Ming Zhang

List of Publications by Citations

190	4,632	36	58
papers	citations	h-index	g-index
205	5,651	3.4	5.77
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
190	Three-dimensional finite element analysis of the foot during standing--a material sensitivity study. *Journal of Biomechanics*, **2005**, 38, 1045-54	2.9	293
189	Estimating the effective Young's modulus of soft tissues from indentation tests--nonlinear finite element analysis of effects of friction and large deformation. *Medical Engineering and Physics*, **1997**, 19, 512-7	2.4	187
188	Effect of Achilles tendon loading on plantar fascia tension in the standing foot. *Clinical Biomechanics*, **2006**, 21, 194-203	2.2	155
187	A 3-dimensional finite element model of the human foot and ankle for insole design. *Archives of Physical Medicine and Rehabilitation*, **2005**, 86, 353-8	2.8	127
186	Effects of plantar fascia stiffness on the biomechanical responses of the ankle-foot complex. *Clinical Biomechanics*, **2004**, 19, 839-46	2.2	123
185	Parametric design of pressure-relieving foot orthosis using statistics-based finite element method. *Medical Engineering and Physics*, **2008**, 30, 269-77	2.4	120
184	Effectiveness of insoles on plantar pressure redistribution. *Journal of Rehabilitation Research and Development*, **2004**, 41, 767-74		97
183	Development of a finite element model of female foot for high-heeled shoe design. *Clinical Biomechanics*, **2008**, 23 Suppl 1, S31-8	2.2	95
182	Consequences of partial and total plantar fascia release: a finite element study. *Foot and Ankle International*, **2006**, 27, 125-32	3.3	83
181	Load transfer mechanics between trans-tibial prosthetic socket and residual limb--dynamic effects. *Journal of Biomechanics*, **2004**, 37, 1371-7	2.9	79
180	Finite element modelling of a residual lower-limb in a prosthetic socket: a survey of the development in the first decade. *Medical Engineering and Physics*, **1998**, 20, 360-73	2.4	77
179	Finite element modeling of the contact interface between trans-tibial residual limb and prosthetic socket. *Medical Engineering and Physics*, **2004**, 26, 655-62	2.4	73
178	Biomechanics of pressure ulcer in body tissues interacting with external forces during locomotion. *Annual Review of Biomedical Engineering*, **2010**, 12, 29-53	12	72
177	Effect of sock on biomechanical responses of foot during walking. *Clinical Biomechanics*, **2006**, 21, 314-21	2.2	71
176	Regional variations in microstructural properties of vertebral trabeculae with aging. *Journal of Bone and Mineral Metabolism*, **2005**, 23, 174-80	2.9	69
175	Why do woodpeckers resist head impact injury: a biomechanical investigation. *PLoS ONE*, **2011**, 6, e26490	3.7	69
174	Biomechanical responses of the intervertebral joints to static and vibrational loading: a finite element study. *Clinical Biomechanics*, **2003**, 18, 790-9	2.2	65

173	Quantitative comparison of plantar foot shapes under different weight-bearing conditions. *Journal of Rehabilitation Research and Development*, **2003**, 40, 517-26		61
172	Pressure distribution at the stump/socket interface in transtibial amputees during walking on stairs, slope and non-flat road. *Clinical Biomechanics*, **2006**, 21, 1067-73	2.2	60
171	Low intensity pulsed ultrasound accelerated bone remodeling during consolidation stage of distraction osteogenesis. *Journal of Orthopaedic Research*, **2006**, 24, 263-70	3.8	53
170	Regional differences in pain threshold and tolerance of the transtibial residual limb: including the effects of age and interface material. *Archives of Physical Medicine and Rehabilitation*, **2005**, 86, 641-9	2.8	53
169	Influence of malalignment on socket reaction moments during gait in amputees with transtibial prostheses. *Gait and Posture*, **2013**, 37, 620-6	2.6	52
168	Computational Models of the Foot and Ankle for Pathomechanics and Clinical Applications: A Review. *Annals of Biomedical Engineering*, **2016**, 44, 213-21	4.7	51
167	Wavelet coherence analysis of spontaneous oscillations in cerebral tissue oxyhemoglobin concentrations and arterial blood pressure in elderly subjects. *Microvascular Research*, **2014**, 93, 14-20	3.7	50
166	Comparison of stress on knee cartilage during kneeling and standing using finite element models. *Medical Engineering and Physics*, **2014**, 36, 439-47	2.4	47
165	Comparison of computational analysis with clinical measurement of stresses on below-knee residual limb in a prosthetic socket. *Medical Engineering and Physics*, **2000**, 22, 607-12	2.4	47
164	Effect of heel height on in-shoe localized triaxial stresses. *Journal of Biomechanics*, **2011**, 44, 2267-72	2.9	45
163	Age-related changes in spontaneous oscillations assessed by wavelet transform of cerebral oxygenation and arterial blood pressure signals. *Journal of Cerebral Blood Flow and Metabolism*, **2013**, 33, 692-9	7.3	44
162	3D foot shape generation from 2D information. *Ergonomics*, **2005**, 48, 625-41	2.9	44
161	The effect of shear forces externally applied to skin surface on underlying tissues. *Journal of Biomedical Engineering*, **1993**, 15, 451-6		44
160	Finite Element Analysis of Foot and Ankle Impact Injury: Risk Evaluation of Calcaneus and Talus Fracture. *PLoS ONE*, **2016**, 11, e0154435	3.7	42
159	Wavelet coherence analysis of prefrontal oxygenation signals in elderly subjects with hypertension. *Physiological Measurement*, **2014**, 35, 777-91	2.9	41
158	Does location of rotation center in artificial disc affect cervical biomechanics?. *Spine*, **2015**, 40, E469-75	3.3	40
157	Cerebral autoregulation in response to posture change in elderly subjects-assessment by wavelet phase coherence analysis of cerebral tissue oxyhemoglobin concentrations and arterial blood pressure signals. *Behavioural Brain Research*, **2015**, 278, 330-6	3.4	37
156	Biomechanics of first ray hypermobility: an investigation on joint force during walking using finite element analysis. *Medical Engineering and Physics*, **2014**, 36, 1388-93	2.4	36

155	Characterization and thermal behavior of calcium deficient hydroxyapatite whiskers with various Ca/P ratios. *Materials Chemistry and Physics*, **2011**, 126, 642-648	4.4	36
154	Assessment of cerebral oxygenation during prolonged simulated driving using near infrared spectroscopy: its implications for fatigue development. *European Journal of Applied Physiology*, **2009**, 107, 281-7	3.4	36
153	Functional restoration and risk of non-union of the first metatarsocuneiform arthrodesis for hallux valgus: A finite element approach. *Journal of Biomechanics*, **2015**, 48, 3142-8	2.9	35
152	Biomechanical effects of cervical arthroplasty with U-shaped disc implant on segmental range of motion and loading of surrounding soft tissue. *European Spine Journal*, **2014**, 23, 613-21	2.7	35
151	Effect of lumbar support on seating comfort predicted by a whole human body-seat model. *International Journal of Industrial Ergonomics*, **2016**, 53, 319-327	2.9	34
150	Glucosamine sulphate-loaded distearoyl phosphocholine liposomes for osteoarthritis treatment: combination of sustained drug release and improved lubrication. *Biomaterials Science*, **2019**, 7, 2716-2728	7.4	33
149	A finite element analysis of the load transfer between an above-knee residual limb and its prosthetic socket--roles of interface friction and distal-end boundary conditions. *IEEE Transactions on Rehabilitation Engineering: A Publication of the IEEE Engineering in Medicine and Biology Society*, **1996**, 4, 337-46		33
148	Perception of socket alignment perturbations in amputees with transtibial prostheses. *Journal of Rehabilitation Research and Development*, **2012**, 49, 843-53		32
147	Biomechanical simulation of high-heeled shoe donning and walking. *Journal of Biomechanics*, **2013**, 46, 2067-74	2.9	31
146	Effects of Ankle Arthrodesis on Biomechanical Performance of the Entire Foot. *PLoS ONE*, **2015**, 10, e0134340	3.7	31
145	Spectral analysis of near-infrared spectroscopy signals measured from prefrontal lobe in subjects at risk for stroke. *Medical Physics*, **2012**, 39, 2179-85	4.4	31
144	Using computational simulation to aid in the prediction of socket fit: a preliminary study. *Medical Engineering and Physics*, **2007**, 29, 923-9	2.4	31
143	Photocrosslinkable nanocomposite ink for printing strong, biodegradable and bioactive bone graft. *Biomaterials*, **2020**, 263, 120378	15.6	31
142	Relationships between femoral strength evaluated by nonlinear finite element analysis and BMD, material distribution and geometric morphology. *Annals of Biomedical Engineering*, **2012**, 40, 1575-85	4.7	30
141	Design of monolimb using finite element modelling and statistics-based Taguchi method. *Clinical Biomechanics*, **2005**, 20, 759-66	2.2	30
140	Finite element simulation on posterior tibial tendinopathy: Load transfer alteration and implications to the onset of pes planus. *Clinical Biomechanics*, **2018**, 51, 10-16	2.2	30
139	Posture-related changes in brain functional connectivity as assessed by wavelet phase coherence of NIRS signals in elderly subjects. *Behavioural Brain Research*, **2016**, 312, 238-45	3.4	29
138	Effects of heel base size, walking speed, and slope angle on center of pressure trajectory and plantar pressure when wearing high-heeled shoes. *Human Movement Science*, **2015**, 41, 307-19	2.4	28

137	Regional variations in microstructural properties of vertebral trabeculae with structural groups. *Spine*, **2006**, 31, 24-32	3.3	28
136	Foot arch deformation and plantar fascia loading during running with rearfoot strike and forefoot strike: A dynamic finite element analysis. *Journal of Biomechanics*, **2019**, 83, 260-272	2.9	28
135	Redistribution of knee stress using laterally wedged insole intervention: Finite element analysis of knee-ankle-foot complex. *Clinical Biomechanics*, **2013**, 28, 61-7	2.2	27
134	Current methods in computer-aided engineering for footwear design. *Footwear Science*, **2009**, 1, 31-46	1.4	27
133	Biomechanics of fencing sport: A scoping review. *PLoS ONE*, **2017**, 12, e0171578	3.7	27
132	Finite element analysis of biomechanical effects of total ankle arthroplasty on the foot. *Journal of Orthopaedic Translation*, **2018**, 12, 55-65	4.2	26
131	In-shoe plantar tri-axial stress profiles during maximum-effort cutting maneuvers. *Journal of Biomechanics*, **2014**, 47, 3799-806	2.9	26
130	A quasi-dynamic nonlinear finite element model to investigate prosthetic interface stresses during walking for trans-tibial amputees. *Clinical Biomechanics*, **2005**, 20, 630-5	2.2	25
129	Finite-element analysis to determine effect of monolimb flexibility on structural strength and interaction between residual limb and prosthetic socket. *Journal of Rehabilitation Research and Development*, **2004**, 41, 775-86		25
128	Effective Connectivity Analysis of the Brain Network in Drivers during Actual Driving Using Near-Infrared Spectroscopy. *Frontiers in Behavioral Neuroscience*, **2017**, 11, 211	3.5	24
127	Effect of alignment changes on sagittal and coronal socket reaction moment interactions in transtibial prostheses. *Journal of Biomechanics*, **2013**, 46, 1343-50	2.9	23
126	Frequency-specific functional connectivity revealed by wavelet-based coherence analysis in elderly subjects with cerebral infarction using NIRS method. *Medical Physics*, **2015**, 42, 5391-403	4.4	23
125	Finite element modeling and modal analysis of the human spine vibration configuration. *IEEE Transactions on Biomedical Engineering*, **2011**, 58, 2987-90	5	23
124	Phase and thermal stability of hydroxyapatite whiskers precipitated using amine additives. *Ceramics International*, **2011**, 37, 279-286	5.1	23
123	Biomechanical study of tarsometatarsal joint fusion using finite element analysis. *Medical Engineering and Physics*, **2014**, 36, 1394-400	2.4	22
122	Effect of transtibial prosthesis alignment changes on out-of-plane socket reaction moments during walking in amputees. *Journal of Biomechanics*, **2012**, 45, 2603-9	2.9	22
121	Regional variations in the apparent and tissue-level mechanical parameters of vertebral trabecular bone with aging using micro-finite element analysis. *Annals of Biomedical Engineering*, **2007**, 35, 1622-31	4.7	22
120	A serrated jaw clamp for tendon gripping. *Medical Engineering and Physics*, **2006**, 28, 379-82	2.4	22

119	Functional connectivity analysis of distracted drivers based on the wavelet phase coherence of functional near-infrared spectroscopy signals. *PLoS ONE*, **2017**, 12, e0188329	3.7	21
118	The influence of high-heeled shoes on strain and tension force of the anterior talofibular ligament and plantar fascia during balanced standing and walking. *Medical Engineering and Physics*, **2016**, 38, 1152-6	2.4	21
117	Age-related alterations in phase synchronization of oxyhemoglobin concentration changes in prefrontal tissues as measured by near-infrared spectroscopy signals. *Microvascular Research*, **2016**, 103, 19-25	3.7	21
116	Finite element analysis of locking plate and two types of intramedullary nails for treating mid-shaft clavicle fractures. *Injury*, **2016**, 47, 1618-23	2.5	21
115	Wearable Vibrotactile Biofeedback Device Allowing Identification of Different Floor Conditions for Lower-Limb Amputees. *Archives of Physical Medicine and Rehabilitation*, **2016**, 97, 1210-3	2.8	20
114	Immediate Effects of Medially Posted Insoles on Lower Limb Joint Contact Forces in Adult Acquired Flatfoot: A Pilot Study. *International Journal of Environmental Research and Public Health*, **2020**, 17,	4.6	20
113	Biomechanism of impact resistance in the woodpecker's head and its application. *Science China Life Sciences*, **2013**, 56, 715-9	8.5	19
112	Peak vertical ground reaction force during two-leg landing: a systematic review and mathematical modeling. *BioMed Research International*, **2014**, 2014, 126860	3	19
111	Long-distance walking effects on trans-tibial amputees compensatory gait patterns and implications on prosthetic designs and training. *Gait and Posture*, **2012**, 35, 328-33	2.6	19
110	Deterioration of stress distribution due to tunnel creation in single-bundle and double-bundle anterior cruciate ligament reconstructions. *Annals of Biomedical Engineering*, **2012**, 40, 1554-67	4.7	18
109	Quantifying the regional load-bearing ability of trans-tibial stumps. *Prosthetics and Orthotics International*, **2006**, 30, 25-34	1.5	18
108	Wavelet coherence analysis of prefrontal tissue oxyhaemoglobin signals as measured using near-infrared spectroscopy in elderly subjects with cerebral infarction. *Microvascular Research*, **2014**, 95, 108-15	3.7	17
107	Biomechanical response of the musculoskeletal system to whole body vibration using a seated driver model. *International Journal of Industrial Ergonomics*, **2015**, 45, 91-97	2.9	17
106	Biomechanical consequences of subtalar joint arthroereisis in treating posterior tibial tendon dysfunction: a theoretical analysis using finite element analysis. *Computer Methods in Biomechanics and Biomedical Engineering*, **2017**, 20, 1525-1532	2.1	16
105	The application of 3D-printed transparent facemask for facial scar management and its biomechanical rationale. *Burns*, **2018**, 44, 453-461	2.3	16
104	Sleeping mattress determinants and evaluation: a biomechanical review and critique. *PeerJ*, **2019**, 7, e6364	3.1	16
103	Assessment of cerebral oxygenation oscillations in subjects with hypertension. *Microvascular Research*, **2013**, 88, 32-41	3.7	16
102	Effects of Sleep Deprivation on Phase Synchronization as Assessed by Wavelet Phase Coherence Analysis of Prefrontal Tissue Oxyhemoglobin Signals. *PLoS ONE*, **2017**, 12, e0169279	3.7	16

101	A Review of the Application of Additive Manufacturing in Prosthetic and Orthotic Clinics from a Biomechanical Perspective. *Engineering*, **2020**, 6, 1258-1266	9.7	16
100	Apparent- and Tissue-Level Yield Behaviors of L4 Vertebral Trabecular Bone and Their Associations with Microarchitectures. *Annals of Biomedical Engineering*, **2016**, 44, 1204-23	4.7	15
99	MICRO-FINITE ELEMENT ANALYSIS OF TRABECULAR BONE YIELD BEHAVIOR EFFECTS OF TISSUE NONLINEAR MATERIAL PROPERTIES. *Journal of Mechanics in Medicine and Biology*, **2011**, 11, 563-580	0.7	15
98	Influence of anteroposterior shifting of trunk mass centroid on vibrational configuration of human spine. *Computers in Biology and Medicine*, **2008**, 38, 146-51	7	15
97	Finite Element Analysis of Generalized Ligament Laxity on the Deterioration of Hallux Valgus Deformity (Bunion). *Frontiers in Bioengineering and Biotechnology*, **2020**, 8, 571192	5.8	15
96	Biomechanical comparison of locking plate and crossing metallic and absorbable screws fixations for intra-articular calcaneal fractures. *Science China Life Sciences*, **2016**, 59, 958-64	8.5	15
95	Prediction on the plantar fascia strain offload upon Fascia taping and Low-Dye taping during running. *Journal of Orthopaedic Translation*, **2020**, 20, 113-121	4.2	14
94	Effects of long-distance walking on socket-limb interface pressure, tactile sensitivity and subjective perceptions of trans-tibial amputees. *Disability and Rehabilitation*, **2013**, 35, 888-93	2.4	13
93	Correlation analysis between prefrontal oxygenation oscillations and cerebral artery hemodynamics in humans. *Microvascular Research*, **2011**, 82, 304-10	3.7	13
92	Vibration modes of injured spine at resonant frequencies under vertical vibration. *Spine*, **2009**, 34, E682-8	3.3	13
91	Gait analysis of low-cost flexible-shank transtibial prostheses. *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, **2006**, 14, 370-7	4.8	13
90	Tai Chi Chuan exercise related change in brain function as assessed by functional near-infrared spectroscopy. *Scientific Reports*, **2019**, 9, 13198	4.9	12
89	Wavelet analysis of sacral tissue oxygenation oscillations by near-infrared spectroscopy in persons with spinal cord injury. *Microvascular Research*, **2011**, 81, 81-7	3.7	12
88	A numerical approach to evaluate the fatigue life of monolimb. *Medical Engineering and Physics*, **2006**, 28, 290-6	2.4	12
87	Effect of pillow height on the biomechanics of the head-neck complex: investigation of the cranio-cervical pressure and cervical spine alignment. *PeerJ*, **2016**, 4, e2397	3.1	12
86	Effect of tibial drill-guide angle on the mechanical environment at bone tunnel aperture after anatomic single-bundle anterior cruciate ligament reconstruction. *International Orthopaedics*, **2014**, 38, 973-81	3.8	11
85	Individual responses to alignment perturbations in socket reaction moments while walking in transtibial prostheses. *Clinical Biomechanics*, **2014**, 29, 590-4	2.2	11
84	Lower limb muscle co-contraction and joint loading of flip-flops walking in male wearers. *PLoS ONE*, **2018**, 13, e0193653	3.7	11

83	Ultrasound elastographic assessment of plantar fascia in runners using rearfoot strike and forefoot strike. *Journal of Biomechanics*, **2019**, 89, 65-71	2.9	10
82	Analysis of compression/release stabilized transfemoral prosthetic socket by finite element modelling method. *Medical Engineering and Physics*, **2020**, 83, 123-129	2.4	10
81	Effective Connectivity in Response to Posture Changes in Elderly Subjects as Assessed Using Functional Near-Infrared Spectroscopy. *Frontiers in Human Neuroscience*, **2018**, 12, 98	3.3	10
80	Biomechanical analysis of combining head-down tilt traction with vibration for different grades of degeneration of the lumbar spine. *Medical Engineering and Physics*, **2017**, 39, 83-93	2.4	10
79	Biomechanical evaluation of heel elevation on load transfer：experimental measurement and finite element analysis. *Acta Mechanica Sinica/Lixue Xuebao*, **2012**, 28, 232-240	2	10
78	Consideration of gender differences in ankle stabilizer selection for half-squat parachute landing. *Aviation, Space, and Environmental Medicine*, **2011**, 82, 1118-24		10
77	TRANSMISSIBILITY OF WHOLE BODY VIBRATION STIMULI THROUGH HUMAN BODY IN DIFFERENT STANDING POSTURES. *Journal of Mechanics in Medicine and Biology*, **2012**, 12, 1250047	0.7	10
76	Dynamic postural stability for double-leg drop landing. *Journal of Sports Sciences*, **2013**, 31, 1074-81	3.6	9
75	Biomechanical comparison of modified Calcanail system with plating fixation in intra-articular calcaneal fracture: A finite element analysis. *Medical Engineering and Physics*, **2019**, 70, 55-61	2.4	8
74	Socket reaction moments in transtibial prostheses during walking at clinically perceived optimal alignment. *Prosthetics and Orthotics International*, **2016**, 40, 503-8	1.5	8
73	Spectral analysis of cerebral oxygenation responses to seated whole-body vibration in healthy men. *International Journal of Industrial Ergonomics*, **2012**, 42, 341-346	2.9	8
72	An in vitro and finite element study of load redistribution in the midfoot. *Science China Life Sciences* , **2014**, 57, 1191-6	8.5	8
71	Wavelet analysis of lumbar muscle oxygenation signals during whole-body vibration: implications for the development of localized muscle fatigue. *European Journal of Applied Physiology*, **2012**, 112, 3109-17	3.4	8
70	Effect of Microstructure of Spongy Bone in Different Parts of Woodpecker's Skull on Resistance to Impact Injury. *Journal of Nanomaterials*, **2013**, 2013, 1-6	3.2	8
69	Changes in segment coordination variability and the impacts of the lower limb across running mileages in half marathons: Implications for running injuries. *Journal of Sport and Health Science*, **2020**, 11, 67-67	8.2	8
68	Influence of arch support heights on the internal foot mechanics of flatfoot during walking: A muscle-driven finite element analysis. *Computers in Biology and Medicine*, **2021**, 132, 104355	7	8
67	Influence of passive elements on prediction of intradiscal pressure and muscle activation in lumbar musculoskeletal models. *Computer Methods and Programs in Biomedicine*, **2019**, 177, 39-46	6.9	7
66	An optimized design of compression sportswear fabric using numerical simulation and the response surface method. *Textile Reseach Journal*, **2012**, 82, 108-116	1.7	7

65	Effect of Magnesium Doping on Hydration Morphology and Mechanical Property of Calcium Phosphate Cement Under Non-Calcined Synthesis Condition. *Journal of the American Ceramic Society*, **2013**, 96, 1944-1950	3.8	7
64	EFFECTS OF LATERALITY, ANKLE INVERSION AND STABILIZERS ON THE PLANTAR PRESSURE DISTRIBUTION DURING UNIPEDAL STANDING. *Journal of Mechanics in Medicine and Biology*, **2012**, 12, 1250055	0.7	7
63	Fatigue test of low-cost flexible-shank monolimb trans-tibial prosthesis. *Prosthetics and Orthotics International*, **2006**, 30, 305-15	1.5	7
62	Effects of Prophylactic Ankle Supports on Vertical Ground Reaction Force During Landing: A Meta-Analysis. *Journal of Sports Science and Medicine*, **2016**, 15, 1-10	2.7	7
61	The primary stability of different implants for intra-articular calcaneal fractures: an in vitro study. *BioMedical Engineering OnLine*, **2018**, 17, 50	4.1	6
60	Shoe-last design exploration and customization. *Journal of the Textile Institute*, **2012**, 103, 541-548	1.5	6
59	An instrument for methodological quality assessment of single-subject finite element analysis used in computational orthopaedics. *Medicine in Novel Technology and Devices*, **2021**, 11, 100067	2.1	6
58	Total ankle arthroplasty and ankle arthrodesis affect the biomechanics of the inner foot differently. *Scientific Reports*, **2019**, 9, 13334	4.9	5
57	Lower Limb Inter-Joint Coordination of Unilateral Transfemoral Amputees: Implications for Adaptation Control. *Applied Sciences (Switzerland)*, **2020**, 10, 4072	2.6	5
56	Lifelong bound feet in China: a quantitative ultrasound and lifestyle questionnaire study in postmenopausal women. *BMJ Open*, **2015**, 5, e006521	3	5
55	Biomechanical analysis of lumbar interbody fusion supplemented with various posterior stabilization systems. *European Spine Journal*, **2021**, 30, 2342-2350	2.7	5
54	Finite element analysis of the valgus knee joint of an obese child. *BioMedical Engineering OnLine*, **2016**, 15, 158	4.1	5
53	Extrinsic foot muscle forces and joint contact forces in flexible flatfoot adult with foot orthosis: A parametric study of tibialis posterior muscle weakness. *Gait and Posture*, **2021**, 88, 54-59	2.6	5
52	Effects of Upper-Limb, Lower-Limb, and Full-Body Compression Garments on Full Body Kinematics and Free-Throw Accuracy in Basketball Players. *Applied Sciences (Switzerland)*, **2020**, 10, 3504	2.6	4
51	Investigation of mechanical behavior of CPC/bone specimens by finite element analysis. *Ceramics International*, **2014**, 40, 2933-2942	5.1	4
50	Influence of screw length and diameter on tibial strain energy density distribution after anterior cruciate ligament reconstruction. *Acta Mechanica Sinica/Lixue Xuebao*, **2014**, 30, 241-249	2	4
49	Age- and direction-related adaptations of lumbar vertebral trabecular bone with respect to apparent stiffness and tissue level stress distribution. *Acta Mechanica Sinica/Lixue Xuebao*, **2009**, 25, 121-129	2	4
48	Laser acupuncture and prevention of bone loss in tail-suspended rats. *Aviation, Space, and Environmental Medicine*, **2010**, 81, 914-8		4

47	Theoretical analysis of contributions of disuse, basic multicellular unit activation threshold, and osteoblastic formation threshold to changes in bone mineral density at menopause. *Journal of Bone and Mineral Metabolism*, **2006**, 24, 386-94	2.9	4
46	Biomechanical analysis of minimally invasive crossing screw fixation for calcaneal fractures: Implications to early weight-bearing rehabilitation. *Clinical Biomechanics*, **2020**, 80, 105143	2.2	4
45	Exercise-Induced Hemodynamic Changes in Muscle Tissue: Implication of Muscle Fatigue. *Applied Sciences (Switzerland)*, **2020**, 10, 3512	2.6	4
44	Computational models of flatfoot with three-dimensional fascia and bulk soft tissue interaction for orthosis design. *Medicine in Novel Technology and Devices*, **2021**, 9, 100050	2.1	4
43	Blood Flow and Oxygen Transport in Descending Branch of Lateral Femoral Circumflex Arteries After Transfemoral Amputation: A Numerical Study. *Journal of Medical and Biological Engineering*, **2017**, 37, 63-73	2.2	3
42	Effects of Ankle Eversion, Limb Laterality, and Ankle Stabilizers on Transient Postural Stability During Unipedal Standing. *Journal of Medical and Biological Engineering*, **2015**, 35, 69-75	2.2	3
41	Bone regeneration strategy inspired by the study of calcification behavior in deer antler. *Materials Science and Engineering C*, **2015**, 57, 67-76	8.3	3
40	Effect of Dropping Height on the Forces of Lower Extremity Joints and Muscles during Landing: A Musculoskeletal Modeling. *Journal of Healthcare Engineering*, **2018**, 2018, 2632603	3.7	3
39	Effects of heel lifting on transtibial amputee gait before and after treadmill walking: a case study. *Prosthetics and Orthotics International*, **2013**, 37, 317-23	1.5	3
38	Regional plantar foot pressure distributions on high-heeled shoes-shank curve effects. *Acta Mechanica Sinica/Lixue Xuebao*, **2011**, 27, 1091-1097	2	3
37	Changes in bone density and geometry of the upper extremities after stroke: a case report. *Physiotherapy Canada Physiotherapie Canada*, **2012**, 64, 88-97	0.8	3
36	Influence prediction of tissue injury on frequency variations of the lumbar spine under vibration. *OMICS A Journal of Integrative Biology*, **2009**, 13, 521-6	3.8	3
35	MECHANICAL TESTING FOR BONE SPECIMENS **2005**, 177-212		3
34	Tai Chi and Yoga for Improving Balance on One Leg: A Neuroimaging and Biomechanics Study. *Frontiers in Neurology*, **2021**, 12, 746599	4.1	3
33	A FootwearFootKnee Computational Platform for Exploring Footwear Effects on Knee Joint Biomechanics. *Journal of Medical and Biological Engineering*, **2016**, 36, 245-256	2.2	3
32	Finite element analysis of subtalar joint arthroereisis on adult-acquired flexible flatfoot deformity using customised sinus tarsi implant. *Journal of Orthopaedic Translation*, **2021**, 27, 139-145	4.2	3
31	Fracture mapping of complex intra-articular calcaneal fractures. *Annals of Translational Medicine*, **2021**, 9, 333	3.2	3
30	REVIEW: HEMODYNAMIC STUDIES FOR LOWER LIMB AMPUTATION AND REHABILITATION. *Journal of Mechanics in Medicine and Biology*, **2015**, 15, 1530005	0.7	2

29	Joint contact force and movement deceleration among badminton forward lunges: a musculoskeletal modelling study. *Sports Biomechanics*, **2020**, 1-13	2.2	2
28	Developing transmission line equations of oxygen transport for predicting oxygen distribution in the arterial system. *Scientific Reports*, **2018**, 8, 5369	4.9	2
27	Numerical simulation on the adaptation of forms in trabecular bone to mechanical disuse and basic multi-cellular unit activation threshold at menopause. *Acta Mechanica Sinica/Lixue Xuebao*, **2008**, 24, 207-214	2	2
26	MRI investigation of musculoskeletal action of transfemoral residual limb inside a prosthetic socket		2
25	Biomechanical comparison among five mid/hindfoot arthrodeses procedures in treating flatfoot using a musculoskeletal multibody driven finite element model. *Computer Methods and Programs in Biomedicine*, **2021**, 211, 106408	6.9	2
24	Biomechanical and fluid flowing characteristics of intervertebral disc of lumbar spine predicted by poroelastic finite element method. *Acta of Bioengineering and Biomechanics*, **2016**, 18, 19-29	0.6	2
23	Foot Model for Investigating Foot Biomechanics and Footwear Design **2014**, 3-18		1
22	Micro-Finite Element Analysis of Bone **2008**, 671-689		1
21	Air cushion action at the distal end of above-knee stump with a prosthetic socket		1
20	Biomechanics of Body Support Surfaces: Issues of Decubitus Ulcer **2003**, 111-134		1
19	Mechanical Properties of Vertebral Trabeculae with Ageing Evaluated with Micro-CT **2007**, 463-473		1
18	Computational Modeling the Foot-Insole Interface. *Studies in Computational Intelligence*, **2007**, 311-321	0.8	1
17	A Three-Dimensional Printed Foot Orthosis for Flexible Flatfoot: An Exploratory Biomechanical Study on Arch Support Reinforcement and Undercut. *Materials*, **2021**, 14,	3.5	1
16	Different Design Feature Combinations of Flatfoot Orthosis on Plantar Fascia Strain and Plantar Pressure: A Muscle-Driven Finite Element Analysis With Taguchi Method.. *Frontiers in Bioengineering and Biotechnology*, **2022**, 10, 853085	5.8	1
15	Measurement of covered curvature based on a tape of integrated accelerometers. *Measurement: Journal of the International Measurement Confederation*, **2022**, 193, 110959	4.6	1
14	Identifying Fatigue Indicators Using Gait Variability Measures: A Longitudinal Study on Elderly Brisk Walking. *Sensors*, **2020**, 20,	3.8	0
13	. *Tsinghua Science and Technology*, **2010**, 15, 540-546	3.4	0
12	Effects of Attrition Shoes on Kinematics and Kinetics of Lower Limb Joints During Walking.. *Frontiers in Bioengineering and Biotechnology*, **2022**, 10, 824297	5.8	0

11	A finite element model of the 3D-printed transparent facemask for applying pressure therapy. *Clinical Biomechanics*, **2021**, 87, 105414	2.2	0
10	Time-evolving coupling functions for evaluating the interaction between cerebral oxyhemoglobin and arterial blood pressure with hypertension. *Medical Physics*, **2021**, 48, 2027-2037	4.4	0
9	Non-amputated limb muscle coordination of unilateral transfemoral amputees. *Journal of Biomechanics*, **2021**, 115, 110155	2.9	0
8	Biomechanical Analysis of a Novel Double-Point Fixation Method for Displaced Intra-Articular Calcaneal Fractures.. *Frontiers in Bioengineering and Biotechnology*, **2022**, 10, 791554	5.8	0
7	The interaction effects of rocker angle and apex location in rocker shoe design on foot biomechanics and Achilles tendon loading. *Medicine in Novel Technology and Devices*, **2022**, 13, 100111	2.1	
6	Anterior Cruciate Ligament Reconstruction with Hybrid Graft versus Autograft: A Systematic Review and Meta-Analysis. *Journal of Healthcare Engineering*, **2021**, 2021, 7562649	3.7	
5	Biomechanical Animal Experimental Research on Osseointegration(Orthopaedic Biomechanics). *The Proceedings of the Asian Pacific Conference on Biomechanics Emerging Science and Technology in Biomechanics*, **2004**, 2004.1, 175-176		
4	Biomechanical analysis of four augmented fixations of plate osteosynthesis for comminuted mid-shaft clavicle fracture: A finite element approach. *Experimental and Therapeutic Medicine*, **2020**, 20, 2106-2112	2.1	
3	Female Foot Model for High-Heeled Shoe Design **2014**, 19-36		
2	Foot and Ankle Model for Surgical Treatment **2014**, 37-48		
1	A half marathon shifts the mediolateral force distribution at the tibiofemoral joint. *European Journal of Sport Science*, **2021**, 1-8	3.9	