1. Record Nr. UNINA9910438046003321

Autore	Singh Jawar
Titolo	Robust SRAM designs and analysis / / Jawar Singh, Saraju P. Mohanty, Dhiraj K. Pradhan
Pubbl/distr/stampa	New York, : Springer, 2012, c2013
ISBN	1-4614-0818-0
Descrizione fisica	1 online resource (175 p.)
Altri autori (Persone)	Leal FilhoWalter
Disciplina	621.3815 621.3815/2 621.38152
Soggetti	Random access memory - Design Semiconductor storage devices
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 to SRAM -- Design Metrics of SRAM Bitcell -- Single-ended SRAM Bitcell Design -- 2-Port SRAM Bitcell Design -- SRAM Bitcell Design Using Unidirectional Devices -- NBTI and its Effect on SRAM.
Sommario/riassunto	This book provides a guide to Static Random Access Memory (SRAM) bitcell design and analysis to meet the nano-regime challenges for CMOS devices and emerging devices, such as Tunnel FETs. Since process variability is an ongoing challenge in large memory arrays, this book highlights the most popular SRAM bitcell topologies (benchmark circuits) that mitigate variability, along with exhaustive analysis. Experimental simulation setups are also included, which cover nano-regime challenges such as process variation, leakage and NBTI for SRAM design and analysis. Emphasis is placed throughout the book on the various trade-offs for achieving a best SRAM bitcell design. Provides a complete and concise introduction to SRAM bitcell design and analysis; Offers techniques to face nano-regime challenges such as process variation, leakage and NBTI for SRAM design and analysis; Includes simulation set-ups for extracting different design metrics for CMOS technology and emerging devices; Emphasizes different trade-offs for achieving the best possible SRAM bitcell design.

2. Record Nr. UNINA9910557613503321

Autore	Park Bum Soo
Titolo	Taxonomy and Ecology of Marine Algae
Pubbl/distr/stampa	Basel, : MDPI - Multidisciplinary Digital Publishing Institute, 2022
Descrizione fisica	1 online resource (218 p.)
Soggetti	Biology, life sciences Research and information: general
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	The term "algae" refers to a large diversity of unrelated phylogenetic entities, ranging from picoplanktonic cells to macroalgal kelps. Marine algae are an important primary producer in the marine food chain, responsible for the high primary production of coastal areas, providing food resources in situ for many grazing species of gastropods, peracarid crustaceans, sea urchins or fish. Recent findings indicate that marine environments have rapidly changed due to global warming over the past several decades. This change has led to significant variations in marine algal ecology. For example, a long-term increase in ocean temperatures due to global warming has facilitated the intensification of harmful algal blooms, which adversely impact public health, aquatic organisms, and aquaculture industries. Thus, extensive studies have been conducted, but there is still a gap in our understanding of the variation in their ecology in accordance with future marine environmental changes. To fill this gap, studies on the taxonomy and ecology of marine algae are highly necessary. We have invited algologists to submit research articles that enable us to advance our understanding of the taxonomy and ecology of marine algae. Fourteen papers have been collected so far, which cover different aspects of the taxonomy and ecology of marine algae, including understudied species, interspecific comparisons, and new techniques.