# Ilse Jonkers

## List of Publications by Year in descending order

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|---|---|---|---|
| 205 papers | 6,383 citations | 66343 42 h-index | 110387 64 g-index |
| 229 all docs | 229 docs citations | 229 times ranked | 5134 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Single leg hop for distance symmetry masks lower limb biomechanics: time to discuss hop distance as decision criterion for return to sport after ACL reconstruction?. British Journal of Sports Medicine, 2022, 56, 249-256. | 6.7 | 51 |
| 2 | Thin patientâ€specific clavicle fracture fixation plates can mechanically outperform commercial plates: An in silico approach. Journal of Orthopaedic Research, 2022, 40, 1695-1706. | 2.3 | 3 |
| 3 | Joint kinematics alone can distinguish hip or knee osteoarthritis patients from asymptomatic controls with high accuracy. Journal of Orthopaedic Research, 2022, 40, 2229-2239. | 2.3 | 4 |
| 4 | Single leg vertical jump performance identifies knee function deficits at return to sport after ACL reconstruction in male athletes. British Journal of Sports Medicine, 2022, 56, 490-498. | 6.7 | 55 |
| 5 | Normal aging affects unconstrained three-dimensional reaching against gravity with reduced vertical precision and increased co-contraction: a pilot study. Experimental Brain Research, 2022, 240, 1029. | 1.5 | 2 |
| 6 | The role of medial ligaments and tibialis posterior in stabilising the medial longitudinal foot arch: a cadaveric gait simulator study. Foot and Ankle Surgery, 2022, 28, 906-911. | 1.7 | 2 |
| 7 | Symmetry in Triple Hop Distance Hides Asymmetries in Knee Function After ACL Reconstruction in Athletes at Return to Sports. American Journal of Sports Medicine, 2022, 50, 441-450. | 4.2 | 19 |
| 8 | Between-Limb Symmetry in ACL and Tibiofemoral Contact Forces in Athletes After ACL Reconstruction and Clearance for Return to Sport. Orthopaedic Journal of Sports Medicine, 2022, 10, 232596712210847. | 1.7 | 6 |
| 9 | Movement Quality Parameters during Gait Assessed by a Single Accelerometer in Subjects with Osteoarthritis and Following Total Joint Arthroplasty. Sensors, 2022, 22, 2955. | 3.8 | 9 |
| 10 | Inertial Sensor-to-Segment Calibration for Accurate 3D Joint Angle Calculation for Use in OpenSim. Sensors, 2022, 22, 3259. | 3.8 | 10 |
| 11 | Can the Output of a Learned Classification Model Monitor a Personâ€™s Functional Recovery Status Post-Total Knee Arthroplasty?. Sensors, 2022, 22, 3698. | 3.8 | 4 |
| 12 | The Exo4Work shoulder exoskeleton effectively reduces muscle and joint loading during simulated occupational tasks above shoulder height. Applied Ergonomics, 2022, 103, 103800. | 3.1 | 16 |
| 13 | Automated muscle elongation measurement during reverse shoulder arthroplasty planning. Journal of Shoulder and Elbow Surgery, 2021, 30, 561-571. | 2.6 | 7 |
| 14 | 12 Degrees of Freedom Muscle Force Driven Fibril-Reinforced Poroviscoelastic Finite Element Model of the Knee Joint. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2021, 29, 123-133. | 4.9 | 15 |
| 15 | The effect of hip muscle weakness and femoral bony deformities on gait performance. Gait and Posture, 2021, 83, 280-286. | 1.4 | 6 |
| 16 | Computationally Efficient Optimization Method to Quantify the Required Surgical Accuracy for a Ligament Balanced TKA. IEEE Transactions on Biomedical Engineering, 2021, 68, 3273-3280. | 4.2 | 5 |
| 17 | Evaluation of functional muscle anatomy scalability in the canine hind limb. Journal of Veterinary Medicine Series C: Anatomia Histologia Embryologia, 2021, 50, 637-644. | 0.7 | 0 |
| 18 | Similar sensorimotor transformations control balance during standing and walking. PLoS Computational Biology, 2021, 17, e1008369. | 3.2 | 18 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | ESB Clinical Biomechanics Award 2020: Pelvis and hip movement strategies discriminate typical and pathological femoral growth â€“ Insights gained from a multi-scale mechanobiological modelling framework. Clinical Biomechanics, 2021, 87, 105405. | 1.2 | 12 |
| 20 | Generic scaled versus subject-specific models for the calculation of musculoskeletal loading in cerebral palsy gait: Effect of personalized musculoskeletal geometry outweighs the effect of personalized neural control. Clinical Biomechanics, 2021, 87, 105402. | 1.2 | 33 |
| 21 | Perturbation of cortical activity elicits regional and age-dependent effects on unconstrained reaching behavior: a pilot study. Experimental Brain Research, 2021, 239, 3585-3600. | 1.5 | 2 |
| 22 | Subject-Specific Spino-Pelvic Models Reliably Measure Spinal Kinematics During Seated Forward Bending in Adult Spinal Deformity. Frontiers in Bioengineering and Biotechnology, 2021, 9, 720060. | 4.1 | 0 |
| 23 | Musculoskeletal modelingâ€based definition of load cases and worstâ€case fracture orientation for the design of clavicle fixation plates. Journal of Orthopaedic Research, 2021, , . | 2.3 | 0 |
| 24 | Measuring only hop distance during single leg hop testing is insufficient to detect deficits in knee function after ACL reconstruction: a systematic review and meta-analysis. British Journal of Sports Medicine, 2020, 54, 139-153. | 6.7 | 88 |
| 25 | Combined manual and automatic landmark detection for enhanced surface registration of anatomical structures: an extensive parameter study for femur and clavicle. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2020, 8, 94-102. | 1.9 | 2 |
| 26 | Implementation of physiological functional spinal units in a rigid-body model of the thoracolumbar spine. Journal of Biomechanics, 2020, 98, 109437. | 2.1 | 21 |
| 27 | Development and validation of a modeling workflow for the generation of image-based, subject-specific thoracolumbar models of spinal deformity. Journal of Biomechanics, 2020, 110, 109946. | 2.1 | 11 |
| 28 | Botulinum toxin injections minimally affect modelled muscle forces during gait in children with cerebral palsy. Gait and Posture, 2020, 82, 54-60. | 1.4 | 9 |
| 29 | A multi-scale modelling framework combining musculoskeletal rigid-body simulations with adaptive finite element analyses, to evaluate the impact of femoral geometry on hip joint contact forces and femoral bone growth. PLoS ONE, 2020, 15, e0235966. | 2.5 | 42 |
| 30 | In Silico-Enhanced Treatment and Rehabilitation Planning for Patients with Musculoskeletal Disorders: Can Musculoskeletal Modelling and Dynamic Simulations Really Impact Current Clinical Practice?. Applied Sciences (Switzerland), 2020, 10, 7255. | 2.5 | 20 |
| 31 | Intrinsic foot muscle forces: A possible biomarker of diabetes. Gait and Posture, 2020, 81, 64-65. | 1.4 | 0 |
| 32 | Towards the Monitoring of Functional Status in a Free-Living Environment for People with Hip or Knee Osteoarthritis: Design and Evaluation of the JOLO Blended Care App. Sensors, 2020, 20, 6967. | 3.8 | 9 |
| 33 | Hip Muscle Forces and Contact Loading During Squatting After Cam-Type FAI Surgery. Journal of Bone and Joint Surgery - Series A, 2020, 102, 34-42. | 3.0 | 10 |
| 34 | Single-event multilevel surgery, but not botulinum toxin injections normalize joint loading in cerebral palsy patients. Clinical Biomechanics, 2020, 76, 105025. | 1.2 | 7 |
| 35 | Virtual Reality Balance Games Provide Little Muscular Challenge to Prevent Muscle Weakness in Healthy Older Adults. Games for Health Journal, 2020, 9, 227-236. | 2.0 | 14 |
| 36 | Use of Computational Modeling to Study Joint Degeneration: A Review. Frontiers in Bioengineering and Biotechnology, 2020, 8, 93. | 4.1 | 30 |

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|---|---|---|---|
| 37 | Physics-Based Simulations to Predict the Differential Effects of Motor Control and Musculoskeletal Deficits on Gait Dysfunction in Cerebral Palsy: A Retrospective Case Study. Frontiers in Human Neuroscience, 2020, 14, 40. | 2.0 | 46 |
| 38 | A Machine Learning Approach to Estimate Hip and Knee Joint Loading Using a Mobile Phone-Embedded IMU. Frontiers in Bioengineering and Biotechnology, 2020, 8, 320. | 4.1 | 29 |
| 39 | Pre-treatmentÂEMG can be used to model post-treatment muscle coordination during walkingÂin children with cerebral palsy. PLoS ONE, 2020, 15, e0228851. | 2.5 | 9 |
| 40 | Automated quantification of glenoid bone defects using 3-dimensional measurements. Journal of Shoulder and Elbow Surgery, 2020, 29, 1050-1058. | 2.6 | 17 |
| 41 | Rapid predictive simulations with complex musculoskeletal models suggest that diverse healthy and pathological human gaits can emerge from similar control strategies. Journal of the Royal Society Interface, 2019, 16, 20190402. | 3.4 | 158 |
| 42 | SimCP: A Simulation Platform to Predict Gait Performance Following Orthopedic Intervention in Children With Cerebral Palsy. Frontiers in Neurorobotics, 2019, 13, 54. | 2.8 | 40 |
| 43 | The influence of knee joint geometry and alignment on the tibiofemoral load distribution: A computational study. Knee, 2019, 26, 813-823. | 1.6 | 27 |
| 44 | Subject-Exoskeleton Contact Model Calibration Leads to Accurate Interaction Force Predictions. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 1597-1605. | 4.9 | 55 |
| 45 | Inverse dynamic estimates of muscle recruitment and joint contact forces are more realistic when minimizing muscle activity rather than metabolic energy or contact forces. Gait and Posture, 2019, 74, 223-230. | 1.4 | 24 |
| 46 | Variation of the clavicleâ€™s muscle insertion footprints â€“ a cadaveric study. Scientific Reports, 2019, 9, 16293. | 3.3 | 5 |
| 47 | A probabilistic method to estimate gait kinetics in the absence of ground reaction force measurements. Journal of Biomechanics, 2019, 96, 109327. | 2.1 | 5 |
| 48 | Subject-specific geometry affects acetabular contact pressure during gait more than subject-specific loading patterns. Computer Methods in Biomechanics and Biomedical Engineering, 2019, 22, 1323-1333. | 1.6 | 5 |
| 49 | Non-rigid deformation to include subject-specific detail in musculoskeletal models of CP children with proximal femoral deformity and its effect on muscle and contact forces during gait. Computer Methods in Biomechanics and Biomedical Engineering, 2019, 22, 376-385. | 1.6 | 6 |
| 50 | Augmented Ligament Reconstruction Partially Restores Hindfoot and Midfoot Kinematics After Lateral Ligament Ruptures. American Journal of Sports Medicine, 2019, 47, 1921-1930. | 4.2 | 20 |
| 51 | Model-based control for exoskeletons with series elastic actuators evaluated on sit-to-stand movements. Journal of NeuroEngineering and Rehabilitation, 2019, 16, 65. | 4.6 | 47 |
| 52 | Combined enzymatic degradation of proteoglycans and collagen significantly alters intratissue strains in articular cartilage during cyclic compression. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 98, 383-394. | 3.1 | 24 |
| 53 | Patients With Medial Knee Osteoarthritis Reduce Medial Knee Contact Forces by Altering Trunk Kinematics, Progression Speed, and Stepping Strategy During Stair Ascent and Descent: A Pilot Study. Journal of Applied Biomechanics, 2019, 35, 280-289. | 0.8 | 10 |
| 54 | Variation of actin filament length in dogs. Journal of Anatomy, 2019, 234, 694-699. | 1.5 | 1 |

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|---|---|---|---|
| 55 | Selective dorsal rhizotomy improves muscle forces during walking in children with spastic cerebral palsy. Clinical Biomechanics, 2019, 65, 26-33. | 1.2 | 22 |
| 56 | A musculoskeletal model customized for squatting task. Computer Methods in Biomechanics and Biomedical Engineering, 2019, 22, 21-24. | 1.6 | 68 |
| 57 | Increased use of stepping strategy in response to medio-lateral perturbations in the elderly relates to altered reactive tibialis anterior activity. Gait and Posture, 2019, 68, 575-582. | 1.4 | 35 |
| 58 | Topographical Variation of Human Femoral Articular Cartilage Thickness, T1rho and T2 Relaxation Times Is Related to Local Loading during Walking. Cartilage, 2019, 10, 229-237. | 2.7 | 14 |
| 59 | SimCP: A Simulation Platform to Predict Gait Performance Following Orthopedic Intervention in Children with Cerebral Palsy. Biosystems and Biorobotics, 2019, , 267-270. | 0.3 | 0 |
| 60 | Longitudinal joint loading in patients before and up to one year after unilateral total hip arthroplasty. Gait and Posture, 2018, 61, 117-124. | 1.4 | 35 |
| 61 | Knee Joint Loading in Healthy Adults During Functional Exercises: Implications for Rehabilitation Guidelines. Journal of Orthopaedic and Sports Physical Therapy, 2018, 48, 162-173. | 3.5 | 71 |
| 62 | Virtual reconstruction of glenoid bone defects using a statistical shape model. Journal of Shoulder and Elbow Surgery, 2018, 27, 160-166. | 2.6 | 42 |
| 63 | Increased sensory noise and not muscle weakness explains changes in non-stepping postural responses following stance perturbations in healthy elderly. Gait and Posture, 2018, 59, 122-127. | 1.4 | 15 |
| 64 | Mobile assessment of the lower limb kinematics in healthy persons and in persons with degenerative knee disorders: A systematic review. Gait and Posture, 2018, 59, 229-241. | 1.4 | 44 |
| 65 | Hip movement pathomechanics of patients with hip osteoarthritis aim at reducing hip joint loading on the osteoarthritic side. Gait and Posture, 2018, 59, 11-17. | 1.4 | 47 |
| 66 | Virtual reality balance training for elderly: Similar skiing games elicit different challenges in balance training. Gait and Posture, 2018, 59, 111-116. | 1.4 | 42 |
| 67 | Performance on Balance Evaluation Systems Test (BESTest) Impacts Health-Related Quality of Life in Adult Spinal Deformity Patients. Spine, 2018, 43, 637-646. | 2.0 | 16 |
| 68 | A methodological framework for detecting ulcersâ€™ risk in diabetic foot subjects by combining gait analysis, a new musculoskeletal foot model and a foot finite element model. Gait and Posture, 2018, 60, 279-285. | 1.4 | 34 |
| 69 | Effect of a prehop on the muscle-tendon interaction during vertical jumps. Journal of Applied Physiology, 2018, 124, 1203-1211. | 2.5 | 10 |
| 70 | A spasticity model based on feedback from muscle force explains muscle activity during passive stretches and gait in children with cerebral palsy. PLoS ONE, 2018, 13, e0208811. | 2.5 | 56 |
| 71 | Subjects with medial and lateral tibiofemoral articular cartilage defects do not alter compartmental loading during walking. Clinical Biomechanics, 2018, 60, 149-156. | 1.2 | 9 |
| 72 | Functional assessment of strains around a full-thickness and critical sized articular cartilage defect under compressive loading using MRI. Osteoarthritis and Cartilage, 2018, 26, 1710-1721. | 1.3 | 15 |

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|---|---|---|---|
| 73 | ANP32A regulates ATM expression and prevents oxidative stress in cartilage, brain, and bone. Science Translational Medicine, 2018, 10, . | 12.4 | 27 |
| 74 | Cartilage-on-cartilage contact: effect of compressive loading on tissue deformations and structural integrity of bovine articular cartilage. Osteoarthritis and Cartilage, 2018, 26, 1699-1709. | 1.3 | 21 |
| 75 | OpenSim Versus Human Body Model: A Comparison Study for the Lower Limbs During Gait. Journal of Applied Biomechanics, 2018, 34, 496-502. | 0.8 | 33 |
| 76 | Ranking of osteogenic potential of physical exercises in postmenopausal women based on femoral neck strains. PLoS ONE, 2018, 13, e0195463. | 2.5 | 27 |
| 77 | Modulation of gluteus medius activity reflects the potential of the muscle to meet the mechanical demands during perturbed walking. Scientific Reports, 2018, 8, 11675. | 3.3 | 28 |
| 78 | The influence of maximum isometric muscle force scaling on estimated muscle forces from musculoskeletal models of children with cerebral palsy. Gait and Posture, 2018, 65, 213-220. | 1.4 | 36 |
| 79 | Musculotendon excursion potential, tendon slack and muscle fibre length: the interaction of the canine gastrocnemius muscle and tendon. Journal of Anatomy, 2018, 233, 460-467. | 1.5 | 22 |
| 80 | Reliability of 3D Lower Extremity Movement Analysis by Means of Inertial Sensor Technology during Transitional Tasks. Sensors, 2018, 18, 2638. | 3.8 | 8 |
| 81 | Functional MRI can detect changes in intratissue strains in a full thickness and critical sized ovine cartilage defect model. Journal of Biomechanics, 2018, 66, 18-25. | 2.1 | 16 |
| 82 | Objectifying Treatment Outcomes Using Musculoskeletal Modelling-Based Simulations of Motion. , 2018, , 1-25. | | 3 |
| 83 | Extended foot-ankle musculoskeletal models for application in movement analysis. Computer Methods in Biomechanics and Biomedical Engineering, 2017, 20, 153-159. | 1.6 | 27 |
| 84 | Differences in knee adduction moment between healthy subjects and patients with osteoarthritis depend on the knee axis definition. Gait and Posture, 2017, 53, 104-109. | 1.4 | 20 |
| 85 | Less hip joint loading only during running rather than walking in elderly compared to young adults. Gait and Posture, 2017, 53, 155-161. | 1.4 | 11 |
| 86 | Robustness of kinematic weighting and scaling concepts for musculoskeletal simulation. Computer Methods in Biomechanics and Biomedical Engineering, 2017, 20, 720-729. | 1.6 | 6 |
| 87 | Joint power generation differentiates young and adult sprinters during the transition from block start into acceleration: a cross-sectional study. Sports Biomechanics, 2017, 16, 452-462. | 1.6 | 10 |
| 88 | Evaluation of predicted knee function for component malrotation in total knee arthroplasty. Medical Engineering and Physics, 2017, 40, 56-64. | 1.7 | 16 |
| 89 | Validation of plantar pressure simulations using finite and discrete element modelling in healthy and diabetic subjects. Computer Methods in Biomechanics and Biomedical Engineering, 2017, 20, 1442-1452. | 1.6 | 2 |
| 90 | Clinical Case: Simulation-based evaluation of post-operative gait function to support clinical decision making in cerebral palsy. Gait and Posture, 2017, 57, 102-103. | 1.4 | 3 |

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|---|---|---|---|
| 91 | The role of muscle forces on foot internal stresses and plantar pressure distribution: differences between healthy and diabetic neuropathic subjects. Gait and Posture, 2017, 57, 73-74. | 1.4 | 0 |
| 92 | Assessment of specific muscle tension in dogs through functional electrical stimulation of the gastrocnemius muscle. Research in Veterinary Science, 2017, 113, 33-39. | 1.9 | 0 |
| 93 | Comparison of lower limb muscle strength between diabetic neuropathic and healthy subjects using OpenSim. Gait and Posture, 2017, 58, 194-200. | 1.4 | 21 |
| 94 | EMG-Driven Optimal Estimation of Subject-SPECIFIC Hill Model Muscleâ€"Tendon Parameters of the Knee Joint Actuators. IEEE Transactions on Biomedical Engineering, 2017, 64, 2253-2262. | 4.2 | 55 |
| 95 | Real-Time Gait Event Detection Based on Kinematic Data Coupled to a Biomechanical Model â€. Sensors, 2017, 17, 671. | 3.8 | 27 |
| 96 | The Differential Effect of Arm Movements during Gait on the Forward Acceleration of the Centre of Mass in Children with Cerebral Palsy and Typically Developing Children. Frontiers in Human Neuroscience, 2017, 11, 96. | 2.0 | 7 |
| 97 | Knee Cartilage Thickness, T1Ï•and T2 Relaxation Time Are Related to Articular Cartilage Loading in Healthy Adults. PLoS ONE, 2017, 12, e0170002. | 2.5 | 46 |
| 98 | Medial knee loading is altered in subjects with early osteoarthritis during gait but not during step-up-and-over task. PLoS ONE, 2017, 12, e0187583. | 2.5 | 39 |
| 99 | Musculoskeletal modelling in dogs: challenges and future perspectives. Veterinary and Comparative Orthopaedics and Traumatology, 2016, 29, 181-187. | 0.5 | 22 |
| 100 | Gait alterations can reduce the risk of edge loading. Journal of Orthopaedic Research, 2016, 34, 1069-1076. | 2.3 | 9 |
| 101 | Cartilage volume and thickness but not biochemical properties relate to joint loading during gait in healthy controls. Osteoarthritis and Cartilage, 2016, 24, S112. | 1.3 | 0 |
| 102 | Footâ€"ankle simulators: A tool to advance biomechanical understanding of a complex anatomical structure. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2016, 230, 440-449. | 1.8 | 4 |
| 103 | A patient-specific guide for optimizing custom-made glenoid implantation in cases of severe glenoid defects: an inÂvitro study. Journal of Shoulder and Elbow Surgery, 2016, 25, 837-845. | 2.6 | 36 |
| 104 | Subject-specific musculoskeletal modelling in patients before and after total hip arthroplasty. Computer Methods in Biomechanics and Biomedical Engineering, 2016, 19, 1683-1691. | 1.6 | 32 |
| 105 | Mechanical effort predicts the selection of ankle over hip strategies in nonstepping postural responses. Journal of Neurophysiology, 2016, 116, 1937-1945. | 1.8 | 22 |
| 106 | A prospective follow up of age related changes in the subchondral bone density of the talus of healthy Labrador Retrievers. BMC Veterinary Research, 2016, 13, 57. | 1.9 | 4 |
| 107 | Tibiofemoral joint loading during therapeutic exercises and activities of daily living: Implications for rehabilitation in osteoarthritis and cartilage repair surgery. Osteoarthritis and Cartilage, 2016, 24, S111-S112. | 1.3 | 0 |
| 108 | Quantifying thumb opposition kinematics using dynamic computed tomography. Journal of Biomechanics, 2016, 49, 1994-1999. | 2.1 | 25 |

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|---|---|---|---|
| 109 | Subchondral bone density distribution of the talus in clinically normal Labrador Retrievers. BMC Veterinary Research, 2016, 12, 56. | 1.9 | 4 |
| 110 | Changes in proprioceptive weighting during quiet standing in women with early and established knee osteoarthritis compared to healthy controls. Gait and Posture, 2016, 44, 184-188. | 1.4 | 10 |
| 111 | The role of altered proximal femoral geometry in impaired pelvis stability and hip control during CP gait: A simulation study. Gait and Posture, 2016, 44, 61-67. | 1.4 | 18 |
| 112 | Does surgical approach or prosthesis type affect hip joint loading one year after surgery?. Gait and Posture, 2016, 44, 74-82. | 1.4 | 19 |
| 113 | Knee contact forces are not altered in early knee osteoarthritis. Gait and Posture, 2016, 45, 115-120. | 1.4 | 61 |
| 114 | Subject-specific geometrical detail rather than cost function formulation affects hip loading calculation. Computer Methods in Biomechanics and Biomedical Engineering, 2016, 19, 1475-1488. | 1.6 | 37 |
| 115 | Insertion of a pressure sensing arrayminimally affects hindfoot bone kinematics. Journal of Foot and Ankle Research, 2015, 8, 24. | 1.9 | 3 |
| 116 | Loading of Hip Measured by Hip Contact Forces at Different Speeds of Walking and Running. Journal of Bone and Mineral Research, 2015, 30, 1431-1440. | 2.8 | 76 |
| 117 | Extrinsic Muscle Forces Affect Ankle Loading Before and After Total Ankle Arthroplasty. Clinical Orthopaedics and Related Research, 2015, 473, 3028-3037. | 1.5 | 9 |
| 118 | Inertial control as novel technique for in vitro gait simulations. Journal of Biomechanics, 2015, 48, 392-395. | 2.1 | 12 |
| 119 | Muscle optimization techniques impact the magnitude of calculated hip joint contact forces. Journal of Orthopaedic Research, 2015, 33, 430-438. | 2.3 | 44 |
| 120 | Gait alterations to effectively reduce hip contact forces. Journal of Orthopaedic Research, 2015, 33, 1094-1102. | 2.3 | 63 |
| 121 | Changes in proprioceptive weighting in women with knee osteoarthritis during quiet standing compared to healthy controls. Osteoarthritis and Cartilage, 2015, 23, A101. | 1.3 | 0 |
| 122 | A quantitative assessment of varus thrust during walking in women with early and established medial knee osteoarthritis.. Osteoarthritis and Cartilage, 2015, 23, A100. | 1.3 | 0 |
| 123 | Sensitivity of predicted muscle forces during gait to anatomical variability in musculotendon geometry. Journal of Biomechanics, 2015, 48, 2116-2123. | 2.1 | 31 |
| 124 | Control of propulsion and body lift during the first two stances of sprint running: a simulation study. Journal of Sports Sciences, 2015, 33, 2016-2024. | 2.0 | 34 |
| 125 | Muscle contributions to centre of mass acceleration during turning gait in typically developing children: A simulation study. Journal of Biomechanics, 2015, 48, 4238-4245. | 2.1 | 17 |
| 126 | Computed tomography-based joint locations affect calculation of joint moments during gait when compared to scaling approaches. Computer Methods in Biomechanics and Biomedical Engineering, 2015, 18, 1238-1251. | 1.6 | 18 |

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|---|---|---|---|
| 127 | Task constraints and minimization of muscle effort result in a small number of muscle synergies during gait. Frontiers in Computational Neuroscience, 2014, 8, 115. | 2.1 | 64 |
| 128 | Influence of altered gait patterns on the hip joint contact forces. Computer Methods in Biomechanics and Biomedical Engineering, 2014, 17, 352-359. | 1.6 | 20 |
| 129 | A new method for estimating subjectâ€specific muscleâ€“tendon parameters of the knee joint actuators: a simulation study. International Journal for Numerical Methods in Biomedical Engineering, 2014, 30, 969-987. | 2.1 | 22 |
| 130 | Hip contact force in presence of aberrant bone geometry during normal and pathological gait. Journal of Orthopaedic Research, 2014, 32, 1406-1415. | 2.3 | 44 |
| 131 | Arm swing in human walking: What is their drive?. Gait and Posture, 2014, 40, 321-326. | 1.4 | 50 |
| 132 | Forefoot deformation during stance: Does the forefoot collapse during loading?. Gait and Posture, 2014, 39, 40-47. | 1.4 | 19 |
| 133 | The effect of perturbing body segment parameters on calculated joint moments and muscle forces during gait. Journal of Biomechanics, 2014, 47, 596-601. | 2.1 | 26 |
| 134 | The effect of muscle weakness on the capability gap during gross motor function: a simulation study supporting design criteria for exoskeletons of the lower limb. BioMedical Engineering OnLine, 2014, 13, 111. | 2.7 | 32 |
| 135 | Altering length and velocity feedback during a neuro-musculoskeletal simulation of normal gait contributes to hemiparetic gait characteristics. Journal of NeuroEngineering and Rehabilitation, 2014, 11, 78. | 4.6 | 32 |
| 136 | The contribution of knee extensor and plantarflexor hyperexcitability to gait impairements after stroke: A simulation study. Gait and Posture, 2014, 39, S32. | 1.4 | 0 |
| 137 | Role of subject-specific musculoskeletal loading on the prediction of bone density distribution in the proximal femur. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 30, 244-252. | 3.1 | 37 |
| 138 | Neuromuscular strategies during gait in women with early and established knee osteoarthritis. Osteoarthritis and Cartilage, 2014, 22, S82-S83. | 1.3 | 0 |
| 139 | How gravity and muscle action control mediolateral center of mass excursion during slow walking: A simulation study. Gait and Posture, 2014, 39, 91-97. | 1.4 | 34 |
| 140 | Subjects with severe knee osteoarthritis reduce medio-lateral forces during gait at the expense of compressive knee contact forces. Osteoarthritis and Cartilage, 2014, 22, S99-S100. | 1.3 | 0 |
| 141 | Characterisation of walking loads by 3D inertial motion tracking. Journal of Sound and Vibration, 2014, 333, 5212-5226. | 3.9 | 65 |
| 142 | Different alterations in the sit to stand movement pattern in women with early and established medial compartment knee osteoarthritis. Osteoarthritis and Cartilage, 2013, 21, S95. | 1.3 | 1 |
| 143 | Gait stability in children with Cerebral Palsy. Research in Developmental Disabilities, 2013, 34, 1689-1699. | 2.2 | 43 |
| 144 | Muscle contributions to center of mass acceleration adapt to asymmetric walking in healthy subjects. Gait and Posture, 2013, 38, 739-744. | 1.4 | 14 |

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|---|---|---|---|
| 145 | Gait characteristics and lower limb muscle strength in women with early and established knee osteoarthritis. Clinical Biomechanics, 2013, 28, 40-47. | 1.2 | 58 |
| 146 | Kinetic and kinematic characteristics of stair negotiation in patients with medial knee osteoarthritis. Osteoarthritis and Cartilage, 2013, 21, S257. | 1.3 | 2 |
| 147 | Influence of weak hip abductor muscles on joint contact forces during normal walking: probabilistic modeling analysis. Journal of Biomechanics, 2013, 46, 2186-2193. | 2.1 | 68 |
| 148 | In vitro analysis of muscle activity illustrates mediolateral decoupling of hind and mid foot bone motion. Gait and Posture, 2013, 38, 56-61. | 1.4 | 17 |
| 149 | An Extended Dynamometer Setup to Improve the Accuracy of Knee Joint Moment Assessment. IEEE Transactions on Biomedical Engineering, 2013, 60, 1202-1208. | 4.2 | 4 |
| 150 | Proprioceptive accuracy in women with early and established knee osteoarthritis and its relation to functional ability, postural control, and muscle strength. Clinical Rheumatology, 2013, 32, 1365-1374. | 2.2 | 45 |
| 151 | Alterated talar and navicular bone morphology is associated with pes planus deformity: A CTâ€scan study. Journal of Orthopaedic Research, 2013, 31, 282-287. | 2.3 | 38 |
| 152 | An in vitro approach to the evaluation of foot-ankle kinematics: Performance evaluation of a custom-built gait simulator. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2013, 227, 955-967. | 1.8 | 25 |
| 153 | Specimen-specific tibial kinematics model for in vitro gait simulations. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2013, 227, 454-463. | 1.8 | 10 |
| 154 | From block clearance to sprint running: Characteristics underlying an effective transition. Journal of Sports Sciences, 2013, 31, 137-149. | 2.0 | 68 |
| 155 | Tibio-Femoral Contact Force During Gait: An Iterative Method Using EMG-Constrained Multi-Body Simulation and Finite Element Analysis. , 2013, , . | | 0 |
| 156 | Transmission of Whole-Body Vibration and Its Effect on Muscle Activation. Journal of Strength and Conditioning Research, 2013, 27, 2533-2541. | 2.1 | 40 |
| 157 | The Contribution of Step Characteristics to Sprint Running Performance in High-Level Male and Female Athletes. Journal of Strength and Conditioning Research, 2013, 27, 116-124. | 2.1 | 78 |
| 158 | The flexion synergy, mother of all synergies and father of new models of gait. Frontiers in Computational Neuroscience, 2013, 7, 14. | 2.1 | 73 |
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