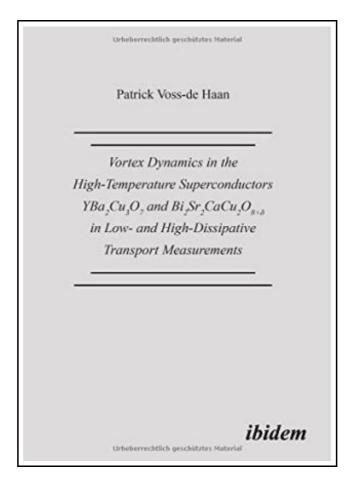
# Vortex Dynamics in the High-Temperature Superconductors YBa2Cu3O7 and Bi2Sr2CaCu2O8+d in Low- and High-Dissipative Transport Measurements



Filesize: 1.96 MB

### Reviews

An exceptional ebook and also the typeface applied was intriguing to read through. I have got read and i also am sure that i am going to likely to go through yet again once more in the foreseeable future. I discovered this pdf from my dad and i advised this ebook to find out. (Dr. Raven Ledner)

## VORTEX DYNAMICS IN THE HIGH-TEMPERATURE SUPERCONDUCTORS YBA2CU3O7 AND BI2SR2CACU2O8+D IN LOW-AND HIGH-DISSIPATIVE TRANSPORT MEASUREMENTS



Ibidem. Taschenbuch. Book Condition: Neu. 210x148x8 mm. Neuware - Since their discovery in 1986, high-temperature superconductors (HTSC) are considered interesting physical systems as well as attractive candidates for a variety of technical applications. In both cases one of the key aspects to be understood is the mechanism of power dissipation, which depends primarily on vortex dynamics: the movement of magnetic flux lines in the superconductor when a transport current is applied. The present work studies vortex dynamics in experiments on two of the most prominent types of HTSC materials, YBa2Cu3O7 (YBCO) and Bi2Sr2CaCu2O8+d (BSCCO), in the limit of low and high current densities. Both, the applied transport current density and the dimensionality of the materials, strongly influence the dynamic response. For the low current limit in BSCCO this thesis concentrates on the influence of oxygen stoichiometry and in YBCO on a vortex glass phase, which indicates a true superconducting state with vanishing linear resistivity. In the high current limit, for the first time, a vortex instability is shown to exist in BSCCO, apparently arising from a fluid phase, while a similar phenomenon in YBCO reveals a clear correlation of the high-dissipative instability to the low-dissipative vortex glass phase. 147 pp. Deutsch.

Read Vortex Dynamics in the High-Temperature Superconductors YBa2Cu3O7 and Bi2Sr2CaCu2O8+d in Low- and High-Dissipative Transport Measurements Online

Download PDF Vortex Dynamics in the High-Temperature Superconductors
YBa2Cu3O7 and Bi2Sr2CaCu2O8+d in Low- and High-Dissipative Transport Measurements

## You May Also Like



#### Psychologisches Testverfahren

Reference Series Books LLC Nov 2011, 2011. Taschenbuch. Book Condition: Neu. 249x191x7 mm. This item is printed on demand - Print on Demand Neuware - Quelle: Wikipedia. Seiten: 100. Kapitel: Myers-Briggs-Typindikator, Keirsey Temperament Sorter, DISG,...

Save PDF »



### Programming in D

Ali Cehreli Dez 2015, 2015. Buch. Book Condition: Neu. 264x182x53 mm. This item is printed on demand - Print on Demand Neuware - The main aim of this book is to teach D to readers...

Save PDF »



### No Friends?: How to Make Friends Fast and Keep Them

Createspace, United States, 2014. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*. Do You Have NO Friends? Are you tired of not having any...

Save PDF »



California Version of Who Am I in the Lives of Children? an Introduction to Early Childhood Education, Enhanced Pearson Etext with Loose-Leaf Version -- Access Card Package

Pearson, United States, 2015. Loose-leaf. Book Condition: New. 10th. 249 x 201 mm. Language: English . Brand New Book. NOTE: Used books, rentals, and purchases made outside of Pearson If purchasing or renting from companies...

Save PDF »



Who Am I in the Lives of Children? an Introduction to Early Childhood Education, Enhanced Pearson Etext with Loose-Leaf Version -- Access Card Package

Pearson, United States, 2015. Book. Book Condition: New. 10th. 250 x 189 mm. Language: English . Brand New Book. NOTE: Used books, rentals, and purchases made outside of Pearson If purchasing or renting from companies...

Save PDF »