Savio L-Y Woo

List of Publications by Year in Descending Order

246 papers	21,776 citations	80 h-index	142 g-index
250 ext. papers	23,137 ext. citations	3.9 avg, IF	6.26 L-index

#	Paper	IF	Citations
246	Design of a new magnesium-based anterior cruciate ligament interference screw using finite element analysis. *Journal of Orthopaedic Translation*, **2020**, 20, 25-30	4.2	6
245	Biomechanics of the Knee **2020**, 189-218		
244	Evaluation of a magnesium ring device for mechanical augmentation of a ruptured ACL: Finite element analysis. *Clinical Biomechanics*, **2019**, 68, 122-127	2.2	4
243	Functional Tissue Engineering of Ligament and Tendon Injuries **2019**, 1179-1198		4
242	The Use of a Large Animal Model and Robotic Technology to Validate New Biotherapies for ACL Healing **2017**, 185-196		
241	Magnesium ring device to restore function of a transected anterior cruciate ligament in the goat stifle joint. *Journal of Orthopaedic Research*, **2016**, 34, 2001-2008	3.8	9
240	Review of Clancyß article on anterior and posterior cruciate ligament reconstruction in rhesus monkeys. *Journal of ISAKOS*, **2016**, 1, 53-60	1.1	
239	Positive effects of an extracellular matrix hydrogel on rat anterior cruciate ligament fibroblast proliferation and collagen mRNA expression. *Journal of Orthopaedic Translation*, **2015**, 3, 114-122	4.2	15
238	Measuring In Vivo Joint Motion and Ligament Function: New Developments **2015**, 21-31		
237	Histological characteristics of ligament healing after bio-enhanced repair of the transected goat ACL. *Journal of Experimental Orthopaedics*, **2015**, 2, 4	2.3	9
236	Orthopedic Research in the Year 2025 **2015**, 3203-3216		
235	Revolutionizing orthopaedic biomaterials: The potential of biodegradable and bioresorbable magnesium-based materials for functional tissue engineering. *Journal of Biomechanics*, **2014**, 47, 1979-86	2.9	137
234	Biomechanical evaluation of the quadriceps tendon autograft for anterior cruciate ligament reconstruction: a cadaveric study. *American Journal of Sports Medicine*, **2014**, 42, 723-30	6.8	46
233	Tensile properties of the medial patellofemoral ligament: the effect of specimen orientation. *Journal of Biomechanics*, **2014**, 47, 592-5	2.9	19
232	Measuring In Vivo Joint Motion and Ligament Function: New Developments **2014**, 1-12		
231	Orthopedic Research in the Year 2025 **2014**, 1-16		
230	High knee valgus in female subjects does not yield higher knee translations during drop landings: a biplane fluoroscopic study. *Journal of Orthopaedic Research*, **2013**, 31, 257-67	3.8	10

229	Healing of the goat anterior cruciate ligament after a new suture repair technique and bioscaffold treatment. *Tissue Engineering - Part A*, **2013**, 19, 2292-9	3.9	22
228	Ligament and Tendon Enthesis: Anatomy and Mechanics **2013**, 69-89		2
227	Fiber orientation of the transverse carpal ligament. *Clinical Anatomy*, **2012**, 25, 478-82	2.5	11
226	Potential of healing a transected anterior cruciate ligament with genetically modified extracellular matrix bioscaffolds in a goat model. *Knee Surgery, Sports Traumatology, Arthroscopy*, **2012**, 20, 1357-65	5.5	56
225	In vivo tibiofemoral kinematics during 4 functional tasks of increasing demand using biplane fluoroscopy. *American Journal of Sports Medicine*, **2012**, 40, 170-8	6.8	46
224	Orthopaedic Research in the Year 2020 **2012**, 1209-1215		1
223	Biomechanical Variation of Double-Bundle Anterior Cruciate Ligament Reconstruction **2012**, 355-361		
222	Relationship of knee shear force and extensor moment on knee translations in females performing drop landings: a biplane fluoroscopy study. *Clinical Biomechanics*, **2011**, 26, 1019-24	2.2	19
221	Relationship of anterior knee laxity to knee translations during drop landings: a bi-plane fluoroscopy study. *Knee Surgery, Sports Traumatology, Arthroscopy*, **2011**, 19, 653-62	5.5	24
220	Alpha1,3-galactosyltransferase knockout does not alter the properties of porcine extracellular matrix bioscaffolds. *Acta Biomaterialia*, **2011**, 7, 1719-27	10.8	16
219	The effects of multiple freeze-thaw cycles on the biomechanical properties of the human bone-patellar tendon-bone allograft. *Journal of Orthopaedic Research*, **2011**, 29, 1193-8	3.8	71
218	Suture augmentation following ACL injury to restore the function of the ACL, MCL, and medial meniscus in the goat stifle joint. *Journal of Biomechanics*, **2011**, 44, 1530-5	2.9	22
217	Functional Tissue Engineering of Ligament and Tendon Injuries **2011**, 997-1021		3
216	Knee kinematic profiles during drop landings: a biplane fluoroscopy study. *Medicine and Science in Sports and Exercise*, **2011**, 43, 533-41	1.2	53
215	Measurements of tibiofemoral kinematics during soft and stiff drop landings using biplane fluoroscopy. *American Journal of Sports Medicine*, **2011**, 39, 1714-22	6.8	53
214	Biomechanical evaluation of using one hamstrings tendon for ACL reconstruction: a human cadaveric study. *Knee Surgery, Sports Traumatology, Arthroscopy*, **2010**, 18, 11-9	5.5	37
213	Evaluation of bone tunnel placement for suture augmentation of an injured anterior cruciate ligament: effects on joint stability in a goat model. *Journal of Orthopaedic Research*, **2010**, 28, 1373-9	3.8	17
212	Effects of cell seeding and cyclic stretch on the fiber remodeling in an extracellular matrix-derived bioscaffold. *Tissue Engineering - Part A*, **2009**, 15, 957-63	3.9	58

211	Evaluation of knee stability with use of a robotic system. *Journal of Bone and Joint Surgery - Series A* , **2009**, 91 Suppl 1, 78-84	5.6	41
210	Tension patterns of the anteromedial and posterolateral grafts in a double-bundle anterior cruciate ligament reconstruction. *Journal of Orthopaedic Research*, **2009**, 27, 879-84	3.8	34
209	Future of Orthopaedic Sports Medicine and Soft Tissue Healing: The Important Role of Engineering. *Cellular and Molecular Bioengineering*, **2009**, 2, 448-461	3.9	4
208	Role of biomechanics in the understanding of normal, injured, and healing ligaments and tendons. *BMC Sports Science, Medicine and Rehabilitation*, **2009**, 1, 9	2.4	66
207	The importance of position and path repeatability on force at the knee during six-DOF joint motion. *Medical Engineering and Physics*, **2009**, 31, 553-7	2.4	6
206	A subject-specific finite element model of the anterior cruciate ligament. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2008**, 2008, 891-4	0.9	7
205	Positive changes in bone marrow-derived cells in response to culture on an aligned bioscaffold. *Tissue Engineering - Part A*, **2008**, 14, 1489-95	3.9	24
204	Functional Tissue Engineering of Ligament and Tendon Injuries **2008**, 1206-1231		3
203	Changes in gene expression of matrix constituents with respect to passage of ligament and tendon fibroblasts. *Annals of Biomedical Engineering*, **2008**, 36, 1927-33	4.7	25
202	Use of a bioscaffold to improve healing of a patellar tendon defect after graft harvest for ACL reconstruction: A study in rabbits. *Journal of Orthopaedic Research*, **2008**, 26, 255-63	3.8	44
201	Effects of a bioscaffold on collagen fibrillogenesis in healing medial collateral ligament in rabbits. *Journal of Orthopaedic Research*, **2008**, 26, 1098-104	3.8	35
200	Contribution of Biomechanics to Orthopaedics and Rehabilitation. *Journal of Biomechanics*, **2007**, 40, S6	2.9	
199	Importance of tibial slope for stability of the posterior cruciate ligament deficient knee. *American Journal of Sports Medicine*, **2007**, 35, 1443-9	6.8	135
198	Validation of a High-Payload Robotic/UFS Testing System for Studying of Joint Motion **2007**, 639		
197	Gene expression by fibroblasts seeded on small intestinal submucosa and subjected to cyclic stretching. *Tissue Engineering*, **2007**, 13, 1313-23		72
196	Determination of a safe range of knee flexion angles for fixation of the grafts in double-bundle anterior cruciate ligament reconstruction: a human cadaveric study. *American Journal of Sports Medicine*, **2007**, 35, 1513-20	6.8	35
195	A novel methodology to reproduce previously recorded six-degree of freedom kinematics on the same diarthrodial joint. *Journal of Biomechanics*, **2006**, 39, 1914-23	2.9	3
194	Estimation of ACL forces by reproducing knee kinematics between sets of knees: A novel non-invasive methodology. *Journal of Biomechanics*, **2006**, 39, 2371-7	2.9	37

193	Long-term effects of porcine small intestine submucosa on the healing of medial collateral ligament: a functional tissue engineering study. *Journal of Orthopaedic Research*, **2006**, 24, 811-9	3.8	59
192	Effect of the iliotibial band on knee biomechanics during a simulated pivot shift test. *Journal of Orthopaedic Research*, **2006**, 24, 967-73	3.8	61
191	Fiber kinematics of small intestinal submucosa under biaxial and uniaxial stretch. *Journal of Biomechanical Engineering*, **2006**, 128, 890-8	2.1	54
190	A model of stress and strain in the interosseous ligament of the forearm based on fiber network theory. *Journal of Biomechanical Engineering*, **2006**, 128, 725-32	2.1	5
189	Differences in torsional joint stiffness of the knee between genders: a human cadaveric study. *American Journal of Sports Medicine*, **2006**, 34, 765-70	6.8	83
188	Treatment with bioscaffold enhances the the fibril morphology and the collagen composition of healing medial collateral ligament in rabbits. *Tissue Engineering*, **2006**, 12, 159-66		43
187	Translation from research to applications. *Tissue Engineering*, **2006**, 12, 3341-64		56
186	Effects of knee flexion angles for graft fixation on force distribution in double-bundle anterior cruciate ligament grafts. *American Journal of Sports Medicine*, **2006**, 34, 577-85	6.8	66
185	Anatomical double-bundle anterior cruciate ligament reconstruction after valgus high tibial osteotomy: a biomechanical study. *American Journal of Sports Medicine*, **2006**, 34, 961-7	6.8	7
184	Biomechanics and anterior cruciate ligament reconstruction. *Journal of Orthopaedic Surgery and Research*, **2006**, 1, 2	2.8	75
183	Biomechanics of knee ligaments: injury, healing, and repair. *Journal of Biomechanics*, **2006**, 39, 1-20	2.9	280
182	The effects of refreezing on the viscoelastic and tensile properties of ligaments. *Journal of Biomechanics*, **2006**, 39, 1153-7	2.9	129
181	The development and validation of a charge-coupled device laser reflectance system to measure the complex cross-sectional shape and area of soft tissues. *Journal of Biomechanics*, **2006**, 39, 3071-5	2.9	32
180	Treatment with Bioscaffold Enhances the the Fibril Morphology and the Collagen Composition of Healing Medial Collateral Ligament in Rabbits. *Tissue Engineering*, **2006**, 060127071904006		
179	Biomechanics of initial tibial fixation in posterior cruciate ligament reconstruction. *Arthroscopy - Journal of Arthroscopic and Related Surgery*, **2005**, 21, 1164-71	5.4	37
178	Summary and Future Directions. *Sports Medicine and Arthroscopy Review*, **2005**, 13, 177-183	2.5	
177	Basic Science of Ligament Healing:. *Sports Medicine and Arthroscopy Review*, **2005**, 13, 161-169	2.5	3
176	A rat model to study the structural properties of the vagina and its supportive tissues. *American Journal of Obstetrics and Gynecology*, **2005**, 192, 80-8	6.4	54

175	Downregulation of human type III collagen gene expression by antisense oligodeoxynucleotide. *Tissue Engineering*, **2005**, 11, 1429-35		6
174	The effectiveness of reconstruction of the anterior cruciate ligament using the novel knot/press-fit technique: a cadaveric study. *American Journal of Sports Medicine*, **2005**, 33, 856-63	6.8	19
173	Basic Science of Ligaments and Tendons Related to Rehabilitation **2004**, 1-14		
172	Biomechanical comparison of tibial inlay versus transtibial techniques for posterior cruciate ligament reconstruction: analysis of knee kinematics and graft in situ forces. *American Journal of Sports Medicine*, **2004**, 32, 587-93	6.8	70
171	An improved method to analyze the stress relaxation of ligaments following a finite ramp time based on the quasi-linear viscoelastic theory. *Journal of Biomechanical Engineering*, **2004**, 126, 92-7	2.1	114
170	Inflammatory response of human tendon fibroblasts to cyclic mechanical stretching. *American Journal of Sports Medicine*, **2004**, 32, 435-40	6.8	109
169	Knee stability and graft function after anterior cruciate ligament reconstruction: a comparison of a lateral and an anatomical femoral tunnel placement. *American Journal of Sports Medicine*, **2004**, 32, 1825-32	6.8	321
168	A three-dimensional finite element model of the human anterior cruciate ligament: a computational analysis with experimental validation. *Journal of Biomechanics*, **2004**, 37, 383-90	2.9	105
167	An evaluation of the quasi-linear viscoelastic properties of the healing medial collateral ligament in a goat model. *Annals of Biomedical Engineering*, **2004**, 32, 329-35	4.7	53
166	Functional tissue engineering for ligament healing: potential of antisense gene therapy. *Annals of Biomedical Engineering*, **2004**, 32, 342-51	4.7	33
165	Biomechanical function of the posterior horn of the medial meniscus: a human cadaveric study. *Journal of Orthopaedic Science*, **2004**, 9, 280-4	1.6	24
164	Distribution of in situ forces in the anterior cruciate ligament in response to rotatory loads. *Journal of Orthopaedic Research*, **2004**, 22, 85-9	3.8	506
163	The use of porcine small intestinal submucosa to enhance the healing of the medial collateral ligament--a functional tissue engineering study in rabbits. *Journal of Orthopaedic Research*, **2004**, 22, 214-20	3.8	107
162	Effects of increasing tibial slope on the biomechanics of the knee. *American Journal of Sports Medicine*, **2004**, 32, 376-82	6.8	506
161	Experimental and Computational Modeling of Joint and Ligament Mechanics. *Journal of Applied Biomechanics*, **2004**, 20, 450-474	1.2	4
160	Effect of Arthroscopic Procedures on the Acromioclavicular Joint. *Clinical Orthopaedics and Related Research*, **2003**, 406, 89-96	2.2	15
159	Measurement of posterior tibial translation in the posterior cruciate ligament-reconstructed knee: significance of the shift in the reference position. *American Journal of Sports Medicine*, **2003**, 31, 843-8	6.8	21
158	Ligament Healing: Present Status and the Future of Functional Tissue Engineering **2003**, 17-34		1

157	A biomechanical and histological evaluation of the structure and function of the healing medial collateral ligament in a goat model. *Knee Surgery, Sports Traumatology, Arthroscopy*, **2003**, 11, 155-62	5.5	29
156	Tensile properties of an anterior cruciate ligament graft after bone-patellar tendon-bone press-fit fixation. *Knee Surgery, Sports Traumatology, Arthroscopy*, **2003**, 11, 68-74	5.5	43
155	Cell orientation determines the alignment of cell-produced collagenous matrix. *Journal of Biomechanics*, **2003**, 36, 97-102	2.9	220
154	The healing medial collateral ligament following a combined anterior cruciate and medial collateral ligament injury--a biomechanical study in a goat model. *Journal of Orthopaedic Research*, **2003**, 21, 1124-30	3.8	32
153	A quantitative analysis of valgus torque on the ACL: a human cadaveric study. *Journal of Orthopaedic Research*, **2003**, 21, 1107-12	3.8	110
152	The effect of initial graft tension on the biomechanical properties of a healing ACL replacement graft: a study in goats. *Journal of Orthopaedic Research*, **2003**, 21, 708-15	3.8	69
151	Anterior cruciate ligament tunnel placement: Comparison of insertion site anatomy with the guidelines of a computer-assisted surgical system. *Arthroscopy - Journal of Arthroscopic and Related Surgery*, **2003**, 19, 154-60	5.4	70
150	Knee stability and graft function following anterior cruciate ligament reconstruction: Comparison between 11 o'clock and 10 o'clock femoral tunnel placement. 2002 Richard O'Connor Award paper. *Arthroscopy - Journal of Arthroscopic and Related Surgery*, **2003**, 19, 297-304	5.4	565
149	Anatomic parameters for planning of interosseous ligament reconstruction using computer-assisted techniques. *Journal of Hand Surgery*, **2003**, 28, 111-6	2.6	32
148	Cyclic mechanical stretching of human tendon fibroblasts increases the production of prostaglandin E2 and levels of cyclooxygenase expression: a novel in vitro model study. *Connective Tissue Research*, **2003**, 44, 128-33	3.3	143
147	Antisense oligonucleotides reduce synthesis of procollagen alpha1 (V) chain in human patellar tendon fibroblasts: potential application in healing ligaments and tendons. *Connective Tissue Research*, **2003**, 44, 167-72	3.3	24
146	Biomechanics of Ligaments: From Molecular Biology to Joint Function **2003**, 13-35		
145	Response of donor and recipient cells after transplantation of cells to the ligament and tendon. *Microscopy Research and Technique*, **2002**, 58, 34-8	2.8	36
144	Fate of donor bone marrow cells in medial collateral ligament after simulated autologous transplantation. *Microscopy Research and Technique*, **2002**, 58, 39-44	2.8	52
143	The effect of rotator cuff tears on reaction forces at the glenohumeral joint. *Journal of Orthopaedic Research*, **2002**, 20, 439-46	3.8	147
142	Biomechanical analysis of an anatomic anterior cruciate ligament reconstruction. *American Journal of Sports Medicine*, **2002**, 30, 660-6	6.8	793
141	The effect of axial tibial torque on the function of the anterior cruciate ligament: a biomechanical study of a simulated pivot shift test. *Arthroscopy - Journal of Arthroscopic and Related Surgery*, **2002**, 18, 394-8	5.4	195
140	Accuracy of anterior cruciate ligament tunnel placement with an active robotic system: a cadaveric study. *Arthroscopy - Journal of Arthroscopic and Related Surgery*, **2002**, 18, 968-73	5.4	19

139	The effect of soft-tissue graft fixation in anterior cruciate ligament reconstruction on graft-tunnel motion under anterior tibial loading. *Arthroscopy - Journal of Arthroscopic and Related Surgery*, **2002** , 18, 960-7	5.4	76
138	The effectiveness of reconstruction of the anterior cruciate ligament with hamstrings and patellar tendon . A cadaveric study comparing anterior tibial and rotational loads. *Journal of Bone and Joint Surgery - Series A*, **2002**, 84, 907-14	5.6	396
137	Enhancement of tendon-bone integration of anterior cruciate ligament grafts with bone morphogenetic protein-2 gene transfer: a histological and biomechanical study. *Journal of Bone and Joint Surgery - Series A*, **2002**, 84, 1123-31	5.6	187
136	The biomechanical interdependence between the anterior cruciate ligament replacement graft and the medial meniscus. *American Journal of Sports Medicine*, **2001**, 29, 226-31	6.8	216
135	The position of the tibia during graft fixation affects knee kinematics and graft forces for anterior cruciate ligament reconstruction. *American Journal of Sports Medicine*, **2001**, 29, 771-6	6.8	54
134	A multidisciplinary study of the healing of an intraarticular anterior cruciate ligament graft in a goat model. *American Journal of Sports Medicine*, **2001**, 29, 620-6	6.8	151
133	Structure and function of the healing medial collateral ligament in a goat model. *Annals of Biomedical Engineering*, **2001**, 29, 173-80	4.7	37
132	Anatomy and biomechanics of theposterior cruciate ligament and posterolateral corner. *Operative Techniques in Sports Medicine*, **2001**, 9, 39-46	0.4	7
131	Precision of ACL Tunnel Placement Using Traditional and Robotic Techniques. *Computer Aided Surgery*, **2001**, 6, 270-278		50
130	Effect of capsular injury on acromioclavicular joint mechanics. *Journal of Bone and Joint Surgery - Series A*, **2001**, 83, 1344-51	5.6	197
129	Ligaments of the Knee in Sports Injuries and Rehabilitation **2001**, 1-10		
128	Biomechanics of the Posterior Cruciate Ligament-Deficient Knee. *Techniques in Orthopaedics*, **2001**, 16, 109-118	0.4	1
127	Anatomy and Biomechanics of the Posterior Cruciate Ligament **2001**, 3-22		1
126	Biomechanical analysis of a double-bundle posterior cruciate ligament reconstruction. *American Journal of Sports Medicine*, **2000**, 28, 144-51	6.8	297
125	The effect of knee flexion angle and application of an anterior tibial load at the time of graft fixation on the biomechanics of a posterior cruciate ligament-reconstructed knee. *American Journal of Sports Medicine*, **2000**, 28, 460-5	6.8	63
124	Biomechanical analysis of a posterior cruciate ligament reconstruction. Deficiency of the posterolateral structures as a cause of graft failure. *American Journal of Sports Medicine*, **2000**, 28, 32-9	6.8	300
123	Importance of the medial meniscus in the anterior cruciate ligament-deficient knee. *Journal of Orthopaedic Research*, **2000**, 18, 109-15	3.8	303
122	Significance of changes in the reference position for measurements of tibial translation and diagnosis of cruciate ligament deficiency. *Journal of Orthopaedic Research*, **2000**, 18, 176-82	3.8	26

121	Mechanical behavior of two hamstring graft constructs for reconstruction of the anterior cruciate ligament. *Journal of Orthopaedic Research*, **2000**, 18, 456-61	3.8	86
120	The effect of the point of application of anterior tibial loads on human knee kinematics. *Journal of Biomechanics*, **2000**, 33, 1147-52	2.9	17
119	Type V collagen is increased during rabbit medial collateral ligament healing. *Knee Surgery, Sports Traumatology, Arthroscopy*, **2000**, 8, 281-5	5.5	78
118	In-situ force in the medial and lateral structures of intact and ACL-deficient knees. *Journal of Orthopaedic Science*, **2000**, 5, 567-71	1.6	102
117	THE EFFECTS OF GROWTH FACTORS ON PROLIFERATION AND MATRIX SYNTHESIS OF FIBROBLASTS FROM GOAT MEDIAL COLLATERAL LIGAMENT. *Journal of Musculoskeletal Research*, **2000**, 04, 257-264	0.1	
116	Interaction between the ACL graft and MCL in a combined ACL+MCL knee injury using a goat model. *Acta Orthopaedica*, **2000**, 71, 387-93		58
115	Experimental investigation of reaction forces at the glenohumeral joint during active abduction. *Journal of Shoulder and Elbow Surgery*, **2000**, 9, 409-17	4.3	71
114	Injury and repair of ligaments and tendons. *Annual Review of Biomedical Engineering*, **2000**, 2, 83-118	12	135
113	Use of robotic technology to study the biomechanics of ligaments and their replacements. *Operative Techniques in Orthopaedics*, **2000**, 10, 87-91	0.3	6
112	Role of the forearm interosseous ligament: is it more than just longitudinal load transfer?. *Journal of Hand Surgery*, **2000**, 25, 683-8	2.6	71
111	The forces in the anterior cruciate ligament and knee kinematics during a simulated pivot shift test: A human cadaveric study using robotic technology. *Arthroscopy - Journal of Arthroscopic and Related Surgery*, **2000**, 16, 633-9	5.4	237
110	Healing and repair of ligament injuries in the knee. *Journal of the American Academy of Orthopaedic Surgeons, The*, **2000**, 8, 364-72	4.5	126
109	Tissue Engineering of Ligament Healing **2000**, 174-195		2
108	A new methodology to measure load transfer through the forearm using multiple universal force sensors. *Journal of Biomechanics*, **1999**, 32, 1331-5	2.9	29
107	Improvement of accuracy in a high-capacity, six degree-of-freedom load cell: application to robotic testing of musculoskeletal joints. *Annals of Biomedical Engineering*, **1999**, 27, 839-43	4.7	17
106	Injury and reconstruction of the anterior cruciate ligament and knee osteoarthritis. *Osteoarthritis and Cartilage*, **1999**, 7, 110-21	6.2	28
105	Use of robotic technology for diathrodial joint research. *Journal of Science and Medicine in Sport*, **1999**, 2, 283-97	4.4	74
104	Early expression of marker genes in the rabbit medial collateral and anterior cruciate ligaments: the use of different viral vectors and the effects of injury. *Journal of Orthopaedic Research*, **1999**, 17, 37-42	3.8	71

103	Cytokine-induced tendinitis: a preliminary study in rabbits. *Journal of Orthopaedic Research*, **1999**, 17, 168-77	3.8	62
102	In situ forces in the human posterior cruciate ligament in response to muscle loads: a cadaveric study. *Journal of Orthopaedic Research*, **1999**, 17, 763-8	3.8	43
101	In situ force distribution in the glenohumeral joint capsule during anterior-posterior loading. *Journal of Orthopaedic Research*, **1999**, 17, 769-76	3.8	78
100	Effects of tenorraphy on the gliding function and tensile properties of partially lacerated canine digital flexor tendons. *Journal of Hand Surgery*, **1999**, 24, 302-9	2.6	22
99	Quantitative analysis of human cruciate ligament insertions. *Arthroscopy - Journal of Arthroscopic and Related Surgery*, **1999**, 15, 741-9	5.4	437
98	Anatomical and Biomechanical Considerations of the PCL. *Journal of Sport Rehabilitation*, **1999**, 8, 260-278	1.7	4
97	Tissue engineering of ligament and tendon healing. *Clinical Orthopaedics and Related Research*, **1999**, S312-23	2.2	212
96	Biomechanics of knee ligaments. *American Journal of Sports Medicine*, **1999**, 27, 533-43	6.8	197
95	A functional comparison of animal anterior cruciate ligament models to the human anterior cruciate ligament. *Annals of Biomedical Engineering*, **1998**, 26, 345-52	4.7	114
94	Effect of combined axial compressive and anterior tibial loads on in situ forces in the anterior cruciate ligament: a porcine study. *Journal of Orthopaedic Research*, **1998**, 16, 122-7	3.8	100
93	In situ forces in the posterolateral structures of the knee under posterior tibial loading in the intact and posterior cruciate ligament-deficient knee. *Journal of Orthopaedic Research*, **1998**, 16, 675-81	3.8	84
92	The effects of multiple-strand suture methods on the strength and excursion of repaired intrasynovial flexor tendons: a biomechanical study in dogs. *Journal of Hand Surgery*, **1998**, 23, 97-104	2.6	163
91	The effects of proximal load on the excursion of autogenous flexor tendon grafts. *Journal of Hand Surgery*, **1998**, 23, 285-9	2.6	6
90	Biomechanics of the ACL: Measurements of in situ force in the ACL and knee kinematics. *Knee*, **1998** , 5, 267-288	2.6	45
89	The effects of platelet-derived growth factor-BB on healing of the rabbit medial collateral ligament. An in vivo study. *American Journal of Sports Medicine*, **1998**, 26, 549-54	6.8	253
88	The effects of a popliteus muscle load on in situ forces in the posterior cruciate ligament and on knee kinematics. A human cadaveric study. *American Journal of Sports Medicine*, **1998**, 26, 669-73	6.8	110
87	Determination of the in situ forces in the human posterior cruciate ligament using robotic technology. A cadaveric study. *American Journal of Sports Medicine*, **1998**, 26, 395-401	6.8	119
86	Biologic Intervention in Ligament Healing. *Sports Medicine and Arthroscopy Review*, **1998**, 6, 74???82	2.5	12

85	Quantitative analysis of collagen fibrils of human cruciate and meniscofemoral ligaments. *Clinical Orthopaedics and Related Research*, **1998**, 205-11	2.2	35
84	Quantitative anthropometry of the subatlantal cervical longitudinal ligaments. *Spine*, **1998**, 23, 893-8	3.3	19
83	Functional evaluation of the ligaments at the acromioclavicular joint during anteroposterior and superoinferior translation. *American Journal of Sports Medicine*, **1997**, 25, 858-62	6.8	152
82	Medial collateral knee ligament healing. Combined medial collateral and anterior cruciate ligament injuries studied in rabbits. *Acta Orthopaedica*, **1997**, 68, 142-8		43
81	The effect of anterior cruciate ligament graft fixation site at the tibia on knee stability: evaluation using a robotic testing system. *Arthroscopy - Journal of Arthroscopic and Related Surgery*, **1997**, 13, 177-82	5.4	236
80	The effects of age on rabbit MCL fibroblast matrix synthesis in response to TGF-beta 1 or EGF. *Mechanisms of Ageing and Development*, **1997**, 97, 121-30	5.6	55
79	Effect of growth factors on matrix synthesis by ligament fibroblasts. *Journal of Orthopaedic Research*, **1997**, 15, 18-23	3.8	184
78	Evaluation of the effect of joint constraints on the in situ force distribution in the anterior cruciate ligament. *Journal of Orthopaedic Research*, **1997**, 15, 278-84	3.8	59
77	Biomechanics of knee ligament healing, repair and reconstruction. *Journal of Biomechanics*, **1997**, 30, 431-9	2.9	70
76	Bundle pattern of the flexor digitorum profundus tendon in zone II of the hand: a quantitative assessment of the size of a laceration. *Journal of Hand Surgery*, **1996**, 21, 978-83	2.6	15
75	Tensile properties of the superior glenohumeral and coracohumeral ligaments. *Journal of Shoulder and Elbow Surgery*, **1996**, 5, 249-54	4.3	85
74	The contribution of the anterior cruciate ligament to knee joint kinematics: Evaluation of its in situ forces using a robot/universal force-moment sensor test system. *Journal of Orthopaedic Science*, **1996**, 1, 335-347	1.6	3
73	Medial collateral ligament healing one year after a concurrent medial collateral ligament and anterior cruciate ligament injury: an interdisciplinary study in rabbits. *Journal of Orthopaedic Research*, **1996**, 14, 223-7	3.8	36
72	Tensile properties of the interosseous membrane of the human forearm. *Journal of Orthopaedic Research*, **1996**, 14, 842-5	3.8	73
71	Human anterior and posterior cervical longitudinal ligaments possess similar tensile properties. *Journal of Orthopaedic Research*, **1996**, 14, 1005-8	3.8	20
70	Forces and moments in six-DOF at the human knee joint: Mathematical description for control. *Journal of Biomechanics*, **1996**, 29, 1577-1585	2.9	101
69	Assessment of posterior cruciate ligament graft performance using robotic technology. *American Journal of Sports Medicine*, **1996**, 24, 824-8	6.8	25
68	A biomechanical analysis of rotator cuff deficiency in a cadaveric model. *American Journal of Sports Medicine*, **1996**, 24, 286-92	6.8	204

67	BIOMECHANICAL PROPERTIES OF PERIPHERAL NERVES. *Hand Clinics*, **1996**, 12, 195-204	1.7	44
66	A new dynamic testing apparatus to study glenohumeral joint motion. *Journal of Biomechanics*, **1995**, 28, 869-74	2.9	75
65	The use of a universal force-moment sensor to determine in-situ forces in ligaments: a new methodology. *Journal of Biomechanical Engineering*, **1995**, 117, 1-7	2.1	178
64	The human posterior cruciate ligament complex: an interdisciplinary study. Ligament morphology and biomechanical evaluation. *American Journal of Sports Medicine*, **1995**, 23, 736-45	6.8	295
63	Shoulder muscle forces and tendon excursions during glenohumeral abduction in the scapular plane. *Journal of Shoulder and Elbow Surgery*, **1995**, 4, 199-208	4.3	100
62	Collagens in an adult bovine medial collateral ligament: immunofluorescence localization by confocal microscopy reveals that type XIV collagen predominates at the ligament-bone junction. *Matrix Biology*, **1995**, 14, 743-51	11.4	54
61	Immobilization of the knee joint alters the mechanical and ultrastructural properties of the rabbit anterior cruciate ligament. *Journal of Orthopaedic Research*, **1995**, 13, 191-200	3.8	44
60	Healing of the medial collateral ligament after a combined medial collateral and anterior cruciate ligament injury and reconstruction of the anterior cruciate ligament: comparison of repair and nonrepair of medial collateral ligament tears in rabbits. *Journal of Orthopaedic Research*, **1995**, 13, 442-9	3.8	44
59	Interspecies variation of compressive biomechanical properties of the meniscus. *Journal of Biomedical Materials Research Part B*, **1995**, 29, 823-8		156
58	Healing of the rabbit medial collateral ligament following an ODonoghue triad injury: effects of anterior cruciate ligament reconstruction. *Journal of Orthopaedic Research*, **1994**, 12, 357-64	3.8	23
57	Tensile and viscoelastic properties of human patellar tendon. *Journal of Orthopaedic Research*, **1994** , 12, 796-803	3.8	307
56	Biomechanical function of the human anterior cruciate ligament. *Arthroscopy - Journal of Arthroscopic and Related Surgery*, **1994**, 10, 140-7	5.4	79
55	Application of Robotics to Studies of Joint Biomechanics **1994**, 81-95		
54	Biomechanics of the ACL and ACL Reconstruction: New Concepts and Applications **1994**, 171-188		
53	Anatomy and Biomechanics of the Human Posterior Cruciate Ligament **1994**, 200-214		0
52	Hamstrings--an anterior cruciate ligament protagonist. An in vitro study. *American Journal of Sports Medicine*, **1993**, 21, 231-7	6.8	274
51	Morphologic and biomechanical comparison of tendons used as free grafts. *Journal of Hand Surgery* , **1993**, 18, 76-82	2.6	71
50	The use of robotics technology to study human joint kinematics: a new methodology. *Journal of Biomechanical Engineering*, **1993**, 115, 211-7	2.1	167

49	The mechanical properties of skeletally mature rabbit anterior cruciate ligament and patellar tendon over a range of strain rates. *Journal of Orthopaedic Research*, **1993**, 11, 58-67	3.8	154
48	In vitro biomechanical analysis of suture methods for flexor tendon repair. *Journal of Orthopaedic Research*, **1993**, 11, 603-11	3.8	74
47	Determination of the in situ loads on the human anterior cruciate ligament. *Journal of Orthopaedic Research*, **1993**, 11, 686-95	3.8	115
46	On the viscoelastic properties of the anteromedial bundle of the anterior cruciate ligament. *Journal of Biomechanics*, **1993**, 26, 447-52	2.9	134
45	Biomechanics of Knee Ligaments. *Journal of Bone and Joint Surgery - Series A*, **1993**, 75, 1716-1727	5.6	65
44	Biology and Biomechanics of the Anterior Cruciate Ligament. *Clinics in Sports Medicine*, **1993**, 12, 637-670	2.6	101
43	Current Concepts for Rehabilitation following Anterior Cruciate Ligament Reconstruction. *Journal of Orthopaedic and Sports Physical Therapy*, **1992**, 15, 270-8	4.2	47
42	A comparative evaluation of the mechanical properties of the rabbit medial collateral and anterior cruciate ligaments. *Journal of Biomechanics*, **1992**, 25, 377-86	2.9	75
41	Healing of the medial collateral ligament following a triad injury: a biomechanical and histological study of the knee in rabbits. *Journal of Orthopaedic Research*, **1992**, 10, 485-95	3.8	48
40	Ultrastructural Differences Between the Cells of the Medial Collateral and the Anterior Cruciate Ligaments. *Clinical Orthopaedics and Related Research*, **1991**, &NA;, 279???286	2.2	23
39	Evaluation of a new injury model to study medial collateral ligament healing: primary repair versus nonoperative treatment. *Journal of Orthopaedic Research*, **1991**, 9, 516-28	3.8	112
38	Viscoelastic shear properties of the equine medial meniscus. *Journal of Orthopaedic Research*, **1991**, 9, 550-8	3.8	47
37	The effects of frequency and duration of controlled passive mobilization on tendon healing. *Journal of Orthopaedic Research*, **1991**, 9, 705-13	3.8	91
36	The effects of increased tension on healing medical collateral ligaments. *American Journal of Sports Medicine*, **1991**, 19, 347-54	6.8	88
35	Tensile properties of the human femur-anterior cruciate ligament-tibia complex. The effects of specimen age and orientation. *American Journal of Sports Medicine*, **1991**, 19, 217-25	6.8	906
34	Stress relaxation of a peripheral nerve. *Journal of Hand Surgery*, **1991**, 16, 859-63	2.6	46
33	Measurement of changes in ligament tension with knee motion and skeletal maturation. *Journal of Biomechanical Engineering*, **1990**, 112, 46-51	2.1	28
32	Acute hemarthrosis: a histological, biochemical, and biomechanical correlation of early effects on the anterior cruciate ligament in a rabbit model. *Journal of Orthopaedic Research*, **1990**, 8, 548-54	3.8	9

31	An in vitro mechanical and histological study of acute stretching on rabbit tibial nerve. *Journal of Orthopaedic Research*, **1990**, 8, 694-701	3.8	148
30	The effects of strain rate on the properties of the medial collateral ligament in skeletally immature and mature rabbits: a biomechanical and histological study. *Journal of Orthopaedic Research*, **1990**, 8, 712-21	3.8	135
29	The use of a laser micrometer system to determine the cross-sectional shape and area of ligaments: a comparative study with two existing methods. *Journal of Biomechanical Engineering*, **1990**, 112, 426-31	2.1	101
28	Cartilage resurfacing of the rabbit knee. The use of an allogeneic demineralized bone matrix-autogeneic perichondrium composite implant. *Acta Orthopaedica*, **1990**, 61, 201-6		44
27	Long-term storage effects on canine osteochondral allografts. *Acta Orthopaedica*, **1990**, 61, 539-45		30
26	Influences of flexor sheath continuity and early motion on tendon healing in dogs. *Journal of Hand Surgery*, **1990**, 15, 69-77	2.6	92
25	Aging and sex-related changes in the biomechanical properties of the rabbit medial collateral ligament. *Mechanisms of Ageing and Development*, **1990**, 56, 129-42	5.6	64
24	A new device to measure the structural properties of the femur-anterior cruciate ligament-tibia complex. *Journal of Biomechanical Engineering*, **1989**, 111, 350-4	2.1	19
23	Para-articular connective tissue in osteoarthritis. *Seminars in Arthritis and Rheumatism*, **1989**, 18, 41-50	5.3	14
22	The physiological basis for application of controlled stress in the rehabilitation of flexor tendon injuries. *Journal of Hand Therapy*, **1989**, 2, 66-70	1.6	43
21	Use of patellar tendon autograft for anterior cruciate ligament reconstruction in the rabbit: a long-term histologic and biomechanical study. *Journal of Orthopaedic Research*, **1989**, 7, 474-85	3.8	183
20	A structural model to describe the nonlinear stress-strain behavior for parallel-fibered collagenous tissues. *Journal of Biomechanical Engineering*, **1989**, 111, 361-3	2.1	46
19	A new method for determining cross-sectional shape and area of soft tissues. *Journal of Biomechanical Engineering*, **1988**, 110, 110-4	2.1	112
18	Temperature dependent behavior of the canine medial collateral ligament. *Journal of Biomechanical Engineering*, **1987**, 109, 68-71	2.1	70
17	Treatment of the medial collateral ligament injury. II: Structure and function of canine knees in response to differing treatment regimens. *American Journal of Sports Medicine*, **1987**, 15, 22-9	6.8	217
16	A rigid-body method for finding centers of rotation and angular displacements of planar joint motion. *Journal of Biomechanics*, **1987**, 20, 715-21	2.9	51
15	Perichondrial autograft for articular cartilage. Shear modulus of neocartilage studied in rabbits. *Acta Orthopaedica*, **1987**, 58, 510-5		53
14	Treatment of the medial collateral ligament injury. I: The importance of anterior cruciate ligament on the varus-valgus knee laxity. *American Journal of Sports Medicine*, **1987**, 15, 15-21	6.8	143

13	New experimental procedures to evaluate the biomechanical properties of healing canine medial collateral ligaments. *Journal of Orthopaedic Research*, **1987**, 5, 425-32	3.8	45
12	Flexor tendon repair. *Journal of Orthopaedic Research*, **1986**, 4, 119-28	3.8	142
11	Tensile properties of the medial collateral ligament as a function of age. *Journal of Orthopaedic Research*, **1986**, 4, 133-41	3.8	137
10	Effects of postmortem storage by freezing on ligament tensile behavior. *Journal of Biomechanics*, **1986**, 19, 399-404	2.9	466
9	Effects of early intermittent passive mobilization on healing canine flexor tendons. *Journal of Hand Surgery*, **1982**, 7, 170-5	2.6	329
8	The effect of immobilization on collagen turnover in connective tissue: a biochemical-biomechanical correlation. *Acta Orthopaedica*, **1982**, 53, 325-32		195
7	The importance of controlled passive mobilization on flexor tendon healing. A biomechanical study. *Acta Orthopaedica*, **1981**, 52, 615-22		207
6	Immobility effects on synovial joints the pathomechanics of joint contracture. *Biorheology*, **1980**, 17, 95-110	1.7	211
5	Experimental hemarthrosis in the knee of the mature canine. *Arthritis and Rheumatism*, **1976**, 19, 59-67		26
4	Connective tissue response to immobility. Correlative study of biomechanical and biochemical measurements of normal and immobilized rabbit knees. *Arthritis and Rheumatism*, **1975**, 18, 257-64		182
3	Biomechanical and biochemical changes in the periarticular connective tissue during contracture development in the immobilized rabbit knee. *Connective Tissue Research*, **1974**, 2, 315-23	3.3	49
2	A Comparison of the Physical Behavior of Normal Articular Cartilage and the Arthroplasty Surface. *Journal of Bone and Joint Surgery - Series A*, **1972**, 54, 147-160	5.6	113
1	Mechanobiologic Studies of Cellular and Molecular Mechanisms of Tendinopathy85-100		1