

# Hung Cao

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9191001/publications.pdf>

Version: 2024-02-01

91  
papers

2,011  
citations

361296

20  
h-index

265120

42  
g-index

98  
all docs

98  
docs citations

98  
times ranked

2844  
citing authors

#	ARTICLE	IF	CITATIONS
1	Power Approaches for Implantable Medical Devices. <i>Sensors</i> , 2015, 15, 28889-28914.	2.1	312
2	A flexible pH sensor based on the iridium oxide sensing film. <i>Sensors and Actuators A: Physical</i> , 2011, 169, 1-11.	2.0	277
3	Cuff-Less and Continuous Blood Pressure Monitoring: A Methodological Review. <i>Technologies</i> , 2017, 5, 21.	3.0	171
4	An Implantable, Batteryless, and Wireless Capsule With Integrated Impedance and pH Sensors for Gastroesophageal Reflux Monitoring. <i>IEEE Transactions on Biomedical Engineering</i> , 2012, 59, 3131-3139.	2.5	110
5	An Integrated $\frac{1}{4}$ LED Optrode for Optogenetic Stimulation and Electrical Recording. <i>IEEE Transactions on Biomedical Engineering</i> , 2013, 60, 225-229.	2.5	97
6	Cardiac tissue engineering: state-of-the-art methods and outlook. <i>Journal of Biological Engineering</i> , 2019, 13, 57.	2.0	89
7	Shear Stress-Activated Wnt-Angiopoietin-2 Signaling Recapitulates Vascular Repair in Zebrafish Embryos. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2014, 34, 2268-2275.	1.1	58
8	Moving Domain Computational Fluid Dynamics to Interface with an Embryonic Model of Cardiac Morphogenesis. <i>PLoS ONE</i> , 2013, 8, e72924.	1.1	51
9	Sol-Gel Iridium Oxide-Based pH Sensor Array on Flexible Polyimide Substrate. <i>IEEE Sensors Journal</i> , 2013, 13, 3857-3864.	2.4	43
10	Wearable multi-channel microelectrode membranes for elucidating electrophysiological phenotypes of injured myocardium. <i>Integrative Biology (United Kingdom)</i> , 2014, 6, 789.	0.6	43
11	Development and Characterization of a Novel Interdigitated Capacitive Strain Sensor for Structural Health Monitoring. <i>IEEE Sensors Journal</i> , 2015, 15, 6542-6548.	2.4	43
12	Fabrication and characterization of biomimetic multichanneled crosslinked polyurethane-coated polyester tissue engineered nerve guides. <i>Journal of Biomedical Materials Research - Part A</i> , 2014, 102, 2793-2804.	2.1	38
13	Plant Metabolite Databases: From Herbal Medicines to Modern Drug Discovery. <i>Journal of Chemical Information and Modeling</i> , 2020, 60, 1101-1110.	2.5	37
14	Hemodynamics and Ventricular Function in a Zebrafish Model of Injury and Repair. <i>Zebrafish</i> , 2014, 11, 447-454.	0.5	31
15	An Integrated Flexible Implantable Micro-Probe for Sensing Neurotransmitters. <i>IEEE Sensors Journal</i> , 2012, 12, 1618-1624.	2.4	28
16	Sol-Gel Deposition of Iridium Oxide for Biomedical Micro-Devices. <i>Sensors</i> , 2015, 15, 4212-4228.	2.1	28
17	Continuous Non-Invasive Blood Pressure Monitoring: A Methodological Review on Measurement Techniques. <i>IEEE Access</i> , 2020, 8, 212478-212498.	2.6	28
18	Design and development of continuous cuff-less blood pressure monitoring devices. , 2016, , .		27

#	ARTICLE	IF	CITATIONS
19	Batteryless implantable dual-sensor capsule for esophageal reflux monitoring. <i>Gastrointestinal Endoscopy</i> , 2013, 77, 649-653.	0.5	26
20	Stretchable electrochemical impedance sensors for intravascular detection of lipid-rich lesions in New Zealand White rabbits. <i>Biosensors and Bioelectronics</i> , 2014, 54, 610-616.	5.3	26
21	Evaluation of commercial metal-oxide based NO <sub>2</sub> sensors. <i>Sensor Review</i> , 2007, 27, 121-131.	1.0	25
22	Real-Time Monitoring and Analysis of Zebrafish Electrocardiogram with Anomaly Detection. <i>Sensors</i> , 2018, 18, 61.	2.1	24
23	An Efficient and Robust Deep Learning Method with 1-D Octave Convolution to Extract Fetal Electrocardiogram. <i>Sensors</i> , 2020, 20, 3757.	2.1	23
24	Phenotyping an adult zebrafish lamp2 cardiomyopathy model identifies mTOR inhibition as a candidate therapy. <i>Journal of Molecular and Cellular Cardiology</i> , 2019, 133, 199-208.	0.9	22
25	Aging-associated sinus arrest and sick sinus syndrome in adult zebrafish. <i>PLoS ONE</i> , 2020, 15, e0232457.	1.1	21
26	Investigation of Methods to Extract Fetal Electrocardiogram from the Mother's Abdominal Signal in Practical Scenarios. <i>Technologies</i> , 2020, 8, 33.	3.0	21
27	Flexible Iridium Oxide Based pH Sensor Integrated With Inductively Coupled Wireless Transmission System for Wearable Applications. <i>IEEE Sensors Journal</i> , 2020, 20, 5130-5138.	2.4	21
28	Investigation of Machine Learning Approaches for Traumatic Brain Injury Classification via EEG Assessment in Mice. <i>Sensors</i> , 2020, 20, 2027.	2.1	20
29	Electrical and Mechanical Strategies to Enable Cardiac Repair and Regeneration. <i>IEEE Reviews in Biomedical Engineering</i> , 2015, 8, 114-124.	13.1	19
30	A wireless bladder volume monitoring system using a flexible capacitance-based sensor. , 2013, , .		17
31	Modeling and process design optimization of a piezoelectric micromachined ultrasonic transducers (PMUT) using lumped elements parameters. <i>Microsystem Technologies</i> , 2017, 23, 4659-4669.	1.2	17
32	A Raspberry Pi-Based Traumatic Brain Injury Detection System for Single-Channel Electroencephalogram. <i>Sensors</i> , 2021, 21, 2779.	2.1	12
33	Deep learning-based framework for cardiac function assessment in embryonic zebrafish from heart beating videos. <i>Computers in Biology and Medicine</i> , 2021, 135, 104565.	3.9	12
34	A wireless strain sensor system for bladder volume monitoring. , 2011, , .		11
35	Acquisition, Processing and Analysis of Electrocardiogram in Awake Zebrafish. <i>IEEE Sensors Journal</i> , 2019, 19, 4283-4289.	2.4	10
36	Unobtrusive acquisition and extraction of fetal and maternal ECG in the home setting. , 2017, , .		9

#	ARTICLE	IF	CITATIONS
37	A novel wireless ECG system for prolonged monitoring of multiple zebrafish for heart disease and drug screening studies. <i>Biosensors and Bioelectronics</i> , 2022, 197, 113808.	5.3	9
38	A Low-Cost, 3D-Printed Biosensor for Rapid Detection of <i>Escherichia coli</i> . <i>Sensors</i> , 2022, 22, 2382.	2.1	9
39	Unobtrusive Continuous Monitoring of Fetal Cardiac Electrophysiology in the Home Setting. , 2018, , .		8
40	Wireless Passive Monitoring of Electrocardiogram in Firefighters. , 2018, , .		8
41	Automatic Segmentation and Cardiac Mechanics Analysis of Evolving Zebrafish Using Deep Learning. <i>Frontiers in Cardiovascular Medicine</i> , 2021, 8, 675291.	1.1	8
42	Fetal Electrocardiogram Extraction from the Mother's Abdominal Signal Using the Ensemble Kalman Filter. <i>Sensors</i> , 2022, 22, 2788.	2.1	8
43	An Infant Monitoring System Using CO <sub>2</sub> Sensors. , 2007, , .		7
44	Home-based mobile fetal/maternal electrocardiogram acquisition and extraction with cloud assistance. , 2019, 2019, .		7
45	Correcting anisotropic intensity in light sheet images using dehazing and image morphology. <i>APL Bioengineering</i> , 2020, 4, 036103.	3.3	7
46	Flexible Sputter-Deposited Carbon Strain Sensor. <i>IEEE Sensors Journal</i> , 2013, 13, 444-445.	2.4	6
47	Development of a Home-based Fetal Electrocardiogram (ECG) Monitoring System. , 2021, 2021, 7116-7119.		6
48	Development of a novel miniaturized LTCC-based wireless pH sensing system. , 2016, , .		5
49	Characterization of flexible pH micro-sensors based on electrodeposited IrO <sub>x</sub> thin film. , 2017, , .		5
50	Wireless Iridium Oxide-Based pH Sensing Systems. , 2018, , .		5
51	Towards Multiplexed and Multimodal Biosensor Platforms in Real-Time Monitoring of Metabolic Disorders. <i>Sensors</i> , 2022, 22, 5200.	2.1	5
52	Nanowire Modification to Enhance the Performance of Neurotransmitter Sensors. <i>Journal of Nanotechnology in Engineering and Medicine</i> , 2010, 1, .	0.8	4
53	Remote detection of gastroesophageal reflux using an impedance and pH sensing transponder. , 2012, , .		4
54	Dry-contact microelectrode membranes for wireless detection of electrical phenotypes in neonatal mouse hearts. <i>Biomedical Microdevices</i> , 2015, 17, 40.	1.4	4

#	ARTICLE	IF	CITATIONS
55	Continuous Electrocardiogram Monitoring in Zebrafish with Prolonged Mild Anesthesia. , 2020, 2020, 2610-2613.		4
56	Classification of Electroencephalogram in a Mouse Model of Traumatic Brain Injury Using Machine Learning Approaches. , 2020, 2020, 3335-3338.		4
57	A non-invasive and remote infant monitoring system using CO <sub>2</sub> sensors. , 2007, , .		3
58	Wireless strain sensor based on amorphous carbon for human-motion detection. , 2013, , .		3
59	A wearable percutaneous implant for long term zebrafish epicardial ECG recording. , 2013, , .		3
60	Sample Tube pH Monitoring via Passive Powering and Communication. , 2019, , .		3
61	Categorizing Sleep in Older Adults with Wireless Activity Monitors Using LSTM Neural Networks. , 2019, 2019, 3368-3372.		3
62	In vivo Evaluation of Non-viral NICD Plasmid-Loaded PLGA Nanoparticles in Developing Zebrafish to Improve Cardiac Functions. Frontiers in Physiology, 2022, 13, 819767.	1.3	3
63	Wireless implants for in vivo diagnosis and closed-loop treatment. , 2011, , .		2
64	Development of a laser micro-machined interdigitated capacitive strain sensor for structural health monitoring applications. , 2014, , .		2
65	Novel apparatus for simultaneous monitoring of electrocardiogram in awake zebrafish. , 2017, , .		2
66	Wireless power transfer for ECG monitoring in freely-swimming zebrafish. , 2017, , .		2
67	A Fluidics-Based Biosensor to Detect and Characterize Inhibition Patterns of Organophosphate to Acetylcholinesterase in Food Materials. Micromachines, 2021, 12, 397.	1.4	2
68	Electrocardiogram: Acquisition and Analysis for Biological Investigations and Health Monitoring. , 2020, , 117-142.		2
69	Investigation of the Self-Calibration Function for IrO <sub>2</sub> -based pH Sensors. , 2020, , .		2
70	Microelectrode array membranes to simultaneously assess cardiac and neurological signals of xenopus laevis under chemical exposures and environmental changes. Biosensors and Bioelectronics, 2022, 210, 114292.	5.3	2
71	An integrated flexible implantable L-glutamate sensor. , 2010, , .		1
72	Fabrication of pH-sensing iridium oxide nanotubes on patterned electrodes using anodic aluminum oxide nanotemplate. , 2013, , .		1

#	ARTICLE	IF	CITATIONS
73	Miniature neurotransmitter sensors featured with iridium oxide nanorods. , 2014, , .		1
74	Passive continuous electrocardiogram monitoring of firemen using non-contact electrodes. , 2017, , .		1
75	A novel design to power the micro-ECG sensor implanted in adult zebrafish. , 2017, , .		1
76	Characterization of Passive Wireless Electrocardiogram Acquisition in Adult Zebrafish. , 2018, , .		1
77	Investigation of Machine Learning and Deep Learning Approaches for Detection of Mild Traumatic Brain Injury from Human Sleep Electroencephalogram. , 2021, 2021, 6134-6137.		1
78	A wearable system for highly selective L-glutamate neurotransmitter sensing. , 2015, , .		0
79	Selective orthogonal predistortion for power amplifiers. , 2015, , .		0
80	A wireless ECG recording system for small animal models of heart regeneration. , 2015, , .		0
81	Intravascular sensors to assess unstable plaques and their compositions: a review. Progress in Biomedical Engineering, 2020, 2, 012001.	2.8	0
82	Design of a Wireless Power and Data Transfer System for pH Sensing inside a Small Tube. , 2021, , .		0
83	Facile Fabrication of Highly Sensitive Pt-black Electrochemical Sensor for L-Glutamate Detection. , 2021, , .		0
84	Study of Zebrafish Cardiac Morphogenesis Using Computational Fluid Dynamics. FASEB Journal, 2013, 27, 1187.8.	0.2	0
85	Testing MD-Link, a Low-Cost Mobile Electrocardiography Monitoring Device, in Patients With Irregular Heartbeat: Protocol for a Cross-Sectional Study. JMIR Research Protocols, 2019, 8, e2.	0.5	0
86	Wirelessly Powered Medical Implants via Radio Frequency. , 2020, , 101-116.		0
87	Fabrication of Highly Sensitive Pt-black Electrochemical Sensors for GABA Detection. , 2021, 2021, 7148-7151.		0
88	Aging-associated sinus arrest and sick sinus syndrome in adult zebrafish. , 2020, 15, e0232457.		0
89	Aging-associated sinus arrest and sick sinus syndrome in adult zebrafish. , 2020, 15, e0232457.		0
90	Aging-associated sinus arrest and sick sinus syndrome in adult zebrafish. , 2020, 15, e0232457.		0

#	ARTICLE	IF	CITATIONS
91	Aging-associated sinus arrest and sick sinus syndrome in adult zebrafish. , 2020, 15, e0232457.		0