Herbert Martins Gomes

List of Publications by Year
in descending order

60 papers	1,263 citations	566801 15 h-index	360668 35 g-index
64 all docs	64 docs citations	64 times ranked	1196 citing authors

#	Article	IF	Citations
1	Truss optimization with dynamic constraints using a particle swarm algorithm. Expert Systems With Applications, 2011, 38, 957-968.	4.4	246
2	Comparison of response surface and neural network with other methods for structural reliability analysis. Structural Safety, 2004, 26, 49-67.	2.8	240
3	An airfoil optimization technique for wind turbines. Applied Mathematical Modelling, 2012, 36, 4898-4907.	2.2	106
4	Reliability based optimization of laminated composite structures using genetic algorithms and Artificial Neural Networks. Structural Safety, 2011, 33, 186-195.	2.8	88
5	Some comparisons for damage detection on structures using genetic algorithms and modal sensitivity method. Applied Mathematical Modelling, 2008, 32, 2216-2232.	2.2	82
6	Sensitivity or Bayesian model updating: a comparison of techniques using the DLR AIRMOD test data. Archive of Applied Mechanics, 2017, 87, 905-925.	1.2	60
7	Reliability analysis of laminated composite structures using finite elements and neural networks. Composite Structures, 2010, 92, 1603-1613.	3.1	55
8	Parameters optimisation of a vehicle suspension system using a particle swarm optimisation algorithm. Vehicle System Dynamics, 2015, 53, 449-474.	2.2	45
9	Experimentally fitted biodynamic models for pedestrian–structure interaction in walking situations. Mechanical Systems and Signal Processing, 2016, 72-73, 590-606.	4.4	44
10	Some aspects on three-dimensional numerical modelling of reinforced concrete structures using the finite element method. Advances in Engineering Software, 2001, 32, 257-277.	1.8	33
11	Optimal discrete piezoelectric patch allocation on composite structures for vibration control based on GA and modal LQR. Computers and Structures, 2013, 128, 101-115.	2.4	29
12	A firefly metaheuristic structural size and shape optimisation with natural frequency constraints. International Journal of Metaheuristics, 2012, 2, 38.	0.1	21
13	Reliability of reinforced concrete structures using stochastic finite elements. Engineering Computations, 2002, 19, 764-786.	0.7	18
14	Optimization of laminated composite plates and shells using genetic algorithms, neural networks and finite elements. Latin American Journal of Solids and Structures, 2011, 8, 413-427.	0.6	18
15	An analytical dynamic model for single-cracked beams including bending, axial stiffness, rotational inertia, shear deformation and coupling effects. Applied Mathematical Modelling, 2014, 38, 938-948.	2.2	17
16	Using optimization procedures to minimize machining time while maintaining surface quality. International Journal of Advanced Manufacturing Technology, 2013, 65, 1659-1667.	1.5	13
17	A fuzzy α-cut optimization analysis for vibration control of laminated composite smart structures under uncertainties. Applied Mathematical Modelling, 2018, 54, 551-566.	2.2	13
18	A coupled biodynamic model for crowd-footbridge interaction. Engineering Structures, 2018, 177, 47-60.	2.6	13

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19	A novel multi-objective quantum particle swarm algorithm for suspension optimization. Computational and Applied Mathematics, 2020, 39, 1.	1.0	13
20	Multi-objective optimization of quarter car passive suspension design in the frequency domain based on PSO. Engineering Computations, 2016, 33, 1422-1434.	0.7	11
21	Reliability analysis of concrete structures with neural networks and response surfaces. Engineering Computations, 2005, 22, 110-128.	0.7	10
22	Vibration analysis based on health and comfort levels on ride vehicles. International Journal of Vehicle Noise and Vibration, 2015, 11, 238.	0.0	9
23	Fuzzy logic for structural system control. Latin American Journal of Solids and Structures, 2012, 9, 111-129.	0.6	8
24	Crowd-structure interaction: Investigating the spatiality and synchronization of a pedestrian force model. Journal of Constructional Steel Research, 2017, 133, 510-521.	1.7	8
25	Measurement and evaluation of human exposure to vibration transmitted to hand-arm system during leisure cyclist activity. Revista Brasileira De Engenharia Biomedica, 2014, 30, 291-300.	0.3	7
26	Reliability based design optimization using a genetic algorithm: application to bonded thin films areas of copper/polypropylene. Ingeniare, 2016, 24, 510-519.	0.1	7
27	A Simple Closed-Loop Active Control of Electrodynamic Shakers by Acceleration Power Spectral Density for Environmental Vibration Tests. Experimental Mechanics, 2008, 48, 683-692.	1.1	6
28	An interval-based multi-objective robust design optimization for vehicle dynamics. Mechanics Based Design of Structures and Machines, 2023, 51, 7076-7101.	3.4	5
29	Investigation of the mechanical behavior of trapezoidal roofing sheets using genetic algorithms. Expert Systems With Applications, 2010, 37, 939-948.	4.4	4
30	Influence of the fixing type in the optimization of trapezoidal roofing sheets. Journal of Constructional Steel Research, 2014, 96, 26-39.	1.7	4
31	A smart force platform using artificial neural networks. Measurement: Journal of the International Measurement Confederation, 2016, 91, 124-133.	2.5	4
32	Design Optimization of Tapered Steel Wind Turbine Towers by QPSO Algorithm. International Journal of Steel Structures, 2020, 20, 1552-1563.	0.6	4
33	Comparative analysis between efficiency grouping and efficacy grouping in cell formation using the firefly metaheuristic algorithm. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2016, 230, 1548-1558.	1.5	3
34	Experimental damping ratio evaluation using Hilbert transform in filament-wound composite plates. Polymers and Polymer Composites, 2021, 29, S1578-S1587.	1.0	3
35	Vertical force calibration of smart force platform using artificial neural networks. Revista Brasileira De Engenharia Biomedica, 2014, 30, 406-411.	0.3	2
36	Case study on vibration health risk and comfort levels in loading crane trucks. International Journal of Health Planning and Management, 2019, 34, e1448-e1463.	0.7	2

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37	Reliability-Based Design Optimization of a Cemented Prosthesis in a Femur Undergoing Bone Remodeling. Journal of Biomechanical Engineering, 2020, 142, .	0.6	2
38	Time and Frequency Domain Analysis of Wind Turbine Towers Under Spatially Correlated Wind Field. International Journal of Steel Structures, 2021, 21, 2028-2044.	0.6	2
39	An Efficient Anti-Optimization Approach for Uncertainty Analysis in Composite Laminates. Materials Research, 2021, 24, .	0.6	2
40	Comparação entre a técnica de substituição do ligamento redondo por implante de fascia lata bubalina preservada em glicerina e o uso de pino transarticular na redução e na estabilização da luxação coxofemoral experimentalmente induzida em cães. Arquivo Brasileiro De Medicina Veterinaria E Zootecnia, 2009, 61, 825-834.	0.1	1
41	A Hybrid Method for Truss Mass Minimization considering Uncertainties. Mathematical Problems in Engineering, 2017, 2017, 1-14.	0.6	1
42	Uncertainty Quantification and Model Identification in a Bayesian and Metaheuristic Framework. , 2019, , 407-417.		1
43	Inferring Structural Variability Using Modal Analysis in a Bayesian Framework. Conference Proceedings of the Society for Experimental Mechanics, 2014, , 363-373.	0.3	1
44	FOOTBRIDGE MODEL UPDATING BASED ON MODAL DATA USING SENSITIVITY METHOD AND PARTICLE SWARM OPTIMIZATION. , 0, , .		1
45	Multiobjective Optimization of Composite Materials for Continuous Fiber Orientation. , 2019, , 1035-1044.		0
46	Numerical study on whole body vibration evaluation in wheeled and tracked armoured vehicles. International Journal of Heavy Vehicle Systems, 2021, 28, 137.	0.1	0
47	Avaliação do nível de exposição à vibração de operadores de empilhadeiras. Revista Sul-americana De Engenharia Estrutural, 2011, 6, .	0.1	0
48	A Parallelised Firefly Algorithm for Structural Size and Shape Optimisation with Multimodal Constraints. Studies in Computational Intelligence, 2014, , 291-314.	0.7	0
49	Probabilistic Analysis of Redundant Systems by the Identification of Multiple Failure Modes. , 0, , .		0
50	Differential evolution metaheuristic for structural optimization in the design of power transmission line towers. , 0, , .		0
51	Fuzzy interval and uncertainty quantification in vehicle dynamics. , 0, , .		0
52	A reliability-based topology optimization approach using BESO. , 0, , .		0
53	CASE STUDY ON HAV AND WBV ON AGRICULTURAL TRACTOR DRIVERS. , 0, , .		0
54	Workplace Vibration and noise exposure levels analysis in a steel cutting and bending unit.. , 0, , .		0

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55	Multi-Scale System Reliability Analysis. , 0, , .		0
56	ANÁLISE COMPARATIVA DE VIBRAÇÕES E CONFORTO EM ELEVADORES COM DIFERENTES SISTEMAS DE ACIONAMENTO. Revista Sul-americana De Engenharia Estrutural, 2018, 15, .	0.1	0
57	Numerical study on whole body vibration evaluation in wheeled and tracked armoured vehicles. International Journal of Heavy Vehicle Systems, 2020, 1, 1.	0.1	0
58	Concise Review of Classical Guitar Modelling Technologies. Engineering Proceedings, 2021, 11, 25.	0.4	0
59	A Real Coded Genetic Algorithm for Fault Diagnosis on Structures. , 0, , .		0
60	A Simple Artificial Neural Network for Structural Re-Analysis in Planar Trusses. , 0, , .		0