

Igor I Katkov

List of Publications by Year in descending order

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31
papers

1,307
citations

643344

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times ranked

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citing authors

#	ARTICLE	IF	CITATIONS
1	Aseptic Technology for Cryoprotectant-Free Vitrification of Human Spermatozoa by Direct Dropping into Clean Liquid Air: Apoptosis, Necrosis, Motility, and Viability. <i>BioMed Research International</i> , 2020, 2020, 1-7.	0.9	5
2	Me2SO- and serum-free cryopreservation of human umbilical cord mesenchymal stem cells using electroporation-assisted delivery of sugars. <i>Cryobiology</i> , 2019, 91, 104-114.	0.3	21
3	Tolerance of human embryonic stem cell derived islet progenitor cells to vitrification-relevant solutions. <i>Cryobiology</i> , 2015, 70, 283-286.	0.3	3
4	Modeling the Effect of the Leidenfrost Vapor Coat Behavior on the Vitrification in Micro-Droplets Using the Cryogenic Droplet Levitation Time. , 2013, , .		0
5	Cryogenic Cooling System – KrioBlast – Increased Efficiency and Lowered the Operation Time of Protective Electrical Induction-Induced Devices. , 2013, , .		3
6	Comparison of 4 Methods for Scalable Kinetic (Fast) Vitrification of Cells: From Theoretical Considerations to Feasibility and Practicality. , 2013, , .		0
7	ComfortFreezer, c: A Benchtop LN2 – Free Programmable Freezer for Cryopreservation of Adherent Cells in Multi-Well Plates for Cell-Based High Content Screening. , 2012, , .		0
8	Bi-Phasic Reverse Movement of Permeable Solute(s) in Cells is Predicted by the Relativistic Permeability Approach. , 2012, , .		0
9	On proper linearization, construction and analysis of the Boyle – van – Hoff plots and correct calculation of the osmotically inactive volume. <i>Cryobiology</i> , 2011, 62, 232-241.	0.3	20
10	Amicus Plato, sed magis amica veritas –: Plots must obey the laws they refer to and models shall describe biophysical reality!. <i>Cryobiology</i> , 2011, 62, 242-244.	0.3	2
11	DMSO-Free Programmed Cryopreservation of Fully Dissociated and Adherent Human Induced Pluripotent Stem Cells. <i>Stem Cells International</i> , 2011, 2011, 1-8.	1.2	81
12	Challenge from the simple: Some caveats in linearization of the Boyle – van – Hoff and Arrhenius plots. <i>Cryobiology</i> , 2008, 57, 142-149.	0.3	11
13	Vitrification of human laser treated blastocysts within cut standard straws (CSS): Novel aseptic packaging and reduced concentrations of cryoprotectants. <i>Cryobiology</i> , 2007, 54, 305-309.	0.3	47
14	Cryopreservation of Human Embryonic Stem Cells. , 2007, , 47-55.		6
15	Vitrification in small quenched volumes with a minimal amount of, or without vitrificants: basic biophysics and thermodynamics. <i>Reproductive Medicine and Assisted Reproductive Techniques Series</i> , 2007, , 21-32.	0.1	9
16	Cryoprotectant-free vitrification of spermatozoa. <i>Reproductive Medicine and Assisted Reproductive Techniques Series</i> , 2007, , 87-106.	0.1	5
17	Influence of exposure to vitrification solutions on 2-cell mouse embryos: I. Intracellular potassium and sodium content. <i>Cryo-Letters</i> , 2007, 28, 403-8.	0.1	10
18	Influence of exposure to vitrification solutions on 2-cell mouse embryos: II. Osmotic effects or chemical toxicity?. <i>Cryo-Letters</i> , 2007, 28, 409-27.	0.1	8

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19	Cryopreservation by slow cooling with DMSO diminished production of Oct-4 pluripotency marker in human embryonic stem cells. <i>Cryobiology</i> , 2006, 53, 194-205.	0.3	112
20	Introduction to the field of cryobiology and overview of selected papers. <i>International Journal of Refrigeration</i> , 2006, 29, 341-345.	1.8	6
21	Low- and high-temperature vitrification as a new approach to biostabilization of reproductive and progenitor cells. <i>International Journal of Refrigeration</i> , 2006, 29, 346-357.	1.8	50
22	Letters: Incongruous Photos. <i>Academe</i> , 2005, 91, 6.	0.3	0
23	Clean technique for cryoprotectant-free vitrification of human spermatozoa. <i>Reproductive BioMedicine Online</i> , 2005, 10, 350-354.	1.1	126
24	Cryoprotectant-Free Cryopreservation of Human Spermatozoa by Vitrification and Freezing in Vapor: Effect on Motility, DNA Integrity, and Fertilization Ability. <i>Biology of Reproduction</i> , 2004, 71, 1167-1173.	1.2	211
25	Prediction of the glass transition temperature of water solutions: comparison of different models. <i>Cryobiology</i> , 2004, 49, 62-82.	0.3	85
26	Vitrification of mammalian spermatozoa in the absence of cryoprotectants: from past practical difficulties to present success. <i>Reproductive BioMedicine Online</i> , 2003, 6, 191-200.	1.1	204
27	The point of maximum cell water volume excursion in case of presence of an impermeable solute. <i>Cryobiology</i> , 2002, 44, 193-203.	0.3	23
28	A Two-Parameter Model of Cell Membrane Permeability for Multisolute Systems. <i>Cryobiology</i> , 2000, 40, 64-83.	0.3	53
29	The Enhancement of the Ability of Mouse Sperm to Survive Freezing and Thawing by the Use of High Concentrations of Glycerol and the Presence of an Escherichia coli Membrane Preparation (Oxyrase) to Lower the Oxygen Concentration. <i>Cryobiology</i> , 2000, 40, 187-209.	0.3	66
30	Factors affecting yield and survival of cells when suspensions are subjected to centrifugation. <i>Cell Biochemistry and Biophysics</i> , 1999, 31, 231-245.	0.9	52
31	Mouse Spermatozoa in High Concentrations of Glycerol: Chemical Toxicity vs Osmotic Shock at Normal and Reduced Oxygen Concentrations. <i>Cryobiology</i> , 1998, 37, 325-338.	0.3	85