Vsevolod A Tverdislov

List of Publications by Year
in descending order

63
papers

467
citations

759055

12
h-index

839398

18
g-index

65
all docs

65
docs citations

65
times ranked

228
citing authors

#	Article	IF	Citations
1	The chiral mind: The role of symmetry in the growth of new hierarchical layers in cognition. Physics of Life Reviews, 2021, 36, 27-29.	1.5	1
2	Chiral Dualism as a Unifying Principle in Molecular Biophysics. Biophysica, 2021, 1, 22-37.	0.6	4
3	A model of autowave self-organization as a hierarchy of active media in the biological evolution. BioSystems, 2020, 198, 104234.	0.9	0
4	Structures and Properties of the Self-Assembling Diphenylalanine Peptide Nanotubes Containing Water Molecules: Modeling and Data Analysis. Nanomaterials, 2020, 10, 1999.	1.9	21
5	Molecular modeling and computational study of the chiral-dependent structures and properties of the self-assembling diphenylalanine peptide nanotubes, containing water molecules. Journal of Molecular Modeling, 2020, 26, 326.	0.8	7
6	A percolation model of natural selection. BioSystems, 2020, 193-194, 104120.	0.9	6
7	Chirality Driven Twisting as a Driving Force of Primitive Folding in Binary Mixtures. Origins of Life and Evolution of Biospheres, 2020, 50, 77-86.	0.8	4
8	Chiral Dualism as an Instrument of Hierarchical Structure Formation in Molecular Biology. Symmetry, 2020, 12, 587.	1.1	24
9	Autowave Self-Organization in the Folding of Proteins. Moscow University Physics Bulletin (English) Tj ETQq1 1 0.784314 rgBT /Overlo	0.1	5
10	On regularities in the spontaneous formation of structural hierarchies in chiral systems of nonliving and living matter. Physics-Uspekhi, 2019, 62, 354-363.	0.8	17
11	Quantitative Criteria of Chirality in Hierarchical Protein Structures. Biophysics (Russian Federation), 2019, 64, 155-166.	0.2	9
12	Spontaneous Resolution and Super-coiling in Xerogels of the Products of Photo-Induced Formose Reaction. Origins of Life and Evolution of Biospheres, 2019, 49, 187-196.	0.8	9
13	Formation of Chiral and Supercoiled Structures in Photoinduced Formose Reaction in the de novo Model. Russian Journal of Physical Chemistry B, 2019, 13, 486-501.	0.2	1
14	Spontaneous resolution in racemic solutions of N-trifluoroacetylated Î±-aminoalcohols. Journal of Molecular Structure, 2019, 1183, 8-13.	1.8	13
15	Molecular modeling and computational study of the chiral-dependent structures and properties of self-assembling diphenylalanine peptide nanotubes. Journal of Molecular Modeling, 2019, 25, 199.	0.8	27
16	Protein Folding as an Autowave Process of Self-Organization in Active Media. Bulletin of the Russian Academy of Sciences: Physics, 2019, 83, 85-90.	0.1	3
17	Natural Selection as a Percolation System. Moscow University Physics Bulletin (English Translation) Tj ETQq1 1 0.784314 rgBT /Overlo	0.1	1
18	Chiral Peculiar Properties of Self-Organization of Diphenylalanine Peptide Nanotubes: Modeling Of Structure and Properties. Mathematical Biology and Bioinformatics, 2019, 14, 94-125.	0.1	11

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19	Investigation of physical properties of diphenylalanine peptide nanotubes having different chiralities and embedded water molecules. Ferroelectrics, 2018, 525, 168-177.	0.3	11
20	Spontaneous Structure Formation in the Products of UV-Initiated Formose Reaction in De-Novo Model. High Energy Chemistry, 2018, 52, 369-372.	0.2	0
21	Formation of Chiral Structures in UV-Initiated Formose Reaction. Doklady Physical Chemistry, 2018, 479, 57-60.	0.2	3
22	Formation of Chiral Structures in Photoinitiated Formose Reaction. High Energy Chemistry, 2018, 52, 108-116.	0.2	3
23	A periodic system of chiral structures in molecular biology. Biophysics (Russian Federation), 2017, 62, 331-341.	0.2	30
24	Active media as a physical model of spatiotemporal self-organization in the stock market. Bulletin of the Russian Academy of Sciences: Physics, 2017, 81, 114-120.	0.1	1
25	On the possibility of chiral structure-density submillimeter inhomogeneities existing in water. Journal of Water Chemistry and Technology, 2017, 39, 319-324.	0.2	15
26	Physical Principles of Discrete Hierarchies Formation in Protein Macromolecules. Journal of Physics: Conference Series, 2017, 917, 042025.	0.3	0
27	Chirality as a physical aspect of structure formation in biological macromolecular systems. Journal of Physics: Conference Series, 2016, 741, 012065.	0.3	9
28	Chemical physics of cellulose nitration. Russian Journal of Physical Chemistry B, 2016, 10, 245-259.	0.2	13
29	Structure formation in low-concentrated solutions of cholesterol and ergosterol. Biophysics (Russian Federation), 2016, 61, 251-256.	0.2	0
30	The mechanism of self-organization in a surface water microlayer utilizing thermocapillary convection. Biophysics (Russian Federation), 2016, 61, 833-837.	0.2	0
31	The influence of the storage temperature and cryopreservation conditions on the extent of human sperm DNA fragmentation. Biophysics (Russian Federation), 2016, 61, 267-270.	0.2	3
32	From autowave mechanisms of self-assembly to molecular machines. Bulletin of the Russian Academy of Sciences: Physics, 2015, 79, 1516-1520.	0.1	14
33	Interactions of helical structures as a molecular basis of intra- and intercellular interactions. Moscow University Physics Bulletin (English Translation of Vestnik Moskovskogo Universiteta,) Tj ETQq1 1 0.784314 rgBT /Overlock 10	0.1	5
34	Self assembly of supramolecular homochiral structures in solutions of chiral biomimetics. Moscow University Physics Bulletin (English Translation of Vestnik Moskovskogo Universiteta, Fizika), 2015, 70, 51-56.	0.1	4
35	â€œMicrobiological agingâ€•by Mechnikov. How to interpret these ideas today?. Biophysics (Russian) Tj ETQq1 1 0.784314 rgBT /Overl	0.2	1
36	Initiation of the formation of chiral strings: Dimension of formation domain, microstructure, and nucleation mechanism. Russian Journal of Physical Chemistry B, 2014, 8, 620-625.	0.2	4

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37	Experimental observation of synergistic regular change in the chirality sign in the hierarchy of biomimetic structures. Biophysics (Russian Federation), 2014, 59, 876-880.	0.2	8
38	An autowave model of vesicle formation on the ocean surface. Moscow University Physics Bulletin (English Translation of Vestnik Moskovskogo Universiteta, Fizika), 2014, 69, 548-551.	0.1	1
39	Commensurability effects in chiral strings. Doklady Physical Chemistry, 2013, 450, 138-141.	0.2	9
40	Chirality as a primary switch of hierarchical levels in molecular biological systems. Biophysics (Russian Federation), 2013, 58, 128-132.	0.2	59
41	Metric Similarity of Dynamic Commutation Processes In Situ and In Vitro. Bulletin of Experimental Biology and Medicine, 2012, 153, 844-846.	0.3	2
42	Superspiralization of Chiral Strings. Bulletin of Experimental Biology and Medicine, 2012, 154, 34-36.	0.3	9
43	Biological fluids as chiral anisometric media. Bulletin of Experimental Biology and Medicine, 2012, 152, 703-706.	0.3	7
44	Self-organization as the driving force for the evolution of the biosphere. Moscow University Physics Bulletin (English Translation of Vestnik Moskovskogo Universiteta, Fizika), 2012, 67, 213-217.	0.1	6
45	From symmetries to the laws of evolution. I. Chirality as a means of active media stratification. Biophysics (Russian Federation), 2012, 57, 120-126.	0.2	18
46	Nonlinearity as the dominant of the nature. Russian Journal of General Chemistry, 2011, 81, 165-169.	0.3	0
47	Ionic and chiral asymmetries as physical factors of biogenesis and ontogenesis. Moscow University Physics Bulletin (English Translation of Vestnik Moskovskogo Universiteta, Fizika), 2011, 66, 105-115.	0.1	2
48	Modeling of ligands for native and chiral modified NMDA receptor NR1-binding core. Biochemistry (Moscow) Supplement Series B: Biomedical Chemistry, 2008, 2, 343-345.	0.2	0
49	Chirality as a problem of biochemical physics. Russian Journal of General Chemistry, 2007, 77, 1994-2005.	0.3	10
50	The principle of parametric fractionation (separation) of substances in biological systems and technology. Russian Journal of General Chemistry, 2007, 77, 2064-2070.	0.3	0
51	Structure and ion selectivity of the open potential-dependent potassium channel. Journal of Structural Chemistry, 2007, 48, 170-172.	0.3	0
52	Energy distribution and ion selectivity of the bacterial potassium channel. Biophysics (Russian) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 142	0.2	1
53	Separation of long-and short-range interactions in calculations of energy distribution of ions in membrane channels. Journal of Structural Chemistry, 2006, 47, 241-246.	0.3	0
54	Effect of isomerization of amino acid residues on the structure of aquaporin. Journal of Structural Chemistry, 2006, 47, 567-569.	0.3	0

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55	About using the approximate fields to calculate the electrostatic potential distribution of membrane channels. Journal of Structural Chemistry, 2005, 46, 603-607.	0.3	0
56	Role of lipid membraneâ€“nucleic acid interactions, DNAâ€“membrane contacts and metal (II) cations in origination of initial cells and in evolution of prokaryotes to eukaryotes. Bioelectrochemistry, 2002, 58, 41-46.	2.4	4
57	Furosemide and DIDS penetration into Langmuir films of stearic acid. The influence of low ionic strength and pH. Colloids and Surfaces B: Biointerfaces, 1995, 5, 205-211.	2.5	3
58	Ionic asymmetry of primary biological systems originates from the fractionation of ions in the Ocean's thin surface layer. Origins of Life and Evolution of Biospheres, 1989, 19, 308-309.	0.8	0
59	Interaction between isolated rat brain synaptic vesicles and planar bilayer membranes. Bulletin of Experimental Biology and Medicine, 1987, 103, 350-352.	0.3	0
60	Interaction of influenza virus proteins with planar bilayer lipid membranes I. Characterization of their adsorption and incorporation into lipid bilayers. Biochimica Et Biophysica Acta - Biomembranes, 1984, 778, 269-275.	1.4	17
61	Interaction of influenza virus proteins with planar bilayer lipid membranes II. Effects of rimantadine and amantadine. Biochimica Et Biophysica Acta - Biomembranes, 1984, 778, 276-280.	1.4	7
62	Spectroscopic study of the interaction of 1-anilinonaphthalene-8-sulfonate and 2-toluidinonaphthalene-6-sulfonate with human blood plasma lipoproteins. Journal of Applied Spectroscopy, 1982, 37, 1261-1265.	0.3	0
63	Interaction of influenza virus proteins with planar lipid bilayers: A model for virion assembly. Biochemical and Biophysical Research Communications, 1981, 102, 308-314.	1.0	11