



# MATERIALS LETTERS

An interdisciplinary journal devoted to rapid communications on the science, applications, and processing of materials.

## AUTHOR INFORMATION PACK

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### DESCRIPTION

*Materials Letters* is dedicated to publishing novel, cutting edge reports of broad interest to the materials community. The journal provides a forum for materials scientists and engineers, physicists, and chemists to rapidly communicate on the most important topics in the field of **materials**.

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- **Novel Materials** - Micro and nanostructures (nanowires, nanotubes, nanoparticles), nanocomposites, thin films, superlattices, quantum dots.
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*Materials Letters* is dedicated to publishing novel, cutting edge reports of broad interest to the materials community. The journal provides a forum for materials scientists and engineers, physicists, and chemists to rapidly communicate on the most important topics in the field in materials. We are primarily interested in those contributions which bring new insights, and papers will be selected on the basis of the importance of the new knowledge they provide.

Contributions include a variety of topics such as:

- **Materials** - Metals and alloys, amorphous solids, ceramics, composites, nanocrystals, polymers, semiconductors.
- **Applications** - Structural, opto-electronic, magnetic, medical, MEMS, sensors, smart, biomaterials.
- **Characterization** - Analytical, microscopy, scanning probes, nanoscopic, optical, electrical, acoustic, spectroscopic, diffraction.
- **Novel Materials** - Micro and nanostructures (nanowires, nanotubes, nanoparticles), nanocomposites, thin films, superlattices, quantum dots.
- **Processing** - Thin film processing, sol-gel processing, mechanical processing, assembly, and nanocrystalline processing leading to unique materials.
- **Properties** - Mechanical, magnetic, optical, electrical, ferroelectric, thermal, interfacial, transport, thermodynamic.
- **Synthesis** - Quenching, solid state, solidification, solution synthesis, vapor deposition, and high pressure, explosive processes leading to unique materials.

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

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[3] G.R. Mettam, L.B. Adams, How to prepare an electronic version of your article, in: B.S. Jones, R.Z. Smith (Eds.), *Introduction to the Electronic Age*, E-Publishing Inc., New York, 2009, pp. 281–304.

Reference to a website:

[4] Cancer Research UK, Cancer statistics reports for the UK. <http://www.cancerresearchuk.org/aboutcancer/statistics/cancerstatsreport/>, 2003 (accessed 13.03.03).

Reference to a dataset:

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### **Keyword List**

Adhesion  
Amorphous materials  
Atom probe  
Atomic force microscopy  
Biomaterials  
Biomimetic  
Carbon materials  
Carbon nanotubes  
Nanoparticles  
Cast  
Ceramics  
Bioceramics  
Functional  
Structural  
Colloidal processing  
Composite materials  
Ceramic composites  
Metallic composites  
Polymeric composites  
Corrosion  
Creep  
Crystal growth  
Crystal structure  
Defects  
Deformation and fracture  
Deposition  
Chemical vapour deposition  
Electrodeposition  
Physical vapour deposition

Sputtering  
Dielectrics  
Diffusion  
Elastic properties  
Electrical properties  
Electroceramics  
Electron microscopy  
Electronic materials  
Contacts  
Organic  
Semiconductors  
Energy storage and conversion  
Epitaxial growth  
Fatigue  
Ferroelectrics  
Fibre technology  
Fullerenes  
Grain boundaries  
Grain boundary junctions  
Indentation and hardness  
Interfaces  
Intermetallic alloys and compounds  
Ion beam technology  
Laminates  
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Laser processing  
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Structural  
Neutron diffraction and scattering  
Nuclear materials  
Optical materials and properties  
Oxidation  
Particles, nanosize  
Phase diagrams  
Phase transformation  
Phosphors  
Piezoelectric materials  
Polymers  
Powder technology  
Porous materials  
Positron annihilation  
Radiation damage  
Recrystallization  
Scanning tunnelling microscopy  
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Sensors  
Shape memory materials  
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Sintering  
Solar energy materials  
Sol-gel preparation



Solidification  
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