



# JOURNAL OF THE MECHANICS AND PHYSICS OF SOLIDS

## AUTHOR INFORMATION PACK

### TABLE OF CONTENTS

●	<b>Description</b>	<b>p.1</b>
●	<b>Audience</b>	<b>p.1</b>
●	<b>Impact Factor</b>	<b>p.1</b>
●	<b>Abstracting and Indexing</b>	<b>p.2</b>
●	<b>Editorial Board</b>	<b>p.2</b>
●	<b>Guide for Authors</b>	<b>p.4</b>



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### DESCRIPTION

The aim is to publish research of the highest quality and of lasting significance on the mechanics of solids. The scope is broad, from fundamental concepts in mechanics to the analysis of novel phenomena and applications. Solids are interpreted broadly to include both hard and soft materials as well as natural and synthetic structures. The approach can be theoretical, experimental or computational. This research activity sits within engineering science and the allied areas of applied mathematics, materials science, bio-mechanics, applied physics, and geophysics.

The Journal was founded in 1952 by Rodney Hill, who was its Editor-in-Chief until 1968. The topics of interest to the Journal evolve with developments in the subject but its basic ethos remains the same: to publish research of the highest quality relating to the **mechanics of solids**. Thus, emphasis is placed on the development of fundamental concepts of mechanics and novel applications of these concepts based on theoretical, experimental or computational approaches, drawing upon the various branches of engineering science and the allied areas within applied mathematics, materials science, structural engineering, applied physics, and geophysics.

The main purpose of the Journal is to foster scientific understanding of the processes of **deformation** and **mechanical failure** of all **solid materials**, both technological and natural, and the connections between these processes and their underlying physical mechanisms. In this sense, the content of the Journal should reflect the current state of the discipline in analysis, experimental observation, and numerical simulation. In the interest of achieving this goal, authors are encouraged to consider the significance of their contributions for the field of mechanics and the implications of their results, in addition to describing the details of their work.

### AUDIENCE

Materials scientists, mechanical engineers, metallurgists and applied mathematicians.

### IMPACT FACTOR

2016: 4.255 © Clarivate Analytics Journal Citation Reports 2017

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Applied Mechanics Reviews  
Agricultural Engineering Abstracts  
Mechanics  
Metals Abstracts  
ISMEC  
Materials Science Citation Index  
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