

## Preface

Bio-inspired computing is a field of study that abstracts computing ideas (data structures, operations with data, ways to control operations, computing models, etc.) from living phenomena or biological systems such as evolution, cells, tissues, neural networks, immune system, and ant colonies. Bio-Inspired Computing: Theories and Applications (BIC-TA) is a series of conferences that aims to bring together researchers working in the main areas of natural computing inspired from biology, for presenting their recent results, exchanging ideas, and cooperating in a friendly framework. The conference has four main topics: evolutionary computing, neural computing, DNA computing, and membrane computing.

Since 2006, the conference has taken place at Wuhan (2006), Zhengzhou (2007), Adelaide (2008), Beijing (2009), Liverpool and Changsha (2010), Penang (2011), Gwalior (2012), Anhui (2013), Wuhan (2014), and Anhui (2015). Following the success of previous editions, the 11th International Conference on Bio-Inspired Computing: Theories and Applications (BIC-TA 2016) was organized by Xidian University, during October 28–30, 2016.

BIC-TA 2016 attracted a wide spectrum of interesting research papers on various aspects of bio-inspired computing with a diverse range of theories and applications. We received 343 submissions, of which 115 papers were selected for two volumes of *Communications in Computer and Information Science*.

We gratefully thank Xidian University, Huazhong University of Science and Technology, and Northwestern Polytechnical University for extensive assistance in organizing the conference. We also thank Dr. Jiao Shi and all other volunteers, whose efforts ensured the smooth running of the conference.

The editors warmly thank the Program Committee members for their prompt and efficient support in reviewing the papers, and the authors of the submitted papers for their interesting papers.

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