

# Allison M Okamura

## List of Publications by Year in descending order

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273  
papers

11,627  
citations

46918

47  
h-index

48187

88  
g-index

284  
all docs

284  
docs citations

284  
times ranked

6596  
citing authors

#	ARTICLE	IF	CITATIONS
1	Geometric Solutions for General Actuator Routing on Inflated-Beam Soft Growing Robots. IEEE Transactions on Robotics, 2022, 38, 1820-1840.	7.3	8
2	Data-Driven Sparse Skin Stimulation Can Convey Social Touch Information to Humans. IEEE Transactions on Haptics, 2022, 15, 392-404.	1.8	8
3	Perceived Intensities of Normal and Shear Skin Stimuli Using a Wearable Haptic Bracelet. IEEE Robotics and Automation Letters, 2022, 7, 6099-6106.	3.3	7
4	A 4-Degree-of-Freedom Parallel Origami Haptic Device for Normal, Shear, and Torsion Feedback. IEEE Robotics and Automation Letters, 2022, 7, 3310-3317.	3.3	6
5	Predicting Hand-Object Interaction for Improved Haptic Feedback in Mixed Reality. IEEE Robotics and Automation Letters, 2022, 7, 3851-3857.	3.3	4
6	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.	2.7	3
7	FingerPrint: A 3-D Printed Soft Monolithic 4-Degree-of-Freedom Fingertip Haptic Device with Embedded Actuation. , 2022, , .		7
8	A Lightweight, High-Extension, Planar 3-Degree-of-Freedom Manipulator Using Pinched Bistable Tapes. , 2022, , .		1
9	Task-Specific Design Optimization and Fabrication for Inflated-Beam Soft Robots with Growable Discrete Joints. , 2022, , .		2
10	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.	1.8	5
11	Body-Mounted Vibrotactile Stimuli: Simultaneous Display of Taps on the Fingertips and Forearm. IEEE Transactions on Haptics, 2021, 14, 432-444.	1.8	6
12	Distributed Sensor Networks Deployed Using Soft Growing Robots. , 2021, , .		5
13	Teleoperation of an Ankle-Foot Prosthesis With a Wrist Exoskeleton. IEEE Transactions on Biomedical Engineering, 2021, 68, 1714-1725.	2.5	8
14	Affective Ratings of Vibrotactile Signals in Older Adults With and Without History of Stroke. , 2021, , .		2
15	Human Perception of Wrist Torque Magnitude During Upper and Lower Extremity Movement. , 2021, , .		0
16	Augmented Haptic Guidance for Needle Insertion with a 2-DoF Wrist-Worn Haptic Device. , 2021, , .		0
17	Embedded Laser-Cut Constraints for Elastomeric Soft Actuators. , 2021, , .		0
18	Augmented Needle Decompression Task with a Wrist-Worn Haptic Device. , 2021, , .		2

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19	Teaching With Hapkit: Enabling Online Haptics Courses With Hands-On Laboratories. IEEE Robotics and Automation Magazine, 2021, 28, 79-91.	2.2	3
20	A Dynamics Simulator for Soft Growing Robots. , 2021, , .		2
21	Macro-Mini Actuation of Pneumatic Pouches for Soft Wearable Haptic Displays. , 2021, , .		3
22	Evolution and Analysis of Hapkit: An Open-Source Haptic Device for Educational Applications. IEEE Transactions on Haptics, 2020, 13, 354-367.	1.8	10
23	Vine Robots. IEEE Robotics and Automation Magazine, 2020, 27, 120-132.	2.2	97
24	Dynamically Reconfigurable Discrete Distributed Stiffness for Inflated Beam Robots. , 2020, , .		18
25	Evaluation of Non-located Force Feedback Driven by Signal-independent Noise. , 2020, , .		0
26	Design, Modeling, Control, and Application of Everting Vine Robots. Frontiers in Robotics and AI, 2020, 7, 548266.	2.0	33
27	Task Dynamics of Prior Training Influence Visual Force Estimation Ability During Teleoperation. IEEE Transactions on Medical Robotics and Bionics, 2020, 2, 586-597.	2.1	5
28	Human Interface for Teleoperated Object Manipulation with a Soft Growing Robot. , 2020, , .		16
29	Continuous Closed-Loop 4-Degree-of-Freedom Holdable Haptic Guidance. IEEE Robotics and Automation Letters, 2020, 5, 6853-6860.	3.3	5
30	Investigating Social Haptic Illusions for Tactile Stroking (SHIFTS). , 2020, , .		15
31	AFREEs: Active Fiber Reinforced Elastomeric Enclosures. , 2020, , .		6
32	Robust navigation of a soft growing robot by exploiting contact with the environment. International Journal of Robotics Research, 2020, 39, 1724-1738.	5.8	42
33	An untethered isoperimetric soft robot. Science Robotics, 2020, 5, .	9.9	72
34	3D Electromagnetic Reconfiguration Enabled by Soft Continuum Robots. IEEE Robotics and Automation Letters, 2020, 5, 1704-1711.	3.3	12
35	Efficient and Trustworthy Social Navigation via Explicit and Implicit Robot-Human Communication. IEEE Transactions on Robotics, 2020, 36, 692-707.	7.3	56
36	Model-Based Design of a Soft 3-D Haptic Shape Display. IEEE Transactions on Robotics, 2020, 36, 613-628.	7.3	20

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37	Upper Extremity Exomuscle for Shoulder Abduction Support. IEEE Transactions on Medical Robotics and Bionics, 2020, 2, 474-484.	2.1	26
38	A Tip Mount for Transporting Sensors and Tools using Soft Growing Robots. , 2020, , .		21
39	3-DoF Wearable, Pneumatic Haptic Device to Deliver Normal, Shear, Vibration, and Torsion Feedback. , 2019, , .		12
40	Holdable Haptic Device for 4-DOF Motion Guidance. , 2019, , .		16
41	Design and Analysis of Pneumatic 2-DoF Soft Haptic Devices for Shear Display. IEEE Robotics and Automation Letters, 2019, 4, 1365-1371.	3.3	25
42	Resonant Frequency Skin Stretch for Wearable Haptics. IEEE Transactions on Haptics, 2019, 12, 247-256.	1.8	3
43	Soft Haptic Device to Render the Sensation of Flying Like a Drone. IEEE Robotics and Automation Letters, 2019, 4, 2524-2531.	3.3	18
44	Perception of a Wearable Haptic Feedback Device to Render the Sensation of Flight. , 2019, , .		1
45	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.	1.8	10
46	Effects of Different Hand-Grounding Locations on Haptic Performance With a Wearable Kinesthetic Haptic Device. IEEE Robotics and Automation Letters, 2019, 4, 351-358.	3.3	7
47	Stiffness Control of Deformable Robots Using Finite Element Modeling. IEEE Robotics and Automation Letters, 2019, 4, 469-476.	3.3	17
48	A Soft, Steerable Continuum Robot That Grows via Tip Extension. Soft Robotics, 2019, 6, 95-108.	4.6	130
49	Evaluation of Skin Deformation Tactile Feedback for Teleoperated Surgical Tasks. IEEE Transactions on Haptics, 2019, 12, 102-113.	1.8	32
50	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.	3.3	8
51	A Tip-Extending Soft Robot Enables Reconfigurable and Deployable Antennas. IEEE Robotics and Automation Letters, 2018, 3, 949-956.	3.3	66
52	Haptics: The Present and Future of Artificial Touch Sensation. Annual Review of Control, Robotics, and Autonomous Systems, 2018, 1, 385-409.	7.5	226
53	Haptic orientation guidance using two parallel double-gimbal control moment gyroscopes. IEEE Transactions on Haptics, 2018, 11, 267-278.	1.8	22
54	Gaussian Process Dynamic Programming for Optimizing Ungrounded Haptic Guidance. , 2018, , .		2

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55	Haptic Dimensions of Human-Robot Interaction. ACM Transactions on Human-Robot Interaction, 2018, 7, 1-3.	3.2	7
56	Facilitating Human-Mobile Robot Communication via Haptic Feedback and Gesture Teleoperation. ACM Transactions on Human-Robot Interaction, 2018, 7, 1-23.	3.2	13
57	Scaling Inertial Forces to Alter Weight Perception in Virtual Reality. , 2018, , .		7
58	Effects of Latency and Refresh Rate on Force Perception via Sensory Substitution by Force-Controlled Skin Deformation Feedback. , 2018, , .		0
59	Obstacle-Aided Navigation of a Soft Growing Robot. , 2018, , .		35
60	Magnified Force Sensory Substitution for Telemanipulation via Force-Controlled Skin Deformation. , 2018, , .		4
61	APAM: Antagonistic Pneumatic Artificial Muscle. , 2018, , .		34
62	Robotic Assistance-as-Needed for Enhanced Visuomotor Learning in Surgical Robotics Training: An Experimental Study. , 2018, , .		27
63	HapWRAP: Soft Growing Wearable Haptic Device. , 2018, , .		33
64	A social haptic device to create continuous lateral motion using sequential normal indentation. , 2018, , .		57
65	Comparing proprioceptive acuity in the arm between joint space and task space. , 2018, , .		4
66	Helical actuation on a soft inflated robot body. , 2018, , .		31
67	Toward the Design of Personalized Continuum Surgical Robots. Annals of Biomedical Engineering, 2018, 46, 1522-1533.	1.3	23
68	Deformable Model-Based Methods for Shape Control of a Haptic Jamming Surface. IEEE Transactions on Visualization and Computer Graphics, 2017, 23, 1029-1041.	2.9	25
69	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.	1.8	82
70	Design of a Compact Actuation and Control System for Flexible Medical Robots. IEEE Robotics and Automation Letters, 2017, 2, 1579-1585.	3.3	29
71	Highly Articulated Robotic Needle Achieves Distributed Ablation of Liver Tissue. IEEE Robotics and Automation Letters, 2017, 2, 1367-1374.	3.3	28
72	Fingertip Tactile Devices for Virtual Object Manipulation and Exploration. , 2017, , .		89

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73	A soft robot that navigates its environment through growth. <i>Science Robotics</i> , 2017, 2, .	9.9	603
74	Design of patient-specific concentric tube robots using path planning from 3-D ultrasound. , 2017, 2017, 165-168.		14
75	Series pneumatic artificial muscles (sPAMs) and application to a soft continuum robot. , 2017, 2017, 5503-5510.		111
76	Open source, modular, customizable, 3-D printed kinesthetic haptic devices. , 2017, , .		11
77	Training in divergent and convergent force fields during 6-DOF teleoperation with a robot-assisted surgical system. , 2017, , .		20
78	Analysis of effective impedance transmitted to the operator in position-exchange bilateral teleoperation. , 2017, , .		4
79	Exomuscle: An inflatable device for shoulder abduction support. , 2017, , .		35
80	WRAP: Wearable, restricted-aperture pneumatics for haptic guidance. , 2017, , .		42
81	Simulating the impact of sensorimotor deficits on reaching performance. , 2017, 2017, 31-37.		10
82	Design of a soft catheter for low-force and constrained surgery. , 2017, , .		25
83	Propagation of joint space quantization error to operational space coordinates and their derivatives. , 2017, , .		2
84	Perception of force and stiffness in the presence of low-frequency haptic noise. <i>PLoS ONE</i> , 2017, 12, e0178605.	1.1	14
85	Modeling of Bioinspired Apical Extension in a Soft Robot. <i>Lecture Notes in Computer Science</i> , 2017, , 522-531.	1.0	39
86	Design and implementation of a 300% strain soft artificial muscle. , 2016, , .		91
87	Closed-loop shape control of a Haptic Jamming deformable surface. , 2016, , .		24
88	Comparison of kinesthetic and skin deformation feedback for mass rendering. , 2016, , .		9
89	End Effector for a Kinesthetic Haptic Device Capable of Displaying Variable Size and Stiffness. <i>Lecture Notes in Computer Science</i> , 2016, , 363-372.	1.0	2
90	Motor learning affects car-to-driver handover in automated vehicles. <i>Science Robotics</i> , 2016, 1, .	9.9	82

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91	A dual-flywheel ungrounded haptic feedback system provides single-axis moment pulses for clear direction signals. , 2016, , .		11
92	Modeling and design of asymmetric vibrations to induce ungrounded pulling sensation through asymmetric skin displacement. , 2016, , .		32
93	3-D printed haptic devices for educational applications. , 2016, , .		38
94	Design of 3-D Printed Concentric Tube Robots. IEEE Transactions on Robotics, 2016, 32, 1419-1430.	7.3	47
95	Surgeon design interface for patient-specific concentric tube robots. , 2016, 2016, 41-48.		11
96	Haptic technologies for direct touch in virtual reality. , 2016, , .		13
97	Two is not always better than one: Effects of teleoperation and haptic coupling. , 2016, , .		14
98	Plane Assist: The Influence of Haptics on Ultrasound-Based Needle Guidance. Lecture Notes in Computer Science, 2016, , 370-377.	1.0	7
99	Toward human-robot collaboration in surgery: Performance assessment of human and robotic agents in an inclusion segmentation task. , 2016, , .		16
100	A Framework for Multilateral Manipulation in Surgical Tasks. IEEE Transactions on Automation Science and Engineering, 2016, 13, 68-77.	3.4	14
101	Noise, But Not Uncoupled Stability, Reduces Realism and Likeability of Bilateral Teleoperation. IEEE Robotics and Automation Letters, 2016, 1, 562-569.	3.3	4
102	Methods for Improving the Curvature of Steerable Needles in Biological Tissue. IEEE Transactions on Biomedical Engineering, 2016, 63, 1167-1177.	2.5	43
103	Stability and quantization-error analysis of haptic rendering of virtual stiffness and damping. International Journal of Robotics Research, 2016, 35, 1103-1120.	5.8	32
104	Impact of Combined Stimuli on the Perception of Transient Forces. Lecture Notes in Computer Science, 2016, , 416-426.	1.0	0
105	Models of human-centered automation in a debridement task. , 2015, , .		7
106	A paced shared-control teleoperated architecture for supervised automation of multilateral surgical tasks. , 2015, , .		17
107	Design and evaluation of a trilateral shared-control architecture for teleoperated training robots. , 2015, 2015, 4887-93.		14
108	Controllable Surface Haptics via Particle Jamming and Pneumatics. IEEE Transactions on Haptics, 2015, 8, 20-30.	1.8	70

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109	Learning and generalization in an isometric visuomotor task. <i>Journal of Neurophysiology</i> , 2015, 113, 1873-1884.	0.9	21
110	Tactor-Induced Skin Stretch as a Sensory Substitution Method in Teleoperated Palpation. <i>IEEE Transactions on Human-Machine Systems</i> , 2015, 45, 714-726.	2.5	37
111	Motor learning transfer from isometric to dynamic reaching. , 2015, , .		1
112	Remote electromagnetic vibration of steerable needles for imaging in power Doppler ultrasound. , 2015, 2015, 2244-2249.		5
113	A single-use haptic palpation probe for locating subcutaneous blood vessels in robot-assisted minimally invasive surgery. , 2015, , .		46
114	Teleoperated versus open needle driving: Kinematic analysis of experienced surgeons and novice users. , 2015, , .		22
115	Navigating the New RAS Publications Landscape [From the Editors' Desks]. <i>IEEE Robotics and Automation Magazine</i> , 2015, 22, 4-163.	2.2	1
116	Sensory Substitution and Augmentation Using 3-Degree-of-Freedom Skin Deformation Feedback. <i>IEEE Transactions on Haptics</i> , 2015, 8, 209-221.	1.8	61
117	Artificial Tactile Sensing of Position and Slip Speed by Exploiting Geometrical Features. <i>IEEE/ASME Transactions on Mechatronics</i> , 2015, 20, 263-274.	3.7	18
118	Methods to Segment Hard Inclusions in Soft Tissue During Autonomous Robotic Palpation. <i>IEEE Transactions on Robotics</i> , 2015, 31, 344-354.	7.3	49
119	M-Width: Stability, noise characterization, and accuracy of rendering virtual mass. <i>International Journal of Robotics Research</i> , 2015, 34, 781-798.	5.8	23
120	Rendered and Characterized Closed-Loop Accuracy of Impedance-Type Haptic Displays. <i>IEEE Transactions on Haptics</i> , 2015, 8, 434-446.	1.8	26
121	Design and experimental evaluation of a skin-stretch haptic device for improved control of brain-computer interfaces. , 2015, , .		7
122	The effect of manipulator gripper stiffness on teleoperated task performance. , 2015, , .		1
123	Environment Perception in the Presence of Kinesthetic or Tactile Guidance Virtual Fixtures. , 2015, , .		3
124	Tactile Skin Deformation Feedback for Conveying Environment Forces in Teleoperation. , 2015, , .		4
125	Sensory substitution of force and torque using 6-DoF tangential and normal skin deformation feedback. , 2015, , .		20
126	Effects of master-slave tool misalignment in a teleoperated surgical robot. , 2015, , .		14



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127	3-D Ultrasound-Guided Robotic Needle Steering in Biological Tissue. IEEE Transactions on Biomedical Engineering, 2014, 61, 2899-2910.	2.5	83
128	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.	2.5	47
129	Torsional Dynamics of Steerable Needles: Modeling and Fluoroscopic Guidance. IEEE Transactions on Biomedical Engineering, 2014, 61, 2707-2717.	2.5	28
130	Effect of load force feedback on grip force control during teleoperation: A preliminary study. , 2014, , .		14
131	Augmentation Of Stiffness Perception With a 1-Degree-of-Freedom Skin Stretch Device. IEEE Transactions on Human-Machine Systems, 2014, 44, 731-742.	2.5	65
132	Mapping stiffness perception in the brain with an fMRI-compatible particle-jamming haptic interface. , 2014, 2014, 2051-6.		9
133	Time-delayed teleoperation for interaction with moving objects in space. , 2014, , .		12
134	Haptic feedback enhances rhythmic motor control by reducing variability, not improving convergence rate. Journal of Neurophysiology, 2014, 111, 1286-1299.	0.9	23
135	Recursive estimation of needle pose for control of 3D-ultrasound-guided robotic needle steering. , 2014, , .		8
136	Testing models of cerebellar ataxia via dynamic simulation. Robotica, 2014, 32, 1383-1397.	1.3	1
137	Effects of robotic manipulators on movements of novices and surgeons. Surgical Endoscopy and Other Interventional Techniques, 2014, 28, 2145-2158.	1.3	54
138	Predicting and correcting ataxia using a model of cerebellar function. Brain, 2014, 137, 1931-1944.	3.7	85
139	Grip Force Control during Virtual Object Interaction: Effect of Force Feedback, Accuracy Demands, and Training. IEEE Transactions on Haptics, 2014, 7, 37-47.	1.8	37
140	Closed-loop stiffness and damping accuracy of impedance-type haptic displays. , 2014, , .		14
141	Design and evaluation of duty-cycling steering algorithms for robotically-driven steerable needles. , 2014, , .		33
142	Position and velocity cursor mappings contribute to distinct muscle forces in simulated isometric and movement reaching. , 2014, , .		4
143	Perception of a Haptic Jamming display: Just noticeable differences in stiffness and geometry. , 2014, , .		18
144	Sensory substitution using 3-degree-of-freedom tangential and normal skin deformation feedback. , 2014, , .		27

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145	Task-dependent impedance and implications for upper-limb prosthesis control. International Journal of Robotics Research, 2014, 33, 827-846.	5.8	21
146	Neural coding of passive lump detection in compliant artificial tissue. Journal of Neurophysiology, 2014, 112, 1131-1141.	0.9	7
147	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	14
148	Robotic Assistance for Cerebellar Reaching. Trends in Augmentation of Human Performance, 2014, , 317-343.	0.4	1
149	Predictive Modeling by the Cerebellum Improves Proprioception. Journal of Neuroscience, 2013, 33, 14301-14306.	1.7	111
150	Tissue fixation by suction increases the accuracy of robotic needle insertion. , 2013, , .		2
151	Adaptation to visuomotor rotation in isometric reaching is similar to movement adaptation. , 2013, 2013, 6650431.		7
152	A framework for analysis of surgeon arm posture variability in robot-assisted surgery. , 2013, , .		15
153	3D Segmentation of Curved Needles Using Doppler Ultrasound and Vibration. Lecture Notes in Computer Science, 2013, , 61-70.	1.0	13
154	Characterization and Psychophysical Studies of an Air-Jet Lump Display. IEEE Transactions on Haptics, 2013, 6, 156-166.	1.8	24
155	A Haptic System for Educational Games: Design and Application-Specific Kinematic Optimization. , 2013, , .		1
156	Cerebellar motor learning: are environment dynamics more important than error size?. Journal of Neurophysiology, 2013, 110, 322-333.	0.9	65
157	Effect of age on stiffness modulation during postural maintenance of the arm. , 2013, 2013, 6650395.		3
158	Sensory substitution via cutaneous skin stretch feedback. , 2013, , .		52
159	Perception of Springs With Visual and Proprioceptive Motion Cues: Implications for Prosthetics. IEEE Transactions on Human-Machine Systems, 2013, 43, 102-114.	2.5	23
160	Novel algorithm for real-time onset detection of surface electromyography in step-tracking wrist movements. , 2013, 2013, 2056-9.		1
161	Coaxial Needle Insertion Assistant With Enhanced Force Feedback. IEEE Transactions on Biomedical Engineering, 2013, 60, 379-389.	2.5	43
162	Autonomous robotic palpation: Machine learning techniques to identify hard inclusions in soft tissues. , 2013, , .		30

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163	Sensory augmentation of stiffness using fingerpad skin stretch. , 2013, , .		20
164	The effect of a robot-assisted surgical system on the kinematics of user movements. , 2013, 2013, 6257-60.		7
165	Cerebellar ataxia impairs modulation of arm stiffness during postural maintenance. Journal of Neurophysiology, 2013, 110, 1611-1620.	0.9	2
166	Does a basic deficit in force control underlie cerebellar ataxia?. Journal of Neurophysiology, 2013, 109, 1107-1116.	0.9	9
167	Robot Guided Sheaths (RoGS) for Percutaneous Access to the Pediatric Kidney: Patient-Specific Design and Preliminary Results. , 2013, , .		4
168	Model-Mediated Teleoperation With Predictive Models and Relative Tracking. , 2013, , .		1
169	Active force perception depends on cerebellar function. Journal of Neurophysiology, 2012, 107, 1612-1620.	0.9	44
170	Characterization of robotic needle insertion and rotation in artificial and ex vivo tissues. , 2012, , .		20
171	User comprehension of task performance with varying impedance in a virtual prosthetic arm: A pilot study. , 2012, , .		5
172	Behavior of Tip-Steerable Needles in Ex Vivo and In Vivo Tissue. IEEE Transactions on Biomedical Engineering, 2012, 59, 2705-2715.	2.5	72
173	Conveying the configuration of a virtual human hand using vibrotactile feedback. , 2012, , .		13
174	Haptic footstep display. , 2012, , .		8
175	HAPI Bands: A haptic augmented posture interface. , 2012, , .		24
176	Wearable haptic device for cutaneous force and slip speed display. , 2012, , .		18
177	Augmented reality and haptic interfaces for robot-assisted surgery. International Journal of Medical Robotics and Computer Assisted Surgery, 2012, 8, 45-56.	1.2	83
178	Design and control of an air-jet lump display. , 2012, , .		13
179	Discrimination of Springs with Vision, Proprioception, and Artificial Skin Stretch Cues. Lecture Notes in Computer Science, 2012, , 160-172.	1.0	3
180	Characterization of an air jet haptic lump display. , 2011, 2011, 3467-70.		12

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181	Coaxial needle insertion assistant for epidural puncture. , 2011, , .		5
182	Robot-Assisted Needle Steering. IEEE Robotics and Automation Magazine, 2011, 18, 35-46.	2.2	146
183	Haptics in medicine and clinical skill acquisition [special section intro.]. IEEE Transactions on Haptics, 2011, 4, 153-154.	1.8	20
184	Experimental evaluation of a coaxial needle insertion assistant with enhanced force feedback. , 2011, 2011, 3447-50.		12
185	Design and evaluation of a multi-modal haptic skin stimulation apparatus. , 2011, 2011, 3455-8.		6
186	Assessing the quality of force feedback in soft tissue simulation. , 2011, 2011, 3451-4.		2
187	Task-dependent impedance improves user performance with a virtual prosthetic arm. , 2011, , .		11
188	Coaxial needle insertion assistant for epidural puncture. , 2011, , .		7
189	Gradual anisometric-isometric transition for human-machine interfaces. , 2011, 2011, 4507-10.		1
190	Force Feedback and Sensory Substitution for Robot-Assisted Surgery. , 2011, , 419-448.		26
191	Robotic Needle Steering: Design, Modeling, Planning, and Image Guidance. , 2011, , 557-582.		74
192	Medical and Health-Care Robotics. IEEE Robotics and Automation Magazine, 2010, 17, 26-37.	2.2	122
193	Estimation of model parameters for steerable needles. , 2010, , 3703-3708.		18
194	Defining performance tradeoffs for multi-degree-of-freedom bilateral teleoperators with LQG control. , 2010, , .		5
195	Evaluation of robotic needle steering in ex vivo tissue. , 2010, 2010, 2068-2073.		37
196	Plugfest 2009: Global interoperability in Telerobotics and telemedicine. , 2010, 2010, 1733-1738.		26
197	Identifying the role of proprioception in upper-limb prosthesis control. ACM Transactions on Applied Perception, 2010, 7, 1-23.	1.2	56
198	Human vs. robotic tactile sensing: Detecting lumps in soft tissue. , 2010, , .		53

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199	Design of a haptic simulator for osteosynthesis screw insertion. , 2010, , .		6
200	Modelling of non-linear elastic tissues for surgical simulation. Computer Methods in Biomechanics and Biomedical Engineering, 2010, 13, 811-818.	0.9	52
201	Mechanics of Flexible Needles Robotically Steered through Soft Tissue. International Journal of Robotics Research, 2010, 29, 1640-1660.	5.8	251
202	Observations and models for needle-tissue interactions. , 2009, , .		41
203	Environment discrimination with vibration feedback to the foot, arm, and fingertip. , 2009, , .		13
204	Effects of haptic and graphical force feedback on teleoperated palpation. , 2009, , .		63
205	Controlling a robotically steered needle in the presence of torsional friction. , 2009, , 3476-3481.		19
206	Characterization of pre-curved needles for steering in tissue. , 2009, 2009, 1200-3.		38
207	Design considerations and human-machine performance of moving virtual fixtures. , 2009, , .		21
208	Tissue property estimation and graphical display for teleoperated robot-assisted surgery. , 2009, , .		72
209	Modeling and Control of Needles With Torsional Friction. IEEE Transactions on Biomedical Engineering, 2009, 56, 2905-2916.	2.5	85
210	The importance of organ geometry and boundary constraints for planning of medical interventions. Medical Engineering and Physics, 2009, 31, 195-206.	0.8	62
211	Quantifying perception of nonlinear elastic tissue models using multidimensional scaling. , 2009, , .		4
212	Observations of needle-tissue interactions. , 2009, 2009, 262-5.		12
213	Force & torque feedback vs force only feedback. , 2009, , .		23
214	Haptics as an aid to copying for people with Williams Syndrome. , 2009, , .		3
215	Stiffness discrimination with visual and proprioceptive cues. , 2009, , .		32
216	Haptic feedback in robot-assisted minimally invasive surgery. Current Opinion in Urology, 2009, 19, 102-107.	0.9	477

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217	Feedback control for steering needles through 3D deformable tissue using helical paths. , 2009, V, 37.		51
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