

1. Record Nr.	UNINA9910143591103321
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Titolo	Systems with hysteresis [[electronic resource]] : analysis, identification and control using the Bouc-Wen model // Faycal Ikhouane, Jose Rodellar
Pubbl/distr/stampa	Chichester, England ; ; Hoboken, NJ, : John Wiley, c2007
ISBN	1-280-97402-8 9786610974023 0-470-51320-9 0-470-51319-5
Descrizione fisica	1 online resource (224 p.)
Altri autori (Persone)	RodellarJose
Disciplina	538.3 621
Soggetti	Hysteresis - Mathematical models Electronic books.
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 (p. [189]-197) and index.
Nota di contenuto	Systems with Hysteresis; Contents; Preface; List of Figures; List of Tables; 1 Introduction; 1.1 Objective and Contents of the Book; 1.2 The Bouc-Wen Model: Origin and Literature Review; 2 Physical Consistency of the Bouc-Wen Model; 2.1 Introduction; 2.2 BIBO Stability of the Bouc-Wen Model; 2.2.1 The Model; 2.2.2 Problem Statement; 2.2.3 Classification of the BIBO-Stable Bouc-Wen Models; 2.2.4 Practical Remarks; 2.3 Free Motion of a Hysteretic Structural System; 2.3.1 Problem Statement; 2.3.2 Asymptotic Trajectories; 2.3.3 Practical Remarks; 2.4 Passivity of the Bouc-Wen model 2.5 Limit Cases2.5.1 The Limit Case $n = 1$; 2.5.2 The Limit Case $\alpha = 1$; 2.5.3 The Limit Case $\alpha = 0$; 2.5.4 The Limit Case $\beta + \gamma = 0$; 2.6 Conclusion; 3 Forced Limit Cycle Characterization of the Bouc-Wen Model; 3.1 Introduction; 3.2 Problem Statement; 3.2.1 The Class of Inputs; 3.2.2 Problem Statement; 3.3 The Normalized Bouc-Wen Model; 3.4 Instrumental Functions; 3.5 Characterization of the Asymptotic Behaviour of the Hysteretic Output; 3.5.1 Technical Lemmas; 3.5.2 Analytic Description of the Forced Limit Cycles for the Bouc-Wen

Model; 3.6 Simulation Example; 3.7 Conclusion
4 Variation of the Hysteresis Loop with the Bouc-Wen Model Parameters
4.1 Introduction; 4.2 Background Results and Methodology of the Analysis; 4.2.1 Background Results; 4.2.2 Methodology of the Analysis; 4.3 Maximal Value of the Hysteretic Output; 4.3.1 Variation with Respect to δ ; 4.3.2 Variation with Respect to σ ; 4.3.3 Variation with Respect to n ; 4.3.4 Summary of the Obtained Results; 4.4 Variation of the Zero of the Hysteretic Output; 4.4.1 Variation with Respect to δ ; 4.4.2 Variation with Respect to σ ; 4.4.3 Variation with Respect to n
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5 Robust Identification of the Bouc-Wen Model Parameters
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6 Control of a System with a Bouc-Wen Hysteresis

Sommario/riassunto

Hysteresis is a system property that is fundamental to a range of engineering applications as the components of systems with hysteresis are able to react differently to different forces applied to them. Control theory is used to model these complex systems and cause them to behave in the desired manner; the Bouc-Wen model is a well-known semi-physical model that is used extensively to describe the hysteresis of systems in the areas of smart structures and civil engineering. The Bouc-Wen model for system hysteresis has increased in popularity due to its capability of capturing in an analytical
