Robust Adaptive Control with Applications

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We live in a world which is filled with uncertainty. It is the randomicity, complexity and nonlinearity of uncertainty that build a multicolored nature and human society, while it is the very thing that brings great difficulties in understanding and changing the real world. Many advanced control theories have been proposed to deal with this problem, among which robust adaptive control is one of the most popular methods. The purpose of this session is to bring together researchers in academia and industries throughout the world to present and share their recent research results and innovative ideas related to robust adaptive control. We are inviting articles on theories and applications of novel robust adaptive control – such as model-reference adaptive control, self-tuing adaptive control, neural and fuzzy adaptive control, adaptive gain scheduling autotuning control and switching control, composite adaptive control, and so on. Particularly, articles with real industrial applications are of great interest.

鲁棒自适应控制及其应用

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不确定性无处不在。正是由于不确定性的随机性、复杂性和非线性，才造就了五彩斑斓的自然世界和人类社会，也正是这个原因，使得人们在认识和改造世界时遇到了很多困难。针对这个问题，人们提出了很多先进控制理论，其中，鲁棒自适应控制就是最受关注的理论之一。本专题旨在与世界范围内相关学术界和工业界的学者一道，共同展示和分享鲁棒自适应控制理论相关应用的新思路和新成果。本专题论文主题包含但不限于：模型参考自适应控制、自校正自适应控制、神经网络与模糊自适应控制、自适应增益调度与切换控制、复合自适应控制等，尤其包含应用到实际系统上的鲁棒自适应控制实例。