

Hartmut F Witte

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/504944/publications.pdf>

Version: 2024-02-01

88
papers

3,848
citations

516561

16
h-index

128225

60
g-index

105
all docs

105
docs citations

105
times ranked

3497
citing authors

#	ARTICLE	IF	CITATIONS
1	ISB recommendation on definitions of joint coordinate system of various joints for the reporting of human joint motion" part I: ankle, hip, and spine. Journal of Biomechanics, 2002, 35, 543-548.	0.9	2,491
2	Basic limb kinematics of small therian mammals. Journal of Experimental Biology, 2002, 205, 1315-1338.	0.8	223
3	Basic limb kinematics of small therian mammals. Journal of Experimental Biology, 2002, 205, 1315-38.	0.8	164
4	Torque patterns of the limbs of small therian mammals during locomotion on flat ground. Journal of Experimental Biology, 2002, 205, 1339-1353.	0.8	83
5	Torque patterns of the limbs of small therian mammals during locomotion on flat ground. Journal of Experimental Biology, 2002, 205, 1339-53.	0.8	65
6	Comparing the effect of different spine and leg designs for a small bounding quadruped robot. , 2015, , .		60
7	Size Influences on Primate Locomotion and Body Shape, with Special Emphasis on the Locomotion of "Small Mammals". Folia Primatologica, 1996, 66, 93-112.	0.3	49
8	Structural Characterization of the Whisker System of the Rat. IEEE Sensors Journal, 2012, 12, 332-339.	2.4	47
9	Musculoskeletal support of lumbar spine stability. Pathophysiology, 2005, 12, 257-265.	1.0	46
10	A novel PDMS micro membrane biosensor based on the analysis of surface stress. Biosensors and Bioelectronics, 2010, 25, 2420-2424.	5.3	37
11	Biomimetic robotics should be based on functional morphology. Journal of Anatomy, 2004, 204, 331-342.	0.9	36
12	Anatomic guidelines for the prevention of abdominal wall hematoma induced by trocar placement. Surgical and Radiologic Anatomy, 1999, 21, 87-89.	0.6	32
13	A Calculation of the Forces Acting on the Human Acetabulum during Walking. Cells Tissues Organs, 1997, 160, 269-280.	1.3	24
14	Legs evolved only at the end!. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2007, 365, 185-198.	1.6	23
15	Transfer of biological principles into the construction of quadruped walking machines. , 0, , .		20
16	Exploring the shock response of spider webs. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 56, 1-5.	1.5	20
17	Characterization of Statical Properties of Rat's Whisker System. IEEE Sensors Journal, 2012, 12, 340-349.	2.4	19
18	Retropatellar contact characteristics in total knee arthroplasty with and without patellar resurfacing. International Orthopaedics, 2000, 24, 191-193.	0.9	18

#	ARTICLE	IF	CITATIONS
19	Fabrication of a surface stress-based PDMS micro-membrane biosensor. <i>Microsystem Technologies</i> , 2010, 16, 1001-1008.	1.2	17
20	Influence of various types of damage on the fracture strength of ceramic femoral heads. <i>Biomedizinische Technik</i> , 2011, 56, 333-339.	0.9	16
21	The role of vibrissal sensing in forelimb position control during travelling locomotion in the rat (<i>Rattus norvegicus</i> , Rodentia). <i>Zoology</i> , 2015, 118, 51-62.	0.6	15
22	Interactions between Motions of the Trunk and the Angle of Attack of the Forelimbs in Synchronous Gaits of the Pika (<i>Ochotona rufescens</i>). , 2006, , 69-77.		15
23	LTCC based bioreactors for cell cultivation. <i>IOP Conference Series: Materials Science and Engineering</i> , 2016, 104, 012001.	0.3	14
24	Towards rich motion skills with the lightweight quadruped robot Serval. <i>Adaptive Behavior</i> , 2020, 28, 129-150.	1.1	13
25	Three-dimensional imaging of the fibrous microstructure of Achilles tendon entheses in <i>Musculus</i> . <i>Journal of Anatomy</i> , 2018, 233, 370-380.	0.9	12
26	INSPIRAT – TOWARDS A BIOLOGICALLY INSPIRED CLIMBING ROBOT FOR THE INSPECTION OF LINEAR STRUCTURES. , 2008, , .		11
27	Is Elastic Energy Storage of Quantitative Relevance for the Functional Morphology of the Human Locomotor Apparatus?. <i>Cells Tissues Organs</i> , 1997, 158, 106-111.	1.3	10
28	Analysis of the vibrissa parametric resonance causing a signal amplification during whisking behaviour. <i>Journal of Bionic Engineering</i> , 2016, 13, 312-323.	2.7	10
29	Functionalized Thick Film Impedance Sensors for Use in In Vitro Cell Culture. <i>Biosensors</i> , 2018, 8, 37.	2.3	10
30	Der Einfluss von Kniegelenkbeugung und Femurrotation auf den retropatellaren Kontakt des menschlichen Kniegelenkes - Influence of Flexion of the Knee and Femoral Rotation on Retropatellar Contact in Humans. <i>Biomedizinische Technik</i> , 1999, 44, 334-338.	0.9	9
31	Towards Rich Motion Skills with the Lightweight Quadruped Robot Serval - A Design, Control and Experimental Study. <i>Lecture Notes in Computer Science</i> , 2018, , 41-55.	1.0	9
32	Correspondence Letter. <i>Journal of Biomechanics</i> , 2003, 36, 303-304.	0.9	8
33	A modular robot climbing on pipe-like structures. , 2009, , .		8
34	Integration of 3-D cell cultures in fluidic microsystems for biological screenings. <i>Engineering in Life Sciences</i> , 2011, 11, 140-147.	2.0	8
35	A computational model for dynamic analysis of the human gait. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2015, 18, 799-804.	0.9	8
36	Epiduroskopie mit Zugang über den Sakralkanal - Einige konstruktive Anforderungen an Instrumente aus anatomischer und biomechanischer Sicht. <i>Biomedizinische Technik</i> , 1997, 42, 24-29.	0.9	6

#	ARTICLE	IF	CITATIONS
37	A modular BioMEMS platform for new procedures and experiments in tissue engineering. Journal of Micromechanics and Microengineering, 2009, 19, 074013.	1.5	6
38	Concept of a modular climbing robot. , 2009, , .		6
39	Cell cultures in microsystems: Biocompatibility aspects. Biotechnology and Bioengineering, 2011, 108, 687-693.	1.7	6
40	Design of an Assistance System for Elderly Based on Analyses of Needs and Acceptance. Lecture Notes in Computer Science, 2009, , 96-105.	1.0	6
41	JOINT ENERGY BALANCES: THE COMMITMENT TO THE SYNCHRONIZATION OF MEASURING SYSTEMS. Journal of Mechanics in Medicine and Biology, 2005, 05, 139-149.	0.3	5
42	Finite Element Analysis of the Membrane Used in a Novel BioMEMS. Journal of Biomimetics, Biomaterials, and Tissue Engineering, 0, 3, 51-57.	0.7	5
43	A Modular Concept for a Biologically Inspired Robot. Lecture Notes in Control and Information Sciences, 2009, , 391-400.	0.6	5
44	Calculation of muscle forces during normal gait under consideration of femoral bending moments. Medical Engineering and Physics, 2016, 38, 1008-1015.	0.8	5
45	PEDOT coating applied on thick film gold electrodes for increased miniaturization capability. Progress in Organic Coatings, 2019, 135, 545-554.	1.9	5
46	Biomechanical analyses of rat locomotion during walking and climbing as a base for the design and construction of climbing robots. , 2010, , .		5
47	Locomotion study of a single actuated, modular swimming robot. , 2010, , .		5
48	Kinematic response in limb and body posture to sensory feedback from carpal sinus hairs in the rat () Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.6	4
49	Animal Vibrissae: Modeling and Adaptive Control of Bio-inspired Sensors. Lecture Notes in Computer Science, 2013, , 159-170.	1.0	3
50	LTCC-based micro plasma source for the selective treatment of cell cultures. , 2017, , .		3
51	Surface properties and biocompatibility of thick film materials used in ceramic bioreactors. Materialia, 2019, 5, 100213.	1.3	3
52	Reducing complexness of control by intelligent mechanics in undulant swimming robots. International Journal of Design and Nature and Ecodynamics, 2012, 7, 1-13.	0.3	3
53	Quadruped locomotion. , 2018, , .		3
54	Ramp-Up-Effects in Spatial Aware Recommender Systems. , 2009, , .		2

#	ARTICLE	IF	CITATIONS
55	Biomechanics is not just biomimetics. , 2013, , .		2
56	Characterizing the Substrate Contact of Carpal Vibrissae of Rats during Locomotion. Lecture Notes in Computer Science, 2014, , 399-401.	1.0	2
57	Microsystems for the Characterization of 3D-ECM Analogous Bio-Interfaces. IFMBE Proceedings, 2009, , 94-97.	0.2	2
58	WARMOR: Whegs Adaptation and Reconfiguration of MOdular Robot with Tunable Compliance. Lecture Notes in Computer Science, 2012, , 345-346.	1.0	2
59	A Phase-Shifting Double-Wheg-Module for Realization of Wheg-Driven Robots. Lecture Notes in Computer Science, 2014, , 97-107.	1.0	2
60	Ist die indirekte Posturographie mittels KraftmeÄplatten der direkten Posturographie durch Bewegungsanalyse gleichwertig? Eine physikalische Betrachtung - Is Indirect Posturography Using Force Plates Equally as Good as Direct Posturography Employing Movements Analysis? Physical considerations. Biomedizinische Technik, 1997, 42, 280-283.	0.9	1
61	Muskelkraftmessung mittels Kernspin-Spektroskopie. Biomedizinische Technik, 1997, 42, 79-80.	0.9	1
62	Patellofemoral Contact Characteristics in Total Knee Prostheses with and Without Anterior Patellar Flange. Journal of Applied Biomechanics, 2004, 20, 144-152.	0.3	1
63	In vivo-Messung der Relativbewegungen von Fragmenten gebrochener Langknochen. Biomedizinische Technik, 2009, , 365-366.	0.9	1
64	Automated control of micromanipulators - A tool for BioMEMS based cell culture. , 2009, , .		1
65	A miniaturized laser-Doppler-system in the ear canal. , 2013, , .		1
66	Design of a Bioinspired Variable Stiffness Sensor. , 2019, , .		1
67	Design and Control of a Flapping Wing System Test Bench. Advances in Intelligent Systems and Computing, 2020, , 34-42.	0.5	1
68	Investigation of Sensitivity of Foot Soles to Vibrational Stimuli: First Results for Developers of Information Interfaces. Lecture Notes in Computer Science, 2015, , 290-299.	1.0	1
69	Phases of Technical Gesture Recognition. Lecture Notes in Computer Science, 2015, , 130-139.	1.0	1
70	Topographical principles and peculiarities of operative access in lumbar disc extrusion. Der Orthopade, 1999, 28, 572-578.	0.7	0
71	Operieren und PrÄparieren an der Leiche â ein neues Ausbildungskonzept fÄr die minimalinvasive Chirurgie. Visceral Medicine, 1999, 15, 46-48.	0.5	0
72	Die vaskulÄre Anatomie der vorderen Bauchwand: Ein Beitrag zur Vermeidung von GefÄÄverletzungen bei der laparoskopischen Chirurgie. Visceral Medicine, 2003, 19, 81-85.	0.5	0

#	ARTICLE	IF	CITATIONS
73	Kinematisches Modell und Dynamiksimulation vierbeinigen Laufens von SÄugetieren. , 2005, , 201-223.		0
74	The human skin as paragon of mechanical sensitive and adaptive coating. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2007, 146, S139.	0.8	0
75	BioMEMS for Processing and Testing of Hydrogel-Based Bio-Interfaces. Biomedizinische Technik, 2012, 57, .	0.9	0
76	Segmented flow microfluidics in multilumen tubing. Biomedizinische Technik, 2012, 57, .	0.9	0
77	Novel wireless measurement system of pressure dedicated to in vivo studies. Current Directions in Biomedical Engineering, 2016, 2, 123-127.	0.2	0
78	Development of a New Information Interface for Elderly Using Vibrations. Advances in Intelligent Systems and Computing, 2016, , 751-759.	0.5	0
79	Force plates may be used for dynamic analyses of endoprostheses explantation procedures. Biomedizinische Technik, 2019, 64, 243-245.	0.9	0
80	Application of Otoplastics to Increase the Reproducibility of OAE-analyses. IFMBE Proceedings, 2009, , 1492-1495.	0.2	0
81	Diagnostics of Human Body Stem Motor Functions by Systematic Provocation Method. IFMBE Proceedings, 2009, , 2150-2152.	0.2	0
82	Improvement of the Design Quality of 3D-Input Devices Using Motion Analyses and Biomechanical Comparisons. Lecture Notes in Computer Science, 2009, , 276-285.	1.0	0
83	TOWARDS AN ADHESIVE GRIPPING MODULE FOR HANDLING TASKS AND SMALL-SIZED CLIMBING ROBOTS. , 2010, , .		0
84	MECHANICAL DESIGN OF A CLIMBING ROBOT BASED ON BIOMECHANICAL ANALYSES. , 2010, , .		0
85	TOWARDS COMPLIANT DRIVES FOR MODULAR CLIMBING ROBOTS. , 2010, , .		0
86	A Small-Sized Underactuated Biologically Inspired Aquatic Robot. Lecture Notes in Computer Science, 2013, , 374-377.	1.0	0
87	IMPROVING RUNNING SMOOTHNESS OF WHEG-DRIVEN SYSTEMS WHILE MAINTAINING THE HIGH VALUED OBSTACLE PERFORMANCE. , 2015, , .		0
88	Estimation to Use the Stick Figure of KinectÂ® Version 2 for Digital Anthropometry. Advances in Intelligent Systems and Computing, 2019, , 530-543.	0.5	0