

Astrid Zech

List of Publications by Year in descending order

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Version: 2024-02-01

85
papers

2,507
citations

201674

27
h-index

223800

46
g-index

89
all docs

89
docs citations

89
times ranked

2665
citing authors

#	ARTICLE	IF	CITATIONS
1	Neuromuscular Training for Sports Injury Prevention. <i>Medicine and Science in Sports and Exercise</i> , 2010, 42, 413-421.	0.4	273
2	Balance Training for Neuromuscular Control and Performance Enhancement: A Systematic Review. <i>Journal of Athletic Training</i> , 2010, 45, 392-403.	1.8	232
3	Neuromuscular Training for Rehabilitation of Sports Injuries. <i>Medicine and Science in Sports and Exercise</i> , 2009, 41, 1831-1841.	0.4	112
4	C-terminal Agrin Fragment as a potential marker for sarcopenia caused by degeneration of the neuromuscular junction. <i>Experimental Gerontology</i> , 2013, 48, 76-80.	2.8	100
5	Residual effects of muscle strength and muscle power training and detraining on physical function in community-dwelling prefrail older adults: a randomized controlled trial. <i>BMC Geriatrics</i> , 2012, 12, 68.	2.7	87
6	Balance training improves memory and spatial cognition in healthy adults. <i>Scientific Reports</i> , 2017, 7, 5661.	3.3	79
7	Exercise-induced neuroplasticity: Balance training increases cortical thickness in visual and vestibular cortical regions. <i>NeuroImage</i> , 2018, 179, 471-479.	4.2	72
8	Effects of footwear on treadmill running biomechanics in preadolescent children. <i>Gait and Posture</i> , 2014, 40, 381-385.	1.4	65
9	Growing-up (habitually) barefoot influences the development of foot and arch morphology in children and adolescents. <i>Scientific Reports</i> , 2017, 7, 8079.	3.3	61
10	Fatigue-Induced Alterations of Static and Dynamic Postural Control in Athletes With a History of Ankle Sprain. <i>Journal of Athletic Training</i> , 2013, 48, 203-208.	1.8	58
11	Long-Term Effects of Habitual Barefoot Running and Walking. <i>Medicine and Science in Sports and Exercise</i> , 2017, 49, 752-762.	0.4	58
12	Effects of Localized and General Fatigue on Static and Dynamic Postural Control in Male Team Handball Athletes. <i>Journal of Strength and Conditioning Research</i> , 2012, 26, 1162-1168.	2.1	56
13	Effects of Strength Training versus Power Training on Physical Performance in Prefrail Community-Dwelling Older Adults. <i>Gerontology</i> , 2012, 58, 197-204.	2.8	56
14	Comparison of Minimalist Footwear Strategies for Simulating Barefoot Running: A Randomized Crossover Study. <i>PLoS ONE</i> , 2015, 10, e0125880.	2.5	56
15	Effects of fatiguing treadmill running on sensorimotor control in athletes with and without functional ankle instability. <i>Clinical Biomechanics</i> , 2013, 28, 790-795.	1.2	50
16	Dose-Response Relationship of Neuromuscular Training for Injury Prevention in Youth Athletes: A Meta-Analysis. <i>Frontiers in Physiology</i> , 2017, 8, 920.	2.8	50
17	Sex-Specific Differences in Running Injuries: A Systematic Review with Meta-Analysis and Meta-Regression. <i>Sports Medicine</i> , 2021, 51, 1011-1039.	6.5	43
18	Kinesio Taping Improves Perceptions of Pain and Function of Patients With Knee Osteoarthritis: A Randomized, Controlled Trial. <i>Journal of Sport Rehabilitation</i> , 2019, 28, 481-487.	1.0	40

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19	Functional Muscle Power Testing in Young, Middle-Aged, and Community-Dwelling Nonfrail and Prefrail Older Adults. <i>Archives of Physical Medicine and Rehabilitation</i> , 2011, 92, 967-971.	0.9	39
20	The relationship between static and dynamic foot posture and running biomechanics: A systematic review and meta-analysis. <i>Gait and Posture</i> , 2019, 72, 109-122.	1.4	34
21	Gait Stability and Its Influencing Factors in Older Adults. <i>Frontiers in Physiology</i> , 2018, 9, 1955.	2.8	34
22	Foot Strike Patterns Differ Between Children and Adolescents Growing up Barefoot vs. Shod. <i>International Journal of Sports Medicine</i> , 2018, 39, 97-103.	1.7	33
23	Epidemiology of injuries in outdoor and indoor hockey players over one season: a prospective cohort study. <i>British Journal of Sports Medicine</i> , 2018, 52, 1091-1096.	6.7	33
24	Adaptation of Running Biomechanics to Repeated Barefoot Running: A Randomized Controlled Study. <i>American Journal of Sports Medicine</i> , 2019, 47, 1975-1983.	4.2	33
25	Influence of biological maturity on static and dynamic postural control among male youth soccer players. <i>Gait and Posture</i> , 2019, 68, 18-22.	1.4	33
26	The effects of being habitually barefoot on foot mechanics and motor performance in children and adolescents aged 6â€“18 years: study protocol for a multicenter cross-sectional study (Barefoot LIFE) https://doi.org/10.1186/s12916-019-01072-2	0.1	0
27	Sex differences in injury rates in team-sport athletes: A systematic review and meta-regression analysis. <i>Journal of Sport and Health Science</i> , 2022, 11, 104-114.	6.5	32
28	Time course and dimensions of postural control changes following neuromuscular training in youth field hockey athletes. <i>European Journal of Applied Physiology</i> , 2014, 114, 395-403.	2.5	31
29	Exploring phase dependent functional gait variability. <i>Human Movement Science</i> , 2017, 52, 191-196.	1.4	29
30	Prospective monitoring of health problems among recreational runners preparing for a half marathon. <i>BMJ Open Sport and Exercise Medicine</i> , 2018, 4, e000308.	2.9	28
31	Feasibility study of dual-task-managing training to improve gait performance of older adults. <i>Aging Clinical and Experimental Research</i> , 2015, 27, 447-455.	2.9	25
32	Minimalist, standard and no footwear on static and dynamic postural stability following jump landing. <i>European Journal of Sport Science</i> , 2015, 15, 279-285.	2.7	25
33	Effects of ankle instability on running gait ankle angles and its variability in young adults. <i>Clinical Biomechanics</i> , 2016, 33, 73-78.	1.2	24
34	Perceptions of football players regarding injury risk factors and prevention strategies. <i>PLoS ONE</i> , 2017, 12, e0176829.	2.5	24
35	Analysis of running stability during 5000â€“m running. <i>European Journal of Sport Science</i> , 2019, 19, 413-421.	2.7	23
36	Epidemiology of injuries during the Wheelchair Basketball World Championships 2018: A prospective cohort study. <i>Scandinavian Journal of Medicine and Science in Sports</i> , 2020, 30, 199-207.	2.9	23

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37	Reliability and performance-dependent variations of muscle function variables during isometric knee extension. <i>Journal of Electromyography and Kinesiology</i> , 2008, 18, 262-269.	1.7	22
38	Effects of barefoot and footwear conditions on learning of a dynamic balance task: a randomized controlled study. <i>European Journal of Applied Physiology</i> , 2018, 118, 2699-2706.	2.5	22
39	Reliability and Correlation of Static and Dynamic Foot Arch Measurement in a Healthy Pediatric Population. <i>Journal of the American Podiatric Medical Association</i> , 2017, 107, 419-427.	0.3	20
40	Motor Skills of Children and Adolescents Are Influenced by Growing up Barefoot or Shod. <i>Frontiers in Pediatrics</i> , 2018, 6, 115.	1.9	20
41	Walking barefoot vs. with minimalist footwear "influence on gait in younger and older adults. <i>BMC Geriatrics</i> , 2020, 20, 88.	2.7	20
42	Effects of barefoot vs. shod walking during indoor and outdoor conditions in younger and older adults. <i>Gait and Posture</i> , 2022, 95, 284-291.	1.4	20
43	Time-dependent postural control adaptations following a neuromuscular warm-up in female handball players: a randomized controlled trial. <i>BMC Sports Science, Medicine and Rehabilitation</i> , 2016, 8, 33.	1.7	18
44	Influence of Barefoot, Minimalist, and Standard Footwear Conditions on Gait and Balance in Healthy Older Adults. <i>Journal of the American Geriatrics Society</i> , 2016, 64, 435-437.	2.6	17
45	The Effect of a Cognitive Dual Task on the Control of Minimum Toe Clearance While Walking. <i>Motor Control</i> , 2019, 23, 344-353.	0.6	17
46	Association Between Exercise Therapy Dose and Functional Improvements in the Early Postoperative Phase After Hip and Knee Arthroplasty: An Observational Study. <i>PM and R</i> , 2015, 7, 1064-1072.	1.6	15
47	Balance, gait, and navigation performance are related to physical exercise in blind and visually impaired children and adolescents. <i>Experimental Brain Research</i> , 2021, 239, 1111-1123.	1.5	15
48	Adolescent Running Biomechanics - Implications for Injury Prevention and Rehabilitation. <i>Frontiers in Sports and Active Living</i> , 2021, 3, 689846.	1.8	14
49	Improving Running Economy by Transitioning to Minimalist Footwear: A Randomised Controlled Trial. <i>Journal of Science and Medicine in Sport</i> , 2018, 21, 1298-1303.	1.3	13
50	Agreements and disagreements in exercise therapy prescriptions after hip replacement among rehabilitation professionals: a multicenter survey. <i>BMC Musculoskeletal Disorders</i> , 2015, 16, 185.	1.9	12
51	Improved balance performance accompanied by structural plasticity in blind adults after training. <i>Neuropsychologia</i> , 2019, 129, 318-330.	1.6	11
52	Validity and Reliability of an Inertial Sensor-Based Knee Proprioception Test in Younger vs. Older Adults. <i>Frontiers in Sports and Active Living</i> , 2019, 1, 27.	1.8	11
53	Arch index and running biomechanics in children aged 10-14 years. <i>Gait and Posture</i> , 2018, 61, 210-214.	1.4	10
54	Comparison of 10 vs. 20 min neuromuscular training for the prevention of lower extremity injuries in male youth football: A cluster randomised controlled trial. <i>Journal of Sports Sciences</i> , 2020, 38, 2177-2185.	2.0	10

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55	Effects of a 10 vs. 20-Min Injury Prevention Program on Neuromuscular and Functional Performance in Adolescent Football Players. <i>Frontiers in Physiology</i> , 2020, 11, 578866.	2.8	9
56	The Interval Between Matches Significantly Influences Injury Risk in Field Hockey. <i>International Journal of Sports Medicine</i> , 2022, 43, 262-268.	1.7	9
57	Maximum isometric torque at individually-adjusted joint angles exceeds eccentric and concentric torque in lower extremity joint actions. <i>BMC Sports Science, Medicine and Rehabilitation</i> , 2022, 14, 13.	1.7	9
58	Spinal postural changes during the modified Matthiass test in healthy children. <i>Der Orthopade</i> , 2018, 47, 567-573.	1.6	8
59	Less noise during dual-task walking in healthy young adults: an analysis of different gait variability components. <i>Experimental Brain Research</i> , 2019, 237, 3185-3193.	1.5	8
60	Running barefoot leads to lower running stability compared to shod running - results from a randomized controlled study. <i>Scientific Reports</i> , 2021, 11, 4376.	3.3	8
61	Effects of physical exhaustion on local dynamic stability and automaticity of walking. <i>Gait and Posture</i> , 2018, 66, 135-138.	1.4	7
62	Effects of elastic ankle support on running ankle kinematics in individuals with chronic ankle instability and healthy controls. <i>Gait and Posture</i> , 2021, 87, 149-155.	1.4	7
63	Effects of manipulated auditory information on local dynamic gait stability. <i>Human Movement Science</i> , 2018, 58, 219-223.	1.4	6
64	Does local dynamic stability of kayak paddling technique affect the sports performance? A pilot study. <i>European Journal of Sport Science</i> , 2018, 18, 491-496.	2.7	6
65	Relevance of urban green space for physical activity and health-related quality of life in older adults. <i>Quality in Ageing and Older Adults</i> , 2018, 19, 158-166.	0.8	6
66	Development of functional variability during the motor learning process of a complex cyclic movement. <i>Journal of Biomechanics</i> , 2018, 77, 124-130.	2.1	6
67	Is an Elastic Ankle Support Effective in Improving Jump Landing Performance, and Static and Dynamic Balance in Young Adults With and Without Chronic Ankle Instability?. <i>Journal of Sport Rehabilitation</i> , 2020, 29, 789-794.	1.0	6
68	Game Exposure, Player Characteristics, and Neuromuscular Performance Influence Injury Risk in Professional and Youth Field Hockey Players. <i>Orthopaedic Journal of Sports Medicine</i> , 2021, 9, 232596712199516.	1.7	6
69	The influence of biological maturity on motor performance among habitually barefoot versus habitually shod adolescents. <i>European Journal of Sport Science</i> , 2019, 19, 621-627.	2.7	5
70	Sensomotorisches Training zur Prävention von Sprunggelenksverletzungen. <i>Deutsche Zeitschrift Fur Sportmedizin</i> , 2012, 2012, 5-8.	0.5	5
71	Longitudinal changes of neuromuscular quadriceps function after reconstruction of the anterior cruciate ligament. <i>Current Orthopaedic Practice</i> , 2009, 20, 276-280.	0.2	4
72	Spinal posture changes using dynamic rasterstereography during the modified Matthiass test discriminate between postural weak and strong healthy children (10-14 years): a pilot study. <i>European Journal of Pediatrics</i> , 2018, 177, 1327-1334.	2.7	4

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73	Does one heavy load back squat set lead to postactivation performance enhancement of three-point explosion and sprint in third division American football players?. BMC Sports Science, Medicine and Rehabilitation, 2021, 13, 64.	1.7	4
74	Adaptation of Running Biomechanics to Repeated Barefoot Running: Response. American Journal of Sports Medicine, 2020, 48, NP6-NP7.	4.2	3
75	Chronic and Residual Effects of a Two-Week Foam Rolling Intervention on Ankle Flexibility and Dynamic Balance. Frontiers in Sports and Active Living, 2022, 4, 799985.	1.8	3
76	Compensation of stochastic time-continuous perturbations during walking in healthy young adults: An analysis of the structure of gait variability. Gait and Posture, 2020, 80, 253-259.	1.4	2
77	Clinical Assessment of the Medial Longitudinal Arch in Children: Rater Agreement and Relationship to Objective Foot Arch Measurements. SN Comprehensive Clinical Medicine, 2020, 2, 2763-2770.	0.6	1
78	Response to: Comment on: "Sex-Specific Differences in Running Injuries: A Systematic Review with Meta-Analysis and Meta-Regression". Sports Medicine, 2021, , 1.	6.5	1
79	Sprunggelenksverletzungen und Präventionsstrategien im deutschen Nachwuchsbasketball. Deutsche Zeitschrift Fur Sportmedizin, 2014, 2014, .	0.5	1
80	Neuromuscular Training Following Knee And Ankle Joint Injuries. Medicine and Science in Sports and Exercise, 2009, 41, 14-15.	0.4	0
81	Effects of Kinesio Taping on Pain and Function in Patients with Knee Osteoarthritis. Medicine and Science in Sports and Exercise, 2016, 48, 586.	0.4	0
82	Prospective Injury Surveillance during the Wheelchair Basketball World Championships 2018. Medicine and Science in Sports and Exercise, 2019, 51, 767-767.	0.4	0
83	The Dose-Response Relationship of Neuromuscular Training to Prevent Lower Extremity Injuries in Young Soccer Players. A Cluster Randomised Controlled Trial. Medicine and Science in Sports and Exercise, 2019, 51, 443-444.	0.4	0
84	Transitioning To Minimalist Footwear To Improve Running Economy. Medicine and Science in Sports and Exercise, 2017, 49, 639-640.	0.4	0
85	ErnÄhrung und Bewegung. , 2008, , 183-218.		0