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Titolo	Brain-Inspired Computing : Second International Workshop, BrainComp 2015, Cetraro, Italy, July 6-10, 2015, Revised Selected Papers // edited by Katrin Amunts, Lucio Grandinetti, Thomas Lippert, Nicolai Petkov
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Descrizione fisica	1 online resource (X, 195 p. 47 illus.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 10087
Disciplina	006.32
Soggetti	User interfaces (Computer systems) Human-computer interaction Computer vision Artificial intelligence Logic design Operating systems (Computers) Microprocessors Computer architecture User Interfaces and Human Computer Interaction Computer Vision Artificial Intelligence Logic Design Operating Systems Processor Architectures
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Human Brainnetome Atlas and its Potential Applications in Brain-inspired Computing -- Workflows for ultra-high resolution 3D models of the human brain on massively parallel supercomputers -- Towards large-scale fiber orientation models of the brain automation and parallelization of a seeded region growing segmentation of high-resolution brain section images -- Including gap junctions into

distributed neuronal network simulations -- Designing Workflows for the Reproducible Analysis of Electrophysiological Data -- Finite-Difference Time-Domain Simulation for Three-dimensional Polarized Light Imaging -- Visual Processing in Cortical Architecture from Neuroscience to Neuromorphic Computing -- Bio-inspired filters for audio analysis -- Sophisticated LVQ Classification Models - Beyond Accuracy Optimization -- Classification of FDG-PET Brain Data by Generalized Matrix Relevance LVQ -- A Cephalomorph Real-time Computer -- Towards the Ultimate Display for Neuroscientific Data Analysis -- Sentiment Analysis and Affective Computing: methods and applications -- Deep representations for collaborative robotics. .

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Sommario/riassunto

This book constitutes revised selected papers from the Second International Workshop on Brain-Inspired Computing, BrainComp 2015, held in Cetraro, Italy, in July 2015. The 14 papers presented in this volume were carefully reviewed and selected for inclusion in this book. They deal with brain structure and function; computational models and brain-inspired computing methods with practical applications; high performance computing; and visualization for brain simulations. .

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