Giuseppe Carlo Marano

List of Publications by Year
in descending order

126 papers	2,615 citations	147726 31 h-index	243529 44 g-index
128 all docs	128 docs citations	128 times ranked	1565 citing authors

#	Article	IF	Citations
1	Modified Genetic Algorithm for the Dynamic Identification of Structural Systems Using Incomplete Measurements. Computer-Aided Civil and Infrastructure Engineering, 2011, 26, 92-110.	6.3	112
2	A comparison between different optimization criteria for tuned mass dampers design. Journal of Sound and Vibration, 2010, 329, 4880-4890.	2.1	101
3	Constrained reliability-based optimization of linear tuned mass dampers for seismic control. International Journal of Solids and Structures, 2007, 44, 7370-7388.	1.3	90
4	Optimum design of linear tuned mass dampers for structures with nonlinear behaviour. Mechanical Systems and Signal Processing, 2010, 24, 1739-1755.	4.4	90
5	A comparison between different robust optimum design approaches: Application to tuned mass dampers. Probabilistic Engineering Mechanics, 2010, 25, 108-118.	1.3	88
6	Robust optimum design of tuned mass dampers devices in random vibrations mitigation. Journal of Sound and Vibration, 2008, 313, 472-492.	2.1	75
7	Optimal design and seismic performance of Multi‐Tuned Mass Damper Inerter (MTMDI) applied to adjacent high‐rise buildings. Structural Design of Tall and Special Buildings, 2020, 29, e1781.	0.9	74
8	Parameters identification of Van der Pol–Duffing oscillators via particle swarm optimization and differential evolution. Mechanical Systems and Signal Processing, 2010, 24, 2076-2095.	4.4	66
9	Optimum design of Tuned Mass Dampers by displacement and energy perspectives. Soil Dynamics and Earthquake Engineering, 2013, 49, 243-253.	1.9	58
10	Parametric identification of seismic isolators using differential evolution and particle swarm optimization. Applied Soft Computing Journal, 2014, 22, 458-464.	4.1	51
11	Identification of parameters of Maxwell and Kelvin–Voigt generalized models for fluid viscous dampers. JVC/Journal of Vibration and Control, 2015, 21, 260-274.	1.5	50
12	Optimal seismic retrofitting of reinforced concrete buildings by steel-jacketing using a genetic algorithm-based framework. Engineering Structures, 2020, 219, 110864.	2.6	47
13	Fuzzy Time-Dependent Reliability Analysis of RC Beams Subject to Pitting Corrosion. Journal of Materials in Civil Engineering, 2008, 20, 578-587.	1.3	43
14	Parameter identification of degrading and pinched hysteretic systems using a modified Bouc–Wen model. Structure and Infrastructure Engineering, 2018, 14, 1573-1585.	2.0	43
15	Robust design of tuned mass dampers installed on multi-degree-of-freedom structures subjected to seismic action. Engineering Optimization, 2015, 47, 1009-1030.	1.5	42
16	High-strain rate compressive behavior of concrete made with substituted coarse aggregates: Recycled crushed concrete and clay bricks. Construction and Building Materials, 2021, 301, 123875.	3.2	41
17	Aleatory uncertainties with global resistance safety factors for non-linear analyses of slender reinforced concrete columns. Engineering Structures, 2022, 255, 113920.	2.6	41
18	Performance of tuned liquid column dampers considering maximum liquid motion in seismic vibration control of structures. Journal of Sound and Vibration, 2012, 331, 1519-1531.	2.1	39

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19	Performance–cost optimization of tuned mass damper under low–moderate seismic actions. Structural Design of Tall and Special Buildings, 2016, 25, 1103-1122.	0.9	39
20	Stochastic optimum design criterion for linear damper devices for seismic protection of buildings. Structural and Multidisciplinary Optimization, 2007, 33, 441-455.	1.7	38
21	Genetic-Algorithm-Based Strategies for Dynamic Identification of Nonlinear Systems with Noise-Corrupted Response. Journal of Computing in Civil Engineering, 2010, 24, 173-187.	2.5	37
22	Optimum design of prestressed concrete beams using constrained differential evolution algorithm. Structural and Multidisciplinary Optimization, 2014, 49, 441-453.	1.7	37
23	Fuzzy-based robust structural optimization. International Journal of Solids and Structures, 2008, 45, 3544-3557.	1.3	36
24	Multi-objective optimization by genetic algorithm of structural systems subject to random vibrations. Structural and Multidisciplinary Optimization, 2009, 39, 385-399.	1.7	36
25	Efficiency of base isolation systems in structural seismic protection and energetic assessment. Earthquake Engineering and Structural Dynamics, 2003, 32, 1505-1531.	2.5	35
26	Predicting torsional strength of RC beams by using Evolutionary Polynomial Regression. Advances in Engineering Software, 2012, 47, 178-187.	1.8	34
27	Strength Reduction Factor of Concrete with Recycled Rubber Aggregates from Tires. Journal of Materials in Civil Engineering, 2019, 31, .	1.3	34
28	Robust optimum criteria for tuned mass dampers in fuzzy environments. Applied Soft Computing Journal, 2009, 9, 1232-1243.	4.1	33
29	A new possibilistic reliability index definition. Acta Mechanica, 2010, 210, 291-303.	1.1	32
30	Mechanical performance and medium-term degradation of rubberised concrete. Construction and Building Materials, 2015, 98, 820-831.	3.2	32
31	Evolutionary Polynomial Regression–Based Statistical Determination of the Shear Capacity Equation for Reinforced Concrete Beams without Stirrups. Journal of Computing in Civil Engineering, 2016, 30, .	2.5	32
32	Optimal arch shape solution under static vertical loads. Acta Mechanica, 2014, 225, 679-686.	1.1	31
33	Structural optimization of hollow-section steel trusses by differential evolution algorithm. International Journal of Steel Structures, 2016, 16, 411-423.	0.6	31
34	On the Fresh/Hardened Properties of Cement Composites Incorporating Rubber Particles from Recycled Tires. Advances in Civil Engineering, 2014, 2014, 1-12.	0.4	27
35	A Free Fractional Viscous Oscillator as a Forced Standard Damped Vibration. Fractional Calculus and Applied Analysis, 2016, 19, 319-356.	1.2	26
36	Enhanced Multi-Strategy Particle Swarm Optimization for Constrained Problems with an Evolutionary-Strategies-Based Unfeasible Local Search Operator. Applied Sciences (Switzerland), 2022, 12, 2285.	1.3	26

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37	Stochastic optimum design criterion of added viscous dampers for buildings seismic protection. Structural Engineering and Mechanics, 2007, 25, 21-37.	1.0	25
38	Optimum design criteria for elastic structures subject to random dynamic loads. Engineering Optimization, 2006, 38, 853-871.	1.5	23
39	Robust optimum design of tuned mass dampers for high-rise buildings under moderate earthquakes. Structural Design of Tall and Special Buildings, 2009, 18, 823-838.	0.9	22
40	Earthquake-Induced Lateral-Torsional Pounding between Two Equal Height Multi-Storey Buildings under Multiple Bi-Directional Ground Motions. Advances in Structural Engineering, 2013, 16, 845-865.	1.2	22
41	A new genetic algorithm-based framework for optimized design of steel-jacketing retrofitting in shear-critical and ductility-critical RC frame structures. Engineering Structures, 2021, 243, 112684.	2.6	22
42	Stochastic optimum design of linear tuned mass dampers for seismic protection of high towers. Structural Engineering and Mechanics, 2008, 29, 603-622.	1.0	22
43	Nonpenalty Machine Learning Constraint Handling Using PSO-SVM for Structural Optimization. Advances in Civil Engineering, 2021, 2021, 1-17.	0.4	21
44	Indirect assessment of concrete resistance from FE model updating and Young's modulus estimation of a multi-span PSC viaduct: Experimental tests and validation. Structures, 2022, 37, 686-697.	1.7	21
45	Stochastic energy analysis of seismic isolated bridges. Soil Dynamics and Earthquake Engineering, 2007, 27, 759-773.	1.9	20
46	Robust optimization of base isolation devices under uncertain parameters. JVC/Journal of Vibration and Control, 2016, 22, 853-868.	1.5	19
47	Sensitivity analysis of optimum stochastic nonstationary response spectra under uncertain soil parameters. Soil Dynamics and Earthquake Engineering, 2008, 28, 1078-1093.	1.9	18
48	Preliminary experimental study on the effects of surface-applied photocatalytic products on the durability of reinforced concrete. Construction and Building Materials, 2013, 48, 137-143.	3.2	18
49	Numerical study on the optimal sensor placement for historic swing bridge dynamic monitoring. Structure and Infrastructure Engineering, 2014, 10, 57-68.	2.0	18
50	Optimal arches shape for single-point-supported deck bridges. Acta Mechanica, 2018, 229, 2291-2297.	1.1	18
51	DAMAGE AND DUCTILITY DEMAND SPECTRA ASSESSMENT OF HYSTERETIC DEGRADING SYSTEMS SUBJECT TO STOCHASTIC SEISMIC LOADS. Journal of Earthquake Engineering, 2006, 10, 615-640.	1.4	17
52	Serviceability Performance Analysis of Concrete Box Girder Bridges Under Traffic-Induced Vibrations by Structural Health Monitoring: A Case Study. International Journal of Civil Engineering, 2018, 16, 553-565.	0.9	17
53	Probabilistic seismic response and uncertainty analysis of continuous bridges under near-fault ground motions. Frontiers of Structural and Civil Engineering, 2019, 13, 1510-1519.	1.2	17
54	Development and Validation of New Bouc–Wen Data-Driven Hysteresis Model for Masonry Infilled RC Frames. Journal of Engineering Mechanics - ASCE, 2021, 147, .	1.6	17

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55	Size and Shape Optimization of a Guyed Mast Structure under Wind, Ice and Seismic Loading. Applied Sciences (Switzerland), 2022, 12, 4875.	1.3	17
56	Parametric Identification of Nonlinear Devices for Seismic Protection Using Soft Computing Techniques. Advanced Materials Research, 0, 639-640, 118-129.	0.3	16
57	The Role of Modulation Function in Nonstationary Stochastic Earthquake Model. Journal of Earthquake and Tsunami, 2014, 08, 1450015.	0.7	16
58	Application of a Machine Learning Algorithm for the Structural Optimization of Circular Arches with Different Cross-Sections. Journal of Applied Mathematics and Physics, 2021, 09, 1159-1170.	0.2	15
59	Multi-objective optimization of a dissipative connection for seismic protection of wall-frame structures. Soil Dynamics and Earthquake Engineering, 2016, 87, 151-163.	1.9	14
60	Optimal preliminary design of variable section beams criterion. SN Applied Sciences, 2021, 3, 1.	1.5	14
61	A comparative study on parameter identification of fluid viscous dampers with different models. Archive of Applied Mechanics, 2014, 84, 1117-1134.	1.2	13
62	Integration Algorithm for Covariance Nonstationary Dynamic Analysis of SDOF Systems Using Equivalent Stochastic Linearization. International Journal of Structural Stability and Dynamics, 2015, 15, 1450044.	1.5	13
63	Theoretical prediction of the dynamic behavior of rolling-ball rubber-layer isolation systems. Structural Control and Health Monitoring, 2016, 23, 1150-1167.	1.9	13
64	Damage-Based Inelastic Seismic Spectra. International Journal of Structural Stability and Dynamics, 2017, 17, 1750115.	1.5	13
65	ULTRA-HIGH-PERFORMANCE FIBER-REINFORCED CONCRETE JACKET FOR THE REPAIR AND THE SEISMIC RETROFITTING OF ITALIAN AND CHINESE RC BRIDGES. , 2017, , .		13
66	Stochastic approach for analytical fragility curves. KSCE Journal of Civil Engineering, 2008, 12, 305-312.	0.9	12
67	Analysis of randomly vibrating structures under hybrid uncertainty. Engineering Structures, 2009, 31, 2677-2686.	2.6	11
68	Evolutionary Modeling to Evaluate the Shear Behavior of Circular Reinforced Concrete Columns. Advances in Civil Engineering, 2014, 2014, 1-14.	0.4	11
69	Optimum design of viscous dissipative links in wall-frame systems. Structural Design of Tall and Special Buildings, 2016, 25, 412-428.	0.9	11
70	Seismic Reassessment of the Leaning Tower of Pisa: Dynamic Monitoring, Site Response, and SSI. Earthquake Spectra, 2019, 35, 703-736.	1.6	11
71	Wireless-Based Identification and Model Updating of a Skewed Highway Bridge for Structural Health Monitoring. Applied Sciences (Switzerland), 2020, 10, 2347.	1.3	11
72	Comparison of different optimum criteria for sensor placement in lattice towers. Structural Design of Tall and Special Buildings, 2011, 20, 1048-1056.	0.9	10

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73	Analytical evaluation of essential facilities fragility curves by using a stochastic approach. Engineering Structures, 2011, 33, 191-201.	2.6	10
74	Site based stochastic seismic spectra. Soil Dynamics and Earthquake Engineering, 2013, 55, 288-295.	1.9	10
75	A MODEL FOR CARBON AND STAINLESS STEEL REINFORCING BARS INCLUDING INELASTIC BUCKLING FOR EVALUATION OF CAPACITY OF EXISTING STRUCTURES. , 2015, , .		10
76	A fuzzy random approach of stochastic seismic response spectrum analysis. Engineering Structures, 2010, 32, 3879-3887.	2.6	8
77	Simplified Lateral-Torsional Buckling Analysis in Special Truss-Reinforced Composite Steel-Concrete Beams. Journal of Structural Engineering, 2011, 137, 1419-1427.	1.7	8
78	Numerical and experimental analysis of the leaning Tower of Pisa under earthquake. Procedia Engineering, 2017, 199, 3350-3355.	1.2	8
79	Prediction of ultimate load capacities of CFST columns with debonding by EPR. Thin-Walled Structures, 2021, 164, 107912.	2.7	8
80	Evolutionary Polynomial Regression Algorithm Enhanced with a Robust Formulation: Application to Shear Strength Prediction of RC Beams without Stirrups. Journal of Computing in Civil Engineering, 2021, 35, .	2.5	8
81	Fuzzy reliability analysis of RC structures by using an improved time-dependent model of chloride ingress. Structure and Infrastructure Engineering, 2010, 6, 205-223.	2.0	7
82	Behavior of the Leaning Tower of Pisa: Insights on Seismic Input and Soil-Structure Interaction. Applied Mechanics and Materials, 2016, 847, 454-462.	0.2	7
83	Polycarbonate laminates thermo-mechanical behaviour under different operating temperatures. Polymer Testing, 2019, 76, 344-349.	2.3	7
84	Fujian Tulou Rammed Earth Structures: Optimizing Restoration Techniques Through Participatory Design and Collective Practices. Procedia Manufacturing, 2020, 44, 92-99.	1.9	7
85	Effects of Excitation Bandwidth on Damping Reduction Factor. Journal of Earthquake Engineering, 2021, 25, 649-676.	1.4	7
86	BRIDGES MONITORING: AN APPLICATION OF AI WITH GAUSSIAN PROCESSES. , 2021, , .		7
87	New analytical model for the hoop contribution to the shear capacity of circular reinforced concrete columns. Computers and Concrete, 2014, 14, 59-71.	0.7	6
88	Volume/thrust optimal shape criteria for arches under static vertical loads. Journal of Traffic and Transportation Engineering (English Edition), 2018, 5, 503-509.	2.0	6
89	Non-stationary stochastic modulation function definition based on process energy release. Physica A: Statistical Mechanics and Its Applications, 2019, 517, 280-289.	1.2	6
90	Shell-supported footbridges. Curved and Layered Structures, 2020, 7, 199-214.	0.5	6

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91	Strong motion duration effects on base isolated systems. Physica A: Statistical Mechanics and Its Applications, 1999, 274, 341-348.	1.2	5
92	Title is missing!. Journal of Earthquake Engineering, 2006, 10, 615.	1.4	5
93	NON-STATIONARY NUMERICAL COVARIANCE ANALYSIS OF LINEAR MULTI DEGREE OF FREEDOM MECHANICAL SYSTEM SUBJECT TO RANDOM INPUTS. International Journal of Computational Methods, 2007, 04, 173-194.	0.8	5
94	Fuzzy-entropy based robust optimization criteria for tuned mass dampers. Earthquake Engineering and Engineering Vibration, 2010, 9, 285-294.	1.1	5
95	Behavior of the Leaning Tower of Pisa: Analysis of Experimental Data from Structural Dynamic Monitoring. Applied Mechanics and Materials, 2016, 847, 445-453.	0.2	5
96	Curved footbridges supported by a shell obtained through thrust network analysis. Journal of Traffic and Transportation Engineering (English Edition), 2019, 6, 65-75.	2.0	5
97	Stochastic Multi-objective Optimisation of Exoskeleton Structures. Journal of Optimization Theory and Applications, 2020, 187, 822-841.	0.8	5
98	Optimal design algorithm for seismic retrofitting of RC columns with steel jacketing technique. Procedia Manufacturing, 2020, 44, 639-646.	1.9	5
99	Series solution of beams with variable cross-section. Procedia Manufacturing, 2020, 44, 489-496.	1.9	5
100	COMPUTATIONAL DESIGN OF COMPARATIVE MODELS AND GEOMETRICALLY CONSTRAINED OPTIMIZATION OF A MULTI DOMAIN VARIABLE SECTION BEAM BASED ON TIMOSHENKO MODEL. , 2021, , .		5
101	Parameters Identification of Stochastic Nonstationary Process Used in Earthquake Modelling. International Journal of Geosciences, 2013, 04, 290-301.	0.2	5
102	PERFORMANCE RELIABILITY BASED OPTIMIZATION CRITERION FOR ELASTIC STRUCTURES SUBJECT TO RANDOM LOADS. International Journal of Reliability, Quality and Safety Engineering, 2008, 15, 391-409.	0.4	4
103	Inelastic seismic spectra including a damage criterion: A stochastic approach. Soil Dynamics and Earthquake Engineering, 2015, 70, 75-79.	1.9	3
104	Influence of Post-Yield Stiffness on Inelastic Seismic Response: A Stochastic Analysis. International Journal of Structural Stability and Dynamics, 2017, 17, 1750028.	1.5	3
105	Identification of Passive Devices for Vibration Control by Evolutionary Algorithms. , 2013, , 373-387.		3
106	Dynamic Response of Infilled Frames Subject to Accidental Column Losses. Lecture Notes in Civil Engineering, 2022, , 1100-1107.	0.3	3
107	Probabilistic seismic response and reliability assessment of isolated bridges. Earthquake Engineering and Engineering Vibration, 2005, 4, 95-106.	1.1	2
108	Reliability based multiobjective optimization for design of structures subject to random vibrations. Journal of Zhejiang University: Science A, 2008, 9, 15-25.	1.3	2

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109	Optimal design of energy harvesting from vibration subject to stochastic colored Gaussian process. Journal of Physics Communications, 2019, 3, 025008.	0.5	2
110	Structural optimization of elastic circular arches and design criteria. Procedia Manufacturing, 2020, 44, 425-432.	1.9	2
111	Evolutionary polynomial regression algorithm combined with robust bayesian regression. Advances in Engineering Software, 2022, 167, 103101.	1.8	2
112	Axial-Bending Interaction Diagrams of Reinforced Concrete Columns Exposed to Chloride Attack. Applied Mechanics and Materials, 2016, 847, 415-422.	0.2	1
113	Vibration Energy Harvesting for Monitoring Dynamical Systems. Shock and Vibration, 2018, 2018, 1-2.	0.3	1
114	Strength deterioration of reinforced concrete column sections subject to pitting. Computers and Concrete, 2015, 15, 643-671.	0.7	1
115	OPTIMAL DESIGN OF TUNED MASS DAMPERS BY PERFORMANCEâ€"COST ANALYSIS. , 2017, , .		1
116	Dynamic Characterization of a Stress Ribbon and Butterfly Arch Pedestrian Bridge Using Wireless Measurements. Structural Integrity, 2020, , 395-403.	0.8	1
117	Cost and EAL based optimization for seismic reinforcement of RC structures. Procedia Structural Integrity, 2021, 33, 917-924.	0.3	1
118	Stochastic Analysis of Sensitivity and Efficiency of Base Isolation System in Seismic Structural Protection. , 2002, , 205.		0
119	Fuzzy Structural Analysis of a Tuned Mass Damper Subject to Random Vibration. Advances in Acoustics and Vibration, 2008, 2008, 1-9.	0.5	0
120	Robust sensors placement criteria for mechanical systems. , 2013, , .		0
121	Numerical Algorithm for Non-Stationary Covariance Analysis of Nonlinear Mechanical System Using Equivalent Stochastic Linearization. , 2014, , .		0
122	Nonstationary First Threshold Crossing Reliability for Linear System Excited by Modulated Gaussian Process. Shock and Vibration, 2018, 2018, 1-17.	0.3	0
123	Parametric Design: formal and structural connection for a pedestrian bridge in the archeological area of Roca Vecchia (IT). Procedia Manufacturing, 2020, 44, 473-480.	1.9	0
124	ENERGY BASED OPTIMUM DESIGN OF TUNED MASS DAMPERS. , 2015, , .		0
125	FINDING CORRELATIONS BETWEEN ENGINEERING DEMAND PARAMETERS AND INTENSITY MEASURES THROUGH EVOLUTIONARY POLYNOMIAL REGRESSION. , 2017, , .		0
126	SEISMIC RELIABILITY-BASED DESIGN OF HARDENING STRUCTURES EQUIPPED WITH DOUBLE SLIDING DEVICES. , 2019, , .		0