

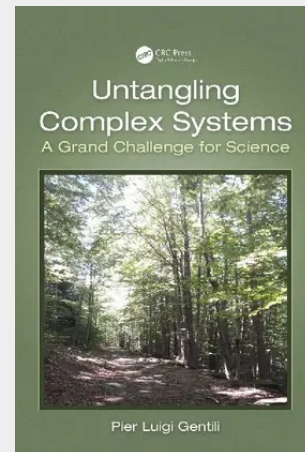
Gentili

Untangling Complex Systems

A Grand Challenge for Science

Complex Systems are natural systems that science is unable to describe exhaustively. Examples of Complex Systems are both unicellular and multicellular living beings; human brains; human immune systems; ecosystems; human societies; the global economy; the climate and geology of our planet. This book is an account of a marvelous interdisciplinary journey the author made to understand properties of the Complex Systems. He has undertaken his trip, equipped with the fundamental principles of physical chemistry, in particular, the Second Law of Thermodynamics that describes the spontaneous evolution of our universe, and the tools of Non-linear dynamics. By dealing with many disciplines, in particular, chemistry, biology, physics, economy, and philosophy, the author demonstrates that Complex Systems are intertwined networks, working in out-of-equilibrium conditions, which exhibit emergent properties, such as self-organization phenomena and chaotic behaviors in time and space.

This book presents the new challenges that the science of the twentieth century is facing. A distinctive feature of this book is the description of Fuzzy Logic as a powerful method to understand and control complex systems. It also presents the different kinds of logic that can be processed by using molecules as computing elements.



93,90 €

93,90 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9780367485627

Medium: Buch

ISBN: 978-0-367-48562-7

Verlag: CRC Press

Erscheinungstermin: 14.01.2020

Sprache(n): Englisch

Auflage: 1. Auflage 2020

Produktform: Kartoniert

Gewicht: 1098 g

Seiten: 588

Format (B x H): 178 x 254 mm

