Special Issue

Digital Twin in Prognostics and Health Management Era

Message from the Guest Editors

PHM uses sensors to monitor the states of devices in real time, uses various models and algorithms to perform fault diagnosis, fault prognostics, and remaining life prediction, and creates the optimal maintenance plan. The combination of digital twin and prognostics and PHM holds immense potential for innovation and application. This Special Issue aims to illuminate the cutting-edge research in digital twin technology for PHM. In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

- Integration of digital twin and PHM methodologies in CPSs;
- Applications of digital twin and PHM in smart manufacturing;
- Real-time monitoring and predictive maintenance using digital twin;
- Data analytics and AI techniques for enhancing PHM through digital twin;
- Security considerations in implementing digital twin and PHM in Industry 4.0;
- Economic and environmental implications of combined digital twin–PHM strategies;
- Human–machine interaction and user-centered design for digital-twin-ehanced PHM studies;

We look forward to receiving your contributions.

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Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

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