Zoran Ivanovic

List of Publications by Year
in descending order

115 papers	2,890 citations	218381 26 h-index	182168 51 g-index
122 all docs	122 docs citations	122 times ranked	3469 citing authors

#	Article	IF	Citations
1	Hypoxia or in situ normoxia: The stem cell paradigm. Journal of Cellular Physiology, 2009, 219, 271-275.	2.0	326
2	In Vivo MR Imaging of Intravascularly Injected Magnetically Labeled Mesenchymal Stem Cells in Rat Kidney and Liver. Radiology, 2004, 233, 781-789.	3.6	232
3	HIF-2Î± Protects Human Hematopoietic Stem/Progenitors and Acute Myeloid Leukemic Cells from Apoptosis Induced by Endoplasmic Reticulum Stress. Cell Stem Cell, 2013, 13, 549-563.	5.2	163
4	Hypoxia Preconditioned Mesenchymal Stem Cells Improve Vascular and Skeletal Muscle Fiber Regeneration After Ischemia Through a Wnt4-dependent Pathway. Molecular Therapy, 2010, 18, 1545-1552.	3.7	156
5	Simultaneous Maintenance of Human Cord Blood SCID-Repopulating Cells and Expansion of Committed Progenitors at Low O2 Concentration (3%). Stem Cells, 2004, 22, 716-724.	1.4	118
6	Very Low O2Concentration (0.1%) Favors G0Return of Dividing CD34+Cells. Stem Cells, 2006, 24, 65-73.	1.4	115
7	Primitive human HPCs are better maintained and expanded in vitro at 1 percent oxygen than at 20 percent. Transfusion, 2000, 40, 1482-1488.	0.8	110
8	Incubation of murine bone marrow cells in hypoxia ensures the maintenance of marrow-repopulating ability together with the expansion of committed progenitors. British Journal of Haematology, 2000, 108, 424-429.	1.2	89
9	Slow-cycling/quiescence balance of hematopoietic stem cells is related to physiological gradient of oxygen. Experimental Hematology, 2010, 38, 847-851.	0.2	87
10	Hypoxia maintains and interleukin-3 reduces the preâ€“colony-forming cell potential of dividing CD34+ murine bone marrow cells. Experimental Hematology, 2002, 30, 67-73.	0.2	72
11	Single-cell profiling reveals the trajectories of natural killer cell differentiation in bone marrow and a stress signature induced by acute myeloid leukemia. Cellular and Molecular Immunology, 2021, 18, 1290-1304.	4.8	62
12	The expansion of murine bone marrow cells preincubated in hypoxia as an in vitro indicator of their marrow-repopulating ability. Leukemia, 2000, 14, 735-739.	3.3	56
13	Low oxygen concentration as a general physiologic regulator of erythropoiesis beyond the EPO-related downstream tuning and a tool for the optimization of red blood cell production ex vivo. Experimental Hematology, 2009, 37, 573-584.	0.2	55
14	Hypoxia Modifies Proliferation and Differentiation of CD34+CML Cells. Stem Cells, 2002, 20, 347-354.	1.4	54
15	The cryopreservation protocol optimal for progenitor recovery is not optimal for preservation of marrow repopulating ability. Bone Marrow Transplantation, 1999, 23, 613-619.	1.3	53
16	Hypoxia-preconditioned mesenchymal stromal cells improve cardiac function in a swine model of chronic myocardial ischaemia. European Journal of Cardio-thoracic Surgery, 2013, 43, 1050-1057.	0.6	48
17	Combination of low O₂ concentration and mesenchymal stromal cells during culture of cord blood CD34⁺ cells improves the maintenance and proliferative capacity of hematopoietic stem cells. Journal of Cellular Physiology, 2012, 227, 2750-2758.	2.0	46
18	Energy Metabolism Rewiring Precedes UVB-Induced Primary Skin Tumor Formation. Cell Reports, 2018, 23, 3621-3634.	2.9	44

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19	Large-scale expansion and transplantation of CD34+ hematopoietic cells: in vitro and in vivo confirmation of neutropenia abrogation related to the expansion process without impairment of the long-term engraftment capacity. Transfusion, 2006, 46, 1934-1942.	0.8	40
20	Interleukin-6 (IL-6) and low O2 concentration (1%) synergize to improve the maintenance of hematopoietic stem cells (pre-CFC). Journal of Cellular Physiology, 2007, 212, 68-75.	2.0	39
21	Clinical-Scale Cultures of Cord Blood CD34+ Cells to Amplify Committed Progenitors and Maintain Stem Cell Activity. Cell Transplantation, 2011, 20, 1453-1464.	1.2	39
22	Concise Review: The Role of Oxygen in Hematopoietic Stem Cell Physiology. Journal of Cellular Physiology, 2015, 230, 1999-2005.	2.0	36
23	Cord Blood Processing by Using a Standard Manual Technique and Automated Closed System "Sepax" (Kit CS-530). Stem Cells and Development, 2005, 14, 6-10.	1.1	33
24	A clinical-scale expansion of mobilized CD34+ hematopoietic stem and progenitor cells by use of a new serum-free medium. Transfusion, 2006, 46, 126-131.	0.8	33
25	Strategies to Enhance Implantation and Survival of Stem Cells After Their Injection in Ischemic Neural Tissue. Stem Cells and Development, 2017, 26, 554-565.	1.1	29
26	Hematopoietic stem cells in research and clinical applications: The â€œCD34 issueâ€• World Journal of Stem Cells, 2010, 2, 18.	1.3	27
27	Comparison of CD34+ cell collection on the CS-3000+ and Amicus blood cell separators. Transfusion, 2003, 43, 1423-1427.	0.8	26
28	Whole-blood leukodepletion filters as a source of CD34+ progenitors potentially usable in cell therapy. Transfusion, 2006, 46, 118-125.	0.8	26
29	Busulfan Administration Flexibility Increases the Applicability of Scid Repopulating Cell Assay in NSG Mouse Model. PLoS ONE, 2013, 8, e74361.	1.1	24
30	Grid-connected converter active and reactive power production maximization with respect to current limitations during grid faults. International Journal of Electrical Power and Energy Systems, 2018, 101, 311-322.	3.3	23
31	Long-term repopulating hematopoietic stem cells and â€œside populationâ€•in human steady state peripheral blood. Stem Cell Research, 2013, 11, 625-633.	0.3	22
32	Human amniotic membrane for guided bone regeneration of calvarial defects in mice. Journal of Materials Science: Materials in Medicine, 2018, 29, 78.	1.7	22
33	Angiotensin II That Reduces the Colony-Forming Ability of Hematopoietic Progenitors in Serum Free Medium Has an Inverse Effect in Serum-Supplemented Medium. Stem Cells, 2002, 20, 269-271.	1.4	20
34	CD34+ cells obtained from â€œgood mobilizersâ€•are more activated and exhibit lower ex vivo expansion efficiency than their counterparts from â€œpoor mobilizersâ€• Transfusion, 2010, 50, 120-127.	0.8	19
35	Discarded leukoreduction filters: A new source of stem cells for research, cell engineering and therapy?. Stem Cell Research, 2013, 11, 736-742.	0.3	19
36	Respect the anaerobic nature of stem cells to exploit their potential in regenerative medicine. Regenerative Medicine, 2013, 8, 677-680.	0.8	19

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37	Very low oxygen concentration (0.1%) reveals two FDCP-Mix cell subpopulations that differ by their cell cycling, differentiation and p27KIP1 expression. Cell Death and Differentiation, 2011, 18, 174-182.	5.0	18
38	Definitive Setup of Clinical Scale Procedure for Ex Vivo Expansion of Cord Blood Hematopoietic Cells for Transplantation. Cell Transplantation, 2012, 21, 2517-2521.	1.2	18
39	Cryopreservation of hematopoietic stem and progenitor cells amplified ex vivo from cord blood <scp>CD</scp>34+ cells. Transfusion, 2013, 53, 2012-2019.	0.8	16
40	Interleukinâ€6 enhances the activity of in vivo longâ€term reconstituting hematopoietic stem cells in â€œhypoxicâ€likeâ€•expansion cultures ex vivo. Transfusion, 2015, 55, 2684-2691.	0.8	16
41	Reliability of ROS and RNS detection in hematopoietic stem cells â˜ potential issues with probes and target cell population. Journal of Cell Science, 2015, 128, 3849-3860.	1.2	16
42	Interleukin-3 and ex vivo maintenance of hematopoietic stem cells: facts and controversies. European Cytokine Network, 2004, 15, 6-13.	1.1	16
43	An Efficient Large-Scale Thawing Procedure for Cord Blood Cells Destined for Selection and Ex Vivo Expansion of CD34+ Cells. Journal of Hematotherapy and Stem Cell Research, 2003, 12, 587-589.	1.8	15
44	Low O2 concentrations enhance theÂpositive effect ofÂIL-17 onÂtheÂmaintenance ofÂerythroid progenitors during co-culture ofÂCD34+ andÂmesenchymal stem cells. European Cytokine Network, 2009, 20, 010-016.	1.1	15
45	Obtaining of CD34+ cells from healthy blood donors: development of a rapid and efficient procedure using leukoreduction filters. Transfusion, 2010, 50, 2152-2157.	0.8	15
46	Chronic myeloid leukemia progenitor cells require autophagy when leaving hypoxia-induced quiescence. Oncotarget, 2017, 8, 96984-96992.	0.8	15
47	Differentiation of human dendritic cell subsets for immune tolerance induction. Transfusion Clinique Et Biologique, 2018, 25, 90-95.	0.2	14
48	Effects of Lipoxygenase Metabolites of Arachidonic Acid on the Growth of Human Blood CD34+ Progenitors. Blood Cells, Molecules, and Diseases, 2000, 26, 427-436.	0.6	13
49	Oxygen concentration influences mRNA processing and expression of thecd34 gene. Journal of Cellular Biochemistry, 2006, 97, 135-144.	1.2	13
50	Thrombopoietin to replace megakaryocyteâ€derived growth factor: impact on stem and progenitor cells during ex vivo expansion of CD34+ cells mobilized in peripheral blood. Transfusion, 2011, 51, 313-318.	0.8	13
51	High hydrostatic pressure treatment for the inactivation of Staphylococcus aureus in human blood plasma. New Biotechnology, 2012, 29, 409-414.	2.4	13
52	A new clinicalâ€scale serumâ€free xenoâ€free medium efficient in ex vivo amplification of mesenchymal stromal cells does not support mesenchymal stem cells. Transfusion, 2017, 57, 433-439.	0.8	13
53	A Simple, One‐Step Clonal Assay Allows the Sequential Detection of Committed (CFU‐GM‐like) Progenitors and Several Subsets of Primitive (HPP‐CFC) Murine Progenitors. Stem Cells, 1999, 17, 219-225.	1.4	12
54	Lowâ€oxygen and highâ€carbonâ€dioxide atmosphere improves the conservation of hematopoietic progenitors in hypothermia. Transfusion, 2009, 49, 1738-1746.	0.8	12

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55	Hypoxia/Hypercapniaâ€Induced Adaptation Maintains Functional Capacity of Cord Blood Stem and Progenitor Cells at 4Â°C. Journal of Cellular Physiology, 2014, 229, 2153-2165.	2.0	12
56	Neonatal sex and weight influence CD34+ cell concentration in umbilical cord blood but not stromal cellâ€“derived factor 1-3â€²A polymorphism. Cytotherapy, 2015, 17, 68-72.	0.3	11
57	Physiological, exÂvivo cell oxygenation is necessary forÂaÂtrue insight into cytokine biology. European Cytokine Network, 2009, 20, 007-009.	1.1	10
58	Hematopoietic stem cells in the hereditarily anemic Belgrade laboratory (b/b) rat. Experimental Hematology, 1995, 23, 1218-23.	0.2	10
59	Stimulator of proliferation of spleen colony-forming cells in acute sterile inflammation. Cell Proliferation, 1993, 26, 503-510.	2.4	8
60	The Disbalance of Î±- and Î²-Globins in Anemic Belgrade Rat Red Blood Cells. Biochemical and Biophysical Research Communications, 1994, 201, 115-122.	1.0	8
61	Steady state peripheral blood provides cells with functional and metabolic characteristics of real hematopoietic stem cells. Journal of Cellular Physiology, 2018, 233, 338-349.	2.0	8
62	Repopulating hematopoietic stem cells from steady-state blood before and after <i>ex vivo</i> culture are enriched in the CD34⁺CD133⁺CXCR4^{low} fraction. Haematologica, 2018, 103, 1604-1615.	1.7	8
63	Rapid and Sustained Engraftment of a Single Allogeneic Ex-Vivo Expanded Cord Blood Unit (CBU) After Reduced Intensity Conditioning (RIC) in Adults. Preliminary Results of a Prospective Trial. Blood, 2011, 118, 486-486.	0.6	8
64	Hemopoietic stem cell proliferation in Belgrade rats: to complete the parable. Hematology and Cell Therapy, 1997, 39, 307-316.	0.7	7
65	A Novel Procedure to Improve Functional Preservation of Hematopoietic Stem and Progenitor Cells in Cord Blood Stored at +4Â°C Before Cryopreservation. Stem Cells and Development, 2014, 23, 1820-1830.	1.1	7
66	Stimulator of proliferation of spleen colony-forming cells in T-cell deprived mice treated with cyclophosphamide or irradiation. Cell Proliferation, 1991, 24, 507-515.	2.4	6
67	Erythroid Progenitor Cells from Pig Bone Marrow and Peripheral Blood. Veterinary Journal, 1999, 158, 196-203.	0.6	6
68	Nucleic acid amplification testing detection of an HIV-1 infection in a blood donor during the preseroconversion window period. Transfusion Medicine, 2007, 17, 147-148.	0.5	6
69	Clinical-scale validation of a new efficient procedure for cryopreservation of ex vivo expanded cord blood hematopoietic stem and progenitor cells. Cytotherapy, 2016, 18, 1543-1547.	0.3	6
70	The majority of cells in so-called â€œmesenchymal stem cellâ€•population are neither stem cells nor progenitors. Transfusion Clinique Et Biologique, 2019, 26, 316-323.	0.2	6
71	Constitutive production of regulators of stem cell proliferation in the hereditarily anaemic belgrade laboratory (b/b) rat. Comparative Haematology International, 1995, 5, 170-176.	0.5	5
72	Human Umbilical Cord Blood-Derived Very-Small-Embryonic-Like Stem Cells with Maximum Regenerative Potential?. Stem Cells and Development, 2012, 21, 2561-2562.	1.1	5

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73	Functional Stability (at +4Â°C) of Hematopoietic Stem and Progenitor Cells Amplified Ex Vivo from Cord Blood CD34+ Cells. Cell Transplantation, 2013, 22, 1501-1506.	1.2	5
74	Stem cell evolutionary paradigm and cell engineering. Transfusion Clinique Et Biologique, 2017, 24, 251-255.	0.2	5
75	Characteristics of cells with engraftment capacity within CD34+ cell population upon G-CSF and Plerixafor mobilization. Leukemia, 2020, 34, 3370-3381.	3.3	5
76	Cancer Stem Cell Case and Evolutionary Paradigm. , 2016, , 287-305.		5
77	Autophagy Targeting and Hematological Mobilization in FLT3-ITD Acute Myeloid Leukemia Decrease Repopulating Capacity and Relapse by Inducing Apoptosis of Committed Leukemic Cells. Cancers, 2022, 14, 453.	1.7	5
78	In vivo effects of interleukin-1 receptor antagonist on hematopoietic bone marrow progenitor cells in normal mice. European Cytokine Network, 1996, 7, 71-4.	1.1	5
79	The seeding efficiency of normal and hereditarily anemic (b/b) rat bone marrow colony forming unitsâ€spleen as determined in a â€œrat to mouseâ€• assay. Stem Cells, 1995, 13, 666-670.	1.4	4
80	The Inhibitory Effect of Human Macrophage Inflammatory Proteinâ€1Î± (LD78) on Acute Myeloid Leukemia Cells in Vitro. Stem Cells, 1996, 14, 445-451.	1.4	4
81	Variations of factor VIII:C plasma levels with respect to the blood group ABO. Transfusion Medicine, 2004, 14, 187-188.	0.5	4
82	Ex Vivo Expansion of Stem and Progenitor Cells Using Thrombopoietin. Stem Cells and Cancer Stem Cells, 2012, , 345-353.	0.1	4
83	Bioenergetic Changes Underline Plasticity of Murine Embryonic Stem Cells. Stem Cells, 2019, 37, 463-475.	1.4	4
84	Discarded plasma obtained after cord blood volume reduction as an alternative for fetal calf serum in mesenchymal stromal cells cultures. Transfusion, 2020, 60, 1910-1917.	0.8	4
85	Pluripotent haemopoietic progenitor cells (CFU-Sd8) in peripheral blood of hereditarily anaemic Belgrade (b/b) rats. Laboratory Animals, 1999, 33, 77-82.	0.5	3
86	Cord (placental) blood storage: extent and functional aspects. Transfusion, 2011, 51, 2044-2045.	0.8	3
87	Ex-Vivo Expanded Peripheral Blood Stem Cells (EVEC) Compared with Un Manipulated Peripheral Blood Stem Cells (PBSC) Autologous Transplantation for Multiple Myeloma: A Pair Match Analysis.. Blood, 2009, 114, 502-502.	0.6	3
88	To harness stem cells by manipulation of energetic metabolism. Transfusion Clinique Et Biologique, 2017, 24, 468-471.	0.2	2
89	Normal Hematopoetic Stem and Progenitor Cells Can Exhibit Metabolic Flexibility Similar to Cancer Cells. Frontiers in Oncology, 2020, 10, 713.	1.3	2
90	Î±-Tocopherol Acetate Attenuates Mitochondrial Oxygen Consumption and Maintains Primitive Cells within Mesenchymal Stromal Cell Population. Stem Cell Reviews and Reports, 2021, 17, 1390-1405.	1.7	2

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91	What Entity Could Be Called a Stem Cell?. , 2016, , 3-15.		2
92	The in vivo effect of recombinant human interleukin-1 receptor antagonist on spleen colony forming cells after radiation induced myelosuppression. European Cytokine Network, 1995, 6, 177-80.	1.1	2
93	Î±- And Î²-Globins of the Anemic Belgrade Laboratory Rat. II. The Effect of Hemin and Iron-Dextran Treatment. Hemoglobin, 1998, 22, 231-244.	0.4	1
94	In Situ Normoxia versus â€œHypoxiaâ€. , 2016, , 17-21.		1
95	Hypoxia/hypercapnia prevents iron-dependent cold injuries in cord blood stem and progenitor cells. Cytotherapy, 2019, 21, 460-467.	0.3	1
96	Production of hematopoietic cells from umbilical cord blood stem cells for transfusion purposes: Focus on ex vivo generation of red blood cells. Scripta Medica, 2012, 43, 99-105.	0.0	1
97	Evolutionary Origins of Stemness. , 2016, , 177-209.		1
98	Expression of miRNA-210 in human bone marrow-derived mesenchymal stromal cells under oxygen deprivation. Archives of Biological Sciences, 2019, 71, 201-208.	0.2	1
99	Erythropoietin & erythroid progenitors in rats exposed to chronic hypoxia. Indian Journal of Medical Research, 1996, 104, 304-10.	0.4	1
100	Evaluation of cryopreserved murine and human hematopoietic stem and progenitor cells designated for transplantation. Vojnosanitetski Pregled, 1999, 56, 577-85.	0.1	1
101	Oxygen Availability and Self Renewal of Stem Cells. , 2009, , .		0
102	Ex vivo amplification kinetics of cord blood hematopoietic progenitor cells in one- and two-step hypoxic response-mimicking cultures (HRMC). , 2015, , .		0
103	Molecular Basis of â€œHypoxicâ€•Signaling, Quiescence, Self-Renewal, and Differentiation in Stem Cells. , 2016, , 115-141.		0
104	Harnessing Anaerobic Nature of Stem Cells for Use in Regenerative Medicine. , 2016, , 257-286.		0
105	Î±-Tocopherol Attenuates Oxidative Phosphorylation of CD34+ Cells, Enhances Their G0 Phase Fraction and Promotes Hematopoietic Stem and Primitive Progenitor Cell Maintenance. Biomolecules, 2021, 11, 558.	1.8	0
106	Ex vivo expansion of hematopoietic cells today. Scripta Medica, 2011, 42, 92-96.	0.0	0
107	Could the difference between normal and malignant stem cells eradicate cancer?. Scripta Medica, 2013, 44, 74-74.	0.0	0
108	Modulation of Acute Myeloid Leukaemic Cell Growth by Human Macrophage Inflammatory Protein-1Î±. , 1997, , 421-429.		0

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109	Other Features Concerning the Analogy â€œStem Cells: Primitive Eukaryotesâ€, 2016, , 235-256.		0
110	Quiescence/Proliferation Issue and Stem Cell Niche. , 2016, , 73-81.		0
111	Metabolic Peculiarities of the Stem Cell Entity. , 2016, , 83-114.		0
112	Low O2 Concentrations and the Maintenance of Stem Cells Ex Vivo. , 2016, , 39-71.		0
113	The Belgrade laboratory (b/b) rat and the role of hypoxia in the maintenance of hematopoietic stem cells. Experimental Hematology, 1996, 24, 1179-80.	0.2	0
114	Alpha Lipoic-Acid Potentiates Ex Vivo Expansion of Human Steady-State Peripheral Blood Hematopoietic Primitive Cells. Biomolecules, 2022, 12, 431.	1.8	0
115	Regulatory Crosstalk between Physiological Low O2 Concentration and Notch Pathway in Early Erythropoiesis. Biomolecules, 2022, 12, 540.	1.8	0