

# Michael C Yip

## List of Publications by Year in descending order

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44  
papers

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citations

516710

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454955

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g-index

45  
all docs

45  
docs citations

45  
times ranked

1171  
citing authors

#	ARTICLE	IF	CITATIONS
1	Constrained Motion Planning Networks X. IEEE Transactions on Robotics, 2022, 38, 868-886.	10.3	13
2	ARCSnake: Reconfigurable Snakelike Robot With Archimedean Screw Propulsion for Multidomain Mobility. IEEE Transactions on Robotics, 2022, 38, 797-809.	10.3	5
3	Robotic Tool Tracking Under Partially Visible Kinematic Chain: A Unified Approach. IEEE Transactions on Robotics, 2022, 38, 1653-1670.	10.3	6
4	Configuration Space Decomposition for Scalable Proxy Collision Checking in Robot Planning and Control. IEEE Robotics and Automation Letters, 2022, 7, 3811-3818.	5.1	7
5	DiffCo: Autodifferentiable Proxy Collision Detection With Multiclass Labels for Safety-Aware Trajectory Optimization. IEEE Transactions on Robotics, 2022, 38, 2668-2685.	10.3	9
6	Remote telesurgery in humans: a systematic review. Surgical Endoscopy and Other Interventional Techniques, 2022, 36, 2771-2777.	2.4	24
7	Pose Estimation for Robot Manipulators via Keypoint Optimization and Sim-to-Real Transfer. IEEE Robotics and Automation Letters, 2022, 7, 4622-4629.	5.1	11
8	Autonomous Navigation in Unknown Environments With Sparse Bayesian Kernel-Based Occupancy Mapping. IEEE Transactions on Robotics, 2022, 38, 3694-3712.	10.3	3
9	CRANE: a 10 Degree-of-Freedom, Tele-surgical System for Dexterous Manipulation within Imaging Bores. , 2022, , .		2
10	Compensatory motion scaling for time-delayed robotic surgery. Surgical Endoscopy and Other Interventional Techniques, 2021, 35, 2613-2618.	2.4	26
11	Artifacts Mitigation in Sensors for Spasticity Assessment. Advanced Intelligent Systems, 2021, 3, 2000106.	6.1	2
12	Stochastic Modeling of Distance to Collision for Robot Manipulators. IEEE Robotics and Automation Letters, 2021, 6, 207-214.	5.1	5
13	Motion Planning Networks: Bridging the Gap Between Learning-Based and Classical Motion Planners. IEEE Transactions on Robotics, 2021, 37, 48-66.	10.3	101
14	Autonomous Robotic Suction to Clear the Surgical Field for Hemostasis Using Image-Based Blood Flow Detection. IEEE Robotics and Automation Letters, 2021, 6, 1383-1390.	5.1	24
15	ARTEMIS: A Collaborative Mixed-Reality System for Immersive Surgical Telementoring. , 2021, , .		64
16	MPC-MPNet: Model-Predictive Motion Planning Networks for Fast, Near-Optimal Planning Under Kinodynamic Constraints. IEEE Robotics and Automation Letters, 2021, 6, 4496-4503.	5.1	17
17	Data-driven Actuator Selection for Artificial Muscle-Powered Robots. , 2021, , .		1
18	Model-Predictive Control of Blood Suction for Surgical Hemostasis using Differentiable Fluid Simulations. , 2021, , .		4

#	ARTICLE	IF	CITATIONS
19	Real-to-Sim Registration of Deformable Soft Tissue with Position-Based Dynamics for Surgical Robot Autonomy. , 2021, , .		14
20	Bimanual Regrasping for Suture Needles using Reinforcement Learning for Rapid Motion Planning. , 2021, , .		19
21	SuPer Deep: A Surgical Perception Framework for Robotic Tissue Manipulation using Deep Learning for Feature Extraction. , 2021, , .		27
22	From Bench to Bedside: The First Live Robotic Surgery on the dVRK to Enable Remote Telesurgery with Motion Scaling. , 2021, , .		5
23	Scalable tactile sensor arrays on flexible substrates with high spatiotemporal resolution enabling slip and grip for closed-loop robotics. Science Advances, 2020, 6, .	10.3	77
24	Neural Manipulation Planning on Constraint Manifolds. IEEE Robotics and Automation Letters, 2020, 5, 6089-6096.	5.1	17
25	Autonomous Navigation in Unknown Environments using Sparse Kernel-based Occupancy Mapping. , 2020, , .		3
26	SOLAR-GP: Sparse Online Locally Adaptive Regression Using Gaussian Processes for Bayesian Robot Model Learning and Control. IEEE Robotics and Automation Letters, 2020, 5, 2832-2839.	5.1	17
27	Learning-Based Proxy Collision Detection for Robot Motion Planning Applications. IEEE Transactions on Robotics, 2020, 36, 1096-1114.	10.3	44
28	Forward Kinematics Kernel for Improved Proxy Collision Checking. IEEE Robotics and Automation Letters, 2020, 5, 2349-2356.	5.1	9
29	Vibration-Based Multi-Axis Force Sensing: Design, Characterization, and Modeling. IEEE Robotics and Automation Letters, 2020, 5, 3082-3089.	5.1	10
30	SuPer: A Surgical Perception Framework for Endoscopic Tissue Manipulation With Surgical Robotics. IEEE Robotics and Automation Letters, 2020, 5, 2294-2301.	5.1	56
31	Dynamically Constrained Motion Planning Networks for Non-Holonomic Robots. , 2020, , .		16
32	Augmented Reality Predictive Displays to Help Mitigate the Effects of Delayed Telesurgery. , 2019, , .		27
33	Motion Planning Networks. , 2019, , .		112
34	Motion Scaling Solutions for Improved Performance in High Delay Surgical Teleoperation. , 2019, , .		11
35	Robotic Artificial Muscles: Current Progress and Future Perspectives. IEEE Transactions on Robotics, 2019, 35, 761-781.	10.3	225
36	Neural Path Planning: Fixed Time, Near-Optimal Path Generation via Oracle Imitation. , 2019, , .		35

#	ARTICLE	IF	CITATIONS
37	Bundled Super-Coiled Polymer Artificial Muscles: Design, Characterization, and Modeling. IEEE Robotics and Automation Letters, 2018, 3, 1671-1678.	5.1	40
38	Three-dimensional hysteresis compensation enhances accuracy of robotic artificial muscles. Smart Materials and Structures, 2018, 27, 035002.	3.5	25
39	Vision-Based Force Feedback Estimation for Robot-Assisted Surgery Using Instrument-Constrained Biomechanical Three-Dimensional Maps. IEEE Robotics and Automation Letters, 2018, 3, 2160-2165.	5.1	48
40	Deeply Informed Neural Sampling for Robot Motion Planning. , 2018, , .		44
41	Modeling and Inverse Compensation of Hysteresis in Supercoiled Polymer Artificial Muscles. IEEE Robotics and Automation Letters, 2017, 2, 773-780.	5.1	60
42	Spurring Innovation in Spatial Haptics: How Open-Source Hardware Can Turn Creativity Loose. IEEE Robotics and Automation Magazine, 2017, 24, 65-76.	2.0	11
43	On the Control and Properties of Supercoiled Polymer Artificial Muscles. IEEE Transactions on Robotics, 2017, 33, 689-699.	10.3	120
44	Model-Less Hybrid Position/Force Control: A Minimalist Approach for Continuum Manipulators in Unknown, Constrained Environments. IEEE Robotics and Automation Letters, 2016, 1, 844-851.	5.1	100