

INNOVATIONS IN UTILIZING NANOCOMPOSITE MATERIALS FOR EMERGING APPLICATIONS

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DESCRIPTION

This special issue focuses more on the analysis and development of nanocomposite materials for the development of equipment, which identifies the diverse and promising nanotechnologies at a maturity level high enough to enable the development of advanced instruments for biomedical applications, nanocomposite electromagnetic coupling and development of solar cell with different nanostructures. The flexibility of nanocomposite material characteristics allows its adaptation in many different application areas, like telecommunications, sensing, aeronautics, biomedical, defence and security, demonstrating the advantages of utilizing the nanomaterial and its implementation, as it has unique capabilities over other competitive technologies. The proposed special issue is one of the thrust area in the field of nanoresearch under various applications. Nanocomposite materials with high dielectric constants are prepared at different weight ratio to characterize the thermal behavior properties. Therefore, prompt research has to be done on novel materials, devices, and computation paradigms. This special issue promotes research concepts on nanocomposites with excellent electric field dependent nonlinear conductivity and high breakdown strength, used in cable accessory insulation materials, development of polyceramic materials for high voltage applications and analysis of different nanocomposite materials for high power applications.

Researchers are also invited to contribute the ideas involved in developing devices for nature biosystems, telecommunications, sensing, aeronautics, biomedical, defence and security, dealing with nanotechnology focused towards instrumentation in connection to current or emerging applications. The scope is to create a well-balanced collection of papers that will help to map the penetration of nanocomposite materials in various emerging areas, and also the perspectives and open challenges for future development.

Topics of interest include but are not limited to:

- ▶ Polymer-ceramic composites for high voltage capacitor
- ▶ Polymer composites
- ▶ Materials for EMI shielding applications
- ▶ Thermogravimetric analysis
- ▶ Composite insulator
- ▶ Fabrication process composite materials
- ▶ Polymer matrix composites

- ▶ Nanoparticles
- ▶ Nanofibers
- ▶ Electrospinning

IMPORTANT DATES

Submission of manuscript: **31st October 2021**

Publication: as per journal schedule

HOW TO SUBMIT

For more details on how to submit please contact the Managing Editor:

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