Gabriele Bleser

List of Publications by Year in Descending Order

47 papers	**927** citations	**15** h-index	**30** g-index
50 ext. papers	**1,223** ext. citations	**2.4** avg, IF	**4.63** L-index

#	Paper	IF	Citations
47	An adaptive learning and control framework based on dynamic movement primitives with application to human-robot handovers. *Robotics and Autonomous Systems*, **2022**, 148, 103935	3.5	0
46	Towards a Better Understanding of Spinal Differences Between Healthy Subjects and Subjects with Back Pain Using Explainable Artificial Intelligence (XAI). *Advances in Intelligent Systems and Computing*, **2022**, 97-100	0.4	
45	Digitale Prävention im Bau-Handwerk **2022**, 315-356		
44	General method for automated feature extraction and selection and its application for gender classification and biomechanical knowledge discovery of sex differences in spinal posture during stance and gait. *Computer Methods in Biomechanics and Biomedical Engineering*, **2021**, 24, 299-307	2.1	10
43	Machine learning techniques demonstrating individual movement patterns of the vertebral column: the fingerprint of spinal motion. *Computer Methods in Biomechanics and Biomedical Engineering*, **2021**, 1-11	2.1	1
42	Classification and Automated Interpretation of Spinal Posture Data Using a Pathology-Independent Classifier and Explainable Artificial Intelligence (XAI). *Sensors*, **2021**, 21,	3.8	8
41	Automated detection and explainability of pathological gait patterns using a one-class support vector machine trained on inertial measurement unit based gait data. *Clinical Biomechanics*, **2021**, 89, 105452	2.2	1
40	Feature extraction and gait classification in hip replacement patients on the basis of kinematic waveform data. *Biomedical Human Kinetics*, **2021**, 13, 177-186	0.8	1
39	Force Shadows: An Online Method to Estimate and Distribute Vertical Ground Reaction Forces from Kinematic Data. *Sensors*, **2020**, 20,	3.8	1
38	An Approach to Magnetometer-free On-body Inertial Sensors Network Alignment. *IFAC-PapersOnLine*, **2020**, 53, 15982-15989	0.7	1
37	Toward Gamified Pain Management Apps: Mobile Application Rating Scale-Based Quality Assessment of Pain-Mentor's First Prototype Through an Expert Study. *JMIR Formative Research*, **2020**, 4, e13170	2.5	5
36	On Expressive Features for Gait Analysis using Lower Limb Inertial Sensor Data. *IFAC-PapersOnLine*, **2020**, 53, 15990-15997	0.7	3
35	Depth camera based statistical shape fitting approach for the creation of an individualized lower body biomechanical model: validity and reliability. *Computer Methods in Biomechanics and Biomedical Engineering*, **2020**, 23, 12-22	2.1	1
34	On optical data-guided optimal control simulations of human motion. *Multibody System Dynamics*, **2020**, 48, 105-126	2.8	2
33	Interpretability of Input Representations for Gait Classification in Patients after Total Hip Arthroplasty. *Sensors*, **2020**, 20,	3.8	19
32	Validity of inertial sensor based 3D joint kinematics of static and dynamic sport and physiotherapy specific movements. *PLoS ONE*, **2019**, 14, e0213064	3.7	39
31	Gamification of a Stress Management App: Results of a User Study. *Lecture Notes in Computer Science*, **2019**, 303-313	0.9	1

30	A Biofeedback App to Instruct Abdominal Breathing (Breathing-Mentor): Pilot Experiment. *JMIR MHealth and UHealth*, **2019**, 7, e13703	5.5	5
29	Towards More Interactive Stress-Related Self-monitoring Tools to Improve Quality of Life. *Advances in Intelligent Systems and Computing*, **2019**, 121-130	0.4	4
28	Towards an Inertial Sensor-Based Wearable Feedback System for Patients after Total Hip Arthroplasty: Validity and Applicability for Gait Classification with Gait Kinematics-Based Features. *Sensors*, **2019**, 19,	3.8	20
27	Stress-Mentor: Linking Gamification and Behavior Change Theory in a Stress Management Application. *Communications in Computer and Information Science*, **2018**, 387-393	0.3	6
26	IMU-to-Segment Assignment and Orientation Alignment for the Lower Body Using Deep Learning. *Sensors*, **2018**, 18,	3.8	40
25	Validity, Test-Retest Reliability and Long-Term Stability of Magnetometer Free Inertial Sensor Based 3D Joint Kinematics. *Sensors*, **2018**, 18,	3.8	40
24	Towards Inertial Sensor Based Mobile Gait Analysis: Event-Detection and Spatio-Temporal Parameters. *Sensors*, **2018**, 19,	3.8	68
23	Human Motion Capturing and Activity Recognition Using Wearable Sensor Networks. *Biosystems and Biorobotics*, **2018**, 191-206	0.2	1
22	Development of an Inertial Motion Capture System for Clinical Application. *I-com*, **2017**, 16, 113-129	1	7
21	Real-time inertial lower body kinematics and ground contact estimation at anatomical foot points for agile human locomotion **2017**,		13
20	Survey of Motion Tracking Methods Based on Inertial Sensors: A Focus on Upper Limb Human Motion. *Sensors*, **2017**, 17,	3.8	153
19	Gamification in Stress Management Apps: A Critical App Review. *JMIR Serious Games*, **2017**, 5, e13	3.4	38
18	Stress Management Apps With Regard to Emotion-Focused Coping and Behavior Change Techniques: A Content Analysis. *JMIR MHealth and UHealth*, **2017**, 5, e22	5.5	31
17	Effective Visualization of Long Term Health Data to Support Behavior Change. *Lecture Notes in Computer Science*, **2017**, 237-247	0.9	5
16	Occlusion-aware video registration for highly non-rigid objects **2016**,		10
15	On Inertial Body Tracking in the Presence of Model Calibration Errors. *Sensors*, **2016**, 16,	3.8	56
14	On data-guided optimal control simulation of human motion. *Proceedings in Applied Mathematics and Mechanics*, **2016**, 16, 89-90	0.2	
13	Cognitive Robotics Systems. *Journal of Intelligent and Robotic Systems: Theory and Applications*, **2015**, 80, 3-5	2.9	1

12	Cognitive Learning, Monitoring and Assistance of Industrial Workflows Using Egocentric Sensor Networks. *PLoS ONE*, **2015**, 10, e0127769	3.7	23
11	Ambulatory inertial spinal tracking using constraints **2014**,		4
10	Innovative system for real-time ergonomic feedback in industrial manufacturing. *Applied Ergonomics*, **2013**, 44, 566-74	4.2	180
9	A Low-Cost and Light-Weight Motion Tracking Suit **2013**,		4
8	A personalized exercise trainer for the elderly. *Journal of Ambient Intelligence and Smart Environments*, **2013**, 5, 547-562	2.2	25
7	A generic approach to inertial tracking of arbitrary kinematic chains **2013**,		8
6	From Interactive to Adaptive Augmented Reality **2012**,		3
5	Using egocentric vision to achieve robust inertial body tracking under magnetic disturbances **2011**,		10
4	Advanced tracking through efficient image processing and visual-inertial sensor fusion. *Computers and Graphics*, **2009**, 33, 59-72	1.8	58
3	Using optical flow as lightweight SLAM alternative **2009**,		3
2	Real-time vision-based tracking and reconstruction. *Journal of Real-Time Image Processing*, **2007**, 2, 161-175	1.7	15
1	Toward Gamified Pain Management Apps: Mobile Application Rating Scale-Based Quality Assessment of Pain-Mentor's First Prototype Through an Expert Study (Preprint)		1