

Status and Trends of Microsensor Technology

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Recently, technologies in materials, fabrications and integrations have rapidly advanced, so that growth of the sensor technology based on these advances is becoming innovative. The sensor technology is getting into the new era. Thus, one can observe some new trends in the rapid-changing sensor technology. The sensor technology naturally intends to employ the highly developed techniques such as the microfabrication, the ultra-thin film formation, the special stucturization, the microprocessor, the integrated circuits and the system engineering supported by the computer, the communication and the control. It is getting to be evident that the sensor technology is pursuing to make sensors miniaturized, multidimensional, multifunctional, intellectual, integrated and systematic, as well as high-sensitive and high reliable. The realization of a smart sensor which can perform the logic-function, the two-way communication and the decision-making is not far. Hence, the microsensors, fabricated by the microelectronic integration technique, are now attracting a great deal of attention.