

# Michael Lavagnino

## List of Publications by Year in descending order

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Version: 2024-02-01

35  
papers

2,153  
citations

257429

24  
h-index

377849

34  
g-index

36  
all docs

36  
docs citations

36  
times ranked

1509  
citing authors

#	ARTICLE	IF	CITATIONS
1	The mechanobiological aetiopathogenesis of tendinopathy: is it the overstimulation or the understimulation of tendon cells?. <i>International Journal of Experimental Pathology</i> , 2007, 88, 217-226.	1.3	193
2	Activation of stress-activated protein kinases (SAPK) in tendon cells following cyclic strain: the effects of strain frequency, strain magnitude, and cytosolic calcium. <i>Journal of Orthopaedic Research</i> , 2002, 20, 947-952.	2.3	171
3	Ex vivo static tensile loading inhibits MMP-1 expression in rat tail tendon cells through a cytoskeletally based mechanotransduction mechanism. <i>Journal of Orthopaedic Research</i> , 2004, 22, 328-333.	2.3	154
4	Effect of Amplitude and Frequency of Cyclic Tensile Strain on the Inhibition of MMP-1 mRNA Expression in Tendon Cells: An In Vitro Study. <i>Connective Tissue Research</i> , 2003, 44, 181-187.	2.3	143
5	In situ cell nucleus deformation in tendons under tensile load; a morphological analysis using confocal laser microscopy. <i>Journal of Orthopaedic Research</i> , 2002, 20, 29-35.	2.3	131
6	In vitro alterations in cytoskeletal tensional homeostasis control gene expression in tendon cells. <i>Journal of Orthopaedic Research</i> , 2005, 23, 1211-1218.	2.3	121
7	Tendon mechanobiology: Current knowledge and future research opportunities. <i>Journal of Orthopaedic Research</i> , 2015, 33, 813-822.	2.3	117
8	Matrix Metalloproteinase Inhibitors Prevent a Decrease in the Mechanical Properties of Stress-Deprived Tendons. <i>American Journal of Sports Medicine</i> , 2007, 35, 763-769.	4.2	111
9	Loss of Homeostatic Tension Induces Apoptosis in Tendon Cells: An In Vitro Study. <i>Clinical Orthopaedics and Related Research</i> , 2008, 466, 1562-1568.	1.5	101
10	A finite element model predicts the mechanotransduction response of tendon cells to cyclic tensile loading. <i>Biomechanics and Modeling in Mechanobiology</i> , 2008, 7, 405-416.	2.8	88
11	Isolated fibrillar damage in tendons stimulates local collagenase mRNA expression and protein synthesis. <i>Journal of Biomechanics</i> , 2006, 39, 2355-2362.	2.1	87
12	Collagen fibril diameter distribution does not reflect changes in the mechanical properties of in vitro stress-deprived tendons. <i>Journal of Biomechanics</i> , 2005, 38, 69-75.	2.1	78
13	Loss of Homeostatic Strain Alters Mechanostat Set Point of Tendon Cells In Vitro. <i>Clinical Orthopaedics and Related Research</i> , 2008, 466, 1583-1591.	1.5	76
14	The effect of stress-deprivation and cyclic loading on the TIMP/MMP ratio in tendon cells: An in vitro experimental study. <i>Disability and Rehabilitation</i> , 2008, 30, 1523-1529.	1.8	69
15	Patellar Tendon Strain is Increased at the Site of the Jumper's Knee Lesion during Knee Flexion and Tendon Loading. <i>American Journal of Sports Medicine</i> , 2008, 36, 2110-2118.	4.2	67
16	Effect of in vitro stress deprivation and cyclic loading on the length of tendon cell cilia in situ. <i>Journal of Orthopaedic Research</i> , 2011, 29, 582-587.	2.3	56
17	Effect of Amplitude and Frequency of Cyclic Tensile Strain on the Inhibition of MMP-1 mRNA Expression in Tendon Cells: An In Vitro Study. <i>Connective Tissue Research</i> , 2003, 44, 181-187.	2.3	52
18	Comparison of the Effects of the CO2 Surgical Laser and Conventional Surgical Techniques on Healing and Wound Tensile Strength of Skin Flaps in the Dog. <i>Veterinary Surgery</i> , 2003, 32, 153-160.	1.0	39

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19	Infrapatellar Straps Decrease Patellar Tendon Strain at the Site of the Jumper's Knee Lesion: A Computational Analysis Based on Radiographic Measurements. <i>Sports Health</i> , 2011, 3, 296-302.	2.7	39
20	Re-establishment of cytoskeletal tensional homeostasis in lax tendons occurs through an actin-mediated cellular contraction of the extracellular matrix. <i>Journal of Orthopaedic Research</i> , 2012, 30, 1695-1701.	2.3	37
21	Age-Related Changes in the Cellular, Mechanical, and Contractile Properties of Rat Tail Tendons. <i>Connective Tissue Research</i> , 2013, 54, 70-75.	2.3	35
22	In vitro effects of oxytetracycline on matrix metalloproteinase-1 mRNA expression and on collagen gel contraction by cultured myofibroblasts obtained from the accessory ligament of foals. <i>American Journal of Veterinary Research</i> , 2004, 65, 491-496.	0.6	33
23	The Effect of Cranial Cruciate Ligament Insufficiency on Caudal Cruciate Ligament Morphology: An Experimental Study in Dogs. <i>Veterinary Surgery</i> , 2002, 31, 596-603.	1.0	29
24	In situ deflection of tendon cell cilia in response to tensile loading: an in vitro study. <i>Journal of Orthopaedic Research</i> , 2011, 29, 925-930.	2.3	29
25	Tendon Contraction After Cyclic Elongation Is an Age-Dependent Phenomenon. <i>American Journal of Sports Medicine</i> , 2014, 42, 1471-1477.	4.2	23
26	Crimp length decreases in lax tendons due to cytoskeletal tension, but is restored with tensional homeostasis. <i>Journal of Orthopaedic Research</i> , 2017, 35, 573-579.	2.3	15
27	Predicting tenocyte expression profiles and average molecular concentrations in Achilles tendon ECM from tissue strain and fiber damage. <i>Biomechanics and Modeling in Mechanobiology</i> , 2017, 16, 1329-1348.	2.8	13
28	Hypoxia inhibits primary cilia formation and reduces cell-mediated contraction in stress-deprived rat tail tendon fascicles. <i>Muscles, Ligaments and Tendons Journal</i> , 2016, 6, 193-197.	0.3	11
29	Stress-deprivation induces an up-regulation of versican and connexin-43 mRNA and protein synthesis and increased ADAMTS-1 production in tendon cells in situ. <i>Connective Tissue Research</i> , 2021, , 1-10.	2.3	7
30	Tendon cell ciliary length as a biomarker of in situ cytoskeletal tensional homeostasis. <i>Muscles, Ligaments and Tendons Journal</i> , 2013, 3, 118-21.	0.3	5
31	DIAT (Depth-Infrared Image Annotation Transfer) for Training a Depth-Based Pig-Pose Detector. , 2020, , .		4
32	Age-dependent effects of systemic administration of oxytetracycline on the viscoelastic properties of rat tail tendons as a mechanistic basis for pharmacological treatment of flexural limb deformities in foals. <i>American Journal of Veterinary Research</i> , 2012, 73, 1951-1956.	0.6	3
33	Effect of collagen length distribution and timing for repair on the active TGF- $\beta$ 2 concentration in tendon. <i>Connective Tissue Research</i> , 2018, 59, 396-409.	2.3	3
34	High magnitude, in vitro, biaxial, cyclic tensile strain induces actin depolymerization in tendon cells. <i>Muscles, Ligaments and Tendons Journal</i> , 2015, 5, 124-8.	0.3	2
35	Thermal energy enhances cell-mediated contraction of lax rat tail tendon fascicles following exercise. <i>Muscles, Ligaments and Tendons Journal</i> , 2015, 5, 51-5.	0.3	1