

# Weihua Xie

## List of Publications by Year in descending order

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Version: 2024-02-01

32  
papers

618  
citations

687363

13  
h-index

610901

24  
g-index

32  
all docs

32  
docs citations

32  
times ranked

871  
citing authors

#	ARTICLE	IF	CITATIONS
1	Flexible Normalâ€Tangential Force Sensor with Opposite Resistance Responding for Highly Sensitive Artificial Skin. <i>Advanced Functional Materials</i> , 2018, 28, 1707503.	14.9	167
2	Enhanced Piezocapacitive Effect in CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> â€Polydimethylsiloxane Composed Sponge for Ultrasensitive Flexible Capacitive Sensor. <i>ACS Applied Nano Materials</i> , 2018, 1, 274-283.	5.0	54
3	High-temperature high-velocity impact on honeycomb sandwich panels. <i>Composites Part B: Engineering</i> , 2018, 138, 1-11.	12.0	33
4	Topology optimisations for integrated thermal protection systems considering thermo-mechanical constraints. <i>Applied Thermal Engineering</i> , 2019, 150, 995-1001.	6.0	31
5	High velocity impact tests on high temperature carbon-carbon composites. <i>Composites Part B: Engineering</i> , 2016, 98, 30-38.	12.0	28
6	Carbon Nanotubeâ€Modified Fabric for Wearable Smart Electronicâ€skin with Exclusive Normalâ€Tangential Force Sensing Ability. <i>Advanced Materials Technologies</i> , 2019, 4, 1800680.	5.8	28
7	Perforation of needle-punched carbon-carbon composites during high-temperature and high-velocity ballistic impacts. <i>Composite Structures</i> , 2020, 245, 112224.	5.8	27
8	Structure Redesign of the Integrated Thermal Protection System and Fuzzy Performance Evaluation. <i>AIAA Journal</i> , 2016, 54, 3598-3607.	2.6	25
9	Impact and blast performance enhancement in bio-inspired helicoidal structures: A numerical study. <i>Journal of the Mechanics and Physics of Solids</i> , 2020, 142, 104025.	4.8	25
10	Global sensitivity analysis of low-velocity impact response of bio-inspired helicoidal laminates. <i>International Journal of Mechanical Sciences</i> , 2020, 187, 106110.	6.7	21
11	Effective mitigation of the thermal short and expansion mismatch effects of an integrated thermal protection system through topology optimization. <i>Composites Part B: Engineering</i> , 2017, 118, 149-157.	12.0	18
12	Analysis and simulation of fracture behavior in naturally occurring Bouligand structures. <i>Acta Biomaterialia</i> , 2021, 135, 473-482.	8.3	15
13	Crack-driving force and toughening mechanism in crustacean-inspired helicoidal structures. <i>International Journal of Solids and Structures</i> , 2021, 208-209, 107-118.	2.7	14
14	ZrB <sub>2</sub> -CNTs Nanocomposites Fabricated by Spark Plasma Sintering. <i>Materials</i> , 2016, 9, 967.	2.9	13
15	GWFMM model for bi-modulus orthotropic materials: Application to mechanical analysis of 4D-C/C composites. <i>Composite Structures</i> , 2016, 150, 132-138.	5.8	13
16	Comparative Study of Structural Efficiencies of Typical Thermal Protection Concepts. <i>AIAA Journal</i> , 2017, 55, 2476-2480.	2.6	13
17	Development and validation of an anisotropic damage constitutive model for C/SiC composite. <i>Ceramics International</i> , 2018, 44, 22880-22889.	4.8	13
18	Predictive models and experiments for high-velocity and high-temperature impacts in Inconel-alloy panels. <i>Materials and Design</i> , 2019, 182, 108032.	7.0	11

#	ARTICLE	IF	CITATIONS
19	Uncertainty quantification method for mechanical behavior of C/SiC composite and its experimental validation. <i>Composite Structures</i> , 2019, 230, 111516.	5.8	11
20	The role of ply angle in interlaminar delamination properties of CFRP laminates. <i>Mechanics of Materials</i> , 2021, 160, 103928.	3.2	11
21	The damage-induced bi-modulus characteristic of C/SiC materials and experimental validation. <i>Ceramics International</i> , 2017, 43, 9171-9177.	4.8	10
22	Continuous gradient ceramic/polymer composite for application in large temperature gradient connection by a polymer-derived ceramic route. <i>Composites Part A: Applied Science and Manufacturing</i> , 2020, 132, 105799.	7.6	10
23	Multi-fidelity uncertainty quantification method with application to nonlinear structural response analysis. <i>Applied Mathematical Modelling</i> , 2019, 75, 853-864.	4.2	6
24	Measurement of the Elastic Modulus and Residual Stress of Thermal Barrier Coatings Using a Digital Image Correlation Technique. <i>Coatings</i> , 2021, 11, 245.	2.6	5
25	Fabrication and Thermal Structural Characteristics of Ultra-high Temperature Ceramic Struts in Scramjets. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2018, 33, 375-380.	1.0	4
26	The connection technology based on high temperature silica fiber optic sensor. , 2012, , .		3
27	Measurement of the high-temperature strain of UHTC materials using chemical composition gratings. <i>Measurement Science and Technology</i> , 2016, 27, 055101.	2.6	3
28	The response of high-temperature optical fiber sensor applied to different materials. , 2013, , .		2
29	Numerical study on aerodynamic heat of hypersonic flight. <i>Thermal Science</i> , 2016, 20, 939-944.	1.1	2
30	Application of CCG Sensors to a High-Temperature Structure Subjected to Thermo-Mechanical Load. <i>Sensors</i> , 2016, 16, 1686.	3.8	1
31	Measurement of high-temperature strains in superalloy and carbon/carbon composites using chemical composition gratings. <i>Strain</i> , 2017, 53, e12218.	2.4	1
32	Uncertainty Characterization Methods for Sparsely Sampled Quantity: A Tradeoff Analysis Considering Propagation. <i>AIAA Journal</i> , 2020, 58, 3129-3138.	2.6	0