Hong Wang

List of Publications by Year
in descending order

58 papers	2,159 citations	201674 27 h-index	233421 45 g-index
60 all docs	60 docs citations	60 times ranked	2257 citing authors

#	Article	IF	Citations
1	Using Atomic Force Microscopy to Study the Real Time Dynamics of DNA Unwinding by Mitochondrial Twinkle Helicase. Bio-protocol, 2021, 11, e4139.	0.4	2
2	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
3	TIN2 is an architectural protein that facilitates TRF2-mediated trans- and cis-interactions on telomeric DNA. Nucleic Acids Research, 2021, 49, 13000-13018.	14.5	6
4	DNA looping by two 5-methylcytosine-binding proteins quantified using nanofluidic devices. Epigenetics and Chromatin, 2020, 13, 18.	3.9	11
5	Single-molecule level structural dynamics of DNA unwinding by human mitochondrial Twinkle helicase. Journal of Biological Chemistry, 2020, 295, 5564-5576.	3.4	13
6	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
7	Measuring UV Photoproduct Repair in Isolated Telomeres and Bulk Genomic DNA. Methods in Molecular Biology, 2019, 1999, 295-306.	0.9	2
8	Cohesin SA2 and EWSR1 in R-Loop Regulation. Biophysical Journal, 2019, 116, 505a.	0.5	0
9	TIN2 is an Architectural Protein Stabilizing TRF1 at Telomere. Biophysical Journal, 2019, 116, 211a-212a.	0.5	0
10	Single-Molecule Study of TRF2 Mediated DNA Compaction using Physiologically Relevant Long Telomeric DNA. Biophysical Journal, 2019, 116, 505a.	0.5	0
11	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
12	Single-molecule DREEM imaging reveals DNA wrapping around human mitochondrial single-stranded DNA binding protein. Nucleic Acids Research, 2018, 46, 11287-11302.	14.5	23
13	Nucleosome-like, Single-stranded DNA (ssDNA)-Histone Octamer Complexes and the Implication for DNA Double Strand Break Repair. Journal of Biological Chemistry, 2017, 292, 5271-5281.	3.4	33
14	Single Molecule Fluorescence and Atomic Force Microscopy Studies of DNA Repair. Biophysical Journal, 2017, 112, 7a.	0.5	0
15	Walking the DNA Methylation Tightrope: The Involvement of Intrinsically Disordered Regions of Transcription Factors. Biophysical Journal, 2017, 112, 207a.	0.5	0
16	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
17	Using Atomic Force Microscopy to Characterize the Conformational Properties of Proteins and Proteinâ€“DNA Complexes That Carry Out DNA Repair. Methods in Enzymology, 2017, 592, 187-212.	1.0	12
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 DNAâ€“DNA pairing. Nucleic Acids Research, 2016, 44, 6363-6376.	14.5	30
20	TRF2-Mediated Control of Telomere DNA Topology as a Mechanism for Chromosome-End Protection. Molecular Cell, 2016, 61, 274-286.	9.7	124
21	Visualizing the Path of DNA through Proteins Using DREEM Imaging. Molecular Cell, 2016, 61, 315-323.	9.7	16
22	Single-Molecule Imaging Reveals Dynamics of SA1-TRF1 Interactions on Telomeric DNA. Biophysical Journal, 2015, 108, 206a.	0.5	0
23	Determining the DNA Diffusion Behavior of SA2 on Various DNA Substrates. Biophysical Journal, 2015, 108, 397a.	0.5	0
24	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
25	Revealing Structure and Dynamics of Telomere Maintenance Proteins on DNA: One Molecule at a Time. Biophysical Journal, 2015, 108, 7a.	0.5	0
26	Telomeres are partly shielded from ultraviolet-induced damage and proficient for nucleotide excision repair of photoproducts. Nature Communications, 2015, 6, 8214.	12.8	28
27	Single-molecule analysis reveals human UV-damaged DNA-binding protein (UV-DDB) dimerizes on DNA via multiple kinetic intermediates. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E1862-71.	7.1	59
28	Probing transient protein-mediated DNA linkages using nanoconfinement. Biomicrofluidics, 2014, 8, 034113.	2.4	13
29	TRF1 and TRF2 use different mechanisms to find telomeric DNA but share a novel mechanism to search for protein partners at telomeres. Nucleic Acids Research, 2014, 42, 2493-2504.	14.5	62
30	Unraveling secrets of telomeres: One molecule at a time. DNA Repair, 2014, 20, 142-153.	2.8	23
31	Investigating bioconjugation by atomic force microscopy. Journal of Nanobiotechnology, 2013, 11, 25.	9.1	19
32	DNA polymerase Î´ stalls on telomeric lagging strand templates independently from G-quadruplex formation. Nucleic Acids Research, 2013, 41, 10323-10333.	14.5	36
33	WT UV-DDB Performs a 3D Search on DNA whereas the XP-E Mutant (K244E DDB2) Mutant Slides. Biophysical Journal, 2013, 104, 77a.	0.5	0
34	Real-time single-molecule imaging reveals a direct interaction between UvrC and UvrB on DNA tightropes. Nucleic Acids Research, 2013, 41, 4901-4912.	14.5	52
35	A Hidden Role of the Inactivated FANCD2: Upregulating Î”Np63. Oncotarget, 2013, 4, 1416-1426.	1.8	15
36	Werner syndrome protein suppresses the formation of large deletions during the replication of human telomeric sequences. Cell Cycle, 2012, 11, 3036-3044.	2.6	47

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37	A New Role for UvrB in NER? Single Molecule Imaging of the NER Complex UvrBC-DNA. Biophysical Journal, 2012, 102, 485a.	0.5	0
38	Damaged DNA induced UV-damaged DNA-binding protein (UV-DDB) dimerization and its roles in chromatinized DNA repair. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E2737-46.	7.1	74
39	Investigating Nucleotide Excision DNA Repair by Single-Molecule Imaging of Quantum Dot Labeled Proteins Reveals Unique Scanning Mechanisms. Biophysical Journal, 2011, 100, 240a.	0.5	0
40	Single Molecule Studies of Physiologically Relevant Telomeric Tails Reveal POT1 Mechanism for Promoting G-quadruplex Unfolding. Journal of Biological Chemistry, 2011, 286, 7479-7489.	3.4	84
41	Nucleotide Excision Repair from Bacteria to Humans: Structureâ€“Function Studies. , 2011, , 267-296.		10
42	Collaborative Dynamic DNA Scanning by Nucleotide Excision Repair Proteins Investigated by Single-Molecule Imaging of Quantum-Dot-Labeled Proteins. Molecular Cell, 2010, 37, 702-713.	9.7	139
43	Replication Protein A Stimulates the Werner Syndrome Protein Branch Migration Activity. Journal of Biological Chemistry, 2009, 284, 34682-34691.	3.4	23
44	The Werner Syndrome Helicase/Exonuclease Processes Mobile D-Loops through Branch Migration and Degradation. PLoS ONE, 2009, 4, e4825.	2.5	43
45	Functional Characterization and Atomic Force Microscopy of a DNA Repair Protein Conjugated to a Quantum Dot. Nano Letters, 2008, 8, 1631-1637.	9.1	52
46	Efficient processing of TFO-directed psoralen DNA interstrand crosslinks by the UvrABC nuclease. Nucleic Acids Research, 2008, 36, 7136-7145.	14.5	15
47	Characterization of Proteinâ€“Protein Interactions Using Atomic Force Microscopy. , 2007, , 39-77.		6
48	Structural basis for DNA recognition and processing by UvrB. Nature Structural and Molecular Biology, 2006, 13, 360-364.	8.2	101
49	UvrB Domain 4, an Autoinhibitory Gate for Regulation of DNA Binding and ATPase Activity. Journal of Biological Chemistry, 2006, 281, 15227-15237.	3.4	42
50	The C-terminal Zinc Finger of UvrA Does Not Bind DNA Directly but Regulates Damage-specific DNA Binding. Journal of Biological Chemistry, 2006, 281, 26370-26381.	3.4	49
51	Structural insights into the first incision reaction during nucleotide excision repair. EMBO Journal, 2005, 24, 885-894.	7.8	84
52	â€˜Close-fitting sleevesâ€™: DNA damage recognition by the UvrABC nuclease system. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2005, 577, 92-117.	1.0	125
53	DNA bending and unbending by MutS govern mismatch recognition and specificity. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 14822-14827.	7.1	170
54	Quantitative characterization of biomolecular assemblies and interactions using atomic force microscopy. Methods, 2003, 29, 175-187.	3.8	96

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55	Functional Oligomeric State of Avian Sarcoma Virus Integrase. Journal of Biological Chemistry, 2003, 278, 1323-1327.	3.4	69
56	DNA Binding Properties of the Yeast Msh2-Msh6 and Mlh1-Pms1 Heterodimers. Biological Chemistry, 2002, 383, 969-75.	2.5	43
57	A Minimal Exonuclease Domain of WRN Forms a Hexamer on DNA and Possesses both 3â€˜â˜’5â€˜ Exonuclease and 5â€˜-Protruding Strand Endonuclease Activities. Biochemistry, 2002, 41, 2901-2912.	2.5	67
58	High affinity cooperative DNA binding by the yeast Mlh1-Pms1 heterodimer 1 1Edited by M. Belfort. Journal of Molecular Biology, 2001, 312, 637-647.	4.2	89