John van Noort

List of Publications by Year
in descending order

83 papers	4,351 citations	126858 33 h-index	118793 62 g-index
86 all docs	86 docs citations	86 times ranked	4655 citing authors

#	Article	IF	Citations
1	A Method for Genetically Installing Site-Specific Acetylation in Recombinant Histones Defines the Effects of H3 K56 Acetylation. Molecular Cell, 2009, 36, 153-163.	4.5	453
2	Human Rad50/Mre11 Is a Flexible Complex that Can Tether DNA Ends. Molecular Cell, 2001, 8, 1129-1135.	4.5	437
3	Insulating behavior for DNA molecules between nanoelectrodes at the 100 nm length scale. Applied Physics Letters, 2001, 79, 3881-3883.	1.5	419
4	Dual architectural roles of HU: Formation of flexible hinges and rigid filaments. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 6969-6974.	3.3	272
5	Single-molecule force spectroscopy reveals a highly compliant helical folding for the 30-nm chromatin fiber. Nature Structural and Molecular Biology, 2009, 16, 534-540.	3.6	230
6	Transcriptional Regulation of the Ambient Temperature Response by H2A.Z Nucleosomes and HSF1 Transcription Factors in Arabidopsis. Molecular Plant, 2017, 10, 1258-1273.	3.9	169
7	Height anomalies in tapping mode atomic force microscopy in air caused by adhesion. Ultramicroscopy, 1997, 69, 117-127.	0.8	136
8	Human Rad51 filaments on double- and single-stranded DNA: correlating regular and irregular forms with recombination function. Nucleic Acids Research, 2005, 33, 3292-3302.	6.5	116
9	Dextran based photodegradable hydrogels formed via a Michael addition. Soft Matter, 2011, 7, 4881.	1.2	113
10	Real-time observation of DNA translocation by the type I restriction modification enzyme EcoR124I. Nature Structural and Molecular Biology, 2004, 11, 838-843.	3.6	111
11	spFRET Using Alternating Excitation and FCS Reveals Progressive DNA Unwrapping in Nucleosomes. Biophysical Journal, 2009, 97, 195-204.	0.2	108
12	Single-Pair FRET Microscopy Reveals Mononucleosome Dynamics. Journal of Fluorescence, 2007, 17, 785-795.	1.3	105
13	Direct Visualization of Dynamic Protein-DNA Interactions with a Dedicated Atomic Force Microscope. Biophysical Journal, 1998, 74, 2840-2849.	0.2	96
14	Nucleosomes can invade DNA territories occupied by their neighbors. Nature Structural and Molecular Biology, 2009, 16, 151-158.	3.6	95
15	Quantitative analysis of single-molecule force spectroscopy on folded chromatin fibers. Nucleic Acids Research, 2015, 43, 3578-3590.	6.5	86
16	The coiled-coil of the human Rad50 DNA repair protein contains specific segments of increased flexibility. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 7581-7586.	3.3	82
17	Sequence-based prediction of single nucleosome positioning and genome-wide nucleosome occupancy. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E2514-22.	3.3	70
18	Single-pair FRET experiments on nucleosome conformational dynamics. Biochimie, 2010, 92, 1729-1740.	1.3	69

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19	Subpiconewton Dynamic Force Spectroscopy Using Magnetic Tweezers. Biophysical Journal, 2008, 94, 2343-2348.	0.2	65
20	Hidden Markov Analysis of Nucleosome Unwrapping Under Force. Biophysical Journal, 2009, 96, 3708-3715.	0.2	62
21	Light-triggered switching of liposome surface charge directs delivery of membrane impermeable payloads in vivo. Nature Communications, 2020, 11, 3638.	5.8	62
22	Nucleosome dynamics: Sequence matters. Advances in Colloid and Interface Science, 2016, 232, 101-113.	7.0	61
23	10 Years of Tension on Chromatin: Results from Single Molecule Force Spectroscopy. Current Pharmaceutical Biotechnology, 2009, 10, 474-485.	0.9	58
24	Parallel Nanometric 3D Tracking of Intracellular Gold Nanorods Using Multifocal Two-Photon Microscopy. Nano Letters, 2013, 13, 980-986.	4.5	57
25	Single-Molecule Microscopy Reveals Membrane Microdomain Organization of Cells in a Living Vertebrate. Biophysical Journal, 2009, 97, 1206-1214.	0.2	53
26	Near-field optical microscopy for DNA studies at the single molecular level. Bioimaging, 1998, 6, 43-53.	1.8	48
27	Chromatin fibers stabilize nucleosomes under torsional stress. Nature Communications, 2020, 11, 126.	5.8	46
28	Multiplexing Genetic and Nucleosome Positioning Codes: A Computational Approach. PLoS ONE, 2016, 11, e0156905.	1.1	43
29	DNA bending by photolyase in specific and non-specific complexes studied by atomic force microscopy. Nucleic Acids Research, 1999, 27, 3875-3880.	6.5	42
30	Multiple Aspects of ATP-Dependent Nucleosome Translocation by RSC and Mi-2 Are Directed by the Underlying DNA Sequence. PLoS ONE, 2009, 4, e6345.	1.1	40
31	Mapping Electrostatic Forces Using Higher Harmonics Tapping Mode Atomic Force Microscopy in Liquid. Langmuir, 1999, 15, 7101-7107.	1.6	39
32	Crenarchaeal chromatin proteins Cren7 and Sul7 compact DNA by inducing rigid bends. Nucleic Acids Research, 2013, 41, 196-205.	6.5	39
33	Torque-limited RecA polymerization on dsDNA. Nucleic Acids Research, 2005, 33, 2099-2105.	6.5	37
34	Coexistence of Twisted, Plectonemic, and Melted DNA in Small Topological Domains. Biophysical Journal, 2014, 106, 1174-1181.	0.2	36
35	High Speed Atomic Force Microscopy of Biomolecules by Image Tracking. Biophysical Journal, 1999, 77, 2295-2303.	0.2	34
36	Histone H3 phosphorylation near the nucleosome dyad alters chromatin structure. Nucleic Acids Research, 2014, 42, 4922-4933.	6.5	34

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37	Dynamics of initiation, termination and reinitiation of DNA translocation by the motor proteinEcoR124I. EMBO Journal, 2005, 24, 4188-4197.	3.5	33
38	Single-molecule force spectroscopy on histone H4 tail-cross-linked chromatin reveals fiber folding. Journal of Biological Chemistry, 2017, 292, 17506-17513.	1.6	33
39	Initiation of translocation by Type I restriction-modification enzymes is associated with a short DNA extrusion. Nucleic Acids Research, 2004, 32, 6540-6547.	6.5	30
40	Single-molecule analysis reveals two separate DNA-binding domains in the Escherichia coli UvrA dimer. Nucleic Acids Research, 2009, 37, 1962-1972.	6.5	25
41	Nucleosome Immobilization Strategies for Singleâ€Pair FRET Microscopy. ChemPhysChem, 2008, 9, 2002-2009.	1.0	23
42	Atomic force microscopy of pollen grains, cellulose microfibrils, and protoplasts. Protoplasma, 1996, 194, 29-39.	1.0	19
43	Rigid Basepair Monte Carlo Simulations of One-Start and Two-Start Chromatin Fiber Unfolding by Force. Biophysical Journal, 2018, 115, 1848-1859.	0.2	19
44	A critical role for linker DNA in higher-order folding of chromatin fibers. Nucleic Acids Research, 2021, 49, 2537-2551.	6.5	19
45	spFRET reveals changes in nucleosome breathing by neighboring nucleosomes. Journal of Physics Condensed Matter, 2015, 27, 064103.	0.7	17
46	Probing Chromatin Structure with Magnetic Tweezers. Methods in Molecular Biology, 2018, 1814, 297-323.	0.4	17
47	Mechanical and structural properties of archaeal hypernucleosomes. Nucleic Acids Research, 2021, 49, 4338-4349.	6.5	16
48	Displacement imaging in porous media using the line scan NMR technique. Geoderma, 1997, 80, 405-416.	2.3	14
49	Optimization of adhesion mode atomic force microscopy resolves individual molecules in topography and adhesion. Ultramicroscopy, 1999, 80, 133-144.	0.8	11
50	Toehold-enhanced LNA probes for selective pull down and single-molecule analysis of native chromatin. Scientific Reports, 2017, 7, 16721.	1.6	11
51	Unraveling DNA Organization with Single-Molecule Force Spectroscopy Using Magnetic Tweezers. Methods in Molecular Biology, 2018, 1837, 317-349.	0.4	10
52	Multiplexed Nanometric 3D Tracking of Microbeads Using an FFT-Phasor Algorithm. Biophysical Journal, 2020, 118, 2245-2257.	0.2	7
53	Bending moduli and spontaneous curvature in one-phase microemulsion systems. A molecular approach. Faraday Discussions, 1996, 104, 317.	1.6	6
54	Exploring molecular biology in sequence space: The road to next-generation single-molecule biophysics. Molecular Cell, 2022, 82, 1788-1805.	4.5	3

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55	Unraveling Bacteriorhodopsin. Biophysical Journal, 2005, 88, 763-764.	0.2	2
56	Regulation of Nucleosome Conformational Dynamics by Post-Translational Histone Modifications Studied with Single-Pair FRET. Biophysical Journal, 2010, 98, 475a.	0.2	2
57	Accuracy of the detection of binding events using 3D single particle tracking. BMC Biophysics, 2017, 10, 3.	4.4	2
58	Coating Gold Nanorods with Self-Assembling Peptide Amphiphiles Promotes Stability and Facilitates in vivo Two-Photon Imaging. Journal of Materials Chemistry B, 2022, , .	2.9	2
59	Analysis of the H-Ras mobility pattern <i>in vivo</i> shows cellular heterogeneity inside epidermal tissue. DMM Disease Models and Mechanisms, 2022, 15, .	1.2	2
60	A Multifocal Two-Photon Microscopy Setup for Parallel 3D Tracking of Gold Nanorods. Biophysical Journal, 2010, 98, 178a.	0.2	1
61	Structure and Dynamics of the Telomeric Nucleosome and Chromatin. Biophysical Journal, 2019, 116, 71a.	0.2	1
62	Overcoming chromatin barriers. ELife, 2019, 8, .	2.8	1
63	Nucleosome Stacking Defines The Structural And Mechanical Properites Of Chromatin Fibers. Biophysical Journal, 2009, 96, 35a.	0.2	0
64	Effect of Histone Acetylation on Nucleosome Dynamics Revealed by spFRET Microscopy. Biophysical Journal, 2009, 96, 55a.	0.2	0
65	Unraveling Chromatin Structure Using Magnetic Tweezers. Biophysical Journal, 2010, 98, 207a.	0.2	0
66	Introduction â€œDNA and chromosomes: Physical and biological approachesâ€ Biochimie, 2010, 92, v-vi.	1.3	0
67	Quantification of Nucleosome Stacking in Single 30 nm Chromatin Fibers. Biophysical Journal, 2010, 98, 474a-475a.	0.2	0
68	Single Molecule Force Spectroscopy Reveals a Left Handed Helical Folding for the 30 nm Chromatin Fiber. Biophysical Journal, 2012, 102, 481a-482a.	0.2	0
69	Nucleosome Conformation and the Higher Order Structure of Chromatin: spFRET Experiments on (Di)Nucleosomes. Biophysical Journal, 2013, 104, 39a.	0.2	0
70	Thermodynamics and Kinetics of Stretched, Plectonemic and Melted DNA. Biophysical Journal, 2013, 104, 28a-29a.	0.2	0
71	Unraveling the Higher Order Structure of Chromatin using Single Molecule Force Spectroscopy. Biophysical Journal, 2013, 104, 13a.	0.2	0
72	Parallel Single-Molecule Excitation Spectroscopy of Gold Nanorods. Biophysical Journal, 2014, 106, 196a.	0.2	0

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73	Interactions and Stacking in Ordered Mononucleosomes and Folded Chromatin: Effects of Histone Tail Modifications. Biophysical Journal, 2014, 106, 74a.	0.2	0
74	Quantitative Analysis of Single-Molecule Force Spectroscopy Data on Chromatin Fibers. Biophysical Journal, 2014, 106, 451a.	0.2	0
75	Unravelling the Role of Linker Histone H1 and the H4-Tail in Chromatin (Un-)Folding. Biophysical Journal, 2016, 110, 68a.	0.2	0
76	A Novel Method for Multiplexed Nanometric Bead Tracking. Biophysical Journal, 2016, 110, 516a-517a.	0.2	0
77	Tracking Gold Nanorods in Live Cells. Biophysical Journal, 2016, 110, 485a.	0.2	0
78	Linker DNA Length Defines the Structure of Chromatin Fibers. Biophysical Journal, 2018, 114, 256a.	0.2	0
79	Structure and Function of Archaeal Histones. Biophysical Journal, 2018, 114, 446a.	0.2	0
80	Two Photon Excitation Spectroscopy of Gold Nanorods for Bio-Sensing. Biophysical Journal, 2018, 114, 169a.	0.2	0
81	(A)Specific DNA Binding of Archaeal Histones, the Formation and Positioning of Hypernucleosomes. Biophysical Journal, 2021, 120, 317a.	0.2	0
82	Engineering Mononucleosomes for Single-Pair FRET Experiments. Methods in Molecular Biology, 2011, 749, 291-303.	0.4	0
83	Multiplexed two-photon excitation spectroscopy of single gold nanorods. Journal of Chemical Physics, 2022, 156, 094201.	1.2	0