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Titolo	Proceedings of 2015 12th International Conference on Remote Engineering and Virtual Instrumentation : 25-27 February 2015, Bangkok, Thailand / / Institute of Electrical and Electronics Engineers
Pubbl/distr/stampa	Piscataway, New Jersey : , : Institute of Electrical and Electronics Engineers, , 2015
ISBN	1-4799-7839-6
Descrizione fisica	1 online resource (112 pages)
Disciplina	620.46
Soggetti	Remote control Engineering instruments Remote sensing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr.	UNINA9910299787603321
Autore	Blanchini Franco
Titolo	Set-Theoretic Methods in Control / / by Franco Blanchini, Stefano Miani
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Birkhäuser, , 2015
ISBN	3-319-17933-0
Edizione	[2nd ed. 2015.]
Descrizione fisica	1 online resource (640 p.)
Collana	Systems & Control: Foundations & Applications, , 2324-9749
Disciplina	511.322
Soggetti	System theory Automatic control Calculus of variations Dynamics Ergodic theory Robotics Automation Systems Theory, Control Control and Systems Theory Calculus of Variations and Optimal Control; Optimization Dynamical Systems and Ergodic Theory Robotics and Automation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Preface -- Introduction -- Lyapunov and Lyapunov-like Function -- Convex Sets and Their Representation -- Invariant Sets -- Dynamic Programming -- Set-Theoretic Analysis of Dynamic Systems -- Control of Parameter-Varying Systems -- Control with Time-Domain Constraints -- Switching and Switched Systems -- (Sub-)Optimal Control -- Set-Theoretic Estimation -- Related Topics -- Appendix -- References -- Index.
Sommario/riassunto	The second edition of this monograph describes the set-theoretic approach for the control and analysis of dynamic systems, both from a theoretical and practical standpoint. This approach is linked to fundamental control problems, such as Lyapunov stability analysis and

stabilization, optimal control, control under constraints, persistent disturbance rejection, and uncertain systems analysis and synthesis. Completely self-contained, this book provides a solid foundation of mathematical techniques and applications, extensive references to the relevant literature, and numerous avenues for further theoretical study. All the material from the first edition has been updated to reflect the most recent developments in the field, and a new chapter on switching systems has been added. Each chapter contains examples, case studies, and exercises to allow for a better understanding of theoretical concepts by practical application. The mathematical language is kept to the minimum level necessary for the adequate formulation and statement of the main concepts, yet allowing for a detailed exposition of the numerical algorithms for the solution of the proposed problems. Set-Theoretic Methods in Control will appeal to both researchers and practitioners in control engineering and applied mathematics. It is also well-suited as a textbook for graduate students in these areas. Praise for the First Edition "This is an excellent book, full of new ideas and collecting a lot of diverse material related to set-theoretic methods. It can be recommended to a wide control community audience." - B. T. Polyak, Mathematical Reviews "This book is an outstanding monograph of a recent research trend in control. It reflects the vast experience of the authors as well as their noticeable contributions to the development of this field...[It] is highly recommended to PhD students and researchers working in control engineering or applied mathematics. The material can also be used for graduate courses in these areas." - Octavian Pastravanu, Zentralblatt MATH.
