Luciano Demasi

List of Publications by Year
in descending order

89 papers	2,584 citations	218677 26 h-index	206112 48 g-index
91 all docs	91 docs citations	91 times ranked	662 citing authors

#	Article	IF	Citations
1	Partitioned parametrized variational procedure for the generation of theorems of structural analysis. Mechanics of Advanced Materials and Structures, 2023, 30, 1749-1768.	2.6	3
2	Partitioned Parametrized Variational Procedure for the Generation of Theorems of Structural Analysis. , 2022, , .		1
3	Optimum Induced Drag of Wingtip Devices: The Concept of Best Winglet Design. Aerotecnica Missili & Spazio, 2022, 101, 61-93.	0.9	0
4	A hierarchical generalized formulation for the large-displacement dynamic analysis of rotating plates. Computational Mechanics, 2021, 68, 1325-1347.	4.0	4
5	Reissnerâ€™s Mixed Variational Theorem and triangular finite element discretizations: an energetic interpretation. Thin-Walled Structures, 2021, 166, 107994.	5.3	1
6	Box Wing and Induced Drag: Compressibility Effect in Subsonic and Transonic Regimes. , 2020, , .		1
7	Properties and numerical solution of an integral equation system to minimize airplane drag for a multiwing system. Mathematical Methods in the Applied Sciences, 2020, , .	2.3	1
8	Computational Architecture Based on Murakami's Zig-Zag Function for the Geometrically Nonlinear Analysis of Variable Angle Tow Laminates. , 2020, , .		1
9	Reissner's Mixed Variational Theorem and Energy Reconstitution for Triangular Elements. , 2020, , .		0
10	Box Wing and Induced Drag: Compressibility Effects in Subsonic and Transonic Regimes. AIAA Journal, 2020, 58, 2398-2413.	2.6	5
11	Large displacement models for composites based on Murakami's Zig-Zag Function, Green-Lagrange Strain Tensor, and Generalized Unified Formulation. Thin-Walled Structures, 2020, 150, 106460.	5.3	9
12	Functional Reconstitution of Reissner Mixed Variational Theorem for Effective Finite Element Implementations. , 2019, , .		0
13	Minimum Induced Drag Conditions for Winglets: the Best Winglet Design Concept. , 2019, , .		4
14	Generalized Unified Formulation - Based Bending Analysis of Variable Angle Tow Panels in the Presence of Hole. , 2018, , .		3
15	Minimum Induced Drag Conditions for Truss-Braced Wings. , 2018, , .		3
16	Minimum Induced Drag Conditions for Truss-Braced Wings. AIAA Journal, 2018, 56, 4669-4684.	2.6	17
17	Properties and Numerical Solution of an Integral Equation to Minimize Airplane Drag. , 2018, , 675-701.		2
18	Zig-Zag and Layerwise Models for Variable-Stiffness Composite Laminates Based on the Generalized Unified Formulation. , 2017, , .		3

#	Article	IF	Citations
19	Equivalent Single Layer, Zig-Zag, and Layer Wise theories for variable angle tow composites based on the Generalized Unified Formulation. Composite Structures, 2017, 177, 54-79.	5.8	43
20	Reduced basis methods for structurally nonlinear Joined Wings. Aerospace Science and Technology, 2017, 68, 486-495.	4.8	5
21	Minimum Induced Drag Theorems for Multiwing Systems. AIAA Journal, 2017, 55, 3266-3287.	2.6	23
22	Aerodynamic and Structural Studies of a Flapping Wing in Forward Flight. AIAA Journal, 2016, 54, 2768-2781.	2.6	7
23	Minimum Induced Drag Theorems for Joined Wings, Closed Systems, and Generic Biwings: Theory. Journal of Optimization Theory and Applications, 2016, 169, 200-235.	1.5	23
24	Minimum Induced Drag Theorems for Joined Wings, Closed Systems, and Generic Biwings: Applications. Journal of Optimization Theory and Applications, 2016, 169, 236-261.	1.5	26
25	Challenges, Ideas, and Innovations of Joined-Wing Configurations: A Concept from the Past, an Opportunity for the Future. Progress in Aerospace Sciences, 2016, 87, 1-93.	12.1	111
26	Minimum Induced Drag Theorems for Multi-Wing Systems. , 2016, , .		7
27	Aeroelasticity of Joined Wings: Unique Aspects and Challenges. , 2016, , .		5
28	PrandtlPlane Joined Wing: Body Freedom Flutter, Limit Cycle Oscillation and Freeplay Studies. , 2015, , .		6
29	Post-critical analysis of highly deformable Joined Wings: The concept of snap-divergence as a characterization of the instability. Journal of Fluids and Structures, 2015, 54, 701-718.	3.4	9
30	Amphibious PrandtlPlane: Preliminary Design Aspects Including Propellers Integration and Ground Effect. , 2015, , .		6
31	Risks of linear design of joined wings: a non-linear dynamic perspective in the presence of follower forces. CEAS Aeronautical Journal, 2015, 6, 161-180.	1.7	5
32	Generalized Unified Formulation Shell Element for Functionally Graded Variable-Stiffness Composite Laminates and Aeroelastic Applications. , 2015, , .		4
33	Generalized Unified Formulation shell element for functionally graded Variable-Stiffness Composite Laminates and aeroelastic applications. Composite Structures, 2015, 131, 501-515.	5.8	21
34	PrandtlPlane Joined Wing: Body freedom flutter, limit cycle oscillation and freeplay studies. Journal of Fluids and Structures, 2015, 59, 57-84.	3.4	28
35	Minimum Induced Drag Theorems for Joined Wings, Closed systems, and Generic Biwings: Theory. , 2015, , .		10
36	Minimum Induced Drag Theorems for Joined Wings, Closed Systems, and Generic Biwings: Results. , 2015, , .		7

#	Article	IF	Citations
37	Phenomenology of nonlinear aeroelastic responses of highly deformable joined wings. Advances in Aircraft and Spacecraft Science, 2015, 2, 125-168.	0.5	18
38	Reduced Order Modeling for the Nonlinear Geometric Response of Some Joined Wings. , 2014, , .		12
39	A Computational Method for Structurally Nonlinear Joined Wings Based on Modal Derivatives. , 2014, , .		8
40	Phenomenology of Nonlinear Aeroelastic Responses of Highly Deformable Joined-wings Configurations. , 2014, , .		12
41	Nonlinear Analysis of PrandtlPlane Joined Wings: Effects of Anisotropy. AIAA Journal, 2014, 52, 964-980.	2.6	20
42	Invariant Formulation for the Minimum Induced Drag Conditions of Nonplanar Wing Systems. AIAA Journal, 2014, 52, 2223-2240.	2.6	57
43	An Invariant Formulation for the Minimum Induced Drag Conditions of Non-planar Wing Systems. , 2014, , .		6
44	A refined structural model for static aeroelastic response and divergence of metallic and composite wings. CEAS Aeronautical Journal, 2013, 4, 175-189.	1.7	11
45	Partially Layer Wise advanced Zig Zag and HSDT models based on the Generalized Unified Formulation. Engineering Structures, 2013, 53, 63-91.	5.3	42
46	Postcritical Analysis of PrandtlPlane Joined-Wing Configurations. AIAA Journal, 2013, 51, 161-177.	2.6	21
47	Assess the Accuracy of the Variational Asymptotic Plate and Shell Analysis Using the Generalized Unified Formulation. Mechanics of Advanced Materials and Structures, 2013, 20, 227-241.	2.6	40
48	Post-Critical Analysis of Joined Wings: the Concept of Snap-Divergence as a Characterization of the Instability. , 2013, , .		10
49	Risks of Linear Design of Joined Wings: a Nonlinear Dynamic Perspective in the Presence of Follower Forces. , 2013, , .		9
50	Nonlinear Analysis of PrandtlPlane Joined Wings. Part II: Effects of Anisotropy. , 2012, , .		13
51	Exploratory Structural Investigation of a Hawkmoth-Inspired MAV's Thorax. International Journal of Micro Air Vehicles, 2012, 4, 291-304.	1.3	2
52	Partially Zig-Zag Advanced Higher Order Shear Deformation Theories Based on the Generalized Unified Formulation. Composite Structures, 2012, 94, 363-375.	5.8	34
53	Flutter Failure Risk Assessment for Damage-Tolerant Composite Aircraft Structures. AIAA Journal, 2011, 49, 655-669.	2.6	18
54	Vibration Analysis of Anisotropic Simply Supported Plates by Using Variable Kinematic and Rayleigh-Ritz Method. Journal of Vibration and Acoustics, Transactions of the ASME, 2011, 133, .	1.6	37

#	Article	IF	Citations
55	Invariant Finite Element Model for Composite Structures: The Generalized Unified Formulation. AIAA Journal, 2010, 48, 1602-1619.	2.6	21
56	A Reduced Order Nonlinear Aeroelastic Analysis of Joined Wings Based on the Proper Orthogonal Decomposition. , 2010, , .		15
57	An Improved Beam Formulation for Aeroelastic Applications. , 2010, , .		4
58	Free Vibration of Sandwich Plates and Shells by Using Zig-Zag Function. Shock and Vibration, 2009, 16, 495-503.	0.6	23
59	Dynamic Aeroelasticity of Structurally Nonlinear Configurations Using Linear Modally Reduced Aerodynamic Generalized Forces. AIAA Journal, 2009, 47, 70-90.	2.6	39
60	Improved Response of Unsymmetrically Laminated Sandwich Plates by Using Zig-zag Functions. Journal of Sandwich Structures and Materials, 2009, 11, 257-267.	3.5	31
61	Three-Dimensional Closed Form Solutions and âˆž³Theories for Orthotropic Plates. Mechanics of Advanced Materials and Structures, 2009, 17, 20-39.	2.6	11
62	Aeroelastic coupling of geometrically nonlinear structures and linear unsteady aerodynamics: Two formulations. Journal of Fluids and Structures, 2009, 25, 918-935.	3.4	27
63	Mixed plate theories based on the Generalized Unified Formulation. Part V: Results. Composite Structures, 2009, 88, 1-16.	5.8	100
64	Mixed plate theories based on the Generalized Unified Formulation. Part IV: Zig-zag theories. Composite Structures, 2009, 87, 195-205.	5.8	109
65	Mixed plate theories based on the Generalized Unified Formulation. Part III: Advanced mixed high order shear deformation theories. Composite Structures, 2009, 87, 183-194.	5.8	93
66	Mixed plate theories based on the Generalized Unified Formulation.. Composite Structures, 2009, 87, 12-22.	5.8	121
67	Mixed plate theories based on the Generalized Unified Formulation. Part I: Governing equations. Composite Structures, 2009, 87, 1-11.	5.8	154
68	Improved bending analysis of sandwich plates using a zig-zag function. Composite Structures, 2009, 89, 408-415.	5.8	79
69	An Invariant Model for any Composite Plate Theory and FEM Applications: The Generalized Unified Formulation. , 2009, , .		5
70	Assess the Accuracy of the Variational Asymptotic Plate and Shell Analysis (VAPAS) using the Generalized Unified Formulation (GUF). , 2009, , .		2
71	âˆž3 Hierarchy plate theories for thick and thin composite plates: The generalized unified formulation. Composite Structures, 2008, 84, 256-270.	5.8	146
72	2D, Quasi 3D and 3D Exact Solutions for Bending of Thick and Thin Sandwich Plates. Journal of Sandwich Structures and Materials, 2008, 10, 271-310.	3.5	48

#	Article	IF	Citations
73	Investigation on the Conditions of Minimum Induced Drag of Closed Wing Systems and C-Wings. Journal of Aircraft, 2007, 44, 81-99.	2.4	40
74	The Structural Order Reduction Challenge in the Case of Geometrically Nonlinear Joined-Wing Confgurations. , 2007, , .		20
75	Dynamic Aeroelasticity of Structurally Nonlinear Configurations Using Linear Modally Reduced Aerodynamic Generalized Forces. , 2007, , .		3
76	Three-dimensional closed form solutions and exact thin plate theories for isotropic plates. Composite Structures, 2007, 80, 183-195.	5.8	52
77	Aeroelasticity of Structurally Nonlinear Lifting Surfaces Using Linear Modally Reduced Aerodynamic Generalized Forces. , 2006, , .		5
78	Quasi-3D analysis of free vibration of anisotropic plates. Composite Structures, 2006, 74, 449-457.	5.8	15
79	Treatment of stress variables in advanced multilayered plate elements based upon Reissnerâ€™s mixed variational theorem. Computers and Structures, 2006, 84, 1215-1221.	4.4	24
80	Erratum on "Induced Drag Minimization: A Variational Approach Using the Acceleration Potential. Journal of Aircraft, 2006, 43, 1247-1247.	2.4	9
81	Structural Ritz-Based Simple-Polynomial Nonlinear Equivalent Plate Approach: An Assessment. Journal of Aircraft, 2006, 43, 1685-1697.	2.4	9
82	Induced Drag Minimization: A Variational Approach Using the Acceleration Potential. Journal of Aircraft, 2006, 43, 669-680.	2.4	29
83	Refined multilayered plate elements based on Murakami zigâ€“zag functions. Composite Structures, 2005, 70, 308-316.	5.8	111
84	Structural Ritz-Based Simple-Polynomial Nonlinear Equivalent Plate Approach - An Assessment. , 2005, , .		3
85	Exploratory Studies of Joined-Wing Aeroelasticity. , 2005, , .		24
86	Two Benchmarks to Assess Two-Dimensional Theories of Sandwich, Composite Plates. AIAA Journal, 2003, 41, 1356-1362.	2.6	46
87	Assessment of Plate Elements on Bending and Vibrations of Composite Structures. Mechanics of Advanced Materials and Structures, 2002, 9, 333-357.	2.6	27
88	Classical and advanced multilayered plate elements based upon PVD and RMVT. Part 1: Derivation of finite element matrices. International Journal for Numerical Methods in Engineering, 2002, 55, 191-231.	2.8	198
89	Classical and advanced multilayered plate elements based upon PVD and RMVT. Part 2: Numerical implementations. International Journal for Numerical Methods in Engineering, 2002, 55, 253-291.	2.8	166