Manjunatha Mahadevappa

List of Publications by Year
in descending order

102 papers	2,218 citations	430874 18 h-index	276875 41 g-index
106 all docs	106 docs citations	106 times ranked	2085 citing authors

#	Article	IF	Citations
1	Adaptive Multidimensional Dual Attentive DCNN for Detecting Cardiac Morbidities Using Fused ECG-PPG Signals. IEEE Transactions on Artificial Intelligence, 2023, 4, 1225-1235.	4.7	4
2	Cisplatin-based Electrochemotherapy Significantly Downregulates Key Heat Shock Proteins in MDA-MB-231-Human Triple-Negative Breast Cancer Cells. Applied Biochemistry and Biotechnology, 2022, 194, 517-528.	2.9	6
3	DRG-NET: A graph neural network for computer-aided grading of diabetic retinopathy. Signal, Image and Video Processing, 2022, 16, 1869-1875.	2.7	3
4	Non-invasive cuffless blood pressure and heart rate monitoring using impedance cardiography. Intelligent Medicine, 2022, 2, 199-208.	3.1	2
5	Lensless In-Line Holographic Microscopy With Light Source of Low Spatio-Temporal Coherence. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-8.	2.9	2
6	A hybrid method for removal of power line interference and baseline wander in ECG signals using EMD and EWT. Biomedical Signal Processing and Control, 2021, 67, 102466.	5.7	42
7	Ventricle shape analysis using modified WKS for atrophy detection. Medical and Biological Engineering and Computing, 2021, 59, 1485-1493.	2.8	1
8	An Electro-Oculogram Based Vision System for Grasp Assistive Devicesâ€"A Proof of Concept Study. Sensors, 2021, 21, 4515.	3.8	0
9	Case Study of Developing an Electromyogram-Based Exoskeleton Control for Upper Limb Rehabilitation. Advances in Intelligent Systems and Computing, 2021, , 171-184.	0.6	0
10	Computer-Aided Retinal Haemorrhage Detection and Super-Resolution in Diabetic Retinopathy Digital Fundus Images. , 2021, , .		0
11	Cross-Head Attentive Deep Neural Network for Estimating Left Ventricular Functional Parameters. , 2021, , .		0
12	Performance analysis of power and power variance for classification, detection and localization of epileptic multi-channel EEG. Microsystem Technologies, 2020, 26, 3129-3142.	2.0	6
13	A Novel Technique to Develop Cognitive Models for Ambiguous Image Identification Using Eye Tracker. IEEE Transactions on Affective Computing, 2020, 11, 63-77.	8.3	10
14	Photonic crystal fiber for high resolution lensless in-line holographic microscopy. Optical Fiber Technology, 2020, 58, 102248.	2.7	0
15	Screening of Ischemic Heart Disease based on PPG Signals using Machine Learning Techniques. , 2020, 2020, 5980-5983.		5
16	Wavelet Transform and Texton based Analysis for Detection of Benign and Malignant Masses. , 2020, 2020, 2178-2181.		0
17	Chaotic behaviour of EEG responses with an identical grasp posture. Computers in Biology and Medicine, 2020, 123, 103822.	7.0	4
18	Compressive Holography From Poisson Noise Plagued Holograms Using Expectation-Maximization. IEEE Transactions on Computational Imaging, 2020, 6, 857-867.	4.4	3

#	Article	IF	Citations
19	Modified distance regularized level set evolution for brain ventricles segmentation. Visual Computing for Industry, Biomedicine, and Art, 2020, 3, 29.	3.7	2
20	Detection and localization of Coronary Arterial Lesion with the Aid of Impedance Cardiography and Artificial Neural Network. , 2020, , .		1
21	Computer Aided Classification of Benign and Malignant Breast Lesions using Maximum Response 8 Filter Bank and Genetic Algorithm. , 2020, , .		1
22	Development of Objective Evidence in Rorschach Ink Blot Test: An Eye Tracking Study. , 2019, 2019, 1391-1394.		5
23	Estimation of echocardiogram parameters with the aid of impedance cardiography and artificial neural networks. Artificial Intelligence in Medicine, 2019, 96, 45-58.	6.5	15
24	Single Image Super-Resolution Technique using Precision learning of Low Resolution Images. , 2019, , .		0
25	Removal of Speckle Noise in Images through a Hybrid Methodology with Application in Optical Coherence Tomography (OCT) Images. , 2019, , .		1
26	Regression between EEG and Speech Signals for Spoken Vowels. , 2019, 2019, 221-224.		0
27	Extended light-source-based lensless microscopy using constrained and regularized reconstruction. Applied Optics, 2019, 58, 509.	1.8	3
28	Epilepsy and seizure characterisation by multifractal analysis of EEG subbands. Biomedical Signal Processing and Control, 2018, 41, 264-270.	5.7	55
29	EEG-Based Detection of Brisk Walking Motor Imagery Using Feature Transformation Techniques. Lecture Notes in Computer Science, 2018, , 78-89.	1.3	0
30	Multifractal Analysis of Speech Imagery of IPA Vowels. , 2018, 2018, 1-4.		1
31	Deep Learning Based Object Shape Identification from EOG Controlled Vision System. , 2018, , .		4
32	Differentiating Color Responses in Retina Through Multielectrode Array Recordings. , 2018, , .		0
33	Adaptive Grasping Using an Interphalangeal Flexion Angle Model and Particle Swarm Optimization. , 2018, , .		3
34	A fingertip force prediction model for grasp patterns characterised from the chaotic behaviour of EEG. Medical and Biological Engineering and Computing, 2018, 56, 2095-2107.	2.8	14
35	Estimation of continuous and constraint-free 3 DoF wrist movements from surface electromyogram signal using kernel recursive least square tracker. Biomedical Signal Processing and Control, 2018, 46, 104-115.	5.7	18
36	Chaos Analysis of Speech Imagery of IPA Vowels. Lecture Notes in Computer Science, 2018, , 101-110.	1.3	1

#	Article	IF	Citations
37	Evaluation of Functional Mobility Outcomes Following Electrical Stimulation in Children With Spastic Cerebral Palsy. Journal of Child Neurology, 2017, 32, 650-656.	1.4	8
38	Multiple entropies performance measure for detection and localization of multi-channel epileptic EEG. Biomedical Signal Processing and Control, 2017, 38, 158-167.	5.7	31
39	High-Magnification Multi-views Based Classification of Breast Fine Needle Aspiration Cytology Cell Samples Using Fusion of Decisions from Deep Convolutional Networks. , 2017, , .		17
40	EEG based motor imagery study of time domain features for classification of power and precision hand grasps. , 2017, , .		15
41	Multifractal analysis of electroencephalogram for human speech modalities. , 2017, , .		3
42	Design of electrode configuration for in vitro experiments of epiretinal electrical stimulation of retinal ganglion cells. IET Science, Measurement and Technology, 2017, 11, 480-488.	1.6	2
43	Classification of artifactual EEG signal and detection of multiple eye movement artifact zones using novel Time-amplitude algorithm. Signal, Image and Video Processing, 2017, 11, 333-340.	2.7	13
44	Characterization of retinal tissue and vitreous humor with Electrical Impedance Spectroscopy. , 2017, , .		1
45	A comparative study of light and electrically evoked response of retinal ganglion cells. , 2017, 2017, 1101-1104.		1
46	PDMS based multielectrode arrays for superior in-vitro retinal stimulation and recording. Biomedical Microdevices, 2017, 19, 75.	2.8	11
47	Estimation of three degrees of freedom of wrist movement from electromyogram using Kernel Ridge Regression. , 2017, , .		1
48	Methods and System for Segmentation of Isolated Nuclei in Microscopic Breast Fine Needle Aspiration Cytology Images. Lecture Notes in Computer Science, 2017, , 380-392.	1.3	0
49	Learning of speckle statistics for in vivo and noninvasive characterization of cutaneous wound regions using laser speckle contrast imaging. Microvascular Research, 2016, 107, 6-16.	2.5	14
50	Trajectory Path Planning of EEG Controlled Robotic Arm Using GA. Procedia Computer Science, 2016, 84, 147-151.	2.0	35
51	Therapeutic effects of functional electrical stimulation on gait, motor recovery, and motor cortex in stroke survivors. Hong Kong Physiotherapy Journal, 2015, 33, 10-20.	1.0	15
52	Probabilistic graphical modeling of speckle statistics in laser speckle contrast imaging for noninvasive and label-free retinal angiography. , 2015, 2015, 6244-7.		0
53	Random room mobility model and extraâ€wireless body area network communication in hospital buildings. IET Networks, 2015, 4, 54-64.	1.8	23
54	Design and development of a lowâ€cost biphasic chargeâ€balanced functional electric stimulator and its clinical validation. Healthcare Technology Letters, 2015, 2, 129-134.	3.3	8

#	Article	IF	Citations
55	Interferenceâ€aware MAC scheduling and admission control for multiple mobile WBANs used in healthcare monitoring. International Journal of Communication Systems, 2015, 28, 1352-1366.	2.5	11
56	Effect of FES in rehabilitation of cerebral palsy children by analysis of surface EMG in tibialis anterior muscle. , 2014, , .		2
57	Low cost point of care estimation of Hemoglobin levels. , 2014, , .		5
58	Learning scale-space representation of nucleus for accurate localization and segmentation of epithelial squamous nuclei in cervical smears. , 2014, , .		3
59	A fast auto white balance scheme for digital pathology. , 2014, , .		18
60	Design, Development, and Clinical Evaluation of the Electronic Mobility Cane for Vision Rehabilitation. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2014, 22, 1148-1159.	4.9	77
61	Electronic Bracelet and Vision-Enabled Waist-Belt for Mobility of Visually Impaired People. Assistive Technology, 2014, 26, 186-195.	2.0	16
62	in vivo laser speckle imaging by adaptive contrast computation for microvasculature assessment. Optics and Lasers in Engineering, 2014, 62, 87-94.	3.8	12
63	Multiscale noise-adaptive homomorphic filtering based speckle denoising in laser speckle imaging. , 2013, , .		4
64	A simple model for bedside evaluation of current for neuromuscular electrical stimulation in cerebral palsy. , 2013, , .		2
65	Way-finding Electronic Bracelet for visually impaired people. , 2013, , .		12
66	CTRI registration and protocol designing for clinical trial of medical devices: A case of FES device for foot drop. , 2013, , .		0
67	An EMG-control functional electrical stimulation (FES) system for restoration of gait in foot drop patients. International Journal of Biomedical Engineering and Technology, 2013, 12, 84.	0.2	5
68	Modelling a BCI system to estimate FES stimulation intensity for individual stroke survivors in foot drop cases. Biomedizinische Technik, 2013, 58 Suppl 1, .	0.8	0
69	Functional Electrical Stimulation on Improving Foot Drop Gait in Poststroke Rehabilitation: A Review of its Technology and Clinical Efficacy. Critical Reviews in Biomedical Engineering, 2013, 41, 149-160.	0.9	19
70	Breast fine needle aspiration cytology practices and commonly perceived diagnostic significance of cytological features: A pan- India survey. Journal of Cytology, 2012, 29, 183.	0.6	7
71	Interference-aware channel switching for use in WBAN with human-sensor interface. , 2012, , .		9
72	Interference mitigation between WBAN equipped patients. , 2012, , .		17

#	Article	IF	Citations
73	Functional electrical stimulation for stoke rehabilitation. Medical Hypotheses, 2012, 78, 687.	1.5	3
74	Surface EMG analysis and changes in gait following electrical stimulation of quadriceps femoris and tibialis anterior in children with spastic cerebral palsy. , 2012, 2012, 5726-9.		18
75	Ultrasonic spectacles and waist-belt for visually impaired and blind person. , 2012, , .		39
76	Review of laser speckle-based analysis in medical imaging. Medical and Biological Engineering and Computing, 2012, 50, 547-558.	2.8	93
77	Surface Electrical Stimulation Technology for Stroke Rehabilitation: A Review of 50 Years of Research. Journal of Medical Imaging and Health Informatics, 2012, 2, 1-14.	0.3	5
78	Electrical Stimulation Devices for Cerebral Palsy. , 2012, , 365-402.		5
79	Brightness preserving contrast enhancement in digital pathology. , 2011, , .		12
80	Development of Cardiac Prescreening Device for Rural Population Using Ultralow-Power Embedded System. IEEE Transactions on Biomedical Engineering, 2011, 58, 745-749.	4.2	20
81	Functional electrical stimulation of dorsiflexor muscle: Effects on dorsiflexor strength, plantarflexor spasticity, and motor recovery in stroke patients. NeuroRehabilitation, 2011, 29, 393-400.	1.3	114
82	CLINICAL USE OF FUNCTIONAL ELECTRICAL STIMULATION FOR CORRECTION OF FOOT DROP: A COMPARISON BETWEEN SUBACUTE AND CHRONIC STROKE PATIENTS. Journal of Mechanics in Medicine and Biology, 2011, 11, 1165-1177.	0.7	5
83	Volume visualization approach for depth-of-field extension in digital pathology. , 2011, , .		5
84	Development of a low-cost non-invasive neurostimulator for applications in post stroke hemiplegics. International Journal of Biomedical Engineering and Technology, 2010, 4, 245.	0.2	6
85	Efficacy of low cost Liquid Based Cytology for cerivcal smears in automated segmentation of cells and nuclei. , 2010, , .		0
86	Efficacy of low cost Liquid Based Cytology for cerivcal smears in automated segmentation of cells and nuclei. , 2010, , .		0
87	Statistical tools for evaluating classification efficacy of feature extraction techniques. , 2010, , .		1
88	Effect of functional electrical stimulation on the effort and walking speed, surface electromyography activity, and metabolic responses in stroke subjects. Journal of Electromyography and Kinesiology, 2010, 20, 1170-1177.	1.7	55
89	Brightness preserving dynamic fuzzy histogram equalization. IEEE Transactions on Consumer Electronics, 2010, 56, 2475-2480.	3.6	307
90	Restoration of gait and motor recovery by functional electrical stimulation therapy in persons with stroke. Disability and Rehabilitation, 2010, 32, 1594-1603.	1.8	91

#	Article	IF	Citations
91	Design of an insole embedded foot pressure sensor controlled FES system for foot drop in stroke patients. , 2010, , .		10
92	Technique of Topographical mapping of FDI muscle response after Single pulse TMS stimulation: A method to study inter hemispheric symmetry and plasticity of human motor cortex. , 2010, , .		2
93	A comparative study of phonocardiogram analysis techniques based on mixed signal processor. , 2010, , .		1
94	Segmentation of blood smear images using normalized cuts for detection of malarial parasites. , 2010, , .		18
95	VHDL modelling and simulation of parallel-beam filtered backprojection for CT image reconstruction. , 2009, , .		1
96	Factors Affecting Perceptual Thresholds in Epiretinal Prostheses. , 2008, 49, 2303.		204
97	Visual Performance Using a Retinal Prosthesis in Three Subjects With Retinitis Pigmentosa. American Journal of Ophthalmology, 2007, 143, 820-827.e2.	3.3	226
98	Implantation of an inactive epiretinal poly(dimethyl siloxane) electrode array in dogs. Experimental Eye Research, 2006, 82, 81-90.	2.6	42
99	Neural responses elicited by electrical stimulation of the retina. Transactions of the American Ophthalmological Society, 2006, 104, 252-9.	1.4	28
100	Perceptual thresholds and electrode impedance in three retinal prosthesis subjects. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2005, 13, 201-206.	4.9	187
101	Long-term stimulation by active epiretinal implants in normal and RCD1 dogs. Journal of Neural Engineering, 2005, 2, S65-S73.	3.5	65
102	The value of preoperative tests in the selection of blind patients for a permanent microelectronic implant. Transactions of the American Ophthalmological Society, 2003, 101, 223-8; discussion 228-30.	1.4	22