

# Electronic noses for food quality: A review

Journal of Food Engineering

144, 103-111

DOI: [10.1016/j.jfoodeng.2014.07.019](https://doi.org/10.1016/j.jfoodeng.2014.07.019)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Fish freshness testing with Artificial Neural Networks. , 2015, , .		5
2	A Novel Feature Extraction Approach Using Window Function Capturing and QPSO-SVM for Enhancing Electronic Nose Performance. <i>Sensors</i> , 2015, 15, 15198-15217.	2.1	21
3	Volatile organic compounds as non-invasive markers for plant phenotyping. <i>Journal of Experimental Botany</i> , 2015, 66, 5403-5416.	2.4	103
4	A Wireless and Portable Electronic Nose to Differentiate Musts of Different Ripeness Degree and Grape Varieties. <i>Sensors</i> , 2015, 15, 8429-8443.	2.1	33
5	Moving your laboratories to the field – Advantages and limitations of the use of field portable instruments in environmental sample analysis. <i>Environmental Research</i> , 2015, 140, 593-603.	3.7	133
6	Real time detection of beer defects with a hand held electronic nose. , 2015, , .		9
7	Changes in the Aromatic Profile of Espresso Coffee as a Function of the Grinding Grade and Extraction Time: A Study by the Electronic Nose System. <i>Journal of Agricultural and Food Chemistry</i> , 2015, 63, 2321-2327.	2.4	61
8	Kiwi fruit ( <i>Actinidia chinensis</i> ) quality determination based on surface acoustic wave resonator combined with electronic nose. <i>Bioengineered</i> , 2015, 6, 53-61.	1.4	15
9	Application of an HS-MS for the detection of ignitable liquids from fire debris. <i>Talanta</i> , 2015, 142, 150-156.	2.9	27
10	Use of an electronic nose as a tool to differentiate winemaking techniques. , 2015, , .		3
11	Study of fish species discrimination via electronic nose. <i>Computers and Electronics in Agriculture</i> , 2015, 119, 83-91.	3.7	47
12	Qualitative and quantitative analysis of Chinese pecans ( <i>Carya cathayensis</i> ) during storage using MOS E-nose combined with chemometrics methods. , 2016, , .		0
13	Coffee and the Electronic Nose. , 2016, , 31-38.		8
14	Implementaci3n y evaluaci3n de una nariz electr3nica para la detecci3n de alcoholes lineales. <i>Revista Colombiana De Quimica</i> , 2016, 45, 12.	0.2	2
15	Short-Time Fourier Transform and Decision Tree-Based Pattern Recognition for Gas Identification Using Temperature Modulated Microhotplate Gas Sensors. <i>Journal of Sensors</i> , 2016, 2016, 1-12.	0.6	9
16	Discriminating among different tea leaves using an operating temperature-modulated tin oxide gas sensor. <i>IOP Conference Series: Materials Science and Engineering</i> , 2016, 108, 012019.	0.3	2
17	A Novel Semi-Supervised Electronic Nose Learning Technique: M-Training. <i>Sensors</i> , 2016, 16, 370.	2.1	5
18	Electronic Noses and Tongues in Wine Industry. <i>Frontiers in Bioengineering and Biotechnology</i> , 2016, 4, 81.	2.0	87

#	ARTICLE	IF	CITATIONS
19	A Novel MOS Nanowire Gas Sensor Device (S3) and GC-MS-Based Approach for the Characterization of Grated Parmigiano Reggiano Cheese. <i>Biosensors</i> , 2016, 6, 60.	2.3	20
20	Enhancing Electronic Nose Performance Based on a Novel QPSO-KELM Model. <i>Sensors</i> , 2016, 16, 520.	2.1	22
21	Determination of Ignitable Liquids in Fire Debris: Direct Analysis by Electronic Nose. <i>Sensors</i> , 2016, 16, 695.	2.1	33
22	A Novel Optimization Technique to Improve Gas Recognition by Electronic Noses Based on the Enhanced Krill Herd Algorithm. <i>Sensors</i> , 2016, 16, 1275.	2.1	8
23	A Novel Semi-Supervised Method of Electronic Nose for Indoor Pollution Detection Trained by M-S4VMs. <i>Sensors</i> , 2016, 16, 1462.	2.1	4
24	Electronic Nose Testing Procedure for the Definition of Minimum Performance Requirements for Environmental Odor Monitoring. <i>Sensors</i> , 2016, 16, 1548.	2.1	39
25	Multivariate Approaches to Electronic Nose and PTRâ€“TOFâ€“MS Technologies in Agro-Food Products. , 2016, , 73-82.		6
26	The study of multimodal gas recognition algorithm based on machine olfaction. , 2016, , .		0
27	Comparative analysis of feature extraction methods in the clustering of electronic nose response correlated with GC/MS analysis. <i>AIP Conference Proceedings</i> , 2016, , .	0.3	1
28	Classification of fruit species based on effective sensor array selection. , 2016, , .		0
29	Comparison of direct interfacing and ADC based system for gas identification using E-Nose. , 2016, , .		4
30	Remarks on neural network-based tea aroma recognition with a mass-sensitive chemical sensor using plasma-organic-polymer-film-coated quartz crystal resonators. , 2016, , .		3
31	Internal quality detection of Chinese pecans ( <i>Carya cathayensis</i> ) during storage using electronic nose responses combined with physicochemical methods. <i>Postharvest Biology and Technology</i> , 2016, 118, 17-25.	2.9	48
32	Quantitative evaluation and prediction for preservation quality of cold shocked cucumber based on entropy. <i>Innovative Food Science and Emerging Technologies</i> , 2016, 35, 58-66.	2.7	9
33	RAPD and SCAR markers as potential tools for detection of milk origin in dairy products: Adulterant sheep breeds in Serra da Estrela cheese production. <i>Food Chemistry</i> , 2016, 211, 631-636.	4.2	26
34	Sensory methods and electronic nose as innovative tools for the evaluation of the aroma transfer properties of food plastic bags. <i>Food Research International</i> , 2016, 85, 235-243.	2.9	24
35	Monitoring of bacterial contamination on chicken meat surface using a novel narrowband spectral index derived from hyperspectral imagery data. <i>Meat Science</i> , 2016, 122, 25-31.	2.7	39
36	Multivariable Sensors for Ubiquitous Monitoring of Gases in the Era of Internet of Things and Industrial Internet. <i>Chemical Reviews</i> , 2016, 116, 11877-11923.	23.0	305

#	ARTICLE	IF	CITATIONS
37	Challenges of large-class-number classification (LCNC): A novel ensemble strategy (ES) and its application to discriminating the geographical origins of 25 green teas. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2016, 157, 43-49.	1.8	17
38	Study on Electronic-Nose-Based Quality Monitoring System for Coffee Under Roasting. <i>Journal of Circuits, Systems and Computers</i> , 2016, 25, 1650116.	1.0	16
39	Detection of Organophosphorus Pesticides with Colorimetry and Computer Image Analysis. <i>Analytical Sciences</i> , 2016, 32, 719-724.	0.8	14
40	An electronic nose for quantitative determination of gas concentrations. <i>Proceedings of SPIE</i> , 2016, , .	0.8	3
41	The electronic nose system: study on the global aromatic profile of espresso coffee prepared with two types of coffee filter holders. <i>European Food Research and Technology</i> , 2016, 242, 2083-2091.	1.6	10
42	Wine Applications With Electronic Noses. , 2016, , 137-148.		12
43	Electronic noses and tongues to assess food authenticity and adulteration. <i>Trends in Food Science and Technology</i> , 2016, 58, 40-54.	7.8	196
44	Classification of Indonesia black teas based on quality by using electronic nose and principal component analysis. <i>AIP Conference Proceedings</i> , 2016, , .	0.3	21
45	Sample handling for electronic nose technology: State of the art and future trends. <i>TrAC - Trends in Analytical Chemistry</i> , 2016, 82, 222-236.	5.8	54
46	Analysis of LPG, electric and induction cookers during cooking typical Ecuadorian dishes into the national efficient cooking program. <i>Food Policy</i> , 2016, 59, 88-102.	2.8	34
47	Application of electronic nose systems for assessing quality of medicinal and aromatic plant products: A review. <i>Journal of Applied Research on Medicinal and Aromatic Plants</i> , 2016, 3, 1-9.	0.9	107
48	Application of electrochemical sensors and sensor matrixes for measurement of odorous chemical compounds. <i>TrAC - Trends in Analytical Chemistry</i> , 2016, 77, 1-13.	5.8	90
49	Human Bond Communications: Generic Classification and Technology Enablers. <i>Wireless Personal Communications</i> , 2016, 88, 5-21.	1.8	12
50	Estimation of multicomponent organic solvent vapor mixture composition with electroconducting polymer chemiresistors. <i>Sensors and Actuators B: Chemical</i> , 2016, 232, 203-218.	4.0	13
51	Relationship between overall difference decision and electronic tongue: Discrimination of civet coffee. <i>Journal of Food Engineering</i> , 2016, 180, 60-68.	2.7	22
52	Data mining derived from food analyses using non-invasive/non-destructive analytical techniques; determination of food authenticity, quality & safety in tandem with computer science disciplines. <i>Trends in Food Science and Technology</i> , 2016, 50, 11-25.	7.8	134
53	Using ion mobility spectrometry for screening the autoxidation of peanuts. <i>Food Control</i> , 2016, 64, 17-21.	2.8	20
54	Comparison of different chemometric methods in quantifying total volatile basic-nitrogen (TVB-N) content in chicken meat using a fabricated colorimetric sensor array. <i>RSC Advances</i> , 2016, 6, 4663-4672.	1.7	37

#	ARTICLE	IF	CITATIONS
55	Effect of hot air drying on volatile compounds of <i>Flammulina velutipes</i> detected by HS-SPME-GC-MS and electronic nose. <i>Food Chemistry</i> , 2016, 196, 860-866.	4.2	163
56	Nondestructively sensing of total viable count (TVC) in chicken using an artificial olfaction system based colorimetric sensor array. <i>Journal of Food Engineering</i> , 2016, 168, 259-266.	2.7	59
57	Fusion of artificial senses as a robust approach to food quality assessment. <i>Journal of Food Engineering</i> , 2016, 171, 230-239.	2.7	74
58	Nanocomposite Materials for Food Packaging Applications: Characterization and Safety Evaluation. <i>Food Engineering Reviews</i> , 2016, 8, 35-51.	3.1	94
59	A Gaussian-based kernel Fisher discriminant analysis for electronic nose data and applications in spirit and vinegar classification. <i>Journal of Food Measurement and Characterization</i> , 2017, 11, 24-32.	1.6	7
60	A combination of quantitative marinating and Maillard reaction to enhance volatile flavor in Chinese marinated chicken. <i>Journal of the Science of Food and Agriculture</i> , 2017, 97, 823-831.	1.7	14
61	Efficacy of a titanium dioxide nanoparticles based indoor anti-odor product as assessed by electronic nose and gas chromatography-mass spectrometry. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2017, 144, 236-241.	1.4	4
63	Differentiation of chill-stored and frozen pork necks using electronic nose with ultrafast gas chromatography. <i>Journal of Food Process Engineering</i> , 2017, 40, e12540.	1.5	29
64	Towards bionic noses. <i>Sensor Review</i> , 2017, 37, 165-171.	1.0	7
65	Application of electronic nose with MOS sensors to prediction of rapeseed quality. <i>Measurement: Journal of the International Measurement Confederation</i> , 2017, 103, 227-234.	2.5	73
66	Signal processing inspired from the olfactory bulb for electronic noses. <i>Measurement Science and Technology</i> , 2017, 28, 015105.	1.4	11
67	Fusion of electronic nose, electronic tongue and computer vision for animal source food authentication and quality assessment – A review. <i>Journal of Food Engineering</i> , 2017, 210, 62-75.	2.7	230
68	Sensor Array Optimization of Electronic Nose for Detection of Bacteria in Wound Infection. <i>IEEE Transactions on Industrial Electronics</i> , 2017, 64, 7350-7358.	5.2	72
69	Electronic noses: Powerful tools in meat quality assessment. <i>Meat Science</i> , 2017, 131, 119-131.	2.7	149
70	A novel electronic nose learning technique based on active learning: EQBC-RBFNN. <i>Sensors and Actuators B: Chemical</i> , 2017, 249, 533-541.	4.0	23
71	Identification of adulteration in uncooked Jasmine rice by a portable low-cost artificial olfactory system. <i>Measurement: Journal of the International Measurement Confederation</i> , 2017, 108, 67-76.	2.5	49
72	Comparison of flavour qualities of mushrooms ( <i>Flammulina velutipes</i> ) packed with different packaging materials. <i>Food Chemistry</i> , 2017, 232, 1-9.	4.2	72
74	SENose: An under U\$50 electronic nose for the monitoring of soil gas emissions. <i>Computers and Electronics in Agriculture</i> , 2017, 133, 15-21.	3.7	16

#	ARTICLE	IF	CITATIONS
75	Compositional and Electronic Discrimination Analyses of Taste and Aroma Profiles of Non-Centrifugal Cane Brown Sugars. <i>Food Analytical Methods</i> , 2017, 10, 1844-1856.	1.3	27
76	Electronic Nose as a Tool for Monitoring the Authenticity of Food. A Review. <i>Food Analytical Methods</i> , 2017, 10, 1800-1816.	1.3	136
77	Early detection of contamination and defect in foodstuffs by electronic nose: A review. <i>TrAC - Trends in Analytical Chemistry</i> , 2017, 97, 257-271.	5.8	139
78	Monomer: Design of ZnO Nanostructures (Nanobush and Nanowire) and Their Room-Temperature Ethanol Vapor Sensing Signatures. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 38135-38145.	4.0	56
79	A framework for analysing E-Nose data based on fuzzy set multiple linear regression: Paddy quality assessment. <i>Sensors and Actuators A: Physical</i> , 2017, 267, 200-209.	2.0	30
81	Electronic nose with polymer-composite sensors for monitoring fungal deterioration of stored rapeseed. <i>International Agrophysics</i> , 2017, 31, 317-325.	0.7	36
82	Addressing the selectivity issue of cobalt doped zinc oxide thin film iso-butane sensors: Conductance transients and principal component analyses. <i>Journal of Applied Physics</i> , 2017, 122, .	1.1	14
83	A CNN-based simplified data processing method for electronic noses. , 2017, , .		20
84	Battery-less pork freshness real-time monitoring system with high efficient RF energy scavenging. , 2017, , .		2
85	Disposable colorimetric geometric barcode sensor for food quality monitoring. , 2017, , .		12
86	Low cost smart phone diagnostics for food using paper-based colorimetric sensor arrays. <i>Food Control</i> , 2017, 82, 227-232.	2.8	101
87	A gas concentration estimation method based on multivariate relevance vector machine using MOS gas sensor arrays. , 2017, , .		3
88	Intelligent evaluation of total volatile basic nitrogen (TVB-N) content in chicken meat by an improved multiple level data fusion model. <i>Sensors and Actuators B: Chemical</i> , 2017, 238, 337-345.	4.0	68
89	Classification of essential oil composition in <i>Rosa damascena</i> Mill. genotypes using an electronic nose. <i>Journal of Applied Research on Medicinal and Aromatic Plants</i> , 2017, 4, 27-34.	0.9	35
90	A novel framework for analyzing MOS E-nose data based on voting theory: Application to evaluate the internal quality of Chinese pecans. <i>Sensors and Actuators B: Chemical</i> , 2017, 242, 511-521.	4.0	46
91	Odor classification using Support Vector Machine. , 2017, , .		5
92	Bacterial Infection Potato Tuber Soft Rot Disease Detection Based on Electronic Nose. <i>Open Life Sciences</i> , 2017, 12, 379-385.	0.6	17
93	SAW Sensor's Frequency Shift Characterization for Odor Recognition and Concentration Estimation. <i>IEEE Sensors Journal</i> , 2017, 17, 7011-7018.	2.4	7

#	ARTICLE	IF	CITATIONS
94	Feature extraction of electronic nose for classification of indoor pollution gases based on kernel entropy component analysis. International Journal of Intelligent Systems Technologies and Applications, 2017, 16, 140.	0.2	0
95	The influence of nanofillers on physical and chemical properties of polysaccharide-based film intended for food packaging. , 2017, , 637-697.		25
96	Potential Applications and Limitations of Electronic Nose Devices for Plant Disease Diagnosis. Sensors, 2017, 17, 2596.	2.1	76
97	Assessment of the Indoor Odour Impact in a Naturally Ventilated Room. Sensors, 2017, 17, 778.	2.1	16
98	Identification of Chinese Herbal Medicines with Electronic Nose Technology: Applications and Challenges. Sensors, 2017, 17, 1073.	2.1	33
99	Array of Chemosensitive Resistors with Composites of Gas Chromatography (GC) Materials and Carbon Black for Detection and Recognition of VOCs: A Basic Study. Sensors, 2017, 17, 1606.	2.1	10
100	Classification of Data from Electronic Nose Using Gradient Tree Boosting Algorithm. Sensors, 2017, 17, 2376.	2.1	26
101	Portable Electronic Nose Based on Electrochemical Sensors for Food Quality Assessment. Sensors, 2017, 17, 2715.	2.1	109
102	Chemical sensors based on hybrid nanomaterials for food analysis. , 2017, , 205-244.		12
103	The Application of State-of-the-Art Analytic Tools (Biosensors and Spectroscopy) in Beverage and Food Fermentation Process Monitoring. Fermentation, 2017, 3, 50.	1.4	10
104	Analysis of Grain Quality at Receival. , 2017, , 513-570.		7
105	Magnetic-Field-Enhanced Morphology of Tin Oxide Nanomaterials for Gas Sensing Applications. Journal of Nanomaterials, 2017, 2017, 1-11.	1.5	15
106	Electronic Noses Applications in Beer Technology. , 2017, , .		9
108	Surfactant free controllable synthesis of 2D and 1D ZnO hierarchical nanostructure and its gas sensing properties. Applied Surface Science, 2018, 449, 838-845.	3.1	22
109	Disposable all-printed electronic biosensor for instantaneous detection and classification of pathogens. Scientific Reports, 2018, 8, 5920.	1.6	42
110	Identification of trace amounts of detergent powder in raw milk using a customized low-cost artificial olfactory system: A novel method. Measurement: Journal of the International Measurement Confederation, 2018, 124, 120-129.	2.5	34
111	An Electronic Nose for Royal Delicious Apple Quality Assessment – A Tri-layer Approach. Food Research International, 2018, 109, 44-51.	2.9	52
112	A Novel Low-Cost Hand-Held Tea Flavor Estimation System. IEEE Transactions on Industrial Electronics, 2018, 65, 4983-4990.	5.2	35

#	ARTICLE	IF	CITATIONS
113	Tilapia fish microbial spoilage monitored by a single optical gas sensor. <i>Food Control</i> , 2018, 89, 72-76.	2.8	69
114	Estimation of the limit of detection in semiconductor gas sensors through linearized calibration models. <i>Analytica Chimica Acta</i> , 2018, 1013, 13-25.	2.6	92
115	Real-Time Non-Invasive Detection and Classification of Diabetes Using Modified Convolution Neural Network. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2018, 22, 1630-1636.	3.9	65
116	Enhancing electronic nose performance based on a novel QPSO-RBM technique. <i>Sensors and Actuators B: Chemical</i> , 2018, 259, 241-249.	4.0	26
117	Characterization of a microbial community developing during refrigerated storage of vacuum packed Yao meat, a Chinese traditional food. <i>LWT - Food Science and Technology</i> , 2018, 90, 562-569.	2.5	30
118	Electronic eye for the prediction of parameters related to grape ripening. <i>Talanta</i> , 2018, 186, 381-388.	2.9	20
119	Multivariate estimation of the limit of detection by orthogonal partial least squares in temperature-modulated MOX sensors. <i>Analytica Chimica Acta</i> , 2018, 1019, 49-64.	2.6	58
120	Automatic smartphone-based microfluidic biosensor system at the point of care. <i>Biosensors and Bioelectronics</i> , 2018, 110, 78-88.	5.3	216
121	Instrumental approaches and innovative systems for saffron quality assessment. <i>Journal of Food Engineering</i> , 2018, 216, 1-10.	2.7	31
122	Advances of electronic nose and its application in fresh foods: A review. <i>Critical Reviews in Food Science and Nutrition</i> , 2018, 58, 2700-2710.	5.4	129
123	Analytical assessment of asphalt odor patterns in hot mix asphalt production. <i>Journal of Cleaner Production</i> , 2018, 172, 1212-1223.	4.6	31
124	Stochastic modeling of the transient regime of an electronic nose for waste cooking oil classification. <i>Journal of Food Engineering</i> , 2018, 221, 114-123.	2.7	9
125	Development of a metal oxide semiconductor-based artificial nose as a fast, reliable and non-expensive analytical technique for aroma profiling of milk adulteration. <i>International Dairy Journal</i> , 2018, 77, 38-46.	1.5	36
126	Non-destructive sensing methods for quality assessment of on-tree fruits: a review. <i>Journal of Food Measurement and Characterization</i> , 2018, 12, 497-526.	1.6	30
127	Other Ingredients. , 2018, , 151-185.		0
128	Evaluation of the freshness of fresh-cut green bell pepper ( <i>Capsicum annuum</i> var. <i>grossum</i> ) using electronic nose. <i>LWT - Food Science and Technology</i> , 2018, 87, 77-84.	2.5	68
129	Prediction of parameters related to grape ripening by multivariate calibration of voltammetric signals acquired by an electronic tongue. <i>Talanta</i> , 2018, 178, 178-187.	2.9	19
130	A review of algorithms for SAW sensors e-nose based volatile compound identification. <i>Sensors and Actuators B: Chemical</i> , 2018, 255, 2472-2482.	4.0	47



#	ARTICLE	IF	CITATIONS
131	Effect of vacuum storage on the freshness of grass carp ( <i>Ctenopharyngodon idella</i> ) fillet based on normal and electronic sensory measurement. Journal of Food Processing and Preservation, 2018, 42, e13418.	0.9	21
132	An evaluation of an olfactory sensor and recognition system using metal-oxide semiconductor gas sensor with variable heater controller. Artificial Life and Robotics, 2018, 23, 73-79.	0.7	1
133	Qualitative and quantitative analysis of toxic materials in adulterated fruit pickle samples by a colorimetric sensor array. Sensors and Actuators B: Chemical, 2018, 257, 783-791.	4.0	42
134	Array of Different Polyaniline-Based Sensors for Detection of Volatile Compounds in Gummy Candy. Food Analytical Methods, 2018, 11, 77-87.	1.3	16
135	A novel modular ANN architecture for efficient monitoring of gases/odours in real-time. Materials Research Express, 2018, 5, 045904.	0.8	7
136	Effect of the catalyst on the physical and aroma attributes of interesterified milk fat-vegetable oil blends. Brazilian Journal of Food Technology, 2018, 21, .	0.8	2
137	A Set of Platforms with Combinatorial and High-Throughput Technique for Gas Sensing, from Material to Device and to System. Micromachines, 2018, 9, 606.	1.4	10
138	A Novel 1D Deep Convolutional Neural Network Based Algorithm for Mixture Gases Recognition. , 2018, , .		6
139	Graphene-based biosensors for on-site detection of contaminants in food. Analytical Methods, 2018, 10, 5061-5070.	1.3	51
140	Sequential Classification of Hyperspectral Images. , 0, , .		1
141	Metal-Organic Framework-Assisted Construction of TiO <sub>2</sub> /Co <sub>3</sub> O <sub>4</sub> Highly Ordered Necklace-like Heterostructures for Enhanced Ethanol Vapor Sensing Performance. Langmuir, 2018, 34, 14577-14585.	1.6	42
142	Discrimination of apples with standardized data from an electronic nose. Electronics and Communications in Japan, 2018, 101, 30-36.	0.3	1
143	DFT based classification of olive oil type using a sinusoidally heated, low cost electronic nose. Computers and Electronics in Agriculture, 2018, 155, 348-358.	3.7	23
144	Discrimination between Alternative Herbal Medicines from Different Categories with the Electronic Nose. Sensors, 2018, 18, 2936.	2.1	14
145	Precise gas discrimination with cross-reactive graphene and metal oxide sensor arrays. Applied Physics Letters, 2018, 113, .	1.5	16
146	Protein-based techniques for halal authentication. , 2018, , 379-391.		2
147	Affinity Ionic Liquids for Chemoselective Gas Sensing. Molecules, 2018, 23, 2380.	1.7	8
148	Prediction models of starch content in fresh cassava roots for a tapioca starch manufacturer in Thailand. Computers and Electronics in Agriculture, 2018, 154, 296-303.	3.7	17

#	ARTICLE	IF	CITATIONS
149	Detection of Odorant Molecules in the Gaseous Phase Using $\hat{1}\pm$ , $\hat{1}^2$ , and $\hat{1}^3$ -Cyclodextrin Films on a Quartz Crystal Microbalance. <i>Technologies</i> , 2018, 6, 63.	3.0	7
150	Electronic Nose: A First Sensors Array Optimization for Pesticides Detection Based on Wilks' A-Statistic. , 2018, , .		9
151	A Novel Convolutional Recurrent Neural Network Based Algorithm for Fast Gas Recognition in Electronic Nose System. , 2018, , .		10
152	Olfactory Display Prototype for Presenting and Sensing Authentic and Synthetic Odors. , 2018, , .		9
153	Microhotplates for Metal Oxide Semiconductor Gas Sensor Applicationsâ€”Towards the CMOS-MEMS Monolithic Approach. <i>Micromachines</i> , 2018, 9, 557.	1.4	84
154	Analysis of volatile compounds of <i>Tremella aurantialba</i> fermentation <i>via</i> electronic nose and HS-SPME-GCMS. <i>Journal of Food Safety</i> , 2018, 38, e12555.	1.1	32
155	Applications of Electronic-Nose Technologies for Noninvasive Early Detection of Plant, Animal and Human Diseases. <i>Chemosensors</i> , 2018, 6, 45.	1.8	79
156	Colorimetric sensor arrays based on chemo-responsive dyes for food odor visualization. <i>Trends in Food Science and Technology</i> , 2018, 81, 90-107.	7.8	127
157	Protein- and Peptide-Based Biosensors in Artificial Olfaction. <i>Trends in Biotechnology</i> , 2018, 36, 1244-1258.	4.9	97
158	The feasibility of using an electronic nose to identify adulteration of Pathumthani 1 in Khaw Dok Mali 105 rice during storage. <i>Journal of Food Measurement and Characterization</i> , 2018, 12, 2515-2523.	1.6	14
159	Using an E-nose machine for detection the adulteration of margarine in cow ghee. <i>Journal of Food Process Engineering</i> , 2018, 41, e12806.	1.5	26
160	Rapid evaluation of fresh chicken meat quality by electronic nose. <i>Czech Journal of Food Sciences</i> , 2018, 36, 420-426.	0.6	17
161	Organizational and Technological Aspects of a Platform for Collective Food Awareness. <i>Advances in Human-Computer Interaction</i> , 2018, 2018, 1-16.	1.8	4
162	A voltammetric e-tongue tool for the emulation of the sensorial analysis and the discrimination of vegetal milks. <i>Sensors and Actuators B: Chemical</i> , 2018, 270, 231-238.	4.0	32
163	Nanostructured ZnO on cotton fabrics â€” A novel flexible gas sensor & UV filter. <i>Journal of Cleaner Production</i> , 2018, 194, 372-382.	4.6	62
164	Detecting and Identifying Industrial Gases by a Method Based on Olfactory Machine at Different Concentrations. <i>Journal of Electrical and Computer Engineering</i> , 2018, 2018, 1-9.	0.6	6
165	An Electronic Architecture for Multipurpose Artificial Noses. <i>Journal of Sensors</i> , 2018, 2018, 1-9.	0.6	17
166	Hyperspectral imaging, a non-destructive technique in medicinal and aromatic plant products industry: Current status and potential future applications. <i>Computers and Electronics in Agriculture</i> , 2018, 152, 9-18.	3.7	25

#	ARTICLE	IF	CITATIONS
167	Detecting Biothreat Agents: From Current Diagnostics to Developing Sensor Technologies. ACS Sensors, 2018, 3, 1894-2024.	4.0	118
168	On the Temporal Stability of Analyte Recognition with an E-Nose Based on a Metal Oxide Sensor Array in Practical Applications. Sensors, 2018, 18, 550.	2.1	36
169	Real Time Analysis of Bioanalytes in Healthcare, Food, Zoology and Botany. Sensors, 2018, 18, 5.	2.1	32
170	Gas Classification Using Deep Convolutional Neural Networks. Sensors, 2018, 18, 157.	2.1	129
171	Low Power Operation of Temperature-Modulated Metal Oxide Semiconductor Gas Sensors. Sensors, 2018, 18, 339.	2.1	86
172	Design and Characterization of Dicyanovinyl Reactive Dyes for the Colorimetric Detection of Thiols and Biogenic Amines. Sensors, 2018, 18, 814.	2.1	7
173	Study on Interference Suppression Algorithms for Electronic Noses: A Review. Sensors, 2018, 18, 1179.	2.1	36
174	Research on a Visual Electronic Nose System Based on Spatial Heterodyne Spectrometer. Sensors, 2018, 18, 1188.	2.1	4
175	Application of a Novel S3 Nanowire Gas Sensor Device in Parallel with GC-MS for the Identification of Rind Percentage of Grated Parmigiano Reggiano. Sensors, 2018, 18, 1617.	2.1	25
176	Lab-made electronic-nose with polyaniline sensor array used in classification of different aromas in gummy candies. Food Research International, 2018, 113, 309-315.	2.9	19
177	PANI/CdO Nanocomposite Thin Films as a Room Temperature Methanol Sensor. Journal of Electronic Materials, 2018, 47, 6000-6006.	1.0	11
178	Performance evaluation of normalized difference based classifier for efficient discrimination of volatile organic compounds. Materials Research Express, 2018, 5, 095901.	0.8	7
179	Peptide Modified ZnO Nanoparticles as Gas Sensors Array for Volatile Organic Compounds (VOCs). Frontiers in Chemistry, 2018, 6, 105.	1.8	41
180	Electronic Noses as a Powerful Tool for Assessing Meat Quality: a Mini Review. Food Analytical Methods, 2018, 11, 2916-2924.	1.3	37
181	Rapid and Non-Destructive Detection of Decay in Peach Fruit at the Cold Environment Using a Self-Developed Handheld Electronic-Nose System. Food Analytical Methods, 2018, 11, 2990-3004.	1.3	22
182	Real-time assessment of food freshness in refrigerators based on a miniaturized electronic nose. Analytical Methods, 2018, 10, 4741-4749.	1.3	36
183	Wireless EAS Sensor Tags for Volatile Profiling in Food Packages. , 2018, , .		4
184	Strategies Behind Biosensors for Food and Waterborne Pathogens. , 2018, , 107-141.		1

#	ARTICLE	IF	CITATIONS
185	Synergistic approaches for odor active compounds monitoring and identification: State of the art, integration, limits and potentialities of analytical and sensorial techniques. <i>TrAC - Trends in Analytical Chemistry</i> , 2018, 107, 116-129.	5.8	28
186	Quorum Sensing and its Biotechnological Applications. , 2018, , .		6
187	Multiangl e discrimination of geographical origin of rice based on analysis of mineral elements and characteristic volatile components. <i>International Journal of Food Science and Technology</i> , 2018, 53, 2088-2096.	1.3	23
188	An overview of smart packaging technologies for monitoring safety and quality of meat and meat products. <i>Packaging Technology and Science</i> , 2018, 31, 449-471.	1.3	94
189	Cu <sub>2</sub> O@PNIPAM core-shell microgels as novel inkjet materials for the preparation of CuO hollow porous nanocubes gas sensing layers. <i>Journal of Materials Chemistry C</i> , 2018, 6, 7249-7256.	2.7	10
190	Identification of Tobacco Types and Cigarette Brands Using an Electronic Nose Based on Conductive Polymer/Porphyrin Composite Sensors. <i>ACS Omega</i> , 2018, 3, 6476-6482.	1.6	30
191	Understanding microfluidic-based gas detectors: A numerical model to investigate fundamental sensor operation, influencing phenomena and optimum geometries. <i>Sensors and Actuators B: Chemical</i> , 2019, 300, 126904.	4.0	9
192	The Electronic Nose Coupled with Chemometric Tools for Discriminating the Quality of Black Tea Samples In Situ. <i>Chemosensors</i> , 2019, 7, 29.	1.8	34
194	Study on volatile markers of pasta quality using GC-MS and a peptide based gas sensor array. <i>LWT - Food Science and Technology</i> , 2019, 114, 108364.	2.5	17
195	Porous Ion Exchange Polymer Matrix for Ultrasmall Au Nanoparticle-Decorated Carbon Nanotube Chemiresistors. <i>Chemistry of Materials</i> , 2019, 31, 5413-5420.	3.2	17
196	Identification of Volatile Organic Compounds and Their Concentrations Using a Novel Method Analysis of MOS Sensors Signal. <i>Journal of Food Science</i> , 2019, 84, 2077-2085.	1.5	26
197	Meat and Fish Freshness Assessment by a Portable and Simplified Electronic Nose System (Mastersense). <i>Sensors</i> , 2019, 19, 3225.	2.1	60
198	Advances in Electronic Nose Development for Application to Agricultural Products. <i>Food Analytical Methods</i> , 2019, 12, 2226-2240.	1.3	48
199	Evolution of Electronic Noses from Research Objects to Engineered Environmental Odour Monitoring Systems: A Review of Standardization Approaches. <i>Biosensors</i> , 2019, 9, 75.	2.3	30
200	Headspace Volatile Evaluation of Carrot Samples Comparison of GC/MS and AuNPs-hpDNA-Based E-Nose. <i>Foods</i> , 2019, 8, 293.	1.9	16
201	Electronic nose an instrument for odour nuisances monitoring. <i>E3S Web of Conferences</i> , 2019, 100, 00079.	0.2	4
202	A Hardware-Deployable Neuromorphic Solution for Encoding and Classification of Electronic Nose Data. <i>Sensors</i> , 2019, 19, 4831.	2.1	21
203	Application of an olfactory system to detect and distinguish bitter chocolates with different percentages of cocoa. <i>Journal of Food Process Engineering</i> , 2019, 42, e13248.	1.5	9

#	ARTICLE	IF	CITATIONS
204	Promising Bioanalytical Approaches to Wine Analysis. , 2019, , 419-457.		4
205	Potential of image processing, dielectric spectroscopy and intelligence methods in order to authentication of microalgae biodiesel. Measurement: Journal of the International Measurement Confederation, 2019, 148, 106962.	2.5	6
206	E-Nose Sensor Array Optimization Based on Volatile Compound Concentration Data. Journal of Physics: Conference Series, 2019, 1201, 012003.	0.3	8
207	POP-CNN: Predicting Odor Pleasantness With Convolutional Neural Network. IEEE Sensors Journal, 2019, 19, 11337-11345.	2.4	28
208	Remarks on Recognition of Aromas from Tea Leaves Using Deep Neural Network Based on PPF-Coated QCR Sensor Signals. , 2019, , .		0
209	A Perspective on Recent Advances in Piezoelectric Chemical Sensors for Environmental Monitoring and Foodstuffs Analysis. Chemosensors, 2019, 7, 39.	1.8	54
210	Electronic nose for smart identification of roofing and paving grade asphalt. Transportation Research Procedia, 2019, 40, 4-11.	0.8	3
211	Iterative complex network approach for chemical gas sensor array characterisation. Journal of Engineering, 2019, 2019, 4612-4616.	0.6	3
212	A Sensor Platform for Athletesâ€™ Training Supervision: A Proof of Concept Study. Sensors, 2019, 19, 3948.	2.1	5
213	A novel multi-odour identification by electronic nose using non-parametric modelling-based feature extraction and time-series classification. Sensors and Actuators B: Chemical, 2019, 298, 126690.	4.0	19
214	Physicochemical properties of Iranian ziziphus honey and emerging approach for predicting them using electronic nose. Measurement: Journal of the International Measurement Confederation, 2019, 148, 106936.	2.5	11
215	Smartphone-based biosensors for portable food evaluation. Current Opinion in Food Science, 2019, 28, 74-81.	4.1	83
216	Detection and classification of diesel-biodiesel blends by LDA, QDA and SVM approaches using an electronic nose. Fuel, 2019, 258, 116114.	3.4	45
217	Discrimination of Chinese Liquors Based on Electronic Nose and Fuzzy Discriminant Principal Component Analysis. Foods, 2019, 8, 38.	1.9	17
218	Volatile profiles of fresh rice noodles fermented with pure and mixed cultures. Food Research International, 2019, 119, 152-160.	2.9	21
219	Developing noninvasive methodologies to assess koala population health through detecting <i>Chlamydia</i> from scats. Molecular Ecology Resources, 2019, 19, 957-969.	2.2	12
220	Improvement of accuracy in beer classification using transient features for electronic nose technology. Journal of Food Measurement and Characterization, 2019, 13, 656-662.	1.6	17
221	Advanced Analysis of Roots and Tubers by Hyperspectral Techniques. Advances in Food and Nutrition Research, 2019, 87, 255-303.	1.5	17

#	ARTICLE	IF	CITATIONS
222	The combined impact of cold smoking and natural antioxidants on quality and shelf life of dolphinfish ( <i>Coryphaena hippurus</i> ) fillets. <i>Food Science and Nutrition</i> , 2019, 7, 1239-1250.	1.5	6
223	Is It Possible to Predict the Odor of a Molecule on the Basis of its Structure?. <i>International Journal of Molecular Sciences</i> , 2019, 20, 3018.	1.8	44
224	Optical determination of carbon dioxide and oxygen by a fluorescent membrane to evaluate the freshness of meat products. <i>Instrumentation Science and Technology</i> , 2019, 47, 640-665.	0.9	7
225	Metal-Organic Frameworks for Chemiresistive Sensors. <i>CheM</i> , 2019, 5, 1938-1963.	5.8	419
226	Training technique of electronic nose using labeled and unlabeled samples based on multi-kernel LapSVM. <i>Sensors and Actuators B: Chemical</i> , 2019, 294, 98-105.	4.0	10
227	Critical review of electronic nose and tongue instruments prospects in pharmaceutical analysis. <i>Analytica Chimica Acta</i> , 2019, 1077, 14-29.	2.6	90
228	Comparison of Sensory and Electronic Tongue Analysis Combined with HS-SPME-GC-MS in the Evaluation of Skim Milk Processed with Different Preheating Treatments. <i>Molecules</i> , 2019, 24, 1650.	1.7	23
229	Towards Integrated Mid-Infrared Gas Sensors. <i>Sensors</i> , 2019, 19, 2076.	2.1	173
230	Intelligent Control of Bulk Tobacco Curing Schedule Using LS-SVM- and ANFIS-Based Multi-Sensor Data Fusion Approaches. <i>Sensors</i> , 2019, 19, 1778.	2.1	10
231	Taste quality traits and volatile profiles of sprouts and wheatgrass from hulled and non-hulled <i>Triticum</i> species. <i>Journal of Food Biochemistry</i> , 2019, 43, e12869.	1.2	8
232	Electronic nose for food sensory evaluation. , 2019, , 7-22.		8
233	Plasmonic versus All-Dielectric Nanoantennas for Refractometric Sensing: A Direct Comparison. <i>ACS Photonics</i> , 2019, 6, 1556-1564.	3.2	51
234	Long-term robust identification potential of a wavelet packet decomposition based recursive drift correction of E-nose data for Chinese spirits. <i>Measurement: Journal of the International Measurement Confederation</i> , 2019, 139, 284-292.	2.5	20
235	Feature Extraction and Classification of Citrus Juice by Using an Enhanced L-KSVD on Data Obtained from Electronic Nose. <i>Sensors</i> , 2019, 19, 916.	2.1	6
236	Discrimination of Different Species of <i>Dendrobium</i> with an Electronic Nose Using Aggregated Conformal Predictor. <i>Sensors</i> , 2019, 19, 964.	2.1	8
237	Biomimetic Membranes with Transmembrane Proteins: State-of-the-Art in Transmembrane Protein Applications. <i>International Journal of Molecular Sciences</i> , 2019, 20, 1437.	1.8	24
238	Evaluation of Smart Portable Device for Food Diagnostics: A Preliminary Study on Cape Hake Fillets ( <i>M. capensis</i> and <i>M. paradoxus</i> ). <i>Journal of Chemistry</i> , 2019, 2019, 1-7.	0.9	12
239	Advances in Nondestructive Methods for Meat Quality and Safety Monitoring. <i>Food Reviews International</i> , 2019, 35, 536-562.	4.3	50

#	ARTICLE	IF	CITATIONS
240	Flavor formation in frying process of green onion ( <i>Allium fistulosum</i> L.) deep-fried oil. <i>Food Research International</i> , 2019, 121, 296-306.	2.9	33
241	BDD electrodes modified with metal nano-catalysts for coffee discrimination in real samples. <i>Sensors and Actuators B: Chemical</i> , 2019, 290, 147-154.	4.0	14
242	Assessing Waste Cooking Oils for the Production of Quality Biodiesel Using an Electronic Nose and a Stochastic Model. <i>Energy &amp; Fuels</i> , 2019, 33, 3221-3226.	2.5	7
243	Reuse of refillable PET packaging: Approaches to safety and quality in soft drink processing. <i>Food Control</i> , 2019, 100, 329-334.	2.8	10
244	Mixture Gases Classification Based on Multi-Label One-Dimensional Deep Convolutional Neural Network. <i>IEEE Access</i> , 2019, 7, 12630-12637.	2.6	48
245	Bio-inspired intelligent structural color materials. <i>Materials Horizons</i> , 2019, 6, 945-958.	6.4	213
246	Bridging interdigitated electrodes by electrochemical-assisted deposition of graphene oxide for constructing flexible gas sensor. <i>Sensors and Actuators B: Chemical</i> , 2019, 286, 591-599.	4.0	30
247	&lt;i>&gt;A Novel feature selection framework for analyzing E-nose data:Application to evaluate the quality of Chinese Dry-Cured Ham&lt;i>&gt;. , 2019, , .		1
248	Current trends and challenges in the deployment of IoT technologies for climate smart facility agriculture. <i>International Journal of Sustainable Agricultural Management and Informatics</i> , 2019, 5, 181.	0.1	10
249	Sensor-Array Optimization Based on Mutual Information for Sanitation-Related Malodor Alerts. , 2019, , .		5
250	Accurate identification of gas type and concentration using DNN reflecting the sensing properties of MOSFET-type gas sensor. , 2019, , .		5
251	Online Scent Classification by Ion-Mobility Spectrometry Sequences. <i>Frontiers in Applied Mathematics and Statistics</i> , 2019, 5, .	0.7	5
252	The Applications of Portable Electronic Nose for Indoor and Outdoor Air Quality Assessments. , 2019, , .		2
253	Detection of Low Concentration NO <sub>2</sub> gas Using Si FET-type Gas Sensor with Localized Micro-heater for Low Power Consumption. , 2019, , .		0
254	â€œEmotional Noseâ€ The Hedonic Character of Olfaction and its Epistemological and Clinical Implications. , 2019, , .		0
255	Quality Evaluation of Green and Dark Tea Grade Using Electronic Nose and Multivariate Statistical Analysis. <i>Journal of Food Science</i> , 2019, 84, 3411-3417.	1.5	28
256	Meat Quality Assessment based on Deep Learning. , 2019, , .		4
257	Resistive gas sensors based on metal-oxide nanowires. <i>Journal of Applied Physics</i> , 2019, 126, .	1.1	148

#	ARTICLE	IF	CITATIONS
258	Pressure Measurement-Based Method for Battery-Free Food Monitoring Powered by NFC Energy Harvesting. <i>Scientific Reports</i> , 2019, 9, 17556.	1.6	18
259	Improving the Chemical Selectivity of an Electronic Nose to TNT, DNT and RDX Using Machine Learning. <i>Sensors</i> , 2019, 19, 5207.	2.1	13
260	Rapid detection of grape syrup adulteration with an array of metal oxide sensors and chemometrics. <i>Engineering in Agriculture, Environment and Food</i> , 2019, 12, 351-359.	0.2	9
261	HS-SPME-MS-Enose Coupled with Chemometrics as an Analytical Decision Maker to Predict In-Cup Coffee Sensory Quality in Routine Controls: Possibilities and Limits. <i>Molecules</i> , 2019, 24, 4515.	1.7	11
262	Efficacy of potent antagonistic yeast <i>Wickerhamiella versatilis</i> against soft rot disease of potato caused by <i>Pectobacterium carotovorum</i> subsp. <i>carotovorum</i> . <i>Archives of Phytopathology and Plant Protection</i> , 2019, 52, 1125-1148.	0.6	9
263	Scent classification by K nearest neighbors using ion-mobility spectrometry measurements. <i>Expert Systems With Applications</i> , 2019, 115, 593-606.	4.4	29
264	Progress in the development of olfactory-based bioelectronic chemosensors. <i>Biosensors and Bioelectronics</i> , 2019, 123, 211-222.	5.3	41
265	The Optoelectronic Nose: Colorimetric and Fluorometric Sensor Arrays. <i>Chemical Reviews</i> , 2019, 119, 231-292.	23.0	718
266	Recognition and sensing of organic compounds using analytical methods, chemical sensors, and pattern recognition approaches. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2019, 185, 18-31.	1.8	35
267	A Novel Method for Generation of a Fingerprint Using Electronic Nose on the Example of Rapeseed Spoilage. <i>Journal of Food Science</i> , 2019, 84, 51-58.	1.5	27
268	Data fusion of electronic eye and electronic tongue signals to monitor grape ripening. <i>Talanta</i> , 2019, 195, 181-189.	2.9	37
269	On the optimization of the support vector machine regression hyperparameters setting for gas sensors array applications. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2019, 184, 22-27.	1.8	62
270	Detecting volatile compounds in food by open-path Fourier-transform infrared spectroscopy. <i>Food Research International</i> , 2019, 119, 968-973.	2.9	15
271	Family-Based Big Medical-Level Data Acquisition System. <i>IEEE Transactions on Industrial Informatics</i> , 2019, 15, 2321-2329.	7.2	17
272	A novel data pre-processing method for odour detection and identification system. <i>Sensors and Actuators A: Physical</i> , 2019, 287, 113-120.	2.0	17
273	The impact of fermentation at elevated temperature on quality attributes and biogenic amines formation of low-salt fermented fish. <i>International Journal of Food Science and Technology</i> , 2019, 54, 723-733.	1.3	17
274	Volatile compounds profiling by using proton transfer reaction-time of flight-mass spectrometry (PTR-ToF-MS). The case study of dark chocolates organoleptic differences. <i>Journal of Mass Spectrometry</i> , 2019, 54, 92-119.	0.7	33
275	Discrimination of Cocoa Liquors Based on Their Odor Fingerprint: a Fast GC Electronic Nose Suitability Study. <i>Food Analytical Methods</i> , 2019, 12, 475-488.	1.3	39



#	ARTICLE	IF	CITATIONS
276	Application of an electronic nose with novel method for generation of smellprints for testing the suitability for consumption of wheat bread during 4-day storage. <i>LWT - Food Science and Technology</i> , 2020, 117, 108665.	2.5	28
277	Self-Assembly of Colloidal Particles for Fabrication of Structural Color Materials toward Advanced Intelligent Systems. <i>Advanced Intelligent Systems</i> , 2020, 2, 1900085.	3.3	18
278	Chromogenic Polymers and Their Packaging Applications: A Review. <i>Polymer Reviews</i> , 2020, 60, 442-492.	5.3	22
279	Freshness Classification of Horse Mackerels with E-Nose System Using Hybrid Binary Decision Tree Structure. <i>International Journal of Pattern Recognition and Artificial Intelligence</i> , 2020, 34, 2050003.	0.7	9
280	Odor in textiles: A review of evaluation methods, fabric characteristics, and odor control technologies. <i>Textile Research Journal</i> , 2020, 90, 1157-1173.	1.1	31
281	Electronic Nose and Its Applications: A Survey. <i>International Journal of Automation and Computing</i> , 2020, 17, 179-209.	4.5	202
282	Molecular materials for gas sensors and sensor arrays. , 2020, , 37-54.		2
283	Monitoring perishable food. , 2020, , 289-314.		2
284	Effect of static-state fermentation on volatile composition in rapeseed meal. <i>Journal of the Science of Food and Agriculture</i> , 2020, 100, 2145-2152.	1.7	15
285	Emerging trends of advanced sensor based instruments for meat, poultry and fish quality a review. <i>Critical Reviews in Food Science and Nutrition</i> , 2020, 60, 3443-3460.	5.4	36
286	Identification of Fresh-Chilled and Frozen-Thawed Chicken Meat and Estimation of their Shelf Life Using an E-Nose Machine Coupled Fuzzy KNN. <i>Food Analytical Methods</i> , 2020, 13, 678-689.	1.3	39
288	Colorimetric sensor array based on gold nanoparticles: Design principles and recent advances. <i>TrAC - Trends in Analytical Chemistry</i> , 2020, 122, 115754.	5.8	147
289	Towards a MOF e-Nose: A SURMOF sensor array for detection and discrimination of plant oil scents and their mixtures. <i>Sensors and Actuators B: Chemical</i> , 2020, 306, 127502.	4.0	50
290	Advancements in Microfabricated Gas Sensors and Microanalytical Tools for the Sensitive and Selective Detection of Odors. <i>Sensors</i> , 2020, 20, 5478.	2.1	27
291	Historical Evolution and Food Control Achievements of Near Infrared Spectroscopy, Electronic Nose, and Electronic Tongue Critical Overview. <i>Sensors</i> , 2020, 20, 5479.	2.1	47
292	Feasibility Study for the Evaluation of Chicken Meat Storage Time Using Surface Acoustic Wave Sensor. <i>Journal of Biosystems Engineering</i> , 2020, 45, 261-271.	1.2	8
293	Swelling of Poly(methyl acrylate) Brushes in Acetone Vapor. <i>Langmuir</i> , 2020, 36, 12053-12060.	1.6	16
294	Rational Design of Semiconductor-Based Chemiresistors and their Libraries for Next-Generation Artificial Olfaction. <i>Advanced Materials</i> , 2020, 32, e2002075.	11.1	215

#	ARTICLE	IF	CITATIONS
295	Dynamic changes in quality of jujube wine during fermentation. <i>Journal of Food Processing and Preservation</i> , 2020, 44, e14704.	0.9	10
296	A Review on the Use of Impedimetric Sensors for the Inspection of Food Quality. <i>International Journal of Environmental Research and Public Health</i> , 2020, 17, 5220.	1.2	26
297	Integration of a low-cost electronic nose and a voltammetric electronic tongue for red wines identification. <i>Food Science and Nutrition</i> , 2020, 8, 4330-4339.	1.5	36
298	Fish Quality Index Method: Principles, weaknesses, validation, and alternatives—A review. <i>Comprehensive Reviews in Food Science and Food Safety</i> , 2020, 19, 2657-2676.	5.9	12
299	Development of a Tuneable NDIR Optical Electronic Nose. <i>Sensors</i> , 2020, 20, 6875.	2.1	21
300	Discrimination Improvement of a Gas Sensors™ Array Using High-Frequency Quartz Crystal Microbalance Coated with Polymeric Films. <i>Sensors</i> , 2020, 20, 6972.	2.1	8
301	Low-Cost Methods to Assess Beer Quality Using Artificial Intelligence Involving Robotics, an Electronic Nose, and Machine Learning. <i>Fermentation</i> , 2020, 6, 104.	1.4	18
302	Study of Room Temperature Ionic Liquids as Gas Sensing Materials in Quartz Crystal Microbalances. <i>Sensors</i> , 2020, 20, 4026.	2.1	16
303	Sensor-Array Optimization Based on Time-Series Data Analytics for Sanitation-Related Malodor Detection. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2020, 14, 705-714.	2.7	14
304	Aspergillus Species Discrimination Using a Gas Sensor Array. <i>Sensors</i> , 2020, 20, 4004.	2.1	14
305	Environmental chemical sensing using small drones: A review. <i>Science of the Total Environment</i> , 2020, 748, 141172.	3.9	109
306	Processing Electronic Nose Data Using Artificial Neural Networks. , 2020, , .		2
307	Opto-Electronic Nose Coupled to a Silicon Micro Pre-Concentrator Device for Selective Sensing of Flavored Waters. <i>Chemosensors</i> , 2020, 8, 60.	1.8	26
308	Development of a Low-Cost Portable Electronic Nose for Cigarette Brands Identification. <i>Sensors</i> , 2020, 20, 4239.	2.1	13
309	Characterization and Analysis of Okoume and Aiele Essential Oils from Gabon by GC-MS, Electronic Nose, and Their Antibacterial Activity Assessment. <i>Sensors</i> , 2020, 20, 6750.	2.1	8
310	Application of E-nose technique to predict sugarcane syrup quality based on purity and refined sugar percentage. <i>Journal of Food Science and Technology</i> , 2020, 58, 4149-4156.	1.4	3
311	Battery-Free and Noninvasive Estimation of Food pH and CO <sub>2</sub> Concentration for Food Monitoring Based on Pressure Measurement. <i>Sensors</i> , 2020, 20, 5853.	2.1	10
312	An analytical investigation on the effect of porous conductive cellulose acetate composite morphology on the detection of organic compounds. <i>Polymer Engineering and Science</i> , 2020, 60, 1631-1641.	1.5	4

#	ARTICLE	IF	CITATIONS
313	Effects of initial temperatures on vacuum film cooling and vacuum spray cooling on apple juice and milk. <i>Journal of Food Processing and Preservation</i> , 2020, 44, e14500.	0.9	10
314	Antioxidant compound screening and chemical composition of sweet ginger ( <i>Alpinia coriandriodora</i> ) Tj ETQq1 1 0.784314 rgBT /Ove 44, e13293.	1.2	6
315	A recursive correction FDA method based on ICA combined with STAW of vinegar E-nose data. <i>Measurement: Journal of the International Measurement Confederation</i> , 2020, 164, 108022.	2.5	6
316	Large-Area Microfluidic Sensors Based on Flat-Optics Au Nanostripe Metasurfaces. <i>Journal of Physical Chemistry C</i> , 2020, 124, 17183-17190.	1.5	10
317	Deep Learning-Based Food Quality Estimation Using Radio Frequency-Powered Sensor Mote. <i>IEEE Access</i> , 2020, 8, 88360-88371.	2.6	28
318	Qualitative analysis of edible oil oxidation using an olfactory machine. <i>Journal of Food Measurement and Characterization</i> , 2020, 14, 2600-2610.	1.6	53
319	iHWG-MOX: A Hybrid Breath Analysis System via the Combination of Substrate-Integrated Hollow Waveguide Infrared Spectroscopy with Metal Oxide Gas Sensors. <i>ACS Sensors</i> , 2020, 5, 1033-1039.	4.0	19
321	Conductive MOFs. <i>EnergyChem</i> , 2020, 2, 100029.	10.1	264
322	An electronic nose-based assistive diagnostic prototype for lung cancer detection with conformal prediction. <i>Measurement: Journal of the International Measurement Confederation</i> , 2020, 158, 107588.	2.5	31
323	Machine Learning for Optical Gas Sensing: A Leaky-Mode Humidity Sensor as Example. <i>IEEE Sensors Journal</i> , 2020, 20, 6954-6963.	2.4	24
324	Novel Sensing Technologies During the Food Drying Process. <i>Food Engineering Reviews</i> , 2020, 12, 121-148.	3.1	19
325	Changes in flavor of fragrant rice during storage under different conditions. <i>Journal of the Science of Food and Agriculture</i> , 2020, 100, 3435-3444.	1.7	32
326	Effects of three carp species on texture, color, and aroma properties of Suan yu, a Chinese traditional fermented fish. <i>Journal of Food Processing and Preservation</i> , 2020, 44, e14403.	0.9	6
327	Principles and recent advances in electronic nose for quality inspection of agricultural and food products. <i>Trends in Food Science and Technology</i> , 2020, 99, 1-10.	7.8	160
328	Effects of different thermal temperatures on the shelf life and microbial diversity of Dezhou-braised chicken. <i>Food Research International</i> , 2020, 136, 109471.	2.9	29
329	A Drift-Compensating Novel Deep Belief Classification Network to Improve Gas Recognition of Electronic Noses. <i>IEEE Access</i> , 2020, 8, 121385-121397.	2.6	19
330	Design of an efficient electronic nose system for odour analysis and assessment. <i>Measurement: Journal of the International Measurement Confederation</i> , 2020, 165, 108089.	2.5	13
331	Electronic noses and tongues. , 2020, , 353-389.		11

#	ARTICLE	IF	CITATIONS
332	Application of the E-nose machine system to detect adulterations in mixed edible oils using chemometrics methods. <i>Journal of Food Processing and Preservation</i> , 2020, 44, e14696.	0.9	45
333	VOC sensing using batch-fabricated temperature compensated self-leveling microstructures. <i>Sensors and Actuators B: Chemical</i> , 2020, 311, 127817.	4.0	8
334	A data-driven meat freshness monitoring and evaluation method using rapid centroid estimation and hidden Markov models. <i>Sensors and Actuators B: Chemical</i> , 2020, 311, 127868.	4.0	24
335	Chemical sensor systems based on 2D and thin film materials. <i>2D Materials</i> , 2020, 7, 022002.	2.0	34
336	Quantitative analysis of fatty acid value during rice storage based on olfactory visualization sensor technology. <i>Sensors and Actuators B: Chemical</i> , 2020, 309, 127816.	4.0	48
337	Visualization of volatome profiles for early detection of fungal infection on storage Jasmine brown rice using electronic nose coupled with chemometrics. <i>Measurement: Journal of the International Measurement Confederation</i> , 2020, 157, 107561.	2.5	42
338	Adsorbent-SERS Technique for Determination of Plant VOCs from Live Cotton Plants and Dried Teas. <i>ACS Omega</i> , 2020, 5, 2779-2790.	1.6	19
339	Discrimination of Chinese Baijiu grades based on colorimetric sensor arrays. <i>Food Science and Biotechnology</i> , 2020, 29, 1037-1043.	1.2	12
340	A Suppression Method of Concentration Background Noise by Transductive Transfer Learning for a Metal Oxide Semiconductor-Based Electronic Nose. <i>Sensors</i> , 2020, 20, 1913.	2.1	6
341	Magnitude estimation and alignment of sensory and instrumental analysis. , 2020, , 285-320.		2
342	Consecutive membrane filtration and re-utilization of the debitterizing wastewater of apricot kernels for a flavor beverage-making. <i>Journal of Cleaner Production</i> , 2020, 262, 121360.	4.6	5
343	Gas sensors for volatile compounds analysis in muscle foods: A review. <i>TrAC - Trends in Analytical Chemistry</i> , 2020, 126, 115877.	5.8	43
344	Research on key technologies of wine quality and safety system using ANN. <i>Journal of Intelligent and Fuzzy Systems</i> , 2020, 38, 1435-1441.	0.8	0
345	Meat quality assessment using Au patch electrode Ag-SnO <sub>2</sub> /SiO <sub>2</sub> /Si MIS capacitive gas sensor at room temperature. <i>Food Chemistry</i> , 2020, 324, 126893.	4.2	46
346	A novel quality evaluation method for magnolia bark using electronic nose and colorimeter data with multiple statistical algorithms. <i>Journal of Traditional Chinese Medical Sciences</i> , 2020, 7, 221-227.	0.1	7
347	Development of Electronic Nose for Qualitative and Quantitative Monitoring of Volatile Flammable Liquids. <i>Sensors</i> , 2020, 20, 1817.	2.1	18
348	Recent Advancements and Future Prospects on E-Nose Sensors Technology and Machine Learning Approaches for Non-Invasive Diabetes Diagnosis: A Review. <i>IEEE Reviews in Biomedical Engineering</i> , 2021, 14, 127-138.	13.1	44
349	An electronic nose supported by an artificial neural network for the rapid detection of aflatoxin B1 and fumonisins in maize. <i>Food Control</i> , 2021, 123, 107722.	2.8	33

#	ARTICLE	IF	CITATIONS
350	Cocoa smoky off-flavour: A MS-based analytical decision maker for routine controls. Food Chemistry, 2021, 336, 127691.	4.2	16
351	Development of a portable electronic nose based on a hybrid filter-wrapper method for identifying the Chinese dry-cured ham of different grades. Journal of Food Engineering, 2021, 290, 110250.	2.7	26
352	Facile synthesis of hollow Fâ€doped SnO<sub>2</sub> nanofibers and their efficiency in ethanol sensing. Journal of the American Ceramic Society, 2021, 104, 1297-1308.	1.9	25
353	Enabling selective, room-temperature gas detection using atomically dispersed Zn. Sensors and Actuators B: Chemical, 2021, 329, 129221.	4.0	10
354	Headspace analysis of shelf life of postharvest arugula leaves using a SERS-active fiber. Postharvest Biology and Technology, 2021, 175, 111410.	2.9	7
355	Numerical expression of odor intensity of volatile compounds from automotive polypropylene. Sensors and Actuators A: Physical, 2021, 321, 112426.	2.0	4
356	Integrated technology roadmapping in startups: a case study of an AgTech in the CachaÃ§a industry. Scientia Agricola, 2021, 78, .	0.6	1
357	Detection of low PPM of volatile organic compounds using nanomaterial functionalized reduced graphene oxide sensor. AIP Conference Proceedings, 2021, , .	0.3	3
358	Measuring chemical deterioration of foods. , 2021, , 637-679.		0
359	ODRP: A Deep Learning Framework for Odor Descriptor Rating Prediction Using Electronic Nose. IEEE Sensors Journal, 2021, 21, 15012-15021.	2.4	20
360	Recent genetic advances on boar taint reduction as an alternative to castration: a review. Journal of Applied Genetics, 2021, 62, 137-150.	1.0	11
361	Intelligent System for Determining the Presence of Falsification in Meat Products Based on Histological Methods. Studies in Systems, Decision and Control, 2021, , 179-201.	0.8	6
362	Nanowire-based sensor electronics for chemical and biological applications. Analyst, The, 2021, 146, 6684-6725.	1.7	16
363	Measurement and differentiation of banana juice scent using an electronic nose FF-2A. PeerJ, 2021, 9, e10638.	0.9	5
364	Emerging nondestructive technologies for quality assessment of fruits, vegetables, and cereals. , 2021, , 219-253.		0
365	Estimation Model for Bread Quality Proficiency Using Fuzzy Weighted Relevance Vector Machine Classifier. Applied Bionics and Biomechanics, 2021, 2021, 1-9.	0.5	8
366	Emerging non-destructive methods for quality and safety monitoring of spices. Trends in Food Science and Technology, 2021, 108, 133-147.	7.8	31
367	VOCs Sensing by Metal Oxides, Conductive Polymers, and Carbon-Based Materials. Nanomaterials, 2021, 11, 552.	1.9	50

#	ARTICLE	IF	CITATIONS
368	Electronic nose for volatile organic compounds analysis in rice aging. <i>Trends in Food Science and Technology</i> , 2021, 109, 83-93.	7.8	62
369	Food Sensors: Challenges and Opportunities. <i>Advanced Materials Technologies</i> , 2021, 6, 2001242.	3.0	49
370	Bacterial diversity and flavor profile of Zha-Chili, a traditional fermented food in China. <i>Food Research International</i> , 2021, 141, 110112.	2.9	57
371	Optimization of electronic nose drift correction applied to tomato volatile profiling. <i>Analytical and Bioanalytical Chemistry</i> , 2021, 413, 3893-3907.	1.9	5
372	Ethanol sensing properties of nitrogen doped In <sub>2</sub> O <sub>3</sub> thin films. <i>Journal of Materials Research</i> , 2021, 36, 1561-1572.	1.2	2
373	Development of compact electronic noses: a review. <i>Measurement Science and Technology</i> , 2021, 32, 062002.	1.4	57
374	Evidence for seed vigor associated with fatty acids and its composition in rice. <i>Agronomy Journal</i> , 2021, 113, 2618-2628.	0.9	1
375	Online Monitoring the Key Intermediates and Volatile Compounds Evolved from Green Tea Roasting by Synchrotron Radiation Photoionization Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2021, 32, 1402-1411.	1.2	7
376	Detection and measurement of aroma compounds with the electronic nose and a novel method for MOS sensor signal analysis during the wheat bread making process. <i>Food and Bioproducts Processing</i> , 2021, 127, 90-98.	1.8	34
377	Is this melon sweet? A quantitative classification for near-infrared spectroscopy. <i>Infrared Physics and Technology</i> , 2021, 114, 103645.	1.3	13
378	Metabolomic Biomarkers Differentiate Soy Sauce Freshness under Conditions of Accelerated Storage. <i>Journal of Food Quality</i> , 2021, 2021, 1-11.	1.4	1
379	Comparison of the characteristics of semiconductor gas sensors with different transducers fabricated on the same substrate. <i>Sensors and Actuators B: Chemical</i> , 2021, 335, 129661.	4.0	36
380	Characterization of bacterial community and flavor differences of different types of Douchi. <i>Food Science and Nutrition</i> , 2021, 9, 3460-3469.	1.5	14
381	A High-Resolution Interface Circuit based on Resistance-to-Frequency Conversion for Resistive Gas Sensor. , 2021, , .		3
382	Polymer-based gas sensors to detect meat spoilage: A review. <i>Reactive and Functional Polymers</i> , 2021, 165, 104962.	2.0	32
383	Trends in artificial aroma sensing by means of electronic nose technologies to advance dairy production – a review. <i>Critical Reviews in Food Science and Nutrition</i> , 2023, 63, 234-248.	5.4	18
384	Machine Learning-Reinforced Noninvasive Biosensors for Healthcare. <i>Advanced Healthcare Materials</i> , 2021, 10, e2100734.	3.9	62
385	Past, present, and future trends in boar taint detection. <i>Trends in Food Science and Technology</i> , 2021, 112, 283-297.	7.8	12

#	ARTICLE	IF	CITATIONS
386	Novel Techniques for Quality Evaluation of Fish: A Review. <i>Food Reviews International</i> , 2023, 39, 639-662.	4.3	7
387	Optimization of Classification Prediction Performances of an Instrumental Odour Monitoring System by Using Temperature Correction Approach. <i>Chemosensors</i> , 2021, 9, 147.	1.8	10
388	An Odor Recognition Algorithm of Electronic Noses Based on Convolutional Spiking Neural Network for Spoiled Food Identification. <i>Journal of the Electrochemical Society</i> , 2021, 168, 077519.	1.3	19
389	Flavor profile of dried shrimp at different processing stages. <i>LWT - Food Science and Technology</i> , 2021, 146, 111403.	2.5	49
390	Effect of four types of thermal processing methods on the aroma profiles of acidity regulator-treated tilapia muscles using E-nose, HS-SPME-GC-MS, and HS-GC-IMS. <i>LWT - Food Science and Technology</i> , 2021, 147, 111585.	2.5	72
391	Molecular dynamics simulation for mechanism revelation of the safety and nutrition of lipids and derivatives in food: State of the art. <i>Food Research International</i> , 2021, 145, 110399.	2.9	12
392	1D Metal Oxide Semiconductor Materials for Chemiresistive Gas Sensors: A Review. <i>Advanced Electronic Materials</i> , 2021, 7, 2100271.	2.6	101
393	Principles of odor coding in vertebrates and artificial chemosensory systems. <i>Physiological Reviews</i> , 2022, 102, 61-154.	13.1	34
394	Compensating Altered Sensitivity of Duty-Cycled MOX Gas Sensors with Machine Learning. , 2021, , .		5
395	Classification of basil plant based on the level of consumed nitrogen fertilizer using an olfactory machine. <i>Food Analytical Methods</i> , 2021, 14, 2617-2629.	1.3	7
396	Large-area synthesis of nanoscopic catalyst-decorated conductive MOF film using microfluidic-based solution shearing. <i>Nature Communications</i> , 2021, 12, 4294.	5.8	36
397	Insights into nano-heterostructured materials for gas sensing: a review. <i>Multifunctional Materials</i> , 2021, 4, 032002.	2.4	40
398	Hybrid Porous Crystalline Materials from Metal Organic Frameworks and Covalent Organic Frameworks. <i>Advanced Science</i> , 2021, 8, e2101883.	5.6	83
399	Classification of olive fruits and oils based on their fatty acid ethyl esters content using electronic nose technology. <i>Journal of Food Measurement and Characterization</i> , 2021, 15, 5427-5438.	1.6	7
400	Advanced techniques in edible oil authentication: A systematic review and critical analysis. <i>Critical Reviews in Food Science and Nutrition</i> , 2023, 63, 873-901.	5.4	16
401	Electronic nose system based on a functionalized capacitive micromachined ultrasonic transducer (CMUT) array for selective detection of plant volatiles. <i>Sensors and Actuators B: Chemical</i> , 2021, 341, 130001.	4.0	7
402	Nanocomposite-Based Chemiresistive Electronic Nose and Application in Coffee Analysis. <i>ACS Food Science &amp; Technology</i> , 2021, 1, 1464-1471.	1.3	5
403	Nanostructured WO <sub>3</sub> based gas sensors: a short review. <i>Sensor Review</i> , 2021, 41, 406-424.	1.0	8

#	ARTICLE	IF	CITATIONS
404	Full Workflows for the Analysis of Gas Chromatography–Ion Mobility Spectrometry in Foodomics: Application to the Analysis of Iberian Ham Aroma. <i>Sensors</i> , 2021, 21, 6156.	2.1	18
405	Soybean Cyst Nematodes Influence Aboveground Plant Volatile Signals Prior to Symptom Development. <i>Frontiers in Plant Science</i> , 2021, 12, 749014.	1.7	3
406	Electrical gas sensors for meat freshness assessment and quality monitoring: A review. <i>Trends in Food Science and Technology</i> , 2021, 118, 36-44.	7.8	53
407	Mildly-doped polythiophene with triflates for molecular recognition. <i>Synthetic Metals</i> , 2021, 280, 116890.	2.1	4
408	Insect odorant receptor-based biosensors: Current status and prospects. <i>Biotechnology Advances</i> , 2021, 53, 107840.	6.0	19
409	Flavors and Off-flavors in Dairy Foods. , 2022, , 560-578.		1
410	Aroma quality evaluation of Dianhong black tea infusions by the combination of rapid gas phase electronic nose and multivariate statistical analysis. <i>LWT - Food Science and Technology</i> , 2022, 153, 112496.	2.5	28
411	Electronic Nose and Tongue Materials for Sensing. , 2021, , .		1
412	Nanosensors for food quality control especially essential oils. , 2021, , 273-288.		0
413	Quality Assessment of Milk by Sensory and Instrument Methods. , 2021, , 383-425.		2
414	A review on plant diseases recognition through deep learning. , 2021, , 219-244.		7
415	Spoilage assessment of chicken breast fillets by means of fourier transform infrared spectroscopy and multispectral image analysis. <i>Current Research in Food Science</i> , 2021, 4, 121-131.	2.7	16
416	New Approaches for Rapid Tomato Quality Control. <i>Food Chemistry, Function and Analysis</i> , 2019, , 85-113.	0.1	1
417	Soil organic matter determination based on artificial olfactory system and PLSR-BPNN. <i>Measurement Science and Technology</i> , 2021, 32, 035801.	1.4	12
418	A pyroelectric-based system for sensing low abundant lactose molecules. , 2019, , .		2
419	Transferring scents over a communication network. , 2020, , .		1
420	Discrimination of Apples with Standardized Data from an Electronic Nose. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2018, 138, 330-336.	0.0	2
421	Optimizing Machine Learning Parameters for Classifying the Sweetness of Pineapple Aroma Using Electronic Nose. <i>International Journal of Intelligent Engineering and Systems</i> , 2020, 13, 122-132.	0.8	12



#	ARTICLE	IF	CITATIONS
422	Detection of Mackerel Fish Spoilage with a Gas Sensor Based on One Single SnO <sub>2</sub> Nanowire. Chemosensors, 2021, 9, 2.	1.8	9
423	Correlating Espresso Quality with Coffee-Machine Parameters by Means of Association Rule Mining. Electronics (Switzerland), 2020, 9, 100.	1.8	7
424	Convenient and accurate method for the identification of Chinese teas by an electronic nose. Quality Assurance and Safety of Crops and Foods, 2019, 11, 79-88.	1.8	6
425	Application of Electronic Nose Systems on Animal-Source Food. Advances in Computer and Electrical Engineering Book Series, 2018, , 151-174.	0.2	8
426	Analysis of Volatile Flavor Compounds in Milk Using Electronic Nose System. Journal of Sensor Science and Technology, 2014, 23, 320-325.	0.1	4
427	Insight on Current Advances in Food Science and Technology for Feeding the World Population. Frontiers in Sustainable Food Systems, 2021, 5, .	1.8	32
428	Assessment the flavor of soybean meal hydrolyzed with Alcalase enzyme under different hydrolysis conditions by E-nose, E-tongue and HS-SPME-GC-MS. Food Chemistry: X, 2021, 12, 100141.	1.8	31
429	A RESTfull Approach for Classifying Pollutants in Water Using Neural Networks. Advances in Intelligent Systems and Computing, 2015, , 371-380.	0.5	0
430	Odor Change of Citrus Juice During Storage Based on Electronic Nose Technology. Lecture Notes in Computer Science, 2017, , 317-326.	1.0	0
431	Remarks on Tea Leaves Aroma Recognition Using Deep Neural Network. Communications in Computer and Information Science, 2017, , 160-167.	0.4	3
432	Scalable and Easy-to-use System Architecture for Electronic Noses. , 2018, , .		0
433	Food safety from a consumers' point of view: food quality. Potravinarstvo, 2018, 12, .	0.5	5
435	Two Dimensional Electronic Nose for Vehicular Central Locking System (E-Nose-V). International Journal of Advanced Computer Science and Applications, 2019, 10, .	0.5	0
436	Electronic Nose for Pesticides: The First Study Towards a Smart Analysis. Contemporary Agriculture, 2019, 68, 17-22.	0.3	4
437	Support Vector Machine as Tool for Classifying Coffee Beverages. Advances in Intelligent Systems and Computing, 2020, , 275-284.	0.5	2
438	Selected Sensor Technology Innovation in Food Quality and Safety. , 2020, , 59-88.		2
439	Análisis de volátiles en el proceso de fermentado de cacao, mediante una nariz electrónica para el control de calidad del producto en Norte de Santander-Cócuta. Respuestas, 2020, 25, 133-146.	0.2	1
440	From Ceramic Tube to Microcantilever: A New Strategy for Low Power, Fast Heating and High Integrated Metal Oxide Semiconductor Gas Sensor. , 2020, , .		0

#	ARTICLE	IF	CITATIONS
441	Remarks on Recognition of Aromas from Tea Sources Using MQ3, MQ5, MQ7 Sensor Signal. International Journal of Scientific Research in Science, Engineering and Technology, 2020, , 244-252.	0.1	1
442	Recognition of Aromas from Tea Sources based on MQ3, MQ5, MQ7 Sensor Signal. International Journal of Scientific Research in Science, Engineering and Technology, 2020, , 259-264.	0.1	0
443	Battery-less Pork Freshness Monitoring Based on High-Efficiency RF Energy Harvesting. Journal of Sensor Science and Technology, 2020, 29, 293-302.	0.1	3
444	V2O5 gas sensors: A review. Sensors and Actuators A: Physical, 2021, 332, 113179.	2.0	26
445	Graphene-Metal-Organic Framework Modified Gas Sensor. Materials Horizons, 2020, , 117-142.	0.3	2
446	Target discrimination, concentration prediction, and status judgment of electronic nose system based on large-scale measurement and multi-task deep learning. Sensors and Actuators B: Chemical, 2022, 351, 130915.	4.0	37
447	Rapid and Non-Invasive Techniques. Advances in Hospitality, Tourism and the Services Industry, 2022, , 41-66.	0.2	0
448	Correlation-Based Incremental Learning Network for Gas Sensors Drift Compensation Classification. Advances in Science, Technology and Engineering Systems, 2020, 5, 660-666.	0.4	0
449	User-friendly lab-on-paper optical sensor for the rapid detection of bacterial spoilage in packaged meat products. RSC Advances, 2021, 11, 35165-35173.	1.7	10
450	Comprehensive Evaluation of Flavor in Charcoal and Electric-Roasted Tamarix Lamb by HS-SPME/GC-MS Combined with Electronic Tongue and Electronic Nose. Foods, 2021, 10, 2676.	1.9	15
451	Correlation-Based Incremental Learning Network with Sliding Window for Perfume Classification. , 2020, , .		0
452	Molecular array device and multivariate analysis for biological fluids. Denki Kagaku, 2020, 88, 262-271.	0.0	1
453	Steady-state response feature extraction optimization to enhance electronic nose performance. , 2020, , .		3
454	Electronic nose based on hybrid free-standing nanofibrous mats for meat spoilage monitoring. Sensors and Actuators B: Chemical, 2022, 353, 131114.	4.0	27
455	Flexible wireless pH sensor system for fish monitoring. Sensing and Bio-Sensing Research, 2021, 34, 100465.	2.2	13
456	Characterization of Conductor-Backed Dielectric Substrates Using a Novel Resonance-Based Method. IEEE Sensors Journal, 2022, 22, 2099-2109.	2.4	10
457	Detecting the different blends of diesel and biodiesel fuels using electronic nose machine coupled ANN and RSM methods. Sustainable Energy Technologies and Assessments, 2022, 51, 101914.	1.7	5
458	The Use of Electronic Nose for the Classification of Blended and Single Malt Scotch Whisky. IEEE Sensors Journal, 2022, 22, 7015-7021.	2.4	12

#	ARTICLE	IF	CITATIONS
459	Nondestructive evaluation: detection of external and internal attributes frequently associated with quality and damage. , 2022, , 399-433.		1
460	Application of nondestructive evaluation (NDE) technologies throughout cold chain logistics of seafood: Classification, innovations and research trends. LWT - Food Science and Technology, 2022, 158, 113127.	2.5	7
461	Toward the Development of Combined Artificial Sensing Systems for Food Quality Evaluation: A Review on the Application of Data Fusion of Electronic Noses, Electronic Tongues and Electronic Eyes. Sensors, 2022, 22, 577.	2.1	36
462	Volatilome Evaluation of Modified Atmosphere Packaged Chilled and Super-Chilled Pork Loins Using Electronic Nose and Hs-Gc-Ims Integration. SSRN Electronic Journal, 0, , .	0.4	0
463	Unmanned Gas-Sensing System for Large-Scale Measurement of Electronic Nose. Lecture Notes in Electrical Engineering, 2022, , 629-637.	0.3	4
464	Overview of advanced technologies for volatile organic compounds measurement in food quality and safety. Critical Reviews in Food Science and Nutrition, 2023, 63, 8226-8248.	5.4	6
465	Digital Assessment and Classification of Wine Faults Using a Low-Cost Electronic Nose, Near-Infrared Spectroscopy and Machine Learning Modelling. Sensors, 2022, 22, 2303.	2.1	11
466	Monitoring the lipid oxidation and flavor of Russian sturgeon fillets treated with low temperature vacuum heating: formation and relationship. Journal of the Science of Food and Agriculture, 2022, 102, 4609-4619.	1.7	5
467	Comparison of the performance of metal oxide and conducting polymer electronic noses for detection of aflatoxin using artificially contaminated maize. Sensors and Actuators B: Chemical, 2022, 360, 131681.	4.0	17
468	Seafood freshness: e-nose data for classification purposes. Food Control, 2022, 138, 108994.	2.8	22
469	Wine Quality Assessment with Application Specific 2D Single Channel Convolutional Neural Networks. , 2021, , .		0
470	Comparison of Cheese Aroma Intensity Measured Using an Electronic Nose (E-Nose) Non-Destructively with the Aroma Intensity Scores of a Sensory Evaluation: A Pilot Study. Sensors, 2021, 21, 8368.	2.1	8
471	Study on rapid detection of food deterioration based on laser absorption spectroscopy. , 2021, , .		0
472	Technical solutions for the implementation of a software and hardware complex for food quality management. Vestnik VoroneÅ¾skogo Gosudarstvennogo Universiteta inÅ¾enernyh Tehnologij, 2022, 83, 49-56.	0.1	0
473	Adulteration detection technologies used for halal/kosher food products: an overview. , 2022, 2, .		14
474	A comparison of online methods for change point detection in ion-mobility spectrometry data. Array, 2022, 14, 100151.	2.5	1
475	Ultra-lightweight dynamic attention network combined with gas sensor for distinguishing the quality of rice. Computers and Electronics in Agriculture, 2022, 197, 106939.	3.7	8
476	Rapid detection of acid neutralizers adulteration in raw milk using FGC E-nose and chemometrics. Journal of Food Measurement and Characterization, 2022, 16, 2978-2988.	1.6	7

#	ARTICLE	IF	CITATIONS
477	Smart Electronic Nose Enabled by an All-Feature Olfactory Algorithm. <i>Advanced Intelligent Systems</i> , 2022, 4, .	3.3	17
478	Development of Gas Sensor Based on Fractal Substrate Structures. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2022, 71, 1-7.	2.4	6
479	High-voltage electrostatic field-assisted modified atmosphere packaging for long-term storage of pakchoi and avoidance of off-flavors. <i>Innovative Food Science and Emerging Technologies</i> , 2022, 79, 103032.	2.7	12
480	Odor Clustering Using a Gas Sensor Array System of Chicken Meat Based on Temperature Variations and Storage Time. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
482	Using a Low-Cost Components e-Nose for Basic Detection of Different Foodstuffs. <i>IEEE Sensors Journal</i> , 2022, 22, 13872-13881.	2.4	10
483	A Gold Nanoparticle-Based Molecular Self-Assembled Colorimetric Chemosensor Array for Monitoring Multiple Organic Oxyanions. <i>Processes</i> , 2022, 10, 1251.	1.3	1
484	Effect of the Dispersion Process and Nanoparticle Quality on Chemical Sensing Performance. <i>ACS Omega</i> , 0, , .	1.6	0
485	Preliminary study non-destructive sorting techniques for pepper ( <i>Capsicum annum L.</i> ) using odor parameter. <i>LWT - Food Science and Technology</i> , 2022, 164, 113667.	2.5	20
486	A Transferable Feature-Based Classifier to Improve Transferability of Electronic Nose Systems. , 2022, 6, 1-4.		1
487	Emerging Approach for Fish Freshness Evaluation: Principle, Application and Challenges. <i>Foods</i> , 2022, 11, 1897.	1.9	12
488	Recent Progress in Electronic Noses for Fermented Foods and Beverages Applications. <i>Fermentation</i> , 2022, 8, 302.	1.4	20
489	Determination of the Masking Effect of the "Zapateria"™ Defect in Flavoured Stuffed Olives Using E-Nose. <i>Molecules</i> , 2022, 27, 4300.	1.7	14
490	Enose Lab Made with Vacuum Sampling: Quantitative Applications. <i>Chemosensors</i> , 2022, 10, 261.	1.8	6
491	Evaluation of aroma characteristics in grass carp mince as affected by different washing processes using an E-nose, HS-SPME-GC-MS, HS-GC-IMS, and sensory analysis. <i>Food Research International</i> , 2022, 158, 111584.	2.9	38
492	Odor clustering using a gas sensor array system of chicken meat based on temperature variations and storage time. <i>Sensing and Bio-Sensing Research</i> , 2022, 37, 100508.	2.2	6
493	Smart paper electronics by laser-induced graphene for biodegradable real-time food spoilage monitoring. <i>Applied Materials Today</i> , 2022, 29, 101589.	2.3	24
494	Recent Progress in Amine Gas Sensors for Food Quality Monitoring: Novel Architectures for Sensing Materials and Systems. <i>ACS Sensors</i> , 2022, 7, 2104-2131.	4.0	60
495	Assessment and Prediction of Fish Freshness Using Mathematical Modelling: A Review. <i>Foods</i> , 2022, 11, 2312.	1.9	10

#	ARTICLE	IF	CITATIONS
496	Development Trend of Electronic Nose Technology in Closed Cabins Gas Detection: A Review. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 9326.	1.3	0
497	Volatilome evaluation of modified atmosphere packaged chilled and super-chilled pork loins using electronic nose and HS-GC-IMS integration. <i>Food Packaging and Shelf Life</i> , 2022, 34, 100953.	3.3	15
498	Applications of Electronic Nose Coupled with Statistical and Intelligent Pattern Recognition Techniques for Monitoring Tea Quality: A Review. <i>Agriculture (Switzerland)</i> , 2022, 12, 1359.	1.4	14
499	A Review of Stimuli-Responsive Smart Materials for Wearable Technology in Healthcare: Retrospective, Perspective, and Prospective. <i>Molecules</i> , 2022, 27, 5709.	1.7	24
500	Sensors for the Food Industry: An Introduction. <i>Food Chemistry, Function and Analysis</i> , 2022, , 1-21.	0.1	0
501	Effects of Cysteine on Physicochemical Properties of High-Moisture Extrudates Prepared from Plant Protein. <i>Foods</i> , 2022, 11, 3109.	1.9	4
502	Micro-Encapsulated Microalgae Oil Supplementation Has No Systematic Effect on the Odor of Vanilla Shake-Test of an Electronic Nose. <i>Foods</i> , 2022, 11, 3452.	1.9	0
503	The flavor profile changes of Pacific oysters ( <i>Crassostrea gigas</i> ) in response to salinity during depuration. <i>Food Chemistry: X</i> , 2022, 16, 100485.	1.8	10
504	Discrimination of geographical indication of Chinese green teas using an electronic nose combined with quantum neural networks: A portable strategy. <i>Sensors and Actuators B: Chemical</i> , 2023, 375, 132946.	4.0	8
505	Quality assurance of packaged food using Nanotechnology. , 2023, , 341-372.		2
506	Recent advances in chromatography-mass spectrometry and electronic nose technology in food flavor analysis and detection. <i>Food Chemistry</i> , 2023, 405, 134814.	4.2	22
507	Assessment of the Microbial Spoilage and Quality of Marinated Chicken Souvlaki through Spectroscopic and Biomimetic Sensors and Data Fusion. <i>Microorganisms</i> , 2022, 10, 2251.	1.6	0
508	Non-destructive Quality Evaluation of Litchi Fruit Using e-Nose System. <i>Advances in Intelligent Systems and Computing</i> , 2023, , 177-188.	0.5	0
509	Utilization of Gas Sensor Array and Principal Component Analysis to Identify Fish Decomposition Level. <i>Khazanah Informatika</i> , 2020, 6, .	0.2	0
510	Electronic Nose Analysis and Statistical Methods for Investigating Volatile Organic Compounds and Yield of Mint Essential Oils Obtained by Hydrodistillation. <i>Chemosensors</i> , 2022, 10, 486.	1.8	7
511	Enhanced ethanol sensing abilities of fiber-like $\text{La}_{1-x}\text{Ce}_x\text{CoO}_3$ ( $0 \leq x \leq 0.2$ ) perovskites based-sensors at low operating temperatures. <i>Sensors and Actuators B: Chemical</i> , 2023, 377, 133012.	4.0	6
512	Determination of pitaya quality using portable NIR spectroscopy and innovative low-cost electronic nose. <i>Scientia Horticulturae</i> , 2023, 310, 111784.	1.7	15
513	Advances in Materials and Technologies for Gas Sensing from Environmental and Food Monitoring to Breath Analysis. <i>Advanced Sustainable Systems</i> , 2023, 7, .	2.7	10

#	ARTICLE	IF	CITATIONS
514	A Qualitative and Quantitative Analysis Strategy for Continuous Turbulent Gas Mixture Monitoring. <i>Chemosensors</i> , 2022, 10, 499.	1.8	2
515	Non-Destructive Quality-Detection Techniques for Cereal Grains: A Systematic Review. <i>Agronomy</i> , 2022, 12, 3187.	1.3	5
516	Elektronik Burun Metal Oksit YarÄ± Ä°letken Sensörlerin GÄ±da Analizlerinde KullanÄ±mÄ±. <i>Akademik GÄ±da</i> , 0, 454-473.	0.5	0
517	Co-culture fermentation characteristics of antifreeze yeast and mining of related freezing-resistant genes. <i>European Food Research and Technology</i> , 2023, 249, 1161-1172.	1.6	1
518	Flavor substances of low-valued red swamp crayfish ( <i>Procambarus clarkii</i> ) hydrolysates derived from double enzymatic systems. <i>Food Research International</i> , 2023, 165, 112461.	2.9	5
519	Optimization of the Mixed Gas Detection Method Based on Neural Network Algorithm. <i>ACS Sensors</i> , 2023, 8, 822-828.	4.0	6
520	Development of a Nondestructive Moldy Coffee Beans Detection System Based on Electronic Nose. , 2023, 7, 1-4.		6
521	Emerging applications of nanotechnology for e-nose. , 2023, , 57-100.		0
522	A mixed gas concentration regression prediction method for electronic nose based on two-channel TCN. <i>Sensors and Actuators B: Chemical</i> , 2023, 382, 133528.	4.0	9
523	Concentration map reconstruction for gas source location using nano quadcopters: Metal oxide semiconductor sensor implementation and indoor experiments validation. <i>Measurement: Journal of the International Measurement Confederation</i> , 2023, 213, 112638.	2.5	1
524	Rapid identification and quantification of vegetable oil adulteration in raw milk using a flash gas chromatography electronic nose combined with machine learning. <i>Food Control</i> , 2023, 150, 109758.	2.8	9
525	E-Nose Technology for Mycotoxin Detection in Feed: Ready for a Real Context in Field Application or Still an Emerging Technology?. <i>Toxins</i> , 2023, 15, 146.	1.5	2
526	E-noses for agri-food productions. , 2023, , 281-298.		1
527	E-nose-based technology for healthcare. , 2023, , 241-256.		0
528	Applications of imaging systems for the assessment of quality characteristics of bread and other baked goods: A review. <i>Comprehensive Reviews in Food Science and Food Safety</i> , 2023, 22, 1817-1838.	5.9	3
529	Recent Advances of MOF-Based Nanoarchitectonics for Chemiresistive Gas Sensors. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2023, 33, 1453-1494.	1.9	4
530	Gas Array Sensors based on Electronic Nose for Detection of Tuna ( <i>Euthynnus Affinis</i> ) Contaminated by <i>Pseudomonas Aeruginosa</i> . <i>Journal of Medical Signals and Sensors</i> , 2022, 12, 306.	0.5	6
531	Technological tools for the measurement of sensory characteristics in food: A review. <i>F1000Research</i> , 0, 12, 340.	0.8	0

#	ARTICLE	IF	CITATIONS
532	Electronic nose as a tool for early detection of diseases and quality monitoring in fresh postharvest produce: A comprehensive review. <i>Comprehensive Reviews in Food Science and Food Safety</i> , 2023, 22, 2408-2432.	5.9	5
533	Review on Sensor Array-Based Analytical Technologies for Quality Control of Food and Beverages. <i>Sensors</i> , 2023, 23, 4017.	2.1	4
534	Progress on odor deterioration of aquatic products: Characteristic volatile compounds, analysis methods, and formation mechanisms. <i>Food Bioscience</i> , 2023, 53, 102666.	2.0	15
539	Measuring meat flavour. , 2024, , 101-107.		0
551	Biogenic amine sensors using organic I <sup>+</sup> -conjugated materials as active sensing components and their commercialization potential. <i>Journal of Materials Chemistry C</i> , 2023, 11, 9749-9767.	2.7	2
559	Electronic nose and its application in the food industry: a review. <i>European Food Research and Technology</i> , 2024, 250, 21-67.	1.6	3
561	Key Indicators for the Discrimination of Wines by Electronic Noses. , 2023, , .		0
567	New Algorithm for Determining the Shape of Particles and the Size of Adulteration Areas in Meat for a Decision Support System. <i>Communications in Computer and Information Science</i> , 2023, , 288-305.	0.4	0
568	Design an Intelligent Candy Inspection System with AIoT. , 2023, , .		0
569	Low-cost electronic-nose (LC-e-nose) systems for the evaluation of plantation and fruit crops: recent advances and future trends. <i>Analytical Methods</i> , 0, , .	1.3	0
574	Development of Coffee Classification by Feature Selection and Classifier Optimization Based on An Electronic Nose. , 2023, , .		0
576	An Encoder-Decoder Structure With Strong Resistance to Sensor Drift in Machine Olfaction. , 2023, , .		0
580	A Prototype to Prevent Fruits from Spoilage: An Approach Using Sensors with Machine Learning. , 0, , .		0