1. Record Nr. UNISA996418178403316

Titolo	Ferroelectric-Gate Field Effect Transistor Memories [[electronic resource]] : Device Physics and Applications / / edited by Byung-Eun Park, Hiroshi Ishiwara, Masanori Okuyama, Shigeki Sakai, Sung-Min Yoon
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2020
ISBN	981-15-1212-4
Edizione	[2nd ed. 2020.]
Descrizione fisica	1 online resource (XIV, 425 p. 313 illus., 183 illus. in color.)
Collana	Topics in Applied Physics, , 0303-4216 ; ; 131
Disciplina	621.3815284
Soggetti	Electronic circuits Electronics Microelectronics Materials—Surfaces Thin films Surfaces (Physics) Interfaces (Physical sciences) Electronic Circuits and Devices Electronics and Microelectronics, Instrumentation Surfaces and Interfaces, Thin Films Circuits and Systems Surface and Interface Science, Thin Films
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	I. Introduction -- II. Practical Characteristics of Inorganic Ferroelectric-gate FETs: Si-Based Ferroelectric-gate Field Effect Transistors -- III. Practical Characteristics of Inorganic Ferroelectric-Gate FETs: Thin Film-Based Ferroelectric-Gate Field Effect Transistors -- Practical Characteristics of Organic Ferroelectric-Gate FETs: Si-Based Ferroelectric-Gate Field Effect Transistors -- V Practical Characteristics of Organic Ferroelectric-Gate FETs: Thin Film-Based Ferroelectric-Gate Field Effect Transistors -- VI Practical Characteristics of Organic Ferroelectric-Gate FETs : Ferroelectric-Gate Field Effect Transistors with

Flexible Substrates -- Applications and Future Prospects.

Sommario/riassunto

This book provides comprehensive coverage of the materials characteristics, process technologies, and device operations for memory field-effect transistors employing inorganic or organic ferroelectric thin films. This transistor-type ferroelectric memory has interesting fundamental device physics and potentially large industrial impact. Among various applications of ferroelectric thin films, the development of nonvolatile ferroelectric random access memory (FeRAM) has been most actively progressed since the late 1980s and reached modest mass production for specific application since 1995. There are two types of memory cells in ferroelectric nonvolatile memories. One is the capacitor-type FeRAM and the other is the field-effect transistor (FET)-type FeRAM. Although the FET-type FeRAM claims the ultimate scalability and nondestructive readout characteristics, the capacitor-type FeRAMs have been the main interest for the major semiconductor memory companies, because the ferroelectric FET has fatal handicaps of cross-talk for random accessibility and short retention time. This book aims to provide the readers with development history, technical issues, fabrication methodologies, and promising applications of FET-type ferroelectric memory devices, presenting a comprehensive review of past, present, and future technologies. The topics discussed will lead to further advances in large-area electronics implemented on glass, plastic or paper substrates as well as in conventional Si electronics. The book is composed of chapters written by leading researchers in ferroelectric materials and related device technologies, including oxide and organic ferroelectric thin films. .

2.

Record Nr.	UNISALENTO991001990159707536
Autore	Herbart, Johann Friedrich
Titolo	Antologia pedagogica / Johann F. Herbart ; a cura di Alfredo Saloni
Pubbl/distr/stampa	Firenze : La nuova Italia, 1973
Descrizione fisica	LVIII, 182 p. ; 21 cm
Collana	Educatori antichi e moderni ; 272
Altri autori (Persone)	Saloni, Alfredo
Disciplina	370.1
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia