

Robert Kevin Katzschmann

List of Publications by Year in descending order

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26
papers

2,642
citations

933410

10
h-index

1372553

10
g-index

26
all docs

26
docs citations

26
times ranked

2335
citing authors

#	ARTICLE	IF	CITATIONS
1	A Recipe for Soft Fluidic Elastomer Robots. <i>Soft Robotics</i> , 2015, 2, 7-25.	8.0	538
2	Exploration of underwater life with an acoustically controlled soft robotic fish. <i>Science Robotics</i> , 2018, 3, .	17.6	489
3	Haptic identification of objects using a modular soft robotic gripper. , 2015, , .		194
4	Model-based dynamic feedback control of a planar soft robot: trajectory tracking and interaction with the environment. <i>International Journal of Robotics Research</i> , 2020, 39, 490-513.	8.5	151
5	Autonomous Object Manipulation Using a Soft Planar Grasping Manipulator. <i>Soft Robotics</i> , 2015, 2, 155-164.	8.0	147
6	Hydraulic Autonomous Soft Robotic Fish for 3D Swimming. <i>Springer Tracts in Advanced Robotics</i> , 2016, , 405-420.	0.4	144
7	Dynamic control of soft robots interacting with the environment. , 2018, , .		129
8	Robust proprioceptive grasping with a soft robot hand. <i>Autonomous Robots</i> , 2019, 43, 681-696.	4.8	120
9	Safe Local Navigation for Visually Impaired Users With a Time-of-Flight and Haptic Feedback Device. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2018, 26, 583-593.	4.9	117
10	Printable hydraulics: A method for fabricating robots by 3D co-printing solids and liquids. , 2016, , .		115
11	Dynamic Motion Control of Multi-Segment Soft Robots Using Piecewise Constant Curvature Matched with an Augmented Rigid Body Model. , 2019, , .		102
12	Enabling independent navigation for visually impaired people through a wearable vision-based feedback system. , 2017, , .		91
13	Whole arm planning for a soft and highly compliant 2D robotic manipulator. , 2014, , .		85
14	Dynamically Closed-Loop Controlled Soft Robotic Arm using a Reduced Order Finite Element Model with State Observer. , 2019, , .		52
15	Soft Robotic Fingers with Embedded Ionogel Sensors and Discrete Actuation Modes for Somatosensitive Manipulation. , 2019, , .		47
16	Microfluidic Tissue Engineering and Bioâ€Actuation. <i>Advanced Materials</i> , 2022, 34, e2108427.	21.0	28
17	RoBoa: Construction and Evaluation of a Steerable Vine Robot for Search and Rescue Applications. , 2021, , .		21
18	Sim-to-Real for Soft Robots Using Differentiable FEM: Recipes for Meshing, Damping, and Actuation. <i>IEEE Robotics and Automation Letters</i> , 2022, 7, 5015-5022.	5.1	19

#	ARTICLE	IF	CITATIONS
19	Cyclic hydraulic actuation for soft robotic devices. , 2016, , .		16
20	Engineered Magnetic Nanocomposites to Modulate Cellular Function. Small, 2022, 18, e2104079.	10.0	16
21	Adaptive Dynamic Sliding Mode Control of Soft Continuum Manipulators. , 2022, , .		7
22	Towards online trajectory generation considering robot dynamics and torque limits. , 2013, , .		6
23	A Compact Acoustic Communication Module for Remote Control Underwater. , 2015, , .		3
24	A soft cube capable of controllable continuous jumping. , 2015, , .		2
25	Modeling and Control of an Omnidirectional Micro Aerial Vehicle Equipped with a Soft Robotic Arm. , 2022, , .		2
26	SMORS: A soft multirotor UAV for multimodal locomotion and robust interaction. , 2022, , .		1