## Ahmad Ayatollahi

List of Publications by Year in descending order

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Version: 2024-02-01

933264 794469 64 549 10 19 citations g-index h-index papers 67 67 67 636 docs citations times ranked citing authors all docs

| #  | Article   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | An efficient neural network based method for medical image segmentation. Computers in Biology and Medicine, 2014, 44, 76-87.  | 3.9 | 58        |
| 2  | FIR Digital Filters Design: Particle Swarm Optimization Utilizing LMS and Minimax Strategies. , 2008, , .   |     | 55        |
| 3  | Towards automatic detection of atrial fibrillation: A hybrid computational approach. Computers in Biology and Medicine, 2010, 40, 919-930.  | 3.9 | 47        |
| 4  | STDP implementation using memristive nanodevice in CMOS-Nano neuromorphic networks. IEICE Electronics Express, 2009, 6, 148-153.  | 0.3 | 46        |
| 5  | A modified Zeeman model for producing HRV signals and its application to ECG signal generation. Journal of Theoretical Biology, 2007, 244, 180-189.   | 0.8 | 45        |
| 6  | Accurate Classification of EEG Signals Using Neural Networks Trained by Hybrid Population-physic-based Algorithm. International Journal of Automation and Computing, 2020, 17, 108-122.                           | 4.5 | 28        |
| 7  | EEG analysis based on wavelet-spectral entropy for epileptic seizures detection. , 2010, , .  |     | 26        |
| 8  | A comparison between Genetic Algorithm and PSO for linear phase FIR digital filter design. , 2008, , .  |     | 19        |
| 9  | Automatic Counting of Leukocytes in Giemsa-Stained Images of Peripheral Blood Smear. , 2009, , .  |     | 16        |
| 10 | A new nonparametric statistical approach to detect lumen and Media-Adventitia borders in intravascular ultrasound frames. Computers in Biology and Medicine, 2019, 104, 10-28.                                    | 3.9 | 16        |
| 11 | AUTOMATIC LUNG NODULE DETECTION BASED ON STATISTICAL REGION MERGING AND SUPPORT VECTOR MACHINES. Image Analysis and Stereology, 2017, 36, 65.   | 0.4 | 16        |
| 12 | A Zero-Pole Reposition Based, 0.95-mW, 68-dB, Linear-in-dB, Constant-Bandwidth Variable Gain Amplifier. Circuits, Systems, and Signal Processing, 2014, 33, 1353-1368.  | 1.2 | 13        |
| 13 | CMOL implementation of spiking neurons and spikeâ€timing dependent plasticity. International Journal of Circuit Theory and Applications, 2011, 39, 357-372.   | 1.3 | 11        |
| 14 | Efficient Hybrid CMOS-Nano Circuit Design for Spiking Neurons and Memristive Synapses with STDP. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2010, E93-A, 1670-1677. | 0.2 | 10        |
| 15 | Image-Based Gating of Intravascular Ultrasound Sequences Using the Phase Information of Dual-Tree<br>Complex Wavelet Transform Coefficients. IEEE Transactions on Medical Imaging, 2019, 38, 2785-2795.           | 5.4 | 10        |
| 16 | Investigation of eye movement pattern parameters of individuals with different fluid intelligence. Experimental Brain Research, 2019, 237, 15-28.   | 0.7 | 10        |
| 17 | A novel method of applying directional filter bank (DFB) for Finger-Knuckle-Print (FKP) recognition. , 2014, , .  |     | 9         |
| 18 | Medical ultrasound image segmentation by modified local histogram range image method. Journal of Biomedical Science and Engineering, 2010, 03, 1078-1084.   | 0.2 | 8         |

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|----|--|-----|-----------|
| 19 | Spectral Entropy for Epileptic Seizures Detection. , 2010, , .   |     | 7         |
| 20 | Multi-expert human action recognition with hierarchical super-class learning. Knowledge-Based Systems, 2022, 250, 109091.  | 4.0 | 7         |
| 21 | Noise power spectrum estimation using constrained variance spectral smoothing and minima tracking. Speech Communication, 2009, 51, 1098-1113.  | 1.6 | 6         |
| 22 | A new CMOS all-pass phase shifter for phased array systems. IEICE Electronics Express, 2009, 6, 504-510.   | 0.3 | 6         |
| 23 | A new high capacity and EMD-based image steganography scheme in spatial domain. , 2013, , .  |     | 6         |
| 24 | A transformation model based on dual-tree complex wavelet transform for non-rigid registration of 3D MRI images. International Journal of Wavelets, Multiresolution and Information Processing, 2019, 17, 1950025. | 0.9 | 5         |
| 25 | Classification of sleep apnea using EMD-based features and PSO-trained neural networks.<br>Biomedizinische Technik, 2021, 66, 459-472.   | 0.9 | 5         |
| 26 | Action recognition in still images using a multi-attention guided network with weakly supervised saliency detection. Multimedia Tools and Applications, 2021, 80, 32567-32593.                                     | 2.6 | 5         |
| 27 | A comparator-based switched-capacitor integrator using a new charge control circuit. , 2008, , .   |     | 4         |
| 28 | Maximum Likelihood Active Contours Specialized for Mammography Segmentation. , 2009, , .   |     | 4         |
| 29 | A novel Iris segmentation method based on balloon active contour. , 2010, , .  |     | 4         |
| 30 | Robust genetic programmingâ€based detection of atrial fibrillation using RR intervals. Expert Systems, 2012, 29, 183-199.  | 2.9 | 4         |
| 31 | A novel ±0.5ÂV, high current drive, and rail to rail current operational amplifier. Analog Integrated Circuits and Signal Processing, 2012, 70, 103-112.   | 0.9 | 4         |
| 32 | Vessel wall detection in the images of intravascular Optical coherence tomography based on the graph cut segmentation. , 2017, , .   |     | 4         |
| 33 | 0.8â€V 1.4â€nW multiâ€decade frequency range true RMS to DC converter based on twoâ€quadrant current squarer circuit. IET Science, Measurement and Technology, 2020, 14, 17-25.                                    | 0.9 | 4         |
| 34 | Modifying the Cosine Model for Nonstationary Blood Flow Signal Simulation. Journal of Ultrasound in Medicine, 2003, 22, 281-285.   | 0.8 | 3         |
| 35 | An objective measure for the musical noise assessment in noise reduction systems. , 2009, , .  |     | 3         |
| 36 | Lumen boundary detection using neutrosophic c-means in IVOCT images. , 2019, , .   |     | 3         |

| #  | Article   | IF  | Citations |
|----|---|-----|-----------|
| 37 | On conditional spectral moments of Gaussian and damped sinusoidal atoms in adaptive signal decomposition. Signal Processing, 2005, 85, 1984-1992.                     | 2.1 | 2         |
| 38 | A low voltage CMOS analog multiplier with high linearity. , 2009, , .   |     | 2         |
| 39 | Segmentation of medical ultrasound image based on local histogram range image. , 2010, , .  |     | 2         |
| 40 | A novel iris recognition system based on active contour. , 2010, , .  |     | 2         |
| 41 | A low voltage low power CMOS analog multiplier. , 2011, , .   |     | 2         |
| 42 | Ultrasound image segmentation by using a FIR neural network. , 2013, , .  |     | 2         |
| 43 | A high CMRR, class AB, fully differential current output stage. Analog Integrated Circuits and Signal Processing, 2014, 78, 465-477.                                  | 0.9 | 2         |
| 44 | Comparison of Using Different Types of Wavelet or FFT for De-nosing of Body Surface Potential Signals. , 2008, , .  |     | 1         |
| 45 | Modified CAEN-BIST algorithm for better utilization of nanofabrics. , 2008, , .   |     | 1         |
| 46 | Automatic Obtaining of Left Ventricular Area and Analyzing the Area Changes. , 2009, , .  |     | 1         |
| 47 | Investigating the linearity of MOSFET-only switched-capacitor & amp; #x0394; & amp; #x03A3; modulators under low-voltage condition., 2009,,.                          |     | 1         |
| 48 | A Low Power and Wide Dynamic Range Digital Pixel Sensor (DPS) for Optical Brain Imaging Systems. Sensing and Imaging, 2022, 23, 1.                                    | 1.0 | 1         |
| 49 | A survey on linear relations between main electrical components during action potential in ventricular cell. Applied Mathematics and Computation, 2007, 188, 148-153. | 1.4 | O         |
| 50 | Effect of switch resistance on comparator-based switched-capacitor circuits., 2008,,.   |     | 0         |
| 51 | A novel CMOS all-pass tunable phase shifter for phased array systems. , 2009, , .   |     | О         |
| 52 | Estimation of Changes in Left Ventricular Wall Thickness in Full Short Axis CMRI to Diagnosis Myocardium Infarctions. , 2009, , .                                     |     | 0         |
| 53 | A novel CMOS all-pass tunable phase shifter. , 2009, , .  |     | 0         |
| 54 | Genetic algorithm as the main optimizer for medical image registration. , 2010, , .   |     | 0         |

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|----|---|-----|-----------|
| 55 | New Approach in Transform-Based Speaker Adaptation Using Minimum Classification Error. , 2010, , .  |     | 0         |
| 56 | Evolutionary eigenvoice MLLR speaker adaptation. Procedia Computer Science, 2011, 3, 992-997.   | 1.2 | 0         |
| 57 | Heuristic search for maximum of mutual information. , 2011, , .   |     | O         |
| 58 | Design a 10-Bit 100MHz pipelined ADC using RB-OTA in 90nm CMOS technology. IEICE Electronics Express, 2012, 9, 815-821.   | 0.3 | 0         |
| 59 | High resolution tagging pattern in the polar coordinate system; A reconstruction based approach. , 2013, , .  |     | 0         |
| 60 | Coronary artery curvature extraction using physic-based model in intravascular ultrasound image sequence., 2016,,.  |     | 0         |
| 61 | A new method for non-rigid registration of MRI images. , 2017, , .  |     | 0         |
| 62 | Novel Coronary Tortuosity Extraction Using Intravascular Ultrasound Sequence Alone., 2017,,.  |     | 0         |
| 63 | Automatic vessel wall segmentation of IVOCT images using region detection EREL algorithm. , 2019, , .   |     | 0         |
| 64 | Automatic Pulmonary Nodule Growth Measurement through CT Image Analysis based on Morphology Filtering and Statistical Region Merging. Biomedical and Pharmacology Journal, 2018, 11, 1247-1259. | 0.2 | O         |