Sunghoon Ivan Lee

List of Publications by Year
in descending order

41 papers	789 citations	623734 14 h-index	580821 25 g-index
42 all docs	42 docs citations	42 times ranked	901 citing authors

#	Article	IF	Citations
1	Ubiquitous Smartphone-Based Respiration Sensing With Wi-Fi Signal. IEEE Internet of Things Journal, 2022, 9, 1479-1490.	8.7	12
2	Estimating Ground Reaction Force and Center of Pressure Using Low-Cost Wearable Devices. IEEE Transactions on Biomedical Engineering, 2022, 69, 1461-1468.	4.2	12
3	Analysis of Gait Sub-Movements to Estimate Ataxia Severity Using Ankle Inertial Data. IEEE Transactions on Biomedical Engineering, 2022, 69, 2314-2323.	4.2	13
4	A Kinematic Data-Driven Approach to Differentiate Involuntary Choreic Movements in Individuals With Neurological Conditions. IEEE Transactions on Biomedical Engineering, 2022, 69, 3784-3791.	4.2	4
5	Predicting and Monitoring Upper-Limb Rehabilitation Outcomes Using Clinical and Wearable Sensor Data in Brain Injury Survivors. IEEE Transactions on Biomedical Engineering, 2021, 68, 1871-1881.	4.2	19
6	Enabling Batteryless Wearable Devices by Transferring Power Through The Human Body. GetMobile (New York, N Y), 2021, 24, 30-34.	1.0	1
7	Decomposition of Reaching Movements Enables Detection and Measurement of Ataxia. Cerebellum, 2021, 20, 811-822.	2.5	33
8	Estimating the Quality of Reaching Movements in Stroke Survivors. , 2021, , .		1
9	LIDS: Mobile System to Monitor Type and Volume of Liquid Intake. IEEE Sensors Journal, 2021, 21, 20750-20763.	4.7	1
10	Effectiveness of a Serious Game for Cognitive Training in Chronic Stroke Survivors with Mild-to-Moderate Cognitive Impairment: A Pilot Randomized Controlled Trial. Applied Sciences (Switzerland), 2020, 10, 6703.	2.5	10
11	Enabling precision rehabilitation interventions using wearable sensors and machine learning to track motor recovery. Npj Digital Medicine, 2020, 3, 121.	10.9	55
12	Can mHealth Technology Help Mitigate the Effects of the COVID-19 Pandemic?. IEEE Open Journal of Engineering in Medicine and Biology, 2020, 1, 243-248.	2.3	69
13	A Simple Low-Cost Wearable Sensor for Long-Term Ambulatory Monitoring of Knee Joint Kinematics. IEEE Transactions on Biomedical Engineering, 2020, 67, 3483-3490.	4.2	16
14	Estimating Upper-Limb Impairment Level in Stroke Survivors Using Wearable Inertial Sensors and a Minimally-Burdensome Motor Task. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 601-611.	4.9	36
15	Rehabilitation Games in Real-World Clinical Settings. ACM Transactions on Computer-Human Interaction, 2020, 27, 1-43.	5.7	10
16	A Wearable RFID System to Monitor Hand Use for Individuals with Upper Limb Paresis. , 2019, , .		6
17	SkinnyPower. , 2019, , .		17
18	Remote Assessment of Cognitive Impairment Level Based on Serious Mobile Game Performance: An Initial Proof of Concept. IEEE Journal of Biomedical and Health Informatics, 2019, 23, 1269-1277.	6.3	26

#	Article	IF	Citations
19	A novel upper-limb function measure derived from finger-worn sensor data collected in a free-living setting. PLoS ONE, 2019, 14, e0212484.	2.5	32
20	Predicting Cognitive Impairment Level after a Serious Game-based Therapy in Chronic Stroke Survivors. , 2019, , .		3
21	The Use of a Finger-Worn Accelerometer for Monitoring of Hand Use in Ambulatory Settings. IEEE Journal of Biomedical and Health Informatics, 2019, 23, 599-606.	6.3	26
22	Towards the Design of a Ring Sensor-based mHealth System to Achieve Optimal Motor Function in Stroke Survivors. , 2019, 3, 1-26.		14
23	Enabling Stroke Rehabilitation in Home and Community Settings: A Wearable Sensor-Based Approach for Upper-Limb Motor Training. IEEE Journal of Translational Engineering in Health and Medicine, 2018, 6, 1-11.	3.7	75
24	A wearable monitoring system for at-home stroke rehabilitation exercises: A preliminary study. , 2018, , .		6
25	Finger-Worn Sensors for Accurate Functional Assessment of the Upper Limbs in Real-World Settings. , 2018, 2018, 4440-4443.		4
26	Towards the Ambulatory Assessment of Movement Quality in Stroke Survivors using a Wrist-worn Inertial Sensor. , 2018, 2018, 2825-2828.		5
27	A Finger-Worn Ring Sensor to Capture Hand Movements in an Ambulatory Setting. Archives of Physical Medicine and Rehabilitation, 2017, 98, e26.	0.9	3
28	Using a Minimum Set of Wearable Sensors to Assess Quality of Movement in Stroke Survivors. , 2017, , .		6
29	Estimating Bradykinesia in Parkinson's Disease with a Minimum Number of Wearable Sensors. , 2017, , .		12
30	A Novel Finger-Worn Sensor for Ambulatory Monitoring of Hand Use. , 2017, , .		4
31	An Overview of Smart Shoes in the Internet of Health Things: Gait and Mobility Assessment in Health Promotion and Disease Monitoring. Applied Sciences (Switzerland), 2017, 7, 986.	2.5	105
32	Identifying predictors for postoperative clinical outcome in lumbar spinal stenosis patients using smart-shoe technology. Journal of NeuroEngineering and Rehabilitation, 2017, 14, 77.	4.6	13
33	Unobtrusive and Continuous Monitoring of Alcohol-impaired Gait Using Smart Shoes. Methods of Information in Medicine, 2017, 56, 74-82.	1.2	21
34	Using Wearable Motion Sensors to Estimate Longitudinal Changes in Movement Quality in Stroke and Traumatic Brain Injury Survivors Undergoing Rehabilitation. Archives of Physical Medicine and Rehabilitation, 2016, 97, e117.	0.9	8
35	A novel flexible wearable sensor for estimating joint-angles. , 2016, , .		7
36	User-optimized activity recognition for exergaming. Pervasive and Mobile Computing, 2016, 26, 3-16.	3.3	9

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37	Objectively quantifying walking ability in degenerative spinal disorder patients using sensor equipped smart shoes. Medical Engineering and Physics, 2016, 38, 442-449.	1.7	33
38	A Prediction Model for Functional Outcomes in Spinal Cord Disorder Patients Using Gaussian Process Regression. IEEE Journal of Biomedical and Health Informatics, 2016, 20, 91-99.	6.3	19
39	Multiple model recognition for near-realistic exergaming. , 2015, , .		1
40	Use of multivariate linear regression and support vector regression to predict functional outcome after surgery for cervical spondylotic myelopathy. Journal of Clinical Neuroscience, 2015, 22, 1444-1449.	1.5	32
41	A Pervasive Assessment of Motor Function: A Lightweight Grip Strength Tracking System. IEEE Journal of Biomedical and Health Informatics, 2013, 17, 1023-1030.	6.3	8