

1. Record Nr.	UNINA9910964624703321
Autore	Isidori Alberto
Titolo	Nonlinear Control Systems // by Alberto Isidori
Pubbl/distr/stampa	London : , : Springer London : , : Imprint : Springer, , 1995
ISBN	1-84628-615-8
Edizione	[3rd ed. 1995.]
Descrizione fisica	1 online resource (xv, 549 pages) : illustrations
Collana	Communications and Control Engineering, , 2197-7119
Disciplina	629.892
Soggetti	Automatic control Robotics Automation System theory Control theory Automotive engineering Mathematical optimization Calculus of variations Control, Robotics, Automation Control and Systems Theory Systems Theory, Control Automotive Engineering Calculus of Variations and Optimization
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Local Decompositions of Control Systems -- 2. Global Decompositions of Control Systems -- 3. Input-Output Maps and Realization Theory -- 4. Elementary Theory of Nonlinear Feedback for Single-Input Single-Output Systems -- 5. Elementary Theory of Nonlinear Feedback for Multi-Input Multi-Output Systems -- 6. Geometric Theory of State Feedback: Tools -- 7. Geometric Theory of Nonlinear Systems: Applications -- 8. Tracking and Regulation -- 9. Global Feedback Design for Single-Input Single-Output Systems -- A. Appendix A -- A.1 Some Facts from Advanced Calculus -- A.2 Some Elementary Notions of Topology -- A.3 Smooth Manifolds -- A.4 Submanifolds -- A.5 Tangent Vectors -- A.6 Vector Fields -- B.

Appendix B -- B.1 Center Manifold Theory -- B.2 Some Useful Properties -- B.3 Local Geometric Theory of Singular Perturbations -- Bibliographical Notes -- References.

Sommario/riassunto

This established and authoritative text focuses on the design and analysis of nonlinear control systems. The author considers the latest research results and techniques in this updated and extended edition. Topics covered include: • local and global decompositions of control systems; • input-output maps and realization theory; • nonlinear feedback for single-input/single-output systems and multi-input/multi-output systems; • applications of state feedback; • output regulation and • global stabilization and disturbance attenuation. Examples are given from mechanical, electrical and aerospace engineering. The approach consists of a rigorous mathematical formulation of control problems and respective methods of solution. The two appendices outline the most important concepts of differential geometry and present some specific data not often found in other standard works. This makes Nonlinear Control Systems suitable as a graduate and undergraduate text and as a source of reference.

2. Record Nr.

UNINA9911019436203321

Titolo

Organic reaction mechanisms [[electronic resource]] 1970 : an annual survey covering the literature dated December 1969 through November 1970 // edited by B. Capon, C. W. Rees

Pubbl/distr/stampa

London, : Interscience Publishers, c1971

ISBN

9786612112478
9781282112476
1282112473
9780470318874
0470318872
9780470318881
0470318880

Descrizione fisica

1 online resource (701 p.)

Collana

Organic Reaction Mechanisms Series ; ; v.108

Altri autori (Persone)

CaponB
ReesCharles W (Charles Wayne)

Disciplina

547.139
547.2

Soggetti

Chemistry, Organic
Chemistry

Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	<p>ORGANIC REACTION MECHANISMS 1970; Contents; Carbonium Ions; Bicyclic and Polycyclic Systems; Participation by Aryl Groups; Participation by Double and Triple Bonds; Reactions of Small-ring Compounds; Metallocenylmethyl Cations; Stable Carbonium Ions and their Reactions; Other Reactions; Nucleophilic Aliphatic Substitution; Ion-pair Phenomena and Borderline Mechanisms; Solvent and Medium Effects; Isotope Effects; Neighbouring Group Participation; Deamination and Related Reactions; Reactions of Aliphatic Diazo-compounds; Fragmentation Reactions</p> <p>Displacement Reactions at Elements other than Carbon Ambident Nucleophiles; Substitution at Vinylic Carbon; Reactions of α-Halogenocarbonyl Compounds; Other Reactions; Carbanions and Electrophilic Aliphatic Substitution; Carbanion Structure and Stability; Reactions of Carbanions; Proton Transfer, Hydrogen Isotope Exchange, and Related Reactions; Organometallics: Groups Ia, IIa, III; Organometallics: Other Elements; Electrophilic Reactions of Hydrocarbons; Miscellaneous Reactions; Elimination Reactions; Steric Course of E2 Reactions; Orientation in E2 Reactions; The E1cB Mechanism</p> <p>The E1cB Mechanism Other Topics; Addition Reactions; Electrophilic Additions; Nucleophilic Additions; Cycloadditions; Nucleophilic Aromatic Substitution; The S_NAr Mechanism; Heterocyclic Systems; Meisenheimer and Related Complexes; Substitution in Polyhalogenomomatic Compounds; Benzyne and Related Intermediates; Other Reactions; Electrophilic Aromatic Substitution; Sulphonation; Nitration; Nitrosation; Azo coupling; Halogenation; Metalation; Metal Cleavage; Decarboxylation; Friedel-Crafts and Related Reactions; Hydrogen Exchange; Miscellaneous Reactions; Molecular Rearrangements</p> <p>Aromatic Rearrangements Sigmatropic Rearrangements; Electrocyclic Rearrangements; Cycloreversion Rearrangements; Anionic Rearrangements; Cationic Rearrangements; Rearrangements Involving Electron-deficient Heteroatoms; Isomerizations; Rearrangements Involving Ring Openings and Closures; Radical Reactions; Structure and Stereochemistry; Decomposition of Azo-compounds; Decomposition of Peroxides; Diradicals; Atom-transfer Processes; Additions; Aromatic Substitution; Rearrangements; Reactions Involving Oxidation or Reduction by Metal Salts; Nitroxides; Reactions Involving Radical Ions Electrochemical Processes Autoxidation; Miscellaneous; Carbenes and Nitrenes; structure; Methods of Generation; Insertions and Abstractions; cycloadditions; Rearrangements; Fragmentations; Reactions with Nucleophiles; Dimerization; Carbenoids and Metal Complexes; Reactions of Aldehydes and Ketones and their Derivatives; Formation and Reactions of Acetals and Ketals; Hydrolysis and Formation of Glycosides; Hydration of Aldehydes and Ketones and Related Reactions; Reactions with Nitrogen Bases; Hydrolysis of Enol Ethers and Esters; Enolization and Related Reactions; Aldol and Related Reactions</p> <p>Reactions of Enamines</p>
Sommario/riassunto	This annual series on organic reaction mechanisms research provides concise, comprehensive coverage of the year's literature as well as

discussions of important results. The present volume either discusses or lists all published work dated from December to November inclusive, that deals significantly with any aspect of organic reaction mechanisms.
