Blake Hannaford

List of Publications by Year
in descending order

198 papers	**10,969** citations	61984 **43** h-index	37204 **96** g-index
202 all docs	**202** docs citations	**202** times ranked	**6123** citing authors

#	Article	IF	Citations
1	Object-Agnostic Vision Measurement Framework Based on One-Shot Learning and Behavior Tree. IEEE Transactions on Cybernetics, 2023, 53, 5202-5215.	9.5	7
2	Real-time virtual intraoperative CT in endoscopic sinus surgery. International Journal of Computer Assisted Radiology and Surgery, 2022, 17, 249-260.	2.8	1
3	Real-Time Camera Localization during Robot-Assisted Telecystoscopy for Bladder Cancer Surveillance. Journal of Medical Robotics Research, 2022, 07, .	1.2	1
4	Multicamera 3D Viewpoint Adjustment for Robotic Surgery via Deep Reinforcement Learning. Journal of Medical Robotics Research, 2021, 06, 2140003.	1.2	8
5	Automated atlas-based segmentation for skull base surgical planning. International Journal of Computer Assisted Radiology and Surgery, 2021, 16, 933-941.	2.8	2
6	Local Style Preservation in Improved GAN-Driven Synthetic Image Generation for Endoscopic Tool Segmentation. Sensors, 2021, 21, 5163.	3.8	11
7	Multi-Frame Feature Aggregation for Real-Time Instrument Segmentation in Endoscopic Video. IEEE Robotics and Automation Letters, 2021, 6, 6773-6780.	5.1	10
8	Learning Surgical Motion Pattern from Small Data in Endoscopic Sinus and Skull Base Surgeries. , 2021, , .		0
9	Opportunities and Barriers to Rural Telerobotic Surgical Health Care in 2021: Report and Research Agenda from a Stakeholder Workshop. Telemedicine Journal and E-Health, 2021, , .	2.8	3
10	A decade retrospective of medical robotics research from 2010 to 2020. Science Robotics, 2021, 6, eabi8017.	17.6	158
11	Sensor Fusion for Force and Position Calibration of a Motorized Surgical Smart Grasper. , 2021, , .		1
12	Towards Better Surgical Instrument Segmentation in Endoscopic Vision: Multi-Angle Feature Aggregation and Contour Supervision. IEEE Robotics and Automation Letters, 2020, 5, 6639-6646.	5.1	36
13	Real-time Data Driven Precision Estimator for RAVEN-II Surgical Robot End Effector Position. , 2020, , .		12
14	The Future of Skull Base Surgery: A View Through Tinted Glasses. World Neurosurgery, 2020, 142, 29-42.	1.3	14
15	Modeling Cable-Driven Robot With Hysteresis and Cable–Pulley Network Friction. IEEE/ASME Transactions on Mechatronics, 2020, 25, 1095-1104.	5.8	22
16	LC-GAN: Image-to-image Translation Based on Generative Adversarial Network for Endoscopic Images. , 2020, , .		16
17	Multicamera 3D Reconstruction of Dynamic Surgical Cavities: Autonomous Optimal Camera Viewpoint Adjustment. , 2020, , .		8
18	Collaborative Robotics Toolkit (CRTK): Open Software Framework for Surgical Robotics Research. , 2020, , .		8

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19	Securing Robot-assisted Minimally Invasive Surgery through Perception Complementarities. , 2020, , .		2
20	Augmented Reality Application for Aiding Tumor Resection in Skull-Base Surgery. , 2019, , .		8
21	Surgical instrument segmentation for endoscopic vision with data fusion of cnn prediction and kinematic pose. , 2019, , .		27
22	Multicamera 3D Reconstruction of Dynamic Surgical Cavities: Camera Grouping and Pair Sequencing. , 2019, , .		11
23	Comparison of Micro–Computed Tomography and Clinical Computed Tomography Protocols for Visualization of Nasal Cartilage Before Surgical Planning for Rhinoplasty. JAMA Facial Plastic Surgery, 2019, 21, 237-243.	2.1	12
24	Multicamera 3D Reconstruction of Dynamic Surgical Cavities: Non-Rigid Registration and Point Classification. , 2019, , .		5
25	RAVEN Eyes Around the Instrument from Modular Axis Sharing. International Journal of Control, Automation and Systems, 2019, 17, 454-464.	2.7	3
26	A Model-Based Recurrent Neural Network With Randomness for Efficient Control With Applications. IEEE Transactions on Industrial Informatics, 2019, 15, 2054-2063.	11.3	31
27	Semi–autonomous image–guided brain tumour resection using an integrated robotic system: A bench–top study. International Journal of Medical Robotics and Computer Assisted Surgery, 2018, 14, e1872.	2.3	19
28	Real-time vision-based surgical tool segmentation with robot kinematics prior. , 2018, , .		26
29	Comparison of 3D Surgical Tool Segmentation Procedures with Robot Kinematics Prior. , 2018, , .		11
30	Soft-obstacle Avoidance for Redundant Manipulators with Recurrent Neural Network. , 2018, , .		3
31	Learned Hand Gesture Classification Through Synthetically Generated Training Samples. , 2018, , .		7
32	A Novel Recurrent Neural Network for Improving Redundant Manipulator Motion Planning Completeness. , 2018, 2018, 2956-2961.		11
33	Automated Surgical Approach Planning for Complex Skull Base Targets: Development and Validation of a Cost Function and Semantic At-las. Surgical Innovation, 2018, 25, 476-484.	0.9	7
34	Evaluation of segmentation methods on head and neck <scp>CT</scp>: Auto–segmentation challenge 2015. Medical Physics, 2017, 44, 2020-2036.	3.0	198
35	Utilizing Elasticity of Cable-Driven Surgical Robot to Estimate Cable Tension and External Force. IEEE Robotics and Automation Letters, 2017, 2, 1593-1600.	5.1	34
36	Gaussian Process Regression for Sensorless Grip Force Estimation of Cable-Driven Elongated Surgical Instruments. IEEE Robotics and Automation Letters, 2017, 2, 1312-1319.	5.1	43

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37	Quantitative Analysis of Transnasal Anterior Skull Base Approach: Report of Technology for Intraoperative Assessment of Instrument Motion. Surgical Innovation, 2017, 24, 405-410.	0.9	3
38	An Automated Methodology for Assessing Anatomy-Specific Instrument Motion during Endoscopic Endonasal Skull Base Surgery. Journal of Neurological Surgery, Part B: Skull Base, 2017, 38, 222-226.	0.8	7
39	Anatomical Region Segmentation for Objective Surgical Skill Assessment with Operating Room Motion Data. Journal of Neurological Surgery, Part B: Skull Base, 2017, 78, 490-496.	0.8	4
40	Roboscope: A flexible and bendable surgical robot for single portal Minimally Invasive Surgery. , 2017, , .		21
41	Efficient orbital structures segmentation with prior anatomical knowledge. Journal of Medical Imaging, 2017, 4, 034501.	1.5	9
42	Region-Specific Objective Signatures of Endoscopic Surgical Instrument Motion: A Cadaveric Exploratory Analysis. Journal of Neurological Surgery, Part B: Skull Base, 2017, 78, 099-104.	0.8	8
43	Towards real-time surface tracking and motion compensation integration for robotic surgery. , 2017, , .		6
44	Improving control precision and motion adaptiveness for surgical robot with recurrent neural network. , 2017, , .		7
45	Debate on the cost of innovation in healthcare: is it too costly?. BMJ Simulation and Technology Enhanced Learning, 2017, 3, S33-S36.	0.7	3
46	Integrated asymmetric stop operator based model for strain stress hysteresis characteristics of cable driven robots loaded longitudinally. , 2017, , .		5
47	Wrist Motion Variation between Novices and Experienced Surgeons Performing Simulated Airway Surgery. OTO Open, 2017, 1, 2473974X1773895.	1.4	0
48	Toward real-time tumor margin identification in image-guided robotic brain tumor resection. Proceedings of SPIE, 2017, 10135, .	0.8	3
49	Atlas Based Anatomical Region Segmentation for Minimally Invasive Skull Base Surgery Objective Motion Analysis. Journal of Neurological Surgery, Part B: Skull Base, 2017, 78, S1-S156.	0.8	1
50	Improved Technology for Navigation-Guided Orbital Surgery and Reconstruction. Journal of Neurological Surgery, Part B: Skull Base, 2017, 78, S1-S156.	0.8	0
51	Haptics. Springer Handbooks, 2016, , 1063-1084.	0.6	47
52	Hysteresis model of longitudinally loaded cable for cable driven robots and identification of the parameters. , 2016, , .		25
53	Unscented Kalman Filter and 3D vision to improve cable driven surgical robot joint angle estimation. , 2016, , .		21
54	Dynamic modeling of cable driven elongated surgical instruments for sensorless grip force estimation. , 2016, 2016, 4128-4134.		25

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55	Evaluation of liver tissue damage and grasp stability using finite element analysis. Computer Methods in Biomechanics and Biomedical Engineering, 2016, 19, 31-40.	1.6	14
56	Objective Signatures of Endoscopic Surgical Performance. Journal of Neurological Surgery, Part B: Skull Base, 2016, 77, .	0.8	0
57	Measurement of the cable-pulley Coulomb and viscous friction for a cable-driven surgical robotic system. , 2015, , .		29
58	Toward real-time endoscopically-guided robotic navigation based on a 3D virtual surgical field model. , 2015, 9415, 94150C.		4
59	Path planning for semi-automated simulated robotic neurosurgery. , 2015, 2015, 2639-2645.		12
60	Atlas and feature based 3D pathway visualization enhancement for skull base pre-operative fast planning from head CT. , 2015, 9415, .		1
61	Semi-autonomous simulated brain tumor ablation with RAVENII Surgical Robot using behavior tree. , 2015, 2015, 3868-3875.		67
62	Improving position precision of a servo-controlled elastic cable driven surgical robot using Unscented Kalman Filter. , 2015, , .		20
63	Crowd-sourced assessment of surgical skills in cricothyrotomy procedure. Journal of Surgical Research, 2015, 196, 302-306.	1.6	48
64	Crowd-Sourced Assessment of Technical Skill: A Valid Method for Discriminating Basic Robotic Surgery Skills. Journal of Endourology, 2015, 29, 1295-1301.	2.1	75
65	Finite Element Analysis for evaluating liver tissue damage due to mechanical compression. Journal of Biomechanics, 2015, 48, 948-955.	2.1	13
66	Force Sensor Integrated Surgical Forceps for Minimally Invasive Robotic Surgery. IEEE Transactions on Robotics, 2015, 31, 1214-1224.	10.3	175
67	Comparison of reaction times while walking. , 2015, , .		2
68	A Laparoscopic Grasping Tool with Force Sensing Capability. IEEE/ASME Transactions on Mechatronics, 2015, , 1-1.	5.8	30
69	Dynamically evaluated gravity compensation for the RAVEN surgical robot. , 2014, , .		5
70	Accurate three-dimensional virtual reconstruction of surgical field using calibrated trajectories of an image-guided medical robot. Journal of Medical Imaging, 2014, 1, 035002.	1.5	13
71	Mapping surgical fields by moving a laser-scanning multimodal scope attached to a robot arm. , 2014, 9036, .		5
72	Fourier transform infrared spectroscopic imaging identifies early biochemical markers of tissue damage. , 2014, , .		0

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73	Experimental evaluation of guidance and forbidden region virtual fixtures for object telemanipulation. , 2014, , .		0
74	MP37-05 THE DA VINCI ROBOT TRAINING DILEMMA: EVALUATING THE RAVEN ROBOT AS A SOLUTION. Journal of Urology, 2014, 191, .	0.4	0
75	Forbidden region virtual fixtures from streaming point clouds. Advanced Robotics, 2014, 28, 1507-1518.	1.8	15
76	Beyond task time: automated measurement augments fundamentals of laparoscopic skills methodology. Journal of Surgical Research, 2014, 192, 329-338.	1.6	31
77	Preliminary Articulable Probe Designs With RAVEN and Challenges: Image-Guided Robotic Surgery Multitool System. Journal of Medical Devices, Transactions of the ASME, 2014, 8, .	0.7	8
78	Multi-finger Haptic Displays for Characterization of Hand Response. Springer Tracts in Advanced Robotics, 2014, , 363-388.	0.4	0
79	Instrument Failures for the da Vinci Surgical System: a Food and Drug Administration MAUDE Database Study. Surgical Endoscopy and Other Interventional Techniques, 2013, 27, 1503-1508.	2.4	46
80	Virtual Reality Robotic Surgery Warm-Up Improves Task Performance in a Dry Laboratory Environment: A Prospective Randomized Controlled Study. Journal of the American College of Surgeons, 2013, 216, 1181-1192.	0.5	104
81	Raven-II: An Open Platform for Surgical Robotics Research. IEEE Transactions on Biomedical Engineering, 2013, 60, 954-959.	4.2	304
82	Control and Tension Estimation of a Cable Driven Mechanism Under Different Tensions. , 2013, , .		16
83	Good vibrations. , 2013, , .		3
84	Glove-Enabled Computer Operations (GECO): Design and Testing of an Extra-Vehicular Activity Glove Adapted for Human-Computer Interface. , 2013, , .		2
85	Future of Robotic Surgery. Cancer Journal (Sudbury, Mass), 2013, 19, 109-119.	2.0	54
86	Multiportal Robotic Access to the Anterior Cranial Fossa: A Surgical and Engineering Feasibility Study. Otolaryngology - Head and Neck Surgery, 2013, 149, 940-946.	1.9	27
87	Design and optimization of support structures for tactile feedback. , 2013, , .		3
88	Improving tactile feedback with an impedance adapter. , 2013, , .		4
89	Commentary. Neurosurgery, 2013, 72, A1-A6.	1.1	17
90	Instrument Failures for the da Vinci Surgical System: a Food and Drug Administration MAUDE Database Study. , 2013, 27, 1503.		1

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91	Computer Modeled Multiportal Approaches to the Skull Base. Journal of Neurological Surgery, Part B: Skull Base, 2012, 73, 415-423.	0.8	23
92	Development of a flexible imaging probe integrated to a surgical telerobot system: Preliminary remote control test and probe design. , 2012, , .		14
93	The Effect of Interaction Force Estimation on Performance in Bilateral Teleoperation. IEEE Transactions on Haptics, 2012, 5, 160-171.	2.7	12
94	Application of Unscented Kalman Filter to a cable driven surgical robot: A simulation study. , 2012, , .		10
95	Robotic compression of soft tissue. , 2012, , .		3
96	Effects of thermal protection methods on haptic perception. , 2011, , .		2
97	Tactile data entry for extravehicular activity. , 2011, , .		6
98	Haptic exploration of spheres: Anatomical regions used for perception. , 2011, , .		0
99	Objective Assessment of Surgical Skills. , 2011, , 619-649.		1
100	Raven: Developing a Surgical Robot from a Concept to a Transatlantic Teleoperation Experiment. , 2011, , 159-197.		22
101	Macro and Micro Soft-Tissue Biomechanics and Tissue Damage: Application in Surgical Robotics. , 2011, , 583-618.		1
102	Freeing the serial mechanism designer from inverse kinematic solvability constraints. Applied Bionics and Biomechanics, 2010, 7, 209-216.	1.1	3
103	Freeing the Serial Mechanism Designer from Inverse Kinematic Solvability Constraints. Applied Bionics and Biomechanics, 2010, 7, 209-216.	1.1	5
104	Haptic exploration of spheres: Techniques and initial experiments. , 2010, , .		3
105	Establishing multimodal telepresence sessions using the Session Initiation Protocol (SIP) and advanced haptic codecs. , 2010, , .		13
106	Plugfest 2009: Global interoperability in Telerobotics and telemedicine. , 2010, 2010, 1733-1738.		26
107	Haptic characteristics of some activities of daily living. , 2010, , .		26
108	Perceptual thresholds for single vs. Multi-Finger Haptic interaction. , 2010, , .		38

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109	Global transparency analysis of the Lawrence teleoperator architecture. , 2009, , .		24
110	The RAVEN: Design and Validation of a Telesurgery System. International Journal of Robotics Research, 2009, 28, 1183-1197.	8.5	209
111	Teleoperation in surgical robotics &#x2013; network latency effects on surgical performance. , 2009, 2009, 6860-3.		44
112	Effect of time delay on telesurgical performance. , 2009, , .		18
113	Bilateral teleoperation with time delay using modified wave variable based controller. , 2009, , .		15
114	Haptics. , 2008, , 719-739.		51
115	Model-based passivity control for bilateral teleoperation of a surgical robot with time delay. , 2008, , .		12
116	TeleRobotic Fundamentals of Laparoscopic Surgery (FLS): Effects of time delay - pilot study. , 2008, 2008, 5597-600.		16
117	Experimental Internet Haptic Collaboration using Virtual Coupling Schemes. , 2008, , .		28
118	Experimental comparison of internet haptic collaboration with time-delay compensation techniques. , 2008, , .		23
119	Haptic Characteristics of Document Conservation Tasks. , 2008, , .		1
120	Biomechanical Properties of Abdominal Organs In Vivo and Postmortem Under Compression Loads. Journal of Biomechanical Engineering, 2008, 130, 021020.	1.3	185
121	Overcoming barriers to wider adoption of mobile telerobotic surgery. , 2008, , .		3
122	Bilateral teleoperation with time delay using modified wave variables. , 2008, , .		11
123	Teleoperation of a Surgical Robot Via Airborne Wireless Radio and Transatlantic Internet Links. Springer Tracts in Advanced Robotics, 2008, , 305-314.	0.4	15
124	Objective assessment of telesurgical robot systems: Telerobotic FLS. Studies in Health Technology and Informatics, 2008, 132, 263-5.	0.3	10
125	Assessment of Tissue Damage due to Mechanical Stresses. International Journal of Robotics Research, 2007, 26, 1159-1171.	8.5	102
126	Automated Tool Handling for the Trauma Pod Surgical Robot. , 2007, , .		13

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127	Comparison of transient performance in the control of soft tissue grasping. , 2007, , .		8
128	Experimental Evaluation of Attachment Methods for a Multifinger Haptic Device. , 2007, , .		4
129	Fast Rendering for a Multifinger Haptic Display. , 2007, , .		0
130	Portable Surgery Master Station for Mobile Robotic Telesurgery. , 2007, , .		18
131	Comparison of Performance of Virtual Coupling Schemes for Haptic Collaboration using Real and Emulated Internet Connections. , 2007, , .		8
132	The red DRAGON: a multi-modality system for simulation and training in minimally invasive surgery. Studies in Health Technology and Informatics, 2007, 125, 149-54.	0.3	16
133	Generalized Approach for Modeling Minimally Invasive Surgery as a Stochastic Process Using a Discrete Markov Model. IEEE Transactions on Biomedical Engineering, 2006, 53, 399-413.	4.2	195
134	Optimization of a Spherical Mechanism for a Minimally Invasive Surgical Robot: Theoretical and Experimental Approaches. IEEE Transactions on Biomedical Engineering, 2006, 53, 1440-1445.	4.2	156
135	An Ankle-Foot Orthosis Powered by Artificial Pneumatic Muscles. Journal of Applied Biomechanics, 2005, 21, 189-197.	0.8	337
136	Human Interaction with Small Haptic Effects. Presence: Teleoperators and Virtual Environments, 2005, 14, 329-344.	0.6	21
137	Time domain passivity control with reference energy following. IEEE Transactions on Control Systems Technology, 2005, 13, 737-742.	5.2	132
138	Stability Guaranteed Control: Time Domain Passivity Approach. IEEE Transactions on Control Systems Technology, 2004, 12, 860-868.	5.2	86
139	Stable Teleoperation With Time-Domain Passivity Control. IEEE Transactions on Automation Science and Engineering, 2004, 20, 365-373.	2.3	310
140	Quantifying surgeon grasping mechanics in laparoscopy using the Blue DRAGON system. Studies in Health Technology and Informatics, 2004, 98, 34-6.	0.3	19
141	Smart surgical tools and augmenting devices. IEEE Transactions on Automation Science and Engineering, 2003, 19, 782-792.	2.3	155
142	Control of a Flexible Manipulator with Noncollocated Feedback: Time Domain Passivity Approach. , 2003, , 121-134.		8
143	In-vivo and in-situ compressive properties of porcine abdominal soft tissues. Studies in Health Technology and Informatics, 2003, 94, 26-32.	0.3	26
144	<title>Detection thresholds for small haptic effects</title>. , 2002, 4570, 50.		4

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145	Control law design for haptic interfaces to virtual reality. IEEE Transactions on Control Systems Technology, 2002, 10, 3-13.	5.2	144
146	Time-domain passivity control of haptic interfaces. IEEE Transactions on Automation Science and Engineering, 2002, 18, 1-10.	2.3	610
147	Task Decomposition of Laparoscopic Surgery for Objective Evaluation of Surgical Residents' Learning Curve Using Hidden Markov Model. Computer Aided Surgery, 2002, 7, 49-61.	1.8	106
148	Artificial Muscles: Actuators for Biorobotic Systems. International Journal of Robotics Research, 2002, 21, 295-309.	8.5	180
149	A Biorobotic Structural Model of the Mammalian Muscle Spindle Primary Afferent Response. Annals of Biomedical Engineering, 2002, 30, 84-96.	2.5	15
150	Task decomposition of laparoscopic surgery for objective evaluation of surgical residents' learning curve using hidden Markov Model. Computer Aided Surgery, 2002, 7, 49-61.	1.8	39
151	The Blue DRAGON--a system for monitoring the kinematics and the dynamics of endoscopic tools in minimally invasive surgery for objective laparoscopic skill assessment. Studies in Health Technology and Informatics, 2002, 85, 412-8.	0.3	26
152	Identification of feasible scaled teleoperation region based on scaling factors and sampling rates. Journal of Mechanical Science and Technology, 2001, 15, 1-9.	0.4	4
153	Bio-Inspired Actuation and Sensing. Autonomous Robots, 2001, 11, 267-272.	4.8	18
154	Markov modeling of minimally invasive surgery based on tool/tissue interaction and force/torque signatures for evaluating surgical skills. IEEE Transactions on Biomedical Engineering, 2001, 48, 579-591.	4.2	219
155	Skills evaluation in minimally invasive surgery using force/torque signatures. Surgical Endoscopy and Other Interventional Techniques, 2000, 14, 791-798.	2.4	128
156	Accounting for Elastic Energy Storage in McKibben Artificial Muscle Actuators. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2000, 122, 386-388.	1.6	173
157	Force-feedback grasper helps restore sense of touch in minimally invasive surgery,. Journal of Gastrointestinal Surgery, 1999, 3, 278-285.	1.7	59
158	Force controlled and teleoperated endoscopic grasper for minimally invasive surgery-experimental performance evaluation. IEEE Transactions on Biomedical Engineering, 1999, 46, 1212-1221.	4.2	289
159	Stable haptic interaction with virtual environments. IEEE Transactions on Automation Science and Engineering, 1999, 15, 465-474.	2.3	523
160	<title>Augmented haptics of manipulator kinematic condition</title>. , 1999, 3840, 54.		7
161	Teleoperation Performance with a Kinematically Redundant Slave Robot. International Journal of Robotics Research, 1998, 17, 579-597.	8.5	30
162	Single-chip velocity measurement system for incremental optical encoders. IEEE Transactions on Control Systems Technology, 1997, 5, 654-661.	5.2	32

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164	Architectures for shared haptic virtual environments. Computers and Graphics, 1997, 21, 421-429.	2.5	69
165	Study of human forearm posture maintenance with a physiologically based robotic arm and spinal level neural controller. Biological Cybernetics, 1997, 76, 285-298.	1.3	32
166	Measurement and modeling of McKibben pneumatic artificial muscles. IEEE Transactions on Automation Science and Engineering, 1996, 12, 90-102.	2.3	1,262
167	Scaling of Direct Drive Robot Arms. International Journal of Robotics Research, 1996, 15, 459-472.	8.5	18
168	<title>Hard-disk actuators for mini-teleoperation</title>. , 1995, 2351, 55.		3
169	A â€œhands-onâ€•course in consumer electronics design. Mechatronics, 1995, 5, 753-762.	3.3	4
170	The anthroform biorobotic arm: A system for the study of spinal circuits. Annals of Biomedical Engineering, 1995, 23, 399-408.	2.5	51
171	Kinesthetic Displays for Remote and Virtual Environments. , 1995, , .		9
172	The Mechanical Spindle: A Replica of the Mammalian Muscle Spindle. , 1995, , 331-333.		4
173	A study and model of the role of the Renshaw cell in regulating the transient firing rate of the motoneuron. Biological Cybernetics, 1994, 71, 251-262.	1.3	4
174	Approximating time-frequency density functions via optimal combinations of spectrograms. IEEE Signal Processing Letters, 1994, 1, 199-202.	3.6	43
175	Sliding Control of Force Reflecting Teleoperation:Preliminary Studies. Presence: Teleoperators and Virtual Environments, 1994, 3, 158-172.	0.6	36
176	A study and model of the role of the Renshaw cell in regulating the transient firing rate of the motoneuron. Biological Cybernetics, 1994, 71, 251-262.	1.3	0
177	<title>Microscopic pick-and-place teleoperation</title>. , 1993, , .		1
178	Motor Control Simulation Of Time Optimal Fast Movement in Man. , 1993, , 411-418.		0
179	The anthroform neural controller: An architecture for spinal circuit emulation. , 1992, , .		0
180	Force-reflection and shared compliant control in operating telemanipulators with time delay. IEEE Transactions on Automation Science and Engineering, 1992, 8, 176-185.	2.3	314

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182	Hidden Markov Model Analysis of Force/Torque Information in Telemanipulation. International Journal of Robotics Research, 1991, 10, 528-539.	8.5	118
183	Kinesthetic Feedback Techniques in Teleoperated Systems. Control and Dynamic Systems, 1991, , 1-32.	0.1	8
184	Hidden Markov Model analysis of force/torque information in telemanipulation. , 1990, , 135-149.		4
185	Actuator Properties and Movement Control: Biological and Technological Models. , 1990, , 101-120.		43
186	A design framework for teleoperators with kinesthetic feedback. IEEE Transactions on Automation Science and Engineering, 1989, 5, 426-434.	2.3	804
187	Time optimality, proprioception, and the triphasic EMG pattern. Behavioral and Brain Sciences, 1989, 12, 231-232.	0.7	1
188	Quantitative Evaluation of Perspective and Stereoscopic Displays in Three-Axis Manual Tracking Tasks. IEEE Transactions on Systems, Man, and Cybernetics, 1987, 17, 61-72.	0.9	109
189	Neurological control of head movements: Inverse modeling and electromyographic evidence. Mathematical Biosciences, 1986, 78, 159-178.	1.9	21
190	An intrinsic mechanism for the oscillatory contraction of muscle. Biological Cybernetics, 1986, 53, 219-227.	1.3	56
191	Short Time Fourier Analysis of the Electromyogram: Fast Movements and Constant Contraction. IEEE Transactions on Biomedical Engineering, 1986, BME-33, 1173-1181.	4.2	74
192	Adaptive Linear Predictor Tracks Implanted Radiopaque Markers. IEEE Transactions on Biomedical Engineering, 1985, BME-32, 117-125.	4.2	7
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194	Roles of the elements of the triphasic control signal. Experimental Neurology, 1985, 90, 619-634.	4.1	282
195	Effects of applied vibration on triphasic electromyographic patterns in neurologically ballistic head movements. Experimental Neurology, 1985, 88, 447-460.	4.1	144
196	Electromyographic Evidence of Neurological Controller Signals with Viscous Load. Journal of Motor Behavior, 1984, 16, 255-274.	0.9	52
197	Left ventricular dynamic geometry in the intact and open chest dog.. Circulation Research, 1982, 50, 573-589.	4.5	67
198	Testing Time Domain Passivity Control of Haptic Enabled Systems. , 0, , 550-559.		1