

# Leandro Dos S Coelho

## List of Publications by Citations

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364  
papers

10,280  
citations

53  
h-index

90  
g-index

425  
ext. papers

12,380  
ext. citations

4.3  
avg, IF

7.29  
L-index

| #   | Paper   | IF   | Citations |
|-----|---|------|-----------|
| 364 | Multi-objective grey wolf optimizer: A novel algorithm for multi-criterion optimization. <i>Expert Systems With Applications</i> , <b>2016</b> , 47, 106-119  | 7.8  | 647       |
| 363 | Combining of chaotic differential evolution and quadratic programming for economic dispatch optimization with valve-point effect. <i>IEEE Transactions on Power Systems</i> , <b>2006</b> , 21, 989-996                     | 7    | 373       |
| 362 | Gaussian quantum-behaved particle swarm optimization approaches for constrained engineering design problems. <i>Expert Systems With Applications</i> , <b>2010</b> , 37, 1676-1683  | 7.8  | 292       |
| 361 | Elephant Herding Optimization <b>2015</b> ,   |      | 262       |
| 360 | Coevolutionary particle swarm optimization using Gaussian distribution for solving constrained optimization problems. <i>IEEE Transactions on Systems, Man, and Cybernetics</i> , <b>2006</b> , 36, 1407-16                 |      | 232       |
| 359 | Short-term forecasting COVID-19 cumulative confirmed cases: Perspectives for Brazil. <i>Chaos, Solitons and Fractals</i> , <b>2020</b> , 135, 109853  | 9.3  | 223       |
| 358 | A new metaheuristic optimisation algorithm motivated by elephant herding behaviour. <i>International Journal of Bio-Inspired Computation</i> , <b>2016</b> , 8, 394   | 2.9  | 194       |
| 357 | Earthworm optimisation algorithm: a bio-inspired metaheuristic algorithm for global optimisation problems. <i>International Journal of Bio-Inspired Computation</i> , <b>2018</b> , 12, 1                                   | 2.9  | 184       |
| 356 | Coyote Optimization Algorithm: A New Metaheuristic for Global Optimization Problems <b>2018</b> ,   |      | 166       |
| 355 | Solving economic load dispatch problems in power systems using chaotic and Gaussian particle swarm optimization approaches. <i>International Journal of Electrical Power and Energy Systems</i> , <b>2008</b> , 30, 297-307 | 5.1  | 164       |
| 354 | Use of chaotic sequences in a biologically inspired algorithm for engineering design optimization. <i>Expert Systems With Applications</i> , <b>2008</b> , 34, 1905-1913  | 7.8  | 159       |
| 353 | An efficient particle swarm approach for mixed-integer programming in reliabilityRedundancy optimization applications. <i>Reliability Engineering and System Safety</i> , <b>2009</b> , 94, 830-837                         | 6.3  | 151       |
| 352 | A quantum particle swarm optimizer with chaotic mutation operator. <i>Chaos, Solitons and Fractals</i> , <b>2008</b> , 37, 1409-1418  | 9.3  | 150       |
| 351 | An improved harmony search algorithm for power economic load dispatch. <i>Energy Conversion and Management</i> , <b>2009</b> , 50, 2522-2526  | 10.6 | 145       |
| 350 | Tuning of PID controller based on a multiobjective genetic algorithm applied to a robotic manipulator. <i>Expert Systems With Applications</i> , <b>2012</b> , 39, 8968-8974  | 7.8  | 139       |
| 349 | Binary optimization using hybrid particle swarm optimization and gravitational search algorithm. <i>Neural Computing and Applications</i> , <b>2014</b> , 25, 1423-1435   | 4.8  | 127       |
| 348 | A novel framework for optimization of a grid independent hybrid renewable energy system: A case study of Iran. <i>Solar Energy</i> , <b>2015</b> , 112, 383-396   | 6.8  | 123       |

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|-----|---|------|-----|
| 347 | Bat-Inspired Optimization Approach for the Brushless DC Wheel Motor Problem. <i>IEEE Transactions on Magnetics</i> , <b>2012</b> , 48, 947-950  | 2    | 122 |
| 346 | Anisotropic superconducting properties of aligned MgB(2) crystallites. <i>Physical Review Letters</i> , <b>2001</b> , 86, 5974-7  | 7.4  | 121 |
| 345 | Determination of photovoltaic modules parameters at different operating conditions using a novel bird mating optimizer approach. <i>Energy Conversion and Management</i> , <b>2015</b> , 89, 608-614                      | 10.6 | 117 |
| 344 | Improved firefly algorithm approach applied to chiller loading for energy conservation. <i>Energy and Buildings</i> , <b>2013</b> , 59, 273-278   | 7    | 117 |
| 343 | A novel chaotic particle swarm optimization approach using H $\infty$ map and implicit filtering local search for economic load dispatch. <i>Chaos, Solitons and Fractals</i> , <b>2009</b> , 39, 510-518                 | 9.3  | 115 |
| 342 | Particle swarm approach based on quantum mechanics and harmonic oscillator potential well for economic load dispatch with valve-point effects. <i>Energy Conversion and Management</i> , <b>2008</b> , 49, 3080-3085      | 10.6 | 113 |
| 341 | Ensemble approach based on bagging, boosting and stacking for short-term prediction in agribusiness time series. <i>Applied Soft Computing Journal</i> , <b>2020</b> , 86, 105837   | 7.5  | 106 |
| 340 | Tuning of PID controller for an automatic regulator voltage system using chaotic optimization approach. <i>Chaos, Solitons and Fractals</i> , <b>2009</b> , 39, 1504-1514   | 9.3  | 103 |
| 339 | Apparent thermal diffusivity estimation of the banana during drying using inverse method. <i>Journal of Food Engineering</i> , <b>2008</b> , 85, 569-579  | 6    | 102 |
| 338 | Earthworm optimization algorithm: a bio-inspired metaheuristic algorithm for global optimization problems. <i>International Journal of Bio-Inspired Computation</i> , <b>2015</b> , 1, 1                                  | 2.9  | 102 |
| 337 | Improved differential evolution approach based on cultural algorithm and diversity measure applied to solve economic load dispatch problems. <i>Mathematics and Computers in Simulation</i> , <b>2009</b> , 79, 3136-3147 | 3.3  | 97  |
| 336 | An efficient cultural self-organizing migrating strategy for economic dispatch optimization with valve-point effect. <i>Energy Conversion and Management</i> , <b>2010</b> , 51, 2580-2587                                | 10.6 | 97  |
| 335 | Design of heat exchangers using Falcon Optimization Algorithm. <i>Applied Thermal Engineering</i> , <b>2019</b> , 156, 119-144  | 5.8  | 83  |
| 334 | Gaussian Artificial Bee Colony Algorithm Approach Applied to Loney's Solenoid Benchmark Problem. <i>IEEE Transactions on Magnetics</i> , <b>2011</b> , 47, 1326-1329  | 2    | 81  |
| 333 | Improved differential evolution algorithms for handling economic dispatch optimization with generator constraints. <i>Energy Conversion and Management</i> , <b>2007</b> , 48, 1631-1639                                  | 10.6 | 81  |
| 332 | Firefly algorithm approach based on chaotic Tinkerbell map applied to multivariable PID controller tuning. <i>Computers and Mathematics With Applications</i> , <b>2012</b> , 64, 2371-2382                               | 2.7  | 80  |
| 331 | A chaotic quantum-behaved particle swarm approach applied to optimization of heat exchangers. <i>Applied Thermal Engineering</i> , <b>2012</b> , 42, 119-128  | 5.8  | 78  |
| 330 | Magnetocaloric effect in the RNi5 (R=Pr, Nd, Gd, Tb, Dy, Ho, Er) series. <i>Physical Review B</i> , <b>2004</b> , 70,   | 3.3  | 78  |

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|-----|---|-----|----|
| 329 | Wind speed forecasting approach based on Singular Spectrum Analysis and Adaptive Neuro Fuzzy Inference System. <i>Renewable Energy</i> , <b>2018</b> , 126, 736-754   | 8.1 | 75 |
| 328 | An improved harmony search algorithm for synchronization of discrete-time chaotic systems. <i>Chaos, Solitons and Fractals</i> , <b>2009</b> , 41, 2526-2532  | 9.3 | 74 |
| 327 | Enhanced ensemble structures using wavelet neural networks applied to short-term load forecasting. <i>Engineering Applications of Artificial Intelligence</i> , <b>2019</b> , 82, 272-281                         | 7.2 | 72 |
| 326 | A backtracking search algorithm combined with Burger's chaotic map for parameter estimation of PEMFC electrochemical model. <i>International Journal of Hydrogen Energy</i> , <b>2014</b> , 39, 11165-11174       | 6.7 | 70 |
| 325 | Particle swarm approaches using Lozi map chaotic sequences to fuzzy modelling of an experimental thermal-vacuum system. <i>Applied Soft Computing Journal</i> , <b>2008</b> , 8, 1354-1364                        | 7.5 | 69 |
| 324 | Optimal chiller loading for energy conservation using a new differential cuckoo search approach. <i>Energy</i> , <b>2014</b> , 75, 237-243  | 7.9 | 68 |
| 323 | Solving non-smooth economic dispatch by a new combination of continuous GRASP algorithm and differential evolution. <i>International Journal of Electrical Power and Energy Systems</i> , <b>2017</b> , 84, 13-24 | 5.1 | 67 |
| 322 | Modified imperialist competitive algorithm based on attraction and repulsion concepts for reliability-redundancy optimization. <i>Expert Systems With Applications</i> , <b>2013</b> , 40, 3794-3802              | 7.8 | 67 |
| 321 | Image thresholding segmentation based on a novel beta differential evolution approach. <i>Expert Systems With Applications</i> , <b>2015</b> , 42, 2136-2142  | 7.8 | 66 |
| 320 | Capacitor placement of distribution systems using particle swarm optimization approaches. <i>International Journal of Electrical Power and Energy Systems</i> , <b>2015</b> , 64, 839-851                         | 5.1 | 65 |
| 319 | . <i>IEEE Transactions on Industrial Electronics</i> , <b>2007</b> , 54, 3234-3245  | 8.9 | 63 |
| 318 | Multi-objective optimization of the environmental-economic dispatch with reinforcement learning based on non-dominated sorting genetic algorithm. <i>Applied Thermal Engineering</i> , <b>2019</b> , 146, 688-700 | 5.8 | 63 |
| 317 | Economic optimization design for shell-and-tube heat exchangers by a Tsallis differential evolution. <i>Applied Thermal Engineering</i> , <b>2017</b> , 111, 143-151  | 5.8 | 61 |
| 316 | Differential evolution optimization combined with chaotic sequences for image contrast enhancement. <i>Chaos, Solitons and Fractals</i> , <b>2009</b> , 42, 522-529   | 9.3 | 59 |
| 315 | Theoretical description of the colossal entropic magnetocaloric effect: Application to MnAs. <i>Physical Review B</i> , <b>2006</b> , 73,   | 3.3 | 59 |
| 314 | Forecasting Brazilian and American COVID-19 cases based on artificial intelligence coupled with climatic exogenous variables. <i>Chaos, Solitons and Fractals</i> , <b>2020</b> , 139, 110027                     | 9.3 | 57 |
| 313 | An improved free search differential evolution algorithm: A case study on parameters identification of one diode equivalent circuit of a solar cell module. <i>Energy</i> , <b>2015</b> , 93, 1515-1522           | 7.9 | 56 |
| 312 | Optimal allocation, sizing of PHEV parking lots in distribution system. <i>International Journal of Electrical Power and Energy Systems</i> , <b>2015</b> , 67, 472-477   | 5.1 | 55 |

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| 311 | Multiobjective Biogeography-Based Optimization Based on Predator-Prey Approach. <i>IEEE Transactions on Magnetics</i> , <b>2012</b> , 48, 951-954  | 2    | 51 |
| 310 | Differential evolution based on truncated Levy-type flights and population diversity measure to solve economic load dispatch problems. <i>International Journal of Electrical Power and Energy Systems</i> , <b>2014</b> , 57, 178-188 | 5.1  | 51 |
| 309 | Model-free adaptive control optimization using a chaotic particle swarm approach. <i>Chaos, Solitons and Fractals</i> , <b>2009</b> , 41, 2001-2009  | 9.3  | 50 |
| 308 | Least squares support vector machines with tuning based on chaotic differential evolution approach applied to the identification of a thermal process. <i>Expert Systems With Applications</i> , <b>2012</b> , 39, 4805-4812           | 7.8  | 49 |
| 307 | MESFET DC model parameter extraction using Quantum Particle Swarm Optimization. <i>Microelectronics Reliability</i> , <b>2009</b> , 49, 660-666  | 1.2  | 49 |
| 306 | Design of heat exchangers using a novel multiobjective free search differential evolution paradigm. <i>Applied Thermal Engineering</i> , <b>2016</b> , 94, 170-177   | 5.8  | 48 |
| 305 | A self-adaptive chaotic differential evolution algorithm using gamma distribution for unconstrained global optimization. <i>Applied Mathematics and Computation</i> , <b>2014</b> , 234, 452-459                                       | 2.7  | 48 |
| 304 | Global Optimization of Electromagnetic Devices Using an Exponential Quantum-Behaved Particle Swarm Optimizer. <i>IEEE Transactions on Magnetics</i> , <b>2008</b> , 44, 1074-1077  | 2    | 48 |
| 303 | Multi-step wind speed forecasting based on hybrid multi-stage decomposition model and long short-term memory neural network. <i>Energy Conversion and Management</i> , <b>2020</b> , 213, 112869                                       | 10.6 | 47 |
| 302 | Multi-step ahead nonlinear identification of Lorenz's chaotic system using radial basis neural network with learning by clustering and particle swarm optimization. <i>Chaos, Solitons and Fractals</i> , <b>2008</b> , 35, 967-979    | 9.3  | 47 |
| 301 | A RBF neural network model with GARCH errors: Application to electricity price forecasting. <i>Electric Power Systems Research</i> , <b>2011</b> , 81, 74-83   | 3.5  | 46 |
| 300 | Production and characterization of a thermostable glucoamylase from <i>Streptosporangium</i> sp. endophyte of maize leaves. <i>Bioresource Technology</i> , <b>2002</b> , 83, 105-9  | 11   | 46 |
| 299 | Calculation of the giant magnetocaloric effect in the MnFeP <sub>0.45</sub> As <sub>0.55</sub> compound. <i>Physical Review B</i> , <b>2004</b> , 70,  | 3.3  | 45 |
| 298 | Cultural coyote optimization algorithm applied to a heavy duty gas turbine operation. <i>Energy Conversion and Management</i> , <b>2019</b> , 199, 111932  | 10.6 | 43 |
| 297 | A chaotic firefly algorithm applied to reliability-redundancy optimization <b>2011</b> ,   |      | 42 |
| 296 | Multiobjective Electromagnetic Optimization Based on a Nondominated Sorting Genetic Approach With a Chaotic Crossover Operator. <i>IEEE Transactions on Magnetics</i> , <b>2008</b> , 44, 1078-1081                                    | 2    | 41 |
| 295 | Wind turbine blade geometry design based on multi-objective optimization using metaheuristics. <i>Energy</i> , <b>2018</b> , 162, 645-658  | 7.9  | 40 |
| 294 | Multiobjective scatter search approach with new combination scheme applied to solve environmental/economic dispatch problem. <i>Energy</i> , <b>2013</b> , 53, 14-21   | 7.9  | 40 |

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|-----|---|------|----|
| 293 | Model-free adaptive control design using evolutionary-neural compensator. <i>Expert Systems With Applications</i> , <b>2010</b> , 37, 499-508   | 7.8  | 40 |
| 292 | Computational intelligence approaches and linear models in case studies of forecasting exchange rates. <i>Expert Systems With Applications</i> , <b>2007</b> , 33, 816-823  | 7.8  | 40 |
| 291 | Novel Gaussian quantum-behaved particle swarm optimiser applied to electromagnetic design. <i>IET Science, Measurement and Technology</i> , <b>2007</b> , 1, 290-294  | 1.5  | 40 |
| 290 | A novel decomposition-ensemble learning framework for multi-step ahead wind energy forecasting. <i>Energy</i> , <b>2021</b> , 216, 119174   | 7.9  | 40 |
| 289 | Wavelet group method of data handling for fault prediction in electrical power insulators. <i>International Journal of Electrical Power and Energy Systems</i> , <b>2020</b> , 123, 106269                                    | 5.1  | 39 |
| 288 | Pressure prediction of a spark ignition single cylinder engine using optimized extreme learning machine models. <i>Applied Energy</i> , <b>2019</b> , 249, 204-221  | 10.7 | 37 |
| 287 | ReliabilityRedundancy optimization by means of a chaotic differential evolution approach. <i>Chaos, Solitons and Fractals</i> , <b>2009</b> , 41, 594-602   | 9.3  | 37 |
| 286 | Improved quantum-inspired evolutionary algorithm with diversity information applied to economic dispatch problem with prohibited operating zones. <i>Energy Conversion and Management</i> , <b>2011</b> , 52, 8-14            | 10.6 | 36 |
| 285 | Multiobjective Cuckoo Search Algorithm Based on Duffing's Oscillator Applied to Jiles-Atherton Vector Hysteresis Parameters Estimation. <i>IEEE Transactions on Magnetics</i> , <b>2013</b> , 49, 1745-1748                   | 2    | 33 |
| 284 | Adaptive cascade control of a hydraulic actuator with an adaptive dead-zone compensation and optimization based on evolutionary algorithms. <i>Expert Systems With Applications</i> , <b>2011</b> , 38, 12262-12269           | 7.8  | 33 |
| 283 | Multiobjective Particle Swarm Approach for the Design of a Brushless DC Wheel Motor. <i>IEEE Transactions on Magnetics</i> , <b>2010</b> , 46, 2994-2997  | 2    | 33 |
| 282 | A V-Shaped Binary Crow Search Algorithm for Feature Selection <b>2018</b> ,   |      | 32 |
| 281 | A Multiobjective Gaussian Particle Swarm Approach Applied to Electromagnetic Optimization. <i>IEEE Transactions on Magnetics</i> , <b>2010</b> , 46, 3289-3292  | 2    | 31 |
| 280 | Cascaded evolutionary algorithm for nonlinear system identification based on correlation functions and radial basis functions neural networks. <i>Mechanical Systems and Signal Processing</i> , <b>2016</b> , 68-69, 378-393 | 7.8  | 30 |
| 279 | A Modified Imperialist Competitive Algorithm for Optimization in Electromagnetics. <i>IEEE Transactions on Magnetics</i> , <b>2012</b> , 48, 579-582  | 2    | 30 |
| 278 | Firefly as a novel swarm intelligence variable selection method in spectroscopy. <i>Analytica Chimica Acta</i> , <b>2014</b> , 852, 20-7  | 6.6  | 28 |
| 277 | PID control design for chaotic synchronization using a tribes optimization approach. <i>Chaos, Solitons and Fractals</i> , <b>2009</b> , 42, 634-640  | 9.3  | 28 |
| 276 | A modified ant colony optimization algorithm based on differential evolution for chaotic synchronization. <i>Expert Systems With Applications</i> , <b>2010</b> , 37, 4198-4203   | 7.8  | 28 |

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|-----|--|-----|----|
| 275 | Correction to "Combining of Chaotic Differential Evolution and Quadratic Programming for Economic Dispatch Optimization with Valve-Point Effect". <i>IEEE Transactions on Power Systems</i> , <b>2006</b> , 21, 1465-1465                                  | 7   | 28 |
| 274 | Co-evolutionary particle swarm optimization for min-max problems using Gaussian distribution   |     | 28 |
| 273 | Metaheuristic inspired on owls behavior applied to heat exchangers design. <i>Thermal Science and Engineering Progress</i> , <b>2019</b> , 14, 100431  | 3.6 | 27 |
| 272 | Novel Gamma Differential Evolution Approach for Multiobjective Transformer Design Optimization. <i>IEEE Transactions on Magnetics</i> , <b>2013</b> , 49, 2121-2124  | 2   | 27 |
| 271 | A comparison between three short-term shoreline prediction models. <i>Ocean and Coastal Management</i> , <b>2012</b> , 69, 102-110   | 3.9 | 27 |
| 270 | A hybrid shuffled complex evolution approach based on differential evolution for unconstrained optimization. <i>Applied Mathematics and Computation</i> , <b>2011</b> , 217, 5822-5829   | 2.7 | 27 |
| 269 | Computational intelligence approach to PID controller design using the universal model. <i>Information Sciences</i> , <b>2010</b> , 180, 3980-3991   | 7.7 | 27 |
| 268 | Hybrid multi-stage decomposition with parametric model applied to wind speed forecasting in Brazilian Northeast. <i>Renewable Energy</i> , <b>2021</b> , 164, 1508-1526  | 8.1 | 27 |
| 267 | Agribusiness time series forecasting using Wavelet neural networks and metaheuristic optimization: An analysis of the soybean sack price and perishable products demand. <i>International Journal of Production Economics</i> , <b>2018</b> , 203, 174-189 | 9.3 | 27 |
| 266 | Electrical Insulator Fault Forecasting Based on a Wavelet Neuro-Fuzzy System. <i>Energies</i> , <b>2020</b> , 13, 484  | 3.1 | 26 |
| 265 | Solution of Jiles-Atherton vector hysteresis parameters estimation by modified Differential Evolution approaches. <i>Expert Systems With Applications</i> , <b>2012</b> , 39, 2021-2025  | 7.8 | 26 |
| 264 | Chaotic synchronization using PID control combined with population based incremental learning algorithm. <i>Expert Systems With Applications</i> , <b>2010</b> , 37, 5347-5352   | 7.8 | 26 |
| 263 | PSO-E: Particle Swarm with Exponential Distribution  |     | 26 |
| 262 | An enhanced bat algorithm approach for reducing electrical power consumption of air conditioning systems based on differential operator. <i>Applied Thermal Engineering</i> , <b>2016</b> , 99, 834-840  | 5.8 | 26 |
| 261 | Electricity Price Forecasting Based on Self-Adaptive Decomposition and Heterogeneous Ensemble Learning. <i>Energies</i> , <b>2020</b> , 13, 5190   | 3.1 | 25 |
| 260 | Modified Social-Spider Optimization Algorithm Applied to Electromagnetic Optimization. <i>IEEE Transactions on Magnetics</i> , <b>2016</b> , 52, 1-4   | 2   | 25 |
| 259 | Multiobjective Optimization of Transformer Design Using a Chaotic Evolutionary Approach. <i>IEEE Transactions on Magnetics</i> , <b>2014</b> , 50, 669-672   | 2   | 25 |
| 258 | Self-organizing migration algorithm applied to machining allocation of clutch assembly. <i>Mathematics and Computers in Simulation</i> , <b>2009</b> , 80, 427-435   | 3.3 | 25 |



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|-----|--|-----|----|
| 257 | Binary coyote optimization algorithm for feature selection. <i>Pattern Recognition</i> , <b>2020</b> , 107, 107470   | 7.7 | 24 |
| 256 | A software tool for teaching of particle swarm optimization fundamentals. <i>Advances in Engineering Software</i> , <b>2008</b> , 39, 877-887  | 3.6 | 24 |
| 255 | Predictive Controller Tuning Using Modified Particle Swarm Optimization Based on Cauchy and Gaussian Distributions <b>2005</b> , 287-298   |     | 24 |
| 254 | Nonlinear identification using a B-spline neural network and chaotic immune approaches. <i>Mechanical Systems and Signal Processing</i> , <b>2009</b> , 23, 2418-2434  | 7.8 | 23 |
| 253 | Chaotic artificial immune approach applied to economic dispatch of electric energy using thermal units. <i>Chaos, Solitons and Fractals</i> , <b>2009</b> , 40, 2376-2383  | 9.3 | 23 |
| 252 | Chaotic coyote algorithm applied to truss optimization problems. <i>Computers and Structures</i> , <b>2021</b> , 242, 106353   | 4.5 | 23 |
| 251 | Using two improved particle swarm optimization variants for optimization of daily electrical power consumption in multi-chiller systems. <i>Applied Thermal Engineering</i> , <b>2015</b> , 89, 640-646                        | 5.8 | 22 |
| 250 | Temperature dependence of coercive field of ZnFe <sub>2</sub> O <sub>4</sub> nanoparticles. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 053917  | 2.5 | 22 |
| 249 | Multiobjective Exponential Particle Swarm Optimization Approach Applied to Hysteresis Parameters Estimation. <i>IEEE Transactions on Magnetics</i> , <b>2012</b> , 48, 283-286   | 2   | 21 |
| 248 | Electromagnetic Optimization Using a Cultural Self-Organizing Migrating Algorithm Approach Based on Normative Knowledge. <i>IEEE Transactions on Magnetics</i> , <b>2009</b> , 45, 1446-1449                                   | 2   | 21 |
| 247 | Thermodynamic optimization design for plate-fin heat exchangers by Tsallis JADE. <i>International Journal of Thermal Sciences</i> , <b>2017</b> , 113, 136-144   | 4.1 | 20 |
| 246 | A GMDH polynomial neural network-based method to predict approximate three-dimensional structures of polypeptides. <i>Expert Systems With Applications</i> , <b>2012</b> , 39, 12268-12279                                     | 7.8 | 20 |
| 245 | Estimation of apparent thermal conductivity of carrot purée during freezing using inverse problem. <i>International Journal of Food Science and Technology</i> , <b>2009</b> , 44, 1292-1303                                   | 3.8 | 20 |
| 244 | Magnetocaloric effect of the ternary Dy, Ho and Er platinum gallides. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2016</b> , 401, 1088-1092  | 2.8 | 19 |
| 243 | A hybrid shuffled complex evolution approach with pattern search for unconstrained optimization. <i>Mathematics and Computers in Simulation</i> , <b>2011</b> , 81, 1901-1909  | 3.3 | 19 |
| 242 | Magnetic and structural investigations on La <sub>0.6</sub> Sr <sub>0.4</sub> MnO <sub>3</sub> nanostructured manganite: Evidence of a ferrimagnetic shell. <i>Journal of Solid State Chemistry</i> , <b>2014</b> , 219, 87-92 | 3.3 | 18 |
| 241 | Supply chain optimisation using evolutionary algorithms. <i>International Journal of Computer Applications in Technology</i> , <b>2008</b> , 31, 158   | 0.7 | 18 |
| 240 | Minimizing computational cost and energy demand of building lighting systems: A real time experiment using a modified competition over resources algorithm. <i>Energy and Buildings</i> , <b>2017</b> , 139, 108-123           | 7   | 17 |



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|-----|---|------|----|
| 239 | Image forgery detection by semi-automatic wavelet soft-Thresholding with error level analysis. <i>Expert Systems With Applications</i> , <b>2017</b> , 85, 348-356  | 7.8  | 17 |
| 238 | Population's variance-based Adaptive Differential Evolution for real parameter optimization <b>2013</b> ,   |      | 17 |
| 237 | Comparative study of SQP and metaheuristics for robotic manipulator design. <i>Applied Numerical Mathematics</i> , <b>2008</b> , 58, 1396-1412  | 2.5  | 17 |
| 236 | Multi-objective adaptive differential evolution for SVM/SVR hyperparameters selection. <i>Pattern Recognition</i> , <b>2021</b> , 110, 107649   | 7.7  | 17 |
| 235 | A Chaotic Approach of Differential Evolution Optimization Applied to Loudspeaker Design Problem. <i>IEEE Transactions on Magnetics</i> , <b>2012</b> , 48, 751-754  | 2    | 16 |
| 234 | A population-based simulated annealing algorithm for global optimization <b>2016</b> ,  |      | 16 |
| 233 | Modified crow search approach applied to electromagnetic optimization <b>2016</b> ,   |      | 16 |
| 232 | Multiobjective Krill Herd Algorithm for Electromagnetic Optimization. <i>IEEE Transactions on Magnetics</i> , <b>2016</b> , 52, 1-4   | 2    | 15 |
| 231 | Bio-inspired optimization algorithms for real underwater image restoration. <i>Signal Processing: Image Communication</i> , <b>2019</b> , 77, 49-65   | 2.8  | 15 |
| 230 | Integrative numerical modeling and thermodynamic optimal design of counter-flow plate-fin heat exchanger applying neural networks. <i>International Journal of Heat and Mass Transfer</i> , <b>2020</b> , 159, 120097 | 4.9  | 15 |
| 229 | Design of robust PSS in multimachine power systems using backtracking search algorithm <b>2015</b> ,  |      | 15 |
| 228 | Generalised minimum variance control state-space design. <i>IET Control Theory and Applications</i> , <b>2011</b> , 5, 1709-1715  | 2.5  | 15 |
| 227 | Nonlinear model identification of an experimental ball-and-tube system using a genetic programming approach. <i>Mechanical Systems and Signal Processing</i> , <b>2009</b> , 23, 1434-1446                            | 7.8  | 15 |
| 226 | Angular dependence of the bulk nucleation field $H_{c2}$ of aligned MgB2 crystallites. <i>Physical Review B</i> , <b>2001</b> , 64,   | 3.3  | 15 |
| 225 | Multi-step ahead meningitis case forecasting based on decomposition and multi-objective optimization methods. <i>Journal of Biomedical Informatics</i> , <b>2020</b> , 111, 103575                                    | 10.2 | 15 |
| 224 | Note: Experimental setup for measuring the barocaloric effect in polymers: Application to natural rubber. <i>Review of Scientific Instruments</i> , <b>2017</b> , 88, 046103  | 1.7  | 14 |
| 223 | Optimization of drop ejection frequency in EHD inkjet printing system using an improved Firefly Algorithm. <i>Applied Soft Computing Journal</i> , <b>2020</b> , 94, 106438   | 7.5  | 14 |
| 222 | Non-Dominated Sorting Genetic Algorithm Based on Reinforcement Learning to Optimization of Broad-Band Reflector Antennas Satellite. <i>IEEE Transactions on Magnetics</i> , <b>2012</b> , 48, 767-770                 | 2    | 14 |

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|-----|---|-----|----|
| 221 | A Multiobjective Firefly Approach Using Beta Probability Distribution for Electromagnetic Optimization Problems. <i>IEEE Transactions on Magnetics</i> , <b>2013</b> , 49, 2085-2088  | 2   | 14 |
| 220 | Hardware opposition-based PSO applied to mobile robot controllers. <i>Engineering Applications of Artificial Intelligence</i> , <b>2014</b> , 28, 64-77   | 7.2 | 14 |
| 219 | Efficient bootstrap stacking ensemble learning model applied to wind power generation forecasting. <i>International Journal of Electrical Power and Energy Systems</i> , <b>2022</b> , 136, 107712  | 5.1 | 14 |
| 218 | MOBOpt [multi-objective Bayesian optimization. <i>SoftwareX</i> , <b>2020</b> , 12, 100520  | 2.7 | 14 |
| 217 | Volumetric efficiency optimization of a single-cylinder D.I. diesel engine using differential evolution algorithm. <i>Applied Thermal Engineering</i> , <b>2016</b> , 108, 660-669  | 5.8 | 14 |
| 216 | A tuning strategy for multivariable PI and PID controllers using differential evolution combined with chaotic Zaslavskii map. <i>Expert Systems With Applications</i> , <b>2011</b> ,   | 7.8 | 13 |
| 215 | Improved Bacterial Foraging Strategy Applied to TEAM Workshop Benchmark Problem. <i>IEEE Transactions on Magnetics</i> , <b>2010</b> , 46, 2903-2906  | 2   | 13 |
| 214 | Demand forecasting based on natural computing approaches applied to the foodstuff retail segment. <i>Journal of Retailing and Consumer Services</i> , <b>2016</b> , 31, 174-181   | 8.5 | 13 |
| 213 | Static force capability optimization of humanoids robots based on modified self-adaptive differential evolution. <i>Computers and Operations Research</i> , <b>2017</b> , 84, 205-215   | 4.6 | 12 |
| 212 | Multi-objective optimization of the Stirling heat engine through self-adaptive Jaya algorithm. <i>Journal of Renewable and Sustainable Energy</i> , <b>2017</b> , 9, 033703   | 2.5 | 12 |
| 211 | Wavenet using artificial bee colony applied to modeling of truck engine powertrain components. <i>Engineering Applications of Artificial Intelligence</i> , <b>2015</b> , 41, 41-55   | 7.2 | 12 |
| 210 | Modified differential evolution approach for optimization of planar parallel manipulators force capabilities. <i>Expert Systems With Applications</i> , <b>2012</b> , 39, 6150-6156   | 7.8 | 11 |
| 209 | Magnetostriction of Fe <sub>100-x</sub> V <sub>x</sub> alloys for 5.2?x?40.7. <i>Journal of Alloys and Compounds</i> , <b>2013</b> , 553, 233-238   | 5.7 | 11 |
| 208 | Estimation of the apparent thermal diffusivity coefficient using an inverse technique. <i>Inverse Problems in Science and Engineering</i> , <b>2009</b> , 17, 569-589   | 1.3 | 11 |
| 207 | Tribes Optimization Algorithm Applied to the Loney's Solenoid. <i>IEEE Transactions on Magnetics</i> , <b>2009</b> , 45, 1526-1529  | 2   | 11 |
| 206 | Self-Organizing Migrating Strategies Applied to Reliability-Redundancy Optimization of Systems. <i>IEEE Transactions on Reliability</i> , <b>2009</b> , 58, 501-510   | 4.6 | 11 |
| 205 | Identification of temperature and moisture content fields using a combined neural network and clustering method approach. <i>International Communications in Heat and Mass Transfer</i> , <b>2009</b> , 36, 304-313   | 5.8 | 11 |
| 204 | Electromagnetic optimization based on an improved diversity-guided differential evolution approach and adaptive mutation factor. <i>COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering</i> , <b>2009</b> , 28, 1112-1120 | 0.7 | 11 |

|     |   |     |    |
|-----|---|-----|----|
| 203 | Linear and non-linear relationships mapping the Henry's law parameters of organic pesticides. <i>Atmospheric Environment</i> , <b>2010</b> , 44, 3179-3186  | 5.3 | 11 |
| 202 | Particle Swarm Optimization with Quasi-Newton Local Search for Solving Economic Dispatch Problem <b>2006</b> ,  |     | 11 |
| 201 | Particle swarm optimization (PSO) applied to fuzzy modeling in a thermal-vacuum system <b>2005</b> ,  |     | 11 |
| 200 | Nonlinear black-box system identification through coevolutionary algorithms and radial basis function artificial neural networks. <i>Applied Soft Computing Journal</i> , <b>2020</b> , 87, 105990                          | 7.5 | 11 |
| 199 | Multi-objective lightning search algorithm applied to wind farm layout optimization. <i>Energy</i> , <b>2021</b> , 216, 119214  | 7.9 | 11 |
| 198 | Novel hybrid model based on echo state neural network applied to the prediction of stock price return volatility. <i>Expert Systems With Applications</i> , <b>2021</b> , 184, 115490                                       | 7.8 | 11 |
| 197 | Multiobjective Symbiotic Search Algorithm Approaches for Electromagnetic Optimization. <i>IEEE Transactions on Magnetics</i> , <b>2017</b> , 53, 1-4  | 2   | 10 |
| 196 | Bayesian Optimized Echo State Network Applied to Short-Term Load Forecasting. <i>Energies</i> , <b>2020</b> , 13, 2390  | 3.1 | 10 |
| 195 | A genetic programming approach based on Levy flight applied to nonlinear identification of a poppet valve. <i>Applied Mathematical Modelling</i> , <b>2014</b> , 38, 1729-1736  | 4.5 | 10 |
| 194 | Structurally tuned multiferroic state in BiFeO <sub>3</sub> -based compounds. <i>Applied Physics A: Materials Science and Processing</i> , <b>2013</b> , 111, 563-567   | 2.6 | 10 |
| 193 | Power system stability enhancement by designing optimal PSS employing backtracking search algorithm <b>2017</b> ,   |     | 10 |
| 192 | Nonlinear Black-box System Identification through Neural Networks of a Hysteretic Piezoelectric Robotic Micromanipulator. <i>IFAC-PapersOnLine</i> , <b>2015</b> , 48, 409-414  | 0.7 | 10 |
| 191 | Comparison between two FPGA implementations of the Particle Swarm Optimization algorithm for high-performance embedded applications <b>2010</b> ,   |     | 10 |
| 190 | Global optimization of thermal conductivity using stochastic algorithms. <i>Inverse Problems in Science and Engineering</i> , <b>2009</b> , 17, 511-535   | 1.3 | 10 |
| 189 | B-spline neural network design using improved differential evolution for identification of an experimental nonlinear process. <i>Applied Soft Computing Journal</i> , <b>2008</b> , 8, 1513-1522                            | 7.5 | 10 |
| 188 | Natural convection heat transfer in partially open enclosures containing an internal local heat source. <i>Brazilian Journal of Chemical Engineering</i> , <b>2007</b> , 24, 375-388  | 1.7 | 10 |
| 187 | Electromagnetic device optimization by hybrid evolution strategy approaches. <i>COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering</i> , <b>2007</b> , 26, 269-279 | 0.7 | 10 |
| 186 | Economic dispatch optimization using hybrid chaotic particle swarm optimizer <b>2007</b> ,  |     | 10 |

|     |   |     |    |
|-----|---|-----|----|
| 185 | Effect of heat exposure on the thermoregulatory responses of selected naked neck chickens. <i>Arquivo Brasileiro De Medicina Veterinaria E Zootecnia</i> , <b>2002</b> , 54, 35-41  | 0.3 | 10 |
| 184 | Harmony Search Approach Based on Ricker Map for Multi-Objective Transformer Design Optimization. <i>IEEE Transactions on Magnetics</i> , <b>2015</b> , 51, 1-4  | 2   | 9  |
| 183 | Biogeography-based Optimization approach based on Predator-Prey concepts applied to path planning of 3-DOF robot manipulator <b>2010</b> ,  |     | 9  |
| 182 | Discrete Differential Evolution with local search to solve the Traveling Salesman Problem: Fundamentals and case studies <b>2008</b> ,  |     | 9  |
| 181 | An Efficient Particle Swarm Optimization Approach Based on Cultural Algorithm Applied to Mechanical Design  |     | 9  |
| 180 | . <i>IEEE Open Journal of Antennas and Propagation</i> , <b>2021</b> , 2, 151-162   | 1.9 | 9  |
| 179 | Hybrid Wavelet Stacking Ensemble Model for Insulators Contamination Forecasting. <i>IEEE Access</i> , <b>2021</b> , 9, 66387-66397  | 3.5 | 9  |
| 178 | Design of spiral heat exchanger from economic and thermal point of view using a tuned wind-driven optimizer. <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> , <b>2018</b> , 40, 1                       | 2   | 8  |
| 177 | Predicting building's corners hygrothermal behavior by using a Fuzzy inference system combined with clustering and Kalman filter. <i>International Communications in Heat and Mass Transfer</i> , <b>2016</b> , 71, 225-233             | 5.8 | 8  |
| 176 | Application of quantitative structure-property relationship analysis to estimate the vapor pressure of pesticides. <i>Ecotoxicology and Environmental Safety</i> , <b>2016</b> , 128, 52-60   | 7   | 8  |
| 175 | Hardware Particle Swarm Optimization Based on the Attractive-Repulsive Scheme for Embedded Applications <b>2010</b> ,   |     | 8  |
| 174 | Influence of egg pre-storage heating period and storage length on incubation results. <i>Brazilian Journal of Poultry Science</i> , <b>2008</b> , 10, 17-22   | 1.3 | 8  |
| 173 | Evidence for the precipitation of the Fe <sub>2</sub> Pr phase in the FePr binary system. <i>Journal of Applied Physics</i> , <b>2001</b> , 90, 2934-2938   | 2.5 | 8  |
| 172 | Generalized minimum variance control under long-range prediction horizon setups. <i>ISA Transactions</i> , <b>2016</b> , 62, 325-32   | 5.5 | 8  |
| 171 | Time series forecasting using ensemble learning methods for emergency prevention in hydroelectric power plants with dam. <i>Electric Power Systems Research</i> , <b>2022</b> , 202, 107584   | 3.5 | 8  |
| 170 | Analysis of zero field and field cooled magnetization curves of CoFe <sub>2</sub> O <sub>4</sub> nanoparticles with a T-dependence on the saturation magnetization. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 721, 525-530 | 5.7 | 7  |
| 169 | A novel multiobjective lognormal-beta differential evolution approach for the transformer design optimization. <i>Engineering Computations</i> , <b>2018</b> , 35, 955-978  | 1.4 | 7  |
| 168 | Nonlinear model predictive control hardware implementation with custom-precision floating point operations <b>2016</b> ,  |     | 7  |

|     |  |     |   |
|-----|--|-----|---|
| 167 | Multi-Objective Ensemble Model for Short-Term Price Forecasting in Corn Price Time Series <b>2019</b> ,  |     | 7 |
| 166 | Magnetizer Design Based on a Quasi-Oppositional Gravitational Search Algorithm. <i>IEEE Transactions on Magnetics</i> , <b>2014</b> , 50, 705-708  | 2   | 7 |
| 165 | Effects of Composition on Solidification Microstructure of Cast Titanium Alloys. <i>Materials Science Forum</i> , <b>2010</b> , 649, 183-188   | 0.4 | 7 |
| 164 | Use of an artificial immune network optimization approach to tune the parameters of a discrete variable structure controller. <i>Expert Systems With Applications</i> , <b>2009</b> , 36, 5009-5015  | 7.8 | 7 |
| 163 | Magnetic coupling between Gd and Pr ions and magnetocaloric effect in Gd <sub>0.5</sub> Pr <sub>0.5</sub> Al <sub>2</sub> compound. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2009</b> , 321, 3014-3018                            | 2.8 | 7 |
| 162 | Identification of the Hénon chaotic map by fuzzy modeling and Nelder-Mead simplex method. <i>Chaos, Solitons and Fractals</i> , <b>2009</b> , 41, 2762-2772  | 9.3 | 7 |
| 161 | Alternative fuels mixture in cement industry kilns employing Particle Swarm Optimization algorithm. <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> , <b>2008</b> , 30,   | 2   | 7 |
| 160 | Magnetocaloric effect and transport properties of Gd <sub>5</sub> Ge <sub>2</sub> (Si <sub>1-x</sub> Sn <sub>x</sub> ) <sub>2</sub> (x=0.23 and 0.40) compounds. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2007</b> , 316, 368-371 | 2.8 | 7 |
| 159 | Path Planning Optimization for Mobile Robots Based on Bacteria Colony Approach <b>2006</b> , 187-198   |     | 7 |
| 158 | Experimental and theoretical analyses of PrAl <sub>2</sub> and NdAl <sub>2</sub> composite for use as an active magnetic regenerator. <i>Journal of Applied Physics</i> , <b>2005</b> , 97, 083905   | 2.5 | 7 |
| 157 | Directional solidification and characterization of binary Fe-Pr and Fe-Nd eutectic alloys. <i>Journal of Alloys and Compounds</i> , <b>2001</b> , 325, 194-200   | 5.7 | 7 |
| 156 | Automatic tuning of PID and gain scheduling PID controllers by a derandomized evolution strategy. <i>Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM</i> , <b>1999</b> , 13, 341-349                          | 1.3 | 7 |
| 155 | Wind turbines anomaly detection based on power curves and ensemble learning. <i>IET Renewable Power Generation</i> , <b>2020</b> , 14, 4086-4093   | 2.9 | 7 |
| 154 | Applying the Potentiality of Using Fuzzy Logic in PID Control Design <b>2005</b> , 193-204   |     | 7 |
| 153 | Efficient hardware implementation of radial basis function neural network with customized-precision floating-point operations. <i>Control Engineering Practice</i> , <b>2017</b> , 60, 124-132   | 3.9 | 6 |
| 152 | Short-term load forecasting using wavenet ensemble approaches <b>2016</b> ,  |     | 6 |
| 151 | Room Temperature Multiferroic Behavior in Pb(Fe <sub>1/2</sub> Nb <sub>1/2</sub> )O <sub>3</sub> Ceramics. <i>Ferroelectrics</i> , <b>2014</b> , 470, 221-226  | 2.6 | 6 |
| 150 | Multiobjective Cuckoo Search Applied to Radial Basis Function Neural Networks Training for System Identification. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2014</b> , 47, 2539-2544               |     | 6 |

|     |   |     |   |
|-----|---|-----|---|
| 149 | Robust design of a 2-DOF GMV controller: a direct self-tuning and fuzzy scheduling approach. <i>ISA Transactions</i> , <b>2012</b> , 51, 13-21  | 5.5 | 6 |
| 148 | Hygrothermal Dynamic and Mould Growth Risk Predictions for Concrete Tiles by Using Least Squares Support Vector Machines. <i>Energies</i> , <b>2017</b> , 10, 1093  | 3.1 | 6 |
| 147 | Hardware Particle Swarm Optimization with passive congregation for embedded applications <b>2011</b> ,  |     | 6 |
| 146 | Modeling and controller performance assessment for a switched reluctance motor drive based on setpoint relay. <i>ISA Transactions</i> , <b>2009</b> , 48, 206-12  | 5.5 | 6 |
| 145 | Gaussian Quantum-Behaved Particle Swarm Optimization Applied to Fuzzy PID Controller Design. <i>Studies in Computational Intelligence</i> , <b>2008</b> , 1-15  | 0.8 | 6 |
| 144 | Cooperative Particle Swarm Optimization for Robust Control System Design <b>2003</b> , 307-316  |     | 6 |
| 143 | Fuzzy Inference System Approach Using Clustering and Differential Evolution Optimization Applied to Identification of a Twin Rotor System. <i>IFAC-PapersOnLine</i> , <b>2017</b> , 50, 13102-13107         | 0.7 | 5 |
| 142 | Multi-objective differential evolution algorithm for underwater image restoration <b>2015</b> ,   |     | 5 |
| 141 | Hardware Architecture for Particle Swarm Optimization Using Floating-Point Arithmetic <b>2009</b> ,   |     | 5 |
| 140 | Self-adaptive Differential Evolution Using Chaotic Local Search for Solving Power Economic Dispatch with Nonsmooth Fuel Cost Function. <i>Studies in Computational Intelligence</i> , <b>2008</b> , 275-286 | 0.8 | 5 |
| 139 | K-Bug, A New Bug Approach for Mobile Robot's Path Planning. <i>Control Applications (CCA), Proceedings of the IEEE International Conference on</i> , <b>2007</b> ,  |     | 5 |
| 138 | Magnetic and magnetocaloric properties of Nd monopnictides. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2004</b> , 272-276, 2373-2374   | 2.8 | 5 |
| 137 | Discrete differential evolution metaheuristics for permutation flow shop scheduling problems. <i>Computers and Industrial Engineering</i> , <b>2022</b> , 166, 107956                                       | 6.4 | 5 |
| 136 | A Harmony Search Approach Using Exponential Probability Distribution Applied to Fuzzy Logic Control Optimization. <i>Studies in Computational Intelligence</i> , <b>2010</b> , 77-88                        | 0.8 | 5 |
| 135 | Multiobjective wind driven optimization approach applied to transformer design <b>2016</b> ,  |     | 5 |
| 134 | Machine Learning-Based Soft Sensors for the Estimation of Laundry Moisture Content in Household Dryer Appliances. <i>Energies</i> , <b>2019</b> , 12, 3843  | 3.1 | 5 |
| 133 | Modelling and Predicting Backstroke Start Performance Using Non-Linear and Linear Models. <i>Journal of Human Kinetics</i> , <b>2018</b> , 61, 29-38  | 2.6 | 4 |
| 132 | Modeling of a 2-DOF Piezoelectric Micromanipulator at High Frequency Rates through Nonlinear Black-box System Identification <b>2018</b> ,  |     | 4 |



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| 131 | Hardware-based parallel firefly algorithm for embedded applications <b>2013</b> ,   |     | 4 |
| 130 | Improved multiobjective particle swarm optimization for designing PID controllers applied to robotic manipulator <b>2014</b> ,  |     | 4 |
| 129 | Accelerating the artificial bee colony algorithm by hardware parallel implementations <b>2012</b> ,   |     | 4 |
| 128 | Cauchy particle swarm optimization with dynamic adaptation applied to inverse heat transfer problem <b>2010</b> ,   |     | 4 |
| 127 | Chaotic differential Harmony Search algorithm applied to power economic dispatch of generators with multiple fuel options <b>2010</b> ,   |     | 4 |
| 126 | Loney's Solenoid Design Using an Artificial Immune Network With Local Search Based on the Simplex Method. <i>IEEE Transactions on Magnetics</i> , <b>2008</b> , 44, 1070-1073   | 2   | 4 |
| 125 | Cultural differential evolution approach to optimize the economic dispatch of electrical energy using thermal generators <b>2008</b> ,  |     | 4 |
| 124 | Supply Chain Optimization Using Chaotic Differential Evolution Method <b>2006</b> ,   |     | 4 |
| 123 | Liquidus projection of the Nb-Ti-Al system near the Al <sub>3</sub> (Nb,Cr) + Cr(Al,Nb) eutectic region. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2006</b> , 424, 77-82 | 5.3 | 4 |
| 122 | Radial basis neural network learning based on particle swarm optimization to multistep prediction of chaotic Lorenz's system <b>2005</b> ,  |     | 4 |
| 121 | Autonomous dirigible navigation using visual tracking and pose estimation   |     | 4 |
| 120 | Influence of digestion on sewage sludge stability and dewaterability ,Preliminary results. <i>Environmental Technology Letters</i> , <b>1987</b> , 8, 249-259   |     | 4 |
| 119 | Sludge dewatering in a conventional plant with phosphorus removal-I. <i>Water Research</i> , <b>1985</b> , 19, 143-149  | 2.5 | 4 |
| 118 | QUANTUM INSPIRED PARTICLE SWARM COMBINED WITH LIN-KERNIGHAN-HELSGAUN METHOD TO THE TRAVELING SALESMAN PROBLEM. <i>Pesquisa Operacional</i> , <b>2015</b> , 35, 465-488  | 0.3 | 4 |
| 117 | Differential Evolution Approach Using Chaotic Sequences Applied to Planning of Mobile Robot in a Static Environment with Obstacles. <i>Studies in Computational Intelligence</i> , <b>2007</b> , 3-22   | 0.8 | 4 |
| 116 | Combining of Differential Evolution and Implicit Filtering Algorithm Applied to Electromagnetic Design Optimization <b>2007</b> , 233-240   |     | 4 |
| 115 | Multi-step ahead Bitcoin Price Forecasting Based on VMD and Ensemble Learning Methods <b>2020</b> ,   |     | 4 |
| 114 | Tuning of Control Parameters of Grey Wolf Optimizer using Fuzzy Inference. <i>IEEE Latin America Transactions</i> , <b>2019</b> , 17, 1191-1198   | 0.7 | 4 |

|     |   |     |   |
|-----|---|-----|---|
| 113 | Electromagnetic Optimization Based on Gaussian Crow Search Approach <b>2018</b> ,   |     | 4 |
| 112 | An Experimental and Comparative Study of Fuzzy PID Controller Structures <b>1999</b> , 147-159  |     | 4 |
| 111 | Variable structure control optimized by differential evolution approach applied to continuous stirred tank reactor. <i>Chemical Engineering Research and Design</i> , <b>2015</b> , 100, 248-260  | 5.5 | 3 |
| 110 | Cascaded free search differential evolution applied to nonlinear system identification based on correlation functions and neural networks <b>2014</b> ,   |     | 3 |
| 109 | Particle Swarm Optimization and strength pareto to solve multiobjective optimization problems. <i>International Journal of Applied Electromagnetics and Mechanics</i> , <b>2013</b> , 43, 137-149 | 0.4 | 3 |
| 108 | Modelagem preditiva de linha de costa utilizando redes neurais artificiais. <i>Boletim De Ciencias Geodesicas</i> , <b>2010</b> , 16, 420-444   | 1.1 | 3 |
| 107 | Multivariable nonlinear boiler power plant identification through neural networks and Particle Swarm Optimization approaches <b>2010</b> ,  |     | 3 |
| 106 | Biogeography-Based Optimization Combined with Predator-Prey Approach Applied to Economic Load Dispatch <b>2010</b> ,  |     | 3 |
| 105 | A Discrete Differential Evolution Approach with Local Search for Traveling Salesman Problems. <i>Studies in Computational Intelligence</i> , <b>2011</b> , 1-12                                   | 0.8 | 3 |
| 104 | Opposition-based shuffled PSO with passive congregation applied to FM matching synthesis <b>2011</b> ,  |     | 3 |
| 103 | A normative differential evolution approach for estimation of heat transfer coefficient during freezing treatment by inverse analysis <b>2011</b> ,   |     | 3 |
| 102 | Nonlinear System Identification Based on B-Spline Neural Network and Modified Particle Swarm Optimization <b>2006</b> ,   |     | 3 |
| 101 | Toward a knowledge-based framework to foster innovation in networked organisations  |     | 3 |
| 100 | Sludge dewatering in a conventional plant with phosphorus removal-II. <i>Water Research</i> , <b>1985</b> , 19, 151-156.  | 2.5 | 3 |
| 99  | Model-Free Learning Adaptive Controller with Neural Network Compensator and Differential Evolution Optimization <b>2006</b> ,   |     | 3 |
| 98  | Multiobjective Gaussian Particle Swarm Approach Applied to Multi-loop PI Controller Tuning of a Quadruple-Tank System. <i>Studies in Computational Intelligence</i> , <b>2010</b> , 1-16          | 0.8 | 3 |
| 97  | Chaotic Jaya Approaches to Solving Electromagnetic Optimization Benchmark Problems. <i>Telecom</i> , <b>2021</b> , 2, 222-231   | 1.8 | 3 |
| 96  | Self-adaptive differential evolution applied to combustion engine calibration. <i>Soft Computing</i> , <b>2021</b> , 25, 109-135  | 3.5 | 3 |

|    |  |     |   |
|----|--|-----|---|
| 95 | Extreme gradient boosting model based on improved Jaya optimizer applied to forecasting energy consumption in residential buildings. <i>Evolving Systems</i> ,1  | 2.1 | 3 |
| 94 | Distributed Business Process Management. <i>IFIP Advances in Information and Communication Technology</i> , <b>1999</b> , 241-258  | 0.5 | 3 |
| 93 | Multivariable system stabilization via discrete variable structure control. <i>Control Engineering Practice</i> , <b>2015</b> , 40, 71-80  | 3.9 | 2 |
| 92 | Solar Power Forecasting Based on Ensemble Learning Methods <b>2020</b> ,   |     | 2 |
| 91 | An R library for nonlinear black-box system identification. <i>SoftwareX</i> , <b>2020</b> , 11, 100495  | 2.7 | 2 |
| 90 | Designing Lead-Lag PSS Employing Backtracking Search Algorithm to Improve Power System Damping <b>2017</b> ,   |     | 2 |
| 89 | Comparison of Different Classifiers for Automatic Target Recognition Systems. <i>IEEE Latin America Transactions</i> , <b>2018</b> , 16, 13-18   | 0.7 | 2 |
| 88 | Steady-State Tracking Properties for the Generalized Minimum Variance Controller: A Review, Proportional-Integral-Derivative Tuning, and Applications. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2014</b> , 53, 1470-1477        | 3.9 | 2 |
| 87 | Swim velocity profile identification by using a modified differential evolution method associated with RBF Neural Network <b>2013</b> ,  |     | 2 |
| 86 | Multi-Objective Model Selection for Unmanned Aerial Vehicles Automatic Target Recognition Systems. <i>IFAC-PapersOnLine</i> , <b>2017</b> , 50, 11607-11612  | 0.7 | 2 |
| 85 | Competing anisotropies on 3d sub-lattice of YNi <sub>4</sub> CoxB compounds. <i>Journal of Applied Physics</i> , <b>2014</b> , 116, 063907   | 2.5 | 2 |
| 84 | Hysteresis parameters estimation using a modified harmony search. <i>COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering</i> , <b>2013</b> , 32, 1974-1985                                 | 0.7 | 2 |
| 83 | Firefly approach optimized wavenets applied to multivariable identification of a thermal process <b>2013</b> ,   |     | 2 |
| 82 | Gaussian artificial bee colony algorithm approach applied to Loney's solenoid benchmark problem <b>2010</b> ,  |     | 2 |
| 81 | A study of pressure and chemical substitution effects on the magnetocaloric properties of the ferromagnetic compound UGa(2). <i>Journal of Physics Condensed Matter</i> , <b>2009</b> , 21, 276001   | 1.8 | 2 |
| 80 | Particle swarm optimization combined with normative knowledge applied to Loney's solenoid design. <i>COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering</i> , <b>2009</b> , 28, 1155-1161 | 0.7 | 2 |
| 79 | Fuzzy Model and Particle Swarm Optimization for Nonlinear Identification of a Chua's Oscillator. <i>IEEE International Conference on Fuzzy Systems</i> , <b>2007</b> ,   |     | 2 |
| 78 | Improved bacterial foraging strategy for controller optimization applied to robotic manipulator system <b>2006</b> ,   |     | 2 |

|    |  |     |   |
|----|--|-----|---|
| 77 | Integrated Logistics in the Virtual Enterprise: The PRODNET-II Approach. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>1998</b> , 31, 225-231                                  |     | 2 |
| 76 | Wavelet Neural Networks and Its Applications in Chaotic Systems Identification <b>2005</b> , 205-217   |     | 2 |
| 75 | Applying Particle Swarm Optimization to Adaptive Controller <b>2007</b> , 82-91  |     | 2 |
| 74 | B-Spline Neural Network Using an Artificial Immune Network Applied to Identification of a Ball-and-Tube Prototype <b>2007</b> , 92-101   |     | 2 |
| 73 | Artificial Immune Network Combined with Normative Knowledge for Power Economic Dispatch of Thermal Units. <i>Advances in Soft Computing</i> , <b>2009</b> , 55-64  |     | 2 |
| 72 | Experimental analysis of R410A flow in helically rib-roughened tubes. <i>Thermal Science and Engineering Progress</i> , <b>2020</b> , 20, 100668   | 3.6 | 2 |
| 71 | Multi-objective symbiotic search algorithm approaches for electromagnetic optimization <b>2016</b> ,   |     | 2 |
| 70 | Multidisciplinary optimisation in mechatronic systems: a comparative analysis with multiobjective techniques. <i>IEEE Latin America Transactions</i> , <b>2016</b> , 14, 364-370   | 0.7 | 2 |
| 69 | Multiobjective Coyote Algorithm Applied to Electromagnetic Optimization <b>2019</b> ,  |     | 2 |
| 68 | A modified harmony search algorithm applied to capacitor placement of radial distribution networks considering voltage stability index. <i>International Journal of Bio-Inspired Computation</i> , <b>2019</b> , 13, 189 | 2.9 | 2 |
| 67 | Ant Lion Approach Based on Lozi Map for Multiobjective Transformer Design Optimization <b>2018</b> ,   |     | 2 |
| 66 | Spiral inductor design based on fireworks optimization combined with free search <b>2018</b> ,   |     | 2 |
| 65 | Discrete Variable Structure Control Design based on Lamarckian Evolution <b>2003</b> , 361-370   |     | 2 |
| 64 | Bio-Inspired Multiobjective Tuning of PID-Controlled Antilock Braking Systems <b>2019</b> ,  |     | 1 |
| 63 | Efficient Sampling of PI Controllers in Evolutionary Multiobjective Optimization <b>2015</b> ,   |     | 1 |
| 62 | Piezoelectric micromanipulator dataset for hysteresis identification. <i>Data in Brief</i> , <b>2020</b> , 29, 105175  | 1.2 | 1 |
| 61 | Multiobjective lightning search applied to Jiles-Atherton hysteresis model parameter estimation <b>2018</b> ,  |     | 1 |
| 60 | Heuristic Kalman Algorithm for Multiobjective Optimization.. <i>IFAC-PapersOnLine</i> , <b>2017</b> , 50, 4460-4465  | 0.7 | 1 |

|    |  |     |   |
|----|--|-----|---|
| 59 | A modified lambda algorithm for optimization in electromagnetics. <i>COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering</i> , <b>2014</b> , 33, 759-767 | 0.7 | 1 |
| 58 | Electrical Transmission Lines Design through Integer Multiobjective Particle Swarm Optimization Approach <b>2012</b> ,   |     | 1 |
| 57 | Wavelet neural network approach applied to biomechanics of swimming <b>2013</b> ,  |     | 1 |
| 56 | Modified differential evolution approaches applied in exergoeconomic analysis and optimization of a cogeneration system. <i>Expert Systems With Applications</i> , <b>2011</b> ,                                 | 7.8 | 1 |
| 55 | Forecasting electricity prices using a RBF neural network With GARCH errors <b>2010</b> ,  |     | 1 |
| 54 | A multiobjective Gaussian Quantum-inspired Particle Swarm approach applied to Electromagnetic Optimization <b>2010</b> ,   |     | 1 |
| 53 | A normative self-organizing migrating algorithm for power economic dispatch of thermal generators with valve-point effects and multiple fuels <b>2009</b> ,  |     | 1 |
| 52 | A harmony search algorithm combined with differential operator applied to reliability-redundancy optimization <b>2009</b> ,  |     | 1 |
| 51 | Low Cost Laboratory Equipment for Analysis and Design of Dynamic Systems. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>1997</b> , 30, 99-104                          |     | 1 |
| 50 | Previs n-linear dos pres de troncos de eucalipto baseada em uma abordagem neuroevolutiva. <i>Gest &amp; Produ</i> , <b>2007</b> , 14, 139-154   | 0.9 | 1 |
| 49 | Use of Cultural Particle Swarm Optimization for Loney's Solenoids Design   |     | 1 |
| 48 | <b>2007</b> ,  |     | 1 |
| 47 | Assessing fuzzy and neural approaches for a PID controller using universal model <b>2005</b> ,   |     | 1 |
| 46 | Otimiza de layouts industriais com base em busca tabu. <i>Gest &amp; Produ</i> , <b>2003</b> , 10, 69-88   | 0.9 | 1 |
| 45 | Design Issues and Laboratory Experiments in a Self-Tuning Control Teaching. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>1999</b> , 32, 6387-6392                     |     | 1 |
| 44 | Tuning of control parameters of the Whale Optimization Algorithm using fuzzy inference system. <i>Journal of Intelligent and Fuzzy Systems</i> , <b>2022</b> , 1-16  | 1.6 | 1 |
| 43 | Lattice Dynamics of Alkali Metals in a Three-Body Interaction. <i>Acta Physica Polonica A</i> , <b>1995</b> , 87, 599-609  | 0.6 | 1 |
| 42 | Identification of an Experimental Process by B-Spline Neural Network Using Improved Differential Evolution Training <b>2007</b> , 72-81  |     | 1 |

|    |   |     |   |
|----|---|-----|---|
| 41 | Reliability-Redundancy Optimization Using a Chaotic Differential Harmony Search Algorithm. <i>Adaptation, Learning, and Optimization</i> , <b>2011</b> , 503-516  | 0.7 | 1 |
| 40 | PSO in Building Fuzzy Systems. <i>Studies in Computational Intelligence</i> , <b>2011</b> , 37-52   | 0.8 | 1 |
| 39 | Meta-heuristic inspired by the behavior of the humpback whale tuned by a fuzzy inference system. <i>Journal of Intelligent and Fuzzy Systems</i> , <b>2020</b> , 39, 7993-8000  | 1.6 | 1 |
| 38 | Chaotic Coyote Optimization Algorithm. <i>Journal of Ambient Intelligence and Humanized Computing</i> , <b>2016</b> , 7, 156-170  | 3.7 | 1 |
| 37 | Multiobjective Ant Lion Approaches Applied to Electromagnetic Device Optimization. <i>Technologies</i> , <b>2021</b> , 9, 35  | 2.4 | 1 |
| 36 | Model Based Predictive Control of Multivariable Hammerstein Processes with Fuzzy Logic Hypercube Interpolated Models. <i>PLoS ONE</i> , <b>2016</b> , 11, e0163116  | 3.7 | 1 |
| 35 | Multi-hop Localization Method Based on Tribes Algorithm. <i>Lecture Notes in Computer Science</i> , <b>2016</b> , 156-170   | 1.7 | 1 |
| 34 | RBF Neural Network combined with self-adaptive MODE and Genetic Algorithm to identify velocity profile of swimmers <b>2016</b> ,  |     | 1 |
| 33 | A case study on environmental sustainability: A study of the trophic changes in fish species as a result of the damming of rivers through clustering analysis. <i>Computers and Industrial Engineering</i> , <b>2019</b> , 135, 1239-1252 | 6.4 | 1 |
| 32 | A Conceptual Model of a Stereo Vision System to Aid a Teleoperated Robot in Pruning Vegetation Close to Overhead Urban Power Lines <b>2018</b> ,  |     | 1 |
| 31 | Development of a New Index to Evaluate Zooplanktons Gonads: An Approach Based on a Suitable Combination of Deformable Models. <i>Lecture Notes in Computer Science</i> , <b>2005</b> , 498-505  | 0.9 | 1 |
| 30 | Predictive Control of a Nonlinear Process Using Multiple Models Optimization Based on Fast Evolutionary Programming <b>2002</b> , 179-190   |     | 1 |
| 29 | Maximizing the thermal performance index applying evolutionary multi-objective optimization approaches for double pipe heat exchanger. <i>Applied Thermal Engineering</i> , <b>2022</b> , 211, 118504                                     | 5.8 | 1 |
| 28 | Predicting centre of mass horizontal speed in low to severe swimming intensities with linear and non-linear models. <i>Journal of Sports Sciences</i> , <b>2019</b> , 37, 1512-1520   | 3.6 | 0 |
| 27 | Nature inspired optimization tools for SVMs - NIOTS.. <i>MethodsX</i> , <b>2021</b> , 8, 101574   | 1.9 | 0 |
| 26 | Nonlinear Identification Method of a Yo-yo System Using Fuzzy Model and Fast Particle Swarm Optimisation <b>2006</b> , 303-314  |     | 0 |
| 25 | Ensemble Learning Models Coupled with Urban Mobility Information Applied to Predict COVID-19 Incidence Cases. <i>Studies in Systems, Decision and Control</i> , <b>2022</b> , 821-858   | 0.8 | 0 |
| 24 | Improved multiobjective differential evolution with spherical pruning algorithm for optimizing 3D printing technology parametrization process. <i>Annals of Operations Research</i> , <b>2021</b> , 317, 1-17                             | 3.2 | 0 |



|    |  |     |   |
|----|--|-----|---|
| 23 | Multiobjective optimization design procedures for data-driven unmanned aerial vehicles automatic target recognition systems <b>2021</b> , 231-256  |     | 0 |
| 22 | Blending Colored and Depth CNN Pipelines in an Ensemble Learning Classification Approach for Warehouse Application Using Synthetic and Real Data. <i>Machines</i> , <b>2022</b> , 10, 28   | 2.9 | 0 |
| 21 | Non-uniformly spaced linear antenna array design by means of PEEC approach applying Cheetah optimization algorithm. <i>International Journal of Applied Electromagnetics and Mechanics</i> , <b>2019</b> , 60, S15-S24             | 2.4 |   |
| 20 | PIPMC: Computational Tool for Teaching FOPDT Model Identification and PI-IMC Tuning. <i>IFAC-PapersOnLine</i> , <b>2015</b> , 48, 70-75  | 0.7 |   |
| 19 | Performance Improvement in the Pattern Classification of Nominal Data Sets Applying Multiple Correspondence Analysis. <i>Applied Mechanics and Materials</i> , <b>2014</b> , 670-671, 1482-1487                                    | 0.3 |   |
| 18 | Polyclonal antibody to ovomucoid determination in gamma irradiated laying eggs. <i>Progress in Nuclear Energy</i> , <b>2011</b> , 53, 1148-1150  | 2.3 |   |
| 17 | Discrete Variable Structure Control Based on Optimization by Cultural Differential Evolution Approach <b>2006</b> , 781  |     |   |
| 16 | Coherence and fluctuation in 3D networks: the superconducting behavior of Nb particles embedded in a Cu matrix. <i>Physica C: Superconductivity and Its Applications</i> , <b>2004</b> , 408-410, 625-627                          | 1.3 |   |
| 15 | Integrated Logistics Management Support System: An Advanced Coordination Functionality for the Virtual Environment. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>1998</b> , 31, 233-238 |     |   |
| 14 | Visual navigation system for autonomous indoor blimps <b>1999</b> , 3716, 223  |     |   |
| 13 | Adversarial Autoencoder and Multi-Task Semi-Supervised Learning for Multi-stage Process. <i>Lecture Notes in Computer Science</i> , <b>2020</b> , 3-16   | 0.9 |   |
| 12 | Solving Facility Layout Problems with a Set of Geometric Hard-constraints using Tabu Search <b>2006</b> , 251-262  |     |   |
| 11 | Multivariable Predictive Control Based on Neural Network Model and Simplex-Evolutionary Hybrid Optimization <b>2000</b> , 427-436  |     |   |
| 10 | Identification of Nonlinear Multivariable Processes by Neural Networks: Open-Loop and Closed-Loop Case Studies <b>2000</b> , 131-140   |     |   |
| 9  | Autotuning of a Fuzzy PID Controller Based on Fuzzy Gain and Phase Margins: Analysis and Design <b>2002</b> , 213-224  |     |   |
| 8  | Fuzzy-Memetic Approach for Prediction of Chaotic Time Series and Nonlinear Identification <b>2002</b> , 757-768  |     |   |
| 7  | A Hybrid Method of Differential Evolution and SQP for Solving the Economic Dispatch Problem with Valve-Point Effect. <i>Advances in Intelligent and Soft Computing</i> , <b>2006</b> , 311-320                                     |     |   |
| 6  | Intelligent Tuning and Application of a PID Controller Using Universal Model. <i>Advances in Intelligent and Soft Computing</i> , <b>2006</b> , 77-86  |     |   |

- 5 Efficient Hardware Implementation of Nonlinear Moving-horizon State Estimation with Artificial Neural Networks. *IFAC-PapersOnLine*, **2020**, 53, 7813-7818 0.7
- 4 Towards a Machine Learning Failure Prediction System Applied to a Smart Manufacturing Process. *IFIP Advances in Information and Communication Technology*, **2020**, 26-35 0.5
- 3 The PRODNET Demonstrator. *IFIP Advances in Information and Communication Technology*, **1999**, 279-290.5
- 2 Clonal Selection Algorithm Applied to Economic Dispatch Optimization of Electrical Energy. *Studies in Computational Intelligence*, **2011**, 73-83 0.8
- 1 Artificial Immune Network Approach with Beta Differential Operator Applied to Optimization of Heat Exchangers. *Lecture Notes in Computer Science*, **2012**, 166-177 0.9