Kenneth Breslauer

List of Publications by Year
in descending order

44	4,924	304743 22	276875 41
papers	citations	h-index	g-index

47	47	47	3311
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Predicting DNA duplex stability from the base sequence.. Proceedings of the National Academy of Sciences of the United States of America, 1986, 83, 3746-3750.	7.1	1,739
2	Calculating thermodynamic data for transitions of any molecularity from equilibrium melting curves. Biopolymers, 1987, 26, 1601-1620.	2.4	1,130
3	Salt-dependent conformational transitions in the self-complementary deoxydodecanucleotide d(CGCAATTCGCG): Evidence for hairpin formation. Biopolymers, 1983, 22, 1247-1257.	2.4	261
4	Enthalpy-entropy compensations in drug-DNA binding studies.. Proceedings of the National Academy of Sciences of the United States of America, 1987, 84, 8922-8926.	7.1	232
5	On volume changes accompanying conformational transitions of biopolymers. , 1998, 39, 619-626.		177
6	Spectroscopic and Calorimetric Characterizations of DNA Duplexes Containing 2-Aminopurineâ€. Biochemistry, 1996, 35, 12329-12337.	2.5	172
7	Thermodynamic Consequences of an Abasic Lesion in Duplex DNA Are Strongly Dependent on Base Sequenceâ€. Biochemistry, 1998, 37, 7321-7327.	2.5	130
8	The melting behavior of a DNA junction structure: A calorimetric and spectroscopic study. Biopolymers, 1987, 26, 1621-1634.	2.4	102
9	Calorimetric determination of base-stacking enthalpies in double-helical DNA molecules. Biopolymers, 1982, 21, 2185-2194.	2.4	96
10	Thermodynamics of Drug-DNA Interactions. Journal of Biomolecular Structure and Dynamics, 1983, 1, 487-507.	3.5	82
11	Partial molar volumes, expansibilities, and compressibilities of oligoglycines in aqueous solutions at 18-55Â°C. Biopolymers, 1994, 34, 541-553.	2.4	82
12	The hydration of nucleic acid duplexes as assessed by a combination of volumetric and structural techniques. , 1999, 50, 459-471.		80
13	Design, Synthesis, and Analysis of Disulfide Cross-Linked DNA Duplexes. Journal of the American Chemical Society, 1996, 118, 11993-12003.	13.7	60
14	Conformational energetics of stable and metastable states formed by DNA triplet repeat oligonucleotides: Implications for triplet expansion diseases. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 14700-14705.	7.1	52
15	The Thermodynamics of Drug-DNA Interactions: Ethidium Bromide and Propidium Iodide. Journal of Biomolecular Structure and Dynamics, 1987, 5, 345-359.	3.5	51
16	Construction of a wheat-flour state diagram. Journal of Thermal Analysis, 1996, 47, 1267-1288.	0.6	41
17	Spectroscopic and volumetric investigation of cytochrome c unfolding at alkaline pH: characterization of the baseâ€induced unfolded state at 25Â°C. FASEB Journal, 1996, 10, 164-170.	0.5	38
18	VACUUM ULTRAVIOLET CIRCULAR DICHROISM OF DOUBLE STRANDED NUCLEIC ACIDS. Photochemistry and Photobiology, 1986, 44, 295-301.	2.5	34

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19	High-resolution calorimetric and optical melting profiles of DNA plasmids: Resolving contributions from intrinsic melting domains and specifically designed inserts. , 1999, 50, 303-318.		29
20	The Impact of an Exocyclic Cytosine Adduct on DNA Duplex Properties:Â Significant Thermodynamic Consequences Despite Modest Lesion-Induced Structural Alterationsâ€. Biochemistry, 1998, 37, 12507-12512.	2.5	27
21	DNA Repair and DNA Triplet Repeat Expansion: The Impact of Abasic Lesions on Triplet Repeat DNA Energetics. Journal of the American Chemical Society, 2009, 131, 9354-9360.	13.7	25
22	DNA Metastability and Biological Regulation:Â Conformational Dynamics of Metastable Î©-DNA Bulge Loops. Journal of the American Chemical Society, 2007, 129, 5272-5280.	13.7	23
23	Hybridization Properties of Oligodeoxynucleotide Pairs Bridged by Polyarginine Peptides. Nucleic Acids Research, 1996, 24, 655-661.	14.5	22
24	Energy Landscapes of Dynamic Ensembles of Rolling Triplet Repeat Bulge Loops: Implications for DNA Expansion Associated with Disease States. Journal of the American Chemical Society, 2012, 134, 6033-6044.	13.7	22
25	APE1 Incision Activity at Abasic Sites in Tandem Repeat Sequences. Journal of Molecular Biology, 2014, 426, 2183-2198.	4.2	22
26	A Monte Carlo method for generating structures of short single-stranded DNA sequences. Biopolymers, 1993, 33, 75-105.	2.4	21
27	DNA energy landscapes via calorimetric detection of microstate ensembles of metastable macrostates and triplet repeat diseases. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 18326-18330.	7.1	21
28	The impact of a bistrand abasic lesion on DNA duplex properties. Biopolymers, 1996, 38, 439-445.	2.4	19
29	Volumetric properties of nucleic acids. Biopolymers, 1998, 48, 264-280.	2.4	19
30	Impact of bistrand abasic sites and proximate orientation on DNA global structure and duplex energetics. Biopolymers, 2018, 109, e23098.	2.4	15
31	Molecular recognition between oligopeptides and nucleic acids. Sequence specific binding of (4S)-(+)- and (4R)-(â^')-dihydrokikumycin B to DNA deduced form1H NMR, footprinting studies and thermodynamic data. Journal of Molecular Recognition, 1989, 2, 6-17.	2.1	14
32	Impact of bulge loop size on DNA triplet repeat domains: Implications for DNA repair and expansion. Biopolymers, 2014, 101, 1-12.	2.4	14
33	Impact of thymine glycol damage on <scp>DNA</scp> duplex energetics: Correlations with lesionâ€induced biochemical and structural consequences. Biopolymers, 2015, 103, 491-508.	2.4	12
34	Energetic coupling between clustered lesions modulated by intervening triplet repeat bulge loops: Allosteric implications for DNA repair and triplet repeat expansion. Biopolymers, 2010, 93, 355-369.	2.4	11
35	Energy mapping of the genetic code and genomic domains: implications for code evolution and molecular Darwinism. Quarterly Reviews of Biophysics, 2020, 53, e11.	5.7	10
36	Conformational diversity of singleâ€stranded <scp>DNA</scp> from bacterial repetitive extragenic palindromes: Implications for the <scp>DNA</scp> recognition elements of transposases. Biopolymers, 2015, 103, 585-596.	2.4	8

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37	Effect of salt on the stability of the pH 4.2 rA8 double helix in a series of organic/aqueous mixed solvents: A test of oligoelectrolyte theory. Biopolymers, 1979, 18, 2167-2174.	2.4	6
38	Dynamic DNA Energy Landscapes and Substrate Complexity in Triplet Repeat Expansion and DNA Repair. Biomolecules, 2019, 9, 709.	4.0	6
39	The shaping of a molecular linguist: How a career studying DNA energetics revealed the language of molecular communication. Journal of Biological Chemistry, 2021, 296, 100522.	3.4	5
40	Differential repair enzyme-substrate selection within dynamic DNA energy landscapes. Quarterly Reviews of Biophysics, 2022, 55, 1-56.	5.7	5
41	Heat Capacity Changes (Î”C_p) for Interconversions between Differentially-Ordered DNA States within Physiological Temperature Domains: Implications for Biological Regulatory Switches. Journal of Physical Chemistry B, 2020, 124, 5614-5625.	2.6	4
42	Fluorescence energy transfer monitored competitive equilibria of nucleic acids: Applications in thermodynamics and screening. Biopolymers, 2002, 61, 214-223.	2.4	3
43	Introductory editorial:Biopolymerscelebrates 50 years of nucleic acids research. Biopolymers, 2013, 99, n/a-n/a.	2.4	0
44	Jack Aviv: Scientist, instrument wizard, humanist and philanthropist. Biopolymers, 2018, 109, e23227.	2.4	0