



fractal and fractional



Special Issue Reprint

Applications of Fractional-Order Systems to Automatic Control

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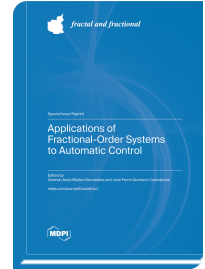
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Fractional-order systems have been applied in diverse areas of science and engineering. Fractional-order calculus is a generalization of the integration and differentiation operators to non-integer order. Fractional order provides additional flexibility and adjustments to operation specifications. In automatic control, fractional systems allow forms of response that are impossible to achieve with classical control, e.g., improvements in noise measurement attenuation without unnecessarily deteriorating the disturbance rejection properties and, consequently, the time response of the closed-loop system.

The focus of this Special Issue is to showcase advances in research on topics related to the theory, design, implementation, and application of fractional-order systems in automatic control.



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