Alexey Savelyev

List of Publications by Year
in descending order

20 papers	1,284 citations	516710 16 h-index	839539 18 g-index
20 all docs	20 docs citations	20 times ranked	1170 citing authors

#	Article	IF	Citations
1	Chemically accurate coarse graining of double-stranded DNA. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 20340-20345.	7.1	150
2	Electrostatic, Steric, and Hydration Interactions Favor Na+ Condensation around DNA Compared with K+. Journal of the American Chemical Society, 2006, 128, 14506-14518.	13.7	138
3	Allâ€atom polarizable force field for DNA based on the classical drude oscillator model. Journal of Computational Chemistry, 2014, 35, 1219-1239.	3.3	136
4	Counterion Atmosphere and Hydration Patterns near a Nucleosome Core Particle. Journal of the American Chemical Society, 2009, 131, 15005-15013.	13.7	90
5	Recent successes in coarseâ€grained modeling of DNA. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2013, 3, 69-83.	14.6	81
6	Molecular Renormalization Group Coarse-Graining of Polymer Chains: Application to Double-Stranded DNA. Biophysical Journal, 2009, 96, 4044-4052.	0.5	80
7	Competition among Li⁺, Na⁺, K⁺, and Rb⁺ Monovalent Ions for DNA in Molecular Dynamics Simulations Using the Additive CHARMM36 and Drude Polarizable Force Fields. Journal of Physical Chemistry B, 2015, 119, 4428-4440.	2.6	80
8	Molecular Renormalization Group Coarse-Graining of Electrolyte Solutions: Application to Aqueous NaCl and KCl. Journal of Physical Chemistry B, 2009, 113, 7785-7793.	2.6	76
9	Balancing the Interactions of Ions, Water, and DNA in the Drude Polarizable Force Field. Journal of Physical Chemistry B, 2014, 118, 6742-6757.	2.6	74
10	Do monovalent mobile ions affect DNA's flexibility at high salt content?. Physical Chemistry Chemical Physics, 2012, 14, 2250.	2.8	68
11	Is DNAâ€™s Rigidity Dominated by Electrostatic or Nonelectrostatic Interactions?. Journal of the American Chemical Society, 2011, 133, 19290-19293.	13.7	63
12	Inter-DNA Electrostatics from Explicit Solvent Molecular Dynamics Simulations. Journal of the American Chemical Society, 2007, 129, 6060-6061.	13.7	62
13	Induced Polarization Influences the Fundamental Forces in DNA Base Flipping. Journal of Physical Chemistry Letters, 2014, 5, 2077-2083.	4.6	59
14	Differential Impact of the Monovalent Ions Li⁺, Na⁺, K⁺, and Rb⁺ on DNA Conformational Properties. Journal of Physical Chemistry Letters, 2015, 6, 212-216.	4.6	51
15	Polyionic Charge Density Plays a Key Role in Differential Recognition of Mobile Ions by Biopolymers. Journal of Physical Chemistry B, 2008, 112, 9135-9145.	2.6	26
16	Differential Deformability of the DNA Minor Groove and Altered BI/BII Backbone Conformational Equilibrium by the Monovalent Ions Li⁺, Na⁺, K⁺, and Rb⁺ via Water-Mediated Hydrogen Bonding. Journal of Chemical Theory and Computation, 2015, 11, 4473-4485.	5.3	26
17	Moving analytical ultracentrifugation software to a good manufacturing practices (GMP) environment. PLoS Computational Biology, 2020, 16, e1007942.	3.2	20
18	Assessment of the DNA partial specific volume and hydration layer properties from CHARMM Drude polarizable and additive MD simulations. Physical Chemistry Chemical Physics, 2021, 23, 10524-10535.	2.8	4

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19	Moving analytical ultracentrifugation software to a good manufacturing practices (GMP) environment. , 2020, 16, e1007942.		0
20	Moving analytical ultracentrifugation software to a good manufacturing practices (GMP) environment. , 2020, 16, e1007942.		0