

# Giacomo Frulla

## List of Publications by Year in descending order

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53  
papers

621  
citations

759233

12  
h-index

677142

22  
g-index

53  
all docs

53  
docs citations

53  
times ranked

319  
citing authors

#	ARTICLE	IF	CITATIONS
1	HELIPLAT: Design, Aerodynamic, Structural Analysis of Long- Endurance Solar-Powered Stratospheric Platform. <i>Journal of Aircraft</i> , 2004, 41, 1505-1520.	2.4	84
2	Design of a High-Altitude Long-Endurance Solar-Powered Unmanned Air Vehicle for Multi-Payload and Operations. <i>Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering</i> , 2007, 221, 199-216.	1.3	52
3	Design, manufacturing and testing of a HALE-UAV structural demonstrator. <i>Composite Structures</i> , 2008, 83, 143-153.	5.8	42
4	Post-buckling behaviour of graphite/epoxy stiffened panels with initial imperfections subjected to eccentric biaxial compression loading. <i>International Journal of Non-Linear Mechanics</i> , 1997, 32, 1017-1033.	2.6	40
5	Stability and Control of a High-Altitude, Long-Endurance UAV. <i>Journal of Guidance, Control, and Dynamics</i> , 2007, 30, 713-721.	2.8	34
6	Structural Uncertainty Effect on Classical Wing Flutter Characteristics. <i>Journal of Aerospace Engineering</i> , 2010, 23, 327-338.	1.4	32
7	Heliplat®: high altitude very-long endurance solar powered UAV for telecommunication and Earth observation applications. <i>Aeronautical Journal</i> , 2004, 108, 277-293.	1.6	31
8	Nonlinear analysis of anisotropic plates with initial imperfections and various boundary conditions subjected to combined biaxial compression and shear loads. <i>International Journal of Solids and Structures</i> , 1994, 31, 763-783.	2.7	26
9	Critical behaviour of slender wing configurations. <i>Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering</i> , 2010, 224, 587-600.	1.3	22
10	Energy harvesting from aeroelastic vibrations induced by discrete gust loads. <i>Journal of Intelligent Material Systems and Structures</i> , 2017, 28, 47-62.	2.5	21
11	Nonlinear LCO amplitude-frequency characteristics for plates fluttering at supersonic speeds. <i>International Journal of Non-Linear Mechanics</i> , 2015, 77, 51-60.	2.6	19
12	HELIPLAT: Aerodynamic and Structural Analysis of HAVE Solar Powered Platform.. , 2002, , .		18
13	Experimental Slender Wing Model Design by the Application of Aeroelastic Scaling Laws. <i>Journal of Aerospace Engineering</i> , 2014, 27, 112-120.	1.4	15
14	Aeroelastic behaviour of a solar-powered high-altitude long endurance unmanned air vehicle (HALE-UAV) slender wing. <i>Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering</i> , 2004, 218, 179-188.	1.3	13
15	Preliminary reliability design of a solar-powered high-altitude very long endurance unmanned air vehicle. <i>Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering</i> , 2002, 216, 189-196.	1.3	12
16	Nonlinear Aeroelastic Modeling and Experiments of Flexible Wings. , 2006, , .		11
17	A Reduced Order Model for the Aeroelastic Analysis of Flexible Wings. <i>SAE International Journal of Aerospace</i> , 0, 6, 447-458.	4.0	11
18	Experimental and numerical vibration analysis of plates with curvilinear sub-stiffeners. <i>Engineering Structures</i> , 2020, 209, 109956.	5.3	11

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19	Rigid rotor dynamic stability using Floquet theory. European Journal of Mechanics, A/Solids, 2000, 19, 139-150.	3.7	10
20	A variable twist blade concept for more effective wind generation: design and realization. Smart Science, 2016, 4, 78-86.	3.2	10
21	Numerical simulation and experimental validation of slender wings flutter behaviour. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2019, 233, 5913-5928.	1.3	9
22	Nonlinear analysis of graphite epoxy/wing boxes under pure bending including lateral pressure. Journal of Aircraft, 1995, 32, 1375-1381.	2.4	8
23	Analytical and Experimental Results of the Coefficient of Thermal Expansion of High-Modulus Graphite-Epoxy Materials. Journal of Composite Materials, 1995, 29, 751-765.	2.4	7
24	Numerical/experimental structural characterization of composite advanced joints for HALE-UAV platforms. Composites Part B: Engineering, 2008, 39, 656-664.	12.0	7
25	Analysis of slender thin-walled anisotropic box-beams including local stiffness and coupling effects. Aircraft Engineering and Aerospace Technology, 2014, 86, 345-355.	0.8	7
26	A New Test Facility for Measuring the Coefficient of Moisture Expansion of Advanced Composite Materials. Journal of Composites Technology and Research, 1992, 14, 225.	0.4	6
27	Graph-based element removal method for topology synthesis of beam based ground structures. Structural and Multidisciplinary Optimization, 2018, 57, 1809-1813.	3.5	5
28	HALE wing experiments and computational models to predict nonlinear flutter and dynamic response. Aeronautical Journal, 2019, 123, 912-946.	1.6	5
29	Generalized topology for resonators having N commensurate harmonics. Journal of Sound and Vibration, 2018, 419, 585-603.	3.9	4
30	Nonlinear angle of twist of advanced composite wing boxes under pure torsion. Journal of Aircraft, 1994, 31, 1297-1302.	2.4	3
31	Cicala's asymptotic approach to the linear shell theory. Composite Structures, 2001, 52, 13-26.	5.8	3
32	Development of an Aeroelastic Wing Model With Piezoelectric Elements for Gust Load Alleviation and Energy Harvesting. , 2014, , .		3
33	Parametric analysis of a fluttering piezoelectric wing. Aircraft Engineering and Aerospace Technology, 2016, 88, 382-388.	0.8	3
34	Constrained combinatorial optimization of multi-layered composite structures by means of Stud GA with proportionate selection and extinction. Structural and Multidisciplinary Optimization, 2017, 55, 2239-2257.	3.5	3
35	Application of Structural Topology Optimization to Couple Thin-Walled Stiffened Box-Beams. , 0, , .		3
36	Numerical/Experimental Validation of Thin-Walled Composite Box Beam Optimal Design. Aerospace, 2020, 7, 111.	2.2	3

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37	Didactical Tool for Wing Weight Estimation in a Preliminary Aircraft Design Stage. WSEAS TRANSACTIONS on ADVANCES in ENGINEERING EDUCATION, 2021, 18, 78-85.	0.4	3
38	Research Activities on Buckling of Composite Structures in Italy. , 2009, , .		2
39	Theoretical and Experimental Flutter Predictions in High Aspect Ratio Composite Wings. SAE International Journal of Aerospace, 2011, 4, 1365-1372.	4.0	2
40	WindDesigner: An open tool for analysis and design of wind generators. , 2013, , .		2
41	Static/Fatigue Structural Behaviour of Damaged Stiffened Composite Plates for UAS Applications. , 2013, , .		2
42	The Influence of Supersonic Stream on the Dependence "Amplitude-Frequency" of Nonlinear Vibrations of Flexible Plate. , 0, , .		2
43	A Multi-Objective Nonlinear Piezoaeroelastic Wing Solution for Energy Harvesting and Load Alleviation: Modeling and Simulation. , 2015, , .		2
44	Preliminary evaluation of the fatigue behaviour of aluminium alloy in corrosive environment. Aircraft Engineering and Aerospace Technology, 2015, 87, 165-171.	0.8	2
45	Aeroelastic Behaviour of Flexible Wings Carrying Distributed Electric Propulsion Systems. , 0, , .		2
46	Efficient Procedure for Robust Optimal Design of Aerospace Laminated Structures. , 0, , .		2
47	An invariant-based performance-oriented procedure for preliminary design of composite structures. Aircraft Engineering and Aerospace Technology, 2018, 90, 532-541.	1.2	2
48	Topology synthesis of planar ground structures for energy harvesting applications. , 2017, , .		2
49	Stability, Control, and Simulation of High-Altitude-Long-Endurance UAVs. , 2006, , .		1
50	A Possible Adaptive Wing Apparatus for New UAV Configurations. , 0, , .		1
51	MDO/MSO of Slender Thin Walled Box Beam Model. , 2017, , .		1
52	Nonlinear Slender Beam-Wise Schemes for Structural Behavior of Flexible UAS Wings. , 2015, , .		0
53	Simplified procedure for damage-oriented evaluation of a stiffened panel with skin-stringer de-bonding in preliminary design stage. Aeronautics and Aerospace Open Access Journal, 2021, 5, 95-101.	0.2	0