Minas V Liarokapis

List of Publications by Year
in descending order

102	1,460	687220 13	610775 24
papers	citations	h-index	g-index

102	102	102	1072
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Single-Grasp Object Classification and Feature Extraction with Simple Robot Hands and Tactile Sensors. IEEE Transactions on Haptics, 2016, 9, 207-220.	1.8	110
2	The convergence of digital commons with local manufacturing from a degrowth perspective: Two illustrative cases. Journal of Cleaner Production, 2018, 197, 1684-1693.	4.6	82
3	Open-source, anthropomorphic, underactuated robot hands with a selectively lockable differential mechanism: Towards affordable prostheses. , 2015, , .		72
4	A Learning Scheme for Reach to Grasp Movements: On EMG-Based Interfaces Using Task Specific Motion Decoding Models. IEEE Journal of Biomedical and Health Informatics, 2013, 17, 915-921.	3.9	51
5	On the Development of Adaptive, Tendon-Driven, Wearable Exo-Gloves for Grasping Capabilities Enhancement. IEEE Robotics and Automation Letters, 2019, 4, 422-429.	3.3	49
6	Open-source, affordable, modular, light-weight, underactuated robot hands. , 2014, , .		45
7	Learning human reach-to-grasp strategies: Towards EMG-based control of robotic arm-hand systems. , 2012, , .		44
8	Human arm impedance: Characterization and modeling in 3D space. , 2010, , .		38
9	A Learning Scheme for EMG Based Decoding of Dexterous, In-Hand Manipulation Motions. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 2205-2215.	2.7	36
10	Functional Anthropomorphism for human to robot motion mapping. , 2012, , .		33
11	Quantifying anthropomorphism of robot hands. , 2013, , .		33
12	A Soft Exoglove Equipped With a Wearable Muscle-Machine Interface Based on Forcemyography and Electromyography. IEEE Robotics and Automation Letters, 2019, 4, 3240-3246.	3.3	32
13	Unplanned, model-free, single grasp object classification with underactuated hands and force sensors. , 2015, , .		30
14	Recent Data Sets on Object Manipulation: A Survey. Big Data, 2016, 4, 197-216.	2.1	29
15	A Passive Closing, Tendon Driven, Adaptive Robot Hand for Ultra-Fast, Aerial Grasping and Perching. , 2019, , .		26
16	A Hybrid, Wearable Exoskeleton Glove Equipped With Variable Stiffness Joints, Abduction Capabilities, and a Telescopic Thumb. IEEE Access, 2020, 8, 173345-173358.	2.6	24
17	Deriving dexterous, in-hand manipulation primitives for adaptive robot hands. , 2017, , .		23
18	A Hybrid, Soft Exoskeleton Glove Equipped with a Telescopic Extra Thumb and Abduction Capabilities. , 2020, , .		22

#	Article	IF	Citations
19	Mapping human to robot motion with functional anthropomorphism for teleoperation and telemanipulation with robot arm hand systems. , 2013, , .		21
20	Post-contact, in-hand object motion compensation for compliant and underactuated hands. , 2016, , .		20
21	On Alternative Uses of Structural Compliance for the Development of Adaptive Robot Grippers and Hands. Frontiers in Neurorobotics, 2019, 13, 91.	1.6	20
22	An Adaptive Actuation Mechanism for Anthropomorphic Robot Hands. Frontiers in Robotics and AI, 2019, 6, 47.	2.0	19
23	Learning task-specific models for reach to grasp movements: Towards EMG-based teleoperation of robotic arm-hand systems. , 2012, , .		18
24	Telemanipulation with the DLR/HIT II robot hand using a dataglove and a low cost force feedback device. , 2013, , .		18
25	Learning task-specific models for dexterous, in-hand manipulation with simple, adaptive robot hands. , 2016, , .		17
26	Post-Contact, In-Hand Object Motion Compensation With Adaptive Hands. IEEE Transactions on Automation Science and Engineering, 2018, 15, 456-467.	3.4	17
27	Task-specific grasp selection for underactuated hands. , 2014, , .		16
28	Robust model free control of robotic manipulators with prescribed transient and steady state performance. , 2014, , .		16
29	Single-Grasp, Model-Free Object Classification using a Hyper-Adaptive Hand, Google Soli, and Tactile Sensors. , 2018, , .		16
30	An Intuitive, Affordances Oriented Telemanipulation Framework for a Dual Robot Arm Hand System: On the Execution of Bimanual Tasks. , 2019, , .		16
31	On Aerial Robots with Grasping and Perching Capabilities: A Comprehensive Review. Frontiers in Robotics and AI, 2021, 8, 739173.	2.0	16
32	Task discrimination from myoelectric activity: A learning scheme for EMG-based interfaces. , 2013, 2013, 6650366.		15
33	Reconfigurable, Adaptive, Lightweight Grasping Mechanisms for Aerial Robotic Platforms. , 2020, , .		15
34	Comparing Machine Learning Methods and Feature Extraction Techniques for the EMG Based Decoding of Human Intention. , 2021, 2021, 4738-4743.		15
35	A Tendon-Driven, Preloaded, Pneumatically Actuated, Soft Robotic Gripper with a Telescopic Palm. , 2020, , .		14
36	Improving Robotic Manipulation Without Sacrificing Grasping Efficiency: A Multi-Modal, Adaptive Gripper With Reconfigurable Finger Bases. IEEE Access, 2021, 9, 83298-83308.	2.6	14

#	Article	IF	Citations
37	Deriving Humanlike Arm Hand System Poses. Journal of Mechanisms and Robotics, 2017, 9, .	1.5	13
38	Learning the post-contact reconfiguration of the hand object system for adaptive grasping mechanisms. , 2017, , .		13
39	Combining Electromyography and Fiducial Marker Based Tracking for Intuitive Telemanipulation with a Robot Arm Hand System. , 2019, , .		13
40	A Low-Cost, Open-Source, Robotic Airship for Education and Research. IEEE Access, 2020, 8, 70713-70721.	2.6	13
41	EMG Based Decoding of Object Motion in Dexterous, In-Hand Manipulation Tasks. , 2018, , .		12
42	Modular, Accessible, Sensorized Objects for Evaluating the Grasping and Manipulation Capabilities of Grippers and Hands. IEEE Robotics and Automation Letters, 2020, 5, 6105-6112.	3.3	12
43	A Wearable, Open-Source, Lightweight Forcemyography Armband: On Intuitive, Robust Muscle-Machine Interfaces. , 2021, , .		12
44	Combining Analytical Modeling and Learning to Simplify Dexterous Manipulation With Adaptive Robot Hands. IEEE Transactions on Automation Science and Engineering, 2019, 16, 1361-1372.	3.4	11
45	Combining Compliance Control, CAD Based Localization, and a Multi-Modal Gripper for Rapid and Robust Programming of Assembly Tasks. , 2020, , .		11
46	A Shared Control Framework for Robotic Telemanipulation Combining Electromyography Based Motion Estimation and Compliance Control. , 2021, , .		11
47	Laminar Jamming Flexure Joints for the Development of Variable Stiffness Robot Grippers and Hands. , 2020, , .		11
48	Prescribed performance image based visual servoing under field of view constraints. , 2014, , .		10
49	A Pneumatically Driven, Disposable, Soft Robotic Gripper Equipped With Multi-Stage, Retractable, Telescopic Fingers. IEEE Transactions on Medical Robotics and Bionics, 2021, 3, 573-582.	2.1	10
50	Open-source, low-cost, compliant, modular, underactuated fingers: Towards affordable prostheses for partial hand amputations. , 2014, 2014, 2541-4.		9
51	An Adaptive, Humanlike Robot Hand with Selective Interdigitation: Towards Robust Grasping and Dexterous, In-Hand Manipulation. , 2019, , .		9
52	EMG-Based Decoding of Manipulation Motions in Virtual Reality: Towards Immersive Interfaces. , 2020, , .		9
53	On the effect of human arm manipulability in 3D force tasks: Towards force-controlled exoskeletons. , 2011, , .		8
54	Task specific robust grasping for multifingered robot hands. , 2014, , .		8

#	Article	IF	Citations
55	Humanlike, task-specific reaching and grasping with redundant arms and low-complexity hands. , 2015, , .		8
56	On Muscle Selection for EMG Based Decoding of Dexterous, In-Hand Manipulation Motions. , 2018, 2018, 1672-1675.		8
57	A Dexterous, Reconfigurable, Adaptive Robot Hand Combining Anthropomorphic and Interdigitated Configurations. , 2021, , .		8
58	A Compact Ratchet Clutch Mechanism for Fine Tendon Termination and Adjustment. , 2018, , .		7
59	Employing Magnets to Improve the Force Exertion Capabilities of Adaptive Robot Hands in Precision Grasps. , 2019, , .		7
60	An Underactuated, Tendon-Driven, Wearable Exo-Glove With a Four-Output Differential Mechanism. , 2019, 2019, 6224-6228.		7
61	Leveraging Enhanced Virtual Reality Methods and Environments for Efficient, Intuitive, and Immersive Teleoperation of Robots. , 2021, , .		7
62	A Series Elastic, Compact Differential Mechanism: On the Development of Adaptive, Lightweight Robotic Grippers and Hands. , 2021, , .		7
63	Employing Pneumatic, Telescopic Actuators for the Development of Soft and Hybrid Robotic Grippers. Frontiers in Robotics and AI, 2020, 7, 601274.	2.0	6
64	A Flexible Robotic Assembly System Combining CAD Based Localization, Compliance Control, and a Multi-Modal Gripper. IEEE Robotics and Automation Letters, 2021, 6, 8639-8646.	3.3	6
65	An integrated approach towards robust grasping with tactile sensing. , 2014, , .		5
66	High-Density Electromyography Based Control of Robotic Devices: On the Execution of Dexterous Manipulation Tasks. , 2020, , .		5
67	Electromyography-Based Decoding of Dexterous, In-Hand Manipulation of Objects: Comparing Task Execution in Real World and Virtual Reality. IEEE Access, 2021, 9, 37297-37310.	2.6	5
68	An Agile, Coaxial, Omnidirectional Rotor Module: On the Development of Hybrid, All Terrain Robotic Rotorcrafts. , 2020, , .		5
69	The New Dexterity Omnirotor Platform: Design, Modeling, and Control of a Modular, Versatile, All-Terrain Vehicle. , 2021, , .		5
70	On Lightmyography: A New Muscle Machine Interfacing Method for Decoding Human Intention and Motion. , 2021, 2021, 4744-4748.		5
71	A Benchmarking Platform and a Control Allocation Method for Improving the Efficiency of Coaxial Rotor Systems. IEEE Robotics and Automation Letters, 2022, 7, 5302-5309.	3.3	5
72	An Adaptive, Affordable, Open-Source Robotic Hand for Deaf and Deaf-Blind Communication Using Tactile American Sign Language. , 2021, 2021, 4732-4737.		5

#	Article	IF	Citations
73	An Electromyography Based Shared Control Framework for Intuitive Robotic Telemanipulation. , 2021, , .		5
74	Quantifying anthropomorphism of robot arms. , 2015, , .		4
75	A Compliant, Underactuated Finger for Anthropomorphic Hands. , 2019, 2019, 682-688.		4
76	On The Combination of Gamification and Crowd Computation in Industrial Automation and Robotics Applications. , 2019, , .		4
77	Prosthetic Limbs. , 2019, , 235-278.		4
78	A Hybrid, Encompassing, Three-Fingered Robotic Gripper Combining Pneumatic Telescopic Mechanisms and Rigid Claws. , 2020, , .		4
79	A Locally-Adaptive, Parallel-Jaw Gripper with Clamping and Rolling Capable, Soft Fingertips for Fine Manipulation of Flexible Flat Cables. , 2021, , .		4
80	On Differential Mechanisms for Underactuated, Lightweight, Adaptive Prosthetic Hands. Frontiers in Neurorobotics, 2021, 15, 702031.	1.6	4
81	Assessing the Suitability and Effectiveness of Mixed Reality Interfaces for Accurate Robot Teleoperation. , 2020, , .		4
82	A Modular, Accessible, Affordable Dexterity Test for Evaluating the Grasping and Manipulation Capabilities of Robotic Grippers and Hands. , 2020, , .		4
83	The ARoA Platform: An Autonomous Robotic Assistant with a Reconfigurable Torso System and Dexterous Manipulation Capabilities. , 2021, , .		4
84	Employing IMU and ArUco Marker Based Tracking to Decode the Contact Forces Exerted by Adaptive Hands. , 2019, , .		3
85	A Pneumatically Driven, Disposable, Soft Robotic Gripper Equipped with Retractable, Telescopic Fingers. , 2020, , .		3
86	A Learning Scheme for EMG Based Interfaces: On Task Specificity in Motion Decoding Domain. Trends in Augmentation of Human Performance, 2014, , 3-36.	0.4	3
87	On Wearable, Lightweight, Low-Cost Human Machine Interfaces for the Intuitive Collection of Robot Grasping and Manipulation Data. , 2022, , .		3
88	Adaptive, Tendon-Driven, Affordable Prostheses for Partial Hand Amputations: On Body-Powered and Motor Driven Implementations. , 2019, 2019, 6656-6660.		2
89	Combining Programming by Demonstration with Path Optimization and Local Replanning to Facilitate the Execution of Assembly Tasks. , 2020, , .		2
90	An Anthropomorphic Prosthetic Hand with an Active, Selectively Lockable Differential Mechanism: Towards Affordable Dexterity. , 2021, , .		2

#	Article	IF	Citations
91	A Multi-Modal Robotic Gripper with a Reconfigurable Base: Improving Dexterous Manipulation without Compromising Grasping Efficiency. , 2021, , .		2
92	A Shared Control Teleoperation Framework for Robotic Airships: Combining Intuitive Interfaces and an Autonomous Landing System. , 2021, , .		2
93	An Accessible, Open-Source Dexterity Test: Evaluating the Grasping and Dexterous Manipulation Capabilities of Humans and Robots. Frontiers in Robotics and AI, 2022, 9, 808154.	2.0	2
94	Biomechatronics: A New Dawn. , 2019, , 543-566.		1
95	Unconventional Uses of Structural Compliance in Adaptive Hands. , 2019, , .		1
96	Enhancing Robot Perception in Grasping and Dexterous Manipulation through Crowdsourcing and Gamification. , 2021, , .		1
97	Practice Problems. , 2019, , 567-604.		0
98	Leveraging Human Perception in Robot Grasping and Manipulation Through Crowdsourcing and Gamification. Frontiers in Robotics and AI, 2021, 8, 652760.	2.0	0
99	Teaching Robotic and Biomechatronic Concepts with a Gripper Design Project and a Grasping and Manipulation Competition. , 2021, , .		0
100	A Learn by Demonstration Approach for Closed-Loop, Robust, Anthropomorphic Grasp Planning. Springer Series on Touch and Haptic Systems, 2016, , 127-149.	0.2	0
101	Model-Free, Vision-Based Object Identification and Contact Force Estimation with a Hyper-Adaptive Robotic Gripper. , 2020, , .		0
102	A Hybrid, Soft Robotic Exoskeleton Glove with Inflatable, Telescopic Structures and a Shared Control Operation Scheme. , 2022, , .		0