Fengchun Tian

List of Publications by Year
in descending order

94	1,539	361413	345221
papers	citations	20	36
		h-index	g-index

94	94	94	1131
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Joint Design for Cooperative Radar and Communication Systems in Multi-Target Optimization. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 614-618.	3.0	3
2	Joint Transceiver Design for Radar-Communication Spectral Sharing Systems by Minimizing Effective Interference Power. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 229-233.	3.0	5
3	A Novel Multisensor Detection System Design for Low Concentrations of Volatile Organic Compounds. IEEE Transactions on Industrial Electronics, 2022, 69, 5314-5324.	7.9	15
4	Study on Sensor Array Optimization of Medical Electronic Nose for Wound Infection Detection. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 1867-1871.	3.0	6
5	MTMI-DCNN: A PSR-Based Method for Time Series Sensor Data Classification. IEEE Sensors Journal, 2022, 22, 6806-6817.	4.7	4
6	A Sparse Reconstruction Domain Transfer Method for Interference Suppression in Artificial Olfactory System. IEEE Sensors Journal, 2022, 22, 6717-6730.	4.7	6
7	Development of Gas Sensor Based on Fractal Substrate Structures. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-7.	4.7	6
8	Gas Sensor with Fractal Geometry Optimized Electrode Structure. , 2022, , .		0
9	Design of Multisensor Electronic Nose Based on Conformal Sensor Chamber. IEEE Transactions on Industrial Electronics, 2021, 68, 6276-6285.	7.9	22
10	A Novel Conformal Design for Multi-Sensor System Synthesis. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 1532-1536.	3.0	7
11	A Weighted Discriminative Extreme Learning Machine Design for Lung Cancer Detection by an Electronic Nose System. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-9.	4.7	21
12	Application of Fractal Geometry in Gas Sensor: A Review. IEEE Sensors Journal, 2021, 21, 14587-14600.	4.7	21
13	A Pre-Concentration System Design for Electronic Nose via Finite Element Method. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 3592-3596.	3.0	5
14	A portable and automatic dual-readout detector integrated with 3D-printed microfluidic nanosensors for rapid carbamate pesticides detection. Sensors and Actuators B: Chemical, 2021, 346, 130454.	7.8	21
15	A novel WWH problem-based semi-supervised online method for sensor drift compensation in E-nose. Sensors and Actuators B: Chemical, 2021, 349, 130727.	7.8	7
16	Development of Au–Pd@UiO-66-on-ZIF-L/CC as a self-supported electrochemical sensor for *in situ* monitoring of cellular hydrogen peroxide. Journal of Materials Chemistry B, 2021, 9, 9031-9040.	5.8	14
17	A Universal Calibration Method for Electronic Nose Based on Projection on to Convex Sets. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-12.	4.7	5
18	MCSP-SSS: A Domain Adaptive Framework for High-Accuracy Sensor Data Classification. IEEE Sensors Journal, 2021, 21, 25995-26005.	4.7	3

#	Article	IF	Citations
19	Functionalized Carbon Nanotube-Decorated MXene Nanosheet-Enabled Microfluidic Electrochemical Aptasensor for Carcinoembryonic Antigen Determination. ACS Sustainable Chemistry and Engineering, 2021, 9, 15386-15393.	6.7	14
20	Collaborative detection for wound infections using electronic nose and FAIMS technology based on a rat wound model. Sensors and Actuators B: Chemical, 2020, 320, 128595.	7.8	10
21	Improved Deep CNN with Parameter Initialization for Data Analysis of Near-Infrared Spectroscopy Sensors. Sensors, 2020, 20, 874.	3.8	25
22	Robust Design for signal mismatch with Steering Vector and Covariance Matrix Constraints. , 2020, , .		0
23	Local warning integrated with global feature based on dynamic spectra for FAIMS data analysis in detection of clinical wound infection. Sensors and Actuators B: Chemical, 2019, 298, 126926.	7.8	8
24	Resistance-Capacitance Gas Sensor Based on Fractal Geometry. Chemosensors, 2019, 7, 31.	3.6	11
25	Domain Transfer Broad Learning System for Long-Term Drift Compensation in Electronic Nose Systems. IEEE Access, 2019, 7, 143947-143959.	4.2	27
26	A Novel Subspace Alignment-Based Interference Suppression Method for the Transfer Caused by Different Sample Carriers in Electronic Nose. Sensors, 2019, 19, 4846.	3.8	6
27	MIMO Radar and MIMO Communication Spectrum Sharing with Interference Mitigation. , 2019, , .		0
28	Improving the Robustness of Prediction Model by Transfer Learning for Interference Suppression of Electronic Nose. IEEE Sensors Journal, 2018, 18, 1111-1121.	4.7	20
29	Research on electronic nose system based on continuous wide spectral gas sensing. Microchemical Journal, 2018, 140, 1-7.	4.5	12
30	Research on an optical e-nose denoising method based on LSSVM. Optik, 2018, 168, 118-126.	2.9	7
31	Single image super resolution based on integration of Bandelet geometric-flow-oriented interpolation and total variation in wavelet domain. Multimedia Tools and Applications, 2018, 77, 6343-6366.	3.9	1
32	Blind multi-image super-resolution based on combination of ANN learning and non-subsampled Contourlet directional image representation. Signal, Image and Video Processing, 2018, 12, 25-31.	2.7	4
33	Pattern Recognition-Based Interference Reduction. , 2018, , 249-264.		0
34	Support Vector Machine Optimized by Genetic Algorithm for Data Analysis of Near-Infrared Spectroscopy Sensors. Sensors, 2018, 18, 3222.	3.8	16
35	Electronic Nose: Algorithmic Challenges. , 2018, , .		8
36	Study on Interference Suppression Algorithms for Electronic Noses: A Review. Sensors, 2018, 18, 1179.	3.8	36

#	Article	IF	Citations
37	Research on a Visual Electronic Nose System Based on Spatial Heterodyne Spectrometer. Sensors, 2018, 18, 1188.	3.8	4
38	Instrumental Batch Correction. , 2018, , 323-333.		0
39	Affine Calibration Transfer Model. , 2018, , 301-321.		0
40	Self-expression-Based Abnormal Odor Detection. , 2018, , 279-298.		0
41	Discriminative Support Vector Machine-Based Odor Classification. , 2018, , 79-93.		0
42	Pattern Mismatch Guided Interference Elimination. , 2018, , 265-278.		0
43	Domain Regularized Subspace Projection Method. , 2018, , 173-191.		0
44	Ensemble of Classifiers for Robust Recognition. , 2018, , 115-131.		0
45	Domain Correction-Based Adaptive Extreme Learning Machine. , 2018, , 209-224.		0
46	An adaptive neuro-fuzzy approach to bulk tobacco flue-curing control process. Drying Technology, 2017, 35, 465-477.	3.1	13
47	Complementary M â€ary orthogonal spreading OFDM architecture for HF communication link. IET Communications, 2017, 11, 292-301.	2.2	10
48	Sensor Array Optimization of Electronic Nose for Detection of Bacteria in Wound Infection. IEEE Transactions on Industrial Electronics, 2017, 64, 7350-7358.	7.9	72
49	A correlated information removing based interference suppression technique in electronic nose for detection of bacteria. Analytica Chimica Acta, 2017, 986, 145-152.	5.4	17
50	Application of fractal analysis in image motion estimation. Imaging Science Journal, 2017, 65, 349-357.	0.5	0
51	Motion-Compensated Temporal Frame Interpolation Algorithm Based on Global Entirety Unidirectional Motion Estimation and Local Fast Bidirectional Motion Estimation. International Journal of Pattern Recognition and Artificial Intelligence, 2017, 31, 1758001.	1.2	3
52	Intelligent estimate of chemical compositions based on NIR spectra analysis. , 2017, , .		1
53	Suppression of Strong Background Interference on E-Nose Sensors in an Open Country Environment. Sensors, 2016, 16, 233.	3.8	18
54	Inter-Group Complementary Sequence Set Based on Interleaved Periodic Complementary Sequences. Wireless Personal Communications, 2016, 91, 1051-1064.	2.7	8

#	Article	IF	Citations
55	Design of orthogonal subsets for M-ary spread spectrum communications with OFDM modulation. , 2016, , .		2
56	Performance comparison of two spread-spectrum-based wireless video transmission schemes. , 2016, , .		1
57	A novel pattern mismatch based interference elimination technique in E-nose. Sensors and Actuators B: Chemical, 2016, 234, 703-712.	7.8	29
58	A Novel Frame Rate Up-Conversion Algorithm Based on Soft Threshold Bandelet Transform. International Journal of Pattern Recognition and Artificial Intelligence, 2016, 30, 1650017.	1.2	2
59	Multiple Orthogonal Subsets With Three-Valued In-Phase Cross-Correlation for HF Communications. IEEE Communications Letters, 2016, 20, 1377-1380.	4.1	17
60	A novel spectrum analysis technique for odor sensing in optical electronic nose. Sensors and Actuators B: Chemical, 2016, 222, 769-779.	7.8	21
61	Temperature Modulated Gas Sensing E-Nose System for Low-Cost and Fast Detection. IEEE Sensors Journal, 2016, 16, 464-474.	4.7	49
62	A Novel Feature Extraction Approach Using Window Function Capturing and QPSO-SVM for Enhancing Electronic Nose Performance. Sensors, 2015, 15, 15198-15217.	3.8	21
63	M-ary spread spectrum ofdm structure based on cascaded cyclic shift complementary pairs. , 2014, , .		7
64	Mutually orthogonal complementary pairs for OFDM-CDMA systems. , 2014, , .		6
65	Carrier frequency offset estimation of OFDM systems based on complementary sequence. , 2014, , .		2
66	Super-resolution image reconstruction based on wavelet packet transform and artifcial neural networks. , 2014, , .		1
67	Concentration estimation of formaldehyde using metal oxide semiconductor gas sensor array-based e-noses. Sensor Review, 2014, 34, 284-290.	1.8	13
68	A novel sensor selection using pattern recognition in electronic nose. Measurement: Journal of the International Measurement Confederation, 2014, 54, 31-39.	5.0	44
69	Feature extraction of wound infection data for electronic nose based on a novel weighted KPCA. Sensors and Actuators B: Chemical, 2014, 201, 555-566.	7.8	63
70	Performance Study of Multilayer Perceptrons in a Low-Cost Electronic Nose. IEEE Transactions on Instrumentation and Measurement, 2014, 63, 1670-1679.	4.7	105
71	A novel classifier ensemble for recognition of multiple indoor air contaminants by an electronic nose. Sensors and Actuators A: Physical, 2014, 207, 67-74.	4.1	56
72	Improving the performance of electronic nose for wound infection detection using orthogonal signal correction and particle swarm optimization. Sensor Review, 2014, 34, 389-395.	1.8	27

#	Article	IF	Citations
73	Standardization of metal oxide sensor array using artificial neural networks through experimental design. Sensors and Actuators B: Chemical, 2013, 177, 947-955.	7.8	20
74	A novel background interferences elimination method in electronic nose using pattern recognition. Sensors and Actuators A: Physical, 2013, 201, 254-263.	4.1	36
75	Chaotic time series prediction of E-nose sensor drift in embedded phase space. Sensors and Actuators B: Chemical, 2013, 182, 71-79.	7.8	61
76	Application and Development Trend of Gas Sensing Technology Based on Absorption Spectroscopy. , 2013, , .		0
77	On-line Calibration of Semiconductor Gas Sensors Based on Prediction Model. Journal of Computers, 2013, 8, .	0.4	1
78	Classification of Electronic Nose Data in Wound Infection Detection Based on PSO-SVM Combined with Wavelet Transform. Intelligent Automation and Soft Computing, 2012, 18, 967-979.	2.1	17
79	A Novel Chaotic Sequence Optimization Neural Network for Concentration Estimation of Formaldehyde by an Electronic Nose. , 2012, , .		3
80	Classification of multiple indoor air contaminants by an electronic nose and a hybrid support vector machine. Sensors and Actuators B: Chemical, 2012, 174, 114-125.	7.8	131
81	Background Interference Elimination in Wound Infection Detection by Electronic Nose Based on Reference Vector-based Independent Component Analysis. Information Technology Journal, 2012, 11, 850-858.	0.3	10
82	On-line sensor calibration transfer among electronic nose instruments for monitoring volatile organic chemicals in indoor air quality. Sensors and Actuators B: Chemical, 2011, 160, 899-909.	7.8	87
83	Gases concentration estimation using heuristics and bio-inspired optimization models for experimental chemical electronic nose. Sensors and Actuators B: Chemical, 2011, 160, 760-770.	7.8	49
84	A background elimination method based on wavelet transform in wound infection detection by electronic nose. Sensors and Actuators B: Chemical, 2011, 157, 395-400.	7.8	38
85	Bilateral similarity function: A novel and universal method for similarity analysis of biological sequences. Journal of Theoretical Biology, 2010, 265, 194-201.	1.7	16
86	Applications of representation method for DNA sequences based on symbolic dynamics. Computational and Theoretical Chemistry, 2009, 909, 33-42.	1.5	12
87	Novel Approach for Tracking Accuracy Enhancement in Infrared Spot Image. Journal of Infrared, Millimeter, and Terahertz Waves, 2009, 30, 190-198.	2.2	1
88	An adaptive QoS and energy-aware routing algorithm for wireless sensor networks. , 2008, , .		20
89	A Solid Trap and Thermal Desorption System with Application to a Medical Electronic Nose. Sensors, 2008, 8, 6885-6898.	3.8	13
90	Circuit and Noise Analysis of Odorant Gas Sensors in an E-Nose. Sensors, 2005, 5, 85-96.	3.8	33

#	Article	IF	Citations
91	Analysing Contributions of Components and Factors to Pork Odour Using Structural Learning with Forgetting Method. Lecture Notes in Computer Science, 2004, , 383-388.	1.3	1
92	Study on noise feature in sensor array of an electronic nose. , 0, , .		0
93	A human vision inspired optical wavelet filter for image data compression. , 0, , .		1
94	Noise and Repeatability of Odorant Gas Sensors in an E-Nose. , 0, , 102-124.		1