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Titolo	Mathematics Applied to Engineering, Modelling, and Social Issues // edited by Frank T. Smith, Hemen Dutta, John N. Mordeson
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Descrizione fisica	1 online resource (703 pages)
Collana	Studies in Systems, Decision and Control, , 2198-4190 ; ; 200
Disciplina	620.00151
Soggetti	Engineering mathematics Engineering - Data processing System theory Control theory Mathematics Social sciences Mathematical and Computational Engineering Applications Systems Theory, Control Mathematics in the Humanities and Social Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	On the Reynolds Equation and the Load Problem in Lubrication: Literature Review and Mathematical Modelling -- On Dynamic Interactions Between Body Motion and Fluid Motion -- Certain Aspects of Problems with Non Homogenous Reactions -- A Survey on the Melnikov Theory for Implicit Ordinary Differential Equations with Applications to RLC Circuits -- Numerical solution of space-time-fractional reaction-diffusion equations via the Caputo and Riesz Derivatives -- An Extended Langhaar's Solution for Two-dimensional Entry Micro-channel Flows with High-order Slip.
Sommario/riassunto	This book presents several aspects of research on mathematics that have significant applications in engineering, modelling and social matters, discussing a number of current and future social issues and problems in which mathematical tools can be beneficial. Each chapter enhances our understanding of the research problems in a particular an

area of study and highlights the latest advances made in that area. The self-contained contributions make the results and problems discussed accessible to readers, and provides references to enable those interested to follow subsequent studies in still developing fields. Presenting real-world applications, the book is a valuable resource for graduate students, researchers and educators. It appeals to general readers curious about the practical applications of mathematics in diverse scientific areas and social problems.

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