Rosana Collepardo-Guevara

List of Publications by Year
in descending order

37 papers	2,361 citations	279487 23 h-index	288905 40 g-index
52 all docs	52 docs citations	52 times ranked	1633 citing authors

#	Article	IF	Citations
1	Surface Electrostatics Govern the Emulsion Stability of Biomolecular Condensates. Nano Letters, 2022, 22, 612-621.	4.5	49
2	RNA length has a non-trivial effect in the stability of biomolecular condensates formed by RNA-binding proteins. PLoS Computational Biology, 2022, 18, e1009810.	1.5	25
3	Kinetic interplay between droplet maturation and coalescence modulates shape of aged protein condensates. Scientific Reports, 2022, 12, 4390.	1.6	20
4	Multiscale modelling of chromatin organisation: Resolving nucleosomes at near-atomistic resolution inside genes. Current Opinion in Cell Biology, 2022, 75, 102067.	2.6	9
5	Deoxyribonucleic Acid Encoded and Size-Defined Ï€-Stacking of Perylene Diimides. Journal of the American Chemical Society, 2022, 144, 368-376.	6.6	15
6	Aging can transform single-component protein condensates into multiphase architectures. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	44
7	Reentrant liquid condensate phase of proteins is stabilized by hydrophobic and non-ionic interactions. Nature Communications, 2021, 12, 1085.	5.8	245
8	Valency and Binding Affinity Variations Can Regulate the Multilayered Organization of Protein Condensates with Many Components. Biomolecules, 2021, 11, 278.	1.8	53
9	Thermodynamics and kinetics of phase separation of protein-RNA mixtures by a minimal model. Biophysical Journal, 2021, 120, 1219-1230.	0.2	56
10	Nucleosome plasticity is a critical element of chromatin liquidâ€"liquid phase separation and multivalent nucleosome interactions. Nature Communications, 2021, 12, 2883.	5.8	75
11	Size conservation emerges spontaneously in biomolecular condensates formed by scaffolds and surfactant clients. Scientific Reports, 2021, 11, 15241.	1.6	33
12	Targeted modulation of protein liquidâ€"liquid phase separation by evolution of amino-acid sequence. PLoS Computational Biology, 2021, 17, e1009328.	1.5	21
13	Liquid-like chromatin in the cell: What can we learn from imaging and computational modeling?. Current Opinion in Structural Biology, 2021, 71, 123-135.	2.6	26
14	Sequence-dependent structural properties of B-DNA: what have we learned in 40Âyears?. Biophysical Reviews, 2021, 13, 995-1005.	1.5	13
15	Physics-driven coarse-grained model for biomolecular phase separation with near-quantitative accuracy. Nature Computational Science, 2021, 1, 732-743.	3.8	128
16	Expansion of Intrinsically Disordered Proteins Increases the Range of Stability of Liquidâ€"Liquid Phase Separation. Molecules, 2020, 25, 4705.	1.7	42
17	Protein disorder-to-order transition enhances the nucleosome-binding affinity of H1. Nucleic Acids Research, 2020, 48, 5318-5331.	6.5	19
18	Liquid network connectivity regulates the stability and composition of biomolecular condensates with many components. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 13238-13247.	3.3	167

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19	DNA binds to a specific site of the adhesive blood-protein von Willebrand factor guided by electrostatic interactions. Nucleic Acids Research, 2020, 48, 7333-7344.	6.5	14
20	Emergence of chromatin hierarchical loops from protein disorder and nucleosome asymmetry. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 7216-7224.	3.3	32
21	Breakdown of the law of rectilinear diameter and related surprises in the liquid-vapor coexistence in systems of patchy particles. Journal of Chemical Physics, 2019, 150, 224510.	1.2	30
22	Forced unraveling of chromatin fibers with nonuniform linker DNA lengths. Journal of Physics Condensed Matter, 2015, 27, 064113.	0.7	9
23	Chromatin Unfolding by Epigenetic Modifications Explained by Dramatic Impairment of Internucleosome Interactions: A Multiscale Computational Study. Journal of the American Chemical Society, 2015, 137, 10205-10215.	6.6	135
24	Chromatin fiber polymorphism triggered by variations of DNA linker lengths. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 8061-8066.	3.3	131
25	Energy Landscapes, Folding Mechanisms, and Kinetics of RNA Tetraloop Hairpins. Journal of the American Chemical Society, 2014, 136, 18052-18061.	6.6	47
26	Dynamic condensation of linker histone C-terminal domain regulates chromatin structure. Nucleic Acids Research, 2014, 42, 7553-7560.	6.5	56
27	Structure and Properties of DNA in Apolar Solvents. Journal of Physical Chemistry B, 2014, 118, 8540-8548.	1.2	22
28	Insights into chromatin fibre structure by <i>inÂvitro</i> and <i>in silico</i> single-molecule stretching experiments. Biochemical Society Transactions, 2013, 41, 494-500.	1.6	9
29	NAFlex: a web server for the study of nucleic acid flexibility. Nucleic Acids Research, 2013, 41, W47-W55.	6.5	45
30	Crucial role of dynamic linker histone binding and divalent ions for DNA accessibility and gene regulation revealed by mesoscale modeling of oligonucleosomes. Nucleic Acids Research, 2012, 40, 8803-8817.	6.5	40
31	The Effect of Linker Histone's Nucleosome Binding Affinity on Chromatin Unfolding Mechanisms. Biophysical Journal, 2011, 101, 1670-1680.	0.2	31
32	Biomolecular modeling and simulation: a field coming of age. Quarterly Reviews of Biophysics, 2011, 44, 191-228.	2.4	136
33	Bimolecular reaction rates from ring polymer molecular dynamics: Application to H + CH4â†' H2 + CH3. Journal of Chemical Physics, 2011, 134, 044131.	1.2	156
34	Modeling Studies of Chromatin Fiber Structure as a Function of DNA Linker Length. Journal of Molecular Biology, 2010, 403, 777-802.	2.0	98
35	Bimolecular reaction rates from ring polymer molecular dynamics. Journal of Chemical Physics, 2009, 130, 174713.	1.2	122
36	Proton transfer in a polar solvent from ring polymer reaction rate theory. Journal of Chemical Physics, 2008, 128, 144502.	1.2	92

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37	A HÃ¼ckel study of the effect of a molecular resonance cavity on the quantum conductance of an alkene wire. Chemical Physics Letters, 2004, 393, 367-371.	1.2	23