Xingyi Huang

List of Publications by Citations

69 papers	1,404 citations	19 h-index	36 g-index
73 ext. papers	1,765 ext. citations	4.3 avg, IF	4.88 L-index

#	Paper	IF	Citations
69	A novel technique for rapid evaluation of fish freshness using colorimetric sensor array. *Journal of Food Engineering*, **2011**, 105, 632-637	6	132
68	Colorimetric aptasensing of ochratoxin A using Au@Fe3O4 nanoparticles as signal indicator and magnetic separator. *Biosensors and Bioelectronics*, **2016**, 77, 1183-91	11.8	122
67	Rapid differentiation of Ghana cocoa beans by FT-NIR spectroscopy coupled with multivariate classification. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2013**, 114, 183-9	4.4	88
66	Magneto-controlled aptasensor for simultaneous electrochemical detection of dual mycotoxins in maize using metal sulfide quantum dots coated silica as labels. *Biosensors and Bioelectronics*, **2017**, 89, 802-809	11.8	85
65	Magnetic-fluorescent-targeting multifunctional aptasensorfor highly sensitive and one-step rapid detection of ochratoxin A. *Biosensors and Bioelectronics*, **2015**, 68, 783-790	11.8	83
64	Nitrogen-Doped Graphene Quantum Dots@SiO2 Nanoparticles as Electrochemiluminescence and Fluorescence Signal Indicators for Magnetically Controlled Aptasensor with Dual Detection Channels. *ACS Applied Materials & Interfaces*, **2015**, 7, 26865-73	9.5	80
63	Effect of ultrasonic treatment on the degradation and inhibition cancer cell lines of polysaccharides from Porphyra yezoensis. *Carbohydrate Polymers*, **2015**, 117, 650-656	10.3	68
62	Fabrication of magnetically assembled aptasensing device for label-free determination of aflatoxin B1 based on EIS. *Biosensors and Bioelectronics*, **2018**, 108, 69-75	11.8	61
61	Nondestructive detection of fish freshness during its preservation by combining electronic nose and electronic tongue techniques in conjunction with chemometric analysis. *Analytical Methods*, **2014**, 6, 529-536	3.2	54
60	A data fusion detection method for fish freshness based on computer vision and near-infrared spectroscopy. *Analytical Methods*, **2016**, 8, 2929-2935	3.2	47
59	Estimating cocoa bean parameters by FT-NIRS and chemometrics analysis. *Food Chemistry*, **2015**, 176, 403-10	8.5	47
58	Novel Prediction of Total Fat Content in Cocoa Beans by FT-NIR Spectroscopy Based on Effective Spectral Selection Multivariate Regression. *Food Analytical Methods*, **2015**, 8, 945-953	3.4	31
57	Discrimination of Cocoa Beans According to Geographical Origin by Electronic Tongue and Multivariate Algorithms. *Food Analytical Methods*, **2014**, 7, 360-365	3.4	29
56	Application of electronic nose as a non-invasive technique for odor fingerprinting and detection of bacterial foodborne pathogens: a review. *Journal of Food Science and Technology*, **2020**, 57, 1977-1990	3.3	26
55	Non-destructive evaluation of total volatile basic nitrogen (TVB-N) and K-values in fish using colorimetric sensor array. *Analytical Methods*, **2015**, 7, 1615-1621	3.2	23
54	Electronic nose classification and differentiation of bacterial foodborne pathogens based on support vector machine optimized with particle swarm optimization algorithm. *Journal of Food Process Engineering*, **2019**, 42, e13236	2.4	22
53	Rapid and nondestructive evaluation of fish freshness by near infrared reflectance spectroscopy combined with chemometrics analysis. *Analytical Methods*, **2014**, 6, 9675-9683	3.2	21

52	Dynamic characteristics of dough during the fermentation process of Chinese steamed bread. *Food Chemistry*, **2020**, 312, 126050	8.5	21
51	Rapid measurement of total polyphenols content in cocoa beans by data fusion of NIR spectroscopy and electronic tongue. *Analytical Methods*, **2014**, 6, 5008-5015	3.2	19
50	Quantitative Analysis of Fish Microbiological Quality Using Electronic Tongue Coupled with Nonlinear Pattern Recognition Algorithms. *Journal of Food Safety*, **2015**, 35, 336-344	2	19
49	Analysis of volatile compounds of Tremella aurantialba fermentation via electronic nose and HS-SPME-GC-MS. *Journal of Food Safety*, **2018**, 38, e12555	2	19
48	Multi-sensor integration approach based on hyperspectral imaging and electronic nose for quantitation of fat and peroxide value of pork meat. *Analytical and Bioanalytical Chemistry*, **2020**, 412, 1169-1179	4.4	18
47	Study on the binding ability of cobalt-porphyrin with small volatile organic compounds based on density functional theory. *Analytical Methods*, **2014**, 6, 3360	3.2	16
46	Properties and catalytic activity of magnetic and acidic ionic liquids: experimental and molecular simulation. *Carbohydrate Polymers*, **2014**, 105, 300-7	10.3	16
45	Study on classification of soy sauce by electronic tongue technique combined with artificial neural network. *Journal of Food Science*, **2011**, 76, S523-7	3.4	16
44	Novel prediction of heavy metal residues in fish using a low-cost optical electronic tongue system based on colorimetric sensors array. *Journal of Food Process Engineering*, **2019**, 42, e12983	2.4	16
43	Integrating NIR Spectroscopy and Electronic Tongue Together with Chemometric Analysis for Accurate Classification of Cocoa Bean Varieties. *Journal of Food Process Engineering*, **2014**, 37, 560-566	2.4	15
42	Detection of Beef Adulterated with Pork Using a Low-Cost Electronic Nose Based on Colorimetric Sensors. *Foods*, **2020**, 9,	4.9	14
41	Comparison of variable selection algorithms on vis-NIR hyperspectral imaging spectra for quantitative monitoring and visualization of bacterial foodborne pathogens in fresh pork muscles. *Infrared Physics and Technology*, **2020**, 107, 103327	2.7	13
40	Rapid and nondestructive detection of freshness quality of postharvest spinaches based on machine vision and electronic nose. *Journal of Food Safety*, **2019**, 39, e12708	2	12
39	Evaluation of lipid oxidation and volatile compounds of traditional dry-cured pork belly: The hyperspectral imaging and multi-gas-sensory approaches. *Journal of Food Process Engineering*, **2020** , 43, e13092	2.4	12
38	Detection of submerged fermentation of Tremella aurantialba using data fusion of electronic nose and tongue. *Journal of Food Process Engineering*, **2019**, 42, e13002	2.4	11
37	Evaluating quality of tomato during storage using fusion information of computer vision and electronic nose. *Journal of Food Process Engineering*, **2018**, 41, e12832	2.4	11
36	Combination of spectra and image information of hyperspectral imaging data for fast prediction of lipid oxidation attributes in pork meat. *Journal of Food Process Engineering*, **2019**, 42, e13225	2.4	11
35	Nondestructive determination of bamboo shoots lignification using FT-NIR with efficient variables selection algorithms. *Analytical Methods*, **2014**, 6, 1090	3.2	10

34	Exploratory review on safety of edible raw fish per the hazard factors and their detection methods. *Trends in Food Science and Technology*, **2017**, 59, 37-48	15.3	9
33	Application of Hyperspectral Imaging as a Nondestructive Technique for Foodborne Pathogen Detection and Characterization. *Foodborne Pathogens and Disease*, **2019**, 16, 712-722	3.8	9
32	Applications of surface functionalized FeO NPs-based detection methods in food safety. *Food Chemistry*, **2021**, 342, 128343	8.5	9
31	Analysis of fish spoilage by gas chromatography–mass spectrometry and electronic olfaction bionic system. *Journal of Food Safety*, **2018**, 38, e12557	2	9
30	Research on the reaction mechanism of colorimetric sensor array with characteristic volatile gases-TMA during fish storage. *Journal of Food Process Engineering*, **2019**, 42, e12952	2.4	8
29	Investigation into crystal size effect on sodium chloride uptake and water activity of pork meat using hyperspectral imaging. *Journal of Food Processing and Preservation*, **2019**, 43, e14197	2.1	7
28	Simultaneous Measurement of Titratable Acidity and Fermentation Index in Cocoa Beans by Electronic Tongue Together with Linear and Non-linear Multivariate Technique. *Food Analytical Methods*, **2014**, 7, 2137-2144	3.4	7
27	Nondestructive monitoring, kinetics and antimicrobial properties of ultrasound technology applied for surface decontamination of bacterial foodborne pathogen in pork. *Ultrasonics Sonochemistry*, **2021**, 70, 105344	8.9	7
26	Integration of computer vision and colorimetric sensor array for nondestructive detection of mango quality. *Journal of Food Process Engineering*, **2018**, 41, e12873	2.4	7
25	Probing the Reactions of Colorimetric Sensor Array and Volatile Organic Compounds Using Time-Dependent Density-Functional Theory. *Journal of Computational and Theoretical Nanoscience*, **2014**, 11, 2194-2198	0.3	6
24	Application of volatile and spectral profiling together with multimode data fusion strategy for the discrimination of preserved eggs. *Food Chemistry*, **2021**, 343, 128515	8.5	6
23	Intelligent evaluation of total polar compounds (TPC) content of frying oil based on fluorescence spectroscopy and low-field NMR. *Food Chemistry*, **2021**, 342, 128242	8.5	5
22	A rapid colorimetric sensing unit for histamine content of mackerel using azo reagent. *Journal of Food Process Engineering*, **2019**, 42, e13099	2.4	4
21	Rapid Assessment of Total Polar Material in Used Frying Oils Using Manganese Tetraphenylporphyrin Fluorescent Sensor with Enhanced Sensitivity. *Food Analytical Methods*, **2020**, 13, 2080-2086	3.4	4
20	Research on reaction mechanism of colorimetric sensor array with lead and its application for determination of lead content of fish. *Journal of Food Process Engineering*, **2019**, 42, e13075	2.4	3
19	A Theoretical Study of Colorimetric Sensor Array Reacting with Volatile Organic Compounds Using Density Functional Theory. *Journal of Computational and Theoretical Nanoscience*, **2015**, 12, 3459-3463	0.3	3
18	Real-time detection of saponin content during the fermentation process of Tremella aurantialba using a homemade artificial olfaction system. *Journal of Food Process Engineering*, **2019**, 42, e13101	2.4	2
17	Study on the Change of Muscle Proteins During the Half-Dried Salt-Cured Silver Carp (Hypophthalmichthys molitrix) Processing. *Journal of Aquatic Food Product Technology*, **2015**, 24, 31-41	1.6	2

16	A Theoretical Study of Metalloporphyrin-Based Fluorescent Array Sensor using Density Functional Theory. *Journal of Fluorescence*, **2020**, 30, 687-694	2.4	2
15	Detection of contamination levels in fresh pork samples using electronic nose smellprints in tandem with support vector machine regression and metaheuristic optimization algorithms. *Journal of Food Science and Technology*, **2021**, 58, 3861-3870	3.3	2
14	Study on the Property of Colorimetric Sensor Array Binding Volatile Organic Compounds using Density Functional Theory. *Advance Journal of Food Science and Technology*, **2016**, 11, 77-81	0.1	2
13	An evaluation of biochemical, structural and volatile changes of dry-cured pork using a combined ion mobility spectrometry, hyperspectral and confocal imaging approach. *Journal of the Science of Food and Agriculture*, **2021**, 101, 5972-5983	4.3	1
12	Monitoring of dough fermentation during Chinese steamed bread processing by near-infrared spectroscopy combined with spectra selection and supervised learning algorithm. *Journal of Food Process Engineering*, **2021**, 44, e13783	2.4	1
11	Characterization of selected Chinese soybean paste based on flavor profiles using HS-SPME-GC/MS, E-nose and E-tongue combined with chemometrics.. *Food Chemistry*, **2021**, 375, 131840	8.5	0
10	The influence of different metal atoms on the performance of metalloporphyrin-based sensor reaction with propanol. *Materials Technology*, **2020**, 1-8	2.1	0
9	Development of a portable electronic nose for in-situ detection of submerged fermentation of Tremella aurantialba. *Journal of Food Safety*, **2021**, 41, e12902	2	0
8	Electronic Structures and Spectroscopic Properties of Fluorescent Sensor Reacting with Volatile Organic Compounds: A Theoretical Analysis. *Journal of Nanoelectronics and Optoelectronics*, **2021**, 16, 584-590	1.3	0
7	Coupling electronic nose with GC–MS improves flavor recognition and grade differentiation of Zhenjiang aromatic vinegar. *Journal of Food Process Engineering*, **2021**, 44, e13806	2.4	0
6	Detection of browning of fresh-cut potato chips based on machine vision and electronic nose. *Journal of Food Process Engineering*, **2021**, 44, e13631	2.4	0
5	Fast monitoring the dynamic change of total acids during apple vinegar fermentation process using a colorimetric IDA sensor array.. *Food Chemistry*, **2022**, 387, 132867	8.5	0
4	Qualitative and Quantitative Analysis of Oxidative Degradation Products in Frying Oil by Three-Dimensional Fluorescence Spectroscopy with Metalloporphyrin-Based Sensor. *Food Analytical Methods*, **2022**, 15, 1143	3.4	
3	Novel colorimetric sensor array for Chinese rice wine evaluation based on color reactions of flavor compounds. *Journal of Food Process Engineering*,e13889	2.4	
2	Corrections to "The Interaction Study of Colorimetric Sensor Array and Volatile Organic Compounds Using Density Functional Theory" [Aug 14 2620-2625]. *IEEE Sensors Journal*, **2016**, 16, 4657-4657	4	
1	A feasibility study for rapid evaluation of emulsion oxidation using synchronous fluorescence spectroscopy coupled with chemometrics. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2022**, 265, 120337	4.4	