Model Predictive Control in Sensing and Robotic- Methods and Applications

Guest Editors:

Dr. Chuxiong Hu

Dr. Ze Wang

Dr. Mingxing Yuan

Prof. Dr. Zheng Chen

Deadline for manuscript submissions:
closed (30 June 2023)
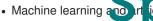
Message from the Guest Editors

Model predictive control is an effective approach to control nonlinear constrained dynamic systems . Due to the remarkable online optimization capability, in the past decades, model predictive control has rapidly developed in both mathematical theory and industrial application. Nowadays, it is believed that advanced model predictive control approaches are also promising to play a pivotal role in sensing, robotics, mechatronics and other related industrial scenarios.

Topic Included：

- Nonlinear predictive control of hybrid systems;

- Multimodal nonlinear predictive control;

- Fuzzy and neural network predictive control;

- Adaptative predictive control;

- Predictive control for fast dynamics;

- Optimization algorithms for model predictive control;

- Heuristic optimization for model predictive control;

- Real industrial applications;

- Real-time model predictive implementation;

- Model predictive control for NCSs under cyberattacks;

- Machine learning and artificial intelligence for model

Special Issue

Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro
Dipartimento di Ingegneria
Elettrica e dell'Informazione
(Department of Electrical and
Information Engineering),
Politecnico di Bari, Via Edoardo
Orabona n. 4, 70125 Bari, Italy

Author Benefits

Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. *Sensors* organizes Special Issues devoted to specific sensing areas and applications each year.

Open Access : free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Ei Compendex, Inspec, Astrophysics Data System, and other databases.
Journal Rank: JCR - Q2 (*Instruments & Instrumentation*) / CiteScore - Q1 (*Instrumentation*)

Contact Us