Allison M Okamura

List of Publications by Year
in descending order

273 papers	11,803 citations	46636 47 h-index	49007 88 g-index
289 all docs	289 docs citations	289 times ranked	8008 citing authors

#	Article	IF	Citations
1	Force Modeling for Needle Insertion Into Soft Tissue. IEEE Transactions on Biomedical Engineering, 2004, 51, 1707-1716.	4.4	696
2	A soft robot that navigates its environment through growth. Science Robotics, 2017, 2, .	18.0	662
3	Haptic feedback in robot-assisted minimally invasive surgery. Current Opinion in Urology, 2009, 19, 102-107.	1.9	489
4	Haptics: The Present and Future of Artificial Touch Sensation. Annual Review of Control, Robotics, and Autonomous Systems, 2018, 1, 385-409.	12.0	247
5	Effect of sensory substitution on suture-manipulation forces for robotic surgical systems. Journal of Thoracic and Cardiovascular Surgery, 2005, 129, 151-158.	2.7	237
6	Application of Haptic Feedback to Robotic Surgery. Journal of Laparoendoscopic and Advanced Surgical Techniques - Part A, 2004, 14, 191-195.	1.0	207
7	Haptic Virtual Fixtures for Robot-Assisted Manipulation. , 2007, , 49-64.		198
8	Toward Active Cannulas: Miniature Snake-Like Surgical Robots. , 2006, , .		191
9	Effects of visual force feedback on robot-assisted surgical task performance. Journal of Thoracic and Cardiovascular Surgery, 2008, 135, 196-202.	2.7	188
10	Modeling of Tool-Tissue Interactions for Computer-Based Surgical Simulation: A Literature Review. Presence: Teleoperators and Virtual Environments, 2008, 17, 463-491.	0.5	170
11	Robot-Assisted Needle Steering. IEEE Robotics and Automation Magazine, 2011, 18, 35-46.	2.1	149
12	A Soft, Steerable Continuum Robot That Grows via Tip Extension. Soft Robotics, 2019, 6, 95-108.	8.1	143
13	Medical and Health-Care Robotics. IEEE Robotics and Automation Magazine, 2010, 17, 26-37.	2.1	127
14	Series pneumatic artificial muscles (sPAMs) and application to a soft continuum robot. , 2017, 2017, 5503-5510.		119
15	Vine Robots. IEEE Robotics and Automation Magazine, 2020, 27, 120-132.	2.1	118
16	Surgical and Interventional Robotics - Core Concepts, Technology, and Design [Tutorial]. IEEE Robotics and Automation Magazine, 2008, 15, 122-130.	2.1	116
17	Predictive Modeling by the Cerebellum Improves Proprioception. Journal of Neuroscience, 2013, 33, 14301-14306.	3.8	116
18	Feeling is Believing: Using a Forceâ€Feedback Joystick to Teach Dynamic Systems. Journal of Engineering Education, 2002, 91, 345-349.	3.4	108

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19	Fingertip Tactile Devices for Virtual Object Manipulation and Exploration. , 2017, , .		106
20	Design and implementation of a 300% strain soft artificial muscle. , 2016, , .		102
21	Modeling and Control of Needles With Torsional Friction. IEEE Transactions on Biomedical Engineering, 2009, 56, 2905-2916.	4.4	88
22	Augmented reality and haptic interfaces for robotâ€assisted surgery. International Journal of Medical Robotics and Computer Assisted Surgery, 2012, 8, 45-56.	2.4	88
23	3-D Ultrasound-Guided Robotic Needle Steering in Biological Tissue. IEEE Transactions on Biomedical Engineering, 2014, 61, 2899-2910.	4.4	88
24	Motor learning affects car-to-driver handover in automated vehicles. Science Robotics, 2016, 1, .	18.0	88
25	Predicting and correcting ataxia using a model of cerebellar function. Brain, 2014, 137, 1931-1944.	8.0	87
26	Three-Dimensional Skin Deformation as Force Substitution: Wearable Device Design and Performance During Haptic Exploration of Virtual Environments. IEEE Transactions on Haptics, 2017, 10, 418-430.	2.7	87
27	An untethered isoperimetric soft robot. Science Robotics, 2020, 5, .	18.0	83
28	Needle-tissue interaction forces for bevel-tip steerable needles. , 2008, , 224-231.		77
29	Robotic Needle Steering: Design, Modeling, Planning, and Image Guidance. , 2011, , 557-582.		77
30	Controllable Surface Haptics via Particle Jamming and Pneumatics. IEEE Transactions on Haptics, 2015, 8, 20-30.	2.7	75
31	Behavior of Tip-Steerable Needles in Ex Vivo and In Vivo Tissue. IEEE Transactions on Biomedical Engineering, 2012, 59, 2705-2715.	4.4	74
32	Tissue property estimation and graphical display for teleoperated robot-assisted surgery. , 2009, , .		72
33	A novel two-dimensional tactile slip display: design, kinematics and perceptual experiments. ACM Transactions on Applied Perception, 2005, 2, 150-165.	1.9	71
34	Integrated planning and image-guided control for planar needle steering. , 2008, 2008, 819-824.		71
35	The effect of visual and haptic feedback on computer-assisted needle insertion. Computer Aided Surgery, 2004, 9, 243-249.	1.6	69
36	A Tip-Extending Soft Robot Enables Reconfigurable and Deployable Antennas. IEEE Robotics and Automation Letters, 2018, 3, 949-956.	5.2	69

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37	Augmentation Of Stiffness Perception With a 1-Degree-of-Freedom Skin Stretch Device. IEEE Transactions on Human-Machine Systems, 2014, 44, 731-742.	4.0	68
38	Effects of haptic and graphical force feedback on teleoperated palpation. , 2009, , .		67
39	Measurement, Analysis, and Display of Haptic Signals During Surgical Cutting. Presence: Teleoperators and Virtual Environments, 2002, 11, 626-651.	0.5	66
40	Analysis of Suture Manipulation Forces for Teleoperation with Force Feedback. Lecture Notes in Computer Science, 2002, , 155-162.	1.0	66
41	Cerebellar motor learning: are environment dynamics more important than error size?. Journal of Neurophysiology, 2013, 110, 322-333.	1.9	66
42	Efficient and Trustworthy Social Navigation via Explicit and Implicit Robotâ€“Human Communication. IEEE Transactions on Robotics, 2020, 36, 692-707.	11.3	65
43	A social haptic device to create continuous lateral motion using sequential normal indentation. , 2018, , .		64
44	Sensory Substitution and Augmentation Using 3-Degree-of-Freedom Skin Deformation Feedback. IEEE Transactions on Haptics, 2015, 8, 209-221.	2.7	61
45	Measurement of the Tip and Friction Force Acting on a Needle during Penetration. Lecture Notes in Computer Science, 2002, , 216-223.	1.0	60
46	Force-Feedback Surgical Teleoperator: Controller Design and Palpation Experiments. , 2008, , .		59
47	Identifying the role of proprioception in upper-limb prosthesis control. ACM Transactions on Applied Perception, 2010, 7, 1-23.	1.9	57
48	Human vs. robotic tactile sensing: Detecting lumps in soft tissue. , 2010, , .		56
49	Sensory substitution via cutaneous skin stretch feedback. , 2013, , .		55
50	Effects of robotic manipulators on movements of novices and surgeons. Surgical Endoscopy and Other Interventional Techniques, 2014, 28, 2145-2158.	2.6	55
51	A single-use haptic palpation probe for locating subcutaneous blood vessels in robot-assisted minimally invasive surgery. , 2015, , .		54
52	Speed-Accuracy Characteristics of Human-Machine Cooperative Manipulation Using Virtual Fixtures With Variable Admittance. Human Factors, 2004, 46, 518-532.	4.1	53
53	A Velocity-Dependent Model for Needle Insertion in Soft Tissue. Lecture Notes in Computer Science, 2005, 8, 624-632.	1.0	53
54	Modelling of non-linear elastic tissues for surgical simulation. Computer Methods in Biomechanics and Biomedical Engineering, 2010, 13, 811-818.	1.7	53

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55	Stable Forbidden-Region Virtual Fixtures for Bilateral Telemanipulation. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2006, 128, 53-64.	1.7	52
56	Modeling the Forces of Cutting With Scissors. IEEE Transactions on Biomedical Engineering, 2008, 55, 848-856.	4.4	51
57	The Touch Thimble: Providing Fingertip Contact Feedback During Point-Force Haptic Interaction. , 2008, , .		50
58	Methods to Segment Hard Inclusions in Soft Tissue During Autonomous Robotic Palpation. IEEE Transactions on Robotics, 2015, 31, 344-354.	11.3	50
59	Dynamic Augmented Reality for Sensory Substitution in Robot-Assisted Surgical Systems. , 2006, 2006, 567-70.		49
60	Friction Compensation for Enhancing Transparency of a Teleoperator With Compliant Transmission. , 2007, 23, 1240-1246.		49
61	Design, Modeling, Control, and Application of Everting Vine Robots. Frontiers in Robotics and AI, 2020, 7, 548266.	3.4	48
62	Robust navigation of a soft growing robot by exploiting contact with the environment. International Journal of Robotics Research, 2020, 39, 1724-1738.	8.8	48
63	Modeling of Bioinspired Apical Extension in a Soft Robot. Lecture Notes in Computer Science, 2017, , 522-531.	1.0	48
64	Active force perception depends on cerebellar function. Journal of Neurophysiology, 2012, 107, 1612-1620.	1.9	47
65	Uncontrolled Manifold Analysis of Arm Joint Angle Variability During Robotic Teleoperation and Freehand Movement of Surgeons and Novices. IEEE Transactions on Biomedical Engineering, 2014, 61, 2869-2881.	4.4	47
66	Design of 3-D Printed Concentric Tube Robots. IEEE Transactions on Robotics, 2016, 32, 1419-1430.	11.3	47
67	WRAP: Wearable, restricted-aperture pneumatics for haptic guidance. , 2017, , .		46
68	Surgical and interventional robotics: part III [Tutorial]. IEEE Robotics and Automation Magazine, 2008, 15, 84-93.	2.1	45
69	Methods for Improving the Curvature of Steerable Needles in Biological Tissue. IEEE Transactions on Biomedical Engineering, 2016, 63, 1167-1177.	4.4	44
70	Coaxial Needle Insertion Assistant With Enhanced Force Feedback. IEEE Transactions on Biomedical Engineering, 2013, 60, 379-389.	4.4	43
71	Observations and models for needle-tissue interactions. , 2009, , .		41
72	The Effect of Visual and Haptic Feedback on Manual and Teleoperated Needle Insertion. Lecture Notes in Computer Science, 2002, , 147-154.	1.0	40

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73	Pseudo-admittance Bilateral Telemanipulation with Guidance Virtual Fixtures. International Journal of Robotics Research, 2007, 26, 865-884.	8.8	40
74	3-D printed haptic devices for educational applications. , 2016, , .		40
75	Characterization of pre-curved needles for steering in tissue. , 2009, 2009, 1200-3.		39
76	Evaluation of robotic needle steering in ex vivo tissue. , 2010, 2010, 2068-2073.		38
77	Grip Force Control during Virtual Object Interaction: Effect of Force Feedback, Accuracy Demands, and Training. IEEE Transactions on Haptics, 2014, 7, 37-47.	2.7	38
78	Tactor-Induced Skin Stretch as a Sensory Substitution Method in Teleoperated Palpation. IEEE Transactions on Human-Machine Systems, 2015, 45, 714-726.	4.0	38
79	Obstacle-Aided Navigation of a Soft Growing Robot. , 2018, , .		38
80	Surgical and interventional robotics: Part II. IEEE Robotics and Automation Magazine, 2008, 15, 94-102.	2.1	37
81	APAM: Antagonistic Pneumatic Artificial Muscle. , 2018, , .		37
82	Exomuscle: An inflatable device for shoulder abduction support. , 2017, , .		36
83	Evaluation of Skin Deformation Tactile Feedback for Teleoperated Surgical Tasks. IEEE Transactions on Haptics, 2019, 12, 102-113.	2.7	36
84	Modeling and design of asymmetric vibrations to induce ungrounded pulling sensation through asymmetric skin displacement. , 2016, , .		35
85	Stability and quantization-error analysis of haptic rendering of virtual stiffness and damping. International Journal of Robotics Research, 2016, 35, 1103-1120.	8.8	35
86	HapWRAP: Soft Growing Wearable Haptic Device. , 2018, , .		35
87	Design and evaluation of duty-cycling steering algorithms for robotically-driven steerable needles. , 2014, , .		34
88	Autonomous robotic palpation: Machine learning techniques to identify hard inclusions in soft tissues. , 2013, , .		33
89	Stiffness discrimination with visual and proprioceptive cues. , 2009, , .		32
90	Helical actuation on a soft inflated robot body. , 2018, , .		32

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91	Robotic Assistance-as-Needed for Enhanced Visuomotor Learning in Surgical Robotics Training: An Experimental Study. , 2018, , .		31
92	Teleoperation of Steerable Needles. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	30
93	Design of a Compact Actuation and Control System for Flexible Medical Robots. IEEE Robotics and Automation Letters, 2017, 2, 1579-1585.	5.2	30
94	Torsional Dynamics of Steerable Needles: Modeling and Fluoroscopic Guidance. IEEE Transactions on Biomedical Engineering, 2014, 61, 2707-2717.	4.4	29
95	Highly Articulated Robotic Needle Achieves Distributed Ablation of Liver Tissue. IEEE Robotics and Automation Letters, 2017, 2, 1367-1374.	5.2	29
96	Effects of Visual and Proprioceptive Motion Feedback on Human Control of Targeted Movement. , 2007, , .		28
97	Sensory substitution using 3-degree-of-freedom tangential and normal skin deformation feedback. , 2014, , .		28
98	Closed-loop shape control of a Haptic Jamming deformable surface. , 2016, , .		28
99	Deformable Model-Based Methods for Shape Control of a Haptic Jamming Surface. IEEE Transactions on Visualization and Computer Graphics, 2017, 23, 1029-1041.	4.5	28
100	Design of a soft catheter for low-force and constrained surgery. , 2017, , .		28
101	Upper Extremity Exomuscle for Shoulder Abduction Support. IEEE Transactions on Medical Robotics and Bionics, 2020, 2, 474-484.	3.3	28
102	Rendered and Characterized Closed-Loop Accuracy of Impedance-Type Haptic Displays. IEEE Transactions on Haptics, 2015, 8, 434-446.	2.7	27
103	Plugfest 2009: Global interoperability in Telerobotics and telemedicine. , 2010, 2010, 1733-1738.		26
104	Design and Analysis of Pneumatic 2-DoF Soft Haptic Devices for Shear Display. IEEE Robotics and Automation Letters, 2019, 4, 1365-1371.	5.2	26
105	Force Feedback and Sensory Substitution for Robot-Assisted Surgery. , 2011, , 419-448.		26
106	HAPI Bands: A haptic augmented posture interface. , 2012, , .		25
107	Haptic feedback enhances rhythmic motor control by reducing variability, not improving convergence rate. Journal of Neurophysiology, 2014, 111, 1286-1299.	1.9	25
108	A Tip Mount for Transporting Sensors and Tools using Soft Growing Robots. , 2020, , .		25

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109	Haptic Simulation of Elbow Joint Spasticity. , 2008, , .		24
110	Characterization and Psychophysical Studies of an Air-Jet Lump Display. IEEE Transactions on Haptics, 2013, 6, 156-166.	2.7	24
111	Force & torque feedback vs force only feedback. , 2009, , .		23
112	Perception of Springs With Visual and Proprioceptive Motion Cues: Implications for Prosthetics. IEEE Transactions on Human-Machine Systems, 2013, 43, 102-114.	4.0	23
113	Sensory augmentation of stiffness using fingerpad skin stretch. , 2013, , .		23
114	Learning and generalization in an isometric visuomotor task. Journal of Neurophysiology, 2015, 113, 1873-1884.	1.9	23
115	M-Width: Stability, noise characterization, and accuracy of rendering virtual mass. International Journal of Robotics Research, 2015, 34, 781-798.	8.8	23
116	Haptic orientation guidance using two parallel double-gimbal control moment gyroscopes. IEEE Transactions on Haptics, 2018, 11, 267-278.	2.7	23
117	Toward the Design of Personalized Continuum Surgical Robots. Annals of Biomedical Engineering, 2018, 46, 1522-1533.	2.6	23
118	Dynamically Reconfigurable Discrete Distributed Stiffness for Inflated Beam Robots. , 2020, , .		23
119	Vision-Based Assistance for Ophthalmic Micro-Surgery. Lecture Notes in Computer Science, 2004, , 49-57.	1.0	22
120	Techniques for environment parameter estimation during telemanipulation. , 2008, , .		22
121	Design considerations and human-machine performance of moving virtual fixtures. , 2009, , .		22
122	Teleoperated versus open needle driving: Kinematic analysis of experienced surgeons and novice users. , 2015, , .		22
123	Haptics in medicine and clinical skill acquisition [special section intro.]. IEEE Transactions on Haptics, 2011, 4, 153-154.	2.7	21
124	Characterization of robotic needle insertion and rotation in artificial and ex vivo tissues. , 2012, , .		21
125	Perception of a Haptic Jamming display: Just noticeable differences in stiffness and geometry. , 2014, , .		21
126	Task-dependent impedance and implications for upper-limb prosthesis control. International Journal of Robotics Research, 2014, 33, 827-846.	8.8	21

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127	Sensory substitution of force and torque using 6-DoF tangential and normal skin deformation feedback. , 2015, , .		21
128	Training in divergent and convergent force fields during 6-DOF teleoperation with a robot-assisted surgical system. , 2017, , .		21
129	Model-Based Design of a Soft 3-DÂHaptic Shape Display. IEEE Transactions on Robotics, 2020, 36, 613-628.	11.3	21
130	Controlling a robotically steered needle in the presence of torsional friction. , 2009, , 3476-3481.		20
131	Soft Haptic Device to Render the Sensation of Flying Like a Drone. IEEE Robotics and Automation Letters, 2019, 4, 2524-2531.	5.2	20
132	Stiffness Control of Deformable Robots Using Finite Element Modeling. IEEE Robotics and Automation Letters, 2019, 4, 469-476.	5.2	20
133	Enhancing Transparency of a Position-Exchange Teleoperator. , 2007, , .		19
134	Artificial Tactile Sensing of Position and Slip Speed by Exploiting Geometrical Features. IEEE/ASME Transactions on Mechatronics, 2015, 20, 263-274.	6.1	19
135	Effects of Translational and Gripping Force Feedback are Decoupled in a 4-Degree-of-Freedom Telemanipulator. , 2007, , .		18
136	Modeling Realistic Tool-Tissue Interactions with Haptic Feedback: A Learning-based Method. , 2008, , .		18
137	Estimation of model parameters for steerable needles. , 2010, , 3703-3708.		18
138	Wearable haptic device for cutaneous force and slip speed display. , 2012, , .		18
139	A paced shared-control teleoperated architecture for supervised automation of multilateral surgical tasks. , 2015, , .		18
140	Human Interface for Teleoperated Object Manipulation with a Soft Growing Robot. , 2020, , .		18
141	Dynamic Guidance with Pseudoadmittance Virtual Fixtures. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	17
142	Effects of master-slave tool misalignment in a teleoperated surgical robot. , 2015, , .		17
143	Toward human-robot collaboration in surgery: Performance assessment of human and robotic agents in an inclusion segmentation task. , 2016, , .		17
144	Holdable Haptic Device for 4-DOF Motion Guidance. , 2019, , .		17

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145	Investigating Social Haptic Illusions for Tactile Stroking (SHIFTS). , 2020, , .		17
146	A framework for analysis of surgeon arm posture variability in robot-assisted surgery. , 2013, , .		15
147	Closed-loop stiffness and damping accuracy of impedance-type haptic displays. , 2014, , .		15
148	A Framework for Multilateral Manipulation in Surgical Tasks. IEEE Transactions on Automation Science and Engineering, 2016, 13, 68-77.	5.7	15
149	Facilitating Human-Mobile Robot Communication via Haptic Feedback and Gesture Teleoperation. ACM Transactions on Human-Robot Interaction, 2018, 7, 1-23.	4.3	15
150	Real-Time 3D Curved Needle Segmentation Using Combined B-Mode and Power Doppler Ultrasound. Lecture Notes in Computer Science, 2014, 17, 381-388.	1.0	15
151	Force Feedback is Noticeably Different for Linear versus Nonlinear Elastic Tissue Models. , 2007, , .		14
152	Design and control of an air-jet lump display. , 2012, , .		14
153	Effect of load force feedback on grip force control during teleoperation: A preliminary study. , 2014, , .		14
154	Design and evaluation of a trilateral shared-control architecture for teleoperated training robots. , 2015, 2015, 4887-93.		14
155	Two is not always better than one: Effects of teleoperation and haptic coupling. , 2016, , .		14
156	Design of patient-specific concentric tube robots using path planning from 3-D ultrasound. , 2017, 2017, 165-168.		14
157	Perception of force and stiffness in the presence of low-frequency haptic noise. PLoS ONE, 2017, 12, e0178605.	2.5	14
158	Geometric Solutions for General Actuator Routing on Inflated-Beam Soft Growing Robots. IEEE Transactions on Robotics, 2022, 38, 1820-1840.	11.3	14
159	Environment discrimination with vibration feedback to the foot, arm, and fingertip. , 2009, , .		13
160	Characterization of an air jet haptic lump display. , 2011, 2011, 3467-70.		13
161	Conveying the configuration of a virtual human hand using vibrotactile feedback. , 2012, , .		13
162	3D Segmentation of Curved Needles Using Doppler Ultrasound and Vibration. Lecture Notes in Computer Science, 2013, , 61-70.	1.0	13

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163	3-DoF Wearable, Pneumatic Haptic Device to Deliver Normal, Shear, Vibration, and Torsion Feedback. , 2019, , .		13
164	Evolution and Analysis of Hapkit: An Open-Source Haptic Device for Educational Applications. IEEE Transactions on Haptics, 2020, 13, 354-367.	2.7	13
165	3D Electromagnetic Reconfiguration Enabled by Soft Continuum Robots. IEEE Robotics and Automation Letters, 2020, 5, 1704-1711.	5.2	13
166	Data-Driven Sparse Skin Stimulation Can Convey Social Touch Information to Humans. IEEE Transactions on Haptics, 2022, 15, 392-404.	2.7	13
167	Observations of needle-tissue interactions. , 2009, 2009, 262-5.		12
168	Experimental evaluation of a coaxial needle insertion assistant with enhanced force feedback. , 2011, 2011, 3447-50.		12
169	Time-delayed teleoperation for interaction with moving objects in space. , 2014, , .		12
170	A dual-flywheel ungrounded haptic feedback system provides single-axis moment pulses for clear direction signals. , 2016, , .		12
171	Open source, modular, customizable, 3-D printed kinesthetic haptic devices. , 2017, , .		12
172	FingerPrint: A 3-D Printed Soft Monolithic 4-Degree-of-Freedom Fingertip Haptic Device with Embedded Actuation. , 2022, , .		12
173	Task-dependent impedance improves user performance with a virtual prosthetic arm. , 2011, , .		11
174	Comparison of kinesthetic and skin deformation feedback for mass rendering. , 2016, , .		11
175	Surgeon design interface for patient-specific concentric tube robots. , 2016, 2016, 41-48.		11
176	Understanding Continuous and Pleasant Linear Sensations on the Forearm From a Sequential Discrete Lateral Skin-Slip Haptic Device. IEEE Transactions on Haptics, 2019, 12, 414-427.	2.7	11
177	A Sufficient Condition for Passive Virtual Walls With Quantization Effects. , 2004, , 1065.		10
178	Control methods for guidance virtual fixtures in compliant human-machine interfaces. , 2008, , .		10
179	Mapping stiffness perception in the brain with an fMRI-compatible particle-jamming haptic interface. , 2014, 2014, 2051-6.		10
180	Simulating the impact of sensorimotor deficits on reaching performance. , 2017, 2017, 31-37.		10

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181	Teleoperation of an Ankle-Foot Prosthesis With a Wrist Exoskeleton. IEEE Transactions on Biomedical Engineering, 2021, 68, 1714-1725.	4.4	10
182	Perceived Intensities of Normal and Shear Skin Stimuli Using a Wearable Haptic Bracelet. IEEE Robotics and Automation Letters, 2022, 7, 6099-6106.	5.2	10
183	Haptic footstep display. , 2012, , .		9
184	Does a basic deficit in force control underlie cerebellar ataxia?. Journal of Neurophysiology, 2013, 109, 1107-1116.	1.9	9
185	AFREEs: Active Fiber Reinforced Elastomeric Enclosures. , 2020, , .		9
186	A 4-Degree-of-Freedom Parallel Origami Haptic Device for Normal, Shear, and Torsion Feedback. IEEE Robotics and Automation Letters, 2022, 7, 3310-3317.	5.2	9
187	Comparison Between Force-Controlled Skin Deformation Feedback and Hand-Grounded Kinesthetic Force Feedback for Sensory Substitution. IEEE Robotics and Automation Letters, 2018, 3, 2174-2181.	5.2	8
188	Scaling Inertial Forces to Alter Weight Perception in Virtual Reality. , 2018, , .		8
189	Effects of Different Hand-Grounding Locations on Haptic Performance With a Wearable Kinesthetic Haptic Device. IEEE Robotics and Automation Letters, 2019, 4, 351-358.	5.2	8
190	Effects of Peripheral Haptic Feedback on Intracortical Brain-Computer Interface Control and Associated Sensory Responses in Motor Cortex. IEEE Transactions on Haptics, 2021, 14, 762-775.	2.7	8
191	Body-Mounted Vibrotactile Stimuli: Simultaneous Display of Taps on the Fingertips and Forearm. IEEE Transactions on Haptics, 2021, 14, 432-444.	2.7	8
192	Effects of Proprioceptive Motion Feedback on Sighted and Non-Sighted Control of a Virtual Hand Prosthesis. , 2008, , .		7
193	Coaxial needle insertion assistant for epidural puncture. , 2011, , .		7
194	Adaptation to visuomotor rotation in isometric reaching is similar to movement adaptation. , 2013, 2013, 6650431.		7
195	The effect of a robot-assisted surgical system on the kinematics of user movements. , 2013, 2013, 6257-60.		7
196	Neural coding of passive lump detection in compliant artificial tissue. Journal of Neurophysiology, 2014, 112, 1131-1141.	1.9	7
197	Models of human-centered automation in a debridement task. , 2015, , .		7
198	Design and experimental evaluation of a skin-stretch haptic device for improved control of brain-computer interfaces. , 2015, , .		7

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199	Plane Assist: The Influence of Haptics on Ultrasound-Based Needle Guidance. Lecture Notes in Computer Science, 2016, , 370-377.	1.0	7
200	Haptic Dimensions of Human-Robot Interaction. ACM Transactions on Human-Robot Interaction, 2018, 7, 1-3.	4.3	7
201	Macro-Mini Actuation of Pneumatic Pouches for Soft Wearable Haptic Displays. , 2021, , .		7
202	Friction Compensation for a Force-Feedback Teleoperator with Compliant Transmission. , 2006, , .		6
203	Virtual Fixture Control for Compliant Human-Machine Interfaces. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	6
204	Design of a haptic simulator for osteosynthesis screw insertion. , 2010, , .		6
205	Design and evaluation of a multi-modal haptic skin stimulation apparatus. , 2011, 2011, 3455-8.		6
206	Comparing proprioceptive acuity in the arm between joint space and task space. , 2018, , .		6
207	Continuous Closed-Loop 4-Degree-of-Freedom Holdable Haptic Guidance. IEEE Robotics and Automation Letters, 2020, 5, 6853-6860.	5.2	6
208	Integration of a Particle Jamming Tactile Display with a Cable-Driven Parallel Robot. Lecture Notes in Computer Science, 2014, , 258-265.	1.0	6
209	Predicting Hand-Object Interaction for Improved Haptic Feedback in Mixed Reality. IEEE Robotics and Automation Letters, 2022, 7, 3851-3857.	5.2	6
210	A Modular 3-Degrees-of-Freedom Force Sensor for Robot-Assisted Minimally Invasive Surgery Research. Sensors, 2023, 23, 5230.	4.0	6
211	Telemanipulators with Sensor/Actuator Asymmetries Fail the Robustness Criterion. , 2008, , .		5
212	Defining performance tradeoffs for multi-degree-of-freedom bilateral teleoperators with LQG control. , 2010, , .		5
213	Coaxial needle insertion assistant for epidural puncture. , 2011, , .		5
214	User comprehension of task performance with varying impedance in a virtual prosthetic arm: A pilot study. , 2012, , .		5
215	Remote electromagnetic vibration of steerable needles for imaging in power Doppler ultrasound. , 2015, 2015, 2244-2249.		5
216	Task Dynamics of Prior Training Influence Visual Force Estimation Ability During Teleoperation. IEEE Transactions on Medical Robotics and Bionics, 2020, 2, 586-597.	3.3	5

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