Thomas George Thuruthel

List of Publications by Year
in descending order

33 papers	1,749 citations	623734 14 h-index	580821 25 g-index
35 all docs	35 docs citations	35 times ranked	1283 citing authors

#	Article	IF	Citations
1	Control Strategies for Soft Robotic Manipulators: A Survey. Soft Robotics, 2018, 5, 149-163.	8.0	412
2	Soft robot perception using embedded soft sensors and recurrent neural networks. Science Robotics, 2019, 4, .	17.6	383
3	Model-Based Reinforcement Learning for Closed-Loop Dynamic Control of Soft Robotic Manipulators. IEEE Transactions on Robotics, 2019, 35, 124-134.	10.3	228
4	A review on self-healing polymers for soft robotics. Materials Today, 2021, 47, 187-205.	14.2	150
5	Learning dynamic models for open loop predictive control of soft robotic manipulators. Bioinspiration and Biomimetics, 2017, 12, 066003.	2.9	96
6	Learning Closed Loop Kinematic Controllers for Continuum Manipulators in Unstructured Environments. Soft Robotics, 2017, 4, 285-296.	8.0	84
7	Stable Open Loop Control of Soft Robotic Manipulators. IEEE Robotics and Automation Letters, 2018, 3, 1292-1298.	5.1	60
8	Self-healing ionic gelatin/glycerol hydrogels for strain sensing applications. NPG Asia Materials, 2022, 14, .	7.9	59
9	Learning Global Inverse Kinematics Solutions for a Continuum Robot. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2016, , 47-54.	0.6	28
10	First-Order Dynamic Modeling and Control of Soft Robots. Frontiers in Robotics and AI, 2020, 7, 95.	3.2	28
11	Learning Global Inverse Statics Solution for a Redundant Soft Robot. , 2016, , .		28
12	Improving Robotic Cooking Using Batch Bayesian Optimization. IEEE Robotics and Automation Letters, 2020, 5, 760-765.	5.1	27
13	A bistable soft gripper with mechanically embedded sensing and actuation for fast grasping. , 2020, , .		23
14	3D Printable Sensorized Soft Gelatin Hydrogel for Multi-Material Soft Structures. IEEE Robotics and Automation Letters, 2021, 6, 5269-5275.	5.1	21
15	Using Redundant and Disjoint Time-Variant Soft Robotic Sensors for Accurate Static State Estimation. IEEE Robotics and Automation Letters, 2021, 6, 2099-2105.	5.1	19
16	Joint Entropy-Based Morphology Optimization of Soft Strain Sensor Networks for Functional Robustness. IEEE Sensors Journal, 2020, 20, 10801-10810.	4.7	18
17	Cerebellum-inspired approach for adaptive kinematic control of soft robots. , 2019, , .		11
18	Closing the Control Loop with Time-Variant Embedded Soft Sensors and Recurrent Neural Networks. Soft Robotics, 2022, 9, 1167-1176.	8.0	9

#	Article	IF	Citations
19	Emergence of behavior through morphology: a case study on an octopus inspired manipulator. Bioinspiration and Biomimetics, 2019, 14, 034001.	2.9	8
20	Soft Self-Healing Fluidic Tactile Sensors with Damage Detection and Localization Abilities. Sensors, 2021, 21, 8284.	3.8	7
21	Modeling the Encoding of Saccade Kinematic Metrics in the Purkinje Cell Layer of the Cerebellar Vermis. Frontiers in Computational Neuroscience, 2018, 12, 108.	2.1	6
22	Drift-Free Latent Space Representation for Soft Strain Sensors. , 2020, , .		6
23	Exploiting Morphology of a Soft Manipulator for Assistive Tasks. Lecture Notes in Computer Science, 2017, , 291-301.	1.3	6
24	Topological Study on the Design of Soft Strain Sensors for Simultaneous Multi-point Contact Localization. , 2021, , .		5
25	Induced Vibrations of Soft Robotic Manipulators for Controller Design and Stiffness Estimation. , 2018, , .		4
26	Closed loop control of a braided-structure continuum manipulator with hybrid actuation based on learning models. , 2019, , .		4
27	A Vision-Based Collocated Actuation-Sensing Scheme for a Compliant Tendon-Driven Robotic Hand. , 2020, , .		4
28	Editorial: Machine Learning Techniques for Soft Robots. Frontiers in Robotics and AI, 2021, 8, 726774.	3.2	4
29	Autonomous dishwasher loading from cluttered trays using preâ€trained deep neural networks. Engineering Reports, 2021, 3, e12321.	1.7	3
30	Learning to stop: a unifying principle for legged locomotion in varying environments. Royal Society Open Science, 2021, 8, 210223.	2.4	3
31	Towards Growing Robots: A Piecewise Morphology-Controller Co-adaptation Strategy for Legged Locomotion. Lecture Notes in Computer Science, 2020, , 357-368.	1.3	2
32	Manipulation of free-floating objects using Faraday flows and deep reinforcement learning. Scientific Reports, 2022, 12, 335.	3.3	2
33	Real World Bayesian Optimization Using Robots to Clean Liquid Spills. Lecture Notes in Computer Science, 2020, , 196-208.	1.3	1