Louis J Soslowsky

List of Publications by Year
in descending order

70 papers	4,505 citations	126708 33 h-index	106150 65 g-index
70 all docs	70 docs citations	70 times ranked	3752 citing authors

#	Article	IF	Citations
1	Inhibition of glucose use improves structural recovery of injured Achilles tendon in mice. Journal of Orthopaedic Research, 2022, 40, 1409-1419.	1.2	1
2	Pulsed electromagnetic field therapy alters early healing in a rat model of rotator cuff injury and repair: Potential mechanisms. Journal of Orthopaedic Research, 2022, 40, 1593-1603.	1.2	11
3	Achilles Tendon Ruptures in Middle-Aged Rats Heal Poorly Compared With Those in Young and Old Rats. American Journal of Sports Medicine, 2022, 50, 170-181.	1.9	5
4	Nonsurgical treatment reduces tendon inflammation and elevates tendon markers in early healing. Journal of Orthopaedic Research, 2022, 40, 2308-2319.	1.2	5
5	Biglycan has a major role in maintenance of mature tendon mechanics. Journal of Orthopaedic Research, 2022, 40, 2546-2556.	1.2	6
6	Biomechanical Parameters of Mesh Reinforcement and Analysis of a Novel Device for Incisional Hernia Prevention. Journal of Surgical Research, 2021, 258, 153-161.	0.8	3
7	MRI-derived porosity index is associated with whole-bone stiffness and mineral density in human cadaveric femora. Bone, 2021, 143, 115774.	1.4	16
8	Liquid Poly-N-acetyl Glucosamine (sNAG) Improves Achilles Tendon Healing in a Rat Model. Annals of Biomedical Engineering, 2021, 49, 515-522.	1.3	0
9	Reticulocalbin 3 is involved in postnatal tendon development by regulating collagen fibrillogenesis and cellular maturation. Scientific Reports, 2021, 11, 10868.	1.6	11
10	Limited Scar Resection for Chronic Achilles Tendon Repair: Use of a Rat Model. American Journal of Sports Medicine, 2021, 49, 2707-2715.	1.9	2
11	Evaluation of Autologous Protein Solution Injection for Treatment of Superficial Digital Flexor Tendonitis in an Equine Model. Frontiers in Veterinary Science, 2021, 8, 697551.	0.9	5
12	Amplifying Bone Marrow Progenitors Expressing Î±â€Smooth Muscle Actin Produce Zonal Insertion Sites During Tendonâ€toâ€Bone Repair. Journal of Orthopaedic Research, 2020, 38, 105-116.	1.2	13
13	Effects of Pulsed Electromagnetic Field Therapy on Rat Achilles Tendon Healing. Journal of Orthopaedic Research, 2020, 38, 70-81.	1.2	13
14	MRI-based assessment of proximal femur strength compared to mechanical testing. Bone, 2020, 133, 115227.	1.4	24
15	Biocompatibility and bioactivity of an FGF-loaded microsphere-based bilayer delivery system. Acta Biomaterialia, 2020, 111, 341-348.	4.1	16
16	Localized delivery of ibuprofen via a bilayer delivery system (BiLDS) for supraspinatus tendon healing in a rat model. Journal of Orthopaedic Research, 2020, 38, 2339-2349.	1.2	8
17	CD44-dependent inflammation, fibrogenesis, and collagenolysis regulates extracellular matrix remodeling and tensile strength during cutaneous wound healing. Matrix Biology, 2019, 75-76, 314-330.	1.5	97
18	MRI-derived bone porosity index correlates to bone composition and mechanical stiffness. Bone Reports, 2019, 11, 100213.	0.2	27

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19	Ultrasoundâ€Guided Dry Needling of the Healthy Rat Supraspinatus Tendon Elicits Early Healing Without Causing Permanent Damage. Journal of Orthopaedic Research, 2019, 37, 2035-2042.	1.2	20
20	Quantitative comparison of three rat models of Achilles tendon injury: A multidisciplinary approach. Journal of Biomechanics, 2019, 88, 194-200.	0.9	14
21	Effects of immobilization angle on tendon healing after achilles rupture in a rat model. Journal of Orthopaedic Research, 2019, 37, 562-573.	1.2	29
22	Tendon healing affects the multiscale mechanical, structural and compositional response of tendon to quasi-static tensile loading. Journal of the Royal Society Interface, 2018, 15, 20170880.	1.5	27
23	Effects of pulsed electromagnetic field therapy at different frequencies and durations on rotator cuff tendon-to-bone healing in a rat model. Journal of Shoulder and Elbow Surgery, 2018, 27, 553-560.	1.2	36
24	Modulating Glucose Metabolism and Lactate Synthesis in Injured Mouse Tendons: Treatment With Dichloroacetate, a Lactate Synthesis Inhibitor, Improves Tendon Healing. American Journal of Sports Medicine, 2018, 46, 2222-2231.	1.9	19
25	Dynamic Loading and Tendon Healing Affect Multiscale Tendon Properties and ECM Stress Transmission. Scientific Reports, 2018, 8, 10854.	1.6	58
26	Pulsed electromagnetic field therapy improves tendonâ€toâ€bone healing in a rat rotator cuff repair model. Journal of Orthopaedic Research, 2017, 35, 902-909.	1.2	35
27	Mechanical, histological, and functional properties remain inferior in conservatively treated Achilles tendons in rodents: Long term evaluation. Journal of Biomechanics, 2017, 56, 55-60.	0.9	22
28	Collagen V haploinsufficiency in a murine model of classic Ehlersâ€“Danlos syndrome is associated with deficient structural and mechanical healing in tendons. Journal of Orthopaedic Research, 2017, 35, 2707-2715.	1.2	20
29	Temporal Healing of Achilles Tendons After Injury in Rodents Depends on Surgical Treatment and Activity. Journal of the American Academy of Orthopaedic Surgeons, The, 2017, 25, 635-647.	1.1	22
30	Decorin and biglycan are necessary for maintaining collagen fibril structure, fiber realignment, and mechanical properties of mature tendons. Matrix Biology, 2017, 64, 81-93.	1.5	159
31	Electrospun PLGA Nanofiber Scaffolds Release Ibuprofen Faster and Degrade Slower After In Vivo Implantation. Annals of Biomedical Engineering, 2017, 45, 2348-2359.	1.3	29
32	Autologous tendon-derived cell-seeded nanofibrous scaffolds improve rotator cuff repair in an age-dependent fashion. Journal of Orthopaedic Research, 2017, 35, 1250-1257.	1.2	23
33	Nonsurgical treatment and early return to activity leads to improved Achilles tendon fatigue mechanics and functional outcomes during early healing in an animal model. Journal of Orthopaedic Research, 2016, 34, 2172-2180.	1.2	53
34	Collagen V-heterozygous and -null supraspinatus tendons exhibit altered dynamic mechanical behaviour at multiple hierarchical scales. Interface Focus, 2016, 6, 20150043.	1.5	19
35	Postinjury biomechanics of Achilles tendon vary by sex and hormone status. Journal of Applied Physiology, 2016, 121, 1106-1114.	1.2	21
36	Injury response of geriatric mouse patellar tendons. Journal of Orthopaedic Research, 2016, 34, 1256-1263.	1.2	22

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37	Tendon mineralization is progressive and associated with deterioration of tendon biomechanical properties, and requires BMP-Smad signaling in the mouse Achilles tendon injury model. Matrix Biology, 2016, 52-54, 315-324.	1.5	36
38	Genetic Response of Rat Supraspinatus Tendon and Muscle to Exercise. PLoS ONE, 2015, 10, e0139880.	1.1	13
39	Evaluating changes in tendon crimp with fatigue loading as an ex vivo structural assessment of tendon damage. Journal of Orthopaedic Research, 2015, 33, 904-910.	1.2	35
40	Regulatory role of collagen V in establishing mechanical properties of tendons and ligaments is tissue dependent. Journal of Orthopaedic Research, 2015, 33, 882-888.	1.2	32
41	Targeted Deletion of Collagen V in Tendons and Ligaments Results in a Classic Ehlers-Danlos Syndrome Joint Phenotype. American Journal of Pathology, 2015, 185, 1436-1447.	1.9	46
42	Analysis of Collagen Organization in Mouse Achilles Tendon Using High-Frequency Ultrasound Imaging. Journal of Biomechanical Engineering, 2014, 136, 021029.	0.6	46
43	Biomechanical and structural response of healing Achilles tendon to fatigue loading following acute injury. Journal of Biomechanics, 2014, 47, 2028-2034.	0.9	65
44	The Tendon Injury Response is Influenced by Decorin and Biglycan. Annals of Biomedical Engineering, 2014, 42, 619-630.	1.3	66
45	The Detrimental Effects of Systemic Ibuprofen Delivery on Tendon Healing Are Time-Dependent. Clinical Orthopaedics and Related Research, 2014, 472, 2433-2439.	0.7	70
46	Efficacy of various analgesics on shoulder function and rotator cuff tendon-to-bone healing in a rat (Rattus norvegicus) model. Journal of the American Association for Laboratory Animal Science, 2014, 53, 185-92.	0.6	18
47	Decorin expression is important for age-related changes in tendon structure and mechanical properties. Matrix Biology, 2013, 32, 3-13.	1.5	169
48	Structureâ€“function relationships of postnatal tendon development: A parallel to healing. Matrix Biology, 2013, 32, 106-116.	1.5	100
49	Effect of Age and Proteoglycan Deficiency on Collagen Fiber Re-Alignment and Mechanical Properties in Mouse Supraspinatus Tendon. Journal of Biomechanical Engineering, 2013, 135, 021019.	0.6	73
50	Mechanical, compositional, and structural properties of the mouse patellar tendon with changes in biglycan gene expression. Journal of Orthopaedic Research, 2013, 31, 1430-1437.	1.2	61
51	Influence of Decorin on the Mechanical, Compositional, and Structural Properties of the Mouse Patellar Tendon. Journal of Biomechanical Engineering, 2012, 134, 031005.	0.6	77
52	Development and evaluation of multiple tendon injury models in the mouse. Journal of Biomechanics, 2012, 45, 1550-1553.	0.9	61
53	Characterizing local collagen fiber re-alignment and crimp behavior throughout mechanical testing in a mature mouse supraspinatus tendon model. Journal of Biomechanics, 2012, 45, 2061-2065.	0.9	84
54	Fiber-aligned polymer scaffolds for rotator cuff repair in a rat model. Journal of Shoulder and Elbow Surgery, 2012, 21, 245-250.	1.2	73

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55	Collagen Fiber Re-Alignment in a Neonatal Developmental Mouse Supraspinatus Tendon Model. Annals of Biomedical Engineering, 2012, 40, 1102-1110.	1.3	30
56	Recapitulation of the Achilles tendon mechanical properties during neonatal development: A Study of differential healing during two stages of development in a mouse model. Journal of Orthopaedic Research, 2012, 30, 448-456.	1.2	30
57	Mechanical, Compositional, and Structural Properties of the Post-natal Mouse Achilles Tendon. Annals of Biomedical Engineering, 2011, 39, 1904-1913.	1.3	83
58	Regulation of Collagen Fibril Nucleation and Initial Fibril Assembly Involves Coordinate Interactions with Collagens V and XI in Developing Tendon. Journal of Biological Chemistry, 2011, 286, 20455-20465.	1.6	118
59	Transient decreases in forelimb gait and ground reaction forces following rotator cuff injury and repair in a rat model. Journal of Biomechanics, 2010, 43, 778-782.	0.9	43
60	The Effect of Postoperative Passive Motion on Rotator Cuff Healing in a Rat Model. Journal of Bone and Joint Surgery - Series A, 2009, 91, 2421-2429.	1.4	103
61	Mechanical properties of the longâ€head of the biceps tendon are altered in the presence of rotator cuff tears in a rat model. Journal of Orthopaedic Research, 2009, 27, 416-420.	1.2	70
62	Effect of fiber distribution and realignment on the nonlinear and inhomogeneous mechanical properties of human supraspinatus tendon under longitudinal tensile loading. Journal of Orthopaedic Research, 2009, 27, 1596-1602.	1.2	259
63	Temporal expression of 8 growth factors in tendon-to-bone healing in a rat supraspinatus model. Journal of Shoulder and Elbow Surgery, 2007, 16, S198-S203.	1.2	180
64	Decorin regulates assembly of collagen fibrils and acquisition of biomechanical properties during tendon development. Journal of Cellular Biochemistry, 2006, 98, 1436-1449.	1.2	361
65	Regenerative properties of fetal sheep tendon are not adversely affected by transplantation into an adult environment. Journal of Orthopaedic Research, 2006, 24, 2124-2132.	1.2	112
66	Influence of Decorin and Biglycan on Mechanical Properties of Multiple Tendons in Knockout Mice. Journal of Biomechanical Engineering, 2005, 127, 181-185.	0.6	167
67	Supraspinatus tendon organizational and mechanical properties in a chronic rotator cuff tear animal model. Journal of Biomechanics, 2004, 37, 739-749.	0.9	176
68	Effect of Altered Matrix Proteins on Quasilinear Viscoelastic Properties in Transgenic Mouse Tail Tendons. Annals of Biomedical Engineering, 2003, 31, 599-605.	1.3	176
69	Variation of biomechanical, structural, and compositional properties along the tendon to bone insertion site. Journal of Orthopaedic Research, 2003, 21, 413-419.	1.2	382
70	Variation of biomechanical, structural, and compositional properties along the tendon to bone insertion site. Journal of Orthopaedic Research, 2003, 21, 413-9.	1.2	199