

Structural, mechanical, and thermodynamic properties

Journal of Chemical Physics

134, 085101

DOI: 10.1063/1.3552946

Citation Report

#	ARTICLE	IF	CITATIONS
1	Moving beyond Watsonâ€™Crick models of coarse grained DNA dynamics. Journal of Chemical Physics, 2011, 135, 205102.	1.2	54
2	A general theory of DNA-mediated and other valence-limited colloidal interactions. Journal of Chemical Physics, 2012, 137, 094108.	1.2	96
3	Inferring bulk self-assembly properties from simulations of small systems with multiple constituent species and small systems in the grand canonical ensemble. Journal of Chemical Physics, 2012, 137, 144105.	1.2	19
4	The effect of topology on the structure and free energy landscape of DNA kissing complexes. Journal of Chemical Physics, 2012, 136, 215102.	1.2	28
5	Sequence-dependent thermodynamics of a coarse-grained DNA model. Journal of Chemical Physics, 2012, 137, 135101.	1.2	265
6	Coarse-Grained Model DNA: Structure, Sequences, Stems, Circles, Hairpins. Journal of Physical Chemistry B, 2012, 116, 14735-14743.	1.2	17
7	Ab initio determination of coarse-grained interactions in double-stranded DNA. Journal of Chemical Physics, 2012, 137, 105102.	1.2	33
8	Self-assembly of short DNA duplexes: from a coarse-grained model to experiments through a theoretical link. Soft Matter, 2012, 8, 8388.	1.2	56
9	Modelling Nucleic Acid Structure and Flexibility: From Atomic to Mesoscopic Scale. RSC Biomolecular Sciences, 2012, , 3-32.	0.4	10
10	DNA Cruciform Arms Nucleate through a Correlated but Asynchronous Cooperative Mechanism. Journal of Physical Chemistry B, 2012, 116, 11616-11625.	1.2	36
11	Formation of dodecagonal quasicrystals in two-dimensional systems of patchy particles. Journal of Chemical Physics, 2012, 136, 054904.	1.2	52
12	LAMMPS framework for dynamic bonding and an application modeling DNA. Computer Physics Communications, 2012, 183, 1793-1802.	3.0	11
13	Modelling chromatin structure and dynamics: status and prospects. Current Opinion in Structural Biology, 2012, 22, 151-159.	2.6	36
14	Analysis of RNA base modification and structural rearrangement by single-molecule real-time detection of reverse transcription. Journal of Nanobiotechnology, 2013, 11, 8.	4.2	131
15	Exploring Energy Landscapes: Metrics, Pathways, and Normal-Mode Analysis for Rigid-Body Molecules. Journal of Chemical Theory and Computation, 2013, 9, 4026-4034.	2.3	21
16	Perspective: Coarse-grained models for biomolecular systems. Journal of Chemical Physics, 2013, 139, 090901.	1.2	675
17	An experimentally-informed coarse-grained 3-site-per-nucleotide model of DNA: Structure, thermodynamics, and dynamics of hybridization. Journal of Chemical Physics, 2013, 139, 144903.	1.2	191
18	A sequence-dependent rigid-base model of DNA. Journal of Chemical Physics, 2013, 138, 055102.	1.2	50

#	ARTICLE	IF	CITATIONS
19	Exploring the mechanisms of DNA hybridization on a surface. <i>Journal of Chemical Physics</i> , 2013, 138, 035102.	1.2	28
20	Procedure to construct a multi-scale coarse-grained model of DNA-coated colloids from experimental data. <i>Soft Matter</i> , 2013, 9, 7342.	1.2	23
21	Developments in understanding and controlling self assembly of DNA-functionalized colloids. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 3115.	1.3	83
22	Coarse-graining DNA for simulations of DNA nanotechnology. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 20395.	1.3	173
23	DNA hybridization kinetics: zippering, internal displacement and sequence dependence. <i>Nucleic Acids Research</i> , 2013, 41, 8886-8895.	6.5	203
24	Coarse-Grained Simulations of RNA and DNA Duplexes. <i>Journal of Physical Chemistry B</i> , 2013, 117, 8047-8060.	1.2	77
25	Optimizing DNA Nanotechnology through Coarse-Grained Modeling: A Two-Footed DNA Walker. <i>ACS Nano</i> , 2013, 7, 2479-2490.	7.3	88
26	Recent successes in coarse-grained modeling of DNA. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2013, 3, 69-83.	6.2	81
27	On the biophysics and kinetics of toehold-mediated DNA strand displacement. <i>Nucleic Acids Research</i> , 2013, 41, 10641-10658.	6.5	423
28	A coarse-grained model for DNA-functionalized spherical colloids, revisited: Effective pair potential from parallel replica simulations. <i>Journal of Chemical Physics</i> , 2013, 138, 025101.	1.2	20
29	Coarse-grained simulations of DNA overstretching. <i>Journal of Chemical Physics</i> , 2013, 138, 085101.	1.2	66
30	Biophysically Inspired Rational Design of Structured Chimeric Substrates for DNAzyme Cascade Engineering. <i>PLoS ONE</i> , 2014, 9, e110986.	1.1	7
31	A new configurational bias scheme for sampling supramolecular structures. <i>Journal of Chemical Physics</i> , 2014, 141, 244909.	1.2	16
32	Progress in molecular modelling of DNA materials. <i>Molecular Simulation</i> , 2014, 40, 777-783.	0.9	17
33	Dynamic Conformational Change Regulates the Protein-DNA Recognition: An Investigation on Binding of a Y-Family Polymerase to Its Target DNA. <i>PLoS Computational Biology</i> , 2014, 10, e1003804.	1.5	48
34	The Role of Loop Stacking in the Dynamics of DNA Hairpin Formation. <i>Journal of Physical Chemistry B</i> , 2014, 118, 14326-14335.	1.2	27
35	Coarse-grained modeling of DNA curvature. <i>Journal of Chemical Physics</i> , 2014, 141, 165103.	1.2	106
36	Anomalous Dynamics of DNA Hairpin Folding. <i>Physical Review Letters</i> , 2014, 112, 198102.	2.9	26

#	ARTICLE	IF	CITATIONS
37	A Coarse-Grained DNA Model Parameterized from Atomistic Simulations by Inverse Monte Carlo. <i>Polymers</i> , 2014, 6, 1655-1675.	2.0	55
38	The power of coarse graining in biomolecular simulations. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2014, 4, 225-248.	6.2	423
39	Modeling DNA Thermodynamics under Torsional Stress. <i>Biophysical Journal</i> , 2014, 106, 1182-1193.	0.2	12
40	Close encounters with DNA. <i>Journal of Physics Condensed Matter</i> , 2014, 26, 413101.	0.7	46
41	Accurate phase diagram of tetravalent DNA nanostars. <i>Journal of Chemical Physics</i> , 2014, 140, .	1.2	50
42	DNA Duplex Formation with a Coarse-Grained Model. <i>Journal of Chemical Theory and Computation</i> , 2014, 10, 5020-5035.	2.3	39
43	Programmable energy landscapes for kinetic control of DNA strand displacement. <i>Nature Communications</i> , 2014, 5, 5324.	5.8	172
44	The OPEP protein model: from single molecules, amyloid formation, crowding and hydrodynamics to DNA/RNA systems. <i>Chemical Society Reviews</i> , 2014, 43, 4871-4893.	18.7	147
45	A Coarse-Grained Model of Unstructured Single-Stranded DNA Derived from Atomistic Simulation and Single-Molecule Experiment. <i>Journal of Chemical Theory and Computation</i> , 2014, 10, 2891-2896.	2.3	79
46	Coarse-grained modeling of DNA oligomer hybridization: Length, sequence, and salt effects. <i>Journal of Chemical Physics</i> , 2014, 141, 035102.	1.2	58
47	Gels of DNA Nanostars Never Crystallize. <i>ACS Nano</i> , 2014, 8, 3567-3574.	7.3	74
48	A Solvent-Mediated Coarse-Grained Model of DNA Derived with the Systematic Newton Inversion Method. <i>Journal of Chemical Theory and Computation</i> , 2014, 10, 3541-3549.	2.3	31
49	A unified coarse-grained model of biological macromolecules based on mean-field multipole–multipole interactions. <i>Journal of Molecular Modeling</i> , 2014, 20, 2306.	0.8	123
50	Simulating a burnt-bridges DNA motor with a coarse-grained DNA model. <i>Natural Computing</i> , 2014, 13, 535-547.	1.8	30
51	A nucleotide-level coarse-grained model of RNA. <i>Journal of Chemical Physics</i> , 2014, 140, 235102.	1.2	117
52	Patterns without Patches: Hierarchical Self-Assembly of Complex Structures from Simple Building Blocks. <i>ACS Nano</i> , 2014, 8, 5891-5897.	7.3	56
53	Introducing improved structural properties and salt dependence into a coarse-grained model of DNA. <i>Journal of Chemical Physics</i> , 2015, 142, 234901.	1.2	267
54	Optimization of a Nucleic Acids united-RESidue 2-Point model (NARES-2P) with a maximum-likelihood approach. <i>Journal of Chemical Physics</i> , 2015, 143, 243111.	1.2	25

#	ARTICLE	IF	CITATIONS
55	The impact of resolution upon entropy and information in coarse-grained models. <i>Journal of Chemical Physics</i> , 2015, 143, 243104.	1.2	106
56	Coarse-grained modelling of supercoiled RNA. <i>Journal of Chemical Physics</i> , 2015, 143, 243122.	1.2	13
57	Plectoneme tip bubbles: Coupled denaturation and writhing in supercoiled DNA. <i>Scientific Reports</i> , 2015, 5, 7655.	1.6	84
58	Atomistic Free Energy Model for Nucleic Acids: Simulations of Single-Stranded DNA and the Entropy Landscape of RNA Stem-Loop Structures. <i>Journal of Physical Chemistry B</i> , 2015, 119, 14840-14856.	1.2	12
59	Melting dynamics of short dsDNA chains in saline solutions. <i>SpringerPlus</i> , 2015, 4, 777.	1.2	1
60	Coarse-Grained Ions for Nucleic Acid Modeling. <i>Journal of Chemical Theory and Computation</i> , 2015, 11, 5436-5446.	2.3	26
61	Flexible Boundaries for Multiresolution Solvation: An Algorithm for Spatial Multiscaling in Molecular Dynamics Simulations. <i>Journal of Chemical Theory and Computation</i> , 2015, 11, 5447-5463.	2.3	12
62	DNA hairpins destabilize duplexes primarily by promoting melting rather than by inhibiting hybridization. <i>Nucleic Acids Research</i> , 2015, 43, 6181-6190.	6.5	54
63	Coarse-Grained Simulation Study of Sequence Effects on DNA Hybridization in a Concentrated Environment. <i>Journal of Physical Chemistry B</i> , 2015, 119, 1823-1834.	1.2	24
64	Switching Bonds in a DNA Gel: An All-DNA Vitrimer. <i>Physical Review Letters</i> , 2015, 114, 078104.	2.9	32
65	Coarse-Grained HiRE-RNA Model for ab Initio RNA Folding beyond Simple Molecules, Including Noncanonical and Multiple Base Pairings. <i>Journal of Chemical Theory and Computation</i> , 2015, 11, 3510-3522.	2.3	65
66	Adaptive resolution simulation of a biomolecule and its hydration shell: Structural and dynamical properties. <i>Journal of Chemical Physics</i> , 2015, 142, 195101.	1.2	47
67	A Mathematical Formulation and Solution of the CoPhMoRe Inverse Problem for Helically Wrapping Polymer Corona Phases on Cylindrical Substrates. <i>Journal of Physical Chemistry C</i> , 2015, 119, 13876-13886.	1.5	40
68	Modeling the stretching of wormlike chains in the presence of excluded volume. <i>Soft Matter</i> , 2015, 11, 5947-5954.	1.2	16
69	Multiscale modelling of DNA mechanics. <i>Journal of Physics Condensed Matter</i> , 2015, 27, 323102.	0.7	13
70	Martini Coarse-Grained Force Field: Extension to DNA. <i>Journal of Chemical Theory and Computation</i> , 2015, 11, 3932-3945.	2.3	239
71	A comparison between parallelization approaches in molecular dynamics simulations on GPUs. <i>Journal of Computational Chemistry</i> , 2015, 36, 1-8.	1.5	85
72	Polarizable coarse-grained models for molecular dynamics simulation of liquid cyclohexane. <i>Journal of Computational Chemistry</i> , 2015, 36, 1311-1321.	1.5	7

#	ARTICLE	IF	CITATIONS
73	Modelling Toehold-Mediated RNA Strand Displacement. <i>Biophysical Journal</i> , 2015, 108, 1238-1247.	0.2	54
74	Physical model for recognition tunneling. <i>Nanotechnology</i> , 2015, 26, 084001.	1.3	27
75	A Coarse-Grained Simulation Study of the Structures, Energetics, and Dynamics of Linear and Circular DNA with Its Ions. <i>Journal of Chemical Theory and Computation</i> , 2015, 11, 2813-2826.	2.3	17
76	Twist-Induced Defects of the P-SSP7 Genome Revealed by Modeling the Cryo-EM Density. <i>Journal of Physical Chemistry B</i> , 2015, 119, 4937-4943.	1.2	7
77	Molecular determinants of the interactions between proteins and ssDNA. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 5033-5038.	3.3	37
78	Characterizing the bending and flexibility induced by bulges in DNA duplexes. <i>Journal of Chemical Physics</i> , 2015, 142, 165101.	1.2	16
79	DNA denaturation bubbles: Free-energy landscape and nucleation/closure rates. <i>Journal of Chemical Physics</i> , 2015, 142, 034903.	1.2	38
80	The effects of multiple probes on the hybridization of target DNA on surfaces. <i>Journal of Chemical Physics</i> , 2015, 142, 015102.	1.2	9
81	Base triplet stepping by the Rad51/RecA family of recombinases. <i>Science</i> , 2015, 349, 977-981.	6.0	145
82	Probabilistic Analysis of Localized DNA Hybridization Circuits. <i>ACS Synthetic Biology</i> , 2015, 4, 898-913.	1.9	32
83	Force-Induced Rupture of a DNA Duplex: From Fundamentals to Force Sensors. <i>ACS Nano</i> , 2015, 9, 11993-12003.	7.3	86
84	DNA nanotechnology: understanding and optimisation through simulation. <i>Molecular Physics</i> , 2015, 113, 1-15.	0.8	34
85	The dynamic interplay between DNA topoisomerases and DNA topology. <i>Biophysical Reviews</i> , 2016, 8, 101-111.	1.5	24
86	Small-angle neutron scattering and molecular dynamics structural study of gelling DNA nanostars. <i>Journal of Chemical Physics</i> , 2016, 145, 084910.	1.2	30
87	New coarse-grained molecular dynamics model of double stranded DNA chain for DNA origami. , 2016, , .		0
88	Design principles for rapid folding of knotted DNA nanostructures. <i>Nature Communications</i> , 2016, 7, 10803.	5.8	42
89	An implicit divalent counterion force field for RNA molecular dynamics. <i>Journal of Chemical Physics</i> , 2016, 144, 105104.	1.2	8
90	A coarse-grained DNA model for the prediction of current signals in DNA translocation experiments. <i>Journal of Chemical Physics</i> , 2016, 145, 194106.	1.2	9

#	ARTICLE	IF	CITATIONS
91	Lattice model of oligonucleotide hybridization in solution. II. Specificity and cooperativity. <i>Journal of Chemical Physics</i> , 2016, 144, 125101.	1.2	9
92	Adaptive resolution simulation of oligonucleotides. <i>Journal of Chemical Physics</i> , 2016, 145, 234101.	1.2	14
93	Characterizing DNA Star-Tile-Based Nanostructures Using a Coarse-Grained Model. <i>ACS Nano</i> , 2016, 10, 4236-4247.	7.3	35
94	Physics of base-pairing dynamics in DNA. <i>Physics Reports</i> , 2016, 631, 1-41.	10.3	46
95	Coarse-grained modeling of RNA 3D structure. <i>Methods</i> , 2016, 103, 138-156.	1.9	42
96	Electrochemical DNA biosensors based on long-range electron transfer: investigating the efficiency of a fluidic channel microelectrode compared to an ultramicroelectrode in a two-electrode setup. <i>Lab on A Chip</i> , 2016, 16, 4373-4381.	3.1	29
97	Sequence-Dependent Mechanism of DNA Oligonucleotide Dehybridization Resolved through Infrared Spectroscopy. <i>Journal of the American Chemical Society</i> , 2016, 138, 11792-11801.	6.6	66
98	Effects of Concentration and Temperature on DNA Hybridization by Two Closely Related Sequences via Large-Scale Coarse-Grained Simulations. <i>Journal of Physical Chemistry B</i> , 2016, 120, 7795-7806.	1.2	22
99	Adaptive resolution simulation of an atomistic DNA molecule in MARTINI salt solution. <i>European Physical Journal: Special Topics</i> , 2016, 225, 1595-1607.	1.2	25
100	Response of a DNA Hydrogen Bond to a Force in Liquid. <i>Advances in Quantum Chemistry</i> , 2016, 72, 13-28.	0.4	0
101	The dynamic interplay between DNA topoisomerases and DNA topology. <i>Biophysical Reviews</i> , 2016, 8, 221-231.	1.5	14
102	A single nucleotide resolution model for large-scale simulations of double stranded DNA. <i>Soft Matter</i> , 2016, 12, 9458-9470.	1.2	17
103	Coarse-Grained Simulations Complemented by Atomistic Molecular Dynamics Provide New Insights into Folding and Unfolding of Human Telomeric G-Quadruplexes. <i>Journal of Chemical Theory and Computation</i> , 2016, 12, 6077-6097.	2.3	50
104	Molecular computers for molecular robots as hybrid systems. <i>Theoretical Computer Science</i> , 2016, 632, 4-20.	0.5	14
105	Direct Simulation of the Self-Assembly of a Small DNA Origami. <i>ACS Nano</i> , 2016, 10, 1724-1737.	7.3	86
106	Computing Nonequilibrium Conformational Dynamics of Structured Nucleic Acid Assemblies. <i>Journal of Chemical Theory and Computation</i> , 2016, 12, 261-273.	2.3	20
107	Self-Assembly of Structures with Addressable Complexity. <i>Journal of the American Chemical Society</i> , 2016, 138, 2457-2467.	6.6	73
108	Coarse-Grained Modeling of Nucleic Acids Using Anisotropic Gay-Berne and Electric Multipole Potentials. <i>Journal of Chemical Theory and Computation</i> , 2016, 12, 676-693.	2.3	47

#	ARTICLE	IF	CITATIONS
109	Theory and simulation of DNA-coated colloids: a guide for rational design. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 6373-6393.	1.3	55
110	Multiscale coarse-grained modelling of chromatin components: DNA and the nucleosome. <i>Advances in Colloid and Interface Science</i> , 2016, 232, 36-48.	7.0	19
111	Sequence Affects the Cyclization of DNA Minicircles. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 1042-1046.	2.1	11
112	The "sugar" coarse-grained DNA model. <i>Journal of Molecular Modeling</i> , 2017, 23, 66.	0.8	11
113	Conformational Dynamics of Mechanically Compliant DNA Nanostructures from Coarse-Grained Molecular Dynamics Simulations. <i>ACS Nano</i> , 2017, 11, 4617-4630.	7.3	65
114	Structural Characterization of Bubbles Formed in DNA Melting: A Monte Carlo Simulation Study. <i>ACS Omega</i> , 2017, 2, 1915-1921.	1.6	7
115	A dsDNA model optimized for electrokinetic applications. <i>Soft Matter</i> , 2017, 13, 3918-3926.	1.2	6
116	Coarse-Grained Molecular Dynamics Model of Double-Stranded DNA for DNA Nanostructure Design. <i>Journal of Physical Chemistry B</i> , 2017, 121, 5033-5039.	1.2	11
117	Martini Coarse-Grained Force Field: Extension to RNA. <i>Biophysical Journal</i> , 2017, 113, 246-256.	0.2	156
118	Multiscale simulations of anisotropic particles combining molecular dynamics and Green's function reaction dynamics. <i>Journal of Chemical Physics</i> , 2017, 146, 114106.	1.2	28
119	Pore translocation of knotted DNA rings. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E2991-E2997.	3.3	76
120	Characterizing the Motion of Jointed DNA Nanostructures Using a Coarse-Grained Model. <i>ACS Nano</i> , 2017, 11, 12426-12435.	7.3	51
121	DNA elasticity from coarse-grained simulations: The effect of groove asymmetry. <i>Journal of Chemical Physics</i> , 2017, 146, 214902.	1.2	38
122	Dynamic Histogram Analysis To Determine Free Energies and Rates from Biased Simulations. <i>Journal of Chemical Theory and Computation</i> , 2017, 13, 6328-6342.	2.3	54
123	Adaptive resolution simulations of biomolecular systems. <i>European Biophysics Journal</i> , 2017, 46, 821-835.	1.2	20
124	How We Make DNA Origami. <i>ChemBioChem</i> , 2017, 18, 1873-1885.	1.3	134
125	Self-assembly of two-dimensional binary quasicrystals: a possible route to a DNA quasicrystal. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 014006.	0.7	20
126	Influence of DNA sequence on the structure of minicircles under torsional stress. <i>Nucleic Acids Research</i> , 2017, 45, 7633-7642.	6.5	32

#	ARTICLE	IF	CITATIONS
127	A Nucleotide-Level Computational Approach to DNA-Based Materials. , 2017, , 71-90.		0
128	Multi-scale coarse-graining for the study of assembly pathways in DNA-brick self-assembly. Journal of Chemical Physics, 2018, 148, 134910.	1.2	18
129	Effects of internal friction on contact formation dynamics of polymer chain. Molecular Physics, 2018, 116, 1026-1036.	0.8	4
130	DNA and DNA computation based on toehold-mediated strand displacement reactions. International Journal of Modern Physics B, 2018, 32, 1840014.	1.0	6
131	How Well Can DNA Rupture DNA? Shearing and Unzipping Forces inside DNA Nanostructures. ACS Omega, 2018, 3, 292-301.	1.6	14
132	Rolling circle amplification shows a sinusoidal template length-dependent amplification bias. Nucleic Acids Research, 2018, 46, 538-545.	6.5	51
133	DNA bipedal motor walking dynamics: an experimental and theoretical study of the dependency on step size. Nucleic Acids Research, 2018, 46, 1553-1561.	6.5	33
134	Incorporating particle flexibility in a density functional description of nematics and cholesterics. Molecular Physics, 2018, 116, 2773-2791.	0.8	14
135	BOCS: Bottom-up Open-source Coarse-graining Software. Journal of Physical Chemistry B, 2018, 122, 3363-3377.	1.2	42
136	Enriched Conformational Sampling of DNA and Proteins with a Hybrid Hamiltonian Derived from the Protein Data Bank. International Journal of Molecular Sciences, 2018, 19, 3405.	1.8	3
137	Lattice models and Monte Carlo methods for simulating DNA origami self-assembly. Journal of Chemical Physics, 2018, 149, 234905.	1.2	12
139	Dynamics of supercoiled DNA with complex knots: large-scale rearrangements and persistent multi-strand interlocking. Nucleic Acids Research, 2018, 46, 7533-7541.	6.5	24
140	Layered-Crossover Tiles with Precisely Tunable Angles for 2D and 3D DNA Crystal Engineering. Journal of the American Chemical Society, 2018, 140, 14670-14676.	6.6	62
141	Representation of DNA environment: Spiral staircase distribution function. Journal of Computational Chemistry, 2018, 39, 2300-2306.	1.5	2
142	Effects of Design Choices on the Stiffness of Wireframe DNA Origami Structures. ACS Nano, 2018, 12, 9291-9299.	7.3	36
143	Development of a simple coarse-grained DNA model for analysis of oligonucleotide complex formation. Molecular Simulation, 2018, 44, 1004-1015.	0.9	6
144	Force-Induced Unravelling of DNA Origami. ACS Nano, 2018, 12, 6734-6747.	7.3	55
145	Coarse-Grained Double-Stranded RNA Model from Quantum-Mechanical Calculations. Journal of Physical Chemistry B, 2018, 122, 7915-7928.	1.2	10

#	ARTICLE	IF	CITATIONS
146	Tethered multifluorophore motion reveals equilibrium transition kinetics of single DNA double helices. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E7512-E7521.	3.3	33
147	The temperature dependence of the helical twist of DNA. <i>Nucleic Acids Research</i> , 2018, 46, 7998-8009.	6.5	55
148	Coarse-grained simulation of DNA using LAMMPS. <i>European Physical Journal E</i> , 2018, 41, 57.	0.7	46
149	Sequence-Dependent Three Interaction Site Model for Single- and Double-Stranded DNA. <i>Journal of Chemical Theory and Computation</i> , 2018, 14, 3763-3779.	2.3	46
150	Principles and Applications of Nucleic Acid Strand Displacement Reactions. <i>Chemical Reviews</i> , 2019, 119, 6326-6369.	23.0	506
151	TacoxDNA: A user-friendly web server for simulations of complex DNA structures, from single strands to origami. <i>Journal of Computational Chemistry</i> , 2019, 40, 2586-2595.	1.5	54
152	Identifying Physical Causes of Apparent Enhanced Cyclization of Short DNA Molecules with a Coarse-Grained Model. <i>Journal of Chemical Theory and Computation</i> , 2019, 15, 4660-4672.	2.3	22
153	Atomic structures of RNA nanotubes and their comparison with DNA nanotubes. <i>Nanoscale</i> , 2019, 11, 14863-14878.	2.8	18
154	Correction of coarse-graining errors by a two-level method: Application to the Asakura-Oosawa model. <i>Journal of Chemical Physics</i> , 2019, 151, 144108.	1.2	8
155	Manipulation of cholesteric liquid crystal phase behavior and molecular assembly by molecular chirality. <i>Physical Review E</i> , 2019, 100, 022703.	0.8	8
156	Substrate conformational dynamics facilitate structure-specific recognition of gapped DNA by DNA polymerase. <i>Nucleic Acids Research</i> , 2019, 47, 10788-10800.	6.5	36
157	Uncertainty quantification of a DNA origami mechanism using a coarse-grained model and kinematic variance analysis. <i>Nanoscale</i> , 2019, 11, 1647-1660.	2.8	23
158	Mesoscale Electrostatics Driving Particle Dynamics in Nonhomogeneous Dielectrics. <i>Journal of Chemical Theory and Computation</i> , 2019, 15, 2033-2041.	2.3	17
159	Computational Simulation of Adapter Length-Dependent LASSO Probe Capture Efficiency. <i>Biomolecules</i> , 2019, 9, 199.	1.8	3
160	A polymer model of bacterial supercoiled DNA including structural transitions of the double helix. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2019, 527, 121196.	1.2	3
161	Understanding the Self-Assembly of DNA-Coated Colloids via Theory and Simulations. <i>Frontiers of Nanoscience</i> , 2019, 13, 87-123.	0.3	3
162	Structure, stability and specificity of the binding of ssDNA and ssRNA with proteins. <i>PLoS Computational Biology</i> , 2019, 15, e1006768.	1.5	49
163	Membrane Scaffolds Enhance the Responsiveness and Stability of DNA-Based Sensing Circuits. <i>Bioconjugate Chemistry</i> , 2019, 30, 1850-1859.	1.8	20

#	ARTICLE	IF	CITATIONS
164	Mechanisms of DNA hybridization: Transition path analysis of a simulation-informed Markov model. <i>Journal of Chemical Physics</i> , 2019, 150, 105103.	1.2	9
165	A Hybrid Hamiltonian for the Accelerated Sampling along Experimental Restraints. <i>International Journal of Molecular Sciences</i> , 2019, 20, 370.	1.8	5
166	Design and synthesis of pleated DNA origami nanotubes with adjustable diameters. <i>Nucleic Acids Research</i> , 2019, 47, 11963-11975.	6.5	7
167	Automated sequence design of 2D wireframe DNA origami with honeycomb edges. <i>Nature Communications</i> , 2019, 10, 5419.	5.8	70
168	Modeling Nucleic Acids at the Residue-Level Resolution. <i>Springer Series on Bio- and Neurosystems</i> , 2019, , 117-161.	0.2	0
169	Coarse-grained modelling of the structural properties of DNA origami. <i>Nucleic Acids Research</i> , 2019, 47, 1585-1597.	6.5	75
170	Triangulated Wireframe Structures Assembled Using Single-Stranded DNA Tiles. <i>ACS Nano</i> , 2019, 13, 1839-1848.	7.3	21
171	Magic v.3: An integrated software package for systematic structure-based coarse-graining. <i>Computer Physics Communications</i> , 2019, 237, 263-273.	3.0	22
172	Solution-Controlled Conformational Switching of an Anchored Wireframe DNA Nanostructure. <i>Small</i> , 2019, 15, e1803628.	5.2	9
173	Dynamic DNA nanotechnology: toward functional nanoscale devices. <i>Nanoscale Horizons</i> , 2020, 5, 182-201.	4.1	158
174	On the role of flexibility in linker-mediated DNA hydrogels. <i>Soft Matter</i> , 2020, 16, 990-1001.	1.2	23
175	A DNA Origami Platform for Single-Pair Förster Resonance Energy Transfer Investigation of DNA-DNA Interactions and Ligation. <i>Journal of the American Chemical Society</i> , 2020, 142, 815-825.	6.6	21
176	Free energy landscape of salt-actuated reconfigurable DNA nanodevices. <i>Nucleic Acids Research</i> , 2020, 48, 548-560.	6.5	18
177	Functional materials and devices by self-assembly. <i>MRS Bulletin</i> , 2020, 45, 799-806.	1.7	27
178	Effects of Model Shape, Volume, and Softness of the Capsid for DNA Packaging of phi29. <i>Journal of Physical Chemistry B</i> , 2020, 124, 10337-10344.	1.2	1
179	Hyperbranched DNA clusters. <i>Nanoscale</i> , 2020, 12, 23003-23012.	2.8	3
180	Self-Limiting Polymerization of DNA Origami Subunits with Strain Accumulation. <i>ACS Nano</i> , 2020, 14, 17428-17441.	7.3	29
181	Computing the Elastic Mechanical Properties of Rodlike DNA Nanostructures. <i>Journal of Chemical Theory and Computation</i> , 2020, 16, 7748-7763.	2.3	13

#	ARTICLE	IF	CITATIONS
182	Coarse-Grained Models of RNA Nanotubes for Large Time Scale Studies in Biomedical Applications. <i>Biomedicines</i> , 2020, 8, 195.	1.4	4
183	Coarse-grained modelling of DNA plectoneme pinning in the presence of base-pair mismatches. <i>Nucleic Acids Research</i> , 2020, 48, 10713-10725.	6.5	15
184	Sharp DNA denaturation in a helicoidal mesoscopic model. <i>Chemical Physics Letters</i> , 2020, 755, 137781.	1.2	7
185	Understanding DNA interactions in crowded environments with a coarse-grained model. <i>Nucleic Acids Research</i> , 2020, 48, 10726-10738.	6.5	24
186	Arranging Small Molecules with Subnanometer Precision on DNA Origami Substrates for the Single-Molecule Investigation of Protein-Ligand Interactions. <i>Small Structures</i> , 2020, 1, 2000038.	6.9	31
187	Mathematical and computational models of RNA nanoclusters and their applications in data-driven environments. <i>Molecular Simulation</i> , 2020, 46, 1094-1115.	0.9	6
188	Ion-mediated interactions between like-charged polyelectrolytes with bending flexibility. <i>Scientific Reports</i> , 2020, 10, 21586.	1.6	8
189	A unified model for DNA bipedal nanomotors. <i>Journal of Applied Physics</i> , 2020, 128, .	1.1	2
190	Measuring Internal Forces in Single-Stranded DNA: Application to a DNA Force Clamp. <i>Journal of Chemical Theory and Computation</i> , 2020, 16, 7764-7775.	2.3	10
191	Design, optimization and analysis of large DNA and RNA nanostructures through interactive visualization, editing and molecular simulation. <i>Nucleic Acids Research</i> , 2020, 48, e72-e72.	6.5	82
192	Reconfigurable T-junction DNA Origami. <i>Angewandte Chemie</i> , 2020, 132, 16076-16080.	1.6	0
193	Modeling DNA-Strand Displacement Reactions in the Presence of Base-Pair Mismatches. <i>Journal of the American Chemical Society</i> , 2020, 142, 11451-11463.	6.6	70
194	Detecting Nanoscale Distribution of Protein Pairs by Proximity-Dependent Super-resolution Microscopy. <i>Journal of the American Chemical Society</i> , 2020, 142, 12069-12078.	6.6	14
195	Mechanistic modeling of chromatin folding to understand function. <i>Nature Methods</i> , 2020, 17, 767-775.	9.0	62
196	Discovery and design of soft polymeric bio-inspired materials with multiscale simulations and artificial intelligence. <i>Journal of Materials Chemistry B</i> , 2020, 8, 6562-6587.	2.9	44
197	Reconfigurable T-junction DNA Origami. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 15942-15946.	7.2	1
198	A new approach to the mechanics of DNA: Atoms-to-beam homogenization. <i>Journal of the Mechanics and Physics of Solids</i> , 2020, 143, 104040.	2.3	8
199	Structure and the role of filling rate on model dsDNA packed in a phage capsid. <i>Physical Review E</i> , 2020, 101, 012406.	0.8	3

#	ARTICLE	IF	CITATIONS
200	The emergence of sequence-dependent structural motifs in stretched, torsionally constrained DNA. <i>Nucleic Acids Research</i> , 2020, 48, 1748-1763.	6.5	21
201	Design and Simulation of a DNA Origami Nanopore for Large Cargoes. <i>Molecular Biotechnology</i> , 2020, 62, 423-432.	1.3	7
202	Detection of single DNA mismatches by force spectroscopy in short DNA hairpins. <i>Journal of Chemical Physics</i> , 2020, 152, 074204.	1.2	13
203	Studying rare events using forward-flux sampling: Recent breakthroughs and future outlook. <i>Journal of Chemical Physics</i> , 2020, 152, 060901.	1.2	50
204	The Business of DNA Nanotechnology: Commercialization of Origami and Other Technologies. <i>Molecules</i> , 2020, 25, 377.	1.7	14
205	Small RNA Biosensor Design Strategy To Mitigate Off-Analyte Response. <i>ACS Sensors</i> , 2020, 5, 377-384.	4.0	0
206	ssDNA diffuses along replication protein A via a reptation mechanism. <i>Nucleic Acids Research</i> , 2020, 48, 1701-1714.	6.5	24
207	MrDNA: a multi-resolution model for predicting the structure and dynamics of DNA systems. <i>Nucleic Acids Research</i> , 2020, 48, 5135-5146.	6.5	67
208	DNA Base Pair Stacking Crystallization of Gold Colloids. <i>Langmuir</i> , 2020, 36, 5118-5125.	1.6	10
209	100th Anniversary of Macromolecular Science Viewpoint: Modeling and Simulation of Macromolecules with Hydrogen Bonds: Challenges, Successes, and Opportunities. <i>ACS Macro Letters</i> , 2020, 9, 656-665.	2.3	37
210	Computational design of probes to detect bacterial genomes by multivalent binding. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 8719-8726.	3.3	14
211	Mesoscale biosimulations within a unified framework: from proteins to plasmids. <i>Molecular Simulation</i> , 2021, 47, 101-112.	0.9	2
212	A review of advancements in coarse-grained molecular dynamics simulations. <i>Molecular Simulation</i> , 2021, 47, 786-803.	0.9	103
213	Twist dynamics and buckling instability of ring DNA: the effect of groove asymmetry and anisotropic bending. <i>Soft Matter</i> , 2021, 17, 1530-1537.	1.2	7
214	DNA origami. <i>Nature Reviews Methods Primers</i> , 2021, 1, .	11.8	382
215	A tetrahedral DNA nanorobot with conformational change in response to molecular trigger. <i>Nanoscale</i> , 2021, 13, 15552-15559.	2.8	15
216	Thermodynamics of DNA Hybridization from Atomistic Simulations. <i>Journal of Physical Chemistry B</i> , 2021, 125, 771-779.	1.2	15
217	Chiral Systems Made from DNA. <i>Advanced Science</i> , 2021, 8, 2003113.	5.6	42

#	ARTICLE	IF	CITATIONS
218	Sequence-Dependent Kink Formation in Short DNA Loops: Theory and Molecular Dynamics Simulations. <i>Journal of Chemical Theory and Computation</i> , 2021, 17, 1308-1317.	2.3	4
219	DNA Nanodevices as Mechanical Probes of Protein Structure and Function. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 2802.	1.3	5
220	Generating DNA Origami Nanostructures through Shape Annealing. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 2950.	1.3	4
221	Coarse-Grained Simulations of DNA Reveal Angular Dependence of Sticky-End Binding. <i>Journal of Physical Chemistry B</i> , 2021, 125, 4016-4024.	1.2	5
222	A Versatile DNA Origami-Based Plasmonic Nanoantenna for Label-Free Single-Molecule Surface-Enhanced Raman Spectroscopy. <i>ACS Nano</i> , 2021, 15, 7065-7077.	7.3	58
223	Quantify the combined effects of temperature and force on the stability of DNA hairpin. <i>Journal of Physics Condensed Matter</i> , 2021, 33, 185102.	0.7	5
224	Base pair fluctuations in helical models for nucleic acids. <i>Journal of Chemical Physics</i> , 2021, 154, 194102.	1.2	8
225	OxDNA.org: a public webserver for coarse-grained simulations of DNA and RNA nanostructures. <i>Nucleic Acids Research</i> , 2021, 49, W491-W498.	6.5	48
226	From predictive modelling to machine learning and reverse engineering of colloidal self-assembly. <i>Nature Materials</i> , 2021, 20, 762-773.	13.3	75
229	A Primer on the oxDNA Model of DNA: When to Use it, How to Simulate it and How to Interpret the Results. <i>Frontiers in Molecular Biosciences</i> , 2021, 8, 693710.	1.6	29
230	Complete Mesoscopic Parameterization of Single LNA Modifications in DNA Applied to Oncogene Probe Design. <i>Journal of Chemical Information and Modeling</i> , 2021, 61, 3615-3624.	2.5	2
231	Effect of DNA Flexibility on Complex Formation of a Cationic Nanoparticle with Double-Stranded DNA. <i>ACS Omega</i> , 2021, 6, 18728-18736.	1.6	7
232	A Self-Regulating DNA Rotaxane Linear Actuator Driven by Chemical Energy. <i>Journal of the American Chemical Society</i> , 2021, 143, 13292-13298.	6.6	11
233	Rapid prototyping of arbitrary 2D and 3D wireframe DNA origami. <i>Nucleic Acids Research</i> , 2021, 49, 10265-10274.	6.5	51
234	Theory and Practice of Coarse-Grained Molecular Dynamics of Biologically Important Systems. <i>Biomolecules</i> , 2021, 11, 1347.	1.8	29
235	LAMMPS - a flexible simulation tool for particle-based materials modeling at the atomic, meso, and continuum scales. <i>Computer Physics Communications</i> , 2022, 271, 108171.	3.0	3,106
237	Mechanical properties of DNA and DNA nanostructures: comparison of atomistic, Martini and oxDNA models. <i>Journal of Materials Chemistry B</i> , 2021, 9, 5102-5113.	2.9	17
238	Repeat DNA-PAINT suppresses background and non-specific signals in optical nanoscopy. <i>Nature Communications</i> , 2021, 12, 501.	5.8	24

#	ARTICLE	IF	CITATIONS
239	A quantitative model for a nanoscale switch accurately predicts thermal actuation behavior. <i>Nanoscale</i> , 2021, 13, 13746-13757.	2.8	4
240	Coarse-grained nucleic acid-protein model for hybrid nanotechnology. <i>Soft Matter</i> , 2021, 17, 3586-3593.	1.2	14
241	Computer-Aided Design of DNA Origami Structures. <i>Methods in Molecular Biology</i> , 2015, 1244, 23-44.	0.4	4
242	Efficient Parameter Estimation for DNA Kinetics Modeled as Continuous-Time Markov Chains. <i>Lecture Notes in Computer Science</i> , 2019, , 80-99.	1.0	2
243	Exploring Cation Mediated DNA Interactions Using Computer Simulations. <i>Lecture Notes in Bioengineering</i> , 2020, , 51-63.	0.3	6
244	Modeling Nucleic Acids at the Residue-Level Resolution. <i>Springer Series in Bio-/neuroinformatics</i> , 2014, , 109-149.	0.1	5
245	DNA Self-Assembly and Computation Studied with a Coarse-Grained Dynamic Bonded Model. <i>Lecture Notes in Computer Science</i> , 2012, , 123-134.	1.0	2
246	Design of hidden thermodynamic driving for non-equilibrium systems via mismatch elimination during DNA strand displacement. <i>Nature Communications</i> , 2020, 11, 2562.	5.8	66
247	The potential of DNA origami to build multifunctional materials. <i>Multifunctional Materials</i> , 2020, 3, 032001.	2.4	48
248	Global and local mechanical properties control endonuclease reactivity of a DNA origami nanostructure. <i>Nucleic Acids Research</i> , 2020, 48, 4672-4680.	6.5	35
249	A review on nonlinear DNA physics. <i>Royal Society Open Science</i> , 2020, 7, 200774.	1.1	14
253	Improving therapeutic potential of non-viral minimized DNA vectors. <i>Cell & Gene Therapy Insights</i> , 2020, 6, 1489-1505.	0.1	7
254	DNA and DNA computation based on toehold-mediated strand-displacement reactions. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2016, 65, 178106.	0.2	2
255	Nanobase.org: a repository for DNA and RNA nanostructures. <i>Nucleic Acids Research</i> , 2022, 50, D246-D252.	6.5	13
256	Design Approaches and Computational Tools for DNA Nanostructures. <i>IEEE Open Journal of Nanotechnology</i> , 2021, 2, 86-100.	0.9	6
257	Physics-Based Coarse-Grained Modeling in Bio- and Nanochemistry. , 2022, , 31-69.		1
258	Critical point for demixing of binary hard spheres. <i>Physical Review E</i> , 2021, 104, 044603.	0.8	3
259	Self-resetting molecular probes for nucleic acids detection enabled by fuel dissipative systems. <i>Nano Today</i> , 2021, 41, 101308.	6.2	17

#	ARTICLE	IF	CITATIONS
260	Thermodynamic Properties of Model DNA. Springer Theses, 2012, , 71-92.	0.0	0
261	Chiral selection in wrapping, crossover, and braiding of DNA mediated by asymmetric bend-writhe elasticity. AIMS Biophysics, 2015, 2, 666-694.	0.3	2
270	The future of biomolecular simulation in the pharmaceutical industry: what we can learn from aerodynamics modelling and weather prediction. Part 1. understanding the physical and computational complexity of <i>in silico</i> drug design. Acta Crystallographica Section D: Structural Biology, 2021, 77, 1348-1356.	1.1	3
271	Building up DNA, bit by bit: a simple description of chain assembly. Soft Matter, 2021, 17, 10736-10743.	1.2	0
272	Amphiphilic DNA nanostructures for bottom-up synthetic biology. Chemical Communications, 2021, 57, 12725-12740.	2.2	24
274	Single-stranded DNA aptamer targeting and neutralization of anti-D alloantibody: a potential therapeutic strategy for haemolytic diseases caused by Rhesus alloantibody. Blood Transfusion, 2018, 16, 184-192.	0.3	2
275	Predicting genome organisation and function with mechanistic modelling. Trends in Genetics, 2021, , .	2.9	9
276	Massively Parallelized Molecular Force Manipulation with On-Demand Thermal and Optical Control. Journal of the American Chemical Society, 2021, 143, 19466-19473.	6.6	6
277	Kinetics of RNA and RNA:DNA Hybrid Strand Displacement. ACS Synthetic Biology, 2021, 10, 3066-3073.	1.9	34
278	Potential of Mean Force for DNA Wrapping Around a Cationic Nanoparticle. Journal of Chemical Theory and Computation, 2021, 17, 7952-7961.	2.3	3
280	Detection of Short DNA Sequences with DNA Nanopores**. ChemPhysChem, 2022, 23, .	1.0	2
281	Characterizing the free-energy landscapes of DNA origamis. Nanoscale, 2022, , .	2.8	6
282	The interplay of supercoiling and thymine dimers in DNA. Nucleic Acids Research, 2022, 50, 2480-2492.	6.5	6
283	Simulation Guided Intramolecular Orthogonal Reporters for Dissecting Cellular Oxidative Stress and Response. SSRN Electronic Journal, 0, , .	0.4	0
284	The Mechanistic Integration and Thermodynamic Optimality of a Nanomotor. Symmetry, 2022, 14, 416.	1.1	0
285	Predicting the Free-Form Shape of Structured DNA Assemblies from Their Lattice-Based Design Blueprint. ACS Nano, 2022, 16, 4289-4297.	7.3	7
286	OxDNA to Study Species Interactions. Entropy, 2022, 24, 458.	1.1	1
287	Environmentâ€Dependent Stability and Mechanical Properties of DNA Origami Sixâ€Helix Bundles with Different Crossover Spacings. Small, 2022, 18, e2107393.	5.2	29

#	ARTICLE	IF	CITATIONS
289	Nucleic Acid Folding Simulations Using a Physics-Based Atomistic Free Energy Model. <i>Journal of Chemical Physics</i> , 2022, 156, 174114.	1.2	1
290	A DNA molecular printer capable of programmable positioning and patterning in two dimensions. <i>Science Robotics</i> , 2022, 7, eabn5459.	9.9	9
291	Accurate Sequence-Dependent Coarse-Grained Model for Conformational and Elastic Properties of Double-Stranded DNA. <i>Journal of Chemical Theory and Computation</i> , 2022, 18, 3239-3256.	2.3	13
292	Single-molecule biophysics experiments in silico: Toward a physical model of a replisome. <i>IScience</i> , 2022, 25, 104264.	1.9	1
295	Coarse-grained modelling out of equilibrium. <i>Physics Reports</i> , 2022, 972, 1-45.	10.3	31
296	Probing the Mechanical Properties of DNA Nanostructures with Metadynamics. <i>ACS Nano</i> , 2022, 16, 8784-8797.	7.3	9
297	The End Restraint Method for Mechanically Perturbing Nucleic Acids In Silico. <i>Methods in Molecular Biology</i> , 2022, , 249-262.	0.4	1
298	Free energy landscapes of DNA and its assemblies: perspectives from coarse-grained modelling. <i>Frontiers of Nanoscience</i> , 2022, , 195-210.	0.3	0
299	Design and simulation of DNA, RNA and hybrid proteinâ€“nucleic acid nanostructures with oxView. <i>Nature Protocols</i> , 2022, 17, 1762-1788.	5.5	33
300	The Free-Energy Landscape of a Mechanically Bistable DNA Origami. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 5875.	1.3	0
301	Accurate and Efficient Estimation of Lennardâ€“Jones Interactions for Coarse-Grained Particles via a Potential Matching Method. <i>Journal of Chemical Theory and Computation</i> , 2022, 18, 4879-4890.	2.3	5
302	Liquid Crystal Ordering in DNA Double Helices with Backbone Discontinuities. <i>Macromolecules</i> , 2022, 55, 5946-5953.	2.2	3
303	Design of Uracil-Modified DNA Nanotubes for Targeted Drug Release via DNA-Modifying Enzyme Reactions. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 34470-34479.	4.0	14
304	A modular spring-loaded actuator for mechanical activation of membrane proteins. <i>Nature Communications</i> , 2022, 13, .	5.8	16
306	Stability and Existence of Noncanonical I-motif DNA Structures in Computer Simulations Based on Atomistic and Coarse-Grained Force Fields. <i>Molecules</i> , 2022, 27, 4915.	1.7	1
307	Heterogeneous migration routes of DNA triplet repeat slip-outs. <i>Biophysical Reports</i> , 2022, 2, 100070.	0.7	1
308	Mutual effects between single-stranded DNA conformation and Na ⁺ â€“Mg ²⁺ ion competition in mixed salt solutions. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 20867-20881.	1.3	4
309	A simple solution to the problem of self-assembling cubic diamond crystals. <i>Nanoscale</i> , 2022, 14, 14268-14275.	2.8	11

#	ARTICLE	IF	CITATIONS
310	Three-phase DNA-origami stepper mechanism based on multi-leg interactions. <i>Biophysical Journal</i> , 2022, , .	0.2	1
311	Multilevel simulation of hard-sphere mixtures. <i>Journal of Chemical Physics</i> , 2022, 157, 124109.	1.2	0
312	Far-Field Electrostatic Signatures of Macromolecular 3D Conformation. <i>Nano Letters</i> , 2022, 22, 7834-7840.	4.5	4
313	Mechanical deformation behaviors and structural properties of ligated DNA crystals. <i>Biophysical Journal</i> , 2022, 121, 4078-4090.	0.2	2
314	Interpenetrating gels in binary suspensions of DNA nanostars. <i>Journal of Chemical Physics</i> , 2022, 157, .	1.2	5
315	Molecular states and spin crossover of hemin studied by DNA origami enabled single-molecule surface-enhanced Raman scattering. <i>Nanoscale</i> , 2022, 14, 16467-16478.	2.8	6
317	Ab initio predictions for 3D structure and stability of single- and double-stranded DNAs in ion solutions. <i>PLoS Computational Biology</i> , 2022, 18, e1010501.	1.5	1
318	Geometrically programmed self-limited assembly of tubules using DNA origami colloids. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	3.3	12
319	DNA origami tubes with reconfigurable cross-sections. <i>Nanoscale</i> , 2023, 15, 562-572.	2.8	3
320	DNA Droplets: Intelligent, Dynamic Fluid. <i>Advanced Biology</i> , 2023, 7, .	1.4	11
321	Mechanical DNA Origami to Investigate Biological Systems. <i>Advanced Biology</i> , 2023, 7, .	1.4	3
322	A versatile and convenient tool for regulation of DNA strand displacement and post-modification on pre-fabricated DNA nanodevices. <i>Nucleic Acids Research</i> , 2023, 51, 29-40.	6.5	5
323	Non-Invasive, Reliable, and Fast Quantification of DNA Loading on Gold Nanoparticles by a One-Step Optical Measurement. <i>Analytical Chemistry</i> , 2023, 95, 1856-1866.	3.2	2
324	Programming rigidity into size-defined wireframe DNA nanotubes. <i>Nanoscale</i> , 2023, 15, 5403-5413.	2.8	4
325	DNA: structure, strand displacement and reaction network. <i>Scientia Sinica Chimica</i> , 2023, 53, 721-733.	0.2	0
326	Predicting DNA kinetics with a truncated continuous-time Markov chain method. <i>Computational Biology and Chemistry</i> , 2023, 104, 107837.	1.1	0
327	Nucleic acid nanostructures for <i>in vivo</i> applications: The influence of morphology on biological fate. <i>Applied Physics Reviews</i> , 2023, 10, .	5.5	6
328	Nonequilibrium Thermodynamics of DNA Nanopore Unzipping. <i>Physical Review Letters</i> , 2023, 130, .	2.9	1

#	ARTICLE	IF	CITATIONS
329	Designing the Self-Assembly of Arbitrary Shapes Using Minimal Complexity Building Blocks. ACS Nano, 2023, 17, 5387-5398.	7.3	11
330	Mechanistic insight into the structure, thermodynamics and dynamics of equilibrium gels of multi-armed DNA nanostars. Physical Chemistry Chemical Physics, 2023, 25, 7847-7858.	1.3	0
331	Prediction and Control in DNA Nanotechnology. ACS Applied Bio Materials, 2024, 7, 626-645.	2.3	5
332	A common rule for the intermediate state caused by DNA mismatch in single-molecule experiments. Communications in Theoretical Physics, 0, , .	1.1	0
333	Stability of DNA and RNA hairpins: a comparative study based on ox-DNA. Journal of Physics Condensed Matter, 2023, 35, 265101.	0.7	0
334	An associative memory Hamiltonian model for DNA and nucleosomes. PLoS Computational Biology, 2023, 19, e1011013.	1.5	2
336	Speed and Correctness Guarantees for Programmable Enthalpy-Neutral DNA Reactions. ACS Synthetic Biology, 2023, 12, 993-1006.	1.9	2
344	The oxDNA Coarse-Grained Model as a Tool to Simulate DNA Origami. Methods in Molecular Biology, 2023, , 93-112.	0.4	4