

Call for Papers IET Control Theory & Applications

Special Issue:

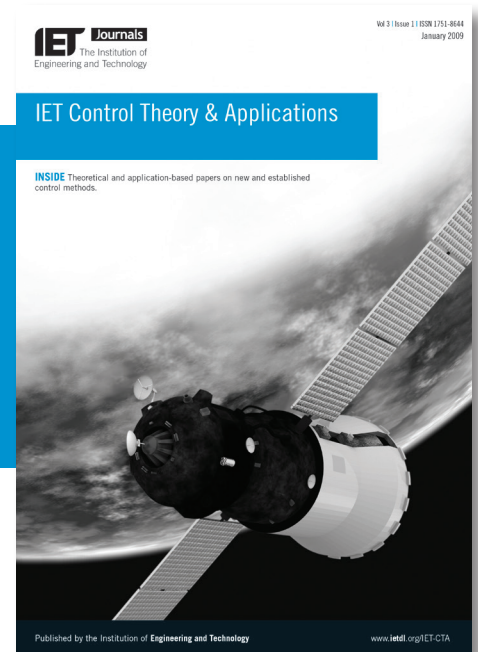
Sliding Mode Based Disturbance Estimation, Attenuation and Fault Detection

The performance of controlled complex dynamic systems inevitably suffers from various disturbances and uncertainties. Moreover, different faults (sensor and actuator faults for example) can occur. Sliding mode based observers have shown high performance for states and parameter estimation robustness with regards to measurement noise even in the presence of unknown inputs. The aim of this Special Issue is to summarize and provide the recent advances in sliding mode based disturbance and parameter estimation, faults detection (DPEFD) and their attenuation. The proposed Special Issue will facilitate faster uptake of advanced sliding mode based DPEFD technologies, as well as address new challenges arising from upcoming complex control systems, and generate new theories and methodologies.

Topics to be covered in this special issue include, but are not limited to the following:

- Sliding mode based external disturbance estimation/observation
- Sliding mode based unknown parameter identification
- Sensor noise filtering and attenuation
- Disturbance estimation/attenuation in stochastic, uncertain or hybrid systems
- Sliding mode observers based fault detection
- Unmatched disturbance attenuation with sliding mode control
- Sliding mode based fault tolerant control
- Applications of advanced disturbance estimation/attenuation approaches to dynamic systems.

All submissions are subject to the journal's peer-review procedures. The authors should follow the journal's Author guide at <http://digital-library.theiet.org/journals/author-guide> when preparing papers for submission to the Special issue.



Important dates:

Submission of Manuscript
February 1, 2014

Notification of Acceptance
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Final Manuscript Due
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Tentative Publication Date
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