1. Record Nr. UNINA9910299977603321 Autore Poznyak Alexander Titolo Attractive Ellipsoids in Robust Control / / by Alexander Poznyak, Andrey Polyakov, Vadim Azhmyakov Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Birkhäuser,, 2014 **ISBN** 3-319-09210-3 Edizione [1st ed. 2014.] Descrizione fisica 1 online resource (365 p.) Collana Systems & Control: Foundations & Applications, , 2324-9749 629.8312 Disciplina Soggetti System theory Systems Theory, Control 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 1. Introduction -- 2. Mathematical Backgrounds -- 3. Robust State Feedback Control -- 4. Robust Output Feedback Control -- 5. Control with Sample-Data Measurements -- 6. Sample Data and Quantifying Output Control -- 7. Robust Control of Implicit Systems -- 8. Attractive Ellipsoids in Sliding Mode control -- 9. Robust Stabilization of Time-Delay Systems -- 10. Robust Control of Switched Systems -- 11. Bounded Robust Control -- 12. Attractive Ellipsoid Method with Adaptation. Sommario/riassunto This monograph introduces a newly developed robust-control design technique for a wide class of continuous-time dynamical systems called the "attractive ellipsoid method." Along with a coherent introduction to the proposed control design and related topics, the monograph studies nonlinear affine control systems in the presence of uncertainty and presents a constructive and easily implementable control strategy that guarantees certain stability properties. The authors discuss linear-style feedback control synthesis in the context of the above-mentioned systems. The development and physical implementation of highperformance robust-feedback controllers that work in the absence of complete information is addressed, with numerous examples to illustrate how to apply the attractive ellipsoid method to mechanical

and electromechanical systems. While theorems are proved

systematically, the emphasis is on understanding and applying the

theory to real-world situations. Attractive Ellipsoids in Robust Control will appeal to undergraduate and graduate students with a background in modern systems theory as well as researchers in the fields of control engineering and applied mathematics.

Record Nr. UNINA9911006660703321

Autore Smith David A
Titolo Quick die change

Pubbl/distr/stampa [Place of publication not identified], : Society of Manufacturing

Engineers, 2005

ISBN 1-62104-020-8

1-61344-962-3

Disciplina 671.2/53

Soggetti Dies (Metal-working)

Mechanical Engineering

Engineering & Applied Sciences

Industrial & Management Engineering

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Note generali Bibliographic Level Mode of Issuance: Monograph