Jos Vanrenterghem

List of Publications by Year
in descending order

108	3,887	159358	143772
papers	citations	30 h-index	57 g-index

109	109	109	3584
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Vector field statistical analysis of kinematic and force trajectories. Journal of Biomechanics, 2013, 46, 2394-2401.	0.9	462
2	Training Load Monitoring in Team Sports: A Novel Framework Separating Physiological and Biomechanical Load-Adaptation Pathways. Sports Medicine, 2017, 47, 2135-2142.	3.1	289
3	Zero- vs. one-dimensional, parametric vs. non-parametric, and confidence interval vs. hypothesis testing procedures in one-dimensional biomechanical trajectory analysis. Journal of Biomechanics, 2015, 48, 1277-1285.	0.9	232
4	Understanding how an arm swing enhances performance in the vertical jump. Journal of Biomechanics, 2004, 37, 1929-1940.	0.9	230
5	The probability of false positives in zero-dimensional analyses of one-dimensional kinematic, force and EMG trajectories. Journal of Biomechanics, 2016, 49, 1468-1476.	0.9	114
6	The trajectory of the centre of pressure during barefoot running as a potential measure for foot function. Gait and Posture, 2008, 27, 669-675.	0.6	108
7	The effect of running speed on knee mechanical loading in females during side cutting. Journal of Biomechanics, 2012, 45, 2444-2449.	0.9	107
8	Region-of-interest analyses of one-dimensional biomechanical trajectories: bridging 0D and 1D theory, augmenting statistical power. PeerJ, 2016, 4, e2652.	0.9	107
9	Statistical Parametric Mapping (SPM) for alpha-based statistical analyses of multi-muscle EMG time-series. Journal of Electromyography and Kinesiology, 2015, 25, 14-19.	0.7	93
10	A functional foot type classification with cluster analysis based on plantar pressure distribution during jogging. Gait and Posture, 2006, 23, 339-347.	0.6	78
11	Performing the vertical jump: Movement adaptations for submaximal jumping. Human Movement Science, 2004, 22, 713-727.	0.6	76
12	The Relationship Between Whole-Body External Loading and Body-Worn Accelerometry During Team-Sport Movements. International Journal of Sports Physiology and Performance, 2017, 12, 18-26.	1.1	73
13	Force-Controlled Balance Perturbations Associated with Falls in Older People: A Prospective Cohort Study. PLoS ONE, 2013, 8, e70981.	1.1	72
14	The reliability and validity of the measurement of lateral trunk motion in two-dimensional video analysis during unipodal functional screening tests in elite female athletes. Physical Therapy in Sport, 2014, 15, 117-123.	0.8	71
15	Solutions for representing the whole-body centre of mass in side cutting manoeuvres based on data that is typically available for lower limb kinematics. Gait and Posture, 2010, 31, 517-521.	0.6	68
16	Measuring biomechanical loads in team sports â€“ from lab to field. Science and Medicine in Football, 2020, 4, 246-252.	1.0	61
17	Gait Kinematics of Subjects with Ankle Instability Using a Multisegmented Foot Model. Medicine and Science in Sports and Exercise, 2013, 45, 2129-2136.	0.2	57
18	A systematic review on biomechanical characteristics of walking in children and adolescents with overweight/obesity: Possible implications for the development of musculoskeletal disorders. Obesity Reviews, 2019, 20, 1033-1044.	3.1	57

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19	Necessary precautions in measuring correct vertical jumping height by means of force plate measurements. Ergonomics, 2001, 44, 814-818.	1.1	56
20	Multi-segment foot landing kinematics in subjects with chronic ankle instability. Clinical Biomechanics, 2015, 30, 585-592.	0.5	53
21	Impact of Knee Modeling Approach on Indicators and Classification of Anterior Cruciate Ligament Injury Risk. Medicine and Science in Sports and Exercise, 2014, 46, 1269-1276.	0.2	51
22	The Maximal and Submaximal Vertical Jump: Implications for Strength and Conditioning. Journal of Strength and Conditioning Research, 2004, 18, 787.	1.0	51
23	How Reliable Are Lower-Limb Kinematics and Kinetics during a Drop Vertical Jump?. Medicine and Science in Sports and Exercise, 2014, 46, 678-685.	0.2	48
24	Can two-dimensional measured peak sagittal plane excursions during drop vertical jumps help identify three-dimensional measured joint moments?. Knee, 2015, 22, 73-79.	0.8	43
25	Mechanical Player Loadâ„¢ using trunk-mounted accelerometry in football: Is it a reliable, task- and player-specific observation?. Journal of Sports Sciences, 2017, 35, 1674-1681.	1.0	40
26	Vector field statistics for objective center-of-pressure trajectory analysis during gait, with evidence of scalar sensitivity to small coordinate system rotations. Gait and Posture, 2014, 40, 255-258.	0.6	38
27	Kinematic response characteristics of the CAREN moving platform system for use in posture and balance research. Medical Engineering and Physics, 2007, 29, 629-635.	0.8	37
28	A force profile analysis comparison between functional data analysis, statistical parametric mapping and statistical non-parametric mapping in on-water single sculling. Journal of Science and Medicine in Sport, 2018, 21, 1100-1105.	0.6	37
29	Sensorimotor and neuropsychological correlates of force perturbations that induce stepping in older adults. Gait and Posture, 2012, 36, 356-360.	0.6	33
30	The energetics and benefit of an arm swing in submaximal and maximal vertical jump performance. Journal of Sports Sciences, 2006, 24, 51-57.	1.0	32
31	Effect of Forward Trunk Inclination on Joint Power Output in Vertical Jumping. Journal of Strength and Conditioning Research, 2008, 22, 708-714.	1.0	30
32	How reliable are knee kinematics and kinetics during side-cutting manoeuvres?. Gait and Posture, 2015, 41, 905-911.	0.6	29
33	Knee and Hip Joint Kinematics Predict Quadriceps and Hamstrings Neuromuscular Activation Patterns in Drop Jump Landings. PLoS ONE, 2016, 11, e0153737.	1.1	29
34	A neural network method to predict task- and step-specific ground reaction force magnitudes from trunk accelerations during running activities. Medical Engineering and Physics, 2020, 78, 82-89.	0.8	28
35	An evaluation of anatomical and functional knee axis definition in the context of side-cutting. Journal of Biomechanics, 2012, 45, 1941-1946.	0.9	27
36	Influence of balance surface on ankle stabilizing muscle activity in subjects with chronic ankle instability.. Journal of Rehabilitation Medicine, 2015, 47, 632-638.	0.8	27

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37	Lower Limb Landing Biomechanics in Subjects with Chronic Ankle Instability. Medicine and Science in Sports and Exercise, 2015, 47, 1225-1231.	0.2	26
38	Sample size estimation for biomechanical waveforms: Current practice, recommendations and a comparison to discrete power analysis. Journal of Biomechanics, 2021, 122, 110451.	0.9	26
39	The role of proximal dynamic joint stability in the development of exertional medial tibial pain: a prospective study. British Journal of Sports Medicine, 2014, 48, 388-393.	3.1	24
40	Two-way ANOVA for scalar trajectories, with experimental evidence of non-phasic interactions. Journal of Biomechanics, 2015, 48, 186-189.	0.9	23
41	Biomechanical loading during running: can a two mass-spring-damper model be used to evaluate ground reaction forces for high-intensity tasks?. Sports Biomechanics, 2021, 20, 571-582.	0.8	23
42	The implementation of inertial sensors for the assessment of temporal parameters of gait in the knee arthroplasty population. Clinical Biomechanics, 2018, 54, 22-27.	0.5	22
43	The feasibility of predicting ground reaction forces during running from a trunk accelerometry driven mass-spring-damper model. PeerJ, 2018, 6, e6105.	0.9	22
44	Whole-body biomechanical load in running-based sports: The validity of estimating ground reaction forces from segmental accelerations. Journal of Science and Medicine in Sport, 2019, 22, 716-722.	0.6	22
45	External and internal loads during the competitive season in professional female soccer players according to their playing position: differences between training and competition. Research in Sports Medicine, 2021, 29, 449-461.	0.7	22
46	Is knee neuromuscular activity related to anterior cruciate ligament injury risk? A pilot study. Knee, 2019, 26, 40-51.	0.8	21
47	Fatness and fitness in relation to functional movement quality in overweight and obese children. Journal of Sports Sciences, 2019, 37, 878-885.	1.0	21
48	Effect of a Home-based Balance Training Protocol on Dynamic Postural Control in Subjects with Chronic Ankle Instability. International Journal of Sports Medicine, 2015, 36, 596-602.	0.8	20
49	Negative Influence of Motor Impairments on Upper Limb Movement Patterns in Children with Unilateral Cerebral Palsy. A Statistical Parametric Mapping Study. Frontiers in Human Neuroscience, 2017, 11, 482.	1.0	20
50	The Neuromuscular Determinants of Unilateral Jump Performance in Soccer Players Are Direction-Specific. International Journal of Sports Physiology and Performance, 2018, 13, 604-611.	1.1	20
51	Understanding the effects of training on underwater undulatory swimming performance and kinematics. Sports Biomechanics, 2021, , 1-16.	0.8	20
52	Can the natural turf pitch be viewed as a risk factor for injury within Association Football?. Journal of Science and Medicine in Sport, 2016, 19, 547-552.	0.6	19
53	On the validity of statistical parametric mapping for nonuniformly and heterogeneously smooth one-dimensional biomechanical data. Journal of Biomechanics, 2019, 91, 114-123.	0.9	19
54	Effects of Exercise on Body Posture, Functional Movement, and Physical Fitness in Children With Overweight/Obesity. Journal of Strength and Conditioning Research, 2020, 34, 2146-2155.	1.0	19

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55	Effect of Tape on Dynamic Postural Stability in Subjects with Chronic Ankle Instability. International Journal of Sports Medicine, 2015, 36, 321-326.	0.8	17
56	Unilateral jumps in different directions: a novel assessment of soccer-associated power?. Journal of Science and Medicine in Sport, 2017, 20, 1018-1023.	0.6	17
57	Athletes with an ACL reconstruction show a different neuromuscular response to environmental challenges compared to uninjured athletes. Gait and Posture, 2021, 83, 44-51.	0.6	17
58	Foot orientation affects muscle activation levels of ankle stabilizers in a single-legged balance board protocol. Human Movement Science, 2014, 33, 419-431.	0.6	16
59	Effects of treadmill versus overground soccer match simulations on biomechanical markers of anterior cruciate ligament injury risk in side cutting. Journal of Sports Sciences, 2015, 33, 1332-1341.	1.0	16
60	Motor learning methods that induce high practice variability reduce kinematic and kinetic risk factors of non-contact ACL injury. Human Movement Science, 2021, 78, 102805.	0.6	16
61	Identifying generalised segmental acceleration patterns that contribute to ground reaction force features across different running tasks. Journal of Science and Medicine in Sport, 2019, 22, 1355-1360.	0.6	15
62	Single-Joint and Whole-Body Movement Changes in Anterior Cruciate Ligament Athletes Returning to Sport. Medicine and Science in Sports and Exercise, 2020, 52, 1658-1667.	0.2	15
63	External load differences between elite youth and professional football players: ready for take-off?. Science and Medicine in Football, 2021, 5, 1-5.	1.0	15
64	Mapping current research trends on anterior cruciate ligament injury risk against the existing evidence: In vivo biomechanical risk factors. Clinical Biomechanics, 2016, 37, 34-43.	0.5	14
65	Lower extremity gait kinematics outcomes after knee replacement demonstrate arthroplasty-specific differences between unicondylar and total knee arthroplasty: A pilot study. Gait and Posture, 2019, 73, 299-304.	0.6	14
66	Match Playâ€“induced Changes in Landing Biomechanics with Special Focus on Fatigability. Medicine and Science in Sports and Exercise, 2019, 51, 1884-1894.	0.2	14
67	Role of physical fitness and functional movement in the body posture of children with overweight/obesity. Gait and Posture, 2020, 80, 331-338.	0.6	13
68	IMU gyroscopes are a valid alternative to 3D optical motion capture system for angular kinematics analysis in tennis. Proceedings of the Institution of Mechanical Engineers, Part P: Journal of Sports Engineering and Technology, 2021, 235, 3-12.	0.4	13
69	A method for manipulating a movable platform's axes of rotation: A novel use of the CAREN system. Gait and Posture, 2006, 24, 510-514.	0.6	12
70	Is energy expenditure taken into account in human sub-maximal jumping? â€“ A simulation study. Journal of Electromyography and Kinesiology, 2008, 18, 108-115.	0.7	12
71	Does stroke performance in amateur tennis players depend on functional power generating capacity?. Journal of Sports Medicine and Physical Fitness, 2019, 59, 760-766.	0.4	12
72	Whole-body dynamic stability in side cutting: Implications for markers of lower limb injury risk and change of direction performance. Journal of Biomechanics, 2020, 104, 109711.	0.9	12

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73	The Utility of a High-intensity Exercise Protocol to Prospectively Assess ACL Injury Risk. International Journal of Sports Medicine, 2016, 37, 125-133.	0.8	11
74	Are Anterior Cruciate Ligamentâ€"reconstructed Athletes More Vulnerable to Fatigue than Uninjured Athletes?. Medicine and Science in Sports and Exercise, 2020, 52, 345-353.	0.2	11
75	Mapping current research trends on neuromuscular risk factors of non-contact ACL injury. Physical Therapy in Sport, 2016, 22, 101-113.	0.8	10
76	Effects of Exercise on Plantar Pressure during Walking in Children with Overweight/Obesity. Medicine and Science in Sports and Exercise, 2020, 52, 654-662.	0.2	10
77	Kinematic Adaptations of Forward and Backward Walking on Land and in Water. Journal of Human Kinetics, 2015, 49, 15-24.	0.7	9
78	Patellar tendon properties distinguish elite from non-elite soccer players and are related to peak horizontal but not vertical power. European Journal of Applied Physiology, 2018, 118, 1737-1749.	1.2	9
79	Changes in Torque-Angle Profiles of the Hamstrings and Hamstrings-to-Quadriceps Ratio After Two Hamstring Strengthening Exercise Interventions in Female Hockey Players. Journal of Strength and Conditioning Research, 2020, 34, 396-405.	1.0	9
80	Temporal kinematic differences throughout single and double-leg forward landings. Journal of Biomechanics, 2020, 99, 109559.	0.9	9
81	The Impact of Childhood Obesity on Joint Alignment: A Systematic Review and Meta-Analysis. Physical Therapy, 2021, 101, .	1.1	9
82	A computational framework for estimating statistical power and planning hypothesis-driven experiments involving one-dimensional biomechanical continua. Journal of Biomechanics, 2018, 66, 159-164.	0.9	8
83	Taping Benefits Ankle Joint Landing Kinematics in Subjects With Chronic Ankle Instability. Journal of Sport Rehabilitation, 2020, 29, 162-167.	0.4	8
84	Dynamic Neuromuscular Control of the Lower Limbs in Response to Unexpected Single-Planar versus Multi-Planar Support Perturbations in Young, Active Adults. PLoS ONE, 2015, 10, e0133147.	1.1	7
85	Effects of increased anteriorâ€"posterior voluntary sway frequency on mechanical and perceived postural stability. Human Movement Science, 2015, 39, 189-199.	0.6	7
86	Implicit advance knowledge effects on the interplay between arm movements and postural adjustments in catching. Neuroscience Letters, 2012, 518, 117-121.	1.0	6
87	Can segmental model reductions quantify whole-body balance accurately during dynamic activities?. Gait and Posture, 2017, 56, 37-41.	0.6	6
88	Probabilistic structure of errors in forehand and backhand groundstrokes of advanced tennis players. International Journal of Performance Analysis in Sport, 2019, 19, 698-710.	0.5	6
89	Smoothing can systematically bias small samples of one-dimensional biomechanical continua. Journal of Biomechanics, 2019, 82, 330-336.	0.9	6
90	Load Monitoring Practice in European Elite Football and the Impact of Club Culture and Financial Resources. Frontiers in Sports and Active Living, 2021, 3, 679824.	0.9	6

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91	Simultaneously assessing amplitude and temporal effects in biomechanical trajectories using nonlinear registration and statistical nonparametric mapping. Journal of Biomechanics, 2022, 136, 111049.	0.9	6
92	Bayesian inverse kinematics vs. least-squares inverse kinematics in estimates of planar postures and rotations in the absence of soft tissue artifact. Journal of Biomechanics, 2019, 82, 324-329.	0.9	5
93	Neuromuscular and biomechanical landing alterations persist in athletes returning to sport after anterior cruciate ligament reconstruction. Knee, 2021, 33, 305-317.	0.8	5
94	Discriminating motion patterns of ACL reconstructed patients from healthy individuals. , 2015, , .		4
95	Asymmetry after Hamstring Injury in English Premier League: Issue Resolved, Or Perhaps Not?. International Journal of Sports Medicine, 2015, 36, 455-459.	0.8	4
96	Postural Adjustments in Catching: On the Interplay between Segment Stabilization and Equilibrium Control. Motor Control, 2013, 17, 48-61.	0.3	3
97	Correlation between an inertial and camera based system for the assessment of temporal parameters of gait in the knee arthroplasty population. Gait and Posture, 2017, 57, 280-281.	0.6	3
98	Accuracy and reliability of a low-cost methodology to assess 3D body posture based on commercial cameras and Excel templates. Measurement: Journal of the International Measurement Confederation, 2021, 173, 108638.	2.5	3
99	The inter-laboratory equivalence for lower limb kinematics and kinetics during unplanned sidestepping. Sports Biomechanics, 2024, 23, 324-334.	0.8	2
100	The non-sagittal knee moment vector identifies â€˜at riskâ€™ individuals that the knee abduction moment alone does not. Sports Biomechanics, 2023, 22, 80-90.	0.8	2
101	Effects of integrative neuromuscular training on the gait biomechanics of children with overweight and obesity. Scandinavian Journal of Medicine and Science in Sports, 2022, 32, 1119-1130.	1.3	2
102	Differential Ratings of Perceived Exertion: Relationships With External Intensity and Load in Elite Menâ€™s Football. International Journal of Sports Physiology and Performance, 2022, 17, 1415-1424.	1.1	2
103	WHAT SEPARATES AN INDIVIDUAL AT RISK OF ACL INJURY? A FIRST STEP TOWARDS AN ACL-RISK MOVEMENT PASSPORT. British Journal of Sports Medicine, 2017, 51, 388.1-388.	3.1	1
104	Synthesis of Subject-Specific Human Balance Responses Using a Task-Level Neuromuscular Control Platform. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 865-873.	2.7	1
105	Load Monitoring Practice in Elite Women Association Football. Frontiers in Sports and Active Living, 2021, 3, 715122.	0.9	1
106	ALLOMETRICALLY SCALED H:Q RATIOS: TIME TO SHARPEN OUR VISION CONCERNING STRENGTH RATIOS AS INJURY RISK FACTOR!. British Journal of Sports Medicine, 2017, 51, 376.1-376.	3.1	0
107	Impact From Acl Deficiency On Dynamic Balance Mechanisms In Side-cutting Maneuvers During Simulated Match-play. Medicine and Science in Sports and Exercise, 2014, 46, 812.	0.2	0
108	A labâ€based comparison of differential ratings of perceived exertion between a run and jump protocol involving low or high impacts on the lower extremities. European Journal of Sport Science, 2023, 23, 746-754.	1.4	0