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	Soggetti	Condensed matter
		Statistical physics
		Dynamical systems
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		Mechanics, Applied
		Statistics
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	Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
	Nota di contenuto	Complex Structured Condensed Matter -- Spatial Statistics and Micromechanics of Materials -- Characterising the Morphology of Disordered Materials -- Topological Characterization of Porous Media -- Nanotomography: Real-Space Volume Imaging with Scanning Probe Microscopy -- Bicontinuous Surfaces in Self-assembling Amphiphilic Systems -- Morphology of Langmuir Monolayer Phases -- Spatial Order in Liquid Crystals: Computer Simulations of Systems of Ellipsoids -- Two-Dimensional Fluid Foams at Equilibrium -- Spatial Statistics and

Morphology -- Morphological Texture Analysis: An Introduction -- Vector- and Tensor-Valued Descriptors for Spatial Patterns -- Computational Topology for Point Data: Betti Numbers of ?-Shapes -- The Euler Number of Discretized Sets — On the Choice of Adjacency in Homogeneous Lattices -- Shape Statistics for Random Domains and Particles -- A Survey on Contact Distributions -- Mark Correlations: Relating Physical Properties to Spatial Distributions -- Spatial Jump Processes and Perfect Simulation -- Statistics for Non-sparse Spatially Homogeneous Gibbs Point Processes -- Spatial Statistics of a Turbulent Random Multiplicative Branching Process.

Sommario/riassunto	The morphology of spatially stuctured materials is a rapidly growing field of research at the interface of statistical physics, applied mathematics and materials science. A wide spectrum of applications encompasses the flow through porous and composite materials as well as microemulsions and foams. Written as a set of lectures and tutorial reviews leading up to the forefront of research, this book will be both a compendium for the experienced researcher as well as a high level introductory text for postgraduate students and nonspecialist researchers working in related areas.