Google Drive



Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses)

Alex Frano

Download now

Click here if your download doesn"t start automatically

Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses)

Alex Frano

Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) Alex Frano
This thesis presents the results of resonant and non-resonant x-ray scattering experiments demonstrating the control of collective ordering phenomena in epitaxial nickel-oxide and copper-oxide based superlattices. Three outstanding results are reported: (1) LaNiO3-LaAlO3 superlattices with fewer than three consecutive NiO2 layers exhibit a novel spiral spin density wave, whereas superlattices with thicker nickel-oxide layer stacks remain paramagnetic. The magnetic transition is thus determined by the dimensionality of the electron system. The polarization plane of the spin density wave can be tuned by epitaxial strain and spatial confinement of the conduction electrons. (2) Further experiments on the same system revealed an unusual structural phase transition controlled by the overall thickness of the superlattices. The transition between uniform and twin-domain states is confined to the nickelate layers and leaves the aluminate layers unaffected. (3) Superlattices based on the high-temperature superconductor YBa2Cu3O7 exhibit an incommensurate charge density wave order that is stabilized by heterointerfaces. These results suggest that interfaces can serve as a powerful tool to manipulate the interplay between spin order, charge order, and superconductivity in cuprates and other transition metal oxides.

Download Spin Spirals and Charge Textures in Transition-Met ...pdf

Read Online Spin Spirals and Charge Textures in Transition-M ...pdf

Download and Read Free Online Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) Alex Frano

---

From reader reviews:

Luis Ray:

Reading a e-book can be one of a lot of action that everyone in the world adores. Do you like reading book thus. There are a lot of reasons why people love it. First reading a publication will give you a lot of new facts. When you read a e-book you will get new information mainly because book is one of various ways to share the information or even their idea. Second, reading a book will make an individual more imaginative. When you reading a book especially tale fantasy book the author will bring someone to imagine the story how the character types do it anything. Third, you are able to share your knowledge to others. When you read this Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses), you can tells your family, friends and soon about yours reserve. Your knowledge can inspire others, make them reading a publication.

Floyd Lipp:

The reserve untitled Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) is the book that recommended to you to see. You can see the quality of the guide content that will be shown to you actually. The language that author use to explained their ideas are easily to understand. The copy writer was did a lot of study when write the book, so the information that they share for you is absolutely accurate. You also can get the e-book of Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) from the publisher to make you a lot more enjoy free time.

Gary Johnson:

This Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) is completely new way for you who has intense curiosity to look for some information given it relief your hunger info. Getting deeper you onto it getting knowledge more you know otherwise you who still having small amount of digest in reading this Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) can be the light food for you because the information inside this specific book is easy to get by simply anyone. These books create itself in the form which is reachable by anyone, yep I mean in the e-book form. People who think that in reserve form make them feel tired even dizzy this e-book is the answer. So you cannot find any in reading a guide especially this one. You can find what you are looking for. It should be here for you. So , don't miss the item! Just read this e-book type for your better life as well as knowledge.

Frances Drury:

With this era which is the greater person or who has ability to do something more are more special than other. Do you want to become one of it? It is just simple method to have that. What you must do is just spending your time little but quite enough to get a look at some books. One of many books in the top record in your reading list is actually Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures

(Springer Theses). This book and that is qualified as The Hungry Mountains can get you closer in becoming precious person. By looking up and review this guide you can get many advantages.

Download and Read Online Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) Alex Frano #1AC3VHMYDNJ

Read Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) by Alex Frano for online ebook

Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) by Alex Frano Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) by Alex Frano books to read online.

Online Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) by Alex Frano ebook PDF download

Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) by Alex Frano Doc

Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) by Alex Frano Mobipocket

Spin Spirals and Charge Textures in Transition-Metal-Oxide Heterostructures (Springer Theses) by Alex Frano EPub