

# Oscar Montiel

## List of Publications by Year in descending order

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93  
papers

2,286  
citations

430874

18  
h-index

233421

45  
g-index

103  
all docs

103  
docs citations

103  
times ranked

1791  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Evaluation Method of Deep Learning-Based Embedded Systems for Traffic Sign Detection. IEEE Access, 2021, 9, 101217-101238.  | 4.2 | 24        |
| 2  | Multicriteria Evaluation of Deep Neural Networks for Semantic Segmentation of Mammographies. Axioms, 2021, 10, 180.   | 1.9 | 4         |
| 3  | A Review of Quantum-Inspired Metaheuristics: Going From Classical Computers to Real Quantum Computers. IEEE Access, 2020, 8, 814-838.   | 4.2 | 52        |
| 4  | Environment Recognition for Path Generation in Autonomous Mobile Robots. Studies in Computational Intelligence, 2020, , 273-288.  | 0.9 | 2         |
| 5  | Acceleration of Path Planning Computation Based on Evolutionary Artificial Potential Field for Non-static Environments. Studies in Computational Intelligence, 2020, , 271-297. | 0.9 | 3         |
| 6  | Multi-objective Evaluation of Deep Learning Based Semantic Segmentation for Autonomous Driving Systems. Studies in Computational Intelligence, 2020, , 299-311.                 | 0.9 | 2         |
| 7  | Hybrid Path Planning Algorithm Based on Membrane Pseudo-Bacterial Potential Field for Autonomous Mobile Robots. IEEE Access, 2019, 7, 156787-156803.                            | 4.2 | 82        |
| 8  | Quantum-Inspired Acromyrmex Evolutionary Algorithm. Scientific Reports, 2019, 9, 12181.   | 3.3 | 24        |
| 9  | Mobile robot path planning using membrane evolutionary artificial potential field. Applied Soft Computing Journal, 2019, 77, 236-251.   | 7.2 | 268       |
| 10 | Quantum inspired algorithm for microcalcification detection in mammograms. Information Sciences, 2019, 480, 305-323.  | 6.9 | 5         |
| 11 | Path Following Fuzzy System for a Nonholonomic Mobile Robot Based on Frontal Camera Information. Studies in Computational Intelligence, 2018, , 223-240.                        | 0.9 | 4         |
| 12 | Pose Estimation in Noncontinuous Video Sequences Using Evolutionary Correlation Filtering. Mathematical Problems in Engineering, 2018, 2018, 1-13.                              | 1.1 | 3         |
| 13 | Fuzzy Evaluation of Pharmacokinetic Models. Computational Intelligence and Neuroscience, 2018, 2018, 1-10.  | 1.7 | 1         |
| 14 | Estimation of Population Pharmacokinetic Model Parameters Using a Genetic Algorithm. Advances in Intelligent Systems and Computing, 2018, , 214-221.                            | 0.6 | 2         |
| 15 | Cellular Automata Enhanced Quantum Inspired Edge Detection. Advances in Intelligent Systems and Computing, 2018, , 141-146.   | 0.6 | 0         |
| 16 | Speeding Up Quantum Genetic Algorithms in Matlab Through the Quack_GPU V1. Advances in Intelligent Systems and Computing, 2018, , 156-161.                                      | 0.6 | 0         |
| 17 | Design and Implementation of Intelligent Controllers in Soft Processors for the Walking of a Biped Robot. Computacion Y Sistemas, 2018, 22, .                                   | 0.3 | 1         |
| 18 | An Optimized GPU Implementation for a Path Planning Algorithm Based on Parallel Pseudo-bacterial Potential Field. Studies in Computational Intelligence, 2017, , 477-492.       | 0.9 | 1         |

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|----|--|-----|-----------|
| 19 | Estimation of Population Pharmacokinetic Parameters Using a Genetic Algorithm. Studies in Computational Intelligence, 2017, , 493-503.   | 0.9 | 0         |
| 20 | Visual environment recognition for robot path planning using template matched filters. , 2017, , .   |     | 1         |
| 21 | Identification of the Workspace of a Hexapod Mobile Robot Using Multobjective Optimization. Computacion Y Sistemas, 2017, 21, .  | 0.3 | 0         |
| 22 | ¿Lo volveré a hacer? Revisitando la implementación del paradigma del emprendimiento en una universidad de México. Retos: Revista De Ciencias De La Administración Y Economía, 2017, 7, 147.        | 1.3 | 4         |
| 23 | Obstacle recognition for path planning in autonomous mobile robots. , 2016, , .  |     | 3         |
| 24 | Reducing the size of traveling salesman problems using vaccination by fuzzy selector. Expert Systems With Applications, 2016, 49, 20-30.   | 7.6 | 8         |
| 25 | Application of NSGA-II algorithm to the spectrum assignment problem in spectrum sharing networks. Applied Soft Computing Journal, 2016, 39, 188-198.   | 7.2 | 28        |
| 26 | Pseudo-Bacterial Potential Field Based Path Planner for Autonomous Mobile Robot Navigation. International Journal of Advanced Robotic Systems, 2015, 12, 81.                                       | 2.1 | 28        |
| 27 | Reducing the Size of Combinatorial Optimization Problems Using the Operator Vaccine by Fuzzy Selector with Adaptive Heuristics. Mathematical Problems in Engineering, 2015, 2015, 1-14.            | 1.1 | 4         |
| 28 | Optimal Path Planning Generation for Mobile Robots using Parallel Evolutionary Artificial Potential Field. Journal of Intelligent and Robotic Systems: Theory and Applications, 2015, 79, 237-257. | 3.4 | 98        |
| 29 | Design and Acceleration of a Quantum Genetic Algorithm Through the Matlab GPU Library. Studies in Computational Intelligence, 2015, , 333-345.   | 0.9 | 2         |
| 30 | Evolving Embedded Fuzzy Controllers. , 2015, , 1451-1477.  |     | 1         |
| 31 | Path planning for mobile robots using Bacterial Potential Field for avoiding static and dynamic obstacles. Expert Systems With Applications, 2015, 42, 5177-5191.                                  | 7.6 | 265       |
| 32 | Obtaining Pharmacokinetic Population Models Using a Genetic Algorithm Approach. Studies in Computational Intelligence, 2015, , 305-317.  | 0.9 | 0         |
| 33 | Classification of Encephalographic Signals using Artificial Neural Networks. Computacion Y Sistemas, 2015, 19, .   | 0.3 | 1         |
| 34 | Admission Control and Channel Allocation for Dynamic Spectrum Access using Multi-objective Optimization. Computacion Y Sistemas, 2015, 19, .   | 0.3 | 0         |
| 35 | An Admission Control and Channel Allocation Algorithm Based on Particle Swarm Optimization for Cognitive Cellular Networks. Studies in Computational Intelligence, 2014, , 151-162.                | 0.9 | 3         |
| 36 | Geo-Navigation for a Mobile Robot and Obstacle Avoidance Using Fuzzy Controllers. Studies in Computational Intelligence, 2014, , 647-669.  | 0.9 | 3         |

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|----|---|-----|-----------|
| 37 | Design of Fuzzy Controllers for a Hexapod Robot. Studies in Computational Intelligence, 2014, , 709-721.  | 0.9 | 0         |
| 38 | MLP for Electroencephalographic Signals Classification Using Different Adaptive Learning Algorithm. Studies in Computational Intelligence, 2014, , 369-380.           | 0.9 | 0         |
| 39 | Ant colony test center for planning autonomous mobile robot navigation. Computer Applications in Engineering Education, 2013, 21, 214-229.                            | 3.4 | 31        |
| 40 | Combinatorial complexity problem reduction by the use of artificial vaccines. Expert Systems With Applications, 2013, 40, 1871-1879.                                  | 7.6 | 7         |
| 41 | Path Planning Using Clonal Selection Algorithm. Studies in Computational Intelligence, 2013, , 303-312.   | 0.9 | 4         |
| 42 | Methodology to Design Fuzzy Logic Controller for Soft-Core Embedded into FPGA. Studies in Computational Intelligence, 2013, , 89-96.                                  | 0.9 | 3         |
| 43 | High Performance Architecture for NSGA-II. Studies in Computational Intelligence, 2013, , 451-461.  | 0.9 | 3         |
| 44 | Using Immunogenetic Algorithms for Solving Combinatorial Optimization Problems. Studies in Computational Intelligence, 2013, , 273-288.                               | 0.9 | 1         |
| 45 | Methodology to Optimize Manufacturing Time for a CNC Using a High Performance Implementation of ACO. International Journal of Advanced Robotic Systems, 2012, 9, 121. | 2.1 | 12        |
| 46 | WLAN Cell Handoff Latency Abatement Using an FPGA Fuzzy Logic Algorithm Implementation. Advances in Fuzzy Systems, 2012, 2012, 1-10.                                  | 0.9 | 2         |
| 47 | High Performance Fuzzy Systems for Real World Problems. Advances in Fuzzy Systems, 2012, 2012, 1-2.   | 0.9 | 2         |
| 48 | Designing High-Performance Fuzzy Controllers Combining IP Cores and Soft Processors. Advances in Fuzzy Systems, 2012, 2012, 1-11.                                     | 0.9 | 4         |
| 49 | Embedding a high speed interval type-2 fuzzy controller for a real plant into an FPGA. Applied Soft Computing Journal, 2012, 12, 988-998.                             | 7.2 | 92        |
| 50 | Efficient Stereoscopic Video Matching and Map Reconstruction for a Wheeled Mobile Robot. International Journal of Advanced Robotic Systems, 2012, 9, 120.             | 2.1 | 5         |
| 51 | Optimization of interval type-2 fuzzy logic controllers using evolutionary algorithms. Soft Computing, 2011, 15, 1145-1160.   | 3.6 | 117       |
| 52 | MODELLING AND SIMULATION OF THE DEFUZZIFICATION STAGE OF A TYPE-2 FUZZY CONTROLLER USING VHDL CODE. Control and Intelligent Systems, 2011, 39, .                      | 0.3 | 11        |
| 53 | Vision Based Obstacle Detection Module for a Wheeled Mobile Robot. , 2010, , .  |     | 0         |
| 54 | Method for Obstacle Detection and Map Reconfiguration in Wheeled Mobile Robotics. Studies in Computational Intelligence, 2010, , 423-441.                             | 0.9 | 0         |

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|----|---|-----|-----------|
| 55 | Embedding a KM Type Reducer for High Speed Fuzzy Controller into an FPGA. Advances in Intelligent and Soft Computing, 2010, , 217-228.  | 0.2 | 2         |
| 56 | Intelligent Method for Contrast Enhancement in Digital Video. Studies in Computational Intelligence, 2010, , 401-422.   | 0.9 | 1         |
| 57 | Embedding a Fuzzy Locomotion Pose Controller for a Wheeled Mobile Robot into an FPGA. Studies in Computational Intelligence, 2010, , 465-481.   | 0.9 | 1         |
| 58 | 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. | 0.9 | 19        |
| 59 | Design and Simulation of the Type-2 Fuzzification Stage: Using Active Membership Functions. Studies in Computational Intelligence, 2009, , 273-293.                                       | 0.9 | 14        |
| 60 | Path planning for autonomous mobile robot navigation with ant colony optimization and fuzzy cost function evaluation. Applied Soft Computing Journal, 2009, 9, 1102-1110.                 | 7.2 | 334       |
| 61 | 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.                    | 0.9 | 10        |
| 62 | Mediative Fuzzy Logic for Controlling Population Size in Evolutionary Algorithms. Intelligent Information Management, 2009, 01, 108-119.  | 0.5 | 1         |
| 63 | Comparison between Ant Colony and Genetic Algorithms for Fuzzy System Optimization. Studies in Computational Intelligence, 2008, , 71-86.   | 0.9 | 11        |
| 64 | Simple tuned fuzzy controller embedded into an FPGA. , 2008, , .  |     | 14        |
| 65 | Modeling and Simulation of the Defuzzification Stage Using Xilinx System Generator and Simulink. Studies in Computational Intelligence, 2008, , 333-343.                                  | 0.9 | 7         |
| 66 | A New Evolutionary Method with a Hybrid Approach Combining Particle Swarm Optimization and Genetic Algorithms using Fuzzy Logic for Decision Making. , 2008, , .                          |     | 16        |
| 67 | Development of an embedded simple tuned fuzzy controller. , 2008, , .   |     | 9         |
| 68 | Design and Simulation of the Fuzzification Stage through the Xilinx System Generator. Studies in Computational Intelligence, 2008, , 297-305.   | 0.9 | 12        |
| 69 | High Performance Parallel Programming of a GA Using Multi-core Technology. Studies in Computational Intelligence, 2008, , 307-314.  | 0.9 | 8         |
| 70 | Methodology to Test and Validate a VHDL Inference Engine through the Xilinx System Generator. Studies in Computational Intelligence, 2008, , 325-331.                                     | 0.9 | 9         |
| 71 | Design and Implementation of a Hybrid Fuzzy Controller Using VHDL. Studies in Computational Intelligence, 2008, , 437-446.  | 0.9 | 5         |
| 72 | Mediative Fuzzy Logic: A New Approach for Contradictory Knowledge Management. , 2008, , 135-149.  |     | 4         |

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|----|---|-----|-----------|
| 73 | Scalability Potential of Multi-core Architecture in a Neuro-Fuzzy System. Studies in Computational Intelligence, 2008, , 315-323.                               | 0.9 | 0         |
| 74 | Optimal Path Planning for Autonomous Mobile Robot Navigation Using Ant Colony Optimization and a Fuzzy Cost Function Evaluation. , 2007, , 790-798.             |     | 15        |
| 75 | An Efficient Computational Method to Implement Type-2 Fuzzy Logic in Control Applications. , 2007, , 45-52.   |     | 74        |
| 76 | Performance of a Simple Tuned Fuzzy Controller and a PID Controller on a DC Motor. , 2007, , .  |     | 53        |
| 77 | Evolutionary optimization of interval type-2 membership functions using the Human Evolutionary Model. IEEE International Conference on Fuzzy Systems, 2007, , . | 0.0 | 7         |
| 78 | Testing and Evaluating the Single Objective Intelligent Evolutionary Algorithm through a Graphic Interface. , 2007, , .   |     | 0         |
| 79 | Human evolutionary model: A new approach to optimization. Information Sciences, 2007, 177, 2075-2098.   | 6.9 | 81        |
| 80 | Experimental study of intelligent controllers under uncertainty using type-1 and type-2 fuzzy logic. Information Sciences, 2007, 177, 2023-2048.                | 6.9 | 226       |
| 81 | Mediative fuzzy logic: a new approach for contradictory knowledge management. Soft Computing, 2007, 12, 251-256.  | 3.6 | 12        |
| 82 | Evolutionary Optimization of a Wiener Model. , 2007, , 43-58.   |     | 0         |
| 83 | Mediative Fuzzy Logic: A Novel Approach for Handling Contradictory Knowledge. , 2007, , 75-91.  |     | 1         |
| 84 | Evolutionary Modeling Using A Wiener Model. , 2006, , 619-632.  |     | 0         |
| 85 | The Evolutionary Learning Rule in System Identification. , 2005, , 195-212.   |     | 1         |
| 86 | Black box evolutionary mathematical modeling applied to linear systems. International Journal of Intelligent Systems, 2005, 20, 293-311.                        | 5.7 | 6         |
| 87 | Application of a breeder genetic algorithm for filter optimization. Natural Computing, 2005, 4, 11-37.  | 3.0 | 1         |
| 88 | Application of a breeder genetic algorithm for finite impulse filter optimization. Information Sciences, 2004, 161, 139-158.                                    | 6.9 | 12        |
| 89 | The evolutionary learning rule for system identification. Applied Soft Computing Journal, 2003, 3, 343-352.   | 7.2 | 20        |
| 90 | A Breeder Genetic Algorithm for Adaptive Filter Optimization. , 2002, , 145-155.  |     | 0         |

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|----|--|-----|-----------|
| 91 | Application of a breeder genetic algorithm for system identification in an adaptive finite impulse response filter. , 0, , . |     | 3         |
| 92 | Integrated Development Platform for Intelligent Control based on Type-2 Fuzzy Logic. , 0, , .                                |     | 4         |
| 93 | Quantum-inspired evolutionary algorithms on continuous space multiobjective problems. Soft Computing, 0, , 1.                | 3.6 | 0         |