1. Record Nr.	UNINA9910257418703321
Titolo	Diffusion Processes: Experiment, Theory, Simulations [[electronic resource]] : Proceedings of the Vth Max Born Symposium Held at Kudowa, Poland, 1–4 June 1994 / / edited by Andrzej Pekalski
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1994
ISBN	3-540-49038-8
Edizione	[1st ed. 1994.]
Descrizione fisica	1 online resource (VIII, 312 p. 33 illus.)
Collana	Lecture Notes in Physics, , 0075-8450 ; ; 438
Disciplina	530.4/15
Soggetti	Physical chemistry
	Thermodynamics
	Statistical physics
	Dynamical systems
	Observations, Astronomical
	Astronomy—Observations
	Astrophysics
	Physical Chemistry
	Complex Systems
	Astronomy, Observations and Techniques
	Astrophysics and Astroparticles
	Statistical Physics and Dynamical Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Selfdiffusion of polymer chains in solutions and melts -- Diffusion on fractal substrates -- Stellar diffusion -- Surface diffusion and lateral interactions in adsorbed layers -- Simple quantum dynamics in presence of topological disorder -- Initially-separated reaction-diffusion systems: theory and experiment -- Anomalous reaction-diffusion systems -- Some aspects of pattern formation in reaction-diffusion systems -- Interface bursting and interface depinning -- Criticality of self-avoiding walks in fractal porous media -- Fractals in biology and medicine -- Diffusion of lattice gases in disordered lattices

-- Single-ion random walk on a lattice in an attractive coulomb cutoff potential -- A model for the underpotential deposition of metals -- Oxygen diffusion in 123-YBCO -- Gating of voltage-dependent sodium channels in excitable membranes - a continuous process? -- The Schrödinger problem -- Fractal dimension and roughness of profiles and surfaces -- Competition between two kinds of entities in a Diffusion—Limited Aggregration process -- Diffusion models of internal dynamics of proteins -- IV-th max born symposium: Solid state physics I.

Sommario/riassunto	The articles in this book reflect the omnipresence of diffusion processes in the natural sciences. They describe experimental results as well as theoretical models and computer simulations, and address a wide readership including graduate students. The problems treated stem from physics, astronomy, physical chemistry, biology, and medicine. The papers are presented in a tutorial style and reflect the present-day trends in the field.