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Nota di contenuto	Cover -- HalfTitle Page -- Title Page -- Copyright -- Declaration -- About the Editor -- Table of Contents -- List of Contributors -- List of Abbreviations -- Preface -- Chapter 1: Introduction -- Reference -- Chapter 2: Exact Solutions for Some Fractional Differential Equations -- Abstract -- Introduction -- Jumarie's Modified Riemann-liouville Derivative And The Extended Jacobi Elliptic Function Expansion Method -- Applications of the Method -- Space-time Fractional Bidirectional Wave Equations -- The Space-time Nonlinear Fractional Srlw Equation -- Conclusion -- Conflict of Interests -- Acknowledgments -- References -- Chapter 3: Compact and Noncompact Solutions to Generalized Sturm–Liouville and Langevin Equation with Caputo–Hadamard Fractional -- Abstract -- Introduction -- Preliminaries -- Auxiliary Results -- The Existence of Solution For the Gsllle -- Numerical Examples
Sommario/riassunto	This book offers an in-depth exploration of fractional differential equations (FDEs), focusing on their methods and applications in modeling complex systems. Edited by Olga Moreira, it comprises 16 articles by various experts who present the extended Jacobi elliptic function expansion method, numerical approximation techniques like the continuous Backward Differentiation Formulas, and stability theories. The text covers practical applications of FDEs in fields such as

physics, engineering, and biology, highlighting their role in understanding phenomena like anomalous diffusion and biological networks. This comprehensive collection is intended for researchers and practitioners seeking to apply advanced mathematical tools for solving real-world problems.

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