

# Adel Ali Al-Jumaily

## List of Publications by Year in descending order

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Version: 2024-02-01

175  
papers

2,777  
citations

304602

22  
h-index

265120

42  
g-index

179  
all docs

179  
docs citations

179  
times ranked

2603  
citing authors

#	ARTICLE	IF	CITATIONS
1	Computer Aided Diagnostic Support System for Skin Cancer: A Review of Techniques and Algorithms. International Journal of Biomedical Imaging, 2013, 2013, 1-22.	3.0	238
2	Active Exoskeleton Control Systems: State of the Art. Procedia Engineering, 2012, 41, 988-994.	1.2	230
3	Feature subset selection using differential evolution and a statistical repair mechanism. Expert Systems With Applications, 2011, 38, 11515-11526.	4.4	179
4	A Framework of Temporal-Spatial Descriptors-Based Feature Extraction for Improved Myoelectric Pattern Recognition. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 1821-1831.	2.7	101
5	Orthogonal Fuzzy Neighborhood Discriminant Analysis for Multifunction Myoelectric Hand Control. IEEE Transactions on Biomedical Engineering, 2010, 57, 1410-1419.	2.5	91
6	Impact of Coronavirus Disease 2019 (COVID-19) Outbreak Quarantine, Isolation, and Lockdown Policies on Mental Health and Suicide. Frontiers in Psychiatry, 2021, 12, 565190.	1.3	82
7	Effects of repetitive SSVEPs on EEG complexity using multiscale inherent fuzzy entropy. Neurocomputing, 2020, 389, 198-206.	3.5	69
8	Ponseti method in the management of clubfoot under 2 years of age: A systematic review. PLoS ONE, 2017, 12, e0178299.	1.1	63
9	The Beneficial Techniques in Preprocessing Step of Skin Cancer Detection System Comparing. Procedia Computer Science, 2014, 42, 25-31.	1.2	57
10	Doppler Radar-Based Non-Contact Health Monitoring for Obstructive Sleep Apnea Diagnosis: A Comprehensive Review. Big Data and Cognitive Computing, 2019, 3, 3.	2.9	57
11	Estimation of Upper Limb Joint Angle Using Surface EMG Signal. International Journal of Advanced Robotic Systems, 2013, 10, 369.	1.3	54
12	Evaluation of extreme learning machine for classification of individual and combined finger movements using electromyography on amputees and non-amputees. Neural Networks, 2017, 85, 51-68.	3.3	53
13	Self-supervised learning model for skin cancer diagnosis. , 2015, , .		52
14	Automatically Early Detection of Skin Cancer: Study Based on Nueral Netwok Classification. , 2009, , .		50
15	Novel feature extraction method based on fuzzy entropy and wavelet packet transform for myoelectric Control. , 2007, , .		47
16	A Combined Ant Colony and Differential Evolution Feature Selection Algorithm. Lecture Notes in Computer Science, 2008, , 1-12.	1.0	43
17	Evaluation of feature extraction techniques and classifiers for finger movement recognition using surface electromyography signal. Medical and Biological Engineering and Computing, 2018, 56, 2259-2271.	1.6	38
18	Differential evolution based feature subset selection. , 2008, , .		37

#	ARTICLE	IF	CITATIONS
19	sEMG Based ANN for Shoulder Angle Prediction. <i>Procedia Engineering</i> , 2012, 41, 1009-1015.	1.2	32
20	Design and Development of a Hand Exoskeleton for Rehabilitation Following Stroke. <i>Procedia Engineering</i> , 2012, 41, 1028-1034.	1.2	32
21	Augmented Reality Game Therapy For Children With Autism Spectrum Disorder. <i>International Journal on Smart Sensing and Intelligent Systems</i> , 2022, 7, 519-536.	0.4	30
22	Fuzzy C Mean Thresholding based Level Set for Automated Segmentation of Skin Lesions. <i>Journal of Signal and Information Processing</i> , 2013, 04, 66-71.	0.8	30
23	Machine learning based prediction of depression among type 2 diabetic patients. , 2017, , .		28
24	Ambient assisted living technologies for older adults with cognitive and physical impairments: a review. <i>European Review for Medical and Pharmacological Sciences</i> , 2019, 23, 10470-10481.	0.5	28
25	Evolutionary fuzzy discriminant analysis feature projection technique in myoelectric control. <i>Pattern Recognition Letters</i> , 2009, 30, 699-707.	2.6	27
26	A Novel Hybrid System for Skin Lesion Detection. , 2007, , .		25
27	Design and Development of a Bilateral Therapeutic Hand Device for Stroke Rehabilitation. <i>International Journal of Advanced Robotic Systems</i> , 2013, 10, 405.	1.3	25
28	Comparing the Performance of Various Filters on Skin Cancer Images. <i>Procedia Computer Science</i> , 2014, 42, 32-37.	1.2	25
29	Self-advising support vector machine. <i>Knowledge-Based Systems</i> , 2013, 52, 214-222.	4.0	24
30	A fusion of time-domain descriptors for improved myoelectric hand control. , 2016, , .		24
31	Electromyogram (EMG) driven system based virtual reality for prosthetic and rehabilitation devices. , 2009, , .		23
32	The automatic identification of melanoma by wavelet and curvelet analysis: Study based on neural network classification. , 2011, , .		22
33	Two-channel surface electromyography for individual and combined finger movements. , 2013, 2013, 4961-4.		21
34	Current conservative management and classification of club foot: A review. <i>Journal of Pediatric Rehabilitation Medicine</i> , 2016, 9, 257-264.	0.3	21
35	Deep Learning of Facial Depth Maps for Obstructive Sleep Apnea Prediction. , 2018, , .		21
36	Channel and Feature Selection in Multifunction Myoelectric Control. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2007, 2007, 5182-5.	0.5	18

#	ARTICLE	IF	CITATIONS
37	Review on automatic early skin cancer detection. , 2011, , .		18
38	AR based upper limb rehabilitation system. , 2012, , .		18
39	Augmented Reality Game Based Multi-Usage Rehabilitation Therapist For Stroke Patients. International Journal on Smart Sensing and Intelligent Systems, 2022, 7, 1044-1058.	0.4	17
40	A novel partially connected cooperative parallel PSO-SVM algorithm: Study based on sleep apnea detection. , 2012, , .		16
41	Multi Neural Networks Investigation based Sleep Apnea Prediction. Procedia Computer Science, 2013, 24, 97-102.	1.2	16
42	A novel extreme learning machine for dimensionality reduction on finger movement classification using sEMG. , 2015, , .		16
43	Probabilistic Road Maps with Obstacle Avoidance in Cluttered Dynamic Environment. , 0, , .		15
44	Augmented reality-based RehaBio system for shoulder rehabilitation. International Journal of Mechatronics and Automation, 2014, 4, 52.	0.1	15
45	Differential evolution based advised SVM for histopathological image analysis for skin cancer detection. , 2015, 2015, 781-4.		15
46	The use of augmented reality in the diagnosis and treatment of autistic children: a review and a new system. Multimedia Tools and Applications, 2020, 79, 18245-18291.	2.6	15
47	Cellular automata based models of wireless sensor networks. , 2009, , .		14
48	Early diagnosis autism based on upper limb motor coordination in high risk subjects for autism. , 2016, , .		14
49	A Novel Virtual Sample Generation Method to Overcome the Small Sample Size Problem in Computer Aided Medical Diagnosing. Algorithms, 2019, 12, 160.	1.2	14
50	A long short-term recurrent spatial-temporal fusion for myoelectric pattern recognition. Expert Systems With Applications, 2021, 178, 114977.	4.4	14
51	Wavefront Propagation and Fuzzy Based Autonomous Navigation. International Journal of Advanced Robotic Systems, 2005, 2, 10.	1.3	13
52	Segmentation of skin cancer images based on gradient vector flow (GVF) snake. , 2011, , .		13
53	Myoelectric control systems for hand rehabilitation device: A review. , 2017, , .		13
54	Augmented Reality for Autistic Children to Enhance Their Understanding of Facial Expressions. Multimodal Technologies and Interaction, 2021, 5, 48.	1.7	13

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55	Training type-2 Fuzzy System by particle swarm optimization. , 2007, , .		12
56	Automated detecting sleep apnea syndrome: A novel system based on genetic SVM. , 2011, , .		12
57	Automated segmentation of skin lesions: Modified Fuzzy C mean thresholding based level set method. , 2013, , .		12
58	Human computer interactive system for fast recovery based stroke rehabilitation. , 2011, , .		11
59	A Novel Oxygen-Hemoglobin Model for Non-Contact Sleep Monitoring of Oxygen Saturation. IEEE Sensors Journal, 2019, 19, 12325-12332.	2.4	11
60	Automatic recognition of melanoma using Support Vector Machines: A study based on Wavelet, Curvelet and color features. , 2014, , .		10
61	Myoelectric feature extraction using temporal-spatial descriptors for multifunction prosthetic hand control. , 2016, 2016, 1696-1699.		10
62	Comparison of EEG Pattern Recognition of Motor Imagery for Finger Movement Classification. , 2019, , .		10
63	Texture Analysis Based Automated Decision Support System for Classification of Skin Cancer Using SA-SVM. Lecture Notes in Computer Science, 2014, , 101-109.	1.0	10
64	Type-2 Fuzzy Classification of Blood Pressure Parameters. , 2007, , .		9
65	Rehabilitation exercise with real-time muscle simulation based EMG and AR. , 2011, , .		9
66	Extreme learning machine based sEMG for drop-foot after stroke detection. , 2016, , .		9
67	Per node deployment based detection of controlled link establishment attack in distributed sensor networks. International Journal of Sensor Networks, 2011, 9, 192.	0.2	8
68	A wearable robotics assistive device: Design, technical solutions, and implementation. , 2017, , .		8
69	Non-contact Doppler radar based prediction of nocturnal body orientations using deep neural network for chronic heart failure patients. , 2017, , .		8
70	Development of Automated Diagnostic System for Skin Cancer: Performance Analysis of Neural Network Learning Algorithms for Classification. Lecture Notes in Computer Science, 2014, , 837-844.	1.0	8
71	Swarm Intelligence based Dimensionality Reduction for Myoelectric Control. , 2007, , .		7
72	A novel swarm based feature selection algorithm in multifunction myoelectric control. Journal of Intelligent and Fuzzy Systems, 2009, 20, 175-185.	0.8	7

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73	Shoulder rehabilitation with biofeedback simulation. , 2012, , .		7
74	The estimation of Knee Joint angle based on Generalized Regression Neural Network (GRNN). , 2015, , .		7
75	Upper limb motor coordination based early diagnosis in high risk subjects for Autism. , 2016, , .		7
76	PCA indexing based feature learning and feature selection. , 2016, , .		7
77	Automatic eyes localization in thermal images for temperature measurement in cattle. , 2017, , .		7
78	Optimal feature set for finger movement classification based on sEMG. , 2018, 2018, 5228-5231.		7
79	Active vibration control in human forearm model using paired piezoelectric sensor and actuator. JVC/Journal of Vibration and Control, 2021, 27, 2231-2242.	1.5	7
80	CHAD: Compact Hand-Assistive Device for enhancement of function in hand impairments. Robotics and Autonomous Systems, 2021, 142, 103784.	3.0	7
81	Augmentation in Healthcare: Augmented Biosignal Using Deep Learning and Tensor Representation. Journal of Healthcare Engineering, 2021, 2021, 1-9.	1.1	7
82	Auto-Encoder based Deep Learning for Surface Electromyography Signal Processing. Advances in Science, Technology and Engineering Systems, 2018, 3, 94-102.	0.4	7
83	Semi Advised SVM with Adaptive Differential Evolution Based Feature Selection for Skin Cancer Diagnosis. Journal of Computer and Communications, 2015, 03, 184-190.	0.6	7
84	Multiview Eye Localisation to Measure Cattle Body Temperature Based on Automated Thermal Image Processing and Computer Vision. Infrared Physics and Technology, 2021, 119, 103932.	1.3	7
85	A novel 3D evaluation method for assessing bone to bone relationships in clubfoot. European Review for Medical and Pharmacological Sciences, 2019, 23, 1882-1890.	0.5	7
86	Classification of Malignant Melanoma and Benign Nevi from Skin Lesions Based on Support Vector Machine. , 2013, , .		6
87	Adaptive Trajectory Control to Achieve Smooth Interaction Force in Robotic Rehabilitation Device. Procedia Computer Science, 2014, 42, 160-167.	1.2	6
88	A novel upper limb rehabilitation system with self-driven virtual arm illusion. , 2014, 2014, 3614-7.		6
89	Semi advised learning and classification algorithm for partially labeled skin cancer data analysis. , 2017, , .		6
90	Spatio-Temporal Inertial Measurements Feature Extraction Improves Hand Movement Pattern Recognition without Electromyography. , 2018, 2018, 2108-2111.		6

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91	Developing a Three-Dimensional (3D) Assessment Method for Clubfootâ€™A Study Protocol. <i>Frontiers in Physiology</i> , 2017, 8, 1098.	1.3	6
92	Automatic Temperature Measurement for Hot Spots in Face Region of Cattle using Infrared Thermography. , 2019, , .		6
93	Type-2 Fuzzy System Based Blood Pressure Parameters Estimation. , 2008, , .		5
94	Virtual games based self rehabilitation for home therapy system. , 2011, , .		5
95	Swarm-wavelet based extreme learning machine for finger movement classification on transradial amputees. , 2014, 2014, 4192-5.		5
96	Non-contact Dual Pulse Doppler System Based Real-time Relative Demodulation and Respiratory & Heart Rates Estimations for Chronic Heart Failure Patients. <i>Procedia Computer Science</i> , 2015, 76, 47-52.	1.2	5
97	A robust myoelectric pattern recognition using online sequential extreme learning machine for finger movement classification. , 2015, 2015, 7266-9.		5
98	Event-related Potentials of Consumer Preferences. <i>Procedia Computer Science</i> , 2015, 76, 68-73.	1.2	5
99	EMG signal based knee joint torque estimation. , 2016, , .		5
100	Active force control system for hand tremor suppression by different actuators. , 2016, , .		5
101	Semi-advised learning model for skin cancer diagnosis based on histopathological images. , 2016, 2016, 631-634.		5
102	Label Self-Advised Support Vector Machine (LSA-SVM)â€™Automated Classification of Foot Drop Rehabilitation Case Study. <i>Biosensors</i> , 2019, 9, 114.	2.3	5
103	Adaptive Wavelet Extreme Learning Machine (AW-ELM) for Index Finger Recognition Using Two-Channel Electromyography. <i>Lecture Notes in Computer Science</i> , 2014, , 471-478.	1.0	5
104	Adaptive Differential Evolution Based Feature Selection and Parameter Optimization for Advised SVM Classifier. <i>Lecture Notes in Computer Science</i> , 2015, , 401-410.	1.0	5
105	Hierarchical Parallel PSO-SVM Based Subject-Independent Sleep Apnea Classification. <i>Lecture Notes in Computer Science</i> , 2012, , 500-507.	1.0	5
106	INDEX FINGER MOTION RECOGNITION USING SELF-ADVISE SUPPORT VECTOR MACHINE. <i>International Journal on Smart Sensing and Intelligent Systems</i> , 2014, 7, 644-657.	0.4	5
107	Fuzzy discriminant analysis based feature projection in myoelectric control. , 2008, 2008, 5049-52.		4
108	Intelligent Artificial Ants based feature extraction from wavelet packet coefficients for biomedical signal classification. , 2008, , .		4

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109	Bio-driven system-based virtual reality for prosthetic and rehabilitation systems. Signal, Image and Video Processing, 2012, 6, 71-84.	1.7	4
110	Non-contact dual pulse Doppler system based respiratory and heart rates estimation for CHF patients. , 2015, 2015, 4202-5.		4
111	Estimation of angle based on EMG using ANFIS. , 2016, , .		4
112	Active force control system for tremor suppression in elbow joint. , 2016, , .		4
113	An investigation of upper limb motor task based discriminate for high risk autism. , 2017, , .		4
114	Using machine learning to perform early diagnosis of Autism Spectrum Disorder based on simple upper limb movements. International Journal of Hybrid Intelligent Systems, 2019, 15, 195-206.	0.9	4
115	Genetic Fuzzy Approach based Sleep Apnea/Hypopnea Detection. International Journal of Machine Learning and Computing, 2012, , 685-688.	0.8	4
116	Fuzzy logic based behaviors blending for intelligent reactive navigation of walking robot. , 0, , .		3
117	Automated detecting and classifying of sleep apnea syndrome based on genetic-SVM. International Journal of Hybrid Intelligent Systems, 2012, 9, 203-210.	0.9	3
118	Novel feature extraction methodology based on histopathological images and subsequent classification by support vector machine. , 2014, , .		3
119	Augmented Reality based Illusion System with biofeedback. , 2014, , .		3
120	Estimation of Torque Based on EMG using ANFIS. Procedia Computer Science, 2017, 105, 197-202.	1.2	3
121	Analytical solution for forced vibration of piezoelectrically actuated Timoshenko beam. Journal of Intelligent Material Systems and Structures, 2019, 30, 1276-1284.	1.4	3
122	Spatially Filtered Low-Density EMG and Time-Domain Descriptors Improves Hand Movement Recognition. , 2019, 2019, 2671-2674.		3
123	Early Diagnose of Autism Spectrum Disorder Using Machine Learning Based on Simple Upper Limb Movements. Advances in Intelligent Systems and Computing, 2020, , 491-500.	0.5	3
124	Orientation Sensitive Fuzzy C Means Based Fast Level Set Evolution for Segmentation of Histopathological Images to Detect Skin Cancer. Advances in Intelligent Systems and Computing, 2020, , 501-510.	0.5	3
125	A Position Weight Matrix Feature Extraction Algorithm Improves Hand Gesture Recognition. , 2020, 2020, 5765-5768.		3
126	A Hybrid Nonlinear-Discriminant Analysis Feature Projection Technique. Lecture Notes in Computer Science, 2008, , 544-550.	1.0	3

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127	Signal Selection for Sleep Apnea Classification. Lecture Notes in Computer Science, 2012, , 661-671.	1.0	3
128	Feature Extraction Using Wavelet Scattering Transform Coefficients for EMG Pattern Classification. Lecture Notes in Computer Science, 2022, , 181-189.	1.0	3
129	Patient cooperative adaptive controller for lower limb Robotic Rehabilitation Device. , 2014, , .		2
130	Swarm-based extreme learning machine for finger movement recognition. , 2014, , .		2
131	Integrating soft and hard threshold selection algorithms for accurate segmentation of skin lesion. , 2014, , .		2
132	Non-contact real-time estimation of intrapulmonary pressure and tidal volume for chronic heart failure patients. , 2016, 2016, 3564-3567.		2
133	ICA based feature learning and feature selection. , 2016, , .		2
134	Adaptive myoelectric pattern recognition for arm movement in different positions using advanced online sequential extreme learning machine. , 2016, 2016, 900-903.		2
135	Kinect-based 3D assessment for clubfoot deformity. , 2020, , .		2
136	Multi-Agent System Concepts Theory and Application Phases. , 0, , .		2
137	Multi View Face Detection in Cattle Using Infrared Thermography. Communications in Computer and Information Science, 2020, , 223-236.	0.4	2
138	Multi agent system for estimation of cardiovascular parameters. , 2005, , .		1
139	Intelligent Pedestrian Detection System in Semi-dark Environment. , 2009, , .		1
140	Adaptive trajectory control based robotic rehabilitation device. , 2014, , .		1
141	EMG Signal Based Knee Joint Angle Estimation of Flexion and Extension with Extreme Learning Machine (ELM) for Enhancement of Patient-Robotic Exoskeleton Interaction. Lecture Notes in Computer Science, 2015, , 583-590.	1.0	1
142	System identification and damping coefficient estimation from EMG based on ANFIS to optimize human exoskeleton interaction. , 2016, , .		1
143	Analyze the Human Movements to Help CNS to Shape the Synergy using CNMF and Pattern Recognition. Procedia Computer Science, 2017, 105, 170-176.	1.2	1
144	Recurrent Fusion of Time-Domain Descriptors Improves EMG-based Hand Movement Recognition. , 2020, 2020, 657-661.		1

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145	Infrared Thermal Imaging for Evaluation of Clubfoot After the Ponseti Casting Method" An Exploratory Study. <i>Frontiers in Pediatrics</i> , 2021, 9, 595506.	0.9	1
146	Scaled Conjugate Gradient based Decision Support System for Automated Diagnosis of Skin Cancer. , 2014, , .		1
147	Swarm Based Fuzzy Discriminant Analysis for Multifunction Prosthesis Control. <i>Lecture Notes in Computer Science</i> , 2010, , 197-206.	1.0	1
148	Effective Physical Rehabilitation System. <i>Advances in Medical Technologies and Clinical Practice Book Series</i> , 2016, , 180-197.	0.3	1
149	Evaluation of Randomized Variable Translation Wavelet Neural Networks. <i>Communications in Computer and Information Science</i> , 2017, , 3-12.	0.4	1
150	PSO-SVM hybrid system for melanoma detection from histo-pathological images. <i>International Journal of Electrical and Computer Engineering</i> , 2019, 9, 2941.	0.5	1
151	Correction to: Electrogastrogram Based Medical Applications an Overview and Processing Frame Work. <i>Advances in Intelligent Systems and Computing</i> , 2020, , C1-C1.	0.5	1
152	Performance Evaluation of SRELM on Bio-signal Pattern Recognition Using Two Electromyography Channels. <i>International Journal on Advanced Science, Engineering and Information Technology</i> , 2020, 10, 1828-1834.	0.2	1
153	Human-Robot Interaction Torque Estimation Methods for a Lower Limb Rehabilitation Robotic System with Uncertainties. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 5529.	1.3	1
154	Behaviors blending for intelligent reactive navigation of climbing robot. , 0, , .		0
155	New Model to estimate Mean Blood Pressure by Heart Rate with Stroke Volume changing influence. , 2006, 2006, 1803-5.		0
156	General Organising Committee. , 2007, , .		0
157	Preparation and characterization of a conductive polymer/electroactive paper actuator. , 2012, , .		0
158	Continuous prediction of shoulder joint angle in real-time. , 2015, , .		0
159	SA-SVM based automated diagnostic system for skin cancer. , 2015, , .		0
160	ANFIS to estimate damping coefficient from EMG to optimize the interaction force. , 2016, , .		0
161	AW-ELM-based Crouch Gait recognition after ischemic stroke. , 2016, , .		0
162	ANFIS to estimate damping coefficient from EMG to optimize the interaction force. , 2016, , .		0

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163	Automatic seagrass detection: A survey. , 2017, , .		0
164	A Cost-effective Method for Epileptic Seizure Classification. , 2019, , .		0
165	Improved myoelectric pattern recognition of finger movement using rejection-based extreme learning machine. Telkomnika (Telecommunication Computing Electronics and Control), 2021, 19, 134.	0.6	0
166	Blood Pressure Estimation with Considering of Stroke Volume Effect. , 2008, , 173-180.		0
167	Myoelectric Control of Prosthetic Devices for Rehabilitation. , 2008, , 965-971.		0
168	Real Time Biosignal-Driven Illusion System for Upper Limb Rehabilitation. , 2014, , .		0
169	A Binary Level Set Method based on K-Means for Contour Tracking on Skin Cancer Images. , 2014, , .		0
170	Self-Organizing Map based Feature Learning in Bio-Signal Processing. Advances in Science, Technology and Engineering Systems, 2017, 2, 505-512.	0.4	0
171	Optimized Kernel Extreme Learning Machine for Myoelectric Pattern Recognition. International Journal of Electrical and Computer Engineering, 2018, 8, 483.	0.5	0
172	Upper Limb Recovery Prediction After Stroke Rehabilitation Based on Regression Method. Biosystems and Biorobotics, 2019, , 380-384.	0.2	0
173	Hybridization of Local Search Optimization and Support Vector Machine Algorithms for Classification Problems Enhancement. Learning and Analytics in Intelligent Systems, 2020, , 209-217.	0.5	0
174	New Model to estimate Mean Blood Pressure by Heart Rate with Stroke Volume changing influence. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
175	Myoelectric Control of Prosthetic Devices for Rehabilitation. , 0, , 965-973.		0