

1. Record Nr.	UNINA9910437881603321
Autore	Zhang Yafei
Titolo	Multilayer integrated film bulk acoustic resonators / / Yafei Zhang, Da Chen
Pubbl/distr/stampa	Berlin ; ; New York, : Springer Shanghai, : Shanghai Jiao Tong University Press, c2013
ISBN	1-283-63155-5 9786613944009 3-642-31776-6
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (158 p.)
Altri autori (Persone)	ChenDa
Disciplina	612
Soggetti	Radio resonators - Design and construction Radio frequency integrated circuits - Design and construction Thin films, Multilayered
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Propagation of Acoustic Wave in Crystals -- The Theory of FBAR -- The Sputtering Deposition and Etching of AlN Film -- The Membrane Structured FBAR -- Solidly Mounted Acoustic Resonator -- The Application of FBAR in RF Filters -- The FBAR Excited by Lateral Filed -- High Sensitive Sensors Based on FBAR.
Sommario/riassunto	Multilayer Integrated Film Bulk Acoustic Resonators mainly introduces the theory, design, fabrication technology and application of a recently developed new type of device, multilayer integrated film bulk acoustic resonators, at the micro and nano scale involving microelectronic devices, integrated circuits, optical devices, sensors and actuators, acoustic resonators, micro-nano manufacturing, multilayer integration, device theory and design principles, etc. These devices can work at very high frequencies by using the newly developed theory, design, and fabrication technology of nano and micro devices. Readers in fields of IC, electronic devices, sensors, materials, and films etc. will benefit from this book by learning the detailed fundamentals and potential applications of these advanced devices. Prof. Yafei Zhang is the director of the Ministry of Education's Key Laboratory for Thin Films and

Microfabrication Technology, PRC; Dr. Da Chen was a PhD student in Prof. Yafei Zhang's research group.

---