

Hao Wan

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2252221/publications.pdf>

Version: 2024-02-01

90
papers

1,823
citations

279798

23
h-index

289244

40
g-index

91
all docs

91
docs citations

91
times ranked

2197
citing authors

#	ARTICLE	IF	CITATIONS
1	Screen-printed gold electrode with gold nanoparticles modification for simultaneous electrochemical determination of lead and copper. <i>Sensors and Actuators B: Chemical</i> , 2015, 209, 336-342.	7.8	142
2	Recent achievements in electronic tongue and bioelectronic tongue as taste sensors. <i>Sensors and Actuators B: Chemical</i> , 2015, 207, 1136-1146.	7.8	141
3	In-situ detection of cadmium with aptamer functionalized gold nanoparticles based on smartphone-based colorimetric system. <i>Talanta</i> , 2020, 208, 120231.	5.5	98
4	A miniaturized electrochemical system for high sensitive determination of chromium(VI) by screen-printed carbon electrode with gold nanoparticles modification. <i>Sensors and Actuators B: Chemical</i> , 2018, 272, 582-588.	7.8	96
5	3D cell-based biosensor for cell viability and drug assessment by 3D electric cell/matrigel-substrate impedance sensing. <i>Biosensors and Bioelectronics</i> , 2019, 130, 344-351.	10.1	87
6	Miniaturized planar room temperature ionic liquid electrochemical gas sensor for rapid multiple gas pollutants monitoring. <i>Sensors and Actuators B: Chemical</i> , 2018, 255, 638-646.	7.8	83
7	A miniaturized electronic nose with artificial neural network for anti-interference detection of mixed indoor hazardous gases. <i>Sensors and Actuators B: Chemical</i> , 2021, 326, 128822.	7.8	72
8	A novel smartphone-based CD-spectrometer for high sensitive and cost-effective colorimetric detection of ascorbic acid. <i>Analytica Chimica Acta</i> , 2020, 1093, 150-159.	5.4	54
9	A novel bionic in vitro bioelectronic tongue based on cardiomyocytes and microelectrode array for bitter and umami detection. <i>Biosensors and Bioelectronics</i> , 2019, 145, 111673.	10.1	53
10	Recent advances in acoustic wave biosensors for the detection of disease-related biomarkers: A review. <i>Analytica Chimica Acta</i> , 2021, 1164, 338321.	5.4	52
11	Graphene FET Array Biosensor Based on ssDNA Aptamer for Ultrasensitive Hg ²⁺ Detection in Environmental Pollutants. <i>Frontiers in Chemistry</i> , 2018, 6, 333.	3.6	46
12	3D microgroove electrical impedance sensing to examine 3D cell cultures for antineoplastic drug assessment. <i>Microsystems and Nanoengineering</i> , 2020, 6, 23.	7.0	42
13	MnO ₂ nanosheets as the biomimetic oxidase for rapid and sensitive oxalate detection combining with bionic E-eye. <i>Biosensors and Bioelectronics</i> , 2019, 130, 254-261.	10.1	40
14	Synchronized electromechanical integration recording of cardiomyocytes. <i>Biosensors and Bioelectronics</i> , 2018, 117, 354-365.	10.1	38
15	Rapid measurement of room temperature ionic liquid electrochemical gas sensor using transient double potential amperometry. <i>Sensors and Actuators B: Chemical</i> , 2017, 242, 658-666.	7.8	36
16	Real-time assessment of food freshness in refrigerators based on a miniaturized electronic nose. <i>Analytical Methods</i> , 2018, 10, 4741-4749.	2.7	36
17	High sensitive reduced graphene oxide-based room temperature ionic liquid electrochemical gas sensor with carbon-gold nanocomposites amplification. <i>Sensors and Actuators B: Chemical</i> , 2019, 299, 126952.	7.8	32
18	Microfluidic chip system integrated with light addressable potentiometric sensor (LAPS) for real-time extracellular acidification detection. <i>Sensors and Actuators B: Chemical</i> , 2019, 301, 127004.	7.8	32

#	ARTICLE	IF	CITATIONS
19	Development of QDs-based nanosensors for heavy metal detection: A review on transducer principles and in-situ detection. <i>Talanta</i> , 2022, 239, 122903.	5.5	32
20	Multi-site dynamic recording for A β oligomers-induced Alzheimer's disease in vitro based on neuronal network chip. <i>Biosensors and Bioelectronics</i> , 2019, 133, 183-191.	10.1	28
21	A novel portable biosensor based on aptamer functionalized gold nanoparticles for adenosine detection. <i>Analytica Chimica Acta</i> , 2020, 1120, 43-49.	5.4	26
22	Confounding effect of benign pulmonary diseases in selecting volatile organic compounds as markers of lung cancer. <i>Journal of Breath Research</i> , 2018, 12, 046013.	3.0	25
23	Efficacy and cardiotoxicity integrated assessment of anticancer drugs by a dual functional cell-based biosensor. <i>Sensors and Actuators B: Chemical</i> , 2019, 283, 881-889.	7.8	23
24	Covalently grafting first-generation PAMAM dendrimers onto MXenes with self-adsorbed AuNPs for use as a functional nanoplatform for highly sensitive electrochemical biosensing of cTnT. <i>Microsystems and Nanoengineering</i> , 2022, 8, 35.	7.0	23
25	Potentiometric multisensor system as a possible simple tool for non-invasive prostate cancer diagnostics through urine analysis. <i>Sensors and Actuators B: Chemical</i> , 2019, 289, 42-47.	7.8	21
26	Design of a novel hybrid sensor with microelectrode array and LAPS for heavy metal determination using multivariate nonlinear calibration. <i>Sensors and Actuators B: Chemical</i> , 2014, 192, 755-761.	7.8	20
27	A bioinspired in vitro bioelectronic tongue with human T2R38 receptor for high-specificity detection of N-C=S-containing compounds. <i>Talanta</i> , 2019, 199, 131-139.	5.5	19
28	Microfluidic-based fluorescent electronic eye with CdTe/CdS core-shell quantum dots for trace detection of cadmium ions. <i>Analytica Chimica Acta</i> , 2020, 1131, 126-135.	5.4	19
29	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.	2.9	19
30	Recent Developments of High-Resolution Chemical Imaging Systems Based on Light-Addressable Potentiometric Sensors (LAPSs). <i>Sensors</i> , 2019, 19, 4294.	3.8	18
31	Electronic Tongues for Inedible Media. <i>Sensors</i> , 2019, 19, 5113.	3.8	18
32	Design of a miniaturized multisensor chip with nanoband electrode array and light addressable potentiometric sensor for ion sensing. <i>Analytical Methods</i> , 2015, 7, 9190-9197.	2.7	17
33	Signal enhancement of electrochemical DNA biosensors for the detection of trace heavy metals. <i>Current Opinion in Electrochemistry</i> , 2019, 17, 23-29.	4.8	17
34	Amperometric gas sensors based on screen printed electrodes with porous ceramic substrates. <i>Sensors and Actuators B: Chemical</i> , 2021, 342, 130045.	7.8	17
35	Extracellular recordings of bionic engineered cardiac tissue based on a porous scaffold and microelectrode arrays. <i>Analytical Methods</i> , 2019, 11, 5872-5879.	2.7	16
36	Advances in Multidimensional Cardiac Biosensing Technologies: From Electrophysiology to Mechanical Motion and Contractile Force. <i>Small</i> , 2020, 16, e2005828.	10.0	16

#	ARTICLE	IF	CITATIONS
37	A double-layered liquid metal-based electrochemical sensing system on fabric as a wearable detector for glucose in sweat. <i>Microsystems and Nanoengineering</i> , 2022, 8, 48.	7.0	16
38	Integrated olfaction, gustation and toxicity detection by a versatile bioengineered cell-based biomimetic sensor. <i>Bioelectrochemistry</i> , 2019, 128, 1-8.	4.6	15
39	Electronic Nose and Electronic Tongue. , 2015, , 19-44.		13
40	Neural networks based fluorescence and electrochemistry dual-modal sensor for sensitive and precise detection of cadmium and lead simultaneously. <i>Sensors and Actuators B: Chemical</i> , 2022, 366, 131922.	7.8	13
41	Tunable and quantitative serial dilution on multi-channel miniaturized microfluidic electrochemical platform. <i>Sensors and Actuators B: Chemical</i> , 2018, 274, 682-688.	7.8	12
42	A Dual Functional Cardioiocyte-based Hybrid-biosensor for the Detection of Diarrhetic Shellfish Poisoning and Paralytic Shellfish Poisoning Toxins. <i>Analytical Sciences</i> , 2018, 34, 893-900.	1.6	12
43	A Review of Recent Advances in Flexible Wearable Sensors for Wound Detection Based on Optical and Electrical Sensing. <i>Biosensors</i> , 2022, 12, 10.	4.7	12
44	A magnetic beads-based portable flow cytometry immunosensor for in-situ detection of marine biotoxin. <i>Biomedical Microdevices</i> , 2018, 20, 60.	2.8	11
45	Sensor-free and Sensor-based Heart-on-a-chip Platform: A Review of Design and Applications. <i>Current Pharmaceutical Design</i> , 2019, 24, 5375-5385.	1.9	11
46	Biomedical sensors. , 2020, , 51-79.		11
47	Cardiomyocyte electrical-mechanical synchronized model for high-content, dose-quantitative and time-dependent drug assessment. <i>Microsystems and Nanoengineering</i> , 2021, 7, 26.	7.0	11
48	Biohybrid Tongue for Evaluation of Taste Interaction between Sweetness and Sourness. <i>Analytical Chemistry</i> , 2022, 94, 6976-6985.	6.5	10
49	Wide dynamic range multi-channel electrochemical instrument for in-field measurements. , 2016, , .		9
50	Facile Screen-Printed Carbon Nanotube Electrode on Porous Substrate with Gold Nanoparticle Modification for Rapid Electrochemical Gas Sensing. <i>Journal of the Electrochemical Society</i> , 2021, 168, 067514.	2.9	9
51	Multiplexed all-solid-state ion-sensitive light-addressable potentiometric sensor (ISLAPS) system based on silicone-rubber for physiological ions detection. <i>Analytica Chimica Acta</i> , 2021, 1179, 338603.	5.4	9
52	Detection of Hazardous Gas Mixtures in the Smart Kitchen Using an Electronic Nose with Support Vector Machine. <i>Journal of the Electrochemical Society</i> , 2020, 167, 147519.	2.9	9
53	Simultaneous detection of hydrogen and methane in breath for the diagnosis of small intestinal bacterial overgrowth by fast gas chromatography. <i>Analytical Methods</i> , 2018, 10, 4329-4338.	2.7	8
54	An Ultrasensitive Gold Nanoband Aptasensor for Mercury(II) Detection in Aquatic Environment. <i>Journal of the Electrochemical Society</i> , 2019, 166, B793-B798.	2.9	8

#	ARTICLE	IF	CITATIONS
55	High-efficient and high-content cytotoxic recording via dynamic and continuous cell-based impedance biosensor technology. <i>Biomedical Microdevices</i> , 2016, 18, 94.	2.8	7
56	A multi-channel handheld automatic spectrometer for wide range and on-site detection of okadaic acid based on specific aptamer binding. <i>Analytical Methods</i> , 2021, 13, 4345-4353.	2.7	7
57	Smart voltammetric procedure in an automatic trace metal monitoring system for expanding the measurement range of a gold-band microelectrode array. <i>Measurement Science and Technology</i> , 2013, 24, 045801.	2.6	5
58	Size-fractionated electrochemical quantification for compact monitoring of fine particulate matter. <i>Microchemical Journal</i> , 2021, 168, 106386.	4.5	5
59	THE STUDY ON NOVEL MICROELECTRODE ARRAY CHIPS FOR THE DETECTION OF HEAVY METALS IN WATER POLLUTION. <i>Journal of Innovative Optical Health Sciences</i> , 2012, 05, 1150002.	1.0	4
60	Miniaturized planar RTIL-based electrochemical gas sensor for real-time point-of-exposure monitoring. , 2016, , .		4
61	Real-Time Monitoring of HL-1 Cell Viscoelasticity for Drug Cardiotoxicity Assessment using a Love Wave Biosensor. <i>Journal of the Electrochemical Society</i> , 2021, 168, 107504.	2.9	4
62	Research progress of organoids-on-chips in biomedical application. <i>Chinese Science Bulletin</i> , 2019, 64, 902-910.	0.7	4
63	Separation and electrochemical detection platform for portable individual PM2.5 monitoring. , 2017, , .		3
64	High-temporal-range drug-induced cardiac side-effect evaluation using simultaneous HL-1-based impedance and long-term electrophysiology recording systems. <i>Analytical Methods</i> , 2019, 11, 5250-5259.	2.7	3
65	A multidimensional biosensor system to guide LUAD individualized treatment. <i>Journal of Materials Chemistry B</i> , 2021, 9, 7991-8002.	5.8	3
66	A QDs Nanocomposites-Based Photoluminescence Ratiometric Method for Selective and Visual Cadmium Detection Combining with Smartphone-Based PL E-Eye. <i>Journal of the Electrochemical Society</i> , 2020, 167, 147520.	2.9	3
67	Colorimetric detection of citric acid as the biomarker for urolithiasis based on sodium dodecylsulfate-AgNPs with a portable CD-spectrometer. <i>Analytica Chimica Acta</i> , 2022, 1191, 339178.	5.4	3
68	In situ determination of cadmium and lead in water environment based on microelectrode array combined PLS with local optimum method. <i>Analytical Methods</i> , 2013, 5, 1823.	2.7	2
69	Analysis of multi-channel microfluidics for serial dilution in lab-on-CMOS platforms. , 2017, , .		2
70	Light Addressable Potentiometric Sensor (LAPS) Integrated Microfluidic System for Real-time Cell Acidification Detection. , 2019, , .		2
71	An in vivo bioelectronic nose for possible quantitative evaluation of odor masking using M/T cell spatial response patterns. <i>Analyst</i> , The, 2021, 147, 178-186.	3.5	2
72	Micro/Nano Electrochemical Sensors for Ion Sensing. , 2016, , 187-227.		1

#	ARTICLE	IF	CITATIONS
73	Room temperature ionic liquid electrochemical gas sensor for rapid oxygen detection with transient double potential amperometry. , 2016, , .		1
74	Multifunctional SH-SY5Y-based biomimetic sensor for integrated detection of olfaction, gustation and toxicity. , 2019, , .		1
75	Colorimetric determination of adenosine in urine using biotin modified aptamer and gold nanoparticles. , 2019, , .		1
76	3D Hierarchical Nanoarchitecture AuNPs/MXene@PAMAM based Biosensor for cTnT Detection in Human Serum*. , 2021, , .		1
77	A Spiking Neural Network-based Olfactory Bionic Model for Periodontal Diseases Screening by Exhaled Breath with Electronic Nose. , 2022, , .		1
78	The Love Wave Biosensor for the Detection of the Bacterial Pneumonia Biomarker C-reactive Protein. , 2022, , .		1
79	A Novel Lateral Flow Strip Based on DNA-Functionalized Gold Nanoparticles for On-site Detection of Mercury (II) Ions. , 2019, , .		0
80	A novel micro-groove impedance sensor for 3D cell viability monitoring and high-throughput drug screening. , 2019, , .		0
81	A Kit for Colorimetric VC Detection Combining with Bionic E-eye. , 2019, , .		0
82	An in vivo bioelectronic tongue for sweetness detection using rat gustatory perception based on brain-computer interface. , 2019, , .		0
83	On Site Determination of Heavy Metal Ions with Portable Electrochemical Instrument Based on Smartphone. ECS Meeting Abstracts, 2021, MA2021-01, 1528-1528.	0.0	0
84	An Aptamer-Based Colorimetric Assay Integrated a Portable Spectrometer for on-Site Detection of PbtX-2. ECS Meeting Abstracts, 2021, MA2021-01, 1358-1358.	0.0	0
85	Synthesis of Fe ₃ O ₄ @MIL-101(Fe) for a Novel Electrochemistry Detection of Citric Acid. ECS Meeting Abstracts, 2021, MA2021-01, 1332-1332.	0.0	0
86	Acoustic Transducer and Its Applications in Biosensors. , 2022, , 517-535.		0
87	Biomimetic Gustatory Membrane-Based Taste Sensors. , 2015, , 265-287.		0
88	A Novel and Sensitive Detection Method of Hydrogen Peroxide and Glucose Based on Copper Nanoclusters. , 2022, , .		0
89	Design of Breath Sampling Device and Procedure for Volatile Organic Compounds and Exhaled Breath Condensate. , 2022, , .		0
90	Smart Electronic Nose for the Detection of Exhaled Breath to Diagnose Small Intestinal Bacterial Overgrowth. , 2022, , .		0