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ISBN	3-031-38681-7
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Descrizione fisica	1 online resource (277 pages)
Disciplina	530.12
Soggetti	Stochastic processes
	Quantum physics
	System theory
	Life - Origin
	Neurosciences Stochastic Processos
	Quantum Physics
	Complex Systems
	Origin of Life
	Neuroscience
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction Random Patterns The Molecular Storm The Joy of Thermodynamics The Engines of Creation From Big Bang to Big Freeze How Chemistry Works Lively Molecules.
Sommario/riassunto	Why is the universe the way it is? Wherever we look, we find ordered structures: from stars to planets to living cells. This book shows that the same driving force is behind structure everywhere: the incessant random motion of the components of matter. Physicists call it thermal noise. Let's call it the molecular storm. This storm drives the fusion reactions that make stars shine. It drives whirlpools and currents in atmospheres and oceans. It spins and distorts molecules until they are in the right orientation to react and form new substances. In living cells, it drives proteins to fold and molecules to self-assemble. It is behind every detail of the astonishing molecular machines that control

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cellular processes. Using cutting-edge research, "Molecular Storms" takes us on a dazzling journey from the early universe to the interior of the smallest living things. There, in a nanoscale world of biological devices, it explains the physics behind the chemical system which we call Life. Whether you're someone with a general interest in science or a student looking to add context to your studies, this book is for you. "Molecular Storms" is an accessible and captivating read that will deepen your appreciation of the power of science to explain the world.