Mu-Chun Su

List of Publications by Year
in descending order

81 papers	1,369 citations	471509 17 h-index	377865 34 g-index
81 all docs	81 docs citations	81 times ranked	1307 citing authors

#	Article	IF	Citations
1	A modified version of the K-means algorithm with a distance based on cluster symmetry. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2001, 23, 674-680.	13.9	299
2	Application of a novel fuzzy neural network to real-time transient stability swings prediction based on synchronized phasor measurements. IEEE Transactions on Power Systems, 1999, 14, 685-692.	6.5	116
3	Fast self-organizing feature map algorithm. IEEE Transactions on Neural Networks, 2000, 11, 721-733.	4.2	84
4	A Neural-Network-Based Approach to White Blood Cell Classification. Scientific World Journal, The, 2014, 2014, 1-9.	2.1	83
5	Evaluation of a haptics-based virtual reality temporal bone simulator for anatomy and surgery training. Computer Methods and Programs in Biomedicine, 2014, 113, 674-681.	4.7	82
6	A fuzzy rule-based approach to spatio-temporal hand gesture recognition. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2000, 30, 276-281.	2.9	55
7	Three-dimensional, virtual reality vestibular rehabilitation for chronic imbalance problem caused by Ménière's disease: a pilot study. Disability and Rehabilitation, 2017, 39, 1601-1606.	1.8	53
8	Machine learning-based assessment tool for imbalance and vestibular dysfunction with virtual reality rehabilitation system. Computer Methods and Programs in Biomedicine, 2014, 116, 311-318.	4.7	41
9	Neuro-fuzzy networks for voltage security monitoring based on synchronized phasor measurements. IEEE Transactions on Power Systems, 1998, 13, 326-332.	6.5	34
10	A PSO-based rule extractor for medical diagnosis. Journal of Biomedical Informatics, 2014, 49, 53-60.	4.3	31
11	A Q-learning-based swarm optimization algorithm for economic dispatch problem. Neural Computing and Applications, 2016, 27, 2333-2350.	5.6	30
12	Neural-network-based fuzzy model and its application to transient stability prediction in power systems. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 1999, 29, 149-157.	2.9	26
13	Interactive 3-dimensional virtual reality rehabilitation for patients with chronic imbalance and vestibular dysfunction. Technology and Health Care, 2014, 22, 915-921.	1.2	24
14	Prediction of survival of ICU patients using computational intelligence. Computers in Biology and Medicine, 2014, 47, 13-19.	7.0	23
15	A swarm-inspired projection algorithm. Pattern Recognition, 2009, 42, 2764-2786.	8.1	22
16	Music emotion recognition using PSO-based fuzzy hyper-rectangular composite neural networks. IET Signal Processing, 2017, 11, 884-891.	1.5	22
17	EEG-based motor network biomarkers for identifying target patients with stroke for upper limb rehabilitation and its construct validity. PLoS ONE, 2017, 12, e0178822.	2.5	21
18	A static hand gesture recognition system using a composite neural network. , 0, , .		19

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19	A fuzzy rule-based approach to recognizing 3-D arm movements. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2001, 9, 191-201.	4.9	17
20	A Novel Measure for Quantifying the Topology Preservation of Self-Organizing Feature Maps. Neural Processing Letters, 2002, 15, 137-145.	3.2	14
21	A Simple Approach to Implementing a System for Monitoring Driver Inattention. , 2006, , .		14
22	A hand-gesture-based control interface for a car-robot. , 2010, , .		13
23	Smart Project Management: Interactive Platform Using Natural Language Processing Technology. Applied Sciences (Switzerland), 2021, 11, 1597.	2.5	13
24	An efficient initialization scheme for the self-organizing feature map algorithm. , 0, , .		12
25	A NEURAL-NETWORK-BASED APPROACH TO RECOGNIZING 3D ARM MOVEMENTS. Biomedical Engineering - Applications, Basis and Communications, 2003, 15, 17-26.	0.6	12
26	Application of neural networks in cluster analysis. , 0, , .		11
27	Dove Swarm Optimization Algorithm. IEEE Access, 2022, 10, 46690-46696.	4.2	11
28	A variant of the SOM algorithm and its interpretation in the viewpoint of social influence and learning. Neural Computing and Applications, 2009, 18, 1043-1055.	5.6	10
29	Cerebral Small Vessel Disease Biomarkers Detection on MRI-Sensor-Based Image and Deep Learning. Sensors, 2019, 19, 2573.	3.8	10
30	Application of a SOM-Based Optimization Algorithm in Minimizing Construction Time for Secant Pile Wall. Journal of Construction Engineering and Management - ASCE, 2010, 136, 1189-1195.	3.8	9
31	Developing a PSO-Based Projection Algorithm for a Porosity Detection System Using X-Ray CT Images of Permeable Concrete. IEEE Access, 2018, 6, 64406-64415.	4.2	9
32	Application of the Self-Organizing Feature Map Algorithm in Facial Image Morphing. Neural Processing Letters, 2001, 14, 35-47.	3.2	8
33	A reinforcement-learning approach to robot navigation. , 0, , .		8
34	Predicting Aggressive Tendencies by Visual Attention Bias Associated with Hostile Emotions. PLoS ONE, 2016, 11, e0149487.	2.5	8
35	A Video Analytic In-Class Student Concentration Monitoring System. IEEE Transactions on Consumer Electronics, 2021, 67, 294-304.	3.6	8
36	An Eye-Tracking System based on Inner Corner-Pupil Center Vector and Deep Neural Network. Sensors, 2020, 20, 25.	3.8	7

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37	The Application and Improvement of Deep Neural Networks in Environmental Sound Recognition. Applied Sciences (Switzerland), 2020, 10, 5965.	2.5	7
38	SOM-based optimization. , 0, , .		6
39	The changes of improvement-related motor kinetics after virtual reality based rehabilitation. , 2017, , .		6
40	New compensation algorithm for color backlight images. , 0, , .		5
41	Smart training: Mask R-CNN oriented approach. Expert Systems With Applications, 2021, 185, 115595.	7.6	5
42	Application of associative memory in human face detection. , 0, , .		4
43	A Neuro-Fuzzy Approach for Compensating Color Backlight Images. Neural Processing Letters, 2006, 23, 273-287.	3.2	4
44	A Fingertip Extraction Method and Its Application to Handwritten Alphanumeric Characters Recognition. , 2008, , .		4
45	Developing a damage assessment model for bridge surroundings: a study of the disaster caused by Typhoon Morakot in Taiwan. Civil Engineering and Environmental Systems, 2014, 31, 24-35.	0.9	4
46	Depth-Sensor-Based Monitoring of Therapeutic Exercises. Sensors, 2015, 15, 25628-25647.	3.8	4
47	An Assist System for Visually Impaired at Indoor Residential Environment using Faster-RCNN. , 2019, , .		4
48	Smart Living: An Interactive Control System for Household Appliances. IEEE Access, 2021, 9, 14897-14904.	4.2	4
49	Extracting Rules from Composite Neural Networks for Medical Diagnostic Problems. Neural Processing Letters, 1998, 8, 253-263.	3.2	3
50	Application of neural networks in spatio-temporal hand gesture recognition. , 0, , .		3
51	Genetic-algorithms-based approach to self-organizing feature map and its application in cluster analysis. , 0, , .		3
52	Rule extraction for voltage security margin estimation. IEEE Transactions on Industrial Electronics, 1999, 46, 1114-1122.	7.9	3
53	A self-organizing feature-map-based fuzzy system. , 2000, , .		3
54	A SOM-based fuzzy system and its application in handwritten digit recognition. , 0, , .		3

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55	Musical symbol recognition using SOM-based fuzzy systems. , 0, , .		3
56	A hierarchical approach to ART-like clustering algorithm. , 0, , .		3
57	An on-line learning neuro-fuzzy system based on artificial immune systems. , 0, , .		3
58	Swarm-inspired data-driven approach for housing market segmentation: a case study of Taipei city. Journal of Housing and the Built Environment, 2021, 36, 1787.	1.8	3
59	A Projection-Based Human Motion Recognition Algorithm Based on Depth Sensors. IEEE Sensors Journal, 2021, 21, 16990-16996.	4.7	3
60	Facial image morphing by self-organizing feature maps. , 0, , .		2
61	TWO LOW-COST HUMAN COMPUTER INTERFACES FOR PEOPLE WITH SEVERE DISABILITIES. Biomedical Engineering - Applications, Basis and Communications, 2004, 16, 344-349.	0.6	2
62	The MSFAM: a modified fuzzy ARTMAP system. Pattern Analysis and Applications, 2005, 8, 1-16.	4.6	2
63	Optimal construction sequencing for secant pile wall. , 2008, , .		2
64	The development of a robot-based learning companion: a user-centered design approach. Interactive Learning Environments, 2015, 23, 356-372.	6.4	2
65	Fuzzy rule extraction for controller designs. , 0, , .		1
66	A Neural-Network-Based Approach to Detecting Hyperellipsoidal Shells. Neural Processing Letters, 1999, 9, 279-292.	3.2	1
67	Recognition of 3D arm movements using neural networks. , 0, , .		1
68	A new generalized learning vector quantization algorithm. , 0, , .		1
69	A Neural-Network-Based Approach to Optical Symbol Recognition. Neural Processing Letters, 2002, 15, 117-135.	3.2	1
70	A SIMPLE APPROACH TO IMPLEMENTING AN ENVIRONMENTAL CONTROL UNIT FOR THE DISABLED. Biomedical Engineering - Applications, Basis and Communications, 2007, 19, 19-26.	0.6	1
71	A neural-network-based sketch recognition system. , 2012, , .		1
72	To Develop the Virtual Physics Laboratory by Integrating Kinect with Gesture Classification Algorithm. , 2013, , .		1

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73	Prediction of postoperative recovery based on a computational rules extractor. , 2015, , .		1
74	A Jacobian Matrix-Based Learning Machine and Its Applications in Medical Diagnosis. IEEE Access, 2017, 5, 20036-20045.	4.2	1
75	Application of neural networks in detecting hyperellipsoidal shells. , 0, , .		0
76	Adding a healing mechanism in the self-organizing feature map algorithm. , 2000, , .		0
77	A Neural Tree with Partial Incremental Learning Capability. , 2007, , .		0
78	ROBOKID: Let Children Construct Their Own Emotional Kids - Learning by Construction. , 2008, , .		0
79	An innovative VR-based vestibular rehabilitation system. , 2012, , .		0
80	The computational rules extractor in the detection of tax evasion. , 2015, , .		0
81	A guideline to determine the training sample size when applying big data mining methods in clinical decision making. , 2018, , .		0