

1. Record Nr.	UNINA9910257432103321
Titolo	Cellular Structures in Instabilities [[electronic resource]] : Proceedings of the Meeting "Structures cellulaires dans les instabilités — périodicité, défauts, turbulence de phase" Held at Gif-sur-Yvette, France, June 20–22, 1983 // edited by J. E. Wesfreid, S. Zaleski
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1984
ISBN	3-540-39073-1
Edizione	[1st ed. 1984.]
Descrizione fisica	1 online resource (VI, 392 p. 99 illus.)
Collana	Lecture Notes in Physics, , 0075-8450 ; ; 210
Disciplina	531/1
Soggetti	Mathematical physics Fluids Numerical analysis Theoretical, Mathematical and Computational Physics Fluid- and Aerodynamics Numerical Analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Cellular structures in instabilities : An introduction -- Rayleigh-Benard instability : Experimental study of the wavenumber selection -- Wavelength selection and pattern localization in buckling problems -- Wavenumber selection in buckling experiments -- Effect of boundaries on periodic patterns -- Cell number selection in Taylor-Couette flow -- Wavelength selection through boundaries in 1-D cellular structures -- Wavenumber selection in Rayleigh-Benard convective structure -- Convection patterns in large aspect ratio systems -- Three dimensional convective structures in a horizontal or tilted porous layer -- Modelisation and simulation of convection in extended geometry -- Pattern evolution from convective and electrohydrodynamic instabilities -- Amplitude equations for non linear convection in high vertical channels -- Stability of cellular systems in Taylor-Couette instability -- Spatial dissipative structures and hydrodynamic instabilities -- Chemical structures far from equilibrium -- Structure defects in

Benard-Marangoni instability -- Non adiabatic phenomena in cellular structures -- Smectics : A model for dynamical systems? -- Defects and interactions with the structures in ehd convection in nematic liquid crystals -- Quantitative study pf the disorganization of hexagonal convective structures -- Shear modes in low-prandtl thermal convection -- Spatial instabilities and temporal chaos -- Temporal and spatial aspects of the onset of chaos in a Taylor instability subjected to a magnetic field -- Electro-hydro-dynamical convective structures and transitions to chaos in a liquid crystal -- Rotating disk flows, transition to turbulence -- Morphological instabilities in the solidification front of binary mixtures -- Cellular structures on premixed flames in a uniform laminar flow -- Energy in the Benard-Rayleigh problem -- Modelisation of thermoconvective instabilities in saturated porous media- lateral boundary influence -- Competition between marangoni and archimedean forces, to determine the surface profile of a liquid heated, open to air -- Surface relief accompanying natural convection in liquid layers heated from below -- On the subject of Gortler vortex.

---