Nancy C Horton

List of Publications by Year
in descending order

53 papers	2,353 citations	361413 20 h-index	265206 42 g-index
60 all docs	60 docs citations	60 times ranked	2236 citing authors

#	Article	IF	Citations
1	High-Resolution Structure of the Nuclease Domain of the Human Parvovirus B19 Main Replication Protein NS1. Journal of Virology, 2022, 96, e0216421.	3.4	3
2	A Diversity of Filamenting Enzymes. FASEB Journal, 2022, 36, .	0.5	0
3	Mechanism of Activation of SgrAI via Enzyme Filamentation and Mechanism of DNA Sequence Specificity Expansion. FASEB Journal, 2022, 36, .	0.5	0
4	Structures, Mechanism, and Functional Relevance of Filament Formation by SgrAI. FASEB Journal, 2022, 36, .	0.5	0
5	Influenza AM2 Channel Oligomerization Is Sensitive to Its Chemical Environment. Analytical Chemistry, 2021, 93, 16273-16281.	6.5	12
6	Novel insights into filament-forming enzymes. Nature Reviews Molecular Cell Biology, 2020, 21, 1-2.	37.0	31
7	Structureâ€Function Studies of the Helicase Domain of NS1 Protein of Human Parvovirus B19. FASEB Journal, 2020, 34, 1-1.	0.5	0
8	The Filament Forming Mechanism of SgrAI Endonucleaseâ€Structural and Kinetic Analysis. FASEB Journal, 2020, 34, 1-1.	0.5	0
9	Filament Formation Induces a Shape Change and Activation of the Nuclease SgrAI. FASEB Journal, 2020, 34, 1-1.	0.5	0
10	Mechanism of Filamentation-Induced Allosteric Activation of the SgrAI Endonuclease. Structure, 2019, 27, 1497-1507.e3.	3.3	13
11	Structures, functions, and mechanisms of filament forming enzymes: a renaissance of enzyme filamentation. Biophysical Reviews, 2019, 11, 927-994.	3.2	71
12	Endonuclease Activity Inhibition of the NS1 Protein of Parvovirus B19 as a Novel Target for Antiviral Drug Development. Antimicrobial Agents and Chemotherapy, 2019, 63, .	3.2	21
13	The run-on oligomer filament enzyme mechanism of SgrAI: Part 2. Kinetic modeling of the full DNA cleavage pathway. Journal of Biological Chemistry, 2018, 293, 14599-14615.	3.4	10
14	The run-on oligomer filament enzyme mechanism of SgrAI: Part 1. Assembly kinetics of the run-on oligomer filament. Journal of Biological Chemistry, 2018, 293, 14585-14598.	3.4	9
15	DNA Binding and Cleavage by the Human Parvovirus B19 NS1 Nuclease Domain. Biochemistry, 2016, 55, 6577-6593.	2.5	23
16	Structure and specificity of FENâ€1 from Methanopyrus kandleri. Proteins: Structure, Function and Bioinformatics, 2015, 83, 188-194.	2.6	0
17	Probing the Run-On Oligomer of Activated SgrAI Bound to DNA. PLoS ONE, 2015, 10, e0124783.	2.5	12
18	Allosteric Regulation of DNA Cleavage and Sequence-Specificity through Run-On Oligomerization. Structure, 2013, 21, 1848-1858.	3.3	23

#	ARTICLE	IF	CITATIONS
19	Structural Analysis of Activated SgrAlâ€“DNA Oligomers Using Ion Mobility Mass Spectrometry. Biochemistry, 2013, 52, 4373-4381.	2.5	20
20	Activation by Oligomerization of an Allosteric Sequence Specific Endonuclease. FASEB Journal, 2012, 26, lb91.	0.5	0
21	New clues in the allosteric activation of DNA cleavage by<i>Sgr</i>AI: structures of<i>Sgr</i>AI bound to cleaved primary-site DNA and uncleaved secondary-site DNA. Acta Crystallographica Section D: Biological Crystallography, 2011, 67, 67-74.	2.5	14
22	Domain Swapping in Allosteric Modulation of DNA Specificity. PLoS Biology, 2010, 8, e1000554.	5.6	17
23	Activation of DNA Cleavage by Oligomerization of DNA-Bound SgrAI. Biochemistry, 2010, 49, 8818-8830.	2.5	20
24	Crystallization of Zinc Finger Proteins Bound to DNA. Methods in Molecular Biology, 2010, 649, 457-477.	0.9	1
25	Novel Allosteric Properties Exhibited by SgrAI, a Restriction Endonuclease Native to Streptomyces griseus. FASEB Journal, 2010, 24, lb52.	0.5	0
26	The restriction enzymeSgrAI: structure solutionviacombination of poor MIRAS and MR phases. Acta Crystallographica Section D: Biological Crystallography, 2009, 65, 393-398.	2.5	0
27	Early Interrogation and Recognition of DNA Sequence by Indirect Readout. Structure, 2008, 16, 1828-1837.	3.3	21
28	DNA Distortion and Specificity in a Sequence-Specific Endonuclease. Journal of Molecular Biology, 2008, 383, 186-204.	4.2	11
29	The structure of SgrAI bound to DNA; recognition of an 8 base pair target. Nucleic Acids Research, 2008, 36, 5405-5416.	14.5	33
30	Chapter 13. DNA Nucleases. RSC Biomolecular Sciences, 2008, , 333-366.	0.4	10
31	Structure of Aart, a Designed Six-finger Zinc Finger Peptide, Bound to DNA. Journal of Molecular Biology, 2006, 363, 405-421.	4.2	87
32	Alteration of Sequence Specificity of the Type II Restriction Endonuclease HincII through an Indirect Readout Mechanism. Journal of Biological Chemistry, 2006, 281, 23852-23869.	3.4	26
33	Crystallization and preliminary X-ray crystallographic analysis of Aart, a designed six-finger zinc-finger peptide, bound to DNA. Acta Crystallographica Section F: Structural Biology Communications, 2005, 61, 573-576.	0.7	3
34	DNA-induced Conformational Changes in Type II Restriction Endonucleases: The Structure of Unliganded HincII. Journal of Molecular Biology, 2005, 351, 76-88.	4.2	3
35	Ca2+Binding in the Active Site of HincII:Â Implications for the Catalytic Mechanismâ€,â€¡. Biochemistry, 2004, 43, 13256-13270.	2.5	26
36	DNA Cleavage byEcoRV Endonuclease:Â Two Metal Ions in Three Metal Ion Binding Sitesâ€. Biochemistry, 2004, 43, 6841-6857.	2.5	84

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37	Mechanistic Insights from the Structures of HincII Bound to Cognate DNA Cleaved from Addition of Mg2+ and Mn2+. Journal of Molecular Biology, 2004, 343, 833-849.	4.2	18
38	Electrostatic Contributions to Site Specific DNA Cleavage byEcoRV Endonucleaseâ€. Biochemistry, 2002, 41, 10754-10763.	2.5	27
39	Sequence selectivity and degeneracy of a restriction endonuclease mediated by DNA intercalation. Nature Structural Biology, 2002, 9, 42-47.	9.7	61
40	Catalytic efficiency and sequence selectivity of a restriction endonuclease modulated by a distal manganese ion binding site. Journal of Molecular Biology, 2001, 306, 851-861.	4.2	21
41	Making the most of metal ions. , 2001, 8, 290-293.		42
42	Crystallographic snapshots along a protein-induced DNA-bending pathway. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 5729-5734.	7.1	45
43	Inhibition of EcoRV Endonuclease by Deoxyribo-3â€˜-S-phosphorothiolates:â€‰ A High-Resolution X-ray Crystallographic Study. Journal of the American Chemical Society, 2000, 122, 3314-3324.	13.7	36
44	Crystallization and preliminary diffraction analysis of the HincII restriction endonucleaseâ€"DNA complex. Acta Crystallographica Section D: Biological Crystallography, 1999, 55, 1943-1945.	2.5	5
45	Divalent Metal Dependence of Site-Specific DNA Binding byEcoRV Endonucleaseâ€. Biochemistry, 1999, 38, 8430-8439.	2.5	67
46	Cation binding to the integrin CD11b I domain and activation model assessment. Structure, 1998, 6, 923-935.	3.3	71
47	Role of protein-induced bending in the specificity of DNA recognition: crystal structure of Eco RV endonuclease complexed with d(AAAGAT) + d(ATCTT) 1 1Edited by P. E. Wright. Journal of Molecular Biology, 1998, 277, 779-787.	4.2	46
48	Metal ion-mediated substrate-assisted catalysis in type II restriction endonucleases. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 13489-13494.	7.1	106
49	Recognition of Flanking DNA Sequences by EcoRV Endonuclease Involves Alternative Patterns of Water-mediated Contacts. Journal of Biological Chemistry, 1998, 273, 21721-21729.	3.4	31
50	Escherichia coli lac repressor- lac operator interaction and the influence of allosteric effectors 1 1Edited by P. E. Wright. Journal of Molecular Biology, 1997, 265, 1-7.	4.2	21
51	The Structure of an RNA/DNA Hybrid: A Substrate of the Ribonuclease Activity of HIV-1 Reverse Transcriptase. Journal of Molecular Biology, 1996, 264, 521-533.	4.2	91
52	Crystal Structure of the Lactose Operon Repressor and Its Complexes with DNA and Inducer. Science, 1996, 271, 1247-1254.	12.6	755
53	Calculation of the free energy of association for protein complexes. Protein Science, 1992, 1, 169-181.	7.6	305