Robert H Riehn

List of Publications by Year in descending order

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64 papers

5,443 citations

279798 23 h-index 51 g-index

66 all docs 66 docs citations

66 times ranked 6022 citing authors

#	Article	IF	CITATIONS
1	Structure, dynamics, and regulation of TRF1-TIN2-mediated trans- and cis-interactions on telomeric DNA. Journal of Biological Chemistry, 2021, 297, 101080.	3.4	8
2	TIN2 is an architectural protein that facilitates TRF2-mediated <i>trans</i> - and <i>cis-</i> - interactions on telomeric DNA. Nucleic Acids Research, 2021, 49, 13000-13018.	14.5	6
3	DNA looping by two 5-methylcytosine-binding proteins quantified using nanofluidic devices. Epigenetics and Chromatin, 2020, 13, 18.	3.9	11
4	Cohesin SA1 and SA2 are RNA binding proteins that localize to RNA containing regions on DNA. Nucleic Acids Research, 2020, 48, 5639-5655.	14.5	47
5	Direct observation of confinement-induced diffusophoresis. Nanotechnology, 2019, 30, 41LT01.	2.6	1
6	Cohesin SA2 and EWSR1 in R-Loop Regulation. Biophysical Journal, 2019, 116, 505a.	0.5	0
7	TIN2 is an Architectural Protein Stabilizing TRF1 at Telomere. Biophysical Journal, 2019, 116, 211a-212a.	0.5	O
8	Single-Molecule Study of TRF2 Mediated DNA Compaction using Physiologically Relevant Long Telomeric DNA. Biophysical Journal, 2019, 116, 505a.	0.5	0
9	Nanoplumbing with 2D Metamaterials. Small, 2019, 15, 1803478.	10.0	O
10	Cohesin SA2 is a sequence-independent DNA-binding protein that recognizes DNA replication and repair intermediates. Journal of Biological Chemistry, 2018, 293, 1054-1069.	3.4	41
11	Manipulation and control of the electrokinetic motion of a non-conductive micro-particle in microchannel by generating lateral temperature gradient. International Journal of Heat and Mass Transfer, 2018, 126, 861-870.	4.8	1
12	Motor-like DNA motion due to an ATP-hydrolyzing protein under nanoconfinement. Scientific Reports, 2018, 8, 10036.	3.3	6
13	DNA Methylation Detection Using Resonance andÂNanobowtie-Antenna-Enhanced Raman Spectroscopy. Biophysical Journal, 2018, 114, 2498-2506.	0.5	21
14	DNA methylation detection using UV nano bowtie antenna enhanced Raman spectroscopy. , 2018, , .		0
15	CpG and methylation-dependent DNA binding and dynamics of the methylcytosine binding domain 2 protein at the single-molecule level. Nucleic Acids Research, 2017, 45, 9164-9177.	14.5	25
16	Dynamics of Large DNA Loops. Biophysical Journal, 2016, 110, 565a.	0.5	0
17	Nonaffine deformation under compression and decompression of a flow-stabilized solid. Journal of Statistical Mechanics: Theory and Experiment, 2016, 2016, 084003.	2.3	1
18	Enhanced electrostatic force microscopy reveals higher-order DNA looping mediated by the telomeric protein TRF2. Scientific Reports, 2016, 6, 20513.	3.3	30

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19	Functional interplay between SA1 and TRF1 in telomeric DNA binding and DNA–DNA pairing. Nucleic Acids Research, 2016, 44, 6363-6376.	14.5	30
20	Collapse of DNA under alternating electric fields. Physical Review E, 2015, 92, 012714.	2.1	8
21	Interference of ATP with the fluorescent probes YOYO-1 and YOYO-3 modifies the mechanical properties of intercalator-stained DNA confined in nanochannels. Mikrochimica Acta, 2015, 182, 1561-1565.	5.0	1
22	DNA Brushing Shoulders: Targeted Looping and Scanning of Large DNA Strands. Nano Letters, 2015, 15, 5641-5646.	9.1	7
23	Nonlinear elasticity of microsphere heaps. Physical Review E, 2014, 90, 022304.	2.1	6
24	Probing transient protein-mediated DNA linkages using nanoconfinement. Biomicrofluidics, 2014, 8, 034113.	2.4	13
25	Flow-driven formation of solid-like microsphere heaps. Soft Matter, 2013, 9, 543-549.	2.7	12
26	Chromatin modification mapping in nanochannels. Biomicrofluidics, 2013, 7, 064105.	2.4	18
27	DNA Looping Induced by Tubular Confinement. Biophysical Journal, 2013, 104, 253a-254a.	0.5	0
28	SENSING DNA WITH ALTERNATING CURRENTS USING A NANOGAP SENSOR EMBEDDED IN A NANOCHANNEL DEVICE. Nano LIFE, 2013, 03, 1340007.	0.9	2
29	Fluctuation modes of nanoconfined DNA. Journal of Applied Physics, 2012, 111, 24701-247018.	2.5	21
30	Near-field enhanced ultraviolet resonance Raman spectroscopy using aluminum bow-tie nano-antenna. Applied Physics Letters, 2012, 101, 113116.	3.3	46
31	Collapse of DNA in ac Electric Fields. Physical Review Letters, 2011, 106, 248103.	7.8	26
32	DNA methylation profiling in nanochannels. Biomicrofluidics, 2011, 5, 34106-341068.	2.4	47
33	Density fluctuations dispersion relationship for a polymer confined to a nanotube. Applied Physics Letters, 2011, 98, 253704.	3.3	12
34	Epigenetic Analysis of Chromatin in Nanochannels. Biophysical Journal, 2010, 98, 600a.	0.5	0
35	Complementary metal oxide semiconductor compatible fabrication and characterization of parylene-C covered nanofluidic channels with integrated nanoelectrodes. Biomicrofluidics, 2009, 3, 031101.	2.4	5
36	Upconverting nanophosphors for bioimaging. Nanotechnology, 2009, 20, 405701.	2.6	59

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37	DNA Condensation by Fieldâ€Induced Nonâ€Equilibrium Noise. ChemPhysChem, 2009, 10, 2871-2875.	2.1	8
38	Stretching chromatin through confinement. Lab on A Chip, 2009, 9, 2772.	6.0	37
39	The potential and challenges of nanopore sequencing. , 2009, , 261-268.		23
40	The potential and challenges of nanopore sequencing. Nature Biotechnology, 2008, 26, 1146-1153.	17.5	2,201
41	Single molecule correlation spectroscopy in continuous flow mixers with zero-mode waveguides. Optics Express, 2008, 16, 10077.	3.4	22
42	Nanochannels for Genomic DNA Analysis: The Long and the Short of It., 2007, , 151-186.		7
43	Microfluidic high gradient magnetic cell separation. Journal of Applied Physics, 2006, 99, 08K101.	2.5	112
44	In Vivo and Scanning Electron Microscopy Imaging of Upconverting Nanophosphors in Caenorhabditiselegans. Nano Letters, 2006, 6, 169-174.	9.1	520
45	A Nanofluidic Railroad Switch for DNA. Nano Letters, 2006, 6, 1973-1976.	9.1	47
46	Wetting Micro- and Nanofluidic Devices Using Supercritical Water. Analytical Chemistry, 2006, 78, 5933-5934.	6.5	18
47	Local Probing of Photocurrent and Photoluminescence in a Phase-Separated Conjugated-Polymer Blend by Means of Near-Field Excitation. Advanced Functional Materials, 2006, 16, 469-476.	14.9	27
48	Use of sub-10 nm Diameter Upconversion Nanophosphors as Bio-labels. Materials Research Society Symposia Proceedings, 2006, 950, 1.	0.1	0
49	Diffusion mechanisms of localised knots along a polymer. Europhysics Letters, 2006, 76, 696-702.	2.0	67
50	DNA statics and dynamics in nanoscale confinement. , 2005, , .		0
51	Statics and Dynamics of Single DNA Molecules Confined in Nanochannels. Physical Review Letters, 2005, 94, 196101.	7.8	480
52	A two-dimensional photonic structure made from a conjugated, fluorescent polymer. Journal of Optics, 2005, 7, S207-S212.	1.5	8
53	Single-molecule studies of repressor-DNA interactions show long-range interactions. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 9796-9801.	7.1	120
54	Restriction mapping in nanofluidic devices. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 10012-10016.	7.1	194

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55	The dynamics of genomic-length DNA molecules in 100-nm channels. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 10979-10983.	7.1	458
56	Fabrication of conjugated polymers nanostructures via direct near-field optical lithography. Ultramicroscopy, 2004, 100, 449-455.	1.9	22
57	Continuous microfluidic immunomagnetic cell separation. Applied Physics Letters, 2004, 85, 5093-5095.	3.3	321
58	Near-field optical lithography of a conjugated polymer. Applied Physics Letters, 2003, 82, 526-528.	3.3	114
59	Versatile synthesis of various conjugated aromatic homo- and copolymers. Synthetic Metals, 2001, 122, 1-5.	3.9	20
60	Efficient electroluminescent poly(p-phenylene vinylene) copolymers for application in LEDs. Synthetic Metals, 2001, 119, 43-44.	3.9	7
61	Fluorine-substituted poly(p-phenylenes vinylenes) copolymers. Synthetic Metals, 2001, 124, 67-69.	3.9	11
62	Ultraviolet–visible near-field microscopy of phase-separated blends of polyfluorene-based conjugated semiconductors. Applied Physics Letters, 2001, 79, 833-835.	3.3	41
63	Efficient blue–green light emitting poly(1,4-phenylene vinylene) copolymers. Chemical Communications, 2000, , 291-292.	4.1	23
64	Electrochemical and Electroluminescent Properties of Random Copolymers of Fluorine- and Alboxy-Substituted Poly(p-phenylene vinylene)s. Macromolecules. 2000. 33. 3337-3341.	4.8	22