Benedicte Vanwanseele

List of Publications by Year
in descending order

132 papers	3,326 citations	172457 29 h-index	175258 52 g-index
137 all docs	137 docs citations	137 times ranked	3500 citing authors

#	Article	IF	Citations
1	Changes in running kinematics and kinetics after a 12-week running program for beginners. Sports Biomechanics, 2022, 21, 201-211.	1.6	4
2	Dose-response effects of forefoot and arch orthotic components on the center of pressure trajectory during running in pronated feet. Gait and Posture, 2022, 92, 212-217.	1.4	9
3	Optimal mechanical forceâ€velocity profile for sprint acceleration performance. Scandinavian Journal of Medicine and Science in Sports, 2022, 32, 559-575.	2.9	22
4	The effect of interventions anticipated to improve plantar intrinsic foot muscle strength on fallâ€related dynamic function in adults: a systematic review. Journal of Foot and Ankle Research, 2022, 15, 3.	1.9	9
5	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
6	Intraâ€assessor reliability and measurement error of ultrasound measures for foot muscle morphology in older adults using a tabletâ€based ultrasound machine. Journal of Foot and Ankle Research, 2022, 15, 6.	1.9	4
7	Muscle-tendon properties and functional gait outcomes in clubfoot patients with and without a relapse compared to typically developing children. Gait and Posture, 2022, 93, 47-53.	1.4	2
8	Impact of Gender and Feature Set on Machine-Learning-Based Prediction of Lower-Limb Overuse Injuries Using a Single Trunk-Mounted Accelerometer. Sensors, 2022, 22, 2860.	3.8	1
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 effects of foot orthosis and low-dye tape on lower limb joint angles and moments during running in individuals with pes planus. Gait and Posture, 2022, 96, 154-159.	1.4	3
13	Sprint force-velocity profiles in soccer players: impact of sex and playing level. Sports Biomechanics, 2021, 20, 947-957.	1.6	15
14	Influence of heel design on lower extremity biomechanics and comfort perception in overground running. Journal of Sports Sciences, 2021, 39, 232-238.	2.0	8
15	Contact Force Reconstruction from the Lower-Back Accelerations during Walking on Vibrating Surfaces. Vibration, 2021, 4, 205-231.	1.9	0
16	Distalâ€toâ€proximal joint mechanics redistribution is a main contributor to reduced walking economy in older adults. Scandinavian Journal of Medicine and Science in Sports, 2021, 31, 1036-1047.	2.9	19
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	Novel technology in sports biomechanics: some words of caution. Sports Biomechanics, 2021, , 1-9.	1.6	32

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19	The energetic, kinematic and kinetic responses to load carried on the back, on the head and in a doublepack. Ergonomics, 2021, 64, 1191-1204.	2.1	1
20	Axial Spondyloarthritis is associated with changes in lumbosacral loading during daily activities. Clinical Biomechanics, 2021, 85, 105347.	1.2	0
21	Differences in multi-segmental spine kinematics between patients with different stages of axial spondyloarthritis and healthy controls. Musculoskeletal Science and Practice, 2021, 53, 102368.	1.3	3
22	The Use of a Single Trunk-Mounted Accelerometer to Detect Changes in Center of Mass Motion Linked to Lower-Leg Overuse Injuries: A Prospective Study. Sensors, 2021, 21, 7385.	3.8	5
23	Ultrasound-Based Optimal Parameter Estimation Improves Assessment of Calf Muscleâ€"Tendon Interaction During Walking. Annals of Biomedical Engineering, 2020, 48, 722-733.	2.5	15
24	Recommendations for statistical analysis involving null hypothesis significance testing. Sports Biomechanics, 2020, 19, 561-568.	1.6	27
25	An age-adapted plyometric exercise program improves dynamic strength, jump performance and functional capacity in older men either similarly or more than traditional resistance training. PLoS ONE, 2020, 15, e0237921.	2.5	15
26	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
27	Accelerometer Based Data Can Provide a Better Estimate of Cumulative Load During Running Compared to GPS Based Parameters. Frontiers in Sports and Active Living, 2020, 2, 575596.	1.8	10
28	Functional movement assessment by means of inertial sensor technology to discriminate between movement behaviour of healthy controls and persons with knee osteoarthritis. Journal of NeuroEngineering and Rehabilitation, 2020, 17, 65.	4.6	15
29	Discriminant validity of 3D joint kinematics and centre of mass displacement measured by inertial sensor technology during the unipodal stance task. PLoS ONE, 2020, 15, e0232513.	2.5	7
30	Ageâ€related differences in vastus lateralis fascicle behavior during fast accelerative legâ€extension movements. Scandinavian Journal of Medicine and Science in Sports, 2020, 30, 1878-1887.	2.9	2
31	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
32	Achilles Subtendon Structure and Behavior as Evidenced From Tendon Imaging and Computational Modeling. Frontiers in Sports and Active Living, 2020, 2, 70.	1.8	14
33	Inter-segmental coordination of the spine is altered during lifting in patients with ankylosing spondylitis. Medicine (United States), 2020, 99, e18941.	1.0	2
34	Multiview 3D Markerless Human Pose Estimation from OpenPose Skeletons. Lecture Notes in Computer Science, 2020, , 166-178.	1.3	11
35	CONTACT FORCE RECONSTRUCTION ON VIBRATING SURFACES. , 2020, , .		1
36	Age-Related Changes in Achilles Tendon Stiffness and Impact on Functional Activities: A Systematic Review and Meta-Analysis. Journal of Aging and Physical Activity, 2019, 27, 116-127.	1.0	33

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37	The influence of knee joint geometry and alignment on the tibiofemoral load distribution: A computational study. Knee, 2019, 26, 813-823.	1.6	27
38	Differences in foot muscle morphology and foot kinematics between symptomatic and asymptomatic pronated feet. Scandinavian Journal of Medicine and Science in Sports, 2019, 29, 1766-1773.	2.9	20
39	Habitual foot strike pattern does not affect simulated Triceps Surae muscle metabolic energy consumption during running. Journal of Experimental Biology, 2019, 222, .	1.7	6
40	Machine learning algorithms can classify outdoor terrain types during running using accelerometry data. Gait and Posture, 2019, 74, 176-181.	1.4	30
41	Multi-segment spine and hip kinematics in asymptomatic individuals during standardized return from forward bending versus functional box lifting. Journal of Electromyography and Kinesiology, 2019, 49, 102352.	1.7	5
42	Variation of actin filament length in dogs. Journal of Anatomy, 2019, 234, 694-699.	1.5	1
43	Effect of acceleration on the rate of power development and neural activity of the leg extensors across the adult life span. European Journal of Applied Physiology, 2019, 119, 781-789.	2.5	6
44	Do Stretch-Shortening Cycles Really Occur in the Medial Gastrocnemius? A Detailed Bilateral Analysis of the Muscle-Tendon Interaction During Jumping. Frontiers in Physiology, 2019, 10, 1504.	2.8	12
45	Effect of habitual foot-strike pattern on the gastrocnemius medialis muscle-tendon interaction and muscle force production during running. Journal of Applied Physiology, 2019, 126, 708-716.	2.5	24
46	Reliability and Agreement of 3D Trunk and Lower Extremity Movement Analysis by Means of Inertial Sensor Technology for Unipodal and Bipodal Tasks. Sensors, 2019, 19, 141.	3.8	16
47	AMIE: Automatic Monitoring of Indoor Exercises. Lecture Notes in Computer Science, 2019, , 424-439.	1.3	9
48	Vision-Based Marker-Less Spatiotemporal Gait Analysis by Using a Mobile Platform: Preliminary Validation. Communications in Computer and Information Science, 2019, , 126-141.	0.5	0
49	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
50	Gait adaptations of older adults on an uneven brick surface can be predicted by age-related physiological changes in strength. Gait and Posture, 2018, 61, 257-262.	1.4	32
51	Energy cost of running instability evaluated with wearable trunk accelerometry. Journal of Applied Physiology, 2018, 124, 462-472.	2.5	6
52	Novice runners show greater changes in kinematics with fatigue compared with competitive runners. Sports Biomechanics, 2018, 17, 350-360.	1.6	54
53	Influence of outdoor running fatigue and medial tibial stress syndrome on accelerometer-based loading and stability. Gait and Posture, 2018, 59, 222-228.	1.4	47
54	The morphology of foot soft tissues is associated with running shoe type in healthy recreational runners. Journal of Science and Medicine in Sport, 2018, 21, 686-690.	1.3	10

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55	Age-related differences in rate of power development exceed differences in peak power. Experimental Gerontology, 2018, 101, 95-100.	2.8	12
56	Effect of a prehop on the muscle-tendon interaction during vertical jumps. Journal of Applied Physiology, 2018, 124, 1203-1211.	2.5	10
57	Data fusion of body-worn accelerometers and heart rate to predict VO2max during submaximal running. PLoS ONE, 2018, 13, e0199509.	2.5	21
58	Age-related decline in leg-extensor power development in single- versus multi-joint movements. Experimental Gerontology, 2018, 110, 98-104.	2.8	8
59	Test-retest reliability of knee extensor rate of velocity and power development in older adults using the isotonic mode on a Biodex System 3 dynamometer. PLoS ONE, 2018, 13, e0196838.	2.5	26
60	Fatigue Prediction in Outdoor Runners Via Machine Learning and Sensor Fusion. , 2018, , .		27
61	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
62	P 074 - A comparison of foot kinematics in children with clubfeet and healthy controls using the Oxford Foot Model. Gait and Posture, 2018, 65, 353-354.	1.4	1
63	Gait kinetics in children with clubfeet treated surgically or with the Ponseti method: A meta-analysis. Gait and Posture, 2018, 66, 94-100.	1.4	13
64	Reliability of 3D Lower Extremity Movement Analysis by Means of Inertial Sensor Technology during Transitional Tasks. Sensors, 2018, 18, 2638.	3.8	8
65	Muscleâ€"tendon unit length changes differ between young and adult sprinters in the first stance phase of sprint running. Royal Society Open Science, 2018, 5, 180332.	2.4	7
66	Functional Effects of Shoes. , 2018, , 1423-1432.		0
67	Bilateral differences in muscle fascicle architecture are not related to the preferred leg in jumping athletes. European Journal of Applied Physiology, 2017, 117, 1453-1461.	2.5	20
68	Foot muscle morphology is related to center of pressure sway and control mechanisms during single-leg standing. Gait and Posture, 2017, 57, 52-56.	1.4	27
69	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
70	Comparison of foot muscle morphology and foot kinematics between recreational runners with normal feet and with asymptomatic over-pronated feet. Gait and Posture, 2017, 54, 290-294.	1.4	49
71	Effects of habitual running shoe type on foot soft tissuesâ€™ morphology. Footwear Science, 2017, 9, S63-S64.	2.1	0
72	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

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73	Adding an arch support to a heel lift improves stability and comfort during gait. Gait and Posture, 2017, 58, 94-97.	1.4	17
74	Characterisation of the responsive properties of two running-specific prosthetic models. Prosthetics and Orthotics International, 2017, 41, 141-148.	1.0	6
75	The effect of three surface conditions, speed and running experience on vertical acceleration of the tibia during running. Sports Biomechanics, 2017, 16, 166-176.	1.6	43
76	Concurrent validity and reliability of wireless instrumented insoles measuring postural balance and temporal gait parameters. Gait and Posture, 2017, 51, 116-124.	1.4	46
77	Lateral trunk lean and medializing the knee as gait strategies for knee osteoarthritis. Gait and Posture, 2017, 51, 247-253.	1.4	35
78	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
79	Information from dynamic length changes improves reliability of static ultrasound fascicle length measurements. PeerJ, 2017, 5, e4164.	2.0	12
80	Functional Effects of Shoes. , 2017, , 1-10.		0
81	Musculoskeletal modelling in dogs: challenges and future perspectives. Veterinary and Comparative Orthopaedics and Traumatology, 2016, 29, 181-187.	0.5	22
82	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
83	An optimized design of in-shoe heel lifts reduces plantar pressure of healthy males. Gait and Posture, 2016, 47, 43-47.	1.4	11
84	Biofeedback in Partial Weight Bearing: Validity of 3 Different Devices. Journal of Orthopaedic and Sports Physical Therapy, 2016, 46, 993-1001.	3.5	7
85	Surface effects on dynamic stability and loading during outdoor running using wireless trunk accelerometry. Gait and Posture, 2016, 48, 220-225.	1.4	38
86	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
87	Selecting gait modification strategies for patients with knee osteoarthritis. Osteoarthritis and Cartilage, 2016, 24, S112-S113.	1.3	0
88	Biofeedback in Partial Weight Bearing: Usability of Two Different Devices from a Patientâ€™s and Physical Therapistâ€™s Perspective. PLoS ONE, 2016, 11, e0165199.	2.5	11
89	Wireless Tri-Axial Trunk Accelerometry Detects Deviations in Dynamic Center of Mass Motion Due to Running-Induced Fatigue. PLoS ONE, 2015, 10, e0141957.	2.5	66
90	In-shoe multi-segment foot kinematics of children during the propulsive phase of walking and running. Human Movement Science, 2015, 39, 200-211.	1.4	17

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91	Train High Eat Low for Osteoarthritis study (THE LO study): protocol for a randomized controlled trial. Journal of Physiotherapy, 2015, 61, 217.	1.7	4
92	Proactive and reactive neuromuscular control in subjects with chronic ankle instability: Evidence from a pilot study on landing. Gait and Posture, 2015, 41, 106-111.	1.4	25
93	The effect of external ankle support on the kinematics and kinetics of the lower limb during a side step cutting task in netballers. BMC Sports Science, Medicine and Rehabilitation, 2014, 6, 42.	1.7	13
94	Treatment of Forefoot Problems in Older People: A Randomized Clinical Trial Comparing Podiatric Treatment With Standardized Shoe Advice. Annals of Family Medicine, 2014, 12, 432-440.	1.9	8
95	Development and evaluation of a leaflet containing shoe advice: a randomized controlled trial. Family Practice, 2014, 31, 267-272.	1.9	5
96	The effect of external ankle support on knee and ankle joint movement and loading in netball players. Journal of Science and Medicine in Sport, 2014, 17, 511-515.	1.3	25
97	Variation in the location of the shoe sole flexion point influences plantar loading patterns during gait. Journal of Foot and Ankle Research, 2014, 7, 20.	1.9	4
98	Individual selection of gait retraining strategies is essential to optimally reduce medial knee load during gait. Clinical Biomechanics, 2014, 29, 828-834.	1.2	55
99	An EMG assessment of Front Row Rugby Union Scrummaging. International Journal of Performance Analysis in Sport, 2014, 14, 225-237.	1.1	9
100	Effect of thong style flipâ€flops on children's barefoot walking and jogging kinematics. Journal of Foot and Ankle Research, 2013, 6, 8.	1.9	33
101	Process evaluation of podiatric treatment of patients with forefoot pain. Journal of Foot and Ankle Research, 2013, 6, 32.	1.9	3
102	Effect of sports shoes on midfoot power generation in children while walking and running. Footwear Science, 2013, 5, S55-S56.	2.1	0
103	Effect of sports shoes on children's vertical jump performance and midfoot and ankle kinetics. Footwear Science, 2013, 5, S58-S59.	2.1	2
104	Knee loading patterns in a simulated netball landing task. European Journal of Sport Science, 2013, 13, 475-482.	2.7	15
105	Mechanics of Jazz Shoes and Their Effect on Pointing in Child Dancers. Journal of Applied Biomechanics, 2012, 28, 242-248.	0.8	13
106	Children's functional performance barefoot and in sports shoes. Journal of Foot and Ankle Research, 2012, 5, .	1.9	0
107	Lower limb muscle strengthening does not change frontal plane moments in women with knee osteoarthritis: A randomized controlled trial. Clinical Biomechanics, 2011, 26, 167-174.	1.2	92
108	Progressive resistance training and dynamic alignment in osteoarthritis: A single-blind randomised controlled trial. Clinical Biomechanics, 2011, 26, 71-77.	1.2	44

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109	Measuring Lifting Forces in Rock Climbing: Effect of Hold Size and Fingertip Structure. Journal of Applied Biomechanics, 2011, 27, 40-46.	0.8	23
110	Effect of children's shoes on gait: a systematic review and metaâ€analysis. Journal of Foot and Ankle Research, 2011, 4, 3.	1.9	92
111	Children's rearfoot and midfoot motion while walking in school shoes. Journal of Foot and Ankle Research, 2011, 4, .	1.9	12
112	The Reliability and Validity of a Three-Camera Foot Image System for Obtaining Foot Anthropometrics. Journal of Applied Biomechanics, 2010, 26, 349-356.	0.8	2
113	Injury Prevalence In Australian Professional Golfers. Medicine and Science in Sports and Exercise, 2010, 42, 420-421.	0.4	0
114	The relationship between knee adduction moment and cartilage and meniscus morphology in women with osteoarthritis. Osteoarthritis and Cartilage, 2010, 18, 894-901.	1.3	56
115	Dynamic alignment and its association with knee adduction moment in medial knee osteoarthritis. Knee, 2010, 17, 210-216.	1.6	41
116	The association of external knee adduction moment with biomechanical variables in osteoarthritis: A systematic review. Knee, 2009, 16, 303-309.	1.6	200
117	Frontal Knee Alignment: Three-dimensional Marker Positions and Clinical Assessment. Clinical Orthopaedics and Related Research, 2009, 467, 504-509.	1.5	46
118	Resistive Exercise for Arthritic Cartilage Health (REACH): A randomized double-blind, sham-exercise controlled trial. BMC Geriatrics, 2009, 9, 1.	2.7	64
119	Strength training for treatment of osteoarthritis of the knee: A systematic review. Arthritis and Rheumatism, 2008, 59, 1488-1494.	6.7	225
120	A quantitative study of humeral cartilage in individuals with spinal cord injury. Spinal Cord, 2008, 46, 129-134.	1.9	9
121	Post-traumatic glenohumeral cartilage lesions: a systematic review. BMC Musculoskeletal Disorders, 2008, 9, 107.	1.9	40
122	Posterior cruciate ligament deficiency: Biomechanical and biological consequences and the outcomes of conservative treatment. Journal of Science and Medicine in Sport, 2008, 11, 433-443.	1.3	47
123	Quantitative Analysis of Local Changes in Patellar Cartilage in Spinal Cord Injured Subjects. Clinical Orthopaedics and Related Research, 2007, 456, 98-102.	1.5	6
124	Degenerative meniscus tears and mobility impairment in women with knee osteoarthritis. Osteoarthritis and Cartilage, 2007, 15, 701-708.	1.3	59
125	A review on the mechanical quality of articular cartilage â€“ Implications for the diagnosis of osteoarthritis. Clinical Biomechanics, 2006, 21, 999-1012.	1.2	110
126	Long-term changes in the tibia and radius bone mineral density following spinal cord injury. Spinal Cord, 2005, 43, 96-101.	1.9	61

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127	In vivo precision of quantitative shoulder cartilage measurements, and changes after spinal cord injury. Magnetic Resonance in Medicine, 2004, 51, 1026-1030.	3.0	16
128	Longitudinal analysis of cartilage atrophy in the knees of patients with spinal cord injury. Arthritis and Rheumatism, 2003, 48, 3377-3381.	6.7	127
129	The effects of immobilization on the characteristics of articular cartilage: current concepts and future directions. Osteoarthritis and Cartilage, 2002, 10, 408-419.	1.3	189
130	Knee cartilage of spinal cord-injured patients displays progressive thinning in the absence of normal joint loading and movement. Arthritis and Rheumatism, 2002, 46, 2073-2078.	6.7	165
131	Muscle tuning and preferred movement path: do we need a paradigm shift or should we redefine the old? â€“ comment on Nigg et al.. Current Issues in Sport Science, 0, , .	0.1	0
132	Triceps surae muscle force potential and force demand shift with altering stride frequency in running. Scandinavian Journal of Medicine and Science in Sports, 0, , .	2.9	10