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**CMOS Hotplate Chemical Microsensors**

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This is the first comprehensive book on microhotplate-based chemical sensor systems in CMOS-technology. It covers all aspects of successful sensor prototyping: theory of transducer modelling, microelectronics design considerations, system design issues, and issues related to system and device microfabrication, packaging, and testing. A variety of different hotplates for different operation conditions is detailed and a family of metal-oxide-covered microhotplate-based microsensor systems with increasing complexity is presented. These systems belong to a new generation of chemical microsensors and represent examples of the successful integration of nanomaterials, microtechnology and microelectronics.

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