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DESCRIPTION

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

**A. METHOD OF INVESTIGATION**
- 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

**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