Record Nr. UNINA9910451263803321 Scaling and disordered systems [[electronic resource]]: international **Titolo** workshop and collection of articles honoring Professor Antonio Coniglio on the occasion of his 60th birthday / / editors, Fereydoon Family ... [et al.] Pubbl/distr/stampa Singapore;; River Edge, NJ,: World Scientific, 2002 **ISBN** 981-277-810-1 Descrizione fisica 1 online resource (361 p.) Altri autori (Persone) FamilyFereydoon Disciplina 530.13 Soggetti Order-disorder models Scaling laws (Statistical physics) Statistical physics Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia "International workshop on scaling and disordered systems, Ecole Note generali superieure de physique et chimie industrielles, Paris, 13-14 April 2000."--P. xxi. Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Contents ; Antonio Coniglio: Curriculum : Preface Vitae : Program of the Workshop ; Part I: Critical Phenomena; Fractal Dimensions and Corrections to Scaling for Critical Potts Clusters; Complex Viscoelastic Behaviour at the Sol-Gel Transition : Scaling and Finite-Size Effects for the Critical Backbone Roughening Transition in Branching Polymers Percolation and Critical Phenomena of an Attractive Micellar System ; Thermally Diluted Ising Systems : Critical Fluctuations in the Breakdown of Disordered Systems ; Critical Fluctuations in 2D XY Magnets Part II: Slow Dynamics Compaction of Granular Matter: A Short Review and the Random Tetris Model Why Conductivity Decreases with Pressure in Ion-Doped Polymers ; Dynamical Non-Linear Susceptibility of the Quenched and Annealed Frustrated Lattice Gas Models

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Standard Scaling and Multiscaling in Phase Ordering Dynamics

Sommario/riassunto

Investigation of the fractal and scaling properties of disordered systems has recently become a focus of great interest in research. Disordered or amorphous materials, like glasses, polymers, gels, colloids, ceramic superconductors and random alloys or magnets, do not have a homogeneous microscopic structure. The microscopic environment varies randomly from site to site in the system and this randomness adds to the complexity and the richness of the properties of these materials. A particularly challenging aspect of random systems is their dynamical behavior. Relaxation in disordered systems