Songning Zhang

List of Publications by Year
in descending order

112 papers	1,669 citations	361045 20 h-index	315357 38 g-index
113 all docs	113 docs citations	113 times ranked	1557 citing authors

#	Article	IF	Citations
1	Contributions of lower extremity joints to energy dissipation during landings. Medicine and Science in Sports and Exercise, 2000, 32, 812-819.	0.2	362
2	Acute effects of barefoot, minimal shoes and running shoes on lower limb mechanics in rear and forefoot strike runners. Footwear Science, 2013, 5, 9-18.	0.8	90
3	A comparison of gait biomechanics of flipâ€flops, sandals, barefoot and shoes. Journal of Foot and Ankle Research, 2013, 6, 45.	0.7	64
4	Effects of Various Midsole Densities of Basketball Shoes on Impact Attenuation during Landing Activities. Journal of Applied Biomechanics, 2005, 21, 3-17.	0.3	54
5	Associations between iliotibial band injury status and running biomechanics in women. Gait and Posture, 2015, 41, 706-710.	0.6	50
6	Frontal plane multi-segment foot kinematics in high- and low-arched females during dynamic loading tasks. Human Movement Science, 2011, 30, 105-114.	0.6	48
7	Simple verbal instruction improves knee biomechanics during landing in female athletes. Knee, 2012, 19, 399-403.	0.8	48
8	Effects of local elastic compression on muscle strength, electromyographic, and mechanomyographic responses in the lower extremity. Journal of Electromyography and Kinesiology, 2012, 22, 44-50.	0.7	46
9	The influence of body mass index and velocity on knee biomechanics during walking. Gait and Posture, 2013, 37, 575-579.	0.6	44
10	Shock and impact reduction in moderate and strenuous landing activities. Sports Biomechanics, 2008, 7, 296-309.	0.8	43
11	Evaluation of efficacy and 3D kinematic characteristics of cervical orthoses. Clinical Biomechanics, 2005, 20, 264-269.	0.5	41
12	Ground reaction force and 3D biomechanical characteristics of walking in short-leg walkers. Gait and Posture, 2006, 24, 487-492.	0.6	35
13	Changing step width alters lower extremity biomechanics during running. Gait and Posture, 2014, 39, 124-128.	0.6	35
14	Effects of resistance and Tai Ji training on mobility and symptoms in knee osteoarthritis patients. Journal of Sport and Health Science, 2013, 2, 209-214.	3.3	32
15	Ankle work and dynamic joint stiffness in high- compared to low-arched athletes during a barefoot running task. Human Movement Science, 2014, 34, 147-156.	0.6	29
16	Greater Step Widths Reduce Internal Knee Abduction Moments in Medial Compartment Knee Osteoarthritis Patients During Stair Ascent. Journal of Applied Biomechanics, 2015, 31, 229-236.	0.3	29
17	Efficacy of an Ankle Brace With a Subtalar Locking System in Inversion Control in Dynamic Movements. Journal of Orthopaedic and Sports Physical Therapy, 2009, 39, 875-883.	1.7	28
18	Validation of the greater trochanter method with radiographic measurements of frontal plane hip joint centers and knee mechanical axis angles and two other hip joint center methods. Journal of Biomechanics, 2016, 49, 3047-3051.	0.9	27

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19	Effects of toe-in and toe-in with wider step width on level walking knee biomechanics in varus, valgus, and neutral knee alignments. Knee, 2017, 24, 1326-1334.	0.8	27
20	The effects of sample size and variability on the correlation coefficient. Medicine and Science in Sports and Exercise, 1996, 28, 386-391.	0.2	24
21	Effects of increased step width on frontal plane knee biomechanics in healthy older adults during stair descent. Knee, 2014, 21, 821-826.	0.8	23
22	Do thigh circumference and mass changes alter knee biomechanics during walking?. Gait and Posture, 2013, 37, 359-362.	0.6	20
23	Stair Ambulation Biomechanics Following Total Knee Arthroplasty: A Systematic Review. Journal of Arthroplasty, 2014, 29, 1857-1862.	1.5	20
24	Effects of Toe-In and Wider Step Width in Stair Ascent with Different Knee Alignments. Medicine and Science in Sports and Exercise, 2017, 49, 563-572.	0.2	20
25	Do ankle braces provide similar effects on ankle biomechanical variables in subjects with and without chronic ankle instability during landing?. Journal of Sport and Health Science, 2012, 1, 114-120.	3.3	19
26	Effects of toe-in angles on knee biomechanics in cycling of patients with medial knee osteoarthritis. Clinical Biomechanics, 2015, 30, 276-282.	0.5	19
27	Influence of Total Knee Arthroplasty on Gait Mechanics of the Replaced and Non-Replaced Limb During Stair Negotiation. Journal of Arthroplasty, 2016, 31, 278-283.	1.5	19
28	The effects of sample size and variability on the correlation coefficient. Medicine and Science in Sports and Exercise, 1996, 28, 386-391.	0.2	17
29	Is the Inverted Surface Landing More Suitable in Evaluating Ankle Braces and Ankle Inversion Perturbation?. Clinical Journal of Sport Medicine, 2012, 22, 214-220.	0.9	16
30	Effects of Workloads and Cadences on Frontal Plane Knee Biomechanics in Cycling. Medicine and Science in Sports and Exercise, 2016, 48, 260-266.	0.2	15
31	Is knee biomechanics different in uphill walking on different slopes for older adults with total knee replacement?. Journal of Biomechanics, 2019, 89, 40-47.	0.9	15
32	Knee Joint Loads and Surrounding Muscle Forces during Stair Ascent in Patients with Total Knee Replacement. PLoS ONE, 2016, 11, e0156282.	1.1	15
33	Examination of femoral-neck structure using finite element model and bone mineral density using dual-energy X-ray absorptiometry. Clinical Biomechanics, 2009, 24, 47-52.	0.5	14
34	Use of an inverse dynamics method to describe the motion of the canine pelvic limb in three dimensions. American Journal of Veterinary Research, 2014, 75, 544-553.	0.3	14
35	Does increasing step width alter knee biomechanics in medial compartment knee osteoarthritis patients during stair descent?. Knee, 2014, 21, 676-682.	0.8	14
36	Acute effects of lateral shoe wedges on joint biomechanics of patients with medial compartment knee osteoarthritis during stationary cycling. Journal of Biomechanics, 2016, 49, 2817-2823.	0.9	14

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37	Knee biomechanics during popular recreational and daily activities in older men. Knee, 2014, 21, 683-687.	0.8	13
38	Frontal Plane Tibiofemoral Alignment is Strongly Related to Compartmental Knee Joint Contact Forces and Muscle Control Strategies During Stair Ascent. Journal of Biomechanical Engineering, 2018, 140, .	0.6	13
39	The Effects of a Home-Based Instructional Program Aimed at Improving Frontal Plane Knee Biomechanics During a Jump-Landing Task. Journal of Orthopaedic and Sports Physical Therapy, 2013, 43, 486-494.	1.7	12
40	Use of an inverse dynamics method to compare the three-dimensional motion of the pelvic limb among clinically normal dogs and dogs with cranial cruciate ligamentâ€“deficient stifle joints following tibial plateau leveling osteotomy or lateral fabellarâ€“tibial suture stabilization. American Journal of Veterinary Research, 2014, 75, 554-564.	0.3	12
41	Increased knee loading in stair ambulation in patients dissatisfied with their total knee replacement. Clinical Biomechanics, 2019, 67, 38-44.	0.5	12
42	Effects of Two Football Stud Types on Knee and Ankle Kinetics of Single-Leg Land-Cut and 180Â° Cut Movements on Infilled Synthetic Turf. Journal of Applied Biomechanics, 2015, 31, 309-317.	0.3	11
43	Effects of modified short-leg walkers on ground reaction force characteristics. Clinical Biomechanics, 2008, 23, 1172-1177.	0.5	10
44	An unstable rocker-bottom shoe alters lower extremity biomechanics during level walking. Footwear Science, 2012, 4, 243-253.	0.8	10
45	Wide step width reduces knee abduction moment of obese adults during stair negotiation. Journal of Biomechanics, 2018, 75, 138-146.	0.9	10
46	Lower-limb joint reaction forces and moments during modified cycling in healthy controls and individuals with knee osteoarthritis. Clinical Biomechanics, 2020, 71, 167-175.	0.5	10
47	A Finite Element Model for Estimation of Contact Dynamics During a Jumping Movement on a Trampoline. Journal of Human Kinetics, 2020, 73, 59-72.	0.7	9
48	Effects of two football stud configurations on biomechanical characteristics of single-leg landing and cutting movements on infilled synthetic turf. Sports Biomechanics, 2014, 13, 362-379.	0.8	8
49	Effect of a combined inversion and plantarflexion surface on ankle kinematics and EMG activities in landing. Journal of Sport and Health Science, 2015, 4, 377-383.	3.3	8
50	Knee joint biomechanics of patients with unilateral total knee arthroplasty during stationary cycling. Journal of Biomechanics, 2021, 115, 110111.	0.9	8
51	Knee biomechanics of patients with total knee replacement during downhill walking on different slopes. Journal of Sport and Health Science, 2022, 11, 50-57.	3.3	8
52	Effects of Vertical Loading on Arch Characteristics and Intersegmental Foot Motions. Journal of Applied Biomechanics, 2012, 28, 165-173.	0.3	7
53	Do knee concentric and eccentric strength and sagittal-plane knee joint biomechanics differ between jumpers and non-jumpers in landing?. Human Movement Science, 2013, 32, 1299-1309.	0.6	7
54	Effects of a multichannel dynamic functional electrical stimulation system on hemiplegic gait and muscle forces. Journal of Physical Therapy Science, 2015, 27, 3541-3544.	0.2	7

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55	Effectiveness of Selected Fitness Exercises on Stress of Femoral Neck using Musculoskeletal Dynamics Simulations and Finite Element Model. Journal of Human Kinetics, 2014, 41, 59-70.	0.7	6
56	Increased Q-Factor increases frontal-plane knee joint loading in stationary cycling. Journal of Sport and Health Science, 2020, 9, 258-264.	3.3	6
57	Does saddle height influence knee frontal-plane biomechanics during stationary cycling?. Knee, 2021, 29, 233-240.	0.8	6
58	Knee biomechanics of selected knee-unfriendly movement elements in 42-form Tai Chi. International Journal of Performance Analysis in Sport, 2018, 18, 1050-1066.	0.5	5
59	Effects of Knee Alignments and Toe Clip on Frontal Plane Knee Biomechanics in Cycling. Journal of Sports Science and Medicine, 2018, 17, 312-321.	0.7	5
60	Recent developments on models and inclusion criteria for chronic ankle instability. Journal of Sport and Health Science, 2012, 1, 170-171.	3.3	4
61	Effects of synthetic turf and shock pad on impact attenuation related biomechanics during drop landing. Sports Biomechanics, 2022, 21, 748-760.	0.8	4
62	Rounding the base: A lower extremity biomechanical analysis in softball players. International Journal of Sports Science and Coaching, 2021, 16, 1322-1331.	0.7	3
63	Are Medial and Lateral Tibiofemoral Compressive Forces Different in Uphill Compared to Level Walking for Patients Following Total Knee Arthroplasty?. Journal of Biomechanical Engineering, 2021, 143, .	0.6	3
64	Efficacy of lumbar and lumbosacral orthoses in restricting spinal ROMs. Journal of Back and Musculoskeletal Rehabilitation, 2006, 19, 49-56.	0.4	2
65	A Comparison of a Multi-body Model and 3D Kinematics and EMG of Double-leg Circle on Pommel Horse. Journal of Human Kinetics, 2012, 31, 45-53.	0.7	2
66	Effects of a combined inversion and plantarflexion surface on knee and hip kinematics during landing. Sports Biomechanics, 2016, 15, 429-439.	0.8	2
67	Increased Q-factor increases medial compartment knee joint contact force during cycling. Journal of Biomechanics, 2021, 118, 110271.	0.9	2
68	Principal Component Analysis of Knee Joint Differences Between Bilateral and Unilateral Total Knee Replacement Patients During Level Walking. Journal of Biomechanical Engineering, 2021, 143, .	0.6	2
69	Can changes of workrate and seat position affect frontal and sagittal plane knee biomechanics in recumbent cycling?. Sports Biomechanics, 2021, , 1-16.	0.8	2
70	A New Device for Simulating Athlete-to-Surface Interactions on Natural and Synthetic Turf. Journal of Testing and Evaluation, 2013, 41, 497-503.	0.4	2
71	Alterations in neuromuscular activation patterns associated with walking in short-leg walking boots. Journal of Sport and Health Science, 2012, 1, 43-48.	3.3	1
72	Recent changes in evidence-based, non-pharmacological treatment recommendations for acupuncture and Tai Chi for knee osteoarthritis. Journal of Sport and Health Science, 2013, 2, 158-159.	3.3	1

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73	Gait Biomechanics of a Second Generation Unstable Shoe. Journal of Applied Biomechanics, 2014, 30, 501-507.	0.3	1
74	Effects of Workload on Frontal Plane Knee Biomecahnics during Cycling. Medicine and Science in Sports and Exercise, 2015, 47, 87.	0.2	1
75	Effects of Saddle Height and Workrate on Frontal Plane Knee Joint Biomechanics. Medicine and Science in Sports and Exercise, 2019, 51, 53-53.	0.2	1
76	Altered biomechanics in bilateral total knee replacement patients during stair negotiation. Knee, 2022, 34, 9-16.	0.8	1
77	Medial and Lateral Tibiofemoral Compressive Forces in Patients Following Unilateral Total Knee Arthroplasty During Stationary Cycling. Journal of Applied Biomechanics, 2022, 38, 179-189.	0.3	1
78	Knee and ankle biomechanics in 90Â° side cutting on synthetic turf with shock pad. Footwear Science, 2022, 14, 173-183.	0.8	1
79	Unique Joint Kinetic Patterns of Short-Leg Walkers in Gait. Medicine and Science in Sports and Exercise, 2006, 38, S172.	0.2	0
80	Changes in Ground Reaction Forces in Modified Short-leg Walkers during Gait. Medicine and Science in Sports and Exercise, 2007, 39, S150-S151.	0.2	0
81	Efficacy of an ankle orthosis with a subtalar locking system in restricting ankle kinetics and kinematics in lateral cutting. Journal of Foot and Ankle Research, 2008, 1, .	0.7	0
82	Ankle Brace with a Calcaneal Strapping System Alters COP Displacement During Gait. Medicine and Science in Sports and Exercise, 2010, 42, 392.	0.2	0
83	Is Knee Strength Related to Knee OA Symptoms Using Data from the Osteoarthritis Initiative?. Medicine and Science in Sports and Exercise, 2010, 42, 97.	0.2	0
84	Lower Extremity Kinetics in High and Low-Arched Athletes during Landing. Medicine and Science in Sports and Exercise, 2010, 42, 681.	0.2	0
85	Electromyographic Responses of Ankle Muscles during Landing on a Combined Inversion and Plantarflexion Surface. Medicine and Science in Sports and Exercise, 2010, 42, 679.	0.2	0
86	Effects of Resistance Training and TaiJi Exercise on Symptoms and Physical Functions of Knee Osteoarthritis. Medicine and Science in Sports and Exercise, 2011, 43, 826.	0.2	0
87	The Influence of Body Mass Index on Biomechanical Risk Factors for Osteoarthritis during Walking. Medicine and Science in Sports and Exercise, 2011, 43, 689.	0.2	0
88	A Comparative Investigation Of Fivefingers With Barefoot And Shoes In Rear-foot Strikers. Medicine and Science in Sports and Exercise, 2011, 43, 60.	0.2	0
89	Participation in some sports, not running, increases risk of knee and hip osteoarthritis. Journal of Sport and Health Science, 2014, 3, 225-226.	3.3	0
90	Effects of Pose Heights of Selected Knee Unfriendly Tai Ji Movement Elements on Knee Biomechanics. Medicine and Science in Sports and Exercise, 2015, 47, 84.	0.2	0

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91	Acute effects of barefoot, minimal shoes and running shoes on lower limb mechanics in rear and forefoot strike runners. Footwear Science, 2015, 7, 191-191.	0.8	0
92	Overground Walking Biomechanics of Dissatisfied Persons With Total Knee Replacements. Journal of Applied Biomechanics, 2021, 37, 365-372.	0.3	0
93	Effects of Orthotic Inserts on Lower Extremity Kinematics During Treadmill Running. Medicine and Science in Sports and Exercise, 2004, 36, S236.	0.2	0
94	Longitudinal Perception about Cushioning, Fit, and Comfort of a Running Shoe over 400 Miles. Medicine and Science in Sports and Exercise, 2004, 36, S267.	0.2	0
95	Effects of Orthotic Inserts on Lower Extremity Kinematics During Treadmill Running. Medicine and Science in Sports and Exercise, 2004, 36, S236.	0.2	0
96	Longitudinal Perception about Cushioning, Fit, and Comfort of a Running Shoe over 400 Miles. Medicine and Science in Sports and Exercise, 2004, 36, S267.	0.2	0
97	Impact Attenuation And Kinetic Characteristics Of Cross Training Shoes In Landing And Jumping Activities. Medicine and Science in Sports and Exercise, 2005, 37, S215.	0.2	0
98	Impact Attenuation And Kinetic Characteristics Of Cross Training Shoes In Landing And Jumping Activities. Medicine and Science in Sports and Exercise, 2005, 37, S215.	0.2	0
99	Effects Of Two Different Landing Protocols On Evaluating Impact Attenuation In Landing. Medicine and Science in Sports and Exercise, 2005, 37, S66.	0.2	0
100	Effects Of Two Different Landing Protocols On Evaluating Impact Attenuation In Landing. Medicine and Science in Sports and Exercise, 2005, 37, S66.	0.2	0
101	Effects of Heel Height Modifications of Basketball Shoe on Joint Kinetics in Jumping. Medicine and Science in Sports and Exercise, 2008, 40, S378.	0.2	0
102	Evaluating Symmetry Of Healthy Participants During Landing. Medicine and Science in Sports and Exercise, 2009, 41, 89.	0.2	0
103	Relationship Between Eccentric Knee Strength And Impact Force Attenuation In Drop Landing. Medicine and Science in Sports and Exercise, 2009, 41, 391.	0.2	0
104	Differences In Impact Force Attenuation And Knee Kinematics During Drop Jump And Drop Landing. Medicine and Science in Sports and Exercise, 2009, 41, 457-458.	0.2	0
105	Biomechanical Outcomes of Stair Ascent and Functional Tests Following Total Knee Replacement. Medicine and Science in Sports and Exercise, 2014, 46, 445.	0.2	0
106	Effect Of Gender And Increasing Treadmill Velocity On Peak Ankle Plantarflexor Powers During Level Walking. Medicine and Science in Sports and Exercise, 2014, 46, 416.	0.2	0
107	Knee and Ankle Biomechanics during Level Walking Both Prior to and Following a Stroke. Medicine and Science in Sports and Exercise, 2016, 48, 399.	0.2	0
108	Knee Joint Loads and Surrounding Muscle Forces of Selected Movement Elements in 42-form Tai Ji. Medicine and Science in Sports and Exercise, 2016, 48, 891.	0.2	0

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109	Knee Biomechanics of Replaced and Non-replaced Limbs during Level Walking Following Total Knee Arthroplasty. Medicine and Science in Sports and Exercise, 2016, 48, 885.	0.2	0
110	Effects Of Knee Varus Alignment On Knee Frontal Plane Biomechanics During Stationary Cycling. Medicine and Science in Sports and Exercise, 2016, 48, 886.	0.2	0
111	Knee Medial Compartment Joint Loads In Stationary Cycling With Increased Q-factor. Medicine and Science in Sports and Exercise, 2020, 52, 254-254.	0.2	0
112	Knee Kinetics Of Patients With Different Types Of Total Knee Arthroplasty Implants During Downhill Walking. Medicine and Science in Sports and Exercise, 2020, 52, 351-351.	0.2	0