Record Nr.	UNINA9910781033603321
Autore	Campanella Humberto
Titolo	Acoustic wave and electromechanical resonators : concept to key applications / / Humberto Campanella
Pubbl/distr/stampa	Norwood, Massachusetts. : , : Artech House, , ©2010 [Piscataqay, New Jersey] : , : IEEE Xplore, , [2010]
ISBN	1-60783-978-4
Descrizione fisica	1 online resource (363 p.)
Collana	Integrated microsystems series
Disciplina	621.381
Soggetti	Acoustic surface wave devices
	Electric resonators
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
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 (microelectomechanical 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.

1.