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Cantilever Sensors for Industrial Applications: 2nd Edition

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Deadline for manuscript
submissions:

closed (10 March 2024)

Message from the Guest Editors

Dear colleagues,

Cantilevers, as the most basic micromechanical spring-mass system, have recently shown increasing potential for commercial application beyond atomic force microscopy (AFM). Cantilevers of various designs and dimensions can complete sensing and monitoring tasks in many application fields. According to their design, self-sensing cantilevers are suitable for tactile probing of micron-sized surfaces or with large-scale workpieces in production environments. They can measure the material surfaces and coatings, including properties inside hard-to-access high-aspect-ratio structures, such as microholes and other irregular vertical objects. Further, cantilever force sensors are usable in grippers of next-generation robotic systems and biomedical instrumentations or as precisely calibrated transferable reference standards to be disseminated by national metrology institutes.

Owing to the success of the first volume, we have edited this second one. The aim is to gather papers that are actively engaged in developing new ideas of cantilever sensors for various applications in industry.

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Guest Editors



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Special Issue



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Message from the Editor-in-Chief

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