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Titolo	Nostradamus 2014: Prediction, Modeling and Analysis of Complex Systems // edited by Ivan Zelinka, Ponnuthurai Nagarathnam Suganthan, Guanrong Chen, Vaclav Snasel, Ajith Abraham, Otto Rössler
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Descrizione fisica	1 online resource (463 p.)
Collana	Advances in Intelligent Systems and Computing, , 2194-5357 ; ; 289
Disciplina	003.857
Soggetti	Computational intelligence Computational complexity Artificial intelligence Software engineering Computational Intelligence Complexity Artificial Intelligence Software Engineering/Programming and Operating Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Proceeding book of the Nostradamus conference contains accepted papers presented at this event in June 2014, was held in the third largest city in the Czech Republic-Ostrava"--Preface.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Chaos, Evolution and Complexity -- Nature-Inspired Algorithms and Nonlinear Systems -- Nonlinear and Predictive Control -- Nonlinear Dynamics and Complex Systems -- Various Topics.
Sommario/riassunto	The prediction of behavior of complex systems, analysis and modeling of its structure is a vitally important problem in engineering, economy and generally in science today. Examples of such systems can be seen in the world around us (including our bodies) and of course in almost every scientific discipline including such "exotic" domains as the earth's atmosphere, turbulent fluids, economics (exchange rate and stock markets), population growth, physics (control of plasma), information flow in social networks and its dynamics, chemistry and complex

networks. To understand such complex dynamics, which often exhibit strange behavior, and to use it in research or industrial applications, it is paramount to create its models. For this purpose there exists a rich spectrum of methods, from classical such as ARMA models or Box Jenkins method to modern ones like evolutionary computation, neural networks, fuzzy logic, geometry, deterministic chaos amongst others. This proceedings book is a collection of accepted papers of the Nostradamus conference that has been held in Ostrava, Czech Republic in June 2014. This book also includes outstanding keynote lectures by distinguished guest speakers: René Lozi (France), Ponnuthurai Nagaratnam Suganthan (Singapore) and Lars Nolle (Germany). The main aim of the conference was to create a periodical possibility for students, academics and researchers to exchange their ideas and novel research methods. This conference establishes a forum for presentation and discussion of recent research trends in the area of applications of various predictive methods.
