



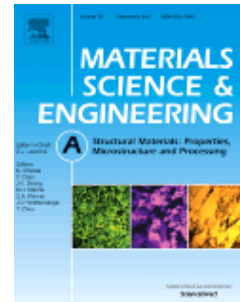
# MATERIALS SCIENCE AND ENGINEERING: A

Structural Materials: Properties, Microstructure and Processing

## AUTHOR INFORMATION PACK

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*Materials Science and Engineering A* provides an international medium for the publication of theoretical and experimental studies related to the **load-bearing capacity** of **materials** as influenced by their basic properties, processing history, microstructure and operating environment. Appropriate [submissions](#) to *Materials Science and Engineering A* should include scientific and/or engineering factors which affect the **microstructure - strength relationships** of materials and report the changes to **mechanical behavior**.

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### AUDIENCE

Materials Scientists, Metallurgists, Mechanical Engineers, Ceramists

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[2] W. Strunk Jr., E.B. White, *The Elements of Style*, fourth ed., Longman, New York, 2000.

Reference to a chapter in an edited book:

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The keywords for *Materials Science and Engineering A* are separated into four categories:

- A. METHOD OF INVESTIGATION
- B. MATERIAL OR CONSTITUTING PHASE(S)
- C. PROCESSING METHOD
- D. INVESTIGATED PHENOMENON

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characterization  
electron microscopy  
finite element analysis  
first principles  
fracture mechanics/fracture behaviour/fatigue  
hardness  
micromechanics  
modelling/simulations  
phase diagrams  
simulations  
stress/strain measurements  
thermal analysis  
X-ray analysis  
other

#### mat **B. MATERIAL OR CONSTITUTING PHASE(S)**

aluminium alloys  
amorphous materials  
biomaterials  
ceramics  
composites  
copper alloys  
glass  
intermetallics  
iron alloys  
magnesium alloys

nanocrystalline materials  
nickel alloys  
other materials  
other metallic alloys  
shape memory alloys  
titanium alloys

proc **C. PROCESSING METHOD**

casting methods  
coatings  
laser methods  
plasticity methods  
powder methods  
surface phenomena

phen **D. INVESTIGATED PHENOMENON**

grains and interfaces  
phase transformation  
plasticity

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