Vitalij Novickij

List of Publications by Year
in descending order

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69	1,011	430874 18	552781 26
papers	citations	h-index	g-index

69	69	69	741
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Effects of Time Delay Between Unipolar Pulses in High Frequency Nano-Electrochemotherapy. IEEE Transactions on Biomedical Engineering, 2022, 69, 1726-1732.	4.2	12
2	High Frequency Bipolar Electroporator with Double-Crowbar Circuit for Load-Independent Forming of Nanosecond Pulses. Applied Sciences (Switzerland), 2022, 12, 1370.	2.5	5
3	Electroporation and cell killing by milli- to nanosecond pulses and avoiding neuromuscular stimulation in cancer ablation. Scientific Reports, 2022, 12, 1763.	3.3	27
4	Bioluminescent calcium mediated detection of nanosecond electroporation: Grasping the differences between 100Âns and 100ÂÂµs pulses. Bioelectrochemistry, 2022, 145, 108084.	4.6	1
5	Micro- and Nanosecond Pulses Used in Doxorubicin Electrochemotherapy in Human Breast and Colon Cancer Cells with Drug Resistance. Molecules, 2022, 27, 2052.	3.8	5
6	Transfection by Electroporation of Cancer and Primary Cells Using Nanosecond and Microsecond Electric Fields. Pharmaceutics, 2022, 14, 1239.	4.5	8
7	Inactivation of Bacteria Using Bioactive Nanoparticles and Alternating Magnetic Fields. Nanomaterials, 2021, 11, 342.	4.1	5
8	Antimicrobial Activity of L-Lysine and Poly-L-Lysine with Pulsed Electric Fields. Applied Sciences (Switzerland), 2021, 11, 2708.	2.5	5
9	Effects of Pulsed Electric Fields on Yeast with Prions and the Structure of Amyloid Fibrils. Applied Sciences (Switzerland), 2021, 11, 2684.	2.5	2
10	Electroporation Cuvette with Integrated Electrodes for High Gradient Electric Field Generation. , 2021, , .		0
11	Measurement and Evaluation of Electric Pulse Parameters to Improve Efficacy of Electrochemotherapy. , 2021, , .		0
12	The Impact of Extracellular Ca2+ and Nanosecond Electric Pulses on Sensitive and Drug-Resistant Human Breast and Colon Cancer Cells. Cancers, 2021, 13, 3216.	3.7	11
13	Dielectrophoretic Manipulation of Cell Transfection Efficiency During Electroporation Using a Center Needle Electrode. Applied Sciences (Switzerland), 2021, 11, 7015.	2.5	2
14	Mechanisms of curcumin-based photodynamic therapy and its effects in combination with electroporation: An in vitro and molecular dynamics study. Bioelectrochemistry, 2021, 140, 107806.	4.6	14
15	Effects of high-frequency nanosecond pulses on prostate cancer cells. Scientific Reports, 2021, 11, 15835.	3.3	17
16	Oxidative Effects during Irreversible Electroporation of Melanoma Cellsâ€"In Vitro Study. Molecules, 2021, 26, 154.	3.8	28
17	The Evidence of the Bystander Effect after Bleomycin Electrotransfer and Irreversible Electroporation. Molecules, 2021, 26, 6001.	3.8	5
18	Contactless electroporation induced by high intensity pulsed electromagnetic fields via distributed nanoelectrodes. Bioelectrochemistry, 2020, 132, 107440.	4.6	24

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19	Predicting electrotransfer in ultra-high frequency sub-microsecond square wave electric fields. Electromagnetic Biology and Medicine, 2020, 39, 1-8.	1.4	10
20	Effects of pulsed electric fields and mild thermal treatment on antimicrobial efficacy of nisin-loaded pectin nanoparticles for food preservation. LWT - Food Science and Technology, 2020, 120, 108915.	5.2	19
21	Bioluminescence as a sensitive electroporation indicator in sub-microsecond and microsecond range of electrical pulses. Journal of Photochemistry and Photobiology B: Biology, 2020, 213, 112066.	3.8	6
22	Electrochemotherapy Using Doxorubicin and Nanosecond Electric Field Pulses: A Pilot in Vivo Study. Molecules, 2020, 25, 4601.	3.8	17
23	Extracellular-Ca2+-Induced Decrease in Small Molecule Electrotransfer Efficiency: Comparison between Microsecond and Nanosecond Electric Pulses. Pharmaceutics, 2020, 12, 422.	4.5	9
24	Probing Nanoelectroporation and Resealing of the Cell Membrane by the Entry of Ca2+ and Ba2+ Ions. International Journal of Molecular Sciences, 2020, 21, 3386.	4.1	23
25	High-Pulsed Electromagnetic Field Generator for Contactless Permeabilization of Cells In Vitro. IEEE Transactions on Magnetics, 2020, 56, 1-6.	2.1	8
26	Concepts and Capabilities of In-House Built Nanosecond Pulsed Electric Field (nsPEF) Generators for Electroporation: State of Art. Applied Sciences (Switzerland), 2020, 10, 4244.	2.5	17
27	Sub-microsecond electrotransfection using new modality of high frequency electroporation. Bioelectrochemistry, 2020, 136, 107594.	4.6	8
28	Effects of extracellular medium conductivity on cell response in the context of sub-microsecond range calcium electroporation. Scientific Reports, 2020, 10, 3718.	3.3	19
29	The First Application of Nanoelectrochemotherapy in Feline Oral Malignant Melanoma Treatmentâ€"Case Study. Animals, 2020, 10, 556.	2.3	14
30	Experimental and Numerical Study of Electroporation Induced by Long Monopolar and Short Bipolar Pulses on Realistic 3D Irregularly Shaped Cells. IEEE Transactions on Biomedical Engineering, 2020, 67, 2781-2788.	4.2	17
31	Excitation and electroporation by MHz bursts of nanosecond stimuli. Biochemical and Biophysical Research Communications, 2019, 518, 759-764.	2.1	44
32	Nanosecond duration pulsed electric field together with formic acid triggers caspase-dependent apoptosis in pathogenic yeasts. Bioelectrochemistry, 2019, 128, 148-154.	4.6	5
33	Fast Ignitron-Based Magnetic Field Pulser for Biological Applications. IEEE Transactions on Magnetics, 2019, 55, 1-5.	2.1	2
34	Low concentrations of acetic and formic acids enhance the inactivation of Staphylococcus aureus and Pseudomonas aeruginosa with pulsed electric fields. BMC Microbiology, 2019, 19, 73.	3.3	18
35	Influence of the electrode material on ROS generation and electroporation efficiency in low and high frequency nanosecond pulse range. Bioelectrochemistry, 2019, 127, 87-93.	4.6	26
36	Computer Adaptive Testing Using Upper-Confidence Bound Algorithm for Formative Assessment. Applied Sciences (Switzerland), 2019, 9, 4303.	2.5	7

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37	Antitumor Response and Immunomodulatory Effects of Sub-Microsecond Irreversible Electroporation and Its Combination with Calcium Electroporation. Cancers, 2019, 11, 1763.	3.7	24
38	Application of pulsed electric fields for the elimination of highly drug-resistant Candida grown under modelled microgravity conditions. International Journal of Astrobiology, 2019, 18, 405-411.	1.6	1
39	Different permeabilization patterns of splenocytes and thymocytes to combination of pulsed electric and magnetic field treatments. Bioelectrochemistry, 2018, 122, 183-190.	4.6	6
40	Pulsed electric field-assisted sensitization of multidrug-resistant Candida albicans to antifungal drugs. Future Microbiology, 2018, 13, 535-546.	2.0	22
41	Membrane Permeabilization of Pathogenic Yeast in Alternating Sub-microsecond Electromagnetic Fields in Combination with Conventional Electroporation. Journal of Membrane Biology, 2018, 251, 189-195.	2.1	17
42	High frequency electroporation efficiency is under control of membrane capacitive charging and voltage potential relaxation. Bioelectrochemistry, 2018, 119, 92-97.	4.6	44
43	Inactivation of Escherichia coli Using Nanosecond Electric Fields and Nisin Nanoparticles: A Kinetics Study. Frontiers in Microbiology, 2018, 9, 3006.	3.5	18
44	Non-invasive nanosecond electroporation for biocontrol of surface infections: an in vivo study. Scientific Reports, 2018, 8, 14516.	3.3	19
45	Nanosecond range electric pulse application as a non-viral gene delivery method: proof of concept. Scientific Reports, 2018, 8, 15502.	3.3	24
46	Induction of Different Sensitization Patterns of MRSA to Antibiotics Using Electroporation. Molecules, 2018, 23, 1799.	3.8	11
47	InÂvitro evaluation of nanosecond electroporation against Trichophyton rubrum with or without antifungal drugs and terpenes. Mycoscience, 2017, 58, 261-266.	0.8	5
48	Selective susceptibility to nanosecond pulsed electric field (nsPEF) across different human cell types. Cellular and Molecular Life Sciences, 2017, 74, 1741-1754.	5.4	50
49	Reversible Permeabilization of Cancer Cells by High Sub-Microsecond Magnetic Field. IEEE Transactions on Magnetics, 2017, 53, 1-4.	2.1	14
50	Concept of high dB/dt pulse forming system for biological cell membrane permeabilization. , 2017, , .		0
51	Feasibility of Parylene Coating for Planar Electroporation Copper Electrodes. Medziagotyra, 2017, 23, .	0.2	3
52	Overcoming Antimicrobial Resistance in Bacteria Using Bioactive Magnetic Nanoparticles and Pulsed Electromagnetic Fields. Frontiers in Microbiology, 2017, 8, 2678.	3.5	24
53	Design and Optimization of Pulsed Magnetic Field Generator for Cell Magneto-Permeabilization. Elektronika Ir Elektrotechnika, 2017, 23, .	0.8	4
54	Membrane permeabilization of mammalian cells using bursts of high magnetic field pulses. PeerJ, 2017, 5, e3267.	2.0	34

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55	Controlled inactivation of Trichophyton rubrum using shaped electrical pulse bursts: Parametric analysis. Biotechnology Progress, 2016, 32, 1056-1060.	2.6	9
56	Measurement of Transient Permeability of Sp2/0 Myeloma Cells: Flow Cytometric Study. Measurement Science Review, 2016, 16, 300-304.	1.0	13
57	Electroporation-assisted inactivation of Escherichia coli using nisin-loaded pectin nanoparticles. Innovative Food Science and Emerging Technologies, 2016, 38, 98-104.	5.6	22
58	Pulsed Electromagnetic Field Assisted in vitro Electroporation: A Pilot Study. Scientific Reports, 2016, 6, 33537.	3.3	36
59	High-frequency submicrosecond electroporator. Biotechnology and Biotechnological Equipment, 2016, 30, 607-613.	1.3	57
60	High-power bipolar multilevel pulsed electroporator. Instrumentation Science and Technology, 2016, 44, 65-72.	1.8	13
61	Irreversible electropermeabilization of the human pathogen Candida albicans: an in-vitro experimental study. European Biophysics Journal, 2015, 44, 9-16.	2.2	7
62	Single Pulse Calibration of Magnetic Field Sensors Using Mobile 43 kJ Facility. Measurement Science Review, 2015, 15, 244-247.	1.0	9
63	Low-cost experimental facility for evaluation of the effect of dynamic mechanical loads on photovoltaic modules. Eksploatacja I Niezawodnosc, 2015, 17, 334-337.	2.0	6
64	Programmable Pulsed Magnetic Field System for Biological Applications. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	19
65	Irreversible magnetoporation of microâ€organisms in high pulsed magnetic fields. IET Nanobiotechnology, 2014, 8, 157-162.	3.8	21
66	Compact Electro-Permeabilization System for Controlled Treatment of Biological Cells and Cell Medium Conductivity Change Measurement. Measurement Science Review, 2014, 14, 279-284.	1.0	10
67	Joule heating influence on the vitality of fungi in pulsed magnetic fields during magnetic permeabilization. Journal of Thermal Analysis and Calorimetry, 2014, 118, 681-686.	3.6	11
68	Contactless dielectrophoretic manipulation of biological cells using pulsed magnetic fields. IET Nanobiotechnology, 2014, 8, 118-122.	3.8	9
69	Microsecond pulsed magnetic field improves efficacy of antifungal agents on pathogenic microorganisms. Bioelectromagnetics, 2014, 35, 347-353.	1.6	9