John G Baust

List of Publications by Year
in descending order

95 papers	4,581 citations	101535 36 h-index	106340 65 g-index
96 all docs	96 docs citations	96 times ranked	2809 citing authors

#	Article	IF	Citations
1	The promise of organ and tissue preservation to transform medicine. Nature Biotechnology, 2017, 35, 530-542.	17.5	371
2	The molecular basis of cryosurgery. BJU International, 2005, 95, 1187-1191.	2.5	314
3	Best Practice Statement on Cryosurgery for the Treatment of Localized Prostate Cancer. Journal of Urology, 2008, 180, 1993-2004.	0.4	219
4	Cryopreservation. Organogenesis, 2009, 5, 90-96.	1.2	180
5	CELL VIABILITY IMPROVES FOLLOWING INHIBITION OF CRYOPRESERVATION-INDUCED APOPTOSIS. In Vitro Cellular and Developmental Biology - Animal, 2000, 36, 262.	1.5	161
6	Intermediary metabolism during low temperature acclimation in the overwintering gall fly larva,Eurosta solidaginis. Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology, 1981, 144, 183-190.	1.5	134
7	A Molecular Basis of Cryopreservation Failure and its Modulation to Improve Cell Survival. Cell Transplantation, 2001, 10, 561-571.	2.5	134
8	Variations in glycerol content and its influence on cold hardiness in the Alaskan carabid beetle, Pterostichus brevicornis. Journal of Insect Physiology, 1970, 16, 979-990.	2.0	120
9	CELL VIABILITY IMPROVES FOLLOWING INHIBITION OF CRYOPRESERVATION-INDUCED APOPTOSIS. In Vitro Cellular and Developmental Biology - Animal, 2000, 36, 262-270.	1.5	115
10	Cryosurgeryâ€"a putative approach to molecular-based optimization. Cryobiology, 2004, 48, 190-204.	0.7	112
11	Cryosurgery for Tumors. Journal of the American College of Surgeons, 2007, 205, 342-356.	0.5	109
12	Chemo-Cryo Combination Therapy: An Adjunctive Model for the Treatment of Prostate Cancer. Cryobiology, 2001, 42, 274-285.	0.7	107
13	Mechanisms of cryoprotection in freezing tolerant animal systems. Cryobiology, 1973, 10, 197-205.	0.7	99
14	Mechanisms of freezing tolerance in an Antarctic midge, Belgica antarctica. Physiological Entomology, 1979, 4, 1-5.	1.5	93
15	A method for quantitative determination of ice nucleating agents in insect hemolymph. Cryobiology, 1982, 19, 180-184.	0.7	93
16	Divergent mechanisms of frost-hardiness in two populations of the gall fly, Eurosta solidaginsis. Journal of Insect Physiology, 1981, 27, 485-490.	2.0	84
17	Cold-Hardiness in the Antarctic Tick, Ixodes uriae. Physiological Zoology, 1987, 60, 499-506.	1.5	78
18	Addition of anticancer agents enhances freezing-induced prostate cancer cell death: implications of mitochondrial involvement. Cryobiology, 2004, 49, 45-61.	0.7	71

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19	Cryosurgery for Tumors â€" A Clinical Overview. Technology in Cancer Research and Treatment, 2004, 3, 187-199.	1.9	70
20	Determination of water â€œboundâ€•by soluble subcellular components during low-temperature acclimation in the gall fly larva, Eurosta solidagensis. Cryobiology, 1981, 18, 315-321.	0.7	69
21	Biochemical correlates to cold hardening in insects. Cryobiology, 1981, 18, 186-198.	0.7	68
22	Cryosurgical technique: Assessment of the fundamental variables using human prostate cancer model systems. Cryobiology, 2007, 55, 189-199.	0.7	66
23	Environmental triggers to cold hardening. Comparative Biochemistry and Physiology A, Comparative Physiology, 1982, 73, 563-570.	0.6	65
24	Cryoablation of Renal Cancer: Variables Involved in Freezing-Induced Cell Death. Technology in Cancer Research and Treatment, 2007, 6, 69-79.	1.9	62
25	Environmental triggers to cryoprotectant modulation in separate populations of the gall fly, Eurost a solidaginis (Fitch). Journal of Insect Physiology, 1982, 28, 431-436.	2.0	57
26	The pathophysiology of thermoablation: optimizing cryoablation. Current Opinion in Urology, 2009, 19, 127-132.	1.8	56
27	The Diversity of Overwintering Strategies Utilized by Separate Populations of Gall Insects. Physiological Zoology, 1979, 52, 572-580.	1.5	55
28	Cell Preservation in Reparative and Regenerative Medicine: Evolution of Individualized Solution Composition. Tissue Engineering, 2004, 10, 1662-1671.	4.6	54
29	Ice nucleating activity in the blood of the freeze-tolerant frog, Rana sylvatica. Cryobiology, 1990, 27, 328-335.	0.7	52
30	Gene Activation of the Apoptotic Caspase Cascade Following Cryogenic Storage. Cell Preservation Technology, 2002, 1, 63-80.	0.6	51
31	Differential scanning calorimetric analysis of antifreeze protein activity in the common mealworm, Tenebrio molitor. BBA - Proteins and Proteomics, 1988, 957, 217-221.	2.1	45
32	Modulation of the cryopreservation cap: elevated survival with reduced dimethyl sulfoxide concentration. Cryobiology, 2002, 45, 97-108.	0.7	44
33	Cryosurgery - a review of recent advances and current issues. Cryo-Letters, 2002, 23, 69-78.	0.3	44
34	Supercooling phenomenon and water content independence in the overwintering beetle, Coleomegilla maculata. Journal of Insect Physiology, 1975, 21, 1751-1754.	2.0	42
35	Temperature dependence-independence of antifreeze turnover in Eurosta solidaginis (Fitch). Journal of Insect Physiology, 1983, 29, 865-869.	2.0	40
36	Absence of metabolic cold adaptation and compensatory acclimation in the Antarctic fly, Belgica antarctica. Journal of Insect Physiology, 1982, 28, 725-729.	2.0	38

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37	Effect of cryoprotectants on the activity of hemolymph nucleating agents in physical solutions. Cryobiology, 1981, 18, 511-514.	0.7	36
38	Cryoablation: physical and molecular basis with putative immunological consequences. International Journal of Hyperthermia, 2019, 36, 10-16.	2.5	36
39	Respiratory metabolism of the antarctic tick, Ixodes uriae. Comparative Biochemistry and Physiology A, Comparative Physiology, 1982, 72, 167-171.	0.6	35
40	Physical aging of glassy state: DSC study of vitrified glycerol systems. Cryobiology, 1991, 28, 87-95.	0.7	35
41	Cryoablative response of prostate cancer cells is influenced by androgen receptor expression. BJU International, 2008, 101, 1310-1316.	2.5	35
42	Population Differences in Antifreeze/Cryoprotectant Accumulation Patterns in an Antarctic Insect. Oikos, 1983, 40, 120.	2.7	32
43	Multiple stress tolerance in an antarctic terrestrial arthropod: Belgica antarctica. Cryobiology, 1987, 24, 140-147.	0.7	31
44	Partial glass formation: A novel mechanism of insect cryoprotection. Cryobiology, 1988, 25, 451-458.	0.7	31
45	Improved Hypothermic Preservation of Human Renal Cells Through Suppression of Both Apoptosis and Necrosis. Cell Preservation Technology, 2002, 1, 239-253.	0.6	31
46	The unfolded protein response in human corneal endothelial cells following hypothermic storage: Implications of a novel stress pathway. Cryobiology, 2011, 63, 46-55.	0.7	30
47	Vitamin D₃ cryosensitization increases prostate cancer susceptibility to cryoablation via mitochondrialâ€mediated apoptosis and necrosis. BJU International, 2012, 109, 949-958.	2.5	29
48	The fate of [14C]glucose during cold-hardening in Eurosta solidaginis (Fitch). Insect Biochemistry, 1987, 17, 347-352.	1.8	26
49	Effects of temperature cycling on cryoprotectant profiles in the goldenrod gall fly, Eurosta solidaginis (Fitch). Journal of Insect Physiology, 1988, 34, 767-771.	2.0	26
50	Biochemical modification of plasma ice nucleating activity in a freeze-tolerant frog. Cryobiology, 1992, 29, 374-384.	0.7	26
51	Changing Paradigms in Biopreservation. Biopreservation and Biobanking, 2009, 7, 3-12.	1.0	26
52	Integrating Molecular Control to Improve Cryopreservation Outcome. Biopreservation and Biobanking, 2017, 15, 134-141.	1.0	26
53	Cryopreservation: Evolution of Molecular Based Strategies. Advances in Experimental Medicine and Biology, 2016, 951, 13-29.	1.6	25
54	Protective agents: Regulation of synthesis. Cryobiology, 1983, 20, 357-364.	0.7	23

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55	Role of Vitamin D3 as a Sensitizer to Cryoablation in a Murine Prostate Cancer Model: Preliminary In Vivo Study. Urology, 2010, 76, 764.e14-764.e20.	1.0	23
56	Characterization and modulation of human mesenchymal stem cell stress pathway response following hypothermic storage. Cryobiology, 2014, 68, 215-226.	0.7	22
57	Ecophysiological studies on arthropods from Spitsbergen. Polar Research, 1983, 1, 235-240.	1.6	21
58	Ecophysiological studies on arthropods from Spitsbergen. Polar Research, 1983, 1, 235-240.	1.6	21
59	Cryoablation Induces Necrosis and Apoptosis in Lung Adenocarcinoma in Mice. Technology in Cancer Research and Treatment, 2007, 6, 635-640.	1.9	20
60	Development of a Tissue Engineered Human Prostate Tumor Equivalent for Use in the Evaluation of Cryoablative Techniques. Technology in Cancer Research and Treatment, 2007, 6, 81-89.	1.9	19
61	An Evaluation of Eluent Recycling and Column Life for HPLC Analysis of Carbohydrates. Journal of Liquid Chromatography and Related Technologies, 1983, 6, 1139-1151.	1.0	18
62	Further inquiry into the cryobehavior of aqueous solutions of glycerol. Cryobiology, 1991, 28, 268-278.	0.7	18
63	Biobanking: The Future of Cell Preservation Strategies. Advances in Experimental Medicine and Biology, 2015, 864, 37-53.	1.6	18
64	Defeating Cancersâ€™ Adaptive Defensive Strategies Using Thermal Therapies: Examining Cancerâ€™s Therapeutic Resistance, Ablative, and Computational Modeling Strategies as a means for Improving Therapeutic Outcome. Technology in Cancer Research and Treatment, 2018, 17, 153303381876220.	1.9	18
65	Morphology of hypoxia following cryoablation in a prostate cancer murine model: Its relationship to necrosis, apoptosis and, microvessel density. Cryobiology, 2010, 61, 148-154.	0.7	17
66	Characterization of Pancreatic Cancer Cell Thermal Response to Heat Ablation or Cryoablation. Technology in Cancer Research and Treatment, 2017, 16, 393-405.	1.9	17
67	Temperature Buffering in an Arctic Microhabitat1. Annals of the Entomological Society of America, 1976, 69, 117-119.	2.5	15
68	Physical aging of the glassy state: sub-Tg ice nucleation in aqueous sorbitol systems. Journal of Non-Crystalline Solids, 1991, 130, 198-203.	3.1	15
69	Asanguineous Whole Body Perfusion with a New Intracellular Acellular Solution and Ultraprofound Hypothermia Provides Cellular Protection During 3.5 Hours of Cardiac Arrest in a Canine Model. ASAIO Journal, 1994, 40, M351-M358.	1.6	15
70	Cold-Storage of Synthetic Human Epidermis in HypoThermosol. Tissue Engineering, 1995, 1, 361-377.	4.6	15
71	Freezing Tolerance in the Goldenrod Gall Fly (Eurosta solidaginis). , 1991, , 260-275.		15
72	Assessment of the Impact of Post-Thaw Stress Pathway Modulation on Cell Recovery following Cryopreservation in a Hematopoietic Progenitor Cell Model. Cells, 2022, 11, 278.	4.1	15

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73	Temperature-induced neural adaptations motoneuron discharge in the alaskan beetle Pterostichus brevicornis (Carabidae). Comparative Biochemistry and Physiology A, Comparative Physiology, 1972, 41, 205-213.	0.6	14
74	Assessment of Cryosurgical Device Performance Using a 3D Tissue-Engineered Cancer Model. Technology in Cancer Research and Treatment, 2017, 16, 900-909.	1.9	14
75	Heterothermy and cold acclimation in the arctic ground squirrel, Citellus undulatus. Comparative Biochemistry and Physiology A, Comparative Physiology, 1980, 67, 447-452.	0.6	11
76	Differential Binding of Sugars and Polyhydric Alcohols to Ion Exchange Resins: Inappropriateness for Quantitative HPLC. Journal of Liquid Chromatography and Related Technologies, 1982, 5, 767-779.	1.0	11
77	Cellular Components of the Coronary Vasculature Exhibit Differential Sensitivity to Low Temperature Insult. Cell Preservation Technology, 2002, 1, 269-280.	0.6	11
78	Enhanced Hypothermic Storage of Neonatal Cardiomyocytes. Cell Preservation Technology, 2005, 3, 61-74.	0.6	11
79	An In Vitro Investigation into Cryoablation and Adjunctive Cryoablation/Chemotherapy Combination Therapy for the Treatment of Pancreatic Cancer Using the PANC-1 Cell Line. Biomedicines, 2022, 10, 450.	3.2	11
80	Insect Freezing Protection in Pterostichus brevicornis (Carabidae). Nature: New Biology, 1972, 236, 219-221.	4.5	10
81	In VitroAssessment of Apoptosis and Necrosis Following Cold Storage in a Human Airway Cell Model. Biopreservation and Biobanking, 2009, 7, 19-27.	1.0	9
82	Assessment of a novel cryoablation device for the endovascular treatment of cardiac tachyarrhythmias. SAGE Open Medicine, 2018, 6, 205031211876979.	1.8	9
83	Dose Escalation of Vitamin D3 Yields Similar Cryosurgical Outcome to Single Dose Exposure in a Prostate Cancer Model. Cancer Control, 2018, 25, 107327481875741.	1.8	8
84	Breast Cancer Cryoablation: Assessment of the Impact of Fundamental Procedural Variables in an In Vitro Human Breast Cancer Model. Breast Cancer: Basic and Clinical Research, 2020, 14, 117822342097236.	1.1	7
85	Ontogenetic variability of chill tolerance in larval Artemia salina. Aquaculture, 1980, 20, 305-311.	3.5	4
86	Investigation of Bladder Cancer Cell Response to Cryoablation and Adjunctive Cisplatin Based Cryo/Chemotherapy. Clinical Research Open Access, 2020, 6, .	0.0	4
87	Evaluation of a Novel Cystoscopic Compatible Cryocatheter for the TreatmentÂof Bladder Cancer. Bladder Cancer, 2020, 6, 303-318.	0.4	4
88	Mechanisms of Cryoablation. , 2011, , 13-21.		3
89	Principles of Cryoablation. , 2016, , 9-16.		3
90	Investigation of the Impact of Cell Cycle Stage on Freeze Response Sensitivity of Androgen-Insensitive Prostate Cancer. Technology in Cancer Research and Treatment, 2016, 15, 609-617.	1.9	2

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91	Loss of Ice-Nucleating Activity and Avoidance of Inoculative Freezing with Puparium Formation Induced by 20-Hydroxyecdysone in Eurosta solidaginis(Diptera:Tephritidae). Applied Entomology and Zoology, 1993, 28, 547-555.	1.2	1
92	Variations in myocardial CPK and Na+-K+ ATpase following normo- and hypothermic exposure to dimethyl sulfoxide and glycerol. Cryobiology, 1979, 16, 166-170.	0.7	0
93	Enhanced Cryoablative Methodologies. Frontiers in Nanobiomedical Research, 2016, , 3-24.	0.1	0
94	Cell Preservation Technology. , 2011, , 154-165.		0
95	The Story of Adjuvants to Boost the Performance of Cryoablation. Current Clinical Urology, 2017, , 385-397.	0.0	0