Tucker Hermans

List of Publications by Year
in descending order

28	548	933447 10	996975 15
papers	citations	h-index	g-index

28	28	28	460
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	In Vitro Simulation of Shoulder Motion Driven by Three-Dimensional Scapular and Humeral Kinematics. Journal of Biomechanical Engineering, 2022, 144, .	1.3	4
2	DefGraspSim: Physics-Based Simulation of Grasp Outcomes for 3D Deformable Objects. IEEE Robotics and Automation Letters, 2022, 7, 6274-6281.	5.1	8
3	Learning Visual Shape Control of Novel 3D Deformable Objects from Partial-View Point Clouds. , 2022, , .		8
4	Development of a Novel Computational Model for Evaluating Fall Risk in Patient Room Design. Herd, 2021, 14, 350-367.	1.5	5
5	Near-Optimal Area-Coverage Path Planning of Energy-Constrained Aerial Robots With Application in Autonomous Environmental Monitoring. IEEE Transactions on Automation Science and Engineering, 2021, 18, 1453-1468.	5.2	40
6	A model predictive approach for online mobile manipulation of non-holonomic objects using learned dynamics. International Journal of Robotics Research, 2021, 40, 815-831.	8.5	3
7	In-Hand Object-Dynamics Inference Using Tactile Fingertips. IEEE Transactions on Robotics, 2021, 37, 1115-1126.	10.3	12
8	Risk-Aware Decision Making for Service Robots to Minimize Risk of Patient Falls in Hospitals. , 2021, , .		4
9	Is the Leader Robot an Adequate Sensor for Posture Estimation and Ergonomic Assessment of A Human Teleoperator?. , 2021, , .		2
10	Dexterous magnetic manipulation of conductive non-magnetic objects. Nature, 2021, 598, 439-443.	27.8	19
11	Planning Sensing Sequences for Subsurface 3D Tumor Mapping. , 2021, , .		0
12	Toward Learning Context-Dependent Tasks from Demonstration for Tendon-Driven Surgical Robots. , 2021, , .		1
13	Learning Continuous 3D Reconstructions for Geometrically Aware Grasping. , 2020, , .		31
14	Benchmarking In-Hand Manipulation. IEEE Robotics and Automation Letters, 2020, 5, 588-595.	5.1	22
15	Multifingered Grasp Planning via Inference in Deep Neural Networks: Outperforming Sampling by Learning Differentiable Models. IEEE Robotics and Automation Magazine, 2020, 27, 55-65.	2.0	32
16	Replicating dynamic humerus motion using an industrial robot. PLoS ONE, 2020, 15, e0242005.	2.5	3
17	Multi-Fingered Active Grasp Learning. , 2020, , .		12
18	Robust Learning of Tactile Force Estimation through Robot Interaction. , 2019, , .		29

#	Article	IF	Citations
19	Assembly Planning by Subassembly Decomposition Using Blocking Reduction. IEEE Robotics and Automation Letters, 2019, 4, 4054-4061.	5.1	10
20	Modeling Grasp Type Improves Learning-Based Grasp Planning. IEEE Robotics and Automation Letters, 2019, 4, 784-791.	5.1	19
21	3D-Printing and Machine Learning Control of Soft Ionic Polymer-Metal Composite Actuators. Scientific Reports, 2019, 9, 17482.	3.3	46
22	Relaxed-rigidity constraints: kinematic trajectory optimization and collision avoidance for in-grasp manipulation. Autonomous Robots, 2019, 43, 469-483.	4.8	27
23	Special Issue on the 2017 Robotics: Science and Systems Conference. International Journal of Robotics Research, 2018, 37, 1519-1520.	8.5	0
24	Dynamic Model Learning and Manipulation Planning for Objects in Hospitals Using a Patient Assistant Mobile (PAM)Robot. , 2018, , .		6
25	Geometric In-Hand Regrasp Planning: Alternating Optimization of Finger Gaits and In-Grasp Manipulation. , 2018, , .		23
26	Grip Stabilization of Novel Objects Using Slip Prediction. IEEE Transactions on Haptics, 2018, 11, 531-542.	2.7	61
27	Active tactile object exploration with Gaussian processes. , 2016, , .		54
28	Stabilizing novel objects by learning to predict tactile slip. , 2015, , .		67