

Hao Wan

List of Publications by Year in descending order

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Version: 2024-02-01

90
papers

1,823
citations

279798

23
h-index

289244

40
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91
all docs

91
docs citations

91
times ranked

2197
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	Acoustic Transducer and Its Applications in Biosensors. , 2022, , 517-535.		0
3	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
4	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
5	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
6	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
7	Biohybrid Tongue for Evaluation of Taste Interaction between Sweetness and Sourness. <i>Analytical Chemistry</i> , 2022, 94, 6976-6985.	6.5	10
8	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
9	A Spiking Neural Network-based Olfactory Bionic Model for Periodontal Diseases Screening by Exhaled Breath with Electronic Nose. , 2022, , .		1
10	A Novel and Sensitive Detection Method of Hydrogen Peroxide and Glucose Based on Copper Nanoclusters. , 2022, , .		0
11	Design of Breath Sampling Device and Procedure for Volatile Organic Compounds and Exhaled Breath Condensate. , 2022, , .		0
12	The Love Wave Biosensor for the Detection of the Bacterial Pneumonia Biomarker C-reactive Protein. , 2022, , .		1
13	Smart Electronic Nose for the Detection of Exhaled Breath to Diagnose Small Intestinal Bacterial Overgrowth. , 2022, , .		0
14	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
15	A multidimensional biosensor system to guide LUAD individualized treatment. <i>Journal of Materials Chemistry B</i> , 2021, 9, 7991-8002.	5.8	3
16	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
17	3D Hierarchical Nanoarchitecture AuNPs/MXene@PAMAM based Biosensor for cTnT Detection in Human Serum* . , 2021, , .		1
18	On Site Determination of Heavy Metal Ions with Portable Electrochemical Instrument Based on Smartphone. <i>ECS Meeting Abstracts</i> , 2021, MA2021-01, 1528-1528.	0.0	0

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19	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
20	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
21	Facile Screen-Printed Carbon Nanotube Electrode on Porous Substrate with Gold Nanoparticle Modification for Rapid Electrochemical Gas Sensing. Journal of the Electrochemical Society, 2021, 168, 067514.	2.9	9
22	Recent advances in acoustic wave biosensors for the detection of disease-related biomarkers: A review. Analytica Chimica Acta, 2021, 1164, 338321.	5.4	52
23	An Odor Recognition Algorithm of Electronic Noses Based on Convolutional Spiking Neural Network for Spoiled Food Identification. Journal of the Electrochemical Society, 2021, 168, 077519.	2.9	19
24	Real-Time Monitoring of HL-1 Cell Viscoelasticity for Drug Cardiotoxicity Assessment using a Love Wave Biosensor. Journal of the Electrochemical Society, 2021, 168, 107504.	2.9	4
25	Multiplexed all-solid-state ion-sensitive light-addressable potentiometric sensor (ISLAPS) system based on silicone-rubber for physiological ions detection. Analytica Chimica Acta, 2021, 1179, 338603.	5.4	9
26	Size-fractionated electrochemical quantification for compact monitoring of fine particulate matter. Microchemical Journal, 2021, 168, 106386.	4.5	5
27	Amperometric gas sensors based on screen printed electrodes with porous ceramic substrates. Sensors and Actuators B: Chemical, 2021, 342, 130045.	7.8	17
28	A multi-channel handheld automatic spectrometer for wide range and on-site detection of okadaic acid based on specific aptamer binding. Analytical Methods, 2021, 13, 4345-4353.	2.7	7
29	An in vivo bioelectronic nose for possible quantitative evaluation of odor masking using M/T cell spatial response patterns. Analyst, The, 2021, 147, 178-186.	3.5	2
30	A novel smartphone-based CD-spectrometer for high sensitive and cost-effective colorimetric detection of ascorbic acid. Analytica Chimica Acta, 2020, 1093, 150-159.	5.4	54
31	In-situ detection of cadmium with aptamer functionalized gold nanoparticles based on smartphone-based colorimetric system. Talanta, 2020, 208, 120231.	5.5	98
32	Biomedical sensors. , 2020, , 51-79.		11
33	Advances in Multidimensional Cardiac Biosensing Technologies: From Electrophysiology to Mechanical Motion and Contractile Force. Small, 2020, 16, e2005828.	10.0	16
34	3D microgroove electrical impedance sensing to examine 3D cell cultures for antineoplastic drug assessment. Microsystems and Nanoengineering, 2020, 6, 23.	7.0	42
35	Microfluidic-based fluorescent electronic eye with CdTe/CdS core-shell quantum dots for trace detection of cadmium ions. Analytica Chimica Acta, 2020, 1131, 126-135.	5.4	19
36	A novel portable biosensor based on aptamer functionalized gold nanoparticles for adenosine detection. Analytica Chimica Acta, 2020, 1120, 43-49.	5.4	26

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37	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
38	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
39	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
40	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
41	Light Addressable Potentiometric Sensor (LAPS) Integrated Microfluidic System for Real-time Cell Acidification Detection. , 2019, , .		2
42	Recent Developments of High-Resolution Chemical Imaging Systems Based on Light-Addressable Potentiometric Sensors (LAPSs). <i>Sensors</i> , 2019, 19, 4294.	3.8	18
43	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
44	A Novel Lateral Flow Strip Based on DNA-Functionalized Gold Nanoparticles for On-site Detection of Mercury (II) Ions. , 2019, , .		0
45	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
46	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
47	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
48	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
49	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
50	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
51	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
52	Integrated olfaction, gustation and toxicity detection by a versatile bioengineered cell-based biomimetic sensor. <i>Bioelectrochemistry</i> , 2019, 128, 1-8.	4.6	15
53	A novel micro-groove impedance sensor for 3D cell viability monitoring and high-throughput drug screening. , 2019, , .		0
54	A Kit for Colorimetric VC Detection Combining with Bionic E-eye. , 2019, , .		0

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55	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
56	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
57	Multifunctional SH-SY5Y-based biomimetic sensor for integrated detection of olfaction, gustation and toxicity. , 2019, , .		1
58	Electronic Tongues for Inedible Media. <i>Sensors</i> , 2019, 19, 5113.	3.8	18
59	Colorimetric determination of adenosine in urine using biotin modified aptamer and gold nanoparticles. , 2019, , .		1
60	An in vivo bioelectronic tongue for sweetness detection using rat gustatory perception based on brain-computer interface. , 2019, , .		0
61	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
62	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
63	Research progress of organoids-on-chips in biomedical application. <i>Chinese Science Bulletin</i> , 2019, 64, 902-910.	0.7	4
64	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
65	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
66	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
67	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
68	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
69	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
70	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
71	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
72	A Dual Functional Cardioinocyte-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

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73	Synchronized electromechanical integration recording of cardiomyocytes. Biosensors and Bioelectronics, 2018, 117, 354-365.	10.1	38
74	Rapid measurement of room temperature ionic liquid electrochemical gas sensor using transient double potential amperometry. Sensors and Actuators B: Chemical, 2017, 242, 658-666.	7.8	36
75	Separation and electrochemical detection platform for portable individual PM2.5 monitoring. , 2017, , .		3
76	Analysis of multi-channel microfluidics for serial dilution in lab-on-CMOS platforms. , 2017, , .		2
77	Miniaturized planar RTIL-based electrochemical gas sensor for real-time point-of-exposure monitoring. , 2016, , .		4
78	Micro/Nano Electrochemical Sensors for Ion Sensing. , 2016, , 187-227.		1
79	Wide dynamic range multi-channel electrochemical instrument for in-field measurements. , 2016, , .		9
80	Room temperature ionic liquid electrochemical gas sensor for rapid oxygen detection with transient double potential amperometry. , 2016, , .		1
81	High-efficient and high-content cytotoxic recording via dynamic and continuous cell-based impedance biosensor technology. Biomedical Microdevices, 2016, 18, 94.	2.8	7
82	Design of a miniaturized multisensor chip with nanoband electrode array and light addressable potentiometric sensor for ion sensing. Analytical Methods, 2015, 7, 9190-9197.	2.7	17
83	Electronic Nose and Electronic Tongue. , 2015, , 19-44.		13
84	Screen-printed gold electrode with gold nanoparticles modification for simultaneous electrochemical determination of lead and copper. Sensors and Actuators B: Chemical, 2015, 209, 336-342.	7.8	142
85	Recent achievements in electronic tongue and bioelectronic tongue as taste sensors. Sensors and Actuators B: Chemical, 2015, 207, 1136-1146.	7.8	141
86	Biomimetic Gustatory Membrane-Based Taste Sensors. , 2015, , 265-287.		0
87	Design of a novel hybrid sensor with microelectrode array and LAPS for heavy metal determination using multivariate nonlinear calibration. Sensors and Actuators B: Chemical, 2014, 192, 755-761.	7.8	20
88	In situ determination of cadmium and lead in water environment based on microelectrode array combined PLS with local optimum method. Analytical Methods, 2013, 5, 1823.	2.7	2
89	Smart voltammetric procedure in an automatic trace metal monitoring system for expanding the measurement range of a gold-band microelectrode array. Measurement Science and Technology, 2013, 24, 045801.	2.6	5
90	THE STUDY ON NOVEL MICROELECTRODE ARRAY CHIPS FOR THE DETECTION OF HEAVY METALS IN WATER POLLUTION. Journal of Innovative Optical Health Sciences, 2012, 05, 1150002.	1.0	4