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	Descrizione fisica	1 online resource (749 pages)
	Collana	Computer Science Series
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	Soggetti	Programming languages (Electronic computers)
		Computer science
		Engineering mathematics
		Engineering - Data processing
		Programming Language
		Computer Science
		Mathematical and Computational Engineering Applications
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	Nota di contenuto	Introduction -- Mathematical Foundations in Python -- Calculus with Python -- Data Structures and Algorithms with Python -- Probability and Statistics -- Differential Equations -- Discrete Mathematics and Combinatorics -- Numerical Methods -- Chaos Theory and Dynamical Systems -- Data Science and Machine Learning -- Advanced Topics.
	Sommario/riassunto	This book offers a rigorous yet approachable pathway to applying Python for mathematical problem-solving, spanning foundational concepts to advanced theoretical frameworks. It bridges the gap between abstract mathematics and computational execution, guiding readers through a logically structured, step-by-step journey. Emphasizing mathematical reasoning, symbolic computation, and real-world problem modeling, it equips readers to analyze, simulate, and visualize complex structures with clarity and efficiency. Ideal for students, researchers, and professionals in Mathematics, Data Science, AI, Physics, and Computational Science, it cultivates both programming skill and deep mathematical intuition.