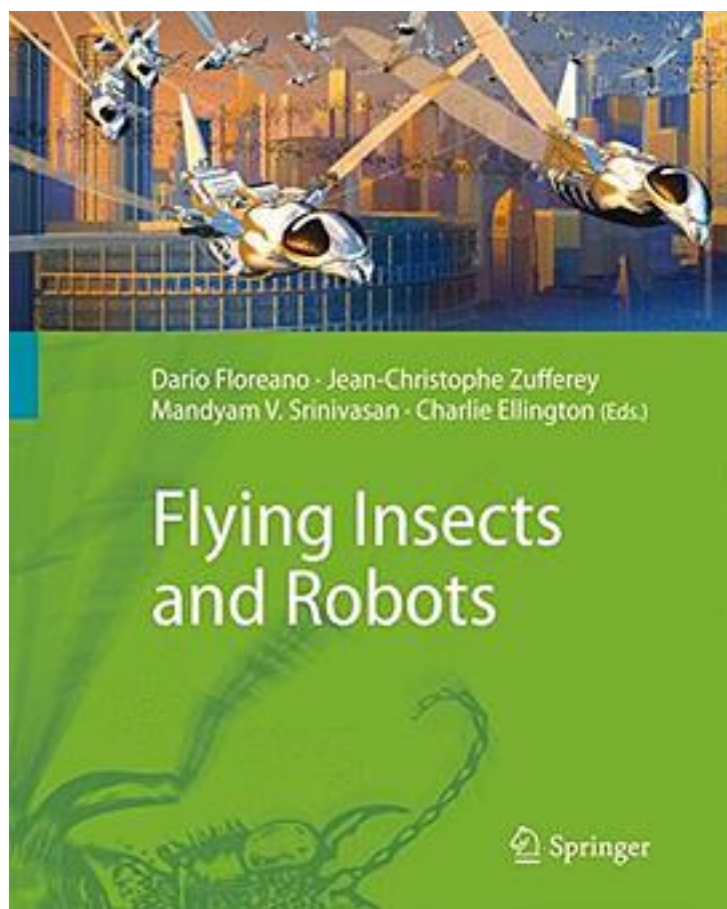


Flying Insects and Robots



[Flying Insects and Robots_ 下载链接1](#)

著者:Srinivasan, Mandyam V. 编

出版者:Springer

出版时间:2009-12-3

装帧:Hardcover

isbn:9783540893929

Flying insects are intelligent micromachines capable of exquisite maneuvers in unpredictable environments. Understanding these systems advances our knowledge of flight control, sensor suites, and unsteady aerodynamics, which is of crucial interest to engineers developing intelligent flying robots or micro air vehicles (MAVs). The

insights we gain when synthesizing bioinspired systems can in turn benefit the fields of neurophysiology, ethology and zoology by providing real-life tests of the proposed models. This book was written by biologists and engineers leading the research in this crossdisciplinary field. It examines all aspects of the mechanics, technology and intelligence of insects and insectoids. After introductory-level overviews of flight control in insects, dedicated chapters focus on the development of autonomous flying systems using biological principles to sense their surroundings and autonomously navigate. A significant part of the book is dedicated to the mechanics and control of flapping wings both in insects and artificial systems. Finally hybrid locomotion, energy harvesting and manufacturing of small flying robots are covered. A particular feature of the book is the depth on realization topics such as control engineering, electronics, mechanics, optics, robotics and manufacturing. This book will be of interest to academic and industrial researchers engaged with theory and engineering in the domains of aerial robotics, artificial intelligence, and entomology.

作者介绍:

目录:

[Flying Insects and Robots_ 下载链接1](#)

标签

评论

[Flying Insects and Robots_ 下载链接1](#)

书评

[Flying Insects and Robots_ 下载链接1](#)