

Contents

Vol. 45, No. 6, 2000

Simultaneous English language translation of the journal is available from MAIK "Nauka/Interperiodica" (Russia).
Biophysics ISSN 0006-3509.

Molecular Biophysics

Intramolecular Dynamics and Functional Activity of Proteins <i>V. M. Mazhul', E. M. Zaitseva, and D. G. Shcherbin</i>	935
Application of Protein Engineering Methods to Studies of Calcium-Binding Proteins <i>S. E. Permyakov and E. A. Permyakov</i>	960
The Spin-dependent Electronic Structure in the Vicinity of the Iron Atom in Rubredoxin <i>G. E. Yalovega, G. Yu. Smolentsev, A. P. Kovtun, A. V. Soldatov, S. Della-Longa, and A. Kongiu-Castellano</i>	977
Flavocytochrome P450 2B4 Photoreduction <i>V. V. Shumyantseva, T. V. Bulko, R. D. Schmid, and A. I. Archakov</i>	982
Sperm Whale Oxymyoglobin Oxidation Catalyzed by Ferrocyanide Ions: Kinetics and Mechanism <i>S. A. Moiseeva, G. B. Postnikova, and V. S. Sivozhelezov</i>	988
The "Phantom" Structure of Solvent and Packing of Double-stranded Molecules of Nucleic Acids in Mesomorphic Dispersion Particles <i>Yu. M. Evdokimov, V. L. Golo, V. I. Salyanov, G. B. Lortkipanidze, and E. I. Kats</i>	998
Visualization of Cruciform Structure in Supercoiled DNA by Atomic Force Microscopy <i>A. P. Limanskii</i>	1007
New Physical Interpretation of S-shaped Curves for DNA–Ligand Binding: Competition Between Different Ligand Complexes <i>Yu. D. Nechipurenko, A. L. Mikheikin, and S. A. Strel'tsov</i>	1011

Cell Biophysics

Electrostriction-induced Capacitive Current Harmonics in Inhomogeneous Bilayers <i>V. I. Passechnik</i>	1016
Electrostriction-induced Transmembrane Current Harmonics as a Tool for Elucidating the Mechanism of Ion Transport in Na ⁺ ,K ⁺ -ATPase Preparations <i>V. I. Passechnik</i>	1025
Mechanism of Local Anesthesia: Long-Range Orientation Effects <i>G. A. Isaeva, A. V. Dmitriev, and P. P. Isaev</i>	1034
Features of the Modulating Effect of Complexes of Type II Ribosome-inactivating Proteins with Sugars on the Neutrophil Respiratory Burst Induced by a Chemotactic Peptide <i>A. A. Alovskaya, V. G. Safronova, V. V. Kornilov, A. N. Kornev, Yu. A. Bulakh, I. I. Agapov, A. G. Tonevitskii, W. Voelter, C. Betzel, and A. M. Mikhailov</i>	1040

Role of Secondary Messengers of Phosphoinositide Nature in Ca^{2+} Accumulation by Retinal Rod Microsomes <i>V. P. Emel'yanova, L. A. Baranova, and I. D. Volotovskii</i>	1047
Exposure to Ionizing Radiation Weakens the Hemoglobin-binding Ability of the Erythrocyte Membrane <i>V. I. Dreval' and L. V. Sichevskaya</i>	1053
Standing Wave Model of the Long-Term Phytoplankton Dynamics in Lake Baikal <i>V. K. Evstaf'ev and N. A. Bondarenko</i>	1056

Complex Systems Biophysics

Identification of Partially Deuterated Exometabolites of Tea Fungus Cultivated in Heavy Water <i>V. P. Kutysenko and D. I. Yurkevich</i>	1063
Activation and Inhibition of the Gravitropic Response in Plants by Weak Combined Magnetic Fields <i>N. A. Belova and V. V. Lednev</i>	1069
Dependence of the Gravitropic Response in Flax Stem Segments on the Frequency and Amplitude of a Weak Combined Magnetic Field <i>N. A. Belova and V. V. Lednev</i>	1075
Structural Theory of Phyllotaxis: II. Interrelation between Lower and Higher Forms of Phyllotaxis <i>A. G. Malygin</i>	1079
Mycelium–Yeast Transitions in Dimorphous Fungi <i>Yu. A. Kumzerov and L. K. Panina</i>	1086
Acoustic Noise of Tense Muscle <i>V. A. Antonets, A. L. Gribkov, and M. E. Shesternin</i>	1091
On the Possibility of Quantitative Estimation of the Weight Perception by the Muscle Analyzer <i>V. A. Antonets, N. M. Anishkina, E. M. Timanin, A. L. Gribkov, and T. B. Singosina</i>	1098
Mechanical Properties of Soft Biological Tissues <i>S. R. Aglyamov and A. R. Skovoroda</i>	1103

Letters to the Editor

Self-Assembly of Type I Collagen Molecules without Teloepitides <i>T. I. Nikolaeva, A. I. Pisachenko, I. I. Selezneva, Yu. A. Rochev, and B. K. Gavriluk</i>	1112
---	------
