Edgar Alfredo Portilla-Flores

List of Publications by Year
in descending order

45 papers	334 citations	840119 11 h-index	887659 17 g-index
50 all docs	50 docs citations	50 times ranked	322 citing authors

#	Article	IF	Citations
1	Design of a Wrist Rehabilitation System with a Novel Mixed Structural Optimization Applying Improved Harmony Search. Applied Sciences (Switzerland), 2021, 11, 1766.	1.3	0
2	An Innovative Optimization Design Procedure for Mechatronic Systems with a Multi-Criteria Formulation. Applied Sciences (Switzerland), 2021, 11, 8900.	1.3	1
3	A Novel Multi-Objective Harmony Search Algorithm with Pitch Adjustment by Genotype. Applied Sciences (Switzerland), 2021, 11, 8931.	1.3	7
4	Design Formulation for a Multi-criteria Optimization of Mechatronic Systems. Mechanisms and Machine Science, 2021, , 849-860.	0.3	0
5	A Comparative Study of Improved Harmony Search Algorithm in Four Bar Mechanisms. IEEE Access, 2020, 8, 148757-148778.	2.6	6
6	Design of the Input and Output Filter for a Matrix Converter Using Evolutionary Techniques. Applied Sciences (Switzerland), 2020, 10, 3524.	1.3	0
7	Tuning a PD+ Controller by Means of Dynamic Optimization in a Mobile Manipulator With Coupled Dynamics. IEEE Access, 2019, 7, 124712-124726.	2.6	11
8	Bacterial Foraging-Based Algorithm for Optimizing the Power Generation of an Isolated Microgrid. Applied Sciences (Switzerland), 2019, 9, 1261.	1.3	16
9	A Novel Mesh Following Technique Based on a Non-Approximant Surface Reconstruction for Industrial Robotic Path Generation. IEEE Access, 2019, 7, 22807-22817.	2.6	8
10	A Harmony Search Variant Based on a Novel Synthesized Approach for Constrained Numerical Optimization. , 2019, , .		1
11	Synthesis of a Non-Grashof Six-Bar Polycentric Knee Prostheses Using an Evolutionary Optimization Algorithm. , 2019, , 1121-1132.		1
12	A Graph-Theory-Based Method for Topological and Dimensional Representation of Planar Mechanisms as a Computational Tool for Engineering Design. IEEE Access, 2019, 7, 587-596.	2.6	9
13	Sintonización óptima de un controlador PD utilizando evolución diferencial con un modelo dinámico virtualizado en Unity 3D. Research in Computing Science, 2019, 148, 423-435.	0.1	1
14	Predicción de trayectorias usando el filtro de Kalman. Research in Computing Science, 2019, 148, 307-316.	0.1	1
15	Multi-Objective Design Optimization of a Hexa-Rotor With Disturbance Rejection Capability Using an Evolutionary Algorithm. IEEE Access, 2018, 6, 69064-69074.	2.6	4
16	Truss Topology Optimization Based on a Birth/Death Element Approach. IEEE Access, 2018, 6, 72609-72619.	2.6	3
17	Metaheuristic techniques comparison to optimize robotic end-effector behavior and its workspace. International Journal of Advanced Robotic Systems, 2018, 15, 172988141880113.	1.3	2
18	Algoritmo basado en el forrajeo de bacterias para la optimización de un smart grid. Research in Computing Science, 2018, 147, 11-24.	0.1	0

#	ARTICLE	IF	CITATIONS
19	Optimal design of a mechanism for children foot guiding. IFMBE Proceedings, 2017, , 717-720.	0.2	0
20	Hybrid Metaheuristic for Designing an End Effector as a Constrained Optimization Problem. IEEE Access, 2017, 5, 6002-6014.	2.6	6
21	Reconfigurable Mechanical System Design for Tracking an Ankle Trajectory Using an Evolutionary Optimization Algorithm. IEEE Access, 2017, 5, 5480-5493.	2.6	16
22	Design of a nonlinear controller and its intelligent optimization for exponential synchronization of a new chaotic system. Optik, 2017, 130, 201-212.	1.4	9
23	Enhancing the Harmony Search Algorithm Performance on Constrained Numerical Optimization. IEEE Access, 2017, 5, 25759-25780.	2.6	23
24	Concurrent design applied to the structural optimization of a wrist rehabilitation system. , 2017, , .		1
25	Un algoritmo memético basado en la colonia artificial de abejas para sÃntesis Ã³ptima de mecanismos. Revista Internacional De Metodos Numericos Para Calculo Y Diseno En Ingenieria, 2017, 33, .	0.1	2
26	Two-Swim Operators in the Modified Bacterial Foraging Algorithm for the Optimal Synthesis of Four-Bar Mechanisms. Computational Intelligence and Neuroscience, 2016, 2016, 1-18.	1.1	15
27	Multirotor design optimization using a genetic algorithm. , 2016, , .		13
28	An Optimum Synthesis of a Planar Mechanism Using a Dynamic-based Approach. IEEE Latin America Transactions, 2015, 13, 1497-1503.	1.2	3
29	Evaluation of gain scheduled predictive control in a nonlinear MIMO model of a hydropower station. International Journal of Electrical Power and Energy Systems, 2015, 66, 125-132.	3.3	14
30	Ortogonal Approach for Haptic Rendering Algorithm based in Conformal Geometric Algebra. Applied Mathematics and Information Sciences, 2015, 9, 113-124.	0.7	3
31	Diseño Ã³ptimo para transmisiÃ³n de fuerza en un efector final. Research in Computing Science, 2015, 91, 117-130.	0.1	2
32	Evaluation of thermal behavior for an asymmetric greenhouse by means of dynamic simulations. DYNA (Colombia), 2014, 81, 152-159.	0.2	9
33	Intelligent diagnosis scheme applied to model hybrid energy power generation system in presence of soft faults requirements: An FDI novel strategy. , 2014, , .		0
34	Synthesis of a planar four-bar mechanism for position control using the harmony search algorithm. , 2014, , .		2
35	Optimum synthesis of a four-bar mechanism using the modified bacterial foraging algorithm. International Journal of Systems Science, 2014, 45, 1080-1100.	3.7	22
36	Optimum Design of Parallelogram Five-bar Manipulator for Dexterous Workspace by using ELEMAEF in Differential Evolution. Applied Mathematics and Information Sciences, 2014, 8, 2129-2140.	0.7	2

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37	SÃntesis Ã³ptima de un mecanismo plano para seguimiento de trayectoria utilizando evoluciÃ³n diferencial. Research in Computing Science, 2014, 72, 85-98.	0.1	3
38	Robust Structure-Control Design Approach for Mechatronic Systems. IEEE/ASME Transactions on Mechatronics, 2013, 18, 1592-1601.	3.7	38
39	Optimum Design of a 3R Robot with a Parallelogram Five-Bar Mechanism for Dexterous Workspace by Using Metaheuristic Algorithm. , 2013, , .		0
40	Kinematic Dexterity Maximization of an Omnidirectional Wheeled Mobile Robot: A Comparison of Metaheuristic and SQP Algorithms. International Journal of Advanced Robotic Systems, 2012, 9, 161.	1.3	7
41	Parametric reconfiguration improvement in non-iterative concurrent mechatronic design using an evolutionary-based approach. Engineering Applications of Artificial Intelligence, 2011, 24, 757-771.	4.3	23
42	Differential evolution techniques for the structure-control design of a five-bar parallel robot. Engineering Optimization, 2010, 42, 535-565.	1.5	28
43	Integration of structure and control using an evolutionary approach: an application to the optimal concurrent design of a CVT. International Journal for Numerical Methods in Engineering, 2007, 71, 883-901.	1.5	19
44	An Evolutionary Approach to Solve a Novel Mechatronic Multiobjective Optimization Problem. , 2007, , 329-351.		2
45	Dynamic approach to optimum synthesis of a four-bar mechanism using a swarm intelligence algorithm. Kybernetika, 0, , 786-803.	0.0	1