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Titolo	System-level modeling of MEMS [[electronic resource] /] / edited by Tamara Bechtold, Gabriele Schrag, and Lihong Feng
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Descrizione fisica	1 online resource (564 p.)
Collana	Advanced Micro and Nanosystems Advanced micro & nanosystems
Altri autori (Persone)	BechtoldT (Tamara) SchragGabriele FengLihong
Disciplina	500
Soggetti	Microelectromechanical systems
Lingua di pubblicazione	Inglese
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	pt. I. Physical and mathematical fundamentals -- pt. II. Lumped element modeling method for MEMS devices -- pt. III. Mathematical model order reduction for MEMS devices -- pt. IV. Modeling of entire microsystems -- pt. V. Software implementations.
Sommario/riassunto	Filling a gap in the literature, this is the first handbook to simultaneously address the three most important approaches of system-level modeling: physical modeling with lumped elements and Kirchhoffian networks, modal modeling to accurately describe the mechanical domain, and mathematical modeling employing, for example, model order reduction methods. By adopting this approach, the top editors and authors from industry and research have created a book that will set the standard for years to come. Writing on a clearly understandable and sufficiently detailed level, they familiarize reader