MATERIALS RESEARCH BULLETIN
An international journal reporting research on the synthesis, structure, and properties of materials

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DESCRIPTION

Materials Research Bulletin is an international journal reporting high-impact research on processing-structure-property relationships in functional inorganic materials and nanomaterials with interesting electronic, magnetic, optical, mechanical or catalytic properties. Papers purely on thermodynamics or theoretical calculations (e.g., density functional theory) do not fall within the scope of the journal unless they also demonstrate a clear link to physical properties. Topics covered include functional materials (e.g., dielectrics, pyroelectrics, piezoelectrics, ferroelectrics, and relaxors); electrochemistry and solid-state ionics (photovoltaics, batteries, sensors, and fuel cells); nanomaterials, graphene, and nanocomposites; novel electronics, luminescence, and photocatalysis; crystal-structure and defect-structure analysis; and non-crystalline solids.

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ceramics
chalcognides
composites
electronic materials
elements
fluorides
fullerenes
glasses
halides
hydrides
inorganic compounds
interfaces
intermetallic compounds
layered compounds
magnetic materials
metals
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multilayers
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topological insulators

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thermogravimetric analysis (TGA)
ultrasonic measurements
XAFS (EXAFS and XANES)
X-ray diffraction
neutron diffraction
transmission electron microscopy (TEM)
electron spin resonance
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- acoustical properties
- catalytic properties
- charge-density waves
- spin density waves
- color centers
- crystal structure
- defects
- dielectric properties
- diffusion
- elastic properties
- electrical properties
- electrochemical properties
- electronic paramagnetic resonance (EPR)
- electronic structure
- energy storage
- equations-of-state
- Fermi surface
- ferroelectricity
- fracture
- ionic conductivity
- specific heat
- spin-density waves
- superconductivity
- surface properties
- thermal conductivity
- thermal expansion
- thermodynamic properties
- multiferroics
- thermoelectrics
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- dielectrics

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