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Descrizione fisica	1 online resource (363 p.)
Collana	Integrated microsystems series
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. MEMs and NEMs resonator technologies -- 2. Acoustic microresonator technologies -- 3. Design and modeling of micro- and nanoresonators -- 4. Fabrication techniques -- 5. Characterization techniques -- 6. Performance optimization -- 7. Integration of resonator to CMOS technologies -- 8. Sensor applications -- 9. Radio frequency applications -- 10. Case studies.
Sommario/riassunto	This groundbreaking book provides you with a comprehensive understanding of FBAR (thin-film bulk acoustic wave resonator), MEMS (microelectromechanical system), and NEMS (nanoelectromechanical system) resonators. For the first time anywhere, you find extensive coverage of these devices at both the technology and application levels. This practical reference offers you guidance in design, fabrication, and characterization of FBARs, MEMS and NEBS. It discusses the integration of these devices with standard CMOS (complementary-metal-oxide-semiconductor) technologies, and their application to sensin.