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Collana	World Scientific series on nonlinear science. Series A, Monographs and treatises ; ; v. 45
Altri autori (Persone)	LamarqueClaude-Henri
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Nota di bibliografia	Includes bibliographical references (p. 507-530) and index.
Nota di contenuto	Preface; Contents; Chapter 1 Introduction to Discontinuous ODEs; Chapter 2 Mathematical Background for Multivalued Formulations; Chapter 3 Numerical Schemes and Analytical Methods; Chapter 4 Properties of Numerical Schemes; Chapter 5 Bifurcations of a Particular van der Pol-Duffing Oscillator; Chapter 6 Stick-Slip Oscillator with Two Degrees of Freedom; Chapter 7 Piecewise Linear Approximations; Chapter 8 Chua's Circuit with Discontinuities; Chapter 9 Mechanical System with Impacts and Modal Approaches; Chapter 10 One DOF Mechanical System with Friction Chapter 11 Modelling the Dynamical Behaviour of Elasto-Plastic Systems Chapter 12 A Mechanical System with 7 DOF; Chapter 13 Stability of Singular Periodic Motions in Single Degree of Freedom Vibro-Impact Oscillators and Grazing...; Chapter 14 Triple Pendulum with Impacts; Chapter 15 Analytical Prediction of Stick-Slip Chaos; Chapter 16 Thermoelasticity, Wear and Stick-Slip Movements of a Rotating Shaft with a Rigid Bush; Chapter 17 Control for Discrete Models of Buildings Including Elastoplastic Terms; Bibliography; Index
Sommario/riassunto	This book presents the theoretical frame for studying lumped

nonsmooth dynamical systems: the mathematical methods are recalled,
and adapted numerical methods are introduced (differential inclusions,
maximal monotone operators, Filippov theory, Aizerman theory, etc).
