

Alexander Y Petrenko

List of Publications by Year in descending order

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59
papers

1,458
citations

430442

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329751

37
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docs citations

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times ranked

1807
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Generation of bone grafts using cryopreserved mesenchymal stromal cells and macroporous collagen-nanohydroxyapatite cryogels. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2022, 110, 489-499. | 1.6 | 7 |
| 2 | Coaxial Alginate Hydrogels: From Self-Assembled 3D Cellular Constructs to Long-Term Storage. <i>International Journal of Molecular Sciences</i> , 2021, 22, 3096. | 1.8 | 11 |
| 3 | Effect of N_2 freezing on post-thaw recovery of Callithrix jacchus mesenchymal stromal cells and properties of 3D collagen-hydroxyapatite scaffolds. <i>Cryobiology</i> , 2020, 92, 215-230. | 0.3 | 13 |
| 4 | Dimethyl sulfoxide: a central player since the dawn of cryobiology, is efficacy balanced by toxicity?. <i>Regenerative Medicine</i> , 2020, 15, 1463-1491. | 0.8 | 118 |
| 5 | Chitinous Scaffolds from Marine Sponges for Tissue Engineering. <i>Springer Series in Biomaterials Science and Engineering</i> , 2019, , 285-307. | 0.7 | 2 |
| 6 | Human organs come out of the deep cold. <i>Nature Biotechnology</i> , 2019, 37, 1127-1128. | 9.4 | 9 |
| 7 | Toward a Molecular Reorganization Energy-Based Analysis of Third-Order Nonlinear Optical Properties of Polymethine Dyes and J-Aggregates. <i>Journal of Physical Chemistry A</i> , 2019, 123, 9321-9327. | 1.1 | 6 |
| 8 | Clinically Relevant Solution for the Hypothermic Storage and Transportation of Human Multipotent Mesenchymal Stromal Cells. <i>Stem Cells International</i> , 2019, 2019, 1-11. | 1.2 | 24 |
| 9 | Organ Preservation into the 2020s: The Era of Dynamic Intervention. <i>Transfusion Medicine and Hemotherapy</i> , 2019, 46, 151-172. | 0.7 | 63 |
| 10 | Novel Cryopreservation Approach Providing Off-the-Shelf Availability of Human Multipotent Mesenchymal Stromal Cells for Clinical Applications. <i>Stem Cells International</i> , 2019, 2019, 1-11. | 1.2 | 16 |
| 11 | Multiple Injections of Cryopreserved Fetal Liver Cells to Ageing Rats Prevent Age-Related Antioxidant System Changes and Increase Lifespan. <i>Problems of Cryobiology and Cryomedicine</i> , 2019, 29, 221-236. | 0.3 | 0 |
| 12 | Cryostructuring of polymer systems. 47. Preparation of wide porous gelatin-based cryostructures in sterilizing organic media and assessment of the suitability of thus formed matrices as spongy scaffolds for 3D cell culturing. <i>E-Polymers</i> , 2018, 18, 175-186. | 1.3 | 21 |
| 13 | Blood Plasma-Based Macroporous Scaffolds as Biocompatible Coatings to Restore Full-Thickness Excision Wounds. <i>Problems of Cryobiology and Cryomedicine</i> , 2018, 28, 044-048. | 0.3 | 2 |
| 14 | Perfusion bioreactor-based cryopreservation of 3D human mesenchymal stromal cell tissue grafts. <i>Cryobiology</i> , 2017, 76, 150-153. | 0.3 | 24 |
| 15 | Novel chitin scaffolds derived from marine sponge <i>Ianthella basta</i> for tissue engineering approaches based on human mesenchymal stromal cells: Biocompatibility and cryopreservation. <i>International Journal of Biological Macromolecules</i> , 2017, 104, 1955-1965. | 3.6 | 75 |
| 16 | 3D chitinous scaffolds derived from cultivated marine demosponge <i>Aplysina aerophoba</i> for tissue engineering approaches based on human mesenchymal stromal cells. <i>International Journal of Biological Macromolecules</i> , 2017, 104, 1966-1974. | 3.6 | 59 |
| 17 | DMSO-free cryopreservation of adipose-derived mesenchymal stromal cells: expansion medium affects post-thaw survival. <i>Cytotechnology</i> , 2017, 69, 265-276. | 0.7 | 26 |
| 18 | Distal [FeS]-Cluster Coordination in [NiFe]-Hydrogenase Facilitates Intermolecular Electron Transfer. <i>International Journal of Molecular Sciences</i> , 2017, 18, 100. | 1.8 | 10 |

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|----|---|-----|-----------|
| 19 | Morphological Features of Thyroid Gland in Rats with Experimental Autoimmune Thyroiditis After Administering Cryopreserved Allogeneic Fetal Cells. <i>Problems of Cryobiology and Cryomedicine</i> , 2017, 27, 356-366. | 0.3 | 2 |
| 20 | Cryosensitivity of Mesenchymal Stromal Cells Cryopreserved Within Marine Sponge <i>Ianthella basta</i> Skeleton-Based Carriers. <i>Problems of Cryobiology and Cryomedicine</i> , 2016, 26, 13-23. | 0.3 | 7 |
| 21 | Effect of Encapsulation into Alginate Microspheres on Viability of Mesenchymal Stromal Cells after Exposure with Penetrating Cryoprotectants. <i>Problems of Cryobiology and Cryomedicine</i> , 2016, 26, 213-220. | 0.3 | 0 |
| 22 | Bioregulators of stem and progenitor cells in preservation solution reduce cold ischemia-related reperfusion injury of isolated rat livers. <i>BioFactors</i> , 2016, 42, 287-295. | 2.6 | 2 |
| 23 | Molecular Reorganization Energy as a Key Determinant of J-Band Formation in J-Aggregates of Polymethine Dyes. <i>Journal of Physical Chemistry A</i> , 2015, 119, 6773-6780. | 1.1 | 17 |
| 24 | Rates and Routes of Electron Transfer of [NiFe]-Hydrogenase in an Enzymatic Fuel Cell. <i>Journal of Physical Chemistry B</i> , 2015, 119, 13870-13882. | 1.2 | 11 |
| 25 | TRANSPLANTATION OF CRYOPRESERVED FETAL LIVER CELLS SEEDED INTO MACROPOROUS ALGINATE-GELATIN SCAFFOLDS IN RATS WITH LIVER FAILURE. <i>Vestnik Transplantologii I Iskusstvennykh Organov</i> , 2015, 17, 50-57. | 0.1 | 3 |
| 26 | Adhesion and proliferation of adipose derived mesenchymal stromal cells on chitosan scaffolds with different degree of deacetylation. <i>Biopolymers and Cell</i> , 2014, 30, 135-140. | 0.1 | 2 |
| 27 | Towards ready-to-use 3-D scaffolds for regenerative medicine: adhesion-based cryopreservation of human mesenchymal stem cells attached and spread within alginate-gelatin cryogel scaffolds. <i>Journal of Materials Science: Materials in Medicine</i> , 2014, 25, 857-871. | 1.7 | 63 |
| 28 | Skin stem cells as an object for cryopreservation. 1. Skin stem reserve. <i>Problems of Cryobiology and Cryomedicine</i> , 2014, 24, 3-15. | 0.3 | 3 |
| 29 | Liver structure in rats with experimental hepatic failure following implantation of macroporous carrier seeded with cryopreserved fetal liver cells. <i>Problems of Cryobiology and Cryomedicine</i> , 2014, 24, 292-301. | 0.3 | 1 |
| 30 | Isolation and identification of chitin in three-dimensional skeleton of <i>Aplysina fistularis</i> marine sponge. <i>International Journal of Biological Macromolecules</i> , 2013, 62, 94-100. | 3.6 | 91 |
| 31 | Cryopreservation of alginate encapsulated mesenchymal stromal cells. <i>Cryobiology</i> , 2013, 66, 215-222. | 0.3 | 62 |
| 32 | Phenotypical properties and ability to multilineage differentiation of adipose tissue stromal cells during subculturing. <i>Cytology and Genetics</i> , 2012, 46, 36-40. | 0.2 | 3 |
| 33 | Mitochondria-targeted plastoquinone derivative SkQ1 decreases ischemia-reperfusion injury during liver hypothermic storage for transplantation. <i>Biochemistry (Moscow)</i> , 2011, 76, 1022-1029. | 0.7 | 9 |
| 34 | Capacity of Bioregulators of Stem and Progenitor Cells to Strongly Affect Liver Redox-Dependent Processes. <i>Rejuvenation Research</i> , 2011, 14, 661-667. | 0.9 | 3 |
| 35 | Coupling of gelatin to inner surfaces of pore walls in spongy alginate-based scaffolds facilitates the adhesion, growth and differentiation of human bone marrow mesenchymal stromal cells. <i>Journal of Materials Science: Materials in Medicine</i> , 2011, 22, 1529-1540. | 1.7 | 61 |
| 36 | Comparison of the methods for seeding human bone marrow mesenchymal stem cells to macroporous alginate cryogel carriers. <i>Bulletin of Experimental Biology and Medicine</i> , 2011, 150, 543-546. | 0.3 | 25 |

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|----|--|-----|-----------|
| 37 | The Use of Catalytic Carbon Deposits as 3D Carriers for Human Bone Marrow Stromal Cells. Bulletin of Experimental Biology and Medicine, 2011, 151, 539-542. | 0.3 | 1 |
| 38 | Organ Preservation: Current Concepts and New Strategies for the Next Decade. Transfusion Medicine and Hemotherapy, 2011, 38, 125-142. | 0.7 | 251 |
| 39 | Reversible mitochondrial uncoupling in the cold phase during liver preservation/reperfusion reduces oxidative injury in the rat model. Cryobiology, 2010, 60, 293-300. | 0.3 | 15 |
| 40 | Growth and adipogenic differentiation of mesenchymal stromal bone marrow cells during culturing in 3D macroporous agarose cryogel sponges. Bulletin of Experimental Biology and Medicine, 2008, 146, 129-132. | 0.3 | 10 |
| 41 | Osteogenic and adipogenic capacity of fibroblast-like progenitor cells derived from human fetal liver. Cell and Tissue Biology, 2008, 2, 140-145. | 0.2 | 1 |
| 42 | Functional hepatic recovery after xenotransplantation of cryopreserved fetal liver cells or soluble cell factor administration in a cirrhotic rat model: Are viable cells necessary?. Journal of Gastroenterology and Hepatology (Australia), 2008, 23, e275-82. | 1.4 | 5 |
| 43 | Cryopreservation of Stem Cells. NATO Science for Peace and Security Series A: Chemistry and Biology, 2008, , 223-231. | 0.5 | 1 |
| 44 | Cryopreservation of human fetal liver hematopoietic stem/progenitor cells using sucrose as an additive to the cryoprotective medium. Cryobiology, 2008, 57, 195-200. | 0.3 | 41 |
| 45 | Choice of conditions of human bone marrow stromal cells seeding into polymer macroporus sponges. Biopolymers and Cell, 2008, 24, 399-405. | 0.1 | 5 |
| 46 | Positive effects of cryopreserved adult or fetal liver cell transplants on hypercholesterolemia and hepatic antioxidant defenses in cholesterol-fed rabbits. Cryobiology, 2007, 55, 72-79. | 0.3 | 2 |
| 47 | Ab Initio Prediction of Tryptophan Fluorescence Quenching by Protein Electric Field Enabled Electron Transfer. Journal of Physical Chemistry B, 2007, 111, 10335-10339. | 1.2 | 59 |
| 48 | Cryopreserved Fetal Liver Cell Transplants Support the Chronic Failing Liver in Rats with CCl4-Induced Cirrhosis. Cell Transplantation, 2006, 15, 23-33. | 1.2 | 13 |
| 49 | Hepatoprotective effect of fetal tissue cytosol and its thermostable fraction in rats with carbon tetrachloride-induced hepatitis. Bulletin of Experimental Biology and Medicine, 2006, 141, 544-547. | 0.3 | 6 |
| 50 | Supplementation with Fetal-Specific Factors Ameliorates Oxidative Liver Damage During Hypothermic Storage and Reperfusion in a Rat Model. Cell Preservation Technology, 2005, 3, 201-209. | 0.8 | 7 |
| 51 | The osmotic characteristics of human fetal liver-derived hematopoietic stem cell candidates. Cryobiology, 2004, 48, 333-340. | 0.3 | 11 |
| 52 | A SIMPLE NON-ENZYMATIC METHOD FOR THE ISOLATION OF HIGH YIELDS OF FUNCTIONAL RAT HEPATOCYTES. Cell Biology International, 2002, 26, 1003-1006. | 1.4 | 13 |
| 53 | Respiratory Activity of Isolated Rat Hepatocytes Following Cold Storage and Subsequent Rewarming: A Comparison of Sucrose-Based and University of Wisconsin Solutions. Cryobiology, 2001, 42, 218-221. | 0.3 | 16 |
| 54 | Effect of transplantation of human fetal tissues on prooxidant-antioxidant equilibrium in the liver and blood rats after partial hepatectomy in rats. Bulletin of Experimental Biology and Medicine, 2001, 132, 950-952. | 0.3 | 0 |

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|----|--|-----|-----------|
| 55 | Intracellular Ice Formation Is Affected by Cell Interactions. <i>Cryobiology</i> , 1999, 38, 363-371. | 0.3 | 106 |
| 56 | Separation of intact and damaged hepatocytes in sucrose following non-enzymatic liver perfusion. <i>Cytotechnology</i> , 1995, 17, 127-131. | 0.7 | 0 |
| 57 | Inhibition of Biotransformation of Xenobiotic p-Nitroanisole after Cryopreservation of Isolated Rat Hepatocytes. <i>Cryobiology</i> , 1993, 30, 158-163. | 0.3 | 5 |
| 58 | A mechanism of latent cryoinjury and reparation of mitochondria. <i>Cryobiology</i> , 1992, 29, 144-152. | 0.3 | 13 |
| 59 | Isolation of intact mitochondria and hepatocytes using vibration. <i>Analytical Biochemistry</i> , 1991, 194, 326-329. | 1.1 | 21 |