Hiromichi Fujie

List of Publications by Year
in descending order

57 papers	2,155 citations	394421 19 h-index	223800 46 g-index
59 all docs	59 docs citations	59 times ranked	1353 citing authors

#	Article	IF	Citations
1	Singleâ€" versus twoâ€"femoral socket anterior cruciate ligament reconstruction technique. Arthroscopy - Journal of Arthroscopic and Related Surgery, 2001, 17, 708-716.	2.7	227
2	Cartilage repair using an in vitro generated scaffold-free tissue-engineered construct derived from porcine synovial mesenchymal stem cells. Biomaterials, 2007, 28, 5462-5470.	11.4	211
3	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.	1.3	204
4	The Use of Robotics Technology to Study Human Joint Kinematics: A New Methodology. Journal of Biomechanical Engineering, 1993, 115, 211-217.	1.3	187
5	Determination of thein situ forces and force distribution within the human anterior cruciate ligament. Annals of Biomedical Engineering, 1995, 23, 467-474.	2.5	134
6	The influence of skeletal maturity on allogenic synovial mesenchymal stem cell-based repair of cartilage in a large animal model. Biomaterials, 2010, 31, 8004-8011.	11.4	128
7	<i>In Vitro</i> Generation of a Scaffold-Free Tissue-Engineered Construct (TEC) Derived from Human Synovial Mesenchymal Stem Cells: Biological and Mechanical Properties and Further Chondrogenic Potential. Tissue Engineering - Part A, 2008, 14, 2041-2049.	3.1	120
8	Forces and moments in six-DOF at the human knee joint: Mathematical description for control. Journal of Biomechanics, 1996, 29, 1577-1585.	2.1	114
9	Optimization of Graft Fixation at the Time of Anterior Cruciate Ligament Reconstruction. American Journal of Sports Medicine, 2008, 36, 1087-1093.	4.2	69
10	A Novel Robotic System for Joint Biomechanical Tests: Application to the Human Knee Joint. Journal of Biomechanical Engineering, 2004, 126, 54-61.	1.3	67
11	Osteochondral Repair Using a Scaffold-Free Tissue-Engineered Construct Derived from Synovial Mesenchymal Stem Cells and a Hydroxyapatite-Based Artificial Bone. Tissue Engineering - Part A, 2014, 20, 2291-2304.	3.1	66
12	Optimization of Graft Fixation at the Time of Anterior Cruciate Ligament Reconstruction. American Journal of Sports Medicine, 2008, 36, 1094-1100.	4.2	55
13	Biomechanical Comparison Between the Rectangular-Tunnel and the Round-Tunnel Anterior Cruciate Ligament Reconstruction Procedures With a Boneâ€"Patellar Tendonâ€"Bone Graft. Arthroscopy - Journal of Arthroscopic and Related Surgery, 2014, 30, 1294-1302.	2.7	51
14	Intervertebral disc regeneration with an adipose mesenchymal stem cell-derived tissue-engineered construct in a rat nucleotomy model. Acta Biomaterialia, 2019, 87, 118-129.	8.3	46
15	Next Generation Mesenchymal Stem Cell (MSC)â€"Based Cartilage Repair Using Scaffold-Free Tissue Engineered Constructs Generated with Synovial Mesenchymal Stem Cells. Cartilage, 2015, 6, 13S-29S.	2.7	44
16	Detection of abnormalities in the superficial zone of cartilage repaired using a tissue engineered construct derived from synovial stem cells. , 2012, 24, 292-307.		41
17	Effect of radial meniscal tear on in situ forces of meniscus and tibiofemoral relationship. Knee Surgery, Sports Traumatology, Arthroscopy, 2017, 25, 355-361.	4.2	37
18	Scaffold-free tissue engineering for injured joint surface restoration. Journal of Experimental Orthopaedics, 2018, 5, 2.	1.8	32

#	ARTICLE	IF	CITATIONS
19	Effect of Calcium Phosphateâ€"Hybridized Tendon Graft on Biomechanical Behavior in Anterior Cruciate Ligament Reconstruction in a Goat Model. American Journal of Sports Medicine, 2011, 39, 1059-1066.	4.2	31
20	ACL Function in Bicruciate-Retaining Total Knee Arthroplasty. Journal of Bone and Joint Surgery - Series A, 2018, 100, e114.	3.0	22
21	Zone-specific integrated cartilage repair using a scaffold-free tissue engineered construct derived from allogenic synovial mesenchymal stem cells: Biomechanical and histological assessments. Journal of Biomechanics, 2015, 48, 4101-4108.	2.1	21
22	Kinematics and Laxity of the Ankle Joint in Anatomic and Nonanatomic Anterior Talofibular Ligament Repair: A Biomechanical Cadaveric Study. American Journal of Sports Medicine, 2019, 47, 667-673.	4.2	19
23	A Biomechanical Comparison of Single-, Double-, and Triple-Bundle Anterior Cruciate Ligament Reconstructions Using a Hamstring Tendon Graft. Arthroscopy - Journal of Arthroscopic and Related Surgery, 2019, 35, 896-905.	2.7	19
24	Different effects of the lateral meniscus complete radial tear on the load distribution and transmission functions depending on the tear site. Knee Surgery, Sports Traumatology, Arthroscopy, 2021, 29, 342-351.	4.2	19
25	Effect of Calcium Phosphateâ€"Hybridized Tendon Graft in Anatomic Single-Bundle ACL Reconstruction in Goats. Orthopaedic Journal of Sports Medicine, 2016, 4, 232596711666265.	1.7	18
26	Comparison of 2 Different Formulations of Artificial Bone for a Hybrid Implant With a Tissue-Engineered Construct Derived From Synovial Mesenchymal Stem Cells: A Study Using a Rabbit Osteochondral Defect Model. American Journal of Sports Medicine, 2017, 45, 666-675.	4.2	18
27	Human iPS cell-derived cartilaginous tissue spatially and functionally replaces nucleus pulposus. Biomaterials, 2022, 284, 121491.	11.4	17
28	The in situ force in the calcaneofibular ligament and the contribution of this ligament to ankle joint stability. Clinical Biomechanics, 2016, 40, 8-13.	1.2	13
29	Use of Robotic Manipulators to Study Diarthrodial Joint Function. Journal of Biomechanical Engineering, 2017, 139, .	1.3	13
30	Surface Morphology and Stiffness of Cartilage-Like Tissue Repaired with a Scaffold-Free Tissue Engineered Construct. Journal of Biomechanical Science and Engineering, 2011, 6, 40-48.	0.3	11
31	Morphological Observations of Mesenchymal Stem Cell Adhesion to a Nanoperiodic-Structured Titanium Surface Patterned Using Femtosecond Laser Processing. Japanese Journal of Applied Physics, 2012, 51, 125203.	1.5	10
32	Complementary Function of the Meniscofemoral Ligament and Lateral Meniscus Posterior Root to Stabilize the Lateral Meniscus Posterior Horn: A Biomechanical Study in a Porcine Knee Model. Orthopaedic Journal of Sports Medicine, 2019, 7, 232596711882160.	1.7	9
33	Effect of Initial Graft Tension During Calcaneofibular Ligament Reconstruction on Ankle Kinematics and Laxity. American Journal of Sports Medicine, 2018, 46, 2935-2941.	4.2	8
34	Biomechanical Effects of Tibial Plateau Levelling Osteotomy on Joint Instability in Normal Canine Stifles: An In Vitro Study. Veterinary and Comparative Orthopaedics and Traumatology, 2020, 33, 301-307.	0.5	8
35	Stem Cell-Based Self-Assembled Tissues Cultured on a Nano-Periodic-Structured Surface Patterned Using Femtosecond Laser Processing. International Journal of Automation Technology, 2016, 10, 55-61.	1.0	8
36	Effect of Initial Graft Tension During Anterior Talofibular Ligament Reconstruction on Ankle Kinematics, Laxity, and In Situ Forces of the Reconstructed Graft. American Journal of Sports Medicine, 2020, 48, 916-922.	4.2	7

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37	Designing Elastic Modulus of Cell Culture Substrate to Regulate YAP and RUNX2 Localization for Controlling Differentiation of Human Mesenchymal Stem Cells. Analytical Sciences, 2021, 37, 447-451.	1.6	7
38	Stiffness of Canine Stifle Joint Ligaments at Relatively High Rates of Elongation. Journal of Biomechanical Engineering, 1991, 113, 404-409.	1.3	5
39	Varus-valgus instability in the anterior cruciate ligament-deficient knee: effect of posterior tibial load. Journal of Experimental Orthopaedics, 2017, 4, 24.	1.8	4
40	A longitudinal tear in the medial meniscal body decreased the in situ meniscus force under an axial load. Knee Surgery, Sports Traumatology, Arthroscopy, 2020, 28, 3457-3465.	4.2	4
41	Frictional properties of articular cartilage-like tissues repaired with a mesenchymal stem cell-based tissue engineered construct. , 2013, 2013, 401-4.		3
42	Analysis of passive tibio-femoral joint movement of Beagle dogs during flexion in cadaveric hind limbs without muscle. Journal of Veterinary Medical Science, 2020, 82, 148-152.	0.9	3
43	Chromatin condensation retains the osteogenic transcription factor, RUNX2, in the nucleus of human mesenchymal stem cells. Journal of Biomechanical Science and Engineering, 2020, 15, 20-00083-20-00083.	0.3	3
44	Effects of the Ankle Flexion Angle During Anterior Talofibular Ligament Reconstruction on Ankle Kinematics, Laxity, and In Situ Forces of the Reconstructed Graft. Foot and Ankle International, 2022, 43, 725-732.	2.3	3
45	A Compressed Collagen Construct for Studying Endothelialâ€"Smooth Muscle Cell Interaction Under High Shear Stress. Annals of Biomedical Engineering, 2022, , 1.	2.5	3
46	Influence of Permeability on the Compressive Property of Articular Cartilage: A Scaffold-Free, Stem Cell-Based Therapy for Cartilage Repair. , 2011, , .		2
47	Investigation of the effects of excessive tibial plateau angle and changes in load on ligament tensile forces in the stifle joints of dogs. American Journal of Veterinary Research, 2021, 82, 459-466.	0.6	2
48	Function of the crocodilian anterior cruciate ligaments. Journal of Morphology, 2021, 282, 1514-1522.	1.2	2
49	Reduction of in situ force through the meniscus with phased inner resection of medial meniscus: an experimental study in a porcine model. Journal of Experimental Orthopaedics, 2020, 7, 21.	1.8	2
50	Mechanical and Biologic Properties of Articular Cartilage Repair Biomaterials. , 2021, , 57-71.		1
51	Scaffold-Free Tissue Engineered Construct (TEC) Derived from Synovial Mesenchymal Stem Cells: Characterization and Demonstration of Efficacy to Cartilage Repair in a Large Animal Model. , 2012, , 751-761.		1
52	Anatomy and Biomechanics of the Human Posterior Cruciate Ligament. , 1994, , 200-214.		1
53	Superficial and Bulk Compressive Properties of Cartilage-Like Tissues Repaired with a Scaffold-Free, Stem Cell-Based Tissue Engineered Construct (TEC)(Machine Elements, Design and Manufacturing). Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C, 2010, 76, 2340-2344.	0.2	0
54	Development of a novel robotic system for joint mechanical tests using a real-time controller. Transactions of the JSME (in Japanese), 2015, 81, 14-00684-14-00684.	0.2	0

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55	Scaffold-Free Stem Cell-Based Tissue Engineering to Repair Cartilage and Its Potential Application to Other Musculoskeletal Tissues. , 2017, , 537-551.		0
56	Osteochondral Repair Using a Hybrid Implant Composed of Stem Cells and Biomaterial. , 2017, , 671-682.		0
57	Designing Culture Substrate for Controlling Mesenchymal Stem Cell Differentiation. Seibutsu Butsuri, 2021, 61, 389-391.	0.1	0