

Ram V Devireddy

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2954627/publications.pdf>

Version: 2024-02-01

92
papers

1,895
citations

249298

26
h-index

340414

39
g-index

93
all docs

93
docs citations

93
times ranked

2022
citing authors

#	ARTICLE	IF	CITATIONS
1	<scp>Dark-field</scp> hyperspectral imaging for label free detection of <scp>nanoâ€bioâ€materials</scp>. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2021, 13, e1661.	3.3	20
2	Breast Cancer Reconstruction: Design Criteria for a Humanized Microphysiological System. Tissue Engineering - Part A, 2021, 27, 479-488.	1.6	2
3	Multimodal Label-Free Monitoring of Adipogenic Stem Cell Differentiation Using Endogenous Optical Biomarkers. Advanced Functional Materials, 2021, 31, 2103955.	7.8	8
4	Non-toxic freezing media to retain the stem cell reserves in adipose tissues. Cryobiology, 2020, 96, 137-144.	0.3	5
5	A Solid-State and Flexible Supercapacitor That Operates across a Wide Temperature Range. ACS Applied Energy Materials, 2020, 3, 5693-5704.	2.5	45
6	Cell Sheets for Tissue Engineering Applications. , 2020, , 579-598.		0
7	Transcriptomic Profiling of Adipose Derived Stem Cells Undergoing Osteogenesis by RNA-Seq. Scientific Reports, 2019, 9, 11800.	1.6	31
8	Cell Sheets for Tissue Engineering Applications. , 2019, , 1-20.		0
9	Improvement of Tribological and Biocompatibility Properties of Orthopedic Materials Using Piezoelectric Direct Discharge Plasma Surface Modification. ACS Biomaterials Science and Engineering, 2019, 5, 2147-2159.	2.6	15
10	Fabrication and characterization of thiol-triacrylate polymer via Michael addition reaction for biomedical applications. Biomedical Materials (Bristol), 2019, 14, 015001.	1.7	8
11	Dark-field hyperspectral imaging of single plasmonic gold nanorods and their scattering characteristics in complex biological environments. , 2019, , .		1
12	Cryopreservation Protocols for Human Adipose Tissue Derived Adult Stem Cells. Methods in Molecular Biology, 2018, 1773, 231-259.	0.4	5
13	Effect of Cryopreservation on Human Adipose Tissue and Isolated Stromal Vascular Fraction Cells: In Vitro and In Vivo Analyses. Plastic and Reconstructive Surgery, 2018, 141, 232e-243e.	0.7	20
14	Methylcellulose Based Thermally Reversible Hydrogels. Methods in Molecular Biology, 2018, 1773, 41-51.	0.4	8
15	Single-Cell Analysis Using Hyperspectral Imaging Modalities. Journal of Biomechanical Engineering, 2018, 140, .	0.6	27
16	Structureâ€property relation of porous poly (l-lactic acid) scaffolds fabricated using organic solvent mixtures and controlled cooling rates and its bio-compatibility with human adipose stem cells. Journal of Bioactive and Compatible Polymers, 2018, 33, 397-415.	0.8	3
17	Effects of Decade Long Freezing Storage on Adipose Derived Stem Cells Functionality. Scientific Reports, 2018, 8, 8162.	1.6	38
18	Heat and Mass Transfer Models and Measurements for Low-Temperature Storage of Biological Systems. , 2018, , 2417-2454.		0

#	ARTICLE	IF	CITATIONS
19	Cryobiology of ovarian tissues: known knowns and known unknowns. <i>Minerva Obstetrics and Gynecology</i> , 2018, 70, 387-401.	0.5	1
20	Inducing Heat Shock Proteins Enhances the Stemness of Frozenâ€“Thawed Adipose Tissue-Derived Stem Cells. <i>Stem Cells and Development</i> , 2017, 26, 608-616.	1.1	25
21	Fabrication and characterization of cell sheets using methylcellulose and PNIPAAm thermoresponsive polymers: A comparison Study. <i>Journal of Biomedical Materials Research - Part A</i> , 2017, 105, 1346-1354.	2.1	18
22	Design and Fabrication of a Low-Cost Three-Dimensional Bioprinter. <i>Journal of Medical Devices, Transactions of the ASME</i> , 2017, 11, 0410011-410019.	0.4	22
23	Heat and Mass Transfer Models and Measurements for Low-Temperature Storage of Biological Systems. , 2017, , 1-39.		0
24	The Relative Functionality of Freshly Isolated and Cryopreserved Human Adipose-Derived Stromal/Stem Cells. <i>Cells Tissues Organs</i> , 2016, 201, 436-444.	1.3	13
25	Cryopreserved Adipose Tissue-Derived Stromal/Stem Cells: Potential for Applications in Clinic and Therapy. <i>Advances in Experimental Medicine and Biology</i> , 2016, 951, 137-146.	0.8	16
26	Microscale Thermoelectric Devices for Use with Biosystems. <i>Frontiers in Nanobiomedical Research</i> , 2016, , 173-220.	0.1	0
27	A Review of Biotransport Education in the 21st Century: Lessons Learned From Experts. <i>Journal of Biomechanical Engineering</i> , 2014, 136, .	0.6	1
28	Methylcellulose Based Thermally Reversible Hydrogel System for Tissue Engineering Applications. <i>Cells</i> , 2013, 2, 460-475.	1.8	69
29	Successful vitrification and autografting of baboon (<i>Papio anubis</i>) ovarian tissue. <i>Human Reproduction</i> , 2013, 28, 2146-2156.	0.4	60
30	Momentum and Heat Transfer in Laminar Slip Flow over a Cylinder. <i>Journal of Thermophysics and Heat Transfer</i> , 2013, 27, 607-614.	0.9	15
31	Synthesis of Poly (L-Lactic Acid) Scaffolds Under Controlled Freezing Conditions. , 2013, , .		0
32	BIOPRESERVATION: HEAT/MASS TRANSFER CHALLENGES AND BIOCHEMICAL/GENETIC ADAPTATIONS IN BIOLOGICAL SYSTEMS. <i>Heat Transfer Research</i> , 2013, 44, 245-272.	0.9	5
33	Effect of Controlled Rate Freezing on the Microstructural Properties of Poly (L-lactic Acid) Scaffolds. , 2012, , .		0
34	Calorimetric measurement of water transport and intracellular ice formation during freezing in cell suspensions. <i>Cryobiology</i> , 2012, 65, 242-255.	0.3	26
35	A Molecular Dynamics Study of DMPC Lipid Bilayers Interacting with Dimethylsulfoxideâ€“Water Mixtures. <i>Journal of Membrane Biology</i> , 2012, 245, 807-814.	1.0	1
36	Influence of Freezing (Thermal) Profiles on the Morphology and Mechanical Properties of Poly (L-Lactic Acid) Scaffolds. , 2012, , .		0

#	ARTICLE	IF	CITATIONS
37	Bioheat Transfer With Ken Diller: A Perspective on Intracellular Ice Formation During Freezing of Cells. , 2012, , .		0
38	Fabrication and characterization of electrodeposited antimony telluride crystalline nanowires and nanotubes. Journal of Materials Chemistry, 2011, 21, 4098-4107.	6.7	44
39	Characterization of electrodeposited bismuth-tellurium nanowires and nanotubes. Acta Materialia, 2011, 59, 2455-2461.	3.8	31
40	Preservation Protocols for Human Adipose Tissue-Derived Adult Stem Cells. Methods in Molecular Biology, 2011, 702, 369-394.	0.4	8
41	Directional Solidification Stage With Dynamically Variable Speeds: Assessment of Cell Viability After Interrupted Cooling. , 2011, , .		0
42	Thermally Reversible Hydrogel Sheets for Adult Stem Cell Culture. , 2010, , .		0
43	Polyvinylpyrrolidone (PVP) Mitigates the Damaging Effects of Intracellular Ice Formation in Adult Stem Cells. Annals of Biomedical Engineering, 2010, 38, 1826-1835.	1.3	9
44	Thermal conductivity of semiconductor (bismuth-telluride)-semimetal (antimony) superlattice nanostructures. Acta Materialia, 2010, 58, 570-576.	3.8	21
45	Cryopreservation of stromal vascular fraction of adipose tissue in a serum-free freezing medium. Journal of Tissue Engineering and Regenerative Medicine, 2010, 4, 224-232.	1.3	71
46	Evaluation of Methylcellulose and Dimethyl Sulfoxide as the Cryoprotectants in a Serum-Free Freezing Media for Cryopreservation of Adipose-Derived Adult Stem Cells. Stem Cells and Development, 2010, 19, 513-522.	1.1	97
47	Evaluation of Polyvinylpyrrolidone as a Cryoprotectant for Adipose Tissue-Derived Adult Stem Cells. Tissue Engineering - Part C: Methods, 2010, 16, 783-792.	1.1	66
48	Innocuous Intracellular Ice Formation in Adult Stem Cells in the Presence of Polyvinylpyrrolidone. , 2010, , .		0
49	Statistical thermodynamics of biomembranes. Cryobiology, 2010, 60, 80-90.	0.3	10
50	Cryomicroscopic Investigations of Freezing Processes in Cell Suspensions. Open Biotechnology Journal, 2010, 4, 26-35.	0.6	17
51	Cellular Biophysics During Freezing of Rat and Mouse Sperm Predicts Post-thaw Motility1. Biology of Reproduction, 2009, 81, 700-706.	1.2	29
52	Comparison of the permeability properties and post-thaw motility of ejaculated and epididymal bovine spermatozoa. Cryobiology, 2009, 59, 164-170.	0.3	23
53	Apoptotic Response and Differentiation Ability of Adipose Derived Stem Cells (ASCs) Frozen/Thawed in the Presence of Polyvinylpyrrolidone (PVP). , 2009, , .		0
54	Numerical simulation of local temperature distortions during ice nucleation of cells in suspension. International Journal of Heat and Mass Transfer, 2008, 51, 5655-5661.	2.5	5

#	ARTICLE	IF	CITATIONS
55	The effect of two different freezing methods on the immediate post-thaw membrane integrity of adipose tissue derived stem cells. International Journal of Heat and Mass Transfer, 2008, 51, 5650-5654.	2.5	14
56	Water transport in epididymal and ejaculated rhesus monkey (Macaca mulatta) sperm during freezing. Cryobiology, 2008, 57, 182-185.	0.3	16
57	Desiccation Tolerance of Adult Stem Cells in the Presence of Trehalose and Glycerol. Open Biotechnology Journal, 2008, 2, 211-218.	0.6	9
58	Membrane Transport Properties of Equine and Macaque Ovarian Tissues Frozen in Mixtures of Dimethylsulfoxide and Ethylene Glycol. Journal of Biomechanical Engineering, 2007, 129, 688-694.	0.6	18
59	Freezing and post-thaw apoptotic behaviour of cells in the presence of palmitoyl nanogold particles. Nanotechnology, 2007, 18, 195104.	1.3	23
60	Electrolyte Effect on Nanotubes Properties. ECS Transactions, 2007, 6, 253-260.	0.3	5
61	Molecular dynamics simulation of pore growth in lipid bilayer membranes in the presence of edge-active agents. Applied Physics Letters, 2007, 91, 204104.	1.5	23
62	Cryopreservation characteristics of adipose-derived stem cells: maintenance of differentiation potential and viability. Journal of Tissue Engineering and Regenerative Medicine, 2007, 1, 322-324.	1.3	103
63	Molecular Dynamics Simulation Studies of Pore Formation in Lipid Bilayers in the Presence of Dimethylsulfoxide. , 2007, , .		0
64	Intracellular Ice Formation in Cell Suspensions Measured Using a Cryomicroscope and a Calorimeter. , 2007, , .		0
65	Freezing response of white bass (Morone chrysops) sperm cells. Cryobiology, 2006, 52, 440-445.	0.3	4
66	Freezing response and optimal cooling rates for cryopreserving sperm cells of striped bass, Morone saxatilis. Theriogenology, 2006, 66, 964-973.	0.9	24
67	Subzero water transport characteristics and optimal rates of freezing rhesus monkey (Macaca Tj ETQq1 1 0.784314 rgBT /Oyerlock 16	1.0	16
68	The Effect of Methanol on Lipid Bilayers: An Atomistic Investigation. Annals of Biomedical Engineering, 2006, 34, 1442-1451.	1.3	32
69	Permeability Characteristics of Ovine Primordial Follicles Calculated with Two Parameter Kedem-Katchalsky Formulation. Cell Preservation Technology, 2006, 4, 188-198.	0.8	2
70	A Molecular Dynamics Simulation Study on the Effect of Methanol on the Structural Characteristics of Lipid Bilayers. , 2005, , 811.		0
71	Effect of Various Freezing Parameters on the Immediate Post-Thaw Membrane Integrity of Adipose Tissue Derived Adult Stem Cells. Biotechnology Progress, 2005, 21, 1511-1524.	1.3	65
72	Transport phenomena during freezing of adipose tissue derived adult stem cells. Biotechnology and Bioengineering, 2005, 92, 372-383.	1.7	45

#	ARTICLE	IF	CITATIONS
73	An Inverse Approach to Determine Solute and Solvent Permeability Parameters in Artificial Tissues. <i>Annals of Biomedical Engineering</i> , 2005, 33, 709-718.	1.3	16
74	Enhancement of post-thaw viability of cells in suspension via pulsed laser heating prior to immersion in liquid nitrogen. <i>Journal of Applied Physics</i> , 2005, 97, 124702.	1.1	2
75	Cellular Response of Adipose Derived Passage-4 Adult Stem Cells to Freezing Stress. <i>Journal of Biomechanical Engineering</i> , 2005, 127, 1081-1086.	0.6	35
76	A Simplified Procedure to Determine the Optimal Rate of Freezing Biological Systems. <i>Journal of Biomechanical Engineering</i> , 2005, 127, 295-300.	0.6	30
77	Predicted permeability parameters of human ovarian tissue cells to various cryoprotectants and water. <i>Molecular Reproduction and Development</i> , 2005, 70, 333-343.	1.0	29
78	Subzero water permeability parameters and optimal freezing rates for sperm cells of the southern platyfish, <i>Xiphophorus maculatus</i> . <i>Cryobiology</i> , 2005, 50, 250-263.	0.3	33
79	A theoretically estimated optimal cooling rate for the cryopreservation of sperm cells from a live-bearing fish, the green swordtail <i>Xiphophorus helleri</i> . <i>Theriogenology</i> , 2005, 63, 2395-2415.	0.9	31
80	On the Possible Application of a Microscale Thermocouple to Measure Intercellular Ice Formation in Cells Embedded in an Extracellular Matrix. , 2004, , 705.		3
81	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
82	Variation in the Membrane Transport Properties and Predicted Optimal Rates of Freezing for Spermatozoa of Diploid and Tetraploid Pacific Oyster, <i>Crassostrea gigas</i> 1. <i>Biology of Reproduction</i> , 2004, 70, 1428-1437.	1.2	29
83	Cryopreservation of canine spermatozoa: theoretical prediction of optimal cooling rates in the presence and absence of cryoprotective agents. <i>Cryobiology</i> , 2003, 47, 109-124.	0.3	54
84	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
85	Recent Advances in Cryobiology Using Calorimetry. , 2003, , 265-294.		14
86	The effect of collection and cooling conditions on water transport characteristics of equine spermatozoa. <i>Theriogenology</i> , 2002, 58, 233-236.	0.9	1
87	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
88	Microscopic and Calorimetric Assessment of Freezing Processes in Uterine Fibroid Tumor Tissue. <i>Cryobiology</i> , 2001, 42, 225-243.	0.3	37
89	Subzero Water Permeability Parameters of Mouse Spermatozoa in the Presence of Extracellular Ice and Cryoprotective Agents1. <i>Biology of Reproduction</i> , 1999, 61, 764-775.	1.2	76
90	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

#	ARTICLE	IF	CITATIONS
91	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
92	Biophysics Of Freezing In Liver Of The Freeze-Tolerant Wood Frog, <i>R. Sylvaticaa</i> . <i>Annals of the New York Academy of Sciences</i> , 1998, 858, 284-297.	1.8	6