1. Record Nr. UNINA9910784767003321

Autore	Hartquist T. W
Titolo	Blowing bubbles in the cosmos [[electronic resource]] : astronomical winds, jets, and explosions / / T.W. Hartquist, J.E. Dyson, and D.P. Ruffle
Pubbl/distr/stampa	New York, : Oxford University Press, c2004
ISBN	0-19-773209-7 1-280-47255-3 0-19-535143-6 0-19-518615-X
Descrizione fisica	1 online resource (188 p.)
Altri autori (Persone)	DysonJ. E <1941-> (John Edward) RuffleD. P
Disciplina	523.01
Soggetti	Solar wind Astrophysical jets Stars, New
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	Contents; 1. The First Discoveries of Astronomical Winds; 2. The Magnitudes of Astronomical Quantities; 3. Stellar Evolution; 4. Basic Structures of Winds and Windblown Bubbles; 5. Star Formation and Low-Mass Young Stellar Objects; 6. Regions of High-Mass Star Formation; 7. Winds from Main-Sequence and Post-Main-Sequence Stars; 8. Supernovae and Their Remnants; 9. Galactic Winds, Starburst Superwinds, and the Epoch of Galaxy Formation; 10. Active Galaxies and Their Nuclei; 11. Some Other Windy and Explosive Sources; Epilogue; Glossary; Mathematical Appendix; Index
Sommario/riassunto	Many astrophysical bodies produce winds, jets or explosions, which blow bubbles. From a nonmathematical perspective, based on the understanding of bubbles, this book addresses various topics in astrophysics including supernovae, the production of structure in the Early Universe, the environments of supermassive black holes and gamma-ray bursts.

2. Record Nr. UNIORUON00072263

Autore	MAREES, Pieter : de
Titolo	Description and historical account of the Gold Kingdom of Guinea (1602) / Pieter de Marees ; Translated from the Dutch and edited by Albert van Dantzig and Adam Jones
Pubbl/distr/stampa	Oxford, : Oxford University Press, c1987
Descrizione fisica	ix,272 p. : ill. ; 23 cm
Disciplina	966.7
Soggetti	GHANA - Vita sociale e costumi
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

3. Record Nr. UNINA9910810762803321

Titolo	Event-based neuromorphic systems / / edited by Shih-Chii S. Liu [and three other]
Pubbl/distr/stampa	Chichester, West Sussex, United Kindgom : , : John Wiley & Sons Inc., , 2015
ISBN	1-118-92762-1 1-118-92760-5 1-118-92763-X
Edizione	[1st edition]
Descrizione fisica	1 online resource (442 p.)
Classificazione	TEC008010
Disciplina	660.6/3
Soggetti	Neuromorphics Discrete-time systems Neural networks (Neurobiology) - Simulation methods
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

EVENT-BASED NEUROMORPHIC SYSTEMS; Contents; List of Contributors; Foreword; Acknowledgments; List of Abbreviations and Acronyms; 1 Introduction; 1.1 Origins and Historical Context; 1.2 Building Useful Neuromorphic Systems; References; Part I Understanding Neuromorphic Systems; 2 Communication; 2.1 Introduction; 2.2 Address-Event Representation; 2.2.1 AER Encoders; 2.2.2 Arbitration Mechanisms; 2.2.3 Encoding Mechanisms; 2.2.4 Multiple AER Endpoints; 2.2.5 Address Mapping; 2.2.6 Routing; 2.3 Considerations for AER Link Design; 2.3.1 Trade-off: Dynamic or Static Allocation
2.3.2 Trade-off: Arbitered Access or Collisions?2.3.3 Trade-off: Queueing versus Dropping Spikes; 2.3.4 Predicting Throughput Requirements; 2.3.5 Design Trade-offs; 2.4 The Evolution of AER Links; 2.4.1 Single Sender, Single Receiver; 2.4.2 Multiple Senders, Multiple Receivers; 2.4.3 Parallel Signal Protocol; 2.4.4 Word-Serial Addressing; 2.4.5 Serial Differential Signaling; 2.5 Discussion; References; 3 Silicon Retinas; 3.1 Introduction; 3.2 Biological Retinas; 3.3 Silicon Retinas with Serial Analog Output; 3.4 Asynchronous Event-Based Pixel Output Versus Synchronous Frames; 3.5 AER Retinas
3.5.1 Dynamic Vision Sensor3.5.2 Asynchronous Time-Based Image Sensor; 3.5.3 Asynchronous Parvo-Magno Retina Model; 3.5.4 Event-Based Intensity-Coding Imagers (Octopus and TTFS); 3.5.5 Spatial Contrast and Orientation Vision Sensor (VISe); 3.6 Silicon Retina Pixels; 3.6.1 DVS Pixel; 3.6.2 ATIS Pixel; 3.6.3 VISe Pixel; 3.6.4 Octopus Pixel; 3.7 New Specifications for Silicon Retinas; 3.7.1 DVS Response Uniformity; 3.7.2 DVS Background Activity; 3.7.3 DVS Dynamic Range; 3.7.4 DVS Latency and Jitter; 3.8 Discussion; References; 4 Silicon Cochleas; 4.1 Introduction; 4.2 Cochlea Architectures
4.2.1 Cascaded 1D4.2.2 Basic 1D Silicon Cochlea; 4.2.3 2D Architecture; 4.2.4 The Resistive (Conductive) Network; 4.2.5 The BM Resonators; 4.2.6 The 2D Silicon Cochlea Model; 4.2.7 Adding the Active Nonlinear Behavior of the OHCs; 4.3 Spike-Based Cochleas; 4.3.1 Q-control of AEREAR2 Filters; 4.3.2 Applications: Spike-Based Auditory Processing; 4.4 Tree Diagram; 4.5 Discussion; References; 5 Locomotion Motor Control; 5.1 Introduction; 5.1.1 Determining Functional Biological Elements; 5.1.2 Rhythmic Motor Patterns; 5.2 Modeling Neural Circuits in Locomotor Control
5.2.1 Describing Locomotor Behavior5.2.2 Fictive Analysis; 5.2.3 Connection Models; 5.2.4 Basic CPG Construction; 5.2.5 Neuromorphic Architectures; 5.3 Neuromorphic CPGs at Work; 5.3.1 A Neuroprosthesis: Control of Locomotion in Vivo; 5.3.2 Walking Robots; 5.3.3 Modeling Intersegmental Coordination; 5.4 Discussion; References; 6 Learning in Neuromorphic Systems; 6.1 Introduction: Synaptic Connections, Memory, and Learning; 6.2 Retaining Memories in Neuromorphic Hardware; 6.2.1 The Problem of Memory Maintenance: Intuition; 6.2.2 The Problem of Memory Maintenance: Quantitative Analysis
6.2.3 Solving the Problem of Memory Maintenance

Sommario/riassunto

"Neuromorphic electronic engineering takes its inspiration from the functioning of nervous systems to build more power efficient electronic sensors and processors. Event-based neuromorphic systems are inspired by the brain's efficient data-driven communication design, which is key to its quick responses and remarkable capabilities. This cross-disciplinary text establishes how circuit building blocks are combined in architectures to construct complete systems. These include vision and auditory sensors as well as neuronal processing and learning circuits that implement models of nervous systems.Techniques for building multi-chip scalable systems are considered throughout the

book, including methods for dealing with transistor mismatch, extensive discussions of communication and interfacing, and making systems that operate in the real world. The book also provides historical context that helps relate the architectures and circuits to each other and that guides readers to the extensive literature. Chapters are written by founding experts and have been extensively edited for overall coherence.This pioneering text is an indispensable resource for practicing neuromorphic electronic engineers, advanced electrical engineering and computer science students and researchers interested in neuromorphic systems.Key features: Summarises the latest design approaches, applications, and future challenges in the field of neuromorphic engineering. Presents examples of practical applications of neuromorphic design principles. Covers address-event communication, retinas, cochleas, locomotion, learning theory, neurons, synapses, floating gate circuits, hardware and software infrastructure, algorithms, and future challenges"--