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	Design and Evaluation of Haptic Guidance in Ultrasound-Based Needle-Insertion Procedures. IEEE Transactions on Biomedical Engineering, 2024, 71, 26-35.	4.4	1
2	Between-Tactor Display Using Dynamic Tactile Stimuli for Directional Cueing in Vibrating Environments. IEEE Transactions on Haptics, 2024, , 1-7.	2.7	1
3	Haptic Guidance and Haptic Error Amplification in a Virtual Surgical Robotic Training Environment. IEEE Transactions on Haptics, 2024, , 1-12.	2.7	1
4	Design and Evaluation of a 3-DoF Haptic Device for Directional Shear Cues on the Forearm. IEEE Transactions on Haptics, 2024, , 1-13.	2.7	0
5	Leveraging Haptic Feedback to Improve Data Quality and Quantity for Deep Imitation Learning Models. IEEE Transactions on Haptics, 2024, , 1-9.	2.7	0
6	Modeling and Control of a 5-DOF Parallel Continuum Haptic Device. IEEE Transactions on Robotics, 2023, 39, 3636-3654.	11.3	2
7	Cognitive and Physical Activities Impair Perception of Smartphone Vibrations. IEEE Transactions on Haptics, 2023, 16, 672-679.	2.7	5
8	A Modular 3-Degrees-of-Freedom Force Sensor for Robot-Assisted Minimally Invasive Surgery Research. Sensors, 2023, 23, 5230.	4.0	6
9	Finite Element Modeling of Pneumatic Bending Actuators for Inflated-Beam Robots. IEEE Robotics and Automation Letters, 2023, 8, 7416-7423.	5.2	2
10	Geometric Solutions for General Actuator Routing on Inflated-Beam Soft Growing Robots. IEEE Transactions on Robotics, 2022, 38, 1820-1840.	11.3	14
11	Data-Driven Sparse Skin Stimulation Can Convey Social Touch Information to Humans. IEEE Transactions on Haptics, 2022, 15, 392-404.	2.7	13
12	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
13	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
14	Predicting Hand-Object Interaction for Improved Haptic Feedback in Mixed Reality. IEEE Robotics and Automation Letters, 2022, 7, 3851-3857.	5.2	6
15	Design of a Wearable Vibrotactile Stimulation Device for Individuals With Upper-Limb Hemiparesis and Spasticity. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2022, 30, 1277-1287.	5.0	5
16	FingerPrint: A 3-D Printed Soft Monolithic 4-Degree-of-Freedom Fingertip Haptic Device with Embedded Actuation. , 2022, , .		12
17	A Lightweight, High-Extension, Planar 3-Degree-of-Freedom Manipulator Using Pinched Bistable Tapes. , 2022, , .		2
18	Task-Specific Design Optimization and Fabrication for Inflated-Beam Soft Robots with Growable Discrete Joints. , 2022, , .		4

#	Article	IF	Citations
19	Human Perception of Wrist Flexion and Extension Torque During Upper and Lower Extremity Movement. IEEE Transactions on Haptics, 2022, 15, 741-752.	2.7	1
20	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
21	Body-Mounted Vibrotactile Stimuli: Simultaneous Display of Taps on the Fingertips and Forearm. IEEE Transactions on Haptics, 2021, 14, 432-444.	2.7	8
22	Distributed Sensor Networks Deployed Using Soft Growing Robots. , 2021, , .		5
23	Teleoperation of an Ankle-Foot Prosthesis With a Wrist Exoskeleton. IEEE Transactions on Biomedical Engineering, 2021, 68, 1714-1725.	4.4	10
24	Affective Ratings of Vibrotactile Signals in Older Adults With and Without History of Stroke. , 2021, , .		2
25	Human Perception of Wrist Torque Magnitude During Upper and Lower Extremity Movement. , 2021, , .		0
26	Augmented Haptic Guidance for Needle Insertion with a 2-DoF Wrist-Worn Haptic Device. , 2021, , .		0
27	Embedded Laser-Cut Constraints for Elastomeric Soft Actuators. , 2021, , .		0
28	Augmented Needle Decompression Task with a Wrist-Worn Haptic Device. , 2021, , .		2
29	Teaching With Hapkit: Enabling Online Haptics Courses With Hands-On Laboratories. IEEE Robotics and Automation Magazine, 2021, 28, 79-91.	2.1	4
30	A Dynamics Simulator for Soft Growing Robots. , 2021, , .		3
31	Macro-Mini Actuation of Pneumatic Pouches for Soft Wearable Haptic Displays. , 2021, , .		7
32	Evolution and Analysis of Hapkit: An Open-Source Haptic Device for Educational Applications. IEEE Transactions on Haptics, 2020, 13, 354-367.	2.7	13
33	Vine Robots. IEEE Robotics and Automation Magazine, 2020, 27, 120-132.	2.1	118
34	Dynamically Reconfigurable Discrete Distributed Stiffness for Inflated Beam Robots. , 2020, , .		23
35	Evaluation of Non-collocated Force Feedback Driven by Signal-independent Noise. , 2020, , .		0
36	Design, Modeling, Control, and Application of Everting Vine Robots. Frontiers in Robotics and AI, 2020, 7, 548266.	3.4	48

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37	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
38	Human Interface for Teleoperated Object Manipulation with a Soft Growing Robot. , 2020, , .		18
39	Continuous Closed-Loop 4-Degree-of-Freedom Holdable Haptic Guidance. IEEE Robotics and Automation Letters, 2020, 5, 6853-6860.	5.2	6
40	Investigating Social Haptic Illusions for Tactile Stroking (SHIFTS). , 2020, , .		17
41	AFREEs: Active Fiber Reinforced Elastomeric Enclosures. , 2020, , .		9
42	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
43	An untethered isoperimetric soft robot. Science Robotics, 2020, 5, .	18.0	83
44	3D Electromagnetic Reconfiguration Enabled by Soft Continuum Robots. IEEE Robotics and Automation Letters, 2020, 5, 1704-1711.	5.2	13
45	Efficient and Trustworthy Social Navigation via Explicit and Implicit Robotâ€“Human Communication. IEEE Transactions on Robotics, 2020, 36, 692-707.	11.3	65
46	Model-Based Design of a Soft 3-DÂHaptic Shape Display. IEEE Transactions on Robotics, 2020, 36, 613-628.	11.3	21
47	Upper Extremity Exomuscle for Shoulder Abduction Support. IEEE Transactions on Medical Robotics and Bionics, 2020, 2, 474-484.	3.3	28
48	A Tip Mount for Transporting Sensors and Tools using Soft Growing Robots. , 2020, , .		25
49	3-DoF Wearable, Pneumatic Haptic Device to Deliver Normal, Shear, Vibration, and Torsion Feedback. , 2019, , .		13
50	Holdable Haptic Device for 4-DOF Motion Guidance. , 2019, , .		17
51	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
52	Resonant Frequency Skin Stretch for Wearable Haptics. IEEE Transactions on Haptics, 2019, 12, 247-256.	2.7	3
53	Soft Haptic Device to Render the Sensation of Flying Like a Drone. IEEE Robotics and Automation Letters, 2019, 4, 2524-2531.	5.2	20
54	Perception of a Wearable Haptic Feedback Device to Render the Sensation of Flight. , 2019, , .		1

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55	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
56	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
57	Stiffness Control of Deformable Robots Using Finite Element Modeling. IEEE Robotics and Automation Letters, 2019, 4, 469-476.	5.2	20
58	A Soft, Steerable Continuum Robot That Grows via Tip Extension. Soft Robotics, 2019, 6, 95-108.	8.1	143
59	Evaluation of Skin Deformation Tactile Feedback for Teleoperated Surgical Tasks. IEEE Transactions on Haptics, 2019, 12, 102-113.	2.7	36
60	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
61	A Tip-Extending Soft Robot Enables Reconfigurable and Deployable Antennas. IEEE Robotics and Automation Letters, 2018, 3, 949-956.	5.2	69
62	Haptics: The Present and Future of Artificial Touch Sensation. Annual Review of Control, Robotics, and Autonomous Systems, 2018, 1, 385-409.	12.0	247
63	Haptic orientation guidance using two parallel double-gimbal control moment gyroscopes. IEEE Transactions on Haptics, 2018, 11, 267-278.	2.7	23
64	Gaussian Process Dynamic Programming for Optimizing Ungrounded Haptic Guidance. , 2018, , .		2
65	Haptic Dimensions of Human-Robot Interaction. ACM Transactions on Human-Robot Interaction, 2018, 7, 1-3.	4.3	7
66	Facilitating Human-Mobile Robot Communication via Haptic Feedback and Gesture Teleoperation. ACM Transactions on Human-Robot Interaction, 2018, 7, 1-23.	4.3	15
67	Scaling Inertial Forces to Alter Weight Perception in Virtual Reality. , 2018, , .		8
68	Effects of Latency and Refresh Rate on Force Perception via Sensory Substitution by Force-Controlled Skin Deformation Feedback. , 2018, , .		0
69	Obstacle-Aided Navigation of a Soft Growing Robot. , 2018, , .		38
70	Magnified Force Sensory Substitution for Telemanipulation via Force-Controlled Skin Deformation. , 2018, , .		4
71	APAM: Antagonistic Pneumatic Artificial Muscle. , 2018, , .		37
72	Robotic Assistance-as-Needed for Enhanced Visuomotor Learning in Surgical Robotics Training: An Experimental Study. , 2018, , .		31

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73	HapWRAP: Soft Growing Wearable Haptic Device. , 2018, , .		35
74	A social haptic device to create continuous lateral motion using sequential normal indentation. , 2018, , .		64
75	Comparing proprioceptive acuity in the arm between joint space and task space. , 2018, , .		6
76	Helical actuation on a soft inflated robot body. , 2018, , .		32
77	Toward the Design of Personalized Continuum Surgical Robots. Annals of Biomedical Engineering, 2018, 46, 1522-1533.	2.6	23
78	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
79	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
80	Design of a Compact Actuation and Control System for Flexible Medical Robots. IEEE Robotics and Automation Letters, 2017, 2, 1579-1585.	5.2	30
81	Highly Articulated Robotic Needle Achieves Distributed Ablation of Liver Tissue. IEEE Robotics and Automation Letters, 2017, 2, 1367-1374.	5.2	29
82	Fingertip Tactile Devices for Virtual Object Manipulation and Exploration. , 2017, , .		106
83	A soft robot that navigates its environment through growth. Science Robotics, 2017, 2, .	18.0	662
84	Design of patient-specific concentric tube robots using path planning from 3-D ultrasound. , 2017, 2017, 165-168.		14
85	Series pneumatic artificial muscles (sPAMs) and application to a soft continuum robot. , 2017, 2017, 5503-5510.		119
86	Open source, modular, customizable, 3-D printed kinesthetic haptic devices. , 2017, , .		12
87	Training in divergent and convergent force fields during 6-DOF teleoperation with a robot-assisted surgical system. , 2017, , .		21
88	Analysis of effective impedance transmitted to the operator in position-exchange bilateral teleoperation. , 2017, , .		4
89	Exomuscle: An inflatable device for shoulder abduction support. , 2017, , .		36
90	WRAP: Wearable, restricted-aperture pneumatics for haptic guidance. , 2017, , .		46

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91	Simulating the impact of sensorimotor deficits on reaching performance. , 2017, 2017, 31-37.		10
92	Design of a soft catheter for low-force and constrained surgery. , 2017, , .		28
93	Propagation of joint space quantization error to operational space coordinates and their derivatives. , 2017, , .		2
94	Perception of force and stiffness in the presence of low-frequency haptic noise. PLoS ONE, 2017, 12, e0178605.	2.5	14
95	Modeling of Bioinspired Apical Extension in a Soft Robot. Lecture Notes in Computer Science, 2017, , 522-531.	1.0	48
96	Design and implementation of a 300% strain soft artificial muscle. , 2016, , .		102
97	Closed-loop shape control of a Haptic Jamming deformable surface. , 2016, , .		28
98	Comparison of kinesthetic and skin deformation feedback for mass rendering. , 2016, , .		11
99	End Effector for a Kinesthetic Haptic Device Capable of Displaying Variable Size and Stiffness. Lecture Notes in Computer Science, 2016, , 363-372.	1.0	3
100	Motor learning affects car-to-driver handover in automated vehicles. Science Robotics, 2016, 1, .	18.0	88
101	A dual-flywheel ungrounded haptic feedback system provides single-axis moment pulses for clear direction signals. , 2016, , .		12
102	Modeling and design of asymmetric vibrations to induce ungrounded pulling sensation through asymmetric skin displacement. , 2016, , .		35
103	3-D printed haptic devices for educational applications. , 2016, , .		40
104	Design of 3-D Printed Concentric Tube Robots. IEEE Transactions on Robotics, 2016, 32, 1419-1430.	11.3	47
105	Surgeon design interface for patient-specific concentric tube robots. , 2016, 2016, 41-48.		11
106	Two is not always better than one: Effects of teleoperation and haptic coupling. , 2016, , .		14
107	Plane Assist: The Influence of Haptics on Ultrasound-Based Needle Guidance. Lecture Notes in Computer Science, 2016, , 370-377.	1.0	7
108	Toward human-robot collaboration in surgery: Performance assessment of human and robotic agents in an inclusion segmentation task. , 2016, , .		17

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109	A Framework for Multilateral Manipulation in Surgical Tasks. IEEE Transactions on Automation Science and Engineering, 2016, 13, 68-77.	5.7	15
110	Noise, But Not Uncoupled Stability, Reduces Realism and Likeability of Bilateral Teleoperation. IEEE Robotics and Automation Letters, 2016, 1, 562-569.	5.2	4
111	Methods for Improving the Curvature of Steerable Needles in Biological Tissue. IEEE Transactions on Biomedical Engineering, 2016, 63, 1167-1177.	4.4	44
112	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
113	Impact of Combined Stimuli on the Perception of Transient Forces. Lecture Notes in Computer Science, 2016, , 416-426.	1.0	0
114	Models of human-centered automation in a debridement task. , 2015, , .		7
115	A paced shared-control teleoperated architecture for supervised automation of multilateral surgical tasks. , 2015, , .		18
116	Design and evaluation of a trilateral shared-control architecture for teleoperated training robots. , 2015, 2015, 4887-93.		14
117	Controllable Surface Haptics via Particle Jamming and Pneumatics. IEEE Transactions on Haptics, 2015, 8, 20-30.	2.7	75
118	Learning and generalization in an isometric visuomotor task. Journal of Neurophysiology, 2015, 113, 1873-1884.	1.9	23
119	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
120	Motor learning transfer from isometric to dynamic reaching. , 2015, , .		1
121	Remote electromagnetic vibration of steerable needles for imaging in power Doppler ultrasound. , 2015, 2015, 2244-2249.		5
122	A single-use haptic palpation probe for locating subcutaneous blood vessels in robot-assisted minimally invasive surgery. , 2015, , .		54
123	Teleoperated versus open needle driving: Kinematic analysis of experienced surgeons and novice users. , 2015, , .		22
124	Navigating the New RAS Publications Landscape [From the Editors' Desks]. IEEE Robotics and Automation Magazine, 2015, 22, 4-163.	2.1	1
125	Sensory Substitution and Augmentation Using 3-Degree-of-Freedom Skin Deformation Feedback. IEEE Transactions on Haptics, 2015, 8, 209-221.	2.7	61
126	Artificial Tactile Sensing of Position and Slip Speed by Exploiting Geometrical Features. IEEE/ASME Transactions on Mechatronics, 2015, 20, 263-274.	6.1	19

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127	Methods to Segment Hard Inclusions in Soft Tissue During Autonomous Robotic Palpation. IEEE Transactions on Robotics, 2015, 31, 344-354.	11.3	50
128	M-Width: Stability, noise characterization, and accuracy of rendering virtual mass. International Journal of Robotics Research, 2015, 34, 781-798.	8.8	23
129	Rendered and Characterized Closed-Loop Accuracy of Impedance-Type Haptic Displays. IEEE Transactions on Haptics, 2015, 8, 434-446.	2.7	27
130	Design and experimental evaluation of a skin-stretch haptic device for improved control of brain-computer interfaces. , 2015, , .		7
131	The effect of manipulator gripper stiffness on teleoperated task performance. , 2015, , .		2
132	Environment Perception in the Presence of Kinesthetic or Tactile Guidance Virtual Fixtures. , 2015, , .		4
133	Tactile Skin Deformation Feedback for Conveying Environment Forces in Teleoperation. , 2015, , .		4
134	Sensory substitution of force and torque using 6-DoF tangential and normal skin deformation feedback. , 2015, , .		21
135	Effects of master-slave tool misalignment in a teleoperated surgical robot. , 2015, , .		17
136	3-D Ultrasound-Guided Robotic Needle Steering in Biological Tissue. IEEE Transactions on Biomedical Engineering, 2014, 61, 2899-2910.	4.4	88
137	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
138	Torsional Dynamics of Steerable Needles: Modeling and Fluoroscopic Guidance. IEEE Transactions on Biomedical Engineering, 2014, 61, 2707-2717.	4.4	29
139	Effect of load force feedback on grip force control during teleoperation: A preliminary study. , 2014, , .		14
140	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
141	Mapping stiffness perception in the brain with an fMRI-compatible particle-jamming haptic interface. , 2014, 2014, 2051-6.		10
142	Time-delayed teleoperation for interaction with moving objects in space. , 2014, , .		12
143	Haptic feedback enhances rhythmic motor control by reducing variability, not improving convergence rate. Journal of Neurophysiology, 2014, 111, 1286-1299.	1.9	25
144	Testing models of cerebellar ataxia via dynamic simulation. Robotica, 2014, 32, 1383-1397.	2.3	1

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145	Effects of robotic manipulators on movements of novices and surgeons. Surgical Endoscopy and Other Interventional Techniques, 2014, 28, 2145-2158.	2.6	55
146	Predicting and correcting ataxia using a model of cerebellar function. Brain, 2014, 137, 1931-1944.	8.0	87
147	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
148	Closed-loop stiffness and damping accuracy of impedance-type haptic displays. , 2014, , .		15
149	Design and evaluation of duty-cycling steering algorithms for robotically-driven steerable needles. , 2014, , .		34
150	Position and velocity cursor mappings contribute to distinct muscle forces in simulated isometric and movement reaching. , 2014, , .		4
151	Perception of a Haptic Jamming display: Just noticeable differences in stiffness and geometry. , 2014, , .		21
152	Sensory substitution using 3-degree-of-freedom tangential and normal skin deformation feedback. , 2014, , .		28
153	Task-dependent impedance and implications for upper-limb prosthesis control. International Journal of Robotics Research, 2014, 33, 827-846.	8.8	21
154	Neural coding of passive lump detection in compliant artificial tissue. Journal of Neurophysiology, 2014, 112, 1131-1141.	1.9	7
155	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
156	Robotic Assistance for Cerebellar Reaching. Trends in Augmentation of Human Performance, 2014, , 317-343.	0.0	1
157	Integration of a Particle Jamming Tactile Display with a Cable-Driven Parallel Robot. Lecture Notes in Computer Science, 2014, , 258-265.	1.0	6
158	Predictive Modeling by the Cerebellum Improves Proprioception. Journal of Neuroscience, 2013, 33, 14301-14306.	3.8	116
159	Tissue fixation by suction increases the accuracy of robotic needle insertion. , 2013, , .		2
160	Adaptation to visuomotor rotation in isometric reaching is similar to movement adaptation. , 2013, 2013, 6650431.		7
161	A framework for analysis of surgeon arm posture variability in robot-assisted surgery. , 2013, , .		15
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	Characterization and Psychophysical Studies of an Air-Jet Lump Display. IEEE Transactions on Haptics, 2013, 6, 156-166.	2.7	24
164	A Haptic System for Educational Games: Design and Application-Specific Kinematic Optimization. , 2013, , .		1
165	Cerebellar motor learning: are environment dynamics more important than error size?. Journal of Neurophysiology, 2013, 110, 322-333.	1.9	66
166	Effect of age on stiffness modulation during postural maintenance of the arm. , 2013, 2013, 6650395.		3
167	Sensory substitution via cutaneous skin stretch feedback. , 2013, , .		55
168	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
169	Novel algorithm for real-time onset detection of surface electromyography in step-tracking wrist movements. , 2013, 2013, 2056-9.		2
170	Coaxial Needle Insertion Assistant With Enhanced Force Feedback. IEEE Transactions on Biomedical Engineering, 2013, 60, 379-389.	4.4	43
171	Autonomous robotic palpation: Machine learning techniques to identify hard inclusions in soft tissues. , 2013, , .		33
172	Sensory augmentation of stiffness using fingerpad skin stretch. , 2013, , .		23
173	The effect of a robot-assisted surgical system on the kinematics of user movements. , 2013, 2013, 6257-60.		7
174	Cerebellar ataxia impairs modulation of arm stiffness during postural maintenance. Journal of Neurophysiology, 2013, 110, 1611-1620.	1.9	2
175	Does a basic deficit in force control underlie cerebellar ataxia?. Journal of Neurophysiology, 2013, 109, 1107-1116.	1.9	9
176	Robot Guided Sheaths (RoGS) for Percutaneous Access to the Pediatric Kidney: Patient-Specific Design and Preliminary Results. , 2013, , .		4
177	Model-Mediated Teleoperation With Predictive Models and Relative Tracking. , 2013, , .		1
178	Active force perception depends on cerebellar function. Journal of Neurophysiology, 2012, 107, 1612-1620.	1.9	47
179	Characterization of robotic needle insertion and rotation in artificial and ex vivo tissues. , 2012, , .		21
180	User comprehension of task performance with varying impedance in a virtual prosthetic arm: A pilot study. , 2012, , .		5

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181	Behavior of Tip-Steerable Needles in Ex Vivo and In Vivo Tissue. IEEE Transactions on Biomedical Engineering, 2012, 59, 2705-2715.	4.4	74
182	Conveying the configuration of a virtual human hand using vibrotactile feedback. , 2012, , .		13
183	Haptic footstep display. , 2012, , .		9
184	HAPI Bands: A haptic augmented posture interface. , 2012, , .		25
185	Wearable haptic device for cutaneous force and slip speed display. , 2012, , .		18
186	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
187	Design and control of an air-jet lump display. , 2012, , .		14
188	Discrimination of Springs with Vision, Proprioception, and Artificial Skin Stretch Cues. Lecture Notes in Computer Science, 2012, , 160-172.	1.0	3
189	Characterization of an air jet haptic lump display. , 2011, 2011, 3467-70.		13
190	Coaxial needle insertion assistant for epidural puncture. , 2011, , .		5
191	Robot-Assisted Needle Steering. IEEE Robotics and Automation Magazine, 2011, 18, 35-46.	2.1	149
192	Haptics in medicine and clinical skill acquisition [special section intro.]. IEEE Transactions on Haptics, 2011, 4, 153-154.	2.7	21
193	Experimental evaluation of a coaxial needle insertion assistant with enhanced force feedback. , 2011, 2011, 3447-50.		12
194	Design and evaluation of a multi-modal haptic skin stimulation apparatus. , 2011, 2011, 3455-8.		6
195	Assessing the quality of force feedback in soft tissue simulation. , 2011, 2011, 3451-4.		2
196	Task-dependent impedance improves user performance with a virtual prosthetic arm. , 2011, , .		11
197	Coaxial needle insertion assistant for epidural puncture. , 2011, , .		7
198	Gradual anisometric-isometric transition for human-machine interfaces. , 2011, 2011, 4507-10.		1

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199	Force Feedback and Sensory Substitution for Robot-Assisted Surgery. , 2011, , 419-448.		26
200	Robotic Needle Steering: Design, Modeling, Planning, and Image Guidance. , 2011, , 557-582.		77
201	Medical and Health-Care Robotics. IEEE Robotics and Automation Magazine, 2010, 17, 26-37.	2.1	127
202	Estimation of model parameters for steerable needles. , 2010, , 3703-3708.		18
203	Defining performance tradeoffs for multi-degree-of-freedom bilateral teleoperators with LQG control. , 2010, , .		5
204	Evaluation of robotic needle steering in ex vivo tissue. , 2010, 2010, 2068-2073.		38
205	Plugfest 2009: Global interoperability in Telerobotics and telemedicine. , 2010, 2010, 1733-1738.		26
206	Identifying the role of proprioception in upper-limb prosthesis control. ACM Transactions on Applied Perception, 2010, 7, 1-23.	1.9	57
207	Human vs. robotic tactile sensing: Detecting lumps in soft tissue. , 2010, , .		56
208	Design of a haptic simulator for osteosynthesis screw insertion. , 2010, , .		6
209	Modelling of non-linear elastic tissues for surgical simulation. Computer Methods in Biomechanics and Biomedical Engineering, 2010, 13, 811-818.	1.7	53
210	Observations and models for needle-tissue interactions. , 2009, , .		41
211	Environment discrimination with vibration feedback to the foot, arm, and fingertip. , 2009, , .		13
212	Effects of haptic and graphical force feedback on teleoperated palpation. , 2009, , .		67
213	Controlling a robotically steered needle in the presence of torsional friction. , 2009, , 3476-3481.		20
214	Characterization of pre-curved needles for steering in tissue. , 2009, 2009, 1200-3.		39
215	Design considerations and human-machine performance of moving virtual fixtures. , 2009, , .		22
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