Young Soo Suh

List of Publications by Year
in descending order

72 papers	1,527 citations	361413 20 h-index	315739 38 g-index
72 all docs	72 docs citations	72 times ranked	1403 citing authors

#	Article	IF	Citations
1	Stability and stabilization of nonuniform sampling systems. Automatica, 2008, 44, 3222-3226.	5.0	245
2	Orientation Estimation Using a Quaternion-Based Indirect Kalman Filter With Adaptive Estimation of External Acceleration. IEEE Transactions on Instrumentation and Measurement, 2010, 59, 3296-3305.	4.7	205
3	A Zero Velocity Detection Algorithm Using Inertial Sensors for Pedestrian Navigation Systems. Sensors, 2010, 10, 9163-9178.	3.8	146
4	Modified Kalman filter for networked monitoring systems employing a send-on-delta method. Automatica, 2007, 43, 332-338.	5.0	96
5	Send-On-Delta Sensor Data Transmission With A Linear Predictor. Sensors, 2007, 7, 537-547.	3.8	71
6	Golf Swing Motion Tracking Using Inertial Sensors and a Stereo Camera. IEEE Transactions on Instrumentation and Measurement, 2014, 63, 943-952.	4.7	54
7	Improving Estimation Performance in Networked Control Systems Applying the Send-on-delta Transmission Method. Sensors, 2007, 7, 2128-2138.	3.8	53
8	A robust fault diagnosis and accommodation scheme for robot manipulators. International Journal of Control, Automation and Systems, 2013, 11, 377-388.	2.7	52
9	Inertial Sensor-Based Two Feet Motion Tracking for Gait Analysis. Sensors, 2013, 13, 5614-5629.	3.8	52
10	Networked Estimation with an Area-Triggered Transmission Method. Sensors, 2008, 8, 897-909.	3.8	43
11	A Virtual Blind Cane Using a Line Laser-Based Vision System and an Inertial Measurement Unit. Sensors, 2016, 16, 95.	3.8	36
12	Gait Analysis Using Floor Markers and Inertial Sensors. Sensors, 2012, 12, 1594-1611.	3.8	34
13	Pedestrian Navigation Using Foot-Mounted Inertial Sensor and LIDAR. Sensors, 2016, 16, 120.	3.8	28
14	Pedestrian inertial navigation with gait phase detection assisted zero velocity updating. , 2009, , .		27
15	Quaternion-Based Indirect Kalman Filter Discarding Pitch and Roll Information Contained in Magnetic Sensors. IEEE Transactions on Instrumentation and Measurement, 2012, 61, 1786-1792.	4.7	27
16	Laser Sensors for Displacement, Distance and Position. Sensors, 2019, 19, 1924.	3.8	25
17	Networked Estimation for Event-Based Sampling Systems with Packet Dropouts. Sensors, 2009, 9, 3078-3089.	3.8	24
18	Human Gait Tracking for Normal People and Walker Users Using a 2D LiDAR. IEEE Sensors Journal, 2020, 20, 6191-6199.	4.7	24

#	Article	IF	Citations
19	A Smoother for Attitude and Position Estimation Using Inertial Sensors With Zero Velocity Intervals. IEEE Sensors Journal, 2012, 12, 1255-1262.	4.7	21
20	Inertial Sensor-Based Smoother for Gait Analysis. Sensors, 2014, 14, 24338-24357.	3.8	21
21	Foot Pose Estimation Using an Inertial Sensor Unit and Two Distance Sensors. Sensors, 2015, 15, 15888-15902.	3.8	20
22	Walking Parameters Estimation Based on a Wrist-Mounted Inertial Sensor for a Walker User. IEEE Sensors Journal, 2017, 17, 2100-2108.	4.7	14
23	Distance estimation using inertial sensor and vision. International Journal of Control, Automation and Systems, 2013, 11, 211-215.	2.7	13
24	Walking Distance Estimation Using Walking Canes with Inertial Sensors. Sensors, 2018, 18, 230.	3.8	13
25	Simple-Structured Quaternion Estimator Separating Inertial and Magnetic Sensor Effects. IEEE Transactions on Aerospace and Electronic Systems, 2019, 55, 2698-2706.	4.7	13
26	Conditional Generative Adversarial Network-Based Regression Approach for Walking Distance Estimation Using Waist-Mounted Inertial Sensors. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-13.	4.7	12
27	Diagonal balanced truncation of discrete delay systems. Automatica, 1999, 35, 1855-1860.	5.0	9
28	Height Compensation Using Ground Inclination Estimation in Inertial Sensor-Based Pedestrian Navigation. Sensors, 2011, 11, 8045-8059.	3.8	9
29	Gait velocity estimation for a smartwatch platform using Kalman filter peak recovery. , 2016, , .		9
30	Robust control of a quad-rotor aerial vehicle. International Journal of Applied Electromagnetics and Mechanics, 2003, 18, 103-114.	0.6	8
31	Attitude estimation using accelerometers with constrained external acceleration. , 2010, , .		8
32	Kalman-Filter-Based Walking Distance Estimation for a Smart-Watch. , 2016, , .		8
33	Computationally Efficient Pitch and Roll Estimation Using a Unit Direction Vector. IEEE Transactions on Instrumentation and Measurement, 2018, 67, 459-465.	4.7	8
34	A visual-inertial servoing method for tracking object with two landmarks and an inertial measurement unit. International Journal of Control, Automation and Systems, 2011, 9, 317-327.	2.7	7
35	Sensor Saturation Compensated Smoothing Algorithm for Inertial Sensor Based Motion Tracking. Sensors, 2014, 14, 8167-8188.	3.8	7
36	A simple smoother for attitude and position estimation using inertial sensor. International Journal of Control, Automation and Systems, 2016, 14, 1626-1630.	2.7	7

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37	Walking Monitoring for Users of Standard and Front-Wheel Walkers. IEEE Transactions on Instrumentation and Measurement, 2017, 66, 3289-3298.	4.7	7
38	Spline Function Simulation Data Generation for Walking Motion Using Foot-Mounted Inertial Sensors. Electronics (Switzerland), 2019, 8, 18.	3.1	7
39	Remote control of a moving robot using the virtual link. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	6
40	Walking Step Length Estimation Using Waist-Mounted Inertial Sensors With Known Total Walking Distance. IEEE Access, 2021, 9, 85476-85487.	4.2	6
41	Remote length measurement system using a single point laser distance sensor and an inertial measurement unit. Computer Standards and Interfaces, 2017, 50, 153-159.	5.4	5
42	Networked control systems using H/sub 2/ multirate control. , 0, , .		4
43	H/sub 2/ networked servo control systems with time-varying delays. , 0, , .		4
44	Inertial and Magnetic Sensor Data Compression Considering the Estimation Error. Sensors, 2009, 9, 5919-5932.	3.8	4
45	Speed control of a PMSM motor based on the new disturbance observer. , 0, , .		3
46	Walking distance estimation of a walker user using a wrist-mounted IMU. , 2017, , .		3
47	Neck Flexion Angle Estimation during Walking. Journal of Sensors, 2017, 2017, 1-9.	1.1	3
48	Histogram Feature-Based Approach for Walking Distance Estimation Using a Waist-Mounted IMU. IEEE Sensors Journal, 2020, 20, 12354-12363.	4.7	3
49	l $_1$ Norm Regularization Robust Attitude Smoother Using Inertial and Magnetic Sensors. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-9.	4.7	3
50	Golf Green Slope Estimation Using a Cross Laser Structured Light System and an Accelerometer. Journal of Electrical Engineering and Technology, 2016, 11, 508-518.	2.0	3
51	3D dynamics analysis of a golf full swing by fusing inertial sensor and vision data. , 2013, , .		2
52	A Sensor-Fusing System for Spatial Circle and Trunk Parameter Estimation. Journal of Circuits, Systems and Computers, 2016, 25, 1650117.	1.5	2
53	Step Length Estimation on a Slope Using Accelerometers and a Barometer. Journal of Institute of Control, Robotics and Systems, 2013, 19, 334-340.	0.2	2
54	Stability of time delay systems using numerical computation of argument principles. , 0, , .		1

#	ARTICLE	IF	CITATIONS
55	Kalman filter for output delay systems. , 0, , .		1
56	Networked Kalman Filter with Sensor Transmission Interval Optimization. , 2006, , .		1
57	A smoother for attitude estimation using inertial and magnetic sensors. , 2010, , .		1
58	A computationally efficient suboptimal smoother for attitude and position estimation using inertial sensors. , 2015, , .		1
59	Inertial motion tracking using sensor saturation compensation with l 1 norm regularization. International Journal of Control, Automation and Systems, 2017, 15, 2001-2012.	2.7	1
60	Pedestrian navigation algorithm using inertial-based walking stick. , 2017, , .		1
61	Robust Self-Calibration for Rectangle Shape UWB Anchor Locations. , 2019, , .		1
62	Opportunistic Calibration Method for Walking Distance Estimation Using a Waist-Mounted Inertial Sensor. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 7906-7913.	4.7	1
63	Human Gait Estimation Using Multiple 2D LiDARs. IEEE Access, 2021, 9, 56881-56892.	4.2	1
64	Stability Condition of State-Delayed Systems Based on Stability-Guaranteed Discretization. Transactions of the Society of Instrument and Control Engineers, 1997, 33, 403-408.	0.2	1
65	ESTIMATION ALGORITHM FOR SEQUENTIAL TRANSMISSION OF SENSOR DATA. Journal of Circuits, Systems and Computers, 2009, 18, 1493-1504.	1.5	0
66	Optimization of the Sampling Periods and the Quantization Bit Lengths for Networked Estimation. Sensors, 2010, 10, 6406-6420.	3.8	0
67	Trajectory generation of a mobile robot using inertial sensors and vision. , 2011, , .		0
68	Indoor Magnetic Signature Based Localization Algorithm without Person-Dependent Parameter Calibration. Sensors, 2014, 14, 14375-14398.	3.8	0
69	Attitude and vertical movement smoother using a unit vector representation. , 2017, , .		0
70	Improved Single Inertial-Sensor-Based Attitude Estimation during Walking Using Velocity-Aided Observation. Sensors, 2021, 21, 3428.	3.8	0
71	Modified Balanced Truncation of State Delay Systems. Transactions of the Society of Instrument and Control Engineers, 1999, 35, 896-903.	0.2	0
72	Stability of discrete state delay systems. , 0, , .		0