## **Boris Rubinsky**

# List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

327	12,502	58	102
papers	citations	h-index	g-index
359 ext. papers	14,034 ext. citations	3.4 avg, IF	6.58 L-index

#	Paper	IF	Citations
327	Evaluating the therapeutic effect of tumor treating fields (TTFields) by monitoring the impedance across TTFields electrode arrays <i>PeerJ</i> , <b>2022</b> , 10, e12877	3.1	O
326	Isochoric supercooling cryomicroscopy <i>Cryobiology</i> , <b>2022</b> ,	2.7	1
325	Methods to stabilize aqueous supercooling identified by use of an isochoric nucleation detection (INDe) device <i>Cryobiology</i> , <b>2022</b> , 106, 91-91	2.7	O
324	On the pressure dependence of salty aqueous eutectics. Cell Reports Physical Science, 2022, 100856	6.1	O
323	The pattern of cell survival in the pig liver following one freeze-thaw cryosurgery cycle <i>Cryo-Letters</i> , <b>2022</b> , 43, 25-31	0.3	
322	Effects of Isochoric Freezing Conditions on Cut Potato Quality. Foods, 2021, 10,	4.9	2
321	Analysis of the relative supercooling enhancement of two emerging supercooling techniques. <i>AIP Advances</i> , <b>2021</b> , 11, 055125	1.5	1
320	Preservation of grape tomato by isochoric freezing. Food Research International, 2021, 143, 110228	7	6
319	A Correlation Between Electric Fields That Target the Cell Membrane Potential and Dividing HeLa Cancer Cell Growth Inhibition. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2021</b> , 68, 1951-1956	5	3
318	Mass transfer into biological matter using isochoric freezing. <i>Cryobiology</i> , <b>2021</b> , 100, 212-215	2.7	1
317	Glucose and glycerol temperature-pressure correlations for the design of cryopreservation protocols in an isochoric system at subfreezing temperature. <i>Biochemical and Biophysical Research Communications</i> , <b>2021</b> , 559, 42-47	3.4	O
316	Multi-scale modeling of intensive macroalgae cultivation and marine nitrogen sequestration. <i>Communications Biology</i> , <b>2021</b> , 4, 848	6.7	3
315	Neutrophils are important for the development of pro-reparative macrophages after irreversible electroporation of the liver in mice. <i>Scientific Reports</i> , <b>2021</b> , 11, 14986	4.9	1
314	Isochoric supercooled preservation and revival of human cardiac microtissues. <i>Communications Biology</i> , <b>2021</b> , 4, 1118	6.7	2
313	Analysis of global energy savings in the frozen food industry made possible by transitioning from conventional isobaric freezing to isochoric freezing. <i>Renewable and Sustainable Energy Reviews</i> , <b>2021</b> , 151, 111621	16.2	1
312	Phase change interface stability during isochoric solidification of an aqueous solution. <i>Applied Physics Letters</i> , <b>2020</b> , 117, 133701	3.4	5
311	Isochoric conditions enhance stability of metastable supercooled water. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 123702	3.4	14

### (2019-2020)

310	A Theoretical Analysis of the Effects of Tumor-Treating Electric Fields on Single Cells. <i>Bioelectromagnetics</i> , <b>2020</b> , 41, 438-446	1.6	2	
309	High-Voltage Electrical Pulses in Oncology: Irreversible Electroporation, Electrochemotherapy, Gene Electrotransfer, Electrofusion, and Electroimmunotherapy. <i>Radiology</i> , <b>2020</b> , 295, 254-272	20.5	79	
308	A three-dimensional model for analysis and control of phase change phenomena during 3D printing of biological tissue. <i>Bioprinting</i> , <b>2020</b> , 18, e00077	7	4	
307	Freezing water at constant volume and under confinement. Communications Physics, 2020, 3,	5.4	10	
306	A Theoretical Study on the Biophysical Mechanisms by Which Tumor Treating Fields Affect Tumor Cells During Mitosis. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2020</b> , 67, 2594-2602	5	14	
305	Suppression of cavitation-induced nucleation in systems under isochoric confinement. <i>Physical Review Research</i> , <b>2020</b> , 2,	3.9	5	
304	A Mathematical Analysis of Directional Solidification of Aqueous Solutions. <i>Journal of Heat Transfer</i> , <b>2020</b> , 142,	1.8	1	
303	A Brain Phantom Study of a Noncontact Single Inductive Coil Device and the Attendant Algorithm for First Stage Diagnosis of Internal Bleeding in the Head. <i>Journal of Medical Devices, Transactions of the ASME</i> , <b>2020</b> , 14,	1.3	5	
302	Detection and estimating the blood accumulation volume of brain hemorrhage in a human anatomical skull using a RF single coil. <i>PeerJ</i> , <b>2020</b> , 8, e10416	3.1	2	
301	Toward a clinical real time tissue ablation technology: combining electroporation and electrolysis (E2). <i>PeerJ</i> , <b>2020</b> , 8, e7985	3.1	3	
300	Preservation of spinach by isochoric (constant volume) freezing. <i>International Journal of Food Science and Technology</i> , <b>2020</b> , 55, 2141-2151	3.8	9	
299	Multifrequency Analysis of Single Inductive Coil Measurements Across a Gel Phantom Simulation of Internal Bleeding in the Brain. <i>Bioelectromagnetics</i> , <b>2020</b> , 41, 21-33	1.6	6	
298	Analysis of the Electric Field-Dependent Current During Electroporation Pulses. <i>IEEE Access</i> , <b>2020</b> , 8, 93850-93856	3.5	1	
297	Preservation of Tilapia (Oreochromis aureus) Fillet by Isochoric (Constant Volume) Freezing. Journal of Aquatic Food Product Technology, <b>2020</b> , 29, 629-640	1.6	5	
296	Viability of Listeria monocytogenes and Salmonella Typhimurium after isochoric freezing. <i>Journal of Food Safety</i> , <b>2020</b> , 40, e12840	2	3	
295	Effect of isochoric freezing on quality aspects of minimally processed potatoes. <i>Journal of Food Science</i> , <b>2020</b> , 85, 2656-2664	3.4	9	
294	Detection and differentiation of bacteria by electrical bioimpedance spectroscopy. <i>BioTechniques</i> , <b>2020</b> , 69, 384-394	2.5	1	
293	A Study on Nonthermal Irreversible Electroporation of the Thyroid. <i>Technology in Cancer Research and Treatment</i> , <b>2019</b> , 18, 1533033819876307	2.7	4	

292	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> , <b>2019</b> , 251, 1-10	6	13
291	A Parallel Multiple Layer Cryolithography Device for the Manufacture of Biological Material for Tissue Engineering. <i>Journal of Medical Devices, Transactions of the ASME</i> , <b>2019</b> , 13,	1.3	2
290	Thermodynamic theory and experimental validation of a multiphase isochoric freezing process. Journal of Biomechanical Engineering, 2019,	2.1	4
289	Prostate cancer treatment with Irreversible Electroporation (IRE): Safety, efficacy and clinical experience in 471 treatments. <i>PLoS ONE</i> , <b>2019</b> , 14, e0215093	3.7	29
288	Normal and fibrotic liver parenchyma respond differently to irreversible electroporation. <i>Hpb</i> , <b>2019</b> , 21, 1344-1353	3.8	4
287	Non-Contact Monitoring of Temporal Volume Changes of a Hematoma in the Head by a Single Inductive Coil: A Numerical Study. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2019</b> , 66, 1328-1336	5	12
286	A Conceivable Mechanism Responsible for the Synergy of High and Low Voltage Irreversible Electroporation Pulses. <i>Annals of Biomedical Engineering</i> , <b>2019</b> , 47, 1552-1563	4.7	10
285	A theoretical study on real time monitoring of single cell mitosis with micro electrical impedance tomography. <i>Biomedical Microdevices</i> , <b>2019</b> , 21, 102	3.7	1
284	Isochoric conditions enable high subfreezing temperature pancreatic islet preservation without osmotic cryoprotective agents. <i>Cryobiology</i> , <b>2019</b> , 86, 130-133	2.7	15
283	Preservation of sweet cherry by isochoric (constant volume) freezing. <i>Innovative Food Science and Emerging Technologies</i> , <b>2019</b> , 52, 108-115	6.8	27
282	Molecular and histological study on the effects of electrolytic electroporation on the liver. <i>Bioelectrochemistry</i> , <b>2019</b> , 125, 79-89	5.6	8
281	Time-dependent Effects of Pressure during Preservation of Rat Hearts in an Isochoric System at Subfreezing Temperatures. <i>Cryo-Letters</i> , <b>2019</b> , 40, 64-70	0.3	1
280	Preservation of rat hearts in subfreezing temperature isochoric conditions to - 8 °LC and 78 MPa. <i>Biochemical and Biophysical Research Communications</i> , <b>2018</b> , 496, 852-857	3.4	22
279	Simultaneous electroporation and dielectrophoresis in non-electrolytic micro/nano-electroporation. <i>Scientific Reports</i> , <b>2018</b> , 8, 2481	4.9	12
278	History of Electroporation <b>2018</b> , 13-37		3
277	Multi-layer cryolithography for additive manufacturing. <i>Progress in Additive Manufacturing</i> , <b>2018</b> , 3, 245	-355	8
276	Molecular and histological study on the effects of non-thermal irreversible electroporation on the liver. <i>Biochemical and Biophysical Research Communications</i> , <b>2018</b> , 500, 665-670	3.4	20
275	The Effect of Textiles Impregnated with Particles of High Emissivity in the Far Infrared, on the Temperature of the Cold Hand. <i>Journal of Biomechanical Engineering</i> , <b>2018</b> ,	2.1	3

274	Escherichia coli viability in an isochoric system at subfreezing temperatures. <i>Cryobiology</i> , <b>2018</b> , 85, 17-2	242.7	10
273	The effect of isochoric freezing on mammalian cells in an extracellular phosphate buffered solution. <i>Cryobiology</i> , <b>2018</b> , 82, 155-158	2.7	5
272	Isochoric vitrification: An experimental study to establish proof of concept. Cryobiology, 2018, 83, 48-55	5 2.7	10
271	An Electrochemistry Study of Cryoelectrolysis in Frozen Physiological Saline. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2017</b> , 64, 1654-1659	5	Ο
270	The promise of organ and tissue preservation to transform medicine. <i>Nature Biotechnology</i> , <b>2017</b> , 35, 530-542	44.5	246
269	Isochoric and isobaric freezing of fish muscle. <i>Biochemical and Biophysical Research Communications</i> , <b>2017</b> , 485, 279-283	3.4	20
268	Cryoelectrolysis; an acute case study in the pig liver. <i>Cryobiology</i> , <b>2017</b> , 78, 110-114	2.7	0
267	Pressure in isochoric systems containing aqueous solutions at subzero Centigrade temperatures. <i>PLoS ONE</i> , <b>2017</b> , 12, e0183353	3.7	10
266	Using non-thermal irreversible electroporation to create an in vivo niche for exogenous cell engraftment. <i>BioTechniques</i> , <b>2017</b> , 62, 229-231	2.5	15
265	Tissue Ablation by Irreversible Electroporation <b>2017</b> , 707-721		
264	Non-electrolytic microelectroporation. <i>Biomedical Microdevices</i> , <b>2017</b> , 19, 65	3.7	2
263	Radar based technology for non-contact monitoring of accumulation of blood in the head: A numerical study. <i>PLoS ONE</i> , <b>2017</b> , 12, e0186381	3.7	8
262	Cryoelectrolysis-electrolytic processes in a frozen physiological saline medium. <i>PeerJ</i> , <b>2017</b> , 5, e2810	3.1	3
261	Single exponential decay waveform; a synergistic combination of electroporation and electrolysis (E2) for tissue ablation. <i>PeerJ</i> , <b>2017</b> , 5, e3190	3.1	12
260	A comparison of freezing-damage during isochoric and isobaric freezing of the potato. <i>PeerJ</i> , <b>2017</b> , 5, e3322	3.1	13
259	Tissue Ablation by Irreversible Electroporation <b>2017</b> , 1-15		
258	Cryoelectrolysis for Treatment of Atrial Fibrillation: A First Order Feasibility Study. <i>Cryo-Letters</i> , <b>2017</b> , 38, 428-433	0.3	
257	Electrolytic Effects During Tissue Ablation by Electroporation. <i>Technology in Cancer Research and Treatment</i> , <b>2016</b> , 15, NP95-NP103	2.7	38

256	Non-ionizing radiofrequency electromagnetic waves traversing the head can be used to detect cerebrovascular autoregulation responses. <i>Scientific Reports</i> , <b>2016</b> , 6, 21667	4.9	11
255	Germicide wound pad with active, in situ, electrolytically produced hypochlorous acid. <i>Biomedical Microdevices</i> , <b>2016</b> , 18, 26	3.7	3
254	Synergistic Combination of Electrolysis and Electroporation for Tissue Ablation. <i>PLoS ONE</i> , <b>2016</b> , 11, e0148317	3.7	27
253	The nematode Caenorhabditis elegans survives subfreezing temperatures in an isochoric system. <i>Biochemical and Biophysical Research Communications</i> , <b>2016</b> , 477, 401-5	3.4	19
252	The effect of undissolved air on isochoric freezing. <i>Cryobiology</i> , <b>2016</b> , 72, 225-31	2.7	8
251	Tissue Ablation by a Synergistic Combination of Electroporation and Electrolysis Delivered by a Single Pulse. <i>Annals of Biomedical Engineering</i> , <b>2016</b> , 44, 3144-3154	4.7	15
250	Advantages of isochoric freezing for food preservation: A preliminary analysis. <i>International Communications in Heat and Mass Transfer</i> , <b>2016</b> , 78, 95-100	5.8	12
249	Modulating electrolytic tissue ablation with reversible electroporation pulses <b>2015</b> , 03, 45-53		26
248	Electrical breakdown in tissue electroporation. <i>Biochemical and Biophysical Research Communications</i> , <b>2015</b> , 467, 736-41	3.4	25
247	Combining Electrolysis and Electroporation for Tissue Ablation. <i>Technology in Cancer Research and Treatment</i> , <b>2015</b> , 14, 395-410	2.7	29
246	Magnetic resonance imaging of electrolysis. <i>Scientific Reports</i> , <b>2015</b> , 5, 8095	4.9	8
245	Electrical impedance tomography of electrolysis. <i>PLoS ONE</i> , <b>2015</b> , 10, e0126332	3.7	9
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244	A Vivens Ex Vivo Study on the Synergistic Effect of Electrolysis and Freezing on the Cell Nucleus. <i>PLoS ONE</i> , <b>2015</b> , 10, e0145133	3.7	5
244		3.7	5 35
	PLoS ONE, <b>2015</b> , 10, e0145133		
243	PLoS ONE, 2015, 10, e0145133  Cryogenic 3D printing for tissue engineering. Cryobiology, 2015, 71, 518-21  Electrical impedance tomographic imaging of a single cell electroporation. Biomedical Microdevices,	2.7	35
243	PLoS ONE, 2015, 10, e0145133  Cryogenic 3D printing for tissue engineering. Cryobiology, 2015, 71, 518-21  Electrical impedance tomographic imaging of a single cell electroporation. Biomedical Microdevices, 2014, 16, 427-37  Model of pore formation in a single cell in a flow-through channel with micro-electrodes.	2.7	35 14

### (2011-2013)

238	Cell membrane electroporation-Part 2: the applications. <i>IEEE Electrical Insulation Magazine</i> , <b>2013</b> , 29, 29-37	2.1	83	
237	Electroporation <b>2013</b> , 21-36		1	
236	Mass Transfer Phenomena in Electroporation <b>2013</b> , 455-492		4	
235	Mechanisms of abiotic horizontal gene transfer: comment on "Lightning-triggered electroporation and electrofusion as possible contributors to natural horizontal gene transfer" by Tadej Kotnik. <i>Physics of Life Reviews</i> , <b>2013</b> , 10, 377-9	2.1	2	
234	The effect of blood flow on magnetic resonance imaging of non thermal irreversible electroporation. <i>Scientific Reports</i> , <b>2013</b> , 3, 3088	4.9	2	
233	Volumetric electromagnetic phase-shift spectroscopy of brain edema and hematoma. <i>PLoS ONE</i> , <b>2013</b> , 8, e63223	3.7	32	
232	Irreversible electroporation of human primary uveal melanoma in enucleated eyes. <i>PLoS ONE</i> , <b>2013</b> , 8, e71789	3.7	5	
231	Measurement of corneal endothelial impedance with non-invasive external electrodesa theoretical study. <i>Medical Engineering and Physics</i> , <b>2012</b> , 34, 195-201	2.4	5	
230	Listeria monocytogenes cell wall constituents exert a charge effect on electroporation threshold. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , <b>2012</b> , 1818, 689-94	3.8	27	
229	Treatment of Uveal Melanoma by Nonthermal Irreversible Electroporation: Electrical and Bioheat Finite Element Model of the Human Eye. <i>Journal of Heat Transfer</i> , <b>2012</b> , 134,	1.8	4	
228	MRI study on reversible and irreversible electroporation induced blood brain barrier disruption. <i>PLoS ONE</i> , <b>2012</b> , 7, e42817	3.7	65	
227	Irreversible electroporation on the small intestine. British Journal of Cancer, 2012, 106, 490-5	8.7	57	
226	Variable electric fields for high throughput electroporation protocol design in curvilinear coordinates. <i>Biotechnology and Bioengineering</i> , <b>2012</b> , 109, 2168-71	4.9	14	
225	Towards electroporation based treatment planning considering electric field induced muscle contractions. <i>Technology in Cancer Research and Treatment</i> , <b>2012</b> , 11, 189-201	2.7	42	
224	Tissue characterization using electrical impedance spectroscopy data: a linear algebra approach. <i>Physiological Measurement</i> , <b>2012</b> , 33, 997-1013	2.9	15	
223	Self-powered electroporation using a singularity-induced nano-electroporation configuration. <i>Biochemical and Biophysical Research Communications</i> , <b>2011</b> , 414, 419-24	3.4	6	
222	Irreversible electroporation near the heart: ventricular arrhythmias can be prevented with ECG synchronization. <i>American Journal of Roentgenology</i> , <b>2011</b> , 196, W330-5	5.4	125	
221	A theoretical analysis of the feasibility of a singularity-induced micro-electroporation system. <i>PLoS ONE</i> , <b>2011</b> , 6, e18523	3.7	9	

220	Cryosurgery with pulsed electric fields. <i>PLoS ONE</i> , <b>2011</b> , 6, e26219	3.7	6
219	C-SMART: Efficient seamless cellular phone based patient monitoring system <b>2011</b> ,		11
218	In vivo non-thermal irreversible electroporation impact on rat liver galvanic apparent internal resistance. <i>Physics in Medicine and Biology</i> , <b>2011</b> , 56, 951-63	3.8	23
217	SVM for prostate cancer using electrical impedance measurements. <i>Physiological Measurement</i> , <b>2011</b> , 32, 1373-87	2.9	13
216	Principles of Tissue Engineering With Nonthermal Irreversible Electroporation. <i>Journal of Heat Transfer</i> , <b>2011</b> , 133,	1.8	20
215	Temperature modulation of electric fields in biological matter. <i>PLoS ONE</i> , <b>2011</b> , 6, e20877	3.7	10
214	Electrical impedance characterization of normal and cancerous human hepatic tissue. <i>Physiological Measurement</i> , <b>2010</b> , 31, 995-1009	2.9	128
213	The effect of electroporation type pulsed electric fields on DNA in aqueous solution. <i>Technology in Cancer Research and Treatment</i> , <b>2010</b> , 9, 423-30	2.7	23
212	Endovascular nonthermal irreversible electroporation: a finite element analysis. <i>Journal of Biomechanical Engineering</i> , <b>2010</b> , 132, 031008	2.1	19
211	Irreversible Electroporation: First Patient Experience Focal Therapy of Prostate Cancer. <i>Series in Biomedical Engineering</i> , <b>2010</b> , 235-247		39
210	A statistical model for multidimensional irreversible electroporation cell death in tissue. <i>BioMedical Engineering OnLine</i> , <b>2010</b> , 9, 13	4.1	58
209	Experimental Studies on Non-thermal Irreversible Electroporation in Tissue. <i>Series in Biomedical Engineering</i> , <b>2010</b> , 155-181		1
208	Isochoric preservation: a novel characterization method. <i>Cryobiology</i> , <b>2010</b> , 60, 23-9	2.7	31
207	Vascular smooth muscle cells ablation with endovascular nonthermal irreversible electroporation. Journal of Vascular and Interventional Radiology, <b>2010</b> , 21, 1708-15	2.4	44
206	Nonthermal irreversible electroporation for tissue decellularization. <i>Journal of Biomechanical Engineering</i> , <b>2010</b> , 132, 091003	2.1	69
205	Zn/Cu-vegetative batteries, bioelectrical characterizations, and primary cost analyses. <i>Journal of Renewable and Sustainable Energy</i> , <b>2010</b> , 2, 033103	2.5	6
204	Tremor Acquisition System Based on UWB Wireless Sensor Network <b>2010</b> ,		8
203	Continuous Close-Proximity RSSI-Based Tracking in Wireless Sensor Networks <b>2010</b> ,		10

202	. IEEE Transactions on Plasma Science, <b>2010</b> , 38, 3211-3218	1.3	8
201	Over-hydration detection in brain by magnetic induction spectroscopy. <i>Journal of Physics:</i> Conference Series, <b>2010</b> , 224, 012123	0.3	7
200	Magnetic resonance imaging characteristics of nonthermal irreversible electroporation in vegetable tissue. <i>Journal of Membrane Biology</i> , <b>2010</b> , 236, 137-46	2.3	52
199	A primary current distribution model of a novel micro-electroporation channel configuration. <i>Biomedical Microdevices</i> , <b>2010</b> , 12, 833-40	3.7	9
198	New mechanism for voltage induced charge movement revealed in GPCRstheory and experiments. <i>PLoS ONE</i> , <b>2010</b> , 5, e8752	3.7	7
197	Historical Review of Irreversible Electroporation in Medicine. Series in Biomedical Engineering, 2010, 1-2	1	10
196	The Use of Irreversible Electroporation in Food Preservation. Series in Biomedical Engineering, 2010, 273	3-312	16
195	Experimental Studies on Irreversible Electroporation of Cells. <i>Series in Biomedical Engineering</i> , <b>2010</b> , 63-83		6
194	Mathematical Models of Mass Transfer in Tissue for Molecular Medicine with Reversible Electroporation <b>2010</b> , 45-74		
193	Cellular phone enabled non-invasive tissue classifier. <i>PLoS ONE</i> , <b>2009</b> , 4, e5178	3.7	7
192	Electrical field and temperature model of nonthermal irreversible electroporation in heterogeneous tissues. <i>Journal of Biomechanical Engineering</i> , <b>2009</b> , 131, 071006	2.1	78
191	The detection of brain ischaemia in rats by inductive phase shift spectroscopy. <i>Physiological Measurement</i> , <b>2009</b> , 30, 809-19	2.9	24
190	Tissue characterization with an electrical spectroscopy SVM classifier. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2009</b> , 56, 525-8	5	24
189	Linear superposition electrical impedance tomography imaging with multiple electrical/biopsy probes. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2009</b> , 56, 1465-72	5	5
188	Micro-electroporation of mesenchymal stem cells with alternating electrical current pulses. <i>Biomedical Microdevices</i> , <b>2009</b> , 11, 95-101	3.7	52
187	Irreversible electroporation for microbial control of drugs in solution. AAPS PharmSciTech, 2009, 10, 88	1 <del>36</del> 9	22
186	In vivo electrical conductivity measurements during and after tumor electroporation: conductivity changes reflect the treatment outcome. <i>Physics in Medicine and Biology</i> , <b>2009</b> , 54, 5949-63	3.8	129
185	Galvanic apparent internal impedance: an intrinsic tissue property. <i>Biochemical and Biophysical Research Communications</i> , <b>2009</b> , 389, 168-71	3.4	19

184	In vivo imaging of irreversible electroporation by means of electrical impedance tomography. <i>Physics in Medicine and Biology</i> , <b>2009</b> , 54, 4927-43	3.8	51
183	New Wearable Body Sensor for Continuous Diagnosis of Internal Tissue Bleeding <b>2009</b> ,		3
182	Non thermal irreversible electroporation: novel technology for vascular smooth muscle cells ablation. <i>PLoS ONE</i> , <b>2009</b> , 4, e4757	3.7	98
181	Distributed network, wireless and cloud computing enabled 3-D ultrasound; a new medical technology paradigm. <i>PLoS ONE</i> , <b>2009</b> , 4, e7974	3.7	25
180	Irreversible electroporation attenuates neointimal formation after angioplasty. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2008</b> , 55, 2268-74	5	35
179	Optimal parameters for the destruction of prostate cancer using irreversible electroporation. <i>Journal of Urology</i> , <b>2008</b> , 180, 2668-74	2.5	105
178	Use of conductive gels for electric field homogenization increases the antitumor efficacy of electroporation therapies. <i>Physics in Medicine and Biology</i> , <b>2008</b> , 53, 6605-18	3.8	35
177	Experimental sensitivity study of inductive phase shift spectroscopy as non-invasive method for hypoperfusion vs bleeding volumetric detection in brain. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i>	0.9	10
176	Intravascular irreversible electroporation: theoretical and experimental feasibility study. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2008</b> , 2008, 2051-4	0.9	7
175	Minimally obtrusive wearable device for continuous interactive cognitive and neurological assessment. <i>Physiological Measurement</i> , <b>2008</b> , 29, 543-54	2.9	10
174	Multiple biopsy probe sampling enabled minimally invasive electrical impedance tomography. <i>Physiological Measurement</i> , <b>2008</b> , 29, 109-26	2.9	4
173	Imaging cryosurgery with EIT: tracking the ice front and post-thaw tissue viability. <i>Physiological Measurement</i> , <b>2008</b> , 29, 899-912	2.9	13
172	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> , <b>2008</b> , 29, S255-66	2.9	14
171	A new concept for medical imaging centered on cellular phone technology. PLoS ONE, 2008, 3, e2075	3.7	55
170	Mass Transfer Model for Drug Delivery in Tissue Cells with Reversible Electroporation. <i>International Journal of Heat and Mass Transfer</i> , <b>2008</b> , 51, 5610-5616	4.9	61
169	Temperature considerations during irreversible electroporation. <i>International Journal of Heat and Mass Transfer</i> , <b>2008</b> , 51, 5617-5622	4.9	89
168	Electric field modulation in tissue electroporation with electrolytic and non-electrolytic additives. <i>Bioelectrochemistry</i> , <b>2007</b> , 70, 551-60	5.6	16
167	In vivo inductive phase shift measurements to detect intraperitoneal fluid. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2007</b> , 54, 953-6	5	13

### (2006-2007)

166	In vivo electrical impedance measurements during and after electroporation of rat liver. <i>Bioelectrochemistry</i> , <b>2007</b> , 70, 287-95	5.6	120
165	Irreversible electroporation in medicine. <i>Technology in Cancer Research and Treatment</i> , <b>2007</b> , 6, 255-60	2.7	289
164	Irreversible electroporation: implications for prostate ablation. <i>Technology in Cancer Research and Treatment</i> , <b>2007</b> , 6, 295-300	2.7	293
163	Irreversible electroporation: a new ablation modalityclinical implications. <i>Technology in Cancer Research and Treatment</i> , <b>2007</b> , 6, 37-48	2.7	515
162	Methods of optimization of electrical impedance tomography for imaging tissue electroporation. <i>Physiological Measurement</i> , <b>2007</b> , 28, 1135-47	2.9	13
161	Inductive phase shift spectroscopy for volumetric brain edema detection: an experimental simulation. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , <b>2007</b> , 2346-9		9
160	The effect of irreversible electroporation on blood vessels. <i>Technology in Cancer Research and Treatment</i> , <b>2007</b> , 6, 307-12	2.7	244
159	Frequency-division multiplexing for electrical impedance tomography in biomedical applications. <i>International Journal of Biomedical Imaging</i> , <b>2007</b> , 2007, 54798	5.2	17
158	Tumor ablation with irreversible electroporation. <i>PLoS ONE</i> , <b>2007</b> , 2, e1135	3.7	349
157	A novel nonthermal energy source for surgical epicardial atrial ablation: irreversible electroporation. <i>Heart Surgery Forum</i> , <b>2007</b> , 10, E162-7	0.7	100
156	The effects of irreversible electroporation on tissue, in vivo <b>2007</b> , 629-629		
155	Frequency Marked Electrodes in Electrical Impedance Tomography <b>2007</b> , 380-383		
154	Electrical impedance measurements during electroporation of rat liver and muscle 2007, 130-133		6
153	Circular and Magnetron Inductor/Sensor Coils to Detect Volumetric Brain Edema by Inductive Phase Shift <b>2007</b> , 315-319		7
152	Optimum Conductivity of Gels for Electric Field Homogenization in Tissue Electroporation Therapies. <i>IFMBE Proceedings</i> , <b>2007</b> , 619-622	0.2	3
151	In vivo results of a new focal tissue ablation technique: irreversible electroporation. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2006</b> , 53, 1409-15	5	371
150	Detecting cryoablation with EIT and the benefit of including ice front imaging data. <i>Physiological Measurement</i> , <b>2006</b> , 27, S175-85	2.9	11
149	The detection of brain oedema with frequency-dependent phase shift electromagnetic induction. <i>Physiological Measurement</i> , <b>2006</b> , 27, 539-52	2.9	38

148	A theoretical study on magnetic induction frequency dependence of phase shift in oedema and haematoma. <i>Physiological Measurement</i> , <b>2006</b> , 27, 829-38	2.9	22
147	Impedance analyzer for in vivo electroporation studies. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , <b>2006</b> , 2006, 5056-9		5
146	Analysis of isochoric subcooling. <i>Cryobiology</i> , <b>2006</b> , 53, 139-42	2.7	31
145	Electrical and thermal characterization of nanochannels between a cell and a silicon based micro-pore. <i>Biomedical Microdevices</i> , <b>2006</b> , 8, 25-34	3.7	21
144	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> , <b>2005</b> , 24, 1915-29	5.8	46
143	The thermodynamic principles of isochoric cryopreservation. <i>Cryobiology</i> , <b>2005</b> , 50, 121-38	2.7	63
142	Heat transfer model to characterize the focal cooling necessary to suppress spontaneous epileptiform activity (Invited Paper) <b>2005</b> ,		1
141	Temperature dependence of tissue impedivity in electrical impedance tomography of cryosurgery. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2005</b> , 52, 695-701	5	24
140	Tissue ablation with irreversible electroporation. <i>Annals of Biomedical Engineering</i> , <b>2005</b> , 33, 223-31	4.7	850
139	Cancer cells ablation with irreversible electroporation. <i>Technology in Cancer Research and Treatment</i> , <b>2005</b> , 4, 699-705	2.7	234
138	Front-tracking image reconstruction algorithm for EIT-monitored cryosurgery using the boundary element method. <i>Physiological Measurement</i> , <b>2005</b> , 26, 503-16	2.9	15
137	A PARALLEL GENETIC ALGORITHM FOR HEAT CONDUCTION PROBLEMS. <i>Numerical Heat Transfer, Part B: Fundamentals,</i> <b>2005</b> , 47, 97-110	1.3	6
136	Frequency dependence of phase shift in edema: a theoretical study with magnetic induction.  Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2005, 2005, 351	8-21	11
135	Assessment of the Viability of Transplant Organs with 3D Electrical Impedance Tomography.  Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2005, 2005, 264	4-7	2
134	Distributed network imaging and electrical impedance tomography of minimally invasive surgery. <i>Technology in Cancer Research and Treatment</i> , <b>2004</b> , 3, 125-34	2.7	17
133	Electrical impedance tomography for imaging tissue electroporation. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2004</b> , 51, 761-7	5	84
132	Subzero nonfreezing cryopresevation of rat hearts using antifreeze protein I and antifreeze protein III. <i>Cryobiology</i> , <b>2004</b> , 48, 273-82	2.7	38
131	Improved viability and reduced apoptosis in subzero 21 hours preservation of transplanted rat hearts using antifreeze proteins. <i>Journal of Heart and Lung Transplantation</i> , <b>2004</b> , 23, S171-S172	5.8	3

#### (2000-2004)

130	Prolonged 24-hour subzero preservation of heterotopically transplanted rat hearts using antifreeze proteins derived from arctic fish. <i>Annals of Thoracic Surgery</i> , <b>2004</b> , 77, 1648-55	2.7	32
129	Electrical impedance tomography of cell viability in tissue with application to cryosurgery. <i>Journal of Biomechanical Engineering</i> , <b>2004</b> , 126, 305-9	2.1	25
128	Utilization of Directional Freezing for the Construction of Tissue Engineering Scaffolds 2003, 439		5
127	Cryosurgical monitoring using electrical impedance tomography: 2D and 3D feasibility studies <b>2003</b> , 4954, 114		1
126	Principles of low temperature cell preservation. <i>Heart Failure Reviews</i> , <b>2003</b> , 8, 277-84	5	96
125	Theoretical analysis of the thermal effects during in vivo tissue electroporation. <i>Bioelectrochemistry</i> , <b>2003</b> , 61, 99-107	5.6	142
124	Flow-through micro-electroporation chip for high efficiency single-cell genetic manipulation. <i>Sensors and Actuators A: Physical</i> , <b>2003</b> , 104, 205-212	3.9	111
123	Instantaneous, quantitative single-cell viability assessment by electrical evaluation of cell membrane integrity with microfabricated devices. <i>Sensors and Actuators A: Physical</i> , <b>2003</b> , 105, 31-39	3.9	53
122	EVOLUTIONARY-GENETIC ALGORITHM FOR SOLVING 2-D STEADY-STATE CONDUCTION PROBLEMS. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , <b>2003</b> , 43, 99-115	1.3	6
121	Preservation of myocyte structure and mitochondrial integrity in subzero cryopreservation of mammalian hearts for transplantation using antifreeze proteinsan electron microscopy study. <i>European Journal of Cardio-thoracic Surgery</i> , <b>2003</b> , 24, 292-6; discussion 296-7	3	47
120	A feasibility study for electrical impedance tomography as a means to monitor tissue electroporation for molecular medicine. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2002</b> , 49, 400-3	5	73
119	Treatment of cancer with cryochemotherapy. <i>British Journal of Cancer</i> , <b>2002</b> , 86, 1658-60	8.7	63
118	Successful use of ocean pout thermal hysteresis protein (antifreeze protein III) in cryopreservation of transplanted mammalian heart at subzero temperature. <i>Journal of Heart and Lung Transplantation</i> , <b>2002</b> , 21, 137	5.8	2
117	Low Temperature Preservation of Biological Organs and Tissues <b>2002</b> , 27-49		2
116	Microfabricated electroporation chip for single cell membrane permeabilization. <i>Sensors and Actuators A: Physical</i> , <b>2001</b> , 89, 242-249	3.9	135
115	Cryosurgical monitoring using bioimpedance measurementsa feasibility study for electrical impedance tomography. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2000</b> , 47, 1376-81	5	35
114	An Analysis of Unicellular Mass Transfer Using a Microfabricated Experimental Technique. <i>Biomedical Microdevices</i> , <b>2000</b> , 2, 305-316	3.7	
113	Transplantation of mammalian livers following freezing: vascular damage and functional recovery. <i>Cryobiology</i> , <b>2000</b> , 40, 84-9	2.7	14

112	Cryosurgery. Annual Review of Biomedical Engineering, <b>2000</b> , 2, 157-87	12	198
111	Micro-Electroporation: Improving the Efficiency and Understanding of Electrical Permeabilization of Cells. <i>Biomedical Microdevices</i> , <b>1999</b> , 2, 145-150	3.7	104
110	Effect of thermal variables on human breast cancer in cryosurgery. <i>Breast Cancer Research and Treatment</i> , <b>1999</b> , 53, 185-92	4.4	54
109	Evaluation of the impedance technique for cryosurgery in a theoretical model of the head. <i>Cryobiology</i> , <b>1999</b> , 38, 51-9	2.7	22
108	An in vivo study of antifreeze protein adjuvant cryosurgery. <i>Cryobiology</i> , <b>1999</b> , 38, 169-75	2.7	73
107	A histological analysis of liver injury in freezing storage. <i>Cryobiology</i> , <b>1999</b> , 39, 271-7	2.7	18
106	Viability of deformed cells. <i>Cryobiology</i> , <b>1999</b> , 39, 243-51	2.7	38
105	Influence of fish antifreeze proteins on the freezing of cell suspensions with cryoprotectant penetrating cells. <i>International Journal of Heat and Mass Transfer</i> , <b>1998</b> , 41, 1907-1915	4.9	14
104	The use of evolutionarygenetic analogy in numerical analysis. <i>Communications in Numerical Methods in Engineering</i> , <b>1998</b> , 14, 151-160		8
103	Ice-Front Propagation Monitoring in Tissue by the use of Visible-Light Spectroscopy. <i>Applied Optics</i> , <b>1998</b> , 37, 6006-10	1.7	9
102	A method to study intracellular ice nucleation. <i>Journal of Biomechanical Engineering</i> , <b>1998</b> , 120, 27-31	2.1	10
101	Effect of antifreeze proteins on frozen primary prostatic adenocarcinoma cells. <i>Urology</i> , <b>1997</b> , 49, 421-	51.6	54
100	MICROSCALE HEAT TRANSFER IN BIOLOGICAL SYSTEMS AT LOW TEMPERATURES. <i>Experimental Heat Transfer</i> , <b>1997</b> , 10, 1-29	2.4	14
99	Kinetics of antifreeze protein-induced ice growth inhibition. FEBS Letters, 1997, 412, 241-4	3.8	43
98	Temperature determination in the frozen region during cryosurgery of rabbit liver using MR image analysis. <i>Magnetic Resonance Imaging</i> , <b>1997</b> , 15, 657-67	3.3	51
97	Chemical adjuvant cryosurgery with antifreeze proteins. <i>Journal of Surgical Oncology</i> , <b>1997</b> , 66, 114-21	2.8	65
96	Effect of thermal variables on frozen human primary prostatic adenocarcinoma cells. <i>Urology</i> , <b>1996</b> , 48, 441-7	1.6	133
95	An Evolutionary-Genetic Approach to Heat Transfer Analysis. <i>Journal of Heat Transfer</i> , <b>1996</b> , 118, 528-5	<b>31</b> .8	10

94	Mechanical stress power measurements during high-power laser ablation. <i>Journal of Applied Physics</i> , <b>1996</b> , 80, 4665-4672	2.5	13
93	An integrated probe for magnetic resonance imaging monitored skin cryosurgery. <i>Journal of Biomechanical Engineering</i> , <b>1995</b> , 117, 59-63	2.1	16
92	Magnetic Resonance Imaging Assisted Temperature Calculations in Multiple Domain Freezing Problems. <i>Journal of Heat Transfer</i> , <b>1995</b> , 117, 1079-1082	1.8	1
91	Phase Transformation in Materials With Nonuniform Phase Transition Temperatures. <i>Journal of Heat Transfer</i> , <b>1995</b> , 117, 803-805	1.8	3
90	MR image-guided control of cryosurgery. <i>Journal of Magnetic Resonance Imaging</i> , <b>1995</b> , 5, 753-60	5.6	44
89	1H magnetic resonance imaging of freezing and thawing in freeze-tolerant frogs. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , <b>1994</b> , 266, R1771-7	3.2	8
88	Freeze tolerance in turtles: visual analysis by microscopy and magnetic resonance imaging.  American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 1994, 267, R1078-88	3.2	8
87	Temperature gradient osmometer and anomalies in freezing temperatures. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , <b>1994</b> , 267, R1646-52	3.2	1
86	Detecting laser-induced phase change at the surface of solids via latent heat of melting with a photothermal deflection technique. <i>Journal of Applied Physics</i> , <b>1994</b> , 75, 1473-1485	2.5	11
85	An inverse finite element minimization-based method for solution of multi-dimensional phase-change and material boundary shapes. <i>International Journal for Numerical Methods in Engineering</i> , <b>1994</b> , 37, 1125-1141	2.4	3
84	MR imaging assisted temperature calculations during cryosurgery. <i>Magnetic Resonance Imaging</i> , <b>1994</b> , 12, 1021-31	3.3	50
83	The role of thermal hysteresis proteins during cryopreservation of oocytes and embryos. <i>Theriogenology</i> , <b>1994</b> , 41, 107-112	2.8	27
82	Freezing of mammalian livers with glycerol and antifreeze proteins. <i>Biochemical and Biophysical Research Communications</i> , <b>1994</b> , 200, 732-41	3.4	59
81	Patterns of ice formation in normal and malignant breast tissue. <i>Cryobiology</i> , <b>1994</b> , 31, 109-20	2.7	38
80	Mechanical interactions between ice crystals and red blood cells during directional solidification. <i>Cryobiology</i> , <b>1994</b> , 31, 483-500	2.7	146
79	Microscopic Behavior of Ice Crystals and Biological Cells during Directional Solidification of Solutions with Cells 880-02 Nihon Kikai Gakkai Ronbunsh Transactions of the Japan Society of Mechanical Engineers Series B B-hen, <b>1994</b> , 60, 1349-1355		3
78	Microscopic Pattern of Ice Crystal Growth in the Presence of Thermal Hysteresis Proteins. <i>Journal of Offshore Mechanics and Arctic Engineering</i> , <b>1994</b> , 116, 173-179	1.5	15
77	Antifreeze glycoproteins increase solution viscosity. <i>Biochemical and Biophysical Research Communications</i> , <b>1993</b> , 197, 927-31	3.4	13

76	Monitoring cryosurgery in the brain and in the prostate with proton NMR. <i>Cryobiology</i> , <b>1993</b> , 30, 191-9	2.7	68
75	A morphological study of cooling rate response in normal and neoplastic human liver tissue: cryosurgical implications. <i>Cryobiology</i> , <b>1993</b> , 30, 482-92	2.7	125
74	Large ice crystals in the nucleus of rapidly frozen liver cells. <i>Cryobiology</i> , <b>1993</b> , 30, 597-603	2.7	20
73	Microscale Heat and Mass Transfer of Vascular and Intracellular Freezing in the Liver. <i>Journal of Heat Transfer</i> , <b>1993</b> , 115, 1029-1035	1.8	20
72	Viscosity sensing with lamb-wave microsensor: dimethylsulfoxide solution viscosity as a function of temperature. <i>Journal of Biomechanical Engineering</i> , <b>1993</b> , 115, 329-31	2.1	14
71	Transrectal ultrasound-guided percutaneous radical cryosurgical ablation of the prostate. <i>Cancer</i> , <b>1993</b> , 72, 1291-9	6.4	378
70	Three-dimensional simulation of the plasma arc welding process. <i>International Journal of Heat and Mass Transfer</i> , <b>1993</b> , 36, 3283-3298	4.9	45
69	MRI-monitored cryosurgery in the rabbit brain. <i>Magnetic Resonance Imaging</i> , <b>1993</b> , 11, 1155-64	3.3	50
68	Experimental observations and theoretical studies on solidification processes in saline solutions. <i>Experimental Thermal and Fluid Science</i> , <b>1993</b> , 6, 157-167	3	7
67	Cryogenic protection of oocytes with antifreeze proteins. <i>Molecular Reproduction and Development</i> , <b>1993</b> , 36, 488-93	2.6	71
66	Optimization of Multiprobe Cryosurgery. <i>Journal of Heat Transfer</i> , <b>1992</b> , 114, 796-801	1.8	77
65	An analytical study of cryosurgery in the lung. <i>Journal of Biomechanical Engineering</i> , <b>1992</b> , 114, 467-72	2.1	33
64	Structural and functional similarity between fish antifreeze proteins and calcium-dependent lectins. <i>Biochemical and Biophysical Research Communications</i> , <b>1992</b> , 185, 335-40	3.4	89
63	The cryoprotective effect of antifreeze glycopeptides from antarctic fishes. <i>Cryobiology</i> , <b>1992</b> , 29, 69-7	92.7	97
62	Inhibition of Ca2+ and K+ currents by "antifreeze" proteins. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , <b>1992</b> , 262, R542-5	3.2	11
61	Fish antifreeze proteins block Ca entry into rabbit parietal cells. <i>American Journal of Physiology - Cell Physiology</i> , <b>1992</b> , 263, C1310-3	5.4	24
60	Cryomicroscopic analysis of freezing in liver of the freeze-tolerant wood frog. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , <b>1992</b> , 263, R185-94	3.2	10
59	Ice-crystal growth and lectins. <i>Nature</i> , <b>1992</b> , 360, 113-4	50.4	24

58	On the use of the Weierstrass-Mandelbrot function to describe the fractal component of turbulent velocity. <i>Fluid Dynamics Research</i> , <b>1992</b> , 9, 81-95	1.2	34
57	The process of freezing and the mechanism of damage during cryosurgery <b>1992</b> , 7-18		4
56	Cryosurgery: advances in the application of low temperatures to medicine. <i>International Journal of Refrigeration</i> , <b>1991</b> , 14, 190-199	3.8	41
55	Ultrasound-guided hepatic cryosurgery in the treatment of metastatic colon carcinoma. Preliminary results. <i>Cancer</i> , <b>1991</b> , 67, 901-7	6.4	242
54	Hypothermic protectiona fundamental property of "antifreeze" proteins. <i>Biochemical and Biophysical Research Communications</i> , <b>1991</b> , 180, 566-71	3.4	125
53	Percutaneous transperineal prostate cryosurgery using transrectal ultrasound guidance: animal model. <i>Urology</i> , <b>1991</b> , 37, 277-81	1.6	54
52	Effects of cooling rate and glycerol concentration on the structure of the frozen kidney: assessment by cryo-scanning electron microscopy. <i>Cryobiology</i> , <b>1990</b> , 27, 301-10	2.7	23
51	The process of freezing and the mechanism of damage during hepatic cryosurgery. <i>Cryobiology</i> , <b>1990</b> , 27, 85-97	2.7	174
50	The effect of antifreeze glycopeptides on membrane potential changes at hypothermic temperatures. <i>Biochemical and Biophysical Research Communications</i> , <b>1990</b> , 173, 1369-74	3.4	95
49	HEAT TRANSFER DURING FREEZING OF BIOLOGICAL MATERIALS. <i>Annual Review of Heat Transfer</i> , <b>1990</b> , 3, 1-38	2.7	2
48	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> , <b>1989</b> , 32, 1111-1130	4.9	19
47	A multi-dimensional model of momentum and mass transfer in the liver. <i>International Journal of Heat and Mass Transfer</i> , <b>1989</b> , 32, 2421-2434	4.9	5
46	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> , <b>1989</b> , 28, 2583-2607	2.4	14
45	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> , <b>1989</b> , 28, 2609-2634	2.4	19
44	A mixed-variable continuously deforming finite element method for parabolic evolution problems. Part III: Numerical implementation and computational results. <i>International Journal for Numerical Methods in Engineering</i> , <b>1989</b> , 28, 2715-2760	2.4	12
43	Effect of ice crystal habit on the viability of glycerol-protected red blood cells. <i>Cryobiology</i> , <b>1989</b> , 26, 580	2.7	20
42	The Energy Equation for Freezing of Biological Tissue. <i>Journal of Heat Transfer</i> , <b>1989</b> , 111, 988-997	1.8	12
41	Energy Storage in a Fluidized Bed. <i>Journal of Heat Transfer</i> , <b>1989</b> , 111, 726-730	1.8	1

40	Two-dimensional heat transfer study on the keyhole plasma arc welding process. <i>International Journal of Heat and Mass Transfer</i> , <b>1988</b> , 31, 1409-1421	4.9	61
39	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> , <b>1988</b> , 234, 343-58		88
38	Transient Melting of a Metal Plate by a Penetrating Plasma Arc. Journal of Heat Transfer, 1987, 109, 463	<b>-4.6</b> 9	7
37	Heat transfer during cryopreservation by perfusion through the vascular system. <i>Cryobiology</i> , <b>1987</b> , 24, 537-41	2.7	
36	Heat Transfer during Cryopreservation <b>1987</b> , 89-116		
35	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> , <b>1986</b> , 23, 1785-1805	2.4	41
34	A finite element study of a coplanar electrode Josephson junction with respect to electric potential and temperature. <i>International Communications in Heat and Mass Transfer</i> , <b>1986</b> , 13, 55-65	5.8	
33	An Inverse Finite Element Method for the Analysis of Stationary Arc Welding Processes. <i>Journal of Heat Transfer</i> , <b>1986</b> , 108, 734-741	1.8	49
32	Society of Gastrointestinal Radiologists Roscoe E. Miller Award. Monitoring hepatic cryosurgery with sonography. <i>American Journal of Roentgenology</i> , <b>1986</b> , 147, 665-9	5.4	59
31	Analysis of the introduction and removal of glycerol in rabbit kidneys using a Krogh cylinder model. <i>Cryobiology</i> , <b>1986</b> , 23, 150-60	2.7	13
30	Ultrasound monitored hepatic cryosurgery: longevity study on an animal model. <i>Cryobiology</i> , <b>1986</b> , 23, 277-85	2.7	19
29	An Analytical Model of Thermal and Vapor Diffusion in Freezing of Wet Coal. <i>Journal of Heat Transfer</i> , <b>1985</b> , 107, 5-11	1.8	3
28	Sonographic monitoring of hepatic cryosurgery in an experimental animal model. <i>American Journal of Roentgenology</i> , <b>1985</b> , 144, 1043-7	5.4	60
27	A cryomicroscope using directional solidification for the controlled freezing of biological material. <i>Cryobiology</i> , <b>1985</b> , 22, 55-68	2.7	125
26	Real time ultrasonic monitoring of hepatic cryosurgery. <i>Cryobiology</i> , <b>1985</b> , 22, 319-30	2.7	84
25	Cryomicroscopic observations on directional solidification in onion cells. <i>Cryobiology</i> , <b>1985</b> , 22, 392-399	2.7	7
24	AN INVERSE FINITE-ELEMENT TECHNIQUE TO DETERMINE THE CHANGE OF PHASE INTERFACE LOCATION IN ONE-DIMENSIONAL MELTING PROBLEMS. <i>Numerical Heat Transfer</i> , <b>1984</b> , 7, 269-283		37
23	A numerical study using <b>f</b> ront tracking <b>[</b> finite elements on the morphological stability of a planar interface during transient solidification processes. <i>Journal of Crystal Growth</i> , <b>1984</b> , 69, 29-46	1.6	11

22	A <b>fr</b> ont tracking <b>F</b> inite element study on change of phase interface stability during solidification processes in solutions. <i>Journal of Crystal Growth</i> , <b>1984</b> , 70, 56-63	1.6	11
21	Ultrasonic monitoring of hepatic cryosurgery: Preliminary report on an animal model. <i>Cryobiology</i> , <b>1984</b> , 21, 713	2.7	2
20	An analytical method to evaluate cooling rates during cryopreservation protocols for organs. <i>Cryobiology</i> , <b>1984</b> , 21, 303-20	2.7	28
19	Ultrasonic characteristics of frozen liver. <i>Cryobiology</i> , <b>1984</b> , 21, 321-8	2.7	97
18	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> , <b>1983</b> , 26, 1885-1889	4.9	13
17	Solidification processes in saline solutions. <i>Journal of Crystal Growth</i> , <b>1983</b> , 62, 513-522	1.6	26
16	NUMERICAL COMPUTATION USING FINITE ELEMENTS FOR THE MOVING INTERFACE IN HEAT TRANSFER PROBLEMS WITH PHASE TRANSFORMATION. <i>Numerical Heat Transfer</i> , <b>1983</b> , 6, 209-222		50
15	Experimental Comparison of Heat Transfer Data With Flow Visualization on a Flat Surface in an Air Fluidized Bed. <i>Journal of Heat Transfer</i> , <b>1983</b> , 105, 809-816	1.8	1
14	A Numerical Study of the Thawing Process of a Frozen Coal Particle. <i>Journal of Heat Transfer</i> , <b>1983</b> , 105, 197-200	1.8	2
13	The effect of orientation on the heat transfer from a flat surface in an air fluidized bed. <i>International Journal of Heat and Mass Transfer</i> , <b>1983</b> , 26, 151-153	4.9	1
12	Thermal Stresses During Solidification Processes. <i>Journal of Heat Transfer</i> , <b>1982</b> , 104, 196-199	1.8	15
11	Solidification of a Conglomerate of Particles. <i>Journal of Heat Transfer</i> , <b>1982</b> , 104, 193-196	1.8	2
10	Transient mass transfer processes during the perfusion of a biological organ with a cryophylactic agent solution. <i>Cryobiology</i> , <b>1982</b> , 19, 70-82	2.7	9
9	A finite element method for the solution of one-dimensional phase change problems. <i>International Journal of Heat and Mass Transfer</i> , <b>1981</b> , 24, 1987-1989	4.9	54
8	Thermal stresses in frozen organs. <i>Cryobiology</i> , <b>1980</b> , 17, 66-73	2.7	58
7	An analytical model for the prediction of the local concentration of cryophylactic agents in perfused organs. <i>Cryobiology</i> , <b>1979</b> , 16, 362-71	2.7	4
6	The Determination of the Thermal History in a One-Dimensional Freezing System by a Perturbation Method. <i>Journal of Heat Transfer</i> , <b>1979</b> , 101, 326-330	1.8	19
5	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> , <b>1978</b> , 100, 300-304	1.8	30

4	Analysis of a Stefan-Like Problem in a Biological Tissue Around a Cryosurgical Probe. <i>Journal of Heat Transfer</i> , <b>1976</b> , 98, 514-519	1.8	47
3	Biomimetic propulsion for a swimming surgical micro-robot		28
2	A novel microfluidic cell-chip for single cell analysis and manipulation		4
1	Isochoric supercooled preservation and revival of human cardiac microtissues		2