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   Soggetti   Automatic control
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   Nota di contenuto   Fractional Calculus for Multivariate Vector-Valued Function and Fractal
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                       -- Fractional-order Comb Filter Design for Power-line Interference
                       Removal -- Practical Realization of Fractional Order Notch Filter with
                       Asymmetric Slopes and Optimized Quality Factor -- Fractional Order
                       Modified IMC for Integrating Processes for Given Stability Margins and
                       Increased Closed Loop Bandwidth -- Internal Model Control based
                       Fractional Order Controller Design for Process Plants Satisfying Desired
                       Gain Margin and Phase Margin -- Novel Hybrid Iterative Learning-
                       Fractional Predicative PI Controller for Time-Delay Systems -- Design
                       of Robust Model Predictive Controller for DC Motor Using Fractional
                       Calculus -- Studying Fractional-order Controller Structures for Load
                       Frequency Control of Interconnected Multiple Source Power Systems --
                       Hardware Implementation of the Fractional Controller on Quadrotor
                       Aircraft -- Optimum Fractional-order PID for Active Suspension of
                       Quarter Car Model Control.

   Sommario/riassunto The book investigates the fractional calculus-based approaches and
                       their benefits to adopting in complex real-time areas. Another

objective is to provide initial solutions for new areas where fractional theory has yet to verify the expertise. The book focuses on the latest scientific interest and illustrates the basic idea of general fractional calculus with MATLAB codes. This book is ideal for researchers working on fractional calculus theory both in simulation and hardware. Researchers from academia and industry working or starting research in applied fractional calculus methods will find the book most useful. The scope of this book covers most of the theoretical and practical studies on linear and nonlinear systems using fractional-order integro-differential operators.