



Recent Patents on Materials Science

Special issue on recent development in Smart Material for Engineering Application

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Aim and Scope:

General interest in the Smart material has been increasing significantly because of their enormous and promising application prospects in the advancement of human civilization. Smart material is regarded as one of the key technologies with applications ranging from Actuators and sensors, civil, mechanical, and aerospace industry, medicine, food, heritage, colour change, and solar radiation control (e.g., electrochromic materials), sensor network (wireless applications), structural health monitoring, nondestructive evaluation, fiber optical sensors/magnetostrictive materials, microfiber composites/piezoceramic materials, self-healing materials/self-diagnostic sensors, shape memory alloys/temperature responsive materials, polymers, polyvinylidene fluoride patches, energy harvesting of sensors, emerging trends of smart materials etc. Hence development of new smart materials needs the fundamental understanding of new concepts using novel materials with tailored properties, multidisciplinary research with long-term strategic aim on final applications. The smart materials like piezoceramic sensors, shape memory alloys, and fiber optical sensors have proved to be significant alternatives to various conventional methods for engineering and science

Topics of the current special issue include, but are not limited to:

- Actuators and sensors
- Smart material applications (civil, mechanical, and aerospace industry)
- Smart materials for medicine, food, heritage, colour change, and solar radiation control
- Sensor network (wireless applications)
- Structural health monitoring/nondestructive evaluation
- Fiber optical sensors/magnetostrictive materials
- Microfiber composites/piezoceramic materials
- Self-healing materials/self-diagnostic sensors
- Shape memory alloys/temperature responsive materials
- Polymers, polyvinylidene fluoride patches
- Energy harvesting of sensors
- Emerging trends of smart materials
- Market survey of smart materials (any type) for the next decade
- Future strategies in development of smart materials

Papers submitted for publication for this special issue will be peer reviewed and selected on basis of their quality and relevance to the theme of this special issue. Submitted manuscripts should not have been published previously, nor be under consideration for publication elsewhere. A guide for authors and other relevant information for submission of manuscripts are available on the Instructions for Authors page (<https://benthamscience.com/journals/recent-patents-on-materials-science/author-guidelines/#top>)

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