Vladimir Binhi

List of Publications by Year
in descending order

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43 papers	974 citations	394286 19 h-index	454834 30 g-index
44 all docs	44 docs citations	44 times ranked	470 citing authors

#	Article	IF	Citations
1	Biological effects of the hypomagnetic field: An analytical review of experiments and theories. PLoS ONE, 2017, 12, e0179340.	1.1	92
2	Effects of weak magnetic fields on biological systems: physical aspects. Physics-Uspekhi, 2003, 46, 259-291.	0.8	79
3	Effect of static magnetic field onE. coli cells and individual rotations of ion-protein complexes. Bioelectromagnetics, 2001, 22, 79-86.	0.9	77
4	Magnetobiology: The kT Paradox and Possible Solutions. Electromagnetic Biology and Medicine, 2007, 26, 45-62.	0.7	66
5	Rotations of macromolecules affect nonspecific biological responses to magnetic fields. Scientific Reports, 2018, 8, 13495.	1.6	46
6	Amplitude and frequency dissociation spectra of ion-protein complexes rotating in magnetic fields. Bioelectromagnetics, 2000, 21, 34-45.	0.9	44
7	Molecular gyroscopes and biological effects of weak extremely low-frequency magnetic fields. Physical Review E, 2002, 65, 051912.	0.8	41
8	A physical mechanism of magnetoreception: Extension and analysis. Bioelectromagnetics, 2017, 38, 41-52.	0.9	40
9	Interference of Ion Quantum States Within a Protein Explains Weak Magnetic Field's Effect on Biosystems. Electromagnetic Biology and Medicine, 1997, 16, 203-214.	0.4	37
10	Zero Magnetic Field Effect Observed in Human Cognitive Processes. Electromagnetic Biology and Medicine, 2009, 28, 310-315.	0.7	36
11	Interference mechanism for some biological effects of pulsed magnetic fields. Bioelectrochemistry, 1998, 45, 73-81.	1.0	35
12	Do naturally occurring magnetic nanoparticles in the human body mediate increased risk of childhood leukaemia with EMF exposure?. International Journal of Radiation Biology, 2008, 84, 569-579.	1.0	34
13	Magnetic factor in solar-terrestrial relations and its impact on the human body: physical problems and prospects for research. Physics-Uspekhi, 2016, 59, 502-510.	0.8	34
14	Ionâ€“protein dissociation predicts â€˜windowsâ€™ in electric field-induced wound-cell proliferation. Biochimica Et Biophysica Acta - General Subjects, 2000, 1474, 147-156.	1.1	31
15	Theoretical Concepts in Magnetobiology after 40 Years of Research. Cells, 2022, 11, 274.	1.8	28
16	Primary physical mechanism of the biological effects of weak magnetic fields. Biophysics (Russian) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.2	26
17	Stochastic dynamics of magnetosomes and a mechanism of biological orientation in the geomagnetic field. Bioelectromagnetics, 2006, 27, 58-63.	0.9	25
18	Stochastic dynamics of magnetosomes in cytoskeleton. Europhysics Letters, 2005, 70, 850-856.	0.7	23

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19	THEORETICAL CONCEPTS IN MAGNETOBIOLOGY. Electromagnetic Biology and Medicine, 2001, 20, 43-58.	0.4	21
20	The influence of geomagnetic field compensation on human cognitive processes. Biophysics (Russian) Tj ETQq0 0 0 rgBT /Overlock 10 T	0.2	21
21	Cardiovascular response as a marker of environmental stress caused by variations in geomagnetic field and local weather. Biomedical Signal Processing and Control, 2019, 51, 401-410.	3.5	16
22	Unfolding and Aggregation of Lysozyme under the Combined Action of Dithiothreitol and Guanidine Hydrochloride: Optical Studies. International Journal of Molecular Sciences, 2021, 22, 2710.	1.8	15
23	Nonspecific magnetic biological effects: A model assuming the spin-orbit coupling. Journal of Chemical Physics, 2019, 151, 204101.	1.2	14
24	On the physical nature of magnetobiological effects. Quantum Electronics, 2006, 36, 691-701.	0.3	9
25	Laser interferometry of the hydrolytic changes in protein solutions: the refractive index and hydration shells. Journal of Biological Physics, 2018, 44, 345-360.	0.7	9
26	Lowâ€Frequency Magnetic Fields in Cars and Office Premises and the Geomagnetic Field Variations. Bioelectromagnetics, 2020, 41, 360-368.	0.9	8
27	Amplitude and frequency dissociation spectra of ion-protein complexes rotating in magnetic fields. Bioelectromagnetics, 2000, 21, 34-45.	0.9	8
28	The paradox of magnetobiology: Analysis and prospects for solution. Biophysics (Russian Federation), 2006, 51, 497-503.	0.2	7
29	Random Effects in Magnetobiology and a Way to Summarize Them. Bioelectromagnetics, 2021, 42, 501-515.	0.9	7
30	A few remarks on â€˜combined action of DC and AC magnetic fields on ion motion in a macromoleculeâ€™. Bioelectromagnetics, 2007, 28, 409-412.	0.9	6
31	Two types of magnetic biological effects: Individual and batch effects. Biophysics (Russian Federation), 2012, 57, 237-243.	0.2	6
32	Relaxation of liquid water states with altered stoichiometry. Biophysics (Russian Federation), 2014, 59, 515-519.	0.2	6
33	Changes in the refractive index of a solution during proteolysis of bovine serum albumin with pepsin. Biophysics (Russian Federation), 2017, 62, 177-181.	0.2	4
34	A limit in the dynamic increase in the accuracy of group migration. BioSystems, 2018, 166, 19-25.	0.9	4
35	Zero Magnetic Field Effect Observed in Human Cognitive Processes. Electromagnetic Biology and Medicine, 2009, 28, 310-315.	0.7	4
36	Reply to â€œComment on â€˜Molecular gyroscopes and biological effects of weak extremely low-frequency magnetic fieldsâ€™ â€. Physical Review E, 2003, 68, .	0.8	3

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37	Precision Interferometry as a New Method for Studying the Conformational State of Protein and Its Interaction with a Solvent. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2020, 128, 771-777.	0.2	3
38	Temperature factor and magnetic noise under conditions of stochastic resonance of magnetosomes. Biophysics (Russian Federation), 2006, 51, 233-236.	0.2	2
39	Response to comments by Frank Barnes and Ben Greenebaum on â€œA physical mechanism of magnetoreception: Extension and analysisâ€• Bioelectromagnetics, 2017, 38, 324-325.	0.9	2
40	A Formula for Frequency and Amplitude Windows of Some ELF and Null MF Bioeffects Follows from the Schroedinger Equation. , 1999, , 417-420.		2
41	Analysis of the structure of magnetic fields that induced inhibition of stimulated neurite outgrowth. Bioelectromagnetics, 2005, 26, 684-689.	0.9	1
42	Reply to A Yu Grosberg's letter to thePhysicsâ€“UspekhiEditorial Board. Physics-Uspekhi, 2005, 48, 537-538.	0.8	1
43	Microwave absorption by magnetic nanoparticles in the organism. Biophysics (Russian Federation), 2011, 56, 1096-1098.	0.2	1