Special Issue

Advances in Proportional-Integral-Derivative-Based Control of Dynamic Systems: Theory and Applications

Message from the Guest Editors

Proportional-integral-derivative (PID) controllers are among the most commonly used controllers in industry. They play a crucial role in maintaining control efficiency and stability in various industrial processes. Some of the key benefits of PID controllers are their versatility. adaptability, ease of implementation, and robust performance. This makes them indispensable tools for maintaining control and stability in various industrial processes. Although the first industrial automatic and hyperreset controllers date back to the 1940s, the development of controller tuning methods and the modification of control algorithms and structures has not stood still. On the contrary, the number of studies is constantly increasing. The Special Issue deals with new tuning methods for constrained PID controllers and other control algorithms with comparable computational complexity.

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The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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