Aboulfazl Shirazi-Adl

List of Publications by Year
in descending order

152 papers	7,995 citations	38742 50 h-index	58581 82 g-index
152 all docs	152 docs citations	152 times ranked	4203 citing authors

#	Article	IF	Citations
1	Blood clot behaves as a poro-visco-elastic material. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 128, 105101.	3.1	11
2	Submaximal electromyography-driven musculoskeletal modeling of the human trunk during static tasks: Equilibrium and stability analyses. Journal of Electromyography and Kinesiology, 2022, 65, 102664.	1.7	4
3	Adjacent segments biomechanics following lumbar fusion surgery: a musculoskeletal finite element model study. European Spine Journal, 2022, 31, 1630-1639.	2.2	7
4	Changes in gastrocnemii activation at mid-to-late stance markedly affects the intact and anterior cruciate ligament deficient knee biomechanics and stability in gait. Knee, 2021, 29, 530-540.	1.6	6
5	Modeling of human intervertebral disc annulus fibrosus with complex multi-fiber networks. Acta Biomaterialia, 2021, 123, 208-221.	8.3	26
6	Knee flexion angle and muscle activations control the stability of an anterior cruciate ligament deficient joint in gait. Journal of Biomechanics, 2021, 117, 110258.	2.1	6
7	A novel coupled musculoskeletal finite element model of the spine â€“ Critical evaluation of trunk models in some tasks. Journal of Biomechanics, 2021, 119, 110331.	2.1	13
8	Biomechanical effects of lumbar fusion surgery on adjacent segments using musculoskeletal models of the intact, degenerated and fused spine. Scientific Reports, 2021, 11, 17892.	3.3	20
9	Evaluating stability of human spine in static tasks: a combined in vivo-computational study. Computer Methods in Biomechanics and Biomedical Engineering, 2021, , 1-13.	1.6	4
10	Internal load-sharing in the human passive lumbar spine: Review of in vitro and finite element model studies. Journal of Biomechanics, 2020, 102, 109441.	2.1	19
11	On the modeling of human intervertebral disc annulus fibrosus: Elastic, permanent deformation and failure responses. Journal of Biomechanics, 2020, 102, 109463.	2.1	17
12	Sensitivity of the knee joint response, muscle forces and stability to variations in gait kinematics-kinetics. Journal of Biomechanics, 2020, 99, 109472.	2.1	9
13	Subject-specific regression equations to estimate lower spinal loads during symmetric and asymmetric static lifting. Journal of Biomechanics, 2020, 102, 109550.	2.1	15
14	Comparison of different lifting analysis tools in estimating lower spinal loads â€“ Evaluation of NIOSH criterion. Journal of Biomechanics, 2020, 112, 110024.	2.1	11
15	Estimation of Trunk Muscle Forces Using a Bio-Inspired Control Strategy Implemented in a Neuro-Osteo-Ligamentous Finite Element Model of the Lumbar Spine. Frontiers in Bioengineering and Biotechnology, 2020, 8, 949.	4.1	3
16	Effect of changes in the lumbar posture in lifting on trunk muscle and spinal loads: A combined in vivo, musculoskeletal, and finite element model study. Journal of Biomechanics, 2020, 104, 109728.	2.1	31
17	3rd International workshop on spinal loading and deformation. Journal of Biomechanics, 2020, 102, 109627.	2.1	0
18	Computational Musculoskeletal Biomechanics of the Knee Joint. , 2019, , 181-199.		1

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19	Subjectâ€specific loads on the lumbar spine in detailed finite element models scaled geometrically and kinematicâ€driven by radiography images. International Journal for Numerical Methods in Biomedical Engineering, 2019, 35, e3182.	2.1	16
20	Sensitivity of medial-lateral load sharing to changes in adduction moments or angles in an asymptomatic knee joint model during gait. Gait and Posture, 2019, 70, 39-47.	1.4	9
21	Hypersensitivity of trunk biomechanical model predictions to errors in image-based kinematics when using fully displacement-control techniques. Journal of Biomechanics, 2019, 84, 161-171.	2.1	14
22	2nd international workshop on spinal loading and deformation. Journal of Biomechanics, 2018, 70, 1-3.	2.1	1
23	Temporal and spatial variations of pressure within intervertebral disc nuclei. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 79, 309-313.	3.1	6
24	A combined passive and active musculoskeletal model study to estimate L4-L5 load sharing. Journal of Biomechanics, 2018, 70, 157-165.	2.1	35
25	Effects of eight different ligament property datasets on biomechanics of a lumbar L4-L5 finite element model. Journal of Biomechanics, 2018, 70, 33-42.	2.1	51
26	Effects of motion segment simulation and joint positioning on spinal loads in trunk musculoskeletal models. Journal of Biomechanics, 2018, 70, 149-156.	2.1	32
27	Trunk response and stability in standing under sagittal-symmetric pullâ€“push forces at different orientations, elevations and magnitudes. Journal of Biomechanics, 2018, 70, 166-174.	2.1	10
28	Computational study of the role of fluid content and flow on the lumbar disc response in cyclic compression: Replication of in vitro and in vivo conditions. Journal of Biomechanics, 2018, 70, 16-25.	2.1	11
29	Trunk musculoskeletal response in maximum voluntary exertions: A combined measurement-modeling investigation. Journal of Biomechanics, 2018, 70, 124-133.	2.1	15
30	Trunk Hybrid Passiveâ€“Active Musculoskeletal Modeling to Determine the Detailed T12â€“S1 Response Under In Vivo Loads. Annals of Biomedical Engineering, 2018, 46, 1830-1843.	2.5	25
31	Computation of the role of kinetics, kinematics, posterior tibial slope and muscle cocontraction on the stability of ACL-deficient knee joint at heel strike â€“ Towards identification of copers from non-copers. Journal of Biomechanics, 2018, 77, 171-182.	2.1	12
32	Obesity and Obesity Shape Markedly Influence Spine Biomechanics: A Subject-Specific Risk Assessment Model. Annals of Biomedical Engineering, 2017, 45, 2373-2382.	2.5	39
33	Subject-specific 2D/3D image registration and kinematics-driven musculoskeletal model of the spine. Journal of Biomechanics, 2017, 57, 18-26.	2.1	28
34	3D active-passive response of human knee joint in gait is markedly altered when simulated as a planar 2D joint. Biomechanics and Modeling in Mechanobiology, 2017, 16, 693-703.	2.8	20
35	Separate the Sheep from the Goats. Journal of Bone and Joint Surgery - Series A, 2017, 99, e102.	3.0	21
36	Computational stability of human knee joint at early stance in Gait: Effects of muscle coactivity and anterior cruciate ligament deficiency. Journal of Biomechanics, 2017, 63, 110-116.	2.1	15

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37	Fluid-flow dependent response of intervertebral discs under cyclic loading: On the role of specimen preparation and preconditioning. Journal of Biomechanics, 2016, 49, 846-856.	2.1	20
38	Subject-specific biomechanics of trunk: musculoskeletal scaling, internal loads and intradiscal pressure estimation. Biomechanics and Modeling in Mechanobiology, 2016, 15, 1699-1712.	2.8	53
39	Effects of sex, age, body height and body weight on spinal loads: Sensitivity analyses in a subject-specific trunk musculoskeletal model. Journal of Biomechanics, 2016, 49, 3492-3501.	2.1	54
40	Alterations in knee contact forces and centers in stance phase of gait: A detailed lower extremity musculoskeletal model. Journal of Biomechanics, 2016, 49, 185-192.	2.1	33
41	Activeâ€“passive biodynamics of the human trunk when seated on a wobble chair. Journal of Biomechanics, 2016, 49, 939-945.	2.1	9
42	Spine loading and deformation â€“ From loading to recovery. Journal of Biomechanics, 2016, 49, 813-816.	2.1	5
43	Estimation of loads on human lumbar spine: A review of in vivo and computational model studies. Journal of Biomechanics, 2016, 49, 833-845.	2.1	160
44	Effects of variation in external pulling force magnitude, elevation, and orientation on trunk muscle forces, spinal loads and stability. Journal of Biomechanics, 2016, 49, 946-952.	2.1	12
45	Cross-sectional area of human trunk paraspinal muscles before and after posterior lumbar surgery using magnetic resonance imaging. European Spine Journal, 2016, 25, 774-782.	2.2	26
46	Role of gastrocnemius activation in knee joint biomechanics: gastrocnemius acts as an ACL antagonist. Computer Methods in Biomechanics and Biomedical Engineering, 2016, 19, 376-385.	1.6	44
47	Effect of intervertebral translational flexibilities on estimations of trunk muscle forces, kinematics, loads, and stability. Computer Methods in Biomechanics and Biomedical Engineering, 2015, 18, 1760-1767.	1.6	32
48	Knee joint passive stiffness and moment in sagittal and frontal planes markedly increase with compression. Computer Methods in Biomechanics and Biomedical Engineering, 2015, 18, 339-350.	1.6	21
49	Computation of trunk stability in forward perturbationsâ€”Effects of preload, perturbation load, initial flexion and abdominal preactivation. Journal of Biomechanics, 2015, 48, 716-720.	2.1	14
50	Revised NIOSH Lifting Equation May generate spine loads exceeding recommended limits. International Journal of Industrial Ergonomics, 2015, 47, 1-8.	2.6	37
51	Comparison of trunk muscle forces, spinal loads and stability estimated by one stability- and three EMG-assisted optimization approaches. Medical Engineering and Physics, 2015, 37, 792-800.	1.7	32
52	Quantification of the role of tibial posterior slope in knee joint mechanics and ACL force in simulated gait. Journal of Biomechanics, 2015, 48, 1899-1905.	2.1	72
53	Trunk active response and spinal forces in sudden forward loading â€“ analysis of the role of perturbation load and pre-perturbation conditions by a kinematics-driven model. Journal of Biomechanics, 2015, 48, 44-52.	2.1	18
54	Effect of body weight on spinal loads in various activities: A personalized biomechanical modeling approach. Journal of Biomechanics, 2015, 48, 276-282.	2.1	55

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55	Comparative evaluation of six quantitative lifting tools to estimate spine loads during static activities. Applied Ergonomics, 2015, 48, 22-32.	3.1	73
56	Steeper posterior tibial slope markedly increases ACL force in both active gait and passive knee joint under compression. Journal of Biomechanics, 2014, 47, 1353-1359.	2.1	82
57	Effect of changes in orientation and position of external loads on trunk muscle activity and kinematics in upright standing. Journal of Electromyography and Kinesiology, 2014, 24, 387-393.	1.7	6
58	Partitioning of knee joint internal forces in gait is dictated by the knee adduction angle and not by the knee adduction moment. Journal of Biomechanics, 2014, 47, 1696-1703.	2.1	56
59	Comparison of eight published static finite element models of the intact lumbar spine: Predictive power of models improves when combined together. Journal of Biomechanics, 2014, 47, 1757-1766.	2.1	291
60	Evaluation of knee joint muscle forces and tissue stressesâ€strains during gait in severe OA versus normal subjects. Journal of Orthopaedic Research, 2014, 32, 69-78.	2.3	53
61	Elevation and orientation of external loads influence trunk neuromuscular response and spinal forces despite identical moments at the L5â€“S1 level. Journal of Biomechanics, 2014, 47, 3035-3042.	2.1	6
62	A novel stability and kinematics-driven trunk biomechanical model to estimate muscle and spinal forces. Medical Engineering and Physics, 2014, 36, 1296-1304.	1.7	44
63	Disc size markedly influences concentration profiles of intravenously administered solutes in the intervertebral disc: a computational study on glucosamine as a model solute. European Spine Journal, 2014, 23, 715-723.	2.2	16
64	Trunk response to sudden forward perturbations â€“ Effects of preload and sudden load magnitudes, posture and abdominal antagonistic activation. Journal of Electromyography and Kinesiology, 2014, 24, 394-403.	1.7	20
65	Lumbopelvic rhythm during forward and backward sagittal trunk rotations: Combined in vivo measurement with inertial tracking device and biomechanical modeling. Clinical Biomechanics, 2014, 29, 7-13.	1.2	84
66	Criterion validity and between-day reliability of an inertial-sensor-based trunk postural stability test during unstable sitting. Journal of Electromyography and Kinesiology, 2013, 23, 899-907.	1.7	39
67	What have we learned from finite element model studies of lumbar intervertebral discs in the past four decades?. Journal of Biomechanics, 2013, 46, 2342-2355.	2.1	102
68	Computational biomechanics of a lumbar motion segment in pure and combined shear loads. Journal of Biomechanics, 2013, 46, 2513-2521.	2.1	27
69	Trunk strength, muscle activity and spinal loads in maximum isometric flexion and extension exertions: A combined in vivo-computational study. Journal of Biomechanics, 2013, 46, 2228-2235.	2.1	20
70	Consideration of equilibrium equations at the hip joint alongside those at the knee and ankle joints has mixed effects on knee joint response during gait. Journal of Biomechanics, 2013, 46, 619-624.	2.1	24
71	Coupled objective function to study the role of abdominal muscle forces in lifting using the kinematics-driven model. Computer Methods in Biomechanics and Biomedical Engineering, 2013, 16, 54-65.	1.6	16
72	In vitro and in silico investigations of disc nucleus replacement. Journal of the Royal Society Interface, 2012, 9, 1869-1879.	3.4	50

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73	THE EFFECTS OF INTRA-ABDOMINAL PRESSURE ON THE STABILITY AND UNLOADING OF THE SPINE. Journal of Mechanics in Medicine and Biology, 2012, 12, 1250014.	0.7	9
74	Computational biodynamics of human knee joint in gait: From muscle forces to cartilage stresses. Journal of Biomechanics, 2012, 45, 2149-2156.	2.1	109
75	Computational pharmacokinetics of solute penetration into human intervertebral discsâ€"Effects of endplate permeability, solute molecular weight and disc size. Journal of Biomechanics, 2012, 45, 2195-2202.	2.1	10
76	Predictive equations for lumbar spine loads in load-dependent asymmetric one- and two-handed lifting activities. Clinical Biomechanics, 2012, 27, 537-544.	1.2	40
77	Computational investigation of sulphate diffusion into the dog disc. , 2011, , .		1
78	Intervertebral Disk Nutrition: A Review of Factors Influencing Concentrations of Nutrients and Metabolites. Orthopedic Clinics of North America, 2011, 42, 465-477.	1.2	158
79	Predictive equations to estimate spinal loads in symmetric lifting tasks. Journal of Biomechanics, 2011, 44, 84-91.	2.1	71
80	Soft tissue wobbling affects trunk dynamic response in sudden perturbations. Journal of Biomechanics, 2011, 44, 547-551.	2.1	18
81	An improved multi-joint EMG-assisted optimization approach to estimate joint and muscle forces in a musculoskeletal model of the lumbar spine. Journal of Biomechanics, 2011, 44, 1521-1529.	2.1	67
82	A comparative study of two trunk biomechanical models under symmetric and asymmetric loadings. Journal of Biomechanics, 2010, 43, 485-491.	2.1	81
83	Analysis of cell viability in intervertebral disc: Effect of endplate permeability on cell population. Journal of Biomechanics, 2010, 43, 1330-1336.	2.1	124
84	Response analysis of the lumbar spine during regular daily activitiesâ€"A finite element analysis. Journal of Biomechanics, 2010, 43, 1849-1856.	2.1	105
85	Knee joint biomechanics in closed-kinetic-chain exercises. Computer Methods in Biomechanics and Biomedical Engineering, 2009, 12, 661-670.	1.6	35
86	Trunk response analysis under sudden forward perturbations using a kinematics-driven model. Journal of Biomechanics, 2009, 42, 1193-1200.	2.1	31
87	Computational biomechanics of articular cartilage of human knee joint: Effect of osteochondral defects. Journal of Biomechanics, 2009, 42, 2458-2465.	2.1	104
88	A novel approach to evaluate abdominal coactivities for optimal spinal stability and compression force in lifting. Computer Methods in Biomechanics and Biomedical Engineering, 2009, 12, 735-745.	1.6	17
89	Transient analysis of trunk response in sudden release loading using kinematics-driven finite element model. Clinical Biomechanics, 2009, 24, 341-347.	1.2	14
90	Comparison of trunk muscle forces and spinal loads estimated by two biomechanical models. Clinical Biomechanics, 2009, 24, 533-541.	1.2	112

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91	Analysis of partial meniscectomy and ACL reconstruction in knee joint biomechanics under a combined loading. Clinical Biomechanics, 2009, 24, 755-761.	1.2	51
92	Computation of trunk equilibrium and stability in free flexionâ€“extension movements at different velocities. Journal of Biomechanics, 2008, 41, 412-421.	2.1	58
93	Seated whole body vibrations with high-magnitude accelerationsâ€”relative roles of inertia and muscle forces. Journal of Biomechanics, 2008, 41, 2639-2646.	2.1	40
94	Role of cartilage collagen fibrils networks in knee joint biomechanics under compression. Journal of Biomechanics, 2008, 41, 3340-3348.	2.1	167
95	Computation of trunk muscle forces, spinal loads and stability in whole-body vibration. Journal of Sound and Vibration, 2008, 318, 1334-1347.	3.9	43
96	Dynamic Stability of Spine Using Stability-Based Optimization and Muscle Spindle Reflex. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2008, 16, 106-118.	4.9	37
97	Knee joint biomechanics in open-kinetic-chain flexion exercises. Clinical Biomechanics, 2008, 23, 477-482.	1.2	43
98	Trunk biomechanics during maximum isometric axial torque exertions in upright standing. Clinical Biomechanics, 2008, 23, 969-978.	1.2	20
99	Computational biomechanics of knee joint in open kinetic chain extension exercises. Computer Methods in Biomechanics and Biomedical Engineering, 2008, 11, 55-61.	1.6	19
100	Relative efficiency of abdominal muscles in spine stability. Computer Methods in Biomechanics and Biomedical Engineering, 2008, 11, 291-299.	1.6	34
101	Effect of tibial tubercle elevation on biomechanics of the entire knee joint under muscle loads. Clinical Biomechanics, 2007, 22, 344-351.	1.2	47
102	Spinal stability and role of passive stiffness in dynamic squat and stoop lifts. Computer Methods in Biomechanics and Biomedical Engineering, 2007, 10, 351-360.	1.6	36
103	Computation of coupled diffusion of oxygen, glucose and lactic acid in an intervertebral disc. Journal of Biomechanics, 2007, 40, 2645-2654.	2.1	101
104	Analysis of squat and stoop dynamic liftings: muscle forces and internal spinal loads. European Spine Journal, 2007, 16, 687-699.	2.2	148
105	Trunk biomechanical models based on equilibrium at a single-level violate equilibrium at other levels. European Spine Journal, 2007, 16, 701-709.	2.2	42
106	Biomechanics of changes in ACL and PCL material properties or prestrains in flexion under muscle force-implications in ligament reconstruction. Computer Methods in Biomechanics and Biomedical Engineering, 2006, 9, 201-209.	1.6	58
107	Wrapping of trunk thoracic extensor muscles influences muscle forces and spinal loads in lifting tasks. Clinical Biomechanics, 2006, 21, 668-675.	1.2	69
108	Knee joint mechanics under quadricepsâ€“hamstrings muscle forces are influenced by tibial restraint. Clinical Biomechanics, 2006, 21, 841-848.	1.2	49

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109	Analysis of large compression loads on lumbar spine in flexion and in torsion using a novel wrapping element. Journal of Biomechanics, 2006, 39, 267-275.	2.1	121
110	Model and in vivo studies on human trunk load partitioning and stability in isometric forward flexions. Journal of Biomechanics, 2006, 39, 510-521.	2.1	155
111	Sensitivity of kinematics-based model predictions to optimization criteria in static lifting tasks. Medical Engineering and Physics, 2006, 28, 504-514.	1.7	79
112	Role of intra-abdominal pressure in the unloading and stabilization of the human spine during static lifting tasks. European Spine Journal, 2006, 15, 1265-1275.	2.2	71
113	Biomechanics of Changes in Lumbar Posture in Static Lifting. Spine, 2005, 30, 2637-2648.	2.0	129
114	Cruciate coupling and screw-home mechanism in passive knee joint during extensionâ€“flexion. Journal of Biomechanics, 2005, 38, 1075-1083.	2.1	125
115	Biomechanics of the knee joint in flexion under various quadriceps forces. Knee, 2005, 12, 424-434.	1.6	193
116	Spinal muscle forces, internal loads and stability in standing under various postures and loadsâ€”application of kinematics-based algorithm. European Spine Journal, 2005, 14, 381-392.	2.2	71
117	Effect of changes in cruciate ligaments pretensions on knee joint laxity and ligament forces. Computer Methods in Biomechanics and Biomedical Engineering, 2005, 8, 17-24.	1.6	17
118	Effect of load position on muscle forces, internal loads and stability of the human spine in upright postures. Computer Methods in Biomechanics and Biomedical Engineering, 2005, 8, 359-368.	1.6	25
119	Effect of strain rate on tensile properties of sheep disc anulus fibrosus. Technology and Health Care, 2004, 12, 333-342.	1.2	27
120	Muscle Activity, Internal Loads, and Stability of the Human Spine in Standing Postures: Combined Model and In Vivo Studies. Spine, 2004, 29, 2633-2642.	2.0	125
121	Biomechanics of passive knee joint in drawer: load transmission in intact and ACL-deficient joints. Knee, 2003, 10, 265-276.	1.6	63
122	On the coupling between anterior and posterior cruciate ligaments, and knee joint response under anterior femoral drawer in flexion: a finite element study. Clinical Biomechanics, 2003, 18, 751-759.	1.2	65
123	Muscle force evaluation and the role of posture in human lumbar spine under compression. European Spine Journal, 2002, 11, 519-526.	2.2	66
124	Load-bearing and stress analysis of the human spine under a novel wrapping compression loading. Clinical Biomechanics, 2000, 15, 718-725.	1.2	75
125	Effect of changes in lordosis on mechanics of the lumbar spine-lumbar curvature in lifting. Journal of Spinal Disorders, 1999, 12, 436-47.	1.1	7
126	Synergy of the human spine in neutral postures. European Spine Journal, 1998, 7, 471-479.	2.2	86

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127	Biomechanical response of the passive human knee joint under anterior-posterior forces. Clinical Biomechanics, 1998, 13, 625-633.	1.2	53
128	The Effect of Variations in Trunk Models in Predicting Muscle Strength and Spinal Loading. Journal of Musculoskeletal Research, 1997, 01, 55-69.	0.2	24
129	Biomechanics of human tibio-femoral joint in axial rotation. Knee, 1997, 4, 203-213.	1.6	28
130	Finite element analysis of human knee joint in varus-valgus. Clinical Biomechanics, 1997, 12, 139-148.	1.2	186
131	Poroelastic creep response analysis of a lumbar motion segment in compression. Journal of Biomechanics, 1996, 29, 1331-1339.	2.1	230
132	Role of posture in mechanics of the lumbar spine in compression. Journal of Spinal Disorders, 1996, 9, 277-86.	1.1	6
133	Biomechanics of the human knee joint in compression: reconstruction, mesh generation and finite element analysis. Knee, 1995, 2, 69-79.	1.6	162
134	Analysis of Role of Bone Compliance on Mechanics of a Lumbar Motion Segment. Journal of Biomechanical Engineering, 1994, 116, 408-412.	1.3	37
135	Fixation pull-out response measurement of bone screws and porous-surfaced posts. Journal of Biomechanics, 1994, 27, 1249-1258.	2.1	29
136	Nonlinear stress analysis of the whole lumbar spine in torsionâ€”Mechanics of facet articulation. Journal of Biomechanics, 1994, 27, 289-299.	2.1	90
137	Biomechanics of the Lumbar Spine in Sagittal/Lateral Moments. Spine, 1994, 19, 2407-2414.	2.0	129
138	Experimental determination of friction characteristics at the trabecular bone/porous-coated metal interface in cementless implants. Journal of Biomedical Materials Research Part B, 1993, 27, 167-175.	3.1	205
139	Nonlinear Response Analysis of the Human Ligamentous Lumbar Spine in Compression. Spine, 1993, 18, 147-158.	2.0	49
140	Finite Element Stress Analysis of a Push-Out Test Part 1: Fixed Interface Using Stress Compatible Elements. Journal of Biomechanical Engineering, 1992, 114, 111-118.	1.3	30
141	Finite Element Stress Analysis of a Push-Out Test Part II: Free Interface With Nonlinear Friction Properties. Journal of Biomechanical Engineering, 1992, 114, 155-161.	1.3	20
142	Dynamics of Human Lumbar Intervertebral Joints. Spine, 1992, 17, 93-102.	2.0	134
143	Finite-element simulation of changes in the fluid content of human lumbar discs. Mechanical and clinical implications. Spine, 1992, 17, 206-12.	2.0	12
144	Finite-Element Evaluation of Contact Loads on Facets of an L2-L3 Lumbar Segment in Complex Loads. Spine, 1991, 16, 533-541.	2.0	97

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145	Reconstruction of a human ligamentous lumbar spine using CT images â€" A three-dimensional finite element mesh generation. Annals of Biomedical Engineering, 1991, 19, 291-302.	2.5	43
146	A parametric axisymmetric model study on the interface motions in porous-surfaced tibial implants. Annals of Biomedical Engineering, 1989, 17, 411-421.	2.5	13
147	Nonlinear finite element analysis of wrapping uniaxial elements. Computers and Structures, 1989, 32, 119-123.	4.4	13
148	On the fibre composite material models of disc annulusâ€"Comparison of predicted stresses. Journal of Biomechanics, 1989, 22, 357-365.	2.1	73
149	Strain in Fibers of a Lumbar Disc. Spine, 1989, 14, 96-103.	2.0	136
150	Nonlinear Gross Response Analysis of a Lumbar Motion Segment in Combined Sagittal Loadings. Journal of Biomechanical Engineering, 1988, 110, 216-222.	1.3	25
151	A finite element study of a lumbar motion segment subjected to pure sagittal plane moments. Journal of Biomechanics, 1986, 19, 331-350.	2.1	233
152	3-D finite element modeling of human spinal discs and correlation with volume-pressure relation due to loading. , 0, , .		1