

# Viviana Meruane

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

47  
papers

999  
citations

18  
h-index

31  
g-index

49  
ext. papers

1,241  
ext. citations

3.5  
avg, IF

5.12  
L-index

#	Paper	IF	Citations
47	Development of a Machine Learning based model for Damage Detection, Localization and Quantification to extend Structure Life. <i>Procedia CIRP</i> , <b>2021</b> , 98, 199-204	1.8	1
46	Phononic band gap optimization in truss-like cellular structures using smooth P-norm approximations. <i>Structural and Multidisciplinary Optimization</i> , <b>2021</b> , 64, 113-124	3.6	3
45	A Deep Learning Framework for Damage Assessment of Composite Sandwich Structures. <i>Shock and Vibration</i> , <b>2021</b> , 2021, 1-12	1.1	3
44	Room Temperature Ferroelastic Creep Behavior of Porous (La <sub>0.6</sub> Sr <sub>0.4</sub> ) <sub>0.95</sub> Co <sub>0.2</sub> Fe <sub>0.8</sub> O <sub>3-<math>\delta</math></sub>	2.9	0
43	Deep semi-supervised generative adversarial fault diagnostics of rolling element bearings. <i>Structural Health Monitoring</i> , <b>2020</b> , 19, 390-411	4.4	22
42	Hydrological Early Warning System Based on a Deep Learning Runoff Model Coupled with a Meteorological Forecast. <i>Water (Switzerland)</i> , <b>2019</b> , 11, 1808	3	10
41	Deep Convolutional Neural Network-Based Structural Damage Localization and Quantification Using Transmissibility Data. <i>Shock and Vibration</i> , <b>2019</b> , 2019, 1-27	1.1	22
40	Gapped Gaussian smoothing technique for debonding assessment with automatic thresholding. <i>Structural Control and Health Monitoring</i> , <b>2019</b> , 26, e2371	4.5	3
39	Experimental study of the variations in the electromechanical properties of piezoelectric energy harvesters and their impact on the frequency response function. <i>Mechanical Systems and Signal Processing</i> , <b>2019</b> , 115, 469-482	7.8	7
38	Deep variational auto-encoders: A promising tool for dimensionality reduction and ball bearing elements fault diagnosis. <i>Structural Health Monitoring</i> , <b>2019</b> , 18, 1092-1128	4.4	60
37	Impact identification using nonlinear dimensionality reduction and supervised learning. <i>Smart Materials and Structures</i> , <b>2019</b> , 28, 115005	3.4	3
36	Ferroelastic behavior of LaCoO <sub>3</sub> : A comparison of impression and compression techniques. <i>Journal of the European Ceramic Society</i> , <b>2019</b> , 39, 1569-1576	6	5
35	Experimental investigation into techniques to predict leak shapes in water distribution systems using vibration measurements. <i>Journal of Hydroinformatics</i> , <b>2018</b> , 20, 815-828	2.6	13
34	Effect of Sr <sup>2+</sup> and Ba <sup>2+</sup> doping on structural stability and mechanical properties of La <sub>2</sub> NiO <sub>4+<math>\delta</math></sub>	5.1	4
33	Ensemble classification method for structural damage assessment under varying temperature. <i>Structural Health Monitoring</i> , <b>2018</b> , 17, 747-762	4.4	27
32	Prediction of leak flow rate in plastic water distribution pipes using vibro-acoustic measurements. <i>Structural Health Monitoring</i> , <b>2018</b> , 17, 959-970	4.4	17
31	Convolutional neural networks for automated damage recognition and damage type identification. <i>Structural Control and Health Monitoring</i> , <b>2018</b> , 25, e2230	4.5	60

30	Experimental validation of a deep neural network sparse representation classification ensemble method. <i>Structural Design of Tall and Special Buildings</i> , <b>2018</b> , 27, e1504	1.8	5
29	The effect of molecular weight and hydrolysis degree of poly(vinyl alcohol)(PVA) on the thermal and mechanical properties of poly(lactic acid)/PVA blends. <i>Polimeros</i> , <b>2018</b> , 28, 169-177	1.6	35
28	Damage assessment in a sandwich panel based on full-field vibration measurements. <i>Journal of Sound and Vibration</i> , <b>2018</b> , 417, 1-18	3.9	39
27	A Bayesian updating procedure for the electromechanical properties of piezoelectric energy harvesters. <i>MATEC Web of Conferences</i> , <b>2018</b> , 211, 05002	0.3	
26	Uncertainties propagation and global sensitivity analysis of the frequency response function of piezoelectric energy harvesters. <i>Smart Materials and Structures</i> , <b>2017</b> , 26, 065003	3.4	15
25	Mechanical properties updating of a non-uniform natural fibre composite panel by means of a parallel genetic algorithm. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2017</b> , 94, 226-233	8.4	18
24	Deep Learning Enabled Fault Diagnosis Using Time-Frequency Image Analysis of Rolling Element Bearings. <i>Shock and Vibration</i> , <b>2017</b> , 2017, 1-17	1.1	147
23	Structural and mechanical properties of La <sub>0.6</sub> Sr <sub>0.4</sub> M <sub>0.1</sub> Fe <sub>0.9</sub> O <sub>3-<math>\delta</math></sub> (M: Co, Ni and Cu) perovskites. <i>Ceramics International</i> , <b>2017</b> , 43, 2089-2094	5.1	2
22	Impact Location and Quantification on an Aluminum Sandwich Panel Using Principal Component Analysis and Linear Approximation with Maximum Entropy. <i>Entropy</i> , <b>2017</b> , 19, 137	2.8	6
21	Modal Strain Energy-Based Debonding Assessment of Sandwich Panels Using a Linear Approximation with Maximum Entropy. <i>Entropy</i> , <b>2017</b> , 19, 619	2.8	7
20	Effect of rare earth dopants on structural and mechanical properties of nanoceria synthesized by combustion method. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2016</b> , 649, 168-173	5.3	9
19	Online Sequential Extreme Learning Machine for Vibration-Based Damage Assessment Using Transmissibility Data. <i>Journal of Computing in Civil Engineering</i> , <b>2016</b> , 30, 04015042	5	13
18	Similitudes for the structural response of flexural plates. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , <b>2016</b> , 230, 174-188	1.3	27
17	Numerical and experimental results for the frequency response of plates in similitude. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , <b>2016</b> , 230, 3212-3221	1.3	12
16	A Broadband Vibration-Based Energy Harvester Using an Array of Piezoelectric Beams Connected by Springs. <i>Shock and Vibration</i> , <b>2016</b> , 2016, 1-13	1.1	21
15	A novel impact identification algorithm based on a linear approximation with maximum entropy. <i>Smart Materials and Structures</i> , <b>2016</b> , 25, 095050	3.4	12
14	Damage Location by Maximum Entropy Method on a Civil Structure. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2016</b> , 105-115	0.3	
13	Structural damage assessment using linear approximation with maximum entropy and transmissibility data. <i>Mechanical Systems and Signal Processing</i> , <b>2015</b> , 54-55, 210-223	7.8	18

12	An inverse parallel genetic algorithm for the identification of skin/core debonding in honeycomb aluminium panels. <i>Structural Control and Health Monitoring</i> , <b>2015</b> , 22, 1426-1439	4.5	10
11	Real-Time Structural Damage Assessment Using Artificial Neural Networks and Antiresonant Frequencies. <i>Shock and Vibration</i> , <b>2014</b> , 2014, 1-14	1.1	14
10	A Maximum Entropy Approach to Assess Debonding in Honeycomb aluminum Plates. <i>Entropy</i> , <b>2014</b> , 16, 2869-2889	2.8	13
9	Model updating using antiresonant frequencies identified from transmissibility functions. <i>Journal of Sound and Vibration</i> , <b>2013</b> , 332, 807-820	3.9	39
8	Structural damage assessment under varying temperature conditions. <i>Structural Health Monitoring</i> , <b>2012</b> , 11, 345-357	4.4	48
7	Structural damage assessment with antiresonances versus mode shapes using parallel genetic algorithms. <i>Structural Control and Health Monitoring</i> , <b>2011</b> , 18, 825-839	4.5	16
6	An hybrid real genetic algorithm to detect structural damage using modal properties. <i>Mechanical Systems and Signal Processing</i> , <b>2011</b> , 25, 1559-1573	7.8	100
5	Damage Detection with Parallel Genetic Algorithms and Operational Modes. <i>Structural Health Monitoring</i> , <b>2010</b> , 9, 481-496	4.4	36
4	On the effect of downtime costs and budget constraint on preventive and replacement policies. <i>Reliability Engineering and System Safety</i> , <b>2008</b> , 93, 144-151	6.3	25
3	Identification of nonlinear dynamic coefficients in plain journal bearings. <i>Tribology International</i> , <b>2008</b> , 41, 743-754	4.9	51
2	The vibroacoustic behaviour of aluminium foam sandwich panels in similitude. <i>Journal of Sandwich Structures and Materials</i> , 109963622098675	2.1	1
1	Evaluation of plates in similitude by experimental tests and artificial neural networks. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 095440622110025	1.3	0