Giovanni Garcea

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2798139/publications.pdf

Version: 2024-02-01

72 papers	1,867 citations	186265 28 h-index	265206 42 g-index
75 all docs	75 docs citations	75 times ranked	490 citing authors

#	Article	IF	Citations
1	A Koiter reduction technique for the nonlinear thermoelastic analysis of shell structures prone to buckling. International Journal for Numerical Methods in Engineering, 2022, 123, 547-576.	2.8	11
2	Sensitivity analysis to geometrical imperfections in shell buckling via a mixed generalized path-following method. Thin-Walled Structures, 2022, 170, 108643.	5.3	12
3	Unconditional stability in large deformation dynamic analysis of elastic structures with arbitrary nonlinear strain measure and multi-body coupling. Computer Methods in Applied Mechanics and Engineering, 2022, 393, 114776.	6.6	7
4	Increasing the buckling capacity with modal geometric â€œimperfectionsâ€•designed by a reduced order model. Thin-Walled Structures, 2022, 178, 109529.	5.3	2
5	An isogeometric framework for the optimal design of variable stiffness shells undergoing large deformations. International Journal of Solids and Structures, 2021, 210-211, 18-34.	2.7	29
6	Isogeometric analysis of 3D beams for arbitrarily large rotations: Locking-free and path-independent solution without displacement DOFs inside the patch. Computer Methods in Applied Mechanics and Engineering, 2021, 373, 113437.	6.6	19
7	Material Design for Optimal Postbuckling Behaviour of Composite Shells. Materials, 2021, 14, 1665.	2.9	5
8	Limit fire analysis of 3D frame structures. Engineering Structures, 2021, 233, 111762.	5.3	7
9	Nonlinear thermoelastic analysis of shell structures: solid-shell modelling and high-performing continuation method. Composite Structures, 2021, 266, 113734.	5.8	9
10	A robust penalty coupling of non-matching isogeometric Kirchhoffâ€“Love shell patches in large deformations. Computer Methods in Applied Mechanics and Engineering, 2020, 371, 113289.	6.6	35
11	In memory of Professor Raffaele Casciaro. Meccanica, 2020, 55, 1847-1851.	2.0	1
12	Optimal Design of CNT-Nanocomposite Nonlinear Shells. Nanomaterials, 2020, 10, 2484.	4.1	10
13	Fiberâ€based shakedown analysis of threeâ€dimensional frames under multiple load combinations: Mixed finite elements and incrementalâ€iterative solution. International Journal for Numerical Methods in Engineering, 2020, 121, 3743-3767.	2.8	11
14	A large rotation finite element analysis of 3D beams by incremental rotation vector and exact strain measure with all the desirable features. Computer Methods in Applied Mechanics and Engineering, 2020, 361, 112811.	6.6	27
15	Large Rotation Finite Element Analysis of 3D Beams Based on Incremental Rotation Vector and Exact Strain Measures. Lecture Notes in Mechanical Engineering, 2020, , 1147-1158.	0.4	0
16	A Numerical Strategy for Multistable Nanocomposite Shells. , 2020, , 59-67.		0
17	Koiter Method and Solid Shell Finite Elements for Postbuckling Optimisation of Variable Angle Tow Composite Structures. Lecture Notes in Mechanical Engineering, 2020, , 1731-1742.	0.4	2
18	A simplified Kirchhoffâ€“Love large deformation model for elastic shells and its effective isogeometric formulation. Computer Methods in Applied Mechanics and Engineering, 2019, 354, 369-396.	6.6	51

#	Article	IF	Citations
19	Postbuckling optimisation of a variable angle tow composite wingbox using a multi-modal Koiter approach. Thin-Walled Structures, 2019, 138, 183-198.	5.3	66
20	A quasi-static nonlinear analysis for assessing the fire resistance of reinforced concrete 3D frames exploiting time-dependent yield surfaces. Computers and Structures, 2019, 212, 327-342.	4.4	10
21	A two-level computational approach for the elasto-plastic analysis of framed structures with composite cross-sections. Composite Structures, 2019, 209, 192-205.	5.8	4
22	An isogeometric formulation of the Koiterâ€™s theory for buckling and initial post-buckling analysis of composite shells. Computer Methods in Applied Mechanics and Engineering, 2018, 337, 387-410.	6.6	36
23	Post-buckling optimisation strategy of imperfection sensitive composite shells using Koiter method and Monte Carlo simulation. Composite Structures, 2018, 192, 654-670.	5.8	42
24	An efficient mixed variational reducedâ€order model formulation for nonlinear analyses of elastic shells. International Journal for Numerical Methods in Engineering, 2018, 113, 634-655.	2.8	39
25	An efficient isogeometric solid-shell formulation for geometrically nonlinear analysis of elastic shells. Computer Methods in Applied Mechanics and Engineering, 2018, 331, 159-183.	6.6	62
26	Evaluation of the capacity surfaces of reinforced concrete sections: Eurocode versus a plasticity-based approach. Meccanica, 2018, 53, 1493-1512.	2.0	24
27	Minkowski plasticity in 3D frames: Decoupled construction of the crossâ€section yield surface and efficient stress update strategy. International Journal for Numerical Methods in Engineering, 2018, 116, 435-464.	2.8	11
28	Composite Finite Elements in Structural Analysis. , 2018, , 105-128.		0
29	Advantages of the mixed format in geometrically nonlinear analysis of beams and shells using solid finite elements. International Journal for Numerical Methods in Engineering, 2017, 109, 1237-1262.	2.8	67
30	A mixed node-based smoothed finite element method (MNS-FEM) for elasticity. Engineering With Computers, 2017, 33, 819-834.	6.1	7
31	Accurate and efficient a posteriori account of geometrical imperfections in Koiter finite element analysis. International Journal for Numerical Methods in Engineering, 2017, 112, 1154-1174.	2.8	40
32	How to improve efficiency and robustness of the Newton method in geometrically non-linear structural problem discretized via displacement-based finite elements. Computer Methods in Applied Mechanics and Engineering, 2017, 313, 986-1005.	6.6	56
33	Deformation modes for the post-critical analysis of thin-walled compressed members by a Koiter semi-analytic approach. International Journal of Solids and Structures, 2017, 110-111, 367-384.	2.7	20
34	Koiter asymptotic analysis of multilayered composite structures using mixed solid-shell finite elements. Composite Structures, 2016, 154, 296-308.	5.8	31
35	A mixed edge-based smoothed finite element method (MES-FEM) for elasticity. Computers and Structures, 2016, 173, 123-138.	4.4	14
36	A composite mixed finite element model for the elasto-plastic analysis of 3D structural problems. Finite Elements in Analysis and Design, 2016, 113, 43-53.	3.2	18

#	Article	IF	Citations
37	Deformation modes of thin-walled members: A comparison between the method of Generalized Eigenvectors and Generalized Beam Theory. Thin-Walled Structures, 2016, 100, 192-212.	5.3	41
38	COMPOSITE FEM MODELS FOR LIMIT AND SHAKEDOWN ANALYSIS. , 2016, , .		0
39	MIXED SOLID MODELS IN NUMERICAL ANALYSIS OF SLENDER STRUCTURES. , 2016, , .		0
40	Effective treatment of complex statical and dynamical load combinations within shakedown analysis of 3D frames. Computers and Structures, 2015, 158, 124-139.	4.4	19
41	An Efficient Algorithm for Shakedown Analysis Based on Equality Constrained Sequential Quadratic Programming. , 2015, , 177-197.		1
42	Shakedown Analysis of 3D Frames with an Effective Treatment of the Load Combinations. , 2015, , 253-277.		0
43	A geometrically exact beam model with non-uniform warping coherently derived from the Saint Venant rod. Engineering Structures, 2014, 68, 33-46.	5.3	47
44	Buckling analysis through a generalized beam model including section distortions. Thin-Walled Structures, 2014, 85, 125-141.	5.3	27
45	A composite beam model including variable warping effects derived from a generalized Saint Venant solution. Composite Structures, 2014, 110, 140-151.	5.8	26
46	A generalized model for heterogeneous and anisotropic beams including section distortions. Thin-Walled Structures, 2014, 74, 85-103.	5.3	61
47	Direct Evaluation of the Post-Buckling Behavior of Slender Structures Through a Numerical Asymptotic Formulation. , 2014, , 203-228.		9
48	A mixed beam model with non-uniform warpings derived from the Saint VenÃnt rod. Computers and Structures, 2013, 121, 87-98.	4.4	52
49	Nonlinear FEM analysis for beams and plate assemblages based on the implicit corotational method. Journal of Mechanics of Materials and Structures, 2012, 7, 539-574.	0.6	40
50	The implicit corotational method and its use in the derivation of nonlinear structural models for beams and plates. Journal of Mechanics of Materials and Structures, 2012, 7, 509-538.	0.6	51
51	An algorithm for incremental elastoplastic analysis using equality constrained sequential quadratic programming. Computers and Structures, 2012, 102-103, 97-107.	4.4	24
52	A unified mathematical programming formulation of strain driven and interior point algorithms for shakedown and limit analysis. International Journal for Numerical Methods in Engineering, 2011, 88, 1085-1111.	2.8	53
53	Three field finite elements for the elastoplastic analysis of 2D continua. Finite Elements in Analysis and Design, 2011, 47, 1119-1130.	3.2	25
54	Asymptotic post-buckling FEM analysis using corotational formulation. International Journal of Solids and Structures, 2009, 46, 377-397.	2.7	91

#	Article	IF	Citations
55	A numerical analysis of infinitesimal mechanisms. International Journal for Numerical Methods in Engineering, 2005, 62, 979-1012.	2.8	12
56	Finite element shakedown analysis of two-dimensional structures. International Journal for Numerical Methods in Engineering, 2005, 63, 1174-1202.	2.8	82
57	Path-following analysis of thin-walled structures and comparison with asymptotic post-critical solutions. International Journal for Numerical Methods in Engineering, 2002, 55, 73-100.	2.8	36
58	An iterative method for shakedown analysis. Computer Methods in Applied Mechanics and Engineering, 2002, 191, 5761-5792.	6.6	53
59	Mixed formulation in Koiter analysis of thin-walled beams. Computer Methods in Applied Mechanics and Engineering, 2001, 190, 3369-3399.	6.6	33
60	Extrapolation locking and its sanitization in Koiter's asymptotic analysis. Computer Methods in Applied Mechanics and Engineering, 1999, 180, 137-167.	6.6	42
61	Mixed formulation and locking in path-following nonlinear analysis. Computer Methods in Applied Mechanics and Engineering, 1998, 165, 247-272.	6.6	64
62	PERTURBATION APPROACH TO ELASTIC POST-BUCKLING ANALYSIS. Computers and Structures, 1998, 66, 585-595.	4.4	57
63	KOITER'S ANALYSIS OF THIN-WALLED STRUCTURES BY A FINITE ELEMENT APPROACH. International Journal for Numerical Methods in Engineering, 1996, 39, 3007-3031.	2.8	57
64	Asymptotic post-buckling analysis of rectangular plates by HC finite elements. International Journal for Numerical Methods in Engineering, 1995, 38, 2325-2345.	2.8	71
65	A General Model for the Analysis of Beams Including Warping Effects. , 0, , .		0
66	A Nonlinear Model for the Analysis of Composite Beams including Warping Effects. , 0, , .		0
67	Efficient Shakedown Analysis of Reinforced Concrete Three-Dimensional Frames subject to a Large Number of Loads. , 0, , .		0
68	Shakedown Analysis of Three-Dimensional Frames subjected to Complex Static and Seismic Loads. , 0, , .		0
69	A Geometrical Exact Three-Dimensional Beam Model including the Effects of Section Distortions. , 0, , .		0
70	Mixed Finite Elements with Enhanced Plastic Behavior. , 0, , .		0
71	A Nonlinear Algorithm for the Analysis of Elastoplastic Structures Modelled with Mixed Finite Elements. , 0, , .		0
72	A reduced order model for nonlinear time history seismic analyzes of elastoâ€plastic 3D frame structures. Earthquake Engineering and Structural Dynamics, 0, , .	4.4	4