Alexander Balaeff

List of Publications by Year
in descending order

22	1,333	471509 17	713466 21
papers	citations	h-index	g-index

23	23	23	1476
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Steering Electrons on Moving Pathways. Accounts of Chemical Research, 2009, 42, 1669-1678.	15.6	168
2	Biological charge transfer via flickering resonance. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 10049-10054.	7.1	140
3	Structural dynamics of the lac repressor-DNA complex revealed by a multiscale simulation. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 6783-6788.	7.1	135
4	PNA versus DNA: Effects of Structural Fluctuations on Electronic Structure and Hole-Transport Mechanisms. Journal of the American Chemical Society, 2008, 130, 11752-11761.	13.7	112
5	Nucleic acid charge transfer: Black, white and gray. Coordination Chemistry Reviews, 2011, 255, 635-648.	18.8	109
6	Modeling DNA loops using the theory of elasticity. Physical Review E, 2006, 73, 031919.	2.1	79
7	Elastic Rod Model of a DNA Loop in theLacOperon. Physical Review Letters, 1999, 83, 4900-4903.	7.8	75
8	Multiscale Method for Simulating Protein-DNA Complexes. Multiscale Modeling and Simulation, 2004, 2, 527-553.	1.6	68
9	Role of Nucleobase Energetics and Nucleobase Interactions in Single-Stranded Peptide Nucleic Acid Charge Transfer. Journal of the American Chemical Society, 2009, 131, 6498-6507.	13.7	55
10	Solution Structure of a Peptide Nucleic Acid Duplex from NMR Data: Features and Limitations. Journal of the American Chemical Society, 2008, 130, 13264-13273.	13.7	50
11	Structural Basis for Cooperative DNA Binding by CAP and Lac Repressor. Structure, 2004, 12, 123-132.	3.3	49
12	Charge splitters and charge transport junctions based on guanine quadruplexes. Nature Nanotechnology, 2018, 13, 316-321.	31.5	46
13	Evidence for a Near-Resonant Charge Transfer Mechanism for Double-Stranded Peptide Nucleic Acid. Journal of the American Chemical Society, 2011, 133, 62-72.	13.7	45
14	Effect of Backbone Flexibility on Charge Transfer Rates in Peptide Nucleic Acid Duplexes. Journal of the American Chemical Society, 2012, 134, 9335-9342.	13.7	38
15	Nonequilibrium Hybridization Enables Discrimination of a Point Mutation within 5â€“40 Â°C. Journal of the American Chemical Society, 2016, 138, 13465-13468.	13.7	31
16	Structure prediction of a complex between the chromosomal protein HMG-D and DNA. , 1998, 30, 113-135.		30
17	DNA Sequencing by Hybridization to Oligonucleotide Matrix. Calculation of Continuous Stacking Hybridization Efficiency. Journal of Biomolecular Structure and Dynamics, 1994, 11, 797-812.	3.5	25
18	B-DNA to Zip-DNA: Simulating a DNA Transition to a Novel Structure with Enhanced Charge-Transport Characteristics. Journal of Physical Chemistry A, 2011, 115, 9377-9391.	2.5	25

#	Article	IF	Citations
19	Electronic Structure of Self-Assembled Peptide Nucleic Acid Thin Films. Journal of Physical Chemistry C, 2011, 115, 17123-17135.	3.1	17
20	DNA charge transport: Moving beyond 1D. Surface Science, 2016, 652, 33-38.	1.9	16
21	Is MD Geometry Sampling Sufficient for Nucleobase Electronic Structure Analysis of ET Reactions? Comparing Classical MD and QM/MM Methods. Journal of Physical Chemistry C, 2010, 114, 20496-20502.	3.1	13
22	Two-color spectroscopy of UV excited ssDNA complex with a single-wall nanotube photoluminescence probe: Fast relaxation by nucleobase autoionization mechanism. Nano Research, 2016, 9, 571-583.	10.4	7