Yonggang Zhang

List of Publications by Year
in descending order

118 papers	3,674 citations	172457 29 h-index	144013 57 g-index
120 all docs	120 docs citations	120 times ranked	1493 citing authors

#	ARTICLE	IF	CITATIONS
1	A Novel Adaptive Kalman Filter With Inaccurate Process and Measurement Noise Covariance Matrices. IEEE Transactions on Automatic Control, 2018, 63, 594-601.	5.7	405
2	A Novel Robust Student's <italic>t</italic>-Based Kalman Filter. IEEE Transactions on Aerospace and Electronic Systems, 2017, 53, 1545-1554.	4.7	281
3	A New Adaptive Extended Kalman Filter for Cooperative Localization. IEEE Transactions on Aerospace and Electronic Systems, 2018, 54, 353-368.	4.7	188
4	A Novel Robust Gaussian–Student's t Mixture Distribution Based Kalman Filter. IEEE Transactions on Signal Processing, 2019, 67, 3606-3620.	5.3	161
5	Robust student's t based nonlinear filter and smoother. IEEE Transactions on Aerospace and Electronic Systems, 2016, 52, 2586-2596.	4.7	158
6	Robust Kalman Filters Based on Gaussian Scale Mixture Distributions With Application to Target Tracking. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2019, 49, 2082-2096.	9.3	133
7	A New Outlier-Robust Student's t Based Gaussian Approximate Filter for Cooperative Localization. IEEE/ASME Transactions on Mechatronics, 2017, 22, 2380-2386.	5.8	126
8	Maximum correntropy unscented Kalman and information filters for non-Gaussian measurement noise. Journal of the Franklin Institute, 2017, 354, 8659-8677.	3.4	124
9	A Robust Gaussian Approximate Fixed-Interval Smoother for Nonlinear Systems With Heavy-Tailed Process and Measurement Noises. IEEE Signal Processing Letters, 2016, 23, 468-472.	3.6	91
10	Kalman-Filtering-Based In-Motion Coarse Alignment for Odometer-Aided SINS. IEEE Transactions on Instrumentation and Measurement, 2017, 66, 3364-3377.	4.7	88
11	A Novel Kullback–Leibler Divergence Minimization-Based Adaptive Student's t-Filter. IEEE Transactions on Signal Processing, 2019, 67, 5417-5432.	5.3	87
12	A Novel Outlier-Robust Kalman Filtering Framework Based on Statistical Similarity Measure. IEEE Transactions on Automatic Control, 2021, 66, 2677-2692.	5.7	68
13	A New Process Uncertainty Robust Student's t Based Kalman Filter for SINS/GPS Integration. IEEE Access, 2017, 5, 14391-14404.	4.2	66
14	Robust Student's t-Based Stochastic Cubature Filter for Nonlinear Systems With Heavy-Tailed Process and Measurement Noises. IEEE Access, 2017, 5, 7964-7974.	4.2	60
15	Embedded cubature Kalman filter with adaptive setting of free parameter. Signal Processing, 2015, 114, 112-116.	3.7	55
16	Diffusion distributed Kalman filter over sensor networks without exchanging raw measurements. Signal Processing, 2017, 132, 1-7.	3.7	54
17	Iterated maximum correntropy unscented Kalman filters for non-Gaussian systems. Signal Processing, 2019, 163, 87-94.	3.7	53
18	Interpolatory cubature Kalman filters. IET Control Theory and Applications, 2015, 9, 1731-1739.	2.1	50

#	Article	IF	Citations
19	A New Fast In-Motion Coarse Alignment Method for GPS-Aided Low-Cost SINS. IEEE/ASME Transactions on Mechatronics, 2018, 23, 1303-1313.	5.8	50
20	A Novel Heavy-Tailed Mixture Distribution Based Robust Kalman Filter for Cooperative Localization. IEEE Transactions on Industrial Informatics, 2021, 17, 3671-3681.	11.3	49
21	A robust Gaussian approximate filter for nonlinear systems with heavy tailed measurement noises. , 2016, , .		43
22	Gaussian filter for nonlinear systems with correlated noises at the same epoch. Automatica, 2015, 60, 122-126.	5.0	41
23	A High-Accuracy GPS-Aided Coarse Alignment Method for MEMS-Based SINS. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 7914-7932.	4.7	41
24	A Slide Window Variational Adaptive Kalman Filter. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 3552-3556.	3.0	39
25	A Novel Adaptive Kalman Filter With Unknown Probability of Measurement Loss. IEEE Signal Processing Letters, 2019, 26, 1862-1866.	3.6	37
26	Variational Adaptive Kalman Filter With Gaussian-Inverse-Wishart Mixture Distribution. IEEE Transactions on Automatic Control, 2021, 66, 1786-1793.	5.7	37
27	A New Kalman Filter-Based In-Motion Initial Alignment Method for DVL-Aided Low-Cost SINS. IEEE Transactions on Vehicular Technology, 2021, 70, 331-343.	6.3	36
28	Robust Rauch–Tung–Striebel Smoothing Framework for Heavy-Tailed and/or Skew Noises. IEEE Transactions on Aerospace and Electronic Systems, 2020, 56, 415-441.	4.7	35
29	A New Robust Kalman Filter for SINS/DVL Integrated Navigation System. IEEE Access, 2019, 7, 51386-51395.	4.2	33
30	Maximum Correntropy Rauch–Tung–Striebel Smoother for Nonlinear and Non-Gaussian Systems. IEEE Transactions on Automatic Control, 2021, 66, 1270-1277.	5.7	32
31	Variational Bayesian IMM-Filter for JMSs With Unknown Noise Covariances. IEEE Transactions on Aerospace and Electronic Systems, 2020, 56, 1652-1661.	4.7	29
32	A Novel Progressive Gaussian Approximate Filter for Tightly Coupled GNSS/INS Integration. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 3493-3505.	4.7	28
33	Modeling of Thermal-Induced Rate Error for FOG With Temperature Ranging From -40 &#x000B0;C to 60 &#x000B0;C. IEEE Photonics Technology Letters, 2014, 26, 18-21.	2.5	27
34	Particle filter with one-step randomly delayed measurements and unknown latency probability. International Journal of Systems Science, 2016, 47, 209-221.	5.5	27
35	An Improved Variational Adaptive Kalman Filter for Cooperative Localization. IEEE Sensors Journal, 2021, 21, 10775-10786.	4.7	27
36	A New <inline-formula> <tex-math notation="LaTeX">$l_0$$</tex-math></inline-formula>-LMS Algorithm With Adaptive Zero Attractor. IEEE Communications Letters, 2015, 19, 2150-2153.	4.1	26

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37	Design of Sigma-Point Kalman Filter with Recursive Updated Measurement. Circuits, Systems, and Signal Processing, 2016, 35, 1767-1782.	2.0	26
38	A New Robust Kalman Filter With Adaptive Estimate of Time-Varying Measurement Bias. IEEE Signal Processing Letters, 2020, 27, 700-704.	3.6	25
39	Resonant micro-optical gyro based on self-injection locking. Optics Express, 2020, 28, 32907.	3.4	25
40	A Novel Adaptive Kalman Filter With Colored Measurement Noise. IEEE Access, 2018, 6, 74569-74578.	4.2	24
41	A New Variational Bayesian Adaptive Extended Kalman Filter for Cooperative Navigation. Sensors, 2018, 18, 2538.	3.8	24
42	A Maximum Correntropy Divided Difference Filter for Cooperative Localization. IEEE Access, 2018, 6, 41720-41727.	4.2	23
43	Fiber optic gyroscope vibration error due to fiber tail length asymmetry based on elastic-optic effect. Optical Engineering, 2012, 51, 124403.	1.0	22
44	Cubature Kalman Filter Under Minimum Error Entropy With Fiducial Points for INS/GPS Integration. IEEE/CAA Journal of Automatica Sinica, 2022, 9, 450-465.	13.1	22
45	A Novel Mixture Distributions-Based Robust Kalman Filter for Cooperative Localization. IEEE Sensors Journal, 2020, 20, 14994-15006.	4.7	21
46	A robust fixed-interval smoother for nonlinear systems with non-stationary heavy-tailed state and measurement noises. Signal Processing, 2021, 180, 107898.	3.7	21
47	A Computationally Efficient Variational Adaptive Kalman Filter for Transfer Alignment. IEEE Sensors Journal, 2020, 20, 13682-13693.	4.7	20
48	Particle filter for nonlinear systems with multiple step randomly delayed measurements. Electronics Letters, 2015, 51, 1859-1861.	1.0	19
49	Latency probability estimation of non‐linear systems with one‐step randomly delayed measurements. IET Control Theory and Applications, 2016, 10, 843-852.	2.1	19
50	Design of Gaussian Approximate Filter and Smoother for Nonlinear Systems with Correlated Noises at One Epoch Apart. Circuits, Systems, and Signal Processing, 2016, 35, 3981-4008.	2.0	19
51	An Outlier-Robust Kalman Filter With Adaptive Selection of Elliptically Contoured Distributions. IEEE Transactions on Signal Processing, 2022, 70, 994-1009.	5.3	19
52	A Lie Group Manifold-Based Nonlinear Estimation Algorithm and Its Application to Low-Accuracy SINS/GNSS Integrated Navigation. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-27.	4.7	18
53	An event based multi-sensor fusion algorithm with deadzone like measurements. Information Fusion, 2018, 42, 111-118.	19.1	17
54	Adaptive Maximum Correntropy Gaussian Filter Based on Variational Bayes. Sensors, 2018, 18, 1960.	3.8	17

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55	Statistical Similarity Measure-Based Adaptive Outlier-Robust State Estimator With Applications. IEEE Transactions on Automatic Control, 2022, 67, 4354-4361.	5.7	17
56	Maximum Correntropy Based Unscented Particle Filter for Cooperative Navigation with Heavy-Tailed Measurement Noises. Sensors, 2018, 18, 3183.	3.8	16
57	Hybrid consensus sigma point approximation nonlinear filter using statistical linearization. Transactions of the Institute of Measurement and Control, 2018, 40, 2517-2525.	1.7	16
58	An Improved Kalman Filter With Adaptive Estimate of Latency Probability. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 2259-2263.	3.0	16
59	A novel robust Student's t-based Gaussian approximate filter with one-step randomly delayed measurements. Signal Processing, 2020, 171, 107496.	3.7	16
60	A Novel Robust Kalman Filtering Framework Based on Normal-Skew Mixture Distribution. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 6789-6805.	9.3	16
61	Exploiting all combinations of microphone sensors in overdetermined frequency domain blind separation of speech signals. International Journal of Adaptive Control and Signal Processing, 2011, 25, 88-94.	4.1	15
62	An Improved Coarse Alignment Algorithm for Odometer-Aided SINS Based on the Optimization Design Method. Sensors, 2018, 18, 195.	3.8	15
63	A Computationally Efficient Outlier-Robust Cubature Kalman Filter for Underwater Gravity Matching Navigation. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-18.	4.7	15
64	Distributed maximum correntropy linear and nonlinear filters for systems with non-Gaussian noises. Signal Processing, 2021, 182, 107937.	3.7	14
65	A Position Loci-Based In-Motion Initial Alignment Method for Low-Cost Attitude and Heading Reference System. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-18.	4.7	14
66	Adaptive Recursive Decentralized Cooperative Localization for Multirobot Systems With Time-Varying Measurement Accuracy. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-25.	4.7	14
67	Coordinate-Descent Diffusion Learning by Networked Agents. IEEE Transactions on Signal Processing, 2018, 66, 352-367.	5.3	13
68	Diffusion nonlinear Kalman filter with intermittent observations. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2018, 232, 2775-2783.	1.3	13
69	Design of High-Degree Student's t-Based Cubature Filters. Circuits, Systems, and Signal Processing, 2018, 37, 2206-2225.	2.0	13
70	Gaussian approximate filter for stochastic dynamic systems with randomly delayed measurements and colored measurement noises. Science China Information Sciences, 2016, 59, 1.	4.3	12
71	A Novel Robust Step Detection Algorithm for Foot-Mounted IMU. IEEE Sensors Journal, 2021, 21, 5331-5339.	4.7	12
72	A New Underwater All Source Positioning and Navigation(ASPN) Algorithm Based on Factor Graph. , 2019, , .		11

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73	A Novel Robust Kalman Filter With Non-stationary Heavy-tailed Measurement Noise. IFAC-PapersOnLine, 2020, 53, 368-373.	0.9	11
74	Modeling for IFOG Vibration Error Based on the Strain Distribution of Quadrupolar Fiber Coil. Sensors, 2016, 16, 1131.	3.8	10
75	A novel multiple-outlier-robust Kalman filter. Frontiers of Information Technology and Electronic Engineering, 2022, 23, 422-437.	2.6	10
76	Stability in self-injection locking of the DFB laser through a fiber optic resonator. Optics Communications, 2022, 505, 127531.	2.1	8
77	Analysis of a highly birefringent photonic crystal fiber with ellipse–rhombus air core. Optik, 2014, 125, 6266-6269.	2.9	7
78	Gaussian approximate filter with progressive measurement update. , 2015, , .		7
79	An Improved SINS Alignment Method Based on Adaptive Cubature Kalman Filter. Sensors, 2019, 19, 5509.	3.8	7
80	SINS initial alignment based on fifth-degree Cubature Kalman Filter. , 2013, , .		6
81	Seventh-degree spherical simplex-radial cubature Kalman filter. , 2014, , .		6
82	Hybrid consensus sigma point approximation nonlinear filter using statistical linearization. Transactions of the Institute of Measurement and Control, 0, , 014233121669175.	1.7	6
83	A Novel Robust Rauch-Tung-Striebel Smoother Based on Slash and Generalized Hyperbolic Skew Student's T-Distributions. , 2018, , .		6
84	A Spatial Diffusion Strategy for Tap-Length Estimation Over Adaptive Networks. IEEE Transactions on Signal Processing, 2015, 63, 4487-4501.	5.3	5
85	An NLMS Algorithm with Tap-Selection Matrix for Sparse System Identification. Circuits, Systems, and Signal Processing, 2017, 36, 2486-2498.	2.0	5
86	Isolation, identification, and resistance gene detection of Vibrio harveyi from Scophthalmus maximus. Aquaculture International, 2021, 29, 2357-2368.	2.2	5
87	Multi-kernel correntropy based extended Kalman filtering for state-of-charge estimation. ISA Transactions, 2022, 129, 271-283.	5.7	5
88	A Strong Tracking Square Root CKF Algorithm Based on Multiple Fading Factors for Target Tracking. , 2014, , .		4
89	A new conditional posterior Cramér-Rao lower bound for a class of nonlinear systems. International Journal of Systems Science, 2016, 47, 3206-3218.	5.5	4
90	Single-Channel Control for Hemispherical Resonator Gyro Based on Time Division Multiplexing and Demultiplexing. IEEE Sensors Journal, 2021, 21, 21342-21348.	4.7	4

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91	Theoretical model and experimental verification of thermal strain distribution in quadrupolar fibre coil. Electronics Letters, 2014, 50, 1382-1384.	1.0	3
92	Model-based diagnosis of incomplete discrete-event system with rough set theory. Science China Information Sciences, 2017, 60, 1.	4.3	3
93	An Effective Tap-Length NLMS Algorithm for Network Echo Cancellers. Circuits, Systems, and Signal Processing, 2017, 36, 1686-1699.	2.0	3
94	Resonant Optical Gyroscope Based on All-Optical Frequency Locking. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-4.	4.7	3
95	Moving state marine SINS initial alignment based on transformed cubature Kalman filter. , 2014, , .		2
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109	Optimal False Data Injection Attacks on MTC. IEEE Transactions on Vehicular Technology, 2022, 71, 3372-3376.	6.3	1
110	Modeling and Simulation analysis of a new Photonic crystal fiber. , 2010, , .		0
111	Analysis of shock error in fiber optic gyroscope induced by underwater explosion. , 2014, , .		0
112	A simplified FOG output error model based on thermal diffusion. , 2016, , .		0
113	An improved nonlinear Kalman filter with recursive measurement update. , 2016, , .		0
114	Algorithm optimization of Er-doped Superfluorescent Fiber Source Feedback Control Module. , 2019, , .		0
115	A novel secure diffusion Kalman filter algorithm against false data injection attacks. IET Communications, 2021, 15, 2028-2035.	2.2	0
116	A Multimodal Solution to Blind Source Separation of Moving Sources. , 0, , 107-125.		0
117	An Improved Unified Transfer Alignment for MEMS-based SINS. , 2021, , .		0
118	Estimation Performance of Cyber-Physical Systems Attacked by False Data Injection. , 2021, , .		0