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Altri autori (Persone)	DufourClaude ForchheimerRobert
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Soggetti	Data structures (Computer science) Information theory Thermodynamics Chemistry, Physical and theoretical Probabilities Data Structures and Information Theory Theoretical Chemistry Probability Theory
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Nota di contenuto	Introduction -- Information Theory and the Living System -- Applications of Information Theory to Psychology -- Entropy in art -- Consistent Definition of Correlations and Multivariate Mutual Information -- An intuitive consideration of irreversible phenomena -- Use of mutual information in linguistics, cryptography, and steganography -- Communication system.
Sommario/riassunto	This monograph explores the interdisciplinary applications of information theory, focusing on the concepts of entropy, mutual information, and their implications in various fields. It explains the fundamental differences between entropy and Shannon's Measure of Information (SMI), presents the application of information theory to living systems and psychology, and also discusses the role of entropy

in art. It critically overviews the definition of correlations and multivariate mutual information. These notions are used to build a new perspective for understanding the irreversibility of processes in macroscopic systems, while the dynamical laws governing the microscopic components are reversible. It also delves into the use of mutual information in linguistics, cryptography, steganography, and communication systems. The book details the theoretical and practical aspects of information theory across a spectrum of disciplines and is a useful tool for any scientist interested in what is usually called entropy.
