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

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DESCRIPTION

Materials Letters has an open access mirror journal Materials Letters: X, sharing the same aims and scope, editorial team, submission system and rigorous peer review.

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.

Contributions include, but are not limited to, a variety of topics such as:

- **Materials**- Metals and alloys, amorphous solids, ceramics, composites, polymers, semiconductors
- **Applications**- Structural, opto-electronic, magnetic, medical, MEMS, sensors, smart
- **Characterization**- Analytical, microscopy, scanning probes, nanoscopic, optical, electrical, magnetic, acoustic, spectroscopic, diffraction
- **Novel Materials** - Micro and nanostructures (nanowires, nanotubes, nanoparticles), nanocomposites, thin films, superlattices, quantum dots.
- **Processing**- Crystal growth, thin film processing, sol-gel processing, mechanical processing, assembly, nanocrystalline processing.
- **Properties**- Mechanical, magnetic, optical, electrical, ferroelectric, thermal, interfacial, transport, thermodynamic
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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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**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
Langmuir-Blodgett films
Laser processing
Luminescence
Magnetic materials
Metal forming and shaping
Metallurgy
Metals and alloys
Multilayer structure
Microstructure
Nanocomposites
Nanocrystalline materials
Functional
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
Psitron annihilation
Radiation damage
Recrystallization
Scanning tunnelling microscopy
Segregation
Sensors
Shape memory materials
Simulation and modelling
Sintering
Solar energy materials
Sol-gel preparation
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Thin films
Varistors
Viscoelasticity
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X-ray techniques

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