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	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
2	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
3	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
4	TRF2-Mediated Control of Telomere DNA Topology as a Mechanism for Chromosome-End Protection. Molecular Cell, 2016, 61, 274-286.	9.7	124
5	Structural basis for DNA recognition and processing by UvrB. Nature Structural and Molecular Biology, 2006, 13, 360-364.	8.2	101
6	Quantitative characterization of biomolecular assemblies and interactions using atomic force microscopy. Methods, 2003, 29, 175-187.	3.8	96
7	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
8	Structural insights into the first incision reaction during nucleotide excision repair. EMBO Journal, 2005, 24, 885-894.	7.8	84
9	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
10	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
11	Functional Oligomeric State of Avian Sarcoma Virus Integrase. Journal of Biological Chemistry, 2003, 278, 1323-1327.	3.4	69
12	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
13	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
14	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
15	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
16	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
17	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
18	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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19	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
20	DNA Binding Properties of the Yeast Msh2-Msh6 and Mlh1-Pms1 Heterodimers. Biological Chemistry, 2002, 383, 969-75.	2.5	43
21	The Werner Syndrome Helicase/Exonuclease Processes Mobile D-Loops through Branch Migration and Degradation. PLoS ONE, 2009, 4, e4825.	2.5	43
22	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
23	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
24	DNA polymerase Î´ stalls on telomeric lagging strand templates independently from G-quadruplex formation. Nucleic Acids Research, 2013, 41, 10323-10333.	14.5	36
25	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
26	Enhanced electrostatic force microscopy reveals higher-order DNA looping mediated by the telomeric protein TRF2. Scientific Reports, 2016, 6, 20513.	3.3	30
27	Functional interplay between SA1 and TRF1 in telomeric DNA binding and DNAâ€“DNA pairing. Nucleic Acids Research, 2016, 44, 6363-6376.	14.5	30
28	Telomeres are partly shielded from ultraviolet-induced damage and proficient for nucleotide excision repair of photoproducts. Nature Communications, 2015, 6, 8214.	12.8	28
29	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
30	Replication Protein A Stimulates the Werner Syndrome Protein Branch Migration Activity. Journal of Biological Chemistry, 2009, 284, 34682-34691.	3.4	23
31	Unraveling secrets of telomeres: One molecule at a time. DNA Repair, 2014, 20, 142-153.	2.8	23
32	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
33	Investigating bioconjugation by atomic force microscopy. Journal of Nanobiotechnology, 2013, 11, 25.	9.1	19
34	Visualizing the Path of DNA through Proteins Using DREEM Imaging. Molecular Cell, 2016, 61, 315-323.	9.7	16
35	Efficient processing of TFO-directed psoralen DNA interstrand crosslinks by the UvrABC nuclease. Nucleic Acids Research, 2008, 36, 7136-7145.	14.5	15
36	A Hidden Role of the Inactivated FANCD2: Upregulating Î”Np63. Oncotarget, 2013, 4, 1416-1426.	1.8	15

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37	Probing transient protein-mediated DNA linkages using nanoconfinement. Biomicrofluidics, 2014, 8, 034113.	2.4	13
38	Single-molecule level structural dynamics of DNA unwinding by human mitochondrial Twinkle helicase. Journal of Biological Chemistry, 2020, 295, 5564-5576.	3.4	13
39	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
40	DNA looping by two 5-methylcytosine-binding proteins quantified using nanofluidic devices. Epigenetics and Chromatin, 2020, 13, 18.	3.9	11
41	Nucleotide Excision Repair from Bacteria to Humans: Structureâ€“Function Studies. , 2011, , 267-296.		10
42	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
43	Characterization of Proteinâ€“Protein Interactions Using Atomic Force Microscopy. , 2007, , 39-77.		6
44	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
45	Measuring UV Photoproduct Repair in Isolated Telomeres and Bulk Genomic DNA. Methods in Molecular Biology, 2019, 1999, 295-306.	0.9	2
46	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
47	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
48	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
49	A New Role for UvrB in NER? Single Molecule Imaging of the NER Complex UvrBC-DNA. Biophysical Journal, 2012, 102, 485a.	0.5	0
50	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
51	Single-Molecule Imaging Reveals Dynamics of SA1-TRF1 Interactions on Telomeric DNA. Biophysical Journal, 2015, 108, 206a.	0.5	0
52	Determining the DNA Diffusion Behavior of SA2 on Various DNA Substrates. Biophysical Journal, 2015, 108, 397a.	0.5	0
53	Revealing Structure and Dynamics of Telomere Maintenance Proteins on DNA: One Molecule at a Time. Biophysical Journal, 2015, 108, 7a.	0.5	0
54	Single Molecule Fluorescence and Atomic Force Microscopy Studies of DNA Repair. Biophysical Journal, 2017, 112, 7a.	0.5	0

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55	Walking the DNA Methylation Tightrope: The Involvement of Intrinsically Disordered Regions of Transcription Factors. Biophysical Journal, 2017, 112, 207a.	0.5	0
56	Cohesin SA2 and EWSR1 in R-Loop Regulation. Biophysical Journal, 2019, 116, 505a.	0.5	0
57	TIN2 is an Architectural Protein Stabilizing TRF1 at Telomere. Biophysical Journal, 2019, 116, 211a-212a.	0.5	0
58	Single-Molecule Study of TRF2 Mediated DNA Compaction using Physiologically Relevant Long Telomeric DNA. Biophysical Journal, 2019, 116, 505a.	0.5	0