John C Bischof

List of Publications by Year
in descending order

203	10,212	31976	42399
papers	citations	53 h-index	92 g-index

224	224	224	10308
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Sperm cryopreservation, inÂvitro fertilization, and embryo freezing. , 2022, , 157-181.		0
2	Vitrification and Rewarming of Magnetic Nanoparticleâ€Loaded Rat Hearts. Advanced Materials Technologies, 2022, 7, 2100873.	5.8	25
3	Thermal Analyses of Nanowarming-Assisted Recovery of the Heart From Cryopreservation by Vitrification. Journal of Heat Transfer, 2022, 144, .	2.1	6
4	Bioapplications of Magnetic Nanowires: Barcodes, Biocomposites, Heaters. IEEE Transactions on Magnetics, 2022, 58, 1-6.	2.1	2
5	Characterization of Miniature Probes for Cryosurgery, Thermal Ablation, and Irreversible Electroporation on Small Animals. Advanced Therapeutics, 2022, 5, .	3.2	3
6	Pancreatic islet cryopreservation by vitrification achieves high viability, function, recovery and clinical scalability for transplantation. Nature Medicine, 2022, 28, 798-808.	30.7	39
7	Phosphonate coating of commercial iron oxide nanoparticles for nanowarming cryopreserved samples. Journal of Materials Chemistry B, 2022, 10, 3734-3746.	5.8	7
8	Ice Control during Cryopreservation of Heart Valves and Maintenance of Post-Warming Cell Viability. Cells, 2022, 11, 1856.	4.1	4
9	Liver Cryopreservation for Regenerative Medicine Applications. Regenerative Engineering and Translational Medicine, 2021, 7, 57-65.	2.9	6
10	Aggregation affects optical properties and photothermal heating of gold nanospheres. Scientific Reports, 2021, 11, 898.	3.3	16
11	Ultrasensitive and Highly Specific Lateral Flow Assays for Point-of-Care Diagnosis. ACS Nano, 2021, 15, 3593-3611.	14.6	270
12	Improved Influenza Diagnostics through Thermal Contrast Amplification. Diagnostics, 2021, 11, 462.	2.6	5
13	Cryopreservation method for Drosophila melanogaster embryos. Nature Communications, 2021, 12, 2412.	12.8	20
14	Conduction Cooling and Plasmonic Heating Dramatically Increase Droplet Vitrification Volumes for Cell Cryopreservation. Advanced Science, 2021, 8, 2004605.	11.2	22
15	Irreversible electroporation augments checkpoint immunotherapy in prostate cancer and promotes tumor antigen-specific tissue-resident memory CD8+ T cells. Nature Communications, 2021, 12, 3862.	12.8	42
16	Vitrification and Nanowarming of Kidneys. Advanced Science, 2021, 8, e2101691.	11.2	41
17	402.3: Long-term Preservation of Isolated Human, Mouse, Porcine Islets and Human Stem Cell Derived Beta Cells (HUES-8 Cell Lines) Using a High Throughput Vitrification-Rewarming Modified Cryomesh Technique to Successfully Cure Diabetes in a Mouse With Transplantation. Transplantation, 2021, 105, S27-S28.	1.0	0
18	Kinetics of nonisothermal phase change with arbitrary temperatureâ€“time history and initial transformed phase distributions. Journal of Chemical Physics, 2021, 155, 211101.	3.0	3

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19	fMâ€“aM Detection of the SARS-CoV-2 Antigen by Advanced Lateral Flow Immunoassay Based on Gold Nanospheres. ACS Applied Nano Materials, 2021, 4, 13826-13837.	5.0	18
20	Optimizing Integrated Electrode Design for Irreversible Electroporation of Implanted Polymer Scaffolds. Annals of Biomedical Engineering, 2020, 48, 1230-1240.	2.5	4
21	Preparation of Scalable Silicaâ€Coated Iron Oxide Nanoparticles for Nanowarming. Advanced Science, 2020, 7, 1901624.	11.2	61
22	Imaging the distribution of iron oxide nanoparticles in hypothermic perfused tissues. Magnetic Resonance in Medicine, 2020, 83, 1750-1759.	3.0	10
23	Cryopreservation and Laser Nanowarming of Zebrafish Embryos Followed by Hatching and Spawning. Advanced Biology, 2020, 4, e2000138.	3.0	25
24	Iron oxideâ€loaded polymer scaffolds for nonâ€invasive hyperthermic treatment of infiltrated cells. AICHE Journal, 2020, 66, e17001.	3.6	2
25	Development and optimization of thermal contrast amplification lateral flow immunoassays for ultrasensitive HIV p24 protein detection. Microsystems and Nanoengineering, 2020, 6, 54.	7.0	33
26	Thermal conductivity of cryoprotective agents loaded with nanoparticles, with application to recovery of preserved tissues and organs from cryogenic storage. PLoS ONE, 2020, 15, e0238941.	2.5	10
27	Diffusion Limited Cryopreservation of Tissue with Radiofrequency Heated Metal Forms. Advanced Healthcare Materials, 2020, 9, e2000796.	7.6	21
28	Photothermal conversion of gold nanoparticles for uniform pulsed laser warming of vitrified biomaterials. Nanoscale, 2020, 12, 12346-12356.	5.6	20
29	The impact of data selection and fitting on SAR estimation for magnetic nanoparticle heating. International Journal of Hyperthermia, 2020, 37, 100-107.	2.5	13
30	Photothermal conversion of gold nanoparticles for fast and uniform laser warming of vitrified biomaterials. Cryobiology, 2020, 97, 266.	0.7	0
31	A Microthermal Sensor for Cryoablation Balloons. Journal of Biomechanical Engineering, 2020, 142, .	1.3	1
32	Nanowarming using Au-tipped Co₃₅Fe₆₅ ferromagnetic nanowires. Nanoscale, 2019, 11, 14607-14615.	5.6	30
33	Engineering T cell response to cancer antigens by choice of focal therapeutic conditions. International Journal of Hyperthermia, 2019, 36, 130-138.	2.5	74
34	Improved detection of group A Streptococcus during thermal contrast amplification vs. visual reading of clinical rapid diagnostic tests. Analytical Methods, 2019, 11, 2013-2017.	2.7	5
35	Journal of Biomechanical Engineering: Legacy Paper 2018. Journal of Biomechanical Engineering, 2019, 141, .	1.3	1
36	Tumor Ablation by Irreversible Electroporation (IRE) Augments CTLA-4 Checkpoint Inhibitor Immunotherapy. Journal of the American College of Surgeons, 2019, 229, e204.	0.5	1

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37	Characterization of Laser Gold Nanowarming: A Platform for Millimeter-Scale Cryopreservation. Langmuir, 2019, 35, 7364-7375.	3.5	46
38	Mapping electrical properties heterogeneity of tumor using boundary informed electrical properties tomography (BIEPT) at 7T. Magnetic Resonance in Medicine, 2019, 81, 393-409.	3.0	13
39	Biomaterial scaffolds for non-invasive focal hyperthermia as a potential tool to ablate metastatic cancer cells. Biomaterials, 2018, 166, 27-37.	11.4	23
40	Cryopreservation by vitrification. Current Opinion in Organ Transplantation, 2018, 23, 353-360.	1.6	44
41	The Role of Protein Loss and Denaturation in Determining Outcomes of Heating, Cryotherapy, and Irreversible Electroporation on Cardiomyocytes. Journal of Biomechanical Engineering, 2018, 140, .	1.3	8
42	Physical and Chemical Enhancement of and Adaptive Resistance to Irreversible Electroporation of Pancreatic Cancer. Annals of Biomedical Engineering, 2018, 46, 25-36.	2.5	16
43	Physical limits of laser gold nanowarming. Cryobiology, 2018, 85, 161.	0.7	1
44	Successful cryopreservation of coral larvae using vitrification and laser warming. Scientific Reports, 2018, 8, 15714.	3.3	60
45	A three-dimensional transient computational study of 532-nm laser thermal ablation in a geometrical model representing prostate tissue. International Journal of Hyperthermia, 2018, 35, 568-577.	2.5	7
46	Nanoparticle Heating for Improved Tissue Destruction and Preservation. Cryobiology, 2018, 80, 176.	0.7	0
47	Nanowarming of artery and heart valves by magnetic nanoparticles. Cryobiology, 2018, 81, 228.	0.7	0
48	Measurement of Specific Heat and Crystallization in VS55, DP6, and M22 Cryoprotectant Systems With and Without Sucrose. Biopreservation and Biobanking, 2018, 16, 270-277.	1.0	15
49	Ultrarapid Inductive Rewarming of Vitrified Biomaterials with Thin Metal Forms. Annals of Biomedical Engineering, 2018, 46, 1857-1869.	2.5	23
50	Thermal Properties of Porcine and Human Biological Systems. , 2018, , 2279-2304.		1
51	From Nanowarming to Thermoregulation: New Multiscale Applications of Bioheat Transfer. Annual Review of Biomedical Engineering, 2018, 20, 301-327.	12.3	22
52	In vivo imaging of electrical properties of an animal tumor model with an 8â€channel transceiver array at 7â€‰T using electrical properties tomography. Magnetic Resonance in Medicine, 2017, 78, 2157-2169.	3.0	22
53	Thermo-mechanical stress analysis of cryopreservation in cryobags and the potential benefit of nanowarming. Cryobiology, 2017, 76, 129-139.	0.7	34
54	Improved tissue cryopreservation using inductive heating of magnetic nanoparticles. Science Translational Medicine, 2017, 9, .	12.4	213

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55	The promise of organ and tissue preservation to transform medicine. Nature Biotechnology, 2017, 35, 530-542.	17.5	371
56	Determination of cryothermal injury thresholds in tissues impacted by cardiac cryoablation. Cryobiology, 2017, 75, 125-133.	0.7	14
57	Multiscale Thermal Property Measurements for Biomedical Applications. ACS Biomaterials Science and Engineering, 2017, 3, 2669-2691.	5.2	18
58	The Role of Nanoparticle Design in Determining Analytical Performance of Lateral Flow Immunoassays. Nano Letters, 2017, 17, 7207-7212.	9.1	149
59	Gold Nanorod Induced Warming of Embryos from the Cryogenic State Enhances Viability. ACS Nano, 2017, 11, 7869-7878.	14.6	106
60	Thermal thresholds of cardiovascular HL-1 cell destruction by cryothermal exposure. Cryobiology, 2017, 78, 115-118.	0.7	5
61	Quantification and biodistribution of iron oxide nanoparticles in the primary clearance organs of mice using T ₁ contrast for heating. Magnetic Resonance in Medicine, 2017, 78, 702-712.	3.0	34
62	Thermal Properties of Porcine and Human Biological Systems. , 2017, , 1-26.		1
63	Ion-Mobility-Based Quantification of Surface-Coating-Dependent Binding of Serum Albumin to Superparamagnetic Iron Oxide Nanoparticles. ACS Applied Materials & Interfaces, 2016, 8, 24482-24490.	8.0	15
64	Quantifying intra- and extracellular aggregation of iron oxide nanoparticles and its influence on specific absorption rate. Nanoscale, 2016, 8, 16053-16064.	5.6	58
65	Thermal Contrast Amplification Reader Yielding 8-Fold Analytical Improvement for Disease Detection with Lateral Flow Assays. Analytical Chemistry, 2016, 88, 11774-11782.	6.5	81
66	A Micro-Thermal Sensor for Focal Therapy Applications. Scientific Reports, 2016, 6, 21395.	3.3	13
67	Quantitative Comparison of Photothermal Heat Generation between Gold Nanospheres and Nanorods. Scientific Reports, 2016, 6, 29836.	3.3	114
68	Multi-scale Thermal Conductivity Measurements for Cryobiological Applications. Frontiers in Nanobiomedical Research, 2016, , 125-171.	0.1	2
69	<italic>In Vivo</italic> Electrical Conductivity Contrast Imaging in a Mouse Model of Cancer Using High-Frequency Magnetoacoustic Tomography With Magnetic Induction (hfMAT-MI). IEEE Transactions on Medical Imaging, 2016, 35, 2301-2311.	8.9	28
70	Thermomechanical Stress in Cryopreservation Via Vitrification With Nanoparticle Heating as a Stress-Moderating Effect. Journal of Biomechanical Engineering, 2016, 138, .	1.3	30
71	Predictable Heating and Positive MRI Contrast from a Mesoporous Silica-Coated Iron Oxide Nanoparticle. Molecular Pharmaceutics, 2016, 13, 2172-2183.	4.6	75
72	The Grand Challenges of Organ Banking: Proceedings from the first global summit on complex tissue cryopreservation. Cryobiology, 2016, 72, 169-182.	0.7	110

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73	Magneto acoustic tomography with short pulsed magnetic field for in-vivo imaging of magnetic iron oxide nanoparticles. Nanomedicine: Nanotechnology, Biology, and Medicine, 2016, 12, 689-699.	3.3	29
74	The Effect of Cold Temperatures on Biological Systems. , 2016, , 19-36.		0
75	Evaluating Broader Impacts of Nanoscale Thermal Transport Research. Nanoscale and Microscale Thermophysical Engineering, 2015, 19, 127-165.	2.6	69
76	Identification of the biologically active liquid chemistry induced by a nonthermal atmospheric pressure plasma jet. Biointerphases, 2015, 10, 029518.	1.6	226
77	Reusable bi-directional 3Ï‰ sensor to measure thermal conductivity of 100-Î¼m thick biological tissues. Review of Scientific Instruments, 2015, 86, 014905.	1.3	45
78	Pulse Timing During Irreversible Electroporation Achieves Enhanced Destruction in a Hindlimb Model of Cancer. Annals of Biomedical Engineering, 2015, 43, 887-895.	2.5	25
79	A Review of Basic to Clinical Studies of Irreversible Electroporation Therapy. IEEE Transactions on Biomedical Engineering, 2015, 62, 4-20.	4.2	278
80	Accounting for biological aggregation in heating and imaging of magnetic nanoparticles. Technology, 2014, 02, 214-228.	1.4	102
81	RF heating of magnetic nanoparticles improves the thawing of cryopreserved biomaterials. Technology, 2014, 02, 229-242.	1.4	89
82	Correlated Parameter Fit of Arrhenius Model for Thermal Denaturation of Proteins and Cells. Annals of Biomedical Engineering, 2014, 42, 2392-2404.	2.5	52
83	Multisite Validation of Cryptococcal Antigen Lateral Flow Assay and Quantification by Laser Thermal Contrast. Emerging Infectious Diseases, 2014, 20, 45-53.	4.3	253
84	Quantifying iron-oxide nanoparticles at high concentration based on longitudinal relaxation using a three-dimensional SWIFT look-locker sequence. Magnetic Resonance in Medicine, 2014, 71, spcone-spcone.	3.0	0
85	In vivo detection of the effects of preconditioning on LNCaP tumors by a TNF-Î± nanoparticle construct using MRI. NMR in Biomedicine, 2014, 27, 1063-1069.	2.8	8
86	Quantifying ironâ€oxide nanoparticles at high concentration based on longitudinal relaxation using a threeâ€dimensional SWIFT lookâ€locker sequence. Magnetic Resonance in Medicine, 2014, 71, 1982-1988.	3.0	51
87	Dynamic imaging of tumor perfusion using contrast enhanced ultrasound: In vivo results. , 2014, , .		5
88	A01 Plenary Lecture. Cryobiology, 2014, 69, 184.	0.7	0
89	Membrane-Targeting Approaches for Enhanced Cancer Cell Destruction with Irreversible Electroporation. Annals of Biomedical Engineering, 2014, 42, 193-204.	2.5	27
90	A Head and Neck Support Device for Inducing Local Hypothermia. Journal of Medical Devices, Transactions of the ASME, 2014, 8, 0110021-110029.	0.7	6

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91	Blood protein and blood cell interactions with gold nanoparticles: the need for in vivo studies. BioNanoMaterials, 2013, 14, .	1.4	4
92	Irreversible Electroporation: An In Vivo Study with Dorsal Skin Fold Chamber. Annals of Biomedical Engineering, 2013, 41, 619-629.	2.5	41
93	Optimizing Magnetic Nanoparticle Based Thermal Therapies Within the Physical Limits of Heating. Annals of Biomedical Engineering, 2013, 41, 78-88.	2.5	61
94	10. Nanoparticle delivered vascular disrupting agents (VDAs): a new opportunity in multimodal cancer treatment. Cryobiology, 2013, 66, 345.	0.7	0
95	Nanoparticle Delivered Vascular Disrupting Agents (VDAs): Use of TNF-Alpha Conjugated Gold Nanoparticles for Multimodal Cancer Therapy. Molecular Pharmaceutics, 2013, 10, 1683-1694.	4.6	67
96	Thermal Processing of Biological Tissue at High Temperatures: Impact of Protein Denaturation and Water Loss on the Thermal Properties of Human and Porcine Liver in the Range 25â€“80â€‰Â°C. Journal of Heat Transfer, 2013, 135, .	2.1	37
97	Methods for Characterizing Convective Cryoprobe Heat Transfer in Ultrasound Gel Phantoms. Journal of Biomechanical Engineering, 2013, 135, 021002.	1.3	37
98	Adaptive third-order Volterra filter for detection and tracking of nonlinear oscillations in ultrasound echo data. , 2013, , .		3
99	Thermal Conductivity Measurements of Thin Biological Tissues Using a Microfabricated 3-Omega Sensor. Journal of Medical Devices, Transactions of the ASME, 2013, 7, .	0.7	3
100	Irreversible Electroporation of Cardiovascular Cells and Tissues. Journal of Medical Devices, Transactions of the ASME, 2013, 7, .	0.7	3
101	In vivo imaging and quantification of iron oxide nanoparticle uptake and biodistribution. , 2012, 8317, .		15
102	Concentration and volume effects in thermochemical ablation in vivo: Results in a porcine model. International Journal of Hyperthermia, 2012, 28, 113-121.	2.5	20
103	An Improved Cryosurgical Probe Testbed Based on Convective Exchange Boundary Conditions. , 2012, , .		1
104	An In Vitro Study on Adjuvant Enhanced Irreversible Electroporation. , 2012, , .		3
105	Measurements of the Thermal Conductivity of Sub-Millimeter Biological Tissues. , 2012, , .		2
106	Spectroscopic and Calorimetric Evaluation of Chemically Induced Protein Denaturation in HuH-7 Liver Cancer Cells and Impact on Cell Survival. Technology in Cancer Research and Treatment, 2012, 11, 467-473.	1.9	7
107	Calorimetric measurement of water transport and intracellular ice formation during freezing in cell suspensions. Cryobiology, 2012, 65, 242-255.	0.7	26
108	In vivo comparison of simultaneous versus sequential injection technique for thermochemical ablation in a porcine model. International Journal of Hyperthermia, 2012, 28, 105-112.	2.5	17

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109	Bloodâ€“Nanoparticle Interactions and in Vivo Biodistribution: Impact of Surface PEG and Ligand Properties. Molecular Pharmaceutics, 2012, 9, 2146-2155.	4.6	113
110	Thermophysical and biological responses of gold nanoparticle laser heating. Chemical Society Reviews, 2012, 41, 1191-1217.	38.1	486
111	Significantly Improved Analytical Sensitivity of Lateral Flow Immunoassays by Using Thermal Contrast. Angewandte Chemie - International Edition, 2012, 51, 4358-4361.	13.8	155
112	Nanoparticle preconditioning for enhanced thermal therapies in cancer. Nanomedicine, 2011, 6, 545-563.	3.3	56
113	Cellular Uptake and Nanoscale Localization of Gold Nanoparticles in Cancer Using Label-Free Confocal Raman Microscopy. Molecular Pharmaceutics, 2011, 8, 176-184.	4.6	72
114	Cooling rate dependent biophysical and viability response shift with attachment state in human dermal fibroblast cells. Cryobiology, 2011, 63, 285-291.	0.7	20
115	Freezeâ€“Thaw Induced Biomechanical Changes in Arteries: Role of Collagen Matrix and Smooth Muscle Cells. Annals of Biomedical Engineering, 2010, 38, 694-706.	2.5	54
116	Real-time monitoring of thermal and mechanical response to sub-therapeutic HIFU beams in vivo. , 2010, , .		6
117	Spatial Distribution of the State of Water in Frozen Mammalian Cells. Biophysical Journal, 2010, 99, 2453-2459.	0.5	53
118	Review of biomaterial thermal property measurements in the cryogenic regime and their use for prediction of equilibrium and non-equilibrium freezing applications in cryobiology. Cryobiology, 2010, 60, 52-70.	0.7	98
119	Pre-conditioning cryosurgery: Cellular and molecular mechanisms and dynamics of TNF-Î± enhanced cryotherapy in an in vivo prostate cancer model system. Cryobiology, 2010, 61, 280-288.	0.7	35
120	Use of Tumor Necrosis Factorâ€“alpha-coated Gold Nanoparticles to Enhance Radiofrequency Ablation in a Translational Model of Renal Tumors. Urology, 2010, 76, 494-498.	1.0	35
121	KTP High Power Laser-Tissue Interactions: In Vitro Experiment and Simulation. Journal of Medical Devices, Transactions of the ASME, 2009, 3, .	0.7	0
122	Thermal Therapy in Urologic Systems: A Comparison of Arrhenius and Thermal Isoeffective Dose Models in Predicting Hyperthermic Injury. Journal of Biomechanical Engineering, 2009, 131, 074507.	1.3	50
123	Adjuvant Approaches to Enhance Cryosurgery. Journal of Biomechanical Engineering, 2009, 131, 074003.	1.3	58
124	Fourier Transform Infrared Spectroscopy Investigation of Native Tissue Matrix Modifications Using a Gamma Irradiation Process. Tissue Engineering - Part C: Methods, 2009, 15, 33-40.	2.1	15
125	Cellular Biophysics During Freezing of Rat and Mouse Sperm Predicts Post-thaw Motility1. Biology of Reproduction, 2009, 81, 700-706.	2.7	29
126	Biodistribution of TNF-Î±-coated gold nanoparticles in an in vivo model system. Nanomedicine, 2009, 4, 401-410.	3.3	171

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127	Membrane hydration correlates to cellular biophysics during freezing in mammalian cells. Biochimica Et Biophysica Acta - Biomembranes, 2009, 1788, 945-953.	2.6	49
128	Frontiers in Biotransport: Water Transport and Hydration. Journal of Biomechanical Engineering, 2009, 131, 074004.	1.3	5
129	A Hydrophobic Gel Phantom for Study of Thermochemical Ablation: Initial Results Using a Weak Acid and Weak Base. Journal of Vascular and Interventional Radiology, 2009, 20, 1352-1358.	0.5	15
130	Freezing-Induced Phase Separation and Spatial Microheterogeneity in Protein Solutions. Journal of Physical Chemistry B, 2009, 113, 10081-10087.	2.6	84
131	Thermal Injury Prediction During Cryoplasty Through InÂVitro Characterization of Smooth Muscle Cell Biophysics and Viability. Annals of Biomedical Engineering, 2008, 36, 86-101.	2.5	20
132	A quantitative analysis on the thermal properties of phosphate buffered saline with glycerol at subzero temperatures. International Journal of Heat and Mass Transfer, 2008, 51, 640-649.	4.8	16
133	A quantitative analysis of the thermal properties of porcine liver with glycerol at subzero and cryogenic temperatures. Cryobiology, 2008, 57, 79-83.	0.7	22
134	A Simple Transient Method for Measurement of Thermal Conductivity of Rigid Polyurethane Foams. Journal of Cellular Plastics, 2008, 44, 481-491.	2.4	17
135	Tumor necrosis factor-Î±â€“induced accentuation in cryoinjury: mechanisms in vitro and in vivo. Molecular Cancer Therapeutics, 2008, 7, 2547-2555.	4.1	31
136	Tumor necrosis factor-alpha induced enhancement of cryosurgery. Proceedings of SPIE, 2008, , .	0.8	1
137	Cryoinjury of MCF-7 Human Breast Cancer Cells and Inhibition of Post-Thaw Recovery Using TNF-Î±. Technology in Cancer Research and Treatment, 2007, 6, 625-633.	1.9	13
138	Use of a Fluorescently Labeled Poly-Caspase Inhibitor for in Vivo Detection of Apoptosis Related to Vascular-Targeting Agent Arsenic Trioxide for Cancer Therapy. Technology in Cancer Research and Treatment, 2007, 6, 651-654.	1.9	26
139	TNF-Î±â€“based accentuation in cryoinjuryâ€”dose, delivery, and response. Molecular Cancer Therapeutics, 2007, 6, 2039-2047.	4.1	75
140	Thermal â€˜Fingerprintingâ€™ of Cells Using FTIR. , 2007, , 87.		1
141	Effects of freezing on membranes and proteins in LNCaP prostate tumor cells. Biochimica Et Biophysica Acta - Biomembranes, 2007, 1768, 728-736.	2.6	77
142	Cellular Level Loading and Heating of Superparamagnetic Iron Oxide Nanoparticles. Langmuir, 2007, 23, 12329-12336.	3.5	92
143	Nanotherapeutics for enhancing thermal therapy of cancer. International Journal of Hyperthermia, 2007, 23, 501-511.	2.5	54
144	Use of X-ray Tomography to Map Crystalline and Amorphous Phases in Frozen Biomaterials. Annals of Biomedical Engineering, 2007, 35, 292-304.	2.5	35

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145	Enhancement of tumor thermal therapy using gold nanoparticleâ€“assisted tumor necrosis factor-Î± delivery. Molecular Cancer Therapeutics, 2006, 5, 1014-1020.	4.1	249
146	A quantitative analysis on latent heat of an aqueous binary mixture. Cryobiology, 2006, 52, 146-151.	0.7	35
147	Water transport and IIF parameters for a connective tissue equivalent. Cryobiology, 2006, 52, 62-73.	0.7	40
148	Effects of Freezing and Cryopreservation on the Mechanical Properties of Arteries. Annals of Biomedical Engineering, 2006, 34, 823-832.	2.5	124
149	Micro and nanoscale phenomenon in bioheat transfer. Heat and Mass Transfer, 2006, 42, 955-966.	2.1	24
150	Thermal Stability of Proteins. Annals of the New York Academy of Sciences, 2005, 1066, 12-33.	3.8	229
151	Polynitroxyl albumin inhibits inflammation and vasoocclusion in transgenic sickle mice. Translational Research, 2005, 145, 204-211.	2.3	39
152	The Kinetics of Thermal Injury in Human Renal Carcinoma Cells. Annals of Biomedical Engineering, 2005, 33, 502-510.	2.5	57
153	A Cryoinjury Model Using Engineered Tissue Equivalents for Cryosurgical Applications. Annals of Biomedical Engineering, 2005, 33, 972-982.	2.5	24
154	Third Prize: Comparison of Radical Nephrectomy, Laparoscopic Microwave Thermotherapy, Cryotherapy, and Radiofrequency Ablation for Destruction of Experimental VX-2 Renal Tumors in Rabbits. Journal of Endourology, 2005, 19, 1082-1187.	2.1	14
155	Analysis of Thermal Stress in Cryosurgery of Kidneys. Journal of Biomechanical Engineering, 2005, 127, 656-661.	1.3	29
156	In vitro model systems for evaluation of smooth muscle cell response to cryoplasty. Cryobiology, 2005, 50, 162-173.	0.7	38
157	In vitrocharacterization of movement, heating and visualization of magnetic nanoparticles for biomedical applications. Nanotechnology, 2005, 16, 1221-1233.	2.6	157
158	Effects of Freezing on the Mechanical Properties of Blood Vessels. , 2004, , 699.		4
159	In vitroassessment of the efficacy of thermal therapy in human benign prostatic hyperplasia. International Journal of Hyperthermia, 2004, 20, 421-439.	2.5	64
160	Engineering Challenges in Tissue Preservation. Cell Preservation Technology, 2004, 2, 91-112.	0.6	38
161	Foreword: Cryosurgery. Technology in Cancer Research and Treatment, 2004, 3, 93-93.	1.9	0
162	Improved Cryosurgery by Use of Thermophysical and Inflammatory Adjuvants. Technology in Cancer Research and Treatment, 2004, 3, 103-111.	1.9	28

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163	Assessing pH and Oxygenation in Cryotherapy-induced Cytotoxicity and Tissue Response to Freezing. Technology in Cancer Research and Treatment, 2004, 3, 245-251.	1.9	4
164	Thermodynamic Nonequilibrium Phase Change Behavior and Thermal Properties of Biological Solutions for Cryobiology Applications. Journal of Biomechanical Engineering, 2004, 126, 196-203.	1.3	36
165	Cryopreservation of Collagen-Based Tissue Equivalents. II. Improved Freezing in the Presence of Cryoprotective Agents. Tissue Engineering, 2004, 10, 23-32.	4.6	32
166	In vitrothermal therapy of AT-1 Dunning prostate tumours. International Journal of Hyperthermia, 2004, 20, 73-92.	2.5	47
167	In Situ Thermal Denaturation of Proteins in Dunning AT-1 Prostate Cancer Cells: Implication for Hyperthermic Cell Injury. Annals of Biomedical Engineering, 2004, 32, 1384-1398.	2.5	76
168	Microvascular blood flow and stasis in transgenic sickle mice: Utility of a dorsal skin fold chamber for intravital microscopy. American Journal of Hematology, 2004, 77, 117-125.	4.1	67
169	Direct cell injury associated with eutectic crystallization during freezing. Cryobiology, 2004, 48, 8-21.	0.7	104
170	Pre-treatment inflammation induced by TNF-Î± augments cryosurgical injury on human prostate cancer. Cryobiology, 2004, 49, 10-27.	0.7	49
171	Heme Oxygenase-1: A Potential Modulator of Inflammation and Vaso-Occlusion in Sickle Cell Disease.. Blood, 2004, 104, 365-365.	1.4	1
172	Mechanisms of Injury Caused by in Vivo Freezing. , 2004, , 455-481.		4
173	Cryothermic and Hyperthermic Treatments of Human Leiomyomata and Adjacent Myometrium and Their Implications for Laparoscopic Surgery. Journal of Minimally Invasive Gynecology, 2003, 10, 90-98.	1.2	20
174	Cryopreservation of Collagen-Based Tissue Equivalents. I. Effect of Freezing in the Absence of Cryoprotective Agents. Tissue Engineering, 2003, 9, 1089-1100.	4.6	35
175	Mechanical property characterization of mouse zona pellucida. IEEE Transactions on Nanobioscience, 2003, 2, 279-286.	3.3	282
176	Histologic differences between cryothermic and hyperthermic therapies. , 2003, , .		10
177	Enhancement of cell and tissue destruction in cryosurgery by use of eutectic freezing. , 2003, 4954, 106.		10
178	Transgenic sickle mice have vascular inflammation. Blood, 2003, 101, 3953-3959.	1.4	195
179	Quantification of Temperature and Injury Response in Thermal Therapy and Cryosurgery. Critical Reviews in Biomedical Engineering, 2003, 31, 355-422.	0.9	150
180	Effect of Microscale Mass Transport and Phase Change on Numerical Prediction of Freezing in Biological Tissues. Journal of Heat Transfer, 2002, 124, 365-374.	2.1	47

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181	Phase Change Behavior of Biomedically Relevant Solutions. , 2002, , 67.		6
182	Effect of Thermal Properties on Heat Transfer in Cryopreservation and Cryosurgery. , 2002, , 7.		3
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