Kuanquan Wang

List of Publications by Year in Descending Order

127 papers	2,216 citations	24 h-index	43 g-index
175 ext. papers	2,875 ext. citations	4.2 avg, IF	5.57 L-index

#	Paper	IF	Citations
127	Generalizable Beat-by-Beat Arrhythmia Detection by Using Weakly Supervised Deep Learning.. *Frontiers in Physiology*, **2022**, 13, 850951	4.6	0
126	Inter-subject registration-based one-shot segmentation with alternating union network for cardiac MRI images.. *Medical Image Analysis*, **2022**, 79, 102455	15.4	0
125	Mechanisms of ventricular arrhythmias elicited by coexistence of multiple electrophysiological remodeling in ischemia: A simulation study.. *PLoS Computational Biology*, **2022**, 18, e1009388	5	0
124	Reciprocal interaction between IK1 and If in biological pacemakers: A simulation study. *PLoS Computational Biology*, **2021**, 17, e1008177	5	0
123	A global benchmark of algorithms for segmenting the left atrium from late gadolinium-enhanced cardiac magnetic resonance imaging. *Medical Image Analysis*, **2021**, 67, 101832	15.4	30
122	Automatic Detection of QRS Complexes Using Dual Channels Based on U-Net and Bidirectional Long Short-Term Memory. *IEEE Journal of Biomedical and Health Informatics*, **2021**, 25, 1052-1061	7.2	8
121	Transformer Network for Significant Stenosis Detection in CCTA of Coronary Arteries. *Lecture Notes in Computer Science*, **2021**, 516-525	0.9	3
120	Effects of long-term fasting and confinement on the cardiovascular activity. *Medical and Biological Engineering and Computing*, **2021**, 59, 1901-1915	3.1	0
119	The Functional Role of Hyperpolarization Activated Current ( ) on Cardiac Pacemaking in Human vs. in the Rabbit Sinoatrial Node: A Simulation and Theoretical Study. *Frontiers in Physiology*, **2021**, 12, 582037	4.6	0
118	ResNet-Attention model for human authentication using ECG signals. *Expert Systems*, **2020**, 38, e12547	2.1	39
117	Deep Atlas Network for Efficient 3D Left Ventricle Segmentation on Echocardiography. *Medical Image Analysis*, **2020**, 61, 101638	15.4	21
116	Improving Whole-Heart CT Image Segmentation by Attention Mechanism. *IEEE Access*, **2020**, 8, 14579-14587	3.9	4
115	Branch-Aware Double DQN for Centerline Extraction in Coronary CT Angiography. *Lecture Notes in Computer Science*, **2020**, 35-44	0.9	2
114	An Automatic Cardiac Segmentation Framework Based on Multi-sequence MR Image. *Lecture Notes in Computer Science*, **2020**, 220-227	0.9	6
113	Multi-step Cascaded Networks for Brain Tumor Segmentation. *Lecture Notes in Computer Science*, **2020**, 163-173	0.9	9
112	Dynamically constructed network with error correction for accurate ventricle volume estimation. *Medical Image Analysis*, **2020**, 64, 101723	15.4	5
111	Generating electrocardiogram signals by deep learning. *Neurocomputing*, **2020**, 404, 122-136	5.4	15

110	Commensal correlation network between segmentation and direct area estimation for bi-ventricle quantification. *Medical Image Analysis*, **2020**, 59, 101591	15.4	12
109	The Quantitative Relationship among the Number of the Pacing Cells Required, the Dimension, and the Diffusion Coefficient. *BioMed Research International*, **2020**, 2020, 3608015	3	
108	Heart failure-induced atrial remodelling promotes electrical and conduction alternans. *PLoS Computational Biology*, **2020**, 16, e1008048	5	1
107	Biological pacemaker: from biological experiments to computational simulation. *Journal of Zhejiang University: Science B*, **2020**, 21, 524-536	4.5	1
106	Alternans in Mouse Atrial Cardiomyocytes: A Computational Study on the Influence of Cell-Cell Coupling and Adrenergic Stimulation. *IEEE Access*, **2020**, 8, 84806-84820	3.5	1
105	A Simulation Study on the Pacing and Driving of the Biological Pacemaker. *BioMed Research International*, **2020**, 2020, 4803172	3	1
104	A Mathematical Model of the Mouse Atrial Myocyte With Inter-Atrial Electrophysiological Heterogeneity. *Frontiers in Physiology*, **2020**, 11, 972	4.6	6
103	The Role of CaMKII Overexpression and Oxidation in Atrial Fibrillation-A Simulation Study. *Frontiers in Physiology*, **2020**, 11, 607809	4.6	2
102	A novel two-dimensional ECG feature extraction and classification algorithm based on convolution neural network for human authentication. *Future Generation Computer Systems*, **2019**, 101, 180-196	7.5	49
101	Multi-Depth Fusion Network for Whole-Heart CT Image Segmentation. *IEEE Access*, **2019**, 7, 23421-23429	3.5	43
100	Cancelable biometric authentication system based on ECG. *Multimedia Tools and Applications*, **2019**, 78, 1857-1887	2.5	29
99	. *IEEE Access*, **2019**, 7, 102119-102135	3.5	53
98	Influence of the distribution of fibrosis within an area of myocardial infarction on wave propagation in ventricular tissue. *Scientific Reports*, **2019**, 9, 14151	4.9	5
97	Multimodal Biometric Authentication Systems Using Convolution Neural Network Based on Different Level Fusion of ECG and Fingerprint. *IEEE Access*, **2019**, 7, 26527-26542	3.5	79
96	Parallel score fusion of ECG and fingerprint for human authentication based on convolution neural network. *Computers and Security*, **2019**, 81, 107-122	4.9	45
95	Concatenated and Connected Random Forests With Multiscale Patch Driven Active Contour Model for Automated Brain Tumor Segmentation of MR Images. *IEEE Transactions on Medical Imaging*, **2018**, 37, 1943-1954	11.7	81
94	Multi-Views Fusion CNN for Left Ventricular Volumes Estimation on Cardiac MR Images. *IEEE Transactions on Biomedical Engineering*, **2018**, 65, 1924-1934	5	40
93	Very deep feature extraction and fusion for arrhythmias detection. *Neural Computing and Applications*, **2018**, 30, 2047-2057	4.8	39

92	Detection of abnormal heart conditions based on characteristics of ECG signals. *Measurement: Journal of the International Measurement Confederation*, **2018**, 125, 634-644	4.6	73
91	Precise Pupil Boundary Detection Using Angular Integral Projection and Active Contour Model **2018**,		1
90	VoxelAtlasGAN: 3D Left Ventricle Segmentation on Echocardiography with Atlas Guided Generation and Voxel-to-Voxel Discrimination. *Lecture Notes in Computer Science*, **2018**, 622-629	0.9	12
89	Detecting atrial fibrillation by deep convolutional neural networks. *Computers in Biology and Medicine*, **2018**, 93, 84-92	7	152
88	Computational Analysis of the Action of Chloroquine on Short QT Syndrome Variant 1 and Variant 3 in Human Ventricles. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2018**, 2018, 5462-5465	0.9	4
87	Automatic Detection of Atrial Fibrillation Based on Continuous Wavelet Transform and 2D Convolutional Neural Networks. *Frontiers in Physiology*, **2018**, 9, 1206	4.6	50
86	A Combined Fully Convolutional Networks and Deformable Model for Automatic Left Ventricle Segmentation Based on 3D Echocardiography. *BioMed Research International*, **2018**, 2018, 5682365	3	14
85	Evoked Hemodynamic Response Estimation to Auditory Stimulus Using Recursive Least Squares Adaptive Filtering with Multidistance Measurement of Near-Infrared Spectroscopy. *Journal of Healthcare Engineering*, **2018**, 2018, 7609713	3.7	2
84	How can a sparse representation be made applicable for very low-dimensional data?. *Expert Systems With Applications*, **2017**, 77, 66-70	7.8	5
83	An efficient and fast GPU-based algorithm for visualizing large volume of 4D data from virtual heart simulations. *Biomedical Signal Processing and Control*, **2017**, 35, 8-18	4.9	5
82	Fingerprint classification based on a Q-Gaussian multiclass support vector machine **2017**,		9
81	Effects of amiodarone on short QT syndrome variant 3 in human ventricles: a simulation study. *BioMedical Engineering OnLine*, **2017**, 16, 69	4.1	6
80	Mechanism underlying impaired cardiac pacemaking rhythm during ischemia: A simulation study. *Chaos*, **2017**, 27, 093934	3.3	5
79	A composite visualization method for electrophysiology-morphous merging of human heart. *BioMedical Engineering OnLine*, **2017**, 16, 70	4.1	2
78	A novel method for the detection of R-peaks in ECG based on K-Nearest Neighbors and Particle Swarm Optimization. *Eurasip Journal on Advances in Signal Processing*, **2017**, 2017,	1.9	18
77	Computational Cardiac Modeling Reveals Mechanisms of Ventricular Arrhythmogenesis in Long QT Syndrome Type 8: R858H Mutation Linked to Ventricular Fibrillation. *Frontiers in Physiology*, **2017**, 8, 771	4.6	16
76	A Combined Random Forests and Active Contour Model Approach for Fully Automatic Segmentation of the Left Atrium in Volumetric MRI. *BioMed Research International*, **2017**, 2017, 8381094	3	3
75	In silico assessment of the effects of quinidine, disopyramide and E-4031 on short QT syndrome variant 1 in the human ventricles. *PLoS ONE*, **2017**, 12, e0179515	3.7	9

74	Modelling the effects of chloroquine on -linked short QT syndrome. *Oncotarget*, **2017**, 8, 106511-106526	3.3	7
73	Sample pair based sparse representation classification for face recognition. *Expert Systems With Applications*, **2016**, 45, 352-358	7.8	15
72	A graph-based method for fitting planar B-spline curves with intersections. *Journal of Computational Design and Engineering*, **2016**, 3, 14-23	4.6	17
71	Multi-view stereo via depth map fusion: A coordinate decent optimization method. *Neurocomputing* , **2016**, 178, 46-61	5.4	6
70	Detail-Preserving and Content-Aware Variational Multi-View Stereo Reconstruction. *IEEE Transactions on Image Processing*, **2016**, 25, 864-77	8.7	14
69	Pacemaker Created in Human Ventricle by Depressing Inward-Rectifier K+ Current: A Simulation Study. *BioMed Research International*, **2016**, 2016, 3830682	3	3
68	Depth Attenuation Degree Based Visualization for Cardiac Ischemic Electrophysiological Feature Exploration. *BioMed Research International*, **2016**, 2016, 2979081	3	2
67	Cardiac left ventricular volumes prediction method based on atlas location and deep learning **2016**,		4
66	A robust statistics driven volume-scalable active contour for segmenting anatomical structures in volumetric medical images with complex conditions. *BioMedical Engineering OnLine*, **2016**, 15, 39	4.1	5
65	A Visualization System for Interactive Exploration of the Cardiac Anatomy. *Journal of Medical Systems*, **2016**, 40, 135	5.1	3
64	EFFECTS OF ACUTE GLOBAL ISCHEMIA ON RE-ENTRANT ARRHYTHMOGENESIS: A SIMULATION STUDY. *Journal of Biological Systems*, **2015**, 23, 213-230	1.6	5
63	Multiview stereo and silhouette fusion via minimizing generalized reprojection error. *Image and Vision Computing*, **2015**, 33, 1-14	3.7	3
62	The virtual heart as a platform for screening drug cardiotoxicity. *British Journal of Pharmacology*, **2015**, 172, 5531-47	8.6	23
61	Effects of amiodarone on ventricular excitation associated with the KCNJ2-linked short QT syndrome: Insights from a modelling study **2015**,		1
60	Neuron anatomy structure reconstruction based on a sliding filter. *BMC Bioinformatics*, **2015**, 16, 342	3.6	9
59	Parallel Optimization of 3D Cardiac Electrophysiological Model Using GPU. *Computational and Mathematical Methods in Medicine*, **2015**, 2015, 862735	2.8	12
58	Weighted Nuclear Norm Minimization Based Tongue Specular Reflection Removal. *Mathematical Problems in Engineering*, **2015**, 2015, 1-15	1.1	3
57	Quick detection of QRS complexes and R-waves using a wavelet transform and K-means clustering. *Bio-Medical Materials and Engineering*, **2015**, 26 Suppl 1, S1059-65	1	11

56	Fusion visualization for cardiac anatomical and ischemic models with depth weighted optic radiation function **2015**,		2
55	Reducing false arrhythmia alarms in the ICU using novel signal quality indices assessment method **2015**,		9
54	Simulation of effects of TBX18 on the pacemaker activity of human ventricular cells **2015**,		1
53	Combination of linear regression classification and collaborative representation classification. *Neural Computing and Applications*, **2014**, 25, 833-838	4.8	4
52	Heart visualization based on hybrid transfer function using size and gradient. *Bio-Medical Materials and Engineering*, **2014**, 24, 3353-9	1	1
51	Multi-boundary cardiac data visualization based on multidimensional transfer function with ray distance. *Bio-Medical Materials and Engineering*, **2014**, 24, 3025-32	1	5
50	Fast neighbourhood component analysis with spatially smooth regulariser for robust noisy face recognition. *IET Biometrics*, **2014**, 3, 278-290	2.9	1
49	Illustrative Cardiac Visualization via Perception-Based Lighting Enhancement. *Journal of Medical Imaging and Health Informatics*, **2014**, 4, 312-316	1.2	6
48	Bright field microscopic cells counting method for BEVS using nonlinear convergence index sliding band filter. *BioMedical Engineering OnLine*, **2014**, 13, 147	4.1	1
47	A pipeline for neuron reconstruction based on spatial sliding volume filter seeding. *Computational and Mathematical Methods in Medicine*, **2014**, 2014, 386974	2.8	4
46	Effects of maximal sodium and potassium conductance on the stability of Hodgkin-Huxley model. *Computational and Mathematical Methods in Medicine*, **2014**, 2014, 761907	2.8	7
45	Iris-based medical analysis by geometric deformation features. *IEEE Journal of Biomedical and Health Informatics*, **2013**, 17, 223-31	7.2	14
44	A New Approach to Separate Haemodynamic Signals for Brain-Computer Interface Using Independent Component Analysis and Least Squares. *Journal of Spectroscopy*, **2013**, 2013, 1-9	1.5	4
43	A cell counting method for BEVS based on nonlinear Transformed Sliding Band Filter. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2012**, 2012, 118-21	0.9	2
42	Distortion correction in wide-angle images for picture-based food portion size estimation **2012**,		3
41	A fast and efficient nearest neighbor method for protein secondary structure prediction **2011**,		2
40	Improved greedy snake model for detecting accurate pupil contour **2011**,		8
39	Effective transfer function for interactive visualization and multivariate volume data **2011**,		2

38	A Novel Contactless Multimodal Biometric System Based on Multiple Hand Features **2011**,		2
37	Real-time interactive heart illustration platform via hardware accelerated rendering **2011**,		2
36	A Novel Biometric System Based on Hand Vein **2010**,		12
35	Iris localization: Detecting accurate pupil contour and localizing limbus boundary **2010**,		9
34	Post-processed LDA for face and palmprint recognition: What is the rationale. *Signal Processing*, **2010**, 90, 2344-2352	4.4	20
33	Hilbert-Huang Transform Based Doppler Blood Flow Signals Analysis **2009**,		3
32	Computerized feature quantification of sublingual veins from color sublingual images. *Computer Methods and Programs in Biomedicine*, **2009**, 93, 192-205	6.9	15
31	A universal texture segmentation and representation scheme based on ant colony optimization for iris image processing. *Computers and Mathematics With Applications*, **2009**, 57, 1862-1868	2.7	14
30	A Feature Extraction Method for Recognition of Petechia Dot in Tongue Image **2009**,		2
29	A Bilingual Teaching Modal in a Programing Language Course **2009**,		2
28	A performance evaluation of filter design and coding schemes for palmprint recognition **2008**,		12
27	A cryptosystem based on palmprint feature **2008**,		28
26	A Novel Cryptographic Algorithm Based on Iris Feature **2008**,		3
25	Biomedical Image Processing: A Cross-Discipline Course for Undergraduate Computer Science and Technology Major **2008**,		2
24	A Novel Cryptosystem Based on Iris Key Generation **2008**,		40
23	An Iris Cryptosystem for Information Security **2008**,		26
22	Multiscale competitive code for efficient palmprint recognition **2008**,		25
21	On kernel difference-weighted k-nearest neighbor classification. *Pattern Analysis and Applications*, **2008**, 11, 247-257	2.3	68

20	Theoretical Investigation on Post-Processed LDA for Face and Palmprint Recognition **2007**,		2
19	A snake-based approach to automated segmentation of tongue image using polar edge detector. *International Journal of Imaging Systems and Technology*, **2006**, 16, 103-112	2.5	19
18	Palmprint Texture Analysis Using Derivative of Gaussian Filters **2006**,		26
17	ONLINE SIGNATURE VERIFICATION BY COMBINING SHAPE CONTEXTS AND LOCAL FEATURES. *International Journal of Image and Graphics*, **2006**, 06, 407-420	0.5	1
16	Palm line extraction and matching for personal authentication. *IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans*, **2006**, 36, 978-987		96
15	Bidirectional PCA with assembled matrix distance metric for image recognition. *IEEE Transactions on Systems, Man, and Cybernetics*, **2006**, 36, 863-72		75
14	Parameter by Parameter Algorithm for Multilayer Perceptrons. *Neural Processing Letters*, **2006**, 23, 229-242	2.4	3
13	Fusion of phase and orientation information for palmprint authentication. *Pattern Analysis and Applications*, **2006**, 9, 103-111	2.3	19
12	Online signature verification based on null component analysis and principal component analysis. *Pattern Analysis and Applications*, **2006**, 8, 345-356	2.3	16
11	Fusion of phase and orientation information for palmprint authentication **2005**,		2
10	Bi-directional PCA with assembled matrix distance metric **2005**,		1
9	Regularization of LDA for Face Recognition: A Post-processing Approach. *Lecture Notes in Computer Science*, **2005**, 377-391	0.9	4
8	Post-processing on LDA□ Discriminant Vectors for Facial Feature Extraction. *Lecture Notes in Computer Science*, **2005**, 346-354	0.9	2
7	Computerized tongue diagnosis based on Bayesian networks. *IEEE Transactions on Biomedical Engineering*, **2004**, 51, 1803-10	5	113
6	Fisherpalms based palmprint recognition. *Pattern Recognition Letters*, **2003**, 24, 2829-2838	4.7	300
5	MULTISCALE WAVELET TEXTURE BASED IRIS VERIFICATION **2003**,		4
4	A novel approach of palm-line extraction		4
3	Combination of polar edge detection and active contour model for automated tongue segmentation		2

List of Publications

2 Approximate entropy based pulse variability analysis 2

1 Modern researches on pulse waveform of TCPD 1