Caro Lucas

List of Publications by Year
in descending order

104 papers	4,530 citations	186265 28 h-index	175258 52 g-index
105 all docs	105 docs citations	105 times ranked	3294 citing authors

#	Article	IF	Citations
1	Imperialist competitive algorithm: An algorithm for optimization inspired by imperialistic competition. , 2007, , .		1,495
2	Optimal Placement of Phasor Measurement Units Using Immunity Genetic Algorithm. IEEE Transactions on Power Delivery, 2009, 24, 1014-1020.	4.3	322
3	Introducing Belbic: Brain Emotional Learning Based Intelligent Controller. Intelligent Automation and Soft Computing, 2004, 10, 11-21.	2.1	269
4	Colonial competitive algorithm. International Journal of Intelligent Computing and Cybernetics, 2008, 1, 337-355.	2.7	211
5	Application of an imperialist competitive algorithm to the design of a linear induction motor. Energy Conversion and Management, 2010, 51, 1407-1411.	9.2	133
6	Predicting Chaotic Time Series Using Neural and Neurofuzzy Models: A Comparative Study. Neural Processing Letters, 2006, 24, 217-239.	3.2	122
7	Imperialist competitive algorithm for minimum bit error rate beamforming. International Journal of Bio-Inspired Computation, 2009, 1, 125.	0.9	96
8	Brain emotional learning based intelligent controller applied to neurofuzzy model of micro-heat exchanger. Expert Systems With Applications, 2007, 32, 911-918.	7.6	95
9	Implementation of Emotional Controller for Interior Permanent-Magnet Synchronous Motor Drive. IEEE Transactions on Industry Applications, 2008, 44, 1466-1476.	4.9	93
10	Model-based fault detection and isolation of a steam generator using neuro-fuzzy networks. Neurocomputing, 2009, 72, 2939-2951.	5.9	84
11	Aerospace launch vehicle control: an intelligent adaptive approach. Aerospace Science and Technology, 2006, 10, 149-155.	4.8	75
12	Motion Control of Omni-Directional Three-Wheel Robots by Brain-Emotional-Learning-Based Intelligent Controller. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2010, 40, 630-638.	2.9	70
13	Recursive Gathâ€"Geva clustering as a basis for evolving neuro-fuzzy modeling. Evolving Systems, 2010, 1, 59-71.	3.9	63
14	Emotional learning based intelligent controller for a PWR nuclear reactor core during load following operation. Annals of Nuclear Energy, 2008, 35, 2051-2058.	1.8	61
15	Implementation of Emotional Controller for Interior Permanent Magnet Synchronous Motor Drive. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2006, , .	0.0	58
16	Multiobjective invasive weed optimization: Application to analysis of Pareto improvement models in electricity markets. Applied Soft Computing Journal, 2012, 12, 100-112.	7.2	56
17	Speed and Flux Control of Induction Motors Using Emotional Intelligent Controller. IEEE Transactions on Industry Applications, 2011, 47, 1126-1135.	4.9	55
18	Solar activity forecast: Spectral analysis and neurofuzzy prediction. Journal of Atmospheric and Solar-Terrestrial Physics, 2005, 67, 595-603.	1.6	54

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19	Aggregation of web search engines based on users' preferences in WebFusion. Knowledge-Based Systems, 2007, 20, 321-328.	7.1	50
20	INTELLIGENT MODELING AND CONTROL OF WASHING MACHINE USING LOCALLY LINEAR NEURO-FUZZY (LLNF) MODELING AND MODIFIED BRAIN EMOTIONAL LEARNING BASED INTELLIGENT CONTROLLER (BELBIC). Asian Journal of Control, 2006, 8, 393-400.	3.0	49
21	An intelligent nuclear reactor core controller for load following operations, using recurrent neural networks and fuzzy systems. Annals of Nuclear Energy, 2003, 30, 63-80.	1.8	44
22	Nonlinear Control and Disturbance Decoupling of HVAC Systems Using Feedback Linearization and Backstepping With Load Estimation. IEEE Transactions on Control Systems Technology, 2008, 16, 918-929.	5.2	43
23	A Neurocomputational Model for Cocaine Addiction. Neural Computation, 2009, 21, 2869-2893.	2.2	43
24	Sensorless speed control of switched reluctance motor using brain emotional learning based intelligent controller. Energy Conversion and Management, 2011, 52, 85-96.	9.2	42
25	Extracting the main patterns of natural time series for long-term neurofuzzy prediction. Neural Computing and Applications, 2007, 16, 383-393.	5.6	40
26	Identification and real-time position control of a servo-hydraulic rotary actuator by means of a neurobiologically motivated algorithm. ISA Transactions, 2012, 51, 208-219.	5.7	38
27	Individual Differences in Nucleus Accumbens Dopamine Receptors Predict Development of Addiction-Like Behavior: A Computational Approach. Neural Computation, 2010, 22, 2334-2368.	2.2	37
28	A hybrid IWO/PSO algorithm for fast and global optimization. , 2009, , .		35
29	A study of electricity market dynamics using Invasive Weed Colonization Optimization. , 2008, , .		31
30	An online predictor model as adaptive habitually linear and transiently nonlinear model. Evolving Systems, 2010, 1, 29-41.	3.9	31
31	Evolving Takagi–Sugeno fuzzy model based on switching to neighboring models. Applied Soft Computing Journal, 2013, 13, 939-946.	7.2	31
32	Lumped thermal model for switched reluctance motor applied to mechanical design optimization. Mathematical and Computer Modelling, 2007, 45, 625-638.	2.0	29
33	Designing MIMO PIID controller using colonial competitive algorithm: Applied to distillation column process. , 2008, , .		28
34	Identification of a nuclear reactor core (VVER) using recurrent neural networks. Annals of Nuclear Energy, 2002, 29, 1225-1240.	1.8	27
35	Introducing evolving Takagi–Sugeno method based on local least squares support vector machine models. Evolving Systems, 2012, 3, 81-93.	3.9	24
36	Axial offset control of PWR nuclear reactor core using intelligent techniques. Nuclear Engineering and Design, 2004, 227, 285-300.	1.7	23

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37	A comparative study of various intelligent based controllers for speed control of IPMSM drives in the field-weakening region. Expert Systems With Applications, 2011, 38, 12643-12653.	7.6	23
38	Multi-step prediction of Dst index using singular spectrum analysis and locally linear neurofuzzy modeling. Earth, Planets and Space, 2006, 58, 331-341.	2.5	22
39	Combination of Singular Spectrum Analysis and Autoregressive Model for Short Term Load Forecasting. , 2007, , .		20
40	BARP-A Dynamic Routing Protocol for Balanced Distribution of Traffic in NoCs. , 2008, , .		20
41	Locally linear neurofuzzy modeling and prediction of geomagnetic disturbances based on solar wind conditions. Space Weather, 2006, 4, n/a-n/a.	3.7	19
42	Forecasting sunspot numbers with the aid of fuzzy descriptor models. Space Weather, 2007, 5, .	3.7	18
43	Introducing adaptive neurofuzzy modeling with online learning method for prediction of time-varying solar and geomagnetic activity indices. Expert Systems With Applications, 2010, 37, 8267-8277.	7.6	18
44	Recursive Gath-Geva clustering as a basis for evolving neuro-fuzzy modeling. , 2010, , .		17
45	Application of various methods for 2D inverse modeling of residual gravity anomalies. Acta Geophysica, 2010, 58, 317-336.	2.0	16
46	Black box modeling of magnetospheric dynamics to forecast geomagnetic activity. Space Weather, 2004, 2, n/a-n/a.	3.7	15
47	NEURO-FUZZY BASED FAULT DIAGNOSIS OF A STEAM GENERATOR. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 1180-1185.	0.4	15
48	Adaptive prediction of epileptic seizures from intracranial recordings. Biomedical Signal Processing and Control, 2012, 7, 456-464.	5.7	15
49	A new systematic design for Habitually Linear Evolving TS Fuzzy Model. Expert Systems With Applications, 2012, 39, 1725-1736.	7.6	15
50	A particle-swarm-based approach for optimum design of BELBIC controller in AVR system. , 2008, , .		14
51	Discrete invasive weed optimization algorithm: application to cooperative multiple task assignment of UAVs. , 2009, , .		14
52	The Application of the Locally Linear Model Tree on Customer Churn Prediction. , 2009, , .		13
53	A New Approach for Image Watermarking by using Particle Swarm Optimization. , 2007, , .		12
54	DESIGN OF AN AEROSPACE LAUNCH VEHICLE AUTOPILOT BASED ON OPTIMIZED EMOTIONAL LEARNING ALGORITHM. Cybernetics and Systems, 2008, 39, 284-303.	2.5	12

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55	Applying <scp>B</scp>rain <scp>E</scp>motional <scp>L</scp>earning <scp>B</scp>ased <scp>I</scp>ntelligent <scp>C</scp>ontroller (<scp>B</scp>elbic) to Multiple‐Area Power Systems. Asian Journal of Control, 2012, 14, 1580-1588.	3.0	11
56	Reinforcement _recurrent fuzzy rule based system based on brain emotional learning structure to predict the complexity dynamic system. , 2008, , .		10
57	Emotional control of inverted pendulum system: A soft switching from imitative to emotional learning. , 2009, , .		8
58	A New Approach to Spatio-Temporal Calculation of Nuclear Reactor Cores Using Neural Computing. Nuclear Science and Engineering, 2007, 155, 119-130.	1.1	7
59	INTELLIGENT ADAPTIVE CONTROL OF NON-LINEAR SYSTEMS BASED ON EMOTIONAL LEARNING APPROACH. International Journal on Artificial Intelligence Tools, 2007, 16, 69-85.	1.0	7
60	How can fuzzy logic determine game equilibriums better?. , 2008, , .		7
61	Cooperative coevolutionary invasive weed optimization and its application to Nash equilibrium search in electricity markets. , 2009, , .		7
62	Imitative learning based emotional controller for unknown systems with unstable equilibrium. International Journal of Intelligent Computing and Cybernetics, 2010, 3, 334-359.	2.7	7
63	Online Multi-step Ahead Prediction of Time-Varying Solar and Geomagnetic Activity Indices via Adaptive Neurofuzzy Modeling and Recursive Spectral Analysis. Solar Physics, 2011, 272, 189-213.	2.5	7
64	Adaptive neuro-fuzzy inference systems for semi-automatic discrimination between seismic events: a study in Tehran region. Journal of Seismology, 2012, 16, 291-303.	1.3	7
65	APPLICATION OF ACTOR-CRITIC REINFORCEMENT LEARNING METHOD FOR CONROL OF A SAGITTAL ARM DURING OSCILLATORY MOVEMENT. Biomedical Engineering - Applications, Basis and Communications, 2004, 16, 305-312.	0.6	6
66	Modified Passivity-Based Control of Switched-Reluctance Motor with Speed and Load Torque Observers. Industrial Electronics Society (IECON), Annual Conference of IEEE, 2006, , .	0.0	6
67	A New Split and Merge Algorithm for Structure Identification in Takagi-Sugeno Fuzzy Model. , 2007, , .		6
68	Long-term prediction of solar and geomagnetic activity daily time series using singular spectrum analysis and fuzzy descriptor models. Earth, Planets and Space, 2009, 61, 1089-1101.	2.5	6
69	Effective spatial clustering methods for optimal facility establishment. Intelligent Data Analysis, 2009, 13, 61-84.	0.9	5
70	Fast evolving neuro-fuzzy model and its application in online classification and time series prediction. Pattern Analysis and Applications, 2012, 15, 279-288.	4.6	5
71	Artificial bee colony based learning of local linear neuro-fuzzy models. , 2013, , .		5
72	A heuristic algorithm for clustering rooted ordered trees. Intelligent Data Analysis, 2007, 11, 355-376.	0.9	4

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73	Nonlinear optimal control of washing machine based on approximate solution of HJB equation. Optimal Control Applications and Methods, 2008, 29, 1-18.	2.1	4
74	Online identification of a neuro-fuzzy model through indirect fuzzy clustering of data space. , 2009, , .		4
75	Online extraction of main linear trends for nonlinear time-varying processes. Information Sciences, 2013, 220, 22-33.	6.9	4
76	Implementation of a Genetically Optimized Interpolative Fuzzy Inference Engine in Controlling a Ball-Plate Laboratory Setup. , 2003, , .		4
77	Fuzzy descriptor systems and spectral analysis for chaotic time series prediction. Neural Computing and Applications, 2009, 18, 991-1004.	5.6	3
78	Input Selection Based on Information Theory forÂConstructing Predictor Models of Solar andÂGeomagnetic Activity Indices. Solar Physics, 2009, 258, 297-318.	2.5	3
79	Generating flexible convex hyper-polygon validity regions via sigmoid-based membership functions in TS modeling. Applied Soft Computing Journal, 2015, 28, 589-598.	7.2	3
80	NEUROFUZZY MODELING OF NATURAL FREQUENCIES OF CYLINDRICAL SHELLS APPLIED TO EVOLUTIONARY BASED OPTIMAL DESIGN OF SR MOTORS. International Journal of Computational Methods, 2006, 03, 263-277.	1.3	2
81	Optimizing High Speed Flip-Flop Using Genetic Algorithm. , 2006, , .		2
82	On the Effectiveness of Prioritized User-Profile and Detecting Active Users in Collaborative Filtering Recommender Systems. , 2007, , .		2
83	Power management by brain emotional learning algorithm. , 2007, , .		2
84	Improving EEG signal prediction via SSA and channel selection. , 2009, , .		2
85	Decision making strategy in the designing of a fuzzy controller for inverted pendulum-cart system. , 2010, , .		2
86	WLoLiMoT: A Wavelet and LoLiMoT Based Algorithm for Time Series Prediction. , 2011, , 345-355.		2
87	Fuzzy-AHP method for measuring Intellectual Capital in Iran insurance industry. , 2006, , .		1
88	Mixture weighted gating and its application to target tracking. , 2006, , .		1
89	Input Stimuli Evolution for RFID Tag Functional Verification. , 2007, , .		1
90	User Modeling for the Result Re-Ranking in the Meta-Search Engines via Reinforcement Learning. , 2007, , .		1

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91	Combined Intelligent Control (CIC) an Intelligent Decision Making Algorithm. International Journal of Advanced Robotic Systems, 2007, 4, 6.	2.1	1
92	Prediction of financial time series with recurrent LoLiMot (locally linear model tree). , 2010, , .		1
93	Face Localization Using an Effective Co-evolutionary Genetic Algorithm. , 2010, , .		1
94	Who Moved?! An Investigation into Distribution of Actions and Behaviors in a Multi Agent System. , 2006, , .		0
95	Optimal fuzzy passing strategy for robot soccer players. , 2008, , .		0
96	Fuzzy Clustering of Transient Evoked OtoAcoustic Emission Signals Using Gustafson Kessel Algorithm. , 2008, , .		0
97	Acquisition of shared symbols in multi-agent cooperative tasks. , 2009, , .		0
98	A hybrid speed sensorless MTPA vector controller for IPMSM drive incorporated with online parameter identification. , 2010, , .		0
99	A Rough Set Approach Aim to Space Weather and Solar Storms Prediction. Lecture Notes in Computer Science, 2011, , 588-601.	1.3	0
100	BANDWIDTH-SENSITIVE ROUTING: FROM INDIVIDUALISM TO COLLECTIVISM. Cybernetics and Systems, 2012, 43, 199-226.	2.5	0
101	MODEL BASED FAULT DIAGNOSIS OF A PWR NUCLEAR POWER PLANT USING FUZZY INFERENCE APPROACH. , 2008, , .		0
102	Using Neurofuzzy Models and Spectral Analysis for Prediction of the Exotic Phenomena with Catastrophic Jumps. Lecture Notes in Computer Science, 2008, , 1156-1170.	1.3	0
103	A New Split and Merge Algorithm for Structure Identification in Takagi-Sugeno Fuzzy Model. , 2007, , .		0
104	User Modeling for the Result Re-Ranking in the Meta-Search Engines via Reinforcement Learning. , 2007, , .		0