Qing-Hao Meng

List of Publications by Citations

111 papers	881 citations	16 h-index	24 g-index
157 ext. papers	1,222 ext. citations	3.4 avg, IF	4.67 L-index

#	Paper	IF	Citations
111	Odor source localization using a mobile robot in outdoor airflow environments with a particle filter algorithm. *Autonomous Robots*, **2011**, 30, 281-292	3	126
110	Improving histogram-based image contrast enhancement using gray-level information histogram with application to X-ray images. *Optik*, **2012**, 123, 511-520	2.5	35
109	Adapting an ant colony metaphor for multi-robot chemical plume tracing. *Sensors*, **2012**, 12, 4737-63	3.8	34
108	Collective odor source estimation and search in time-variant airflow environments using mobile robots. *Sensors*, **2011**, 11, 10415-43	3.8	33
107	A Bioinspired Neural Network for Data Processing in an Electronic Nose. *IEEE Transactions on Instrumentation and Measurement*, **2016**, 65, 2369-2380	5.2	31
106	Electronic nose with a new feature reduction method and a multi-linear classifier for Chinese liquor classification. *Review of Scientific Instruments*, **2014**, 85, 055004	1.7	27
105	Adaptive extended Kalman filter (AEKF)-based mobile robot localization using sonar. *Robotica*, **2000**, 18, 459-473	2.1	24
104	Measurement of sheet resistance of cross microareas using a modified van der Pauw method. *Semiconductor Science and Technology*, **1996**, 11, 805-811	1.8	23
103	Development of compact electronic noses: a review. *Measurement Science and Technology*, **2021**, 32, 062002	2	23
102	. *IEEE Signal Processing Letters*, **2018**, 25, 283-287	3.2	22
101	A New Method Combining KECA-LDA With ELM for Classification of Chinese Liquors Using Electronic Nose. *IEEE Sensors Journal*, **2016**, 16, 8010-8017	4	20
100	A Bio-Inspired Breathing Sampling Electronic Nose for Rapid Detection of Chinese Liquors. *IEEE Sensors Journal*, **2017**, 17, 4689-4698	4	17
99	Odor-induced emotion recognition based on average frequency band division of EEG signals. *Journal of Neuroscience Methods*, **2020**, 334, 108599	3	17
98	Real-Time Noncrosstalk Sonar System by Short Optimized Pulse-Position Modulation Sequences. *IEEE Transactions on Instrumentation and Measurement*, **2009**, 58, 3442-3449	5.2	17
97	Simulate the aerodynamic olfactory effects of gas-sensitive UAVs: A numerical model and its parallel implementation. *Advances in Engineering Software*, **2016**, 102, 123-133	3.6	17
96	A Wind Estimation Method with an Unmanned Rotorcraft for Environmental Monitoring Tasks. *Sensors*, **2018**, 18,	3.8	17
95	Stacked Sparse Auto-Encoders (SSAE) Based Electronic Nose for Chinese Liquors Classification. *Sensors*, **2017**, 17,	3.8	15

94	Probability-PSO Algorithm for Multi-robot Based Odor Source Localization in Ventilated Indoor Environments. *Lecture Notes in Computer Science*, **2008**, 1206-1215	0.9	14
93	Improvement in the accuracy of estimating the time-of-flight in an ultrasonic ranging system using multiple square-root unscented Kalman filters. *Review of Scientific Instruments*, **2010**, 81, 104901	1.7	13
92	Distributed least-squares estimation of a remote chemical source via convex combination in wireless sensor networks. *Sensors*, **2014**, 14, 11444-66	3.8	12
91	Neural network and fuzzy logic techniques based collision avoidance for a mobile robot. *Robotica*, **1997**, 15, 627-632	2.1	12
90	Non-crosstalk real-time ultrasonic range system with optimized chaotic pulse position-width modulation excitation **2008**,		12
89	Review of Crosstalk Elimination Methods for Ultrasonic Range Systems in Mobile Robots **2006**,		12
88	Recent Progress and Trend of Robot Odor Source Localization. *IEEJ Transactions on Electrical and Electronic Engineering*, **2021**, 16, 938-953	1	12
87	Data Processing for Multiple Electronic Noses Using Sensor Response Visualization. *IEEE Sensors Journal*, **2018**, 18, 9360-9369	4	12
86	Multivariate multifractal detrended fluctuation analysis of 3D wind field signals. *Physica A: Statistical Mechanics and Its Applications*, **2018**, 490, 513-523	3.3	11
85	A CNN-based simplified data processing method for electronic noses **2017**,		10
84	Chemical Source Searching by Controlling a Wheeled Mobile Robot to Follow an Online Planned Route in Outdoor Field Environments. *Sensors*, **2019**, 19,	3.8	9
83	Detecting Seizures From EEG Signals Using the Entropy of Visibility Heights of Hierarchical Neighbors. *IEEE Access*, **2019**, 7, 7889-7896	3.5	9
82	Source Exploration for an Under-Actuated System: A Control-Theoretic Paradigm. *IEEE Transactions on Control Systems Technology*, **2020**, 28, 1100-1107	4.8	9
81	A Portable Odor-Tracing Instrument. *IEEE Transactions on Instrumentation and Measurement*, **2016**, 65, 631-642	5.2	8
80	An adaptive P300 model for controlling a humanoid robot with mind **2013**,		8
79	A Flying Odor Compass to Autonomously Locate the Gas Source. *IEEE Transactions on Instrumentation and Measurement*, **2017**, 1-13	5.2	8
78	Distributed Sequential Location Estimation of a Gas Source via Convex Combination in WSNs. *IEEE Transactions on Instrumentation and Measurement*, **2016**, 65, 1484-1494	5.2	7
77	SSVEP-based hierarchical architecture for control of a humanoid robot with mind **2014**,		7

76	Frequency-Hopping Pseudo-Random Pulse Width Modulation to Eliminate Crosstalk of Sonar Sensors in Mobile Robots **2006**,		7
75	Odometry based pose determination and errors measurement for a mobile robot with two steerable drive wheels. *Journal of Intelligent and Robotic Systems: Theory and Applications*, **2005**, 41, 263-282	2.8	7
74	Olfactory EEG Signal Classification Using a Trapezoid Difference-Based Electrode Sequence Hashing Approach. *International Journal of Neural Systems*, **2020**, 30, 2050011	6.2	7
73	Temporal-spatial cross-correlation analysis of non-stationary near-surface wind speed time series. *Journal of Central South University*, **2017**, 24, 692-698	2.1	6
72	2-D Wind Velocity Measurement Using a Vertically Suspended Optical Fiber Combined With a Photosensor Array. *IEEE Transactions on Instrumentation and Measurement*, **2017**, 66, 2074-2082	5.2	6
71	A multiple-fan active control wind tunnel for outdoor wind speed and direction simulation. *Review of Scientific Instruments*, **2018**, 89, 035108	1.7	6
70	Design of a portable electronic nose for real-fake detection of liquors. *Review of Scientific Instruments*, **2017**, 88, 095001	1.7	6
69	Research on the Effect of Electrical Signals on Growth of Sansevieria under Light-Emitting Diode (LED) Lighting Environment. *PLoS ONE*, **2015**, 10, e0131838	3.7	6
68	An OpenViBE-based brainwave control system for Cerebot **2013**,		6
67	Mobile robot based odor source localization via particle filter **2009**,		6
66	GRP-DNet: A gray recurrence plot-based densely connected convolutional network for classification of epileptiform EEG. *Journal of Neuroscience Methods*, **2021**, 347, 108953	3	6
65	Improvement of energy efficiency via spectrum optimization of excitation sequence for multichannel simultaneously triggered airborne sonar system. *Review of Scientific Instruments*, **2009**, 80, 124903	1.7	5
64	Mobile Robot based Odor Path Estimation via Dynamic Window Approach **2008**,		5
63	A Hand-Held Electronic Nose System for Rapid Identification of Chinese Liquors. *IEEE Transactions on Instrumentation and Measurement*, **2021**, 1-1	5.2	5
62	Using Spike-Based Bio-Inspired Olfactory Model for Data Processing in Electronic Noses. *IEEE Sensors Journal*, **2018**, 18, 692-702	4	5
61	Slow cortical potential signal classification using concave-convex feature. *Journal of Neuroscience Methods*, **2019**, 324, 108303	3	4
60	Electronic nose using a bio-inspired neural network modeled on mammalian olfactory system for Chinese liquor classification. *Review of Scientific Instruments*, **2019**, 90, 025001	1.7	4
59	Distributed sequential adaptive weighted localization of a gas-leakage source using a wireless sensor network **2013**,		4

58	Asymmetric multiscale multifractal analysis of wind speed signals. *International Journal of Modern Physics C*, **2017**, 28, 1750137	1.1	4
57	Mobile robot gas source localization via top-down visual attention mechanism and shape analysis **2010**,		4
56	Wall-following by an Autonomously Guided Vehicle (AGV) Using a New Fuzzy-I (Integration) Controller. *Robotica*, **1999**, 17, 79-86	2.1	4
55	Community structure detection in complex networks for characterizing atmospheric boundary-layer wind speed time series **2016**,		4
54	A Fast Method for Chinese Liquor Recognition **2018**,		4
53	Unstructured Road Vanishing Point Detection Using Convolutional Neural Networks and Heatmap Regression. *IEEE Transactions on Instrumentation and Measurement*, **2021**, 70, 1-8	5.2	4
52	Learning to rapidly re-contact the lost plume in chemical plume tracing. *Sensors*, **2015**, 15, 7512-36	3.8	3
51	Localization of multiple odor sources via selective olfaction and adapted ant colony optimization algorithm **2013**,		3
50	UAV-based Odor Source Localization in Multi-Building Environments Using Simulated Annealing Algorithm **2020**,		3
49	A wind estimation method for quadrotors using inertial measurement units **2016**,		3
48	DCCA cross-correlation analysis of 3D wind field signals in indoor and outdoor environments **2016**,		3
47	Nonlinear analysis of the near-surface wind speed time series **2012**,		2
46	Multi-robot odor-plume tracing in indoor natural airflow environments using an improved ACO algorithm **2010**,		2
45	Integrating Perceptual Properties of the HVS into the Computational Model of Visual Attention **2009**,		2
44	An estimation-based plume tracing method in time-variant airflow-field via mobile robot **2009**,		2
43	A particle filter algorithm for odor source localization in wireless sensor network **2011**,		2
42	Hearing based relative localization for mobile robots in outdoor environments **2012**,		2
41	Numerical simulation of odor plume in indoor ventilated environments for studying odor source localization with mobile robots **2012**,		2

40	Odometry based pose determination and error measurement for a mobile robot with two steerable drive wheels		2
39	Normalizing the polynomial-match for the non-linear signal in transducers. *Sensors and Actuators A: Physical*, **2005**, 125, 76-83	3.9	2
38	Safe-Nav: learning to prevent PointGoal navigation failure in unknown environments. *Complex & Intelligent Systems*,1	7.1	2
37	D-VPnet: A network for real-time dominant vanishing point detection in natural scenes. *Neurocomputing*, **2020**, 417, 432-440	5.4	2
36	3-Dimensional Modeling and Attitude Control of Multi-Joint Autonomous Underwater Vehicles. *Journal of Marine Science and Engineering*, **2021**, 9, 307	2.4	2
35	Multi-Sensor Integrated Navigation Algorithm Using Adaptive Federated Kalman Filter for MAVs **2018**,		2
34	A Portable E-nose Endowed with Subjective Evaluation Function of Air Quality in Vehicles. *IEEE Transactions on Instrumentation and Measurement*, **2022**, 1-1	5.2	2
33	A gas source declaration scheme based on a tetrahedral sensor structure in three-dimensional airflow environments. *Review of Scientific Instruments*, **2019**, 90, 024104	1.7	1
32	Gas Source Declaration With Tetrahedral Sensing Geometries and Median Value Filtering Extreme Learning Machine. *IEEE Access*, **2020**, 8, 7227-7235	3.5	1
31	A portable E-nose system for classification of Chinese liquor **2015**,		1
30	Simulation of Outdoor Near-Surface Airflows Based on a Wind Tunnel with Multiple Actively-Controlled Fans. *Advanced Materials Research*, **2013**, 807-809, 102-105	0.5	1
29	Non-crosstalk ultrasonic ranging system excited using chaotic sine frequency modulated sequences **2011**,		1
28	Multi-robot Based Chemical Plume Tracing with Virtual Odor-Source-Probability Sensor **2009**,		1
27	Motion capture and reconstruction based on depth information using Kinect **2012**,		1
26	Determination of optimal top-down gains for specific searching tasks **2010**,		1
25	A Novel Object Recognition Method for Mobile Robot Localizing a Single Odor/Gas Source in Complex Environments **2008**,		1
24	Rapid door-number recognition by a humanoid mobile robot		1
23	Rapid Door Number Recognition by a Humanoid Mobile Robot. *Journal of Intelligent and Robotic Systems: Theory and Applications*, **2005**, 43, 33-54	2.9	1

22	A triangular hashing learning approach for olfactory EEG signal recognition. *Applied Soft Computing Journal*, **2022**, 118, 108471	7.5	1
21	Touch Gesture and Emotion Recognition using Decomposed Spatiotemporal Convolutions. *IEEE Transactions on Instrumentation and Measurement*, **2022**, 1-1	5.2	1
20	Experimental Comparison of Spiral and Zigzag Algorithms for Odor Plume Finding in An Outdoor Natural Airflow Environment. *The Abstracts of the International Conference on Advanced Mechatronics Toward Evolutionary Fusion of IT and Mechatronics ICAM*, **2010**, 2010.5, 171-176		1
19	Multiscale entropy analysis of the 3D near-surface wind field **2016**,		1
18	Time and frequency domain analysis to plant electrical signal of swallow palm and anthurium under controlled LED environment **2016**,		1
17	A numerical model to simulate the aerodynamic olfactory effect of the gas-sensitive UAV **2016**,		1
16	An Automatic Detection and Recognition Method for Pointer-type Meters in Natural Gas Stations **2019**,		1
15	EEG-Based Odor Recognition Using Channel-Frequency Convolutional Neural Network **2019**,		1
14	Design of handheld electronic nose bionic chambers for Chinese liquors recognition. *Measurement: Journal of the International Measurement Confederation*, **2021**, 172, 108856	4.6	1
13	Touch Gesture Recognition using Spatiotemporal Fusion Features. *IEEE Sensors Journal*, **2021**, 1-1	4	1
12	A Double-Square-Based Electrode Sequence Learning Method for Odor Concentration Identification Using EEG Signals. *IEEE Transactions on Instrumentation and Measurement*, **2021**, 1-1	5.2	1
11	A Small Bionic Sensor Chamber Designed for Hand-Held Electronic Nose **2018**,		1
10	Multiscale Complex Network for Analyzing the Wind Field from Different Heights and Seasons* **2018**,		1
9	Stereo Vision based Cabin's 6-dimensional Pose Measurement in Docking Process **2018**,		1
8	A Voting-Near-Extreme-Learning-Machine Classification Algorithm **2018**,		1
7	Latticed mode: A new control strategy for wind field simulation in a multiple-fan wind tunnel. *Review of Scientific Instruments*, **2019**, 90, 085104	1.7	0
6	A Double Triangular Feature-Based Sensor Sequence Coding Approach for Identifying Chinese Liquors Using An E-nose System. *IEEE Sensors Journal*, **2022**, 1-1	4	0
5	Uncertainty-driven active view planning in feature-based monocular vSLAM. *Applied Soft Computing Journal*, **2021**, 108, 107459	7.5	0

4	Decoding olfactory EEG signals for different odor stimuli identification using wavelet-spatial domain feature. *Journal of Neuroscience Methods*, **2021**, 363, 109355	3	0
3	MASS: A multi-source domain adaptation network for cross-subject touch gesture recognition. *IEEE Transactions on Industrial Informatics*, **2022**, 1-1	11.9	0
2	Single Gas Source Localization Using A Mobile Sensor Network. *The Abstracts of the International Conference on Advanced Mechatronics Toward Evolutionary Fusion of IT and Mechatronics ICAM*, **2010** , 2010.5, 177-182		
1	A novel indoor smell regulation method. *AIP Advances*, **2020**, 10, 105226	1.5	