

John C Bischof

List of Publications by Year in descending order

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203
papers

10,212
citations

31949

53
h-index

42364

92
g-index

224
all docs

224
docs citations

224
times ranked

10308
citing authors

#	ARTICLE	IF	CITATIONS
1	The cryobiology of cryosurgical injury. <i>Urology</i> , 2002, 60, 40-49.	0.5	520
2	Thermophysical and biological responses of gold nanoparticle laser heating. <i>Chemical Society Reviews</i> , 2012, 41, 1191-1217.	18.7	486
3	The promise of organ and tissue preservation to transform medicine. <i>Nature Biotechnology</i> , 2017, 35, 530-542.	9.4	371
4	Mechanical property characterization of mouse zona pellucida. <i>IEEE Transactions on Nanobioscience</i> , 2003, 2, 279-286.	2.2	282
5	A Review of Basic to Clinical Studies of Irreversible Electroporation Therapy. <i>IEEE Transactions on Biomedical Engineering</i> , 2015, 62, 4-20.	2.5	278
6	Ultrasensitive and Highly Specific Lateral Flow Assays for Point-of-Care Diagnosis. <i>ACS Nano</i> , 2021, 15, 3593-3611.	7.3	270
7	Multisite Validation of Cryptococcal Antigen Lateral Flow Assay and Quantification by Laser Thermal Contrast. <i>Emerging Infectious Diseases</i> , 2014, 20, 45-53.	2.0	253
8	Enhancement of tumor thermal therapy using gold nanoparticle-assisted tumor necrosis factor- α delivery. <i>Molecular Cancer Therapeutics</i> , 2006, 5, 1014-1020.	1.9	249
9	Thermal Stability of Proteins. <i>Annals of the New York Academy of Sciences</i> , 2005, 1066, 12-33.	1.8	229
10	Identification of the biologically active liquid chemistry induced by a nonthermal atmospheric pressure plasma jet. <i>Biointerphases</i> , 2015, 10, 029518.	0.6	226
11	Improved tissue cryopreservation using inductive heating of magnetic nanoparticles. <i>Science Translational Medicine</i> , 2017, 9, .	5.8	213
12	Transgenic sickle mice have vascular inflammation. <i>Blood</i> , 2003, 101, 3953-3959.	0.6	195
13	Biodistribution of TNF- α -coated gold nanoparticles in an <i>in vivo</i> model system. <i>Nanomedicine</i> , 2009, 4, 401-410.	1.7	171
14	In vitro characterization of movement, heating and visualization of magnetic nanoparticles for biomedical applications. <i>Nanotechnology</i> , 2005, 16, 1221-1233.	1.3	157
15	Significantly Improved Analytical Sensitivity of Lateral Flow Immunoassays by Using Thermal Contrast. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 4358-4361.	7.2	155
16	Quantification of Temperature and Injury Response in Thermal Therapy and Cryosurgery. <i>Critical Reviews in Biomedical Engineering</i> , 2003, 31, 355-422.	0.5	150
17	The Role of Nanoparticle Design in Determining Analytical Performance of Lateral Flow Immunoassays. <i>Nano Letters</i> , 2017, 17, 7207-7212.	4.5	149
18	Effects of Freezing and Cryopreservation on the Mechanical Properties of Arteries. <i>Annals of Biomedical Engineering</i> , 2006, 34, 823-832.	1.3	124

#	ARTICLE	IF	CITATIONS
19	Measurement of Water Transport during Freezing in Cell Suspensions Using a Differential Scanning Calorimeter. <i>Cryobiology</i> , 1998, 36, 124-155.	0.3	118
20	Quantitative Comparison of Photothermal Heat Generation between Gold Nanospheres and Nanorods. <i>Scientific Reports</i> , 2016, 6, 29836.	1.6	114
21	Bloodâ€“Nanoparticle Interactions and <i>in Vivo</i> Biodistribution: Impact of Surface PEG and Ligand Properties. <i>Molecular Pharmaceutics</i> , 2012, 9, 2146-2155.	2.3	113
22	The Grand Challenges of Organ Banking: Proceedings from the first global summit on complex tissue cryopreservation. <i>Cryobiology</i> , 2016, 72, 169-182.	0.3	110
23	Gold Nanorod Induced Warming of Embryos from the Cryogenic State Enhances Viability. <i>ACS Nano</i> , 2017, 11, 7869-7878.	7.3	106
24	Direct cell injury associated with eutectic crystallization during freezing. <i>Cryobiology</i> , 2004, 48, 8-21.	0.3	104
25	Accounting for biological aggregation in heating and imaging of magnetic nanoparticles. <i>Technology</i> , 2014, 02, 214-228.	1.4	102
26	Review of biomaterial thermal property measurements in the cryogenic regime and their use for prediction of equilibrium and non-equilibrium freezing applications in cryobiology. <i>Cryobiology</i> , 2010, 60, 52-70.	0.3	98
27	Cellular Level Loading and Heating of Superparamagnetic Iron Oxide Nanoparticles. <i>Langmuir</i> , 2007, 23, 12329-12336.	1.6	92
28	RF heating of magnetic nanoparticles improves the thawing of cryopreserved biomaterials. <i>Technology</i> , 2014, 02, 229-242.	1.4	89
29	Freezing-Induced Phase Separation and Spatial Microheterogeneity in Protein Solutions. <i>Journal of Physical Chemistry B</i> , 2009, 113, 10081-10087.	1.2	84
30	Cryosurgical changes in the porcine kidney: histologic analysis with thermal history correlation. <i>Cryobiology</i> , 2002, 45, 167-182.	0.3	82
31	Thermal Contrast Amplification Reader Yielding 8-Fold Analytical Improvement for Disease Detection with Lateral Flow Assays. <i>Analytical Chemistry</i> , 2016, 88, 11774-11782.	3.2	81
32	Effects of freezing on membranes and proteins in LNCaP prostate tumor cells. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2007, 1768, 728-736.	1.4	77
33	Subzero Water Permeability Parameters of Mouse Spermatozoa in the Presence of Extracellular Ice and Cryoprotective Agents. <i>Biology of Reproduction</i> , 1999, 61, 764-775.	1.2	76
34	In Situ Thermal Denaturation of Proteins in Dunning AT-1 Prostate Cancer Cells: Implication for Hyperthermic Cell Injury. <i>Annals of Biomedical Engineering</i> , 2004, 32, 1384-1398.	1.3	76
35	TNF- α -based accentuation in cryoinjuryâ€“dose, delivery, and response. <i>Molecular Cancer Therapeutics</i> , 2007, 6, 2039-2047.	1.9	75
36	Predictable Heating and Positive MRI Contrast from a Mesoporous Silica-Coated Iron Oxide Nanoparticle. <i>Molecular Pharmaceutics</i> , 2016, 13, 2172-2183.	2.3	75

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37	Cryosurgery of Normal and Tumor Tissue in the Dorsal Skin Flap Chamber: Part I—Thermal Response. <i>Journal of Biomechanical Engineering</i> , 2001, 123, 301-309.	0.6	74
38	Engineering T cell response to cancer antigens by choice of focal therapeutic conditions. <i>International Journal of Hyperthermia</i> , 2019, 36, 130-138.	1.1	74
39	Cellular Uptake and Nanoscale Localization of Gold Nanoparticles in Cancer Using Label-Free Confocal Raman Microscopy. <i>Molecular Pharmaceutics</i> , 2011, 8, 176-184.	2.3	72
40	Evaluating Broader Impacts of Nanoscale Thermal Transport Research. <i>Nanoscale and Microscale Thermophysical Engineering</i> , 2015, 19, 127-165.	1.4	69
41	Microvascular blood flow and stasis in transgenic sickle mice: Utility of a dorsal skin fold chamber for intravital microscopy. <i>American Journal of Hematology</i> , 2004, 77, 117-125.	2.0	67
42	Nanoparticle Delivered Vascular Disrupting Agents (VDAs): Use of TNF-Alpha Conjugated Gold Nanoparticles for Multimodal Cancer Therapy. <i>Molecular Pharmaceutics</i> , 2013, 10, 1683-1694.	2.3	67
43	Quantitative Measurement and Prediction of Biophysical Response During Freezing in Tissues. <i>Annual Review of Biomedical Engineering</i> , 2000, 2, 257-288.	5.7	66
44	Supraphysiological Thermal Injury in Dunning AT-1 Prostate Tumor Cells. <i>Journal of Biomechanical Engineering</i> , 2000, 122, 51-59.	0.6	64
45	In vitro assessment of the efficacy of thermal therapy in human benign prostatic hyperplasia. <i>International Journal of Hyperthermia</i> , 2004, 20, 421-439.	1.1	64
46	Optimizing Magnetic Nanoparticle Based Thermal Therapies Within the Physical Limits of Heating. <i>Annals of Biomedical Engineering</i> , 2013, 41, 78-88.	1.3	61
47	Preparation of Scalable Silica-Coated Iron Oxide Nanoparticles for Nanowarming. <i>Advanced Science</i> , 2020, 7, 1901624.	5.6	61
48	Successful cryopreservation of coral larvae using vitrification and laser warming. <i>Scientific Reports</i> , 2018, 8, 15714.	1.6	60
49	A Parametric Study of Freezing Injury in AT-1 Rat Prostate Tumor Cells. <i>Cryobiology</i> , 1999, 39, 13-28.	0.3	58
50	Adjuvant Approaches to Enhance Cryosurgery. <i>Journal of Biomechanical Engineering</i> , 2009, 131, 074003.	0.6	58
51	Quantifying intra- and extracellular aggregation of iron oxide nanoparticles and its influence on specific absorption rate. <i>Nanoscale</i> , 2016, 8, 16053-16064.	2.8	58
52	Investigation of the Mechanism and the Effect of Cryoimmunology in the Copenhagen Rat. <i>Cryobiology</i> , 2001, 42, 59-68.	0.3	57
53	The Kinetics of Thermal Injury in Human Renal Carcinoma Cells. <i>Annals of Biomedical Engineering</i> , 2005, 33, 502-510.	1.3	57
54	Nanoparticle preconditioning for enhanced thermal therapies in cancer. <i>Nanomedicine</i> , 2011, 6, 545-563.	1.7	56

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55	Nanotherapeutics for enhancing thermal therapy of cancer. <i>International Journal of Hyperthermia</i> , 2007, 23, 501-511.	1.1	54
56	Freeze-Thaw Induced Biomechanical Changes in Arteries: Role of Collagen Matrix and Smooth Muscle Cells. <i>Annals of Biomedical Engineering</i> , 2010, 38, 694-706.	1.3	54
57	Spatial Distribution of the State of Water in Frozen Mammalian Cells. <i>Biophysical Journal</i> , 2010, 99, 2453-2459.	0.2	53
58	Correlated Parameter Fit of Arrhenius Model for Thermal Denaturation of Proteins and Cells. <i>Annals of Biomedical Engineering</i> , 2014, 42, 2392-2404.	1.3	52
59	Quantifying iron oxide nanoparticles at high concentration based on longitudinal relaxation using a three-dimensional SWIFT lock sequence. <i>Magnetic Resonance in Medicine</i> , 2014, 71, 1982-1988.	1.9	51
60	Thermal Therapy in Urologic Systems: A Comparison of Arrhenius and Thermal Isoeffective Dose Models in Predicting Hyperthermic Injury. <i>Journal of Biomechanical Engineering</i> , 2009, 131, 074507.	0.6	50
61	Pre-treatment inflammation induced by TNF- α augments cryosurgical injury on human prostate cancer. <i>Cryobiology</i> , 2004, 49, 10-27.	0.3	49
62	Membrane hydration correlates to cellular biophysics during freezing in mammalian cells. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2009, 1788, 945-953.	1.4	49
63	Effect of Microscale Mass Transport and Phase Change on Numerical Prediction of Freezing in Biological Tissues. <i>Journal of Heat Transfer</i> , 2002, 124, 365-374.	1.2	47
64	In vitro thermal therapy of AT-1 Dunning prostate tumours. <i>International Journal of Hyperthermia</i> , 2004, 20, 73-92.	1.1	47
65	Characterization of Laser Gold Nanowarming: A Platform for Millimeter-Scale Cryopreservation. <i>Langmuir</i> , 2019, 35, 7364-7375.	1.6	46
66	Reusable bi-directional 3×10^{-4} m thick biological tissues. <i>Review of Scientific Instruments</i> , 2015, 86, 014905.	0.6	45
67	Cryopreservation by vitrification. <i>Current Opinion in Organ Transplantation</i> , 2018, 23, 353-360.	0.8	44
68	Irreversible electroporation augments checkpoint immunotherapy in prostate cancer and promotes tumor antigen-specific tissue-resident memory CD8+ T cells. <i>Nature Communications</i> , 2021, 12, 3862.	5.8	42
69	Irreversible Electroporation: An In Vivo Study with Dorsal Skin Fold Chamber. <i>Annals of Biomedical Engineering</i> , 2013, 41, 619-629.	1.3	41
70	Vitrification and Nanowarming of Kidneys. <i>Advanced Science</i> , 2021, 8, e2101691.	5.6	41
71	Cryosurgery of Normal and Tumor Tissue in the Dorsal Skin Flap Chamber: Part II - Injury Response. <i>Journal of Biomechanical Engineering</i> , 2001, 123, 310-316.	0.6	40
72	Water transport and IIF parameters for a connective tissue equivalent. <i>Cryobiology</i> , 2006, 52, 62-73.	0.3	40

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73	Polynitroxyl albumin inhibits inflammation and vasoocclusion in transgenic sickle mice. <i>Translational Research</i> , 2005, 145, 204-211.	2.4	39
74	Pancreatic islet cryopreservation by vitrification achieves high viability, function, recovery and clinical scalability for transplantation. <i>Nature Medicine</i> , 2022, 28, 798-808.	15.2	39
75	Engineering Challenges in Tissue Preservation. <i>Cell Preservation Technology</i> , 2004, 2, 91-112.	0.8	38
76	In vitro model systems for evaluation of smooth muscle cell response to cryoplasty. <i>Cryobiology</i> , 2005, 50, 162-173.	0.3	38
77	Microscopic and Calorimetric Assessment of Freezing Processes in Uterine Fibroid Tumor Tissue. <i>Cryobiology</i> , 2001, 42, 225-243.	0.3	37
78	Measurement and numerical analysis of freezing in solutions enclosed in a small container. <i>International Journal of Heat and Mass Transfer</i> , 2002, 45, 1915-1931.	2.5	37
79	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. <i>Journal of Heat Transfer</i> , 2013, 135, .	1.2	37
80	Methods for Characterizing Convective Cryoprobe Heat Transfer in Ultrasound Gel Phantoms. <i>Journal of Biomechanical Engineering</i> , 2013, 135, 021002.	0.6	37
81	Thermodynamic Nonequilibrium Phase Change Behavior and Thermal Properties of Biological Solutions for Cryobiology Applications. <i>Journal of Biomechanical Engineering</i> , 2004, 126, 196-203.	0.6	36
82	Cryopreservation of Collagen-Based Tissue Equivalents. I. Effect of Freezing in the Absence of Cryoprotective Agents. <i>Tissue Engineering</i> , 2003, 9, 1089-1100.	4.9	35
83	A quantitative analysis on latent heat of an aqueous binary mixture. <i>Cryobiology</i> , 2006, 52, 146-151.	0.3	35
84	Use of X-ray Tomography to Map Crystalline and Amorphous Phases in Frozen Biomaterials. <i>Annals of Biomedical Engineering</i> , 2007, 35, 292-304.	1.3	35
85	Pre-conditioning cryosurgery: Cellular and molecular mechanisms and dynamics of TNF- α enhanced cryotherapy in an in vivo prostate cancer model system. <i>Cryobiology</i> , 2010, 61, 280-288.	0.3	35
86	Use of Tumor Necrosis Factor- α -coated Gold Nanoparticles to Enhance Radiofrequency Ablation in a Translational Model of Renal Tumors. <i>Urology</i> , 2010, 76, 494-498.	0.5	35
87	Thermo-mechanical stress analysis of cryopreservation in cryobags and the potential benefit of nanowarming. <i>Cryobiology</i> , 2017, 76, 129-139.	0.3	34
88	Quantification and biodistribution of iron oxide nanoparticles in the primary clearance organs of mice using T ₁ contrast for heating. <i>Magnetic Resonance in Medicine</i> , 2017, 78, 702-712.	1.9	34
89	Development and optimization of thermal contrast amplification lateral flow immunoassays for ultrasensitive HIV p24 protein detection. <i>Microsystems and Nanoengineering</i> , 2020, 6, 54.	3.4	33
90	Cryopreservation of Collagen-Based Tissue Equivalents. II. Improved Freezing in the Presence of Cryoprotective Agents. <i>Tissue Engineering</i> , 2004, 10, 23-32.	4.9	32

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91	Tumor necrosis factor- α -induced accentuation in cryoinjury: mechanisms <i>in vitro</i> and <i>in vivo</i> . <i>Molecular Cancer Therapeutics</i> , 2008, 7, 2547-2555.	1.9	31
92	Liver Freezing Response of the Freeze-Tolerant Wood Frog, <i>Rana sylvatica</i> , in the Presence and Absence of Glucose. I. Experimental Measurements. <i>Cryobiology</i> , 1999, 38, 310-326.	0.3	30
93	Thermomechanical Stress in Cryopreservation Via Vitrification With Nanoparticle Heating as a Stress-Moderating Effect. <i>Journal of Biomechanical Engineering</i> , 2016, 138, .	0.6	30
94	Nanowarming using Au-tipped $\text{Co}_{35}\text{Fe}_{65}$ ferromagnetic nanowires. <i>Nanoscale</i> , 2019, 11, 14607-14615.	2.8	30
95	Analysis of Thermal Stress in Cryosurgery of Kidneys. <i>Journal of Biomechanical Engineering</i> , 2005, 127, 656-661.	0.6	29
96	Cellular Biophysics During Freezing of Rat and Mouse Sperm Predicts Post-thaw Motility1. <i>Biology of Reproduction</i> , 2009, 81, 700-706.	1.2	29
97	Magneto acoustic tomography with short pulsed magnetic field for in-vivo imaging of magnetic iron oxide nanoparticles. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2016, 12, 689-699.	1.7	29
98	Improved Cryosurgery by Use of Thermophysical and Inflammatory Adjuvants. <i>Technology in Cancer Research and Treatment</i> , 2004, 3, 103-111.	0.8	28
99	<i>In Vivo</i> Electrical Conductivity Contrast Imaging in a Mouse Model of Cancer Using High-Frequency Magnetoacoustic Tomography With Magnetic Induction (hfMAT-MI). <i>IEEE Transactions on Medical Imaging</i> , 2016, 35, 2301-2311.	5.4	28
100	Membrane-Targeting Approaches for Enhanced Cancer Cell Destruction with Irreversible Electroporation. <i>Annals of Biomedical Engineering</i> , 2014, 42, 193-204.	1.3	27
101	Liver Freezing Response of the Freeze-Tolerant Wood Frog, <i>Rana sylvatica</i> , in the Presence and Absence of Glucose. II. Mathematical Modeling. <i>Cryobiology</i> , 1999, 38, 327-338.	0.3	26
102	Measurement and Prediction of Thermal Behavior and Acute Assessment of Injury in a Pig Model of Renal Cryosurgery. <i>Journal of Endourology</i> , 2001, 15, 193-197.	1.1	26
103	Use of a Fluorescently Labeled Poly-Caspase Inhibitor for <i>In Vivo</i> Detection of Apoptosis Related to Vascular-Targeting Agent Arsenic Trioxide for Cancer Therapy. <i>Technology in Cancer Research and Treatment</i> , 2007, 6, 651-654.	0.8	26
104	Calorimetric measurement of water transport and intracellular ice formation during freezing in cell suspensions. <i>Cryobiology</i> , 2012, 65, 242-255.	0.3	26
105	Ice Formation in Isolated Human Hepatocytes and Human Liver Tissue. <i>ASAIO Journal</i> , 1997, 43, 271-278.	0.9	26
106	Pulse Timing During Irreversible Electroporation Achieves Enhanced Destruction in a Hindlimb Model of Cancer. <i>Annals of Biomedical Engineering</i> , 2015, 43, 887-895.	1.3	25
107	Cryopreservation and Laser Nanowarming of Zebrafish Embryos Followed by Hatching and Spawning. <i>Advanced Biology</i> , 2020, 4, e2000138.	3.0	25
108	Vitrification and Rewarming of Magnetic Nanoparticle-Loaded Rat Hearts. <i>Advanced Materials Technologies</i> , 2022, 7, 2100873.	3.0	25

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109	A Cryoinjury Model Using Engineered Tissue Equivalents for Cryosurgical Applications. <i>Annals of Biomedical Engineering</i> , 2005, 33, 972-982.	1.3	24
110	Micro and nanoscale phenomenon in bioheat transfer. <i>Heat and Mass Transfer</i> , 2006, 42, 955-966.	1.2	24
111	Biomaterial scaffolds for non-invasive focal hyperthermia as a potential tool to ablate metastatic cancer cells. <i>Biomaterials</i> , 2018, 166, 27-37.	5.7	23
112	Ultrarapid Inductive Rewarming of Vitrified Biomaterials with Thin Metal Forms. <i>Annals of Biomedical Engineering</i> , 2018, 46, 1857-1869.	1.3	23
113	A quantitative analysis of the thermal properties of porcine liver with glycerol at subzero and cryogenic temperatures. <i>Cryobiology</i> , 2008, 57, 79-83.	0.3	22
114	In vivo imaging of electrical properties of an animal tumor model with an 8-channel transceiver array at 7T using electrical properties tomography. <i>Magnetic Resonance in Medicine</i> , 2017, 78, 2157-2169.	1.9	22
115	From Nanowarming to Thermoregulation: New Multiscale Applications of Bioheat Transfer. <i>Annual Review of Biomedical Engineering</i> , 2018, 20, 301-327.	5.7	22
116	Conduction Cooling and Plasmonic Heating Dramatically Increase Droplet Vitrification Volumes for Cell Cryopreservation. <i>Advanced Science</i> , 2021, 8, 2004605.	5.6	22
117	A Simple Cryopreservation Method for the Maintenance of Cell Viability and Mechanical Integrity of a Cultured Cartilage Analog. <i>Cryobiology</i> , 2000, 40, 370-375.	0.3	21
118	Diffusion Limited Cryopreservation of Tissue with Radiofrequency Heated Metal Forms. <i>Advanced Healthcare Materials</i> , 2020, 9, e2000796.	3.9	21
119	Cryothermic and Hyperthermic Treatments of Human Leiomyomata and Adjacent Myometrium and Their Implications for Laparoscopic Surgery. <i>Journal of Minimally Invasive Gynecology</i> , 2003, 10, 90-98.	1.4	20
120	Thermal Injury Prediction During Cryoplasty Through In Vitro Characterization of Smooth Muscle Cell Biophysics and Viability. <i>Annals of Biomedical Engineering</i> , 2008, 36, 86-101.	1.3	20
121	Cooling rate dependent biophysical and viability response shift with attachment state in human dermal fibroblast cells. <i>Cryobiology</i> , 2011, 63, 285-291.	0.3	20
122	Concentration and volume effects in thermochemical ablation in vivo: Results in a porcine model. <i>International Journal of Hyperthermia</i> , 2012, 28, 113-121.	1.1	20
123	Photothermal conversion of gold nanoparticles for uniform pulsed laser warming of vitrified biomaterials. <i>Nanoscale</i> , 2020, 12, 12346-12356.	2.8	20
124	Cryopreservation method for <i>Drosophila melanogaster</i> embryos. <i>Nature Communications</i> , 2021, 12, 2412.	5.8	20
125	Multiscale Thermal Property Measurements for Biomedical Applications. <i>ACS Biomaterials Science and Engineering</i> , 2017, 3, 2669-2691.	2.6	18
126	Point-of-Care Detection of the SARS-CoV-2 Antigen by Advanced Lateral Flow Immunoassay Based on Gold Nanospheres. <i>ACS Applied Nano Materials</i> , 2021, 4, 13826-13837.	2.4	18

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127	A Simple Transient Method for Measurement of Thermal Conductivity of Rigid Polyurethane Foams. <i>Journal of Cellular Plastics</i> , 2008, 44, 481-491.	1.2	17
128	In vivo comparison of simultaneous versus sequential injection technique for thermochemical ablation in a porcine model. <i>International Journal of Hyperthermia</i> , 2012, 28, 105-112.	1.1	17
129	A quantitative analysis on the thermal properties of phosphate buffered saline with glycerol at subzero temperatures. <i>International Journal of Heat and Mass Transfer</i> , 2008, 51, 640-649.	2.5	16
130	Physical and Chemical Enhancement of and Adaptive Resistance to Irreversible Electroporation of Pancreatic Cancer. <i>Annals of Biomedical Engineering</i> , 2018, 46, 25-36.	1.3	16
131	Aggregation affects optical properties and photothermal heating of gold nanospheres. <i>Scientific Reports</i> , 2021, 11, 898.	1.6	16
132	Fourier Transform Infrared Spectroscopy Investigation of Native Tissue Matrix Modifications Using a Gamma Irradiation Process. <i>Tissue Engineering - Part C: Methods</i> , 2009, 15, 33-40.	1.1	15
133	A Hydrophobic Gel Phantom for Study of Thermochemical Ablation: Initial Results Using a Weak Acid and Weak Base. <i>Journal of Vascular and Interventional Radiology</i> , 2009, 20, 1352-1358.	0.2	15
134	In vivo imaging and quantification of iron oxide nanoparticle uptake and biodistribution. , 2012, 8317, .		15
135	Ion-Mobility-Based Quantification of Surface-Coating-Dependent Binding of Serum Albumin to Superparamagnetic Iron Oxide Nanoparticles. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 24482-24490.	4.0	15
136	Measurement of Specific Heat and Crystallization in VS55, DP6, and M22 Cryoprotectant Systems With and Without Sucrose. <i>Biopreservation and Biobanking</i> , 2018, 16, 270-277.	0.5	15
137	Thermal Therapy of Prostate Tumor Tissue in the Dorsal Skin Flap Chamber. <i>Microvascular Research</i> , 2002, 64, 170-173.	1.1	14
138	Third Prize: Comparison of Radical Nephrectomy, Laparoscopic Microwave Thermotherapy, Cryotherapy, and Radiofrequency Ablation for Destruction of Experimental VX-2 Renal Tumors in Rabbits. <i>Journal of Endourology</i> , 2005, 19, 1082-1187.	1.1	14
139	Determination of cryothermal injury thresholds in tissues impacted by cardiac cryoablation. <i>Cryobiology</i> , 2017, 75, 125-133.	0.3	14
140	Cryoinjury of MCF-7 Human Breast Cancer Cells and Inhibition of Post-Thaw Recovery Using TNF- α . <i>Technology in Cancer Research and Treatment</i> , 2007, 6, 625-633.	0.8	13
141	A Micro-Thermal Sensor for Focal Therapy Applications. <i>Scientific Reports</i> , 2016, 6, 21395.	1.6	13
142	Mapping electrical properties heterogeneity of tumor using boundary informed electrical properties tomography (BIEPT) at 7T. <i>Magnetic Resonance in Medicine</i> , 2019, 81, 393-409.	1.9	13
143	The impact of data selection and fitting on SAR estimation for magnetic nanoparticle heating. <i>International Journal of Hyperthermia</i> , 2020, 37, 100-107.	1.1	13
144	Response Of A Liver Tissue Slab To An Hyperosmotic Sucrose Boundary Condition: Microscale Cellular And Vascular Level Effectsa. <i>Annals of the New York Academy of Sciences</i> , 1998, 858, 147-162.	1.8	12

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145	Histologic differences between cryothermic and hyperthermic therapies. , 2003, , .		10
146	Enhancement of cell and tissue destruction in cryosurgery by use of eutectic freezing. , 2003, 4954, 106.		10
147	Imaging the distribution of iron oxide nanoparticles in hypothermic perfused tissues. Magnetic Resonance in Medicine, 2020, 83, 1750-1759.	1.9	10
148	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.	1.1	10
149	<i>In vivo</i> detection of the effects of preconditioning on LNCaP tumors by a TNF- α nanoparticle construct using MRI. NMR in Biomedicine, 2014, 27, 1063-1069.	1.6	8
150	The Role of Protein Loss and Denaturation in Determining Outcomes of Heating, Cryotherapy, and Irreversible Electroporation on Cardiomyocytes. Journal of Biomechanical Engineering, 2018, 140, .	0.6	8
151	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.	0.8	7
152	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.	1.1	7
153	Phosphonate coating of commercial iron oxide nanoparticles for nanowarming cryopreserved samples. Journal of Materials Chemistry B, 2022, 10, 3734-3746.	2.9	7
154	Biophysics Of Freezing In Liver Of The Freeze-Tolerant Wood Frog, <i>R. Sylvaticaa</i> . Annals of the New York Academy of Sciences, 1998, 858, 284-297.	1.8	6
155	Phase Change Behavior of Biomedically Relevant Solutions. , 2002, , 67.		6
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