

Chan Gook Park

List of Publications by Year in descending order

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124
papers

1,793
citations

304743

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124
docs citations

124
times ranked

1641
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	MEMS Based Pedestrian Navigation System. Journal of Navigation, 2006, 59, 135-153.	1.7	138
3	Adaptive step length estimation algorithm using optimal parameters and movement status awareness. Medical Engineering and Physics, 2011, 33, 1064-1071.	1.7	84
4	Consistent EKF-Based Visual-Inertial Odometry on Matrix Lie Group. IEEE Sensors Journal, 2018, 18, 3780-3788.	4.7	77
5	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
6	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
7	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
8	A Calibration Technique for a Redundant IMU Containing Low-Grade Inertial Sensors. ETRI Journal, 2005, 27, 418-426.	2.0	49
9	EKF-Based Visual Inertial Navigation Using Sliding Window Nonlinear Optimization. IEEE Transactions on Intelligent Transportation Systems, 2019, 20, 2470-2479.	8.0	44
10	A Smartphone-Based Pedestrian Dead Reckoning System With Multiple Virtual Tracking for Indoor Navigation. IEEE Sensors Journal, 2018, 18, 6756-6764.	4.7	40
11	New Map-Matching Algorithm Using Virtual Track for Pedestrian Dead Reckoning. ETRI Journal, 2010, 32, 891-900.	2.0	38
12	The IPIN 2019 Indoor Localisation Competitionâ€™ Description and Results. IEEE Access, 2020, 8, 206674-206718.	4.2	37
13	A Human Motion Tracking Algorithm Using Adaptive EKF Based on Markov Chain. IEEE Sensors Journal, 2016, 16, 8953-8962.	4.7	34
14	Optimal Configuration of Redundant Inertial Sensors Considering Lever Arm Effect. IEEE Sensors Journal, 2016, 16, 3171-3180.	4.7	33
15	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
16	Kinematic Model-Based Pedestrian Dead Reckoning for Heading Correction and Lower Body Motion Tracking. Sensors, 2015, 15, 28129-28153.	3.8	31
17	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
18	Observability Analysis of IMU Intrinsic Parameters in Stereo Visualâ€™ Inertial Odometry. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 7530-7541.	4.7	27

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19	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
20	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
21	Grid Design for Efficient and Accurate Point Mass Filter-Based Terrain Referenced Navigation. IEEE Sensors Journal, 2018, 18, 1731-1738.	4.7	24
22	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
23	Adaptive Attitude Estimation for Low-Cost MEMS IMU Using Ellipsoidal Method. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 7082-7091.	4.7	23
24	A Calibration Technique for a Two-Axis Magnetic Compass in Telematics Devices. ETRI Journal, 2005, 27, 280-288.	2.0	22
25	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
26	Enhanced Pedestrian Navigation Based on Course Angle Error Estimation Using Cascaded Kalman Filters. Sensors, 2018, 18, 1281.	3.8	22
27	A GNSS interference identification using an adaptive cascading IIR notch filter. GPS Solutions, 2014, 18, 605-613.	4.3	20
28	Consistent EKF-Based Visual-Inertial Navigation Using Points and Lines. IEEE Sensors Journal, 2018, 18, 7638-7649.	4.7	20
29	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
30	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
31	Double Fault Detection of Cone-Shaped Redundant IMUs Using Wavelet Transformation and EPSA. Sensors, 2014, 14, 3428-3444.	3.8	17
32	Adaptive complex EKF-based DOA estimation for GPS spoofing detection. IET Signal Processing, 2018, 12, 174-181.	1.5	17
33	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
34	MEMS 3D DR/GPS Integrated System for Land Vehicle Application Robust to GPS Outages. IEEE Access, 2019, 7, 73336-73348.	4.2	17
35	Drift error analysis caused by RLG dither axis bending. Sensors and Actuators A: Physical, 2007, 133, 425-430.	4.1	16
36	Robust Pedestrian Dead Reckoning for Multiple Poses in Smartphones. IEEE Access, 2021, 9, 54498-54508.	4.2	15

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37	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
38	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
39	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
40	A mitigation of line-of-sight by TDOA error modeling in wireless communication system.. , 2008, , .		13
41	Non-symmetric unscented transformation with application to in-flight alignment. International Journal of Control, Automation and Systems, 2010, 8, 776-781.	2.7	12
42	Advanced Heuristic Drift Elimination for indoor pedestrian navigation. , 2014, , .		12
43	Accelerometer-based smartphone step detection using machine learning technique. , 2017, , .		12
44	Threshold-less Zero-Velocity Detection Algorithm for Pedestrian Dead Reckoning. , 2019, , .		12
45	Calibration of a Redundant IMU. , 2004, , .		10
46	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
47	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
48	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
49	Development of inspection gauge system for gas pipeline. Journal of Mechanical Science and Technology, 2004, 18, 370-378.	0.4	9
50	In-Flight Alignment Algorithm based on Non-Symmetric Unscented Transformation. , 2006, , .		9
51	SDINS/GPS in-flight alignment using GPS carrier phase rate. GPS Solutions, 2004, 8, 74.	4.3	8
52	Helmet Tracker System Using Stereo Cameras. , 2006, , .		8
53	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
54	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

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55	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
56	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
57	Position fix in terrain referenced navigation using statistical verification. IET Radar, Sonar and Navigation, 2014, 8, 1091-1099.	1.8	7
58	Grid Support Adaptation for Point Mass Filter Based Terrain Referenced Navigation Using Mutual Information. IEEE Sensors Journal, 2018, 18, 7603-7610.	4.7	7
59	Patch-based Stereo Direct Visual Odometry Robust to Illumination Changes. International Journal of Control, Automation and Systems, 2019, 17, 743-751.	2.7	7
60	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
61	Novel Methods of Mitigating Lever Arm Effect in Redundant IMU. IEEE Sensors Journal, 2021, 21, 9465-9474.	4.7	7
62	RBPPFF for robust TAN. IET Radar, Sonar and Navigation, 2019, 13, 2230-2243.	1.8	7
63	Photometric Visual-Inertial Navigation With Uncertainty-Aware Ensembles. IEEE Transactions on Robotics, 2022, 38, 2039-2052.	10.3	7
64	The Stability Analysis of the Adaptive Fading Extended Kalman Filter. Control Applications (CCA), Proceedings of the IEEE International Conference on, 2007, , .	0.0	6
65	Simulation results of ranging performance in two-ray multipath model. , 2008, , .		6
66	Two Stage Particle Filter Based Terrain Referenced Navigation for Computational Efficiency. IEEE Sensors Journal, 2019, 19, 11396-11402.	4.7	6
67	Development of a robust attitude determination system for a nano-satellite. , 2014, , .		5
68	Observability analysis of in-flight calibration of gyros and attitude sensors on orbit. , 2016, , .		5
69	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
70	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
71	Distributed GM-CPHD Filter Based on Generalized Inverse Covariance Intersection. IEEE Access, 2021, 9, 94078-94086.	4.2	5
72	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

#	ARTICLE	IF	CITATIONS
73	Multi-target Tracking Based on Gaussian Mixture Labeled Multi-Bernoulli Filter with Adaptive Gating. , 2019, , .		4
74	A Zero-Velocity Detection Algorithm Robust to Various Gait Types for Pedestrian Inertial Navigation. IEEE Sensors Journal, 2022, 22, 4916-4931.	4.7	4
75	Adaptive Kalman filter for the navigation system with virtual velocity measurement. , 2007, , .		4
76	SMC-CPHD Filter with Adaptive Survival Probability for Multiple Frequency Tracking. Applied Sciences (Switzerland), 2022, 12, 1369.	2.5	4
77	Leverarm compensation for integrated navigation system of land vehicles. , 0, , .		3
78	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
79	Covariance calculation for batch processing terrain referenced navigation. , 2014, , .		3
80	Development of a piezoresistive MEMS pressure sensor for a precision air data module. , 2014, , .		3
81	Reducing the computation time in the state chi-square test for IMU fault detection. , 2014, , .		3
82	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
83	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
84	Robust aerial scene-matching algorithm based on relative velocity model. Robotics and Autonomous Systems, 2020, 124, 103372.	5.1	3
85	A Rapid and Adaptive Alignment under Mooring Condition Using Adaptive EKF and CNN-Based Learning. Sensors, 2020, 20, 4069.	3.8	3
86	Constrained Filtering-based Fusion of Images, Events, and Inertial Measurements for Pose Estimation. , 2020, , .		3
87	Object-based Visual-Inertial Navigation System on Matrix Lie Group. , 2022, , .		3
88	Design of a Base Station for MEMS CCR Localization in an Optical Sensor Network. Sensors, 2014, 14, 8313-8329.	3.8	2
89	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
90	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

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91	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
92	Rapid Initialization using Relative Pose Constraints in Stereo Visual-Inertial Odometry. , 2019, , .		2
93	Image-Based Monte-Carlo Localization With Information Allocation Logic to Mitigate Shadow Effect. IEEE Access, 2020, 8, 213447-213459.	4.2	2
94	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
95	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
96	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
97	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
98	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
99	Ensemble Kalman Filter Based LiDAR Odometry for Skewed Point Clouds Using Scan Slicing. , 2022, , .		2
100	An Extended Robust H infinity Filter for Nonlinear Uncertain Systems with Constraints. , 0, , .		1
101	A study of INS/CDGPS integration with a scalar adaptive filter. , 2007, , .		1
102	Analysis of convergent beam to improve sensor node positioning performance in optics-based WSN. , 2014, , .		1
103	Improvement of batch TRN using mean removal and two step search method for lunar lander. , 2015, , .		1
104	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
105	Monocular Visual Inertial Navigation for Mobile Robots using Uncertainty based Triangulation. IFAC-PapersOnLine, 2017, 50, 2217-2222.	0.9	1
106	Modified sequential processing terrain referenced navigation considering slant range measurement. IET Radar, Sonar and Navigation, 2018, 12, 1208-1216.	1.8	1
107	Information Fusion for Cooperative Indoor Positioning Using BÃ©zier Curves. IEEE Sensors Journal, 2022, 22, 5063-5074.	4.7	1
108	Frequency Tracking and Mitigation Method of Multiple GNSS Interferences Using an Adaptive Linear Kalman Notch Filter. , 0, , .		1

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109	Road Constrained Labeled Multi Bernoulli Filter based on PDF Truncation for Multi-Target Tracking. IFAC-PapersOnLine, 2020, 53, 15739-15744.	0.9	1
110	Extended Kalman filter design for multiple satellites formation flying. , 2008, , .		0
111	Lunar terrain parameter estimation using LMS for hazard detection and safe landing. , 2015, , .		0
112	Pedestrian motion classification on omnidirectional treadmill. , 2015, , .		0
113	Optics-based wireless sensor node localization using MEMS CCR. International Journal of Control, Automation and Systems, 2015, 13, 1402-1409.	2.7	0
114	Frequency tracking algorithm based on adaptive fading Kalman filter. , 2017, , .		0
115	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
116	Comparison of Step Length Estimation Models Using Inertial Sensor on Pelvis. , 2019, , .		0
117	Long-term Stability Analysis of Vertical Channel Damping and Kalman Filtering for Inertial Navigation System/Vertical Gauge. , 2019, , .		0
118	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
119	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
120	Comparative Study of Sequential Processing Terrain Referenced Navigation. Proceedings of International Conference on Artificial Life and Robotics, 2018, 23, 767-770.	0.1	0
121	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
122	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
123	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
124	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