

Xiao-Su Xu

List of Publications by Year in descending order

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docs citations

63
times ranked

761
citing authors

#	ARTICLE	IF	CITATIONS
1	An M-Estimation-Based Improved Interacting Multiple Model for INS/DVL Navigation Method. IEEE Sensors Journal, 2022, 22, 13375-13386.	4.7	4
2	A Novel SINS/USBL Tightly Integrated Navigation Strategy Based on Improved ANFIS. IEEE Sensors Journal, 2022, 22, 9763-9777.	4.7	10
3	A Staggered Grid Based Water Current Aided SINS/DVL Integration Solution for Mid Water Navigation. IEEE Sensors Journal, 2022, 22, 13136-13143.	4.7	3
4	M-M Estimation-Based Robust Cubature Kalman Filter for INS/GPS Integrated Navigation System. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-11.	4.7	19
5	Virtual DVL Reconstruction Method for an Integrated Navigation System Based on DS-LSSVM Algorithm. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-13.	4.7	16
6	A Quasi-Newton Quaternions Calibration Method for DVL Error Aided GNSS. IEEE Transactions on Vehicular Technology, 2021, 70, 2465-2477.	6.3	29
7	A Novel Method to Estimate the Sea State for Recycling Work on the Sea Surface. Mathematical Problems in Engineering, 2021, 2021, 1-11.	1.1	1
8	Improved exponential weighted moving average based measurement noise estimation for strapdown inertial navigation system/doppler velocity log integrated system. Journal of Navigation, 2021, 74, 467-487.	1.7	6
9	An Enhanced INS/GNSS Tightly Coupled Navigation System Using Time-Differenced Carrier Phase Measurement. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 5208-5218.	4.7	17
10	A Novel SINS/DVL Tightly Integrated Navigation Method for Complex Environment. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 5183-5196.	4.7	83
11	A Simple and Precise Correction Method for DVL Measurements Under the Dynamic Environment. IEEE Transactions on Vehicular Technology, 2020, 69, 10750-10758.	6.3	22
12	Fast SINS Initial Alignment Method Based on Iterative Algorithms in Inertial Frame. Mathematical Problems in Engineering, 2020, 2020, 1-12.	1.1	2
13	Hull Deformation Measurement With Large Angles Based on Inertial Sensors. IEEE Access, 2020, 8, 191413-191420.	4.2	2
14	DVL Aided SINS Coarse Alignment Solution With High Dynamics. IEEE Access, 2020, 8, 169922-169929.	4.2	2
15	An Improved Adaptive Kalman Filter for Underwater SINS/DVL System. Mathematical Problems in Engineering, 2020, 2020, 1-14.	1.1	13
16	An Iterative Doppler Velocity Log Error Calibration Algorithm Based on Newton Optimization. Mathematical Problems in Engineering, 2020, 2020, 1-9.	1.1	2
17	In-motion coarse alignment method for SINS/DVL with the attitude dynamics. ISA Transactions, 2020, 105, 377-386.	5.7	20
18	An IMM-UKF Aided SINS/USBL Calibration Solution for Underwater Vehicles. IEEE Transactions on Vehicular Technology, 2020, 69, 3740-3747.	6.3	48

#	ARTICLE	IF	CITATIONS
19	An Improved Interacting Multiple Model Algorithm for INS/DVL Integrated Navigation System. , 2020, , .		3
20	Keyframe-Based Camera Relocalization Method Using Landmark and Keypoint Matching. IEEE Access, 2019, 7, 86854-86862.	4.2	4
21	A Hybrid Approach Based on Improved AR Model and MAA for INS/DVL Integrated Navigation Systems. IEEE Access, 2019, 7, 82794-82808.	4.2	18
22	An Extensible Positioning System for Locating Mobile Robots in Unfamiliar Environments. Sensors, 2019, 19, 4025.	3.8	8
23	A misalignment angle error calibration method of underwater acoustic array in strapdown inertial navigation system/ultrashort baseline integrated navigation system based on single transponder mode. Review of Scientific Instruments, 2019, 90, 085001.	1.3	11
24	Landmark Generation in Visual Place Recognition Using Multi-Scale Sliding Window for Robotics. Applied Sciences (Switzerland), 2019, 9, 3146.	2.5	6
25	A Hybrid IMM Based INS/DVL Integration Solution for Underwater Vehicles. IEEE Transactions on Vehicular Technology, 2019, 68, 5459-5470.	6.3	78
26	An Error Correction Approach based on AR model and RLS for Inertial Navigation System. , 2019, , .		0
27	An Ultra-Short Baseline Positioning Model Based on Rotating Array & Reusing Elements and Its Error Analysis. Sensors, 2019, 19, 4373.	3.8	13
28	Single-Source Aided Semi-Autonomous Passive Location for Correcting the Position of an Underwater Vehicle. IEEE Sensors Journal, 2019, 19, 3267-3275.	4.7	21
29	In-Motion Filter-QUEST Alignment for Strapdown Inertial Navigation Systems. IEEE Transactions on Instrumentation and Measurement, 2018, 67, 1979-1993.	4.7	41
30	Multipath Parallel ICCP Underwater Terrain Matching Algorithm Based on Multibeam Bathymetric Data. IEEE Access, 2018, 6, 48708-48715.	4.2	14
31	A Novel Hybrid of a Fading Filter and an Extreme Learning Machine for GPS/INS during GPS Outages. Sensors, 2018, 18, 3863.	3.8	10
32	An Indoor Navigation System Based on Stereo Camera and Inertial Sensors with Points and Lines. Journal of Sensors, 2018, 2018, 1-14.	1.1	2
33	A novel robust Kalman filter for SINS/GPS. , 2018, , .		0
34	Robust Time-Difference-of-Arrival (TDOA) Localization Using Weighted Least Squares with Cone Tangent Plane Constraint. Sensors, 2018, 18, 778.	3.8	47
35	In-motion coarse alignment method based on reconstructed observation vectors. Review of Scientific Instruments, 2017, 88, 035001.	1.3	18
36	A hybrid fusion algorithm for GPS/INS integration during GPS outages. Measurement: Journal of the International Measurement Confederation, 2017, 103, 42-51.	5.0	104

#	ARTICLE	IF	CITATIONS
37	A fast alignment method for SINS with large misalignment angles based on ADRC. , 2017, , .		2
38	A RLS-SVM Aided Fusion Methodology for INS during GPS Outages. Sensors, 2017, 17, 432.	3.8	20
39	An Adaptive Damping Network Designed for Strapdown Fiber Optic Gyrocompass System for Ships. Sensors, 2017, 17, 494.	3.8	12
40	A Coarse Alignment Method Based on Digital Filters and Reconstructed Observation Vectors. Sensors, 2017, 17, 709.	3.8	15
41	An IMM-Aided ZUPT Methodology for an INS/DVL Integrated Navigation System. Sensors, 2017, 17, 2030.	3.8	27
42	Novel SINS Initial Alignment Method under Large Misalignment Angles and Uncertain Noise Based on Nonlinear Filter. Mathematical Problems in Engineering, 2017, 2017, 1-14.	1.1	3
43	A Kalman Filter for SINS Self-Alignment Based on Vector Observation. Sensors, 2017, 17, 264.	3.8	32
44	FOG Random Drift Signal Denoising Based on the Improved AR Model and Modified Sage-Husa Adaptive Kalman Filter. Sensors, 2016, 16, 1073.	3.8	49
45	Transverse Navigation under the Ellipsoidal Earth Model and its Performance in both Polar and Non-polar areas. Journal of Navigation, 2016, 69, 335-352.	1.7	27
46	Novel nonlinear filter for sins initial alignment with large misalignment angles. , 2016, , .		2
47	Interlaced matrix Kalman filter for spacecraft attitude estimation. , 2016, , .		1
48	A fast mutant fault detection method of underwater integrated navigation. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2016, 230, 815-831.	1.3	2
49	Initial Alignment of Large Azimuth Misalignment Angles in SINS Based on Adaptive UPF. Sensors, 2015, 15, 21807-21823.	3.8	29
50	A Fault-Tolerant Filtering Algorithm for SINS/DVL/MCP Integrated Navigation System. Mathematical Problems in Engineering, 2015, 2015, 1-12.	1.1	12
51	A Self-Alignment Algorithm for SINS Based on Gravitational Apparent Motion and Sensor Data Denoising. Sensors, 2015, 15, 9827-9853.	3.8	17
52	SINS/DVL/LBL interactive aiding positioning technology based on AUV. , 2015, , .		3
53	A Method for SINS Alignment with Large Initial Misalignment Angles Based on Kalman Filter with Parameters Resetting. Mathematical Problems in Engineering, 2014, 2014, 1-10.	1.1	12
54	A fast and high-accuracy transfer alignment method between M/S INS for ship based on iterative calculation. Measurement: Journal of the International Measurement Confederation, 2014, 51, 297-309.	5.0	27

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55	An initial alignment method for strapdown gyrocompass based on gravitational apparent motion in inertial frame. Measurement: Journal of the International Measurement Confederation, 2014, 55, 593-604.	5.0	35
56	A fast compass alignment method for SINS based on saved data and repeated navigation solution. Measurement: Journal of the International Measurement Confederation, 2013, 46, 3836-3846.	5.0	36
57	Research of Autonomous Navigation System for AUV Based on SDVM. , 2013, , .		0
58	A Rapid Transfer Alignment Method for SINS Based on the Added Backward-Forward SINS Resolution and Data Fusion. Mathematical Problems in Engineering, 2013, 2013, 1-10.	1.1	6
59	A new method of seamless land navigation for GPS/INS integrated system. Measurement: Journal of the International Measurement Confederation, 2012, 45, 691-701.	5.0	88
60	The Application of EKF and UKF to the SINS/GPS Integrated Navigation Systems. , 2010, , .		9
61	Novel Hybrid of LS-SVM and Kalman Filter for GPS/INS Integration. Journal of Navigation, 2010, 63, 289-299.	1.7	56
62	Novel terrain integrated navigation system using neural network aided Kalman filter. , 2010, , .		5