

# Tobias Bruckmann

## List of Publications by Year in descending order

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47  
papers

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citations

933447

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h-index

752698

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51  
docs citations

51  
times ranked

335  
citing authors

#	ARTICLE	IF	CITATIONS
1	Simulation and Model-Based Verification of an Emergency Strategy for Cable Failure in Cable Robots. <i>Actuators</i> , 2022, 11, 56.	2.3	4
2	Cable-Driven Parallel Robots. , 2022, , 1-14.		1
3	Simulation and optimization of automated masonry construction using cable robots. <i>Advanced Engineering Informatics</i> , 2021, 50, 101388.	8.0	23
4	An Emergency Strategy for Cable Failure in Reconfigurable Cable Robots. <i>Mechanisms and Machine Science</i> , 2021, , 217-229.	0.5	2
5	Real-Time Cable Force Calculation beyond the Wrench-Feasible Workspace. <i>Robotics</i> , 2020, 9, 41.	3.5	7
6	Optimization of Trajectories for Cable Robots on Automated Construction Sites. , 2020, , .		4
7	Development of a Dynamic Electronic Speed Controller for Multicopters. , 2019, , .		0
8	Improving the Performance of Auxiliary Null Space Tasks via Time Scaling-Based Relaxation of the Primary Task. , 2019, , .		1
9	Rest-to-Rest Trajectory Planning for Underactuated Cable-Driven Parallel Robots. <i>IEEE Transactions on Robotics</i> , 2019, 35, 1338-1351.	10.3	49
10	A Conditional Stop Capable Trajectory Planner for Cable-Driven Parallel Robots. <i>Mechanisms and Machine Science</i> , 2019, , 281-292.	0.5	1
11	Development of Emergency Strategies for Cable-Driven Parallel Robots after a Cable Break. <i>Mechanisms and Machine Science</i> , 2019, , 269-280.	0.5	6
12	Energy Consumption Reduction of a Cable-Driven Storage and Retrieval System. <i>Springer Proceedings in Advanced Robotics</i> , 2019, , 383-391.	1.3	0
13	Process Analysis of Cable-Driven Parallel Robots for Automated Construction. <i>Intelligent Systems, Control and Automation: Science and Engineering</i> , 2018, , 63-83.	0.5	4
14	Rest-to-Rest Trajectory Planning for Planar Underactuated Cable-Driven Parallel Robots. <i>Mechanisms and Machine Science</i> , 2018, , 207-218.	0.5	7
15	Design and Analysis of a Novel Cable-Driven Haptic Master Device for Planar Grasping. <i>Mechanisms and Machine Science</i> , 2018, , 307-318.	0.5	2
16	Concept Studies of Automated Construction Using Cable-Driven Parallel Robots. <i>Mechanisms and Machine Science</i> , 2018, , 364-375.	0.5	10
17	Influence of Automated Building Construction Systems on Vocational Education and Training. , 2018, , .		2
18	The need to generate realistic strain signals at an automotive coil spring for durability simulation leading to fatigue life assessment. <i>Mechanical Systems and Signal Processing</i> , 2017, 94, 432-447.	8.0	38

#	ARTICLE	IF	CITATIONS
19	Reducing cyclic testing time for components of automotive suspension system utilising the wavelet transform and the Fuzzy C-Means. <i>Mechanical Systems and Signal Processing</i> , 2017, 90, 1-14.	8.0	43
20	Design and simulation based validation of the control architecture of a stacker crane based on an innovative wire-driven robot. <i>Robotics and Computer-Integrated Manufacturing</i> , 2017, 44, 117-128.	9.9	11
21	Evaluation of alternative drive systems based on driving patterns comparing Germany, China and Malaysia. <i>International Journal of Automotive and Mechanical Engineering</i> , 2017, 14, 3985-3997.	0.9	1
22	Simulation of automated construction using wire robots. , 2016, , .		8
23	Combined Use of Modified Hough Transformation, Random Sample Consensus and Linear Least Square to Extract the Normal Parameterization of a Straight Line: An Application for Cable Driven Parallel Robots. <i>Procedia Technology</i> , 2016, 26, 382-388.	1.1	2
24	A Versatile Tension Distribution Algorithm for $n$ -DOF Parallel Robots Driven by $n+2$ Cables. <i>IEEE Transactions on Robotics</i> , 2015, 31, 1444-1457.	10.3	126
25	Improving the Performance of a New Storage and Retrieval Machine Based on a Parallel Manipulator Using FMEA Analysis. <i>IFAC-PapersOnLine</i> , 2015, 48, 1658-1663.	0.9	11
26	Robust Internal Force-Based Impedance Control for Cable-Driven Parallel Robots. <i>Mechanisms and Machine Science</i> , 2015, , 131-143.	0.5	16
27	Analysis of a Real-Time Capable Cable Force Computation Method. <i>Mechanisms and Machine Science</i> , 2015, , 227-238.	0.5	19
28	Simulation of a cable-driven actuation concept for a humanoid robot prototype. , 2014, , .		2
29	Application of the Wavelet Transforms for Compressing Lower Suspension Arm Strain Data. <i>Applied Mechanics and Materials</i> , 2014, 663, 78-82.	0.2	0
30	FCM-based Optimisation to Enhance the Morlet Wavelet Ability for Compressing Suspension Strain Data. , 2014, 3, 288-294.		3
31	Analysis of Geometrical Force Calculation Algorithms for Cable-Driven Parallel Robots with a Threefold Redundancy. , 2014, , 203-211.		4
32	Use of Passively Guided Deflection Units and Energy-Storing Elements to Increase the Application Range of Wire Robots. <i>Mechanisms and Machine Science</i> , 2013, , 167-184.	0.5	11
33	A reconfigurable, tendon-based haptic interface for research into human-environment interactions. <i>Robotica</i> , 2013, 31, 441-453.	1.9	9
34	An energy-efficient wire-based storage and retrieval system. , 2013, , .		11
35	Application Examples of Wire Robots. , 2013, , 291-310.		5
36	Development of a Storage Retrieval Machine for High Racks Using a Wire Robot. , 2012, , .		16

#	ARTICLE	IF	CITATIONS
37	A Design-To-Task Approach for Wire Robots. , 2012, , 83-97.		5
38	Design Approaches for Wire Robots. , 2009, , .		6
39	A Novel Tensed Mechanism for Simulation of Maneuvers in Wind Tunnels. , 2009, , .		6
40	Closed-form Force Distribution for Parallel Wire Robots. , 2009, , 25-34.		99
41	A real-time capable force calculation algorithm for redundant tendon-based parallel manipulators. , 2008, , .		73
42	Continuous Workspace Analysis, Synthesis and Optimization of Wire Robots. , 2008, , .		6
43	Wire Robots Part II: Dynamics, Control & Application. , 2008, , .		15
44	A new force calculation algorithm for tendon-based parallel manipulators. , 2007, , .		17
45	Continuous workspace analysis for parallel cable-driven Stewart-Gough platforms. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 4010025-4010026.	0.2	13
46	Wire Robots Part I: Kinematics, Analysis & Design. , 0, , .		50
47	Wavelet-Based Feature Extraction Algorithm for Fatigue Strain Data Associated with the &lt;i>k</i>-Means Clustering Technique. Advanced Materials Research, 0, 891-892, 1717-1722.	0.3	0