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	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
2	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
3	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
4	Enabling precision rehabilitation interventions using wearable sensors and machine learning to track motor recovery. Npj Digital Medicine, 2020, 3, 121.	10.9	55
5	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
6	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
7	Decomposition of Reaching Movements Enables Detection and Measurement of Ataxia. Cerebellum, 2021, 20, 811-822.	2.5	33
8	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
9	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
10	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
11	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
12	Unobtrusive and Continuous Monitoring of Alcohol-impaired Gait Using Smart Shoes. Methods of Information in Medicine, 2017, 56, 74-82.	1.2	21
13	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
14	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
15	SkinnyPower. , 2019, , .		17
16	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
17	Towards the Design of a Ring Sensor-based mHealth System to Achieve Optimal Motor Function in Stroke Survivors. , 2019, 3, 1-26.		14
18	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

#	Article	IF	Citations
19	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
20	Estimating Bradykinesia in Parkinson's Disease with a Minimum Number of Wearable Sensors. , 2017, , .		12
21	Ubiquitous Smartphone-Based Respiration Sensing With Wi-Fi Signal. IEEE Internet of Things Journal, 2022, 9, 1479-1490.	8.7	12
22	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
23	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
24	Rehabilitation Games in Real-World Clinical Settings. ACM Transactions on Computer-Human Interaction, 2020, 27, 1-43.	5.7	10
25	User-optimized activity recognition for exergaming. Pervasive and Mobile Computing, 2016, 26, 3-16.	3.3	9
26	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
27	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
28	A novel flexible wearable sensor for estimating joint-angles. , 2016, , .		7
29	Using a Minimum Set of Wearable Sensors to Assess Quality of Movement in Stroke Survivors. , 2017, , .		6
30	A wearable monitoring system for at-home stroke rehabilitation exercises: A preliminary study. , 2018, , .		6
31	A Wearable RFID System to Monitor Hand Use for Individuals with Upper Limb Paresis. , 2019, , .		6
32	Towards the Ambulatory Assessment of Movement Quality in Stroke Survivors using a Wrist-worn Inertial Sensor. , 2018, 2018, 2825-2828.		5
33	A Novel Finger-Worn Sensor for Ambulatory Monitoring of Hand Use. , 2017, , .		4
34	Finger-Worn Sensors for Accurate Functional Assessment of the Upper Limbs in Real-World Settings. , 2018, 2018, 4440-4443.		4
35	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
36	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

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37	Predicting Cognitive Impairment Level after a Serious Game-based Therapy in Chronic Stroke Survivors. , 2019, , .		3
38	Multiple model recognition for near-realistic exergaming. , 2015, , .		1
39	Enabling Batteryless Wearable Devices by Transferring Power Through The Human Body. GetMobile (New York, N Y), 2021, 24, 30-34.	1.0	1
40	Estimating the Quality of Reaching Movements in Stroke Survivors. , 2021, , .		1
41	LIDS: Mobile System to Monitor Type and Volume of Liquid Intake. IEEE Sensors Journal, 2021, 21, 20750-20763.	4.7	1