Record Nr.	UNINA9910450707203321
Titolo	Ginzburg-Landau vortices [[electronic resource] /] / Haim Brezis, Tatsien Li
Pubbl/distr/stampa	Beijing, China, : Higher Education Press Singapore, : World Scientific Publishing, Co., c2005
ISBN	1-281-89694-2 9786611896942 981-270-118-4
Descrizione fisica	1 online resource (196 p.)
Collana	Series in contemporary applied mathematics ; ; 5
Altri autori (Persone)	BrezisH (Haim) LiDaqian
Disciplina	532.0595
Soggetti	Singularities (Mathematics)
	Mathematical physics
	Superconductors - Mathematics
	Superificial equations Nonlinear - Numerical solutions
	Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"The "Ginzburg-Landau Vortices" School and Symposium was held during November 18-19, 2002 in Fudan University, Shanghai, China" P. v.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Preface; Contents; Bifurcation Problems for Ginzburg-Landau Equations and Applications to Bose-Einstein Condensates; Vortex Analysis of the Ginzburg-Landau Model of Superconductivity; On Singular Perturbation Problems Involving a "Circular-Well" Potential; Existence Results on Ginzburg-Landau Equations; A Survey on Ginzburg-Landau Vortices of Superconducting Thin Films*; On the Hydro-dynamic Limit of Ginzburg-Landau Wave Vortices; Singular Sets of the Landau-Lifshitz System*; Analysis of Ginzburg-Landau Models for Type I Superconductivity*; Ferromagnets and Landau-Lifshitz Equation
Sommario/riassunto	The Ginzburg-Landau equation as a mathematical model of superconductors has become an extremely useful tool in many areas of

1.

physics where vortices carrying a topological charge appear. The remarkable progress in the mathematical understanding of this equation involves a combined use of mathematical tools from many branches of mathematics. The Ginzburg-Landau model has been an amazing source of new problems and new ideas in analysis, geometry and topology. This collection will meet the urgent needs of the specialists, scholars and graduate students working in this area or related areas.