

Christian Willberg

List of Publications by Year in descending order

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23
papers

289
citations

1040056

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16
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all docs

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docs citations

23
times ranked

259
citing authors

#	ARTICLE	IF	CITATIONS
1	Manufacturing-Induced Imperfections in Composite Parts Manufactured via Automated Fiber Placement. <i>Journal of Composites Science</i> , 2019, 3, 56.	3.0	80
2	Experimental and Theoretical Analysis of Lamb Wave Generation by Piezoceramic Actuators for Structural Health Monitoring. <i>Experimental Mechanics</i> , 2012, 52, 429-438.	2.0	32
3	Characterization of the guided wave propagation in simplified foam, honeycomb and hollow sphere structures. <i>Composites Part B: Engineering</i> , 2014, 56, 553-566.	12.0	25
4	Guided Waves for Damage Detection in Complex Composite Structures: The Influence of Omega Stringer and Different Reference Damage Size. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 3068.	2.5	23
5	Development, Validation and Comparison of Higher Order Finite Element Approaches to Compute the Propagation of Lamb Waves Efficiently. <i>Key Engineering Materials</i> , 0, 518, 95-105.	0.4	22
6	Peridynamic analysis of fibre-matrix debond and matrix failure mechanisms in composites under transverse tensile load by an energy-based damage criterion. <i>Composites Part B: Engineering</i> , 2019, 158, 18-27.	12.0	21
7	Estimation of airframe weight reduction by integration of piezoelectric and guided wave-based structural health monitoring. <i>Structural Health Monitoring</i> , 2019, 18, 1778-1788.	7.5	15
8	A mode-dependent energy-based damage model for peridynamics and its implementation. <i>Journal of Mechanics of Materials and Structures</i> , 2019, 14, 193-217.	0.6	14
9	The Phenomenon of Continuous Mode Conversion of Lamb Waves in CFRP Plates. <i>Key Engineering Materials</i> , 0, 518, 364-374.	0.4	10
10	Increasing the scanning range of Lamb wave based SHM systems by optimizing the actuator-sensor design. <i>CEAS Aeronautical Journal</i> , 2013, 4, 87-98.	1.7	9
11	Automated model generation and sizing of aircraft structures. <i>Aircraft Engineering and Aerospace Technology</i> , 2016, 88, 268-276.	0.8	9
12	Simulation of Piezoelectric Induced Lamb Waves in Plates. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2009, 9, 503-504.	0.2	8
13	Automated sizing of a composite wing for the usage within a multidisciplinary design process. <i>Aircraft Engineering and Aerospace Technology</i> , 2016, 88, 303-310.	0.8	3
14	An energy based peridynamic state-based failure criterion. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2018, 18, e201800074.	0.2	3
15	Evaluation of manufacturing deviations of composite materials. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2021, 20, e202000345.	0.2	3
16	Peridynamic Simulation of a Mixed-Mode Fracture Experiment in PMMA Utilizing an Adaptive-Time Stepping for an Explicit Solver. <i>Journal of Peridynamics and Nonlocal Modeling</i> , 2023, 5, 205-228.	2.9	3
17	Lamb wave propagation using Wave Finite Element Method. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2009, 9, 509-510.	0.2	2
18	Virtual sensors for SHM using isogeometric piezoelectric finite elements. <i>International Journal of Structural Integrity</i> , 2015, 6, 704-713.	3.3	2

#	ARTICLE	IF	CITATIONS
19	Validation of a 20 m Wind Turbine Blade Model. <i>Energies</i> , 2021, 14, 2451.	3.1	2
20	Analysis of the dynamical behavior of piezoceramic actuators using piezoelectric isogeometric finite elements. <i>Advances in Computational Design</i> , 2016, 1, 37-60.	0.3	2
21	Verification and Validation of a 2D energy based peridynamic state-based failure criterion. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2019, 19, e201900331.	0.2	1
22	Real-time FEM for the Virtual Surgery of Soft Tissues. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2009, 9, 173-174.	0.2	0
23	Increasing the scanning range of Lamb wave based SHM systems by optimizing the sensor design and excitation frequency. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2011, 11, 625-626.	0.2	0