

Rafael Davalos

List of Publications by Year in descending order

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182
papers

9,667
citations

36303

51
h-index

42399

92
g-index

186
all docs

186
docs citations

186
times ranked

4757
citing authors

#	ARTICLE	IF	CITATIONS
1	Modeling of a single bipolar electrode with tines for irreversible electroporation delivery. <i>Computers in Biology and Medicine</i> , 2022, 142, 104870.	7.0	4
2	Comparison of analysis methods for determination of dynamic tissue conductivity during microseconds-long pulsed electric fields. <i>Biomedical Signal Processing and Control</i> , 2022, 72, 103305.	5.7	3
3	High-frequency irreversible electroporation brain tumor ablation: exploring the dynamics of cell death and recovery. <i>Bioelectrochemistry</i> , 2022, 144, 108001.	4.6	5
4	A Comparative Modeling Study of Thermal Mitigation Strategies in Irreversible Electroporation Treatments. <i>Journal of Heat Transfer</i> , 2022, 144, .	2.1	7
5	Experimental and Numerical Investigation of Parameters Affecting High-Frequency Irreversible Electroporation for Prostate Cancer Ablation. <i>Journal of Biomechanical Engineering</i> , 2022, 144, .	1.3	8
6	Exploration of Novel Pathways Underlying Irreversible Electroporation Induced Anti-Tumor Immunity in Pancreatic Cancer. <i>Frontiers in Oncology</i> , 2022, 12, 853779.	2.8	6
7	Laser Machined Fiber-Based Microprobe: Application in Microscale Electroporation. <i>Advanced Fiber Materials</i> , 2022, 4, 859-872.	16.1	8
8	High-Frequency Irreversible Electroporation (H-FIRE) Induced Bloodâ€“Brain Barrier Disruption Is Mediated by Cytoskeletal Remodeling and Changes in Tight Junction Protein Regulation. <i>Biomedicines</i> , 2022, 10, 1384.	3.2	8
9	Multi-Tissue Analysis on the Impact of Electroporation on Electrical and Thermal Properties. <i>IEEE Transactions on Biomedical Engineering</i> , 2021, 68, 771-782.	4.2	18
10	Single Cell Forces after Electroporation. <i>ACS Nano</i> , 2021, 15, 2554-2568.	14.6	20
11	Frequency-specific, valveless flow control in insect-mimetic microfluidic devices. <i>Bioinspiration and Biomimetics</i> , 2021, 16, 036004.	2.9	4
12	A constriction channel analysis of astrocytoma stiffness and disease progression. <i>Biomicrofluidics</i> , 2021, 15, 024103.	2.4	11
13	A novel ultralow conductivity electromanipulation buffer improves cell viability and enhances dielectrophoretic consistency. <i>Electrophoresis</i> , 2021, 42, 1366-1377.	2.4	9
14	Establishing an immunocompromised porcine model of human cancer for novel therapy development with pancreatic adenocarcinoma and irreversible electroporation. <i>Scientific Reports</i> , 2021, 11, 7584.	3.3	16
15	Rapid Impedance Spectroscopy for Monitoring Tissue Impedance, Temperature, and Treatment Outcome During Electroporation-Based Therapies. <i>IEEE Transactions on Biomedical Engineering</i> , 2021, 68, 1536-1546.	4.2	18
16	A Theoretical Argument for Extended Interpulse Delays in Therapeutic High-Frequency Irreversible Electroporation Treatments. <i>IEEE Transactions on Biomedical Engineering</i> , 2021, 68, 1999-2010.	4.2	23
17	In Vitro Experimental and Numerical Studies on the Preferential Ablation of Chemo-Resistant Tumor Cells Induced by High-Voltage Nanosecond Pulsed Electric Fields. <i>IEEE Transactions on Biomedical Engineering</i> , 2021, 68, 2400-2411.	4.2	13
18	Electrotaxis-on-Chip to Quantify Neutrophil Migration Towards Electrochemical Gradients. <i>Frontiers in Immunology</i> , 2021, 12, 674727.	4.8	10

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19	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.	3.0	31
20	Differential effects of nanosecond pulsed electric fields on cells representing progressive ovarian cancer. Bioelectrochemistry, 2021, 142, 107942.	4.6	12
21	Generation of Tumor-activated T cells Using Electroporation. Bioelectrochemistry, 2021, 142, 107886.	4.6	5
22	A review: Dielectrophoresis for characterizing and separating similar cell subpopulations based on bioelectric property changes due to disease progression and therapy assessment. Electrophoresis, 2021, 42, 2423-2444.	2.4	9
23	A Multiplexed Microfluidic Device to Measure Blood-Brain Barrier Disruption by Pulsed Electric Fields. , 2021, 2021, 1222-1225.		1
24	An Investigation for Large Volume, Focal Blood-Brain Barrier Disruption with High-Frequency Pulsed Electric Fields. Pharmaceuticals, 2021, 14, 1333.	3.8	8
25	Understanding the role of calcium-mediated cell death in high-frequency irreversible electroporation. Bioelectrochemistry, 2020, 131, 107369.	4.6	36
26	On-Chip Impedance for Quantifying Parasitic Voltages During AC Electrokinetic Trapping. IEEE Transactions on Biomedical Engineering, 2020, 67, 1664-1671.	4.2	8
27	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.	4.2	10
28	Starting a Fire Without Flame: The Induction of Cell Death and Inflammation in Electroporation-Based Tumor Ablation Strategies. Frontiers in Oncology, 2020, 10, 1235.	2.8	52
29	Modeling iontophoretic drug delivery in a microfluidic device. Lab on A Chip, 2020, 20, 3310-3321.	6.0	12
30	EView: An electric field visualization web platform for electroporation-based therapies. Computer Methods and Programs in Biomedicine, 2020, 197, 105682.	4.7	10
31	Development of an endothermic electrode for electroporation-based therapies: A simulation study. Applied Physics Letters, 2020, 117, .	3.3	10
32	Cytoskeletal Disruption after Electroporation and Its Significance to Pulsed Electric Field Therapies. Cancers, 2020, 12, 1132.	3.7	46
33	Self-aligned microfluidic contactless dielectrophoresis device fabricated by single-layer imprinting on cyclic olefin copolymer. Analytical and Bioanalytical Chemistry, 2020, 412, 3881-3889.	3.7	9
34	Development of a Multi-Pulse Conductivity Model for Liver Tissue Treated With Pulsed Electric Fields. Frontiers in Bioengineering and Biotechnology, 2020, 8, 396.	4.1	16
35	Patient Derived Xenografts Expand Human Primary Pancreatic Tumor Tissue Availability for ex vivo Irreversible Electroporation Testing. Frontiers in Oncology, 2020, 10, 843.	2.8	15
36	Dynamics of Cell Death After Conventional IRE and H-FIRE Treatments. Annals of Biomedical Engineering, 2020, 48, 1451-1462.	2.5	54

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37	High-Voltage Electrical Pulses in Oncology: Irreversible Electroporation, Electrochemotherapy, Gene Electrotransfer, Electrofusion, and Electroimmunotherapy. <i>Radiology</i> , 2020, 295, 254-272.	7.3	208
38	High-Frequency Irreversible Electroporation for Treatment of Primary Liver Cancer: A Proof-of-Principle Study in Canine Hepatocellular Carcinoma. <i>Journal of Vascular and Interventional Radiology</i> , 2020, 31, 482-491.e4.	0.5	40
39	Treatment of Infiltrative Superficial Tumors in Awake Standing Horses Using Novel High-Frequency Pulsed Electrical Fields. <i>Frontiers in Veterinary Science</i> , 2019, 6, 265.	2.2	8
40	Characterization of sequentially-staged cancer cells using electrorotation. <i>PLoS ONE</i> , 2019, 14, e0222289.	2.5	24
41	Cycled pulsing to mitigate thermal damage for multi-electrode irreversible electroporation therapy. <i>International Journal of Hyperthermia</i> , 2019, 36, 952-962.	2.5	28
42	Experimental High-Frequency Irreversible Electroporation Using a Single-Needle Delivery Approach for Nonthermal Pancreatic Ablation In Vivo. <i>Journal of Vascular and Interventional Radiology</i> , 2019, 30, 854-862.e7.	0.5	44
43	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. <i>Therapeutic Advances in Urology</i> , 2019, 11, 175628721985230.	2.0	5
44	High-frequency irreversible electroporation is an effective tumor ablation strategy that induces immunologic cell death and promotes systemic anti-tumor immunity. <i>EBioMedicine</i> , 2019, 44, 112-125.	6.1	116
45	The feasibility of using dielectrophoresis for isolation of glioblastoma subpopulations with increased stemness. <i>Electrophoresis</i> , 2019, 40, 2592-2600.	2.4	14
46	Special Collection on Electroporation-Based Therapies: A Selection of Papers From the Second World Congress on Electroporation. <i>Technology in Cancer Research and Treatment</i> , 2019, 18, 153303381985296.	1.9	1
47	Separation of Macrophages and Fibroblasts Using Contactless Dielectrophoresis and a Novel ImageJ Macro. <i>Bioelectricity</i> , 2019, 1, 49-55.	1.1	8
48	Irreversible Electroporation: Background, Theory, and Review of Recent Developments in Clinical Oncology. <i>Bioelectricity</i> , 2019, 1, 214-234.	1.1	101
49	Real-time prediction of patient immune cell modulation during irreversible electroporation therapy. <i>Scientific Reports</i> , 2019, 9, 17739.	3.3	25
50	Temporal Characterization of Blood-Brain Barrier Disruption with High-Frequency Electroporation. <i>Cancers</i> , 2019, 11, 1850.	3.7	34
51	Characterization of Ablation Thresholds for 3D-Cultured Patient-Derived Glioma Stem Cells in Response to High-Frequency Irreversible Electroporation. <i>Research</i> , 2019, 2019, 8081315.	5.7	15
52	Development of an In Vitro 3D Brain Tissue Model Mimicking In Vivo-Like Pro-inflammatory and Pro-oxidative Responses. <i>Annals of Biomedical Engineering</i> , 2018, 46, 877-887.	2.5	12
53	Characterization of Nonlinearity and Dispersion in Tissue Impedance During High-Frequency Electroporation. <i>IEEE Transactions on Biomedical Engineering</i> , 2018, 65, 2190-2201.	4.2	30
54	Characterization of Conductivity Changes During High-Frequency Irreversible Electroporation for Treatment Planning. <i>IEEE Transactions on Biomedical Engineering</i> , 2018, 65, 1810-1819.	4.2	53

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55	History of Electroporation. , 2018, , 13-37.		7
56	Multi-scale Biophysical Principles in Clinical Irreversible Electroporation. , 2018, , 41-66.		3
57	Electrical Characterization of Human Biological Tissue for Irreversible Electroporation Treatments. , 2018, 2018, 4170-4173.		12
58	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.	1.9	23
59	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.	1.9	12
60	Ablation outcome of irreversible electroporation on potato monitored by impedance spectrum under multi-electrode system. BioMedical Engineering OnLine, 2018, 17, 126.	2.7	22
61	Effects of internal electrode cooling on irreversible electroporation using a perfused organ model. International Journal of Hyperthermia, 2018, 35, 44-55.	2.5	38
62	High-Frequency Irreversible Electroporation for Intracranial Meningioma: A Feasibility Study in a Spontaneous Canine Tumor Model. Technology in Cancer Research and Treatment, 2018, 17, 153303381878528.	1.9	58
63	Fluid shear stress impacts ovarian cancer cell viability, subcellular organization, and promotes genomic instability. PLoS ONE, 2018, 13, e0194170.	2.5	57
64	Thermal Considerations with Tissue Electroporation. , 2018, , 2489-2519.		0
65	Thermal Considerations with Tissue Electroporation. , 2018, , 1-31.		1
66	High-Frequency Irreversible Electroporation: Safety and Efficacy of Next-Generation Irreversible Electroporation Adjacent to Critical Hepatic Structures. Surgical Innovation, 2017, 24, 276-283.	0.9	23
67	Irreversible electroporation for the ablation of pancreatic malignancies: A patientâ€specific methodology. Journal of Surgical Oncology, 2017, 115, 711-717.	1.7	21
68	A feasibility study for enrichment of highly aggressive cancer subpopulations by their biophysical properties via dielectrophoresis enhanced with synergistic fluid flow. Electrophoresis, 2017, 38, 1507-1514.	2.4	24
69	Predictive therapeutic planning for irreversible electroporation treatment of spontaneous malignant glioma. Medical Physics, 2017, 44, 4968-4980.	3.0	50
70	Tissue Ablation by Irreversible Electroporation. , 2017, , 707-721.		0
71	Preclinical Studies on Irreversible Electroporation. , 2017, , 1527-1542.		0
72	The Feasibility of Enhancing Susceptibility of Glioblastoma Cells to IRE Using a Calcium Adjuvant. Annals of Biomedical Engineering, 2017, 45, 2535-2547.	2.5	18

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73	Avoiding nerve stimulation in irreversible electroporation: a numerical modeling study. <i>Physics in Medicine and Biology</i> , 2017, 62, 8060-8079.	3.0	54
74	A microfluidic model of the blood-brain barrier to study permeabilization by pulsed electric fields. <i>RSC Advances</i> , 2017, 7, 42811-42818.	3.6	50
75	A Comprehensive Characterization of Parameters Affecting High-Frequency Irreversible Electroporation Lesions. <i>Annals of Biomedical Engineering</i> , 2017, 45, 2524-2534.	2.5	39
76	Enhancing Irreversible Electroporation by Manipulating Cellular Biophysics with a Molecular Adjuvant. <i>Biophysical Journal</i> , 2017, 113, 472-480.	0.5	21
77	High-frequency irreversible electroporation targets resilient tumor-initiating cells in ovarian cancer. <i>Integrative Biology (United Kingdom)</i> , 2017, 9, 979-987.	1.3	20
78	Perfused organ model development and evaluation for irreversible electroporation investigations. , 2017, , .		0
79	Biological Responses. , 2017, , 155-274.		3
80	Electrical Manipulation and Sorting of Cells. <i>Microsystems and Nanosystems</i> , 2017, , 57-92.	0.1	4
81	Irreversible electroporation inhibits pro-cancer inflammatory signaling in triple negative breast cancer cells. <i>Bioelectrochemistry</i> , 2017, 113, 42-50.	4.6	23
82	Medical Applications. , 2017, , 275-388.		2
83	Expression and activity of the urokinase plasminogen activator system in canine primary brain tumors. <i>OncoTargets and Therapy</i> , 2017, Volume 10, 2077-2085.	2.0	10
84	Thermal Considerations with Tissue Electroporation. , 2017, , 1-31.		2
85	Tissue Ablation by Irreversible Electroporation. , 2017, , 1-15.		0
86	Quantification of cell membrane permeability induced by monopolar and high-frequency bipolar bursts of electrical pulses. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2016, 1858, 2689-2698.	2.6	81
87	Enhanced contactless dielectrophoresis enrichment and isolation platform via cell-scale microstructures. <i>Biomicrofluidics</i> , 2016, 10, 014109.	2.4	47
88	Extracellular sodium dependence of the conduction velocity-calcium relationship: evidence of ephaptic self-attenuation. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2016, 310, H1129-H1139.	3.2	32
89	Characterization of Irreversible Electroporation Ablation with a Validated Perfused Organ Model. <i>Journal of Vascular and Interventional Radiology</i> , 2016, 27, 1913-1922.e2.	0.5	27
90	Induction of rapid, reproducible hepatic ablations using next-generation, high frequency irreversible electroporation (H-FIRE) in vivo. <i>Hpb</i> , 2016, 18, 726-734.	0.3	50

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91	Modeling of Transmembrane Potential in Realistic Multicellular Structures before Electroporation. <i>Biophysical Journal</i> , 2016, 111, 2286-2295.	0.5	46
92	Electroporation of Brain Endothelial Cells on Chip toward Permeabilizing the Blood-Brain Barrier. <i>Biophysical Journal</i> , 2016, 110, 503-513.	0.5	27
93	Improving cancer therapies by targeting the physical and chemical hallmarks of the tumor microenvironment. <i>Cancer Letters</i> , 2016, 380, 330-339.	7.2	56
94	Preclinical Studies on Irreversible Electroporation. , 2016, , 1-16.		0
95	Implications and considerations of thermal effects when applying irreversible electroporation tissue ablation therapy. <i>Prostate</i> , 2015, 75, 1114-1118.	2.3	51
96	Targeted cellular ablation based on the morphology of malignant cells. <i>Scientific Reports</i> , 2015, 5, 17157.	3.3	75
97	Electrochemotherapy (ECT) and irreversible electroporation (IRE) -advanced techniques for treating deep-seated tumors based on electroporation. <i>BioMedical Engineering OnLine</i> , 2015, 14, 11.	2.7	59
98	Bursts of Bipolar Microsecond Pulses Inhibit Tumor Growth. <i>Scientific Reports</i> , 2015, 5, 14999.	3.3	96
99	Mitigation of impedance changes due to electroporation therapy using bursts of high-frequency bipolar pulses. <i>BioMedical Engineering OnLine</i> , 2015, 14, S3.	2.7	81
100	The feasibility of using irreversible electroporation to introduce pores in bacterial cellulose scaffolds for tissue engineering. <i>Applied Microbiology and Biotechnology</i> , 2015, 99, 4785-4794.	3.6	21
101	Safety and feasibility of the NanoKnife system for irreversible electroporation ablative treatment of canine spontaneous intracranial gliomas. <i>Journal of Neurosurgery</i> , 2015, 123, 1008-1025.	1.6	70
102	The Feasibility of a Smart Surgical Probe for Verification of IRE Treatments Using Electrical Impedance Spectroscopy. <i>IEEE Transactions on Biomedical Engineering</i> , 2015, 62, 2674-2684.	4.2	30
103	Folate Conjugated Cellulose Nanocrystals Potentiate Irreversible Electroporation-induced Cytotoxicity for the Selective Treatment of Cancer Cells. <i>Technology in Cancer Research and Treatment</i> , 2015, 14, 757-766.	1.9	22
104	In Vivo Irreversible Electroporation Kidney Ablation: Experimentally Correlated Numerical Models. <i>IEEE Transactions on Biomedical Engineering</i> , 2015, 62, 561-569.	4.2	68
105	A Review of Basic to Clinical Studies of Irreversible Electroporation Therapy. <i>IEEE Transactions on Biomedical Engineering</i> , 2015, 62, 4-20.	4.2	278
106	A Numerical Investigation of the Electric and Thermal Cell Kill Distributions in Electroporation-Based Therapies in Tissue. <i>PLoS ONE</i> , 2014, 9, e103083.	2.5	155
107	Focal blood-brain-barrier disruption with high-frequency pulsed electric fields. <i>Technology</i> , 2014, 02, 206-213.	1.4	30
108	Electrokinetics and Rare-Cell Detection. <i>RSC Detection Science</i> , 2014, , 61-83.	0.0	3

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109	In vivo characterization and numerical simulation of prostate properties for non-thermal irreversible electroporation ablation. <i>Prostate</i> , 2014, 74, 458-468.	2.3	103
110	Joule heating effects on particle immobilization in insulator-based dielectrophoretic devices. <i>Electrophoresis</i> , 2014, 35, 352-361.	2.4	62
111	In Vitro and Numerical Support for Combinatorial Irreversible Electroporation and Electrochemotherapy Glioma Treatment. <i>Annals of Biomedical Engineering</i> , 2014, 42, 475-487.	2.5	38
112	2013 AES Annual Meeting. <i>Electrophoresis</i> , 2014, 35, 1767-1767.	2.4	0
113	In-vitro bipolar nano- and microsecond electro-pulse bursts for irreversible electroporation therapies. <i>Bioelectrochemistry</i> , 2014, 100, 69-79.	4.6	91
114	Nonthermal Irreversible Electroporation as a Focal Ablation Treatment for Brain Cancer. <i>Tumors of the Central Nervous System</i> , 2014, , 171-182.	0.1	11
115	Sphingolipid metabolites modulate dielectric characteristics of cells in a mouse ovarian cancer progression model. <i>Integrative Biology (United Kingdom)</i> , 2013, 5, 843-852.	1.3	29
116	Investigating dielectric properties of different stages of syngeneic murine ovarian cancer cells. <i>Biomicrofluidics</i> , 2013, 7, 11809.	2.4	68
117	The Effects of Metallic Implants on Electroporation Therapies: Feasibility of Irreversible Electroporation for Brachytherapy Salvage. <i>CardioVascular and Interventional Radiology</i> , 2013, 36, 1638-1645.	2.0	27
118	Simultaneous electrokinetic flow and dielectrophoretic trapping using perpendicular static and dynamic electric fields. <i>Microfluidics and Nanofluidics</i> , 2013, 15, 599-609.	2.2	16
119	An Experimental and Numerical Investigation of Phase Change Electrodes for Therapeutic Irreversible Electroporation. <i>Journal of Biomechanical Engineering</i> , 2013, 135, 111009.	1.3	20
120	Label-free Isolation and Enrichment of Cells Through Contactless Dielectrophoresis. <i>Journal of Visualized Experiments</i> , 2013, , .	0.3	13
121	Pathology of non-thermal irreversible electroporation (N-TIRE)-induced ablation of the canine brain. <i>Journal of Veterinary Science</i> , 2013, 14, 433.	1.3	22
122	Improved Local and Systemic Anti-Tumor Efficacy for Irreversible Electroporation in Immunocompetent versus Immunodeficient Mice. <i>PLoS ONE</i> , 2013, 8, e64559.	2.5	73
123	Cell Electroporation Mechanisms and Preclinical Foundation for Focal Therapy. , 2013, , 309-329.		1
124	Dielectrophoretic differentiation of mouse ovarian surface epithelial cells, macrophages, and fibroblasts using contactless dielectrophoresis. <i>Biomicrofluidics</i> , 2012, 6, 024104.	2.4	52
125	Structure, Sulfatide Binding Properties, and Inhibition of Platelet Aggregation by a Disabled-2 Protein-derived Peptide. <i>Journal of Biological Chemistry</i> , 2012, 287, 37691-37702.	3.4	17
126	Isolation of rare cancer cells from blood cells using dielectrophoresis. , 2012, 2012, 590-3.		13

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127	Towards the development of latent heat storage electrodes for electroporation-based therapies. Applied Physics Letters, 2012, 101, 083902.	3.3	14
128	Isolation of prostate tumor initiating cells (TICs) through their dielectrophoretic signature. Lab on A Chip, 2012, 12, 182-189.	6.0	108
129	A Three-Dimensional In Vitro Tumor Platform for Modeling Therapeutic Irreversible Electroporation. Biophysical Journal, 2012, 103, 2033-2042.	0.5	81
130	7.0-T Magnetic Resonance Imaging Characterization of Acute Blood-Brain-Barrier Disruption Achieved with Intracranial Irreversible Electroporation. PLoS ONE, 2012, 7, e50482.	2.5	45
131	Multilayer contactless dielectrophoresis: Theoretical considerations. Electrophoresis, 2012, 33, 1938-1946.	2.4	24
132	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.	4.2	174
133	Advances in Therapeutic Electroporation to Mitigate Muscle Contractions. Journal of Membrane Science & Technology, 2012, 02, .	0.5	13
134	Electrical conductivity changes during irreversible electroporation treatment of brain cancer. , 2011, 2011, 739-42.		12
135	Mixing Enhancement in Microfluidic Devices Using Contactless Dielectrophoresis (cDEP). , 2011, , .		0
136	Disabled $\alpha 2$ modulates homotypic and heterotypic platelet interactions by binding to sulfatides. British Journal of Haematology, 2011, 154, 122-133.	2.5	18
137	Theoretical Considerations of Tissue Electroporation With High-Frequency Bipolar Pulses. IEEE Transactions on Biomedical Engineering, 2011, 58, 1474-1482.	4.2	104
138	Modeling and development of a low frequency contactless dielectrophoresis (cDEP) platform to sort cancer cells from dilute whole blood samples. Biosensors and Bioelectronics, 2011, 30, 13-20.	10.1	82
139	High-frequency irreversible electroporation (H-FIRE) for non-thermal ablation without muscle contraction. BioMedical Engineering OnLine, 2011, 10, 102.	2.7	265
140	A Parametric Study Delineating Irreversible Electroporation from Thermal Damage Based on a Minimally Invasive Intracranial Procedure. BioMedical Engineering OnLine, 2011, 10, 34.	2.7	118
141	Selective concentration of human cancer cells using contactless dielectrophoresis. Electrophoresis, 2011, 32, 2523-2529.	2.4	97
142	Microfluidic mixing using contactless dielectrophoresis. Electrophoresis, 2011, 32, 2569-2578.	2.4	31
143	Separation of mixtures of particles in a multipart microdevice employing insulator-based dielectrophoresis. Electrophoresis, 2011, 32, 2456-2465.	2.4	46
144	Contactless dielectrophoretic spectroscopy: Examination of the dielectric properties of cells found in blood. Electrophoresis, 2011, 32, 3164-3171.	2.4	52

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145	Nonthermal irreversible electroporation for intracranial surgical applications. Journal of Neurosurgery, 2011, 114, 681-688.	1.6	89
146	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.	1.9	128
147	Experimental characterization of intrapulse tissue conductivity changes for electroporation. , 2011, 2011, 5581-4.		7
148	Successful Treatment of a Large Soft Tissue Sarcoma With Irreversible Electroporation. Journal of Clinical Oncology, 2011, 29, e372-e377.	1.6	113
149	Enrichment of Cancer Cells Using a High Throughput Contactless Dielectrophoretic (CDEP) Microfluidic Device. , 2011, , .		0
150	An experimental investigation of temperature changes during electroporation. , 2011, , .		8
151	A low cost solution for the fabrication of dielectrophoretic microfluidic devices and embedded electrodes. , 2011, 2011, 8384-7.		0
152	Intracranial Nonthermal Irreversible Electroporation: In-Vivo Analysis. Journal of Membrane Biology, 2010, 236, 127-136.	2.1	138
153	Electromagnetically Controlled Biological Assembly of Aligned Bacterial Cellulose Nanofibers. Annals of Biomedical Engineering, 2010, 38, 2475-2484.	2.5	56
154	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.	2.5	101
155	Non-thermal irreversible electroporation for deep intracranial disorders. , 2010, 2010, 2743-6.		8
156	A study using irreversible electroporation to treat large, irregular tumors in a canine patient. , 2010, 2010, 2747-50.		4
157	Selective isolation of live/dead cells using contactless dielectrophoresis (cDEP). Lab on A Chip, 2010, 10, 438.	6.0	248
158	Towards the creation of decellularized organ constructs using irreversible electroporation and active mechanical perfusion. BioMedical Engineering OnLine, 2010, 9, 83.	2.7	85
159	Thermal Aspects of Irreversible Electroporation. Series in Biomedical Engineering, 2010, , 123-154.	0.5	8
160	A Preliminary Study to Delineate Irreversible Electroporation From Thermal Damage Using the Arrhenius Equation. Journal of Biomechanical Engineering, 2009, 131, 074509.	1.3	44
161	The Feasibility of Irreversible Electroporation for the Treatment of Breast Cancer and Other Heterogeneous Systems. Annals of Biomedical Engineering, 2009, 37, 2615-25.	2.5	83
162	Contactless dielectrophoresis: a new technique for cell manipulation. Biomedical Microdevices, 2009, 11, 997-1006.	2.8	203

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163	Pilot study of irreversible electroporation for intracranial surgery. , 2009, 2009, 6513-6.		16
164	Impedimetric and optical interrogation of single cells in a microfluidic device for real-time viability and chemical response assessment. Biosensors and Bioelectronics, 2008, 23, 845-851.	10.1	22
165	Sample concentration and impedance detection on a microfluidic polymer chip. Biomedical Microdevices, 2008, 10, 661-670.	2.8	79
166	Performance impact of dynamic surface coatings on polymeric insulator-based dielectrophoretic particle separators. Analytical and Bioanalytical Chemistry, 2008, 390, 847-855.	3.7	47
167	Temperature considerations during irreversible electroporation. International Journal of Heat and Mass Transfer, 2008, 51, 5617-5622.	4.8	111
168	Mathematical Modeling of Irreversible Electroporation for Treatment Planning. Technology in Cancer Research and Treatment, 2007, 6, 275-286.	1.9	167
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