

# Chunsheng Wu

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3413555/publications.pdf>

Version: 2024-02-01

101  
papers

2,716  
citations

218677

26  
h-index

189892

50  
g-index

104  
all docs

104  
docs citations

104  
times ranked

3338  
citing authors

#	ARTICLE	IF	CITATIONS
1	Metal-Organic Framework-Based Stimuli-Responsive Systems for Drug Delivery. <i>Advanced Science</i> , 2019, 6, 1801526.	11.2	491
2	Cell-Based Biosensors and Their Application in Biomedicine. <i>Chemical Reviews</i> , 2014, 114, 6423-6461.	47.7	294
3	Synthesis, functionalization, and applications of metal-organic frameworks in biomedicine. <i>Dalton Transactions</i> , 2018, 47, 2114-2133.	3.3	195
4	A novel electrochemical biosensor based on dynamic polymerase-extending hybridization for E. coli O157:H7 DNA detection. <i>Talanta</i> , 2009, 78, 647-652.	5.5	103
5	Recent advances in olfactory receptor-based biosensors. <i>Biosensors and Bioelectronics</i> , 2013, 42, 570-580.	10.1	93
6	A novel biomimetic olfactory-based biosensor for single olfactory sensory neuron monitoring. <i>Biosensors and Bioelectronics</i> , 2009, 24, 1498-1502.	10.1	66
7	Applications of Functional Metal-Organic Frameworks in Biosensors. <i>Biotechnology Journal</i> , 2021, 16, e1900424.	3.5	58
8	The Escherichia coli O157:H7 DNA detection on a gold nanoparticle-enhanced piezoelectric biosensor. <i>Science Bulletin</i> , 2008, 53, 1175-1184.	9.0	56
9	DNA Immobilization and Hybridization Detection by the Intrinsic Molecular Charge Using Capacitive Field-Effect Sensors Modified with a Charged Weak Polyelectrolyte Layer. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 20068-20075.	8.0	53
10	An improved sensitive assay for the detection of PSP toxins with neuroblastoma cell-based impedance biosensor. <i>Biosensors and Bioelectronics</i> , 2015, 67, 458-464.	10.1	51
11	Folic acid-functionalized zirconium metal-organic frameworks based electrochemical impedance biosensor for the cancer cell detection. <i>Sensors and Actuators B: Chemical</i> , 2019, 301, 127073.	7.8	51
12	Chemodynamic nanomaterials for cancer theranostics. <i>Journal of Nanobiotechnology</i> , 2021, 19, 192.	9.1	51
13	Label-free detection of DNA using a light-addressable potentiometric sensor modified with a positively charged polyelectrolyte layer. <i>Nanoscale</i> , 2015, 7, 6143-6150.	5.6	49
14	Sensing of double-stranded DNA molecules by their intrinsic molecular charge using the light-addressable potentiometric sensor. <i>Sensors and Actuators B: Chemical</i> , 2016, 229, 506-512.	7.8	48
15	Bioengineered olfactory sensory neuron-based biosensor for specific odorant detection. <i>Biosensors and Bioelectronics</i> , 2013, 40, 401-406.	10.1	43
16	Gold nanorods@metal-organic framework core-shell nanostructure as contrast agent for photoacoustic imaging and its biocompatibility. <i>Journal of Alloys and Compounds</i> , 2018, 748, 193-198.	5.5	42
17	Electrospun cellulose-based conductive polymer nanofibrous mats: composite scaffolds and their influence on cell behavior with electrical stimulation for nerve tissue engineering. <i>Soft Matter</i> , 2020, 16, 6591-6598.	2.7	39
18	Piezoelectric olfactory receptor biosensor prepared by aptamer-assisted immobilization. <i>Sensors and Actuators B: Chemical</i> , 2013, 187, 481-487.	7.8	38

#	ARTICLE	IF	CITATIONS
19	A novel surface acoustic wave-based biosensor for highly sensitive functional assays of olfactory receptors. <i>Biochemical and Biophysical Research Communications</i> , 2011, 407, 18-22.	2.1	37
20	Recent advances in taste cell- and receptor-based biosensors. <i>Sensors and Actuators B: Chemical</i> , 2014, 201, 75-85.	7.8	35
21	Recent progress in micro/nano biosensors for shellfish toxin detection. <i>Biosensors and Bioelectronics</i> , 2021, 176, 112899.	10.1	33
22	A biomimetic bitter receptor-based biosensor with high efficiency immobilization and purification using self-assembled aptamers. <i>Analyst, The</i> , 2013, 138, 5989.	3.5	31
23	A biomimetic olfactory-based biosensor with high efficiency immobilization of molecular detectors. <i>Biosensors and Bioelectronics</i> , 2012, 31, 44-48.	10.1	29
24	Piezoelectric aptasensor with gold nanoparticle amplification for the label-free detection of okadaic acid. <i>Sensors and Actuators B: Chemical</i> , 2021, 346, 130446.	7.8	29
25	An ATP sensitive light addressable biosensor for extracellular monitoring of single taste receptor cell. <i>Biomedical Microdevices</i> , 2012, 14, 1047-1053.	2.8	28
26	Dual functional extracellular recording using a light-addressable potentiometric sensor for bitter signal transduction. <i>Analytica Chimica Acta</i> , 2018, 1022, 106-112.	5.4	28
27	Hydrothermal synthesis of MOFs. , 2020, , 141-157.		28
28	Sensing <i>Escherichia coli</i> O157:H7 via frequency shift through a self-assembled monolayer based QCM immunosensor. <i>Journal of Zhejiang University: Science B</i> , 2008, 9, 121-131.	2.8	26
29	Label-free functional assays of chemical receptors using a bioengineered cell-based biosensor with localized extracellular acidification measurement. <i>Biosensors and Bioelectronics</i> , 2014, 54, 623-627.	10.1	24
30	Enhanced fluorescent effect of graphitic C <sub>3</sub> N <sub>4</sub> @ZIF-8 nanocomposite contribute to its improved sensing capabilities. <i>RSC Advances</i> , 2019, 9, 3734-3739.	3.6	23
31	Label-free electrical detection of DNA with a multi-spot LAPS: First step towards light-addressable DNA chips. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2014, 211, 1423-1428.	1.8	22
32	Functional expression of olfactory receptors using cell-free expression system for biomimetic sensors towards odorant detection. <i>Biosensors and Bioelectronics</i> , 2019, 130, 382-388.	10.1	22
33	A novel biomimetic olfactory cell-based biosensor with DNA-directed site-specific immobilization of cells on a microelectrode array. <i>Sensors and Actuators B: Chemical</i> , 2015, 217, 186-192.	7.8	20
34	Surface modification and construction of LAPS towards biosensing applications. <i>Sensors and Actuators B: Chemical</i> , 2018, 265, 161-173.	7.8	20
35	The progress of olfactory transduction and biomimetic olfactory-based biosensors. <i>Science Bulletin</i> , 2007, 52, 1886-1896.	1.7	19
36	Bioanalytical and chemical sensors using living taste, olfactory, and neural cells and tissues: a short review. <i>Analyst, The</i> , 2015, 140, 7048-7061.	3.5	18

#	ARTICLE	IF	CITATIONS
37	Modulated light-activated electrochemistry at silicon functionalized with metal-organic frameworks towards addressable DNA chips. <i>Biosensors and Bioelectronics</i> , 2019, 146, 111750.	10.1	18
38	Iodine Immobilized UiO-66-NH <sub>2</sub> Metal-Organic Framework as an Effective Antibacterial Additive for Poly( $\mu$ -caprolactone). <i>Polymers</i> , 2022, 14, 283.	4.5	18
39	A bioelectronic taste sensor based on bioengineered <i>Escherichia coli</i> cells combined with ITO-constructed electrochemical sensors. <i>Analytica Chimica Acta</i> , 2019, 1079, 73-78.	5.4	17
40	Comparison of different zinc precursors for the construction of zeolitic imidazolate framework-8 artificial shells on living cells. <i>Soft Matter</i> , 2020, 16, 270-275.	2.7	17
41	Biomimetic Sensors for the Senses: Towards Better Understanding of Taste and Odor Sensation. <i>Sensors</i> , 2017, 17, 2881.	3.8	16
42	Label-Free Detection of <i>E. coli</i> O157:H7 DNA Using Light-Addressable Potentiometric Sensors with Highly Oriented ZnO Nanorod Arrays. <i>Sensors</i> , 2019, 19, 5473.	3.8	16
43	Peptide Sequence-Dominated Enzyme-Responsive Nanoplatfrom for Anticancer Drug Delivery. <i>Current Topics in Medicinal Chemistry</i> , 2019, 19, 74-97.	2.1	16
44	Ultrasonication on a microfluidic chip to lyse single and multiple <i>Pseudo-nitzschia</i> for marine biotoxin analysis. <i>Biotechnology Journal</i> , 2011, 6, 150-155.	3.5	15
45	An Electrochemical Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> Aptasensor for Sensitive and Label-Free Detection of Marine Biological Toxins. <i>Sensors</i> , 2021, 21, 4938.	3.8	15
46	A NOVEL BITTER DETECTION BIOSENSOR BASED ON LIGHT ADDRESSABLE POTENTIOMETRIC SENSOR. <i>Journal of Innovative Optical Health Sciences</i> , 2012, 05, 1250008.	1.0	14
47	A non-labeled DNA biosensor based on light addressable potentiometric sensor modified with TiO <sub>2</sub> thin film. <i>Journal of Zhejiang University: Science B</i> , 2009, 10, 860-866.	2.8	13
48	New Acid Biosensor for Taste Transduction Based on Extracellular Recording of PKD Channels. <i>IEEE Sensors Journal</i> , 2012, 12, 3113-3118.	4.7	13
49	A biomimetic taste biosensor based on bitter receptors synthesized and purified on chip from a cell-free expression system. <i>Sensors and Actuators B: Chemical</i> , 2020, 312, 127949.	7.8	13
50	An electrochemical PAH-modified aptasensor for the label-free and highly-sensitive detection of saxitoxin. <i>Talanta</i> , 2022, 240, 123185.	5.5	13
51	Light-Addressable Electrochemical Sensors toward Spatially Resolved Biosensing and Imaging Applications. <i>ACS Sensors</i> , 2022, 7, 1791-1807.	7.8	13
52	Label-free Detection of DNA Hybridization with Light-addressable Potentiometric Sensors: Comparison of Various DNA-immobilization Strategies. <i>Procedia Engineering</i> , 2014, 87, 755-758.	1.2	12
53	Scanning Electrochemical Photometric Sensors for Label-Free Single-Cell Imaging and Quantitative Absorption Analysis. <i>Analytical Chemistry</i> , 2020, 92, 9739-9744.	6.5	12
54	Effects of surface condition of conductive electrospun nanofiber mats on cell behavior for nerve tissue engineering. <i>Materials Science and Engineering C</i> , 2021, 120, 111795.	7.3	12

#	ARTICLE	IF	CITATIONS
55	Fast decomposition of hydrogen peroxide by Zeolitic imidazolate framework-67 crystals. <i>Materials Letters</i> , 2019, 239, 94-97.	2.6	10
56	Electrochemically Activated Conductive Ni-Based MOFs for Non-enzymatic Sensors Toward Long-Term Glucose Monitoring. <i>Frontiers in Chemistry</i> , 2020, 8, 602752.	3.6	10
57	Light-Addressable Square Wave Voltammetry (LASWV) Based on a Field-Effect Structure for Electrochemical Sensing and Imaging. <i>ACS Sensors</i> , 2021, 6, 1636-1642.	7.8	10
58	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
59	Response enhancement of olfactory sensory neurons-based biosensors for odorant detection. <i>Journal of Zhejiang University: Science B</i> , 2009, 10, 285-290.	2.8	8
60	Label-Free Detection of Saxitoxin with Field-Effect Device-Based Biosensor. <i>Nanomaterials</i> , 2022, 12, 1505.	4.1	8
61	Fabrication of cellulose nanocrystal composite filter papers for rapid and highly efficient removal of bacteria from aqueous solutions. <i>Cellulose</i> , 2019, 26, 7027-7035.	4.9	7
62	Nanosized Modification Strategies for Improving the Antitumor Efficacy of MEK Inhibitors. <i>Current Drug Targets</i> , 2020, 21, 228-251.	2.1	7
63	The Light-Addressable Potentiometric Sensor and Its Application in Biomedicine towards Chemical and Biological Sensing. <i>Chemosensors</i> , 2022, 10, 156.	3.6	7
64	A light-addressable microfluidic device for label-free functional assays of bioengineered taste receptor cells via extracellular recording. <i>Biophysics Reports</i> , 2019, 5, 73-79.	0.8	6
65	Facially- controllable synthesis of zeolitic imidezolate framework-8 nanocrystal and its colloidal stability in phosphate buffered saline. <i>Materials Chemistry and Physics</i> , 2020, 245, 122576.	4.0	6
66	Synthesis of a Removable Cytoprotective Exoskeleton by Tea Polyphenol Complexes for Living Cell Encapsulation. <i>ACS Biomaterials Science and Engineering</i> , 2021, 7, 764-771.	5.2	6
67	<i>In Vivo</i> Bioelectronic Nose Based on a Bioengineered Rat Realizes the Detection and Classification of Multiodorants. <i>ACS Chemical Neuroscience</i> , 2022, 13, 1727-1737.	3.5	6
68	Accurate and effective live bacteria microarray patterning on thick polycationic polymer layers co-patterned with HMDS. <i>RSC Advances</i> , 2012, 2, 7673.	3.6	5
69	Biomimetic chemical sensors using bioengineered olfactory and taste cells. <i>Bioengineered</i> , 2014, 5, 326-330.	3.2	5
70	A Light-Addressable Potentiometric Sensor for Odorant Detection Using Single Bioengineered Olfactory Sensory Neurons as Sensing Element. <i>Methods in Molecular Biology</i> , 2017, 1572, 233-246.	0.9	5
71	Field-Effect Sensors Using Biomaterials for Chemical Sensing. <i>Sensors</i> , 2021, 21, 7874.	3.8	5
72	A sperm-cell-based biosensor using a fluorescence probe for responsive signal readout toward bitter flavor detection. <i>Talanta</i> , 2020, 211, 120731.	5.5	4

#	ARTICLE	IF	CITATIONS
73	A Novel Electrical Cell-Substrate Impedance Biosensor for Rapid Detection of Marine Toxins. <i>Sensor Letters</i> , 2014, 12, 1041-1045.	0.4	4
74	Light-Addressable Potentiometric Sensors in Microfluidics. <i>Frontiers in Bioengineering and Biotechnology</i> , 2022, 10, 833481.	4.1	4
75	A Taste Bud Organoid-Based Microelectrode Array Biosensor for Taste Sensing. <i>Chemosensors</i> , 2022, 10, 208.	3.6	4
76	A QCM Biosensor Based on Gold Nanoparticles Amplification for Real-time Bacteria DNA Detection. , 2007, , .		3
77	Electrostatic Detection of Unlabelled Single- and Double-stranded DNA Using Capacitive Field-effect Devices Functionalized with a Positively Charged Polyelectrolyte Layer. <i>Procedia Engineering</i> , 2015, 120, 544-547.	1.2	3
78	Label-free Electrostatic Detection of DNA Amplification by PCR Using Capacitive Field-effect Devices. <i>Procedia Engineering</i> , 2016, 168, 514-517.	1.2	3
79	DNA and RhoB-functionalized metal-organic frameworks for the sensitive fluorescent detection of liquid alcohols. <i>Microchemical Journal</i> , 2021, 170, 106688.	4.5	3
80	Delaminated Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> flake as an effective UV-protective material for living cells. <i>Materials Letters</i> , 2020, 260, 126972.	2.6	2
81	Tea polyphenol cytoprotective exoskeleton for living cells. <i>Materials Letters</i> , 2021, 293, 129670.	2.6	2
82	Preparation and application of taste bud organoids in biomedicine towards chemical sensation mechanisms. <i>Biotechnology and Bioengineering</i> , 2022, 119, 1515-2030.	3.3	2
83	Taste Sensors with Gustatory Cells. , 2015, , 197-224.		1
84	Smell Sensors with Insect Antenna. , 2015, , 77-102.		1
85	Smell Sensors Based on Olfactory Receptor. , 2015, , 103-128.		1
86	A sperm cell-based biosensor using fluorescence probe for responsive signal readout towards bitter detection. , 2019, , .		1
87	Olfactory Optogenetics: Light Illuminates the Chemical Sensing Mechanisms of Biological Olfactory Systems. <i>Biosensors</i> , 2021, 11, 309.	4.7	1
88	2D Carbon Nitride-Based Electrochemical Aptasensor for Label-Free and Highly-Sensitive Detection of Okadaic Acid in Shellfish. <i>Journal of the Electrochemical Society</i> , 2022, 169, 057526.	2.9	1
89	Detection of E. coli O157:H7 DNA by a novel QCM biosensor coupled with gold nanoparticles amplification. , 2007, , .		0
90	A microfluidic device for single and small population cell trapping and lysis of <i>Pseudo-nitzschia</i> . , 2010, , .		0

#	ARTICLE	IF	CITATIONS
91	Olfactory receptors molecular sensors using surface acoustic wave chip. , 2011, , .		0
92	A PKD Channel-based Biosensor for Taste Transduction. , 2011, , .		0
93	DNA-Decorated Devices as Smell Sensors. , 2015, , 145-165.		0
94	Label-Free DNA Biosensors with Field-Effect Devices. , 2016, , 45-71.		0
95	Dual extracellular recording using a light-addressable potentiometric sensor for taste signal transduction. , 2017, , .		0
96	Controllable olfactory cellular network formation on polyaniline conducting polymer modified microelectrode array. , 2017, , .		0
97	Combined effects of electrospun nanofibrous scaffold and electrical field on the neuronal outgrowth. Materials Letters, 2019, 256, 126659.	2.6	0
98	An in-vivo bioelectronic nose using bioengineered olfactory system of rat as sensitive elements towards explosive detection. , 2019, , .		0
99	Gustatory Receptor-Based Taste Sensors. , 2015, , 241-263.		0
100	Piezoelectric Biosensor Based on Olfactory Receptor Expressed in a Heterologous Cell System for Drug Discovery. , 2008, , 313-316.		0
101	Notice of Removal: A Taste Bud Organoid-based MEA Biosensor for Taste Sensation. , 2022, , .		0