Tao Zhang

List of Publications by Year
in descending order

53 papers	1,130 citations	331670 21 h-index	434195 31 g-index
53 all docs	53 docs citations	53 times ranked	634 citing authors

#	ARTICLE	IF	CITATIONS
1	A Novel SINS/DVL Tightly Integrated Navigation Method for Complex Environment. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 5183-5196.	4.7	83
2	A Hybrid IMM Based INS/DVL Integration Solution for Underwater Vehicles. IEEE Transactions on Vehicular Technology, 2019, 68, 5459-5470.	6.3	78
3	Student's t-Based Robust Kalman Filter for a SINS/USBL Integration Navigation Strategy. IEEE Sensors Journal, 2020, 20, 5540-5553.	4.7	65
4	Robust Time-Difference-of-Arrival (TDOA) Localization Using Weighted Least Squares with Cone Tangent Plane Constraint. Sensors, 2018, 18, 778.	3.8	47
5	In-Motion Filter-QUEST Alignment for Strapdown Inertial Navigation Systems. IEEE Transactions on Instrumentation and Measurement, 2018, 67, 1979-1993.	4.7	41
6	Study on Installation Error Analysis and Calibration of Acoustic Transceiver Array Based on SINS/USBL Integrated System. IEEE Access, 2018, 6, 66923-66939.	4.2	40
7	A Fast Robust In-Motion Alignment Method for SINS With DVL Aided. IEEE Transactions on Vehicular Technology, 2020, 69, 3816-3827.	6.3	39
8	In-Motion Coarse Alignment Method for SINS/GPS Using Position Loci. IEEE Sensors Journal, 2019, 19, 3930-3938.	4.7	36
9	A Student's T-Based Measurement Uncertainty Filter for SINS/USBL Tightly Integration Navigation System. IEEE Transactions on Vehicular Technology, 2021, 70, 8627-8638.	6.3	34
10	AUV Underwater Positioning Algorithm Based on Interactive Assistance of SINS and LBL. Sensors, 2016, 16, 42.	3.8	32
11	A Kalman Filter for SINS Self-Alignment Based on Vector Observation. Sensors, 2017, 17, 264.	3.8	32
12	Underwater Positioning Algorithm Based on SINS/LBL Integrated System. IEEE Access, 2018, 6, 7157-7163.	4.2	30
13	Initial Alignment of Large Azimuth Misalignment Angles in SINS Based on Adaptive UPF. Sensors, 2015, 15, 21807-21823.	3.8	29
14	A Quasi-Newton Quaternions Calibration Method for DVL Error Aided GNSS. IEEE Transactions on Vehicular Technology, 2021, 70, 2465-2477.	6.3	29
15	Robust Initial Alignment for SINS/DVL Based on Reconstructed Observation Vectors. IEEE/ASME Transactions on Mechatronics, 2020, 25, 1659-1667.	5.8	29
16	An Efficient Constrained Weighted Least Squares Method With Bias Reduction for TDOA-Based Localization. IEEE Sensors Journal, 2021, 21, 10122-10131.	4.7	28
17	A Variational Bayesian Based Strong Tracking Interpolatory Cubature Kalman Filter for Maneuvering Target Tracking. IEEE Access, 2018, 6, 52544-52560.	4.2	26
18	AUV Positioning Method Based on Tightly Coupled SINS/LBL for Underwater Acoustic Multipath Propagation. Sensors, 2016, 16, 357.	3.8	24

#	Article	IF	Citations
19	A Robust In-Motion Alignment Method With Inertial Sensors and Doppler Velocity Log. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-13.	4.7	22
20	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
21	In-Motion Coarse Alignment Based on the Vector Observation for SINS. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 3740-3750.	4.7	21
22	A Fast SINS Self-Alignment Method Under Geographic Latitude Uncertainty. IEEE Sensors Journal, 2020, 20, 2885-2894.	4.7	21
23	A Robust In-Motion Optimization-Based Alignment for SINS/GPS Integration. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 4362-4372.	8.0	21
24	Efficient Underwater Acoustical Localization Method Based On Time Difference and Bearing Measurements. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-16.	4.7	21
25	An Improved Initial Alignment Method for SINS/GPS Integration With Vectors Subtraction. IEEE Sensors Journal, 2021, 21, 18256-18262.	4.7	20
26	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
27	Coarse Alignment Technology on Moving base for SINS Based on the Improved Quaternion Filter Algorithm. Sensors, 2017, 17, 1424.	3.8	18
28	A Calibration Method of USBL Installation Error Based on Attitude Determination. IEEE Transactions on Vehicular Technology, 2020, 69, 8317-8328.	6.3	17
29	A New Coupled Method of SINS/DVL Integrated Navigation Based on Improved Dual Adaptive Factors. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-11.	4.7	16
30	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
31	A Coarse Alignment Method Based on Digital Filters and Reconstructed Observation Vectors. Sensors, 2017, 17, 709.	3.8	15
32	Multipath Parallel ICCP Underwater Terrain Matching Algorithm Based on Multibeam Bathymetric Data. IEEE Access, 2018, 6, 48708-48715.	4.2	14
33	A calibration method of ultra-short baseline installation error with large misalignment based on variational Bayesian unscented Kalman filter. Review of Scientific Instruments, 2019, 90, 055003.	1.3	14
34	Geomagnetic Gradient-Assisted Evolutionary Algorithm for Long-Range Underwater Navigation. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-12.	4.7	14
35	An Adaptive Damping Network Designed for Strapdown Fiber Optic Gyrocompass System for Ships. Sensors, 2017, 17, 494.	3.8	12
36	GMSK-SLAM: a new RGB-D SLAM method with dynamic areas detection towards dynamic environments. Multimedia Tools and Applications, 2021, 80, 31729-31751.	3.9	12

#	ARTICLE	IF	CITATIONS
37	A Coarse-Alignment Method Based on the Optimal-REQUEST Algorithm. Sensors, 2018, 18, 239.	3.8	11
38	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
39	Application of improved fifth-degree cubature Kalman filter in the nonlinear initial alignment of strapdown inertial navigation system. Review of Scientific Instruments, 2019, 90, 015111.	1.3	11
40	A Novel and Robust Calibration Method for the Underwater Transponder Position. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-12.	4.7	10
41	A Fast-Initial Alignment Method With Angular Rate Aiding Based on Robust Kalman Filter. IEEE Access, 2019, 7, 51369-51378.	4.2	8
42	A SINS Aided Correct Method for USBL Range Based on Maximum Correntropy Criterion Adaptive Filter. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-13.	4.7	8
43	A High-Order Coning Error Compensation Algorithm Under High Rate Maneuvering. IEEE Sensors Journal, 2020, 20, 208-218.	4.7	7
44	A Passive Acoustic Positioning Algorithm Based on Virtual Long Baseline Matrix Window. Journal of Navigation, 2019, 72, 193-206.	1.7	6
45	A Novel Robust Inertial and Ultra-Short Baseline Integrated Navigation Strategy Under the Influence of Motion Effect. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 19323-19334.	8.0	6
46	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
47	A Robust Calibration Method for the Underwater Transponder Position Based on Gauss-Newton Iteration Algorithm. , 2019, , .		3
48	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
49	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
50	An Iterative-Optimization-Based Calibration Framework for VIO With Limited Prior Conditions. IEEE Sensors Journal, 2021, 21, 24694-24708.	4.7	2
51	The Fine Calibration of the Ultra-Short Baseline System With Inaccurate Measurement Noise Covariance Matrix. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-8.	4.7	2
52	Online calibration of ultra-short baseline installation error in dynamic environment. International Journal of Sensor Networks, 2019, 30, 254.	0.4	1
53	An RCG-based analysis of the Translation of Polysemous Verb â€˜Yaoâ€™ in A Dream of Red Mansions. Cadernos De Traducao, 2022, 42, 1-22.	0.0	0

4