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Polymer Hybrid Materials in Nano and Microsensors

Guest Editors:

Message from the Guest Editors

Dr. Chan Ho Park Dear Colleagues,

Dr. Hyunseung Yang

Dr. Ji-Won Seo

Deadline for manuscript submissions: closed (30 June 2022) Nano and microsensors have been utilized in various fields including biomedicine, pharmaceutics, soft robotics, environment monitoring, and wearable/implantable electronics. Trends of miniaturization and real-time detection in sensors demand a breakthrough of the materials and methodologies. In this regard, functional polymers and their hybrid materials have intensively been used as a core material of sensors which are significantly fast and specific in their response, versatility, biocompatibility, and easy tailoring as well as tunable mechanical properties.

We address both fundamentals and applications to cover recent impressive research in nano and microsensors. Fundamental studies include novel polymer design, the fabrication process, sensing mechanism, and characterization. Applications include wearable and implantable electronics, chemical and biological sensors, point-of-care diagnostics, environmental monitoring, toxic gas detection, and nano- and micro-actuators, as well as 3D-printed electronics. This Special Issue introduces new insights on numerous functions of polymer-based materials for next-generation sensors.









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Editor-in-Chief

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Message from the Editor-in-Chief

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