

Special Issue on  
**Graphene Based Smart Nanomaterials**

# CALL FOR PAPERS

Graphene and its derivatives (reduced graphene oxides, graphene oxides) are potential nanomaterials currently being widely investigated for diverse applications in drug delivery, shape memory polymers, gene delivery, biosensor, tissue engineering, flexible electronic devices, antibacterial composites, photovoltaic devices, and physical sensors due to its exceptional mechanical, electrical, physical, and chemical properties. Its excellent properties can be used to develop smart nanomaterials with enhanced properties for various advanced smart applications.

There is no doubt that graphene based smart nanomaterials are helping to develop next generation technologies with enhancing properties to change the life style of peoples. Therefore, a special issue of smart applications of graphene and its derivatives is desired for scientific community.

The aim of this special issue is to publish high quality research papers and review articles addressing recent research and development on graphene based smart nanomaterials.

Potential topics include but are not limited to the following:

- ▶ Graphene based inorganic and organic nanocomposites for live cell electrochemical biosensors
- ▶ Graphene based nanocomposites with damage self-monitoring capabilities
- ▶ Graphene based ultrafast and compact optoelectronic devices
- ▶ Graphene based pressure, temperature, moisture, touch sensors, and so on
- ▶ Graphene based smart textiles
- ▶ Graphene based infrared sensors
- ▶ Flexible graphene heaters
- ▶ Graphene-based modulator and Wi-Fi receiver
- ▶ Functionalization of graphene and its importance for diverse applications
- ▶ Decoration of graphene and its derivatives for smart applications
- ▶ Graphene based optical biosensors
- ▶ Graphene based smart nanomaterials to wearable sensors
- ▶ Graphene as drug carrier and therapy and imaging agent
- ▶ Graphene based SERS substrates for detection of micro-RNA/DNA
- ▶ Graphene based nanomaterials for ionic polymer actuators
- ▶ Graphene and its derivative based nanomaterials for electric and magnetic stimuli-response
- ▶ Multifunctional and smart graphene filled polymers as piezoelectrics and actuators

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**Lead Guest Editor**

Ishaq Ahmad, National Center for Physics, Islamabad, Pakistan  
*ishaq\_ah@yahoo.com*

**Guest Editors**

Zhi Chunyi, City University of Hong Kong, Kowloon, Hong Kong  
*cy.zhi@cityu.edu.hk*

Kemal Celebi, ETH Zürich, Zürich, Switzerland  
*kemal.celebi@mat.ethz.ch*

Rashid Jalil, University of Engineering and Technology, Lahore, Pakistan  
*rashidjalil@uet.edu.pk*

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