

1. Record Nr.	UNINA9910480578003321
Autore	Liu Tai-Ping <1945->
Titolo	Large time behavior of solutions for general quasilinear hyperbolic-parabolic systems of conservation laws // Tai-Ping Liu, Yanni Zeng
Pubbl/distr/stampa	Providence, Rhode Island : , : American Mathematical Society, , 1997 ©1997
ISBN	1-4704-0184-3
Descrizione fisica	1 online resource (135 p.)
Collana	Memoirs of the American Mathematical Society, , 0065-9266 ; ; Volume 65, Number 361
Disciplina	531/.1133
Soggetti	Shock waves Conservation laws (Mathematics) Differential equations, Parabolic - Numerical solutions Differential equations, Hyperbolic - Numerical solutions Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"January 1997, volume 125, number 599 (end of volume)."
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	""Contents""; ""Abstract""; ""1. Introduction""; ""2. Viscous Conservation Laws""; ""3. Diffusion Waves""; ""4. Systems with Diagonalizable Linearizations""; ""5. Green's Function for a 2 x 2 Linear System""; ""6. Green's Functions for n x n Systems with Applications""; ""6.1. Green's Functions""; ""6.2. Applications""; ""7. Energy Estimate""; ""8. Systems with Non-Diagonalizable Linearizations""; ""9. Applications to Continuum Mechanics""; ""References""

2. Record Nr.	UNINA9910254982603321
Titolo	3D Flash Memories // edited by Rino Micheloni
Pubbl/distr/stampa	Dordrecht : , : Springer Netherlands : , : Imprint : Springer, , 2016
ISBN	94-017-7512-5
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (391 p.)
Disciplina	004
Soggetti	Computer storage devices Electronic circuits Memory Structures Electronic Circuits and Devices Circuits and Systems
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 at the end of each chapters and index.
Nota di contenuto	Dedication Page -- Foreword -- Preface -- Introduction -- About the Editor -- Acknowledgements -- 1 The Business of NAND -- 2 Reliability of 3D NAND Flash memories -- 3 3D Stacked NAND Flash memories -- 4 3D Charge Trap NAND Flash memories -- 5 3D Floating Gate NAND Flash memories -- 6 Advanced Architectures for 3D NAND Flash memories with vertical channel -- 7 3D VG-Type NAND Flash memories -- 8 RRAM Cross-point arrays -- 9 3D Multi-Chip Integration and Packaging Technology -- 10 BCH and LDPC Error Correction Codes for NAND Flash memories -- 11 Advanced algebraic and graph-based ECC schemes for modern NVMs -- 12 System-Level Considerations on Design of 3D NAND Flash memories -- Index.
Sommario/riassunto	This book walks the reader through the next step in the evolution of NAND flash memory technology, namely the development of 3D flash memories, in which multiple layers of memory cells are grown within the same piece of silicon. It describes their working principles, device architectures, fabrication techniques and practical implementations, and highlights why 3D flash is a brand new technology. After reviewing market trends for both NAND and solid state drives (SSDs), the book digs into the details of the flash memory cell itself, covering both

floating gate and emerging charge trap technologies. There is a plethora of different materials and vertical integration schemes out there. New memory cells, new materials, new architectures (3D Stacked, BiCS and P-BiCS, 3D FG, 3D VG, 3D advanced architectures); basically, each NAND manufacturer has its own solution. Chapter 3 to chapter 7 offer a broad overview of how 3D can materialize. The 3D wave is impacting emerging memories as well and chapter 8 covers 3D RRAM (resistive RAM) crosspoint arrays. Visualizing 3D structures can be a challenge for the human brain: this is why all these chapters contain a lot of bird's-eye views and cross sections along the 3 axes. The second part of the book is devoted to other important aspects, such as advanced packaging technology (i.e. TSV in chapter 9) and error correction codes, which have been leveraged to improve flash reliability for decades. Chapter 10 describes the evolution from legacy BCH to the most recent LDPC codes, while chapter 11 deals with some of the most recent advancements in the ECC field. Last but not least, chapter 12 looks at 3D flash memories from a system perspective. Is 14nm the last step for planar cells? Can 100 layers be integrated within the same piece of silicon? Is 4 bit/cell possible with 3D? Will 3D be reliable enough for enterprise and datacenter applications? These are some of the questions that this book helps answering by providing insights into 3D flash memory design, process technology and applications.
