Oscar Castillo

List of Publications by Year in Descending Order

863 papers	14,767 citations	66 h-index	99 g-index
1,009 ext. papers	17,079 ext. citations	2 avg, IF	7.53 L-index

#	Paper	IF	Citations
863	A New Cuckoo Search Algorithm Using Interval Type-2 Fuzzy Logic for Dynamic Parameter Adaptation. *Lecture Notes in Networks and Systems*, **2022**, 853-860	0.5	0
862	Optimal Fuzzy Controller Design for Autonomous Robot Path Tracking Using Population-Based Metaheuristics. *Symmetry*, **2022**, 14, 202	2.7	4
861	A Deep-learned Type-3 Fuzzy System and Its Application in Modeling Problems. *Acta Polytechnica Hungarica*, **2022**, 19, 151-172	2.2	5
860	Simulation Results. *SpringerBriefs in Applied Sciences and Technology*, **2022**, 29-65	0.4	
859	String Theory Algorithm. *SpringerBriefs in Applied Sciences and Technology*, **2022**, 11-27	0.4	0
858	Analysis of Cotton Yarn Count by Fuzzy Logic Model. *Algorithms for Intelligent Systems*, **2022**, 349-361	0.5	
857	Convolutional Neural Network Design Using a Particle Swarm Optimization for Face Recognition. *Lecture Notes in Networks and Systems*, **2022**, 233-242	0.5	0
856	Type-2 Fuzzy Logic Systems. *Studies in Fuzziness and Soft Computing*, **2022**, 5-11	0.7	1
855	Introduction to Interval Type-3 Fuzzy Systems. *Studies in Fuzziness and Soft Computing*, **2022**, 1-4	0.7	2
854	Interval Type-3 Fuzzy Sets. *Studies in Fuzziness and Soft Computing*, **2022**, 13-43	0.7	0
853	A Review on the Role of Computational Intelligence on Sustainability Development. *Studies in Computational Intelligence*, **2022**, 3-18	0.8	
852	Generalized Type-2 Fuzzy Parameter Adaptation in the Marine Predator Algorithm for Fuzzy Controller Parameterization in Mobile Robots. *Symmetry*, **2022**, 14, 859	2.7	3
851	Interval Type-3 Fuzzy Aggregation of Neural Networks for Multiple Time Series Prediction: The Case of Financial Forecasting. *Axioms*, **2022**, 11, 251	1.6	0
850	Fuzzy-Chaotic Variant of the Multiverse Optimizer Algorithm in Benchmark Function Optimization. *Lecture Notes in Networks and Systems*, **2022**, 53-63	0.5	
849	Mixing Population-Based Metaheuristics: An Approach Based on a Distributed-Queue for the Optimal Design of Fuzzy Controllers. *Lecture Notes in Networks and Systems*, **2022**, 839-846	0.5	
848	Stabilization of a Fuzzy Controller Using an Interval Type-2 Fuzzy System Designed with the Bee Colony Optimization Algorithm. *Lecture Notes in Networks and Systems*, **2022**, 713-721	0.5	
847	Parameter Adaptation in Harmony Search with Shadowed Type-2 Fuzzy Approach for Designing Optimized Interval Type-2 Fuzzy Controllers. *Lecture Notes in Networks and Systems*, **2022**, 730-738	0.5	

846	Interval Type-3 Fuzzy Aggregators for Ensembles of Neural Networks in Time Series Prediction. *Lecture Notes in Networks and Systems*, **2022**, 785-793	0.5	0
845	Interval Type-2 Fuzzy Dynamic Parameter Adaptation in Bee Colony Optimization for Autonomous Mobile Robot Navigation. *Studies in Fuzziness and Soft Computing*, **2021**, 45-62	0.7	1
844	Optimization of Fuzzy Logic Controllers with Distributed Bio-Inspired Algorithms. *Studies in Computational Intelligence*, **2021**, 1-11	0.8	3
843	Optimization of Fuzzy Controllers for Autonomous Mobile Robots Using the Stochastic Fractal Search Method. *Studies in Computational Intelligence*, **2021**, 175-188	0.8	
842	Review of Fuzzy Control for Path Tracking in the Robotino System. *Studies in Computational Intelligence*, **2021**, 205-215	0.8	
841	Optimal Design of Fuzzy Logic Systems Through a Chicken Search Optimization Algorithm Applied to a Benchmark Problem. *Studies in Computational Intelligence*, **2021**, 229-247	0.8	3
840	Optimization of Fuzzy Trajectory Tracking in Autonomous Mobile Robots Based on Bio-inspired Algorithms. *Studies in Computational Intelligence*, **2021**, 249-271	0.8	2
839	Optimization of Fuzzy Systems Through Metaheuristics in Control Systems. *Studies in Computational Intelligence*, **2021**, 299-313	0.8	
838	A Comparative Study of the Grey Wolf Optimizer and Firefly Algorithm in Mathematical Benchmark Functions of the CEC 15 Competition. *Studies in Computational Intelligence*, **2021**, 163-174	0.8	0
837	Fuzzy Logic Systems. *SpringerBriefs in Applied Sciences and Technology*, **2021**, 5-8	0.4	1
836	Differential Evolution Algorithm. *SpringerBriefs in Applied Sciences and Technology*, **2021**, 9-12	0.4	
835	Proposed Method. *SpringerBriefs in Applied Sciences and Technology*, **2021**, 13-15	0.4	
834	Frequency Regulation System: A Deep Learning Identification, Type-3 Fuzzy Control and LMI Stability Analysis. *Energies*, **2021**, 14, 7801	3.1	0
833	Shadowed Type-2 Fuzzy Systems for Dynamic Parameter Adaptation in Harmony Search and Differential Evolution for Optimal Design of Fuzzy Controllers. *Mathematics*, **2021**, 9, 2439	2.3	2
832	Optimization of Type-2 and Intuitionistic Fuzzy Systems in Intelligent Control. *Advances in Intelligent Systems and Computing*, **2021**, 292-300	0.4	1
831	Comparison of Neural Network Models Applied to Human Recognition. *Advances in Intelligent Systems and Computing*, **2021**, 130-142	0.4	1
830	Fuzzy Dynamic Parameter Adaptation for Particle Swarm Optimization of Modular Granular Neural Networks Applied to Time Series Prediction. *Studies in Computational Intelligence*, **2021**, 189-204	0.8	1
829	Optimal Design of Interval Type-2 Fuzzy Tracking Controllers of Mobile Robots Using a Metaheuristic Algorithm. *Studies in Computational Intelligence*, **2021**, 315-341	0.8	3

828	A Novel Study of the Multi-verse Optimizer and Its Applications on Multiple Areas of Computer Science. *Studies in Computational Intelligence*, **2021**, 133-144	0.8	3
827	Best fit membership function for designing fuzzy logic controller aided intelligent overcurrent fault protection scheme. *International Transactions on Electrical Energy Systems*, **2021**, 31, e12875	2.2	1
826	Special Issue on Intelligent Biomedical Data Analysis and Processing. *Intelligent Decision Technologies*, **2021**, 15, 13-17	0.7	
825	An Efficient Chicken Search Optimization Algorithm for the Optimal Design of Fuzzy Controllers. *Axioms*, **2021**, 10, 30	1.6	5
824	A New Approach for Dynamic Stochastic Fractal Search with Fuzzy Logic for Parameter Adaptation. *Fractal and Fractional*, **2021**, 5, 33	3	2
823	Bio-Inspired Algorithms and Its Applications for Optimization in Fuzzy Clustering. *Algorithms*, **2021**, 14, 122	1.8	14
822	High-Speed Interval Type-2 Fuzzy Systems for Dynamic Parameter Adaptation in Harmony Search for Optimal Design of Fuzzy Controllers. *Mathematics*, **2021**, 9, 758	2.3	8
821	A Novel Fractional-Order Multiple-Model Type-3 Fuzzy Control for Nonlinear Systems with Unmodeled Dynamics. *International Journal of Fuzzy Systems*, **2021**, 23, 1633	3.6	20
820	Editorial on Special Issue: Trends and Developments on Type-2 Fuzzy Sets and Systems *International Journal of Fuzzy Systems*, **2021**, 23, 1055-1056	3.6	
819	Type-2 intuitionistic fuzzy matrix games based on a new distance measure: Application to biogas-plant implementation problem. *Applied Soft Computing Journal*, **2021**, 106, 107357	7.5	17
818	Inventory of a deteriorating green product with preservation technology cost using a hybrid algorithm. *Soft Computing*, **2021**, 25, 11621-11636	3.5	1
817	Differential Evolution Algorithm with Type-2 Fuzzy Logic for Dynamic Parameter Adaptation with Application to Intelligent Control. *SpringerBriefs in Applied Sciences and Technology*, **2021**,	0.4	5
816	Optimization of Type-2 Fuzzy Logic Controller Design Using the GSO and FA Algorithms. *International Journal of Fuzzy Systems*, **2021**, 23, 42-57	3.6	30
815	Joint set-up of parameters in genetic algorithms and the artificial bee colony algorithm: an approach for cultivation process modelling. *Soft Computing*, **2021**, 25, 2015-2038	3.5	6
814	Control Strategies Based on Interval Type-2 Fuzzy Logic for Autonomous Mobile and Humanoid Robots. *Studies in Systems, Decision and Control*, **2021**, 221-236	0.8	1
813	Gradient Stabilization of Infinite Dimensional Bilinear Systems. *Studies in Systems, Decision and Control*, **2021**, 251-288	0.8	
812	Stabilization of Infinite Dimensional Linear Systems. *Studies in Systems, Decision and Control*, **2021**, 11-38	0.8	
811	Regional Stabilization of Infinite Dimensional Linear Systems. *Studies in Systems, Decision and Control*, **2021**, 73-110	0.8	

810	GPU Accelerated Membrane Evolutionary Artificial Potential Field for Mobile Robot Path Planning. *Studies in Computational Intelligence*, **2021**, 233-247	0.8	0
809	A Review on the Cuckoo Search Algorithm. *Studies in Computational Intelligence*, **2021**, 113-124	0.8	1
808	Regional Gradient Stabilization of Infinite Dimensional Semilinear Systems. *Studies in Systems, Decision and Control*, **2021**, 289-306	0.8	0
807	Optimization using the firefly algorithm of ensemble neural networks with type-2 fuzzy integration for COVID-19 time series prediction. *Soft Computing*, **2021**, 1-38	3.5	7
806	Proposed Methodology. *SpringerBriefs in Applied Sciences and Technology*, **2021**, 29-62	0.4	
805	Gradient Stabilization of Infinite Dimensional Linear Systems. *Studies in Systems, Decision and Control*, **2021**, 213-228	0.8	
804	Stochastic Fractal Dynamic Search for the Optimization of CEC2017 Benchmark Functions. *Advances in Intelligent Systems and Computing*, **2021**, 349-357	0.4	
803	Beam and Ball Plant System Controlling Using Intuitionistic Fuzzy Control. *IFIP Advances in Information and Communication Technology*, **2021**, 255-262	0.5	
802	Regional Gradient Stabilization of Infinite Dimensional Linear Systems. *Studies in Systems, Decision and Control*, **2021**, 229-249	0.8	
801	Comparative Study of Conventional and Interval Type-2 Fuzzy Logic Controllers for Velocity Regulation in Lego Mindstorms Ev3 Humanoids. *Studies in Systems, Decision and Control*, **2021**, 201-219	0.8	1
800	Regional Stabilization of Infinite Dimensional Semilinear Systems. *Studies in Systems, Decision and Control*, **2021**, 137-157	0.8	
799	Review of Hybrid Combinations of Metaheuristics for Problem Solving Optimization. *Studies in Computational Intelligence*, **2021**, 221-232	0.8	
798	Experimental Results. *SpringerBriefs in Applied Sciences and Technology*, **2021**, 63-72	0.4	
797	Background and Theory. *SpringerBriefs in Applied Sciences and Technology*, **2021**, 5-28	0.4	0
796	An Efficient High-Order -Plane Aggregation in General Type-2 Fuzzy Systems Using Newton-Cotes Rules. *International Journal of Fuzzy Systems*, **2021**, 23, 1102-1121	3.6	4
795	A Novel Method for a COVID-19 Classification of Countries Based on an Intelligent Fuzzy Fractal Approach. *Healthcare (Switzerland)*, **2021**, 9,	3.4	24
794	Optimization of a fuzzy controller for autonomous robot navigation using a new competitive multi-metaheuristic model. *Soft Computing*, **2021**, 25, 11653-11672	3.5	5
793	Spatial and Temporal Spread of the COVID-19 Pandemic Using Self Organizing Neural Networks and a Fuzzy Fractal Approach. *Sustainability*, **2021**, 13, 8295	3.6	5

792	Fuzzy logic research work in Mexico motivated by Lotfi Zadeh. *Notes on Intuitionistic Fuzzy Sets*, **2021**, 27, 1-10	1.4	3
791	Differential Evolution with Shadowed and General Type-2 Fuzzy Systems for Dynamic Parameter Adaptation in Optimal Design of Fuzzy Controllers. *Axioms*, **2021**, 10, 194	1.6	4
790	A new meta-heuristic optimization algorithm based on a paradigm from physics: string theory. *Journal of Intelligent and Fuzzy Systems*, **2021**, 41, 1657-1675	1.6	2
789	Modeling assumptions, optimal control strategies and mitigation through vaccination to Zika virus. *Chaos, Solitons and Fractals*, **2021**, 150, 111137	9.3	4
788	GPU-Accelerated implementation of a genetically optimized image encryption algorithm. *Soft Computing*, **2021**, 1-16	3.5	0
787	A new fuzzy fractal control approach of non-linear dynamic systems: The case of controlling the COVID-19 pandemics. *Chaos, Solitons and Fractals*, **2021**, 151, 111250	9.3	4
786	Towards asymmetric uncertainty modeling in designing General Type-2 Fuzzy classifiers for medical diagnosis. *Expert Systems With Applications*, **2021**, 183, 115370	7.8	12
785	Unsupervised Deep Learning based Variational Autoencoder Model for COVID-19 Diagnosis and Classification. *Pattern Recognition Letters*, **2021**, 151, 267-274	4.7	12
784	Implementation and Evaluation of the Controllers. *Studies in Fuzziness and Soft Computing*, **2021**, 101-123	0.7	
783	Optimization of Membership Function Parameters for Fuzzy Controllers in Cruise Control Problem Using the Multi-verse Optimizer. *Studies in Computational Intelligence*, **2021**, 15-40	0.8	1
782	Output Stabilization of Infinite Dimensional Semilinear Systems. *Studies in Systems, Decision and Control*, **2021**, 159-183	0.8	
781	Stabilization of Infinite Dimensional Second Order Semilinear Systems. *Studies in Systems, Decision and Control*, **2021**, 185-212	0.8	
780	Using Fuzzy Inference Systems for the Creation of Forex Market Predictive Models. *IEEE Access*, **2021**, 9, 69391-69404	3.5	3
779	Regional Stabilization of Infinite Dimensional Bilinear Systems. *Studies in Systems, Decision and Control*, **2021**, 111-136	0.8	
778	Optimal Design of Fuzzy Controllers Using the Multiverse Optimizer. *Advances in Intelligent Systems and Computing*, **2021**, 289-298	0.4	3
777	Stabilization of Infinite Dimensional Semilinear Systems. *Studies in Systems, Decision and Control*, **2021**, 39-72	0.8	
776	A New Approach for an Intuitionistic Fuzzy Sugeno Integral Using Morphological Gradient Edge Detector. *Advances in Intelligent Systems and Computing*, **2021**, 26-45	0.4	
775	A survey of Type-2 fuzzy logic controller design using nature inspired optimization. *Journal of Intelligent and Fuzzy Systems*, **2020**, 39, 6169-6179	1.6	8

774	An approach for non-singleton generalized Type-2 fuzzy classifiers. *Journal of Intelligent and Fuzzy Systems*, **2020**, 39, 7203-7215	1.6	4
773	Multimodal human eye blink recognition method using feature level fusion for exigency detection. *Soft Computing*, **2020**, 24, 16829-16845	3.5	6
772	Fuzzy Logic in Dynamic Parameter Adaptation of Harmony Search Optimization for Benchmark Functions and Fuzzy Controllers. *International Journal of Fuzzy Systems*, **2020**, 22, 1198-1211	3.6	20
771	Designing hybrid classifiers based on general type-2 fuzzy logic and support vector machines. *Soft Computing*, **2020**, 24, 18009-18019	3.5	4
770	Analysis of Spatial Spread Relationships of Coronavirus (COVID-19) Pandemic in the World using Self Organizing Maps. *Chaos, Solitons and Fractals*, **2020**, 138, 109917	9.3	74
769	Intuitionistic Fuzzy Sliding Controller for Uncertain Hyperchaotic Synchronization. *International Journal of Fuzzy Systems*, **2020**, 22, 1430-1443	3.6	14
768	Multiple Ensemble Neural Network Models with Fuzzy Response Aggregation for Predicting COVID-19 Time Series: The Case of Mexico. *Healthcare (Switzerland)*, **2020**, 8,	3.4	88
767	Comparative study of interval Type-2 and general Type-2 fuzzy systems in medical diagnosis. *Information Sciences*, **2020**, 525, 37-53	7.7	52
766	Global Path Planning and Path-Following for Wheeled Mobile Robot Using a Novel Control Structure Based on a Vision Sensor. *International Journal of Fuzzy Systems*, **2020**, 22, 1880-1891	3.6	13
765	Generalized type-2 fuzzy logic in galactic swarm optimization: design of an optimal ball and beam fuzzy controller. *Journal of Intelligent and Fuzzy Systems*, **2020**, 39, 3545-3559	1.6	5
764	Comparison of particle swarm optimization variants with fuzzy dynamic parameter adaptation for modular granular neural networks for human recognition. *Journal of Intelligent and Fuzzy Systems*, **2020**, 38, 3229-3252	1.6	43
763	Learning rules for Sugeno ANFIS with parametric conjunction operations. *Applied Soft Computing Journal*, **2020**, 89, 106095	7.5	9
762	Fuzzy Parameter Adaptation in Genetic Algorithms for the Optimization of Fuzzy Integrators in Modular Neural Networks for Multimodal Biometry. *Computacion Y Sistemas*, **2020**, 24,	1.4	5
761	Development of a Java Library to Solve the School Bus Routing Problem. *EAI/Springer Innovations in Communication and Computing*, **2020**, 175-196	0.6	
760	Introduction to Fuzzy Harmony Search. *SpringerBriefs in Applied Sciences and Technology*, **2020**, 1-4	0.4	2
759	Proposed Fuzzy Harmony Search Method. *SpringerBriefs in Applied Sciences and Technology*, **2020**, 9-11	0.4	
758	The Differential Evolution Algorithm with a Fuzzy Logic Approach for Dynamic Parameter Adjustment Using Benchmark Functions. *Studies in Computational Intelligence*, **2020**, 169-179	0.8	2
757	Implementation a Fuzzy System for Trajectory Tracking of an Omnidirectional Mobile Autonomous Robot. *Studies in Computational Intelligence*, **2020**, 327-340	0.8	1

756	Study of the Relevance of Polynomial Order in Takagi-Sugeno Fuzzy Inference Systems Applied in Diagnosis Problems. *Studies in Computational Intelligence*, **2020**, 19-33	0.8	
755	Harmony Search with Dynamic Adaptation of Parameters for the Optimization of a Benchmark Set of Functions. *Studies in Computational Intelligence*, **2020**, 97-108	0.8	3
754	Adaptation of Parameters with Binary Cat Swarm Optimization Algorithm of Controller for a Mobile Autonomous Robot. *Studies in Computational Intelligence*, **2020**, 35-46	0.8	
753	Type-2 Fuzzy Logic for Dynamic Parameter Adaptation in the Imperialist Competitive Algorithm. *Studies in Computational Intelligence*, **2020**, 109-118	0.8	2
752	Fuzzy Flower Pollination Algorithm to Solve Control Problems. *Studies in Computational Intelligence* , **2020**, 119-154	0.8	5
751	Modular granular neural network optimization using the firefly algorithm applied to time series prediction **2020**, 199-216		3
750	Omnidirectional Four Wheel Mobile Robot Control with a Type-2 Fuzzy Logic Behavior-Based Strategy. *Studies in Computational Intelligence*, **2020**, 49-62	0.8	1
749	Chemical Reaction Algorithm to Control Problems. *Studies in Computational Intelligence*, **2020**, 185-193	0.8	
748	Evaluation of Parallel Exploration and Exploitation Capabilities in Two PSO Variants with Intra Communication. *Studies in Computational Intelligence*, **2020**, 169-184	0.8	1
747	Analysis of P, PI, Fuzzy and Fuzzy PI Controllers for Control Position in Omnidirectional Robots. *Studies in Computational Intelligence*, **2020**, 339-353	0.8	0
746	Theory of the Original Harmony Search Method. *SpringerBriefs in Applied Sciences and Technology*, **2020**, 5-7	0.4	
745	Constrained Real-Parameter Optimization Using the Firefly Algorithm and the Grey Wolf Optimizer. *Studies in Computational Intelligence*, **2020**, 155-167	0.8	5
744	Environment Recognition for Path Generation in Autonomous Mobile Robots. *Studies in Computational Intelligence*, **2020**, 273-288	0.8	1
743	Optimization of Fuzzy Controllers for Autonomous Mobile Robots Using the Grey Wolf Optimizer. *Studies in Computational Intelligence*, **2020**, 289-299	0.8	4
742	Towards a Control Strategy Based on Type-2 Fuzzy Logic for an Autonomous Mobile Robot. *Studies in Computational Intelligence*, **2020**, 301-314	0.8	7
741	Implementation of a Fuzzy Controller for an Autonomous Mobile Robot in the PIC18F4550 Microcontroller. *Studies in Computational Intelligence*, **2020**, 315-325	0.8	2
740	Comparison of Fuzzy Controller Optimization with Dynamic Parameter Adjustment Based on of Type-1 and Type-2 Fuzzy Logic. *Studies in Computational Intelligence*, **2020**, 47-56	0.8	7
739	Parameter Adaptation in the Imperialist Competitive Algorithm Using Generalized Type-2 Fuzzy Logic. *Studies in Computational Intelligence*, **2020**, 3-10	0.8	3

738	Harmony Search with Dynamic Adaptation of Parameters for the Optimization of a Benchmark Controller. *Studies in Computational Intelligence*, **2020**, 157-168	0.8	3
737	Towards Tracking Trajectory of Planar Quadrotor Models. *Studies in Computational Intelligence*, **2020**, 313-323	0.8	1
736	Fuzzy Logic Controller with Fuzzylab Python Library and the Robot Operating System for Autonomous Robot Navigation: A Practical Approach. *Studies in Computational Intelligence*, **2020**, 355-369	0.8	1
735	Study Cases to Test Fuzzy Harmony Search. *SpringerBriefs in Applied Sciences and Technology*, **2020**, 13-67	0.4	1
734	Fuzzy Galactic Swarm Optimization with Dynamic Adjustment of Parameters Based on Fuzzy Logic. *SN Computer Science*, **2020**, 1, 1	2	10
733	Design of an interval Type-2 fuzzy model with justifiable uncertainty. *Information Sciences*, **2020**, 513, 206-221	7.7	47
732	Intuitionistic fuzzy control of twin rotor multiple input multiple output systems. *Journal of Intelligent and Fuzzy Systems*, **2020**, 38, 821-833	1.6	15
731	A new randomness approach based on sine waves to improve performance in metaheuristic algorithms. *Soft Computing*, **2020**, 24, 11989-12011	3.5	6
730	A new multi-stable fractional-order four-dimensional system with self-excited and hidden chaotic attractors: Dynamic analysis and adaptive synchronization using a novel fuzzy adaptive sliding mode control method. *Applied Soft Computing Journal*, **2020**, 87, 105943	7.5	72
729	Finite-interval-valued Type-2 Gaussian fuzzy numbers applied to fuzzy TODIM in a healthcare problem. *Engineering Applications of Artificial Intelligence*, **2020**, 87, 103352	7.2	50
728	Optimal Design of Fuzzy Systems Using Differential Evolution and Harmony Search Algorithms with Dynamic Parameter Adaptation. *Applied Sciences (Switzerland)*, **2020**, 10, 6146	2.6	6
727	Forecasting of COVID-19 time series for countries in the world based on a hybrid approach combining the fractal dimension and fuzzy logic. *Chaos, Solitons and Fractals*, **2020**, 140, 110242	9.3	56
726	A new prediction approach of the COVID-19 virus pandemic behavior with a hybrid ensemble modular nonlinear autoregressive neural network. *Soft Computing*, **2020**, 1-10	3.5	4
725	Early diagnosis of COVID-19-affected patients based on X-ray and computed tomography images using deep learning algorithm. *Soft Computing*, **2020**, 1-9	3.5	49
724	A comprehensive review on type 2 fuzzy logic applications: Past, present and future. *Engineering Applications of Artificial Intelligence*, **2020**, 95, 103916	7.2	66
723	Type-2 fuzzy control for line following using line detection images. *Journal of Intelligent and Fuzzy Systems*, **2020**, 39, 6089-6097	1.6	6
722	Handling data-skewness in character based string similarity join using Hadoop. *Applied Computing and Informatics*, **2020**, ahead-of-print,	4.2	2
721	A state of the art review of intelligent scheduling. *Artificial Intelligence Review*, **2020**, 53, 501-593	9.7	30

720	Optimization of fuzzy controller design using a Differential Evolution algorithm with dynamic parameter adaptation based on Type-1 and Interval Type-2 fuzzy systems. *Soft Computing*, **2020**, 24, 193-214	3.5	32
719	Scientometric inspection of research progression in hesitant fuzzy sets. *Journal of Intelligent and Fuzzy Systems*, **2020**, 38, 619-626	1.6	6
718	A novel parameter estimation in dynamic model via fuzzy swarm intelligence and chaos theory for faults in wastewater treatment plant. *Soft Computing*, **2020**, 24, 111-129	3.5	21
717	Nature-Inspired Optimization of Type-2 Fuzzy Logic Controllers. *Advances in Intelligent Systems and Computing*, **2020**, 4-6	0.4	2
716	Cuckoo search and firefly algorithms in terms of generalized net theory. *Soft Computing*, **2020**, 24, 4877-4898	3.5	12
715	High-Speed Interval Type-2 Fuzzy System for Dynamic Crossover Parameter Adaptation in Differential Evolution and Its Application to Controller Optimization. *International Journal of Fuzzy Systems*, **2020**, 22, 414-427	3.6	7
714	Synchronization of fractional time-delayed financial system using a novel type-2 fuzzy active control method. *Chaos, Solitons and Fractals*, **2020**, 136, 109768	9.3	25
713	A high-speed interval type 2 fuzzy system approach for dynamic parameter adaptation in metaheuristics. *Engineering Applications of Artificial Intelligence*, **2019**, 85, 666-680	7.2	39
712	Comparative Study in Fuzzy Controller Optimization Using Bee Colony, Differential Evolution, and Harmony Search Algorithms. *Algorithms*, **2019**, 12, 9	1.8	39
711	Type-2 Fuzzy Logic Augmentation of the Imperialist Competitive Algorithm with Dynamic Parameter Adaptation. *Advances in Intelligent Systems and Computing*, **2019**, 167-176	0.4	
710	Design of Optimal Fuzzy Controllers for Autonomous Mobile Robots Using the Grey Wolf Algorithm. *Advances in Intelligent Systems and Computing*, **2019**, 285-295	0.4	1
709	Comparative Study of Fuzzy Controller Optimization with Dynamic Parameter Adjustment Based on Type 1 and Type 2 Fuzzy Logic. *Advances in Intelligent Systems and Computing*, **2019**, 296-305	0.4	0
708	Firefly Algorithm and Grey Wolf Optimizer for Constrained Real-Parameter Optimization. *Advances in Intelligent Systems and Computing*, **2019**, 531-541	0.4	
707	Dynamic Parameter Adaptation Based on Using Interval Type-2 Fuzzy Logic in Bio-inspired Optimization Methods. *Advances in Intelligent Systems and Computing*, **2019**, 1-12	0.4	
706	Bio-inspired Optimization of Type-2 Fuzzy Controllers in Autonomous Mobile Robot Navigation. *Studies in Systems, Decision and Control*, **2019**, 187-200	0.8	3
705	Comparative Analysis of Type-1 Fuzzy Inference Systems with Different Sugeno Polynomial Orders Applied to Diagnosis Problems. *Advances in Intelligent Systems and Computing*, **2019**, 453-465	0.4	
704	Gaze-Guided Control of an Autonomous Mobile Robot Using Type-2 Fuzzy Logic. *Applied System Innovation*, **2019**, 2, 14	2.4	3
703	Optimization of Fuzzy Controller Using Galactic Swarm Optimization with Type-2 Fuzzy Dynamic Parameter Adjustment. *Axioms*, **2019**, 8, 26	1.6	25

702	A New Approach to Multiple Time Series Prediction Using MIMO Fuzzy Aggregation Models with Modular Neural Networks. *International Journal of Fuzzy Systems*, **2019**, 21, 1629-1648	3.6	39
701	Visual-Servoing Based Global Path Planning Using Interval Type-2 Fuzzy Logic Control. *Axioms*, **2019**, 8, 58	1.6	16
700	Multi-Metaheuristic Competitive Model for Optimization of Fuzzy Controllers. *Algorithms*, **2019**, 12, 90	1.8	15
699	Comparative Study of the Conventional Mathematical and Fuzzy Logic Controllers for Velocity Regulation. *Axioms*, **2019**, 8, 53	1.6	3
698	Designing a general type-2 fuzzy expert system for diagnosis of depression. *Applied Soft Computing Journal*, **2019**, 80, 329-341	7.5	33
697	A new fuzzy learning vector quantization method for classification problems based on a granular approach. *Granular Computing*, **2019**, 4, 197-209	5.4	12
696	Optimization of granulation for fuzzy controllers of autonomous mobile robots using the Firefly Algorithm. *Granular Computing*, **2019**, 4, 185-195	5.4	19
695	Fuzzy Harmony Search Algorithm Using an Interval Type-2 Fuzzy Logic Applied to Benchmark Mathematical Functions. *Studies in Computational Intelligence*, **2019**, 13-28	0.8	3
694	Interval Type-2 Fuzzy Logic Dynamic Mutation and Crossover Parameter Adaptation in a Fuzzy Differential Evolution Method. *Studies in Computational Intelligence*, **2019**, 81-94	0.8	3
693	Optimization of fuzzy controllers for autonomous mobile robots using the grey wolf optimizer **2019**,		6
692	Towards an Adaptive Control Strategy Based on Type-2 Fuzzy Logic for Autonomous Mobile Robots **2019**,		5
691	An Approach for Optimization of Intuitionistic and Type-2 Fuzzy Systems in Pattern Recognition Applications **2019**,		1
690	Relevance of Polynomial Order in Takagi-Sugeno Fuzzy Inference Systems Applied in Diagnosis Problems **2019**,		2
689	Approximation of Intuitionistic Fuzzy Systems for Time Series Analysis in Plant Monitoring and Diagnosis. *Studies in Fuzziness and Soft Computing*, **2019**, 87-100	0.7	
688	Fuzzy Control for Systems with Dead-Zone and Backlash. *Studies in Fuzziness and Soft Computing*, **2019**, 55-71	0.7	1
687	Proposed Method. *SpringerBriefs in Applied Sciences and Technology*, **2019**, 17-22	0.4	
686	Theory and Background. *SpringerBriefs in Applied Sciences and Technology*, **2019**, 5-7	0.4	
685	Optimization of Modular Neural Networks for Pattern Recognition with Parallel Genetic Algorithms. *Lecture Notes in Computer Science*, **2019**, 223-235	0.9	1

684	Comparative Study of P, PI, Fuzzy and Fuzzy PI Controllers in Position Control for Omnidirectional Robots. *Lecture Notes in Computer Science*, **2019**, 714-727	0.9	0
683	DIFFERENTIAL EVOLUTION WITH DYNAMIC ADAPTATION OF PARAMETERS BASED ON A FUZZY LOGIC AUGMENTATION APPROACH. *Journal of Universal Mathematics*, **2019**, 2, 183-207	0.1	
682	Hindi Query Expansion based on Semantic Importance of Hindi WordNet Relations and Fuzzy Graph Connectivity Measures. *Computacion Y Sistemas*, **2019**, 23,	1.4	2
681	Type-2 Fuzzy Logic in Control of Nonsmooth Systems. *Studies in Fuzziness and Soft Computing*, **2019**,	0.7	6
680	PSO with Dynamic Adaptation of Parameters for Optimization in Neural Networks with Interval Type-2 Fuzzy Numbers Weights. *Axioms*, **2019**, 8, 14	1.6	15
679	A novel multi-objective evolutionary algorithm with fuzzy logic based adaptive selection of operators: FAME. *Information Sciences*, **2019**, 471, 233-251	7.7	49
678	An approach for parameterized shadowed type-2 fuzzy membership functions applied in control applications. *Soft Computing*, **2019**, 23, 3887-3901	3.5	44
677	Background on Type-1 and Type-2 Fuzzy Logic. *Studies in Fuzziness and Soft Computing*, **2019**, 5-19	0.7	2
676	Fuzzy Control Synthesis for Systems with Discontinuous Friction. *Studies in Fuzziness and Soft Computing*, **2019**, 73-83	0.7	1
675	Fuzzy Control for Wheeled Mobile Robots. *Studies in Fuzziness and Soft Computing*, **2019**, 85-96	0.7	1
674	Comments on Fuzzy Sets, Interval Type-2 Fuzzy Sets, General Type-2 Fuzzy Sets and Intuitionistic Fuzzy Sets. *Studies in Fuzziness and Soft Computing*, **2019**, 35-43	0.7	7
673	Special issue on Type-2 fuzzy systems and granular computing *Granular Computing*, **2019**, 4, 143-143	5.4	1
672	Fuzzy Lyapunov Synthesis for Nonsmooth Mechanical Systems. *Studies in Fuzziness and Soft Computing*, **2019**, 43-54	0.7	
671	Fuzzy Control for Biped Robots Under Impacts. *Studies in Fuzziness and Soft Computing*, **2019**, 97-120	0.7	
670	Graphical Representation of Intuitionistic Membership Functions for Its Efficient Use in Intuitionistic Fuzzy Systems. *Studies in Fuzziness and Soft Computing*, **2019**, 239-250	0.7	1
669	Shadowed Type-2 Fuzzy Systems for Dynamic Parameter Adaptation in Harmony Search and Differential Evolution Algorithms. *Algorithms*, **2019**, 12, 17	1.8	28
668	Self-defense of the Plants. *SpringerBriefs in Applied Sciences and Technology*, **2019**, 9-12	0.4	
667	Predator-Prey Model. *SpringerBriefs in Applied Sciences and Technology*, **2019**, 13-15	0.4	

666	Framework for Optimization of Intuitionistic and Type-2 Fuzzy Systems in Control Applications. *Studies in Fuzziness and Soft Computing*, **2019**, 79-86	0.7	2
665	Interval type-2 fuzzy logic for dynamic parameter adaptation in a modified gravitational search algorithm. *Information Sciences*, **2019**, 476, 159-175	7.7	92
664	Optimization of type-1, interval type-2 and general type-2 fuzzy inference systems using a hierarchical genetic algorithm for modular granular neural networks. *Granular Computing*, **2019**, 4, 211-236	5.4	9
663	A new approach to control of multivariable systems through a hierarchical aggregation of fuzzy controllers. *Granular Computing*, **2019**, 4, 1-13	5.4	17
662	Application of Interval Type-2 Fuzzy Logic to polypropylene business policy in a petrochemical plant in India. *Journal of the Saudi Society of Agricultural Sciences*, **2018**, 17, 24-42	3.3	4
661	A new optimization meta-heuristic algorithm based on self-defense mechanism of the plants with three reproduction operators. *Soft Computing*, **2018**, 22, 4907-4920	3.5	23
660	New Classification Method Based on Modular Neural Networks with the LVQ Algorithm and Type-2 Fuzzy Logic. *SpringerBriefs in Applied Sciences and Technology*, **2018**,	0.4	2
659	A Comparative Study of Dynamic Adaptation of Parameters in the GWO Algorithm Using Type-1 and Interval Type-2 Fuzzy Logic. *Studies in Computational Intelligence*, **2018**, 3-16	0.8	4
658	Galactic Swarm Optimization with Adaptation of Parameters Using Fuzzy Logic for the Optimization of Mathematical Functions. *Studies in Computational Intelligence*, **2018**, 131-140	0.8	8
657	Comparison of Bio-Inspired Methods with Parameter Adaptation Through Interval Type-2 Fuzzy Logic. *Studies in Computational Intelligence*, **2018**, 39-53	0.8	3
656	Differential Evolution Algorithm with Interval Type-2 Fuzzy Logic for the Optimization of the Mutation Parameter. *Studies in Computational Intelligence*, **2018**, 55-65	0.8	5
655	Design and Implementation of a Fuzzy Path Optimization System for Omnidirectional Autonomous Mobile Robot Control in Real-Time. *Studies in Computational Intelligence*, **2018**, 241-252	0.8	8
654	Fuzzy Logic for Inculcating Significance of Semantic Relations in Word Sense Disambiguation Using a WordNet Graph. *International Journal of Fuzzy Systems*, **2018**, 20, 444-459	3.6	9
653	Path Following Fuzzy System for a Nonholonomic Mobile Robot Based on Frontal Camera Information. *Studies in Computational Intelligence*, **2018**, 223-240	0.8	2
652	Impact Study of the Footprint of Uncertainty in Control Applications Based on Interval Type-2 Fuzzy Logic Controllers. *Studies in Computational Intelligence*, **2018**, 181-197	0.8	3
651	Optimization of Membership Function Parameters for Fuzzy Controllers of an Autonomous Mobile Robot Using the Firefly Algorithm. *Studies in Computational Intelligence*, **2018**, 199-206	0.8	9
650	A New Approach for Time Series Prediction Using Ensembles of IT2FNN Models with Optimization of Fuzzy Integrators. *International Journal of Fuzzy Systems*, **2018**, 20, 701-728	3.6	45
649	ClusFuDE: Forecasting low dimensional numerical data using an improved method based on automatic clustering, fuzzy relationships and differential evolution. *Engineering Applications of Artificial Intelligence*, **2018**, 71, 175-189	7.2	31

648	A new fuzzy bee colony optimization with dynamic adaptation of parameters using interval type-2 fuzzy logic for tuning fuzzy controllers. *Soft Computing*, **2018**, 22, 571-594	3.5	54
647	Comparison of Type-2 Fuzzy Integration for Optimized Modular Neural Networks Applied to Human Recognition. *Studies in Systems, Decision and Control*, **2018**, 285-302	0.8	
646	A New Approach for Dynamic Mutation Parameter in the Differential Evolution Algorithm Using Fuzzy Logic. *Advances in Intelligent Systems and Computing*, **2018**, 85-93	0.4	3
645	Study on the Use of Type-1 and Interval Type-2 Fuzzy Systems Applied to Benchmark Functions Using the Fuzzy Harmony Search Algorithm. *Advances in Intelligent Systems and Computing*, **2018**, 94-103	0.4	1
644	Fuzzy Adaptation for Particle Swarm Optimization for Modular Neural Networks Applied to Iris Recognition. *Advances in Intelligent Systems and Computing*, **2018**, 104-114	0.4	2
643	A New Metaheuristic Based on the Self-defense Mechanisms of the Plants with a Fuzzy Approach Applied to the CEC2015 Functions. *Advances in Intelligent Systems and Computing*, **2018**, 115-121	0.4	
642	Fuzzy Chemical Reaction Algorithm with Dynamic Adaptation of Parameters. *Advances in Intelligent Systems and Computing*, **2018**, 122-130	0.4	2
641	Methodology for the Optimization of a Fuzzy Controller Using a Bio-inspired Algorithm. *Advances in Intelligent Systems and Computing*, **2018**, 131-137	0.4	12
640	How to Gauge the Accuracy of Fuzzy Control Recommendations: A Simple Idea. *Advances in Intelligent Systems and Computing*, **2018**, 287-292	0.4	
639	Comparative Study of Metrics That Affect in the Performance of the Bee Colony Optimization Algorithm Through Interval Type-2 Fuzzy Logic Systems. *Advances in Intelligent Systems and Computing*, **2018**, 61-72	0.4	2
638	A generalized type-2 fuzzy logic approach for dynamic parameter adaptation in bee colony optimization applied to fuzzy controller design. *Information Sciences*, **2018**, 460-461, 476-496	7.7	92
637	Trajectory Optimization for an Autonomous Mobile Robot Using the Bat Algorithm. *Advances in Intelligent Systems and Computing*, **2018**, 232-241	0.4	1
636	Particle Swarm Optimization with Fuzzy Dynamic Parameters Adaptation for Modular Granular Neural Networks. *Advances in Intelligent Systems and Computing*, **2018**, 277-288	0.4	
635	A New Optimization Metaheuristic Based on the Self-defense Techniques of Natural Plants Applied to the CEC 2015 Benchmark Functions. *Advances in Intelligent Systems and Computing*, **2018**, 380-388	0.4	2
634	A Hybrid Approach for Modular Neural Network Design Using Intercriteria Analysis and Intuitionistic Fuzzy Logic. *Complexity*, **2018**, 2018, 1-11	1.6	32
633	High order ⊞planes integration: A new approach to computational cost reduction of General Type-2 Fuzzy Systems. *Engineering Applications of Artificial Intelligence*, **2018**, 74, 186-197	7.2	93
632	Parameter Optimization for Membership Functions of Type-2 Fuzzy Controllers for Autonomous Mobile Robots Using the Firefly Algorithm. *Communications in Computer and Information Science*, **2018**, 569-579	0.3	12
631	A New Hybridization Approach between the Fireworks Algorithm and Grey Wolf Optimizer Algorithm. *Journal of Optimization*, **2018**, 2018, 1-18	0.5	18

630	Fuzzy Dynamic Parameter Adaptation in the Harmony Search Algorithm for the Optimization of the Ball and Beam Controller. *Advances in Operations Research*, **2018**, 2018, 1-16	1.3	29
629	Optimization of Membership Function Parameters for Fuzzy Controllers of an Autonomous Mobile Robot Using the Flower Pollination Algorithm. *Journal of Automation, Mobile Robotics and Intelligent Systems*, **2018**, 12, 44-49	1	16
628	An Analytical Insight to Investigate the Research Patterns in the Realm of Type-2 Fuzzy Logic. *Journal of Automation, Mobile Robotics and Intelligent Systems*, **2018**, 12, 3-32	1	2
627	Problem Statement and Development. *SpringerBriefs in Applied Sciences and Technology*, **2018**, 17-34	0.4	
626	A Takagi–Sugeno-Kang Fuzzy Model Formalization of Eelgrass Leaf Biomass Allometry with Application to the Estimation of Average Biomass of Leaves in Shoots: Comparing the Reproducibility Strength of the Present Fuzzy and Related Crisp Proxies. *Studies in Computational Intelligence*, **2018**, 329-362	0.8	
625	Simulation Results. *SpringerBriefs in Applied Sciences and Technology*, **2018**, 33-46	0.4	
624	Problem Statements. *SpringerBriefs in Applied Sciences and Technology*, **2018**, 11-21	0.4	
623	Theory and Background. *SpringerBriefs in Applied Sciences and Technology*, **2018**, 5-27	0.4	
622	Problem Statement. *SpringerBriefs in Applied Sciences and Technology*, **2018**, 29-32	0.4	
621	Differential Evolution Algorithm Using a Dynamic Crossover Parameter with Fuzzy Logic Applied for the CEC 2015 Benchmark Functions. *Communications in Computer and Information Science*, **2018**, 580-591	0.3	
620	Money Management for a Foreign Exchange Trading Strategy Using a Fuzzy Inference System. *Studies in Computational Intelligence*, **2018**, 275-286	0.8	
619	Dynamic Parameter Adaptation Using Interval Type-2 Fuzzy Logic in Bio-Inspired Optimization Methods. *Advances in Intelligent Systems and Computing*, **2018**, 1-12	0.4	1
618	Proposed Classification Method. *SpringerBriefs in Applied Sciences and Technology*, **2018**, 33-39	0.4	
617	Simulation Results. *SpringerBriefs in Applied Sciences and Technology*, **2018**, 41-54	0.4	
616	Toward General Type-2 Fuzzy Logic Systems Based on Shadowed Sets. *Advances in Intelligent Systems and Computing*, **2018**, 131-142	0.4	1
615	Comparative Study of Type-1 and Interval Type-2 Fuzzy Systems in the Fuzzy Harmony Search Algorithm Applied to Benchmark Functions. *Advances in Intelligent Systems and Computing*, **2018**, 162-170	0.4	1
614	A Review of Fuzzy and Mathematic Methods for Dynamic Parameter Adaptation in the Firefly Algorithm. *Studies in Computational Intelligence*, **2018**, 311-321	0.8	3
613	Dynamic Parameter Adaptation for Meta-Heuristic Optimization Algorithms Through Type-2 Fuzzy Logic. *SpringerBriefs in Applied Sciences and Technology*, **2018**,	0.4	2

612	Theory and Background. *SpringerBriefs in Applied Sciences and Technology*, **2018**, 3-10	0.4	2
611	Improved Method Based on Type-2 Fuzzy Logic for the Adaptive Harmony Search Algorithm. *Studies in Computational Intelligence*, **2018**, 29-37	0.8	3
610	Statistical Comparison of the Bee Colony Optimization and Fuzzy BCO Algorithms for Fuzzy Controller Design Using Trapezoidals MFs. *Studies in Fuzziness and Soft Computing*, **2018**, 291-306	0.7	1
609	Performance Evaluation of Optimization Algorithms based on GPU using CUDA Architecture **2018**,		2
608	On Intuitionistic Fuzzy (mathcal {C})-Ends. *Trends in Mathematics*, **2018**, 177-184	0.3	
607	A variant to the dynamic adaptation of parameters in galactic swarm optimization using a fuzzy logic augmentation **2018**,		8
606	Fuzzy Galactic Swarm Optimization with Dynamic Adjustment of Parameters Based on Fuzzy Logic. *Journal of Peridynamics and Nonlocal Modeling*, **2018**, 1, 1	2.1	1
605	A Fuzzy Harmony Search Algorithm for the Optimization of a Benchmark Set of Functions. *Lecture Notes in Computer Science*, **2018**, 401-412	0.9	
604	Differential Evolution Algorithm Using a Dynamic Crossover Parameter with High-Speed Interval Type 2 Fuzzy System. *Lecture Notes in Computer Science*, **2018**, 369-378	0.9	2
603	A New Method for Parameterization of General Type-2 Fuzzy Sets. *Fuzzy Information and Engineering*, **2018**, 10, 31-57	0.5	11
602	Fuzzy Dynamic Adaptation of Gap Generation and Mutation in Genetic Optimization of Type 2 Fuzzy Controllers. *Advances in Operations Research*, **2018**, 2018, 1-13	1.3	17
601	Bio-inspired Optimization Metaheuristic Algorithm Based on the Self-defense of the Plants. *Studies in Fuzziness and Soft Computing*, **2018**, 111-121	0.7	
600	Interval Type II Fuzzy Rough Set Rule Based Expert System to Diagnose Chronic Kidney Disease. *Communications in Computer and Information Science*, **2018**, 559-568	0.3	1
599	Fuzzy rule-based models with interactive rules and their granular generalization. *Fuzzy Sets and Systems*, **2017**, 307, 1-28	3.7	25
598	A fuzzy hierarchical operator in the grey wolf optimizer algorithm. *Applied Soft Computing Journal*, **2017**, 57, 315-328	7.5	131
597	Optimization of Type-2 Fuzzy Controllers Using the Bee Colony Algorithm. *SpringerBriefs in Applied Sciences and Technology*, **2017**,	0.4	3
596	Modification of the Bat Algorithm Using Type-2 Fuzzy Logic for Dynamical Parameter Adaptation. *Studies in Computational Intelligence*, **2017**, 343-355	0.8	16
595	Gravitational Search Algorithm with Parameter Adaptation Through a Fuzzy Logic System. *Studies in Computational Intelligence*, **2017**, 391-405	0.8	1

594	Ant colony optimization with dynamic parameter adaptation based on interval type-2 fuzzy logic systems. *Applied Soft Computing Journal*, **2017**, 53, 74-87	7.5	123
593	Optimization Mathematical Functions for Multiple Variables Using the Algorithm of Self-defense of the Plants. *Studies in Computational Intelligence*, **2017**, 631-640	0.8	7
592	Interval type-2 fuzzy logic for dynamic parameter adaptation in the bat algorithm. *Soft Computing*, **2017**, 21, 667-685	3.5	36
591	Interval Type-2 Fuzzy Possibilistic C-Means Optimization Using Particle Swarm Optimization. *Studies in Computational Intelligence*, **2017**, 63-78	0.8	4
590	Particle Swarm Optimization of the Fuzzy Integrators for Time Series Prediction Using Ensemble of IT2FNN Architectures. *Studies in Computational Intelligence*, **2017**, 141-158	0.8	6
589	Imperialist Competitive Algorithm with Dynamic Parameter Adaptation Applied to the Optimization of Mathematical Functions. *Studies in Computational Intelligence*, **2017**, 329-341	0.8	8
588	Differential Evolution Using Fuzzy Logic and a Comparative Study with Other Metaheuristics. *Studies in Computational Intelligence*, **2017**, 257-268	0.8	12
587	An Adaptive Fuzzy Control Based on Harmony Search and Its Application to Optimization. *Studies in Computational Intelligence*, **2017**, 269-283	0.8	7
586	A Review of Dynamic Parameter Adaptation Methods for the Firefly Algorithm. *Studies in Computational Intelligence*, **2017**, 285-295	0.8	10
585	An Overview of Granular Computing Using Fuzzy Logic Systems. *Studies in Computational Intelligence*, **2017**, 19-38	0.8	5
584	A FPGA-Based Hardware Architecture Approach for Real-Time Fuzzy Edge Detection. *Studies in Computational Intelligence*, **2017**, 519-540	0.8	2
583	Choquet Integral and Interval Type-2 Fuzzy Choquet Integral for Edge Detection. *Studies in Computational Intelligence*, **2017**, 79-97	0.8	9
582	On the Graphical Representation of Intuitionistic Membership Functions for Its Use in Intuitionistic Fuzzy Inference Systems. *Studies in Computational Intelligence*, **2017**, 115-126	0.8	2
581	Sensor Less Fuzzy Logic Tracking Control for a Servo System with Friction and Backlash. *Studies in Computational Intelligence*, **2017**, 603-613	0.8	
580	Fuzzy Dynamic Adaptation of Parameters in the Water Cycle Algorithm. *Studies in Computational Intelligence*, **2017**, 297-311	0.8	9
579	Optimization of Reactive Control for Mobile Robots Based on the CRA Using Type-2 Fuzzy Logic. *Studies in Computational Intelligence*, **2017**, 505-515	0.8	5
578	Comparative Analysis of Designing Differents Types of Membership Functions Using Bee Colony Optimization in the Stabilization of Fuzzy Controllers. *Studies in Computational Intelligence*, **2017**, 551-571	0.8	7
577	A Study of Parameter Dynamic Adaptation with Fuzzy Logic for the Grey Wolf Optimizer Algorithm. *Lecture Notes in Computer Science*, **2017**, 228-238	0.9	1

576	An Extension of the Fuzzy Possibilistic Clustering Algorithm Using Type-2 Fuzzy Logic Techniques. *Advances in Fuzzy Systems*, **2017**, 2017, 1-23	1.7	55
575	A Grey Wolf Optimizer for Modular Granular Neural Networks for Human Recognition. *Computational Intelligence and Neuroscience*, **2017**, 2017, 4180510	3	60
574	An open source implementation of an intuitionistic fuzzy inference system in Clojure **2017**,		1
573	A New Meta-Heuristics of Optimization with Dynamic Adaptation of Parameters Using Type-2 Fuzzy Logic for Trajectory Control of a Mobile Robot. *Algorithms*, **2017**, 10, 85	1.8	30
572	Comparison of T-Norms and S-Norms for Interval Type-2 Fuzzy Numbers in Weight Adjustment for Neural Networks. *Information (Switzerland)*, **2017**, 8, 114	2.6	9
571	Dynamic simultaneous adaptation of parameters in the grey wolf optimizer using fuzzy logic **2017**,		3
570	Optimization of modular granular neural networks using a firefly algorithm for human recognition. *Engineering Applications of Artificial Intelligence*, **2017**, 64, 172-186	7.2	116
569	A method based on Interactive Evolutionary Computation and fuzzy logic for increasing the effectiveness of advertising campaigns. *Information Sciences*, **2017**, 414, 175-186	7.7	12
568	Fuzzy higher type information granules from an uncertainty measurement. *Granular Computing*, **2017**, 2, 95-103	5.4	57
567	Type-2 Fuzzy Granular Models. *SpringerBriefs in Applied Sciences and Technology*, **2017**,	0.4	1
566	Experimentation and Results Discussion. *SpringerBriefs in Applied Sciences and Technology*, **2017**, 37-49	0.4	
565	Comparative study of the use of fuzzy logic in improving particle swarm optimization variants for mathematical functions using co-evolution. *Applied Soft Computing Journal*, **2017**, 52, 1070-1083	7.5	60
564	Iterative fireworks algorithm with fuzzy coefficients **2017**,		4
563	Edge Detection Method Based on General Type-2 Fuzzy Logic Applied to Color Images. *Information (Switzerland)*, **2017**, 8, 104	2.6	13
562	Review of Recent Type-2 Fuzzy Image Processing Applications. *Information (Switzerland)*, **2017**, 8, 97	2.6	31
561	Imperialist Competitive Algorithm with Dynamic Parameter Adaptation Using Fuzzy Logic Applied to the Optimization of Mathematical Functions. *Algorithms*, **2017**, 10, 18	1.8	36
560	New Methodology to Approximate Type-Reduction Based on a Continuous Root-Finding Karnik Mendel Algorithm. *Algorithms*, **2017**, 10, 77	1.8	45
559	Comparative Study of Type-2 Fuzzy Particle Swarm, Bee Colony and Bat Algorithms in Optimization of Fuzzy Controllers. *Algorithms*, **2017**, 10, 101	1.8	44

558	Advances in Granular Computing. *SpringerBriefs in Applied Sciences and Technology*, **2017**, 19-35	0.4	1
557	General Type-2 Fuzzy Edge Detection in the Preprocessing of a Face Recognition System. *Studies in Computational Intelligence*, **2017**, 3-18	0.8	10
556	A Study of Parameters of the Grey Wolf Optimizer Algorithm for Dynamic Adaptation with Fuzzy Logic. *Studies in Computational Intelligence*, **2017**, 371-390	0.8	13
555	Bidding Strategies Based on Type-1 and Interval Type-2 Fuzzy Systems for Google AdWords Advertising Campaigns. *Studies in Computational Intelligence*, **2017**, 99-113	0.8	3
554	Metrics for Edge Detection Methods. *SpringerBriefs in Applied Sciences and Technology*, **2017**, 17-19	0.4	2
553	Generalized Type-2 Fuzzy Edge Detection Applied on a Face Recognition System. *SpringerBriefs in Applied Sciences and Technology*, **2017**, 37-41	0.4	2
552	Theory and Background. *SpringerBriefs in Applied Sciences and Technology*, **2017**, 7-11	0.4	1
551	Water Cycle Algorithm with Fuzzy Logic for Dynamic Adaptation of Parameters. *Lecture Notes in Computer Science*, **2017**, 250-260	0.9	5
550	Background and Theory. *SpringerBriefs in Applied Sciences and Technology*, **2017**, 5-18	0.4	
549	On the Use of Parallel Genetic Algorithms for Improving the Efficiency of a Monte Carlo-Digital Image Based Approximation of Eelgrass Leaf Area I: Comparing the Performances of Simple and Master-Slaves Structures. *Studies in Computational Intelligence*, **2017**, 431-455	0.8	1
548	Problem Statements. *SpringerBriefs in Applied Sciences and Technology*, **2017**, 13-21	0.4	
547	Fuzzy Logic Dynamic Parameter Adaptation in the Gravitational Search Algorithm. *Advances in Intelligent Systems and Computing*, **2017**, 47-57	0.4	
546	Edge Detection Methods Based on Generalized Type-2 Fuzzy Logic Systems. *SpringerBriefs in Applied Sciences and Technology*, **2017**, 21-35	0.4	2
545	Bee Colony Optimization Algorithm. *SpringerBriefs in Applied Sciences and Technology*, **2017**, 23-32	0.4	
544	A Generalized Type-2 Fuzzy Logic System for the dynamic adaptation the parameters in a Bee Colony Optimization algorithm applied in an autonomous mobile robot control **2016**,		6
543	**2016**,		4
542	A proposal for an intuitionistic fuzzy inference system **2016**,		6
541	Interval type-2 fuzzy logic for dynamic parameter adaptation in the Harmony search algorithm **2016** ,		6

540	Bat algorithm with parameter adaptation using Interval Type-2 fuzzy logic for benchmark mathematical functions **2016**,		11
539	A fuzzy system for dynamic parameter adaptation in gravitational search algorithm **2016**,		4
538	Ant colony optimization for the design of Modular Neural Networks in pattern recognition **2016**,		5
537	Fuzzy Topsis Method Associated with Improved Selection of Machines of High Productivity. *Advances in Intelligent Systems and Computing*, **2016**, 3-12	0.4	2
536	Comparative Study of Bio-inspired Algorithms Applied in the Design of Fuzzy Controller for the Water Tank. *Studies in Fuzziness and Soft Computing*, **2016**, 419-438	0.7	2
535	Interval Type-2 Fuzzy Possibilistic C-Means Clustering Algorithm. *Studies in Fuzziness and Soft Computing*, **2016**, 185-194	0.7	5
534	Dynamic parameter adaptation in particle swarm optimization using interval type-2 fuzzy logic. *Soft Computing*, **2016**, 20, 1057-1070	3.5	93
533	An improved sobel edge detection method based on generalized type-2 fuzzy logic. *Soft Computing* , **2016**, 20, 773-784	3.5	120
532	Optimization of interval type-2 fuzzy systems for image edge detection. *Applied Soft Computing Journal*, **2016**, 47, 631-643	7.5	113
531	Differential Evolution with Fuzzy Logic for Dynamic Adaptation of Parameters in Mathematical Function Optimization. *Studies in Fuzziness and Soft Computing*, **2016**, 361-374	0.7	7
530	A generalized type-2 fuzzy granular approach with applications to aerospace. *Information Sciences*, **2016**, 354, 165-177	7.7	178
529	A comparative study of type-1 fuzzy logic systems, interval type-2 fuzzy logic systems and generalized type-2 fuzzy logic systems in control problems. *Information Sciences*, **2016**, 354, 257-274	7.7	275
528	Ensemble Neural Network with Type-1 and Type-2 Fuzzy Integration for Time Series Prediction and Its Optimization with PSO. *Studies in Fuzziness and Soft Computing*, **2016**, 375-388	0.7	2
527	Optimization of fuzzy controller design using a new bee colony algorithm with fuzzy dynamic parameter adaptation. *Applied Soft Computing Journal*, **2016**, 43, 131-142	7.5	105
526	Method for Higher Order polynomial Sugeno Fuzzy Inference Systems. *Information Sciences*, **2016**, 351, 76-89	7.7	14
525	Interval Type-2 Fuzzy System Design Based on the Interval Type-2 Fuzzy C-Means Algorithm. *Studies in Fuzziness and Soft Computing*, **2016**, 133-146	0.7	4
524	Optimization of type-2 fuzzy weights in backpropagation learning for neural networks using GAs and PSO. *Applied Soft Computing Journal*, **2016**, 38, 860-871	7.5	104
523	Hierarchical aggregation of multiple fuzzy controllers for global complex control problems. *Applied Soft Computing Journal*, **2016**, 38, 851-859	7.5	9

522	Imperialist Competitive Algorithm with Fuzzy Logic for Parameter Adaptation: A Parameter Variation Study. *Advances in Intelligent Systems and Computing*, **2016**, 277-289	0.4	2
521	Fuzzy Logic for Improving Interactive Evolutionary Computation Techniques for Ad Text Optimization. *Advances in Intelligent Systems and Computing*, **2016**, 291-300	0.4	2
520	Optimization by Cuckoo Search of Interval Type-2 Fuzzy Logic Systems for Edge Detection. *Studies in Fuzziness and Soft Computing*, **2016**, 141-154	0.7	3
519	A Neural Network with a Learning Vector Quantization Algorithm for Multiclass Classification Using a Modular Approach. *Studies in Fuzziness and Soft Computing*, **2016**, 171-184	0.7	1
518	Optimization of an Integrator to Control the Flight of an Airplane. *Studies in Fuzziness and Soft Computing*, **2016**, 407-417	0.7	1
517	Choquet Integral with Interval Type 2 Sugeno Measures as an Integration Method for Modular Neural Networks. *Studies in Fuzziness and Soft Computing*, **2016**, 71-86	0.7	1
516	Method for Uncertainty Measurement and Its Application to the Formation of Interval Type-2 Fuzzy Sets. *Advances in Intelligent Systems and Computing*, **2016**, 61-74	0.4	
515	Control Problem and Proposed Method. *SpringerBriefs in Applied Sciences and Technology*, **2016**, 13-19	0.4	
514	Theory and Background. *SpringerBriefs in Applied Sciences and Technology*, **2016**, 3-11	0.4	
513	Simulation Results. *SpringerBriefs in Applied Sciences and Technology*, **2016**, 21-59	0.4	
512	Genetic Optimization of Type-1 and Interval Type-2 Fuzzy Integrators in Ensembles of ANFIS Models for Time Series Prediction. *Studies in Fuzziness and Soft Computing*, **2016**, 331-351	0.7	
511	A Comparative Study of Membership Functions for an Interval Type-2 Fuzzy System Used for Dynamic Parameter Adaptation in Particle Swarm Optimization. *Studies in Fuzziness and Soft Computing*, **2016**, 373-385	0.7	1
510	Optimization of Type-1 and Type-2 Fuzzy Systems Applied to Pattern Recognition. *Studies in Fuzziness and Soft Computing*, **2016**, 127-139	0.7	
509	Fuzzy Sets in Dynamic Adaptation of Parameters of a Bee Colony Optimization for Controlling the Trajectory of an Autonomous Mobile Robot. *Sensors*, **2016**, 16,	3.8	51
508	Review of Recent Type-2 Fuzzy Controller Applications. *Algorithms*, **2016**, 9, 39	1.8	44
507	A New Fuzzy Harmony Search Algorithm Using Fuzzy Logic for Dynamic Parameter Adaptation. *Algorithms*, **2016**, 9, 69	1.8	47
506	Design of Ensemble Neural Networks for Predicting the US Dollar/MX Time Series with Particle Swarm Optimization. *Studies in Fuzziness and Soft Computing*, **2016**, 317-329	0.7	2
505	**2016**,		7

504	Comparison between Choquet and Sugeno integrals as aggregation operators for pattern recognition **2016**,		5
503	**2016**,		1
502	Type-2 fuzzy logic dynamic parameter adaptation in a new Fuzzy Differential Evolution method **2016**,		4
501	A fuzzy logic approach for dynamic adaptation of parameters in galactic swarm optimization **2016**,		6
500	A new metaheuristic based on the self-defense techniques of the plants in nature **2016**,		3
499	Grey wolf optimizer with dynamic adaptation of parameters using fuzzy logic **2016**,		26
498	Fuzzy differential evolution method with dynamic parameter adaptation using type-2 fuzzy logic **2016**,		9
497	Bidding strategies based on type-1 and interval type-2 fuzzy inference systems for Google Adwords advertising campaigns **2016**,		1
496	Type-1 to Type-n Fuzzy Logic and Systems. *Studies in Fuzziness and Soft Computing*, **2016**, 129-157	0.7	2
495	Cuckoo Search via L□y Flights and a Comparison with Genetic Algorithms. *Studies in Computational Intelligence*, **2015**, 91-103	0.8	10
494	A New Proposal for a Granular Fuzzy C-Means Algorithm. *Studies in Computational Intelligence*, **2015**, 47-57	0.8	2
493	Study of Parameter Variations in the Cuckoo Search Algorithm and the Influence in Its Behavior. *Studies in Computational Intelligence*, **2015**, 199-210	0.8	3
492	Method for Measurement of Uncertainty Applied to the Formation of Interval Type-2 Fuzzy Sets. *Studies in Computational Intelligence*, **2015**, 13-25	0.8	3
491	Generalized type-2 fuzzy weight adjustment for backpropagation neural networks in time series prediction. *Information Sciences*, **2015**, 325, 159-174	7.7	44
490	Cuckoo Search Algorithm via L□y Flight with Dynamic Adaptation of Parameter Using Fuzzy Logic for Benchmark Mathematical Functions. *Studies in Computational Intelligence*, **2015**, 555-571	0.8	6
489	Type-2 fuzzy logic aggregation of multiple fuzzy controllers for airplane flight control. *Information Sciences*, **2015**, 324, 247-256	7.7	138
488	Imperialist Competitive Algorithm Applied to the Optimization of Mathematical Functions: A Parameter Variation Study. *Studies in Computational Intelligence*, **2015**, 219-232	0.8	6
487	An Improved Harmony Search Algorithm Using Fuzzy Logic for the Optimization of Mathematical Functions. *Studies in Computational Intelligence*, **2015**, 605-615	0.8	9

486	A New Bio-inspired Optimization Algorithm Based on the Self-defense Mechanisms of Plants. *Studies in Computational Intelligence*, **2015**, 211-218	0.8	6
485	Bio-Inspired Optimization of Type-2 Fuzzy Controllers **2015**, 1499-1507		
484	Fuzzy Controllers for Autonomous Mobile Robots **2015**, 1517-1531		1
483	Ant Colony Optimization with Parameter Adaptation Using Fuzzy Logic for TSP Problems. *Studies in Computational Intelligence*, **2015**, 593-603	0.8	13
482	Face Recognition with a Sobel Edge Detector and the Choquet Integral as Integration Method in a Modular Neural Networks. *Studies in Computational Intelligence*, **2015**, 59-70	0.8	8
481	Short Remark on Fuzzy Sets, Interval Type-2 Fuzzy Sets, General Type-2 Fuzzy Sets and Intuitionistic Fuzzy Sets. *Advances in Intelligent Systems and Computing*, **2015**, 183-190	0.4	13
480	A New Bat Algorithm with Fuzzy Logic for Dynamical Parameter Adaptation and Its Applicability to Fuzzy Control Design. *Studies in Computational Intelligence*, **2015**, 65-79	0.8	8
479	Optimization of modular granular neural networks using a hierarchical genetic algorithm based on the database complexity applied to human recognition. *Information Sciences*, **2015**, 309, 73-101	7.7	42
478	Generalized Type-2 Fuzzy Systems for controlling a mobile robot and a performance comparison with Interval Type-2 and Type-1 Fuzzy Systems. *Expert Systems With Applications*, **2015**, 42, 5904-5914	7.8	203
477	Cuckoo search algorithm for the optimization of type-2 fuzzy image edge detection systems **2015**,		17
476	**2015**,		4
475	Edge detection method based on Interval type-2 fuzzy systems for color images **2015**,		5
474	A new Interval Type-2 Fuzzy Possibilistic C-Means clustering algorithm **2015**,		6
473	Fuzzy control of parameters to dynamically adapt the HS algorithm for optimization **2015**,		3
472	Optimization of Reactive Fuzzy Controllers for Mobile Robots Based on the Chemical Reactions Algorithm. *Studies in Computational Intelligence*, **2015**, 253-266	0.8	1
471	A New Approach for Intelligent Control of Nonlinear Dynamic Plants Using a Benchmark Problem. *Studies in Computational Intelligence*, **2015**, 477-487	0.8	
470	Color Image Edge Detection Method Based on Interval Type-2 Fuzzy Systems. *Studies in Computational Intelligence*, **2015**, 3-11	0.8	3
469	A Method Based on Interactive Evolutionary Computation for Increasing the Effectiveness of Advertisement Texts **2015**,		1

468	Modification of the Bat Algorithm using fuzzy logic for dynamical parameter adaptation **2015**,		17
467	A new approach for dynamic fuzzy logic parameter tuning in Ant Colony Optimization and its application in fuzzy control of a mobile robot. *Applied Soft Computing Journal*, **2015**, 28, 150-159	7.5	133
466	A hybrid optimization method with PSO and GA to automatically design Type-1 and Type-2 fuzzy logic controllers. *International Journal of Machine Learning and Cybernetics*, **2015**, 6, 175-196	3.8	48
465	Information granule formation via the concept of uncertainty-based information with Interval Type-2 Fuzzy Sets representation and Takagi Sugeno Kang consequents optimized with Cuckoo search. *Applied Soft Computing Journal*, **2015**, 27, 602-609	7.5	126
464	New approach using ant colony optimization with ant set partition for fuzzy control design applied to the ball and beam system. *Information Sciences*, **2015**, 294, 203-215	7.7	53
463	Introduction to an optimization algorithm based on the chemical reactions. *Information Sciences*, **2015**, 291, 85-95	7.7	13
462	A fuzzy cellular prey predator model for pest control under sustainable bio-economic equilibrium: A formal description and simulation analysis study. *Applied Mathematical Modelling*, **2015**, 39, 1794-1803	4.5	3
461	A Harmony Search Algorithm Comparison with Genetic Algorithms. *Studies in Computational Intelligence*, **2015**, 105-123	0.8	8
460	A hybrid learning method composed by the orthogonal least-squares and the back-propagation learning algorithms for interval A2-C1 type-1 non-singleton type-2 TSK fuzzy logic systems. *Soft Computing*, **2015**, 19, 661-678	3.5	23
459	Fuzzy Chemical Reaction Algorithm. *Lecture Notes in Computer Science*, **2015**, 452-459	0.9	1
458	Response integration in modular neural networks using Choquet Integral with Interval type 2 Sugeno measures **2015**,		4
457	Bio-Inspired Optimization Algorithm Based on the Self-defense Mechanism in Plants. *Lecture Notes in Computer Science*, **2015**, 227-237	0.9	6
456	Fuzzy Index to Evaluate Edge Detection in Digital Images. *PLoS ONE*, **2015**, 10, e0131161	3.7	13
455	Fuzzy Logic for Dynamic Parameter Tuning in ACO and Its Application in Optimal Fuzzy Logic Controller Design. *Studies in Computational Intelligence*, **2015**, 3-28	0.8	5
454	Bio-Inspired Optimization of Interval Type-2 Fuzzy Controller Design **2015**, 183-215		
453	Fuzzy Classification System Design Using PSO with Dynamic Parameter Adaptation Through Fuzzy Logic. *Studies in Computational Intelligence*, **2015**, 29-47	0.8	8
452	Optimization of Benchmark Mathematical Functions Using the Firefly Algorithm with Dynamic Parameters. *Studies in Computational Intelligence*, **2015**, 81-89	0.8	9
451	A Fuzzy Bee Colony Optimization Algorithm Using an Interval Type-2 Fuzzy Logic System for Trajectory Control of a Mobile Robot. *Lecture Notes in Computer Science*, **2015**, 460-471	0.9	5

450	Optimization of a reactive controller for mobile robots based on CRA **2015**,		2
449	Time Series Prediction Using Ensembles of ANFIS Models with Particle Swarm Optimization of the Fuzzy Integrators. *Lecture Notes in Computer Science*, **2015**, 472-483	0.9	2
448	A New Bat Algorithm Augmentation Using Fuzzy Logic for Dynamical Parameter Adaptation. *Lecture Notes in Computer Science*, **2015**, 433-442	0.9	4
447	Proposed augmentation of the Bat Algorithm using fuzzy logic for dynamic parameter adaptation **2015**,		1
446	Fuzzy dynamic parameters adaptation in the Cuckoo Search Algorithm using fuzzy logic **2015**,		23
445	Differential Evolution with Dynamic Adaptation of Parameters for the Optimization of Fuzzy Controllers. *Studies in Computational Intelligence*, **2015**, 49-63	0.8	3
444	Fuzzy System Optimization Using a Hierarchical Genetic Algorithm Applied to Pattern Recognition. *Advances in Intelligent Systems and Computing*, **2015**, 713-720	0.4	6
443	A Type-2 Fuzzy Neural Network Ensemble to Predict Chaotic Time Series. *Studies in Computational Intelligence*, **2015**, 185-195	0.8	2
442	Exploring the Suitability of a Genetic Algorithm as Tool for Boosting Efficiency in Monte Carlo Estimation of Leaf Area of Eelgrass. *Studies in Computational Intelligence*, **2015**, 291-303	0.8	3
441	A New Algorithm Based in the Smart Behavior of the Bees for the Design of Mamdani-Style Fuzzy Controllers Using Complex Non-linear Plants. *Studies in Computational Intelligence*, **2015**, 617-637	0.8	8
440	Design of an Optimal Modular LVQ Network for Classification of Arrhythmias Based on a Variable Training-Test Datasets Strategy. *Advances in Intelligent Systems and Computing*, **2015**, 369-375	0.4	
439	Design of a Fuzzy System for the Fly the de Havilland Beaver. *Advances in Intelligent Systems and Computing*, **2015**, 81-88	0.4	
438	Application of interval type-2 fuzzy neural networks in non-linear identification and time series prediction. *Soft Computing*, **2014**, 18, 1213-1224	3.5	75
437	A review on type-2 fuzzy logic applications in clustering, classification and pattern recognition. *Applied Soft Computing Journal*, **2014**, 21, 568-577	7.5	174
436	A review on interval type-2 fuzzy logic applications in intelligent control. *Information Sciences*, **2014**, 279, 615-631	7.7	172
435	Embedded Average of an Interval Type-2 Fuzzy Systems for Applications in FPGAs. *Intelligent Automation and Soft Computing*, **2014**, 20, 183-199	2.6	3
434	Implementing flower multi-objective algorithm for selection of university academic credits **2014**,		7
433	Finishing mill strip gage setup and control by interval type-1 non-singleton type-2 fuzzy logic systems. *Applied Soft Computing Journal*, **2014**, 24, 900-911	7.5	17

432	Optimization of the Type-1 and Type-2 fuzzy controller design for the water tank using the Bee Colony Optimization **2014**,		10
431	Optimization of interval type-2 fuzzy integrators in ensembles of ANFIS models for prediction of the Mackey-Glass time series **2014**,		6
430	Optimization of ensemble neural networks with fuzzy integration using the particle swarm algorithm for the US Dollar/MX time series prediction **2014**,		1
429	A fuzzy differential evolution method with dynamic adaptation of parameters for the optimization of fuzzy controllers **2014**,		7
428	**2014**,		3
427	Interval type-2 fuzzy clustering algorithm using the combination of the fuzzy and possibilistic C-Mean algorithms **2014**,		4
426	Optimal design of interval type 2 fuzzy controllers based on a simple tuning algorithm. *Applied Soft Computing Journal*, **2014**, 23, 270-285	7.5	32
425	Type-1 and Type-2 fuzzy logic controller design using a Hybrid PSO□GA optimization method. *Information Sciences*, **2014**, 285, 35-49	7.7	49
424	A new neural network model based on the LVQ algorithm for multi-class classification of arrhythmias. *Information Sciences*, **2014**, 279, 483-497	7.7	93
423	Edge-Detection Method for Image Processing Based on Generalized Type-2 Fuzzy Logic. *IEEE Transactions on Fuzzy Systems*, **2014**, 22, 1515-1525	8.3	180
422	Surface aggregation patterns of LDL receptors near coated pits III: potential effects of combined retrograde membrane flow-diffusion and a polarized-insertion mechanism. *Theoretical Biology and Medical Modelling*, **2014**, 11, 23	2.3	2
421	Interval type-2 fuzzy weight adjustment for backpropagation neural networks with application in time series prediction. *Information Sciences*, **2014**, 260, 1-14	7.7	100
420	Modular Neural Networks architecture optimization with a new nature inspired method using a fuzzy combination of Particle Swarm Optimization and Genetic Algorithms. *Information Sciences*, **2014**, 270, 143-153	7.7	71
419	A fuzzy system for parameter adaptation in ant colony optimization **2014**,		4
418	Optimization of the type-1 and interval type-2 fuzzy integrators in Ensembles of ANFIS models for prediction of the Dow Jones time series **2014**,		2
417	Bat Algorithm Comparison with Genetic Algorithm Using Benchmark Functions. *Studies in Computational Intelligence*, **2014**, 225-237	0.8	8
416	Genetic Design of Optimal Type-1 and Type-2 Fuzzy Systems for Longitudinal Control of an Airplane. *Intelligent Automation and Soft Computing*, **2014**, 20, 213-227	2.6	13
415	Shipwrecked on Fear: Selection of Electives in School Minorities in a University Using Cuckoo Search Algorithm. *Studies in Computational Intelligence*, **2014**, 139-150	0.8	3

414	Chemical Optimization Algorithm for Fuzzy Controller Design. *SpringerBriefs in Applied Sciences and Technology*, **2014**,	0.4	7
413	The Proposed Chemical Reaction Algorithm. *SpringerBriefs in Applied Sciences and Technology*, **2014**, 13-18	0.4	
412	Time series prediction using ensembles of ANFIS models with genetic optimization of interval type-2 and type-1 fuzzy integrators. *International Journal of Hybrid Intelligent Systems*, **2014**, 11, 211-226	0.9	45
411	A Fuzzy Control Design for an Autonomous Mobile Robot Using Ant Colony Optimization. *Studies in Computational Intelligence*, **2014**, 289-304	0.8	2
410	Using the value of Lin's concordance correlation coefficient as a criterion for efficient estimation of areas of leaves of eelgrass from noisy digital images. *Source Code for Biology and Medicine*, **2014**, 9, 29	1.9	4
409	A multi-objective optimization of type-2 fuzzy control speed in FPGAs. *Applied Soft Computing Journal*, **2014**, 24, 1164-1174	7.5	25
408	Design of a Fuzzy System for Flight Control of an F-16 Airplane. *Studies in Computational Intelligence*, **2014**, 209-224	0.8	
407	Face Recognition with Choquet Integral in Modular Neural Networks. *Studies in Computational Intelligence*, **2014**, 437-449	0.8	6
406	Uncertainty-Based Information Granule Formation. *Studies in Computational Intelligence*, **2014**, 113-123	0.8	
405	Hierarchical Genetic Algorithms for Fuzzy Inference System Optimization Applied to Response Integration for Pattern Recognition. *Lecture Notes in Computer Science*, **2014**, 345-356	0.9	
404	Genetic Algorithm Optimization for Type-2 Non-singleton Fuzzy Logic Controllers. *Studies in Computational Intelligence*, **2014**, 3-18	0.8	18
403	Toolbox for bio-inspired optimization of mathematical functions. *Computer Applications in Engineering Education*, **2014**, 22, 11-22	1.6	5
402	Fuzzy granular gravitational clustering algorithm for multivariate data. *Information Sciences*, **2014**, 279, 498-511	7.7	100
401	A survey on nature-inspired optimization algorithms with fuzzy logic for dynamic parameter adaptation. *Expert Systems With Applications*, **2014**, 41, 6459-6466	7.8	97
400	Particle swarm optimization of ensemble neural networks with fuzzy aggregation for time series prediction of the Mexican Stock Exchange. *Information Sciences*, **2014**, 280, 188-204	7.7	86
399	Optimization of Benchmark Mathematical Functions Using the Firefly Algorithm. *Studies in Computational Intelligence*, **2014**, 177-189	0.8	4
398	Optimization of Fuzzy Control Systems for Mobile Robots Based on PSO. *Studies in Computational Intelligence*, **2014**, 191-208	0.8	4
397	Comparison of the Optimal Design of Fuzzy Controllers for the Water Tank Using Ant Colony Optimization. *Studies in Computational Intelligence*, **2014**, 255-273	0.8	5

396	Differential Evolution with Dynamic Adaptation of Parameters for the Optimization of Fuzzy Controllers. *Studies in Computational Intelligence*, **2014**, 275-288	0.8	22
395	Designing Type-2 Fuzzy Systems Using the Interval Type-2 Fuzzy C-Means Algorithm. *Studies in Computational Intelligence*, **2014**, 37-50	0.8	9
394	A Comparative Study of Membership Functions for an Interval Type-2 Fuzzy System used to Dynamic Parameter Adaptation in Particle Swarm Optimization. *Studies in Computational Intelligence*, **2014**, 67-78	0.8	2
393	Theory and Background. *SpringerBriefs in Applied Sciences and Technology*, **2014**, 5-9	0.4	
392	Simulation Results. *SpringerBriefs in Applied Sciences and Technology*, **2014**, 27-56	0.4	
391	Optimization of Fuzzy Controllers Design Using the Bee Colony Algorithm. *Studies in Computational Intelligence*, **2014**, 163-175	0.8	
390	Application Problems. *SpringerBriefs in Applied Sciences and Technology*, **2014**, 19-26	0.4	
389	Chemical Definitions. *SpringerBriefs in Applied Sciences and Technology*, **2014**, 11-12	0.4	
388	A Type 2 Fuzzy Neural Network Ensemble to Estimate Time Increased Probability of Seismic Hazard in North Region of Baja California Peninsula. *Studies in Computational Intelligence*, **2014**, 125-135	0.8	
387	Nature-Inspired Optimization of Type-2 Fuzzy Systems. *Lecture Notes in Computer Science*, **2014**, 331-344	0.9	0
386	MLP for Electroencephalographic Signals Classification Using Different Adaptive Learning Algorithm. *Studies in Computational Intelligence*, **2014**, 369-380	0.8	
385	A visual toolbox for modeling and testing multi-net neural systems. *Computer Applications in Engineering Education*, **2013**, 21, 164-184	1.6	1
384	Ant colony test center for planning autonomous mobile robot navigation. *Computer Applications in Engineering Education*, **2013**, 21, 214-229	1.6	29
383	Using MatLab's fuzzy logic toolbox to create an application for RAMSET in software engineering courses. *Computer Applications in Engineering Education*, **2013**, 21, 596-605	1.6	6
382	Computational intelligence software for interval type-2 fuzzy logic. *Computer Applications in Engineering Education*, **2013**, 21, 737-747	1.6	12
381	Using allometric procedures to substantiate the plastochrone method for eelgrass leaf growth assessments. *Theoretical Biology and Medical Modelling*, **2013**, 10, 34	2.3	2
380	Optimization of interval type-2 and type-1 fuzzy integrators in ensembles of ANFIS models with Genetic Algorithms **2013**,		1
379	Interval type-2 fuzzy clustering for membership function generation **2013**,		14

378	A new approach for time series prediction using ensembles of ANFIS models with interval type-2 and type-1 fuzzy integrators **2013**,		9
377	A new approach based on generalized type-2 fuzzy logic for edge detection **2013**,		3
376	Modular granular neural networks optimization with Multi-Objective Hierarchical Genetic Algorithm for human recognition based on iris biometric **2013**,		10
375	Statistical comparison of type-1 and type-2 fuzzy systems design with genetic algorithms in the case of three tank water control **2013**,		2
374	Neural Network with Type-2 Fuzzy Weights Adjustment for Pattern Recognition of the Human Iris Biometrics. *Lecture Notes in Computer Science*, **2013**, 259-270	0.9	10
373	A hybrid method for IT2 TSK formation based on the principle of justifiable granularity and PSO for spread optimization **2013**,		4
372	A new gravitational search algorithm using fuzzy logic to parameter adaptation **2013**,		60
371	Time series prediction using ensembles of neuro-fuzzy models with interval type-2 and type-1 fuzzy integrators **2013**,		4
370	Generalized type-2 fuzzy logic in response integration of modular neural networks **2013**,		5
369	Nature inspired chemical optimization to design a type-2 fuzzy controller for a mobile robot **2013**,		3
368	Bat algorithm to improve a Financial Trust Forest **2013**,		3
367	Formation of general type-2 Gaussian membership functions based on the information granule numerical evidence **2013**,		5
366	A class of interval type-2 fuzzy neural networks illustrated with application to non-linear identification **2013**,		3
365	Particle swarm optimization with dynamic parameter adaptation using interval type-2 fuzzy logic for benchmark mathematical functions **2013**,		16
364	Optimization of type-2 fuzzy integration in ensemble neural networks for predicting the US Dolar/MX pesos time series **2013**,		7
363	Optimization of ensemble neural networks with type-2 fuzzy response integration for predicting the Mackey-Glass time series **2013**,		1
362	Particle swarm optimization of interval type-2 fuzzy systems for FPGA applications. *Applied Soft Computing Journal*, **2013**, 13, 496-508	7.5	121
361	Genetic Optimization of Membership Functions in Modular Fuzzy Controllers for Complex Problems. *Studies in Computational Intelligence*, **2013**, 51-62	0.8	6

360	Optimal design of type-2 and type-1 fuzzy tracking controllers for autonomous mobile robots under perturbed torques using a new chemical optimization paradigm. *Expert Systems With Applications*, **2013**, 40, 3185-3195	7.8	112
359	Handling of Synergy into an Algorithm for Project Portfolio Selection. *Studies in Computational Intelligence*, **2013**, 417-430	0.8	8
358	Conjunction and disjunction operations for digital fuzzy hardware. *Applied Soft Computing Journal*, **2013**, 13, 3248-3258	7.5	11
357	Optimization of the Interval Type-2 Fuzzy C-Means using Particle Swarm Optimization **2013**,		8
356	Evolutionary Optimization of the Fuzzy Integrator in a Navigation System for a Mobile Robot. *Studies in Computational Intelligence*, **2013**, 21-31	0.8	15
355	Modular Neural Networks Optimization with Hierarchical Genetic Algorithms with Fuzzy Response Integration for Pattern Recognition. *Lecture Notes in Computer Science*, **2013**, 247-258	0.9	3
354	Optimization of a Fuzzy Tracking Controller for an Autonomous Mobile Robot under Perturbed Torques by Means of a Chemical Optimization Paradigm. *Studies in Computational Intelligence*, **2013** , 3-20	0.8	12
353	Parallel Particle Swarm Optimization with Parameters Adaptation Using Fuzzy Logic. *Lecture Notes in Computer Science*, **2013**, 374-385	0.9	15
352	Optimal design of fuzzy classification systems using PSO with dynamic parameter adaptation through fuzzy logic. *Expert Systems With Applications*, **2013**, 40, 3196-3206	7.8	195
351	An Analysis of the Relationship between the Size of the Clusters and the Principle of Justifiable Granularity in Clustering Algorithms. *Studies in Fuzziness and Soft Computing*, **2013**, 239-263	0.7	1
350	A review on the applications of type-2 fuzzy logic in classification and pattern recognition. *Expert Systems With Applications*, **2013**, 40, 5413-5423	7.8	111
349	Interval Type-2 Fuzzy Logic for Hybrid Intelligent Control. *Studies in Fuzziness and Soft Computing*, **2013**, 91-94	0.7	1
348	Type-2 Fuzzy Logic in Image Analysis and Pattern Recognition. *Studies in Fuzziness and Soft Computing*, **2013**, 187-201	0.7	
347	A Method to Solve the Traveling Salesman Problem Using Ant Colony Optimization Variants with Ant Set Partitioning. *Studies in Computational Intelligence*, **2013**, 237-246	0.8	17
346	Particle Swarm Optimization for Average Approximation of Interval Type-2 Fuzzy Inference Systems Design in FPGAs for Real Applications. *Studies in Computational Intelligence*, **2013**, 33-49	0.8	10
345	An edge detection method based on generalized type-2 fuzzy logic **2013**,		2
344	Backpropagation learning method with interval type-2 fuzzy weights in neural networks **2013**,		1
343	Optimization of Interval Type-2 and Type-1 Fuzzy Integrators in Ensembles of ANFIS Models with Genetic Algorithms **2013**,		1

342	Design of optimal membership functions for fuzzy controllers of the water tank and inverted pendulum with PSO variants **2013**,		4
341	**2013**,		5
340	Particle Swarm Optimization with Dynamic Parameter Adaptation Using Fuzzy Logic for Benchmark Mathematical Functions. *Studies in Computational Intelligence*, **2013**, 247-258	0.8	13
339	Optimization of type-2 fuzzy weight for neural network using genetic algorithm and particle swarm optimization **2013**,		8
338	An Analysis on the Intrinsic Implementation of the Principle of Justifiable Granularity in Clustering Algorithms. *Studies in Computational Intelligence*, **2013**, 121-134	0.8	2
337	Optimization of fuzzy control systems with different variants of Particle Swarm Optimization **2013**,		4
336	Comparison of fuzzy controllers for the water tank with Type-1 and Type-2 fuzzy logic **2013**,		17
335	Genetic optimization of interval type-2 fuzzy reactive controllers for mobile robots **2013**,		3
334	Dynamic Fuzzy Logic Parameter Tuning for ACO and Its Application in the Fuzzy Logic Control of an Autonomous Mobile Robot. *International Journal of Advanced Robotic Systems*, **2013**, 10, 51	1.4	26
333	Optimal Design of the Fuzzy Navigation System for a Mobile Robot Using Evolutionary Algorithms. *International Journal of Advanced Robotic Systems*, **2013**, 10, 139	1.4	8
332	Universal Approximation of a Class of Interval Type-2 Fuzzy Neural Networks in Nonlinear Identification. *Advances in Fuzzy Systems*, **2013**, 2013, 1-16	1.7	17
331	Dynamic Fuzzy Logic Parameter Tuning for ACO and Its Application in TSP Problems. *Studies in Computational Intelligence*, **2013**, 259-271	0.8	46
330	Bio-inspired Optimization Methods on Graphic Processing Unit for Minimization of Complex Mathematical Functions. *Studies in Computational Intelligence*, **2013**, 313-322	0.8	18
329	Type-2 Fuzzy Grammar in Language Evolution. *Studies in Computational Intelligence*, **2013**, 501-515	0.8	4
328	Designing Systematic Stable Fuzzy Logic Controllers by Fuzzy Lyapunov Synthesis. *Studies in Computational Intelligence*, **2013**, 63-79	0.8	6
327	Design of Fuzzy Control Systems with Different PSO Variants. *Studies in Computational Intelligence*, **2013**, 81-88	0.8	17
326	Optimization of Membership Functions for Type-1 and Type 2 Fuzzy Controllers of an Autonomous Mobile Robot Using PSO. *Studies in Computational Intelligence*, **2013**, 97-104	0.8	11
325	Optimization of Type-2 and Type-1 Fuzzy Tracking Controllers for an Autonomous Mobile Robot under Perturbed Torques by Means of a Chemical Optimization Paradigm. *Studies in Fuzziness and Soft Computing*, **2013**, 3-26	0.7	3

324	Hierarchical Genetic Optimization of the Fuzzy Integrator for Navigation of a Mobile Robot. *Studies in Fuzziness and Soft Computing*, **2013**, 77-96	0.7	6
323	Comparative Study of Type-1 and Type-2 Fuzzy Systems for the Three-Tank Water Control Problem. *Lecture Notes in Computer Science*, **2013**, 362-373	0.9	7
322	Bio-inspired Optimization of Interval Type-2 Fuzzy Controllers. *Studies in Fuzziness and Soft Computing*, **2013**, 241-254	0.7	
321	Particle Swarm Optimization for Multi-objective Control Design Using AT2-FLC in FPGA Device. *Studies in Fuzziness and Soft Computing*, **2013**, 97-124	0.7	
320	Type-2 Fuzzy Logic Grammars in Language Evolution. *Studies in Fuzziness and Soft Computing*, **2013**, 265-286		
319	Genetic Optimization of Modular Type-1 Fuzzy Controllers for Complex Control Problems. *Studies in Fuzziness and Soft Computing*, **2013**, 125-154	0.7	1
318	Comparative study of bio-inspired algorithms applied to the optimization of type-1 and type-2 fuzzy controllers for an autonomous mobile robot. *Information Sciences*, **2012**, 192, 19-38	7.7	202
317	Genetic optimization of modular neural networks with fuzzy response integration for human recognition. *Information Sciences*, **2012**, 197, 1-19	7.7	91
316	Hybrid intelligent system for cardiac arrhythmia classification with Fuzzy K-Nearest Neighbors and neural networks combined with a fuzzy system. *Expert Systems With Applications*, **2012**, 39, 2947-2955	7.8	77
315	A new approach for time series prediction using ensembles of ANFIS models. *Expert Systems With Applications*, **2012**, 39, 3494-3506	7.8	125
314	An optimization method for designing type-2 fuzzy inference systems based on the footprint of uncertainty using genetic algorithms. *Expert Systems With Applications*, **2012**, 39, 4590-4598	7.8	109
313	Genetic Design of an Interval Type-2 Fuzzy Controller for Velocity Regulation in a DC Motor. *International Journal of Advanced Robotic Systems*, **2012**, 9, 204	1.4	6
312	**2012**,		3
311	Optimization of type-2 fuzzy systems based on bio-inspired methods: A concise review. *Information Sciences*, **2012**, 205, 1-19	7.7	140
310	Recent Advances in Interval Type-2 Fuzzy Systems. *SpringerBriefs in Applied Sciences and Technology* , **2012**,	0.4	16
309	Particle Swarm Optimization in the Design of Type-2 Fuzzy Systems. *SpringerBriefs in Applied Sciences and Technology*, **2012**, 27-31	0.4	1
308	Designing Type-1 and Type-2 Fuzzy Logic Controllers via Fuzzy Lyapunov Synthesis for nonsmooth mechanical systems. *Engineering Applications of Artificial Intelligence*, **2012**, 25, 971-979	7.2	98
307	Nature optimization applied to design a type-2 fuzzy controller for an autonomous mobile robot **2012**,		10

306	Type-2 Fuzzy Logic Systems. *SpringerBriefs in Applied Sciences and Technology*, **2012**, 7-12	0.4	14
305	Bio-Inspired Optimization Methods. *SpringerBriefs in Applied Sciences and Technology*, **2012**, 13-18	0.4	
304	Introduction to Type-2 Fuzzy Logic Control. *Studies in Fuzziness and Soft Computing*, **2012**, 3-5	0.7	6
303	Type-2 Fuzzy Logic in Intelligent Control Applications. *Studies in Fuzziness and Soft Computing*, **2012** ,	0.7	49
302	Fuzzy granular gravitational clustering algorithm **2012**,		5
301	Type-2 fuzzy granular approach for intelligent control: The case of three tank water control **2012**,		1
300	Design of a Type-2 Fuzzy Controller and Its Comparison with Type-1 Fuzzy and PID Controllers for Velocity Regulation in a Motor. *Studies in Fuzziness and Soft Computing*, **2012**, 65-75	0.7	2
299	High Performance Fuzzy Systems for Real World Problems. *Advances in Fuzzy Systems*, **2012**, 2012, 1-2	1.7	1
298	Embedding a high speed interval type-2 fuzzy controller for a real plant into an FPGA. *Applied Soft Computing Journal*, **2012**, 12, 988-998	7.5	78
297	A review on the design and optimization of interval type-2 fuzzy controllers. *Applied Soft Computing Journal*, **2012**, 12, 1267-1278	7.5	257
296	Other Methods for Optimization of Type-2 Fuzzy Systems. *SpringerBriefs in Applied Sciences and Technology*, **2012**, 37-43	0.4	
295	Comparison between multiobjective GA and PSO for parameter optimization of AT2-FLC for a real application in FPGA **2012**,		3
294	Bio-inspired optimization of fuzzy logic controllers for autonomous mobile robots **2012**,		12
293	Decentralized direct and indirect I-term adaptive fuzzy-neural control of a bioprocess plant **2012**,		1
292	Simulation of language evolution using Fuzzy Grammars **2012**,		2
291	Optimization of type-2 fuzzy reactive controllers for an autonomous mobile robot **2012**,		12
290	Methodology to Optimize Manufacturing Time for a CNC Using a High Performance Implementation of ACO. *International Journal of Advanced Robotic Systems*, **2012**, 9, 121	1.4	7
289	Efficient Stereoscopic Video Matching and Map Reconstruction for a Wheeled Mobile Robot. *International Journal of Advanced Robotic Systems*, **2012**, 9, 120	1.4	3

288	Design of Interval Type-2 Fuzzy Logic Controllers. *Studies in Fuzziness and Soft Computing*, **2012**, 23-47	0.7	3
287	Interval Type-2 Mamdani Fuzzy Systems for Intelligent Control. *Studies in Fuzziness and Soft Computing*, **2012**, 163-177	0.7	7
286	Overview of Genetic Algorithms Applied in the Optimization of Type-2 Fuzzy Systems. *SpringerBriefs in Applied Sciences and Technology*, **2012**, 19-25	0.4	2
285	Ant Colony Optimization Algorithms for the Design of Type-2 Fuzzy Systems. *SpringerBriefs in Applied Sciences and Technology*, **2012**, 33-35	0.4	2
284	Genetic Optimization of Interval Type-2 Fuzzy Systems for Hardware Implementation on FPGAs. *SpringerBriefs in Applied Sciences and Technology*, **2012**, 63-84	0.4	1
283	Simulation Results Illustrating the Optimization of Type-2 Fuzzy Controllers. *SpringerBriefs in Applied Sciences and Technology*, **2012**, 45-62	0.4	
282	Optimization of Fuzzy Logic Controllers for Robotic Autonomous Systems with PSO and ACO. *Adaptation, Learning, and Optimization*, **2011**, 389-417	0.7	1
281	Intelligent Control of Nonlinear Dynamic Plants Using a Hierarchical Modular Approach and Type-2 Fuzzy Logic. *Lecture Notes in Computer Science*, **2011**, 1-12	0.9	17
280	**2011**,		1
279	Genetic optimization of ensemble neural networks for complex time series prediction **2011**,		18
278	Genetic algorithm with a Neuro-Fuzzy fitness function for optimal fuzzy controller design **2011**,		1
277	Face Recognition With an Improved Interval Type-2 Fuzzy Logic Sugeno Integral and Modular Neural Networks. *IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans*, **2011**, 41, 1001-1012		92
276	Design of interval type-2 fuzzy models through optimal granularity allocation. *Applied Soft Computing Journal*, **2011**, 11, 5590-5601	7.5	99
275	Generation of walking periodic motions for a biped robot via genetic algorithms. *Applied Soft Computing Journal*, **2011**, 11, 5306-5314	7.5	25
274	Optimization of interval type-2 fuzzy logic controllers using evolutionary algorithms. *Soft Computing*, **2011**, 15, 1145-1160	3.5	102
273	Simulation of the bird age-structured population growth based on an interval type-2 fuzzy cellular structure. *Information Sciences*, **2011**, 181, 519-535	7.7	80
272	Design of fuzzy systems using a new chemical optimization paradigm **2011**,		1
271	Distributed parameter bioprocess plant identification and I-term control using centralized recurrent neural network models **2011**,		1

270	An improved evolutionary method with fuzzy logic for combining Particle Swarm Optimization and Genetic Algorithms. *Applied Soft Computing Journal*, **2011**, 11, 2625-2632	7.5	162
269	A new validation index for fuzzy clustering and its comparisons with other methods **2011**,		5
268	ACO-Tuning of a Fuzzy Controller for the Ball and Beam Problem. *Lecture Notes in Computer Science* , **2011**, 58-69	0.9	8
267	MODELLING AND SIMULATION OF THE DEFUZZIFICATION STAGE OF A TYPE-2 FUZZY CONTROLLER USING VHDL CODE. *Control and Intelligent Systems*, **2011**, 39,		11
266	Bio-Inspired Optimization Methods for Minimization of Complex Mathematical Functions. *Lecture Notes in Computer Science*, **2011**, 131-142	0.9	2
265	Modular Neural Networks with Type-2 Fuzzy Integration for Pattern Recognition of Iris Biometric Measure. *Lecture Notes in Computer Science*, **2011**, 363-373	0.9	3
264	Comparative Study of Fuzzy Information Processing in Type-2 Fuzzy Systems. *Intelligent Systems Reference Library*, **2011**, 75-93	0.8	
263	A New Model of Modular Neural Networks with Fuzzy Granularity for Pattern Recognition and Its Optimization with Hierarchical Genetic Algorithms. *Lecture Notes in Computer Science*, **2011**, 331-342	0.9	2
262	Fuzzy Logic Controllers Optimization Using Genetic Algorithms and Particle Swarm Optimization. *Lecture Notes in Computer Science*, **2010**, 475-486	0.9	12
261	Type-2 Fuzzy Inference System Optimization Based on the Uncertainty of Membership Functions Applied to Benchmark Problems. *Lecture Notes in Computer Science*, **2010**, 454-464	0.9	2
260	Design of a Fuzzy System for the Longitudinal Control of an F-14 Airplane. *Studies in Computational Intelligence*, **2010**, 213-224	0.8	22
259	Hybrid system for cardiac arrhythmia classification with fuzzy k-nearest neighbors and Multi Layer Perceptrons combined by a fuzzy inference system **2010**,		1
258	A T-S Fuzzy Logic Controller for biped robot walking based on adaptive network fuzzy inference system **2010**,		7
257	Reactive and tracking control of a mobile robot in a distributed environment using fuzzy logic **2010**,		11
256	**2010**,		2
255	An Observer for the Type-1 Fuzzy Control of a Servomechanism with Backlash Using Only Motor Measurements. *Studies in Computational Intelligence*, **2010**, 405-421	0.8	3
254	Chaotic Time Series Prediction Using Ensembles of ANFIS. *Studies in Computational Intelligence*, **2010**, 287-301	0.8	4
253	Neural networks recognition rate as index to compare the performance of fuzzy edge detectors **2010**,		5

252	Direct torque adaptive vector neural control of a three-phase induction motor **2010**,		2
251	Type-2 Fuzzy Logic Controllers Optimization Using Genetic Algoritms and Particle Swarm Optimization **2010**,		15
250	Interval Type-2 Fuzzy Logic for Control Applications **2010**,		4
249	Optimization of Membership Functions for an Incremental Fuzzy PD Control Based on Genetic Algorithms. *Studies in Computational Intelligence*, **2010**, 195-211	0.8	5
248	Optimal Design of Type-2 Fuzzy Membership Functions Using Genetic Algorithms in a Partitioned Search Space **2010**,		8
247	Fuzzy control of parameters to dynamically adapt the PSO and GA Algorithms **2010**,		19
246	Evolutionary method combining Particle Swarm Optimisation and Genetic Algorithms using fuzzy logic for parameter adaptation and aggregation: the case neural network optimisation for face recognition. *International Journal of Artificial Intelligence and Soft Computing*, **2010**, 2, 77	0.1	13
245	A hybrid approach with fuzzy logic in a multi-agent system for controlling autonomous mobile robots in known environments. *International Journal of Intelligent Engineering Informatics*, **2010**, 1, 21	0.3	3
244	Bio-inspired Optimization of Fuzzy Logic Controllers for Robotic Autonomous Systems with PSO and ACO. *Fuzzy Information and Engineering*, **2010**, 2, 119-143	0.5	3
243	Fuzzy logic control with genetic membership function parameters optimization for the output regulation of a servomechanism with nonlinear backlash. *Expert Systems With Applications*, **2010**, 37, 4368-4378	7.8	80
242	An improved method for edge detection based on interval type-2 fuzzy logic. *Expert Systems With Applications*, **2010**, 37, 8527-8535	7.8	113
241	Embedding a KM Type Reducer for High Speed Fuzzy Controller into an FPGA. *Advances in Intelligent and Soft Computing*, **2010**, 217-228		2
240	Comparative Study of Feature Extraction Methods of Fuzzy Logic Type 1 and Type-2 for Pattern Recognition System Based on the Mean Pixels. *Studies in Computational Intelligence*, **2010**, 171-188	0.8	6
239	A New Optimization Method Based on a Paradigm Inspired by Nature. *Studies in Computational Intelligence*, **2010**, 277-283	0.8	8
238	Comparison of Fuzzy Edge Detectors Based on the Image Recognition Rate as Performance Index Calculated with Neural Networks. *Studies in Computational Intelligence*, **2010**, 389-399	0.8	11
237	Hybrid System for Cardiac Arrhythmia Classification with Fuzzy K-Nearest Neighbors and Neural Networks Combined by a Fuzzy Inference System. *Studies in Computational Intelligence*, **2010**, 37-55	0.8	5
236	Fuzzy Control for Dynamical Parameter Adaptation in a Parallel Evolutionary Method Combining Particle Swarm Optimization and Genetic Algorithms. *Studies in Computational Intelligence*, **2010**, 161-178	0.8	3
235	Optimization of Type-2 Fuzzy Logic Controllers Using PSO Applied to Linear Plants. *Studies in Computational Intelligence*, **2010**, 181-193	0.8	8

234	A Fuzzy Reactive Controller of a Mobile Robot. *Studies in Computational Intelligence*, **2010**, 225-232	0.8	1
233	An Interval Type-2 Fuzzy Neural Network for Chaotic Time Series Prediction with Cross-Validation and Akaike Test. *Studies in Computational Intelligence*, **2010**, 269-285	0.8	19
232	Fuzzy System to Control the Movement of a Wheeled Mobile Robot. *Studies in Computational Intelligence*, **2010**, 445-463	0.8	5
231	Fuzzy Logic for Parameter Tuning in Evolutionary Computation and Bio-inspired Methods. *Lecture Notes in Computer Science*, **2010**, 465-474	0.9	10
230	Bio-inspired Optimization Methods of Fuzzy Logic Controllers Applied to Linear Plants. *Advances in Intelligent and Soft Computing*, **2010**, 245-252		1
229	Neuro-Fuzzy Based Output Feedback Controller Design for Biped Robot Walking. *Studies in Computational Intelligence*, **2010**, 423-444	0.8	1
228	Direct and Indirect Neural Identification and Control of a Continuous Bioprocess via Marquardt Learning. *Studies in Computational Intelligence*, **2010**, 81-102	0.8	1
227	Multi-Agent System Based on Psychological Models for Mobile Robots. *Studies in Computational Intelligence*, **2010**, 143-159	0.8	
226	An Application of Fuzzy Lyapunov Synthesis in the Design of Type-2 Fuzzy Logic Controllers. *Advances in Intelligent and Soft Computing*, **2010**, 229-236		
225	Embedding a Fuzzy Locomotion Pose Controller for a Wheeled Mobile Robot into an FPGA. *Studies in Computational Intelligence*, **2010**, 465-481	0.8	
224	Simple Tuning of Type-2 Fuzzy Controllers. *Studies in Computational Intelligence*, **2010**, 103-123	0.8	
223	Increasing Energy Efficiency of a Preamble Sampling MAC Protocol for Wireless Sensor Networks Using a Fuzzy Logic Approach. *Studies in Computational Intelligence*, **2010**, 125-142	0.8	0
222	Multi-Agent System with Personality Profiles and Preferences and Learning for Autonomous Mobile Robot with Fuzzy Logic Support. *Studies in Computational Intelligence*, **2010**, 233-250	0.8	
221	Fuzzy Cellular Model for Predator-Prey Interaction Applied to the Control of Plagues in a Peppers Cropping. *Studies in Computational Intelligence*, **2010**, 329-351	0.8	
220	Comparative Study of Type-2 Fuzzy Inference System Optimization Based on the Uncertainty of Membership Functions. *Studies in Computational Intelligence*, **2010**, 103-120	0.8	1
219	Optimization of type-2 fuzzy logic controllers for mobile robots using evolutionary methods **2009**,		13
218	Parameter tuning of membership functions of a fuzzy logic controller for an autonomous wheeled mobile robot using ant colony optimization **2009**,		3
217	A hybrid approach with the wavelet transform, modular neural networks and fuzzy integrals for face and fingerprint recognition **2009**,		1

216	Modeling and Simulation of the Defuzzification Stage of a Type-2 Fuzzy Controller Using the Xilinx System Generator and Simulink. *Studies in Computational Intelligence*, **2009**, 309-325	0.8	15
215	Design and Simulation of the Type-2 Fuzzification Stage: Using Active Membership Functions. *Studies in Computational Intelligence*, **2009**, 273-293	0.8	11
214	Face, Fingerprint and Voice Recognition with Modular Neural Networks and Fuzzy Integration. *Studies in Computational Intelligence*, **2009**, 69-79	0.8	6
213	Preface to the special issue on analysis and design of hybrid intelligent systems. *International Journal of Intelligent Systems*, **2009**, 24, 1077-1079	8.4	1
212	A cognitive map and fuzzy inference engine model for online design and self fine-tuning of fuzzy logic controllers. *International Journal of Intelligent Systems*, **2009**, 24, 1134-1173	8.4	23
211	Path planning for autonomous mobile robot navigation with ant colony optimization and fuzzy cost function evaluation. *Applied Soft Computing Journal*, **2009**, 9, 1102-1110	7.5	253
210	Type-1 and type-2 fuzzy inference systems as integration methods in modular neural networks for multimodal biometry and its optimization with genetic algorithms. *Information Sciences*, **2009**, 179, 2123-2145	7.7	70
209	A hybrid learning algorithm for a class of interval type-2 fuzzy neural networks. *Information Sciences*, **2009**, 179, 2175-2193	7.7	215
208	Optimization of interval type-2 fuzzy logic controllers for a perturbed autonomous wheeled mobile robot using genetic algorithms. *Information Sciences*, **2009**, 179, 2158-2174	7.7	260
207	Interval type-2 fuzzy logic and modular neural networks for face recognition applications. *Applied Soft Computing Journal*, **2009**, 9, 1377-1387	7.5	73
206	Evolutionary method combining particle swarm optimization and genetic algorithms using fuzzy logic for decision making **2009**,		55
205	Parameter tuning of membership functions of a type-1 and type-2 fuzzy logic controller for an autonomous wheeled mobile robot using ant colony optimization **2009**,		9
204	Intelligence techniques are needed to further enhance the advantage of groups with diversity in problem solving **2009**,		7
203	Genetic design of biped walking fuzzy logic controller **2009**,		2
202	**2009**,		2
201	Comparative study of fuzzy methods for response integration in ensemble neural networks. *International Journal of Advanced Intelligence Paradigms*, **2009**, 1, 291	0.5	
200	Interval Type-2 Fuzzy Logic Applications. *Studies in Computational Intelligence*, **2009**, 203-231	0.8	
199	Soft Computing Models for Intelligent Control of Non-linear Dynamical Systems. *Studies in Computational Intelligence*, **2009**, 43-70	0.8	2

198	Methodology to Test and Validate a VHDL Inference Engine of a Type-2 FIS, through the Xilinx System Generator. *Studies in Computational Intelligence*, **2009**, 295-308	0.8	9
197	Optimization of Fuzzy Response Integrators in Modular Neural Networks with Hierarchical Genetic Algorithms: The Case of Face, Fingerprint and Voice Recognition. *Studies in Computational Intelligence*, **2009**, 111-129	0.8	6
196	Particle Swarm Optimization Applied to the Design of Type-1 and Type-2 Fuzzy Controllers for an Autonomous Mobile Robot. *Studies in Computational Intelligence*, **2009**, 247-262	0.8	15
195	Interval Type-2 Fuzzy Cellular Model Applied to the Dynamics of a Uni-specific Population Induced by Environment Variations. *Studies in Computational Intelligence*, **2009**, 33-47	0.8	1
194	Optimization of Type-2 Fuzzy Integration in Modular Neural Networks Using an Evolutionary Method with Applications in Multimodal Biometry. *Lecture Notes in Computer Science*, **2009**, 454-465	0.9	9
193	Optimization of Membership Functions of a Fuzzy Logic Controller for an Autonomous Wheeled Mobile Robot Using Ant Colony Optimization. *Studies in Computational Intelligence*, **2009**, 3-16	0.8	
192	Comparative Study of Fuzzy Methods for Response Integration in Ensemble Neural Networks for Pattern Recognition. *Studies in Computational Intelligence*, **2009**, 123-140	0.8	2
191	Evolutionary Optimization of Type-2 Fuzzy Logic Systems Applied to Linear Plants. *Studies in Computational Intelligence*, **2009**, 17-31	0.8	6
190	Fuzzy Logic for Combining Particle Swarm Optimization and Genetic Algorithms: Preliminary Results. *Lecture Notes in Computer Science*, **2009**, 444-453	0.9	1
189	Genetic Optimization for the Design of Walking Patterns of a Biped Robot. *Studies in Computational Intelligence*, **2009**, 259-271	0.8	
188	Controlling Unstable Non-Minimum-Phase Systems with Fuzzy Logic: The Perturbed Case. *Studies in Computational Intelligence*, **2009**, 245-257	0.8	
187	Fuzzy Control for Output Regulation of a Servomechanism with Backlash. *Studies in Computational Intelligence*, **2008**, 19-28	0.8	5
186	Fingerprint recognition using the fuzzy Sugeno integral for response integration in modular neural networks. *International Journal of General Systems*, **2008**, 37, 499-515	2.1	8
185	Comparison between Ant Colony and Genetic Algorithms for Fuzzy System Optimization. *Studies in Computational Intelligence*, **2008**, 71-86	0.8	9
184	Simple tuned fuzzy controller embedded into an FPGA **2008**,		11
183	Type-2 Fuzzy Logic: Theory and Applications. *Studies in Fuzziness and Soft Computing*, **2008**,	0.7	231
182	Interval type-2 fuzzy inference systems as integration methods in modular neural networks for multimodal biometry and its optimisation with genetic algorithms. *International Journal of Biometrics*, **2008**, 1, 114	0.4	12
181	Modeling and Simulation of the Defuzzification Stage Using Xilinx System Generator and Simulink. *Studies in Computational Intelligence*, **2008**, 333-343	0.8	6

180	Optimization with Genetic Algorithms of Interval Type-2 Fuzzy Logic controllers for an autonomous wheeled mobile robot: A comparison under different kinds of perturbations **2008**,		11
179	Intelligent control using an Interval Type-2 Fuzzy Neural Network with a hybrid learning algorithm **2008**,		3
178	A New Evolutionary Method with a Hybrid Approach Combining Particle Swarm Optimization and Genetic Algorithms using Fuzzy Logic for Decision Making **2008**,		12
177	Implementation of a Wireless Control System with Self Timed Activation for Mobile Robots **2008**,		3
176	Hybrid Genetic-Fuzzy Optimization of a Type-2 Fuzzy Logic Controller **2008**,		15
175	Fuzzy Cellular Model Applied to the Dynamics of a Uni-Specific Population Induced by Environment Variations **2008**,		2
174	Building Fuzzy Inference Systems with a New Interval Type-2 Fuzzy Logic Toolbox **2008**, 104-114		36
173	**2008**,		4
172	A hybrid learning algorithm for Interval Type-2 Fuzzy Neural Networks in time series prediction for the case of air pollution **2008**,		10
171	Fuzzy-Neural control of a distributed parameter bioprocess plant **2008**,		3
170	**2008**,		5
169	Reactive control of a mobile robot in a distributed environment using fuzzy logic **2008**,		12
168	Computational intelligence software: Type-2 Fuzzy Logic and Modular Neural Networks **2008**,		3
167	Optimization of Response Integration with Fuzzy Logic in Ensemble Neural Networks Using Genetic Algorithms. *Studies in Computational Intelligence*, **2008**, 129-150	0.8	11
166	Genetic optimization of a Type-2 fuzzy controller for output regulation of a servomechanism with backlash **2008**,		11
165	Fuzzy Modeling Fundamentals **2008**, 1		2
164	Systematic design of a stable type-2 fuzzy logic controller. *Applied Soft Computing Journal*, **2008**, 8, 1274-1279	71	72
163	**2008**,		9

162	Optimization of Interval Type-2 Fuzzy Logic Controllers for a Perturbed Autonomous Wheeled Mobile Robot Using Genetic Algorithms. *Studies in Computational Intelligence*, **2008**, 3-18	0.8	6
161	A Hybrid Model Based on a Cellular Automata and Fuzzy Logic to Simulate the Population Dynamics. *Studies in Computational Intelligence*, **2008**, 189-203	0.8	1
160	Modeling and Simulation by Petri Networks of a Fault Tolerant Agent Node. *Studies in Computational Intelligence*, **2008**, 251-267	0.8	
159	A New Evolutionary Method Combining Particle Swarm Optimization and Genetic Algorithms Using Fuzzy Logic. *Studies in Computational Intelligence*, **2008**, 347-361	0.8	2
158	Comparative Study of Type-1 and Type-2 Fuzzy Systems Optimized by Hierarchical Genetic Algorithms. *Studies in Computational Intelligence*, **2008**, 53-70	0.8	2
157	Stability on Type-1 and Type-2 Fuzzy Logic Systems. *Studies in Computational Intelligence*, **2008**, 29-51	0.8	2
156	A New Biometric Recognition Technique Based on Hand Geometry and Voice Using Neural Networks and Fuzzy Logic. *Studies in Computational Intelligence*, **2008**, 171-186	0.8	20
155	Design and Simulation of the Fuzzification Stage through the Xilinx System Generator. *Studies in Computational Intelligence*, **2008**, 297-305	0.8	9
154	Methodology to Test and Validate a VHDL Inference Engine through the Xilinx System Generator. *Studies in Computational Intelligence*, **2008**, 325-331	0.8	6
153	A Hybrid Learning Algorithm for Interval Type-2 Fuzzy Neural Networks: The Case of Time Series Prediction. *Studies in Computational Intelligence*, **2008**, 363-386	0.8	7
152	Optimization of Artificial Neural Network Architectures for Time Series Prediction Using Parallel Genetic Algorithms. *Studies in Computational Intelligence*, **2008**, 387-399	0.8	2
151	Design and Implementation of a Hybrid Fuzzy Controller Using VHDL. *Studies in Computational Intelligence*, **2008**, 437-446	0.8	3
150	Type-1 and Type-2 Fuzzy Inference Systems as Integration Methods in Modular Neural Networks for Multimodal Biometry and Its Optimization with Genetic Algorithms. *Studies in Computational Intelligence*, **2008**, 89-114	0.8	18
149	Systematic Design of a Stable Type-2 Fuzzy Logic Controller **2008**, 319-331		4
148	Mediative Fuzzy Logic: A New Approach for Contradictory Knowledge Management **2008**, 135-149		3
147	5 Design of Intelligent Systems with Interval Type-2 Fuzzy Logic **2007**, 53-76		6
146	Hierarchical genetic algorithms for topology optimization in fuzzy control systems. *International Journal of General Systems*, **2007**, 36, 575-591	2.1	37
145	Simple Sequencing and Selection of Learning Objects using Fuzzy Inference **2007**,		2

144	Evolutionary optimization of interval type-2 membership functions using the Human Evolutionary Model. *IEEE International Conference on Fuzzy Systems*, **2007**,		7
143	Type-2 Fuzzy Logic for Improving Training Data and Response Integration in Modular Neural Networks for Image Recognition. *Lecture Notes in Computer Science*, **2007**, 604-612	0.9	18
142	**2007**,		1
141	Hybrid Control for an Autonomous Wheeled Mobile Robot Under Perturbed Torques. *Lecture Notes in Computer Science*, **2007**, 594-603	0.9	12
140	Interval Type-2 Fuzzy Logic for Intelligent Control Applications **2007**,		2
139	**2007**,		51
138	3 Type-2 Fuzzy Logic. *Studies in Fuzziness and Soft Computing*, **2007**, 29-43	0.7	24
137	An intelligent hybrid approach for industrial quality control combining neural networks, fuzzy logic and fractal theory. *Information Sciences*, **2007**, 177, 1543-1557	7.7	69
136	Human evolutionary model: A new approach to optimization. *Information Sciences*, **2007**, 177, 2075-2098	7.7	62
135	Experimental study of intelligent controllers under uncertainty using type-1 and type-2 fuzzy logic. *Information Sciences*, **2007**, 177, 2023-2048	7.7	190
134	A hybrid modular neural network architecture with fuzzy Sugeno integration for time series forecasting. *Applied Soft Computing Journal*, **2007**, 7, 1217-1226	7.5	65
133	An intuitionistic fuzzy system for time series analysis in plant monitoring and diagnosis. *Applied Soft Computing Journal*, **2007**, 7, 1227-1233	7.5	45
132	Interval-Related Talks at the North American Fuzzy Information Processing Society Annual Conference NAFIPS07. *Reliable Computing*, **2007**, 13, 441-443		
131	Interval-Related Talks at the 2007 IEEE Symposium Series on Computational Intelligence. *Reliable Computing*, **2007**, 13, 435-440		
130	Mediative fuzzy logic: a new approach for contradictory knowledge management. *Soft Computing*, **2007**, 12, 251-256	3.5	10
129	10 Experimental Study of Intelligent Controllers Under Uncertainty Using Type-1 and Type-2 Fuzzy Logic. *Studies in Fuzziness and Soft Computing*, **2007**, 121-132	0.7	5
128	Building Fuzzy Inference Systems with the Interval Type-2 Fuzzy Logic Toolbox **2007**, 53-62		32
127	Comparison of Hybrid Intelligent Systems, Neural Networks and Interval Type-2 Fuzzy Logic for Time Series Prediction. *Neural Networks (IJCNN), International Joint Conference on*, **2007**,		16

126	**2007**,		7
125	Pattern Recognition for Industrial Monitoring and Security using the Fuzzy Sugeno Integral and Modular Neural Networks. *Neural Networks (IJCNN), International Joint Conference on*, **2007**,		2
124	Optimal Path Planning for Autonomous Mobile Robot Navigation Using Ant Colony Optimization and a Fuzzy Cost Function Evaluation **2007**, 790-798		11
123	An Efficient Computational Method to Implement Type-2 Fuzzy Logic in Control Applications **2007**, 45-52		62
122	Evolutionary design and applications of hybrid intelligent systems. *International Journal of Innovative Computing and Applications*, **2007**, 1, 48	0.4	1
121	**2007**,		6
120	Hybrid Learning Algorithm for Interval Type-2 Fuzzy Neural Networks **2007**,		3
119	**2007**,		39
118	A New Method for Response Integration in Modular Neural Networks using Type-2 Fuzzy Logic for Biometric Systems. *Neural Networks (IJCNN), International Joint Conference on*, **2007**,		5
117	An Interval Type-2 Fuzzy Logic Toolbox for Control Applications. *IEEE International Conference on Fuzzy Systems*, **2007**,		66
116	Design of Hybrid Intelligent Systems **2007**,		1
115	1 Introduction to Type-2 Fuzzy Logic. *Studies in Fuzziness and Soft Computing*, **2007**, 1-4	0.7	2
114	A Method for Response Integration in Modular Neural Networks using Interval Type-2 Fuzzy Logic. *IEEE International Conference on Fuzzy Systems*, **2007**,		5
113	Hybrid Learning Algorithm for Interval Type-2 Fuzzy Neural Networks **2007**,		13
112	Intelligent Control and Planning of Autonomous Algorithms Mobile Robots Using Fuzzy Logic and Genetic **2007**, 255-265		
111	Evolutionary Optimization of a Wiener Model **2007**, 43-58		
110	Mediative Fuzzy Logic: A Novel Approach for Handling Contradictory Knowledge **2007**, 75-91		
109	A Method for Creating Ensemble Neural Networks Using a Sampling Data Approach **2007**, 355-364		0

108	Providing Intelligence to Evolutionary Computational Methods **2007**, 473-481		
107	A Fuzzy Approach for the Sequencing of Didactic Resources in Educational Adaptive Hypermedia Systems **2007**, 885-892		
106	11 Evolutionary Optimization of Interval Type-2 Membership Functions Using the Human Evolutionary Model. *Studies in Fuzziness and Soft Computing*, **2007**, 133-144	0.7	2
105	Evolutionary Computing for Topology Optimization of Type-2 Fuzzy Controllers **2007**, 163-178		17
104	Tracking Control for a Unicycle Mobile Robot Using a Fuzzy Logic Controller **2007**, 243-253		1
103	From Type-1 to Type-2 Fuzzy Logic Control: A Stability and Robustness Study **2007**, 135-149		2
102	Pattern Recognition for Industrial Security Using the Fuzzy Sugeno Integral and Modular Neural Networks **2007**, 105-114		2
101	A Method for Response Integration in Modular Neural Networks with Type-2 Fuzzy Logic for Biometric Systems **2007**, 5-15		11
100	Design of Modular Neural Networks with Fuzzy Integration Applied to Time Series Prediction **2007**, 265-273		10
99	Evolutionary Computing for the Optimization of Mathematical Functions **2007**, 463-472		4
98	Evolutionary Computing for Topology Optimization of Type-2 Fuzzy Systems **2007**, 63-75		14
97	Intelligent Control and Planning of Autonomous Mobile Robots Using Fuzzy Logic and Multiple Objective Genetic Algorithms **2007**, 799-807		3
96	A Method for Creating Ensemble Neural Networks Using a Sampling Data Approach **2007**, 772-780		3
95	15 A New Approach for Plant Monitoring Using Type-2 Fuzzy Logic and Fractal Theory. *Studies in Fuzziness and Soft Computing*, **2007**, 187-202	0.7	2
94	2 Type-1 Fuzzy Logic. *Studies in Fuzziness and Soft Computing*, **2007**, 5-28	0.7	2
93	Design of Stable Type-2 Fuzzy Logic Controllers based on a Fuzzy Lyapunov Approach **2006**,		9
92	**2006**,		2
91	Multiple Objective Genetic Algorithms for Path-planning Optimization in Autonomous Mobile Robots. *Soft Computing*, **2006**, 11, 269-279	3.5	84

90	Evolutionary Modeling Using A Wiener Model **2006**, 619-632		
89	Evolutionary Computing for Topology Optimization of Fuzzy Systems in Intelligent Control **2006**, 633-647		1
88	Theory of Fuzzy Chaos for the Simulation and Control of Nonlinear Dynamical Systems **2006**, 391-414		3
87	Modular Neural Networks. *Studies in Fuzziness and Soft Computing*, **2005**, 109-129	0.7	9
86	The Evolutionary Learning Rule in System Identification **2005**, 195-212		1
85	Intelligent control of a stepping motor drive using an adaptive neuro?fuzzy inference system. *Information Sciences*, **2005**, 170, 133-151	7.7	56
84	Preface to the special issue on soft computing for modeling, simulation, and control of nonlinear dynamical systems. *International Journal of Intelligent Systems*, **2005**, 20, 127-129	8.4	1
83	Face recognition using modular neural networks and the fuzzy Sugeno integral for response integration. *International Journal of Intelligent Systems*, **2005**, 20, 275-291	8.4	24
82	Black box evolutionary mathematical modeling applied to linear systems. *International Journal of Intelligent Systems*, **2005**, 20, 293-311	8.4	6
81	Application of a breeder genetic algorithm for filter optimization. *Natural Computing*, **2005**, 4, 11-37	1.3	1
80	Handling Uncertainty in Controllers Using Type-2 Fuzzy Logic. *Journal of Intelligent Systems*, **2005**, 14,	1.5	4
79	Introduction to Pattern Recognition with Intelligent Systems. *Studies in Fuzziness and Soft Computing*, **2005**, 1-5	0.7	2
78	Human Evolutionary Model. *Journal of Intelligent Systems*, **2005**, 14,	1.5	1
77	Hybrid Intelligent Systems for Pattern Recognition Using Soft Computing. *Studies in Fuzziness and Soft Computing*, **2005**,	0.7	89
76	Hierarchical genetic algorithms for fuzzy system optimization in intelligent control **2004**,		4
75	A New Method for Adaptive Control of Non-Linear Plants Using Type-2 Fuzzy Logic and Neural Networks. *International Journal of General Systems*, **2004**, 33, 289-304	2.1	62
74	A new approach for plant monitoring using type-2 fuzzy logic and fractal theory. *International Journal of General Systems*, **2004**, 33, 305-319	2.1	23
73	Intelligent control of a stepping motor drive using a hybrid neuro-fuzzy approach. *Soft Computing*, **2004**, 8, 546-555	3.5	13

72	Application of a breeder genetic algorithm for finite impulse filter optimization. *Information Sciences*, **2004**, 161, 139-158	7.7	9
71	Automated Quality Control in Sound Speakers Manufacturing Using a Hybrid Neuro-Fuzzy-Fractal Approach **2004**, 401-417		
70	A New Hybrid Fuzzy-Fractal Approach for Plant Monitoring and Diagnostics. *International Journal of Smart Engineering System Design*, **2003**, 5, 417-427		1
69	Intelligent Control of the Electrical Tuning Process for the Manufacturing of Televisions Using Soft Computing Techniques. *International Journal of Smart Engineering System Design*, **2003**, 5, 455-466		
68	A New Method for Adaptive Model-Based Control of Dynamic Industrial Plants using Neural Networks, Fuzzy Logic and Fractal Theory. *Systems Analysis Modelling Simulation*, **2003**, 43, 1-15		1
67	Application of a New Theory of Fuzzy Chaos for the Simulation and Control of NonLinear Dynamical Systems. *Systems Analysis Modelling Simulation*, **2003**, 43, 847-865		
66	The evolutionary learning rule for system identification. *Applied Soft Computing Journal*, **2003**, 3, 343-352	7.5	20
65	Intelligent adaptive model-based control of robotic dynamic systems with a hybrid fuzzy-neural approach. *Applied Soft Computing Journal*, **2003**, 3, 363-378	7.5	61
64	Adaptive intelligent control of aircraft systems with a hybrid approach combining neural networks, fuzzy logic and fractal theory. *Applied Soft Computing Journal*, **2003**, 3, 353-362	7.5	74
63	Special issue on soft computing for control of non-linear dynamical systems. *Applied Soft Computing Journal*, **2003**, 3, 303-304	7.5	2
62	Intelligent control of a stepping motor drive using a hybrid neuro-fuzzy ANFIS approach. *Applied Soft Computing Journal*, **2003**, 3, 209-219	7.5	69
61	A Hybrid Fuzzy-Fractal Approach for Time Series Analysis and Prediction and Its Applications to Plant Monitoring **2003**, 419-430		
60	Soft Computing and Fractal Theory for Intelligent Manufacturing. *Studies in Fuzziness and Soft Computing*, **2003**,	0.7	39
59	A hybrid fuzzy-fractal approach for time series analysis and plant monitoring. *International Journal of Intelligent Systems*, **2002**, 17, 751-765	8.4	7
58	Intelligent control of aircraft dynamic systems with a new hybrid neuro-fuzzy-fractal approach. *Information Sciences*, **2002**, 142, 161-175	7.7	14
57	Adaptive Model-Based Control of Non-Linear Dynamical Systems with a Neuro-Fuzzy-Genetic Approach. *International Journal of Smart Engineering System Design*, **2002**, 4, 41-47		3
56	A NEW METHOD FOR ADAPTIVE CONTROL OF NON-LINEAR PLANTS USING TYPE-2 FUZZY LOGIC AND NEURAL NETWORKS **2002**,		12
55	Hybrid intelligent systems for time series prediction using neural networks, fuzzy logic, and fractal theory. *IEEE Transactions on Neural Networks*, **2002**, 13, 1395-408		126

54	A Breeder Genetic Algorithm for Adaptive Filter Optimization **2002**, 145-155		
53	Soft Computing for Control of Dynamical Systems **2002**, 99-102		
52	A Hybrid Fuzzy-Fractal Approach for Time Series Analysis and Prediction and Its Applications to Plant Monitoring. *Power Systems*, **2002**, 209-219	0.4	1
51	Intelligent Control of Robotic Autonomous Systems using a Neuro-Fuzzy-Genetic Approach **2002**, 157-166		0
50	Adaptive Model-Based Control of Non-linear Plants Using Soft Computing Techniques. *Power Systems*, **2002**, 63-74	0.4	
49	A new method for adaptive model-based control of non-linear dynamic plants using a neuro-fuzzy-fractal approach. *Soft Computing*, **2001**, 5, 171-177	3.5	22
48	Intelligent control of complex electrochemical systems with a neuro-fuzzy-genetic approach. *IEEE Transactions on Industrial Electronics*, **2001**, 48, 951-955	8.9	77
47	Soft Computing for Control of Non-Linear Dynamical Systems. *Studies in Fuzziness and Soft Computing*, **2001**,	0.7	69
46	INTELLIGENT ADAPTIVE MODEL-BASED CONTROL OF ROBOTIC DYNAMIC SYSTEMS WITH A NEW HYBRID NEURO-FUZZY-FRACTAL APPROACH **2000**,		5
45	Modelling, Simulation and Behavior Identification of Non-Linear Dynamical Systems with a New Fuzzy-Fractal-Genetic Approach. *Advances in Fuzzy Systems*, **2000**, 95-106		1
44	Modelling complex dynamical systems with a new fuzzy inference system for differential equations: the case of robotic dynamic systems **1999**,		1
43	Intelligent quality control for manufacturing in the food industry using a new fuzzy-fractal approach **1999**,		2
42	Automated mathematical modelling, simulation and behavior identification of robotic dynamic systems using a new fuzzy-fractal-genetic approach. *Robotics and Autonomous Systems*, **1999**, 28, 19-30	3.5	12
41	DEVELOPING A NEW METHOD FOR THE IDENTIFICATION OF MICROORGANISMS FOR THE FOOD INDUSTRY USING THE FRACTAL DIMENSION. *Fractals*, **1994**, 02, 457-460	3.2	19
40	Simulation and forecasting of international trade dynamics using non-linear mathematical models and fuzzy logic techniques		3
39	A new fuzzy-genetic approach for the simulation and forecasting of international trade non-linear dynamics		8
38	Design of Intelligent Systems with Interval Type-2 Fuzzy Logic575-601		1
37	Evolutionary computing for optimizing type-2 fuzzy systems in intelligent control of non-linear dynamic plants		18

36	Handling Uncertainty in Controllers Using Type-2 Fuzzy Logic	9
35	Integrated development platform for intelligent control based on type-2 fuzzy logic	4
34	Interval Type-2 TSK Fuzzy Logic Systems Using Hybrid Learning Algorithm	29
33	Fuzzy logic for plant monitoring and diagnostics	1
32	Adaptive noise cancellation using type-2 fuzzy logic and neural networks	15
31	A new method for fuzzy inference in intuitionistic fuzzy systems	6
30	Intelligent control of the transmission power in cellular phones using fuzzy logic	1
29	A new hybrid approach for plant monitoring and diagnostics using type-2 fuzzy logic and fractal theory	7
28	A new method for adaptive model-based control of non-linear plants using type-2 fuzzy logic and neural networks	10
27	A reprogrammable hardware fuzzy controller for the battery charging process	1
26	Fingerprint recognition using modular neural networks and fuzzy integrals for response integration	4
25	Optimization of modular neural networks using hierarchical genetic algorithms applied to speech recognition	3
24	Simulation and forecasting complex economic time series using neural networks and fuzzy logic	13
23	Adaptive control of a stepping motor drive using a hybrid neuro-fuzzy approach	2
22	Simulation and forecasting complex financial time series using neural networks and fuzzy logic	21
21	A new fuzzy-fractal approach for forecasting financial and economic time series	3
20	A new hybrid approach for plant monitoring and diagnostics combining type-2 fuzzy logic and fractal theory	2
19	Intelligent control of non-linear dynamic plants using type-2 fuzzy logic and neural networks	3

18	A new method for fuzzy estimation of the fractal dimension and its applications to time series analysis and pattern recognition		5
17	Application of a breeder genetic algorithm for system identification in an adaptive finite impulse response filter		2
16	A new fuzzy-fractal-genetic method for automated mathematical modelling and simulation of robotic dynamic systems		19
15	An adaptive model-based neuro-fuzzy-fractal controller for biochemical reactors in the food industry		7
14	A general method for surface quality control in intelligent manufacturing of materials using a new fuzzy-fractal approach		1
13	Automated mathematical modelling for financial time series prediction using fuzzy logic, dynamical systems and fractal theory		14
12	On the dynamical investigation and synchronization of variable-order fractional neural networks: the Hopfield-like neural network model. *European Physical Journal: Special Topics*,1	2.3	0
11	Multi-objective quantum tunicate swarm optimization with deep learning model for intelligent dystrophinopathies diagnosis. *Soft Computing*,1	3.5	1
10	Modelling, Simulation and Control of Non-Linear Dynamical Systems		30
9	Intelligent control of dynamic systems using type-2 fuzzy logic and stability issues. *International Mathematical Forum*,1371-1382	4.6	21
8	Improving the human evolutionary model: An intelligent optimization method. *International Mathematical Forum*,2, 21-44	4.6	2
7	Comparative analysis of noise robustness of type 2 fuzzy logic controllers. *Kybernetika*,175-201		55
6	Generalized-Hukuhara-Gradient Efficient-Direction Method to Solve Optimization Problems with Interval-Valued Functions and Its Application in Least-Squares Problems. *International Journal of Fuzzy Systems*,1	3.6	3
5	Dynamic parameter adaptation in Ant Colony Optimization using a fuzzy system for TSP problems		10
4	Statistical Analysis of Type-1 and Interval Type-2 Fuzzy Logic in dynamic parameter adaptation of the BCO		18
3	An Exhaustive Review of Bio-Inspired Algorithms and its Applications for Optimization in Fuzzy Clustering		2
2	Optimal Setting of Membership Functions for Interval Type-2 Fuzzy Tracking Controllers Using a Shark Smell Metaheuristic Algorithm. *International Journal of Fuzzy Systems*,1	3.6	7
1	New Concepts on Quadripartitioned Single-Valued Neutrosophic Graph with Real-Life Application. *International Journal of Fuzzy Systems*,1	3.6	1