

# William R Taylor

## List of Publications by Year in descending order

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Version: 2024-02-01

174  
papers

6,370  
citations

66250

44  
h-index

93651

72  
g-index

187  
all docs

187  
docs citations

187  
times ranked

6314  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Long-term follow-up after multilevel surgery in cerebral palsy. Archives of Orthopaedic and Trauma Surgery, 2022, 142, 2131-2138.   | 1.3 | 5         |
| 2  | Finite element derived femoral strength is a better predictor of hip fracture risk than aBMD in the AGES Reykjavik study cohort. Bone, 2022, 154, 116219.   | 1.4 | 10        |
| 3  | Can tibio-femoral kinematic and kinetic parameters reveal poor functionality and underlying deficits after total knee replacement? A systematic review. Knee, 2022, 34, 62-75.                    | 0.8 | 2         |
| 4  | Optimizing Backrest Geometry to Minimize Interfacial Pressure Concentrations in the Mid-to-Lumbar Region During Leg Press Resistance Training. Journal of Biomechanical Engineering, 2022, 144, . | 0.6 | 0         |
| 5  | Turning in Circles: Understanding Manual Wheelchair Use Towards Developing User-Friendly Steering Systems. Frontiers in Bioengineering and Biotechnology, 2022, 10, 831528.                       | 2.0 | 5         |
| 6  | ISB clinical biomechanics award winner 2021: Tibio-femoral kinematics of natural versus replaced knees – A comparison using dynamic videofluoroscopy. Clinical Biomechanics, 2022, 96, 105667.    | 0.5 | 3         |
| 7  | Personalised pose estimation from single-plane moving fluoroscope images using deep convolutional neural networks. PLoS ONE, 2022, 17, e0270596.  | 1.1 | 1         |
| 8  | European Society of Biomechanics S.M. Perren Award 2022: Standardized tibio-femoral implant loads and kinematics. Journal of Biomechanics, 2022, 141, 111171.                                     | 0.9 | 10        |
| 9  | Feedback improves compliance of pressure relief activities in wheelchair users with spinal cord injury. Spinal Cord, 2021, 59, 175-184.   | 0.9 | 13        |
| 10 | Techniques for In Vivo Measurement of Ligament and Tendon Strain: A Review. Annals of Biomedical Engineering, 2021, 49, 7-28.   | 1.3 | 19        |
| 11 | Technologies and Sensor Design for the Measurement of Ground Reaction Forces in Mice: A Review. Biomechanics, 2021, 1, 53-72.   | 0.5 | 0         |
| 12 | Rhythmic auditory stimuli modulate movement recovery in response to perturbation during locomotion. Journal of Experimental Biology, 2021, 224, .   | 0.8 | 9         |
| 13 | In Vivo Elongation Patterns of the Collateral Ligaments in Healthy Knees During Functional Activities. Journal of Bone and Joint Surgery - Series A, 2021, 103, 1620-1627.                        | 1.4 | 6         |
| 14 | Quantification of morning stiffness to assess disease activity and treatment effects in rheumatoid arthritis. Rheumatology, 2021, 60, 5282-5291.  | 0.9 | 2         |
| 15 | Towards validation and standardization of automatic gait event identification algorithms for use in paediatric pathological populations. Gait and Posture, 2021, 86, 64-69.                       | 0.6 | 20        |
| 16 | Small Force Sensor to Measure the Three Components of the Ground Reaction Forces in Mice. Engineering Proceedings, 2021, 6, .   | 0.4 | 0         |
| 17 | Restoring range of motion in reduced acetabular version by increasing femoral antetorsion – What about joint load?. Clinical Biomechanics, 2021, 87, 105409.                                      | 0.5 | 5         |
| 18 | Adapting Footfall Rhythmicity to Auditory Perturbations Affects Resilience of Locomotor Behavior: A Proof-of-Concept Study. Frontiers in Neuroscience, 2021, 15, 678965.                          | 1.4 | 0         |

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|----|--|-----|-----------|
| 19 | Data-Driven Investigation of Gait Patterns in Individuals Affected by Normal Pressure Hydrocephalus. <i>Sensors</i> , 2021, 21, 6451.  | 2.1 | 6         |
| 20 | Does Subthalamic Deep Brain Stimulation Impact Asymmetry and Dyscoordination of Gait in Parkinson's Disease?. <i>Neurorehabilitation and Neural Repair</i> , 2021, 35, 1020-1029.  | 1.4 | 8         |
| 21 | Restoration of Heel-toe Gait Patterns for the Prevention of Asymmetrical Hip Internal Rotation in Patients with Unilateral Spastic Cerebral Palsy. <i>Children</i> , 2021, 8, 773.   | 0.6 | 3         |
| 22 | Impact of the Marker Set Configuration on the Accuracy of Gait Event Detection in Healthy and Pathological Subjects. <i>Frontiers in Human Neuroscience</i> , 2021, 15, 720699.  | 1.0 | 4         |
| 23 | Dynamic Knee Joint Line Orientation Is Not Predictive of Tibio-Femoral Load Distribution During Walking. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 754715.   | 2.0 | 5         |
| 24 | Knieendoprothetik: Biomechanik des Kniegelenks. <i>Springer Reference Medizin</i> , 2021, , 1-18.  | 0.0 | 0         |
| 25 | Identifying Fallers Based on Functional Parameters: A Machine Learning Approach. , 2021, , .   |     | 1         |
| 26 | Properties and Function of the Medial Patellofemoral Ligament: A Systematic Review. <i>American Journal of Sports Medicine</i> , 2020, 48, 754-766.  | 1.9 | 31        |
| 27 | Revealing the optimal thresholds for movement performance: A systematic review and meta-analysis to benchmark pathological walking behaviour. <i>Neuroscience and Biobehavioral Reviews</i> , 2020, 108, 24-33.                    | 2.9 | 24        |
| 28 | Elongation Patterns of the Posterior Cruciate Ligament after Total Knee Arthroplasty. <i>Journal of Clinical Medicine</i> , 2020, 9, 2078.   | 1.0 | 5         |
| 29 | Tibio-femoral kinematics of the healthy knee joint throughout complete cycles of gait activities. <i>Journal of Biomechanics</i> , 2020, 110, 109915.  | 0.9 | 22        |
| 30 | The effect of increasing heel height on lower limb symmetry during the back squat in trained and novice lifters. <i>BMC Sports Science, Medicine and Rehabilitation</i> , 2020, 12, 42.  | 0.7 | 2         |
| 31 | Differentiation between mechanically loose and fixed press-fit implants using quantitative acoustics and load self-referencing: A phantom study on shoulder prostheses in polyurethane foam. <i>PLoS ONE</i> , 2020, 15, e0233548. | 1.1 | 0         |
| 32 | The effect of elevating the heels on spinal kinematics and kinetics during the back squat in trained and novice weight trainers. <i>Journal of Sports Sciences</i> , 2020, 38, 1000-1008.  | 1.0 | 11        |
| 33 | Assessing the Temporal Organization of Walking Variability: A Systematic Review and Consensus Guidelines on Detrended Fluctuation Analysis. <i>Frontiers in Physiology</i> , 2020, 11, 562.  | 1.3 | 27        |
| 34 | Wearable Inertial Measurement Units for Assessing Gait in Real-World Environments. <i>Frontiers in Physiology</i> , 2020, 11, 90.  | 1.3 | 46        |
| 35 | Evaluation of an intensity-based algorithm for 2D/3D registration of natural knee videofluoroscopy data. <i>Medical Engineering and Physics</i> , 2020, 77, 107-113.   | 0.8 | 24        |
| 36 | Length-Change Patterns of the Collateral Ligaments During Functional Activities After Total Knee Arthroplasty. <i>Annals of Biomedical Engineering</i> , 2020, 48, 1396-1406.  | 1.3 | 16        |

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|----|---|-----|-----------|
| 37 | Transpositions of Intervertebral Centroids in Adolescents Suffering from Idiopathic Scoliosis Optically Diagnosed. Lecture Notes in Computational Vision and Biomechanics, 2020, , 133-141.         | 0.5 | 1         |
| 38 | The Capacity of Generic Musculoskeletal Simulations to Predict Knee Joint Loading Using the CAMS-Knee Datasets. Annals of Biomedical Engineering, 2020, 48, 1430-1440.                              | 1.3 | 29        |
| 39 | Rigid 3D Registration Algorithm for Localization of the Vertebral Centroids in 3D Deformity Models of Adolescent Idiopathic Scoliosis. Computer-Aided Design and Applications, 2020, 17, 1313-1325. | 0.4 | 2         |
| 40 | Title is missing!. , 2020, 15, e0233548.  |     | 0         |
| 41 | Title is missing!. , 2020, 15, e0233548.  |     | 0         |
| 42 | Title is missing!. , 2020, 15, e0233548.  |     | 0         |
| 43 | Title is missing!. , 2020, 15, e0233548.  |     | 0         |
| 44 | Title is missing!. , 2020, 15, e0233548.  |     | 0         |
| 45 | Title is missing!. , 2020, 15, e0233548.  |     | 0         |
| 46 | Technology-Enhanced Systems in Idiopathic Scoliosis 3D Diagnosis and Screening. Lecture Notes in Networks and Systems, 2019, , 271-278.   | 0.5 | 1         |
| 47 | Low back pain and its relationship with sitting behaviour among sedentary office workers. Applied Ergonomics, 2019, 81, 102894.   | 1.7 | 122       |
| 48 | Kinematic Evaluation of the GMK Sphere Implant During Gait Activities: A Dynamic Videofluoroscopy Study. Journal of Orthopaedic Research, 2019, 37, 2337-2347.                                      | 1.2 | 53        |
| 49 | Sensitivity of low-frequency axial transmission acoustics to axially and azimuthally varying cortical thickness: A phantom-based study. PLoS ONE, 2019, 14, e0219360.                               | 1.1 | 5         |
| 50 | Can low-frequency guided waves at the tibia paired with machine learning differentiate between healthy and osteopenic/osteoporotic subjects? A pilot study. Ultrasonics, 2019, 94, 109-116.         | 2.1 | 20        |
| 51 | Tibio-Femoral Contact Force Distribution is Not the Only Factor Governing Pivot Location after Total Knee Arthroplasty. Scientific Reports, 2019, 9, 182.   | 1.6 | 10        |
| 52 | A method to concatenate multiple short time series for evaluating dynamic behaviour during walking. PLoS ONE, 2019, 14, e0218594.   | 1.1 | 14        |
| 53 | Does variability of footfall kinematics correlate with dynamic stability of the centre of mass during walking?. PLoS ONE, 2019, 14, e0217460.   | 1.1 | 10        |
| 54 | Minimal detectable difference of the finger and wrist range of motion: comparison of goniometry and 3D motion analysis. Journal of Orthopaedic Surgery and Research, 2019, 14, 173.                 | 0.9 | 49        |

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|----|---|-----|-----------|
| 55 | Wheelchair Tilt-in-Space and Recline Functions: Influence on Sitting Interface Pressure and Ischial Blood Flow in an Elderly Population. <i>BioMed Research International</i> , 2019, 2019, 1-10.               | 0.9 | 17        |
| 56 | Knee implant kinematics are task-dependent. <i>Journal of the Royal Society Interface</i> , 2019, 16, 20180678.   | 1.5 | 26        |
| 57 | Elongation Patterns of the Collateral Ligaments After Total Knee Arthroplasty Are Dominated by the Knee Flexion Angle. <i>Frontiers in Bioengineering and Biotechnology</i> , 2019, 7, 323.                     | 2.0 | 19        |
| 58 | Short-term functional assessment of gait, plantarflexor strength, and tendon properties after Achilles tendon rupture. <i>Gait and Posture</i> , 2018, 62, 179-185.   | 0.6 | 16        |
| 59 | Comparison of the kinematics and kinetics of shoulder exercises performed with constant and elastic resistance. <i>BMC Sports Science, Medicine and Rehabilitation</i> , 2018, 10, 22.                          | 0.7 | 3         |
| 60 | Evaluation of the accuracy of musculoskeletal simulation during squats by means of instrumented knee prostheses. <i>Medical Engineering and Physics</i> , 2018, 61, 95-99.                                      | 0.8 | 22        |
| 61 | Soft Electronic Strain Sensor with Chipless Wireless Readout: Toward Real-time Monitoring of Bladder Volume. <i>Advanced Materials Technologies</i> , 2018, 3, 1800031.   | 3.0 | 32        |
| 62 | Towards Subject-Specific Strength Training Design through Predictive Use of Musculoskeletal Models. <i>Applied Bionics and Biomechanics</i> , 2018, 2018, 1-10.   | 0.5 | 7         |
| 63 | The "Journal of Functional Morphology and Kinesiology" Journal Club Series: Highlights on Recent Papers in Motor Control and Learning. <i>Journal of Functional Morphology and Kinesiology</i> , 2018, 3, 16.   | 1.1 | 2         |
| 64 | How to squat? Effects of various stance widths, foot placement angles and level of experience on knee, hip and trunk motion and loading. <i>BMC Sports Science, Medicine and Rehabilitation</i> , 2018, 10, 14. | 0.7 | 47        |
| 65 | Influence of the moving fluoroscope on gait patterns. <i>PLoS ONE</i> , 2018, 13, e0200608.   | 1.1 | 13        |
| 66 | Robustness of kinematic weighting and scaling concepts for musculoskeletal simulation. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2017, 20, 720-729.                                  | 0.9 | 6         |
| 67 | Spinal kinematics during gait in healthy individuals across different age groups. <i>Human Movement Science</i> , 2017, 54, 73-81.  | 0.6 | 39        |
| 68 | Loading conditions in the spine, hip and knee during different executions of back extension exercises. <i>BMC Sports Science, Medicine and Rehabilitation</i> , 2017, 9, 10.                                    | 0.7 | 9         |
| 69 | High-heeled walking decreases lumbar lordosis. <i>Gait and Posture</i> , 2017, 55, 12-14.   | 0.6 | 17        |
| 70 | A comprehensive assessment of the musculoskeletal system: The CAMS-Knee data set. <i>Journal of Biomechanics</i> , 2017, 65, 32-39.   | 0.9 | 82        |
| 71 | Risk Factors for Knee Injury in Golf: A Systematic Review. <i>Sports Medicine</i> , 2017, 47, 2621-2639.  | 3.1 | 17        |
| 72 | In-situ force plate calibration: 12 years' experience with an approach for correcting the point of force application. <i>Gait and Posture</i> , 2017, 58, 98-102.   | 0.6 | 3         |

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|----|--|-----|-----------|
| 73 | Achieving ecological validity in mobility assessment: Validating a wearable sensor technology for comprehensive gait assessment. , 2017, , .   |     | 1         |
| 74 | What Is the Contribution of Ia-Afference for Regulating Motor Output Variability during Standing?. Frontiers in Human Neuroscience, 2017, 11, 87.  | 1.0 | 5         |
| 75 | Cortical Contribution to Linear, Non-linear and Frequency Components of Motor Variability Control during Standing. Frontiers in Human Neuroscience, 2017, 11, 548.   | 1.0 | 2         |
| 76 | Towards evidence based strength training: a comparison of muscle forces during deadlifts, goodmornings and split squats. BMC Sports Science, Medicine and Rehabilitation, 2017, 9, 13.   | 0.7 | 14        |
| 77 | The influence of muscle-tendon forces on ACL loading during jump landing: a systematic review. Muscles, Ligaments and Tendons Journal, 2017, 7, 125.   | 0.1 | 7         |
| 78 | Towards assessing cortical bone porosity using low-frequency quantitative acoustics: A phantom-based study. PLoS ONE, 2017, 12, e0182617.  | 1.1 | 5         |
| 79 | A moving fluoroscope to capture tibiofemoral kinematics during complete cycles of free level and downhill walking as well as stair descent. PLoS ONE, 2017, 12, e0185952.  | 1.1 | 39        |
| 80 | Application of Machine Learning Approaches for Classifying Sitting Posture Based on Force and Acceleration Sensors. BioMed Research International, 2016, 2016, 1-9.  | 0.9 | 56        |
| 81 | Can Gait Signatures Provide Quantitative Measures for Aiding Clinical Decision-Making? A Systematic Meta-Analysis of Gait Variability Behavior in Patients with Parkinson's Disease. Frontiers in Human Neuroscience, 2016, 10, 319. | 1.0 | 37        |
| 82 | The Effects of Selective Dorsal Rhizotomy on Balance and Symmetry of Gait in Children with Cerebral Palsy. PLoS ONE, 2016, 11, e0152930.   | 1.1 | 18        |
| 83 | The Restoration of Passive Rotational Tibio-Femoral Laxity after Anterior Cruciate Ligament Reconstruction. PLoS ONE, 2016, 11, e0159600.  | 1.1 | 19        |
| 84 | Revealing the quality of movement: A meta-analysis review to quantify the thresholds to pathological variability during standing and walking. Neuroscience and Biobehavioral Reviews, 2016, 68, 111-119.                             | 2.9 | 62        |
| 85 | Occupational sitting behaviour and its relationship with back pain – A pilot study. Applied Ergonomics, 2016, 56, 84-91.   | 1.7 | 41        |
| 86 | Orthotic correction of lower limb function during gait does not immediately influence spinal kinematics in spastic hemiplegic cerebral palsy. Gait and Posture, 2016, 49, 457-462.   | 0.6 | 14        |
| 87 | Kinematics and Kinetics of Squats, Drop Jumps and Imitation Jumps of Ski Jumpers. Journal of Strength and Conditioning Research, 2016, 30, 643-652.  | 1.0 | 11        |
| 88 | Quantifying spinal gait kinematics using an enhanced optical motion capture approach in adolescent idiopathic scoliosis. Gait and Posture, 2016, 44, 231-237.  | 0.6 | 51        |
| 89 | Seat pan and backrest pressure distribution while sitting in office chairs. Applied Ergonomics, 2016, 53, 1-9.   | 1.7 | 47        |
| 90 | Reliability of Phase Velocity Measurements of Flexural Acoustic Waves in the Human Tibia In-Vivo. PLoS ONE, 2016, 11, e0152417.  | 1.1 | 5         |

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|-----|---|-----|-----------|
| 91  | Loading Patterns of the Posterior Cruciate Ligament in the Healthy Knee: A Systematic Review. PLoS ONE, 2016, 11, e0167106.   | 1.1 | 29        |
| 92  | Increased unilateral tendon stiffness and its effect on gait 2â€“6 years after <scp>A</scp>chilles tendon rupture. Scandinavian Journal of Medicine and Science in Sports, 2015, 25, 860-867.   | 1.3 | 49        |
| 93  | A Fast Testing Method to Objectively Quantify the Stiffness of Stability Boots. Applied Bionics and Biomechanics, 2015, 2015, 1-6.  | 0.5 | 1         |
| 94  | Review of Modelling Techniques for<i>In Vivo</i> Muscle Force Estimation in the Lower Extremities during Strength Training. Computational and Mathematical Methods in Medicine, 2015, 2015, 1-12.   | 0.7 | 23        |
| 95  | Are pressure measurements effective in the assessment of office chair comfort/discomfort? A review. Applied Ergonomics, 2015, 48, 273-282.  | 1.7 | 70        |
| 96  | Towards the assessment of local dynamic stability of level-grounded walking in an older population. Medical Engineering and Physics, 2015, 37, 1152-1155.   | 0.8 | 32        |
| 97  | Using Skin Markers for Spinal Curvature Quantification in Main Thoracic Adolescent Idiopathic Scoliosis: An Explorative Radiographic Study. PLoS ONE, 2015, 10, e0135689.   | 1.1 | 51        |
| 98  | Soft Tissue Artefacts of the Human Back: Comparison of the Sagittal Curvature of the Spine Measured Using Skin Markers and an Open Upright MRI. PLoS ONE, 2014, 9, e95426.  | 1.1 | 74        |
| 99  | Joint Angles of the Ankle, Knee, and Hip and Loading Conditions During Split Squats. Journal of Applied Biomechanics, 2014, 30, 373-380.  | 0.3 | 20        |
| 100 | Identification of functional parameters for the classification of older female fallers and prediction of â€“first-timeâ€™ fallers. Journal of the Royal Society Interface, 2014, 11, 20140353.  | 1.5 | 46        |
| 101 | Towards clinical application: Repetitive sensor position re-calibration for improved reliability of gait parameters. Gait and Posture, 2014, 39, 1146-1148.   | 0.6 | 64        |
| 102 | Towards understanding knee joint laxity: Errors in non-invasive assessment of joint rotation can be corrected. Medical Engineering and Physics, 2014, 36, 889-895.  | 0.8 | 11        |
| 103 | European Society of Biomechanics S.M. Perren Award 2014: Safety factor of the proximal femur during gait: A population-based finite element study. Journal of Biomechanics, 2014, 47, 3433-3440.  | 0.9 | 23        |
| 104 | Modulation of the Relationship Between External Knee Adduction Moments and Medial Joint Contact Forces Across Subjects and Activities. Arthritis and Rheumatology, 2014, 66, 1218-1227.   | 2.9 | 73        |
| 105 | Insight from direct in vivo measurements on the force distribution across the human knee in flexion: can it be modified, and can the internal loads be predicted from external measurements?. Osteoarthritis and Cartilage, 2014, 22, S100. | 0.6 | 1         |
| 106 | Is gait variability reliable? An assessment of spatio-temporal parameters of gait variability during continuous overground walking. Gait and Posture, 2014, 39, 615-617.  | 0.6 | 105       |
| 107 | Automatic distinction of upper body motions in the main anatomical planes. Medical Engineering and Physics, 2014, 36, 516-521.  | 0.8 | 8         |
| 108 | Efficacy of the Functional Movement Screen. Journal of Strength and Conditioning Research, 2014, 28, 3571-3584.   | 1.0 | 104       |

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|-----|---|-----|-----------|
| 109 | Terminally Differentiated CD8 <sup>+</sup> T Cells Negatively Affect Bone Regeneration in Humans. <i>Science Translational Medicine</i> , 2013, 5, 177ra36.   | 5.8 | 250       |
| 110 | Kinetic and kinematic differences between deadlifts and goodmornings. <i>The Sports Medicine, Arthroscopy, Rehabilitation and Technology</i> , 2013, 5, 27.   | 1.0 | 14        |
| 111 | Lumbar spinal loads vary with body height and weight. <i>Medical Engineering and Physics</i> , 2013, 35, 969-977.   | 0.8 | 81        |
| 112 | Anterior Cruciate Ligament-Deficient Patients With Passive Knee Joint Laxity Have a Decreased Range of Anterior-Posterior Motion During Active Movements. <i>American Journal of Sports Medicine</i> , 2013, 41, 1051-1057.   | 1.9 | 46        |
| 113 | <i>In Vivo</i> Spinal Posture during Upright and Reclined Sitting in an Office Chair. <i>BioMed Research International</i> , 2013, 2013, 1-5.   | 0.9 | 18        |
| 114 | Temporal but Not Spatial Variability during Gait Is Reduced after Selective Dorsal Rhizotomy in Children with Cerebral Palsy. <i>PLoS ONE</i> , 2013, 8, e69500.  | 1.1 | 12        |
| 115 | Age-Related Modifications to the Magnitude and Periodicity of Neuromuscular Noise. <i>PLoS ONE</i> , 2013, 8, e82791.   | 1.1 | 4         |
| 116 | The difference between stretching and splitting muscle trauma during THA seems not to play a dominant role in influencing periprosthetic BMD changes. <i>Clinical Biomechanics</i> , 2012, 27, 813-818.                       | 0.5 | 11        |
| 117 | The spectral content of postural sway during quiet stance: Influences of age, vision and somatosensory inputs. <i>Journal of Electromyography and Kinesiology</i> , 2012, 22, 131-136.  | 0.7 | 64        |
| 118 | An enhanced and validated generic thoraco-lumbar spine model for prediction of muscle forces. <i>Medical Engineering and Physics</i> , 2012, 34, 709-716.   | 0.8 | 94        |
| 119 | Absolute and functional iron deficiency in professional athletes during training and recovery. <i>International Journal of Cardiology</i> , 2012, 156, 186-191.   | 0.8 | 68        |
| 120 | Effective marker placement for functional identification of the centre of rotation at the hip. <i>Gait and Posture</i> , 2012, 36, 482-486.   | 0.6 | 33        |
| 121 | The quality of bone surfaces may govern the use of model based fluoroscopy in the determination of joint laxity. <i>Medical Engineering and Physics</i> , 2012, 34, 1427-1432.  | 0.8 | 13        |
| 122 | Comparative evaluation of a novel measurement tool to assess lumbar spine posture and range of motion. <i>European Spine Journal</i> , 2012, 21, 2170-2180.   | 1.0 | 69        |
| 123 | Generic Rules of Mechano-Regulation Combined with Subject Specific Loading Conditions Can Explain Bone Adaptation after THA. <i>PLoS ONE</i> , 2012, 7, e36231.   | 1.1 | 27        |
| 124 | Extreme Levels of Noise Constitute a Key Neuromuscular Deficit in the Elderly. <i>PLoS ONE</i> , 2012, 7, e48449.   | 1.1 | 28        |
| 125 | Velocity of Lordosis Angle during Spinal Flexion and Extension. <i>PLoS ONE</i> , 2012, 7, e50135.  | 1.1 | 31        |
| 126 | The direct lateral approach: impact on gait patterns, foot progression angle and pain in comparison with a minimally invasive anterolateral approach. <i>Archives of Orthopaedic and Trauma Surgery</i> , 2012, 132, 725-731. | 1.3 | 27        |



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|-----|---|-----|-----------|
| 127 | Patellofemoral joint contact forces during activities with high knee flexion. <i>Journal of Orthopaedic Research</i> , 2012, 30, 408-415.   | 1.2 | 77        |
| 128 | Kinematic measures for assessing gait stability in elderly individuals: a systematic review. <i>Journal of the Royal Society Interface</i> , 2011, 8, 1682-1698.  | 1.5 | 310       |
| 129 | Collateral ligament length change patterns after joint line elevation may not explain midflexion instability following TKA. <i>Medical Engineering and Physics</i> , 2011, 33, 1303-1308.   | 0.8 | 25        |
| 130 | Influence of prosthesis design and implantation technique on implant stresses after cementless revision THR. <i>Journal of Orthopaedic Surgery and Research</i> , 2011, 6, 20.  | 0.9 | 16        |
| 131 | The medial-lateral force distribution in the ovine stifle joint during walking. <i>Journal of Orthopaedic Research</i> , 2011, 29, 567-571.   | 1.2 | 23        |
| 132 | The weighted optimal common shape technique improves identification of the hip joint center of rotation in vivo. <i>Journal of Orthopaedic Research</i> , 2011, 29, 1470-1475.  | 1.2 | 43        |
| 133 | The SCoRE residual: A quality index to assess the accuracy of joint estimations. <i>Journal of Biomechanics</i> , 2011, 44, 1400-1404.  | 0.9 | 52        |
| 134 | Biomechanik des Kniegelenks. , 2011, , 19-31.   |     | 3         |
| 135 | Joint line elevation in revision TKA leads to increased patellofemoral contact forces. <i>Journal of Orthopaedic Research</i> , 2010, 28, 1-5.  | 1.2 | 88        |
| 136 | Effect of fatigue on force fluctuations in knee extensors in young adults. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2010, 368, 2783-2798.   | 1.6 | 25        |
| 137 | A novel system for the dynamic assessment of back shape. <i>Medical Engineering and Physics</i> , 2010, 32, 1080-1083.  | 0.8 | 44        |
| 138 | Regulation of the patellofemoral contact area: An essential mechanism in patellofemoral joint mechanics?. <i>Journal of Biomechanics</i> , 2010, 43, 3237-3239.   | 0.9 | 12        |
| 139 | Frontal plane alignment: An imageless method to predict the mechanical femoral-tibial angle (mFTA) based on functional determination of joint centres and axes. <i>Gait and Posture</i> , 2010, 31, 204-208.  | 0.6 | 14        |
| 140 | Repeatability and reproducibility of OSSCA, a functional approach for assessing the kinematics of the lower limb. <i>Gait and Posture</i> , 2010, 32, 231-236.  | 0.6 | 72        |
| 141 | The Expression of Proinflammatory Cytokines and Matrix Metalloproteinases in the Synovial Membranes of Patients With Osteoarthritis Compared With Traumatic Knee Disorders. <i>Arthroscopy - Journal of Arthroscopic and Related Surgery</i> , 2010, 26, 1096-1104. | 1.3 | 52        |
| 142 | Modulation of Matrix Metalloprotease-2 Levels by Mechanical Loading of Three-Dimensional Mesenchymal Stem Cell Constructs: Impact on <i>In Vitro</i> Tube Formation. <i>Tissue Engineering - Part A</i> , 2010, 16, 3139-3148.                                      | 1.6 | 27        |
| 143 | The Influence of Recovery and Training Phases on Body Composition, Peripheral Vascular Function and Immune System of Professional Soccer Players. <i>PLoS ONE</i> , 2009, 4, e4910.   | 1.1 | 39        |
| 144 | A comparison of techniques for fixation of the quadriceps muscle-tendon complex for in vitro biomechanical testing of the knee joint in sheep. <i>Medical Engineering and Physics</i> , 2009, 31, 69-75.  | 0.8 | 7         |

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|-----|--|-----|-----------|
| 145 | Stair climbing results in more challenging patellofemoral contact mechanics and kinematics than walking at early knee flexion under physiological-like quadriceps loading. <i>Journal of Biomechanics</i> , 2009, 42, 2590-2596.   | 0.9 | 37        |
| 146 | Reduction of the influence of skin marker artefact using the optimal common shape technique. <i>Gait and Posture</i> , 2009, 30, S31-S32.  | 0.6 | 1         |
| 147 | Biomechanical, Microvascular, and Cellular Factors Promote Muscle and Bone Regeneration. <i>Exercise and Sport Sciences Reviews</i> , 2008, 36, 64-70.   | 1.6 | 22        |
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