

Alessandro Airoidi

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4759669/publications.pdf>

Version: 2024-02-01

35
papers

818
citations

687363

13
h-index

501196

28
g-index

38
all docs

38
docs citations

38
times ranked

678
citing authors

#	ARTICLE	IF	CITATIONS
1	Composite chiral structures for morphing airfoils: Numerical analyses and development of a manufacturing process. <i>Composites Part B: Engineering</i> , 2010, 41, 133-147.	12.0	147
2	Modelling of impact forces and pressures in Lagrangian bird strike analyses. <i>International Journal of Impact Engineering</i> , 2006, 32, 1651-1677.	5.0	107
3	Chiral topologies for composite morphing structures – Part I: Development of a chiral rib for deformable airfoils. <i>Physica Status Solidi (B): Basic Research</i> , 2015, 252, 1435-1445.	1.5	69
4	Identification of material parameters for modelling delamination in the presence of fibre bridging. <i>Composite Structures</i> , 2012, 94, 3240-3249.	5.8	52
5	Foam-filled energy absorbers with auxetic behaviour for localized impacts. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 788, 139500.	5.6	48
6	A design solution for a crashworthy landing gear with a new triggering mechanism for the plastic collapse of metallic tubes. <i>Aerospace Science and Technology</i> , 2005, 9, 445-455.	4.8	47
7	Design of a Morphing Airfoil with Composite Chiral Structure. <i>Journal of Aircraft</i> , 2012, 49, 1008-1019.	2.4	44
8	Chiral topologies for composite morphing structures – Part II: Novel configurations and technological processes. <i>Physica Status Solidi (B): Basic Research</i> , 2015, 252, 1446-1454.	1.5	36
9	Reliability of strain monitoring of composite structures via the use of optical fiber ribbon tapes for structural health monitoring purposes. <i>Composite Structures</i> , 2015, 134, 762-771.	5.8	32
10	Carbon Fiber Reinforced Smart Laminates with Embedded SMA Actuators – Part I: Embedding Techniques and Interface Analysis. <i>Journal of Materials Engineering and Performance</i> , 2009, 18, 664-671.	2.5	26
11	Efficient modelling of forces and local strain evolution during delamination of composite laminates. <i>Composites Part B: Engineering</i> , 2015, 72, 137-149.	12.0	21
12	Modelling competitive delamination and debonding phenomena in composite T-Joints. <i>Procedia Engineering</i> , 2011, 10, 3483-3489.	1.2	19
13	An efficient approach for modeling interlaminar damage in composite laminates with explicit finite element codes. <i>Journal of Reinforced Plastics and Composites</i> , 2013, 32, 1075-1091.	3.1	16
14	Fibre optics health monitoring for aeronautical applications. <i>Meccanica</i> , 2015, 50, 2547-2567.	2.0	14
15	Design and manufacturing of skins based on composite corrugated laminates for morphing aerodynamic surfaces. <i>Smart Materials and Structures</i> , 2017, 26, 045024.	3.5	12
16	Failure and energy absorption of plastic and composite chiral honeycombs. <i>WIT Transactions on the Built Environment</i> , 2012, , .	0.0	11
17	Design of a Motorcycle Composite Swing-Arm by Means of Multi-objective Optimisation. <i>Applied Composite Materials</i> , 2012, 19, 599-618.	2.5	10
18	Composite Corrugated Laminates for Morphing Applications. , 2018, , 247-276.		10

#	ARTICLE	IF	CITATIONS
19	Carbon Fiber-Reinforced Smart Laminates with Embedded SMA Actuators”Part II: Numerical Models and Empirical Correlations. Journal of Materials Engineering and Performance, 2009, 18, 672-678.	2.5	9
20	Thermomechanical response of out-of-autoclave infused carbon-phenolic laminates for rocket engine applications subjected to surface ablation. Composites Part A: Applied Science and Manufacturing, 2022, 159, 107035.	7.6	9
21	Characterization of the interface between composites and embedded Fiber Optic sensors or NiTiNOL wires. Procedia Engineering, 2011, 10, 3490-3496.	1.2	8
22	Compression Behavior of EBM Printed Auxetic Chiral Structures. Materials, 2022, 15, 1520.	2.9	8
23	A bi-phasic modelling approach for interlaminar and intralaminar damage in the matrix of composite laminates. Composite Structures, 2020, 234, 111747.	5.8	7
24	Design of a morphing actuated aileron with chiral composite internal structure. Advances in Aircraft and Spacecraft Science, 2014, 1, 331-351.	0.5	7
25	Analysis of residual stresses and interface damage propagation in hybrid composite/metallic elements monitored through optical fiber sensors. Aerospace Science and Technology, 2022, 129, 107373.	4.8	7
26	Design of Skid Landing Gears by Means of Multibody Optimization. Journal of Aircraft, 2006, 43, 555-563.	2.4	5
27	Design of a Leading Edge Morphing Based on Compliant Structures in the Framework of the CS2-AIRGREEN2 Project. , 2018, , .		5
28	Application of an iterative global approximation technique to structural optimizations. Optimization and Engineering, 2009, 10, 109-132.	2.4	4
29	Strain field reconstruction on composite spars based on the identification of equivalent load conditions. Proceedings of SPIE, 2017, , .	0.8	4
30	Development of an actuated corrugated laminate for morphing structures. Aeronautical Journal, 2021, 125, 180-204.	1.6	4
31	Direct search of feasible region and application to a crashworthy helicopter seat. Structural and Multidisciplinary Optimization, 2012, 45, 875-887.	3.5	3
32	Development of a numerical mesoscale material model for short fibre-reinforced ceramics matrix composites. Journal of Materials Science, 2013, 48, 1646-1659.	3.7	3
33	Shear post-buckling behavior of Glare modeling fiberglass damage. , 2006, , .		2
34	Smart structures for deformable mirrors actuated by piezocomposites. Proceedings of SPIE, 2010, , .	0.8	1
35	Experimental Identification of Frictional Effects on Interlaminar Toughness of Composite Laminates in 4ENF Test. Experimental Mechanics, 2022, 62, 1135-1145.	2.0	1