Damijan Miklavcic

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8859614/publications.pdf

Version: 2024-02-01

407	23,138	5876	12233
papers	citations	81 h-index	133 g-index

443	443	443	8716
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Revisiting the role of pulsed electric fields in overcoming the barriers to in vivo gene electrotransfer. Bioelectrochemistry, 2022, 144, 107994.	2.4	20
2	Effect of the cholesterol on electroporation of planar lipid bilayer. Bioelectrochemistry, 2022, 144, 108004.	2.4	7
3	Effects of Time Delay Between Unipolar Pulses in High Frequency Nano-Electrochemotherapy. IEEE Transactions on Biomedical Engineering, 2022, 69, 1726-1732.	2.5	12
4	The Phenomenon of Electroporation. Food Engineering Series, 2022, , 107-141.	0.3	5
5	Numerical mesoscale tissue model of electrochemotherapy in liver based on histological findings. Scientific Reports, 2022, 12, 6476.	1.6	5
6	Muscle contractions and pain sensation accompanying high-frequency electroporation pulses. Scientific Reports, 2022, 12, 8019.	1.6	22
7	Safety and chronic lesion characterization of pulsed field ablation in a Porcine model. Journal of Cardiovascular Electrophysiology, 2021, 32, 958-969.	0.8	54
8	Intracellular delivery of trehalose renders mesenchymal stromal cells viable and immunomodulatory competent after cryopreservation. Cytotechnology, 2021, 73, 391-411.	0.7	4
9	Water Pores in Planar Lipid Bilayers at Fast and Slow Rise of Transmembrane Voltage. Membranes, 2021, 11, 263.	1.4	7
10	Editorial: Pulsed Electric Fields in Biotechnology. Frontiers in Bioengineering and Biotechnology, 2021, 9, 639150.	2.0	2
11	High-Frequency and High-Voltage Asymmetric Bipolar Pulse Generator for Electroporation Based Technologies and Therapies. Electronics (Switzerland), 2021, 10, 1203.	1.8	10
12	Pulsed Electric Field (PEF) Enhances Iron Uptake by the Yeast Saccharomyces cerevisiae. Biomolecules, 2021, 11, 850.	1.8	13
13	Gene transfer by electroporation with high frequency bipolar pulses in vitro. Bioelectrochemistry, 2021, 140, 107803.	2.4	15
14	Electroporation with nanosecond pulses and bleomycin or cisplatin results in efficient cell kill and low metal release from electrodes. Bioelectrochemistry, 2021, 140, 107798.	2.4	33
15	Effect of electroporation in a continuous flow system on bioaccumulation of magnesium, zinc and calcium ions in Lactobacillus rhamnosus B 442 cells. Bioelectrochemistry, 2021, 140, 107769.	2.4	0
16	Contactless delivery of plasmid encoding EGFP in vivo by high-intensity pulsed electromagnetic field. Bioelectrochemistry, 2021, 141, 107847.	2.4	6
17	Cell death due to electroporation â€“ A review. Bioelectrochemistry, 2021, 141, 107871.	2.4	174
18	Pulsed electric field treatment of Lacticaseibacillus rhamnosus and Lacticaseibacillus paracasei, bacteria with probiotic potential. LWT - Food Science and Technology, 2021, 152, 112304.	2.5	10

#	Article	IF	Citations
19	Retrospective Study for Validation and Improvement of Numerical Treatment Planning of Irreversible Electroporation Ablation for Treatment of Liver Tumors. IEEE Transactions on Biomedical Engineering, 2021, 68, 3513-3524.	2.5	11
20	Pulse Duration Dependent Asymmetry in Molecular Transmembrane Transport Due to Electroporation in H9c2 Rat Cardiac Myoblast Cells In Vitro. Molecules, 2021, 26, 6571.	1.7	1
21	Electroporation of Cell-Seeded Electrospun Fiber Mats for Cryopreservation. IFMBE Proceedings, 2021, , 485-494.	0.2	0
22	PEF-treated plant and animal tissues: Insights by approaching with different electroporation assessment methods. Innovative Food Science and Emerging Technologies, 2021, 74, 102872.	2.7	16
23	Electrodes and Electric Field Distribution in Clinical Practice. , 2021, , 21-59.		2
24	Peri-tumoral Metallic Implants Reduce the Efficacy of Irreversible Electroporation for the Ablation of Colorectal Liver Metastases. CardioVascular and Interventional Radiology, 2020, 43, 84-93.	0.9	24
25	Contactless electroporation induced by high intensity pulsed electromagnetic fields via distributed nanoelectrodes. Bioelectrochemistry, 2020, 132, 107440.	2.4	24
26	Cancellation effect is present in high-frequency reversible and irreversible electroporation. Bioelectrochemistry, 2020, 132, 107442.	2.4	46
27	Evaluation and Optimization of Protein Extraction From E. coli by Electroporation. Frontiers in Bioengineering and Biotechnology, 2020, 8, 543187.	2.0	5
28	Investigation of safety for electrochemotherapy and irreversible electroporation ablation therapies in patients with cardiac pacemakers. BioMedical Engineering OnLine, 2020, 19, 85.	1.3	7
29	Scratching the electrode surface: Insights into a high-voltage pulsed-field application from in vitro & in silico studies in indifferent fluid. Electrochimica Acta, 2020, 363, 137187.	2.6	26
30	Early Cost-effectiveness Analysis of Electrochemotherapy as a Prospect Treatment Modality for Skin Melanoma. Clinical Therapeutics, 2020, 42, 1535-1548.e2.	1.1	6
31	Reduction in Pulmonary Vein Stenosis and Collateral Damage With Pulsed Field Ablation Compared With Radiofrequency Ablation in a Canine Model. Circulation: Arrhythmia and Electrophysiology, 2020, 13, e008337.	2.1	49
32	A Prospective Phase II Study Evaluating Intraoperative Electrochemotherapy of Hepatocellular Carcinoma. Cancers, 2020, 12, 3778.	1.7	22
33	Electronic Emulator of Biological Tissue as an Electrical Load during Electroporation. Applied Sciences (Switzerland), 2020, 10, 3103.	1.3	3
34	Electroporation as a Solvent-Free Green Technique for Non-Destructive Extraction of Proteins and Lipids From Chlorella vulgaris. Frontiers in Bioengineering and Biotechnology, 2020, 8, 443.	2.0	24
35	Short microsecond pulses achieve homogeneous electroporation of elongated biological cells irrespective of their orientation in electric field. Scientific Reports, 2020, 10, 9149.	1.6	24
36	Development of adaptive resistance to electric pulsed field treatment in CHO cell line in vitro. Scientific Reports, 2020, 10, 9988.	1.6	4

#	Article	IF	Citations
37	High-Pulsed Electromagnetic Field Generator for Contactless Permeabilization of Cells In Vitro. IEEE Transactions on Magnetics, 2020, 56, 1-6.	1.2	8
38	Mechanistic view of skin electroporation â€“ models and dosimetry for successful applications: an expert review. Expert Opinion on Drug Delivery, 2020, 17, 689-704.	2.4	30
39	High-Voltage Electrical Pulses in Oncology: Irreversible Electroporation, Electrochemotherapy, Gene Electrotransfer, Electrofusion, and Electroimmunotherapy. Radiology, 2020, 295, 254-272.	3.6	208
40	Ultrathin glass fiber microprobe for electroporation of arbitrary selected cell groups. Bioelectrochemistry, 2020, 135, 107545.	2.4	5
41	Electrotransfer of siRNA to Silence Enhanced Green Fluorescent Protein in Tumor Mediated by a High Intensity Pulsed Electromagnetic Field. Vaccines, 2020, 8, 49.	2.1	12
42	Effect of interphase and interpulse delay in high-frequency irreversible electroporation pulses on cell survival, membrane permeabilization and electrode material release. Bioelectrochemistry, 2020, 134, 107523.	2.4	30
43	Towards standardization of electroporation devices and protocols. IEEE Instrumentation and Measurement Magazine, 2020, 23, 74-81.	1.2	13
44	Calculations of Cell Transmembrane Voltage Induced by Time-Varying Magnetic Fields. IEEE Transactions on Plasma Science, 2020, 48, 1088-1095.	0.6	8
45	Intraoperative electrochemotherapy of colorectal liver metastases: A prospective phase II study. European Journal of Surgical Oncology, 2020, 46, 1628-1633.	0.5	30
46	Cardiac Pacemaker Exposed to Electroporation Pulses â€“ An Ex Vivo Study. IFMBE Proceedings, 2020, , 439-446.	0.2	1
47	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.	2.5	17
48	Percutaneous image guided electrochemotherapy of hepatocellular carcinoma: technological advancement. Radiology and Oncology, 2020, 54, 347-352.	0.6	25
49	Analysis of damage-associated molecular pattern molecules due to electroporation of cells in vitro. Radiology and Oncology, 2020, 54, 317-328.	0.6	42
50	Functional Requirements and Quality Assurance Necessary for Successful Incorporation of Electroporation-Based Therapies Into Clinical Practice. Journal of Medical Devices, Transactions of the ASME, 2020, 14, .	0.4	1
51	The contribution of lipid peroxidation to membrane permeability in electropermeabilization: A molecular dynamics study. Bioelectrochemistry, 2019, 125, 46-57.	2.4	71
52	Effect of electroporation and recovery medium pH on cell membrane permeabilization, cell survival and gene transfer efficiency in vitro. Bioelectrochemistry, 2019, 130, 107342.	2.4	21
53	Nanosecond Pulse Electroporator With Silicon Carbide mosfets: Development and Evaluation. IEEE Transactions on Biomedical Engineering, 2019, 66, 3526-3533.	2.5	21
54	Irreversible electroporation for catheter-based cardiac ablation: a systematic review of the preclinical experience. Journal of Interventional Cardiac Electrophysiology, 2019, 55, 251-265.	0.6	46

#	Article	IF	Citations
55	Me2SO- and serum-free cryopreservation of human umbilical cord mesenchymal stem cells using electroporation-assisted delivery of sugars. Cryobiology, 2019, 91, 104-114.	0.3	21
56	Electroporation-Induced Stress Response and Its Effect on Gene Electrotransfer Efficacy: In Vivo Imaging and Numerical Modeling. IEEE Transactions on Biomedical Engineering, 2019, 66, 2671-2683.	2.5	15
57	Nonlinear Dispersive Model of Electroporation for Irregular Nucleated Cells. Bioelectromagnetics, 2019, 40, 331-342.	0.9	19
58	Electrochemotherapy of superficial tumors â€“ Current status:. Seminars in Oncology, 2019, 46, 173-191.	0.8	80
59	Large Liver Blood Vessels and Bile Ducts Are Not Damaged by Electrochemotherapy with Bleomycin in Pigs. Scientific Reports, 2019, 9, 3649.	1.6	39
60	Membrane Electroporation and Electropermeabilization: Mechanisms and Models. Annual Review of Biophysics, 2019, 48, 63-91.	4.5	417
61	Assessing the electro-deformation and electro-poration of biological cells using a three-dimensional finite element model. Applied Physics Letters, 2019, 114, .	1.5	33
62	Introduction of Phage Genome into Escherichia coli by Electroporation. Methods in Molecular Biology, 2019, 1898, 51-56.	0.4	1
63	Electrochemotherapy â€“ Emerging applications technical advances, new indications, combined approaches, and multi-institutional collaboration. European Journal of Surgical Oncology, 2019, 45, 92-102.	0.5	138
64	The use of high-frequency short bipolar pulses in cisplatin electrochemotherapy in vitro. Radiology and Oncology, 2019, 53, 194-205.	0.6	29
65	Radiological findings of porcine liver after electrochemotherapy with bleomycin. Radiology and Oncology, 2019, 53, 415-426.	0.6	14
66	Electrochemotherapy as treatment option for hepatocellular carcinoma, a prospective pilot study. European Journal of Surgical Oncology, 2018, 44, 651-657.	0.5	71
67	Numerical Modelling for Prediction and Evaluation of Treatment Outcome. , 2018, , 67-80.		0
68	In vitro electroporation detection methods â€“ An overview. Bioelectrochemistry, 2018, 120, 166-182.	2.4	130
69	Recommendations and requirements for reporting on applications of electric pulse delivery for electroporation of biological samples. Bioelectrochemistry, 2018, 122, 69-76.	2.4	45
70	Plasma membrane depolarization and permeabilization due to electric pulses in cell lines of different excitability. Bioelectrochemistry, 2018, 122, 103-114.	2.4	26
71	Special issue on bacterial inactivation. Bioelectrochemistry, 2018, 123, 260.	2.4	0
72	From Cell to Tissue Propertiesâ€"Modeling Skin Electroporation With Pore and Local Transport Region Formation. IEEE Transactions on Biomedical Engineering, 2018, 65, 458-468.	2.5	22

#	Article	IF	Citations
73	Cell membrane permeabilization and cell survival after electroporation in acidic media in vitro. , 2018, , .		1
74	Cardiac Ablation byÂElectroporation. JACC: Clinical Electrophysiology, 2018, 4, 1481-1482.	1.3	7
75	Selective extraction of proteins from bacterial cells by electroporation, sonoporation or glass bead homogenization. New Biotechnology, 2018, 44, S81.	2.4	1
76	Time-Dependent Finite Element Analysis of In Vivo Electrochemotherapy Treatment. Technology in Cancer Research and Treatment, 2018, 17, 153303381879051.	0.8	13
77	Computational Feasibility Analysis of Electrochemotherapy With Novel Needle-Electrode Arrays for the Treatment of Invasive Breast Ductal Carcinoma. Technology in Cancer Research and Treatment, 2018, 17, 153303381879493.	0.8	8
78	Electrochemotherapy of Spinal Metastases Using Transpedicular Approachâ€"A Numerical Feasibility Study. Technology in Cancer Research and Treatment, 2018, 17, 153303461877025.	0.8	13
79	Numerical study of gene electrotransfer efficiency based on electroporation volume and electrophoretic movement of plasmid DNA. BioMedical Engineering OnLine, 2018, 17, 80.	1.3	10
80	Connecting the in vitro and in vivo experiments in electrochemotherapy - a feasibility study modeling cisplatin transport in mouse melanoma using the dual-porosity model. Journal of Controlled Release, 2018, 286, 33-45.	4.8	18
81	Ultrasonographic changes in the liver tumors as indicators of adequate tumor coverage with electric field for effective electrochemotherapy. Radiology and Oncology, 2018, 52, 383-391.	0.6	21
82	Cryopreservation of Human Adipose-Derived Stem Cells in Combination with Trehalose and Reversible Electroporation. Journal of Membrane Biology, 2017, 250, 1-9.	1.0	40
83	A comprehensive theoretical study of thermal relations in plant tissue following electroporation. International Journal of Heat and Mass Transfer, 2017, 111, 150-162.	2.5	4
84	Predictive therapeutic planning for irreversible electroporation treatment of spontaneous malignant glioma. Medical Physics, 2017, 44, 4968-4980.	1.6	50
85	Mathematical Models Describing Cell Death Due to Electroporation. , 2017, , 1199-1218.		2
86	Electric Field Distribution and Electroporation Threshold. , 2017, , 1043-1058.		18
87	Predicting irreversible electroporation-induced tissue damage by means of magnetic resonance electrical impedance tomography. Scientific Reports, 2017, 7, 10323.	1.6	24
88	The Effect of Nanosecond, High-Voltage Electric Pulses on the Shape and Permeability of Polymersome GUVs. Journal of Membrane Biology, 2017, 250, 441-453.	1.0	2
89	Investigation of numerical models for planning of electrochemotherapy treatments of invasive ductal carcinoma. , 2017, , .		5
90	Modeling and optimization of Blumlein nanosecond pulse generator for experiments on planar lipid bilayers. , 2017, , .		0

#	Article	IF	Citations
91	The effect of pulse duration, power and energy of fractional Er:YAG laser for transdermal delivery of differently sized FITC dextrans. International Journal of Pharmaceutics, 2017, 516, 204-213.	2.6	20
92	Biological Responses. , 2017, , 155-274.		3
93	Mathematical model of tumor volume dynamics in mice treated with electrochemotherapy. Medical and Biological Engineering and Computing, 2017, 55, 1085-1096.	1.6	2
94	ELECTROCHEMOTHERAPY COMBINED WITH STANDARD AND CO2 LASER SURGERIES IN CANINE ORAL MELANOMA. Slovenian Veterinary Research, 2017, 54, .	0.0	6
95	Membrane permeabilization of mammalian cells using bursts of high magnetic field pulses. PeerJ, 2017, 5, e3267.	0.9	34
96	Editorial (Thematic Issue: Gene Transfer by Electric Fields). Current Gene Therapy, 2016, 16, 73-74.	0.9	1
97	Electrochemotherapy by pulsed electromagnetic field treatment (PEMF) in mouse melanoma B16F10 in vivo. Radiology and Oncology, 2016, 50, 39-48.	0.6	48
98	Gene Electrotransfer: A Mechanistic Perspective. Current Gene Therapy, 2016, 16, 98-129.	0.9	168
99	Quantification of cell membrane permeability induced by monopolar and high-frequency bipolar bursts of electrical pulses. Biochimica Et Biophysica Acta - Biomembranes, 2016, 1858, 2689-2698.	1.4	81
100	Foreword to Sixth Special Issue on Electroporation-Based Technologies and Treatments. Journal of Membrane Biology, 2016, 249, 591-592.	1.0	1
101	Tutorial: Electroporation of cells in complex materials and tissue. Journal of Applied Physics, 2016, 119, .	1.1	145
102	Electroporation-Enhanced Transdermal Delivery of Patent Blue Using Green Skin Pore Device. IFMBE Proceedings, 2016, , 1030-1033.	0.2	5
103	Properties of lipid electropores II: Comparison of continuum-level modeling of pore conductance to molecular dynamics simulations. Bioelectrochemistry, 2016, 112, 112-124.	2.4	25
104	Effects of high voltage nanosecond electric pulses on eukaryotic cells (in vitro): A systematic review. Bioelectrochemistry, 2016, 110, 1-12.	2.4	160
105	Energy-efficient biomass processing with pulsed electric fields for bioeconomy and sustainable development. Biotechnology for Biofuels, 2016, 9, 94.	6.2	179
106	Inactivation of spores by electric arcs. BMC Microbiology, 2016, 16, 148.	1.3	5
107	The effect of temperature and bacterial growth phase on protein extraction by means of electroporation. Bioelectrochemistry, 2016, 112, 77-82.	2.4	24
108	Recommendations guidelines on the key information to be reported in studies of application of PEF technology in food and biotechnological processes. Innovative Food Science and Emerging Technologies, 2016, 37, 312-321.	2.7	194

#	Article	IF	Citations
109	Electric Field Distribution and Electroporation Threshold. , 2016, , 1-17.		2
110	Dynamic finite-element model for efficient modelling of electric currents in electroporated tissue. Scientific Reports, 2016, 6, 26409.	1.6	55
111	Pulsed Electromagnetic Field Assisted in vitro Electroporation: A Pilot Study. Scientific Reports, 2016, 6, 33537.	1.6	36
112	A statistical model describing combined irreversible electroporation and electroporation-induced blood-brain barrier disruption. Radiology and Oncology, 2016, 50, 28-38.	0.6	35
113	Education on electrical phenomena involved in electroporation-based therapies and treatments: a blended learning approach. BioMedical Engineering OnLine, 2016, 15, 36.	1.3	4
114	Recommendations for improving the quality of reporting clinical electrochemotherapy studies based on qualitative systematic review. Radiology and Oncology, 2016, 50, 1-13.	0.6	101
115	Specific electrical capacitance and voltage breakdown as a function of temperature for different planar lipid bilayers. Bioelectrochemistry, 2016, 112, 132-137.	2.4	16
116	Electric field distribution in relation to cell membrane electroporation in potato tuber tissue studied by magnetic resonance techniques. Innovative Food Science and Emerging Technologies, 2016, 37, 384-390.	2.7	26
117	Proper Patient and Treatment Parameters Selection for Electrochemotherapy of Deep Seated Head and Neck Tumors. IFMBE Proceedings, 2016, , 275-279.	0.2	0
118	Cryopreservation of Human Umbilical Stem Cells in Combination with Trehalose and Reversible Electroporation. IFMBE Proceedings, 2016, , 307-310.	0.2	3
119	Cell Electrosensitization Exists Only in Certain Electroporation Buffers. PLoS ONE, 2016, 11, e0159434.	1.1	43
120	Investigation of the mechanisms of action behind Electromotive Drug Administration (EMDA). PeerJ, 2016, 4, e2309.	0.9	15
121	Mathematical Models Describing Cell Death Due to Electroporation. , 2016, , 1-20.		0
122	Electrochemotherapy (ECT) and irreversible electroporation (IRE) -advanced techniques for treating deep-seated tumors based on electroporation. BioMedical Engineering OnLine, 2015, 14, I1.	1.3	59
123	Careful treatment planning enables safe ablation of liver tumors adjacent to major blood vessels by percutaneous irreversible electroporation (IRE). Radiology and Oncology, 2015, 49, 234-241.	0.6	82
124	Coupling treatment planning with navigation system: a new technological approach in treatment of head and neck tumors by electrochemotherapy. BioMedical Engineering OnLine, 2015, 14, S2.	1.3	55
125	Web-based tool for visualization of electric field distribution in deep-seated body structures and planning of electroporation-based treatments. BioMedical Engineering OnLine, 2015, 14, S4.	1.3	40
126	Electrochemotherapy of colorectal liver metastases - an observational study of its effects on the electrocardiogram. BioMedical Engineering OnLine, 2015, 14, S5.	1.3	43

#	Article	IF	Citations
127	Current density imaging sequence for monitoring current distribution during delivery of electric pulses in irreversible electroporation. BioMedical Engineering OnLine, 2015, 14, S6.	1.3	8
128	Variation in dielectric properties due to pathological changes in human liver. Bioelectromagnetics, 2015, 36, 603-612.	0.9	87
129	Ultrasound and electric pulses for transdermal drug delivery enhancement: Ex vivo assessment of methods with in vivo oriented experimental protocols. International Journal of Pharmaceutics, 2015, 490, 65-73.	2.6	39
130	Introduction to Fifth Special Issue on Electroporation-Based Technologies and Treatments. Journal of Membrane Biology, 2015, 248, 825-826.	1.0	0
131	Experimental Factors to Be Considered in Electroporation-Mediated Transdermal Diffusion Experiments. Journal of Biomechanical Engineering, 2015, 137, 124501.	0.6	8
132	Electroporation-based applications in biotechnology. Trends in Biotechnology, 2015, 33, 480-488.	4.9	445
133	Modeling electroporation of the non-treated and vacuum impregnated heterogeneous tissue of spinach leaves. Innovative Food Science and Emerging Technologies, 2015, 29, 55-64.	2.7	23
134	Electrochemotherapy of tumors as in situ vaccination boosted by immunogene electrotransfer. Cancer Immunology, Immunotherapy, 2015, 64, 1315-1327.	2.0	134
135	Mathematical Models Describing Chinese Hamster Ovary Cell Death Due to Electroporation In Vitro. Journal of Membrane Biology, 2015, 248, 865-881.	1.0	36
136	Generator and Setup for Emulating Exposures of Biological Samples to Lightning Strokes. IEEE Transactions on Biomedical Engineering, 2015, 62, 2535-2543.	2.5	4
137	Assessment of the electrochemical effects of pulsed electric fields in a biological cell suspension. Bioelectrochemistry, 2015, 106, 249-257.	2.4	33
138	Protein Extraction by Means of Electroporation from E. coli with Preserved Viability. Journal of Membrane Biology, 2015, 248, 893-901.	1.0	31
139	In Situ Monitoring of Electric Field Distribution in Mouse Tumor during Electroporation. Radiology, 2015, 274, 115-123.	3.6	63
140	Electroporation Threshold of POPC Lipid Bilayers with Incorporated Polyoxyethylene Glycol (C₁₂E₈). Journal of Physical Chemistry B, 2015, 119, 192-200.	1.2	17
141	Dual-porosity model of mass transport in electroporated biological tissue: Simulations and experimental work for model validation. Innovative Food Science and Emerging Technologies, 2015, 29, 41-54.	2.7	18
142	Effect of Blood Vessel Segmentation on the Outcome of Electroporation-Based Treatments of Liver Tumors. PLoS ONE, 2015, 10, e0125591.	1.1	23
143	A Numerical Investigation of the Electric and Thermal Cell Kill Distributions in Electroporation-Based Therapies in Tissue. PLoS ONE, 2014, 9, e103083.	1.1	155
144	Introduction to Fourth Special Issue on Electroporation-Based Technologies and Treatments. Journal of Membrane Biology, 2014, 247, 1207-1208.	1.0	0

#	Article	IF	Citations
145	Segmentation of hepatic vessels from MRI images for planning of electroporation-based treatments in the liver. Radiology and Oncology, 2014, 48, 267-281.	0.6	32
146	Cell membrane electroporation-Part 3: the equipment. IEEE Electrical Insulation Magazine, 2014, 30, 8-18.	1.1	91
147	CHO cell viability in CO<inf>2</inf> saturated media. , 2014, , .		0
148	First experience with a new biomedical engineering program in slovenia established following the TEMPUS IV CRH-BME joint project guidelines. , 2014, 2014, 5156-9.		0
149	Magnetic resonance electrical impedance tomography for measuring electrical conductivity during electroporation. Physiological Measurement, 2014, 35, 985-996.	1.2	30
150	Electrochemotherapy: from the drawing board into medical practice. BioMedical Engineering OnLine, 2014, 13, 29.	1.3	284
151	Matlab-based tool for ECG and HRV analysis. Biomedical Signal Processing and Control, 2014, 10, 108-116.	3.5	30
152	Testing a prototype pulse generator for a continuous flow system and its use for E. coli inactivation and microalgae lipid extraction. Bioelectrochemistry, 2014, 100, 44-51.	2.4	81
153	Dual-porosity model of solute diffusion in biological tissue modified by electroporation. Biochimica Et Biophysica Acta - Biomembranes, 2014, 1838, 1950-1966.	1.4	34
154	Electroporation of archaeal lipid membranes using MD simulations. Bioelectrochemistry, 2014, 100, 18-26.	2.4	56
155	Electroporation in Food Processing and Biorefinery. Journal of Membrane Biology, 2014, 247, 1279-1304.	1.0	218
156	Transdermal transport pathway creation: Electroporation pulse order. Mathematical Biosciences, 2014, 257, 60-68.	0.9	33
157	Comparison of Flow Cytometry, Fluorescence Microscopy and Spectrofluorometry for Analysis of Gene Electrotransfer Efficiency. Journal of Membrane Biology, 2014, 247, 1259-1267.	1.0	24
158	Electrochemotherapy in non-melanoma head and neck cancers: a retrospective analysis of the treated cases. British Journal of Oral and Maxillofacial Surgery, 2014, 52, 957-964.	0.4	50
159	Bio-Electroporation 2013 â€" New biotechnological and clinical applications. Bioelectrochemistry, 2014, 100, 1-2.	2.4	1
160	Electroporation-Based Technologies for Medicine: Principles, Applications, and Challenges. Annual Review of Biomedical Engineering, 2014, 16, 295-320.	5.7	655
161	Protein extraction by means of electroporation and bacterial viability of E. coli. New Biotechnology, 2014, 31, S186.	2.4	0
162	Structural Properties of Archaeal Lipid Bilayers: Small-Angle X-ray Scattering and Molecular Dynamics Simulation Study. Langmuir, 2014, 30, 8308-8315.	1.6	24

#	Article	IF	Citations
163	Intraoperative electrochemotherapy of colorectal liver metastases. Journal of Surgical Oncology, 2014, 110, 320-327.	0.8	155
164	Modulation of Activity of Known Cytotoxic Ruthenium(III) Compound (KP418) with Hampered Transmembrane Transport in Electrochemotherapy In Vitro and In Vivo. Journal of Membrane Biology, 2014, 247, 1239-1251.	1.0	12
165	Evidence of Conducting Hydrophobic Nanopores Across Membranes in Response to an Electric Field. Journal of Physical Chemistry C, 2014, 118, 6752-6757.	1.5	38
166	Predicting electroporation of cells in an inhomogeneous electric field based on mathematical modeling and experimental CHO-cell permeabilization to propidium iodide determination. Bioelectrochemistry, 2014, 100, 52-61.	2.4	20
167	Molecular Insights into Electroporation and Electrotransfer through Model Cell Membranes. Biophysical Journal, 2014, 106, 291a.	0.2	0
168	Nanosecond Electric Pulse Effects on Gene Expression. Journal of Membrane Biology, 2013, 246, 851-859.	1.0	39
169	Planning of Electroporation-Based Treatments Using Web-Based Treatment-Planning Software. Journal of Membrane Biology, 2013, 246, 833-842.	1.0	36
170	Comparison of Alkaline Lysis with Electroextraction and Optimization of Electric Pulses to Extract Plasmid DNA from Escherichia coli. Journal of Membrane Biology, 2013, 246, 861-867.	1.0	28
171	On the Electroporation Thresholds of Lipid Bilayers: Molecular Dynamics Simulation Investigations. Journal of Membrane Biology, 2013, 246, 843-850.	1.0	54
172	Modeling of electric field distribution in tissues during electroporation. BioMedical Engineering OnLine, 2013, 12, 16.	1.3	183
173	Antitumor effectiveness of electrochemotherapy: A systematic review and meta-analysis. European Journal of Surgical Oncology, 2013, 39, 4-16.	0.5	309
174	Cell membrane electroporation-Part 2: the applications. IEEE Electrical Insulation Magazine, 2013, 29, 29-37.	1.1	110
175	Magnetic resonance electrical impedance tomography for determining electric field distribution during electroporation. Journal of Physics: Conference Series, 2013, 434, 012086.	0.3	0
176	Electroporation of Intracellular Liposomes Using Nanosecond Electric Pulsesâ€"A Theoretical Study. IEEE Transactions on Biomedical Engineering, 2013, 60, 2624-2635.	2.5	61
177	Cytotoxicity and uptake of archaeosomes prepared from Aeropyrum pernix lipids. Human and Experimental Toxicology, 2013, 32, 950-959.	1.1	8
178	Introduction to Third Special Electroporation-Based Technologies and Treatments Issue. Journal of Membrane Biology, 2013, 246, 723-724.	1.0	3
179	Modeling Cell Electroporation and Its Measurable Effects in Tissue. , 2013, , 493-520.		5
180	Skin electroporation for transdermal drug delivery: The influence of the order of different square wave electric pulses. International Journal of Pharmaceutics, 2013, 457, 214-223.	2.6	73

#	Article	IF	Citations
181	In vivo real-time monitoring system of electroporation mediated control of transdermal and topical drug delivery. Journal of Controlled Release, 2013, 172, 862-871.	4.8	55
182	Effect of different parameters used for in vitro gene electrotransfer on gene expression efficiency, cell viability and visualization of plasmid DNA at the membrane level. Journal of Gene Medicine, 2013, 15, 169-181.	1.4	46
183	Electrofusion of B16-F1 and CHO cells: The comparison of the pulse first and contact first protocols. Bioelectrochemistry, 2013, 89, 34-41.	2.4	21
184	Tumor size and effectiveness of electrochemotherapy. Radiology and Oncology, 2013, 47, 32-41.	0.6	92
185	Cell electrofusion using nanosecond electric pulses. Scientific Reports, 2013, 3, 3382.	1.6	110
186	Electroporation-Based Treatment Planning for Deep-Seated Tumors Based on Automatic Liver Segmentation of MRI Images. PLoS ONE, 2013, 8, e69068.	1.1	21
187	Low-Frequency Sonoporation in vitro: Experimental System Evaluation. Strojniski Vestnik/Journal of Mechanical Engineering, 2012, 58, 319-326.	0.6	9
188	A numerical analysis of multicellular environment for modeling tissue electroporation. Applied Physics Letters, 2012, 100, .	1.5	44
189	Numerical simulations aided development of nanosecond pulse electroporators. , 2012, , .		5
190	Treatment planning of electroporation-based medical interventions: electrochemotherapy, gene electrotransfer and irreversible electroporation. Physics in Medicine and Biology, 2012, 57, 5425-5440.	1.6	107
191	Lucifer Yellow uptake by CHO cells exposed to magnetic and electric pulses. Radiology and Oncology, 2012, 46, 119-25.	0.6	45
192	Implementation of a Multidisciplinary Professional Skills Course at an Electrical Engineering School. IEEE Transactions on Education, 2012, 55, 332-340.	2.0	23
193	Cell membrane electroporation- Part 1: The phenomenon. IEEE Electrical Insulation Magazine, 2012, 28, 14-23.	1.1	375
194	Temperature Control System for Measuring Planar Lipid Bilayer Properties. Procedia Engineering, 2012, 44, 910-914.	1.2	0
195	Educational application for visualization and analysis of electric field strength in multiple electrode electroporation. BMC Medical Education, 2012, 12, 102.	1.0	17
196	Assessing how electroporation affects the effective conductivity tensor of biological tissues. Applied Physics Letters, 2012, 101, 213702.	1.5	26
197	Patient-specific treatment planning of electrochemotherapy: Procedure design and possible pitfalls. Bioelectrochemistry, 2012, 87, 265-273.	2.4	63
198	Synthesis and Biological Evaluation of the Thionated Antibacterial Agent Nalidixic Acid and Its Organoruthenium(II) Complex. Organometallics, 2012, 31, 5867-5874.	1.1	62

#	Article	IF	Citations
199	Electrochemotherapy: technological advancements for efficient electroporation-based treatment of internal tumors. Medical and Biological Engineering and Computing, 2012, 50, 1213-1225.	1.6	188
200	Network for Development of Electroporation-Based Technologies and Treatments: COST TD1104. Journal of Membrane Biology, 2012, 245, 591-598.	1.0	30
201	Molecular-Level Characterization of Lipid Membrane Electroporation using Linearly Rising Current. Journal of Membrane Biology, 2012, 245, 651-659.	1.0	36
202	Introduction for the special issue on electroporation. Journal of Membrane Biology, 2012, 245, 507-508.	1.0	0
203	In Vivo Muscle Electroporation Threshold Determination: Realistic Numerical Models and In Vivo Experiments. Journal of Membrane Biology, 2012, 245, 509-520.	1.0	45
204	Ex Vivo and In Silico Feasibility Study of Monitoring Electric Field Distribution in Tissue during Electroporation Based Treatments. PLoS ONE, 2012, 7, e45737.	1.1	40
205	Nanosecond electric pulses cause mitochondrial membrane permeabilization in Jurkat cells. Bioelectromagnetics, 2012, 33, 257-264.	0.9	131
206	Pre- and post-natal exposure of children to EMF generated by domestic induction cookers. Physics in Medicine and Biology, 2011, 56, 6149-6160.	1.6	40
207	The Cell in the Electric Field. , 2011, , 19-29.		14
208	Planar lipid bilayers: Observing pore creation and extinction. , 2011, 2011, 746-9.		0
209	Advantages and Disadvantages of Different Concepts of Electroporation Pulse Generation. Automatika, 2011, 52, 12-19.	1.2	70
210	Changing the Direction and Orientation of Electric Field During Electric Pulses Application Improves Plasmid Gene Transfer in vitro. Journal of Visualized Experiments, 2011, , .	0.2	1
211	Cell counting tool parameters optimization approach for electroporation efficiency determination of attached cells in phase contrast images. Journal of Microscopy, 2011, 241, 303-314.	0.8	32
212	Equivalent Pulse Parameters for Electroporation. IEEE Transactions on Biomedical Engineering, 2011, 58, 3279-3288.	2.5	179
213	Magnetic Resonance Electrical Impedance Tomography for Monitoring Electric Field Distribution During Tissue Electroporation. IEEE Transactions on Medical Imaging, 2011, 30, 1771-1778.	5.4	47
214	Resistive heating and electropermeabilization of skin tissue during in vivo electroporation: A coupled nonlinear finite element model. International Journal of Heat and Mass Transfer, 2011, 54, 2294-2302.	2.5	29
215	Promoting harmonization of BME education in Europe: The CRH-BME Tempus project. , 2011, 2011, 6522-5.		9
216	Electrochemotherapy: A New Technological Approach in Treatment of Metastases in the Liver. Technology in Cancer Research and Treatment, 2011, 10, 475-485.	0.8	159

#	Article	IF	Citations
217	A Numerical Approach to Investigate Electrofusion of Cells of Different Sizes. IFMBE Proceedings, 2011, , 1326-1329.	0.2	2
218	Pipette tip with integrated electrodes for gene electrotransfer of cells in suspension: a feasibility study in CHO cells. Radiology and Oncology, 2011, 45, 204-8.	0.6	6
219	The Influence of Intracellular Vesicle Size and Position on the Transmembrane Voltage Induced by Nanosecond Electric Fields. IFMBE Proceedings, 2011, , 255-258.	0.2	0
220	Integrated Software for Electrochemotherapy Treatment Planning of Deep-Seated Tumors. IFMBE Proceedings, 2011, , 614-617.	0.2	0
221	Voltage- and Current-Clamp Methods for Determination of Planar Lipid Bilayer Properties. Behavior Research Methods, 2010, , 29-69.	2.3	14
222	Cell Electrofusion Visualized with Fluorescence Microscopy. Journal of Visualized Experiments, 2010, , .	0.2	4
223	Optimization and Numerical Modeling in Irreversible Electroporation Treatment Planning. Series in Biomedical Engineering, 2010, , 203-222.	0.5	12
224	Cellâ€“Cell Electrofusion: Optimization of Electric Field Amplitude and Hypotonic Treatment for Mouse Melanoma (B16-F1) and Chinese Hamster Ovary (CHO) Cells. Journal of Membrane Biology, 2010, 236, 107-116.	1.0	49
225	Robustness of Treatment Planning for Electrochemotherapy of Deep-Seated Tumors. Journal of Membrane Biology, 2010, 236, 147-153.	1.0	79
226	Induced Transmembrane Voltage and Its Correlation with Electroporation-Mediated Molecular Transport. Journal of Membrane Biology, 2010, 236, 3-13.	1.0	188
227	Analysis and Comparison of Electrical Pulse Parameters for Gene Electrotransfer of Two Different Cell Lines. Journal of Membrane Biology, 2010, 236, 97-105.	1.0	22
228	Hollow Microneedle Arrays for Intradermal Drug Delivery and DNA Electroporation. Journal of Membrane Biology, 2010, 236, 117-125.	1.0	92
229	Electroporation-Based Technologies and Treatments. Journal of Membrane Biology, 2010, 236, 1-2.	1.0	23
230	Electropermeabilization of endocytotic vesicles in B16 F1 mouse melanoma cells. Medical and Biological Engineering and Computing, 2010, 48, 407-413.	1.6	62
231	The influence of skeletal muscle anisotropy on electroporation: in vivo study and numerical modeling. Medical and Biological Engineering and Computing, 2010, 48, 637-648.	1.6	81
232	Electroâ€mediated gene transfer and expression are controlled by the lifeâ€time of DNA/membrane complex formation. Journal of Gene Medicine, 2010, 12, 117-125.	1.4	104
233	Effect of Mg ions on efficiency of gene electrotransfer and on cell electropermeabilization. Bioelectrochemistry, 2010, 79, 265-271.	2.4	30
234	Numerical analysis and thermographic investigation of induction heating. International Journal of Heat and Mass Transfer, 2010, 53, 3585-3591.	2.5	104

#	Article	IF	Citations
235	Electrochemical treatment of tumors using a one-probe two-electrode device. Electrochimica Acta, 2010, 55, 6010-6014.	2.6	25
236	Synthesis and Characterization of Novel Ruthenium(III) Complexes with Histamine. Bioinorganic Chemistry and Applications, 2010, 2010, 1-6.	1.8	4
237	Numerical study of the electroporation pulse shape effect on molecular uptake of biological cells. Radiology and Oncology, 2010, 44, 34-41.	0.6	59
238	Antivascular effects of electrochemotherapy: implications in treatment of bleeding metastases. Expert Review of Anticancer Therapy, 2010, 10, 729-746.	1.1	177
239	Towards treatment planning and treatment of deep-seated solid tumors by electrochemotherapy. BioMedical Engineering OnLine, 2010, 9, 10.	1.3	165
240	Numerical optimization of gene electrotransfer into muscle tissue. BioMedical Engineering OnLine, 2010, 9, 66.	1.3	28
241	Finite Element Modeling of in Vivo Electroporation. Series in Biomedical Engineering, 2010, , 183-202.	0.5	3
242	Changes in Electrocardiogram during Intra-Abdominal Electrochemotherapy: A Preliminary Report. IFMBE Proceedings, 2010, , 616-619.	0.2	1
243	The influence of electroporation on cytotoxicity of anticancer ruthenium(III) complex KP1339 in vitro and in vivo. Anticancer Research, 2010, 30, 2055-63.	0.5	14
244	Measurement protocol for planar lipid bilayer viscoelastic properties. IEEE Transactions on Dielectrics and Electrical Insulation, 2009, 16, 1236-1242.	1.8	11
245	Three-dimensional finite-element analysis of joule heating in electrochemotherapy and in vivo gene electrotransfer. IEEE Transactions on Dielectrics and Electrical Insulation, 2009, 16, 1338-1347.	1.8	72
246	Measuring the Induced Membrane Voltage with Di-8-ANEPPS. Journal of Visualized Experiments, 2009, , .	0.2	30
247	Cell size dynamics and viability of cells exposed to hypotonic treatment and electroporation for electrofusion optimization. Radiology and Oncology, 2009, 43, .	0.6	33
248	Electroporation in Biological Cell and Tissue: An Overview. Food Engineering Series, 2009, , 1-37.	0.3	35
249	Non invasive contact electrodes for in vivo localized cutaneous electropulsation and associated drug and nucleic acid delivery. Journal of Controlled Release, 2009, 134, 125-131.	4.8	61
250	A Time-Dependent Numerical Model of Transmembrane Voltage Inducement and Electroporation of Irregularly Shaped Cells. IEEE Transactions on Biomedical Engineering, 2009, 56, 1491-1501.	2.5	144
251	The Effective Conductivity and the Induced Transmembrane Potential in Dense Cell System Exposed to DC and AC Electric Fields. IEEE Transactions on Plasma Science, 2009, 37, 99-106.	0.6	10
252	Current density in a model of a human body with a conductive implant exposed to ELF electric and magnetic fields. Bioelectromagnetics, 2009, 30, 591-599.	0.9	6

#	Article	IF	Citations
253	Response to Comment on ValiÄ•et al., 2009. Bioelectromagnetics, 2009, 30, 600-600.	0.9	0
254	Mechanisms involved in gene electrotransfer using high- and low-voltage pulses â€" An in vitro study. Bioelectrochemistry, 2009, 74, 265-271.	2.4	110
255	Comparison of paper-based and electronic data collection process in clinical trials: Costs simulation study. Contemporary Clinical Trials, 2009, 30, 300-316.	0.8	113
256	A System for the Determination of Planar Lipid Bilayer Breakdown Voltage and Its Applications. IEEE Transactions on Nanobioscience, 2009, 8, 132-138.	2.2	22
257	An e-learning application on electrochemotherapy. BioMedical Engineering OnLine, 2009, 8, 26.	1.3	14
258	Optimization of induction heating using numerical modeling and genetic algorithm. , 2009, , .		11
259	Blumlein Configuration for High-Repetition-Rate Pulse Generation of Variable Duration and Polarity Using Synchronized Switch Control. IEEE Transactions on Biomedical Engineering, 2009, 56, 2642-2648.	2.5	53
260	A Multiphysics Model for Studying the Influence of Pulse Repetition Frequency on Tissue Heating During Electrochemotherapy. IFMBE Proceedings, 2009, , 2609-2613.	0.2	5
261	Time course of electrical and diffusional parameters during and after electroporation. IFMBE Proceedings, 2009, , 2659-2663.	0.2	0
262	The influence of intracellular connections on the electric field induced membrane voltage and electroporation of cells in clusters. IFMBE Proceedings, 2009, , 74-77.	0.2	0
263	Numerical models of microneedle electrodes for gene electrotransfer in skin. IFMBE Proceedings, 2009, , 84-87.	0.2	0
264	Analysis of Mechanisms Involved in Gene Electrotransfer - Theoretical and an in Vitro Study. IFMBE Proceedings, 2009, , 158-161.	0.2	0
265	Method for treatment planning of tissue ablation by irreversible electroporation. IFMBE Proceedings, 2009, , 150-153.	0.2	0
266	Optimization of bulk cell electrofusion in vitro for production of humanâ€"mouse heterohybridoma cells. Bioelectrochemistry, 2008, 74, 124-129.	2.4	32
267	The effect of electroporation pulses on functioning of the heart. Medical and Biological Engineering and Computing, 2008, 46, 745-57.	1.6	69
268	Electrode commutation sequence for honeycomb arrangement of electrodes in electrochemotherapy and corresponding electric field distribution. Bioelectrochemistry, 2008, 74, 26-31.	2.4	14
269	The temperature effect during pulse application on cell membrane fluidity and permeabilization. Bioelectrochemistry, 2008, 74, 52-57.	2.4	75
270	Theoretical and experimental analysis of conductivity, ion diffusion and molecular transport during cell electroporation â€" Relation between short-lived and long-lived pores. Bioelectrochemistry, 2008, 74, 38-46.	2.4	100

#	Article	IF	Citations
271	Vascular disrupting action of electroporation and electrochemotherapy with bleomycin in murine sarcoma. British Journal of Cancer, 2008, 98, 388-398.	2.9	187
272	A Numerical Model of Permeabilized Skin With Local Transport Regions. IEEE Transactions on Biomedical Engineering, 2008, 55, 1927-1930.	2.5	26
273	Numerical Modeling and Optimization of Electric Field Distribution in Subcutaneous Tumor Treated With Electrochemotherapy Using Needle Electrodes. IEEE Transactions on Plasma Science, 2008, 36, 1665-1672.	0.6	68
274	Kinetics of Transmembrane Transport of Small Molecules into Electropermeabilized Cells. Biophysical Journal, 2008, 95, 2837-2848.	0.2	160
275	Optimization of electrode position and electric pulse amplitude in electrochemotherapy. Radiology and Oncology, 2008, 42, .	0.6	43
276	Electrochemotherapy of Tumours. Journal of Visualized Experiments, 2008, , .	0.2	28
277	Numerical modeling in electroporation-based biomedical applications. Radiology and Oncology, 2008, 42, .	0.6	53
278	Electrochemotherapy in treatment of tumours. European Journal of Surgical Oncology, 2008, 34, 232-240.	0.5	394
279	Electrochemotherapy in Veterinary Oncology. Journal of Veterinary Internal Medicine, 2008, 22, 826-831.	0.6	107
280	Numerical Modeling and Optimization of Local Electric Field Distribution in Anisotropic Tissue for in vivo Electrochemotherapy and Electrogene Transfer. , 2008, , .		1
281	Numerical Models of Skin Electropermeabilization Taking Into Account Conductivity Changes and the Presence of Local Transport Regions. IEEE Transactions on Plasma Science, 2008, 36, 1650-1658.	0.6	45
282	Variability of the Minimal Transmembrane Voltage Resulting in Detectable Membrane Electroporation. Electromagnetic Biology and Medicine, 2008, 27, 372-385.	0.7	51
283	Efficiency of High- and Low-Voltage Pulse Combinations for Gene Electrotransfer in Muscle, Liver, Tumor, and Skin. Human Gene Therapy, 2008, 19, 1261-1272.	1.4	145
284	Chapter Seven Electroporation of Planar Lipid Bilayers and Membranes. Behavior Research Methods, 2008, , 165-226.	2.3	44
285	Importance of Contact Surface between Electrodes and Treated Tissue in Electrochemotherapy. Technology in Cancer Research and Treatment, 2008, 7, 393-399.	0.8	36
286	Time-dependent Model of Induced Transmembrane Voltage and Electroporation on Clusters of Cells. IFMBE Proceedings, 2008, , 623-627.	0.2	2
287	EFFICIENCY OF HIGH AND LOW VOLTAGE PULSE COMBINATIONS FOR GENE ELECTROTRANSFER IN MUSCLE, LIVER, TUMOR AND SKIN. Human Gene Therapy, 2008, 19, 081015093227032.	1.4	74
288	Numerical Models of Skin Conductivity Changes during Electroporation. IFMBE Proceedings, 2008, , 307-310.	0.2	1

#	Article	IF	Citations
289	Electroporation in dense cell suspensionâ€"Theoretical and experimental analysis of ion diffusion and cell permeabilization. Biochimica Et Biophysica Acta - General Subjects, 2007, 1770, 12-23.	1.1	82
290	Electroporator with automatic change of electric field direction improves gene electrotransfer in-vitro. BioMedical Engineering OnLine, 2007, 6, 25.	1.3	55
291	Analytical and numerical quantification and comparison of the local electric field in the tissue for different electrode configurations. BioMedical Engineering OnLine, 2007, 6, 37.	1.3	68
292	Feasibility study for cell electroporation detection and separation by means of dielectrophoresis. Bioelectrochemistry, 2007, 71, 164-171.	2.4	47
293	Combined therapy of the antimetastatic compound NAMI-A and electroporation on B16F1 tumour cells in vitro. Bioelectrochemistry, 2007, 71, 113-117.	2.4	15
294	Determination of the lipid bilayer breakdown voltage by means of linear rising signal. Bioelectrochemistry, 2007, 70, 23-27.	2.4	49
295	Real time electroporation control for accurate and safe in vivo non-viral gene therapy. Bioelectrochemistry, 2007, 70, 501-507.	2.4	137
296	Web-Based Electronic Data Collection System to Support Electrochemotherapy Clinical Trial. IEEE Transactions on Information Technology in Biomedicine, 2007, 11, 222-230.	3.6	28
297	Feasibility of Employing Model-Based Optimization of Pulse Amplitude and Electrode Distance for Effective Tumor Electropermeabilization. IEEE Transactions on Biomedical Engineering, 2007, 54, 773-781.	2.5	55
298	Electropermeabilization of dense cell suspensions. European Biophysics Journal, 2007, 36, 173-185.	1.2	92
299	A Numerical Model of Skin Electropermeabilization Based on InÂVivo Experiments. Annals of Biomedical Engineering, 2007, 35, 2138-2144.	1.3	62
300	Cell membrane fluidity at different temperatures in relation to electroporation effectiveness of cell line V79. , 2007, , 570-573.		1
301	Analysis of Tissue Heating During Electroporation Based Therapy: A 3D FEM Model for a Pair of Needle Electrodes. , 2007, , 631-634.		6
302	An experimental and numerical study of the induced transmembrane voltage and electroporation on clusters of irregularly shaped cells. , 2007, , 639-642.		6
303	A numerical model of skin electroporation as a method to enhance gene transfection in skin. , 2007, , 597-601.		2
304	Separation of electroporated and non-electroporated cells by means of dielectrophoresis. , 2007, , 178-181.		1
305	Numerical Assessment of Induced Current Densities for Pregnant Women Exposed to 50 Hz Electromagnetic Field. , 2007, , 226-229.		0
306	Increasing the repetition frequency of electric pulse delivery reduces unpleasant sensations that occur in electrochemotherapy. Neoplasma, 2007, 54, 246-50.	0.7	52

#	Article	IF	Citations
307	A Personal Computer as a Universal Controller for Medical-Focused Appliances. , 2007, , 381-384.		0
308	Theoretical Evaluation of Voltage Inducement on Internal Membranes of Biological Cells Exposed to Electric Fields. Biophysical Journal, 2006, 90, 480-491.	0.2	268
309	Importance of tumour coverage by sufficiently high local electric field for effective electrochemotherapy. European Journal of Cancer, Supplement, 2006, 4, 45-51.	2.2	126
310	Electrochemotherapy â€“ An easy, highly effective and safe treatment of cutaneous and subcutaneous metastases: Results of ESOPE (European Standard Operating Procedures of Electrochemotherapy) study. European Journal of Cancer, Supplement, 2006, 4, 3-13.	2.2	713
311	Numerical Determination of Transmembrane Voltage Induced on Irregularly Shaped Cells. Annals of Biomedical Engineering, 2006, 34, 642-652.	1.3	174
312	Cell membrane fluidity related to electroporation and resealing. European Biophysics Journal, 2006, 35, 196-204.	1.2	68
313	The effect of high frequency electric pulses on muscle contractions and antitumor efficiency in vivo for a potential use in clinical electrochemotherapy. Bioelectrochemistry, 2005, 65, 121-128.	2.4	112
314	Sequential Finite Element Model of Tissue Electropermeabilization. IEEE Transactions on Biomedical Engineering, 2005, 52, 816-827.	2.5	232
315	The Course of Tissue Permeabilization Studied on a Mathematical Model of a Subcutaneous Tumor in Small Animals. IEEE Transactions on Biomedical Engineering, 2005, 52, 1373-1381.	2.5	131
316	An algorithm for synchronization ofin vivoelectroporation with ECG. Journal of Medical Engineering and Technology, 2005, 29, 288-296.	0.8	13
317	Effect of Cell Electroporation on the Conductivity of a Cell Suspension. Biophysical Journal, 2005, 88, 4378-4390.	0.2	248
318	Electrophoretic Component of Electric Pulses Determines the Efficacy of In Vivo DNA Electrotransfer. Human Gene Therapy, 2005, 16, 1194-1201.	1.4	126
319	Electrophoretic Component of Electric Pulses Determines the Efficacy of In Vivo DNA Electrotransfer. Human Gene Therapy, 2005, .	1.4	1
320	Techniques of signal generation required for electropermeabilization. Bioelectrochemistry, 2004, 64, 113-124.	2.4	105
321	The effect of resting transmembrane voltage on cell electropermeabilization: a numerical analysis. Bioelectrochemistry, 2004, 63, 311-315.	2.4	27
322	Sequential Finite Element Model of Tissue Electropermeabilisation. , 2004, 2004, 3551-4.		16
323	Effect of electric field induced transmembrane potential on spheroidal cells: theory and experiment. European Biophysics Journal, 2003, 32, 519-528.	1.2	197
324	Finite-element modeling of needle electrodes in tissue from the perspective of frequent model computation. IEEE Transactions on Biomedical Engineering, 2003, 50, 1221-1232.	2.5	41

#	Article	IF	Citations
325	Cell membrane electropermeabilization with arbitrary pulse waveforms. IEEE Engineering in Medicine and Biology Magazine, 2003, 22, 77-81.	1.1	19
326	Shape transformation and burst of giant POPC unilamellar liposomes modulated by non-ionic detergent C12E8. Chemistry and Physics of Lipids, 2003, 125, 123-138.	1.5	27
327	Effect of surfactant polyoxyethylene glycol (C12E8) on electroporation of cell line DC3F. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2003, 214, 205-217.	2.3	33
328	Quantitative model of small molecules uptake after in vitro cell electropermeabilization. Bioelectrochemistry, 2003, 60, 1-10.	2.4	122
329	Role of pulse shape in cell membrane electropermeabilization. Biochimica Et Biophysica Acta - Biomembranes, 2003, 1614, 193-200.	1.4	140
330	Effective Conductivity of a Suspension of Permeabilized Cells: A Theoretical Analysis. Biophysical Journal, 2003, 85, 719-729.	0.2	94
331	Perturbation of blood flow as a mechanism of anti-tumour action of direct current electrotherapy. Physiological Measurement, 2003, 24, 75-90.	1.2	13
332	Monte-Carlo Simulation of Light Transport for NIRS Measurements in Tumors of Elliptic Geometry. Advances in Experimental Medicine and Biology, 2003, 530, 41-49.	0.8	5
333	Postocclusive Reactive Hyperemia in Healthy Volunteers and Patients With Peripheral Vascular Disease Measured by Three Noninvasive Methods. Advances in Experimental Medicine and Biology, 2003, 530, 661-669.	0.8	22
334	Effect of Hydralazine on Blood Flow, Oxygenation, and Interstitial Fluid Pressure in Subcutaneous Tumors. Advances in Experimental Medicine and Biology, 2003, , 25-29.	0.8	5
335	Increased pulse repetition frequency for effective and less painful electrochemotherapy. WIT Transactions on Biomedicine and Health, 2003, , .	0.0	0
336	Mechanisms of in Vivo DNA Electrotransfer: Respective Contributions of Cell Electropermeabilization and DNA Electrophoresis. Molecular Therapy, 2002, 5, 133-140.	3.7	280
337	High voltage pulse generation. Electronics Letters, 2002, 38, 680.	0.5	15
338	Oxygenation and blood flow in tumors treated with hydralazine: Evaluation with a novel luminescence-based fiber-optic sensor. Technology and Health Care, 2002, 10, 363-380.	0.5	19
339	Effective conductivity of cell suspensions. IEEE Transactions on Biomedical Engineering, 2002, 49, 77-80.	2.5	56
340	Dependence of induced transmembrane potential on cell density, arrangement, and cell position inside a cell system. IEEE Transactions on Biomedical Engineering, 2002, 49, 605-612.	2.5	150
341	The effect of pulse repetition frequency on the uptake into electropermeabilized cells in vitro with possible applications in electrochemotherapy. Bioelectrochemistry, 2002, 57, 167-172.	2.4	112
342	Inter-pulse interval between rectangular voltage pulses affects electroporation threshold of artificial lipid bilayers. IEEE Transactions on Nanobioscience, 2002, 1, 116-120.	2.2	21

#	Article	IF	Citations
343	Optimisation of pulse parameters in vitro for in vivo electrochemotherapy. Anticancer Research, 2002, 22, 1731-6.	0.5	28
344	Oxygenation and blood flow in tumors treated with hydralazine: evaluation with a novel luminescence-based fiber-optic sensor. Technology and Health Care, 2002, 10, 363-80.	0.5	6
345	Electrochemotherapy of tumours resistant to cisplatin. European Journal of Cancer, 2001, 37, 1166-1172.	1.3	44
346	A reliable method of determining wound healing rate. Medical and Biological Engineering and Computing, 2001, 39, 263-271.	1.6	67
347	Prognostic factors in the prediction of chronic wound healing by electrical stimulation. Medical and Biological Engineering and Computing, 2001, 39, 542-550.	1.6	32
348	Cell membrane electropermeabilization by symmetrical bipolar rectangular pulses. Bioelectrochemistry, 2001, 54, 83-90.	2.4	127
349	Parameters of Postocclusive Reactive Hyperemia Measured by Near Infrared Spectroscopy in Patients with Peripheral Vascular Disease and in Healthy Volunteers. Annals of Biomedical Engineering, 2001, 29, 311-320.	1.3	71
350	Cell membrane electropermeabilization by symmetrical bipolar rectangular pulses. Bioelectrochemistry, 2001, 54, 91-95.	2.4	107
351	The influence of medium conductivity on electropermeabilization and survival of cells in vitro. Bioelectrochemistry, 2001, 54, 107-115.	2.4	132
352	Electrochemotherapy with cisplatin: the systemic antitumour effectiveness of cisplatin can be potentiated locally by the application of electric pulses in the treatment of malignant melanoma skin metastases. Melanoma Research, 2000, 10, 381-385.	0.6	92
353	Theoretical evaluation of the distributed power dissipation in biological cells exposed to electric fields. Bioelectromagnetics, 2000, 21, 385-394.	0.9	140
354	Modeling of interstitial fluid pressure in solid tumor. Simulation Modelling Practice and Theory, 2000, 8, 17-24.	0.4	14
355	Second-order model of membrane electric field induced by alternating external electric fields. IEEE Transactions on Biomedical Engineering, 2000, 47, 1074-1081.	2.5	124
356	Reproducibility of Parameters of Postocclusive Reactive Hyperemia Measured by Near Infrared Spectroscopy and Transcutaneous Oximetry. Annals of Biomedical Engineering, 2000, 28, 168-173.	1.3	53
357	Modelling of chronic wound healing dynamics. Medical and Biological Engineering and Computing, 2000, 38, 339-347.	1.6	38
358	Evaluation of Cell Membrane Electropermeabilization by Means of a Nonpermeant Cytotoxic Agent. BioTechniques, 2000, 28, 921-926.	0.8	55
359	Numerical Modeling for In Vivo Electroporation. , 2000, 37, 63-81.		11
360	Analytical Description of Transmembrane Voltage Induced by Electric Fields on Spheroidal Cells. Biophysical Journal, 2000, 79, 670-679.	0.2	217

#	Article	IF	Citations
361	A validated model of in vivo electric field distribution in tissues for electrochemotherapy and for DNA electrotransfer for gene therapy. Biochimica Et Biophysica Acta - General Subjects, 2000, 1523, 73-83.	1.1	307
362	Summary of Session H: Applications of Dosimetry in Biology & Medicine. , 2000, , 449-450.		0
363	Electrochemotherapy with cisplatin: clinical experience in malignant melanoma patients. Clinical Cancer Research, 2000, 6, 863-7.	3.2	121
364	Theoretical evaluation of the distributed power dissipation in biological cells exposed to electric fields. Bioelectromagnetics, 2000, 21, 385-94.	0.9	20
365	Increased platinum accumulation in SA-1 tumour cells after in vivo electrochemotherapy with cisplatin. British Journal of Cancer, 1999, 79, 1386-1391.	2.9	68
366	Blood Perfusion of Subcutaneous Tumours in Mice Following the Application of Low-Level Direct Electric Current. Advances in Experimental Medicine and Biology, 1999, 471, 497-506.	0.8	8
367	Tumor blood flow modifying effect of electrochemotherapy with bleomycin. Anticancer Research, 1999, 19, 4017-22.	0.5	73
368	Intrinsic Sensitivity of Tumor Cells to Bleomycin as an Indicator of Tumor Response to Electrochemotherapy. Japanese Journal of Cancer Research, 1998, 89, 328-333.	1.7	47
369	Calculation of the electrical parameters in electrochemotherapy of solid tumours in mice. Computers in Biology and Medicine, 1998, 28, 439-448.	3.9	44
370	Time course of transmembrane voltage induced by time-varying electric fieldsâ€"a method for theoretical analysis and its application. Bioelectrochemistry, 1998, 45, 3-16.	1.0	187
371	Electric Field-Induced Transmembrane Potential Depends on Cell Density and Organizatio. Electromagnetic Biology and Medicine, 1998, 17, 391-399.	0.4	104
372	Electrochemotherapy with cisplatin: potentiation of local cisplatin antitumour effectiveness by application of electric pulses in cancer patients. European Journal of Cancer, 1998, 34, 1213-1218.	1.3	146
373	The Importance of Electric Field Distribution for Effective in Vivo Electroporation of Tissues. Biophysical Journal, 1998, 74, 2152-2158.	0.2	236
374	Contrast Enhanced MRI Assessment of Tumor Blood Volume After Application of Electric Pulses. Electromagnetic Biology and Medicine, 1998, 17, 299-306.	0.4	25
375	Effect of Electric-Field Intensity on Electropermeabilization and Electrosensitmty of Various Tumor-Cell LinesIn Vitro. Electromagnetic Biology and Medicine, 1998, 17, 263-272.	0.4	60
376	Blood Perfusion in a Murine Fibrosarcoma Tumor Model After Direct Current Electrotherapy a Study with⁸⁶Rb Extraction Technique. Electromagnetic Biology and Medicine, 1998, 17, 273-282.	0.4	5
377	Significance of Treatment Energy in Cell Electropermeabilization. Electromagnetic Biology and Medicine, 1998, 17, 255-262.	0.4	7
378	Effective treatment of cutaneous and subcutaneous malignant tumours by electrochemotherapy. British Journal of Cancer, 1998, 77, 2336-2342.	2.9	414

#	Article	IF	Citations
379	Intratumoral cisplatin administration in electrochemotherapy. Anti-Cancer Drugs, 1998, 9, 525-530.	0.7	52
380	Mathematical Modeling of Chronic Wound Healing. Electromagnetic Biology and Medicine, 1998, 17, 237-242.	0.7	2
381	Tumor Treatment by Direct Electric Current: Computation of Electric Current and Power Density Distribution. Electromagnetic Biology and Medicine, 1997, 16, 119-128.	0.4	10
382	Anti-tumor effectiveness of electrochemotherapy with bleomycin is increased by TNF-Î± on SA-1 tumors in mice. Cancer Letters, 1997, 116, 85-92.	3.2	52
383	Electric current density imaging of mice tumors. Magnetic Resonance in Medicine, 1997, 37, 404-409.	1.9	48
384	Host's immune response in electrotherapy of murine tumors by direct current. European Cytokine Network, 1997, 8, 275-9.	1.1	14
385	Electrochemotherapy with bleomycin in SA-1 tumor-bearing miceâ€"natural resistance and immune responsiveness. Anti-Cancer Drugs, 1996, 7, 785-791.	0.7	29
386	Changing electrode orientation improves the efficacy of electrochemotherapy of solid tumors in mice. Bioelectrochemistry, 1996, 39, 61-66.	1.0	76
387	Biomedical applications of electric pulses with special emphasis on antitumor electrochemotherapy. Bioelectrochemistry, 1995, 38, 203-207.	1.0	126
388	Mathematical modelling of tumor growth in mice following electrotherapy and bleomycin treatment. Mathematics and Computers in Simulation, 1995, 39, 597-602.	2.4	20
389	A Theoretical Approach to Perturbation of Biological Systems by Electrical Currents. Electromagnetic Biology and Medicine, 1995, 14, 51-62.	0.4	5
390	Antitumor effectiveness of electrochemotherapy with cis-diamminedichloroplatinum(II) in mice. Cancer Research, 1995, 55, 3450-5.	0.4	214
391	Electrochemotherapy: variable anti-tumor effect on different tumor models. Bioelectrochemistry, 1994, 35, 23-27.	1.0	62
392	Tumour treatment by direct electric current: Electrode material deposition. Bioelectrochemistry, 1994, 35, 93-97.	1.0	24
393	Low level direct current â€" cell culture fibroblast model. Bioelectrochemistry, 1994, 35, 99-101.	1.0	6
394	Anti-tumor effect of tumor necrosis factor combined with electrotherapy on mouse sarcoma. Anti-Cancer Drugs, 1994, 5, 69-74.	0.7	9
395	Tumor treatment by direct electric current-tumor temperature and pH, electrode material and configuration. Bioelectrochemistry, 1993, 30, 209-220.	1.0	59
396	Potentiation of bleomycin antitumor effectiveness by electrotherapy. Cancer Letters, 1993, 69, 81-84.	3.2	24

#	Article	IF	Citations
397	Conflicting Data on Biological Systems Treated with Electrical Direct Current. Electromagnetic Biology and Medicine, 1992, 11, 67-69.	0.4	1
398	Electromagnetic influences on cellular processes. , 1992, , .		0
399	Local Treatment of Murine Tumors by Electric Direct Current. Electromagnetic Biology and Medicine, 1992, 11, 109-125.	0.4	16
400	Anti-tumor effect of electrotherapy alone or in combination with interleukin-2 in mice with sarcoma and melanoma tumors. Anti-Cancer Drugs, 1992, 3, 253-260.	0.7	23
401	Modified cell proliferation due to electrical currents. Medical and Biological Engineering and Computing, 1992, 30, CE21-CE28.	1.6	36
402	Tumor Bioelectric Potential and its Possible Exploitation for Tumor Growth Retardation. Journal of Bioelectricity, 1990, 9, 133-149.	0.7	42
403	Electrical neuroimmunomodulation-a possible mechanism for wound and cancer treatment. , 0, , .		0
404	Measures of wound healing rate. , 0, , .		2
405	In vivo electroporation threshold determination. , 0, , .		6
406	Electronic design of electrode communication control for multiple electrodes in electrochemotherapy and corresponding electric field distribution. , 0, , .		1
407	The Web-based medical record system to support clinical trials. , 0, , .		1