

Martin Schagerl

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5515906/publications.pdf>

Version: 2024-02-01

70
papers

731
citations

759233

12
h-index

580821

25
g-index

73
all docs

73
docs citations

73
times ranked

520
citing authors

#	ARTICLE	IF	CITATIONS
1	Review of Structural Health Monitoring Methods Regarding a Multi-Sensor Approach for Damage Assessment of Metal and Composite Structures. <i>Sensors</i> , 2020, 20, 826.	3.8	106
2	Modelling, Dynamics and Control of Tethered Satellite Systems. <i>Nonlinear Dynamics</i> , 2006, 43, 73-96.	5.2	75
3	Application of electrical impedance tomography to an anisotropic carbon fiber-reinforced polymer composite laminate for damage localization. <i>Composites Science and Technology</i> , 2018, 160, 231-236.	7.8	65
4	A semi-analytical model for local post-buckling analysis of stringer- and frame-stiffened cylindrical panels. <i>Thin-Walled Structures</i> , 2006, 44, 102-114.	5.3	50
5	The effect of fiber waviness on the fatigue life of CFRP materials. <i>International Journal of Fatigue</i> , 2016, 90, 139-147.	5.7	48
6	On the paradox of the free falling folded chain. <i>Acta Mechanica</i> , 1997, 125, 155-168.	2.1	46
7	Slumping instabilities of elastic membranes holding liquids and gases. <i>International Journal of Non-Linear Mechanics</i> , 2005, 40, 1112-1138.	2.6	19
8	Characterization of the spatial elastoresistivity of inkjet-printed carbon nanotube thin films. <i>Smart Materials and Structures</i> , 2018, 27, 105009.	3.5	17
9	Thickness dependency of mechanical properties of laser-sintered polyamide lightweight structures. <i>Additive Manufacturing</i> , 2018, 23, 25-33.	3.0	17
10	In situ spatial strain monitoring of a single-lap joint using inkjet-printed carbon nanotube embedded thin films. <i>Structural Health Monitoring</i> , 2019, 18, 1479-1490.	7.5	14
11	Damage identification using wave damage interaction coefficients predicted by deep neural networks. <i>Ultrasonics</i> , 2022, 124, 106743.	3.9	14
12	Thickness dependent anisotropy of mechanical properties and inhomogeneous porosity characteristics in laser-sintered polyamide 12 specimens. <i>Additive Manufacturing</i> , 2020, 33, 101141.	3.0	13
13	Structural health monitoring of aerospace sandwich structures via strain measurements along zero-strain trajectories. <i>Engineering Failure Analysis</i> , 2021, 126, 105454.	4.0	13
14	Damage mechanisms under static and fatigue loading at locally compacted regions in a high pressure resin transfer molded carbon fiber non-crimp fabric. <i>Composites Part A: Applied Science and Manufacturing</i> , 2018, 115, 57-65.	7.6	11
15	Boundary conformal design of laser sintered sandwich cores and simulation of graded lattice cells using a forward homogenization Approach. <i>Materials and Design</i> , 2020, 190, 108539.	7.0	11
16	On the Capability of Measuring Actual Strain Values With Electrical Impedance Tomography Using Planar Silkscreen Printed Elastoresistive Sensors. <i>IEEE Sensors Journal</i> , 2021, 21, 5798-5808.	4.7	11
17	Relative equilibria of tethered satellite systems and their stability for very stiff tethers. <i>Dynamical Systems</i> , 2001, 16, 253-278.	0.4	10
18	A composite view on Windenburg's problem: Buckling and minimum stiffness requirements of compressively loaded orthotropic plates with edge reinforcements. <i>International Journal of Mechanical Sciences</i> , 2010, 52, 471-484.	6.7	10

#	ARTICLE	IF	CITATIONS
19	Fatigue strength and weight optimization of threaded connections in tie-rods for aircraft structures. <i>Procedia Engineering</i> , 2018, 213, 374-382.	1.2	10
20	Impact behavior and fractography of additively manufactured polymers: Laser sintering, multijet fusion, and hot lithography. <i>Additive Manufacturing</i> , 2019, 29, 100816.	3.0	10
21	Stability of Relative Equilibria. Part I: Comparison of Four Methods. <i>Meccanica</i> , 2000, 35, 325-351.	2.0	9
22	Fatigue behaviour of discontinuous carbon-fibre reinforced specimens and structural parts. <i>International Journal of Fatigue</i> , 2020, 131, 105289.	5.7	9
23	Crack Identification in Necked Double Shear Lugs by Means of the Electro-Mechanical Impedance Method. <i>Sensors</i> , 2021, 21, 44.	3.8	9
24	In situ laser-ultrasonic monitoring of Poisson's ratio and bulk sound velocities of steel plates during thermal processes. <i>Acta Materialia</i> , 2022, 235, 118097.	7.9	9
25	An Inkjet-Printed Carbon Nanotube Strain Distribution Sensor for Quasi Real-Time Strain Monitoring of Lightweight Design Materials. <i>Advances in Science and Technology</i> , 0, , .	0.2	8
26	Biomechanical testing of zirconium dioxide osteosynthesis system for Le Fort I advancement osteotomy fixation. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2018, 77, 34-39.	3.1	7
27	Improved current injection pattern for the detection of delaminations in carbon fiber reinforced polymer plates using electrical impedance tomography. <i>Structural Health Monitoring</i> , 2021, 20, 2747-2757.	7.5	7
28	Electro-Mechanical Impedance Measurements as a Possible SHM Method for Sandwich Debonding Detection. <i>Key Engineering Materials</i> , 0, 742, 763-777.	0.4	6
29	Material modelling and property mapping for structural FEA of thin-walled additively manufactured components. <i>Virtual and Physical Prototyping</i> , 2021, 16, 97-112.	10.4	6
30	Structural Response Prediction of Thin-Walled Additively Manufactured Parts Considering Orthotropy, Thickness Dependency and Scatter. <i>Materials</i> , 2021, 14, 2463.	2.9	6
31	Optimal Placement of Fiber Optical Sensors along Zero-strain Trajectories to Detect Damages in Thin-walled Structures with Highest Sensitivity. , 0, , .		6
32	The effect of ply folds as manufacturing defect on the fatigue life of CFRP materials. <i>Frattura Ed Integrita Strutturale</i> , 2016, 10, 76-81.	0.9	6
33	Propagation of small waves in inextensible strings. <i>Wave Motion</i> , 2002, 35, 339-353.	2.0	5
34	Prediction of the collapse mode of axially crushed profiles. <i>Proceedings of the Institution of Civil Engineers: Structures and Buildings</i> , 2013, 166, 456-464.	0.8	5
35	Characterizing the Conductivity and Enhancing the Piezoresistivity of Carbon Nanotube-Polymeric Thin Films. <i>Materials</i> , 2017, 10, 724.	2.9	5
36	Strain measurements along zero-strain trajectories as possible structural health monitoring method for debonding initiation and propagation in aircraft sandwich structures. <i>Procedia Structural Integrity</i> , 2020, 28, 1473-1480.	0.8	5

#	ARTICLE	IF	CITATIONS
37	Vibration-Based Thermal Health Monitoring for Face Layer Debonding Detection in Aerospace Sandwich Structures. Applied Sciences (Switzerland), 2021, 11, 211.	2.5	5
38	Development of Aircraft Spoiler Demonstrators for Cost-Efficient Investigations of SHM Technologies under Quasi-Realistic Loading Conditions. Aerospace, 2021, 8, 320.	2.2	5
39	Characterization of the spatial elastoresistivity of inkjet-printed carbon nanotube thin films for strain-state sensing. Proceedings of SPIE, 2017, , .	0.8	3
40	Comparison of electrical impedance tomography inverse solver approaches for damage sensing. , 2017, , .		3
41	Manufacturing and Costs of Current Sandwich and Future Monolithic Designs of Spoilers. Journal of Aircraft, 2019, 56, 85-93.	2.4	3
42	Design, simulation, testing and application of laser-sintered conformal lattice structures on component level. Rapid Prototyping Journal, 2021, 27, 43-57.	3.2	3
43	Dynamical Analysis of the Deployment Process of Tethered Satellite Systems. Solid Mechanics and Its Applications, 2002, , 345-354.	0.2	3
44	Observing the Fracture Behavior of a Center Crack Via Electrical Impedance Tomography using Inkjet-printed Carbon Nanotube Thin Films. , 0, , .		3
45	Shear property measurement of additively manufactured continuous fibre reinforced plastics by in-plane torsion testing. Additive Manufacturing, 2022, 55, 102805.	3.0	3
46	Geometrically exact solution of a buckling column with asymmetric boundary conditions. Proceedings in Applied Mathematics and Mechanics, 2012, 12, 203-204.	0.2	2
47	On the folding of plates which buckle before and beyond the elastic limit. Proceedings in Applied Mathematics and Mechanics, 2013, 13, 111-112.	0.2	2
48	On the back calculation of material strength values from strength test results. Proceedings in Applied Mathematics and Mechanics, 2018, 18, e201800342.	0.2	2
49	Application of Kalman filter based neutral axis tracking for crack length quantification in beam structures. , 2019, , .		2
50	Model-based Evaluation of Electro-mechanical Impedance Measurements for Detection and Size Identification of Face Layer Debondings in Sandwich Panels. , 0, , .		2
51	Application of the Scattering Analysis Method for Guided Waves Measured by Laser Scanning Vibrometry. , 0, , .		2
52	Elastic body impact on sandwich panels at low and intermediate velocity. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2015, 229, 221-231.	1.3	1
53	Through-thickness fatigue behavior of non-crimp fabrics featuring manufacturing defects. Procedia Structural Integrity, 2016, 2, 158-165.	0.8	1
54	On the fatigue and fracture behavior of necked double shear lugs for aircraft applications. Materialwissenschaft Und Werkstofftechnik, 2020, 51, 284-296.	0.9	1

#	ARTICLE	IF	CITATIONS
55	Implications of free-edge effect at thin plain-woven carbon fiber reinforced plastic laminates with out-of-plane waviness under cyclic loading. <i>Journal of Composite Materials</i> , 0, , 002199832110417.	2.4	1
56	STRENGTH AND WEIGHT EQUIVALENT SUBSTITUTION OF LARGE SANDWICH PANELS BY MONOLITHIC CFRP STRUCTURES. , 2016, , .		1
57	Evaluation of the E/M Impedance Method as a SHM Technique for Large Civil Aircraft Spoilers: Analytical, Numerical and Experimental Studies Performed with Simple Structures. , 0, , .		1
58	Manufacturing of artificial sub-surface cracks to investigate non-linear features of electro-mechanical impedance measurements. , 2018, , .		1
59	Experimental measurements of vibrations of artificial sub-surface cracks and evaluation of identification potential for the electro-mechanical impedance method. , 2019, , .		1
60	Evaluation of spatial strain distribution by elastoresistive thin-film sensors using 2D Electrical Impedance Tomography. <i>Materials Today: Proceedings</i> , 2022, 62, 2440-2445.	1.8	1
61	Framework for Strain Measurements at Cyclic Loaded Structures with Planar Elastoresistive Sensors Applying Electrical Impedance Tomography. <i>Lecture Notes in Civil Engineering</i> , 2023, , 805-815.	0.4	1
62	On the magnitude of surface stresses of buckled plates. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2011, 11, 269-270.	0.2	0
63	Stress concentrations at free edges of shear webs. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2012, 12, 221-222.	0.2	0
64	Smart Structural Health Monitoring Validated on a Simple Plate under Compressive Loading. <i>Key Engineering Materials</i> , 0, 569-570, 1052-1059.	0.4	0
65	Using X-FEM for Progressive Damage Simulation of Laminated Composites Featuring Manufacturing Imperfections. <i>Key Engineering Materials</i> , 0, 713, 139-142.	0.4	0
66	Strength Analysis of Additively Manufactured Titanium Load Introduction Elements. <i>Lightweight Design Worldwide</i> , 2019, 12, 42-49.	0.1	0
67	Enhanced characterization of the yield behavior of sheet metal at torsional load using digital image correlation methods. <i>Continuum Mechanics and Thermodynamics</i> , 2021, 33, 475-483.	2.2	0
68	Updating the finite element model for electrical impedance tomography using self-organizing map. , 2018, , .		0
69	Considering inhomogeneous material properties for stiffness and failure prediction of thin-walled additively manufactured parts. <i>Procedia Structural Integrity</i> , 2021, 34, 78-86.	0.8	0
70	Correction factors for in-plane shear strength and stiffness testing of flat angle-ply composite laminates with high Poisson's ratios. <i>Polymers and Polymer Composites</i> , 2022, 30, 096739112211145.	1.9	0