

Giuseppe Failla

List of Publications by Year in descending order

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99
times ranked

1086
citing authors

#	ARTICLE	IF	CITATIONS
1	Evolutionary Spectra Estimation Using Wavelets. Journal of Engineering Mechanics - ASCE, 2004, 130, 952-960.	1.6	137
2	Physically-Based Approach to the Mechanics of a Strong Non-Local Linear Elasticity Theory. Journal of Elasticity, 2009, 97, 103-130.	0.9	116
3	Stationary and non-stationary stochastic response of linear fractional viscoelastic systems. Probabilistic Engineering Mechanics, 2012, 28, 85-90.	1.3	81
4	Advanced materials modelling via fractional calculus: challenges and perspectives. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20200050.	1.6	65
5	Vibration mitigation in offshore wind turbines via tuned mass damper. Engineering Structures, 2019, 183, 610-636.	2.6	64
6	The mechanically based non-local elasticity: an overview of main results and future challenges. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2013, 371, 20120433.	1.6	60
7	On the stochastic response of a fractionally-damped Duffing oscillator. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 5131-5142.	1.7	56
8	The mechanically-based approach to 3D non-local linear elasticity theory: Long-range central interactions. International Journal of Solids and Structures, 2010, 47, 2347-2358.	1.3	55
9	Time-domain uncoupled analyses for seismic assessment of land-based wind turbines. Engineering Structures, 2016, 123, 275-299.	2.6	51
10	Seismic analysis of offshore wind turbines on bottom-fixed support structures. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20140086.	1.6	47
11	Damage detection in Euler-Bernoulli beams via spatial wavelet analysis. Structural Control and Health Monitoring, 2006, 13, 472-487.	1.9	42
12	On Euler-Bernoulli discontinuous beam solutions via uniform-beam Green's functions. International Journal of Solids and Structures, 2007, 44, 7666-7687.	1.3	42
13	An exact generalised function approach to frequency response analysis of beams and plane frames with the inclusion of viscoelastic damping. Journal of Sound and Vibration, 2016, 360, 171-202.	2.1	42
14	Finite-Element Formulation of a Nonlocal Hereditary Fractional-Order Timoshenko Beam. Journal of Engineering Mechanics - ASCE, 2017, 143, .	1.6	41
15	Improved inerter-based vibration absorbers. International Journal of Mechanical Sciences, 2021, 192, 106087.	3.6	40
16	Closed-form solutions for Euler-Bernoulli arbitrary discontinuous beams. Archive of Applied Mechanics, 2011, 81, 605-628.	1.2	37
17	On the dynamics of non-local fractional viscoelastic beams under stochastic agencies. Composites Part B: Engineering, 2018, 137, 102-110.	5.9	36
18	Finite element method for a nonlocal Timoshenko beam model. Finite Elements in Analysis and Design, 2014, 89, 77-92.	1.7	34

#	ARTICLE	IF	CITATIONS
19	On the dynamics of nano-frames. <i>International Journal of Engineering Science</i> , 2021, 160, 103433.	2.7	30
20	Non-local stiffness and damping models for shear-deformable beams. <i>European Journal of Mechanics, A/Solids</i> , 2013, 40, 69-83.	2.1	29
21	New perspectives in offshore wind energy. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2015, 373, 20140228.	1.6	28
22	Analysis of the coupled dynamic response of an offshore floating multi-purpose platform for the Blue Economy. <i>Ocean Engineering</i> , 2020, 217, 107943.	1.9	28
23	Exact frequency response analysis of axially loaded beams with viscoelastic dampers. <i>International Journal of Mechanical Sciences</i> , 2016, 115-116, 370-384.	3.6	25
24	An exact approach to the dynamics of locally-resonant beams. <i>Mechanics Research Communications</i> , 2020, 103, 103460.	1.0	25
25	A novel approach to nonlinear variable-order fractional viscoelasticity. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2020, 378, 20190296.	1.6	25
26	A Galerkin Approach for Power Spectrum Determination of Nonlinear Oscillators. <i>Meccanica</i> , 2002, 37, 51-65.	1.2	24
27	A solution method for Euler-Bernoulli vibrating discontinuous beams. <i>Mechanics Research Communications</i> , 2008, 35, 517-529.	1.0	24
28	Solution strategies for 1D elastic continuum with long-range interactions: Smooth and fractional decay. <i>Mechanics Research Communications</i> , 2010, 37, 13-21.	1.0	24
29	A non-local two-dimensional foundation model. <i>Archive of Applied Mechanics</i> , 2013, 83, 253-272.	1.2	24
30	Seismic vulnerability evaluation of historical masonry churches: Proposal for a general and comprehensive numerical approach to cross-check results. <i>Engineering Failure Analysis</i> , 2017, 82, 208-228.	1.8	24
31	On the moving load problem in Euler-Bernoulli uniform beams with viscoelastic supports and joints. <i>Acta Mechanica</i> , 2017, 228, 805-821.	1.1	23
32	A mechanically based approach to non-local beam theories. <i>International Journal of Mechanical Sciences</i> , 2011, 53, 676-687.	3.6	22
33	Flexural vibrations of discontinuous layered elastically bonded beams. <i>Composites Part B: Engineering</i> , 2018, 135, 175-188.	5.9	21
34	On intermediate-scale open-sea experiments on floating offshore structures: Feasibility and application on a spar support for offshore wind turbines. <i>Marine Structures</i> , 2018, 61, 220-237.	1.6	20
35	On the moving load problem in beam structures equipped with tuned mass dampers. <i>Meccanica</i> , 2017, 52, 3101-3115.	1.2	19
36	On time-domain uncoupled analyses for offshore wind turbines under seismic loads. <i>Bulletin of Earthquake Engineering</i> , 2018, 16, 1007-1040.	2.3	19

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37	A wavelet-based spectrum for non-stationary processes. <i>Mechanics Research Communications</i> , 2011, 38, 361-367.	1.0	18
38	An exact modal analysis approach to vibration analysis of structures with mass-spring subsystems and rotational joints. <i>Journal of Sound and Vibration</i> , 2019, 438, 191-219.	2.1	18
39	On the fatigue behavior of support structures for offshore wind turbines. <i>Wind and Structures, an International Journal</i> , 2014, 18, 117-134.	0.8	18
40	Wave propagation in stress-driven nonlocal Rayleigh beam lattices. <i>International Journal of Mechanical Sciences</i> , 2022, 215, 106901.	3.6	18
41	Progress on the experimental set-up for the testing of a floating offshore wind turbine scaled model in a field site. <i>Wind Engineering</i> , 2016, 40, 455-467.	1.1	17
42	Flexural wave propagation in locally-resonant beams with uncoupled/coupled bending-torsion beam-like resonators. <i>International Journal of Mechanical Sciences</i> , 2022, 215, 106925.	3.6	17
43	Interval static analysis of multi-cracked beams with uncertain size and position of cracks. <i>Applied Mathematical Modelling</i> , 2020, 86, 92-114.	2.2	16
44	Operational Modal Analysis of a Spar-Type Floating Platform Using Frequency Domain Decomposition Method. <i>Energies</i> , 2016, 9, 870.	1.6	15
45	Free and forced vibrations of damped locally-resonant sandwich beams. <i>European Journal of Mechanics, A/Solids</i> , 2021, 86, 104188.	2.1	15
46	Some properties of multi-degree-of-freedom potential systems and application to statistical equivalent non-linearization. <i>International Journal of Non-Linear Mechanics</i> , 2003, 38, 405-421.	1.4	14
47	A correction method for dynamic analysis of linear systems. <i>Computers and Structures</i> , 2004, 82, 1217-1226.	2.4	14
48	Stochastic response of linear and non-linear systems to $\hat{\pm}$ -stable Lévy white noises. <i>Probabilistic Engineering Mechanics</i> , 2005, 20, 128-135.	1.3	14
49	On the dynamics of viscoelastic discontinuous beams. <i>Mechanics Research Communications</i> , 2014, 60, 52-63.	1.0	14
50	Coupled bending-torsional frequency response of beams with attachments: exact solutions including warping effects. <i>Acta Mechanica</i> , 2018, 229, 2445-2475.	1.1	14
51	Spectral Approach to Equivalent Statistical Quadraticization and Cubicization Methods for Nonlinear Oscillators. <i>Journal of Engineering Mechanics - ASCE</i> , 2003, 129, 31-42.	1.6	13
52	Coupled bending and torsional free vibrations of beams with in-span supports and attached masses. <i>European Journal of Mechanics, A/Solids</i> , 2017, 66, 387-411.	2.1	13
53	General finite element description for non-uniform and discontinuous beam elements. <i>Archive of Applied Mechanics</i> , 2012, 82, 43-67.	1.2	12
54	The finite element method for fractional non-local thermal energy transfer in non-homogeneous rigid conductors. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2015, 29, 116-127.	1.7	12

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55	Stochastic Analysis of a Nonlocal Fractional Viscoelastic Bar Forced by Gaussian White Noise. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B: Mechanical Engineering, 2017, 3, .	0.7	12
56	Response-Spectrum Uncoupled Analyses for Seismic Assessment of Offshore Wind Turbines. Journal of Marine Science and Engineering, 2018, 6, 85.	1.2	12
57	Exact frequency response of two-node coupled bending-torsional beam element with attachments. Applied Mathematical Modelling, 2018, 63, 508-537.	2.2	12
58	Response Power Spectrum of Multi-Degree-of-Freedom Nonlinear Systems by a Galerkin Technique. Journal of Applied Mechanics, Transactions ASME, 2003, 70, 708-714.	1.1	11
59	Approximate Analytical Mean-Square Response of an Impacting Stochastic System Oscillator With Fractional Damping. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B: Mechanical Engineering, 2017, 3, .	0.7	11
60	Exact stochastic analysis of coupled bending-torsion beams with in-span supports and masses. Probabilistic Engineering Mechanics, 2018, 54, 53-64.	1.3	11
61	A Fractional Approach to Non-Newtonian Blood Rheology in Capillary Vessels. Journal of Peridynamics and Nonlocal Modeling, 2019, 1, 88-96.	1.4	11
62	Random vibration mitigation of beams via tuned mass dampers with spring inertia effects. Meccanica, 2019, 54, 1365-1383.	1.2	10
63	A two-degree-of-freedom tuned mass damper for offshore wind turbines on floating spar supports. Marine Structures, 2022, 83, 103146.	1.6	10
64	On the vibrations of a mechanically based non-local beam model. Computational Materials Science, 2012, 64, 278-282.	1.4	9
65	Complex modal analysis of rods with viscous damping devices. Journal of Sound and Vibration, 2014, 333, 2130-2163.	2.1	9
66	A new displacement-based framework for non-local Timoshenko beams. Meccanica, 2015, 50, 2103-2122.	1.2	9
67	Stationary Response of Beams and Frames with Fractional Dampers through Exact Frequency Response Functions. Journal of Engineering Mechanics - ASCE, 2017, 143, .	1.6	9
68	An original framework for triply-coupled bending-torsion dynamics of beams. Thin-Walled Structures, 2021, 159, 107317.	2.7	9
69	On the free vibrations of locally-resonant structures. Computers and Structures, 2020, 241, 106356.	2.4	8
70	An original perspective on variable-order fractional operators for viscoelastic materials. Meccanica, 2021, 56, 769-784.	1.2	8
71	A novel reduced-order dynamic-stiffness formulation for locally resonant metamaterial plates. Composite Structures, 2022, 280, 114811.	3.1	8
72	Mechanically Based Nonlocal Euler-Bernoulli Beam Model. Journal of Nanomechanics & Micromechanics, 2014, 4, .	1.4	7

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73	A Mellin transform approach to wavelet analysis. Communications in Nonlinear Science and Numerical Simulation, 2015, 28, 175-193.	1.7	7
74	Nonlinear Random Vibrations of Beams with In-Span Supports via Statistical Linearization with Constrained Modes. Journal of Engineering Mechanics - ASCE, 2019, 145, .	1.6	7
75	Dynamic Response Characterization of Floating Structures Based on Numerical Simulations. Energies, 2020, 13, 5670.	1.6	7
76	Ultra-wide low-frequency band gap in locally-resonant plates with tunable inerter-based resonators. Applied Mathematical Modelling, 2022, 106, 682-695.	2.2	7
77	An interval framework for uncertain frequency response of multi-cracked beams with application to vibration reduction via tuned mass dampers. Meccanica, 2021, 56, 923-952.	1.2	5
78	Stochastic response of a fractional vibroimpact system. Procedia Engineering, 2017, 199, 1086-1091.	1.2	4
79	Exact frequency response of bars with multiple dampers. Acta Mechanica, 2017, 228, 49-68.	1.1	4
80	Analysis of the Coupled Dynamics of an Offshore Floating Multi-Purpose Platform: Part A " Rigid Body Analysis. , 2019, , .		4
81	Analysis of the Coupled Dynamics of an Offshore Floating Multi-Purpose Platform: Part B " Hydro-Elastic Analysis With Flexible Support Platform. , 2019, , .		4
82	Stochastic Response of Offshore Structures by a New Approach to Statistical Cubicization. Journal of Offshore Mechanics and Arctic Engineering, 2002, 124, 6-13.	0.6	3
83	Fatigue Analysis of Offshore Wind Turbines on Fixed Support Structures. Key Engineering Materials, 0, 569-570, 539-546.	0.4	3
84	Output-only identification of rigid body motions of floating structures: a case study. Procedia Engineering, 2017, 199, 930-935.	1.2	3
85	Seismic uncoupled analyses for offshore wind turbines. IET Renewable Power Generation, 2017, 11, 1100-1112.	1.7	3
86	On the Free Vibrations of Non-Classically Damped Locally Resonant Metamaterial Plates. Nanomaterials, 2022, 12, 541.	1.9	3
87	An improved analog equation method for non-linear dynamic analysis of time-fractional beams with discontinuities. Meccanica, 2020, 55, 649-668.	1.2	2
88	Frequency analysis of beams with multiple dampers via exact generalized functions. Coupled Systems Mechanics, 2016, 5, 157-190.	0.4	2
89	New prospects in non-conventional modelling of solids and structures. Meccanica, 2022, 57, 751-755.	1.2	2
90	Fractional-Order Thermal Energy Transport for Small-Scale Engineering Devices. Journal of Nanomechanics & Micromechanics, 2014, 4, .	1.4	1

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91	On the moving multi-loads problem in discontinuous beam structures with interlayer slip. <i>Procedia Engineering</i> , 2017, 199, 2531-2536.	1.2	1
92	A Comparison Among Plastic Deformation Capacities of RC Members According to International Codes. <i>AIP Conference Proceedings</i> , 2008, , .	0.3	0
93	Two-Step Pushover Analysis of an Ancient Masonry Oil-Mill in the Southern Italy. <i>Advanced Materials Research</i> , 2010, 133-134, 361-366.	0.3	0
94	A novel statistical linearization solution for randomly excited coupled bending-torsional beams resting on non-linear supports. <i>Meccanica</i> , 2019, 54, 1307-1326.	1.2	0
95	A Novel Solution to Find the Dynamic Response of an Euler-Bernoulli Beam Fitted with Intraspan TMDs under Poisson Type Loading. <i>Infrastructures</i> , 2020, 5, 40.	1.4	0
96	Nonlocal Approaches to the Dynamics of Metamaterials. <i>Springer Tracts in Mechanical Engineering</i> , 2021, , 393-415.	0.1	0
97	Seismic Analysis of Wind Energy Converters. , 2014, , 1-19.		0
98	Seismic Analysis of Wind Energy Converters. , 2015, , 2675-2692.		0
99	COMPARATIVE SEISMIC ASSESSMENT OF A MEDIOEVAL MASONRY CHURCH IN SOUTHERN ITALY. , 2017, , .		0