flexible and Covalent-Bound Branched DNA Structure. Journal of the American Chemical Society, 2021, 143, 19893-19900.	13.7	17
150	Super-resolution FRET measurements. Nanoscale, 2021, 13, 18421-18433.	5.6	21
151	Next generation single-molecule techniques: Imaging, labeling, and manipulation in Vitro and in cellulo. Molecular Cell, 2022, 82, 304-314.	9.7	17
152	Characterizing the free-energy landscapes of DNA origamis. Nanoscale, 2022, , .	5.6	6
154	Recent Progress of Magnetically Actuated DNA Micro/Nanorobots. Cyborg and Bionic Systems, 2022, 2022, .	7.9	17
155	Chemically modified DNA nanostructures for drug delivery. Innovation(China), 2022, 3, 100217.	9.1	8
156	DNA-Based Nanofabrication for Nanoelectronics. Advanced Functional Materials, 2022, 32, .	14.9	27
157	Recent developments in DNA-based mechanical nanodevices. Chemical Communications, 2022, 58, 4700-4710.	4.1	7
158	Genetically Encoded Double-Stranded DNA-Based Nanostructure Folded by a Covalently Bivalent CRISPR/dCas System. Journal of the American Chemical Society, 2022, 144, 6575-6582.	13.7	11
159	Single-Molecule FRET: A Tool to Characterize DNA Nanostructures. Frontiers in Molecular Biosciences, 2022, 9, 835617.	3.5	2
160	High-Force Application by a Nanoscale DNA Force Spectrometer. ACS Nano, 2022, 16, 5682-5695.	14.6	20
161	Characterizing and Harnessing the Mechanical Properties of Short Single-Stranded DNA in Structured Assemblies. ACS Nano, 2021, 15, 20430-20441.	14.6	10

#	ARTICLE	IF	CITATIONS
162	Salt-induced conformational switching of a flat rectangular DNA origami structure. <i>Nanoscale</i> , 2022, 14, 7898-7905.	5.6	4
170	Probing the Mechanical Properties of DNA Nanostructures with Metadynamics. <i>ACS Nano</i> , 2022, 16, 8784-8797.	14.6	9
171	The Free-Energy Landscape of a Mechanically Bistable DNA Origami. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 5875.	2.5	0
172	High-throughput force measurement of individual kinesin-1 motors during multi-motor transport. <i>Nanoscale</i> , 0, , .	5.6	0
173	A modular spring-loaded actuator for mechanical activation of membrane proteins. <i>Nature Communications</i> , 2022, 13, .	12.8	16
174	Three-dimensional electron ptychography of organicâ€“inorganic hybrid nanostructures. <i>Nature Communications</i> , 2022, 13, .	12.8	13
175	In situ small-angle X-ray scattering reveals strong condensation of DNA origami during silicification. <i>Nature Communications</i> , 2022, 13, .	12.8	13
176	Hierarchical assembly of DNA origami nanostructures. <i>MRS Communications</i> , 2022, 12, 543-551.	1.8	4
177	Biotechnology applications of proteins functionalized with DNA oligonucleotides. <i>Trends in Biotechnology</i> , 2022, , .	9.3	1
178	DNA Self-Assembly of Single Molecules with Deterministic Position and Orientation. <i>ACS Nano</i> , 2022, 16, 16924-16931.	14.6	18
179	Actuating tension-loaded DNA clamps drives membrane tubulation. <i>Science Advances</i> , 2022, 8, .	10.3	8
181	Single-Molecule Methods for Characterizing Different DNA Higher-Order Structures. <i>Engineering</i> , 2023, 24, 276-291.	6.7	0
183	Multiplexed Detection of Molecular Interactions with DNA Origami Engineered Cells in 3D Collagen Matrices. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 55307-55319.	8.0	1
185	Mechanical DNA Origami to Investigate Biological Systems. <i>Advanced Biology</i> , 2023, 7, .	2.5	3
186	A DNA origami-based device for investigating DNA bending proteins by transmission electron microscopy. <i>Nanoscale</i> , 2023, 15, 3212-3218.	5.6	1
187	Shrinking gate fluorescence correlation spectroscopy yields equilibrium constants and separates photophysics from structural dynamics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2023, 120, .	7.1	12
188	Self-assembly of DNA origami for nanofabrication, biosensing, drug delivery, and computational storage. <i>IScience</i> , 2023, 26, 106638.	4.1	9
189	DNA Origami Curvature Sensors for Nanoparticle and Vesicle Size Determination with Single-Molecule FRET Readout. <i>ACS Nano</i> , 2023, 17, 3088-3097.	14.6	8

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191	DNA Origami Fiducial for Accurate 3D Atomic Force Microscopy Imaging. Nano Letters, 2023, 23, 1236-1243.	9.1	4
192	Storage of mechanical energy in DNA nanorobotics using molecular torsion springs. Nature Physics, 2023, 19, 741-751.	16.7	7
193	Artificial Genetic Switches and DNA Origami: Current Landscape and Prospects as Designer Therapeutics and Visualization Tools. , 2022, , 1-30.		0
194	Weak tension accelerates hybridization and dehybridization of short oligonucleotides. Nucleic Acids Research, 0, , .	14.5	0
195	Combining pMINFLUX, graphene energy transfer and DNA-PAINT for nanometer precise 3D super-resolution microscopy. Light: Science and Applications, 2023, 12, .	16.6	6
197	Recent Advances in DNA Origami-Engineered Nanomaterials and Applications. Chemical Reviews, 2023, 123, 3976-4050.	47.7	42
198	Modular, Articulated Models of DNA and Peptide Nucleic Acids for Nanotechnology Education. The Biophysicist, 2023, 4, 1-10.	0.3	0
199	Steric Communication between Dynamic Components on DNA Nanodevices. ACS Nano, 0, , .	14.6	1
200	Genetically Encoded DNA Origami for Gene Therapy In Vivo. Journal of the American Chemical Society, 2023, 145, 9343-9353.	13.7	16
201	Fabricating higher-order functional DNA origami structures to reveal biological processes at multiple scales. NPG Asia Materials, 2023, 15, .	7.9	5
202	Effect of Ionic Strength on the Thermal Stability of DNA Origami Nanostructures. ChemBioChem, 2023, 24, .	2.6	5
203	Self-Assembly of DNA Nanostructures in Different Cations. Small, 2023, 19, .	10.0	3
204	Monitoring Molecular Dynamics with <sc>Single-Molecule</sc> Electronic Devices and Fluorescence Techniques<sup>â€‹</sup>. Chinese Journal of Chemistry, 2023, 41, 2889-2907.	4.9	1
206	Molecular Recognition in Confined Space Elucidated with DNA Nanopores and Single-Molecule Force Microscopy. Nano Letters, 2023, 23, 4439-4447.	9.1	2
209	A Programmable DNA Origami Nanospring That Reports Dynamics of Single Integrin Motion, Force Magnitude and Force Orientation in Living Cells. ACS Nano, 2023, 17, 13185-13194.	14.6	1
210	Patterning DNA Origami on Membranes Through Protein Self-Organization. Natural Computing Series, 2023, , 411-431.	2.2	1
211	Mechanics of dynamic and deformable DNA nanostructures. Chemical Science, 0, , .	7.4	1
212	DNA-Based Mechanical Sensors for Cell Applications. Chemistry, 2023, 5, 1546-1559.	2.2	2

#	ARTICLE	IF	CITATIONS
213	Artificial Genetic Switches and DNA Origami: Current Landscape and Prospects as Designer Therapeutics and Visualization Tools. , 2023, , 1835-1864.		0
214	DNA Origami: From Molecular Folding Art to Drug Delivery Technology. Advanced Materials, 0, , .	21.0	3
215	Deep-LASI: deep-learning assisted, single-molecule imaging analysis of multi-color DNA origami structures. Nature Communications, 2023, 14, .	12.8	0
218	DNA origami: a tool to evaluate and harness transcription factors. Journal of Molecular Medicine, 0, , .	3.9	0
219	DNA Origami-Based Single-Molecule Force Spectroscopy and Applications. Methods in Molecular Biology, 2024, , 479-507.	0.9	0
220	A DNA Origami-Based Gene Editing System for Efficient Gene Therapy in Vivo. Angewandte Chemie, 2023, 135, .	2.0	0
221	A DNA Origami-Based Gene Editing System for Efficient Gene Therapy in Vivo. Angewandte Chemie - International Edition, 2023, 62, .	13.8	2
222	Electrokinetic Torque Generation by DNA Nanorobotic Arms Studied via Single-Molecule Fluctuation Analysis. Journal of Physical Chemistry B, 0, , .	2.6	0
223	DNA-Modulated and Mechanoresponsive Excitonic Couplings Reveal Chiroptical Correlation of Conformation, Tension, and Dynamics of DNA Self-Assembly. Nano Letters, 0, , .	9.1	0
225	Decoding Biomechanical Cues Based on DNA Sensors. Small, 0, , .	10.0	0
226	The combination of DNA nanostructures and materials for highly sensitive electrochemical detection. Bioelectrochemistry, 2024, 157, 108651.	4.6	0
227	Chemically Conjugated Branched Staples for Super-DNA Origami. Journal of the American Chemical Society, 2024, 146, 4178-4186.	13.7	0
229	Super-resolved FRET and co-tracking in pMINFLUX. Nature Photonics, 0, , .	31.4	0
230	Cooperative control of a DNA origami force sensor. Scientific Reports, 2024, 14, .	3.3	0
231	Use of DNA forceps to measure receptor-ligand dissociation equilibrium constants in a single-molecule competition assay. Methods in Enzymology, 2024, , 51-82.	1.0	0
232	Magnetic tweezers principles and promises. Methods in Enzymology, 2024, , 1-49.	1.0	0
233	Prediction of DNA origami shape using graph neural network. Nature Materials, 0, , .	27.5	0
234	An RNA origami robot that traps and releases a fluorescent aptamer. Science Advances, 2024, 10, .	10.3	0