1. Record Nr. UNINA9910969199003321

Autore	Jacob Bruce
Titolo	Memory systems : cache, DRAM, disk / / Bruce Jacob, Spencer W. Ng, David T. Wang; with contributions by Samuel Rodriguez
Pubbl/distr/stampa	San Francisco, CA, : Morgan Kaufmann Oxford, : Elsevier Science [distributor], 2008
ISBN	1-322-46554-1 1-281-76645-3 9786611766450 0-08-055384-2
Edizione	[1st edition]
Descrizione fisica	1 online resource (1017 p.)
Altri autori (Persone)	NgSpencer W WangDavid
Disciplina	004.5 004.5 22
Soggetti	Computer storage devices Computer input-output equipment
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	Front Cover; In Praise of Memory Systems: Cache, DRAM, Disk; Memory Systems Cache, DRAM, Disk; Copyright Page; Contents; Preface; Overview. On Memory Systems and Their Design; Ov.1 Memory Systems; Ov.2 Four Anecdotes on Modular Design; Ov.3 Cross-Cutting Issues; Ov.4 An Example Holistic Analysis; Ov.5 What to Expect; Part I. Cache; Chapter 1. An Overview of Cache Principles; 1.1 Caches, 'Caches,' and "Caches"; 1.2 Locality Principles; 1.3 What to Cache, Where to Put It, and How to Maintain It; 1.4 Insights and Optimizations; Chapter 2. Logical Organization 2.1 Logical Organization: A Taxonomy 2.2 Transparently Addressed Caches; 2.3 Non-Transparently Addressed Caches; 2.4 Virtual Addressing and Protection; 2.5 Distributed and Partitioned Caches; 2.6 Case Studies; Chapter 3. Management of Cache Contents; 3.1 Case Studies: On-Line Heuristics; 3.2 Case Studies: Off-Line Heuristics; 3.3 Case Studies: Combined Approaches; 3.4 Discussions; 3.5 Building a Content-Management; Chapter 4. Management of Cache Consistency;

4.1 Consistency with Backing Store; 4.2 Consistency with Self; 4.3 Consistency with Other Clients; Chapter 5. Implementation Issues 5.1 Overview 5.2 SRAM Implementation; 5.3 Advanced SRAM Topics; 5.4 Cache Implementation; Chapter 6. Cache Case Studies; 6.1 Logical Organization; 6.2 Pipeline Interface; 6.3 Case Studies of Detailed Itanium-2 Circuits; Part II. DRAM; Chapter 7. Overview of DRAMs; 7.1 DRAM Basics: Internals, Operation; 7.2 Evolution of the DRAM Architecture; 7.3 Modern-Day DRAM Standards; 7.4 Fully Buffered DIMM: A Compromise of Sorts; 7.5 Issues in DRAM Systems, Briefly; Chapter 8. DRAM Device Organization: Basic Circuits and Architecture; 8.1 DRAM Device Organization; 8.2 DRAM Storage Cells
8.3 RAM Array Structures 8.4 Differential Sense Amplifier; 8.5 Decoders and Redundancy; 8.6 DRAM Device Control Logic; 8.7 DRAM Device Configuration; 8.8 Data I/O; 8.9 DRAM Device Packaging; 8.10 DRAM Process Technology and Process Scaling Considerations; Chapter 9. DRAM System Signaling and Timing; 9.1 Signaling System; 9.2 Transmission Lines on PCBs; 9.3 Termination; 9.4 Signaling; 9.5 Timing Synchronization; 9.6 Selected DRAM Signaling and Timing Issues; 9.7 Summary; Chapter 10. DRAM Memory System Organization; 10.1 Conventional Memory System; 10.2 Basic Nomenclature; 10.3 Memory Modules
10.4 Memory System Topology 10.5 Summary; Chapter 11. Basic DRAM Memory-Access Protocol; 11.1 Basic DRAM Commands; 11.2 DRAM Command Interactions; 11.3 Additional Constraints; 11.4 Command Timing Summary; 11.5 Summary; Chapter 12. Evolutionary Developments of DRAM Device Architecture; 12.1 DRAM Device Families; 12.2 Historical-Commodity DRAM Devices; 12.3 Modern-Commodity DRAM Devices; 12.4 High Bandwidth Path; 12.5 Low Latency; 12.6 Interesting Alternatives; Chapter 13. DRAM Memory Controller; 13.1 DRAM Controller Architecture; 13.2 Row-Buffer-Management Policy
13.3 Address Mapping (Translation)

Sommario/riassunto

Bones and Cartilage provides the most in-depth review ever assembled on the topic. It examines the function, development and evolution of bone and cartilage as tissues, organs and skeletal systems. It describes how bone and cartilage is developed in embryos and are maintained in adults, how bone reappears when we break a leg, or even regenerates when a newt grows a new limb, or a lizard a tail. This book also looks at the molecules and cells that make bones and cartilages and how they differ in various parts of the body and across species. It answers such questions as "Is bone always

2. Record Nr. UNINA9910616368803321

Titolo	Epigenetics, Development, Ecology and Evolution / / edited by Luis María Vaschetto
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2022
ISBN	9783031137716 9783031137709
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (239 pages)
Collana	Biomedical and Life Sciences Series
Disciplina	572.865
Soggetti	Epigenetics Developmental biology Evolutionary developmental biology Molecular evolution Zoology Evolutionary genetics Developmental Biology and Stem Cells Evolutionary Developmental Biology Molecular Evolution Evolutionary Genetics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Chapter 1. An Introduction to Epigenetics, Development, Ecology and Evolution. Chapter 2. Epigenetic Regulation: The Cross-Talk among Development, Adaptive Strategies, and Microevolutionary Change -- Chapter 3. Epigenetics and Phenotypic Plasticity in Animals -- Chapter 4. Role of Environmentally Induced Epigenetic Transgenerational Inheritance in Evolutionary Biology -- Chapter 5. Transgenerational Epigenetic Programming -- Chapter 6. Epigenetics, Evolution and Development of Birds -- Chapter 7. Epigenetics and the Extreme Stress Response -- Chapter 8. Epigenetic Adaptation to Local Ecologies as a First Step toward Gene: Culture Co-evolution.
Sommario/riassunto	Epigenetic modifications comprise heritable gene expression changes

that occur without alteration of the DNA sequence and 'co-act' with genetic factors to shape development processes and evolutionary trajectories. Multicellular organisms receive different types of environmental stimuli/stresses that trigger epigenetic modifications during development. These environmentally driven mechanisms represent an underlying cause of phenotypic diversity, especially in metazoans. This book aims to present some of the latest epigenetic insights into the development of metazoans (including humans) as an intersection between their ecology and evolution.