1. Record Nr.	UNISA996466177003316
Titolo	Multimodal Brain Image Analysis and Mathematical Foundations of Computational Anatomy [[electronic resource]] : 4th International Workshop, MBIA 2019, and 7th International Workshop, MFCA 2019, Held in Conjunction with MICCAI 2019, Shenzhen, China, October 17, 2019, Proceedings / / edited by Dajiang Zhu, Jingwen Yan, Heng Huang, Li Shen, Paul M. Thompson, Carl-Fredrik Westin, Xavier Pennec, Sarang Joshi, Mads Nielsen, Tom Fletcher, Stanley Durrleman, Stefan Sommer
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-030-33226-8
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (XVII, 230 p. 113 illus., 91 illus. in color.)
Collana	Image Processing, Computer Vision, Pattern Recognition, and Graphics ; ; 11846
Disciplina	006.37
Soggetti	Pattern recognition Optical data processing Artificial intelligence Computers Pattern Recognition Image Processing and Computer Vision Artificial Intelligence Information Systems and Communication Service
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	MBIA -- Non-rigid Registration of White Matter Tractography Using Coherent Point Drift Algorithm -- An Edge Enhanced SRGAN for MRI Super Resolution in Slice-selection Direction -- Exploring Functional Connectivity Biomarker in Autism Using Group-wise Sparse Representation -- Classifying Stages of Mild Cognitive Impairment via Augmented Graph Embedding -- Mapping the spatio-temporal functional coherence in the resting brain -- Species-Preserved Structural Connections Revealed by Sparse Tensor CCA -- Identification

of Abnormal Cortical 3-hinge Folding Patterns on Autism Spectral Brains -- Exploring Brain Hemodynamic Response Patterns Via Deep Recurrent Autoencoder -- 3D Convolutional Long-short Term Memory Network for Spatiotemporal Modeling of fMRI Data -- Biological Knowledge Guided Deep Neural Network for Genotype-Phenotype Association Study -- Learning Human Cognition via fMRI Analysis Using 3D CNN and Graph Neural Network -- CU-Net: Cascaded U-Net with Loss Weighted Sampling for Brain Tumor Segmentation -- BrainPainter: A software for the visualisation of brain structures, biomarkers and associated pathological processes -- Structural Similarity based Anatomical and Functional Brain Imaging Fusion -- Multimodal Brain Tumor Segmentation Using Encoder-Decoder with Hierarchical Separable Convolution -- Prioritizing Amyloid Imaging Biomarkers in Alzheimer's Disease via Learning to Rank -- MFCA -- Diffeomorphic Metric Learning and Template Optimization for Registration-Based Predictive Models -- 3D mapping of serial histology sections with anomalies using a novel robust deformable registration algorithm -- Spatiotemporal Modeling for Image Time Series with Appearance Change: Application to Early Brain Development -- Surface Foliation Based Brain Morphometry Analysis -- Mixture Probabilistic Principal Geodesic Analysis -- A Geodesic Mixed Effects Model in Kendall's Shape Space -- An as-invariant-as-possible GL+(3)-based Statistical Shape Model.

| Sommario/riassunto | This book constitutes the refereed joint proceedings of the 4th International Workshop on Multimodal Brain Image Analysis, MBAI 2019, and the 7th International Workshop on Mathematical Foundations of Computational Anatomy, MFCA 2019, held in conjunction with the 22nd International Conference on Medical Imaging and Computer-Assisted Intervention, MICCAI 2019, in Shenzhen, China, in October 2019. The 16 full papers presented at MBAI 2019 and the 7 full papers presented at MFCA 2019 were carefully reviewed and selected. The MBAI papers intend to move forward the state of the art in multimodal brain image analysis, in terms of analysis methodologies, algorithms, software systems, validation approaches, benchmark datasets, neuroscience, and clinical applications. The MFCA papers are devoted to statistical and geometrical methods for modeling the variability of biological shapes. The goal is to foster the interactions between the mathematical community around shapes and the MICCAI community around computational anatomy applications. |