Arturo GonzÃ¡lez

List of Publications by Year
in descending order

57 papers	1,226 citations	361296 20 h-index	395590 33 g-index
58 all docs	58 docs citations	58 times ranked	574 citing authors

#	Article	IF	Citations
1	Verifying the suitability of uncoupled numerical methods for solving vehicle-bridge interaction problems. Structure and Infrastructure Engineering, 2023, 19, 1407-1424.	2.0	2
2	Academic Advising in Civil Engineering: Design and Evaluation of a Hybrid Model. Education Sciences, 2022, 12, 326.	1.4	1
3	Computing the value of information from periodic testing in holistic decision making under uncertainty. Reliability Engineering and System Safety, 2021, 206, 107242.	5.1	8
4	A simplified method for holistic value of information computation for informed structural integrity management under uncertainty. Marine Structures, 2021, 76, 102888.	1.6	7
5	Bayesian maintenance decision optimisation based on computing the information value from condition inspections. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, 2021, 235, 545-555.	0.6	1
6	A kNN algorithm for locating and quantifying stiffness loss in a bridge from the forced vibration due to a truck crossing at low speed. Mechanical Systems and Signal Processing, 2021, 154, 107599.	4.4	45
7	A widely-applicable structural maintenance decision-analytic modelling approach assisted by information value computation. Ocean Engineering, 2021, 237, 109596.	1.9	2
8	Fatigue inspection and maintenance optimization: A comparison of information value, life cycle cost and reliability based approaches. Ocean Engineering, 2021, 220, 108286.	1.9	11
9	Sensitivity to Damage of the Forced Frequencies of a Simply Supported Beam Subjected to a Moving Quarter-Car. Lecture Notes in Mechanical Engineering, 2020, , 350-362.	0.3	2
10	Identifying damage in a bridge by analysing rotation response to a moving load. Structure and Infrastructure Engineering, 2020, 16, 1050-1065.	2.0	22
11	A holistic approach to risk-based decision on inspection and design of fatigue-sensitive structures. Engineering Structures, 2020, 221, 110949.	2.6	3
12	Regularization Methods Applied to Noisy Response from Beams under Static Loading. Journal of Engineering Mechanics - ASCE, 2020, 146, .	1.6	10
13	An integrated probabilistic approach for optimum maintenance of fatigue-critical structural components. Marine Structures, 2019, 68, 102649.	1.6	5
14	Probabilistic investigations into the value of information: A comparison of condition-based and time-based maintenance strategies. Ocean Engineering, 2019, 188, 106181.	1.9	31
15	Reliability methods in the design point of free-standing spent fuel racks under seismic conditions. Progress in Nuclear Energy, 2019, 115, 208-220.	1.3	6
16	Damage detection in bridges based on patterns of dynamic amplification. Structural Control and Health Monitoring, 2019, 26, e2361.	1.9	8
17	Experimental validation of the seismic analysis methodology for free-standing spent fuel racks. Nuclear Engineering and Technology, 2019, 51, 884-893.	1.1	9
18	Influence of the modelling properties on the seismic response of free-standing spent fuel racks. Nuclear Engineering and Design, 2019, 342, 210-218.	0.8	5

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19	Numerical analysis of techniques to extract bridge dynamic features from short records of acceleration. IABSE Symposium Report, 2019, , .	0.0	0
20	Dynamic Amplification Factor of Continuous versus Simply Supported Bridges Due to the Action of a Moving Vehicle. Infrastructures, 2018, 3, 12.	1.4	4
21	Turning a traditional teaching setting into a feedback-rich environment. International Journal of Educational Technology in Higher Education, 2018, 15, .	4.5	21
22	Value of inspection in steel structural integrity management. IOP Conference Series: Earth and Environmental Science, 2018, 146, 012080.	0.2	0
23	DYNAMIC IMPACT OF HEAVY LONG VEHICLES WITH EQUALLY SPACED AXLES ON SHORT-SPAN HIGHWAY BRIDGES. Baltic Journal of Road and Bridge Engineering, 2018, 13, 1-13.	0.4	7
24	A discussion on the merits and limitations of using drive-by monitoring to detect localised damage in a bridge. Mechanical Systems and Signal Processing, 2017, 90, 234-253.	4.4	70
25	Sources of uncertainty in the seismic design of submerged free-standing racks. Energy Procedia, 2017, 127, 310-319.	1.8	4
26	Static and dynamic moments for any plane within a straight solid slab bridge caused by the crossing of a truck. Engineering Structures, 2017, 150, 465-480.	2.6	8
27	Application of empirical mode decomposition to drive-by bridge damage detection. European Journal of Mechanics, A/Solids, 2017, 61, 151-163.	2.1	111
28	Parametric analysis of modelling properties governing the seismic response of free-standing spent fuel racks. , 2017, , .		1
29	Characterization of non-linear bearings using the Hilbertâ€“Huang transform. Advances in Mechanical Engineering, 2015, 7, 168781401558212.	0.8	10
30	The Virtual Axle concept for detection of localised damage using Bridge Weigh-in-Motion data. Engineering Structures, 2015, 89, 26-36.	2.6	20
31	Experimental validation of a drive-by stiffness identification method for bridge monitoring. Structural Health Monitoring, 2015, 14, 317-331.	4.3	56
32	Footprint caused by a vehicle configuration on the dynamic amplification of the bridge response. Journal of Physics: Conference Series, 2015, 628, 012064.	0.3	2
33	A bridge-monitoring tool based on bridge and vehicle accelerations. Structure and Infrastructure Engineering, 2015, 11, 619-637.	2.0	24
34	Bridge Damage Detection Using Weigh-in-Motion Technology. Journal of Bridge Engineering, 2015, 20, .	1.4	51
35	The use of a dynamic truckâ€“trailer drive-by system to monitor bridge damping. Structural Health Monitoring, 2014, 13, 143-157.	4.3	132
36	Direct measurement of dynamics in road bridges using a bridge weigh-in-motion system. Baltic Journal of Road and Bridge Engineering, 2013, 8, 263-270.	0.4	7

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37	Assessment dynamic ratio for traffic loading on highway bridges. Structure and Infrastructure Engineering, 2012, 8, 295-304.	2.0	23
38	Adaptation of Cross Entropy optimisation to a dynamic Bridge WIM calibration problem. Engineering Structures, 2012, 44, 13-22.	2.6	37
39	Testing of a Bridge Weigh-in-Motion Algorithm Utilising Multiple Longitudinal Sensor Locations. Journal of Testing and Evaluation, 2012, 40, 961-974.	0.4	23
40	Comparison of Bridge Dynamic Amplifications due to Articulated 5-Axle Trucks and Large Cranes. Baltic Journal of Road and Bridge Engineering, 2011, 6, 39-47.	0.4	25
41	Characteristic Dynamic Increment for extreme traffic loading events on short and medium span highway bridges. Engineering Structures, 2010, 32, 3827-3835.	2.6	63
42	Critical speed for the dynamics of truck events on bridges with a smooth road surface. Journal of Sound and Vibration, 2010, 329, 2127-2146.	2.1	26
43	A regularised solution to the bridge weigh-in-motion equations. International Journal of Heavy Vehicle Systems, 2009, 16, 310.	0.1	42
44	Assessment of the Condition of a Beam Using a Static Loading Test. Key Engineering Materials, 2009, 413-414, 269-276.	0.4	8
45	Characteristic dynamic traffic load effects in bridges. Engineering Structures, 2009, 31, 1607-1612.	2.6	44
46	Influence of pre-existing vibrations on the dynamic response of medium span bridges. Canadian Journal of Civil Engineering, 2009, 36, 73-84.	0.7	2
47	Determination of bridge lifetime dynamic amplification factor using finite element analysis of critical loading scenarios. Engineering Structures, 2008, 30, 2330-2337.	2.6	41
48	Bridge roughness index as an indicator of bridge dynamic amplification. Computers and Structures, 2006, 84, 759-769.	2.4	25
49	Wavelet domain analysis for identification of vehicle axles from bridge measurements. Computers and Structures, 2006, 84, 1792-1801.	2.4	65
50	The development of a dynamic amplification estimator for bridges with good road profiles. Journal of Sound and Vibration, 2006, 293, 125-137.	2.1	27
51	Evaluation of an Artificial Neural Network Technique Applied to Multiple-Sensor Weigh-in-Motion Systems. Transportation Research Record, 2003, 1855, 151-159.	1.0	16
52	Vehicle-Bridge Dynamic Interaction Using Finite Element Modelling. , 0, , .		28
53	Monitoring of Changes in Bridge Response Using Weigh-In-Motion Systems. Key Engineering Materials, 0, 569-570, 183-190.	0.4	1
54	Experimental Testing of a Cross-Entropy Algorithm to Detect Damage. Key Engineering Materials, 0, 569-570, 1170-1177.	0.4	5

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55	Impact of Road Profile when Detecting a Localised Damage from Bridge Acceleration Response to a Moving Vehicle. Key Engineering Materials, 0, 569-570, 199-206.	0.4	5
56	Application of the Hilbert-Huang Transform for Identification of Changes in Boundary Conditions of a Bridge Using Vibration Data due to Traffic. Key Engineering Materials, 0, 569-570, 892-899.	0.4	0
57	Dynamic Axle Force and Road Profile Identification Using a Moving Vehicle. International Journal of Architecture Engineering and Construction, 0, , 1-16.	0.1	14