

# Aaron M Stoker

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/671382/publications.pdf>

Version: 2024-02-01

96  
papers

1,977  
citations

257450

24  
h-index

302126

39  
g-index

99  
all docs

99  
docs citations

99  
times ranked

1898  
citing authors

#	ARTICLE	IF	CITATIONS
1	Dynamic Mechanical Loading Enhances Functional Properties of Tissue-Engineered Cartilage Using Mature Canine Chondrocytes. <i>Tissue Engineering - Part A</i> , 2010, 16, 1781-1790.	3.1	109
2	Importance of Donor Chondrocyte Viability for Osteochondral Allografts. <i>American Journal of Sports Medicine</i> , 2016, 44, 1260-1268.	4.2	88
3	A Novel System Improves Preservation of Osteochondral Allografts. <i>Clinical Orthopaedics and Related Research</i> , 2014, 472, 3404-3414.	1.5	82
4	Improved Osteochondral Allograft Preservation Using Serum-Free Media at Body Temperature. <i>American Journal of Sports Medicine</i> , 2012, 40, 2542-2548.	4.2	70
5	Passaged Adult Chondrocytes Can Form Engineered Cartilage with Functional Mechanical Properties: A Canine Model. <i>Tissue Engineering - Part A</i> , 2010, 16, 1041-1051.	3.1	63
6	Using Animal Models in Osteoarthritis Biomarker Research. <i>Journal of Knee Surgery</i> , 2011, 24, 251-264.	1.6	63
7	The Effect of Bupivacaine and Morphine in a Coculture Model of Diarthrodial Joints. <i>Arthroscopy - Journal of Arthroscopic and Related Surgery</i> , 2009, 25, 225-231.	2.7	62
8	Differences in Interleukin-1 Response Between Engineered and Native Cartilage. <i>Tissue Engineering - Part A</i> , 2008, 14, 1721-1730.	3.1	53
9	Multiple injections of leukoreduced platelet rich plasma reduce pain and functional impairment in a canine model of ACL and meniscal deficiency. <i>Journal of Orthopaedic Research</i> , 2016, 34, 607-615.	2.3	52
10	MRI versus Ultrasonography to Assess Meniscal Abnormalities in Acute Knees. <i>Journal of Knee Surgery</i> , 2014, 27, 319-324.	1.6	50
11	Validation of the Missouri Osteochondral Allograft Preservation System for the Maintenance of Osteochondral Allograft Quality During Prolonged Storage. <i>American Journal of Sports Medicine</i> , 2018, 46, 58-65.	4.2	50
12	Effects of growth factors on equine synovial fibroblasts seeded on synthetic scaffolds for avascular meniscal tissue engineering. <i>Research in Veterinary Science</i> , 2010, 88, 326-332.	1.9	49
13	High seeding density of human chondrocytes in agarose produces tissue-engineered cartilage approaching native mechanical and biochemical properties. <i>Journal of Biomechanics</i> , 2016, 49, 1909-1917.	2.1	49
14	Identification of Synovial Fluid Biomarkers for Knee Osteoarthritis and Correlation with Radiographic Assessment. <i>Journal of Knee Surgery</i> , 2016, 29, 242-247.	1.6	48
15	Examination of synovial fluid hyaluronan quantity and quality in stifle joints of dogs with osteoarthritis. <i>American Journal of Veterinary Research</i> , 2008, 69, 1569-1573.	0.6	38
16	Tissue-engineered articular cartilage exhibits tensionâ€compression nonlinearity reminiscent of the native cartilage. <i>Journal of Biomechanics</i> , 2013, 46, 1784-1791.	2.1	38
17	Effects of Dexamethasone on the Functional Properties of Cartilage Explants during Long-Term Culture. <i>American Journal of Sports Medicine</i> , 2010, 38, 78-85.	4.2	37
18	Improved Preservation of Fresh Osteochondral Allografts for Clinical Use. <i>Journal of Knee Surgery</i> , 2012, 25, 117-126.	1.6	37

#	ARTICLE	IF	CITATIONS
19	<i>In Vivo</i> Toxicity of Local Anesthetics and Corticosteroids on Chondrocyte and Synoviocyte Viability and Metabolism. <i>Cartilage</i> , 2015, 6, 106-112.	2.7	36
20	<i>In Vitro</i> Toxicity of Local Anesthetics and Corticosteroids on Chondrocyte and Synoviocyte Viability and Metabolism. <i>Cartilage</i> , 2015, 6, 233-240.	2.7	33
21	Bone Marrow Aspirate Concentrate versus Platelet Rich Plasma to Enhance Osseous Integration Potential for Osteochondral Allografts. <i>Journal of Knee Surgery</i> , 2018, 31, 314-320.	1.6	32
22	Effects of proinflammatory cytokines on canine articular chondrocytes in a three-dimensional culture. <i>American Journal of Veterinary Research</i> , 2005, 66, 1187-1196.	0.6	31
23	Hyaluronic acid versus saline intra-articular injections for amelioration of chronic knee osteoarthritis: A canine model. <i>Journal of Orthopaedic Research</i> , 2016, 34, 1772-1779.	2.3	30
24	Metabolic Responses of Meniscus to IL-1 $\beta$ . <i>Journal of Knee Surgery</i> , 2018, 31, 834-840.	1.6	29
25	Chondrocyte Viability at Time of Transplantation for Osteochondral Allografts Preserved by the Missouri Osteochondral Preservation System versus Standard Tissue Bank Protocol. <i>Journal of Knee Surgery</i> , 2018, 31, 772-780.	1.6	27
26	Expression of Toll-like receptors 2 and 4 in stifle joint synovial tissues of dogs with or without osteoarthritis. <i>American Journal of Veterinary Research</i> , 2010, 71, 750-754.	0.6	25
27	Biomarkers affected by impact velocity and maximum strain of cartilage during injury. <i>Journal of Biomechanics</i> , 2014, 47, 3185-3195.	2.1	25
28	Enhanced Fracture and Soft-Tissue Healing by Means of Anabolic Dietary Supplementation. <i>Journal of Bone and Joint Surgery - Series A</i> , 2006, 88, 2386-2394.	3.0	24
29	TCAP knockdown by RNA interference inhibits myoblast differentiation in cultured skeletal muscle cells. <i>Neuromuscular Disorders</i> , 2008, 18, 413-422.	0.6	23
30	Development of a Micronized Meniscus Extracellular Matrix Scaffold for Potential Augmentation of Meniscal Repair and Regeneration. <i>Tissue Engineering - Part C: Methods</i> , 2016, 22, 1059-1070.	2.1	21
31	Meniscal biology in health and disease. <i>Connective Tissue Research</i> , 2017, 58, 225-237.	2.3	21
32	Evaluation of Partial Transection versus Synovial Debridement of the ACL as Novel Canine Models for Management of ACL Injuries. <i>Journal of Knee Surgery</i> , 2015, 28, 404-410.	1.6	20
33	Expression of proteins in serum, synovial fluid, synovial membrane, and articular cartilage samples obtained from dogs with stifle joint osteoarthritis secondary to cranial cruciate ligament disease and dogs without stifle joint arthritis. <i>American Journal of Veterinary Research</i> , 2013, 74, 386-394.	0.6	19
34	Evaluation of Synthetic Osteochondral Implants. <i>Journal of Knee Surgery</i> , 2014, 27, 295-302.	1.6	19
35	Characterization of Knee Meniscal Pathology: Correlation of Gross, Histologic, Biochemical, Molecular, and Radiographic Measures of Disease. <i>Journal of Knee Surgery</i> , 2015, 28, 175-182.	1.6	19
36	Comparison of biologic scaffolds for augmentation of partial rotator cuff tears in a canine model. <i>Journal of Shoulder and Elbow Surgery</i> , 2020, 29, 1573-1583.	2.6	19

#	ARTICLE	IF	CITATIONS
37	Use of a polymerase chain reaction assay to detect bovine leukosis virus in dairy cattle. <i>Journal of the American Veterinary Medical Association</i> , 2003, 222, 983-985.	0.5	17
38	Site-specific analysis of gene expression in early osteoarthritis using the Pond-Nuki model in dogs. <i>Journal of Orthopaedic Surgery and Research</i> , 2006, 1, 8.	2.3	17
39	Detection and Evaluation of Matrix Metalloproteinases Involved in Cruciate Ligament Disease in Dogs Using Multiplex Bead Technology. <i>Veterinary Surgery</i> , 2010, 39, 306-314.	1.0	17
40	Acute Management of Anterior Cruciate Ligament Injuries Using Novel Canine Models. <i>Journal of Knee Surgery</i> , 2016, 29, 594-603.	1.6	17
41	Development of a whole organ culture model for intervertebral disc disease. <i>Journal of Orthopaedic Translation</i> , 2016, 5, 1-8.	3.9	16
42	Subchondroplasty for the treatment of post-traumatic bone marrow lesions of the medial femoral condyle in a pre-clinical canine model. <i>Journal of Orthopaedic Research</i> , 2018, 36, 2709-2717.	2.3	16
43	Pulsed electromagnetic fields promote repair of focal articular cartilage defects with engineered osteochondral constructs. <i>Biotechnology and Bioengineering</i> , 2020, 117, 1584-1596.	3.3	16
44	Identification of Novel Synovial Fluid Biomarkers Associated with Meniscal Pathology. <i>Journal of Knee Surgery</i> , 2015, 29, 047-062.	1.6	15
45	Comparison of Techniques for Preimplantation Treatment of Osteochondral Allograft Bone. <i>Journal of Knee Surgery</i> , 2019, 32, 097-104.	1.6	15
46	Clinical Application of the Basic Science of Articular Cartilage Pathology and Treatment. <i>Journal of Knee Surgery</i> , 2020, 33, 1056-1068.	1.6	15
47	Evaluation of in vitro growth factor treatments on fibrochondrogenesis by synovial membrane cells from osteoarthritic and nonosteoarthritic joints of dogs. <i>American Journal of Veterinary Research</i> , 2011, 72, 500-511.	0.6	14
48	Long-term storage and preservation of tissue engineered articular cartilage. <i>Journal of Orthopaedic Research</i> , 2016, 34, 141-148.	2.3	14
49	Development of a Novel Canine Model for Posttraumatic Osteoarthritis of the Knee. <i>Journal of Knee Surgery</i> , 2016, 29, 235-241.	1.6	14
50	Review of In Vitro Models and Development and Initial Validation of a Novel Co-Culture Model for the Study of Osteoarthritis. <i>Current Rheumatology Reviews</i> , 2007, 3, 172-182.	0.8	13
51	Biologic Joint Repair Strategies: The Mizzou BioJoint Story. <i>Toxicologic Pathology</i> , 2017, 45, 931-938.	1.8	13
52	In vitro toxicity of local anaesthetics and corticosteroids on supraspinatus tenocyte viability and metabolism. <i>Journal of Orthopaedic Translation</i> , 2017, 8, 20-24.	3.9	13
53	Comparison of Platelet-Rich Plasma, Stromal Vascular Fraction (SVF), or SVF with an Injectable PLGA Nanofiber Scaffold for the Treatment of Osteochondral Injury in Dogs. <i>Journal of Knee Surgery</i> , 2018, 31, 686-697.	1.6	13
54	Hyperosmolar irrigation compared with a standard solution in a canine shoulder arthroscopy model. <i>Journal of Shoulder and Elbow Surgery</i> , 2015, 24, 1243-1248.	2.6	12

#	ARTICLE	IF	CITATIONS
55	Characterization of Meniscal Pathology Using Molecular and Proteomic Analyses. <i>Journal of Knee Surgery</i> , 2015, 28, 496-505.	1.6	12
56	Comparison of meniscal allograft transplantation techniques using a preclinical canine model. <i>Journal of Orthopaedic Research</i> , 2021, 39, 154-164.	2.3	12
57	Association between cancer chemotherapy and canine distemper virus, canine parvovirus, and rabies virus antibody titers in tumor-bearing dogs. <i>Journal of the American Veterinary Medical Association</i> , 2001, 219, 1238-1241.	0.5	11
58	Analysis of relevant proteins from bone graft harvested using the reamer irrigator and aspirator system (RIA) versus iliac crest (IC) bone graft and RIA waste water. <i>Injury</i> , 2016, 47, 1661-1668.	1.7	11
59	Metabolic responses of meniscal explants to injury and inflammation ex vivo. <i>Journal of Orthopaedic Research</i> , 2018, 36, 2657-2663.	2.3	11
60	Canine models of spine disorders. <i>JOR Spine</i> , 2020, 3, e1109.	3.2	11
61	Optimising femoral-head osteochondral allograft transplantation in a preclinical model. <i>Journal of Orthopaedic Translation</i> , 2016, 5, 48-56.	3.9	9
62	Metabolic responses of osteochondral allografts to re-warming. <i>Journal of Orthopaedic Research</i> , 2019, 37, 1530-1536.	2.3	9
63	Use of a Hyperosmolar Saline Solution to Mitigate Proinflammatory and Degradative Responses of Articular Cartilage and Meniscus for Application to Arthroscopic Surgery. <i>Arthroscopy - Journal of Arthroscopic and Related Surgery</i> , 2020, 36, 3050-3057.	2.7	9
64	Culture of equine fibroblast-like synoviocytes on synthetic tissue scaffolds towards meniscal tissue engineering: a preliminary cell-seeding study. <i>PeerJ</i> , 2014, 2, e353.	2.0	9
65	Transient expression of the diseased phenotype of osteoarthritic chondrocytes in engineered cartilage. <i>Journal of Orthopaedic Research</i> , 2017, 35, 829-836.	2.3	8
66	The Effect of Uniaxial Cyclic Tensile Load on Gene Expression in Canine Cranial Cruciate Ligamentocytes. <i>Veterinary Surgery</i> , 2010, 39, 433-443.	1.0	7
67	Biomarkers Affected by Impact Severity during Osteochondral Injury. <i>Journal of Knee Surgery</i> , 2015, 28, 191-200.	1.6	7
68	Investigating the relationship between proteomic, compositional, and histologic biomarkers and cartilage biomechanics using artificial neural networks. <i>Journal of Biomechanics</i> , 2018, 80, 136-143.	2.1	7
69	Enhanced Subchondroplasty Treatment for Post-Traumatic Cartilage and Subchondral Bone Marrow Lesions in a Canine Model. <i>Journal of Orthopaedic Research</i> , 2020, 38, 740-746.	2.3	7
70	Evaluation of anti-inflammatory and chondroprotective effects of peroxisome proliferator-activated receptor gamma agonists in cartilage and synovial explants from dogs. <i>American Journal of Veterinary Research</i> , 2010, 71, 1142-1147.	0.6	6
71	In vitro effects of meloxicam on metabolism in articular chondrocytes from dogs with naturally occurring osteoarthritis. <i>American Journal of Veterinary Research</i> , 2013, 74, 1198-1205.	0.6	6
72	Effects on Exposed Articular Cartilage During Open Surgical Procedures: A Comparison of Various Fluids in an Animal Model. <i>Arthroscopy - Journal of Arthroscopic and Related Surgery</i> , 2015, 31, 113-117.	2.7	6

#	ARTICLE	IF	CITATIONS
73	Assessment of Reamer Irrigator Aspirator System (RIA) filtrate for its osteoinductive potential in a validated animal model. <i>Injury</i> , 2018, 49, 1046-1051.	1.7	6
74	Association between the strength of serologic recognition of bovine leukosis virus and lymphocyte count in bovine leukosis virus-infected cows. <i>Journal of the American Veterinary Medical Association</i> , 2002, 220, 1681-1684.	0.5	5
75	Effects of Low-Temperature Hydrogen Peroxide Gas Plasma Sterilization on In Vitro Cytotoxicity of Poly( $\epsilon$ -Caprolactone) (PCL). <i>Journal of Biomaterials Science, Polymer Edition</i> , 2012, 23, 2197-2206.	3.5	5
76	Characterizing correlations among disease severity measures in osteochondral tissues from osteoarthritic knees. <i>Journal of Orthopaedic Research</i> , 2021, 39, 1103-1112.	2.3	5
77	A prospective randomized double-blind clinical trial to assess the effects of leukocyte-reduced platelet-rich plasma on pro-inflammatory, degradative, and anabolic biomarkers after closed pilon fractures. <i>Journal of Orthopaedic Research</i> , 2022, 40, 925-932.	2.3	5
78	T1 $\rho$ , T2 mapping, and EPIC-MRI CT Imaging in a Canine Model of Knee Osteochondral Injury. <i>Journal of Orthopaedic Research</i> , 2020, 38, 368-377.	2.3	4
79	Protein biomarkers in serum and urine for determining presence or absence of hip dysplasia in a canine model. <i>Journal of Orthopaedic Research</i> , 2019, 37, 916-920.	2.3	3
80	Metabolic responses of meniscal tissue to focal collagenase degeneration. <i>Connective Tissue Research</i> , 2020, 61, 349-359.	2.3	3
81	Effects of cyclic compression on intervertebral disc metabolism using a whole organ rat tail model. <i>Journal of Orthopaedic Research</i> , 2020, 39, 1945-1954.	2.3	3
82	Elution properties of a resorbable magnesium phosphate cement. <i>Journal of Clinical Orthopaedics and Trauma</i> , 2020, 11, S729-S734.	1.5	3
83	Unicompartmental bipolar osteochondral and meniscal allograft transplantation is effective for treatment of medial compartment gonarthrosis in a canine model. <i>Journal of Orthopaedic Research</i> , 2021, 39, 1093-1102.	2.3	3
84	In Vivo Toxicity of Local Anesthetics and Corticosteroids on Supraspinatus Tenocyte Cell Viability and Metabolism. <i>Iowa orthopaedic journal, The</i> , 2018, 38, 107-112.	0.5	3
85	Outcomes Associated With Osteochondral Allograft Transplantation in Dogs. <i>Frontiers in Veterinary Science</i> , 2021, 8, 759610.	2.2	3
86	Fibroblasts From Common Anterior Cruciate Ligament Tendon Grafts Exhibit Different Biologic Responses to Mechanical Strain. <i>American Journal of Sports Medicine</i> , 2021, 49, 215-225.	4.2	2
87	An Injectable Containing Morphine, Ropivacaine, Epinephrine, and Ketorolac Is Not Cytotoxic to Articular Cartilage Explants From Degenerative Knees. <i>Arthroscopy - Journal of Arthroscopic and Related Surgery</i> , 2021, , .	2.7	2
88	Functional Tissue Engineering of Articular Cartilage With Adult Chondrocytes. , 2009, , .		1
89	A Whole Organ Culture Model for Intervertebral Disc in the Presence of Nicotine and Cotinine Using Rat Tail Explants in a Rotating Bioreactor. <i>Spine Journal</i> , 2013, 13, S29-S30.	1.3	1
90	Analyzing Chondrocyte Viability: Letter to the Editor. <i>American Journal of Sports Medicine</i> , 2013, 41, NP29-NP30.	4.2	1

#	ARTICLE	IF	CITATIONS
91	A Hyperosmolar Saline Solution Fortified with Anti-Inflammatory Components Mitigates Articular Cartilage Pro-Inflammatory and Degradative Responses in an In Vitro Model of Knee Arthroscopy. <i>Cartilage</i> , 2021, , 194760352110115.	2.7	1
92	Small laboratory animal models of anterior cruciate ligament reconstruction. <i>Journal of Orthopaedic Research</i> , 2022, 40, 1967-1980.	2.3	1
93	Treatment-Monitoring Capabilities of Serum and Urine Biomarkers for Meniscal Allograft Transplantation in a Preclinical Canine Model. <i>American Journal of Sports Medicine</i> , 0, , 036354652211054.	4.2	1
94	Fabrication of Tissue-Engineered Cartilage Grafts With Anatomic Surface Contours for Repair of Large Focal Defects. , 2013, , .		0
95	Effects of Caffeine on Intervertebral Disc Cell Viability in a Whole Organ Culture Model. <i>Global Spine Journal</i> , 2020, 12, 219256822094803.	2.3	0
96	Bacterial DNA screening to characterize surgical site infection risk in orthopaedic patients. <i>Journal of Orthopaedics</i> , 2021, 27, 56-62.	1.3	0