A low cost instrumented glove for extended monitoring

Journal of Neuroscience Methods 160, 335-348 DOI: 10.1016/j.jneumeth.2006.09.021

Citation Report

#	Article	IF	CITATIONS
1	Measuring Finger Flexion and Activity Trends over a 25 Hour Period using a Low Cost Wireless Device. , 2006, 2006, 6281-4.		7
2	Hand Segmentation for Augmented Reality System. , 2007, , .		7
3	Translational haptic feedback for post-stroke rehabilitation. , 2007, , .		2
4	Use of a pneumatic glove for hand rehabilitation following stroke. , 2009, 2009, 2434-7.		28
5	Development and evaluation of a low-cost sensor glove for assessment of human finger movements in neurophysiological settings. Journal of Neuroscience Methods, 2009, 178, 138-147.	1.3	125
6	A Pneumatic Glove and Immersive Virtual Reality Environment for Hand Rehabilitative Training After Stroke. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2010, 18, 551-559.	2.7	205
7	An instrumented glove for small primates. Journal of Neuroscience Methods, 2010, 187, 100-104.	1.3	64
8	Enhancement of bend sensor properties as applied in a glove for use in neurorehabilitation settings. , 2010, 2010, 5903-6.		12
9	An interactive therapy system for arm and hand rehabilitation. , 2010, , .		5
10	A Literature Review of Transmission Effectiveness and Electromagnetic Compatibility in Home Telemedicine Environments to Evaluate Safety and Security. Telemedicine Journal and E-Health, 2010, 16, 818-826.	1.6	11
11	Design and validation of a multi-finger sensing device based on Optical linear encoder. , 2010, , .		3
12	Methods and hints to linearise the resistance values vs. bending angle relationship of bend sensors. , 2011, , .		1
13	Development of a haptic keypad for training finger individuation after stroke. , 2011, , .		2
14	Development of finger-motion capturing device based on optical linear encoder. Journal of Rehabilitation Research and Development, 2011, 48, 69.	1.6	64
15	Synergy-based optimal design of hand pose sensing. , 2012, , .		8
16	Smart wearable systems: Current status and future challenges. Artificial Intelligence in Medicine, 2012, 56, 137-156.	3.8	707
17	A new method of accurate hand- and arm-tracking for small primates. Journal of Neural Engineering, 2012, 9, 026025.	1.8	15
18	Shaping Resistive Bend Sensors to Enhance Readout Linearity. ISRN Electronics, 2012, 2012, 1-7.	1.1	13

CITATION REPORT

#	Article	IF	CITATIONS
19	Design and evaluation of a low-cost instrumented glove for hand function assessment. Journal of NeuroEngineering and Rehabilitation, 2012, 9, 2.	2.4	84
20	Synergy-based hand pose sensing: Reconstruction enhancement. International Journal of Robotics Research, 2013, 32, 396-406.	5.8	34
21	Synergy-based hand pose sensing: Optimal glove design. International Journal of Robotics Research, 2013, 32, 407-424.	5.8	46
22	A Sensorized Glove and Ball for Monitoring Hand Rehabilitation Therapy in Stroke Patients. , 2013, , .		6
23	The Manumeter: A non-obtrusive wearable device for monitoring spontaneous use of the wrist and fingers. , 2013, 2013, 6650397.		17
24	The Manumeter: A Wearable Device for Monitoring Daily Use of the Wrist and Fingers. IEEE Journal of Biomedical and Health Informatics, 2014, 18, 1804-1812.	3.9	76
25	Feasibility of teleoperations with multi-fingered robotic hand for safe extravehicular manipulations. Aerospace Science and Technology, 2014, 39, 666-674.	2.5	23
26	Training finger individuation with a mechatronic-virtual reality system leads to improved fine motor control post-stroke. Journal of NeuroEngineering and Rehabilitation, 2014, 11, 171.	2.4	76
27	Smart wearable body sensors for patient self-assessment and monitoring. Archives of Public Health, 2014, 72, 28.	1.0	333
28	Assessment of hand kinematics using inertial and magnetic sensors. Journal of NeuroEngineering and Rehabilitation, 2014, 11, 70.	2.4	133
29	Development and evaluation of a novel low-cost sensor-based knee flexion angle measurement system. Knee, 2014, 21, 896-901.	0.8	28
30	A novel array of flex sensors for a goniometric glove. Sensors and Actuators A: Physical, 2014, 205, 119-125.	2.0	75
31	Using inertial and magnetic sensors for hand tracking and rendering in wearable haptics. , 2015, , .		7
32	Mobile application with simple moving average filtering for monitoring finger muscles therapy of post-stroke people. , 2015, , .		4
33	A low power miniaturized monitoring system of six human physiological parameters based on wearable body sensor network. Sensor Review, 2015, 35, 210-218.	1.0	23
34	A proposed optical-based sensor for assessment of hand movement. , 2015, , .		8
35	Data glove embedded with 9-axis IMU and force sensing sensors for evaluation of hand function. , 2015, 2015, 4631-4.		30
36	Egocentric Object Recognition Leveraging the 3D Shape of the Grasping Hand. Lecture Notes in Computer Science, 2015, , 746-762.	1.0	1

#	Article	IF	CITATIONS
37	Objective Surgical Skill Assessment: An Initial Experience by Means of a Sensory Glove Paving the Way to Open Surgery Simulation?. Journal of Surgical Education, 2015, 72, 910-917.	1.2	26
38	Wearable soft artificial skin for hand motion detection with embedded microfluidic strain sensing. , 2015, , .		82
39	Effects on interface pressure and tissue oxygenation under ischial tuberosities during the application of an alternating cushion. Journal of Tissue Viability, 2015, 24, 91-101.	0.9	8
40	Home-based therapy of chronic stroke survivors' Upper limb assisted by a finger movement tracking device. , 2015, , .		2
41	LOVETT scalling with MYO armband for monitoring finger muscles therapy of post-stroke people. , 2016, , .		7
42	A low-cost sensor glove with vibrotactile feedback and multiple finger joint and hand motion sensing for human-robot interaction. , 2016, , .		30
43	A novel distributed functional electrical stimulation and assessment system for hand movements using wearable technology. , 2016, , .		8
44	Development and evaluation of a sensor glove for hand function assessment and preliminary attempts at assessing hand coordination. Measurement: Journal of the International Measurement Confederation, 2016, 93, 1-12.	2.5	28
45	Resistive flex sensors: a survey. Smart Materials and Structures, 2016, 25, 013001.	1.8	112
46	A remote quantitative Fugl-Meyer assessment framework for stroke patients based on wearable sensor networks. Computer Methods and Programs in Biomedicine, 2016, 128, 100-110.	2.6	97
47	Design and Evaluation of a 3-D Printed Optical Sensor for Monitoring Finger Flexion. IEEE Sensors Journal, 2017, 17, 1937-1944.	2.4	22
48	A piezo-resistive graphene strain sensor with a hollow cylindrical geometry. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2017, 219, 20-27.	1.7	36
49	A System for Simultaneous Finger Joints Goniometric Measurements Based on Inertial Sensors. IEEE Latin America Transactions, 2017, 15, 1821-1826.	1.2	2
50	GESTO: A Glove for Enhanced Sensing and Touching Based on Inertial and Magnetic Sensors for Hand Tracking and Cutaneous Feedback. IEEE Transactions on Human-Machine Systems, 2017, 47, 1066-1076.	2.5	61
51	A springs actuated finger exoskeleton: From mechanical design to spring variables evaluation. , 2017, 2017, 1319-1325.		6
52	IMU Sensor-based Electronic Goniometric Glove (iSEG-Glove) for clinical finger movement analysis. IEEE Sensors Journal, 2017, , 1-1.	2.4	58
53	A Novel Finger-Worn Sensor for Ambulatory Monitoring of Hand Use. , 2017, , .		4
54	Hand in air tapping: A wearable input technology to type wireless. , 2017, , .		6

		CITATION R	EPORT	
#	Article		IF	Citations
55	A Two-Axis Goniometric Sensor for Tracking Finger Motion. Sensors, 2017, 17, 770.		2.1	21
56	Flex sensor characterization against shape and curvature changes. Sensors and Actuators 2018, 273, 221-231.	A: Physical,	2.0	41
57	Development of a smart garment for monitoring body postures based on FBG and flex se technologies. Sensors and Actuators A: Physical, 2018, 272, 153-160.	nsing	2.0	33
58	Wearable sensors for clinical applications in epilepsy, Parkinson's disease, and stroke mixed-methods systematic review. Journal of Neurology, 2018, 265, 1740-1752.	а	1.8	140
59	A Wearable Detector for Simultaneous Finger Joint Motion Measurement. IEEE Transactic Biomedical Circuits and Systems, 2018, 12, 644-654.	ns on	2.7	45
60	Wrist Movement Detector for ROS Based Control of the Robotic Hand. Advances in Robo Automation, 2018, 07, .	tics &	0.2	2
61	A Novel All-in-One Manufacturing Process for a Soft Sensor System and its Application to Sensing Glove. , 2018, , .	a Soft		9
62	Sensory Systems for Human Body Gesture Recognition and Motion Capture. , 2018, , .			9
63	Development of Finger Motion Reconstruction System Based on Leap Motion Controller.	,2018,,.		6
64	Design of Digital Gloves with Feedback for VR. , 2018, , .			4
65	Evaluation of an integrated sensory glove at decreasing joint flexion degree. , 2018, , .			7
66	Application of the artificial neural network method to detect defective assembling proces a wearable technology. Journal of Manufacturing Systems, 2018, 49, 163-171.	ses by using	7.6	44
67	An instrumented glove for monitoring hand function. Review of Scientific Instruments, 20 105001.)18, 89,	0.6	8
68	Position Control of a Soft Prosthetic Finger with Limited Feedback Information. , 2018, , .			1
69	Wearable system with embedded force sensors for neurologic rehabilitation trainings. , 2	018,,.		10
70	Interactive hand pose estimation using a stretch-sensing soft glove. ACM Transactions or 2019, 38, 1-15.	Graphics,	4.9	103
71	Tracing the Motion of Finger Joints for Gesture Recognition via Sewing RGO-Coated Fiber Textile Glove. IEEE Sensors Journal, 2019, 19, 9504-9511.	s Onto a	2.4	44
72	A Platform for Rehabilitation of Finger Individuation in Children with Hemiplegic Cerebral 2019, 2019, 343-348.	Palsy. ,		7

CITATION REPORT

#	Article	IF	CITATIONS
73	Flex Sensor Compensator via Hammerstein–Wiener Modeling Approach for Improved Dynamic Goniometry and Constrained Control of a Bionic Hand. Sensors, 2019, 19, 3896.	2.1	6
74	An upper body garment with integrated sensors for people with neurological disorders – early development and evaluation. BMC Biomedical Engineering, 2019, 1, 3.	1.7	13
75	A novel flex sensor-based flexible smart garment for monitoring body postures. Journal of Industrial Textiles, 2019, 49, 262-274.	1.1	17
76	Stretchable e-Skin Patch for Gesture Recognition on the Back of the Hand. IEEE Transactions on Industrial Electronics, 2020, 67, 647-657.	5.2	32
77	A fiber Bragg grating-based smart wearable belt for monitoring knee joint postures. Textile Reseach Journal, 2020, 90, 386-394.	1.1	27
78	Development and evaluation of wearable electro-goniometer for the assessment of repetitive efforts and measurement of joint trajectories during carpet weaving. International Journal of Business and Systems Research, 2020, 14, 314.	0.2	0
79	Parkinson's disease: current assessment methods and wearable devices for evaluation of movement disorder motor symptoms - a patient and healthcare professional perspective. BMC Neurology, 2020, 20, 419.	0.8	39
80	Static accuracy of resistive bend sensors. , 2020, 2020, 4672-4675.		Ο
81	A Review on Human Healthcare Internet of Things: A Technical Perspective. SN Computer Science, 2020, 1, 1.	2.3	30
82	Heartrate variability biofeedback for migraine using a smartphone application and sensor: A randomized controlled trial. General Hospital Psychiatry, 2021, 69, 41-49.	1.2	18
83	Design and Evaluation of an FBG Sensor-Based Glove to Simultaneously Monitor Flexure of Ten Finger Joints. IEEE Sensors Journal, 2021, 21, 7620-7630.	2.4	22
84	Measurements comparison of finger joint angles in hand postures between an sEMG armband and a sensory glove. Biocybernetics and Biomedical Engineering, 2021, 41, 605-616.	3.3	8
85	Design of Instrumented Glove for Hand Motion Evaluation. , 2021, , .		2
86	A Weft Knit Data Glove. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-12.	2.4	7
87	New Device for Intrinsic Hand Muscle Strength Measurement: An Alternative to Strain Gauge Handheld Dynamometer. Evaluation and the Health Professions, 2019, 42, 103-113.	0.9	4
89	Glove-based systems for medical applications: review of recent advancements. Journal of Textile Engineering & Fashion Technology, 2018, 4, .	0.1	6
90	Rehabilitation Glove Device Design. Journal of Engineering Technology and Applied Sciences, 2018, 3, 75-81.	0.2	4
91	Wireless Sensory Glove System developed for advanced Human Computer Interface. International Journal of Information Science, 2012, 2, 54-59.	0.2	3

		CITATION REPORT	
#	Article	IF	CITATIONS
92	Sensorized Garments Developed for Remote Postural and Motor Rehabilitation. , 2013, , 265-289.		0
93	Combined Ambient and Wearable Sensors for Gesture-Based Environmental Control in the Home. Advances in Computational Intelligence and Robotics Book Series, 2015, , 1-21.	0.4	0
94	Sensorized Garments Developed for Remote Postural and Motor Rehabilitation. , 2015, , 511-536.		0
95	Synergy-Based Optimal Sensing Techniques for Hand Pose Reconstruction. Springer Series on Toucl and Haptic Systems, 2016, , 259-283.	h 0.2	0
96	LOVETT Scaling with Flex Sensor and MYO Armband for Monitoring Finger Muscles Therapy of Post-Stroke People. Emitter: International Journal of Engineering Technology, 2015, 3, .	0.7	2
97	Robotic Hand Control with a Remote Sensory Glove. International Journal of Mechanical Engineering and Robotics Research, 2020, , 727-732.	g 0.7	0
98	Wearables for Neurologic Conditions: Considerations for Our Patients and Research Limitations. Neurology: Clinical Practice, 2021, 11, e537-e543.	0.8	0
99	Wearables for Neurologic Conditions. Neurology: Clinical Practice, 2021, 11, e537-e543.	0.8	6
100	A Low Cost sEMG Development Platform for Hand Joint Angle Acquisition. , 2020, , .		1
101	Development and evaluation of a novel flex sensor-based glenohumeral subluxation degree assessment for wearable shoulder sling. Sensors and Actuators A: Physical, 2022, 337, 113405.	2.0	3
102	Improving Data Glove Accuracy and Usability Using a Neural Network When Measuring Finger Joint Range of Motion. Sensors, 2022, 22, 2228.	2.1	6
103	Design and Implementation of an Instrumented Data Glove that measures Kinematics and Dynamics Human Hand. , 2021, 2021, 7229-7232.	s of	3
104	High Compliance Pneumatic Actuators to Promote Finger Extension in Stroke Survivors. , 2021, 202 4588-4591.	21,	0
105	Optimal Reconstruction of Human Motion From Scarce Multimodal Data. IEEE Transactions on Human-Machine Systems, 2022, 52, 833-842.	2.5	3
107	Measurement of upper limb function in ALS: a structured review of current methods and future directions. Journal of Neurology, 2022, 269, 4089-4101.	1.8	3
109	Artificial Intelligence Hand Spatial Position Predictor Based on Data Gloves and Jetson Xavier NX. , 2022, , .		0
110	A Curvature Sensor Utilizing the Matteucci Effect in Amorphous Wire. Sensors, 2023, 23, 1243.	2.1	3
111	Dynamic Measurement Assessments of Sensory Gloves Based on Resistive Flex Sensors and Inertial Measurement Units. IEEE Transactions on Instrumentation and Measurement, 2023, 72, 1-10.	2.4	2

		CITATION RE	IPORT	
# 112	ARTICLE Smart Wearable Sensor Design Techniques For Mobile Health Care Solutions. , 2023, ,	204-222.	IF	Citations 0
113	Quantitative assessments of finger individuation with an instrumented glove. Journal o NeuroEngineering and Rehabilitation, 2023, 20, .	f	2.4	2
115	Multimodal Augmented Feedback for Functional Grasp Training Using a Smart Glove ar Reality for Persons with Spinal Cord Injury. , 2023, , .	nd Virtual		0
116	EEG and Motor Effects of Multimodal Feedback to Train Functional Grasp after Traumar , 2023, , .	tic Brain Injury.		0
119	Force Feedback Glove Design for Virtual Reality Applications. , 2023, , .			0
120	Fusion of Sensory and Motor Performance Toward a Sophisticated Prosthetic Hand. , 2	023,,.		0