# Mechanics of Advanced Composite Structures



An International Journal on Advanced Materials and Composite Structures

Volume .... Consecutive Number ....

New Computational Approaches and Novel Applications

Analytical, Numerical, and Experimental Techniques

Structural, Thermal, and Vibration Analysis

Prediction of Dynamic Response and Impact Behaviour

Optimal Design and Structural Optimization

Processing and Fabrication Techniques

Damage Detection, Fracture and Creep Analysis, and Progressive Failure Modeling

Atomistic, Continuum, and Multi-Scale Modeling

Nanomaterials and Nanocomposites

Smart, Self-Healing, and Functionally Graded Materials



#### Articles in Press



#### Current Issue

# **Journal Archive**

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  - Issue 2
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- + Volume 8 (2021)
- + Volume 7 (2020)
- + Volume 6 (2019)
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# **Facts and Figures**

Number of Volumes: 10 Number of Issues: 21 Number of Articles: 247

**Number of Contributors: 546** 

Article View: 301,257 PDF Download: 123,587

**Number of Indexing Databases: 14** 

**Number of Reviewers: 2496** 

Mechanics of Advanced Composite Structures (MACS) is an international, peer-reviewed, open-access journal (print and online) within mechanics aspects of advanced materials and composite structures and is now published twice a year, which was founded in 2014 by Semnan University. The journal will publish the latest and most innovative research results dealing with analytical methods and numerical simulations, experimental investigations, and research and development studies relevant to the knowledge and application of new and advanced materials and composites in engineering structures, including basic individual structural components such as beams, plates, and shells.

The journal welcomes contributions in relation to the new computational approaches and novel applications to gain an understanding of mechanical properties, thermal behavior, vibration and dynamic characteristics, damage evolution (detection and modeling), and failure mechanisms.

Major areas covered by this journal include various polymer, metal, and ceramic matrix composites; nanomaterials and nanocomposites; self-healing materials; actuator/sensor (smart) materials and structures; active and passive control of composite structures; functionally graded materials; biomaterials and biocomposites; polymeric based adhesives; measuring and testing techniques for composite materials; processing and manufacturing of composites and nanocomposites; and mathematical models at different scales: nano, micro, meso, and macro.

The Editorial Board accepts for publication only manuscripts in English submitted via the electronic system available on the journal website. All articles accepted for publication will be available online followed by printed in hard copy.

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☐ Size-Dependent Nonlinear Dynamics of a Non-Uniform Piezoelectric Microbeam Based on the Strain Gradient Theory

In Situ Formation of SiC/CNT Ceramic Nanocomposite by Phenolic Pyrolysis

☐ Analytical Approach for Thermo-electro-mechanical Vibration of Piezoelectric Nanoplates Resting on Elastic Foundations based on Nonlocal Theory

IIII Static and Free Vibration Analyses of Functionally Graded Nano-composite Plates Reinforced by Wavy Carbon Nanotubes Resting on a Pasternak Elastic Foundation

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