Tissue Ablation with Irreversible Electroporation

Annals of Biomedical Engineering 33, 223-231 DOI: 10.1007/s10439-005-8981-8

Citation Report

#	Article	IF	CITATIONS
1	Cancer Cells Ablation with Irreversible Electroporation. Technology in Cancer Research and Treatment, 2005, 4, 699-705.	0.8	261
2	The Importance od the Composite Skin Model in Numerical Investigations of the Thermal Response Associated with In Vivo Skin Electroporation. , 2006, , .		0
3	Bases and rationale of the electrochemotherapy. European Journal of Cancer, Supplement, 2006, 4, 38-44.	2.2	147
4	Microdosimetry for conventional and supra-electroporation in cells with organelles. Biochemical and Biophysical Research Communications, 2006, 341, 1266-1276.	1.0	183
5	In Vivo Results of a New Focal Tissue Ablation Technique: Irreversible Electroporation. IEEE Transactions on Biomedical Engineering, 2006, 53, 1409-1415.	2.5	442
6	Numerical Modeling of In Vivo Plate Electroporation Thermal Dose Assessment. Journal of Biomechanical Engineering, 2006, 128, 76-84.	0.6	21
7	Impedance Analyzer for in vivo Electroporation Studies. , 2006, 2006, 5056-9.		7
8	Irreversible Electroporation in Medicine. Technology in Cancer Research and Treatment, 2007, 6, 255-259.	0.8	357
9	Irreversible Electroporation: Implications for Prostate Ablation. Technology in Cancer Research and Treatment, 2007, 6, 295-300.	0.8	336
10	Irreversible Electroporation: A New Ablation Modality — Clinical Implications. Technology in Cancer Research and Treatment, 2007, 6, 37-48.	0.8	644
11	Numerical Assessment of Thermal Response Associated With In Vivo Skin Electroporation: The Importance of the Composite Skin model. Journal of Biomechanical Engineering, 2007, 129, 330-340.	0.6	20
12	Towards Solid Tumor Treatment by Irreversible Electroporation: Intrinsic Redistribution of Fields and Currents in Tissue. Technology in Cancer Research and Treatment, 2007, 6, 261-273.	0.8	93
13	Methods of optimization of electrical impedance tomography for imaging tissue electroporation. Physiological Measurement, 2007, 28, 1135-1147.	1.2	16
14	Mathematical Modeling of Irreversible Electroporation for Treatment Planning. Technology in Cancer Research and Treatment, 2007, 6, 275-286.	0.8	167
15	Design of an Irreversible Electroporation System for Clinical Use. Technology in Cancer Research and Treatment, 2007, 6, 313-320.	0.8	106
16	The Effect of Irreversible Electroporation on Blood Vessels. Technology in Cancer Research and Treatment, 2007, 6, 307-312.	0.8	300
17	Imaging Guided Percutaneous Irreversible Electroporation: Ultrasound and Immunohistological Correlation. Technology in Cancer Research and Treatment, 2007, 6, 287-293.	0.8	222
18	A Study of the Immunological Response to Tumor Ablation with Irreversible Electroporation. Technology in Cancer Research and Treatment, 2007, 6, 301-305.	0.8	98

#	Article	IF	CITATIONS
19	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
21	Electric field modulation in tissue electroporation with electrolytic and non-electrolytic additives. Bioelectrochemistry, 2007, 70, 551-560.	2.4	18
22	Thermal damage reduction associated with in vivo skin electroporation: A numerical investigation justifying aggressive pre-cooling. International Journal of Heat and Mass Transfer, 2007, 50, 105-116.	2.5	39
23	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
24	In vivo electrical impedance measurements during and after electroporation of rat liver. Bioelectrochemistry, 2007, 70, 287-295.	2.4	151
25	The effect of electroporation pulses on functioning of the heart. Medical and Biological Engineering and Computing, 2008, 46, 745-57.	1.6	69
26	Temperature considerations during irreversible electroporation. International Journal of Heat and Mass Transfer, 2008, 51, 5617-5622.	2.5	111
27	Irreversible Electroporation Attenuates Neointimal Formation After Angioplasty. IEEE Transactions on Biomedical Engineering, 2008, 55, 2268-2274.	2.5	39
28	Kinetics of Transmembrane Transport of Small Molecules into Electropermeabilized Cells. Biophysical Journal, 2008, 95, 2837-2848.	0.2	160
29	Optimal Parameters for the Destruction of Prostate Cancer Using Irreversible Electroporation. Journal of Urology, 2008, 180, 2668-2674.	0.2	115
30	Use of conductive gels for electric field homogenization increases the antitumor efficacy of electroporation therapies. Physics in Medicine and Biology, 2008, 53, 6605-6618.	1.6	43
31	Intravascular irreversible electroporation: Theoretical and experimental feasibility study. , 2008, 2008, 2051-4.		8
32	Application of Electroporation Gene Therapy: Past, Current, and Future. Methods in Molecular Biology, 2008, 423, 3-17.	0.4	47
33	Non-ionizing radiation with nanosecond pulsed electric fields as a cancer treatment: in vitro studies. , 2009, 2009, 6509-12.		7
34	Theoretical study for the treatment of pancreatic cancer using electric pulses. , 2009, 2009, 5997-6000.		1
35	Towards Solid Tumor Treatment by Nanosecond Pulsed Electric Fields. Technology in Cancer Research and Treatment, 2009, 8, 289-306.	0.8	52
36	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
37	A Preliminary Study to Delineate Irreversible Electroporation From Thermal Damage Using the Arrhenius Equation. Journal of Biomechanical Engineering, 2009, 131, 074509.	0.6	44

#	Article	IF	Citations
38	Electroporation in Biological Cell and Tissue: An Overview. Food Engineering Series, 2009, , 1-37.	0.3	35
39	Liver tumor ablation: Percutaneous and open approaches. Journal of Surgical Oncology, 2009, 100, 619-634.	0.8	90
40	The Feasibility of Irreversible Electroporation for the Treatment of Breast Cancer and Other Heterogeneous Systems. Annals of Biomedical Engineering, 2009, 37, 2615-25.	1.3	83
41	Contactless dielectrophoresis: a new technique for cell manipulation. Biomedical Microdevices, 2009, 11, 997-1006.	1.4	203
42	Nucleic Acids Electrotransfer-Based Gene Therapy (Electrogenetherapy): Past, Current, and Future. Molecular Biotechnology, 2009, 43, 167-176.	1.3	118
43	Physical methods of nucleic acid transfer: general concepts and applications. British Journal of Pharmacology, 2009, 157, 207-219.	2.7	107
44	<i>In vivo</i> electrical conductivity measurements during and after tumor electroporation: conductivity changes reflect the treatment outcome. Physics in Medicine and Biology, 2009, 54, 5949-5963.	1.6	158
45	Microdevice for Analyzing the Effect of Electrochemotherapy on Cancer Cells. Analytical Chemistry, 2009, 81, 3517-3522.	3.2	7
46	<i>In vivo</i> imaging of irreversible electroporation by means of electrical impedance tomography. Physics in Medicine and Biology, 2009, 54, 4927-4943.	1.6	65
47	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
48	The effect of high frequency steep pulsed electric fields on in vitro and in vivo antitumor efficiency of ovarian cancer cell line skov3 and potential use in electrochemotherapy. Journal of Experimental and Clinical Cancer Research, 2009, 28, 53.	3.5	15
49	Pilot study of irreversible electroporation for intracranial surgery. , 2009, 2009, 6513-6.		16
50	Electroporation Advances in Large Animals. Current Gene Therapy, 2009, 9, 316-326.	0.9	34
51	Irreversible Electroporation. Anesthesia and Analgesia, 2010, 110, 1305-1309.	1.1	182
52	Optimization and Numerical Modeling in Irreversible Electroporation Treatment Planning. Series in Biomedical Engineering, 2010, , 203-222.	0.5	12
53	Robustness of Treatment Planning for Electrochemotherapy of Deep-Seated Tumors. Journal of Membrane Biology, 2010, 236, 147-153.	1.0	79
54	Magnetic Resonance Imaging Characteristics of Nonthermal Irreversible Electroporation in Vegetable Tissue. Journal of Membrane Biology, 2010, 236, 137-146.	1.0	68
55	Intracranial Nonthermal Irreversible Electroporation: InÂVivo Analysis. Journal of Membrane Biology, 2010, 236, 127-136.	1.0	138

# 56	ARTICLE Treatment of breast cancer through the application of irreversible electroporation using a novel minimally invasive single needle electrode. Breast Cancer Research and Treatment, 2010, 123, 295-301.	IF 1.1	CITATIONS
57	Irreversible Electroporation Therapy in the Liver: Longitudinal Efficacy Studies in a Rat Model of Hepatocellular Carcinoma. Cancer Research, 2010, 70, 1555-1563.	0.4	165
58	Preclinical Analysis of Irreversible Electroporation on Rat Liver Tissues Using a Microfabricated Electroporator. Tissue Engineering - Part C: Methods, 2010, 16, 1245-1253.	1.1	18
59	Caspase-3 Activation by Exponential Decay Nanosecond Pulsed Electric Fields on Tumor-Bearing BALB/c Nude Miceln Vivo. IEEE Transactions on Plasma Science, 2010, 38, 1963-1971.	0.6	9
60	Ablation of bone cells by electroporation. Journal of Bone and Joint Surgery: British Volume, 2010, 92-B, 1614-1620.	3.4	47
61	Experimental studies on effects of sub-lethal dose of pulsed electric field on Hela cells. , 2010, , .		0
62	Non-thermal irreversible electroporation for deep intracranial disorders. , 2010, 2010, 2743-6.		8
63	A study using irreversible electroporation to treat large, irregular tumors in a canine patient. , 2010, 2010, 2747-50.		4
64	The Effect of Electroporation Type Pulsed Electric Fields on DNA in Aqueous Solution. Technology in Cancer Research and Treatment, 2010, 9, 423-430.	0.8	26
65	Endovascular Nonthermal Irreversible Electroporation: A Finite Element Analysis. Journal of Biomechanical Engineering, 2010, 132, 031008.	0.6	21
66	MR Imaging to Assess Immediate Response to Irreversible Electroporation for Targeted Ablation of Liver Tissues: Preclinical Feasibility Studies in a Rodent Model. Radiology, 2010, 256, 424-432.	3.6	65
67	Irreversible Electroporation: First Patient Experience Focal Therapy of Prostate Cancer. Series in Biomedical Engineering, 2010, , 235-247.	0.5	53
68	Irreversible Electroporation Systems for Clinical Use. Series in Biomedical Engineering, 2010, , 255-272.	0.5	5
69	A statistical model for multidimensional irreversible electroporation cell death in tissue. BioMedical Engineering OnLine, 2010, 9, 13.	1.3	79
70	Towards the creation of decellularized organ constructs using irreversible electroporation and active mechanical perfusion. BioMedical Engineering OnLine, 2010, 9, 83.	1.3	85
71	Experimental Studies on Non-thermal Irreversible Electroporation in Tissue. Series in Biomedical Engineering, 2010, , 155-181.	0.5	1
72	Nanosecond pulsed electric fields stimulate apoptosis without release of pro-apoptotic factors from mitochondria in B16f10 melanoma. Archives of Biochemistry and Biophysics, 2010, 497, 82-89.	1.4	98
73	Advanced Hepatic Ablation Technique for Creating Complete Cell Death: Irreversible Electroporation. Radiology, 2010, 255, 426-433.	3.6	276

#	Article	IF	CITATIONS
74	Apoptosis initiation and angiogenesis inhibition: melanoma targets for nanosecond pulsed electric fields. Pigment Cell and Melanoma Research, 2010, 23, 554-563.	1.5	83
75	Nonthermal Irreversible Electroporation for Tissue Decellularization. Journal of Biomechanical Engineering, 2010, 132, 091003.	0.6	97
76	Model Analysis of Electric Fields Induced by High-Voltage Pulsing in Cylindrical Nerves. IEEE Transactions on Plasma Science, 2010, 38, 2894-2900.	0.6	8
77	Intracellular electroporation site distributions: Modeling examples for nsPEF and IRE pulse waveforms. , 2011, 2011, 732-5.		7
78	Electrical conductivity changes during irreversible electroporation treatment of brain cancer. , 2011, 2011, 739-42.		12
79	Investigation of the Safety of Irreversible Electroporation in Humans. Journal of Vascular and Interventional Radiology, 2011, 22, 611-621.	0.2	408
80	Ablative Therapies for Colorectal Liver Metastases. Surgical Oncology Clinics of North America, 2011, 20, 259-271.	0.6	6
82	Renal Tissue Ablation With Irreversible Electroporation: Preliminary Results in a Porcine Model. Urology, 2011, 77, 754-760.	0.5	98
83	Acute and Subacute Effects of Irreversible Electroporation on Nerves: Experimental Study in a Pig Model. Radiology, 2011, 260, 421-427.	3.6	78
84	Irreversible Electroporation Near the Heart: Ventricular Arrhythmias Can Be Prevented With ECG Synchronization. American Journal of Roentgenology, 2011, 196, W330-W335.	1.0	166
85	Dose-Dependent Thresholds of 10-ns Electric Pulse Induced Plasma Membrane Disruption and Cytotoxicity in Multiple Cell Lines. PLoS ONE, 2011, 6, e15642.	1.1	71
86	The Effects of Irreversible Electroporation (IRE) on Nerves. PLoS ONE, 2011, 6, e18831.	1.1	127
87	Cryosurgery with Pulsed Electric Fields. PLoS ONE, 2011, 6, e26219.	1.1	8
88	Theoretical Considerations of Tissue Electroporation With High-Frequency Bipolar Pulses. IEEE Transactions on Biomedical Engineering, 2011, 58, 1474-1482.	2.5	104
89	Targeted Tissue Ablation With Nanosecond Pulses. IEEE Transactions on Biomedical Engineering, 2011, 58, 2161-2167.	2.5	32
90	Equivalent Pulse Parameters for Electroporation. IEEE Transactions on Biomedical Engineering, 2011, 58, 3279-3288.	2.5	179
91	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
92	The current role of minimally invasive therapies in the management of liver tumors. Abdominal Imaging, 2011, 36, 635-647.	2.0	23

#	Article	IF	CITATIONS
93	Irreversible Electroporation in a Swine Lung Model. CardioVascular and Interventional Radiology, 2011, 34, 391-395.	0.9	38
94	Percutaneous Irreversible Electroporation Lung Ablation: Preliminary Results in a Porcine Model. CardioVascular and Interventional Radiology, 2011, 34, 1278-1287.	0.9	39
95	The future of MSK interventions. Skeletal Radiology, 2011, 40, 1133-1136.	1.2	3
96	High-frequency irreversible electroporation (H-FIRE) for non-thermal ablation without muscle contraction. BioMedical Engineering OnLine, 2011, 10, 102.	1.3	265
97	A Parametric Study Delineating Irreversible Electroporation from Thermal Damage Based on a Minimally Invasive Intracranial Procedure. BioMedical Engineering OnLine, 2011, 10, 34.	1.3	118
98	Irreversible electroporation of the pancreas: Definitive local therapy without systemic effects. Journal of Surgical Oncology, 2011, 104, 22-28.	0.8	172
99	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
100	Nonthermal irreversible electroporation for intracranial surgical applications. Journal of Neurosurgery, 2011, 114, 681-688.	0.9	89
101	Non-Thermal Irreversible Electroporation (N-TIRE) and Adjuvant Fractionated Radiotherapeutic Multimodal Therapy for Intracranial Malignant Glioma in a Canine Patient. Technology in Cancer Research and Treatment, 2011, 10, 73-83.	0.8	128
102	Successful Treatment of a Large Soft Tissue Sarcoma With Irreversible Electroporation. Journal of Clinical Oncology, 2011, 29, e372-e377.	0.8	113
103	Irreversible Electroporation in the Liver: Contrast-enhanced Inversion-Recovery MR Imaging Approaches to Differentiate Reversibly Electroporated Penumbra from Irreversibly Electroporated Ablation Zones. Radiology, 2011, 258, 461-468.	3.6	66
104	An experimental investigation of temperature changes during electroporation. , 2011, , .		8
105	The Improvement of Irreversible Electroporation Therapy Using Saline-Irrigated Electrodes: A Theoretical Study. Technology in Cancer Research and Treatment, 2011, 10, 347-360.	0.8	6
106	Novel methods for renal tissue ablation. Current Opinion in Urology, 2012, 22, 379-384.	0.9	14
107	Towards Electroporation Based Treatment Planning considering Electric Field Induced Muscle Contractions. Technology in Cancer Research and Treatment, 2012, 11, 189-201.	0.8	50
108	Characterization of Irreversible Electroporation Ablation in In Vivo Porcine Liver. American Journal of Roentgenology, 2012, 198, W62-W68.	1.0	79
109	Effect of irreversible electroporation on three-dimensional cell culture model. , 2012, 2012, 179-82.		3
110	FDTD-based microdosimetry for high-intensity nanosecond pulsed electric fields (nsPEFs) application. , 2012, , .		1

#	Article	IF	CITATIONS
111	Long Term Survival of Mice with Hepatocellular Carcinoma after Pulse Power Ablation with Nanosecond Pulsed Electric Fields. Technology in Cancer Research and Treatment, 2012, 11, 83-93.	0.8	70
112	Towards a predictive model of electroporation-based therapies using pre-pulse electrical measurements. , 2012, 2012, 2575-8.		5
113	Hepatocellular carcinoma: current trends in worldwide epidemiology, risk factors, diagnosis, and therapeutics. Hepatic Medicine: Evidence and Research, 2012, 4, 19.	0.9	170
114	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
115	US Findings after Irreversible Electroporation Ablation: Radiologic-Pathologic Correlation. Radiology, 2012, 262, 117-125.	3.6	89
116	Percutaneous ultrasound-guided irreversible electroporation: A goat liver study. Oncology Letters, 2012, 4, 450-454.	0.8	13
117	Irreversible Electroporation in Porcine Liver. Investigative Radiology, 2012, 47, 671-675.	3.5	60
118	BNNT-Mediated Irreversible Electroporation: Its Potential on Cancer Cells. Technology in Cancer Research and Treatment, 2012, 11, 459-465.	0.8	31
119	Irreversible Electroporation Therapy in the Management of Locally Advanced Pancreatic Adenocarcinoma. Journal of the American College of Surgeons, 2012, 215, 361-369.	0.2	248
120	3D simulation of electric and thermal field due to short electrical pulses in hemorrhage control. , 2012, , .		0
121	Percutaneous Irreversible Electroporation for Downstaging and Control of Unresectable Pancreatic Adenocarcinoma. Journal of Vascular and Interventional Radiology, 2012, 23, 1613-1621.	0.2	205
123	Ablation of Perivascular Hepatic Malignant Tumors with Irreversible Electroporation. Journal of the American College of Surgeons, 2012, 215, 379-387.	0.2	240
124	Temperature Control System for Measuring Planar Lipid Bilayer Properties. Procedia Engineering, 2012, 44, 910-914.	1.2	0
125	Percutaneous Irreversible Electroporation of Surgically Unresectable Pancreatic Cancer: A Case Report. Journal of Vascular and Interventional Radiology, 2012, 23, 142-145.	0.2	65
126	Towards the development of latent heat storage electrodes for electroporation-based therapies. Applied Physics Letters, 2012, 101, 083902.	1.5	14
127	Nanoelectroablation therapy for murine basal cell carcinoma. Biochemical and Biophysical Research Communications, 2012, 424, 446-450.	1.0	46
128	Multiple effects of electroporation on the adhesive behaviour of breast cancer cells and fibroblasts. Cancer Cell International, 2012, 12, 9.	1.8	37
129	The optimization of needle electrode number and placement for irreversible electroporation of hepatocellular carcinoma. Radiology and Oncology, 2012, 46, 126-35.	0.6	38

#	Article	IF	CITATIONS
130	A Three-Dimensional InÂVitro Tumor Platform for Modeling Therapeutic Irreversible Electroporation. Biophysical Journal, 2012, 103, 2033-2042.	0.2	81
131	A brief overview of electroporation pulse strength–duration space: A region where additional intracellular effects are expected. Bioelectrochemistry, 2012, 87, 236-243.	2.4	227
132	Treatment of Uveal Melanoma by Nonthermal Irreversible Electroporation: Electrical and Bioheat Finite Element Model of the Human Eye. Journal of Heat Transfer, 2012, 134, .	1.2	9
133	System for Measuring Planar Lipid Bilayer Properties. Journal of Membrane Biology, 2012, 245, 625-632.	1.0	4
134	Combination of Microsecond and Nanosecond Pulsed Electric Field Treatments for Inactivation of Escherichia coli in Water Samples. Journal of Membrane Biology, 2012, 245, 643-650.	1.0	38
135	MRI Study on Reversible and Irreversible Electroporation Induced Blood Brain Barrier Disruption. PLoS ONE, 2012, 7, e42817.	1.1	81
136	7.0-T Magnetic Resonance Imaging Characterization of Acute Blood-Brain-Barrier Disruption Achieved with Intracranial Irreversible Electroporation. PLoS ONE, 2012, 7, e50482.	1.1	45
137	Transient Features in Nanosecond Pulsed Electric Fields Differentially Modulate Mitochondria and Viability. PLoS ONE, 2012, 7, e51349.	1.1	69
138	Therapeutic potential of irreversible electroporation in sarcoma. Expert Review of Anticancer Therapy, 2012, 12, 177-184.	1.1	11
139	Irreversible electroporation on the small intestine. British Journal of Cancer, 2012, 106, 490-495.	2.9	70
140	Electrode Activation Sequencing Employing Conductivity Changes in Irreversible Electroporation Tissue Ablation. IEEE Transactions on Biomedical Engineering, 2012, 59, 604-607.	2.5	11
141	Electrodiffusion of Molecules in Aqueous Media: A Robust, Discretized Description for Electroporation and Other Transport Phenomena. IEEE Transactions on Biomedical Engineering, 2012, 59, 1514-1522.	2.5	14
142	TASER electronic control devices and eye injuries. Documenta Ophthalmologica, 2012, 124, 157-159.	1.0	7
143	Real-time ultrasound imaging of irreversible electroporation in a porcine liver model adequately characterizes the zone of cellular necrosis. Hpb, 2012, 14, 98-102.	0.1	34
144	Experimental Characterization and Numerical Modeling of Tissue Electrical Conductivity during Pulsed Electric Fields for Irreversible Electroporation Treatment Planning. IEEE Transactions on Biomedical Engineering, 2012, 59, 1076-1085.	2.5	174
145	Microsecond and nanosecond electric pulses in cancer treatments. Bioelectromagnetics, 2012, 33, 106-123.	0.9	162
146	Palliative treatment of presacral recurrence of endometrial cancer using irreversible electroporation: a case report. Journal of Medical Case Reports, 2013, 7, 128.	0.4	12
147	Gene delivery in conjunction with gold nanoparticle and tumor treating electric field. Journal of Applied Physics, 2013, 114, .	1.1	15

#	Article	IF	CITATIONS
148	Electric Field-Assisted Delivery of Photofrin to Human Breast Carcinoma Cells. Journal of Membrane Biology, 2013, 246, 725-735.	1.0	25
149	On the Electroporation Thresholds of Lipid Bilayers: Molecular Dynamics Simulation Investigations. Journal of Membrane Biology, 2013, 246, 843-850.	1.0	54
150	Sequential multi-molecule delivery using vortex-assisted electroporation. Lab on A Chip, 2013, 13, 2764.	3.1	26
151	Efficient electroporation of liposomes doped with pore stabilizing nisin. Journal of Liposome Research, 2013, 23, 197-202.	1.5	11
152	Irreversible Electroporation of Locally Advanced Pancreatic Head Adenocarcinoma. Journal of Gastrointestinal Surgery, 2013, 17, 1850-1856.	0.9	85
153	Modeling of electric field distribution in tissues during electroporation. BioMedical Engineering OnLine, 2013, 12, 16.	1.3	183
154	Cell membrane electroporation-Part 2: the applications. IEEE Electrical Insulation Magazine, 2013, 29, 29-37.	1.1	110
155	Irreversible Electroporation: An In Vivo Study with Dorsal Skin Fold Chamber. Annals of Biomedical Engineering, 2013, 41, 619-629.	1.3	41
156	Evaluation of an Endorectal Electrode for Performing Focused Irreversible Electroporation Ablations in the Swine Rectum. Journal of Vascular and Interventional Radiology, 2013, 24, 1249-1256.	0.2	21
157	Irreversible Electroporation: Hype or Hope?. CardioVascular and Interventional Radiology, 2013, 36, 1719-1720.	0.9	4
158	Pain Analysis in Patients with Hepatocellular Carcinoma: Irreversible Electroporation versus Radiofrequency Ablation—Initial Observations. CardioVascular and Interventional Radiology, 2013, 36, 176-182.	0.9	41
159	Irreversible Electroporation Adjacent to the Rectum: Evaluation of Pathological Effects in a Pig Model. CardioVascular and Interventional Radiology, 2013, 36, 213-220.	0.9	16
160	Bioengineering Strategies for Designing Targeted Cancer Therapies. Advances in Cancer Research, 2013, 118, 1-59.	1.9	68
161	Irreversible Electroporation of the Pig Kidney with Involvement of the Renal Pelvis: Technical Aspects, Clinical Outcome, and Three-dimensional CT Rendering for Assessment of the Treatment Zone. Journal of Vascular and Interventional Radiology, 2013, 24, 1888-1897.	0.2	27
162	Induction of Cell Death Mechanisms and Apoptosis by Nanosecond Pulsed Electric Fields (nsPEFs). Cells, 2013, 2, 136-162.	1.8	150
163	Electroporation. , 2013, , 21-36.		2
164	Comparison of Simulation-based Treatment Planning with Imaging and Pathology Outcomes for Percutaneous CT-guided Irreversible Electroporation of the Porcine Pancreas: A Pilot Study. Journal of Vascular and Interventional Radiology, 2013, 24, 1709-1718.	0.2	23
165	The Effects of Metallic Implants on Electroporation Therapies: Feasibility of Irreversible Electroporation for Brachytherapy Salvage. CardioVascular and Interventional Radiology, 2013, 36, 1638-1645.	0.9	27

ARTICLE IF CITATIONS # Modeling Cell Electroporation and Its Measurable Effects in Tissue. , 2013, , 493-520. 5 166 3D model and simulation of electroporation application on healthy and tumoral breast tissue., 2013, , . Irreversible electroporation: A novel pancreatic cancer therapy. Current Problems in Cancer, 2013, 37, 168 1.0 20 262-265. Tumor Ablation: Common Modalities and General Practices. Techniques in Vascular and Interventional 232 Radiology, 2013, 16, 192-200. Anesthesia for irreversible electroporation of hepatic malignant tumors. Journal of Clinical 170 0.7 5 Anesthesia, 2013, 25, 430-431. Nonthermal Irreversible Electroporation: Fundamentals, Applications, and Challenges. IEEE Transactions on Biomedical Engineering, 2013, 60, 707-714. 171 2.5 164 Can electroporation previous to radiofrequency hepatic ablation enlarge thermal lesion size? A 172 feasibility study based on theoretical modelling and <i>in vivo </i>experiments. International Journal 1.1 5 of Hyperthermia, 2013, 29, 211-218. Irreversible Electroporation: Evaluation of Nonthermal and Thermal Ablative Capabilities in the Porcine Kidney. Urology, 2013, 81, 679-684. 174 Minimally Invasive Therapies for Hepatic Malignancy. Current Problems in Surgery, 2013, 50, 146-179. 0.6 7 Irreversible Electroporation in Locally Advanced Pancreatic Cancer: Potential Improved Overall Survival. Annals of Surgical Oncology, 2013, 20, 443-449. Hepatic Epithelioid Hemangioendothelioma Treated With Irreversible Electroporation and Antibiotics. 176 0.8 14 Journal of Clinical Oncology, 2013, 31, e422-e426. Imaging-Guided Adrenal Tumor Ablation. American Journal of Roentgenology, 2013, 200, 1226-1233. 36 Irreversible Electroporation Ablation: Is All the Damage Nonthermal?. Radiology, 2013, 266, 462-470. 178 3.6 200 Histological and Finite Element Analysis of Cell Death due to Irreversible Electroporation. TCRT 179 1.5 24 Express, 2013, 13, 561-9. Irreversible Electroporation of Hepatic Malignancy. Seminars in Interventional Radiology, 2013, 30, 180 0.3 39 067-073. An Experimental and Numerical Investigation of Phase Change Electrodes for Therapeutic Irreversible Electroporation. Journal of Biomechanical Engineering, 2013, 135, 111009. 182 Lung Cancer Ablation: What Is the Evidence?. Seminars in Interventional Radiology, 2013, 30, 151-156. 0.3 34 Lung Cancer Ablation: Technologies and Techniques. Seminars in Interventional Radiology, 2013, 30, 69 141-150.

#	Article	IF	CITATIONS
184	Bipolar versus multipolar radiofrequency (RF) ablation for the treatment of renal cell carcinoma: Differences in technical and clinical parameters. International Journal of Hyperthermia, 2013, 29, 21-29.	1.1	12
185	Ablative therapies for small renal tumours. Nature Reviews Urology, 2013, 10, 284-291.	1.9	29
186	Nanoelectroablation of human pancreatic carcinoma in a murine xenograft model without recurrence. International Journal of Cancer, 2013, 132, 1933-1939.	2.3	50
187	The electromagnetic spectrum: current and future applications in oncology. Future Oncology, 2013, 9, 657-667.	1.1	9
188	News from Clinical Research Office of the Endourological Society (CROES). Journal of Endourology, 2013, 27, 261-264.	1.1	14
189	Irreversible Electroporation in Porcine Liver. Journal of Computer Assisted Tomography, 2013, 37, 154-158.	0.5	49
190	Experimental and Analytical Studies on Contact Irreversible Electroporation for Superficial Tumor Treatment. Journal of Biomechanical Science and Engineering, 2013, 8, 306-318.	0.1	4
191	Cell responses without receptors and ligands, using nanosecond pulsed electric fields (nsPEFs). International Journal of Nanomedicine, 2013, 8, 3401.	3.3	13
192	Pathology of non-thermal irreversible electroporation (N-TIRE)-induced ablation of the canine brain. Journal of Veterinary Science, 2013, 14, 433.	0.5	22
193	Hemorrhage Control of Liver Injury by Short Electrical Pulses. PLoS ONE, 2013, 8, e49852.	1.1	13
194	Electroporation-Based Treatment Planning for Deep-Seated Tumors Based on Automatic Liver Segmentation of MRI Images. PLoS ONE, 2013, 8, e69068.	1.1	21
195	Irreversible Electroporation Ablation (IRE) of Unresectable Soft Tissue Tumors: Learning Curve Evaluation in the First 150 Patients Treated. PLoS ONE, 2013, 8, e76260.	1.1	109
196	Image-Guided Therapies for Hepatocellular Carcinoma in Hepatocelluar Carcinoma — Future Outlook. , 0, , .		0
197	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
198	Irreversible electroporation: the evolution of a laboratory technique to be used in interventional oncology. Diagnostic and Interventional Radiology, 2014, 20, 147-54.	0.7	39
199	Basic Features of a Cell Electroporation Model: Illustrative Behavior for Two Very Different Pulses. Journal of Membrane Biology, 2014, 247, 1209-1228.	1.0	79
200	Electroporation Gene Therapy. , 2014, , 93-106.		7
201	Dynamic effects of point source electroporation on the rat brain tissue. Bioelectrochemistry, 2014, 99, 30-39.	2.4	22

#	Article	IF	CITATIONS
202	Parametric study of irreversible electroporation with different needle electrodes: Electrical and thermal analysis. International Journal of Hyperthermia, 2014, 30, 335-347.	1.1	20
203	Alternating electric field capacitively coupled micro-electroporation. RSC Advances, 2014, 4, 54603-54613.	1.7	15
204	The Effect of Small Intestine Heterogeneity on Irreversible Electroporation Treatment Planning. Journal of Biomechanical Engineering, 2014, 136, 091009.	0.6	6
205	Comparison of Percutaneous Ablation Technologies in the Treatment of Malignant Liver Tumors. Seminars in Interventional Radiology, 2014, 31, 129-137.	0.3	50
206	Renal Ablation Update. Seminars in Interventional Radiology, 2014, 31, 157-166.	0.3	16
207	Electroporation. Circulation: Arrhythmia and Electrophysiology, 2014, 7, 573-575.	2.1	27
208	The State of Irreversible Electroporation in Interventional Oncology. Seminars in Interventional Radiology, 2014, 31, 111-117.	0.3	51
209	Specific CT 3D rendering of the treatment zone after Irreversible Electroporation (IRE) in a pig liver model: the "Chebyshev Center Concept―to define the maximum treatable tumor size. BMC Medical Imaging, 2014, 14, 2.	1.4	12
210	The safety and efficacy of irreversible electroporation for the ablation of prostate cancer: a multicentre prospective human in vivo pilot study protocol. BMJ Open, 2014, 4, e006382.	0.8	48
211	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
212	Focal blood-brain-barrier disruption with high-frequency pulsed electric fields. Technology, 2014, 02, 206-213.	1.4	30
213	Rapid dramatic alterations to the tumor microstructure in pancreatic cancer following irreversible electroporation ablation. Nanomedicine, 2014, 9, 1181-1192.	1.7	46
214	Simulation of nanoparticle based enhancement of cellular electroporation for biomedical applications. Journal of Applied Physics, 2014, 116, .	1.1	16
215	In vivo characterization and numerical simulation of prostate properties for non-thermal irreversible electroporation ablation. Prostate, 2014, 74, 458-468.	1.2	103
216	Evaluation of thermal injury to liver, pancreas and kidney during irreversible electroporation in an <i>in vivo</i> experimental model. British Journal of Surgery, 2014, 101, 1113-1121.	0.1	97
217	Efficient Procedure and Methods to Determine Critical Electroporation Parameters. , 2014, , .		7
218	Irreversible magnetoporation of microâ€organisms in high pulsed magnetic fields. IET Nanobiotechnology, 2014, 8, 157-162.	1.9	21
219	Vessel Patency Post Irreversible Electroporation. CardioVascular and Interventional Radiology, 2014, 37, 1523-1529.	0.9	103

#	Article	IF	CITATIONS
220	Ablation therapy for hepatocellular carcinoma: past, present and future perspectives. Hepatic Oncology, 2014, 1, 67-79.	4.2	11
221	Emerging needle ablation technology in urology. Current Opinion in Urology, 2014, 24, 98-103.	0.9	3
222	<i>In Vivo</i> Evidences of Nanosecond Pulsed Electric Fields for Melanoma Malignancy Treatment on Tumor-Bearing BALB/c Nude Mice. Technology in Cancer Research and Treatment, 2014, 13, 337-344.	0.8	17
223	Magnetic resonance electrical impedance tomography for measuring electrical conductivity during electroporation. Physiological Measurement, 2014, 35, 985-996.	1.2	30
224	Electrochemotherapy: from the drawing board into medical practice. BioMedical Engineering OnLine, 2014, 13, 29.	1.3	284
225	Bipolar nanosecond electric pulses are less efficient at electropermeabilization and killing cells than monopolar pulses. Biochemical and Biophysical Research Communications, 2014, 443, 568-573.	1.0	101
226	Matlab-based tool for ECG and HRV analysis. Biomedical Signal Processing and Control, 2014, 10, 108-116.	3.5	30
227	Dual-porosity model of solute diffusion in biological tissue modified by electroporation. Biochimica Et Biophysica Acta - Biomembranes, 2014, 1838, 1950-1966.	1.4	34
228	Electrical impedance tomographic imaging of a single cell electroporation. Biomedical Microdevices, 2014, 16, 427-437.	1.4	18
229	In Vitro and Numerical Support for Combinatorial Irreversible Electroporation and Electrochemotherapy Glioma Treatment. Annals of Biomedical Engineering, 2014, 42, 475-487.	1.3	38
230	Thermal ablation of tumours: biological mechanisms and advances in therapy. Nature Reviews Cancer, 2014, 14, 199-208.	12.8	1,477
231	Percutaneous Ablation of Peribiliary Tumors with Irreversible Electroporation. Journal of Vascular and Interventional Radiology, 2014, 25, 112-118.	0.2	143
232	A clinical and biological evaluation of a novel, noninvasive radiofrequency device for the longâ€ŧerm reduction of adipose tissue. Lasers in Surgery and Medicine, 2014, 46, 94-103.	1.1	42
233	Electroporation in Food Processing and Biorefinery. Journal of Membrane Biology, 2014, 247, 1279-1304.	1.0	218
234	In-vitro bipolar nano- and microsecond electro-pulse bursts for irreversible electroporation therapies. Bioelectrochemistry, 2014, 100, 69-79.	2.4	91
235	A protective effect after clearance of orthotopic rat hepatocellular carcinoma by nanosecond pulsed electric fields. European Journal of Cancer, 2014, 50, 2705-2713.	1.3	73
236	Electroporation-Based Technologies for Medicine: Principles, Applications, and Challenges. Annual Review of Biomedical Engineering, 2014, 16, 295-320.	5.7	655
237	Nouvelles techniques d'ablation tumorale en cancérologie (micro-onde, électroporation). Diagnostic and Interventional Imaging, 2014, 95, 665-671.	0.0	0

#	Article	IF	Citations
238	Irreversible Electroporation. Advances in Surgery, 2014, 48, 253-258.	0.6	14
239	Low electric field parameters required to induce death of cancer cells. Electromagnetic Biology and Medicine, 2014, 33, 159-163.	0.7	7
240	Irreversible electroporation of unresectable soft tissue tumors with vascular invasion: effective palliation. BMC Cancer, 2014, 14, 540.	1.1	51
241	Minimally Invasive Ablation Treatment for Locally Advanced Pancreatic Adenocarcinoma. CardioVascular and Interventional Radiology, 2014, 37, 586-591.	0.9	14
242	Ablation of colorectal liver metastases by irreversible electroporation: results of the COLDFIRE-I ablate-and-resect study. European Radiology, 2014, 24, 2467-2475.	2.3	76
243	Membrane-Targeting Approaches for Enhanced Cancer Cell Destruction with Irreversible Electroporation. Annals of Biomedical Engineering, 2014, 42, 193-204.	1.3	27
244	Irreversible Electroporation Ablation: Creation of Large-Volume Ablation Zones in in Vivo Porcine Liver with Four-Electrode Arrays. Radiology, 2014, 270, 416-424.	3.6	72
245	Advances in managing hepatocellular carcinoma. Frontiers of Medicine, 2014, 8, 175-189.	1.5	8
246	Borderline and locally advanced pancreatic adenocarcinoma margin accentuation with intraoperative irreversible electroporation. Surgery, 2014, 156, 910-922.	1.0	94
247	Tissue damage modeling in gene electrotransfer: The role of pH. Bioelectrochemistry, 2014, 100, 105-111.	2.4	38
248	Irreversible electroporation (NanoKnife) in cancer treatment. Gastrointestinal Intervention, 2014, 3, 8-18.	0.1	73
249	Irreversible Electroporation for Nonthermal Tumor Ablation in the Clinical Setting: A Systematic Review of Safety and Efficacy. Journal of Vascular and Interventional Radiology, 2014, 25, 997-1011.	0.2	343
250	Three-dimensional analysis of irreversible electroporation: Estimation of thermal and non-thermal damage. International Journal of Heat and Mass Transfer, 2014, 72, 66-74.	2.5	17
251	New tumor ablation techniques for cancer treatment (microwave, electroporation). Diagnostic and Interventional Imaging, 2014, 95, 677-682.	1.8	25
252	Comparison of the effects of the repetition rate between microsecond and nanosecond pulses: Electropermeabilization-induced electro-desensitization?. Biochimica Et Biophysica Acta - General Subjects, 2014, 1840, 2139-2151.	1.1	84
253	Percutaneous Irreversible Electroporation for the Treatment of Colorectal Cancer Liver Metastases with a Proposal for a New Response Evaluation System. Journal of Vascular and Interventional Radiology, 2014, 25, 1233-1239.e2.	0.2	51
254	Theoretical analysis of AC electric field transmission into biological tissue through frozen saline for electroporation. Bioelectromagnetics, 2014, 35, 607-613.	0.9	2
255	Implications and considerations of thermal effects when applying irreversible electroporation tissue ablation therapy. Prostate, 2015, 75, 1114-1118.	1.2	51

#	Article	IF	Citations
256	Targeted cellular ablation based on the morphology of malignant cells. Scientific Reports, 2015, 5, 17157.	1.6	75
257	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
258	Tissue heterogeneity in structure and conductivity contribute to cell survival during irreversible electroporation ablation by "electric field sinks― Scientific Reports, 2015, 5, 8485.	1.6	93
259	The Effect of Irreversible Electroporation on the Femur: Experimental Study in a Rabbit Model. Scientific Reports, 2015, 5, 18187.	1.6	12
260	Electric Ablation with Irreversible Electroporation (IRE) in Vital Hepatic Structures and Follow-up Investigation. Scientific Reports, 2015, 5, 16233.	1.6	35
261	Mitigation of impedance changes due to electroporation therapy using bursts of high-frequency bipolar pulses. BioMedical Engineering OnLine, 2015, 14, S3.	1.3	81
262	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
263	Thermoablation: a new treatment option to replace surgical intervention?. Memo - Magazine of European Medical Oncology, 2015, 8, 242-246.	0.3	2
264	Colorectal liver metastatic disease: efficacy of irreversible electroporation—a single-arm phase II clinical trial (COLDFIRE-2 trial). BMC Cancer, 2015, 15, 772.	1.1	36
265	Monitoring the permeabilization of a single cell in a microfluidic device, through the estimation of its dielectric properties based on combined dielectrophoresis and electrorotation in situ experiments. Electrophoresis, 2015, 36, 1115-1122.	1.3	26
266	Variation in dielectric properties due to pathological changes in human liver. Bioelectromagnetics, 2015, 36, 603-612.	0.9	87
267	A mathematical framework for predicting thermal damage during bone electrostimulation. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2015, 34, 1085-1100.	0.5	0
268	Irreversible Electroporation of the Pancreas Is Feasible and Safe in a Porcine Survival Model. Pancreas, 2015, 44, 791-798.	0.5	24
269	Cell death, perfusion and electrical parameters are critical in models of hepatic radiofrequency ablation. International Journal of Hyperthermia, 2015, 31, 538-550.	1.1	92
270	Simulation studies on the impact of the firing of action potential of myocytes with bipolar pulses. , 2015, , .		0
271	Heat transfer simulation for design of electrothermal bipolar vessel sealing device. , 2015, , .		0
272	Investigation of electroporation effect on HT29 cell lines adhesion properties. , 2015, , .		3
273	Assessment of Various Types of US Findings after Irreversible Electroporation in Porcine Liver: Comparison with Radiofrequency Ablation. Journal of Vascular and Interventional Radiology, 2015, 26, 279-287.e3.	0.2	17

#	Article	IF	CITATIONS
274	Analysis of pulsed electric field effects on cellular tissue with Cole–Cole model: Monitoring permeabilization under inhomogeneous electrical field with bioimpedance parameter variations. Innovative Food Science and Emerging Technologies, 2015, 29, 193-200.	2.7	18
275	An "Off-the-Shelf―System for Intraprocedural Electrical Current Evaluation and Monitoring of Irreversible Electroporation Therapy. CardioVascular and Interventional Radiology, 2015, 38, 736-741.	0.9	8
276	The feasibility of using irreversible electroporation to introduce pores in bacterial cellulose scaffolds for tissue engineering. Applied Microbiology and Biotechnology, 2015, 99, 4785-4794.	1.7	21
277	Percutaneous Irreversible Electroporation of a Large Centrally Located Hepatocellular Adenoma in a Woman with a Pregnancy Wish. CardioVascular and Interventional Radiology, 2015, 38, 1031-1035.	0.9	11
278	Safety and feasibility of the NanoKnife system for irreversible electroporation ablative treatment of canine spontaneous intracranial gliomas. Journal of Neurosurgery, 2015, 123, 1008-1025.	0.9	70
279	Irreversible Electroporation Can Effectively Ablate Hepatocellular Carcinoma to Complete Pathologic Necrosis. Journal of Vascular and Interventional Radiology, 2015, 26, 1184-1188.	0.2	52
280	The Feasibility of a Smart Surgical Probe for Verification of IRE Treatments Using Electrical Impedance Spectroscopy. IEEE Transactions on Biomedical Engineering, 2015, 62, 2674-2684.	2.5	30
281	Irreversible electroporation for nonthermal tumor ablation in patients with hepatocellular carcinoma: initial clinical experience in Japan. Japanese Journal of Radiology, 2015, 33, 424-432.	1.0	44
282	Factors Associated with Short-Term Local Recurrence of Liver Cancer after Percutaneous Ablation Using Irreversible Electroporation: A Prospective Single-Center Study. Journal of Vascular and Interventional Radiology, 2015, 26, 694-702.	0.2	60
283	Irreversible Electroporation (IRE) Fails to Demonstrate Efficacy in a Prospective Multicenter Phase II Trial on Lung Malignancies: The ALICE Trial. CardioVascular and Interventional Radiology, 2015, 38, 401-408.	0.9	70
284	Pulse Timing During Irreversible Electroporation Achieves Enhanced Destruction in a Hindlimb Model of Cancer. Annals of Biomedical Engineering, 2015, 43, 887-895.	1.3	25
285	Stage III pancreatic cancer and the role of irreversible electroporation. BMJ, The, 2015, 350, h521-h521.	3.0	38
286	Case study to assess the safety of irreversible electroporation near the heart. SpringerPlus, 2015, 4, 74.	1.2	13
287	An overview: Investigation of electroporation and sonoporation techniques. , 2015, , .		3
288	Harnessing the immunomodulatory effect of thermal and non-thermal ablative therapies for cancer treatment. Tumor Biology, 2015, 36, 9137-9146.	0.8	61
289	Mathematical Models Describing Chinese Hamster Ovary Cell Death Due to Electroporation In Vitro. Journal of Membrane Biology, 2015, 248, 865-881.	1.0	36
290	Irreversible Electroporation for Colorectal Liver Metastases. Techniques in Vascular and Interventional Radiology, 2015, 18, 159-169.	0.4	35
291	Safety and Feasibility of Irreversible Electroporation (IRE) in Patients with Locally Advanced Pancreatic Cancer: Results of a Prospective Study. Digestive Surgery, 2015, 32, 90-97.	0.6	114

#	Article	IF	CITATIONS
292	Minimally Invasive Percutaneous Treatment of Small Renal Tumors with Irreversible Electroporation: A Single-Center Experience. Journal of Vascular and Interventional Radiology, 2015, 26, 1465-1471.	0.2	54
294	Interpulse multifrequency electrical impedance measurements during electroporation of adherent differentiated myotubes. Bioelectrochemistry, 2015, 105, 123-135.	2.4	25
295	Combining Electrolysis and Electroporation for Tissue Ablation. Technology in Cancer Research and Treatment, 2015, 14, 395-410.	0.8	35
296	Simulation and mathematical analyses of AC electric field driven apoptosis via microtubule disintegration. Japanese Journal of Applied Physics, 2015, 54, 097301.	0.8	2
297	Potential therapeutic benefits stemming from the thermal nature of irreversible electroporation of solid cancers. Hepatobiliary and Pancreatic Diseases International, 2015, 14, 331-333.	0.6	11
298	Antitumor Efficacy of Irreversible Electroporation and Doxorubicin-Loaded Polymeric Micelles. ACS Macro Letters, 2015, 4, 1081-1084.	2.3	9
299	Niche Applications of Irreversible Electroporation. Techniques in Vascular and Interventional Radiology, 2015, 18, 170-175.	0.4	5
300	Irreversible Electroporation of Hepatic and Pancreatic Malignancies: Radiologic-Pathologic Correlation. Techniques in Vascular and Interventional Radiology, 2015, 18, 176-182.	0.4	14
301	Study on temperature of liver and tumor under high frequency nanosecond pulsed field. , 2015, , .		0
302	In Vivo Irreversible Electroporation Kidney Ablation: Experimentally Correlated Numerical Models. IEEE Transactions on Biomedical Engineering, 2015, 62, 561-569.	2.5	68
303	A Review of Basic to Clinical Studies of Irreversible Electroporation Therapy. IEEE Transactions on Biomedical Engineering, 2015, 62, 4-20.	2.5	278
304	Electroporation Threshold of POPC Lipid Bilayers with Incorporated Polyoxyethylene Glycol (C ₁₂ E ₈). Journal of Physical Chemistry B, 2015, 119, 192-200.	1.2	17
305	Update on Treatment of Liver Metastases: Focus on Ablation Therapies. Current Oncology Reports, 2015, 17, 420.	1.8	8
307	Local Control of Perivascular Malignant Liver Lesions Using Percutaneous Irreversible Electroporation: Initial Experiences. CardioVascular and Interventional Radiology, 2015, 38, 152-159.	0.9	29
308	Planning Irreversible Electroporation in the Porcine Kidney: Are Numerical Simulations Reliable for Predicting Empiric Ablation Outcomes?. CardioVascular and Interventional Radiology, 2015, 38, 182-190.	0.9	22
309	CT-guided Irreversible Electroporation in an Acute Porcine Liver Model: Effect of Previous Transarterial Iodized Oil Tissue Marking on Technical Parameters, 3D Computed Tomographic Rendering of the Electroporation Zone, and Histopathology. CardioVascular and Interventional Radiology, 2015, 38, 191-200.	0.9	7
310	Electromechanics of polarized lipid bilayers. Mathematics and Mechanics of Complex Systems, 2016, 4, 31-54.	0.5	16
311	Bridging and downstaging therapy in patients suffering from hepatocellular carcinoma waiting on the list of liver transplantation. Translational Gastroenterology and Hepatology, 2016, 1, 34-34.	1.5	20

ARTICLE

Local Ablative Strategies for Ductal Pancreatic Cancer (Radiofrequency Ablation, Irreversible) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 742

313	Bystander Effect Induced by Electroporation is Possibly Mediated by Microvesicles and Dependent on Pulse Amplitude, Repetition Frequency and Cell Type. Journal of Membrane Biology, 2016, 249, 703-711.	1.0	9
314	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
316	Macroscopic Modeling of In Vivo Drug Transport in Electroporated Tissue. Journal of Biomechanical Engineering, 2016, 138, 4032380.	0.6	14
317	Voltage pulse generator for electroporation threshold evaluation. , 2016, , .		0
319	Histopathological Outcomes after Irreversible Electroporation for Prostate Cancer: Results of an Ablate and Resect Study. Journal of Urology, 2016, 196, 552-559.	0.2	42
320	Comparative Effects of Irreversible Electroporation, Radiofrequency Ablation, and Partial Nephrectomy on Renal Function Preservation in a Porcine Solitary Kidney Model. Urology, 2016, 94, 281-287.	0.5	7
321	Effects of high voltage nanosecond electric pulses on eukaryotic cells (in vitro): A systematic review. Bioelectrochemistry, 2016, 110, 1-12.	2.4	160
323	Tissue Ablation by a Synergistic Combination of Electroporation and Electrolysis Delivered by a Single Pulse. Annals of Biomedical Engineering, 2016, 44, 3144-3154.	1.3	23
324	Imaging Intratumoral Nanoparticle Uptake After Combining Nanoembolization with Various Ablative Therapies in Hepatic VX2 Rabbit Tumors. Journal of Biomedical Nanotechnology, 2016, 12, 296-307.	0.5	21
325	Electrochemical Effects after Transarterial Chemoembolization in Combination with Percutaneous Irreversible Electroporation: Observations in an Acute Porcine Liver Model. Journal of Vascular and Interventional Radiology, 2016, 27, 913-921.e2.	0.2	11
326	Irreversible Electroporation (IRE) in Renal Tumors. Current Urology Reports, 2016, 17, 15.	1.0	24
327	Pilot Study to Assess Safety and Clinical Outcomes of Irreversible Electroporation for Partial Gland Ablation in Men with Prostate Cancer. Journal of Urology, 2016, 196, 883-890.	0.2	54
328	The Effect of Millisecond Pulsed Electric Fields (msPEF) on Intracellular Drug Transport with Negatively Charged Large Nanocarriers Made of Solid Lipid Nanoparticles (SLN): In Vitro Study. Journal of Membrane Biology, 2016, 249, 645-661.	1.0	16
329	Differences in the Effects of Duty Cycle and Interval on Cell Response Induced by High-Frequency Pulses Under Different Pulse Durations. IEEE Transactions on Plasma Science, 2016, 44, 2097-2110.	0.6	4
330	Percutaneous thermal ablation of primary lung cancer. Diagnostic and Interventional Imaging, 2016, 97, 1019-1024.	1.8	69
331	Characterization of Irreversible Electroporation Ablation with a Validated Perfused Organ Model. Journal of Vascular and Interventional Radiology, 2016, 27, 1913-1922.e2.	0.2	27
332	Recent Advances in Pancreatic Cancer Surgery of Relevance to the Practicing Pathologist. Surgical Pathology Clinics, 2016, 9, 539-545.	0.7	6

#	Article	IF	CITATIONS
333	Induction of rapid, reproducible hepatic ablations using next-generation, high frequency irreversible electroporation (H-FIRE) inÂvivo. Hpb, 2016, 18, 726-734.	0.1	50
334	Intraoperative adverse events during irreversible electroporation–a call for caution. American Journal of Surgery, 2016, 212, 715-721.	0.9	15
335	Optimizing Irreversible Electroporation Ablation with a Bipolar Electrode. Journal of Vascular and Interventional Radiology, 2016, 27, 1441-1450.e2.	0.2	35
336	Irreversible electroporation in locally advanced pancreatic cancer: A call for standardization of energy delivery. Journal of Surgical Oncology, 2016, 114, 865-871.	0.8	67
337	Irreversible electroporation for locally advanced pancreatic cancer. Diagnostic and Interventional Imaging, 2016, 97, 1297-1304.	1.8	19
338	Preventing Scars after Injury with Partial Irreversible Electroporation. Journal of Investigative Dermatology, 2016, 136, 2297-2304.	0.3	22
339	Dynamic finite-element model for efficient modelling of electric currents in electroporated tissue. Scientific Reports, 2016, 6, 26409.	1.6	55
340	Management of Locally Advanced Pancreatic Cancer. Surgical Clinics of North America, 2016, 96, 1371-1389.	0.5	16
341	Early nontumorous CT findings after irreversible electroporation of locally advanced pancreatic cancer. Abdominal Radiology, 2016, 41, 2142-2149.	1.0	12
342	Modeling of Transmembrane Potential in Realistic Multicellular Structures before Electroporation. Biophysical Journal, 2016, 111, 2286-2295.	0.2	46
343	Multiphoton imaging reveals that nanosecond pulsed electric fields collapse tumor and normal vascular perfusion in human glioblastoma xenografts. Scientific Reports, 2016, 6, 34443.	1.6	21
344	Image-guided ablation in the thorax. , 0, , 223-242.		2
345	Principles of irreversible electroporation. , 0, , 13-19.		0
346	Irreversible electroporation: Medical application of intense electric pulses for sustainable health. AIP Conference Proceedings, 2016, , .	0.3	1
347	Effects of irreversible electroporation on cervical cancer cell lines in vitro. Molecular Medicine Reports, 2016, 14, 2187-2193.	1.1	12
348	Design and fabrication of an uniform electric field producing microfluidic electroporation chip based on MEMS technology. , 2016, , .		0
349	Irreversible electroporation of the liver: is there a safe limit to the ablation volume?. Scientific Reports, 2016, 6, 23781.	1.6	22
350	Noninvasive microwave ablation zone radii estimation using x-ray CT image analysis. Medical Physics, 2016, 43, 4476-4482.	1.6	3

#	Article	IF	CITATIONS
351	A statistical model describing combined irreversible electroporation and electroporation-induced blood-brain barrier disruption. Radiology and Oncology, 2016, 50, 28-38.	0.6	35
352	Interventional Radiology for Liver Lesions. Seminars in Roentgenology, 2016, 51, 367-377.	0.2	2
353	New Approaches in Locoregional Therapies for Hepatocellular Carcinoma. Journal of Gastrointestinal Cancer, 2016, 47, 239-246.	0.6	5
354	Electroporación percutánea irreversible de un tumor renal: manejo anestésico. Revista Española De AnestesiologÃa Y Reanimación, 2016, 63, 419-422.	0.1	3
355	Focal vs extended ablation in localized prostate cancer with irreversible electroporation; a multi-center randomized controlled trial. BMC Cancer, 2016, 16, 299.	1.1	32
356	Electroporation of Brain Endothelial Cells on Chip toward Permeabilizing the Blood-Brain Barrier. Biophysical Journal, 2016, 110, 503-513.	0.2	27
357	Bile Duct Injury after Irreversible Electroporation of Hepatic Malignancies: Evaluation of MR Imaging Findings and Laboratory Values. Journal of Vascular and Interventional Radiology, 2016, 27, 96-103.	0.2	45
358	Contrast Enhancement Patterns after Irreversible Electroporation: Experimental Study of CT Perfusion Correlated to Histopathology in Normal Porcine Liver. Journal of Vascular and Interventional Radiology, 2016, 27, 104-111.	0.2	19
359	A prospective study analyzing the application of radiofrequency energy and high-voltage, ultrashort pulse duration electrical fields on the quantitative reduction of adipose tissue. Journal of Cosmetic and Laser Therapy, 2016, 18, 257-267.	0.3	15
360	A Versatile Multilevel Converter Platform for Cancer Treatment Using Irreversible Electroporation. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2016, 4, 236-242.	3.7	32
361	Percutaneous Ablation of Hepatic Tumors Using Irreversible Electroporation: A Prospective Safety and Midterm Efficacy Study in 34 Patients. Journal of Vascular and Interventional Radiology, 2016, 27, 480-486.	0.2	56
363	Current Controversies in the Surgical Management of Pancreatic Cancer. , 2016, , 121-132.		Ο
364	Improving cancer therapies by targeting the physical and chemical hallmarks of the tumor microenvironment. Cancer Letters, 2016, 380, 330-339.	3.2	56
365	The Role of Irreversible Electroporation and Other Ablative Techniques in Patients with Borderline Resectable Pancreatic Cancer. , 2016, , 289-306.		0
366	Irreversible Electroporation in Patients with Hepatocellular Carcinoma: Immediate versus Delayed Findings at MR Imaging. Radiology, 2016, 278, 285-294.	3.6	44
367	Electrolytic Effects During Tissue Ablation by Electroporation. Technology in Cancer Research and Treatment, 2016, 15, NP95-NP103.	0.8	56
368	High-power bipolar multilevel pulsed electroporator. Instrumentation Science and Technology, 2016, 44, 65-72.	0.9	13
369	Evaluation of the Electroporation Efficiency of a Grid Electrode for Electrochemotherapy. Technology in Cancer Research and Treatment, 2016, 15, 296-307.	0.8	33

#	Article	IF	CITATIONS
370	Why we should not routinely apply irreversible electroporation as an alternative curative treatment modality for localized prostate cancer at this stage. World Journal of Urology, 2017, 35, 11-20.	1.2	7
371	Single-center nonrandomized clinical trial to assess the safety and efficacy of irreversible electroporation (IRE) ablation of liver tumors in humans: Short to mid-term results. European Journal of Surgical Oncology, 2017, 43, 751-757.	0.5	57
372	Induction of apoptosis of liver cancer cells by nanosecond pulsed electric fields (nsPEFs). Medical Oncology, 2017, 34, 24.	1.2	35
373	High efficiency hydrodynamic bacterial electrotransformation. Lab on A Chip, 2017, 17, 490-500.	3.1	25
374	Irreversible Electroporation: Disappearance of Observable Changes at Imaging Does Not Always Imply Complete Reversibility of the Underlying Causal Tissue Changes. Radiology, 2017, 282, 301-302.	3.6	2
375	Lung ablation: Best practice/results/response assessment/role alongside other ablative therapies. Clinical Radiology, 2017, 72, 657-664.	0.5	39
376	Stereotactic Body Radiation Therapy for Liver Metastases: Background and Clinical Evidence. , 2017, , 217-227.		0
377	Percutaneous Irreversible Electroporation: Long-term survival analysis of 71 patients with inoperable malignant hepatic tumors. Scientific Reports, 2017, 7, 43687.	1.6	59
378	High-Frequency Irreversible Electroporation: Safety and Efficacy of Next-Generation Irreversible Electroporation Adjacent to Critical Hepatic Structures. Surgical Innovation, 2017, 24, 276-283.	0.4	23
379	Miniaturized two-stack Blumlein pulser with a variable repetition-rate for non-thermal irreversible-electroporation experiments. Review of Scientific Instruments, 2017, 88, 014704.	0.6	1
380	Anatomically Realistic Simulations of Liver Ablation by Irreversible Electroporation: Impact of Blood Vessels on Ablation Volumes and Undertreatment. Technology in Cancer Research and Treatment, 2017, 16, 783-792.	0.8	21
381	Irreversible electroporation of small renal masses: suboptimal oncologic efficacy in an early series. World Journal of Urology, 2017, 35, 1549-1555.	1.2	29
382	Bipolar Microsecond Pulses and Insulated Needle Electrodes for Reducing Muscle Contractions During Irreversible Electroporation. IEEE Transactions on Biomedical Engineering, 2017, 64, 2924-2937.	2.5	64
383	Frequency spectrum of induced transmembrane potential and permeabilization efficacy of bipolar electric pulses. Biochimica Et Biophysica Acta - Biomembranes, 2017, 1859, 1282-1290.	1.4	26
384	Raman microspectroscopic detection of thermal denaturation associated with irreversible electroporation. International Journal of Heat and Mass Transfer, 2017, 111, 163-170.	2.5	2
385	Electroporation of tissue and cells: A three-equation model of drug delivery. Computers in Biology and Medicine, 2017, 84, 226-234.	3.9	21
386	Irreversible Electroporation for Locally Advanced Pancreatic Cancer. Pancreas, 2017, 46, 283-287.	0.5	11
387	Recurrence patterns following irreversible electroporation for hepatic malignancies. Journal of Surgical Oncology, 2017, 115, 704-710.	0.8	31

ARTICLE IF CITATIONS # Multiâ disciplinary management of locally advanced pancreatic cancer with irreversible 388 0.8 8 electroporation. Journal of Surgical Oncology, 2017, 116, 35-45. Irreversible electroporation in primary and metastatic hepatic malignancies. Medicine (United States), 0.4 29 2017, 96, e6386. Long-term effectiveness of irreversible electroporation in a murine model of colorectal liver 390 9 1.6 metastasis. Scientific Reports, 2017, 7, 44821. Multi-parametric study of temperature and thermal damage of tumor exposed to high-frequency nanosecond-pulsed electric fields based on finite element simulation. Medical and Biological 24 Engineering and Computing, 2017, 55, 1109-1122. Image-guided ablation of renal cell carcinoma. Clinical Radiology, 2017, 72, 636-644. 392 0.5 28 InÂvitro evaluation of nanosecond electroporation against Trichophyton rubrum with or without antifungal drugs and terpenes. Mycoscience, 2017, 58, 261-266. 0.3 Comparative Study of the Biological Responses to Conventional Pulse and High-Frequency Monopolar 394 0.6 5 Pulse Bursts. IEEE Transactions on Plasma Science, 2017, 45, 2629-2638. Induction Chemotherapy Followed by Resection or Irreversible Electroporation in Locally Advanced Pancreatic Cancer (IMPÁLA): A Prospective Cohort Study. Annals of Surgical Oncology, 2017, 24, 70 2734-2743. Pain After Percutaneous Irreversible Electroporation of Renal Tumors Is Not Dependent on Tumor 396 1.1 6 Location. Journal of Endourology, 2017, 31, 751-755. Successful ablation of lymph nodes using irreversible electroporation (IRE) in a porcine survival 0.8 model. Langenbeck's Archives of Surgery, 2017, 402, 465-473. El rol de la electroporaciÃ³n irreversible en la cirugÃa hepato-bilio-pancreÃ_itica. CirugÃa Española, 2017, 398 2 0.1 95, 307-312. Evaluation of a robotic system for irreversible electroporation (IRE) of malignant liver tumors: 400 initial results. International Journal of Computer Assisted Radiology and Surgery, 2017, 12, 803-809. Multimodality imaging to assess immediate response following irreversible electroporation in 401 0.6 7 patients with malignant hepatic tumors. Journal of Medical Ultrasonics (2001), 2017, 44, 247-254. Percutaneous irreversible electroporation (IRE) of prostate cancer: Contrast-enhanced ultrasound (CEUS) findings during followÂup. Clinical Hemorheology and Microcirculation, 2017, 64, 501-506. The Safety of Irreversible Electroporation on Nerves Adjacent to Treated Tumors. World 403 0.7 4 Neurosurgery, 2017, 108, 642-649. Clinical and pathological outcomes after irreversible electroporation of the pancreas using two 404 0.1 parallel plate electrodes: a porcine model. Hpb, 2017, 19, 1058-1065. Irreversible Electroporation: A Novel Ultrasound-guided Modality for Non-thermal Tumor Ablation. 405 0.2 18 Journal of Medical Ultrasound, 2017, 25, 195-200. Pulsed electric fields (PEF) applications on wine production: A review. BIO Web of Conferences, 2017, 0.1 9,02008.

	CITATION RE	EPORT	
Article		IF	CITATIONS
Differential-Concentration Scanning Ion Conductance Microscopy. Analytical Chemistr 12458-12465.	y, 2017, 89,	3.2	25
An evaluation of irreversible electroporation thresholds in human prostate cancer and correlations to physiological measurements. APL Bioengineering, 2017, 1, 016101.	potential	3.3	17
Electropermeabilization of Inner and Outer Cell Membranes with Microsecond Pulsed E Quantitative Study with Calcium Ions. Scientific Reports, 2017, 7, 13079.	Electric Fields:	1.6	52
Feasibility and safety of focal irreversible electroporation as salvage treatment for local radioâ€recurrent prostate cancer. BJU International, 2017, 120, 51-58.	lized	1.3	28
The Role of the Irreversible Electroporation in the Hepato-Pancreatico-Biliary Surgery. C Española (English Edition), 2017, 95, 307-312.	lirugÃa	0.1	1
Tissue Ablation by Irreversible Electroporation. , 2017, , 707-721.			0
Treatment Planning for Electrochemotherapy and Irreversible Electroporation of Deep- Tumors. , 2017, , 1001-1017.	Seated		6
Preclinical Studies on Irreversible Electroporation. , 2017, , 1527-1542.			0
Mass Transfer of Electrolytic Species During Electric Field-Based Tumor Treatments. , 2	017, , 589-606.		0
Treatment of lymph node metastases from gastric cancer with a combination of Irrever Electroporation and Electrochemotherapy: a case report. Clinical Case Reports (discon 1389-1394.	rsible tinued), 2017, 5,	0.2	10
Predicting irreversible electroporation-induced tissue damage by means of magnetic re electrical impedance tomography. Scientific Reports, 2017, 7, 10323.	sonance	1.6	24
A Comprehensive Characterization of Parameters Affecting High-Frequency Irreversible Electroporation Lesions. Annals of Biomedical Engineering, 2017, 45, 2524-2534.		1.3	39
Enhancing Irreversible Electroporation by Manipulating Cellular Biophysics with a Mole Adjuvant. Biophysical Journal, 2017, 113, 472-480.	cular	0.2	21
Irreversible Electroporation Ablation of an Unresectable Fibrous Sarcoma With 2 Electr Report. Technology in Cancer Research and Treatment, 2017, 16, 964-968.	odes: A Case	0.8	4
Magnetic Resonance Imaging Findings After Percutaneous Irreversible Electroporation Metastases. Investigative Radiology, 2017, 52, 23-29.	of Liver	3.5	21
Midterm Safety and Efficacy of Irreversible Electroporation of Malignant Liver Tumors L to Major Portal or Hepatic Veins. Radiology, 2017, 285, 1023-1031.	_ocated Close	3.6	73

423	Possibilities of the method of irreversible electroporation in treatment of the local and widespread pancreatic cancer. Journal of Physics: Conference Series, 2017, 784, 012054.	0.3	0
424	High-frequency irreversible electroporation targets resilient tumor-initiating cells in ovarian cancer. Integrative Biology (United Kingdom), 2017, 9, 979-987.	0.6	20

#

#	Article	IF	CITATIONS
425	Synergistic combinations of short high-voltage pulses and long low-voltage pulses enhance irreversible electroporation efficacy. Scientific Reports, 2017, 7, 15123.	1.6	17
426	The role of irreversible electroporation (IRE) for locally advanced pancreatic cancer: a systematic review of safety and efficacy. Scandinavian Journal of Gastroenterology, 2017, 52, 1165-1171.	0.6	63
427	Perfused organ model development and evaluation for irreversible electroporation investigations. , 2017, , .		0
428	Irreversible electroporation-mediated shRNA knockdown of the HPV18 E6 gene suppresses cervical cancer growth in vitro and in vivo. Oncology Letters, 2017, 14, 1943-1949.	0.8	2
429	Quantitative Limits on Small Molecule Transport via the Electropermeome — Measuring and Modeling Single Nanosecond Perturbations. Scientific Reports, 2017, 7, 57.	1.6	34
430	Decision Making: Thermal Ablation Options for Small Renal Masses. Seminars in Interventional Radiology, 2017, 34, 167-175.	0.3	16
431	Transarterial embolization (TAE) as add-on to percutaneous radiofrequency ablation (RFA) for the treatment of renal tumors: Review of the literature, overview of state-of-the-art embolization materials and further perspective of advanced image-guided tumor ablation. European Journal of Radiology, 2017, 86, 143-162.	1.2	22
432	Non-Fourier based thermal-mechanical tissue damage prediction for thermal ablation. Bioengineered, 2017, 8, 71-77.	1.4	7
433	Biological Responses. , 2017, , 155-274.		3
434	Medical Applications. , 2017, , 275-388.		2
435	Focused transhepatic electroporation mediated by hypersaline infusion through the portal vein in rat model. Preliminary results on differential conductivity. Radiology and Oncology, 2017, 51, 415-421.	0.6	3
436	Localized Electroporation With Dielectrophoretic Field Flow Fractionation: Toward Removal of Circulating Tumour Cells From Human Blood. IEEE Transactions on Nanobioscience, 2017, 16, 802-809.	2.2	5
437	Development of contact irreversible electroporation using a comb-shaped miniature electrode. Journal of Thermal Science and Technology, 2017, 12, JTST0023-JTST0023.	0.6	5
438	The optimization of the treatment planning for achieving complete ablation of tumor during irreversible electroporation by genetic algorithm. , 2017, , .		1
439	Study of anti-cancer mechanism: Neolamarckia cadamba leaves exposed with electric field on HeLa cell. , 2017, , .		0
440	Dielectric variations of potato induced by irreversible electroporation under different pulses based on the cole-cole model. IEEE Transactions on Dielectrics and Electrical Insulation, 2017, 24, 2225-2233.	1.8	7
441	Electrodes Deployment for IRE Tumor Ablation based on the Nelder-Mead Simplex Algorithm. , 2017, , .		0
442	Synthesis and applications of cellulose nanohybrid materials. , 2017, , 289-320.		4

		CITATION RE	PORT	
#	Article		IF	Citations
443	Uncertainty Quantification in Irreversible Electroporation Simulations. Bioengineering, 2	017, 4, 41.	1.6	5
444	The Electrode Modality Development in Pulsed Electric Field Treatment Facilitates Biocel Mechanism Study and Improves Cancer Ablation Efficacy. Journal of Healthcare Engineer 1-10.		1.1	5
445	Irreversible Electroporation of the Pancreas Using Parallel Plate Electrodes in a Porcine N Feasibility Study. PLoS ONE, 2017, 12, e0169396.	1odel: A	1.1	4
446	MRI-TRUS fusion for electrode positioning during irreversible electroporation for treatme prostate cancer. Diagnostic and Interventional Radiology, 2017, 23, 321-325.	ent of	0.7	8
447	Irreversible electroporation for the treatment of localized prostate cancer: a summary of findings and treatment feedback. Diagnostic and Interventional Radiology, 2017, 23, 36	imaging 5-370.	0.7	15
448	Using non-thermal irreversible electroporation to create an in vivo niche for exogenous c engraftment. BioTechniques, 2017, 62, 229-231.	tell	0.8	22
449	Antitumor efficacy of liposome-encapsulated NVP-BEZ 235 in combination with irreversil electroporation. Drug Delivery, 2018, 25, 668-678.	ble	2.5	15
450	Clinically applicable irreversible electroporation for eradication of micro-organisms. Lette Applied Microbiology, 2018, 67, 15-21.	ers in	1.0	15
451	Pair-matched patient-reported quality of life and early oncological control following foca irreversible electroporation versus robot-assisted radical prostatectomy. World Journal o 2018, 36, 1383-1389.		1.2	28
452	Characterization of Nonlinearity and Dispersion in Tissue Impedance During High-Freque Electroporation. IEEE Transactions on Biomedical Engineering, 2018, 65, 2190-2201.	ncy	2.5	30
453	Sine wave electropermeabilization reveals the frequency-dependent response of the biol membranes. Biochimica Et Biophysica Acta - Biomembranes, 2018, 1860, 1022-1034.	ogical	1.4	24
454	Irreversible electroporation ablation for atrial fibrillation. Journal of Cardiovascular Electrophysiology, 2018, 29, 643-651.		0.8	48
455	Characterization of Conductivity Changes During High-Frequency Irreversible Electropor Treatment Planning. IEEE Transactions on Biomedical Engineering, 2018, 65, 1810-1819	ation for	2.5	53
456	Mechanical fractionation of tissues using microsecond-long HIFU pulses on a clinical MR International Journal of Hyperthermia, 2018, 34, 1213-1224.	-HIFU system.	1.1	23
458	History of Electroporation. , 2018, , 13-37.			7
459	Multi-scale Biophysical Principles in Clinical Irreversible Electroporation. , 2018, , 41-66.			3
460	Numerical Modelling for Prediction and Evaluation of Treatment Outcome. , 2018, , 67-8	30.		0
461	Optimization of Electrode Configuration and Pulse Strength in Irreversible Electroporation Large Ablation Volumes Without Thermal Damage. Journal of Engineering and Science in Diagnostics and Therapy, 2018, 1, .	on for Medical	0.3	11

#	Article	IF	CITATIONS
462	Technology of irreversible electroporation and review of its clinical data on liver cancers. Expert Review of Medical Devices, 2018, 15, 99-106.	1.4	15
463	Effect of Differing Parameters on Irreversible Electroporation in a Porcine Model. Journal of Endourology, 2018, 32, 338-343.	1.1	2
464	Conductivity Rise During Irreversible Electroporation: True Permeabilization or Heat?. CardioVascular and Interventional Radiology, 2018, 41, 1257-1266.	0.9	20
465	Irreversible electroporation for the treatment of cardiac arrhythmias. Expert Review of Cardiovascular Therapy, 2018, 16, 349-360.	0.6	42
466	Focused Impedance Method: Basics and Applications. , 2018, , 137-185.		8
467	Plasma membrane depolarization and permeabilization due to electric pulses in cell lines of different excitability. Bioelectrochemistry, 2018, 122, 103-114.	2.4	26
468	Optimization of a single insertion electrode array for the creation of clinically relevant ablations using high-frequency irreversible electroporation. Computers in Biology and Medicine, 2018, 95, 107-117.	3.9	23
469	From the basic science of biological effects of ultrashort electrical pulses to medical therapies. Bioelectromagnetics, 2018, 39, 257-276.	0.9	28
470	Modeling liver electrical conductivity during hypertonic injection. International Journal for Numerical Methods in Biomedical Engineering, 2018, 34, e2904.	1.0	2
471	Physical and Chemical Enhancement of and Adaptive Resistance to Irreversible Electroporation of Pancreatic Cancer. Annals of Biomedical Engineering, 2018, 46, 25-36.	1.3	16
472	Development of an Electroporation and Nanoparticle-based Therapeutic Platform for Bone Metastases. Radiology, 2018, 286, 149-157.	3.6	21
473	High frequency electroporation efficiency is under control of membrane capacitive charging and voltage potential relaxation. Bioelectrochemistry, 2018, 119, 92-97.	2.4	44
474	Response assessment in pancreatic ductal adenocarcinoma: role of imaging. Abdominal Radiology, 2018, 43, 435-444.	1.0	32
475	¹⁸ F-FDG PET Biomarkers Help Detect Early Metabolic Response to Irreversible Electroporation and Predict Therapeutic Outcomes in a Rat Liver Tumor Model. Radiology, 2018, 287, 137-145.	3.6	8
476	Effects of voltage strength during electroporation on the development and quality of in vitroâ€produced porcine embryos. Reproduction in Domestic Animals, 2018, 53, 313-318.	0.6	26
477	Treatment of Cancer In Vitro Using Radiation and High-Frequency Bursts of Submicrosecond Electrical Pulses. IEEE Transactions on Biomedical Engineering, 2018, 65, 928-935.	2.5	17
478	Focal irreversible electroporation as primary treatment for localized prostate cancer. BJU International, 2018, 121, 716-724.	1.3	74
479	An In Vitro Experimental Study of the Pulse Delivery Method in Irreversible Electroporation. Journal of Engineering and Science in Medical Diagnostics and Therapy, 2018, 1, .	0.3	4

#	Article	IF	CITATIONS
480	Palliative therapy in pancreatic cancer—interventional treatment with radiofrequency ablation/irreversible electroporation. Translational Gastroenterology and Hepatology, 2018, 3, 80-80.	1.5	37
481	The prostate cancer focal therapy. Cland Surgery, 2018, 7, 89-102.	0.5	15
482	Selective Electroporation of Organelles Under an Intense Picosecond Pulsed Electric Field. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2018, 3, 235-245.	1.4	7
483	A continuous droplet electroporation system for high throughput processing. Analyst, The, 2018, 143, 5785-5791.	1.7	11
484	The effects of irreversible electroporation on the stomach wall after ablating hepatic tissues. Biomedical Microdevices, 2018, 20, 97.	1.4	0
485	Characterization of Cell Membrane Permeability <i>In Vitro</i> Part II: Computational Model of Electroporation-Mediated Membrane Transport*. Technology in Cancer Research and Treatment, 2018, 17, 153303381879249.	0.8	23
486	Long-term survival after percutaneous irreversible electroporation of inoperable colorectal liver metastases. Cancer Management and Research, 2019, Volume 11, 317-322.	0.9	20
487	Characterization of Cell Membrane Permeability <i>In Vitro</i> Part I: Transport Behavior Induced by Single-Pulse Electric Fields*. Technology in Cancer Research and Treatment, 2018, 17, 153303381879249.	0.8	12
488	Dielectric Property Measurement of Breast—Tumor Phantom Model Under Pulsed Electric Field Treatment. IEEE Transactions on Radiation and Plasma Medical Sciences, 2018, 2, 608-617.	2.7	12
489	Interventional Radiology in Oncology. , 2018, , 41-61.		0
490	Ablation outcome of irreversible electroporation on potato monitored by impedance spectrum under multi-electrode system. BioMedical Engineering OnLine, 2018, 17, 126.	1.3	22
491	Rejuvenation of aged rat skin with pulsed electric fields. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, 2309-2318.	1.3	8
492	A Review on Differences in Effects on Normal and Malignant Cells and Tissues to Electroporation-Based Therapies: A Focus on Calcium Electroporation. Technology in Cancer Research and Treatment, 2018, 17, 153303381878807.	0.8	29
493	Current and Future Treatment of Hepatocellular Carcinoma: An Updated Comprehensive Review. Journal of Clinical and Translational Hepatology, 2018, 6, 1-10.	0.7	218
494	Impact on genitourinary function and quality of life following focal irreversible electroporation of different prostate segments. Diagnostic and Interventional Radiology, 2018, 24, 268-275.	0.7	16
495	Targeted Ablative Therapies for Prostate Cancer. Cancer Treatment and Research, 2018, 175, 15-53.	0.2	1
496	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
497	Contrast-Enhanced Transrectal Ultrasound in Focal Therapy for Prostate Cancer. Current Urology Reports, 2018, 19, 87.	1.0	14

#	Article	IF	CITATIONS
498	Effects of internal electrode cooling on irreversible electroporation using a perfused organ model. International Journal of Hyperthermia, 2018, 35, 44-55.	1.1	38
499	Electrolytic ablation enables cancer cell targeting through pH modulation. Communications Biology, 2018, 1, 48.	2.0	19
500	Development of a statistical model for cervical cancer cell death with irreversible electroporation in vitro. PLoS ONE, 2018, 13, e0195561.	1.1	17
501	First Human Trial of High-Frequency Irreversible Electroporation Therapy for Prostate Cancer. Technology in Cancer Research and Treatment, 2018, 17, 153303381878969.	0.8	55
502	Navigation Systems for Treatment Planning and Execution of Percutaneous Irreversible Electroporation. Technology in Cancer Research and Treatment, 2018, 17, 153303381879179.	0.8	19
503	Irreversible Electroporation for Nonthermal Tumor Ablation in Patients with Locally Advanced Pancreatic Cancer: Initial Clinical Experience in Japan. Internal Medicine, 2018, 57, 3225-3231.	0.3	24
504	Electroporation and its Relevance for Cardiac Catheter Ablation. JACC: Clinical Electrophysiology, 2018, 4, 977-986.	1.3	81
505	Elimination of Purkinje Fibers by Electroporation Reduces Ventricular Fibrillation Vulnerability. Journal of the American Heart Association, 2018, 7, e009070.	1.6	40
506	Comparison of Chronologic Change in the Size and Contrast-Enhancement of Ablation Zones on CT Images after Irreversible Electroporation and Radiofrequency Ablation. Korean Journal of Radiology, 2018, 19, 560.	1.5	7
507	Thermal Considerations with Tissue Electroporation. , 2018, , 2489-2519.		0
508	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
509	Noninvasive detection of changes in cells' cytosol conductivity by combining dielectrophoresis with optical tweezers. Analytica Chimica Acta, 2018, 1030, 166-171.	2.6	7
510	Molecular and histological study on the effects of non-thermal irreversible electroporation on the liver. Biochemical and Biophysical Research Communications, 2018, 500, 665-670.	1.0	34
511	Ablation of Atrial Fibrillation With PulsedÂElectric Fields. JACC: Clinical Electrophysiology, 2018, 4, 987-995.	1.3	183
512	Parameters optimization of bipolar high frequency pulses on tissue ablation and inhibiting muscle contraction. IEEE Transactions on Dielectrics and Electrical Insulation, 2018, 25, 207-216.	1.8	22
513	Electroporation Improvement of Leukemic Cells Using Dielectrophoresis Technique. , 2018, , .		3
514	Transport of charged small molecules after electropermeabilization — drift and diffusion. BMC Biophysics, 2018, 11, 4.	4.4	29
515	Interventional radiology of the adrenal glands: current status. Gland Surgery, 2018, 7, 147-165.	0.5	20

#	Article	IF	CITATIONS
516	Predicting Nonthermal Electroporation of Intervertebral Disc Tissue. , 2018, , .		0
517	Local Joule heating and electric force on biological membrane during electro-microinjection. International Journal of Heat and Mass Transfer, 2019, 140, 798-806.	2.5	2
518	Pulsed Field Ablation for Pulmonary Vein Isolation in Atrial Fibrillation. Journal of the American College of Cardiology, 2019, 74, 315-326.	1.2	347
519	Contemporary treatments in prostate cancer focal therapy. Current Opinion in Oncology, 2019, 31, 200-206.	1.1	68
520	Locally Advanced Pancreatic Cancer: Work-Up, Staging, and Local Intervention Strategies. Cancers, 2019, 11, 976.	1.7	63
521	Pre-clinical investigation of the synergy effect of interleukin-12 gene-electro-transfer during partially irreversible electropermeabilization against melanoma. , 2019, 7, 161.		19
522	Ablation of Intrahepatic Cholangiocarcinoma. Seminars in Interventional Radiology, 2019, 36, 298-302.	0.3	22
523	Perspective on Pulsed Electric Field Treatment in the Bio-based Industry. Frontiers in Bioengineering and Biotechnology, 2019, 7, 265.	2.0	59
524	Conductive nanoparticles improve cell electropermeabilization. Nanotechnology, 2019, 30, 495101.	1.3	12
525	Electrical and thermal analyses of catheter-based irreversible electroporation of digestive tract. International Journal of Hyperthermia, 2019, 36, 853-866.	1.1	11
526	Irreversible Electroporation of the Pancreas. Seminars in Interventional Radiology, 2019, 36, 213-220.	0.3	12
527	Irreversible Electroporation Combined with Checkpoint Blockade and TLR7 Stimulation Induces Antitumor Immunity in a Murine Pancreatic Cancer Model. Cancer Immunology Research, 2019, 7, 1714-1726.	1.6	72
528	Update In Percutaneous Lung Ablation. Current Radiology Reports, 2019, 7, 1.	0.4	2
529	Treatment of Infiltrative Superficial Tumors in Awake Standing Horses Using Novel High-Frequency Pulsed Electrical Fields. Frontiers in Veterinary Science, 2019, 6, 265.	0.9	8
530	Chemical Enhancement of Irreversible Electroporation: A Review and Future Suggestions. Technology in Cancer Research and Treatment, 2019, 18, 153303381987412.	0.8	14
531	Application of pulsed electric fields for the valorization of platelets with no therapeutic value for transfusion medicine. Technology, 2019, 07, 40-45.	1.4	3
532	Selective distant electrostimulation by synchronized bipolar nanosecond pulses. Scientific Reports, 2019, 9, 13116.	1.6	20
533	A Study on Nonthermal Irreversible Electroporation of the Thyroid. Technology in Cancer Research and Treatment, 2019, 18, 153303381987630.	0.8	7

#	Article	IF	CITATIONS
534	Image-guided lung metastasis ablation: a literature review. International Journal of Hyperthermia, 2019, 36, 37-45.	1.1	58
535	Cycled pulsing to mitigate thermal damage for multi-electrode irreversible electroporation therapy. International Journal of Hyperthermia, 2019, 36, 952-962.	1.1	28
536	Irreversible Electroporation for Unresectable Hepatocellular Carcinoma: Initial Experience. CardioVascular and Interventional Radiology, 2019, 42, 584-590.	0.9	45
537	Numerical workflow of irreversible electroporation for deep-seated tumor. Physics in Medicine and Biology, 2019, 64, 055016.	1.6	25
538	Gross and microscopic changes of liver neoplasms and background hepatic structures following neoadjuvant therapy. Journal of Clinical Pathology, 2019, 72, 112-119.	1.0	1
539	Experimental High-Frequency Irreversible Electroporation Using a Single-Needle Delivery Approach for Nonthermal Pancreatic Ablation InÂVivo. Journal of Vascular and Interventional Radiology, 2019, 30, 854-862.e7.	0.2	44
540	Numerical simulation modeling of the irreversible electroporation treatment zone for focal therapy of prostate cancer, correlation with whole-mount pathology and T2-weighted MRI sequences. Therapeutic Advances in Urology, 2019, 11, 175628721985230.	0.9	5
541	Characterization of irreversible electroporation on the stomach: A feasibility study in rats. Scientific Reports, 2019, 9, 9094.	1.6	14
542	Image-guided Irreversible Electroporation of Localized Prostate Cancer: Functional and Oncologic Outcomes. Radiology, 2019, 292, 250-257.	3.6	40
543	Modulation of biological responses to 2†ns electrical stimuli by field reversal. Biochimica Et Biophysica Acta - Biomembranes, 2019, 1861, 1228-1239.	1.4	25
544	Valorization of platelets with no therapeutic value with Pulsed Electric Fields*. , 2019, , .		1
545	Ultrasound-guided percutaneous irreversible electroporation of hepatic and abdominal tumors not eligible for surgery or thermal ablation: a western report on safety and efficacy. Journal of Ultrasound, 2019, 22, 53-58.	0.7	5
546	Large Liver Blood Vessels and Bile Ducts Are Not Damaged by Electrochemotherapy with Bleomycin in Pigs. Scientific Reports, 2019, 9, 3649.	1.6	39
547	Treatment of locally advanced pancreatic cancer with irreversible electroporation – a Danish single center study of safety and feasibility. Scandinavian Journal of Gastroenterology, 2019, 54, 252-258.	0.6	23
548	Current State of Tumor Ablation Therapies. Digestive Diseases and Sciences, 2019, 64, 951-958.	1.1	21
549	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.	1.3	18
550	Normal and fibrotic liver parenchyma respond differently to irreversible electroporation. Hpb, 2019, 21, 1344-1353.	0.1	7
551	A Conceivable Mechanism Responsible for the Synergy of High and Low Voltage Irreversible Electroporation Pulses. Annals of Biomedical Engineering, 2019, 47, 1552-1563.	1.3	18

#	Article	IF	CITATIONS
552	Irreversible electroporation reverses resistance to immune checkpoint blockade in pancreatic cancer. Nature Communications, 2019, 10, 899.	5.8	169
553	IGBT-Based Pulsed Electric Fields Generator for Disinfection: Design and In Vitro Studies on Pseudomonas aeruginosa. Annals of Biomedical Engineering, 2019, 47, 1314-1325.	1.3	9
554	Does Drug-Eluting Bead TACE Enhance the Local Effect of IRE? Imaging and Histopathological Evaluation in a Porcine Model. CardioVascular and Interventional Radiology, 2019, 42, 880-885.	0.9	7
555	Arterio-Enteric Fistula after Irreversible Electroporation. American Surgeon, 2019, 85, 55-57.	0.4	8
556	Chip Scale Tunable Nanosecond Pulsed Electric Field Generator for Cell Electroporation. , 2019, , .		0
557	Antitumor Response and Immunomodulatory Effects of Sub-Microsecond Irreversible Electroporation and Its Combination with Calcium Electroporation. Cancers, 2019, 11, 1763.	1.7	24
558	Industrial Electronics for Biomedicine: A New Cancer Treatment Using Electroporation. IEEE Industrial Electronics Magazine, 2019, 13, 6-18.	2.3	23
559	Irreversible Electroporation: Background, Theory, and Review of Recent Developments in Clinical Oncology. Bioelectricity, 2019, 1, 214-234.	0.6	101
560	Real-time prediction of patient immune cell modulation during irreversible electroporation therapy. Scientific Reports, 2019, 9, 17739.	1.6	25
561	Temporal Characterization of Blood–Brain Barrier Disruption with High-Frequency Electroporation. Cancers, 2019, 11, 1850.	1.7	34
562	What Are the Effects of Irreversible Electroporation on a Staphylococcus aureus Rabbit Model of Osteomyelitis?. Clinical Orthopaedics and Related Research, 2019, 477, 2367-2377.	0.7	3
563	Nanosecond Pulsed Electric Fields Induce Endoplasmic Reticulum Stress Accompanied by Immunogenic Cell Death in Murine Models of Lymphoma and Colorectal Cancer. Cancers, 2019, 11, 2034.	1.7	35
564	Preclinical Evaluation of Pulsed Field Ablation. Circulation: Arrhythmia and Electrophysiology, 2019, 12, e007781.	2.1	102
565	Hybrid analytical-numerical approach for investigation of differential effects in normal and cancer cells under electroporation. RSC Advances, 2019, 9, 41518-41530.	1.7	7
566	Intraoperative Irreversible Electroporation in Locally Advanced Pancreatic Cancer: A Guide for the Interventional Radiologist. Seminars in Interventional Radiology, 2019, 36, 386-391.	0.3	6
567	Multiparametric Finite-Element Simulation and Experiment on Thermal Effects in Skin Tumor Exposed to High-Frequency Nanosecond Pulse Bursts. IEEE Transactions on Plasma Science, 2019, 47, 924-934.	0.6	4
568	Selective Inactivation of <i>Pseudomonas aeruginosa</i> and <i>Staphylococcus epidermidis</i> with Pulsed Electric Fields and Antibiotics. Advances in Wound Care, 2019, 8, 136-148.	2.6	8
569	Tumor Ablation Enhancement by Combining Radiofrequency Ablation and Irreversible Electroporation: An In Vitro 3D Tumor Study. Annals of Biomedical Engineering, 2019, 47, 694-705.	1.3	18

#	Article	IF	CITATIONS
570	Electric field-responsive nanoparticles and electric fields: physical, chemical, biological mechanisms and therapeutic prospects. Advanced Drug Delivery Reviews, 2019, 138, 56-67.	6.6	113
571	Available ablation energies to treat cT1 renal cell cancer: emerging technologies. World Journal of Urology, 2019, 37, 445-455.	1.2	15
572	Bioimpedance Analysis of Epithelial Monolayers After Exposure to Nanosecond Pulsed Electric Fields. IEEE Transactions on Biomedical Engineering, 2019, 66, 2010-2021.	2.5	14
573	Pulsed electric fields for cardiac ablation and beyond: A state-of-the-art review. Heart Rhythm, 2019, 16, 1112-1120.	0.3	77
574	Application of Pulsed Electric Fields to Cancer Therapy. Bioelectricity, 2019, 1, 30-34.	0.6	40
575	Intracardiac pulsed field ablation: Proof of feasibility in a chronic porcine model. Heart Rhythm, 2019, 16, 754-764.	0.3	121
576	Electroporation Ablative Therapy as a Clinical Tool. , 2019, , 179-200.		0
577	Molecular and histological study on the effects of electrolytic electroporation on the liver. Bioelectrochemistry, 2019, 125, 79-89.	2.4	16
578	Verification of Electroporation Models Using the Potato Tuber as In Vitro Simulation. Journal of Medical and Biological Engineering, 2019, 39, 224-229.	1.0	6
579	Preliminary Diagnostic Accuracy of Multiparametric Magnetic Resonance Imaging to Detect Residual Prostate Cancer Following Focal Therapy with Irreversible Electroporation. European Urology Focus, 2019, 5, 585-591.	1.6	27
580	Low-Voltage Irreversible Electroporation Using a Comb-Shaped Contact Electrode. IEEE Transactions on Biomedical Engineering, 2020, 67, 420-427.	2.5	10
581	Safety and efficacy of magnetic anchoring electrode-assisted irreversible electroporation for gastric tissue ablation. Surgical Endoscopy and Other Interventional Techniques, 2020, 34, 580-589.	1.3	7
582	High-Frequency Irreversible Electroporation Using 5,000-V Waveforms to Create Reproducible 2- and 4-cm Ablation Zones—A Laboratory Investigation Using Mechanically Perfused Liver. Journal of Vascular and Interventional Radiology, 2020, 31, 162-168.e7.	0.2	15
583	A 2-D Cell Layer Study on Synergistic Combinations of High-Voltage and Low-Voltage Irreversible Electroporation Pulses. IEEE Transactions on Biomedical Engineering, 2020, 67, 957-965.	2.5	14
584	Successful Tumor Electrochemotherapy Using Sine Waves. IEEE Transactions on Biomedical Engineering, 2020, 67, 1040-1049.	2.5	19
585	Optimizing Integrated Electrode Design for Irreversible Electroporation of Implanted Polymer Scaffolds. Annals of Biomedical Engineering, 2020, 48, 1230-1240.	1.3	4
586	Transcatheter intraâ€arterial perfusion (TRIP)â€MRI biomarkers help detect immediate response to irreversible electroporation of rabbit VX2 liver tumor. Magnetic Resonance in Medicine, 2020, 84, 365-374.	1.9	5
587	Predicting electrotransfer in ultra-high frequency sub-microsecond square wave electric fields. Electromagnetic Biology and Medicine, 2020, 39, 1-8.	0.7	10

#	Article	IF	CITATIONS
588	Endocardial ventricular pulsed field ablation: a proof-of-concept preclinical evaluation. Europace, 2020, 22, 434-439.	0.7	83
589	Forging ahead: Update on radiofrequency ablation technology and techniques. Journal of Cardiovascular Electrophysiology, 2020, 31, 360-369.	0.8	12
590	Irreversible electroporation (IRE): a narrative review of the development of IRE from the laboratory to a prostate cancer treatment. BJU International, 2020, 125, 369-378.	1.3	25
591	Systematic review and meta-analysis of local ablative therapies for resectable colorectal liver metastases. European Journal of Surgical Oncology, 2020, 46, 772-781.	0.5	53
592	Simplified Non-Thermal Tissue Ablation With A Single Insertion Device Enabled By Bipolar High-Frequency Pulses. IEEE Transactions on Biomedical Engineering, 2020, 67, 1-1.	2.5	10
593	Feasibility of Electroacoustic Tomography: A Simulation Study. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 889-897.	1.7	3
594	Electroporation-Based Treatments in Small Animal Veterinary Oral and Maxillofacial Oncology. Frontiers in Veterinary Science, 2020, 7, 575911.	0.9	13
595	Analysis of the Electric Field-Dependent Current During Electroporation Pulses. IEEE Access, 2020, 8, 93850-93856.	2.6	6
596	Modern therapeutic approaches for the treatment of malignant liverÂtumours. Nature Reviews Gastroenterology and Hepatology, 2020, 17, 755-772.	8.2	120
597	The interplay of excitation and electroporation in nanosecond pulse stimulation. Bioelectrochemistry, 2020, 136, 107598.	2.4	31
598	Emerging electroporation-based technologies for wound care. , 2020, , 155-170.		1
599	In Vitro Study of Calcium Microsecond Electroporation of Prostate Adenocarcinoma Cells. Molecules, 2020, 25, 5406.	1.7	11
600	Direct Current Ablation of Deep SubstrateÂArrhythmia. JACC: Case Reports, 2020, 2, 1762-1765.	0.3	0
601	Predictors of Occlusion of Hepatic Blood Vessels after Irreversible Electroporation of Liver Tumors. Journal of Vascular and Interventional Radiology, 2020, 31, 2033-2042.e1.	0.2	6
602	Early Cost-effectiveness Analysis of Electrochemotherapy as a Prospect Treatment Modality for Skin Melanoma. Clinical Therapeutics, 2020, 42, 1535-1548.e2.	1.1	6
603	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
604	Starting a Fire Without Flame: The Induction of Cell Death and Inflammation in Electroporation-Based Tumor Ablation Strategies. Frontiers in Oncology, 2020, 10, 1235.	1.3	52
605	EView: An electric field visualization web platform for electroporation-based therapies. Computer Methods and Programs in Biomedicine, 2020, 197, 105682.	2.6	10

#	Article	IF	Citations
606	Acute and subacute effects of irreversible electroporation on normal common bile ducts in a rabbit model. Journal of Hepato-Biliary-Pancreatic Sciences, 2020, 27, 776-784.	1.4	5
607	Time Domain Nuclear Magnetic Resonance (TD-NMR) to evaluate the effect of potato cell membrane electroporation. Innovative Food Science and Emerging Technologies, 2020, 65, 102456.	2.7	7
608	Effect of irreversible electroporation parameters and the presence of a metal stent on the electric field line pattern. Scientific Reports, 2020, 10, 13517.	1.6	8
609	Electroporation-Based Treatments in Urology. Cancers, 2020, 12, 2208.	1.7	19
610	Thermochromic Tissue Phantoms for Evaluating Temperature Distribution in Simulated Clinical Applications of Pulsed Electric Field Therapies. Bioelectricity, 2020, 2, 362-371.	0.6	1
611	Combination of Irreversible Electroporation and STING Agonist for Effective Cancer Immunotherapy. Cancers, 2020, 12, 3123.	1.7	33
612	Irreversible Electroporation for De-epithelialization of Murine Small Intestine. Journal of Surgical Research, 2020, 256, 602-610.	0.8	2
613	Effects of irreversible electroporation on femoral nerves in a rabbit model. Minimally Invasive Therapy and Allied Technologies, 2022, 31, 306-312.	0.6	5
614	Design and Characterization of a Minimally Invasive Bipolar Electrode for Electroporation. Biology, 2020, 9, 303.	1.3	6
615	Image guided thermal ablation in lung cancer treatment. Journal of Thoracic Disease, 2020, 12, 7039-7047.	0.6	28
616	AC Pulsed Field Ablation Is Feasible and Safe in Atrial and Ventricular Settings: A Proof-of-Concept Chronic Animal Study. Frontiers in Bioengineering and Biotechnology, 2020, 8, 552357.	2.0	23
617	HyCHEED System for Maintaining Stable Temperature Control during Preclinical Irreversible Electroporation Experiments at Clinically Relevant Temperature and Pulse Settings. Sensors, 2020, 20, 6227.	2.1	4
618	Role of Catheter Ablation as a First-Line Treatment for Atrial Fibrillation. Current Treatment Options in Cardiovascular Medicine, 2020, 22, 1.	0.4	0
619	A Digital Controlled Pulse Generator for a Possible Tumor Therapy Combining Irreversible Electroporation With Nanosecond Pulse Stimulation. IEEE Transactions on Biomedical Circuits and Systems, 2020, 14, 595-605.	2.7	10
620	Cytoskeletal Disruption after Electroporation and Its Significance to Pulsed Electric Field Therapies. Cancers, 2020, 12, 1132.	1.7	46
621	Correlation between the loss of intracellular molecules and cell viability after cell electroporation. Bioelectrochemistry, 2020, 135, 107550.	2.4	26
622	Mathematical modeling of the thermal effects of irreversible electroporation for <i>inÂvitro</i> , <i>inÂvivo</i> , and clinical use: a systematic review. International Journal of Hyperthermia, 2020, 37, 486-505.	1.1	42
623	Cardiac synchronization and arrhythmia during irreversible electroporation. Journal of Surgical Oncology, 2020, 122, 407-411.	0.8	10

#	Article	IF	CITATIONS
624	Temperature Dependence of High Frequency Irreversible Electroporation Evaluated in a 3D Tumor Model. Annals of Biomedical Engineering, 2020, 48, 2233-2246.	1.3	21
625	The role of 217-Hz ELF magnetic fields emitted from GSM mobile phones on electrochemotherapy mechanisms. Electromagnetic Biology and Medicine, 2020, 39, 239-249.	0.7	6
626	Development of a Multi-Pulse Conductivity Model for Liver Tissue Treated With Pulsed Electric Fields. Frontiers in Bioengineering and Biotechnology, 2020, 8, 396.	2.0	16
627	Irreversible Electroporation in Locally Advanced Pancreatic Adenocarcinoma: Aiming to Improve Overall Survival. Journal of Gastrointestinal Cancer, 2020, 51, 1084-1087.	0.6	0
628	Advances in Atrial Fibrillation Ablation. Cardiac Electrophysiology Clinics, 2020, 12, 167-174.	0.7	6
629	Algorithmically Controlled Electroporation: A Technique for Closed Loop Temperature Regulated Pulsed Electric Field Cancer Ablation. IEEE Transactions on Biomedical Engineering, 2020, 67, 2176-2186.	2.5	8
630	Development of adaptive resistance to electric pulsed field treatment in CHO cell line in vitro. Scientific Reports, 2020, 10, 9988.	1.6	4
631	Emerging Technologies for Pulmonary Vein Isolation. Circulation Research, 2020, 127, 170-183.	2.0	53
632	Magnetic Resonance Imaging Assessment After Therapy in Prostate Cancer. Topics in Magnetic Resonance Imaging, 2020, 29, 47-58.	0.7	5
633	High-Voltage Electrical Pulses in Oncology: Irreversible Electroporation, Electrochemotherapy, Gene Electrotransfer, Electrofusion, and Electroimmunotherapy. Radiology, 2020, 295, 254-272.	3.6	208
634	Alternatives to Surgery for Early-Stage Non–Small Cell Lung Cancer. Clinics in Chest Medicine, 2020, 41, 197-210.	0.8	15
635	Heating technology for malignant tumors: a review. International Journal of Hyperthermia, 2020, 37, 711-741.	1.1	211
636	Feasibility of selective cardiac ventricular electroporation. PLoS ONE, 2020, 15, e0229214.	1.1	22
637	Development of a substrate-invariant 2-D array of nanosecond-pulsed streamer discharges. Plasma Research Express, 2020, 2, 015001.	0.4	0
638	Pulsed field ablation for pulmonary vein isolation in the treatment of atrial fibrillation. Journal of Cardiovascular Electrophysiology, 2020, 31, 2136-2147.	0.8	59
639	Candida albicans biofilm inactivated by cold plasma treatment in vitro and in vivo. Plasma Processes and Polymers, 2020, 17, 1900068.	1.6	16
640	Ablation Approaches and Imaging Modalities to Lower Risk of Atrioesophageal Injury During Catheter Ablation for Atrial Fibrillation. Current Cardiovascular Risk Reports, 2020, 14, 1.	0.8	1
641	Pulsed Field Ablation Versus Radiofrequency Ablation. Circulation: Arrhythmia and Electrophysiology, 2020, 13, e008303.	2.1	112

#	Article	IF	CITATIONS
642	Electrothermal Analysis of the Breast-Tumor Model During Electroporation. IEEE Transactions on Radiation and Plasma Medical Sciences, 2020, 4, 512-524.	2.7	0
643	High-Frequency Irreversible Electroporation for Treatment of Primary Liver Cancer: A Proof-of-Principle Study in Canine Hepatocellular Carcinoma. Journal of Vascular and Interventional Radiology, 2020, 31, 482-491.e4.	0.2	40
644	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
645	Microfluidic Electroporation Coupling Pulses of Nanoseconds and Milliseconds to Facilitate Rapid Uptake and Enhanced Expression of DNA in Cell Therapy. Scientific Reports, 2020, 10, 6061.	1.6	18
646	Numerical modelling challenges for clinical electroporation ablation technique of liver tumors. Mathematical Modelling of Natural Phenomena, 2020, 15, 11.	0.9	9
647	Doxorubicin Assisted by Microsecond Electroporation Promotes Irreparable Morphological Alternations in Sensitive and Resistant Human Breast Adenocarcinoma Cells. Applied Sciences (Switzerland), 2020, 10, 2765.	1.3	16
648	Multi-Tissue Analysis on the Impact of Electroporation on Electrical and Thermal Properties. IEEE Transactions on Biomedical Engineering, 2021, 68, 771-782.	2.5	18
649	Catheter ablation for atrial fibrillation: current indications and evolving technologies. Nature Reviews Cardiology, 2021, 18, 210-225.	6.1	87
650	Irreversible electroporation ablation against subcutaneously implanted VX2 tumors in rabbits: findings of shearwave ultrasound elastography. Scottish Medical Journal, 2021, 66, 23-28.	0.7	1
651	Single Cell Forces after Electroporation. ACS Nano, 2021, 15, 2554-2568.	7.3	20
652	Optimal Voltage and Electrical Pulse Conditions for Electrical Ablation to Induce Immunogenic Cell Death (ICD). Journal of Industrial and Engineering Chemistry, 2021, 94, 225-232.	2.9	6
653	Current evidence for focal therapy and partial gland ablation for organ-confined prostate cancer: systematic review of literature published in the last 2 years. Current Opinion in Urology, 2021, 31, 49-57.	0.9	7
654	Pulsed field ablation: a promise that came true. Current Opinion in Cardiology, 2021, 36, 5-9.	0.8	9
655	Recent developments in the kinetics of ruptures of giant vesicles under constant tension. RSC Advances, 2021, 11, 29598-29619.	1.7	9
656	Combinatorial effect of radium-223 and irreversible electroporation on prostate cancer bone metastasis in mice. International Journal of Hyperthermia, 2021, 38, 650-662.	1.1	2
657	Magnetic anchoring and guidance-assisted endoscopic irreversible electroporation for gastric mucosal ablation: a preclinical study in canine model. Surgical Endoscopy and Other Interventional Techniques, 2021, 35, 5665-5674.	1.3	6
658	Irreversible electroporation ablation overcomes tumor-associated immunosuppression to improve the efficacy of DC vaccination in a mice model of pancreatic cancer. Oncolmmunology, 2021, 10, 1875638.	2.1	27
659	The influence of external electric fields on proton transfer tautomerism in the guanine–cytosine base pair. Physical Chemistry Chemical Physics, 2021, 23, 6252-6265.	1.3	10

#	Article	IF	CITATIONS
660	A review of cutting-edge therapies for hepatocellular carcinoma (HCC): Perspectives from patents. International Journal of Medical Sciences, 2021, 18, 3066-3081.	1.1	12
661	Modeling Methods for Treatment Planning in Overlapping Electroporation Treatments. IEEE Transactions on Biomedical Engineering, 2022, 69, 1318-1327.	2.5	6
662	Cryoablation, high-intensity focused ultrasound, irreversible electroporation, and vascular-targeted photodynamic therapy for prostate cancer: a systemic review and meta-analysis. International Journal of Clinical Oncology, 2021, 26, 461-484.	1.0	14
663	Fibrilação Atrial (Parte 2) – Ablação por Cateter. Arquivos Brasileiros De Cardiologia, 2021, 116, 334-345.	0.3	0
664	Efficacy and safety of irreversible electroporation for malignant liver tumors: a systematic review and meta-analysis. European Radiology, 2021, 31, 6511-6521.	2.3	20
665	The Landmark Series: Locally Advanced Pancreatic Cancer and Ablative Therapy Options. Annals of Surgical Oncology, 2021, 28, 4173-4180.	0.7	8
666	Continuum analysis to assess field enhancements for tailoring electroporation driven by monopolar or bipolar pulsing based on nonuniformly distributed nanoparticles. Physical Review E, 2021, 103, 022402.	0.8	9
667	Magnetically Driven Micro and Nanorobots. Chemical Reviews, 2021, 121, 4999-5041.	23.0	345
668	Image-guided tumor ablation in gynecologic oncology: Review of interventional oncology techniques and case examples highlighting a collaborative, multidisciplinary program. Gynecologic Oncology, 2021, 160, 835-843.	0.6	5
669	Irreversible electroporation (IRE) in renal cell carcinoma (RCC): a mid-term clinical experience. European Radiology, 2021, 31, 7491-7499.	2.3	12
670	10Âns PEFs induce a histological response linked to cell death and cytotoxic T-lymphocytes in an immunocompetent mouse model of peritoneal metastasis. Clinical and Translational Oncology, 2021, 23, 1220-1237.	1.2	3
671	Microsecond Pulsed Electric Fields: An Effective Way to Selectively Target and Radiosensitize Medulloblastoma Cancer Stem Cells. International Journal of Radiation Oncology Biology Physics, 2021, 109, 1495-1507.	0.4	12
672	Irreversible Electroporation (IRE) in Locally Advanced Pancreatic Cancer: A Review of Current Clinical Outcomes, Mechanism of Action and Opportunities for Synergistic Therapy. Journal of Clinical Medicine, 2021, 10, 1609.	1.0	22
673	Establishing an immunocompromised porcine model of human cancer for novel therapy development with pancreatic adenocarcinoma and irreversible electroporation. Scientific Reports, 2021, 11, 7584.	1.6	16
674	Immunological effect of irreversible electroporation on hepatocellular carcinoma. BMC Cancer, 2021, 21, 443.	1.1	14
675	Novel Ablation Therapy Using Endoscopic Irreversible Electroporation in the Bile Duct: A Pilot Animal Study. Clinical Endoscopy, 2021, 54, 413-419.	0.6	4
676	Investigation of Effect of Nanosecond Pulsed Electric Field on MCF-7 Breast Cancer Cells. Journal of Drug Delivery and Therapeutics, 2021, 11, 43-49.	0.2	0
677	Rapid Impedance Spectroscopy for Monitoring Tissue Impedance, Temperature, and Treatment Outcome During Electroporation-Based Therapies. IEEE Transactions on Biomedical Engineering, 2021, 68, 1536-1546.	2.5	18

#	Article	IF	CITATIONS
678	Ablation in Pancreatic Cancer: Past, Present and Future. Cancers, 2021, 13, 2511.	1.7	12
679	Combination of irreversible electroporation with sustained release of a synthetic membranolytic polymer for enhanced cancer cell killing. Scientific Reports, 2021, 11, 10810.	1.6	3
680	Pulsed-Field Ablation for AtrialÂFibrillation. JACC: Clinical Electrophysiology, 2021, 7, 628-629.	1.3	2
681	Development of a thermal model for irreversible electroporation: an approach to estimate and optimize the IRE protocols. International Journal of Computer Assisted Radiology and Surgery, 2021, 16, 1325-1334.	1.7	4
682	High-Frequency and High-Voltage Asymmetric Bipolar Pulse Generator for Electroporation Based Technologies and Therapies. Electronics (Switzerland), 2021, 10, 1203.	1.8	10
683	Pulsed Field Ablation of Paroxysmal Atrial Fibrillation. JACC: Clinical Electrophysiology, 2021, 7, 614-627.	1.3	184
684	Irreversible Electroporation for Prostate Cancer. Life, 2021, 11, 490.	1.1	9
685	Irreversible Electroporation to Treat Unresectable Colorectal Liver Metastases (COLDFIRE-2): A Phase II, Two-Center, Single-Arm Clinical Trial. Radiology, 2021, 299, 470-480.	3.6	30
686	Comparison between high-frequency irreversible electroporation and irreversible electroporation ablation of small swine liver: follow-up of DCE-MRI and pathological observations. Chinese Medical Journal, 2021, 134, 2081-2090.	0.9	3
687	Electroporation-Based Therapy for Brain Tumors: A Review. Journal of Biomechanical Engineering, 2021, 143, .	0.6	14
688	Interventional Treatment for Cholangiocarcinoma. Frontiers in Oncology, 2021, 11, 671327.	1.3	7
689	A Theoretical Argument for Extended Interpulse Delays in Therapeutic High-Frequency Irreversible Electroporation Treatments. IEEE Transactions on Biomedical Engineering, 2021, 68, 1999-2010.	2.5	23
690	How does the level of pulmonary venous isolation compare between pulsed field ablation and thermal energy ablation (radiofrequency, cryo, or laser)?. Europace, 2021, 23, 1757-1766.	0.7	30
691	Focal therapy for localized cancer: a patent review. Expert Review of Medical Devices, 2021, 18, 751-769.	1.4	1
692	Does pulsed field ablation regress over time? A quantitative temporal analysis of pulmonary vein isolation. Heart Rhythm, 2021, 18, 878-884.	0.3	25
693	Irreversible Electroporation for Renal Ablation Does Not Cause Significant Injury to Adjacent Ureter or Bowel in a Porcine Model. Journal of Endourology, 2021, 35, 873-877.	1.1	4
694	Ablation Modalities for Therapeutic Intervention in Arrhythmia-Related Cardiovascular Disease: Focus on Electroporation. Journal of Clinical Medicine, 2021, 10, 2657.	1.0	17
695	Exploring the Conformational Changes Induced by Nanosecond Pulsed Electric Fields on the Voltage Sensing Domain of a Ca2+ Channel. Membranes, 2021, 11, 473.	1.4	12

#	Article	IF	CITATIONS
696	Microfluidic electrical cell lysis for high-throughput and continuous production of cell-free varicella-zoster virus. Journal of Biotechnology, 2021, 335, 19-26.	1.9	8
697	Feasibility and effectiveness of endoscopic irreversible electroporation for the upper gastrointestinal tract: an experimental animal study. Scientific Reports, 2021, 11, 15353.	1.6	10
698	Clinical Applications and Immunological Aspects of Electroporation-Based Therapies. Vaccines, 2021, 9, 727.	2.1	6
699	Pulsed field ablation prevents chronic atrial fibrotic changes and restrictive mechanics after catheter ablation for atrial fibrillation. Europace, 2021, 23, 1767-1776.	0.7	43
700	Electrotherapies for Glioblastoma. Advanced Science, 2021, 8, e2100978.	5.6	25
701	Neutrophils are important for the development of pro-reparative macrophages after irreversible electroporation of the liver in mice. Scientific Reports, 2021, 11, 14986.	1.6	5
702	Minimally invasive image-guided therapy of primary and metastatic pancreatic cancer. World Journal of Gastroenterology, 2021, 27, 4322-4341.	1.4	8
703	Pulsed field ablation: have we finally found the holy grail?. Europace, 2021, 23, 1691-1692.	0.7	3
704	Addressing the worldwide hepatocellular carcinoma: epidemiology, prevention and management. Journal of Gastrointestinal Oncology, 2021, 12, S361-S373.	0.6	66
705	Multicenter randomized controlled trial and registry study to assess the safety and efficacy of the NanoKnife® system for the ablation of stage 3 pancreatic adenocarcinoma: overview of study protocols. BMC Cancer, 2021, 21, 785.	1.1	6
706	Combination of natural killer cell-based immunotherapy and irreversible electroporation for the treatment of hepatocellular carcinoma. Annals of Translational Medicine, 2021, 9, 1089-1089.	0.7	5
707	Mechanisms of curcumin-based photodynamic therapy and its effects in combination with electroporation: An in vitro and molecular dynamics study. Bioelectrochemistry, 2021, 140, 107806.	2.4	14
708	Open irreversible electroporation for isolated local recurrence of pancreatic ductal adenocarcinoma after primary surgery. Pancreatology, 2021, 21, 1349-1355.	0.5	2
709	In Vitro Experimental and Numerical Studies on the Preferential Ablation of Chemo-Resistant Tumor Cells Induced by High-Voltage Nanosecond Pulsed Electric Fields. IEEE Transactions on Biomedical Engineering, 2021, 68, 2400-2411.	2.5	13
710	Gene transfer by electroporation with high frequency bipolar pulses in vitro. Bioelectrochemistry, 2021, 140, 107803.	2.4	15
711	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
712	Germicidal efficacy of the pulsed magnetic field against pathogens and spoilage microorganisms in food processing: An overview. Food Control, 2022, 136, 108496.	2.8	20
713	Ablation Zone Involution of Liver Tumors Is Faster in Patients Treated with Irreversible Electroporation Than Microwave Ablation. Medicina (Lithuania), 2021, 57, 877.	0.8	4

#	Article	IF	CITATIONS
714	Machine Learning for H-FIRE Protocols: Tuning Parameters for High-Frequency Irreversible Electroporation by Machine Learning. IEEE Microwave Magazine, 2021, 22, 42-59.	0.7	8
715	Preconditioning with Near-Infrared Irradiation to Enhance the Irreversible Electroporation Efficiency in HeLa Cells. Applied Sciences (Switzerland), 2021, 11, 8504.	1.3	1
716	Picosecond Pulsed Electric Fields and Promise in Neurodegeneration Research. Bioelectricity, 2021, 3, 176-185.	0.6	4
717	Histotripsy Ablation Alters the Tumor Microenvironment and Promotes Immune System Activation in a Subcutaneous Model of Pancreatic Cancer. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 2987-3000.	1.7	31
718	Physiological and histopathological effects of electroporation pulse on stomach of rats. BMC Gastroenterology, 2021, 21, 351.	0.8	1
719	Immunomodulatory Effect of Irreversible Electroporation Alone and Its Cooperating With Immunotherapy in Pancreatic Cancer. Frontiers in Oncology, 2021, 11, 712042.	1.3	15
720	Editorial commentary: Pulsed field catheter ablation in atrial fibrillation: The promising future of an old technology. Trends in Cardiovascular Medicine, 2022, 32, 388-389.	2.3	1
721	A nanosecond pulsed electric field (nsPEF) can affect membrane permeabilization and cellular viability in a 3D spheroids tumor model. Bioelectrochemistry, 2021, 141, 107839.	2.4	9
722	Generation of Tumor-activated T cells Using Electroporation. Bioelectrochemistry, 2021, 142, 107886.	2.4	5
723	Determining tissue conductivity in tissue ablation by nanosecond pulsed electric fields. Bioelectrochemistry, 2022, 143, 107949.	2.4	2
724	OpenEP: an open-source simulator for electroporation-based tumor treatments. Scientific Reports, 2021, 11, 1423.	1.6	14
725	Can local ablative techniques replace surgery for locally advanced pancreatic cancer?. Journal of Gastrointestinal Oncology, 2021, 12, 2536-2546.	0.6	4
726	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
727	Overview of ablation techniques. , 2021, , 41-94.		0
729	Electroporation-Based Gene Therapy: Recent Evolution in the Mechanism Description and Technology Developments. Methods in Molecular Biology, 2014, 1121, 3-23.	0.4	33
730	Low-Energy DC Current Ablation in a Mouse Tumor Model. Methods in Molecular Biology, 2014, 1121, 257-265.	0.4	7
731	Cell Electroporation Mechanisms and Preclinical Foundation for Focal Therapy. , 2013, , 309-329.		1
732	Cryosurgery and Irreversible Electroporation: The State of the Art, Advantages, and Limitations. , 2016, , 1-16.		1

IF ARTICLE CITATIONS # Thermal Considerations with Tissue Electroporation., 2017, , 1-31. 733 2 Cryosurgery and Irreversible Electroporation: The State of the Art, Advantages, and Limitations., 2017, 734 , 1985-2000. Irreversible Electroporation Techniques in the Treatment of Locally Advanced Liver and Pancreatic 735 2 Cancer., 2017, , 2001-2015. Safety of Clinical Irreversible Electroporation., 2017, , 2017-2035. Optimum Conductivity of Gels for Electric Field Homogenization in Tissue Electroporation Therapies. 737 0.2 3 IFMBE Proceedings, 2007, , 619-622. Historical Review of Irreversible Electroporation in Medicine. Series in Biomedical Engineering, 2010, , 1-21. The Use of Irreversible Electroporation in Food Preservation. Series in Biomedical Engineering, 2010, , 739 0.5 21 273-312. Mechanism of Irreversible Electroporation in Cells: Insight from the Models. Series in Biomedical 9 Engineering, 2010, , 85-122. 741 Thermal Aspects of Irreversible Electroporation. Series in Biomedical Engineering, 2010, , 123-154. 0.5 8 742 Finite Element Modeling of in Vivo Electroporation. Series in Biomedical Engineering, 2010, , 183-202. Alternative Verfahren beim Nierenzellkarzinom., 2016, , 65-98. 743 1 Nonthermal Irreversible Electroporation as a Focal Ablation Treatment for Brain Cancer. Tumors of 745 0.1 the Central Nervous System, 2014, , 171-182. Electroporation Therapy., 2014, , 269-287. 746 3 Irreversible electroporation is a thermally mediated ablation modality for pulses on the order of one 747 2.4 microsecond. Bioelectrochemistry, 2020, 135, 107544. Impact of needle positioning on ablation success of irreversible electroporation: a unicentric 748 1.6 14 retrospective analysis. Scientific Reports, 2020, 10, 21902. Asymmetric Waveforms Decrease Lethal Thresholds in High Frequency Irreversible Electroporation 749 Therapies. Scientific Reports, 2017, 7, 40747. Tumor Ablation with Irreversible Electroporation. PLoS ONE, 2007, 2, e1135. 750 421 1.1 Non Thermal Irreversible Electroporation: Novel Technology for Vascular Smooth Muscle Cells 1.1 Ablation. PLoS ONE, 2009, 4, e4757.

#	Article	IF	CITATIONS
752	The Role of pH Fronts in Reversible Electroporation. PLoS ONE, 2011, 6, e17303.	1.1	58
753	Synergistic Effects of Nanosecond Pulsed Electric Fields Combined with Low Concentration of Gemcitabine on Human Oral Squamous Cell Carcinoma In Vitro. PLoS ONE, 2012, 7, e43213.	1.1	47
754	Irreversible Electroporation of Human Primary Uveal Melanoma in Enucleated Eyes. PLoS ONE, 2013, 8, e71789.	1.1	7
755	Dose-Dependent ATP Depletion and Cancer Cell Death following Calcium Electroporation, Relative Effect of Calcium Concentration and Electric Field Strength. PLoS ONE, 2015, 10, e0122973.	1.1	68
756	Effect of Blood Vessel Segmentation on the Outcome of Electroporation-Based Treatments of Liver Tumors. PLoS ONE, 2015, 10, e0125591.	1.1	23
757	Ablation of Myocardial Tissue With Nanosecond Pulsed Electric Fields. PLoS ONE, 2015, 10, e0144833.	1.1	38
758	Synergistic Combination of Electrolysis and Electroporation for Tissue Ablation. PLoS ONE, 2016, 11, e0148317.	1.1	32
759	The Influence of a Metal Stent on the Distribution of Thermal Energy during Irreversible Electroporation. PLoS ONE, 2016, 11, e0148457.	1.1	43
760	Effect of Twisted Fiber Anisotropy in Cardiac Tissue on Ablation with Pulsed Electric Fields. PLoS ONE, 2016, 11, e0152262.	1.1	20
761	Cell Electrosensitization Exists Only in Certain Electroporation Buffers. PLoS ONE, 2016, 11, e0159434.	1.1	43
762	Optimization of Irreversible Electroporation Protocols for In-vivo Myocardial Decellularization. PLoS ONE, 2016, 11, e0165475.	1.1	49
763	Time-Dependent Impact of Irreversible Electroporation on Pancreas, Liver, Blood Vessels and Nerves: A Systematic Review of Experimental Studies. PLoS ONE, 2016, 11, e0166987.	1.1	63
764	The Effects of Irreversible Electroporation on the Colon in a Porcine Model. PLoS ONE, 2016, 11, e0167275.	1.1	9
765	Irreversible electroporation ablation area enhanced by synergistic high- and low-voltage pulses. PLoS ONE, 2017, 12, e0173181.	1.1	19
766	A Novel Nonthermal Energy Source for Surgical Epicardial Atrial Ablation: Irreversible Electroporation. Heart Surgery Forum, 2007, 10, E162-E167.	0.2	134
767	Mechanisms of Nanosecond Pulsed Electric Field (NsPEF)-Induced Cell Death in Cells and Tumors. Journal of Nanomedicine Research, 2015, 2, .	1.8	7
768	Maximizing Local Access to Therapeutic Deliveries in Glioblastoma. Part III: Irreversible Electroporation and High-Frequency Irreversible Electroporation for the Eradication of Glioblastoma. , 0, , 373-393.		5
769	Maximizing Local Access to Therapeutic Deliveries in Glioblastoma. Part V: Clinically Relevant Model for Testing New Therapeutic Approaches. , 0, , 405-425.		5

#	Article	IF	CITATIONS
770	Thermodynamic profiling during irreversible electroporation in porcine liver and pancreas: a case study series. Journal of Clinical and Translational Research, 0, , .	0.3	7
771	Surgical intervention in renal cell carcinoma patients with lung and bronchus metastasis is associated with longer survival time: a population-based analysis. Annals of Translational Medicine, 2019, 7, 323-323.	0.7	11
772	Irreversible Electroporation for the Ablation of Renal Cell Carcinoma: A Prospective, Human, In Vivo Study Protocol (IDEAL Phase 2b). JMIR Research Protocols, 2017, 6, e21.	0.5	18
773	Radiotherapy Enhancement with Electroporation in Human Intestinal Colon Cancer HT-29 Cells. Asian Pacific Journal of Cancer Prevention, 2018, 19, 1259-1262.	0.5	8
774	Similar complication rates for irreversible electroporation and thermal ablation in patients with hepatocellular tumors. Radiology and Oncology, 2019, 53, 116-122.	0.6	26
775	Analysis of damage-associated molecular pattern molecules due to electroporation of cells in vitro. Radiology and Oncology, 2020, 54, 317-328.	0.6	42
776	The methodology for endoluminal irreversible electroporation in porcine models. Acta Veterinaria Brno, 2019, 88, 201-205.	0.2	4
778	Percutaneous ablation of pancreatic cancer. World Journal of Gastroenterology, 2016, 22, 9661.	1.4	42
779	Postoperative inflammation as a possible cause of portal vein thrombosis after irreversible electroporation for locally advanced pancreatic cancer. World Journal of Gastroenterology, 2017, 23, 6003.	1.4	3
780	Irreversible electroporation of locally advanced pancreatic neck/body adenocarcinoma. Journal of Gastrointestinal Oncology, 2015, 6, 329-35.	0.6	26
781	Current and future technology for minimally invasive ablation of renal cell carcinoma. Indian Journal of Urology, 2010, 26, 410.	0.2	17
782	Histological analysis of human pancreatic carcinoma following irreversible electroporation in a nude mouse model. World Journal of Gastrointestinal Oncology, 2018, 10, 476-486.	0.8	7
783	Locoregional treatment for hepatocellular carcinoma: The best is yet to come. World Journal of Radiology, 2015, 7, 306.	0.5	24
784	Irreversible Electroporation: A Novel Image-Guided Cancer Therapy. Gut and Liver, 2010, 4, S99.	1.4	139
785	Rat liver regeneration following ablation with irreversible electroporation. PeerJ, 2016, 4, e1571.	0.9	30
786	Stereotactically-navigated percutaneous Irreversible Electroporation (IRE) compared to conventional IRE: a prospective trial. PeerJ, 2016, 4, e2277.	0.9	26
787	Single exponential decay waveform; a synergistic combination of electroporation and electrolysis (E2) for tissue ablation. PeerJ, 2017, 5, e3190.	0.9	19
788	Toward a clinical real time tissue ablation technology: combining electroporation and electrolysis (E2). PeerJ, 2020, 8, e7985.	0.9	5

#	Article	IF	CITATIONS
789	A mathematical model of drug dynamics in an electroporated tissue. Mathematical Biosciences and Engineering, 2021, 18, 8641-8660.	1.0	5
790	Pulsed Electric Fields Induce Extracellular Matrix Remodeling through Matrix Metalloproteinases Activation and Decreased Collagen Production. Journal of Investigative Dermatology, 2022, 142, 1326-1337.e9.	0.3	2
791	Electric-driven membrane poration: A rationale for water role in the kinetics of pore formation. Bioelectrochemistry, 2022, 143, 107987.	2.4	9
792	Plate Electroporation: A Numerical Study of Factors Affecting Thermal Damage. , 2005, , .		0
793	Mathematical Models of Mass Transfer in Tissue for Molecular Medicine with Reversible Electroporation. , 2010, , 45-74.		0
794	Irreversible Electroporation (IRE) on Liver Tumor Ablation: A Summary of Preclinical Translational Research. , 2011, , 219-230.		0
795	TASER ® Conducted Electrical Weapons. , 2011, , 233-275.		0
796	Emerging Therapies for Hepatocellular Carcinoma. , 2012, , 263-290.		0
797	Interventional Oncology. , 2013, , 205-362.		0
798	Irreversible Electroporation in Liver Tumor. , 2013, , 515-522.		0
799	Percutaneous Interventional Radiology: The Lung. , 2013, , 535-558.		0
800	Focal Therapy for Prostate Cancer Using Irreversible Electroporation. , 2014, , 235-241.		0
802	Interventional Radiology in Oncology. , 2014, , 43-63.		0
804	Biomedical Applications of Electrochemistry, Use of Electric Fields in Cancer Therapy. , 2014, , 126-131.		2
805	Minimally Invasive Therapies for Pelvic Urological Cancer. , 2015, , 93-102.		0
806	Emerging Energies for Focal Ablation of Prostate Cancer. , 2015, , 191-198.		0
807	Safety of Clinical Irreversible Electroporation. , 2016, , 1-19.		0
808	Electrochemical lysis in the treatment of patients with prostate cancer. Onkologiya Zhurnal Imeni P A Gertsena, 2016, 5, 33.	0.0	2

#	Article	IF	CITATIONS
809	Combining Electrolysis and Electroporation for Tissue Ablation. , 2016, , 1-21.		0
810	Preclinical Studies on Irreversible Electroporation. , 2016, , 1-16.		0
812	New focal therapy options in the treatment of patients with prostate cancer. Onkologiya Zhurnal Imeni P A Gertsena, 2016, 5, 66.	0.0	0
814	Microwave ablation and irreversible electroporation. , 2017, , 1448-1458.e2.		0
815	Emerging New Treatment Modalities: Irreversible Electroporation. , 2017, , 453-468.		0
816	Tissue Ablation by Irreversible Electroporation. , 2017, , 1-15.		0
817	Treatment Planning for Electrochemotherapy and Irreversible Electroporation of Deep-Seated Tumors. , 2017, , 1-17.		0
818	Combining Electrolysis and Electroporation for Tissue Ablation. , 2017, , 1733-1753.		1
819	Irreversible Electroporation Techniques in the Treatment of Locally Advanced Liver and Pancreatic Cancer. , 2017, , 1-16.		0
820	Effects of dielectrophoresis on thrombogenesis in human whole blood. Electrophoresis, 2017, 38, 1755-1763.	1.3	2
821	Thermal Considerations with Tissue Electroporation. , 2018, , 1-31.		1
822	Intravascular Contrast Agents. , 2018, , 39-89.		0
824	Role of Interventional Radiology in Management of Gastrointestinal Cancers and Neuroendocrine Tumors. , 2019, , 551-572.		0
825	Precision Locoregional Therapies for Hepatocellular Carcinoma: Percutaneous Ablation and Radiotherapy. Molecular and Translational Medicine, 2019, , 195-224.	0.4	3
826	The linfluence TENS H Current Over Proliferation of Cancer Cells Depending on the Intensity in in vitro Assay. Acta Balneologica, 2019, 61, 213-216.	0.1	0
827	Electroacoustic tomography (EAT): linear scanning with a single element transducer. , 2019, , .		0
828	Electroacoustic tomography system with nanosecond electric pulse excitation source. , 2019, , .		0
829	Ablative Techniques for CRLM: Alone or in Association. , 2020, , 487-506.		0

#	Article	IF	Citations
830	Gastrointestinal Interventions: Then and Now. Digestive Disease Interventions, 2020, 04, 401-408.	0.3	0
831	Percutaneous Ablation of Breast Masses. , 2020, , 435-454.		0
832	Physics and Physiology of Thermal Ablations. , 2020, , 1-13.		1
833	A Short Review of Membrane Models for Cells Electroporation. IFMBE Proceedings, 2020, , 67-74.	0.2	0
835	Translational Approach for Percutaneous Interventions for the Treatment of Cardiac Arrhythmias. International Journal of Cardiovascular Sciences, 2020, 33, 550-564.	0.0	0
836	Translation of Cryobiological Techniques to Socially Economically Deprived Populations—Part 2: Cryosurgery. Journal of Medical Devices, Transactions of the ASME, 2020, 14, .	0.4	0
840	Analysis on reversible/irreversible electroporation region in lung adenocarcinoma cell model in vitro with electric pulses delivered by needle electrodes. Physics in Medicine and Biology, 2020, 65, 225001.	1.6	8
841	Numerical Modeling of Electroporation Process Using Endocardial Catheter. IFMBE Proceedings, 2021, , 896-904.	0.2	0
842	Severe duodenal thickening post image guided Irreversible Electroporation of Locally Advanced Pancreatic Cancer mimicking duodenal infarction: A case report. Radiology Case Reports, 2020, 15, 1769-1772.	0.2	1
844	Regional hepatic therapies: an important component in the management of colorectal cancer liver metastases. Hepatobiliary Surgery and Nutrition, 2013, 2, 97-107.	0.7	6
845	Alternative to surgery in early stage NSCLC-interventional radiologic approaches. Translational Lung Cancer Research, 2013, 2, 340-53.	1.3	2
846	Evaluation of Soft Tissue Sarcoma Tumors Electrical Conductivity Anisotropy Using Diffusion Tensor Imaging for Numerical Modeling on Electroporation. Journal of Biomedical Physics and Engineering, 2016, 6, 71-80.	0.5	1
848	Preclinical and clinical evaluation of the liver tumor irreversible electroporation by magnetic resonance imaging. American Journal of Translational Research (discontinued), 2017, 9, 580-590.	0.0	6
849	Irreversible electroporation of stage 3 locally advanced pancreatic cancer: optimal technique and outcomes. Journal of Visualized Surgery, 2015, 1, 4.	0.2	7
850	Irreversible Electroporation for Prostate Cancer as Salvage Treatment Following Prior Radiation and Cryotherapy. Reviews in Urology, 2017, 19, 268-272.	0.9	3
851	High-voltage pulsed electric field plus photodynamic therapy kills breast cancer cells by triggering apoptosis. American Journal of Translational Research (discontinued), 2018, 10, 334-351.	0.0	11
852	Diffusion MRI biomarkers predict the outcome of irreversible electroporation in a pancreatic tumor mouse model. American Journal of Cancer Research, 2018, 8, 1615-1623.	1.4	6
853	Thermodynamic profiling during irreversible electroporation in porcine liver and pancreas: a case study series. Journal of Clinical and Translational Research, 2020, 5, 109-132.	0.3	3

#	Article	IF	Citations
855	Irreversible Electroporation (IRE) for Prostate Cancer. , 2021, , 241-247.		0
857	Safety of Irreversible Electroporation Ablation of the Pancreas. Pancreas, 2021, 50, 1281-1286.	0.5	8
858	Local Treatments in the Unresectable Patient with Colorectal Cancer Metastasis: A Review from the Point of View of the Medical Oncologist. Cancers, 2021, 13, 5938.	1.7	11
859	Establishing Irreversible Electroporation Electric Field Potential Threshold in A Suspension In Vitro Model for Cardiac and Neuronal Cells. Journal of Clinical Medicine, 2021, 10, 5443.	1.0	19
860	A Multicenter Single-Arm Objective Performance Criteria Trial to Determine the Efficacy and Safety of High-Frequency Irreversible Electroporation as Primary Treatment for Localized Prostate Cancer: A Study Protocol. Frontiers in Oncology, 2021, 11, 760003.	1.3	2
861	A fundamental theoretical study on the different effect of electroporation on tumor blood vessels and normal blood vessels. Bioelectrochemistry, 2022, 144, 108010.	2.4	5
862	Electrodes and Electric Field Distribution in Clinical Practice. , 2021, , 21-59.		2
863	Validation of a Multipolar Pulsed-Field Ablation Catheter for Endpoint Assessment in Pulmonary Vein Isolation Procedures. SSRN Electronic Journal, 0, , .	0.4	0
864	Characterization of dispersion and anisotropic-conductivity in tissue model during electroporation pulses. Bioelectrochemistry, 2022, 144, 108029.	2.4	7
865	Effects of Time Delay Between Unipolar Pulses in High Frequency Nano-Electrochemotherapy. IEEE Transactions on Biomedical Engineering, 2022, 69, 1726-1732.	2.5	12
866	Irreversible Electroporation Ablation for Atrial Fibrillation. Cardiology Discovery, 2022, Publish Ahead of Print, .	0.6	0
867	A Comparative Modeling Study of Thermal Mitigation Strategies in Irreversible Electroporation Treatments. Journal of Heat Transfer, 2022, 144, .	1.2	7
868	Vesicular nanocarrier based stimuli-responsive drug delivery systems. , 2022, , 61-86.		1
870	Employing Novel Porcine Models of Subcutaneous Pancreatic Cancer to Evaluate Oncological Therapies. Methods in Molecular Biology, 2022, 2394, 883-895.	0.4	5
871	Irreversible Electroporation: An Emerging Immunomodulatory Therapy on Solid Tumors. Frontiers in Immunology, 2021, 12, 811726.	2.2	24
872	Experimental and Numerical Investigation of Parameters Affecting High-Frequency Irreversible Electroporation for Prostate Cancer Ablation. Journal of Biomechanical Engineering, 2022, 144, .	0.6	8
873	Cytotoxicity of a Cell Culture Medium Treated with a High-Voltage Pulse Using Stainless Steel Electrodes and the Role of Iron Ions. Membranes, 2022, 12, 184.	1.4	5
874	Electromagnetic bioeffects: a multiscale molecular simulation perspective. Physical Chemistry Chemical Physics, 2022, 24, 6327-6348.	1.3	7

#	Article	IF	CITATIONS
875	Validation of a multipolar pulsed-field ablation catheter for endpoint assessment in pulmonary vein isolation procedures. Europace, 2022, 24, 1248-1255.	0.7	16
876	Effects of Ultra-Short Pulsed Electric Field Exposure on Glioblastoma Cells. International Journal of Molecular Sciences, 2022, 23, 3001.	1.8	7
877	Focal prostate cancer therapy in the era of multiparametric MRI: a review of options and outcomes. Prostate Cancer and Prostatic Diseases, 2023, 26, 218-227.	2.0	5
878	Characterization of Miniature Probes for Cryosurgery, Thermal Ablation, and Irreversible Electroporation on Small Animals. Advanced Therapeutics, 2022, 5, .	1.6	3
879	Irreversible electroporation versus radiofrequency ablation for malignant hepatic tumor: A prospective single-center double-arm trial. Journal of Interventional Medicine, 2022, , .	0.2	0
880	The Effect of Discharge Mode on the Distribution of Myocardial Pulsed Electric Field—A Simulation Study for Pulsed Field Ablation of Atrial Fibrillation. Journal of Cardiovascular Development and Disease, 2022, 9, 95.	0.8	5
881	Preclinical Study of Biphasic Asymmetric Pulsed Field Ablation. Frontiers in Cardiovascular Medicine, 2022, 9, 859480.	1.1	3
882	PulznÃ-pole - elektroporace: novÃ; nadÄ›je na zvýÅ;enÃ-efektivity a bezpeÄnosti katetrizaÄnÃch ablacÃ-nejenoi fibrilace sÃnÃ?. Intervencni A Akutni Kardiologie, 2021, 20, 178-180.	ⁿ o.0	0
883	Non-thermal Electroporation Ablation of Epileptogenic Zones Stops Seizures in Mice While Providing Reduced Vascular Damage and Accelerated Tissue Recovery. Frontiers in Behavioral Neuroscience, 2021, 15, 774999.	1.0	4
884	Multimodal therapy with or without irreversible electroporation for unresectable locally advanced pancreatic adenocarcinoma: a systematic review and meta-analysis. Hpb, 2021, , .	0.1	6
885	Laser Machined Fiber-Based Microprobe: Application in Microscale Electroporation. Advanced Fiber Materials, 2022, 4, 859-872.	7.9	8
886	Electroporation and Electrochemotherapy in Gynecological and Breast Cancer Treatment. Molecules, 2022, 27, 2476.	1.7	6
887	Investigating the effect of electrode orientation on irreversible electroporation with experiment and simulation. International Journal of Computer Assisted Radiology and Surgery, 2022, 17, 1399-1407.	1.7	1
892	Effective proliferation control of MCF7 breast cancer using microsecond duration electrical pulse. Journal of Cancer Research and Therapeutics, 2023, 19, 1725-1730.	0.3	0
893	Alternatives to whole gland treatment for localized prostate cancer: a review of novel focal therapies. Current Opinion in Urology, 2022, 32, 239-247.	0.9	1
894	In vivo porcine characterization of atrial lesion safety and efficacy utilizing a circular pulsedâ€field ablation catheter including assessment of collateral damage to adjacent tissue in supratherapeutic ablation applications. Journal of Cardiovascular Electrophysiology, 2022, 33, 1480-1488.	0.8	10
895	Combination of Metalâ€Phenolic Networkâ€Based Immunoactive Nanoparticles and Bipolar Irreversible Electroporation for Effective Cancer Immunotherapy. Small, 2022, 18, e2200316.	5.2	20
896	ELECTROCHEMOTHERAPY IN THE TREATMENT OF UNRESECTABLE PANCREATIC CANCER. Modern Medical Technologies, 2022, , 40-45.	0.1	0

#	Article	IF	CITATIONS
897	Nanosecond Pulsed Electric Field (nsPEF): Opening the Biotechnological Pandora's Box. International Journal of Molecular Sciences, 2022, 23, 6158.	1.8	17
898	Pulsed Field Ablation: a Novel Therapeutic Tool for Catheter-Based Treatment of Atrial Fibrillation. Current Cardiology Reports, 2022, 24, 793-799.	1.3	4
899	GM1 asymmetry in the membrane stabilizes pores. Biophysical Journal, 2022, 121, 3295-3302.	0.2	9
900	Oncology and mechanics: Landmark studies and promising clinical applications. Advances in Applied Mechanics, 2022, , 513-571.	1.4	2
901	2022 ABME Paper Awards. Annals of Biomedical Engineering, 0, , .	1.3	0
902	Time Course of Irreversible Electroporation Lesion Development Through Short- and Long-Term Follow-Up in Pulsed-Field Ablation–Treated Hearts. Circulation: Arrhythmia and Electrophysiology, 2022, 15, .	2.1	16
903	Integrated, Transparent Silicon Carbide Electronics and Sensors for Radio Frequency Biomedical Therapy. ACS Nano, 2022, 16, 10890-10903.	7.3	17
904	Interventional oncology of liver tumors: how it all started and where are we now. British Journal of Radiology, 2022, 95, .	1.0	1
905	The Enlargement of Ablation Area by Electrolytic Irreversible Electroporation (E-IRE) Using Pulsed Field with Bias DC Field. Annals of Biomedical Engineering, 0, , .	1.3	0
906	Numerical analysis and animal study of noninvasive handheld electroporation delivery device for skin superficial lesion treatment. International Journal of Hyperthermia, 2022, 39, 1017-1025.	1.1	0
908	Bubble Formation in Pulsed Electric Field Technology May Pose Limitations. Micromachines, 2022, 13, 1234.	1.4	1
909	New progress in tumor treatment based on nanoparticles combined with irreversible electroporation. Nano Select, 2022, 3, 1382-1394.	1.9	0
910	Safety and feasibility of irreversible electroporation for the pancreatic head in a porcine model. World Journal of Gastrointestinal Oncology, 2022, 14, 1499-1509.	0.8	0
911	High-Intensity Pulsed Electromagnetic Field-Mediated Gene Electrotransfection In Vitro. International Journal of Molecular Sciences, 2022, 23, 9543.	1.8	3
912	Modern Management of Localized Renal Cell Carcinoma— Is Ablation Part of the Equation?. Journal of Kidney Cancer and VHL, 2022, 9, 5-23.	0.2	4
913	Induction of Bystander and Abscopal Effects after Electroporation-Based Treatments. Cancers, 2022, 14, 3770.	1.7	2
914	Changes in hydration of liposome membranes exposed to nanosecond electric pulses detected by wide-field Coherent anti-Stokes Raman microspectroscopy. Bioelectrochemistry, 2022, 147, 108218.	2.4	4
915	An Adjustable High-Voltage Exponential-Like Decay Pulse with Bio-Load Independence for Tissue Ablation Using Combining Electroporation and Electrolysis. SSRN Electronic Journal, 0, , .	0.4	0

#	Article	IF	CITATIONS
916	All-atom molecular dynamics simulations of the combined effects of different phospholipids and cholesterol content on electroporation. RSC Advances, 2022, 12, 24491-24500.	1.7	0
917	Extended interpulse delays improve therapeutic efficacy of microsecond-duration pulsed electric fields. , 2022, , .		0
918	Therapeutic Bronchoscopy for Lung Nodules: Where Are We Now?. Seminars in Respiratory and Critical Care Medicine, 2022, 43, 480-491.	0.8	0
919	Real-Time Temperature Rise Estimation during Irreversible Electroporation Treatment through State-Space Modeling. Bioengineering, 2022, 9, 499.	1.6	4
920	Pulsed-field ablation-based pulmonary vein isolation: acute safety, efficacy and short-term follow-up in a multi-center real world scenario. Clinical Research in Cardiology, 2023, 112, 795-806.	1.5	21
921	Modeling coupled single cell electroporation and thermal effects from nanosecond electric pulse trains. Journal of Applied Physics, 2022, 132, .	1.1	10
922	A Solid-State Pulse Adder for High-Voltage Short Pulses and Low-Voltage Long Pulses. IEEE Transactions on Plasma Science, 2022, 50, 3107-3112.	0.6	1
923	A computational comparison of radiofrequency and pulsed field ablation in terms of lesion morphology in the cardiac chamber. Scientific Reports, 2022, 12, .	1.6	11
924	Irreversible Electroporation Balloon Therapy for Palliative Treatment of Obstructive Urethral Transitional Cell Carcinoma in Dogs. Journal of the American Animal Hospital Association, 2022, 58, 231-239.	0.5	2
925	Substantially Improved Electrofusion Efficiency of Hybridoma Cells: Based on the Combination of Nanosecond and Microsecond Pulses. Bioengineering, 2022, 9, 450.	1.6	1
926	Assessing membrane material properties from the response of giant unilamellar vesicles to electric fields. Advances in Physics: X, 2023, 8, .	1.5	1
927	MR Current Density and MREIT Data Acquisition. Advances in Experimental Medicine and Biology, 2022, , 111-134.	0.8	0
928	Palliative Treatment of Esophageal Cancer Using Calcium Electroporation. Cancers, 2022, 14, 5283.	1.7	6
929	Reversible and Irreversible Effects of Electroporation on Contractility and Calcium Homeostasis in Isolated Cardiac Ventricular Myocytes. Circulation: Arrhythmia and Electrophysiology, 2022, 15, .	2.1	7
931	Human cardiomyocytes are more susceptible to irreversible electroporation by pulsed electric field than human esophageal cells. Physiological Reports, 2022, 10, .	0.7	9
932	Pulse width and intensity effects of pulsed electric fields on cancerous and normal skin cells. Scientific Reports, 2022, 12, .	1.6	5
933	Optimization of Transpedicular Electrode Insertion for Electroporation-Based Treatments of Vertebral Tumors. Cancers, 2022, 14, 5412.	1.7	4
934	Initial experience with pulsed field ablation for atrial fibrillation. Frontiers in Cardiovascular Medicine, 0, 9, .	1.1	11

#	Article	IF	CITATIONS
935	Liver tissue remodeling following ablation with irreversible electroporation in a porcine model. Frontiers in Veterinary Science, 0, 9, .	0.9	0
936	Advances of Electroporation-Related Therapies and the Synergy with Immunotherapy in Cancer Treatment. Vaccines, 2022, 10, 1942.	2.1	7
937	Development of a Novel All-solid-state Synergetic Pulse Generator for Biomedical Effects. , 2022, , .		0
938	Effects of pulsed field ablation on autonomic nervous system in paroxysmal atrial fibrillation: A pilot study. Heart Rhythm, 2023, 20, 329-338.	0.3	14
939	CT-Guided Irreversible Electroporation of Unresectable Pelvic Solitary Fibrous Tumor. CardioVascular and Interventional Radiology, 0, , .	0.9	0
940	Irreversible electroporation: present and future in the treatment of hepatocellular carcinoma. , 2022, 45, .		0
941	Emerging trends and hot spots on electrical impedance tomography extrapulmonary applications. Heliyon, 2022, 8, e12458.	1.4	1
943	Invasive and non-invasive electrodes for successful drug and gene delivery in electroporation-based treatments. Frontiers in Bioengineering and Biotechnology, 0, 10, .	2.0	4
944	Human in vitro assay for irreversible electroporation cardiac ablation. Frontiers in Physiology, 0, 13, .	1.3	4
945	PIRET—A Platform for Treatment Planning in Electroporation-Based Therapies. IEEE Transactions on Biomedical Engineering, 2023, 70, 1902-1910.	2.5	4
946	The Influence of Irreversible Electroporation Parameters on the Size of the Ablation Zone and Thermal Effects: A Systematic Review. Technology in Cancer Research and Treatment, 2023, 22, 153303382211250.	0.8	1
947	Treatment of pancreatic cancer with irreversible electroporation and intratumoral CD40 antibody stimulates systemic immune responses that inhibit liver metastasis in an orthotopic model. , 2023, 11, e006133.		5
948	Early Single-Center Experience With Irreversible Electroporation for Stage 2, 3, and 4 Pancreatic Adenocarcinomas. Pancreas, 2022, 51, 976-984.	0.5	0
949	Multiphysics Analysis of Reversible Electroporation and Electrodeformation of Cervical Cells Using a Nanosecond Pulse Generator. IEEE Transactions on Plasma Science, 2023, 51, 534-543.	0.6	4
950	Microwave ablation trocar for ablating cancerous tumors: a numerical analysis. Medical and Biological Engineering and Computing, 2023, 61, 1113-1131.	1.6	3
951	Pancreatic islets implanted in an irreversible electroporation generated extracellular matrix in the liver. Radiology and Oncology, 2023, 57, 51-58.	0.6	2
952	A Single-Cell Electroporation Model for Quantitatively Estimating the Pore Area Ratio by High-Frequency Irreversible Electroporation. Applied Sciences (Switzerland), 2023, 13, 1808.	1.3	2
953	Plant-based model for the visual evaluation of electroporated area after irreversible electroporation and its comparison to in-vivo animal data. Science Progress, 2023, 106, 003685042311562.	1.0	3

# 954	ARTICLE The potential of pulsed magnetic field to achieve microbial inactivation and enzymatic stability in foods: A concise critical review. Future Foods, 2023, 7, 100230.	lF 2.4	CITATIONS 2
955	Engineering high post-electroporation viabilities and transfection efficiencies for elongated cells on suspended nanofiber networks. Bioelectrochemistry, 2023, 152, 108415.	2.4	2
956	Pulsed Electric Field Ablation of Esophageal Malignancies and Mitigating Damage to Smooth Muscle: An In Vitro Study. International Journal of Molecular Sciences, 2023, 24, 2854.	1.8	1
957	Irreversible Electroporation-Assisted Resection for Locally Advanced Pancreas Cancer. Surgical Innovation, 0, , 155335062311574.	0.4	1
958	Enhancing electroporation-induced liposomal drug release in suspension and solid phases. International Journal of Pharmaceutics, 2023, 635, 122744.	2.6	0
959	Irreversible Electroporation in Pancreatic Cancer—An Evolving Experimental and Clinical Method. International Journal of Molecular Sciences, 2023, 24, 4381.	1.8	4
960	Introduction to nanoengineering and nanotechnology for biomedical applications. , 2023, , 1-34.		0
961	Recent Advancements in Electroporation Technologies: From Bench to Clinic. Annual Review of Biomedical Engineering, 2023, 25, 77-100.	5.7	11
962	Salvage irreversible electroporation for radio-recurrent prostate cancer. Nature Reviews Urology, 2023, 20, 517-518.	1.9	1
963	Design of Electrical Characterization Method for Electroporation-Treated Biological Tissues. Designs, 2023, 7, 35.	1.3	1
964	Learning Needle Placement in Soft Tissue With Robot-assisted Navigation. In Vivo, 2023, 37, 702-708.	0.6	0
965	A Preliminary Study of Cell Death Dynamics with PFA Using an In Vitro 3D Cardiac Cell Model. , 2022, , .		0
966	Interventional Radiology in the Treatment of Pancreatic Adenocarcinoma: Present and Future Perspectives. Life, 2023, 13, 835.	1.1	1
967	Pearls and Pitfalls of Pulsed Field Ablation. Korean Circulation Journal, 2023, 53, 273.	0.7	9
968	An Overview of Subnanosecond Pulsed Electric Field Biological Effects: Toward Contactless Technologies for Cancer Treatment. Bioelectricity, 2023, 5, 76-98.	0.6	1
969	Study on the process of cardiomyocyte apoptosis after pulsed field ablation. Frontiers in Cardiovascular Medicine, 0, 10, .	1.1	2
970	Pushing the Limits with Nanoknife®: A Promising New Technology in Localised Prostate Cancer Management. European Medical Journal Allergy & Immunology, 0, , 90-102.	0.0	0
972	Advances in the Application of Pulsed Field Ablation for Arrhythmia Treatment. Cardiovascular Innovations and Applications, 2023, 8, .	0.1	0

#	Article	IF	CITATIONS
986	US-guided ablation of tumors $\hat{a} \in$ " where is it used and how did we get there. , 2023, 1, .		0
987	Functional outcomes and safety of focal therapy for prostate cancer: a systematic review on results and patient-reported outcome measures (PROMs). Prostate Cancer and Prostatic Diseases, 0, , .	2.0	1
990	Oncological results and cancer control definition in focal therapyÂfor Prostate Cancer: a systematic review. Prostate Cancer and Prostatic Diseases, 0, , .	2.0	1
1000	Computational Approaches. Studies in Mechanobiology, Tissue Engineering and Biomaterials, 2023, , 179-282.	0.7	0
1008	Present and Future of Metal Nanoparticles in Tumor Ablation Therapy. Nanoscale, 0, , .	2.8	0
1019	Simulation and Intelligent Data Mining of Molecular Transport Through Multiple Nanopores in an Electroporated Giant Unilamellar Vesicle. , 2023, , .		1