Gaetano Giunta

List of Publications by Year
in descending order

77 papers	2,227 citations	257450 24 h-index	265206 42 g-index
90 all docs	90 docs citations	90 times ranked	969 citing authors

#	Article	IF	Citations
1	A geometrically nonlinear analysis through hierarchical one-dimensional modelling of sandwich beam structures. Acta Mechanica, 2023, 234, 67-83.	2.1	9
2	Data-driven multiscale method for composite plates. Computational Mechanics, 2022, 70, 1025-1040.	4.0	9
3	Hierarchical beam finite elements for geometrically nonlinear analysis coupled with Asymptotic Numerical Method. Mechanics of Advanced Materials and Structures, 2021, 28, 2487-2500.	2.6	14
4	A data-driven analysis on bridging techniques for heterogeneous materials and structures. Mechanics of Advanced Materials and Structures, 2021, 28, 1-15.	2.6	10
5	A novel computational framework for the analysis of bistable composite beam structures. Composite Structures, 2021, 257, 113167.	5.8	5
6	Model reduction for the forming process of fibrous composites structures via second gradient enriched continuum models. Mechanics of Advanced Materials and Structures, 2021, 28, 1061-1072.	2.6	4
7	Strong and weak form solutions of curved beams via Carreraâ€™s unified formulation. Mechanics of Advanced Materials and Structures, 2020, 27, 1342-1353.	2.6	13
8	The boundary effects on stretch-induced membrane wrinkling. Thin-Walled Structures, 2020, 154, 106838.	5.3	14
9	Data-driven multiscale finite element method: From concurrence to separation. Computer Methods in Applied Mechanics and Engineering, 2020, 363, 112893.	6.6	65
10	Multiscale CUF-FE2 nonlinear analysis of composite beam structures. Computers and Structures, 2019, 221, 28-43.	4.4	25
11	Multiscale Nonlinear Analysis of Beam Structures by Means of the Carrera Unified Formulation. PoliTO Springer Series, 2019, , 47-63.	0.5	2
12	Modeling of composite and sandwich beams with a generic cross-section using a variable separation method. Composites Part B: Engineering, 2019, 165, 648-661.	12.0	7
13	A static analysis of three-dimensional sandwich beam structures by hierarchical finite elements modelling. Journal of Sandwich Structures and Materials, 2019, 21, 2382-2410.	3.5	6
14	Non-linear multi-scale modeling of 3D-spacer-rubber composites. , 2019, , 70-76.		0
15	Locking-free curved elements with refined kinematics for the analysis of composite structures. Computer Methods in Applied Mechanics and Engineering, 2018, 337, 481-500.	6.6	15
16	Geometrically Nonlinear Analysis of Beam Structures via Hierarchical One-Dimensional Finite Elements. Mathematical Problems in Engineering, 2018, 2018, 1-22.	1.1	10
17	Free Vibration Analysis of Fibre-Metal Laminated Beams via Hierarchical One-Dimensional Models. Mathematical Problems in Engineering, 2018, 2018, 1-12.	1.1	7
18	Integration of material and process modelling in a business decision support system: Case of COMPOSELECTOR H2020 project. Composite Structures, 2018, 204, 778-790.	5.8	17

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19	A Fourier-related double scale analysis on the instability phenomena of sandwich plates. Computer Methods in Applied Mechanics and Engineering, 2017, 318, 270-295.	6.6	40
20	A two-dimensional Fourier-series finite element for wrinkling analysis of thin films on compliant substrates. Thin-Walled Structures, 2017, 114, 144-153.	5.3	20
21	A new Fourier-related double scale analysis for wrinkling analysis of thin films on compliant substrates. Composite Structures, 2017, 160, 613-624.	5.8	17
22	A free vibration analysis of three-dimensional sandwich beams using hierarchical one-dimensional finite elements. Composites Part B: Engineering, 2017, 110, 7-19.	12.0	51
23	A micromechanics approach for effective elastic properties of nano-composites with energetic surfaces/interfaces. Composite Structures, 2017, 159, 278-287.	5.8	22
24	A static analysis of three-dimensional functionally graded beams by hierarchical modelling and a collocation meshless solution method. Acta Mechanica, 2016, 227, 969-991.	2.1	25
25	An intuitive computational multi-scale methodology and tool for the dynamic modelling of viscoelastic composites and structures. Composite Structures, 2016, 144, 131-137.	5.8	15
26	A thermal stress finite element analysis of beam structures by hierarchical modelling. Composites Part B: Engineering, 2016, 95, 179-195.	12.0	25
27	Hierarchical Beam Finite Elements Based Upon a Variables Separation Method. International Journal of Applied Mechanics, 2016, 08, 1650026.	2.2	6
28	Optimal design of a multilayered piezoelectric transducer based on a special unit cell homogenization method. Acta Mechanica, 2016, 227, 1837-1847.	2.1	4
29	Hierarchical one-dimensional finite elements for the thermal stress analysis of three-dimensional functionally graded beams. Composite Structures, 2016, 153, 514-528.	5.8	19
30	Mixed-dimensional modeling by means of solid and higher-order multi-layered plate finite elements. Mechanics of Advanced Materials and Structures, 2016, 23, 960-970.	2.6	7
31	A Thermal Stress Analysis of Three-Dimensional Beams by Refined One-Dimensional Models and Strong Form Solutions. Applied Mechanics and Materials, 2016, 828, 139-171.	0.2	6
32	Higher-Order Hierarchical Models for the Free Vibration Analysis of Thin-Walled Beams. Mathematical Problems in Engineering, 2015, 2015, 1-12.	1.1	4
33	An analysis of composite beams by means of hierarchical finite elements and a variables separation method. Computers and Structures, 2015, 158, 15-29.	4.4	10
34	A static analysis of three-dimensional functionally graded beams through hierarchical one-dimensional finite elements. AIP Conference Proceedings, 2015, , .	0.4	0
35	Hierarchical models for the static analysis of three-dimensional sandwich beam structures. Composite Structures, 2015, 133, 1284-1301.	5.8	13
36	Static Analysis of Shear Actuated Piezo-Electric Beams via Hierarchical FEM Theories. Mechanics of Advanced Materials and Structures, 2015, 22, 3-18.	2.6	8

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37	A novel two-dimensional finite element to study the instability phenomena of sandwich plates. Computer Methods in Applied Mechanics and Engineering, 2015, 283, 1117-1137.	6.6	34
38	A new family of finite elements for wrinkling analysis of thin films on compliant substrates. Composite Structures, 2015, 119, 568-577.	5.8	28
39	A free vibration analysis of piezo-electric beams via hierarchical one-dimensional finite elements. Journal of Intelligent Material Systems and Structures, 2014, 25, 1009-1023.	2.5	8
40	Analysis of nano-plates by atomistic-refined models accounting for surface free energy effect. Acta Mechanica, 2014, 225, 31-51.	2.1	7
41	Hierarchical theories for a linearised stability analysis of thin-walled beams with open and closed cross-section. Advances in Aircraft and Spacecraft Science, 2014, 1, 253-271.	0.5	8
42	Effective electromechanical coupling coefficient of adaptive structures with integrated multi-functional piezoelectric structural fiber composites. Smart Structures and Systems, 2014, 13, 501-515.	1.9	7
43	A dynamic analysis of three-dimensional functionally graded beams by hierarchical models. Smart Structures and Systems, 2014, 13, 637-657.	1.9	5
44	A Thermo-Mechanical Analysis of Isotropic and Composite Beams via Collocation with Radial Basis Functions. Journal of Thermal Stresses, 2013, 36, 1169-1199.	2.0	26
45	Static, free vibration and stability analysis of three-dimensional nano-beams by atomistic refined models accounting for surface free energy effect. International Journal of Solids and Structures, 2013, 50, 1460-1472.	2.7	33
46	Free vibration and stability analysis of three-dimensional sandwich beams via hierarchical models. Composites Part B: Engineering, 2013, 47, 326-338.	12.0	38
47	Free vibration analysis of composite beams via refined theories. Composites Part B: Engineering, 2013, 44, 540-552.	12.0	96
48	Hierarchical FEM modelling of piezo-electric beam structures. Composite Structures, 2013, 95, 705-718.	5.8	13
49	A thermo-mechanical analysis of functionally graded beams via hierarchical modelling. Composite Structures, 2013, 95, 676-690.	5.8	59
50	A refined 1D element for the structural analysis of single and multiple fiber/matrix cells. Composite Structures, 2013, 96, 455-468.	5.8	18
51	Failure indentation analysis of composite sandwich plates via hierarchical models. Journal of Sandwich Structures and Materials, 2013, 15, 45-70.	3.5	20
52	Failure Analysis of Composite Plates Subjected to Localized Loadings via a Unified Formulation. Journal of Engineering Mechanics - ASCE, 2012, 138, 458-467.	2.9	3
53	Variable kinematic plate elements coupled via Arlequin method. International Journal for Numerical Methods in Engineering, 2012, 91, 1264-1290.	2.8	24
54	Hierarchical Theories for a Linearised Stability Analysis of FGM Beams. , 2011, , .		1

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55	Free Vibration Analysis of Composite Plates via Refined Theories Accounting for Uncertainties. Shock and Vibration, 2011, 18, 537-554.	0.6	10
56	Multi-Model Beam Theories via the Arlequin Method. , 2011, , 151-168.		0
57	Evaluation of various through the thickness and curvature approximations in free vibration analysis of cylindrical composites shells. International Journal of Vehicle Noise and Vibration, 2011, 7, 212.	0.1	5
58	Static analysis of laminated beams via a unified formulation. Composite Structures, 2011, 94, 75-83.	5.8	65
59	Hierarchical theories for the free vibration analysis of functionally graded beams. Composite Structures, 2011, 94, 68-74.	5.8	102
60	Hierarchical modelling of doubly curved laminated composite shells under distributed and localised loadings. Composites Part B: Engineering, 2011, 42, 682-691.	12.0	45
61	Variable kinematic beam elements coupled via Arlequin method. Composite Structures, 2011, 93, 697-708.	5.8	46
62	Multi-scale modelling of sandwich structures using hierarchical kinematics. Composite Structures, 2011, 93, 2375-2383.	5.8	31
63	ANALYSIS OF THIN-WALLED BEAMS VIA A ONE-DIMENSIONAL UNIFIED FORMULATION THROUGH A NAVIER-TYPE SOLUTION. International Journal of Applied Mechanics, 2011, 03, 407-434.	2.2	40
64	Refined beam elements with arbitrary cross-section geometries. Computers and Structures, 2010, 88, 283-293.	4.4	218
65	Analysis of FGM beams by means of a unified formulation. IOP Conference Series: Materials Science and Engineering, 2010, 10, 012073.	0.6	4
66	Analysis of FGM Beams by Means of Classical and Advanced Theories. Mechanics of Advanced Materials and Structures, 2010, 17, 622-635.	2.6	99
67	An Improved Beam Formulation for Aeroelastic Applications. , 2010, , .		4
68	REFINED BEAM THEORIES BASED ON A UNIFIED FORMULATION. International Journal of Applied Mechanics, 2010, 02, 117-143.	2.2	249
69	Exact, Hierarchical Solutions for Localized Loadings in Isotropic, Laminated, and Sandwich Shells. Journal of Pressure Vessel Technology, Transactions of the ASME, 2009, 131, .	0.6	29
70	Hierarchical Evaluation of Failure Parameters in Composite Plates. AIAA Journal, 2009, 47, 692-702.	2.6	32
71	A Refined Beam Theory with Only Displacement Variables and Deformable Cross-Section. , 2009, , .		2
72	Hierarchical models for failure analysis of plates bent by distributed and localized transverse loadings. Journal of Zhejiang University: Science A, 2008, 9, 600-613.	2.4	30

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73	Best on Plate/Shell Theories for Laminated Structures Analysis. , 2008, , .		2
74	Hierarchical closed form solutions for plates bent by localized transverse loadings. Journal of Zhejiang University: Science A, 2007, 8, 1026-1037.	2.4	30
75	Analysis of Three-Dimensional Piezo-Electric Beams via a Unified Formulation. Advanced Materials Research, 0, 745, 101-118.	0.3	3
76	A hygrothermal stress finite element analysis of laminated beam structures through hierarchical one-dimensional modeling. Mechanics of Advanced Materials and Structures, 0, , 1-15.	2.6	6
77	Thermo-Mechanical Analysis of Isotropic and Orthotropic Beams using a Unified Formulation. , 0, , .		0