Maury Hull

List of Publications by Year
in descending order

185 papers	7,909 citations	50276 46 h-index	56724 83 g-index
187 all docs	187 docs citations	187 times ranked	3339 citing authors

#	Article	IF	Citations
1	A Finite Element Model of the Human Knee Joint for the Study of Tibio-Femoral Contact. Journal of Biomechanical Engineering, 2002, 124, 273-280.	1.3	413
2	Does A Kinematically Aligned Total Knee Arthroplasty Restore Function Without Failure Regardless of Alignment Category?. Clinical Orthopaedics and Related Research, 2013, 471, 1000-1007.	1.5	358
3	Structural Properties of Six Tibial Fixation Methods for Anterior Cruciate Ligament Soft Tissue Grafts. American Journal of Sports Medicine, 1999, 27, 35-43.	4.2	292
4	Accurate alignment and high function after kinematically aligned TKA performed with generic instruments. Knee Surgery, Sports Traumatology, Arthroscopy, 2013, 21, 2271-2280.	4.2	256
5	How the stiffness of meniscal attachments and meniscal material properties affect tibio-femoral contact pressure computed using a validated finite element model of the human knee joint. Journal of Biomechanics, 2003, 36, 19-34.	2.1	226
6	How Three Methods for Fixing a Medial Meniscal Autograft Affect Tibial Contact Mechanics. American Journal of Sports Medicine, 1999, 27, 320-328.	4.2	208
7	The effect of pedaling rate on coordination in cycling. Journal of Biomechanics, 1997, 30, 1051-1058.	2.1	200
8	Results of an Initial Experience with Custom-fit Positioning Total Knee Arthroplasty in a Series of 48 Patients. Orthopedics, 2008, 31, 857-63.	1.1	178
9	Implant Survival and Function Ten Years After Kinematically Aligned Total Knee Arthroplasty. Journal of Arthroplasty, 2018, 33, 3678-3684.	3.1	174
10	Compressive moduli of the human medial meniscus in the axial and radial directions at equilibrium and at a physiological strain rate. Journal of Orthopaedic Research, 2008, 26, 951-956.	2.3	165
11	EFFECT OF THE ANGLE OF THE FEMORAL AND TIBIAL TUNNELS IN THE CORONAL PLANE AND INCREMENTAL EXCISION OF THE POSTERIOR CRUCIATE LIGAMENT ON TENSION OF AN ANTERIOR CRUCIATE LIGAMENT GRAFT. Journal of Bone and Joint Surgery - Series A, 2003, 85, 1018-1029.	3.0	160
12	Does varus alignment adversely affect implant survival and function six years after kinematically aligned total knee arthroplasty?. International Orthopaedics, 2015, 39, 2117-2124.	1.9	156
13	Direct measurement of strain in the posterolateral bundle of the anterior cruciate ligament. Journal of Biomechanics, 1997, 30, 281-283.	2.1	147
14	Contributions of Femoral Fixation Methods to the Stiffness of Anterior Cruciate Ligament Replacements at Implantation. Arthroscopy - Journal of Arthroscopic and Related Surgery, 1999, 15, 379-387.	2.7	141
15	Comparison of Viscoelastic, Structural, and Material Properties of Double-Looped Anterior Cruciate Ligament Grafts Made From Bovine Digital Extensor and Human Hamstring Tendons. Journal of Biomechanical Engineering, 2001, 123, 162-169.	1.3	135
16	Native Knee Laxities at 0Â°, 45Â°, and 90Â° of Flexion and Their Relationship to the Goal of the Gap-Balancing Alignment Method of Total Knee Arthroplasty. Journal of Bone and Joint Surgery - Series A, 2015, 97, 1678-1684.	3.0	127
17	Nonanatomic Location of the Posterior Horn of a Medial Meniscal Autograft Implanted in a Cadaveric Knee Adversely Affects the Pressure Distribution on the Tibial Plateau. American Journal of Sports Medicine, 2002, 30, 74-82.	4.2	125
18	Evaluation of Performance Criteria for Simulation of Submaximal Steady-State Cycling Using a Forward Dynamic Model. Journal of Biomechanical Engineering, 1998, 120, 334-341.	1.3	113

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19	Contact Mechanics of the Medial Tibial Plateau after Implantation of a Medial Meniscal Allograft. American Journal of Sports Medicine, 2000, 28, 370-376.	4.2	113
20	Assessment of the Radii of the Medial and Lateral Femoral Condyles in Varus and Valgus Knees with Osteoarthritis. Journal of Bone and Joint Surgery - Series A, 2010, 92, 98-104.	3.0	111
21	Measurement of pedal loading in bicycling: II. Analysis and results. Journal of Biomechanics, 1981, 14, 857-872.	2.1	108
22	A theoretical analysis of preferred pedaling rate selection in endurance cycling. Journal of Biomechanics, 1999, 32, 409-415.	2.1	101
23	Strain in the medial collateral ligament of the human knee under single and combined loads. Journal of Biomechanics, 1996, 29, 199-206.	2.1	99
24	How Four Weeks of Implantation Affect the Strength and Stiffness of a Tendon Graft in a Bone Tunnel. American Journal of Sports Medicine, 2002, 30, 506-513.	4.2	97
25	Is the circumferential tensile modulus within a human medial meniscus affected by the test sample location and cross-sectional area?. Journal of Orthopaedic Research, 2000, 18, 945-951.	2.3	96
26	Femoral bone and cartilage wear is predictable at 0Â° and 90Â° in the osteoarthritic knee treated with total knee arthroplasty. Knee Surgery, Sports Traumatology, Arthroscopy, 2014, 22, 2975-2981.	4.2	96
27	How Frequently Do Four Methods for Mechanically Aligning a Total Knee Arthroplasty Cause Collateral Ligament Imbalance and Change Alignment from Normal in White Patients?. Journal of Bone and Joint Surgery - Series A, 2014, 96, e101.	3.0	95
28	Measurment of pedal loading in bicycling: I. Instrumentation. Journal of Biomechanics, 1981, 14, 843-855.	2.1	85
29	Does Calipered Kinematically Aligned TKA Restore Native Left to Right Symmetry of the Lower Limb and Improve Function?. Journal of Arthroplasty, 2018, 33, 398-406.	3.1	79
30	Use of roentgenography and magnetic resonance imaging to predict meniscal geometry determined with a three-dimensional coordinate digitizing system. Journal of Orthopaedic Research, 2000, 18, 228-237.	2.3	78
31	Are undesirable contact kinematics minimized after kinematically aligned total knee arthroplasty? An intersurgeon analysis of consecutive patients. Knee Surgery, Sports Traumatology, Arthroscopy, 2013, 21, 2281-2287.	4.2	78
32	Evaluation of the Single-Incision Arthroscopic Technique for Anterior Cruciate Ligament Replacement. American Journal of Sports Medicine, 1999, 27, 284-293.	4.2	77
33	A mechanically decoupled two force component bicycle pedal dynamometer. Journal of Biomechanics, 1988, 21, 375-386.	2.1	76
34	Multivariable optimization of cycling biomechanics. Journal of Biomechanics, 1989, 22, 1151-1161.	2.1	76
35	The sensitivity of tibiofemoral contact pressure to the size and shape of the lateral and medial menisci. Journal of Orthopaedic Research, 2004, 22, 807-814.	2.3	73
36	Do varus or valgus outliers have higher forces in the medial or lateral compartments than those which are in-range after a kinematically aligned total knee arthroplasty?. Bone and Joint Journal, 2017, 99-B, 1319-1328.	4.4	68

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37	What clinical characteristics and radiographic parameters are associated with patellofemoral instability after kinematically aligned total knee arthroplasty?. International Orthopaedics, 2017, 41, 283-291.	1.9	68
38	Does Malrotation of the Tibial and Femoral Components Compromise Function in Kinematically Aligned Total Knee Arthroplasty?. Orthopedic Clinics of North America, 2016, 47, 41-50.	1.2	67
39	A new technique for transmission of signals from implantable transducers. IEEE Transactions on Biomedical Engineering, 1998, 45, 614-619.	4.2	64
40	Variability of the location of the tibial tubercle affects the rotational alignment of the tibial component in kinematically aligned total knee arthroplasty. Knee Surgery, Sports Traumatology, Arthroscopy, 2013, 21, 2288-2295.	4.2	63
41	In vivo tensile behavior of a four-bundle hamstring graft as a replacement for the anterior cruciate ligament. Journal of Orthopaedic Research, 1997, 15, 539-545.	2.3	61
42	What mechanisms are associated with tibial component failure after kinematically-aligned total knee arthroplasty?. International Orthopaedics, 2017, 41, 1561-1569.	1.9	60
43	Bivariate optimization of pedalling rate and crank arm length in cycling. Journal of Biomechanics, 1988, 21, 839-849.	2.1	59
44	The level of compressive load affects conclusions from statistical analyses to determine whether a lateral meniscal autograft restores tibial contact pressure to normal: A study in human cadaveric knees. Journal of Orthopaedic Research, 2003, 21, 459-464.	2.3	56
45	A New Load Application System for In Vitro Study of Ligamentous Injuries to the Human Knee Joint. Journal of Biomechanical Engineering, 1995, 117, 373-382.	1.3	54
46	Longitudinal Shapes of the Tibia and Femur are Unrelated and Variable. Clinical Orthopaedics and Related Research, 2010, 468, 1142-1148.	1.5	48
47	Three-dimensional knee joint loading during seated cycling. Journal of Biomechanics, 1992, 25, 41-53.	2.1	45
48	Contact pressure and tension in anterior cruciate ligament grafts subjected to roof impingement during passive extension. Journal of Orthopaedic Research, 1997, 15, 263-268.	2.3	45
49	Kinematically aligned total knee arthroplasty limits high tibial forces, differences in tibial forces between compartments, and abnormal tibial contact kinematics during passive flexion. Knee Surgery, Sports Traumatology, Arthroscopy, 2018, 26, 1589-1601.	4.2	44
50	MRI-based technique for determining nonuniform deformations throughout the volume of articular cartilage explants. Magnetic Resonance in Medicine, 2005, 53, 321-328.	3.0	42
51	Does Kinematic Alignment and Flexion of a Femoral Component Designed for Mechanical Alignment Reduce the Proximal and Lateral Reach of the Trochlea?. Journal of Arthroplasty, 2016, 31, 1808-1813.	3.1	41
52	Kinematic alignment more closely restores the groove location and the sulcus angle of the native trochlea than mechanical alignment: implications for prosthetic design. Knee Surgery, Sports Traumatology, Arthroscopy, 2019, 27, 1504-1513.	4.2	41
53	The effect of lower-limb anatomy on knee loads during seated cycling. Journal of Biomechanics, 1992, 25, 1195-1207.	2.1	39
54	Response of intersegmental knee loads to foot/pedal platform degrees of freedom in cycling. Journal of Biomechanics, 1993, 26, 1327-1340.	2.1	39

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55	Heterogeneous three-dimensional strain fields during unconfined cyclic compression in bovine articular cartilage explants. Journal of Orthopaedic Research, 2005, 23, 1390-1398.	2.3	39
56	Identification of Cross-Sectional Parameters of Lateral Meniscal Allografts That Predict Tibial Contact Pressure in Human Cadaveric Knees. Journal of Biomechanical Engineering, 2002, 124, 481-489.	1.3	38
57	Toward An MRI-Based Method to Measure Non-Uniform Cartilage Deformation: An MRI-Cyclic Loading Apparatus System and Steady-State Cyclic Displacement of Articular Cartilage Under Compressive Loading. Journal of Biomechanical Engineering, 2003, 125, 180-188.	1.3	38
58	How the fixation method stiffness and initial tension affect anterior loadâ€“displacement of the knee and tension in anterior cruciate ligament grafts: A study in cadaveric knees using a double-loop hamstrings graft. Journal of Orthopaedic Research, 2004, 22, 613-624.	2.3	38
59	New algorithm for selecting meniscal allografts that best match the size and shape of the damaged meniscus. Journal of Orthopaedic Research, 2006, 24, 1535-1543.	2.3	38
60	Lengthening of double-looped tendon graft constructs in three regions after cyclic loading: A study using Roentgen stereophotogrammetric analysis. Journal of Orthopaedic Research, 2004, 22, 839-846.	2.3	37
61	Early Tension Loss in an Anterior Cruciate Ligament Graft. Journal of Bone and Joint Surgery - Series A, 2005, 87, 381-390.	3.0	37
62	An In Vitro Osteotomy Method to Expose the Medial Compartment of the Human Knee. Journal of Biomechanical Engineering, 1997, 119, 379-385.	1.3	36
63	A method for quantifying the anterior loadâ€“displacement behavior of the human knee in both the low and high stiffness regions. Journal of Biomechanics, 2001, 34, 1655-1660.	2.1	36
64	Design and demonstration of a dynamometric horseshoe for measuring ground reaction loads of horses during racing conditions. Journal of Biomechanics, 2005, 38, 2102-2112.	2.1	35
65	How Frequent Is Rotational Mismatch Within 0Â°Â±10Â° in Kinematically Aligned Total Knee Arthroplasty?. Orthopedics, 2013, 36, e1515-20.	1.1	35
66	Kinematic Alignment in Total Knee Arthroplasty. , 2012, , 1255-1268.		35
67	In situ deformation of cartilage in cyclically loaded tibiofemoral joints by displacement-encoded MRI. Osteoarthritis and Cartilage, 2009, 17, 1461-1468.	1.3	34
68	Foam-Reinforced Elderly Human Tibia Approximates Young Human Tibia Better than Porcine Tibia. American Journal of Sports Medicine, 2004, 32, 755-764.	4.2	32
69	Is There a Force Target That Predicts Early Patient-reported Outcomes After Kinematically Aligned TKA?. Clinical Orthopaedics and Related Research, 2019, 477, 1200-1207.	1.5	32
70	Non-driving intersegmental knee moments in cycling computed using a model that includes three-dimensional kinematics of the shank/foot and the effect of simplifying assumptions. Journal of Biomechanics, 2003, 36, 803-813.	2.1	31
71	Initial Tension and Anterior Load-Displacement Behavior of High-Stiffness Anterior Cruciate Ligament Graft Constructs. Journal of Bone and Joint Surgery - Series A, 2004, 86, 1675-1683.	3.0	31
72	Analysis of differences in laxities and neutral positions from native after kinematically aligned TKA using cruciate retaining implants. Journal of Orthopaedic Research, 2019, 37, 358-369.	2.3	30

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73	Implementation of a Five Degree of Freedom Automated System to Determine Knee Flexibility In Vitro. Journal of Biomechanical Engineering, 1990, 112, 392-400.	1.3	29
74	The limits of passive motion are variable between and unrelated within normal tibiofemoral joints. Journal of Orthopaedic Research, 2015, 33, 1594-1602.	2.3	29
75	A high-accuracy three-dimensional coordinate digitizing system for reconstructing the geometry of diarthrodial joints. Journal of Biomechanics, 1998, 31, 571-577.	2.1	28
76	Compaction of a Bone Dowel in the Tibial Tunnel Improves the Fixation Stiffness of a Soft Tissue Anterior Cruciate Ligament Graft. American Journal of Sports Medicine, 2005, 33, 719-725.	4.2	28
77	Analysis of Skiing Accidents Involving Combined Injuries to the Medial Collateral and Anterior Cruciate Ligaments. American Journal of Sports Medicine, 1997, 25, 35-40.	4.2	26
78	Quadriceps load aggravates and roofplasty mitigates active impingement of anterior cruciate ligament grafts against the intercondylar roof. Journal of Orthopaedic Research, 1998, 16, 611-617.	2.3	26
79	Deviations in femoral joint lines using calipered kinematically aligned TKA from virtually planned joint lines are small and do not affect clinical outcomes. Knee Surgery, Sports Traumatology, Arthroscopy, 2020, 28, 3118-3127.	4.2	26
80	Outcomes in Patients with a Calipered Kinematically Aligned TKA That Already Had a Contralateral Mechanically Aligned TKA. Journal of Knee Surgery, 2021, 34, 087-093.	1.6	26
81	Anterior Laxity, Slippage, and Recovery of Function in the First Year After Tibialis Allograft Anterior Cruciate Ligament Reconstruction. American Journal of Sports Medicine, 2011, 39, 78-88.	4.2	25
82	A Dynamic System Model for Estimating Surface-Induced Frame Loads During Off-Road Cycling. Journal of Mechanical Design, Transactions of the ASME, 1994, 116, 816-822.	2.9	23
83	How Changing the Inversion/Eversion Foot Angle Affects the Nondriving Intersegmental Knee Moments and the Relative Activation of the Vastii Muscles in Cycling. Journal of Biomechanical Engineering, 2006, 128, 391-398.	1.3	22
84	Simulation of total knee arthroplasty in 5Â° or 7Â° valgus: A study of gap imbalances and changes in limb and knee alignments from native. Journal of Orthopaedic Research, 2017, 35, 2031-2039.	2.3	22
85	A Total Knee Arthroplasty Is Stiffer When the Intraoperative Tibial Force Is Greater than the Native Knee. Journal of Knee Surgery, 2019, 32, 1008-1014.	1.6	22
86	A cruciate-retaining implant can treat both knees of most windswept deformities when performed with calipered kinematically aligned TKA. Knee Surgery, Sports Traumatology, Arthroscopy, 2021, 29, 437-445.	4.2	22
87	Small differences in tibial contact locations following kinematically aligned TKA from the native contralateral knee. Knee Surgery, Sports Traumatology, Arthroscopy, 2020, 28, 2893-2904.	4.2	21
88	Are the maximum shortening velocity and the shape parameter in a Hill-type model of whole muscle related to activation?. Journal of Biomechanics, 2005, 38, 2172-2180.	2.1	20
89	Functional Roles of the Leg Muscles When Pedaling in the Recumbent Versus the Upright Position. Journal of Biomechanical Engineering, 2005, 127, 301-310.	1.3	19
90	Is economy of competitive cyclists affected by the anteriorâ€“posterior foot position on the pedal?. Journal of Biomechanics, 2007, 40, 1262-1267.	2.1	18

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91	An In Vivo Study of the Effect of Distal Femoral Resection on Passive Knee Extension. Journal of Arthroplasty, 2010, 25, 1137-1142.	3.1	18
92	Accuracy evaluation of a lower-cost and four higher-cost laser scanners. Journal of Biomechanics, 2016, 49, 127-131.	2.1	18
93	Physiological response to cycling with both circular and noncircular chainrings. Medicine and Science in Sports and Exercise, 1992, 24, 1114-22.	0.4	18
94	Analysis of Leg Loading in Snow Skiing. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1978, 100, 177-186.	1.6	17
95	Pedal and knee loads using a multi-degree-of-freedom pedal platform in cycling. Journal of Biomechanics, 1997, 30, 505-511.	2.1	17
96	Coupled Motions Under Compressive Load in Intact and ACL-Deficient Knees: A Cadaveric Study. Journal of Biomechanical Engineering, 2007, 129, 818-824.	1.3	17
97	Internalâ€“external malalignment of the femoral component in kinematically aligned total knee arthroplasty increases tibial force imbalance but does not change laxities of the tibiofemoral joint. Knee Surgery, Sports Traumatology, Arthroscopy, 2018, 26, 1618-1628.	4.2	17
98	Error optimization of a three-dimensional magnetic resonance imaging tagging-based cartilage deformation technique. Magnetic Resonance in Medicine, 2005, 54, 1290-1294.	3.0	16
99	What are the bias, imprecision, and limits of agreement for finding the flexionâ€“extension plane of the knee with five tibial reference lines?. Knee, 2016, 23, 406-411.	1.6	16
100	Increases in tibial force imbalance but not changes in tibiofemoral laxities are caused by varusâ€“valgus malalignment of the femoral component in kinematically aligned TKA. Knee Surgery, Sports Traumatology, Arthroscopy, 2018, 26, 3238-3248.	4.2	16
101	A new tibial coordinate system improves the precision of anteriorâ€“posterior knee laxity measurements: A cadaveric study using Roentgen stereophotogrammetric analysis. Journal of Orthopaedic Research, 2005, 23, 327-333.	2.3	15
102	An Improved Tibial Force Sensor to Compute Contact Forces and Contact Locations In Vitro After Total Knee Arthroplasty. Journal of Biomechanical Engineering, 2017, 139, .	1.3	15
103	Negligible effect of surgeon experience on the accuracy and time to perform unrestricted caliper verified kinematically aligned TKA with manual instruments. Knee Surgery, Sports Traumatology, Arthroscopy, 2022, 30, 2966-2974.	4.2	15
104	Analysis of Road Induced Loads in Bicycle Frames. Journal of Mechanisms, Transmissions, and Automation in Design, 1983, 105, 138-145.	0.2	14
105	Goniometric measurement of hip motion in cycling while standing. Journal of Biomechanics, 1990, 23, 687-703.	2.1	13
106	An angular velocity profile in cycling derived from mechanical energy analysis. Journal of Biomechanics, 1991, 24, 577-586.	2.1	13
107	The effect of intersegmental knee moments on patellofemoral contact mechanics in cycling. Journal of Biomechanics, 1998, 31, 677-683.	2.1	13
108	Geometric symmetry of the solar surface of hooves of Thoroughbred racehorses. American Journal of Veterinary Research, 2003, 64, 1030-1039.	0.6	13

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109	High-Stiffness Distal Fixation Restores Anterior Laxity and Stiffness as Well as Joint Line Fixation with an Interference Screw. American Journal of Sports Medicine, 2007, 35, 2073-2082.	4.2	13
110	Does alignment of the limb and tibial width determine relative narrowing between compartments when planning mechanically aligned TKA?. Archives of Orthopaedic and Trauma Surgery, 2018, 138, 91-97.	2.4	13
111	In Vivo Calibration of a Femoral Fixation Device Transducer for Measuring Anterior Cruciate Ligament Graft Tension: A Study in an Ovine Model. Journal of Biomechanical Engineering, 2001, 123, 355-361.	1.3	12
112	Does Graft Construct Lengthening at the Fixations Cause an Increase in Anterior Laxity Following Anterior Cruciate Ligament Reconstruction in vivo?. Journal of Biomechanical Engineering, 2010, 132, 081001.	1.3	12
113	A Best-Fit of an Anatomic Tibial Baseplate Closely Parallels the Flexion-Extension Plane and Covers a High Percentage of the Proximal Tibia. Journal of Knee Surgery, 2020, 34, 1486-1494.	1.6	12
114	EARLY TENSION LOSS IN AN ANTERIOR CRUCIATE LIGAMENT GRAFT. Journal of Bone and Joint Surgery - Series A, 2005, 87, 381-390.	3.0	12
115	An activation-recruitment scheme for use in muscle modeling. Journal of Biomechanics, 1992, 25, 1467-1476.	2.1	11
116	Lengthening of a Single-Loop Tibialis Tendon Graft Construct After Cyclic Loading: A Study Using Roentgen Stereophotogrammetric Analysis. Journal of Biomechanical Engineering, 2006, 128, 437-442.	1.3	11
117	Quasi-Steady-State Displacement Response of Whole Human Cadaveric Knees in a MRI Scanner. Journal of Biomechanical Engineering, 2009, 131, 081004.	1.3	11
118	Tibial Contact Force and Contact Location Errors of the VERASENSE. Journal of Biomechanical Engineering, 2018, 140, .	1.3	11
119	Tibial forces are more useful than varusâ€valgus laxities for identifying and correcting overstuffing in kinematically aligned total knee arthroplasty. Journal of Orthopaedic Research, 2021, 39, 1271-1280.	2.3	11
120	Contributions of rider-induced loads to bicycle frame stress. Journal of Strain Analysis for Engineering Design, 1988, 23, 105-114.	1.8	10
121	A method for designing multiload component dynamometers incorporating octagonal strain rings. Experimental Mechanics, 1989, 29, 195-204.	2.0	10
122	Does a tensioning device pinned to the tibia improve knee anteriorâ€“posterior load-displacement compared to manual tensioning of the graft following anterior cruciate ligament reconstruction? A cadaveric study of two tibial fixation devices. Journal of Orthopaedic Research, 2006, 24, 1832-1841.	2.3	10
123	Empirical Relationship Between Lengthening an Anterior Cruciate Ligament Graft and Increases in Knee Anterior Laxity: A Human Cadaveric Study. Journal of Biomechanical Engineering, 2006, 128, 969-972.	1.3	10
124	Kinematically aligned TKA restores physiological patellofemoral biomechanics in the sagittal plane during a deep knee bend. Knee Surgery, Sports Traumatology, Arthroscopy, 2020, 28, 1497-1507.	4.2	10
125	Coordinate system requirements to determine motions of the tibiofemoral joint free from kinematic crosstalk errors. Journal of Biomechanics, 2020, 109, 109928.	2.1	10
126	Restoring the Patientâ€™s Pre-Arthritic Posterior Slope Is the Correct Target for Maximizing Internal Tibial Rotation When Implanting a PCL Retaining TKA with Calipered Kinematic Alignment. Journal of Personalized Medicine, 2021, 11, 516.	2.5	10

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127	More passive internal tibial rotation with posterior cruciate ligament retention than with excision in a medial pivot TKA implanted with unrestricted caliper verified kinematic alignment. Knee Surgery, Sports Traumatology, Arthroscopy, 2023, 31, 852-860.	4.2	10
128	A Surgeon That Switched to Unrestricted Kinematic Alignment with Manual Instruments Has a Short Learning Curve and Comparable Resection Accuracy and Outcomes to Those of an Experienced Surgeon. Journal of Personalized Medicine, 2022, 12, 1152.	2.5	10
129	A microcomputer controlled snow ski binding systemâ€"I. Instrumentation and field evaluation. Journal of Biomechanics, 1985, 18, 255-265.	2.1	9
130	Dehydration rates of meniscus and articular cartilage in vitro using a fast and accurate laser-based coordinate digitizing system. Journal of Biomechanics, 2007, 40, 3223-3229.	2.1	9
131	Revision of a Medial UKA to a Kinematic Aligned TKA: Comparison of Operative Complexity, Postoperative Alignment, and Outcome Scores to a Primary TKA. Journal of Knee Surgery, 2021, 34, 406-414.	1.6	9
132	Reorienting the tibial baseplate improves the registration accuracy of model-based radiostereometric analysis. Journal of Biomechanics, 2020, 113, 110078.	2.1	9
133	An Implantable Transducer for Measuring Tension in an Anterior Cruciate Ligament Graft. Journal of Biomechanical Engineering, 1998, 120, 327-333.	1.3	9
134	Kinematically Aligned TKA with MRI-based Cutting Guides. , 0, , 207-207.		9
135	Errors in Calculating Anteriorâ€"Posterior Tibial Contact Locations in Total Knee Arthroplasty Using Three-Dimensional Model to Two-Dimensional Image Registration in Radiographs: An In Vitro Study of Two Methods. Journal of Biomechanical Engineering, 2017, 139, .	1.3	8
136	The posterolateral upslope of a low-conforming insert blocks the medial pivot during a deep knee bend in TKA: a comparative analysis of two implants with different insert conformities. Knee Surgery, Sports Traumatology, Arthroscopy, 2023, 31, 3627-3636.	4.2	8
137	Design of Aluminum Bicycle Frames. Journal of Mechanical Design, 1981, 103, 901-907.	0.1	7
138	Telemetry system for monitoring anterior cruciate ligament graft forcesin vivo. Medical and Biological Engineering and Computing, 1998, 36, 330-336.	2.8	7
139	Maximum Total Point Motion of Five Points Versus All Points in Assessing Tibial Baseplate Stability. Journal of Biomechanical Engineering, 2021, 143, .	1.3	7
140	Differences in Trochlear Morphology from Native Using a Femoral Component Interfaced with an Anatomical Patellar Prosthesis in Kinematic Alignment and Mechanical Alignment. Journal of Knee Surgery, 2022, 35, 625-633.	1.6	7
141	Kinematically Aligned Total Knee Arthroplasty Using Calipered Measurements, Manual Instruments, and Verification Checks. , 2020, , 279-300.		7
142	Can an isometer predict the tensile behavior of a double-looped hamstring graft during anterior cruciate ligament reconstruction?. Journal of Orthopaedic Research, 1998, 16, 386-393.	2.3	6
143	An MRI-Based Method to Align the Compressive Loading Axis for Human Cadaveric Knees. Journal of Biomechanical Engineering, 2007, 129, 855-862.	1.3	6
144	Roentgen Stereophotogrammetric Analysis Methods for Determining Ten Causes of Lengthening of a Soft-Tissue Anterior Cruciate Ligament Graft Construct. Journal of Biomechanical Engineering, 2008, 130, 041002.	1.3	6

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145	Validation of a New Method for Finding the Rotational Axes of the Knee Using Both Marker-Based Roentgen Stereophotogrammetric Analysis and 3D Video-Based Motion Analysis for Kinematic Measurements. Journal of Biomechanical Engineering, 2011, 133, 051003.	1.3	6
146	Measurement Error Versus Repeated Measurements: A Guide Describing Two Methods for Computing Bias and Precision of Migration Measurements From Double Examinations Using Radiostereometric Analysis. Journal of Biomechanical Engineering, 2022, 144, .	1.3	6
147	A New Force Plate Design Incorporating Octagonal Strain Rings. Journal of Applied Biomechanics, 1995, 11, 311-321.	0.8	5
148	Static and Fatigue Strength of a Fixation Device Transducer for Measuring Anterior Cruciate Ligament Graft Tension. Journal of Biomechanical Engineering, 2000, 122, 600-603.	1.3	5
149	Tension in a double loop tendon anterior cruciate graft during a simulated open chain knee extension exercise. Journal of Orthopaedic Research, 2005, 23, 77-83.	2.3	5
150	Optimized Design of an Instrumented Spatial Linkage that Minimizes Errors in Locating the Rotational Axes of the Tibiofemoral Joint: A Computational Analysis. Journal of Biomechanical Engineering, 2013, 135, 31003.	1.3	5
151	Errors in femoral anteversion, femoral offset, and vertical offset followingrobotâ€assistedtotal hip arthroplasty. International Journal of Medical Robotics and Computer Assisted Surgery, 2020, 16, e2104.	2.3	5
152	An insert with less than spherical medial conformity causes a loss of passive internal rotation after calipered kinematically aligned TKA. Archives of Orthopaedic and Trauma Surgery, 2021, 141, 2287-2294.	2.4	5
153	Propagation of registration error into maximum total point motion to analyze tibial baseplate stability at six months using marker-based and model-based RSA. Journal of Biomechanics, 2021, 127, 110651.	2.1	5
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