

Antonio Concilio

List of Publications by Year in descending order

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118
papers

1,243
citations

331670

21
h-index

454955

30
g-index

123
all docs

123
docs citations

123
times ranked

498
citing authors

#	ARTICLE	IF	CITATIONS
1	Airfoil Structural Morphing Based on S.M.A. Actuator Series: Numerical and Experimental Studies. <i>Journal of Intelligent Material Systems and Structures</i> , 2011, 22, 987-1004.	2.5	73
2	Design and Functional Test of a Morphing High-Lift Device for a Regional Aircraft. <i>Journal of Intelligent Material Systems and Structures</i> , 2011, 22, 1005-1023.	2.5	72
3	A Novel SMA-based Concept for Airfoil Structural Morphing. <i>Journal of Materials Engineering and Performance</i> , 2009, 18, 696-705.	2.5	62
4	Wing Shape Control through an SMA-Based Device. <i>Journal of Intelligent Material Systems and Structures</i> , 2009, 20, 283-296.	2.5	53
5	Actuation System Design for a Morphing Wing Trailing Edge. <i>Recent Patents on Mechanical Engineering</i> , 2014, 7, 138-148.	0.3	44
6	Validation of a smart structural concept for wing-flap camber morphing. <i>Smart Structures and Systems</i> , 2014, 14, 659-678.	1.9	43
7	Optimization and integration of shape memory alloy (SMA)-based elastic actuators within a morphing flap architecture. <i>Journal of Intelligent Material Systems and Structures</i> , 2012, 23, 381-396.	2.5	40
8	Morphing wings review: aims, challenges, and current open issues of a technology. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2023, 237, 4112-4130.	2.1	39
9	Aero-servo-elastic design of a morphing wing trailing edge system for enhanced cruise performance. <i>Aerospace Science and Technology</i> , 2019, 86, 215-235.	4.8	36
10	Numerical and experimental transition results evaluation for a morphing wing and aileron system. <i>Aeronautical Journal</i> , 2018, 122, 747-784.	1.6	35
11	A new semi-active suspension system for racing vehicles. <i>FME Transactions</i> , 2017, 45, 578-584.	1.4	33
12	Load monitoring of aircraft landing gears using fiber optic sensors. <i>Sensors and Actuators A: Physical</i> , 2018, 281, 31-41.	4.1	27
13	Passengers' Comfort Modeling Inside Aircraft. <i>Journal of Aircraft</i> , 2008, 45, 2001-2008.	2.4	26
14	Design and integration sensitivity of a morphing trailing edge on a reference airfoil: The effect on high-altitude long-endurance aircraft performance. <i>Journal of Intelligent Material Systems and Structures</i> , 2017, 28, 2933-2946.	2.5	24
15	Aeroelastic Assessments and Functional Hazard Analysis of a Regional Aircraft Equipped with Morphing Winglets. <i>Aerospace</i> , 2019, 6, 104.	2.2	24
16	Integrated Design of a Morphing Winglet for Active Load Control and Alleviation of Turboprop Regional Aircraft. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 2439.	2.5	24
17	Estimated performance of an adaptive trailing-edge device aimed at reducing fuel consumption on a medium-size aircraft. <i>Proceedings of SPIE</i> , 2013, , .	0.8	23
18	Numerical and experimental validation of a full scale servo-actuated morphing aileron model. <i>Smart Materials and Structures</i> , 2018, 27, 105034.	3.5	23

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19	Stringer debonding edge detection employing fiber optics by combined distributed strain profile and wave scattering approaches for non-model based SHM. Composite Structures, 2019, 216, 58-66.	5.8	22
20	SARISTU: Adaptive Trailing Edge Device (ATED) design process review. Chinese Journal of Aeronautics, 2021, 34, 187-210.	5.3	22
21	A shape memory alloy torsion actuator for static blade twist. Journal of Intelligent Material Systems and Structures, 2019, 30, 2605-2626.	2.5	21
22	An adaptive control system for wing TE shape control. Proceedings of SPIE, 2013, , .	0.8	17
23	Structural Design of an Adaptive Wing Trailing Edge for Enhanced Cruise Performance. , 2016, , .		17
24	KRISTINA: Kinematic rib-based structural system for innovative adaptive trailing edge. Proceedings of SPIE, 2016, , .	0.8	16
25	Safety and Reliability Aspects of an Adaptive Trailing Edge Device (ATED). , 2016, , .		16
26	Preliminary design of an adaptive aileron for next generation regional aircraft. Journal of Theoretical and Applied Mechanics, 0, , 307.	0.5	15
27	A Shape Memory Alloy Application for Compact Unmanned Aerial Vehicles. Aerospace, 2016, 3, 16.	2.2	14
28	A single slotted morphing flap based on SMA technology. Smart Structures and Systems, 2016, 17, 819-835.	1.9	14
29	Quadratic nonlinear optical and preliminary piezoelectric investigation of crosslinked samples obtained from a liquid chromophore. Journal of Polymer Science, Part B: Polymer Physics, 2012, 50, 650-655.	2.1	13
30	Skinâ€stringer debonding detection using distributed dispersion index features. Structural Health Monitoring, 2018, 17, 1245-1254.	7.5	13
31	Active vibration control using fiber Bragg grating sensors and piezoelectric actuators in co-located configuration. , 2007, , .		11
32	Distributed electromechanical actuation system design for a morphing trailing edge wing. Proceedings of SPIE, 2016, , .	0.8	11
33	An original device for train bogie energy harvesting: a real application scenario. Smart Structures and Systems, 2015, 16, 383-399.	1.9	11
34	Preliminary Design Process for an Adaptive Winglet. International Journal of Mechanical Engineering and Robotics Research, 2017, 6, 83-92.	1.0	11
35	A multi-scaled demonstrator for aircraft weight and balance measurements based on FBC sensors: Design rationale and experimental characterization. Measurement: Journal of the International Measurement Confederation, 2019, 141, 113-123.	5.0	10
36	Static and Dynamic Performance of a Morphing Trailing Edge Concept with High-Damping Elastomeric Skin. Aerospace, 2019, 6, 22.	2.2	10

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37	Airfoil Morphing Architecture Based on Shape Memory Alloys. , 2008, , .		9
38	Influence of structural architecture on linear shape memory alloy actuator performance and morphing system layout optimisation. Journal of Intelligent Material Systems and Structures, 2014, 25, 2037-2051.	2.5	9
39	Actuation System Design for a Morphing Aileron. Applied Mechanics and Materials, 2015, 798, 582-588.	0.2	9
40	AIRGREEN2 - Clean Sky 2 Programme: Adaptive Wing Technology Maturation, Challenges and Perspectives. , 2018, , .		9
41	Impact area and debonding line detection assessment by cross-correlation analysis and distributed sensing. Optical Fiber Technology, 2020, 58, 102245.	2.7	9
42	A SMA-based morphing flap: conceptual and advanced design. Smart Structures and Systems, 2015, 16, 555-577.	1.9	9
43	<title>Active shape airfoil control through composite-piezoceramic actuators</title>. , 2001, 4327, 641.		8
44	Monito-Ring: An original fiber optic system for morphing application. Journal of Intelligent Material Systems and Structures, 2015, 26, 2463-2476.	2.5	8
45	Historical Background and Future Perspectives. , 2015, , 3-30.		8
46	Car Soundproof Improvement through an SMA Adaptive System. Actuators, 2018, 7, 88.	2.3	8
47	Distributed Actuation and Control of a Morphing Wing Trailing Edge. , 2016, , 171-186.		8
48	Synchronized Switched Shunt Control Technique Applied on a Cantilevered Beam: Numerical and Experimental Investigations. Journal of Intelligent Material Systems and Structures, 2008, 19, 1089-1100.	2.5	7
49	Shape Memory Polymer Composite Actuator: Modeling Approach for Preliminary Design and Validation. Actuators, 2019, 8, 51.	2.3	7
50	Specific Modeling Issues on an Adaptive Winglet Skeleton. Applied Sciences (Switzerland), 2021, 11, 3565.	2.5	7
51	FE Modeling of an Innovative Vibration Control Shunt Technique. Journal of Intelligent Material Systems and Structures, 2008, 19, 875-887.	2.5	6
52	Design of an MR Based on Device for the Adaptive Stiffness Control of Tail Shafts. Journal of Intelligent Material Systems and Structures, 2009, 20, 837-848.	2.5	6
53	Numerical design of an adaptive aileron. , 2016, , .		6
54	A Preliminary Assessment of an FBG-Based Hard Landing Monitoring System. Photonics, 2021, 8, 450.	2.0	6

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55	Whirl Tower Demonstration of an SMA Blade Twist System. <i>Actuators</i> , 2022, 11, 141.	2.3	6
56	De-Bonding Numerical Characterization and Detection in Aeronautic Multi-Element Spars. <i>Sensors</i> , 2022, 22, 4152.	3.8	6
57	SMA Embedded Panel Optimized Through a Genetic Approach. <i>Journal of Intelligent Material Systems and Structures</i> , 2009, 20, 1529-1540.	2.5	5
58	Multi-tone Switching Shunt Control by a PZT Network Embedded into a Fiberglass Panel: Design, Manufacture, and Test. <i>Journal of Intelligent Material Systems and Structures</i> , 2010, 21, 437-451.	2.5	5
59	SMA-Based System for Environmental Sensors Released from an Unmanned Aerial Vehicle. <i>Aerospace</i> , 2017, 4, 4.	2.2	5
60	Historical Background and Current Scenario. , 2018, , 3-84.		5
61	Damage Detection of CFRP Stiffened Panels by Using Cross-Correlated Spatially Shifted Distributed Strain Sensors. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 2662.	2.5	5
62	Manufacturing and Testing of Smart Morphing SARISTU Trailing Edge. , 2016, , 199-215.		5
63	Morphing Technologies: Adaptive Ailerons. , 2016, , .		4
64	Shape Sensing for Morphing Structures Using Fiber Bragg Grating Technology. , 2016, , 471-491.		4
65	Structural Design of an Adaptive Wing Trailing Edge for Large Aeroplanes. , 2016, , 159-170.		4
66	Technological demonstration of an adaptive aileron system. , 2018, , .		4
67	Sensitivity analysis of OFDR-based distributed sensing for flaws detection in representative coupon from filament wound motor vessel. , 2018, , .		4
68	A fiber optic sensors system for load monitoring on aircraft landing gears. , 2019, , .		4
69	Status and Perspectives of Commercial Aircraft Morphing. <i>Biomimetics</i> , 2022, 7, 11.	3.3	4
70	FBG sensor system for trailing edge chord-wise hinge rotation measurements. , 2013, , .		3
71	Shape memory polymeric composites sensing by optic fibre Bragg gratings: A very first approach. <i>AIP Conference Proceedings</i> , 2016, , .	0.4	3
72	Primary Structural Components Characterization of an Adaptive Trailing Edge Device (ATED). , 2016, , .		3

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73	Aeroelastic analysis of an adaptive trailing edge with a smart elastic skin. AIP Conference Proceedings, 2017, , .	0.4	3
74	Circular Patch Sensor Based on Distributed Fiber Optic Technology for Tensile and Bending Loads Identification. IEEE Sensors Journal, 2017, 17, 5908-5914.	4.7	3
75	Landing gear hard impact: Preliminary study on optic monitoring system. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2023, 237, 4151-4162.	2.1	3
76	Aeroelastic stability analysis of a large civil aircraft equipped with morphing winglets and adaptive flap tabs. , 2018, , .		3
77	Hinge rotation of a morphing rib using FBG strain sensors. Smart Structures and Systems, 2015, 15, 1393-1410.	1.9	3
78	Use of artificial neural networks as estimators and controllers. , 1996, , .		2
79	Piezoelectric and electromagnetic solutions aimed at realizing an active Gurney flap. Journal of Intelligent Material Systems and Structures, 2013, 24, 924-935.	2.5	2
80	Numerical and Experimental Testing of a Morphing Upper Surface Wing Equipped with Conventional and Morphing Ailerons. , 2017, , .		2
81	An Adaptive Trailing Edge. , 2018, , 517-545.		2
82	Morphing Aileron. , 2018, , 547-582.		2
83	Shape memory alloys compact actuators for aerodynamic surfaces twisting. , 2020, , .		2
84	Control System Design for a Morphing Wing Trailing Edge. Computational Methods in Applied Sciences (Springer), 2017, , 175-193.	0.3	2
85	Effect of hinge elasticity on morphing winglet mechanical systems. , 2019, , .		2
86	Flutter analysis of a large civil aircraft in case of free-plays and internal failures of morphing wing flaps mechanical systems. , 2019, , .		2
87	Understanding Shape Memory Alloy Torsional Actuators: From the Conceptual to the Preliminary Design. Actuators, 2022, 11, 81.	2.3	2
88	Preliminary Assessment of an FBG-Based Landing Gear Weight on Wheel System. Actuators, 2022, 11, 191.	2.3	2
89	<title>Architecture definition of a piezoceramic-based ANN system for multiple-tone vibration suppression</title>. , 1999, , .		1
90	Feasibility study on rotorcraft blade morphing in hovering. , 2005, , .		1

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91	SMA Based Adaptive Tuneable Dynamic Vibration Absorbers for Noise Radiated Control. , 2005, , .		1
92	A Survey of Structural Health Monitoring Research in Italy. , 2009, , .		1
93	Actuation needs for an adaptive trailing edge device aimed at reducing fuel consumption on a regional aircraft. Proceedings of SPIE, 2013, , .	0.8	1
94	Design approach of a large strain sensor based on nanoparticle technology: A highly-integrable sensor for Morphing applications including SHM & shape reconstruction. , 2017, , .		1
95	Stress Analysis of a Morphing System. , 2018, , 451-488.		1
96	On the Experimental Characterization of Morphing Structures. , 2018, , 683-712.		1
97	Preliminary Assessment of Morphing Winglet and Flap Tabs Influence on the Aeroelastic Stability of Next Generation Regional Aircraft. , 2018, , .		1
98	A linear guide-based actuation concept for a novel morphing aileron. Aeronautical Journal, 2019, 123, 1075-1097.	1.6	1
99	Optimization design process of a morphing winglet. , 2018, , .		1
100	AN ADAPTIVE TRAILING EDGE FOR LARGE COMMERCIAL AIRCRAFT. , 2016, , .		1
101	Development of a conceptual demonstrator of a SMA-based Rotorcraft blade twist system. , 2019, , .		1
102	An Overview of the AG2 Project: Latest Achievements. , 2022, , .		1
103	Feed-forward adaptive system for vibration and sound radiation reduction phase I: architecture, definition, and specifications. , 1998, , .		0
104	Artificial neural network models to identify a comfort index for propeller and jet aircraft. , 2000, , .		0
105	An MRF-based device for the torque stiffness control of all movable vertical tails. , 2005, , .		0
106	Seismic protection of civil historical structures by MR dampers. , 2006, , .		0
107	A Broadband Acoustic Feedback Control System on Confined Area on Board of Aircraft. , 2007, , .		0
108	Optimisation of an SMA-Based Morphing Architecture. , 2010, , .		0

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109	FBG based transducers for morphing applications. , 2015, , .		0
110	A load identification sensor based on distributed fiber optic technology. Proceedings of SPIE, 2017, , .	0.8	0
111	Exploitation of Adaptive Trailing Edge Architectures to Small Aircraft. , 2017, , .		0
112	Ring patch sensor based on FBG array for normal and bending load recognition. , 2017, , .		0
113	Technological Solutions for Realising an Active Gurney Flap for Green Rotorcraft Applications, Based on Piezoelectrics and Electromagnets. , 2011, , .		0
114	Statistical Based Features Vector for Skin-stringer Debonding Detection. , 0, , .		0
115	An Overview of Adaptive Structures Engineering Activities at CIRA. , 2022, , .		0
116	Laboratory characterization of a SMA based system for blade morphing. , 2022, , .		0
117	Morphing Wing Technologies within the Airgreen 2 Project. , 2022, , .		0
118	SMA actuator for helicopter blade twist. , 2022, , .		0