DESCRIPTION

BioSystems encourages experimental, computational, and theoretical articles that link biology, evolutionary thinking, and the information processing sciences. The link areas form a circle that encompasses the fundamental nature of biological information processing, computational modeling of complex biological systems, evolutionary models of computation, the application of biological principles to the design of novel computing systems, and the use of biomolecular materials to synthesize artificial systems that capture essential principles of natural biological information processing.

The categories and topics listed below are examples, the editors will be happy to comment on the relevance of other topics:

Molecular Evolution
Self-organizing and self-replicating systems
Origins and evolution of the genetic mechanism

Biological Information Processing
Molecular recognition
Cellular control
Neuromolecular computing
Biological adaptability
Molecular computing technologies

Evolutionary Systems
Stochastic evolutionary algorithms
Evolutionary optimization
Simulation of genetic and ecological systems
Applications (neural nets, machine learning, robotics)

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INTRODUCTION

BioSystems encourages experimental, computational, and theoretical articles that link biology, evolutionary thinking, and the information processing sciences. The link areas form a circle that encompasses the fundamental nature of biological information processing, computational modeling of complex biological systems, evolutionary models of computation, the application of biological principles to the design of novel computing systems, and the use of biomolecular materials to synthesize artificial systems that capture essential principles of natural biological information processing.

Types of paper

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Regular Papers are original scientific articles describing research in any of the above areas irrespective of length. They are standard contributions to BioSystems.

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