Special Issue

Recent Advances in MEMS Resonator-Based Magnetic Sensors

Message from the Guest Editor

Nowadays, magnetic sensors have gained significant prominence in various fields such as biomedical sensors, automotive sensors, non-contact sensing, and nondestructive testing. Amongst the various types of magnetic sensors, MEMS resonator magnetic sensors have the advantages of small size, batch manufacturing, low-power consumption, high sensitivity and resolution, and facile integration with the CMOS technique. This Special Issue centres around the advancements in MEMS resonator magnetic sensors and their recent progress. The Special Issue encompasses various subjects such as the design, manufacturing, analysis, packaging, and integration of magnetic sensors based on MEMS resonators.

- Design and fabrication techniques for MEMS resonant magnetic sensors
- Characterization and modeling, stimulation of MEMS resonant magnetic sensors
- Novel materials and new device concepts for MEMS resonant magnetic sensors
- Physical sensing mechanisms and principles
- Integration of MEMS resonant magnetic sensors in practical applications
- MEMS resonant magnetic sensors for harsh environments
- Applications and markets evaluation for MEMS resonant magnetic sensor

Guest Editor

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