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| 1. Record Nr.           | UNINA9910299756703321  |
| Autore                  | Benzaouia Abdellah   |
| Titolo                  | Advanced TakagiSugeno Fuzzy Systems : Delay and Saturation / / by Abdellah Benzaouia, Ahmed El Hajjaji   |
| Pubbl/distr/stampa      | Cham : , : Springer International Publishing : , : Imprint : Springer, , 2014  |
| ISBN                    | 3-319-05639-5  |
| Edizione                | [1st ed. 2014.]  |
| Descrizione fisica      | 1 online resource (317 p.)   |
| Collana                 | Studies in Systems, Decision and Control, , 2198-4182 ; ; 8  |
| Disciplina              | 006.33   |
| Soggetti                | Automatic control<br>Artificial intelligence<br>Computational intelligence<br>Control and Systems Theory<br>Artificial Intelligence<br>Computational Intelligence  |
| Lingua di pubblicazione | Inglese  |
| Formato                 | Materiale a stampa   |
| Livello bibliografico   | Monografia   |
| Note generali           | Description based upon print version of record.  |
| Nota di contenuto       | Introduction to TakagiSugeno Fuzzy Systems -- Stabilization of TakagiSugeno Fuzzy Systems with Constrained Controls -- Static Output Feedback Control for Fuzzy Systems -- Stabilization of Discrete-time TakagiSugeno Fuzzy Positive Systems -- Stabilization of Delayed T-S Fuzzy Positive Systems -- Robust Control of T-S Fuzzy Systems with Time-varying Delay -- Robust Output $H_{\infty}$ Fuzzy Control -- Stabilization of Discrete-time T-S Fuzzy Positive Systems with Multiple Delays -- Stabilization of Two Dimensional T-S Fuzzy Systems.   |
| Sommario/riassunto      | This monograph puts the reader in touch with a decade's worth of new developments in the field of fuzzy control specifically those of the popular Takagi-Sugeno (T-S) type. New techniques for stabilizing control analysis and design based on multiple Lyapunov functions and linear matrix inequalities (LMIs), are proposed. All the results are illustrated with numerical examples and figures and a rich bibliography is provided for further investigation. Control saturations are taken into account within the fuzzy model. The concept of positive invariance is used to obtain sufficient asymptotic stability conditions for the fuzzy |

system with constrained control inside a subset of the state space. The authors also consider the non-negativity of the states. This is of practical importance in many chemical, physical and biological processes that involve quantities that have intrinsically constant and non-negative sign: concentration of substances, level of liquids, etc. Results for linear systems are then extended to linear systems with delay. It is shown that LMI techniques can usually handle the new constraint of non-negativity of the states when care is taken to use an adequate Lyapunov function. From these foundations, the following further problems are also treated: . asymptotic stabilization of uncertain T-S fuzzy systems with time-varying delay, focusing on delay-dependent stabilization synthesis based on parallel distributed controller (PDC); . asymptotic stabilization of uncertain T-S fuzzy systems with multiple delays, focusing on delay-dependent stabilization synthesis based on PDC with results obtained under linear programming; . design of delay-independent, observer-based,  $H_\infty$  infinity control for T-S fuzzy systems with time varying delay; and . asymptotic stabilization of 2-D T-S fuzzy systems. Advanced Takagi–Sugeno Fuzzy Systems provides researchers and graduate students interested in fuzzy control systems with further approaches based LMI and LP.

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| 2. Record Nr.           | UNISA996681279903316  |
| Autore                  | MURA, Salvatore <1984- >  |
| Titolo                  | L'Italia repubblicana : un profilo storico dal 1946 a oggi / Salvatore Mura, Albertina Vittoria |
| Pubbl/distr/stampa      | Roma, : Carocci, 2025   |
| ISBN                    | 978-88-290-2797-2   |
| Descrizione fisica      | 293 p. ; 22 cm  |
| Collana                 | Quality paperbacks ; 728  |
| Altri autori (Persone)  | VITTORIA, Albertina   |
| Disciplina              | 945.092   |
| Soggetti                | Italia - 1946-2023 - Storia   |
| Collocazione            | X.3.B. 9023   |
| Lingua di pubblicazione | Italiano  |
| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |