Arvydas Usas

List of Publications by Year
in descending order

64 papers	5,901 citations	81743 39 h-index	114278 63 g-index
64 all docs	64 docs citations	64 times ranked	5581 citing authors

#	Article	IF	Citations
1	Synergistic enhancement of bone formation and healing by stem cellâ€“expressed VEGF and bone morphogenetic protein-4. Journal of Clinical Investigation, 2002, 110, 751-759.	3.9	625
2	Clonal Isolation of Muscle-Derived Cells Capable of Enhancing Muscle Regeneration and Bone Healing. Journal of Cell Biology, 2000, 150, 1085-1100.	2.3	593
3	NF-Î°B inhibition delays DNA damageâ€“induced senescence and aging in mice. Journal of Clinical Investigation, 2012, 122, 2601-2612.	3.9	358
4	VEGF Improves, Whereas sFlt1 Inhibits, BMP2-Induced Bone Formation and Bone Healing Through Modulation of Angiogenesis. Journal of Bone and Mineral Research, 2005, 20, 2017-2027.	3.1	350
5	Cartilage repair using bone morphogenetic protein 4 and muscle-derived stem cells. Arthritis and Rheumatism, 2006, 54, 433-442.	6.7	262
6	The Use of an Antifibrosis Agent to Improve Muscle Recovery after Laceration. American Journal of Sports Medicine, 2001, 29, 394-402.	1.9	225
7	Enhancement of Tendon-Bone Integration of Anterior Cruciate Ligament Grafts with Bone Morphogenetic Protein-2 Gene Transfer. Journal of Bone and Joint Surgery - Series A, 2002, 84, 1123-1131.	1.4	225
8	Cartilage repair in a rat model of osteoarthritis through intraarticular transplantation of muscleâ€derived stem cells expressing bone morphogenetic protein 4 and soluble fltâ€1. Arthritis and Rheumatism, 2009, 60, 1390-1405.	6.7	185
9	Effect of Bone Morphogenetic Protein-2-Expressing Muscle-Derived Cells on Healing of Critical-Sized Bone Defects in Mice. Journal of Bone and Joint Surgery - Series A, 2001, 83, 1032-1039.	1.4	181
10	Improvement of muscle healing through enhancement of muscle regeneration and prevention of fibrosis. Muscle and Nerve, 2003, 28, 365-372.	1.0	176
11	BMP4-Expressing Muscle-Derived Stem Cells Differentiate into Osteogenic Lineage and Improve Bone Healing in Immunocompetent Mice. Molecular Therapy, 2002, 6, 169-178.	3.7	174
12	Gamma interferon as an antifibrosis agent in skeletal muscle. Journal of Orthopaedic Research, 2003, 21, 798-804.	1.2	145
13	Muscle-derived stem cells for tissue engineering and regenerative therapy. Biomaterials, 2007, 28, 5401-5406.	5.7	135
14	Enhancement of Bone Healing Based onEx VivoGene Therapy Using Human Muscle-Derived Cells Expressing Bone Morphogenetic Protein 2. Human Gene Therapy, 2002, 13, 1201-1211.	1.4	127
15	Retroviral Delivery of Noggin Inhibits the Formation of Heterotopic Ossification Induced by BMP-4, Demineralized Bone Matrix, and Trauma in an Animal Model. Journal of Bone and Joint Surgery - Series A, 2004, 86, 80-91.	1.4	108
16	The Effect of Relaxin Treatment on Skeletal Muscle Injuries. American Journal of Sports Medicine, 2005, 33, 1816-1824.	1.9	100
17	Isolation and Characterization of Human Anterior Cruciate Ligament-Derived Vascular Stem Cells. Stem Cells and Development, 2012, 21, 859-872.	1.1	100
18	Muscle derived, cell based ex vivo gene therapy for treatment of full thickness articular cartilage defects. Journal of Rheumatology, 2002, 29, 1920-30.	1.0	98

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19	Blocking vascular endothelial growth factor with soluble Fltâ€1 improves the chondrogenic potential of mouse skeletal muscleâ€"derived stem cells. Arthritis and Rheumatism, 2009, 60, 155-165.	6.7	96
20	Therapeutic Potential of Anterior Cruciate Ligament-Derived Stem Cells for Anterior Cruciate Ligament Reconstruction. Cell Transplantation, 2012, 21, 1651-1665.	1.2	96
21	The influence of sex on the chondrogenic potential of muscleâ€derived stem cells: Implications for cartilage regeneration and repair. Arthritis and Rheumatism, 2008, 58, 3809-3819.	6.7	82
22	Structural and functional healing of critical-size segmental bone defects by transduced muscle-derived cells expressing BMP4. Journal of Gene Medicine, 2004, 6, 984-991.	1.4	80
23	Accelerated aging of intervertebral discs in a mouse model of progeria. Journal of Orthopaedic Research, 2010, 28, 1600-1607.	1.2	79
24	Human muscleâ€"derived stem/progenitor cells promote functional murine peripheral nerve regeneration. Journal of Clinical Investigation, 2014, 124, 1745-1756.	3.9	79
25	A comparison of bone regeneration with human mesenchymal stem cells and muscle-derived stem cells and the critical role of BMP. Biomaterials, 2014, 35, 6859-6870.	5.7	78
26	Osteogenic Potential of Postnatal Skeletal Muscleâ€"Derived Stem Cells Is Influenced by Donor Sex. Journal of Bone and Mineral Research, 2007, 22, 1592-1602.	3.1	72
27	Platelet-Rich Plasma Promotes the Proliferation of Human Muscle Derived Progenitor Cells and Maintains Their Stemness. PLoS ONE, 2013, 8, e64923.	1.1	68
28	Ex vivo gene therapy-induced endochondral bone formation: comparison of muscle-derived stem cells and different subpopulations of primary muscle-derived cells. Bone, 2004, 34, 982-992.	1.4	61
29	Investigating the role of DNA damage in tobacco smoking-induced spine degeneration. Spine Journal, 2014, 14, 416-423.	0.6	57
30	Development of a self-inactivating tet-on retroviral vector expressing bone morphogenetic protein 4 to achieve regulated bone formation. Molecular Therapy, 2004, 9, 885-894.	3.7	55
31	Differential Effect of BMP4 on NIH/3T3 and C2C12 Cells: Implications for Endochondral Bone Formation. Journal of Bone and Mineral Research, 2005, 20, 1611-1623.	3.1	55
32	Dystrophin and utrophin â€œdouble knockoutâ€• dystrophic mice exhibit a spectrum of degenerative musculoskeletal abnormalities. Journal of Orthopaedic Research, 2013, 31, 343-349.	1.2	52
33	The Dose of Growth Factors Influences the Synergistic Effect of Vascular Endothelial Growth Factor on Bone Morphogenetic Protein 4â€"Induced Ectopic Bone Formation. Tissue Engineering - Part A, 2009, 15, 2123-2133.	1.6	51
34	Bone Regeneration Mediated by BMP4-Expressing Muscle-Derived Stem Cells Is Affected by Delivery System. Tissue Engineering - Part A, 2009, 15, 285-293.	1.6	50
35	Skeletal Muscle-Derived Stem Cells: Implications for Cell-Mediated Therapies. Medicina (Lithuania), 2011, 47, 469.	0.8	49
36	Role of donor and host cells in muscleâ€derived stem cellâ€mediated bone repair: differentiation <i>vs.</i> paracrine effects. FASEB Journal, 2014, 28, 3792-3809.	0.2	48

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37	Noggin Improves Bone Healing Elicited by Muscle Stem Cells Expressing Inducible BMP4. Molecular Therapy, 2005, 12, 239-246.	3.7	45
38	Sustained Release of Bone Morphogenetic Protein 2 via Coacervate Improves the Osteogenic Potential of Muscle-Derived Stem Cells. Stem Cells Translational Medicine, 2013, 2, 667-677.	1.6	45
39	RhoA mediates defective stem cell function and heterotopic ossification in dystrophic muscle of mice. FASEB Journal, 2013, 27, 3619-3631.	0.2	40
40	BMP2 is Superior to BMP4 for Promoting Human Muscle-Derived Stem Cell-Mediated Bone Regeneration in a Critical-Sized Calvarial Defect Model. Cell Transplantation, 2013, 22, 2393-2408.	1.2	40
41	The role of Notch signaling in muscle progenitor cell depletion and the rapid onset of histopathology in muscular dystrophy. Human Molecular Genetics, 2015, 24, 2923-2937.	1.4	35
42	Identification and characterization of chondrogenic progenitor cells in the fascia of postnatal skeletal muscle. Journal of Molecular Cell Biology, 2011, 3, 369-377.	1.5	29
43	Effect of Host Sex and Sex Hormones on Muscle-Derived Stem Cell-Mediated Bone Formation and Defect Healing. Tissue Engineering - Part A, 2012, 18, 1751-1759.	1.6	27
44	Impact of storage conditions on electromechanical, histological and histochemical properties of osteochondral allografts. BMC Musculoskeletal Disorders, 2015, 16, 314.	0.8	27
45	Cyclooxygenase-2 deficiency impairs muscle-derived stem cell-mediated bone regeneration via cellular autonomous and non-autonomous mechanisms. Human Molecular Genetics, 2016, 25, 3216-3231.	1.4	26
46	Converse Relationship Between In Vitro Osteogenic Differentiation and In Vivo Bone Healing Elicited by Different Populations of Muscle-Derived Cells Genetically Engineered to Express BMP4. Journal of Bone and Mineral Research, 2004, 19, 630-641.	3.1	25
47	Ex Vivo Noggin Gene Therapy Inhibits Bone Formation in a Mouse Model of Postoperative Resynostosis. Plastic and Reconstructive Surgery, 2009, 123, 94S-103S.	0.7	24
48	Skeletal muscle-derived stem cells: implications for cell-mediated therapies. Medicina (Lithuania), 2011, 47, 469-79.	0.8	24
49	The role of cell type in bone healing mediated by ex vivo gene therapy. Langenbeck's Archives of Surgery, 2003, 388, 347-355.	0.8	21
50	Customization of direct laser lithography-based 3D scaffolds for optimized in vivo outcome. Applied Surface Science, 2019, 487, 692-702.	3.1	19
51	Use of an Ultrasonic Blade Facilitates Muscle Repair After Incision Injury. Journal of Surgical Research, 2011, 167, e177-e184.	0.8	17
52	Human myogenic endothelial cells exhibit chondrogenic and osteogenic potentials at the clonal level. Journal of Orthopaedic Research, 2013, 31, 1089-1095.	1.2	17
53	Skeletal Muscle-Derived Stem/Progenitor Cells: A Potential Strategy for the Treatment of Acute Kidney Injury. Stem Cells International, 2016, 2016, 1-13.	1.2	15
54	Gene therapy to improve osteogenesis in bone lesions with severe soft tissue damage. Langenbeck's Archives of Surgery, 2003, 388, 356-365.	0.8	12

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55	Characterization of tissue engineered cartilage products: Recent developments in advanced therapy. Pharmacological Research, 2016, 113, 823-832.	3.1	7
56	The Effect of Ozone Treatment on the Physicochemical Properties and Biocompatibility of Electrospun Poly(Îµ)caprolactone Scaffolds. Pharmaceutics, 2021, 13, 1288.	2.0	7
57	The Microenvironment-Specific Transformation of Adult Stem Cells Models Malignant Triton Tumors. PLoS ONE, 2013, 8, e82173.	1.1	5
58	Regenerative pharmacology for the treatment of acute kidney injury: Skeletal muscle stem/progenitor cells for renal regeneration?. Pharmacological Research, 2016, 113, 802-807.	3.1	4
59	Functionalized Electrospun Scaffoldâ€“Human-Muscle-Derived Stem Cell Construct Promotes In Vivo Neocartilage Formation. Polymers, 2022, 14, 2498.	2.0	4
60	Regenerative Medicine Based on Muscle-Derived Stem Cells. Operative Techniques in Orthopaedics, 2010, 20, 119-126.	0.2	3
61	Design and fabrication method of bi-layered fibrous scaffold for cartilage regeneration. Biochemical Engineering Journal, 2022, 182, 108413.	1.8	3
62	Quantitative Arthroscopic Assessment of Articular Cartilage Quality by Means of Cartilage Electromechanical Properties. Arthroscopy Techniques, 2018, 7, e763-e766.	0.5	2
63	Nondestructive Assessment of Articular Cartilage Electromechanical Properties after Osteochondral Autologous and Allogeneic Transplantation in a Goat Model. Cartilage, 2020, 11, 348-357.	1.4	2
64	Muscle Repair after Injury and Disease. , 2008, , 459-480.		1