

# Valerij Kozlov

## List of Publications by Year in descending order

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62  
papers

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623734

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677142

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docs citations

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times ranked

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citing authors

#	ARTICLE	IF	CITATIONS
1	Shaking-Induced Aggregation and Flotation in Immunoglobulin Dispersions: Differences between Water and Water-Ethanol Mixtures. ACS Omega, 2020, 5, 14689-14701.	3.5	54
2	Long-Living nanobubbles of dissolved gas in aqueous solutions of salts and erythrocyte suspensions. Journal of Biophotonics, 2011, 4, 150-164.	2.3	51
3	Biocompatibility of new materials based on nano-structured nitinol with titanium and tantalum composite surface layers: experimental analysis in vitro and in vivo. Journal of Materials Science: Materials in Medicine, 2018, 29, 33.	3.6	38
4	Colloidal Crystal Formation at the Nafion-Water Interface. Journal of Physical Chemistry B, 2014, 118, 3372-3377.	2.6	34
5	Near-surface structure of Nafion in deuterated water. Journal of Chemical Physics, 2018, 149, 164901.	3.0	32
6	Properties and Use of Water Activated by Plasma of Piezoelectric Direct Discharge. Frontiers in Physics, 2021, 8, .	2.1	31
7	The Physical Nature of Mesoscopic Inhomogeneities in Highly Diluted Aqueous Suspensions of Protein Particles. Physics of Wave Phenomena, 2019, 27, 102-112.	1.1	24
8	Study of the physicochemical and biological properties of the new promising Ti-20Nb-13Ta-5Zr alloy for biomedical applications. Materials Chemistry and Physics, 2020, 255, 123557.	4.0	23
9	Influence of Fluoropolymer Film Modified With Nanoscale Photoluminophor on Growth and Development of Plants. Frontiers in Physics, 2020, 8, .	2.1	19
10	Dynamics of Nafion membrane swelling in H2O/D2O mixtures as studied using FTIR technique. Journal of Chemical Physics, 2018, 148, 124901.	3.0	18
11	New Nanostructured Carbon Coating Inhibits Bacterial Growth, but Does Not Influence on Animal Cells. Nanomaterials, 2020, 10, 2130.	4.1	18
12	Development of a Biocompatible PLGA Polymers Capable to Release Thrombolytic Enzyme Prourokinase. Journal of Biomaterials Science, Polymer Edition, 2020, 31, 1405-1420.	3.5	17
13	Bacteriostatic and Cytotoxic Properties of Composite Material Based on ZnO Nanoparticles in PLGA Obtained by Low Temperature Method. Polymers, 2022, 14, 49.	4.5	15
14	Laser scattering in water and aqueous solutions of salts. Proceedings of SPIE, 2010, , .	0.8	14
15	Self-oscillating Water Chemiluminescence Modes and Reactive Oxygen Species Generation Induced by Laser Irradiation; Effect of the Exclusion Zone Created by Nafion. Entropy, 2014, 16, 6166-6185.	2.2	13
16	A Novel Biodegradable Composite Polymer Material Based on PLGA and Silver Oxide Nanoparticles with Unique Physicochemical Properties and Biocompatibility with Mammalian Cells. Materials, 2021, 14, 6915.	2.9	13
17	Antibacterial behavior of organosilicon composite with nano aluminum oxide without influencing animal cells. Reactive and Functional Polymers, 2022, 170, 105143.	4.1	13
18	Long-Term Effect of Low-Frequency Electromagnetic Irradiation in Water and Isotonic Aqueous Solutions as Studied by Photoluminescence from Polymer Membrane. Polymers, 2021, 13, 1443.	4.5	12

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19	Cluster Structure of Dissolved Gas Nanobubbles in Ionic Aqueous Solutions. Journal of Chemical & Engineering Data, 2012, 57, 2823-2831.	1.9	11
20	Formation of Water-Free Cavity in the Process of Nafion Swelling in a Cell of Limited Volume; Effect of Polymer Fibers Unwinding. Polymers, 2020, 12, 2888.	4.5	11
21	Phase states of water near the surface of a polymer membrane. Phase microscopy and luminescence spectroscopy experiments. Journal of Experimental and Theoretical Physics, 2014, 119, 924-932.	0.9	10
22	Evolution of the Size Distribution of Gold Nanoparticles under Laser Irradiation. Physics of Wave Phenomena, 2021, 29, 102-107.	1.1	10
23	Synthesis of a Novel, Biocompatible and Bacteriostatic Borosiloxane Composition with Silver Oxide Nanoparticles. Materials, 2022, 15, 527.	2.9	10
24	Time dependence of the luminescence from a polymer membrane swollen in water: Concentration and isotopic effects. Physics of Wave Phenomena, 2017, 25, 259-271.	1.1	8
25	Nafion Swelling in Salt Solutions in a Finite Sized Cell: Curious Phenomena Dependent on Sample Preparation Protocol. Polymers, 2022, 14, 1511.	4.5	7
26	Suppression of the coalescence of gas bubbles in aqueous electrolyte solutions: dependence on the external pressure and velocity of gas flow through a column with liquid. Physics of Wave Phenomena, 2017, 25, 219-224.	1.1	5
27	Investigation of Deuterium Substitution Effects in a Polymer Membrane Using IR Fourier Spectrometry. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2018, 125, 337-342.	0.6	5
28	Dynamics of Polymer Membrane Swelling in Aqueous Suspension of Amino-Acids with Different Isotopic Composition; Photoluminescence Spectroscopy Experiments. Polymers, 2021, 13, 2635.	4.5	5
29	Possibility to Alter Dynamics of Luminescence from Surface of Polymer Membrane with Ultrasonic Waves. Polymers, 2022, 14, 2542.	4.5	5
30	Study of Suppression of Gas Bubbles Coalescence in the Liquid for Use in Technologies of Oil Production and Associated Gas Utilization. , 2017, , .		4
31	Simulation of the Formation of a Cascade of Displacements and Transient Ionization Processes in Silicon Semiconductor Structures under Neutron Exposure. Semiconductors, 2019, 53, 1249-1254.	0.5	4
32	Swelling of Polymer Membrane in an Aqueous Protein Suspension: Photoluminescence Spectroscopy Experiments. Physics of Wave Phenomena, 2021, 29, 123-130.	1.1	4
33	Quantum-aperture formation in a quasi-ballistic MESFET by neutron irradiation. Russian Microelectronics, 2005, 34, 359-364.	0.5	3
34	Refraction coefficient of water and aqueous solutions in the optical frequency range in the vicinity of Nafion. Biophysics (Russian Federation), 2012, 57, 733-749.	0.7	3
35	Stochastic Ultralow-Frequency Oscillations of the Luminescence Intensity from the Surface of a Polymer Membrane Swelling in Aqueous Salt Solutions. Polymers, 2022, 14, 688.	4.5	3
36	Photoinduced Short-Lived Absorption in PbWO <sub>4</sub> :Nb Scintillation Crystals. Atomic Energy, 2001, 90, 300-303.	0.4	2

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37	Electrical and luminescence properties of silicon-based tunnel transit-time light-emitting diodes p +/n +/n-Si:Er. <i>Semiconductors</i> , 2010, 44, 1486-1491.	0.5	2
38	Natural fluctuations in tunneling-current distribution over the area of a reverse-biased silicon p-n junction. <i>Semiconductors</i> , 2012, 46, 130-135.	0.5	2
39	Investigation of the phase states of aqueous salt solutions near a polymer membrane surface. <i>Physics of Wave Phenomena</i> , 2015, 23, 255-264.	1.1	2
40	Study of the luminescence from polymeric membrane swollen in water with various content of deuterium; isotopic effects. <i>Journal of Physics: Conference Series</i> , 2019, 1348, 012030.	0.4	2
41	Comparison of the Efficiency of Promising Heterostructure Frequency-Multiplier Diodes of the THz-Frequency Range. <i>Semiconductors</i> , 2020, 54, 1360-1364.	0.5	2
42	Rheological Effects of Polymer Membrane Swelling in Water and Their Dependence on Isotopic Composition. <i>Physics of Wave Phenomena</i> , 2020, 28, 182-186.	1.1	2
43	The Role of Shaking of a Liquid Sample in the Dynamics of Polymer Membrane Swelling: A Cell of Limited Volume. <i>Physics of Wave Phenomena</i> , 2021, 29, 114-122.	1.1	2
44	Using of Optimization Models in Financial Decision Support Systems. <i>Statistics of Ukraine</i> , 2020, 88, 75-83.	0.3	2
45	Fourier IR Spectroscopy Study of the Effects of Unsteadiness on the Process of Swelling of Polymeric Membranes. <i>Optics and Spectroscopy (English Translation of Optika i Spektroskopiya)</i> , 2021, 129, 460-470.	0.6	2
46	Dynamics of Polymer Membrane Swelling in an Aqueous Suspension of Amino Acids. The Role of Isotopic Composition. <i>Physics of Wave Phenomena</i> , 2022, 30, 196-208.	1.1	2
47	Generation of electromagnetic radiation in the motion of vortices in magnetically coupled superconducting films. <i>Journal of Experimental and Theoretical Physics</i> , 1998, 86, 720-730.	0.9	1
48	Tunneling electron transport through heterobarriers with nanometer heterogeneities. <i>Semiconductors</i> , 2010, 44, 1499-1503.	0.5	1
49	Microwave-signal generation in a planar Gunn diode with radiation exposure taken into account. <i>Semiconductors</i> , 2016, 50, 1579-1583.	0.5	1
50	On Heating and Relaxation of the Electron-Hole-Gas Energy in the Track of a Primary Recoil Atom. <i>Semiconductors</i> , 2020, 54, 946-950.	0.5	1
51	Laser Photoluminescence Spectroscopy of the Subsurface Microstructure in a Nafion Polymer Membrane in Deuterated Water. <i>Herald of the Bauman Moscow State Technical University, Series Natural Sciences</i> , 2019, , 48-65.	0.5	1
52	Digital Economy: Preconditions, Threats and Prospects. <i>Statistics of Ukraine</i> , 2021, 92, 58-66.	0.3	1
53	Terahertz negative conductivity of heterostructure barriers during ballistic transport of hot electrons. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2007, 71, 109-112.	0.6	0
54	Transit-time frequency quantum beats and THz negative conductance in nanoscale semiconductor heterostructures. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2009, 73, 80-83.	0.6	0

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55	Control of the tunnel current flowing through nonuniform heterogeneous barriers with spherically symmetric inclusions. Journal of Surface Investigation, 2012, 6, 726-729.	0.5	0
56	Comparison of the Radiation Resistance of Prospective Bipolar and Heterobipolar Transistors. Semiconductors, 2019, 53, 1353-1356.	0.5	0
57	The research of time dependence polymeric membrane swelling in water with various deuterium content. Journal of Physics: Conference Series, 2019, 1348, 012035.	0.4	0
58	Characteristics of Protein Aggregation and Flotation in Water and Alcohol-Water Mixture. Physics of Wave Phenomena, 2020, 28, 145-149.	1.1	0
59	Rheological Effects on Swelling of Polymer Membranes in Water. Herald of the Bauman Moscow State Technical University, Series Natural Sciences, 2020, , 36-47.	0.5	0
60	Impact of the Potential of Scattering at Radiation-Induced Defects on Carrier Transport in GaAs Structures. Semiconductors, 2020, 54, 1134-1140.	0.5	0
61	Modeling the Response of a Microwave Low-Barrier Uncooled Mott Diode to the Action of Heavy Ions of Outer Space and Femtosecond Laser Pulses. Semiconductors, 2021, 55, 780.	0.5	0
62	Non-Stationarity Effects in Polymer Membrane Swelling as Studied by Infrared Fourier Spectrometry Technique. Herald of the Bauman Moscow State Technical University, Series Natural Sciences, 2022, , 122-140.	0.5	0