StanisÅ‚aw Osowski

List of Publications by Year
in descending order

155 papers	3,483 citations	236925 25 h-index	155660 55 g-index
158 all docs	158 docs citations	158 times ranked	3034 citing authors

#	Article	IF	Citations
1	ECG beat recognition using fuzzy hybrid neural network. IEEE Transactions on Biomedical Engineering, 2001, 48, 1265-1271.	4.2	434
2	Support Vector Machine-Based Expert System for Reliable Heartbeat Recognition. IEEE Transactions on Biomedical Engineering, 2004, 51, 582-589.	4.2	420
3	Classification of milk by means of an electronic nose and SVM neural network. Sensors and Actuators B: Chemical, 2004, 98, 291-298.	7.8	171
4	Forecasting of the daily meteorological pollution using wavelets and support vector machine. Engineering Applications of Artificial Intelligence, 2007, 20, 745-755.	8.1	158
5	Accurate Fault Location in the Power Transmission Line Using Support Vector Machine Approach. IEEE Transactions on Power Systems, 2004, 19, 979-986.	6.5	148
6	On-line heart beat recognition using hermite polynomials and neuro-fuzzy network. IEEE Transactions on Instrumentation and Measurement, 2003, 52, 1224-1231.	4.7	146
7	Neural network for estimation of harmonic components in a power system. IEE Proceedings C: Generation Transmission and Distribution, 1992, 139, 129.	0.3	113
8	Metal oxide sensor arrays for detection of explosives at sub-parts-per million concentration levels by the differential electronic nose. Sensors and Actuators B: Chemical, 2012, 161, 528-533.	7.8	100
9	Fourier and wavelet descriptors for shape recognition using neural networks—a comparative study. Pattern Recognition, 2002, 35, 1949-1957.	8.1	98
10	Improving the accuracy of prediction of PM10 pollution by the wavelet transformation and an ensemble of neural predictors. Engineering Applications of Artificial Intelligence, 2012, 25, 1246-1258.	8.1	86
11	Recognition of Coffee Using Differential Electronic Nose. IEEE Transactions on Instrumentation and Measurement, 2012, 61, 1803-1810.	4.7	82
12	Application of Support Vector Machine and Genetic Algorithm for Improved Blood Cell Recognition. IEEE Transactions on Instrumentation and Measurement, 2009, 58, 2159-2168.	4.7	78
13	Higher order statistics and neural network for tremor recognition. IEEE Transactions on Biomedical Engineering, 2002, 49, 152-159.	4.2	66
14	Ensemble Neural Network Approach for Accurate Load Forecasting in a Power System. International Journal of Applied Mathematics and Computer Science, 2009, 19, 303-315.	1.5	65
15	Fast Second Order Learning Algorithm for Feedforward Multilayer Neural Networks and its Applications. Neural Networks, 1996, 9, 1583-1596.	5.9	58
16	Data mining methods for prediction of air pollution. International Journal of Applied Mathematics and Computer Science, 2016, 26, 467-478.	1.5	52
17	Support vector machine for fault diagnosis of the broken rotor bars of squirrel-cage induction motor. Neural Computing and Applications, 2010, 19, 557-564.	5.6	50
18	Classification of gasoline with supplement of bio-products by means of an electronic nose and SVM neural network. Sensors and Actuators B: Chemical, 2006, 113, 135-141.	7.8	47

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19	Recognition and classification system of arrhythmia using ensemble of neural networks. Measurement: Journal of the International Measurement Confederation, 2008, 41, 610-617.	5.0	47
20	Data mining for feature selection in gene expression autism data. Expert Systems With Applications, 2015, 42, 864-872.	7.6	44
21	SVD technique for estimation of harmonic components in a power system: a statistical approach. IET Generation, Transmission and Distribution, 1994, 141, 473.	1.1	41
22	Automatic recognition of the blood cells of myelogenous leukemia using SVM. , 0, , .		41
23	Differential electronic nose and support vector machine for fast recognition of tobacco. Expert Systems With Applications, 2012, 39, 9886-9891.	7.6	34
24	Melanoma recognition using extended set of descriptors and classifiers. Eurasip Journal on Image and Video Processing, 2015, 2015, .	2.6	33
25	High Precision LSTM Model for Short-Time Load Forecasting in Power Systems. Energies, 2021, 14, 2983.	3.1	30
26	Epileptic seizure characterization by Lyapunov exponent of EEG signal. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2007, 26, 1276-1287.	0.9	28
27	Novel methods of image description and ensemble of classifiers in application to mammogram analysis. Expert Systems With Applications, 2017, 81, 67-78.	7.6	27
28	New approach to selection of initial values of weights in neural function approximation. Electronics Letters, 1993, 29, 313.	1.0	26
29	Differential electronic nose of two chemo sensor arrays for odor discrimination. Sensors and Actuators B: Chemical, 2010, 145, 246-249.	7.8	26
30	Lyapunov exponent of EEG signal for epileptic seizure characterization. , 0, , .		23
31	Neural system for heartbeats recognition using genetically integrated ensemble of classifiers. Computers in Biology and Medicine, 2011, 41, 173-180.	7.0	22
32	Gene selection for cancer classification. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2009, 28, 231-241.	0.9	21
33	Computerized system for recognition of autism on the basis of gene expression microarray data. Computers in Biology and Medicine, 2015, 56, 82-88.	7.0	21
34	Support Vector Machine for soft fault location in electrical circuits. Journal of Intelligent and Fuzzy Systems, 2011, 22, 21-31.	1.4	20
35	New automated image analysis method for the assessment of Ki-67 labeling index in meningiomas.. Folia Histochemica Et Cytobiologica, 2010, 47, 587-92.	1.5	20
36	Ensemble of classifiers and wavelet transformation for improved recognition of Fuhrman grading in clear-cell renal carcinoma. Biocybernetics and Biomedical Engineering, 2017, 37, 357-364.	5.9	19

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37	Transfer learning in recognition of drill wear using convolutional neural network. , 2017, , .		18
38	Signal flow graphs and neural networks. Biological Cybernetics, 1994, 70, 387-395.	1.3	17
39	Gas analysis system composed of a solid-state sensor array and hybrid neural network structure. Sensors and Actuators B: Chemical, 1999, 55, 38-46.	7.8	17
40	Neuro-Fuzzy TSK Network for Calibration of Semiconductor Sensor Array for Gas Measurements. IEEE Transactions on Instrumentation and Measurement, 2004, 53, 630-637.	4.7	17
41	Single-class SVM and directed transfer function approach to the localization of the region containing epileptic focus. Neurocomputing, 2009, 72, 1575-1583.	5.9	17
42	Multistage classification by using logistic regression and neural networks for assessment of financial condition of company. Decision Support Systems, 2012, 52, 539-547.	5.9	17
43	Regularisation of neural networks for improved load forecasting in the power system. IET Generation, Transmission and Distribution, 2002, 149, 340.	1.1	14
44	Texture characterization based on the Kolmogorovâ€"Smirnov distance. Expert Systems With Applications, 2015, 42, 503-509.	7.6	14
45	Deep learning and non-negative matrix factorization in recognition of mammograms. Proceedings of SPIE, 2017, , .	0.8	14
46	Neuro-Fuzzy Network for Flavor Recognition and Classification. IEEE Transactions on Instrumentation and Measurement, 2004, 53, 638-644.	4.7	13
47	Smell similarity on the basis of gas sensor array measurements. Sensors and Actuators B: Chemical, 2008, 129, 643-651.	7.8	13
48	Developing automatic recognition system of drill wear in standard laminated chipboard drilling process. Bulletin of the Polish Academy of Sciences: Technical Sciences, 2016, 64, 633-640.	0.8	13
49	Aggregation of classifiers ensemble using local discriminatory power and quantiles. Expert Systems With Applications, 2016, 46, 316-323.	7.6	12
50	Autoencoder versus PCA in face recognition. , 2017, , .		12
51	White Blood Cell Automatic Counting System Based on Support Vector Machine. Lecture Notes in Computer Science, 2007, , 318-326.	1.3	12
52	Chiral behavior of TGS gas sensors: Discrimination of the enantiomers by the electronic nose. Sensors and Actuators B: Chemical, 2007, 122, 493-502.	7.8	11
53	Ensemble of data mining methods for gene ranking. Bulletin of the Polish Academy of Sciences: Technical Sciences, 2012, 60, 461-470.	0.8	11
54	Deep learning in assessment of drill condition on the basis of images of drilled holes. Proceedings of SPIE, 2017, , .	0.8	11

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55	Evolving the ensemble of predictors model for forecasting the daily average PM10. International Journal of Environment and Pollution, 2011, 46, 199.	0.2	10
56	Comparative Analysis of Feature Selection Methods for Blood Cell Recognition in Leukemia. Lecture Notes in Computer Science, 2012, , 467-481.	1.3	10
57	Neural network for estimation of parameters of sinewave. Electronics Letters, 1990, 26, 689-691.	1.0	9
58	Support Vector Machine for Fault Diagnosis in Electrical Circuits. , 2006, , .		9
59	Fusion of FISH image analysis methods of HER2 status determination in breast cancer. Expert Systems With Applications, 2016, 61, 78-85.	7.6	9
60	Automatic Evaluation System of FISH Images in Breast Cancer. Lecture Notes in Computer Science, 2014, , 332-339.	1.3	9
61	Detection of remote harmonics using SVD. , 0, , .		8
62	Recognition and classification of colon cells applying the ensemble of classifiers. Computers in Biology and Medicine, 2009, 39, 156-165.	7.0	8
63	Neural predictor ensemble for accurate forecasting of PM^{10} pollution. , 2010, , .		8
64	Gene selection in autism – Comparative study. Neurocomputing, 2017, 250, 37-44.	5.9	8
65	Deep Learning Approach to Power Demand Forecasting in Polish Power System. Energies, 2020, 13, 6154.	3.1	8
66	Epileptic Seizure Prediction Using Lyapunov Exponents and Support Vector Machine. Lecture Notes in Computer Science, 2007, , 373-381.	1.3	8
67	Random CNN structure: tool to increase generalization ability in deep learning. Eurasip Journal on Image and Video Processing, 2022, 2022, .	2.6	8
68	Realisation of resistive N-port networks using operational amplifiers. Electronics Letters, 1978, 14, 412.	1.0	7
69	Neural networks in interpolation problems. Neurocomputing, 1993, 5, 105-118.	5.9	7
70	Analysis of features for efficient ECG signal classification using neuro-fuzzy network. , 0, , .		7
71	NEURAL METHODS OF CALIBRATION OF SENSORS FOR GAS MEASUREMENTS AND AROMA IDENTIFICATION SYSTEM. Journal of Sensory Studies, 2008, 23, 533-557.	1.6	7
72	Automatic recognition of industrial tools using artificial intelligence approach. Expert Systems With Applications, 2013, 40, 4777-4784.	7.6	7

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73	Differential Electronic Nose in On-Line Dynamic Measurements. Metrology and Measurement Systems, 2014, 21, 649-662.	1.4	7
74	Data mining methods for gene selection on the basis of gene expression arrays. International Journal of Applied Mathematics and Computer Science, 2014, 24, 657-668.	1.5	7
75	Fuzzy self-organizing hybrid neural network for gas analysis system. IEEE Transactions on Instrumentation and Measurement, 2000, 49, 424-428.	4.7	6
76	Fault location in transmission line using hybrid neural network. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2002, 21, 18-30.	0.9	6
77	Localization of spots in FISH images of breast cancer using 3â€Ð shape analysis. Journal of Microscopy, 2016, 262, 252-259.	1.8	6
78	Novel segmentation algorithm for identification of cell membrane staining in HER2 images. Pattern Recognition Letters, 2016, 84, 225-231.	4.2	6
79	Hourglass Shapes in Rank Grey-Level Hit-or-miss Transform for Membrane Segmentation in HER2/neu Images. Lecture Notes in Computer Science, 2015, , 3-14.	1.3	6
80	Shape recognition using FFT preprocessing and neural network. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 1998, 17, 658-666.	0.9	5
81	Wavelets and Support Vector Machine for Forecasting the Meteorological Pollution. , 2006, , .		5
82	Recognition of Colon Cells Using Ensemble of Classifiers. Neural Networks (IJCNN), International Joint Conference on, 2007, , .	0.0	5
83	Single-class SVM classifier for localization of epileptic focus on the basis of EEG. , 2008, , .		5
84	Signal flow graphs for determination of higher order sensitivities of circuit functions. , 2011, , .		5
85	Mining Data of Noisy Signal Patterns in Recognition of Gasoline Bio-Based Additives using Electronic Nose. Metrology and Measurement Systems, 2017, 24, 27-44.	1.4	5
86	Gene Selection for Cancer Classification through Ensemble of Methods. Lecture Notes in Computer Science, 2009, , 507-516.	1.3	5
87	Computerized Classification Systemfor the Identification of Soil Microorganisms. Applied Mathematics and Information Sciences, 2016, 10, 21-31.	0.5	5
88	Support Vector Machine for Recognition of White Blood Cells of Leukaemia. , 2007, , 93-122.		5
89	Analysis of active networks using flow-graph technique. Electronics Letters, 1978, 14, 227.	1.0	4
90	Computerized System for Quantitative Assessment of Atherosclerotic Plaques in the Femoral and Iliac Arteries Visualized by Multislice Computed Tomography. IEEE Transactions on Biomedical Engineering, 2015, 62, 1490-1502.	4.2	4

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91	Computerized classification system for the identification of soil microorganisms. AIP Conference Proceedings, 2015, , .	0.4	4
92	Automatic recognition of drill condition on the basis of images of drilled holes. , 2016, , .		4
93	Thresholding techniques for segmentation of atherosclerotic plaque and lumen areas in vascular arteries. Bulletin of the Polish Academy of Sciences: Technical Sciences, 2015, 63, 269-280.	0.8	4
94	Deep neural networks and classical approach to face recognition - comparative analysis. Przeglad Elektrotechniczny, 2018, 1, 3-6.	0.2	4
95	Neural Approaches to Short-Time Load Forecasting in Power Systemsâ€"A Comparative Study. Energies, 2022, 15, 3265.	3.1	4
96	Synthesis of rational transfer matrices with active RC networks using equal valued grounded capacitors. International Journal of Electronics, 1977, 42, 229-239.	1.4	3
97	Resistive hybrid matrix realisation using operational amplifiers. Electronics Letters, 1979, 15, 426.	1.0	3
98	Synthesis of <i>n</i>â€port networks by a matrixâ€continuant. International Journal of Circuit Theory and Applications, 1979, 7, 77-86.	2.0	3
99	Frequency-multiple generation technique using Chebyshev polynomials. Electronics Letters, 1980, 16, 91.	1.0	3
100	Neural network for nonâ€linear programming with linear equality constraints. International Journal of Circuit Theory and Applications, 1992, 20, 93-98.	2.0	3
101	Learning in dynamic neural networks using signal flow graphs. International Journal of Circuit Theory and Applications, 1999, 27, 209-228.	2.0	3
102	Ensemble of neural predictors for forecasting the atmospheric pollution. , 2008, , .		3
103	Anomaly detection in ECG using wavelet transformation. , 2020, , .		3
104	Synthesis of an arbitrary voltage transfer function. International Journal of Electronics, 1976, 41, 73-80.	1.4	2
105	Analysis of active ladder network by using coates flow graphs and continuants. International Journal for Numerical Methods in Engineering, 1977, 11, 900-904.	2.8	2
106	Synthesis of active RC multiport voltage transfer functions with reduced number of operational amplifiers. Electronics Letters, 1978, 14, 665.	1.0	2
107	Analogue simulation of the nonlinear transfer characteristics: a novel approach. IEE Journal on Electronic Circuits and Systems, 1978, 2, 26.	0.4	2
108	Voltage transfer function realisation using active R network: flow-graph technique. Electronics Letters, 1979, 15, 416.	1.0	2

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109	Modelling of sinusoidal function for nonlinear signal processing applications. Electronics Letters, 1991, 27, 642.	1.0	2
110	Genetic algorithm for integration of ensemble of classifiers in arrhythmia recognition. , 2009, , .		2
111	Nucleolus detection in the Fuhrman grading system for application in CCRC. Biomedizinische Technik, 2014, 59, 79-86.	0.8	2
112	Diagnostic System of Drill Condition in Laminated Chipboard Drilling Process. MATEC Web of Conferences, 2017, 125, 04002.	0.2	2
113	Methods of Integration of Ensemble of Neural Predictors of Time Series - Comparative Analysis. Lecture Notes in Computer Science, 2011, , 41-50.	1.3	2
114	Signal flow graphs and neural networks. Biological Cybernetics, 1994, 70, 387-395.	1.3	2
115	Reply: Neural network for estimation of parameters of sinewave. Electronics Letters, 1992, 28, 1751.	1.0	2
116	Deep CNN ensemble for recognition of face images. , 2021, , .		2
117	Feature Selection Methods in Gene Recognition Problem. , 2020, , .		2
118	Nonlinear<tex>x^2</tex>-controlled elements and their applications. IEEE Transactions on Circuits and Systems, 1982, 29, 578-581.	0.9	1
119	Computer simulation of SC circuits using NAP. Electronics Letters, 1987, 23, 547-549.	1.0	1
120	Neural network approach to the solution of linear complementarity problems. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 1995, 8, 431-445.	1.9	1
121	Multilayer volterra filter and its applications. Neural Computing and Applications, 1996, 4, 228-236.	5.6	1
122	Integration of multiple neural classifiers for heart beat recognition. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2005, 24, 648-661.	0.9	1
123	Matrix method of sensitivity computation of linear networks. Electronics Letters, 2005, 41, 115.	1.0	1
124	Blind source separation for improved load forecasting in the power system. , 0, , .		1
125	Neural predictors and wavelet transformation for forecasting the PM10 pollution. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2011, 30, 1376-1388.	0.9	1
126	Modified neuro-fuzzy TSK network and its application in electronic nose. Bulletin of the Polish Academy of Sciences: Technical Sciences, 2013, 61, 675-680.	0.8	1

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127	Milk duct segmentation in microscopic HE images of breast cancer tissues. MATEC Web of Conferences, 2017, 125, 04013.	0.2	1
128	Data Mining of Electricity Consumption in Small Power Region. , 2018, , .		1
129	Neural Network Ensemble for 24-Hour Load Pattern Prediction in Power System. Studies in Computational Intelligence, 2010, , 151-169.	0.9	1
130	Prediction of Power Consumption for Small Power Region Using Indexing Approach and Neural Network. Lecture Notes in Computer Science, 2010, , 54-59.	1.3	1
131	Optimisation approach to the analysis of piecewise-linear convex circuits. IEE Proceedings, Part G: Circuits, Devices and Systems, 1992, 139, 295.	0.2	1
132	Analysis of cascade connection of nonalike 2-ports. IEEE Transactions on Circuits and Systems, 1977, 24, 275-277.	0.9	0
133	Rational admittance function realisation using two operational amplifiers. Electronics Letters, 1979, 15, 85.	1.0	0
134	Reply: Synthesis of active RC multiport voltage transfer functions with reduced number of operational amplifiers. Electronics Letters, 1980, 16, 333.	1.0	0
135	Conductance matrix approach to the synthesis of active resistive N- port networks. International Journal of Electronics, 1980, 48, 165-173.	1.4	0
136	Minimal realization of two-port parameters. International Journal of Electronics, 1982, 52, 217-229.	1.4	0
137	Synthesis of voltage transfer matrix using universal building blocks. International Journal of Electronics, 1984, 57, 681-691.	1.4	0
138	Novel realisation of convertor-type gyrator. Electronics Letters, 1986, 22, 424.	1.0	0
139	Design of nonlinear circuits using a numerical optimization method. International Journal of Electronics, 1989, 66, 93-108.	1.4	0
140	Non-linear diode ladder network. International Journal of Electronics, 1991, 70, 591-598.	1.4	0
141	OLS versus SVM approach to learning of RBF networks. , 0, , .		0
142	Support Vector Machine for Recognition of Bio-products in Gasoline. Lecture Notes in Computer Science, 2005, , 899-904.	1.3	0
143	Short Term Load Forecasting Model in the Power System Using Ensemble of Predictors. Conference Record - IEEE Instrumentation and Measurement Technology Conference, 2007, , .	0.0	0
144	Higherâ€order differentiation of network functions using signal flow graphs. International Journal of Circuit Theory and Applications, 2012, 40, 975-983.	2.0	0

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145	Dynamic models of epidemic &#x2014; Preliminary study. , 2015, , .		0
146	Particle swarm optimization in synthesis of electric circuits. , 2016, , .		0
147	Exploration of noisy data in differential electronic nose. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2016, 35, 1382-1392.	0.9	0
148	Local Dynamic Fusion for 24-Hour Load Pattern Prediction in Power System. , 2018, , .		0
149	Prediction of Air Pollution Using LSTM. Lecture Notes in Computer Science, 2021, , 208-219.	1.3	0
150	Hierarchical System of Gene Selection Based on Deep Learning and Ensemble Approach. , 2021, , .		0
151	Recognition of Heartbeats Using Support Vector Machine Networks â€" A Comparative Study. Lecture Notes in Computer Science, 2005, , 637-642.	1.3	0
152	Gradients and Active Contour Models for Localization of Cell Membrane in HER2/neu Images. Lecture Notes in Computer Science, 2015, , 432-444.	1.3	0
153	Nonlinear resistive network synthesis. IEE Proceedings, Part G: Electronic Circuits and Systems, 1983, 130, 15.	0.2	0
154	Image Processing for Localization and Parameterization of the Glandular Ducts of Colon in Inflammatory Bowel Diseases. , 0, , 688-708.		0
155	Image Processing for Localization and Parameterization of the Glandular Ducts of Colon in Inflammatory Bowel Diseases. , 0, , 1-24.		0