Domenico Prattichizzo

List of Publications by Year
in descending order

266 papers	8,507 citations	61977 43 h-index	76898 74 g-index
275 all docs	275 docs citations	275 times ranked	5601 citing authors

#	Article	IF	Citations
1	Leaderâ€“follower formation control of nonholonomic mobile robots with input constraints. Automatica, 2008, 44, 1343-1349.	5.0	567
2	Wearable Haptic Systems for the Fingertip and the Hand: Taxonomy, Review, and Perspectives. IEEE Transactions on Haptics, 2017, 10, 580-600.	2.7	486
3	Towards Wearability in Fingertip Haptics: A 3-DoF Wearable Device for Cutaneous Force Feedback. IEEE Transactions on Haptics, 2013, 6, 506-516.	2.7	226
4	Image-Based Visual Servoing for Nonholonomic Mobile Robots Using Epipolar Geometry. , 2007, 23, 87-100.		199
5	Hand synergies: Integration of robotics and neuroscience for understanding the control of biological and artificial hands. Physics of Life Reviews, 2016, 17, 1-23.	2.8	191
6	Grasping. , 2008, , 671-700.		185
7	Cutaneous Feedback of Fingertip Deformation and Vibration for Palpation in Robotic Surgery. IEEE Transactions on Biomedical Engineering, 2016, 63, 278-287.	4.2	169
8	Cutaneous Force Feedback as a Sensory Subtraction Technique in Haptics. IEEE Transactions on Haptics, 2012, 5, 289-300.	2.7	144
9	Vision-Based Localization for Leaderâ€“Follower Formation Control. IEEE Transactions on Robotics, 2009, 25, 1431-1438.	10.3	141
10	Using Kinect for hand tracking and rendering in wearable haptics. , 2011, , .		138
11	On the role of hand synergies in the optimal choice of grasping forces. Autonomous Robots, 2011, 31, 235-252.	4.8	138
12	The automatic control telelab: a user-friendly interface for distance learning. IEEE Transactions on Education, 2003, 46, 252-257.	2.4	131
13	Mapping Synergies From Human to Robotic Hands With Dissimilar Kinematics: An Approach in the Object Domain. IEEE Transactions on Robotics, 2013, 29, 825-837.	10.3	115
14	Localization of Autonomous Underwater Vehicles by Floating Acoustic Buoys: A Set-Membership Approach. IEEE Journal of Oceanic Engineering, 2005, 30, 140-152.	3.8	104
15	A Humanâ€“Robot Interaction Perspective on Assistive and Rehabilitation Robotics. Frontiers in Neurorobotics, 2017, 11, 24.	2.8	102
16	Cutaneous haptic feedback to ensure the stability of robotic teleoperation systems. International Journal of Robotics Research, 2015, 34, 1773-1787.	8.5	100
17	Manipulability of cooperating robots with unactuated joints and closed-chain mechanisms. IEEE Transactions on Automation Science and Engineering, 2000, 16, 336-345.	2.3	92
18	Walking Ahead: The Headed Social Force Model. PLoS ONE, 2017, 12, e0169734.	2.5	91

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19	The Soft-SixthFinger: a Wearable EMG Controlled Robotic Extra-Finger for Grasp Compensation in Chronic Stroke Patients. IEEE Robotics and Automation Letters, 2016, 1, 1000-1006.	5.1	90
20	Evaluation of Wearable Haptic Systems for the Fingers in Augmented Reality Applications. IEEE Transactions on Haptics, 2017, 10, 511-522.	2.7	89
21	Grasping. Springer Handbooks, 2016, , 955-988.	0.6	84
22	Improving Transparency in Teleoperation by Means of Cutaneous Tactile Force Feedback. ACM Transactions on Applied Perception, 2014, 11, 1-16.	1.9	83
23	Sensory Subtraction in Robot-Assisted Surgery: Fingertip Skin Deformation Feedback to Ensure Safety and Improve Transparency in Bimanual Haptic Interaction. IEEE Transactions on Biomedical Engineering, 2014, 61, 1318-1327.	4.2	82
24	On Motion and Force Controllability of Precision Grasps with Hands Actuated by Soft Synergies. IEEE Transactions on Robotics, 2013, 29, 1440-1456.	10.3	80
25	On the manipulability ellipsoids of underactuated robotic hands with compliance. Robotics and Autonomous Systems, 2012, 60, 337-346.	5.1	75
26	The flying hand: A formation of UAVs for cooperative aerial tele-manipulation. , 2014, , .		75
27	Observer design via Immersion and Invariance for vision-based leaderâ€“follower formation control. Automatica, 2010, 46, 148-154.	5.0	70
28	SynGrasp: A MATLAB Toolbox for Underactuated and Compliant Hands. IEEE Robotics and Automation Magazine, 2015, 22, 52-68.	2.0	69
29	Dynamic analysis of mobility and graspability of general manipulation systems. IEEE Transactions on Automation Science and Engineering, 1998, 14, 241-258.	2.3	67
30	The hRing: A wearable haptic device to avoid occlusions in hand tracking. , 2016, , .		67
31	Simplified design of haptic display by extending one-point kinesthetic feedback to multipoint tactile feedback. , 2010, , .		66
32	The Sixth-Finger: A modular extra-finger to enhance human hand capabilities. , 2014, , .		66
33	Compensating Hand Function in Chronic Stroke Patients Through the Robotic Sixth Finger. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 142-150.	4.9	64
34	Experimental evaluation of magnified haptic feedback for robotâ€assisted needle insertion and palpation. International Journal of Medical Robotics and Computer Assisted Surgery, 2017, 13, e1809.	2.3	64
35	Design and development of a 3RRS wearable fingertip cutaneous device. , 2015, , .		62
36	GESTO: A Glove for Enhanced Sensing and Touching Based on Inertial and Magnetic Sensors for Hand Tracking and Cutaneous Feedback. IEEE Transactions on Human-Machine Systems, 2017, 47, 1066-1076.	3.5	61

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37	EGT for multiple view geometry and visual servoing - Robotics and vision with pinhole and panoramics cameras. IEEE Robotics and Automation Magazine, 2005, 12, 26-39.	2.0	59
38	Design and Evaluation of a Wearable Skin Stretch Device for Haptic Guidance. IEEE Robotics and Automation Letters, 2018, 3, 524-531.	5.1	59
39	Navigation assistance and guidance of older adults across complex public spaces: the DALiÂapproach. Intelligent Service Robotics, 2015, 8, 77-92.	2.6	58
40	Steering and Control of Miniaturized Untethered Soft Magnetic Grippers With Haptic Assistance. IEEE Transactions on Automation Science and Engineering, 2018, 15, 290-306.	5.2	57
41	A Three Revolute-Revolute-Spherical Wearable Fingertip Cutaneous Device for Stiffness Rendering. IEEE Transactions on Haptics, 2018, 11, 39-50.	2.7	56
42	Convolution profiles for right inversion of multivariable non-minimum phase discrete-time systems. Automatica, 2002, 38, 1695-1703.	5.0	53
43	Leader-Follower Formations: Uncalibrated Vision-Based Localization and Control. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	53
44	Operator Awareness in Humanâ€“Robot Collaboration Through Wearable Vibrotactile Feedback. IEEE Robotics and Automation Letters, 2018, 3, 4289-4296.	5.1	53
45	Two Finger Grasping Simulation with Cutaneous and Kinesthetic Force Feedback. Lecture Notes in Computer Science, 2012, , 373-382.	1.3	53
46	Toward wearable supernumerary robotic fingers to compensate missing grasping abilities in hemiparetic upper limb. International Journal of Robotics Research, 2017, 36, 1414-1436.	8.5	52
47	A three DoFs wearable tactile display for exploration and manipulation of virtual objects. , 2012, , .		49
48	Stabilization of a Hierarchical Formation of Unicycle Robots with Velocity and Curvature Constraints. IEEE Transactions on Robotics, 2009, 25, 1176-1184.	10.3	48
49	Enhancing the Performance of Passive Teleoperation Systems via Cutaneous Feedback. IEEE Transactions on Haptics, 2015, 8, 397-409.	2.7	48
50	Teleoperation in cluttered environments using wearable haptic feedback. , 2017, , .		46
51	Off-line removal of TMS-induced artifacts on human electroencephalography by Kalman filter. Journal of Neuroscience Methods, 2007, 162, 293-302.	2.5	45
52	KUKA Control Toolbox. IEEE Robotics and Automation Magazine, 2011, 18, 69-79.	2.0	45
53	Teleoperation of Steerable Flexible Needles by Combining Kinesthetic and Vibratory Feedback. IEEE Transactions on Haptics, 2014, 7, 551-556.	2.7	45
54	Design and prototyping softâ€“rigid tendon-driven modular grippers using interpenetrating phase composites materials. International Journal of Robotics Research, 2020, 39, 1635-1646.	8.5	45

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55	Application of Kalman Filter to Remove TMS-Induced Artifacts from EEG Recordings. IEEE Transactions on Control Systems Technology, 2008, 16, 1360-1366.	5.2	44
56	Turning a near-hovering controlled quadrotor into a 3D force effector. , 2014, , .		44
57	Modeling and Prototyping of an Underactuated Gripper Exploiting Joint Compliance and Modularity. IEEE Robotics and Automation Letters, 2018, 3, 2854-2861.	5.1	43
58	A Geometric Characterization of Leader-Follower Formation Control. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	42
59	Image-based Visual Servoing with Central Catadioptric Cameras. International Journal of Robotics Research, 2008, 27, 41-56.	8.5	41
60	SynGrasp: A MATLAB toolbox for grasp analysis of human and robotic hands. , 2013, , .		40
61	Touch the virtual reality. , 2015, , .		40
62	An EMG Interface for the Control of Motion and Compliance of a Supernumerary Robotic Finger. Frontiers in Neurorobotics, 2016, 10, 18.	2.8	40
63	Design of a wearable skin stretch cutaneous device for the upper limb. , 2016, , .		40
64	A Modular Wearable Finger Interface for Cutaneous and Kinesthetic Interaction: Control and Evaluation. IEEE Transactions on Industrial Electronics, 2020, 67, 706-716.	7.9	39
65	Caring About the Human Operator: Haptic Shared Control for Enhanced User Comfort in Robotic Telemanipulation. IEEE Transactions on Haptics, 2020, 13, 197-203.	2.7	38
66	Force feedback in a piezoelectric linear actuator for neurosurgery. International Journal of Medical Robotics and Computer Assisted Surgery, 2011, 7, 268-275.	2.3	37
67	Human-Robot Formation Control via Visual and Vibrotactile Haptic Feedback. IEEE Transactions on Haptics, 2014, 7, 499-511.	2.7	36
68	Using the robotic sixth finger and vibrotactile feedback for grasp compensation in chronic stroke patients. , 2015, , .		36
69	High-gamma oscillations in the motor cortex during visuo-motor coordination: A tACS interferential study. Brain Research Bulletin, 2017, 131, 47-54.	3.0	36
70	Consistent Task Specification for Manipulation Systems With General Kinematics. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1997, 119, 760-767.	1.6	35
71	A soft supernumerary robotic finger and mobile arm support for grasping compensation and hemiparetic upper limb rehabilitation. Robotics and Autonomous Systems, 2017, 93, 1-12.	5.1	35
72	The neural resource allocation problem when enhancing human bodies with extra robotic limbs. Nature Machine Intelligence, 2021, 3, 850-860.	16.0	34

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73	Geometric insight into discrete-time cheap and singular linear quadratic Riccati (LQR) problems. IEEE Transactions on Automatic Control, 2002, 47, 102-107.	5.7	33
74	Upper Body Pose Estimation Using Wearable Inertial Sensors and Multiplicative Kalman Filter. IEEE Sensors Journal, 2020, 20, 492-500.	4.7	33
75	Analysis and optimization of tendinous actuation for biomorphically designed robotic systems. Robotica, 2000, 18, 23-31.	1.9	31
76	The Haptik Library. IEEE Robotics and Automation Magazine, 2007, 14, 64-75.	2.0	31
77	Planar mirrors for image-based robot localization and 3-D reconstruction. Mechatronics, 2012, 22, 398-409.	3.3	31
78	Displaying Sensed Tactile Cues with a Fingertip Haptic Device. IEEE Transactions on Haptics, 2015, 8, 384-396.	2.7	31
79	Haptic Feedback for Microrobotics Applications: A Review. Frontiers in Robotics and AI, 2016, 3, .	3.2	31
80	Human augmentation by wearable supernumerary robotic limbs: review and perspectives. Progress in Biomedical Engineering, 2021, 3, 042005.	4.9	31
81	Using a Fingertip Tactile Device to Substitute Kinesthetic Feedback in Haptic Interaction. Lecture Notes in Computer Science, 2010, , 125-130.	1.3	31
82	Cooperative Navigation for Mixed Humanâ€“Robot Teams Using Haptic Feedback. IEEE Transactions on Human-Machine Systems, 2017, 47, 462-473.	3.5	30
83	Visibility maintenance via controlled invariance for leaderâ€“follower vehicle formations. Automatica, 2011, 47, 1060-1067.	5.0	29
84	Haptic Guidance in Dynamic Environments Using Optimal Reciprocal Collision Avoidance. IEEE Robotics and Automation Letters, 2018, 3, 265-272.	5.1	29
85	Efficient FEM-Based Simulation of Soft Robots Modeled as Kinematic Chains. , 2018, , .		29
86	RemoTouch: A system for remote touch experience. , 2010, , .		28
87	Can Wearable Haptic Devices Foster the Embodiment of Virtual Limbs?. IEEE Transactions on Haptics, 2019, 12, 339-349.	2.7	28
88	Bringing Haptics to Second Life for Visually Impaired People. Lecture Notes in Computer Science, 2008, , 896-905.	1.3	28
89	Range estimation from a moving camera: An Immersion and Invariance approach. , 2009, , .		27
90	On Grasp Quality Measures: Grasp Robustness and Contact Force Distribution in Underactuated and Compliant Robotic Hands. IEEE Robotics and Automation Letters, 2017, 2, 329-336.	5.1	27

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91	Vibrotactile haptic feedback for intuitive control of robotic extra fingers. , 2015, , .		26
92	Cooperative aerial tele-manipulation with haptic feedback. , 2016, , .		26
93	Preventing Undesired Face-Touches With Wearable Devices and Haptic Feedback. IEEE Access, 2020, 8, 139033-139043.	4.2	26
94	An Object-Based Approach to Map Human Hand Synergies onto Robotic Hands with Dissimilar Kinematics. , 0, , .		26
95	Experimental evaluation of co-manipulated ultrasound-guided flexible needle steering. International Journal of Medical Robotics and Computer Assisted Surgery, 2016, 12, 219-230.	2.3	25
96	Soft finger tactile rendering for wearable haptics. , 2015, , .		24
97	Discrete Cosserat Approach for Closed-Chain Soft Robots: Application to the Fin-Ray Finger. IEEE Transactions on Robotics, 2021, 37, 2083-2098.	10.3	24
98	A Unified Setting for Decoupling With Preview and Fixed-Lag Smoothing in the Geometric Context. IEEE Transactions on Automatic Control, 2006, 51, 809-813.	5.7	23
99	Wearable haptics and hand tracking via an RGB-D camera for immersive tactile experiences. , 2014, , .		23
100	Compliant gripper design, prototyping, and modeling using screw theory formulation. International Journal of Robotics Research, 2021, 40, 55-71.	8.5	23
101	Grasp Stiffness Control in Robotic Hands Through Coordinated Optimization of Pose and Joint Stiffness. IEEE Robotics and Automation Letters, 2018, 3, 3952-3959.	5.1	22
102	Virtual Fetal Touch Through a Haptic Interface Decreases Maternal Anxiety and Salivary Cortisol. Journal of the Society for Gynecologic Investigation, 2005, 12, 37-40.	1.7	21
103	KCT: a MATLAB toolbox for motion control of KUKA robot manipulators. , 2010, , .		21
104	On a Class of Hierarchical Formations of Unicycles and Their Internal Dynamics. IEEE Transactions on Automatic Control, 2012, 57, 845-859.	5.7	21
105	Haptic Assistive Bracelets for Blind Skier Guidance. , 2016, , .		21
106	Haptic wrist guidance using vibrations for Human-Robot teams. , 2016, , .		21
107	Towards robotic MAGMaS: Multiple aerial-ground manipulator systems. , 2017, , .		21
108	The Closure Signature: A Functional Approach to Model Underactuated Compliant Robotic Hands. IEEE Robotics and Automation Letters, 2018, 3, 2206-2213.	5.1	21

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109	Combining Wearable Finger Haptics and Augmented Reality: User Evaluation Using an External Camera and the Microsoft HoloLens. IEEE Robotics and Automation Letters, 2018, 3, 4297-4304.	5.1	21
110	Design, Development, and Control of a Hand/Wrist Exoskeleton for Rehabilitation and Training. IEEE Transactions on Robotics, 2022, 38, 1472-1488.	10.3	21
111	Operating Remote Laboratories Through a Bootable Device. IEEE Transactions on Industrial Electronics, 2007, 54, 3134-3140.	7.9	20
112	A new approach to the cheap LQ regulator exploiting the geometric properties of the Hamiltonian system. Automatica, 2008, 44, 2834-2839.	5.0	20
113	Dynamic Performance of Mobile Haptic Interfaces. , 2008, 24, 559-575.		20
114	Using Postural Synergies to Animate a Low-Dimensional Hand Avatar in Haptic Simulation. IEEE Transactions on Haptics, 2013, 6, 106-116.	2.7	20
115	A force-based bilateral teleoperation framework for aerial robots in contact with the environment. , 2015, , .		20
116	The Tele-MAGMaS: An Aerial-Ground Comanipulator System. IEEE Robotics and Automation Magazine, 2018, 25, 66-75.	2.0	20
117	Design of Multiple Wearable Robotic Extra Fingers for Human Hand Augmentation. Robotics, 2019, 8, 102.	3.5	20
118	Towards a Virtual Reality Interface for Remote Robotic Teleoperation. , 2019, , .		19
119	Hand closure model for planning top grasps with soft robotic hands. International Journal of Robotics Research, 2020, 39, 1706-1723.	8.5	19
120	An object-based mapping algorithm to control wearable robotic extra-fingers. , 2014, , .		18
121	Multicontact Bilateral Telemanipulation With Kinematic Asymmetries. IEEE/ASME Transactions on Mechatronics, 2017, 22, 445-456.	5.8	18
122	Design and Prototype of Supernumerary Robotic Finger (SRF) Inspired by Fin RayÂ® Effect for Patients Suffering from Sensorimotor Hand Impairment. , 2019, , .		18
123	contact and grasp robustness measures: Analysis and experiments. Lecture Notes in Control and Information Sciences, 1997, , 83-90.	1.0	17
124	Vibrotactile haptic feedback for human-robot interaction in leader-follower tasks. , 2012, , .		17
125	Evaluation of grasp stiffness in underactuated compliant hands. , 2013, , .		17
126	Digital Handwriting with a Finger or a Stylus: A Biomechanical Comparison. IEEE Transactions on Haptics, 2015, 8, 356-370.	2.7	17

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127	A mobile platform for haptic grasping in large environments. Virtual Reality, 2006, 10, 11-23.	6.1	16
128	Intuitive control of self-propelled microjets with haptic feedback. Journal of Micro-Bio Robotics, 2015, 10, 37-53.	2.1	16
129	A passive guidance system for a robotic walking assistant using brakes. , 2015, , .		16
130	The Role of Closed-Loop Hand Control in Handshaking Interactions. IEEE Robotics and Automation Letters, 2019, 4, 878-885.	5.1	16
131	Humanâ€“Robot Team Interaction Through Wearable Haptics for Cooperative Manipulation. IEEE Transactions on Haptics, 2019, 12, 350-362.	2.7	16
132	Accessible Educational Resources for Teaching and Learning Robotics. Robotics, 2021, 10, 38.	3.5	16
133	Flexible scheduling and tactile communication for humanâ€“robot collaboration. Robotics and Computer-Integrated Manufacturing, 2022, 73, 102233.	9.9	16
134	A Nested Computational Approach to the Discrete-Time Finite-Horizon LQ Control Problem. SIAM Journal on Control and Optimization, 2003, 42, 1002-1012.	2.1	15
135	Straight Line Path-Planning in Visual Servoing. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2007, 129, 541-543.	1.6	15
136	Shape and weight rendering for haptic Augmented Reality. , 2010, , .		15
137	An accurate and robust visual-compass algorithm for robot-mounted omnidirectional cameras. Robotics and Autonomous Systems, 2012, 60, 1179-1190.	5.1	14
138	Effects of Kinesthetic and Cutaneous Stimulation During the Learning of a Viscous Force Field. IEEE Transactions on Haptics, 2014, 7, 251-263.	2.7	13
139	Towards a synergy framework across neuroscience and robotics: Lessons learned and open questions. Reply to comments on: â€œHand synergies: Integration of robotics and neuroscience for understanding the control of biological and artificial handsâ€• Physics of Life Reviews, 2016, 17, 54-60.	2.8	13
140	Modeling and Prototyping of a Soft Prosthetic Hand Exploiting Joint Compliance and Modularity. , 2018, , .		13
141	Exploiting Robot Hand Compliance and Environmental Constraints for Edge Grasps. Frontiers in Robotics and AI, 2019, 6, 135.	3.2	13
142	Simultaneous control of natural and extra degrees of freedom by isometric force and electromyographic activity in the muscle-to-force null space. Journal of Neural Engineering, 2022, 19, 016004.	3.5	13
143	Planar Catadioptric Stereo: Single and multi-view geometry for calibration and localization. , 2009, , .		12
144	When Helbing meets Laumond: The Headed Social Force Model. , 2016, , .		12

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145	Kinesthetic and vibrotactile haptic feedback improves the performance of laser microsurgery. , 2016, , .		12
146	Rendering of Pressure and Textures Using Wearable Haptics in Immersive VR Environments. , 2018, , .		12
147	Wearable haptic anklets for gait and freezing improvement in Parkinsonâ€™s disease: a proof-of-concept study. Neurological Sciences, 2020, 41, 3643-3651.	1.9	12
148	Unicycle steering by brakes: A passive guidance support for an assistive cart. , 2013, , .		11
149	Improving transparency in passive teleoperation by combining cutaneous and kinesthetic force feedback. , 2013, , .		11
150	Grasp quality evaluation in underactuated robotic hands. , 2016, , .		11
151	Evaluation of an electromagnetic system with haptic feedback for control of untethered, soft grippers affected by disturbances. , 2016, , .		11
152	Fingertip force estimation via inertial and magnetic sensors in deformable object manipulation. , 2016, , .		11
153	Handâ€“toolâ€“tissue interaction forces in neurosurgery for haptic rendering. Medical and Biological Engineering and Computing, 2016, 54, 1229-1241.	2.8	11
154	Combining Haptic and Bang-Bang Braking Actions for Passive Robotic Walker Path Following. IEEE Transactions on Haptics, 2019, 12, 542-553.	2.7	11
155	2 Does Torque Minimization Yield a Stable Human Grasp?. , 0, , 21-40.		10
156	Maintaining connectivity among multiple agents in cyclic pursuit: A geometric approach. , 2010, , .		10
157	Object motion-decoupled internal force control for a compliant multifingered hand. , 2012, , .		10
158	Cutaneous device for teleoperated needle insertion. , 2012, , .		10
159	Evaluation of a predictive approach in steering the human locomotion via haptic feedback. , 2015, , .		10
160	Design, Development, and Control of a Tendon-actuated Exoskeleton for Wrist Rehabilitation and Training. , 2020, , .		10
161	Perceptual Issues in Haptic Digital Watermarking. IEEE MultiMedia, 2007, 14, 84-91.	1.7	9
162	Vibrotactile stimuli for augmented haptic feedback in robot-assisted surgery. , 2013, , .		9

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163	Modeling compliant grasps exploiting environmental constraints. , 2015, , .		9
164	Design, development, and preliminary evaluation of a highly wearable exoskeleton. , 2020, , .		9
165	Emerging of new bioartificial corticospinal motor synergies using a robotic additional thumb. Scientific Reports, 2021, 11, 18487.	3.3	9
166	Squaring down LTI systems: A geometric approach. Systems and Control Letters, 2007, 56, 236-244.	2.3	8
167	Sensory-motor augmentation of the robot with shared human perception. , 2018, , .		8
168	A Novel Pneumatic Force Sensor for Robot-Assisted Surgery. Lecture Notes in Computer Science, 2018, , 587-599.	1.3	8
169	Linear Integration of Tactile and Non-tactile Inputs Mediates Estimation of Fingertip Relative Position. Frontiers in Neuroscience, 2019, 13, 68.	2.8	8
170	Presenting Surface Features Using a Haptic Ring: A Psychophysical Study on Relocating Vibrotactile Feedback. IEEE Transactions on Haptics, 2019, 12, 428-437.	2.7	8
171	The Mag-Gripper: A Soft-Rigid Gripper Augmented With an Electromagnet to Precisely Handle Clothes. IEEE Robotics and Automation Letters, 2020, 5, 6591-6598.	5.1	8
172	Wearable Haptics for Remote Social Walking. IEEE Transactions on Haptics, 2020, 13, 761-776.	2.7	8
173	Design of Personalized Wearable Haptic Interfaces to Account for Fingertip Size and shape. IEEE Transactions on Haptics, 2021, 14, 266-272.	2.7	8
174	Detachable Robotic Grippers for Human-Robot Collaboration. Frontiers in Robotics and AI, 2021, 8, 644532.	3.2	8
175	Animating a Synergy-Based Deformable Hand Avatar for Haptic Grasping. Lecture Notes in Computer Science, 2010, , 203-210.	1.3	8
176	Epipole-based visual servoing for mobile robots. Advanced Robotics, 2006, 20, 255-280.	1.8	7
177	Uncalibrated Video Compass for Mobile Robots from Paracatadioptric Line Images. , 2007, , .		7
178	A teleoperation system for micro-invasive brain surgery. Paladyn, 2010, 1, .	2.7	7
179	Miniaturized rigid probe driver with haptic loop control for neurosurgical interventions. , 2010, , .		7
180	Using inertial and magnetic sensors for hand tracking and rendering in wearable haptics. , 2015, , .		7

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181	Design guidelines for a wearable robotic extra-finger. , 2015, , .		7
182	On Control Interfaces for the Robotic Sixth Finger. , 2016, , .		7
183	A Mathematical Model of the Pneumatic Force Sensor for Robot-assisted Surgery. , 2019, , .		7
184	A robotic microsurgical forceps for transoral laser microsurgery. International Journal of Computer Assisted Radiology and Surgery, 2019, 14, 321-333.	2.8	7
185	Grasp Planning With a Soft Reconfigurable Gripper Exploiting Embedded and Environmental Constraints. IEEE Robotics and Automation Letters, 2021, 6, 5215-5222.	5.1	7
186	The HapBand: A Cutaneous Device for Remote Tactile Interaction. Lecture Notes in Computer Science, 2014, , 284-291.	1.3	7
187	Design Criteria for Wearable Robotic Extraâ€“Fingers with Underactuated Modular Structure. Mechanisms and Machine Science, 2019, , 509-517.	0.5	7
188	Design and Prototyping of an Underactuated Hand Exoskeleton With Fingers Coupled by a Gear-Based Differential. Frontiers in Robotics and AI, 2022, 9, 862340.	3.2	7
189	The Wavejoints: A Novel Methodology to Design Soft-Rigid Grippers Made by Monolithic 3D Printed Fingers with Adjustable Joint Stiffness. , 2022, , .		7
190	Robotic dexterity via nonholonomy. , 1998, , 35-49.		6
191	Generalized Signal Decoupling Problem with Stability for Discrete-Time Systems. Journal of Optimization Theory and Applications, 2001, 111, 59-80.	1.5	6
192	Contact forces evoked by transcranial magnetic stimulation of the motor cortex in a multi-finger grasp. Brain Research Bulletin, 2008, 75, 723-736.	3.0	6
193	An LMI framework for analysis and design of multi-dimensional haptic systems. , 2008, , .		6
194	Steering of flexible needles combining kinesthetic and vibratory force feedback. , 2014, , .		6
195	Sensory stimulation for human guidance in robot walkers: A comparison between haptic and acoustic solutions. , 2016, , .		6
196	Robot-assisted microsurgical forceps with haptic feedback for transoral laser microsurgery. , 2016, 2016, 5156-5159.		6
197	Efficient nonlinear skin simulation for multi-finger tactile rendering. , 2016, , .		6
198	A perceptually-motivated deadband compression approach for cutaneous haptic feedback. , 2016, , .		6

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199	Hand Guidance Using Grasping Metaphor and Wearable Haptics. , 2020, , .		6
200	Grasping With the SoftPad, a Soft Sensorized Surface for Exploiting Environmental Constraints With Rigid Grippers. IEEE Robotics and Automation Letters, 2020, 5, 3884-3891.	5.1	6
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