

# Jinglong Liu

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

122 papers	3,613 citations	35 h-index	57 g-index
134 ext. papers	4,379 ext. citations	8.9 avg, IF	5.73 L-index

#	Paper	IF	Citations
122	Biosensors and bioelectronics on smartphone for portable biochemical detection. <i>Biosensors and Bioelectronics</i> , <b>2016</b> , 75, 273-84	11.8	416
121	Cell-based biosensors and their application in biomedicine. <i>Chemical Reviews</i> , <b>2014</b> , 114, 6423-61	68.1	221
120	Olfactory cell-based biosensor: a first step towards a neurochip of bioelectronic nose. <i>Biosensors and Bioelectronics</i> , <b>2006</b> , 22, 318-22	11.8	127
119	Smartphone-based integrated voltammetry system for simultaneous detection of ascorbic acid, dopamine, and uric acid with graphene and gold nanoparticles modified screen-printed electrodes. <i>Biosensors and Bioelectronics</i> , <b>2018</b> , 119, 55-62	11.8	107
118	Interactions of benzotriazole UV stabilizers with human serum albumin: Atomic insights revealed by biosensors, spectroscopies and molecular dynamics simulations. <i>Chemosphere</i> , <b>2016</b> , 144, 1050-9	8.4	105
117	Smartphone-based portable biosensing system using impedance measurement with printed electrodes for 2,4,6-trinitrotoluene (TNT) detection. <i>Biosensors and Bioelectronics</i> , <b>2015</b> , 70, 81-8	11.8	102
116	Smartphone-based cyclic voltammetry system with graphene modified screen printed electrodes for glucose detection. <i>Biosensors and Bioelectronics</i> , <b>2017</b> , 98, 449-456	11.8	94
115	Impedance studies of bio-behavior and chemosensitivity of cancer cells by micro-electrode arrays. <i>Biosensors and Bioelectronics</i> , <b>2009</b> , 24, 1305-10	11.8	94
114	A novel electrochemical biosensor based on dynamic polymerase-extending hybridization for E. coli O157:H7 DNA detection. <i>Talanta</i> , <b>2009</b> , 78, 647-52	6.2	87
113	Protein detecting with smartphone-controlled electrochemical impedance spectroscopy for point-of-care applications. <i>Sensors and Actuators B: Chemical</i> , <b>2016</b> , 222, 994-1002	8.5	82
112	Smartphone-based sensing system using ZnO and graphene modified electrodes for VOCs detection. <i>Biosensors and Bioelectronics</i> , <b>2017</b> , 93, 94-101	11.8	79
111	Detection of heavy metal toxicity using cardiac cell-based biosensor. <i>Biosensors and Bioelectronics</i> , <b>2007</b> , 22, 3224-9	11.8	73
110	Extracellular potentials recording in intact olfactory epithelium by microelectrode array for a bioelectronic nose. <i>Biosensors and Bioelectronics</i> , <b>2010</b> , 25, 2212-7	11.8	69
109	Battery-Free and Wireless Epidermal Electrochemical System with All-Printed Stretchable Electrode Array for Multiplexed In Situ Sweat Analysis. <i>Advanced Materials Technologies</i> , <b>2019</b> , 4, 1800658	6.8	68
108	Smartphone-based portable electrochemical biosensing system for detection of circulating microRNA-21 in saliva as a proof-of-concept. <i>Sensors and Actuators B: Chemical</i> , <b>2020</b> , 308, 127718	8.5	65
107	Recent advances in olfactory receptor-based biosensors. <i>Biosensors and Bioelectronics</i> , <b>2013</b> , 42, 570-80	11.8	65
106	A novel biomimetic olfactory-based biosensor for single olfactory sensory neuron monitoring. <i>Biosensors and Bioelectronics</i> , <b>2009</b> , 24, 1498-502	11.8	59

105	Smartphone-based battery-free and flexible electrochemical patch for calcium and chloride ions detections in biofluids. <i>Sensors and Actuators B: Chemical</i> , <b>2019</b> , 297, 126743	8.5	57
104	A novel microphysiometer based on high sensitivity LAPS and microfluidic system for cellular metabolism study and rapid drug screening. <i>Biosensors and Bioelectronics</i> , <b>2013</b> , 40, 167-73	11.8	53
103	Olfactory biosensor using odorant-binding proteins from honeybee: Ligands of floral odors and pheromones detection by electrochemical impedance. <i>Sensors and Actuators B: Chemical</i> , <b>2014</b> , 193, 420-427	8.5	52
102	Olfactory biosensor for insect semiochemicals analysis by impedance sensing of odorant-binding proteins on interdigitated electrodes. <i>Biosensors and Bioelectronics</i> , <b>2015</b> , 67, 662-9	11.8	51
101	Impedance sensing and molecular modeling of an olfactory biosensor based on chemosensory proteins of honeybee. <i>Biosensors and Bioelectronics</i> , <b>2013</b> , 40, 174-9	11.8	47
100	Plasmonic nano-arrays for ultrasensitive bio-sensing. <i>Nanophotonics</i> , <b>2018</b> , 7, 1517-1531	6.3	47
99	Smartphone-based biosensors for portable food evaluation. <i>Current Opinion in Food Science</i> , <b>2019</b> , 28, 74-81	9.8	46
98	Smartphone-based differential pulse amperometry system for real-time monitoring of levodopa with carbon nanotubes and gold nanoparticles modified screen-printing electrodes. <i>Biosensors and Bioelectronics</i> , <b>2019</b> , 129, 216-223	11.8	46
97	Graphene oxide-based optical biosensor functionalized with peptides for explosive detection. <i>Biosensors and Bioelectronics</i> , <b>2015</b> , 68, 494-499	11.8	45
96	A novel experimental research based on taste cell chips for taste transduction mechanism. <i>Sensors and Actuators B: Chemical</i> , <b>2008</b> , 131, 24-28	8.5	38
95	One step electrochemical deposition and reduction of graphene oxide on screen printed electrodes for impedance detection of glucose. <i>Sensors and Actuators B: Chemical</i> , <b>2017</b> , 244, 290-298	8.5	37
94	Combining localized surface plasmon resonance with anodic stripping voltammetry for heavy metal ion detection. <i>Sensors and Actuators B: Chemical</i> , <b>2016</b> , 231, 349-356	8.5	37
93	Electrogenerated chemiluminescence on smartphone with graphene quantum dots nanocomposites for Escherichia Coli detection. <i>Sensors and Actuators B: Chemical</i> , <b>2019</b> , 297, 126811	8.5	36
92	Bioelectronic tongue of taste buds on microelectrode array for salt sensing. <i>Biosensors and Bioelectronics</i> , <b>2013</b> , 40, 115-20	11.8	36
91	Battery-Free and Wireless Smart Wound Dressing for Wound Infection Monitoring and Electrically Controlled On-Demand Drug Delivery. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2100852	15.6	36
90	Passive and wireless near field communication tag sensors for biochemical sensing with smartphone. <i>Sensors and Actuators B: Chemical</i> , <b>2017</b> , 246, 748-755	8.5	35
89	Nanoplasmonic biosensor: coupling electrochemistry to localized surface plasmon resonance spectroscopy on nanocup arrays. <i>Biosensors and Bioelectronics</i> , <b>2015</b> , 67, 237-42	11.8	35
88	A novel design of multifunctional integrated cell-based biosensors for simultaneously detecting cell acidification and extracellular potential. <i>Biosensors and Bioelectronics</i> , <b>2009</b> , 24, 1462-8	11.8	35

87	Battery-free, wireless, and flexible electrochemical patch for in situ analysis of sweat cortisol via near field communication. <i>Biosensors and Bioelectronics</i> , <b>2021</b> , 172, 112782	11.8	35
86	Olfactory mucosa tissue-based biosensor: A bioelectronic nose with receptor cells in intact olfactory epithelium. <i>Sensors and Actuators B: Chemical</i> , <b>2010</b> , 146, 527-533	8.5	33
85	Label-free amino acid detection based on nanocomposites of graphene oxide hybridized with gold nanoparticles. <i>Biosensors and Bioelectronics</i> , <b>2016</b> , 77, 963-70	11.8	32
84	Olfactory receptor cells respond to odors in a tissue and semiconductor hybrid neuron chip. <i>Biosensors and Bioelectronics</i> , <b>2010</b> , 26, 1672-8	11.8	32
83	Olfactory and taste cell sensor and its applications in biomedicine. <i>Sensors and Actuators A: Physical</i> , <b>2007</b> , 139, 131-138	3.9	32
82	Mutual promotion of electrochemical-localized surface plasmon resonance on nanochip for sensitive sialic acid detection. <i>Biosensors and Bioelectronics</i> , <b>2018</b> , 117, 32-39	11.8	30
81	Electrochemiluminescence on smartphone with silica nanopores membrane modified electrodes for nitroaromatic explosives detection. <i>Biosensors and Bioelectronics</i> , <b>2019</b> , 129, 284-291	11.8	30
80	Biosensor recording of extracellular potentials in the taste epithelium for bitter detection. <i>Sensors and Actuators B: Chemical</i> , <b>2013</b> , 176, 497-504	8.5	28
79	Monitoring the electrochemical responses of neurotransmitters through localized surface plasmon resonance using nanohole array. <i>Biosensors and Bioelectronics</i> , <b>2017</b> , 93, 241-249	11.8	28
78	In vitro assessing the risk of drug-induced cardiotoxicity by embryonic stem cell-based biosensor. <i>Sensors and Actuators B: Chemical</i> , <b>2011</b> , 155, 214-219	8.5	28
77	Embryonic stem cells as a novel cell source of cell-based biosensors. <i>Biosensors and Bioelectronics</i> , <b>2007</b> , 22, 810-5	11.8	28
76	Extracellular potentials recording in intact taste epithelium by microelectrode array for a taste sensor. <i>Biosensors and Bioelectronics</i> , <b>2013</b> , 43, 186-92	11.8	26
75	Impedance spectroscopy analysis of human odorant binding proteins immobilized on nanopore arrays for biochemical detection. <i>Biosensors and Bioelectronics</i> , <b>2016</b> , 79, 251-7	11.8	23
74	Virtual sensor array based on MXene for selective detections of VOCs. <i>Sensors and Actuators B: Chemical</i> , <b>2021</b> , 331, 129414	8.5	23
73	Two-dimensional molybdenum disulfide (MoS <sub>2</sub> ) with gold nanoparticles for biosensing of explosives by optical spectroscopy. <i>Sensors and Actuators B: Chemical</i> , <b>2018</b> , 261, 279-287	8.5	22
72	AlGa <sub>N</sub> /Ga <sub>N</sub> heterostructures for non-invasive cell electrophysiological measurements. <i>Biosensors and Bioelectronics</i> , <b>2007</b> , 23, 513-9	11.8	22
71	Smartphone-based square wave voltammetry system with screen-printed graphene electrodes for norepinephrine detection. <i>Smart Materials in Medicine</i> , <b>2020</b> , 1, 1-9	12.9	21
70	Biosensor analysis of natural and artificial sweeteners in intact taste epithelium. <i>Biosensors and Bioelectronics</i> , <b>2014</b> , 54, 385-92	11.8	20

69	An olfactory bulb slice-based biosensor for multi-site extracellular recording of neural networks. <i>Biosensors and Bioelectronics</i> , <b>2011</b> , 26, 3313-9	11.8	20
68	Electrophoresis-enhanced localized surface plasmon resonance sensing based on nanocup array for thrombin detection. <i>Sensors and Actuators B: Chemical</i> , <b>2016</b> , 232, 219-225	8.5	20
67	Nanoplasmonic monitoring of odorants binding to olfactory proteins from honeybee as biosensor for chemical detection. <i>Sensors and Actuators B: Chemical</i> , <b>2015</b> , 221, 341-349	8.5	19
66	A novel bioelectronic nose based on brain-machine interface using implanted electrode recording in vivo in olfactory bulb. <i>Biosensors and Bioelectronics</i> , <b>2013</b> , 49, 263-9	11.8	19
65	Fingerprints mapping and biochemical sensing on smartphone by electrochemiluminescence. <i>Sensors and Actuators B: Chemical</i> , <b>2019</b> , 285, 34-41	8.5	18
64	High spatial resolution impedance measurement of EIS sensors for light addressable cell adhesion monitoring. <i>Biosensors and Bioelectronics</i> , <b>2011</b> , 26, 2822-7	11.8	17
63	Salivary Cortisol Determination on Smartphone-Based Differential Pulse Voltammetry System. <i>Sensors</i> , <b>2020</b> , 20,	3.8	16
62	Fully integrated battery-free and flexible electrochemical tag for on-demand wireless in situ monitoring of heavy metals. <i>Sensors and Actuators B: Chemical</i> , <b>2020</b> , 310, 127809	8.5	16
61	Peptide Functionalized Nanoplasmonic Sensor for Explosive Detection. <i>Nano-Micro Letters</i> , <b>2016</b> , 8, 36-43	8.5	16
60	Extracellular recording of spatiotemporal patterning in response to odors in the olfactory epithelium by microelectrode arrays. <i>Biosensors and Bioelectronics</i> , <b>2011</b> , 27, 12-7	11.8	16
59	Spectroscopic detection of thrombin with peptides self-assembled on gold nanoparticles hybridized graphene oxide. <i>Sensors and Actuators B: Chemical</i> , <b>2017</b> , 242, 443-449	8.5	15
58	Fat taste detection with odorant-binding proteins (OBPs) on screen-printed electrodes modified by reduced graphene oxide. <i>Sensors and Actuators B: Chemical</i> , <b>2017</b> , 252, 973-982	8.5	15
57	Design principle in biosensing: Critical analysis based on graphitic carbon nitride (G-C <sub>3</sub> N <sub>4</sub> ) photoelectrochemical biosensor. <i>TrAC - Trends in Analytical Chemistry</i> , <b>2021</b> , 145, 116454	14.6	15
56	Onion-inspired MXene/chitosan-quercetin multilayers: Enhanced response to H <sub>2</sub> O molecules for wearable human physiological monitoring. <i>Sensors and Actuators B: Chemical</i> , <b>2021</b> , 329, 129209	8.5	14
55	Umami evaluation in taste epithelium on microelectrode array by extracellular electrophysiological recording. <i>Biochemical and Biophysical Research Communications</i> , <b>2013</b> , 438, 334-9	3.4	13
54	Olfactory epithelium biosensor: odor discrimination of receptor neurons from a bio-hybrid sensing system. <i>Biomedical Microdevices</i> , <b>2012</b> , 14, 1055-61	3.7	12
53	Wireless, battery-free and wearable device for electrically controlled drug delivery: sodium salicylate released from bilayer polypyrrole by near-field communication on smartphone. <i>Biomedical Microdevices</i> , <b>2020</b> , 22, 53	3.7	12
52	Electrochemical and optical biosensors based on multifunctional MXene nanoplatforms: Progress and prospects. <i>Talanta</i> , <b>2021</b> , 235, 122726	6.2	12

51	A multi-scale electrode array (MSEA) to study excitation-contraction coupling of cardiomyocytes for high-throughput bioassays. <i>Sensors and Actuators B: Chemical</i> , <b>2011</b> , 152, 107-114	8.5	11
50	Nanochannel Templated Iridium Oxide Nanostructures for Wide-Range pH Sensing from Solutions to Human Skin Surface. <i>Analytical Chemistry</i> , <b>2020</b> , 92, 3844-3851	7.8	10
49	Biomedical Sensors and Measurement. <i>Advanced Topics in Science and Technology in China</i> , <b>2011</b> ,	0.2	10
48	Detection of Bitter Taste Molecules Based on Odorant-Binding Protein-Modified Screen-Printed Electrodes. <i>ACS Omega</i> , <b>2020</b> , 5, 27536-27545	3.9	9
47	Olfactory biosensor based on odorant-binding proteins of <i>Bactrocera dorsalis</i> with electrochemical impedance sensing for pest management. <i>Sensor Review</i> , <b>2017</b> , 37, 396-403	1.4	8
46	Neurosecretory cell-based biosensor: monitoring secretion of adrenal chromaffin cells by local extracellular acidification using light-addressable potentiometric sensor. <i>Biosensors and Bioelectronics</i> , <b>2012</b> , 35, 421-424	11.8	8
45	A high sensitive in vivo biosensing detection for odors by multiunit in rat olfactory bulb. <i>Sensors and Actuators B: Chemical</i> , <b>2013</b> , 186, 308-314	8.5	8
44	Embryonic Stem Cells Biosensor and Its Application in Drug Analysis and Toxin Detection. <i>IEEE Sensors Journal</i> , <b>2007</b> , 7, 1625-1631	4	8
43	Smartphone-based photoelectrochemical biosensing system with graphitic carbon nitride/gold nanoparticles modified electrodes for matrix metalloproteinase-2 detection. <i>Biosensors and Bioelectronics</i> , <b>2021</b> , 193, 113572	11.8	8
42	Recent Advances in Intelligent Wearable Medical Devices Integrating Biosensing and Drug Delivery.. <i>Advanced Materials</i> , <b>2022</b> , e2108491	24	7
41	Electrochemical non-enzymatic sensing of glycoside toxins by boronic acid functionalized nano-composites on screen-printed electrode. <i>Sensors and Actuators B: Chemical</i> , <b>2021</b> , 329, 129197	8.5	7
40	Gold Nanoparticles on Graphene Oxide Substrate as Sensitive Nanoprobes for Rapid L-Cysteine Detection through Smartphone-Based Multimode Analysis. <i>ChemistrySelect</i> , <b>2018</b> , 3, 10002-10009	1.8	7
39	Biomimetic sensor for sweet taste detection based on graphene composite materials. <i>Sensors and Actuators B: Chemical</i> , <b>2017</b> , 251, 909-917	8.5	6
38	Room Temperature VOCs Sensing with Termination-Modified Ti3C2Tx MXene for Wearable Exhaled Breath Monitoring. <i>Advanced Materials Technologies</i> , 2100872	6.8	6
37	Nanoplasmonic Biosensor Using Localized Surface Plasmon Resonance Spectroscopy for Biochemical Detection. <i>Methods in Molecular Biology</i> , <b>2017</b> , 1571, 89-107	1.4	4
36	Peptide-based biosensors <b>2018</b> , 565-601		4
35	Microelectrode recording of tissue neural oscillations for a bionic olfactory biosensor. <i>Journal of Bionic Engineering</i> , <b>2012</b> , 9, 494-500	2.7	4
34	Electrochemical modeling and evaluation for textile electrodes to skin. <i>BioMedical Engineering OnLine</i> , <b>2020</b> , 19, 30	4.1	3

33	DESIGN OF MICROPHYSIOMETER BASED ON MULTIPARAMETER CELL-BASED BIOSENSORS FOR QUICK DRUG ANALYSIS. <i>Journal of Innovative Optical Health Sciences</i> , <b>2012</b> , 05, 1150005	1.2	3
32	Wearable battery-free theranostic dental patch for wireless intraoral sensing and drug delivery. <i>Npj Flexible Electronics</i> , <b>2022</b> , 6,	10.7	3
31	Basics of Sensors and Measurement. <i>Advanced Topics in Science and Technology in China</i> , <b>2011</b> , 17-50	0.2	2
30	Progress of Biomimetic Artificial Nose and Tongue <b>2009</b> ,		2
29	Olfactory Cell-Based Smell Sensors <b>2015</b> , 45-59		1
28	Smell Sensors Based on Odorant Binding Proteins <b>2015</b> , 129-144		1
27	Impedance Detection and Modeling of Chemotherapeutic Agents by a Cancer Cell-Based Biosensor. <i>Analytical Letters</i> , <b>2014</b> , 47, 1348-1360	2.2	1
26	Light Addressable Potentiometric Sensor as Cell-Based Biosensors for Biomedical Application <b>2011</b> ,		1
25	Preliminary Modeling and Simulation Study on Olfactory Cell Sensation <b>2009</b> ,		1
24	Smartphone-Based Electrochemical System for Biosensors and Biodetection. <i>Methods in Molecular Biology</i> , <b>2022</b> , 2393, 493-514	1.4	1
23	Bio-electron transfer modulated localized surface plasmon resonance biosensing with charge density monitoring.. <i>Biosensors and Bioelectronics</i> , <b>2022</b> , 201, 113956	11.8	1
22	A Novel Taste Sensor Based on Ion Channels Incorporated in Nano-lipid Bilayer Membranes <b>2008</b> , 306-308		1
21	Implantable platinum nanotree microelectrode with a battery-free electrochemical patch for peritoneal carcinomatosis monitoring. <i>Biosensors and Bioelectronics</i> , <b>2021</b> , 185, 113265	11.8	1
20	A wireless, ingestible pH sensing capsule system based on iridium oxide for monitoring gastrointestinal health. <i>Sensors and Actuators B: Chemical</i> , <b>2021</b> , 349, 130781	8.5	1
19	MXene/MWCNT electronic fabric with enhanced mechanical robustness on humidity sensing for real-time respiration monitoring. <i>Sensors and Actuators B: Chemical</i> , <b>2022</b> , 361, 131704	8.5	1
18	Discrimination of signal oscillations in the in vitro olfactory bulb with microelectrode array. <i>Science Bulletin</i> , <b>2013</b> , 58, 3015-3018		0
17	Artificial Intelligent Olfactory System for the Diagnosis of Parkinson's Disease.. <i>ACS Omega</i> , <b>2022</b> , 7, 4001-4010	3.9	0
16	Electrochemistry Coupling Localized Surface Plasmon Resonance for Biochemical Detection. <i>Methods in Molecular Biology</i> , <b>2022</b> , 2393, 15-35	1.4	0



- 15 Label-Free Sensing of Cysteine through Cadmium Ion Coordination: Smartphone-Based Electrochemical Detection.. *ChemPlusChem*, **2022**, 87, e202200040 2.8 o
- 14 Computational Model of Taste Pathways: A Biomimetic Algorithm for Electronic Tongue Based on Nerve Conduction Mechanism. *IEEE Sensors Journal*, **2022**, 22, 6859-6870 4 o
- 13 Elimination of oxygen interference in the photoelectrochemical sensor with ferricyanide shield oxygen reduction for point of care testing.. *Analytica Chimica Acta*, **2022**, 1206, 339796 6.6 o
- 12 Battery-free and wireless tag for in situ sensing of urinary albumin/creatinine ratio (ACR) for the assessment of albuminuria. *Sensors and Actuators B: Chemical*, **2022**, 367, 132050 8.5 o
- 11 Gustatory Epithelium-Based Taste Sensors **2015**, 225-240
- 10 A photovoltage-based integrated sensor for extracellular redox potential measurement and acidification detection. *Science Bulletin*, **2014**, 59, 2309-2317
- 9 Biosensors and Measurement. *Advanced Topics in Science and Technology in China*, **2011**, 199-275 0.2
- 8 ODOR DISCRIMINATION BY MITRAL CELLS IN RAT OLFACTORY BULB USING MICROWIRE ARRAY RECORDING. *Journal of Innovative Optical Health Sciences*, **2012**, 05, 1250003 1.2
- 7 The Study on Bionic Olfactory Neurochip Based on Light-addressable Potentiometric Sensor. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, **2005**, 2005, 4862-5
- 6 Smartphone-based chemical sensors and biosensors for biomedical applications **2022**, 307-332
- 5 Biosensors and Bioelectronics on Smartphone **2020**, 1-29
- 4 Smell Sensors Based on Olfactory Epithelium **2015**, 61-76
- 3 Electrochemical Characteristics Based on Skin-Electrode Contact Pressure for Dry Biomedical Electrodes and the Application to Wearable ECG Signal Acquisition. *Journal of Sensors*, **2021**, 2021, 1-9 2
- 2 Biosensors and Bioelectronics on Smartphone **2022**, 627-655
- 1 Low-Cost Computational Models for Biomedical Sensors **2022**,