

1. Record Nr.	UNINA990008560210403321
Autore	Servizio geologico, sismico e dei suoli <Emilia-Romagna>
Titolo	Ravenna / Servizio geologico d'Italia, Regione Emilia-Romagna, Servizio geologico sismico e dei suoli ; a cura di A. Amorosi
Pubbl/distr/stampa	Roma, : SystemCart, 2002
Descrizione fisica	141 p. : ill. ; 21 cm + 2 c. ripieg.
Disciplina	551
Locazione	ILFGE FAGBC FARBC
Collocazione	MP UB Coll. 012(223)a 60 551 B 113/223 INU B 1243
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	In custodia

2. Record Nr.	UNISA996198377403316
Titolo	Arbeitspapiere / Mannheimer Zentrum fur Europaische Sozialforschung : = Working papers / Mannheim Centre for European Social Research
Pubbl/distr/stampa	Mannheim, : MZES, 1999-
Descrizione fisica	Online-Ressource
Disciplina	300
Soggetti	Monografische Reihe
Lingua di pubblicazione	Tedesco
Formato	Materiale a stampa
Livello bibliografico	Periodico
Note generali	Gesehen am 15.08.2017
3. Record Nr.	UNINA9910299608903321
Autore	Saldivar Márquez Martha Belem
Titolo	Analysis and Control of Oilwell Drilling Vibrations : A Time-Delay Systems Approach // by Martha Belem Saldivar Márquez, Islam Boussaada, Hugues Mounier, Silviu-Iulian Niculescu
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015
ISBN	3-319-15747-7
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (294 p.)
Collana	Advances in Industrial Control, , 1430-9491
Disciplina	622.3381
Soggetti	Fossil fuels Automatic control Vibration Dynamics Fossil Fuels (incl. Carbon Capture) Control and Systems Theory Vibration, Dynamical Systems, 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	From the Contents: Introduction -- Part I Modelling -- An Overview of Drillstring Models -- Bit–Rock Frictional Interface -- Comprehensive Modelling of a Vertical Oilwell Drilling System -- Part II Analysis -- Neural-Type Time-Delay Systems: Theoretical Background -- Part III Control -- Field Observations and Empirical Drilling Control -- Low-Order Controllers -- Flatness-Based Control of Drilling Vibrations.
Sommario/riassunto	<p>This book reports the results of exhaustive research work on modeling and control of vertical oilwell drilling systems. It is focused on the analysis of the system-dynamic response and the elimination of the most damaging drillstring vibration modes affecting overall perforation performance: stick-slip (torsional vibration) and bit-bounce (axial vibration). The text is organized in three parts. The first part, Modeling, presents lumped- and distributed-parameter models that allow the dynamic behavior of the drillstring to be characterized; a comprehensive mathematical model taking into account mechanical and electric components of the overall drilling system is also provided. The distributed nature of the system is accommodated by considering a system of wave equations subject to nonlinear boundary conditions; this model is transformed into a pair of neutral-type time-delay equations which can overcome the complexity involved in the analysis and simulation of the partial differential equation model. The second part, Analysis, is devoted to the study of the response of the system described by the time-delay model; important properties useful for analyzing system stability are investigated and frequency- and time-domain techniques are reviewed. Part III, Control, concerns the design of stabilizing control laws aimed at eliminating undesirable drilling vibrations; diverse control techniques based on infinite-dimensional system representations are designed and evaluated. The control proposals are shown to be effective in suppressing stick-slip and bit-bounce so that a considerable improvement of the overall drilling performance can be achieved. This self-contained book provides operational guidelines to avoid drilling vibrations. Furthermore, since the modeling and control techniques presented here can be generalized to treat diverse engineering problems, it constitutes a useful resource to researchers working on control and its engineering application in oilwell drilling.</p>