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Smart Sensors Application in Predictive Maintenance

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Message from the Guest Editors

Some research directions for smart sensors can be considered, as follows. Sensors will become real smart sensors, characterized by the following: intelligent measurement units that self-monitor, transmit status diagnoses to the operating system, and create a reliable network of measurement and calibration data. Sensors will be used for the maintenance and security of machines and devices. Predictive maintenance for machines and devices will become increasingly more efficient, easier, cheaper, and improve uptime. In the future, maintenance will rely on sensors instead of being carried out according to a needs-based timetable. Safety will also improve because unsafe situations will be easily predicted. Autonomous wireless-connected sensors will be possible. Sensors will be self-learning over the entire lifespan without maintenance, modifications, or calibration. The possibilities and areas of application for robot technology will increase significantly. Old and new technologies at the chip level are arising.



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Special Issue



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Message from the Editor-in-Chief

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