Hung Cao

List of Publications by Year in Descending Order

72 papers	1,266 citations	17 h-index	34 g-index
98 ext. papers	1,659 ext. citations	4 avg, IF	4.5 L-index

#	Paper	IF	Citations
72	A novel wireless ECG system for prolonged monitoring of multiple zebrafish for heart disease and drug screening studies. *Biosensors and Bioelectronics*, **2022**, 197, 113808	11.8	1
71	Evaluation of Non-viral NICD Plasmid-Loaded PLGA Nanoparticles in Developing Zebrafish to Improve Cardiac Functions.. *Frontiers in Physiology*, **2022**, 13, 819767	4.6	0
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	11.8	0
69	Fabrication of Highly Sensitive Pt-black Electrochemical Sensors for GABA Detection. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2021**, 2021, 7148-7151	0.9	
68	Development of a Home-based Fetal Electrocardiogram (ECG) Monitoring System. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2021**, 2021, 7116-7119	0.9	1
67	A Raspberry Pi-Based Traumatic Brain Injury Detection System for Single-Channel Electroencephalogram. *Sensors*, **2021**, 21,	3.8	1
66	Automatic Segmentation and Cardiac Mechanics Analysis of Evolving Zebrafish Using Deep Learning. *Frontiers in Cardiovascular Medicine*, **2021**, 8, 675291	5.4	2
65	Deep learning-based framework for cardiac function assessment in embryonic zebrafish from heart beating videos. *Computers in Biology and Medicine*, **2021**, 135, 104565	7	5
64	Investigation of Machine Learning and Deep Learning Approaches for Detection of Mild Traumatic Brain Injury from Human Sleep Electroencephalogram. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2021**, 2021, 6134-6137	0.9	
63	Aging-associated sinus arrest and sick sinus syndrome in adult zebrafish. *PLoS ONE*, **2020**, 15, e0232457	3.7	9
62	Investigation of Methods to Extract Fetal Electrocardiogram from the Mother?s Abdominal Signal in Practical Scenarios. *Technologies*, **2020**, 8,	2.4	5
61	. *IEEE Sensors Journal*, **2020**, 20, 5130-5138	4	11
60	Wirelessly Powered Medical Implants via Radio Frequency **2020**, 101-116		
59	Electrocardiogram: Acquisition and Analysis for Biological Investigations and Health Monitoring **2020**, 117-142		1
58	Intravascular sensors to assess unstable plaques and their compositions: a review. *Progress in Biomedical Engineering*, **2020**, 2, 012001	7.2	
57	Plant Metabolite Databases: From Herbal Medicines to Modern Drug Discovery. *Journal of Chemical Information and Modeling*, **2020**, 60, 1101-1110	6.1	12
56	Continuous Electrocardiogram Monitoring in Zebrafish with Prolonged Mild Anesthesia. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2020**, 2020, 2610-2613	0.9	1

55	Classification of Electroencephalogram in a Mouse Model of Traumatic Brain Injury Using Machine Learning Approaches. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2020**, 2020, 3335-3338	0.9	1
54	An Efficient and Robust Deep Learning Method with 1-D Octave Convolution to Extract Fetal Electrocardiogram. *Sensors*, **2020**, 20,	3.8	7
53	Correcting anisotropic intensity in light sheet images using dehazing and image morphology. *APL Bioengineering*, **2020**, 4, 036103	6.6	2
52	Continuous Non-Invasive Blood Pressure Monitoring: A Methodological Review on Measurement Techniques. *IEEE Access*, **2020**, 8, 212478-212498	3.5	8
51	Investigation of Machine Learning Approaches for Traumatic Brain Injury Classification via EEG Assessment in Mice. *Sensors*, **2020**, 20,	3.8	7
50	Aging-associated sinus arrest and sick sinus syndrome in adult zebrafish **2020**, 15, e0232457		
49	Aging-associated sinus arrest and sick sinus syndrome in adult zebrafish **2020**, 15, e0232457		
48	Aging-associated sinus arrest and sick sinus syndrome in adult zebrafish **2020**, 15, e0232457		
47	Aging-associated sinus arrest and sick sinus syndrome in adult zebrafish **2020**, 15, e0232457		
46	Phenotyping an adult zebrafish lamp2 cardiomyopathy model identifies mTOR inhibition as a candidate therapy. *Journal of Molecular and Cellular Cardiology*, **2019**, 133, 199-208	5.8	12
45	Acquisition, Processing and Analysis of Electrocardiogram in Awake Zebrafish. *IEEE Sensors Journal*, **2019**, 19, 4283-4289	4	4
44	Home-based mobile fetal/maternal electrocardiogram acquisition and extraction with cloud assistance **2019**, 2019,		1
43	Cardiac tissue engineering: state-of-the-art methods and outlook. *Journal of Biological Engineering*, **2019**, 13, 57	6.3	51
42	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	2	
41	Categorizing Sleep in Older Adults with Wireless Activity Monitors Using LSTM Neural Networks. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2019**, 2019, 3368-3372	0.9	2
40	Characterization of Passive Wireless Electrocardiogram Acquisition in Adult Zebrafish **2018**,		1
39	Wireless Passive Monitoring of Electrocardiogram in Firefighters **2018**,		5
38	**2018**,		6

37	Modeling and process design optimization of a piezoelectric micromachined ultrasonic transducers (PMUT) using lumped elements parameters. *Microsystem Technologies*, **2017**, 23, 4659-4669	1.7	9
36	**2017**,		1
35	Real-Time Monitoring and Analysis of Zebrafish Electrocardiogram with Anomaly Detection. *Sensors*, **2017**, 18,	3.8	16
34	Unobtrusive acquisition and extraction of fetal and maternal ECG in the home setting **2017**,		7
33	**2017**,		2
32	Cuff-Less and Continuous Blood Pressure Monitoring: A Methodological Review. *Technologies*, **2017**, 5, 21	2.4	109
31	**2016**,		2
30	**2016**,		19
29	Sol-gel deposition of iridium oxide for biomedical micro-devices. *Sensors*, **2015**, 15, 4212-28	3.8	14
28	Dry-contact microelectrode membranes for wireless detection of electrical phenotypes in neonatal mouse hearts. *Biomedical Microdevices*, **2015**, 17, 40	3.7	4
27	Development and Characterization of a Novel Interdigitated Capacitive Strain Sensor for Structural Health Monitoring. *IEEE Sensors Journal*, **2015**, 15, 6542-6548	4	22
26	Electrical and Mechanical Strategies to Enable Cardiac Repair and Regeneration. *IEEE Reviews in Biomedical Engineering*, **2015**, 8, 114-24	6.4	13
25	Power Approaches for Implantable Medical Devices. *Sensors*, **2015**, 15, 28889-914	3.8	199
24	Wearable multi-channel microelectrode membranes for elucidating electrophysiological phenotypes of injured myocardium. *Integrative Biology (United Kingdom)*, **2014**, 6, 789-95	3.7	28
23	Fabrication and characterization of biomimetic multichanneled crosslinked-urethane-doped polyester tissue engineered nerve guides. *Journal of Biomedical Materials Research - Part A*, **2014**, 102, 2793-804	5.4	32
22	Stretchable electrochemical impedance sensors for intravascular detection of lipid-rich lesions in New Zealand White rabbits. *Biosensors and Bioelectronics*, **2014**, 54, 610-6	11.8	18
21	Hemodynamics and ventricular function in a zebrafish model of injury and repair. *Zebrafish*, **2014**, 11, 447-54	2	25
20	Development of a laser micro-machined interdigitated capacitive strain sensor for structural health monitoring applications **2014**,		2

19	Shear stress-activated Wnt-angiopoietin-2 signaling recapitulates vascular repair in zebrafish embryos. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2014**, 34, 2268-75	9.4	45
18	Flexible Sputter-Deposited Carbon Strain Sensor. *IEEE Sensors Journal*, **2013**, 13, 444-445	4	6
17	Wireless strain sensor based on amorphous carbon for human-motion detection **2013**,		1
16	Sol-Gel Iridium Oxide-Based pH Sensor Array on Flexible Polyimide Substrate. *IEEE Sensors Journal*, **2013**, 13, 3857-3864	4	33
15	An integrated LED optrode for optogenetic stimulation and electrical recording. *IEEE Transactions on Biomedical Engineering*, **2013**, 60, 225-9	5	82
14	Batteryless implantable dual-sensor capsule for esophageal reflux monitoring. *Gastrointestinal Endoscopy*, **2013**, 77, 649-53	5.2	21
13	A wireless bladder volume monitoring system using a flexible capacitance-based sensor **2013**,		14
12	A wearable percutaneous implant for long term zebrafish epicardial ECG recording **2013**,		3
11	Moving domain computational fluid dynamics to interface with an embryonic model of cardiac morphogenesis. *PLoS ONE*, **2013**, 8, e72924	3.7	42
10	Study of Zebrafish Cardiac Morphogenesis Using Computational Fluid Dynamics. *FASEB Journal*, **2013**, 27, 1187.8	0.9	
9	An implantable, batteryless, and wireless capsule with integrated impedance and pH sensors for gastroesophageal reflux monitoring. *IEEE Transactions on Biomedical Engineering*, **2012**, 59, 3131-9	5	75
8	. *IEEE Sensors Journal*, **2012**, 12, 1618-1624	4	17
7	Wireless implants for in vivo diagnosis and closed-loop treatment **2011**,		2
6	A flexible pH sensor based on the iridium oxide sensing film. *Sensors and Actuators A: Physical*, **2011** , 169, 1-11	3.9	212
5	A wireless strain sensor system for bladder volume monitoring **2011**,		5
4	Nanowire Modification to Enhance the Performance of Neurotransmitter Sensors. *Journal of Nanotechnology in Engineering and Medicine*, **2010**, 1,		3
3	Evaluation of commercial metal-oxide based NO2sensors. *Sensor Review*, **2007**, 27, 121-131	1.4	20
2	**2007**,		1

1 An Infant Monitoring System Using CO/sub 2/ Sensors **2007**, 4