Filippo Cianetti

List of Publications by Year
in descending order

91 papers	1,145 citations	394421 19 h-index	454955 30 g-index
92 all docs	92 docs citations	92 times ranked	615 citing authors

#	Article	IF	Citations
1	Non-Gaussianity and non-stationarity in vibration fatigue. International Journal of Fatigue, 2017, 97, 9-19.	5.7	82
2	Influence of the addendum modification on spur gear efficiency. Mechanism and Machine Theory, 2012, 49, 216-233.	4.5	79
3	Random fatigue. A new frequency domain criterion for the damage evaluation of mechanical components. International Journal of Fatigue, 2015, 70, 417-427.	5.7	62
4	Dynamic Measurements Using FDM 3D-Printed Embedded Strain Sensors. Sensors, 2019, 19, 2661.	3.8	60
5	Fatigue behaviour analysis of mechanical components subject to random bimodal stress process: frequency domain approach. International Journal of Fatigue, 2005, 27, 335-345.	5.7	57
6	The frequency domain approach in virtual fatigue estimation of non-linear systems: The problem of non-Gaussian states of stress. International Journal of Fatigue, 2009, 31, 766-775.	5.7	54
7	Random multiaxial fatigue: A comparative analysis among selected frequency and time domain fatigue evaluation methods. International Journal of Fatigue, 2015, 74, 107-118.	5.7	50
8	An equivalent uniaxial stress process for fatigue life estimation of mechanical components under multiaxial stress conditions. International Journal of Fatigue, 2008, 30, 1479-1497.	5.7	46
9	Non-stationarity index in vibration fatigue: Theoretical and experimental research. International Journal of Fatigue, 2017, 104, 221-230.	5.7	42
10	An innovative modal approach for frequency domain stress recovery and fatigue damage evaluation. International Journal of Fatigue, 2016, 91, 382-396.	5.7	39
11	Evaluation of mechanical component fatigue behavior under random loads: Indirect frequency domain method. International Journal of Fatigue, 2014, 61, 141-150.	5.7	28
12	Fatigue damage assessment in wide-band uniaxial random loadings by PSD decomposition: outcomes from recent research. International Journal of Fatigue, 2016, 91, 248-250.	5.7	25
13	Development of a new simple energy method for life prediction in multiaxial fatigue. International Journal of Fatigue, 2018, 112, 1-8.	5.7	23
14	Experimental and Numerical Vibrational Analysis of a Horizontal-Axis Micro-Wind Turbine. Energies, 2018, 11, 456.	3.1	23
15	The Use of Spectral Method for Fatigue Life Assessment for Non-Gaussian Random Loads. Acta Mechanica Et Automatica, 2016, 10, 100-103.	0.6	22
16	Multibody modelling of N DOF robot arm assigned to milling manufacturing. Dynamic analysis and position errors evaluation. Journal of Mechanical Science and Technology, 2016, 30, 405-420.	1.5	22
17	Correction formula approach to evaluate fatigue damage induced by non-Gaussian stress state. Procedia Structural Integrity, 2018, 8, 390-398.	0.8	22
18	Parametric Finite Elements Model of SLM Additive Manufacturing process. Procedia Structural Integrity, 2018, 8, 410-421.	0.8	20

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19	The effort of the dynamic simulation on the fatigue damage evaluation of flexible mechanical systems loaded by non-Gaussian and non stationary loads. International Journal of Fatigue, 2017, 103, 60-72.	5.7	19
20	The design of durability tests by fatigue damage spectrum approach. Fatigue and Fracture of Engineering Materials and Structures, 2018, 41, 787-796.	3.4	18
21	Fast evaluation of stress state spectral moments. International Journal of Mechanical Sciences, 2017, 127, 4-9.	6.7	17
22	Device for measuring the inertia properties of space payloads. Mechanism and Machine Theory, 2014, 74, 134-153.	4.5	15
23	Vibration Fatigue of FDM 3D Printed Structures: The Use of Frequency Domain Approach. Materials, 2022, 15, 854.	2.9	15
24	Numerical Simulation of an Intramedullary Elastic Nail: Expansion Phase and Load-Bearing Behavior. Frontiers in Bioengineering and Biotechnology, 2018, 6, 174.	4.1	14
25	On-line fatigue alleviation for wind turbines by a robust control approach. International Journal of Electrical Power and Energy Systems, 2019, 109, 384-394.	5.5	14
26	On the Evaluation of Surface Fatigue Strength of a Stainless-Steel Aeronautical Component. Metals, 2019, 9, 455.	2.3	13
27	Damping heat coefficient â€“ Theoretical and experimental research on a vibrating beam. Journal of Sound and Vibration, 2017, 400, 13-21.	3.9	12
28	Collection of experimental data for multiaxial fatigue criteria verification. Fatigue and Fracture of Engineering Materials and Structures, 2020, 43, 162-174.	3.4	12
29	A procedure for the virtual evaluation of the stress state of mechanical systems and components for the automotive industry: Development and experimental validation. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2005, 219, 633-643.	1.9	11
30	Random Loads Fatigue: The Use of Spectral Methods Within Multibody Simulation. , 2005, , 1735.		10
31	Evaluation of fatigue damage with an energy criterion of simple implementation. Procedia Structural Integrity, 2018, 8, 192-203.	0.8	10
32	Experimental multiaxial fatigue tests realized with newly developed geometry specimens. Fatigue and Fracture of Engineering Materials and Structures, 2019, 42, 827-837.	3.4	10
33	Analytical procedure for the optimization of plastic gear tooth root. Mechanism and Machine Theory, 2021, 166, 104496.	4.5	10
34	Validation of a New Method for Frequency Domain Dynamic Simulation and Damage Evaluation of Mechanical Components Modelled with Modal Approach. Procedia Engineering, 2015, 101, 493-500.	1.2	9
35	The importance of dynamic behaviour of vibrating systems on the response in case of non-Gaussian random excitations. Procedia Structural Integrity, 2018, 12, 224-238.	0.8	9
36	A multibody simulation of a human fall: model creation and validation. Procedia Structural Integrity, 2019, 24, 337-348.	0.8	9

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37	Multibody Models for the Analysis of a Fall From Height: Accident, Suicide, or Murder?. Frontiers in Bioengineering and Biotechnology, 2019, 7, 419.	4.1	9
38	Spectral analysis of sine-sweep vibration: A fatigue damage estimation method. Mechanical Systems and Signal Processing, 2021, 157, 107698.	8.0	9
39	Motion sickness. Part I: development of a model for predicting motion sickness incidence. International Journal of Human Factors Modelling and Simulation, 2011, 2, 163.	0.2	8
40	Lowâ€temperature fatigue life properties of aluminum butt weldments by the means of the local strain energy density approach. Material Design and Processing Communications, 2019, 1, e30.	0.9	8
41	Piezoresistive dynamic simulations of FDM 3D-Printed embedded strain sensors: a new modal approach. Procedia Structural Integrity, 2019, 24, 390-397.	0.8	7
42	Tool Steels: Forging Simulation and Microstructure Evolution of Large Scale Ingot. Acta Physica Polonica A, 2015, 128, 629-633.	0.5	7
43	Motion sickness. Part II: experimental verification on the railways of a model for predicting motion sickness incidence. International Journal of Human Factors Modelling and Simulation, 2011, 2, 188.	0.2	6
44	Strengthening Improvement on Gear Steels. Steel Research International, 2016, 87, 608-613.	1.8	6
45	Dynamic modeling of wind turbines. Experimental tuning of a multibody model. Procedia Structural Integrity, 2018, 8, 56-66.	0.8	6
46	Fatigue Life Extimation of a Military Aircraft Structure subjected to Random Loads. Procedia Structural Integrity, 2018, 12, 183-195.	0.8	6
47	The relevance of non-stationarities and non-Gaussianities in vibration fatigue. MATEC Web of Conferences, 2018, 165, 10011.	0.2	6
48	Development of selection methodologies and procedures of the modal set for the generation of flexible body models for multi-body simulation. Proceedings of the Institution of Mechanical Engineers, Part K: Journal of Multi-body Dynamics, 2004, 218, 19-30.	0.8	5
49	On field durability tests of mechanical systems. The use of the Fatigue Damage Spectrum. Procedia Structural Integrity, 2017, 3, 176-190.	0.8	5
50	Virtual qualification of aircraft parts: test simulation or acceptable evidence?. Procedia Structural Integrity, 2019, 24, 526-540.	0.8	5
51	Design and implementation of new experimental multiaxial random fatigue tests on astm-a105 circular specimens. International Journal of Fatigue, 2021, 142, 105983.	5.7	5
52	Single-process 3D-printed structures with vibration durability self-awareness. Additive Manufacturing, 2021, 47, 102303.	3.0	5
53	Optimisation of the process of experimental sign off of a vehicle. International Journal of Heavy Vehicle Systems, 2005, 12, 193.	0.2	4
54	Development of a procedure for the structural design of roller coaster structures: The rails. Engineering Structures, 2015, 93, 13-26.	5.3	4

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55	Manganese Effect on Q&P CMnSi Steels. Materials Science Forum, 2016, 879, 430-435.	0.3	4
56	Mechanical behaviour of wind turbines operating above design conditions. Procedia Structural Integrity, 2019, 24, 495-509.	0.8	4
57	Numerical Investigations on the Front Fender of a Motorcycle. , 0, , .		3
58	Development of a new procedure for the wheel-rail contact force evaluation in simulations of railway dynamics. International Journal of Heavy Vehicle Systems, 2005, 12, 69.	0.2	3
59	Random Loads Fatigue. Experimental Approach through Thermoelasticity. Procedia Engineering, 2015, 101, 312-321.	1.2	3
60	Boron Effect on Hardenability of High Thickness Forged Steel Materials. Materials Science Forum, 0, 879, 1282-1287.	0.3	3
61	Dynamic Experimental and Numerical Analysis of Loads for a Horizontal Axis Micro Wind Turbine. Green Energy and Technology, 2018, , 79-90.	0.6	3
62	Synthesis of Equivalent Load Conditions for Military Vehicles. International Journal of Vehicle Structures and Systems, 2010, 2, .	0.2	2
63	Virtual Qualification of Aeronautical Actuators: Durability Test. Procedia Engineering, 2015, 109, 189-196.	1.2	2
64	The use of the <i>P_{CT}</i> index in railway motion sickness incidence evaluation. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2015, 229, 428-445.	2.0	2
65	Dynamic behavior of wind turbines. An on-board evaluation technique to monitor fatigue. Procedia Structural Integrity, 2018, 12, 102-112.	0.8	2
66	Dynamic modeling of wind turbines. How to model flexibility into multibody modelling. Procedia Structural Integrity, 2018, 12, 87-101.	0.8	2
67	Development of a procedure for the structural design of roller coaster structures: The supporting structures. Engineering Structures, 2018, 168, 643-652.	5.3	2
68	Sine-Sweep qualification test for engine components: The choice of simulation technique. Procedia Structural Integrity, 2019, 24, 360-369.	0.8	2
69	CubeSat Spatial Expedition: An Overview From Design To Experimental Verification. IOP Conference Series: Materials Science and Engineering, 2021, 1038, 012026.	0.6	2
70	An estimation model of suspension loads in explicit multibody simulation. IOP Conference Series: Materials Science and Engineering, 2021, 1038, 012042.	0.6	2
71	How to Experimentally Monitor the Fatigue Behaviour of Vibrating Mechanical Systems?. Strojniski Vestnik/Journal of Mechanical Engineering, 2020, 66, 557-566.	1.1	2
72	An interaction model between flexible structures and piezoelements useful in multi-body modelling. Proceedings of the Institution of Mechanical Engineers, Part K: Journal of Multi-body Dynamics, 2001, 215, 207-217.	0.8	1

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73	A Methodology for Active Control of Multibody Test-Rig for Virtual Simulation of Vehicles Through Acceleration Inputs. , 2005, , 2359.		1
74	Integrated Roller Coaster Design Environment: Dynamic and Structural Vehicle Analysis. , 2015, , .		1
75	Numerical Modelling and Simulation of the Hot Rolling Mill Process. Advanced Engineering Forum, 0, 15, 64-74.	0.3	1
76	Development and validation of a simplified automotive steering dynamic model. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2021, 235, 2188-2199.	1.9	1
77	On the statistical distribution of the maxima of sine on random process. Mechanical Systems and Signal Processing, 2021, 158, 107726.	8.0	1
78	Random Loads Fatigue: The Simulation of Non-Linear Systems. , 2009, , .		1
79	Relating Vibration and Thermal Losses Using the Damping Heat Coefficient. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 89-91.	0.5	1
80	Development and validation of a simulation methodology to analyse mechanical systems moving on flexible bodies. International Journal of Heavy Vehicle Systems, 2007, 14, 70.	0.2	0
81	Analytical Model, Multibody Simulation and Validation Tests for Dynamical Instability Reduction of a Grinding Machine With Dampers. , 2011, , .		0
82	Development of a Methodology for the Evaluation of Motion Sickness Incidence in Railways. , 2013, , .		0
83	Parametric Multibody Modeling of Anthropomorphic Robot to Predict Joint Compliance Influence on End Effector Positioning. , 2013, , .		0
84	Design of a Biomedical Device Through Non Linear Analysis. , 2015, , .		0
85	Optimized Design of Structural Components Realized Through Additive Manufacturing. , 2015, , .		0
86	Numerical evaluation of internal heat generation of roller coaster polyurethane wheels. Procedia Structural Integrity, 2019, 24, 612-624.	0.8	0
87	Non-stationarity and non-Gaussianity in Vibration Fatigue. Conference Proceedings of the Society for Experimental Mechanics, 2020, , 73-76.	0.5	0
88	A novel method for the evaluation of driving simulator performances. IOP Conference Series: Materials Science and Engineering, 2021, 1038, 012044.	0.6	0
89	Non Linear Multibody Modelling for the Vibrational Prevision of the Shift Lever of Automotive Gearboxes. , 2013, , .		0
90	Analysis and Optimization of a Spring Based Clamping System. , 2015, , .		0

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91	Modelling Microstructure and Mechanical Properties of High Strength Steels During Hot Rolling in an ESP Plant. , 0, , 159-164.		0