

# Anne MÃ¼ndermann

## List of Publications by Year in descending order

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Version: 2024-02-01

115  
papers

5,890  
citations

134610

34  
h-index

84171

75  
g-index

125  
all docs

125  
docs citations

125  
times ranked

4817  
citing authors

#	ARTICLE	IF	CITATIONS
1	High tibial osteotomy effectively redistributes compressive knee loads during walking. <i>Journal of Orthopaedic Research</i> , 2023, 41, 591-600.	1.2	8
2	Trunk muscle function and its association with functional limitations in sedentary occupation workers with and without chronic nonspecific low back pain. <i>Journal of Back and Musculoskeletal Rehabilitation</i> , 2022, 35, 783-791.	0.4	2
3	RetroBRACE: clinical, socioeconomic and functional “biomechanical outcomes 2 years after ACL repair and InternalBrace augmentation in comparison to ACL reconstruction and healthy controls” experimental protocol of a non-randomised single-centre comparative study. <i>BMJ Open</i> , 2022, 12, e054709.	0.8	5
4	TOWARDS WEARABLE SENSOR BASED GAIT ANALYSIS IN ROUTINE CLINICAL PRACTICE: ASSOCIATION BETWEEN GAIT KINEMATICS AND PATIENT REPORTED OUTCOMES IN HIP ARTHROPLASTY. <i>Osteoarthritis and Cartilage</i> , 2022, 30, S141-S142.	0.6	1
5	ASSOCIATION BETWEEN MECHANOSENSITIVE BLOOD MARKERS AND PATIENT REPORTED OUTCOMES IN PATIENTS WITH KNEE OSTEOARTHRITIS. <i>Osteoarthritis and Cartilage</i> , 2022, 30, S98-S99.	0.6	2
6	SERUM CARTILAGE BIOMARKERS IN RESPONSE TO 21 DAYS BED REST WITH EXERCISE AND NUTRITION COUNTERMEASURES. <i>Osteoarthritis and Cartilage</i> , 2022, 30, S105.	0.6	0
7	RESTING SERUM CARTILAGE OLIGOMERIC MATRIX PROTEIN CONCENTRATION - THE ROLE OF AGE AND ANTERIOR CRUCIATE LIGAMENT INJURY. <i>Osteoarthritis and Cartilage</i> , 2022, 30, S111.	0.6	0
8	Reliability of the Fluoroscopic Assessment of Load-Induced Glenohumeral Translation during a 30° Shoulder Abduction Test. <i>Biomechanics</i> , 2022, 2, 255-263.	0.5	3
9	Dynamic versus static medial patellofemoral ligament reconstruction technique in the treatment of recurrent patellar dislocation: a randomized clinical trial protocol. <i>Journal of Orthopaedic Surgery and Research</i> , 2022, 17, .	0.9	0
10	Side to side kinematic gait differences within patients and spatiotemporal and kinematic gait differences between patients with severe knee osteoarthritis and controls measured with inertial sensors. <i>Gait and Posture</i> , 2021, 84, 24-30.	0.6	21
11	Kinematic changes in severe hip osteoarthritis measured at matched gait speeds. <i>Journal of Orthopaedic Research</i> , 2021, 39, 1253-1261.	1.2	14
12	Scope and Limits of Teriparatide Use in Delayed and Nonunions: A Case Series. <i>Clinics and Practice</i> , 2021, 11, 47-57.	0.6	5
13	Lateral trochlear lengthening osteotomy. <i>Archives of Orthopaedic and Trauma Surgery</i> , 2021, 141, 1721-1730.	1.3	2
14	Association between fatty infiltration of paraspinal muscle, sagittal spinopelvic alignment and stenosis grade in patients with degenerative lumbar spinal stenosis. <i>North American Spine Society Journal (NASSJ)</i> , 2021, 5, 100054.	0.3	6
15	Mechanosensitive blood markers and their interrelation in patients with medial compartment knee osteoarthritis. <i>Osteoarthritis and Cartilage</i> , 2021, 29, S144-S145.	0.6	3
16	Long-term repeatability of cartilage oligomeric matrix protein kinetics in response to walking stress. <i>Osteoarthritis and Cartilage</i> , 2021, 29, S150-S152.	0.6	0
17	Experimental-analytical approach to assessing mechanosensitive cartilage blood marker kinetics in healthy adults: dose-response relationship and interrelationship of nine candidate markers. <i>F1000Research</i> , 2021, 10, 490.	0.8	4
18	Abductor Muscle Strength Deficit in Patients After Total Hip Arthroplasty: A Systematic Review and Meta-Analysis. <i>Journal of Arthroplasty</i> , 2021, 36, 3015-3027.	1.5	12

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19	Assessing Site Specificity of Osteoarthritic Gait Kinematics with Wearable Sensors and Their Association with Patient Reported Outcome Measures (PROMs): Knee versus Hip Osteoarthritis. Sensors, 2021, 21, 5363.	2.1	12
20	Assessing Fatty Infiltration of Paraspinal Muscles in Patients With Lumbar Spinal Stenosis: Goutallier Classification and Quantitative MRI Measurements. Frontiers in Neurology, 2021, 12, 656487.	1.1	19
21	Accelerometry-based physical activity, disability and quality of life before and after lumbar decompression surgery from a physiotherapeutic perspective: an observational cohort study. North American Spine Society Journal (NASSJ), 2021, 8, 100087.	0.3	0
22	Severity of degenerative lumbar spinal stenosis affects pelvic rigidity during walking. Spine Journal, 2020, 20, 112-120.	0.6	21
23	Abductor muscle strength deficit in patients after total hip arthroplasty for hip osteoarthritis: a protocol for a systematic review and meta-analysis. BMJ Open, 2020, 10, e035413.	0.8	2
24	Hip abductor muscle strength in patients after total or unicompartmental knee arthroplasty for knee osteoarthritis or avascular necrosis: a systematic review and meta-analysis protocol. BMJ Open, 2020, 10, e038770.	0.8	0
25	Framework for modulating ambulatory load in the context of in vivo mechanosensitivity of articular cartilage. Osteoarthritis and Cartilage Open, 2020, 2, 100108.	0.9	4
26	Assessing in vivo articular cartilage mechanosensitivity as outcome of high tibial osteotomy in patients with medial compartment osteoarthritis: Experimental protocol. Osteoarthritis and Cartilage Open, 2020, 2, 100043.	0.9	5
27	Analytical approach for determining the suitability of nine candidate blood markers for investigating the response of articular cartilage to ambulatory load. Osteoarthritis and Cartilage, 2020, 28, S320-S321.	0.6	0
28	Locomotion replacement exercise cannot counteract cartilage biomarker response to 5 days of immobilization in healthy adults. Journal of Orthopaedic Research, 2020, 38, 2373-2382.	1.2	8
29	Functional limitations after lateral column lengthening osteotomy of the calcaneus are associated with lower quality of life. International Orthopaedics, 2020, 44, 1091-1097.	0.9	3
30	Measuring gait kinematics in patients with severe hip osteoarthritis using wearable sensors. Gait and Posture, 2020, 81, 49-55.	0.6	19
31	Total knee arthroplasty: posterior tibial slope influences the size but not the rotational alignment of the tibial component. Knee Surgery, Sports Traumatology, Arthroscopy, 2020, 28, 3899-3905.	2.3	3
32	Clinical and Biomechanical Outcomes of One-Stage Treatment of a Simultaneous Ipsilateral Patellar Tendon and ACL Tear Combined with a Tibial Plateau Fracture: A Case Study. Case Reports in Orthopedics, 2020, 2020, 1-8.	0.1	1
33	Kinematic changes in patients with severe knee osteoarthritis are a result of reduced walking speed rather than disease severity. Gait and Posture, 2020, 79, 256-261.	0.6	33
34	The effect of micro-and hypergravity on serum comp levels in healthy adults. Osteoarthritis and Cartilage, 2019, 27, S169-S170.	0.6	3
35	Good vibrations: Itch induction by whole body vibration exercise without the need of a pruritogen. Experimental Dermatology, 2019, 28, 1390-1396.	1.4	6
36	The effect of different running shoes on treadmill running mechanics and muscle activity assessed using statistical parametric mapping (SPM). Gait and Posture, 2019, 69, 1-7.	0.6	25

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37	The natural initiation and progression of osteoarthritis in the anterior cruciate ligament deficient feline knee. <i>Osteoarthritis and Cartilage</i> , 2019, 27, 687-693.	0.6	9
38	Dose-response relationship between ambulatory load magnitude and load-induced changes in COMP in young healthy adults. <i>Osteoarthritis and Cartilage</i> , 2019, 27, 106-113.	0.6	26
39	Retrospective Evaluation of Changes in Gait Patterns in Children and Adolescents With Cerebral Palsy After Multilevel Surgery. <i>Journal of Child Neurology</i> , 2018, 33, 453-462.	0.7	3
40	Decompression surgery improves gait quality in patients with symptomatic lumbar spinal stenosis. <i>Spine Journal</i> , 2018, 18, 2195-2204.	0.6	43
41	Repeatability of spatiotemporal, plantar pressure and force parameters during treadmill walking and running. <i>Gait and Posture</i> , 2018, 62, 117-123.	0.6	35
42	Reduction in ulnar pressure distribution when walking with forearm crutches with a novel cuff design: Cross-sectional intervention study on the biomechanical efficacy of an ulnar recess. <i>Assistive Technology</i> , 2018, 30, 34-38.	1.2	1
43	Sensitivity of serum concentration of cartilage biomarkers to 21 days of bed rest. <i>Journal of Orthopaedic Research</i> , 2018, 36, 1465-1471.	1.2	25
44	Effects of a Dynamic Chair on Chair Seat Motion and Trunk Muscle Activity during Office Tasks and Task Transitions. <i>International Journal of Environmental Research and Public Health</i> , 2018, 15, 2723.	1.2	5
45	Inertial Sensor-Based Gait and Attractor Analysis as Clinical Measurement Tool: Functionality and Sensitivity in Healthy Subjects and Patients With Symptomatic Lumbar Spinal Stenosis. <i>Frontiers in Physiology</i> , 2018, 9, 1095.	1.3	12
46	Marathon performance but not BMI affects post-marathon pro-inflammatory and cartilage biomarkers. <i>Journal of Sports Sciences</i> , 2017, 35, 711-718.	1.0	21
47	Measuring joint kinematics of treadmill walking and running: Comparison between an inertial sensor based system and a camera-based system. <i>Journal of Biomechanics</i> , 2017, 57, 32-38.	0.9	96
48	Changes in Cartilage Biomarker Levels During a Transcontinental Multistage Footrace Over 4486 km. <i>American Journal of Sports Medicine</i> , 2017, 45, 2630-2636.	1.9	30
49	Prospective clinical evaluation of a novel anatomic cuff for forearm crutches in patients with osteoarthritis. <i>BMC Musculoskeletal Disorders</i> , 2017, 18, 110.	0.8	3
50	Mid-term functional outcome of a total arthroplasty of the first metatarsophalangeal joint. <i>Clinical Biomechanics</i> , 2017, 41, 9-13.	0.5	8
51	Stair dimension affects knee kinematics and kinetics in patients with good outcome after TKA similarly as in healthy subjects. <i>Journal of Orthopaedic Research</i> , 2016, 34, 1753-1761.	1.2	10
52	Long-duration space flight and cartilage adaptation: First results on changes in tissue metabolism. <i>Osteoarthritis and Cartilage</i> , 2016, 24, S144-S145.	0.6	9
53	Validity and reliability of a portable gait analysis system for measuring spatiotemporal gait characteristics: comparison to an instrumented treadmill. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2016, 13, 6.	2.4	85
54	Effect of gait retraining for reducing ambulatory knee load on trunk biomechanics and trunk muscle activity. <i>Gait and Posture</i> , 2016, 47, 24-30.	0.6	12

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55	Effect of foot position on balance ability in single-leg stance with and without visual feedback. <i>Journal of Biomechanics</i> , 2016, 49, 1969-1972.	0.9	9
56	Mobile inertial sensor based gait analysis: Validity and reliability of spatiotemporal gait characteristics in healthy seniors. <i>Gait and Posture</i> , 2016, 49, 371-374.	0.6	43
57	THU0021â€¦Impact of Immobilization on Serum Levels of Cartilage Oligomeric Matrix Protein and Implications for Clinical Practice in Musculoskeletal Disorders. <i>Annals of the Rheumatic Diseases</i> , 2016, 75, 184.3-185.	0.5	0
58	Impact of medium term bed rest on serum levels of cartilage oligomeric matrix protein. <i>Osteoarthritis and Cartilage</i> , 2016, 24, S151-S152.	0.6	2
59	AB0085â€¦The Effect of Immobility and Microgravity on Cartilage Metabolism. <i>Annals of the Rheumatic Diseases</i> , 2015, 74, 919.1-919.	0.5	4
60	Improvement of walking speed and gait symmetry in older patients after hip arthroplasty: a prospective cohort study. <i>BMC Musculoskeletal Disorders</i> , 2015, 16, 291.	0.8	33
61	AB1200â€¦Prospective Clinical Evaluation of a New Anatomic Cuff for Forearm Crutches. <i>Annals of the Rheumatic Diseases</i> , 2015, 74, 1304.3-1304.	0.5	0
62	Comparison of volumetric bone mineral density in the operated and contralateral knee after anterior cruciate ligament and reconstruction: A 1â€¦year followâ€¦up study using peripheral quantitative computed tomography. <i>Journal of Orthopaedic Research</i> , 2015, 33, 1804-1810.	1.2	17
63	Reduced lower leg muscle activity while balancing on cobblestone shaped surfaces. <i>Gait and Posture</i> , 2015, 41, 562-567.	0.6	3
64	Difference in Motor Fatigue between Patients with Stroke and Patients with Multiple Sclerosis: A Pilot Study. <i>Frontiers in Neurology</i> , 2014, 5, 279.	1.1	14
65	Objective assessment of motor fatigue in multiple sclerosis: the Fatigue index Kliniken Schmieder (FKS). <i>Journal of Neurology</i> , 2014, 261, 1752-1762.	1.8	38
66	Forearm pressure distribution during ambulation with elbow crutches: a cross-sectional study. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2014, 11, 61.	2.4	23
67	Leg muscle function during recreational alpine skiing in two patients following unilateral total knee arthroplasty. <i>Sports Orthopaedics and Traumatology</i> , 2013, 29, 306-313.	0.1	1
68	Changes in gait patterns and muscle activity following total hip arthroplasty: A six-month follow-up. <i>Clinical Biomechanics</i> , 2013, 28, 762-769.	0.5	50
69	Whole-Body Vibration Versus Eccentric Training or a Wait-and-See Approach for Chronic Achilles Tendinopathy: A Randomized Clinical Trial. <i>Journal of Orthopaedic and Sports Physical Therapy</i> , 2013, 43, 794-803.	1.7	54
70	Effects of whole-body vibration training on physical function in patients with Multiple Sclerosis. <i>NeuroRehabilitation</i> , 2013, 32, 655-663.	0.5	47
71	Minimizing Preoperative and Postoperative Limping in Patients After Total Hip Arthroplasty. <i>American Journal of Physical Medicine and Rehabilitation</i> , 2013, 92, 1060-1069.	0.7	23
72	Age- and sex-dependent disparity in physical fitness between obese and normal weight children and adolescents. <i>Journal of Sports Medicine and Physical Fitness</i> , 2013, 53, 48-55.	0.4	12

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73	Deficits 10-Years after Achilles Tendon Repair. International Journal of Sports Medicine, 2012, 33, 474-479.	0.8	64
74	Amplitude and Phasing of Trunk Motion is Critical for the Efficacy of Gait Training Aimed at Reducing Ambulatory Loads at the Knee. Journal of Biomechanical Engineering, 2012, 134, 011010.	0.6	16
75	A relationship between mechanically-induced changes in serum cartilage oligomeric matrix protein (COMP) and changes in cartilage thickness after 5 years. Osteoarthritis and Cartilage, 2012, 20, 1309-1315.	0.6	79
76	Impact of total hip arthroplasty on pain, walking ability, and cardiovascular fitness. Journal of Orthopaedic Research, 2012, 30, 2025-2030.	1.2	11
77	Effect of footwear on the external knee adduction moment – A systematic review. Knee, 2012, 19, 163-175.	0.8	78
78	Use of Anthropometry for the Measurement of Lower Extremity Alignment. , 2012, , 2951-2970.		0
79	Effects of obesity on the biomechanics of stair-walking in children. Gait and Posture, 2011, 34, 119-125.	0.6	37
80	Visualizing changes in lower body coordination with different types of foot orthoses using self-organizing maps (SOM). Gait and Posture, 2011, 34, 485-489.	0.6	12
81	Effects of footwear on the external knee adduction moment: A systematic review. Journal of Science and Medicine in Sport, 2011, 14, e70-e71.	0.6	1
82	Objective assessment of motor fatigue in multiple sclerosis using kinematic gait analysis: a pilot study. Journal of NeuroEngineering and Rehabilitation, 2011, 8, 59.	2.4	45
83	Changes in knee adduction moment, pain, and functionality with a variable-stiffness walking shoe after 6 months. Journal of Orthopaedic Research, 2010, 28, 873-879.	1.2	50
84	Vibration training intervention to maintain cartilage thickness and serum concentrations of cartilage oligomeric matrix protein (COMP) during immobilization. Osteoarthritis and Cartilage, 2009, 17, 1598-1603.	0.6	67
85	Football players at the New Zealand 2008 Masters Games: A profile of training and injuries. Journal of Science and Medicine in Sport, 2009, 12, S39.	0.6	0
86	Training habits and injuries of masters' level football players: A preliminary report. Physical Therapy in Sport, 2009, 10, 63-66.	0.8	4
87	Adaptive patterns of movement during stair climbing in patients with knee osteoarthritis. Journal of Orthopaedic Research, 2009, 27, 325-329.	1.2	69
88	Change in serum COMP concentration due to ambulatory load is not related to knee OA Status. Journal of Orthopaedic Research, 2009, 27, 1408-1413.	1.2	53
89	Resultant knee joint moments for lateral movement tasks on sliding and non-sliding sport surfaces. Journal of Sports Sciences, 2009, 27, 427-435.	1.0	25
90	A variable-stiffness shoe lowers the knee adduction moment in subjects with symptoms of medial compartment knee osteoarthritis. Journal of Biomechanics, 2008, 41, 2720-2725.	0.9	88

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91	In vivo knee loading characteristics during activities of daily living as measured by an instrumented total knee replacement. <i>Journal of Orthopaedic Research</i> , 2008, 26, 1167-1172.	1.2	193
92	Implications of increased medio-lateral trunk sway for ambulatory mechanics. <i>Journal of Biomechanics</i> , 2008, 41, 165-170.	0.9	229
93	Predicting changes in knee adduction moment due to load-altering interventions from pressure distribution at the foot in healthy subjects. <i>Journal of Biomechanics</i> , 2008, 41, 2989-2994.	0.9	41
94	A comparison of measuring mechanical axis alignment using three-dimensional position capture with skin markers and radiographic measurements in patients with bilateral medial compartment knee osteoarthritis. <i>Knee</i> , 2008, 15, 480-485.	0.8	46
95	Regional Cartilage Thinning Occurs First in the Walking Weight Bearing Regions of the Femur in Medial Compartment Knee Osteoarthritis. , 2008, , .		2
96	In healthy subjects without knee osteoarthritis, the peak knee adduction moment influences the acute effect of shoe interventions designed to reduce medial compartment knee load. <i>Journal of Orthopaedic Research</i> , 2007, 25, 540-546.	1.2	68
97	Foot orthoses affect frequency components of muscle activity in the lower extremity. <i>Gait and Posture</i> , 2006, 23, 295-302.	0.6	73
98	The role of ambulatory mechanics in the initiation and progression of knee osteoarthritis. <i>Current Opinion in Rheumatology</i> , 2006, 18, 514-518.	2.0	476
99	The potential of vibration training to affect the response of muscle, bone and cartilage during short term bed rest. <i>Journal of Biomechanics</i> , 2006, 39, S196.	0.9	1
100	A Markerless Motion Capture System to Study Musculoskeletal Biomechanics: Visual Hull and Simulated Annealing Approach. <i>Annals of Biomedical Engineering</i> , 2006, 34, 1019-1029.	1.3	247
101	A Model for Understanding the Pathomechanics of Osteoarthritis in Aging. , 2006, , 923-936.		0
102	Conditions that influence the accuracy of anthropometric parameter estimation for human body segments using shape-from-silhouette. , 2005, , .		5
103	Serum concentration of cartilage oligomeric matrix protein (COMP) is sensitive to physiological cyclic loading in healthy adults. <i>Osteoarthritis and Cartilage</i> , 2005, 13, 34-38.	0.6	134
104	Secondary gait changes in patients with medial compartment knee osteoarthritis: Increased load at the ankle, knee, and hip during walking. <i>Arthritis and Rheumatism</i> , 2005, 52, 2835-2844.	6.7	574
105	A Framework for the in Vivo Pathomechanics of Osteoarthritis at the Knee. <i>Annals of Biomedical Engineering</i> , 2004, 32, 447-457.	1.3	830
106	Potential strategies to reduce medial compartment loading in patients with knee osteoarthritis of varying severity: Reduced walking speed. <i>Arthritis and Rheumatism</i> , 2004, 50, 1172-1178.	6.7	364
107	Consistent Immediate Effects of Foot Orthoses on Comfort and Lower Extremity Kinematics, Kinetics, and Muscle Activity. <i>Journal of Applied Biomechanics</i> , 2004, 20, 71-84.	0.3	34
108	Foot orthotics affect lower extremity kinematics and kinetics during running. <i>Clinical Biomechanics</i> , 2003, 18, 254-262.	0.5	193

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109	Orthotic Comfort Is Related to Kinematics, Kinetics, and EMG in Recreational Runners. <i>Medicine and Science in Sports and Exercise</i> , 2003, 35, 1710-1719.	0.2	106
110	Effect of Shoe Inserts on Kinematics, Center of Pressure, and Leg Joint Moments during Running. <i>Medicine and Science in Sports and Exercise</i> , 2003, 35, 314-319.	0.2	119
111	Development of a reliable method to assess footwear comfort during running. <i>Gait and Posture</i> , 2002, 16, 38-45.	0.6	211
112	Relationship between footwear comfort of shoe inserts and anthropometric and sensory factors. <i>Medicine and Science in Sports and Exercise</i> , 2001, 33, 1939-1945.	0.2	182
113	Experimental-analytical approach to assessing mechanosensitive cartilage blood marker kinetics in healthy adults: dose-response relationship and interrelationship of nine candidate markers. <i>F1000Research</i> , 0, 10, 490.	0.8	4
114	Ex-vivo experimental strategies for assessing unconstrained shoulder biomechanics: a scoping review protocol. <i>F1000Research</i> , 0, 11, 77.	0.8	0
115	Ex-vivo experimental strategies for assessing unconstrained shoulder biomechanics: a scoping review protocol. <i>F1000Research</i> , 0, 11, 77.	0.8	0