

Contents

Cognitive and Computational Foundations of Brain Science

Speech Emotion Recognition Using Local and Global Features.	3
<i>Yuanbo Gao, Baobin Li, Ning Wang, and Tingshao Zhu</i>	
Advertisement and Expectation in Lifestyle Changes: A Computational Model.	14
<i>Seyed Amin Tabatabaei and Jan Treur</i>	
A Computational Cognitive Model of Self-monitoring and Decision Making for Desire Regulation	26
<i>Altaf Hussain Abro and Jan Treur</i>	
Video Category Classification Using Wireless EEG.	39
<i>Aunnoy K Mutasim, Rayhan Sardar Tipu, M. Raihanul Bashar, and M. Ashraful Amin</i>	
Learning Music Emotions via Quantum Convolutional Neural Network	49
<i>Gong Chen, Yan Liu, Jiannong Cao, Shenghua Zhong, Yang Liu, Yuxian Hou, and Peng Zhang</i>	
Supervised EEG Source Imaging with Graph Regularization in Transformed Domain	59
<i>Feng Liu, Jing Qin, Shouyi Wang, Jay Rosenberger, and Jianzhong Su</i>	
Insula Functional Parcellation from fMRI Data via Improved Artificial Bee-Colony Clustering	72
<i>Xuewu Zhao, Junzhong Ji, and Yao Yao</i>	
EEG-Based Emotion Recognition via Fast and Robust Feature Smoothing . . .	83
<i>Cheng Tang, Di Wang, Ah-Hwee Tan, and Chunyan Miao</i>	

Human Information Processing Systems

Stronger Activation in Widely Distributed Regions May not Compensate for an Ineffectively Connected Neural Network When Reading a Second Language	95
<i>Hao Yan, Chuanzhu Sun, Shan Wang, and Lijun Bai</i>	
Objects Categorization on fMRI Data: Evidences for Feature-Map Representation of Objects in Human Brain	107
<i>Sutao Song, Jiakai Zhang, and Yuehua Tong</i>	

Gender Role Differences of Female College Students in Facial Expression Recognition: Evidence from N170 and VPP	116
<i>Sutao Song, Jieyin Feng, Meiyun Wu, Beixi Tang, and Gongxiang Chen</i>	

Brain Big Data Analytics, Curation and Management

Overview of Acquisition Protocol in EEG Based Recognition System	129
<i>Hui-Yen Yap, Yun-Huoy Choo, and Wee-How Khoh</i>	
A Study on Automatic Sleep Stage Classification Based on Clustering Algorithm	139
<i>Xuexiao Shao, Bin Hu, and Xiangwei Zheng</i>	
Speaker Verification Method Based on Two-Layer GMM-UBM Model in the Complex Environment	149
<i>Qiang He, Zhijiang Wan, Haiyan Zhou, Jie Yang, and Ning Zhong</i>	
Emotion Recognition from EEG Using Rhythm Synchronization Patterns with Joint Time-Frequency-Space Correlation	159
<i>Hongzhi Kuai, Hongxia Xu, and Jianzhao Yan</i>	

Informatics Paradigms for Brain and Mental Health

Patients with Major Depressive Disorder Alters Dorsal Medial Prefrontal Cortex Response to Anticipation with Different Saliences	171
<i>Bin Zhang and Jijun Wang</i>	
Abnormal Brain Activity in ADHD: A Study of Resting-State fMRI	181
<i>Chao Tang, Yuqing Wei, Jiajia Zhao, Xin Zhang, and Jingxin Nie</i>	
Wearable EEG-Based Real-Time System for Depression Monitoring	190
<i>Shengjie Zhao, Qinglin Zhao, Xiaowei Zhang, Hong Peng, Zhijun Yao, Jian Shen, Yuan Yao, Hua Jiang, and Bin Hu</i>	
Group Guided Sparse Group Lasso Multi-task Learning for Cognitive Performance Prediction of Alzheimer's Disease	202
<i>Xiaoli Liu, Peng Cao, Jinzhu yang, Dazhe Zhao, and Osmar Zaiane</i>	
A Novel Deep Learning Based Multi-class Classification Method for Alzheimer's Disease Detection Using Brain MRI Data	213
<i>Jyoti Islam and Yanqing Zhang</i>	
A Quantitative Analysis Method for Objectively Assessing the Depression Mood Status Based on Portable EEG and Self-rating Scale	223
<i>Zhijiang Wan, Qiang He, Haiyan Zhou, Jie Yang, Jianzhao Yan, and Ning Zhong</i>	

Workshop on Affective, Psychological and Physiological Computing (APPC 2017)

Social Events Forecasting in Microblogging	235
<i>Yang Zhou, Chuxue Zhang, Xiaoqian Liu, Jingying Wang, Yuanbo Gao, Shuotian Bai, and Tingshao Zhu</i>	
Study on Depression Classification Based on Electroencephalography Data Collected by Wearable Devices	244
<i>Hanshu Cai, Yanhao Zhang, Xiaocong Sha, and Bin Hu</i>	
Corticospinal Tract Alteration is Associated with Motor Performance in Subacute Basal Ganglia Stroke	254
<i>Jing Wang, Ziyu Meng, Zengai Chen, and Yao Li</i>	
Detecting Depression in Speech Under Different Speaking Styles and Emotional Valences.	261
<i>Zhenyu Liu, Bin Hu, Xiaoyu Li, Fei Liu, Gang Wang, and Jing Yang</i>	
Scientific Advances on Consciousness	272
<i>Yinsheng Zhang</i>	

Workshop on Big Data and Visualization for Brainsmatics (BDVB 2017)

BECA: A Software Tool for Integrated Visualization of Human Brain Data . . .	285
<i>Huang Li, Shiaofer Fang, Bob Zigon, Olaf Sporns, Andrew J. Saykin, Joaquín Goñi, and Li Shen</i>	

Workshop on Semantic Technology for eHealth (STeH 2017)

Knowledge Graphs in the Quality Use of Antidepressants: A Perspective from Clinical Research Applications	295
<i>Weijing Tang, Yu Yang, Zhisheng Huang, and Xiaoli Hua</i>	
Using Knowledge Graph for Analysis of Neglected Influencing Factors of Statin-Induced Myopathy	304
<i>Yu Yang, Zhisheng Huang, Yong Han, Xiaoli Hua, and Weijing Tang</i>	

Workshop on Mesoscopic Brainformatics (MBAI 2017)

Mesoscopic Brainformatics	315
<i>Dezhong Yao</i>	

Special Session on Brain Informatics in Neurogenetics (BIN 2017)

The Development and Application of Biochemical Analysis of Saliva
in the Assessment of the Activity of Nervous System 327
Chen Li, Pan Gu, Kangwei Shen, and Xuejun Kang

Author Index 335

Brain Informatics

International Conference, BI 2017, Beijing, China,

November 16-18, 2017, Proceedings

Zeng, Y.; He, Y.; Kotaleski, J.H.; Martone, M.; Xu, B.;

Peng, H.; Luo, Q. (Eds.)

2017, XVI, 336 p. 100 illus., Softcover

ISBN: 978-3-319-70771-6