

Boris Rubinsky

List of Publications by Citations

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327
papers

12,502
citations

58
h-index

102
g-index

359
ext. papers

14,034
ext. citations

3.4
avg, IF

6.58
L-index

#	Paper	IF	Citations
327	Tissue ablation with irreversible electroporation. <i>Annals of Biomedical Engineering</i> , 2005 , 33, 223-31	4.7	850
326	Irreversible electroporation: a new ablation modality--clinical implications. <i>Technology in Cancer Research and Treatment</i> , 2007 , 6, 37-48	2.7	515
325	Transrectal ultrasound-guided percutaneous radical cryosurgical ablation of the prostate. <i>Cancer</i> , 1993 , 72, 1291-9	6.4	378
324	In vivo results of a new focal tissue ablation technique: irreversible electroporation. <i>IEEE Transactions on Biomedical Engineering</i> , 2006 , 53, 1409-15	5	371
323	Tumor ablation with irreversible electroporation. <i>PLoS ONE</i> , 2007 , 2, e1135	3.7	349
322	Irreversible electroporation: implications for prostate ablation. <i>Technology in Cancer Research and Treatment</i> , 2007 , 6, 295-300	2.7	293
321	Irreversible electroporation in medicine. <i>Technology in Cancer Research and Treatment</i> , 2007 , 6, 255-60	2.7	289
320	The promise of organ and tissue preservation to transform medicine. <i>Nature Biotechnology</i> , 2017 , 35, 530-542	44.5	246
319	The effect of irreversible electroporation on blood vessels. <i>Technology in Cancer Research and Treatment</i> , 2007 , 6, 307-12	2.7	244
318	Ultrasound-guided hepatic cryosurgery in the treatment of metastatic colon carcinoma. Preliminary results. <i>Cancer</i> , 1991 , 67, 901-7	6.4	242
317	Cancer cells ablation with irreversible electroporation. <i>Technology in Cancer Research and Treatment</i> , 2005 , 4, 699-705	2.7	234
316	Cryosurgery. <i>Annual Review of Biomedical Engineering</i> , 2000 , 2, 157-87	12	198
315	The process of freezing and the mechanism of damage during hepatic cryosurgery. <i>Cryobiology</i> , 1990 , 27, 85-97	2.7	174
314	Mechanical interactions between ice crystals and red blood cells during directional solidification. <i>Cryobiology</i> , 1994 , 31, 483-500	2.7	146
313	Theoretical analysis of the thermal effects during in vivo tissue electroporation. <i>Bioelectrochemistry</i> , 2003 , 61, 99-107	5.6	142
312	Microfabricated electroporation chip for single cell membrane permeabilization. <i>Sensors and Actuators A: Physical</i> , 2001 , 89, 242-249	3.9	135
311	Effect of thermal variables on frozen human primary prostatic adenocarcinoma cells. <i>Urology</i> , 1996 , 48, 441-7	1.6	133

310	In vivo electrical conductivity measurements during and after tumor electroporation: conductivity changes reflect the treatment outcome. <i>Physics in Medicine and Biology</i> , 2009 , 54, 5949-63	3.8	129
309	Electrical impedance characterization of normal and cancerous human hepatic tissue. <i>Physiological Measurement</i> , 2010 , 31, 995-1009	2.9	128
308	Irreversible electroporation near the heart: ventricular arrhythmias can be prevented with ECG synchronization. <i>American Journal of Roentgenology</i> , 2011 , 196, W330-5	5.4	125
307	A morphological study of cooling rate response in normal and neoplastic human liver tissue: cryosurgical implications. <i>Cryobiology</i> , 1993 , 30, 482-92	2.7	125
306	Hypothermic protection--a fundamental property of "antifreeze" proteins. <i>Biochemical and Biophysical Research Communications</i> , 1991 , 180, 566-71	3.4	125
305	A cryomicroscope using directional solidification for the controlled freezing of biological material. <i>Cryobiology</i> , 1985 , 22, 55-68	2.7	125
304	In vivo electrical impedance measurements during and after electroporation of rat liver. <i>Bioelectrochemistry</i> , 2007 , 70, 287-95	5.6	120
303	Flow-through micro-electroporation chip for high efficiency single-cell genetic manipulation. <i>Sensors and Actuators A: Physical</i> , 2003 , 104, 205-212	3.9	111
302	Optimal parameters for the destruction of prostate cancer using irreversible electroporation. <i>Journal of Urology</i> , 2008 , 180, 2668-74	2.5	105
301	Micro-Electroporation: Improving the Efficiency and Understanding of Electrical Permeabilization of Cells. <i>Biomedical Microdevices</i> , 1999 , 2, 145-150	3.7	104
300	A novel nonthermal energy source for surgical epicardial atrial ablation: irreversible electroporation. <i>Heart Surgery Forum</i> , 2007 , 10, E162-7	0.7	100
299	Non thermal irreversible electroporation: novel technology for vascular smooth muscle cells ablation. <i>PLoS ONE</i> , 2009 , 4, e4757	3.7	98
298	The cryoprotective effect of antifreeze glycopeptides from antarctic fishes. <i>Cryobiology</i> , 1992 , 29, 69-79	2.7	97
297	Ultrasonic characteristics of frozen liver. <i>Cryobiology</i> , 1984 , 21, 321-8	2.7	97
296	Principles of low temperature cell preservation. <i>Heart Failure Reviews</i> , 2003 , 8, 277-84	5	96
295	The effect of antifreeze glycopeptides on membrane potential changes at hypothermic temperatures. <i>Biochemical and Biophysical Research Communications</i> , 1990 , 173, 1369-74	3.4	95
294	Temperature considerations during irreversible electroporation. <i>International Journal of Heat and Mass Transfer</i> , 2008 , 51, 5617-5622	4.9	89
293	Structural and functional similarity between fish antifreeze proteins and calcium-dependent lectins. <i>Biochemical and Biophysical Research Communications</i> , 1992 , 185, 335-40	3.4	89

292	A mathematical model for the freezing process in biological tissue. <i>Proceedings of the Royal Society of London Series B, Containing Papers of A Biological Character</i> , 1988 , 234, 343-58		88
291	Electrical impedance tomography for imaging tissue electroporation. <i>IEEE Transactions on Biomedical Engineering</i> , 2004 , 51, 761-7	5	84
290	Real time ultrasonic monitoring of hepatic cryosurgery. <i>Cryobiology</i> , 1985 , 22, 319-30	2.7	84
289	Cell membrane electroporation-Part 2: the applications. <i>IEEE Electrical Insulation Magazine</i> , 2013 , 29, 29-37	2.1	83
288	High-Voltage Electrical Pulses in Oncology: Irreversible Electroporation, Electrochemotherapy, Gene Electrotransfer, Electrofusion, and Electroimmunotherapy. <i>Radiology</i> , 2020 , 295, 254-272	20.5	79
287	Electrical field and temperature model of nonthermal irreversible electroporation in heterogeneous tissues. <i>Journal of Biomechanical Engineering</i> , 2009 , 131, 071006	2.1	78
286	Optimization of Multiprobe Cryosurgery. <i>Journal of Heat Transfer</i> , 1992 , 114, 796-801	1.8	77
285	A feasibility study for electrical impedance tomography as a means to monitor tissue electroporation for molecular medicine. <i>IEEE Transactions on Biomedical Engineering</i> , 2002 , 49, 400-3	5	73
284	An in vivo study of antifreeze protein adjuvant cryosurgery. <i>Cryobiology</i> , 1999 , 38, 169-75	2.7	73
283	Cryogenic protection of oocytes with antifreeze proteins. <i>Molecular Reproduction and Development</i> , 1993 , 36, 488-93	2.6	71
282	Nonthermal irreversible electroporation for tissue decellularization. <i>Journal of Biomechanical Engineering</i> , 2010 , 132, 091003	2.1	69
281	Monitoring cryosurgery in the brain and in the prostate with proton NMR. <i>Cryobiology</i> , 1993 , 30, 191-9	2.7	68
280	MRI study on reversible and irreversible electroporation induced blood brain barrier disruption. <i>PLoS ONE</i> , 2012 , 7, e42817	3.7	65
279	Chemical adjuvant cryosurgery with antifreeze proteins. <i>Journal of Surgical Oncology</i> , 1997 , 66, 114-21	2.8	65
278	The thermodynamic principles of isochoric cryopreservation. <i>Cryobiology</i> , 2005 , 50, 121-38	2.7	63
277	Treatment of cancer with cryochemotherapy. <i>British Journal of Cancer</i> , 2002 , 86, 1658-60	8.7	63
276	Mass Transfer Model for Drug Delivery in Tissue Cells with Reversible Electroporation. <i>International Journal of Heat and Mass Transfer</i> , 2008 , 51, 5610-5616	4.9	61
275	Two-dimensional heat transfer study on the keyhole plasma arc welding process. <i>International Journal of Heat and Mass Transfer</i> , 1988 , 31, 1409-1421	4.9	61

274	Sonographic monitoring of hepatic cryosurgery in an experimental animal model. <i>American Journal of Roentgenology</i> , 1985 , 144, 1043-7	5.4	60
273	Freezing of mammalian livers with glycerol and antifreeze proteins. <i>Biochemical and Biophysical Research Communications</i> , 1994 , 200, 732-41	3.4	59
272	Society of Gastrointestinal Radiologists Roscoe E. Miller Award. Monitoring hepatic cryosurgery with sonography. <i>American Journal of Roentgenology</i> , 1986 , 147, 665-9	5.4	59
271	A statistical model for multidimensional irreversible electroporation cell death in tissue. <i>BioMedical Engineering OnLine</i> , 2010 , 9, 13	4.1	58
270	Thermal stresses in frozen organs. <i>Cryobiology</i> , 1980 , 17, 66-73	2.7	58
269	Irreversible electroporation on the small intestine. <i>British Journal of Cancer</i> , 2012 , 106, 490-5	8.7	57
268	A new concept for medical imaging centered on cellular phone technology. <i>PLoS ONE</i> , 2008 , 3, e2075	3.7	55
267	Effect of antifreeze proteins on frozen primary prostatic adenocarcinoma cells. <i>Urology</i> , 1997 , 49, 421-5	1.6	54
266	Effect of thermal variables on human breast cancer in cryosurgery. <i>Breast Cancer Research and Treatment</i> , 1999 , 53, 185-92	4.4	54
265	Percutaneous transperineal prostate cryosurgery using transrectal ultrasound guidance: animal model. <i>Urology</i> , 1991 , 37, 277-81	1.6	54
264	A finite element method for the solution of one-dimensional phase change problems. <i>International Journal of Heat and Mass Transfer</i> , 1981 , 24, 1987-1989	4.9	54
263	Instantaneous, quantitative single-cell viability assessment by electrical evaluation of cell membrane integrity with microfabricated devices. <i>Sensors and Actuators A: Physical</i> , 2003 , 105, 31-39	3.9	53
262	Micro-electroporation of mesenchymal stem cells with alternating electrical current pulses. <i>Biomedical Microdevices</i> , 2009 , 11, 95-101	3.7	52
261	Magnetic resonance imaging characteristics of nonthermal irreversible electroporation in vegetable tissue. <i>Journal of Membrane Biology</i> , 2010 , 236, 137-46	2.3	52
260	In vivo imaging of irreversible electroporation by means of electrical impedance tomography. <i>Physics in Medicine and Biology</i> , 2009 , 54, 4927-43	3.8	51
259	Temperature determination in the frozen region during cryosurgery of rabbit liver using MR image analysis. <i>Magnetic Resonance Imaging</i> , 1997 , 15, 657-67	3.3	51
258	MR imaging assisted temperature calculations during cryosurgery. <i>Magnetic Resonance Imaging</i> , 1994 , 12, 1021-31	3.3	50
257	MRI-monitored cryosurgery in the rabbit brain. <i>Magnetic Resonance Imaging</i> , 1993 , 11, 1155-64	3.3	50

256	NUMERICAL COMPUTATION USING FINITE ELEMENTS FOR THE MOVING INTERFACE IN HEAT TRANSFER PROBLEMS WITH PHASE TRANSFORMATION. <i>Numerical Heat Transfer</i> , 1983 , 6, 209-222		50
255	An Inverse Finite Element Method for the Analysis of Stationary Arc Welding Processes. <i>Journal of Heat Transfer</i> , 1986 , 108, 734-741	1.8	49
254	Preservation of myocyte structure and mitochondrial integrity in subzero cryopreservation of mammalian hearts for transplantation using antifreeze proteins--an electron microscopy study. <i>European Journal of Cardio-thoracic Surgery</i> , 2003 , 24, 292-6; discussion 296-7	3	47
253	Analysis of a Stefan-Like Problem in a Biological Tissue Around a Cryosurgical Probe. <i>Journal of Heat Transfer</i> , 1976 , 98, 514-519	1.8	47
252	Improved viability and reduced apoptosis in sub-zero 21-hour preservation of transplanted rat hearts using anti-freeze proteins. <i>Journal of Heart and Lung Transplantation</i> , 2005 , 24, 1915-29	5.8	46
251	Three-dimensional simulation of the plasma arc welding process. <i>International Journal of Heat and Mass Transfer</i> , 1993 , 36, 3283-3298	4.9	45
250	Vascular smooth muscle cells ablation with endovascular nonthermal irreversible electroporation. <i>Journal of Vascular and Interventional Radiology</i> , 2010 , 21, 1708-15	2.4	44
249	MR image-guided control of cryosurgery. <i>Journal of Magnetic Resonance Imaging</i> , 1995 , 5, 753-60	5.6	44
248	Kinetics of antifreeze protein-induced ice growth inhibition. <i>FEBS Letters</i> , 1997 , 412, 241-4	3.8	43
247	Towards electroporation based treatment planning considering electric field induced muscle contractions. <i>Technology in Cancer Research and Treatment</i> , 2012 , 11, 189-201	2.7	42
246	Cryosurgery: advances in the application of low temperatures to medicine. <i>International Journal of Refrigeration</i> , 1991 , 14, 190-199	3.8	41
245	A finite element method for the study of solidification processes in the presence of natural convection. <i>International Journal for Numerical Methods in Engineering</i> , 1986 , 23, 1785-1805	2.4	41
244	Irreversible Electroporation: First Patient Experience Focal Therapy of Prostate Cancer. <i>Series in Biomedical Engineering</i> , 2010 , 235-247		39
243	Electrolytic Effects During Tissue Ablation by Electroporation. <i>Technology in Cancer Research and Treatment</i> , 2016 , 15, NP95-NP103	2.7	38
242	The detection of brain oedema with frequency-dependent phase shift electromagnetic induction. <i>Physiological Measurement</i> , 2006 , 27, 539-52	2.9	38
241	Subzero nonfreezing cryopresevation of rat hearts using antifreeze protein I and antifreeze protein III. <i>Cryobiology</i> , 2004 , 48, 273-82	2.7	38
240	Viability of deformed cells. <i>Cryobiology</i> , 1999 , 39, 243-51	2.7	38
239	Patterns of ice formation in normal and malignant breast tissue. <i>Cryobiology</i> , 1994 , 31, 109-20	2.7	38

238	AN INVERSE FINITE-ELEMENT TECHNIQUE TO DETERMINE THE CHANGE OF PHASE INTERFACE LOCATION IN ONE-DIMENSIONAL MELTING PROBLEMS. <i>Numerical Heat Transfer</i> , 1984 , 7, 269-283		37
237	Cryogenic 3D printing for tissue engineering. <i>Cryobiology</i> , 2015 , 71, 518-21	2.7	35
236	Irreversible electroporation attenuates neointimal formation after angioplasty. <i>IEEE Transactions on Biomedical Engineering</i> , 2008 , 55, 2268-74	5	35
235	Use of conductive gels for electric field homogenization increases the antitumor efficacy of electroporation therapies. <i>Physics in Medicine and Biology</i> , 2008 , 53, 6605-18	3.8	35
234	Cryosurgical monitoring using bioimpedance measurements--a feasibility study for electrical impedance tomography. <i>IEEE Transactions on Biomedical Engineering</i> , 2000 , 47, 1376-81	5	35
233	On the use of the Weierstrass-Mandelbrot function to describe the fractal component of turbulent velocity. <i>Fluid Dynamics Research</i> , 1992 , 9, 81-95	1.2	34
232	An analytical study of cryosurgery in the lung. <i>Journal of Biomechanical Engineering</i> , 1992 , 114, 467-72	2.1	33
231	Volumetric electromagnetic phase-shift spectroscopy of brain edema and hematoma. <i>PLoS ONE</i> , 2013 , 8, e63223	3.7	32
230	Prolonged 24-hour subzero preservation of heterotopically transplanted rat hearts using antifreeze proteins derived from arctic fish. <i>Annals of Thoracic Surgery</i> , 2004 , 77, 1648-55	2.7	32
229	Isochoric preservation: a novel characterization method. <i>Cryobiology</i> , 2010 , 60, 23-9	2.7	31
228	Analysis of isochoric subcooling. <i>Cryobiology</i> , 2006 , 53, 139-42	2.7	31
227	Analytic Solutions to the Heat Equation Involving a Moving Boundary with Applications to the Change of Phase Problem (the Inverse Stefan Problem). <i>Journal of Heat Transfer</i> , 1978 , 100, 300-304	1.8	30
226	Prostate cancer treatment with Irreversible Electroporation (IRE): Safety, efficacy and clinical experience in 471 treatments. <i>PLoS ONE</i> , 2019 , 14, e0215093	3.7	29
225	Combining Electrolysis and Electroporation for Tissue Ablation. <i>Technology in Cancer Research and Treatment</i> , 2015 , 14, 395-410	2.7	29
224	Biomimetic propulsion for a swimming surgical micro-robot		28
223	An analytical method to evaluate cooling rates during cryopreservation protocols for organs. <i>Cryobiology</i> , 1984 , 21, 303-20	2.7	28
222	Listeria monocytogenes cell wall constituents exert a charge effect on electroporation threshold. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2012 , 1818, 689-94	3.8	27
221	The role of thermal hysteresis proteins during cryopreservation of oocytes and embryos. <i>Theriogenology</i> , 1994 , 41, 107-112	2.8	27

220	Synergistic Combination of Electrolysis and Electroporation for Tissue Ablation. <i>PLoS ONE</i> , 2016 , 11, e0148317	3.7	27
219	Preservation of sweet cherry by isochoric (constant volume) freezing. <i>Innovative Food Science and Emerging Technologies</i> , 2019 , 52, 108-115	6.8	27
218	Modulating electrolytic tissue ablation with reversible electroporation pulses 2015 , 03, 45-53		26
217	Solidification processes in saline solutions. <i>Journal of Crystal Growth</i> , 1983 , 62, 513-522	1.6	26
216	Electrical breakdown in tissue electroporation. <i>Biochemical and Biophysical Research Communications</i> , 2015 , 467, 736-41	3.4	25
215	Electrical impedance tomography of cell viability in tissue with application to cryosurgery. <i>Journal of Biomechanical Engineering</i> , 2004 , 126, 305-9	2.1	25
214	Distributed network, wireless and cloud computing enabled 3-D ultrasound; a new medical technology paradigm. <i>PLoS ONE</i> , 2009 , 4, e7974	3.7	25
213	The detection of brain ischaemia in rats by inductive phase shift spectroscopy. <i>Physiological Measurement</i> , 2009 , 30, 809-19	2.9	24
212	Tissue characterization with an electrical spectroscopy SVM classifier. <i>IEEE Transactions on Biomedical Engineering</i> , 2009 , 56, 525-8	5	24
211	Temperature dependence of tissue impedivity in electrical impedance tomography of cryosurgery. <i>IEEE Transactions on Biomedical Engineering</i> , 2005 , 52, 695-701	5	24
210	Fish antifreeze proteins block Ca entry into rabbit parietal cells. <i>American Journal of Physiology - Cell Physiology</i> , 1992 , 263, C1310-3	5.4	24
209	Ice-crystal growth and lectins. <i>Nature</i> , 1992 , 360, 113-4	50.4	24
208	The effect of electroporation type pulsed electric fields on DNA in aqueous solution. <i>Technology in Cancer Research and Treatment</i> , 2010 , 9, 423-30	2.7	23
207	In vivo non-thermal irreversible electroporation impact on rat liver galvanic apparent internal resistance. <i>Physics in Medicine and Biology</i> , 2011 , 56, 951-63	3.8	23
206	Effects of cooling rate and glycerol concentration on the structure of the frozen kidney: assessment by cryo-scanning electron microscopy. <i>Cryobiology</i> , 1990 , 27, 301-10	2.7	23
205	Preservation of rat hearts in subfreezing temperature isochoric conditions to - 8 °C and 78 MPa. <i>Biochemical and Biophysical Research Communications</i> , 2018 , 496, 852-857	3.4	22
204	Irreversible electroporation for microbial control of drugs in solution. <i>AAPS PharmSciTech</i> , 2009 , 10, 881-69		22
203	A theoretical study on magnetic induction frequency dependence of phase shift in oedema and haematoma. <i>Physiological Measurement</i> , 2006 , 27, 829-38	2.9	22

202	Evaluation of the impedance technique for cryosurgery in a theoretical model of the head. <i>Cryobiology</i> , 1999 , 38, 51-9	2.7	22
201	Electrical and thermal characterization of nanochannels between a cell and a silicon based micro-pore. <i>Biomedical Microdevices</i> , 2006 , 8, 25-34	3.7	21
200	Isochoric and isobaric freezing of fish muscle. <i>Biochemical and Biophysical Research Communications</i> , 2017 , 485, 279-283	3.4	20
199	Molecular and histological study on the effects of non-thermal irreversible electroporation on the liver. <i>Biochemical and Biophysical Research Communications</i> , 2018 , 500, 665-670	3.4	20
198	Principles of Tissue Engineering With Nonthermal Irreversible Electroporation. <i>Journal of Heat Transfer</i> , 2011 , 133,	1.8	20
197	Large ice crystals in the nucleus of rapidly frozen liver cells. <i>Cryobiology</i> , 1993 , 30, 597-603	2.7	20
196	Microscale Heat and Mass Transfer of Vascular and Intracellular Freezing in the Liver. <i>Journal of Heat Transfer</i> , 1993 , 115, 1029-1035	1.8	20
195	Effect of ice crystal habit on the viability of glycerol-protected red blood cells. <i>Cryobiology</i> , 1989 , 26, 580	2.7	20
194	Endovascular nonthermal irreversible electroporation: a finite element analysis. <i>Journal of Biomechanical Engineering</i> , 2010 , 132, 031008	2.1	19
193	Galvanic apparent internal impedance: an intrinsic tissue property. <i>Biochemical and Biophysical Research Communications</i> , 2009 , 389, 168-71	3.4	19
192	A continuum model for the propagation of discrete phase-change fronts in porous media in the presence of coupled heat flow, fluid flow and species transport processes. <i>International Journal of Heat and Mass Transfer</i> , 1989 , 32, 1111-1130	4.9	19
191	A mixed-variable continuously deforming finite element method for parabolic evolution problems. Part II: The coupled problem of phase-change in porous media. <i>International Journal for Numerical Methods in Engineering</i> , 1989 , 28, 2609-2634	2.4	19
190	Ultrasound monitored hepatic cryosurgery: longevity study on an animal model. <i>Cryobiology</i> , 1986 , 23, 277-85	2.7	19
189	The Determination of the Thermal History in a One-Dimensional Freezing System by a Perturbation Method. <i>Journal of Heat Transfer</i> , 1979 , 101, 326-330	1.8	19
188	The nematode <i>Caenorhabditis elegans</i> survives subfreezing temperatures in an isochoric system. <i>Biochemical and Biophysical Research Communications</i> , 2016 , 477, 401-5	3.4	19
187	A histological analysis of liver injury in freezing storage. <i>Cryobiology</i> , 1999 , 39, 271-7	2.7	18
186	Frequency-division multiplexing for electrical impedance tomography in biomedical applications. <i>International Journal of Biomedical Imaging</i> , 2007 , 2007, 54798	5.2	17
185	Distributed network imaging and electrical impedance tomography of minimally invasive surgery. <i>Technology in Cancer Research and Treatment</i> , 2004 , 3, 125-34	2.7	17

184	Electric field modulation in tissue electroporation with electrolytic and non-electrolytic additives. <i>Bioelectrochemistry</i> , 2007 , 70, 551-60	5.6	16
183	An integrated probe for magnetic resonance imaging monitored skin cryosurgery. <i>Journal of Biomechanical Engineering</i> , 1995 , 117, 59-63	2.1	16
182	The Use of Irreversible Electroporation in Food Preservation. <i>Series in Biomedical Engineering</i> , 2010 , 273-312		16
181	Using non-thermal irreversible electroporation to create an in vivo niche for exogenous cell engraftment. <i>BioTechniques</i> , 2017 , 62, 229-231	2.5	15
180	Tissue characterization using electrical impedance spectroscopy data: a linear algebra approach. <i>Physiological Measurement</i> , 2012 , 33, 997-1013	2.9	15
179	Front-tracking image reconstruction algorithm for EIT-monitored cryosurgery using the boundary element method. <i>Physiological Measurement</i> , 2005 , 26, 503-16	2.9	15
178	Microscopic Pattern of Ice Crystal Growth in the Presence of Thermal Hysteresis Proteins. <i>Journal of Offshore Mechanics and Arctic Engineering</i> , 1994 , 116, 173-179	1.5	15
177	Thermal Stresses During Solidification Processes. <i>Journal of Heat Transfer</i> , 1982 , 104, 196-199	1.8	15
176	Tissue Ablation by a Synergistic Combination of Electroporation and Electrolysis Delivered by a Single Pulse. <i>Annals of Biomedical Engineering</i> , 2016 , 44, 3144-3154	4.7	15
175	Isochoric conditions enable high subfreezing temperature pancreatic islet preservation without osmotic cryoprotective agents. <i>Cryobiology</i> , 2019 , 86, 130-133	2.7	15
174	Isochoric conditions enhance stability of metastable supercooled water. <i>Applied Physics Letters</i> , 2020 , 116, 123702	3.4	14
173	A Theoretical Study on the Biophysical Mechanisms by Which Tumor Treating Fields Affect Tumor Cells During Mitosis. <i>IEEE Transactions on Biomedical Engineering</i> , 2020 , 67, 2594-2602	5	14
172	Electrical impedance tomographic imaging of a single cell electroporation. <i>Biomedical Microdevices</i> , 2014 , 16, 427-37	3.7	14
171	Variable electric fields for high throughput electroporation protocol design in curvilinear coordinates. <i>Biotechnology and Bioengineering</i> , 2012 , 109, 2168-71	4.9	14
170	MICROSCALE HEAT TRANSFER IN BIOLOGICAL SYSTEMS AT LOW TEMPERATURES. <i>Experimental Heat Transfer</i> , 1997 , 10, 1-29	2.4	14
169	Influence of fish antifreeze proteins on the freezing of cell suspensions with cryoprotectant penetrating cells. <i>International Journal of Heat and Mass Transfer</i> , 1998 , 41, 1907-1915	4.9	14
168	The effect of brain hematoma location on volumetric inductive phase shift spectroscopy of the brain with circular and magnetron sensor coils: a numerical simulation study. <i>Physiological Measurement</i> , 2008 , 29, S255-66	2.9	14
167	Transplantation of mammalian livers following freezing: vascular damage and functional recovery. <i>Cryobiology</i> , 2000 , 40, 84-9	2.7	14

166	Viscosity sensing with lamb-wave microsensor: dimethylsulfoxide solution viscosity as a function of temperature. <i>Journal of Biomechanical Engineering</i> , 1993 , 115, 329-31	2.1	14
165	A mixed-variable continuously deforming finite element method for parabolic evolution problems. Part I: The variational formulation for a single evolution equation. <i>International Journal for Numerical Methods in Engineering</i> , 1989 , 28, 2583-2607	2.4	14
164	A shift from the isobaric to the isochoric thermodynamic state can reduce energy consumption and augment temperature stability in frozen food storage. <i>Journal of Food Engineering</i> , 2019 , 251, 1-10	6	13
163	SVM for prostate cancer using electrical impedance measurements. <i>Physiological Measurement</i> , 2011 , 32, 1373-87	2.9	13
162	Imaging cryosurgery with EIT: tracking the ice front and post-thaw tissue viability. <i>Physiological Measurement</i> , 2008 , 29, 899-912	2.9	13
161	In vivo inductive phase shift measurements to detect intraperitoneal fluid. <i>IEEE Transactions on Biomedical Engineering</i> , 2007 , 54, 953-6	5	13
160	Methods of optimization of electrical impedance tomography for imaging tissue electroporation. <i>Physiological Measurement</i> , 2007 , 28, 1135-47	2.9	13
159	Mechanical stress power measurements during high-power laser ablation. <i>Journal of Applied Physics</i> , 1996 , 80, 4665-4672	2.5	13
158	Antifreeze glycoproteins increase solution viscosity. <i>Biochemical and Biophysical Research Communications</i> , 1993 , 197, 927-31	3.4	13
157	The effect of a magnetic field on the heat transfer characteristics of an air fluidized bed of ferromagnetic particles. <i>International Journal of Heat and Mass Transfer</i> , 1983 , 26, 1885-1889	4.9	13
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