Jianhan Lin

List of Publications by Year
in descending order

74 papers	3,109 citations	136950 32 h-index	161849 54 g-index
74 all docs	74 docs citations	74 times ranked	2873 citing authors

#	Article	IF	Citations
1	A Review on Micromixers. Micromachines, 2017, 8, 274.	2.9	324
2	A microfluidic colorimetric biosensor for rapid detection of Escherichia coli O157:H7 using gold nanoparticle aggregation and smart phone imaging. Biosensors and Bioelectronics, 2019, 124-125, 143-149.	10.1	237
3	A microfluidic biosensor for online and sensitive detection of Salmonella typhimurium using fluorescence labeling and smartphone video processing. Biosensors and Bioelectronics, 2019, 140, 111333.	10.1	133
4	An ultrasensitive fluorescent biosensor using high gradient magnetic separation and quantum dots for fast detection of foodborne pathogenic bacteria. Sensors and Actuators B: Chemical, 2018, 265, 318-325.	7.8	100
5	A sensitive impedance biosensor based on immunomagnetic separation and urease catalysis for rapid detection of Listeria monocytogenes using an immobilization-free interdigitated array microelectrode. Biosensors and Bioelectronics, 2015, 74, 504-511.	10.1	96
6	Fast and sensitive detection of foodborne pathogen using electrochemical impedance analysis, urease catalysis and microfluidics. Biosensors and Bioelectronics, 2016, 86, 770-776.	10.1	90
7	Exploiting Enzyme Catalysis in Ultra-Low Ion Strength Media for Impedance Biosensing of Avian Influenza Virus Using a Bare Interdigitated Electrode. Analytical Chemistry, 2014, 86, 1965-1971.	6.5	82
8	An impedance immunosensor based on low-cost microelectrodes and specific monoclonal antibodies for rapid detection of avian influenza virus H5N1 in chicken swabs. Biosensors and Bioelectronics, 2015, 67, 546-552.	10.1	82
9	Recent advances on magnetic nanobead based biosensors: From separation to detection. TrAC - Trends in Analytical Chemistry, 2020, 128, 115915.	11.4	79
10	Gold Nanobones Enhanced Ultrasensitive Surface-Enhanced Raman Scattering Aptasensor for Detecting Escherichia coli O157:H7. ACS Sensors, 2020, 5, 588-596.	7.8	78
11	Efficient separation and quantitative detection of Listeria monocytogenes based on screen-printed interdigitated electrode, urease and magnetic nanoparticles. Food Control, 2017, 73, 555-561.	5.5	77
12	A microfluidic impedance biosensor based on immunomagnetic separation and urease catalysis for continuous-flow detection of E. coli O157:H7. Sensors and Actuators B: Chemical, 2018, 259, 1013-1021.	7.8	74
13	Microfluidic Colorimetric Biosensors Based on MnO₂ Nanozymes and Convergenceâ€“Divergence Spiral Micromixers for Rapid and Sensitive Detection of Salmonella. ACS Sensors, 2021, 6, 2883-2892.	7.8	73
14	A lab-on-chip device for the sample-in-result-out detection of viable Salmonella using loop-mediated isothermal amplification and real-time turbidity monitoring. Lab on A Chip, 2020, 20, 2296-2305.	6.0	66
15	A microfluidic biosensor for rapid and automatic detection of Salmonella using metal-organic framework and Raspberry Pi. Biosensors and Bioelectronics, 2021, 178, 113020.	10.1	65
16	Optical Biosensor for Rapid Detection of Salmonella typhimurium Based on Porous Gold@Platinum Nanocatalysts and a 3D Fluidic Chip. ACS Sensors, 2020, 5, 65-72.	7.8	62
17	A sensitive immunoassay for simultaneous detection of foodborne pathogens using MnO2 nanoflowers-assisted loading and release of quantum dots. Food Chemistry, 2020, 322, 126719.	8.2	53
18	Rapid and sensitive detection of Salmonella Typhimurium using nickel nanowire bridge for electrochemical impedance amplification. Talanta, 2020, 211, 120715.	5.5	52

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19	A Label-Free Impedance Immunosensor Using Screen-Printed Interdigitated Electrodes and Magnetic Nanobeads for the Detection of E. coli O157:H7. Biosensors, 2015, 5, 791-803.	4.7	51
20	A capillary biosensor for rapid detection of Salmonella using Fe-nanocluster amplification and smart phone imaging. Biosensors and Bioelectronics, 2019, 127, 142-149.	10.1	51
21	Evaluation study of a portable impedance biosensor for detection of avian influenza virus. Journal of Virological Methods, 2011, 178, 52-58.	2.1	49
22	A sensitive biosensor using double-layer capillary based immunomagnetic separation and invertase-nanocluster based signal amplification for rapid detection of foodborne pathogen. Biosensors and Bioelectronics, 2018, 100, 583-590.	10.1	49
23	An optical biosensor using immunomagnetic separation, urease catalysis and pH indication for rapid and sensitive detection of Listeria monocytogenes. Sensors and Actuators B: Chemical, 2018, 258, 447-453.	7.8	47
24	A microfluidic signal-off biosensor for rapid and sensitive detection of Salmonella using magnetic separation and enzymatic catalysis. Food Control, 2019, 103, 186-193.	5.5	47
25	Sensitive and simultaneous detection of different pathogens by surface-enhanced Raman scattering based on aptamer and Raman reporter co-mediated gold tags. Sensors and Actuators B: Chemical, 2020, 317, 128182.	7.8	44
26	An Electrochemical Aptasensor Using Coaxial Capillary with Magnetic Nanoparticle, Urease Catalysis and PCB Electrode for Rapid and Sensitive Detection of Escherichia coli O157:H7. Nanotheranostics, 2017, 1, 403-414.	5.2	43
27	Rapid detection of Salmonella Typhimurium using magnetic nanoparticle immunoseparation, nanocluster signal amplification and smartphone image analysis. Sensors and Actuators B: Chemical, 2019, 284, 134-139.	7.8	43
28	An Acid-Responsive Microfluidic Salmonella Biosensor Using Curcumin as Signal Reporter and ZnO-Capped Mesoporous Silica Nanoparticles for Signal Amplification. Sensors and Actuators B: Chemical, 2020, 312, 127958.	7.8	43
29	An ultrasensitive biosensor for colorimetric detection of Salmonella in large-volume sample using magnetic grid separation and platinum loaded zeolitic imidazolate Framework-8 nanocatalysts. Biosensors and Bioelectronics, 2020, 150, 111862.	10.1	40
30	A Microfluidic Biosensor Based on Magnetic Nanoparticle Separation, Quantum Dots Labeling and MnO2 Nanoflower Amplification for Rapid and Sensitive Detection of Salmonella Typhimurium. Micromachines, 2020, 11, 281.	2.9	40
31	An ultrasensitive biosensor for fast detection of Salmonella using 3D magnetic grid separation and urease catalysis. Biosensors and Bioelectronics, 2020, 157, 112160.	10.1	38
32	An impedance biosensor based on magnetic nanobead net and MnO2 nanoflowers for rapid and sensitive detection of foodborne bacteria. Biosensors and Bioelectronics, 2021, 173, 112800.	10.1	37
33	An ultrasensitive impedance biosensor for Salmonella detection based on rotating high gradient magnetic separation and cascade reaction signal amplification. Biosensors and Bioelectronics, 2021, 176, 112921.	10.1	34
34	Biosensors Coupled with Signal Amplification Technology for the Detection of Pathogenic Bacteria: A Review. Biosensors, 2021, 11, 190.	4.7	33
35	A sensitive Salmonella biosensor using platinum nanoparticle loaded manganese dioxide nanoflowers and thin-film pressure detector. Sensors and Actuators B: Chemical, 2020, 321, 128616.	7.8	31
36	A microfluidic immunosensor for visual detection of foodborne bacteria using immunomagnetic separation, enzymatic catalysis and distance indication. Mikrochimica Acta, 2019, 186, 757.	5.0	30

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37	Combining impedance biosensor with immunomagnetic separation for rapid screening of Salmonella in poultry supply chains. Poultry Science, 2020, 99, 1606-1614.	3.4	30
38	Fe-MIL-88NH₂ Metalâ€“Organic Framework Nanocubes Decorated with Pt Nanoparticles for the Detection of Salmonella. ACS Applied Nano Materials, 2021, 4, 5115-5122.	5.0	29
39	A Fluidic Device for Immunomagnetic Separation of Foodborne Bacteria Using Self-Assembled Magnetic Nanoparticle Chains. Micromachines, 2018, 9, 624.	2.9	28
40	DNA-mediated growth of noble metal nanomaterials for biosensing applications. TrAC - Trends in Analytical Chemistry, 2022, 148, 116533.	11.4	28
41	An enzyme-free biosensor for sensitive detection of Salmonella using curcumin as signal reporter and click chemistry for signal amplification. Theranostics, 2018, 8, 6263-6273.	10.0	26
42	Ratiometric fluorescent sensing system for drug residue analysis: Highly sensitive immunosensor using dual-emission quantum dots hybrid and compact smartphone based-device. Analytica Chimica Acta, 2020, 1102, 91-98.	5.4	26
43	Long-term in situ bioelectrochemical monitoring of biohythane process: Metabolic interactions and microbial evolution. Bioresource Technology, 2021, 332, 125119.	9.6	26
44	A high gradient and strength bioseparator with nano-sized immunomagnetic particles for specific separation and efficient concentration of E. coli O157:H7. Journal of Magnetism and Magnetic Materials, 2015, 378, 206-213.	2.3	24
45	A colorimetric immunosensor for determination of foodborne bacteria using rotating immunomagnetic separation, gold nanorod indication, and click chemistry amplification. Mikrochimica Acta, 2020, 187, 197.	5.0	24
46	A finger-actuated microfluidic biosensor for colorimetric detection of foodborne pathogens. Food Chemistry, 2022, 381, 131801.	8.2	23
47	Rapid and sensitive detection of Escherichia coli O157:H7 using coaxial channel-based DNA extraction and microfluidic PCR. Journal of Dairy Science, 2018, 101, 9736-9746.	3.4	22
48	Competitive activation cross amplification combined with smartphone-based quantification for point-of-care detection of single nucleotide polymorphism. Biosensors and Bioelectronics, 2021, 183, 113200.	10.1	20
49	Establishment of a simultaneous detection method for ten duck viruses using MALDI-TOF mass spectrometry. Journal of Virological Methods, 2019, 273, 113723.	2.1	16
50	A microfluidic biosensor for rapid detection of Salmonella typhimurium based on magnetic separation, enzymatic catalysis and electrochemical impedance analysis. Chinese Chemical Letters, 2022, 33, 3156-3160.	9.0	16
51	A Review on Magnetophoretic Immunoseparation. Journal of Nanoscience and Nanotechnology, 2016, 16, 2152-2163.	0.9	15
52	Exploring Protein-Inorganic Hybrid Nanoflowers and Immune Magnetic Nanobeads to Detect Salmonella Typhimurium. Nanomaterials, 2018, 8, 1006.	4.1	15
53	A Rapid and Sensitive Salmonella Biosensor Based on Viscoelastic Inertial Microfluidics. Sensors, 2020, 20, 2738.	3.8	15
54	Recent Advances on Bioaerosol Collection and Detection in Microfluidic Chips. Analytical Chemistry, 2021, 93, 9013-9022.	6.5	15

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55	Automatic and multi-channel detection of bacteria on a slidable centrifugal disc based on FTA card nucleic acid extraction and recombinase aided amplification. Lab on A Chip, 2021, 22, 80-89.	6.0	15
56	Rapid identification of H5 avian influenza virus in chicken throat swab specimens using microfluidic real-time RT-PCR. Analytical Methods, 2014, 6, 2628.	2.7	12
57	Challenges and Perspectives for Biosensing of Bioaerosol Containing Pathogenic Microorganisms. Micromachines, 2021, 12, 798.	2.9	12
58	Hyperspectral dark-field microscopy for pathogen detection based on spectral angle mapping. Sensors and Actuators B: Chemical, 2022, 367, 132042.	7.8	10
59	Power-free microfluidic biosensing of Salmonella with slide multivalve and disposable syringe. Biosensors and Bioelectronics, 2022, 213, 114458.	10.1	10
60	A general-purpose signal processing algorithm for biological profiles using only first-order derivative information. BMC Bioinformatics, 2019, 20, 611.	2.6	9
61	A lab-on-a-tube biosensor for automatic detection of foodborne bacteria using rotated Halbach magnetic separation and Raspberry Pi imaging. Talanta, 2022, 239, 123095.	5.5	9
62	Continuous-Flow Separation and Efficient Concentration of Foodborne Bacteria from Large Volume Using Nickel Nanowire Bridge in Microfluidic Chip. Micromachines, 2019, 10, 644.	2.9	8
63	Magnetic Bead Chain-Based Continuous-Flow DNA Extraction for Microfluidic PCR Detection of Salmonella. Micromachines, 2021, 12, 384.	2.9	8
64	A lab-on-a-disc platform based on nickel nanowire net and smartphone imaging for rapid and automatic detection of foodborne bacteria. Chinese Chemical Letters, 2022, 33, 2091-2095.	9.0	7
65	Three-dimensional printed magnetophoretic system for the continuous flow separation of avian influenza H5N1 viruses. Journal of Separation Science, 2017, 40, 1540-1547.	2.5	6
66	From pretreatment to assay: A chemiluminescence- and optical fiber-based fully automated immunosensing (COFFAI) system. Sensors and Actuators B: Chemical, 2022, 362, 131820.	7.8	6
67	Sample-in-answer-out colorimetric detection of Salmonella typhimurium using non-enzymatic cascade amplification. Analytica Chimica Acta, 2022, 1218, 339850.	5.4	6
68	Slipchip-based immunomagnetic separation combined with loop-mediated isothermal amplification for rapid detection of Bacillus cereus with tetracycline resistance gene tetL in pasteurized milk. Food Control, 2022, 140, 109122.	5.5	5
69	Impedance Immunosensor Based on Interdigitated Array Microelectrodes for Rapid Detection of Avian Influenza Virus Subtype H5. Sensor Letters, 2013, 11, 1256-1260.	0.4	4
70	A portable viable Salmonella detection device based on microfluidic chip and recombinase aided amplification. Chinese Chemical Letters, 2023, 34, 107360.	9.0	4
71	Online Detection of Peroxidase Using 3D Printing, Active Magnetic Mixing, and Spectra Analysis. BioMed Research International, 2017, 2017, 1-8.	1.9	2
72	Development of automatic and efficient immuno-separator of foodborne pathogenic bacteria using magnetophoresis and magnetic mixing. International Journal of Agricultural and Biological Engineering, 2019, 12, 167-172.	0.6	2

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73	DNA-mediated Au@Ag@silica nanopopcorn fluorescent probe for in vivo near-infrared imaging of probiotic Lactobacillus Plantarum. Biosensors and Bioelectronics, 2022, 212, 114421.	10.1	2
74	Simple and rapid separation of Haematococcus pluvialis and ciliate based on the deanâ€coupled inertial microfluidics. Journal of Separation Science, 2022, 45, 3900-3908.	2.5	1