

# Arturo González

## List of Publications by Year in descending order

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Version: 2024-02-01

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	The use of a dynamic truckâ€“trailer drive-by system to monitor bridge damping. Structural Health Monitoring, 2014, 13, 143-157.	4.3	132
2	Application of empirical mode decomposition to drive-by bridge damage detection. European Journal of Mechanics, A/Solids, 2017, 61, 151-163.	2.1	111
3	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
4	Wavelet domain analysis for identification of vehicle axles from bridge measurements. Computers and Structures, 2006, 84, 1792-1801.	2.4	65
5	Characteristic Dynamic Increment for extreme traffic loading events on short and medium span highway bridges. Engineering Structures, 2010, 32, 3827-3835.	2.6	63
6	Experimental validation of a drive-by stiffness identification method for bridge monitoring. Structural Health Monitoring, 2015, 14, 317-331.	4.3	56
7	Bridge Damage Detection Using Weigh-in-Motion Technology. Journal of Bridge Engineering, 2015, 20, .	1.4	51
8	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
9	Characteristic dynamic traffic load effects in bridges. Engineering Structures, 2009, 31, 1607-1612.	2.6	44
10	A regularised solution to the bridge weigh-in-motion equations. International Journal of Heavy Vehicle Systems, 2009, 16, 310.	0.1	42
11	Determination of bridge lifetime dynamic amplification factor using finite element analysis of critical loading scenarios. Engineering Structures, 2008, 30, 2330-2337.	2.6	41
12	Adaptation of Cross Entropy optimisation to a dynamic Bridge WIM calibration problem. Engineering Structures, 2012, 44, 13-22.	2.6	37
13	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
14	Vehicle-Bridge Dynamic Interaction Using Finite Element Modelling. , 0, , .		28
15	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
16	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
17	Bridge roughness index as an indicator of bridge dynamic amplification. Computers and Structures, 2006, 84, 759-769.	2.4	25
18	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

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19	A bridge-monitoring tool based on bridge and vehicle accelerations. <i>Structure and Infrastructure Engineering</i> , 2015, 11, 619-637.	2.0	24
20	Assessment dynamic ratio for traffic loading on highway bridges. <i>Structure and Infrastructure Engineering</i> , 2012, 8, 295-304.	2.0	23
21	Testing of a Bridge Weigh-in-Motion Algorithm Utilising Multiple Longitudinal Sensor Locations. <i>Journal of Testing and Evaluation</i> , 2012, 40, 961-974.	0.4	23
22	Identifying damage in a bridge by analysing rotation response to a moving load. <i>Structure and Infrastructure Engineering</i> , 2020, 16, 1050-1065.	2.0	22
23	Turning a traditional teaching setting into a feedback-rich environment. <i>International Journal of Educational Technology in Higher Education</i> , 2018, 15, .	4.5	21
24	The Virtual Axle concept for detection of localised damage using Bridge Weigh-in-Motion data. <i>Engineering Structures</i> , 2015, 89, 26-36.	2.6	20
25	Evaluation of an Artificial Neural Network Technique Applied to Multiple-Sensor Weigh-in-Motion Systems. <i>Transportation Research Record</i> , 2003, 1855, 151-159.	1.0	16
26	Dynamic Axle Force and Road Profile Identification Using a Moving Vehicle. <i>International Journal of Architecture Engineering and Construction</i> , 0, , 1-16.	0.1	14
27	Fatigue inspection and maintenance optimization: A comparison of information value, life cycle cost and reliability based approaches. <i>Ocean Engineering</i> , 2021, 220, 108286.	1.9	11
28	Characterization of non-linear bearings using the Hilbert-Huang transform. <i>Advances in Mechanical Engineering</i> , 2015, 7, 168781401558212.	0.8	10
29	Regularization Methods Applied to Noisy Response from Beams under Static Loading. <i>Journal of Engineering Mechanics - ASCE</i> , 2020, 146, .	1.6	10
30	Experimental validation of the seismic analysis methodology for free-standing spent fuel racks. <i>Nuclear Engineering and Technology</i> , 2019, 51, 884-893.	1.1	9
31	Assessment of the Condition of a Beam Using a Static Loading Test. <i>Key Engineering Materials</i> , 2009, 413-414, 269-276.	0.4	8
32	Static and dynamic moments for any plane within a straight solid slab bridge caused by the crossing of a truck. <i>Engineering Structures</i> , 2017, 150, 465-480.	2.6	8
33	Damage detection in bridges based on patterns of dynamic amplification. <i>Structural Control and Health Monitoring</i> , 2019, 26, e2361.	1.9	8
34	Computing the value of information from periodic testing in holistic decision making under uncertainty. <i>Reliability Engineering and System Safety</i> , 2021, 206, 107242.	5.1	8
35	A simplified method for holistic value of information computation for informed structural integrity management under uncertainty. <i>Marine Structures</i> , 2021, 76, 102888.	1.6	7
36	Direct measurement of dynamics in road bridges using a bridge weigh-in-motion system. <i>Baltic Journal of Road and Bridge Engineering</i> , 2013, 8, 263-270.	0.4	7

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37	DYNAMIC IMPACT OF HEAVY LONG VEHICLES WITH EQUALLY SPACED AXLES ON SHORT-SPAN HIGHWAY BRIDGES. <i>Baltic Journal of Road and Bridge Engineering</i> , 2018, 13, 1-13.	0.4	7
38	Reliability methods in the design point of free-standing spent fuel racks under seismic conditions. <i>Progress in Nuclear Energy</i> , 2019, 115, 208-220.	1.3	6
39	Experimental Testing of a Cross-Entropy Algorithm to Detect Damage. <i>Key Engineering Materials</i> , 0, 569-570, 1170-1177.	0.4	5
40	Impact of Road Profile when Detecting a Localised Damage from Bridge Acceleration Response to a Moving Vehicle. <i>Key Engineering Materials</i> , 0, 569-570, 199-206.	0.4	5
41	An integrated probabilistic approach for optimum maintenance of fatigue-critical structural components. <i>Marine Structures</i> , 2019, 68, 102649.	1.6	5
42	Influence of the modelling properties on the seismic response of free-standing spent fuel racks. <i>Nuclear Engineering and Design</i> , 2019, 342, 210-218.	0.8	5
43	Sources of uncertainty in the seismic design of submerged free-standing racks. <i>Energy Procedia</i> , 2017, 127, 310-319.	1.8	4
44	Dynamic Amplification Factor of Continuous versus Simply Supported Bridges Due to the Action of a Moving Vehicle. <i>Infrastructures</i> , 2018, 3, 12.	1.4	4
45	A holistic approach to risk-based decision on inspection and design of fatigue-sensitive structures. <i>Engineering Structures</i> , 2020, 221, 110949.	2.6	3
46	Influence of pre-existing vibrations on the dynamic response of medium span bridges. <i>Canadian Journal of Civil Engineering</i> , 2009, 36, 73-84.	0.7	2
47	Footprint caused by a vehicle configuration on the dynamic amplification of the bridge response. <i>Journal of Physics: Conference Series</i> , 2015, 628, 012064.	0.3	2
48	Sensitivity to Damage of the Forced Frequencies of a Simply Supported Beam Subjected to a Moving Quarter-Car. <i>Lecture Notes in Mechanical Engineering</i> , 2020, , 350-362.	0.3	2
49	A widely-applicable structural maintenance decision-analytic modelling approach assisted by information value computation. <i>Ocean Engineering</i> , 2021, 237, 109596.	1.9	2
50	Verifying the suitability of uncoupled numerical methods for solving vehicle-bridge interaction problems. <i>Structure and Infrastructure Engineering</i> , 2023, 19, 1407-1424.	2.0	2
51	Monitoring of Changes in Bridge Response Using Weigh-In-Motion Systems. <i>Key Engineering Materials</i> , 0, 569-570, 183-190.	0.4	1
52	Bayesian maintenance decision optimisation based on computing the information value from condition inspections. <i>Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability</i> , 2021, 235, 545-555.	0.6	1
53	Parametric analysis of modelling properties governing the seismic response of free-standing spent fuel racks. , 2017, , .		1
54	Academic Advising in Civil Engineering: Design and Evaluation of a Hybrid Model. <i>Education Sciences</i> , 2022, 12, 326.	1.4	1

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55	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
56	Value of inspection in steel structural integrity management. IOP Conference Series: Earth and Environmental Science, 2018, 146, 012080.	0.2	0
57	Numerical analysis of techniques to extract bridge dynamic features from short records of acceleration. IABSE Symposium Report, 2019, , .	0.0	0