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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-ouput 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.