Chan Gook Park

List of Publications by Year
in descending order

124 papers	1,793 citations	304743 22 h-index	315739 38 g-index
124 all docs	124 docs citations	124 times ranked	1641 citing authors

#	Article	IF	Citations
1	Monocular Visual-Inertial-Wheel Odometry Using Low-Grade IMU in Urban Areas. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 925-938.	8.0	20
2	Information Fusion for Cooperative Indoor Positioning Using BÃ©zier Curves. IEEE Sensors Journal, 2022, 22, 5063-5074.	4.7	1
3	A Zero-Velocity Detection Algorithm Robust to Various Gait Types for Pedestrian Inertial Navigation. IEEE Sensors Journal, 2022, 22, 4916-4931.	4.7	4
4	Lightweight Marginalized Particle Filtering With Enhanced Consistency for Terrain Referenced Navigation. IEEE Transactions on Aerospace and Electronic Systems, 2022, 58, 2493-2504.	4.7	8
5	SMC-CPHD Filter with Adaptive Survival Probability for Multiple Frequency Tracking. Applied Sciences (Switzerland), 2022, 12, 1369.	2.5	4
6	Photometric Visual-Inertial Navigation With Uncertainty-Aware Ensembles. IEEE Transactions on Robotics, 2022, 38, 2039-2052.	10.3	7
7	Guest Editorial Special Issue on Advanced Sensors and Sensing Technologies for Indoor Positioning and Navigation. IEEE Sensors Journal, 2022, 22, 4754-4754.	4.7	0
8	Object-based Visual-Inertial Navigation System on Matrix Lie Group. , 2022, , .		3
9	Ensemble Kalman Filter Based LiDAR Odometry for Skewed Point Clouds Using Scan Slicing. , 2022, , .		2
10	A Study of the Applicability of a MEMS Oscillator for GNSS Receivers According to Environmental Tests. International Journal of Aeronautical and Space Sciences, 2021, 22, 397-414.	2.0	0
11	Robust Pedestrian Dead Reckoning for Multiple Poses in Smartphones. IEEE Access, 2021, 9, 54498-54508.	4.2	15
12	Distributed GM-CPHD Filter Based on Generalized Inverse Covariance Intersection. IEEE Access, 2021, 9, 94078-94086.	4.2	5
13	Point-Mass Filtering With Boundary Flow and Its Application to Terrain Referenced Navigation. IEEE Transactions on Aerospace and Electronic Systems, 2021, 57, 3600-3613.	4.7	2
14	Novel Methods of Mitigating Lever Arm Effect in Redundant IMU. IEEE Sensors Journal, 2021, 21, 9465-9474.	4.7	7
15	Mitigation of a Heading Drift in Pedestrian Dead-reckoning Caused by the Sensor Bandwidth. International Journal of Control, Automation and Systems, 2021, 19, 2882-2890.	2.7	2
16	Parameter Estimation of Radar Noise Model for Terrain Referenced Navigation Using a New EM Initialization Method. IEEE Transactions on Aerospace and Electronic Systems, 2020, 56, 107-112.	4.7	8
17	The Effectiveness of Acceleration Matching According to the Sensor Performance in Shipboard Rapid Transfer Alignment. Journal of Navigation, 2020, 73, 1-15.	1.7	7
18	Robust aerial scene-matching algorithm based on relative velocity model. Robotics and Autonomous Systems, 2020, 124, 103372.	5.1	3

#	Article	IF	Citations
19	A Rapid and Adaptive Alignment under Mooring Condition Using Adaptive EKF and CNN-Based Learning. Sensors, 2020, 20, 4069.	3.8	3
20	Constrained Filtering-based Fusion of Images, Events, and Inertial Measurements for Pose Estimation. , 2020, , .		3
21	The IPIN 2019 Indoor Localisation Competitionâ€"Description and Results. IEEE Access, 2020, 8, 206674-206718.	4.2	37
22	Image-Based Monte-Carlo Localization With Information Allocation Logic to Mitigate Shadow Effect. IEEE Access, 2020, 8, 213447-213459.	4.2	2
23	Context Awareness and Step Length Estimation by Shape Distance and H-Features. International Journal of Control, Automation and Systems, 2020, 18, 3051-3061.	2.7	2
24	Observability Analysis of IMU Intrinsic Parameters in Stereo Visualâ€"Inertial Odometry. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 7530-7541.	4.7	27
25	Multiple Frequency Tracking and Mitigation Based on RSPWVD and Adaptive Multiple Linear Kalman Notch Filter. International Journal of Control, Automation and Systems, 2020, 18, 1139-1149.	2.7	2
26	Adaptive Attitude Estimation for Low-Cost MEMS IMU Using Ellipsoidal Method. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 7082-7091.	4.7	23
27	Design of a GNSS Antenna to Prevent LNA Saturation and Intermodulation Caused by S-Band Signals. International Journal of Aeronautical and Space Sciences, 2020, 21, 780-789.	2.0	0
28	A Reinforcement Learning-Based Path Planning Considering Degree of Observability. Proceedings of International Conference on Artificial Life and Robotics, 2020, 25, 502-505.	0.1	0
29	Auxiliary-Filter-Free Incompressible Particle Flow Filtering Using Direct Estimation of the Log-Density Gradient with Target Tracking Examples. IFAC-PapersOnLine, 2020, 53, 1268-1273.	0.9	2
30	Road Constrained Labeled Multi Bernoulli Filter based on PDF Truncation for Multi-Target Tracking. IFAC-PapersOnLine, 2020, 53, 15739-15744.	0.9	1
31	A Performance Analysis of Pose Estimation Based on Two-View Tracking and Multi-State Constraint Kalman Filter Fusion. Proceedings of International Conference on Artificial Life and Robotics, 2020, 25, 506-509.	0.1	0
32	Novel Motion Sensing Algorithm for Improving SAR Imaging by Parametric Error Modeling. International Journal of Aeronautical and Space Sciences, 2019, 20, 761-767.	2.0	2
33	Ensemble transform particle filter using regularized optimal transport and measure of nonlinearity. Measurement: Journal of the International Measurement Confederation, 2019, 146, 363-371.	5.0	4
34	Threshold-less Zero-Velocity Detection Algorithm for Pedestrian Dead Reckoning. , 2019, , .		12
35	Evaluating Indoor Positioning Systems in a Shopping Mall: The Lessons Learned From the IPIN 2018 Competition. IEEE Access, 2019, 7, 148594-148628.	4.2	60
36	Two Stage Particle Filter Based Terrain Referenced Navigation for Computational Efficiency. IEEE Sensors Journal, 2019, 19, 11396-11402.	4.7	6

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37	MEMS 3D DR/GPS Integrated System for Land Vehicle Application Robust to GPS Outages. IEEE Access, 2019, 7, 73336-73348.	4.2	17
38	Multi-target Tracking Based on Gaussian Mixture Labeled Multi-Bernoulli Filter with Adaptive Gating. , 2019, , .		4
39	Comparison of Step Length Estimation Models Using Inertial Sensor on Pelvis. , 2019, , .		0
40	Long-term Stability Analysis of Vertical Channel Damping and Kalman Filtering for Inertial Navigation System/Vertical Gauge. , 2019, , .		0
41	Frequency tracking and mitigation method based on CPHD filter and adaptive multiple linear Kalman notch filter for multiple GNSS interference. Navigation, Journal of the Institute of Navigation, 2019, 66, 803-830.	2.8	5
42	Rapid Initialization using Relative Pose Constraints in Stereo Visual-Inertial Odometry. , 2019, , .		2
43	EKF-Based Visual Inertial Navigation Using Sliding Window Nonlinear Optimization. IEEE Transactions on Intelligent Transportation Systems, 2019, 20, 2470-2479.	8.0	44
44	Patch-based Stereo Direct Visual Odometry Robust to Illumination Changes. International Journal of Control, Automation and Systems, 2019, 17, 743-751.	2.7	7
45	RBPPFF for robust TAN. IET Radar, Sonar and Navigation, 2019, 13, 2230-2243.	1.8	7
46	The Effect of Inertial Measurement Unit on Synthetic Aperture Radar Image Quality. Proceedings of International Conference on Artificial Life and Robotics, 2019, 24, 104-107.	0.1	0
47	Grid Design for Efficient and Accurate Point Mass Filter-Based Terrain Referenced Navigation. IEEE Sensors Journal, 2018, 18, 1731-1738.	4.7	24
48	An Adaptive Kalman Filtering Approach to Fourier Analysis for Estimating Various Chirp-Type GNSS Interference Frequencies. Navigation, Journal of the Institute of Navigation, 2018, 65, 3-13.	2.8	5
49	Consistent EKF-Based Visual-Inertial Odometry on Matrix Lie Group. IEEE Sensors Journal, 2018, 18, 3780-3788.	4.7	77
50	Adaptive complexâ€EKFâ€based DOA estimation for GPS spoofing detection. IET Signal Processing, 2018, 12, 174-181.	1.5	17
51	Analysis of the Fading Factor of an Adaptive Fading Kalman Filter under Ramp GNSS Fault Conditions. Transactions of the Japan Society for Aeronautical and Space Sciences, 2018, 61, 191-200.	0.7	2
52	Performance Analysis of Flash LiDAR Based TRN Using Different Correlation Functions. International Journal of Aeronautical and Space Sciences, 2018, 19, 986-993.	2.0	0
53	Multiple Feature Aggregation Using Convolutional Neural Networks for SAR Image-Based Automatic Target Recognition. IEEE Geoscience and Remote Sensing Letters, 2018, 15, 1882-1886.	3.1	60
54	A pedestrian dead reckoning system using a foot kinematic constraint and shoe modeling for various motions. Sensors and Actuators A: Physical, 2018, 284, 135-144.	4.1	17

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55	Grid Support Adaptation for Point Mass Filter Based Terrain Referenced Navigation Using Mutual Information. IEEE Sensors Journal, 2018, 18, 7603-7610.	4.7	7
56	Particles resampling scheme using regularized optimal transport for sequential Monte Carlo filters. International Journal of Adaptive Control and Signal Processing, 2018, 32, 1393-1402.	4.1	3
57	Consistent EKF-Based Visual-Inertial Navigation Using Points and Lines. IEEE Sensors Journal, 2018, 18, 7638-7649.	4.7	20
58	Enhanced Pedestrian Navigation Based on Course Angle Error Estimation Using Cascaded Kalman Filters. Sensors, 2018, 18, 1281.	3.8	22
59	Modified sequential processing terrain referenced navigation considering slant range measurement. IET Radar, Sonar and Navigation, 2018, 12, 1208-1216.	1.8	1
60	A Smartphone-Based Pedestrian Dead Reckoning System With Multiple Virtual Tracking for Indoor Navigation. IEEE Sensors Journal, 2018, 18, 6756-6764.	4.7	40
61	Comparative Study of Sequential Processing Terrain Referenced Navigation. Proceedings of International Conference on Artificial Life and Robotics, 2018, 23, 767-770.	0.1	0
62	Map assisted PDR/Wi-Fi fusion for indoor positioning using smartphone. International Journal of Control, Automation and Systems, 2017, 15, 627-639.	2.7	22
63	Mitigation of Vision Measurement Nonlinearity Effect on Lunar Descent Navigation Using Underweighting. Journal of Guidance, Control, and Dynamics, 2017, 40, 2370-2377.	2.8	1
64	Accelerometer-based smartphone step detection using machine learning technique. , 2017, , .		12
65	Frequency tracking algorithm based on adaptive fading Kalman filter. , 2017, , .		0
66	Monocular Visual Inertial Navigation for Mobile Robots using Uncertainty based Triangulation. IFAC-PapersOnLine, 2017, 50, 2217-2222.	0.9	1
67	A pedestrian dead-reckoning system that considers the heel-strike and toe-off phases when using a foot-mounted IMU. Measurement Science and Technology, 2016, 27, 015702.	2.6	28
68	An Adaptive Complementary Kalman Filter Using Fuzzy Logic for a Hybrid Head Tracker System. IEEE Transactions on Instrumentation and Measurement, 2016, 65, 2163-2173.	4.7	32
69	A Human Motion Tracking Algorithm Using Adaptive EKF Based on Markov Chain. IEEE Sensors Journal, 2016, 16, 8953-8962.	4.7	34
70	A soft-failure detection and identification algorithm for the integrated navigation system of lunar lander. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2016, 230, 2023-2035.	1.3	3
71	Autocovariance least-squares based measurement error covariance estimation for attitude determination of lunar lander. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2016, 230, 2010-2022.	1.3	2
72	Observability analysis of in-flight calibration of gyros and attitude sensors on orbit. , 2016, , .		5

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73	Design of Oscillation Control Loop With Coarse-Precision Mode Transition for Solid-State Resonant Gyroscope. IEEE Sensors Journal, 2016, 16, 1730-1742.	4.7	8
74	Optimal Configuration of Redundant Inertial Sensors Considering Lever Arm Effect. IEEE Sensors Journal, 2016, 16, 3171-3180.	4.7	33
75	Analysis of Geometric Effects on Integrated Inertial/Vision for Lunar Descent Navigation. Journal of Guidance, Control, and Dynamics, 2016, 39, 937-943.	2.8	10
76	Lunar terrain parameter estimation using LMS for hazard detection and safe landing. , 2015, , .		0
77	Kinematic Model-Based Pedestrian Dead Reckoning for Heading Correction and Lower Body Motion Tracking. Sensors, 2015, 15, 28129-28153.	3.8	31
78	Improvement of batch TRN using mean removal and two step search method for lunar lander. , 2015, , .		1
79	Pedestrian motion classification on omnidirectional treadmill. , 2015, , .		0
80	Improvement of terrain referenced navigation using a Point Mass Filter with grid adaptation. International Journal of Control, Automation and Systems, 2015, 13, 1173-1181.	2.7	23
81	Optics-based wireless sensor node localization using MEMS CCR. International Journal of Control, Automation and Systems, 2015, 13, 1402-1409.	2.7	0
82	Design of a MEMS piezoresistive differential pressure sensor with small thermal hysteresis for air data modules. Review of Scientific Instruments, 2015, 86, 065003.	1.3	25
83	Global navigation satellite system interference tracking and mitigation based on an adaptive fading Kalman filter. IET Radar, Sonar and Navigation, 2015, 9, 1030-1039.	1.8	24
84	Covariance calculation for batch processing terrain referenced navigation. , 2014, , .		3
85	Development of a piezoresistive MEMS pressure sensor for a precision air data module. , 2014, , .		3
86	Design of a Base Station for MEMS CCR Localization in an Optical Sensor Network. Sensors, 2014, 14, 8313-8329.	3.8	2
87	Double Fault Detection of Cone-Shaped Redundant IMUs Using Wavelet Transformation and EPSA. Sensors, 2014, 14, 3428-3444.	3.8	17
88	Analysis of convergent beam to improve sensor node positioning performance in optics-based WSN. , 2014, , .		1
89	Reducing the computation time in the state chi-square test for IMU fault detection. , 2014, , .		3
90	Advanced Heuristic Drift Elimination for indoor pedestrian navigation. , 2014, , .		12

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91	Development of a robust attitude determination system for a nano-satellite. , 2014, , .		5
92	Position fix in terrain referenced navigation using statistical verification. IET Radar, Sonar and Navigation, 2014, 8, 1091-1099.	1.8	7
93	A GNSS interference identification using an adaptive cascading IIR notch filter. GPS Solutions, 2014, 18, 605-613.	4.3	20
94	A multi-class classification approach for target localization in wireless sensor networks. Journal of Mechanical Science and Technology, 2014, 28, 323-329.	1.5	8
95	Approach to direct coning/sculling error compensation based on the sinusoidal modelling of IMU signal. IET Radar, Sonar and Navigation, 2013, 7, 527-534.	1.8	14
96	Fault tolerant attitude estimation for an LEO satellite using a multi-hypothesis filter. International Journal of Control, Automation and Systems, 2012, 10, 1070-1076.	2.7	3
97	A theoretical approach to observability analysis of the SDINS/GPS in maneuvering with horizontal constant velocity. International Journal of Control, Automation and Systems, 2012, 10, 298-307.	2.7	10
98	Cascade filter structure for sensor/actuator fault detection and isolation of satellite attitude control system. International Journal of Control, Automation and Systems, 2012, 10, 506-516.	2.7	10
99	Intentional GNSS Interference Detection and Characterization Algorithm Using AGC and Adaptive IIR Notch Filter. International Journal of Aeronautical and Space Sciences, 2012, 13, 491-498.	2.0	15
100	Adaptive step length estimation algorithm using optimal parameters and movement status awareness. Medical Engineering and Physics, 2011, 33, 1064-1071.	1.7	84
101	Non-symmetric unscented transformation with application to in-flight alignment. International Journal of Control, Automation and Systems, 2010, 8, 776-781.	2.7	12
102	New Map-Matching Algorithm Using Virtual Track for Pedestrian Dead Reckoning. ETRI Journal, 2010, 32, 891-900.	2.0	38
103	Adaptive Two-Stage Extended Kalman Filter for a Fault-Tolerant INS-GPS Loosely Coupled System. IEEE Transactions on Aerospace and Electronic Systems, 2009, 45, 125-137.	4.7	155
104	Extended Kalman filter design for multiple satellites formation flying. , 2008, , .		0
105	Simulation results of ranging performance in two-ray multipath model. , 2008, , .		6
106	A mitigation of line-of-sight by TDOA error modeling in wireless communication system.. , 2008, , .		13
107	A study of INS/CDGPS integration with a scalar adaptive filter. , 2007, , .		1
108	The Stability Analysis of the Adaptive Fading Extended Kalman Filter. Control Applications (CCA), Proceedings of the IEEE International Conference on, 2007, , .	0.0	6

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109	The stability analysis of the adaptive two-stage Kalman filter. International Journal of Adaptive Control and Signal Processing, 2007, 21, 856-870.	4.1	18
110	Drift error analysis caused by RLG dither axis bending. Sensors and Actuators A: Physical, 2007, 133, 425-430.	4.1	16
111	Adaptive Kalman filter for the navigation system with virtual velocity measurement. , 2007, , .		4
112	Adaptive two-stage Kalman filter in the presence of unknown random bias. International Journal of Adaptive Control and Signal Processing, 2006, 20, 305-319.	4.1	75
113	MEMS Based Pedestrian Navigation System. Journal of Navigation, 2006, 59, 135-153.	1.7	138
114	Helmet Tracker System Using Stereo Cameras. , 2006, , .		8
115	In-Flight Alignment Algorithm based on Non-Symmetric Unscented Transformation. , 2006, , .		9
116	A Calibration Technique for a Two-Axis Magnetic Compass in Telematics Devices. ETRI Journal, 2005, 27, 280-288.	2.0	22
117	A Calibration Technique for a Redundant IMU Containing Low-Grade Inertial Sensors. ETRI Journal, 2005, 27, 418-426.	2.0	49
118	The robustness of controllability and observability for discrete linear time-varying systems with norm-bounded uncertainty. IEEE Transactions on Automatic Control, 2005, 50, 1039-1043.	5.7	14
119	SDINS/GPS in-flight alignment using GPS carrier phase rate. GPS Solutions, 2004, 8, 74.	4.3	8
120	Development of inspection gauge system for gas pipeline. Journal of Mechanical Science and Technology, 2004, 18, 370-378.	0.4	9
121	Calibration of a Redundant IMU. , 2004, , .		10
122	An Extended Robust H infinity Filter for Nonlinear Uncertain Systems with Constraints. , 0, , .		1
123	Leverarm compensation for integrated navigation system of land vehicles. , 0, , .		3
124	Frequency Tracking and Mitigation Method of Multiple GNSS Interferences Using an Adaptive Linear Kalman Notch Filter. , 0, , .		1