

## Special Issue

# Smart Responsive Materials for Sensors and Actuators

### Message from the Guest Editors

Recent advances in the fabrication techniques have enabled the production of different types of sensors and actuators that can be utilized in a wide range of applications, such as detectors, soft robotics, biomedical, and smart textiles. Smart responsive materials have been increasingly popular in the field of sensors and actuators due to their unique physical and chemical properties, which enable them to respond dynamically to external stimuli such as radiation, temperature, chemical reactions, external forces, and magnetic and electric fields. The research presented in this Special Issue underscores the significant potential of smart responsive materials in creating the next generation of smart materials and devices. As the field continues to evolve, these materials are expected to play a crucial role in a wide array of technological advancements, from environmental sensing and healthcare monitoring to soft robots and beyond.

### Guest Editors

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### Deadline for manuscript submissions

30 December 2025



## Actuators

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## About the Journal

### Message from the Editorial Board

We are just entering the Next Wave of Technology (NWT) where actuators will play the same role as the computer chip did for computers/social media approximately four decades ago. Just in the U.S., production of \$1 trillion year of electromechanical systems (vehicles, orthotics, manufacturing cells, freight trains, aircraft, etc.) will be impacted by the NWT, all driven by actuators. Five key trends can be found for the future perspectives: "Performance to Reliability", "Hard to Soft", "Macro to Nano", "Homo to Hetero" and "Single to Multi functional". We invite papers that primarily impact these economic sectors; those illustrating basic scientific principles are also welcome.

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### Editors-in-Chief

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